NOTICE OF DECISION
Site Design Review – ARE Manufacturing Building Addition and Site Improvement
File No. DR223-0005 – 518 S Springbrook Road

August 24, 2023

Alvin Elbert
Elbert Rental At 518, LLC
518 S Springbrook Road
Newberg, OR 97132
Sent via email: rachel@aremanufacturing.com

Dear Mr. Elbert,

The Community Development Director has approved the site design review application DR223-0005 to construct a 10,534 square foot addition to an existing manufacturing building, add 14 additional parking spaces, and pave a truck turnaround area. The decision will become effective on September 8, 2023, unless an appeal is filed.

You may appeal this decision to the Newberg Planning Commission within 14 calendar days of this decision in accordance with Newberg Municipal Code (NMC) 15.100.170. All appeals must be in writing on a form provided by the Planning Division. If you wish to appeal, you must submit the written appeal form together with the required fee of $582 (plus 5 percent technology fee) to the Planning Division within 14 days of the date of this decision.

The deadline for filing an appeal is 4:30 pm on September 7, 2023.

Site design review approval is only valid for one year from the effective date above. If approval for your project is approaching its expiration date, contact the Planning Division regarding extension opportunities.

Please contact me at 503-554-7728 or clay.downing@newbergoregon.gov if you have questions about this correspondence.

Sincerely,

Clay Downing, Planning Manager
City of Newberg , Community Development Department

STAFF REPORT
Site Design Review - ARE Manufacturing Building Addition and Site Improvement
File No. DR223-0005 – 518 S Springbrook Road

FILE NO: DR223-0005

REQUEST: Construct a 10,530 square foot addition to an existing 17,550 square foot manufacturing building, establish 14 new off-street parking spaces, pave a truck turnaround area, and complete other improvements

LOCATION: 518 S Springbrook Road

TAX LOT: R3221 03700

APPLICANT: Alvin Elbert

OWNER: Elbert Rental, LLC

ZONE: Limited Industrial District (M-1)

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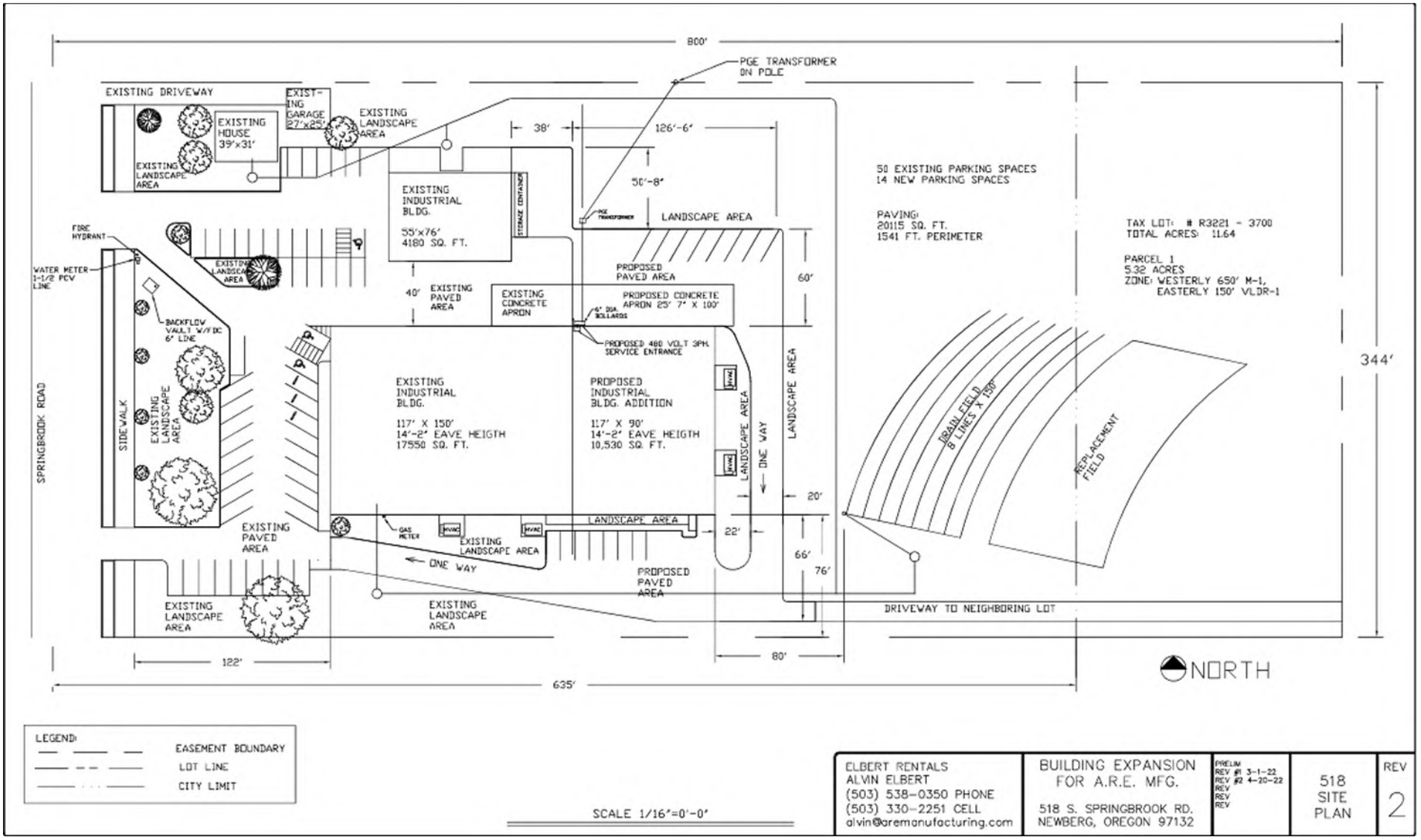
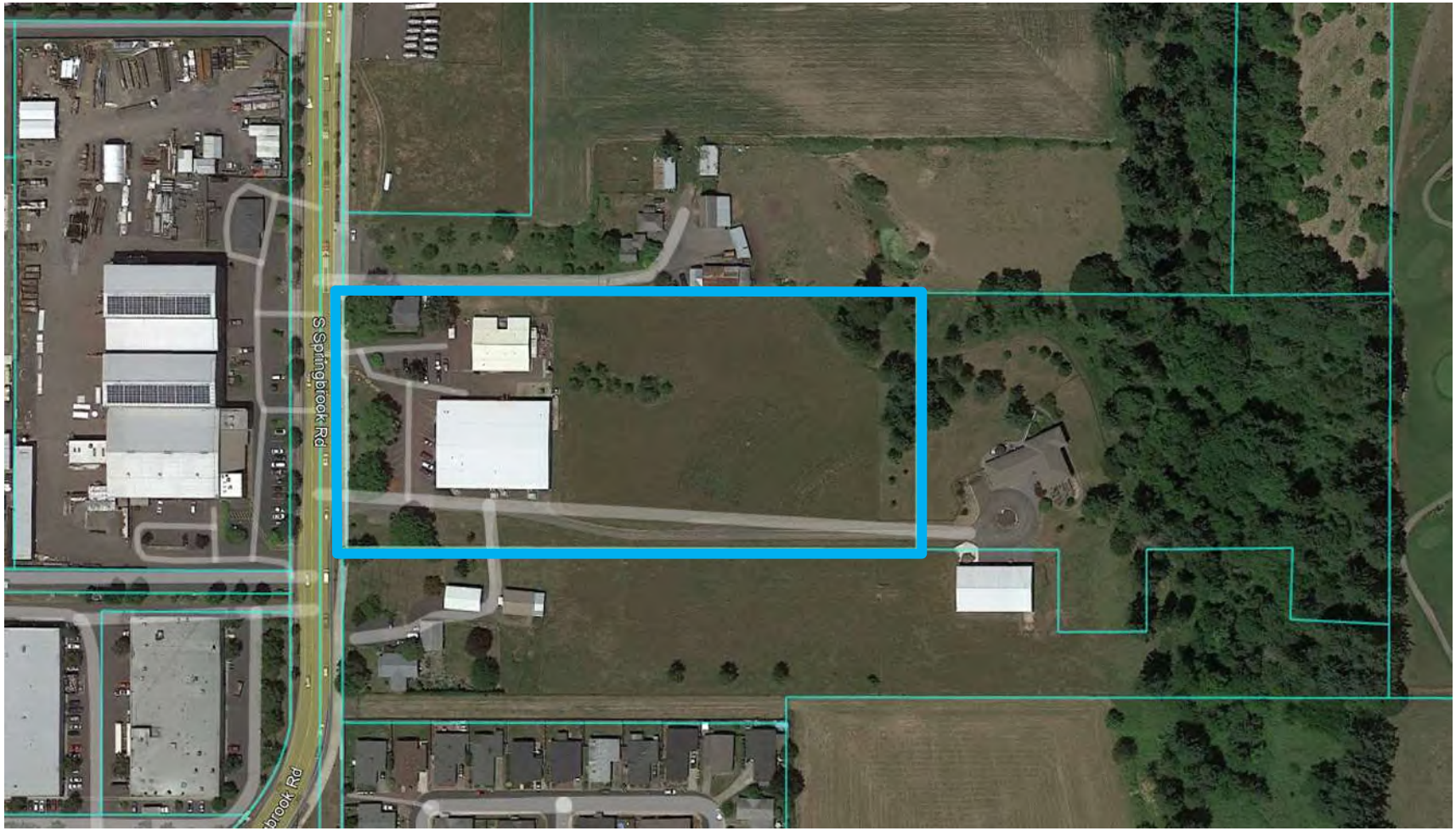
B. DESCRIPTION OF APPLICATION:

Alvin Elbert (Applicant) with Elbert Rental, LLC, has requested approval of a Type II site design review on behalf of ARE Manufacturing (Tenant) to construct a 10,530 addition to an existing 17,550 square foot manufacturing building, establish 14 new off-street parking spaces, add additional bicycle parking, pave a one-way truck turnaround, and provide additional landscaping. The subject site is a ±6.05-acre property in the M-1 district. Roughly 2.06 acres of the site are improved with a ±4,180 square foot manufacturing building, a ±17,550 square foot manufacturing building, an off-street parking area with ±53 spaces, and a single residential dwelling with a detached garage. Access to the site is provided via two driveway connections to S Springbrook Road along the property's western boundary. The southern driveway is shared with the property to the east. The proposed improvements will expand the existing manufacturing site by roughly an acre to the east.

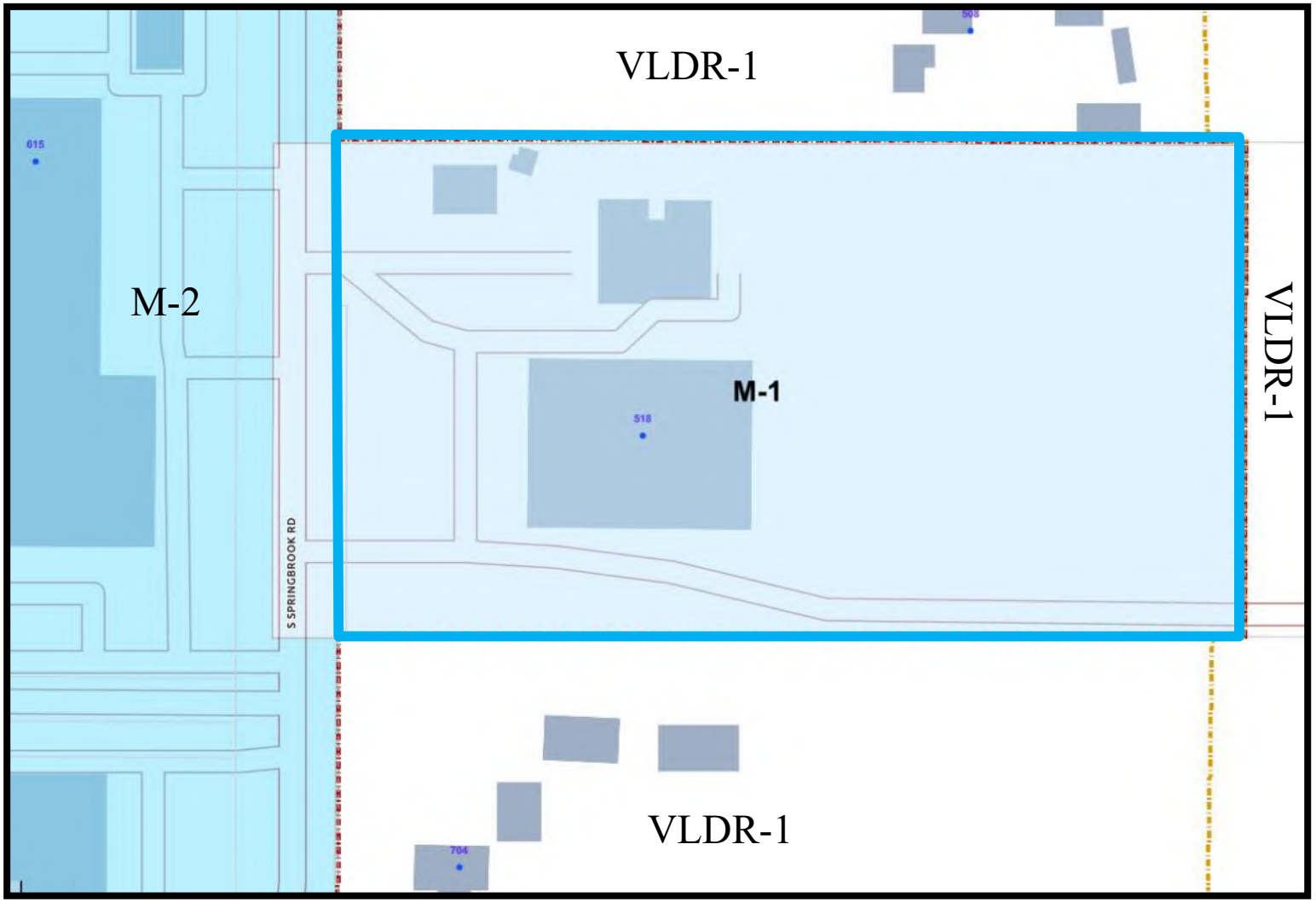
SITE PLAN


800'
PGE TRANSFORMER ON POLE
EXISTING DRIVEWAY
EXIST-ING GARAGE 27'x25'
EXISTING HOUSE 39'x31'
EXISTING LANDSCAPE AREA
EXISTING LANDSCAPE AREA
38'
126'-6"
50'-8"
EXISTING INDUSTRIAL BLDG. 55'x76' 4180 SQ. FT.
STORAGE CONTAINER
PGE TRANSFORMER
LANDSCAPE AREA
50 EXISTING PARKING SPACES
14 NEW PARKING SPACES
PAVING:
20115 SQ. FT.
1541 FT. PERIMETER
TAX LOT: # R3221 - 3700
TOTAL ACRES: 11.64
PARCEL 1
5.32 ACRES
ZONE: WESTERLY 650' M-1,
EASTERLY 150' VLDR-1
FIRE HYDRANT
WATER METER 1-1/2 PCV LINE
EXISTING LANDSCAPE AREA
PROPOSED PAVED AREA
60'
40'
EXISTING PAVED AREA
EXISTING CONCRETE APRON
PROPOSED CONCRETE APRON 25' 7" X 100'
6" DIA. BOLLARDS
PROPOSED 480 VOLT 3PH. SERVICE ENTRANCE
BACKFLOW VAULT W/Y DC 6" LINE
SIDEWALK
EXISTING LANDSCAPE AREA
SPRINGBROOK ROAD
EXISTING INDUSTRIAL BLDG. 117' X 150' 14'-2" EAVE HEIGTH 17550 SQ. FT.
PROPOSED INDUSTRIAL BLDG. ADDITION 117' X 90' 14'-2" EAVE HEIGTH 10,530 SQ. FT.
HVAC
LANDSCAPE AREA
ONE WAY
LANDSCAPE AREA
20'
344'
DRAIN FIELD 8 LINES X 150'
REPLACEMENT FIELD
EXISTING PAVED AREA
GAS METER
LANDSCAPE AREA
22'
EXISTING LANDSCAPE AREA
ONE WAY
66'
76'
PROPOSED PAVED AREA
EXISTING LANDSCAPE AREA
DRIVEWAY TO NEIGHBORING LOT
EXISTING LANDSCAPE AREA
122'
80'
635'
NORTH
LEGEND:
EASEMENT BOUNDARY
LOT LINE
CITY LIMIT
SCALE 1/16"=0'-0"
ELBERT RENTALS
ALVIN ELBERT
(503) 538-0350 PHONE
(503) 330-2251 CELL
alvin@aremanufacturing.com
BUILDING EXPANSION FOR A.R.E. MFG.
518 S. SPRINGBROOK RD.
NEWBERG, OREGON 97132
PRELIM
REV #1 3-1-22
REV #2 4-20-22
REV
REV
REV
518 SITE PLAN
REV 2

AERIAL MAP



ZONING MAP



C. SITE INFORMATION:

1. **Location:** The subject property is located the Limited Industrial District (M-1) zoning district. It is sited east of S Springbrook Road and west of Chehalem Glenn Golf Course. Adjacent properties to the north and south are located outside of Newberg's city limits but within Newberg's Urban Growth Boundary. The property to the east is outside of the Newberg city limits, outside of Newberg's Urban Growth Boundary, and part of unincorporated Yamhill County.
2. **Size:** ±6.05 acres (±263,538 square feet)
3. **Zoning:** Limited Industrial Uses (M-1)
4. **Subdistricts and Overlay Zones:** Bypass Interchange Overlay**,** Airport Inner Horizontal Surface
5. **Current Land Uses:** Manufacturing business and a single-family home
6. **Natural Features:** None.
7. **Adjacent Land Uses:**
   a) North: Agricultural and Residential (detached single family dwelling)
   b) South: Residential (detached single family dwelling)
   c) East: Residential (detached single family dwelling)
   d) West: (across S Springbrook Road) Manufacturing Building
8. **Adjacent Zoning:** The following zoning districts abut the subject property.
   a) North: Unincorporated Yamhill County, VLDR (Very Low Density Residential)
   b) East: Unincorporated Yamhill County, VLDR (Very Low Density Residential)
   c) South: Unincorporated Yamhill County, VLDR (Very Low Density Residential)
   d) West: M-2 (Light Industrial District)
9. **Access and Transportation:** Access to the proposed development is provided from S Springbrook Road which is classified as a minor arterial under the jurisdiction of Oregon Department of Transportation (ODOT).
10. **Utilities:**
    a. Water: There is a 14-inch water line located on S Springbrook Road with a meter serving the property. Fire flow will need to be confirmed by a fire flow test.
    b. Wastewater: There is a no wastewater line located nearby on S Springbrook Road. The property is served by a septic system.
    c. Stormwater: There is a 12-inch storm line and water quality swales along the frontage of the property.

d. Overhead Lines: Any new connection to the property will need to be undergrounded. See NMC 15.430.010 for exception provisions.

D. PROCESS:

The Site Design Review request is a Type II application and follows the procedures in NMC 15.100.030 and 15.100.220. Following a 15-day referral comment period, and a 14-day public comment period, the Community Development Director makes a decision on the application based on the criteria listed in the attached findings. The Director's decision is final unless appealed.

Important dates related to this application are as follows:

07/01/2023: The Community Development Director deemed the application complete.

07/07/2023: Notice for public comment was posted and mailed.

07/07/2023: Application was routed for a 15-day referral review.

08/24/2023: The Community Development Director issued a decision on the application.

E. AGENCY COMMENTS:

The application was routed to several public agencies for review and comment (Attachment 2). Comments and recommendations from City departments have been incorporated into the findings and conditions. As of the writing of this report, the City received the following agency comments:

1. Building Official: Comment provided stating:

   "Sewer needs to connect to public system."
2. City Manager: Reviewed, no conflict.
3. Community Development Director: Reviewed, no conflict.
4. Finance Department: Reviewed, no conflict.
5. Public Works Maintenance Superintendent: Reviewed, no conflict.
6. Public Works Water Treatment Plant Superintendent: Reviewed, no conflict.
7. Public Works Waste Water Treatment Plant: Reviewed, no conflict. Provided comment provided stating:

   "ARE Manufacturing is not connected to Newberg's sanitary sewer. If they connect to Newberg's sanitary sewer, pretreatment will be required."
8. Public Works Engineering Division: Comments were provided and have been incorporated into the staff reports Findings and Conditions of Approval.
9. Ziply Fiber: Reviewed, no conflict.

F. PUBLIC COMMENTS:

No public comments were received during the public comment period that occurred from July 7, 2023, through July 21, 2023.

G. ANALYSIS:

The proposed project requests to expand an existing manufacturing building on a subject property in the M-1 zoning district. The current tenant, ARE Manufacturing Inc, operates a contract machine shop that specializes in manufacturing machined components. The list of services provided on the subject property includes, CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM. Pursuant to NMC 15.05 "light manufacturing" means:

> A category of uses under Chapter 15.303 NMC that involves manufacturing, processing, fabrication, packaging, or assembly of goods. These types of firms are involved in the secondary processing and assembly of materials and components into finished products, generally for the wholesale market, for transfer to other plants, or to order for firms or consumers. The external impact from these uses is generally less than heavy manufacturing. Outdoor storage and processing of goods and materials is less than 10 percent of the site. Transportation needs are often met by truck. Goods are generally not displayed or sold on site, but if so, they are a subordinate part of sales. Relatively few customers come to the manufacturing site (typically fewer than five per day per 1,000 square feet of floor area).

Because the list of services that ARE Manufacturing Inc provides on the subject property is consistent with the definition of the light manufacturing use category, the proposed project is evaluated as a light manufacturing use. Further, NMC 15.306.020 (Row 506) indicates that light manufacturing is a "permitted" in the M-1 district where the subject property is located.

The subject property is located in the Inner Horizontal Surface of the Airport Overlay Zone (AO) Subdistrict which is associated with Sportsman Airpark. Pursuant to NMC 15.05.030, the Inner Horizontal Surface is one of five of the airport's imaginary surfaces, and "any object extending above these imaginary surfaces is an obstruction." The definition of an Inner Horizontal Surface is an area 150 feet above the airport elevation. According to the facility details provided by the Federal Aviation Administration (FAA), the elevation of Sportsman Airpark is ±181 feet. The subject property is at an elevation of ±178 feet, meaning the Inner Horizontal Surface begins ±153 above the subject property. According to the application materials, this project will expand on an existing manufacturing structure. The building specification (Attachment 1) indicates that the building will be ±19 feet in height. Because the proposed project's height from the

subject property's elevation will not exceed ± 331 feet in elevation, the structure will not interfere with the Inner Horizontal Surface.

Regarding requirements for conducting a traffic study, the Applicant submitted a trip generation and transportation system development charge (TSDC) analysis performed by Jennifer Danziger, PE of Lancaster Mobley. The analysis was conducted using the 11th edition of the ITE Trip Generation Manual and found that the existing trip generation exceeds what would be predicted by the ITE trip generation estimate for a similarly sized building used for manufacturing. The analysis suggested that this supports the Applicant's explanation that the proposed expansion is intended to provide more workspace for existing employees rather than new workspace for new employees. The existing building is not of sufficient area according to ITE trip generations estimates to create the actual number of trips measured. There are more employees than the size of the building supports. The measured trip generation was more in line with a larger building used for manufacturing. The analysis concluded that no new transportation system impacts will be created by the building expansion.

Formatting notes: The Newberg Municipal Code (NMC) criteria are written in ***italic bold*** font and the findings are written in regular font. The NMC criteria will be presented first, followed by the findings of fact. Finding of fact with underlined font indicate subsequent inclusion in Exhibit "B" Conditions of Approval.

A. FINDINGS FOR STREETS AND SIDEWALKS (NMC TITLE 12. STREETS AND SIDEWALKS)

Chapter 12.05 Street and Sidewalks

12.05.090 Permits and certificates.

A. Concurrent with the issuance of a building permit for the construction of a building for residential use or business structures or an addition to a dwelling or business structure, the value of which is $30,000 or more except as the city engineer may require on building permits of lesser value in accordance with NMC 12.05.040, the owner, builder or contractor to whom the building permit is issued shall meet the following requirements:

1. Construct a sidewalk within the dedicated right-of-way for the full frontage in which a sidewalk in good repair does not exist. The sidewalk construction shall be completed within the building construction period or prior to issuance of an occupancy permit, whichever is the lesser.

2. Dedicate right-of-way in accordance with the city transportation plan.

Finding: This project involves an expansion of an existing manufacturing building on a property with frontage along S Springbrook Road. As noted in the application materials (Attachment 1), the site's frontage was improved in 2017 as a part of ODOT's NewbergDundee Bypass project.

1. **Construct a sidewalk within the dedicated right-of-way for the full frontage**: The sidewalks along the front of the property are already improved. The Applicant will be required to replace any sidewalks along the site's frontage that are in poor condition or not in full compliance with City of Newberg and Federal ADA standards. Determination of any sidewalk panels to be replaced will occur as part of the building permit process.

2. **Dedicate right-of-way in accordance with the city transportation plan**: Because there is adequate existing right-of-way along the project site's frontage, right-of-way dedication is not needed.

The criteria will be met if the aforementioned condition of approval is adhered to.

B. FINDINGS FOR SITE DESIGN REVIEW (NMC CHAPTER 15.220. SITE DESIGN REVIEW)

15.220.020 Site design review applicability.

A. Applicability of Requirements. Site design review shall be required prior to issuance of building permits or commencement of work for all improvements noted below. Site design review permits shall be processed as either Type I or Type II, as noted below.

[…]

2. Type II.

a. Any new development or remodel which is not specifically identified within subsection (A)(1) of this section.

Finding: Pursuant NMC 15.220.020(A)(1)(g), industrial additions which do not exceed 1,000 square feet can be reviewed as a Type I application. According to the application materials (Attachment 1), this project will expand an existing manufacturing building by ±10,530 square feet, which exceeds the threshold in NMC 15.220.020(A)(1)(g). Consistent with NMC 15.220.020(A)(2)(a), this project is being reviewed following a Type II procedure.

15.220.050 Criteria for design review

B. Type II. The following criteria are required to be met in order to approve a Type II design review request:

1. Design Compatibility. The proposed design review request incorporates an architectural design which is compatible with and/or superior to existing or proposed uses and structures in the surrounding area. This shall include, but not be limited to, building architecture, materials, colors, roof design, landscape design, and signage.

Finding: As noted in the application materials (Attachment 1), this proposal will expand an existing manufacturing building, establish a one-way travel lane, and expand the off-street parking area. The Applicant's narrative indicates that the exterior of the new portion of the building will match the materials on the existing building, which include corrugated metal siding and a metal roof. The surrounding properties to the north, east, and south are in Yamhill County's Very Low-Density Residential zone and are occupied by detached single dwellings with large metal accessory structures.

The provided plans include updated landscaping adjacent to the expansion area, along the eastern and northern property lines.

See findings for development standards associated with landscaping and parking area and service drive improvements pursuant to NMC 15.420.010, 15.420.020, and 15.440.060 for determination of design compatibility with surrounding uses.

2. Parking and On-Site Circulation. Parking areas shall meet the requirements of NMC 15.440.010. Parking studies may be required to determine if adequate parking and circulation are provided for uses not specifically identified in NMC

15.440.010. Provisions shall be made to provide efficient and adequate on-site circulation without using the public streets as part of the parking lot circulation pattern. Parking areas shall be designed so that vehicles can efficiently enter and exit the public streets with a minimum impact on the functioning of the public street.

Finding: This application will expand an existing light manufacturing operation on a property in the M-1 district. Pursuant NMC 15.440.010(A) off-street parking is required to be provided. According to the application materials (Attachment 1), the site has 53 existing off-street parking spaces and the proposed site improvements will provide an additional 14 parking spaces. Pursuant NMC 15.440.030, permitted uses in the M-1 district are required to provide a minimum of 1 space per 500 square feet of gross floor building area. The existing site includes two manufacturing buildings totaling ±21,730 square feet in size. The proposed 10,530 square foot addition will result in a total building area of ±32,260 square feet.

Based on the minimum requirements in NMC 15.440.030, 64 off-street parking spaces are required. The Applicant is proposing 67 off-street parking spaces, which meets this requirement.

The subject site has frontage along S Springbrook Road. On-street parking is not available along S Springbrook Road. According to NMC 15.440.010(F), the maximum allowed parking on a site with no on-street parking available is determined by multiplying the minimum required by 1.5. Based on this standard, the maximum allowed parking on the site is ±96 spaces. Because the proposed project will include 67 parking spaces, this criterion is met.

According to the site plan (Attachment 1), the Applicant is proposing to place 60-degree stalls along a 20-foot-wide one-way paved travel aisle. Each parking space is planned to be 11 feet wide by 23 feet deep. Pursuant to NMC 15.440.070, 60-degree angled parking is required to be a minimum of 10.4 feet wide by 20.1 feet deep and accessible by a 15-foot-wide travel aisle for one way traffic.

The criteria are met.

3. ***Setbacks and General Requirements. The proposal shall comply with NMC 15.415.010 through 15.415.060 dealing with height restrictions and public access; and NMC 15.405.010 through 15.405.040 and 15.410.010 through 15.410.070 dealing with setbacks, coverage, vision clearance, and yard requirements.***

Finding: According to the application materials (Attachment 1), the proposed project will expand an existing manufacturing building on a property in the M-1 district. Pursuant to NMC 15.05.030, the front yard is the area that extends from the property line that is parallel to a street. The site's western property line abuts S Springbrook Road and is the only property line that abuts a street. Based on the existing conditions plan, the established building is ±121 feet from the site's western (front) property line. According to the preliminary site plan, the building addition will occur on the east side of the primary structure. Because the expansion will occur on the eastern side of the existing building, the proposed project will not encroach into the front setback area.

The adjacent properties to the north, south, and east of the subject property are located outside of the City of Newberg and within Yamhill County's Very Low-Density Residential zone. The adjacent properties to the north, south, and east are occupied by residential dwellings. Pursuant to NMC 15.410.030(B), a ten-foot setback is required along all interior property lines where an industrial site shares a common property line with a residentially zoned property. Based on the preliminary site plan, the planned expansion area is designed to be more than 20 feet from the northern, southern, and eastern property lines respectively.

The site has two existing driveway connections to S Springbrook Road, and the proposed alterations do not include changes to the driveways or the existing vision clearance areas.

The properties that abut the subject site to the north, south, and east are in Yamhill County's Very Low-Density Residential (VLDR) zone. According to the Yamhill County Zoning Ordinance Section 502.06.G, the maximum building height for dwellings in the VLDR zone is 35 feet and for other buildings is 45 feet. According to the building specification provided in the application (Attachment 1), the expanded building will match the height of the existing structure, which is ±19 tall.

The criteria are met.

4. ***Landscaping Requirements. The proposal shall comply with NMC 15.420.010 dealing with landscape requirements and landscape screening.***

Finding: The subject property is a ±6.05-acre site that is situated in the M-1 district. Pursuant to 15.420.010(B)(1), fifteen percent of any property in the M-1 district is required to be landscaped. Existing and proposed site improvements occupy ±3.35 acres (147,926 square feet) of the site.

According to the preliminary site plan ±17,212 square feet of the improved area is landscaped and an additional ±12,086 square feet will be provided as a part of this proposal. The total landscaped area (after improvement) is expected to be ±29,298 square feet, which is roughly 20 percent of the improved portion of the site. Therefore, the 15 percent criterion will be met.

See other findings related to landscaping in NMC Chapter 15.420 which are provided elsewhere in this staff report.

5. ***Signs. Signs shall comply with NMC* 15.435.010 *et seq. dealing with signs.***

Finding: The proposed project does not request to install or modify any signs. Because the Applicant has not requested to add or modify signage on the subject property, this criterion is not applicable.

6. ***Manufactured Dwelling, Mobile Home and RV Parks. Manufactured dwelling and mobile home parks shall also comply with the standards listed in NMC 15.445.075 through 15.445.100 in addition to the other clear and objective criteria listed in this section. RV parks also shall comply with NMC 15.445.170 in addition to the other criteria listed in this section.***

Finding: The proposed project will expand an existing manufacturing building on a property in the M-1 district.

Because the proposed project will not add or modify a manufactured dwelling, mobile home, or RV Park, the criterion is not applicable.

7. ***Zoning District Compliance. The proposed use shall be listed as a permitted or conditionally permitted use in the zoning district in which it is located as found in NMC 15.305.010 through 15.336.020. Through this site review process, the director may make a determination that a use is determined to be similar to those listed in the applicable zoning district, if it is not already specifically listed. In this case, the director shall make a finding that the use shall not have any different or more detrimental effects upon the adjoining neighborhood area than those specifically listed.***

Finding: This application proposes to expand an existing manufacturing building on a property in the M-1 district.

The tenant of the subject property (ARE Manufacturing Inc) operates a machine shop that specializes in manufacturing machined components which provides services including CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM. Pursuant to NMC 15.05, the Light manufacturing means:

> A category of uses under Chapter 15.303 NMC that involves manufacturing, processing, fabrication, packaging, or assembly of goods. These types of firms are involved in the secondary processing and assembly of materials and components into finished products, generally for the wholesale market, for transfer to other plants, or to order for firms or consumers. The external impact from these uses is generally less than heavy manufacturing. Outdoor storage and processing of goods and materials is less than 10 percent of the site. Transportation needs are often met by truck. Goods are generally not displayed or sold on site, but if so, they are a subordinate part of sales. Relatively few customers come to the manufacturing site (typically fewer than five per day per 1,000 square feet of floor area).

The list of services that ARE Manufacturing Inc provides is consistent with the definition of the light manufacturing use category. Pursuant to NMC 15.306.020(506), Light manufacturing is permitted in the M-1 district. Because light manufacturing is considered a permitted use in the M-1 zoning district and the subject property is located in the M-1 zoning district, the proposed use is considered permitted at the subject property.

This criterion is met.

8. ***Subdistrict Compliance. Properties located within subdistricts shall comply with the provisions of those subdistricts located in NMC 15.340.010 through 15.348.060.***

Finding: The subject property is located in the Inner Horizontal Surface of the Airport Overlay Zone (AO) associated with Sportsman Airpark. Pursuant to NMC 15.05.030, the Inner Horizontal Surface is one of five of the airport's imaginary surfaces, and "any object extending above these imaginary surfaces is an obstruction." The definition of an Inner Horizontal Surface is an area 150 feet above the airport elevation.

According to the facility details provided by the Federal Aviation Administration (FAA), the elevation of Sportsman Airpark is ±181 feet. The subject property is at an elevation of ±178 feet, meaning the Inner Horizontal Surface begins ±153 above the subject property. According to the application materials (Attachment 1), this project will expand an existing manufacturing structure. The application materials (Attachment 1) indicate that the building will be ±19 feet in height. Because the proposed structure will be less than ±153 at the subject property, the structure will interfere with the Inner Horizontal Surface.

This criterion is satisfied.

9. ***Alternative Circulation, Roadway Frontage Improvements and Utility Improvements. Where applicable, new developments shall provide for access for vehicles and pedestrians to adjacent properties which are currently developed or will be developed in the future. This may be accomplished through the provision of local public streets or private access and utility easements. At the time of development of a parcel, provisions shall be made to develop the adjacent street frontage in accordance with city street standards and the standards contained in the transportation plan. At the discretion of the city, these improvements may be deferred through use of a deferred improvement agreement or other form of security.***

Finding: The subject site has frontage along S Springbrook Road, which was recently improved by ODOT as a part of the Newberg-Dundee Bypass project. As such, frontage is already improved and further improvements are not required.

The site has an existing easement which allows the property to the east to access the public right of way. The application materials (Attachment 1) include a preliminary stormwater report which indicates that additional stormwater management facilities are planned on the site. No work is proposed in the right-of-way or on facilities that will be maintained by the city. The neighboring properties to the north, south, and east are located outside the city limits and are not anticipated to need additional access for existing or future development.

Findings related to off-street parking, bicycle parking, and private walkways are provided elsewhere in this report under NMC Chapter 15.440.

10. ***Traffic Study Improvements. If a traffic study is required, improvements identified in the traffic study shall be implemented as required by the director.***

Finding: The application materials (Attachment 1) include a trip generation and transportation system development charge (TSDC) analysis performed by Jennifer Danziger, PE of Lancaster Mobley. The report compared observed site traffic to the 11th edition of the Institute of Traffic Engineers (ITE) Trip Generation Manual predictive model's estimate based on the existing conditions of the site. According to report, the actual traffic generated on-site is 24 evening peak hour trips with 154 total weekday trips. The ITE Trip Generation Manual's estimate for the existing two manufacturing buildings (which total ±21,730 square feet) is 16 evening peak hour trips with 104 total weekday trips. Lancaster Mobley's analysis suggests that their observations support the Applicant's explanation that the proposed ±10,530 square foot expansion is intended

to provide more workspace for existing employees rather than new workspace for new employees. According to the ITE Trip Generation Manual, a ±32,260 square foot building is expected to generate 24 peak evening trips and 154 total weekday trips. Because the analysis is consistent with the Applicant's statements, it can be concluded that no new transportation system impacts are created by the building expansion.

The criterion is met.

C. FINDINGS FOR ZONING DISTRICTS (NMC DIVISION 15.300)

Chapter 15.305 Zoning Use Table

[…]

15.305.020 Zoning use table – Use districts.

Use	*M-1 Zone*
Light Manufacturing	***P***

Finding: This application proposes to expand an existing manufacturing building on a property in the M-1 district.

The tenant of the subject property (ARE Manufacturing Inc) operates a machine shop that specializes in manufacturing machined components which provides services including CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM. Pursuant to NMC 15.05, the Light manufacturing means:

> A category of uses under Chapter 15.303 NMC that involves manufacturing, processing, fabrication, packaging, or assembly of goods. These types of firms are involved in the secondary processing and assembly of materials and components into finished products, generally for the wholesale market, for transfer to other plants, or to order for firms or consumers. The external impact from these uses is generally less than heavy manufacturing. Outdoor storage and processing of goods and materials is less than 10 percent of the site. Transportation needs are often met by truck. Goods are generally not displayed or sold on site, but if so, they are a subordinate part of sales. Relatively few customers come to the manufacturing site (typically fewer than five per day per 1,000 square feet of floor area).

The list of services that ARE Manufacturing Inc provides is consistent with the definition of the light manufacturing use category. Pursuant to NMC 15.306.020(506), Light manufacturing is permitted in the M-1 district. Because light manufacturing is considered a permitted use in the M-1 zoning district and the subject property is located in the M-1 zoning district, the proposed use is considered permitted at the subject property.

This criterion is met.

Chapter 15.340 Airport Overlay (AO) Subdistrict

[…]

15.340.050 Limitations.

A. To meet the standards and reporting requirements established in FAA Regulations, Part 77, no structure shall penetrate into the airport imaginary surfaces as defined in this code except as provided in NMC 15.340.030(B).

B. High density public uses as defined in this code shall not be permitted in the airport approach safety zone or the displaced threshold approach surface zone.

C. Following July 1990, if FAA funds are used by the city to improve or enhance the airport, new structures, buildings and dense uses shall be prohibited in the runway protection zone consistent with federal requirements.

D. Whenever there is a conflict in height limitations prescribed by this overlay zone and the primary zoning district, the lowest height limitation fixed shall govern; provided, however, that the height limitations here imposed shall not apply to such structures customarily employed for aeronautical purposes.

E. No glare-producing materials shall be used on the exterior of any structure located within the airport approach safety zone.

F. In noise-sensitive areas (within 1,500 feet of an airport or within established noise contour boundaries of 55 Ldn and above for identified airports) where noise levels are a concern, a declaration of anticipated noise levels shall be attached to any building permit or development approval. In areas where the noise level is anticipated to be 55 Ldn and above, prior to issuance of a building permit for construction of noise-sensitive land use (real property normally used for sleeping or normally used as schools, churches, hospitals, or public libraries) the permit applicant shall be required to demonstrate that the indoor noise level will not exceed 55 Ldn. The director will review building permits for noise-sensitive developments.

Finding: The subject property is located in the Inner Horizontal Surface of the Airport Overlay Zone (AO) associated with Sportsman Airpark. Pursuant to NMC 15.05.030, the Inner Horizontal Surface is one of five of the airport's imaginary surfaces*, and "any object extending above these imaginary surfaces is an obstruction."* The definition of an Inner Horizontal Surface is an area 150 feet above the airport elevation.

According to the facility details provided by the Federal Aviation Administration (FAA), the elevation of Sportsman Airpark is ±181 feet. The subject property is at an elevation of ±178 feet, meaning the Inner Horizontal Surface begins ±153 above the subject property. According to the application materials (Attachment 1), this project will expand an existing manufacturing structure. The application materials (Attachment 1) indicate that the building will be ±19 feet in height. Because the proposed structure will be less than ±153 at the subject property, the structure will interfere with the Inner Horizontal Surface.

This criterion is satisfied.

Chapter 15.356 Bypass Interchange (BI) Overlay

15.356.030 Permitted uses.

All uses of land and water that are permitted in the underlying zoning district(s) are also permitted in the bypass interchange overlay, with the exception of the special limitations on commercial uses in the industrial districts as outlined in NMC 15.356.050.

Finding: The subject property is within the Bypass Interchange Overlay. The application materials (Attachment 1) indicate that the proposal will expand the existing manufacturing building on the site.

Pursuant to NMC 15.05.030, the manufacturing use of the site is consistent with the Light Manufacturing use category. Pursuant to NMC 15.303.506, light manufacturing is considered industrial use. The list of prohibited uses in the Bypass Interchange Overlay (NMC 15.356.050) includes a variety of commercial uses. Because the proposed use is not listed in the NMC 15.356.050 as a prohibited use and uses that are permitted in the underlaying zoning district are permitted, the proposed use of the site is allowed in the Bypass Interchange Overlay.

The criterion is met.

D. FINDINGS FOR DEVELOPMENT STANDARDS (NMC DIVISION 15.400)

Chapter 15.405 Lot Requirements

[…]

15.405.010 Minimum and maximum lot area.

A. In the following districts, each lot or development site shall have an area as shown below except as otherwise permitted by this code:

[…]

3. In the M-1, M-2, M-3, and M-E districts, each lot or development site shall have a minimum area of 20,000 square feet.

Finding: As noted on the application materials (Attachment 1), the proposed project will expand an existing manufacturing building on the subject property. The subject site is located in the M-1 district. The subject property, Tax Lot R3221 03700, is ±6.05 acres. Because the subject property's size will not be modified and is larger than 20,000 square feet, the lot exceeds the requirement for minimum lot size in the M-1 zoning district.

The criterion is met.

15.405.020 Lot area exceptions.

The following shall be exceptions to the required lot areas:

A. Lots of record with less than the area required by this code.

Finding: As noted on the application materials (Attachment 1), the proposed project will expand an existing manufacturing building on the subject property. The subject site is located in the M-1 district. The subject property, Tax Lot R3221 03700, is ±6.05 acres.

Because the existing lot is larger than the area required by the code, the criterion is not applicable.

B. Lots or development sites which, as a process of their creation, were approved in accordance with this code.

Finding: The subject property is an established lot of record. The subject property, Tax Lot R3221 03700, is ±6.05 acres.

Because the existing lot is larger than the area required by the code, the criterion is not applicable.

15.405.040 Lot coverage and parking coverage requirements.

[…]

C. All other districts and uses not listed in subsection (B) of this section shall not be limited as to lot coverage and parking coverage except as otherwise required by this code.

Finding: The subject property is in the M-1 district. According to the provided application materials (Attachment 1), this project will expand an existing manufacturing building. Pursuant to NMC 15.405.040(C), this project is exempt from lot coverage and parking coverage requirements.

The criterion is met.

Chapter 15.410 Yard Setback Requirements

15.410.010 General yard regulations.

A. No yard or open space provided around any building for the purpose of complying with the provisions of this code shall be considered as providing a yard or open space for any other building.

Finding: The application materials (Attachment 1) depict the subject property's existing setback area which are located on the subject property.

The criterion is met.

B. No yard or open space on adjoining property shall be considered as providing required yard or open space for another lot or development site under the provisions of this code.

Finding: The application materials (Attachment 1) depict the subject property's existing setback area which are located on the subject property.

The criterion is met.

C. No front yards provided around any building for the purpose of complying with the regulations of this code shall be used for public or private parking areas or garages, or other accessory buildings, except as specifically provided elsewhere in this code.

The application materials (Attachment 1) do not propose the use of public or private parking areas or other accessory buildings occurring in the front yard area.

The criterion is met.

D. When the common property line separating two or more contiguous lots is covered by a building or a permitted group of buildings with respect to such common property line or lines does not fully conform to the required yard spaces on each side of such common property line or lines, such lots shall constitute a single development site and the yards as required by this code shall then not apply to such common property lines.

Because the application materials (Attachment 1) do not depict any property line being covered by a building or group of buildings, the criterion is met.

E. Dwellings Where Permitted above Nonresidential Buildings. The front and interior yard requirements for residential uses shall not be applicable; provided, that all yard requirements for the district in which such building is located are complied with.

Because the application materials (Attachment 1) do not request use of a dwelling above the subject property's nonresidential buildings, this criterion is not applicable.

F. In the AI airport industrial district, clear areas, safety areas, object-free areas, taxiways, parking aprons, and runways may be counted as required yards for a building, even if located upon an adjacent parcel.

Because the subject property is not located in the AI airport industrial district, this criterion is not applicable.

G. In the AR airport residential district, clear areas, safety areas, object-free areas, taxiways, parking aprons, and runways may be counted as required yards for a building, if located upon an adjacent parcel.

Because the subject property is not located in the AI airport residential district, this criterion is not applicable.

15.410.020 Front yard setback.

[…]

C. Industrial. All lots or development sites in the M-1, M-2 or M-3 districts shall have a front yard of 20 feet. Lots or development sites in the AI district shall have a front yard of 10 feet. Lots or development sites in the M-4 district shall have a front yard of 20 feet where abutting Highway 219, arterials, and collectors, and a front yard of 10 feet along other streets.

[…]

Finding: According to the application materials (Attachment 1), the proposed project will expand an existing manufacturing building on a property in the M-1 district. Pursuant to NMC 15.05.030, the front yard is the area that extends from the property line that is parallel to a street. The site's western property line abuts S Springbrook Road and is the only property line that abuts a street.

Based on the existing conditions plan, the established building is ±121 feet from the site's western (front) property line. According to the preliminary site plan, expansion will occur on the east side of the primary structure. Because the expansion will occur on the eastern side of the existing building, the proposed project will not encroach into the front setback area.

The criterion is met.

15.410.030 Interior yard setback.

[…]

> ***C. Industrial and Mixed Employment. All lots or development sites in the AI, M-1, M-2, M-3, M-4, and M-E districts shall have no interior yards where said lots or development sites abut property lines of commercially or industrially zoned property. When interior lot lines of said districts are common with property zoned residentially, interior yards of not less than 10 feet shall be required opposite the residential districts.***

Finding: According to the application materials (Attachment 1), the proposed project will expand an existing manufacturing building on a property in the M-1 district.

The adjacent properties to the north, south, and east of the subject property are located outside of the City of Newberg and within Yamhill County's Very Low-Density Residential zone. The adjacent properties to the north, south, and east are occupied by residential dwellings. The preliminary site plan (Attachment 1) indicates that the proposed project will be more than 20 feet from the northern, southern, and eastern property lines respectively. Because the proposed expansion will be more than 20 feet from the northern, southern, and eastern property lines, the proposed project will exceed and comply with the 10-foot minimum requirement for interior yard setbacks.

The criterion is met.

15.410.050 Special setback requirements to planned rights-of-way.

A. Yard Requirements for Property Abutting Partial or Future Street Rights-of-Way.

1. Except as provided in subsection (A)(2) of this section, no building shall be erected on a lot which abuts a street having only a portion of its required width dedicated, unless the yards provided and maintained in connection with such building have a width and/or depth needed to complete the street width plus the width and/or depths of the yards required on the lot by this code.

2. Where a comprehensive plan street design or a future street plan exists, the placement of buildings and the establishment of yards where required by this code shall relate to the future street boundaries as determined by said plans.

Finding: Because the subject property does not abut a partial or future street right-of-way, the criterion is not applicable.

B. Planned Street Right-of-Way Widths. Planned street right-of-way widths are established as indicated in subsection (C) of this section for the various categories of streets shown in the transportation system plan.

Finding: Because the subject property does not abut a partial or future street right-of-way, the criterion is not applicable.

C. A lot or parcel of land in any district adjoining a street for which the planned right-of-way width and alignment have been determined shall have a building setback line equal to the yard required in the district, plus a distance of:

1. Fifty feet from and parallel with the centerline of expressways.

2. Thirty-five feet from and parallel with the centerline of major and minor arterials.

3. Thirty feet from and parallel with the centerline of multifamily, commercial and industrial streets and single-family collector streets.

4. Thirty feet from and parallel with the centerline of single-family local streets.

5. Twenty-five feet from and parallel with the centerline of single-family hillside, cul-de-sacs and local streets which will never be extended more than 2,400 feet in length and which will have a relatively even division of traffic to two or more exits.

Exceptions to the above five classifications are shown in the transportation system plan.

Finding: Because the subject property does not abut a partial or future street right-of-way, the criterion is not applicable.

D. The centerline of planned streets shall be either the officially surveyed centerline or a centerline as on a precise plan. In the event of conflict between the two, the latter-described line shall prevail. In all other cases, a line midway between properties abutting the right-of-way shall be the centerline for the purposes of this code.

Finding: Because the subject property does not abut a partial or future street right-of-way, the criterion is not applicable.

15.410.060 Vision clearance setback.

The following vision clearance standards shall apply to all zones (see Appendix A, Figure 9)

[…]

B. At the intersection of a private drive and a street, a triangle formed by the intersection of the curb lines, each leg of the vision clearance triangle shall be a minimum of 25 feet in length.

Finding: According to the Applicant's preliminary site plan (Attachment 1), the site has two existing driveway connections to S Springbrook Road, a public right-of-way. The proposed project will not modify to the existing driveways or the existing vision clearance areas. The application materials show no obstructions being present in the vision clearance triangles formed by S Springbrook Road and the subject property's service drives.

The criterion is met.

C. Vision clearance triangles shall be kept free of all visual obstructions from two and one-half feet to nine feet above the curb line. Where curbs are absent, the edge of the asphalt or future curb location shall be used as a guide, whichever provides the greatest amount of vision clearance.

Finding: According to the Applicant's preliminary site plan (Attachment 1), the site has two existing driveway connections to S Springbrook Road, a public right-of-way. The proposed project will not modify to the existing driveways or the existing vision clearance areas. The application materials show no obstructions being present in the vision clearance triangles formed by S Springbrook Road and the subject property's service drives.

The criterion is met.

Chapter 15.415 Building and Site Design Standards

[…]

15.415.020 Building height limitation.

[…]

B. Commercial, Industrial and Mixed Employment.

1. ***In the C-1 district no main building or accessory building shall exceed 30 feet in height.***
2. ***In the AI, C-2, C-3, M-E, M-1, M-2, and M-3 districts there is no building height limitation, except, where said districts abut upon a residential district, the maximum permitted building height shall not exceed the maximum building height permitted in the abutting residential district for a distance of 50 feet from the abutting boundary.***
3. ***In the C-4 district, building height limitation is described in NMC 15.352.040(J)(1).***
4. ***In the M-E district within the riverfront overlay subdistrict, building height limitation is described in NMC 15.352.060.***

Finding: The proposed project will expand an existing manufacturing building on a property located in the M-1 district.

The properties that abut the project site to the north, south, and east are located outside of the City of Newberg and are in Yamhill County's Very Low-Density Residential zone. According to the Yamhill County Zoning Ordinance Section 502.06(G), the maximum building height for dwellings is 35 feet and for other buildings is 45 feet.

According to the application materials (Attachment 1), the expanded building will match the height of the existing structure, which is ±19 tall. Because the proposed structure will be less than 35 feet in height, it will not exceed the maximum allowable height of the abutting residential areas.

The criterion is met.

[…]

15.415.040 Public access required.

No building or structure shall be erected or altered except on a lot fronting or abutting on a public street or having access to a public street over a private street or easement of record approved in accordance with provisions contained in this code. New private streets may not be created to provide access except as allowed under NMC 15.332.020(B)(24), 15.336.020(B)(8), and in the M-4 zone. Existing private streets may not be used for access for new dwelling units, except as allowed under NMC 15.405.030. No building or structure shall be erected or altered without provisions for access roadways as required in the Oregon Fire Code, as adopted by the city.

Finding: The subject property is already improved and possesses access to a public right-of-way. As shown on the preliminary plans (Attachment 1), the development site has two existing driveway connections to S Springbrook Road. The proposed project includes improvements to a drive aisle and off-street parking area which connect to the existing driveways. Because the on-site parking and circulation connect to the existing driveways leading onto S Springbrook Road, the site has access to a public street.

This criterion is met.

Chapter 15.420 Landscaping and Outdoor Areas

15.420.010 Required minimum standards.

A. Private and Shared Outdoor Recreation Areas in Residential Developments.

1. Private Areas. Each ground-level living unit in a residential development subject to a design review plan approval shall have an accessible outdoor private space of not less than 48 square feet in area. The area shall be enclosed, screened or otherwise designed to provide increased privacy for unit residents, their guests and neighbors.

2. Individual and Shared Areas. Usable outdoor recreation space shall be provided for the individual and/or shared use of residents and their guests in any multifamily residential development, as follows:

a. One- or two-bedroom units: 200 square feet per unit.

b. Three- or more bedroom units: 300 square feet per unit.

c. Storage areas are required in residential developments. Convenient areas shall be provided in residential developments for the storage of articles such as bicycles, barbecues, luggage, outdoor furniture, and the like. These shall be entirely enclosed.

3. In the AR airport residential district a five percent landscaping standard is required with the goal of "softening" the buildings and making the development "green" with plants, where possible. The existence of the runway, taxiway, and approach open areas already provide generally for the 15 percent requirement.

Finding: Because the proposed project is not a residential development, the criteria are not applicable.

B. Required Landscaped Area. The following landscape requirements are established for all developments except single-family dwellings:

1. ***A minimum of 15 percent of the lot area shall be landscaped; provided, however, that computation of this minimum may include areas landscaped under subsection (B)(3) of this section. Development in the C-3 (central business district) zoning district and M-4 (large lot industrial) zoning district is exempt from the 15 percent landscape area requirement of this section. Additional landscaping requirements in the C-4 district are described in NMC 15.352.040(K). In the AI airport industrial district, only a five percent landscaping standard is required with the goal of "softening" the buildings and making the development "green" with plants, where possible. The existence of the runway, taxiway, and approach open areas already provide generally for the 15 percent requirement. Developments in the AI airport industrial district with a public street frontage shall have said minimum landscaping between the front property line and the front of the building.***
2. ***All areas subject to the final design review plan and not otherwise improved shall be landscaped.***
3. ***The following landscape requirements shall apply to the parking and loading areas:***
    a. ***A parking or loading area providing 10 or more spaces shall be improved with defined landscaped areas totaling no less than 25 square feet per parking space.***
    b. ***A parking, loading area, or drive aisle which runs adjacent to a property line shall be separate from any lot line adjacent to a street by a landscaped strip at least 10 feet in interior width or the width of the required yard, whichever is greater, and any other lot line by a landscaped strip of at least five feet in interior width. See subsections (B)(3)(c) and (d) of this section for material to plant within landscape strips.***
    c. ***A landscaped strip separating a parking area, loading area, or drive aisle from a street shall contain street trees spaced as appropriate to the species, not to exceed 50 feet apart on average, and a combination of shrubs and ground cover, or lawn. This landscaping shall provide partial screening of these areas from the street.***
    d. ***A landscaped strip separating a parking area, loading area, or drive aisle from an interior lot line shall contain any combination of trees, shrubs, ground cover or lawn. Plant material shall be selected from at least two different plant***

material groups (example: trees and shrubs, or lawn and shrubs, or lawn and trees and shrubs).

e. Landscaping in a parking or loading area shall be located in defined landscaped areas which are uniformly distributed throughout the parking or loading area.

f. Landscaping areas in a parking lot, service drive or loading area shall have an interior width of not less than five feet.

g. All multifamily, institutional, commercial, or industrial parking areas, service drives, or loading zones which abut a residential district shall be enclosed with a 75 percent opaque, site-obscuring fence, wall or evergreen hedge along and immediately adjacent to any interior property line which abuts the residential district. Landscape plantings must be large enough to provide the required minimum screening requirement within 12 months after initial installation. Adequate provisions shall be maintained to protect walls, fences or plant materials from being damaged by vehicles using said parking areas.

h. An island of landscaped area shall be located to separate blocks of parking spaces. At a minimum, one deciduous shade tree per seven parking spaces shall be planted to create a partial tree canopy over and around the parking area. No more than seven parking spaces may be grouped together without an island separation unless otherwise approved by the director based on the following alternative standards:

i. Provision of a continuous landscaped strip, with a five-foot minimum width, which runs perpendicular to the row of parking spaces (see Appendix A, Figure 13).

ii. Provision of tree planting landscape islands, each of which is at least 16 square feet in size, and spaced no more than 50 feet apart on average, within areas proposed for back-to-back parking (see Appendix A, Figure 14).

4. Trees, Shrubs and Ground Covers. The species of street trees required under this section shall conform to those authorized by the city council through resolution. The director shall have the responsibility for preparing and updating the street tree species list which shall be adopted in resolution form by the city council.

a. Arterial and minor arterial street trees shall have spacing of approximately 50 feet on center. These trees shall have a minimum two-inch caliper tree trunk or stalk at a measurement of two feet up from the base and shall be balled and burlapped or boxed.

b. Collector and local street trees shall be spaced approximately 35 to 40 feet on center. These trees shall have a minimum of a one and one-half or one and three-fourths inch tree trunk or stalk and shall be balled and burlapped or boxed.

c. *Accent Trees. Accent trees are trees such as flowering cherry, flowering plum, crab-apple, Hawthorne and the like. These trees shall have a minimum one and one-half inch caliper tree trunk or stalk and shall be at least eight to 10 feet in height. These trees may be planted bare root or balled and burlapped. The spacing of these trees should be approximately 25 to 30 feet on center.*

d. *All broad-leafed evergreen shrubs and deciduous shrubs shall have a minimum height of 12 to 15 inches and shall be balled and burlapped or come from a two-gallon can. Gallon-can size shrubs will not be allowed except in ground covers. Larger sizes of shrubs may be required in special areas and locations as specified by the design review board. Spacing of these shrubs shall be typical for the variety, three to eight feet, and shall be identified on the landscape planting plan.*

e. *Ground Cover Plant Material. Ground cover plant material such as greening juniper, cotoneaster, minor Bowles, English ivy, hypericum and the like shall be one of the following sizes in specified spacing for that size:*

Gallon cans	*3 feet on center*
4" containers	*2 feet on center*
2-1/4" containers	*18" on center*
Rooted cuttings	*12" on center*

5. *Automatic, underground irrigation systems shall be provided for all areas required to be planted by this section. The director shall retain the flexibility to allow a combination of irrigated and nonirrigated areas. Landscaping material used within nonirrigated areas must consist of drought- resistant varieties. Provision must be made for alternative irrigation during the first year after initial installation to provide sufficient moisture for plant establishment.*

6. *Required landscaping shall be continuously maintained.*

7. *Maximum height of tree species shall be considered when planting under overhead utility lines.*

8. *Landscaping requirements and standards for parking and loading areas (subsection (B)(3) of this section) will apply to development proposals unless the institution has addressed the requirements and standards by an approved site development master plan. With an approved site development master plan, the landscape requirements will be reviewed through an administrative Type I review process.*

9. *In the M-4 zone, landscaping requirements and standards for parking and loading areas (subsection (B)(3) of this section) do not apply unless within 50 feet of a residential district.*

Finding: The subject property is a ±6.05-acre site that is situated in the M-1 district. Existing and proposed site improvements occupy ±3.35 acres (147,926 square feet) of the site.

1. **Minimum Landscaping**: According to the preliminary site plan ±17,212 square feet of the improved area is landscaped and an additional ±12,086 square feet will be provided as a part of this proposal. The total landscaped area (after improvement) is expected to be ±29,298 square feet, which is roughly 20 percent of the improved portion of the site. The criterion is met.
2. **All areas subject to the final design review plan and not otherwise improved shall be landscaped:** The application materials (Attachment 1) indicate that all proposed project areas not scheduled for other improvements will be landscaped. The criterion is met.
3. **Landscape requirements for parking and loading areas**:

    a. According to the application materials (Attachment 1), the subject site has 53 existing off-street parking spaces, and in accordance with this standard the parking and loading areas are required to have 1,650 square feet of landscaping. Based on the preliminary site plan and landscaping plan, the existing site and proposed improvements include more than ±10,000 square feet of landscaping in the parking and loading areas, which exceeds the minimum requirement. This criterion is met.

    b. As shown on the existing conditions plan (Attachment 1), the site's western property line abuts a public street, and the remaining property lines are shared with adjacent lots. The preliminary site plan shows that the parking area is separated from S Springbrook Road by a ±25 to 59-foot landscape strip and the landscape area along the right of way includes a mix of lawn, trees, and shrubs. The drive aisle and parking area is setback at least 25 feet from the southern property line, 44 feet from the northern property line, and ±340 feet from the eastern property line. The criterion is met.

    c. The preliminary site plan shows that the parking area is separated from S Springbrook Road by a ±25 to 59-foot existing landscape strip. The landscape area along the right of way includes a mix of lawn, trees, and shrubs. This criterion is met.

    d. NMC 15.420.010(B)(3) outlines the requirements for landscaping parking areas. According to the preliminary site plan (Attachment 1), the expanded parking area will include a travel aisle that wraps around the building adjacent to the interior property lines which provides access to two separate areas parking areas. Each area will include seven parking spaces. The northern spaces will be north of the drive aisle facing the northern property line (away from the building). The parking spaces south of the building will be located north of the travel aisle facing the building. The Applicant has provided a preliminary planting plan which shows the area around each section of parking spaces will be landscaped. According to

NMC 15.420.010(B)(3)(d) a landscape strip separating a parking area, loading area, or drive aisle from an interior lot line shall contain any combination of trees, shrubs, ground cover, or lawn.

Because the plantings in the landscape strip south of the proposed project which separates the parking area from an interior lot line is depicts planting only with one type of landscape material (tall fescue blend), prior to issuance of building permits the Applicant shall be required to submit an updated landscaping plan containing at least two different plant material groups (example: trees and shrubs, or lawn and shrubs, or lawn and trees and shrubs) within landscape strip south of the proposed project area which separates the parking area from an interior lot line. The criterion will be met if the aforementioned condition of approval is adhered to.

e. The preliminary site plan and landscaping plan (Attachment 1) show a distribution of several existing and proposed landscaping areas in the parking lot and service drive areas throughout the subject area including those that separate parking service drive areas from the existing street, abutting property, and the on-site structure. The criterion is met.

f. This application will expand an existing industrial structure. According to the preliminary site plan (Attachment 1), the existing and new landscape areas that are within the parking area, service drive, or loading area, are designed to be at least five feet in width. This criterion is met.

g. The subject property is located in the M-1 district. Abutting properties to the north, south, and east are within Yamhill County's Very Low-Density Residential zone. Because the subject property's proposed parking area and drive aisle on the south side of the building addition are located next to the property's southern interior lot line which abuts residential uses, prior to building permit approval the Applicant shall submit an updated site plan and updated landscape plan showing a 75 percent opaque, site-obscuring fence, wall or evergreen hedge between the proposed (i.e. new) parking area on the south side of the building addition and the interior property line to the south of the subject property. If landscape plantings are utilized, the plantings must be large enough to provide the required minimum screening requirement within 12 months after initial installation. Adequate provisions shall be maintained to protect walls, fences or plant materials from being damaged by vehicles using said parking areas. This criterion will be met if the aforementioned condition of approval is adhered to.

h. This application involves the expansion of an existing industrial site. The proposal plans to expand the existing parking are by ±14 spaces. The new parking blocks include two separate areas with seven parking stalls. One is planned to be located south of the expanded building area and one will be located north of it. Each section of parking spaces includes a dedicated landscape area. This criterion is met.

4. **Trees, Shrubs and Ground Covers**: Because the subject property has existing street trees along its S Springbrook Road frontage and is proposing no changes to this portion of the subject property, this criterion is not applicable.
5. **Irrigation systems:** The landscape plan (Attachment 1) indicates that all depicted areas will be maintained using an automatic irrigation system. The criterion is met.
6. **Required landscaping maintenance:** The application materials include a preliminary site plan, landscaping plan, and planting schedule that the Applicant shall be responsible for maintaining pursuant to this code section.
7. **Maximum height of tree species:** The subject property does not contain overhead utility lines. The criterion is not applicable.
8. **Landscaping requirements for parking and loading areas:** Because the proposed project is not part of an approved site development master plan, this criterion is not applicable.
9. **Landscaping requirements and standards for parking and loading areas in the M-4 zone:** Because the subject property is located in the M-1 zoning district, this criterion is not applicable.

The criteria will be met if the aforementioned conditions of approval are adhered to.

C. Installation of Landscaping. All landscaping required by these provisions shall be installed prior to the issuance of occupancy permits, unless security equal to 110 percent of the cost of the landscaping as determined by the director is filed with the city, insuring such installation within six months of occupancy. A security – cash, certified check, time certificates of deposit, assignment of a savings account, bond or such other assurance of completion as shall meet with the approval of the city attorney – shall satisfy the security requirements. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the director, the security may be used by the city to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the city shall be returned to the applicant.

Finding: Because the proposed project requires the installation of landscaping, the Applicant shall install all required landscaping prior to the issuance of occupancy permits, unless security equal to 110 percent of the cost of the landscaping as determined by the director is filed with the city, insuring such installation within six months of occupancy.

The criterion will be met if the aforementioned condition of approval is adhered to.

15.420.020 Landscaping and amenities in public rights-of-way.

A. Pedestrian Space Landscaping. Pedestrian spaces shall include all sidewalks and medians used for pedestrian refuge. Spaces near sidewalks shall provide plant material for cooling and dust control, and street furniture for comfort and safety, such as benches, waste receptacles and pedestrian-scale lighting. These spaces should be

designed for short-term as well as long-term use. Elements of pedestrian spaces shall not obstruct sightlines and shall adhere to any other required city safety measures. Medians used for pedestrian refuge shall be designed for short-term use only with plant material for cooling and dust control, and pedestrian-scale lighting. The design of these spaces shall facilitate safe pedestrian crossing with lighting and accent paving to delineate a safe crossing zone visually clear to motorists and pedestrians alike.

Finding: The subject site's western property boundary has frontage along S Springbrook Road. ODOT completed frontage improvements along the site's frontage in 2017 as a part of the Newberg-Dundee Bypass project. The existing frontage includes a ±12-foot-wide pedestrian path and a ±8-foot-wide landscape area. Because the subject property's frontage is already improved and will not be modified as part of the property project, no additional improvements are required.

This criterion is met.

B. Planting Strip Landscaping. All planting strips shall be landscaped. Planting strips provide a physical and psychological buffer for pedestrians from traffic with plant material that reduces heat and dust, creating a more comfortable pedestrian environment. Planting strips shall have different arrangements and combinations of plant materials according to the frequency of on-street parking (see Appendix A, Figures 18 and 19).

Finding: The subject site's western property boundary has frontage along S Springbrook Road. ODOT completed frontage improvements along the site's frontage in 2017 as a part of the Newberg-Dundee Bypass project. The existing frontage includes a ±12-foot-wide pedestrian path, ±8-foot-wide landscape area, and existing street trees. Because the subject property's frontage is already improved and will not be modified as part of the property project, no additional improvements are required.

This criterion is met.

Chapter 15.425 Exterior Lighting

15.425.020 Applicability and exemptions.

A. Applicability. Outdoor lighting shall be required for safety and personal security in areas of assembly, parking, and traverse, as part of multifamily residential, commercial, industrial, public, recreational and institutional uses. The applicant for any Type I or Type II development permit shall submit, as part of the site plan, evidence that the proposed outdoor lighting plan will comply with this section. This information shall contain but not be limited to the following:

1. The location, height, make, model, lamp type, wattage, and proposed cutoff angle of each outdoor lighting fixture.

2. Additional information the director may determine is necessary, including but not limited to illuminance level profiles, hours of business operation, and percentage of site dedicated to parking and access.

3. ***If any portion of the site is used after dark for outdoor parking, assembly or traverse, an illumination plan for these areas is required. The plan must address safety and personal security.***

Finding: The application materials (Attachment 1) indicate that the project will install:

- W34-150L Wall Pack Luminaire (Unshielded LED, 139W, and 18,182 lumens)
- WL20LED Wall Light Luminaire (Unshielded LED, 20W, and 1,788 lumens)

The application materials do not include information about the location of proposed lighting within the proposed project. Because the application materials do not indicate where the proposed lighting will be installed, prior to building permit approval, the Applicant shall submit a lighting plan or revised site plan that specifies the location of any proposed light fixtures, fixture type, and detailed specification.

The criteria will be met if the aforementioned condition of approval is adhered to.

Chapter 15.430 Underground Utility Installation

A. All new utility lines, including but not limited to electric, communication, natural gas, and cable television transmission lines, shall be placed underground. This does not include surface-mounted transformers, connections boxes, meter cabinets, service cabinets, temporary facilities during construction, and high-capacity electric lines operating at 50,000 volts or above.

Finding: There are no overhead utility lines along the project site's frontage.

The submitted plans do show a new electric service to the proposed building. Any new service connection to the property is required to be undergrounded. See NMC 15.430.010 for additional requirements and exception provisions.

The criterion will be met if the aforementioned condition of approval is adhered to.

B. Existing utility lines shall be placed underground when they are relocated, or when an addition or remodel requiring a Type II design review is proposed, or when a developed area is annexed to the city.

Finding: There are no overhead utility lines along the project site's frontage. Because the subject property does not have overhead utilities and proposed project does not request the addition of overhead utilities, the criterion is not applicable.

C. The director may make exceptions to the requirement to underground utilities based on one or more of the following criteria:

1. ***The cost of undergrounding the utility is extraordinarily expensive.***
2. ***There are physical factors that make undergrounding extraordinarily difficult.***
3. ***Existing utility facilities in the area are primarily overhead and are unlikely to be changed.***

Finding: There are no overhead utility lines along the project site's frontage. Because the subject property does not have overhead utilities and proposed project does not request the addition of overhead utilities, the criterion is not applicable.

Article I. Off-Street Parking Requirements

Chapter 15.440 Off-Street Parking, Bicycle Parking and Private Walkways

15.440.010 Required off-street parking

A. Off-street parking shall be provided on the lot or development site for all R-1, C-1, M-1, M-2 and M-3 zones. In all other zones, the required parking shall be on the lot or development site or within 400 feet of the lot or development site which the parking is required to serve. All required parking must be under the same ownership as the lot or development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the lot or development site.

1. In cases where the applicant is proposing off-street parking, refer to subsection (F) of this section for the maximum number of parking spaces.

Finding: This application involves the expansion of an existing manufacturing building on a property within the M-1 District. Pursuant to NMC 15.303, light manufacturing is permitted to use in the M-1 district. According to the application materials (Attachment 1), the proposed project will result in 67 total off-street parking spaces being located on the subject property.

According to the application materials (Attachment 1), the building will total ±28,080 square feet in size after the expansion. Pursuant to NMC 15.440.030, the minimum required parking spaces for permitted uses in the M-1 district is one space per 500 square feet of building. Based on that calculation, the site is required to have a minimum of 56 off-street parking spaces. Because the proposed project will include more than 56 parking spaces, this minimum number of parking spaces will be provided to serve the ongoing use.

The criterion is met.

[…]

F. Maximum Number of Off-Street Automobile Parking Spaces. The maximum number of off-street automobile parking spaces allowed per site equals the minimum number of required spaces, pursuant to NMC 15.440.030, multiplied by a factor of:

1. One and one-fifth spaces for uses fronting a street with adjacent on-street parking spaces; or

2. One and one-half spaces for uses fronting no street with adjacent on-street parking; or

3. A factor determined according to a parking analysis.

Finding: This application involves the expansion of an existing manufacturing building on a property within the M-1 District. Pursuant to NMC 15.303, light manufacturing is permitted to use in the M-1 district. According to the application materials (Attachment 1), the proposed project will result in 67 total off-street parking spaces on the subject property.

According to the application materials (Attachment 1), the building will total ±28,080 square feet in size after the expansion. Pursuant to NMC 15.440.030, the minimum required parking spaces

for permitted uses in the M-1 district is one space per 500 square feet of building. Based on that calculation, the site is required to have a minimum of 56 off-street parking spaces. The maximum parking requirements for sites that have frontage where no on-street parking is available is determined by multiplying the required minimum by 1.5. The subject site has a frontage on S Springbrook Road, which does not have on-street parking available. Multiplying 56 by 1.5 results in a maximum of 84 off-street parking spaces that are allowed on the site.

Because the proposed project will provide less than 84 parking spaces, the maximum number of parking spaces will not be exceeded.

The criterion is met.

15.440.020 Parking area and service drive design

A. All public or private parking areas, parking spaces, or garages shall be designed, laid out and constructed in accordance with the minimum standards as set forth in NMC 15.440.070.

Finding: See findings for NMC 15.440.070 elsewhere in this staff report.

B. Groups of three or more parking spaces, except those in conjunction with a single-family detached dwelling, duplex dwelling, triplex dwelling, quadplex dwelling, townhouse dwelling or cottage cluster project on a single lot, shall be served by a service drive so that no backward movement or other maneuvering of a vehicle within a street, other than an alley, will be required. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety in traffic access and egress and maximum safety of pedestrian and vehicular traffic on the site, but in no case shall two-way and one-way service drives be less than 20 feet and 12 feet, respectively. Service drives shall be improved in accordance with the minimum standards as set forth in NMC 15.440.060.

Finding: The existing parking area includes two driveways that allow for vehicle ingress and egress via S Springbrook Road. The proposed service drive and parking areas located to the north, east and western portion of the proposed addition will be approximately 15 feet in width at the narrowest dimension. Because the proposed service drive areas will not require maneuvering in a public right-of-way and will also be one-way and more than 12 feet in width, the proposed project meets the minimum service drive requirements for groupings of three or more parking spaces.

The criterion is met.

C. Gates. A private drive or private street serving as primary access to more than one dwelling unit shall not be gated to limit access, except as approved by variance.

Finding: Because the proposed project does not propose to add a gate to the subject property, the criterion is not applicable.

D. In the AI airport industrial district and AR airport residential district, taxiways may be used as part of the service drive design where an overall site plan is submitted that shows how the circulation of aircraft and vehicles are safely accommodated, where security fences are located, if required, and is approved by the fire marshal, planning director, and public works director. The following submittal must be made:

1. A drawing of the area to be developed, including the probable location, height, and description of structures to be constructed; the location and description of a security fence or gate to secure the aircraft operations areas of off-airport property from the other nonsecured pedestrian/auto/truck areas of on-airport property; the proposed location of the proposed taxiway access in accordance with FAA specifications (refer to Federal Aviation Administration Advisory Circular No. 150/5300-13 regarding airport design, and AC/5370-10B regarding construction standards for specifications that should be used as a guideline); and the identification of the vehicular traffic pattern area clearly separated from aircraft traffic. Once specific buildings have been designed, FAA Form 7460-1, Notice of Proposed Construction or Alteration, must be submitted to the City of Newberg, the private airport owner, and the FAA for airspace review.

Finding: Finding: Because the proposed project is not located in the AI airport industrial district nor the AR airport residential district, the criterion is not applicable.

15.440.030 Parking spaces required.

Use	***Minimum Parking Spaces Required***
Industrial Types	
Except as specifically mentioned herein, industrial uses listed as permitted in the M districts: M-1, M-2, M-3, and M-4	***1 for each 500 sq. ft. of gross floor area***

Finding: This application involves the expansion of an existing manufacturing building on a property within the M-1 District. Pursuant to NMC 15.303, light manufacturing is permitted to use in the M-1 district. According to the application materials (Attachment 1), the proposed project will result in 67 total off-street parking spaces being located on the subject property.

According to the application materials (Attachment 1), the building will total ±28,080 square feet in size after the expansion. The minimum required parking spaces for permitted uses in the M-1 district is one space per 500 square feet of building. Based on that calculation, the site is required to have a minimum of 56 off-street parking spaces. Because the proposed project will include more than 56 parking spaces, this minimum number of parking spaces will be provided to serve the ongoing use.

The criterion is met.

15.440.040 Parking requirements for uses not specified.

The parking space requirements for buildings and uses not set forth herein shall be determined by the director through a Type I procedure. Such determination shall be based upon the requirements for the most comparable building or use specified herein. [Ord. 2451, 12-2-96. Code 2001 § 151.613.]

Finding: The existing and ongoing use of the subject property will be light manufacturing which is considered an industrial use. The current tenant, ARE Manufacturing Inc, operates a contract machine shop that specializes in manufacturing machined components. The list of services

provided on the subject property includes, CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM.

Pursuant to NMC 15.303.506 and 15.305.020, light manufacturing is identified as an industrial use. Because the subject property's existing and ongoing use is light manufacturing which is an industrial use not otherwise listed NMC 15.440.030, proposed project was evaluated for its minimum parking spaces requirement of listed under "Except as specifically mentioned herein, industrial uses listed as permitted in the M districts: M-1, M-2, M-3, and M-4".

Because the proposed project's minimum parking requirements were applicable pursuant to NMC 15.440.030, this code section (NMC 15.440.040) is not applicable.

The criterion is not applicable.

15.440.050 Common facilities for mixed uses.

A. In the case of mixed uses, the total requirements for off-street parking spaces shall be the sum of the requirements for the various uses. Off-street parking facilities for one use shall not be considered as providing parking facilities for any other use except as provided below.

Finding: The existing and ongoing use of the subject property will be light manufacturing which is considered an industrial use. The current tenant, ARE Manufacturing Inc, operates a contract machine shop that specializes in manufacturing machined components. The list of services provided on the subject property includes, CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM. Further, the Applicant has not requested consideration of joint uses of the parking facilities.

These various activities are considered part of a single use category – light manufacturing. Because no additional or complementary activities are proposed or were evaluated, the existing and ongoing uses do not qualify as mixed uses of the subject property's parking facilities.

The criterion is not applicable.

B. Joint Uses of Parking Facilities. The director may, upon application, authorize the joint use of parking facilities required by said uses and any other parking facility; provided, that:

1. The applicant shows that there is no substantial conflict in the principal operating hours of the building or use for which the joint use of parking facilities is proposed.

2. The parking facility for which joint use is proposed is no further than 400 feet from the building or use required to have provided parking.

3. The parties concerned in the joint use of off-street parking facilities shall evidence agreement for such joint use by a legal instrument approved by the city attorney as to form and content. Such instrument, when approved as conforming to the provisions of the ordinance, shall be recorded in the office of the county recorder and copies of the instrument filed with the director.

Finding: The existing and ongoing use of the subject property will be light manufacturing which is considered an industrial use by a single tenant. The current tenant, ARE Manufacturing Inc, operates a contract machine shop that specializes in manufacturing machined components. The list of services provided on the subject property includes, CNC milling and turning, CNC tube bending, welding, manual machining, laser marking, automatic sawing, vibratory finishing, powder coating, complete part finishing and assembly, CAD/CAM, and wire EDM. Further, the Applicant has not requested consideration of joint uses of the parking facilities.

Because the Applicant has not requested consideration of joint uses of the parking facilities and has not demonstrated how parking facilities could be used jointly with other parties, the proposed project is not considered a joint use parking facility.

The criteria are not applicable.

C. Commercial establishments within 200 feet of a commercial public parking lot may reduce the required number of parking spaces by 50 percent.

Finding: The existing and ongoing use of the subject property will be light manufacturing which is considered an industrial use. The subject property is located within the M-1 zoning district.

Because the subject property does not contain any commercial uses or establishments and is located more than 200 feet from a commercial public parking lot, it does not conform to the criterion's requirements for a reduction in the required number of parking spaces.

The criterion is not applicable.

15.440.060 Parking area and service drive improvements.

All public or private parking areas, outdoor vehicle sales areas, and service drives shall be improved according to the following:

A. All parking areas and service drives shall have surfacing of asphaltic concrete or Portland cement concrete or other hard surfacing such as brick or concrete pavers. Other durable and dust-free surfacing materials may be approved by the director for infrequently used parking areas. All parking areas and service drives shall be graded so as not to drain stormwater over the public sidewalk or onto any abutting public or private property.

Finding: The application materials (Attachment 1) indicate that the existing service drive and parking areas are paved, and that all proposed parking and service drive areas will also be paved. Because the existing and proposed areas will be paved, the requirement to provide hard surface materials in parking and service areas is met.

Regarding grading and drainage of stormwater, the Applicant submitted a preliminary stormwater memorandum and facility design prepared by Andrey Chernishov, PE of HBH Consulting Engineers. The Applicant will be required to submit a final stormwater management plan and facility design with the building permit application.

This criterion will be met if the aforementioned condition of approval is adhered to.

B. All parking areas shall be designed not to encroach on public streets, alleys, and other rights-of-way. Parking areas shall not be placed in the area between the curb and sidewalk or, if there is no sidewalk, in the public right-of-way between the curb and the property line. The director may issue a permit for exceptions for unusual circumstances where the design maintains safety and aesthetics.

Finding: The proposed project will add 14 additional parking areas to locations north and south of the building addition. Both proposed parking locations are located between the building addition and an interior lot line. Because the propose parking does not occur in the area between the curb and sidewalk of the subject property, the proposed parking meets the code requirement.

The criterion is met.

C. All parking areas, except those required in conjunction with a single-family detached, duplex, triplex, quadplex or townhouse dwelling, or cottage cluster project, shall provide a substantial bumper which will prevent cars from encroachment on abutting private and public property.

Finding: The proposed project will add 14 additional parking areas to locations north and south of the building addition. Both proposed parking locations are located between the building addition and an interior lot line. Because neither of the proposed parking locations will be adjacent to subject property's lot lines, the proposed parking will not encroach on abutting private or public property.

The criterion is met.

D. All parking areas, including service drives, except those required in conjunction with single-family detached, duplex, triplex, quadplex or townhouse dwellings or cottage cluster projects, shall be screened in accordance with NMC 15.420.010(B).

Finding: See findings for NMC 15.420.010(B) which are provided elsewhere in this staff report.

E. Any lights provided to illuminate any public or private parking area or vehicle sales area shall be so arranged as to reflect the light away from any abutting or adjacent residential district.

Finding: The application materials (Attachment 1) indicate that the project will install:

- W34-150L Wall Pack Luminaire (Unshielded LED, 139W, and 18,182 lumens)
- WL20LED Wall Light Luminaire (Unshielded LED, 20W, and 1,788 lumens)

The application materials do not include information about the location of proposed lighting within the proposed project. Because the application materials do not indicate where the proposed lighting will be installed, prior to building permit approval, the Applicant shall submit a lighting plan or revised site plan that specifies the location of any proposed light fixtures, fixture type, and detailed specification.

The criteria will be met if the aforementioned condition of approval is adhered to.

F. All service drives and parking spaces shall be substantially marked and comply with NMC 15.440.070.

Finding: See findings for NMC 15.440.070 which are provided elsewhere in this staff report.

G. Parking areas for residential uses shall not be located in a required front yard, except as follows:

1. Single-family detached, duplex, triplex, quadplex, and townhouse dwellings: parking is authorized in a front yard on a service drive which provides access to an improved parking area outside the front yard.

Finding: The existing and continued use on the subject property is light manufacturing which is considered an industrial use. Because the proposed project is not a residential use, the criterion is not applicable.

H. A reduction in size of the parking stall may be allowed for up to a maximum of 30 percent of the total number of spaces to allow for compact cars. For high turnover uses, such as convenience stores or fast-food restaurants, at the discretion of the director, all stalls will be required to be full-sized.

Finding: Because the proposed project has not requested use of compact parking stall sizing, the criterion is not applicable.

I. Affordable housing projects may use a tandem parking design, subject to approval of the community development director.

Finding: Because the proposed project is not related to affordable housing, the criterion is not applicable.

J. Portions of off-street parking areas may be developed or redeveloped for transit-related facilities and uses such as transit shelters or park-and-ride lots, subject to meeting all other applicable standards, including retaining the required minimum number of parking spaces.

Finding: Because the proposed project is not requesting installation of transit-related facility and/or uses, the criterion is not applicable.

15.440.070 Parking tables and diagrams.

The following tables provide the minimum dimensions of public or private parking areas:

Diagram 1

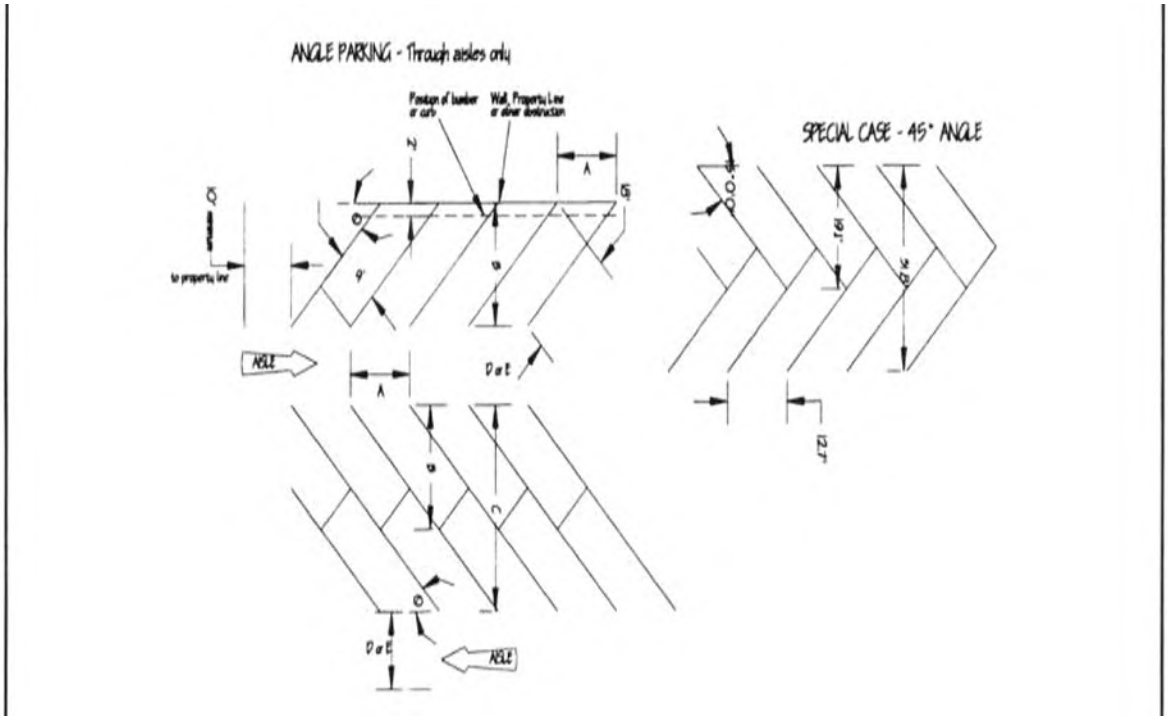
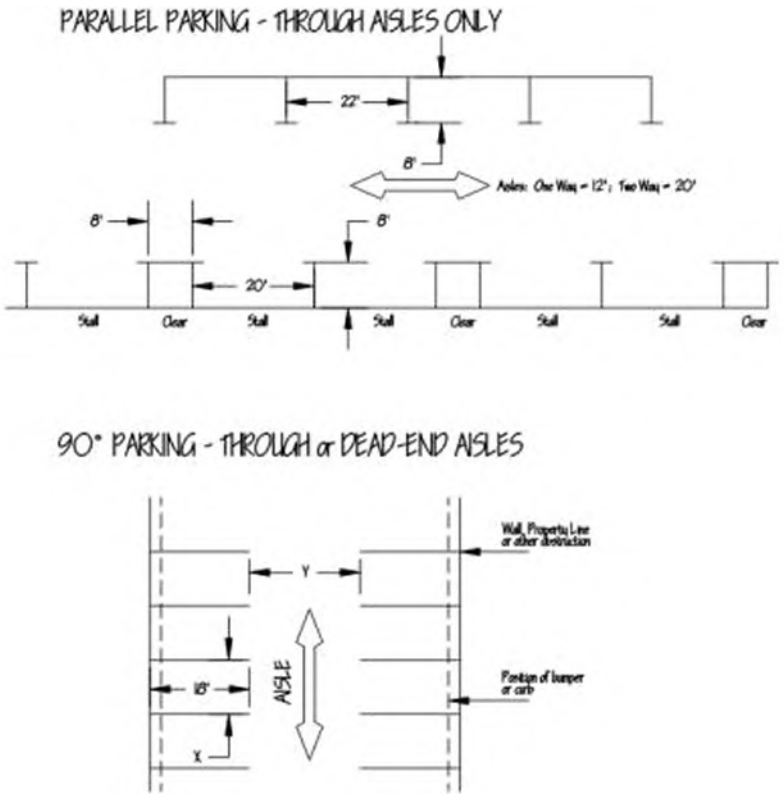


Table of Dimensions (In Feet)

Basic Stall			*Back to Back*	*Aisles*	
Angle – °	*A*	*B*	*C*	*D (One-Way)*	*E (Two-Way)*
30°	*18*	*16.8*	*25.8*	*12*	*20*
38°	*14.6*	*18.2*	*29.3*	*12*	*20*
45°	*12.7*	*19.1*	*31.8*	*12*	*20*
52°	*11.4*	*19.7*	*33.9*	*13*	*20*
55°	*11*	*19.9*	*34.6*	*14*	*20*
60°	*10.4*	*20.1*	*35.7*	*15*	*20*
70°	*9.6*	*20*	*36.9*	*18*	*20*
80°	*9.1*	*19.3*	*37*	*20*	*20*

Diagram 2

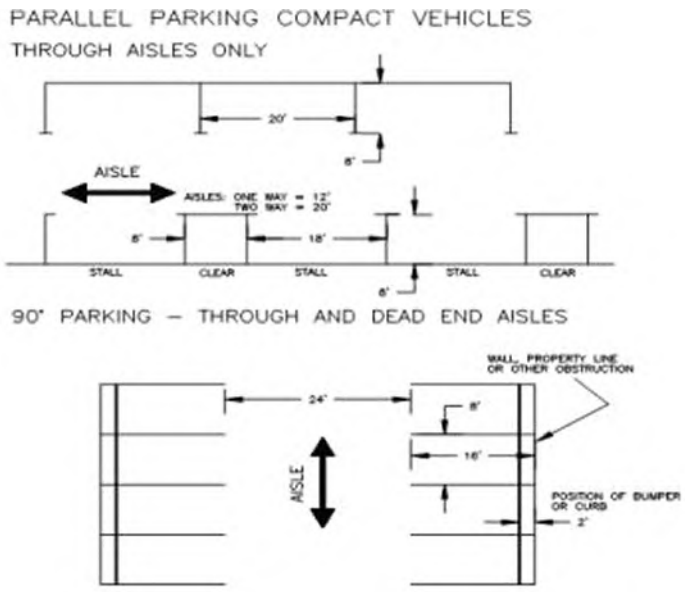


Notes:

1. ***Bumpers must be installed where paved areas abut street right-of-way (except at driveways).***
2. ***No stalls shall be such that cars must back over the property line to enter or leave stall.***
3. ***Stalls must be clearly marked and the markings must be maintained in good condition.***
4. ***The sketches show typical situations to illustrate the required standards. For further information or advice, contact the community development department at 537-1210.***

Table of Dimensions (In Feet) *Stall Width with Corresponding Aisle Width*						
Stall Width = X	***9***	***9.5***	***10***	***10.5***	***11***	***12***
Aisle Width = Y	***24***	***24***	***22***	***22***	***20***	***20***

Diagram 3



Notes:

1. ***Bumpers must be installed where paved areas abut street right-of-way (except at driveways).***
2. ***No stalls shall be such that cars must back over the property line to enter or leave stall.***
3. ***Stalls must be clearly marked and the markings must be maintained in good condition.***
4. ***The sketches show typical situations to illustrate the required standards. For further information or advice, contact the planning department.***

Finding: The application materials (Attachment 1) indicate that the proposed project will add 14 additional parking areas to locations north and south of the building addition. The parking spaces are located in two areas, accessed by a 20-foot-wide one-way drive aisle. The proposed project will install:

- seven 60-degree angled parking stalls that are 11 feet wide by 23 feet deep on the north side of the building addition, and
- seven 90-degree parking stall that are 9 feet wide by 18 feet deep on the south side of the building addition.

NMC 15.440.070 (Table of Dimensions) specifies that 60-degree angle parking stall have basic dimensions of 10.4 feet wide by 20.1 feet deep. NMC 15.440.070 (Diagram 2) specifics that a standard 90-degree parking stall have basic dimensions of 9 feet wide by 18 feet deep.

Because the proposed parking stalls are equal to or greater in size than the minimum requirements found in the Table of Dimensions and Diagram 2, the proposed parking stalls will meet the minimum dimensional requirements.

The criteria are met.

15.440.075 Residential garage standards.

A. Single-car garages for residential uses shall have a minimum inside width of 10 feet by 20 feet.

Finding: The existing and continued use on the subject property is light manufacturing which is considered an industrial use. Because the proposed project is not a residential use, the criterion is not applicable.

B. Two-car garages for residential uses shall have a minimum inside width of 20 feet by 20 feet.

Finding: The existing and continued use on the subject property is light manufacturing which is considered an industrial use. Because the proposed project is not a residential use, the criterion is not applicable.

C. Three-car garages for residential uses shall have a minimum inside width of 30 feet by 20 feet.

Finding: The existing and continued use on the subject property is light manufacturing which is considered an industrial use. Because the proposed project is not a residential use, the criterion is not applicable.

15.440.080 Off-street loading.

A. Buildings to be built or substantially altered which receive and distribute materials and merchandise by trucks shall provide and maintain off-street loading berths in sufficient number and size to adequately handle the needs of the particular use.

1. The following standards shall be used in establishing the minimum number of berths required:

Gross Floor Area of the Building in Square Feet	*No. of Berths*
Up to 10,000	*1*
10,000 and over	*2*

2. A loading berth shall contain a space 10 feet wide and 35 feet long and have a vertical clearance of 14 feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased.

3. Additional off-street loading requirements within the C-4 district are described in NMC 15.352.040(H)(7).

4. Where a facility includes an aircraft hangar, the off-street loading requirement is not required since loading may occur through the hangar doors.

Finding: The existing and continued use on the subject property is light manufacturing which is considered an industrial use. Because the proposed use of the subject property will not expand receipt and distribution of materials and merchandise, the criteria are not applicable.

B. The following provisions shall apply to off-street loading facilities:

1. The provision and maintenance of off-street loading space is a continuing obligation of the property owner. No building permit shall be issued until plans are presented that show property that is and will remain available for exclusive use as off-street loading space. The subsequent use of property for which the building permit is issued shall be conditional upon the unqualified continuance and availability of the amount of loading space required by this code. Should the owner or occupant of any building change the use to which the building is put, thereby increasing off-street loading requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until such time as the increased off-street loading requirements are met.

2. Owners of two or more buildings may agree to utilize jointly the same loading spaces when the hours of operation do not overlap; provided, that satisfactory legal evidence is presented to the city attorney in the form of deeds, leases or contracts to establish the joint use.

3. A plan drawn to scale, indicating how the off-street loading requirements are to be fulfilled, shall accompany an application for a building permit.

4. Design Requirements for Loading Areas.

a. Areas used for standing and maneuvering of vehicles shall have durable and dustless surfaces of asphaltic concrete or portland cement concrete, maintained adequately for all-weather use and so drained as to avoid flow of water across the sidewalks.

b. Loading areas adjacent to residential zones designed to minimize disturbance of residents.

c. Artificial lighting which may be provided shall be so deflected as not to shine or create glare in any residential zone or on any adjacent dwelling.

d. Access aisles shall be of sufficient width for all vehicular turning and maneuvering.

e. Vision clearance standards as identified in NMC 15.410.060 shall apply. [Ord. 2647, 6-5-06; Ord. 2564, 4-15-02; Ord. 2451, 12-2-96. Code 2001 § 151.617.]

Finding: Because an off-street loading berth is not required, the criterion is not applicable.

Article II. Bicycle Parking

[…]

15.440.100 Facility requirements.

Bicycle parking facilities shall be provided for the uses shown in the following table. Fractional space requirements shall be rounded up to the next whole number.

Use	*Minimum Number of Bicycle Parking Spaces Required*
New commercial, industrial, office, and institutional developments, including additions that total 4,000 square feet or more	***One bicycle parking space for every 10,000 square feet of gross floor area. In C-4 districts, two bicycle parking spaces, or one per 5,000 square feet of building area, must be provided, whichever is greater***

Finding: Pursuant to NMC 15.440.100, an expansion of an industrial building that exceeds 4,000 square feet is required to meet the minimum bike parking requirements of one space for every 10,000 square feet of gross floor area.

According to the application materials (Attachment 1), the building expansion will increase the floor area of the existing structure by 10,530 square feet. Therefore, bike parking is required.

The application materials (Attachment 1, Sheet C3) indicate that additional bike parking will be located adjacent (west) to the seven new parking stalls that will be added on the south side of the building addition.

The criterion is met.

15.440.110 Design.

A. Bicycle parking facilities shall consist of one or more of the following:

1. A firmly secured loop, bar, rack, or similar facility that accommodates locking the bicycle frame and both wheels using a cable or U-shaped lock.

2. An enclosed locker.

3. A designated area within the ground floor of a building, garage, or storage area. Such area shall be clearly designated for bicycle parking.

4. Other facility designs approved by the director.

Finding: The application materials (Attachment 1, Sheet C3) indicate that additional bike parking will be located adjacent (west) to the seven new parking stalls that will be added on the south side of the building addition.

Because the application materials do not specific the design of the bicycle parking facility to be installed, the applicant shall ensure that bicycle parking facility is installed prior to issuance of certificate of occupancy which consists of a firmly secured loop, bar, rack, or similar facility that accommodates locking the bicycle frame and both wheels using a cable or U-shaped lock; an enclosed locker; or other design approved by the City of Newberg's Community Development Director.

The criterion will be met of the aforementioned condition of approval is adhered to.

B. All bicycle parking spaces shall be at least six feet long and two and one-half feet wide. Spaces shall not obstruct pedestrian travel.

Finding: The application materials (Attachment 1, Sheet C3) indicate that additional bike parking will be located adjacent (west) to the seven new parking stalls that will be added on the south side of the building addition.

Because the application materials do not specific the design of the bicycle parking facility to be installed, the applicant shall install bicycle parking spaces that are at least six feet long and two and one-half feet wide, and which do not obstruct pedestrian travel.

C. All spaces shall be located within 50 feet of a building entrance of the development.

Finding: The application materials (Attachment 1, Sheet C3) indicate that additional bike parking will be located adjacent (west) to the seven new parking stalls that will be added on the south side of the building addition approximately 45 feet from a building entrance. Because the proposed bicycle parking facility will be located less than 50 feet from a building entrance, the space are located within the minimum requirement distance from a building entrance.

The criterion is met.

D. Required bicycle parking facilities may be located in the public right-of-way adjacent to a development subject to approval of the authority responsible for maintenance of that right-of-way.

Finding: Because the proposed bicycle facilities are located off-street and outside of the public right of way, the criterion is not applicable.

Article III. Private Walkways

[…]

15.440.130 Where required.

Private walkways shall be constructed as part of any development requiring Type II design review, including mobile home parks. In addition, they may be required as part of conditional use permits or planned unit developments. In the airport industrial (AI) district and residential (AR) district, on-site walks are not required in aircraft operations areas, such as parking aprons, taxiways, and runways.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

The existing structure was previously approved at a time when the requirements of NMC 15.440.130 were not in place. Because the proposed project modifies a limited portion of the existing structure and subject property and the addition of a private walkway would affect areas of the subject property that are unrelated to the proposed project (i.e., parking, drive aisles, on-site circulation patterns), the requirement to construct a private walkway is not applicable to the subject property for this project.

The criterion is not applicable.

15.440.140 Private walkway design.

A. All required private walkways shall meet the applicable building code and Americans with Disabilities Act requirements.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway design are not applicable.

The criterion is not applicable.

B. Required private walkways shall be a minimum of four feet wide.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway design are not applicable.

The criterion is not applicable.

C. Required private walkways shall be constructed of portland cement concrete or brick.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway construction materials are not applicable.

The criterion is not applicable.

D. Crosswalks crossing service drives shall, at a minimum, be painted on the asphalt or clearly marked with contrasting paving materials or humps/raised crossings. If painted striping is used, it should consist of thermoplastic striping or similar type of durable application.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway design are not applicable.

The criterion is not applicable.

E. At a minimum, required private walkways shall connect each main pedestrian building entrance to each abutting public street and to each other.

Finding: The proposed project will expand of an existing manufacturing building located in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway connections are not applicable.

The criterion is not applicable.

F. The review body may require on-site walks to connect to development on adjoining sites.

Finding: This application is for an expansion of an existing manufacturing building on a property in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

See finding for NMC 15.440.140. Because a private walkway is not required for the proposed project pursuant to NMC 15.440.140, criteria related private walkway connections to adjoining development sites are not applicable.

The criterion is not applicable.

G. The review body may modify these requirements where, in its opinion, the development provides adequate on-site pedestrian circulation, or where lot dimensions, existing building layout, or topography preclude compliance with these standards.

Finding: This application is for an expansion of an existing manufacturing building on a property in the M-1 district. The application materials (Attachment 1) do not identify a private walkway which connects the main building entrance to the public street.

The existing structure was previously approved at a time when the requirements of NMC 15.440.130 were not in place. The proposed project will add to the existing structure but will not significantly modify the use on the subject property. Because the proposed project modifies a limited portion of the existing structure and subject property and the addition of a private walkway would affect areas of the subject property that are unrelated to the proposed project (i.e., parking, drive aisles, overall circulation patterns), the requirement to construct a private walkway is not applicable to the subject property for this project.

See also finding for NMC 15.440.140.

The criterion is not applicable.

E. FINDINGS FOR PUBLIC IMPROVEMENT STANDARDS (NMC CHAPTER 15.505. PUBLIC IMPROVEMENT STANDARDS)

15.505.020 Applicability.

The provision and utilization of public facilities and services within the City of Newberg shall apply to all land developments in accordance with this chapter. No development shall be approved unless the following improvements are provided for prior to occupancy or operation, unless future provision is assured in accordance with NMC 15.505.030(E).

Finding: All improvements reviewed under this application are identified in the NMC 15.505 section specific to them and are conditioned to comply with the Public Works Design and Construction Standards in those sections.

This criterion is met.

A. Public Works Design and Construction Standards. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall comply with the requirements of the most recently adopted Newberg public works design and construction standards.

Finding: The submitted plans do not include improvements within the right-of-way or to be maintained by the city. The stormwater improvements require city approval. The Applicant shall submit final plans for the stormwater improvements which comply with the requirements of the most recently adopted Newberg Public Works Design and Construction Standards.

This criterion will be met if the aforementioned condition of approval is adhered to.

B. Street Improvements. All projects subject to a Type II design review, partition, or subdivision approval must construct street improvements necessary to serve the development.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. The Applicant is not proposing street improvements. None are required to serve the development.

This criterion is not applicable.

C. Water. All developments, lots, and parcels within the City of Newberg shall be served by the municipal water system as specified in Chapter 13.15 NMC.

Finding: The existing lot is served by a 14-inch public water line, a meter, and a fire hydrant along the frontage.

This criterion is met.

D. Wastewater. All developments, lots, and parcels within the City of Newberg shall be served by the municipal wastewater system as specified in Chapter 13.10 NMC.

Finding: This lot is not served by the public wastewater system. A septic system has been approved to remain by the City Engineer as the closest wastewater connection is too far away to make the extension of that line proportional to the impacts of the proposed project.

This criterion is not applicable.

E. Stormwater. All developments, lots, and parcels within the City of Newberg shall manage stormwater runoff as specified in Chapters 13.20 and 13.25 NMC.

Finding: The Applicant has submitted a preliminary stormwater memorandum prepared by Andrey Chernishov, PE of HBH Consulting Engineers. A final stormwater report and plan will be required with the building permit application.

This criterion will be met if the aforementioned condition of approval is adhered to.

F. Utility Easements. Utility easements shall be provided as necessary and required by the review body to provide needed facilities for present or future development of the area.

Finding: The Applicant submitted supplemental materials identifying two easements for utilities on the property. New easements are not proposed, and no new easements have been identified as needed.

This criterion is met.

G. City Approval of Public Improvements Required. No building permit may be issued until all required public facility improvements are in place and approved by the director, or are otherwise bonded for in a manner approved by the review authority, in conformance with the provisions of this code and the Newberg Public Works Design and Construction Standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: Any required public improvement permit(s) for this project must be submitted, approved, and issued prior to building permits being issued.

This criterion will be met if the aforementioned condition of approval is adhered to.

15.505.030 Street standards.

[…]

B. Applicability. The provisions of this section apply to:

1. The creation, dedication, and/or construction of all public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.

2. ***The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.***

3. ***The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way or easements.***

4. ***The designation of planter strips. Street trees are required subject to Chapter 15.420 NMC.***

5. ***Developments outside the city that tie into or take access from city streets.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed.

Because the proposed project constitutes new development in the City of Newberg as noted in sub-section 15.505.030(B)(1), NMC Section 15.505.030 is applicable to the proposed project.

C. ***Layout of Streets, Alleys, Bikeways, and Walkways. Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan. In areas where the transportation system plan or future street plans do not show specific transportation improvements, roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments for adjoining properties, unless it is found in the public interest to modify these patterns. Transportation improvements shall conform to the standards within the Newberg Municipal Code, the Newberg public works design and construction standards, the Newberg transportation system plan, and other adopted city plans.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

These requirements are not applicable.

D. ***Construction of New Streets. Where new streets are necessary to serve a new development, subdivision, or partition, right-of-way dedication and full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:***

1. ***The land abutting the opposite side of the new street is undeveloped and not part of the new development; and***

2. ***The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

These requirements are not applicable.

E. Improvements to Existing Streets.

1. All projects subject to partition, subdivision, or Type II design review approval shall dedicate right-of-way sufficient to improve the street to the width specified in subsection (G) of this section.

2. All projects subject to partition, subdivision, or Type II design review approval must construct a minimum of a three-quarter street improvement to all existing streets adjacent to, within, or necessary to serve the development. The director may waive or modify this requirement where the applicant demonstrates that the condition of existing streets to serve the development meets city standards and is in satisfactory condition to handle the projected traffic loads from the development. Where a development has frontage on both sides of an existing street, full street improvements are required.

3. In lieu of the street improvement requirements outlined in NMC 15.505.040(B), the review authority may elect to accept from the applicant monies to be placed in a fund dedicated to the future reconstruction of the subject street(s). The amount of money deposited with the city shall be 100 percent of the estimated cost of the required street improvements (including any associated utility improvements), and 10 percent of the estimated cost for inflation. Cost estimates used for this purpose shall be based on preliminary design of the constructed street provided by the applicant's engineer and shall be approved by the director.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to existing streets were proposed. None are required to mitigate the impacts of the development.

The criteria are not applicable.

F. Improvements Relating to Impacts. Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application.

Finding: No improvements to existing streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

G. Street Width and Design Standards.

1. Design Standards. All streets shall conform with the standards contained in Table 15.505.030(G). Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (G)(2) through (10) of this section.

Table 15.505.030(G) Street Design Standards

Type of Street	*Right-of-Way Width*	*Curb-to-Curb Pavement Width*	*Motor Vehicle Travel Lanes*	*Median Type*	*Striped Bike Lane (Both Sides)*	*On-Street Parking*
Arterial Streets						
*Expressway***	*ODOT*	*ODOT*	*ODOT*	*ODOT*	*ODOT*	*ODOT*
Major arterial	*95 – 100 feet*	*74 feet*	*4 lanes*	*TWLTL or median**	*Yes*	*No**
Minor arterial	*69 – 80 feet*	*48 feet*	*2 lanes*	*TWLTL or median**	*Yes*	*No**
Collectors						
Major	*57 – 80 feet*	*36 feet*	*2 lanes*	*None**	*Yes*	*No**
Minor	*61 – 65 feet*	*40 feet*	*2 lanes*	*None**	*Yes**	*Yes**
Local Streets						
Local residential	*54 – 60 feet*	*32 feet*	*2 lanes*	*None*	*No*	*Yes*
Limited residential, parking both sides	*44 – 50 feet*	*28 feet*	*2 lanes*	*None*	*No*	*Yes*
Limited residential, parking one side	*40 – 46 feet*	*26 feet*	*2 lanes*	*None*	*No*	*One side*
Local commercial/ industrial	*55 – 65 feet*	*34 feet*	*2 lanes*	*None**	*No**	*Yes**

** May be modified with approval of the director. Modification will change overall curb-to-curb and right-of-way width. Where a center turn lane is not required, a landscaped median shall be provided instead, with turning pockets as necessary to preserve roadway functions.*

*** All standards shall be per ODOT expressway standards.*

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

2. ***Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet.***

    a. ***Exception.***

        i. ***Minimum lane width of 11 feet along S River Street from E First Street to E Fourteenth Street.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

3. ***Bike Lanes. Striped bike lanes shall be a minimum of six feet wide. Bike lanes shall be provided where shown in the Newberg transportation system plan.***

    a. ***Exception.***

        i. ***Minimum striped bike lane width of six feet with a one-foot wide buffer along S River Street from E First Street to the bypass.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

4. ***Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide.***

    a. ***Exception.***

        i. ***Minimum parking lane width of seven feet along S River Street from the bypass to E Fourteenth Street.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

5. ***Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

6. ***Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review authority, and only in consideration of the following factors:***

    a. ***The requirements of the fire chief shall be followed.***

    b. ***The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.***

    c. ***Use for through streets or looped streets is preferred over cul-de-sac streets.***

    d. ***Use for short blocks (under 400 feet) is preferred over longer blocks.***

    e. ***The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.***

    f. ***On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.***

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

7. ***Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.***

    a. ***Exception.***

        i. ***Twelve-foot-wide sidewalks, inclusive of the curb, with tree wells along S River Street from the bypass to E Fourteenth Street.***

        ii. ***Twelve-foot-wide shared-use path and four-foot buffer, inclusive of the curb, with tree wells along the east side of S River Street from the bypass to E Fourteenth Street.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No sidewalks were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

8. ***Planter Strips. Except where infeasible, a planter strip shall be provided between the sidewalk and the curb line, with a minimum width of five feet. This strip shall be landscaped in accordance with the standards in NMC 15.420.020. Curb-side sidewalks may be allowed on limited residential streets. Where curb-side sidewalks are allowed, the following shall be provided:***

    a. ***Additional reinforcement is done to the sidewalk section at corners.***

    b. ***Sidewalk width is six feet.***

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage.

This criterion is not applicable.

9. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.

Finding: An existing slope easement along the S Springbrook Road frontage is identified on the application materials provided.

This criterion is met.

10. Intersections and Street Design. The street design standards in the Newberg public works design and construction standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

11. The planning commission may approve modifications to street standards for the purpose of ingress or egress to a minimum of three and a maximum of six lots through a conditional use permit.

Finding: No modifications have been requested.

This criterion is not applicable.

H. Modification of Street Right-of-Way and Improvement Width. The director, pursuant to the Type II review procedures of Chapter 15.220 NMC, may allow modification to the public street standards of subsection (G) of this section, when the criteria in both subsections (H)(1) and (2) of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:

a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or

b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or

c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or

d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.

2. ***Modification of the standards of this section shall only be approved if the director finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes.***

Finding: No modifications have been requested.

This criterion is not applicable.

I. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface, and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the street without a temporary turnaround. Easements or right-of-way may be required as necessary to preserve access to the turnaround.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

J. Topography. The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

K. Future Extension of Streets. All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be "to and through": through the development and to the edges of the project site to serve adjacent properties for future development.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

L. Cul-de-Sacs.

1. ***Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever practical to connect with another street, walkway, school, or similar destination.***

    a. ***Physical or topographic conditions make a street connection impracticable. These conditions include but are not limited to controlled access streets,***

railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.

b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.

c. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.

d. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use, except where the adjoining land is designated as an urban reserve area.

2. Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).

3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

Each cul-de-sac shall have a circular end with a minimum diameter of 96 feet, curb-to-curb, within a 109-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, curbside sidewalks, and sprinkler systems in every building along the street.

Finding: No cul-de-sac was proposed.

The criteria are not applicable.

M. Street Names and Street Signs. Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs.

Finding: No street naming is proposed or required.

This criterion is not applicable.

N. Platting Standards for Alleys.

1. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the director.

2. The right-of-way width and paving design for alleys shall be not less than 20 feet wide. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.505.010 et seq.

3. Where two alleys intersect, 10-foot corner cut-offs shall be provided.

4. Unless otherwise approved by the city engineer where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.

5. ***All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word "street" or "streets" therein appeared as the word "alley" or "alleys" respectively.***

Finding: No alleys are proposed.

The criteria are not applicable.

O. Platting Standards for Blocks.

1. ***Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.***

2. ***Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.***

Zone(s)	*Maximum Block Length*	*Maximum Block Perimeter*
R-1	*800 feet*	*2,000 feet*
R-2, R-3, RP, I	*1,200 feet*	*3,000 feet*

3. ***Exceptions.***

   a. ***If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.***

   b. ***Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.***

   c. ***Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.***

   d. ***Institutional campuses located in an R-1 zone may apply the standards for the institutional zone.***

   e. ***Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.***

f. Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area.

Finding: No new blocks are proposed.

Because no new blocks are proposed, the criteria are not applicable.

4. Public Pedestrian Walkways and Bicycle Access. The approval authority in approving a land use application with conditions may require a developer to provide an access way where the creation of a street consistent with street spacing standards is infeasible and the creation of a cul-de-sac or dead-end street is unavoidable. A public walkway provides a connection through a block that is longer than established standards or connects the end of the street to another right-of-way or a public access easement. A public walkway shall be contained within a public right-of-way or public access easement, as required by the city. A public walkway shall be a minimum of 10 feet wide and shall provide a minimum six-foot-wide paved surface or other all-weather surface approved by the city (see subsection (S) of this section for public walkway standards).

Design features should be considered that allow access to emergency vehicles but that restrict access to non-emergency motorized vehicles.

Finding: No pedestrian walkways or bicycle access are proposed and none are required.

This criterion is not applicable.

P. Private Streets. New private streets, as defined in NMC 15.05.030, shall not be created, except as allowed by NMC 15.240.020(L)(2).

Finding: No private streets are proposed.

This criterion is not applicable.

Q. Traffic Calming.

1. The following roadway design features may be required in new street construction where traffic calming needs are anticipated:

a. Serpentine alignment.

b. Curb extensions.

c. Traffic diverters/circles.

d. Raised medians and landscaping.

e. Other methods shown effective through engineering studies.

2. Traffic-calming measures such as speed humps should be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street constructions.

Finding: No traffic calming is proposed or required.

This criterion is not applicable.

R. Vehicular Access Standards.

1. Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.

2. Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in Table 15.505.R below. The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.

Table 15.505.R. Access Spacing Standards

Roadway Functional Classification	*Area*[1]	*Minimum Public Street Intersection Spacing (Feet)*[2]	*Driveway Setback from Intersecting Street*[3]
Expressway	*All*	*Refer to ODOT Access Spacing Standards*	*NA*
Major arterial	*Urban* *CBD*	*Refer to ODOT Access Spacing Standards*	
Minor arterial	*Urban* *CBD*	*500* *200*	*150* *100*
Major collector	*All*	*400*	*150*
Minor collector	*All*	*300*	*100*

[1] "Urban" refers to intersections inside the city urban growth boundary outside the central business district (C-3 zone).

"CBD" refers to intersections within the central business district (C-3 zone).

"All" refers to all intersections within the Newberg urban growth boundary.

[2] Measured centerline to centerline.

Roadway Functional Classification	*Area[1]*	*Minimum Public Street Intersection Spacing (Feet)[2]*	*Driveway Setback from Intersecting Street[3]*

[3] The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.

Finding: No new access to the property is proposed. The Applicant submitted a transportation system impact analysis that showed no impacts. Access is not changed by the proposed development.

This criterion is not applicable.

3. ***Properties with Multiple Frontages. Where a property has frontage on more than one street, access shall be limited to the street with the lesser classification.***

   a. ***For a duplex, triplex or quadplex dwelling or a cottage cluster project with frontage on two local streets, access may be permitted on both streets.***

Finding: The property does not have multiple frontages.

This criterion is not applicable.

4. ***Driveways. More than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 40 feet of lot frontage separating each driveway approach. More than one driveway is permitted on a lot accessed from a major collector as long as there is at least 100 feet of lot frontage separating each driveway approach.***

   a. ***For a duplex, triplex or quadplex dwelling or a cottage cluster project, more than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 22 feet of lot frontage separating each driveway approach.***

Finding: The property the development is proposed on is a minor arterial under the jurisdiction of ODOT.

This criterion is not applicable.

5. ***Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:***

   a. ***The review body finds that creating a public street frontage is not feasible.***

   b. ***The alley access is for no more than six dwellings and no more than six lots.***

   c. ***The alley has through access to streets on both ends.***

d. One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.

Finding: No alley access is proposed.

This criterion is not applicable.

6. Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.

Finding: The existing accesses will remain in use.

This criterion is not applicable.

7. Shared Driveways.

a. The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When shared driveways are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).

b. Access easements (i.e., for the benefit of affected properties) and maintenance agreements shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.

c. No more than four lots may access one shared driveway, with the exception of cottage dwellings on individual lots that are part of a cottage cluster.

d. Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.

e. Where three or more lots share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway. However, duplex, triplex, quadplex, townhouse and cottage dwellings with shared driveways shall be exempt from this standard.

Finding: No shared access is proposed.

This criterion is not applicable.

8. ***Frontage Streets and Alleys. The review body for a partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.***

Finding: The existing access is sufficient.

This criterion is not applicable.

9. ***ODOT or Yamhill County Right-of-Way. Where a property abuts an ODOT or Yamhill County right-of-way, the applicant for any development project shall obtain an access permit from ODOT or Yamhill County.***

Finding: The proposed development takes access from S Springbrook Road which is a minor arterial under the jurisdiction of ODOT. The access is pre-existing. This criterion is not applicable.

10. ***Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:***

    a. ***Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.***

    b. ***Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.***

    c. ***Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.***

Finding: No exceptions have been requested. The criteria are not applicable.

11. ***Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria.***

Finding: No exceptions have been requested.

This criterion is not applicable.

S. Public Walkways.

1. ***Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. Public walkways are meant to connect cul-de-sacs to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other***

community destinations or public areas. Where practical, public walkway easements and locations may also be used to accommodate public utilities.

2. ***Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.***
3. ***A walk strip, not less than 10 feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications in the Newberg public works design and construction standards.***
4. ***Public walkways shall be designed to meet the Americans with Disabilities Act requirements.***
5. ***Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.***
6. ***The developer of the public walkway may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.***
7. ***Lighting may be required for public walkways in excess of 250 feet in length.***
8. ***The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.***

Finding: No public walkways were proposed or required.

The criteria are not applicable.

T. Street Trees. Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

Finding: As noted in the application materials (Attachment 1), the site's frontage along S Springbrook Road was improved in 2017 as a part of ODOT's Newberg-Dundee Bypass project. The upgraded frontage includes a ±12 foot pedestrian path and an ±8 foot planter strip.

See findings for NMC 15.420.010(B)(4) which provided elsewhere in this staff report.

U. Street Lights. All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the Newberg public works design and construction standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

Finding: There is no street lighting along the property frontage. The Applicant will be required to provide a street lighting analysis to determine if street lighting along the property frontages meets city standards or if additional PGE Option A streetlights are required. The lighting

analysis will need to extend to the centerline of the property frontage. If additional street lighting is needed, plans submitted with permit applications are to include any additional PGE Option A streetlights necessary to meet City standards. This criterion will be met if the aforementioned condition of approval is adhered to.

V. Transit Improvements. Development proposals for sites that include or are adjacent to existing or planned transit facilities, as shown in the Newberg transportation system plan or adopted local or regional transit plan, shall be required to provide any of the following, as applicable and required by the review authority:

1. ***Reasonably direct pedestrian connections between the transit facility and building entrances of the site. For the purpose of this section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.***
2. ***A transit passenger landing pad accessible to disabled persons.***
3. ***An easement of dedication for a passenger shelter or bench if such facility is in an adopted plan.***
4. ***Lighting at the transit facility.***

Finding: The proposed project is not near a planned or existing transit facility.

The criteria are not applicable.

15.505.040 Public utility standards.

[…]

B. Applicability. This section applies to all development where installation, extension or improvement of water, wastewater, or private utilities is required to serve the development or use of the subject property.

Finding: The proposed project will construct a 10,530 addition to an existing 17,550 square foot manufacturing building, establish 14 new off-street parking spaces, add additional bicycle parking, pave a one-way truck turnaround, and provide additional landscaping. Because water, wastewater and private utilities will be installed or modified to accommodate on-site changes, this code section is applicable.

C. General Standards.

1. ***The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the Newberg public works design and construction standards and require a public improvements permit.***
2. ***The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all proposed public and private utilities shall be coordinated by the***

developer and be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

Finding: The Applicant submitted supplemental materials identifying two easements for utilities on the property. New easements are not proposed, and no new easements have been identified as needed.

S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed.

This criteria are met.

D. Standards for Water Improvements. All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary wastewater and stormwater facilities, as applicable.

1. ***All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.***
2. ***Specific location, size and capacity of such facilities will be subject to the approval of the director with reference to the applicable water master plan. All water facilities shall conform with city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.***
3. ***The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.***
4. ***Design, construction and material standards shall be as specified by the director for the construction of such public water facilities in the city.***

Finding: The existing project site is served by the public water system. The submitted plans do not show an additional connection to the public water system. No additional connection is required. The Applicant submitted a service provider permit application from Tualatin Valley Fire and Rescue (TVF&R) indicating TVF&R will review fire flows.

The criteria are met.

E. Standards for Wastewater Improvements. All development that has a need for wastewater services shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and stormwater facilities, as applicable.

1. ***All septic tank systems and on-site sewage systems are prohibited. Existing septic systems must be abandoned or removed in accordance with Yamhill County standards.***
2. ***All properties shall be provided with gravity service to the city wastewater system, except for lots that have unique topographic or other natural features that make gravity wastewater extension impractical as determined by the director. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the director.***
3. ***All developments shall be required to be linked to existing wastewater collection facilities adequately sized to serve their intended area by the construction of wastewater lines which connect to existing adequately sized wastewater facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.***
4. ***Specific location, size and capacity of wastewater facilities will be subject to the approval of the director with reference to the applicable wastewater master plan. All wastewater facilities shall be sized to provide adequate capacity during peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.***
5. ***Temporary wastewater service facilities, including pumping stations, will be permitted only if the director approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.***
6. ***The design of the wastewater facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.***
7. ***Design, construction and material standards shall be as specified by the director for the construction of such wastewater facilities in the city.***

Finding: The site is served by an existing septic system. The closest public wastewater line is approximately 375 feet to the north in S Springbrook Road. During past discussions between the Applicant and city staff for a previous proposed building expansion project, the Applicant referenced a verbal agreement was reached that allowed the option for the property at 518 S Springbrook Road to stay on septic. That decision was based on a pavement cutting moratorium in place at that time and the distance needed to extend a public wastewater main to the site at 518 S Springbrook Road (375-feet). That moratorium has ended and the distance to extend a public wastewater main to serve 518 S Springbrook Road remains unchanged.

With the distance required to extend a public wastewater main to serve the site at 518 S Springbrook Road being greater than 100 feet, the City Engineer agrees with the previous verbal agreement that allowed the option for the property at 518 S Springbrook Road to stay on septic for the proposed building expansion project. Relevant NMC sections supporting allowing the property at 518 S Springbrook Road to remain on septic until a public wastewater main is within 100 feet of the property are listed below. Specifically, NMC 13.10.050(D) states:

> The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes, situated within the city and abutting on any public street, alley or easement in which there is now located or may in the future be located a public wastewater system of the city, is required at the owner's expense to install suitable toilet and plumbing facilities directly with the proper side sewer in accordance with the provisions of this chapter. The connection shall be made within 90 days after the date of the official notice to do so; provided, that the public wastewater system is within 100 feet of any property line. For the purposes of this section, notice shall be deemed to have been received upon the mailing of the notice in accordance with NMC 13.10.290.

Because the subject property is located more than 100 feet from existing wastewater main which can serve the property, no further modifications to the existing wastewater system are required at this time. At such time as a public wastewater system becomes available to a property serviced by a private wastewater disposal system, as provided in NMC 13.10.050(D), a direct connection shall be made to the public wastewater system in compliance with this chapter, including payment of all connection fees and systems development charges. Any septic tanks, cesspools and similar private wastewater disposal facilities shall be removed or abandoned and filled with suitable material as required by the Oregon Department of Environmental Quality. When public wastewater system service is obtained, the connection or connections to the premises being served shall be made ahead of the private disposal system. No connections shall be made to the effluent side of existing septic tanks or cesspools.

The Applicant will be required to connect to the public wastewater system at the time in the future that the sewer line is extended to within 100 feet of the property.

This criterion will be met if the aforementioned condition of approval is adhered to.

F. Easements. Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies. Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the Newberg public works design and construction standards.

Finding: No easements are proposed, and no new easements are required to serve the proposed development.

This criterion is not applicable.

15.505.050 Stormwater system standards.

A. Purpose. The purpose of this section is to provide for the drainage of surface water from all development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in stormwater runoff.

B. Applicability. The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city stormwater system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

C. General Requirement. All stormwater runoff shall be conveyed to a public storm wastewater or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

Finding: The Applicant submitted a preliminary stormwater memorandum and facility design prepared by Andrey Chernishov, PE of HBH Consulting Engineers. The Applicant will be required to submit a final stormwater management plan and facility design with the building permit application.

This criterion will be met if the aforementioned condition of approval is adhered to.

D. Plan for Stormwater and Erosion Control. No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the State of Oregon prepares a stormwater report and erosion control plan for the project. This plan shall contain at a minimum:

1. The methods to be used to minimize the amount of runoff, sedimentation, and pollution created from the development both during and after construction.

2. Plans for the construction of stormwater facilities and any other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the stormwater plans.

3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included in the stormwater report and shall be stamped by a licensed professional engineer in the State of Oregon. Peak design discharges shall be computed based upon the design criteria outlined in the public works design and construction standards for the city.

Finding: The Applicant submitted a preliminary stormwater memorandum and facility design prepared by Andrey Chernishov, PE of HBH Consulting Engineers. The submitted plans show erosion control methods. Regarding erosion control methods:

- If less than 1-acre is disturbed, the Applicant will be required to obtain an erosion and sediment control permit issued by the City of Newberg prior to any ground disturbing activity.
- If 1-acre or more is disturbed, a DEQ 1200-C permit will be required to be submitted with permit applications.

This criterion will be met if the aforementioned condition of approval is adhered to.

E. Development Standards. Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the Newberg public works design and construction standards.

Finding: The submitted plans reference City of Newberg Public Works Design and Construction standard drawings. The Applicant shall submit final plans for the stormwater improvements which comply with the requirements of the most recently adopted Newberg Public Works Design and Construction Standards.

This criterion will be met if the aforementioned condition of approval is adhered to.

F. CONCLUSION:

The proposed site design review will meet the applicable review criteria for a Type II Design Review if the conditions of approval are adhered to.

Section III: Conditions of Approval – DR223-0005

ARE Manufacturing – Manufacturing Building Addition and Site Improvement

Site Design Review –518 S Springbrook Road

THE FOLLOWING MUST BE CMOMPLETED BEFORE THE CITY WILL ISSUE A BUILDING PERMIT:

1. **Permit Submittal:** Prior to construction, receive approval for all required building permits.
2. **Conditions of Approval:** Either write or otherwise permanently affix the conditions of approval contained within this report onto the first page of the plans submitted for building permit review.
3. **Sidewalks**: The Applicant will be required to replace any sidewalks along the site's frontage that are in poor condition or not in full compliance with City of Newberg and Federal ADA standards. Determination of any sidewalk panels to be replaced will occur as part of the building permit process.
4. **Landscaping Requirements**:
   a. Prior to issuance of building permits the Applicant shall be required to submit an updated landscaping plan containing at least two different plant material groups (example: trees and shrubs, or lawn and shrubs, or lawn and trees and shrubs) within landscape strip south of the proposed project area which separates the parking area from an interior lot line.
   b. Prior to building permit approval the Applicant shall submit an updated site plan and updated landscape plan showing a 75 percent opaque, site-obscuring fence, wall or evergreen hedge between the proposed (i.e. new) parking area on the south side of the building addition and the interior property line to the south of the subject property. If landscape plantings are utilized, the plantings must be large enough to provide the required minimum screening requirement within 12 months after initial installation. Adequate provisions shall be maintained to protect walls, fences or plant materials from being damaged by vehicles using said parking areas.
   c. to building permit approval the Applicant shall submit an updated site plan and updated landscape plan showing a 75 percent opaque, site-obscuring fence, wall or evergreen hedge between the proposed parking areas and the interior property lines to the north, south, and east of the subject property which abuts residential districts. If landscape plantings are utilized, the plantings must be large enough to provide the required minimum screening requirement within 12 months after initial installation. Adequate provisions shall be maintained to protect walls, fences or plant materials from being damaged by vehicles using said parking areas.
   d. The Applicant shall install all required landscaping prior to the issuance of

occupancy permits, unless security equal to 110 percent of the cost of the landscaping as determined by the director is filed with the city, insuring such installation within six months of occupancy.

5. **Exterior Lighting Requirements**: prior to building permit approval, the Applicant shall submit a lighting plan or revised site plan that specifies the location of any proposed light fixtures, fixture type, and detailed specification.

6. **Undergrounding Required**: Any new service connection to the property is required to be undergrounded. See NMC 15.430.010 for additional requirements and exception provisions.

7. **Stormwater Management Plan and Facility Design**: The Applicant will be required to submit a final stormwater management plan and facility design with the building permit application.

8. **Bicycle Parking Facility Requirements**:

    a. The applicant shall ensure that bicycle parking facility is installed prior to issuance of certificate of occupancy which consists of a firmly secured loop, bar, rack, or similar facility that accommodates locking the bicycle frame and both wheels using a cable or U-shaped lock; an enclosed locker; or other design approved by the City of Newberg's Community Development Director.

    b. The applicant shall install bicycle parking spaces that are at least six feet long and two and one-half feet wide, and which do not obstruct pedestrian travel.

9. **Stormwater Improvements**:

    a. The Applicant shall submit final plans for the stormwater improvements which comply with the requirements of the most recently adopted Newberg Public Works Design and Construction Standards.

    b. A final stormwater report and plan will be required with the building permit application.

10. **Public Improvement Permits**: Any required public improvement permit(s) for this project must be submitted, approved, and issued prior to building permits being issued.

11. **Street Lighting Analysis**: The Applicant will be required to provide a street lighting analysis to determine if street lighting along the property frontages meets city standards or if additional PGE Option A streetlights are required. The lighting analysis will need to extend to the centerline of the property frontage. If additional street lighting is needed, plans submitted with permit applications are to include any additional PGE Option A streetlights necessary to meet City standards.

12. **Future Wastewater Connection**: The Applicant will be required to connect to the public wastewater system at the time in the future that the sewer line is extended to within 100 feet of the property.

13. **Erosion Control Methods Required**: Regarding erosion control methods:

a. If less than 1-acre is disturbed, the Applicant will be required to obtain an erosion and sediment control permit issued by the City of Newberg prior to any ground disturbing activity.

b. If 1-acre or more is disturbed, a DEQ 1200-C permit will be required to be submitted with permit applications.

ATTACHMENT 1: APPLICATION AND SUPPLEMENTAL MATERIALS

TYPE II APPLICATION – LAND USE

File #: _____

TYPES – PLEASE CHECK ONE:

- ☑ **Design review**
- ☐ **Tentative Plan for Partition**
- ☐ **Tentative Plan for Subdivision**
- ☐ **Type II Major Modification**
- ☐ **Variance** _____
- ☐ **Other: (Explain)** _____

APPLICANT INFORMATION:

APPLICANT: Alvin Elbert

ADDRESS: 518 S Springbrook Rd CITY: Newberg STATE: OR ZIP: 97132

EMAIL ADDRESS: rachel@aremanufacturing.com PHONE: 503-538-0350 MOBILE: 503-330-2251

OWNER *(if different from above)*: Elbert Rental @ 518, LLC PHONE: 503-538-0350

ADDRESS: 518 S Springbrook Rd CITY: Newberg STATE: OR ZIP: 97132

ENGINEER/SURVEYOR: HBH Consulting Engineers, Inc./ TerraCalc Land Surverying, Inc. CONTACT: Andre Chernishov/ Darren Harr

EMAIL ADDRESS: achernishov@hbh-consulting.com/darren@terra-calc.com PHONE: (503) 554-9553 / 503-857-0935 MOBILE: 503-951-0906/503-729-2112

GENERAL INFORMATION:

PROJECT LOCATION: 518 S Springbrook Rd PROJECT VALUATION: $ 1.4M

PROJECT DESCRIPTION/USE: Addition to existing building to expand production space.

MAP/TAX LOT NO. (i.e.3200AB-400): R3221 03700 SITE SIZE: 11.64 SQ. FT. ☐ ACRE ☑

COMP PLAN DESIGNATION: Industrial CURRENT ZONING: M1

CURRENT USE: Manufacturing/Production Facility

SURROUNDING USES:

NORTH: Residential SOUTH: Residential

EAST: Residential WEST: Industrial

ATTACHED PROJECT CRITERIA AND REQUIREMENTS *(check all that apply)*

General Checklist: ☑ Fees ☑ Public Notice Information ☑ Current Title Report ☑ Written Criteria Response ☑ Owner Signature ☑ 2 Copies of full Application Packet

For detailed checklists, applicable criteria for the written response, and other requirements per application type, turn to:

The Application Packet can be submitted to Planning@newbergoregon.gov or at 414 E First St., Newberg OR. 97132
If the Application is emailed 2 physical copies must be mailed or brought into the Community Development Department

The above statements and information herein contained are in all respects true, complete, and correct to the best of my knowledge and belief. Tentative plans must substantially conform to all standards, regulations, and procedures officially adopted by the City of Newberg. All owners must sign the application or submit letters of consent. Incomplete or missing information may delay the approval process.

Alvin R. Elbert 4-19-23
Applicant Signature Date

Alvin R Elbert 4-19-23
Owner Signature Date

Alvin Elbert
Print Name

Alvin Elbert
Print Name

A.R.E.
MANUFACTURING, INC.
518 S. SPRINGBROOK RD.
NEWBERG, OR 97132
503-538-0350
503-538-5148 FAX

To the City of Newberg Planning Division:

A.R.E. Manufacturing, Inc. is proposing the expansion of an existing building. The proposal is to contract Pacific Building Systems to manufacture a 10,534 square foot rigid frame addition to the east end of the existing building for additional production space.

We meet or exceed the following design review criteria:

1. **Design compatibility**
   The proposed expansion will be attached to the existing industrial building at 518 S. Springbrook Rd. The structure design and materials will be the same as the existing structure. The roof design will be an extension of what is currently in place, as well. Landscaped areas will be added on the north, east and south sides of the lot. Landscaping will match what is already in place on the west side of the property.

2. **Parking and On-site circulation**
   Included in the proposal are 14 additional parking spaces and a new bike rack area. Additionally, we are adding a paved one-way truck route around the building to improve traffic flow thru the existing parking lot. We do not plan to add additional employees or increase truck traffic, so these improvements are simply for efficiency, not capacity. See item 10.

3. **Setbacks and general requirements.**

   The proposed addition complies with all requirements within NMC 15.145.010 through 15.415.060(regarding height restrictions), as well as NMC 15.405.010 through 15.405.00 (regarding lot requirements), and NMC 15.410.010 through 15.140.070 (regarding Yard setback requirements).

4. **Landscaping requirements.**

   All requirements in NMC 15.420.010 for landscaping are met per the site plan.

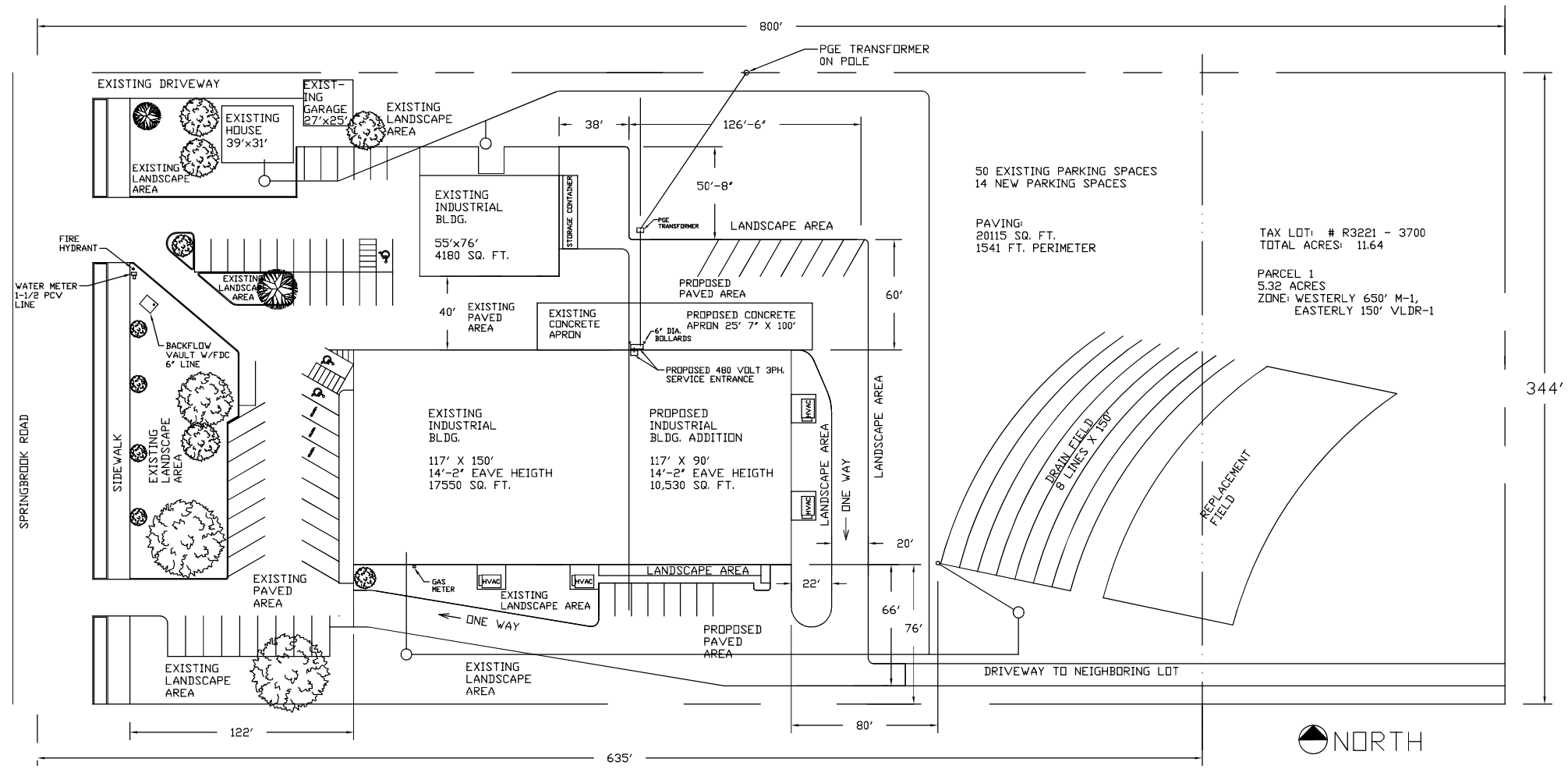
5. **Signs.**

   A.R.E. Manufacturing, Inc. does not have a road facing sign nor are any signs included in this proposal. Therefore, all requirements in 15.435.010 are not applicable.

6. **Manufactured Dwelling, Mobile Home and RV Parks.**

   This proposal does not include any manufactured or mobile homes. All requirements NMC 15.445.075 through 15.445.100, as well as NMC 15.445.170 are not applicable.

7. **Zoning district compliance.**
   A.R.E. Manufacturing, Inc. is zoned M-1 industrial. Our proposed project falls within all zoning guidelines as it does not change the use or activity currently at this property.
8. **Sub district Compliance**
   Property being improved is not a part of any subdistricts. Therefore, is not subject to the requirements lined out in NMC 15.340.010 through 15.348.060
9. **Alternative Circulation, Roadway Frontage Improvements and Utility Improvements**
   Sidewalk, curb and frontage improvements have already been completed by ODOT in conjunction with the 99W Bypass project. (Thanks ODOT!)
10. **Traffic Study Improvements**
    A traffic study was recently conducted by Lancaster Mobley, as requested by the city during the pre-application meeting. The traffic study showed that, as we stated prior to the study, there will be no increase of traffic to the property. We are not adding employees or services. We are simply increasing our working footprint to allow our existing employees to complete their existing services in a more efficient way.



LEGEND:

- EASEMENT BOUNDARY
- LOT LINE
- CITY LIMIT

SCALE 1/16"=0'-0"

ELBERT RENTALS
ALVIN ELBERT
(503) 538-0350 PHONE
(503) 330-2251 CELL
alvin@aremanufacturing.com

BUILDING EXPANSION
FOR A.R.E. MFG.

518 S. SPRINGBROOK RD.
NEWBERG, OREGON 97132

PRELIM
REV #1 3-1-22
REV #2 4-20-22
REV
REV
REV

518
SITE
PLAN

REV
2

First American Title Insurance Company

775 NE Evans Street
McMinnville, OR 97128
Phn - (503)376-7363
Fax - (866)800-7294

YAMHILL COUNTY TITLE UNIT
FAX (866)800-7294

Title Officer: Clayton Carter
(503)376-7363
ctcarter@firstam.com

LOT BOOK SERVICE

Rachel Akana
518 S Springbrook Rd.
Newberg, OR 97132

Order No.: 1039-4060122
May 01, 2023

Attn:
Phone No.: - Fax No.:
Email: rachel@aremanufacturing.com

Re:

Fee: $550.00

We have searched our Tract Indices as to the following described property:

Parcel 1 of Partition 99-28, recorded May 26, 1999 as Instrument No. 199911089, Deed and Mortgage Records, Yamhill County, Oregon.

and as of April 26, 2023 at 8:00 a.m.

We find that the last deed of record runs to

Elbert Rental at 512, LLC, as to an undivided fifty (50%) percent interest
Elbert Rental at 518, LLC, as to an undivided fifty (50%) percent interest

We find the following apparent encumbrances within ten (10) years prior to the effective date hereof:

1. The rights of the public in and to that portion of the premises herein described lying within the limits of streets, roads and highways.

2. Annexation Agreement Waiver of Rights to Remonstrance and the terms and conditions thereof:

Between:	Alvin Robert Elbert and Jeanine Ann Elbert
And:	City of Newberg
Recording Information:	April 22, 1987, Film Volume 212, Page 1687, Deed and Mortgage Records

3. Roadway Easement Agreement and the terms and conditions thereof:
   Between: Alvin Robert Elbert and Jeanine Ann Elbert
   And: City of Newberg
   Recording Information: April 22, 1987, Film Volume 212, Page 1689, Deed and Mortgage Records

4. Easement as shown on the recorded plat/partition
   For: 30' access and utilities easement, to benefit Parcel 2 of said Partition
   Affects: See plat for exact location

5. Permanent Easement and Subordination, including terms and provisions thereof.

   Recorded: July 06, 2015, Instrument No. 201509636, Deed and Mortgage Records

We have also searched our General Index for Judgments and State and Federal Liens against the Grantee(s) named above and find:

NONE

We find the following unpaid taxes and city liens:

1. City liens, if any, of the City of Newberg.

NOTE: Taxes for the year 2022-2023 PAID IN FULL
Tax Amount: $9,410.66
Map No.: R3221 03700
Property ID: 63059
Tax Code No.: 29.0

NOTE: Taxes for the year 2022-2023 PAID IN FULL
Tax Amount: $896.82
Map No.: R3221 03700
Property ID: 640129
Tax Code No.: 29.2

NOTE: Taxes for the year 2022-2023 PAID IN FULL
Tax Amount: $4,388.34
Map No.: P13159
Property ID: 465696
Tax Code No.: 29.0
(Affects Personal Property)

NOTE: Taxes for the year 2022-2023 PAID IN FULL
Tax Amount: $14,009.05
Map No.: R3221 03700 A03
Property ID: 561157
Tax Code No.: 29.0

NOTE: Taxes for the year 2022-2023 PAID IN FULL
Tax Amount: $1,004.72
Map No.: R3221 03700 A04

Property ID:	715080
Tax Code No.:	29.0

NOTE: Taxes for the year 2022-2023 PAID IN FULL

Tax Amount:	$39,980.11
Map No.:	R3221 03700 000E1
Property ID:	800159
Tax Code No.:	29.0

NOTE: We find no outstanding voluntary liens of record affecting subject property. An inquiry should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any security interest in the subject property.

THIS IS NOT a title report since no examination has been made of the title to the above described property. Our search for apparent encumbrances was limited to our Tract Indices, and therefore above listings do not include additional matters which might have been disclosed by an examination of the record title. We assume no liability in connection with this Lot Book Service and will not be responsible for errors or omissions therein. The charge for this service will not include supplemental reports, rechecks or other services.

Grantors Name and Address
Alvin Elbert and Jeanine Elbert
518 South Springbrook Road
Newberg, Oregon 97132

Grantees' Names and Addresses
Elbert Rental at 512, LLC
518 South Springbrook Road
Newberg, Oregon 97132

After recording return to:
John T. Bridges
515 East 1st Street
Newberg, Oregon 97132

Until requested otherwise, send all tax statements to:
No change

OFFICIAL YAMHILL COUNTY RECORDS
KERI HINTON, COUNTY CLERK
202302613

00652155202300026130010012
$81.00
03/29/2023 11:25:29 AM

DMR-DDMR Cnt=1 Stn=1036 DAVISM
$5.00 $5.00 $11.00 $60.00

BARGAIN AND SALE DEED

KNOW ALL MEN BY THESE PRESENTS that **Alvin Elbert** and **Jeanine Elbert**, hereinafter called Grantor, for the consideration hereinafter stated, does hereby grant, bargain, sell, and convey unto **Elbert Rental at 512, LLC**, called Grantee, and unto Grantees' heirs, successors, and assigns, all of that certain real property, with the tenements, hereditaments, and appurtenances thereunto belonging or in any way appertaining, situated in Yamhill County, State of Oregon, described as follows:

An undivided fifty (50%) percent interest in Parcel 1 of Partition Plat 99-28 recorded May 26, 1999 as Instrument No. 199911089, Deed and Mortgage Records, Yamhill County, State of Oregon.

To Have and to Hold the same unto Grantees and Grantees' heirs, successors, and assigns forever.

The true and actual consideration paid for this transfer, stated in terms of dollars, is $0. The transfer is for business planning purposes.

In construing this deed, where the context so requires, the singular includes the plural, and all grammatical changes shall be made so that this deed shall apply equally to corporations and individuals.

IN WITNESS WHEREOF, the Grantor has executed this instrument this 24 day of March, 2023; if Grantor is a corporation, it has caused its name to be signed and its seal, if any, affixed by an officer or other person duly authorized to do so by order of its board of directors.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL AS DEFINED IN ORS 92.010 OR 215.010 TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Alvin R. Elbert
Alvin Elbert, Grantor

Jeanine A Elbert
Jeanine Elbert, Grantor

STATE OF OREGON,)
)
County of Yamhill) ss.

This instrument was acknowledged before me on this 24 day of March, 2023, by Alvin Elbert and Jeanine Elbert.

OFFICIAL STAMP
EMILY DELO
NOTARY PUBLIC – OREGON
COMMISSION NO. 1034457
MY COMMISSION EXPIRES FEBRUARY 28, 2027

Notary Public for Oregon
My Commission Expires:

Grantors Name and Address
Alvin Elbert and Jeanine Elbert
518 South Springbrook Road
Newberg, Oregon 97132

Grantees' Names and Addresses
Elbert Rental at 518, LLC
518 South Springbrook Road
Newberg, Oregon 97132

After recording return to:
John T. Bridges
515 East 1st Street
Newberg, Oregon 97132

Until requested otherwise, send all tax statements to:
No change

O FICIAL YAMHILL COUNTY RECORDS
K RI HINTON, COUNTY CLERK

202302614

00652156202300026140010019

$81.00

03/29/2023 11:26:26 AM

DMR-DDMR Cnt=1 Stn=1036 DAVISM
$5.00 $5.00 $11.00 $60.00

BARGAIN AND SALE DEED

KNOW ALL MEN BY THESE PRESENTS that **Alvin Elbert** and **Jeanine Elbert** , hereinafter called Grantor, for the consideration hereinafter stated, does hereby grant, bargain, sell, and convey unto **Elbert Rental at 518, LLC**, called Grantee, and unto Grantees' heirs, successors, and assigns, all of that certain real property, with the tenements, hereditaments, and appurtenances thereunto belonging or in any way appertaining, situated in Yamhill County, State of Oregon, described as follows:

An undivided fifty (50%) percent interest in Pracel 1 of Partition Plat 99-28 recorded May 26, 1999 as Instrument No. 199911089, Deed and Mortgage Records, Yamhill County, State of Oregon.

To Have and to Hold the same unto Grantees and Grantees' heirs, successors, and assigns forever.

The true and actual consideration paid for this transfer, stated in terms of dollars, is $0. The transfer is for business planning purposes.

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Alvin R. Elbert
Alvin Elbert, Grantor

Jeanine A Elbert
Jeanine Elbert, Grantor

STATE OF OREGON,)
)
County of Yamhill) ss.

This instrument was acknowledged before me on this 24 day of March, 2023, by Alvin Elbert and Jeanine Elbert.

OFFICIAL STAMP
EMILY DELO
NOTARY PUBLIC – OREGON
COMMISSION NO. 1034457
MY COMMISSION EXPIRES FEBRUARY 28, 2027

Notary Public for Oregon
My Commission Expires:

First American Title Insurance Company
775 NE Evans Street
McMinnville, OR 97128

Illegal Restrictive Covenants

Please be advised that any provision contained in this document, or in a document that is attached, linked, or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable by law.

Community Development Department
P.O. Box 970 ▪ 414 E First Street ▪ Newberg, Oregon 97132
503-537-1240. Fax 503-537-1272 www.newbergoregon.gov

WE WANT YOUR COMMENTS ON A PROPOSED NEW DEVELOPMENT IN YOUR NEIGHBORHOOD

A property owner in your neighborhood submitted an application to the City of Newberg to construct a 10,354 square foot rigid frame addition to the existing building for additional production space. You are invited to take part in the City's review of this project by sending in your written comments. For more details about giving comments, please see the back of this sheet.

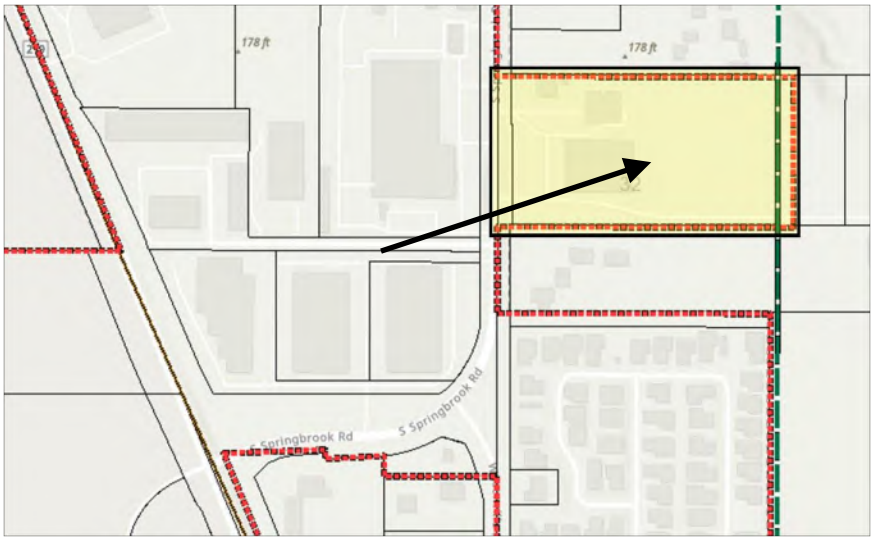
The development would include a 10,354 square foot rigid frame addition to the existing building. This addition will include a route for trucks to go around the building, 14 new parking spaces, and additional landscape throughout the property the property.

APPLICANT: ***Alvin Elbert***
TELEPHONE: 503-538-0350

PROPERTY OWNER: ***Elbert Rental @ 518, LLC***

LOCATION: ***518 S Springbrook Rd, Newberg, OR 97132***

TAX LOT NUMBER: ***R3221 03700***



We are mailing you information about this project because you own land within 500 feet of the proposed new project. We invite you to send any written comments for or against the proposal within 14 days from the date this notice is mailed.

If you mail your comments to the City, please put the following information on the outside of the envelope:

Written Comments: File No.XX **(City staff will give you the file number for your project at the time of application)**
City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

You can look over all the information about this project or drop comments off at Newberg City Hall, 414 E. First Street. You can also buy copies of the information for a cost of 25 cents a page. If you have any questions about the project, you can call the Newberg Planning Division at 503-537-1240.

All written comments must be turned in by 4:30 p.m. on ***May 8th, 2023*****.** Any issue which might be raised in an appeal of this case to the Land Use Board of Appeals (LUBA) must be submitted to the City in writing before this date. You must include enough detail to enable the decision maker an opportunity to respond. The applicable criteria used to make a decision on this application for design review approval are found in Newberg Development Code 15.220.050(B).

The Community Development Director will make a decision at the end of a 14-day comment period. If you send in written comments about this project, you will be sent information about any decision made by the City relating to this project.

