PLANNING COMMISSION STAFF REPORT
100 S GARFIELD STREET SUBDIVISION – PRELIMINARY PLAT – SUB322-0001

HEARING DATE:	December 8, 2022
FILE NO:	SUB322-0001
REQUEST:	Subdivide a 1.93acre (84,022 sq ft) property into 12 lots for residential homes
LOCATION:	100 S Garfield Street
TAX LOT:	R3219DB 04690
PROPERTY SIZE:	1.93 acres
APPLICANT/OWNER:	Scott Holden
ZONE:	R-2 (Medium Density Residential)
PLAN DISTRICT:	MDR (Medium Density Residential)
OVERLAY:	Stream Corridor Subdistrict Overlay

ATTACHMENTS:

Planning Commission Order 2022-15 with:

Exhibit “A”: Findings
Exhibit “B”: Conditions of Approval
Exhibit “C”: Preliminary

Attachments:
1: Application
2: Agency Comments

Section I: Application Information

A. DESCRIPTION OF APPLICATION: The applicant is requesting preliminary plat approval for a 12-lot subdivision of an existing 1.93-acre property addressed as 100 S Garfield Street, tax lot R3219DB 04690. The applicant anticipates future construction of duplex residential homes on each of the proposed lots, including dedication and improvement of a street with termination into a cul-de-sac to serve the subdivision, stormwater facility, and other utility improvements. The property is zoned R-2 and is within the Stream Corridor Overlay Subdistrict. The existing duplex is proposed to be demolished.

B. SITE INFOMRMATION:

1. Location: 100 S Garfield Street, West of S Blaine Street and North of E Eighth Street.

2. Size: 1.93 acres

3. Topography: The majority of the property is flat. The northwest corner has steady incline to the northwest and then slopes down into the stream corridor of the unnamed tributary to Chehalem Creek.

4. Current Land Uses: Duplex Dwelling

5. Natural Features: Stream corridor vegetation, groundcover and trees associated with existing

house.

6. Adjacent Land Uses:
    a. North: Low Density Residential (Residential)
    b. East: Medium and High Density Residential (Chehalem Creek Apartments and Newberg School District 29J Physical Plant Services, Residential)
    c. South: Medium Density Residential (Residential)
    d. West: Low and Medium Density Residential (Residential)
7. Zoning:
    a. North: R-1 (Low Density Residential)
    b. East: R-2 / R-3 (Medium / High Density Residential)
    c. South: R-2 (Medium Density Residential)
    d. West: R-1 / R-2 (Low / Medium Density Residential)

8. Access and Transportation: Access to the proposed development is provided from E Eighth Street via S Garfield Street. Both are classified as a Local Residential Street under the jurisdiction of the City of Newberg.

9. Utilities:

    a. Water: The City's GIS system shows an existing 4-inch water line that terminates within the applicant's property boundary. The applicant will need to perform an analysis of the water system to determine if the line needs to be upsized to serve the proposed development. The applicant will need to perform fire flow testing and submit results of the fire flow test at the time of the permit submittals.

    b. Wastewater: The City's GIS system shows an existing 8-inch wastewater line that terminates at the southern end of the property line. The applicant will be required to decommission any existing septic and connect to the public wastewater line.

    c. Stormwater: There are no public storm lines adjacent to the property.

    d. Overhead Lines: Existing overhead utilities will be required to be undergrounded. New utility connections will need to be underground.

C. **PROCESS:** This subdivision application is a Type III application per Newberg Municipal Code 15.100.050(B)(10) and 15.235.030(A). Type III development actions shall be decided through a Quasi-Judicial procedure with the Planning Commission. The decision shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq. A Type III decision may be appealed to the City Council by a Type III affected party in accordance with NMC 15.100.160 et seq. Important dates related to this application are as follows:

11/04/2022: The Community Development Director deemed the application complete.

11/17/2022: The applicant mailed notice to the property owners within 500 feet of the site.

11/23/2022: The Newberg Graphic published notice of the Planning Commission hearing and notice was posted in four public places.

11/28/2022: The applicant posted notice on the site.

12/08/2022: The Planning Commission will hold a quasi-judicial hearing to consider the application.

D. AGENCY COMMENTS: The application was routed to several public agencies for review and comment. Comments and recommendations from City departments have been incorporated into the findings and conditions. Original comments can be reference in Attachment 2. As of the writing of this report the city received the following agency comments:

City Manager: Reviewed, no conflict.