Date Mailed: ***04/24/23***

Land Use Notice

FILE # (insert the file number assigned to you at the time of application)

PROPOSAL: To construct a 10,354 square foot rigid frame addition to the existing building for additional production space

FOR FURTHER INFORMATION, CONTACT:

City of Newberg
Community Development Department
414 E First Street
Phone: 503-537-1240

2′

3′

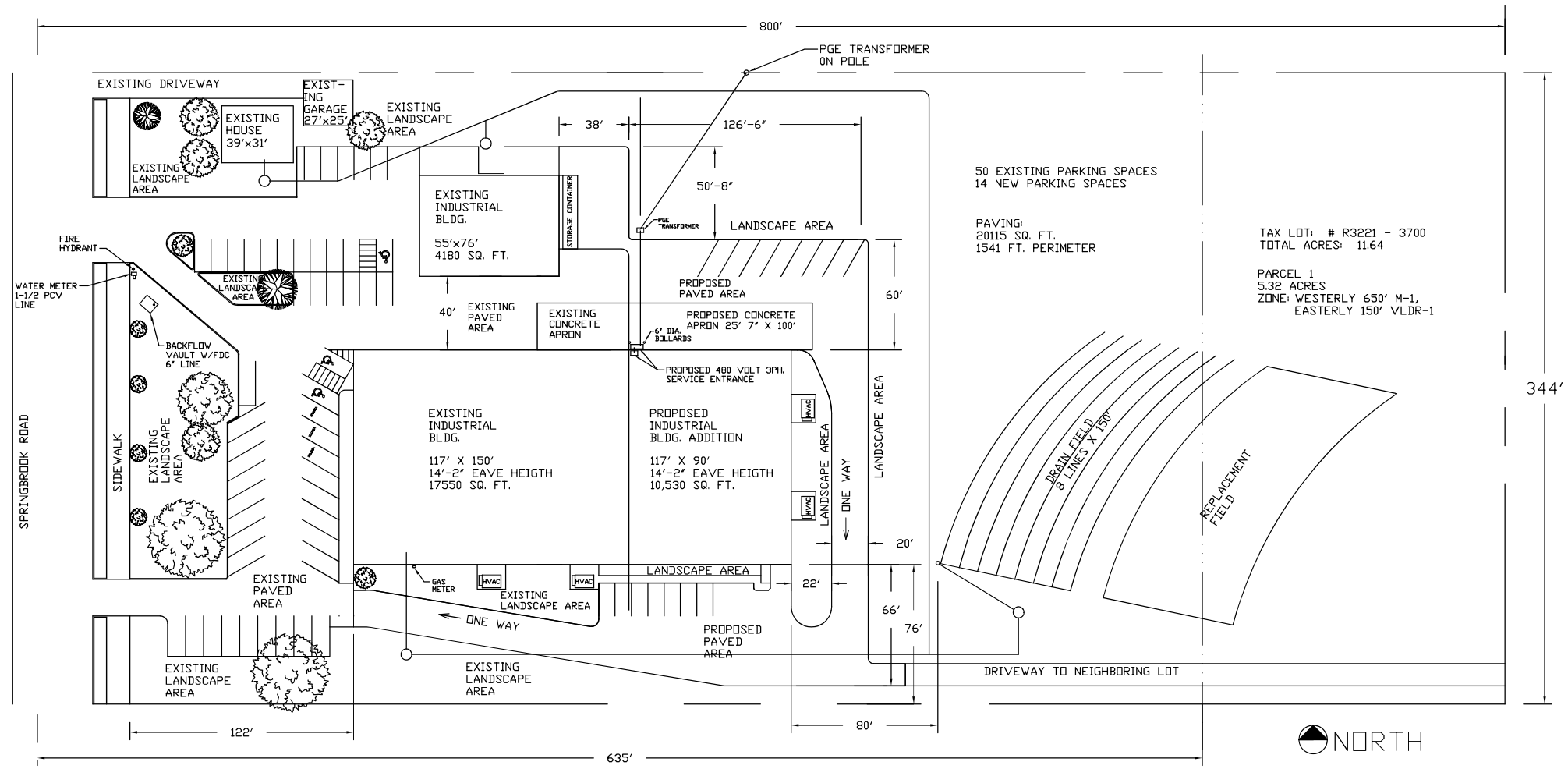
TAXID	Owner Name	Mailing Address	Mail City	Mail State	Mail Zip	Site Address	Site City	Site State	Site Zip
R3221 03400	Oregon Department Of Transport C/O Right Of Way Section	4040 Fairview Industrial Dr SE MS 2	Salem	OR	97302	808 NE Springbrook Rd	Newberg	OR	97132
R3221 03500	Alvin & Jeanine Elbert	518 S Springbrook Rd	Newberg	OR	97132	704 N Springbrook Rd	Newberg	OR	97132
R3221 01700	Pnwp LLC #5	6600 SW 105th Ave STE 175	Beaverton	OR	97008	705 S Springbrook Rd # B	Newberg	OR	97132
R3221 03700	Elbert Rental At 518 LLC	518 S Springbrook Rd	Newberg	OR	97132	518 S Springbrook Rd	Newberg	OR	97132
R3221 03700	Alvin & Jeanine Elbert	518 S Springbrook Rd	Newberg	OR	97132	518 S Springbrook Rd	Newberg	OR	97132
R3221 01703	Thom LLC	Po Box 296	Newberg	OR	97132	705 S Springbrook Rd # A	Newberg	OR	97132
R3221 01300	Nut Tree Ranch LLC	Po Box 820	Sebastopol	CA	95473	2902 E 2nd St UNIT 81	Newberg	OR	97132
R3221 01300	Brad & Susan Schmidlkofer	2902 E 2nd St UNIT 33	Newberg	OR	97132	2902 E 2nd St UNIT 33	Newberg	OR	97132
R3221 01300	Mary Heath	2902 E 2nd St UNIT 104	Newberg	OR	97132	2902 E 2nd St UNIT 104	Newberg	OR	97132
R3221 01300	James & Stacey Jean	2902 E 2nd St UNIT 30	Newberg	OR	97132	2902 E 2nd St UNIT 30	Newberg	OR	97132
R3221 01300	Timothy Stell	2902 E 2nd St UNIT 25	Newberg	OR	97132	2902 E 2nd St UNIT 25	Newberg	OR	97132
R3221 01300	Bill & Natoma Dawson	2902 E 2nd St UNIT 81	Newberg	OR	97132	2902 E 2nd St UNIT 81	Newberg	OR	97132
R3221 01300	Nona Bradford & Joni Nelson-Bradford	2902 E 2nd St UNIT 44	Newberg	OR	97132	2902 E 2nd St UNIT 44	Newberg	OR	97132
R3221 01300	Rosella Brooks	905 S Springbrook Rd	Newberg	OR	97132	2902 E 2nd St UNIT 39	Newberg	OR	97132
R3221 01300	Mary Violando	2902 E 2nd St UNIT 34	Newberg	OR	97132	2902 E 2nd St UNIT 34	Newberg	OR	97132
R3221 01300	Loran Hackett	2902 E 2nd St UNIT 105	Newberg	OR	97132	2902 E 2nd St UNIT 105	Newberg	OR	97132
R3221 01300	Gary Ewell	2902 E 2nd St UNIT 59	Newberg	OR	97132	2902 E 2nd St UNIT 59	Newberg	OR	97132
R3221 01300	Rick Schwarzenberger	2902 E 2nd St UNIT 31	Newberg	OR	97132	2902 E 2nd St UNIT 31	Newberg	OR	97132
R3221 01300	Itsuko Villa	2902 E 2nd St UNIT 29	Newberg	OR	97132	2902 E 2nd St UNIT 29	Newberg	OR	97132
R3221 01300	Joseph Copening & Jean Shafer	2902 E 2nd St UNIT 16	Newberg	OR	97132	2902 E 2nd St UNIT 16	Newberg	OR	97132
R3221 01300	Kit Henderson	2902 E 2nd St UNIT 18	Newberg	OR	97132	2902 E 2nd St UNIT 18	Newberg	OR	97132
R3221 01300	Douglas & Sharon Cloepfil	2902 E 2nd St UNIT 47	Newberg	OR	97132	2902 E 2nd St UNIT 47	Newberg	OR	97132
R3221 01300	Layton Barrus	2902 E 2nd St UNIT 70	Newberg	OR	97132	2902 E 2nd St UNIT 70	Newberg	OR	97132
R3221 01300	Dale Justice	2902 E 2nd St UNIT 76	Newberg	OR	97132	2902 E 2nd St UNIT 76	Newberg	OR	97132
R3221 01300	Wesley Gibbs	2902 E 2nd St UNIT 71	Newberg	OR	97132	2902 E 2nd St UNIT 71	Newberg	OR	97132
R3221 01300	Frank Harris	2902 E 2nd St UNIT 68	Newberg	OR	97132	2902 E 2nd St UNIT 68	Newberg	OR	97132
R3221 01300	Lisha Rhodes	467 S Whitney Dr	Newberg	OR	97132	2902 E 2nd St UNIT 79	Newberg	OR	97132
R3221 01300	Geoffrey Clark	102 NE Canvasback Way UNIT 204	Beaverton	OR	97006	2902 E 2nd St UNIT 37	Newberg	OR	97132
R3221 01300	Jerry Hallmark	2902 E 2nd St UNIT 11	Newberg	OR	97132	2902 E 2nd St UNIT 11	Newberg	OR	97132
R3221 01300	Julie & James Fitch	2902 E 2nd St UNIT 75	Newberg	OR	97132	2902 E 2nd St UNIT 75	Newberg	OR	97132
R3221 01300	Ralph & Judith Jennings	2902 E 2nd St UNIT 74	Newberg	OR	97132	2902 E 2nd St UNIT 74	Newberg	OR	97132
R3221 01300	Juanita Phillips	2902 E 2nd St UNIT 36	Newberg	OR	97132	2902 E 2nd St UNIT 36	Newberg	OR	97132
R3221 01300	Linda Dorner	2902 E 2nd St UNIT 73	Newberg	OR	97132	2902 E 2nd St UNIT 73	Newberg	OR	97132
R3221 01300	Janet Holten	2902 E 2nd St UNIT 66	Newberg	OR	97132	2902 E 2nd St UNIT 66	Newberg	OR	97132
R3221 01300	Roxane Risner	Po Box 1234	Sherwood	OR	97140	2902 E 2nd St UNIT 78	Newberg	OR	97132
R3221 01300	Hazel Ade	2902 E 2nd St UNIT 82	Newberg	OR	97132	2902 E 2nd St UNIT 82	Newberg	OR	97132
R3221 01300	Denny & Jana Perkins	2902 E 2nd St UNIT 67	Newberg	OR	97132	2902 E 2nd St UNIT 67	Newberg	OR	97132
R3221 01300	Timothy Hodges	2902 E 2nd St UNIT 88	Newberg	OR	97132	2902 E 2nd St UNIT 88	Newberg	OR	97132
R3221 01300	Diann Cochran	2902 E 2nd St UNIT 86	Newberg	OR	97132	2902 E 2nd St UNIT 86	Newberg	OR	97132
R3221 01300	Tracy Lozada & Christopher Hartley	2902 E 2nd St UNIT 96	Newberg	OR	97132	2902 E 2nd St UNIT 96	Newberg	OR	97132
R3221 01300	Esther Freimark	2902 E 2nd St UNIT 45	Newberg	OR	97132	2902 E 2nd St UNIT 45	Newberg	OR	97132
R3221 01300	Sheila Wright	2902 E 2nd St UNIT 83	Newberg	OR	97132	2902 E 2nd St UNIT 83	Newberg	OR	97132
R3221 01300	Sharon Ashby	2902 E 2nd St UNIT 97	Newberg	OR	97132	2902 E 2nd St UNIT 97	Newberg	OR	97132
R3221 01300	Clara Hamilton	2902 E 2nd St UNIT 4	Newberg	OR	97132	2902 E 2nd St UNIT 4	Newberg	OR	97132
R3221 01300	Christine Gourley	2902 E 2nd St UNIT 6	Newberg	OR	97132	2902 E 2nd St UNIT 6	Newberg	OR	97132
R3221 01300	Laura Nunn	2902 E 2nd St UNIT 17	Newberg	OR	97132	2902 E 2nd St UNIT 17	Newberg	OR	97132
R3221 01300	Theresa Ronquillo & Sandra Haire	2902 E 2nd St UNIT 5	Newberg	OR	97132	2902 E 2nd St UNIT 5	Newberg	OR	97132
R3221 01300	Ray & Carolyn Morgret	2902 E 2nd St UNIT 80	Newberg	OR	97132	2902 E 2nd St UNIT 80	Newberg	OR	97132
R3221 01300	Marilyn Johnson & James Smith II	16869 SW 65th Ave # 136	Lake Oswego	OR	97035	2902 E 2nd St UNIT 69	Newberg	OR	97132
R3221 01300	Terrance & Patricia Wilson	2902 E 2nd St UNIT 94	Newberg	OR	97132	2902 E 2nd St UNIT 94	Newberg	OR	97132

R3221	01300	John & Roger Stopa	2902 E 2nd St UNIT 99	Newberg	OR	97132	2902 E 2nd St UNIT 99	Newberg	OR	97132
R3221	01300	Mary Siler	2902 E 2nd St UNIT 107	Newberg	OR	97132	2902 E 2nd St UNIT 107	Newberg	OR	97132
R3221	01300	Sharon Schultz	2902 E 2nd St UNIT 98	Newberg	OR	97132	2902 E 2nd St UNIT 98	Newberg	OR	97132
R3221	01300	Ron Lehmann & Karla Barrett	2902 E 2nd St UNIT 72	Newberg	OR	97132	2902 E 2nd St UNIT 72	Newberg	OR	97132
R3221	01300	Kathleen Farnell	2902 E 2nd St UNIT 2	Newberg	OR	97132	2902 E 2nd St UNIT 2	Newberg	OR	97132
R3221	01300	Patricia Kelly	2902 E 2nd St UNIT 32	Newberg	OR	97132	2902 E 2nd St UNIT 32	Newberg	OR	97132
R3221	01300	Eric Kristich	2902 E 2nd St UNIT 26	Newberg	OR	97132	2902 E 2nd St UNIT 26	Newberg	OR	97132
R3221	01300	Art Sasaki	612 Pioneer St	Dayton	OR	97114	2902 E 2nd St UNIT 23	Newberg	OR	97132
R3221	01300	Caryll & Dorothy Carter	2902 E 2nd St UNIT 43	Newberg	OR	97132	2902 E 2nd St UNIT 43	Newberg	OR	97132
R3221	01300	Gayl Watson & Ilene Kline	Po Box 143	Newberg	OR	97132	2902 E 2nd St UNIT 35	Newberg	OR	97132
R3221	01300	William Kalmbach	2902 E 2nd St UNIT 95	Newberg	OR	97132	2902 E 2nd St UNIT 95	Newberg	OR	97132
R3221	01300	Rodney Cosby & Ronny Huxhold	2902 E 2nd St UNIT 50	Newberg	OR	97132	2902 E 2nd St UNIT 50	Newberg	OR	97132
R3221	01300	Doris & Robert Rucker	2902 E 2nd St UNIT 112	Newberg	OR	97132	2902 E 2nd St UNIT 112	Newberg	OR	97132
R3221	01300	Leslie & Donald Peterson	2902 E 2nd St UNIT 113	Newberg	OR	97132	2902 E 2nd St UNIT 113	Newberg	OR	97132
R3221	01300	Rose Cavanaugh & Robert Jamieson	2902 E 2nd St UNIT 110	Newberg	OR	97132	2902 E 2nd St UNIT 110	Newberg	OR	97132
R3221	01300	Robert & Susan Rice	2902 E 2nd St UNIT 77	Newberg	OR	97132	2902 E 2nd St UNIT 77	Newberg	OR	97132
R3221	01300	Arlan Graham	479 SW Stepien Rd	Gaston	OR	97119	2902 E 2nd St UNIT 28	Newberg	OR	97132
R3221	01300	Barbara Kautz	2902 E 2nd St UNIT 15	Newberg	OR	97132	2902 E 2nd St UNIT 15	Newberg	OR	97132
R3221	01300	Gerald Jelinek	2902 E 2nd St UNIT 103	Newberg	OR	97132	2902 E 2nd St UNIT 103	Newberg	OR	97132
R3221	01300	Bacon & Gail Gourley	2902 E 2nd St UNIT 109	Newberg	OR	97132	2902 E 2nd St UNIT 109	Newberg	OR	97132
R3221	01300	Ronard Grubbs & Joyce Walding	2902 E 2nd St UNIT 101	Newberg	OR	97132	2902 E 2nd St UNIT 101	Newberg	OR	97132
R3221	01300	Angela Anderson	2902 E 2nd St UNIT 92	Newberg	OR	97132	2902 E 2nd St UNIT 92	Newberg	OR	97132
R3221	01300	Robert & Betty Gleason	2902 E 2nd St UNIT 114	Newberg	OR	97132	2902 E 2nd St UNIT 114	Newberg	OR	97132
R3221	01300	Michael & Karen Schrieber	2902 E 2nd St UNIT 57	Newberg	OR	97132	2902 E 2nd St UNIT 57	Newberg	OR	97132
R3221	01300	Glen Thornton	2902 E 2nd St UNIT 1	Newberg	OR	97132	2902 E 2nd St UNIT 1	Newberg	OR	97132
R3221	01300	Shari Wiltshire & Deanna Demoura	2902 E 2nd St UNIT 51	Newberg	OR	97132	2902 E 2nd St UNIT 51	Newberg	OR	97132
R3221	01300	Bill Gray	901 N Pecan Ct APT 26	Newberg	OR	97132	2902 E 2nd St UNIT 14	Newberg	OR	97132
R3221	01300	Margaret & Jacob Fogle	2902 E 2nd St UNIT 40	Newberg	OR	97132	2902 E 2nd St UNIT 40	Newberg	OR	97132
R3221	01300	Myrna Beach	2902 E 2nd St UNIT 111	Newberg	OR	97132	2902 E 2nd St UNIT 111	Newberg	OR	97132
R3221	01300	John Jones	Po Box 51	Dundee	OR	97115	2902 E 2nd St UNIT 102	Newberg	OR	97132
R3221	01300	Varnel Hackett & Chrystal Hauptman	8000 Missouri	Vernonia	OR	97064	2902 E 2nd St UNIT 19	Newberg	OR	97132
R3221	01300	Cindy Norberg	2902 E 2nd St UNIT 64	Newberg	OR	97132	2902 E 2nd St UNIT 64	Newberg	OR	97132
R3221	01300	Jerry Davis	2902 E 2nd St UNIT 65	Newberg	OR	97132	2902 E 2nd St UNIT 65	Newberg	OR	97132
R3221	01300	Jerry Davis	2902 E 2nd St UNIT 65	Newberg	OR	97132	2902 E 2nd St UNIT 65	Newberg	OR	97132
R3221	01300	Jerry Davis	2902 E 2nd St UNIT 65	Newberg	OR	97132	2902 E 2nd St UNIT 65	Newberg	OR	97132
R3221	01300	Ramona Haggstrom & Elisabeth Clark	2902 E 2nd St UNIT 106	Newberg	OR	97132	2902 E 2nd St UNIT 106	Newberg	OR	97132
R3221	01300	Sharon Bohl & Julia Ransom	2902 E 2nd St UNIT 49	Newberg	OR	97132	2902 E 2nd St UNIT 49	Newberg	OR	97132
R3221	01300	William Ashburn	2902 E 2nd St UNIT 42	Newberg	OR	97132	2902 E 2nd St UNIT 42	Newberg	OR	97132
R3221	01300	Lacie & Chris Nash	29800 NE Raintree Ln	Newberg	OR	97132	2902 E 2nd St UNIT 13	Newberg	OR	97132
R3221	01300	Kathy Ingraham	2902 E 2nd St UNIT 61	Newberg	OR	97132	2902 E 2nd St UNIT 61	Newberg	OR	97132
R3221	01300	Donald Parrish	2902 E 2nd St UNIT 90	Newberg	OR	97132	2902 E 2nd St UNIT 90	Newberg	OR	97132
R3221	01300	Linda Moss	2902 E 2nd St UNIT 56	Newberg	OR	97132	2902 E 2nd St UNIT 56	Newberg	OR	97132
R3221	01300	Lisha Rhodes & Barbara Monson	2902 E 2nd St UNIT 12	Newberg	OR	97132	2902 E 2nd St UNIT 12	Newberg	OR	97132
R3221	01300	Gary & Candace Lipp	2902 E 2nd St UNIT 52	Newberg	OR	97132	2902 E 2nd St UNIT 52	Newberg	OR	97132
R3221	01300	Judy Workman	2902 E 2nd St UNIT 87	Newberg	OR	97132	2902 E 2nd St UNIT 87	Newberg	OR	97132
R3221	01300	Vicki Braly	2902 E 2nd St UNIT 9	Newberg	OR	97132	2902 E 2nd St UNIT 9	Newberg	OR	97132
R3221	01300	Stan & Connie Neal	2902 E 2nd St UNIT 60	Newberg	OR	97132	2902 E 2nd St UNIT 60	Newberg	OR	97132
R3221	01300	Linda Byrd	Po Box 3024	Newberg	OR	97132	2902 E 2nd St UNIT 38	Newberg	OR	97132
R3221	01300	Judy Workman & Anthony Fazekas	2902 E 2nd St UNIT 54	Newberg	OR	97132	2902 E 2nd St UNIT 54	Newberg	OR	97132
R3221	01300	Lynn Gourley & Virginia Scholl	2902 E 2nd St UNIT 63	Newberg	OR	97132	2902 E 2nd St UNIT 63	Newberg	OR	97132
R3221	01300	Connie Hamel	11977 Kathaway Ct	Oregon City	OR	97045	2902 E 2nd St UNIT 89	Newberg	OR	97132

R3221	01300	Hubert & Shirley Mardock	2902 E 2nd St UNIT 85	Newberg	OR	97132	2902 E 2nd St UNIT 85	Newberg	OR	97132
R3221	01300	Leslie Janac & Donald Jones	2902 E 2nd St UNIT 100	Newberg	OR	97132	2902 E 2nd St UNIT 100	Newberg	OR	97132
R3221	01300	Korey & Joe Derkacht	2902 E 2nd St UNIT 62	Newberg	OR	97132	2902 E 2nd St UNIT 62	Newberg	OR	97132
R3221	01300	Roger & Laura Ross	1102 N Springbrook Rd # 200	Newberg	OR	97132	2902 E 2nd St UNIT 84	Newberg	OR	97132
R3221	01300	Ruth Owens	2902 E 2nd St UNIT 53	Newberg	OR	97132	2902 E 2nd St UNIT 53	Newberg	OR	97132
R3221	01300	Scott & Sherry Alcover	2902 E 2nd St UNIT 10	Newberg	OR	97132	2902 E 2nd St UNIT 10	Newberg	OR	97132
R3221	01300	Samer & Salam Al-Tameemi	2902 E 2nd St UNIT 41	Newberg	OR	97132	2902 E 2nd St UNIT 41	Newberg	OR	97132
R3221	01300	Aurora Heffernan & Monica Boeve-Wallace	2902 E 2nd St UNIT 108	Newberg	OR	97132	2902 E 2nd St UNIT 108	Newberg	OR	97132
R3221	01300	Dennis & Carol Morgan	2902 E 2nd St UNIT 27	Newberg	OR	97132	2902 E 2nd St UNIT 27	Newberg	OR	97132
R3221	01300	Daryl & Linda Jones	2902 E 2nd St UNIT 28A	Newberg	OR	97132	2902 E 2nd St UNIT 28A	Newberg	OR	97132
R3221	01300	David Sherman	2902 E 2nd St UNIT 21	Newberg	OR	97132	2902 E 2nd St UNIT 21	Newberg	OR	97132
R3221	01300	Diane Ferriera & Jack Castillo	2902 E 2nd St UNIT 20	Newberg	OR	97132	2902 E 2nd St UNIT 20	Newberg	OR	97132
R3221	01300	Charan Gould	2902 E 2nd St UNIT 8	Newberg	OR	97132	2902 E 2nd St UNIT 8	Newberg	OR	97132
R3221	01300	Charles & Shanda Holmes	19115 SW Conzelmann Rd	Sherwood	OR	97140	2902 E 2nd St UNIT 24	Newberg	OR	97132
R3221	01300	Mrl Personal Property Trust & Del Group Inc	Po Box 785	Newberg	OR	97132	2902 E 2nd St UNIT 93	Newberg	OR	97132
R3221	01300	Ruth Black	2902 E 2nd St UNIT 48	Newberg	OR	97132	2902 E 2nd St UNIT 48	Newberg	OR	97132
R3221	01300	Barbara Martinson	2902 E 2nd St UNIT 7	Newberg	OR	97132	2902 E 2nd St UNIT 7	Newberg	OR	97132
R3221	01300	Morris Bickell	2902 E 2nd St UNIT 55	Newberg	OR	97132	2902 E 2nd St UNIT 55	Newberg	OR	97132
R3221	01300	Jill & James Bickell	2902 E 2nd St UNIT 3	Newberg	OR	97132	2902 E 2nd St UNIT 3	Newberg	OR	97132
R3221	01300	Diane Drew	2902 E 2nd St UNIT 22	Newberg	OR	97132	2902 E 2nd St UNIT 22	Newberg	OR	97132
R3221	01701	Pnwp LLC #5	6600 SW 105th Ave STE 175	Beaverton	OR	97008	705 S Springbrook Rd # C	Newberg	OR	97132
R3221	03801	Ruth Kilgore	8625 NE Saint Paul Hwy	Newberg	OR	97132	8625 NE Saint Paul Hwy	Newberg	OR	97132
R3221	04000	Lawrence Anderson	3700 E Fernwood Rd	Newberg	OR	97132	3700 E Fernwood Rd	Newberg	OR	97132
R3221	03800	W F Incorporated	615 S Springbrook Rd	Newberg	OR	97132	NE Springbrook Rd	Newberg	OR	97132
R3221	03701	Alvin & Jeanine Elbert	606 S Springbrook Rd	Newberg	OR	97132	606 S Springbrook Rd	Newberg	OR	97132
R3221	01601	Springbrook Industrial Park LLC	Po Box 9	Newberg	OR	97132	675 S Springbrook Rd STE C800	Newberg	OR	97132
R3221	01600	W F Incorporated	PO Box 1136	Newberg	OR	97132	615 S Springbrook Rd	Newberg	OR	97132
R3221	01400	First Assembly Of God Of Newbe	502 S Saint Paul Hwy	Newberg	OR	97132	502 S Saint Paul Hwy	Newberg	OR	97132
R3221	01602	Rick & Terry Beaudry LLC	Po Box 1149	Newberg	OR	97132	653 S Springbrook Rd	Newberg	OR	97132
R3221	03401	Springbrook Estates Yamhill LLC	385 Clinton St	Costa Mesa	CA	92626	1000 S Mckern Ct	Newberg	OR	97132
R3221	03401	Lindsey Ebert & Gabriela Lazalde	1000 S Mckern Ct UNIT 69	Newberg	OR	97132	1000 S Mckern Ct UNIT 69	Newberg	OR	97132
R3221	03401	Justin & Tanisha Bush	1000 S Mckern Ct UNIT 12	Newberg	OR	97132	1000 S Mckern Ct UNIT 12	Newberg	OR	97132
R3221	03401	David Miller	1000 S Mckern Ct UNIT 29	Newberg	OR	97132	1000 S Mckern Ct UNIT 29	Newberg	OR	97132
R3221	03401	Angela & Michael Hale	1000 S Mckern Ct UNIT 27	Newberg	OR	97132	1000 S Mckern Ct UNIT 27	Newberg	OR	97132
R3221	03401	Dolores & Dennis Horine	1000 S Mckern Ct UNIT 102	Newberg	OR	97132	1000 S Mckern Ct UNIT 102	Newberg	OR	97132
R3221	03401	Jeffrey Ostby	1000 S Mckern Ct UNIT 73	Newberg	OR	97132	1000 S Mckern Ct UNIT 73	Newberg	OR	97132
R3221	03401	Rachel Brown	1000 S Mckern Ct UNIT 66	Newberg	OR	97132	1000 S Mckern Ct UNIT 66	Newberg	OR	97132
R3221	03401	Donna Jones	1000 S Mckern Ct UNIT 52	Newberg	OR	97132	1000 S Mckern Ct UNIT 52	Newberg	OR	97132
R3221	03401	Springbrook Estates Yamhill LLC	385 Clinton St	Costa Mesa	CA	92626	1000 S Mckern Ct UNIT 76	Newberg	OR	97132
R3221	03401	Anthony Eiwen	1000 S Mckern Ct UNIT 28	Newberg	OR	97132	1000 S Mckern Ct UNIT 28	Newberg	OR	97132
R3221	03401	Shayla & Michael Vondrachek	1000 S Mckern Ct UNIT 14	Newberg	OR	97132	1000 S Mckern Ct UNIT 14	Newberg	OR	97132
R3221	03401	Peter & Jessica Gasiorowski	1000 S Mckern Ct UNIT 50	Newberg	OR	97132	1000 S Mckern Ct UNIT 50	Newberg	OR	97132
R3221	03401	Wendy Coffin	1000 S Mckern Ct UNIT 63	Newberg	OR	97132	1000 S Mckern Ct UNIT 63	Newberg	OR	97132
R3221	03401	Jeffery Musall	1000 S Mckern Ct UNIT 24	Newberg	OR	97132	1000 S Mckern Ct UNIT 24	Newberg	OR	97132
R3221	03401	Paul Gipson	1000 S Mckern Ct UNIT 25	Newberg	OR	97132	1000 S Mckern Ct UNIT 25	Newberg	OR	97132
R3221	03401	Garcia Castulo & Esteban Faustino	1000 S Mckern Ct UNIT 46	Newberg	OR	97132	1000 S Mckern Ct UNIT 46	Newberg	OR	97132
R3221	03401	Duane & Lynda Blondo	1000 S Mckern Ct UNIT 22	Newberg	OR	97132	1000 S Mckern Ct UNIT 22	Newberg	OR	97132
R3221	03401	Scott & Erin Bernhardt	980 SW 7th St	Dundee	OR	97115	1000 S Mckern Ct UNIT 65	Newberg	OR	97132
R3221	03401	Alcaraz & Maria Campuzano	1000 S Mckern Ct UNIT 51	Newberg	OR	97132	1000 S Mckern Ct UNIT 51	Newberg	OR	97132
R3221	03401	Eric Weber	1000 S Mckern Ct UNIT 35	Newberg	OR	97132	1000 S Mckern Ct UNIT 35	Newberg	OR	97132
R3221	03401	John & Dagmar McMahan	1000 S Mckern Ct UNIT 32	Newberg	OR	97132	1000 S Mckern Ct UNIT 32	Newberg	OR	97132

R3221	03401	Laurie Schroder	1000 S Mckern Ct UNIT 47	Newberg	OR	97132	1000 S Mckern Ct UNIT 47	Newberg	OR	97132
R3221	03401	Leland Boatright	1000 S Mckern Ct UNIT 61	Newberg	OR	97132	1000 S Mckern Ct UNIT 61	Newberg	OR	97132
R3221	03401	Barbara Beyke	1000 S Mckern Ct UNIT 40	Newberg	OR	97132	1000 S Mckern Ct UNIT 40	Newberg	OR	97132
R3221	03401	Barbara Beyke	1000 S Mckern Ct UNIT 40	Newberg	OR	97132	1000 S Mckern Ct UNIT 40	Newberg	OR	97132
R3221	03401	Beth Stevenson	1000 S Mckern Ct UNIT 26	Newberg	OR	97132	1000 S Mckern Ct UNIT 26	Newberg	OR	97132
R3221	03401	Gerald & Alice Towers	1000 S Mckern Ct UNIT 8	Newberg	OR	97132	1000 S Mckern Ct UNIT 8	Newberg	OR	97132
R3221	03401	Marilyn Lewis	1000 S Mckern Ct UNIT 62	Newberg	OR	97132	1000 S Mckern Ct UNIT 62	Newberg	OR	97132
R3221	03401	Randle Salsberry	1000 S Mckern Ct UNIT 15	Newberg	OR	97132	1000 S Mckern Ct UNIT 15	Newberg	OR	97132
R3221	03401	Haley & Brandon Tuttle	1000 S Mckern Ct UNIT 21	Newberg	OR	97132	1000 S Mckern Ct UNIT 21	Newberg	OR	97132
R3221	03401	Alfredo Chavira	1000 S Mckern Ct UNIT 44	Newberg	OR	97132	1000 S Mckern Ct UNIT 44	Newberg	OR	97132
R3221	03401	Diane & Kenneth Robinson	Po Box 296	Newberg	OR	97132	1000 S Mckern Ct UNIT 23	Newberg	OR	97132
R3221	03401	Daniel Jette & Lisa Price	1000 S Mckern Ct UNIT 37	Newberg	OR	97132	1000 S Mckern Ct UNIT 37	Newberg	OR	97132
R3221	03401	Antoinette Haworth & Todd Wydler	1000 S Mckern Ct UNIT 7	Newberg	OR	97132	1000 S Mckern Ct UNIT 7	Newberg	OR	97132
R3221	03401	Felix Alvarez	1000 S Mckern Ct UNIT 64	Newberg	OR	97132	1000 S Mckern Ct UNIT 64	Newberg	OR	97132
R3221	03401	Martin Rahier Ii	1000 S Mckern Ct UNIT 20	Newberg	OR	97132	1000 S Mckern Ct UNIT 20	Newberg	OR	97132
R3221	03401	Robert Bolton Jr & Bryce Autery	1000 S Mckern Ct UNIT 53	Newberg	OR	97132	1000 S Mckern Ct UNIT 53	Newberg	OR	97132
R3221	03401	Lauren & Carmen Alligaier	1000 S Mckern Ct UNIT 36	Newberg	OR	97132	1000 S Mckern Ct UNIT 36	Newberg	OR	97132
R3221	03401	Arlen Ford	1000 S Mckern Ct UNIT 56	Newberg	OR	97132	1000 S Mckern Ct UNIT 56	Newberg	OR	97132
R3221	03401	Scott & Jennifer Cannard	1000 S Mckern Ct UNIT 54	Newberg	OR	97132	1000 S Mckern Ct UNIT 54	Newberg	OR	97132
R3221	03401	Bonnie, Samuel, & Kimberly Sattler	15238 SW Summerview Dr	Portland	OR	97224	1000 S Mckern Ct UNIT 9	Newberg	OR	97132
R3221	03401	Janelle & Brent Shores	1000 S Mckern Ct UNIT 34	Newberg	OR	97132	1000 S Mckern Ct UNIT 34	Newberg	OR	97132
R3221	03401	Cody & Abbie Helzer	1000 S Mckern Ct UNIT 33	Newberg	OR	97132	1000 S Mckern Ct UNIT 33	Newberg	OR	97132
R3221	03401	Librado Garcia & Luz Pena-Anaya	1000 S Mckern Ct UNIT 5	Newberg	OR	97132	1000 S Mckern Ct UNIT 5	Newberg	OR	97132
R3221	03401	Ron & Paula Curtis	1000 S Mckern Ct UNIT 17	Newberg	OR	97132	1000 S Mckern Ct UNIT 17	Newberg	OR	97132
R3221	03401	Beau & Josephine Foulk	1000 S Mckern Ct UNIT 4	Newberg	OR	97132	1000 S Mckern Ct UNIT 4	Newberg	OR	97132
R3221	03401	Gary & Rebecca Shelton	1000 S Mckern Ct UNIT 72	Newberg	OR	97132	1000 S Mckern Ct UNIT 72	Newberg	OR	97132
R3221	03401	Lavonne Finsand	1000 S Mckern Ct UNIT 3	Newberg	OR	97132	1000 S Mckern Ct UNIT 3	Newberg	OR	97132
R3221	03401	Samuel Hutchison	1000 S Mckern Ct UNIT 42	Newberg	OR	97132	1000 S Mckern Ct UNIT 42	Newberg	OR	97132
R3221	03401	Fuentes Sangabriel	1000 S Mckern Ct UNIT 10	Newberg	OR	97132	1000 S Mckern Ct UNIT 10	Newberg	OR	97132
R3221	03401	Sandra Funk	1000 S Mckern Ct UNIT 13	Newberg	OR	97132	1000 S Mckern Ct UNIT 13	Newberg	OR	97132
R3221	03401	John Hoover & Tina Houck	1000 S Mckern Ct UNIT 57	Newberg	OR	97132	1000 S Mckern Ct UNIT 57	Newberg	OR	97132
R3221	03401	Dela & Dela Arturo	1000 S Mckern Ct UNIT 58	Newberg	OR	97132	1000 S Mckern Ct UNIT 58	Newberg	OR	97132
R3221	03401	Lynn Depretto	21240 S Richard Ct	Oregon City	OR	97045	1000 S Mckern Ct UNIT 59	Newberg	OR	97132
R3221	03401	Joana Castaneda-Ramirez & Fernando Torres-Perez	1000 S Mckern Ct UNIT 18	Newberg	OR	97132	1000 S Mckern Ct UNIT 18	Newberg	OR	97132
R3221	03401	Russell & Gena Stroup	9630 NE Neumann Ln	Newberg	OR	97132	1000 S Mckern Ct UNIT 75	Newberg	OR	97132
R3221	03401	Viki Drydrahl	1000 S Mckern Ct UNIT 2	Newberg	OR	97132	1000 S Mckern Ct UNIT 2	Newberg	OR	97132
R3221	03401	Karen Catalan	1000 S Mckern Ct UNIT 43	Newberg	OR	97132	1000 S Mckern Ct UNIT 43	Newberg	OR	97132
R3221	03401	Suzanne Thomas	1000 S Mckern Ct UNIT 11	Newberg	OR	97132	1000 S Mckern Ct UNIT 11	Newberg	OR	97132
R3221	03401	David Cranmer	1000 S Mckern Ct UNIT 45	Newberg	OR	97132	1000 S Mckern Ct UNIT 45	Newberg	OR	97132
R3221	03401	Darlene Ingram & Laura Palmblad	1000 S Mckern Ct UNIT 38	Newberg	OR	97132	1000 S Mckern Ct UNIT 38	Newberg	OR	97132
R3221	03401	Donald & Linda Cooley	1000 S Mckern Ct UNIT 70	Newberg	OR	97132	1000 S Mckern Ct UNIT 70	Newberg	OR	97132
R3221	03401	Silvino Gusman & Maria Rodriguez	1000 S Mckern Ct UNIT 88	Newberg	OR	97132	1000 S Mckern Ct UNIT 88	Newberg	OR	97132
R3221	03401	Raymond & Delia Camacho	1000 S Mckern Ct UNIT 98	Newberg	OR	97132	1000 S Mckern Ct UNIT 98	Newberg	OR	97132
R3221	03401	Ryan & Randy Swinhart	1000 S Mckern Ct UNIT 122	Newberg	OR	97132	1000 S Mckern Ct UNIT 122	Newberg	OR	97132
R3221	03401	Erin Davidson	1000 S Mckern Ct UNIT 89	Newberg	OR	97132	1000 S Mckern Ct UNIT 89	Newberg	OR	97132
R3221	03401	David & Renae Leslie	1000 S Mckern Ct UNIT 126	Newberg	OR	97132	1000 S Mckern Ct UNIT 126	Newberg	OR	97132
R3221	03401	Jason Smith & Janice Jeffries	1000 S Mckern Ct UNIT 113	Newberg	OR	97132	1000 S Mckern Ct UNIT 113	Newberg	OR	97132
R3221	03401	Richard & Betty Karlow	1000 S Mckern Ct UNIT 80	Newberg	OR	97132	1000 S Mckern Ct UNIT 80	Newberg	OR	97132
R3221	03401	Cherie & Joe Houser	1000 S Mckern Ct UNIT 85	Newberg	OR	97132	1000 S Mckern Ct UNIT 85	Newberg	OR	97132
R3221	03401	Teryan Hundley & Alexis Crow	1000 S Mckern Ct UNIT 109	Newberg	OR	97132	1000 S Mckern Ct UNIT 109	Newberg	OR	97132
R3221	03401	Holly Turnbull	1000 S Mckern Ct UNIT 87	Newberg	OR	97132	1000 S Mckern Ct UNIT 87	Newberg	OR	97132

R3221	03401	Dallas & Barbara Smith	1000 S Mckern Ct UNIT 115	Newberg	OR	97132	1000 S Mckern Ct UNIT 115	Newberg	OR	97132
R3221	03401	Patricia Mendoza & Mario Montes	1000 S Mckern Ct UNIT 90	Newberg	OR	97132	1000 S Mckern Ct UNIT 90	Newberg	OR	97132
R3221	03401	Yehudith Samson	1000 S Mckern Ct UNIT 107	Newberg	OR	97132	1000 S Mckern Ct UNIT 107	Newberg	OR	97132
R3221	03401	Sharon Omalley	1000 S Mckern Ct UNIT 84	Newberg	OR	97132	1000 S Mckern Ct UNIT 84	Newberg	OR	97132
R3221	03401	Jon & Lois Tromblay	1000 S Mckern Ct UNIT 116	Newberg	OR	97132	1000 S Mckern Ct UNIT 116	Newberg	OR	97132
R3221	03401	Barbara Kaston	Po Box 230095	Portland	OR	97281	1000 S Mckern Ct UNIT 77	Newberg	OR	97132
R3221	03401	Laura Martinez	1000 S Mckern Ct UNIT 96	Newberg	OR	97132	1000 S Mckern Ct UNIT 96	Newberg	OR	97132
R3221	03401	Dana & John St John	20525 SW 94th Ave	Tualatin	OR	97062	1000 S Mckern Ct UNIT 100	Newberg	OR	97132
R3221	03401	Richard & Virginia Gates	1000 S Mckern Ct UNIT 92	Newberg	OR	97132	1000 S Mckern Ct UNIT 92	Newberg	OR	97132
R3221	03401	Felicity Harvey	1000 S Mckern Ct UNIT 114	Newberg	OR	97132	1000 S Mckern Ct UNIT 114	Newberg	OR	97132
R3221	03401	Jay & Darlene Andreas	1000 S Mckern Ct UNIT 83	Newberg	OR	97132	1000 S Mckern Ct UNIT 83	Newberg	OR	97132
R3221	03401	John Boaz	1000 S Mckern Ct UNIT 111	Newberg	OR	97132	1000 S Mckern Ct UNIT 111	Newberg	OR	97132
R3221	03401	Jaime Sanchez-Lopez & Yesmin Salas-Rosales	1000 S Mckern Ct UNIT 112	Newberg	OR	97132	1000 S Mckern Ct UNIT 112	Newberg	OR	97132
R3221	03401	Wayne & Mary German	1000 S Mckern Ct UNIT 108	Newberg	OR	97132	1000 S Mckern Ct UNIT 108	Newberg	OR	97132
R3221	03401	Mario Sanchez & Waltraud Geiger	1000 S Mckern Ct UNIT 125	Newberg	OR	97132	1000 S Mckern Ct UNIT 125	Newberg	OR	97132
R3221	03401	Russell & Gena Stroup	Po Box 662	Newberg	OR	97132	1000 S Mckern Ct UNIT 119	Newberg	OR	97132
R3221	03401	Alexis Bartin & Camilla Botkin	1000 S Mckern Ct UNIT 79	Newberg	OR	97132	1000 S Mckern Ct UNIT 79	Newberg	OR	97132
R3221	03401	Virginia Gongliewski	1000 S Mckern Ct UNIT 81	Newberg	OR	97132	1000 S Mckern Ct UNIT 81	Newberg	OR	97132
R3221	03401	Virginia Espinoza	1000 S Mckern Ct UNIT 101	Newberg	OR	97132	1000 S Mckern Ct UNIT 101	Newberg	OR	97132
R3221	03401	Kristal Varela	1000 S Mckern Ct UNIT 95	Newberg	OR	97132	1000 S Mckern Ct UNIT 95	Newberg	OR	97132
R3221	03401	Barbara Stevens	15532 SW Pacific Hwy STE C1B	Portland	OR	97224	1000 S Mckern Ct UNIT 93	Newberg	OR	97132
R3221	03401	Kelly & Kristopher Rohweder	1000 S Mckern Ct UNIT 123	Newberg	OR	97132	1000 S Mckern Ct UNIT 123	Newberg	OR	97132
R3221	03401	Ryan Pratt	1000 S Mckern Ct UNIT 103	Newberg	OR	97132	1000 S Mckern Ct UNIT 103	Newberg	OR	97132
R3221	03401	Kelly & Kenneth Duhon	1000 S Mckern Ct UNIT 104	Newberg	OR	97132	1000 S Mckern Ct UNIT 104	Newberg	OR	97132
R3221	03401	Sandra & Richard Driskell	8607 Vashon Dr NE	Lacey	WA	98516	1000 S Mckern Ct UNIT 105	Newberg	OR	97132
R3221	03401	Ann Hardie	1000 S Mckern Ct UNIT 82	Newberg	OR	97132	1000 S Mckern Ct UNIT 82	Newberg	OR	97132
R3221	03401	Jose & Ramona Garcia	1000 S Mckern Ct UNIT 30	Newberg	OR	97132	1000 S Mckern Ct UNIT 30	Newberg	OR	97132
R3221	03401	Alvaro Guzman & Evangelina Anaya	1000 S Mckern Ct UNIT 110	Newberg	OR	97132	1000 S Mckern Ct UNIT 110	Newberg	OR	97132
R3221	03401	Ladawn & Travis Hutchens	1000 S Mckern Ct UNIT 99	Newberg	OR	97132	1000 S Mckern Ct UNIT 99	Newberg	OR	97132
R3221	03401	Helen Richards	1000 S Mckern Ct UNIT 106	Newberg	OR	97132	1000 S Mckern Ct UNIT 106	Newberg	OR	97132
R3221	03401	Marcia & Randall Cobb	1000 S Mckern Ct UNIT 41	Newberg	OR	97132	1000 S Mckern Ct UNIT 41	Newberg	OR	97132
R3221	03401	Evelyn Powell	1000 S Mckern Ct UNIT 117	Newberg	OR	97132	1000 S Mckern Ct UNIT 117	Newberg	OR	97132
R3221	03401	Adam Putnam & Tristan Paris	1000 S Mckern Ct UNIT 124	Newberg	OR	97132	1000 S Mckern Ct UNIT 124	Newberg	OR	97132
R3221	03401	Ladonna Lake	1000 S Mckern Ct UNIT 71	Newberg	OR	97132	1000 S Mckern Ct UNIT 71	Newberg	OR	97132
R3221	03401	Jovita & Marisol Campuzano	1000 S Mckern Ct UNIT 74	Newberg	OR	97132	1000 S Mckern Ct UNIT 74	Newberg	OR	97132
R3221	03401	Jacques & Sany Blondeau	Po Box 876	Newberg	OR	97132	1000 S Mckern Ct UNIT 67	Newberg	OR	97132
R3221	03401	Samuel & Tamara Spooner	1000 S Mckern Ct UNIT 86	Newberg	OR	97132	1000 S Mckern Ct UNIT 86	Newberg	OR	97132
R3221	03401	Taylor & Janet Kopecky	Po Box 365	Brightwood	OR	97011	1000 S Mckern Ct UNIT 55	Newberg	OR	97132
R3221	03401	Linda & David Dobbins	1000 S Mckern Ct UNIT 120	Newberg	OR	97132	1000 S Mckern Ct UNIT 120	Newberg	OR	97132
R3221	03401	William & Katherine Kelly	1000 S Mckern Ct UNIT 97	Newberg	OR	97132	1000 S Mckern Ct UNIT 97	Newberg	OR	97132
R3221	03401	Jennifer Fitzgerald & Athen Turner	1000 S Mckern Ct UNIT 121	Newberg	OR	97132	1000 S Mckern Ct UNIT 121	Newberg	OR	97132
R3221	03401	Robert & Dena Evans	1000 S Mckern Ct UNIT 91	Newberg	OR	97132	1000 S Mckern Ct UNIT 91	Newberg	OR	97132
R3221	03401	Brian Hernandez	1000 S Mckern Ct UNIT 118	Newberg	OR	97132	1000 S Mckern Ct UNIT 118	Newberg	OR	97132
R3221	03401	Donna Johnson	1000 S Mckern Ct UNIT 68	Newberg	OR	97132	1000 S Mckern Ct UNIT 68	Newberg	OR	97132
R3221	03401	Anita Griffin	1000 S Mckern Ct UNIT 31	Newberg	OR	97132	1000 S Mckern Ct UNIT 31	Newberg	OR	97132
R3221	03401	Amanda King	1000 S Mckern Ct UNIT 49	Newberg	OR	97132	1000 S Mckern Ct UNIT 49	Newberg	OR	97132
R3221	03401	Bernardo Hermosillo-Zamora & Jennifer Hermosillo	1000 S Mckern Ct UNIT 39	Newberg	OR	97132	1000 S Mckern Ct UNIT 39	Newberg	OR	97132
R3221	03401	Thomas & Valerie Munkres	1000 S Mckern Ct UNIT 19	Newberg	OR	97132	1000 S Mckern Ct UNIT 19	Newberg	OR	97132
R3221	03401	Marvin & Jolie Wyatt	1000 S Mckern Ct UNIT 48	Newberg	OR	97132	1000 S Mckern Ct UNIT 48	Newberg	OR	97132
R3221	03401	John Zoltner	1000 S Mckern Ct UNIT 94	Newberg	OR	97132	1000 S Mckern Ct UNIT 94	Newberg	OR	97132



LEGEND:

- EASEMENT BOUNDARY
- LOT LINE
- CITY LIMIT

SCALE 1/16"=0'-0"

ELBERT RENTALS
ALVIN ELBERT
(503) 538-0350 PHONE
(503) 330-2251 CELL
alvin@aremanufacturing.com

BUILDING EXPANSION
FOR A.R.E. MFG.

518 S. SPRINGBROOK RD.
NEWBERG, OREGON 97132

PRELIM
REV #1 3-1-22
REV #2 4-20-22
REV
REV
REV

518
SITE
PLAN

REV
2

321 SW 4th Ave., Suite 400
Portland, OR 97204
503.248.0313
lancastermobley.com

Memorandum

To: **A.R.E Manufacturing**

From: **Myla Cross**
Jennifer Danziger, PE

Date: **October 11, 2022**

Subject: **A.R.E Manufacturing - Trip Generation & TSDC Analysis**

RENEWS: 12/31/2023

Introduction

This memorandum reports the trip generation analysis of the proposed expansion of the A.R.E Manufacturing development located at 518 S Springbrook in Newberg, Oregon. The proposed expansion will include the construction of a 10,530-square foot (SF) addition to an existing industrial building, which will expand the existing machine production space. The applicant seeks to determine the necessary fees associated with the City of Newberg's Transportation System Development Charges (TSDC's) by completing a trip generation analysis. Figure 1 displays a vicinity map with the A.R.E Manufacturing property outlined in yellow, and the location of the proposed building expansion outlined in red.

Figure 1: Project Location (image from Google Earth)

Trip Generation

Existing Trip Generation

A.R.E Manufacturing currently has two buildings, encompassing a total of 21,730 SF, which serve as machine production space. The proposed expansion is aimed to accommodate current employees and provide more space for working conditions. No new employees are planned to be hired as a result of the proposed expansion.

Two methods were used to compare the trip generation for the existing development. One uses industry sources to estimate site demand while the other considers the actual site operations.

ITE Trip Rates

The first method was to estimate the number of trips by using average trip rates from the *Trip Generation Manual* [1]. Specifically, data from land use code 140, *Manufacturing* was used based on the square footage of the gross floor area.

Using ITE trip rates, the trip generation calculations estimate that a typical 21,730-SF manufacturing building is anticipated to generate 15 trips during the morning peak hour, 16 trips during the evening peak hour, and 104 average weekday trips. Table 1 provides a summary of the trip generation estimates for each land use. Detailed trip generation calculations are attached in the technical appendix to this memorandum.

Table 1: Existing ITE Trip Generation Estimate Summary

Development	Land Use Code	Size	Evening Peak Hour			Weekday Total
			Enter	Exit	Total	
Manufacturing	140	21,730 SF	5	11	16	104

Site Observations

The second method was to use trip generation data and employment information provided by the client. The documents provided by the client show that the number of day shift employees is significantly higher than the number of night shift employees. The data also includes travel mode information which indicates that while the majority of employees drive to work, several use different modes of transportation such as carpooling, walking, or biking. Table 2 provides a summary of A.R.E Manufacturing's employee schedules and modes of transport.

Table 2: Employment Information

Department	Number of Employees	Employee Schedule		Mode of Transportation			
		Day Shift	Night Shift	Drive	Carpool	Bike/Walk	WFM
Office	6	6	0	4	0	1	1
Production	39	35	4	32	2	5	0
Total:	45	41	4	36	2	6	1

Notes: WFM = Work from Home

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

Traffic entering and exiting the parking lot was counted by the client on Tuesday, August 2, 2022, during the PM peak hour and is summarized in Table 3. A total of 4 entering vehicles and 24 exiting vehicles were observed, bringing the PM peak hour total to 28 vehicles. Detailed trip generation data and employment information provided by the client is attached in the appendix of this memorandum.

Table 3: Existing Trip Generation Summary – Site Observations

Development	Land Use Code	Size	Evening Peak Hour		
			Enter	Exit	Total
Manufacturing	140	21,730 SF	4	24	28

The observed PM peak hour total of the A.R.E Manufacturing facility is approximately 57% higher than the estimated ITE trip generation for a development of the same size and general use classification, indicating that the existing trip generation of the site is more aligned with a larger size manufacturing development. This finding is consistent with the stated purpose of the expansion, which is to better accommodate the needs of the current employees rather than expand operations to accommodate a greater number of employees.

Additionally, the number of day shift employees at A.R.E Manufacturing is significantly higher than that of night shift employees. ITE trip rates estimate approximately 31% entering trips, and 69% exiting trips during the PM peak hour. Based on the information provided by the client, there are approximately 14% entering trips and 86% exiting trips during the PM peak hour. Thus, there is a much higher concentration of employee density during the day shift compared to the ITE rate estimates. The proposed expansion will allow for the existing day shift employees to have the necessary space to conduct daily work activities.

Proposed Expansion Trip Generation

The proposed expansion will include the addition of 10,530 SF to the existing site, bringing the total size of the development to 32,260 SF. Table 4 summarizes the trip generation of a 32,260-SF manufacturing development using ITE trip rates.

Table 4: Proposed ITE Trip Generation Summary

Land Use	Code	Size (DU)	Evening Peak Hour			Weekday Total
			Enter	Exit	Total	
Manufacturing	140	32,260	7	17	24	154

When comparing the existing trip generation, summarized in Table 3, and the trip generation using the proposed 32,260-SF total and ITE rates, we can conclude that the existing trip generation for the site based on the number of staff and shift schedules, is more aligned with a development the size of the proposed square footage.

Transportation System Development Charge

Based on conversations with the client, the proposed 10,530 SF expansion is not intended to add capacity for additional employees, but rather to provide additional space for current employees. There is no near-term plan

for hiring as part of the expansion, hence, no new trips are anticipated to be generated by the proposed expansion.

As shown in the trip generation analysis, the existing site trip generation is higher than ITE estimates for the existing sized building. Instead, the existing trip generation is more aligned with, and actually exceeds, ITE trip estimates for a 32,260-SF manufacturing. Therefore, the analysis supports that the idea that the expansion will be used to accommodate current employees and provide more space for existing working conditions rather than hiring additional employees and thereby, increasing trip generation.

Additionally, based on ITE trip rates, if the project site were to be sold in the future to another manufacturing development the trip generation would still be lower than the existing trip generation of A.R.E Manufacturing. Accordingly, no new trips will be added to the transportation network as a result of this expansion.

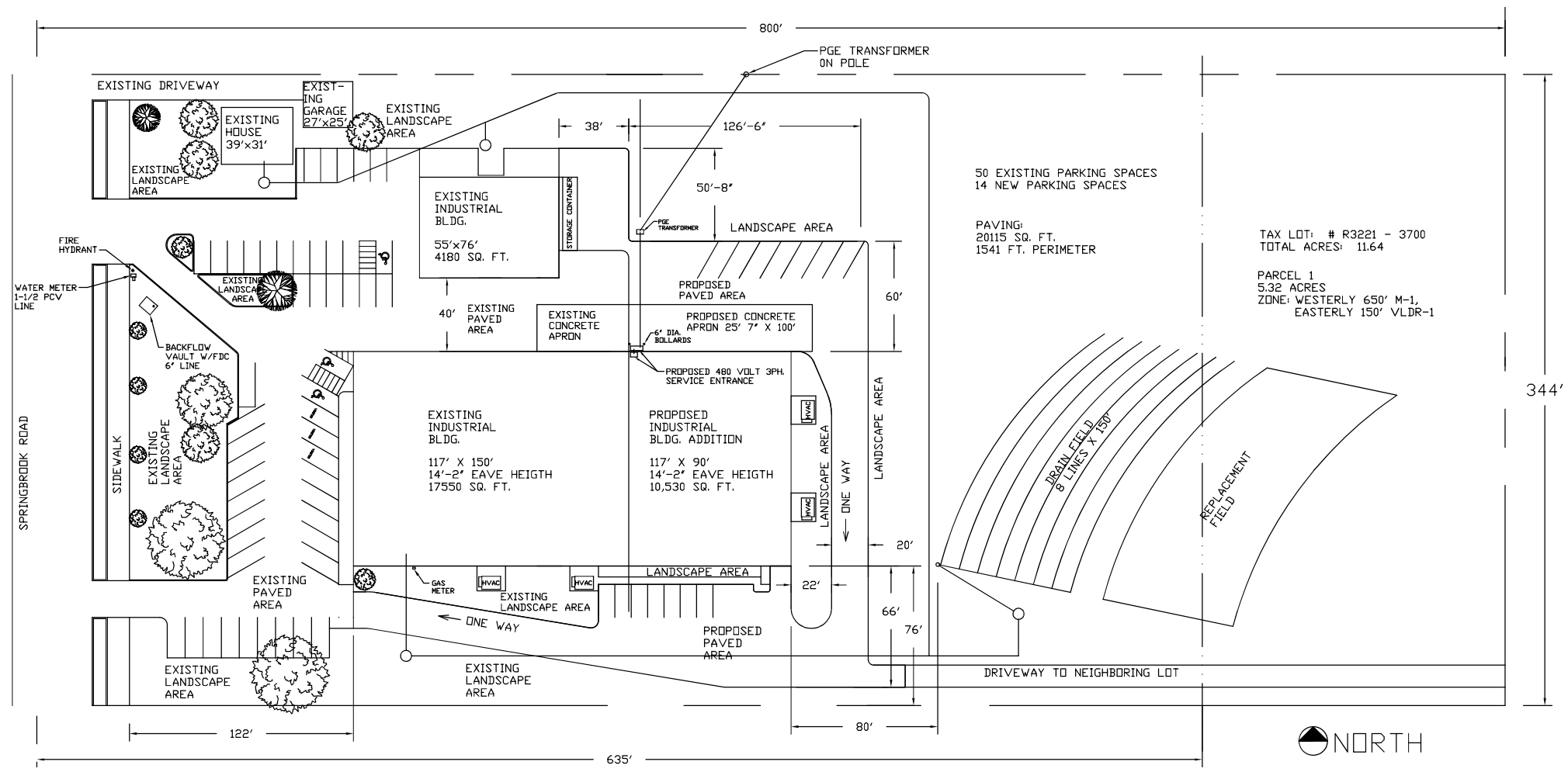
Per the City of Newberg, Transportation System Development Charge (TSDC) fees are billed at $5,663 per PM peak hour vehicle-trip end. Based on the findings of the trip generation analysis, ITE trip rates are not suitable to determine the amount of vehicle trip ends anticipated to be generated by the proposed expansion. Instead, the findings of this memorandum show that no new trips will be generated by the proposed expansion, therefore, we suggest that no TSDC fee is warranted.

Appendix

Site Plan

ITE Trip Generation Worksheets

Client Trip Generation Data & Employee Information



LEGEND:

- EASEMENT BOUNDARY
- LOT LINE
- CITY LIMIT

SCALE 1/16″=0′-0″

ELBERT RENTALS
ALVIN ELBERT
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(503) 330-2251 CELL
alvin@aremanufacturing.com

BUILDING EXPANSION
FOR A.R.E. MFG.

518 S. SPRINGBROOK RD.
NEWBERG, OREGON 97132

PRELIM
REV #1 3-1-22
REV #2 4-20-22
REV
REV
REV

518
SITE
PLAN

REV
2

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use:	Manufacturing
Land Use Code:	140
Land Use Subcategory:	All Sites
Setting/Location	General Urban/Suburban
Variable:	1000 SF GFA
Trip Type:	Vehicle
Variable Quantity:	21.73

AM PEAK HOUR

Trip Rate: 0.68

	Enter	Exit	Total
Directional Split	76%	24%	
Trip Ends	11	4	15

PM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Split	31%	69%	
Trip Ends	5	11	16

WEEKDAY

Trip Rate: 4.75

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	52	52	104

SATURDAY

Trip Rate: 1.49

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	16	16	32

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use:	Manufacturing
Land Use Code:	140
Land Use Subcategory:	All Sites
Setting/Location	General Urban/Suburban
Variable:	1000 SF GFA
Trip Type:	Vehicle
Variable Quantity:	32.26

AM PEAK HOUR

Trip Rate: 0.68

	Enter	Exit	Total
Directional Split	76%	24%	
Trip Ends	17	5	22

PM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Split	31%	69%	
Trip Ends	7	17	24

WEEKDAY

Trip Rate: 4.75

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	77	77	154

SATURDAY

Trip Rate: 1.49

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	24	24	48

A.R.E. Traffic Report
3:30-5:15

Semi Truck Traffic				Delivery Trucks				Residential Traffic				8/2/2022	3:30-5:15
0				4				37				In	10
In:	0	Out:	0	In:	2	Out:	2	In:	8	Out:	29	Out	31
Log				Log				Log				Total	41
In	Time	Out	Time	In	Time	Out	Time	In	Time	Out	Time		
				x	3:31 PM	x	3:33 PM	x	3:43 PM	x	3:43 PM		
				x	3:49 PM	x	3:40 PM	x	3:47 PM	x	3:45 PM		
								x	3:49 PM	x	4:09 PM		
								x	3:56 PM	x	4:15 PM		
								x	4:07 PM	x	4:23 PM		
								x	4:32 PM	x	4:27 PM		
								x	4:32 PM	x	4:28 PM		
								x	4:42 PM	x	4:33 PM		
										x	4:34 PM		
										x	4:34 PM		
										x	4:34 PM		
										x	4:35 PM		
										x	4:36 PM		
										x	4:37 PM		
										x	4:38 PM		
										x	4:38 PM		
										x	4:41 PM		
										x	4:43 PM		
										x	4:43 PM		
										x	4:44 PM		
										x	4:46 PM		
										x	4:46 PM		
										x	4:47 PM		
										x	4:50 PM		
										x	4:51 PM		
										x	5:00 PM		
										x	5:01 PM		
										x	5:02 PM		
										x	5:05 PM		

A.R.E. Traffic Report
3:30-4:30

Semi Truck Traffic				Delivery Trucks				Residential Traffic				8/2/2022	3:30-4:30
0				4				0				**In**	9
In:	0	**Out:**	0	**In:**	2	**Out:**	2	**In:**	7	**Out:**	7	**Out**	9
Log				**Log**				**Log**				**Total**	18
In	Time	Out	Time	In	Time	Out	Time	In	Time	Out	Time		
				x	3:31 PM	x	3:33 PM	x	3:43 PM	x	3:43 PM		
				x	3:49 PM	x	3:40 PM	x	3:47 PM	x	3:45 PM		
								x	3:49 PM	x	4:09 PM		
								x	3:56 PM	x	4:15 PM		
								x	4:07 PM	x	4:23 PM		
								x	4:32 PM	x	4:27 PM		
								x	4:32 PM	x	4:28 PM		

A.R.E. Traffic Report
4:00-5:00

Semi Truck Traffic				Delivery Trucks				Residential Traffic				8/2/2022	4:00-5:00
0				0				28				In	4
In:	0	Out:	0	In:	0	Out:	0	In:	4	Out:	24	Out	24
Log				Log				Log				Total	28
In	Time	Out	Time	In	Time	Out	Time	In	Time	Out	Time		
				x	3:31 PM	x	3:33 PM	x	4:07 PM	x	4:09 PM		
				x	3:49 PM	x	3:40 PM	x	4:32 PM	x	4:15 PM		
								x	4:32 PM	x	4:23 PM		
								x	4:42 PM	x	4:27 PM		
										x	4:28 PM		
										x	4:33 PM		
										x	4:34 PM		
										x	4:34 PM		
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										x	4:38 PM		
										x	4:41 PM		
										x	4:43 PM		
										x	4:43 PM		
										x	4:44 PM		
										x	4:46 PM		
										x	4:46 PM		
										x	4:47 PM		
										x	4:50 PM		
										x	4:51 PM		
										x	5:00 PM		

Name	Reg Hours	Dept	Sched	Mode of transport
[redacted]	8:00am-4:30pm	**Office**	Day (M-F)	Drive
[redacted]	8:00am-4:30pm	**Office**	Day (M-F)	Drive
[redacted]	9:00am-5:00pm	**Office**	Day (M-F)	Drive
[redacted]	8:00am-4:30pm	**Office**	Day (M-F)	Drive
[redacted]	9:00am-5:00pm	**Office**	Day (M-F)	at home
[redacted]	12:30pm-5:30pm	**Office**	Day (M-F)	Bike
[redacted]	7:30am-4:30pm	Shop	Day (M-F)	Drive
[redacted]	8:00am-4:30pm	Shop	Day (M-F)	Carpool
[redacted]	6:00am-4:30pm	Shop	Day (M-F)	Drive
[redacted]	8:30am-5:00pm	Shop	Day (M-F)	Drive
[redacted]	6:00am-2:30pm	Shop	Day (M-F)	Drive
[redacted]	1:00pm-4:30pm	Shop	Day (M-S)	Drive
[redacted]	6:00am-12:00pm	Shop	Day (M-S)	Bike
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Walk
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Carpool
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive

Name	Reg Hours	Dept	Sched	Mode of transport
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Bike/Carpool
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (M-Th)	Bike
[redacted]	6:00am-4:30pm	Shop	Day (T-F)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (T-F)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (T-F)	Drive
[redacted]	7:30am-6:00pm	Shop	Day (T-F)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (T-F)	Walk/carpool
[redacted]	6:00am-4:30pm	Shop	Day (W-S)	Drive
[redacted]	6:00am-4:30pm	Shop	Day (W-S)	Drive
[redacted]	4:00pm-2:30am	Shop	**Nights**	Drive
[redacted]	4:00pm-2:30am	Shop	**Nights**	Drive
[redacted]	4:00pm-2:30am	Shop	**Nights**	Drive
[redacted]	4:00pm-2:30am	Shop	**Nights**	Drive
Total Employees				**45**

FIRE CODE / LAND USE / BUILDING REVIEW APPLICATION

Tualatin Valley Fire & Rescue

North Operating Center
11945 SW 70th Avenue
Tigard, OR 97223
Phone: 503-649-8577

South Operating Center
8445 SW Elligsen Rd
Wilsonville, OR 97070
Phone: 503-649-8577

REV 6-30-20

Project Information

Applicant Name: Alvin Elbert

Address: 518 S Springbrook Rd, Newberg, OR 97132

Phone: 503-538-0350

Email: Rachel@aremanufacturing.com

Site Address: 518 S Springbrook Rd, Newberg OR 97132

City: Newberg

Map & Tax Lot #: R3221 03700

Business Name: A.R.E. Manufacturing, Inc.

Land Use/Building Jurisdiction: Newberg

Land Use/ Building Permit # _____

Choose from: Beaverton, Tigard, Newberg, Tualatin, North Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County

Project Description

A.R.E. Manufacturing, Inc. is proposing the expansion of an existing building. The proposal is to contract Pacific Building Systems to manufacture a 10,534 square foot rigid frame addition to the east end of the existing building for additional production space. This addition will include a sprinkler system.

Permit/Review Type (check one):

X Land Use / Building Review - Service Provider Permit

☐ Emergency Radio Responder Coverage Install/Test

☐ LPG Tank (Greater than 2,000 gallons)

☐ Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)

- Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation.

☐ Explosives Blasting (Blasting plan is required)

☐ Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)

☐ Tents or Temporary Membrane Structures (in excess of 10,000 square feet)

☐ Temporary Haunted House or similar

☐ OLCC Cannabis Extraction License Review

☐ Ceremonial Fire or Bonfire
(For gathering, ceremony or other assembly)

For Fire Marshal's Office Use Only

TVFR Permit # _____

Permit Type: _____

Submittal Date: _____

Assigned To: _____

Due Date: _____

Fees Due: _____

Fees Paid:

Approval/Inspection Conditions

(For Fire Marshal's Office Use Only)

This section is for application approval only

_____
Fire Marshal or Designee Date

Conditions:

See Attached Conditions: ☐ Yes ☐ No

Site Inspection Required: ☐ Yes ☐ No

This section used when site inspection is required

Inspection Comments:

_____
Final TVFR Approval Signature & Emp ID Date

Tualatin Valley Fire & Rescue
www.tvfr.com

Command & Business Operations Center and North Operating Center
11945 SW 70th Avenue
Tigard, Oregon 97223-8566
503-649-8577

South Operating Center
8445 SW Elligsen Road
Wilsonville, Oregon
97070-9641
503-649-8577

Training Center
12400 SW Tonquin Road
Sherwood, Oregon
97140-9734
503-259-1600

FIRE DEPARTMENT ACCESS AND WATER SUPPLY PERMIT CHECKLIST

Project Name	Address and/or Legal Description	TVF&R Permit #
A.R.E. Expansion	518 S Springbrook Rd, Newberg, OR 97132	
Description of Proposed Work:	A 10,534 square foot rigid frame addition to the east end of the existing building for additional production space.	Jurisdiction: Sherwood
Bldg. Square Footage: 10,354	Type of Construction: Type 11B	Fire Sprinklers: Y ■ N ☐
Fire Alarms: Y ■ N ☐	Bldg. Height: (Measured to gutter line or top of parapet) 14ft 9inches	ERRC ☐ MERRC ☐ N/A ☐

Complete checklist below if the submittal involves constructing or altering a building.

ITEM #	PROVIDED		REQUIREMENT	CODE REF
1	Y ☑	N/A ☐	Fire service plans shall consist of a site plan and elevation views of buildings. The site plan shall be labeled as FS-1. Elevation view sheets shall be FS-2, FS-3, etc.	OFC 105.4.2
2	Y ☑	N/A ☐	Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1)	OFC 503.1.1
3	Y ☐	N/A ☑	Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. Diagrams can be found in the corresponding guide located at: http://www.tvfr.com/DocumentCenter/View/1296.	OFC 503.2.5 & D103.1
4	Y ☐	N/A ☑	Buildings exceeding 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access.	D104.1
5	Y ☐	N/A ☑	Buildings or facilities having a gross building area of more than 62,000 square feet shall have at least two approved separate means of fire apparatus access. Exception: Projects having a gross building area of up to 124,000 square feet that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.	OFC D104.2
6	Y ☐	N/A ☑	Multifamily projects having more than 100 dwelling units shall be provided with two separate and approved fire apparatus access roads. Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2. Projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus roads regardless of whether they are equipped with an approved automatic sprinkler system.	OFC D106
7	Y ☐	N/A ☑	Buildings with a vertical distance between the grade plane and the highest roof surface that exceeds 30 feet in height shall be provided with a fire apparatus access road constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. For the purposes of this section, the highest roof surface shall be determined by	OFC D105.1, D105.2

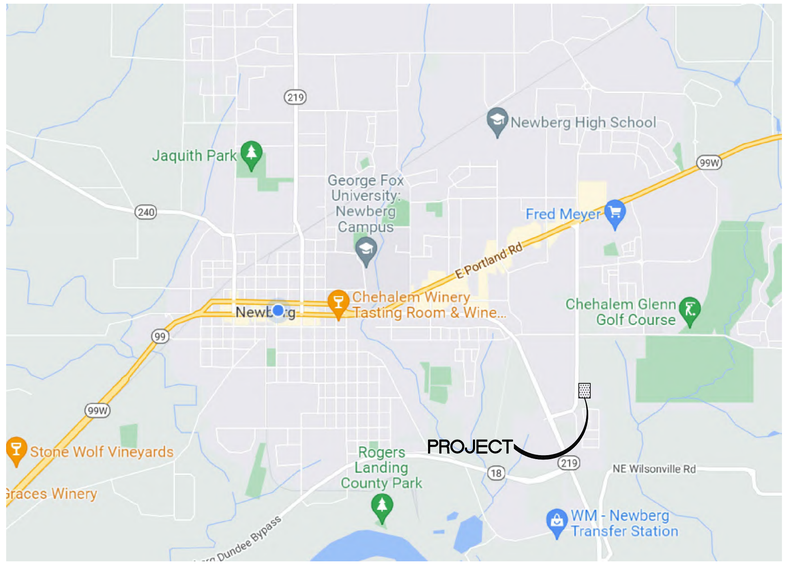
ITEM #	PROVIDED		REQUIREMENT	CODE REF
			measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of the parapet walls, whichever is greater. Any portion of the building may be used for this measurement, provided that it is accessible to firefighters and is capable of supporting ground ladder placement.	
8	Y ☐	N/A ☑	Developments of one- or two-family dwellings, where the number of dwelling units exceeds 30, shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3. Exception: Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.	OFC D107
9	Y ☑	N/A ☐	At least one of the required aerial access routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial access road is positioned shall be approved by the Fire Marshal. Overhead utility and power lines shall not be located over the aerial access road or between the aerial access road and the building.	OFC D105.3, D105.4
10	Y ☐	N/A ☑	Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the area to be served (as identified by the Fire Marshal), measured in a straight line between accesses.	OFC D104.3
11	Y ☑	N/A ☐	Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants and an unobstructed vertical clearance of not less than 13 feet 6 inches.	OFC 503.2.1 & D103.1
12	Y ☐	N/A ☑	The fire district will approve access roads of 12 feet for up to three dwelling units (Group R-3) and accessory (Group U) buildings.	OFC 503.1.1
13	Y ☐	N/A ☑	Where access roads are less than 20 feet and exceed 400 feet in length, turnouts 10 feet wide and 30 feet long may be required and will be determined on a case by case basis.	OFC 503.2.2
14	Y ☑	N/A ☐	Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background.	OFC D103.6
15	Y ☑	N/A ☐	Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25-foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background	OFC 503.3
16	Y ☑	N/A ☐	Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet and shall extend 20 feet before and after the point of the hydrant.	OFC D103.1
17	Y ☐	N/A ☑	Where access roads are less than 20 feet and exceed 400 feet in length, turnouts 10 feet wide and 30 feet long may be required and will be determined on a case by case basis.	OFC 503.2.2
18	Y ☑	N/A ☐	Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with approved plans or the requirements of the Fire Code may be requested.	OFC 503.2.3
19	Y ☑	N/A ☐	The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point.	OFC 503.2.4 & D103.3
20	Y ☑	N/A ☐	Fire apparatus access roadway grades shall not exceed 15%. Alternate methods and materials may be available at the discretion of the Fire Marshal (for grade exceeding 15%).	OFC D103.2
21	Y ☐	N/A ☑	Approved forest dwellings (in which the structure meets all County forest dwelling fire siting, fire retardant roof, and spark arrestor requirements) are allowed up to 20% maximum grade. Access roads greater than 20% shall be considered on a case-by-case basis. Forest dwelling access roads shall be an all-weather surface capable of supporting imposed loads of not less than 37,000 pounds gross vehicle weight and be no less than 12 feet minimum width. All other access requirements, including turnarounds shall be determined upon a heavy brush unit response capability to the individual property.	OFC 503.1.1 & D102.1.1

ITEM #	PROVIDED		REQUIREMENT	CODE REF
22	Y ☑	N/A ☐	Turnarounds shall be as flat as possible and have a maximum of 5% grade with the exception of crowning for water run-off.	OFC 503.2.7 & D103.2
23	Y ☑	N/A ☐	Intersections shall be level (maximum 5%) with the exception of crowning for water run-off.	OFC 503.2.7 & D103.2
24	Y ☑	N/A ☐	Portions of aerial apparatus roads that will be used for aerial operations shall be as flat as possible. Front to rear and side to side maximum slope shall not exceed 10%.	OFC D103.2
25	Y ☐	N/A ☑	Gates securing fire apparatus roads shall comply with all of the following: 1. Minimum unobstructed width shall be not less than 20 feet (or the required roadway surface width). 2. Gates shall be set back at minimum of 30 feet from the intersecting roadway or as approved. 3. Electric gates shall be equipped with a means for operation by fire department personnel. 4. Electric automatic gates shall comply with ASTM F 2200 and UL 325.	OFC D103.5, & 503.6
26	Y ☐	N/A ☑	Private bridges shall be designed and constructed in accordance with the State of Oregon Department of Transportation and American Association of State Highway and Transportation Officials Standards *Standard Specification for Highway Bridges.* Vehicle load limits shall be posted at both entrances to bridges when required by the Fire Marshal.	OFC 503.2.6
27	Y ☑	N/A ☐	Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project.	OFC Appendix B
28	Y ☐	N/A ☑	Where a portion of a commercial building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided.	OFC 507.5.1
29	Y ☐	N/A ☑	Where the most remote portion of a residential structure is more than 600 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the structure(s), on-site fire hydrants and mains shall be provided.	OFC 507.5.1
30	Y ☐	N/A ☑	Rural one-and-two-family dwellings, where there is no fixed and reliable water supply and there is approved access, shall not be required to provide a firefighting water supply.	OFC B103
31	Y ☐	N/A ☑	Detached U occupancies, in rural areas, that are in excess of 3,600 square feet are not required to have a water supply when they have approved fire department access.	OFC D102
32	Y ☑	N/A ☐	Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the Fire Marshal.	OFC C102.1
33	Y ☑	N/A ☐	Where fire hydrants are subject to impact by a motor vehicle, guard posts, bollards or other approved means of protection shall be provided.	OFC 507.5.6 & OFC 312
34	Y ☑	N/A ☐	FDCs shall be located within 100 feet of a fire hydrant (or as approved). Hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle, fully visible, and recognizable from the street or nearest point of the fire department vehicle access or as otherwise approved.	OFC 912.2.1 & NFPA 13

ITEM #	PROVIDED		REQUIREMENT	CODE REF
35	Y ☐	N/A ☑	In new buildings where the design reduces the level of radio coverage for public safety communications systems below minimum performance levels, a distributed antenna system, signal booster, or other method approved by TVF&R and Washington County Consolidated Communications Agency shall be provided. http://www.tvfr.com/DocumentCenter/View/1296. · Emergency responder radio system testing and/or system installation is required for this building. Please contact me (using my contact info below) for further information including an alternate means of compliance that is available. If the alternate method is preferred, it must be requested from TVF&R prior to issuance of building permit. · Testing shall take place after the installation of all roofing systems; exterior walls, glazing and siding/cladding; and all permanent interior walls, partitions, ceilings, and glazing. MERRC Q&A MERRC Q&A MERRC Permit Application MERRC Permit Application	OFC 510, Appendix F, & OSSC 915
36	Y ☐	N/A ☑	A Knox box for building access may be required for structures and gates. See Appendix B for further information and detail on required installations. Order via www.knoxbox.com or contact TVF&R for assistance and instructions regarding installation and placement.	OFC 506.1

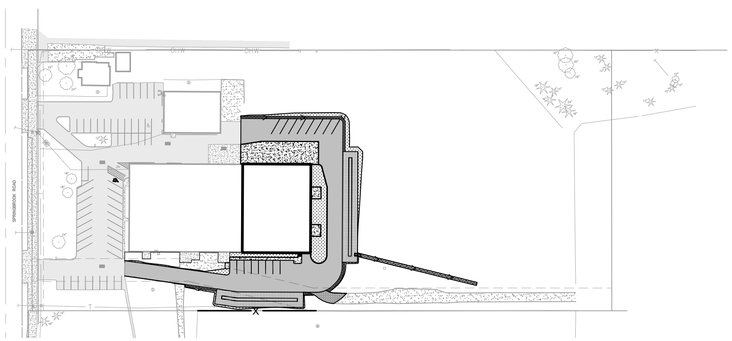
A.R.E. MANUFACTURING EXPANSION

NEWBERG, OREGON



VICINITY MAP

NTS



SITE PLAN

1" = 100'

CIVIL ENGINEER

HBH CONSULTING ENGINEERS, INC.
501 E FIRST STREET
NEWBERG, OREGON 97132
CONTACT: ANDREY CHERNISHOV, PE
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FAX: (503) 537-9554
EMAIL: ACHERNISHOV@HBH-CONSULTING.COM

PROJECT INFORMATION

518 S. SPRINGBROOK RD
NEWBERG, OR 97132

LOCATE

(48 HOUR NOTICE PRIOR TO EXCAVATION) OREGON LAW REQUIRES YOU TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090 & ORS 757.542 THROUGH 757.562 AND ORS 757.993. YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER BY CALLING (503) 242-1987. ONE CALL SYSTEM NUMBER 1-800-332-2344.

SHEET INDEX TABLE

OWNER/DEVELOPER

ALVIN ELBERT
A.R.E. MANUFACTURING, INC.
518 S SPRINGBROOK RD
NEWBERG, OR 97132

TAX LOT INFORMATION

THIS PROJECT IN SECTION 21 OF T. 3 S., R.2 W., W.M. CITY OF NEWBERG, YAMHILL COUNTY, OREGON (TAX LOT 3800 & 3801)

PROPOSED LEGEND

PROPOSED MINOR CONTOUR	221'
PROPOSED MAJOR CONTOUR	220'
LIMITS OF GRADING	
GRADING BREAK LINE	
ASPHALT	
CONCRETE	
LANDSCAPING	
RIP RAP/GRAVEL ROADWAY	
STORM WATER PLANTINGS	

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
ANDREY R. CHERNISHOV
EXPIRES 12/31/2023

PRELIMINARY

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Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-00804-Design\DWG\1 COVER & FRONT MATTER.dwg

REV.	DATE	DESCRIPTION	BY

0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

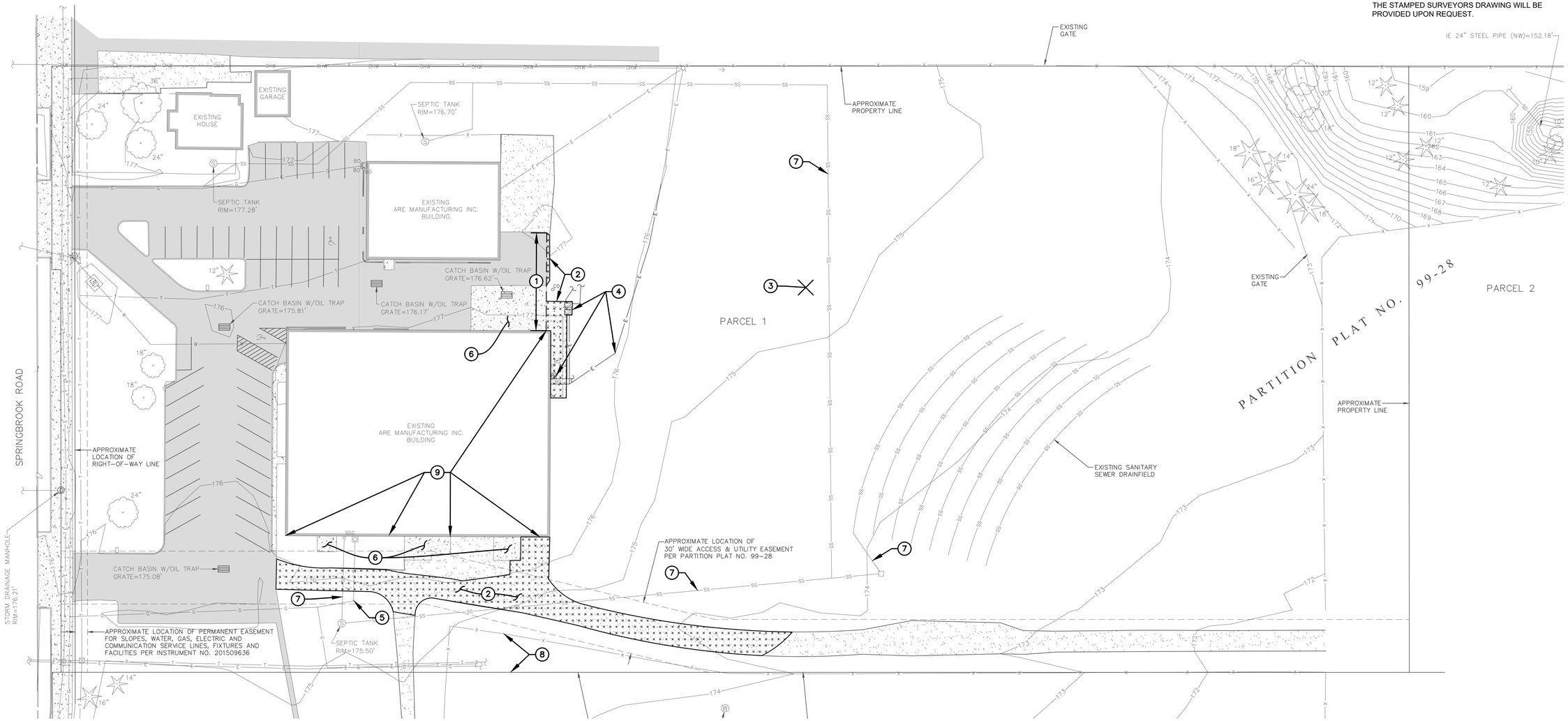
A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

COVER

Sheet No. C1 1 of 9
Date 4/30/2023
2022-008

THIS IS NOT THE STAMPED SURVEYOR'S DRAWING.
THE STAMPED SURVEYORS DRAWING WILL BE PROVIDED UPON REQUEST.

SEE SURVEYOR'S STAMPED DRAWING



EXISTING CONDITIONS + DEMO

1" = 30'

(XX) EXISTING CONDITIONS + DEMO KEY NOTES

1. SAWCUT EXISTING CONCRETE AND ASPHALT
2. REMOVE EXISTING GRAVEL, ASPHALT AND CONCRETE. HAUL OFFSITE.
3. REMOVE EXISTING TREE AND HAUL OFFSITE
4. RELOCATE AND RECONNECT ELECTRICAL UTILITIES PER ELECTRICAL PLANS BY OTHERS
5. PRESERVE AND PROTECT EXISTING GAS SERVICE DURING CONSTRUCTION
6. PRESERVE AND PROTECT EXISTING CONCRETE PADS DURING CONSTRUCTION
7. PRESERVE AND PROTECT EXISTING SANITARY SERVICE DURING CONSTRUCTION
8. RELOCATE EXISTING FENCE TO PROPERTY LINE
9. PRESERVE AND PROTECT EXISTING DOWNSPOUTS DURING CONSTRUCTION

SCALE 1"=50' (HORZ.)
50 25 12.5 0 50

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Designed By:	Drawn By:	Checked By:	Submittal No:
ARB	ARB	ARC	1ST ENGR

File: L:\2022-008\4-Design\DWG\1.1 EX & DEMO.dwg

REV	DATE	DESCRIPTION	BY

0" 1"
IF THIS LINE IS NOT 1 INCH
SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

EXISTING CONDITIONS + DEMO

Sheet No. C2
Date 6/26/2023
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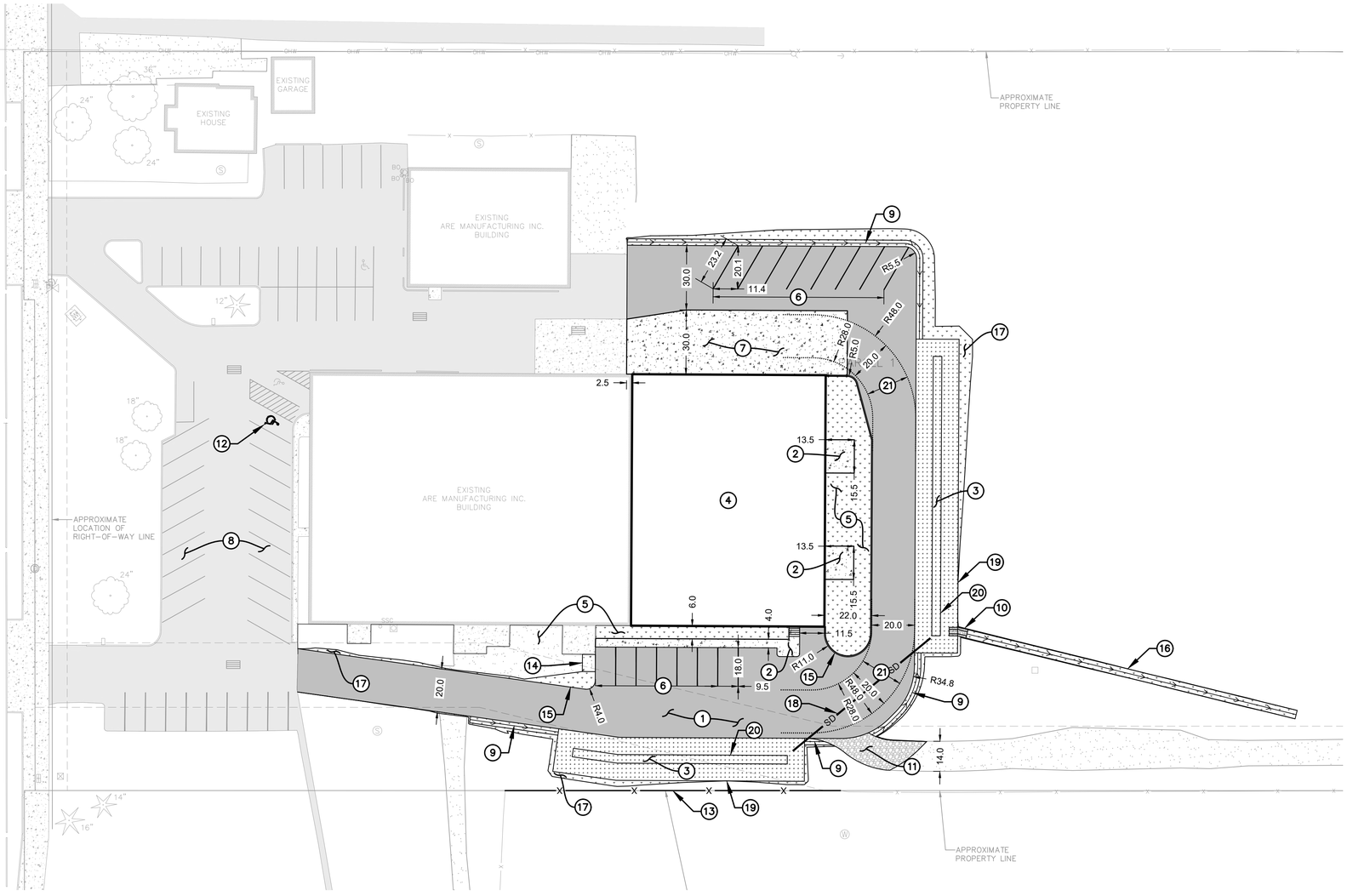
2022-008

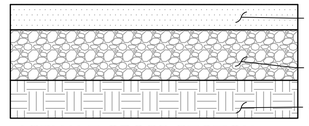


SITE PLAN

1" = 30'

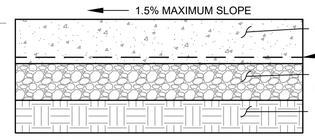
(XX) SITE + UTILITY PLAN KEY NOTES

1. INSTALL ASPHALT PER ASPHALT CROSS SECTION DETAIL LOCATED ON THIS SHEET
2. INSTALL CONCRETE PER STANDARD CONCRETE CROSS SECTION DETAIL LOCATED ON THIS SHEET. SEE SHEETS C5 THROUGH C7 FOR DETAILED GRADING
3. INSTALL 2.0' DEEP SWALE WITH 4.0' WIDE BASE AND 4:1 MOW-ABLE SIDE SLOPES PER CITY OF NEWBERG DETAIL 460. SEE LANDSCAPING PLANS BY OTHERS FOR PLANTING SCHEDULE. CONTRACTOR TO BRING GRASS TO FULL FRUITION AS CONDITION OF PROJECT COMPLETION. SEE SHEET C5 FOR GRADING.
4. PROPOSED BUILDING EXTENSION. SEE ARCHITECTURAL AND STRUCTURAL PLANS BY OTHERS.
5. SEE LANDSCAPING PLANS BY OTHERS
6. 14 TOTAL NEW PARKING STALLS. STRIPE WITH 4" WIDE YELLOW, WATER BASED ACRYLIC PAINT.
7. INSTALL CONCRETE PER TRAFFICKED CONCRETE CROSS SECTION DETAIL LOCATED ON THIS SHEET
8. 53 EXISTING PARKING STALLS TO REMAIN (TYP)
9. DRAINAGE DEPRESSION TO SWALE
10. EMBEDDED RIP-RAP OVERFLOW CHANNEL FOR SWALE PER RIP-RAP CROSS SECTION DETAIL ON THIS SHEET AND CITY OF NEWBERG DETAIL 422. CHANNEL SERVES AS SPILLWAY FOR 50- AND 100-YEAR EVENTS.
11. ADJUST GRAVEL DRIVEWAY TO TRANSITION INTO NEW PARKING LOT
12. STRIPE NEW ADA STALL PER OREGON TRANSPORTATION COMMISSION STANDARDS FOR ACCESSIBLE PARKING PLACES FIGURE 6
13. RELOCATED EXISTING FENCE
14. INSTALL 8.0' x 6.0' CONCRETE PAD PER STANDARD CONCRETE SECTION DETAIL ON THIS SHEET. INSTALL SIX STALL BICYCLE RACK ON CONCRETE PAD. SEE SHEET C5 FOR DETAILED GRADING.
15. CONSTRUCT CURB AROUND EASTERN AND SOUTHERN LANDSCAPE ISLAND PER MODIFIED CITY OF NEWBERG DETAIL 502 ON SHEET C9
16. GRASSED DITCH TO FIELD. DITCH DIMENSIONS TO MATCH RIP RAP OVERFLOW CROSS SECTION DETAILED ON THIS SHEET.
17. DAYLIGHT AT 4:1 OUTSIDE OF DITCHES, DEPRESSIONS AND SWALES TO EXISTING GRADE (TYP)
18. INSTALL 83 LF 8" CLASS 52 DUCTILE IRON SWALE CONNECTOR PIPE. IE = 172.21, S=0.00%. PIPE SECTION IS PARTIALLY LOCATED IN 3/4"-0" GRAVEL FOR ASPHALT SECTION. CONTRACTOR TO PROTECT AND PRESERVE PIPE AFTER INSTALLATION FROM VEHICLE TRAFFIC DURING CONSTRUCTION UNTIL SUCH A POINT THAT THE PIPE HAS BEEN PAVED OVER.
19. TOP OF SWALE
20. BOTTOM OF SWALE
21. FIRE TRUCK TURNING PATH



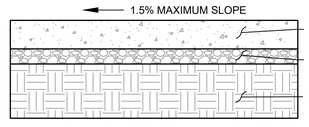
ASPHALT CROSS SECTION

1. DESIGNED TO MEET FIRE TRUCK LOAD OF 12,500 POUNDS OF POINT LOAD (WHEEL LOAD) AND 75,000 LB LIVE LOAD (GROSS VEHICLE WEIGHT).

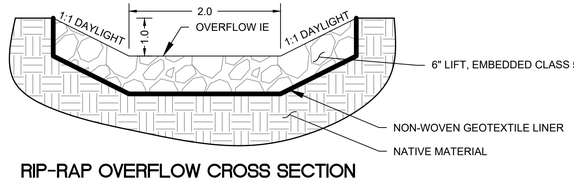


TRAFFICKED CONCRETE SECTION

1. DESIGNED TO MEET FIRE TRUCK LOAD OF 12,500 POUNDS OF POINT LOAD (WHEEL LOAD) AND 75,000 LB LIVE LOAD (GROSS VEHICLE WEIGHT).



STANDARD CONCRETE SECTION



RIP-RAP OVERFLOW CROSS SECTION

SCALE 1"=30' (HORZ.)

30 15 7.5 0 30

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
BET R. CHERNISHOV
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Designed By:	ARB
Drawn By:	ARB
Checked By:	ARC
Submittal No:	1ST ENGR
File:	L:\2022-008\4-Design\DWG\2 SITE PLAN.dwg

REV.	DATE	DESCRIPTION	BY

0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

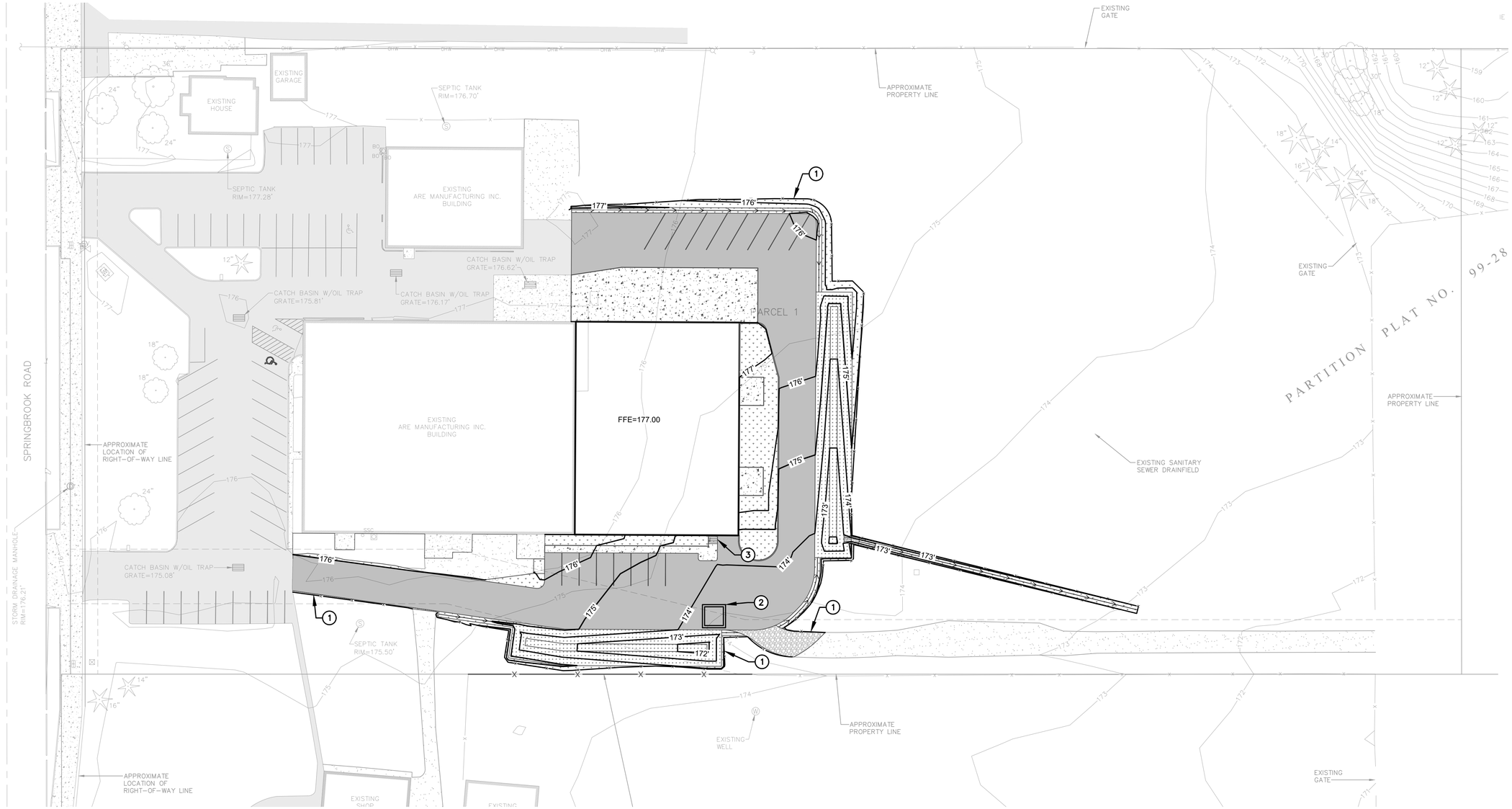
ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

SITE + UTILITY PLAN

Sheet No.	C3
Date	4/30/2023
	3 OF 9

2022-008



GRADING PLAN OVERALL

1" = 30'

(XX) GRADING PLAN OVERALL KEY NOTES

1. INSTALL SEDIMENT FENCE PER CITY OF NEWBERG DETAIL 602
2. INSTALL CONCRETE WASHOUT PER CITY OF NEWBERG DETAIL 607
3. INSTALL CONCRETE STAIRCASE BETWEEN SIDEWALK AND BUILDING FFE. CONTRACTOR TO FIELD GRADE STAIRCASE. STAIR CASE TO MEET BUILDING CODE.

SCALE 1"=30' (HORZ.)

30 15 7.5 0 30

REGISTERED PROFESSIONAL ENGINEER
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OREGON
MARCH 09, 2010
ALEX R. CHERNISHOV
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File: L:\2022-00804-Design\DWG\4 GRADING PLAN.dwg

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ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

GRADING PLAN OVERALL

Sheet No. C4
Date 6/20/2023
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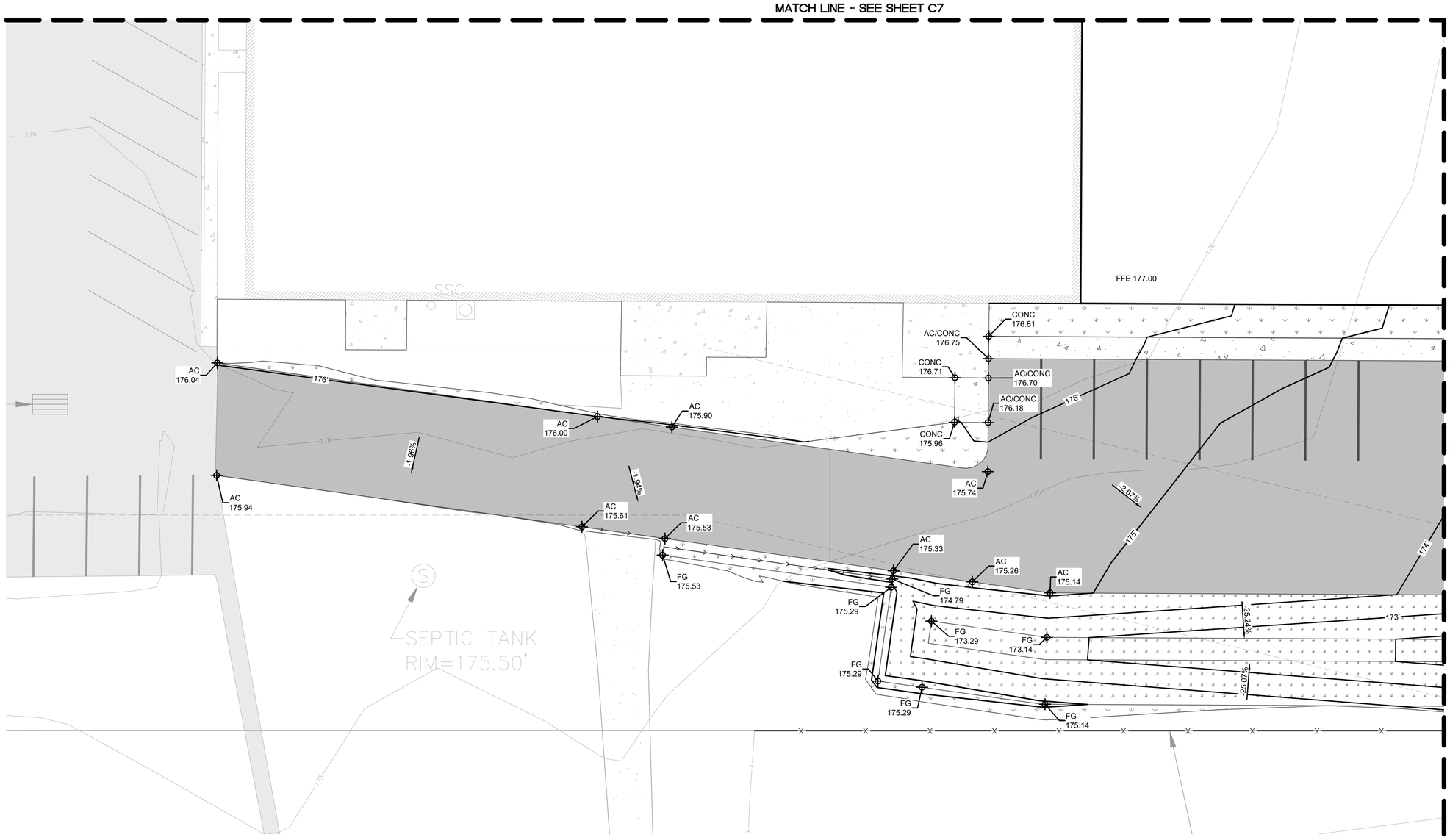
2022-008



DETAILED GRADING 1

1" = 10'

DETAILED GRADING 1 LEGEND

AC	ASPHALT FINISHED GRADE
CONC	CONCRETE FINISHED GRADE
CCUT	CURB CUT DEPRESSION GRADE
FG	FINISHED GRADE
GUT	GUTTER GRADE. TO BE USED TO ESTABLISHED PAVEMENT GRADES. ACTUAL FINISHED GRADE OF CATCH BASIN RIMS OR CURB CUT DEPRESSIONS MAY VARY FROM THIS ELEVATION
TFC	TOP FACE OF CURB
TBC	TOP BACK OF CURB (TYPICALLY THE SAME AS TOP FACE OF CURB).

NOTE: TFC AND TBC ARE ASSUMED TO BE +0.5 FEET FROM AC OR GUT ELEVATIONS UNLESS OTHERWISE STATED

SCALE 1"=10' (HORZ.)

10 5 2.5 0 10

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
DEC. 09, 2010
KEVIN R. CHERNISHOV
EXPIRES 12/31/2023

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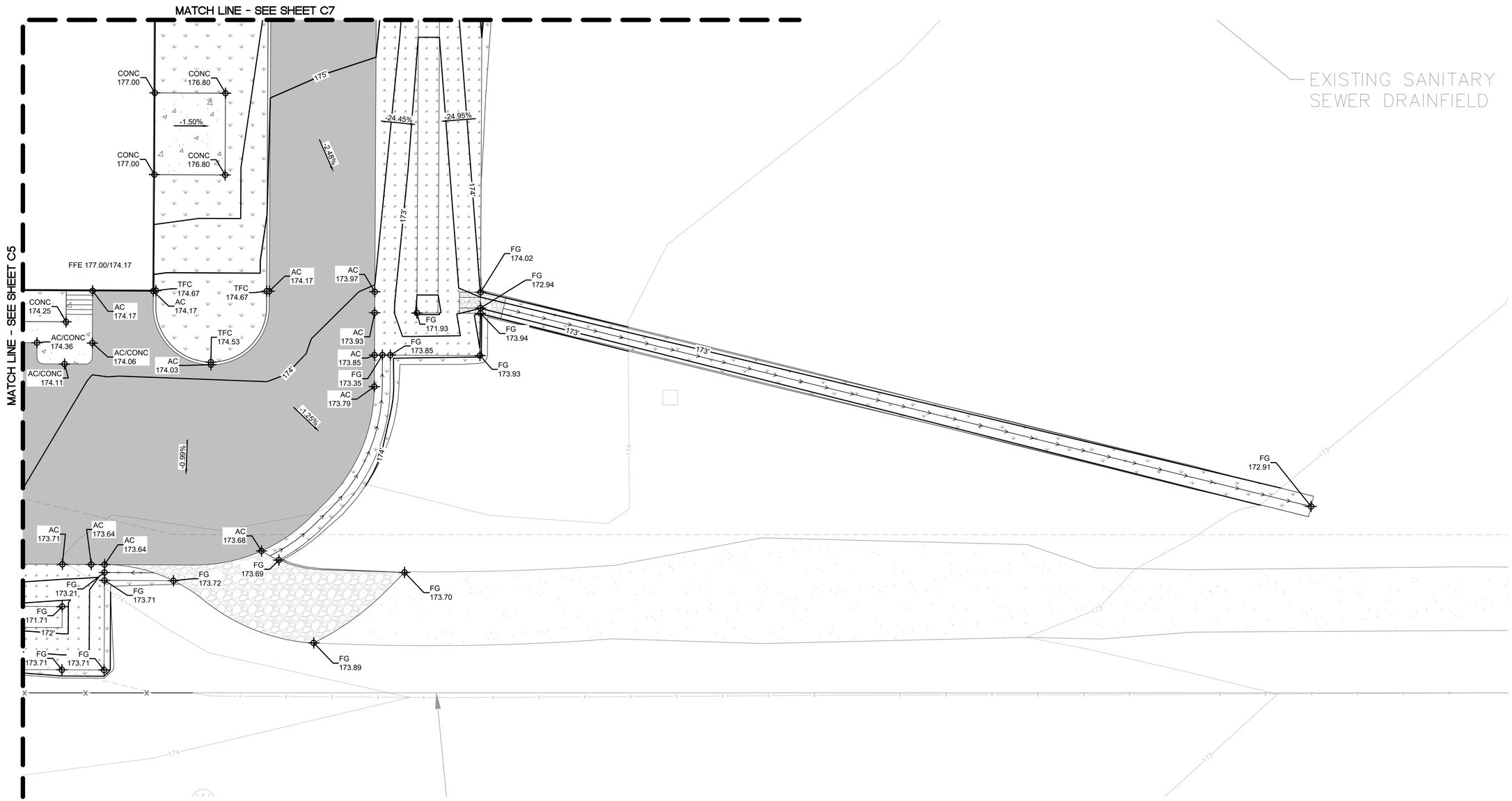
ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

DETAILED GRADING 1

Date: 6/20/2023
Sheet No: C5
6 of 9

2022-008



DETAILED GRADING 2

1" = 10'

DETAILED GRADING 2 LEGEND

AC	ASPHALT FINISHED GRADE
CONC	CONCRETE FINISHED GRADE
CCUT	CURB CUT DEPRESSION GRADE
FG	FINISHED GRADE
GUT	GUTTER GRADE. TO BE USED TO ESTABLISHED PAVEMENT GRADES. ACTUAL FINISHED GRADE OF CATCH BASIN RIMS OR CURB CUT DEPRESSIONS MAY VARY FROM THIS ELEVATION
TFC	TOP FACE OF CURB
TBC	TOP BACK OF CURB (TYPICALLY THE SAME AS TOP FACE OF CURB).

NOTE: TFC AND TBC ARE ASSUMED TO BE +0.5 FEET FROM AC OR GUT ELEVATIONS UNLESS OTHERWISE STATED

SCALE 1"=10' (HORZ.)

10 5 2.5 0 10

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File: L:\2022-00804-Design\DWG\4 GRADING PLAN.dwg

REV.	DATE	DESCRIPTION	BY

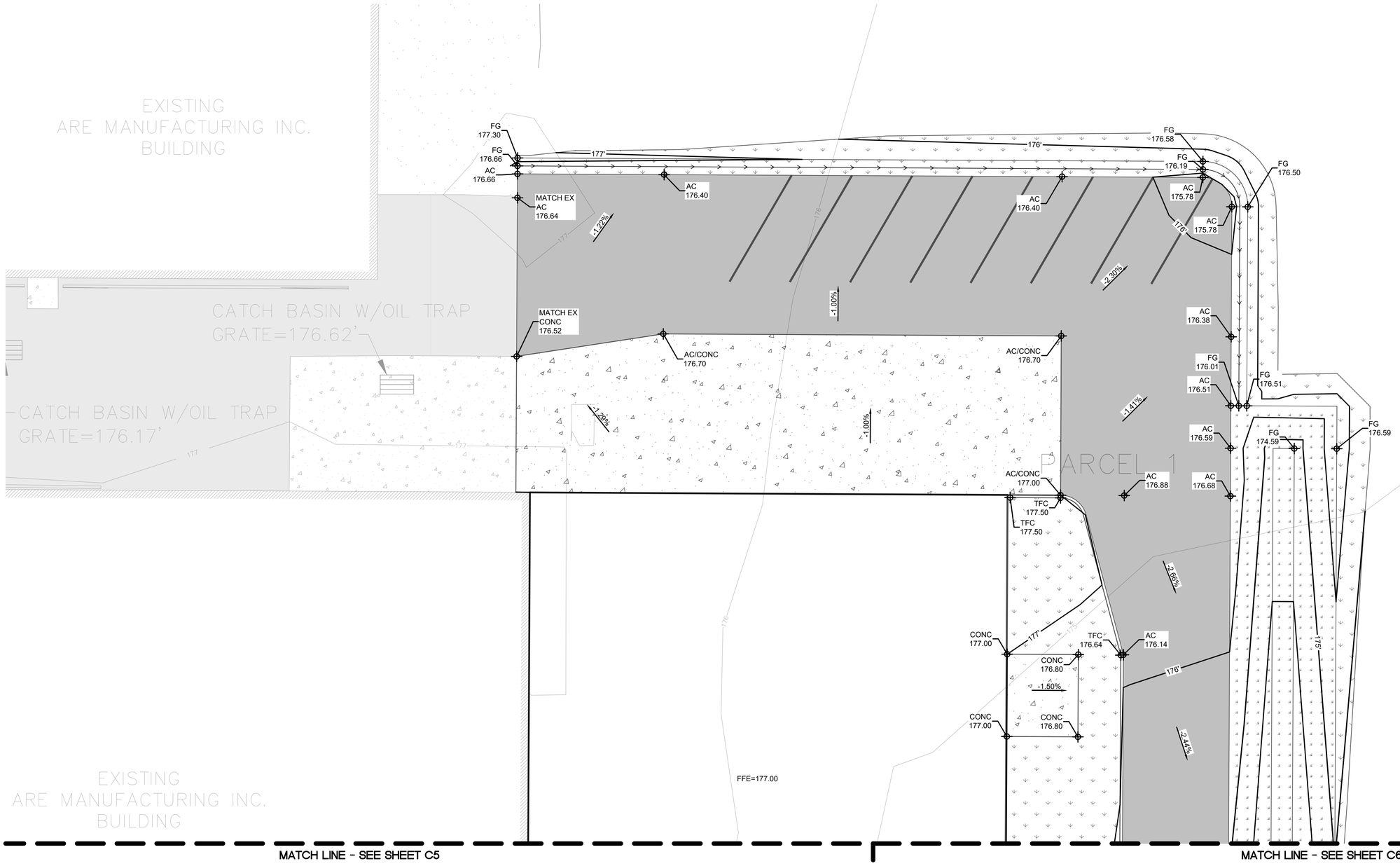
0" 1"
IF THIS LINE IS NOT 1 INCH
SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

DETAILED GRADING 2

Sheet No. C6
Date 6/20/2023
7 OF 9
2022-008



DETAILED GRADING 3

1" = 10'

DETAILED GRADING 3 LEGEND

AC	ASPHALT FINISHED GRADE
CONC	CONCRETE FINISHED GRADE
CCUT	CURB CUT DEPRESSION GRADE
FG	FINISHED GRADE
GUT	GUTTER GRADE. TO BE USED TO ESTABLISHED PAVEMENT GRADES. ACTUAL FINISHED GRADE OF CATCH BASIN RIMS OR CURB CUT DEPRESSIONS MAY VARY FROM THIS ELEVATION
TFC	TOP FACE OF CURB
TBC	TOP BACK OF CURB (TYPICALLY THE SAME AS TOP FACE OF CURB).

NOTE: TFC AND TBC ARE ASSUMED TO BE +0.5 FEET FROM AC OR GUT ELEVATIONS UNLESS OTHERWISE STATED

SCALE 1"=10' (HORZ.)

10 5 2.5 0 10

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
ALEXANDER R. CHERNISHOV
EXPIRES 12/31/2023

PRELIMINARY

H B H CONSULTING ENGINEERS
501 E First Street
Newberg, Oregon 97132
503/554-9553 ■ fax 503/537-9554
email: mail@hbh-consulting.com

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-00804-Design\DWG\4 GRADING PLAN.dwg

BY	DESCRIPTION	REV.	DATE

0" 1"
IF THIS LINE IS NOT 1 INCH
SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

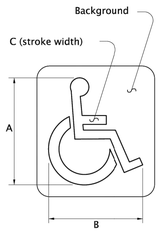
A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

DETAILED GRADING 3

Sheet No. C7 | 8 OF 9
Date 6/20/2023
2022-008

OREGON TRANSPORTATION COMMISSION
Standards for Accessible Parking Places
August 2018

PAVEMENT MARKING STENCIL



Pavement Marking Background: Optional: Blue, Retroreflective

Pavement Marking Stencil: White, Retroreflective

LEGEND	DIMENSIONS (INCHES)						
	A	B	C	D	E	F	G
MINIMUM	28	24	3				
STANDARD	41	36	4				

The pavement marking stencil shall be used to designate an accessible parking area reserved for vehicles with DMV permits.

Figure 6

11

RIPRAP:

- ROCK FOR RIPRAP SHALL BE ANGULAR IN SHAPE.
- THICKNESS OF A SINGLE ROCK SHALL NOT BE LESS THAN ONE-THIRD ITS LENGTH.

RIPRAP INSTALLATION:

- EXCAVATE BELOW FINISH GRADE TO DEPTH & DIMENSIONS SHOWN ON APPROVED PLANS.
- INSTALL WOVEN GEOTEXTILE FABRIC.
- PLACE RIP RAP TO FINISH GRADE.

- GRADE RIPRAP SHALL BE THE CLASS AND SIZE OF ROCK ACCORDING TO THE FOLLOWING:

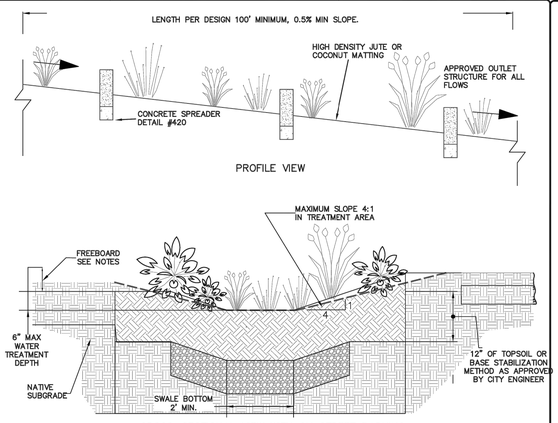
CLASS 50	CLASS 100	CLASS 200	CLASS 700	CLASS 2000	PERCENT (BY WEIGHT)
		WEIGHT OF ROCK (LBS)			
50-30	100-60	200-140	700-500	2000-1400	20
30-15	60-25	140-80	500-200	1400-700	30
15-2	25-2	80-8	200-20	700-40	40
2-0	2-0	8-0	20-0	40-0	10

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

RIPRAP

SCALE: N.T.S.
DATE: MARCH 2014
APPROVED BY: JAY H.
STANDARD DRAWING 422



HYDRAULIC DESIGN CRITERIA:

1. DESIGN FLOW: WATER QUALITY FLOW
2. MIN. HYDRAULIC RESIDENCE TIME: 9 MINUTES
3. MAXIMUM WATER DESIGN DEPTH: 0.5 FEET
4. MINIMUM FREE BOARD: 1.0 FOOT (FOR FACILITIES NOT NOT PROTECTED FROM HIGH FLOWS)
5. MANNING "n" VALUE: 0.24
6. MAXIMUM VELOCITY: 2.0 fps BASED ON 25-YEAR FLOW

FACILITY DESIGN CRITERIA:

1. UP UNTIL THE MAX WATER SURFACE, INTERIOR SIDE SLOPES MAY SLOPE IS 4H:1V
2. ABOVE MAX WATER SURFACE, INTERIOR SIDE SLOPES, MAX SLOPE IS 2H:1V
3. IF INTERIOR SIDE SLOPES MUST BE MOWED SIDE SLOPE THEN THE MAX SLOPE IS 4H:1V
4. EXTERIOR SIDE SLOPES MAX 2H:1V
5. MINIMUM FREEBOARD 1 FOOT FROM 25 YEAR DESIGN WATER SURFACE ELEVATION
6. PROVIDE AN ENERGY DISSIPATER AT THE ENTRANCE OF SWALE, WITH A MINIMUM LENGTH OF 4 FEET. IT WILL BE DESIGNED TO REDUCE VELOCITIES AND SPREAD THE FLOW ACROSS THE TREATMENT CROSS SECTION.

FACILITY DESIGN CRITERIA:

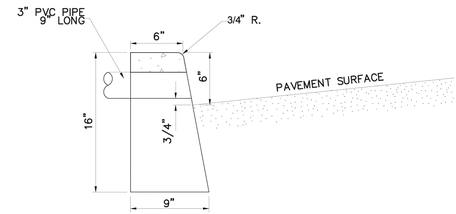
7. THE USE OF INTERMEDIATE FLOW SPREADERS IS REQUIRED, SPACING FOR CONCRETE SPREADERS TO BE DETERMINED BY DESIGN ENGINEER.
8. EXTEND RIVER ROCK, TOPSOIL, AND HIGH DENSITY JUTE OR COCONUT MATTING TO TOP OF TREATMENT AREA (OR WQV LEVEL). EXTEND TOPSOIL AND LOW DENSITY JUTE MATTING TO THE EDGE OF WATER QUALITY TRACT.
9. WHERE SWALES WRAP 180-DEGREES FORMING PARALLEL CHANNELS, FREEBOARD SHALL BE PROVIDED BETWEEN EACH OF THE PARALLEL CHANNELS. A 1 FOOT WALL ABOVE GROUND SURFACE MAY ALSO BE USED. ALTERNATIVE: A SOIL BASED BERM WITH A MIN. TOP WIDTH OF 1 FOOT & MAX 2.5H:1V SIDE SLOPES MAY BE USED.
10. WHERE SWALES ARE DESIGNED WITH DITCH INLETS & OUTLET STRUCTURES & DESIGN OF MAINTENANCE ACCESS TO SUCH STRUCTURES MAY BE DIFFICULT DUE TO SWALE LOCATION, SWALES MAYBE DESIGNED AS FLOW THROUGH FACILITIES WITH UNSUMPED STRUCTURES. MAINTENANCE ACCESS TO STRUCTURE END OF THE FACILITY IS REQUIRED.

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

VEGETATED SWALE

SCALE: N.T.S.
DATE: MARCH 2014
APPROVED BY: JAY H.
STANDARD DRAWING 460



NOTES:

1. CONCRETE SHALL HAVE STRENGTH OF 3300 P.S.I. AT 28 DAYS.
2. TRANSVERSE CONTRACTION JOINTS – MAKE 1/8" x 1 1/2" DEEP CUT SPACED AT 15' INTERVALS.
3. THIS TYPE OF CURB TO BE USED ONLY WHERE SPECIFIED.
4. APPLY CURING COMPOUND (PETROLEUM BASE) TO FRESH CONCRETE TO RETAIN MOISTURE.
5. CURB TO BE BEDDED ON A FOUR INCH LIFT OF 3/4"-0" COMPACTED TO 95% OF THE MODIFIED PROCTOR (ASTMD1557/AASHTO T-180)

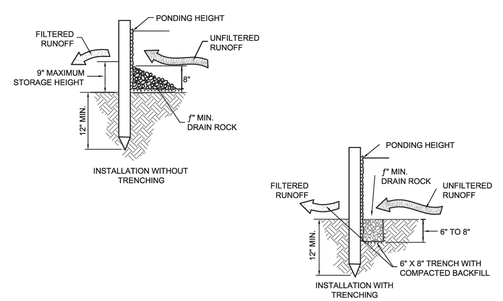
MODIFED

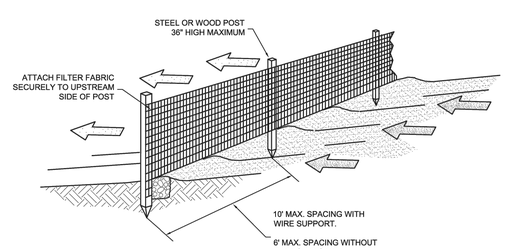
City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS: 05/05/2015 - ASM

CURB - TYPE "C"

SCALE: N.T.S.
DATE: May 2015
APPROVED BY: K. Hofmann
STANDARD DRAWING 502



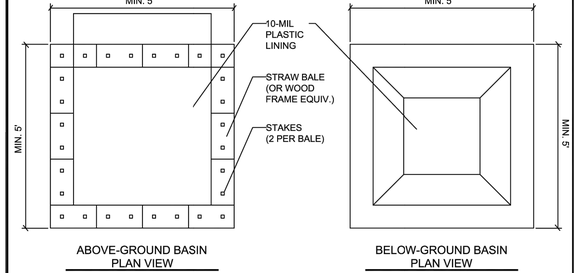


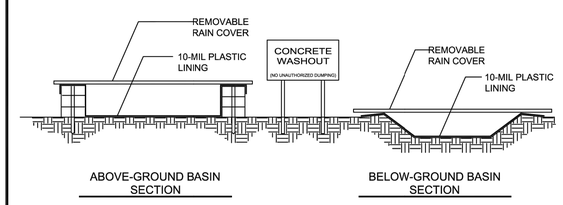
City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

SILT FENCE

SCALE: N.T.S.
DATE: MAY 2007
APPROVED BY: D. DANICIC
STANDARD DRAWING 602





NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. "CONCRETE WASHOUT" SIGN TO BE LOCATED ADJACENT TO WASHOUT FACILITY.
3. REMOVABLE RAIN COVER REQUIRED DURING WET WEATHER SEASON.

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS: NA

CONCRETE WASTE MANAGEMENT

SCALE: N.T.S
DATE: 01/10/2014
APPROVED BY:
STANDARD DRAWING 607

PRELIMINARY
REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
OCTOBER 09, 2015
BRET R. CHERNISHOV
EXPIRES 12/31/2023

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email: mail@hbh-consulting.com

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-00804-Design\DWG\5 DETAILS.dwg

REV.	DATE	DESCRIPTION	BY

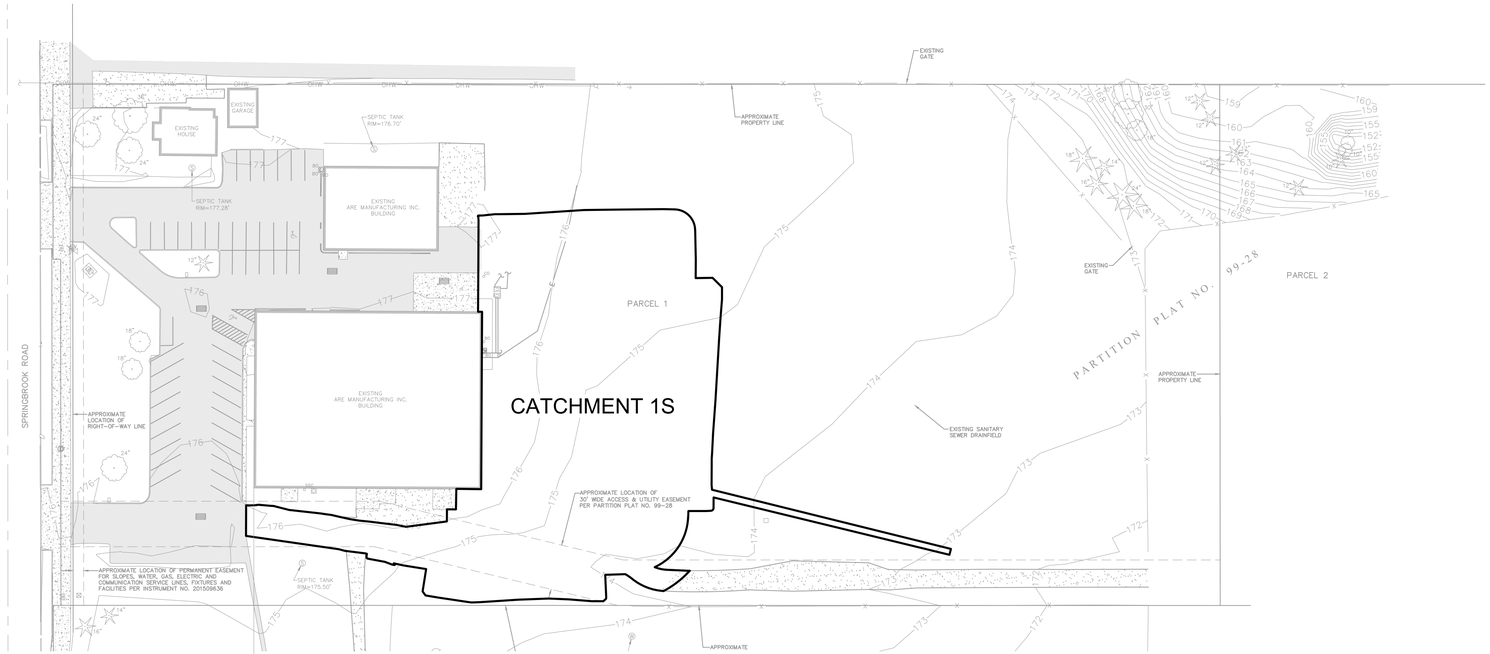
0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

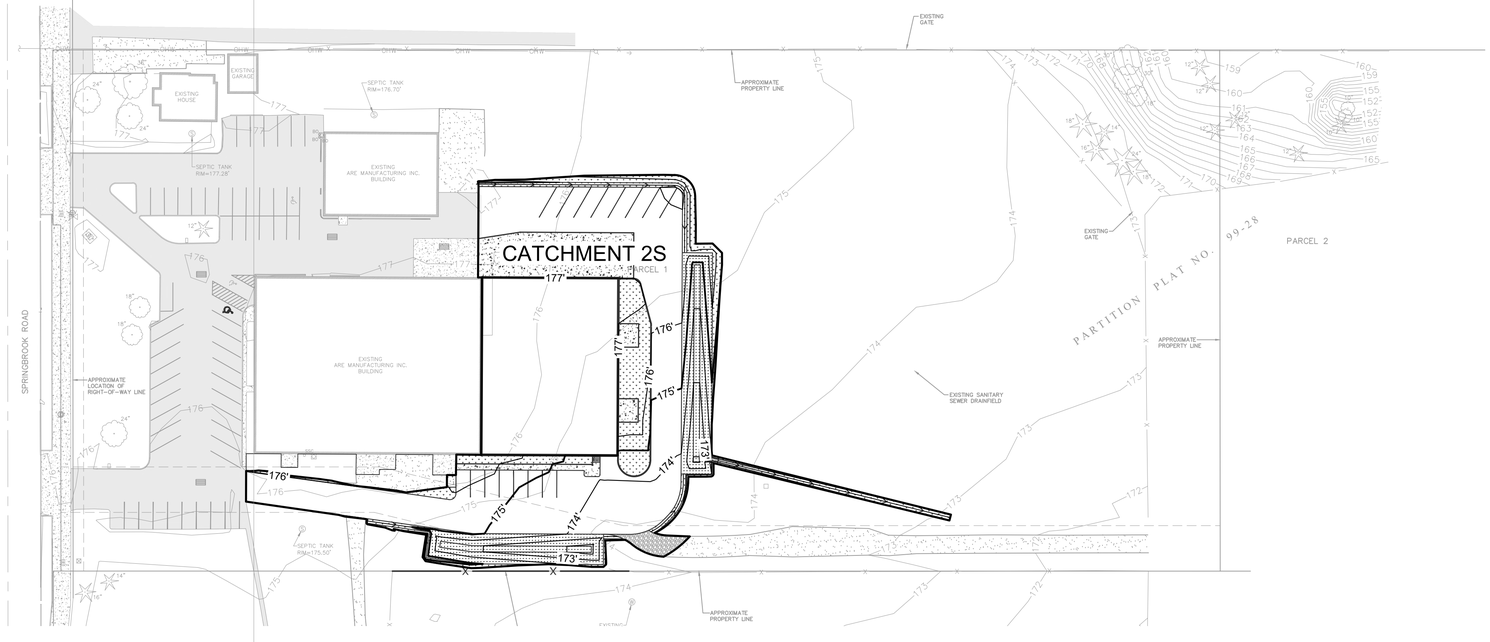
DETAILS 1

Sheet No. C8 — 9 of 9
Date 5/3/2023
2022-008



PREDEVELOPED CATCHMENTS

1" = 50'



DEVELOPED CATCHMENTS

1" = 50'

SCALE 1"=50' (HORZ.)

50 25 12.5 0 50

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
ERIC R. CHERNISHOV
EXPIRES 12/31/2023

PRELIMINARY

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email: mail@hbh-consulting.com

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-008\4-Design\DWG\8 Catchments.dwg

BY	DESCRIPTION	DATE	REV.

0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE
CATCHMENTS

Date: 5/3/2023
Sheet No: C9
10 OF 9

2022-008

H B H
CONSULTING
ENGINEERS

501 E First Street
Newberg, Oregon 97132
Ph. 503-554-9553 | Fax 503-0537-9554

STORMWATER MEMORANDUM

Date: **April 30, 2023** Project Number: **2022-008**
To: **To Whom It May Concern**
From: **Andrey Chernishov, PE**
RE: **A.R.E. Manufacturing Expansion: HydroCAD Report**

Overview

The proposed development is a building expansion on a 5.99 acre lot located at 518 S Springbrook Road in Newberg, Oregon. The limits of drainage associated with the development are approximately 0.986 acres of the property. The development area is approximately 98.6% pervious and drains to the southeast. The proposed project reduces the pervious area of the development to approximately 28%. A pair of swales connected via culvert will be added to the east and south sides of the development, as shown in Attachment C. These will treat and retain the increased runoff due to the added impervious area. The retention provided by the swale reduces the developed peak runoff to zero through the 100-year event. HydroCAD was used to model stormwater on the site. The data is included in Attachment A.

Design Methodology

HydroCAD 10 computer software ran with the Santa Barbara Urban Hydrograph (SBUH) Method was used to analyze stormwater runoff for the site. This method utilizes the SCS Type 1A 24-hour design storm. The 24-hour storm rainfall intensities listed in the City of Newberg Design Standards were used in the model.

For quantity treatment, the City of Newberg requires that stormwater runoff be detained onsite such that developed runoff rates do not exceed predeveloped runoff rates for ½ of the 2-year, 2-year, 10-year, and 25-year return storms. For quality treatment, the City of Newberg requires stormwater quality facilities to be designed to treat a dry weather storm event totaling 1.0 inches of precipitation falling in 24 hours, with an average storm return period of 96 hours using a Type IA rainfall distribution. This storm event was also modeled in HydroCAD.

Existing Conditions

Per USDA NRCS WSS records, the soils underlying the project site are 100% Aloha Silt Loam with a Hydrological Soil Group (HSG) rating of C/D. The Aloha Silt Loam is in a drained condition which increases the HSG to rating C. The predeveloped soil conditions are summarized in Table 1 below.

Table 1 – Subcatchment 1S – Predeveloped

Surface	CN	Area (SF)	% of Total Area
Asphalt (HSG C)	98	50	0%
Gravel (HSG C)	96	4,727	11%
Concrete (HSG C)	98	550	1%
Grass Cover > 75% (HSG C)	98	37,628	88%
Total	*77*	*42,955*	*100%*

Infiltration testing was performed at the proposed swale's location and depth. This yielded a factored infiltration rate of 3.83 in/hr. The report for this test is included as Attachment B.

Proposed Conditions

Fill will retain the same soil characteristics as what is currently onsite. The proposed improvements will reduce pervious areas and increase impervious areas. This triggers the need for both quantity and quality treatment per City of Newberg Design Standards. Runoff will drain on the site via roof drains and surface flows to a set of interconnected swales located at the east and south sides of the development. This developed area is classified as Subcatchment 2S in the HydroCAD models and summarized in Table 2 below.

Table 2 – Subcatchment 2S – Developed

Surface	CN	Area (SF)	% of Total Area
Asphalt (HSG C)	98	16,522	38%
Gravel (HSG C)	98	440	1%
Concrete (HSG C)	98	3,886	9%
Roofs (HSG C)	98	10,530	25%
Grass Cover > 75% (HSG C)	74	6,340	15%
Water Surface	98	5,237	12%
Total	*92*	*42,955*	*100%*

The two swales are combined into a single pond the HydroCAD models. The two combined swales will be 5,240 square feet and two feet deep in total. The swale side slopes will be 4:1 with a base four feet in width. The 5,801 CF swale volume retains flows up to the 100-year storm event. An emergency channel designed to dissipate overflow and convey the 100-year storm event into the property's eastern grassy field is included.

Water Quality and Quantity

The facility collects and holds stormwater runoff, allowing pollutants to filter out and settle to the vegetated bottom of the basin. The established infiltration rate was used in the HydroCAD model to show the water quality event is 100% infiltrated in the swales.

Stormwater quantity control is also provided by the swales. HydroCAD software was used to show and determine the capacity and conveyance of the proposed swale at each of the relevant storm events. The proposed swale is designed to have 1.0' of freeboard at the 25-year storm event, meeting City of Newberg standards. The overflow elevation is 172.94'. The swale elevations for respective storm events are summarized in Table 3 below.

Table 3 – Pond Max Water Surface Elevations

Design Storm Event	WQ	½ of 2-Year	2-Year	10-Year	25-Year	50-Year	100-Year
Maximum Water Surface Elevation	171.93'	171.96'	172.33'	172.62'	172.77'	172.83'	172.92'

Subcatchment flows are summarized in Table 4 below.

Table 4 – Runoff Summary

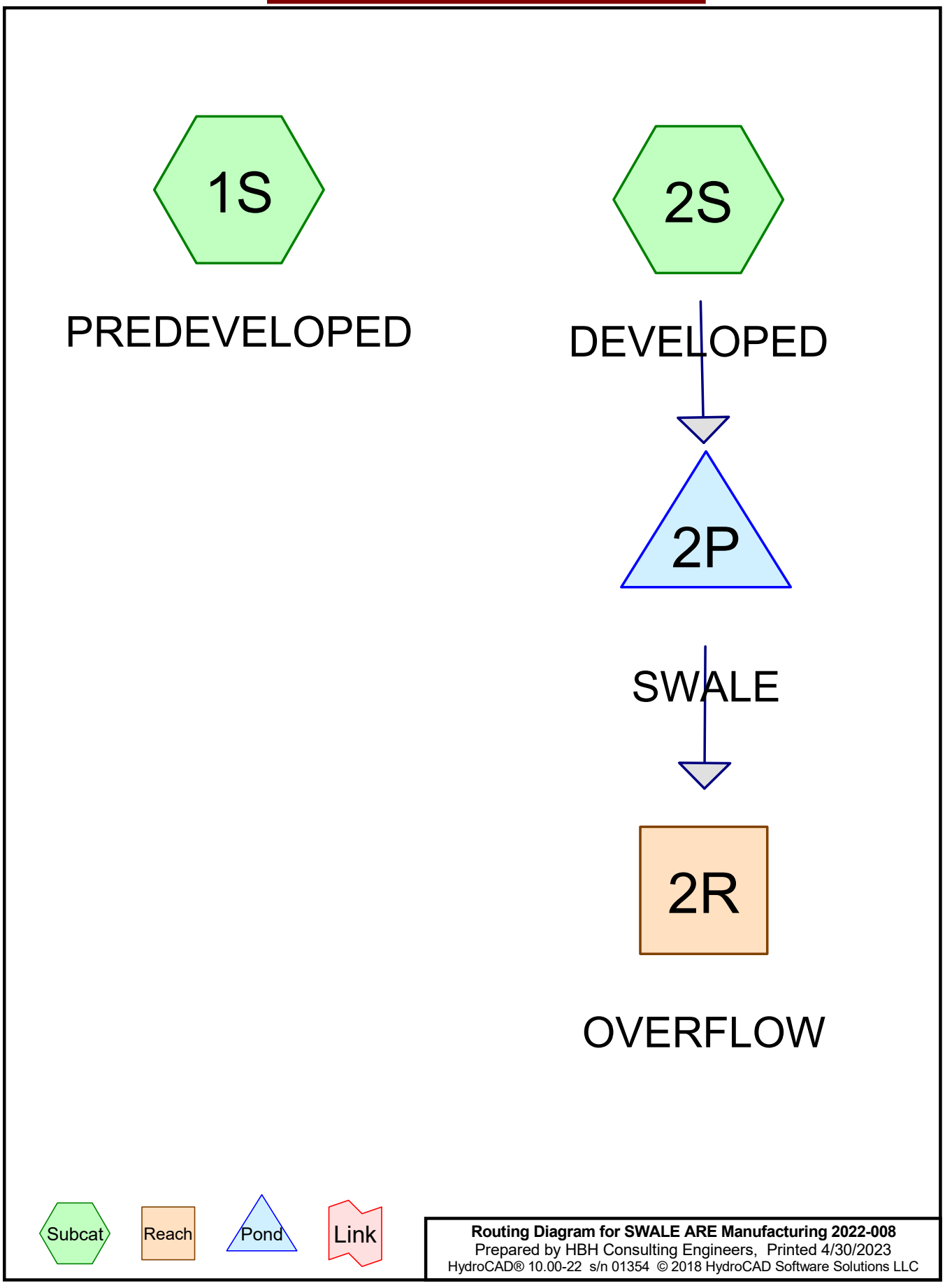
Development Condition	½ of 2 Year Storm	2-Year Storm	10-Year Storm	25-Year Storm
Predeveloped (1S)	0.008 cfs	0.108 cfs	0.269 cfs	0.361 cfs
Developed (2S)	0.000 cfs	0.000 cfs	0.000 cfs	0.000 cfs

There will be a net decrease in peak runoff rates for all relevant storm events when comparing developed peak runoff rates to predeveloped rates. The proposed development complies with the City of Newberg requirements for stormwater quality and quantity treatment.

Attachments

Attachment A – HydroCAD Data
Attachment B – Infiltration Test Report
Attachment C – Utility Plan/Details
Attachment D – Catchment Maps

BEGIN ATTACHMENT A



Routing Diagram for SWALE ARE Manufacturing 2022-008
Prepared by HBH Consulting Engineers, Printed 4/30/2023

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
43,968	74	>75% Grass cover, Good, HSG C (1S, 2S)
4,436	98	Concrete, HSG C (1S, 2S)
5,167	96	Gravel surface, HSG C (1S, 2S)
16,572	98	Paved parking, HSG C (1S, 2S)
10,530	98	Unconnected roofs, HSG C (2S)
5,237	98	Water Surface, 0% imp, HSG C (2S)
85,910	**86**	**TOTAL AREA**

Summary for Subcatchment 1S: PREDEVELOPED

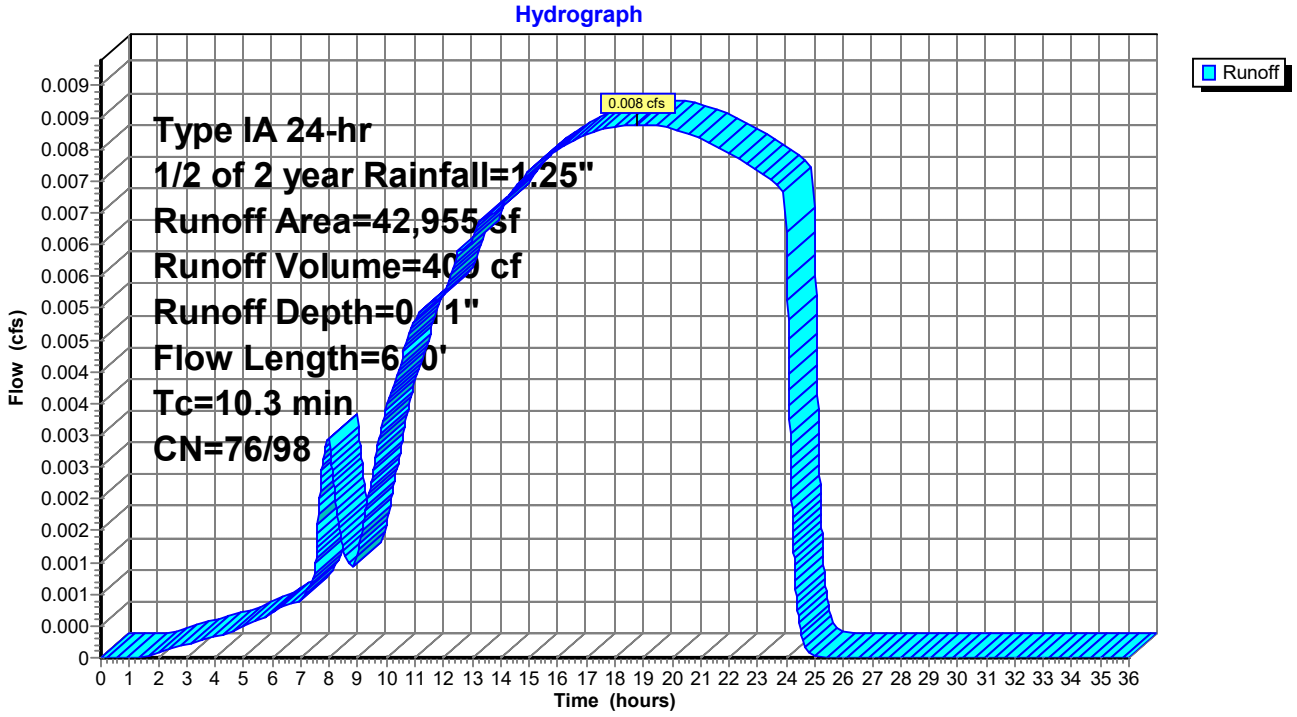
Runoff = 0.008 cfs @ 18.75 hrs, Volume= 409 cf, Depth= 0.11"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 1/2 of 2 year Rainfall=1.25"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

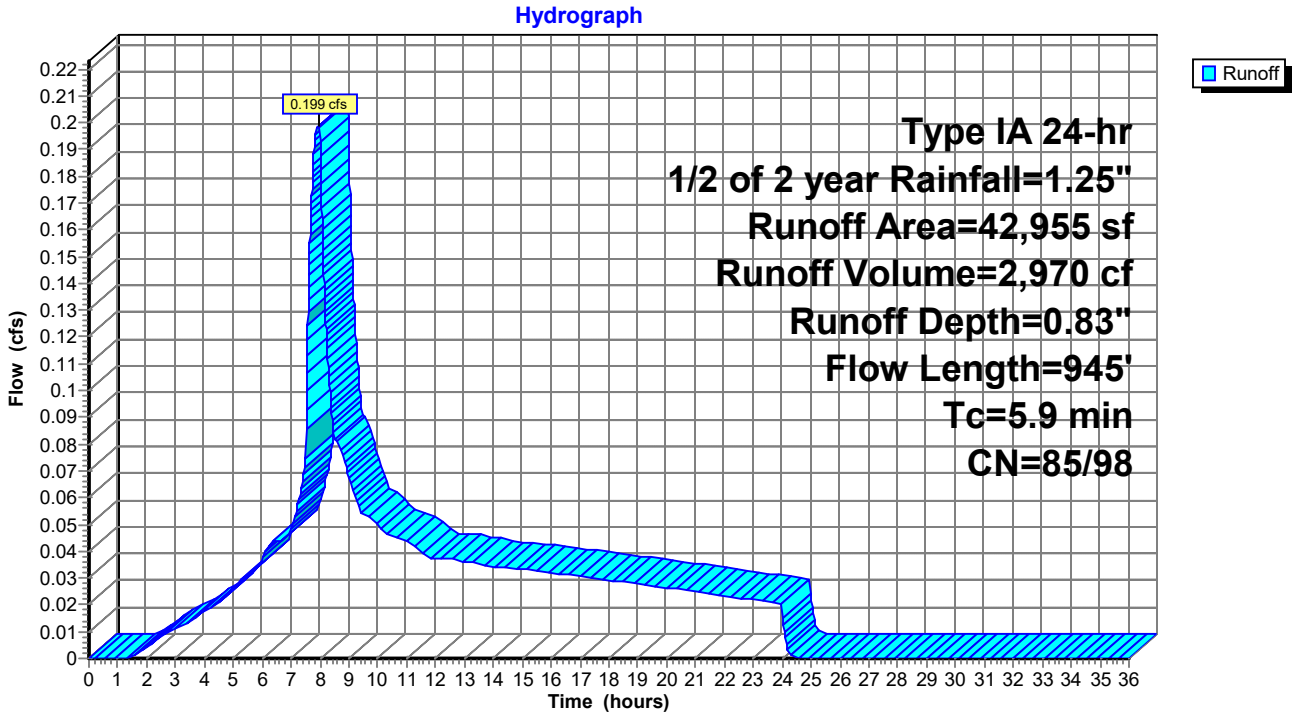
Runoff = 0.199 cfs @ 7.93 hrs, Volume= 2,970 cf, Depth= 0.83"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 1/2 of 2 year Rainfall=1.25"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

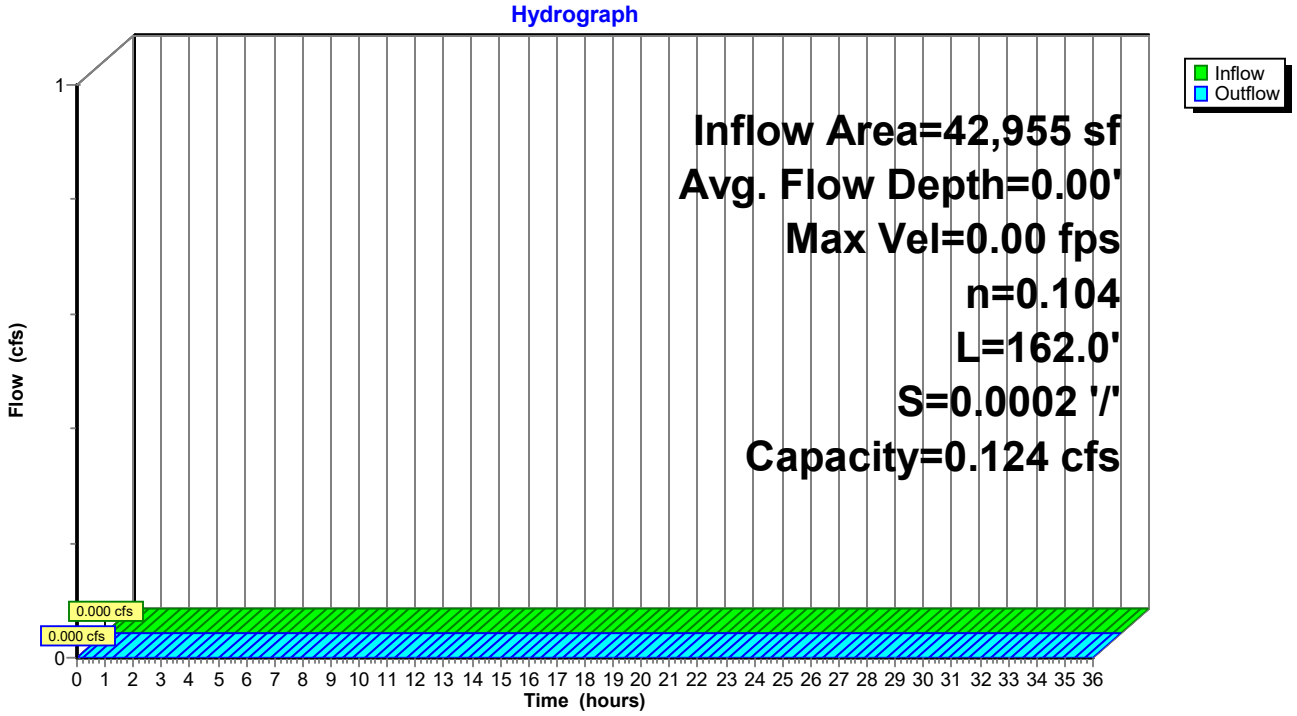
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for 1/2 of 2 year event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.83" for 1/2 of 2 year event
Inflow = 0.199 cfs @ 7.93 hrs, Volume= 2,970 cf
Outflow = 0.169 cfs @ 8.06 hrs, Volume= 2,970 cf, Atten= 15%, Lag= 7.8 min
Discarded = 0.169 cfs @ 8.06 hrs, Volume= 2,970 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 171.96' @ 8.06 hrs Surf.Area= 1,901 sf Storage= 77 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 1.7 min (723.9 - 722.3)

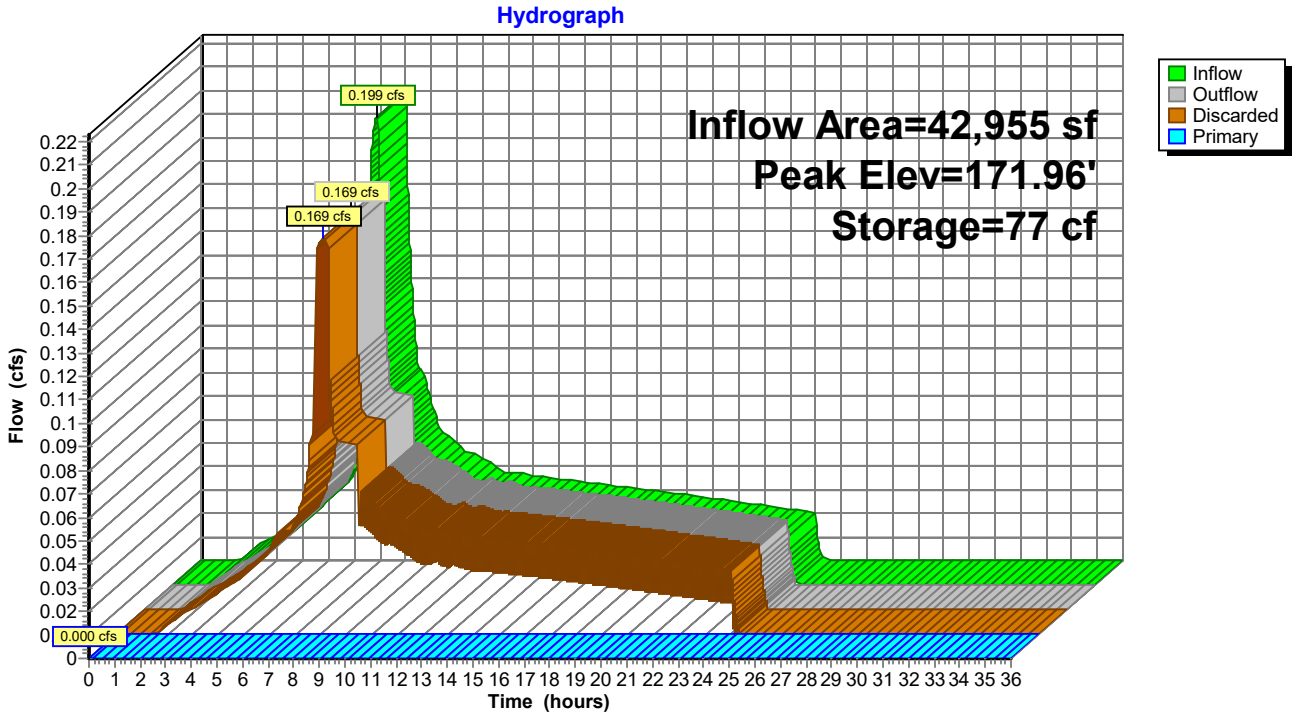
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.169 cfs @ 8.06 hrs HW=171.96' (Free Discharge)
2=Exfiltration (Exfiltration Controls 0.169 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
1=Sharp-Crested Vee/Trap Weir (Controls 0.000 cfs)

Pond 2P: SWALE



Summary for Subcatchment 1S: PREDEVELOPED

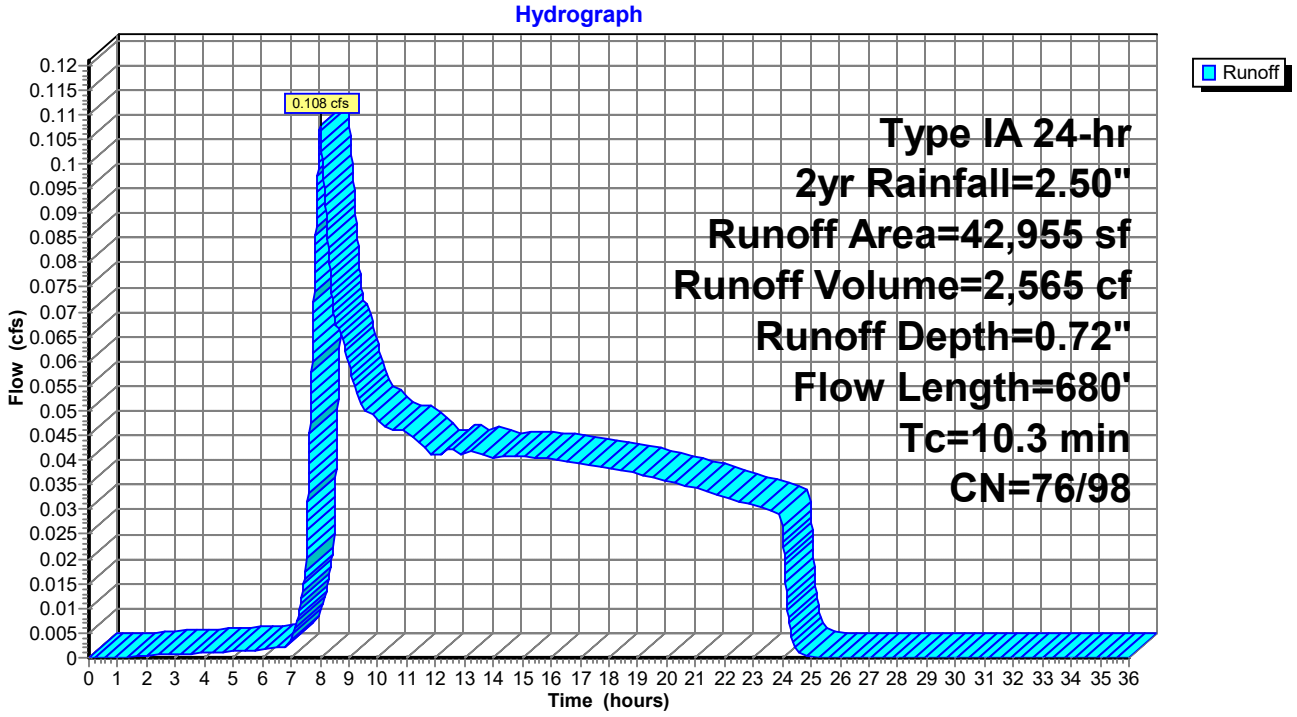
Runoff = 0.108 cfs @ 8.01 hrs, Volume= 2,565 cf, Depth= 0.72"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2yr Rainfall=2.50"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

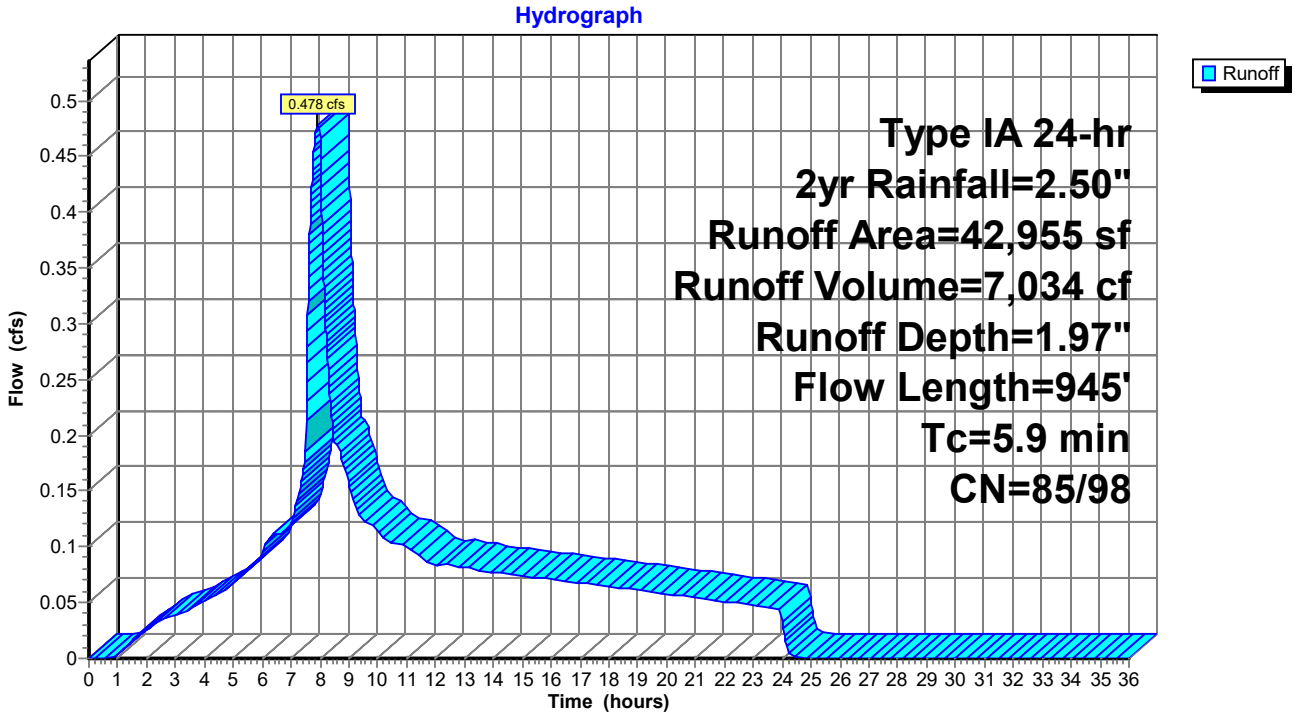
Runoff = 0.478 cfs @ 7.91 hrs, Volume= 7,034 cf, Depth= 1.97"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2yr Rainfall=2.50"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

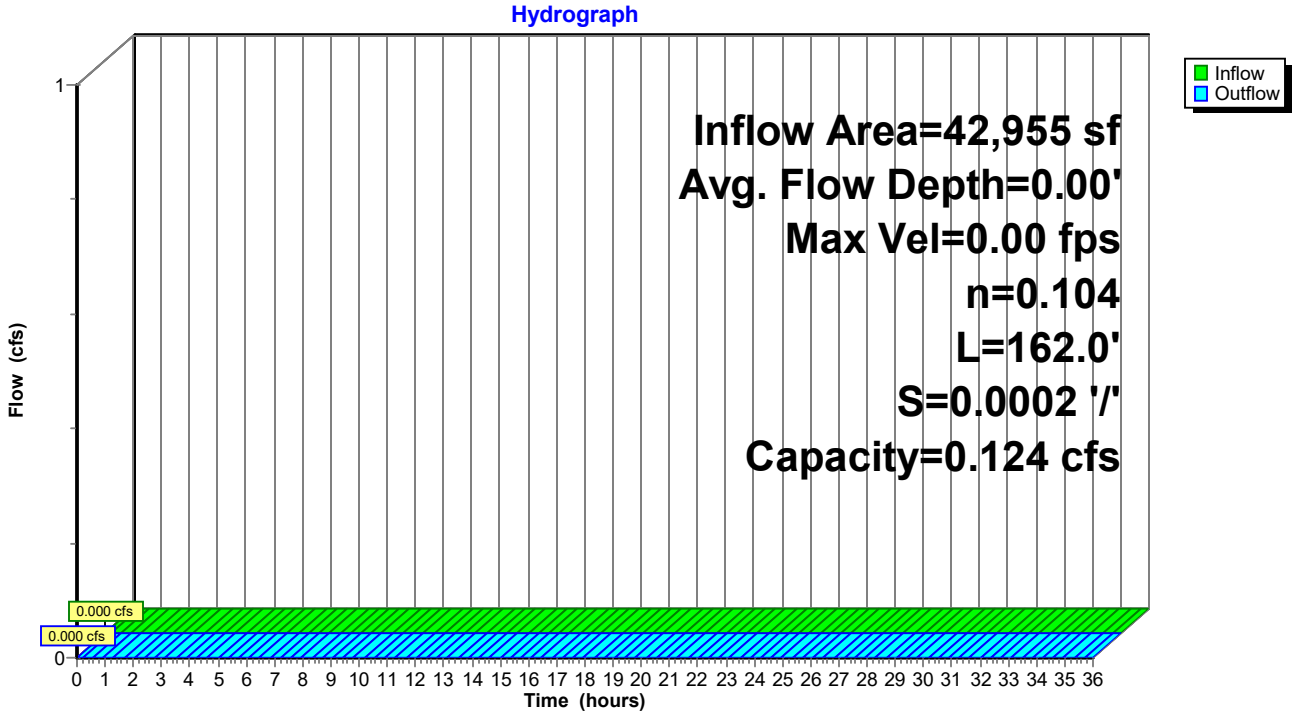
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for 2yr event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 1.97" for 2yr event
Inflow = 0.478 cfs @ 7.91 hrs, Volume= 7,034 cf
Outflow = 0.230 cfs @ 8.35 hrs, Volume= 7,035 cf, Atten= 52%, Lag= 26.4 min
Discarded = 0.230 cfs @ 8.35 hrs, Volume= 7,035 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 172.33' @ 8.35 hrs Surf.Area= 2,597 sf Storage= 563 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 10.9 min (707.5 - 696.5)

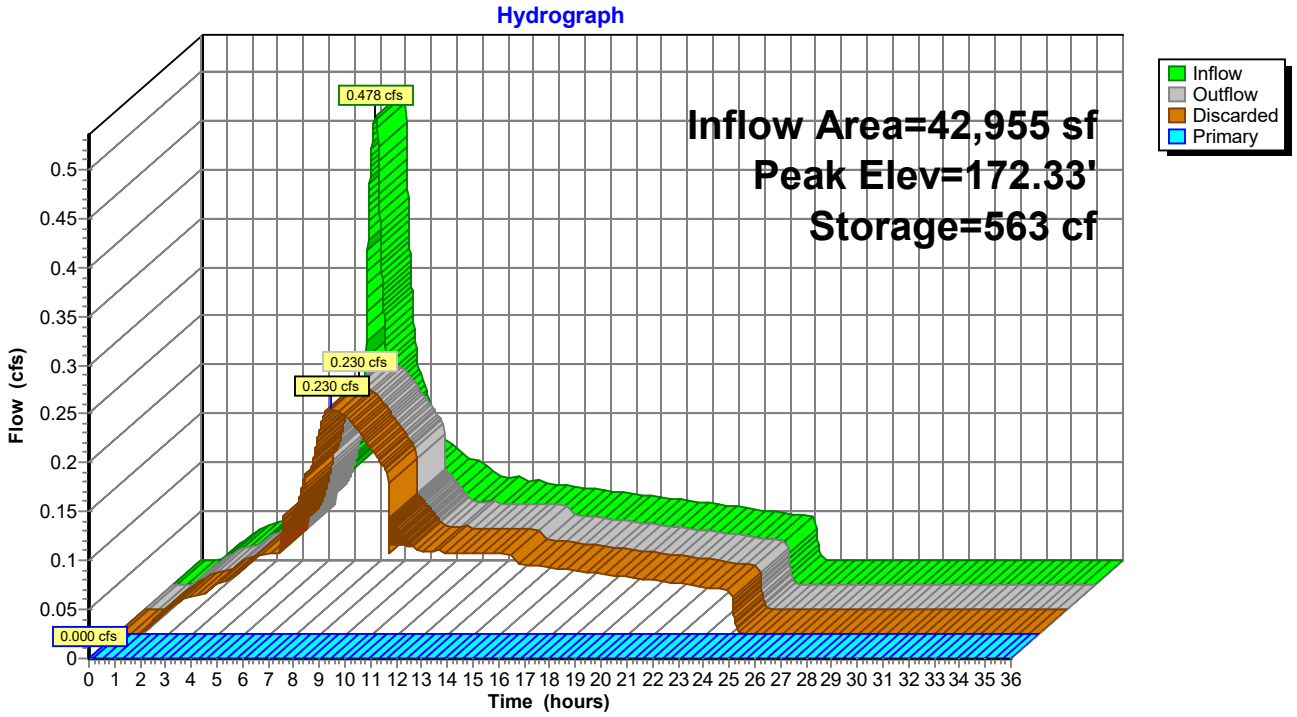
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.230 cfs @ 8.35 hrs HW=172.33' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.230 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
↑**1=Sharp-Crested Vee/Trap Weir** (Controls 0.000 cfs)

Pond 2P: SWALE



Summary for Subcatchment 1S: PREDEVELOPED

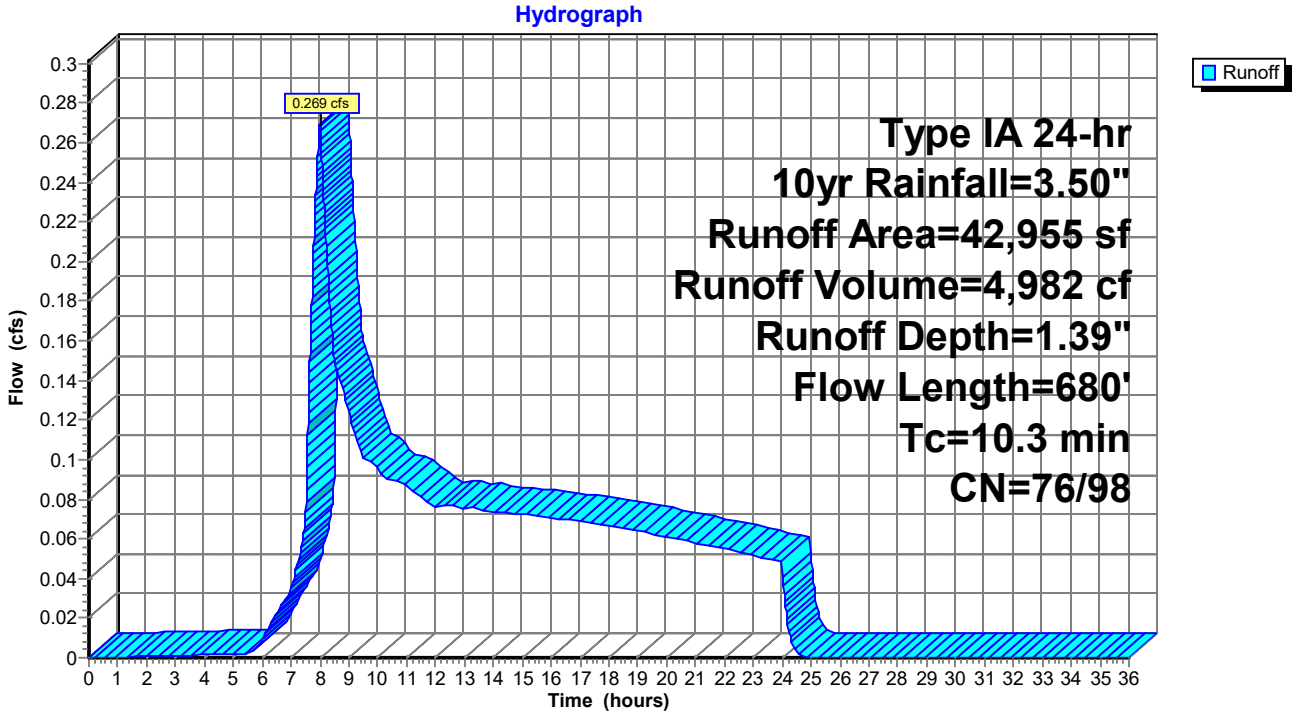
Runoff = 0.269 cfs @ 8.00 hrs, Volume= 4,982 cf, Depth= 1.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10yr Rainfall=3.50"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

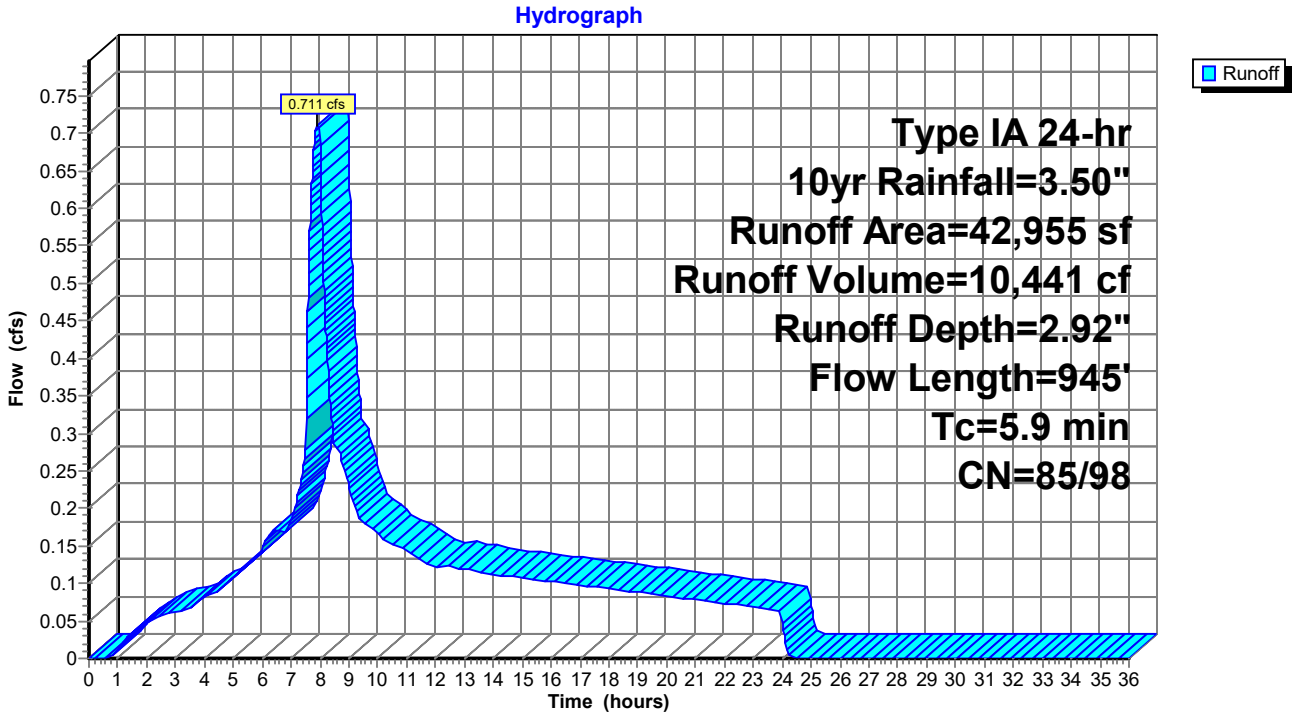
Runoff = 0.711 cfs @ 7.91 hrs, Volume= 10,441 cf, Depth= 2.92"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10yr Rainfall=3.50"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

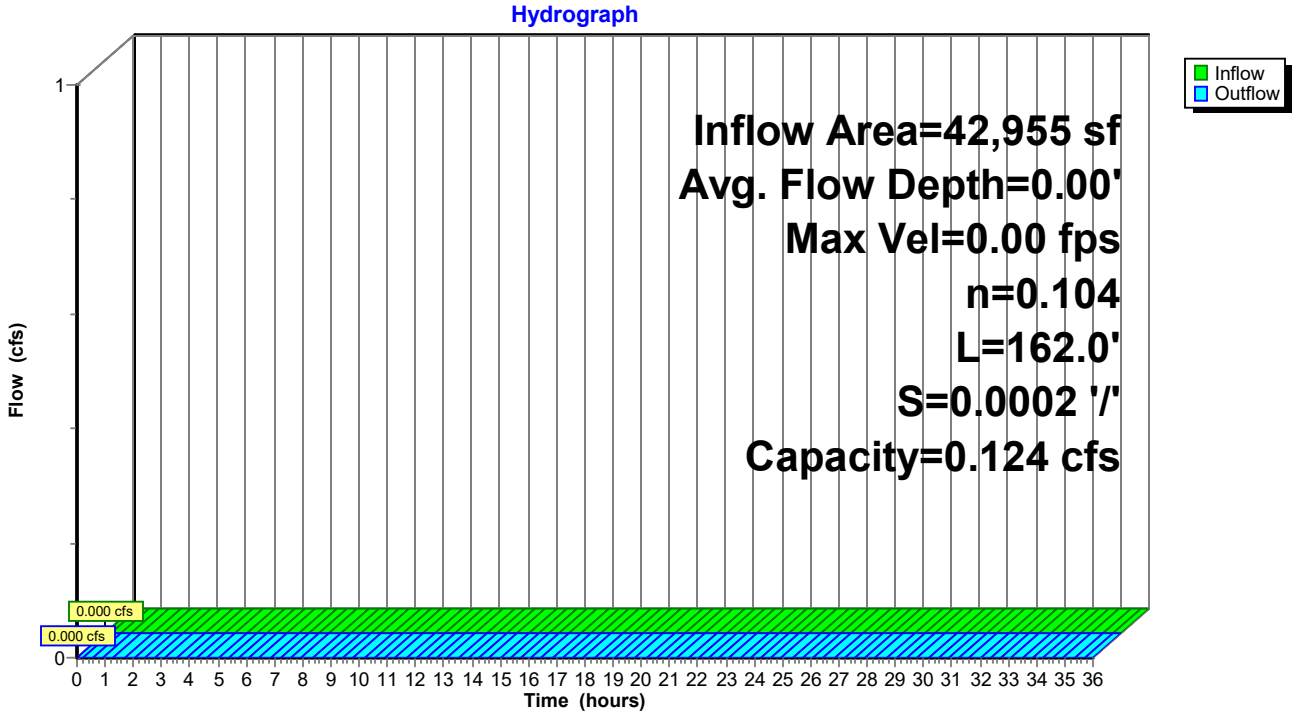
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for 10yr event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 2.92" for 10yr event
Inflow = 0.711 cfs @ 7.91 hrs, Volume= 10,441 cf
Outflow = 0.280 cfs @ 8.62 hrs, Volume= 10,441 cf, Atten= 61%, Lag= 42.6 min
Discarded = 0.280 cfs @ 8.62 hrs, Volume= 10,441 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 172.62' @ 8.62 hrs Surf.Area= 3,162 sf Storage= 1,133 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 23.0 min (708.9 - 685.9)

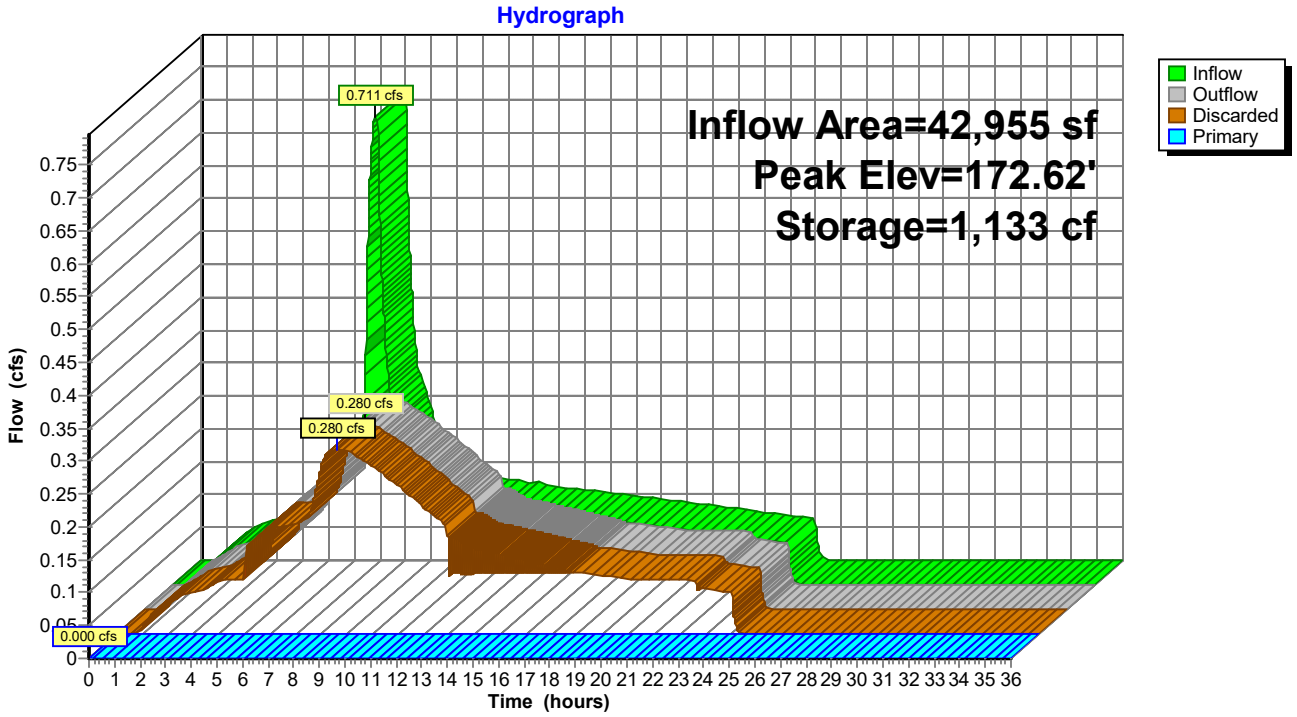
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.280 cfs @ 8.62 hrs HW=172.62' (Free Discharge)
2=Exfiltration (Exfiltration Controls 0.280 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
1=Sharp-Crested Vee/Trap Weir (Controls 0.000 cfs)

Pond 2P: SWALE



Summary for Subcatchment 1S: PREDEVELOPED

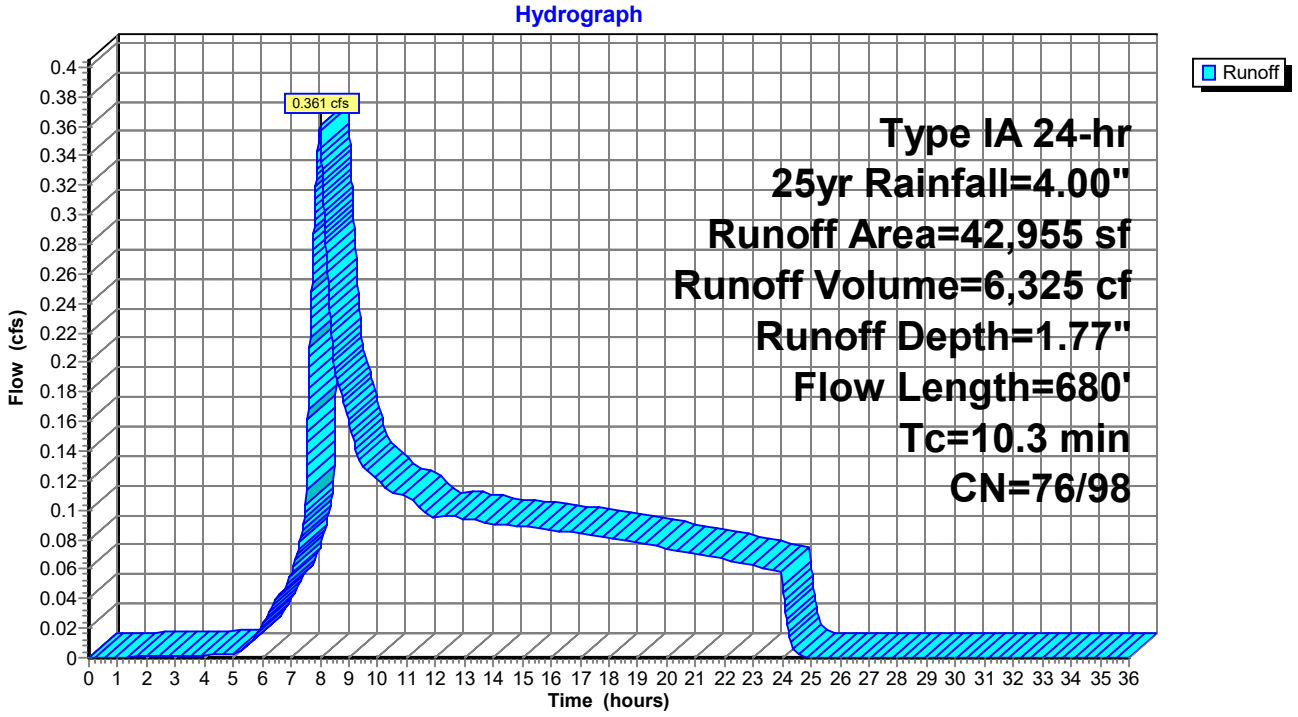
Runoff = 0.361 cfs @ 8.00 hrs, Volume= 6,325 cf, Depth= 1.77"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25yr Rainfall=4.00"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

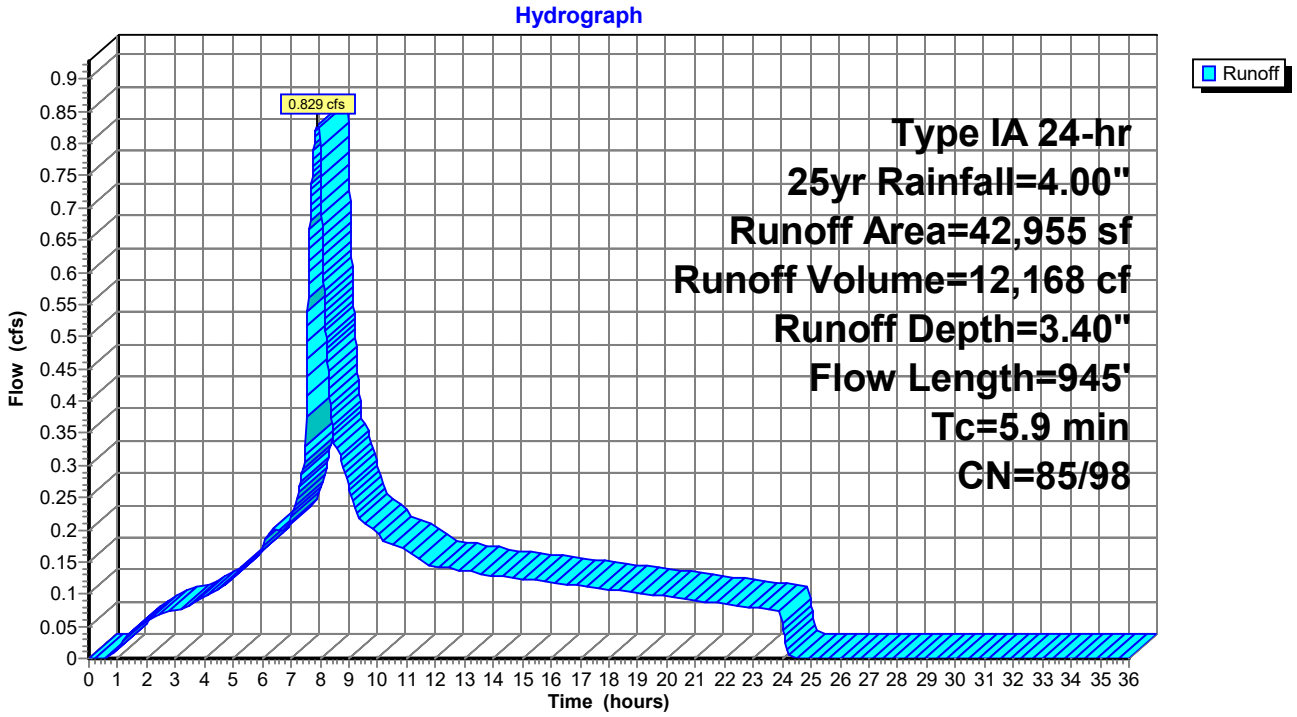
Runoff = 0.829 cfs @ 7.91 hrs, Volume= 12,168 cf, Depth= 3.40"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25yr Rainfall=4.00"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

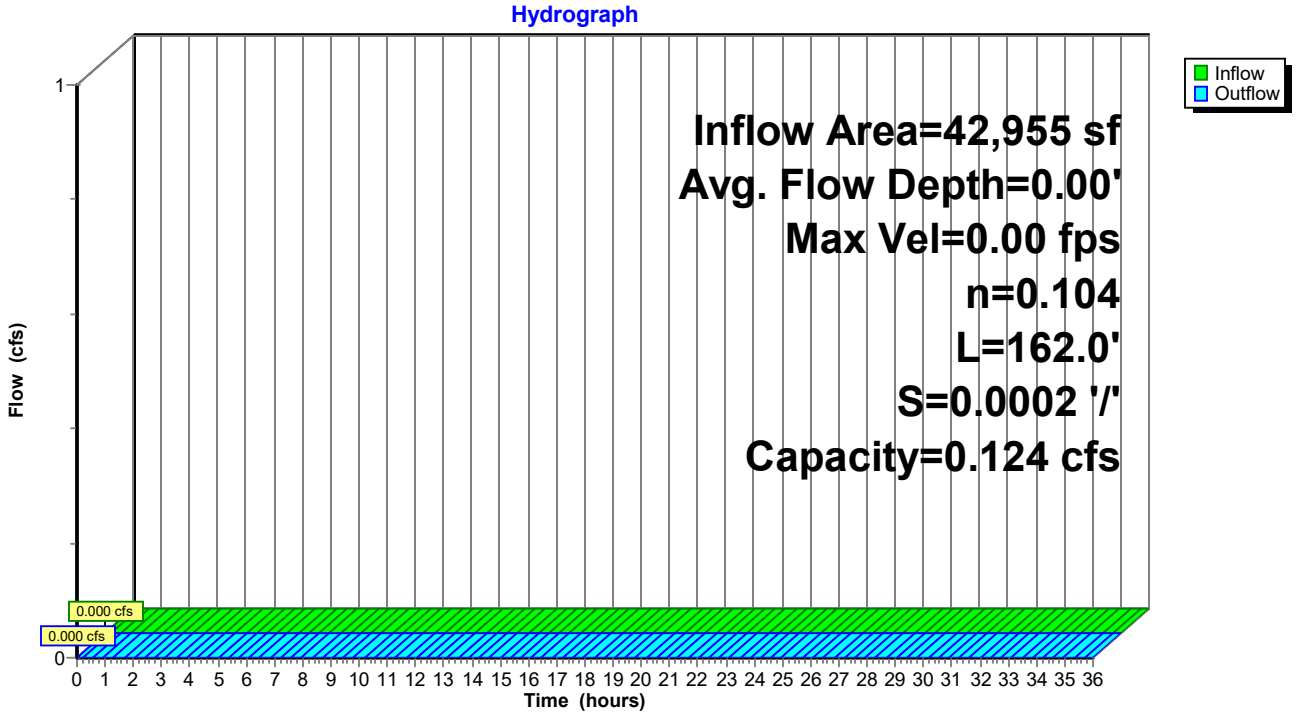
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for 25yr event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 3.40" for 25yr event
Inflow = 0.829 cfs @ 7.91 hrs, Volume= 12,168 cf
Outflow = 0.307 cfs @ 8.75 hrs, Volume= 12,169 cf, Atten= 63%, Lag= 50.9 min
Discarded = 0.307 cfs @ 8.75 hrs, Volume= 12,169 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 172.77' @ 8.75 hrs Surf.Area= 3,462 sf Storage= 1,497 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 30.3 min (712.3 - 681.9)

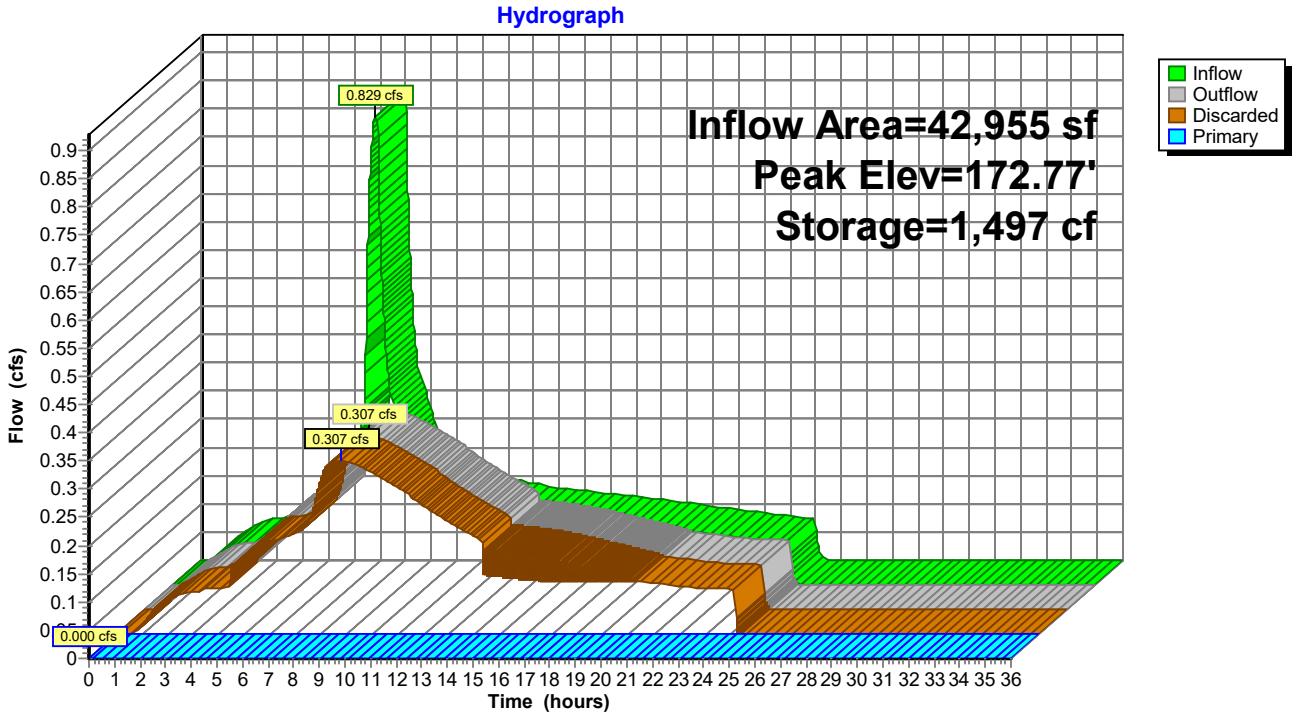
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.307 cfs @ 8.75 hrs HW=172.77' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.307 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
↑**1=Sharp-Crested Vee/Trap Weir** (Controls 0.000 cfs)

Pond 2P: SWALE



Summary for Subcatchment 1S: PREDEVELOPED

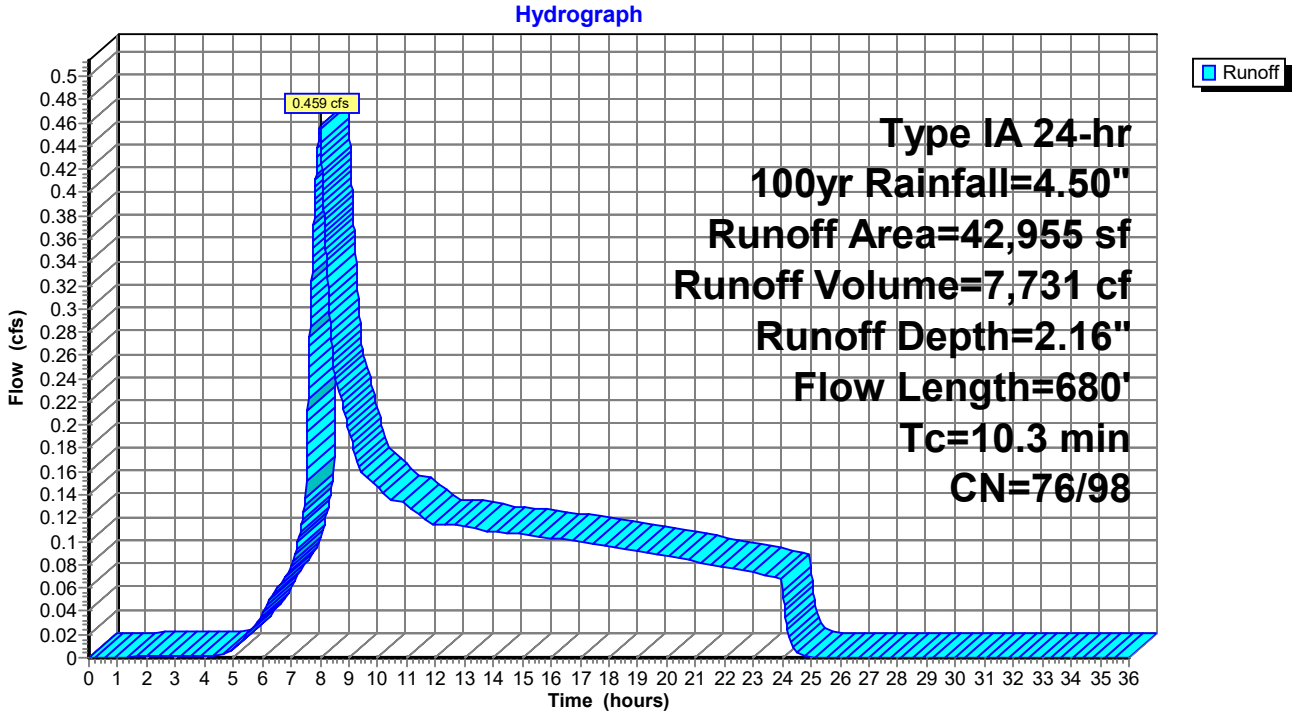
Runoff = 0.459 cfs @ 8.00 hrs, Volume= 7,731 cf, Depth= 2.16"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100yr Rainfall=4.50"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

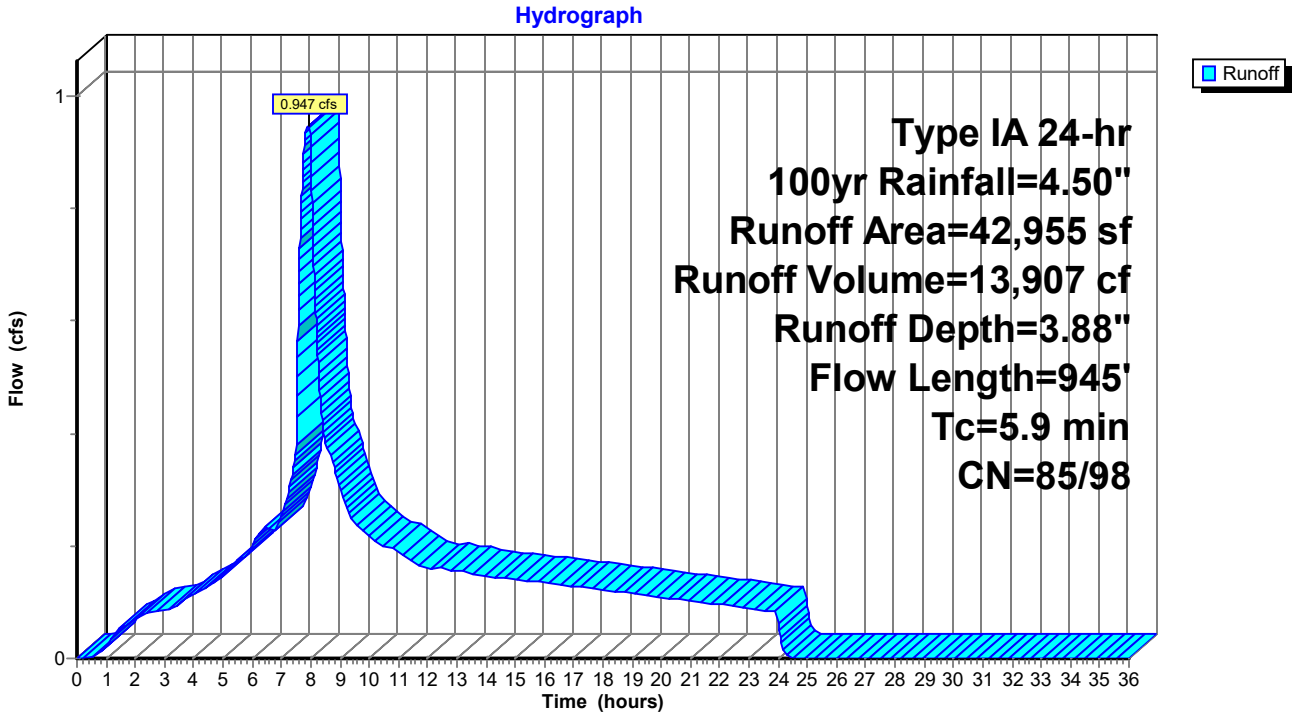
Runoff = 0.947 cfs @ 7.91 hrs, Volume= 13,907 cf, Depth= 3.88"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100yr Rainfall=4.50"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

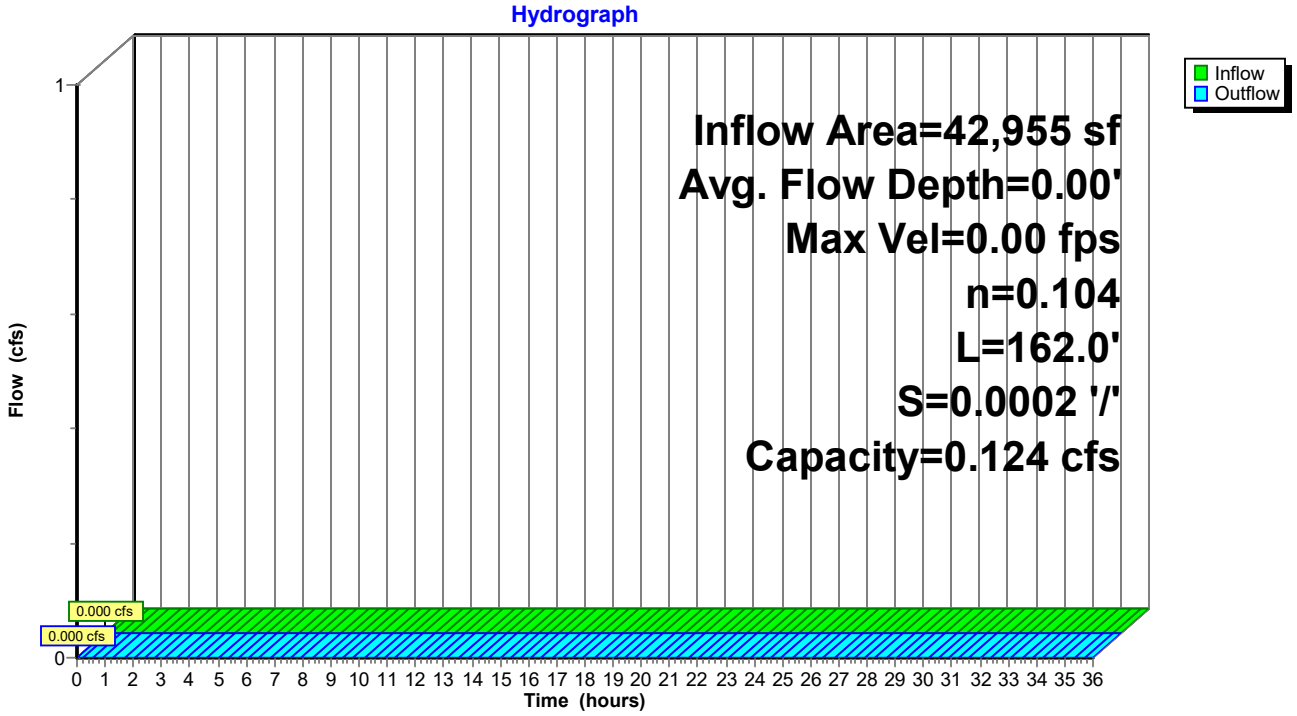
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for 100yr event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 3.88" for 100yr event
Inflow = 0.947 cfs @ 7.91 hrs, Volume= 13,907 cf
Outflow = 0.333 cfs @ 8.84 hrs, Volume= 13,907 cf, Atten= 65%, Lag= 56.2 min
Discarded = 0.333 cfs @ 8.84 hrs, Volume= 13,907 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 172.92' @ 8.84 hrs Surf.Area= 3,755 sf Storage= 1,893 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 38.0 min (716.6 - 678.6)

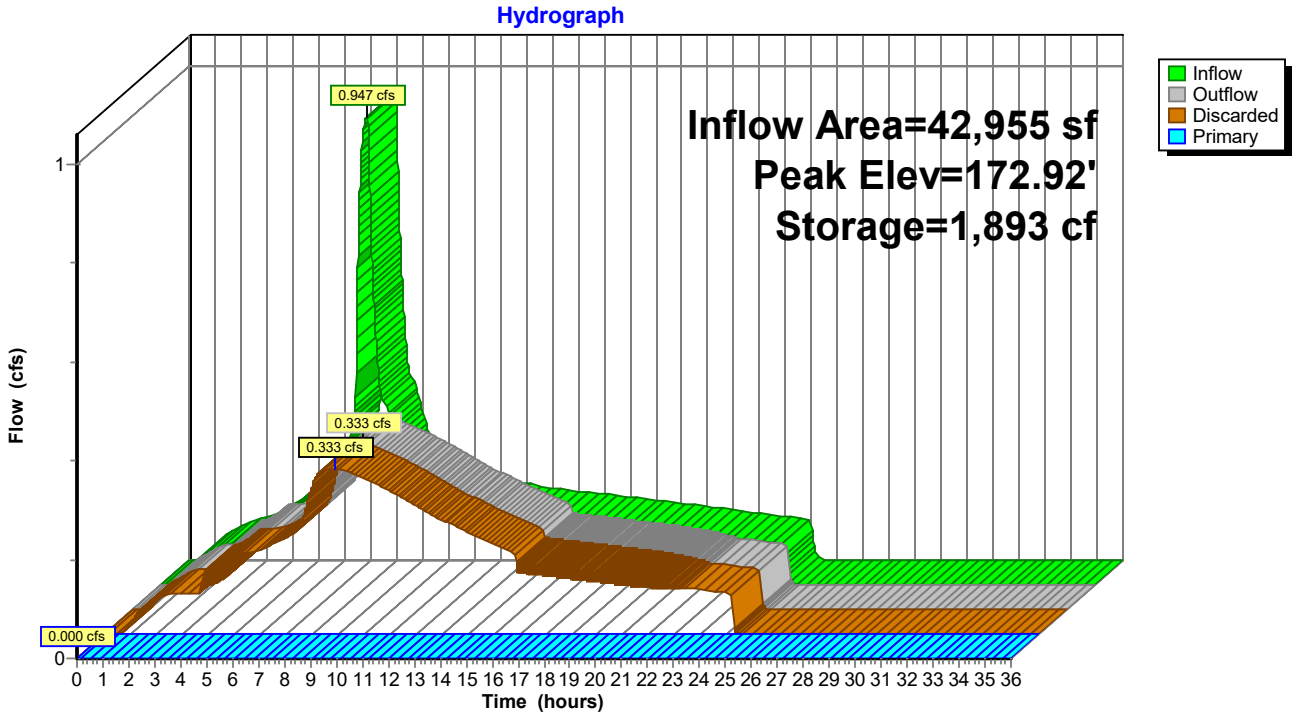
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.333 cfs @ 8.84 hrs HW=172.92' (Free Discharge)
2=Exfiltration (Exfiltration Controls 0.333 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
1=Sharp-Crested Vee/Trap Weir (Controls 0.000 cfs)

Pond 2P: SWALE



Summary for Subcatchment 1S: PREDEVELOPED

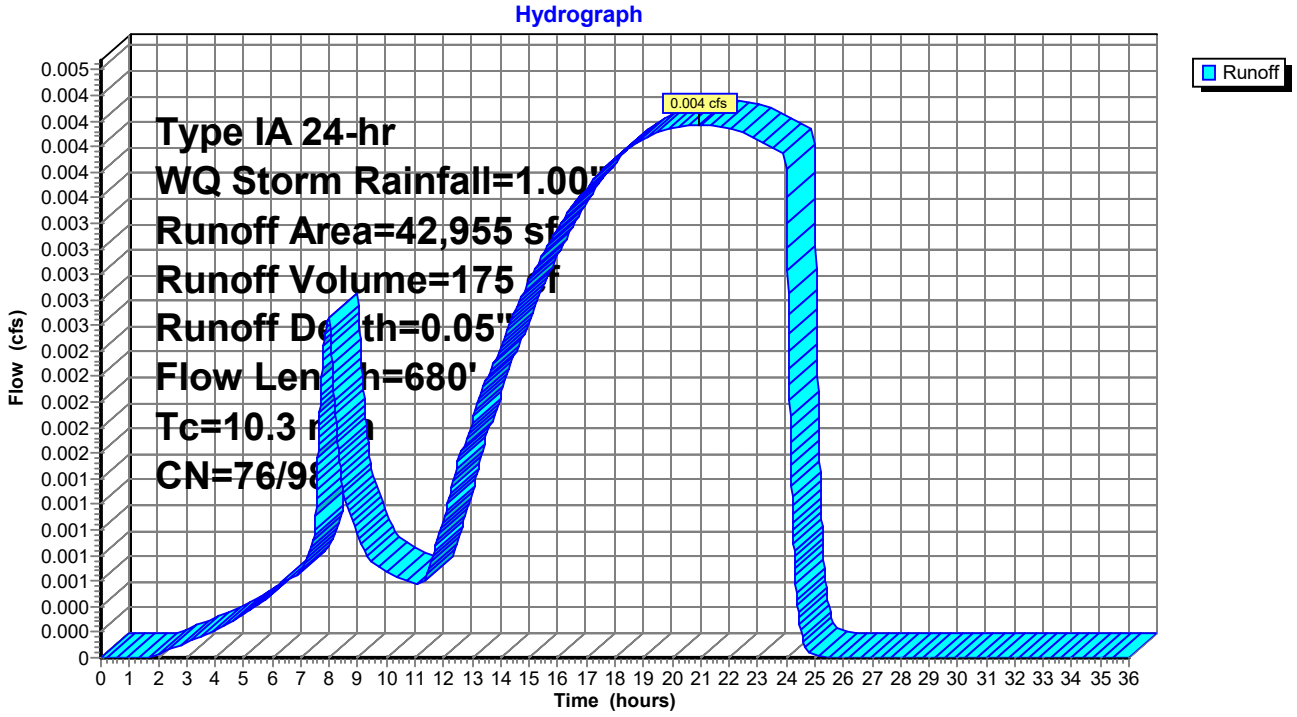
Runoff = 0.004 cfs @ 20.93 hrs, Volume= 175 cf, Depth= 0.05"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Storm Rainfall=1.00"

	Area (sf)	CN	Description
	50	98	Paved parking, HSG C
	4,727	96	Gravel surface, HSG C
*	550	98	Concrete, HSG C
	37,628	74	>75% Grass cover, Good, HSG C
	42,955	77	Weighted Average
	42,355	76	98.60% Pervious Area
	600	98	1.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	86	0.1000	2.29		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
0.2	31	0.0200	2.28		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
9.5	563	0.0200	0.99		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
10.3	680	Total			

Subcatchment 1S: PREDEVELOPED



Summary for Subcatchment 2S: DEVELOPED

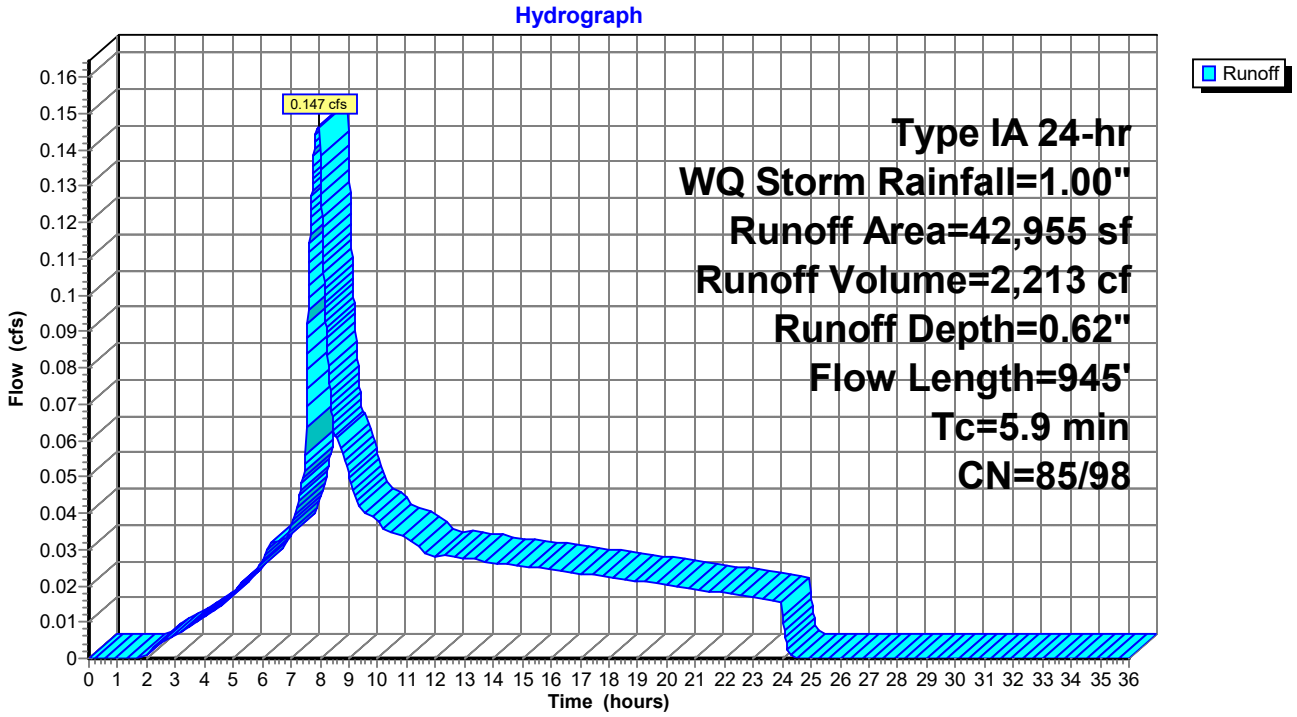
Runoff = 0.147 cfs @ 7.94 hrs, Volume= 2,213 cf, Depth= 0.62"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Storm Rainfall=1.00"

	Area (sf)	CN	Description
	16,522	98	Paved parking, HSG C
*	3,886	98	Concrete, HSG C
	10,530	98	Unconnected roofs, HSG C
	5,237	98	Water Surface, 0% imp, HSG C
	6,340	74	>75% Grass cover, Good, HSG C
	440	96	Gravel surface, HSG C
	42,955	94	Weighted Average
	12,017	85	27.98% Pervious Area
	30,938	98	72.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	56	0.1000	2.10		**Sheet Flow, Roof** Smooth surfaces n= 0.011 P2= 2.60"
1.3	77	0.0200	0.99		**Shallow Concentrated Flow, Landscape** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.0500	4.54		**Shallow Concentrated Flow, Pavement** Paved Kv= 20.3 fps
4.1	790	0.0050	3.21	2.519	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 PVC, smooth interior
5.9	945	Total			

Subcatchment 2S: DEVELOPED



Summary for Reach 2R: OVERFLOW

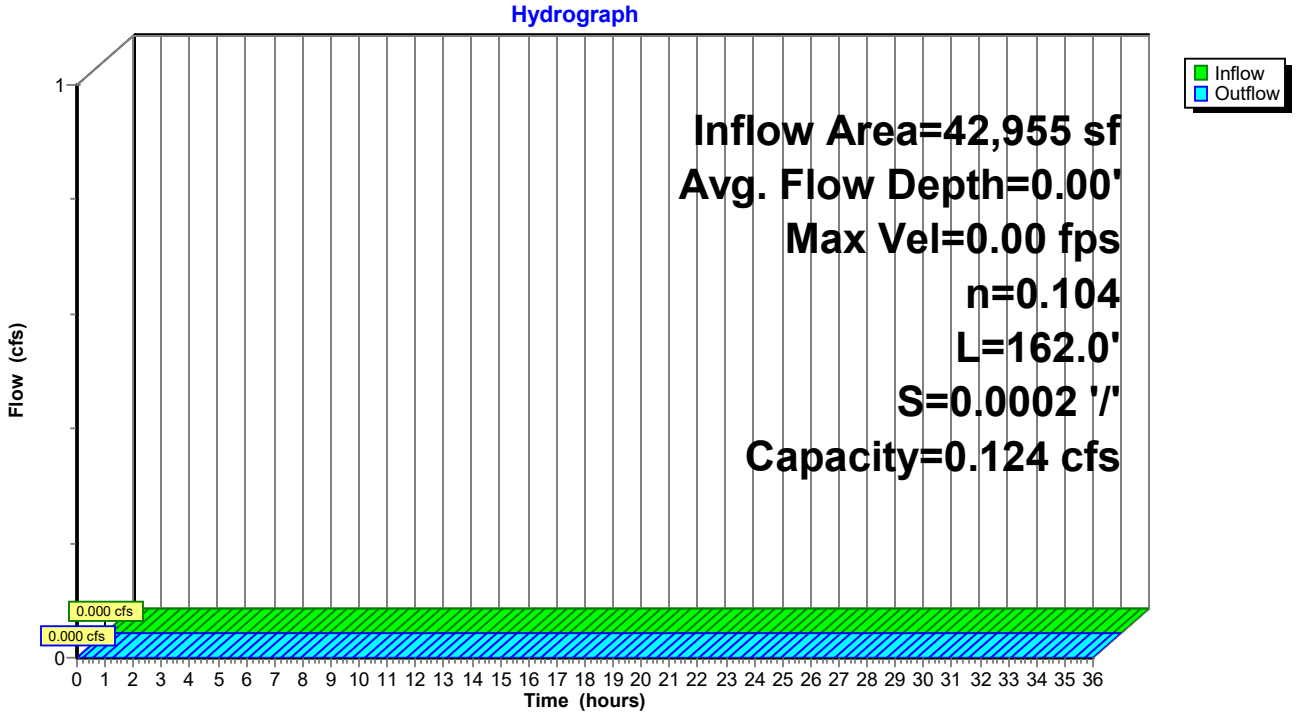
Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.00" for WQ Storm event
Inflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.000 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 1.3 sf, Capacity= 0.124 cfs

2.00' x 0.50' deep channel, n= 0.104 Riprap, 6-inch
Side Slope Z-value= 1.0 '/' Top Width= 3.00'
Length= 162.0' Slope= 0.0002 '/'
Inlet Invert= 172.94', Outlet Invert= 172.91'

Reach 2R: OVERFLOW



Summary for Pond 2P: SWALE

Inflow Area = 42,955 sf, 72.02% Impervious, Inflow Depth = 0.62" for WQ Storm event
Inflow = 0.147 cfs @ 7.94 hrs, Volume= 2,213 cf
Outflow = 0.148 cfs @ 7.93 hrs, Volume= 2,213 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.148 cfs @ 7.93 hrs, Volume= 2,213 cf
Primary = 0.000 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 171.93' @ 7.87 hrs Surf.Area= 1,840 sf Storage= 46 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 1.2 min (733.0 - 731.9)

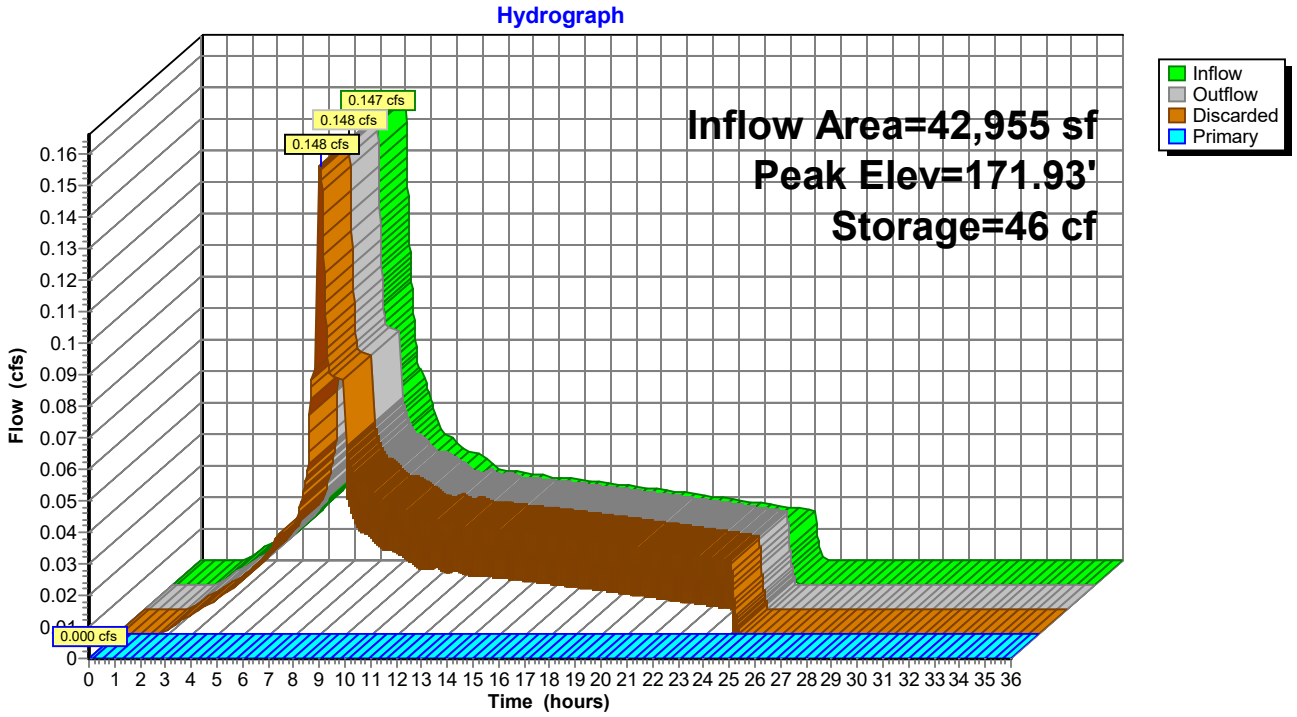
Volume	Invert	Avail.Storage	Storage Description
#1	171.93'	5,755 cf	**4.00'W x 230.00'L x 2.00'H Swale Z=4.0**
#2	170.93'	46 cf	**4.00'W x 230.00'L x 1.00'H Planting Media** 920 cf Overall x 5.0% Voids
		5,801 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	172.94'	**45.0 deg x 2.0' long x 0.50' rise Sharp-Crested Vee/Trap Weir** Cv= 2.56 (C= 3.20)
#2	Discarded	170.93'	**3.830 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.163 cfs @ 7.93 hrs HW=171.93' (Free Discharge)
2=Exfiltration (Exfiltration Controls 0.163 cfs)

Primary OutFlow Max=0.000 cfs @ 0.00 hrs HW=170.93' TW=172.94' (Dynamic Tailwater)
1=Sharp-Crested Vee/Trap Weir (Controls 0.000 cfs)

Pond 2P: SWALE



END ATTACHMENT A

ATTACHMENT B (1/2)

H B H
CONSULTING
ENGINEERS

501 E First Street
Newberg, Oregon 97132
Ph. 503-554-9553 | Fax 503-537-9554

M E M O R A N D U M

Date: **January 26, 2023** Project Number: **2022-008**
To: **To Whom This May Concern**
From: **Andrey Chenishov, PE**
RE: **A.R.E. Manufacturing: Infiltration Test**

Performed by: Andrew Bates, PE
Test Location: Tax Lots 3800 & 3801, Newberg, 97132 OR (see Figure 1 for Test Pit Locations)
Depth of Infiltration Test: 30" Below Ground Surface (BGS)
Test Method: Falling Head Infiltration Test

Test Notes: Tests performed in grassy field east end of existing building and parking lot. Two test pits were dug using a skid-steer excavator to approximately 30" depth. Soil was firm and held the bladed cut of an excavator. Test Pit #2 had some organic material present at the test depth (roots). The test pits were approximately 1.5 x 5 feet in area in 2.5 feet deep. Beginning at 9:22 AM the test pits was wetted and filled to approximately 6" below the brim by 9:35 AM. The test pits were kept filled at that level for approximately a half hour when the testing period began at 10:00 AM. The testing period concluded at 1:01 PM.

Time	Lapse (HR)	Test Pit #1 Level	Test Pit #2 Level	Test Pit #1 Drop (ft)	Test Pit #2 Drop (ft)	Infiltration Rates (in/hr)
10:00 AM		1.65				
10:04 AM			1.85			
10:33 AM	0.550	0.9		0.75		16.4
10:35 AM	0.517		1.5		0.35	8.1
10:43 AM		1.55				
10:47 AM			1.7			
11:15 AM	0.533	1		0.55		12.4
11:16 AM	0.483		1.4		0.3	7.4
11:23 AM		1.7				
11:28 AM			1.75			
12:03 PM	0.667	0.9		0.8		14.4
12:05 PM	0.617		1.3		0.45	8.8
12:12 PM		1.7				
12:17 PM			1.75			
12:59 PM	0.783	0.7		1		15.3
1:01 PM	0.733		1.2		0.55	9.0

Results:

Average Raw Rate = 11.47 in/hr **Factored Infiltration Rate (33%) = 11.47/3 = *3.83 in/hr***

ATTACHMENT B (2/2)

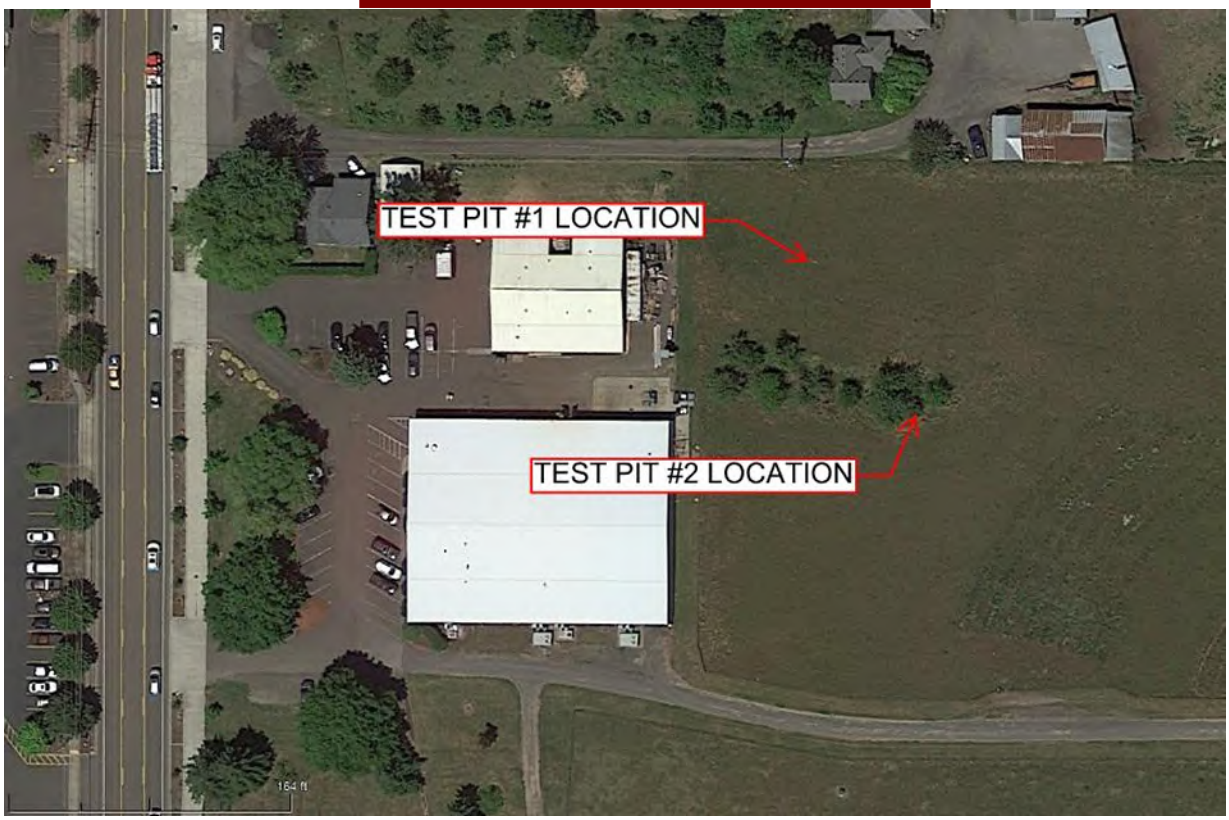
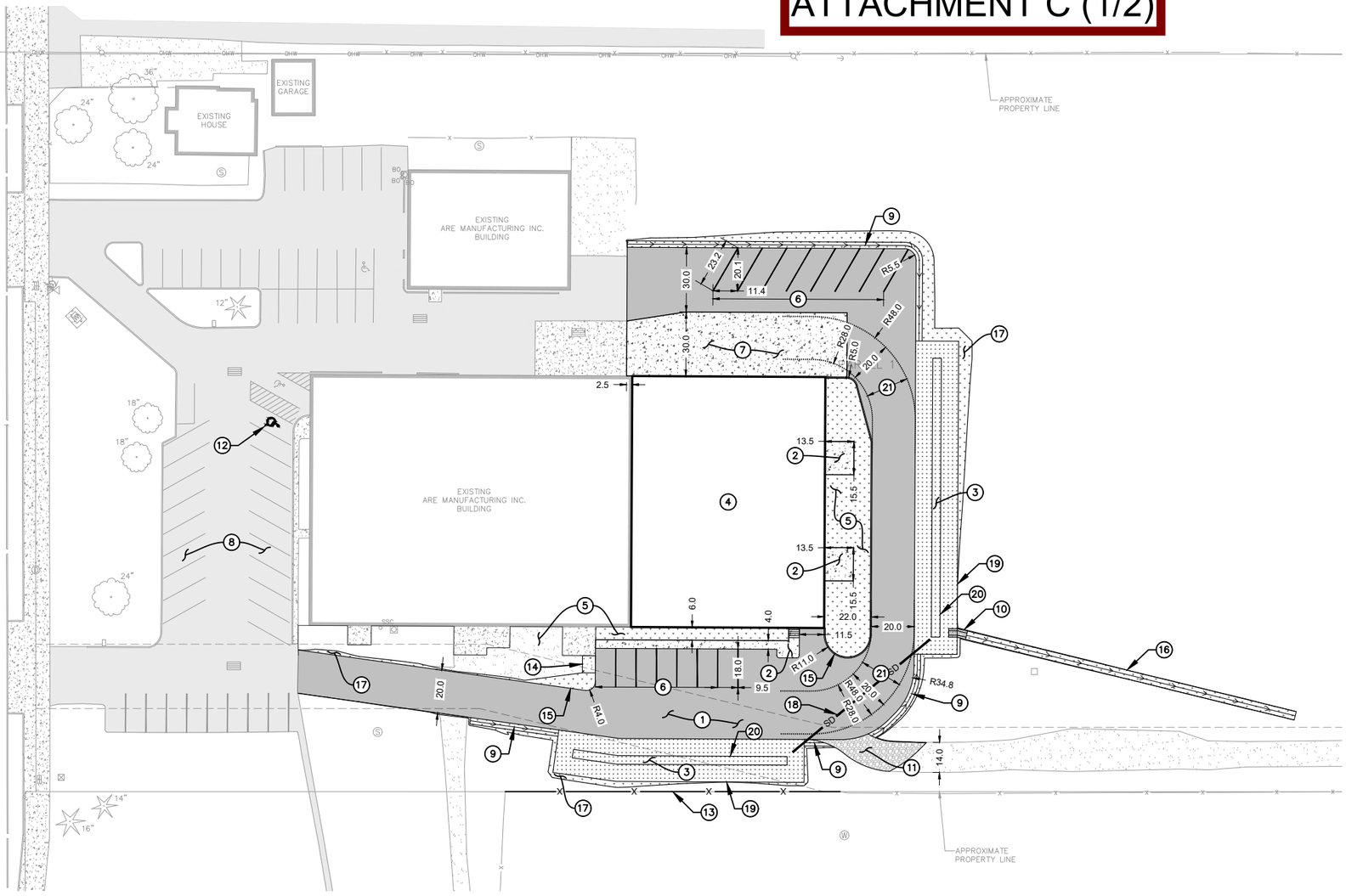


Figure 1. Test Pit Locations

Figure 2. Test Pit #1

Figure 3. Test Pit #2

ATTACHMENT C (1/2)



SITE PLAN

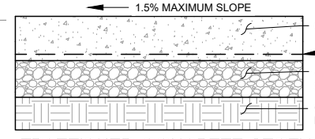
1" = 30'

SITE + UTILITY PLAN KEY NOTES

1. INSTALL ASPHALT PER ASPHALT CROSS SECTION DETAIL LOCATED ON THIS SHEET
2. INSTALL CONCRETE PER STANDARD CONCRETE CROSS SECTION DETAIL LOCATED ON THIS SHEET. SEE SHEETS C5 THROUGH C7 FOR DETAILED GRADING
3. INSTALL 2.0' DEEP SWALE WITH 4.0' WIDE BASE AND 4:1 MOW-ABLE SIDE SLOPES PER CITY OF NEWBERG DETAIL 460. SEE LANDSCAPING PLANS BY OTHERS FOR PLANTING SCHEDULE. CONTRACTOR TO BRING GRASS TO FULL FRUITION AS CONDITION OF PROJECT COMPLETION. SEE SHEET C5 FOR GRADING.
4. PROPOSED BUILDING EXTENSION. SEE ARCHITECTURAL AND STRUCTURAL PLANS BY OTHERS.
5. SEE LANDSCAPING PLANS BY OTHERS
6. 14 TOTAL NEW PARKING STALLS. STRIPE WITH 4" WIDE YELLOW, WATER BASED ACRYLIC PAINT.
7. INSTALL CONCRETE PER TRAFFICKED CONCRETE CROSS SECTION DETAIL LOCATED ON THIS SHEET
8. 53 EXISTING PARKING STALLS TO REMAIN (TYP)
9. DRAINAGE DEPRESSION TO SWALE
10. EMBEDDED RIP-RAP OVERFLOW CHANNEL FOR SWALE PER RIP-RAP CROSS SECTION DETAIL ON THIS SHEET AND CITY OF NEWBERG DETAIL 422. CHANNEL SERVES AS SPILLWAY FOR 50- AND 100-YEAR EVENTS.
11. ADJUST GRAVEL DRIVEWAY TO TRANSITION INTO NEW PARKING LOT
12. STRIPE NEW ADA STALL PER OREGON TRANSPORTATION COMMISSION STANDARDS FOR ACCESSIBLE PARKING PLACES FIGURE 6
13. RELOCATED EXISTING FENCE
14. INSTALL 8.0' x 6.0' CONCRETE PAD PER STANDARD CONCRETE SECTION DETAIL ON THIS SHEET. INSTALL SIX STALL BICYCLE RACK ON CONCRETE PAD. SEE SHEET C5 FOR DETAILED GRADING.
15. CONSTRUCT CURB AROUND EASTERN AND SOUTHERN LANDSCAPE ISLAND PER MODIFIED CITY OF NEWBERG DETAIL 502 ON SHEET C9
16. GRASSED DITCH TO FIELD. DITCH DIMENSIONS TO MATCH RIP RAP OVERFLOW CROSS SECTION DETAILED ON THIS SHEET.
17. DAYLIGHT AT 4:1 OUTSIDE OF DITCHES, DEPRESSIONS AND SWALES TO EXISTING GRADE (TYP)
18. INSTALL 83 LF 8" CLASS 52 DUCTILE IRON SWALE CONNECTOR PIPE. IE = 172.21, S=0.00%. PIPE SECTION IS PARTIALLY LOCATED IN 3/4"-0" GRAVEL FOR ASPHALT SECTION. CONTRACTOR TO PROTECT AND PRESERVE PIPE AFTER INSTALLATION FROM VEHICLE TRAFFIC DURING CONSTRUCTION UNTIL SUCH A POINT THAT THE PIPE HAS BEEN PAVED OVER.
19. TOP OF SWALE
20. BOTTOM OF SWALE
21. FIRE TRUCK TURNING PATH

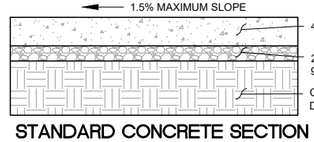
ASPHALT CROSS SECTION

1. DESIGNED TO MEET FIRE TRUCK LOAD OF 12,500 POUNDS OF POINT LOAD (WHEEL LOAD) AND 75,000 LB LIVE LOAD (GROSS VEHICLE WEIGHT).

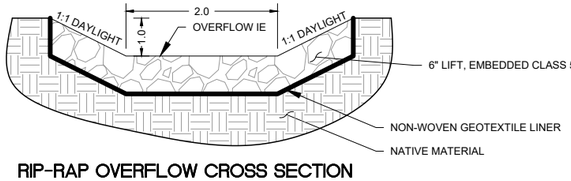


TRAFFICKED CONCRETE SECTION

1. DESIGNED TO MEET FIRE TRUCK LOAD OF 12,500 POUNDS OF POINT LOAD (WHEEL LOAD) AND 75,000 LB LIVE LOAD (GROSS VEHICLE WEIGHT).



STANDARD CONCRETE SECTION



RIP-RAP OVERFLOW CROSS SECTION

SCALE 1"=30' (HORZ.)

30 15 7.5 0 30

H B H CONSULTING ENGINEERS
501 E First Street
Newberg, Oregon 97132
503/554-9553 ■ fax 503/537-9554
email: mail@hbh-consulting.com

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
KEVIN R. CHERNISHOV
EXPIRES: 12/31/2023

PRELIMINARY

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-008\4-Design\DWG\2 SITE PLAN.dwg

REV.	DATE	DESCRIPTION	BY

0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

SITE + UTILITY PLAN

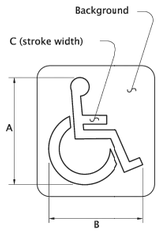
Sheet No: C3
Date: 4/30/2023
3 OF 9

2022-008

ATTACHMENT C (2/2)

OREGON TRANSPORTATION COMMISSION
Standards for Accessible Parking Places
August 2018

PAVEMENT MARKING STENCIL



Pavement Marking Background: Optional: Blue, Retroreflective

Pavement Marking Stencil: White, Retroreflective

LEGEND	DIMENSIONS (INCHES)					
	A	B	C	D	E	F	G
MINIMUM	28	24	3			
STANDARD	41	36	4			

The pavement marking stencil shall be used to designate an accessible parking area reserved for vehicles with DMV permits.

Figure 6

11

RIPRAP:

- ROCK FOR RIPRAP SHALL BE ANGULAR IN SHAPE.
- THICKNESS OF A SINGLE ROCK SHALL NOT BE LESS THAN ONE-THIRD ITS LENGTH.

RIPRAP INSTALLATION:

- EXCAVATE BELOW FINISH GRADE TO DEPTH & DIMENSIONS SHOWN ON APPROVED PLANS.
- INSTALL WOVEN GEOTEXTILE FABRIC.
- PLACE RIP RAP TO FINISH GRADE.

- GRADE RIPRAP SHALL BE THE CLASS AND SIZE OF ROCK ACCORDING TO THE FOLLOWING:

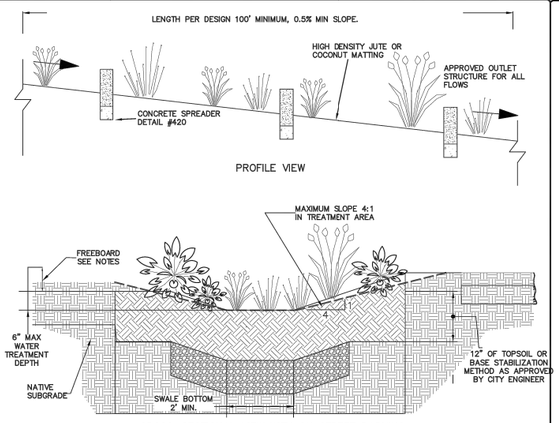
CLASS 50	CLASS 100	CLASS 200	CLASS 700	CLASS 2000	PERCENT (BY WEIGHT)
		WEIGHT OF ROCK (LBS)			
50-30	100-60	200-140	700-500	2000-1400	20
30-15	60-25	140-80	500-200	1400-700	30
15-2	25-2	80-8	200-20	700-40	40
2-0	2-0	8-0	20-0	40-0	10

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

RIPRAP

SCALE: N.T.S.
DATE: MARCH 2014
APPROVED BY: JAY H.
STANDARD DRAWING 422



HYDRAULIC DESIGN CRITERIA:

1. DESIGN FLOW: WATER QUALITY FLOW
2. MIN. HYDRAULIC RESIDENCE TIME: 9 MINUTES
3. MAXIMUM WATER DESIGN DEPTH: 0.5 FEET
4. MINIMUM FREE BOARD: 1.0 FOOT (FOR FACILITIES NOT NOT PROTECTED FROM HIGH FLOWS)
5. MANNING "n" VALUE: 0.24
6. MAXIMUM VELOCITY: 2.0 fps BASED ON 25-YEAR FLOW

FACILITY DESIGN CRITERIA:

1. UP UNTIL THE MAX WATER SURFACE, INTERIOR SIDE SLOPES MAX SLOPE IS 4H:1V
2. ABOVE MAX WATER SURFACE, INTERIOR SIDE SLOPES, MAX SLOPE IS 2H:1V
3. IF INTERIOR SIDE SLOPES MUST BE MOWED SIDE SLOPE THEN THE MAX SLOPE IS 4H:1V
4. EXTERIOR SIDE SLOPES MAX 2H:1V
5. MINIMUM FREEBOARD 1 FOOT FROM 25 YEAR DESIGN WATER SURFACE ELEVATION
6. PROVIDE AN ENERGY DISSIPATER AT THE ENTRANCE OF SWALE, WITH A MINIMUM LENGTH OF 4 FEET. IT WILL BE DESIGNED TO REDUCE VELOCITIES AND SPREAD THE FLOW ACROSS THE TREATMENT CROSS SECTION.

FACILITY DESIGN CRITERIA:

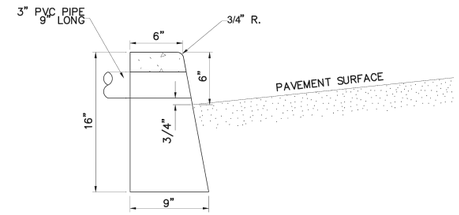
7. THE USE OF INTERMEDIATE FLOW SPREADERS IS REQUIRED, SPACING FOR CONCRETE SPREADERS TO BE DETERMINED BY DESIGN ENGINEER.
8. EXTEND RIVER ROCK, TOPSOIL, AND HIGH DENSITY JUTE OR COCONUT MATTING TO TOP OF TREATMENT AREA (OR WQV LEVEL). EXTEND TOPSOIL AND LOW DENSITY JUTE MATTING TO THE EDGE OF WATER QUALITY TRACT.
9. WHERE SWALES WRAP 180-DEGREES FORMING PARALLEL CHANNELS, FREEBOARD SHALL BE PROVIDED BETWEEN EACH OF THE PARALLEL CHANNELS. A 1 FOOT WALL ABOVE GROUND SURFACE MAY ALSO BE USED. ALTERNATIVE: A SOIL BASED BERM WITH A MIN. TOP WIDTH OF 1 FOOT & MAX 2.5H:1V SIDE SLOPES MAY BE USED.
10. WHERE SWALES ARE DESIGNED WITH DITCH INLETS & OUTLET STRUCTURES & DESIGN OF MAINTENANCE ACCESS TO SUCH STRUCTURES MAY BE DIFFICULT DUE TO SWALE LOCATION, SWALES MAYBE DESIGNED AS FLOW THROUGH FACILITIES WITH UNSUMPED STRUCTURES. MAINTENANCE ACCESS TO STRUCTURE END OF THE FACILITY IS REQUIRED.

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

VEGETATED SWALE

SCALE: N.T.S.
DATE: MARCH 2014
APPROVED BY: JAY H.
STANDARD DRAWING 460



NOTES:

1. CONCRETE SHALL HAVE STRENGTH OF 3300 P.S.I. AT 28 DAYS.
2. TRANSVERSE CONTRACTION JOINTS – MAKE 1/8" x 1 1/2" DEEP CUT SPACED AT 15' INTERVALS.
3. THIS TYPE OF CURB TO BE USED ONLY WHERE SPECIFIED.
4. APPLY CURING COMPOUND (PETROLEUM BASE) TO FRESH CONCRETE TO RETAIN MOISTURE.
5. CURB TO BE BEDDED ON A FOUR INCH LIFT OF 3/4"-0" COMPACTED TO 95% OF THE MODIFIED PROCTOR (ASTMD1557/AASHTO T-180)

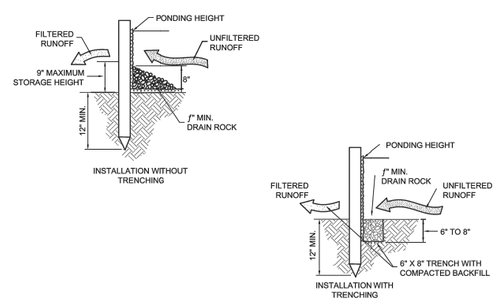
MODIFED

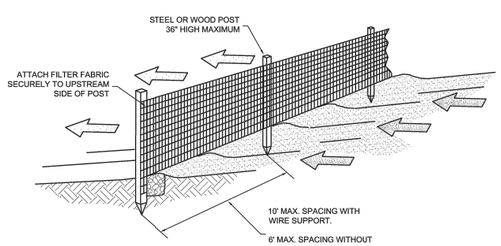
City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS: 05/05/2015 - ASM

CURB - TYPE "C"

SCALE: N.T.S.
DATE: May 2015
APPROVED BY: K. Hofmann
STANDARD DRAWING 502



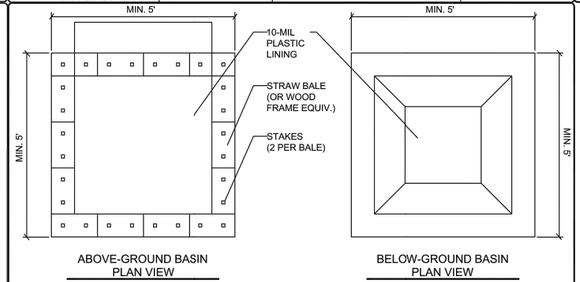


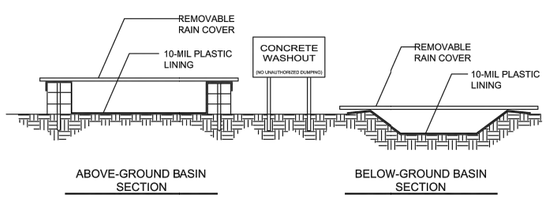
City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS:

SILT FENCE

SCALE: N.T.S.
DATE: MAY 2007
APPROVED BY: D. DANICIC
STANDARD DRAWING 602





NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. "CONCRETE WASHOUT" SIGN TO BE LOCATED ADJACENT TO WASHOUT FACILITY.
3. REMOVABLE RAIN COVER REQUIRED DURING WET WEATHER SEASON.

City of Newberg — PUBLIC WORKS ENGINEERING DIVISION, 414 E. FIRST STREET NEWBERG, OR 97132, PHONE: 503-537-1240, FAX: 503-537-1277

REVISIONS: NA

CONCRETE WASTE MANAGEMENT

SCALE: N.T.S
DATE: 01/10/2014
APPROVED BY:
STANDARD DRAWING 607

PRELIMINARY
REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
KEY R. CHERNISHOV
EXPIRES 12/31/2023

H B H CONSULTING ENGINEERS
501 E First Street
Newberg, Oregon 97132
503/554-9553 ■ fax 503/537-9554
email: mail@hbh-consulting.com

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-008\4-Design\DWG\5 DETAILS.dwg

REV.	DATE	DESCRIPTION	BY

0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

ALVIN ELBERT
518 S SPRINGBROOK ROAD

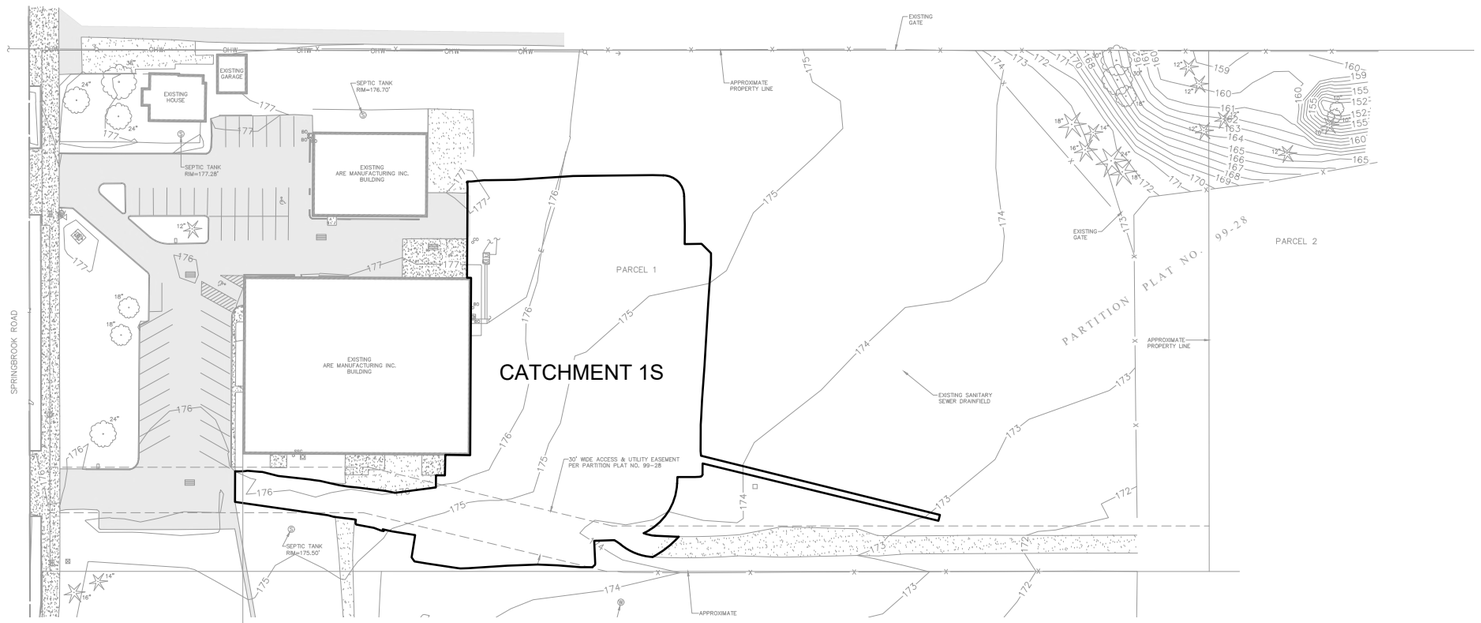
A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

DETAILS 1

Sheet No. C8
Date 4/30/2023
8 of 9

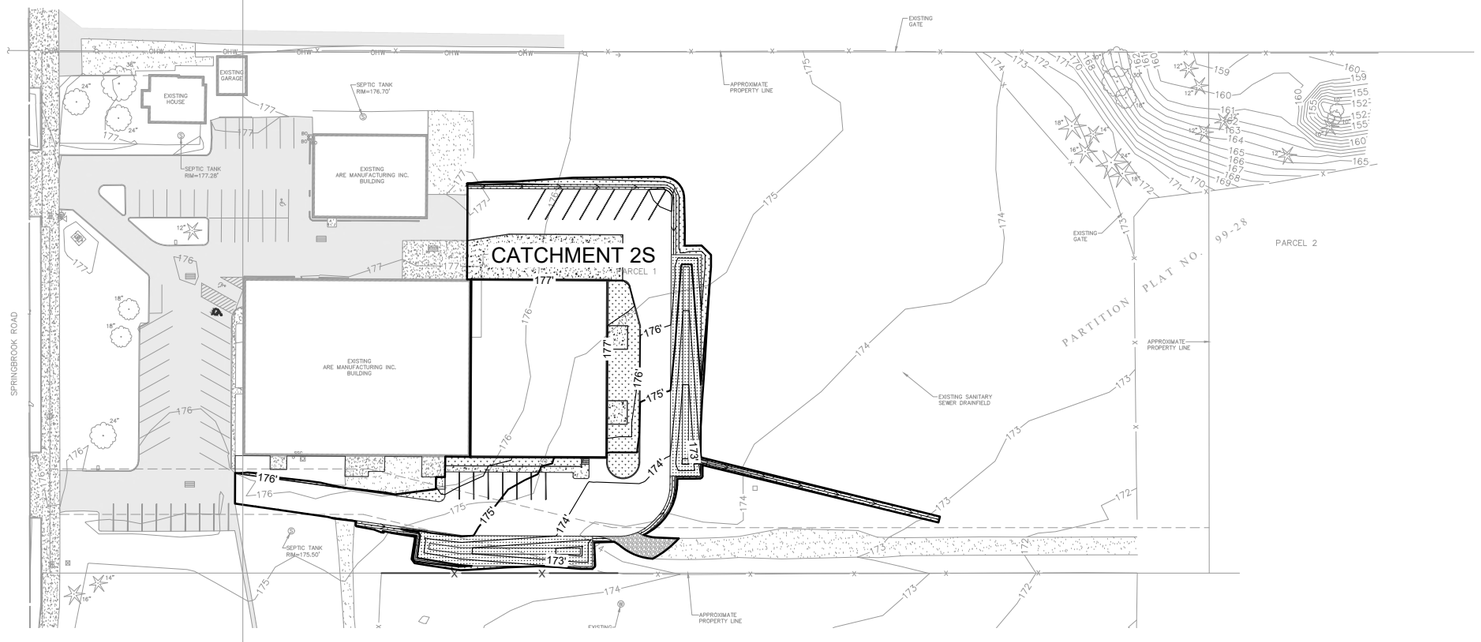
2022-008

ATTACHMENT D



PREDEVELOPED CATCHMENTS

1" = 50'



DEVELOPED CATCHMENTS

1" = 50'

SCALE 1"=50' (HORZ.)

50 25 12.5 0 50

REGISTERED PROFESSIONAL ENGINEER
76347PE
OREGON
MARCH 09, 2010
KEVIN R. CHERNISHOV
EXPIRES: 12/31/2023

PRELIMINARY

H B H CONSULTING ENGINEERS
501 E First Street
Newberg, Oregon 97132
503/554-9553 ■ fax 503/537-9554
email: mail@hbh-consulting.com

Designed By: ARB | Drawn By: ARB | Checked By: ARC | Submittal No: 1ST ENGR
File: L:\2022-008\4-Design\DWG\6 Catchments.dwg

REV.	DATE	DESCRIPTION	BY

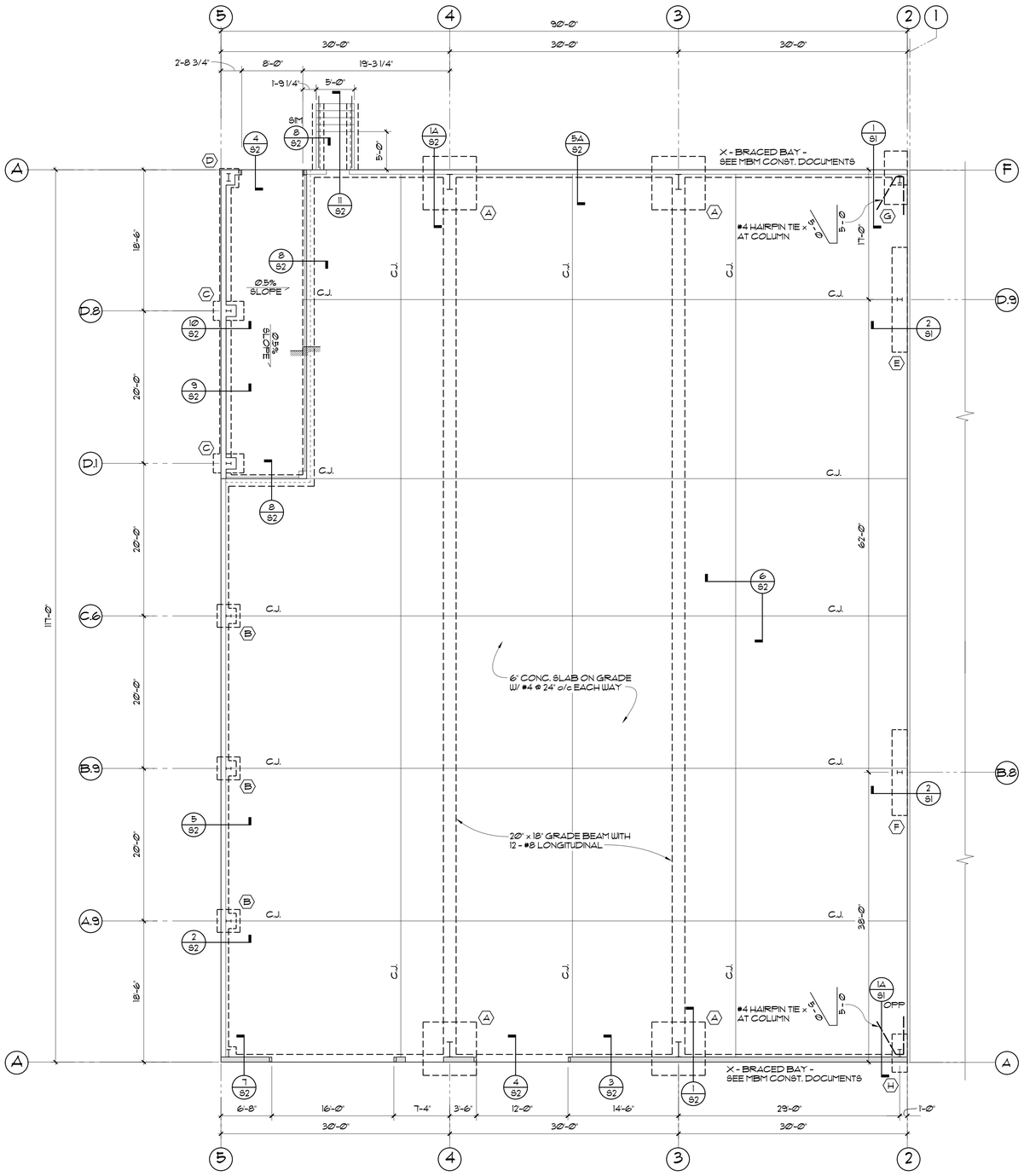
0" 1"
IF THIS LINE IS NOT 1 INCH SCALE IS NOT AS SHOWN

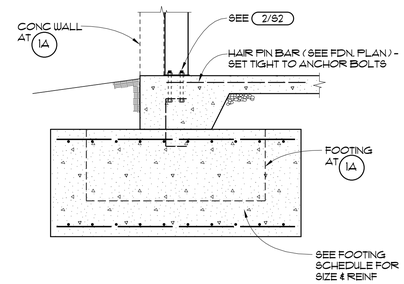
ALVIN ELBERT
518 S SPRINGBROOK ROAD

A.R.E. MANUFACTURING EXPANSION
NE AARON DRIVE + NE DUNN PLACE

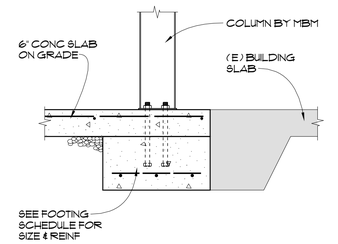
CATCHMENTS

Sheet No: C9 | 6 of 6
Date: 4/30/2023
2022-008





1 S1 1A S1 1/2" = 1' - 0"



2 S1 3/4" = 1' - 0"

GENERAL NOTES

GENERAL

1. These notes set the minimum standards for construction. The drawings govern over the General Notes to the extent shown.
2. Contractor shall verify all dimensions and conditions on drawings and in the field. Coordinate locations of openings through floors, roof and walls with architectural, mechanical and electrical plans. Notify design agency of any discrepancies.
3. Contractor shall provide all necessary temporary support prior to completion of vertical and lateral load systems.
4. The contractor shall be responsible for all required safety precautions and methods, techniques, sequences, and procedures required to perform his work.
5. Where reference is made to ASTM, AISC, ACI or other standards, the latest issue shall apply.
6. All work shall be in strict compliance with the International Building Code as amended by the State of Washington and all other state and local codes and building requirements that apply.
7. Design Criteria - See load criteria provide by Metal Building Manufacturer

FOUNDATIONS

1. Design soil pressure assumed to be 1500 psf LL plus DL
2. All footings to bear on firm undisturbed soil (or approved compacted fill when verified by Soils engineer) minimum 18" below final grade. Notify Engineer before proceeding if any unusual conditions are encountered in the footing excavations.
3. Do not excavate closer than a 2:1 slope below footings.
4. Clear all footing excavations of loose material by hand.
5. Excavations may be made under continuous footings for pipes.

CONCRETE - CAST IN PLACE

1. Foundation design was based on concrete strength of f'c = 2500 psi , but concrete with strength of f'c = 3500 psi is to be provided.
2. Minimum Mix Requirements:
   a. Slump: 2 to 4 inches. Deviation from design slump = + 1/2" to -1".
   b. Air Entrainment: Per ACI at all exterior slabs.
   c. Admix: Water reducing admix (Pozzolith or equal) for all slabs.
3. Place and cure all concrete per ACI codes and standards.

REINFORCING

1. All reinforcing steel for concrete to be grade 60 (grade 40 for ties & stirrups) and shall conform to I.B.C. standards and ASTM A615.
2. All welded reinforcing steel shall conform to ASTM A706.
3. Fabricate and install reinforcing steel according to the " Manual of Standard Practice for Detailing Reinforced Concrete Structures " ACI Standard 315.
4. Provide 2-0" x 2-0" corner bars to match horizontal reinforcing in walls and footings at all corners and intersections.
5. Splices in wall and slab reinforcing shall be lapped 40 diameters and shall be staggered at least 4-0" alternate bars.
6. Provide two #4 continuous bars at top and bottom of all walls unless noted otherwise on plan.
7. Lap all bars in intersecting footing 2- 0" or 40 diameters, whichever is greater.
8. Reinforcing shall not be bent or displaced for the convenience of other trades unless approved by the Architect.
9. Minimum cover from concrete surfaces to reinforcing steel shall be :
   3" to bottom of footing
   1 ¼" from top of slab on grade
   Center of wall unless noted otherwise
10. Electrical conduit shall be placed near center of slab.

ANCHOR BOLTS

1. 1 3/8" ϕ TO BE A325
2. 3/4" ϕ TO BE F1554 A36

NOTES :

1. BUILDING COLUMNS SHOWN ARE BY OTHERS UNLESS NOTED OTHERWISE
2. VERTICAL ELEMENT AT JAMB BY MBM

FOOTING SCHEDULE			
MARK	SIZE	REINFORCEMENT	REMARKS
A	7-0" SQ x 10"	(5) #5 EACH WAY	SEE DETAIL
B	3-0" SQ x 10"	(3) #4 EACH WAY	SEE DETAIL
C	4-0" x 2-6" x 10"	(2) #5 LONGIT & (3) #5 TRANSV	SEE DETAIL
D	2-6" SQ x 10"	(2) #4 EACH WAY	SEE DETAIL
E	13-9" x 2-0" x 12"	(4) #5 LONGIT & (12) #5 TRANSV	SEE DETAIL
F	11-3" x 2-0" x 12"	(5) #5 LONGIT & (10) #5 TRANSV	SEE DETAIL
G	7-0" x 3'-0" x 36"	(6) #6 LONGIT & (13) #5 TRANSV	SEE DETAIL
H	5-0" x 2-0" x 24"	(4) #5 LONGIT & (9) #5 TRANSV	SEE DETAIL

VERIFY AND COORDINATE ALL DIMENSIONS WITH ARCH'L. AND METAL BLDG. MANUFACTURER. ANCHOR BOLT SIZE AND LAYOUT PROVIDED BY METAL BLDG. MANUFACTURER

THE METAL BUILDING IS TO BE BIDDER DESIGNED BY METAL BLDG MANUF. (MBM). THE BUILDING LAYOUT / FRAMING / SHOP DRAWINGS AND STRUCTURAL CALCULATIONS (EACH STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF WASHINGTON) ARE TO BE SUBMITTED FOR REVIEW BY THE ENGINEER TO VERIFY COMPLACEN WITH DESIGN OF FOUNDATIONS. FOUNDATION WAS DESIGNED FOR BUILDING FRAME REACTIONS PROVIDE BY MBM.

FOUNDATION PLAN

1/8" = 1' - 0"

FOR ASSUMED ROOF FRAMING PLAN - SEE 12 S2

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 51302 OREGON JANUARY 11, 2005 BRUCE W KENNY

RENEWAL DATE: 6 / 30 /2023

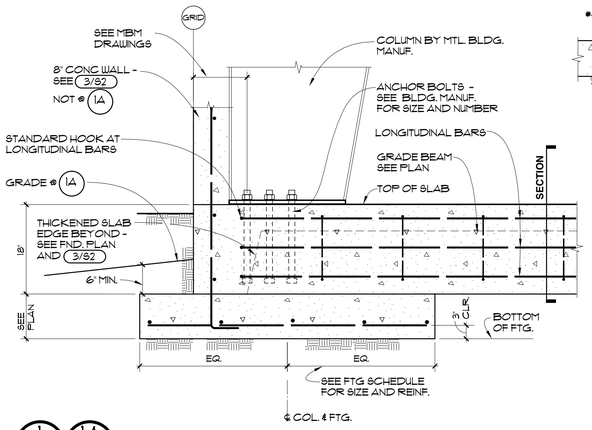
BKE INC.
STRUCTURAL ENGINEERS
2700 SE HARRISON ST. STE B
MILWAUKIE OR, 97222
503-607-0481, FAX 503-607-0485

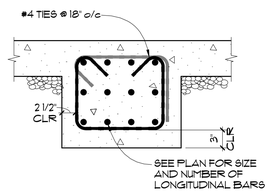
DO NOT SCALE FROM DRAWINGS - VERIFY ALL DIMENSIONS W/ ARCH.

A.R.E. MFG. NEWBERG
NEW STEEL BUILDING
518 S. SPRINGBROOK ROAD
NEWBERG , OR 97132

DATE: 03-23-2023
PROJECT: 22 - 166
REVISIONS:

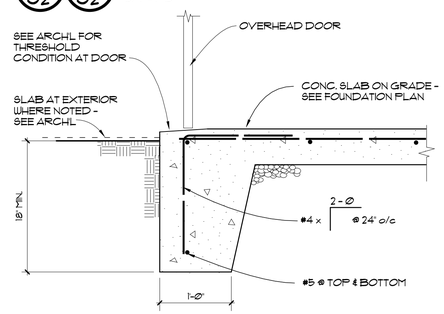
FOUNDATION PLAN
S1



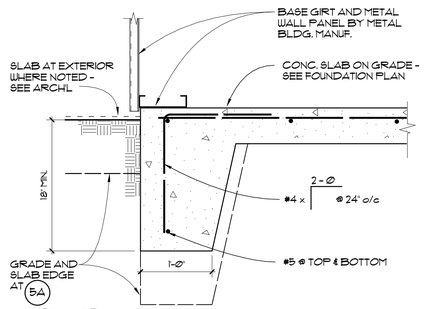


SECTION

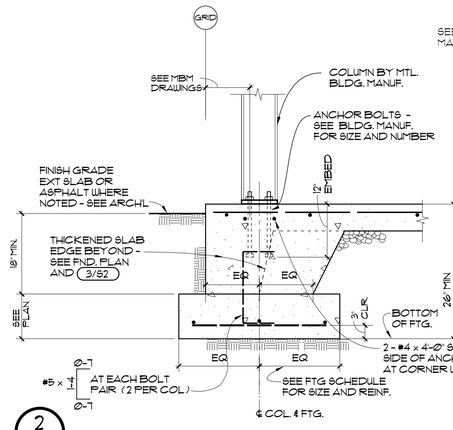
1/S2 1A/S2 3/4" = 1'-0"

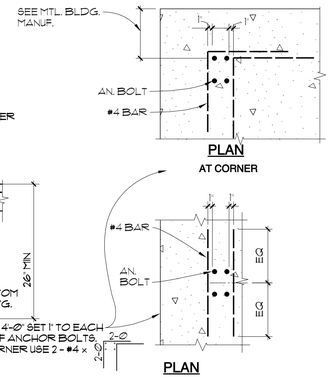


4/S2 1" = 1'-0"

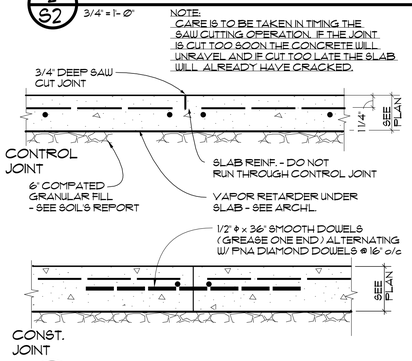


5/S2 5A/S2 1" = 1'-0"

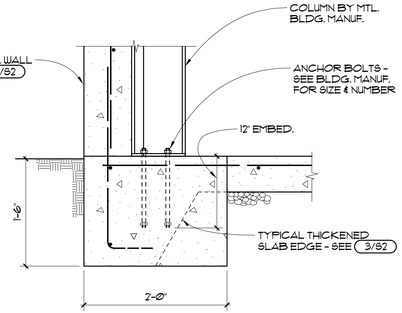




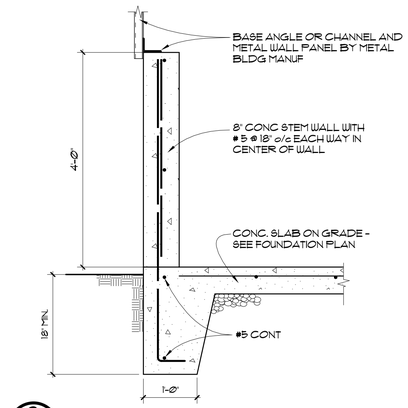
2/S2 3/4" = 1'-0"



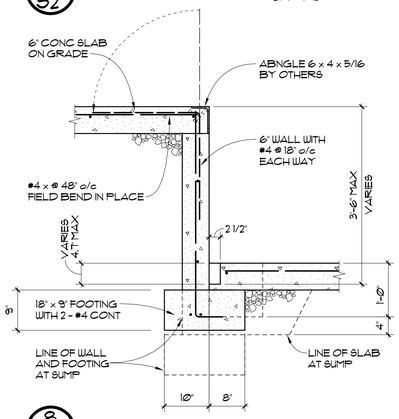
6/S2 1" = 1'-0"



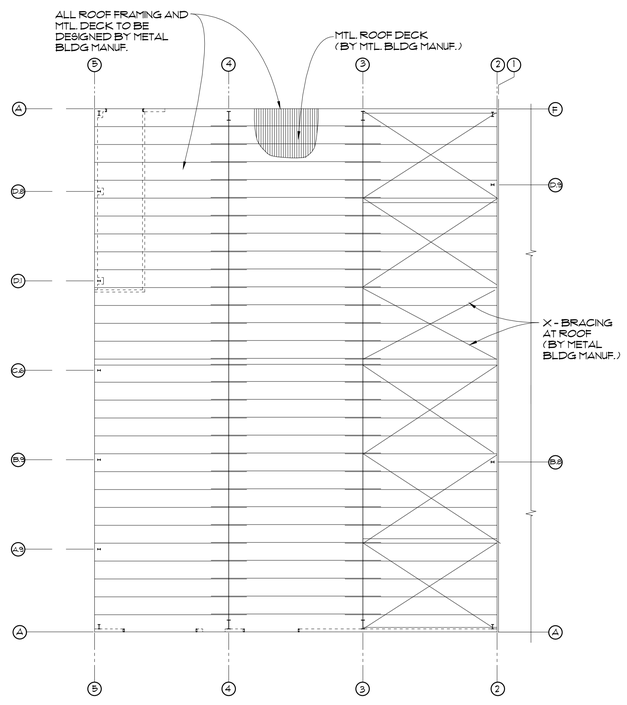
7/S2 1" = 1'-0"



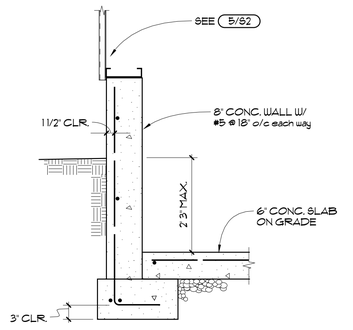
3/S2 3/4" = 1'-0"



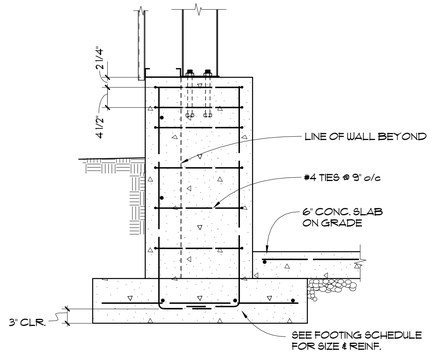
8/S2 3/4" = 1'-0"



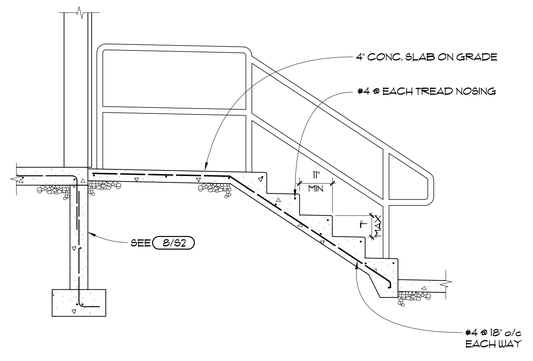
12/S2 ASSUMED ROOF FRAMING PLAN
1/16" = 1'-0"



9/S2 3/4" = 1'-0"



10/S2 3/4" = 1'-0"



11/S2 1/2" = 1'-0"

DO NOT SCALE FROM DRAWINGS - VERIFY ALL DIMENSIONS W/ ARCH.

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 51302 OREGON JANUARY 11, 2005 BRUCE W. KENNY
RENEWAL DATE: 6 / 30 /2023

BKE INC.
STRUCTURAL ENGINEERS
2700 SE HARRISON ST. STE B
MILWAUKIE OR, 97222
503-607-0481, FAX 503-607-0485

A.R.E. MFG. NEWBERG
NEW STEEL BUILDING
518 S. SPRINGBROOK ROAD
NEWBERG, OR 97132

DATE: 03-23-2023
PROJECT: 22-166
REVISIONS:

ASSUMED ROOF FRAMING PLAN/ DETAILS

S2

FOUNDATION CALCULATIONS

FOR

A.R.E. MANUFACTURING
BUILDING EXPANSION
518 S SPRINGBROOK ROAD
NEWBERG, OR 97132

BKE INC.
STRUCTURAL
ENGINEERS

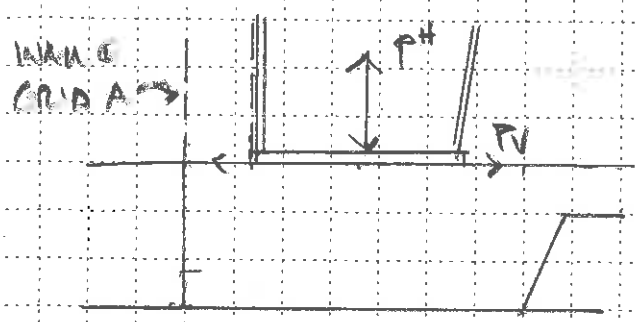
Project: _____

Client: HAWORTH, INC. Proj. No.: 22-166

Date: MARCH 2023 By: BWK Sheet No.: _____

2700 SE HARRISON STREET, SUITE B, MILWAUKIE, OREGON 97222, 503-607-0481, FAX 503-607-0486. bruce@bkengineers.com

FRAME FOOTING GRID 3/A & F



F^V = 68.5K ± 8.7K

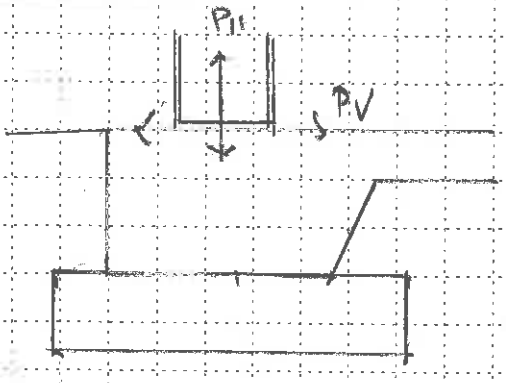
F^H = ±9.2K

A_{MIN} = 68.5/1.5 = 45.7 SQ IN OR 69 SQ IN

USE 1'-0" SQ x 10" W/ 5-#5 EA WAY
-SEE ATTACHED

CHECK UPLIFT:
$(7^2)(1.0)(0.15)$ = 9.8K > 8.7 − 1.0K

FRAME FOOTING GRID 2/A



P^V = 10.9K ± 5.5K

P^H = 2.1K ± 2.4K

A_{MIN} = 10.9/1.5 = 7.27 SQ IN FOR 5'-0" x 2'-0"

$t = \{-5.5 + 0.15[0.5(7.5)(4.17) + 2.25(2.5) + 1.33(3.7) + 0.11(2.08)(2)/5(2)(0.15)] = 2.0'$

ADD WALL

USE 5'-0" x 2'-0" x 24" FTG W/ 4-#5 LONGIT + 9-#5 TRANSVERSE

FRAME FOOTING @ GRID 2/F

P^V = 5.8K ± 13.6K

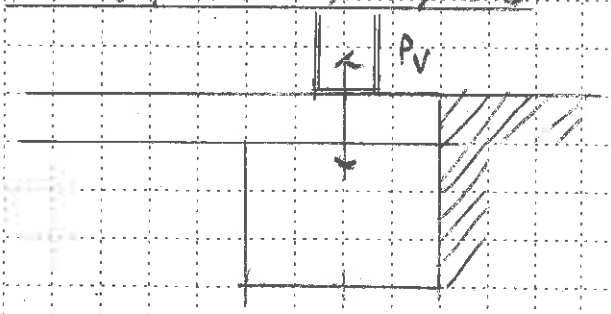
P^H = 2.4K ± 3.2K

A_{MIN} = 5.8/1.5 = 3.87 SQ IN

$t = \{-13.6 + 0.15[0.5(2.5)(5.17) + 3(2.5)(3) + 3(2.67)] + 0.11(3.08)(3)\} \div 7(3)(0.15) = -2.8'$

USE 7'-0" x 3'-0" x 36" FTG W/ 6-#6 LONGIT + 12-#6 TRANSV

FRAME FOOTING 2/B.8



P^V = 33.3K ± 4.0K

BKE INC.
STRUCTURAL ENGINEERS

Project: A.R.E. MFG. BUILDING EXPANSION
Client: HAWORTH, INC. Proj. No.: 22-166
Date: MARCH 2023 By: BWK Sheet No.: 1

2700 SE HARRISON STREET, SUITE B, MILWAUKIE, OREGON 97222, 503-607-0481, FAX 503-607-0486. bruce@bkengineers.com

FRAME FOOTING GRID 2/B.5 GRID

USE 11'-3" x 2'-0" x 12" FTG
W/ 3 #5 LONG'L & 10 #5 TRANSV.
- SEE ATTACHED

CHECK UPLIFT
11.0(2)(1.5)(0.15) = 4.95K > -4.0
∴ OK

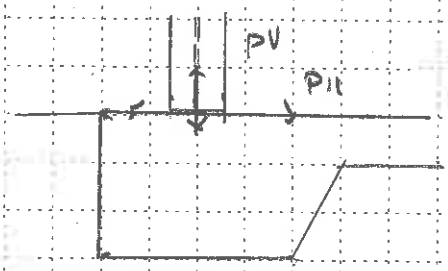
FRAME FOOTING GRID 2/D.9

PV = 41.1K < -5.0K

USE 13'-9" x 2'-0" x 12" FTG
W/ 4, #5 LONG'L & 12 #5 TRANSV.
- SEE ATTACHED

CHECK UPLIFT
13.75(2)(1.5)(0.15) = 6.2K > -5.4
∴ OK

ENDWALL COL. FOOTING GRID 5/A.4 F



PV = 4.5K PH = ±1.0
+ -1.0K

CHECK THICKENED SLAB EDGE
q_s = 4.5/(2)² = 1.1 KSF < 1.5 KSF
∴ OK

CHECK UPLIFT
0.15(2.25)(2.92)(1.5) = 1.5K > -1.0
∴ OK

ENDWALL COL. FOOTING GRID 6/A.9.6

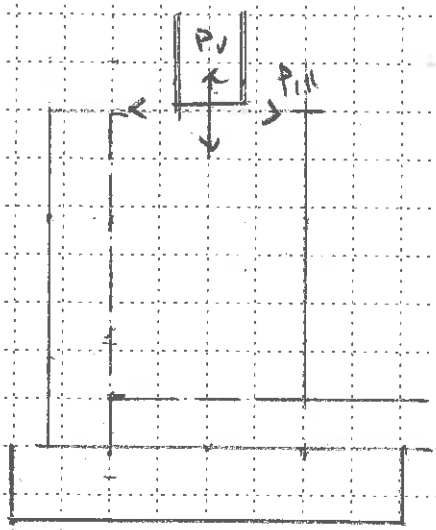
PV = 12.5 K MAX PH = ± 1.7K MAX
+ -3.4 K MAX

AMIN = 12.5/1.5 = 2.9 ft² OR 3' SQ

ΣV = -3.4 + 0.15[0.5(4.5)(3)
+(2.5)(2.75) + 0.5(3)] + 0.11(1.75)(1.9)
= 4.9K > NO NET UPLIFT

USE 3'-0" SQ x 10" FTG.
W/ 3, #4 EA WAY

ENDWALL COL. FTG. GRID 5/B.1 & D.8



PV = 13.5 + 0.15(1.92)(34) = 14.5K MAX
+ - 3.4K MAX

PH = ± 1.6K

BKE INC.
STRUCTURAL ENGINEERS
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Project: A.R.E. MFG. BUILDING EXPANSION
Client: HAWORTH, INC. Proj. No.: 22-166
Date: MARCH 2023 By: BWK Sheet No.: 7

BK STRUCTURAL ENGINEERS INC
Architeer Arch. & Eng., LLC
2700 SE Harrison Street, Suite B
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Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 10:59AM

General Footing

Project File: A.R.E..ec6

DESCRIPTION: Grid 2/B.8

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 ksi
Concrete Density	=	145.0 pcf
φ Values Flexure	=	0.90
Shear	=	0.750

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
Add Ftg Wt for Soil Pressure	:	No
Use ftg wt for stability, moments & shears	:	Yes
Add Pedestal Wt for Soil Pressure	:	No
Use Pedestal wt for stability, mom & shear	:	No

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Soil Density	=	110.0 pcf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Footing base depth below soil surface	=	ft
Allow press. increase per foot of depth	=	ksf
when footing base is below	=	ft

Increases based on footing plan dimension

Allowable pressure increase per foot of depth	=	ksf
when max. length or width is greater than	=	ft

Dimensions

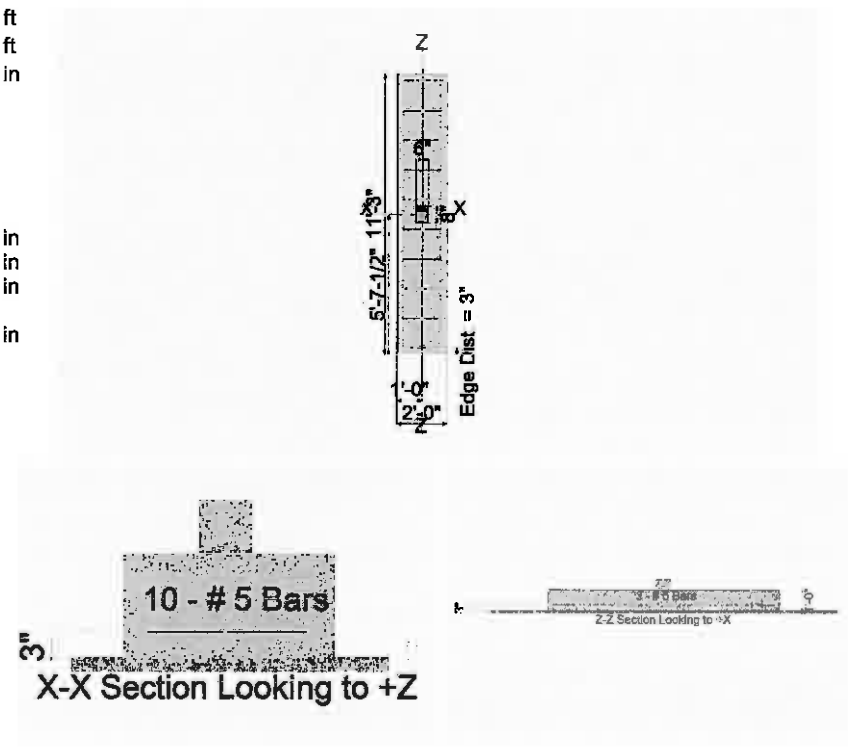
Width parallel to X-X Axis	=	2.0 ft
Length parallel to Z-Z Axis	=	11.250 ft
Footing Thickness	=	12.0 in

Pedestal dimensions...

px : parallel to X-X Axis	=	6.0 in
pz : parallel to Z-Z Axis	=	8.0 in
Height	=	6.0 in

Rebar Centerline to Edge of Concrete...

at Bottom of footing	=	3.0 in



Reinforcing

Bars parallel to X-X Axis		
Number of Bars	=	10.0
Reinforcing Bar Size	=	# 5
Bars parallel to Z-Z Axis		
Number of Bars	=	3.0
Reinforcing Bar Size	=	# 5

Bandwidth Distribution Check (ACI 15.4.4.2)

Direction Requiring Closer Separation

	Bars along X-X Axis
# Bars required within zone	30.2 %
# Bars required on each side of zone	69.8 %

Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	11.50			21.80				k
OB : Overburden	=								ksf
M-xx	=								k-ft
M-zz	=								k-ft
V-x	=								k
V-z	=								k

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Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 10:59AM

General Footing

Project File: A.R.E..ec6

DESCRIPTION: Grid 2/B.8

DESIGN SUMMARY

Design OK

	Min. Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.9867	Soil Bearing	1.480 ksf	1.50 ksf	+D+S about Z-Z axis
PASS	n/a	Overturning - X-X	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Overturning - Z-Z	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Sliding - X-X	0.0 k	0.0 k	No Sliding
PASS	n/a	Sliding - Z-Z	0.0 k	0.0 k	No Sliding
PASS	n/a	Uplift	0.0 k	0.0 k	No Uplift
PASS	0.02852	Z Flexure (+X)	0.3087 k-ft/ft	10.825 k-ft/ft	+1.20D+0.50S
PASS	0.02852	Z Flexure (-X)	0.3087 k-ft/ft	10.825 k-ft/ft	+1.20D+0.50S
PASS	0.8597	X Flexure (+Z)	15.370 k-ft/ft	17.879 k-ft/ft	+1.20D+0.50S
PASS	0.8597	X Flexure (-Z)	15.370 k-ft/ft	17.879 k-ft/ft	+1.20D+0.50S
PASS	n/a	1-way Shear (+X)	0.0 psi	82.158 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a
PASS	0.5567	1-way Shear (+Z)	45.741 psi	82.158 psi	+1.20D+0.50S
PASS	0.5567	1-way Shear (-Z)	45.741 psi	82.158 psi	+1.20D+0.50S
PASS	n/a	2-way Punching	39.692 psi	82.158 psi	+1.20D+0.50S

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc (in)	Zecc (in)	Actual Soil Bearing Stress @ Location Bottom, -Z	Top, +Z	Left, -X	Right, +X	Actual / Allow Ratio
X-X, D Only	1.50	n/a	0.0	0.5111	0.5111	n/a	n/a	0.341
X-X, +D+S	1.50	n/a	0.0	1.480	1.480	n/a	n/a	0.987
Z-Z, D Only	1.50	0.0	n/a	n/a	n/a	0.5111	0.5111	0.341
Z-Z, +D+S	1.50	0.0	n/a	n/a	n/a	1.480	1.480	0.987

Overturning Stability

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.40D	10.018	+Z	Bottom	0.2592	AsMin	0.4650	17.879	OK
X-X, +1.40D	10.018	-Z	Bottom	0.2592	AsMin	0.4650	17.879	OK
X-X, +1.20D+0.50S	15.370	+Z	Bottom	0.3966	Min for Bending	0.4650	17.879	OK
X-X, +1.20D+0.50S	15.370	-Z	Bottom	0.3966	Min for Bending	0.4650	17.879	OK
Z-Z, +1.40D	0.2012	-X	Bottom	0.2592	AsMin	0.2756	10.825	OK
Z-Z, +1.40D	0.2012	+X	Bottom	0.2592	AsMin	0.2756	10.825	OK
Z-Z, +1.20D+0.50S	0.3087	-X	Bottom	0.2592	AsMin	0.2756	10.825	OK
Z-Z, +1.20D+0.50S	0.3087	+X	Bottom	0.2592	AsMin	0.2756	10.825	OK

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Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 10:59AM

General Footing

Project File: A.R.E..ec6

DESCRIPTION: Grid 2/D.9

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 ksi
Concrete Density	=	145.0 pcf
φ Values Flexure	=	0.90
Shear	=	0.750

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
Add Ftg Wt for Soil Pressure	:	No
Use ftg wt for stability, moments & shears	:	Yes
Add Pedestal Wt for Soil Pressure	:	No
Use Pedestal wt for stability, mom & shear	:	No

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Soil Density	=	110.0 pcf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Footing base depth below soil surface	=	ft
Allow press. increase per foot of depth	=	ksf
when footing base is below	=	ft

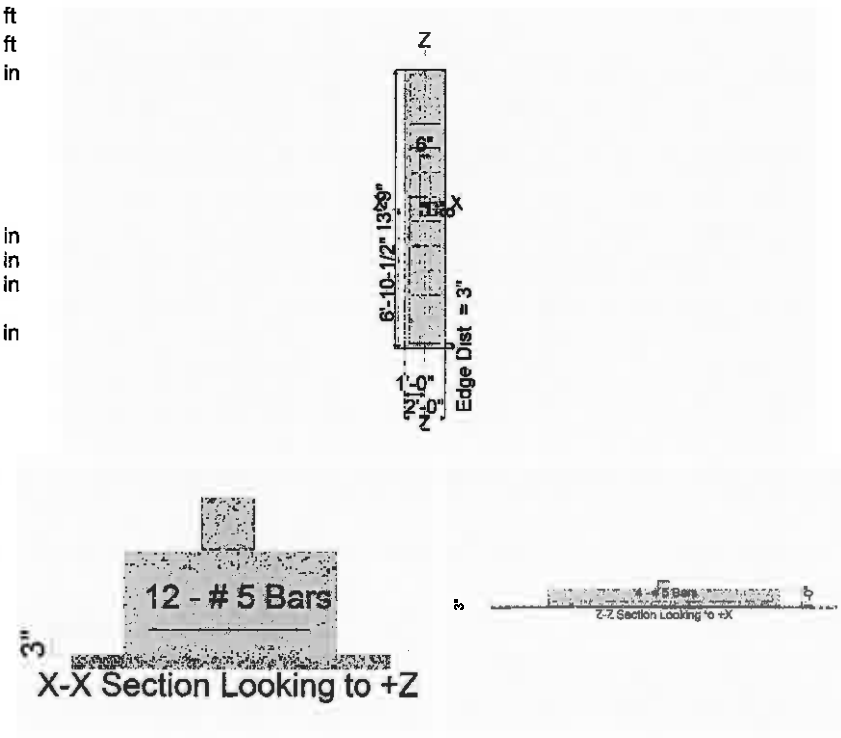
Increases based on footing plan dimension

Allowable pressure increase per foot of depth	=	ksf
when max. length or width is greater than	=	ft

Dimensions

Width parallel to X-X Axis	=	2.0 ft
Length parallel to Z-Z Axis	=	13.750 ft
Footing Thickness	=	12.0 in

Pedestal dimensions...		
px : parallel to X-X Axis	=	6.0 in
pz : parallel to Z-Z Axis	=	8.0 in
Height	=	6.0 in
Rebar Centerline to Edge of Concrete...		
at Bottom of footing	=	3.0 in



Reinforcing

Bars parallel to X-X Axis			
Number of Bars	=		12.0
Reinforcing Bar Size	=	#	5
Bars parallel to Z-Z Axis			
Number of Bars	=		4.0
Reinforcing Bar Size	=	#	5

Bandwidth Distribution Check (ACI 15.4.4.2)
Direction Requiring Closer Separation

Bars required within zone
Bars required on each side of zone

Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	13.30			27.70				k
OB : Overburden	=								ksf
M-xx	=								k-ft
M-zz	=								k-ft
V-x	=								k
V-z	=								k

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Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 10:59AM

General Footing

Project File: A.R.E. ec6

DESCRIPTION: Grid 2/D.9

DESIGN SUMMARY

Design N.G.

Min. Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	Soil Bearing	ksf	ksf	
FAIL	Overturning - X-X	k-ft	k-ft	
FAIL	Overturning - Z-Z	k-ft	k-ft	
FAIL	Sliding - X-X	k	k	
FAIL	Sliding - Z-Z	k	k	
FAIL	Uplift	k	k	
PASS	Z Flexure (+X)	k-ft/ft	k-ft/ft	
PASS	Z Flexure (-X)	k-ft/ft	k-ft/ft	
PASS	X Flexure (+Z)	k-ft/ft	k-ft/ft	
PASS	X Flexure (-Z)	k-ft/ft	k-ft/ft	
PASS	1-way Shear (+X)	psi	psi	
PASS	1-way Shear (-X)	psi	psi	
PASS	1-way Shear (+Z)	psi	psi	
PASS	1-way Shear (-Z)	psi	psi	
PASS	2-way Punching	psi	psi	

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc (in)	Zecc (in)	Actual Soil Bearing Stress @ Location Bottom, -Z	Top, +Z	Left, -X	Right, +X	Actual / Allow Ratio
X-X, D Only	1.50	n/a	0.0	0.4836	0.4836	n/a	n/a	0.322
X-X, +D+S	1.50	n/a	0.0	1.491	1.491	n/a	n/a	0.994
Z-Z, D Only	1.50	0.0	n/a	n/a	n/a	0.4836	0.4836	0.322
Z-Z, +D+S	1.50	0.0	n/a	n/a	n/a	1.491	1.491	0.994

Overturning Stability

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.40D	14.486	+Z	Bottom	0.3728	Min for Bending	0.620	23.414	OK
X-X, +1.40D	14.486	-Z	Bottom	0.3728	Min for Bending	0.620	23.414	OK
X-X, +1.20D+0.50S	23.192	+Z	Bottom	0.6137	Min for Bending	0.620	23.414	OK
X-X, +1.20D+0.50S	23.192	-Z	Bottom	0.6137	Min for Bending	0.620	23.414	OK
Z-Z, +1.40D	0.1904	-X	Bottom	0.2592	AsMin	0.2705	10.634	OK
Z-Z, +1.40D	0.1904	+X	Bottom	0.2592	AsMin	0.2705	10.634	OK
Z-Z, +1.20D+0.50S	0.3048	-X	Bottom	0.2592	AsMin	0.2705	10.634	OK
Z-Z, +1.20D+0.50S	0.3048	+X	Bottom	0.2592	AsMin	0.2705	10.634	OK

END WALL @ LINE FOOTING GRIDS 5/A1 & 5 CONT'D

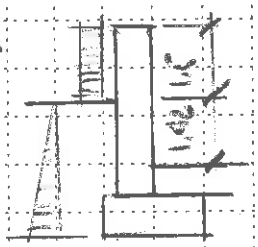
$A_{MIN} = 14.5/1.5 = 9.7\,in^2$

USE 4'-0" x 2'-6" x 1'-0" W/ 2-#5 LONGIT & #3 STIRRUPS

GRID 5/A-D RETAINING WALL

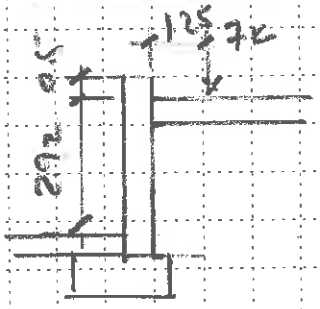
WIND 16.2 PSF

EFP = 35 PCF



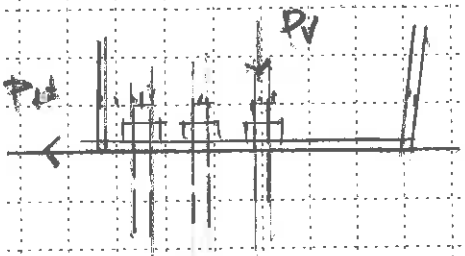
USE 8" WALL W/ #5 VERT @ 18" O/C ON 18" x 9" FTG - SEE ATTACHED

INTERIOR RETAINING WALL



USE 6" WALL W/ #4 VERT @ 18" O/C ON 18" x 10" FTG - SEE ATTACHED

ANCHOR BOLTS GRID 3&4/A&F



MAX SHEAR LOAD ID 1

BASIC REACTIONS

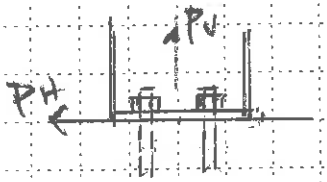
$P_V^{DL\ COL} = 12.6 + 12.2 = 24.8K$

$P_H^{DL\ COL} = -16.A - 17.5 = -33.9K$

$P_V^{SNOW} = 43.6K$ $P_H^{SNOW} = -62.3K$

USE 6 - 1 3/8" ø A325 BOLTS W/ 12" EMBED - SEE ATTACHED

ANCHOR BOLTS GRID 2/F (2/A SIM)



MAX SHEAR LOADS ID 9

BASIC REACTIONS

$P_V^{V2D} = -1.2/2 = -0.6K$

$P_H^{1/2E} = 0.1/2 = 0.05K$

$P_V^{E-L} = -5.0K$ $P_H^{E-L} = -4.6K$

MAX UPLIFT LOAD ID 14

$P_V^{1.0D+0.7E} = 1.0(-1.2 - 1.A) = -3.0K$

$P_H^{1.0D+0.7E} = 1.0(0.1 + 0.1) = 0.2K$

$P_V^{0.6D-0.7E} = 0.6(-9.2) = -4.6K$

$P_V^{0.6D-0.7E\ FOUNDS} = 0.75(-9.6) = -5.17K$

$P_H^{0.6D-0.7E\ FOUNDS} = 0.75(0.3) = -0.23$

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Project: A.R.E. MFG. BUILDING EXPANSION

Client: HAWORTH, INC. Proj. No.: 22-166

Date: MARCH 2023 By: BWK Sheet No.: 7

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Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 11:51AM

Cantilevered Retaining Wall

Project File: A.R.E..ec6

DESCRIPTION: Grid 5/A-D

Code Reference:

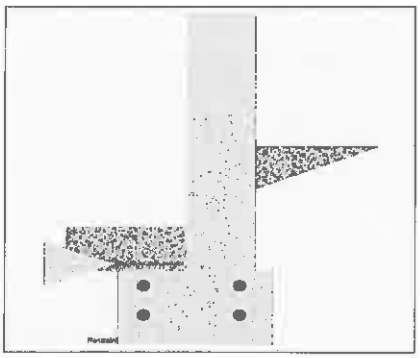
Calculations per IBC 2018 1807.3, CBC 2019, ASCE 7-16

Criteria

Retained Height	=	1.42 ft
Wall height above soil	=	1.50 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	6.00 in
Water height over heel	=	0.0 ft

Soil Data

Allow Soil Bearing	=	1,500.0 psf
Equivalent Fluid Pressure Method		
Active Heel Pressure	=	45.0 psf/ft
	=	
Passive Pressure	=	250.0 psf/ft
Soil Density, Heel	=	110.00 pcf
Soil Density, Toe	=	150.00 pcf
Footing||Soil Friction	=	0.400
Soil height to ignore for passive pressure	=	12.00 in



Surcharge Loads

Surcharge Over Heel	=	0.0 psf
Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0
Used for Sliding & Overturning		

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	0.00 ft
...Height to Bottom	=	0.00 ft
Load Type	=	Wind (W) (Service Level)
Wind on Exposed Stem (Strength Level)	=	16.2 psf

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type		Spread Footing
Base Above/Below Soil at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

Axial Load Applied to Stem

Axial Dead Load	=	0.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

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Cantilevered Retaining Wall

Project File: A.R.E..ec6

DESCRIPTION: Grid 5/A-D

Design Summary

Wall Stability Ratios

Overturning	=	3.75	OK
Slab Resists All Sliding !			
Global Stability	=	2.89	
Total Bearing Load	=	555 lbs	
...resultant ecc.	=	1.30 in	
Eccentricity within middle third			
Soil Pressure @ Toe	=	531 psf	OK
Soil Pressure @ Heel	=	210 psf	OK
Allowable	=	1,500 psf	
Soil Pressure Less Than Allowable			
ACI Factored @ Toe	=	743 psf	
ACI Factored @ Heel	=	294 psf	
Footing Shear @ Toe	=	0.8 psi	OK
Footing Shear @ Heel	=	0.0 psi	OK
Allowable	=	82.2 psi	

Sliding Calcs

Lateral Sliding Force	=	128.8 lbs

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.600
Seismic, E	1.000

Stem Construction

		Bottom
		Stem OK
Design Height Above Ftg	ft =	0.00
Wall Material Above "Ht"	=	Concrete
Design Method	=	SD
Thickness	=	8.00
Rebar Size	=	# 5
Rebar Spacing	=	18.00
Rebar Placed at	=	Edge
Design Data		
fb/FB + fa/Fa	=	**0.021**
Total Force @ Section		
Service Level	lbs =	
Strength Level	lbs =	111.5
Moment....Actual		
Service Level	ft-# =	
Strength Level	ft-# =	118.7
Moment.....Allowable	=	5,565.4
Shear.....Actual		
Service Level	psi =	
Strength Level	psi =	1.5
Shear.....Allowable	psi =	82.2
Anet (Masonry)	in2 =	
Wall Weight	psf =	100.0
Rebar Depth 'd'	in =	6.19

Masonry Data

f'm	psi =	
Fs	psi =	
Solid Grouting	=	
Modular Ratio 'n'	=	
Equiv. Solid Thick.	=	
Masonry Block Type	=	
Masonry Design Method	=	ASD

Concrete Data

f'c	psi =	3,000.0
Fy	psi =	60,000.0

Architeer Arch. & Eng., LLC
2700 SE Harrison Street, Suite B
Milwaukie, OR 97222
Tel: 503-607-0481
bruce@bkengineers.com

Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 12 MAR 2023, 11:51AM

Cantilevered Retaining Wall

Project File: A.R.E..ec6

DESCRIPTION: Grid 5/A-D

Concrete Stem Rebar Area Details

Bottom Stem	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.0045 in2/ft	
(4/3) * As :	0.006 in2/ft	Min Stem T&S Reinf Area 0.561 in2
200bd/fy : 200(12)(6.1875)/60000 :	0.2475 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	==========	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.2067 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	1.0059 in2/ft	#6@ 27.50 in #6@ 55.00 in

Footing Data

Toe Width	=	0.67 ft
Heel Width	=	0.83
Total Footing Width	=	1.50
Footing Thickness	=	10.00 in
Key Width	=	0.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	0.00 ft

f'c = 3,000 psi Fy = 60,000 psi
Footing Concrete Density = 150.00 pcf
Min. As % = 0.0018
Cover @ Top 2.00 @ Btm.= 3.00 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	743	294 psf	
Mu' : Upward	=	150	4 ft-#	
Mu' : Downward	=	48	5 ft-#	
Mu: Design	=	102 NG	0 ft-#	OK
phiMn	=	6,032	1,753 ft-#	
Actual 1-Way Shear	=	0.78	0.03 psi	
Allow 1-Way Shear	=	82.16	43.82 psi	

Toe Reinforcing = # 5 @ 18.00 in
Heel Reinforcing = None Spec'd
Key Reinforcing = None Spec'd
Footing Torsion, Tu = 0.00 ft-lbs
Footing Allow. Torsion, phi Tu = 0.00 ft-lbs

If torsion exceeds allowable, provide supplemental design for footing torsion.

Other Acceptable Sizes & Spacings

Toe: #4@ 11.11 in, #5@ 17.22 in, #6@ 24.44 in, #7@ 33.33 in, #8@ 43.88 in, #9@ 55.55 in, #10@ 70.55 in

Heel: phiMn = ph*5*lambda*sqrt(fc)*Sm

Key: No key defined

Min footing T&S reinf Area 0.32 in2
Min footing T&S reinf Area per foot 0.22 in2 /ft

If one layer of horizontal bars:	If two layers of horizontal bars:
#4@ 11.11 in	#4@ 22.22 in
#5@ 17.22 in	#5@ 34.44 in
#6@ 24.44 in	#6@ 48.89 in

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Project Title: A.R.E. Manufacturing
Engineer: bwk
Project ID: 22-166
Project Descr: Building expansion

Printed: 15 MAR 2023, 12:06PM

Restrained Retaining Wall

Project File: A.R.E..ec6

DESCRIPTION: Interior wall

Code Reference

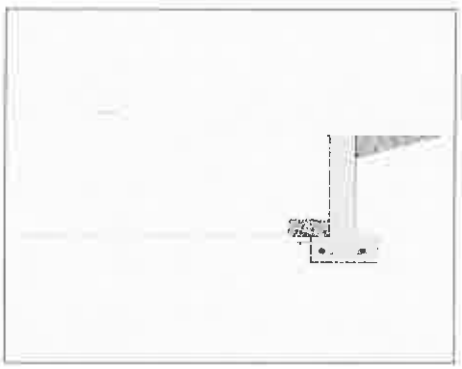
Calculations per IBC 2018 1807.3, CBC 2019, ASCE 7-16

Criteria

Retained Height	=	2.916 ft
Wall height above soil	=	0.0 ft
Total Wall Height	=	2.916 ft
Top Support Height	=	2.750 ft
Slope Behind Wal	=	0
Height of Soil over Toe	=	6 in

Soil Data

Allow Soil Bearing	=	1,500.0 psf
Equivalent Fluid Pressure Method		
At-Rest Heel Pressure	=	55.0 psf/ft
	=	0.0 psf/ft
Passive Pressure	=	250.0 psf/ft
Soil Density	=	110 pcf
Footing||Soil Frictior	=	0.4 psf
Soil height to ignore for passive pressure	=	12 in



Surcharge Loads

Surcharge Over Heel = psf
>>>Used To Resist Sliding & Overturning
Surcharge Over Toe = psf
Used for Sliding & Overturning

Axial Load Applied to Stem

Axial Dead Load	=	lbs
Axial Live Load	=	lbs
Axial Load Eccentricity	=	in

Earth Pressure Seismic Load

Uniform Lateral Load Applied to Stem

Lateral Load	=	#/ft
...Height to Top	=	ft
...Height to Bottom	=	ft
Load Type	=	Wind (W) (Strength Level)
Wind on Exposed Stem	=	0.00 psf (Strength Level)

Wind acts left-to-right toward retention side.

Adjacent Footing Load

Adjacent Footing Load	=	7,000.0 lbs
Footing Width	=	0.250 ft
Eccentricity	=	in
Wall to Ftg CL Dist	=	1.250 ft
Footing Type		Line Load
Base Above/Below Soil at Back of Wall	=	ft
Poisson's Ratio	=	0.3

K_h Soil Density Multiplier = 0.2 g Added seismic per unit area = 0.0 psf

Design Summary

Total Bearing Load	=	1,625.44 lbs
...resultant ecc.	=	0.0 in
Soil Pressure @ Toe	=	1,083.62 psf OK
Soil Pressure @ Heel	=	1,083.62 psf OK
Allowable	=	psf
Soil Pressure Less Than Allowable		
ACI Factored @ Toe	=	1,300.35 psf
ACI Factored @ Heel	=	1,300.35 psf
Footing Shear @ Toe	=	0.6940 psi OK
Footing Shear @ Heel	=	5.003 psi OK
Allowable	=	82.158 psi
Reaction at Top	=	180.225 lbs
Reaction at Bottom	=	866.13 lbs

Sliding Calcs
Lateral Sliding Force = 866.13 lbs

Concrete Stem Construction

Thickness = 6.00 in
Wall Weight = 75.0 psf
Stem is FIXED to top of footing

		@ Top Support	Mmax Between Top & Base	@ Base of Wall
		Stem OK	Stem OK	Stem OK
Design Height Above Ftg	=	2.750 ft	0.01104 ft	0.00 ft
Rebar Size	=	# 4	# 4	# 4
Rebar Spacing	=	18.00 in	18.00 in	18.00 in
Rebar Placed at	=	Center	Center	Edge
Rebar Depth 'd'	=	3.0 in	3.0 in	3.50 in
Design Data				
fb/FB + fa/Fa	=	0.000	0.255	0.217
Moment....Actual	=	0.2292 ft-#	438.455 ft-#	438.455 ft-#
Moment.....Allowable	=	1,721.33 ft-#	1,721.33 ft-#	2,021.33 ft-#
Shear Force @ this height	=	210.606 lbs		839.62 lbs
Shear.....Actual	=	5.850 psi		19.991 psi
Shear.....Allowable	=	82.158 psi		82.158 psi

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing

Load Factors

Building Code	
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

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Project Title: A.R.E. Manufacturing
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Project ID: 22-166
Project Descr: Building expansion

Printed: 15 MAR 2023, 12:06PM

Restrained Retaining Wall

Project File: A.R.E..ec6

DESCRIPTION: Interior wall

Footing Strengths & Dimensions

Toe Width	=	0.50 ft
Heel Width	=	1.0
Total Footing Width	=	1.50
Footing Thickness	=	9.0 in
Key Width	=	in
Key Depth	=	in
Key Distance from Toe	=	ft

f'c = 3,000 psi Fy = 60000 psi
Footing Concrete Density = 150 pcf
Min. As % = 0.0018
Cover @ Top = 2 in @ Btm.= 3 in

Footing Design Results

		Toe	Heel	
Factored Pressure	=	1,300.35	1,300.35	psf
Mu' : Upward	=	162.544		ft-#
Mu' : Downward	=	25.125		ft-#
Mu: Design	=	137	-98	ft-#
Actual 1-Way Shear	=	0.6940		psi
Allow 1-Way Shear	=	82.158	82.158	psi

Other Acceptable Sizes & Spacings:

Toe: # 4 @ 18.00 in -or- #4@ 12.34 in, #5@ 19.13 in, #6@ 27.16 in, #7@ 37
Heel: None Spec'd -or- phiMn = phi * 5 * lambda * sqrt(fc) * Sm
Key: # 0 @ 0.00 in -or- No key defined

Min footing T&S reinf Area 0.29 in2
Min footing T&S reinf Area per foot 0.19 in2 /ft

If one layer of horizontal bars:
#4@ 12.35 in
#5@ 19.14 in
#6@ 27.16 in

If two layers of horizontal bars:
#4@ 24.69 in
#5@ 38.27 in
#6@ 54.32 in

Summary of Forces on Footing : Slab RESISTS sliding, stem is FIXED at footing

Forces acting on footing for soil pressure

>>> Sliding Forces are restrained by the adjacent slab

Load & Moment Summary For Footing : For Soil Pressure Calcs

Moment @ Top of Footing Applied from Stem			=	-387.522 ft-#
Surcharge Over Heel	=	0.0 lbs	0.0 ft	0.0 ft-#
Adjacent Footing Load	=	1,050.11 lbs	1.250 ft	1,312.63 ft-#
Axial Dead Load on Stem	=	0.0 lbs	0.0 ft	0.0 ft-#
Soil Over Toe	=	27.50 lbs	0.250 ft	6.875 ft-#
Surcharge Over Toe	=	0.0 lbs	0.0 ft	0.0 ft-#
Stem Weight	=	218.70 lbs	0.750 ft	164.025 ft-#
Soil Over Heel	=	160.380 lbs	1.250 ft	200.475 ft-#
Footing Weight	=	168.750 lbs	0.750 ft	126.563 ft-#
Total Vertical Force	=	1,625.44 lbs	Base Moment =	1,423.05 ft-#

Stem is specified to be fixed to footing, and top restraint is assumed to react out any tendency for moment at the footing/soil interface, so uniform soil pressure is assumed.