Community Development Director:

1. Check with Engineering Department on frontage improvements or not for 733 S Garfield Street.
2. Did not see a mitigation plan for the storm outfall in the stream corridor.
3. Need confirmation on the wetland delineation prior to going before Planning Commission.

Finance: Reviewed, no conflict.

Police Department: Reviewed, no conflict.

Director of Public Works:

All development street and utility plans shall be reviewed, approved, and appropriate permit issued to ensure compliance with construction specifications by Newberg Public Works Engineering Division prior to construction.

Public Works, Maintenance Superintendent:

1. No water or wastewater connection shall be allowed to under a stormwater facility.
2. All of the stormwater facilities being installed here will be private and the responsibility of the maintenance will fall upon HOA or adjacent homeowner.
3. Location of stormwater pipe is in a poor location and the city will never accept ownership of the this pipe in the future at its current proposed location and will be unable to assist in case of backups.
4. There needs to be a 6" clean out installed at back of ROW for the shared wastewater lateral.
5. No matter what the water study concluded the new city standard is 8" ductile iron pipe and that is what should be installed.

Public Works, Water: Reviewed, no conflict.

Public Works, Wastewater Compliance: Reviewed, No conflict.

Public Works Wastewater Superintendent: Reviewed, no conflict.

Tualatin Valley Fire & Rescue: Approved.

Ziply Fiber: Reviewed, no conflict.

Department of State Lands: Pending review.

E. **PUBLIC COMMENTS:** As of the writing of this report, the City has not received written public comments.

F. **ANALYSIS:** The property is zoned R-2, where the minimum lot size is 3,000 square feet and lot size averaging is permitted. The proposed subdivision would create twelve lots that meet the average lot size standards and other standards for lot dimensions. The application also includes frontage improvements to S Garfield Street and the creation of a private stormwater facility. It should be noted that while reviewing this application it was determined that since the S Garfield Street will not be a through street but a cul-de-sac, readdressing for the five existing lots off of S Garfield Street will need to occur. The name of the street has not yet been determined, but the street type will be a "Court" to adhere to typical naming standards for cul-de-sacs.

G. **PRELIMINARY STAFF RECOMMENDATION:** At this time, staff recommends the following motion:

> *Move to adopt Planning Commission Order 2022-15, which approves the requested Subdivision preliminary plat with the attached conditions of approval.*

PLANNING COMMISSION ORDER 2022-15

AN ORDER APPROVING SUB322-0001 FOR THE PRELIMINARY PLAT OF A SUBDIVISION AT 100 S GARFIELD STREET, YAMHILL COUNTY TAX LOT R3219DB 04690.

RECITALS

1. Scott Holden, submitted an application for a preliminary plat approval of a 12-lot subdivision on property zoned R-2 (Medium Density) addressed as 100 S Garfield Street, Tax Lot R3219DB 04690.

2. After proper notice, the Newberg Planning Commission held a public hearing on December 8, 2022, to consider the application. The Commission considered testimony and deliberated.

3. The Newberg Planning Commission finds that the application, as conditioned in Exhibit "B", meets the applicable Newberg Municipal Code criteria as shown in the findings in Exhibit "A".

The Newberg Planning Commission orders as follows:

1. The subdivision preliminary plat application SUB322-0001 is hereby approved, subject to the conditions contained in Exhibit "B". Exhibit "B" is hereby adopted and by this reference incorporated.

2. The findings shown in Exhibit "A" are hereby adopted. Exhibit "A" is hereby adopted and by this reference incorporated.

3. This order shall be effective on December 22, 2022, unless appealed prior to this date.

4. This order shall expire two years after the effective date above if the applicant does not record the final plat by that time unless an extension is granted per Newberg Development Code 15.235.030(C).

Adopted by the Newberg Planning Commission this 8th day of December 2022.