Vertical component of active lateral soil pressure IS NOT considered in the calculation of Sliding Resistance.

Dimensional Solutions DSAnchor Report	Version: 5.7.0	Date:	3/15/2023	Time	9:15:41 AM
Project Name	A.R.E. Manufacturing	Project No.	22-166		
Project Description		Engineer:		Checker:	
File Path	P:\Haworth, Inc\22-166 A.R.E. Mfg. foundation\Grid 3and4 A and F.dsa				

PROJECT INFORMATION

Grid 3 and 4 A and F

Name:	A.R.E. Manufacturing
Number:	22-166
Client:	Haworth Inc
Location:	Newberg, OR

DESIGN CODE: ACI 318 - 2014 **INPUT UNITS:** English **OUTPUT UNITS:** English

CONCRETE PARAMETERS

Compressive Strength (psi)	3000
Unit Weight (pcf)	150

ANCHOR PARAMETERS

Yield Strength fy (ksi)	81
Tensile Strength fut (ksi)	105

REINFORCING STEEL PARAMETERS

Yield Strength (psi)	60000

REBAR PARAMETERS

Longitudinal Bar Size (in.)	4
Tie Bar Size (in.)	4

APPLIED LOADS

Load Case	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - Dead	24.8	33.9	0.	0.	0.
2 - Live	43.6	-62.3	0.	0.	0.
3 - Wind	0.	0.	0.	0.	0.
4 - Earthquake	0.	0.	0.	0.	0.

FACTORED (ULTIMATE) LOAD COMBINATIONS

Load Combination	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - 1.4Dead	34.72	47.46	0.	0.	0.
2 - 1.2Dead + 1.6Live	99.52	-59.	0.	0.	0.
3 - 1.2Dead + Live + 1.6Wind	73.36	-21.62	0.	0.	0.
4 - 0.9Dead + 1.6Wind	22.32	30.51	0.	0.	0.
5 - 1.2Dead + Live + Earthquake	73.36	-21.62	0.	0.	0.
6 - 0.9Dead + Earthquake	22.32	30.51	0.	0.	0.

GROUP ANCHOR STRENGTH - ULTIMATE LOAD COMBINATIONS

TENSILE STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 6

Load Combination	Axial Load (kip)	Group Tensile Capacity (kip)	Tensile Ratio	Remarks	Controlling Strength
1 - 1.4Dead	0.	34.566	0.		TENSILECONCBREAKOUT
2 - 1.2Dead + 1.6Live	0.	34.566	0.		TENSILECONCBREAKOUT
3 - 1.2Dead + Live + 1.6Wind	0.	34.566	0.		TENSILECONCBREAKOUT
4 - 0.9Dead + 1.6Wind	0.	34.566	0.		TENSILECONCBREAKOUT
5 - 1.2Dead + Live + Earthqua	0.	34.566	0.		TENSILECONCBREAKOUT
6 - 0.9Dead + Earthquake	0.	34.566	0.		TENSILECONCBREAKOUT

SHEAR STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 2

SHEAR STRENGTH - X DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	47.46	69.133	0.687		PRYOUT
2 - 1.2Dead + 1.6Live	-59.	69.133	0.853		PRYOUT
3 - 1.2Dead + Live + 1.6Wind	-21.62	69.133	0.313		PRYOUT
4 - 0.9Dead + 1.6Wind	30.51	69.133	0.441		PRYOUT
5 - 1.2Dead + Live + Earthqua	-21.62	69.133	0.313		PRYOUT
6 - 0.9Dead + Earthquake	30.51	69.133	0.441		PRYOUT

SHEAR STRENGTH - Z DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	0.	69.133	0.		PRYOUT
2 - 1.2Dead + 1.6Live	0.	69.133	0.		PRYOUT
3 - 1.2Dead + Live + 1.6Wind	0.	69.133	0.		PRYOUT
4 - 0.9Dead + 1.6Wind	0.	69.133	0.		PRYOUT
5 - 1.2Dead + Live + Earthqua	0.	69.133	0.		PRYOUT
6 - 0.9Dead + Earthquake	0.	69.133	0.		PRYOUT

COMBINED TENSION AND SHEAR STRENGTH

Load Combination	Interaction Ratio	Allowable Interaction Ratio	Remarks
1 - 1.4Dead	0.687	1.2	
2 - 1.2Dead + 1.6Live	0.853	1.2	

3 - 1.2Dead + Live + 1.6Wind	0.313	1.2
4 - 0.9Dead + 1.6Wind	0.441	1.2
5 - 1.2Dead + Live + Earthqua	0.313	1.2
6 - 0.9Dead + Earthquake	0.441	1.2

Note: Group capacities include seismic risk factor where required.
Reinforcement is assumed to resist shear and therefore it must be designed appropriately to resist shear forces resulting from the governing mode of failure.

*** indicates user specified value or a value based on user selection of uncracked/cracked concrete section.

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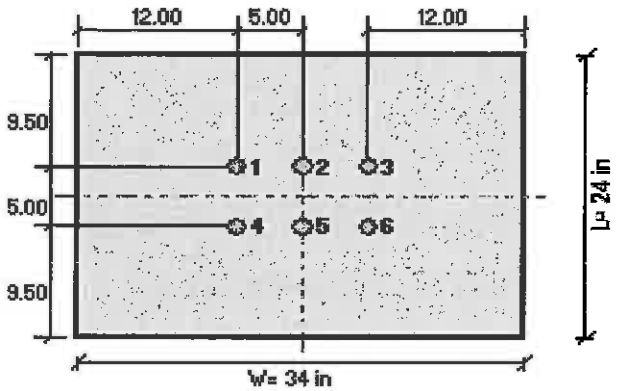
Dimensional Solutions DSAnchor Report	Version: 5.7.0	Date:	3/15/2023	Time	9:15:41 AM
Project Name	A.R.E. Manufacturing	Project No.	22-166		
Project Description		Engineer:		Checker:	
File Path	P:\Haworth, Inc\22-166 A.R.E. Mfg. foundation\Grid 3and4 A and F.dsa				

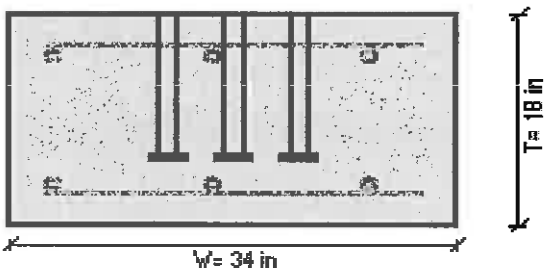
(All Dimensions in Inches)



PLAN

1-3/8 in. Headed Bolt
A325 Type
with 12 in embedment depth

Provide Anchor Reinforcement



ELEVATION

17

ANCHOR BOLTS GRID 2/F CONT'D

USE 3/4"ϕ A36 BOLTS
W/ 12" EMBED - SEE ATTACHED

ALL OTHER ANCHOR BOLT SHEAR & UPLIFT LOADS LESS THAN 2/F

GRADE BEAM GRID A-1 / 3-4

FACTORED TENSION LOAD
$= 1.2(74.8) + 1.6(62.3) = 129.4^K$

$A_{REQ} = \frac{129.4}{0.75(60)} = 2.88 in^2$

LIMIT TIE ROD ELONGATION TO 1/2"

$A_{MIN} = \frac{PL}{0.5E} = \frac{96.2(115)(12)}{0.5(29\times10^3)} = 9.16 in^2$

USE 12 #8 $A = 9.43 in^2$

MIN & MAX GRADE BEAM AREA

$A_{g\,MAX} = 9.43/0.01 = 943 in^2$
$A_{g\,MIN} = 9.43/0.08 = 118 in^2$

USE 20" X 16" GRADE BEAM $A_g = 320 in^2$

BKE INC.
STRUCTURAL ENGINEERS
2700 SE HARRISON STREET, SUITE B, MILWAUKIE, OREGON 97222, 503-607-0481, FAX 503-607-0486. bruce@bkengineers.com

Dimensional Solutions DSAnchor Report	Version: 5.7.0	Date:	3/15/2023	Time	9:25:44 AM
Project Name	A.R.E. Manufacturing	Project No.	22-166		
Project Description		Engineer:		Checker:	
File Path	P:\Haworth, Inc\22-166 A.R.E. Mfg. foundation\Grid2F.dsa				

PROJECT INFORMATION

Grid 2F Shear

Name:	A.R.E. Manufacturing
Number:	22-166
Client:	Haworth Inc
Location:	Newberg, OR

DESIGN CODE: ACI 318 - 2014 **INPUT UNITS:** English **OUTPUT UNITS:** English

CONCRETE PARAMETERS

Compressive Strength (psi)	3000
Unit Weight (pcf)	150

ANCHOR PARAMETERS

Yield Strength fy (ksi)	36
Tensile Strength fut (ksi)	58

REINFORCING STEEL PARAMETERS

Yield Strength (psi)	60000

REBAR PARAMETERS

Longitudinal Bar Size (in.)	4
Tie Bar Size (in.)	4

APPLIED LOADS

Load Case	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - Dead	-0.6	0.05	0.	0.	0.
2 - Live	0.	0.	0.	0.	0.
3 - Wind	0.	0.	0.	0.	0.
4 - Earthquake	-5.	-4.6	0.	0.	0.

FACTORED (ULTIMATE) LOAD COMBINATIONS

Load Combination	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - 1.4Dead	-0.84	0.07	0.	0.	0.
2 - 1.2Dead + 1.6Live	-0.72	0.06	0.	0.	0.
3 - 1.2Dead + Live + 1.6Wind	-0.72	0.06	0.	0.	0.
4 - 0.9Dead + 1.6Wind	-0.54	0.045	0.	0.	0.
5 - 1.2Dead + Live + Earthquake	-13.22	-11.44	0.	0.	0.
6 - 0.9Dead + Earthquake	-13.04	-11.455	0.	0.	0.

GROUP ANCHOR STRENGTH - ULTIMATE LOAD COMBINATIONS

TENSILE STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 5

Load Combination	Axial Load (kip)	Group Tensile Capacity (kip)	Tensile Ratio	Remarks	Controlling Strength
1 - 1.4Dead	-0.84	22.808	0.037		TENSILECONCBREAKOUT
2 - 1.2Dead + 1.6Live	-0.72	22.808	0.032		TENSILECONCBREAKOUT
3 - 1.2Dead + Live + 1.6Wind	-0.72	22.808	0.032		TENSILECONCBREAKOUT
4 - 0.9Dead + 1.6Wind	-0.54	22.808	0.024		TENSILECONCBREAKOUT
5 - 1.2Dead + Live + Earthqua	-13.22	22.808	0.58		TENSILECONCBREAKOUT
6 - 0.9Dead + Earthquake	-13.04	22.808	0.572		TENSILECONCBREAKOUT

SHEAR STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 6

SHEAR STRENGTH - X DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	0.07	30.22	0.002		SHEARSTEEL
2 - 1.2Dead + 1.6Live	0.06	30.22	0.002		SHEARSTEEL
3 - 1.2Dead + Live + 1.6Wind	0.06	30.22	0.002		SHEARSTEEL
4 - 0.9Dead + 1.6Wind	0.045	30.22	0.001		SHEARSTEEL
5 - 1.2Dead + Live + Earthqua	-11.44	30.22	0.379		SHEARSTEEL
6 - 0.9Dead + Earthquake	-11.455	30.22	0.379		SHEARSTEEL

SHEAR STRENGTH - Z DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	0.	30.22	0.		SHEARSTEEL
2 - 1.2Dead + 1.6Live	0.	30.22	0.		SHEARSTEEL
3 - 1.2Dead + Live + 1.6Wind	0.	30.22	0.		SHEARSTEEL
4 - 0.9Dead + 1.6Wind	0.	30.22	0.		SHEARSTEEL
5 - 1.2Dead + Live + Earthqua	0.	30.22	0.		SHEARSTEEL
6 - 0.9Dead + Earthquake	0.	30.22	0.		SHEARSTEEL

COMBINED TENSION AND SHEAR STRENGTH

Load Combination	Interaction Ratio	Allowable Interaction Ratio	Remarks
1 - 1.4Dead	0.039	1.2	
2 - 1.2Dead + 1.6Live	0.034	1.2	

3 - 1.2Dead + Live + 1.6Wind	0.034	1.2
4 - 0.9Dead + 1.6Wind	0.025	1.2
5 - 1.2Dead + Live + Earthqua	0.958	1.2
6 - 0.9Dead + Earthquake	0.951	1.2

Note: Group capacities include seismic risk factor where required.
Reinforcement is assumed to resist shear and therefore it must be designed appropriately to resist shear forces resulting from the governing mode of failure.

*** indicates user specified value or a value based on user selection of uncracked/cracked concrete section.

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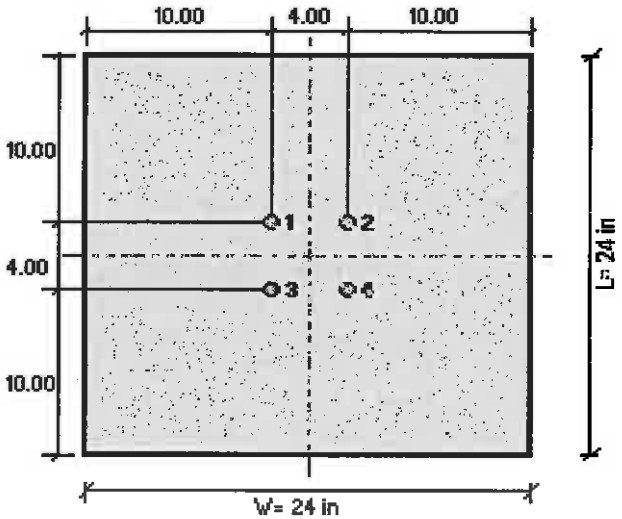
Project Name	A.R.E. Manufacturing	Project No.	22-166		
Project Description		Engineer:		Checker:	
File Path	P:\Haworth, Inc\22-166 A.R.E. Mfg. foundation\Grid2F.dsa				

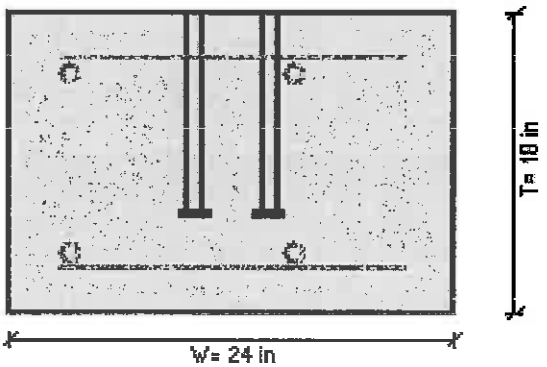
(All Dimensions in Inches)



PLAN

3/4 in. Headed Bolt
F1554 36 Type
with 12 in embedment depth

Provide Anchor Reinforcement



ELEVATION

23

Dimensional Solutions DSAnchor Report	Version: 5.7.0	Date:	3/15/2023	Time	9:28:50 AM
Project Name	A.R.E. Manufacturing	Project No.	22-166		
Project Description		Engineer:		Checker:	
File Path	P:\Haworth, Inc\22-166 A.R.E. Mfg. foundation\Grid2F Max Up.dsa				

PROJECT INFORMATION

Grid 2F Max Up

Name:	A.R.E. Manufacturing
Number:	22-166
Client:	Haworth Inc
Location:	Newberg, OR

DESIGN CODE: ACI 318 - 2014 **INPUT UNITS:** English **OUTPUT UNITS:** English

CONCRETE PARAMETERS

Compressive Strength (psi)	3000
Unit Weight (pcf)	150

ANCHOR PARAMETERS

Yield Strength fy (ksi)	36
Tensile Strength fut (ksi)	58

REINFORCING STEEL PARAMETERS

Yield Strength (psi)	60000

REBAR PARAMETERS

Longitudinal Bar Size (in.)	4
Tie Bar Size (in.)	4

APPLIED LOADS

Load Case	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - Dead	-3.	2.	0.	0.	0.
2 - Live	-5.7	-0.23	0.	0.	0.
3 - Wind	0.	0.	0.	0.	0.
4 - Earthquake	-4.6	0.	0.	0.	0.

FACTORED (ULTIMATE) LOAD COMBINATIONS

Load Combination	Axial (kip)	Shear X (kip)	Moment Z (kip-ft)	Shear Z (kip)	Moment X (kip-ft)
1 - 1.4Dead	-4.2	2.8	0.	0.	0.
2 - 1.2Dead + 1.6Live	-12.72	2.032	0.	0.	0.
3 - 1.2Dead + Live + 1.6Wind	-9.3	2.17	0.	0.	0.
4 - 0.9Dead + 1.6Wind	-2.7	1.8	0.	0.	0.
5 - 1.2Dead + Live + Earthquake	-20.8	2.17	0.	0.	0.
6 - 0.9Dead + Earthquake	-14.2	1.8	0.	0.	0.

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GROUP ANCHOR STRENGTH - ULTIMATE LOAD COMBINATIONS

TENSILE STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 5

Load Combination	Axial Load (kip)	Group Tensile Capacity (kip)	Tensile Ratio	Remarks	Controlling Strength
1 - 1.4Dead	-4.2	22.808	0.184		TENSILECONCBREAKOUT
2 - 1.2Dead + 1.6Live	-12.72	22.808	0.558		TENSILECONCBREAKOUT
3 - 1.2Dead + Live + 1.6Wind	-9.3	22.808	0.408		TENSILECONCBREAKOUT
4 - 0.9Dead + 1.6Wind	-2.7	22.808	0.118		TENSILECONCBREAKOUT
5 - 1.2Dead + Live + Earthqua	-20.8	22.808	0.912		TENSILECONCBREAKOUT
6 - 0.9Dead + Earthquake	-14.2	22.808	0.623		TENSILECONCBREAKOUT

SHEAR STRENGTH

Seismic Risk Factor or Reduction Factor for concrete failure modes 1 for governing load combination 1

SHEAR STRENGTH - X DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	2.8	30.22	0.093		SHEARSTEEL
2 - 1.2Dead + 1.6Live	2.032	30.22	0.067		SHEARSTEEL
3 - 1.2Dead + Live + 1.6Wind	2.17	30.22	0.072		SHEARSTEEL
4 - 0.9Dead + 1.6Wind	1.8	30.22	0.06		SHEARSTEEL
5 - 1.2Dead + Live + Earthqua	2.17	30.22	0.072		SHEARSTEEL
6 - 0.9Dead + Earthquake	1.8	30.22	0.06		SHEARSTEEL

SHEAR STRENGTH - Z DIRECTION

Load Combination	Shear Load (kip)	Group Shear Capacity (kip)	Shear Ratio	Remarks	Controlling Strength
1 - 1.4Dead	0.	30.22	0.		SHEARSTEEL
2 - 1.2Dead + 1.6Live	0.	30.22	0.		SHEARSTEEL
3 - 1.2Dead + Live + 1.6Wind	0.	30.22	0.		SHEARSTEEL
4 - 0.9Dead + 1.6Wind	0.	30.22	0.		SHEARSTEEL
5 - 1.2Dead + Live + Earthqua	0.	30.22	0.		SHEARSTEEL
6 - 0.9Dead + Earthquake	0.	30.22	0.		SHEARSTEEL

COMBINED TENSION AND SHEAR STRENGTH

Load Combination	Interaction Ratio	Allowable Interaction Ratio	Remarks
1 - 1.4Dead	0.277	1.2	
2 - 1.2Dead + 1.6Live	0.625	1.2	

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3 - 1.2Dead + Live + 1.6Wind	0.48	1.2
4 - 0.9Dead + 1.6Wind	0.178	1.2
5 - 1.2Dead + Live + Earthqua	0.984	1.2
6 - 0.9Dead + Earthquake	0.682	1.2

Note: Group capacities include seismic risk factor where required.
Reinforcement is assumed to resist shear and therefore it must be designed appropriately to resist shear forces resulting from the governing mode of failure.

*** indicates user specified value or a value based on user selection of uncracked/cracked concrete section.

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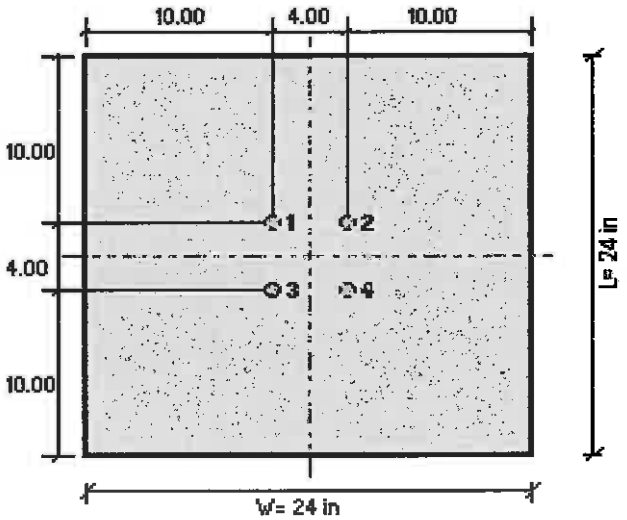
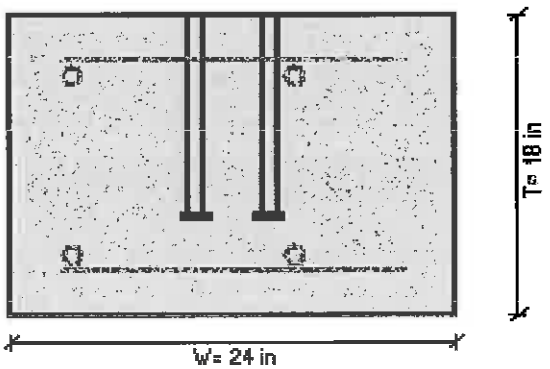
(All Dimensions in Inches)



PLAN

3/4 in. Headed Bolt
F1554 36 Type
with 12 in embedment depth

Provide Anchor Reinforcement



ELEVATION

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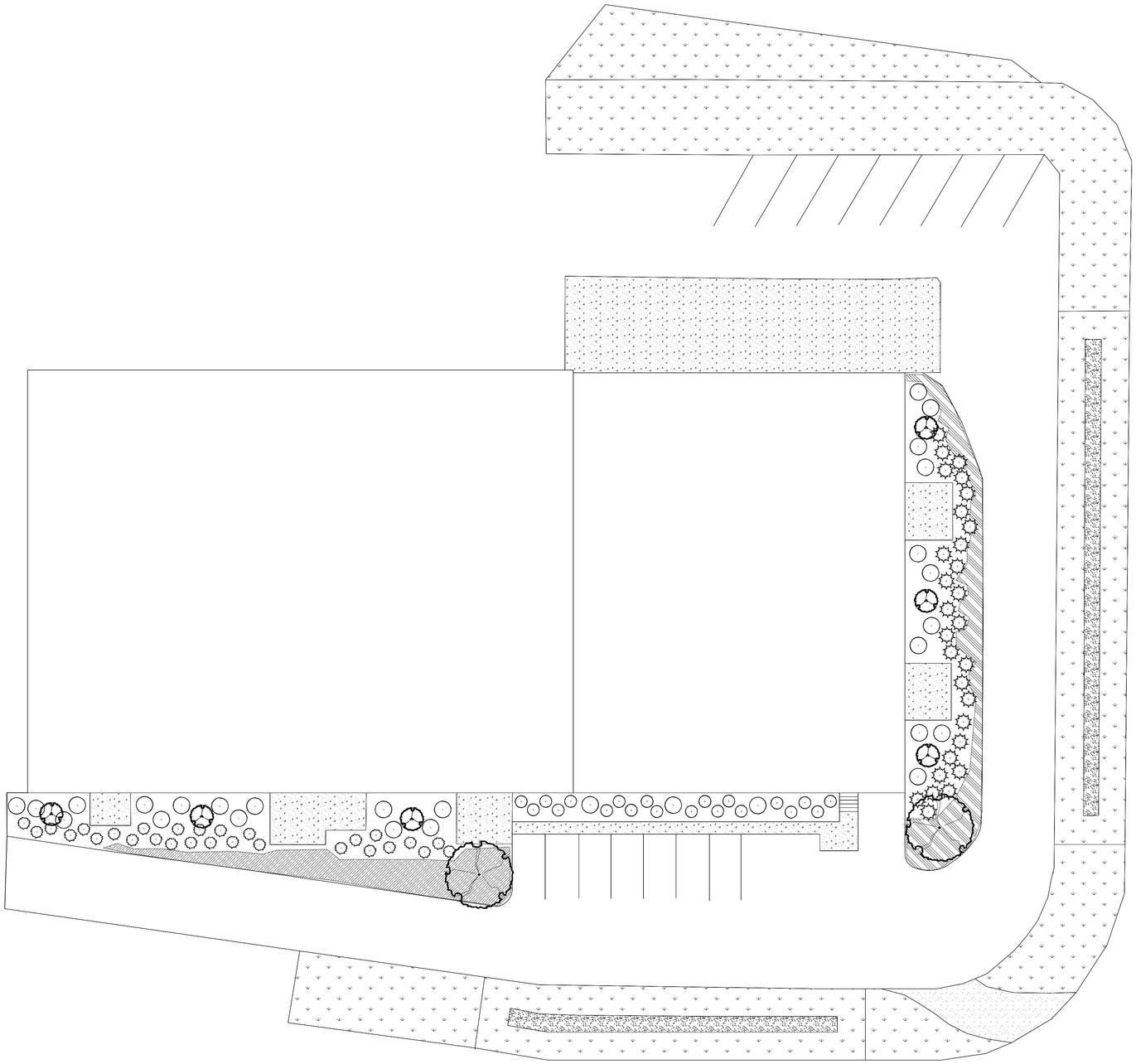


Plant Schedule

	Acer Rubrum 'Sunset'	2" Cal.
	Acer Palmatum 'Bloodgood'	1.5" Cal
	Prunus laurocerasus 'Otto Luyken'	5 Gal.
	Choisya ternata	5 Gal.
	Viburnum Davidii	3 Gal.
	Spiraea japonica 'Pink princess'	3 Gal.
	Nandina domestica 'gulf stream'	3 Gal.
	Rubus Calycinoides 'Emerald Carpet'	4" Pots 3' O.C.
	Kinnicknick	4" Pots 3' O.C.
	Protime PT 301 water smarter tall fescue blend	Seed

* All Shrub beds to recieve automatic irrigation system
* All shrub beds to recieve 3" of hemlock bark mulch

C and D Landscape Co.
16800 NE McDougall Rd.
Dayton, OR 97114
503.864.3551

NORTH

Planting Plan

A.R.E. Manufactuing Expansion
NE Aaron Drive & NE Dunn Place

SCALE 1"=16'
DATE 03/01/23
DRAWING # L 1.0

(LP / X) = INSTALL LUMINAIRE POLE #.
(X = POLE #).

OPTION "A" STREET LIGHTING NOTES:
1. LUMINAIRES SHALL BE CITY OF NEWBERG APPROVED 88 WATT LED, 240V, MAST ARM MOUNTED, GRAY, COBRAHEAD, FLAT LENS FIXTURE, WITH TWISTLOCK P.E. RECEPTACLE.

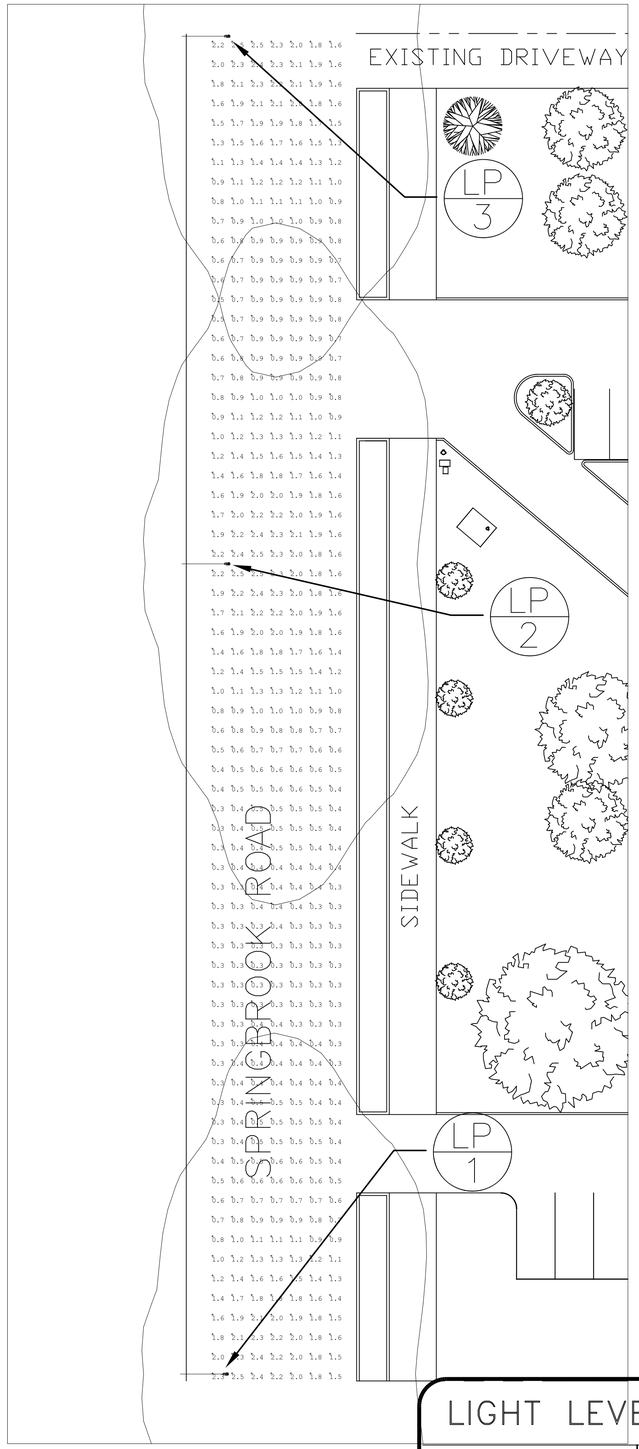
CITY OF NEWBERG PREFERRED COBRAHEAD LUMINAIRES ARE:
88W LEOTEK GCM2-40H-MV-WW-2R-GY-700-RWG-WL-FDC-PGE

2. THE PHOTOELECTRIC CONTROL SHALL BE PGE APPROVED TWISTLOCK, FAIL-ON ELECTRONIC, 105-300 VAC, 60 HZ PER ANSI 136.10, BRONZE HOUSING, 1.5 LUMEN TURN-ON, RATED 1000W TUNGSTEN (1800 VA BALLAST) 1.5:1 TURN-OFF/TURN-ON RATIO, SOLID BRASS PLUG BLADES, CONFORMALLY COATED CDS CELL, 160 JOULE MOV, 2-4 SEC. TURN-OFF DELAY.

PGE APPROVED PHOTOELECTRIC CONTROLS ARE:
DTL DLL 1271.5 J50
RIPLEY RD8645
INTERMATIC-EK4536SB

3. PGE APPROVED MAST ARMS TO BE, STEEL, 12-FOOT MAST ARMS.
APPROVED MAST ARMS ARE:
SALCO WPDG-125-12-S
MACLEAN POWER SYSTEMS S-125-12DG

4. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO P.G.E. SCHEDULE "95" OPTION "A" SPECIFICATIONS. ALL MATERIALS AND INSTALLATION BE APPROVED BY CITY OF NEWBERG AND PGE.



GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

STREETLIGHTING DESIGN
Scale: 1"= 20'

LIGHT POLE LOCATION TABLE

POLE NUMBER	MH	WATTS	LUMENS	ARM	ARRANGEMENT	STREET	POLE TYPE
1	30 FT	88	10331	6	SINGLE	SPRINGBROOK	WOOD POLE
2	30 FT	88	10331	6	SINGLE	SPRINGBROOK	WOOD POLE
3	30 FT	88	10331	6	SINGLE	SPRINGBROOK	WOOD POLE

NUMERIC SUMMARY						
PROJECT: A.R.E. MANUFACTURING						
LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN
HERITAGE ST	ILLUMINANCE	FC	1.07	2.50	0.30	3.57

LIGHT LEVEL REQUIREMENTS

ROADWAY	CLASSIFICATION		LIGHT LEVEL	UNIFORMITY
SPRINGBROOK RD	ARTERIAL	TARGET	1.0 FC AVG	4:1 AVG/MIN
		ACHIEVED	1.07 FC AVG	3.57:1 AVG/MIN

Northstar Electrical Contractors
11055 S.W. Clay Street
Sherwood, Oregon 97140
Phone 503-612-0840
Fax 503-612-0891
Email adam.suminski@NorthStarElect.com

A.R.E MANUFACTURING
NEWBERG, OR

NO.	REV DESCRIPTION	REV DATE

Title: STREET LIGHTING
Designed by: Adam Suminski
Checked by: Jesse Culp
Date: July 22, 2022

DWG. NO
EL1

BUILDING INFORMATION

JOB NUMBER: 22-8706
CUSTOMER: Elbert Rentals
PROJECT: Building Expansion
LOCATION: Newberg, OR 97132

MAIN BUILDING
DESCRIPTION: 117'-0" x 90'-0" x 14'-9 3/16" x 14'-1-1/16"
SLOPE: 1.0:12

LOADING INFORMATION

BLDG. CODE:	OSSC19 (IBC 18)	
CLOSED/OPEN:	Closed	
EXPOSURE:	C	
WIND SPEED:	97	MPH
COLLATERAL LOAD:	7.00	PSF
DEAD LOAD:	4.50	PSF + FRAME WT
LIVE LOAD:	20.00	PSF
ROOF SNOW LOAD:	25.00	PSF
GROUND SNOW LOAD:	7.00	PSF
SNOW IMPORTANCE (Is):	1.00	

EARTHQUAKE DESIGN DATA

SEISMIC DESIGN CATEGORY: D
SEISMIC IMPORTANCE FACTOR: 1.00
MAPPED SPECTRAL RESPONSE ACCELERATIONS

S_s 0.849 %g S_{MS} 1.019 %g
S_1 0.409 %g S_{M1} 0.773 %g

SPECTRAL RESPONSE COEFFICIENTS

S_{DS} 0.679 %g S_{D1} 0.516 %g

FRAMED OPENINGS

FRONT SIDEWALL:
(1) 16'-0" W x 12'-0" H
(1) 4'-4 1/2" W x 7'-2 1/4" H
(1) 12'-0" W x 12'-0" H

LEFT ENDWALL:
None

BACK SIDEWALL:
(1) 8'-0" W x 8'-0" H
(1) 3'-4-1/2" W x 7'-2 1/4" H

RIGHT ENDWALL:
None

FRAMING DATA

PRIMARY STEEL COLOR: GREY
FRAME TYPE: Standard Rigid Frame
LEFT ENDWALL: Post & Beam
RIGHT ENDWALL: Rigid Frame
BUILDING FRAMES: 2 Rigid Frames, Clear Span
1 Rigid Frame with interior columns at :17'-0", 79'-0"

FRONT SIDEWALL BRACING: X-Bracing
BACK SIDEWALL BRACING: X-Bracing
LEFT ENDWALL BRACING: X-Bracing
RIGHT ENDWALL BRACING: None

FRONT SIDEWALL EXTENSION: None
BACK SIDEWALL EXTENSION: None
LEFT ENDWALL EXTENSION: None
RIGHT ENDWALL EXTENSION: None

SHEETING TYPE AND COLOR

ROOF: 6" Kingseam, Gauge: 24 Ext., 26 Int.
Color: Kingspan Imperial White Int & Ext.
WALL: PBR, Gauge: 26, Color: Ashland Grey
EAVE SOFFIT: None
GABLE SOFFIT: None
SW LINER: None
EW LINER: None
GABLE TRIM: Imperial White
EAVE TRIM: Imperial White
GUTTER TRIM: Imperial White
CORNER TRIM: Mt Hood White
JAMB TRIM: Mt Hood White
DOWNSPOUT: Mt Hood White
BASE TRIM: Ashland Grey
BASE COND: Base Channel

ACCESSORIES

1 - 4070 Insulated Walk Door w/ Lever-Lockset & Dead Bolt
1 - 3070 Insulated Walk Door w/ Lever-Lockset & Dead Bolt

BUILDING NOTES

*** It is the customer's responsibility to verify building codes and loadings with the local building department.
1. Standard X-bracing.
2. Post and beam end frame at the left endwall, half-loaded rigid (M-2) end frame at the right endwall.
3. 6" thick Kingseam standing seam roofing with 24 ga. kynar ext. and 26 ga. painted int. and 26 gauge painted PBR siding.
4. Girts spaced 4' on center for insulation system. No facing, hangars, support kit or banding required.
5. Right endwall is open and flashed to existing building (PBS job # 93-3931). Customer to verify dimensions of existing building.
6. 3'-6" high CMU wall by others at front sidewall.
7. Building includes 5 psf collateral loading for sprinkler system. Sprinklers by others
8. Full height 3/4" plywood liner panel by others on all interior walls.

INSULATION

ROOF: None
WALLS: Unfaced Insulation Banded Liner (R-25) w/ Thermal Tape

GENERAL NOTES:

1. PRODUCT CERTIFICATIONS
APPROVED FABRICATOR OF PREFABRICATED BUILDINGS. REF. IAS REPORT NO. FA-405

2. MATERIALS SPECIFICATION

	ASTM DESIGNATION	YIELD STRENGTH
FLAT BAR	A-572	FY = 50 KSI MIN
STEEL PLATE	A-572	FY = 50 KSI MIN
HOT-ROLLED MILL SHAPES	A-992	FY = 50 KSI MIN
CONNECTION PLATES	A-572	FY = 50 KSI MIN
BRACE RODS	A-36	FY = 36 KSI MIN
COLD-FORMED LIGHT GAGE SHAPES	A-570	FY = 55 KSI
ROOF AND WALL SHEETING (R PANEL)	A-792-94	FY = 80 KSI (GRADE E)
ROOF SHEETING (STANDING SEAM)	A-446-76	FY = 50 KSI (GRADE D)
BOLTS TYP	A-325	
1/2" BOLTS	GRADE 5	

3. SECONDARY STRUCTURAL COATING
FORMED FROM GALVANIZED PRODUCTS (G60)

4. BUILDER/CONTRACTOR OR A/E FIRM RESPONSIBILITIES
PACIFIC BUILDING SYSTEMS STANDARD PRODUCT SPECIFICATIONS FOR DESIGN, FABRICATION, QUALITY CRITERIA, STANDARDS AND TOLERANCES SHALL GOVERN THE WORK, UNLESS STIPULATED OTHERWISE IN THE CONTRACT DOCUMENTS.

IN CASE OF DISCREPANCIES BETWEEN PACIFIC BUILDING SYSTEMS STRUCTURAL PLANS AND PLANS FOR OTHER TRADES,THE PACIFIC BUILDING SYSTEMS PLANS SHALL GOVERN.

IT IS THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR TO OBTAIN APPROPRIATE APPROVALS AND NECESSARY PERMITS FROM CITY, COUNTY, STATE, OR FEDERAL AGENCIES, AS REQUIRED.

ACCEPTANCE OF THE PACIFIC BUILDING SYSTEMS INTERPRETATION OF THE CONTRACT.

ONCE THE BUILDER/CONTRACTOR OR A/E FIRM HAS SIGNED PACIFIC BUILDING SYSTEMS APPROVAL PACKAGE, CHANGES FROM THE CONTRACT BY THE BUILDER WILL BE BILLED TO THE BUILDER/ CONTRACTOR FOR MATERIAL, ENGINEERING, AND HANDLING FEES. SUCH CHANGES MAY CAUSE THE PROJECT TO BE MOVED FROM THE FABRICATION AND/OR SHIPPING SCHEDULE. A PENALTY FEE MAY BE CHARGED IF THE PROJECT MUST BE MOVED FROM THE FABRICATION AND/OR SHIPPING SCHEDULE, AS LONG AS PACIFIC BUILDING SYSTEMS DESIGN AND DETAILING APPROACH COMPLIES WITH THE CONTRACT.

THE BUILDER/CONTRACTOR OR A/E FIRM IS RESPONSIBLE FOR THE OVERALL PROJECT COORDINATION. ALL INTERFACE AND COMPATIBILITY CONCERNING ANY MATERIALS NOT FURNISHED BY PACIFIC BUILDING SYSTEMS ARE TO BE CONSIDERED AND COORDINATED BY THE BUILDER/CONTRACTOR OR A/E FIRM. THESE PACIFIC BUILDING SYSTEMS ASSUMPTIONS SHALL GOVERN UNLESS SPECIFIC DESIGN CRITERIA CONCERNING THIS INTERFACE BETWEEN MATERIALS IS FURNISHED AS PART OF THE CONTRACT.

THE BUILDER/CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL OTHER PROJECT PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF ANY GOVERNING BUILDING AUTHORITIES.

SUPPLYING SEALED ENGINEERING DESIGN DATA AND DRAWINGS FOR THE PACIFIC BUILDING SYSTEMS BUILDING DOES NOT IMPLY OR CONSTITUTE AN AGREEMENT THAT PACIFIC BUILDING SYSTEMS OR ITS DESIGN ENGINEER IS ACTING AS THE ENGINEER OF RECORD OR DESIGN PROFESSIONAL FOR THE CONSTRUCTION PROJECT. THESE DRAWINGS AND DESIGN DATA ARE SEALED AS TO THE STRUCTURAL SYSTEM FURNISHED BY PACIFIC BUILDING SYSTEMS IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CONTRACT.

THE BUILDER/CONTRACTOR IS RESPONSIBLE FOR SETTING OF ANCHOR BOLTS AND ERECTION OF STEEL BUILDING COMPONENTS IN ACCORDANCE WITH PACIFIC BUILDING SYSTEMS "FOR CONSTRUCTION" DRAWINGS. TEMPORARY SUPPORTS OR BRACING REQUIRED FOR THE BUILDING ERECTION WILL BE THE RESPONSIBILITY OF THE ERECTOR TO DETERMINE, FURNISH, AND INSTALL.

5. A-325 BOLT TIGHTENING REQUIREMENTS
HIGH STRENGTH A-325 BOLTS SHALL BE TIGHTENED BY THE TURN-OF-THE-NUT METHOD IN ACCORDANCE WITH THE LATEST EDITION, AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A-325 OR A-490 BOLTS. WASHERS ARE NOT REQUIRED WHEN A-325 BOLTS ARE TIGHTENED BY THE TURN-OF-THE-NUT METHOD.

TABLE -NUT ROTATION FROM SNUG-TIGHT CONDITION

BOLT LENGTH (UNDERSIDE OF HEAD TO EDGE OF BOLT)	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS AND OTHER SLOPED NOT MORE THAN 1:20 (BEVELED WASHER NOT USED)	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO THE BOLT AXIS (BEVELED WASHER NOT USED)
UP TO AND INCLUDING 4 DIAMETERS	1/3 TURN	1/2 TURN	2/3 TURN
OVER 4 DIAMETERS BUT NOT EXCEEDING 8 DIAMETERS	1/2 TURN	2/3 TURN	5/6 TURN

FOR BOLTS INSTALLED BY 1/2 TURN AND LESS, THE TOLERANCE SHALL BE PLUS OR MINUS 30 DEGREES.
FOR BOLTS INSTALLED BY 2/3 TURN AND MORE, THE TOLERANCE SHALL BE PLUS OR MINUS 45 DEGREES.

DRAWING TABLE OF CONTENTS

PAGE	DRAWING DESCRIPTION	REVISION			
CS1	Drawing Cover Sheet	.	.	.	.
F1	Anchor Bolt Plan	.	.	.	.
F2	Anchor Bolt Details	.	.	.	.
F3	Anchor Bolt Reactions	.	.	.	.
E1	Roof Framing Plan	.	.	.	.
E2	Roof Sheeting Plan	.	.	.	.
E3	Sidewall Elevations	.	.	.	.
E4-E5	Endwall Elevations	.	.	.	.
E6-E7	Rigid Frame Elevations	.	.	.	.
D1-D2	Detail Drawings	.	.	.	.
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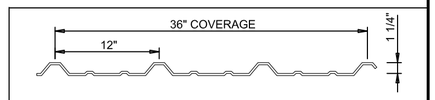
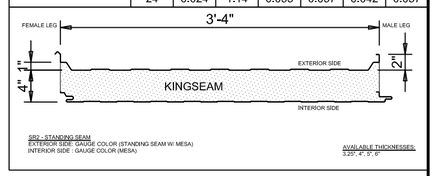
NOTE: IT IS THE CUSTOMER'S RESPONSIBILITY TO VERIFY ALL THE DESIGN CRITERIA

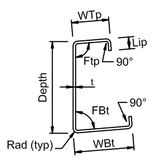


PBR PANEL SECTION PROPERTIES

Thickness		Weight (PSF)	Positive Bend		Negative Bend	
Ga.	Inches		Ix (In4)	Sx (In3)	Ix (In4)	Sx (In3)
29	0.013	0.75	0.024	0.023	0.022	0.033
26	0.019	0.94	0.038	0.038	0.031	0.045
24	0.024	1.14	0.055	0.057	0.042	0.057

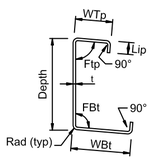


EAVE STRUT SECTION PROPERTIES (1:12)



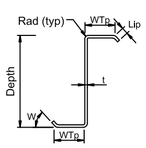
Mark	Size			t		Lip	Rad	Ftp	FBt	Area	Pounds Per Foot	Ixx	SxTop	SxBot
	Depth	WTp	WBt											
	Inches	Inches	Inches	Gage	Inches	Inches	Inches	Degree	Degree	In2		In4	In3	In3
8GS16-1	8	3.000	5.000	16	0.060	0.87	0.188	94.76	85.24	0.847	2.88	10.414	2.278	2.866
8GS14-1				14	0.075	0.91				1.059	3.60	12.953	2.836	3.563
8GS12-1				12	0.105	0.98				1.483	5.05	17.949	3.935	4.935
10GS14-1	10	3.000	5.000	14	0.075	0.91	0.188	94.76	85.24	1.284	4.37	21.789	3.867	4.769
10GS12-1				12	0.105	0.98				1.798	6.12	30.269	5.379	6.622
12GS14-1	12	3.000	5.000	14	0.075	0.91	0.188	94.76	85.24	1.434	4.88	33.484	5.006	6.071
12GS12-1				12	0.105	0.98				2.008	6.83	46.591	6.973	8.445

APEX STRUT SECTION PROPERTIES (1:12)



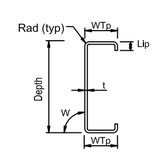
Mark	Size			t		Lip	Rad	Ftp	FBt	Area	Pounds Per Foot	Ixx	SxTop	SxBot
	Depth	WTp	WBt											
	Inches	Inches	Inches	Gage	Inches	Inches	Inches	Degree	Degree	In2		In4	In3	In3
8GS16A-1	8	3.000	5.000	16	0.060	0.87	0.188	85.24	94.76	1.028	3.50	10.917	2.393	2.865
8GS14A-1				14	0.075	0.91				1.284	4.37	13.579	2.977	3.565
8GS12A-1				12	0.105	0.98				1.798	6.12	18.819	4.128	4.946
10GS14A1	10	3.000	5.000	14	0.075	0.91	0.188	85.24	94.76	1.434	4.88	22.608	4.032	4.747
10GS12A1				12	0.105	0.98				2.008	6.83	31.409	5.603	6.600
12GS14A1	12	3.000	5.000	14	0.075	0.91	0.188	85.24	94.76	1.584	5.39	34.501	5.193	6.026
12GS12A1				12	0.105	0.98				2.218	7.55	48.008	7.227	8.391

ZEE SECTION PROPERTIES



Mark	Size		t		Lip	Rad	W	Area	Pounds Per Foot	Ixx	Sxx
	Depth	WTp									
	Inches	Inches	Gage	Inches	Inches	Inches	Degree	In2		In4	In3
8Z16	8	2.5	16	0.060	0.76	0.188	50	0.847	2.88	8.156	2.039
8Z14			14	0.075	0.78			1.059	3.60	10.153	2.538
8Z12			12	0.105	0.83			1.483	5.05	14.097	3.524
10Z16	10	2.875	16	0.060	0.88	0.188	50	1.028	3.50	15.225	3.045
10Z14			14	0.075	0.91			1.284	4.37	18.971	3.794
10Z12			12	0.105	0.96			1.798	6.12	26.387	5.277
12Z14	12	2.875	14	0.075	0.93	0.188	50	1.434	4.88	29.266	4.878
12Z12			12	0.105	1.01			2.008	6.83	40.765	6.794

CEE SECTION PROPERTIES



Mark	Size		t		Lip	Rad	W	Area	Pounds Per Foot	Ixx	Sxx
	Depth	WTp									
	Inches	Inches	Gage	Inches	Inches	Inches	Degree	In2		In4	In3
8C16	8	2.5	16	0.060	0.87	0.188	90	0.847	2.88	8.035	2.009
8C14			14	0.075	0.91			1.059	3.60	9.990	2.498
8C12			12	0.105	0.98			1.483	5.05	13.833	3.458
10C16	10	3	16	0.060	0.87	0.188	90	1.028	3.50	15.158	3.032
10C14			14	0.075	0.91			1.284	4.37	18.874	3.775
10C12			12	0.105	0.98			1.798	6.12	26.213	5.243
12C14	12	3	14	0.075	0.91	0.188	90	1.434	4.88	29.150	4.858
12C12			12	0.105	0.98			2.008	6.83	40.554	6.759

WARNING NOTICE
VERY IMPORTANT INFORMATION

THIS MATERIAL IS SUBJECT TO SEVERE WATER DAMAGE IF MOISTURE IS ALLOWED TO GET BETWEEN THE PARTS; THEREFORE, IT MUST BE STORED UNDER COVER AND ONE END ELEVATED TO ALLOW FOR DRAINAGE UNTIL ERECTED. IF MOISTURE IS ALLOWED TO GET BETWEEN THE PARTS, "RUST" OR "PAINT LIFT OFF" MAY OCCUR. THE MANUFACTURER WILL NOT ACCEPT CLAIMS FOR WET STORAGE DAMAGE. THE CUSTOMER ASSUMES FULL RESPONSIBILITY FOR THE CONDITION OF THIS MATERIAL AFTER DELIVERY BY THE TRUCKING COMPANY.

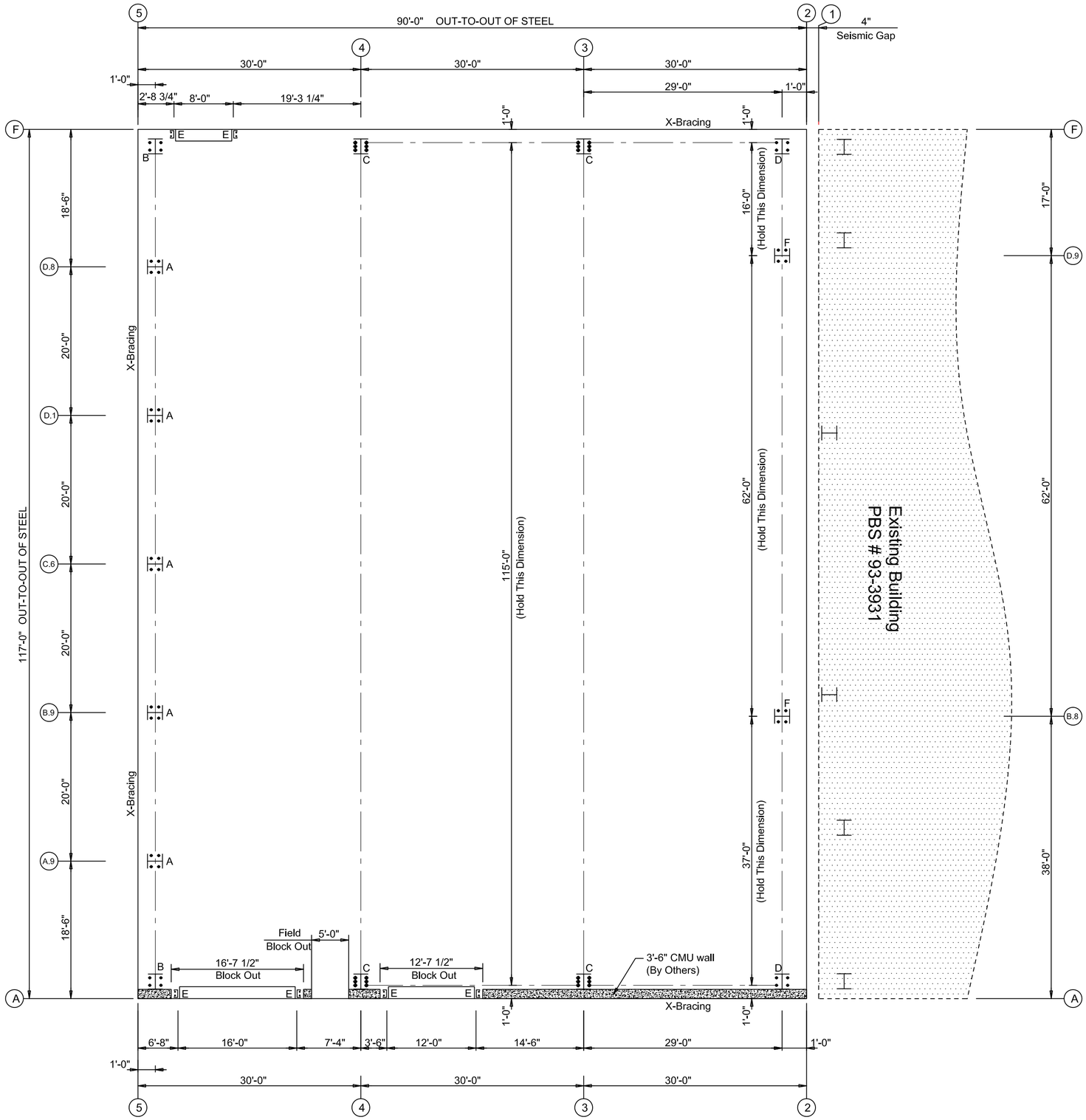
REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Drawing Cover Sheet
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
DWG BY: NM
CHECKED BY:
PAGE: CS1 OF CS1
JOB ID: 22-8706



ANCHOR BOLT PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)

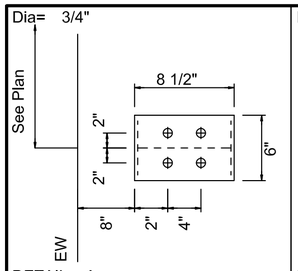
REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

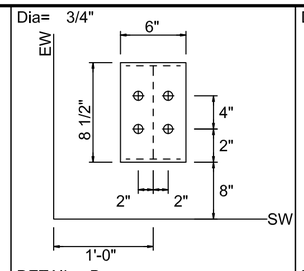
PROJ: Building Expansion
Newberg, OR 97132
TITLE: Anchor Bolt Plan
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
DWG BY: NM
CHECKED BY:
PAGE: F1 OF F3
JOB ID: 22-8706



DETAIL A



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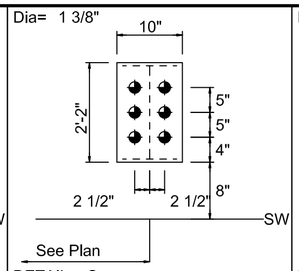

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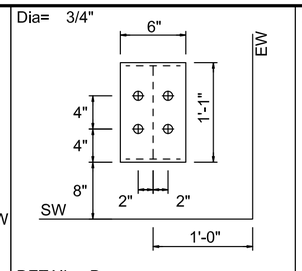
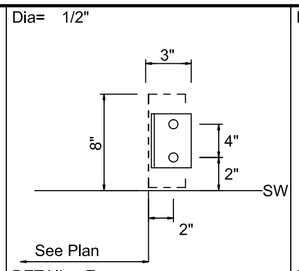
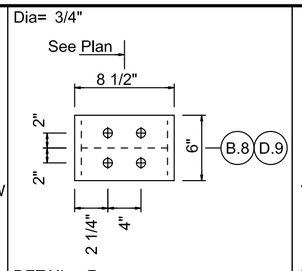


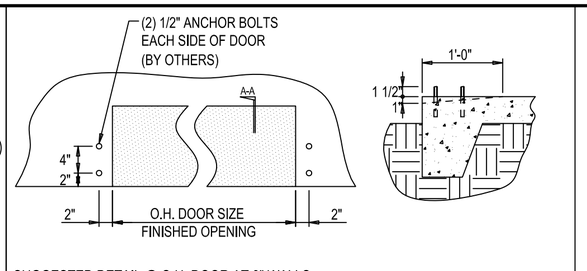
DETAIL D



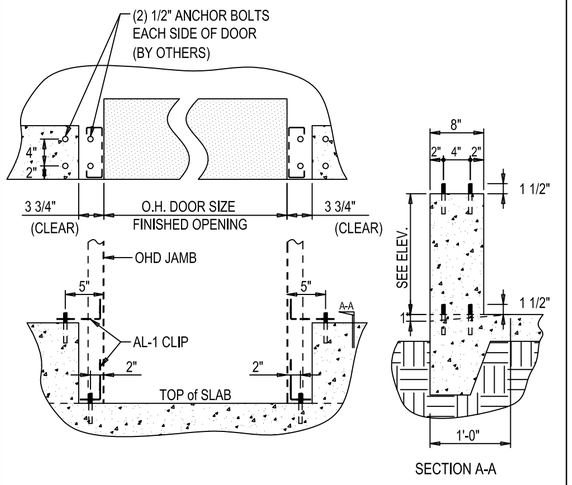
DETAIL E



DETAIL F

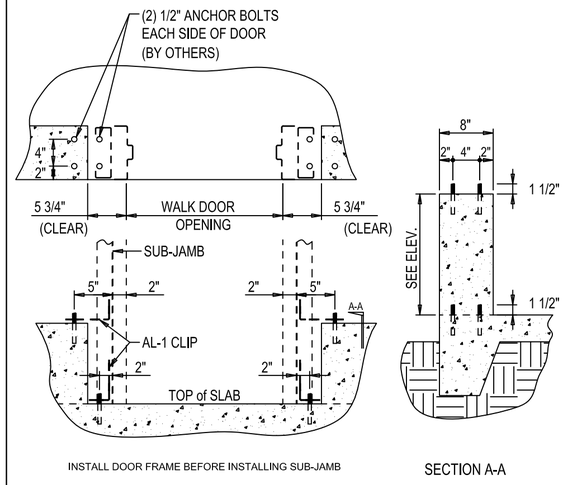


SUGGESTED DETAIL @ O.H. DOOR AT 8" WALLS



SECTION A-A

SUGGESTED DETAIL @ O.H. DOOR AT 8" STEM-WALLS
(JAMBS TO FINISHED FLOOR)



INSTALL DOOR FRAME BEFORE INSTALLING SUB-JAMB

SECTION A-A

SUGGESTED DETAIL @ WALK DOOR AT 8" STEM-WALLS
(WITH SUB-FRAMING TO FINISHED FLOOR)

REGISTERED PROFESSIONAL ENGINEER
74932PE
OREGON
JULY 13, 2004
KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

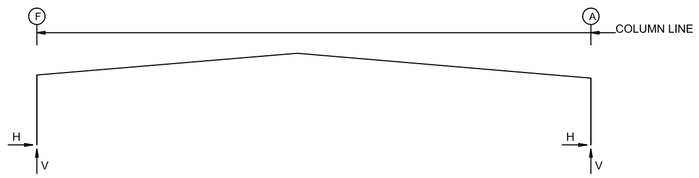
REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Anchor Bolt Details
DEALER: Elbert Rentals

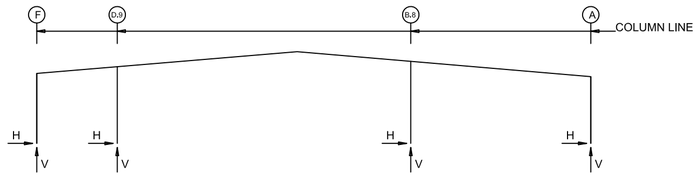
PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY, WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
DWG BY: NM
CHECKED BY:
PAGE: F2 OF F3
JOB ID: 22-8706

FRAME LINES: 4 3



FRAME LINES: 2



RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin	Bolt(in) Qty	Bolt(in) Dia	Base_Plate(in) Width	Base_Plate(in) Length	Base_Plate(in) Thick	Grout (in)
4*	F	1	96.2	68.5	2	-8.1	-5.8	6	1.375	10.00	26.00	0.500	0.0
					4	-6.4	-8.4						
4*	A	3	7.9	-5.7	1	-96.2	68.4	6	1.375	10.00	26.00	0.500	0.0
		1	-96.2	68.4	5	7.0	-8.7						

4* Frame lines: 4 3

RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin	Bolt(in) Qty	Bolt(in) Dia	Base_Plate(in) Width	Base_Plate(in) Length	Base_Plate(in) Thick	Grout (in)
2	F	8	3.4	0.4	9	-3.2	-4.1	4	0.750	6.000	13.00	0.500	0.0
		12	0.0	5.8	14	-0.1	-13.6						
2	A	10	2.1	-0.4	7	-2.4	3.7	4	0.750	6.000	13.00	0.500	0.0
		15	-0.6	10.9	11	0.0	-5.5						
2	D.9	4	0.0	-5.0	4	0.0	-5.0	4	0.750	6.000	8.500	0.500	0.0
		13	0.0	41.1									
2	B.8	6	0.0	-4.0	6	0.0	-4.0	4	0.750	6.000	8.500	0.500	0.0
		1	0.0	33.3									

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	-----Dead---- Horiz	Vert	--Collateral- Horiz	Vert	-----Live---- Horiz	Vert	-----Snow---- Horiz	Vert	--Wind_Left1- Horiz	Vert	-Wind_Right1- Horiz	Vert
4*	F	16.4	12.6	17.5	12.2	49.8	34.9	62.3	43.6	-29.9	-22.3	-21.2	-16.9
4*	A	-16.4	12.6	-17.5	12.2	-49.8	34.9	-62.3	43.6	21.6	-17.0	29.6	-22.1

Frame Line	Column Line	--Wind_Left2- Horiz	Vert	-Wind_Right2- Horiz	Vert	--Wind_Long1- Horiz	Vert	--Wind_Long2- Horiz	Vert	-Seismic_Left Horiz	Vert	Seismic_Right Horiz	Vert
4*	F	-16.8	-11.4	-8.3	-6.1	-27.0	-26.7	-28.9	-22.6	-6.0	-1.3	6.0	1.3
4*	A	8.6	-6.1	16.6	-11.2	27.8	-21.8	28.0	-27.1	-6.5	1.3	6.5	-1.3

Frame Line	Column Line	-Seismic_Long Horiz	Vert	F1UNB_SL_L- Horiz	Vert	F1UNB_SL_R- Horiz	Vert
4*	F	0.0	-9.2	44.1	38.2	47.0	23.4
4*	A	0.0	-8.7	-44.1	21.6	-47.0	39.4

Frame Line	Column Line	-----Dead---- Horiz	Vert	--Collateral- Horiz	Vert	-----Live---- Horiz	Vert	-----Snow---- Horiz	Vert	--Wind_Left1- Horiz	Vert	-Wind_Right1- Horiz	Vert
2	F	0.1	-1.2	0.1	-1.6	0.3	-4.7	0.4	-5.8	-2.4	1.0	2.1	2.9
2	A	-0.1	1.2	-0.1	1.2	-0.3	3.5	-0.4	4.4	-2.0	-1.6	2.4	-4.8
2	D.9	0.0	6.3	0.0	7.0	0.0	19.9	0.0	24.9	0.0	-13.8	0.0	-11.3
2	B.8	0.0	5.4	0.0	6.1	0.0	17.5	0.0	21.8	0.0	-10.5	0.0	-11.5

Frame Line	Column Line	--Wind_Left2- Horiz	Vert	-Wind_Right2- Horiz	Vert	--Wind_Long1- Horiz	Vert	--Wind_Long2- Horiz	Vert	-Seismic_Left Horiz	Vert	Seismic_Right Horiz	Vert
2	F	-3.0	-0.1	1.5	1.9	1.1	0.0	0.3	-1.8	-4.6	-5.0	4.6	5.0
2	A	-1.4	-0.3	3.0	-3.5	-0.7	-4.7	-0.7	-6.1	-3.1	1.4	3.1	-1.4
2	D.9	0.0	-8.0	0.0	-5.5	0.0	-14.6	0.0	-8.8	0.0	5.5	0.0	-5.5
2	B.8	0.0	-5.3	0.0	-6.3	0.0	-8.9	0.0	-12.0	0.0	-1.9	0.0	1.9

Frame Line	Column Line	-Seismic_Long Horiz	Vert	F2UNB_SL_L- Horiz	Vert	F2UNB_SL_R- Horiz	Vert
2	F	0.0	-9.2	-0.3	-7.6	0.6	-2.7
2	A	0.0	-8.7	0.3	0.0	-0.6	4.9
2	D.9	0.0	0.0	0.0	27.7	0.0	9.5
2	B.8	0.0	0.0	0.0	10.8	0.0	20.8

4* Frame lines: 4 3

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind Press Horz
5	F	0.7	0.8	2.3	2.9	0.0	-2.1	0.0	-1.5	0.0	-1.3	0.0	-0.6	-1.6
5	D.8	1.9	2.3	6.6	8.2	-1.3	-7.6	0.0	-2.5	-1.3	-5.5	0.0	-0.4	-2.2
5	D.1	1.8	2.2	6.1	7.7	0.0	-3.5	1.3	-4.6	0.0	-1.6	1.3	-2.7	-2.6
5	C.6	1.8	2.2	6.3	7.9	0.0	-3.2	0.0	-3.2	0.0	-1.4	0.0	-1.5	-2.8
5	B.9	1.8	2.1	6.1	7.6	-1.3	-4.5	0.0	-3.3	-1.3	-2.6	0.0	-1.4	-2.5
5	A.9	1.9	2.3	6.6	8.2	0.0	-2.6	1.3	-7.5	0.0	-0.5	1.3	-5.5	-2.1
5	A	0.7	0.8	2.3	2.9	0.0	-1.5	0.0	-2.1	0.0	-0.6	0.0	-1.3	-1.5

Frm Line	Col Line	Wind Suct Horz	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert	Seis_Left Horz	Seis_Left Vert	Seis_Right Horz	Seis_Right Vert	E1UNB_SL_L- Horz	E1UNB_SL_L- Vert	E1UNB_SL_R- Horz	E1UNB_SL_R- Vert
5	F	1.7	0.0	-2.4	0.0	-1.4	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.8
5	D.8	2.3	0.0	-6.1	-0.4	-4.1	-4.2	-3.3	0.0	3.7	0.0	7.9	0.0	2.6
5	D.1	2.7	0.3	-6.2	0.0	-3.0	0.0	3.1	4.2	-3.5	0.0	9.6	0.0	1.9
5	C.6	2.9	0.0	-4.0	0.0	-4.9	0.0	0.1	0.0	-0.1	0.0	5.2	0.0	7.7
5	B.9	2.6	0.0	-3.2	-0.4	-6.4	-4.2	-3.4	0.0	3.1	0.0	1.8	0.0	8.5
5	A.9	2.2	0.3	-3.9	0.0	-6.0	0.0	3.4	4.2	-3.1	0.0	2.6	0.0	8.0
5	A	1.6	0.0	-1.4	0.0	-2.4	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.9

ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin	Bolt(in) Qty	Bolt(in) Dia	Base_Plate(in) Width	Base_Plate(in) Length	Base_Plate(in) Thick	Grout (in)
5	F	16	1.0	-1.0	17	-0.9	-1.0	4	0.750	6.000	8.500	0.375	0.0
		18	0.0	4.5	16	1.0	-1.0						
5	D.8	19	1.4	-3.4	17	-1.3	-2.5	4	0.750	6.000	8.500	0.375	0.0
		1	0.0	12.4	19	1.4	-3.4						
5	D.1	16	1.6	-2.6	17	-1.6	-2.6	4	0.750	6.000	8.500	0.375	0.0
		18	0.0	13.5	16	1.6	-2.6						
5	C.6	20	1.7	-1.8	21	-1.7	-1.8	4	0.750	6.000	8.500	0.375	0.0
		1	0.0	11.9	20	1.7	-1.8						
5	B.9	20	1.6	-2.8	21	-1.5	-2.8	4	0.750	6.000	8.500	0.375	0.0
		22	0.0	12.5	20	1.6	-2.8						
5	A.9	23	1.3	-3.4	21	-1.3	-2.5	4	0.750	6.000	8.500	0.375	0.0
		1	0.0	12.4	23	1.3	-3.4						
5	A	20	1.0	-1.0	21	-0.9	-1.0	4	0.750	6.000	8.500	0.375	0.0
		22	0.0	4.5	20	1.0	-1.0						

NOTES FOR REACTIONS

1. All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
2. Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
3. Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
4. Building reactions are based on the following building data:

Width (ft)	= 117'-0"
Length (ft)	= 90'-0"
Eave Height (ft)	= 14'-9 3/16" / 14'-1 1/16"
Roof Slope (rise/12)	= 1.0:12
Dead Load (psf)	= 4.50
Collateral Load (psf)	= 7.00
Live Load (psf)	= 20.00
Roof Snow Load (psf)	= 25.00
Ground Snow Load (psf)	=7.00
Wind Speed (mph)	= 97
Wind Code	= OSSC19 (IBC 18)
Exposure	= C
Closed/Open	= Closed
Importance Seismic	= 1.00
Importance Snow (Is)	= 1.00
Seismic Zone	= D
Seismic Coeff (Fa*Ss)	= 1.019

5. Loading conditions are:
   1 Dead+Collateral+Snow+Slide_Snow
   2 0.6Dead+0.6Wind_Left1
   3 0.6Dead+0.6Wind_Right1
   4 0.6Dead+0.6Wind_Long1L
   5 0.6Dead+0.6Wind_Long2L
   6 0.6Dead+0.6Wind_Long2R
   7 1.1Dead+1.1Collateral+0.7Seismic_Left
   8 1.1Dead+1.1Collateral+0.7Seismic_Right
   9 Dead/2+0.7Seismic_Left
   10 Dead/2+0.7Seismic_Right
   11 Dead/2+0.7Seismic_LongL
   12 Dead/2+0.7Seismic_LongR
   13 Dead+Collateral+F2UNB_SL_L
   14 1.07Dead+1.07Collateral+0.52Seismic_LongL+0.75F2UNB_SL_L
   15 1.07Dead+1.07Collateral+0.52Seismic_LongR+0.75F2UNB_SL_R
   16 0.6Dead+0.6Wind_Suction+0.6Wind_Long1L
   17 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1L
   18 Dead+Collateral+E1UNB_SL_L
   19 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
   20 0.6Dead+0.6Wind_Suction+0.6Wind_Long2L
   21 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2L
   22 Dead+Collateral+E1UNB_SL_R
   23 0.6Dead+0.6Wind_Right1+0.6Wind_Suction

BUILDING BRACING REACTIONS

Wall Loc	Col Line	± Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear (lb/ft) Wind	Seis	Note
L_EW	5	D.8,D.1	1.3	1.1	4.2	3.4		
		B.9,A.9	1.3	1.1	4.2	3.3		
F_SW	A	3,2	7.4	3.0	21.5	8.7		
R_EW	2							(h)
B_SW	F	2,3	7.5	3.2	21.6	9.2		

(h)Rlgid frame at endwall

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
○ 12	Jamb	1/2"	A36	1.50
⊕ 28	Endwall	3/4"	A36	2.00
◒ 24	Frame	1 3/8"	A36	3.50
⊕ 16	Frame	3/4"	A36	2.00

REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION	DATE
A Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Anchor Bolt Reactions
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY, WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
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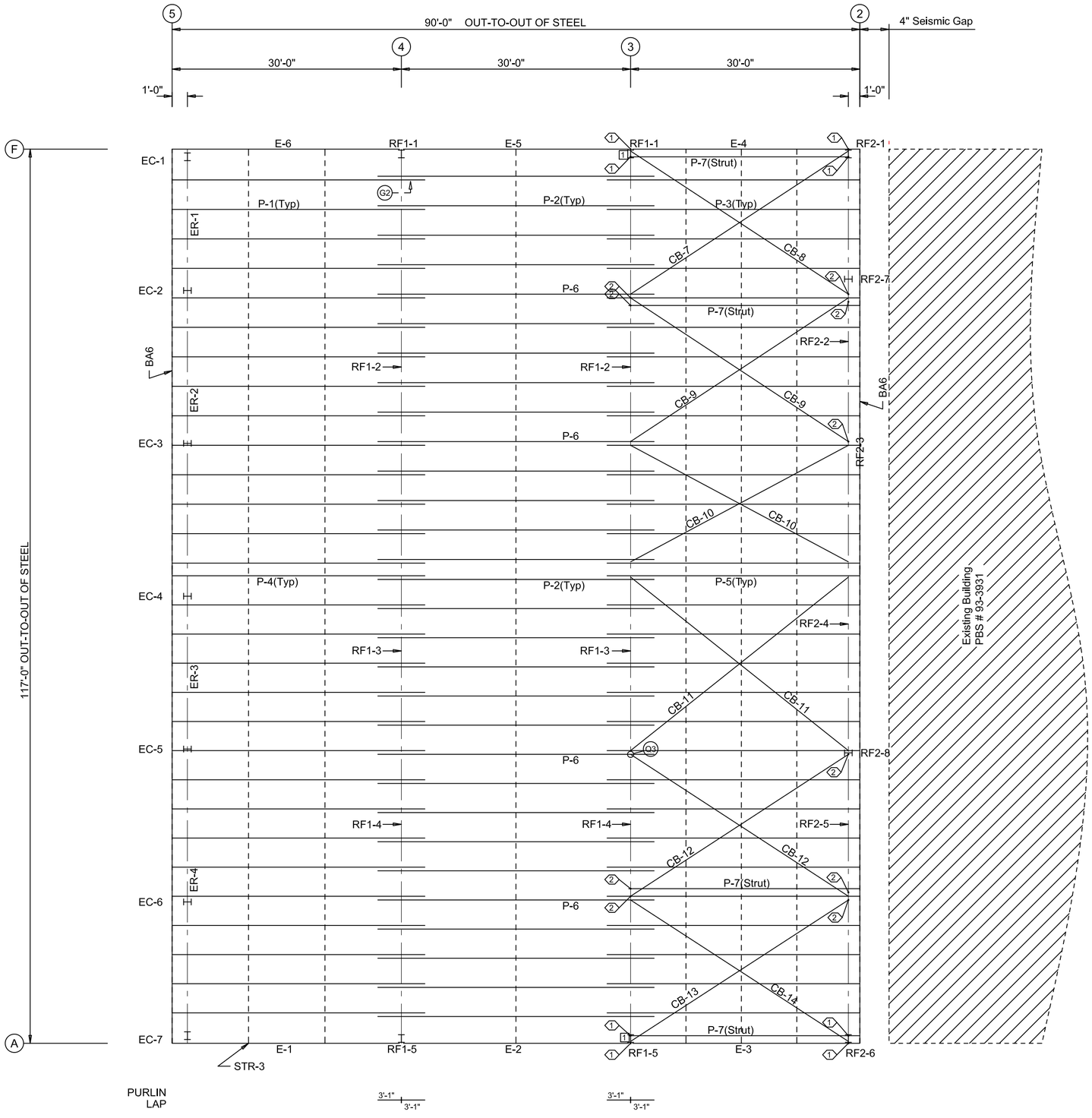
PAGE: F3 OF F3
JOB ID: 22-8706

SPECIAL BOLTS ROOF PLAN					
ID	QUAN	TYPE	DIA	LENGTH	WASH
1	4	GR_5	1/2"	1 1/4"	2
2	2	GR_5	1/2"	1 1/4"	2

MEMBER TABLE ROOF PLAN	
MARK	PART
P-1	10Z12
P-2	10Z14
P-3	10Z12
P-4	10Z12
P-5	10Z12
P-6	10Z12
P-7	10Z16
E-1	10GS14-1
E-2	10GS14-1
E-3	10GS12-1
E-4	10GS12-1
E-5	10GS14-1
E-6	10GS14-1
CB-7	1 ROD
CB-8	1 ROD
CB-9	3/4 ROD
CB-10	5/8 ROD
CB-11	5/8 ROD
CB-12	7/8 ROD
CB-13	1 ROD
CB-14	1 ROD

CONNECTION PLATES ROOF PLAN	
ID	MARK/PART
1	ESP-3



ROOF FRAMING PLAN

NOTE:
PBS IS NOT RESPONSIBLE FOR RETROFITTING / EVALUATION OF THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURES DUE TO EXTRA LOADS, SUCH AS, SNOW DRIFT CAUSED BY THIS BUILDING ADDITION.

REGISTERED PROFESSIONAL ENGINEER
74932PE
OREGON
JULY 13, 2004
KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Roof Framing
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
DWG BY: NM
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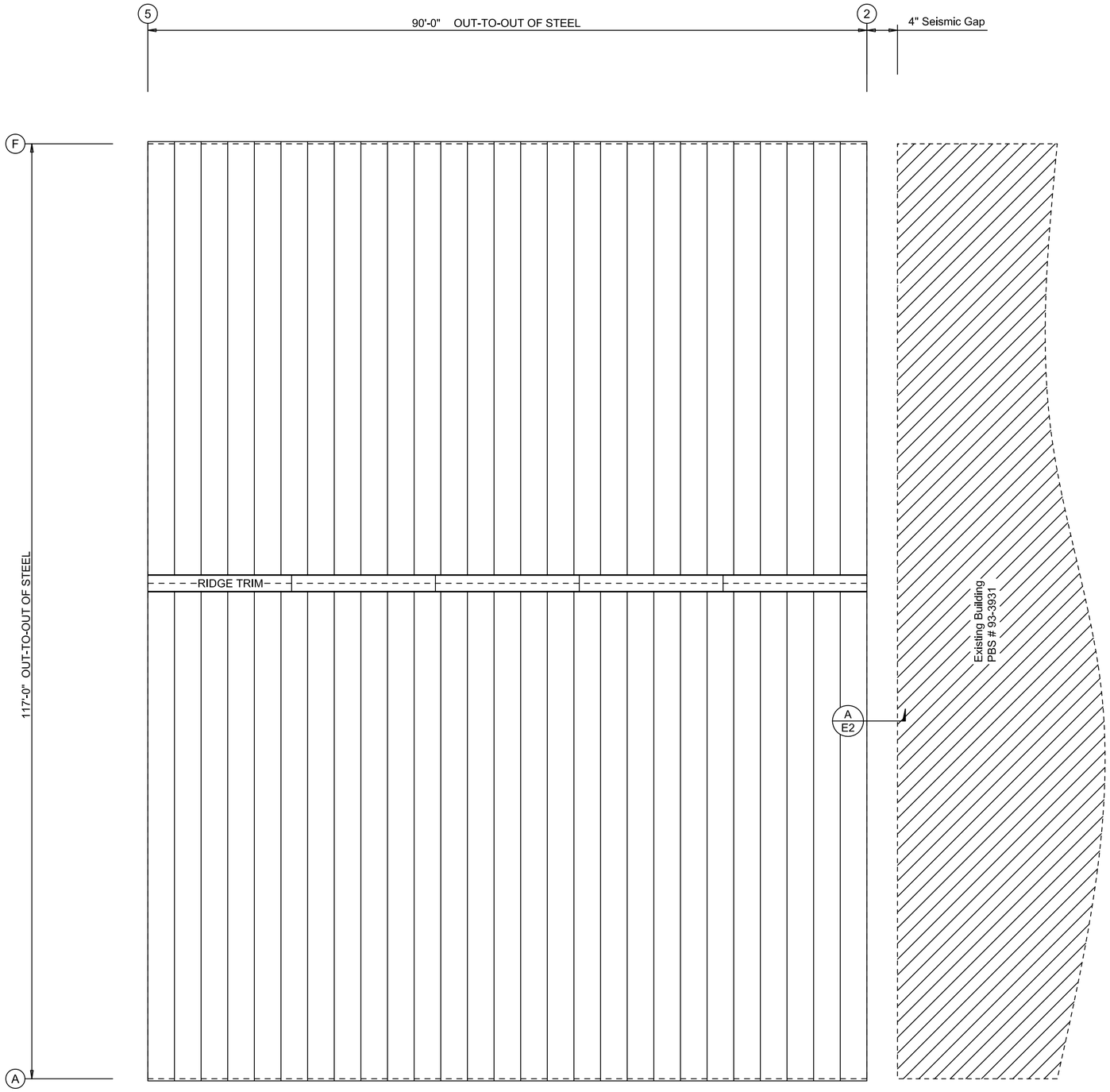
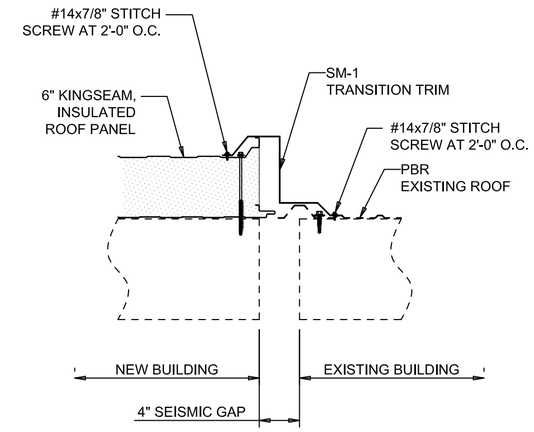
PAGE: E1 OF E7
JOB ID: 22-8706



ROOF SHEETING PLAN

PANELS: 6" Kingseam, 24 Ga. Ext. / 26 Ga. Int. - Kingspan Imperial White Int & Ext.



A / E2 ROOF TRANSITION DETAIL

REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Roof Sheeting
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY, WOODBURN, OREGON 97071 PHONE 503 / 981-9581

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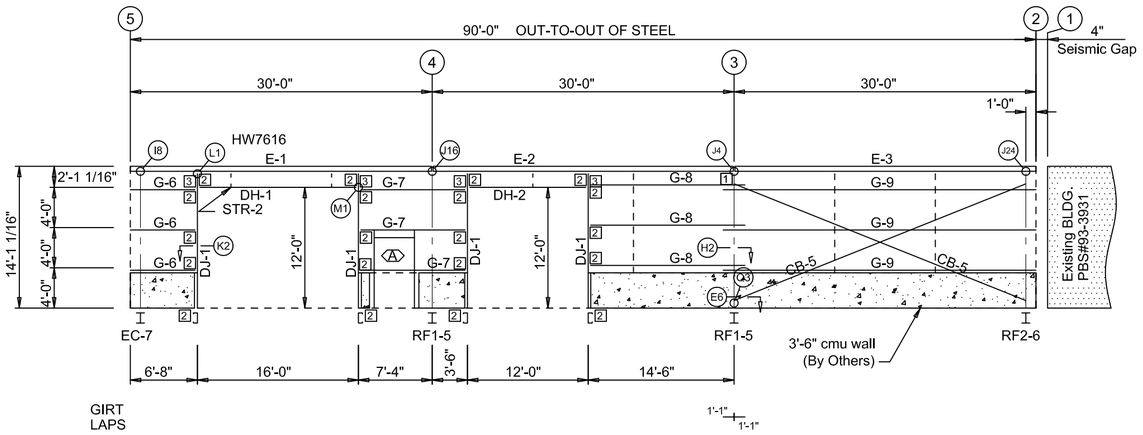
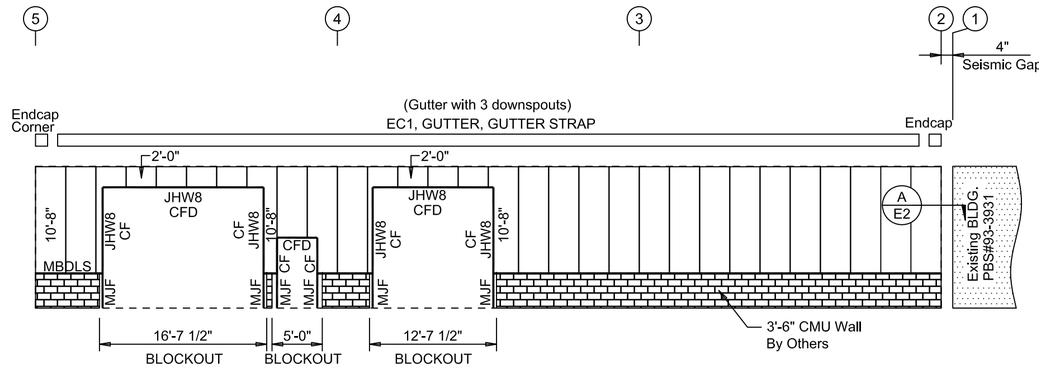


SIDEWALL FRAMING: FRAME LINE A

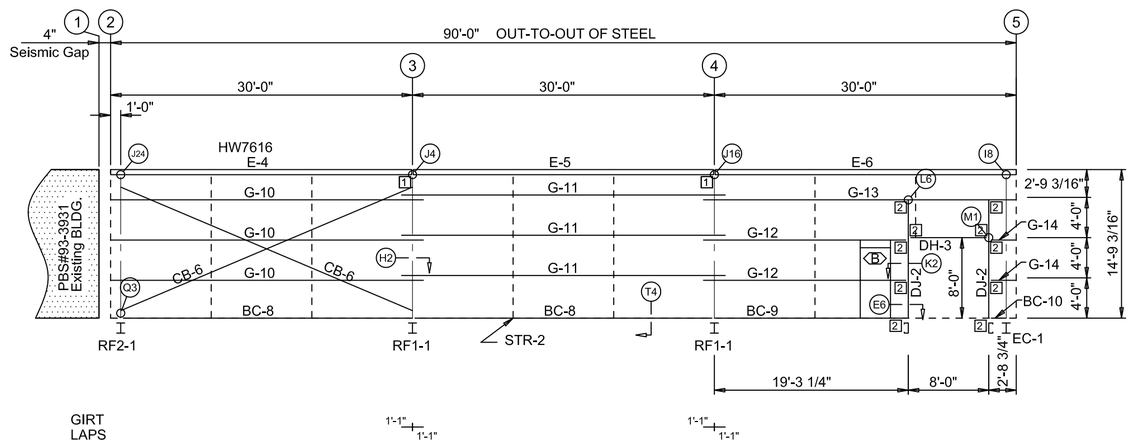


SIDEWALL SHEETING & TRIM: FRAME LINE A

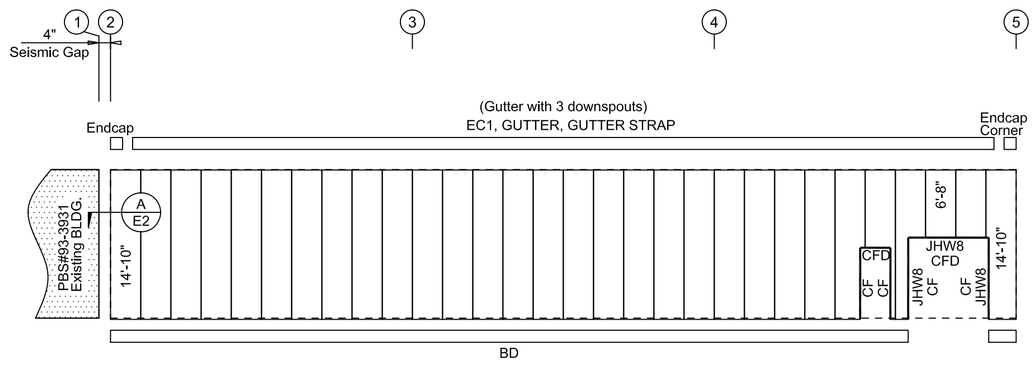
PANELS: 26 Ga. PBR - Ashland Grey

MEMBER TABLE FRAME LINE A	
MARK	PART
DJ-1	8C16
DH-1	8C16
DH-2	8C16
E-1	10GS14-1
E-2	10GS14-1
E-3	10GS12-1
G-6	8Z16
G-7	8Z16
G-8	8Z16
G-9	8Z16
CB-5	1 1/4ROD

CONNECTION PLATES FRAME LINE A	
☐ID	MARK/PART
1	ESP-3
2	AL-1
3	DJC-2



SIDEWALL FRAMING: FRAME LINE F

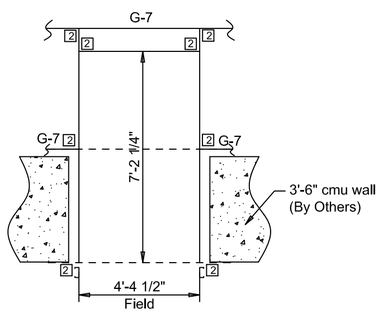


SIDEWALL SHEETING & TRIM: FRAME LINE F

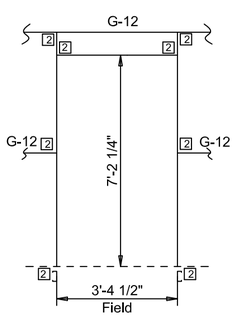
PANELS: 26 Ga. PBR - Ashland Grey

MEMBER TABLE FRAME LINE F	
MARK	PART
DJ-2	8C16
DH-3	8C16
E-4	10GS12-1
E-5	10GS14-1
E-6	10GS14-1
G-10	8Z16
G-11	8Z16
G-12	8Z16
G-13	8Z12
G-14	8Z16
BC-8	8C16
BC-9	8C16
BC-10	8C16
CB-6	1 1/4ROD

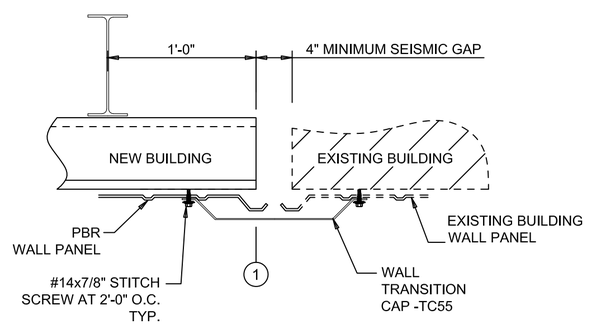
CONNECTION PLATES FRAME LINE F	
☐ID	MARK/PART
1	ESP-3
2	AL-1



A WALK DOOR CONNECTION DETAIL



B WALK DOOR CONNECTION DETAIL



A / E3 WALL TRANSITION DETAIL @ EXISTING BUILDING

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Sidewall Framing
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

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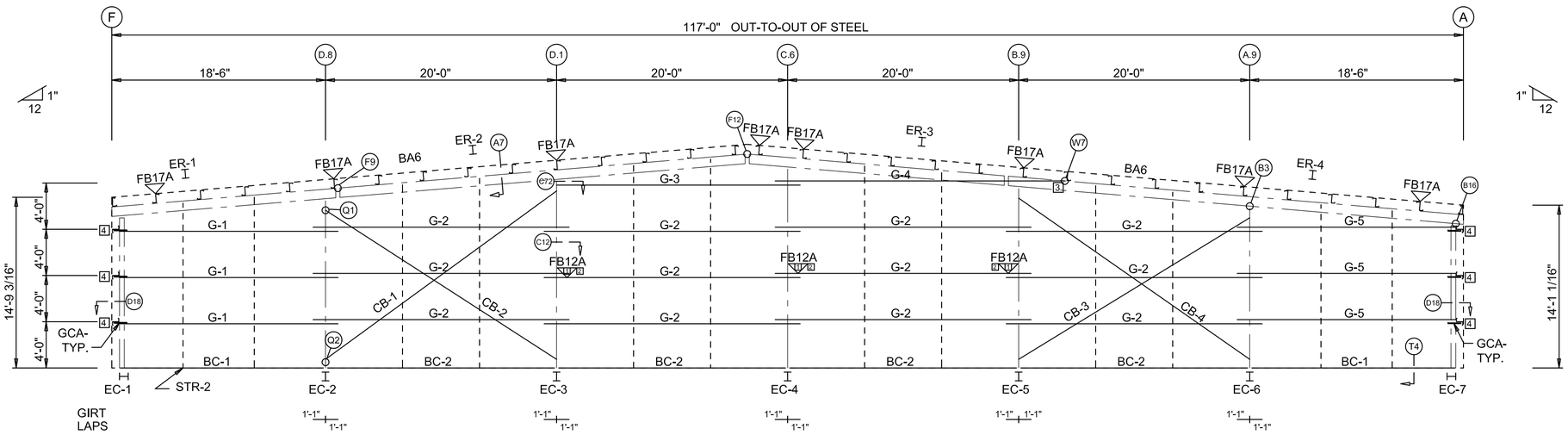
BOLT TABLE FRAME LINE 5				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	3/4"	2 3/4"
ER-2/ER-3	4	A325	3/4"	2 3/4"
ER-3/ER-4	8	A325	3/4"	2 3/4"
Columns/Raf	4	A325	5/8"	2 1/4"

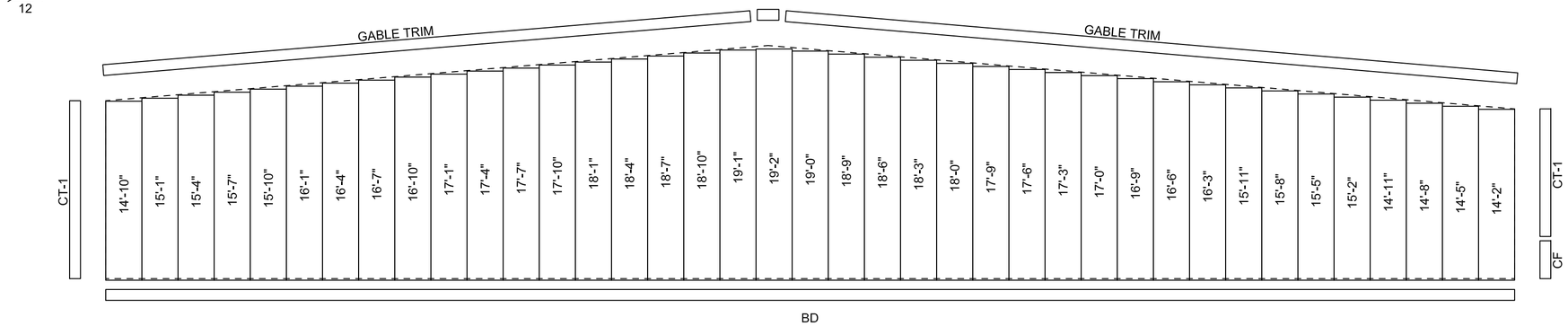
FLANGE BRACE TABLE FRAME LINE 5		
▽ID	MARK	LENGTH
1	FB17A	1'-5"
2	FB12A	1'-0"

CONNECTION PLATES FRAME LINE 5	
□ID	MARK/PART
1	FBP-8S
2	FBP-1
3	AL-8
4	PL-8G

MEMBER TABLE FRAME LINE 5	
MARK	PART
EC-1	W8X10
EC-2	W8X10
EC-3	W8X10
EC-4	W8X10
EC-5	W8X10
EC-6	W8X10
EC-7	W8X10
ER-1	W10X12
ER-2	W10X12
ER-3	W10X12
ER-4	W10X12
G-1	8Z16
G-2	8Z16
G-3	8Z16
G-4	8Z16
G-5	8Z16
BC-1	8C16
BC-2	8C16
CB-1	3/8 Cab
CB-2	3/8 Cab
CB-3	5/16 Cab
CB-4	5/16 Cab



ENDWALL FRAMING: FRAME LINE 5



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Ga. PBR - Ashland Grey

REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Endwall Framing
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
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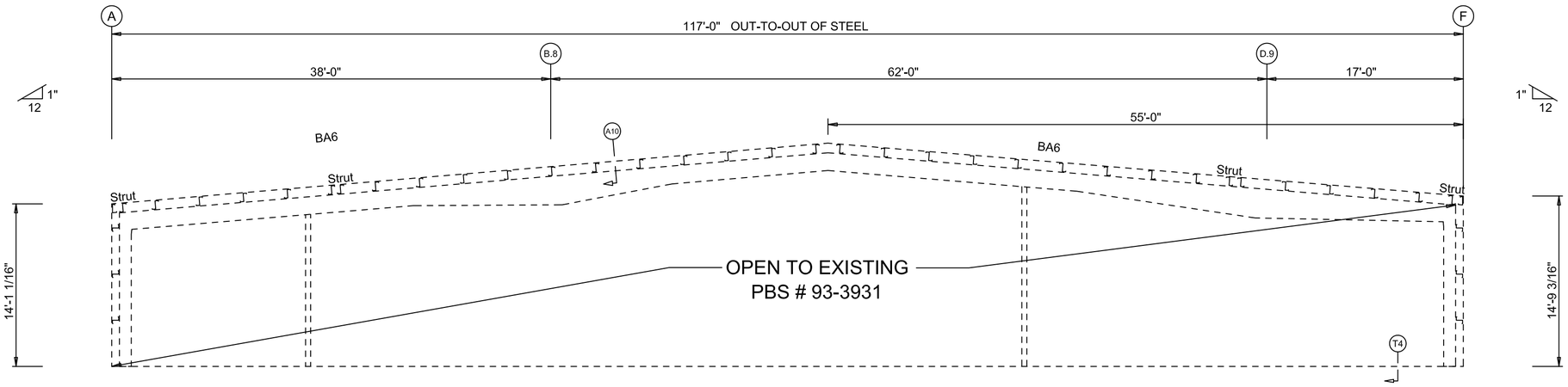
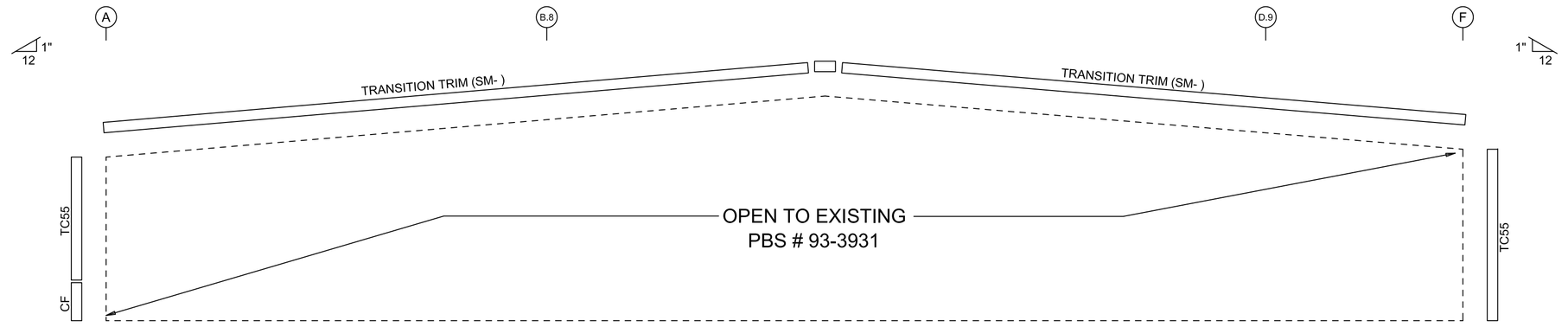


ENDWALL FRAMING: FRAME LINE 2



ENDWALL SHEETING & TRIM: FRAME LINE 2

REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
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PROJ: Building Expansion
Newberg, OR 97132
TITLE: Endwall Framing
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
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PAGE: E5 OF E7
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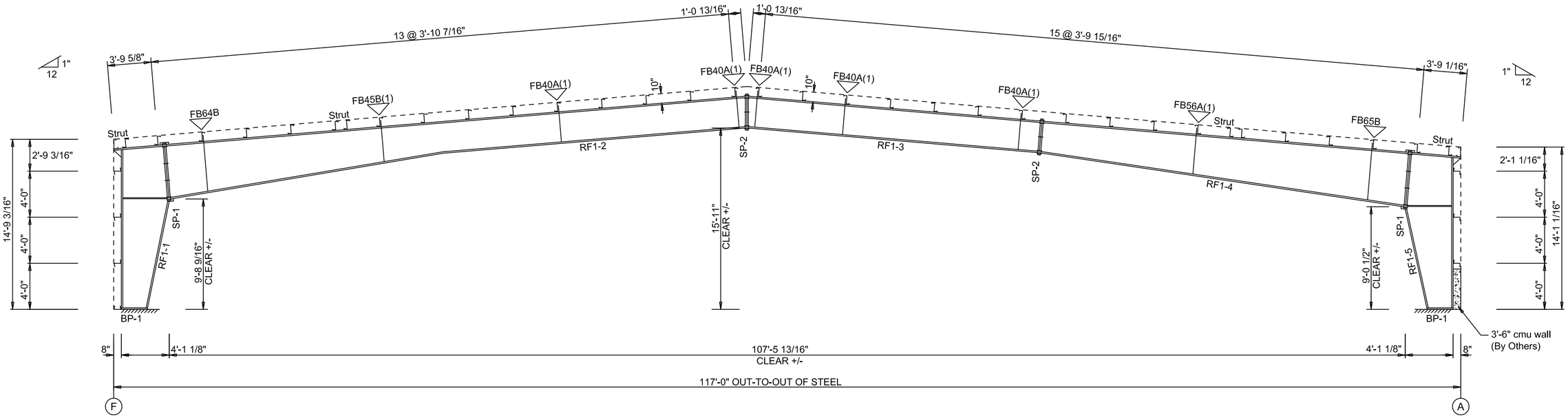
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	4	A325	1 1/8	3 1/2"	10"	1"	5'-3 3/4"
SP-2	4	4	2	A325	3/4"	2 3/4"	10"	1/2"	3'-1 3/4"

BASE PLATE TABLE			
Col Mark	Plate Size Width	Thick	Length
BP-1	10"	1/2"	2'-2"

FLANGE BRACES: Both Sides(U.N.)
FBxxB(1): xx=length(in)
B - L3X3X316
A - L2X2X1/8

MEMBER TABLE					
Mark	Web Depth Start/End	Web Plate Thick	Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	24.0/31.8	0.375	36.0	10 x 1/2" x 166.8	10 x 5/8" x 113.6
	31.8/48.0	0.375	134.4	10 x 1/2" x 51.3	
RF1-2	54.0/42.0	0.250	144.0	10 x 1/2" x 240.0	10 x 3/4" x 240.0
	42.0/30.0	0.250	144.0	10 x 1/2" x 240.0	10 x 3/4" x 48.9
	30.0/30.0	0.188	36.0	10 x 1/2" x 128.0	10 x 1/2" x 240.0
	30.0/30.0	0.188	140.1		10 x 1/2" x 77.5
	30.0/30.0	0.188	144.0		
RF1-3	30.0/30.0	0.188	144.0	10 x 5/8" x 67.5	10 x 1/2" x 65.0
	30.0/30.0	0.188	127.5	10 x 5/8" x 240.0	10 x 1/2" x 240.0
	30.0/30.0	0.188	36.0		
RF1-4	30.0/39.0	0.250	144.0	10 x 1/2" x 144.0	10 x 1/2" x 228.4
	39.0/48.0	0.250	144.0	10 x 1/2" x 240.0	10 x 3/4" x 156.3
	48.0/54.0	0.250	96.0		
RF1-5	48.0/32.4	0.375	126.4	10 x 1/2" x 51.2	10 x 5/8" x 105.8
	32.4/24.0	0.375	36.0	10 x 1/2" x 158.7	



RIGID FRAME ELEVATION: FRAME LINE 4 3

REGISTERED PROFESSIONAL ENGINEER
74932PE
OREGON
JULY 13, 2004
KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Rigid Frame Elevation
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

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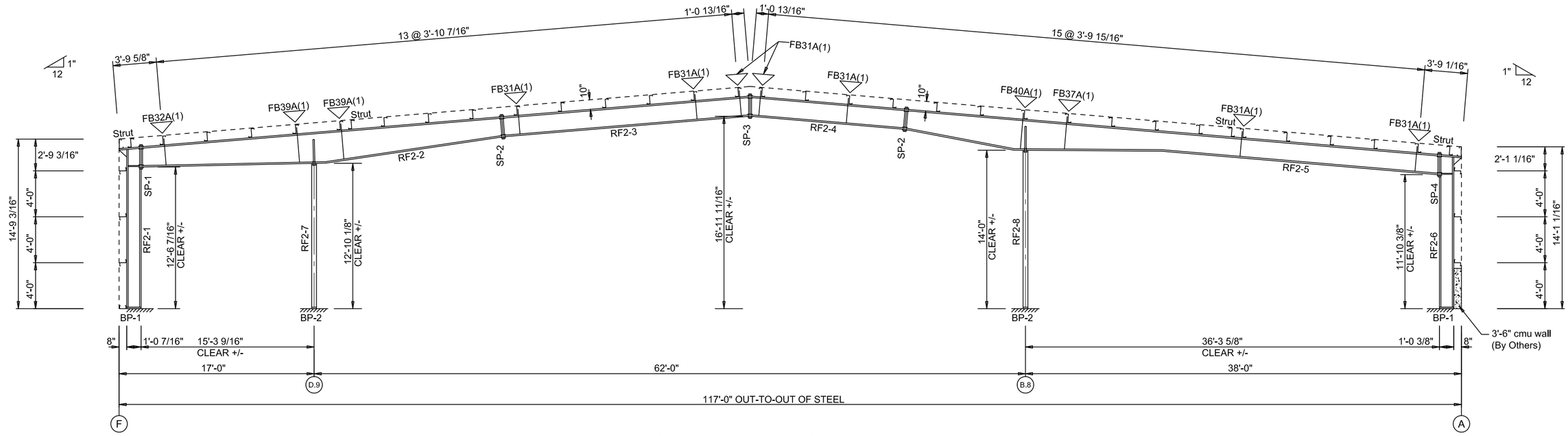
PAGE: E6 OF E7
JOB ID: 22-8706

SPLICE PLATE & BOLT TABLE										CAP PLATE BOLTS				
Mark	Qty Top	Bot	Int	Type	Dia	Length	Width	Thick	Length	Mark	Qty	Type	Dia	Length
SP-1	4	4	0	A325	3/4"	2 3/4"	6"	3/4"	2'-2 3/4"	RF2-7	4	A325	5/8"	2 1/4"
SP-2	4	4	0	A325	3/4"	2 3/4"	6"	3/8"	2'-1 1/2"	RF2-8	4	A325	5/8"	2 1/4"
SP-3	4	4	0	A325	3/4"	2 3/4"	6"	1/2"	2'-1 1/2"					
SP-4	4	4	0	A325	3/4"	2 3/4"	6"	1/2"	2'-2 3/4"					

BASE PLATE TABLE			
Col Mark	Plate Size Width	Thick	Length
BP-1	6"	1/2"	1'-1"
BP-2	6"	1/2"	8 1/2"

▽FLANGE BRACES: Both Sides(U.N.)
FBxxA(1): xx=length(in)
A - L2X2X1/8

MEMBER TABLE					
Mark	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF2-1	12.0/12.0	0.188	36.0	6 x 3/16" x 167.1	6 x 1/4" x 145.1
	12.0/12.0	0.188	132.1	6 x 3/16" x 19.9	
RF2-2	18.0/21.1	0.135	50.0	6 x 3/16" x 38.9	6 x 1/4" x 40.5
	21.1/30.0	0.135	144.0	6 x 1/2" x 240.0	6 x 1/2" x 153.8
	30.0/27.3	0.135	42.9	6 x 1/2" x 100.5	6 x 1/2" x 187.3
	27.3/18.0	0.135	144.0		
RF2-3	18.0/18.0	0.135	115.8	6 x 3/8" x 240.0	6 x 3/16" x 240.0
	18.0/18.0	0.135	144.0	6 x 3/8" x 19.8	6 x 3/16" x 18.3
RF2-4	18.0/18.0	0.135	127.3	6 x 1/4" x 163.3	6 x 3/16" x 161.8
	18.0/18.0	0.135	36.0		
RF2-5	18.0/30.0	0.135	115.0	6 x 3/8" x 41.3	6 x 3/8" x 115.6
	30.0/20.8	0.135	118.3	6 x 3/8" x 240.0	6 x 3/8" x 154.7
	20.8/18.0	0.135	36.0	6 x 3/16" x 39.6	6 x 3/16" x 53.1
	18.0/18.0	0.135	144.0	6 x 3/16" x 240.0	6 x 3/16" x 240.0
	18.0/18.0	0.135	113.1		
	18.0/18.0	0.135	36.0		
RF2-6	12.0/12.0	0.188	124.1	6 x 3/16" x 19.9	6 x 3/16" x 136.9
	12.0/12.0	0.188	36.0	6 x 3/16" x 159.0	
RF2-7	W8X18				
RF2-8	W8X18				



RIGID FRAME ELEVATION: FRAME LINE 2

REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Rigid Frame Elevation
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
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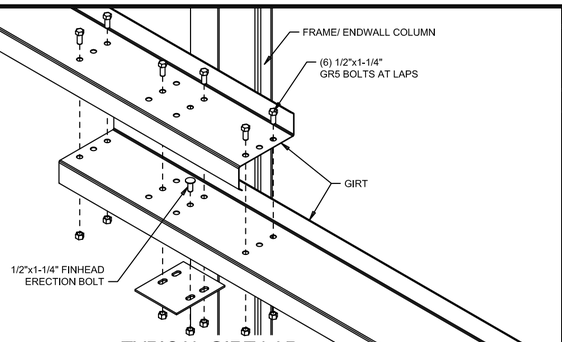
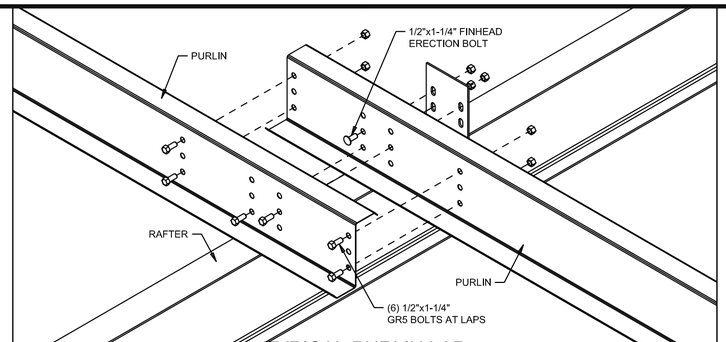
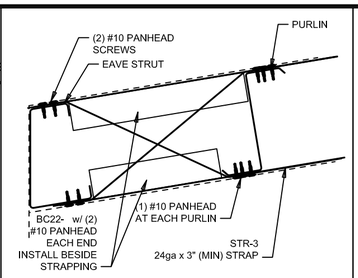


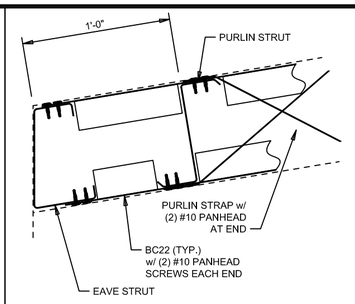
TYPICAL GIRT LAP



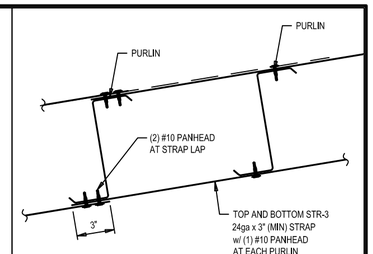
TYPICAL PURLIN LAP



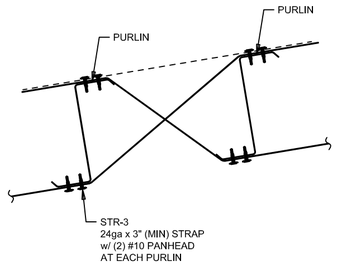
ROOF STRAP BRACE DETAIL
(AT EAVE)



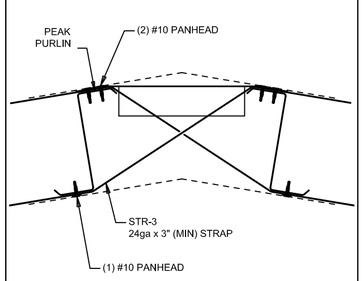
ROOF STRAP BRACE DETAIL
(AT EAVE WITH STRUT)



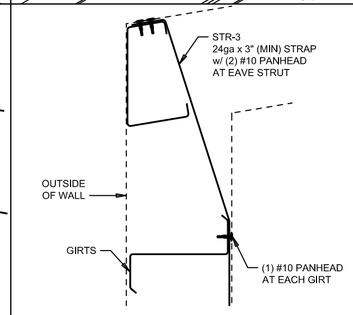
ROOF SAG STRAP DETAIL
(AT MID-SPAN)



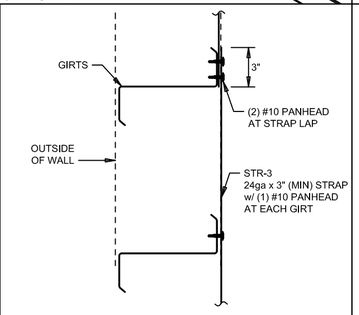
ROOF STRAP BRACE DETAIL
(AT MID-SPAN)



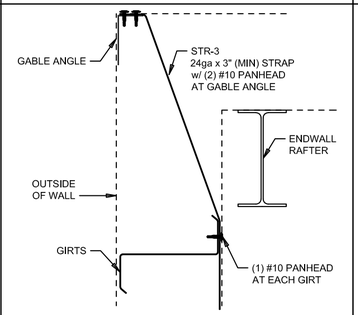
ROOF STRAP BRACE DETAIL
(AT PEAK)



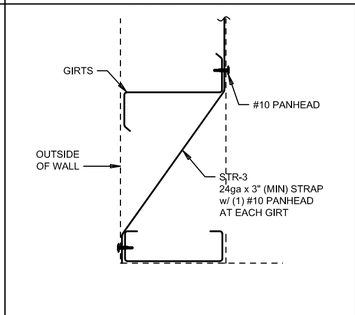
WALL SAG ANGLE DETAIL
(AT BUILDING EAVE)



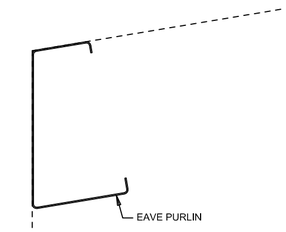
WALL STRAP DETAIL
(AT STRAP LAP)



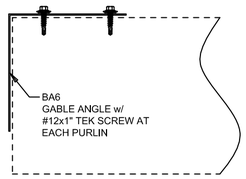
WALL STRAP DETAIL
(AT BY-PASS RAFTER)



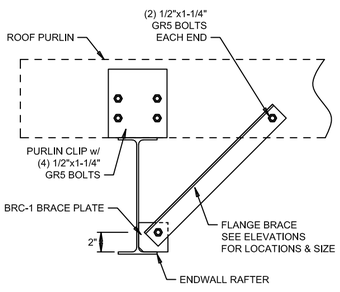
WALL STRAP DETAIL
(AT BASE CHANNEL)



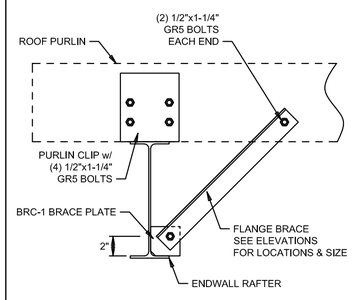
BUILDING EAVE



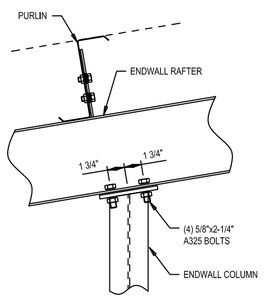
AT BLDG GABLE



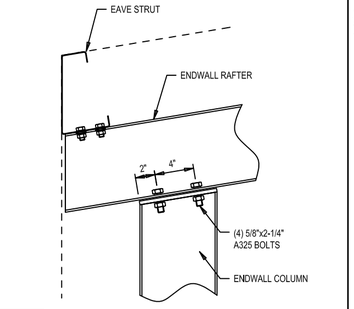
A7 PURLIN TO ENDWALL RAFTER



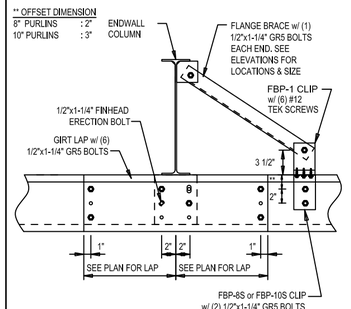
A10 PURLIN TO ENDWALL RAFTER



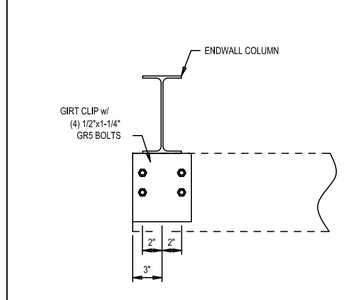
B3 ENDWALL COLUMN TO RAFTER



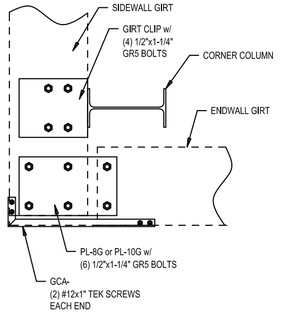
B16 CORNER COLUMN TO RAFTER



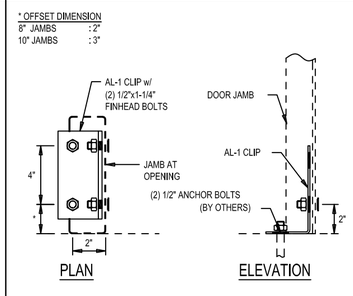
C12 LAPPED BY -PASS GIRT



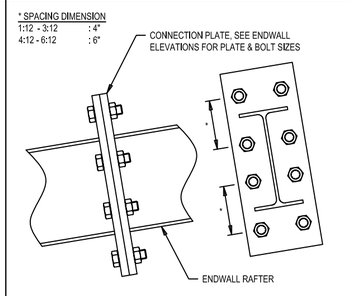
C72 BY-PASS GIRT AT OPEN WALL



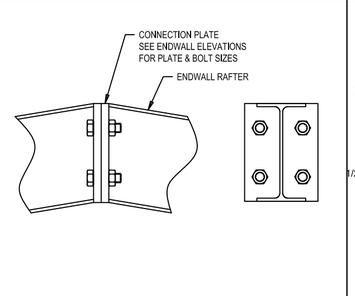
D18 CORNER BYPASS GIRTS



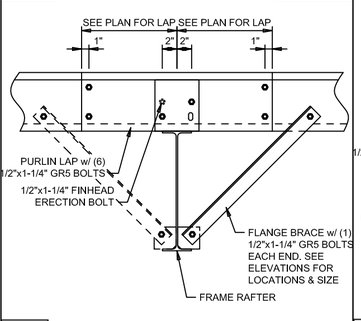
E6 BASE PLATE AT DOOR JAMB



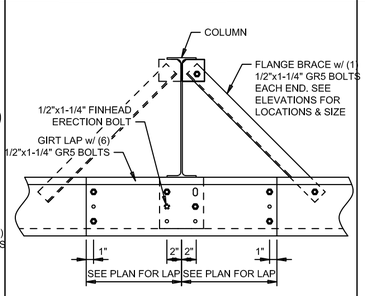
F9 RAFTER CONNECTION AT SPLICE



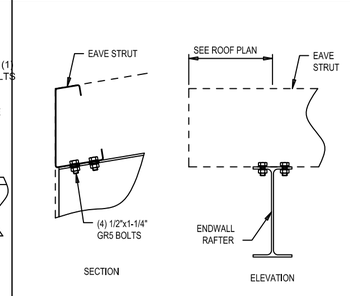
F12 RAFTER CONNECTION AT PEAK



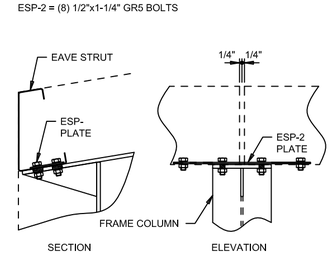
G2 LAP PURLIN TO RAFTER



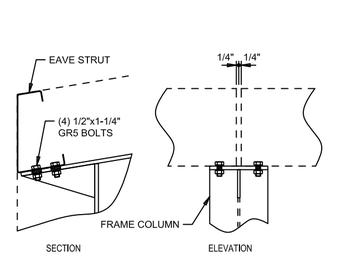
H2 LAP GIRT TO COLUMN



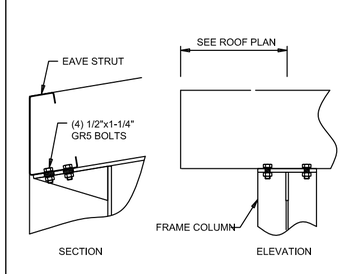
I8 EAVE STRUT TO EW RAFTER



J4 EAVE STRUT TO FRAME



J16 EAVE STRUT TO FRAME



J24 EAVE STRUT TO EW FRAME

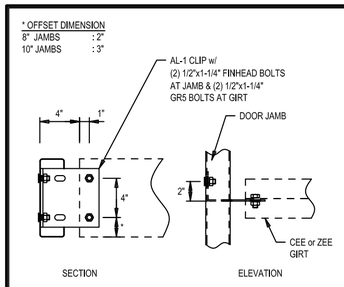
REGISTERED PROFESSIONAL ENGINEER 74932PE OREGON JULY 13, 2004 KAILONG LUO
EXPIRATION DATE: 12/31/22
5/13/2022

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

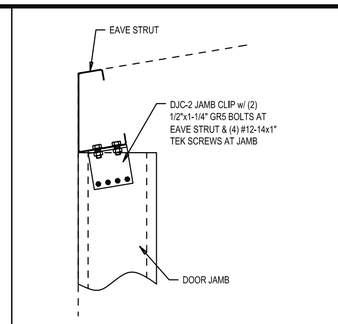
PROJ: Building Expansion
Newberg, OR 97132
TITLE: Detail Drawings
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY, WOODBURN, OREGON 97071 PHONE 503 / 981-9581

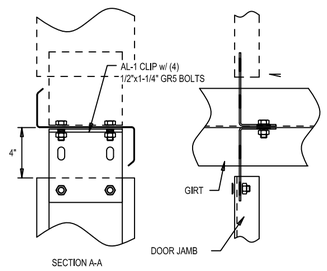
DATE: 5/ 5/22
DWG BY: NM
CHECKED BY:
PAGE: D1 OF D2
JOB ID: 22-8706



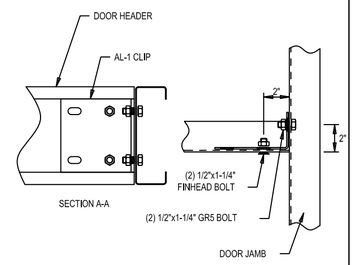
K2 WALL GIRT TO DOOR JAMB



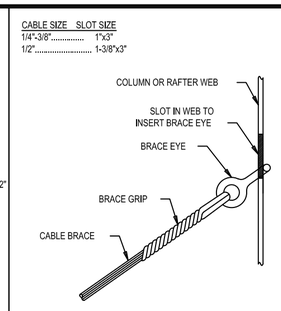
L1 DOOR JAMB TO EAVE STRUT



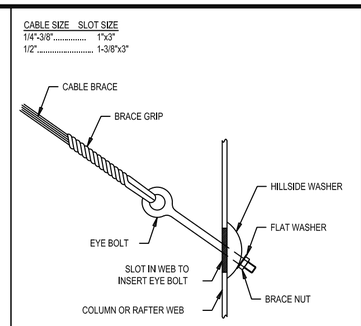
L6 DOOR JAMB TO GIRT



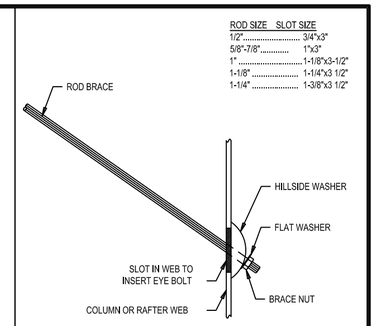
M1 DOOR HEADER TO DOOR JAMB



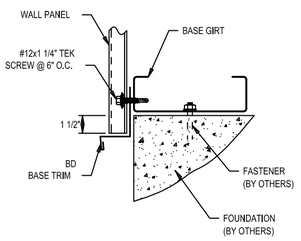
Q1 DIAGONAL CABLE, BRACE EYE END



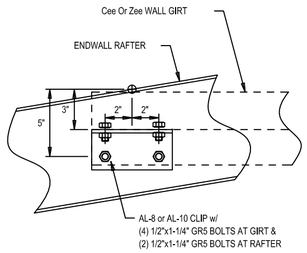
Q2 DIAGONAL CABLE, EYEBOLT END



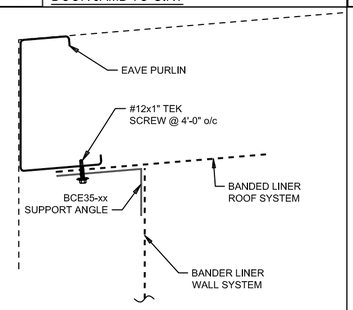
Q3 DIAGONAL ROD BRACE



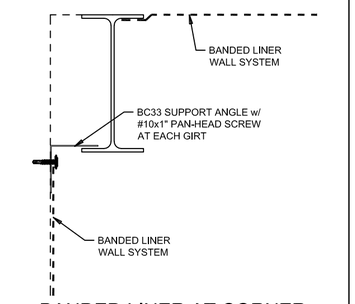
T4 BASE TRIM DETAIL



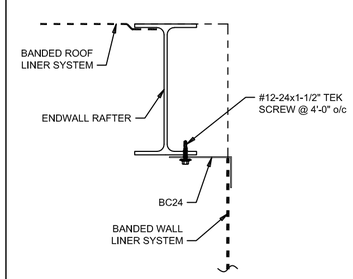
W7 ENDWALL GIRT TO RAFTER



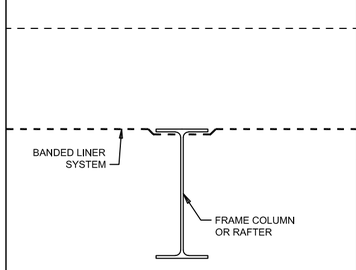
BANDED LINER AT EAVE
(1:12 - 4:12 8" GIRTS)



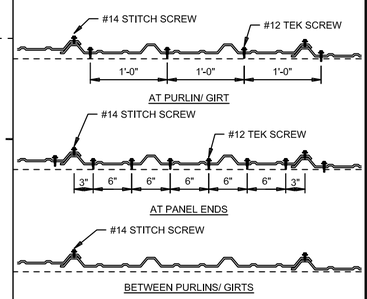
BANDED LINER AT CORNER
(BY-PASS GIRTS)



BANDED LINER AT ENDWALL RAFTER
(BY-PASS ENDWALL)

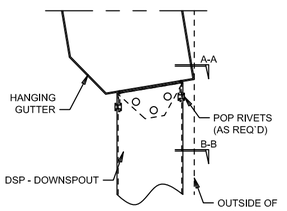


BANDED LINER AT FRAME
(BY-PASS SIDEWALL)

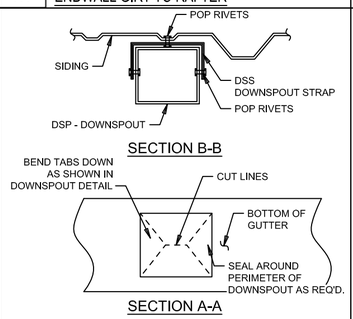


PBR PANEL SCREWS

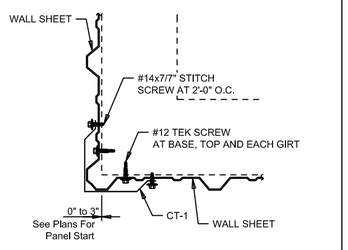
HOLD DOWNSPOUT TO GUTTER AT DESIRED LOCATION
SCRIBE LINE AROUND OUTSIDE PERIMETER OF DOWNSPOUT
ON BOTTOM OF GUTTER. CUT ALONG LINES SHOWN IN
SECTION A-A.



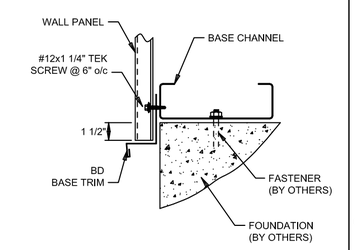
3" PANEL GUTTER



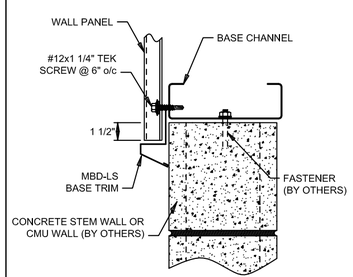
DOWNSPOUT SECTIONS



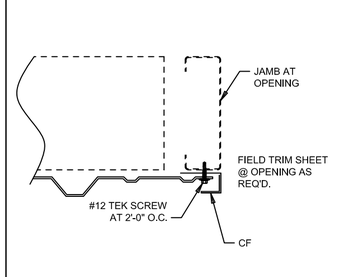
CORNER TRIM DETAIL



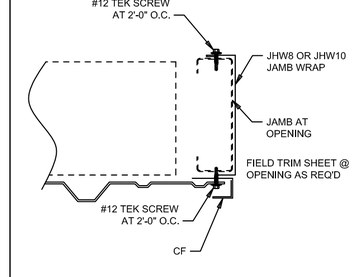
BASE TRIM DETAIL



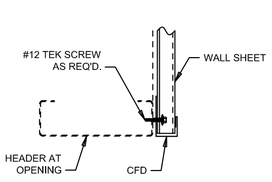
BASE TRIM DETAIL



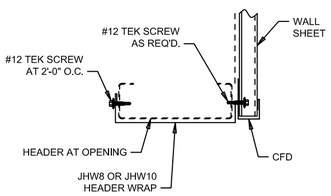
JAMB TRIM DETAIL



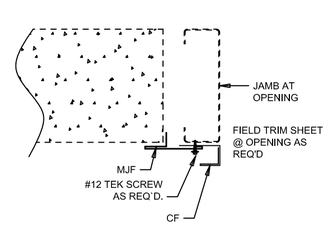
JAMB TRIM DETAIL
(WITH JAMB WRAPS)



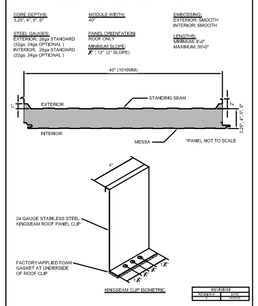
HEADER TRIM DETAIL

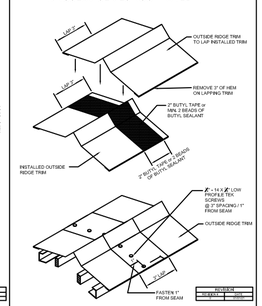


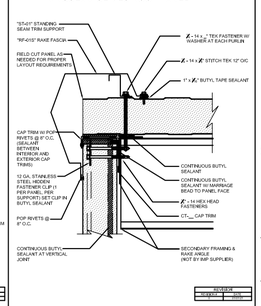
HEADER TRIM DETAIL
(WITH HEADER WRAPS)

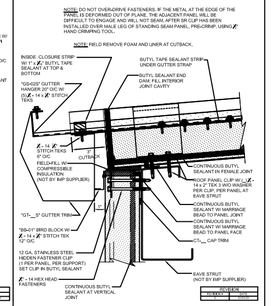


MASONRY JAMB TRIM DETAIL









HEADER TRIM DETAIL

MASONRY JAMB TRIM DETAIL

REVISION		DATE
A	Issued For Permits Only	5/10/22 NM

PROJ: Building Expansion
Newberg, OR 97132
TITLE: Detail Drawings
DEALER: Elbert Rentals

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N. PACIFIC HWY. WOODBURN, OREGON 97071 PHONE 503 / 981-9581

DATE: 5/ 5/22
DWG BY: NM
CHECKED BY:
PAGE: D2 OF D2
JOB ID: 22-8706

PACIFIC BUILDING SYSTEMS
MANUFACTURED BY TRUSS-T STRUCTURES, INC.
2100 N PACIFIC HWY.
WOODBURN, OREGON 97071
PHONE: 503-981-9581

IAS Inc. Fabricator Inspection Program FA-405
(See Web at www.iasonline.org)

CUSTOMER
Elbert Rentals
518 South Springbrook Road
Newberg, OR 97132

PROJECT
Building Expansion
518 S Springbrook Rd
Newberg, OR 97132

Job No. 22-8706

BUILDING DATA

Width	=	117'-0"	Seismic Design Category	=	D
Length	=	90'-0"	Seismic Importance Factor	=	1.00
Eave Height	=	14'-9 3/16" / 14'-1	Mapped Spectral Response Accelerations		
Roof Slope	=	1.0:12 / 1.0181:12	Ss = 0.849	Sms =	1.019
Dead Load	=	4.50 psf	S1 = 0.409	Sm1 =	0.773
Live Load	=	20.00 psf	Spectral Response Coefficients		
Collateral Load	=	7.00 psf	Sds = 0.679		
Wind Speed (mph)	=	97 mph	Sd1 = 0.516		
Wind Code	=	OSSC19 (IBC 18)	Ground Snow Load	=	7.00 psf
Closed / Open	=	Closed	Roof Snow Load	=	25.00 psf
Exposure	=	C	Snow Importance Factor (Is)	=	1.00
Importance - Wind	=	1.00			

5/13/2022

pbs	**Customer**	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

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Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Pacific Building Systems
2100 N Pacific Hwy
Woodburn, OR 97071

STRUCTURAL DESIGN CALCULATIONS
FOR
Elbert Rentals
518 South Springbrook Road
Newberg, OR 97132

Building Expansion
518 S Springbrook Rd
Newberg, OR 97132
22-8706

BUILDING LAYOUT

Width	(ft)=	117.0
Length	(ft)=	90.0
Eave Height	(ft)=	14.8/ 14.1
Roof Slope (rise/12)	=	1.00/ 1.02

BUILDING LOADS

Roof Dead Load (psf)	=	4.5
Wall Dead Load		
Left Endwall (psf)	=	5.0
Right Endwall (psf)	=	5.0
Front Sidewall (psf)	=	5.0
Back Sidewall (psf)	=	5.0
Live Load (psf)	=	20.0
Collateral Load (psf)	=	7.0
Snow Load (psf)	=	25.0
Wind Speed (mph)	=	97.0
Wind Code	=	OSSC 19 (IBC 18)
Closed/Open	=	C
Exposure	=	C
Internal Wind Coeff	=	-0.18, +0.18
Importance - Wind	=	1.00
Importance - Seismic	=	1.00
Seismic Design Category	=	D
Seismic Coeff (Fa*Ss)	=	1.02

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Designer : AC
Detailer : CB

5/ 3/22

==========
22-8706 Design Loads For Building Components: 5/ 3/22 10:30am
==========

FRONT SIDEWALL:

BASIC LOADS:

Basic Wind	Wind_Load_Ratio Deflect	Factor
17.3	0.48	0.60

EDGE ZONE:

--Left_Zone-- Width	Base	--Right_Zone- Width	Base	-----Wind_Ratio---- Girt	Panel	Jamb/ Column
5.63	0.00	5.63	0.00	1.07	1.00	1.07

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	Wind Long	
16.0	-16.7		.. Girt/Header
18.7	-20.2		.. Panel
16.0	-16.7		.. Jamb
0.0	0.0		.. Parapet

BACK SIDEWALL:

BASIC LOADS:

Basic Wind	Wind_Load_Ratio Deflect	Factor
17.3	0.48	0.60

EDGE ZONE:

--Left_Zone-- Width	Base	--Right_Zone- Width	Base	-----Wind_Ratio---- Girt	Panel	Jamb/ Column
5.63	0.00	5.63	0.00	1.07	1.00	1.07

WIND PRESSURE/SUCTION:

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Wind Press	Wind Suct	Wind Long	
16.0	-16.7		.. Girt/Header
18.7	-20.2		.. Panel
16.0	-16.7		.. Jamb
0.0	0.0		.. Parapet

LEFT ENDWALL:

BASIC LOADS:

Dead Load	Coll Load	Live Load	Snow Load	Rain Load	Basic Wind	Wind_Load_Ratio Deflect	Factor
4.5	7.0	20.0	25.0	0.0	17.3	0.48	0.60

EDGE ZONE:

--Left_Zone-- Width	Base	--Right_Zone- Width	Base	-----Wind_Ratio---- Girt	Panel	Jamb/ Column
5.63	0.00	5.63	0.00	1.07	1.00	1.07

BASIC LOADS AT EAVE:

Seis Dead	Seis Girt	Seis Load	---Torsion--- Wind	Seismic
5.00	0.27	8.31	0.00	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	
16.0	-16.7	.. Column
16.0	-16.7	.. Girt/Header
16.0	-16.7	.. Jamb
18.7	-20.2	.. Panel
39.8	-25.5	.. Parapet
25.9	-17.3	.. Transverse bracing, Facia/Parapet

WIND COEFFICIENTS:

Surf Id	---Wind_1-- Left	Right	---Wind_2-- Left	Right	-Long_Wind- 1	2	Surface Friction
1	0.57	-1.00	1.16	-0.35	-0.65	-0.65	0.00
2	-1.11	-0.65	-0.75	-0.29	-1.11	-0.65	0.00
3	-0.65	-1.11	-0.29	-0.75	-0.65	-1.11	0.00
4	-0.91	0.63	-0.32	1.27	-0.65	-0.65	0.00

COLUMN, RAFTER & BRACING DESIGN LOADS:

Load No.	Id	Dead	---Live--- Coll	Roof	Floor	--Add_Snow- Snow	Drift	Slide	Rain	Wind_1 Left	Right	Wind_2 Left	Right	Long_Wind 1	2	Column_Wind Press	Suct	Long Seis	Tran Seis	Aux_Load Id	Coef
99	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

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	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

0.00 0.00 0.00 0.00 0 0.00
4 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
5 1.00 1.00 0.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
6 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
7 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
8 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
9 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
10 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.60 0.00 0.00 0.00 0 0.00
11 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.60 0.00 0.00 0.00 0 0.00
12 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.60 0.00 0.00 0 0.00
13 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.60 0.00 0.00 0 0.00
14 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0 0.00
15 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0 0.00
16 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0 0.00
17 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.60 0.00 0.00 0 0.00
18 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
19 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
20 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.45 0.00 0.00 0 0.00
21 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.45 0.00 0.00 0 0.00
22 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
23 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
24 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.45 0.00 0.00 0 0.00
25 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.45 0.00 0.00 0 0.00
26 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
27 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.45 0.00 0.00 0 0.00
28 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.45 0.00 0.00 0 0.00
29 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.45 0.00 0.00 0 0.00
30 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.45 0.00 0.00 0.00

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	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

0.00 0.45 0.00 0.00 0 0.00
31 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.45 0.00 0.00 0 0.00
32 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.45 0.00 0.00 0 0.00
33 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45
0.00 0.45 0.00 0.00 0 0.00
34 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00
0.60 0.00 0.00 0.00 0 0.00
35 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60
0.60 0.00 0.00 0.00 0 0.00
36 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00
0.00 0.60 0.00 0.00 0 0.00
37 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60
0.00 0.60 0.00 0.00 0 0.00
38 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00
0.00 0.60 0.00 0.00 0 0.00
39 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00
0.00 0.60 0.00 0.00 0 0.00
40 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00
0.00 0.60 0.00 0.00 0 0.00
41 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00
0.00 0.60 0.00 0.00 0 0.00
42 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.70 0 0.00
43 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.70 0 0.00
44 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.53 0 0.00
45 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.53 0 0.00
46 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.53 0 0.00
47 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.53 0 0.00
48 0.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.70 0 0.00
49 0.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.70 0 0.00
50 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 1 1.00
51 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 1 0.75
52 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00
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53 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.45 0.00 0.00 1 0.75
54 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.45 0.00 0.00 1 0.75
55 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.45 0.00 0.00 1 0.75
56 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.52 0.00 1 0.75
57 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

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	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

0.00 0.00 -0.52 0.00 1 0.75
58 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.52 1 0.75
59 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.52 1 0.75
60 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 2 1.00
61 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 2 0.75
62 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.45 0.00 0.00 2 0.75
63 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00
0.00 0.45 0.00 0.00 2 0.75
64 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00
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65 1.00 1.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.45 0.00 0.00 2 0.75
66 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
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67 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 -0.52 0.00 2 0.75
68 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
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69 1.07 1.07 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.52 2 0.75
70 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
71 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
72 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
73 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
74 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
75 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00
0.00 0.00 0.00 0.00 0 0.00
76 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
77 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
78 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
79 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
80 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
81 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.00 0.00 0.00 0 0.00
82 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
83 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
84 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.45 0.00 0.00 0.00 0.00 0.00 0.00

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	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

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0.00  0.00  0.00  0.00  0  0.00
    85  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.45 0.00  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    86  1.00 1.00 0.00  0.00 0.75  0.75  0.00 0.00  0.00  0.45 0.00  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    87  1.00 1.00 0.00  0.00 0.75  0.00  0.75 0.00  0.00  0.45 0.00  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    88  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.45  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    89  1.00 1.00 0.00  0.00 0.75  0.75  0.00 0.00  0.00  0.00 0.45  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    90  1.00 1.00 0.00  0.00 0.75  0.00  0.75 0.00  0.00  0.00 0.45  0.00 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    91  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.00  0.45 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    92  1.00 1.00 0.00  0.00 0.75  0.75  0.00 0.00  0.00  0.00 0.00  0.45 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    93  1.00 1.00 0.00  0.00 0.75  0.00  0.75 0.00  0.00  0.00 0.00  0.45 0.00 0.00
0.00  0.00  0.00  0.00  0  0.00
    94  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.45 0.00
0.00  0.00  0.00  0.00  0  0.00
    95  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.45
0.00  0.00  0.00  0.00  0  0.00
    96  1.00 1.00 0.00  0.00 0.75  0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.45 0.00
0.00  0.00  0.00  0.00  0  0.00
    97  1.00 1.00 0.00  0.00 0.75  0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.45
0.00  0.00  0.00  0.00  0  0.00
    98  1.00 1.00 0.00  0.00 0.75  0.00  0.75 0.00  0.00  0.00 0.00  0.00 0.45 0.00
0.00  0.00  0.00  0.00  0  0.00
    99  1.00 1.00 0.00  0.00 0.75  0.00  0.75 0.00  0.00  0.00 0.00  0.00 0.00 0.45
0.00  0.00  0.00  0.00  0  0.00
```

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Add_Load Coeff
2	1	E1UNB_SL_L	3	1	0.30
				2	1.00
				3	0.34
	2	E1UNB_SL_R	3	2	0.30
				1	1.00
				4	0.32

ADDITIONAL LOADS:

No. Add	Add Id	Loc Id	Basic Load	Load Type	Fx W1	Fy W2	Mom Co	X Dl1	Y Dl2	.. Conc .. Dist
4	1	3	U_SNOW	D	-0.38	-0.38	-0.09	0.00	62.22	
	2	2	U_SNOW	D	-0.38	-0.38	0.08	0.00	55.19	
	3	2	U_SNOW	D	-0.38	-0.38	0.08	37.13	55.19	
	4	3	U_SNOW	D	-0.38	-0.38	-0.09	0.00	16.65	

STEPPED LOAD COEFFICIENTS:

No.	Basic Load	Location Use	Id	No. Step	Locate	Coef	Locate	Coef	Locate	Coef
	WINDL1	-	2	2	36.91	1.00	55.19	0.59		

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

WINDR1	-	3	2	27.00	0.59	62.22	1.00
WINDL2	-	2	2	36.91	1.00	55.19	0.39
WINDR2	-	3	2	27.00	0.39	62.22	1.00

RIGHT ENDWALL:

BASIC LOADS:

Dead Load	Coll Load	Live Load	Snow Load	Rain Load	Basic Wind	Wind_Load_Ratio Deflect	Factor
0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.60

EDGE ZONE:

--Left_Zone-- Width	Base	--Right_Zone- Width	Base	-----Wind_Ratio---- Girt	Panel	Jamb/ Column
5.63	0.00	5.63	0.00	1.07	1.00	1.07

BASIC LOADS AT EAVE:

Seis Dead	Seis Girt	Seis Load	---Torsion--- Wind	Seismic
5.00	0.27	0.00	0.00	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	
0.0	0.0	.. Column
0.0	0.0	.. Girt/Header
0.0	0.0	.. Jamb
0.0	0.0	.. Panel
0.0	0.0	.. Parapet
25.9	-17.3	.. Transverse bracing, Facia/Parapet

WIND COEFFICIENTS:

Surf Id	---Wind_1-- Left	Right	---Wind_2-- Left	Right	-Long_Wind- 1	2	Surface Friction
1	0.63	-0.91	1.27	-0.32	-0.65	-0.65	0.00
2	-1.11	-0.65	-0.75	-0.29	-1.11	-0.65	0.00
3	-0.65	-1.11	-0.29	-0.75	-0.65	-1.11	0.00
4	-1.00	0.57	-0.35	1.16	-0.65	-0.65	0.00

COLUMN, RAFTER & BRACING DESIGN LOADS:

Load No.	Id	---Live--- Dead	Coll	Roof	Floor	--Add_Snow- Snow	Drift	Slide	Rain	Wind_1 Left	Right	Wind_2 Left	Right	Long_Wind 1	2	Column_Wind Press	Suct	Long Seis	Tran Seis	Aux_Load Id	Coef
109	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

5 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
6 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
7 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
8 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
9 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
11 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
13 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
14 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
16 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
21 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
25 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
27 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
28 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
30 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00
31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0 0.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

32 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
33 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
34 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
35 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
36 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
37 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
39 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
40 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
41 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
42 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
43 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
46 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
47 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
48 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
49 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 1.00
51 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
53 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
55 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
56 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
57 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
58 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

59 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 1.00
61 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
63 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
64 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
65 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
66 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
67 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
68 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
69 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.75
70 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
71 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
72 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
73 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
74 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
76 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
77 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
78 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
79 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
80 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
81 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
82 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
83 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
84 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
85 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0.00 0 0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

86	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
87	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
88	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
89	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
90	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0	0.00
91	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
92	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
93	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
94	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
95	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
96	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
97	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
98	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
99	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
100	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
101	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
102	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
103	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
104	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0	0.00
105	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
106	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0	0.00
107	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
108	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0	0.00
109	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coeff
2	1	E2UNB_SL_L	3	1	0.30
				2	1.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

			3	0.32
2	E2UNB_SL_R	3	2	0.30
			1	1.00
			4	0.34

ADDITIONAL LOADS:

No. Add	Add Id	Loc Id	Basic Load	Load Type	Fx W1	Fy W2	Mom Co	X Dl1	Y Dl2	.. Conc .. Dist
4	1	3	U_SNOW	D	-0.38	-0.38	-0.08	0.00	55.19	
	2	2	U_SNOW	D	-0.38	-0.38	0.09	0.00	62.22	
	3	2	U_SNOW	D	-0.38	-0.38	0.09	45.58	62.22	
	4	3	U_SNOW	D	-0.38	-0.38	-0.08	0.00	18.06	

STEPPED LOAD COEFFICIENTS:

No.	Basic Load	Location Use	No. Id	No. Step	Locate	Coef	Locate	Coef	Locate	Coef
	WINDL1	-	2	2	35.22	1.00	62.22	0.59		
	WINDR1	-	3	2	18.28	0.59	55.19	1.00		
	WINDL2	-	2	2	35.22	1.00	62.22	0.39		
	WINDR2	-	3	2	18.28	0.39	55.19	1.00		

ROOFDES:

BASIC LOADS:

Dead Load	Coll Load	Live Load	Snow Load	Rain Load	Basic Wind	Wind_Load_Ratio Deflect	Surface Factor	Friction	Seis Factor	% Snow
4.5	7.0	20.0	25.0	0.0	17.3	0.48	0.00	0.00	1.000	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	Wind Suct_Roof	
16.0	-16.1		.. Purlins
16.0	-18.7		.. Panels
8.4	-6.1	-11.9	.. Long Bracing, Building
12.8	-9.1		.. Long Bracing, Wall Edge Zone
25.9	-17.3	13.8	.. Long Bracing, Facia/Parapet

EDGE & CORNER ZONE WIND:

Wind Surf Id	No. Zone Id	Zone	Width	Length	--Purlin--- Press	Suct	---Panel--- Press	Suct
1	2	7	1	0.00	0.00	1.00	1.00	1.00	1.00
			2	8.45	8.45	1.00	1.45	1.00	1.74
			7	2.82	8.45	1.00	2.15	1.00	3.13
			8	2.82	8.45	1.00	2.15	1.00	3.13
			11	5.64	2.82	1.00	2.15	1.00	3.13
			12	5.64	2.82	1.00	2.15	1.00	3.13
			15	8.45	8.45	1.00	1.93	1.00	2.30
	3	7	1	0.00	0.00	1.00	1.00	1.00	1.00
			2	8.45	8.45	1.00	1.45	1.00	1.74
			9	2.82	8.45	1.00	2.15	1.00	3.13
			10	2.82	8.45	1.00	2.15	1.00	3.13
			13	5.64	2.82	1.00	2.15	1.00	3.13
			14	5.64	2.82	1.00	2.15	1.00	3.13

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

15	8.45	8.45	1.00	1.93	1.00	2.30

EDGE & CORNER ZONE WIND: LONGITUDINAL

Wind Surf Id	No. Zone Id	Zone Id	Width	Length	Purlin Suct
1	2	1	0.00	0.00	1.00
	3	1	0.00	0.00	1.00
2	2	1	0.00	0.00	1.00
	3	1	0.00	0.00	1.00

PURLIN DESIGN LOADS:

Surf Id	--Load- No.	Id	Dead	Coll	Live	--Add_Snow- Snow	Drift	Slide	Rain	Wind Press	Wind Suct	Aux_Load Id	Coef
2	15	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		3	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0	0.00
		4	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0	0.00
		5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0	0.00
		6	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0	0.00
		7	1.00	1.00	0.00	0.75	0.75	0.00	0.00	0.45	0.00	0	0.00
		8	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.45	0.00	0	0.00
		9	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0	0.00
		10	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	3	1.00
		11	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	4	1.00
		12	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	1	1.00
		13	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	2	1.00
		14	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1	-1.00
		15	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2	-1.00
3	15	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		3	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0	0.00
		4	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0	0.00
		5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0	0.00
		6	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0	0.00
		7	1.00	1.00	0.00	0.75	0.75	0.00	0.00	0.45	0.00	0	0.00
		8	1.00	1.00	0.00	0.75	0.00	0.75	0.00	0.45	0.00	0	0.00
		9	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0	0.00
		10	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	3	1.00
		11	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	4	1.00
		12	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	1	1.00
		13	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	2	1.00
		14	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1	-1.00
		15	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2	-1.00

BRACING DESIGN LOADS:

--Load- No.	Id	Dead	Coll	Live	--Add_Snow- Snow	Drift	Slide	Rain	Wind Press	Wind Suct	Seis Load	Aux_Load Id	Coef
14	1	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00
	2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.60	0.00	0	0.00
	4	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.60	0.00	0	0.00
	6	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
	7	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

8	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
9	1.10	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
10	1.07	1.07	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
11	1.07	1.07	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
12	1.07	1.07	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.52	0	0.00
13	1.07	1.07	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.52	0	0.00
14	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coef
4	1	PAT_SL_1	1	1	0.50
	2	PAT_SL_2	1	3	0.50
	3	PAT_SL_3	2	1	0.50
				2	0.50
	4	PAT_SL_4	2	2	0.50
				3	0.50

ADDITIONAL LOADS:

No. Add	Add Id	Surf Id	Basic Load	Load Type	Fy W1	W2	Dx Dx1	Dx2	.. Conc .. Dist
3	1	0	U_SNOW	D	-25.0	-25.0	0.0	30.0	
	2	0	U_SNOW	D	-25.0	-25.0	30.0	60.0	
	3	0	U_SNOW	D	-25.0	-25.0	60.0	90.0	

RIGID FRAME - 1:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic Wind	Defl Ratio	Temperature Change
4.5	7.0	20.0	25.0	0.0	17.3	0.48	0

BASIC LOADS AT EAVE:

Seismic Load	--Torsion-- Wind	Seis	--EW_Brace- Wind	Seis
6.25	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf Id	---Wind_1-- Left	Right	---Wind_2-- Left	Right	---Wind_3-- Left	Right	---Wind_4-- Left	Right	Long_Wind 1	2	Surface Friction
1	0.37	-0.82	0.96	-0.19	0.00	0.00	0.00	0.00	-0.63	-0.63	0.00
2	-0.87	-0.55	-0.51	-0.19	0.00	0.00	0.00	0.00	-0.87	-0.55	0.00
3	-0.55	-0.87	-0.19	-0.51	0.00	0.00	0.00	0.00	-0.55	-0.87	0.00
4	-0.79	0.38	-0.18	1.02	0.00	0.00	0.00	0.00	-0.63	-0.63	0.00

*(
*
---Load_Coefficients---

*No.	Id	---Live--- Dead	Coll	Roof 1	Floor 2	-Add_Snow- Long	Tran	Drift	Slide	Rain	--Wind_1-- Lt	Rt	--Wind_2-- Lt	Rt	--Wind_3-- Lt	Rt	--Wind_4-- Lt	Rt	Long_Wind --Seismic- Aux_Load Temp	Id	Coeff
108	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00

	Customer	Elbert Rentals	Job No	22-8706
	Project	Building Expansion	Date	5/3/2022
	Location	Newberg, OR 97132	Designed By	AC
	Size	117 x 90 x 14.8 x 14.1	Checked By	

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
2 1.00 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
3 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
4 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
5 1.00 1.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
6 1.00 1.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
7 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
8 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
9 1.00 1.00 0.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
10 1.00 1.00 0.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
11 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
12 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
13 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
14 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
15 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
16 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
17 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
18 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
19 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
20 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
21 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
22 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
23 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
24 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
25 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0 0.00
26 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.60 0.00 0.00 0.00 0.00 0 0.00
27 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0 0.00
28 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

pbs	Customer	Elbert Rentals	Job No	22-8706
	Project	Building Expansion	Date	5/3/2022
	Location	Newberg, OR 97132	Designed By	AC
	Size	117 x 90 x 14.8 x 14.1	Checked By	

0.00 0.00 0.00 0.00 -0.60 0.00 0.00 0.00 0 0.00
29 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
30 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
31 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
32 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
33 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0 0.00
34 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0.00 0 0.00
35 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0 0.00
36 1.00 1.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0 0.00
37 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
38 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
39 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.45 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
40 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
41 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
42 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.45 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
43 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
44 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
45 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.45 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
46 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
47 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
48 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.45 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
49 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0 0.00
50 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0.00 0 0.00
51 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0 0.00
52 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0.00 0 0.00
53 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.45 0.00 0.00 0.00 0.00 0 0.00
54 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0.00 0 0.00
55 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
0.00  0.00  0.00  0.00  0.45  0.00  0.00  0.00   0   0.00
       56  1.00 1.00  0.00  0.00  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00 -0.45  0.00  0.00  0.00   0   0.00
       57  1.00 1.00  0.00  0.00  0.75  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.45  0.00  0.00  0.00   0   0.00
       58  1.00 1.00  0.00  0.00  0.75  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00 -0.45  0.00  0.00  0.00   0   0.00
       59  1.00 1.00  0.00  0.00  0.75  0.00  0.75  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.45  0.00  0.00  0.00   0   0.00
       60  1.00 1.00  0.00  0.00  0.75  0.00  0.75  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00 -0.45  0.00  0.00  0.00   0   0.00
       61  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.60  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   0   0.00
       62  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.60  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   0   0.00
       63  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.60  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   0   0.00
       64  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.60  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   0   0.00
       65  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.60  0.00  0.00  0.00  0.00   0   0.00
       66  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00 -0.60  0.00  0.00  0.00  0.00   0   0.00
       67  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.60  0.00  0.00  0.00   0   0.00
       68  0.60 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00 -0.60  0.00  0.00  0.00   0   0.00
       69  1.10 1.10  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.70  0.00   0   0.00
       70  1.10 1.10  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.70  0.00   0   0.00
       71  1.10 1.10  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.70  0.00  0.00   0   0.00
       72  1.10 1.10  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.70  0.00  0.00   0   0.00
       73  1.07 1.07  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.53  0.00   0   0.00
       74  1.07 1.07  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.53  0.00   0   0.00
       75  1.07 1.07  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.53  0.00   0   0.00
       76  1.07 1.07  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.53  0.00   0   0.00
       77  1.07 1.07  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.53  0.00  0.00   0   0.00
       78  1.07 1.07  0.75  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.53  0.00  0.00   0   0.00
       79  1.07 1.07  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.53  0.00  0.00   0   0.00
       80  1.07 1.07  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.53  0.00  0.00   0   0.00
       81  0.50 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.70  0.00   0   0.00
       82  0.50 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
```

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0.00	0	0.00							
	83	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0	0.00							
	84	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-0.70	0.00	0.00	0	0.00							
	85	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00							
	86	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00							
	87	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	88	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	89	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	90	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	91	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	92	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.75							
	93	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	1	0.75							
	94	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-0.52	0.00	0.00	1	0.75							
	95	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	1	0.75							
	96	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0.00	1	0.75							
	97	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00							
	98	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00							
	99	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	100	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	101	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	102	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	103	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	104	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.75							
	105	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	2	0.75							
	106	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	-0.52	0.00	0.00	2	0.75							
	107	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	2	0.75							
	108	1.07	1.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0.00	2	0.75							

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coeff
2	1	F1UNB_SL_L	3	1	0.30
				2	1.00
				3	0.34
	2	F1UNB_SL_R	3	2	0.30
				1	1.00
				4	0.32

ADDITIONAL LOADS:

No. Add	Add Id	Surf Id	Basic Type	Load Type	Fx W1	Fy W2	Mom Co	Dx Dl1	Dy Dl2	.. Conc .. Dist
4	1	3	U_SNOW	D	-0.75	-0.75	-0.085	0.00	62.22	
	2	2	U_SNOW	D	-0.75	-0.75	0.083	0.00	55.19	
	3	2	U_SNOW	D	-0.75	-0.75	0.083	37.13	55.19	
	4	3	U_SNOW	D	-0.75	-0.75	-0.085	0.00	16.65	

STEPPED LOAD COEFFICIENTS:

No.	Basic Load	Surf Id	No. Step	Locate	Coef	Locate	Coef	Locate	Coef
4	WINDL1	2	2	36.91	1.00	55.19	0.63		
	WINDR1	3	2	27.00	0.63	62.22	1.00		
	WINDL2	2	2	36.91	1.00	55.19	0.37		
	WINDR2	3	2	27.00	0.37	62.22	1.00		

RIGID FRAME - 2:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic Wind	Defl Ratio	Temperature Change
4.5	7.0	20.0	25.0	0.0	17.3	0.48	0

BASIC LOADS AT EAVE:

Seismic Load	--Torsion-- Wind	Seis	--EW_Brace- Wind	Seis
3.85	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf Id	---Wind_1-- Left	Right	---Wind_2-- Left	Right	---Wind_3-- Left	Right	---Wind_4-- Left	Right	Long_Wind 1	2	Surface Friction
1	0.46	-0.77	0.93	-0.28	0.00	0.00	0.00	0.00	-0.63	-0.63	0.00
2	-1.11	-0.65	-0.75	-0.29	0.00	0.00	0.00	0.00	-0.87	-0.55	0.00
3	-0.65	-1.11	-0.29	-0.75	0.00	0.00	0.00	0.00	-0.55	-0.87	0.00
4	-0.73	0.49	-0.26	0.99	0.00	0.00	0.00	0.00	-0.63	-0.63	0.00

*(
*
----------Load_Coefficients----------

* No.	---Live--- Id	Dead	Coll	-Add_Snow- Roof	Floor	Snow	Drift	Slide	Rain	--Wind_1-- Lt	Rt	--Wind_2-- Lt	Rt	--Wind_3-- Lt	Rt	--Wind_4-- Lt	Rt	Long_Wind 1	2	--Seismic- Long	Tran	Temp	Aux_Load Id	Coeff

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

108	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	2	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	3	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	4	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	5	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	6	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	7	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	8	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	9	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	10	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	13	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	14	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	15	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	16	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	17	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	18	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	19	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	20	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	21	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	22	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	23	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	24	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00						
	25	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0	0.00						
	26	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	-0.60	0.00	0.00	0.00	0.00	0	0.00						
	27	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0	0.00						

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

28	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.60	0.00	0.00	0.00	0	0.00
29	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
30	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
31	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
32	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
33	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
34	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00	0.00	0.00	0.00	0	0.00
35	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0	0.00
36	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00	0.00	0.00	0	0.00
37	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
38	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
39	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
40	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
41	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
42	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
43	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
44	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
45	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
46	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
47	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
48	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
49	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
50	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00	0.00	0.00	0.00	0	0.00
51	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
52	1.00	1.00	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00	0.00	0.00	0.00	0	0.00
53	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0	0.00
54	1.00	1.00	0.00	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	0.00	0.00	0.00	0.00	0	0.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

55 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0 0.00
56 1.00 1.00 0.00 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0 0.00
57 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0 0.00
58 1.00 1.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0 0.00
59 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.45 0.00 0.00 0.00 0 0.00
60 1.00 1.00 0.00 0.00 0.75 0.00 0.75 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -0.45 0.00 0.00 0.00 0 0.00
61 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
62 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
63 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
64 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 0.00
65 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.60 0.00 0.00 0.00 0.00 0 0.00
66 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 -0.60 0.00 0.00 0.00 0.00 0 0.00
67 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.60 0.00 0.00 0.00 0 0.00
68 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 -0.60 0.00 0.00 0.00 0 0.00
69 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.70 0.00 0 0.00
70 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 -0.70 0.00 0 0.00
71 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.70 0.00 0.00 0 0.00
72 1.10 1.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 -0.70 0.00 0.00 0 0.00
73 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.53 0.00 0 0.00
74 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 -0.53 0.00 0 0.00
75 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.53 0.00 0 0.00
76 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 -0.53 0.00 0 0.00
77 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.53 0.00 0.00 0 0.00
78 1.07 1.07 0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 -0.53 0.00 0.00 0 0.00
79 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.53 0.00 0.00 0 0.00
80 1.07 1.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 -0.53 0.00 0.00 0 0.00
81 0.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.70 0.00 0 0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
        82  0.50 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.70  0.00   0   0.00
        83  0.50 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.70  0.00  0.00   0   0.00
        84  0.50 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.70  0.00  0.00   0   0.00
        85  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   1.00
        86  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   1.00
        87  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        88  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        89  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.45  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        90  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.45  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        91  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.45  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        92  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.45  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   1   0.75
        93  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.52  0.00  0.00   1   0.75
        94  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.52  0.00  0.00   1   0.75
        95  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.52  0.00   1   0.75
        96  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.52  0.00   1   0.75
        97  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   1.00
        98  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   1.00
        99  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       100  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       101  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.45  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       102  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.45  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       103  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.45  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       104  1.00 1.00  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.45  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00   2   0.75
       105  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.52  0.00  0.00   2   0.75
       106  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00 -0.52  0.00  0.00   2   0.75
       107  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00  0.52  0.00   2   0.75
       108  1.07 1.07  0.00  0.00  0.01  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00  0.00  0.00  0.00  0.00 -0.52  0.00   2   0.75
```

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coeff
2	1	F2UNB_SL_L	3	1	0.30
				2	1.00
				3	0.34
	2	F2UNB_SL_R	3	2	0.30
				1	1.00
				4	0.32

ADDITIONAL LOADS:

No. Add	Add Id	Surf Id	Basic Type	Load Type	Fx W1	Fy W2	Mom Co	Dx Dl1	Dy Dl2	.. Conc .. Dist
4	1	3	U_SNOW	D	-0.38	-0.38	-0.085	0.00	62.22	
	2	2	U_SNOW	D	-0.38	-0.38	0.083	0.00	55.19	
	3	2	U_SNOW	D	-0.38	-0.38	0.083	37.13	55.19	
	4	3	U_SNOW	D	-0.38	-0.38	-0.085	0.00	16.65	

STEPPED LOAD COEFFICIENTS:

No.	Basic Load	Surf Id	No. Step	Locate	Coef	Locate	Coef	Locate	Coef
4	WINDL1	2	2	36.91	1.00	55.19	0.59		
	WINDR1	3	2	27.00	0.59	62.22	1.00		
	WINDL2	2	2	36.91	1.00	55.19	0.39		
	WINDR2	3	2	27.00	0.39	62.22	1.00		

Frame Line	Col Line	Max_Pos_Val Id	Horz	Vert	Max_Neg_Val Id	Horz	Vert	Anc._Bolt No.	Diam	Base_Plate Width	Len	Thick
5	F	16	1.0	-1.0	17	-0.9	-1.0	4	0.750	6.00	8.50	0.375
		18	0.0	4.5	16	1.0	-1.0					
5	D.8	19	1.4	-3.4	17	-1.3	-2.5	4	0.750	6.00	8.50	0.375
		1	0.0	12.4	19	1.4	-3.4					
5	D.1	16	1.6	-2.6	17	-1.6	-2.6	4	0.750	6.00	8.50	0.375
		18	0.0	13.5	16	1.6	-2.6					
5	C.6	20	1.7	-1.8	21	-1.7	-1.8	4	0.750	6.00	8.50	0.375
		1	0.0	11.9	20	1.7	-1.8					
5	B.9	20	1.6	-2.8	21	-1.5	-2.8	4	0.750	6.00	8.50	0.375
		22	0.0	12.5	20	1.6	-2.8					
5	A.9	23	1.3	-3.4	21	-1.3	-2.5	4	0.750	6.00	8.50	0.375
		1	0.0	12.4	23	1.3	-3.4					
5	A	20	1.0	-1.0	21	-0.9	-1.0	4	0.750	6.00	8.50	0.375
		22	0.0	4.5	20	1.0	-1.0					
4*	F	1	96.2	68.5	2	-8.1	-5.8	6	1.375	10.00	26.00	0.500
					3	-6.4	-8.4					

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

4*	A	4	7.9	-5.7	1	-96.2	68.4	6	1.375	10.00	26.00	0.500
		1	-96.2	68.4	5	7.0	-8.7					
2	F	6	3.4	0.4	7	-3.2	-4.1	4	0.750	6.00	13.00	0.500
		8	0.0	5.8	9	-0.1	-13.6					
2	A	10	2.1	-0.4	11	-2.4	3.7	4	0.750	6.00	13.00	0.500
		12	-0.6	10.9	13	0.0	-5.5					
2	D.9	3	0.0	-5.0	3	0.0	-5.0	4	0.750	6.00	8.50	0.500
		14	0.0	41.1								
2	B.8	15	0.0	-4.0	15	0.0	-4.0	4	0.750	6.00	8.50	0.500
		1	0.0	33.3								

4* Frame Lines:4 3

LOAD COMBINATIONS:

Id	Combination
1	Dead+Collateral+Snow+Slide_Snow
2	0.6Dead+0.6Wind_Left1
3	0.6Dead+0.6Wind_Long1L
4	0.6Dead+0.6Wind_Right1
5	0.6Dead+0.6Wind_Long2L
6	1.1Dead+1.1Collateral+0.7Seismic_Right
7	Dead/2+0.7Seismic_Left
8	Dead/2+0.7Seismic_LongR
9	1.07Dead+1.07Collateral+0.52Seismic_LongL+0.75F2UNB_SL_L
10	Dead/2+0.7Seismic_Right
11	1.1Dead+1.1Collateral+0.7Seismic_Left
12	1.07Dead+1.07Collateral+0.52Seismic_LongR+0.75F2UNB_SL_R
13	Dead/2+0.7Seismic_LongL
14	Dead+Collateral+F2UNB_SL_L
15	0.6Dead+0.6Wind_Long2R
16	0.6Dead+0.6Wind_Suction+0.6Wind_Long1L
17	0.6Dead+0.6Wind_Pressure+0.6Wind_Long1L
18	Dead+Collateral+E1UNB_SL_L
19	0.6Dead+0.6Wind_Left1+0.6Wind_Suction
20	0.6Dead+0.6Wind_Suction+0.6Wind_Long2L
21	0.6Dead+0.6Wind_Pressure+0.6Wind_Long2L
22	Dead+Collateral+E1UNB_SL_R
23	0.6Dead+0.6Wind_Right1+0.6Wind_Suction
24	Dead+Collateral+0.75Snow+0.45Wind_Long2L+0.75Slide_Snow

BUILDING BRACING REACTIONS:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Wall Loc	Wall Line	Col Line	Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear(lb/ft) Wind	Seismic	Notes
L_EW	5	D.8,D.1	1.34	1.09	3.20	2.60			
		B.9,A.9	1.34	1.05	3.20	2.51			
F_SW	A	3 ,2	7.39	3.00	16.55	6.71			
R_EW	2								(h)
B_SW	F	2 ,3	7.55	3.23	16.60	7.11			

(h)Rigid frame at endwall

Reaction values shown are unfactored. Maximum load combination factors are:
Wind : 0.60
Seismic: 0.70

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22-8706 Additional Reactions Report: 5/ 3/22 10:30am

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Rigid Frame Column Reactions(k)

Frame Line	Col Line	Dead Horz	Dead Vert	Collateral Horz	Collateral Vert	Live Horz	Live Vert	Snow Horz	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert
4*	F	16.4	12.6	17.5	12.2	49.8	34.9	62.3	43.6	-29.9	-22.3
4*	A	-16.4	12.6	-17.5	12.2	-49.8	34.9	-62.3	43.6	21.6	-17.0

Frame Line	Col Line	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert
4*	F	-21.2	-16.9	-16.8	-11.4	-8.3	-6.1	-27.0	-26.7	-28.9	-22.6
4*	A	29.6	-22.1	8.6	-6.1	16.6	-11.2	27.8	-21.8	28.0	-27.1

Frame Line	Col Line	-Seis_Left- Horz	-Seis_Left- Vert	-Seis_Right Horz	-Seis_Right Vert	-Seis_Long- Horz	-Seis_Long- Vert	F1UNB_SL_L Horz	F1UNB_SL_L Vert	F1UNB_SL_R Horz	F1UNB_SL_R Vert
4*	F	-6.0	-1.3	6.0	1.3	0.0	-9.2	44.1	38.2	47.0	23.4
4*	A	-6.5	1.3	6.5	-1.3	0.0	-8.7	-44.1	21.6	-47.0	39.4

Frame Line	Col Line	Dead Horz	Dead Vert	Collateral Horz	Collateral Vert	Live Horz	Live Vert	Snow Horz	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	F	0.1	-1.2	0.1	-1.6	0.3	-4.7	0.4	-5.8	-2.4	1.0
2	A	-0.1	1.2	-0.1	1.2	-0.3	3.5	-0.4	4.4	-2.0	-1.6
2	D.9	0.0	6.3	0.0	7.0	0.0	19.9	0.0	24.9	0.0	-13.8
2	B.8	0.0	5.4	0.0	6.1	0.0	17.5	0.0	21.8	0.0	-10.5

Frame Line	Col Line	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert
2	F	2.1	2.9	-3.0	-0.1	1.5	1.9	1.1	0.0	0.3	-1.8
2	A	2.4	-4.8	-1.4	-0.3	3.0	-3.5	-0.7	-4.7	-0.7	-6.1
2	D.9	0.0	-11.3	0.0	-8.0	0.0	-5.5	0.0	-14.6	0.0	-8.8
2	B.8	0.0	-11.5	0.0	-5.3	0.0	-6.3	0.0	-8.9	0.0	-12.0

Frame Line	Col Line	-Seis_Left- Horz	-Seis_Left- Vert	-Seis_Right Horz	-Seis_Right Vert	-Seis_Long- Horz	-Seis_Long- Vert	F2UNB_SL_L Horz	F2UNB_SL_L Vert	F2UNB_SL_R Horz	F2UNB_SL_R Vert
2	F	-4.6	-5.0	4.6	5.0	0.0	-9.2	-0.3	-7.6	0.6	-2.7
2	A	-3.1	1.4	3.1	-1.4	0.0	-8.7	0.3	0.0	-0.6	4.9
2	D.9	0.0	5.5	0.0	-5.5	0.0	0.0	0.0	27.7	0.0	9.5
2	B.8	0.0	-1.9	0.0	1.9	0.0	0.0	0.0	10.8	0.0	20.8

4* Frame Lines:4 3

Endwall Column Reactions(k)

Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert
5	F	0.7	0.8	2.3	2.9	0.0	-2.1	0.0	-1.5
5	D.8	1.9	2.3	6.6	8.2	-1.3	-7.6	0.0	-2.5
5	D.1	1.8	2.2	6.1	7.7	0.0	-3.5	1.3	-4.6
5	C.6	1.8	2.2	6.3	7.9	0.0	-3.2	0.0	-3.2
5	B.9	1.8	2.1	6.1	7.6	-1.3	-4.5	0.0	-3.3
5	A.9	1.9	2.3	6.6	8.2	0.0	-2.6	1.3	-7.5
5	A	0.7	0.8	2.3	2.9	0.0	-1.5	0.0	-2.1

Frame Line	Col Line	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind_Long1 Horz	Wind_Long1 Vert
5	F	0.0	-1.3	0.0	-0.6	-1.6	1.7	0.0	-2.4
5	D.8	-1.3	-5.5	0.0	-0.4	-2.2	2.3	0.0	-6.1
5	D.1	0.0	-1.6	1.3	-2.7	-2.6	2.7	0.3	-6.2
5	C.6	0.0	-1.4	0.0	-1.5	-2.8	2.9	0.0	-4.0
5	B.9	-1.3	-2.6	0.0	-1.4	-2.5	2.6	0.0	-3.2
5	A.9	0.0	-0.5	1.3	-5.5	-2.1	2.2	0.3	-3.9
5	A	0.0	-0.6	0.0	-1.3	-1.5	1.6	0.0	-1.4

Frame	Col	Wind_Long2	Seismic_Left	Seismic_Right	-E1UNB_SL_L-

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Line	Line	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
5	F	0.0	-1.4	0.0	0.0	0.0	0.0	0.0	3.0
5	D.8	-0.4	-4.1	-4.2	-3.3	0.0	3.7	0.0	7.9
5	D.1	0.0	-3.0	0.0	3.1	4.2	-3.5	0.0	9.6
5	C.6	0.0	-4.9	0.0	0.1	0.0	-0.1	0.0	5.2
5	B.9	-0.4	-6.4	-4.2	-3.4	0.0	3.1	0.0	1.8
5	A.9	0.0	-6.0	0.0	3.4	4.2	-3.1	0.0	2.6
5	A	0.0	-2.4	0.0	0.0	0.0	0.0	0.0	0.8

Frame Line	Col Line	-E1UNB_SL_R- Horz	Vert
5	F	0.0	0.8
5	D.8	0.0	2.6
5	D.1	0.0	1.9
5	C.6	0.0	7.7
5	B.9	0.0	8.5
5	A.9	0.0	8.0
5	A	0.0	2.9

22-8706 Seismic Design Report: 5/ 3/22 10:30am

Building Data

Code	=IBC 18
Length	= 90.00
Width	= 117.00
Left Eave Height	= 14.77
Right Eave Height	= 14.09

Seismic Formula

Base Shear, V = 0.667*Ie*Fa*Ss*W/R

Vmin = 0.044*Sds*Ie*W
Vmax = Sd1*Ie*W/(T*R)

T(Moment_Frame) = 0.269
Shear Force, E = Rho*V
(Rigid frame, endwall frame, wind bent, wind column & base reactions)

T(Braced_Frame) = 0.167
Shear Force, Em = Omega*V
(Wall diagonal bracing, splice at rigid frame & wind bent knee)

Note: Applied load is seismic force multiplied by load combination

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
  Fa*Ss                 =   1.019
  Zone/Design Category=   D
  Ie                    =   1.000
  S1                    =   0.409
  Sd1                   =   0.516
  Sds                   =   0.679

Seismic Dead Load, W
--------------------
  Frame    Dead         =    2.00 (psf  )
  Roof     Dead         =    4.50 (psf  )
  Collateral            =    7.00 (psf  )
  Roof     Total        =   13.50 (psf  )     , Weight= 142.15 (k )
  Left  EW Dead         =    5.00 (psf  )     , Weight=   4.94 (k )
  Front SW Dead         =    5.00 (psf  )     , Weight=   3.17 (k )
  Right EW Dead         =    5.00 (psf  )     , Weight=   4.94 (k )
  Back  SW Dead         =    5.00 (psf  )     , Weight=   3.32 (k )
                                                         -------
                                                Total = 158.52 (k )

Seismic Forces
--------------

  Roof Bracing
                  R  =   3.25, Rho=   1.30
                  Cs =   0.2091
                  W  = 152.03 (k )
          Force, V  =  31.79 (k )
          Force, E  =  41.32 (k )

  Sidewall Bracing
    Front         R  =   3.25, Rho=   1.30, Omega=   2.00
                  Cs =   0.2091
                  W  =  79.14 (k )
          Force, V  =  16.55 (k )
          Force, Em =  33.10 (k )
          Force, E  =  21.51 (k )
    Back          R  =   3.25, Rho=   1.30, Omega=   2.00
                  Cs =   0.2091
                  W  =  79.38 (k )
          Force, V  =  16.60 (k )
          Force, Em =  33.20 (k )
          Force, E  =  21.58 (k )

  Endwall Bracing
    Left          R  =   3.25, Rho=   1.30, Omega=   2.00
                  Cs =   0.2091
                  W  =  30.56 (k )
          Force, V  =   6.39 (k )
          Force, Em =  12.78 (k )
          Force, E  =   8.31 (k )

  Rigid Frames
                  R  =   3.50, Rho=   1.30
```

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
                  Cs =   0.1942
  Frame  1        W  =  49.52 (k )
         Force, V  =   9.62 (k )
         Force, E  =  12.50 (k )
  Frame  2        W  =  30.51 (k )
         Force, V  =   5.92 (k )
         Force, E  =   7.70 (k )

End Plates
  Frame           R  =   3.50, Rho=   1.00, Omega=   3.00

Total Base Shear
  Longitudinal
         Force, V  =  33.15 (k )
  Transverse
         Force, V  =  31.55 (k )
```

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Design Code 4/29/22 3:57pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Purlin Layout(Surface 2) 4/29/22 3:57pm

PURLIN SYSTEM COMBINATIONS:

System Id	Purlin Depth	Purlin Row	Purlin Weight	Added_Purlin Row	Added_Purlin Weight	Total Weight	Show Report	Max_UC Purlin	Max_UC Panel	Max_UC Table
1	10.0	14	7857.4	0	0.0	7857.4	Y	1.03	0.19	0.68
2	10.0	14	7857.4	2	59.2	7916.5		1.03	0.19	0.68
3	10.0	14	7857.4	6	177.5	8034.9		1.03	0.19	0.50

SURFACE LAYOUT:

Surface Id	Length	No. Row	Peak Space
2	55.191	14	1.000

PURLIN LOCATION:

Purlin Id	Surf Offset	Space	Load Width	Dead Load	Show Report	Max_Load Id	Max_Load UC	Max_Load Report	Notes
1	3.801	3.801	3.836	1.63		14	1.03	Mom,Shr	
2	7.672	3.871	3.871	1.61		11	1.03	Mom,Shr	
3	11.543	3.871	3.871	1.61	Y	11	1.03	Mom,Shr	
4	15.413	3.871	3.871	1.61		11	1.03	Mom,Shr	
5	19.284	3.871	3.871	1.61		11	1.03	Mom,Shr	
6	23.155	3.871	3.871	1.61		11	1.03	Mom,Shr	
7	27.026	3.871	3.871	1.61		11	1.03	Mom,Shr	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

8	30.896	3.871	3.871	1.61	11	1.03	Mom,Shr
9	34.767	3.871	3.871	1.61	11	1.03	Mom,Shr
10	38.638	3.871	3.871	1.61	11	1.03	Mom,Shr
11	42.508	3.871	3.871	1.61	11	1.03	Mom,Shr
12	46.379	3.871	3.871	1.61	11	1.03	Mom,Shr
13	50.250	3.871	3.871	1.61	11	1.03	Mom,Shr
14	54.121	3.871	3.005	2.07	14	0.80	Mom,Shr
	55.191	1.070					

Average= 1.64

LAYOUT:

Bay Id	Part	Design Length	---Lap(ft)-- Left	Right	No. Strap	Unit Weight	Total Weight
LExt	10Z12	1.00			0	6.1	85.7
1	10Z12	29.00		3.00	2	195.8	2741.8
2	10Z14	30.00	3.00	3.00	1	157.3	2202.5
3	10Z12	29.00	3.00		3	195.8	2741.8
RExt	10Z12	1.00			0	6.1	85.7
				Total(lb)=		561.2	7857.4

LOAD COMBINATIONS:

11 - Dead+Collateral+Snow/2+PAT_SL_4
14 - Dead+Collateral+Snow-PAT_SL_1

ROOF PURLIN
Surface Id = 2
Purlin Id = 3
Offset = 11.60

LAYOUT (Purlin Id= 3):

Bay Id	Part	Design Length (ft)	---Lap(ft)-- Left	Right	Load Width	No. Strap	Available Reduction Factor Out	In
LExt	10Z12	1.00			3.87	0	0.00	0.00
1	10Z12	29.00		3.00	3.87	2	0.00	0.00
2	10Z14	30.00	3.00	3.00	3.87	1	0.00	0.00
3	10Z12	29.00	3.00		3.87	3	0.00	0.00
RExt	10Z12	1.00			3.87	0	0.00	0.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID 1 - Dead+Collateral+Live:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.12	0.00		0.02	0.50			0.06
1	1.38		-1.77	-2.13	0.06		-7.76	11.37	5.20	11.06
2	1.82	1.45	-1.45	-1.82	11.06	6.15	-2.57	15.00	6.15	11.06
3	2.13	1.77		-1.38	11.06	5.20	-7.76	17.63		0.06
RExt	0.12			0.00	0.06		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.12	10.94	0.01	RSup	0.06	13.28	0.00	LSup	0.00	0.16	
1	RLap	-1.77	10.94	0.16	MidS	-7.76	9.60	0.81	RSup	0.48	-1.21	
2	RLap	-1.45	3.96	0.37	RLap	6.15	7.40	0.83	RLap	0.78	-0.16	
3	LLap	1.77	10.94	0.16	MidS	-7.76	11.40	0.68	LSup	0.48	-1.21	
RExt	LSup	0.12	10.94	0.01	LSup	0.06	13.28	0.00	LSup	0.00	0.16	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					1.07	5.30	3.07	0.35
2	0.77	5.30	2.19	0.35	0.77	5.30	2.19	0.35
3	1.07	5.30	3.07	0.35				

LOAD ID 2 - Dead+Collateral+Snow:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.59		-2.05	-2.47	0.07		-9.00	11.37	6.02	12.81
2	2.10	1.68	-1.68	-2.10	12.81	7.13	-2.97	15.00	7.13	12.81
3	2.47	2.05		-1.59	12.81	6.02	-9.00	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	RLap	-2.05	10.94	0.19	MidS	-9.00	9.60	0.94	RSup	0.55	-1.40
2	RLap	-1.68	3.96	0.42	RLap	7.13	7.40	0.96	RLap	0.90	-0.19
3	LLap	2.05	10.94	0.19	MidS	-9.00	11.40	0.79	LSup	0.55	-1.40
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.24	5.30	3.07	0.40
2	0.89	5.30	2.19	0.41	0.89	5.30	2.19	0.41
3	1.24	5.30	3.07	0.40				

LOAD ID 3 - Dead+Collateral+Snow+Snow_Drift:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.59		-2.05	-2.47	0.07		-9.00	11.37	6.02	12.81
2	2.10	1.68	-1.68	-2.10	12.81	7.13	-2.97	15.00	7.13	12.81
3	2.47	2.05		-1.59	12.81	6.02	-9.00	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.05	10.94	0.19	MidS	-9.00	9.60	0.94	RSup	0.55	-1.40	
2	RLap	-1.68	3.96	0.42	RLap	7.13	7.40	0.96	RLap	0.90	-0.19	
3	LLap	2.05	10.94	0.19	MidS	-9.00	11.40	0.79	LSup	0.55	-1.40	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.24	5.30	3.07	0.40
2	0.89	5.30	2.19	0.41	0.89	5.30	2.19	0.41
3	1.24	5.30	3.07	0.40				

LOAD ID 4 - Dead+Collateral+Snow+Slide_Snow:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.59		-2.05	-2.47	0.07		-9.00	11.37	6.02	12.81
2	2.10	1.68	-1.68	-2.10	12.81	7.13	-2.97	15.00	7.13	12.81
3	2.47	2.05		-1.59	12.81	6.02	-9.00	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.05	10.94	0.19	MidS	-9.00	9.60	0.94	RSup	0.55	-1.40	
2	RLap	-1.68	3.96	0.42	RLap	7.13	7.40	0.96	RLap	0.90	-0.19	
3	LLap	2.05	10.94	0.19	MidS	-9.00	11.40	0.79	LSup	0.55	-1.40	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap Calc Shear	Bear	UC	Right_Lap Calc Shear	Bear	UC
1				1.24	5.30	3.07	0.40
2	0.89	5.30	2.19	0.41	0.89	5.30	2.19	0.41
3	1.24	5.30	3.07	0.40				

LOAD ID 5 - Dead+Collateral+0.75Live+0.45Wind_Pressure1:

REACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.13	0.00		0.02	0.50		0.06
1	1.47		-1.90	-2.29	0.06		-8.32	11.37	5.57	11.84
2	1.95	1.56	-1.56	-1.95	11.84	6.59	-2.75	15.00	6.59	11.84
3	2.29	1.90		-1.47	11.84	5.57	-8.32	17.63		0.06
RExt	0.13			0.00	0.06		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.13	10.94	0.01	RSup	0.06	13.28	0.00	LSup	0.00	0.17	
1	RLap	-1.90	10.94	0.17	MidS	-8.32	9.60	0.87	RSup	0.51	-1.30	
2	RLap	-1.56	3.96	0.39	RLap	6.59	7.40	0.89	RLap	0.83	-0.17	
3	LLap	1.90	10.94	0.17	MidS	-8.32	11.40	0.73	LSup	0.51	-1.30	
RExt	LSup	0.13	10.94	0.01	LSup	0.06	13.28	0.00	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				1.15 5.30	3.07	0.37
2	0.83 5.30	2.19	0.38	0.83 5.30	2.19	0.38
3	1.15 5.30	3.07	0.37			

LOAD ID 6 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1:

REACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.64		-2.11	-2.54	0.07		-9.24	11.37	6.18	13.16
2	2.16	1.73	-1.73	-2.16	13.16	7.32	-3.05	15.00	7.32	13.16
3	2.54	2.11		-1.64	13.16	6.18	-9.24	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.19	
1	RLap	-2.11	10.94	0.19	MidS	-9.24	9.60	0.96	RSup	0.57	-1.44	
2	RLap	-1.73	3.96	0.44	RLap	7.32	7.40	0.99	RLap	0.93	-0.19	
3	LLap	2.11	10.94	0.19	MidS	-9.24	11.40	0.81	LSup	0.57	-1.44	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.19	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				1.28 5.30	3.07	0.42
2	0.92 5.30	2.19	0.42	0.92 5.30	2.19	0.42
3	1.28 5.30	3.07	0.42			

LOAD ID 7 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1+0.75Snow_Drift:

REACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.64		-2.11	-2.54	0.07		-9.24	11.37	6.18	13.16
2	2.16	1.73	-1.73	-2.16	13.16	7.32	-3.05	15.00	7.32	13.16

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

3	2.54	2.11	-1.64	13.16	6.18	-9.24	17.63		0.07
REXt	0.14		0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.19	
1	RLap	-2.11	10.94	0.19	MidS	-9.24	9.60	0.96	RSup	0.57	-1.44	
2	RLap	-1.73	3.96	0.44	RLap	7.32	7.40	0.99	RLap	0.93	-0.19	
3	LLap	2.11	10.94	0.19	MidS	-9.24	11.40	0.81	LSup	0.57	-1.44	
REXt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
1					1.28	5.30	3.07	0.42
2	0.92	5.30	2.19	0.42	0.92	5.30	2.19	0.42
3	1.28	5.30	3.07	0.42				

LOAD ID 8 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1+0.75Slide_Snow:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.64		-2.11	-2.54	0.07		-9.24	11.37	6.18	13.16
2	2.16	1.73	-1.73	-2.16	13.16	7.32	-3.05	15.00	7.32	13.16
3	2.54	2.11		-1.64	13.16	6.18	-9.24	17.63		0.07
REXt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.19	
1	RLap	-2.11	10.94	0.19	MidS	-9.24	9.60	0.96	RSup	0.57	-1.44	
2	RLap	-1.73	3.96	0.44	RLap	7.32	7.40	0.99	RLap	0.93	-0.19	
3	LLap	2.11	10.94	0.19	MidS	-9.24	11.40	0.81	LSup	0.57	-1.44	
REXt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
1					1.28	5.30	3.07	0.42

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2	0.92	5.30	2.19	0.42	0.92	5.30	2.19	0.42	
3	1.28	5.30	3.07	0.42					

LOAD ID 9 - 0.6Dead+0.6Wind_Suction1:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			0.06	0.00		-0.01	0.50		-0.03
1	-0.61		0.66	0.79	-0.03		3.07	10.99	-1.90	-4.07
2	-0.66	-0.52	0.52	0.66	-4.07	-2.30	0.84	15.00	-2.30	-4.07
3	-0.79	-0.66		0.61	-4.07	-1.90	3.07	18.01		-0.03
RExt	-0.06			0.00	-0.03		-0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	0.06	10.94	0.01	RSup	-0.03	13.28	0.00	LSup	0.00	-0.06	
1	RLap	0.66	10.94	0.06	MidS	3.07	9.65	0.32	RSup	0.18	0.48	
2	RLap	0.52	3.96	0.13	RLap	-2.30	7.38	0.31	RLap	0.29	0.03	
3	LLap	-0.66	10.94	0.06	MidS	3.07	11.33	0.27	LSup	0.18	0.48	
RExt	LSup	-0.06	10.94	0.01	LSup	-0.03	13.28	0.00	LSup	0.00	-0.06	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.39	5.30	3.07	0.13
2	0.28	5.30	2.19	0.13	0.28	5.30	2.19	0.13
3	0.39	5.30	3.07	0.13				

LOAD ID 10 - Dead+Collateral+Snow/2+PAT_SL_3:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.57		-2.08	-2.50	0.07		-8.67	11.16	6.77	13.64
2	2.22	1.80	-1.57	-1.99	13.64	7.62	-3.89	15.81	4.90	10.24
3	1.69	1.41		-0.99	10.24	5.59	-5.23	18.31		0.05
RExt	0.09			0.00	0.05		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit

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Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.17		
1	RLap	-2.08	10.94	0.19	MidS	-8.67	9.67	0.90	RSup	0.59	-1.30		
2	LLap	1.80	3.96	0.45	LLap	7.62	7.40	1.03	LLap	0.96	-0.49		
3	LLap	1.41	10.94	0.13	LLap	5.59	12.08	0.46	LSup	0.44	-0.71		
RExt	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.10		

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.32	5.30	3.07	0.43
2	0.95	5.30	2.19	0.43	0.71	5.30	2.19	0.33
3	0.99	5.30	3.07	0.32				

LOAD ID 11 - Dead+Collateral+Snow/2+PAT_SL_4:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.09	0.00		0.01	0.50		0.05
1	0.99		-1.41	-1.69	0.05		-5.23	10.69	5.59	10.24
2	1.99	1.57	-1.80	-2.22	10.24	4.90	-3.89	14.19	7.62	13.64
3	2.50	2.08		-1.57	13.64	6.77	-8.67	17.84		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.10	
1	RLap	-1.41	10.94	0.13	MidS	-5.23	9.89	0.53	RSup	0.44	-0.71	
2	RLap	-1.80	3.96	0.45	RLap	7.62	7.40	1.03	RLap	0.96	-0.49	
3	LLap	2.08	10.94	0.19	MidS	-8.67	11.37	0.76	LSup	0.59	-1.30	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.99	5.30	3.07	0.32
2	0.71	5.30	2.19	0.33	0.95	5.30	2.19	0.43
3	1.32	5.30	3.07	0.43				

LOAD ID 12 - Dead+Collateral+Snow/2+PAT_SL_1:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	MidSpan Mom	MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.14		0.00		0.02	0.50		0.07
1	1.66		-1.99	-2.41	0.07		-9.72	11.81	4.39	11.00
2	1.50	1.22	-0.99	-1.27	11.00	6.92	-1.16	16.23	4.19	7.59
3	1.60	1.32		-1.08	7.59	3.21	-6.25	17.32		0.05
RExt	0.09			0.00	0.05		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.20	
1	RLap	-1.99	10.94	0.18	MidS	-9.72	9.47	1.03	RSup	0.48	-1.61	
2	LLap	1.22	3.96	0.31	LLap	6.92	7.28	0.95	LLap	0.83	0.18	
3	LLap	1.32	10.94	0.12	MidS	-6.25	11.42	0.55	LSup	0.33	-1.02	
RExt	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					1.07	5.30	3.07	0.35
2	0.77	5.30	2.19	0.35	0.53	5.30	2.19	0.24
3	0.74	5.30	3.07	0.24				

LOAD ID 13 - Dead+Collateral+Snow/2+PAT_SL_2:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	MidSpan Mom	MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.09		0.00		0.01	0.50		0.05
1	1.08		-1.32	-1.60	0.05		-6.25	11.68	3.21	7.59
2	1.27	0.99	-1.22	-1.50	7.59	4.19	-1.16	13.77	6.92	11.00
3	2.41	1.99		-1.66	11.00	4.39	-9.72	17.19		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.13	
1	RLap	-1.32	10.94	0.12	MidS	-6.25	9.51	0.66	RSup	0.33	-1.02	
2	RLap	-1.22	3.96	0.31	RLap	6.92	7.28	0.95	RLap	0.83	0.18	
3	LLap	1.99	10.94	0.18	MidS	-9.72	11.43	0.85	LSup	0.48	-1.61	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.20	

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	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.74	5.30	3.07	0.24
2	0.53	5.30	2.19	0.24	0.77	5.30	2.19	0.35
3	1.07	5.30	3.07	0.35				

LOAD ID 14 - Dead+Collateral+Snow-PAT_SL_1:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.09	0.00		0.01	0.50		0.05
1	0.99		-1.41	-1.69	0.05		-5.23	10.69	5.59	10.24
2	1.99	1.57	-1.80	-2.22	10.24	4.90	-3.89	14.19	7.62	13.64
3	2.50	2.08		-1.57	13.64	6.77	-8.67	17.84		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.10	
1	RLap	-1.41	10.94	0.13	MidS	-5.23	9.89	0.53	RSup	0.44	-0.71	
2	RLap	-1.80	3.96	0.45	RLap	7.62	7.40	1.03	RLap	0.96	-0.49	
3	LLap	2.08	10.94	0.19	MidS	-8.67	11.37	0.76	LSup	0.59	-1.30	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.99	5.30	3.07	0.32
2	0.71	5.30	2.19	0.33	0.95	5.30	2.19	0.43
3	1.32	5.30	3.07	0.43				

LOAD ID 15 - Dead+Collateral+Snow-PAT_SL_2:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07

Customer	Elbert Rentals	**Job No**	22-8706
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Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	1.57		-2.08	-2.50	0.07		-8.67	11.16	6.77	13.64
2	2.22	1.80	-1.57	-1.99	13.64	7.62	-3.89	15.81	4.90	10.24
3	1.69	1.41		-0.99	10.24	5.59	-5.23	18.31		0.05
REXt	0.09			0.00	0.05		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.17	
1	RLap	-2.08	10.94	0.19	MidS	-8.67	9.67	0.90	RSup	0.59	-1.30	
2	LLap	1.80	3.96	0.45	LLap	7.62	7.40	1.03	LLap	0.96	-0.49	
3	LLap	1.41	10.94	0.13	LLap	5.59	12.08	0.46	LSup	0.44	-0.71	
REXt	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.32	5.30	3.07	0.43
2	0.95	5.30	2.19	0.43	0.71	5.30	2.19	0.33
3	0.99	5.30	3.07	0.32				

DEFLECTION:

LOAD ID 16 - Dead+Collateral+Live:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.16		
1	14.50	-1.21	2.32	0.52
2	15.00	-0.16	2.40	0.07
3	14.50	-1.21	2.32	0.52
REXt	1.00	0.16		

LOAD ID 17 - Dead+Collateral+Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.40	2.32	0.60
2	15.00	-0.19	2.40	0.08
3	14.50	-1.40	2.32	0.60
REXt	1.00	0.18		

LOAD ID 18 - Dead+Collateral+Snow+Snow_Drift:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.40	2.32	0.60

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	15.00	-0.19	2.40	0.08
3	14.50	-1.40	2.32	0.60
REXt	1.00	0.18		

LOAD ID 19 - Dead+Collateral+Snow+Slide_Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.40	2.32	0.60
2	15.00	-0.19	2.40	0.08
3	14.50	-1.40	2.32	0.60
REXt	1.00	0.18		

LOAD ID 20 - Dead+Collateral+0.75Live+0.36Wind_Pressure1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.16		
1	14.50	-1.24	3.48	0.36
2	15.00	-0.16	3.60	0.05
3	14.50	-1.24	3.48	0.36
REXt	1.00	0.16		

LOAD ID 21 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.38	3.48	0.40
2	15.00	-0.18	3.60	0.05
3	14.50	-1.38	3.48	0.40
REXt	1.00	0.18		

LOAD ID 22 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1+0.75Snow_Drift:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.38	3.48	0.40
2	15.00	-0.18	3.60	0.05
3	14.50	-1.38	3.48	0.40
REXt	1.00	0.18		

LOAD ID 23 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1+0.75Slide_Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.38	3.48	0.40
2	15.00	-0.18	3.60	0.05
3	14.50	-1.38	3.48	0.40
REXt	1.00	0.18		

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID 24 - 0.6Dead+0.48Wind_Suction1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	-0.04		
1	14.50	0.28	3.48	0.08
2	15.00	0.02	3.60	0.01
3	14.50	0.28	3.48	0.08
RExt	1.00	-0.04		

22-8706 Purlin Layout(Surface 3) 4/29/22 3:57pm

PURLIN SYSTEM COMBINATIONS:

System Id	Purlin Depth	Purlin Row	Purlin Weight	Added_Purlin Row	Added_Purlin Weight	Total Weight	Show Report	Max_UC Purlin	Max_UC Panel	Max_UC Table
1	10.0	16	8979.8	0	0.0	8979.8	Y	1.02	0.19	0.68
2	10.0	16	8979.8	2	59.2	9039.0		1.02	0.19	0.68
3	10.0	16	8979.8	6	177.5	9157.4		1.02	0.19	0.50

SURFACE LAYOUT:

Surface Id	Length	No. Row	Peak Space
3	62.223	16	1.000

PURLIN LOCATION:

Purlin Id	Surf Offset	Space	Load Width	Dead Load	Show Report	Max_Load Id	Max_Load UC	Max_Load Report	Notes
1	1.070	1.070	2.983	2.09		14	0.79	Mom,Shr	
2	4.897	3.826	3.826	1.63		14	1.02	Mom,Shr	
3	8.723	3.826	3.826	1.63	Y	11	1.02	Mom,Shr	
4	12.549	3.826	3.826	1.63		11	1.02	Mom,Shr	
5	16.376	3.826	3.826	1.63		11	1.02	Mom,Shr	
6	20.202	3.826	3.826	1.63		11	1.02	Mom,Shr	
7	24.029	3.826	3.826	1.63		11	1.02	Mom,Shr	
8	27.855	3.826	3.826	1.63		11	1.02	Mom,Shr	
9	31.682	3.826	3.826	1.63		11	1.02	Mom,Shr	
10	35.508	3.826	3.826	1.63		11	1.02	Mom,Shr	
11	39.335	3.826	3.826	1.63		11	1.02	Mom,Shr	
12	43.161	3.826	3.826	1.63		11	1.02	Mom,Shr	
13	46.988	3.826	3.826	1.63		11	1.02	Mom,Shr	
14	50.814	3.826	3.826	1.63		11	1.02	Mom,Shr	
15	54.641	3.826	3.826	1.63		11	1.02	Mom,Shr	
16	58.467	3.826	3.791	1.64		11	1.02	Mom,Shr	
	62.223	3.756							
				1.65					
			Average=						

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LAYOUT:

Bay Id	Part	Design Length	Lap(ft) Left	Lap(ft) Right	No. Strap	Unit Weight	Total Weight
LExt	10Z12	1.00			0	6.1	97.9
1	10Z12	29.00		3.00	2	195.8	3133.4
2	10Z14	30.00	3.00	3.00	1	157.3	2517.1
3	10Z12	29.00	3.00		3	195.8	3133.4
RExt	10Z12	1.00			0	6.1	97.9
				Total(lb)=		561.2	8979.8

LOAD COMBINATIONS:

11 - Dead+Collateral+Snow/2+PAT_SL_4
14 - Dead+Collateral+Snow-PAT_SL_1

==========

22-8706 Purlin(Surface 3, Id 3) 4/29/22 3:57pm

==========

ROOF PURLIN
Surface Id = 3
Purlin Id = 3
Offset = 8.71

LAYOUT (Purlin Id= 3):

Bay Id	Part	Design Length (ft)	Lap(ft) Left	Lap(ft) Right	Load Width	No. Strap	Available Reduction Factor Out	Available Reduction Factor In
LExt	10Z12	1.00			3.82	0	0.00	0.00
1	10Z12	29.00		3.00	3.82	2	0.00	0.00
2	10Z14	30.00	3.00	3.00	3.82	1	0.00	0.00
3	10Z12	29.00	3.00		3.82	3	0.00	0.00
RExt	10Z12	1.00			3.82	0	0.00	0.00

LOAD ID 1 - Dead+Collateral+Live:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.12	0.00			0.01	0.50		0.06

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	1.36		-1.75	-2.11	0.06		-7.68	11.37	5.14	10.93
2	1.80	1.44	-1.44	-1.80	10.93	6.08	-2.54	15.00	6.08	10.93
3	2.11	1.75		-1.36	10.93	5.14	-7.68	17.63		0.06
RExt	0.12			0.00	0.06		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.12	10.94	0.01	RSup	0.06	13.28	0.00	LSup	0.00	0.15	
1	RLap	-1.75	10.94	0.16	MidS	-7.68	9.60	0.80	RSup	0.47	-1.20	
2	RLap	-1.44	3.96	0.36	RLap	6.08	7.40	0.82	RLap	0.77	-0.16	
3	LLap	1.75	10.94	0.16	MidS	-7.68	11.40	0.67	LSup	0.47	-1.20	
RExt	LSup	0.12	10.94	0.01	LSup	0.06	13.28	0.00	LSup	0.00	0.15	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
1					1.06	5.30	3.07	0.35
2	0.76	5.30	2.19	0.35	0.76	5.30	2.19	0.35
3	1.06	5.30	3.07	0.35				

LOAD ID 2 - Dead+Collateral+Snow:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.58		-2.03	-2.44	0.07		-8.89	11.37	5.95	12.66
2	2.08	1.66	-1.66	-2.08	12.66	7.04	-2.94	15.00	7.04	12.66
3	2.44	2.03		-1.58	12.66	5.95	-8.89	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.03	10.94	0.19	MidS	-8.89	9.60	0.93	RSup	0.55	-1.39	
2	RLap	-1.66	3.96	0.42	RLap	7.04	7.40	0.95	RLap	0.89	-0.18	
3	LLap	2.03	10.94	0.19	MidS	-8.89	11.40	0.78	LSup	0.55	-1.39	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1					1.23	5.30	3.07	0.40
2	0.88	5.30	2.19	0.40	0.88	5.30	2.19	0.40
3	1.23	5.30	3.07	0.40				

LOAD ID 3 - Dead+Collateral+Snow+Snow_Drift:

REACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.58		-2.03	-2.44	0.07		-8.89	11.37	5.95	12.66
2	2.08	1.66	-1.66	-2.08	12.66	7.04	-2.94	15.00	7.04	12.66
3	2.44	2.03		-1.58	12.66	5.95	-8.89	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.03	10.94	0.19	MidS	-8.89	9.60	0.93	RSup	0.55	-1.39	
2	RLap	-1.66	3.96	0.42	RLap	7.04	7.40	0.95	RLap	0.89	-0.18	
3	LLap	2.03	10.94	0.19	MidS	-8.89	11.40	0.78	LSup	0.55	-1.39	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				1.23 5.30	3.07	0.40
2	0.88 5.30	2.19	0.40	0.88 5.30	2.19	0.40
3	1.23 5.30	3.07	0.40			

LOAD ID 4 - Dead+Collateral+Snow+Slide_Snow:

REACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.58		-2.03	-2.44	0.07		-8.89	11.37	5.95	12.66
2	2.08	1.66	-1.66	-2.08	12.66	7.04	-2.94	15.00	7.04	12.66
3	2.44	2.03		-1.58	12.66	5.95	-8.89	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.03	10.94	0.19	MidS	-8.89	9.60	0.93	RSup	0.55	-1.39	
2	RLap	-1.66	3.96	0.42	RLap	7.04	7.40	0.95	RLap	0.89	-0.18	
3	LLap	2.03	10.94	0.19	MidS	-8.89	11.40	0.78	LSup	0.55	-1.39	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear	Bear	UC		Calc Shear	Bear	UC	
1					1.23	5.30	3.07	0.40
2	0.88	5.30	2.19	0.40	0.88	5.30	2.19	0.40
3	1.23	5.30	3.07	0.40				

LOAD ID 5 - Dead+Collateral+0.75Live+0.45Wind_Pressure1:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.13	0.00		0.02	0.50		0.06
1	1.46		-1.88	-2.26	0.06		-8.22	11.37	5.50	11.71
2	1.92	1.54	-1.54	-1.92	11.71	6.51	-2.72	15.00	6.51	11.71
3	2.26	1.88		-1.46	11.71	5.50	-8.22	17.63		0.06
RExt	0.13			0.00	0.06		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.13	10.94	0.01	RSup	0.06	13.28	0.00	LSup	0.00	0.17	
1	RLap	-1.88	10.94	0.17	MidS	-8.22	9.60	0.86	RSup	0.50	-1.28	
2	RLap	-1.54	3.96	0.39	RLap	6.51	7.40	0.88	RLap	0.82	-0.17	
3	LLap	1.88	10.94	0.17	MidS	-8.22	11.40	0.72	LSup	0.50	-1.28	
RExt	LSup	0.13	10.94	0.01	LSup	0.06	13.28	0.00	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear	Bear	UC		Calc Shear	Bear	UC	
1					1.14	5.30	3.07	0.37
2	0.82	5.30	2.19	0.37	0.82	5.30	2.19	0.37
3	1.14	5.30	3.07	0.37				

LOAD ID 6 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	MidSpan Mom	MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.62		-2.08	-2.51	0.07		-9.14	11.37	6.11	13.01
2	2.14	1.71	-1.71	-2.14	13.01	7.24	-3.02	15.00	7.24	13.01
3	2.51	2.08		-1.62	13.01	6.11	-9.14	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.08	10.94	0.19	MidS	-9.14	9.60	0.95	RSup	0.56	-1.42	
2	RLap	-1.71	3.96	0.43	RLap	7.24	7.40	0.98	RLap	0.91	-0.19	
3	LLap	2.08	10.94	0.19	MidS	-9.14	11.40	0.80	LSup	0.56	-1.42	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				1.26	5.30	3.07	0.41
2	0.91	5.30	2.19	0.41	0.91	5.30	2.19	0.41
3	1.26	5.30	3.07	0.41				

LOAD ID 7 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1+0.75Snow_Drift:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	MidSpan Mom	MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.62		-2.08	-2.51	0.07		-9.14	11.37	6.11	13.01
2	2.14	1.71	-1.71	-2.14	13.01	7.24	-3.02	15.00	7.24	13.01
3	2.51	2.08		-1.62	13.01	6.11	-9.14	17.63		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.08	10.94	0.19	MidS	-9.14	9.60	0.95	RSup	0.56	-1.42	
2	RLap	-1.71	3.96	0.43	RLap	7.24	7.40	0.98	RLap	0.91	-0.19	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

3	LLap	2.08	10.94	0.19	MidS	-9.14	11.40	0.80	LSup	0.56	-1.42	
REXt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.26	5.30	3.07	0.41
2	0.91	5.30	2.19	0.41	0.91	5.30	2.19	0.41
3	1.26	5.30	3.07	0.41				

LOAD ID 8 - Dead+Collateral+0.75Snow+0.45Wind_Pressure1+0.75Slide_Snow:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.14	0.00		0.02	0.50		0.07
1	1.62		-2.08	-2.51	0.07		-9.14	11.37	6.11	13.01
2	2.14	1.71	-1.71	-2.14	13.01	7.24	-3.02	15.00	7.24	13.01
3	2.51	2.08		-1.62	13.01	6.11	-9.14	17.63		0.07
REXt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.18	
1	RLap	-2.08	10.94	0.19	MidS	-9.14	9.60	0.95	RSup	0.56	-1.42	
2	RLap	-1.71	3.96	0.43	RLap	7.24	7.40	0.98	RLap	0.91	-0.19	
3	LLap	2.08	10.94	0.19	MidS	-9.14	11.40	0.80	LSup	0.56	-1.42	
REXt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.26	5.30	3.07	0.41
2	0.91	5.30	2.19	0.41	0.91	5.30	2.19	0.41
3	1.26	5.30	3.07	0.41				

LOAD ID 9 - 0.6Dead+0.6Wind_Suction1:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LExt	0.00			0.06	0.00		-0.01	0.50		-0.03
1	-0.60		0.49	0.57	-0.03		2.95	10.89	-1.22	-2.82
2	-0.40	-0.32	0.32	0.40	-2.82	-1.74	0.18	15.00	-1.74	-2.82
3	-0.57	-0.49		0.60	-2.82	-1.22	2.95	18.11		-0.03
RExt	-0.06			0.00	-0.03		-0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.06	10.94	0.01	RSup	-0.03	13.28	0.00	LSup	0.00	-0.06	
1	LSup	-0.60	10.94	0.05	MidS	2.95	9.72	0.30	RSup	0.12	0.47	
2	RLap	0.32	3.96	0.08	RLap	-1.74	7.27	0.24	RLap	0.21	-0.10	
3	RSup	0.60	10.94	0.05	MidS	2.95	11.34	0.26	LSup	0.12	0.47	
RExt	LSup	-0.06	10.94	0.01	LSup	-0.03	13.28	0.00	LSup	0.00	-0.06	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.27	5.30	3.07	0.09
2	0.20	5.30	2.19	0.09	0.20	5.30	2.19	0.09
3	0.27	5.30	3.07	0.09				

LOAD ID 10 - Dead+Collateral+Snow/2+PAT_SL_3:

REACTIONS:

Bay	Shear(k)				Moment(f-k)				
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.55		-2.06	-2.47	0.07		-8.57	11.16	6.69	13.49
2	2.19	1.78	-1.55	-1.97	13.49	7.53	-3.84	15.81	4.84	10.12
3	1.67	1.40		-0.98	10.12	5.52	-5.17	18.31		0.05
RExt	0.09			0.00	0.05		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.17	
1	RLap	-2.06	10.94	0.19	MidS	-8.57	9.67	0.89	RSup	0.58	-1.29	
2	LLap	1.78	3.96	0.45	LLap	7.53	7.40	1.02	LLap	0.95	-0.48	
3	LLap	1.40	10.94	0.13	LLap	5.52	12.08	0.46	LSup	0.43	-0.70	
RExt	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					1.31	5.30	3.07	0.43
2	0.94	5.30	2.19	0.43	0.71	5.30	2.19	0.32
3	0.98	5.30	3.07	0.32				

LOAD ID 11 - Dead+Collateral+Snow/2+PAT_SL_4:

REACTIONS:

Bay	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00		-0.09	0.00			0.01	0.50		0.05
1	0.98		-1.40	-1.67	0.05		-5.17	10.69	5.52	10.12
2	1.97	1.55	-1.78	-2.19	10.12	4.84	-3.84	14.19	7.53	13.49
3	2.47	2.06		-1.55	13.49	6.69	-8.57	17.84		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.10	
1	RLap	-1.40	10.94	0.13	MidS	-5.17	9.89	0.52	RSup	0.43	-0.70	
2	RLap	-1.78	3.96	0.45	RLap	7.53	7.40	1.02	RLap	0.95	-0.48	
3	LLap	2.06	10.94	0.19	MidS	-8.57	11.37	0.75	LSup	0.58	-1.29	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					0.98	5.30	3.07	0.32
2	0.71	5.30	2.19	0.32	0.94	5.30	2.19	0.43
3	1.31	5.30	3.07	0.43				

LOAD ID 12 - Dead+Collateral+Snow/2+PAT_SL_1:

REACTIONS:

Bay	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00		-0.14	0.00			0.02	0.50		0.07
1	1.64		-1.97	-2.38	0.07		-9.61	11.81	4.34	10.87
2	1.48	1.21	-0.98	-1.26	10.87	6.84	-1.15	16.23	4.15	7.51
3	1.58	1.31		-1.07	7.51	3.18	-6.18	17.32		0.05
RExt	0.09			0.00	0.05		0.01	0.50		0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.20	
1	RLap	-1.97	10.94	0.18	MidS	-9.61	9.47	1.01	RSup	0.47	-1.60	
2	LLap	1.21	3.96	0.30	LLap	6.84	7.28	0.94	LLap	0.82	0.18	
3	LLap	1.31	10.94	0.12	MidS	-6.18	11.42	0.54	LSup	0.33	-1.01	
RExt	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					1.05	5.30	3.07	0.34
2	0.76	5.30	2.19	0.35	0.52	5.30	2.19	0.24
3	0.73	5.30	3.07	0.24				

LOAD ID 13 - Dead+Collateral+Snow/2+PAT_SL_2:

REACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.09	0.00		0.01	0.50		0.05
1	1.07		-1.31	-1.58	0.05		-6.18	11.68	3.18	7.51
2	1.26	0.98	-1.21	-1.48	7.51	4.15	-1.15	13.77	6.84	10.87
3	2.38	1.97		-1.64	10.87	4.34	-9.61	17.19		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.13	
1	RLap	-1.31	10.94	0.12	MidS	-6.18	9.51	0.65	RSup	0.33	-1.01	
2	RLap	-1.21	3.96	0.30	RLap	6.84	7.28	0.94	RLap	0.82	0.18	
3	LLap	1.97	10.94	0.18	MidS	-9.61	11.43	0.84	LSup	0.47	-1.60	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.20	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.73	5.30	3.07	0.24
2	0.52	5.30	2.19	0.24	0.76	5.30	2.19	0.35
3	1.05	5.30	3.07	0.34				

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID 14 - Dead+Collateral+Snow-PAT_SL_1:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.09	0.00		0.01	0.50			0.05
1	0.98		-1.40	-1.67	0.05		-5.17	10.69	5.52	10.12
2	1.97	1.55	-1.78	-2.19	10.12	4.84	-3.84	14.19	7.53	13.49
3	2.47	2.06		-1.55	13.49	6.69	-8.57	17.84		0.07
RExt	0.14			0.00	0.07		0.02	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.09	10.94	0.01	RSup	0.05	13.28	0.00	LSup	0.00	0.10	
1	RLap	-1.40	10.94	0.13	MidS	-5.17	9.89	0.52	RSup	0.43	-0.70	
2	RLap	-1.78	3.96	0.45	RLap	7.53	7.40	1.02	RLap	0.95	-0.48	
3	LLap	2.06	10.94	0.19	MidS	-8.57	11.37	0.75	LSup	0.58	-1.29	
RExt	LSup	0.14	10.94	0.01	LSup	0.07	13.28	0.01	LSup	0.00	0.17	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.98	5.30	3.07 0.32
2	0.71	5.30	2.19 0.32	0.94	5.30	2.19 0.43
3	1.31	5.30	3.07 0.43			

LOAD ID 15 - Dead+Collateral+Snow-PAT_SL_2:

REACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00		-0.14	0.00		0.02	0.50			0.07
1	1.55		-2.06	-2.47	0.07		-8.57	11.16	6.69	13.49
2	2.19	1.78	-1.55	-1.97	13.49	7.53	-3.84	15.81	4.84	10.12
3	1.67	1.40		-0.98	10.12	5.52	-5.17	18.31		0.05
RExt	0.09			0.00	0.05		0.01	0.50		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.14	10.94	0.01	RSup	0.07	13.28	0.01	LSup	0.00	0.17	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	RLap	-2.06	10.94	0.19	MidS	-8.57	9.67	0.89	RSup	0.58	-1.29
2	LLap	1.78	3.96	0.45	LLap	7.53	7.40	1.02	LLap	0.95	-0.48
3	LLap	1.40	10.94	0.13	LLap	5.52	12.08	0.46	LSup	0.43	-0.70
REXT	LSup	0.09	10.94	0.01	LSup	0.05	13.28	0.00	LSup	0.00	0.10

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (GR_5)

Bay Id	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					1.31	5.30	3.07	0.43
2	0.94	5.30	2.19	0.43	0.71	5.30	2.19	0.32
3	0.98	5.30	3.07	0.32				

DEFLECTION:

LOAD ID 16 - Dead+Collateral+Live:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.15		
1	14.50	-1.20	2.32	0.52
2	15.00	-0.16	2.40	0.07
3	14.50	-1.20	2.32	0.52
REXT	1.00	0.15		

LOAD ID 17 - Dead+Collateral+Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.39	2.32	0.60
2	15.00	-0.18	2.40	0.08
3	14.50	-1.39	2.32	0.60
REXT	1.00	0.18		

LOAD ID 18 - Dead+Collateral+Snow+Snow_Drift:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.39	2.32	0.60
2	15.00	-0.18	2.40	0.08
3	14.50	-1.39	2.32	0.60
REXT	1.00	0.18		

LOAD ID 19 - Dead+Collateral+Snow+Slide_Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.39	2.32	0.60

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	15.00	-0.18	2.40	0.08
3	14.50	-1.39	2.32	0.60
REXt	1.00	0.18		

LOAD ID 20 - Dead+Collateral+0.75Live+0.36Wind_Pressure1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.16		
1	14.50	-1.23	3.48	0.35
2	15.00	-0.16	3.60	0.05
3	14.50	-1.23	3.48	0.35
REXt	1.00	0.16		

LOAD ID 21 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.37	3.48	0.39
2	15.00	-0.18	3.60	0.05
3	14.50	-1.37	3.48	0.39
REXt	1.00	0.18		

LOAD ID 22 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1+0.75Snow_Drift:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.37	3.48	0.39
2	15.00	-0.18	3.60	0.05
3	14.50	-1.37	3.48	0.39
REXt	1.00	0.18		

LOAD ID 23 - Dead+Collateral+0.75Snow+0.36Wind_Pressure1+0.75Slide_Snow:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	0.18		
1	14.50	-1.37	3.48	0.39
2	15.00	-0.18	3.60	0.05
3	14.50	-1.37	3.48	0.39
REXt	1.00	0.18		

LOAD ID 24 - 0.6Dead+0.48Wind_Suction1:

Bay Id	Offset (ft)	Deflect(in) Calc	Limit	Ratio
LExt	0.00	-0.04		
1	14.50	0.27	3.48	0.08
2	15.00	-0.03	3.60	0.01
3	14.50	0.27	3.48	0.08
REXt	1.00	-0.04		

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Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 In-Plane Roof Force 4/29/22 3:57pm

Win (k)= Design load in the plane of the purlin web
Wout(k)= Design load in the plane of the purlin flange
Pl (k)= Force in plane of roof per anti-roll clip

PURLIN ROLL FORCES:

Surf Id	Line Id	Load Id	--Roof_Load-- Win	Wout	Pl
2	1	2	31.04	2.59	0.04
2	2	10	59.08	4.92	-0.01
2	3	11	59.08	4.92	-0.01
2	4	2	31.04	2.59	0.04
3	1	15	34.99	-2.97	0.04
3	2	2	66.59	-5.65	-0.01
3	3	2	66.59	-5.65	-0.01
3	4	14	34.99	-2.97	0.04

STANDARD CONNECTION:

Surf Id	Line Id	No.	Attachment	Roll Id	Thick	Force/Connection Calc	Limit	UC	Stiff Calc	Deflection Calc	Limit
2	L_EW	14	Weld clip	@023	0.187	0.04	0.32	0.11	0.58	0.06	0.25
2	RF	14	Weld clip	@023	0.187	0.04	0.32	0.11	0.58	0.06	0.25
3	L_EW	16	Weld clip	@023	0.187	0.04	0.32	0.11	0.58	0.06	0.25
3	RF	16	Weld clip	@023	0.187	0.04	0.32	0.11	0.58	0.06	0.25

PANEL SHEAR/DIAPHRAGM:

Surf Id	Line Id	Panel_Shear Calc	Limit	-Deflection- Calc	Limit
2	L_EW	9.1	50.0	0.77	1.00
2	RF	9.1	50.0	0.78	1.00
3	L_EW	9.1	50.0	0.76	1.00
3	RF	9.1	50.0	0.77	1.00

22-8706 Roof Panel Design 4/29/22 3:57pm

PANEL LAYOUT:

Surf Id	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space	---Stiffness--- Rotation	Shear
2	24 DLOK	DLOK	24.00	50.0	55.19	14	3.866	0.00	0.90
3	24 DLOK	DLOK	24.00	50.0	62.22	16	3.822	0.00	0.90

PANEL STRENGTH:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Surf Id	Area	Load Id	Support Moment(ft-lb/ft) Offset	Calc	Limit	Ratio	Midspan Moment(ft-lb/ft) Offset	Calc	Limit	Ratio
2	Left	1	3.9	38.4	246.8	0.16	1.5	-28.3	326.3	0.09
		2	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		3	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		4	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		5	3.9	42.0	246.8	0.17	1.5	-30.9	326.3	0.09
		6	3.9	47.9	246.8	0.19	1.5	-35.2	326.3	0.11
		7	3.9	-52.3	326.3	0.16	1.5	37.2	246.8	0.15
2	Center	1	3.9	38.4	246.8	0.16	1.5	-28.3	326.3	0.09
		2	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		3	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		4	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		5	3.9	42.0	246.8	0.17	1.5	-30.9	326.3	0.09
		6	3.9	47.9	246.8	0.19	1.5	-35.2	326.3	0.11
		7	3.9	-37.3	326.3	0.11	1.5	26.5	246.8	0.11
2	Right	1	3.9	38.4	246.8	0.16	1.5	-28.3	326.3	0.09
		2	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		3	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		4	3.9	46.3	246.8	0.19	1.5	-34.1	326.3	0.10
		5	3.9	42.0	246.8	0.17	1.5	-30.9	326.3	0.09
		6	3.9	47.9	246.8	0.19	1.5	-35.2	326.3	0.11
		7	3.9	-52.3	326.3	0.16	1.5	37.2	246.8	0.15
3	Left	1	58.4	37.6	246.8	0.15	60.7	-27.6	326.3	0.08
		2	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		3	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		4	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		5	58.4	41.0	246.8	0.17	60.7	-30.2	326.3	0.09
		6	58.4	46.8	246.8	0.19	60.7	-34.4	326.3	0.11
		7	58.4	-51.1	326.3	0.16	60.7	36.4	246.8	0.15
3	Center	1	58.4	37.6	246.8	0.15	60.7	-27.6	326.3	0.08
		2	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		3	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		4	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		5	58.4	41.0	246.8	0.17	60.7	-30.2	326.3	0.09
		6	58.4	46.8	246.8	0.19	60.7	-34.4	326.3	0.11
		7	58.4	-36.4	326.3	0.11	60.7	25.9	246.8	0.10
3	Right	1	58.4	37.6	246.8	0.15	60.7	-27.6	326.3	0.08
		2	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		3	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		4	58.4	45.2	246.8	0.18	60.7	-33.3	326.3	0.10
		5	58.4	41.0	246.8	0.17	60.7	-30.2	326.3	0.09
		6	58.4	46.8	246.8	0.19	60.7	-34.4	326.3	0.11
		7	58.4	-51.1	326.3	0.16	60.7	36.4	246.8	0.15

PANEL DEFLECTION:

Surf Id	Area	Load Id	Deflection(in) Offset	Calc	Limit	Ratio
2	Left	8	1.9	-0.01	0.31	0.02

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

		9	1.9	-0.01	0.31	0.03
		10	1.9	-0.01	0.31	0.03
		11	1.9	-0.01	0.31	0.03
		12	1.9	-0.01	0.52	0.01
		13	1.9	0.01	0.52	0.03
2	Center	8	1.9	-0.01	0.31	0.02
		9	1.9	-0.01	0.31	0.03
		10	1.9	-0.01	0.31	0.03
		11	1.9	-0.01	0.31	0.03
		12	1.9	-0.01	0.52	0.01
		13	1.9	0.01	0.52	0.02
2	Right	8	1.9	-0.01	0.31	0.02
		9	1.9	-0.01	0.31	0.03
		10	1.9	-0.01	0.31	0.03
		11	1.9	-0.01	0.31	0.03
		12	1.9	-0.01	0.52	0.01
		13	1.9	0.01	0.52	0.03
3	Left	8	60.3	-0.01	0.31	0.02
		9	60.3	-0.01	0.31	0.03
		10	60.3	-0.01	0.31	0.03
		11	60.3	-0.01	0.31	0.03
		12	60.3	-0.01	0.51	0.01
		13	60.3	0.01	0.51	0.03
3	Center	8	60.3	-0.01	0.31	0.02
		9	60.3	-0.01	0.31	0.03
		10	60.3	-0.01	0.31	0.03
		11	60.3	-0.01	0.31	0.03
		12	60.3	-0.01	0.51	0.01
		13	60.3	0.01	0.51	0.02
3	Right	8	60.3	-0.01	0.31	0.02
		9	60.3	-0.01	0.31	0.03
		10	60.3	-0.01	0.31	0.03
		11	60.3	-0.01	0.31	0.03
		12	60.3	-0.01	0.51	0.01
		13	60.3	0.01	0.51	0.03

LOAD COMBINATION:

Load Id	Description
1	Dead+Live
2	Dead+Snow
3	Dead+Snow+Snow_Drift
4	Dead+Snow+Slide_Snow
5	Dead+0.75Live+0.45Wind_Pressure1
6	Dead+0.75Snow+0.45Wind_Pressure1
7	0.6Dead+0.6Wind_Suction1
8	Live
9	Snow
10	Snow+Snow_Drift
11	Snow+Slide_Snow
12	Wind_Pressure1

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

13 Wind_Suction1

22-8706 Roof Diagonal Bracing 4/29/22 3:57pm

PANEL SHEAR:

Length	Wind Calc	Seismic Calc	Limit
90.00	39.7	155.1	0.0

DIAGONAL BRACING:

Bay Id	Brace_Locate Start	End	Diag_Brace Type	Size	Part	Brace_Tension(k) Wind Calc	Wind Limit	Seismic Calc	Seismic Limit	Max UC	KL/R
3	0.00	19.26	R	1.000	1 ROD	4.25	15.04	14.36	15.04	0.96	
	19.26	38.52	R	0.750	3/4 ROD	2.03	8.46	8.55	8.46	1.01	
	38.52	55.00	R	0.625	5/8 ROD	0.91	5.87	3.30	5.87	0.56	
	55.00	78.92	R	0.625	5/8 ROD	0.26	5.87	2.48	5.87	0.42	
	78.92	97.96	R	0.875	7/8 ROD	3.23	11.51	8.90	11.51	0.77	
	97.96	117.00	R	1.000	1 ROD	4.00	15.04	14.29	15.04	0.95	

22-8706 Sidewall Diagonal Bracing 4/29/22 3:57pm

PANEL SHEAR:

Wall Id	Base Length	Wind Calc	Seismic Calc	Limit
2	0.0	1000.0	1000.0	100.0
4	79.0	57.3	220.6	100.0

DIAGONAL BRACING:

Wall Id	Bay Id	Brace_Locate Bot	Top	Diag_Brace Type	Size	Part	Brace_Tension(k) Wind Calc	Wind Limit	Seismic Calc	Seismic Limit	Max UC	KL/R
2	3	0.0	14.1	R	1.250	1 1/4ROD	4.79	23.50	25.00	28.20	0.89	
4	1	0.0	14.8	R	1.250	1 1/4ROD	4.92	23.50	25.28	28.20	0.90	

BOTTOM DIAGONAL BRACE REACTIONS:

Wall	Bay	Col	--Wind_Max(k)--	Seismic_Max(k)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Id	Id	Horz	Vert(+/-)	Horz	Vert(+/-)
2	3	3	-4.43	1.80	-15.06	6.11
2	3	4	4.43	1.80	15.06	6.11
4	1	1	-4.53	1.94	-15.10	6.47
4	1	2	4.53	1.94	15.10	6.47

LOAD COMBINATIONS:

1(Wind) - Dead+Collateral+Snow+0.6Wind_Long1
9(Seismic) - 1.1Dead+1.1Collateral+0.7Seismic_Long

22-8706 Bracing Deflection 4/29/22 3:57pm

ROOF ATTACHMENT DEFLECTION:

Wall Id	Attach Locate	Deflection(in) Wind	Seismic	Span/Deflect ----Wind--- Calc	Limit	--Seismic-- Calc	Limit
1	0.0	0.04	0.26	4445	60	692	65
1	19.3	0.08	0.44	2573	60	450	65
1	38.5	0.12	0.68	1768	60	319	65
1	55.0	0.15	0.81	1532	60	286	65
1	78.9	0.16	0.71	1300	60	293	65
1	98.0	0.11	0.53	1769	60	358	65
1	117.0	0.04	0.25	4365	60	668	65

WALL DEFLECTION AT EAVE:

Wall Id	Wall Height	Deflection(in) Wind	Seismic	Span/Deflect ----Wind--- Calc	Limit	--Seismic-- Calc	Limit
2	14.1	0.04	0.25	4365	60	668	65
4	14.8	0.04	0.26	4445	60	692	65

22-8706 Purlin Strut, Longitudinal Load 4/29/22 3:57pm

Surf Id	Brace Locate	Purl Id	Bay Id	Purlin Part	Load Id	-Axial(k)- Calc	Limit	Moment(f-k) Calc	Limit	-Axl+Mom- Loc	UC	Max UC	Max KL/R	Unbrace Minor
2	19.3	5	1	10Z12	1	0.76	13.72	-7.22	9.60	MidS	0.81	0.81	90	9.7

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

						2	-0.55	59.22	-7.22	9.60	MidS	0.74	0.75	90	9.7
						3	0.76	13.72	-7.22	9.60	MidS	0.81	0.81	90	9.7
						4	-0.55	59.22	-7.22	9.60	MidS	0.74	0.75	90	9.7
						5	0.76	13.72	-7.22	9.60	MidS	0.81	0.81	90	9.7
						6	-0.55	59.22	-7.22	9.60	MidS	0.74	0.75	90	9.7
						7	0.76	13.72	1.11	9.60	MidS	0.17	0.17	90	9.7
						8	-0.55	59.22	1.11	9.60	MidS	0.11	0.12	90	9.7
						9	1.63	13.72	-3.12	9.60	MidS	0.44	0.44	90	9.7
						10	1.21	13.72	-6.73	9.60	MidS	0.79	0.79	90	9.7
						11	1.21	13.72	-7.66	9.60	MidS	0.89	0.89	90	9.7
						12	1.21	13.72	-7.66	9.60	MidS	0.89	0.89	90	9.7
						13	1.21	13.72	-7.66	9.60	MidS	0.89	0.89	90	9.7
						14	1.63	13.72	-0.56	9.60	MidS	0.18	0.18	90	9.7
2	19.3	5	2	10Z14		1	0.76	4.18	5.72	7.40	RLap	0.96	0.96	131	15.0
						2	-0.55	42.29	5.72	7.40	RLap	0.76	0.77	131	15.0
						3	0.76	4.18	5.72	7.40	RLap	0.96	0.96	131	15.0
						4	-0.55	42.29	5.72	7.40	RLap	0.76	0.77	131	15.0
						5	0.76	4.18	5.72	7.40	RLap	0.96	0.96	131	15.0
						6	-0.55	42.29	5.72	7.40	RLap	0.76	0.77	131	15.0
						7	0.76	4.18	-0.88	7.40	RLap	0.30	0.30	131	15.0
						8	-0.55	42.29	-0.88	7.40	RLap	0.11	0.12	131	15.0
#						9	3.11	4.18	2.48	7.40	RLap	1.08	1.08	131	15.0
#						10	2.31	4.18	5.33	7.40	RLap	1.27	1.27	131	15.0
#						11	2.31	4.18	6.07	7.40	RLap	1.37	1.37	131	15.0
#						12	2.31	4.18	6.07	7.40	RLap	1.37	1.37	131	15.0
#						13	2.31	4.18	6.07	7.40	RLap	1.37	1.37	131	15.0

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

						14	3.11	4.18	0.44	7.40	RLap	0.80	0.80	131
15.0														
- Increase Purlin Gage ----														
2	19.3	5	2	10Z12		1	0.76	6.61	5.72	12.00	RLap	0.59	0.59	130
15.0														
						2	-0.55	59.22	5.72	12.00	RLap	0.47	0.48	130
15.0														
						3	0.76	6.61	5.72	12.00	RLap	0.59	0.59	130
15.0														
						4	-0.55	59.22	5.72	12.00	RLap	0.47	0.48	130
15.0														
						5	0.76	6.61	5.72	12.00	RLap	0.59	0.59	130
15.0														
						6	-0.55	59.22	5.72	12.00	RLap	0.47	0.48	130
15.0														
						7	0.76	6.61	-0.88	12.00	RLap	0.19	0.19	130
15.0														
						8	-0.55	59.22	-0.88	12.00	RLap	0.07	0.07	130
15.0														
						9	3.11	6.61	2.48	12.00	RLap	0.68	0.68	130
15.0														
						10	2.31	6.61	5.33	12.00	RLap	0.79	0.79	130
15.0														
						11	2.31	6.61	6.07	12.00	RLap	0.86	0.86	130
15.0														
						12	2.31	6.61	6.07	12.00	RLap	0.86	0.86	130
15.0														
						13	2.31	6.61	6.07	12.00	RLap	0.86	0.86	130
15.0														
						14	3.11	6.61	0.44	12.00	RLap	0.51	0.51	130
15.0														
2	19.3	5	3	10Z12		1	2.47	21.11	-7.22	11.40	MidS	0.75	0.75	90
7.3														
						2	2.98	21.11	-7.22	11.40	MidS	0.77	0.77	90
7.3														
						3	2.47	21.11	-7.22	11.40	MidS	0.75	0.75	90
7.3														
						4	2.98	21.11	-7.22	11.40	MidS	0.77	0.77	90
7.3														
						5	2.47	21.11	-7.22	11.40	MidS	0.75	0.75	90
7.3														
						6	2.98	21.11	-7.22	11.40	MidS	0.77	0.77	90
7.3														
						7	2.47	21.11	1.11	11.40	MidS	0.21	0.21	90
7.3														
						8	2.98	21.11	1.11	11.40	MidS	0.24	0.24	90
7.3														
						9	11.79	21.11	-3.13	11.40	MidS	0.83	0.83	90
7.3														
						10	8.76	21.11	-6.73	11.40	MidS	1.01	1.01	90

Customer	Elbert Rentals	**Job No**	22-8706	
Project	Building Expansion	**Date**	5/3/2022	
Location	Newberg, OR 97132	**Designed By**	AC	
Size	117 x 90 x 14.8 x 14.1	**Checked By**		

7.3										
#			11	8.76	21.11	-7.66	11.40	MidS	1.09	1.09	90
7.3										
#			12	8.76	21.11	-7.66	11.40	MidS	1.09	1.09	90
7.3										
#			13	8.76	21.11	-7.66	11.40	MidS	1.09	1.09	90
7.3										
			14	11.79	21.11	-0.56	11.40	MidS	0.61	0.61	90
7.3										
- Added Purlin Strut -----										
2	19.3	5	3	10Z16	1	0.90	9.98			0.09	90
6.0										
			2	1.08	9.98					0.11	90
6.0										
			3	0.90	9.98					0.09	90
6.0										
			4	1.08	9.98					0.11	90
6.0										
			5	0.90	9.98					0.09	90
6.0										
			6	1.08	9.98					0.11	90
6.0										
			7	0.90	9.98					0.09	90
6.0										
			8	1.08	9.98					0.11	90
6.0										
			9	4.29	9.98					0.43	90
6.0										
			10	3.18	9.98					0.32	90
6.0										
			11	3.18	9.98					0.32	90
6.0										
			12	3.18	9.98					0.32	90
6.0										
			13	3.18	9.98					0.32	90
6.0										
			14	4.29	9.98					0.43	90
6.0										
- Purlin With Added Strut -										
2	19.3	5	3	10Z12	1	1.57	21.11	-7.22	11.40	MidS	0.71	0.71	90
7.3										
			2	1.90	21.11	-7.22	11.40	MidS	0.72	0.72	90
7.3										
			3	1.57	21.11	-7.22	11.40	MidS	0.71	0.71	90
7.3										
			4	1.90	21.11	-7.22	11.40	MidS	0.72	0.72	90
7.3										
			5	1.57	21.11	-7.22	11.40	MidS	0.71	0.71	90
7.3										
			6	1.90	21.11	-7.22	11.40	MidS	0.72	0.72	90
7.3										
			7	1.57	21.11	1.11	11.40	MidS	0.17	0.17	90
7.3										
			8	1.90	21.11	1.11	11.40	MidS	0.19	0.19	90

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

7.3														
					9	7.50	21.11	-3.13	11.40	MidS	0.63	0.63	90	
7.3														
					10	5.57	21.11	-6.73	11.40	MidS	0.85	0.85	90	
7.3														
					11	5.57	21.11	-7.66	11.40	MidS	0.94	0.94	90	
7.3														
					12	5.57	21.11	-7.66	11.40	MidS	0.94	0.94	90	
7.3														
					13	5.57	21.11	-7.66	11.40	MidS	0.94	0.94	90	
7.3														
					14	7.50	21.11	-0.56	11.40	MidS	0.40	0.40	90	
7.3														

2	38.5	10	1	10Z12	1	0.91	13.72	-7.22	9.60	MidS	0.82	0.82	90	
9.7														
					2	-0.66	59.22	-7.22	9.60	MidS	0.74	0.75	90	
9.7														
					3	0.91	13.72	-7.22	9.60	MidS	0.82	0.82	90	
9.7														
					4	-0.66	59.22	-7.22	9.60	MidS	0.74	0.75	90	
9.7														
					5	0.91	13.72	-7.22	9.60	MidS	0.82	0.82	90	
9.7														
					6	-0.66	59.22	-7.22	9.60	MidS	0.74	0.75	90	
9.7														
					7	0.91	13.72	1.11	9.60	MidS	0.18	0.18	90	
9.7														
					8	-0.66	59.22	1.11	9.60	MidS	0.10	0.12	90	
9.7														
					9	1.55	13.72	-3.12	9.60	MidS	0.44	0.44	90	
9.7														
					10	1.15	13.72	-6.73	9.60	MidS	0.78	0.78	90	
9.7														
					11	1.15	13.72	-7.66	9.60	MidS	0.88	0.88	90	
9.7														
					12	1.15	13.72	-7.66	9.60	MidS	0.88	0.88	90	
9.7														
					13	1.15	13.72	-7.66	9.60	MidS	0.88	0.88	90	
9.7														
					14	1.55	13.72	-0.56	9.60	MidS	0.17	0.17	90	
9.7														

2	38.5	10	2	10Z14	1	0.91	4.18	5.72	7.40	RLap	0.99	0.99	131	
15.0														
					2	-0.66	42.29	5.72	7.40	RLap	0.76	0.77	131	
15.0														
					3	0.91	4.18	5.72	7.40	RLap	0.99	0.99	131	
15.0														
					4	-0.66	42.29	5.72	7.40	RLap	0.76	0.77	131	
15.0														
					5	0.91	4.18	5.72	7.40	RLap	0.99	0.99	131	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

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15.0
                                  6 -0.66 42.29   5.72  7.40  RLap 0.76  0.77   131
15.0
                                  7  0.91  4.18  -0.88  7.40  RLap 0.34  0.34   131
15.0
                                  8 -0.66 42.29  -0.88  7.40  RLap 0.10  0.12   131
15.0
                                  9  2.92  4.18   2.48  7.40  RLap 1.03  1.03   131
15.0
#                                10  2.17  4.18   5.33  7.40  RLap 1.24  1.24   131
15.0
#                                11  2.17  4.18   6.07  7.40  RLap 1.34  1.34   131
15.0
#                                12  2.17  4.18   6.07  7.40  RLap 1.34  1.34   131
15.0
#                                13  2.17  4.18   6.07  7.40  RLap 1.34  1.34   131
15.0
                                 14  2.92  4.18   0.44  7.40  RLap 0.76  0.76   131
15.0
 - Increase Purlin Gage ----
  2    38.5 10     2 10Z12        1  0.91  6.61   5.72 12.00  RLap 0.61  0.61   130
15.0
                                  2 -0.66 59.22   5.72 12.00  RLap 0.47  0.48   130
15.0
                                  3  0.91  6.61   5.72 12.00  RLap 0.61  0.61   130
15.0
                                  4 -0.66 59.22   5.72 12.00  RLap 0.47  0.48   130
15.0
                                  5  0.91  6.61   5.72 12.00  RLap 0.61  0.61   130
15.0
                                  6 -0.66 59.22   5.72 12.00  RLap 0.47  0.48   130
15.0
                                  7  0.91  6.61  -0.88 12.00  RLap 0.21  0.21   130
15.0
                                  8 -0.66 59.22  -0.88 12.00  RLap 0.07  0.07   130
15.0
                                  9  2.92  6.61   2.48 12.00  RLap 0.65  0.65   130
15.0
                                 10  2.17  6.61   5.33 12.00  RLap 0.77  0.77   130
15.0
                                 11  2.17  6.61   6.07 12.00  RLap 0.83  0.83   130
15.0
                                 12  2.17  6.61   6.07 12.00  RLap 0.83  0.83   130
15.0
                                 13  2.17  6.61   6.07 12.00  RLap 0.83  0.83   130
15.0
                                 14  2.92  6.61   0.44 12.00  RLap 0.48  0.48   130
15.0

 ------------------------------------------------------------------------------
  2    38.5 10     3 10Z12        1  1.71 21.11  -7.22 11.40  MidS 0.71  0.71    90
7.3
                                  2  0.80 21.11  -7.22 11.40  MidS 0.67  0.67    90
7.3
```

	Customer	Elbert Rentals	**Job No**	22-8706	
	Project	Building Expansion	**Date**	5/3/2022	
	Location	Newberg, OR 97132	**Designed By**	AC	
	Size	117 x 90 x 14.8 x 14.1	**Checked By**		

				3	1.71	21.11	-7.22	11.40	MidS	0.71	0.71	90	7.3
				4	0.80	21.11	-7.22	11.40	MidS	0.67	0.67	90	7.3
				5	1.71	21.11	-7.22	11.40	MidS	0.71	0.71	90	7.3
				6	0.80	21.11	-7.22	11.40	MidS	0.67	0.67	90	7.3
				7	1.71	21.11	1.11	11.40	MidS	0.18	0.18	90	7.3
				8	0.80	21.11	1.11	11.40	MidS	0.14	0.14	90	7.3
				9	7.19	21.11	-3.13	11.40	MidS	0.61	0.61	90	7.3
				10	5.34	21.11	-6.73	11.40	MidS	0.84	0.84	90	7.3
				11	5.34	21.11	-7.66	11.40	MidS	0.92	0.92	90	7.3
				12	5.34	21.11	-7.66	11.40	MidS	0.92	0.92	90	7.3
				13	5.34	21.11	-7.66	11.40	MidS	0.92	0.92	90	7.3
				14	7.19	21.11	-0.56	11.40	MidS	0.39	0.39	90	7.3
2	55.0	14	1 10Z12	1	0.41	13.72	-5.61	9.60	MidS	0.61	0.61	90	9.7
				2	-0.30	59.22	-5.61	9.60	MidS	0.58	0.58	90	9.7
				3	0.41	13.72	-5.61	9.60	MidS	0.61	0.61	90	9.7
				4	-0.30	59.22	-5.61	9.60	MidS	0.58	0.58	90	9.7
				5	0.41	13.72	-5.61	9.60	MidS	0.61	0.61	90	9.7
				6	-0.30	59.22	-5.61	9.60	MidS	0.58	0.58	90	9.7
				7	0.41	13.72	0.86	9.60	MidS	0.12	0.12	90	9.7
				8	-0.30	59.22	0.86	9.60	MidS	0.08	0.09	90	9.7
				9	0.86	13.72	-2.43	9.60	MidS	0.32	0.32	90	9.7
				10	0.64	13.72	-5.23	9.60	MidS	0.59	0.59	90	9.7
				11	0.64	13.72	-5.95	9.60	MidS	0.67	0.67	90	9.7
				12	0.64	13.72	-5.95	9.60	MidS	0.67	0.67	90	9.7
				13	0.64	13.72	-5.95	9.60	MidS	0.67	0.67	90	9.7
				14	0.86	13.72	-0.43	9.60	MidS	0.11	0.11	90	9.7
2	55.0	14	2 10Z14	1	0.41	4.18	4.44	7.40	RLap	0.70	0.70	131	15.0

	Customer	Elbert Rentals	**Job No**	22-8706	
	Project	Building Expansion	**Date**	5/3/2022	
	Location	Newberg, OR 97132	**Designed By**	AC	
	Size	117 x 90 x 14.8 x 14.1	**Checked By**		

					2	-0.30	42.29	4.44	7.40	RLap	0.59	0.60	131	15.0
					3	0.41	4.18	4.44	7.40	RLap	0.70	0.70	131	15.0
					4	-0.30	42.29	4.44	7.40	RLap	0.59	0.60	131	15.0
					5	0.41	4.18	4.44	7.40	RLap	0.70	0.70	131	15.0
					6	-0.30	42.29	4.44	7.40	RLap	0.59	0.60	131	15.0
					7	0.41	4.18	-0.68	7.40	RLap	0.19	0.19	131	15.0
					8	-0.30	42.29	-0.68	7.40	RLap	0.09	0.09	131	15.0
					9	1.63	4.18	1.92	7.40	RLap	0.65	0.65	131	15.0
					10	1.21	4.18	4.14	7.40	RLap	0.85	0.85	131	15.0
					11	1.21	4.18	4.71	7.40	RLap	0.93	0.93	131	15.0
					12	1.21	4.18	4.71	7.40	RLap	0.93	0.93	131	15.0
					13	1.21	4.18	4.71	7.40	RLap	0.93	0.93	131	15.0
					14	1.63	4.18	0.34	7.40	RLap	0.44	0.44	131	15.0
2	55.0	14	3	10Z12	1	0.58	21.11	-5.61	11.40	MidS	0.52	0.52	90	7.3
					2	0.23	21.11	-5.61	11.40	MidS	0.50	0.50	90	7.3
					3	0.58	21.11	-5.61	11.40	MidS	0.52	0.52	90	7.3
					4	0.23	21.11	-5.61	11.40	MidS	0.50	0.50	90	7.3
					5	0.58	21.11	-5.61	11.40	MidS	0.52	0.52	90	7.3
					6	0.23	21.11	-5.61	11.40	MidS	0.50	0.50	90	7.3
					7	0.58	21.11	0.86	11.40	MidS	0.10	0.10	90	7.3
					8	0.23	21.11	0.86	11.40	MidS	0.09	0.09	90	7.3
					9	2.46	21.11	-2.43	11.40	MidS	0.33	0.33	90	7.3
					10	1.82	21.11	-5.23	11.40	MidS	0.55	0.55	90	7.3
					11	1.82	21.11	-5.95	11.40	MidS	0.61	0.61	90	7.3
					12	1.82	21.11	-5.95	11.40	MidS	0.61	0.61	90	7.3
					13	1.82	21.11	-5.95	11.40	MidS	0.61	0.61	90	7.3
					14	2.46	21.11	-0.43	11.40	MidS	0.15	0.15	90	7.3

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Surf Id	Brace Locate	Purl Id	Bay Id	Purlin Part	Load Id	-Axial(k)- Calc	Limit	Moment(f-k) Calc	Limit	-Axl+Mom- Loc	UC	Max UC	Max KL/R	Unbrace Minor
3	55.0	1	1	10Z12	1	0.41	13.72	-5.57	9.60	MidS	0.61	0.61	90	9.7
					2	-0.30	59.22	-5.57	9.60	MidS	0.57	0.58	90	9.7
					3	0.41	13.72	-5.57	9.60	MidS	0.61	0.61	90	9.7
					4	-0.30	59.22	-5.57	9.60	MidS	0.57	0.58	90	9.7
					5	0.41	13.72	-5.57	9.60	MidS	0.61	0.61	90	9.7
					6	-0.30	59.22	-5.57	9.60	MidS	0.57	0.58	90	9.7
					7	0.41	13.72	0.85	9.60	MidS	0.12	0.12	90	9.7
					8	-0.30	59.22	0.85	9.60	MidS	0.08	0.09	90	9.7
					9	0.86	13.72	-2.41	9.60	MidS	0.31	0.31	90	9.7
					10	0.64	13.72	-5.19	9.60	MidS	0.59	0.59	90	9.7
					11	0.64	13.72	-5.90	9.60	MidS	0.66	0.66	90	9.7
					12	0.64	13.72	-5.90	9.60	MidS	0.66	0.66	90	9.7
					13	0.64	13.72	-5.90	9.60	MidS	0.66	0.66	90	9.7
					14	0.86	13.72	-0.43	9.60	MidS	0.11	0.11	90	9.7
3	55.0	1	2	10Z14	1	0.41	4.18	4.41	7.40	RLap	0.70	0.70	131	15.0
					2	-0.30	42.29	4.41	7.40	RLap	0.59	0.60	131	15.0
					3	0.41	4.18	4.41	7.40	RLap	0.70	0.70	131	15.0
					4	-0.30	42.29	4.41	7.40	RLap	0.59	0.60	131	15.0
					5	0.41	4.18	4.41	7.40	RLap	0.70	0.70	131	15.0
					6	-0.30	42.29	4.41	7.40	RLap	0.59	0.60	131	15.0
					7	0.41	4.18	-0.68	7.40	RLap	0.19	0.19	131	15.0
					8	-0.30	42.29	-0.68	7.40	RLap	0.08	0.09	131	15.0
					9	1.63	4.18	1.91	7.40	RLap	0.65	0.65	131	15.0
					10	1.21	4.18	4.11	7.40	RLap	0.85	0.85	131	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

15.0														
					11	1.21	4.18	4.68	7.40	RLap	0.92	0.92	131	
15.0														
					12	1.21	4.18	4.68	7.40	RLap	0.92	0.92	131	
15.0														
					13	1.21	4.18	4.68	7.40	RLap	0.92	0.92	131	
15.0														
					14	1.63	4.18	0.34	7.40	RLap	0.44	0.44	131	
15.0														
3	55.0	1	3	10Z12	1	0.58	21.11	-5.57	11.40	MidS	0.52	0.52	90	
7.3														
					2	0.23	21.11	-5.57	11.40	MidS	0.50	0.50	90	
7.3														
					3	0.58	21.11	-5.57	11.40	MidS	0.52	0.52	90	
7.3														
					4	0.23	21.11	-5.57	11.40	MidS	0.50	0.50	90	
7.3														
					5	0.58	21.11	-5.57	11.40	MidS	0.52	0.52	90	
7.3														
					6	0.23	21.11	-5.57	11.40	MidS	0.50	0.50	90	
7.3														
					7	0.58	21.11	0.85	11.40	MidS	0.10	0.10	90	
7.3														
					8	0.23	21.11	0.85	11.40	MidS	0.09	0.09	90	
7.3														
					9	2.46	21.11	-2.41	11.40	MidS	0.33	0.33	90	
7.3														
					10	1.82	21.11	-5.19	11.40	MidS	0.54	0.54	90	
7.3														
					11	1.82	21.11	-5.90	11.40	MidS	0.60	0.60	90	
7.3														
					12	1.82	21.11	-5.90	11.40	MidS	0.60	0.60	90	
7.3														
					13	1.82	21.11	-5.90	11.40	MidS	0.60	0.60	90	
7.3														
					14	2.46	21.11	-0.43	11.40	MidS	0.15	0.15	90	
7.3														
3	78.9	7	1	10Z12	1	1.00	13.72	-7.14	9.60	MidS	0.82	0.82	90	
9.7														
					2	-0.72	59.22	-7.14	9.60	MidS	0.73	0.74	90	
9.7														
					3	1.00	13.72	-7.14	9.60	MidS	0.82	0.82	90	
9.7														
					4	-0.72	59.22	-7.14	9.60	MidS	0.73	0.74	90	
9.7														
					5	1.00	13.72	-7.14	9.60	MidS	0.82	0.82	90	
9.7														
					6	-0.72	59.22	-7.14	9.60	MidS	0.73	0.74	90	
9.7														
					7	1.00	13.72	1.09	9.60	MidS	0.19	0.19	90	
9.7														
					8	-0.72	59.22	1.09	9.60	MidS	0.10	0.11	90	
9.7														
					9	1.84	13.72	-3.09	9.60	MidS	0.46	0.46	90	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

9.7											
				10	1.37	13.72	-6.66	9.60	MidS	0.79	0.79	90
9.7											
				11	1.37	13.72	-7.57	9.60	MidS	0.89	0.89	90
9.7											
				12	1.37	13.72	-7.57	9.60	MidS	0.89	0.89	90
9.7											
				13	1.37	13.72	-7.57	9.60	MidS	0.89	0.89	90
9.7											
				14	1.84	13.72	-0.55	9.60	MidS	0.19	0.19	90
9.7											

3	78.9	7	2 10Z14	1	1.00	4.18	5.65	7.40	RLap	1.00	1.00	131
15.0											
				2	-0.72	42.29	5.65	7.40	RLap	0.75	0.76	131
15.0											
				3	1.00	4.18	5.65	7.40	RLap	1.00	1.00	131
15.0											
				4	-0.72	42.29	5.65	7.40	RLap	0.75	0.76	131
15.0											
				5	1.00	4.18	5.65	7.40	RLap	1.00	1.00	131
15.0											
				6	-0.72	42.29	5.65	7.40	RLap	0.75	0.76	131
15.0											
				7	1.00	4.18	-0.87	7.40	RLap	0.36	0.36	131
15.0											
				8	-0.72	42.29	-0.87	7.40	RLap	0.10	0.12	131
15.0											
#				9	3.50	4.18	2.45	7.40	RLap	1.17	1.17	131
15.0											
#				10	2.60	4.18	5.27	7.40	RLap	1.34	1.34	131
15.0											
#				11	2.60	4.18	6.00	7.40	RLap	1.43	1.43	131
15.0											
#				12	2.60	4.18	6.00	7.40	RLap	1.43	1.43	131
15.0											
#				13	2.60	4.18	6.00	7.40	RLap	1.43	1.43	131
15.0											
				14	3.50	4.18	0.44	7.40	RLap	0.90	0.90	131
15.0											
- Increase Purlin Gage ----											
3	78.9	7	2 10Z12	1	1.00	6.61	5.65	12.00	RLap	0.62	0.62	130
15.0											
				2	-0.72	59.22	5.65	12.00	RLap	0.46	0.47	130
15.0											
				3	1.00	6.61	5.65	12.00	RLap	0.62	0.62	130
15.0											
				4	-0.72	59.22	5.65	12.00	RLap	0.46	0.47	130
15.0											
				5	1.00	6.61	5.65	12.00	RLap	0.62	0.62	130
15.0											
				6	-0.72	59.22	5.65	12.00	RLap	0.46	0.47	130
15.0											

Customer	Elbert Rentals	**Job No**	22-8706	
Project	Building Expansion	**Date**	5/3/2022	
Location	Newberg, OR 97132	**Designed By**	AC	
Size	117 x 90 x 14.8 x 14.1	**Checked By**		

					7	1.00	6.61	-0.87	12.00	RLap	0.22	0.22	130	15.0
					8	-0.72	59.22	-0.87	12.00	RLap	0.07	0.07	130	15.0
					9	3.50	6.61	2.45	12.00	RLap	0.73	0.73	130	15.0
					10	2.60	6.61	5.27	12.00	RLap	0.83	0.83	130	15.0
					11	2.60	6.61	6.00	12.00	RLap	0.89	0.89	130	15.0
					12	2.60	6.61	6.00	12.00	RLap	0.89	0.89	130	15.0
					13	2.60	6.61	6.00	12.00	RLap	0.89	0.89	130	15.0
					14	3.50	6.61	0.44	12.00	RLap	0.57	0.57	130	15.0
3	78.9	7	3	10Z12	1	1.37	21.11	-7.14	11.40	MidS	0.69	0.69	90	7.3
					2	2.47	21.11	-7.14	11.40	MidS	0.74	0.74	90	7.3
					3	1.37	21.11	-7.14	11.40	MidS	0.69	0.69	90	7.3
					4	2.47	21.11	-7.14	11.40	MidS	0.74	0.74	90	7.3
					5	1.37	21.11	-7.14	11.40	MidS	0.69	0.69	90	7.3
					6	2.47	21.11	-7.14	11.40	MidS	0.74	0.74	90	7.3
					7	1.37	21.11	1.09	11.40	MidS	0.16	0.16	90	7.3
					8	2.47	21.11	1.09	11.40	MidS	0.21	0.21	90	7.3
					9	7.18	21.11	-3.09	11.40	MidS	0.61	0.61	90	7.3
					10	5.33	21.11	-6.66	11.40	MidS	0.84	0.84	90	7.3
					11	5.33	21.11	-7.57	11.40	MidS	0.92	0.92	90	7.3
					12	5.33	21.11	-7.57	11.40	MidS	0.92	0.92	90	7.3
					13	5.33	21.11	-7.57	11.40	MidS	0.92	0.92	90	7.3
					14	7.18	21.11	-0.55	11.40	MidS	0.39	0.39	90	7.3
3	98.0	12	1	10Z12	1	0.74	13.72	-7.14	9.60	MidS	0.80	0.80	90	9.7
					2	-0.54	59.22	-7.14	9.60	MidS	0.73	0.74	90	9.7
					3	0.74	13.72	-7.14	9.60	MidS	0.80	0.80	90	9.7
					4	-0.54	59.22	-7.14	9.60	MidS	0.73	0.74	90	9.7

Customer	Elbert Rentals	**Job No**	22-8706	
Project	Building Expansion	**Date**	5/3/2022	
Location	Newberg, OR 97132	**Designed By**	AC	
Size	117 x 90 x 14.8 x 14.1	**Checked By**		

				5	0.74	13.72	-7.14	9.60	MidS	0.80	0.80	90	9.7
				6	-0.54	59.22	-7.14	9.60	MidS	0.73	0.74	90	9.7
				7	0.74	13.72	1.09	9.60	MidS	0.17	0.17	90	9.7
				8	-0.54	59.22	1.09	9.60	MidS	0.10	0.11	90	9.7
				9	1.61	13.72	-3.09	9.60	MidS	0.44	0.44	90	9.7
				10	1.19	13.72	-6.66	9.60	MidS	0.78	0.78	90	9.7
				11	1.19	13.72	-7.57	9.60	MidS	0.87	0.87	90	9.7
				12	1.19	13.72	-7.57	9.60	MidS	0.87	0.87	90	9.7
				13	1.19	13.72	-7.57	9.60	MidS	0.87	0.87	90	9.7
				14	1.61	13.72	-0.55	9.60	MidS	0.17	0.17	90	9.7
3	98.0	12	2 10Z14	1	0.74	4.18	5.65	7.40	RLap	0.94	0.94	131	15.0
				2	-0.54	42.29	5.65	7.40	RLap	0.75	0.76	131	15.0
				3	0.74	4.18	5.65	7.40	RLap	0.94	0.94	131	15.0
				4	-0.54	42.29	5.65	7.40	RLap	0.75	0.76	131	15.0
				5	0.74	4.18	5.65	7.40	RLap	0.94	0.94	131	15.0
				6	-0.54	42.29	5.65	7.40	RLap	0.75	0.76	131	15.0
				7	0.74	4.18	-0.87	7.40	RLap	0.29	0.29	131	15.0
				8	-0.54	42.29	-0.87	7.40	RLap	0.10	0.12	131	15.0
#				9	3.07	4.18	2.45	7.40	RLap	1.07	1.07	131	15.0
#				10	2.28	4.18	5.27	7.40	RLap	1.26	1.26	131	15.0
#				11	2.28	4.18	6.00	7.40	RLap	1.36	1.36	131	15.0
#				12	2.28	4.18	6.00	7.40	RLap	1.36	1.36	131	15.0
#				13	2.28	4.18	6.00	7.40	RLap	1.36	1.36	131	15.0
				14	3.07	4.18	0.44	7.40	RLap	0.80	0.80	131	15.0
- Increase Purlin Gage ----													
3	98.0	12	2 10Z12	1	0.74	6.61	5.65	12.00	RLap	0.58	0.58	130	15.0
				2	-0.54	59.22	5.65	12.00	RLap	0.46	0.47	130	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

15.0

			3	0.74	6.61	5.65	12.00	RLap 0.58	0.58	130
15.0										
			4	-0.54	59.22	5.65	12.00	RLap 0.46	0.47	130
15.0										
			5	0.74	6.61	5.65	12.00	RLap 0.58	0.58	130
15.0										
			6	-0.54	59.22	5.65	12.00	RLap 0.46	0.47	130
15.0										
			7	0.74	6.61	-0.87	12.00	RLap 0.18	0.18	130
15.0										
			8	-0.54	59.22	-0.87	12.00	RLap 0.07	0.07	130
15.0										
			9	3.07	6.61	2.45	12.00	RLap 0.67	0.67	130
15.0										
			10	2.28	6.61	5.27	12.00	RLap 0.79	0.79	130
15.0										
			11	2.28	6.61	6.00	12.00	RLap 0.85	0.85	130
15.0										
			12	2.28	6.61	6.00	12.00	RLap 0.85	0.85	130
15.0										
			13	2.28	6.61	6.00	12.00	RLap 0.85	0.85	130
15.0										
			14	3.07	6.61	0.44	12.00	RLap 0.50	0.50	130
15.0										

3	98.0	12	3 10Z12	1	3.36	21.11	-7.14	11.40	MidS	0.79	0.79	90
7.3												
				2	2.73	21.11	-7.14	11.40	MidS	0.76	0.76	90
7.3												
				3	3.36	21.11	-7.14	11.40	MidS	0.79	0.79	90
7.3												
				4	2.73	21.11	-7.14	11.40	MidS	0.76	0.76	90
7.3												
				5	3.36	21.11	-7.14	11.40	MidS	0.79	0.79	90
7.3												
				6	2.73	21.11	-7.14	11.40	MidS	0.76	0.76	90
7.3												
				7	3.36	21.11	1.09	11.40	MidS	0.26	0.26	90
7.3												
				8	2.73	21.11	1.09	11.40	MidS	0.23	0.23	90
7.3												
				9	12.05	21.11	-3.09	11.40	MidS	0.84	0.84	90
7.3												
				10	8.95	21.11	-6.66	11.40	MidS	1.01	1.01	90
7.3												
#				11	8.95	21.11	-7.57	11.40	MidS	1.09	1.09	90
7.3												
#				12	8.95	21.11	-7.57	11.40	MidS	1.09	1.09	90
7.3												
#				13	8.95	21.11	-7.57	11.40	MidS	1.09	1.09	90

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

7.3											
				14	12.05	21.11	-0.55	11.40	MidS	0.62	0.62	90
7.3											
- Added Purlin Strut -----											
3	98.0	12	3 10Z16	1	1.22	9.98					0.12	90
6.0											
				2	0.99	9.98					0.10	90
6.0											
				3	1.22	9.98					0.12	90
6.0											
				4	0.99	9.98					0.10	90
6.0											
				5	1.22	9.98					0.12	90
6.0											
				6	0.99	9.98					0.10	90
6.0											
				7	1.22	9.98					0.12	90
6.0											
				8	0.99	9.98					0.10	90
6.0											
				9	4.38	9.98					0.44	90
6.0											
				10	3.26	9.98					0.33	90
6.0											
				11	3.26	9.98					0.33	90
6.0											
				12	3.26	9.98					0.33	90
6.0											
				13	3.26	9.98					0.33	90
6.0											
				14	4.38	9.98					0.44	90
6.0											
- Purlin With Added Strut -											
3	98.0	12	3 10Z12	1	2.14	21.11	-7.14	11.40	MidS	0.73	0.73	90
7.3											
				2	1.74	21.11	-7.14	11.40	MidS	0.71	0.71	90
7.3											
				3	2.14	21.11	-7.14	11.40	MidS	0.73	0.73	90
7.3											
				4	1.74	21.11	-7.14	11.40	MidS	0.71	0.71	90
7.3											
				5	2.14	21.11	-7.14	11.40	MidS	0.73	0.73	90
7.3											
				6	1.74	21.11	-7.14	11.40	MidS	0.71	0.71	90
7.3											
				7	2.14	21.11	1.09	11.40	MidS	0.20	0.20	90
7.3											
				8	1.74	21.11	1.09	11.40	MidS	0.18	0.18	90
7.3											
				9	7.66	21.11	-3.09	11.40	MidS	0.63	0.63	90
7.3											
				10	5.69	21.11	-6.66	11.40	MidS	0.85	0.85	90
7.3											
				11	5.69	21.11	-7.57	11.40	MidS	0.93	0.93	90

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

7.3

12	5.69	21.11	-7.57	11.40	MidS	0.93	0.93	90

7.3

13	5.69	21.11	-7.57	11.40	MidS	0.93	0.93	90

7.3

14	7.66	21.11	-0.55	11.40	MidS	0.41	0.41	90

7.3

22-8706 Eave Strut, Longitudinal Load(Wall 2) 4/29/22 3:57pm

Wall Id	Bay Id	Eave Part	Bay Width (ft)	Load Id	-Axial_Calc- Wind (k)	Seis (k)	Axial Limit (k)	Max UC	Max KL/r
2	1	10GS14-1	30.00	9	0.47	1.54	25.37	0.06	0
2	2	10GS14-1	30.00	9	0.47	2.98	25.37	0.12	0
2	3	10GS12-1	30.00	9	2.71	15.18	44.19	0.34	0
- Added Purlin Strut ----									
2	3	10Z16	30.00	9	1.39	7.77	12.03	0.65	

22-8706 Eave Strut, Longitudinal Load(Wall 4) 4/29/22 3:57pm

Wall Id	Bay Id	Eave Part	Bay Width (ft)	Load Id	-Axial_Calc- Wind (k)	Seis (k)	Axial Limit (k)	Max UC	Max KL/r
4	3	10GS14-1	30.00	9	0.50	1.58	25.37	0.06	0
4	2	10GS14-1	30.00	9	0.50	3.04	25.37	0.12	0
4	1	10GS12-1	30.00	9	2.76	15.27	44.19	0.35	0
- Added Purlin Strut ----									
4	1	10Z16	30.00	9	1.41	7.82	12.03	0.65	

22-8706 Strut Bolts 4/29/22 3:57pm

RAFTER CONNECTION:

Location		Purlin	Back_SW Eave Strut	Front_SW Eave Strut
Left	EW	Welded Clip	Direct Bolt	Direct Bolt

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

RF Welded Clip Direct Bolt Direct Bolt

EAVE STRUTS:

Wall Id	Frm_Line Id	Type	Bolt_Selected No.	Type	Dia	Wshr	Bolt_Capacity(k) Calc	Shear	Bear	Ratio	Dt_Bolt Id
2	1	EW	2	GR_5	0.500	1	1.54	10.60	4.38	0.35	77
2	2	RF	2	GR_5	0.500	1	2.98	10.60	4.38	0.68	77
2	3	RF	4	GR_5	0.500	2 ##	15.18	21.21	16.35	0.93	78
2	4	RF	4	GR_5	0.500	2 ##	15.18	21.21	16.35	0.93	78
4	1	EW	2	GR_5	0.500	1	1.58	10.60	4.38	0.36	77
4	2	RF	2	GR_5	0.500	1	3.04	10.60	4.38	0.69	77
4	3	RF	4	GR_5	0.500	2 ##	15.27	21.21	16.35	0.93	78
4	4	RF	4	GR_5	0.500	2 ##	15.27	21.21	16.35	0.93	78

PURLIN STRUTS AT EAVE:

Surf Id	Frm_Line Id	Type	Bay Id	Brace Loc	Bolt_Selected No.	Type	Dia	Wshr	Load Id	Bolt_Capacity(k) Calc	Shear	Bear	Ratio	Dt_Bolt Id
3	3	RF		117.00	4	GR_5	0.500	2 ##	1	7.77	21.21	9.35	0.83	72
3	4	RF		117.00	4	GR_5	0.500	2 ##	1	7.77	21.21	9.35	0.83	72
2	3	RF		0.00	4	GR_5	0.500	2 ##	1	7.82	21.21	9.35	0.84	72
2	4	RF		0.00	4	GR_5	0.500	2 ##	1	7.82	21.21	9.35	0.84	72

PURLINS:

Surf Id	Frm_Line Id	Type	Brace Loc	Bolt_Selected No.	Type	Dia	Wshr	Bolt_Capacity(k) Shear Calc	Shear Limit	Bearing Calc	Bearing Limit	Ratio	Dt_Bolt Id
2	1	EW	19.26	2	GR_5	0.500	1	0.76	10.60	0.76	6.13	0.12	71
2	2	RF	19.26	2	GR_5	0.500	1	1.63	10.60	1.63	6.13	0.27	71
2	3	RF	19.26	2	GR_5	0.500	2 ##	8.81	10.60	6.55	8.18	0.83	72
2	4	RF	19.26	2	GR_5	0.500	2 ##	7.68	10.60	7.50	8.18	0.92	72
2	1	EW	38.52	2	GR_5	0.500	1	0.91	10.60	0.91	6.13	0.15	71
2	2	RF	38.52	2	GR_5	0.500	1	1.55	10.60	1.55	6.13	0.25	71
2	3	RF	38.52	2	GR_5	0.500	1	7.19	10.60	5.81	6.13	0.95	71
2	4	RF	38.52	2	GR_5	0.500	2 ##	7.19	10.60	7.19	8.18	0.88	72
2	1	EW	55.00	2	GR_5	0.500	1	0.41	10.60	0.41	6.13	0.07	71
2	2	RF	55.00	2	GR_5	0.500	1	0.86	10.60	0.86	4.38	0.20	71
2	3	RF	55.00	2	GR_5	0.500	1	2.46	10.60	1.63	4.38	0.37	71
2	4	RF	55.00	2	GR_5	0.500	1	2.46	10.60	2.46	6.13	0.40	71
3	1	EW	55.00	2	GR_5	0.500	1	0.41	10.60	0.41	6.13	0.07	71
3	2	RF	55.00	2	GR_5	0.500	1	0.86	10.60	0.86	4.38	0.20	71
3	3	RF	55.00	2	GR_5	0.500	1	2.46	10.60	1.63	4.38	0.37	71
3	4	RF	55.00	2	GR_5	0.500	1	2.46	10.60	2.46	6.13	0.40	71
3	1	EW	78.92	2	GR_5	0.500	1	1.00	10.60	1.00	6.13	0.16	71
3	2	RF	78.92	2	GR_5	0.500	1	1.84	10.60	1.84	6.13	0.30	71
3	3	RF	78.92	2	GR_5	0.500	1	7.59	10.60	5.52	6.13	0.90	71
3	4	RF	78.92	2	GR_5	0.500	2 ##	7.59	10.60	7.18	8.18	0.88	72
3	1	EW	97.96	2	GR_5	0.500	1	0.74	10.60	0.74	6.13	0.12	71
3	2	RF	97.96	2	GR_5	0.500	1	1.61	10.60	1.61	6.13	0.26	71

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Surf Id	Frm_Line Id	Bay Type	Brace Id	Brace Loc	Bolt_Selected No.	Bolt_Selected Type	Bolt_Selected Dia	Bolt_Selected Wshr	Load Id	Bolt_Capacity(k) Calc	Bolt_Capacity(k) Shear	Bolt_Capacity(k) Bear	Bolt_Capacity(k) Ratio	Dt_Bolt Id
3	3	RF		97.96	2	GR_5	0.500	2 ##	8.78	10.60	6.73	8.18	0.83	72
3	4	RF		97.96	2	GR_5	0.500	2 ##	7.67	10.60	7.66	8.18	0.94	72

PURLIN STRUTS:

Surf Id	Frm_Line Id	Bay Type	Brace Id	Brace Loc	Bolt_Selected No.	Bolt_Selected Type	Bolt_Selected Dia	Bolt_Selected Wshr	Load Id	Bolt_Capacity(k) Calc	Bolt_Capacity(k) Shear	Bolt_Capacity(k) Bear	Bolt_Capacity(k) Ratio	Dt_Bolt Id
2	3	RF		19.26	2	GR_5	0.500	2 ##	9	4.29	10.60	4.67	0.92	72
2	4	RF		19.26	2	GR_5	0.500	2 ##	9	4.29	10.60	4.67	0.92	72
3	3	RF		97.96	2	GR_5	0.500	2 ##	9	4.38	10.60	4.67	0.94	72
3	4	RF		97.96	2	GR_5	0.500	2 ##	9	4.38	10.60	4.67	0.94	72

##NOTE : Not standard bolt connection

22-8706 Roof Panel Zones 4/29/22 3:57pm

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
24 DLOK	0.024	50.00	59.00

PANEL ZONE LAYOUT:

Surf Id	Zone Id	Zone Description	Locate(ft) Start	Locate(ft) End	Surface(ft) Offset1	Surface(ft) Offset2	Bay Id	Purlin(ft,in) Load Id	Purlin(ft,in) Min Width	Purlin(ft,in) Thick	Panel Zone (ft)
2	1	Interior	16.90	73.10	16.90	55.19	3	13	3.87	0.105	3.87
2	2	Middle	8.45	81.55	8.45	55.19	3	13	3.87	0.105	3.87
2	7	Lt top corner	0.00	8.45	0.00	2.82	1	1	3.87	0.105	3.87
2	8	Rt top corner	81.55	90.00	0.00	2.82	3	1	3.87	0.105	3.87
2	11	Lt top cor gabl	0.00	2.82	2.82	8.46	1	1	3.87	0.105	3.87
2	12	Rt top cor gabl	87.18	90.00	2.82	8.46	3	1	3.87	0.105	3.87
2	15	Exterior	0.00	90.00	0.00	55.19	3	13	3.87	0.105	3.87
3	1	Interior	16.90	73.10	0.00	45.32	3	11	3.82	0.105	3.82
3	2	Middle	8.45	81.55	0.00	53.77	3	11	3.82	0.105	3.82
3	9	Rt bot corner	81.55	90.00	59.40	62.22	3	16	3.82	0.105	3.82
3	10	Lt bot corner	0.00	8.45	59.40	62.22	1	16	3.82	0.105	3.82
3	13	Rt bot cor gabl	87.18	90.00	53.76	59.40	3	15	3.82	0.105	3.82
3	14	Lt bot cor gabl	0.00	2.82	53.76	59.40	1	15	3.82	0.105	3.82
3	15	Exterior	0.00	90.00	0.00	62.22	3	11	3.82	0.105	3.82

STANDING SEAM LAYOUT:

Surf Id	Zone Id	Seam Type	Clip(in,ft) Type	Clip(in,ft) Height	Clip(in,ft) Width	Screw Qty	Wind Clamp	Reference Id

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	1	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	2	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	7	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	8	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	11	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	12	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
2	15	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	1	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	2	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	9	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	10	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	13	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	14	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01
3	15	STANDARD	2H	4.38	4.00	2	N	DL2424-2HST01

STANDING SEAM STRENGTH:

Surf Id	Zone Id	Panel(psf) Calc	Panel(psf) Limit	Panel(psf) UC	Clip(k) Calc	Clip(k) Limit	Clip(k) UC
2	1	11.21	51.24	0.22	0.09	0.42	0.21
2	2	19.50	51.24	0.38	0.15	0.42	0.36
2	7	35.08	51.24	0.68	0.27	0.42	0.64
2	8	35.08	51.24	0.68	0.27	0.42	0.64
2	11	35.08	51.24	0.68	0.27	0.42	0.64
2	12	35.08	51.24	0.68	0.27	0.42	0.64
2	15	25.78	51.24	0.50	0.20	0.42	0.47
3	1	11.21	51.64	0.22	0.09	0.42	0.20
3	2	19.50	51.64	0.38	0.15	0.42	0.35
3	9	35.08	51.64	0.68	0.27	0.42	0.64
3	10	35.08	51.64	0.68	0.27	0.42	0.64
3	13	35.08	51.64	0.68	0.27	0.42	0.64
3	14	35.08	51.64	0.68	0.27	0.42	0.64
3	15	25.78	51.64	0.50	0.20	0.42	0.47

BASE SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
T3125PTW	0.21	0.50	2.80

BASE SCREW CHECK:

Wall Id	Base Length (ft)	Screw Space (ft)	Force/Screw Wind (k)	Force/Screw Seis (k)	Shear Limit (k)	Max UC	
2	0.00					Base Shear Not Available	
4	79.00	1.00	0.057	0.218	0.335	Panel Shear Not Used	

==========

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Weight Summary 4/29/22 3:57pm

Roof Purlins	=	16837.20
Eave Struts	=	995.40
Struts	=	420.00
Roof Bracing	=	785.51
Wall Bracing	=	542.97
Total	=	19581.09

22-8706 Warning Summary 4/29/22 3:57pm

.. No Warnings

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Wall 2 - Design Code 4/29/22 3:58pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Wall 2 - Bypass Girt Layout 4/29/22 3:58pm

GIRT LAYOUT:

Locate	Des Id	Bay Id	Part	Bay_Offset Start	End	Design Length	---Extend-- Left	Right	Weight	----Max_Load--- Id	UC	Report	Rot
4.00	1	1	8Z16	0.00	6.67	6.00	0.00	0.00	17.3	WP	0.03	Shear	D
	2	1	8Z16	22.67	24.00	0.67	0.00	0.00	1.9	WS	0.00	Deflect	D
	3	1	8Z16	24.00	28.00	3.83	0.00	0.00	11.0	WP	0.02	Shear	D
	4	1	8Z16	28.00	30.00	1.67	0.00	0.00	4.8	WS	0.16	Mom+Shr	D
		2	8Z16	0.00	3.50	3.17	0.00	0.00	9.1	WP	0.12	Moment	D
	5	2	8Z16	15.50	30.00	14.17	0.00	1.00	43.7	WP	0.32	Moment	D
		3	8Z16	0.00	29.00	29.00	1.00	0.00	86.4	WS	0.50	Moment	D
8.00	6	1	8Z16	0.00	6.67	6.00	0.00	0.00	17.3	WS	0.05	Shear	D
	7	1	8Z16	22.67	30.00	7.00	0.00	0.00	20.2	WP	0.33	Moment	D
		2	8Z16	0.00	3.50	3.17	0.00	0.00	9.1	WS	0.33	Mom+Shr	D
	8	2	8Z16	15.50	30.00	14.17	0.00	1.00	43.7	WP	0.72	Moment	D
		3	8Z16	0.00	29.00	29.00	1.00	0.00	86.4	WS	0.82	Moment	D
12.00	9	1	8Z16	0.00	6.67	6.00	0.00	0.00	17.3	WP	0.03	Shear	D
	10	1	8Z16	22.67	30.00	7.00	0.00	0.00	20.2	WP	0.12	Moment	D
		2	8Z16	0.00	3.50	3.17	0.00	0.00	9.1	WS	0.13	Mom+Shr	D
	11	2	8Z16	15.50	30.00	14.17	0.00	1.00	43.7	WP	0.46	Moment	D
		3	8Z16	0.00	29.00	29.00	1.00	0.00	86.4	WS	0.54	Moment	D

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay		
1	2	3
2	2	2

22-8706 Wall 2 - Girt Design 1 (Locate 4.00) 4/29/22 3:58pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	4.0000	6.00			2.25	0	17.3	0.00	0.65
								17.3		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.06		-0.06	0.00			-0.10	3.00		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.06	2.56	0.03	MidS	-0.10	4.37	0.02	LLap	0.02	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.07		0.07	0.00			0.11	3.02		0.00

STRENGTH/DEFLECTION:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	-0.07	2.56	0.03	MidS	0.11	3.62	0.03	RLap	0.02	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)				
	Left	Left	Right	Right	Left	Left	Mid-Span	Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.01		-0.01	0.00		-0.01	3.00		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	0.01	2.56	0.00	MidS	-0.01	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)				
	Left	Left	Right	Right	Left	Left	Mid-Span	Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.01		0.01	0.00		0.01	3.00		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	-0.01	2.56	0.00	MidS	0.01	3.62	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	4.0000	0.67			2.25	0	1.9	0.00	0.65
								1.9		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.01		-0.01	0.00			0.00	0.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.01	2.56	0.00	MidS	0.00	4.37	0.00	LSup	0.00	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.01		0.01	0.00			0.00	0.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	-0.01	2.56	0.00	MidS	0.00	4.74	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k) Left	Left	Right	Right	Moment(f-k) Left	Left	Mid-Span	Right	Right

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.00			0.00	0.00		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	0.00	2.56	0.00	MidS	0.00	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.00			0.00	0.00		0.00	0.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	0.00	2.56	0.00	MidS	0.00	4.74	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	0.00	0.09	0.00	0.09	0.00	0.09	0.00	0.09

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	4.0000	3.83			2.25	0	11.0	0.00	0.65
								11.0		

LOAD ID - 0.6Wind_Pressure:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.04		-0.04	0.00		-0.04	1.92			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.04	2.56	0.02	MidS	-0.04	4.37	0.01	LSup	0.00	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.04		0.04	0.00		0.04	1.92			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	-0.04	2.56	0.02	MidS	0.04	3.62	0.01	LSup	0.00	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.01		-0.01	0.00		-0.01	1.92			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.01	2.56	0.00	MidS	-0.01	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.01		0.01	0.00		0.01	1.92		0.00	

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	-0.01	2.56	0.00	MidS	0.01	3.62	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	0.00	0.51	0.00	0.51	0.00	0.51	0.00	0.51

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22-8706 Wall 2 - Girt Design 4 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	--Lap(ft)-- Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	8Z16	4.0000	1.67			2.25	0	4.8	0.00	0.70
2	8Z16	4.0000	3.17			2.25	0	9.1	0.00	0.70
								13.9		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.26		-0.29	0.00		0.22	0.83		0.46	
2	0.18		0.11	0.46		0.20	1.58		0.00	

STRENGTH/DEFLECTION:

Bay	Shear(k)	Moment(f-k)	-Mom+Shr-	Deflect(in)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RSup	-0.29	2.56	0.11	RSup	0.46	4.02	0.11	RSup	0.15	-0.01	
2	LSup	0.18	2.56	0.07	LSup	0.46	3.97	0.12	LSup	0.12	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					
1	0.27		0.31	0.00			-0.23	0.83		-0.48
2	-0.19		-0.12	-0.48			-0.21	1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	0.31	2.56	0.12	RSup	-0.48	4.37	0.11	RSup	0.16	0.01	
2	LSup	-0.19	2.56	0.07	LSup	-0.48	4.37	0.11	LSup	0.12	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					
1	-0.04		-0.04	0.00			0.03	0.83		0.06
2	0.03		0.02	0.06			0.03	1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	-0.04	2.56	0.02	RSup	0.06	4.02	0.02	RSup	0.02	0.00	
2	LSup	0.03	2.56	0.01	LSup	0.06	3.62	0.02	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	0.04			0.04	0.00		-0.03	0.83		-0.06
2	-0.03			-0.02	-0.06		-0.03	1.58		0.00

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC		Calc	Limit
1	RSup	0.04	2.56	0.02	RSup	-0.06	4.37	0.01	RSup	0.02		0.00	
2	LSup	-0.03	2.56	0.01	LSup	-0.06	4.37	0.01	LSup	0.00		0.00	

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	-0.01		0.01		0.00		0.00	
2	0.00	0.42	0.00	0.42	0.00	0.42	0.00	0.42

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22-8706 Wall 2 - Girt Design 5 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
2	8Z16	4.0000	14.17		1.00	2.25	1	43.7	0.00	0.70
3	8Z16	4.0000	29.00	1.00		2.25	2	86.4	0.00	0.70
								130.1		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	0.05		-0.24	-0.26	0.00		-0.05	2.21	1.24	1.49
3	0.36	0.34		-0.26	1.49	1.14	-1.59	16.88		0.00

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC		Calc	Limit
2	RLap	-0.24	2.56	0.09	RLap	1.24	3.89	0.32	RLap	0.28		0.43	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

3	LLap	0.34	2.56	0.13	MidS	-1.59	4.37	0.36	RLap	0.28	-0.88

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
2					0.37	5.30	1.75	0.21
3	0.37	5.30	1.75	0.21				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
2	-0.05		0.25	0.27	0.00		0.05	2.16	-1.31	-1.57
3	-0.38	-0.36		0.28	-1.57	-1.20	1.66	16.74		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	0.25	2.56	0.10	RLap	-1.31	4.37	0.30	RLap	0.29	-0.43	
3	LLap	-0.36	2.56	0.14	MidS	1.66	3.32	0.50	RLap	0.30	0.92	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
2					0.39	5.30	1.75	0.22
3	0.39	5.30	1.75	0.22				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	0.01		-0.03	-0.04	0.00		-0.01	2.21	0.18	0.21
3	0.05	0.05		-0.04	0.21	0.16	-0.22	16.88		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	-0.03	2.56	0.01	RLap	0.18	3.62	0.05	RLap	0.04	0.06	
3	LLap	0.05	2.56	0.02	MidS	-0.22	4.37	0.05	LLap	0.04	-0.12	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.05	5.30	1.75	0.03
3	0.05	5.30	1.75	0.03				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	-0.01		0.03	0.04	0.00		0.01	2.16	-0.18	-0.21
3	-0.05	-0.05		0.04	-0.21	-0.16	0.22	16.90		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	0.03	2.56	0.01	RLap	-0.18	4.37	0.04	RLap	0.04	-0.06	
3	LLap	-0.05	2.56	0.02	MidS	0.22	3.32	0.07	LLap	0.04	0.12	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.05	5.30	1.75	0.03
3	0.05	5.30	1.75	0.03				

DEFLECTION (Working Load):

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
2	0.34		-0.35		0.06		-0.06	
3	-0.70	3.87	0.74	3.87	-0.12	3.87	0.12	3.87

22-8706 Wall 2 - Girt Design 6 (Locate 8.00) 4/29/22 3:58pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	8.0000	6.00			4.00	0	17.3	0.00	0.65
								17.3		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.12		-0.12		0.00		-0.17	3.00		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.12	2.56	0.04	MidS	-0.17	4.37	0.04	RLap	0.04	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.13		0.13		0.00		0.19	3.02		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k)	-Mom+Shr-	Deflect(in)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	LSup	-0.13	2.56	0.05	MidS	0.19	3.62	0.05	RLap	0.04	0.01	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.02		-0.02	0.00			-0.02	3.00		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	LSup	0.02	2.56	0.01	MidS	-0.02	4.37	0.01	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.02		0.02	0.00			0.02	3.00		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	LSup	-0.02	2.56	0.01	MidS	0.02	3.62	0.01	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80

GIRT LAYOUT:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	8.0000	7.00			4.00	0	20.2	0.00	0.70
2	8Z16	8.0000	3.17			4.00	0	9.1	0.00	0.70
								29.3		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.02		-0.26	0.00		0.47		3.50		1.26
2	0.46		0.34	1.26		0.58		1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	-0.26	2.56	0.10	RSup	1.26	3.83	0.33	RSup	0.28	0.02	
2	LSup	0.46	2.56	0.18	LSup	1.26	3.97	0.32	LSup	0.32	-0.09	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.02		0.28	0.00		-0.49		3.50		-1.31
2	-0.48		-0.35	-1.31		-0.61		1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	0.28	2.56	0.11	RSup	-1.31	4.37	0.30	RSup	0.30	-0.02	
2	LSup	-0.48	2.56	0.19	LSup	-1.31	4.37	0.30	LSup	0.33	0.09	

LOAD ID - Seismic_Pressure:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.00		-0.04	0.00			0.07	3.50		0.18
2	0.06		0.05	0.18			0.08	1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	-0.04	2.56	0.01	RSup	0.18	3.83	0.05	RSup	0.04	0.00	
2	LSup	0.06	2.56	0.03	LSup	0.18	3.97	0.04	LSup	0.05	-0.01	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.00		0.04	0.00			-0.07	3.50		-0.18
2	-0.06		-0.05	-0.18			-0.08	1.58		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RSup	0.04	2.56	0.01	RSup	-0.18	4.37	0.04	RSup	0.04	0.00	
2	LSup	-0.06	2.56	0.03	LSup	-0.18	4.37	0.04	LSup	0.05	0.01	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	0.02	0.93	-0.02	0.93	0.00	0.93	0.00	0.93
2	-0.07		0.07		-0.01		0.01	

GIRT LAYOUT:

Available
Reduction

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Factor Out	In
2	8Z16	8.0000	14.17		1.00	4.00	1	43.7	0.00	0.70
3	8Z16	8.0000	29.00	1.00		4.00	2	86.4	0.00	0.70
								130.1		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
2	0.05		-0.46	-0.50	0.00		-0.03	1.21	2.72	3.19
3	0.67	0.63		-0.45	3.19	2.55	-2.60	17.37		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
2	RLap	-0.46	2.56	0.18	RLap	2.72	3.80	0.72	RLap	0.60	-0.01	
3	LLap	0.63	2.56	0.25	LLap	2.55	3.89	0.66	LLap	0.59	-1.36	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
2				0.80	5.30	1.75	0.46
3	0.80	5.30	1.75	0.46		

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
2	-0.05		0.48	0.52	0.00		0.03	1.19	-2.85	-3.35
3	-0.70	-0.66		0.48	-3.35	-2.67	2.72	17.21		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	RLap	0.48	2.56	0.19	RLap	-2.85	4.37	0.65	RLap	0.63	0.01	
3	LLap	-0.66	2.56	0.26	MidS	2.72	3.32	0.82	LLap	0.62	1.42	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
2					0.84	5.30	1.75	0.48
3	0.84	5.30	1.75	0.48				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
2	0.01		-0.06	-0.07	0.00		0.00	1.21	0.38	0.45
3	0.09	0.09		-0.06	0.45	0.36	-0.37	17.37		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	-0.06	2.56	0.03	RLap	0.38	3.80	0.10	RLap	0.08	0.00	
3	LLap	0.09	2.56	0.03	LLap	0.36	3.89	0.09	LLap	0.08	-0.19	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc Shear		Bear	UC	Calc Shear		Bear	UC
2					0.11	5.30	1.75	0.06
3	0.11	5.30	1.75	0.06				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)				
	Left	Left	Right	Right	Left	Left	Mid-Span	Right	Right

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	-0.01		0.06	0.07	0.00		0.00	1.19	-0.39	-0.45
3	-0.09	-0.09		0.06	-0.45	-0.36	0.37	17.38		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	0.06	2.56	0.03	RLap	-0.39	4.37	0.09	RLap	0.09	0.00	
3	LLap	-0.09	2.56	0.03	MidS	0.37	3.32	0.11	LLap	0.08	0.19	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.11	5.30	1.75	0.06
3	0.11	5.30	1.75	0.06				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
2	-0.01		0.01		0.00		0.00	
3	-1.09	3.87	1.14	3.87	-0.19	3.87	0.19	3.87

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22-8706 Wall 2 - Girt Design 9 (Locate 12.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
1	8Z16	12.0000	6.00			2.63	0	17.3	0.00	0.65
								17.3		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

	Shear(k)		Moment(f-k)	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.08		-0.08	0.00		-0.11	3.00			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.08	2.56	0.03	MidS	-0.11	4.37	0.03	LLap	0.02	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.08		0.08	0.00		0.13	3.02			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	-0.08	2.56	0.03	MidS	0.13	3.62	0.03	RLap	0.03	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.01		-0.01	0.00		-0.02	3.00			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	LSup	0.01	2.56	0.00	MidS	-0.02	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.01		0.01	0.00		0.02	3.00			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	LSup	-0.01	2.56	0.00	MidS	0.02	3.62	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80

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22-8706 Wall 2 - Girt Design 10 (Locate 12.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	--Lap(ft)-- Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	8Z16	12.0000	7.00			2.63	0	20.2	0.00	0.70
2	8Z16	12.0000	3.17			2.63	0	9.1	0.00	0.70
								29.3		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.02		-0.15	0.00		-0.01	0.89			0.46
2	0.19		0.11	0.46		0.20	1.58			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RSup	-0.15	2.56	0.06	RSup	0.46	3.87	0.12	RSup	0.11	0.00	
2	LSup	0.19	2.56	0.07	LSup	0.46	3.97	0.12	LSup	0.12	-0.03	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.02		0.16	0.00		0.01	0.89			-0.48
2	-0.19		-0.11	-0.48		-0.21	1.58			0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RSup	0.16	2.56	0.06	RSup	-0.48	4.37	0.11	RSup	0.12	0.00	
2	LSup	-0.19	2.56	0.08	LSup	-0.48	4.37	0.11	LSup	0.13	0.03	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.00		-0.02	0.00		0.00	0.89			0.06
2	0.03		0.01	0.06		0.03	1.58			0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RSup	-0.02	2.56	0.01	RSup	0.06	3.62	0.02	LSup	0.00	0.00	
2	LSup	0.03	2.56	0.01	LSup	0.06	3.62	0.02	LSup	0.02	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.00		0.02	0.00		0.00	0.89			-0.06
2	-0.03		-0.01	-0.06		-0.03	1.58			0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC		Calc	Limit
1	RSup	0.02	2.56	0.01	RSup	-0.06	4.37	0.01	LSup	0.00		0.00	
2	LSup	-0.03	2.56	0.01	LSup	-0.06	4.37	0.01	LSup	0.02		0.00	

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	0.00	0.93	0.00	0.93	0.00	0.93	0.00	0.93
2	-0.02		0.02		0.00		0.00	

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22-8706 Wall 2 - Girt Design 11 (Locate 12.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
2	8Z16	12.0000	14.17		1.00	2.63	1	43.7	0.00	0.70
3	8Z16	12.0000	29.00	1.00		2.63	2	86.4	0.00	0.70
								130.1		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	0.03		-0.30	-0.32	0.00		-0.02	1.32	1.75	2.06
3	0.44	0.41		-0.29	2.06	1.63	-1.72	17.31		0.00

STRENGTH/DEFLECTION:

Bay		Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC		Calc	Limit
2	RLap	-0.30	2.56	0.12	RLap	1.75	3.80	0.46	RLap	0.39		0.05	
3	LLap	0.41	2.56	0.16	LLap	1.63	3.89	0.42	LLap	0.38		-0.91	

LAP BOLT SHEAR/BEARING:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bolt Size =0.500 (GR_5)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.51	5.30	1.75	0.29
3	0.51	5.30	1.75	0.29				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	-0.03		0.31	0.34	0.00		0.02	1.30	-1.83	-2.16
3	-0.46	-0.43		0.32	-2.16	-1.71	1.80	17.16		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	0.31	2.56	0.12	RLap	-1.83	4.37	0.42	RLap	0.41	-0.05	
3	LLap	-0.43	2.56	0.17	MidS	1.80	3.32	0.54	LLap	0.40	0.95	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.54	5.30	1.75	0.31
3	0.54	5.30	1.75	0.31				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	0.00		-0.04	-0.05	0.00		0.00	1.32	0.25	0.29
3	0.06	0.06		-0.04	0.29	0.23	-0.24	17.31		0.00

STRENGTH/DEFLECTION:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	-0.04	2.56	0.02	RLap	0.25	3.80	0.06	RLap	0.05	0.01	
3	LLap	0.06	2.56	0.02	LLap	0.23	3.89	0.06	LLap	0.05	-0.13	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.07	5.30	1.75	0.04
3	0.07	5.30	1.75	0.04				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
2	0.00		0.04	0.05	0.00		0.00	1.30	-0.25	-0.29
3	-0.06	-0.06		0.04	-0.29	-0.23	0.24	17.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
2	RLap	0.04	2.56	0.02	RLap	-0.25	4.37	0.06	RLap	0.05	-0.01	
3	LLap	-0.06	2.56	0.02	MidS	0.24	3.32	0.07	LLap	0.05	0.13	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
2					0.07	5.30	1.75	0.04
3	0.07	5.30	1.75	0.04				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	0.04		-0.04		0.01		-0.01	
3	-0.73	3.87	0.76	3.87	-0.13	3.87	0.13	3.87

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22-8706 Wall 2 - Door Jamb & Header Design 4/29/22 3:58pm

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LAYOUT:

Open Id	Bay Id	Locate	Part	Length	Load Width	Weight
1	1	JambL	8C16	13.25	8.00	38.2
		JambR	8C16	13.25	8.00	38.2
		Header	8c16	16.00	0.63	46.1
3	2	JambL	8C16	13.25	6.00	38.2
		JambR	8C16	13.25	6.00	38.2
		Header	8c16	12.00	0.63	34.6

STRENGTH/DEFLECTION:

Open Id	Member	Load Id	--Shear(k)- Calc	Limit	--Moment(ft,f-k)- Loc	Calc	Limit	Mom+ Shear	Max UC	Deflect(in) Calc	Limit
1	JambL	WP	-0.70	2.5	6.00	-2.30	5.0	0.46	0.46	-0.25	1.77
		WS	0.74	2.5	6.00	2.44	4.2	0.49	0.58	0.27	1.77
		SP	-0.10	2.5	6.00	-0.33	5.0	0.06	0.06	-0.04	1.77
		SS	0.10	2.5	6.00	0.33	4.2	0.06	0.08	0.05	1.77
	JambR	WP	-0.52	2.5	6.76	-1.68	5.0	0.30	0.34	-0.18	1.77
		WS	0.54	2.5	6.76	1.76	4.2	0.35	0.42	0.19	1.77
		SP	-0.07	2.5	6.76	-0.24	5.0	0.04	0.05	-0.03	1.77
		SS	0.07	2.5	6.76	0.24	4.2	0.04	0.06	0.03	1.77
	Header	WP	0.05	2.5	8.00	-0.19	5.0	0.00	0.04	-0.03	2.13
		WS	-0.05	2.5	8.00	0.20	3.2	0.00	0.06	0.03	2.13
		SP	0.01	2.5	8.00	-0.03	5.0	0.00	0.01	-0.01	2.13
		SS	-0.01	2.5	8.00	0.03	3.2	0.00	0.01	0.01	2.13
3	JambL	WP	-0.19	2.5	2.91	-0.24	4.5	0.08	0.08	-0.01	1.77
		WS	0.20	2.5	2.91	0.25	4.5	0.08	0.08	0.02	1.77
		SP	-0.03	2.5	2.91	-0.03	4.1	0.00	0.01	0.00	1.77
		SS	0.03	2.5	2.91	0.03	4.1	0.00	0.01	0.00	1.77
	JambR	WP	-0.45	2.5	7.58	-1.48	5.0	0.30	0.30	-0.16	1.77
		WS	0.47	2.5	7.56	1.54	4.2	0.31	0.36	0.17	1.77
		SP	-0.06	2.5	7.58	-0.21	5.0	0.04	0.04	-0.03	1.77
		SS	0.06	2.5	7.56	0.21	4.2	0.04	0.05	0.03	1.77
	Header	WP	0.04	2.5	6.00	-0.11	5.0	0.00	0.02	-0.01	1.60
		WS	-0.04	2.5	6.00	0.11	4.1	0.00	0.03	0.01	1.60
		SP	0.01	2.5	6.00	-0.02	5.0	0.00	0.00	0.00	1.60
		SS	-0.01	2.5	6.00	0.02	4.1	0.00	0.00	0.00	1.60

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction
SP - Seismic_Pressure
SS - Seismic_Suction

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Wall 2 - Panel Design (Bay 1) 4/29/22 3:58pm

PANEL DATA:

Bay Id	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
1	26 PBR	PBR	26.00	80.0	0.00	13.25

MOMENTS & DEFLECTION:

Span Id	Locate(ft) Start	End	Load	Moment(ft-lb/ft) Start Calc	Start Limit	Midspan Calc	Midspan Limit	End Calc	End Limit	Max UC	Deflect(in) Calc	Deflect(in) Limit
1	3.50	4.00	WP	0.0	150.4	6.0	150.4	12.7	150.4	0.08	0.00	0.07
			WS	0.0	139.0	-6.5	139.0	-13.7	139.0	0.10	0.00	0.07
2	4.00	8.00	WP	12.7	150.4	-7.9	139.0	16.4	150.4	0.11	-0.01	0.53
			WS	-13.7	139.0	8.6	150.4	-17.7	139.0	0.13	0.01	0.53
3	8.00	12.00	WP	16.4	150.4	-8.6	139.0	11.4	150.4	0.11	-0.01	0.53
			WS	-17.7	139.0	9.3	150.4	-12.3	139.0	0.13	0.01	0.53
4	12.00	13.25	WP	11.4	150.4	3.5	150.4	0.0	150.4	0.08	0.00	0.17
			WS	-12.3	139.0	-3.8	139.0	0.0	139.0	0.09	0.00	0.17

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

22-8706 Wall 2 - Liner Panel 4/29/22 3:58pm

PANEL DATA:

--Bay_Id- Start	End	Height	Part	Type	Gage	Yield	Rotation Stiffness
1	3	Eave	B-LINER	BLS	29.00	80.0	0.00

22-8706 Wall 2 - Panel Zones 4/29/22 3:58pm

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
26 PBR	0.019	80.00	94.40

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
T3125PTW	0.21	0.50	2.80

PANEL ZONE LAYOUT:

Zone Id	Description	Wall(ft) Offset1	Wall(ft) Offset2	Bay Id	Girt(ft,ft,in) Locate	Load Width	Min Thick	Panel Span (ft)
1	Interior	5.63	84.37	1	8.00	4.00	0.060	4.00
2	Lt Edge	0.00	5.63	1	8.00	4.00	0.060	4.00
3	Rt Edge	84.37	90.00	3	8.00	4.00	0.060	4.00

GIRT SCREW CHECK:

Zone Id	Screw Space (ft)	Wind Suction (psf)	Load (k)	Limit(k) Girt Pullout	Panel Pullover	Screw Tension	Max UC
1	1.00	12.12	0.05	0.23	0.44	0.75	0.21
2	1.00	12.12	0.05	0.23	0.44	0.75	0.21
3	1.00	12.12	0.05	0.23	0.44	0.75	0.21

22-8706 Wall 2 - Weight Summary 4/29/22 3:58pm

Girts	=	527.52
Jambs/Headers	=	233.31
		760.83

22-8706 Wall 2 - Warning Summary 4/29/22 3:58pm

.. No Warnings

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Wall 4 - Design Code 4/29/22 3:58pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Wall 4 - Bypass Girt Layout 4/29/22 3:58pm

GIRT LAYOUT:

Locate	Des Bay Id	Bay Id	Part	Bay_Offset Start	Bay_Offset End	Design Length	---Extend-- Left	Extend-- Right	Weight	----Max_Load--- Id	UC	Report	Rot
4.00	1	1	8Z16	1.00	30.00	29.00	0.00	1.00	86.4	WP	0.79	Moment	D
		2	8Z16	0.00	30.00	30.00	1.00	1.00	92.2	WP	0.82	Moment	D
		3	8Z16	0.00	14.50	14.17	1.00	0.00	43.7	WP	0.50	Moment	D
	2	3	8Z16	14.50	17.50	2.83	0.00	0.00	8.2	WP	0.02	Shear	D
	3	3	8Z16	17.50	19.27	1.10	0.00	0.00	3.2	WP	0.01	Shear	D
	4	3	8Z16	27.27	30.00	2.40	0.00	0.00	6.9	WP	0.02	Shear	D
8.00	5	1	8Z16	1.00	30.00	29.00	0.00	1.00	86.4	WS	0.78	Moment	D
		2	8Z16	0.00	30.00	30.00	1.00	1.00	92.2	WP	0.78	Moment	D
		3	8Z16	0.00	19.27	18.94	1.00	0.00	57.4	WP	0.65	Moment	D
	6	3	8Z16	27.27	30.00	2.40	0.00	0.00	6.9	WP	0.02	Shear	D
12.00	7	1	8Z16	1.00	30.00	29.00	0.00	1.00	86.4	WS	0.62	Moment	D
		2	8Z16	0.00	30.00	30.00	1.00	1.00	92.2	WP	0.80	Moment	D
		3	8Z12	0.00	30.00	29.67	1.00	0.00	154.9	WS	0.81	Moment	D

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

GIRT INSIDE FLANGE BRACE:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

No._Brace/Bay

1	2	3
2	2	2

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22-8706 Wall 4 - Girt Design 1 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	4.0000	29.00		1.00	4.00	2	86.4	0.00	0.70
2	8Z16	4.0000	30.00	1.00	1.00	4.00	2	92.2	0.00	0.70
3	8Z16	4.0000	14.17	1.00		4.00	1	43.7	0.00	0.70
								222.2		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
1	0.43		-0.65	-0.69	0.00		-2.39	11.15	3.06	3.73
2	0.62	0.58	-0.49	-0.53	3.73	3.13	-1.32	16.22	1.81	2.32
3	0.44	0.40		-0.11	2.32	1.91	-0.15	11.36		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.65	2.56	0.25	RLap	3.06	3.86	0.79	RLap	0.69	-1.15	
2	LLap	0.58	2.56	0.23	LLap	3.13	3.83	0.82	LLap	0.70	-0.47	
3	LLap	0.40	2.56	0.16	LLap	1.91	3.81	0.50	LLap	0.43	-0.35	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					0.93	5.30	1.75	0.53
2	0.93	5.30	1.75	0.53	0.58	5.30	1.75	0.33
3	0.58	5.30	1.75	0.33				

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.46		0.68	0.72	0.00		2.51	11.31	-3.21	-3.90
2	-0.65	-0.61	0.51	0.55	-3.90	-3.27	1.38	16.23	-1.89	-2.43
3	-0.46	-0.42		0.11	-2.43	-1.99	0.16	11.36		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	0.68	2.56	0.26	MidS	2.51	3.32	0.76	RLap	0.73	1.21	
2	LLap	-0.61	2.56	0.24	LLap	-3.27	4.37	0.75	LLap	0.73	0.49	
3	LLap	-0.42	2.56	0.16	LLap	-1.99	4.37	0.46	LLap	0.45	0.37	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				0.98	5.30	1.75	0.56
2	0.98	5.30	1.75	0.56	0.61	5.30	1.75	0.35
3	0.61	5.30	1.75	0.35				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.06		-0.09	-0.10	0.00		-0.34	11.15	0.43	0.53
2	0.09	0.08	-0.07	-0.07	0.53	0.44	-0.19	16.22	0.26	0.33
3	0.06	0.06		-0.02	0.33	0.27	-0.02	11.36		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.09	2.56	0.04	RLap	0.43	3.86	0.11	RLap	0.10	-0.16	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

2	LLap	0.08	2.56	0.03	LLap	0.44	3.83	0.12	LLap	0.10	-0.07
3	LLap	0.06	2.56	0.02	LLap	0.27	3.80	0.07	LLap	0.06	-0.05

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.13	5.30	1.75	0.08
2	0.13	5.30	1.75	0.08	0.08	5.30	1.75	0.05
3	0.08	5.30	1.75	0.05				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.06		0.09	0.10	0.00		0.34	11.15	-0.43	-0.53
2	-0.09	-0.08	0.07	0.07	-0.53	-0.44	0.19	16.22	-0.26	-0.33
3	-0.06	-0.06		0.02	-0.33	-0.27	0.02	11.36		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.09	2.56	0.04	MidS	0.34	3.32	0.10	RLap	0.10	0.16	
2	LLap	-0.08	2.56	0.03	LLap	-0.44	4.37	0.10	LLap	0.10	0.07	
3	LLap	-0.06	2.56	0.02	LLap	-0.27	4.37	0.06	LLap	0.06	0.05	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.13	5.30	1.75	0.08
2	0.13	5.30	1.75	0.08	0.08	5.30	1.75	0.05
3	0.08	5.30	1.75	0.05				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	-0.92	3.87	0.97	3.87	-0.16	3.87	0.16	3.87
2	-0.38	4.00	0.39	4.00	-0.07	4.00	0.07	4.00
3	-0.28		0.30		-0.05		0.05	

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22-8706 Wall 4 - Girt Design 2 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
3	8Z16	4.0000	2.83			4.00	0	8.2	0.00	0.65
								8.2		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
3	0.05		-0.05	0.00			-0.04	1.42		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	LSup	0.05	2.56	0.02	MidS	-0.04	4.37	0.01	LSup	0.00	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
3	-0.06		0.06	0.00			0.04	1.42		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

3	LSup	-0.06	2.56	0.02	MidS	0.04	3.62	0.01	LSup	0.00	0.00

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					
3	0.01		-0.01	0.00			-0.01	1.42		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	LSup	0.01	2.56	0.00	MidS	-0.01	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					
3	-0.01		0.01	0.00			0.01	1.42		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	LSup	-0.01	2.56	0.00	MidS	0.01	3.62	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
3	0.00	0.38	0.00	0.38	0.00	0.38	0.00	0.38

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22-8706 Wall 4 - Girt Design 3 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Available

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Reduction Factor Out	In
3	8Z16	4.0000	1.10			4.00	0	3.2	0.00	0.65
								3.2		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
3	0.02		-0.02		0.00		-0.01	0.55		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	LSup	0.02	2.56	0.01	MidS	-0.01	4.37	0.00	LSup	0.00	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
3	-0.02		0.02		0.00		0.01	0.55		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	LSup	-0.02	2.56	0.01	MidS	0.01	4.15	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
3	0.00		0.00		0.00		0.00	0.55		0.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	0.00	2.56	0.00	MidS	0.00	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------				
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
3	0.00			0.00	0.00		0.00	0.55		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	0.00	2.56	0.00	MidS	0.00	4.15	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
3	0.00	0.15	0.00	0.15	0.00	0.15	0.00	0.15

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22-8706 Wall 4 - Girt Design 4 (Locate 4.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
3	8Z16	4.0000	2.40			4.00	0	6.9	0.00	0.65
								6.9		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	0.05		-0.05	0.00		-0.03	1.20			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	LSup	0.05	2.56	0.02	MidS	-0.03	4.37	0.01	LSup	0.00	0.00	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	-0.05		0.05	0.00		0.03	1.20			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	LSup	-0.05	2.56	0.02	MidS	0.03	3.62	0.01	LSup	0.00	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	0.01		-0.01	0.00		0.00	1.20			0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	LSup	0.01	2.56	0.00	MidS	0.00	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	-0.01		0.01	0.00		0.00		1.20		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	LSup	-0.01	2.56	0.00	MidS	0.00	3.62	0.00	LSup	0.00	0.00	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
3	0.00	0.32	0.00	0.32	0.00	0.32	0.00	0.32

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22-8706 Wall 4 - Girt Design 5 (Locate 8.00) 4/29/22 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	--Lap(ft)-- Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	8Z16	8.0000	29.00		1.00	4.00	2	86.4	0.00	0.70
2	8Z16	8.0000	30.00	1.00	1.00	4.00	2	92.2	0.00	0.70
3	8Z16	8.0000	18.94	1.00		4.00	1	57.4	0.00	0.70
								236.0		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.43		-0.64	-0.68	0.00		-2.46	11.31	2.89	3.55
2	0.59	0.56	-0.52	-0.56	3.55	2.98	-1.05	15.47	2.47	3.01
3	0.55	0.51		-0.32	3.01	2.48	-0.89	13.93		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1	RLap	-0.64	2.56	0.25	RLap	2.89	3.87	0.75	RLap	0.66	-1.22	
2	LLap	0.56	2.56	0.22	LLap	2.98	3.83	0.78	LLap	0.66	-0.27	
3	LLap	0.51	2.56	0.20	LLap	2.48	3.84	0.65	LLap	0.56	-1.26	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.89	5.30	1.75	0.51
2	0.89	5.30	1.75	0.51	0.75	5.30	1.75	0.43
3	0.75	5.30	1.75	0.43				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.47		0.67	0.71	0.00		2.58	11.48	-3.02	-3.71
2	-0.62	-0.58	0.54	0.58	-3.71	-3.11	1.09	15.48	-2.58	-3.14
3	-0.57	-0.53		0.34	-3.14	-2.59	0.93	13.93		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.67	2.56	0.26	MidS	2.58	3.32	0.78	RLap	0.69	1.28	
2	LLap	-0.58	2.56	0.23	LLap	-3.11	4.37	0.71	LLap	0.69	0.28	
3	LLap	-0.53	2.56	0.21	LLap	-2.59	4.37	0.59	LLap	0.58	1.32	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.93	5.30	1.75	0.53
2	0.93	5.30	1.75	0.53	0.79	5.30	1.75	0.45
3	0.79	5.30	1.75	0.45				

LOAD ID - Seismic_Pressure:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.06		-0.09	-0.10	0.00		-0.35	11.31	0.41	0.50
2	0.08	0.08	-0.07	-0.08	0.50	0.42	-0.15	15.47	0.35	0.42
3	0.08	0.07		-0.05	0.42	0.35	-0.11	11.91		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.09	2.56	0.04	RLap	0.41	3.87	0.11	RLap	0.09	-0.17	
2	LLap	0.08	2.56	0.03	LLap	0.42	3.83	0.11	LLap	0.09	-0.04	
3	LLap	0.07	2.56	0.03	LLap	0.35	3.83	0.09	LLap	0.08	-0.18	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC
1				0.13	5.30	1.75	0.07
2	0.13	5.30	1.75	0.07	0.11	5.30	1.75	0.06
3	0.11	5.30	1.75	0.06				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.06		0.09	0.10	0.00		0.35	11.31	-0.41	-0.50
2	-0.08	-0.08	0.07	0.08	-0.50	-0.42	0.15	15.47	-0.35	-0.42
3	-0.08	-0.07		0.05	-0.42	-0.35	0.11	11.92		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	0.09	2.56	0.04	MidS	0.35	3.32	0.10	RLap	0.09	0.17	
2	LLap	-0.08	2.56	0.03	LLap	-0.42	4.37	0.10	LLap	0.09	0.04	
3	LLap	-0.07	2.56	0.03	LLap	-0.35	4.37	0.08	LLap	0.08	0.18	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.13	5.30	1.75	0.07
2	0.13	5.30	1.75	0.07	0.11	5.30	1.75	0.06
3	0.11	5.30	1.75	0.06				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	-0.98	3.87	1.03	3.87	-0.17	3.87	0.17	3.87
2	-0.21	4.00	0.22	4.00	-0.04	4.00	0.04	4.00
3	-1.00		1.06		-0.18		0.18	

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22-8706 Wall 4 - Girt Design 6 (Locate 8.00) 4/29/22 3:58pm

==========

GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
3	8Z16	8.0000	2.40			4.00	0	6.9	0.00	0.65
								6.9		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	0.05			-0.05	0.00		-0.03	1.20		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	0.05	2.56	0.02	MidS	-0.03	4.37	0.01	LSup	0.00	0.00	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
	Shear(k)				Moment(f-k)					
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	-0.05		0.05		0.00		0.03	1.20		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	-0.05	2.56	0.02	MidS	0.03	3.62	0.01	LSup	0.00	0.00	

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
	Shear(k)				Moment(f-k)					
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	0.01		-0.01		0.00		0.00	1.20		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	0.01	2.56	0.00	MidS	0.00	4.37	0.00	LSup	0.00	0.00	

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
	Shear(k)				Moment(f-k)					
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	-0.01		0.01		0.00		0.00	1.20		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	LSup	-0.01	2.56	0.00	MidS	0.00	3.62	0.00	LSup	0.00	0.00	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
3	0.00	0.32	0.00	0.32	0.00	0.32	0.00	0.32

22-8706 Wall 4 - Girt Design 7 (Locate 12.00) 4/29/22 3:58pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	12.0000	29.00		1.00	2.96	2	86.4	0.00	0.70
2	8Z16	12.0000	30.00	1.00	1.00	2.96	2	92.2	0.00	0.70
3	8Z12	12.0000	29.67	1.00		2.96	2	154.9	0.00	0.70
								333.4		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.33		-0.46	-0.49	0.00		-1.95	11.71	1.83	2.30
2	0.39	0.36	-0.44	-0.47	2.30	1.93	-0.34	13.64	3.02	3.47
3	0.72	0.69		-0.86	3.47	2.76	-5.16	19.27		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.46	2.56	0.18	RLap	1.83	3.89	0.47	RLap	0.43	-1.03	
2	RLap	-0.44	2.56	0.17	RLap	3.02	3.79	0.80	RLap	0.66	0.17	
3	RSup	-0.86	12.17	0.07	MidS	-5.16	8.69	0.59	MidS	0.54	-1.49	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Bear	UC	Right_Lap(k) Calc Shear	Bear	UC

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1					0.58	5.30	1.75	0.33
2	0.58	5.30	1.75	0.33	0.64	5.30	1.75	0.36
3	1.10	5.30	3.07	0.36				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.36		0.48	0.51	0.00		2.05	11.87	-1.91	-2.41
2	-0.40	-0.38	0.46	0.49	-2.41	-2.02	0.35	13.63	-3.16	-3.63
3	-0.76	-0.73		0.92	-3.63	-2.89	5.43	19.27		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	0.48	2.56	0.19	MidS	2.05	3.32	0.62	RLap	0.45	1.08	
2	RLap	0.46	2.56	0.18	RLap	-3.16	4.37	0.72	RLap	0.69	-0.19	
3	RSup	0.92	12.17	0.08	MidS	5.43	6.72	0.81	MidS	0.57	1.56	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.60	5.30	1.75	0.34
2	0.60	5.30	1.75	0.34	0.67	5.30	1.75	0.38
3	1.15	5.30	3.07	0.38				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.05		-0.07	-0.07	0.00		-0.28	11.71	0.26	0.33
2	0.05	0.05	-0.06	-0.07	0.33	0.27	-0.05	13.64	0.43	0.49
3	0.10	0.10		-0.12	0.49	0.39	-0.73	19.27		0.00

STRENGTH/DEFLECTION:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	-0.07	2.56	0.03	RLap	0.26	3.89	0.07	RLap	0.06	-0.15	
2	RLap	-0.06	2.56	0.02	RLap	0.43	3.79	0.11	RLap	0.09	0.02	
3	RSup	-0.12	12.17	0.01	MidS	-0.73	8.69	0.08	LSup	0.00	-0.21	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.08	5.30	1.75 0.05
2	0.08	5.30	1.75 0.05	0.09	5.30	1.75 0.05
3	0.16	5.30	3.07 0.05			

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.05		0.07	0.07	0.00		0.28	11.71	-0.26	-0.32
2	-0.05	-0.05	0.06	0.07	-0.32	-0.27	0.05	13.63	-0.43	-0.49
3	-0.10	-0.10		0.12	-0.49	-0.39	0.73	19.27		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	0.07	2.56	0.03	MidS	0.28	3.32	0.08	RLap	0.06	0.15	
2	RLap	0.06	2.56	0.02	RLap	-0.43	4.37	0.10	RLap	0.09	-0.02	
3	RSup	0.12	12.17	0.01	MidS	0.73	6.72	0.11	LSup	0.00	0.21	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.08	5.30	1.75 0.05
2	0.08	5.30	1.75 0.05	0.09	5.30	1.75 0.05
3	0.16	5.30	3.07 0.05			

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	-0.83	3.87	0.87	3.87	-0.15	3.87	0.15	3.87
2	0.14	4.00	-0.15	4.00	0.02	4.00	-0.02	4.00
3	-1.19	3.96	1.25	3.96	-0.21	3.96	0.21	3.96

22-8706 Wall 4 - Door Jamb & Header Design 4/29/22 3:58pm

LAYOUT:

Open Id	Bay Id	Locate	Part	Length	Load Width	Load Weight
4	3	JambL	8C16	12.00	4.00	34.6
		JambR	8C16	12.00	4.00	34.6
		Header	8c16	8.00	2.00	23.0

STRENGTH/DEFLECTION:

Open Id	Member	Load Id	--Shear(k)- Calc	Shear Limit	--Moment(ft,f-k)- Loc	Moment Calc	Moment Limit	Mom+ Shear	Max UC	Deflect(in) Calc	Deflect(in) Limit
4	JambL	WP	-0.46	2.5	8.00	-1.52	5.0	0.24	0.30	-0.13	1.60
		WS	0.48	2.5	8.00	1.59	4.2	0.25	0.37	0.13	1.60
		SP	-0.06	2.5	8.00	-0.21	5.0	0.03	0.04	-0.02	1.60
		SS	0.06	2.5	8.00	0.21	4.2	0.03	0.05	0.02	1.60
	JambR	WP	0.28	2.5	7.36	-0.87	5.0	0.17	0.17	-0.08	1.60
		WS	-0.31	2.5	7.39	0.95	4.1	0.19	0.23	0.09	1.60
		SP	0.04	2.5	7.36	-0.12	5.0	0.00	0.02	-0.01	1.60
		SS	-0.04	2.5	7.46	0.12	4.1	0.00	0.03	0.01	1.60
	Header	WP	0.08	2.5	4.00	-0.15	5.0	0.00	0.03	-0.01	1.07
		WS	-0.08	2.5	4.00	0.16	4.1	0.00	0.04	0.01	1.07
		SP	0.01	2.5	4.00	-0.02	5.0	0.00	0.00	0.00	1.07
		SS	-0.01	2.5	4.00	0.02	4.1	0.00	0.01	0.00	1.07

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction
SP - Seismic_Pressure
SS - Seismic_Suction

22-8706 Wall 4 - Panel Design (Bay 3) 4/29/22 3:58pm

PANEL DATA:

Bay	Rotation	Panel

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Part	Type	Gage	Yield	Stiffness	Height
3	26 PBR	PBR	26.00	80.0	0.00	13.93

MOMENTS & DEFLECTION:

Span Id	Locate(ft) Start	End	Load	Moment(ft-lb/ft) Start Calc	Start Limit	Midspan Calc	Midspan Limit	End Calc	End Limit	Max UC	Deflect(in) Calc	Deflect(in) Limit
1	0.00	4.00	WP	0.0	139.0	-14.0	139.0	18.7	150.4	0.12	-0.02	0.53
			WS	0.0	150.4	15.2	150.4	-20.2	139.0	0.15	0.02	0.53
2	4.00	8.00	WP	18.7	150.4	-5.7	139.0	14.8	150.4	0.12	0.00	0.53
			WS	-20.2	139.0	6.2	150.4	-16.0	139.0	0.15	0.00	0.53
3	8.00	12.00	WP	14.8	150.4	-9.1	139.0	11.8	150.4	0.10	-0.01	0.53
			WS	-16.0	139.0	9.9	150.4	-12.8	139.0	0.11	0.01	0.53
4	12.00	13.93	WP	11.8	150.4	-1.0	139.0	0.0	139.0	0.08	0.00	0.26
			WS	-12.8	139.0	1.1	150.4	0.0	150.4	0.09	0.00	0.26

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

PANEL DATA:

--Bay_Id- Start	End	Height	Part	Type	Gage	Yield	Rotation Stiffness
1	3	Eave	B-LINER	BLS	29.00	80.0	0.00

PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
26 PBR	0.019	80.00	94.40

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
T3125PTW	0.21	0.50	2.80

PANEL ZONE LAYOUT:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Zone Id	Description	Wall(ft) Offset1	Wall(ft) Offset2	Girt(ft,ft,in) Bay Id	Girt(ft,ft,in) Load Locate	Girt(ft,ft,in) Width	Girt(ft,ft,in) Min Thick	Panel Span (ft)
1	Interior	5.63	84.37	1	4.00	4.00	0.060	4.00
2	Lt Edge	0.00	5.63	1	4.00	4.00	0.060	4.00
3	Rt Edge	84.37	90.00	3	4.00	4.00	0.060	4.00

GIRT SCREW CHECK:

Zone Id	Screw Space (ft)	Wind Suction (psf)	Load (k)	Limit(k) Girt Pullout	Limit(k) Panel Pullover	Limit(k) Screw Tension	Max UC
1	1.00	12.12	0.05	0.23	0.44	0.75	0.21
2	1.00	12.12	0.05	0.23	0.44	0.75	0.21
3	1.00	12.12	0.05	0.23	0.44	0.75	0.21

22-8706 Wall 4 - Weight Summary 4/29/22 3:58pm

Girts	=	816.79
Jambs/Headers	=	92.16
		908.95

22-8706 Wall 4 - Warning Summary 4/29/22 3:58pm

.. No Warnings

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Wall 1 - Design Code 4/29/22 3:58pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Wall 1 - Column & Rafter Design 4/29/22 3:58pm

MEMBER LAYOUT:

Id	Locate (ft)	Part	Web(in) Depth	Web(in) Thick	Flange(in) Width	Flange(in) Thick	Length (ft)	Weight (lb)	Max_Load Id	Max_Load UC	Report
Col1	0.7	W8X10	7.48	0.170	3.94	0.205	13.1	131.5	17	0.17	Mom+Axl
Col2	18.5	W8X10	7.48	0.170	3.94	0.205	14.6	146.3	17	0.79	Mom+Axl
Col3	38.5	W8X10	7.48	0.170	3.94	0.205	16.3	163.0	17	0.38	Mom+Axl
Col4	58.5	W8X10	7.48	0.170	3.94	0.205	17.4	173.8	16	0.54	Mom+Axl
Col5	78.5	W8X10	7.48	0.170	3.94	0.205	15.7	156.8	17	0.34	Mom+Axl
Col6	98.5	W8X10	7.48	0.170	3.94	0.205	14.0	139.9	16	0.68	Mom+Axl
Col7	116.3	W8X10	7.48	0.170	3.94	0.205	12.5	124.7	16	0.15	Mom+Axl
Raf1	Surf 2	W10X12	9.45	0.190	3.96	0.210	19.6	235.6	3	0.70	Mom+Axl
Raf2	Surf 2	W10X12	9.45	0.190	3.96	0.210	35.6	426.7	50	0.74	Mom+Axl
Raf3	Surf 3	W10X12	9.45	0.190	3.96	0.210	22.5	270.2	3	0.65	Mom+Axl
Raf4	Surf 3	W10X12	9.45	0.190	3.96	0.210	39.7	476.5	60	0.71	Mom+Axl
								2445.0			

DESIGN ACTIONS/STRENGTH:

Id	Load Id	Axial(k) Calc	Axial(k) Limit	Shear(k) Calc	Shear(k) Limit	Moment(f-k) Calc	Moment(f-k) Limit
Col1	1	3.88	66.40	0.00	26.83	0.00	19.94
Col1	2	1.56	66.40	0.00	26.83	0.00	19.94
Col1	3	4.46	66.40	0.00	26.83	0.00	19.94

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	4	4.46	66.40	0.00	26.83	0.00	19.94
Col1	5	4.46	66.40	0.00	26.83	0.00	19.94
Col1	6	3.30	66.40	0.00	26.83	0.00	19.94
Col1	7	3.73	66.40	0.00	26.83	0.00	19.94
Col1	8	3.73	66.40	0.00	26.83	0.00	19.94
Col1	9	3.73	66.40	0.00	26.83	0.00	19.94
Col1	10	-0.80	88.62	0.95	26.83	-3.11	20.22
Col1	11	-0.23	88.62	0.95	26.83	-3.11	20.22
Col1	12	-0.80	88.62	-1.01	26.83	3.33	20.22
Col1	13	-0.23	88.62	-1.01	26.83	3.33	20.22
Col1	14	-0.66	88.62	-1.01	26.83	3.33	20.22
Col1	15	-0.27	88.62	-1.01	26.83	3.33	20.22
Col1	16	-0.16	88.62	-1.01	26.83	3.33	20.22
Col1	17	0.36	66.40	-1.01	26.83	3.33	20.22
Col1	18	2.72	66.40	-0.76	26.83	2.49	20.22
Col1	19	3.01	66.40	-0.76	26.83	2.49	20.22
Col1	20	2.24	66.40	-0.76	26.83	2.49	20.22
Col1	21	2.67	66.40	-0.76	26.83	2.49	20.22
Col1	22	3.15	66.40	-0.76	26.83	2.49	20.22
Col1	23	3.44	66.40	-0.76	26.83	2.49	20.22
Col1	24	2.68	66.40	-0.76	26.83	2.49	20.22
Col1	25	3.10	66.40	-0.76	26.83	2.49	20.22
Col1	26	3.15	66.40	-0.76	26.83	2.49	20.22
Col1	27	3.44	66.40	-0.76	26.83	2.49	20.22
Col1	28	2.68	66.40	-0.76	26.83	2.49	20.22
Col1	29	3.10	66.40	-0.76	26.83	2.49	20.22
Col1	30	3.15	66.40	-0.76	26.83	2.49	20.22
Col1	31	3.44	66.40	-0.76	26.83	2.49	20.22
Col1	32	2.68	66.40	-0.76	26.83	2.49	20.22
Col1	33	3.10	66.40	-0.76	26.83	2.49	20.22
Col1	34	-1.04	88.62	0.95	26.83	-3.11	20.22
Col1	35	-0.48	88.62	0.95	26.83	-3.11	20.22
Col1	36	-1.04	88.62	-1.01	26.83	3.33	20.22
Col1	37	-0.48	88.62	-1.01	26.83	3.33	20.22
Col1	38	-0.90	88.62	-1.01	26.83	3.33	20.22
Col1	39	-0.52	88.62	-1.01	26.83	3.33	20.22
Col1	40	-0.41	88.62	-1.01	26.83	3.33	20.22
Col1	41	0.06	66.40	-1.01	26.83	3.33	20.22
Col1	42	1.75	66.40	0.00	26.83	0.00	19.94
Col1	43	1.68	66.40	0.00	26.83	0.00	19.94
Col1	44	3.43	66.40	0.00	26.83	0.00	19.94
Col1	45	3.38	66.40	0.00	26.83	0.00	19.94
Col1	46	1.69	66.40	0.00	26.83	0.00	19.94
Col1	47	1.64	66.40	0.00	26.83	0.00	19.94
Col1	48	0.41	66.40	0.00	26.83	0.00	19.94
Col1	49	0.34	66.40	0.00	26.83	0.00	19.94
Col1	50	4.51	66.40	0.00	26.83	0.00	19.94
Col1	51	3.77	66.40	0.00	26.83	0.00	19.94
Col1	52	2.82	66.40	-0.76	26.83	2.49	20.22
Col1	53	3.11	66.40	-0.76	26.83	2.49	20.22
Col1	54	3.19	66.40	-0.76	26.83	2.49	20.22
Col1	55	3.48	66.40	-0.76	26.83	2.49	20.22
Col1	56	3.88	66.40	0.00	26.83	0.00	19.94
Col1	57	3.88	66.40	0.00	26.83	0.00	19.94

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	58	3.91	66.40	0.00	26.83	0.00	19.94
Col1	59	3.86	66.40	0.00	26.83	0.00	19.94
Col1	60	2.41	66.40	0.00	26.83	0.00	19.94
Col1	61	2.20	66.40	0.00	26.83	0.00	19.94
Col1	62	1.24	66.40	-0.76	26.83	2.49	20.22
Col1	63	1.53	66.40	-0.76	26.83	2.49	20.22
Col1	64	1.61	66.40	-0.76	26.83	2.49	20.22
Col1	65	1.91	66.40	-0.76	26.83	2.49	20.22
Col1	66	2.31	66.40	0.00	26.83	0.00	19.94
Col1	67	2.31	66.40	0.00	26.83	0.00	19.94
Col1	68	2.33	66.40	0.00	26.83	0.00	19.94
Col1	69	2.28	66.40	0.00	26.83	0.00	19.94
Col1	70	-0.90	88.62	0.00	26.83	0.00	19.94
Col1	71	-0.52	88.62	0.00	26.83	0.00	19.94
Col1	72	-0.41	88.62	0.00	26.83	0.00	19.94
Col1	73	0.06	66.40	0.00	26.83	0.00	19.94
Col1	74	-1.04	88.62	0.00	26.83	0.00	19.94
Col1	75	-0.48	88.62	0.00	26.83	0.00	19.94
Col1	76	2.35	66.40	0.00	26.83	0.00	19.94
Col1	77	2.63	66.40	0.00	26.83	0.00	19.94
Col1	78	2.72	66.40	0.00	26.83	0.00	19.94
Col1	79	3.01	66.40	0.00	26.83	0.00	19.94
Col1	80	2.24	66.40	0.00	26.83	0.00	19.94
Col1	81	2.67	66.40	0.00	26.83	0.00	19.94
Col1	82	2.78	66.40	0.00	26.83	0.00	19.94
Col1	83	2.78	66.40	0.00	26.83	0.00	19.94
Col1	84	2.78	66.40	0.00	26.83	0.00	19.94
Col1	85	3.07	66.40	0.00	26.83	0.00	19.94
Col1	86	3.07	66.40	0.00	26.83	0.00	19.94
Col1	87	3.07	66.40	0.00	26.83	0.00	19.94
Col1	88	3.15	66.40	0.00	26.83	0.00	19.94
Col1	89	3.15	66.40	0.00	26.83	0.00	19.94
Col1	90	3.15	66.40	0.00	26.83	0.00	19.94
Col1	91	3.44	66.40	0.00	26.83	0.00	19.94
Col1	92	3.44	66.40	0.00	26.83	0.00	19.94
Col1	93	3.44	66.40	0.00	26.83	0.00	19.94
Col1	94	2.68	66.40	0.00	26.83	0.00	19.94
Col1	95	3.10	66.40	0.00	26.83	0.00	19.94
Col1	96	2.68	66.40	0.00	26.83	0.00	19.94
Col1	97	3.10	66.40	0.00	26.83	0.00	19.94
Col1	98	2.68	66.40	0.00	26.83	0.00	19.94
Col1	99	3.10	66.40	0.00	26.83	0.00	19.94
Col2	1	10.76	66.40	0.00	26.83	0.00	5.71
Col2	2	4.19	66.40	0.00	26.83	0.00	5.71
Col2	3	12.40	66.40	0.00	26.83	0.00	5.71
Col2	4	12.40	66.40	0.00	26.83	0.00	5.71
Col2	5	12.40	66.40	0.00	26.83	0.00	5.71
Col2	6	9.12	66.40	0.00	26.83	0.00	5.71
Col2	7	10.35	66.40	0.00	26.83	0.00	5.71
Col2	8	10.35	66.40	0.00	26.83	0.00	5.71
Col2	9	10.35	66.40	0.00	26.83	0.00	5.71
Col2	10	-1.92	88.62	1.33	26.83	-4.86	20.63
Col2	11	-0.52	88.62	1.33	26.83	-4.86	20.63
Col2	12	-1.92	88.62	-1.38	26.83	5.06	6.49

		Customer	Elbert Rentals		**Job No**	22-8706	
		Project	Building Expansion		**Date**	5/3/2022	
		Location	Newberg, OR 97132		**Designed By**	AC	
		Size	117 x 90 x 14.8 x 14.1		**Checked By**		

Col2	13	-0.52	88.62	-1.38	26.83	5.06	6.49
Col2	14	-2.17	88.62	-1.38	26.83	5.06	6.49
Col2	15	0.40	66.40	-1.38	26.83	5.06	6.49
Col2	16	-0.93	88.62	-1.38	26.83	5.06	6.49
Col2	17	1.63	66.40	-1.38	26.83	5.06	6.49
Col2	18	7.12	66.40	-1.04	26.83	3.80	6.49
Col2	19	8.93	66.40	-1.04	26.83	3.80	6.49
Col2	20	6.38	66.40	-1.04	26.83	3.80	6.49
Col2	21	7.42	66.40	-1.04	26.83	3.80	6.49
Col2	22	8.35	66.40	-1.04	26.83	3.80	6.49
Col2	23	10.16	66.40	-1.04	26.83	3.80	6.49
Col2	24	7.61	66.40	-1.04	26.83	3.80	6.49
Col2	25	8.65	66.40	-1.04	26.83	3.80	6.49
Col2	26	8.35	66.40	-1.04	26.83	3.80	6.49
Col2	27	10.16	66.40	-1.04	26.83	3.80	6.49
Col2	28	7.61	66.40	-1.04	26.83	3.80	6.49
Col2	29	8.65	66.40	-1.04	26.83	3.80	6.49
Col2	30	8.35	66.40	-1.04	26.83	3.80	6.49
Col2	31	10.16	66.40	-1.04	26.83	3.80	6.49
Col2	32	7.61	66.40	-1.04	26.83	3.80	6.49
Col2	33	8.65	66.40	-1.04	26.83	3.80	6.49
Col2	34	-2.61	88.62	1.33	26.83	-4.86	20.63
Col2	35	-1.22	88.62	1.33	26.83	-4.86	20.63
Col2	36	-2.61	88.62	-1.38	26.83	5.06	6.49
Col2	37	-1.22	88.62	-1.38	26.83	5.06	6.49
Col2	38	-2.87	88.62	-1.38	26.83	5.06	6.49
Col2	39	-0.44	88.62	-1.38	26.83	5.06	6.49
Col2	40	-1.62	88.62	-1.38	26.83	5.06	6.49
Col2	41	0.88	66.40	-1.38	26.83	5.06	6.49
Col2	42	4.69	66.40	0.00	26.83	0.00	5.71
Col2	43	7.21	66.40	0.00	26.83	0.00	5.71
Col2	44	9.47	66.40	0.00	26.83	0.00	5.71
Col2	45	11.38	66.40	0.00	26.83	0.00	5.71
Col2	46	4.54	66.40	0.00	26.83	0.00	5.71
Col2	47	6.45	66.40	0.00	26.83	0.00	5.71
Col2	48	1.02	66.40	0.00	26.83	0.00	5.71
Col2	49	3.54	66.40	0.00	26.83	0.00	5.71
Col2	50	12.12	66.40	0.00	26.83	0.00	5.71
Col2	51	10.14	66.40	0.00	26.83	0.00	5.71
Col2	52	7.20	66.40	-1.04	26.83	3.80	6.49
Col2	53	9.03	66.40	-1.04	26.83	3.80	6.49
Col2	54	8.14	66.40	-1.04	26.83	3.80	6.49
Col2	55	9.96	66.40	-1.04	26.83	3.80	6.49
Col2	56	10.43	66.40	0.00	26.83	0.00	5.71
Col2	57	10.43	66.40	0.00	26.83	0.00	5.71
Col2	58	10.49	66.40	0.00	26.83	0.00	5.71
Col2	59	12.37	66.40	0.00	26.83	0.00	5.71
Col2	60	6.76	66.40	0.00	26.83	0.00	5.71
Col2	61	6.12	66.40	0.00	26.83	0.00	5.71
Col2	62	3.19	66.40	-1.04	26.83	3.80	6.49
Col2	63	5.00	66.40	-1.04	26.83	3.80	6.49
Col2	64	4.12	66.40	-1.04	26.83	3.80	6.49
Col2	65	5.93	66.40	-1.04	26.83	3.80	6.49
Col2	66	6.41	66.40	0.00	26.83	0.00	5.71

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col2	67	6.41	66.40	0.00	26.83	0.00	5.71
Col2	68	6.47	66.40	0.00	26.83	0.00	5.71
Col2	69	8.34	66.40	0.00	26.83	0.00	5.71
Col2	70	-2.87	88.62	0.00	26.83	0.00	5.71
Col2	71	-0.44	88.62	0.00	26.83	0.00	5.71
Col2	72	-1.62	88.62	0.00	26.83	0.00	5.71
Col2	73	0.88	66.40	0.00	26.83	0.00	5.71
Col2	74	-2.61	88.62	0.00	26.83	0.00	5.71
Col2	75	-1.22	88.62	0.00	26.83	0.00	5.71
Col2	76	6.18	66.40	0.00	26.83	0.00	5.71
Col2	77	8.00	66.40	0.00	26.83	0.00	5.71
Col2	78	7.12	66.40	0.00	26.83	0.00	5.71
Col2	79	8.93	66.40	0.00	26.83	0.00	5.71
Col2	80	6.38	66.40	0.00	26.83	0.00	5.71
Col2	81	7.42	66.40	0.00	26.83	0.00	5.71
Col2	82	7.41	66.40	0.00	26.83	0.00	5.71
Col2	83	7.41	66.40	0.00	26.83	0.00	5.71
Col2	84	7.41	66.40	0.00	26.83	0.00	5.71
Col2	85	9.24	66.40	0.00	26.83	0.00	5.71
Col2	86	9.24	66.40	0.00	26.83	0.00	5.71
Col2	87	9.24	66.40	0.00	26.83	0.00	5.71
Col2	88	8.35	66.40	0.00	26.83	0.00	5.71
Col2	89	8.35	66.40	0.00	26.83	0.00	5.71
Col2	90	8.35	66.40	0.00	26.83	0.00	5.71
Col2	91	10.16	66.40	0.00	26.83	0.00	5.71
Col2	92	10.16	66.40	0.00	26.83	0.00	5.71
Col2	93	10.16	66.40	0.00	26.83	0.00	5.71
Col2	94	7.61	66.40	0.00	26.83	0.00	5.71
Col2	95	8.65	66.40	0.00	26.83	0.00	5.71
Col2	96	7.61	66.40	0.00	26.83	0.00	5.71
Col2	97	8.65	66.40	0.00	26.83	0.00	5.71
Col2	98	7.61	66.40	0.00	26.83	0.00	5.71
Col2	99	8.65	66.40	0.00	26.83	0.00	5.71
Col3	1	10.06	64.65	0.00	26.83	0.00	13.76
Col3	2	3.94	64.65	0.00	26.83	0.00	13.76
Col3	3	11.60	64.65	0.00	26.83	0.00	13.76
Col3	4	11.60	64.65	0.00	26.83	0.00	13.76
Col3	5	11.60	64.65	0.00	26.83	0.00	13.76
Col3	6	8.53	64.65	0.00	26.83	0.00	13.76
Col3	7	9.68	64.65	0.00	26.83	0.00	13.76
Col3	8	9.68	64.65	0.00	26.83	0.00	13.76
Col3	9	9.68	64.65	0.00	26.83	0.00	13.76
Col3	10	-1.97	88.62	1.56	26.83	-6.38	21.18
Col3	11	-0.18	88.62	1.56	26.83	-6.38	21.18
Col3	12	-1.97	88.62	-1.63	26.83	6.64	17.72
Col3	13	-0.18	88.62	-1.63	26.83	6.64	17.72
Col3	14	-0.48	88.62	-1.63	26.83	6.64	17.72
Col3	15	-0.46	88.62	-1.63	26.83	6.64	17.72
Col3	16	0.81	64.65	-1.63	26.83	6.64	17.72
Col3	17	0.83	64.65	-1.63	26.83	6.64	17.72
Col3	18	7.80	64.65	-1.22	26.83	4.98	17.72
Col3	19	7.81	64.65	-1.22	26.83	4.98	17.72
Col3	20	5.84	64.65	-1.22	26.83	4.98	17.72
Col3	21	7.19	64.65	-1.22	26.83	4.98	17.72

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	22	8.95	64.65	-1.22	26.83	4.98	17.72
Col3	23	8.96	64.65	-1.22	26.83	4.98	17.72
Col3	24	6.99	64.65	-1.22	26.83	4.98	17.72
Col3	25	8.34	64.65	-1.22	26.83	4.98	17.72
Col3	26	8.95	64.65	-1.22	26.83	4.98	17.72
Col3	27	8.96	64.65	-1.22	26.83	4.98	17.72
Col3	28	6.99	64.65	-1.22	26.83	4.98	17.72
Col3	29	8.34	64.65	-1.22	26.83	4.98	17.72
Col3	30	8.95	64.65	-1.22	26.83	4.98	17.72
Col3	31	8.96	64.65	-1.22	26.83	4.98	17.72
Col3	32	6.99	64.65	-1.22	26.83	4.98	17.72
Col3	33	8.34	64.65	-1.22	26.83	4.98	17.72
Col3	34	-2.62	88.62	1.56	26.83	-6.38	21.18
Col3	35	-0.83	88.62	1.56	26.83	-6.38	21.18
Col3	36	-2.62	88.62	-1.63	26.83	6.64	17.72
Col3	37	-0.83	88.62	-1.63	26.83	6.64	17.72
Col3	38	-1.12	88.62	-1.63	26.83	6.64	17.72
Col3	39	-1.11	88.62	-1.63	26.83	6.64	17.72
Col3	40	0.10	64.65	-1.63	26.83	6.64	17.72
Col3	41	0.11	64.65	-1.63	26.83	6.64	17.72
Col3	42	6.55	64.65	0.00	26.83	0.00	13.76
Col3	43	4.22	64.65	0.00	26.83	0.00	13.76
Col3	44	10.49	64.65	0.00	26.83	0.00	13.76
Col3	45	8.72	64.65	0.00	26.83	0.00	13.76
Col3	46	5.89	64.65	0.00	26.83	0.00	13.76
Col3	47	4.13	64.65	0.00	26.83	0.00	13.76
Col3	48	3.11	64.65	0.00	26.83	0.00	13.76
Col3	49	0.78	64.65	0.00	26.83	0.00	13.76
Col3	50	13.54	64.65	0.00	26.83	0.00	13.76
Col3	51	11.14	64.65	0.00	26.83	0.00	13.76
Col3	52	9.56	64.65	-1.22	26.83	4.98	17.72
Col3	53	9.56	64.65	-1.22	26.83	4.98	17.72
Col3	54	10.41	64.65	-1.22	26.83	4.98	17.72
Col3	55	10.40	64.65	-1.22	26.83	4.98	17.72
Col3	56	11.41	64.65	0.00	26.83	0.00	13.76
Col3	57	11.41	64.65	0.00	26.83	0.00	13.76
Col3	58	13.06	64.65	0.00	26.83	0.00	13.76
Col3	59	11.32	64.65	0.00	26.83	0.00	13.76
Col3	60	5.82	64.65	0.00	26.83	0.00	13.76
Col3	61	5.35	64.65	0.00	26.83	0.00	13.76
Col3	62	3.77	64.65	-1.22	26.83	4.98	17.72
Col3	63	3.78	64.65	-1.22	26.83	4.98	17.72
Col3	64	4.61	64.65	-1.22	26.83	4.98	17.72
Col3	65	4.63	64.65	-1.22	26.83	4.98	17.72
Col3	66	5.62	64.65	0.00	26.83	0.00	13.76
Col3	67	5.62	64.65	0.00	26.83	0.00	13.76
Col3	68	7.27	64.65	0.00	26.83	0.00	13.76
Col3	69	5.54	64.65	0.00	26.83	0.00	13.76
Col3	70	-1.12	88.62	0.00	26.83	0.00	13.76
Col3	71	-1.11	88.62	0.00	26.83	0.00	13.76
Col3	72	0.10	64.65	0.00	26.83	0.00	13.76
Col3	73	0.11	64.65	0.00	26.83	0.00	13.76
Col3	74	-2.62	88.62	0.00	26.83	0.00	13.76
Col3	75	-0.83	88.62	0.00	26.83	0.00	13.76

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	76	6.96	64.65	0.00	26.83	0.00	13.76
Col3	77	6.97	64.65	0.00	26.83	0.00	13.76
Col3	78	7.80	64.65	0.00	26.83	0.00	13.76
Col3	79	7.81	64.65	0.00	26.83	0.00	13.76
Col3	80	5.84	64.65	0.00	26.83	0.00	13.76
Col3	81	7.19	64.65	0.00	26.83	0.00	13.76
Col3	82	8.11	64.65	0.00	26.83	0.00	13.76
Col3	83	8.11	64.65	0.00	26.83	0.00	13.76
Col3	84	8.11	64.65	0.00	26.83	0.00	13.76
Col3	85	8.12	64.65	0.00	26.83	0.00	13.76
Col3	86	8.12	64.65	0.00	26.83	0.00	13.76
Col3	87	8.12	64.65	0.00	26.83	0.00	13.76
Col3	88	8.95	64.65	0.00	26.83	0.00	13.76
Col3	89	8.95	64.65	0.00	26.83	0.00	13.76
Col3	90	8.95	64.65	0.00	26.83	0.00	13.76
Col3	91	8.96	64.65	0.00	26.83	0.00	13.76
Col3	92	8.96	64.65	0.00	26.83	0.00	13.76
Col3	93	8.96	64.65	0.00	26.83	0.00	13.76
Col3	94	6.99	64.65	0.00	26.83	0.00	13.76
Col3	95	8.34	64.65	0.00	26.83	0.00	13.76
Col3	96	6.99	64.65	0.00	26.83	0.00	13.76
Col3	97	8.34	64.65	0.00	26.83	0.00	13.76
Col3	98	6.99	64.65	0.00	26.83	0.00	13.76
Col3	99	8.34	64.65	0.00	26.83	0.00	13.76
Col4	1	10.33	62.66	0.00	26.83	0.00	11.30
Col4	2	4.04	62.66	0.00	26.83	0.00	11.30
Col4	3	11.90	62.66	0.00	26.83	0.00	11.30
Col4	4	11.90	62.66	0.00	26.83	0.00	11.30
Col4	5	11.90	62.66	0.00	26.83	0.00	11.30
Col4	6	8.76	62.66	0.00	26.83	0.00	11.30
Col4	7	9.93	62.66	0.00	26.83	0.00	11.30
Col4	8	9.93	62.66	0.00	26.83	0.00	11.30
Col4	9	9.93	62.66	0.00	26.83	0.00	11.30
Col4	10	-0.75	88.62	1.67	26.83	-7.25	20.42
Col4	11	-1.26	88.62	1.67	26.83	-7.25	20.42
Col4	12	-0.75	88.62	-1.74	26.83	7.55	14.14
Col4	13	-1.26	88.62	-1.74	26.83	7.55	14.14
Col4	14	-0.24	88.62	-1.74	26.83	7.55	14.14
Col4	15	-0.28	88.62	-1.74	26.83	7.55	14.14
Col4	16	0.97	62.66	-1.74	26.83	7.55	14.14
Col4	17	0.92	62.66	-1.74	26.83	7.55	14.14
Col4	18	8.11	62.66	-1.30	26.83	5.66	14.14
Col4	19	8.07	62.66	-1.30	26.83	5.66	14.14
Col4	20	6.94	62.66	-1.30	26.83	5.66	14.14
Col4	21	6.57	62.66	-1.30	26.83	5.66	14.14
Col4	22	9.28	62.66	-1.30	26.83	5.66	14.14
Col4	23	9.24	62.66	-1.30	26.83	5.66	14.14
Col4	24	8.12	62.66	-1.30	26.83	5.66	14.14
Col4	25	7.74	62.66	-1.30	26.83	5.66	14.14
Col4	26	9.28	62.66	-1.30	26.83	5.66	14.14
Col4	27	9.24	62.66	-1.30	26.83	5.66	14.14
Col4	28	8.12	62.66	-1.30	26.83	5.66	14.14
Col4	29	7.74	62.66	-1.30	26.83	5.66	14.14
Col4	30	9.28	62.66	-1.30	26.83	5.66	14.14

		Customer	Elbert Rentals		**Job No**	22-8706	
		Project	Building Expansion		**Date**	5/3/2022	
		Location	Newberg, OR 97132		**Designed By**	AC	
		Size	117 x 90 x 14.8 x 14.1		**Checked By**		

Col4	31	9.24	62.66	-1.30	26.83	5.66	14.14
Col4	32	8.12	62.66	-1.30	26.83	5.66	14.14
Col4	33	7.74	62.66	-1.30	26.83	5.66	14.14
Col4	34	-1.42	88.62	1.67	26.83	-7.25	20.42
Col4	35	-1.92	88.62	1.67	26.83	-7.25	20.42
Col4	36	-1.42	88.62	-1.74	26.83	7.55	14.14
Col4	37	-1.92	88.62	-1.74	26.83	7.55	14.14
Col4	38	-0.91	88.62	-1.74	26.83	7.55	14.14
Col4	39	-0.95	88.62	-1.74	26.83	7.55	14.14
Col4	40	0.23	62.66	-1.74	26.83	7.55	14.14
Col4	41	0.18	62.66	-1.74	26.83	7.55	14.14
Col4	42	4.53	62.66	0.00	26.83	0.00	11.30
Col4	43	4.37	62.66	0.00	26.83	0.00	11.30
Col4	44	9.10	62.66	0.00	26.83	0.00	11.30
Col4	45	8.98	62.66	0.00	26.83	0.00	11.30
Col4	46	4.39	62.66	0.00	26.83	0.00	11.30
Col4	47	4.27	62.66	0.00	26.83	0.00	11.30
Col4	48	1.00	62.66	0.00	26.83	0.00	11.30
Col4	49	0.84	62.66	0.00	26.83	0.00	11.30
Col4	50	9.24	62.66	0.00	26.83	0.00	11.30
Col4	51	7.94	62.66	0.00	26.83	0.00	11.30
Col4	52	6.52	62.66	-1.30	26.83	5.66	14.14
Col4	53	6.48	62.66	-1.30	26.83	5.66	14.14
Col4	54	7.29	62.66	-1.30	26.83	5.66	14.14
Col4	55	7.25	62.66	-1.30	26.83	5.66	14.14
Col4	56	8.23	62.66	0.00	26.83	0.00	11.30
Col4	57	8.23	62.66	0.00	26.83	0.00	11.30
Col4	58	8.28	62.66	0.00	26.83	0.00	11.30
Col4	59	8.17	62.66	0.00	26.83	0.00	11.30
Col4	60	11.77	62.66	0.00	26.83	0.00	11.30
Col4	61	9.84	62.66	0.00	26.83	0.00	11.30
Col4	62	8.41	62.66	-1.30	26.83	5.66	14.14
Col4	63	8.38	62.66	-1.30	26.83	5.66	14.14
Col4	64	9.19	62.66	-1.30	26.83	5.66	14.14
Col4	65	9.15	62.66	-1.30	26.83	5.66	14.14
Col4	66	10.12	62.66	0.00	26.83	0.00	11.30
Col4	67	10.12	62.66	0.00	26.83	0.00	11.30
Col4	68	10.18	62.66	0.00	26.83	0.00	11.30
Col4	69	10.07	62.66	0.00	26.83	0.00	11.30
Col4	70	-0.91	88.62	0.00	26.83	0.00	11.30
Col4	71	-0.95	88.62	0.00	26.83	0.00	11.30
Col4	72	0.23	62.66	0.00	26.83	0.00	11.30
Col4	73	0.18	62.66	0.00	26.83	0.00	11.30
Col4	74	-1.42	88.62	0.00	26.83	0.00	11.30
Col4	75	-1.92	88.62	0.00	26.83	0.00	11.30
Col4	76	7.33	62.66	0.00	26.83	0.00	11.30
Col4	77	7.30	62.66	0.00	26.83	0.00	11.30
Col4	78	8.11	62.66	0.00	26.83	0.00	11.30
Col4	79	8.07	62.66	0.00	26.83	0.00	11.30
Col4	80	6.94	62.66	0.00	26.83	0.00	11.30
Col4	81	6.57	62.66	0.00	26.83	0.00	11.30
Col4	82	8.51	62.66	0.00	26.83	0.00	11.30
Col4	83	8.51	62.66	0.00	26.83	0.00	11.30
Col4	84	8.51	62.66	0.00	26.83	0.00	11.30

	Customer	Elbert Rentals			**Job No**	22-8706	
	Project	Building Expansion			**Date**	5/3/2022	
	Location	Newberg, OR 97132			**Designed By**	AC	
	Size	117 x 90 x 14.8 x 14.1			**Checked By**		

Col4	85	8.47	62.66	0.00	26.83	0.00	11.30
Col4	86	8.47	62.66	0.00	26.83	0.00	11.30
Col4	87	8.47	62.66	0.00	26.83	0.00	11.30
Col4	88	9.28	62.66	0.00	26.83	0.00	11.30
Col4	89	9.28	62.66	0.00	26.83	0.00	11.30
Col4	90	9.28	62.66	0.00	26.83	0.00	11.30
Col4	91	9.24	62.66	0.00	26.83	0.00	11.30
Col4	92	9.24	62.66	0.00	26.83	0.00	11.30
Col4	93	9.24	62.66	0.00	26.83	0.00	11.30
Col4	94	8.12	62.66	0.00	26.83	0.00	11.30
Col4	95	7.74	62.66	0.00	26.83	0.00	11.30
Col4	96	8.12	62.66	0.00	26.83	0.00	11.30
Col4	97	7.74	62.66	0.00	26.83	0.00	11.30
Col4	98	8.12	62.66	0.00	26.83	0.00	11.30
Col4	99	7.74	62.66	0.00	26.83	0.00	11.30
Col5	1	10.04	65.75	0.00	26.83	0.00	14.19
Col5	2	3.92	65.75	0.00	26.83	0.00	14.19
Col5	3	11.57	65.75	0.00	26.83	0.00	14.19
Col5	4	11.57	65.75	0.00	26.83	0.00	14.19
Col5	5	11.57	65.75	0.00	26.83	0.00	14.19
Col5	6	8.51	65.75	0.00	26.83	0.00	14.19
Col5	7	9.66	65.75	0.00	26.83	0.00	14.19
Col5	8	9.66	65.75	0.00	26.83	0.00	14.19
Col5	9	9.66	65.75	0.00	26.83	0.00	14.19
Col5	10	-0.28	88.62	1.51	26.83	-5.90	21.03
Col5	11	-2.04	88.62	1.51	26.83	-5.90	21.03
Col5	12	-0.28	88.62	-1.57	26.83	6.15	18.27
Col5	13	-2.04	88.62	-1.57	26.83	6.15	18.27
Col5	14	-0.50	88.62	-1.57	26.83	6.15	18.27
Col5	15	-0.37	88.62	-1.57	26.83	6.15	18.27
Col5	16	0.82	65.75	-1.57	26.83	6.15	18.27
Col5	17	0.95	65.75	-1.57	26.83	6.15	18.27
Col5	18	7.80	65.75	-1.18	26.83	4.61	18.27
Col5	19	7.89	65.75	-1.18	26.83	4.61	18.27
Col5	20	7.09	65.75	-1.18	26.83	4.61	18.27
Col5	21	5.77	65.75	-1.18	26.83	4.61	18.27
Col5	22	8.95	65.75	-1.18	26.83	4.61	18.27
Col5	23	9.04	65.75	-1.18	26.83	4.61	18.27
Col5	24	8.24	65.75	-1.18	26.83	4.61	18.27
Col5	25	6.91	65.75	-1.18	26.83	4.61	18.27
Col5	26	8.95	65.75	-1.18	26.83	4.61	18.27
Col5	27	9.04	65.75	-1.18	26.83	4.61	18.27
Col5	28	8.24	65.75	-1.18	26.83	4.61	18.27
Col5	29	6.91	65.75	-1.18	26.83	4.61	18.27
Col5	30	8.95	65.75	-1.18	26.83	4.61	18.27
Col5	31	9.04	65.75	-1.18	26.83	4.61	18.27
Col5	32	8.24	65.75	-1.18	26.83	4.61	18.27
Col5	33	6.91	65.75	-1.18	26.83	4.61	18.27
Col5	34	-0.93	88.62	1.51	26.83	-5.90	21.03
Col5	35	-2.69	88.62	1.51	26.83	-5.90	21.03
Col5	36	-0.93	88.62	-1.57	26.83	6.15	18.27
Col5	37	-2.69	88.62	-1.57	26.83	6.15	18.27
Col5	38	-1.15	88.62	-1.57	26.83	6.15	18.27
Col5	39	-1.02	88.62	-1.57	26.83	6.15	18.27

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	40	0.11	65.75	-1.57	26.83	6.15	18.27
Col5	41	0.24	65.75	-1.57	26.83	6.15	18.27
Col5	42	4.21	65.75	0.00	26.83	0.00	14.19
Col5	43	6.52	65.75	0.00	26.83	0.00	14.19
Col5	44	8.71	65.75	0.00	26.83	0.00	14.19
Col5	45	10.46	65.75	0.00	26.83	0.00	14.19
Col5	46	4.12	65.75	0.00	26.83	0.00	14.19
Col5	47	5.87	65.75	0.00	26.83	0.00	14.19
Col5	48	0.78	65.75	0.00	26.83	0.00	14.19
Col5	49	3.09	65.75	0.00	26.83	0.00	14.19
Col5	50	5.71	65.75	0.00	26.83	0.00	14.19
Col5	51	5.26	65.75	0.00	26.83	0.00	14.19
Col5	52	3.67	65.75	-1.18	26.83	4.61	18.27
Col5	53	3.78	65.75	-1.18	26.83	4.61	18.27
Col5	54	4.55	65.75	-1.18	26.83	4.61	18.27
Col5	55	4.65	65.75	-1.18	26.83	4.61	18.27
Col5	56	5.54	65.75	0.00	26.83	0.00	14.19
Col5	57	5.54	65.75	0.00	26.83	0.00	14.19
Col5	58	5.46	65.75	0.00	26.83	0.00	14.19
Col5	59	7.18	65.75	0.00	26.83	0.00	14.19
Col5	60	12.46	65.75	0.00	26.83	0.00	14.19
Col5	61	10.33	65.75	0.00	26.83	0.00	14.19
Col5	62	8.74	65.75	-1.18	26.83	4.61	18.27
Col5	63	8.83	65.75	-1.18	26.83	4.61	18.27
Col5	64	9.62	65.75	-1.18	26.83	4.61	18.27
Col5	65	9.70	65.75	-1.18	26.83	4.61	18.27
Col5	66	10.60	65.75	0.00	26.83	0.00	14.19
Col5	67	10.60	65.75	0.00	26.83	0.00	14.19
Col5	68	10.53	65.75	0.00	26.83	0.00	14.19
Col5	69	12.24	65.75	0.00	26.83	0.00	14.19
Col5	70	-1.15	88.62	0.00	26.83	0.00	14.19
Col5	71	-1.02	88.62	0.00	26.83	0.00	14.19
Col5	72	0.11	65.75	0.00	26.83	0.00	14.19
Col5	73	0.24	65.75	0.00	26.83	0.00	14.19
Col5	74	-0.93	88.62	0.00	26.83	0.00	14.19
Col5	75	-2.69	88.62	0.00	26.83	0.00	14.19
Col5	76	6.92	65.75	0.00	26.83	0.00	14.19
Col5	77	7.02	65.75	0.00	26.83	0.00	14.19
Col5	78	7.80	65.75	0.00	26.83	0.00	14.19
Col5	79	7.89	65.75	0.00	26.83	0.00	14.19
Col5	80	7.09	65.75	0.00	26.83	0.00	14.19
Col5	81	5.77	65.75	0.00	26.83	0.00	14.19
Col5	82	8.07	65.75	0.00	26.83	0.00	14.19
Col5	83	8.07	65.75	0.00	26.83	0.00	14.19
Col5	84	8.07	65.75	0.00	26.83	0.00	14.19
Col5	85	8.17	65.75	0.00	26.83	0.00	14.19
Col5	86	8.17	65.75	0.00	26.83	0.00	14.19
Col5	87	8.17	65.75	0.00	26.83	0.00	14.19
Col5	88	8.95	65.75	0.00	26.83	0.00	14.19
Col5	89	8.95	65.75	0.00	26.83	0.00	14.19
Col5	90	8.95	65.75	0.00	26.83	0.00	14.19
Col5	91	9.04	65.75	0.00	26.83	0.00	14.19
Col5	92	9.04	65.75	0.00	26.83	0.00	14.19
Col5	93	9.04	65.75	0.00	26.83	0.00	14.19

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	94	8.24	65.75	0.00	26.83	0.00	14.19
Col5	95	6.91	65.75	0.00	26.83	0.00	14.19
Col5	96	8.24	65.75	0.00	26.83	0.00	14.19
Col5	97	6.91	65.75	0.00	26.83	0.00	14.19
Col5	98	8.24	65.75	0.00	26.83	0.00	14.19
Col5	99	6.91	65.75	0.00	26.83	0.00	14.19
Col6	1	10.76	66.40	0.00	26.83	0.00	6.10
Col6	2	4.19	66.40	0.00	26.83	0.00	6.10
Col6	3	12.40	66.40	0.00	26.83	0.00	6.10
Col6	4	12.40	66.40	0.00	26.83	0.00	6.10
Col6	5	12.40	66.40	0.00	26.83	0.00	6.10
Col6	6	9.12	66.40	0.00	26.83	0.00	6.10
Col6	7	10.35	66.40	0.00	26.83	0.00	6.10
Col6	8	10.35	66.40	0.00	26.83	0.00	6.10
Col6	9	10.35	66.40	0.00	26.83	0.00	6.10
Col6	10	-0.51	88.62	1.27	26.83	-4.44	20.47
Col6	11	-1.86	88.62	1.27	26.83	-4.44	20.47
Col6	12	-0.51	88.62	-1.32	26.83	4.62	6.93
Col6	13	-1.86	88.62	-1.32	26.83	4.62	6.93
Col6	14	0.33	66.40	-1.32	26.83	4.62	6.93
Col6	15	-2.15	88.62	-1.32	26.83	4.62	6.93
Col6	16	1.56	66.40	-1.32	26.83	4.62	6.93
Col6	17	-0.92	88.62	-1.32	26.83	4.62	6.93
Col6	18	8.88	66.40	-0.99	26.83	3.47	6.93
Col6	19	7.12	66.40	-0.99	26.83	3.47	6.93
Col6	20	7.43	66.40	-0.99	26.83	3.47	6.93
Col6	21	6.42	66.40	-0.99	26.83	3.47	6.93
Col6	22	10.11	66.40	-0.99	26.83	3.47	6.93
Col6	23	8.35	66.40	-0.99	26.83	3.47	6.93
Col6	24	8.66	66.40	-0.99	26.83	3.47	6.93
Col6	25	7.65	66.40	-0.99	26.83	3.47	6.93
Col6	26	10.11	66.40	-0.99	26.83	3.47	6.93
Col6	27	8.35	66.40	-0.99	26.83	3.47	6.93
Col6	28	8.66	66.40	-0.99	26.83	3.47	6.93
Col6	29	7.65	66.40	-0.99	26.83	3.47	6.93
Col6	30	10.11	66.40	-0.99	26.83	3.47	6.93
Col6	31	8.35	66.40	-0.99	26.83	3.47	6.93
Col6	32	8.66	66.40	-0.99	26.83	3.47	6.93
Col6	33	7.65	66.40	-0.99	26.83	3.47	6.93
Col6	34	-1.21	88.62	1.27	26.83	-4.44	20.47
Col6	35	-2.55	88.62	1.27	26.83	-4.44	20.47
Col6	36	-1.21	88.62	-1.32	26.83	4.62	6.93
Col6	37	-2.55	88.62	-1.32	26.83	4.62	6.93
Col6	38	-0.51	88.62	-1.32	26.83	4.62	6.93
Col6	39	-2.84	88.62	-1.32	26.83	4.62	6.93
Col6	40	0.80	66.40	-1.32	26.83	4.62	6.93
Col6	41	-1.61	88.62	-1.32	26.83	4.62	6.93
Col6	42	7.03	66.40	0.00	26.83	0.00	6.10
Col6	43	4.69	66.40	0.00	26.83	0.00	6.10
Col6	44	11.24	66.40	0.00	26.83	0.00	6.10
Col6	45	9.47	66.40	0.00	26.83	0.00	6.10
Col6	46	6.32	66.40	0.00	26.83	0.00	6.10
Col6	47	4.54	66.40	0.00	26.83	0.00	6.10
Col6	48	3.36	66.40	0.00	26.83	0.00	6.10

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col6	49	1.02	66.40	0.00	26.83	0.00	6.10
Col6	50	6.80	66.40	0.00	26.83	0.00	6.10
Col6	51	6.15	66.40	0.00	26.83	0.00	6.10
Col6	52	4.99	66.40	-0.99	26.83	3.47	6.93
Col6	53	3.22	66.40	-0.99	26.83	3.47	6.93
Col6	54	5.91	66.40	-0.99	26.83	3.47	6.93
Col6	55	4.14	66.40	-0.99	26.83	3.47	6.93
Col6	56	6.44	66.40	0.00	26.83	0.00	6.10
Col6	57	6.44	66.40	0.00	26.83	0.00	6.10
Col6	58	8.24	66.40	0.00	26.83	0.00	6.10
Col6	59	6.49	66.40	0.00	26.83	0.00	6.10
Col6	60	12.19	66.40	0.00	26.83	0.00	6.10
Col6	61	10.19	66.40	0.00	26.83	0.00	6.10
Col6	62	9.03	66.40	-0.99	26.83	3.47	6.93
Col6	63	7.27	66.40	-0.99	26.83	3.47	6.93
Col6	64	9.95	66.40	-0.99	26.83	3.47	6.93
Col6	65	8.20	66.40	-0.99	26.83	3.47	6.93
Col6	66	10.48	66.40	0.00	26.83	0.00	6.10
Col6	67	10.48	66.40	0.00	26.83	0.00	6.10
Col6	68	12.28	66.40	0.00	26.83	0.00	6.10
Col6	69	10.54	66.40	0.00	26.83	0.00	6.10
Col6	70	-0.51	88.62	0.00	26.83	0.00	6.10
Col6	71	-2.84	88.62	0.00	26.83	0.00	6.10
Col6	72	0.80	66.40	0.00	26.83	0.00	6.10
Col6	73	-1.61	88.62	0.00	26.83	0.00	6.10
Col6	74	-1.21	88.62	0.00	26.83	0.00	6.10
Col6	75	-2.55	88.62	0.00	26.83	0.00	6.10
Col6	76	7.96	66.40	0.00	26.83	0.00	6.10
Col6	77	6.20	66.40	0.00	26.83	0.00	6.10
Col6	78	8.88	66.40	0.00	26.83	0.00	6.10
Col6	79	7.12	66.40	0.00	26.83	0.00	6.10
Col6	80	7.43	66.40	0.00	26.83	0.00	6.10
Col6	81	6.42	66.40	0.00	26.83	0.00	6.10
Col6	82	9.19	66.40	0.00	26.83	0.00	6.10
Col6	83	9.19	66.40	0.00	26.83	0.00	6.10
Col6	84	9.19	66.40	0.00	26.83	0.00	6.10
Col6	85	7.43	66.40	0.00	26.83	0.00	6.10
Col6	86	7.43	66.40	0.00	26.83	0.00	6.10
Col6	87	7.43	66.40	0.00	26.83	0.00	6.10
Col6	88	10.11	66.40	0.00	26.83	0.00	6.10
Col6	89	10.11	66.40	0.00	26.83	0.00	6.10
Col6	90	10.11	66.40	0.00	26.83	0.00	6.10
Col6	91	8.35	66.40	0.00	26.83	0.00	6.10
Col6	92	8.35	66.40	0.00	26.83	0.00	6.10
Col6	93	8.35	66.40	0.00	26.83	0.00	6.10
Col6	94	8.66	66.40	0.00	26.83	0.00	6.10
Col6	95	7.65	66.40	0.00	26.83	0.00	6.10
Col6	96	8.66	66.40	0.00	26.83	0.00	6.10
Col6	97	7.65	66.40	0.00	26.83	0.00	6.10
Col6	98	8.66	66.40	0.00	26.83	0.00	6.10
Col6	99	7.65	66.40	0.00	26.83	0.00	6.10
Col7	1	3.87	66.40	0.00	26.83	0.00	19.94
Col7	2	1.55	66.40	0.00	26.83	0.00	19.94
Col7	3	4.45	66.40	0.00	26.83	0.00	19.94

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	4	4.45	66.40	0.00	26.83	0.00	19.94
Col7	5	4.45	66.40	0.00	26.83	0.00	19.94
Col7	6	3.29	66.40	0.00	26.83	0.00	19.94
Col7	7	3.73	66.40	0.00	26.83	0.00	19.94
Col7	8	3.73	66.40	0.00	26.83	0.00	19.94
Col7	9	3.73	66.40	0.00	26.83	0.00	19.94
Col7	10	-0.23	88.62	0.90	26.83	-2.80	20.19
Col7	11	-0.80	88.62	0.90	26.83	-2.80	20.19
Col7	12	-0.23	88.62	-0.96	26.83	2.99	20.19
Col7	13	-0.80	88.62	-0.96	26.83	2.99	20.19
Col7	14	-0.26	88.62	-0.96	26.83	2.99	20.19
Col7	15	-0.66	88.62	-0.96	26.83	2.99	20.19
Col7	16	0.35	66.40	-0.96	26.83	2.99	20.19
Col7	17	-0.16	88.62	-0.96	26.83	2.99	20.19
Col7	18	3.00	66.40	-0.72	26.83	2.24	20.19
Col7	19	2.71	66.40	-0.72	26.83	2.24	20.19
Col7	20	2.66	66.40	-0.72	26.83	2.24	20.19
Col7	21	2.23	66.40	-0.72	26.83	2.24	20.19
Col7	22	3.44	66.40	-0.72	26.83	2.24	20.19
Col7	23	3.15	66.40	-0.72	26.83	2.24	20.19
Col7	24	3.09	66.40	-0.72	26.83	2.24	20.19
Col7	25	2.67	66.40	-0.72	26.83	2.24	20.19
Col7	26	3.44	66.40	-0.72	26.83	2.24	20.19
Col7	27	3.15	66.40	-0.72	26.83	2.24	20.19
Col7	28	3.09	66.40	-0.72	26.83	2.24	20.19
Col7	29	2.67	66.40	-0.72	26.83	2.24	20.19
Col7	30	3.44	66.40	-0.72	26.83	2.24	20.19
Col7	31	3.15	66.40	-0.72	26.83	2.24	20.19
Col7	32	3.09	66.40	-0.72	26.83	2.24	20.19
Col7	33	2.67	66.40	-0.72	26.83	2.24	20.19
Col7	34	-0.48	88.62	0.90	26.83	-2.80	20.19
Col7	35	-1.05	88.62	0.90	26.83	-2.80	20.19
Col7	36	-0.48	88.62	-0.96	26.83	2.99	20.19
Col7	37	-1.05	88.62	-0.96	26.83	2.99	20.19
Col7	38	-0.51	88.62	-0.96	26.83	2.99	20.19
Col7	39	-0.90	88.62	-0.96	26.83	2.99	20.19
Col7	40	0.06	66.40	-0.96	26.83	2.99	20.19
Col7	41	-0.40	88.62	-0.96	26.83	2.99	20.19
Col7	42	1.68	66.40	0.00	26.83	0.00	19.94
Col7	43	1.74	66.40	0.00	26.83	0.00	19.94
Col7	44	3.38	66.40	0.00	26.83	0.00	19.94
Col7	45	3.43	66.40	0.00	26.83	0.00	19.94
Col7	46	1.64	66.40	0.00	26.83	0.00	19.94
Col7	47	1.69	66.40	0.00	26.83	0.00	19.94
Col7	48	0.34	66.40	0.00	26.83	0.00	19.94
Col7	49	0.40	66.40	0.00	26.83	0.00	19.94
Col7	50	2.40	66.40	0.00	26.83	0.00	19.94
Col7	51	2.19	66.40	0.00	26.83	0.00	19.94
Col7	52	1.53	66.40	-0.72	26.83	2.24	20.19
Col7	53	1.23	66.40	-0.72	26.83	2.24	20.19
Col7	54	1.90	66.40	-0.72	26.83	2.24	20.19
Col7	55	1.61	66.40	-0.72	26.83	2.24	20.19
Col7	56	2.29	66.40	0.00	26.83	0.00	19.94
Col7	57	2.29	66.40	0.00	26.83	0.00	19.94

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	58	2.27	66.40	0.00	26.83	0.00	19.94
Col7	59	2.32	66.40	0.00	26.83	0.00	19.94
Col7	60	4.49	66.40	0.00	26.83	0.00	19.94
Col7	61	3.76	66.40	0.00	26.83	0.00	19.94
Col7	62	3.10	66.40	-0.72	26.83	2.24	20.19
Col7	63	2.80	66.40	-0.72	26.83	2.24	20.19
Col7	64	3.47	66.40	-0.72	26.83	2.24	20.19
Col7	65	3.18	66.40	-0.72	26.83	2.24	20.19
Col7	66	3.86	66.40	0.00	26.83	0.00	19.94
Col7	67	3.86	66.40	0.00	26.83	0.00	19.94
Col7	68	3.84	66.40	0.00	26.83	0.00	19.94
Col7	69	3.89	66.40	0.00	26.83	0.00	19.94
Col7	70	-0.51	88.62	0.00	26.83	0.00	19.94
Col7	71	-0.90	88.62	0.00	26.83	0.00	19.94
Col7	72	0.06	66.40	0.00	26.83	0.00	19.94
Col7	73	-0.40	88.62	0.00	26.83	0.00	19.94
Col7	74	-0.48	88.62	0.00	26.83	0.00	19.94
Col7	75	-1.05	88.62	0.00	26.83	0.00	19.94
Col7	76	2.63	66.40	0.00	26.83	0.00	19.94
Col7	77	2.34	66.40	0.00	26.83	0.00	19.94
Col7	78	3.00	66.40	0.00	26.83	0.00	19.94
Col7	79	2.71	66.40	0.00	26.83	0.00	19.94
Col7	80	2.66	66.40	0.00	26.83	0.00	19.94
Col7	81	2.23	66.40	0.00	26.83	0.00	19.94
Col7	82	3.07	66.40	0.00	26.83	0.00	19.94
Col7	83	3.07	66.40	0.00	26.83	0.00	19.94
Col7	84	3.07	66.40	0.00	26.83	0.00	19.94
Col7	85	2.77	66.40	0.00	26.83	0.00	19.94
Col7	86	2.77	66.40	0.00	26.83	0.00	19.94
Col7	87	2.77	66.40	0.00	26.83	0.00	19.94
Col7	88	3.44	66.40	0.00	26.83	0.00	19.94
Col7	89	3.44	66.40	0.00	26.83	0.00	19.94
Col7	90	3.44	66.40	0.00	26.83	0.00	19.94
Col7	91	3.15	66.40	0.00	26.83	0.00	19.94
Col7	92	3.15	66.40	0.00	26.83	0.00	19.94
Col7	93	3.15	66.40	0.00	26.83	0.00	19.94
Col7	94	3.09	66.40	0.00	26.83	0.00	19.94
Col7	95	2.67	66.40	0.00	26.83	0.00	19.94
Col7	96	3.09	66.40	0.00	26.83	0.00	19.94
Col7	97	2.67	66.40	0.00	26.83	0.00	19.94
Col7	98	3.09	66.40	0.00	26.83	0.00	19.94
Col7	99	2.67	66.40	0.00	26.83	0.00	19.94
Raf1	1	0.49	73.23	-5.47	37.51	18.32	30.41
Raf1	2	0.19	73.23	-2.09	37.51	6.98	30.41
Raf1	3	0.57	73.23	-6.32	37.51	21.16	30.41
Raf1	4	0.57	73.23	-6.32	37.51	21.16	30.41
Raf1	5	0.57	73.23	-6.32	37.51	21.16	30.41
Raf1	6	0.42	73.23	-4.63	37.51	15.49	30.41
Raf1	7	0.47	73.23	-5.26	37.51	17.62	30.41
Raf1	8	0.47	73.23	-5.26	37.51	17.62	30.41
Raf1	9	0.47	73.23	-5.26	37.51	17.62	30.41
Raf1	10	-0.96	105.99	1.07	37.51	-3.54	30.41
Raf1	11	-0.97	105.99	-0.26	37.51	-0.96	30.41

		Customer	Elbert Rentals		**Job No**	22-8706	
		Project	Building Expansion		**Date**	5/3/2022	
		Location	Newberg, OR 97132		**Designed By**	AC	
		Size	117 x 90 x 14.8 x 14.1		**Checked By**		

Raf1	12	-0.96	105.99	1.07	37.51	-3.54	30.41
Raf1	13	-0.97	105.99	-0.26	37.51	-0.96	30.41
Raf1	14	0.62	74.61	1.09	37.51	-3.91	30.41
Raf1	15	-1.33	105.99	0.25	37.51	-0.85	30.41
Raf1	16	1.36	74.61	-0.48	37.51	-1.76	30.41
Raf1	17	0.48	73.23	-0.38	37.51	1.31	30.41
Raf1	18	1.22	74.61	-3.62	37.51	11.92	30.41
Raf1	19	0.71	73.23	-4.24	37.51	14.22	30.41
Raf1	20	-1.05	105.99	-3.16	37.51	10.58	30.41
Raf1	21	-1.02	105.99	-3.76	37.51	12.52	30.41
Raf1	22	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	23	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	24	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	25	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf1	26	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	27	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	28	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	29	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf1	30	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	31	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	32	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	33	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf1	34	-0.97	105.99	1.43	37.51	-4.74	30.41
Raf1	35	-0.99	105.99	0.62	37.51	-2.16	30.41
Raf1	36	-0.97	105.99	1.43	37.51	-4.74	30.41
Raf1	37	-0.99	105.99	0.62	37.51	-2.16	30.41
Raf1	38	0.60	74.61	1.45	37.51	-5.11	30.41
Raf1	39	-1.30	105.99	0.61	37.51	-2.05	30.41
Raf1	40	1.34	74.61	-0.81	37.51	-2.96	30.41
Raf1	41	0.44	73.23	0.03	37.51	0.11	30.41
Raf1	42	1.13	73.23	-2.34	37.51	7.81	30.41
Raf1	43	2.69	73.23	-2.25	37.51	7.55	30.41
Raf1	44	1.07	73.23	-4.81	37.51	16.07	30.41
Raf1	45	2.31	73.23	-4.74	37.51	15.88	30.41
Raf1	46	0.89	73.23	-2.27	37.51	7.57	30.41
Raf1	47	2.08	73.23	-2.20	37.51	7.38	30.41
Raf1	48	1.01	73.23	-0.49	37.51	1.63	30.41
Raf1	49	2.52	73.23	-0.40	37.51	1.37	30.41
Raf1	50	0.47	73.23	-6.27	37.51	20.22	30.41
Raf1	51	0.40	73.23	-5.22	37.51	16.91	30.41
Raf1	52	0.71	74.61	-3.73	37.51	11.72	30.41
Raf1	53	-1.38	105.99	-4.36	37.51	14.02	30.41
Raf1	54	1.26	74.61	-4.21	37.51	13.34	30.41
Raf1	55	0.84	73.23	-4.84	37.51	15.64	30.41
Raf1	56	0.41	73.23	-5.37	37.51	17.40	30.41
Raf1	57	0.41	73.23	-5.37	37.51	17.40	30.41
Raf1	58	1.09	73.23	-5.40	37.51	17.49	30.41
Raf1	59	2.40	73.23	-5.34	37.51	17.30	30.41
Raf1	60	0.27	73.23	-3.38	37.51	11.60	30.41
Raf1	61	0.24	73.23	-3.05	37.51	10.45	30.41
Raf1	62	0.59	74.61	-1.57	37.51	5.26	30.41
Raf1	63	-1.20	105.99	-2.19	37.51	7.56	30.41
Raf1	64	1.14	74.61	-2.05	37.51	6.88	30.41
Raf1	65	0.52	73.23	-2.67	37.51	9.18	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf1	66	0.25	73.23	-3.20	37.51	10.94	30.41
Raf1	67	0.25	73.23	-3.20	37.51	10.94	30.41
Raf1	68	0.95	73.23	-3.23	37.51	11.03	30.41
Raf1	69	2.07	73.23	-3.17	37.51	10.84	30.41
Raf1	70	0.60	74.61	1.45	37.51	-5.11	30.41
Raf1	71	-1.30	105.99	0.61	37.51	-2.05	30.41
Raf1	72	1.34	74.61	-0.81	37.51	-2.96	30.41
Raf1	73	0.44	73.23	0.03	37.51	0.11	30.41
Raf1	74	-0.97	105.99	1.43	37.51	-4.74	30.41
Raf1	75	-0.99	105.99	0.62	37.51	-2.16	30.41
Raf1	76	0.67	74.61	-3.14	37.51	10.30	30.41
Raf1	77	-1.33	105.99	-3.76	37.51	12.60	30.41
Raf1	78	1.22	74.61	-3.62	37.51	11.92	30.41
Raf1	79	0.71	73.23	-4.24	37.51	14.22	30.41
Raf1	80	-1.05	105.99	-3.16	37.51	10.58	30.41
Raf1	81	-1.02	105.99	-3.76	37.51	12.52	30.41
Raf1	82	0.70	74.61	-3.77	37.51	12.43	30.41
Raf1	83	0.70	74.61	-3.77	37.51	12.43	30.41
Raf1	84	0.70	74.61	-3.77	37.51	12.43	30.41
Raf1	85	-1.38	105.99	-4.40	37.51	14.73	30.41
Raf1	86	-1.38	105.99	-4.40	37.51	14.73	30.41
Raf1	87	-1.38	105.99	-4.40	37.51	14.73	30.41
Raf1	88	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	89	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	90	1.26	74.61	-4.25	37.51	14.05	30.41
Raf1	91	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	92	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	93	0.77	73.23	-4.88	37.51	16.35	30.41
Raf1	94	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	95	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf1	96	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	97	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf1	98	-1.10	105.99	-3.79	37.51	12.71	30.41
Raf1	99	-1.07	105.99	-4.40	37.51	14.65	30.41
Raf2	1	0.48	73.23	4.97	37.51	16.29	30.41
Raf2	2	0.18	73.23	1.89	37.51	6.21	30.41
Raf2	3	0.56	73.23	5.74	37.51	18.81	30.41
Raf2	4	0.56	73.23	5.74	37.51	18.81	30.41
Raf2	5	0.56	73.23	5.74	37.51	18.81	30.41
Raf2	6	0.41	73.23	4.20	37.51	13.77	30.41
Raf2	7	0.46	73.23	4.78	37.51	15.66	30.41
Raf2	8	0.46	73.23	4.78	37.51	15.66	30.41
Raf2	9	0.46	73.23	4.78	37.51	15.66	30.41
Raf2	10	-1.34	105.99	-1.00	37.51	-3.31	30.41
Raf2	11	-1.42	105.99	0.25	37.51	-1.29	30.41
Raf2	12	-1.34	105.99	-1.00	37.51	-3.31	30.41
Raf2	13	-1.42	105.99	0.25	37.51	-1.29	30.41
Raf2	14	-0.90	105.99	-0.97	37.51	-2.82	30.41
Raf2	15	-0.69	105.99	-0.23	37.51	-0.76	30.41
Raf2	16	1.15	73.23	-0.43	37.51	-1.27	30.41
Raf2	17	0.47	73.23	-0.34	37.51	1.04	30.41
Raf2	18	1.14	73.23	3.80	37.51	11.77	30.41
Raf2	19	0.68	73.23	3.83	37.51	12.55	30.41
Raf2	20	-1.15	105.99	2.84	37.51	9.28	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	21	-1.21	105.99	3.49	37.51	11.50	30.41
Raf2	22	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	23	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	24	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	25	-1.24	105.99	4.07	37.51	13.39	30.41
Raf2	26	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	27	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	28	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	29	-1.24	105.99	4.07	37.51	13.39	30.41
Raf2	30	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	31	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	32	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	33	-1.24	105.99	4.07	37.51	13.39	30.41
Raf2	34	-1.33	105.99	-1.33	37.51	-4.38	30.41
Raf2	35	-1.41	105.99	-0.54	37.51	-1.55	30.41
Raf2	36	-1.33	105.99	-1.33	37.51	-4.38	30.41
Raf2	37	-1.41	105.99	-0.54	37.51	-1.55	30.41
Raf2	38	-0.89	105.99	-1.27	37.51	-3.68	30.41
Raf2	39	-0.68	105.99	-0.56	37.51	-1.83	30.41
Raf2	40	1.13	73.23	-0.73	37.51	-2.13	30.41
Raf2	41	0.44	73.23	-0.04	37.51	0.31	29.31
Raf2	42	1.74	73.23	2.15	37.51	7.06	30.41
Raf2	43	2.61	73.23	2.02	37.51	6.60	30.41
Raf2	44	1.09	73.23	4.38	37.51	14.38	30.41
Raf2	45	2.23	73.23	4.29	37.51	14.03	30.41
Raf2	46	1.28	73.23	2.08	37.51	6.82	30.41
Raf2	47	2.02	73.23	1.98	37.51	6.47	30.41
Raf2	48	1.88	73.23	0.47	37.51	1.57	30.41
Raf2	49	2.46	73.23	-0.35	37.51	1.11	30.41
Raf2	50	0.79	73.23	7.25	37.51	22.47	30.41
Raf2	51	0.64	73.23	5.91	37.51	18.40	30.41
Raf2	52	-0.80	105.99	5.09	37.51	15.05	30.41
Raf2	53	-0.64	105.99	5.13	37.51	15.83	30.41
Raf2	54	1.17	73.23	5.50	37.51	16.40	30.41
Raf2	55	0.88	73.23	5.54	37.51	17.18	30.41
Raf2	56	0.65	73.23	6.04	37.51	18.84	30.41
Raf2	57	0.65	73.23	6.04	37.51	18.84	30.41
Raf2	58	1.09	73.23	6.09	37.51	19.01	30.41
Raf2	59	2.31	73.23	6.00	37.51	18.67	30.41
Raf2	60	0.24	73.23	-2.91	37.51	8.59	30.41
Raf2	61	0.22	73.23	-2.65	37.51	7.99	30.41
Raf2	62	-0.84	105.99	1.69	37.51	4.64	30.41
Raf2	63	-0.68	105.99	1.88	37.51	5.43	30.41
Raf2	64	1.03	73.23	2.11	37.51	5.99	30.41
Raf2	65	0.49	73.23	-2.30	37.51	6.77	30.41
Raf2	66	0.23	73.23	-2.78	37.51	8.43	30.41
Raf2	67	0.23	73.23	-2.78	37.51	8.43	30.41
Raf2	68	1.19	73.23	-2.82	37.51	8.60	30.41
Raf2	69	2.01	73.23	-2.75	37.51	8.26	30.41
Raf2	70	-0.89	105.99	-1.27	37.51	-3.68	30.41
Raf2	71	-0.68	105.99	-0.56	37.51	-1.83	30.41
Raf2	72	1.13	73.23	-0.73	37.51	-2.13	30.41
Raf2	73	0.44	73.23	-0.04	37.51	0.31	29.31
Raf2	74	-1.33	105.99	-1.33	37.51	-4.38	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	75	-1.41	105.99	-0.54	37.51	-1.55	30.41
Raf2	76	-0.82	105.99	3.38	37.51	10.41	30.41
Raf2	77	-0.66	105.99	3.42	37.51	11.20	30.41
Raf2	78	1.14	73.23	3.80	37.51	11.77	30.41
Raf2	79	0.68	73.23	3.83	37.51	12.55	30.41
Raf2	80	-1.15	105.99	2.84	37.51	9.28	30.41
Raf2	81	-1.21	105.99	3.49	37.51	11.50	30.41
Raf2	82	-0.85	105.99	3.96	37.51	12.30	30.41
Raf2	83	-0.85	105.99	3.96	37.51	12.30	30.41
Raf2	84	-0.85	105.99	3.96	37.51	12.30	30.41
Raf2	85	-0.69	105.99	3.99	37.51	13.09	30.41
Raf2	86	-0.69	105.99	3.99	37.51	13.09	30.41
Raf2	87	-0.69	105.99	3.99	37.51	13.09	30.41
Raf2	88	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	89	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	90	1.18	73.23	4.37	37.51	13.66	30.41
Raf2	91	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	92	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	93	0.73	73.23	4.41	37.51	14.44	30.41
Raf2	94	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	95	-1.24	105.99	4.07	37.51	13.39	30.41
Raf2	96	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	97	-1.24	105.99	4.07	37.51	13.39	30.41
Raf2	98	-1.18	105.99	3.42	37.51	11.17	30.41
Raf2	99	-1.24	105.99	4.07	37.51	13.39	30.41
Raf3	1	0.50	73.23	-5.08	37.51	17.02	30.41
Raf3	2	0.19	73.23	-1.94	37.51	6.49	30.41
Raf3	3	0.58	73.23	-5.87	37.51	19.65	30.41
Raf3	4	0.58	73.23	-5.87	37.51	19.65	30.41
Raf3	5	0.58	73.23	-5.87	37.51	19.65	30.41
Raf3	6	0.42	73.23	-4.30	37.51	14.39	30.41
Raf3	7	0.48	73.23	-4.88	37.51	16.36	30.41
Raf3	8	0.48	73.23	-4.88	37.51	16.36	30.41
Raf3	9	0.48	73.23	-4.88	37.51	16.36	30.41
Raf3	10	-1.43	105.99	0.47	37.51	-1.58	30.41
Raf3	11	-1.45	105.99	0.95	37.51	-2.47	30.41
Raf3	12	-1.43	105.99	0.47	37.51	-1.58	30.41
Raf3	13	-1.45	105.99	0.95	37.51	-2.47	30.41
Raf3	14	-0.91	105.99	0.24	37.51	0.59	28.51
Raf3	15	-0.71	105.99	0.28	37.51	-1.50	30.41
Raf3	16	0.15	73.23	-0.42	37.51	1.49	30.41
Raf3	17	0.41	73.23	0.41	37.51	1.39	30.41
Raf3	18	0.43	73.23	-3.99	37.51	13.41	30.41
Raf3	19	0.63	73.23	3.95	37.51	13.34	30.41
Raf3	20	-1.26	105.99	3.43	37.51	11.11	30.41
Raf3	21	-1.24	105.99	-3.40	37.51	10.84	30.41
Raf3	22	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	23	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	24	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	25	-1.29	105.99	-3.99	37.51	12.82	30.41
Raf3	26	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	27	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	28	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	29	-1.29	105.99	-3.99	37.51	12.82	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf3	30	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	31	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	32	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	33	-1.29	105.99	-3.99	37.51	12.82	30.41
Raf3	34	-1.45	105.99	0.80	37.51	-2.70	30.41
Raf3	35	-1.47	105.99	1.24	37.51	-3.20	30.41
Raf3	36	-1.45	105.99	0.80	37.51	-2.70	30.41
Raf3	37	-1.47	105.99	1.24	37.51	-3.20	30.41
Raf3	38	-0.93	105.99	-0.53	37.51	-1.42	30.41
Raf3	39	-0.73	105.99	0.57	37.51	-2.23	30.41
Raf3	40	0.12	73.23	-0.09	37.51	0.37	30.41
Raf3	41	0.39	73.23	0.08	37.51	-0.88	30.36
Raf3	42	0.61	73.23	-2.24	37.51	7.26	30.41
Raf3	43	0.79	73.23	2.14	37.51	7.02	30.41
Raf3	44	0.71	73.23	-4.51	37.51	14.93	30.41
Raf3	45	0.80	73.23	4.41	37.51	14.75	30.41
Raf3	46	0.50	73.23	-2.15	37.51	7.03	30.41
Raf3	47	0.63	73.23	2.07	37.51	6.85	30.41
Raf3	48	0.46	73.23	-0.52	37.51	1.52	30.41
Raf3	49	0.67	73.23	0.44	37.51	1.28	30.41
Raf3	50	0.66	73.23	-5.55	37.51	16.79	30.41
Raf3	51	0.55	73.23	-4.64	37.51	14.22	30.41
Raf3	52	-0.72	105.99	-3.99	37.51	11.90	30.41
Raf3	53	-0.56	105.99	-3.93	37.51	11.84	30.41
Raf3	54	0.55	73.23	-4.34	37.51	13.24	30.41
Raf3	55	0.74	73.23	-4.27	37.51	13.17	30.41
Raf3	56	0.56	73.23	-4.78	37.51	14.67	30.41
Raf3	57	0.56	73.23	-4.78	37.51	14.67	30.41
Raf3	58	0.66	73.23	-4.86	37.51	14.76	30.41
Raf3	59	0.95	73.23	-4.71	37.51	14.58	30.41
Raf3	60	0.46	73.23	6.70	37.51	18.17	30.41
Raf3	61	0.39	73.23	5.50	37.51	15.25	30.41
Raf3	62	-1.09	105.99	4.73	37.51	12.94	30.41
Raf3	63	-0.93	105.99	4.76	37.51	12.88	30.41
Raf3	64	0.44	73.23	5.16	37.51	14.28	30.41
Raf3	65	0.64	73.23	5.19	37.51	14.21	30.41
Raf3	66	0.40	73.23	5.64	37.51	15.71	30.41
Raf3	67	0.40	73.23	5.64	37.51	15.71	30.41
Raf3	68	0.72	73.23	5.62	37.51	15.80	30.41
Raf3	69	0.69	73.23	5.66	37.51	15.62	30.41
Raf3	70	-0.93	105.99	-0.53	37.51	-1.42	30.41
Raf3	71	-0.73	105.99	0.57	37.51	-2.23	30.41
Raf3	72	0.12	73.23	-0.09	37.51	0.37	30.41
Raf3	73	0.39	73.23	0.08	37.51	-0.88	30.36
Raf3	74	-1.45	105.99	0.80	37.51	-2.70	30.41
Raf3	75	-1.47	105.99	1.24	37.51	-3.20	30.41
Raf3	76	-0.91	105.99	-3.64	37.51	12.07	30.41
Raf3	77	-0.75	105.99	-3.58	37.51	12.01	30.41
Raf3	78	0.43	73.23	-3.99	37.51	13.41	30.41
Raf3	79	0.63	73.23	3.95	37.51	13.34	30.41
Raf3	80	-1.26	105.99	3.43	37.51	11.11	30.41
Raf3	81	-1.24	105.99	-3.40	37.51	10.84	30.41
Raf3	82	-0.95	105.99	-4.23	37.51	14.05	30.41
Raf3	83	-0.95	105.99	-4.23	37.51	14.05	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf3	84	-0.95	105.99	-4.23	37.51	14.05	30.41
Raf3	85	-0.79	105.99	-4.17	37.51	13.99	30.41
Raf3	86	-0.79	105.99	-4.17	37.51	13.99	30.41
Raf3	87	-0.79	105.99	-4.17	37.51	13.99	30.41
Raf3	88	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	89	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	90	0.48	73.23	-4.58	37.51	15.39	30.41
Raf3	91	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	92	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	93	0.68	73.23	4.53	37.51	15.32	30.41
Raf3	94	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	95	-1.29	105.99	-3.99	37.51	12.82	30.41
Raf3	96	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	97	-1.29	105.99	-3.99	37.51	12.82	30.41
Raf3	98	-1.30	105.99	4.01	37.51	13.09	30.41
Raf3	99	-1.29	105.99	-3.99	37.51	12.82	30.41
Raf4	1	0.50	73.23	5.48	37.51	18.34	30.41
Raf4	2	0.19	73.23	2.09	37.51	6.99	30.41
Raf4	3	0.58	73.23	6.32	37.51	21.18	30.41
Raf4	4	0.58	73.23	6.32	37.51	21.18	30.41
Raf4	5	0.58	73.23	6.32	37.51	21.18	30.41
Raf4	6	0.42	73.23	4.63	37.51	15.50	30.41
Raf4	7	0.48	73.23	5.26	37.51	17.63	30.41
Raf4	8	0.48	73.23	5.26	37.51	17.63	30.41
Raf4	9	0.48	73.23	5.26	37.51	17.63	30.41
Raf4	10	-1.21	105.99	-0.26	37.51	-0.91	30.41
Raf4	11	-1.18	105.99	-1.06	37.51	-3.54	30.41
Raf4	12	-1.21	105.99	-0.26	37.51	-0.91	30.41
Raf4	13	-1.18	105.99	-1.06	37.51	-3.54	30.41
Raf4	14	-1.18	105.99	0.26	37.51	-0.89	30.41
Raf4	15	0.65	74.96	-1.08	37.51	-3.83	30.41
Raf4	16	-0.47	105.99	0.38	37.51	1.30	30.41
Raf4	17	1.42	74.96	0.47	37.51	-1.71	30.41
Raf4	18	0.54	73.23	4.24	37.51	14.23	30.41
Raf4	19	1.27	74.96	-3.80	37.51	11.96	30.41
Raf4	20	-1.10	105.99	3.76	37.51	12.57	30.41
Raf4	21	-1.03	105.99	3.16	37.51	10.64	30.41
Raf4	22	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	23	1.31	74.96	-4.37	37.51	14.09	30.41
Raf4	24	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	25	-1.09	105.99	3.79	37.51	12.76	30.41
Raf4	26	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	27	1.31	74.96	-4.37	37.51	14.09	30.41
Raf4	28	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	29	-1.09	105.99	3.79	37.51	12.76	30.41
Raf4	30	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	31	1.31	74.96	-4.37	37.51	14.09	30.41
Raf4	32	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	33	-1.09	105.99	3.79	37.51	12.76	30.41
Raf4	34	-1.24	105.99	-0.62	37.51	-2.11	30.41
Raf4	35	-1.21	105.99	-1.42	37.51	-4.69	30.41
Raf4	36	-1.24	105.99	-0.62	37.51	-2.11	30.41
Raf4	37	-1.21	105.99	-1.42	37.51	-4.69	30.41
Raf4	38	-1.15	105.99	-0.61	37.51	-2.02	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf4	39	0.63	74.96	-1.44	37.51	-5.04	30.41
Raf4	40	-0.44	105.99	-0.03	37.51	0.10	30.41
Raf4	41	1.40	74.96	-0.81	37.51	-2.91	30.41
Raf4	42	1.69	73.23	2.25	37.51	7.55	30.41
Raf4	43	1.74	73.23	2.34	37.51	7.82	30.41
Raf4	44	1.56	73.23	4.74	37.51	15.89	30.41
Raf4	45	1.09	73.23	4.81	37.51	16.09	30.41
Raf4	46	1.32	73.23	2.20	37.51	7.38	30.41
Raf4	47	1.28	73.23	2.27	37.51	7.58	30.41
Raf4	48	1.52	73.23	0.40	37.51	1.36	30.41
Raf4	49	1.88	73.23	0.49	37.51	1.64	30.41
Raf4	50	0.47	73.23	3.38	37.51	11.69	30.41
Raf4	51	0.40	73.23	3.06	37.51	10.52	30.41
Raf4	52	-1.09	105.99	2.20	37.51	7.65	30.41
Raf4	53	0.61	74.96	-1.61	37.51	5.39	30.41
Raf4	54	0.52	73.23	2.67	37.51	9.24	30.41
Raf4	55	1.19	74.96	-2.06	37.51	6.98	30.41
Raf4	56	0.41	73.23	3.20	37.51	11.01	30.41
Raf4	57	0.41	73.23	3.20	37.51	11.01	30.41
Raf4	58	1.51	73.23	3.17	37.51	10.91	30.41
Raf4	59	1.19	73.23	3.24	37.51	11.11	30.41
Raf4	60	0.51	73.23	-6.45	37.51	21.35	30.41
Raf4	61	0.43	73.23	-5.31	37.51	17.56	30.41
Raf4	62	-1.27	105.99	-4.51	37.51	14.90	30.41
Raf4	63	0.74	74.96	-4.47	37.51	14.21	30.41
Raf4	64	-0.74	105.99	-4.95	37.51	16.36	30.41
Raf4	65	1.31	74.96	-4.92	37.51	15.67	30.41
Raf4	66	0.45	73.23	-5.44	37.51	17.99	30.41
Raf4	67	0.45	73.23	-5.44	37.51	17.99	30.41
Raf4	68	1.50	73.23	-5.40	37.51	17.84	30.41
Raf4	69	1.10	73.23	-5.49	37.51	18.15	30.41
Raf4	70	-1.15	105.99	-0.61	37.51	-2.02	30.41
Raf4	71	0.63	74.96	-1.44	37.51	-5.04	30.41
Raf4	72	-0.44	105.99	-0.03	37.51	0.10	30.41
Raf4	73	1.40	74.96	-0.81	37.51	-2.91	30.41
Raf4	74	-1.24	105.99	-0.62	37.51	-2.11	30.41
Raf4	75	-1.21	105.99	-1.42	37.51	-4.69	30.41
Raf4	76	-1.22	105.99	3.77	37.51	12.64	30.41
Raf4	77	0.70	74.96	-3.35	37.51	10.37	30.41
Raf4	78	0.54	73.23	4.24	37.51	14.23	30.41
Raf4	79	1.27	74.96	-3.80	37.51	11.96	30.41
Raf4	80	-1.10	105.99	3.76	37.51	12.57	30.41
Raf4	81	-1.03	105.99	3.16	37.51	10.64	30.41
Raf4	82	-1.27	105.99	4.40	37.51	14.76	30.41
Raf4	83	-1.27	105.99	4.40	37.51	14.76	30.41
Raf4	84	-1.27	105.99	4.40	37.51	14.76	30.41
Raf4	85	0.73	74.96	-3.93	37.51	12.50	30.41
Raf4	86	0.73	74.96	-3.93	37.51	12.50	30.41
Raf4	87	0.73	74.96	-3.93	37.51	12.50	30.41
Raf4	88	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	89	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	90	0.60	73.23	4.88	37.51	16.36	30.41
Raf4	91	1.31	74.96	-4.37	37.51	14.09	30.41
Raf4	92	1.31	74.96	-4.37	37.51	14.09	30.41

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf4	93	1.31	74.96	-4.37	37.51	14.09	30.41
Raf4	94	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	95	-1.09	105.99	3.79	37.51	12.76	30.41
Raf4	96	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	97	-1.09	105.99	3.79	37.51	12.76	30.41
Raf4	98	-1.15	105.99	4.40	37.51	14.70	30.41
Raf4	99	-1.09	105.99	3.79	37.51	12.76	30.41

STRENGTH RATIO:

Id	Load Id	Axial	Shear	Moment	Axial+ Moment	Shear+ Moment	Max UC
Col1	1	0.06	0.00	0.00	0.06		0.06
Col1	2	0.02	0.00	0.00	0.02		0.02
Col1	3	0.07	0.00	0.00	0.07		0.07
Col1	4	0.07	0.00	0.00	0.07		0.07
Col1	5	0.07	0.00	0.00	0.07		0.07
Col1	6	0.05	0.00	0.00	0.05		0.05
Col1	7	0.06	0.00	0.00	0.06		0.06
Col1	8	0.06	0.00	0.00	0.06		0.06
Col1	9	0.06	0.00	0.00	0.06		0.06
Col1	10	0.01	0.04	0.15	0.15		0.15
Col1	11	0.00	0.04	0.15	0.15		0.15
Col1	12	0.01	0.04	0.16	0.16		0.16
Col1	13	0.00	0.04	0.16	0.16		0.16
Col1	14	0.01	0.04	0.16	0.16		0.16
Col1	15	0.00	0.04	0.16	0.16		0.16
Col1	16	0.00	0.04	0.16	0.16		0.16
Col1	17	0.01	0.04	0.16	0.17		0.17
Col1	18	0.04	0.03	0.12	0.14		0.14
Col1	19	0.05	0.03	0.12	0.15		0.15
Col1	20	0.03	0.03	0.12	0.14		0.14
Col1	21	0.04	0.03	0.12	0.14		0.14
Col1	22	0.05	0.03	0.12	0.15		0.15
Col1	23	0.05	0.03	0.12	0.15		0.15
Col1	24	0.04	0.03	0.12	0.14		0.14
Col1	25	0.05	0.03	0.12	0.15		0.15
Col1	26	0.05	0.03	0.12	0.15		0.15
Col1	27	0.05	0.03	0.12	0.15		0.15
Col1	28	0.04	0.03	0.12	0.14		0.14
Col1	29	0.05	0.03	0.12	0.15		0.15
Col1	30	0.05	0.03	0.12	0.15		0.15
Col1	31	0.05	0.03	0.12	0.15		0.15
Col1	32	0.04	0.03	0.12	0.14		0.14
Col1	33	0.05	0.03	0.12	0.15		0.15
Col1	34	0.01	0.04	0.15	0.15		0.15
Col1	35	0.01	0.04	0.15	0.15		0.15
Col1	36	0.01	0.04	0.16	0.16		0.16
Col1	37	0.01	0.04	0.16	0.16		0.16
Col1	38	0.01	0.04	0.16	0.16		0.16
Col1	39	0.01	0.04	0.16	0.16		0.16
Col1	40	0.00	0.04	0.16	0.16		0.16
Col1	41	0.00	0.04	0.16	0.16		0.16

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	42	0.03	0.00	0.00	0.03	0.03
Col1	43	0.03	0.00	0.00	0.03	0.03
Col1	44	0.05	0.00	0.00	0.05	0.05
Col1	45	0.05	0.00	0.00	0.05	0.05
Col1	46	0.03	0.00	0.00	0.03	0.03
Col1	47	0.02	0.00	0.00	0.02	0.02
Col1	48	0.01	0.00	0.00	0.01	0.01
Col1	49	0.01	0.00	0.00	0.01	0.01
Col1	50	0.07	0.00	0.00	0.07	0.07
Col1	51	0.06	0.00	0.00	0.06	0.06
Col1	52	0.04	0.03	0.12	0.14	0.14
Col1	53	0.05	0.03	0.12	0.15	0.15
Col1	54	0.05	0.03	0.12	0.15	0.15
Col1	55	0.05	0.03	0.12	0.15	0.15
Col1	56	0.06	0.00	0.00	0.06	0.06
Col1	57	0.06	0.00	0.00	0.06	0.06
Col1	58	0.06	0.00	0.00	0.06	0.06
Col1	59	0.06	0.00	0.00	0.06	0.06
Col1	60	0.04	0.00	0.00	0.04	0.04
Col1	61	0.03	0.00	0.00	0.03	0.03
Col1	62	0.02	0.03	0.12	0.13	0.13
Col1	63	0.02	0.03	0.12	0.13	0.13
Col1	64	0.02	0.03	0.12	0.13	0.13
Col1	65	0.03	0.03	0.12	0.14	0.14
Col1	66	0.03	0.00	0.00	0.03	0.03
Col1	67	0.03	0.00	0.00	0.03	0.03
Col1	68	0.04	0.00	0.00	0.04	0.04
Col1	69	0.03	0.00	0.00	0.03	0.03
Col1	70	0.01	0.00	0.00	0.01	0.01
Col1	71	0.01	0.00	0.00	0.01	0.01
Col1	72	0.00	0.00	0.00	0.00	0.00
Col1	73	0.00	0.00	0.00	0.00	0.00
Col1	74	0.01	0.00	0.00	0.01	0.01
Col1	75	0.01	0.00	0.00	0.01	0.01
Col1	76	0.04	0.00	0.00	0.04	0.04
Col1	77	0.04	0.00	0.00	0.04	0.04
Col1	78	0.04	0.00	0.00	0.04	0.04
Col1	79	0.05	0.00	0.00	0.05	0.05
Col1	80	0.03	0.00	0.00	0.03	0.03
Col1	81	0.04	0.00	0.00	0.04	0.04
Col1	82	0.04	0.00	0.00	0.04	0.04
Col1	83	0.04	0.00	0.00	0.04	0.04
Col1	84	0.04	0.00	0.00	0.04	0.04
Col1	85	0.05	0.00	0.00	0.05	0.05
Col1	86	0.05	0.00	0.00	0.05	0.05
Col1	87	0.05	0.00	0.00	0.05	0.05
Col1	88	0.05	0.00	0.00	0.05	0.05
Col1	89	0.05	0.00	0.00	0.05	0.05
Col1	90	0.05	0.00	0.00	0.05	0.05
Col1	91	0.05	0.00	0.00	0.05	0.05
Col1	92	0.05	0.00	0.00	0.05	0.05
Col1	93	0.05	0.00	0.00	0.05	0.05
Col1	94	0.04	0.00	0.00	0.04	0.04
Col1	95	0.05	0.00	0.00	0.05	0.05

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	96	0.04	0.00	0.00	0.04	0.04
Col1	97	0.05	0.00	0.00	0.05	0.05
Col1	98	0.04	0.00	0.00	0.04	0.04
Col1	99	0.05	0.00	0.00	0.05	0.05
Col2	1	0.16	0.00	0.00	0.16	0.16
Col2	2	0.06	0.00	0.00	0.06	0.06
Col2	3	0.19	0.00	0.00	0.19	0.19
Col2	4	0.19	0.00	0.00	0.19	0.19
Col2	5	0.19	0.00	0.00	0.19	0.19
Col2	6	0.14	0.00	0.00	0.14	0.14
Col2	7	0.16	0.00	0.00	0.16	0.16
Col2	8	0.16	0.00	0.00	0.16	0.16
Col2	9	0.16	0.00	0.00	0.16	0.16
Col2	10	0.02	0.05	0.24	0.24	0.24
Col2	11	0.01	0.05	0.24	0.23	0.23
Col2	12	0.02	0.05	0.78	0.67	0.67
Col2	13	0.01	0.05	0.78	0.75	0.75
Col2	14	0.02	0.05	0.78	0.65	0.65
Col2	15	0.01	0.05	0.78	0.78	0.78
Col2	16	0.01	0.05	0.78	0.73	0.73
Col2	17	0.02	0.05	0.78	0.79	0.79
Col2	18	0.11	0.04	0.58	0.64	0.64
Col2	19	0.13	0.04	0.58	0.65	0.65
Col2	20	0.10	0.04	0.58	0.63	0.63
Col2	21	0.11	0.04	0.58	0.64	0.64
Col2	22	0.13	0.04	0.58	0.65	0.65
Col2	23	0.15	0.04	0.58	0.66	0.66
Col2	24	0.11	0.04	0.58	0.64	0.64
Col2	25	0.13	0.04	0.58	0.65	0.65
Col2	26	0.13	0.04	0.58	0.65	0.65
Col2	27	0.15	0.04	0.58	0.66	0.66
Col2	28	0.11	0.04	0.58	0.64	0.64
Col2	29	0.13	0.04	0.58	0.65	0.65
Col2	30	0.13	0.04	0.58	0.65	0.65
Col2	31	0.15	0.04	0.58	0.66	0.66
Col2	32	0.11	0.04	0.58	0.64	0.64
Col2	33	0.13	0.04	0.58	0.65	0.65
Col2	34	0.03	0.05	0.24	0.24	0.24
Col2	35	0.01	0.05	0.24	0.23	0.23
Col2	36	0.03	0.05	0.78	0.63	0.63
Col2	37	0.01	0.05	0.78	0.70	0.70
Col2	38	0.03	0.05	0.78	0.61	0.61
Col2	39	0.01	0.05	0.78	0.75	0.75
Col2	40	0.02	0.05	0.78	0.68	0.68
Col2	41	0.01	0.05	0.78	0.79	0.79
Col2	42	0.07	0.00	0.00	0.07	0.07
Col2	43	0.11	0.00	0.00	0.11	0.11
Col2	44	0.14	0.00	0.00	0.14	0.14
Col2	45	0.17	0.00	0.00	0.17	0.17
Col2	46	0.07	0.00	0.00	0.07	0.07
Col2	47	0.10	0.00	0.00	0.10	0.10
Col2	48	0.02	0.00	0.00	0.02	0.02
Col2	49	0.05	0.00	0.00	0.05	0.05
Col2	50	0.18	0.00	0.00	0.18	0.18

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col2	51	0.15	0.00	0.00	0.15	0.15
Col2	52	0.11	0.04	0.58	0.64	0.64
Col2	53	0.14	0.04	0.58	0.65	0.65
Col2	54	0.12	0.04	0.58	0.65	0.65
Col2	55	0.15	0.04	0.58	0.66	0.66
Col2	56	0.16	0.00	0.00	0.16	0.16
Col2	57	0.16	0.00	0.00	0.16	0.16
Col2	58	0.16	0.00	0.00	0.16	0.16
Col2	59	0.19	0.00	0.00	0.19	0.19
Col2	60	0.10	0.00	0.00	0.10	0.10
Col2	61	0.09	0.00	0.00	0.09	0.09
Col2	62	0.05	0.04	0.58	0.61	0.61
Col2	63	0.08	0.04	0.58	0.62	0.62
Col2	64	0.06	0.04	0.58	0.62	0.62
Col2	65	0.09	0.04	0.58	0.63	0.63
Col2	66	0.10	0.00	0.00	0.10	0.10
Col2	67	0.10	0.00	0.00	0.10	0.10
Col2	68	0.10	0.00	0.00	0.10	0.10
Col2	69	0.13	0.00	0.00	0.13	0.13
Col2	70	0.03	0.00	0.00	0.03	0.03
Col2	71	0.01	0.00	0.00	0.01	0.01
Col2	72	0.02	0.00	0.00	0.02	0.02
Col2	73	0.01	0.00	0.00	0.01	0.01
Col2	74	0.03	0.00	0.00	0.03	0.03
Col2	75	0.01	0.00	0.00	0.01	0.01
Col2	76	0.09	0.00	0.00	0.09	0.09
Col2	77	0.12	0.00	0.00	0.12	0.12
Col2	78	0.11	0.00	0.00	0.11	0.11
Col2	79	0.13	0.00	0.00	0.13	0.13
Col2	80	0.10	0.00	0.00	0.10	0.10
Col2	81	0.11	0.00	0.00	0.11	0.11
Col2	82	0.11	0.00	0.00	0.11	0.11
Col2	83	0.11	0.00	0.00	0.11	0.11
Col2	84	0.11	0.00	0.00	0.11	0.11
Col2	85	0.14	0.00	0.00	0.14	0.14
Col2	86	0.14	0.00	0.00	0.14	0.14
Col2	87	0.14	0.00	0.00	0.14	0.14
Col2	88	0.13	0.00	0.00	0.13	0.13
Col2	89	0.13	0.00	0.00	0.13	0.13
Col2	90	0.13	0.00	0.00	0.13	0.13
Col2	91	0.15	0.00	0.00	0.15	0.15
Col2	92	0.15	0.00	0.00	0.15	0.15
Col2	93	0.15	0.00	0.00	0.15	0.15
Col2	94	0.11	0.00	0.00	0.11	0.11
Col2	95	0.13	0.00	0.00	0.13	0.13
Col2	96	0.11	0.00	0.00	0.11	0.11
Col2	97	0.13	0.00	0.00	0.13	0.13
Col2	98	0.11	0.00	0.00	0.11	0.11
Col2	99	0.13	0.00	0.00	0.13	0.13
Col3	1	0.16	0.00	0.00	0.16	0.16
Col3	2	0.06	0.00	0.00	0.06	0.06
Col3	3	0.18	0.00	0.00	0.18	0.18
Col3	4	0.18	0.00	0.00	0.18	0.18
Col3	5	0.18	0.00	0.00	0.18	0.18

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	6	0.13	0.00	0.00	0.13	0.13
Col3	7	0.15	0.00	0.00	0.15	0.15
Col3	8	0.15	0.00	0.00	0.15	0.15
Col3	9	0.15	0.00	0.00	0.15	0.15
Col3	10	0.02	0.06	0.30	0.31	0.31
Col3	11	0.00	0.06	0.30	0.30	0.30
Col3	12	0.02	0.06	0.37	0.34	0.34
Col3	13	0.00	0.06	0.37	0.37	0.37
Col3	14	0.01	0.06	0.37	0.37	0.37
Col3	15	0.01	0.06	0.37	0.37	0.37
Col3	16	0.01	0.06	0.37	0.38	0.38
Col3	17	0.01	0.06	0.37	0.38	0.38
Col3	18	0.12	0.05	0.28	0.34	0.34
Col3	19	0.12	0.05	0.28	0.34	0.34
Col3	20	0.09	0.05	0.28	0.33	0.33
Col3	21	0.11	0.05	0.28	0.34	0.34
Col3	22	0.14	0.05	0.28	0.35	0.35
Col3	23	0.14	0.05	0.28	0.35	0.35
Col3	24	0.11	0.05	0.28	0.33	0.33
Col3	25	0.13	0.05	0.28	0.34	0.34
Col3	26	0.14	0.05	0.28	0.35	0.35
Col3	27	0.14	0.05	0.28	0.35	0.35
Col3	28	0.11	0.05	0.28	0.33	0.33
Col3	29	0.13	0.05	0.28	0.34	0.34
Col3	30	0.14	0.05	0.28	0.35	0.35
Col3	31	0.14	0.05	0.28	0.35	0.35
Col3	32	0.11	0.05	0.28	0.33	0.33
Col3	33	0.13	0.05	0.28	0.34	0.34
Col3	34	0.03	0.06	0.30	0.31	0.31
Col3	35	0.01	0.06	0.30	0.30	0.30
Col3	36	0.03	0.06	0.37	0.33	0.33
Col3	37	0.01	0.06	0.37	0.36	0.36
Col3	38	0.01	0.06	0.37	0.36	0.36
Col3	39	0.01	0.06	0.37	0.36	0.36
Col3	40	0.00	0.06	0.37	0.37	0.37
Col3	41	0.00	0.06	0.37	0.37	0.37
Col3	42	0.10	0.00	0.00	0.10	0.10
Col3	43	0.07	0.00	0.00	0.07	0.07
Col3	44	0.16	0.00	0.00	0.16	0.16
Col3	45	0.13	0.00	0.00	0.13	0.13
Col3	46	0.09	0.00	0.00	0.09	0.09
Col3	47	0.06	0.00	0.00	0.06	0.06
Col3	48	0.05	0.00	0.00	0.05	0.05
Col3	49	0.01	0.00	0.00	0.01	0.01
Col3	50	0.21	0.00	0.00	0.21	0.21
Col3	51	0.17	0.00	0.00	0.17	0.17
Col3	52	0.15	0.05	0.28	0.35	0.35
Col3	53	0.15	0.05	0.28	0.35	0.35
Col3	54	0.16	0.05	0.28	0.36	0.36
Col3	55	0.16	0.05	0.28	0.36	0.36
Col3	56	0.18	0.00	0.00	0.18	0.18
Col3	57	0.18	0.00	0.00	0.18	0.18
Col3	58	0.20	0.00	0.00	0.20	0.20
Col3	59	0.18	0.00	0.00	0.18	0.18

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	60	0.09	0.00	0.00	0.09	0.09
Col3	61	0.08	0.00	0.00	0.08	0.08
Col3	62	0.06	0.05	0.28	0.31	0.31
Col3	63	0.06	0.05	0.28	0.31	0.31
Col3	64	0.07	0.05	0.28	0.32	0.32
Col3	65	0.07	0.05	0.28	0.32	0.32
Col3	66	0.09	0.00	0.00	0.09	0.09
Col3	67	0.09	0.00	0.00	0.09	0.09
Col3	68	0.11	0.00	0.00	0.11	0.11
Col3	69	0.09	0.00	0.00	0.09	0.09
Col3	70	0.01	0.00	0.00	0.01	0.01
Col3	71	0.01	0.00	0.00	0.01	0.01
Col3	72	0.00	0.00	0.00	0.00	0.00
Col3	73	0.00	0.00	0.00	0.00	0.00
Col3	74	0.03	0.00	0.00	0.03	0.03
Col3	75	0.01	0.00	0.00	0.01	0.01
Col3	76	0.11	0.00	0.00	0.11	0.11
Col3	77	0.11	0.00	0.00	0.11	0.11
Col3	78	0.12	0.00	0.00	0.12	0.12
Col3	79	0.12	0.00	0.00	0.12	0.12
Col3	80	0.09	0.00	0.00	0.09	0.09
Col3	81	0.11	0.00	0.00	0.11	0.11
Col3	82	0.13	0.00	0.00	0.13	0.13
Col3	83	0.13	0.00	0.00	0.13	0.13
Col3	84	0.13	0.00	0.00	0.13	0.13
Col3	85	0.13	0.00	0.00	0.13	0.13
Col3	86	0.13	0.00	0.00	0.13	0.13
Col3	87	0.13	0.00	0.00	0.13	0.13
Col3	88	0.14	0.00	0.00	0.14	0.14
Col3	89	0.14	0.00	0.00	0.14	0.14
Col3	90	0.14	0.00	0.00	0.14	0.14
Col3	91	0.14	0.00	0.00	0.14	0.14
Col3	92	0.14	0.00	0.00	0.14	0.14
Col3	93	0.14	0.00	0.00	0.14	0.14
Col3	94	0.11	0.00	0.00	0.11	0.11
Col3	95	0.13	0.00	0.00	0.13	0.13
Col3	96	0.11	0.00	0.00	0.11	0.11
Col3	97	0.13	0.00	0.00	0.13	0.13
Col3	98	0.11	0.00	0.00	0.11	0.11
Col3	99	0.13	0.00	0.00	0.13	0.13
Col4	1	0.16	0.00	0.00	0.16	0.16
Col4	2	0.06	0.00	0.00	0.06	0.06
Col4	3	0.19	0.00	0.00	0.19	0.19
Col4	4	0.19	0.00	0.00	0.19	0.19
Col4	5	0.19	0.00	0.00	0.19	0.19
Col4	6	0.14	0.00	0.00	0.14	0.14
Col4	7	0.16	0.00	0.00	0.16	0.16
Col4	8	0.16	0.00	0.00	0.16	0.16
Col4	9	0.16	0.00	0.00	0.16	0.16
Col4	10	0.01	0.06	0.35	0.35	0.35
Col4	11	0.01	0.06	0.35	0.35	0.35
Col4	12	0.01	0.06	0.53	0.52	0.52
Col4	13	0.01	0.06	0.53	0.51	0.51
Col4	14	0.00	0.06	0.53	0.53	0.53

				Customer	Elbert Rentals	**Job No**	22-8706	
				Project	Building Expansion	**Date**	5/3/2022	
				Location	Newberg, OR 97132	**Designed By**	AC	
				Size	117 x 90 x 14.8 x 14.1	**Checked By**		

Col4	15	0.00	0.06	0.53	0.53	0.53
Col4	16	0.02	0.06	0.53	0.54	0.54
Col4	17	0.01	0.06	0.53	0.54	0.54
Col4	18	0.13	0.05	0.40	0.46	0.46
Col4	19	0.13	0.05	0.40	0.46	0.46
Col4	20	0.11	0.05	0.40	0.46	0.46
Col4	21	0.10	0.05	0.40	0.45	0.45
Col4	22	0.15	0.05	0.40	0.47	0.47
Col4	23	0.15	0.05	0.40	0.47	0.47
Col4	24	0.13	0.05	0.40	0.46	0.46
Col4	25	0.12	0.05	0.40	0.46	0.46
Col4	26	0.15	0.05	0.40	0.47	0.47
Col4	27	0.15	0.05	0.40	0.47	0.47
Col4	28	0.13	0.05	0.40	0.46	0.46
Col4	29	0.12	0.05	0.40	0.46	0.46
Col4	30	0.15	0.05	0.40	0.47	0.47
Col4	31	0.15	0.05	0.40	0.47	0.47
Col4	32	0.13	0.05	0.40	0.46	0.46
Col4	33	0.12	0.05	0.40	0.46	0.46
Col4	34	0.02	0.06	0.35	0.35	0.35
Col4	35	0.02	0.06	0.35	0.35	0.35
Col4	36	0.02	0.06	0.53	0.50	0.50
Col4	37	0.02	0.06	0.53	0.49	0.49
Col4	38	0.01	0.06	0.53	0.51	0.51
Col4	39	0.01	0.06	0.53	0.51	0.51
Col4	40	0.00	0.06	0.53	0.53	0.53
Col4	41	0.00	0.06	0.53	0.53	0.53
Col4	42	0.07	0.00	0.00	0.07	0.07
Col4	43	0.07	0.00	0.00	0.07	0.07
Col4	44	0.15	0.00	0.00	0.15	0.15
Col4	45	0.14	0.00	0.00	0.14	0.14
Col4	46	0.07	0.00	0.00	0.07	0.07
Col4	47	0.07	0.00	0.00	0.07	0.07
Col4	48	0.02	0.00	0.00	0.02	0.02
Col4	49	0.01	0.00	0.00	0.01	0.01
Col4	50	0.15	0.00	0.00	0.15	0.15
Col4	51	0.13	0.00	0.00	0.13	0.13
Col4	52	0.10	0.05	0.40	0.45	0.45
Col4	53	0.10	0.05	0.40	0.45	0.45
Col4	54	0.12	0.05	0.40	0.46	0.46
Col4	55	0.12	0.05	0.40	0.46	0.46
Col4	56	0.13	0.00	0.00	0.13	0.13
Col4	57	0.13	0.00	0.00	0.13	0.13
Col4	58	0.13	0.00	0.00	0.13	0.13
Col4	59	0.13	0.00	0.00	0.13	0.13
Col4	60	0.19	0.00	0.00	0.19	0.19
Col4	61	0.16	0.00	0.00	0.16	0.16
Col4	62	0.13	0.05	0.40	0.47	0.47
Col4	63	0.13	0.05	0.40	0.47	0.47
Col4	64	0.15	0.05	0.40	0.47	0.47
Col4	65	0.15	0.05	0.40	0.47	0.47
Col4	66	0.16	0.00	0.00	0.16	0.16
Col4	67	0.16	0.00	0.00	0.16	0.16
Col4	68	0.16	0.00	0.00	0.16	0.16

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col4	69	0.16	0.00	0.00	0.16	0.16
Col4	70	0.01	0.00	0.00	0.01	0.01
Col4	71	0.01	0.00	0.00	0.01	0.01
Col4	72	0.00	0.00	0.00	0.00	0.00
Col4	73	0.00	0.00	0.00	0.00	0.00
Col4	74	0.02	0.00	0.00	0.02	0.02
Col4	75	0.02	0.00	0.00	0.02	0.02
Col4	76	0.12	0.00	0.00	0.12	0.12
Col4	77	0.12	0.00	0.00	0.12	0.12
Col4	78	0.13	0.00	0.00	0.13	0.13
Col4	79	0.13	0.00	0.00	0.13	0.13
Col4	80	0.11	0.00	0.00	0.11	0.11
Col4	81	0.10	0.00	0.00	0.10	0.10
Col4	82	0.14	0.00	0.00	0.14	0.14
Col4	83	0.14	0.00	0.00	0.14	0.14
Col4	84	0.14	0.00	0.00	0.14	0.14
Col4	85	0.14	0.00	0.00	0.14	0.14
Col4	86	0.14	0.00	0.00	0.14	0.14
Col4	87	0.14	0.00	0.00	0.14	0.14
Col4	88	0.15	0.00	0.00	0.15	0.15
Col4	89	0.15	0.00	0.00	0.15	0.15
Col4	90	0.15	0.00	0.00	0.15	0.15
Col4	91	0.15	0.00	0.00	0.15	0.15
Col4	92	0.15	0.00	0.00	0.15	0.15
Col4	93	0.15	0.00	0.00	0.15	0.15
Col4	94	0.13	0.00	0.00	0.13	0.13
Col4	95	0.12	0.00	0.00	0.12	0.12
Col4	96	0.13	0.00	0.00	0.13	0.13
Col4	97	0.12	0.00	0.00	0.12	0.12
Col4	98	0.13	0.00	0.00	0.13	0.13
Col4	99	0.12	0.00	0.00	0.12	0.12
Col5	1	0.15	0.00	0.00	0.15	0.15
Col5	2	0.06	0.00	0.00	0.06	0.06
Col5	3	0.18	0.00	0.00	0.18	0.18
Col5	4	0.18	0.00	0.00	0.18	0.18
Col5	5	0.18	0.00	0.00	0.18	0.18
Col5	6	0.13	0.00	0.00	0.13	0.13
Col5	7	0.15	0.00	0.00	0.15	0.15
Col5	8	0.15	0.00	0.00	0.15	0.15
Col5	9	0.15	0.00	0.00	0.15	0.15
Col5	10	0.00	0.06	0.28	0.28	0.28
Col5	11	0.02	0.06	0.28	0.29	0.29
Col5	12	0.00	0.06	0.34	0.33	0.33
Col5	13	0.02	0.06	0.34	0.31	0.31
Col5	14	0.01	0.06	0.34	0.33	0.33
Col5	15	0.00	0.06	0.34	0.33	0.33
Col5	16	0.01	0.06	0.34	0.34	0.34
Col5	17	0.01	0.06	0.34	0.34	0.34
Col5	18	0.12	0.04	0.25	0.31	0.31
Col5	19	0.12	0.04	0.25	0.31	0.31
Col5	20	0.11	0.04	0.25	0.31	0.31
Col5	21	0.09	0.04	0.25	0.30	0.30
Col5	22	0.14	0.04	0.25	0.32	0.32
Col5	23	0.14	0.04	0.25	0.32	0.32

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	24	0.13	0.04	0.25	0.31	0.31
Col5	25	0.11	0.04	0.25	0.30	0.30
Col5	26	0.14	0.04	0.25	0.32	0.32
Col5	27	0.14	0.04	0.25	0.32	0.32
Col5	28	0.13	0.04	0.25	0.31	0.31
Col5	29	0.11	0.04	0.25	0.30	0.30
Col5	30	0.14	0.04	0.25	0.32	0.32
Col5	31	0.14	0.04	0.25	0.32	0.32
Col5	32	0.13	0.04	0.25	0.31	0.31
Col5	33	0.11	0.04	0.25	0.30	0.30
Col5	34	0.01	0.06	0.28	0.28	0.28
Col5	35	0.03	0.06	0.28	0.29	0.29
Col5	36	0.01	0.06	0.34	0.32	0.32
Col5	37	0.03	0.06	0.34	0.30	0.30
Col5	38	0.01	0.06	0.34	0.32	0.32
Col5	39	0.01	0.06	0.34	0.32	0.32
Col5	40	0.00	0.06	0.34	0.34	0.34
Col5	41	0.00	0.06	0.34	0.34	0.34
Col5	42	0.06	0.00	0.00	0.06	0.06
Col5	43	0.10	0.00	0.00	0.10	0.10
Col5	44	0.13	0.00	0.00	0.13	0.13
Col5	45	0.16	0.00	0.00	0.16	0.16
Col5	46	0.06	0.00	0.00	0.06	0.06
Col5	47	0.09	0.00	0.00	0.09	0.09
Col5	48	0.01	0.00	0.00	0.01	0.01
Col5	49	0.05	0.00	0.00	0.05	0.05
Col5	50	0.09	0.00	0.00	0.09	0.09
Col5	51	0.08	0.00	0.00	0.08	0.08
Col5	52	0.06	0.04	0.25	0.28	0.28
Col5	53	0.06	0.04	0.25	0.28	0.28
Col5	54	0.07	0.04	0.25	0.29	0.29
Col5	55	0.07	0.04	0.25	0.29	0.29
Col5	56	0.08	0.00	0.00	0.08	0.08
Col5	57	0.08	0.00	0.00	0.08	0.08
Col5	58	0.08	0.00	0.00	0.08	0.08
Col5	59	0.11	0.00	0.00	0.11	0.11
Col5	60	0.19	0.00	0.00	0.19	0.19
Col5	61	0.16	0.00	0.00	0.16	0.16
Col5	62	0.13	0.04	0.25	0.32	0.32
Col5	63	0.13	0.04	0.25	0.32	0.32
Col5	64	0.15	0.04	0.25	0.32	0.32
Col5	65	0.15	0.04	0.25	0.33	0.33
Col5	66	0.16	0.00	0.00	0.16	0.16
Col5	67	0.16	0.00	0.00	0.16	0.16
Col5	68	0.16	0.00	0.00	0.16	0.16
Col5	69	0.19	0.00	0.00	0.19	0.19
Col5	70	0.01	0.00	0.00	0.01	0.01
Col5	71	0.01	0.00	0.00	0.01	0.01
Col5	72	0.00	0.00	0.00	0.00	0.00
Col5	73	0.00	0.00	0.00	0.00	0.00
Col5	74	0.01	0.00	0.00	0.01	0.01
Col5	75	0.03	0.00	0.00	0.03	0.03
Col5	76	0.11	0.00	0.00	0.11	0.11
Col5	77	0.11	0.00	0.00	0.11	0.11

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	78	0.12	0.00	0.00	0.12	0.12
Col5	79	0.12	0.00	0.00	0.12	0.12
Col5	80	0.11	0.00	0.00	0.11	0.11
Col5	81	0.09	0.00	0.00	0.09	0.09
Col5	82	0.12	0.00	0.00	0.12	0.12
Col5	83	0.12	0.00	0.00	0.12	0.12
Col5	84	0.12	0.00	0.00	0.12	0.12
Col5	85	0.12	0.00	0.00	0.12	0.12
Col5	86	0.12	0.00	0.00	0.12	0.12
Col5	87	0.12	0.00	0.00	0.12	0.12
Col5	88	0.14	0.00	0.00	0.14	0.14
Col5	89	0.14	0.00	0.00	0.14	0.14
Col5	90	0.14	0.00	0.00	0.14	0.14
Col5	91	0.14	0.00	0.00	0.14	0.14
Col5	92	0.14	0.00	0.00	0.14	0.14
Col5	93	0.14	0.00	0.00	0.14	0.14
Col5	94	0.13	0.00	0.00	0.13	0.13
Col5	95	0.11	0.00	0.00	0.11	0.11
Col5	96	0.13	0.00	0.00	0.13	0.13
Col5	97	0.11	0.00	0.00	0.11	0.11
Col5	98	0.13	0.00	0.00	0.13	0.13
Col5	99	0.11	0.00	0.00	0.11	0.11
Col6	1	0.16	0.00	0.00	0.16	0.16
Col6	2	0.06	0.00	0.00	0.06	0.06
Col6	3	0.19	0.00	0.00	0.19	0.19
Col6	4	0.19	0.00	0.00	0.19	0.19
Col6	5	0.19	0.00	0.00	0.19	0.19
Col6	6	0.14	0.00	0.00	0.14	0.14
Col6	7	0.16	0.00	0.00	0.16	0.16
Col6	8	0.16	0.00	0.00	0.16	0.16
Col6	9	0.16	0.00	0.00	0.16	0.16
Col6	10	0.01	0.05	0.22	0.21	0.21
Col6	11	0.02	0.05	0.22	0.22	0.22
Col6	12	0.01	0.05	0.67	0.64	0.64
Col6	13	0.02	0.05	0.67	0.57	0.57
Col6	14	0.00	0.05	0.67	0.67	0.67
Col6	15	0.02	0.05	0.67	0.56	0.56
Col6	16	0.02	0.05	0.67	0.68	0.68
Col6	17	0.01	0.05	0.67	0.62	0.62
Col6	18	0.13	0.04	0.50	0.57	0.57
Col6	19	0.11	0.04	0.50	0.55	0.55
Col6	20	0.11	0.04	0.50	0.56	0.56
Col6	21	0.10	0.04	0.50	0.55	0.55
Col6	22	0.15	0.04	0.50	0.58	0.58
Col6	23	0.13	0.04	0.50	0.56	0.56
Col6	24	0.13	0.04	0.50	0.57	0.57
Col6	25	0.12	0.04	0.50	0.56	0.56
Col6	26	0.15	0.04	0.50	0.58	0.58
Col6	27	0.13	0.04	0.50	0.56	0.56
Col6	28	0.13	0.04	0.50	0.57	0.57
Col6	29	0.12	0.04	0.50	0.56	0.56
Col6	30	0.15	0.04	0.50	0.58	0.58
Col6	31	0.13	0.04	0.50	0.56	0.56
Col6	32	0.13	0.04	0.50	0.57	0.57

			Customer	Elbert Rentals		**Job No**	22-8706	
			Project	Building Expansion		**Date**	5/3/2022	
			Location	Newberg, OR 97132		**Designed By**	AC	
			Size	117 x 90 x 14.8 x 14.1		**Checked By**		

Col6	33	0.12	0.04	0.50	0.56	0.56
Col6	34	0.01	0.05	0.22	0.21	0.21
Col6	35	0.03	0.05	0.22	0.22	0.22
Col6	36	0.01	0.05	0.67	0.60	0.60
Col6	37	0.03	0.05	0.67	0.54	0.54
Col6	38	0.01	0.05	0.67	0.64	0.64
Col6	39	0.03	0.05	0.67	0.52	0.52
Col6	40	0.01	0.05	0.67	0.67	0.67
Col6	41	0.02	0.05	0.67	0.58	0.58
Col6	42	0.11	0.00	0.00	0.11	0.11
Col6	43	0.07	0.00	0.00	0.07	0.07
Col6	44	0.17	0.00	0.00	0.17	0.17
Col6	45	0.14	0.00	0.00	0.14	0.14
Col6	46	0.10	0.00	0.00	0.10	0.10
Col6	47	0.07	0.00	0.00	0.07	0.07
Col6	48	0.05	0.00	0.00	0.05	0.05
Col6	49	0.02	0.00	0.00	0.02	0.02
Col6	50	0.10	0.00	0.00	0.10	0.10
Col6	51	0.09	0.00	0.00	0.09	0.09
Col6	52	0.08	0.04	0.50	0.54	0.54
Col6	53	0.05	0.04	0.50	0.52	0.52
Col6	54	0.09	0.04	0.50	0.54	0.54
Col6	55	0.06	0.04	0.50	0.53	0.53
Col6	56	0.10	0.00	0.00	0.10	0.10
Col6	57	0.10	0.00	0.00	0.10	0.10
Col6	58	0.12	0.00	0.00	0.12	0.12
Col6	59	0.10	0.00	0.00	0.10	0.10
Col6	60	0.18	0.00	0.00	0.18	0.18
Col6	61	0.15	0.00	0.00	0.15	0.15
Col6	62	0.14	0.04	0.50	0.57	0.57
Col6	63	0.11	0.04	0.50	0.55	0.55
Col6	64	0.15	0.04	0.50	0.57	0.57
Col6	65	0.12	0.04	0.50	0.56	0.56
Col6	66	0.16	0.00	0.00	0.16	0.16
Col6	67	0.16	0.00	0.00	0.16	0.16
Col6	68	0.18	0.00	0.00	0.18	0.18
Col6	69	0.16	0.00	0.00	0.16	0.16
Col6	70	0.01	0.00	0.00	0.01	0.01
Col6	71	0.03	0.00	0.00	0.03	0.03
Col6	72	0.01	0.00	0.00	0.01	0.01
Col6	73	0.02	0.00	0.00	0.02	0.02
Col6	74	0.01	0.00	0.00	0.01	0.01
Col6	75	0.03	0.00	0.00	0.03	0.03
Col6	76	0.12	0.00	0.00	0.12	0.12
Col6	77	0.09	0.00	0.00	0.09	0.09
Col6	78	0.13	0.00	0.00	0.13	0.13
Col6	79	0.11	0.00	0.00	0.11	0.11
Col6	80	0.11	0.00	0.00	0.11	0.11
Col6	81	0.10	0.00	0.00	0.10	0.10
Col6	82	0.14	0.00	0.00	0.14	0.14
Col6	83	0.14	0.00	0.00	0.14	0.14
Col6	84	0.14	0.00	0.00	0.14	0.14
Col6	85	0.11	0.00	0.00	0.11	0.11
Col6	86	0.11	0.00	0.00	0.11	0.11

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col6	87	0.11	0.00	0.00	0.11	0.11
Col6	88	0.15	0.00	0.00	0.15	0.15
Col6	89	0.15	0.00	0.00	0.15	0.15
Col6	90	0.15	0.00	0.00	0.15	0.15
Col6	91	0.13	0.00	0.00	0.13	0.13
Col6	92	0.13	0.00	0.00	0.13	0.13
Col6	93	0.13	0.00	0.00	0.13	0.13
Col6	94	0.13	0.00	0.00	0.13	0.13
Col6	95	0.12	0.00	0.00	0.12	0.12
Col6	96	0.13	0.00	0.00	0.13	0.13
Col6	97	0.12	0.00	0.00	0.12	0.12
Col6	98	0.13	0.00	0.00	0.13	0.13
Col6	99	0.12	0.00	0.00	0.12	0.12
Col7	1	0.06	0.00	0.00	0.06	0.06
Col7	2	0.02	0.00	0.00	0.02	0.02
Col7	3	0.07	0.00	0.00	0.07	0.07
Col7	4	0.07	0.00	0.00	0.07	0.07
Col7	5	0.07	0.00	0.00	0.07	0.07
Col7	6	0.05	0.00	0.00	0.05	0.05
Col7	7	0.06	0.00	0.00	0.06	0.06
Col7	8	0.06	0.00	0.00	0.06	0.06
Col7	9	0.06	0.00	0.00	0.06	0.06
Col7	10	0.00	0.03	0.14	0.14	0.14
Col7	11	0.01	0.03	0.14	0.13	0.13
Col7	12	0.00	0.04	0.15	0.15	0.15
Col7	13	0.01	0.04	0.15	0.14	0.14
Col7	14	0.00	0.04	0.15	0.15	0.15
Col7	15	0.01	0.04	0.15	0.14	0.14
Col7	16	0.01	0.04	0.15	0.15	0.15
Col7	17	0.00	0.04	0.15	0.15	0.15
Col7	18	0.05	0.03	0.11	0.13	0.13
Col7	19	0.04	0.03	0.11	0.13	0.13
Col7	20	0.04	0.03	0.11	0.13	0.13
Col7	21	0.03	0.03	0.11	0.13	0.13
Col7	22	0.05	0.03	0.11	0.14	0.14
Col7	23	0.05	0.03	0.11	0.13	0.13
Col7	24	0.05	0.03	0.11	0.13	0.13
Col7	25	0.04	0.03	0.11	0.13	0.13
Col7	26	0.05	0.03	0.11	0.14	0.14
Col7	27	0.05	0.03	0.11	0.13	0.13
Col7	28	0.05	0.03	0.11	0.13	0.13
Col7	29	0.04	0.03	0.11	0.13	0.13
Col7	30	0.05	0.03	0.11	0.14	0.14
Col7	31	0.05	0.03	0.11	0.13	0.13
Col7	32	0.05	0.03	0.11	0.13	0.13
Col7	33	0.04	0.03	0.11	0.13	0.13
Col7	34	0.01	0.03	0.14	0.13	0.13
Col7	35	0.01	0.03	0.14	0.14	0.14
Col7	36	0.01	0.04	0.15	0.14	0.14
Col7	37	0.01	0.04	0.15	0.15	0.15
Col7	38	0.01	0.04	0.15	0.14	0.14
Col7	39	0.01	0.04	0.15	0.14	0.14
Col7	40	0.00	0.04	0.15	0.15	0.15
Col7	41	0.00	0.04	0.15	0.14	0.14

	Customer	Elbert Rentals		**Job No**	22-8706
	Project	Building Expansion		**Date**	5/3/2022
	Location	Newberg, OR 97132		**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1		**Checked By**	

Col7	42	0.03	0.00	0.00	0.03	0.03
Col7	43	0.03	0.00	0.00	0.03	0.03
Col7	44	0.05	0.00	0.00	0.05	0.05
Col7	45	0.05	0.00	0.00	0.05	0.05
Col7	46	0.02	0.00	0.00	0.02	0.02
Col7	47	0.03	0.00	0.00	0.03	0.03
Col7	48	0.01	0.00	0.00	0.01	0.01
Col7	49	0.01	0.00	0.00	0.01	0.01
Col7	50	0.04	0.00	0.00	0.04	0.04
Col7	51	0.03	0.00	0.00	0.03	0.03
Col7	52	0.02	0.03	0.11	0.12	0.12
Col7	53	0.02	0.03	0.11	0.12	0.12
Col7	54	0.03	0.03	0.11	0.12	0.12
Col7	55	0.02	0.03	0.11	0.12	0.12
Col7	56	0.03	0.00	0.00	0.03	0.03
Col7	57	0.03	0.00	0.00	0.03	0.03
Col7	58	0.03	0.00	0.00	0.03	0.03
Col7	59	0.03	0.00	0.00	0.03	0.03
Col7	60	0.07	0.00	0.00	0.07	0.07
Col7	61	0.06	0.00	0.00	0.06	0.06
Col7	62	0.05	0.03	0.11	0.13	0.13
Col7	63	0.04	0.03	0.11	0.13	0.13
Col7	64	0.05	0.03	0.11	0.14	0.14
Col7	65	0.05	0.03	0.11	0.13	0.13
Col7	66	0.06	0.00	0.00	0.06	0.06
Col7	67	0.06	0.00	0.00	0.06	0.06
Col7	68	0.06	0.00	0.00	0.06	0.06
Col7	69	0.06	0.00	0.00	0.06	0.06
Col7	70	0.01	0.00	0.00	0.01	0.01
Col7	71	0.01	0.00	0.00	0.01	0.01
Col7	72	0.00	0.00	0.00	0.00	0.00
Col7	73	0.00	0.00	0.00	0.00	0.00
Col7	74	0.01	0.00	0.00	0.01	0.01
Col7	75	0.01	0.00	0.00	0.01	0.01
Col7	76	0.04	0.00	0.00	0.04	0.04
Col7	77	0.04	0.00	0.00	0.04	0.04
Col7	78	0.05	0.00	0.00	0.05	0.05
Col7	79	0.04	0.00	0.00	0.04	0.04
Col7	80	0.04	0.00	0.00	0.04	0.04
Col7	81	0.03	0.00	0.00	0.03	0.03
Col7	82	0.05	0.00	0.00	0.05	0.05
Col7	83	0.05	0.00	0.00	0.05	0.05
Col7	84	0.05	0.00	0.00	0.05	0.05
Col7	85	0.04	0.00	0.00	0.04	0.04
Col7	86	0.04	0.00	0.00	0.04	0.04
Col7	87	0.04	0.00	0.00	0.04	0.04
Col7	88	0.05	0.00	0.00	0.05	0.05
Col7	89	0.05	0.00	0.00	0.05	0.05
Col7	90	0.05	0.00	0.00	0.05	0.05
Col7	91	0.05	0.00	0.00	0.05	0.05
Col7	92	0.05	0.00	0.00	0.05	0.05
Col7	93	0.05	0.00	0.00	0.05	0.05
Col7	94	0.05	0.00	0.00	0.05	0.05
Col7	95	0.04	0.00	0.00	0.04	0.04

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	96	0.05	0.00	0.00	0.05		0.05
Col7	97	0.04	0.00	0.00	0.04		0.04
Col7	98	0.05	0.00	0.00	0.05		0.05
Col7	99	0.04	0.00	0.00	0.04		0.04
Raf1	1	0.01	0.15	0.60	0.61		0.61
Raf1	2	0.00	0.06	0.23	0.23		0.23
Raf1	3	0.01	0.17	0.70	0.70		0.70
Raf1	4	0.01	0.17	0.70	0.70		0.70
Raf1	5	0.01	0.17	0.70	0.70		0.70
Raf1	6	0.01	0.12	0.51	0.51		0.51
Raf1	7	0.01	0.14	0.58	0.58		0.58
Raf1	8	0.01	0.14	0.58	0.58		0.58
Raf1	9	0.01	0.14	0.58	0.58		0.58
Raf1	10	0.01	0.03	0.12	0.12		0.12
Raf1	11	0.01	0.01	0.03	0.04		0.04
Raf1	12	0.01	0.03	0.12	0.12		0.12
Raf1	13	0.01	0.01	0.03	0.04		0.04
Raf1	14	0.01	0.03	0.13	0.13		0.13
Raf1	15	0.01	0.01	0.03	0.03		0.03
Raf1	16	0.02	0.01	0.06	0.07		0.07
Raf1	17	0.01	0.01	0.04	0.05		0.05
Raf1	18	0.02	0.10	0.39	0.40		0.40
Raf1	19	0.01	0.11	0.47	0.47		0.47
Raf1	20	0.01	0.08	0.35	0.35		0.35
Raf1	21	0.01	0.10	0.41	0.41		0.41
Raf1	22	0.02	0.11	0.46	0.47		0.47
Raf1	23	0.01	0.13	0.54	0.54		0.54
Raf1	24	0.01	0.10	0.42	0.42		0.42
Raf1	25	0.01	0.12	0.48	0.48		0.48
Raf1	26	0.02	0.11	0.46	0.47		0.47
Raf1	27	0.01	0.13	0.54	0.54		0.54
Raf1	28	0.01	0.10	0.42	0.42		0.42
Raf1	29	0.01	0.12	0.48	0.48		0.48
Raf1	30	0.02	0.11	0.46	0.47		0.47
Raf1	31	0.01	0.13	0.54	0.54		0.54
Raf1	32	0.01	0.10	0.42	0.42		0.42
Raf1	33	0.01	0.12	0.48	0.48		0.48
Raf1	34	0.01	0.04	0.16	0.16		0.16
Raf1	35	0.01	0.02	0.07	0.08		0.08
Raf1	36	0.01	0.04	0.16	0.16		0.16
Raf1	37	0.01	0.02	0.07	0.08		0.08
Raf1	38	0.01	0.04	0.17	0.17		0.17
Raf1	39	0.01	0.02	0.07	0.07		0.07
Raf1	40	0.02	0.02	0.10	0.11		0.11
Raf1	41	0.01	0.00	0.00	0.01		0.01
Raf1	42	0.02	0.06	0.26	0.26		0.26
Raf1	43	0.04	0.06	0.25	0.27		0.27
Raf1	44	0.01	0.13	0.53	0.54		0.54
Raf1	45	0.03	0.13	0.52	0.54		0.54
Raf1	46	0.01	0.06	0.25	0.25		0.25
Raf1	47	0.03	0.06	0.24	0.26		0.26
Raf1	48	0.01	0.01	0.05	0.06		0.06
Raf1	49	0.03	0.01	0.05	0.06		0.06

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf1	50	0.01	0.17	0.66	0.67	0.67
Raf1	51	0.01	0.14	0.56	0.56	0.56
Raf1	52	0.01	0.10	0.39	0.39	0.39
Raf1	53	0.01	0.12	0.46	0.46	0.46
Raf1	54	0.02	0.11	0.44	0.45	0.45
Raf1	55	0.01	0.13	0.51	0.52	0.52
Raf1	56	0.01	0.14	0.57	0.57	0.57
Raf1	57	0.01	0.14	0.57	0.57	0.57
Raf1	58	0.01	0.14	0.58	0.58	0.58
Raf1	59	0.03	0.14	0.57	0.59	0.59
Raf1	60	0.00	0.09	0.38	0.38	0.38
Raf1	61	0.00	0.08	0.34	0.35	0.35
Raf1	62	0.01	0.04	0.17	0.18	0.18
Raf1	63	0.01	0.06	0.25	0.25	0.25
Raf1	64	0.02	0.05	0.23	0.23	0.23
Raf1	65	0.01	0.07	0.30	0.31	0.31
Raf1	66	0.00	0.09	0.36	0.36	0.36
Raf1	67	0.00	0.09	0.36	0.36	0.36
Raf1	68	0.01	0.09	0.36	0.37	0.37
Raf1	69	0.03	0.08	0.36	0.37	0.37
Raf1	70	0.01	0.04	0.17	0.17	0.17
Raf1	71	0.01	0.02	0.07	0.07	0.07
Raf1	72	0.02	0.02	0.10	0.11	0.11
Raf1	73	0.01	0.00	0.00	0.01	0.01
Raf1	74	0.01	0.04	0.16	0.16	0.16
Raf1	75	0.01	0.02	0.07	0.08	0.08
Raf1	76	0.01	0.08	0.34	0.34	0.34
Raf1	77	0.01	0.10	0.41	0.42	0.42
Raf1	78	0.02	0.10	0.39	0.40	0.40
Raf1	79	0.01	0.11	0.47	0.47	0.47
Raf1	80	0.01	0.08	0.35	0.35	0.35
Raf1	81	0.01	0.10	0.41	0.41	0.41
Raf1	82	0.01	0.10	0.41	0.41	0.41
Raf1	83	0.01	0.10	0.41	0.41	0.41
Raf1	84	0.01	0.10	0.41	0.41	0.41
Raf1	85	0.01	0.12	0.48	0.49	0.49
Raf1	86	0.01	0.12	0.48	0.49	0.49
Raf1	87	0.01	0.12	0.48	0.49	0.49
Raf1	88	0.02	0.11	0.46	0.47	0.47
Raf1	89	0.02	0.11	0.46	0.47	0.47
Raf1	90	0.02	0.11	0.46	0.47	0.47
Raf1	91	0.01	0.13	0.54	0.54	0.54
Raf1	92	0.01	0.13	0.54	0.54	0.54
Raf1	93	0.01	0.13	0.54	0.54	0.54
Raf1	94	0.01	0.10	0.42	0.42	0.42
Raf1	95	0.01	0.12	0.48	0.48	0.48
Raf1	96	0.01	0.10	0.42	0.42	0.42
Raf1	97	0.01	0.12	0.48	0.48	0.48
Raf1	98	0.01	0.10	0.42	0.42	0.42
Raf1	99	0.01	0.12	0.48	0.48	0.48
Raf2	1	0.01	0.13	0.54	0.54	0.54
Raf2	2	0.00	0.05	0.20	0.21	0.21
Raf2	3	0.01	0.15	0.62	0.62	0.62
Raf2	4	0.01	0.15	0.62	0.62	0.62

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	5	0.01	0.15	0.62	0.62	0.62
Raf2	6	0.01	0.11	0.45	0.46	0.46
Raf2	7	0.01	0.13	0.51	0.52	0.52
Raf2	8	0.01	0.13	0.51	0.52	0.52
Raf2	9	0.01	0.13	0.51	0.52	0.52
Raf2	10	0.01	0.03	0.11	0.11	0.11
Raf2	11	0.01	0.01	0.04	0.05	0.05
Raf2	12	0.01	0.03	0.11	0.11	0.11
Raf2	13	0.01	0.01	0.04	0.05	0.05
Raf2	14	0.01	0.03	0.09	0.09	0.09
Raf2	15	0.01	0.01	0.03	0.03	0.03
Raf2	16	0.02	0.01	0.04	0.05	0.05
Raf2	17	0.01	0.01	0.03	0.04	0.04
Raf2	18	0.02	0.10	0.39	0.39	0.39
Raf2	19	0.01	0.10	0.41	0.42	0.42
Raf2	20	0.01	0.08	0.31	0.31	0.31
Raf2	21	0.01	0.09	0.38	0.38	0.38
Raf2	22	0.02	0.12	0.45	0.45	0.45
Raf2	23	0.01	0.12	0.47	0.48	0.48
Raf2	24	0.01	0.09	0.37	0.37	0.37
Raf2	25	0.01	0.11	0.44	0.44	0.44
Raf2	26	0.02	0.12	0.45	0.45	0.45
Raf2	27	0.01	0.12	0.47	0.48	0.48
Raf2	28	0.01	0.09	0.37	0.37	0.37
Raf2	29	0.01	0.11	0.44	0.44	0.44
Raf2	30	0.02	0.12	0.45	0.45	0.45
Raf2	31	0.01	0.12	0.47	0.48	0.48
Raf2	32	0.01	0.09	0.37	0.37	0.37
Raf2	33	0.01	0.11	0.44	0.44	0.44
Raf2	34	0.01	0.04	0.14	0.15	0.15
Raf2	35	0.01	0.01	0.05	0.06	0.06
Raf2	36	0.01	0.04	0.14	0.15	0.15
Raf2	37	0.01	0.01	0.05	0.06	0.06
Raf2	38	0.01	0.03	0.12	0.12	0.12
Raf2	39	0.01	0.01	0.06	0.06	0.06
Raf2	40	0.02	0.02	0.07	0.08	0.08
Raf2	41	0.01	0.00	0.01	0.01	0.01
Raf2	42	0.02	0.06	0.23	0.24	0.24
Raf2	43	0.04	0.05	0.22	0.23	0.23
Raf2	44	0.01	0.12	0.47	0.48	0.48
Raf2	45	0.03	0.11	0.46	0.47	0.47
Raf2	46	0.02	0.06	0.22	0.23	0.23
Raf2	47	0.03	0.05	0.21	0.22	0.22
Raf2	48	0.03	0.01	0.05	0.06	0.06
Raf2	49	0.03	0.01	0.04	0.05	0.05
Raf2	50	0.01	0.19	0.74	0.74	0.74
Raf2	51	0.01	0.16	0.61	0.61	0.61
Raf2	52	0.01	0.14	0.49	0.49	0.49
Raf2	53	0.01	0.14	0.52	0.52	0.52
Raf2	54	0.02	0.15	0.54	0.54	0.54
Raf2	55	0.01	0.15	0.57	0.57	0.57
Raf2	56	0.01	0.16	0.62	0.62	0.62
Raf2	57	0.01	0.16	0.62	0.62	0.62
Raf2	58	0.01	0.16	0.63	0.63	0.63

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	59	0.03	0.16	0.61	0.63	0.63
Raf2	60	0.00	0.08	0.28	0.28	0.28
Raf2	61	0.00	0.07	0.26	0.26	0.26
Raf2	62	0.01	0.05	0.15	0.15	0.15
Raf2	63	0.01	0.05	0.18	0.18	0.18
Raf2	64	0.01	0.06	0.20	0.20	0.20
Raf2	65	0.01	0.06	0.22	0.23	0.23
Raf2	66	0.00	0.07	0.28	0.28	0.28
Raf2	67	0.00	0.07	0.28	0.28	0.28
Raf2	68	0.02	0.08	0.28	0.29	0.29
Raf2	69	0.03	0.07	0.27	0.28	0.28
Raf2	70	0.01	0.03	0.12	0.12	0.12
Raf2	71	0.01	0.01	0.06	0.06	0.06
Raf2	72	0.02	0.02	0.07	0.08	0.08
Raf2	73	0.01	0.00	0.01	0.01	0.01
Raf2	74	0.01	0.04	0.14	0.15	0.15
Raf2	75	0.01	0.01	0.05	0.06	0.06
Raf2	76	0.01	0.09	0.34	0.34	0.34
Raf2	77	0.01	0.09	0.37	0.37	0.37
Raf2	78	0.02	0.10	0.39	0.39	0.39
Raf2	79	0.01	0.10	0.41	0.42	0.42
Raf2	80	0.01	0.08	0.31	0.31	0.31
Raf2	81	0.01	0.09	0.38	0.38	0.38
Raf2	82	0.01	0.11	0.40	0.40	0.40
Raf2	83	0.01	0.11	0.40	0.40	0.40
Raf2	84	0.01	0.11	0.40	0.40	0.40
Raf2	85	0.01	0.11	0.43	0.43	0.43
Raf2	86	0.01	0.11	0.43	0.43	0.43
Raf2	87	0.01	0.11	0.43	0.43	0.43
Raf2	88	0.02	0.12	0.45	0.45	0.45
Raf2	89	0.02	0.12	0.45	0.45	0.45
Raf2	90	0.02	0.12	0.45	0.45	0.45
Raf2	91	0.01	0.12	0.47	0.48	0.48
Raf2	92	0.01	0.12	0.47	0.48	0.48
Raf2	93	0.01	0.12	0.47	0.48	0.48
Raf2	94	0.01	0.09	0.37	0.37	0.37
Raf2	95	0.01	0.11	0.44	0.44	0.44
Raf2	96	0.01	0.09	0.37	0.37	0.37
Raf2	97	0.01	0.11	0.44	0.44	0.44
Raf2	98	0.01	0.09	0.37	0.37	0.37
Raf2	99	0.01	0.11	0.44	0.44	0.44
Raf3	1	0.01	0.14	0.56	0.56	0.56
Raf3	2	0.00	0.05	0.21	0.21	0.21
Raf3	3	0.01	0.16	0.65	0.65	0.65
Raf3	4	0.01	0.16	0.65	0.65	0.65
Raf3	5	0.01	0.16	0.65	0.65	0.65
Raf3	6	0.01	0.11	0.47	0.48	0.48
Raf3	7	0.01	0.13	0.54	0.54	0.54
Raf3	8	0.01	0.13	0.54	0.54	0.54
Raf3	9	0.01	0.13	0.54	0.54	0.54
Raf3	10	0.01	0.01	0.05	0.06	0.06
Raf3	11	0.01	0.03	0.08	0.09	0.09
Raf3	12	0.01	0.01	0.05	0.06	0.06
Raf3	13	0.01	0.03	0.08	0.09	0.09

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf3	14	0.01	0.01	0.02	0.02	0.02
Raf3	15	0.01	0.01	0.05	0.05	0.05
Raf3	16	0.00	0.01	0.05	0.05	0.05
Raf3	17	0.01	0.01	0.05	0.05	0.05
Raf3	18	0.01	0.11	0.44	0.44	0.44
Raf3	19	0.01	0.11	0.44	0.44	0.44
Raf3	20	0.01	0.09	0.37	0.37	0.37
Raf3	21	0.01	0.09	0.36	0.36	0.36
Raf3	22	0.01	0.12	0.51	0.51	0.51
Raf3	23	0.01	0.12	0.50	0.51	0.51
Raf3	24	0.01	0.11	0.43	0.43	0.43
Raf3	25	0.01	0.11	0.42	0.42	0.42
Raf3	26	0.01	0.12	0.51	0.51	0.51
Raf3	27	0.01	0.12	0.50	0.51	0.51
Raf3	28	0.01	0.11	0.43	0.43	0.43
Raf3	29	0.01	0.11	0.42	0.42	0.42
Raf3	30	0.01	0.12	0.51	0.51	0.51
Raf3	31	0.01	0.12	0.50	0.51	0.51
Raf3	32	0.01	0.11	0.43	0.43	0.43
Raf3	33	0.01	0.11	0.42	0.42	0.42
Raf3	34	0.01	0.02	0.09	0.09	0.09
Raf3	35	0.01	0.03	0.11	0.11	0.11
Raf3	36	0.01	0.02	0.09	0.09	0.09
Raf3	37	0.01	0.03	0.11	0.11	0.11
Raf3	38	0.01	0.01	0.05	0.05	0.05
Raf3	39	0.01	0.02	0.07	0.08	0.08
Raf3	40	0.00	0.00	0.01	0.01	0.01
Raf3	41	0.01	0.00	0.03	0.03	0.03
Raf3	42	0.01	0.06	0.24	0.24	0.24
Raf3	43	0.01	0.06	0.23	0.24	0.24
Raf3	44	0.01	0.12	0.49	0.49	0.49
Raf3	45	0.01	0.12	0.49	0.49	0.49
Raf3	46	0.01	0.06	0.23	0.23	0.23
Raf3	47	0.01	0.06	0.23	0.23	0.23
Raf3	48	0.01	0.01	0.05	0.05	0.05
Raf3	49	0.01	0.01	0.04	0.05	0.05
Raf3	50	0.01	0.15	0.55	0.56	0.56
Raf3	51	0.01	0.12	0.47	0.47	0.47
Raf3	52	0.01	0.11	0.39	0.39	0.39
Raf3	53	0.01	0.10	0.39	0.39	0.39
Raf3	54	0.01	0.12	0.44	0.44	0.44
Raf3	55	0.01	0.11	0.43	0.44	0.44
Raf3	56	0.01	0.13	0.48	0.49	0.49
Raf3	57	0.01	0.13	0.48	0.49	0.49
Raf3	58	0.01	0.13	0.49	0.49	0.49
Raf3	59	0.01	0.13	0.48	0.49	0.49
Raf3	60	0.01	0.18	0.60	0.60	0.60
Raf3	61	0.01	0.15	0.50	0.50	0.50
Raf3	62	0.01	0.13	0.43	0.43	0.43
Raf3	63	0.01	0.13	0.42	0.42	0.42
Raf3	64	0.01	0.14	0.47	0.47	0.47
Raf3	65	0.01	0.14	0.47	0.47	0.47
Raf3	66	0.01	0.15	0.52	0.52	0.52
Raf3	67	0.01	0.15	0.52	0.52	0.52

	Customer	Elbert Rentals		**Job No**	22-8706
	Project	Building Expansion		**Date**	5/3/2022
	Location	Newberg, OR 97132		**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1		**Checked By**	

Raf3	68	0.01	0.15	0.52	0.52	0.52
Raf3	69	0.01	0.15	0.51	0.52	0.52
Raf3	70	0.01	0.01	0.05	0.05	0.05
Raf3	71	0.01	0.02	0.07	0.08	0.08
Raf3	72	0.00	0.00	0.01	0.01	0.01
Raf3	73	0.01	0.00	0.03	0.03	0.03
Raf3	74	0.01	0.02	0.09	0.09	0.09
Raf3	75	0.01	0.03	0.11	0.11	0.11
Raf3	76	0.01	0.10	0.40	0.40	0.40
Raf3	77	0.01	0.10	0.39	0.40	0.40
Raf3	78	0.01	0.11	0.44	0.44	0.44
Raf3	79	0.01	0.11	0.44	0.44	0.44
Raf3	80	0.01	0.09	0.37	0.37	0.37
Raf3	81	0.01	0.09	0.36	0.36	0.36
Raf3	82	0.01	0.11	0.46	0.46	0.46
Raf3	83	0.01	0.11	0.46	0.46	0.46
Raf3	84	0.01	0.11	0.46	0.46	0.46
Raf3	85	0.01	0.11	0.46	0.46	0.46
Raf3	86	0.01	0.11	0.46	0.46	0.46
Raf3	87	0.01	0.11	0.46	0.46	0.46
Raf3	88	0.01	0.12	0.51	0.51	0.51
Raf3	89	0.01	0.12	0.51	0.51	0.51
Raf3	90	0.01	0.12	0.51	0.51	0.51
Raf3	91	0.01	0.12	0.50	0.51	0.51
Raf3	92	0.01	0.12	0.50	0.51	0.51
Raf3	93	0.01	0.12	0.50	0.51	0.51
Raf3	94	0.01	0.11	0.43	0.43	0.43
Raf3	95	0.01	0.11	0.42	0.42	0.42
Raf3	96	0.01	0.11	0.43	0.43	0.43
Raf3	97	0.01	0.11	0.42	0.42	0.42
Raf3	98	0.01	0.11	0.43	0.43	0.43
Raf3	99	0.01	0.11	0.42	0.42	0.42
Raf4	1	0.01	0.15	0.60	0.61	0.61
Raf4	2	0.00	0.06	0.23	0.23	0.23
Raf4	3	0.01	0.17	0.70	0.70	0.70
Raf4	4	0.01	0.17	0.70	0.70	0.70
Raf4	5	0.01	0.17	0.70	0.70	0.70
Raf4	6	0.01	0.12	0.51	0.51	0.51
Raf4	7	0.01	0.14	0.58	0.58	0.58
Raf4	8	0.01	0.14	0.58	0.58	0.58
Raf4	9	0.01	0.14	0.58	0.58	0.58
Raf4	10	0.01	0.01	0.03	0.03	0.03
Raf4	11	0.01	0.03	0.12	0.12	0.12
Raf4	12	0.01	0.01	0.03	0.03	0.03
Raf4	13	0.01	0.03	0.12	0.12	0.12
Raf4	14	0.01	0.01	0.03	0.03	0.03
Raf4	15	0.01	0.03	0.13	0.13	0.13
Raf4	16	0.00	0.01	0.04	0.04	0.04
Raf4	17	0.02	0.01	0.06	0.06	0.06
Raf4	18	0.01	0.11	0.47	0.47	0.47
Raf4	19	0.02	0.10	0.39	0.40	0.40
Raf4	20	0.01	0.10	0.41	0.42	0.42
Raf4	21	0.01	0.08	0.35	0.35	0.35
Raf4	22	0.01	0.13	0.54	0.54	0.54

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf4	23	0.02	0.12	0.46	0.47	0.47
Raf4	24	0.01	0.12	0.48	0.48	0.48
Raf4	25	0.01	0.10	0.42	0.42	0.42
Raf4	26	0.01	0.13	0.54	0.54	0.54
Raf4	27	0.02	0.12	0.46	0.47	0.47
Raf4	28	0.01	0.12	0.48	0.48	0.48
Raf4	29	0.01	0.10	0.42	0.42	0.42
Raf4	30	0.01	0.13	0.54	0.54	0.54
Raf4	31	0.02	0.12	0.46	0.47	0.47
Raf4	32	0.01	0.12	0.48	0.48	0.48
Raf4	33	0.01	0.10	0.42	0.42	0.42
Raf4	34	0.01	0.02	0.07	0.07	0.07
Raf4	35	0.01	0.04	0.15	0.16	0.16
Raf4	36	0.01	0.02	0.07	0.07	0.07
Raf4	37	0.01	0.04	0.15	0.16	0.16
Raf4	38	0.01	0.02	0.07	0.07	0.07
Raf4	39	0.01	0.04	0.17	0.17	0.17
Raf4	40	0.00	0.00	0.00	0.01	0.01
Raf4	41	0.02	0.02	0.10	0.10	0.10
Raf4	42	0.02	0.06	0.25	0.26	0.26
Raf4	43	0.02	0.06	0.26	0.26	0.26
Raf4	44	0.02	0.13	0.52	0.53	0.53
Raf4	45	0.01	0.13	0.53	0.54	0.54
Raf4	46	0.02	0.06	0.24	0.25	0.25
Raf4	47	0.02	0.06	0.25	0.26	0.26
Raf4	48	0.02	0.01	0.04	0.06	0.06
Raf4	49	0.03	0.01	0.05	0.06	0.06
Raf4	50	0.01	0.09	0.38	0.39	0.39
Raf4	51	0.01	0.08	0.35	0.35	0.35
Raf4	52	0.01	0.06	0.25	0.25	0.25
Raf4	53	0.01	0.04	0.18	0.18	0.18
Raf4	54	0.01	0.07	0.30	0.31	0.31
Raf4	55	0.02	0.05	0.23	0.24	0.24
Raf4	56	0.01	0.09	0.36	0.36	0.36
Raf4	57	0.01	0.09	0.36	0.36	0.36
Raf4	58	0.02	0.08	0.36	0.37	0.37
Raf4	59	0.02	0.09	0.37	0.37	0.37
Raf4	60	0.01	0.17	0.70	0.71	0.71
Raf4	61	0.01	0.14	0.58	0.58	0.58
Raf4	62	0.01	0.12	0.49	0.49	0.49
Raf4	63	0.01	0.12	0.47	0.47	0.47
Raf4	64	0.01	0.13	0.54	0.54	0.54
Raf4	65	0.02	0.13	0.52	0.52	0.52
Raf4	66	0.01	0.15	0.59	0.59	0.59
Raf4	67	0.01	0.15	0.59	0.59	0.59
Raf4	68	0.02	0.14	0.59	0.59	0.59
Raf4	69	0.02	0.15	0.60	0.60	0.60
Raf4	70	0.01	0.02	0.07	0.07	0.07
Raf4	71	0.01	0.04	0.17	0.17	0.17
Raf4	72	0.00	0.00	0.00	0.01	0.01
Raf4	73	0.02	0.02	0.10	0.10	0.10
Raf4	74	0.01	0.02	0.07	0.07	0.07
Raf4	75	0.01	0.04	0.15	0.16	0.16
Raf4	76	0.01	0.10	0.42	0.42	0.42

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf4	77	0.01	0.09	0.34	0.35	0.35
Raf4	78	0.01	0.11	0.47	0.47	0.47
Raf4	79	0.02	0.10	0.39	0.40	0.40
Raf4	80	0.01	0.10	0.41	0.42	0.42
Raf4	81	0.01	0.08	0.35	0.35	0.35
Raf4	82	0.01	0.12	0.49	0.49	0.49
Raf4	83	0.01	0.12	0.49	0.49	0.49
Raf4	84	0.01	0.12	0.49	0.49	0.49
Raf4	85	0.01	0.10	0.41	0.42	0.42
Raf4	86	0.01	0.10	0.41	0.42	0.42
Raf4	87	0.01	0.10	0.41	0.42	0.42
Raf4	88	0.01	0.13	0.54	0.54	0.54
Raf4	89	0.01	0.13	0.54	0.54	0.54
Raf4	90	0.01	0.13	0.54	0.54	0.54
Raf4	91	0.02	0.12	0.46	0.47	0.47
Raf4	92	0.02	0.12	0.46	0.47	0.47
Raf4	93	0.02	0.12	0.46	0.47	0.47
Raf4	94	0.01	0.12	0.48	0.48	0.48
Raf4	95	0.01	0.10	0.42	0.42	0.42
Raf4	96	0.01	0.12	0.48	0.48	0.48
Raf4	97	0.01	0.10	0.42	0.42	0.42
Raf4	98	0.01	0.12	0.48	0.48	0.48
Raf4	99	0.01	0.10	0.42	0.42	0.42

COLUMN REACTIONS:

Id	Load Id	Vert(k)	In_Plane Horz(k)	--Out_Plane_Horz-- Base(k)	Roof(k)
Col1	1	3.88	0.00	0.00	0.00
Col1	2	1.56	0.00	0.00	0.00
Col1	3	4.46	0.00	0.00	0.00
Col1	4	4.46	0.00	0.00	0.00
Col1	5	4.46	0.00	0.00	0.00
Col1	6	3.30	0.00	0.00	0.00
Col1	7	3.73	0.00	0.00	0.00
Col1	8	3.73	0.00	0.00	0.00
Col1	9	3.73	0.00	0.00	0.00
Col1	10	-0.67	0.00	-0.95	-0.95
Col1	11	-0.10	0.00	-0.95	-0.95
Col1	12	-0.67	0.00	1.01	1.01
Col1	13	-0.10	0.00	1.01	1.01
Col1	14	-0.53	0.00	1.01	1.01
Col1	15	-0.14	0.00	1.01	1.01
Col1	16	-0.03	0.00	1.01	1.01
Col1	17	0.36	0.00	1.01	1.01
Col1	18	2.72	0.00	0.76	0.76
Col1	19	3.01	0.00	0.76	0.76
Col1	20	2.24	0.00	0.76	0.76
Col1	21	2.67	0.00	0.76	0.76
Col1	22	3.15	0.00	0.76	0.76
Col1	23	3.44	0.00	0.76	0.76
Col1	24	2.68	0.00	0.76	0.76

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	25	3.10	0.00	0.76	0.76
Col1	26	3.15	0.00	0.76	0.76
Col1	27	3.44	0.00	0.76	0.76
Col1	28	2.68	0.00	0.76	0.76
Col1	29	3.10	0.00	0.76	0.76
Col1	30	3.15	0.00	0.76	0.76
Col1	31	3.44	0.00	0.76	0.76
Col1	32	2.68	0.00	0.76	0.76
Col1	33	3.10	0.00	0.76	0.76
Col1	34	-0.96	0.00	-0.95	-0.95
Col1	35	-0.40	0.00	-0.95	-0.95
Col1	36	-0.96	0.00	1.01	1.01
Col1	37	-0.40	0.00	1.01	1.01
Col1	38	-0.82	0.00	1.01	1.01
Col1	39	-0.44	0.00	1.01	1.01
Col1	40	-0.33	0.00	1.01	1.01
Col1	41	0.06	0.00	1.01	1.01
Col1	42	1.75	0.00	0.00	0.00
Col1	43	1.68	0.00	0.00	0.00
Col1	44	3.43	0.00	0.00	0.00
Col1	45	3.38	0.00	0.00	0.00
Col1	46	1.69	0.00	0.00	0.00
Col1	47	1.64	0.00	0.00	0.00
Col1	48	0.41	0.00	0.00	0.00
Col1	49	0.34	0.00	0.00	0.00
Col1	50	4.51	0.00	0.00	0.00
Col1	51	3.77	0.00	0.00	0.00
Col1	52	2.82	0.00	0.76	0.76
Col1	53	3.11	0.00	0.76	0.76
Col1	54	3.19	0.00	0.76	0.76
Col1	55	3.48	0.00	0.76	0.76
Col1	56	3.88	0.00	0.00	0.00
Col1	57	3.88	0.00	0.00	0.00
Col1	58	3.91	0.00	0.00	0.00
Col1	59	3.86	0.00	0.00	0.00
Col1	60	2.41	0.00	0.00	0.00
Col1	61	2.20	0.00	0.00	0.00
Col1	62	1.24	0.00	0.76	0.76
Col1	63	1.53	0.00	0.76	0.76
Col1	64	1.61	0.00	0.76	0.76
Col1	65	1.91	0.00	0.76	0.76
Col1	66	2.31	0.00	0.00	0.00
Col1	67	2.31	0.00	0.00	0.00
Col1	68	2.33	0.00	0.00	0.00
Col1	69	2.28	0.00	0.00	0.00
Col1	70	-0.82	0.00	0.00	0.00
Col1	71	-0.44	0.00	0.00	0.00
Col1	72	-0.33	0.00	0.00	0.00
Col1	73	0.06	0.00	0.00	0.00
Col1	74	-0.96	0.00	0.00	0.00
Col1	75	-0.40	0.00	0.00	0.00
Col1	76	2.35	0.00	0.00	0.00
Col1	77	2.63	0.00	0.00	0.00
Col1	78	2.72	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	79	3.01	0.00	0.00	0.00
Col1	80	2.24	0.00	0.00	0.00
Col1	81	2.67	0.00	0.00	0.00
Col1	82	2.78	0.00	0.00	0.00
Col1	83	2.78	0.00	0.00	0.00
Col1	84	2.78	0.00	0.00	0.00
Col1	85	3.07	0.00	0.00	0.00
Col1	86	3.07	0.00	0.00	0.00
Col1	87	3.07	0.00	0.00	0.00
Col1	88	3.15	0.00	0.00	0.00
Col1	89	3.15	0.00	0.00	0.00
Col1	90	3.15	0.00	0.00	0.00
Col1	91	3.44	0.00	0.00	0.00
Col1	92	3.44	0.00	0.00	0.00
Col1	93	3.44	0.00	0.00	0.00
Col1	94	2.68	0.00	0.00	0.00
Col1	95	3.10	0.00	0.00	0.00
Col1	96	2.68	0.00	0.00	0.00
Col1	97	3.10	0.00	0.00	0.00
Col1	98	2.68	0.00	0.00	0.00
Col1	99	3.10	0.00	0.00	0.00
Col2	1	10.76	0.00	0.00	0.00
Col2	2	4.19	0.00	0.00	0.00
Col2	3	12.40	0.00	0.00	0.00
Col2	4	12.40	0.00	0.00	0.00
Col2	5	12.40	0.00	0.00	0.00
Col2	6	9.12	0.00	0.00	0.00
Col2	7	10.35	0.00	0.00	0.00
Col2	8	10.35	0.00	0.00	0.00
Col2	9	10.35	0.00	0.00	0.00
Col2	10	-1.77	0.00	-1.33	-1.33
Col2	11	-0.55	0.21	-1.33	-1.33
Col2	12	-1.77	0.00	1.38	1.38
Col2	13	-0.55	0.21	1.38	1.38
Col2	14	-2.66	0.78	1.38	1.38
Col2	15	0.40	0.00	1.38	1.38
Col2	16	-1.42	0.77	1.38	1.38
Col2	17	1.63	0.00	1.38	1.38
Col2	18	6.64	0.58	1.04	1.04
Col2	19	8.93	0.00	1.04	1.04
Col2	20	6.38	0.00	1.04	1.04
Col2	21	7.29	0.16	1.04	1.04
Col2	22	7.87	0.58	1.04	1.04
Col2	23	10.16	0.00	1.04	1.04
Col2	24	7.61	0.00	1.04	1.04
Col2	25	8.52	0.16	1.04	1.04
Col2	26	7.87	0.58	1.04	1.04
Col2	27	10.16	0.00	1.04	1.04
Col2	28	7.61	0.00	1.04	1.04
Col2	29	8.52	0.16	1.04	1.04
Col2	30	7.87	0.58	1.04	1.04
Col2	31	10.16	0.00	1.04	1.04
Col2	32	7.61	0.00	1.04	1.04
Col2	33	8.52	0.16	1.04	1.04

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col2	34	-2.53	0.00	-1.33	-1.33
Col2	35	-1.31	0.21	-1.33	-1.33
Col2	36	-2.53	0.00	1.38	1.38
Col2	37	-1.31	0.21	1.38	1.38
Col2	38	-3.42	0.78	1.38	1.38
Col2	39	-0.36	0.00	1.38	1.38
Col2	40	-2.17	0.77	1.38	1.38
Col2	41	0.88	0.00	1.38	1.38
Col2	42	2.30	2.91	0.00	0.00
Col2	43	7.21	0.00	0.00	0.00
Col2	44	7.66	2.20	0.00	0.00
Col2	45	11.38	0.00	0.00	0.00
Col2	46	2.73	2.20	0.00	0.00
Col2	47	6.45	0.00	0.00	0.00
Col2	48	-1.37	2.91	0.00	0.00
Col2	49	3.54	0.00	0.00	0.00
Col2	50	12.11	0.00	0.00	0.00
Col2	51	10.13	0.00	0.00	0.00
Col2	52	6.72	0.59	1.04	1.04
Col2	53	9.03	0.00	1.04	1.04
Col2	54	7.66	0.58	1.04	1.04
Col2	55	9.96	0.00	1.04	1.04
Col2	56	10.43	0.00	0.00	0.00
Col2	57	10.43	0.00	0.00	0.00
Col2	58	8.71	2.16	0.00	0.00
Col2	59	12.37	0.00	0.00	0.00
Col2	60	6.76	0.00	0.00	0.00
Col2	61	6.12	0.00	0.00	0.00
Col2	62	2.70	0.58	1.04	1.04
Col2	63	5.00	0.00	1.04	1.04
Col2	64	3.64	0.58	1.04	1.04
Col2	65	5.93	0.00	1.04	1.04
Col2	66	6.41	0.00	0.00	0.00
Col2	67	6.41	0.00	0.00	0.00
Col2	68	4.69	2.16	0.00	0.00
Col2	69	8.34	0.00	0.00	0.00
Col2	70	-3.42	0.78	0.00	0.00
Col2	71	-0.36	0.00	0.00	0.00
Col2	72	-2.17	0.77	0.00	0.00
Col2	73	0.88	0.00	0.00	0.00
Col2	74	-2.53	0.00	0.00	0.00
Col2	75	-1.31	0.21	0.00	0.00
Col2	76	5.70	0.58	0.00	0.00
Col2	77	8.00	0.00	0.00	0.00
Col2	78	6.64	0.58	0.00	0.00
Col2	79	8.93	0.00	0.00	0.00
Col2	80	6.38	0.00	0.00	0.00
Col2	81	7.29	0.16	0.00	0.00
Col2	82	6.94	0.58	0.00	0.00
Col2	83	6.94	0.58	0.00	0.00
Col2	84	6.94	0.58	0.00	0.00
Col2	85	9.24	0.00	0.00	0.00
Col2	86	9.24	0.00	0.00	0.00
Col2	87	9.24	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col2	88	7.87	0.58	0.00	0.00
Col2	89	7.87	0.58	0.00	0.00
Col2	90	7.87	0.58	0.00	0.00
Col2	91	10.16	0.00	0.00	0.00
Col2	92	10.16	0.00	0.00	0.00
Col2	93	10.16	0.00	0.00	0.00
Col2	94	7.61	0.00	0.00	0.00
Col2	95	8.52	0.16	0.00	0.00
Col2	96	7.61	0.00	0.00	0.00
Col2	97	8.52	0.16	0.00	0.00
Col2	98	7.61	0.00	0.00	0.00
Col2	99	8.52	0.16	0.00	0.00
Col3	1	10.06	0.00	0.00	0.00
Col3	2	3.94	0.00	0.00	0.00
Col3	3	11.60	0.00	0.00	0.00
Col3	4	11.60	0.00	0.00	0.00
Col3	5	11.60	0.00	0.00	0.00
Col3	6	8.53	0.00	0.00	0.00
Col3	7	9.68	0.00	0.00	0.00
Col3	8	9.68	0.00	0.00	0.00
Col3	9	9.68	0.00	0.00	0.00
Col3	10	-1.93	0.15	-1.56	-1.56
Col3	11	-0.02	0.00	-1.56	-1.56
Col3	12	-1.93	0.15	1.63	1.63
Col3	13	-0.02	0.00	1.63	1.63
Col3	14	-0.31	0.00	1.63	1.63
Col3	15	-0.96	0.81	1.63	1.63
Col3	16	0.81	0.00	1.63	1.63
Col3	17	0.16	0.80	1.63	1.63
Col3	18	7.80	0.00	1.22	1.22
Col3	19	7.32	0.60	1.22	1.22
Col3	20	5.74	0.11	1.22	1.22
Col3	21	7.19	0.00	1.22	1.22
Col3	22	8.95	0.00	1.22	1.22
Col3	23	8.47	0.60	1.22	1.22
Col3	24	6.89	0.11	1.22	1.22
Col3	25	8.34	0.00	1.22	1.22
Col3	26	8.95	0.00	1.22	1.22
Col3	27	8.47	0.60	1.22	1.22
Col3	28	6.89	0.11	1.22	1.22
Col3	29	8.34	0.00	1.22	1.22
Col3	30	8.95	0.00	1.22	1.22
Col3	31	8.47	0.60	1.22	1.22
Col3	32	6.89	0.11	1.22	1.22
Col3	33	8.34	0.00	1.22	1.22
Col3	34	-2.65	0.15	-1.56	-1.56
Col3	35	-0.73	0.00	-1.56	-1.56
Col3	36	-2.65	0.15	1.63	1.63
Col3	37	-0.73	0.00	1.63	1.63
Col3	38	-1.03	0.00	1.63	1.63
Col3	39	-1.68	0.81	1.63	1.63
Col3	40	0.10	0.00	1.63	1.63
Col3	41	-0.55	0.80	1.63	1.63
Col3	42	6.55	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	43	1.83	2.91	0.00	0.00
Col3	44	10.49	0.00	0.00	0.00
Col3	45	6.91	2.20	0.00	0.00
Col3	46	5.89	0.00	0.00	0.00
Col3	47	2.32	2.20	0.00	0.00
Col3	48	3.11	0.00	0.00	0.00
Col3	49	-1.61	2.91	0.00	0.00
Col3	50	13.54	0.00	0.00	0.00
Col3	51	11.14	0.00	0.00	0.00
Col3	52	9.56	0.00	1.22	1.22
Col3	53	9.07	0.60	1.22	1.22
Col3	54	10.41	0.00	1.22	1.22
Col3	55	9.91	0.60	1.22	1.22
Col3	56	11.41	0.00	0.00	0.00
Col3	57	11.41	0.00	0.00	0.00
Col3	58	13.06	0.00	0.00	0.00
Col3	59	9.54	2.16	0.00	0.00
Col3	60	5.82	0.00	0.00	0.00
Col3	61	5.35	0.00	0.00	0.00
Col3	62	3.77	0.00	1.22	1.22
Col3	63	3.29	0.60	1.22	1.22
Col3	64	4.61	0.00	1.22	1.22
Col3	65	4.13	0.60	1.22	1.22
Col3	66	5.62	0.00	0.00	0.00
Col3	67	5.62	0.00	0.00	0.00
Col3	68	7.27	0.00	0.00	0.00
Col3	69	3.76	2.16	0.00	0.00
Col3	70	-1.03	0.00	0.00	0.00
Col3	71	-1.68	0.81	0.00	0.00
Col3	72	0.10	0.00	0.00	0.00
Col3	73	-0.55	0.80	0.00	0.00
Col3	74	-2.65	0.15	0.00	0.00
Col3	75	-0.73	0.00	0.00	0.00
Col3	76	6.96	0.00	0.00	0.00
Col3	77	6.47	0.60	0.00	0.00
Col3	78	7.80	0.00	0.00	0.00
Col3	79	7.32	0.60	0.00	0.00
Col3	80	5.74	0.11	0.00	0.00
Col3	81	7.19	0.00	0.00	0.00
Col3	82	8.11	0.00	0.00	0.00
Col3	83	8.11	0.00	0.00	0.00
Col3	84	8.11	0.00	0.00	0.00
Col3	85	7.62	0.60	0.00	0.00
Col3	86	7.62	0.60	0.00	0.00
Col3	87	7.62	0.60	0.00	0.00
Col3	88	8.95	0.00	0.00	0.00
Col3	89	8.95	0.00	0.00	0.00
Col3	90	8.95	0.00	0.00	0.00
Col3	91	8.47	0.60	0.00	0.00
Col3	92	8.47	0.60	0.00	0.00
Col3	93	8.47	0.60	0.00	0.00
Col3	94	6.89	0.11	0.00	0.00
Col3	95	8.34	0.00	0.00	0.00
Col3	96	6.89	0.11	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	97	8.34	0.00	0.00	0.00
Col3	98	6.89	0.11	0.00	0.00
Col3	99	8.34	0.00	0.00	0.00
Col4	1	10.33	0.00	0.00	0.00
Col4	2	4.04	0.00	0.00	0.00
Col4	3	11.90	0.00	0.00	0.00
Col4	4	11.90	0.00	0.00	0.00
Col4	5	11.90	0.00	0.00	0.00
Col4	6	8.76	0.00	0.00	0.00
Col4	7	9.93	0.00	0.00	0.00
Col4	8	9.93	0.00	0.00	0.00
Col4	9	9.93	0.00	0.00	0.00
Col4	10	-0.58	0.00	-1.67	-1.67
Col4	11	-1.08	0.00	-1.67	-1.67
Col4	12	-0.58	0.00	1.74	1.74
Col4	13	-1.08	0.00	1.74	1.74
Col4	14	-0.07	0.00	1.74	1.74
Col4	15	-0.11	0.00	1.74	1.74
Col4	16	0.97	0.00	1.74	1.74
Col4	17	0.92	0.00	1.74	1.74
Col4	18	8.11	0.00	1.30	1.30
Col4	19	8.07	0.00	1.30	1.30
Col4	20	6.94	0.00	1.30	1.30
Col4	21	6.57	0.00	1.30	1.30
Col4	22	9.28	0.00	1.30	1.30
Col4	23	9.24	0.00	1.30	1.30
Col4	24	8.12	0.00	1.30	1.30
Col4	25	7.74	0.00	1.30	1.30
Col4	26	9.28	0.00	1.30	1.30
Col4	27	9.24	0.00	1.30	1.30
Col4	28	8.12	0.00	1.30	1.30
Col4	29	7.74	0.00	1.30	1.30
Col4	30	9.28	0.00	1.30	1.30
Col4	31	9.24	0.00	1.30	1.30
Col4	32	8.12	0.00	1.30	1.30
Col4	33	7.74	0.00	1.30	1.30
Col4	34	-1.31	0.00	-1.67	-1.67
Col4	35	-1.82	0.00	-1.67	-1.67
Col4	36	-1.31	0.00	1.74	1.74
Col4	37	-1.82	0.00	1.74	1.74
Col4	38	-0.80	0.00	1.74	1.74
Col4	39	-0.85	0.00	1.74	1.74
Col4	40	0.23	0.00	1.74	1.74
Col4	41	0.18	0.00	1.74	1.74
Col4	42	4.53	0.00	0.00	0.00
Col4	43	4.37	0.00	0.00	0.00
Col4	44	9.10	0.00	0.00	0.00
Col4	45	8.98	0.00	0.00	0.00
Col4	46	4.39	0.00	0.00	0.00
Col4	47	4.27	0.00	0.00	0.00
Col4	48	1.00	0.00	0.00	0.00
Col4	49	0.84	0.00	0.00	0.00
Col4	50	9.24	0.00	0.00	0.00
Col4	51	7.94	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col4	52	6.52	0.00	1.30	1.30
Col4	53	6.48	0.00	1.30	1.30
Col4	54	7.29	0.00	1.30	1.30
Col4	55	7.25	0.00	1.30	1.30
Col4	56	8.23	0.00	0.00	0.00
Col4	57	8.23	0.00	0.00	0.00
Col4	58	8.28	0.00	0.00	0.00
Col4	59	8.17	0.00	0.00	0.00
Col4	60	11.77	0.00	0.00	0.00
Col4	61	9.84	0.00	0.00	0.00
Col4	62	8.41	0.00	1.30	1.30
Col4	63	8.38	0.00	1.30	1.30
Col4	64	9.19	0.00	1.30	1.30
Col4	65	9.15	0.00	1.30	1.30
Col4	66	10.12	0.00	0.00	0.00
Col4	67	10.12	0.00	0.00	0.00
Col4	68	10.18	0.00	0.00	0.00
Col4	69	10.07	0.00	0.00	0.00
Col4	70	-0.80	0.00	0.00	0.00
Col4	71	-0.85	0.00	0.00	0.00
Col4	72	0.23	0.00	0.00	0.00
Col4	73	0.18	0.00	0.00	0.00
Col4	74	-1.31	0.00	0.00	0.00
Col4	75	-1.82	0.00	0.00	0.00
Col4	76	7.33	0.00	0.00	0.00
Col4	77	7.30	0.00	0.00	0.00
Col4	78	8.11	0.00	0.00	0.00
Col4	79	8.07	0.00	0.00	0.00
Col4	80	6.94	0.00	0.00	0.00
Col4	81	6.57	0.00	0.00	0.00
Col4	82	8.51	0.00	0.00	0.00
Col4	83	8.51	0.00	0.00	0.00
Col4	84	8.51	0.00	0.00	0.00
Col4	85	8.47	0.00	0.00	0.00
Col4	86	8.47	0.00	0.00	0.00
Col4	87	8.47	0.00	0.00	0.00
Col4	88	9.28	0.00	0.00	0.00
Col4	89	9.28	0.00	0.00	0.00
Col4	90	9.28	0.00	0.00	0.00
Col4	91	9.24	0.00	0.00	0.00
Col4	92	9.24	0.00	0.00	0.00
Col4	93	9.24	0.00	0.00	0.00
Col4	94	8.12	0.00	0.00	0.00
Col4	95	7.74	0.00	0.00	0.00
Col4	96	8.12	0.00	0.00	0.00
Col4	97	7.74	0.00	0.00	0.00
Col4	98	8.12	0.00	0.00	0.00
Col4	99	7.74	0.00	0.00	0.00
Col5	1	10.04	0.00	0.00	0.00
Col5	2	3.92	0.00	0.00	0.00
Col5	3	11.57	0.00	0.00	0.00
Col5	4	11.57	0.00	0.00	0.00
Col5	5	11.57	0.00	0.00	0.00
Col5	6	8.51	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	7	9.66	0.00	0.00	0.00
Col5	8	9.66	0.00	0.00	0.00
Col5	9	9.66	0.00	0.00	0.00
Col5	10	-0.13	0.00	-1.51	-1.51
Col5	11	-2.05	0.21	-1.51	-1.51
Col5	12	-0.13	0.00	1.57	1.57
Col5	13	-2.05	0.21	1.57	1.57
Col5	14	-0.96	0.78	1.57	1.57
Col5	15	-0.22	0.00	1.57	1.57
Col5	16	0.21	0.77	1.57	1.57
Col5	17	0.95	0.00	1.57	1.57
Col5	18	7.34	0.58	1.18	1.18
Col5	19	7.89	0.00	1.18	1.18
Col5	20	7.09	0.00	1.18	1.18
Col5	21	5.64	0.16	1.18	1.18
Col5	22	8.49	0.58	1.18	1.18
Col5	23	9.04	0.00	1.18	1.18
Col5	24	8.24	0.00	1.18	1.18
Col5	25	6.79	0.16	1.18	1.18
Col5	26	8.49	0.58	1.18	1.18
Col5	27	9.04	0.00	1.18	1.18
Col5	28	8.24	0.00	1.18	1.18
Col5	29	6.79	0.16	1.18	1.18
Col5	30	8.49	0.58	1.18	1.18
Col5	31	9.04	0.00	1.18	1.18
Col5	32	8.24	0.00	1.18	1.18
Col5	33	6.79	0.16	1.18	1.18
Col5	34	-0.84	0.00	-1.51	-1.51
Col5	35	-2.76	0.21	-1.51	-1.51
Col5	36	-0.84	0.00	1.57	1.57
Col5	37	-2.76	0.21	1.57	1.57
Col5	38	-1.67	0.78	1.57	1.57
Col5	39	-0.93	0.00	1.57	1.57
Col5	40	-0.50	0.77	1.57	1.57
Col5	41	0.24	0.00	1.57	1.57
Col5	42	1.91	2.91	0.00	0.00
Col5	43	6.52	0.00	0.00	0.00
Col5	44	6.96	2.20	0.00	0.00
Col5	45	10.46	0.00	0.00	0.00
Col5	46	2.38	2.20	0.00	0.00
Col5	47	5.87	0.00	0.00	0.00
Col5	48	-1.52	2.91	0.00	0.00
Col5	49	3.09	0.00	0.00	0.00
Col5	50	5.70	0.00	0.00	0.00
Col5	51	5.26	0.00	0.00	0.00
Col5	52	3.21	0.59	1.18	1.18
Col5	53	3.78	0.00	1.18	1.18
Col5	54	4.09	0.58	1.18	1.18
Col5	55	4.65	0.00	1.18	1.18
Col5	56	5.53	0.00	0.00	0.00
Col5	57	5.53	0.00	0.00	0.00
Col5	58	3.74	2.16	0.00	0.00
Col5	59	7.18	0.00	0.00	0.00
Col5	60	12.46	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	61	10.33	0.00	0.00	0.00
Col5	62	8.28	0.58	1.18	1.18
Col5	63	8.83	0.00	1.18	1.18
Col5	64	9.15	0.58	1.18	1.18
Col5	65	9.70	0.00	1.18	1.18
Col5	66	10.60	0.00	0.00	0.00
Col5	67	10.60	0.00	0.00	0.00
Col5	68	8.81	2.16	0.00	0.00
Col5	69	12.24	0.00	0.00	0.00
Col5	70	-1.67	0.78	0.00	0.00
Col5	71	-0.93	0.00	0.00	0.00
Col5	72	-0.50	0.77	0.00	0.00
Col5	73	0.24	0.00	0.00	0.00
Col5	74	-0.84	0.00	0.00	0.00
Col5	75	-2.76	0.21	0.00	0.00
Col5	76	6.46	0.58	0.00	0.00
Col5	77	7.02	0.00	0.00	0.00
Col5	78	7.34	0.58	0.00	0.00
Col5	79	7.89	0.00	0.00	0.00
Col5	80	7.09	0.00	0.00	0.00
Col5	81	5.64	0.16	0.00	0.00
Col5	82	7.61	0.58	0.00	0.00
Col5	83	7.61	0.58	0.00	0.00
Col5	84	7.61	0.58	0.00	0.00
Col5	85	8.17	0.00	0.00	0.00
Col5	86	8.17	0.00	0.00	0.00
Col5	87	8.17	0.00	0.00	0.00
Col5	88	8.49	0.58	0.00	0.00
Col5	89	8.49	0.58	0.00	0.00
Col5	90	8.49	0.58	0.00	0.00
Col5	91	9.04	0.00	0.00	0.00
Col5	92	9.04	0.00	0.00	0.00
Col5	93	9.04	0.00	0.00	0.00
Col5	94	8.24	0.00	0.00	0.00
Col5	95	6.79	0.16	0.00	0.00
Col5	96	8.24	0.00	0.00	0.00
Col5	97	6.79	0.16	0.00	0.00
Col5	98	8.24	0.00	0.00	0.00
Col5	99	6.79	0.16	0.00	0.00
Col6	1	10.76	0.00	0.00	0.00
Col6	2	4.19	0.00	0.00	0.00
Col6	3	12.40	0.00	0.00	0.00
Col6	4	12.40	0.00	0.00	0.00
Col6	5	12.40	0.00	0.00	0.00
Col6	6	9.12	0.00	0.00	0.00
Col6	7	10.35	0.00	0.00	0.00
Col6	8	10.35	0.00	0.00	0.00
Col6	9	10.35	0.00	0.00	0.00
Col6	10	-0.49	0.15	-1.27	-1.27
Col6	11	-1.72	0.00	-1.27	-1.27
Col6	12	-0.49	0.15	1.32	1.32
Col6	13	-1.72	0.00	1.32	1.32
Col6	14	0.33	0.00	1.32	1.32
Col6	15	-2.65	0.81	1.32	1.32

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col6	16	1.56	0.00	1.32	1.32
Col6	17	-1.41	0.80	1.32	1.32
Col6	18	8.88	0.00	0.99	0.99
Col6	19	6.65	0.60	0.99	0.99
Col6	20	7.34	0.11	0.99	0.99
Col6	21	6.42	0.00	0.99	0.99
Col6	22	10.11	0.00	0.99	0.99
Col6	23	7.88	0.60	0.99	0.99
Col6	24	8.57	0.11	0.99	0.99
Col6	25	7.65	0.00	0.99	0.99
Col6	26	10.11	0.00	0.99	0.99
Col6	27	7.88	0.60	0.99	0.99
Col6	28	8.57	0.11	0.99	0.99
Col6	29	7.65	0.00	0.99	0.99
Col6	30	10.11	0.00	0.99	0.99
Col6	31	7.88	0.60	0.99	0.99
Col6	32	8.57	0.11	0.99	0.99
Col6	33	7.65	0.00	0.99	0.99
Col6	34	-1.24	0.15	-1.27	-1.27
Col6	35	-2.47	0.00	-1.27	-1.27
Col6	36	-1.24	0.15	1.32	1.32
Col6	37	-2.47	0.00	1.32	1.32
Col6	38	-0.42	0.00	1.32	1.32
Col6	39	-3.40	0.81	1.32	1.32
Col6	40	0.80	0.00	1.32	1.32
Col6	41	-2.16	0.80	1.32	1.32
Col6	42	7.03	0.00	0.00	0.00
Col6	43	2.38	2.91	0.00	0.00
Col6	44	11.24	0.00	0.00	0.00
Col6	45	7.72	2.20	0.00	0.00
Col6	46	6.32	0.00	0.00	0.00
Col6	47	2.80	2.20	0.00	0.00
Col6	48	3.36	0.00	0.00	0.00
Col6	49	-1.28	2.91	0.00	0.00
Col6	50	6.80	0.00	0.00	0.00
Col6	51	6.15	0.00	0.00	0.00
Col6	52	4.99	0.00	0.99	0.99
Col6	53	2.74	0.60	0.99	0.99
Col6	54	5.91	0.00	0.99	0.99
Col6	55	3.67	0.60	0.99	0.99
Col6	56	6.44	0.00	0.00	0.00
Col6	57	6.44	0.00	0.00	0.00
Col6	58	8.24	0.00	0.00	0.00
Col6	59	4.78	2.16	0.00	0.00
Col6	60	12.19	0.00	0.00	0.00
Col6	61	10.19	0.00	0.00	0.00
Col6	62	9.03	0.00	0.99	0.99
Col6	63	6.80	0.60	0.99	0.99
Col6	64	9.95	0.00	0.99	0.99
Col6	65	7.72	0.60	0.99	0.99
Col6	66	10.48	0.00	0.00	0.00
Col6	67	10.48	0.00	0.00	0.00
Col6	68	12.28	0.00	0.00	0.00
Col6	69	8.83	2.16	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col6	70	-0.42	0.00	0.00	0.00
Col6	71	-3.40	0.81	0.00	0.00
Col6	72	0.80	0.00	0.00	0.00
Col6	73	-2.16	0.80	0.00	0.00
Col6	74	-1.24	0.15	0.00	0.00
Col6	75	-2.47	0.00	0.00	0.00
Col6	76	7.96	0.00	0.00	0.00
Col6	77	5.72	0.60	0.00	0.00
Col6	78	8.88	0.00	0.00	0.00
Col6	79	6.65	0.60	0.00	0.00
Col6	80	7.34	0.11	0.00	0.00
Col6	81	6.42	0.00	0.00	0.00
Col6	82	9.19	0.00	0.00	0.00
Col6	83	9.19	0.00	0.00	0.00
Col6	84	9.19	0.00	0.00	0.00
Col6	85	6.95	0.60	0.00	0.00
Col6	86	6.95	0.60	0.00	0.00
Col6	87	6.95	0.60	0.00	0.00
Col6	88	10.11	0.00	0.00	0.00
Col6	89	10.11	0.00	0.00	0.00
Col6	90	10.11	0.00	0.00	0.00
Col6	91	7.88	0.60	0.00	0.00
Col6	92	7.88	0.60	0.00	0.00
Col6	93	7.88	0.60	0.00	0.00
Col6	94	8.57	0.11	0.00	0.00
Col6	95	7.65	0.00	0.00	0.00
Col6	96	8.57	0.11	0.00	0.00
Col6	97	7.65	0.00	0.00	0.00
Col6	98	8.57	0.11	0.00	0.00
Col6	99	7.65	0.00	0.00	0.00
Col7	1	3.87	0.00	0.00	0.00
Col7	2	1.55	0.00	0.00	0.00
Col7	3	4.45	0.00	0.00	0.00
Col7	4	4.45	0.00	0.00	0.00
Col7	5	4.45	0.00	0.00	0.00
Col7	6	3.29	0.00	0.00	0.00
Col7	7	3.73	0.00	0.00	0.00
Col7	8	3.73	0.00	0.00	0.00
Col7	9	3.73	0.00	0.00	0.00
Col7	10	-0.11	0.00	-0.90	-0.90
Col7	11	-0.68	0.00	-0.90	-0.90
Col7	12	-0.11	0.00	0.96	0.96
Col7	13	-0.68	0.00	0.96	0.96
Col7	14	-0.14	0.00	0.96	0.96
Col7	15	-0.53	0.00	0.96	0.96
Col7	16	0.35	0.00	0.96	0.96
Col7	17	-0.03	0.00	0.96	0.96
Col7	18	3.00	0.00	0.72	0.72
Col7	19	2.71	0.00	0.72	0.72
Col7	20	2.66	0.00	0.72	0.72
Col7	21	2.23	0.00	0.72	0.72
Col7	22	3.44	0.00	0.72	0.72
Col7	23	3.15	0.00	0.72	0.72
Col7	24	3.09	0.00	0.72	0.72

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	25	2.67	0.00	0.72	0.72
Col7	26	3.44	0.00	0.72	0.72
Col7	27	3.15	0.00	0.72	0.72
Col7	28	3.09	0.00	0.72	0.72
Col7	29	2.67	0.00	0.72	0.72
Col7	30	3.44	0.00	0.72	0.72
Col7	31	3.15	0.00	0.72	0.72
Col7	32	3.09	0.00	0.72	0.72
Col7	33	2.67	0.00	0.72	0.72
Col7	34	-0.40	0.00	-0.90	-0.90
Col7	35	-0.97	0.00	-0.90	-0.90
Col7	36	-0.40	0.00	0.96	0.96
Col7	37	-0.97	0.00	0.96	0.96
Col7	38	-0.43	0.00	0.96	0.96
Col7	39	-0.83	0.00	0.96	0.96
Col7	40	0.06	0.00	0.96	0.96
Col7	41	-0.33	0.00	0.96	0.96
Col7	42	1.68	0.00	0.00	0.00
Col7	43	1.74	0.00	0.00	0.00
Col7	44	3.38	0.00	0.00	0.00
Col7	45	3.43	0.00	0.00	0.00
Col7	46	1.64	0.00	0.00	0.00
Col7	47	1.69	0.00	0.00	0.00
Col7	48	0.34	0.00	0.00	0.00
Col7	49	0.40	0.00	0.00	0.00
Col7	50	2.40	0.00	0.00	0.00
Col7	51	2.19	0.00	0.00	0.00
Col7	52	1.53	0.00	0.72	0.72
Col7	53	1.23	0.00	0.72	0.72
Col7	54	1.90	0.00	0.72	0.72
Col7	55	1.61	0.00	0.72	0.72
Col7	56	2.29	0.00	0.00	0.00
Col7	57	2.29	0.00	0.00	0.00
Col7	58	2.27	0.00	0.00	0.00
Col7	59	2.32	0.00	0.00	0.00
Col7	60	4.49	0.00	0.00	0.00
Col7	61	3.76	0.00	0.00	0.00
Col7	62	3.10	0.00	0.72	0.72
Col7	63	2.80	0.00	0.72	0.72
Col7	64	3.47	0.00	0.72	0.72
Col7	65	3.18	0.00	0.72	0.72
Col7	66	3.86	0.00	0.00	0.00
Col7	67	3.86	0.00	0.00	0.00
Col7	68	3.84	0.00	0.00	0.00
Col7	69	3.89	0.00	0.00	0.00
Col7	70	-0.43	0.00	0.00	0.00
Col7	71	-0.83	0.00	0.00	0.00
Col7	72	0.06	0.00	0.00	0.00
Col7	73	-0.33	0.00	0.00	0.00
Col7	74	-0.40	0.00	0.00	0.00
Col7	75	-0.97	0.00	0.00	0.00
Col7	76	2.63	0.00	0.00	0.00
Col7	77	2.34	0.00	0.00	0.00
Col7	78	3.00	0.00	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	79	2.71	0.00	0.00	0.00
Col7	80	2.66	0.00	0.00	0.00
Col7	81	2.23	0.00	0.00	0.00
Col7	82	3.07	0.00	0.00	0.00
Col7	83	3.07	0.00	0.00	0.00
Col7	84	3.07	0.00	0.00	0.00
Col7	85	2.77	0.00	0.00	0.00
Col7	86	2.77	0.00	0.00	0.00
Col7	87	2.77	0.00	0.00	0.00
Col7	88	3.44	0.00	0.00	0.00
Col7	89	3.44	0.00	0.00	0.00
Col7	90	3.44	0.00	0.00	0.00
Col7	91	3.15	0.00	0.00	0.00
Col7	92	3.15	0.00	0.00	0.00
Col7	93	3.15	0.00	0.00	0.00
Col7	94	3.09	0.00	0.00	0.00
Col7	95	2.67	0.00	0.00	0.00
Col7	96	3.09	0.00	0.00	0.00
Col7	97	2.67	0.00	0.00	0.00
Col7	98	3.09	0.00	0.00	0.00
Col7	99	2.67	0.00	0.00	0.00

COLUMN DEFLECTIONS:

Id	Load Id	Deflection(in) Calc	Limit
Col1	100	0.00	1.31
Col1	101	0.00	1.31
Col1	102	0.00	1.31
Col1	103	0.00	1.31
Col1	104	0.00	1.31
Col1	105	0.00	1.31
Col1	106	0.00	1.31
Col1	107	0.00	1.31
Col1	108	0.00	1.31
Col1	109	-0.09	1.31
Col1	110	-0.09	1.31
Col1	111	0.09	1.31
Col1	112	0.09	1.31
Col1	113	0.09	1.31
Col1	114	0.09	1.31
Col1	115	0.09	1.31
Col1	116	0.09	1.31
Col1	117	0.07	1.31
Col1	118	0.07	1.31
Col1	119	0.07	1.31
Col1	120	0.07	1.31
Col1	121	0.07	1.31
Col1	122	0.07	1.31
Col1	123	0.07	1.31
Col1	124	0.07	1.31
Col1	125	0.07	1.31
Col1	126	0.07	1.31

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	127	0.07	1.31
Col1	128	0.07	1.31
Col1	129	0.07	1.31
Col1	130	0.07	1.31
Col1	131	0.07	1.31
Col1	132	0.07	1.31
Col1	133	-0.09	1.31
Col1	134	-0.09	1.31
Col1	135	0.09	1.31
Col1	136	0.09	1.31
Col1	137	0.09	1.31
Col1	138	0.09	1.31
Col1	139	0.09	1.31
Col1	140	0.09	1.31
Col1	141	0.00	1.31
Col1	142	0.00	1.31
Col1	143	0.00	1.31
Col1	144	0.00	1.31
Col1	145	0.00	1.31
Col1	146	0.00	1.31
Col1	147	0.00	1.31
Col1	148	0.00	1.31
Col1	149	0.00	1.31
Col1	150	0.00	1.31
Col1	151	0.00	1.31
Col1	152	0.00	1.31
Col1	153	0.00	1.31
Col1	154	0.00	1.31
Col1	155	0.07	1.31
Col1	156	0.07	1.31
Col1	157	0.07	1.31
Col1	158	0.07	1.31
Col1	159	0.00	1.31
Col1	160	0.00	1.31
Col1	161	0.00	1.31
Col1	162	0.00	1.31
Col1	163	0.00	1.31
Col1	164	0.00	1.31
Col1	165	0.07	1.31
Col1	166	0.07	1.31
Col1	167	0.07	1.31
Col1	168	0.07	1.31
Col1	169	0.00	1.31
Col1	170	0.00	1.31
Col1	171	0.00	1.31
Col1	172	0.00	1.31
Col1	173	0.00	1.31
Col1	174	0.00	1.31
Col1	175	0.00	1.31
Col1	176	0.00	1.31
Col1	177	0.00	1.31
Col1	178	0.00	1.31
Col1	179	0.00	1.31
Col1	180	0.00	1.31

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col1	181	0.00	1.31
Col1	182	0.00	1.31
Col1	183	0.00	1.31
Col1	184	0.00	1.31
Col1	185	0.00	1.31
Col1	186	0.00	1.31
Col1	187	0.00	1.31
Col1	188	0.00	1.31
Col1	189	0.00	1.31
Col1	190	0.00	1.31
Col1	191	0.00	1.31
Col1	192	0.00	1.31
Col1	193	0.00	1.31
Col2	100	0.00	1.46
Col2	101	0.00	1.46
Col2	102	0.00	1.46
Col2	103	0.00	1.46
Col2	104	0.00	1.46
Col2	105	0.00	1.46
Col2	106	0.00	1.46
Col2	107	0.00	1.46
Col2	108	0.00	1.46
Col2	109	-0.17	1.46
Col2	110	-0.17	1.46
Col2	111	0.17	1.46
Col2	112	0.17	1.46
Col2	113	0.17	1.46
Col2	114	0.17	1.46
Col2	115	0.17	1.46
Col2	116	0.17	1.46
Col2	117	0.13	1.46
Col2	118	0.13	1.46
Col2	119	0.13	1.46
Col2	120	0.13	1.46
Col2	121	0.13	1.46
Col2	122	0.13	1.46
Col2	123	0.13	1.46
Col2	124	0.13	1.46
Col2	125	0.13	1.46
Col2	126	0.13	1.46
Col2	127	0.13	1.46
Col2	128	0.13	1.46
Col2	129	0.13	1.46
Col2	130	0.13	1.46
Col2	131	0.13	1.46
Col2	132	0.13	1.46
Col2	133	-0.17	1.46
Col2	134	-0.17	1.46
Col2	135	0.17	1.46
Col2	136	0.17	1.46
Col2	137	0.17	1.46
Col2	138	0.17	1.46
Col2	139	0.17	1.46
Col2	140	0.17	1.46

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col2	141	0.00	1.46
Col2	142	0.00	1.46
Col2	143	0.00	1.46
Col2	144	0.00	1.46
Col2	145	0.00	1.46
Col2	146	0.00	1.46
Col2	147	0.00	1.46
Col2	148	0.00	1.46
Col2	149	0.00	1.46
Col2	150	0.00	1.46
Col2	151	0.00	1.46
Col2	152	0.00	1.46
Col2	153	0.00	1.46
Col2	154	0.00	1.46
Col2	155	0.13	1.46
Col2	156	0.13	1.46
Col2	157	0.13	1.46
Col2	158	0.13	1.46
Col2	159	0.00	1.46
Col2	160	0.00	1.46
Col2	161	0.00	1.46
Col2	162	0.00	1.46
Col2	163	0.00	1.46
Col2	164	0.00	1.46
Col2	165	0.13	1.46
Col2	166	0.13	1.46
Col2	167	0.13	1.46
Col2	168	0.13	1.46
Col2	169	0.00	1.46
Col2	170	0.00	1.46
Col2	171	0.00	1.46
Col2	172	0.00	1.46
Col2	173	0.00	1.46
Col2	174	0.00	1.46
Col2	175	0.00	1.46
Col2	176	0.00	1.46
Col2	177	0.00	1.46
Col2	178	0.00	1.46
Col2	179	0.00	1.46
Col2	180	0.00	1.46
Col2	181	0.00	1.46
Col2	182	0.00	1.46
Col2	183	0.00	1.46
Col2	184	0.00	1.46
Col2	185	0.00	1.46
Col2	186	0.00	1.46
Col2	187	0.00	1.46
Col2	188	0.00	1.46
Col2	189	0.00	1.46
Col2	190	0.00	1.46
Col2	191	0.00	1.46
Col2	192	0.00	1.46
Col2	193	0.00	1.46
Col3	100	0.00	1.63

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	101	0.00	1.63
Col3	102	0.00	1.63
Col3	103	0.00	1.63
Col3	104	0.00	1.63
Col3	105	0.00	1.63
Col3	106	0.00	1.63
Col3	107	0.00	1.63
Col3	108	0.00	1.63
Col3	109	-0.27	1.63
Col3	110	-0.27	1.63
Col3	111	0.28	1.63
Col3	112	0.28	1.63
Col3	113	0.28	1.63
Col3	114	0.28	1.63
Col3	115	0.28	1.63
Col3	116	0.28	1.63
Col3	117	0.21	1.63
Col3	118	0.21	1.63
Col3	119	0.21	1.63
Col3	120	0.21	1.63
Col3	121	0.21	1.63
Col3	122	0.21	1.63
Col3	123	0.21	1.63
Col3	124	0.21	1.63
Col3	125	0.21	1.63
Col3	126	0.21	1.63
Col3	127	0.21	1.63
Col3	128	0.21	1.63
Col3	129	0.21	1.63
Col3	130	0.21	1.63
Col3	131	0.21	1.63
Col3	132	0.21	1.63
Col3	133	-0.27	1.63
Col3	134	-0.27	1.63
Col3	135	0.28	1.63
Col3	136	0.28	1.63
Col3	137	0.28	1.63
Col3	138	0.28	1.63
Col3	139	0.28	1.63
Col3	140	0.28	1.63
Col3	141	0.00	1.63
Col3	142	0.00	1.63
Col3	143	0.00	1.63
Col3	144	0.00	1.63
Col3	145	0.00	1.63
Col3	146	0.00	1.63
Col3	147	0.00	1.63
Col3	148	0.00	1.63
Col3	149	0.00	1.63
Col3	150	0.00	1.63
Col3	151	0.00	1.63
Col3	152	0.00	1.63
Col3	153	0.00	1.63
Col3	154	0.00	1.63

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col3	155	0.21	1.63
Col3	156	0.21	1.63
Col3	157	0.21	1.63
Col3	158	0.21	1.63
Col3	159	0.00	1.63
Col3	160	0.00	1.63
Col3	161	0.00	1.63
Col3	162	0.00	1.63
Col3	163	0.00	1.63
Col3	164	0.00	1.63
Col3	165	0.21	1.63
Col3	166	0.21	1.63
Col3	167	0.21	1.63
Col3	168	0.21	1.63
Col3	169	0.00	1.63
Col3	170	0.00	1.63
Col3	171	0.00	1.63
Col3	172	0.00	1.63
Col3	173	0.00	1.63
Col3	174	0.00	1.63
Col3	175	0.00	1.63
Col3	176	0.00	1.63
Col3	177	0.00	1.63
Col3	178	0.00	1.63
Col3	179	0.00	1.63
Col3	180	0.00	1.63
Col3	181	0.00	1.63
Col3	182	0.00	1.63
Col3	183	0.00	1.63
Col3	184	0.00	1.63
Col3	185	0.00	1.63
Col3	186	0.00	1.63
Col3	187	0.00	1.63
Col3	188	0.00	1.63
Col3	189	0.00	1.63
Col3	190	0.00	1.63
Col3	191	0.00	1.63
Col3	192	0.00	1.63
Col3	193	0.00	1.63
Col4	100	0.00	1.74
Col4	101	0.00	1.74
Col4	102	0.00	1.74
Col4	103	0.00	1.74
Col4	104	0.00	1.74
Col4	105	0.00	1.74
Col4	106	0.00	1.74
Col4	107	0.00	1.74
Col4	108	0.00	1.74
Col4	109	-0.35	1.74
Col4	110	-0.35	1.74
Col4	111	0.37	1.74
Col4	112	0.37	1.74
Col4	113	0.37	1.74
Col4	114	0.37	1.74

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col4	115	0.37	1.74
Col4	116	0.37	1.74
Col4	117	0.28	1.74
Col4	118	0.28	1.74
Col4	119	0.28	1.74
Col4	120	0.28	1.74
Col4	121	0.28	1.74
Col4	122	0.28	1.74
Col4	123	0.28	1.74
Col4	124	0.28	1.74
Col4	125	0.28	1.74
Col4	126	0.28	1.74
Col4	127	0.28	1.74
Col4	128	0.28	1.74
Col4	129	0.28	1.74
Col4	130	0.28	1.74
Col4	131	0.28	1.74
Col4	132	0.28	1.74
Col4	133	-0.35	1.74
Col4	134	-0.35	1.74
Col4	135	0.37	1.74
Col4	136	0.37	1.74
Col4	137	0.37	1.74
Col4	138	0.37	1.74
Col4	139	0.37	1.74
Col4	140	0.37	1.74
Col4	141	0.00	1.74
Col4	142	0.00	1.74
Col4	143	0.00	1.74
Col4	144	0.00	1.74
Col4	145	0.00	1.74
Col4	146	0.00	1.74
Col4	147	0.00	1.74
Col4	148	0.00	1.74
Col4	149	0.00	1.74
Col4	150	0.00	1.74
Col4	151	0.00	1.74
Col4	152	0.00	1.74
Col4	153	0.00	1.74
Col4	154	0.00	1.74
Col4	155	0.28	1.74
Col4	156	0.28	1.74
Col4	157	0.28	1.74
Col4	158	0.28	1.74
Col4	159	0.00	1.74
Col4	160	0.00	1.74
Col4	161	0.00	1.74
Col4	162	0.00	1.74
Col4	163	0.00	1.74
Col4	164	0.00	1.74
Col4	165	0.28	1.74
Col4	166	0.28	1.74
Col4	167	0.28	1.74
Col4	168	0.28	1.74

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col4	169	0.00	1.74
Col4	170	0.00	1.74
Col4	171	0.00	1.74
Col4	172	0.00	1.74
Col4	173	0.00	1.74
Col4	174	0.00	1.74
Col4	175	0.00	1.74
Col4	176	0.00	1.74
Col4	177	0.00	1.74
Col4	178	0.00	1.74
Col4	179	0.00	1.74
Col4	180	0.00	1.74
Col4	181	0.00	1.74
Col4	182	0.00	1.74
Col4	183	0.00	1.74
Col4	184	0.00	1.74
Col4	185	0.00	1.74
Col4	186	0.00	1.74
Col4	187	0.00	1.74
Col4	188	0.00	1.74
Col4	189	0.00	1.74
Col4	190	0.00	1.74
Col4	191	0.00	1.74
Col4	192	0.00	1.74
Col4	193	0.00	1.74
Col5	100	0.00	1.57
Col5	101	0.00	1.57
Col5	102	0.00	1.57
Col5	103	0.00	1.57
Col5	104	0.00	1.57
Col5	105	0.00	1.57
Col5	106	0.00	1.57
Col5	107	0.00	1.57
Col5	108	0.00	1.57
Col5	109	-0.23	1.57
Col5	110	-0.23	1.57
Col5	111	0.24	1.57
Col5	112	0.24	1.57
Col5	113	0.24	1.57
Col5	114	0.24	1.57
Col5	115	0.24	1.57
Col5	116	0.24	1.57
Col5	117	0.18	1.57
Col5	118	0.18	1.57
Col5	119	0.18	1.57
Col5	120	0.18	1.57
Col5	121	0.18	1.57
Col5	122	0.18	1.57
Col5	123	0.18	1.57
Col5	124	0.18	1.57
Col5	125	0.18	1.57
Col5	126	0.18	1.57
Col5	127	0.18	1.57
Col5	128	0.18	1.57

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	129	0.18	1.57
Col5	130	0.18	1.57
Col5	131	0.18	1.57
Col5	132	0.18	1.57
Col5	133	-0.23	1.57
Col5	134	-0.23	1.57
Col5	135	0.24	1.57
Col5	136	0.24	1.57
Col5	137	0.24	1.57
Col5	138	0.24	1.57
Col5	139	0.24	1.57
Col5	140	0.24	1.57
Col5	141	0.00	1.57
Col5	142	0.00	1.57
Col5	143	0.00	1.57
Col5	144	0.00	1.57
Col5	145	0.00	1.57
Col5	146	0.00	1.57
Col5	147	0.00	1.57
Col5	148	0.00	1.57
Col5	149	0.00	1.57
Col5	150	0.00	1.57
Col5	151	0.00	1.57
Col5	152	0.00	1.57
Col5	153	0.00	1.57
Col5	154	0.00	1.57
Col5	155	0.18	1.57
Col5	156	0.18	1.57
Col5	157	0.18	1.57
Col5	158	0.18	1.57
Col5	159	0.00	1.57
Col5	160	0.00	1.57
Col5	161	0.00	1.57
Col5	162	0.00	1.57
Col5	163	0.00	1.57
Col5	164	0.00	1.57
Col5	165	0.18	1.57
Col5	166	0.18	1.57
Col5	167	0.18	1.57
Col5	168	0.18	1.57
Col5	169	0.00	1.57
Col5	170	0.00	1.57
Col5	171	0.00	1.57
Col5	172	0.00	1.57
Col5	173	0.00	1.57
Col5	174	0.00	1.57
Col5	175	0.00	1.57
Col5	176	0.00	1.57
Col5	177	0.00	1.57
Col5	178	0.00	1.57
Col5	179	0.00	1.57
Col5	180	0.00	1.57
Col5	181	0.00	1.57
Col5	182	0.00	1.57

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col5	183	0.00	1.57
Col5	184	0.00	1.57
Col5	185	0.00	1.57
Col5	186	0.00	1.57
Col5	187	0.00	1.57
Col5	188	0.00	1.57
Col5	189	0.00	1.57
Col5	190	0.00	1.57
Col5	191	0.00	1.57
Col5	192	0.00	1.57
Col5	193	0.00	1.57
Col6	100	0.00	1.40
Col6	101	0.00	1.40
Col6	102	0.00	1.40
Col6	103	0.00	1.40
Col6	104	0.00	1.40
Col6	105	0.00	1.40
Col6	106	0.00	1.40
Col6	107	0.00	1.40
Col6	108	0.00	1.40
Col6	109	-0.14	1.40
Col6	110	-0.14	1.40
Col6	111	0.15	1.40
Col6	112	0.15	1.40
Col6	113	0.15	1.40
Col6	114	0.15	1.40
Col6	115	0.15	1.40
Col6	116	0.15	1.40
Col6	117	0.11	1.40
Col6	118	0.11	1.40
Col6	119	0.11	1.40
Col6	120	0.11	1.40
Col6	121	0.11	1.40
Col6	122	0.11	1.40
Col6	123	0.11	1.40
Col6	124	0.11	1.40
Col6	125	0.11	1.40
Col6	126	0.11	1.40
Col6	127	0.11	1.40
Col6	128	0.11	1.40
Col6	129	0.11	1.40
Col6	130	0.11	1.40
Col6	131	0.11	1.40
Col6	132	0.11	1.40
Col6	133	-0.14	1.40
Col6	134	-0.14	1.40
Col6	135	0.15	1.40
Col6	136	0.15	1.40
Col6	137	0.15	1.40
Col6	138	0.15	1.40
Col6	139	0.15	1.40
Col6	140	0.15	1.40
Col6	141	0.00	1.40
Col6	142	0.00	1.40

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col6	143	0.00	1.40
Col6	144	0.00	1.40
Col6	145	0.00	1.40
Col6	146	0.00	1.40
Col6	147	0.00	1.40
Col6	148	0.00	1.40
Col6	149	0.00	1.40
Col6	150	0.00	1.40
Col6	151	0.00	1.40
Col6	152	0.00	1.40
Col6	153	0.00	1.40
Col6	154	0.00	1.40
Col6	155	0.11	1.40
Col6	156	0.11	1.40
Col6	157	0.11	1.40
Col6	158	0.11	1.40
Col6	159	0.00	1.40
Col6	160	0.00	1.40
Col6	161	0.00	1.40
Col6	162	0.00	1.40
Col6	163	0.00	1.40
Col6	164	0.00	1.40
Col6	165	0.11	1.40
Col6	166	0.11	1.40
Col6	167	0.11	1.40
Col6	168	0.11	1.40
Col6	169	0.00	1.40
Col6	170	0.00	1.40
Col6	171	0.00	1.40
Col6	172	0.00	1.40
Col6	173	0.00	1.40
Col6	174	0.00	1.40
Col6	175	0.00	1.40
Col6	176	0.00	1.40
Col6	177	0.00	1.40
Col6	178	0.00	1.40
Col6	179	0.00	1.40
Col6	180	0.00	1.40
Col6	181	0.00	1.40
Col6	182	0.00	1.40
Col6	183	0.00	1.40
Col6	184	0.00	1.40
Col6	185	0.00	1.40
Col6	186	0.00	1.40
Col6	187	0.00	1.40
Col6	188	0.00	1.40
Col6	189	0.00	1.40
Col6	190	0.00	1.40
Col6	191	0.00	1.40
Col6	192	0.00	1.40
Col6	193	0.00	1.40
Col7	100	0.00	1.25
Col7	101	0.00	1.25
Col7	102	0.00	1.25

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	103	0.00	1.25
Col7	104	0.00	1.25
Col7	105	0.00	1.25
Col7	106	0.00	1.25
Col7	107	0.00	1.25
Col7	108	0.00	1.25
Col7	109	-0.07	1.25
Col7	110	-0.07	1.25
Col7	111	0.08	1.25
Col7	112	0.08	1.25
Col7	113	0.08	1.25
Col7	114	0.08	1.25
Col7	115	0.08	1.25
Col7	116	0.08	1.25
Col7	117	0.06	1.25
Col7	118	0.06	1.25
Col7	119	0.06	1.25
Col7	120	0.06	1.25
Col7	121	0.06	1.25
Col7	122	0.06	1.25
Col7	123	0.06	1.25
Col7	124	0.06	1.25
Col7	125	0.06	1.25
Col7	126	0.06	1.25
Col7	127	0.06	1.25
Col7	128	0.06	1.25
Col7	129	0.06	1.25
Col7	130	0.06	1.25
Col7	131	0.06	1.25
Col7	132	0.06	1.25
Col7	133	-0.07	1.25
Col7	134	-0.07	1.25
Col7	135	0.08	1.25
Col7	136	0.08	1.25
Col7	137	0.08	1.25
Col7	138	0.08	1.25
Col7	139	0.08	1.25
Col7	140	0.08	1.25
Col7	141	0.00	1.25
Col7	142	0.00	1.25
Col7	143	0.00	1.25
Col7	144	0.00	1.25
Col7	145	0.00	1.25
Col7	146	0.00	1.25
Col7	147	0.00	1.25
Col7	148	0.00	1.25
Col7	149	0.00	1.25
Col7	150	0.00	1.25
Col7	151	0.00	1.25
Col7	152	0.00	1.25
Col7	153	0.00	1.25
Col7	154	0.00	1.25
Col7	155	0.06	1.25
Col7	156	0.06	1.25

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	157	0.06	1.25
Col7	158	0.06	1.25
Col7	159	0.00	1.25
Col7	160	0.00	1.25
Col7	161	0.00	1.25
Col7	162	0.00	1.25
Col7	163	0.00	1.25
Col7	164	0.00	1.25
Col7	165	0.06	1.25
Col7	166	0.06	1.25
Col7	167	0.06	1.25
Col7	168	0.06	1.25
Col7	169	0.00	1.25
Col7	170	0.00	1.25
Col7	171	0.00	1.25
Col7	172	0.00	1.25
Col7	173	0.00	1.25
Col7	174	0.00	1.25
Col7	175	0.00	1.25
Col7	176	0.00	1.25
Col7	177	0.00	1.25
Col7	178	0.00	1.25
Col7	179	0.00	1.25
Col7	180	0.00	1.25
Col7	181	0.00	1.25
Col7	182	0.00	1.25
Col7	183	0.00	1.25
Col7	184	0.00	1.25
Col7	185	0.00	1.25
Col7	186	0.00	1.25
Col7	187	0.00	1.25
Col7	188	0.00	1.25
Col7	189	0.00	1.25
Col7	190	0.00	1.25
Col7	191	0.00	1.25
Col7	192	0.00	1.25
Col7	193	0.00	1.25

RAFTER DEFLECTIONS:

	Load	Deflection(in)	
Id	Id	Calc	Limit
Raf1	100	-0.33	1.19
Raf1	101	-0.12	1.19
Raf1	102	-0.38	1.19
Raf1	103	-0.38	1.19
Raf1	104	-0.38	1.19
Raf1	105	-0.28	1.19
Raf1	106	-0.31	1.19
Raf1	107	-0.31	1.19
Raf1	108	-0.31	1.19
Raf1	109	0.04	1.79
Raf1	110	0.00	2.01

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf1	111	0.04	1.79
Raf1	112	0.00	2.01
Raf1	113	0.03	1.79
Raf1	114	0.00	1.79
Raf1	115	0.00	1.79
Raf1	116	-0.03	1.79
Raf1	117	-0.23	1.79
Raf1	118	-0.26	1.79
Raf1	119	-0.21	1.79
Raf1	120	-0.24	1.79
Raf1	121	-0.27	1.79
Raf1	122	-0.30	1.79
Raf1	123	-0.24	1.79
Raf1	124	-0.27	1.79
Raf1	125	-0.27	1.79
Raf1	126	-0.30	1.79
Raf1	127	-0.24	1.79
Raf1	128	-0.27	1.79
Raf1	129	-0.27	1.79
Raf1	130	-0.30	1.79
Raf1	131	-0.24	1.79
Raf1	132	-0.27	1.79
Raf1	133	0.06	1.79
Raf1	134	0.02	1.79
Raf1	135	0.06	1.79
Raf1	136	0.02	1.79
Raf1	137	0.06	1.79
Raf1	138	0.02	1.79
Raf1	139	0.03	1.79
Raf1	140	-0.01	1.79
Raf1	141	-0.14	1.19
Raf1	142	-0.13	1.19
Raf1	143	-0.29	1.19
Raf1	144	-0.28	1.19
Raf1	145	-0.33	1.19
Raf1	146	-0.32	1.19
Raf1	147	-0.33	1.19
Raf1	148	-0.32	1.19
Raf1	149	-0.33	1.19
Raf1	150	-0.32	1.19
Raf1	151	-0.03	1.19
Raf1	152	-0.02	1.19
Raf1	153	-0.40	1.19
Raf1	154	-0.33	1.19
Raf1	155	-0.26	1.79
Raf1	156	-0.29	1.79
Raf1	157	-0.29	1.79
Raf1	158	-0.31	1.79
Raf1	159	-0.34	1.19
Raf1	160	-0.34	1.19
Raf1	161	-0.34	1.19
Raf1	162	-0.34	1.19
Raf1	163	-0.19	1.19
Raf1	164	-0.18	1.19

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf1	165	-0.11	1.79
Raf1	166	-0.13	1.79
Raf1	167	-0.13	1.79
Raf1	168	-0.16	1.79
Raf1	169	-0.18	1.19
Raf1	170	-0.18	1.19
Raf1	171	-0.19	1.19
Raf1	172	-0.18	1.19
Raf1	173	0.06	1.79
Raf1	174	0.02	1.79
Raf1	175	0.03	1.79
Raf1	176	-0.01	1.79
Raf1	177	-0.03	1.19
Raf1	178	-0.21	1.79
Raf1	179	-0.24	1.79
Raf1	180	-0.23	1.79
Raf1	181	-0.26	1.79
Raf1	182	-0.25	1.79
Raf1	183	-0.25	1.79
Raf1	184	-0.25	1.79
Raf1	185	-0.27	1.79
Raf1	186	-0.27	1.79
Raf1	187	-0.27	1.79
Raf1	188	-0.27	1.79
Raf1	189	-0.27	1.79
Raf1	190	-0.27	1.79
Raf1	191	-0.30	1.79
Raf1	192	-0.30	1.79
Raf1	193	-0.30	1.79
Raf2	100	-0.23	1.34
Raf2	101	-0.09	1.34
Raf2	102	-0.26	1.34
Raf2	103	-0.26	1.34
Raf2	104	-0.26	1.34
Raf2	105	-0.19	1.34
Raf2	106	-0.22	1.34
Raf2	107	-0.22	1.34
Raf2	108	-0.22	1.34
Raf2	109	0.04	2.01
Raf2	110	-0.02	2.01
Raf2	111	0.04	2.01
Raf2	112	-0.02	2.01
Raf2	113	0.05	2.01
Raf2	114	0.00	2.01
Raf2	115	-0.04	2.01
Raf2	116	-0.02	2.01
Raf2	117	-0.19	2.01
Raf2	118	-0.18	2.01
Raf2	119	-0.14	2.01
Raf2	120	-0.18	2.01
Raf2	121	-0.22	2.01
Raf2	122	-0.20	2.01
Raf2	123	-0.16	2.01
Raf2	124	-0.21	2.01

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	125	-0.22	2.01
Raf2	126	-0.20	2.01
Raf2	127	-0.16	2.01
Raf2	128	-0.21	2.01
Raf2	129	-0.22	2.01
Raf2	130	-0.20	2.01
Raf2	131	-0.16	2.01
Raf2	132	-0.21	2.01
Raf2	133	0.05	2.01
Raf2	134	0.02	2.01
Raf2	135	0.05	2.01
Raf2	136	0.02	2.01
Raf2	137	0.06	2.01
Raf2	138	0.02	2.01
Raf2	139	0.04	2.01
Raf2	140	-0.01	2.01
Raf2	141	-0.10	1.34
Raf2	142	-0.09	1.34
Raf2	143	-0.20	1.34
Raf2	144	-0.19	1.34
Raf2	145	-0.23	1.34
Raf2	146	-0.22	1.34
Raf2	147	-0.23	1.34
Raf2	148	-0.22	1.34
Raf2	149	-0.23	1.34
Raf2	150	-0.22	1.34
Raf2	151	-0.03	1.34
Raf2	152	-0.02	1.34
Raf2	153	-0.46	1.34
Raf2	154	-0.37	1.34
Raf2	155	-0.36	2.01
Raf2	156	-0.34	2.01
Raf2	157	-0.37	2.01
Raf2	158	-0.35	2.01
Raf2	159	-0.37	1.34
Raf2	160	-0.37	1.34
Raf2	161	-0.38	1.34
Raf2	162	-0.37	1.34
Raf2	163	-0.15	1.34
Raf2	164	-0.13	1.34
Raf2	165	-0.07	2.01
Raf2	166	-0.11	2.01
Raf2	167	-0.09	2.01
Raf2	168	-0.12	2.01
Raf2	169	-0.14	1.34
Raf2	170	-0.14	1.34
Raf2	171	-0.14	1.34
Raf2	172	-0.14	1.34
Raf2	173	0.06	2.01
Raf2	174	0.02	2.01
Raf2	175	0.04	2.01
Raf2	176	-0.01	2.01
Raf2	177	-0.02	1.34
Raf2	178	-0.18	2.01

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf2	179	-0.16	2.01
Raf2	180	-0.19	2.01
Raf2	181	-0.18	2.01
Raf2	182	-0.21	2.01
Raf2	183	-0.21	2.01
Raf2	184	-0.21	2.01
Raf2	185	-0.19	2.01
Raf2	186	-0.19	2.01
Raf2	187	-0.19	2.01
Raf2	188	-0.22	2.01
Raf2	189	-0.22	2.01
Raf2	190	-0.22	2.01
Raf2	191	-0.20	2.01
Raf2	192	-0.20	2.01
Raf2	193	-0.20	2.01
Raf3	100	-0.24	1.34
Raf3	101	-0.09	1.34
Raf3	102	-0.27	1.34
Raf3	103	-0.27	1.34
Raf3	104	-0.27	1.34
Raf3	105	-0.20	1.34
Raf3	106	-0.23	1.34
Raf3	107	-0.23	1.34
Raf3	108	-0.23	1.34
Raf3	109	0.02	2.01
Raf3	110	0.05	2.01
Raf3	111	0.02	2.01
Raf3	112	0.05	2.01
Raf3	113	-0.01	2.01
Raf3	114	-0.01	2.01
Raf3	115	-0.02	2.01
Raf3	116	-0.04	2.01
Raf3	117	-0.18	2.01
Raf3	118	-0.20	2.01
Raf3	119	-0.18	2.01
Raf3	120	-0.13	2.01
Raf3	121	-0.21	2.01
Raf3	122	-0.23	2.01
Raf3	123	-0.21	2.01
Raf3	124	-0.16	2.01
Raf3	125	-0.21	2.01
Raf3	126	-0.23	2.01
Raf3	127	-0.21	2.01
Raf3	128	-0.16	2.01
Raf3	129	-0.21	2.01
Raf3	130	-0.23	2.01
Raf3	131	-0.21	2.01
Raf3	132	-0.16	2.01
Raf3	133	0.02	2.01
Raf3	134	0.07	2.01
Raf3	135	0.02	2.01
Raf3	136	0.07	2.01
Raf3	137	0.02	2.01
Raf3	138	0.01	2.01

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf3	139	-0.01	2.01
Raf3	140	-0.02	2.01
Raf3	141	-0.09	1.34
Raf3	142	-0.11	1.34
Raf3	143	-0.20	1.34
Raf3	144	-0.21	1.34
Raf3	145	-0.23	1.34
Raf3	146	-0.24	1.34
Raf3	147	-0.23	1.34
Raf3	148	-0.24	1.34
Raf3	149	-0.23	1.34
Raf3	150	-0.24	1.34
Raf3	151	-0.01	1.34
Raf3	152	-0.03	1.34
Raf3	153	-0.22	1.34
Raf3	154	-0.17	1.34
Raf3	155	-0.17	2.01
Raf3	156	-0.16	2.01
Raf3	157	-0.17	2.01
Raf3	158	-0.16	2.01
Raf3	159	-0.17	1.34
Raf3	160	-0.17	1.34
Raf3	161	-0.18	1.34
Raf3	162	-0.17	1.34
Raf3	163	-0.45	1.34
Raf3	164	-0.36	1.34
Raf3	165	-0.33	2.01
Raf3	166	-0.34	2.01
Raf3	167	-0.35	2.01
Raf3	168	-0.36	2.01
Raf3	169	-0.37	1.34
Raf3	170	-0.37	1.34
Raf3	171	-0.36	1.34
Raf3	172	-0.37	1.34
Raf3	173	0.02	2.01
Raf3	174	0.01	2.01
Raf3	175	-0.01	2.01
Raf3	176	-0.02	2.01
Raf3	177	-0.02	1.34
Raf3	178	-0.16	2.01
Raf3	179	-0.18	2.01
Raf3	180	-0.18	2.01
Raf3	181	-0.20	2.01
Raf3	182	-0.19	2.01
Raf3	183	-0.19	2.01
Raf3	184	-0.19	2.01
Raf3	185	-0.21	2.01
Raf3	186	-0.21	2.01
Raf3	187	-0.21	2.01
Raf3	188	-0.21	2.01
Raf3	189	-0.21	2.01
Raf3	190	-0.21	2.01
Raf3	191	-0.23	2.01
Raf3	192	-0.23	2.01

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf3	193	-0.23	2.01
Raf4	100	-0.33	1.19
Raf4	101	-0.12	1.19
Raf4	102	-0.38	1.19
Raf4	103	-0.38	1.19
Raf4	104	-0.38	1.19
Raf4	105	-0.28	1.19
Raf4	106	-0.31	1.19
Raf4	107	-0.31	1.19
Raf4	108	-0.31	1.19
Raf4	109	0.00	2.01
Raf4	110	0.04	1.79
Raf4	111	0.00	2.01
Raf4	112	0.04	1.79
Raf4	113	0.00	1.79
Raf4	114	0.04	2.01
Raf4	115	-0.03	1.79
Raf4	116	0.02	2.01
Raf4	117	-0.26	1.79
Raf4	118	-0.23	1.79
Raf4	119	-0.24	1.79
Raf4	120	-0.20	1.79
Raf4	121	-0.30	1.79
Raf4	122	-0.27	1.79
Raf4	123	-0.27	1.79
Raf4	124	-0.24	1.79
Raf4	125	-0.30	1.79
Raf4	126	-0.27	1.79
Raf4	127	-0.27	1.79
Raf4	128	-0.24	1.79
Raf4	129	-0.30	1.79
Raf4	130	-0.27	1.79
Raf4	131	-0.27	1.79
Raf4	132	-0.24	1.79
Raf4	133	0.02	1.79
Raf4	134	0.06	1.79
Raf4	135	0.02	1.79
Raf4	136	0.06	1.79
Raf4	137	0.02	1.79
Raf4	138	0.06	1.79
Raf4	139	-0.01	1.79
Raf4	140	0.04	2.01
Raf4	141	-0.13	1.19
Raf4	142	-0.14	1.19
Raf4	143	-0.28	1.19
Raf4	144	-0.29	1.19
Raf4	145	-0.32	1.19
Raf4	146	-0.33	1.19
Raf4	147	-0.32	1.19
Raf4	148	-0.33	1.19
Raf4	149	-0.32	1.19
Raf4	150	-0.33	1.19
Raf4	151	-0.02	1.19
Raf4	152	-0.03	1.19

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf4	153	-0.19	1.19
Raf4	154	-0.17	1.19
Raf4	155	-0.13	1.79
Raf4	156	-0.11	1.79
Raf4	157	-0.16	1.79
Raf4	158	-0.13	1.79
Raf4	159	-0.18	1.19
Raf4	160	-0.18	1.19
Raf4	161	-0.18	1.19
Raf4	162	-0.19	1.19
Raf4	163	-0.39	1.19
Raf4	164	-0.33	1.19
Raf4	165	-0.28	1.79
Raf4	166	-0.26	1.79
Raf4	167	-0.31	1.79
Raf4	168	-0.28	1.79
Raf4	169	-0.33	1.19
Raf4	170	-0.33	1.19
Raf4	171	-0.33	1.19
Raf4	172	-0.34	1.19
Raf4	173	0.02	1.79
Raf4	174	0.06	1.79
Raf4	175	-0.01	1.79
Raf4	176	0.04	2.01
Raf4	177	-0.03	1.19
Raf4	178	-0.23	1.79
Raf4	179	-0.21	1.79
Raf4	180	-0.26	1.79
Raf4	181	-0.23	1.79
Raf4	182	-0.27	1.79
Raf4	183	-0.27	1.79
Raf4	184	-0.27	1.79
Raf4	185	-0.25	1.79
Raf4	186	-0.25	1.79
Raf4	187	-0.25	1.79
Raf4	188	-0.30	1.79
Raf4	189	-0.30	1.79
Raf4	190	-0.30	1.79
Raf4	191	-0.27	1.79
Raf4	192	-0.27	1.79
Raf4	193	-0.27	1.79

UNBRACED LENGTH:

Id	Major (ft)	--Minor(ft)-- Bend	Axial	----KL/R---- Major	Minor
Col1	13.1	4.0	4.0	49	57
Col2	14.6	14.6	4.0	55	57
Col3	16.3	8.3	4.0	61	57
Col4	17.4	9.4	4.0	65	57
Col5	15.7	8.0	4.0	58	57
Col6	14.0	14.0	4.0	52	57
Col7	12.5	4.0	4.0	46	57

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Raf1	20.1	3.9	3.9	62	59
Raf2	20.1	3.9	3.9	62	59
Raf3	20.1	3.8	3.8	62	58
Raf4	20.1	3.8	3.8	62	58

LOAD COMBINATIONS:

Strength Combinations

1 - Dead+Collateral+Live
2 - Dead+Collateral
3 - Dead+Collateral+Snow
4 - Dead+Collateral+Snow+Snow_Drift
5 - Dead+Collateral+Snow+Slide_Snow
6 - Dead+Collateral+0.75Live
7 - Dead+Collateral+0.75Snow
8 - Dead+Collateral+0.75Snow+0.75Snow_Drift
9 - Dead+Collateral+0.75Snow+0.75Slide_Snow
10 - Dead+0.6Wind_Pressure+0.6Wind_Long1
11 - Dead+0.6Wind_Pressure+0.6Wind_Long2
12 - Dead+0.6Wind_Suction+0.6Wind_Long1
13 - Dead+0.6Wind_Suction+0.6Wind_Long2
14 - Dead+0.6Wind_Left1+0.6Wind_Suction
15 - Dead+0.6Wind_Right1+0.6Wind_Suction
16 - Dead+0.6Wind_Left2+0.6Wind_Suction
17 - Dead+0.6Wind_Right2+0.6Wind_Suction
18 - Dead+Collateral+0.75Live+0.45Wind_Left2+0.45Wind_Suction
19 - Dead+Collateral+0.75Live+0.45Wind_Right2+0.45Wind_Suction
20 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long1
21 - Dead+Collateral+0.75Live+0.45Wind_Suction+0.45Wind_Long2
22 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction
23 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction
24 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long1
25 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long2
26 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction+0.75Snow_Drift
27 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction+0.75Snow_Drift
28 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long1+0.75Snow_Drift
29 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long2+0.75Snow_Drift
30 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.45Wind_Suction+0.75Slide_Snow
31 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.45Wind_Suction+0.75Slide_Snow
32 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long1+0.75Slide_Snow
33 - Dead+Collateral+0.75Snow+0.45Wind_Suction+0.45Wind_Long2+0.75Slide_Snow
34 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1
35 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2
36 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long1
37 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long2
38 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
39 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
40 - 0.6Dead+0.6Wind_Left2+0.6Wind_Suction
41 - 0.6Dead+0.6Wind_Right2+0.6Wind_Suction
42 - 1.1Dead+1.1Collateral+0.7Seismic_L
43 - 1.1Dead+1.1Collateral+0.7Seismic_R

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

44 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
45 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
46 - 1.07Dead+1.07Collateral+0.53Seismic_L
47 - 1.07Dead+1.07Collateral+0.53Seismic_R
48 - Dead/2+0.7Seismic_L
49 - Dead/2+0.7Seismic_R
50 - Dead+Collateral+E1UNB_SL_L
51 - Dead+Collateral+0.75E1UNB_SL_L
52 - Dead+Collateral+0.45Wind_Left1+0.45Wind_Suction+0.75E1UNB_SL_L
53 - Dead+Collateral+0.45Wind_Right1+0.45Wind_Suction+0.75E1UNB_SL_L
54 - Dead+Collateral+0.45Wind_Left2+0.45Wind_Suction+0.75E1UNB_SL_L
55 - Dead+Collateral+0.45Wind_Right2+0.45Wind_Suction+0.75E1UNB_SL_L
56 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75E1UNB_SL_L
57 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75E1UNB_SL_L
58 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75E1UNB_SL_L
59 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75E1UNB_SL_L
60 - Dead+Collateral+E1UNB_SL_R
61 - Dead+Collateral+0.75E1UNB_SL_R
62 - Dead+Collateral+0.45Wind_Left1+0.45Wind_Suction+0.75E1UNB_SL_R
63 - Dead+Collateral+0.45Wind_Right1+0.45Wind_Suction+0.75E1UNB_SL_R
64 - Dead+Collateral+0.45Wind_Left2+0.45Wind_Suction+0.75E1UNB_SL_R
65 - Dead+Collateral+0.45Wind_Right2+0.45Wind_Suction+0.75E1UNB_SL_R
66 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75E1UNB_SL_R
67 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75E1UNB_SL_R
68 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75E1UNB_SL_R
69 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75E1UNB_SL_R
70 - 0.6Dead+0.6Wind_Left1
71 - 0.6Dead+0.6Wind_Right1
72 - 0.6Dead+0.6Wind_Left2
73 - 0.6Dead+0.6Wind_Right2
74 - 0.6Dead+0.6Wind_Long1
75 - 0.6Dead+0.6Wind_Long2
76 - Dead+Collateral+0.75Live+0.45Wind_Left1
77 - Dead+Collateral+0.75Live+0.45Wind_Right1
78 - Dead+Collateral+0.75Live+0.45Wind_Left2
79 - Dead+Collateral+0.75Live+0.45Wind_Right2
80 - Dead+Collateral+0.75Live+0.45Wind_Long1
81 - Dead+Collateral+0.75Live+0.45Wind_Long2
82 - Dead+Collateral+0.75Snow+0.45Wind_Left1
83 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Snow_Drift
84 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Slide_Snow
85 - Dead+Collateral+0.75Snow+0.45Wind_Right1
86 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Snow_Drift
87 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Slide_Snow
88 - Dead+Collateral+0.75Snow+0.45Wind_Left2
89 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Snow_Drift
90 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Slide_Snow
91 - Dead+Collateral+0.75Snow+0.45Wind_Right2
92 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Snow_Drift
93 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Slide_Snow
94 - Dead+Collateral+0.75Snow+0.45Wind_Long1
95 - Dead+Collateral+0.75Snow+0.45Wind_Long2
96 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Snow_Drift
97 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Snow_Drift

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

98 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Slide_Snow
99 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Slide_Snow
Deflection Combinations
100 - Dead+Collateral+Live
101 - Dead+Collateral
102 - Dead+Collateral+Snow
103 - Dead+Collateral+Snow+Snow_Drift
104 - Dead+Collateral+Snow+Slide_Snow
105 - Dead+Collateral+0.75Live
106 - Dead+Collateral+0.75Snow
107 - Dead+Collateral+0.75Snow+0.75Snow_Drift
108 - Dead+Collateral+0.75Snow+0.75Slide_Snow
109 - Dead+0.48Wind_Pressure+0.48Wind_Long1
110 - Dead+0.48Wind_Pressure+0.48Wind_Long2
111 - Dead+0.48Wind_Suction+0.48Wind_Long1
112 - Dead+0.48Wind_Suction+0.48Wind_Long2
113 - Dead+0.48Wind_Left1+0.48Wind_Suction
114 - Dead+0.48Wind_Right1+0.48Wind_Suction
115 - Dead+0.48Wind_Left2+0.48Wind_Suction
116 - Dead+0.48Wind_Right2+0.48Wind_Suction
117 - Dead+Collateral+0.75Live+0.36Wind_Left2+0.36Wind_Suction
118 - Dead+Collateral+0.75Live+0.36Wind_Right2+0.36Wind_Suction
119 - Dead+Collateral+0.75Live+0.36Wind_Suction+0.36Wind_Long1
120 - Dead+Collateral+0.75Live+0.36Wind_Suction+0.36Wind_Long2
121 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.36Wind_Suction
122 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.36Wind_Suction
123 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long1
124 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long2
125 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.36Wind_Suction+0.75Snow_Drift
126 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.36Wind_Suction+0.75Snow_Drift
127 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long1+0.75Snow_Drift
128 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long2+0.75Snow_Drift
129 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.36Wind_Suction+0.75Slide_Snow
130 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.36Wind_Suction+0.75Slide_Snow
131 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long1+0.75Slide_Snow
132 - Dead+Collateral+0.75Snow+0.36Wind_Suction+0.36Wind_Long2+0.75Slide_Snow
133 - 0.6Dead+0.48Wind_Pressure+0.48Wind_Long1
134 - 0.6Dead+0.48Wind_Pressure+0.48Wind_Long2
135 - 0.6Dead+0.48Wind_Suction+0.48Wind_Long1
136 - 0.6Dead+0.48Wind_Suction+0.48Wind_Long2
137 - 0.6Dead+0.48Wind_Left1+0.48Wind_Suction
138 - 0.6Dead+0.48Wind_Right1+0.48Wind_Suction
139 - 0.6Dead+0.48Wind_Left2+0.48Wind_Suction
140 - 0.6Dead+0.48Wind_Right2+0.48Wind_Suction
141 - 1.1Dead+1.1Collateral+0.7Seismic_L
142 - 1.1Dead+1.1Collateral+0.7Seismic_R
143 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
144 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
145 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_L
146 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_R
147 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_L+0.75Snow_Drift
148 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_R+0.75Snow_Drift
149 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_L+0.75Slide_Snow
150 - 1.07Dead+1.07Collateral+0.75Snow+0.53Seismic_R+0.75Slide_Snow

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

151 - Dead/2+0.7Seismic_L
152 - Dead/2+0.7Seismic_R
153 - Dead+Collateral+E1UNB_SL_L
154 - Dead+Collateral+0.75E1UNB_SL_L
155 - Dead+Collateral+0.36Wind_Left1+0.36Wind_Suction+0.75E1UNB_SL_L
156 - Dead+Collateral+0.36Wind_Right1+0.36Wind_Suction+0.75E1UNB_SL_L
157 - Dead+Collateral+0.36Wind_Left2+0.36Wind_Suction+0.75E1UNB_SL_L
158 - Dead+Collateral+0.36Wind_Right2+0.36Wind_Suction+0.75E1UNB_SL_L
159 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75E1UNB_SL_L
160 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75E1UNB_SL_L
161 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75E1UNB_SL_L
162 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75E1UNB_SL_L
163 - Dead+Collateral+E1UNB_SL_R
164 - Dead+Collateral+0.75E1UNB_SL_R
165 - Dead+Collateral+0.36Wind_Left1+0.36Wind_Suction+0.75E1UNB_SL_R
166 - Dead+Collateral+0.36Wind_Right1+0.36Wind_Suction+0.75E1UNB_SL_R
167 - Dead+Collateral+0.36Wind_Left2+0.36Wind_Suction+0.75E1UNB_SL_R
168 - Dead+Collateral+0.36Wind_Right2+0.36Wind_Suction+0.75E1UNB_SL_R
169 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75E1UNB_SL_R
170 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75E1UNB_SL_R
171 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75E1UNB_SL_R
172 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75E1UNB_SL_R
173 - 0.6Dead+0.48Wind_Left1
174 - 0.6Dead+0.48Wind_Right1
175 - 0.6Dead+0.48Wind_Left2
176 - 0.6Dead+0.48Wind_Right2
177 - 0.6Dead
178 - Dead+Collateral+0.75Live+0.36Wind_Left1
179 - Dead+Collateral+0.75Live+0.36Wind_Right1
180 - Dead+Collateral+0.75Live+0.36Wind_Left2
181 - Dead+Collateral+0.75Live+0.36Wind_Right2
182 - Dead+Collateral+0.75Snow+0.36Wind_Left1
183 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Snow_Drift
184 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Slide_Snow
185 - Dead+Collateral+0.75Snow+0.36Wind_Right1
186 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Snow_Drift
187 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Slide_Snow
188 - Dead+Collateral+0.75Snow+0.36Wind_Left2
189 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Snow_Drift
190 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Slide_Snow
191 - Dead+Collateral+0.75Snow+0.36Wind_Right2
192 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Snow_Drift
193 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Slide_Snow

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22-8706 Wall 1 - Column Flange Brace 4/29/22 3:58pm

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COLUMN FLANGE BRACES:

Id	Column Side	Part	Brace_At Girt_Id
Col3	R	L2X2X1/8	2

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
   Col4       R    L2X2X1/8   2
   Col5       L    L2X2X1/8   2
================================================================================
 22-8706             Wall 1 - Rafter Splice Design              4/29/22  3:58pm
================================================================================

 DESIGN CONSTANTS:
 -----------------
  Plate Yield          = 50.00(ksi )
  Bolt Type            = A325
  Bolt Shear   Stress  = 27.00(ksi )
  Bolt Tension Stress  = 45.00(ksi )


 PLATE SIZE:
 -----------
              -Surface- Rafter  ---Plate---  ---------------Bolts---------------
  Id     Type Id Locate  Depth  Width Thick    Dia  Gage RowT SpaceT RowB SpaceB
  ------ ---- -- ------ ------  ----- -----  -----  ----- ---- ------ ---- ------
  Spl1    M    2   19.6   9.87   6.00 0.375  0.750  3.50    2   4.00    2   4.00
  Spl2    FF   3    0.0   9.87   6.00 0.375  0.750  3.50    1   0.00    1   0.00
  Spl3    M    3   22.6   9.87   6.00 0.375  0.750  3.50    2   4.00    2   4.00

 PLATE REACTIONS:
 ----------------
                 Load  Axial  Shear  Moment
  Id       Side   Id    (k )   (k )  (f-k )
  ------   ----  ----  -----  -----  ------
  Spl1     Top     3    0.52   5.27   15.19
           Bot    38    0.28   1.27   -3.68
  Spl2     Top    60    0.17   2.41    5.40
           Bot    35    1.47   0.46   -1.44
  Spl3     Top    60    0.46   5.84   14.78
           Bot    35    1.21   1.24   -3.20

 WELDS:
 ------
            -Top_Flange_To_Plate-  -Bot_Flange_To_Plate-  -----Web_To_Plate----
                      Shear(k/in )           Shear(k/in )           Shear(k/in )
  Id         Size Typ  Calc Limit   Size Typ  Calc Limit   Size Typ  Calc Limit
  ------    ----- --- ----- -----  ----- --- ----- -----  ----- --- ----- -----
  Spl1      0.188 F2   2.44  3.89  0.188 F2   0.59  3.89  0.125 F1   0.56  1.86
  Spl2      0.188 F1   1.73  3.89  0.188 F1   0.46  3.89  0.125 F1   0.26  1.86
  Spl3      0.188 F2   2.37  3.89  0.188 F2   0.51  3.89  0.125 F1   0.62  1.86

 LOAD COMBINATIONS:
 ------------------
    3 - Dead+Collateral+Snow
   35 - 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2
   38 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
   60 - Dead+Collateral+E1UNB_SL_R

================================================================================
 22-8706             Wall 1 - Base Plate Design                 4/29/22  3:58pm
```

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

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DESIGN CONSTANTS:

Base Plate Yield = 50.00(ksi)
Concrete Bearing = 0.88(ksi)
Bolt Type = A36
Bolt Shear Stress = 11.60(ksi)
Bolt Tension Stress = 21.75(ksi)

BASE SIZE:

Id	Base(in) Type	Depth	Elev	Plate_Size(in) Width	Thick	Length	Bolts(in) Dia	Row	Space	Gage	Req Thick	Req Dia
Col1	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.125	0.164
Col2	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.235	0.278
Col3	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.207	0.278
Col4	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.175	0.215
Col5	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.212	0.278
Col6	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.235	0.278
Col7	S3	7.89	0.0	6.00	0.375	8.50	0.750	2	4.00	4.00	0.125	0.160

S3 - Welded Plate

BASE REACTIONS:

Id	Max_Comp- Load	Fy(k)	Max_Tension+Shear Load	Tens Fy(k)	Shear Fx(k)	-Max_Shear- Load	Fx(k)	Max_Shear+Tension Load	Shear Fx(k)	Tens Fy(k)
Col1	50	4.51	36	-0.96	1.01	12	1.01	36	1.01	-0.96
Col2	3	12.40	38	-3.42	1.59	42	2.91	48	2.91	-1.37
Col3	50	13.54	36	-2.65	1.64	49	2.91	49	2.91	-1.61
Col4	3	11.90	37	-1.82	1.74	12	1.74	37	1.74	-1.82
Col5	60	12.46	37	-2.76	1.58	42	2.91	48	2.91	-1.52
Col6	3	12.40	39	-3.40	1.55	49	2.91	49	2.91	-1.28
Col7	60	4.49	37	-0.97	0.96	12	0.96	37	0.96	-0.97

WELDS:

Id	-Top_Flange_To_Plate- Size	Typ	Shear(k/in) Calc	Limit	-Bot_Flange_To_Plate- Size	Typ	Shear(k/in) Calc	Limit	-----Web_To_Plate---- Size	Typ	Shear(k/in) Calc	Limit
Col1	0.125	F1	0.12	1.86	0.125	F1	0.12	1.86	0.125	F1	0.14	1.86
Col2	0.125	F1	0.43	1.86	0.125	F1	0.43	1.86	0.125	F1	0.39	1.86
Col3	0.125	F1	0.34	1.86	0.125	F1	0.34	1.86	0.125	F1	0.39	1.86
Col4	0.125	F1	0.23	1.86	0.125	F1	0.23	1.86	0.125	F1	0.23	1.86
Col5	0.125	F1	0.35	1.86	0.125	F1	0.35	1.86	0.125	F1	0.39	1.86
Col6	0.125	F1	0.43	1.86	0.125	F1	0.43	1.86	0.125	F1	0.39	1.86

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Col7	0.125	F1	0.12	1.86	0.125	F1	0.12	1.86	0.125	F1	0.13	1.86

LOAD COMBINATIONS:

3 - Dead+Collateral+Snow
12 - Dead+0.6Wind_Suction+0.6Wind_Long1
36 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long1
37 - 0.6Dead+0.6Wind_Suction+0.6Wind_Long2
38 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
39 - 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
42 - 1.1Dead+1.1Collateral+0.7Seismic_L
48 - Dead/2+0.7Seismic_L
49 - Dead/2+0.7Seismic_R
50 - Dead+Collateral+E1UNB_SL_L
60 - Dead+Collateral+E1UNB_SL_R

22-8706 Wall 1 - Bypass Girt Layout 4/29/22 3:58pm

GIRT LAYOUT:

Locate	Des Bay Id	Bay Id	Part	Offset Start	Offset End	Design Length	Extend-- Left	Extend-- Right	Weight	Max_Load--- Id	Max_Load--- UC	Max_Load--- Report	Rot
4.00	1	1	8Z16	0.00	18.50	18.17	0.00	1.00	55.2	WS	0.29	Mom+Shr	D
		2	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.29	Mom+Shr	D
		3	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.26	Mom+Shr	D
		4	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.26	Mom+Shr	D
		5	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.29	Mom+Shr	D
		6	8Z16	0.00	18.50	18.17	1.00	0.00	55.2	WS	0.29	Mom+Shr	D
8.00	2	1	8Z16	0.00	18.50	18.17	0.00	1.00	55.2	WS	0.29	Mom+Shr	D
		2	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.29	Mom+Shr	D
		3	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.26	Mom+Shr	D
		4	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.26	Mom+Shr	D
		5	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.29	Mom+Shr	D
		6	8Z16	0.00	18.50	18.17	1.00	0.00	55.2	WS	0.29	Mom+Shr	D
12.00	3	1	8Z16	0.00	18.50	18.17	0.00	1.00	55.2	WS	0.34	Mom+Shr	D
		2	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.33	Mom+Shr	D
		3	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.28	Mom+Shr	D
		4	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.27	Mom+Shr	D
		5	8Z16	0.00	20.00	20.00	1.00	1.00	63.4	WS	0.31	Mom+Shr	D
		6	8Z16	0.00	18.50	18.17	1.00	0.00	55.2	WS	0.31	Mom+Shr	D
16.00	4	3	8Z16	0.00	20.00	20.00	0.00	1.00	60.5	WP	0.35	Moment	D
		4	8Z16	0.00	20.00	20.00	1.00	0.00	60.5	WP	0.35	Moment	D

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay					
1	2	3	4	5	6
2	2	2	2	2	2

22-8706 Wall 1 - Girt Design 1 (Locate 4.00) 4/29/22 3:58pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	4.0000	18.17		1.00	4.00	2	55.2	0.00	0.70
2	8Z16	4.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
3	8Z16	4.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
4	8Z16	4.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
5	8Z16	4.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
6	8Z16	4.0000	18.17	1.00		4.00	2	55.2	0.00	0.70
								363.8		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.27		-0.39	-0.43	0.00		-0.92	6.92	1.10	1.51
2	0.40	0.36	-0.33	-0.37	1.51	1.13	-0.53	10.31	0.92	1.27
3	0.38	0.34	-0.35	-0.39	1.27	0.91	-0.61	9.89	0.99	1.36
4	0.39	0.35	-0.34	-0.38	1.36	0.99	-0.61	10.11	0.91	1.27
5	0.37	0.33	-0.36	-0.40	1.27	0.92	-0.53	9.69	1.13	1.51
6	0.43	0.39		-0.27	1.51	1.10	-0.92	11.25		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.39	2.5	0.15	RLap	1.10	3.96	0.28	RLap	0.28	-0.17	
2	LLap	0.36	2.5	0.14	LLap	1.13	3.92	0.29	LLap	0.28	-0.08	
3	RLap	-0.35	2.5	0.14	RLap	0.99	3.95	0.25	RLap	0.25	-0.11	
4	LLap	0.35	2.5	0.14	LLap	0.99	3.95	0.25	LLap	0.25	-0.11	
5	RLap	-0.36	2.5	0.14	RLap	1.13	3.92	0.29	RLap	0.28	-0.08	
6	LLap	0.39	2.5	0.15	LLap	1.10	3.96	0.28	LLap	0.28	-0.17	

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.38	5.30	1.75	0.22
2	0.38	5.30	1.75	0.22	0.32	5.30	1.75	0.18
3	0.32	5.30	1.75	0.18	0.34	5.30	1.75	0.19
4	0.34	5.30	1.75	0.19	0.32	5.30	1.75	0.18
5	0.32	5.30	1.75	0.18	0.38	5.30	1.75	0.22
6	0.38	5.30	1.75	0.22				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.29		0.41	0.45	0.00		0.98	7.08	-1.15	-1.58
2	-0.41	-0.37	0.35	0.39	-1.58	-1.19	0.55	10.33	-0.95	-1.32
3	-0.40	-0.36	0.36	0.40	-1.32	-0.94	0.63	9.88	-1.03	-1.41
4	-0.40	-0.36	0.36	0.40	-1.41	-1.03	0.63	10.12	-0.94	-1.32
5	-0.39	-0.35	0.37	0.41	-1.32	-0.95	0.55	9.67	-1.19	-1.58
6	-0.45	-0.41		0.29	-1.58	-1.15	0.98	11.09		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.41	2.5	0.16	RLap	-1.15	4.37	0.26	RLap	0.29	0.18	
2	LLap	-0.37	2.5	0.15	LLap	-1.19	4.37	0.27	LLap	0.29	0.08	
3	RLap	0.36	2.5	0.14	RLap	-1.03	4.37	0.24	RLap	0.26	0.11	
4	LLap	-0.36	2.5	0.14	LLap	-1.03	4.37	0.24	LLap	0.26	0.11	
5	RLap	0.37	2.5	0.15	RLap	-1.19	4.37	0.27	RLap	0.29	0.08	
6	LLap	-0.41	2.5	0.16	LLap	-1.15	4.37	0.26	LLap	0.29	0.18	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	-----Left_Lap(k)-----				-----Right_Lap(k)----			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.40	5.30	1.75	0.23
2	0.40	5.30	1.75	0.23	0.33	5.30	1.75	0.19
3	0.33	5.30	1.75	0.19	0.35	5.30	1.75	0.20
4	0.35	5.30	1.75	0.20	0.33	5.30	1.75	0.19

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

5	0.33	5.30	1.75	0.19	0.40	5.30	1.75	0.23
6	0.40	5.30	1.75	0.23				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.04		-0.06	-0.06	0.00		-0.13	6.92	0.15	0.21
2	0.06	0.05	-0.05	-0.05	0.21	0.16	-0.07	10.31	0.13	0.18
3	0.05	0.05	-0.05	-0.05	0.18	0.13	-0.09	9.89	0.14	0.19
4	0.05	0.05	-0.05	-0.05	0.19	0.14	-0.09	10.11	0.13	0.18
5	0.05	0.05	-0.05	-0.06	0.18	0.13	-0.07	9.69	0.16	0.21
6	0.06	0.06		-0.04	0.21	0.15	-0.13	11.25		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	-0.06	2.5	0.02	RLap	0.15	3.96	0.04	RLap	0.04	-0.02	
2	LLap	0.05	2.5	0.02	LLap	0.16	3.92	0.04	LLap	0.04	-0.01	
3	RLap	-0.05	2.5	0.02	RLap	0.14	3.95	0.04	RLap	0.04	-0.01	
4	LLap	0.05	2.5	0.02	LLap	0.14	3.95	0.04	LLap	0.04	-0.01	
5	RLap	-0.05	2.5	0.02	RLap	0.16	3.92	0.04	RLap	0.04	-0.01	
6	LLap	0.06	2.5	0.02	LLap	0.15	3.96	0.04	LLap	0.04	-0.02	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00			

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left	Shear(k) Left	Shear(k) Right	Shear(k) Right	Moment(f-k) Left	Moment(f-k) Left	Moment(f-k) Mid-Span	Moment(f-k) Right	Moment(f-k) Right

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.04		0.06	0.06	0.00		0.13	6.92	-0.15	-0.21
2	-0.06	-0.05	0.05	0.05	-0.21	-0.16	0.07	10.31	-0.13	-0.18
3	-0.05	-0.05	0.05	0.05	-0.18	-0.13	0.09	9.89	-0.14	-0.19
4	-0.05	-0.05	0.05	0.05	-0.19	-0.14	0.09	10.11	-0.13	-0.18
5	-0.05	-0.05	0.05	0.06	-0.18	-0.13	0.07	9.69	-0.16	-0.21
6	-0.06	-0.06		0.04	-0.21	-0.15	0.13	11.25		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.06	2.5	0.02	RLap	-0.15	4.37	0.04	RLap	0.04	0.02	
2	LLap	-0.05	2.5	0.02	LLap	-0.16	4.37	0.04	LLap	0.04	0.01	
3	RLap	0.05	2.5	0.02	RLap	-0.14	4.37	0.03	RLap	0.04	0.01	
4	LLap	-0.05	2.5	0.02	LLap	-0.14	4.37	0.03	LLap	0.04	0.01	
5	RLap	0.05	2.5	0.02	RLap	-0.16	4.37	0.04	RLap	0.04	0.01	
6	LLap	-0.06	2.5	0.02	LLap	-0.15	4.37	0.04	LLap	0.04	0.02	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	-0.14	2.42	0.14	2.42	-0.02	2.42	0.02	2.42
2	-0.06	2.67	0.07	2.67	-0.01	2.67	0.01	2.67
3	-0.08	2.67	0.09	2.67	-0.01	2.67	0.01	2.67
4	-0.08	2.67	0.09	2.67	-0.01	2.67	0.01	2.67
5	-0.06	2.67	0.07	2.67	-0.01	2.67	0.01	2.67
6	-0.14	2.42	0.14	2.42	-0.02	2.42	0.02	2.42

GIRT LAYOUT:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	8.0000	18.17		1.00	4.00	2	55.2	0.00	0.70
2	8Z16	8.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
3	8Z16	8.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
4	8Z16	8.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
5	8Z16	8.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
6	8Z16	8.0000	18.17	1.00		4.00	2	55.2	0.00	0.70
								363.8		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
1	0.27		-0.39	-0.43	0.00		-0.92	6.92	1.10	1.51
2	0.40	0.36	-0.33	-0.37	1.51	1.13	-0.53	10.31	0.92	1.27
3	0.38	0.34	-0.35	-0.39	1.27	0.91	-0.61	9.89	0.99	1.36
4	0.39	0.35	-0.34	-0.38	1.36	0.99	-0.61	10.11	0.91	1.27
5	0.37	0.33	-0.36	-0.40	1.27	0.92	-0.53	9.69	1.13	1.51
6	0.43	0.39		-0.27	1.51	1.10	-0.92	11.25		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.39	2.5	0.15	RLap	1.10	3.96	0.28	RLap	0.28	-0.17	
2	LLap	0.36	2.5	0.14	LLap	1.13	3.92	0.29	LLap	0.28	-0.08	
3	RLap	-0.35	2.5	0.14	RLap	0.99	3.95	0.25	RLap	0.25	-0.11	
4	LLap	0.35	2.5	0.14	LLap	0.99	3.95	0.25	LLap	0.25	-0.11	
5	RLap	-0.36	2.5	0.14	RLap	1.13	3.92	0.29	RLap	0.28	-0.08	
6	LLap	0.39	2.5	0.15	LLap	1.10	3.96	0.28	LLap	0.28	-0.17	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc	Shear	Bear	UC	Right_Lap(k) Calc	Shear	Bear	UC
1					0.38	5.30	1.75	0.22
2	0.38	5.30	1.75	0.22	0.32	5.30	1.75	0.18
3	0.32	5.30	1.75	0.18	0.34	5.30	1.75	0.19
4	0.34	5.30	1.75	0.19	0.32	5.30	1.75	0.18

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

5	0.32	5.30	1.75	0.18	0.38	5.30	1.75	0.22	
6	0.38	5.30	1.75	0.22					

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.29		0.41	0.45	0.00		0.98	7.08	-1.15	-1.58
2	-0.41	-0.37	0.35	0.39	-1.58	-1.19	0.55	10.33	-0.95	-1.32
3	-0.40	-0.36	0.36	0.40	-1.32	-0.94	0.63	9.88	-1.03	-1.41
4	-0.40	-0.36	0.36	0.40	-1.41	-1.03	0.63	10.12	-0.94	-1.32
5	-0.39	-0.35	0.37	0.41	-1.32	-0.95	0.55	9.67	-1.19	-1.58
6	-0.45	-0.41		0.29	-1.58	-1.15	0.98	11.09		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	0.41	2.5	0.16	RLap	-1.15	4.37	0.26	RLap	0.29	0.18	
2	LLap	-0.37	2.5	0.15	LLap	-1.19	4.37	0.27	LLap	0.29	0.08	
3	RLap	0.36	2.5	0.14	RLap	-1.03	4.37	0.24	RLap	0.26	0.11	
4	LLap	-0.36	2.5	0.14	LLap	-1.03	4.37	0.24	LLap	0.26	0.11	
5	RLap	0.37	2.5	0.15	RLap	-1.19	4.37	0.27	RLap	0.29	0.08	
6	LLap	-0.41	2.5	0.16	LLap	-1.15	4.37	0.26	LLap	0.29	0.18	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.40	5.30	1.75 0.23
2	0.40	5.30	1.75 0.23	0.33	5.30	1.75 0.19
3	0.33	5.30	1.75 0.19	0.35	5.30	1.75 0.20
4	0.35	5.30	1.75 0.20	0.33	5.30	1.75 0.19
5	0.33	5.30	1.75 0.19	0.40	5.30	1.75 0.23
6	0.40	5.30	1.75 0.23			

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k) Left	Shear(k) Left	Shear(k) Right	Shear(k) Right	Moment(f-k) Left	Moment(f-k) Left	Moment(f-k) Mid-Span	Moment(f-k) Right	Moment(f-k) Right

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.04		-0.06	-0.06	0.00		-0.13	6.92	0.15	0.21
2	0.06	0.05	-0.05	-0.05	0.21	0.16	-0.07	10.31	0.13	0.18
3	0.05	0.05	-0.05	-0.05	0.18	0.13	-0.09	9.89	0.14	0.19
4	0.05	0.05	-0.05	-0.05	0.19	0.14	-0.09	10.11	0.13	0.18
5	0.05	0.05	-0.05	-0.06	0.18	0.13	-0.07	9.69	0.16	0.21
6	0.06	0.06		-0.04	0.21	0.15	-0.13	11.25		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.06	2.5	0.02	RLap	0.15	3.96	0.04	RLap	0.04	-0.02	
2	LLap	0.05	2.5	0.02	LLap	0.16	3.92	0.04	LLap	0.04	-0.01	
3	RLap	-0.05	2.5	0.02	RLap	0.14	3.95	0.04	RLap	0.04	-0.01	
4	LLap	0.05	2.5	0.02	LLap	0.14	3.95	0.04	LLap	0.04	-0.01	
5	RLap	-0.05	2.5	0.02	RLap	0.16	3.92	0.04	RLap	0.04	-0.01	
6	LLap	0.06	2.5	0.02	LLap	0.15	3.96	0.04	LLap	0.04	-0.02	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.04		0.06	0.06	0.00		0.13	6.92	-0.15	-0.21
2	-0.06	-0.05	0.05	0.05	-0.21	-0.16	0.07	10.31	-0.13	-0.18
3	-0.05	-0.05	0.05	0.05	-0.18	-0.13	0.09	9.89	-0.14	-0.19
4	-0.05	-0.05	0.05	0.05	-0.19	-0.14	0.09	10.11	-0.13	-0.18
5	-0.05	-0.05	0.05	0.06	-0.18	-0.13	0.07	9.69	-0.16	-0.21
6	-0.06	-0.06		0.04	-0.21	-0.15	0.13	11.25		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)	Moment(f-k)	Mom+Shr	Deflect(in)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.06	2.5	0.02	RLap	-0.15	4.37	0.04	RLap	0.04	0.02	
2	LLap	-0.05	2.5	0.02	LLap	-0.16	4.37	0.04	LLap	0.04	0.01	
3	RLap	0.05	2.5	0.02	RLap	-0.14	4.37	0.03	RLap	0.04	0.01	
4	LLap	-0.05	2.5	0.02	LLap	-0.14	4.37	0.03	LLap	0.04	0.01	
5	RLap	0.05	2.5	0.02	RLap	-0.16	4.37	0.04	RLap	0.04	0.01	
6	LLap	-0.06	2.5	0.02	LLap	-0.15	4.37	0.04	LLap	0.04	0.02	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00				

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
1	-0.14	2.42	0.14	2.42	-0.02	2.42	0.02	2.42
2	-0.06	2.67	0.07	2.67	-0.01	2.67	0.01	2.67
3	-0.08	2.67	0.09	2.67	-0.01	2.67	0.01	2.67
4	-0.08	2.67	0.09	2.67	-0.01	2.67	0.01	2.67
5	-0.06	2.67	0.07	2.67	-0.01	2.67	0.01	2.67
6	-0.14	2.42	0.14	2.42	-0.02	2.42	0.02	2.42

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	8Z16	12.0000	18.17		1.00	4.15	2	55.2	0.00	0.70
2	8Z16	12.0000	20.00	1.00	1.00	4.98	2	63.4	0.00	0.70
3	8Z16	12.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
4	8Z16	12.0000	20.00	1.00	1.00	4.00	2	63.4	0.00	0.70
5	8Z16	12.0000	20.00	1.00	1.00	4.67	2	63.4	0.00	0.70

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

6	8Z16	12.0000	18.17	1.00	3.82	2	55.2	0.00	0.70	
							363.8			

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.27		-0.42	-0.46	0.00		-0.89	6.68	1.30	1.74
2	0.49	0.44	-0.42	-0.47	1.74	1.27	-0.78	10.27	1.04	1.48
3	0.40	0.36	-0.33	-0.37	1.48	1.11	-0.55	10.30	0.90	1.25
4	0.37	0.34	-0.35	-0.39	1.25	0.90	-0.57	9.76	1.07	1.44
5	0.44	0.40	-0.41	-0.46	1.44	1.02	-0.72	9.82	1.17	1.61
6	0.42	0.38		-0.24	1.61	1.20	-0.82	11.49		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	-0.42	2.5	0.16	RLap	1.30	3.93	0.33	RLap	0.32	-0.15	
2	LLap	0.44	2.5	0.17	LLap	1.27	3.94	0.32	LLap	0.32	-0.14	
3	LLap	0.36	2.5	0.14	LLap	1.11	3.92	0.28	LLap	0.27	-0.09	
4	RLap	-0.35	2.5	0.14	RLap	1.07	3.93	0.27	RLap	0.26	-0.09	
5	RLap	-0.41	2.5	0.16	RLap	1.17	3.95	0.30	RLap	0.29	-0.13	
6	LLap	0.38	2.5	0.15	LLap	1.20	3.93	0.31	LLap	0.29	-0.14	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
1				0.44	5.30	1.75 0.25
2	0.44	5.30	1.75 0.25	0.37	5.30	1.75 0.21
3	0.37	5.30	1.75 0.21	0.31	5.30	1.75 0.18
4	0.31	5.30	1.75 0.18	0.36	5.30	1.75 0.21
5	0.36	5.30	1.75 0.21	0.40	5.30	1.75 0.23
6	0.40	5.30	1.75 0.23			

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Shear(k) Left	Shear(k) Left	Shear(k) Right	Shear(k) Right	Moment(f-k) Left	Moment(f-k) Left	Moment(f-k) Mid-Span	Moment(f-k) Right	Moment(f-k) Right

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.29		0.44	0.48	0.00		0.94	6.84	-1.37	-1.82
2	-0.51	-0.46	0.43	0.48	-1.82	-1.34	0.81	10.28	-1.08	-1.54
3	-0.41	-0.37	0.35	0.39	-1.54	-1.15	0.58	10.29	-0.94	-1.31
4	-0.39	-0.35	0.37	0.41	-1.31	-0.94	0.60	9.76	-1.11	-1.50
5	-0.46	-0.41	0.43	0.48	-1.50	-1.06	0.74	9.80	-1.23	-1.68
6	-0.44	-0.40		0.27	-1.68	-1.26	0.87	11.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.44	2.5	0.17	RLap	-1.37	4.37	0.31	RLap	0.34	0.16	
2	LLap	-0.46	2.5	0.18	LLap	-1.34	4.37	0.31	LLap	0.33	0.14	
3	LLap	-0.37	2.5	0.15	LLap	-1.15	4.37	0.26	LLap	0.28	0.09	
4	RLap	0.37	2.5	0.14	RLap	-1.11	4.37	0.25	RLap	0.27	0.10	
5	RLap	0.43	2.5	0.17	RLap	-1.23	4.37	0.28	RLap	0.31	0.13	
6	LLap	-0.40	2.5	0.16	LLap	-1.26	4.37	0.29	LLap	0.31	0.15	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.46	5.30	1.75	0.26
2	0.46	5.30	1.75	0.26	0.39	5.30	1.75	0.22
3	0.39	5.30	1.75	0.22	0.33	5.30	1.75	0.19
4	0.33	5.30	1.75	0.19	0.37	5.30	1.75	0.21
5	0.37	5.30	1.75	0.21	0.42	5.30	1.75	0.24
6	0.42	5.30	1.75	0.24				

LOAD ID - Seismic_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.04		-0.06	-0.06	0.00		-0.13	6.68	0.18	0.25
2	0.07	0.06	-0.06	-0.07	0.25	0.18	-0.11	10.27	0.15	0.21
3	0.06	0.05	-0.05	-0.05	0.21	0.16	-0.08	10.30	0.13	0.18
4	0.05	0.05	-0.05	-0.06	0.18	0.13	-0.08	9.76	0.15	0.20
5	0.06	0.06	-0.06	-0.06	0.20	0.14	-0.10	9.82	0.17	0.23
6	0.06	0.05		-0.03	0.23	0.17	-0.12	11.49		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.06	2.5	0.02	RLap	0.18	3.93	0.05	RLap	0.05	-0.02	
2	LLap	0.06	2.5	0.02	LLap	0.18	3.94	0.05	LLap	0.05	-0.02	
3	LLap	0.05	2.5	0.02	LLap	0.16	3.92	0.04	LLap	0.04	-0.01	
4	RLap	-0.05	2.5	0.02	RLap	0.15	3.93	0.04	RLap	0.04	-0.01	
5	RLap	-0.06	2.5	0.02	RLap	0.17	3.95	0.04	RLap	0.04	-0.02	
6	LLap	0.05	2.5	0.02	LLap	0.17	3.93	0.04	LLap	0.04	-0.02	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00				

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.04		0.06	0.06	0.00		0.13	6.68	-0.18	-0.25
2	-0.07	-0.06	0.06	0.07	-0.25	-0.18	0.11	10.27	-0.15	-0.21
3	-0.06	-0.05	0.05	0.05	-0.21	-0.16	0.08	10.30	-0.13	-0.18
4	-0.05	-0.05	0.05	0.06	-0.18	-0.13	0.08	9.76	-0.15	-0.20
5	-0.06	-0.06	0.06	0.06	-0.20	-0.14	0.10	9.82	-0.17	-0.23
6	-0.06	-0.05		0.03	-0.23	-0.17	0.12	11.49		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-	Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.06	2.5	0.02	RLap	-0.18	4.37	0.04	RLap	0.05	0.02	
2	LLap	-0.06	2.5	0.02	LLap	-0.18	4.37	0.04	LLap	0.05	0.02	
3	LLap	-0.05	2.5	0.02	LLap	-0.16	4.37	0.04	LLap	0.04	0.01	
4	RLap	0.05	2.5	0.02	RLap	-0.15	4.37	0.03	RLap	0.04	0.01	
5	RLap	0.06	2.5	0.02	RLap	-0.17	4.37	0.04	RLap	0.04	0.02	
6	LLap	-0.05	2.5	0.02	LLap	-0.17	4.37	0.04	LLap	0.04	0.02	

LAP BOLT SHEAR/BEARING:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00				

DEFLECTION (Working Load):

Span	Wind_Pressure		Wind_Suction		Seis_Pressure		Seis_Suction	
Id	Calc	Limit	Calc	Limit	Calc	Limit	Calc	Limit
1	-0.12	2.42	0.13	2.42	-0.02	2.42	0.02	2.42
2	-0.11	2.67	0.12	2.67	-0.02	2.67	0.02	2.67
3	-0.07	2.67	0.07	2.67	-0.01	2.67	0.01	2.67
4	-0.07	2.67	0.08	2.67	-0.01	2.67	0.01	2.67
5	-0.10	2.67	0.11	2.67	-0.02	2.67	0.02	2.67
6	-0.11	2.42	0.12	2.42	-0.02	2.42	0.02	2.42

22-8706 Wall 1 - Girt Design 4 (Locate 16.00) 4/29/22 3:58pm

GIRT LAYOUT:

Bay			Design	--Lap(ft)--		Load	No.		Available Reduction Factor	
Id	Part	Locate	Length	Left	Right	Width	Brace	Weight	Out	In
3	8Z16	16.0000	20.00		1.00	3.53	2	60.5	0.00	0.70
4	8Z16	16.0000	20.00	1.00		3.52	2	60.5	0.00	0.70
								121.0		

LOAD ID - 0.6Wind_Pressure:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	0.25		-0.39	-0.43	0.00		-0.92	7.37	1.38	1.79
4	0.43	0.39		-0.25	1.79	1.38	-0.91	12.65		0.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	RLap	-0.39	2.5	0.15	RLap	1.38	3.91	0.35	RLap	0.33	-0.19	
4	LLap	0.39	2.5	0.15	LLap	1.38	3.91	0.35	LLap	0.33	-0.19	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
3					0.45	5.30	1.75	0.26
4	0.45	5.30	1.75	0.26				

LOAD ID - 0.6Wind_Suction:

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
3	-0.26		0.41	0.45	0.00		0.96	7.37	-1.43	-1.86
4	-0.44	-0.41		0.26	-1.86	-1.43	0.95	12.65		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
3	RLap	0.41	2.5	0.16	RLap	-1.43	4.37	0.33	RLap	0.34	0.20	
4	LLap	-0.41	2.5	0.16	LLap	-1.43	4.37	0.33	LLap	0.34	0.20	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay	Left_Lap(k)				Right_Lap(k)			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
3					0.47	5.30	1.75	0.27
4	0.47	5.30	1.75	0.27				

LOAD ID - Seismic_Pressure:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	0.04		-0.06	-0.06	0.00		-0.13	7.37	0.19	0.25
4	0.06	0.06		-0.04	0.25	0.19	-0.13	12.65		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	RLap	-0.06	2.5	0.02	RLap	0.19	3.91	0.05	RLap	0.05	-0.03	
4	LLap	0.06	2.5	0.02	LLap	0.19	3.91	0.05	LLap	0.05	-0.03	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC
3				0.00	0.00	0.00 0.00
4	0.00	0.00	0.00 0.00			

LOAD ID - Seismic_Suction:

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
3	-0.04		0.06	0.06	0.00		0.13	7.37	-0.19	-0.25
4	-0.06	-0.06		0.04	-0.25	-0.19	0.13	12.65		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
3	RLap	0.06	2.5	0.02	RLap	-0.19	4.37	0.04	RLap	0.05	0.03	
4	LLap	-0.06	2.5	0.02	LLap	-0.19	4.37	0.04	LLap	0.05	0.03	

LAP BOLT SHEAR/BEARING:

Bolt Size =0.500 (GR_5)

Bay Id	Left_Lap(k) Calc Shear	Left_Lap(k) Bear	Left_Lap(k) UC	Right_Lap(k) Calc Shear	Right_Lap(k) Bear	Right_Lap(k) UC

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

3					0.00	0.00	0.00	0.00	
4	0.00	0.00	0.00	0.00					

DEFLECTION (Working Load):

Span Id	Wind_Pressure Calc	Wind_Pressure Limit	Wind_Suction Calc	Wind_Suction Limit	Seis_Pressure Calc	Seis_Pressure Limit	Seis_Suction Calc	Seis_Suction Limit
3	-0.15	2.67	0.16	2.67	-0.03	2.67	0.03	2.67
4	-0.15	2.67	0.16	2.67	-0.03	2.67	0.03	2.67

PANEL SHEAR WITH NO BRACING:

Base Length	Wind Load	Wind Calc	Seismic Load	Seismic Calc	Limit
117.00	15	13.8	48	57.3	100.0

DIAGONAL BRACE LAYOUT:

Bay Id	Brace_Locate Start	Brace_Locate End	Bay Width	Design Length	Diag_Brace Type	Diag_Brace Size	Diag_Brace Part	KL/R Calc	KL/R Limit
2	0.00	16.30	20.00	25.80	C	0.375	3/8 Cab		
5	0.00	15.68	20.00	25.42	C	0.313	5/16 Cab		

DIAGONAL BRACE STRENGTH:

Bay Id	Brace_Locate Start	Brace_Locate End	Wind(k) Load	Wind(k) Calc	Wind(k) Limit	Seismic(k) Load	Seismic(k) Calc	Seismic(k) Limit	Max UC
2	0.00	16.30	15	1.04	7.70	48	5.77	7.70	0.75
5	0.00	15.68	15	1.02	5.60	48	5.68	5.60	1.02

COLUMN BASE REACTIONS:

Bay Id	Col Id	Wind_Max(k) Load	Wind_Max(k) Horz	Wind_Max(k) Vert(+/-)	Seismic_Max(k) Load	Seismic_Max(k) Horz	Seismic_Max(k) Vert(+/-)
2	2	38	-0.78	0.63	48	-2.91	2.37
2	3	15	0.81	0.66	43	2.91	2.37
5	5	38	-0.78	0.61	48	-2.91	2.28
5	6	15	0.81	0.63	43	2.91	2.28

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

DEFLECTION AT RAFTER:

Wall Height	Deflection(in) Wind	Seismic	Span/Deflect ----Wind--- Calc	Limit	--Seismic-- Calc	Limit
15.7	0.14	1.65	999.	60.	114.	60.

LOAD COMBINATIONS:

15 - Dead+0.6Wind_Right1+0.6Wind_Suction
38 - 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
43 - 1.1Dead+1.1Collateral+0.7Seismic_R
48 - Dead/2+0.7Seismic_L

22-8706 Wall 1 - Wall Panel Design 4/29/22 3:58pm

PANEL DATA:

Bay Id	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
2	26 PBR	PBR	26.00	80.0	0.00	17.96

MOMENTS & DEFLECTION:

Span Id	Locate(ft) Start	End	Load	Moment(ft-lb/ft) Start Calc	Limit	Midspan Calc	Limit	End Calc	Limit	Max UC	Deflect(in) Calc	Limit
1	0.00	4.00	WP	0.0	150.4	-13.4	139.0	20.4	150.4	0.14	-0.02	0.53
			WS	0.0	150.4	14.5	150.4	-22.1	139.0	0.16	0.02	0.53
2	4.00	8.00	WP	20.4	150.4	-8.6	139.0	8.0	150.4	0.14	-0.01	0.53
			WS	-22.1	139.0	9.3	150.4	-8.7	139.0	0.16	0.01	0.53
3	8.00	12.00	WP	8.0	150.4	-2.2	139.0	37.1	150.4	0.25	0.01	0.53
			WS	-8.7	139.0	2.4	150.4	-40.2	139.0	0.29	-0.01	0.53
4	12.00	17.96	WP	37.1	150.4	-32.9	139.0	0.0	150.4	0.25	-0.11	0.79
			WS	-40.2	139.0	35.6	150.4	0.0	139.0	0.29	0.12	0.79

WP - 0.6Wind_Pressure
WS - 0.6Wind_Suction

22-8706 Wall 1 - Liner Panel Summary 4/29/22 3:58pm

PANEL DATA:

--Bay_Id- Start	End	Height	Part	Type	Gage	Yield	Rotation Stiffness

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

1 6 Rafter B-LINER BLS 29.00 80.0 0.00

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22-8706 Wall 1 - Panel Zones 4/29/22 3:58pm

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PANEL:

Part	Thick (in)	Yield (ksi)	Tensile Strength (ksi)
26 PBR	0.019	80.00	94.40

GIRT SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
T3125PTW	0.21	0.50	2.80

PANEL ZONE LAYOUT:

Zone Id	Description	----Wall(ft)--- Offset1	Offset2	Bay Id	--Girt(ft,ft,in)-- Locate	Load Width	Min Thick	Panel Span (ft)
1	Interior	5.63	111.37	2	4.00	4.98	0.060	4.00
2	Lt Edge	0.00	5.63	1	12.00	4.15	0.060	4.29
3	Rt Edge	111.37	117.00	6	4.00	4.00	0.060	4.00

GIRT SCREW CHECK:

Zone Id	Screw Space (ft)	Wind Suction (psf)	Load (k)	--------Limit(k)------- Girt Pullout	Panel Pullover	Screw Tension	Max UC
1	1.00	12.14	0.06	0.23	0.44	0.75	0.26
2	1.00	12.14	0.05	0.23	0.44	0.75	0.22
3	1.00	12.14	0.05	0.23	0.44	0.75	0.21

BASE SCREWS:

Part	Dia (in)	Washer (in)	Limit (k)
T3125PTW	0.21	0.50	2.80

BASE SCREW CHECK:

Base Length	Screw Space (ft)	Force/Screw Wind (k)	Seis (k)	Shear Limit (k)	Max UC

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

117.00 1.00 0.014 0.057 0.335 0.17

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22-8706 Wall 1 - Weight Summary 4/29/22 3:58pm

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Columns	=	1036.05
Rafters	=	1408.96
Girts	=	1212.48
Bracing	=	24.01
Clips	=	66.00
Total Weight	=	3747.50

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22-8706 Wall 1 - Warning Summary 4/29/22 3:58pm

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.. No Warnings

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Frame 1 - Design Code 4/29/22 3:56pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Frame 1 - Base Plates and Anchor Bolt 4/29/22 3:56pm

DESIGN CONSTANTS:

Base Plate Yield = 50.00 (ksi)
Concrete Bearing = 0.88 (ksi)
Bolt Type = A36
Bolt Shear Stress = 11.60 (ksi)
Bolt Tension Stress = 21.75 (ksi)

BASE PLATE & BOLT SIZE:

Id	Typ	Depth	Elev	Width	Length	Thick	Row	Dia	Gage	Limit	UC	Req Thick	Req Dia
Left	P	25.1	0.0	10.0	26.00	0.500	3	1.375	5.00	103.3	0.93	0.313	1.306
Right	P	25.1	0.0	10.0	26.00	0.500	3	1.375	5.00	103.3	0.93	0.317	1.306

BASE REACTIONS:

Column Id	-Max_Comp- Ld	Fy(k)	Max_Tension+Shear Tens Ld	Fy(k)	Shear Fx(k)	-Max_Shear Ld	Fx(k)	Max_Shear+Tension Shear Ld	Fx(k)	Tens Fy(k)
Left	5	68.6	65	-8.4	7.8	6	96.0	83	17.2	-0.1
Right	6	68.4	67	-8.7	8.3	6	96.0	67	8.3	-8.7

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

WELDS:

Base	Outside_Flange_To_Base Shear(k/in)				Inside_Flange_To_Base Shear(k/in)				-----Web_To_Base----- Shear(k/in)			
Id	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
Left	0.188	F1	0.42	2.78	0.188	F2	0.21	2.78	0.313	F1	4.00	4.64
Right	0.188	F1	0.43	2.78	0.188	F2	0.22	2.78	0.313	F1	4.00	4.64

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow
65 - 0.6Dead+0.6Wind_Long1
67 - 0.6Dead+0.6Wind_Long2
83 - Dead/2+0.7Seismic_Long

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22-8706 Frame 1 - Bolted-End-Plates 4/29/22 3:56pm

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DESIGN CONSTANTS:

Splice Yield = 50.00 (ksi)
Bolt Type = A325 Snug-Tightened
Bolt Shear Stress = 27.00 (ksi)
Bolt Tension Stress = 45.00 (ksi)

PLATE SIZE:

Splice Id	Typ	Member Locate	Web Depth	Splice(in) Width	Thick	Bolts(A325) Dia	Gage	Gage2	RowT	SpaceT	RowB	SpaceB	RowI
1	PSS	1- 2	54.00	10.0	1.000	1.125	5.00	5.00	2	4.00	2	4.00	2
2	-EE	3- 4	30.11	10.0	0.500	0.750	5.00	5.00	2	4.00	2	4.00	1
3	-EE	4- 5	30.00	10.0	0.500	0.750	5.00	5.00	2	4.00	2	4.00	1
4	PSS	5- 6	54.00	10.0	1.000	1.125	5.00	5.00	2	4.00	2	4.00	2

PLATE DESIGN:

Splice Id	Ten Typ	Load Loc	Max_Moment Load Id	Axial (k)	Shear (k)	Moment (f-k)	Max_Shear Load Id	Axial (k)	Shear (k)	Moment (f-k)	Req Thick	Req Dia	Bolt UC
1	PSS	Top	5	100.9	54.2	976.8	5	100.9	54.2	976.8	0.756	1.041	0.89
		Bot	68	-10.7	-3.7	-90.8	66	-9.8	-5.8	-71.8	0.263	0.596	0.28
2	-EE	Top	66	-10.4	1.1	14.7	68	-11.0	-1.8	13.2	0.196	0.527	0.19
		Bot	6	96.0	3.8	-196.3	97	80.8	12.4	-168.5	0.321	0.536	0.51
3	-EE	Top	68	-10.6	1.2	33.1	85	79.5	-15.8	20.8	0.253	0.645	0.32
		Bot	97	82.3	-14.2	-214.6	6	97.8	-17.3	-127.8	0.392	0.656	0.77
4	PSS	Top	6	101.0	-54.0	908.2	6	101.0	-54.0	908.2	0.756	0.992	0.80

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bot	66	-9.9	3.3	-78.0	68	-10.3	6.1	-71.7	0.245	0.557	0.24

WELDS:

Splice		Outside_Flange_To_Bep Shear(k/in)				Inside_Flange_To_Bep Shear(k/in)				-----Web_To_Bep------ Shear(k/in)			
Id	Side	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
1	L	0.438	F2	8.73	9.10	0.188	F2	1.05	3.89	0.500	F2	6.54	7.43
1	R	0.500	F2	9.34	11.15	0.188	F2	0.92	3.89	0.375	F2	4.67	5.57
2	L	0.188	F2	0.26	3.89	0.188	F2	3.49	3.89	0.125	F2	1.31	1.86
2	R	0.188	F2	0.27	3.89	0.188	F2	3.49	3.89	0.125	F2	1.31	1.86
3	L	0.188	F2	0.61	3.89	0.188	F2	3.83	3.89	0.125	F2	1.43	1.86
3	R	0.188	F2	0.57	3.89	0.188	F2	3.69	3.89	0.125	F2	1.85	1.86
4	L	0.438	F2	8.68	9.10	0.188	F2	0.79	3.89	0.313	F2	4.34	4.64
4	R	0.438	F2	8.11	9.10	0.188	F2	0.90	3.89	0.438	F2	6.08	6.50

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow
66 - 0.6Dead-0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2
85 - Dead+Collateral+F1UNB_SL_L
97 - Dead+Collateral+F1UNB_SL_R

Stiffener Yield = 50.0 (ksi)

STIFFENER SIZE:

----Stiffener--- Location	Offset	--Web(in)-- Depth	Thick	----Stiffener_Size(in)--- Width	Thick	Length	No.
Lt Col	0.0	48.00	0.375	4.00	0.500	48.00	1
Rt Col	117.0	48.00	0.375	4.00	0.375	48.00	1

STIFFENER DESIGN:

	----Tension(k)---			--Compression(k)-			Max
Location	Load	Calc	Limit	Load	Calc	Limit	UC
Lt Col	68	19.6	119.8	5	207.2	225.0	0.92
Rt Col	66	17.1	89.8	6	194.6	195.1	1.00

WELDS:

	---Stiff_To_Flg/EP--- Shear(k/in)				-----Stiff_To_Web---- Shear(k/in)			
Stiffener Location	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Lt Col	0.188	F2	1.23	3.89	0.188	F1	2.16	2.78
Rt Col	0.188	F2	1.07	3.89	0.188	F1	2.03	2.78

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow
66 - 0.6Dead-0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2

22-8706 Frame 1 - Transverse Stiffeners 4/29/22 3:56pm

No Stiffeners Required.

22-8706 Frame 1 - Flange Braces 4/29/22 3:56pm

DESIGN CONSTANTS:

Flange Brace Yield = 36.00 ksi
Girt/Purlin Yield = 55.00 ksi
Flange Brace Bolt = GR_5 (1 Washers)
Bolt Shear Stress = 24.00 ksi

Flange Brace Force
Inside flange, max of bending compression

LAYOUT:

Surf Id	Loc	Side	Part	Seg Id	Web Depth	Brace Offset	Angle Deg	Design Length	Bolt_Dia Frame	Bolt_Dia Purlin	Bolt_Dia Clip	Attachment Frame	Attachment Purlin Ref
2	2	2	L3X3X316	2	50.62	36.00	33.1	62.23	0.500	0.500		Clip	Web
	6	1	L3X3X316	3	35.22	24.00	30.9	42.81	0.500	0.500		Clip	Web
	10	1	L2X2X1/8	4	30.00	24.00	34.9	38.42	0.500	0.500		Clip	Web
	14	1	L2X2X1/8	4	30.00	24.00	34.9	38.42	0.500	0.500		Clip	Web
3	1	1	L2X2X1/8	5	30.00	24.00	34.8	38.52	0.500	0.500		Clip	Web
	3	1	L2X2X1/8	5	30.00	24.00	34.8	38.52	0.500	0.500		Clip	Web
	7	1	L2X2X1/8	5	30.00	24.00	34.8	38.52	0.500	0.500		Clip	Web
	11	1	L2X2X1/8	6	40.11	36.00	39.3	53.73	0.500	0.500		Clip	Web
	15	2	L3X3X316	7	51.53	36.00	32.7	62.99	0.500	0.500		Clip	Web

DESIGN:

Surf	Load(f-k)	Force	-Brace_UC-	---Connection_UC---

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Id	Moment	(k)	Comp	Tens	Frame	Purlin	Clip
2	2	5	813.1	2.93	0.38	0.35	0.62	0.67	
	6	97	310.5	3.65	0.38	0.43	0.77	0.83	
	10	66	27.1	0.32	0.09	0.09	0.09	0.07	
	14	66	16.4	0.19	0.05	0.05	0.05	0.04	
3	1	68	15.5	0.18	0.05	0.05	0.05	0.04	
	3	68	30.9	0.36	0.10	0.10	0.10	0.08	
	7	68	34.9	0.40	0.11	0.11	0.11	0.09	
	11	85	254.1	1.81	0.68	0.49	0.48	0.41	
	15	6	747.0	2.66	0.35	0.31	0.56	0.61	

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow
66 - 0.6Dead-0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2
85 - Dead+Collateral+F1UNB_SL_L
97 - Dead+Collateral+F1UNB_SL_R

22-8706 Frame 1 - Web To Flange Weld 4/29/22 3:56pm

Surf Id	Mem Id	Seg Id	Sec Id	Load Id	Shear (k)	Q (in3)	Ixx (in4)	---Web_Flange_Weld--- Shear(k/in) Size	Typ	Calc	Limit
1	1	1	1	5	90.1	72.1	2118	0.250	F1	3.07	3.71
2	2	2	6	5	50.1	185.4	12431	0.188	F1	0.75	2.78
2	2	3	9	5	45.4	170.7	10408	0.188	F1	0.74	2.78
2	3	4	20	5	26.2	76.3	2748	0.188	F1	0.73	2.78
3	4	5	34	97	19.0	88.5	3028	0.188	F1	0.56	2.78
3	5	6	57	6	36.6	113.6	7046	0.188	F1	0.59	2.78
3	5	7	64	6	50.5	185.4	12431	0.188	F1	0.75	2.78
4	6	8	69	6	89.4	72.1	2118	0.250	F1	3.04	3.71

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow
97 - Dead+Collateral+F1UNB_SL_R

22-8706 Frame 1 - Special Segments 4/29/22 3:56pm

FLANGE PLATE:

Locate	--Initial-- Width (in)	Thick (in)	---Final--- Width (in)	Thick (in)

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Lt Col	10.0	0.500	10.0	0.500
Rt Col	10.0	0.500	10.0	0.500

WEB PLATE:

Locate	Id	Actions Axial (k)	Actions Moment (f-k)	Calc Web Shear (k)	Initial Web Thick (in)	Initial Shear Limit (k)	Final Web Thick (in)	Final Shear Limit (k)	UC	Note
Lt Col	5	103.0	976.8	165.6	0.375	245.5	0.375	245.5	0.67	AISC G3-2
Rt Col	6	102.8	908.2	150.4	0.375	245.4	0.375	245.4	0.61	AISC G3-2

REQUIRED WEB DESIGN:

Locate	h	av	Kv	Cv
Lt Col	45.76	52.00	8.87	0.52
Rt Col	45.72	51.96	8.87	0.52

LOAD COMBINATIONS:

5 - Dead+Collateral+Snow
6 - Dead+Collateral+Snow

FRAME:

Id = 1
Type = RF
Line Id = 2 3
Load Width= 29.80
UC Limit= 1.03
KL/R Limit= 200.00

MEMBERS:

Srf Id	Mem Id	Seg Id	Len	Flange- Wid	Web_Depth Strt	Web_Depth End	Plate_Thickness- Web	O-flg	I-flg	Max_Shear- Id	Ld	Ucv	O-Flg--- Id	Ld	Uco	I-Flg--- Id	Ld	Max Uci	KL/R
1	1	1	13.9	10.0	24.0	48.0	0.375	0.500	0.625	5	5	0.57	5	5	0.72	5	5	0.90	65
2	2	2	4.1	10.0	54.0	49.9	0.250	0.500	0.750	6	5	0.71	6	5	0.73	8	5		

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

```
1.03  103
   2   2   3 20.0 10.0 49.9 30.0 0.250 0.500 0.750   9   5 0.64   9   5 0.63   9   5
1.03  103
   2   3   4 26.7 10.0 30.0 30.0 0.188 0.500 0.500  20   5 0.66  31   6 1.00  20  97
0.91  101
   3   4   5 25.7 10.0 30.0 30.0 0.188 0.625 0.500  34  97 0.47  39   5 0.95  40  97
0.46  100
   3   5   6 20.0 10.0 30.0 44.9 0.250 0.500 0.500  57   6 0.52  47  97 0.85  57   6
0.94  105
   3   5   7 12.2 10.0 44.9 54.0 0.250 0.500 0.750  64   6 0.72  64   6 0.66  64   6
0.98  105
   4   6   8 13.3 10.0 48.0 24.0 0.375 0.500 0.625  65   6 0.57  65   6 0.65  65   6
0.83   60


 LOAD COMBINATIONS:
 ------------------
      #- Controlling Load Combination In Design Summary

     1 - Dead+Collateral+Live
     2 - Dead+Collateral+Live
     3 - Dead+Collateral
     4 - Dead+Collateral
     5#- Dead+Collateral+Snow
     6#- Dead+Collateral+Snow
     7 - Dead+Collateral+Snow+Snow_Drift
     8 - Dead+Collateral+Snow+Snow_Drift
     9 - Dead+Collateral+Snow+Slide_Snow
    10 - Dead+Collateral+Snow+Slide_Snow
    11 - Dead
    12 - Dead
    13 - Dead+Collateral+0.75Live
    14 - Dead+Collateral+0.75Live
    15 - Dead+Collateral+0.75Snow
    16 - Dead+Collateral+0.75Snow
    17 - Dead+Collateral+0.75Snow+0.75Snow_Drift
    18 - Dead+Collateral+0.75Snow+0.75Snow_Drift
    19 - Dead+Collateral+0.75Snow+0.75Slide_Snow
    20 - Dead+Collateral+0.75Snow+0.75Slide_Snow
    21 - Dead+0.6Wind_Left1
    22 - Dead+0.6Wind_Right1
    23 - Dead+0.6Wind_Left2
    24 - Dead+0.6Wind_Right2
    25 - Dead+0.6Wind_Long1
    26 - Dead-0.6Wind_Long1
    27 - Dead+0.6Wind_Long2
    28 - Dead-0.6Wind_Long2
    29 - Dead+Collateral+0.75Live+0.45Wind_Left1
    30 - Dead+Collateral+0.75Live+0.45Wind_Right1
    31 - Dead+Collateral+0.75Live+0.45Wind_Left2
    32 - Dead+Collateral+0.75Live+0.45Wind_Right2
    33 - Dead+Collateral+0.75Live+0.45Wind_Long1
    34 - Dead+Collateral+0.75Live-0.45Wind_Long1
    35 - Dead+Collateral+0.75Live+0.45Wind_Long2
```

pbs	**Customer**	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

36 - Dead+Collateral+0.75Live-0.45Wind_Long2
37 - Dead+Collateral+0.75Snow+0.45Wind_Left1
38 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Snow_Drift
39 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Slide_Snow
40 - Dead+Collateral+0.75Snow+0.45Wind_Right1
41 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Snow_Drift
42 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Slide_Snow
43 - Dead+Collateral+0.75Snow+0.45Wind_Left2
44 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Snow_Drift
45 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Slide_Snow
46 - Dead+Collateral+0.75Snow+0.45Wind_Right2
47 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Snow_Drift
48 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Slide_Snow
49 - Dead+Collateral+0.75Snow+0.45Wind_Long1
50 - Dead+Collateral+0.75Snow-0.45Wind_Long1
51 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Snow_Drift
52 - Dead+Collateral+0.75Snow-0.45Wind_Long1+0.75Snow_Drift
53 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Slide_Snow
54 - Dead+Collateral+0.75Snow-0.45Wind_Long1+0.75Slide_Snow
55 - Dead+Collateral+0.75Snow+0.45Wind_Long2
56 - Dead+Collateral+0.75Snow-0.45Wind_Long2
57 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Snow_Drift
58 - Dead+Collateral+0.75Snow-0.45Wind_Long2+0.75Snow_Drift
59 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Slide_Snow
60 - Dead+Collateral+0.75Snow-0.45Wind_Long2+0.75Slide_Snow
61 - 0.6Dead+0.6Wind_Left1
62 - 0.6Dead+0.6Wind_Right1
63 - 0.6Dead+0.6Wind_Left2
64 - 0.6Dead+0.6Wind_Right2
65 - 0.6Dead+0.6Wind_Long1
66 - 0.6Dead-0.6Wind_Long1
67 - 0.6Dead+0.6Wind_Long2
68 - 0.6Dead-0.6Wind_Long2
69 - 1.1Dead+1.1Collateral+0.7Seismic_L
70 - 1.1Dead+1.1Collateral+0.7Seismic_R
71 - 1.1Dead+1.1Collateral+0.7Seismic_Long
72 - 1.1Dead+1.1Collateral-0.7Seismic_Long
73 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
74 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
75 - 1.07Dead+1.07Collateral+0.53Seismic_L
76 - 1.07Dead+1.07Collateral+0.53Seismic_R
77 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_Long
78 - 1.07Dead+1.07Collateral+0.75Live-0.53Seismic_Long
79 - 1.07Dead+1.07Collateral+0.53Seismic_Long
80 - 1.07Dead+1.07Collateral-0.53Seismic_Long
81 - Dead/2+0.7Seismic_L
82 - Dead/2+0.7Seismic_R
83 - Dead/2+0.7Seismic_Long
84 - Dead/2-0.7Seismic_Long
85 - Dead+Collateral+F1UNB_SL_L
86 - Dead+Collateral+F1UNB_SL_L
87 - Dead+Collateral+0.75F1UNB_SL_L
88 - Dead+Collateral+0.75F1UNB_SL_L
89 - Dead+Collateral+0.45Wind_Left1+0.75F1UNB_SL_L

pbs	**Customer**	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

90 - Dead+Collateral+0.45Wind_Left2+0.75F1UNB_SL_L
91 - Dead+Collateral+0.45Wind_Right1+0.75F1UNB_SL_L
92 - Dead+Collateral+0.45Wind_Right2+0.75F1UNB_SL_L
93 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F1UNB_SL_L
94 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F1UNB_SL_L
95 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F1UNB_SL_L
96 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F1UNB_SL_L
97#- Dead+Collateral+F1UNB_SL_R
98 - Dead+Collateral+F1UNB_SL_R
99 - Dead+Collateral+0.75F1UNB_SL_R
100 - Dead+Collateral+0.75F1UNB_SL_R
101 - Dead+Collateral+0.45Wind_Left1+0.75F1UNB_SL_R
102 - Dead+Collateral+0.45Wind_Left2+0.75F1UNB_SL_R
103 - Dead+Collateral+0.45Wind_Right1+0.75F1UNB_SL_R
104 - Dead+Collateral+0.45Wind_Right2+0.75F1UNB_SL_R
105 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F1UNB_SL_R
106 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F1UNB_SL_R
107 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F1UNB_SL_R
108 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F1UNB_SL_R
109 - Dead+Collateral+Live
110 - Dead+Collateral+Live
111 - Dead+Collateral
112 - Dead+Collateral
113 - Dead+Collateral+Snow
114 - Dead+Collateral+Snow
115 - Dead+Collateral+Snow+Snow_Drift
116 - Dead+Collateral+Snow+Snow_Drift
117 - Dead+Collateral+Snow+Slide_Snow
118 - Dead+Collateral+Snow+Slide_Snow
119 - Dead
120 - Dead
121 - Dead+Collateral+0.75Live
122 - Dead+Collateral+0.75Live
123 - Dead+Collateral+0.75Snow
124 - Dead+Collateral+0.75Snow
125 - Dead+Collateral+0.75Snow+0.75Snow_Drift
126 - Dead+Collateral+0.75Snow+0.75Snow_Drift
127 - Dead+Collateral+0.75Snow+0.75Slide_Snow
128 - Dead+Collateral+0.75Snow+0.75Slide_Snow
129 - Dead+0.48Wind_Left1
130 - Dead+0.48Wind_Right1
131 - Dead+0.48Wind_Left2
132 - Dead+0.48Wind_Right2
133 - Dead+0.48Wind_Long1
134 - Dead-0.48Wind_Long1
135 - Dead+0.48Wind_Long2
136 - Dead-0.48Wind_Long2
137 - Dead+Collateral+0.75Live+0.36Wind_Left1
138 - Dead+Collateral+0.75Live+0.36Wind_Right1
139 - Dead+Collateral+0.75Live+0.36Wind_Left2
140 - Dead+Collateral+0.75Live+0.36Wind_Right2
141 - Dead+Collateral+0.75Live+0.36Wind_Long1
142 - Dead+Collateral+0.75Live-0.36Wind_Long1
143 - Dead+Collateral+0.75Live+0.36Wind_Long2

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

144 - Dead+Collateral+0.75Live-0.36Wind_Long2
145 - Dead+Collateral+0.75Snow+0.36Wind_Left1
146 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Snow_Drift
147 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Slide_Snow
148 - Dead+Collateral+0.75Snow+0.36Wind_Right1
149 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Snow_Drift
150 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Slide_Snow
151 - Dead+Collateral+0.75Snow+0.36Wind_Left2
152 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Snow_Drift
153 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Slide_Snow
154 - Dead+Collateral+0.75Snow+0.36Wind_Right2
155 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Snow_Drift
156 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Slide_Snow
157 - Dead+Collateral+0.75Snow+0.36Wind_Long1
158 - Dead+Collateral+0.75Snow-0.36Wind_Long1
159 - Dead+Collateral+0.75Snow+0.36Wind_Long1+0.75Snow_Drift
160 - Dead+Collateral+0.75Snow-0.36Wind_Long1+0.75Snow_Drift
161 - Dead+Collateral+0.75Snow+0.36Wind_Long1+0.75Slide_Snow
162 - Dead+Collateral+0.75Snow-0.36Wind_Long1+0.75Slide_Snow
163 - Dead+Collateral+0.75Snow+0.36Wind_Long2
164 - Dead+Collateral+0.75Snow-0.36Wind_Long2
165 - Dead+Collateral+0.75Snow+0.36Wind_Long2+0.75Snow_Drift
166 - Dead+Collateral+0.75Snow-0.36Wind_Long2+0.75Snow_Drift
167 - Dead+Collateral+0.75Snow+0.36Wind_Long2+0.75Slide_Snow
168 - Dead+Collateral+0.75Snow-0.36Wind_Long2+0.75Slide_Snow
169 - 0.6Dead+0.48Wind_Left1
170 - 0.6Dead+0.48Wind_Right1
171 - 0.6Dead+0.48Wind_Left2
172 - 0.6Dead+0.48Wind_Right2
173 - 0.6Dead+0.48Wind_Long1
174 - 0.6Dead-0.48Wind_Long1
175 - 0.6Dead+0.48Wind_Long2
176 - 0.6Dead-0.48Wind_Long2
177 - 1.1Dead+1.1Collateral+0.7Seismic_L
178 - 1.1Dead+1.1Collateral+0.7Seismic_R
179 - 1.1Dead+1.1Collateral+0.7Seismic_Long
180 - 1.1Dead+1.1Collateral-0.7Seismic_Long
181 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
182 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
183 - 1.07Dead+1.07Collateral+0.53Seismic_L
184 - 1.07Dead+1.07Collateral+0.53Seismic_R
185 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_Long
186 - 1.07Dead+1.07Collateral+0.75Live-0.53Seismic_Long
187 - 1.07Dead+1.07Collateral+0.53Seismic_Long
188 - 1.07Dead+1.07Collateral-0.53Seismic_Long
189 - Dead/2+0.7Seismic_L
190 - Dead/2+0.7Seismic_R
191 - Dead/2+0.7Seismic_Long
192 - Dead/2-0.7Seismic_Long
193 - Dead+Collateral+F1UNB_SL_L
194 - Dead+Collateral+F1UNB_SL_L
195 - Dead+Collateral+0.75F1UNB_SL_L
196 - Dead+Collateral+0.75F1UNB_SL_L
197 - Dead+Collateral+0.36Wind_Left1+0.75F1UNB_SL_L

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

198 - Dead+Collateral+0.36Wind_Left2+0.75F1UNB_SL_L
199 - Dead+Collateral+0.36Wind_Right1+0.75F1UNB_SL_L
200 - Dead+Collateral+0.36Wind_Right2+0.75F1UNB_SL_L
201 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F1UNB_SL_L
202 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F1UNB_SL_L
203 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F1UNB_SL_L
204 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F1UNB_SL_L
205 - Dead+Collateral+F1UNB_SL_R
206 - Dead+Collateral+F1UNB_SL_R
207 - Dead+Collateral+0.75F1UNB_SL_R
208 - Dead+Collateral+0.75F1UNB_SL_R
209 - Dead+Collateral+0.36Wind_Left1+0.75F1UNB_SL_R
210 - Dead+Collateral+0.36Wind_Left2+0.75F1UNB_SL_R
211 - Dead+Collateral+0.36Wind_Right1+0.75F1UNB_SL_R
212 - Dead+Collateral+0.36Wind_Right2+0.75F1UNB_SL_R
213 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F1UNB_SL_R
214 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F1UNB_SL_R
215 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F1UNB_SL_R
216 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F1UNB_SL_R

PLATE LIMITS:

Seg Id	Web Depth/Thick Calc	Web Depth/Thick Limit	Flange Width/(2xThick) Calc	Flange Width/(2xThick) Limit	Flange Thick	Flange Min	Web_Depth/ Flange_Width Calc	Web_Depth/ Flange_Width Limit	Web_Area/ Flange_Area Calc	Web_Area/ Flange_Area Limit
1	128.0	260.0	10.0		0.500	0.375	4.8		3.6	10.0
2	216.0	260.0	10.0		0.500	0.250	5.4		2.7	10.0
3	194.3	260.0	10.0		0.500	0.250	4.9		2.4	10.0
4	160.0	260.0	10.0		0.500	0.188	3.0		1.1	10.0
5	160.0	260.0	10.0		0.500	0.188	3.0		1.1	10.0
6	176.7	260.0	10.0		0.500	0.250	4.4		2.2	10.0
7	216.0	260.0	10.0		0.500	0.250	5.4		2.7	10.0
8	128.0	260.0	10.0		0.500	0.375	4.8		3.6	10.0

FRAME AREA:

Frame Area= 430.55
Building Area= 1974.71
Ratio= 0.22

WEIGHTS:

Member	1	2	3	4	5	6
Weight (lb)	1224	1890	1415	1471	2349	1167

Total Weight (lb)
Frame = 9515
Splice Plate = 920
Base Plate = 74

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

10509

REACTIONS - Sidewall Columns:

Load	Left_Column				Right_Column			
Id	Fx(k)	Fy(k)	Fz(k)	M(f-k)	Fx(k)	Fy(k)	Fz(k)	M(f-k)
1	83.60	59.82	0.00	0.00	-83.60	59.66	0.00	0.00
2	83.61	59.75	0.00	0.00	-83.61	59.74	0.00	0.00
3	33.87	24.91	0.00	0.00	-33.87	24.85	0.00	0.00
4	33.88	24.87	0.00	0.00	-33.88	24.88	0.00	0.00
5	96.01	68.56	0.00	0.00	-96.01	68.36	0.00	0.00
6	96.03	68.47	0.00	0.00	-96.03	68.45	0.00	0.00
7	96.01	68.56	0.00	0.00	-96.01	68.36	0.00	0.00
8	96.03	68.47	0.00	0.00	-96.03	68.45	0.00	0.00
9	96.01	68.56	0.00	0.00	-96.01	68.36	0.00	0.00
10	96.03	68.47	0.00	0.00	-96.03	68.45	0.00	0.00
11	16.39	12.65	0.00	0.00	-16.39	12.61	0.00	0.00
12	16.39	12.63	0.00	0.00	-16.39	12.63	0.00	0.00
13	71.17	51.09	0.00	0.00	-71.17	50.96	0.00	0.00
14	71.19	51.03	0.00	0.00	-71.19	51.02	0.00	0.00
15	80.49	57.64	0.00	0.00	-80.49	57.49	0.00	0.00
16	80.51	57.57	0.00	0.00	-80.51	57.56	0.00	0.00
17	80.49	57.64	0.00	0.00	-80.49	57.49	0.00	0.00
18	80.51	57.57	0.00	0.00	-80.51	57.56	0.00	0.00
19	80.49	57.64	0.00	0.00	-80.49	57.49	0.00	0.00
20	80.51	57.57	0.00	0.00	-80.51	57.56	0.00	0.00
21	-1.54	-0.72	0.00	0.00	-3.44	2.43	0.00	0.00
22	3.68	2.50	0.00	0.00	1.34	-0.61	0.00	0.00
23	6.31	5.79	0.00	0.00	-11.25	8.95	0.00	0.00
24	11.42	9.01	0.00	0.00	-6.41	5.90	0.00	0.00
25	0.18	-3.39	4.53	0.00	0.29	-0.43	4.43	0.00
26	0.31	0.48	0.00	0.00	0.16	3.17	0.00	0.00
27	-0.93	-0.91	4.53	0.00	0.42	-3.61	4.43	0.00
28	-0.80	2.97	0.00	0.00	0.30	-0.01	0.00	0.00
29	57.76	41.04	0.00	0.00	-61.50	43.36	0.00	0.00
30	61.68	43.45	0.00	0.00	-57.91	41.07	0.00	0.00
31	63.63	45.92	0.00	0.00	-67.34	48.24	0.00	0.00
32	67.47	48.33	0.00	0.00	-63.71	45.95	0.00	0.00
33	59.05	39.04	3.40	0.00	-58.70	41.20	3.33	0.00
34	59.15	41.94	0.00	0.00	-58.79	43.90	0.00	0.00
35	58.22	40.89	3.40	0.00	-58.60	38.83	3.33	0.00
36	58.32	43.80	0.00	0.00	-58.69	41.53	0.00	0.00
37	67.08	47.58	0.00	0.00	-70.82	49.89	0.00	0.00
38	67.08	47.58	0.00	0.00	-70.82	49.89	0.00	0.00
39	67.08	47.58	0.00	0.00	-70.82	49.89	0.00	0.00
40	71.00	49.99	0.00	0.00	-67.23	47.60	0.00	0.00
41	71.00	49.99	0.00	0.00	-67.23	47.60	0.00	0.00
42	71.00	49.99	0.00	0.00	-67.23	47.60	0.00	0.00
43	72.95	52.47	0.00	0.00	-76.66	54.77	0.00	0.00
44	72.95	52.47	0.00	0.00	-76.66	54.77	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

45	72.95	52.47	0.00	0.00	-76.66	54.77	0.00	0.00
46	76.79	54.88	0.00	0.00	-73.03	52.48	0.00	0.00
47	76.79	54.88	0.00	0.00	-73.03	52.48	0.00	0.00
48	76.79	54.88	0.00	0.00	-73.03	52.48	0.00	0.00
49	68.37	45.58	3.40	0.00	-68.02	47.73	3.33	0.00
50	68.47	48.49	0.00	0.00	-68.11	50.43	0.00	0.00
51	68.37	45.58	3.40	0.00	-68.02	47.73	3.33	0.00
52	68.47	48.49	0.00	0.00	-68.11	50.43	0.00	0.00
53	68.37	45.58	3.40	0.00	-68.02	47.73	3.33	0.00
54	68.47	48.49	0.00	0.00	-68.11	50.43	0.00	0.00
55	67.54	47.43	3.40	0.00	-67.92	45.36	3.33	0.00
56	67.64	50.34	0.00	0.00	-68.01	48.06	0.00	0.00
57	67.54	47.43	3.40	0.00	-67.92	45.36	3.33	0.00
58	67.64	50.34	0.00	0.00	-68.01	48.06	0.00	0.00
59	67.54	47.43	3.40	0.00	-67.92	45.36	3.33	0.00
60	67.64	50.34	0.00	0.00	-68.01	48.06	0.00	0.00
61	-8.10	-5.77	0.00	0.00	3.12	-2.62	0.00	0.00
62	-2.87	-2.56	0.00	0.00	7.90	-5.66	0.00	0.00
63	-0.25	0.74	0.00	0.00	-4.69	3.90	0.00	0.00
64	4.87	3.95	0.00	0.00	0.15	0.85	0.00	0.00
65	-6.38	-8.45	4.53	0.00	6.85	-5.48	4.43	0.00
66	-6.25	-4.57	0.00	0.00	6.72	-1.88	0.00	0.00
67	-7.49	-5.96	4.53	0.00	6.98	-8.66	4.43	0.00
68	-7.36	-2.09	0.00	0.00	6.86	-5.06	0.00	0.00
69	33.09	26.49	0.00	0.00	-41.84	28.23	0.00	0.00
70	41.44	28.27	0.00	0.00	-32.69	26.46	0.00	0.00
71	37.26	20.91	15.11	0.00	-37.26	21.24	15.06	0.00
72	37.69	33.85	0.00	0.00	-37.69	33.46	0.00	0.00
73	70.39	52.13	0.00	0.00	-77.01	53.41	0.00	0.00
74	76.71	53.48	0.00	0.00	-70.08	52.05	0.00	0.00
75	33.09	25.96	0.00	0.00	-39.71	27.27	0.00	0.00
76	39.41	27.30	0.00	0.00	-32.78	25.93	0.00	0.00
77	73.55	47.91	11.44	0.00	-73.55	48.10	11.40	0.00
78	73.87	57.70	0.00	0.00	-73.87	57.36	0.00	0.00
79	36.25	21.74	11.44	0.00	-36.25	21.97	11.40	0.00
80	36.57	31.53	0.00	0.00	-36.57	31.23	0.00	0.00
81	4.02	5.44	0.00	0.00	-12.77	7.19	0.00	0.00
82	12.37	7.20	0.00	0.00	-3.62	5.43	0.00	0.00
83	8.20	-0.15	15.11	0.00	-8.20	0.20	15.06	0.00
84	8.63	12.78	0.00	0.00	-8.63	12.42	0.00	0.00
85	77.90	63.06	0.00	0.00	-77.92	46.50	0.00	0.00
86	77.85	63.13	0.00	0.00	-77.87	46.42	0.00	0.00
87	66.90	53.52	0.00	0.00	-66.91	41.09	0.00	0.00
88	66.86	53.58	0.00	0.00	-66.87	41.03	0.00	0.00
89	53.45	43.53	0.00	0.00	-57.20	33.41	0.00	0.00
90	59.33	48.42	0.00	0.00	-63.05	38.30	0.00	0.00
91	57.37	45.95	0.00	0.00	-53.62	31.13	0.00	0.00
92	63.17	50.83	0.00	0.00	-59.42	36.02	0.00	0.00
93	69.25	50.49	11.22	0.00	-69.26	38.26	11.19	0.00
94	69.56	60.09	0.00	0.00	-69.57	47.34	0.00	0.00
95	66.15	54.63	0.00	0.00	-72.66	43.46	0.00	0.00
96	72.34	55.96	0.00	0.00	-65.85	42.13	0.00	0.00
97	80.80	48.44	0.00	0.00	-80.81	64.20	0.00	0.00
98	80.78	48.37	0.00	0.00	-80.79	64.27	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

99	69.07	42.55	0.00	0.00	-69.08	54.37	0.00	0.00
100	69.05	42.49	0.00	0.00	-69.06	54.43	0.00	0.00
101	55.64	32.49	0.00	0.00	-59.39	46.77	0.00	0.00
102	61.52	37.38	0.00	0.00	-65.23	51.65	0.00	0.00
103	59.55	34.90	0.00	0.00	-55.79	44.48	0.00	0.00
104	65.34	39.79	0.00	0.00	-61.59	49.36	0.00	0.00
105	71.43	39.46	11.22	0.00	-71.44	51.60	11.19	0.00
106	71.74	49.07	0.00	0.00	-71.75	60.67	0.00	0.00
107	68.33	43.60	0.00	0.00	-74.83	56.80	0.00	0.00
108	74.53	44.93	0.00	0.00	-68.04	55.47	0.00	0.00

DEFLECTIONS:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
109	-0.35	0.05	-2.93
110	-0.34	0.06	-2.93
111	-0.14	0.02	-1.18
112	-0.14	0.03	-1.18
113	-0.40	0.06	-3.37
114	-0.39	0.07	-3.37
115	-0.40	0.06	-3.37
116	-0.39	0.07	-3.37
117	-0.40	0.06	-3.37
118	-0.39	0.07	-3.37
119	-0.07	0.01	-0.57
120	-0.07	0.01	-0.57
121	-0.30	0.05	-2.49
122	-0.29	0.05	-2.49
123	-0.34	0.05	-2.82
124	-0.33	0.06	-2.82
125	-0.34	0.05	-2.82
126	-0.33	0.06	-2.82
127	-0.34	0.05	-2.82
128	-0.33	0.06	-2.82
129	-0.02	0.01	-0.15
130	-0.02	0.00	-0.16
131	-0.05	0.01	-0.40
132	-0.05	0.01	-0.40
133	-0.06	-0.05	-0.10
134	-0.06	-0.05	-0.10
135	0.04	0.06	-0.05
136	0.04	0.06	-0.05
137	-0.26	0.05	-2.18
138	-0.26	0.04	-2.18
139	-0.28	0.05	-2.36
140	-0.28	0.05	-2.37
141	-0.29	0.01	-2.14
142	-0.29	0.01	-2.14
143	-0.21	0.08	-2.10

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

144	-0.21	0.08	-2.10
145	-0.29	0.05	-2.51
146	-0.29	0.05	-2.51
147	-0.29	0.05	-2.51
148	-0.30	0.05	-2.51
149	-0.30	0.05	-2.51
150	-0.30	0.05	-2.51
151	-0.32	0.05	-2.69
152	-0.32	0.05	-2.69
153	-0.32	0.05	-2.69
154	-0.32	0.05	-2.69
155	-0.32	0.05	-2.69
156	-0.32	0.05	-2.69
157	-0.33	0.01	-2.47
158	-0.33	0.01	-2.47
159	-0.33	0.01	-2.47
160	-0.33	0.01	-2.47
161	-0.33	0.01	-2.47
162	-0.33	0.01	-2.47
163	-0.25	0.09	-2.43
164	-0.25	0.09	-2.43
165	-0.25	0.09	-2.43
166	-0.25	0.09	-2.43
167	-0.25	0.09	-2.43
168	-0.25	0.09	-2.43
169	0.01	0.00	0.08
170	0.00	0.00	0.07
171	-0.02	0.00	-0.17
172	-0.02	0.00	-0.17
173	-0.03	-0.05	0.13
174	-0.03	-0.05	0.13
175	0.07	0.05	0.18
176	0.07	0.05	0.18
177	-0.04	0.14	-1.28
178	-0.27	-0.09	-1.32
179	-0.15	0.03	-1.30
180	-0.15	0.02	-1.30
181	-0.22	0.14	-2.56
182	-0.39	-0.04	-2.59
183	-0.06	0.11	-1.25
184	-0.23	-0.06	-1.28
185	-0.30	0.05	-2.58
186	-0.30	0.05	-2.57
187	-0.15	0.03	-1.27
188	-0.15	0.02	-1.26
189	0.08	0.12	-0.26
190	-0.15	-0.11	-0.31
191	-0.03	0.01	-0.29
192	-0.03	0.00	-0.28
193	0.02	0.41	-2.66
194	0.02	0.40	-2.66
195	-0.02	0.32	-2.29
196	-0.02	0.31	-2.29
197	0.02	0.31	-1.98

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

198	0.00	0.31	-2.16
199	0.01	0.31	-1.98
200	-0.01	0.31	-2.16
201	-0.03	0.31	-2.37
202	-0.03	0.31	-2.37
203	0.05	0.40	-2.36
204	-0.11	0.23	-2.39
205	-0.67	-0.26	-3.01
206	-0.66	-0.25	-3.01
207	-0.53	-0.19	-2.55
208	-0.53	-0.18	-2.55
209	-0.49	-0.19	-2.24
210	-0.51	-0.19	-2.42
211	-0.49	-0.19	-2.24
212	-0.52	-0.19	-2.43
213	-0.54	-0.19	-2.64
214	-0.54	-0.19	-2.63
215	-0.45	-0.10	-2.62
216	-0.62	-0.27	-2.65

DEFLECTIONS RATIO:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
109	477	2960	479
110	491	2503	479
111	1182	7333	1185
112	1217	6172	1185
113	415	2588	416
114	427	2188	417
115	415	2588	416
116	427	2188	417
117	415	2588	416
118	427	2188	417
119	2438	15892	2455
120	2514	13167	2456
121	561	3465	562
122	577	2931	563
123	496	3071	497
124	510	2598	497
125	496	3071	497
126	510	2598	497
127	496	3071	497
128	510	2598	497
129	9223	29234	9164
130	7498	44339	8862
131	3621	23001	3532
132	3356	30226	3495
133	2702	3503	13618
134	2712	3484	13742

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

135	4037	2865	27850
136	4009	2875	28380
137	653	3431	644
138	645	3547	643
139	602	3369	594
140	596	3469	593
141	577	20798	655
142	578	21429	655
143	793	1883	668
144	794	1887	668
145	567	3009	560
146	567	3009	560
147	567	3009	560
148	561	3099	559
149	561	3099	559
150	561	3099	559
151	529	2964	522
152	529	2964	522
153	529	2964	522
154	524	3042	521
155	524	3042	521
156	524	3042	521
157	509	11323	568
158	509	11513	568
159	509	11323	568
160	509	11513	568
161	509	11323	568
162	509	11513	568
163	670	1746	578
164	671	1750	578
165	670	1746	578
166	671	1750	578
167	670	1746	578
168	671	1750	578
169	18943	99999	18609
170	35752	99999	19988
171	8724	63926	8320
172	7336	99999	8115
173	4798	3195	11182
174	4832	3179	11099
175	2448	3121	7878
176	2437	3133	7836
177	4178	1141	1095
178	627	1823	1060
179	1090	6105	1077
180	1096	6402	1080
181	771	1150	548
182	428	4540	541
183	2638	1431	1122
184	711	2634	1093
185	550	3080	544
186	551	3141	545
187	1121	6272	1107
188	1126	6507	1110

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

189	2124	1348	5305
190	1143	1488	4572
191	4956	28667	4912
192	5104	35789	4980
193	6763	385	528
194	10696	394	527
195	10259	504	613
196	6928	517	612
197	9996	518	710
198	39512	516	650
199	12406	521	709
200	23615	518	649
201	5585	508	591
202	5776	509	592
203	3041	399	595
204	1455	697	587
205	251	602	466
206	254	624	466
207	313	829	549
208	318	865	549
209	340	832	626
210	325	835	579
211	337	826	625
212	324	829	578
213	309	853	532
214	309	847	532
215	367	1567	535
216	267	586	529

MAX DEFLECTION:

Type	Load Id	Deflect (in)	Span/Deflect Calc	Limit
Live Vertical		-2.18	644.	180.
Horizontal Drift	216	-0.62	268.	65.
Horizontal Total	205	-0.67	251.	60.

Horizontal Spring Constant= 78.00 k/in

P-DELTA - Direct Analysis:

CONVERGENCE CHECK:

Column	Max Deflect Ratio
Left	0.0283
Right	0.0496

MAXIMUM DRIFT CHECK:

Load	Max_Drift(in) First	Second	Second/ First

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Order	Order	Ratio
5	0.39	0.40	1.03

22-8706 Frame 1 - Rigid Frame Clearances 4/29/22 3:56pm

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left	116.39	57.13	116.39
Right	108.33	1346.86	108.33
Midspan	190.92	659.97	190.92

HORIZONTAL CLEARANCE:

Location	Span	X_CoordL	X_CoordR
Left - Right	1289.95	57.03	1346.98

22-8706 Frame 1 - Weight Summary 4/29/22 3:56pm

Total Weight (lb)

Frame	=	9515
Splice Plate	=	920
Base Plate	=	74
		10509

22-8706 Frame 1 - Warning Summary 4/29/22 3:56pm

.. No Warnings

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

22-8706 Frame 2 - Design Code 4/29/22 4:10pm

STRUCTURAL CODE:

Design Basis : WS - Working Stress
Hot Rolled Steel : AISC16
Cold Formed Steel : NAUS16

BUILDING CODE:

Wind Code : OSSC 19 (IBC 18)
Seismic Zone : D

MODULUS OF ELASTICITY:

Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

22-8706 Frame 2 - Interior Columns 4/29/22 4:10pm

COLUMN SIZE:

Col Id	Locate (ft)	Part	Length (ft)	---Web(in)-- Depth	Thick	-Flange(in)- Width	Thick	Max_Load Id	UC
1	17.0	W8X18	12.8	7.48	0.23	5.25	0.330	86	0.81
2	79.0	W8X18	13.9	7.48	0.23	5.25	0.330	5	0.78

COLUMN ACTIONS/STRENGTH:

Col Id	Load Id	--Axial(k)-- Calc	Limit	--Shear(k)-- Calc	Limit	----Moment(f-k)---- Calc	Limit Left	Limit Right	Max UC
1	1	32.89	50.64	0.00	37.44	0.00	41.79	27.28	0.65
	2	33.24	50.64	0.00	37.44	0.00	41.79	27.28	0.66
	3	13.24	50.64	0.00	37.44	0.00	41.79	27.28	0.26
	4	13.38	50.64	0.00	37.44	0.00	41.79	27.28	0.26
	5	37.77	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	6	38.18	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	7	37.77	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	8	38.18	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	9	37.77	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	10	38.18	50.64	0.00	37.44	0.00	41.79	27.28	0.75
	11	6.29	50.64	0.00	37.44	0.00	41.79	27.28	0.12
	12	6.36	50.64	0.00	37.44	0.00	41.79	27.28	0.13
	13	27.99	50.64	0.00	37.44	0.00	41.79	27.28	0.55
	14	28.30	50.64	0.00	37.44	0.00	41.79	27.28	0.56

Customer	Elbert Rentals		**Job No**	22-8706	
Project	Building Expansion		**Date**	5/3/2022	
Location	Newberg, OR 97132		**Designed By**	AC	
Size	117 x 90 x 14.8 x 14.1		**Checked By**		

15	31.67	50.64	0.00	37.44	0.00	41.79	27.28	0.63
16	32.01	50.64	0.00	37.44	0.00	41.79	27.28	0.63
17	31.67	50.64	0.00	37.44	0.00	41.79	27.28	0.63
18	32.01	50.64	0.00	37.44	0.00	41.79	27.28	0.63
19	31.67	50.64	0.00	37.44	0.00	41.79	27.28	0.63
20	32.01	50.64	0.00	37.44	0.00	41.79	27.28	0.63
21	-2.19	157.49	0.00	37.44	0.00	41.79	27.28	0.01
22	-0.68	157.49	0.00	37.44	0.00	41.79	27.28	0.00
23	1.57	50.64	0.00	37.44	0.00	41.79	27.28	0.03
24	3.01	50.64	0.00	37.44	0.00	41.79	27.28	0.06
25	-2.64	157.49	0.00	37.44	0.00	41.79	27.28	0.02
26	-2.63	157.49	0.00	37.44	0.00	41.79	27.28	0.02
27	1.03	50.64	0.00	37.44	0.00	41.79	27.28	0.02
28	1.04	50.64	0.00	37.44	0.00	41.79	27.28	0.02
29	22.12	50.64	0.00	37.44	0.00	41.79	27.28	0.44
30	23.00	50.64	0.00	37.44	0.00	41.79	27.28	0.45
31	24.75	50.64	0.00	37.44	0.00	41.79	27.28	0.49
32	25.59	50.64	0.00	37.44	0.00	41.79	27.28	0.51
33	21.60	50.64	0.00	37.44	0.00	41.79	27.28	0.43
34	21.60	50.64	0.00	37.44	0.00	41.79	27.28	0.43
35	24.26	50.64	0.00	37.44	0.00	41.79	27.28	0.48
36	24.26	50.64	0.00	37.44	0.00	41.79	27.28	0.48
37	25.85	50.64	0.00	37.44	0.00	41.79	27.28	0.51
38	25.85	50.64	0.00	37.44	0.00	41.79	27.28	0.51
39	25.85	50.64	0.00	37.44	0.00	41.79	27.28	0.51
40	26.69	50.64	0.00	37.44	0.00	41.79	27.28	0.53
41	26.69	50.64	0.00	37.44	0.00	41.79	27.28	0.53
42	26.69	50.64	0.00	37.44	0.00	41.79	27.28	0.53
43	28.47	50.64	0.00	37.44	0.00	41.79	27.28	0.56
44	28.47	50.64	0.00	37.44	0.00	41.79	27.28	0.56
45	28.47	50.64	0.00	37.44	0.00	41.79	27.28	0.56
46	29.27	50.64	0.00	37.44	0.00	41.79	27.28	0.58
47	29.27	50.64	0.00	37.44	0.00	41.79	27.28	0.58
48	29.27	50.64	0.00	37.44	0.00	41.79	27.28	0.58
49	25.30	50.64	0.00	37.44	0.00	41.79	27.28	0.50
50	25.29	50.64	0.00	37.44	0.00	41.79	27.28	0.50
51	25.30	50.64	0.00	37.44	0.00	41.79	27.28	0.50
52	25.29	50.64	0.00	37.44	0.00	41.79	27.28	0.50
53	25.30	50.64	0.00	37.44	0.00	41.79	27.28	0.50
54	25.29	50.64	0.00	37.44	0.00	41.79	27.28	0.50
55	27.97	50.64	0.00	37.44	0.00	41.79	27.28	0.55
56	27.96	50.64	0.00	37.44	0.00	41.79	27.28	0.55
57	27.97	50.64	0.00	37.44	0.00	41.79	27.28	0.55
58	27.96	50.64	0.00	37.44	0.00	41.79	27.28	0.55
59	27.97	50.64	0.00	37.44	0.00	41.79	27.28	0.55
60	27.96	50.64	0.00	37.44	0.00	41.79	27.28	0.55
61	-4.65	157.49	0.00	37.44	0.00	41.79	27.28	0.03
62	-3.11	157.49	0.00	37.44	0.00	41.79	27.28	0.02
63	-1.10	157.49	0.00	37.44	0.00	41.79	27.28	0.01
64	0.49	50.64	0.00	37.44	0.00	41.79	27.28	0.01
65	-5.09	157.49	0.00	37.44	0.00	41.79	27.28	0.03
66	-5.08	157.49	0.00	37.44	0.00	41.79	27.28	0.03
67	-1.64	157.49	0.00	37.44	0.00	41.79	27.28	0.01
68	-1.62	157.49	0.00	37.44	0.00	41.79	27.28	0.01

			Customer	Elbert Rentals			**Job No**	22-8706	
			Project	Building Expansion			**Date**	5/3/2022	
			Location	Newberg, OR 97132			**Designed By**	AC	
			Size	117 x 90 x 14.8 x 14.1			**Checked By**		
	69	18.88	50.64	0.00	37.44	0.00	41.79	27.28	0.37
	70	10.39	50.64	0.00	37.44	0.00	41.79	27.28	0.21
	71	14.63	50.64	0.00	37.44	0.00	41.79	27.28	0.29
	72	14.63	50.64	0.00	37.44	0.00	41.79	27.28	0.29
	73	32.62	50.64	0.00	37.44	0.00	41.79	27.28	0.64
	74	25.52	50.64	0.00	37.44	0.00	41.79	27.28	0.50
	75	17.44	50.64	0.00	37.44	0.00	41.79	27.28	0.34
	76	11.03	50.64	0.00	37.44	0.00	41.79	27.28	0.22
	77	29.07	50.64	0.00	37.44	0.00	41.79	27.28	0.57
	78	29.04	50.64	0.00	37.44	0.00	41.79	27.28	0.57
	79	14.24	50.64	0.00	37.44	0.00	41.79	27.28	0.28
	80	14.24	50.64	0.00	37.44	0.00	41.79	27.28	0.28
	81	7.11	50.64	0.00	37.44	0.00	41.79	27.28	0.14
	82	-0.88	157.49	0.00	37.44	0.00	41.79	27.28	0.01
	83	3.16	50.64	0.00	37.44	0.00	41.79	27.28	0.06
	84	3.18	50.64	0.00	37.44	0.00	41.79	27.28	0.06
	85	40.81	50.64	0.00	37.44	0.00	41.79	27.28	0.81
	86	41.16	50.64	0.00	37.44	0.00	41.79	27.28	0.81
	87	33.92	50.64	0.00	37.44	0.00	41.79	27.28	0.67
	88	34.21	50.64	0.00	37.44	0.00	41.79	27.28	0.68
	89	27.99	50.64	0.00	37.44	0.00	41.79	27.28	0.55
	90	30.64	50.64	0.00	37.44	0.00	41.79	27.28	0.61
	91	28.90	50.64	0.00	37.44	0.00	41.79	27.28	0.57
	92	31.50	50.64	0.00	37.44	0.00	41.79	27.28	0.62
	93	34.99	50.64	0.00	37.44	0.00	41.79	27.28	0.69
	94	34.99	50.64	0.00	37.44	0.00	41.79	27.28	0.69
	95	38.41	50.64	0.00	37.44	0.00	41.79	27.28	0.76
	96	31.58	50.64	0.00	37.44	0.00	41.79	27.28	0.62
	97	22.50	50.64	0.00	37.44	0.00	41.79	27.28	0.44
	98	22.83	50.64	0.00	37.44	0.00	41.79	27.28	0.45
	99	20.20	50.64	0.00	37.44	0.00	41.79	27.28	0.40
	100	20.48	50.64	0.00	37.44	0.00	41.79	27.28	0.40
	101	14.30	50.64	0.00	37.44	0.00	41.79	27.28	0.28
	102	16.94	50.64	0.00	37.44	0.00	41.79	27.28	0.33
	103	15.20	50.64	0.00	37.44	0.00	41.79	27.28	0.30
	104	17.79	50.64	0.00	37.44	0.00	41.79	27.28	0.35
	105	21.26	50.64	0.00	37.44	0.00	41.79	27.28	0.42
	106	21.23	50.64	0.00	37.44	0.00	41.79	27.28	0.42
	107	24.72	50.64	0.00	37.44	0.00	41.79	27.28	0.49
	108	17.81	50.64	0.00	37.44	0.00	41.79	27.28	0.35
2	1	29.12	42.76	0.00	37.44	0.00	41.79	24.62	0.68
	2	28.99	42.76	0.00	37.44	0.00	41.79	24.62	0.68
	3	11.54	42.76	0.00	37.44	0.00	41.79	24.62	0.27
	4	11.48	42.76	0.00	37.44	0.00	41.79	24.62	0.27
	5	33.53	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	6	33.37	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	7	33.53	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	8	33.37	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	9	33.53	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	10	33.37	42.76	0.00	37.44	0.00	41.79	24.62	0.78
	11	5.38	42.76	0.00	37.44	0.00	41.79	24.62	0.13
	12	5.35	42.76	0.00	37.44	0.00	41.79	24.62	0.13
	13	24.72	42.76	0.00	37.44	0.00	41.79	24.62	0.58
	14	24.60	42.76	0.00	37.44	0.00	41.79	24.62	0.58

		Customer	Elbert Rentals			**Job No**	22-8706		
		Project	Building Expansion			**Date**	5/3/2022		
		Location	Newberg, OR 97132			**Designed By**	AC		
		Size	117 x 90 x 14.8 x 14.1			**Checked By**			

15	28.02	42.76	0.00	37.44	0.00	41.79	24.62	0.66
16	27.89	42.76	0.00	37.44	0.00	41.79	24.62	0.65
17	28.02	42.76	0.00	37.44	0.00	41.79	24.62	0.66
18	27.89	42.76	0.00	37.44	0.00	41.79	24.62	0.65
19	28.02	42.76	0.00	37.44	0.00	41.79	24.62	0.66
20	27.89	42.76	0.00	37.44	0.00	41.79	24.62	0.65
21	-1.17	157.49	0.00	37.44	0.00	41.79	24.62	0.01
22	-1.80	157.49	0.00	37.44	0.00	41.79	24.62	0.01
23	2.18	42.76	0.00	37.44	0.00	41.79	24.62	0.05
24	1.57	42.76	0.00	37.44	0.00	41.79	24.62	0.04
25	-0.18	157.49	0.00	37.44	0.00	41.79	24.62	0.00
26	-0.18	157.49	0.00	37.44	0.00	41.79	24.62	0.00
27	-2.07	157.49	0.00	37.44	0.00	41.79	24.62	0.01
28	-2.07	157.49	0.00	37.44	0.00	41.79	24.62	0.01
29	19.86	42.76	0.00	37.44	0.00	41.79	24.62	0.46
30	19.48	42.76	0.00	37.44	0.00	41.79	24.62	0.46
31	22.21	42.76	0.00	37.44	0.00	41.79	24.62	0.52
32	21.84	42.76	0.00	37.44	0.00	41.79	24.62	0.51
33	20.66	42.76	0.00	37.44	0.00	41.79	24.62	0.48
34	20.67	42.76	0.00	37.44	0.00	41.79	24.62	0.48
35	19.23	42.76	0.00	37.44	0.00	41.79	24.62	0.45
36	19.23	42.76	0.00	37.44	0.00	41.79	24.62	0.45
37	23.14	42.76	0.00	37.44	0.00	41.79	24.62	0.54
38	23.14	42.76	0.00	37.44	0.00	41.79	24.62	0.54
39	23.14	42.76	0.00	37.44	0.00	41.79	24.62	0.54
40	22.78	42.76	0.00	37.44	0.00	41.79	24.62	0.53
41	22.78	42.76	0.00	37.44	0.00	41.79	24.62	0.53
42	22.78	42.76	0.00	37.44	0.00	41.79	24.62	0.53
43	25.49	42.76	0.00	37.44	0.00	41.79	24.62	0.60
44	25.49	42.76	0.00	37.44	0.00	41.79	24.62	0.60
45	25.49	42.76	0.00	37.44	0.00	41.79	24.62	0.60
46	25.14	42.76	0.00	37.44	0.00	41.79	24.62	0.59
47	25.14	42.76	0.00	37.44	0.00	41.79	24.62	0.59
48	25.14	42.76	0.00	37.44	0.00	41.79	24.62	0.59
49	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
50	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
51	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
52	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
53	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
54	23.96	42.76	0.00	37.44	0.00	41.79	24.62	0.56
55	22.51	42.76	0.00	37.44	0.00	41.79	24.62	0.53
56	22.52	42.76	0.00	37.44	0.00	41.79	24.62	0.53
57	22.51	42.76	0.00	37.44	0.00	41.79	24.62	0.53
58	22.52	42.76	0.00	37.44	0.00	41.79	24.62	0.53
59	22.51	42.76	0.00	37.44	0.00	41.79	24.62	0.53
60	22.52	42.76	0.00	37.44	0.00	41.79	24.62	0.53
61	-3.22	157.49	0.00	37.44	0.00	41.79	24.62	0.02
62	-3.85	157.49	0.00	37.44	0.00	41.79	24.62	0.02
63	0.04	42.76	0.00	37.44	0.00	41.79	24.62	0.00
64	-0.72	157.49	0.00	37.44	0.00	41.79	24.62	0.00
65	-2.24	157.49	0.00	37.44	0.00	41.79	24.62	0.01
66	-2.23	157.49	0.00	37.44	0.00	41.79	24.62	0.01
67	-4.12	157.49	0.00	37.44	0.00	41.79	24.62	0.03
68	-4.12	157.49	0.00	37.44	0.00	41.79	24.62	0.03

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

69	11.18	42.76	0.00	37.44	0.00	41.79	24.62	0.26
70	14.15	42.76	0.00	37.44	0.00	41.79	24.62	0.33
71	12.66	42.76	0.00	37.44	0.00	41.79	24.62	0.30
72	12.67	42.76	0.00	37.44	0.00	41.79	24.62	0.30
73	24.23	42.76	0.00	37.44	0.00	41.79	24.62	0.57
74	26.71	42.76	0.00	37.44	0.00	41.79	24.62	0.62
75	11.20	42.76	0.00	37.44	0.00	41.79	24.62	0.26
76	13.44	42.76	0.00	37.44	0.00	41.79	24.62	0.31
77	25.47	42.76	0.00	37.44	0.00	41.79	24.62	0.60
78	25.49	42.76	0.00	37.44	0.00	41.79	24.62	0.60
79	12.32	42.76	0.00	37.44	0.00	41.79	24.62	0.29
80	12.32	42.76	0.00	37.44	0.00	41.79	24.62	0.29
81	1.31	42.76	0.00	37.44	0.00	41.79	24.62	0.03
82	4.06	42.76	0.00	37.44	0.00	41.79	24.62	0.09
83	2.68	42.76	0.00	37.44	0.00	41.79	24.62	0.06
84	2.68	42.76	0.00	37.44	0.00	41.79	24.62	0.06
85	22.40	42.76	0.00	37.44	0.00	41.79	24.62	0.52
86	22.26	42.76	0.00	37.44	0.00	41.79	24.62	0.52
87	19.68	42.76	0.00	37.44	0.00	41.79	24.62	0.46
88	19.56	42.76	0.00	37.44	0.00	41.79	24.62	0.46
89	14.83	42.76	0.00	37.44	0.00	41.79	24.62	0.35
90	17.18	42.76	0.00	37.44	0.00	41.79	24.62	0.40
91	14.45	42.76	0.00	37.44	0.00	41.79	24.62	0.34
92	16.81	42.76	0.00	37.44	0.00	41.79	24.62	0.39
93	20.43	42.76	0.00	37.44	0.00	41.79	24.62	0.48
94	20.44	42.76	0.00	37.44	0.00	41.79	24.62	0.48
95	19.23	42.76	0.00	37.44	0.00	41.79	24.62	0.45
96	21.64	42.76	0.00	37.44	0.00	41.79	24.62	0.51
97	32.39	42.76	0.00	37.44	0.00	41.79	24.62	0.76
98	32.27	42.76	0.00	37.44	0.00	41.79	24.62	0.75
99	27.17	42.76	0.00	37.44	0.00	41.79	24.62	0.64
100	27.07	42.76	0.00	37.44	0.00	41.79	24.62	0.63
101	22.32	42.76	0.00	37.44	0.00	41.79	24.62	0.52
102	24.67	42.76	0.00	37.44	0.00	41.79	24.62	0.58
103	21.94	42.76	0.00	37.44	0.00	41.79	24.62	0.51
104	24.30	42.76	0.00	37.44	0.00	41.79	24.62	0.57
105	27.93	42.76	0.00	37.44	0.00	41.79	24.62	0.65
106	27.95	42.76	0.00	37.44	0.00	41.79	24.62	0.65
107	26.73	42.76	0.00	37.44	0.00	41.79	24.62	0.63
108	29.13	42.76	0.00	37.44	0.00	41.79	24.62	0.68

COLUMN UNBRACED LENGTH:

Col		---Unbraced_Length--		--------KL/R-------		
Id	K	Major	Minor	Major	Minor	Limit
1	1.00	12.8	12.8	45.	125.	200
2	1.00	13.9	13.9	49.	136.	200

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

PLATE SIZE:

Col Id	Cap Type	Col Depth	--Plate(in)-- Width	Thick	---------Bolts(in)--------- Type	Dia	Gage	Row	Space
Col1	P-	8.14	10.00	0.500	A325	0.625	3.50	2	4.00
Col2	P-	8.14	10.00	0.500	A325	0.625	3.50	2	4.00

PLATE DESIGN:

Col Id	Load Id	Axial (k)	Shear (k)	Moment (f-k)	Req Thick	Req Dia	Note
Col1	65	-5.1	0.0	0.0	0.216	0.184	
Col2	68	-4.1	0.0	0.0	0.194	0.166	

WELDS:

Col	----Outside_Flange--- Shear(k/in)				----Inside_Flange---- Shear(k/in)				---------Web--------- Shear(k/in)			
Id	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
Col1	0.188	F1	0.28	2.78	0.188	F1	0.28	2.78	0.125	F1	0.28	1.86
Col2	0.188	F1	0.23	2.78	0.188	F1	0.23	2.78	0.125	F1	0.23	1.86

LOAD COMBINATIONS:

65 - 0.6Dead+0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2

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22-8706 Frame 2 - Base Plates and Anchor Bolt 4/29/22 4:10pm

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DESIGN CONSTANTS:

Base Plate Yield = 50.00 (ksi)
Concrete Bearing = 0.88 (ksi)
Bolt Type = A36
Bolt Shear Stress = 11.60 (ksi)
Bolt Tension Stress = 21.75 (ksi)

BASE PLATE & BOLT SIZE:

---Column_Base(in)--- Id	Typ	Depth	Elev	--Plate_Size(in)-- Width	Length	Thick	--Bolts(A36)- Row	Dia	Gage	-Shear(k)- Limit	UC	Req Thick	Req Dia
Left	P	12.4	0.0	6.0	13.00	0.500	2	0.750	4.00	20.5	0.74	0.468	0.634

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Right	P	12.4	0.0	6.0	13.00	0.500	2	0.750	4.00	20.5	0.73	0.299	0.633
Col1	P	8.1	0.0	6.0	8.50	0.500	2	0.750	4.00	6.2	0.03	0.374	0.265
Col2	P	8.1	0.0	6.0	8.50	0.500	2	0.750	4.00	4.7	0.02	0.337	0.238

BASE REACTIONS:

Column Id	-Max_Comp- Ld	Fy(k)	Max_Tension+Shear Ld	Tens Fy(k)	Shear Fx(k)	-Max_Shear Ld	Fx(k)	Max_Shear+Tension Ld	Shear Fx(k)	Tens Fy(k)
Left	84	5.9	93	-13.5	11.2	71	15.1	71	15.1	-9.6
Right	106	10.8	83	-5.5	15.1	71	15.1	71	15.1	-3.4
Col1	86	41.2	65	-5.0	0.0	96	0.6	61	0.0	-4.5
Col2	9	33.5	68	-4.0	0.0	108	0.5	61	0.0	-3.1

WELDS:

Base	Outside_Flange_To_Base Shear(k/in)				Inside_Flange_To_Base Shear(k/in)				-----Web_To_Base----- Shear(k/in)			
Id	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit	Size	Typ	Calc	Limit
Left	0.125	F1	1.13	1.86	0.125	F2	0.56	1.86	0.125	F1	1.26	1.86
Right	0.125	F1	0.46	1.86	0.125	F2	0.23	1.86	0.125	F1	1.25	1.86
Col1	0.188	F1	0.47	2.78	0.188	F1	0.47	2.78	0.125	F1	0.09	1.86
Col2	0.188	F1	0.38	2.78	0.188	F1	0.38	2.78	0.125	F1	0.07	1.86

LOAD COMBINATIONS:

```
    9 - Dead+Collateral+Snow+Slide_Snow
   61 - 0.6Dead+0.6Wind_Left1
   65 - 0.6Dead+0.6Wind_Long1
   68 - 0.6Dead-0.6Wind_Long2
   71 - 1.1Dead+1.1Collateral+0.7Seismic_Long
   83 - Dead/2+0.7Seismic_Long
   84 - Dead/2-0.7Seismic_Long
   86 - Dead+Collateral+F2UNB_SL_L
   93 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F2UNB_SL_L
   96 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_L
  106 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F2UNB_SL_R
  108 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_R
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22-8706 Frame 2 - Bolted-End-Plates 4/29/22 4:10pm

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DESIGN CONSTANTS:

```
 Splice Yield         = 50.00 (ksi  )
 Bolt Type            = A325  Snug-Tightened
 Bolt Shear   Stress  = 27.00 (ksi  )
```

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Bolt Tension Stress = 45.00 (ksi)

PLATE SIZE:

Splice Id	Typ	Member Locate	Web Depth	Splice(in) Width	Thick	Bolts(A325) Dia	Gage	Gage2	RowT	SpaceT	RowB	SpaceB	RowI
1	VEE	1- 2	18.00	6.0	0.750	0.750	3.50	3.50	2	4.00	2	4.00	0
2	-EE	4- 5	18.00	6.0	0.375	0.750	3.50	3.50	2	4.00	2	4.00	0
3	-EE	6- 7	18.06	6.0	0.500	0.750	3.50	3.50	2	4.00	2	4.00	0
4	-EE	7- 8	18.00	6.0	0.375	0.750	3.50	3.50	2	4.00	2	4.00	0
5	VEE	11-12	18.00	6.0	0.500	0.750	3.50	3.50	2	4.00	2	4.00	0

PLATE DESIGN:

Splice Id	Ten Typ	Load Loc	Max_Moment Load Id	Axial (k)	Shear (k)	Moment (f-k)	Max_Shear Load Id	Axial (k)	Shear (k)	Moment (f-k)	Req Thick	Req Dia	Bolt UC
1	VEE	Top	218b	1.9	5.2	108.9	86	-0.1	-11.7	1.9	0.674	0.624	0.72
		Bot	217b	-2.2	-12.6	-99.4	95	-1.0	-12.8	-31.9	0.673	0.616	0.67
2	-EE	Top	107	0.5	6.0	8.8	86	0.6	10.4	0.8	0.162	0.244	0.11
		Bot	70	1.1	3.1	-6.0	10	1.3	9.4	-0.3	0.127	0.175	0.10
3	-EE	Top	66	-1.4	0.5	6.2	66	-1.4	0.5	6.2	0.153	0.586	0.07
		Bot	86	-0.2	-4.8	-66.3	85	-0.3	-4.8	-66.1	0.466	0.596	0.63
4	-EE	Top	5	1.5	-11.4	36.0	5	1.5	-11.4	36.0	0.334	0.447	0.37
		Bot	62	-1.0	1.0	-6.0	68	-1.6	1.1	-3.8	0.147	0.200	0.07
5	VEE	Top	217b	-0.9	-4.6	68.6	98	0.8	-6.3	6.9	0.438	0.548	0.55
		Bot	218b	1.0	0.4	-65.5	108	0.8	-4.4	-18.5	0.423	0.539	0.52

b) Loads shown are full loads. Design results are adjusted for seismic strength factor (1.200)

WELDS:

Splice Id	Side	Outside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Limit	Inside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Limit	Web_To_Bep Size	Typ	Shear(k/in) Calc	Limit
1	L	0.188	F2	3.73	4.67	0.250	F2	5.70	6.24	0.250	F2	3.73	4.45
1	R	0.188	F2	4.19	4.67	0.188	F2	4.17	4.67	0.188	F2	3.00	3.34
2	L	0.188	F2	0.42	3.89	0.188	F2	0.29	3.89	0.125	F2	0.29	1.86
2	R	0.188	F2	0.40	3.89	0.188	F2	0.23	3.89	0.125	F2	0.29	1.86
3	L	0.188	F2	0.28	3.89	0.188	F2	2.54	3.89	0.125	F2	1.82	1.86
3	R	0.188	F2	0.26	3.89	0.188	F2	2.54	3.89	0.125	F2	1.82	1.86
4	L	0.188	F2	1.51	3.89	0.188	F2	0.23	3.89	0.125	F2	0.81	1.86
4	R	0.188	F2	1.66	3.89	0.188	F2	0.27	3.89	0.125	F2	0.59	1.86
5	L	0.188	F2	2.64	4.67	0.188	F2	2.52	4.67	0.125	F2	1.89	2.23
5	R	0.188	F2	2.35	4.67	0.188	F2	3.76	4.67	0.188	F2	2.35	3.34

LOAD COMBINATIONS:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

5 - Dead+Collateral+Snow
10 - Dead+Collateral+Snow+Slide_Snow
62 - 0.6Dead+0.6Wind_Right1
66 - 0.6Dead-0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2
70 - 1.1Dead+1.1Collateral+0.7Seismic_R
85 - Dead+Collateral+F2UNB_SL_L
86 - Dead+Collateral+F2UNB_SL_L
95 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_L
98 - Dead+Collateral+F2UNB_SL_R
107 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_R
108 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_R
217 - 1.1Dead+1.1Collateral+1.62Seismic_L
218 - 1.1Dead+1.1Collateral+1.62Seismic_R

22-8706 Frame 2 - Bearing Stiffeners 4/29/22 4:10pm

Stiffener Yield = 50.0 (ksi)

STIFFENER SIZE:

Location	Offset	Web Depth	Web Thick	Stiffener Width	Stiffener Thick	Stiffener Length	No.
Lt Col	0.0	12.00	0.188	3.00	0.250	12.00	1
Rt Col	117.0	12.00	0.188	3.00	0.250	12.00	1
Col1	17.0	29.99	0.134	3.00	0.250	29.99	1
Col2	79.0	29.96	0.134	3.00	0.250	29.96	1

STIFFENER DESIGN:

Location	Tension Load	Tension Calc	Tension Limit	Compression Load	Compression Calc	Compression Limit	Max UC
Lt Col	81	22.8	44.9	70	27.6	71.2	0.51
Rt Col	70	13.4	44.9	69	15.1	71.2	0.30
Col1	65	5.1	44.9	86	40.9	58.5	0.70
Col2	68	4.1	44.9	5	33.3	58.5	0.57

WELDS:

Stiffener Location	Stiff_To_Flg/EP Size	Typ	Shear(k/in) Calc	Limit	Stiff_To_Web Size	Typ	Shear(k/in) Calc	Limit
Lt Col	0.188	F2	1.90	3.89	0.125	F1	1.15	1.86
Rt Col	0.188	F2	1.11	3.89	0.125	F1	0.63	1.86
Col1	0.188	F2	0.42	3.89	0.125	F1	0.68	1.86
Col2	0.188	F2	0.34	3.89	0.125	F1	0.56	1.86

LOAD COMBINATIONS:

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

---

5 - Dead+Collateral+Snow
65 - 0.6Dead+0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2
69 - 1.1Dead+1.1Collateral+0.7Seismic_L
70 - 1.1Dead+1.1Collateral+0.7Seismic_R
81 - Dead/2+0.7Seismic_L
86 - Dead+Collateral+F2UNB_SL_L

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22-8706 Frame 2 - Transverse Stiffeners 4/29/22 4:10pm

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No Stiffeners Required.

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22-8706 Frame 2 - Flange Braces 4/29/22 4:10pm

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DESIGN CONSTANTS:

Flange Brace Yield = 36.00 ksi
Girt/Purlin Yield = 55.00 ksi
Flange Brace Bolt = GR_5 (1 Washers)
Bolt Shear Stress = 24.00 ksi

Flange Brace Force
Inside flange, max of bending compression

LAYOUT:

Surf Id	Loc	Side	Part	Seg Id	Web Depth	Brace Offset	Angle Deg	Design Length	-----Bolt_Dia----- Frame	Purlin	--Attachment- Clip	Frame	Purlin	Ref
2	1	1	L2X2X1/8	2	19.67	24.00	46.5	30.32	0.500	0.500		Clip	Web	
	4	1	L2X2X1/8	3	28.79	24.00	36.0	37.44	0.500	0.500		Clip	Web	
	5	1	L2X2X1/8	4	28.28	24.00	36.5	37.02	0.500	0.500		Clip	Web	
	9	1	L2X2X1/8	5	18.00	24.00	48.6	29.32	0.500	0.500		Clip	Web	
	13	1	L2X2X1/8	6	18.00	24.00	48.6	29.32	0.500	0.500		Clip	Web	
	14	1	L2X2X1/8	6	18.00	24.00	48.6	29.32	0.500	0.500		Clip	Web	
3	1	1	L2X2X1/8	7	18.00	24.00	48.8	29.23	0.500	0.500		Clip	Web	
	3	1	L2X2X1/8	7	18.00	24.00	48.8	29.23	0.500	0.500		Clip	Web	
	7	1	L2X2X1/8	8	29.77	24.00	35.2	38.13	0.500	0.500		Clip	Web	
	8	1	L2X2X1/8	9	26.37	24.00	38.4	35.41	0.500	0.500		Clip	Web	
	12	1	L2X2X1/8	10	18.00	24.00	48.9	29.19	0.500	0.500		Clip	Web	
	16	1	L2X2X1/8	11	18.00	24.00	48.9	29.19	0.500	0.500		Clip	Web	

DESIGN:

Surf	Load(f-k)	Force	-Brace_UC-	---Connection_UC---

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Loc	Id	Moment	(k)	Comp	Tens	Frame	Purlin	Clip
2	1	74	58.8	0.80	0.19	0.22	0.21	0.26	
	4	86	221.2	2.60	0.70	0.70	0.70	0.85	
	5	86	206.0	2.44	0.66	0.66	0.65	0.80	
	9	61	4.7	0.06	0.01	0.02	0.02	0.02	
	13	66	8.3	0.10	0.02	0.03	0.03	0.03	
	14	66	6.8	0.08	0.02	0.02	0.02	0.03	
3	1	66	5.8	0.07	0.02	0.02	0.02	0.02	
	3	82	5.1	0.06	0.02	0.02	0.02	0.02	
	7	5	182.8	1.98	0.54	0.53	0.53	0.65	
	8	5	133.1	1.55	0.41	0.42	0.42	0.51	
	12	95	17.4	0.23	0.05	0.06	0.06	0.07	
	16	81	24.1	0.32	0.08	0.09	0.08	0.10	

LOAD COMBINATIONS:

- 5 - Dead+Collateral+Snow
- 61 - 0.6Dead+0.6Wind_Left1
- 66 - 0.6Dead-0.6Wind_Long1
- 74 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
- 81 - Dead/2+0.7Seismic_L
- 82 - Dead/2+0.7Seismic_R
- 86 - Dead+Collateral+F2UNB_SL_L
- 95 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_L

22-8706 Frame 2 - Web To Flange Weld 4/29/22 4:10pm

Surf Id	Mem Id	Seg Id	Sec Id	Load Id	Shear (k)	Q (in3)	Ixx (in4)	---Web_Flange_Weld--- Size	Typ	Shear(k/in) Calc	Limit
1	1	1	1	70	3.8	8.5	124	0.125	F1	0.26	1.86
2	2	2	8	95	12.7	12.7	281	0.125	F1	0.57	1.86
2	3	3	11	95	15.0	32.6	816	0.188	F1	0.60	2.78
2	4	4	19	86	20.0	45.8	1698	0.188	F1	0.54	2.78
2	5	5	28	86	10.4	16.6	330	0.125	F1	0.53	1.86
2	6	6	41	85	4.6	16.6	330	0.125	F1	0.23	1.86
3	7	7	49	5	11.4	12.7	281	0.125	F1	0.51	1.86
3	8	8	50	5	11.3	20.7	445	0.125	F1	0.52	1.86
3	9	9	61	5	11.0	25.2	683	0.125	F1	0.41	1.86
3	10	10	64	7	8.7	10.2	251	0.125	F1	0.35	1.86
3	11	11	75	98	6.2	10.2	251	0.125	F1	0.25	1.86
4	12	12	76	69	2.5	6.9	111	0.125	F1	0.16	1.86

LOAD COMBINATIONS:

- 5 - Dead+Collateral+Snow
- 7 - Dead+Collateral+Snow+Snow_Drift
- 69 - 1.1Dead+1.1Collateral+0.7Seismic_L
- 70 - 1.1Dead+1.1Collateral+0.7Seismic_R
- 85 - Dead+Collateral+F2UNB_SL_L

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

86 - Dead+Collateral+F2UNB_SL_L
95 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_L
98 - Dead+Collateral+F2UNB_SL_R

FLANGE PLATE:

Locate	--Initial-- Width (in)	Thick (in)	---Final--- Width (in)	Thick (in)
Lt Col	6.0	0.188	6.0	0.188
Rt Col	6.0	0.188	6.0	0.188

WEB PLATE:

Locate	Id	------Actions----- Axial (k)	Moment (f-k)	Calc Web Shear (k)	---Initial-- Web Thick (in)	Shear Limit (k)	------Final------ Web Thick (in)	Shear Limit (k)	UC	Note
Lt Col	70	1.1	49.7	32.6	0.188	40.4	0.188	40.4	0.81	AISC G3-1
Rt Col	69	0.0	30.5	20.3	0.188	40.4	0.188	40.4	0.50	AISC G3-1

REQUIRED WEB DESIGN:

Locate	h	av	Kv	Cv
Lt Col	12.00	17.56	7.33	1.00
Rt Col	12.00	17.56	7.34	1.00

LOAD COMBINATIONS:

69 - 1.1Dead+1.1Collateral+0.7Seismic_L
70 - 1.1Dead+1.1Collateral+0.7Seismic_R

FRAME:

Id = 2
Type = RF
Line Id = 4
Load Width= 15.50
UC Limit= 1.03
KL/R Limit= 200.00

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

MEMBERS:

Srf Id	Mem Id	Seg Id	Len	--Flange- Wid	Strt	Web_Depth End	Web	-Plate_Thickness- O-flg	I-flg	--Max_Shear- Id	Ld	Ucv	----O-Flg--- Id	Ld	Uco	----I-Flg--- Id	Ld	Max Uci	KL/R
1	1	1	13.9	6.0	12.0	12.0	0.188	0.188	0.250	1	70	0.09	7	81	0.98	7	70	0.93	118
2	2	2	4.5	6.0	18.0	21.2	0.134	0.188	0.250	10	95	0.74	10	96	0.85	10	96	0.87	116
2	3	3	10.9	6.0	21.2	30.0	0.134	0.500	0.500	18	86	1.01	18	86	0.83	18	86	0.99	103
2	4	4	16.5	6.0	30.0	18.0	0.134	0.500	0.500	19	86	0.98	19	86	0.82	19	86	1.00	135
2	5	5	16.0	6.0	18.0	18.0	0.134	0.375	0.188	28	86	0.51	36	86	0.83	36	86	0.89	140
2	6	6	5.7	6.0	18.0	18.0	0.134	0.375	0.188	41	85	0.23	37	86	0.83	37	86	0.89	140
3	7	7	13.7	6.0	18.0	18.0	0.134	0.250	0.188	49	5	0.56	42	86	0.91	42	86	0.88	146
3	8	8	10.5	6.0	18.0	30.0	0.134	0.375	0.375	55	5	0.85	55	5	0.74	54	5	0.96	141
3	9	9	12.0	6.0	30.0	18.0	0.134	0.375	0.375	56	5	0.77	56	5	0.76	56	5	0.94	141
3	10	10	10.0	6.0	18.0	18.0	0.134	0.188	0.188	64	7	0.43	68	108	0.61	64	86	1.03	152
3	11	11	14.5	6.0	18.0	18.0	0.134	0.188	0.188	75	98	0.31	71	108	0.78	75	69	0.63	152
4	12	12	13.3	6.0	12.0	12.0	0.188	0.188	0.188	76	69	0.06	76	70	0.69	76	107	0.84	116

COLUMNS:

Col Id	Mem Id	Locate	Part	--Max_Axial- Id	Ld	UC	--Max_Shear- Id	Ld	UC	-----Max_Axial+Moment---- ----O-Flg--- Id	Ld	Uco	----I-Flg--- Id	Ld	Uci	Max KL/R
1	13	17.0	W8X18	80	86	0.81	80	74	0.00	80	86	0.81	80	86	0.81	124
2	14	79.0	W8X18	83	5	0.78	83	74	0.00	83	5	0.78	83	5	0.78	135

LOAD COMBINATIONS:

#- Controlling Load Combination In Design Summary

1 - Dead+Collateral+Live
2 - Dead+Collateral+Live
3 - Dead+Collateral

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

4 - Dead+Collateral
5#- Dead+Collateral+Snow
6 - Dead+Collateral+Snow
7#- Dead+Collateral+Snow+Snow_Drift
8 - Dead+Collateral+Snow+Snow_Drift
9 - Dead+Collateral+Snow+Slide_Snow
10 - Dead+Collateral+Snow+Slide_Snow
11 - Dead
12 - Dead
13 - Dead+Collateral+0.75Live
14 - Dead+Collateral+0.75Live
15 - Dead+Collateral+0.75Snow
16 - Dead+Collateral+0.75Snow
17 - Dead+Collateral+0.75Snow+0.75Snow_Drift
18 - Dead+Collateral+0.75Snow+0.75Snow_Drift
19 - Dead+Collateral+0.75Snow+0.75Slide_Snow
20 - Dead+Collateral+0.75Snow+0.75Slide_Snow
21 - Dead+0.6Wind_Left1
22 - Dead+0.6Wind_Right1
23 - Dead+0.6Wind_Left2
24 - Dead+0.6Wind_Right2
25 - Dead+0.6Wind_Long1
26 - Dead-0.6Wind_Long1
27 - Dead+0.6Wind_Long2
28 - Dead-0.6Wind_Long2
29 - Dead+Collateral+0.75Live+0.45Wind_Left1
30 - Dead+Collateral+0.75Live+0.45Wind_Right1
31 - Dead+Collateral+0.75Live+0.45Wind_Left2
32 - Dead+Collateral+0.75Live+0.45Wind_Right2
33 - Dead+Collateral+0.75Live+0.45Wind_Long1
34 - Dead+Collateral+0.75Live-0.45Wind_Long1
35 - Dead+Collateral+0.75Live+0.45Wind_Long2
36 - Dead+Collateral+0.75Live-0.45Wind_Long2
37 - Dead+Collateral+0.75Snow+0.45Wind_Left1
38 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Snow_Drift
39 - Dead+Collateral+0.75Snow+0.45Wind_Left1+0.75Slide_Snow
40 - Dead+Collateral+0.75Snow+0.45Wind_Right1
41 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Snow_Drift
42 - Dead+Collateral+0.75Snow+0.45Wind_Right1+0.75Slide_Snow
43 - Dead+Collateral+0.75Snow+0.45Wind_Left2
44 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Snow_Drift
45 - Dead+Collateral+0.75Snow+0.45Wind_Left2+0.75Slide_Snow
46 - Dead+Collateral+0.75Snow+0.45Wind_Right2
47 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Snow_Drift
48 - Dead+Collateral+0.75Snow+0.45Wind_Right2+0.75Slide_Snow
49 - Dead+Collateral+0.75Snow+0.45Wind_Long1
50 - Dead+Collateral+0.75Snow-0.45Wind_Long1
51 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Snow_Drift
52 - Dead+Collateral+0.75Snow-0.45Wind_Long1+0.75Snow_Drift
53 - Dead+Collateral+0.75Snow+0.45Wind_Long1+0.75Slide_Snow
54 - Dead+Collateral+0.75Snow-0.45Wind_Long1+0.75Slide_Snow
55 - Dead+Collateral+0.75Snow+0.45Wind_Long2
56 - Dead+Collateral+0.75Snow-0.45Wind_Long2
57 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Snow_Drift

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

58 - Dead+Collateral+0.75Snow-0.45Wind_Long2+0.75Snow_Drift
59 - Dead+Collateral+0.75Snow+0.45Wind_Long2+0.75Slide_Snow
60 - Dead+Collateral+0.75Snow-0.45Wind_Long2+0.75Slide_Snow
61 - 0.6Dead+0.6Wind_Left1
62 - 0.6Dead+0.6Wind_Right1
63 - 0.6Dead+0.6Wind_Left2
64 - 0.6Dead+0.6Wind_Right2
65 - 0.6Dead+0.6Wind_Long1
66 - 0.6Dead-0.6Wind_Long1
67 - 0.6Dead+0.6Wind_Long2
68 - 0.6Dead-0.6Wind_Long2
69#- 1.1Dead+1.1Collateral+0.7Seismic_L
70#- 1.1Dead+1.1Collateral+0.7Seismic_R
71 - 1.1Dead+1.1Collateral+0.7Seismic_Long
72 - 1.1Dead+1.1Collateral-0.7Seismic_Long
73 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
74#- 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
75 - 1.07Dead+1.07Collateral+0.53Seismic_L
76 - 1.07Dead+1.07Collateral+0.53Seismic_R
77 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_Long
78 - 1.07Dead+1.07Collateral+0.75Live-0.53Seismic_Long
79 - 1.07Dead+1.07Collateral+0.53Seismic_Long
80 - 1.07Dead+1.07Collateral-0.53Seismic_Long
81#- Dead/2+0.7Seismic_L
82 - Dead/2+0.7Seismic_R
83 - Dead/2+0.7Seismic_Long
84 - Dead/2-0.7Seismic_Long
85#- Dead+Collateral+F2UNB_SL_L
86#- Dead+Collateral+F2UNB_SL_L
87 - Dead+Collateral+0.75F2UNB_SL_L
88 - Dead+Collateral+0.75F2UNB_SL_L
89 - Dead+Collateral+0.45Wind_Left1+0.75F2UNB_SL_L
90 - Dead+Collateral+0.45Wind_Left2+0.75F2UNB_SL_L
91 - Dead+Collateral+0.45Wind_Right1+0.75F2UNB_SL_L
92 - Dead+Collateral+0.45Wind_Right2+0.75F2UNB_SL_L
93 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F2UNB_SL_L
94 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F2UNB_SL_L
95#- 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_L
96#- 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_L
97 - Dead+Collateral+F2UNB_SL_R
98#- Dead+Collateral+F2UNB_SL_R
99 - Dead+Collateral+0.75F2UNB_SL_R
100 - Dead+Collateral+0.75F2UNB_SL_R
101 - Dead+Collateral+0.45Wind_Left1+0.75F2UNB_SL_R
102 - Dead+Collateral+0.45Wind_Left2+0.75F2UNB_SL_R
103 - Dead+Collateral+0.45Wind_Right1+0.75F2UNB_SL_R
104 - Dead+Collateral+0.45Wind_Right2+0.75F2UNB_SL_R
105 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F2UNB_SL_R
106 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F2UNB_SL_R
107#- 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_R
108#- 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_R
109 - Dead+Collateral+Live
110 - Dead+Collateral+Live
111 - Dead+Collateral

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

112 - Dead+Collateral
113 - Dead+Collateral+Snow
114 - Dead+Collateral+Snow
115 - Dead+Collateral+Snow+Snow_Drift
116 - Dead+Collateral+Snow+Snow_Drift
117 - Dead+Collateral+Snow+Slide_Snow
118 - Dead+Collateral+Snow+Slide_Snow
119 - Dead
120 - Dead
121 - Dead+Collateral+0.75Live
122 - Dead+Collateral+0.75Live
123 - Dead+Collateral+0.75Snow
124 - Dead+Collateral+0.75Snow
125 - Dead+Collateral+0.75Snow+0.75Snow_Drift
126 - Dead+Collateral+0.75Snow+0.75Snow_Drift
127 - Dead+Collateral+0.75Snow+0.75Slide_Snow
128 - Dead+Collateral+0.75Snow+0.75Slide_Snow
129 - Dead+0.48Wind_Left1
130 - Dead+0.48Wind_Right1
131 - Dead+0.48Wind_Left2
132 - Dead+0.48Wind_Right2
133 - Dead+0.48Wind_Long1
134 - Dead-0.48Wind_Long1
135 - Dead+0.48Wind_Long2
136 - Dead-0.48Wind_Long2
137 - Dead+Collateral+0.75Live+0.36Wind_Left1
138 - Dead+Collateral+0.75Live+0.36Wind_Right1
139 - Dead+Collateral+0.75Live+0.36Wind_Left2
140 - Dead+Collateral+0.75Live+0.36Wind_Right2
141 - Dead+Collateral+0.75Live+0.36Wind_Long1
142 - Dead+Collateral+0.75Live-0.36Wind_Long1
143 - Dead+Collateral+0.75Live+0.36Wind_Long2
144 - Dead+Collateral+0.75Live-0.36Wind_Long2
145 - Dead+Collateral+0.75Snow+0.36Wind_Left1
146 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Snow_Drift
147 - Dead+Collateral+0.75Snow+0.36Wind_Left1+0.75Slide_Snow
148 - Dead+Collateral+0.75Snow+0.36Wind_Right1
149 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Snow_Drift
150 - Dead+Collateral+0.75Snow+0.36Wind_Right1+0.75Slide_Snow
151 - Dead+Collateral+0.75Snow+0.36Wind_Left2
152 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Snow_Drift
153 - Dead+Collateral+0.75Snow+0.36Wind_Left2+0.75Slide_Snow
154 - Dead+Collateral+0.75Snow+0.36Wind_Right2
155 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Snow_Drift
156 - Dead+Collateral+0.75Snow+0.36Wind_Right2+0.75Slide_Snow
157 - Dead+Collateral+0.75Snow+0.36Wind_Long1
158 - Dead+Collateral+0.75Snow-0.36Wind_Long1
159 - Dead+Collateral+0.75Snow+0.36Wind_Long1+0.75Snow_Drift
160 - Dead+Collateral+0.75Snow-0.36Wind_Long1+0.75Snow_Drift
161 - Dead+Collateral+0.75Snow+0.36Wind_Long1+0.75Slide_Snow
162 - Dead+Collateral+0.75Snow-0.36Wind_Long1+0.75Slide_Snow
163 - Dead+Collateral+0.75Snow+0.36Wind_Long2
164 - Dead+Collateral+0.75Snow-0.36Wind_Long2
165 - Dead+Collateral+0.75Snow+0.36Wind_Long2+0.75Snow_Drift

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

166 - Dead+Collateral+0.75Snow-0.36Wind_Long2+0.75Snow_Drift
167 - Dead+Collateral+0.75Snow+0.36Wind_Long2+0.75Slide_Snow
168 - Dead+Collateral+0.75Snow-0.36Wind_Long2+0.75Slide_Snow
169 - 0.6Dead+0.48Wind_Left1
170 - 0.6Dead+0.48Wind_Right1
171 - 0.6Dead+0.48Wind_Left2
172 - 0.6Dead+0.48Wind_Right2
173 - 0.6Dead+0.48Wind_Long1
174 - 0.6Dead-0.48Wind_Long1
175 - 0.6Dead+0.48Wind_Long2
176 - 0.6Dead-0.48Wind_Long2
177 - 1.1Dead+1.1Collateral+0.7Seismic_L
178 - 1.1Dead+1.1Collateral+0.7Seismic_R
179 - 1.1Dead+1.1Collateral+0.7Seismic_Long
180 - 1.1Dead+1.1Collateral-0.7Seismic_Long
181 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_L
182 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_R
183 - 1.07Dead+1.07Collateral+0.53Seismic_L
184 - 1.07Dead+1.07Collateral+0.53Seismic_R
185 - 1.07Dead+1.07Collateral+0.75Live+0.53Seismic_Long
186 - 1.07Dead+1.07Collateral+0.75Live-0.53Seismic_Long
187 - 1.07Dead+1.07Collateral+0.53Seismic_Long
188 - 1.07Dead+1.07Collateral-0.53Seismic_Long
189 - Dead/2+0.7Seismic_L
190 - Dead/2+0.7Seismic_R
191 - Dead/2+0.7Seismic_Long
192 - Dead/2-0.7Seismic_Long
193 - Dead+Collateral+F2UNB_SL_L
194 - Dead+Collateral+F2UNB_SL_L
195 - Dead+Collateral+0.75F2UNB_SL_L
196 - Dead+Collateral+0.75F2UNB_SL_L
197 - Dead+Collateral+0.36Wind_Left1+0.75F2UNB_SL_L
198 - Dead+Collateral+0.36Wind_Left2+0.75F2UNB_SL_L
199 - Dead+Collateral+0.36Wind_Right1+0.75F2UNB_SL_L
200 - Dead+Collateral+0.36Wind_Right2+0.75F2UNB_SL_L
201 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F2UNB_SL_L
202 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F2UNB_SL_L
203 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_L
204 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_L
205 - Dead+Collateral+F2UNB_SL_R
206 - Dead+Collateral+F2UNB_SL_R
207 - Dead+Collateral+0.75F2UNB_SL_R
208 - Dead+Collateral+0.75F2UNB_SL_R
209 - Dead+Collateral+0.36Wind_Left1+0.75F2UNB_SL_R
210 - Dead+Collateral+0.36Wind_Left2+0.75F2UNB_SL_R
211 - Dead+Collateral+0.36Wind_Right1+0.75F2UNB_SL_R
212 - Dead+Collateral+0.36Wind_Right2+0.75F2UNB_SL_R
213 - 1.07Dead+1.07Collateral+0.52Seismic_Long+0.75F2UNB_SL_R
214 - 1.07Dead+1.07Collateral-0.52Seismic_Long+0.75F2UNB_SL_R
215 - 1.07Dead+1.07Collateral+0.52Seismic_L+0.75F2UNB_SL_R
216 - 1.07Dead+1.07Collateral+0.52Seismic_R+0.75F2UNB_SL_R

PLATE LIMITS:

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Seg Id	Web Depth/Thick Calc	Web Depth/Thick Limit	Flange Width/(2xThick) Calc	Flange Width/(2xThick) Limit	Flange Thick	Flange Min	Web_Depth/ Flange_Width Calc	Web_Depth/ Flange_Width Limit	Web_Area/ Flange_Area Calc	Web_Area/ Flange_Area Limit
1	64.0	260.0	16.0		0.188	0.188	2.0		2.0	10.0
2	157.9	260.0	16.0		0.188	0.134	3.5		2.5	10.0
3	223.0	260.0	6.0		0.500	0.134	5.0		1.3	10.0
4	223.0	260.0	6.0		0.500	0.134	5.0		1.3	10.0
5	133.8	260.0	16.0		0.188	0.134	3.0		2.2	10.0
6	133.8	260.0	16.0		0.188	0.134	3.0		2.2	10.0
7	133.8	260.0	16.0		0.188	0.134	3.0		2.2	10.0
8	223.0	260.0	8.0		0.375	0.134	5.0		1.8	10.0
9	223.0	260.0	8.0		0.375	0.134	5.0		1.8	10.0
10	133.8	260.0	16.0		0.188	0.134	3.0		2.2	10.0
11	133.8	260.0	16.0		0.188	0.134	3.0		2.2	10.0
12	64.0	260.0	16.0		0.188	0.188	2.0		2.0	10.0

FRAME AREA:

Frame Area= 244.19
Building Area= 1974.71
Ratio= 0.12

WEIGHTS:

Member	1	2	3	4	5	6	7	8	9	10
Weight (lb)	230	81	352	518	316	112	234	276	316	159

Member	11	12
Weight (lb)	231	203

Column	1	2
Weight (lb)	231	251

Total Weight (lb)

Frame	=	3025
Interior Col	=	481
Splice Plate	=	211
Column Cap	=	21
Base Plate	=	37
		3775

REACTIONS - Sidewall Columns:

Load	Left_Column		Right_Column	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Fx(k)	Fy(k)	Fz(k)	M(f-k)	Fx(k)	Fy(k)	Fz(k)	M(f-k)
1	0.85	-7.15	0.00	0.00	-0.31	5.84	0.00	0.00
2	0.61	-7.47	0.00	0.00	-0.47	5.95	0.00	0.00
3	0.27	-2.75	0.00	0.00	-0.14	2.41	0.00	0.00
4	0.17	-2.87	0.00	0.00	-0.20	2.45	0.00	0.00
5	1.03	-8.22	0.00	0.00	-0.34	6.69	0.00	0.00
6	0.75	-8.59	0.00	0.00	-0.52	6.81	0.00	0.00
7	1.03	-8.22	0.00	0.00	-0.34	6.69	0.00	0.00
8	0.75	-8.59	0.00	0.00	-0.52	6.81	0.00	0.00
9	1.03	-8.22	0.00	0.00	-0.34	6.69	0.00	0.00
10	0.75	-8.59	0.00	0.00	-0.52	6.81	0.00	0.00
11	0.11	-1.16	0.00	0.00	-0.06	1.19	0.00	0.00
12	0.06	-1.22	0.00	0.00	-0.09	1.21	0.00	0.00
13	0.68	-6.07	0.00	0.00	-0.28	4.99	0.00	0.00
14	0.48	-6.34	0.00	0.00	-0.41	5.08	0.00	0.00
15	0.80	-6.88	0.00	0.00	-0.31	5.63	0.00	0.00
16	0.57	-7.19	0.00	0.00	-0.45	5.73	0.00	0.00
17	0.80	-6.88	0.00	0.00	-0.31	5.63	0.00	0.00
18	0.57	-7.19	0.00	0.00	-0.45	5.73	0.00	0.00
19	0.80	-6.88	0.00	0.00	-0.31	5.63	0.00	0.00
20	0.57	-7.19	0.00	0.00	-0.45	5.73	0.00	0.00
21	-1.33	-0.59	0.00	0.00	-1.24	0.25	0.00	0.00
22	1.31	0.54	0.00	0.00	1.33	-1.65	0.00	0.00
23	-1.71	-1.27	0.00	0.00	-0.91	1.03	0.00	0.00
24	0.96	-0.07	0.00	0.00	1.71	-0.87	0.00	0.00
25	0.74	-1.20	4.53	0.00	-0.50	-1.64	4.43	0.00
26	0.74	2.67	0.00	0.00	-0.49	1.95	0.00	0.00
27	0.26	-2.30	4.53	0.00	-0.52	-2.48	4.43	0.00
28	0.26	1.57	0.00	0.00	-0.52	1.12	0.00	0.00
29	-0.68	-5.93	0.00	0.00	-1.30	4.38	0.00	0.00
30	1.54	-4.86	0.00	0.00	0.73	2.88	0.00	0.00
31	-0.93	-6.42	0.00	0.00	-1.04	4.96	0.00	0.00
32	1.30	-5.30	0.00	0.00	1.02	3.46	0.00	0.00
33	1.04	-6.23	3.40	0.00	-0.67	2.91	3.33	0.00
34	1.03	-3.32	0.00	0.00	-0.67	5.61	0.00	0.00
35	0.62	-7.11	3.40	0.00	-0.71	2.30	3.33	0.00
36	0.62	-4.20	0.00	0.00	-0.71	5.00	0.00	0.00
37	-0.60	-6.80	0.00	0.00	-1.35	5.03	0.00	0.00
38	-0.60	-6.80	0.00	0.00	-1.35	5.03	0.00	0.00
39	-0.60	-6.80	0.00	0.00	-1.35	5.03	0.00	0.00
40	1.65	-5.68	0.00	0.00	0.70	3.53	0.00	0.00
41	1.65	-5.68	0.00	0.00	0.70	3.53	0.00	0.00
42	1.65	-5.68	0.00	0.00	0.70	3.53	0.00	0.00
43	-0.85	-7.28	0.00	0.00	-1.09	5.61	0.00	0.00
44	-0.85	-7.28	0.00	0.00	-1.09	5.61	0.00	0.00
45	-0.85	-7.28	0.00	0.00	-1.09	5.61	0.00	0.00
46	1.42	-6.12	0.00	0.00	0.99	4.10	0.00	0.00
47	1.42	-6.12	0.00	0.00	0.99	4.10	0.00	0.00
48	1.42	-6.12	0.00	0.00	0.99	4.10	0.00	0.00
49	1.14	-7.07	3.40	0.00	-0.71	3.56	3.33	0.00
50	1.13	-4.15	0.00	0.00	-0.71	6.25	0.00	0.00
51	1.14	-7.07	3.40	0.00	-0.71	3.56	3.33	0.00
52	1.13	-4.15	0.00	0.00	-0.71	6.25	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

53	1.14	-7.07	3.40	0.00	-0.71	3.56	3.33	0.00
54	1.13	-4.15	0.00	0.00	-0.71	6.25	0.00	0.00
55	0.72	-7.95	3.40	0.00	-0.75	2.95	3.33	0.00
56	0.71	-5.05	0.00	0.00	-0.75	5.65	0.00	0.00
57	0.72	-7.95	3.40	0.00	-0.75	2.95	3.33	0.00
58	0.71	-5.05	0.00	0.00	-0.75	5.65	0.00	0.00
59	0.72	-7.95	3.40	0.00	-0.75	2.95	3.33	0.00
60	0.71	-5.05	0.00	0.00	-0.75	5.65	0.00	0.00
61	-1.34	-0.10	0.00	0.00	-1.20	-0.24	0.00	0.00
62	1.27	1.01	0.00	0.00	1.36	-2.13	0.00	0.00
63	-1.72	-0.78	0.00	0.00	-0.87	0.55	0.00	0.00
64	0.92	0.39	0.00	0.00	1.74	-1.35	0.00	0.00
65	0.71	-0.72	4.53	0.00	-0.46	-2.12	4.43	0.00
66	0.70	3.15	0.00	0.00	-0.46	1.47	0.00	0.00
67	0.23	-1.81	4.53	0.00	-0.49	-2.96	4.43	0.00
68	0.23	2.05	0.00	0.00	-0.48	0.64	0.00	0.00
69	-3.42	-6.94	0.00	0.00	-2.46	3.76	0.00	0.00
70	3.75	0.76	0.00	0.00	2.13	1.58	0.00	0.00
71	0.25	-9.56	15.11	0.00	-0.19	-3.44	15.06	0.00
72	0.23	3.38	0.00	0.00	-0.17	8.77	0.00	0.00
73	-2.47	-9.62	0.00	0.00	-2.20	6.12	0.00	0.00
74	3.57	-3.18	0.00	0.00	1.52	4.29	0.00	0.00
75	-2.51	-5.91	0.00	0.00	-1.90	3.42	0.00	0.00
76	2.90	-0.10	0.00	0.00	1.56	1.78	0.00	0.00
77	0.60	-11.29	11.44	0.00	-0.35	0.58	11.40	0.00
78	0.60	-1.47	0.00	0.00	-0.33	9.81	0.00	0.00
79	0.24	-7.90	11.44	0.00	-0.18	-2.03	11.40	0.00
80	0.23	1.89	0.00	0.00	-0.17	7.22	0.00	0.00
81	-3.33	-4.18	0.00	0.00	-2.20	1.60	0.00	0.00
82	3.28	2.97	0.00	0.00	2.16	-0.41	0.00	0.00
83	0.04	-7.07	15.11	0.00	-0.04	-5.51	15.06	0.00
84	0.03	5.85	0.00	0.00	-0.03	6.71	0.00	0.00
85	0.08	-10.25	0.00	0.00	0.29	2.38	0.00	0.00
86	-0.14	-10.56	0.00	0.00	0.11	2.49	0.00	0.00
87	0.12	-8.37	0.00	0.00	0.18	2.39	0.00	0.00
88	-0.07	-8.64	0.00	0.00	0.03	2.48	0.00	0.00
89	-1.21	-8.20	0.00	0.00	-0.84	1.77	0.00	0.00
90	-1.47	-8.69	0.00	0.00	-0.59	2.35	0.00	0.00
91	1.01	-7.14	0.00	0.00	1.19	0.28	0.00	0.00
92	0.77	-7.59	0.00	0.00	1.48	0.86	0.00	0.00
93	0.05	-13.51	11.22	0.00	0.10	-1.94	11.19	0.00
94	0.03	-3.90	0.00	0.00	0.12	7.13	0.00	0.00
95	-2.96	-11.80	0.00	0.00	-1.73	3.49	0.00	0.00
96	2.96	-5.60	0.00	0.00	1.95	1.72	0.00	0.00
97	1.09	-5.24	0.00	0.00	-0.63	7.28	0.00	0.00
98	0.87	-5.54	0.00	0.00	-0.75	7.37	0.00	0.00
99	0.87	-4.63	0.00	0.00	-0.51	6.07	0.00	0.00
100	0.68	-4.89	0.00	0.00	-0.62	6.15	0.00	0.00
101	-0.46	-4.48	0.00	0.00	-1.51	5.44	0.00	0.00
102	-0.72	-4.97	0.00	0.00	-1.25	6.03	0.00	0.00
103	1.72	-3.42	0.00	0.00	0.50	3.96	0.00	0.00
104	1.49	-3.86	0.00	0.00	0.80	4.54	0.00	0.00
105	0.80	-9.75	11.22	0.00	-0.57	1.74	11.19	0.00
106	0.79	-0.12	0.00	0.00	-0.56	10.80	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

107	-2.17	-8.09	0.00	0.00	-2.35	7.16	0.00	0.00
108	3.66	-1.82	0.00	0.00	1.23	5.39	0.00	0.00

REACTIONS - Interior Columns:

Load	Col_1				Col_2			
Id	Fx(k)	Fy(k)	Fz(k)	M(f-k)	Fx(k)	Fy(k)	Fz(k)	M(f-k)
1	-0.39	32.89	0.00	0.00	-0.15	29.12	0.00	0.00
2	-0.18	33.24	0.00	0.00	0.04	28.99	0.00	0.00
3	-0.08	13.24	0.00	0.00	-0.04	11.54	0.00	0.00
4	0.00	13.38	0.00	0.00	0.03	11.48	0.00	0.00
5	-0.50	37.77	0.00	0.00	-0.18	33.53	0.00	0.00
6	-0.26	38.18	0.00	0.00	0.03	33.37	0.00	0.00
7	-0.50	37.77	0.00	0.00	-0.18	33.53	0.00	0.00
8	-0.26	38.18	0.00	0.00	0.03	33.37	0.00	0.00
9	-0.50	37.77	0.00	0.00	-0.18	33.53	0.00	0.00
10	-0.26	38.18	0.00	0.00	0.03	33.37	0.00	0.00
11	-0.03	6.29	0.00	0.00	-0.02	5.38	0.00	0.00
12	0.01	6.36	0.00	0.00	0.02	5.35	0.00	0.00
13	-0.29	27.99	0.00	0.00	-0.11	24.72	0.00	0.00
14	-0.11	28.30	0.00	0.00	0.04	24.60	0.00	0.00
15	-0.36	31.67	0.00	0.00	-0.14	28.02	0.00	0.00
16	-0.16	32.01	0.00	0.00	0.04	27.89	0.00	0.00
17	-0.36	31.67	0.00	0.00	-0.14	28.02	0.00	0.00
18	-0.16	32.01	0.00	0.00	0.04	27.89	0.00	0.00
19	-0.36	31.67	0.00	0.00	-0.14	28.02	0.00	0.00
20	-0.16	32.01	0.00	0.00	0.04	27.89	0.00	0.00
21	-0.01	-1.98	0.00	0.00	-0.01	-0.94	0.00	0.00
22	0.00	-0.47	0.00	0.00	0.01	-1.57	0.00	0.00
23	0.01	1.57	0.00	0.00	0.01	2.18	0.00	0.00
24	-0.01	3.01	0.00	0.00	0.00	1.57	0.00	0.00
25	0.00	-2.43	0.00	0.00	0.00	0.05	0.00	0.00
26	0.00	-2.42	0.00	0.00	0.00	0.05	0.00	0.00
27	0.00	1.03	0.00	0.00	0.00	-1.84	0.00	0.00
28	0.00	1.04	0.00	0.00	0.00	-1.84	0.00	0.00
29	-0.03	22.12	0.00	0.00	0.06	19.86	0.00	0.00
30	-0.21	23.00	0.00	0.00	-0.07	19.48	0.00	0.00
31	-0.05	24.75	0.00	0.00	0.07	22.21	0.00	0.00
32	-0.25	25.59	0.00	0.00	-0.09	21.84	0.00	0.00
33	-0.14	21.60	0.00	0.00	-0.04	20.66	0.00	0.00
34	-0.14	21.60	0.00	0.00	-0.04	20.67	0.00	0.00
35	-0.11	24.26	0.00	0.00	0.00	19.23	0.00	0.00
36	-0.11	24.26	0.00	0.00	0.00	19.23	0.00	0.00
37	-0.06	25.85	0.00	0.00	0.07	23.14	0.00	0.00
38	-0.06	25.85	0.00	0.00	0.07	23.14	0.00	0.00
39	-0.06	25.85	0.00	0.00	0.07	23.14	0.00	0.00
40	-0.27	26.69	0.00	0.00	-0.09	22.78	0.00	0.00
41	-0.27	26.69	0.00	0.00	-0.09	22.78	0.00	0.00
42	-0.27	26.69	0.00	0.00	-0.09	22.78	0.00	0.00
43	-0.08	28.47	0.00	0.00	0.07	25.49	0.00	0.00
44	-0.08	28.47	0.00	0.00	0.07	25.49	0.00	0.00

Customer	Elbert Rentals		**Job No**	22-8706	
Project	Building Expansion		**Date**	5/3/2022	
Location	Newberg, OR 97132		**Designed By**	AC	
Size	117 x 90 x 14.8 x 14.1		**Checked By**		

45	-0.08	28.47	0.00	0.00	0.07	25.49	0.00	0.00
46	-0.32	29.27	0.00	0.00	-0.11	25.14	0.00	0.00
47	-0.32	29.27	0.00	0.00	-0.11	25.14	0.00	0.00
48	-0.32	29.27	0.00	0.00	-0.11	25.14	0.00	0.00
49	-0.19	25.30	0.00	0.00	-0.05	23.96	0.00	0.00
50	-0.19	25.29	0.00	0.00	-0.05	23.96	0.00	0.00
51	-0.19	25.30	0.00	0.00	-0.05	23.96	0.00	0.00
52	-0.19	25.29	0.00	0.00	-0.05	23.96	0.00	0.00
53	-0.19	25.30	0.00	0.00	-0.05	23.96	0.00	0.00
54	-0.19	25.29	0.00	0.00	-0.05	23.96	0.00	0.00
55	-0.16	27.97	0.00	0.00	0.00	22.51	0.00	0.00
56	-0.16	27.96	0.00	0.00	0.00	22.52	0.00	0.00
57	-0.16	27.97	0.00	0.00	0.00	22.51	0.00	0.00
58	-0.16	27.96	0.00	0.00	0.00	22.52	0.00	0.00
59	-0.16	27.97	0.00	0.00	0.00	22.51	0.00	0.00
60	-0.16	27.96	0.00	0.00	0.00	22.52	0.00	0.00
61	-0.03	-4.53	0.00	0.00	-0.02	-3.08	0.00	0.00
62	0.01	-2.99	0.00	0.00	0.01	-3.71	0.00	0.00
63	-0.01	-0.98	0.00	0.00	0.00	0.04	0.00	0.00
64	0.00	0.49	0.00	0.00	0.00	-0.58	0.00	0.00
65	0.00	-4.96	0.00	0.00	0.00	-2.10	0.00	0.00
66	0.00	-4.95	0.00	0.00	0.00	-2.10	0.00	0.00
67	0.00	-1.51	0.00	0.00	-0.01	-3.98	0.00	0.00
68	0.00	-1.50	0.00	0.00	-0.01	-3.99	0.00	0.00
69	0.29	18.88	0.00	0.00	0.19	11.18	0.00	0.00
70	-0.23	10.39	0.00	0.00	-0.26	14.15	0.00	0.00
71	-0.05	14.63	0.00	0.00	-0.01	12.66	0.00	0.00
72	-0.05	14.63	0.00	0.00	-0.01	12.67	0.00	0.00
73	0.27	32.62	0.00	0.00	0.32	24.23	0.00	0.00
74	-0.58	25.52	0.00	0.00	-0.43	26.71	0.00	0.00
75	0.19	17.44	0.00	0.00	0.14	11.20	0.00	0.00
76	-0.19	11.03	0.00	0.00	-0.19	13.44	0.00	0.00
77	-0.21	29.07	0.00	0.00	-0.04	25.47	0.00	0.00
78	-0.22	29.04	0.00	0.00	-0.04	25.49	0.00	0.00
79	-0.05	14.24	0.00	0.00	-0.01	12.32	0.00	0.00
80	-0.05	14.24	0.00	0.00	-0.01	12.32	0.00	0.00
81	0.12	7.11	0.00	0.00	0.02	1.31	0.00	0.00
82	0.02	-0.78	0.00	0.00	-0.07	4.06	0.00	0.00
83	0.00	3.16	0.00	0.00	0.00	2.68	0.00	0.00
84	0.00	3.18	0.00	0.00	0.00	2.68	0.00	0.00
85	-0.36	40.81	0.00	0.00	-0.02	22.40	0.00	0.00
86	-0.10	41.16	0.00	0.00	0.12	22.26	0.00	0.00
87	-0.28	33.92	0.00	0.00	-0.03	19.68	0.00	0.00
88	-0.06	34.21	0.00	0.00	0.09	19.56	0.00	0.00
89	0.02	27.99	0.00	0.00	0.09	14.83	0.00	0.00
90	0.00	30.64	0.00	0.00	0.10	17.18	0.00	0.00
91	-0.20	28.90	0.00	0.00	-0.01	14.45	0.00	0.00
92	-0.24	31.50	0.00	0.00	-0.02	16.81	0.00	0.00
93	-0.18	34.99	0.00	0.00	0.03	20.43	0.00	0.00
94	-0.19	34.99	0.00	0.00	0.03	20.44	0.00	0.00
95	0.38	38.41	0.00	0.00	0.30	19.23	0.00	0.00
96	-0.64	31.58	0.00	0.00	-0.27	21.64	0.00	0.00
97	-0.27	22.50	0.00	0.00	-0.20	32.39	0.00	0.00
98	-0.13	22.83	0.00	0.00	0.00	32.27	0.00	0.00

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

99	-0.21	20.20	0.00	0.00	-0.15	27.17	0.00	0.00
100	-0.08	20.48	0.00	0.00	0.02	27.07	0.00	0.00
101	-0.02	14.30	0.00	0.00	0.05	22.32	0.00	0.00
102	-0.04	16.94	0.00	0.00	0.05	24.67	0.00	0.00
103	-0.14	15.20	0.00	0.00	-0.10	21.94	0.00	0.00
104	-0.18	17.79	0.00	0.00	-0.12	24.30	0.00	0.00
105	-0.16	21.26	0.00	0.00	-0.07	27.93	0.00	0.00
106	-0.17	21.23	0.00	0.00	-0.08	27.95	0.00	0.00
107	0.19	24.72	0.00	0.00	0.32	26.73	0.00	0.00
108	-0.40	17.81	0.00	0.00	-0.49	29.13	0.00	0.00

DEFLECTIONS:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vertical Defl @ Midspan Of Col LT-1	1-2	2-RT
109	-0.80	-0.25	0.17	-2.83	0.00
110	-0.66	-0.11	0.16	-2.84	0.03
111	-0.29	-0.07	0.06	-1.12	0.01
112	-0.24	-0.02	0.06	-1.12	0.02
113	-0.93	-0.30	0.19	-3.26	-0.01
114	-0.78	-0.15	0.19	-3.26	0.03
115	-0.93	-0.30	0.19	-3.26	-0.01
116	-0.78	-0.15	0.19	-3.26	0.03
117	-0.93	-0.30	0.19	-3.26	-0.01
118	-0.78	-0.15	0.19	-3.26	0.03
119	-0.13	-0.03	0.03	-0.52	0.01
120	-0.11	0.00	0.03	-0.52	0.01
121	-0.66	-0.20	0.14	-2.40	0.00
122	-0.55	-0.08	0.14	-2.41	0.03
123	-0.76	-0.23	0.16	-2.72	0.00
124	-0.63	-0.10	0.16	-2.73	0.03
125	-0.76	-0.23	0.16	-2.72	0.00
126	-0.63	-0.10	0.16	-2.73	0.03
127	-0.76	-0.23	0.16	-2.72	0.00
128	-0.63	-0.10	0.16	-2.73	0.03
129	0.34	0.35	-0.01	-0.03	0.07
130	-0.27	-0.24	0.01	-0.16	0.12
131	0.29	0.34	0.00	-0.27	0.07
132	-0.33	-0.26	0.03	-0.39	0.11
133	-0.08	-0.08	0.00	0.03	-0.06
134	-0.08	-0.08	0.00	0.03	-0.06
135	0.07	0.11	0.00	-0.13	0.09
136	0.07	0.11	0.00	-0.13	0.08
137	-0.21	0.19	0.11	-2.04	0.07
138	-0.74	-0.32	0.13	-2.13	0.09
139	-0.25	0.18	0.12	-2.22	0.07
140	-0.79	-0.34	0.14	-2.30	0.09
141	-0.57	-0.18	0.12	-1.99	-0.03
142	-0.57	-0.18	0.12	-1.99	-0.04
143	-0.44	-0.02	0.12	-2.12	0.08
144	-0.44	-0.03	0.12	-2.11	0.08

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

145	-0.29	0.18	0.13	-2.36	0.07	
146	-0.29	0.18	0.13	-2.36	0.07	
147	-0.29	0.18	0.13	-2.36	0.07	
148	-0.83	-0.35	0.15	-2.45	0.09	
149	-0.83	-0.35	0.15	-2.45	0.09	
150	-0.83	-0.35	0.15	-2.45	0.09	
151	-0.33	0.16	0.14	-2.54	0.07	
152	-0.33	0.16	0.14	-2.54	0.07	
153	-0.33	0.16	0.14	-2.54	0.07	
154	-0.88	-0.38	0.16	-2.62	0.08	
155	-0.88	-0.38	0.16	-2.62	0.08	
156	-0.88	-0.38	0.16	-2.62	0.08	
157	-0.66	-0.20	0.13	-2.31	-0.03	
158	-0.66	-0.21	0.13	-2.31	-0.04	
159	-0.66	-0.20	0.13	-2.31	-0.03	
160	-0.66	-0.21	0.13	-2.31	-0.04	
161	-0.66	-0.20	0.13	-2.31	-0.03	
162	-0.66	-0.21	0.13	-2.31	-0.04	
163	-0.52	-0.05	0.14	-2.44	0.08	
164	-0.53	-0.05	0.14	-2.44	0.07	
165	-0.52	-0.05	0.14	-2.44	0.08	
166	-0.53	-0.05	0.14	-2.44	0.07	
167	-0.52	-0.05	0.14	-2.44	0.08	
168	-0.53	-0.05	0.14	-2.44	0.07	
169	0.38	0.35	-0.02	0.18	0.07	
170	-0.22	-0.23	0.00	0.05	0.11	
171	0.33	0.35	-0.01	-0.06	0.07	
172	-0.28	-0.25	0.02	-0.18	0.11	
173	-0.03	-0.07	-0.01	0.24	-0.06	
174	-0.03	-0.07	-0.01	0.24	-0.06	
175	0.12	0.11	-0.01	0.08	0.08	
176	0.12	0.11	-0.01	0.08	0.08	
177	1.33	1.60	0.01	-1.33	0.40	
178	-1.92	-1.71	0.13	-1.14	-0.37	
179	-0.29	-0.05	0.07	-1.23	0.02	
180	-0.30	-0.07	0.07	-1.23	0.01	
181	0.72	1.23	0.10	-2.57	0.33	
182	-1.98	-1.52	0.19	-2.40	-0.30	
183	0.94	1.20	0.03	-1.27	0.30	
184	-1.51	-1.30	0.11	-1.13	-0.27	
185	-0.63	-0.15	0.14	-2.48	0.01	
186	-0.65	-0.17	0.14	-2.48	0.01	
187	-0.28	-0.05	0.07	-1.20	0.01	
188	-0.29	-0.06	0.07	-1.19	0.01	
189	1.46	1.54	-0.04	-0.35	0.36	
190	-1.58	-1.55	0.07	-0.17	-0.35	
191	-0.06	-0.01	0.01	-0.26	0.01	
192	-0.06	-0.01	0.01	-0.25	0.00	
193	-0.56	0.11	0.19	-3.49	0.53	
194	-0.42	0.25	0.19	-3.49	0.56	
195	-0.49	0.07	0.16	-2.89	0.40	
196	-0.37	0.18	0.16	-2.90	0.43	
197	-0.04	0.45	0.13	-2.53	0.47	
198	-0.08	0.44	0.14	-2.71	0.47	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

199	-0.57	-0.06	0.15	-2.62	0.49
200	-0.62	-0.08	0.16	-2.80	0.49
201	-0.45	0.12	0.16	-2.98	0.42
202	-0.46	0.11	0.16	-2.97	0.41
203	0.85	1.45	0.12	-3.05	0.72
204	-1.76	-1.21	0.21	-2.90	0.11
205	-0.82	-0.36	0.13	-2.28	-0.22
206	-0.70	-0.23	0.13	-2.29	-0.19
207	-0.68	-0.28	0.12	-1.99	-0.16
208	-0.58	-0.17	0.11	-2.00	-0.13
209	-0.23	0.10	0.08	-1.64	-0.09
210	-0.27	0.09	0.09	-1.81	-0.09
211	-0.76	-0.40	0.10	-1.72	-0.07
212	-0.81	-0.43	0.12	-1.90	-0.08
213	-0.65	-0.23	0.12	-2.08	-0.15
214	-0.67	-0.26	0.12	-2.07	-0.15
215	0.66	1.10	0.07	-2.16	0.16
216	-1.96	-1.57	0.17	-1.99	-0.46

DEFLECTIONS RATIO:

Load	Lateral Defl @ Top Of Col		Vertical Defl @ Midspan Of Col		
Id	Left	Right	LT-1	1-2	2-RT
109	210	642	1227	263	99999
110	252	1415	1263	262	16024
111	573	2132	3144	664	58715
112	699	7474	3238	662	22571
113	178	524	1062	228	53099
114	214	1079	1094	227	16421
115	178	524	1062	228	53099
116	214	1079	1094	227	16421
117	178	524	1062	228	53100
118	214	1079	1094	227	16421
119	1289	5455	6832	1432	55749
120	1584	34098	7034	1428	32819
121	252	805	1451	309	99999
122	304	1923	1493	308	16321
123	219	677	1277	273	99999
124	263	1522	1314	272	16036
125	219	677	1277	273	99999
126	263	1522	1314	272	16036
127	219	677	1277	273	99999
128	263	1522	1314	272	16036
129	493	452	19497	22861	6409
130	612	671	14135	4737	3963
131	571	461	52650	2801	6357
132	502	616	6976	1916	4052
133	2138	2119	99999	25269	8170
134	2100	2066	99999	23898	7955
135	2266	1491	99992	5603	5317
136	2254	1492	99999	5670	5385

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

137	810	816	1913	364	6221	
138	226	498	1596	349	5124	
139	673	872	1734	335	6320	
140	211	464	1465	322	5339	
141	293	902	1763	373	13364	
142	291	881	1772	373	12709	
143	381	7225	1741	351	5961	
144	379	6340	1750	351	6078	
145	584	895	1631	314	6089	
146	584	895	1631	314	6089	
147	584	895	1631	314	6089	
148	201	453	1390	303	5227	
149	201	453	1390	303	5227	
150	201	453	1390	303	5227	
151	508	969	1498	293	6202	
152	508	969	1498	293	6202	
153	508	969	1498	293	6202	
154	189	423	1289	283	5474	
155	189	423	1289	283	5474	
156	189	423	1289	283	5474	
157	253	781	1517	321	13044	
158	252	763	1523	321	12375	
159	253	781	1517	321	13044	
160	252	763	1523	321	12375	
161	253	781	1517	321	13044	
162	252	763	1523	321	12375	
163	318	3430	1501	305	5970	
164	316	3178	1508	305	6098	
165	318	3430	1501	305	5970	
166	316	3178	1508	305	6098	
167	318	3430	1501	305	5970	
168	316	3178	1508	305	6098	
169	440	451	9266	4231	6987	
170	747	698	79094	14663	4098	
171	500	459	26468	13006	6906	
172	591	641	11754	4122	4187	
173	5334	2324	16347	3134	7571	
174	5155	2270	15251	3112	7393	
175	1410	1431	21141	9873	5642	
176	1402	1428	19230	9671	5715	
177	125	99	15791	558	1149	
178	87	93	1595	655	1243	
179	570	2947	2898	603	30175	
180	549	2350	3049	606	60459	
181	230	129	2138	289	1367	
182	84	104	1069	309	1502	
183	177	132	8145	584	1505	
184	110	122	1824	660	1666	
185	266	1084	1424	299	30779	
186	258	952	1447	300	66576	
187	587	3051	2980	620	30854	
188	570	2557	3100	622	50020	
189	114	103	5235	2127	1264	
190	106	102	2984	4375	1304	

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

191	2869	20062	13883	2861	80968
192	2681	11208	18638	2939	99999
193	300	1422	1063	213	855
194	396	643	1091	213	809
195	342	2397	1275	257	1135
196	446	877	1309	256	1065
197	3902	355	1615	293	969
198	2021	364	1486	274	970
199	294	2596	1384	283	934
200	270	1951	1286	266	940
201	369	1339	1255	250	1097
202	362	1464	1275	250	1112
203	196	110	1755	243	632
204	95	131	977	256	4171
205	205	447	1512	325	2106
206	240	681	1560	324	2436
207	246	570	1741	373	2870
208	290	914	1796	371	3409
209	726	1517	2440	454	5177
210	614	1724	2156	411	5107
211	221	393	1951	431	6370
212	207	372	1760	392	6062
213	258	683	1700	358	3123
214	249	620	1731	359	2948
215	251	144	2765	344	2769
216	85	101	1227	373	998

MAX DEFLECTION:

Type	Load Id	Deflect (in)	Span/Deflect Calc	Limit
Live Vertical		-2.14	348.	180.
Horizontal Drift	182	-1.98	85.	65.
Horizontal Total	182	-1.98	85.	65.

Horizontal Spring Constant= 3.58 k/in

P-DELTA - Direct Analysis:

CONVERGENCE CHECK:

Column	Max Deflect Ratio
Left	0.0470
Right	0.0476
Col1	0.0484
Col2	0.0487

MAXIMUM DRIFT CHECK:

Load	Max_Drift(in) First	Second	Second/ First

Customer	Elbert Rentals	**Job No**	22-8706
Project	Building Expansion	**Date**	5/3/2022
Location	Newberg, OR 97132	**Designed By**	AC
Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Id	Order	Order	Ratio
9	0.75	0.93	1.24

ENDWALL VERTICAL DEFLECTION:

Column Locate	Use	--Vertical_Down(in)- Load	Deflect	Limit	---Vertical_Up(in)-- Load	Deflect	Limit
17.00	Column	194	0.05	0.00	174	0.00	0.00
79.00	Column	117	0.04	0.00	176	0.00	0.00

22-8706 Frame 2 - Flange Hole Check 4/29/22 4:10pm

INSIDE FLANGE CHECK:

Col Id	Mem Id	Seg Id	Sec Id	---Flange--- Width	Thick	Eff Hole Dia	Net/ Gross (a)	Max_UC Load	UC
1	3	3	17	6.000	0.500	0.688	1.002	65	0.10
1	4	4	19	6.000	0.500	0.688	1.002	65	0.10
2	8	8	55	6.000	0.375	0.688	1.002	68	0.08
2	9	9	57	6.000	0.375	0.688	1.002	68	0.08

(a)FuAfn/YtFyAfg - If < 1, tension rupture calcs are implemented

LOAD COMBINATIONS:

65 - 0.6Dead+0.6Wind_Long1
68 - 0.6Dead-0.6Wind_Long2

22-8706 Frame 2 - Rigid Frame Clearances 4/29/22 4:10pm

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left	150.02	20.36	150.02
Right	141.99	1383.69	141.99
Midspan	203.40	659.98	203.40
Col1	153.12	204.00	153.12
Col2	166.87	948.00	166.87

HORIZONTAL CLEARANCE:

Location	Span	X_CoordL	X_CoordR

	Customer	Elbert Rentals	**Job No**	22-8706
	Project	Building Expansion	**Date**	5/3/2022
	Location	Newberg, OR 97132	**Designed By**	AC
	Size	117 x 90 x 14.8 x 14.1	**Checked By**	

Left - Col1	183.56	20.44	204.00
Col1 - Col2	744.00	204.00	948.00
Col2 - Right	435.63	948.00	1383.63

==========

22-8706 Frame 2 - Weight Summary 4/29/22 4:10pm

==========

Total Weight (lb)

Frame	=	3025
Interior Col	=	481
Splice Plate	=	211
Column Cap	=	21
Base Plate	=	37
		3775

==========

22-8706 Frame 2 - Warning Summary 4/29/22 4:10pm

==========

.. No Warnings

5/13/2022

W34-150L

RAB

Ultra-economy wall pack with traditional look.

Color: Bronze

Weight: 14.3 lbs

Project:	Type:
Prepared By:	**Date:**

Driver Info

Type	Constant Current
120V	1.17A
208V	0.67A
240V	0.58A
277V	0.52A
Input Watts	138.4W

LED Info

Watts	139W
Color Temp	5000K (Cool)
Color Accuracy	84 CRI
L70 Lifespan	50,000 Hours
Lumens	18,182
Efficacy	131.4 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations. Suitable for mounting within 4 feet of the ground.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: PUPN4XQL

Performance

Lifespan:

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.17A, 208V: 0.68A, 240V: 0.58A, 277V: 0.52A

THD:

2.2% at 120V, 3.61% at 277V

Power Factor:

99.5% at 120V, 93.9% at 277V

Note:

All values are typical (tolerance +/- 10%)

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Housing:

Die-cast aluminum

Lens:

Glass

Reflector:

Specular aluminum

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Technical Specifications (continued)

Construction

Mounting:

Die-cast backbox with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged door for easy re-assembly.

Green Technology:

Mercury and UV free. RoHS-compliant components.

Finish:

Formulated for high durability and long-lasting color

Other

Replacement:

Replaces up to 400W Metal Halide

Equivalency:

Equivalent to 400W Metal Halide

5 Yr Limited Warranty:

The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

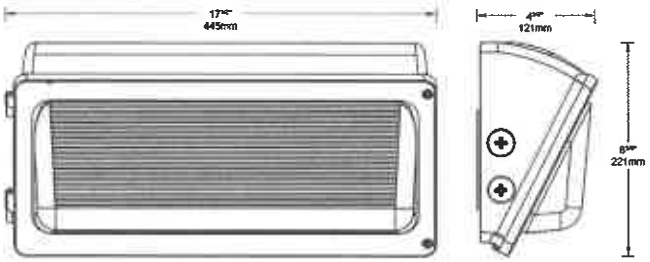
Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- Economy-grade wall pack with traditional look
- Covers footprint of large-sized HID wall packs
- Available in various lumen packages
- Integrated 0-10V dimming
- 50,000-Hour LED lifespan

Ordering Matrix

Family		Lumen Package		CRI/Color Temp	Voltage	Options
W34	-	150L	-			
		150L = 18,000lm, 136W		**Blank** = 80 CRI / 5000K **840** = 80 CRI / 4000K **830** = 80 CRI / 3000K	**Blank** = 120-277V, 0-10V Dimming **/480** = 480V, 0-10V Dimming	**Blank** = No Option **/PCU** = 120-277V Button Photocell **/MVS** = Microwave Motion Sensor **/LC** = 120-277V Lightcloud® Controller

All values are nominal with +/- 10% tolerance. See spec sheet for more details.

Wall Light

Project Information	
Job Name	
Fixture Type	20 Watt LED Wall Light
Catalog Number	WL20LED
Approved by	

WL20LED 20 Watt LED Wall Light

c UL us LISTED

LED lighting facts LED Product Partner

MANUFACTURED* & TESTED IN USA

SPECIFICATIONS:

Lumens: 1788
Watts: 19.45
Lumens/Watt: 91.92
CRI: 84
CCT: 4617
Lifespan: 200,000+ hrs.[1]

Patent Pending

Construction:
Traditional polycarbonate housing provides proven environmental protection for LED modules. Traditional fixture designs provide a familiar look and standard installation requirements. Retaining this look allows the ability to upgrade fixtures gradually, while retaining the same overall fixture appearance throughout a facility.

Glare Free:
Positioning of the LED modules within the housing result in light directed to desired locations and eliminates offensive light.

Lens:
Lens assembly is designed to provide high efficiency and to target the light where needed to satisfy outdoor lighting requirements. Positioning of the LEDs (along with Patent Pending thermal management system) results in the light being directed to desired locations eliminating glare and offensive light.

Thermal Management:
Atlas' Patent Pending exclusive Thermal Stacking Technology System™ features a unique internal design that allows for lower operating temperatures which results in a brighter, whiter light, more stable color and longer LED and driver life.

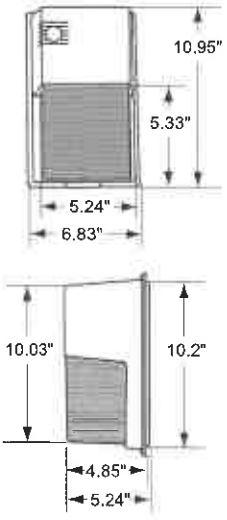
Listings:
Luminaire is certified to UL/cUL Standards for Wet Locations.
Lighting Facts Certified

AC Input:
120/208/240/277 V

Driver:
Constant current, Class 2, 120-277 VAC, 50-60 Hz
High Efficiency – min. 84%
Off-State Power: 0 Watts
0-10 V Dimming

LEDs:
4500K CCT
Epoxy Guard™ protective conformal coated boards
Atlas LEDs provide higher lumen output, greater energy efficiency and more reliable fixture performance. They are tested and binned at 700mA which is the actual operating current used in Atlas LED luminaires, giving a better representation of actual performance.

DIMENSIONS:



Warranty: Five-year limited warranty

Testing:
Atlas LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 & LM-80, and have received the Department of Energy "Lighting Facts" label.

Installation:
Fixture retains the same knock-out sizes and positions as previous models, reducing wiring costs.

Weight: 6.6 lbs.

Photo Control:
For factory installed 120V button photo control add suffix PC to part number. For factory installed 208-277V photo control add PM to part number.

[1]LED Life Span Based Upon LM-80 Test Results

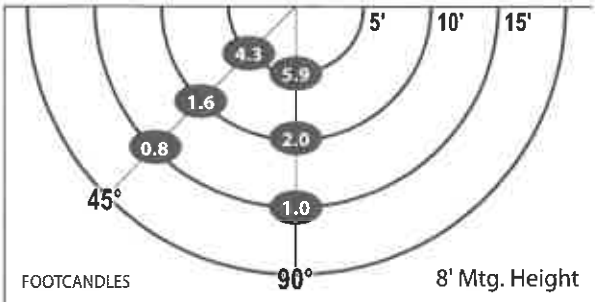
ATLAS LIGHTING PRODUCTS, INC.
PO BOX 2348 | BURLINGTON, NC 27216
800-849-8485 | FAX: 336-227-0110 | www.atlaslightingproducts.com

*The majority of Atlas Lighting Products are assembled in USA facilities by an American Workforce utilizing both Domestic and Foreign components. Meets Buy American requirements within the ARRA.

Atlas Lighting Products LED Wall Light

WL20LED 20 Watt LED Wall Light

PHOTOMETRIC



ENERGY SAVINGS

LED		HID			
WATTAGE	ANNUAL COST	SOURCE WATTAGE	TOTAL WATTAGE USED	ANNUAL COST	ANNUAL SAVINGS
20	$9	50	72	$52	$43
20	$9	70	90	$59	$50
20	$9	100	129	$77	$68

Atlas Lighting Products

LED lighting facts®

A Program of the U.S. DOE

Light Output (Lumens)	**1788**
Watts	**19.45**
Lumens per Watt (Efficacy)	**91.92**
Color Accuracy Color Rendering Index (CRI)	**84**

Light Color Correlated Color Temperature (CCT) **4617 (Daylight)**

Warm White | Bright White | Daylight

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: PRB4-L2X4TI (1/13/2017)

Model Number: WL20LED [Upgrade : 1/13/2017]

Type: Luminaire - Area/Roadway

ATLAS LIGHTING PRODUCTS, INC.
PO BOX 2348 | BURLINGTON, NC 27216
800-849-8485 | FAX: 336-227-0110 | www.atlaslightingproducts.com

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ATTACHMENT 2: AGENCY COMMENTS

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

Brooks Bateman

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: July 26, 2023
Please refer questions and comments to: Clay Downing

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Alvin Elbert
REQUEST:	ARE Manufactureing Inc Expansion Design Review
SITE ADDRESS:	518 S Springbrook Rd
LOCATION:	N/A
TAX LOT:	R3221 03700
FILE NO:	DR223-0005
ZONE:	M-1(Limited Industrial District)
HEARING DATE:	N/A

Project Information is Attached:

☐ Reviewed, no conflict.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☒ Comments. (Attach additional pages as needed)

SEWER NEEDS TO CONNECT TO PUBLIC SYSTEM

BROOKS BATEMAN — Reviewed By:

7.14.23 — Date:

BUILDING — Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: July 26, 2023
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REQUEST:	ARE Manufactureing Inc Expansion Design Review
SITE ADDRESS:	518 S Springbrook Rd
LOCATION:	N/A
TAX LOT:	R3221 03700
FILE NO:	DR223-0005
ZONE:	M-1(Limited Industrial District)
HEARING DATE:	N/A

RECEIVED
7/11/23

Project Information is Attached:

- [x] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Digitally signed by Will
DN: C=US, OU=Worthey, O=City of Newberg, CN=Will, E=will.worthey@newbergoregon.gov
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Reviewed By: Will Worthey CM

Date: 7/11/23

Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

Doug Rux

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: July 26, 2023
Please refer questions and comments to: Clay Downing

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Alvin Elbert
REQUEST:	ARE Manufactureing Inc Expansion Design Review
SITE ADDRESS:	518 S Springbrook Rd
LOCATION:	N/A
TAX LOT:	R3221 03700
FILE NO:	DR223-0005
ZONE:	M-1(Limited Industrial District)
HEARING DATE:	N/A

Project Information is Attached:

- [x] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: Doug Rux

Date: 7/21/23

Organization: City of Newberg

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: 7/12/23 Date:

Finance
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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RECEIVED
7/12/23

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- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: _____ Date: 7/11/23

Maintenance Superintendent
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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Please refer questions and comments to: Clay Downing

NOTE: Full size plans are available at the Community Development Department Office.

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HEARING DATE:	N/A

RECEIVED
7/12/23

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- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)

Reviewed By: _____ Date: 7/12/23

City of Newberg - Operations
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

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Please refer questions and comments to: Clay Downing

NOTE: Full size plans are available at the Community Development Department Office.

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REQUEST:	ARE Manufactureing Inc Expansion Design Review
SITE ADDRESS:	518 S Springbrook Rd
LOCATION:	N/A
TAX LOT:	R3221 03700
FILE NO:	DR223-0005
ZONE:	M-1(Limited Industrial District)
HEARING DATE:	N/A

RECEIVED
7/12/23

Project Information is Attached:

☑ Reviewed, no conflict. * ARE Manufacturing is not connected to Newberg's sanitary sewer. If they connect to Newberg's sanitary sewer, pretreatment will be required.

☐ Reviewed; recommend denial for the following reasons:

☐ Require additional information to review. (Please list information required)

☐ Meeting requested.

☑ Comments. (Attach additional pages as needed)

April Catan

Digitally signed by April Catan
DN: C=US, OU=Operations, O=City of Newberg, CN=April Catan, E=april.catan@newbergoregon.gov
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Reviewed By:

7/12/23
Date:

City of Newberg
Organization:

ENGINEERING COMMENTS
July 26, 2023

FILE NO:	DR223-0005
REQUEST:	ARE Manufacturing Expansion
LOCATION:	518 S Springbrook Rd

SITE INFORMATION:

Access and Transportation: Access to the proposed development is provided from S Springbrook Road which is classified as a minor arterial under the jurisdiction of Oregon Department of Transportation (ODOT).

Utilities:

Water: There is a 14-inch water line located on S Springbrook Road with a meter serving the property. Fire flow will need to be confirmed by a fire flow test.

Wastewater: There is a no wastewater line located nearby on S Springbrook Road. The property is served by a septic system.

Stormwater: There is a 12-inch storm line and water quality swales along the frontage of the property.

Overhead Lines: Any new connection the property will need to be undergrounded. See NMC 15.430.010 for exception provisions.

Chapter 12.05 Street and Sidewalks
12.05.090 Permits and certificates.
A. Concurrent with the issuance of a building permit for the construction of a building for residential use or business structures or an addition to a dwelling or business structure, the value of which is $30,000 or more except as the city engineer may require on building permits of lesser value in accordance with NMC 12.05.040, the owner, builder or contractor to whom the building permit is issued shall meet the following requirements:

> ***1. Construct a sidewalk within the dedicated right-of-way for the full frontage in which a sidewalk in good repair does not exist. The sidewalk construction shall be completed within the building construction period or prior to issuance of an occupancy permit, whichever is the lesser.***

Finding: The sidewalks along the front of the property are already improved. The applicant will be required to replace any sidewalks along the site's frontage that are in poor condition or not in full compliance with City of Newberg and Federal ADA standards. Determination of any sidewalk panels to be replaced will occur as part of the building permit process.

This criterion will be met if the aforementioned condition of approval is adhered to.

> ***2. Dedicate right-of-way in accordance with the city transportation plan.***

Finding: There is adequate existing right-of-way along the project site's frontage. Right-of-way dedication is not needed.

This criterion is not applicable.

Chapter 15.220 Site Design Review
15.220.030 Site design review requirements.
B. Type II. The following information is required to be submitted with all Type II applications for site design review:

13. Roadways and Utilities. The proposed plans shall indicate any public improvements that will be constructed as part of the project, including, but not limited to, roadway and utility improvements.

Finding: The applicant is not proposing any public improvements. None are required.

This criterion is not applicable.

14. Traffic Study. A traffic study shall be submitted for any project that generates in excess of 40 trips per p.m. peak hour. This requirement may be waived by the director when a determination is made that a previous traffic study adequately addresses the proposal and/or when off-site and frontage improvements have already been completed which adequately

mitigate any traffic impacts and/or the proposed use is not in a location which is adjacent to an intersection which is functioning at a poor level of service. A traffic study may be required by the director for projects below 40 trips per p.m. peak hour where the use is located immediately adjacent to an intersection functioning at a poor level of service. The traffic study shall be conducted according to the City of Newberg design standards. [Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.192.]

Finding: The applicant submitted a trip generation and transportation system development charge (TSDC) analysis performed by Jennifer Danziger, PE of Lancaster Mobley. The analysis using the 11th edition of the ITE Trip Generation Manual found that the existing trip generation exceeds what would be predicted by the ITE trip generation estimate for a similarly sized building used for manufacturing. The analysis suggested that this supports the applicant's explanation that the proposed expansion is intended to provide more workspace for existing employees rather than new workspace for new employees. The existing building is not of sufficient area according to ITE trip generations estimates to create the actual number of trips measured. There are more employees than the size of the building supports. The measured trip generation was more in line with a larger building used for manufacturing. The analysis concluded that no new transportation system impacts are created by the building expansion.

This criterion is met.

Chapter 15.430 Underground Utility Installation

15.430.010 Underground utility installation.

A. All new utility lines, including but not limited to electric, communication, natural gas, and cable television transmission lines, shall be placed underground. This does not include surface-mounted transformers, connections boxes, meter cabinets, service cabinets, temporary facilities during construction, and high-capacity electric lines operating at 50,000 volts or above.

B. Existing utility lines shall be placed underground when they are relocated, or when an addition or remodel requiring a Type II design review is proposed, or when a developed area is annexed to the city.

C. The director may make exceptions to the requirement to underground utilities based on one or more of the following criteria:

1. The cost of undergrounding the utility is extraordinarily expensive.

2. There are physical factors that make undergrounding extraordinarily difficult.

3. Existing utility facilities in the area are primarily overhead and are unlikely to be changed. [Ord. 2537, 11-6-00. Code 2001 § 151.589.]

Finding: There are no overhead utility lines along the project site's frontage. The submitted plans do show a new electric service to the proposed building. Any new service connection to the property is required to be undergrounded. See NMC 15.430.010 for additional requirements and exception provisions.

This criterion will be met if the aforementioned condition of approval is adhered to.

Chapter 15.505 Public Improvement Standards

15.505.010 Purpose.

This chapter provides standards for public infrastructure and utilities installed with new development, consistent with the policies of the City of Newberg comprehensive plan and adopted city master plans. The standards are intended to minimize disturbance to natural features, promote energy conservation and efficiency, minimize and maintain development impacts on surrounding properties and neighborhoods, and ensure timely completion of adequate public facilities to serve new development. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

15.505.020 Applicability.

The provision and utilization of public facilities and services within the City of Newberg shall apply to all land developments in accordance with this chapter. No development shall be approved unless the following improvements are provided for prior to occupancy or operation, unless future provision is assured in accordance with NMC 15.505.030(E).

Finding: All improvements reviewed under this application are identified in the NMC 15.505 section specific to them and are conditioned to comply with the Public Works Design and Construction Standards in those sections.

This criterion is met.

A. Public Works Design and Construction Standards. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall comply with the requirements of the most recently adopted Newberg public works design and construction standards.

Finding: The submitted plans do not include improvements within the right-of-way or to be maintained by the city. The stormwater improvements require city approval. The applicant shall submit final plans for the stormwater improvements which comply with the requirements of the most recently adopted Newberg Public Works Design and Construction Standards.

This criterion will be met if the aforementioned condition of approval is adhered to.

B. Street Improvements. All projects subject to a Type II design review, partition, or subdivision approval must construct street improvements necessary to serve the development.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. The applicant is not proposing street improvements. None are required to serve the development.

This criterion is not applicable.

C. Water. All developments, lots, and parcels within the City of Newberg shall be served by the municipal water system as specified in Chapter 13.15 NMC.

Finding: The existing lot is served by a 14-inch public water line, a meter, and a fire hydrant along the frontage.

This criterion is met.

D. Wastewater. All developments, lots, and parcels within the City of Newberg shall be served by the municipal wastewater system as specified in Chapter 13.10 NMC.

Finding: This lot is not served by the public wastewater system. A septic system has been approved to remain by the City Engineer as the closest wastewater connection is too far away to make the extension of that line proportional to the impacts of the proposed project.

This criterion is not applicable.

E. Stormwater. All developments, lots, and parcels within the City of Newberg shall manage stormwater runoff as specified in Chapters 13.20 and 13.25 NMC.

Finding: The applicant has submitted a preliminary stormwater memorandum prepared by Andrey Chernishov, PE of HBH Consulting Engineers. A final stormwater report and plan will be required with the building permit application.

This criterion will be met if the aforementioned condition of approval is adhered to.

F. Utility Easements. Utility easements shall be provided as necessary and required by the review body to provide needed facilities for present or future development of the area.

Finding: The applicant submitted supplemental materials identifying two easements for utilities on the property. New easements are not proposed, and no new easements have been identified as needed.

This criterion is met.

G. City Approval of Public Improvements Required. No building permit may be issued until all required public facility improvements are in place and approved by the director, or are otherwise bonded for in a manner approved by the review authority, in conformance with the provisions of this code and the Newberg Public Works Design and Construction Standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: Any required public improvement permit(s) for this project must be submitted, approved, and issued prior to building permits being issued.

This criterion will be met if the aforementioned condition of approval is adhered to.

15.505.030 Street standards.

A. Purpose. The purpose of this section is to:

1. Provide for safe, efficient, and convenient multi-modal transportation within the City of Newberg.

2. Provide adequate access to all proposed and anticipated developments in the City of Newberg. For purposes of this section, "adequate access" means direct routes of travel between destinations; such destinations may include residential neighborhoods, parks, schools, shopping areas, and employment centers.

3. Provide adequate area in all public rights-of-way for sidewalks, wastewater and water lines, stormwater facilities, natural gas lines, power lines, and other utilities commonly and appropriately placed in such rights-of-way. For purposes of this section, "adequate area" means space sufficient to provide all required public services to standards defined in this code and in the Newberg public works design and construction standards.

B. Applicability. The provisions of this section apply to:

1. The creation, dedication, and/or construction of all public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.

2. The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.

3. The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way or easements.

4. The designation of planter strips. Street trees are required subject to Chapter 15.420 NMC.

5. Developments outside the city that tie into or take access from city streets.

C. Layout of Streets, Alleys, Bikeways, and Walkways. Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan. In areas where the transportation system plan or future street plans do not show specific transportation improvements, roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments for adjoining properties, unless it is found in the public interest to modify these patterns. Transportation improvements shall conform to the standards within the Newberg Municipal Code, the Newberg public works design and construction standards, the Newberg transportation system plan, and other adopted city plans.

D. Construction of New Streets. Where new streets are necessary to serve a new development, subdivision, or partition, right-of-way dedication and full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:

1. The land abutting the opposite side of the new street is undeveloped and not part of the new development; and

2. The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

E. Improvements to Existing Streets.

1. All projects subject to partition, subdivision, or Type II design review approval shall dedicate right-of-way sufficient to improve the street to the width specified in subsection (G) of this section.

2. All projects subject to partition, subdivision, or Type II design review approval must construct a minimum of a three-quarter street improvement to all existing streets adjacent to, within, or necessary to serve the development. The director may waive or modify this requirement where the applicant demonstrates that the condition of existing streets to serve the development meets city standards and is in satisfactory condition to handle the projected traffic loads from the development. Where a development has frontage on both sides of an existing street, full street improvements are required.

3. In lieu of the street improvement requirements outlined in NMC 15.505.040(B), the review authority may elect to accept from the applicant monies to be placed in a fund

dedicated to the future reconstruction of the subject street(s). The amount of money deposited with the city shall be 100 percent of the estimated cost of the required street improvements (including any associated utility improvements), and 10 percent of the estimated cost for inflation. Cost estimates used for this purpose shall be based on preliminary design of the constructed street provided by the applicant's engineer and shall be approved by the director.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to existing streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

F. Improvements Relating to Impacts. Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application.

Finding: No improvements to existing streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

G. Street Width and Design Standards.

1. Design Standards. All streets shall conform with the standards contained in Table 15.505.030(G). Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (G)(2) through (10) of this section.

Table 15.505.030(G) Street Design Standards

Type of Street	*Right-of-Way Width*	*Curb-to-Curb Pavement Width*	*Motor Vehicle Travel Lanes*	*Median Type*	*Striped Bike Lane (Both Sides)*	*On-Street Parking*
Arterial Streets						
*Expressway***	*ODOT*	*ODOT*	*ODOT*	*ODOT*	*ODOT*	*ODOT*
Major arterial	*95 – 100 feet*	*74 feet*	*4 lanes*	*TWLTL or median**	*Yes*	*No**

Type of Street	*Right-of-Way Width*	*Curb-to-Curb Pavement Width*	*Motor Vehicle Travel Lanes*	*Median Type*	*Striped Bike Lane (Both Sides)*	*On-Street Parking*
Minor arterial	*69 – 80 feet*	*48 feet*	*2 lanes*	*TWLTL or median**	*Yes*	*No**
Collectors						
Major	*57 – 80 feet*	*36 feet*	*2 lanes*	*None**	*Yes*	*No**
Minor	*61 – 65 feet*	*40 feet*	*2 lanes*	*None**	*Yes**	*Yes**
Local Streets						
Local residential	*54 – 60 feet*	*32 feet*	*2 lanes*	*None*	*No*	*Yes*
Limited residential, parking both sides	*44 – 50 feet*	*28 feet*	*2 lanes*	*None*	*No*	*Yes*
Limited residential, parking one side	*40 – 46 feet*	*26 feet*	*2 lanes*	*None*	*No*	*One side*
Local commercial/ industrial	*55 – 65 feet*	*34 feet*	*2 lanes*	*None**	*No**	*Yes**

** May be modified with approval of the director. Modification will change overall curb-to-curb and right-of-way width. Where a center turn lane is not required, a landscaped median shall be provided instead, with turning pockets as necessary to preserve roadway functions.*

*** All standards shall be per ODOT expressway standards.*

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

2. Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet.

a. Exception.

i. Minimum lane width of 11 feet along S River Street from E First Street to E Fourteenth Street.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No improvements to streets were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

3. Bike Lanes. Striped bike lanes shall be a minimum of six feet wide. Bike lanes shall be provided where shown in the Newberg transportation system plan.

a. Exception.

i. Minimum striped bike lane width of six feet with a one-foot wide buffer along S River Street from E First Street to the bypass.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

4. Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide.

a. Exception.

i. Minimum parking lane width of seven feet along S River Street from the bypass to E Fourteenth Street.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

5. Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

6. Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review authority, and only in consideration of the following factors:

a. The requirements of the fire chief shall be followed.

b. The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.

c. Use for through streets or looped streets is preferred over cul-de-sac streets.

d. Use for short blocks (under 400 feet) is preferred over longer blocks.

e. The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.

f. On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

7. Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.

a. Exception.

i. Twelve-foot-wide sidewalks, inclusive of the curb, with tree wells along S River Street from the bypass to E Fourteenth Street.

ii. Twelve-foot-wide shared-use path and four-foot buffer, inclusive of the curb, with tree wells along the east side of S River Street from the bypass to E Fourteenth Street.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No sidewalks were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

8. Planter Strips. Except where infeasible, a planter strip shall be provided between the sidewalk and the curb line, with a minimum width of five feet. This strip shall be landscaped in accordance with the standards in NMC 15.420.020. Curb-side sidewalks may be allowed on limited residential streets. Where curb-side sidewalks are allowed, the following shall be provided:

a. Additional reinforcement is done to the sidewalk section at corners.

b. Sidewalk width is six feet.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage.

This criterion is not applicable.

9. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.

Finding: An existing slope easement along the S Springbrook Road frontage is identified on the application materials provided.

This criterion is met.

10. Intersections and Street Design. The street design standards in the Newberg public works design and construction standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.

Finding: S Springbrook Road is improved with travel lanes, center turn lane, curb, planter strip and 12-wide sidewalk along the project site's frontage. No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

11. The planning commission may approve modifications to street standards for the purpose of ingress or egress to a minimum of three and a maximum of six lots through a conditional use permit.

Finding: No modifications have been requested.

This criterion is not applicable.

H. Modification of Street Right-of-Way and Improvement Width. The director, pursuant to the Type II review procedures of Chapter 15.220 NMC, may allow modification to the public street standards of subsection (G) of this section, when the criteria in both subsections (H)(1) and (2) of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:

a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or

b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or

c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or

d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.

2. Modification of the standards of this section shall only be approved if the director finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes.

Finding: No modifications have been requested.

This criterion is not applicable.

I. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface, and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the street without a temporary turnaround. Easements or right-of-way may be required as necessary to preserve access to the turnaround.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

J. Topography. The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

K. Future Extension of Streets. All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be "to and through": through the development and to the edges of the project site to serve adjacent properties for future development.

Finding: No street improvements were proposed. None are required to mitigate the impacts of the development.

This criterion is not applicable.

L. Cul-de-Sacs.

1. Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever practical to connect with another street, walkway, school, or similar destination.

a. Physical or topographic conditions make a street connection impracticable. These conditions include but are not limited to controlled access streets, railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.

b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.

c. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.

d. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use, except where the adjoining land is designated as an urban reserve area.

2. Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).

3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

Each cul-de-sac shall have a circular end with a minimum diameter of 96 feet, curb-to-curb, within a 109-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, curbside sidewalks, and sprinkler systems in every building along the street.

Finding: No cul-de-sac was proposed.

This criterion is not applicable.

M. Street Names and Street Signs. Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs.

Finding: No street naming is proposed or required.

This criterion is not applicable.

N. Platting Standards for Alleys.

1. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the director.

2. The right-of-way width and paving design for alleys shall be not less than 20 feet wide. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.505.010 et seq.

3. Where two alleys intersect, 10-foot corner cut-offs shall be provided.

4. Unless otherwise approved by the city engineer where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.

5. All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word "street" or "streets" therein appeared as the word "alley" or "alleys" respectively.

Finding: No alleys are proposed.

This criterion is not applicable.

O. Platting Standards for Blocks.

1. Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.

2. Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.

Zone(s)	*Maximum Block Length*	*Maximum Block Perimeter*
R-1	*800 feet*	*2,000 feet*
R-2, R-3, RP, I	*1,200 feet*	*3,000 feet*

3. Exceptions.

a. If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.

b. Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.

c. Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.

d. Institutional campuses located in an R-1 zone may apply the standards for the institutional zone.

e. Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.

f. Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area.

Finding: No new blocks are proposed.

This criterion is not applicable.

4. Public Pedestrian Walkways and Bicycle Access. The approval authority in approving a land use application with conditions may require a developer to provide an access way where the creation of a street consistent with street spacing standards is infeasible and the creation of a cul-de-sac or dead-end street is unavoidable. A public walkway provides a connection through a block that is longer than established standards or connects the end of the street to another right-of-way or a public access easement. A public walkway shall be contained within a public right-of-way or public access easement, as required by the city. A public walkway shall be a minimum of 10 feet wide and shall provide a minimum six-foot-wide paved surface or other all-weather surface approved by the city (see subsection (S) of this section for public walkway standards).

Design features should be considered that allow access to emergency vehicles but that restrict access to non-emergency motorized vehicles.

Finding: No pedestrian walkways or bicycle access are proposed and none are required.

This criterion is not applicable.

P. Private Streets. New private streets, as defined in NMC 15.05.030, shall not be created, except as allowed by NMC 15.240.020(L)(2).

Finding: No private streets are proposed.

This criterion is not applicable.

Q. Traffic Calming.

1. The following roadway design features may be required in new street construction where traffic calming needs are anticipated:

a. Serpentine alignment.

b. Curb extensions.

c. Traffic diverters/circles.

d. Raised medians and landscaping.

e. Other methods shown effective through engineering studies.

2. Traffic-calming measures such as speed humps should be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street constructions.

Finding: No traffic calming is proposed or required.

This criterion is not applicable.

R. Vehicular Access Standards.

1. Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.

2. Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in Table 15.505.R below. The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.

Table 15.505.R. Access Spacing Standards

Roadway Functional Classification	*Area*[1]	*Minimum Public Street Intersection Spacing (Feet)*[2]	*Driveway Setback from Intersecting Street*[3]
Expressway	*All*	*Refer to ODOT Access Spacing Standards*	*NA*
Major arterial	*Urban* *CBD*	*Refer to ODOT Access Spacing Standards*	
Minor arterial	*Urban* *CBD*	*500* *200*	*150* *100*
Major collector	*All*	*400*	*150*
Minor collector	*All*	*300*	*100*

[1] *"Urban" refers to intersections inside the city urban growth boundary outside the central business district (C-3 zone).*

"CBD" refers to intersections within the central business district (C-3 zone).

"All" refers to all intersections within the Newberg urban growth boundary.

[2] *Measured centerline to centerline.*

[3] *The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.*

Finding: No new access to the property is proposed. The applicant submitted a transportation system impact analysis that showed no impacts. Access is not changed by the proposed development.

This criterion is not applicable.

3. Properties with Multiple Frontages. Where a property has frontage on more than one street, access shall be limited to the street with the lesser classification.

a. For a duplex, triplex or quadplex dwelling or a cottage cluster project with frontage on two local streets, access may be permitted on both streets.

Finding: The property does not have multiple frontages.

This criterion is not applicable.

4. Driveways. More than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 40 feet of lot frontage separating each driveway approach. More than one driveway is permitted on a lot accessed from a major collector as long as there is at least 100 feet of lot frontage separating each driveway approach.

a. For a duplex, triplex or quadplex dwelling or a cottage cluster project, more than one driveway is permitted on a lot accessed from either a minor collector or local street as long as there is at least 22 feet of lot frontage separating each driveway approach.

Finding: The property the development is proposed on is a minor arterial under the jurisdiction of ODOT.

This criterion is not applicable.

5. Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:

a. The review body finds that creating a public street frontage is not feasible.

b. The alley access is for no more than six dwellings and no more than six lots.

c. The alley has through access to streets on both ends.

d. One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.

Finding: No alley access is proposed.

This criterion is not applicable.

6. Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.

Finding: The existing accesses will remain in use.

This criterion is not applicable.

7. Shared Driveways.

a. The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When

shared driveways are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).

b. Access easements (i.e., for the benefit of affected properties) and maintenance agreements shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.

c. No more than four lots may access one shared driveway, with the exception of cottage dwellings on individual lots that are part of a cottage cluster.

d. Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.

e. Where three or more lots share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway. However, duplex, triplex, quadplex, townhouse and cottage dwellings with shared driveways shall be exempt from this standard.

Finding: No shared access is proposed.

This criterion is not applicable.

8. Frontage Streets and Alleys. The review body for a partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.

Finding: The existing access is sufficient.

This criterion is not applicable.

9. ODOT or Yamhill County Right-of-Way. Where a property abuts an ODOT or Yamhill County right-of-way, the applicant for any development project shall obtain an access permit from ODOT or Yamhill County.

Finding: The proposed development takes access from S Springbrook Road which is a minor arterial under the jurisdiction of ODOT. The access is pre-existing.

This criterion is not applicable.

10. Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:

a. Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.

b. Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.

c. Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.

Finding: No exceptions have been requested.

This criterion is not applicable.

11. Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria.

Finding: No exceptions have been requested.

This criterion is not applicable.

S. Public Walkways.

1. Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. Public walkways are meant to connect cul-de-sacs to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas. Where practical, public walkway easements and locations may also be used to accommodate public utilities.

2. Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.

3. A walk strip, not less than 10 feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications in the Newberg public works design and construction standards.

4. Public walkways shall be designed to meet the Americans with Disabilities Act requirements.

5. Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.

6. The developer of the public walkway may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.

7. Lighting may be required for public walkways in excess of 250 feet in length.

8. The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.

Finding: No public walkways were proposed or required.

This criterion is not applicable.

T. Street Trees. Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

Finding: PLANNING

This criterion will be met if the aforementioned condition of approval is adhered to.
or
This criterion is not applicable.
or
This criterion is met.

U. Street Lights. All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the Newberg public works design and construction standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

Finding: There is no street lighting along the property frontage.

The applicant will be required to provide a street lighting analysis to determine if street lighting along the property frontages meets city standards or if additional PGE Option A streetlights are required. The lighting analysis will need to extend to the centerline of the property frontage. If additional street lighting is needed, plans submitted with permit applications are to include any additional PGE Option A streetlights necessary to meet City standards.

This criterion will be met if the aforementioned condition of approval is adhered to.

V. Transit Improvements. Development proposals for sites that include or are adjacent to existing or planned transit facilities, as shown in the Newberg transportation system plan or adopted local or regional transit plan, shall be required to provide any of the following, as applicable and required by the review authority:

> ***1. Reasonably direct pedestrian connections between the transit facility and building entrances of the site. For the purpose of this section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.***
>
> ***2. A transit passenger landing pad accessible to disabled persons.***
>
> ***3. An easement of dedication for a passenger shelter or bench if such facility is in an adopted plan.***
>
> ***4. Lighting at the transit facility. [Ord. 2889 § 2 (Exh. B §§ 43 – 45), 12-6-21; Ord. 2880 § 2 (Exh. B §§ 51, 52), 6-7-21; Ord. 2871 § 3 (Exh. D), 3-1-21; Ord. 2862 § 1 (Exh. A § 1), 6-15-20; Ord. 2822 § 1 (Exh. A), 2-5-18; Ord. 2810 § 2 (Exhs. B, C), 12-19-16; Ord. 2763 § 1 (Exh. A § 19), 9-16-13; Ord. 2736 § 1 (Exh. A §§ 1, 3, 4), 3-21-11; Ord. 2619, 5-16-05; Ord. 2513, 8-2-99; Ord. 2507, 3-1-99; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 §§ 151.681, 151.683, 151.684 – 151.686, 151.689 – 151.692, 151.694, 151.695, 151.701 – 151.703, 151.705.]***

Finding: The proposed project is not near a planned or existing transit facility.

This criterion is not applicable.

15.505.040 Public utility standards.
A. Purpose. The purpose of this section is to provide adequate services and facilities appropriate to the scale and type of development.

B. Applicability. This section applies to all development where installation, extension or improvement of water, wastewater, or private utilities is required to serve the development or use of the subject property.

C. General Standards.

> ***1. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the Newberg public works design and construction standards and require a public improvements permit.***
>
> ***2. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all***

proposed public and private utilities shall be coordinated by the developer and be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

D. Standards for Water Improvements. All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary wastewater and stormwater facilities, as applicable.

1. All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

2. Specific location, size and capacity of such facilities will be subject to the approval of the director with reference to the applicable water master plan. All water facilities shall conform with city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.

3. The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.

4. Design, construction and material standards shall be as specified by the director for the construction of such public water facilities in the city.

Finding: The existing project site is served by the public water system. The submitted plans do not show an additional connection to the public water system. No additional connection is required. The applicant submitted a service provider permit application from Tualatin Valley Fire and Rescue (TVF&R) indicating TVF&R will review fire flows.

This criterion is met.

E. Standards for Wastewater Improvements. All development that has a need for wastewater services shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and stormwater facilities, as applicable.

1. All septic tank systems and on-site sewage systems are prohibited. Existing septic systems must be abandoned or removed in accordance with Yamhill County standards.

2. All properties shall be provided with gravity service to the city wastewater system, except for lots that have unique topographic or other natural features that make gravity

wastewater extension impractical as determined by the director. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the director.

3. All developments shall be required to be linked to existing wastewater collection facilities adequately sized to serve their intended area by the construction of wastewater lines which connect to existing adequately sized wastewater facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

4. Specific location, size and capacity of wastewater facilities will be subject to the approval of the director with reference to the applicable wastewater master plan. All wastewater facilities shall be sized to provide adequate capacity during peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.

5. Temporary wastewater service facilities, including pumping stations, will be permitted only if the director approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.

6. The design of the wastewater facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.

7. Design, construction and material standards shall be as specified by the director for the construction of such wastewater facilities in the city.

Finding: The site is served by an existing septic system. The closest public wastewater line is approximately 375 feet to the north in S Springbrook Road. During past discussions between the applicant and city staff for a previous proposed building expansion project, the applicant referenced a verbal agreement was reached that allowed the option for the property at 518 S Springbrook Road to stay on septic. That decision was based on a pavement cutting moratorium in place at that time and the distance needed to extend a public wastewater main to the site at 518 S Springbrook Road (375-feet). That moratorium has ended and the distance to extend a public wastewater main to serve 518 S Springbrook Road remains unchanged.

With the distance required to extend a public wastewater main to serve the site at 518 S Springbrook Road being greater than 100 feet, the City Engineer agrees with the previous verbal agreement that allowed the option for the property at 518 S Springbrook Road to stay on septic for the proposed building expansion project. Relevant NMC sections supporting allowing the property at 518 S Springbrook Road to remain on septic until a public wastewater main is within 100 feet of the property are listed below.

13.10.050 Use of public wastewater system required.
D. Connection Required.

The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes, situated within the city and abutting on any public street, alley or easement in which there is now located or may in the future be located a public wastewater system of the city, is required at the owner's expense to install suitable toilet and plumbing facilities directly with the proper side sewer in accordance with the provisions of this chapter. The connection shall be made within 90 days after the date of the official notice to do so, provided that the public wastewater system is within 100 feet of any property line. For the purposes of this section, notice shall be deemed to have been received upon the mailing of the notice in accordance with NMC 13.10.290.

13.10.060 Private wastewater disposal.
C. Connection to Wastewater System. At such time as a public wastewater system becomes available to a property serviced by a private wastewater disposal system, as provided in NMC 13.10.050(D), a direct connection shall be made to the public wastewater system in compliance with this chapter, including payment of all connection fees and systems development charges. Any septic tanks, cesspools and similar private wastewater disposal facilities shall be removed or abandoned and filled with suitable material as required by the Oregon Department of Environmental Quality. When public wastewater system service is obtained, the connection or connections to the premises being served shall be made ahead of the private disposal system. No connections shall be made to the effluent side of existing septic tanks or cesspools.

The applicant will be required to connect to the public wastewater system at the time in the future that the sewer line is extended to within 100 feet of the property.

This criterion will be met if the aforementioned condition of approval is adhered to.

F. Easements. Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies. Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the Newberg public works design and construction standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: No easements are proposed, and no new easements are required to serve the proposed development.

This criterion is not applicable.

15.505.050 Stormwater system standards.
A. Purpose. The purpose of this section is to provide for the drainage of surface water from all development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in stormwater runoff.

B. Applicability. The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city stormwater system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

C. General Requirement. All stormwater runoff shall be conveyed to a public storm wastewater or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

Finding: The applicant submitted a preliminary stormwater memorandum and facility design prepared by Andrey Chernishov, PE of HBH Consulting Engineers. The applicant will be required to submit a final stormwater management plan and facility design with the building permit application.

This criterion will be met if the aforementioned condition of approval is adhered to.

D. Plan for Stormwater and Erosion Control. No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the State of Oregon prepares a stormwater report and erosion control plan for the project. This plan shall contain at a minimum:

> ***1. The methods to be used to minimize the amount of runoff, sedimentation, and pollution created from the development both during and after construction.***
>
> ***2. Plans for the construction of stormwater facilities and any other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the stormwater plans.***
>
> ***3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included in the stormwater report and shall be stamped by a licensed professional engineer in the State of Oregon. Peak design discharges shall be computed based upon the design criteria outlined in the public works design and construction standards for the city.***

Finding: The applicant submitted a preliminary stormwater memorandum and facility design prepared by Andrey Chernishov, PE of HBH Consulting Engineers. The submitted plans show erosion control methods. If less than 1-acre is disturbed, the applicant will be required to obtain an erosion and sediment control permit issued by the City of Newberg prior to any ground disturbing activity. A DEQ 1200-C permit will be required to be submitted with permit applications if 1-acre or more is disturbed.

This criterion will be met if the aforementioned condition of approval is adhered to.

E. Development Standards. Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the Newberg public works design and construction standards. [Ord. 2810 § 2 (Exhs. B, C), 12-19-16.]

Finding: The submitted plans reference City of Newberg Public Works Design and Construction standard drawings.
The applicant shall submit final plans for the stormwater improvements which comply with the requirements of the most recently adopted Newberg Public Works Design and Construction Standards.

This criterion will be met if the aforementioned condition of approval is adhered to.

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to: July 26, 2023
Please refer questions and comments to: Clay Downing

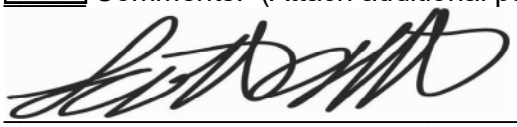
NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Alvin Elbert
REQUEST:	ARE Manufactureing Inc Expansion Design Review
SITE ADDRESS:	518 S Springbrook Rd
LOCATION:	N/A
TAX LOT:	R3221 03700
FILE NO:	DR223-0005
ZONE:	M-1(Limited Industrial District)
HEARING DATE:	N/A

RECEIVED
7/12/23

Project Information is Attached:

- [✔] Reviewed, no conflict.
- [ ] Reviewed; recommend denial for the following reasons:
- [ ] Require additional information to review. (Please list information required)
- [ ] Meeting requested.
- [ ] Comments. (Attach additional pages as needed)



Reviewed By: Date: 7/12/23

Scott Albert - Ziply Fiber Network Engineer
Organization: 503-526-3544 scott.albert@ziply.com