ATTEST:

Planning Commission Chair

Planning Commission Secretary

List of Exhibits:

Exhibit "A": Findings
Exhibit "B": Conditions of Approval

Exhibit A: Findings – File SUB322-0001
100 S Garfield Street Subdivision Preliminary Plat

These findings are based on review of the following approval criteria as outlined in NMC Division 15.200 Land Use Applications Chapter 15.235 LAND DIVSIONS:

15.200 Land Use Applications

15.235.050 Preliminary plat approval criteria.

A. Approval Criteria. By means of a Type II procedure for a partition, or a Type II or III procedure for a subdivision per NMC 15.235.030(A), the applicable review body shall approve, approve with conditions, or deny an application for a preliminary plat. The decision shall be based on findings of compliance with all of the following approval criteria:

1. The land division application shall conform to the requirements of this chapter;

Finding: The application included all the required submittal elements and follows the proper process and public notice requirements for a subdivision.

2. All proposed lots, blocks, and proposed land uses shall conform to the applicable provisions of NMC Division 15.400, Development Standards;

Finding: Compliance with provisions of NMC 15.400, Development Standards, are addressed in detail below.

3. Access to individual lots, and public improvements necessary to serve the development, including but not limited to water, wastewater, stormwater, and streets, shall conform to NMC 15.500 Public Improvement Standards;

Finding: Compliance with provisions of NMC 15.500, Development Standards, are addressed in detail below.

4. The proposed plat name is not already recorded for another subdivision, and satisfies the provision of ORS Chapter 92;

Finding: The applicant states a plat name has not been decided at this time but will be provided for approval during the final plat review. A plat name not already recorded, and meeting ORS Chapter 92 will be required during the final plat review. If this condition is adhered to then this criterion will be met.

5. The proposed streets, utilities, and stormwater facilities are adequate to serve the proposed development at adopted level of service standards, conform to the city of Newberg adopted master plans and applicable Newberg public works design and construction standards, and allow for transitions to existing and potential future development

on adjacent lands. The preliminary plat shall identify all proposed public improvements and dedications;

Finding: The proposed plans will meet the above criteria when the conditions of approval detailed in the NMC Chapter 15 section of this staff report are met and final plans that comply with the Newberg Public Works Design and Construction Standards are submitted and approved.

6. All proposed private common areas and improvements, if any, are identified on the preliminary plat and maintenance of such areas is assured through the appropriate legal instrument.

Finding: The applicant has shown on the preliminary plat the stormwater facility that will be in a private common area, Tract A and Tract B. Tract A and Tract B maintenance agreements will need to be recorded and accompany future development submittals. If this condition is adhered to this criterion will be met.

7. Evidence that any required state and federal permits, as applicable, have been obtained or can reasonably be obtained prior to development; and

Finding: The application materials indicate that there is a wetland northwest of the site and an unnamed tributary to Chehalem Creek within the western area of the property. A wetland delineation / determination report was submitted. A report of DSL concurrence with the wetland delineation / determination report was not submitted. DSL concurrence with the wetland delineation / determination report will be required in accordance with State and/or Federal requirements. The applicant is required to comply with State and/or Federal permitting related to wetlands and streams. The applicant is to provide copies of any State and/or Federal permits related to the wetland and onsite stream and show compliance with any State and/or Federal permits or provide documentation from State and/or Federal agencies that wetland/waters of the state related permits are not required, prior to issuance of permits from the City of Newberg.

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

8. Evidence that improvements or conditions required by the city, road authority, Yamhill County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.

Finding: A service provider permit was obtained and approved from Tualatin Valley Fire and Rescue on the preliminary plat. This can be viewed in Attachment 3, Public Agency Comments. This criterion is met.

15.220.030 Site design review requirements.

B. Type II. The following information is required to be submitted with all Type II applications for a 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.

Findings: The applicant's proposed plans show new sidewalks, curb and gutter, planter strip, new pavement and new water and wastewater mains and service laterals.

This criterion is met.

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: Based on the Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition used to estimate the number of trips, the project use falls under ITE Code 210 for single family detached housing, with an estimated 1 vehicle trip per dwelling. The estimated trips for the proposed project are less than the threshold of 40 peak pm trips required for a traffic study.

This criterion does not apply.

Division 15.300 ZONING DISTRICTS

Chapter 15.342 STREAM CORRIDOR OVERLAY (SC) SUBDISTRICT

15.342.020 Where these regulations apply.

The regulations of this chapter apply to the portion of any lot or development site which is within an SC overlay subdistrict. Unless specifically exempted by NMC 15.342.040, these regulations apply to the following:

A. New structures, additions, accessory structures, decks, addition of concrete or other impervious surfaces;

B. Any action requiring a development permit by this code;

C. Changing of topography by filling or grading;

D. Installation or expansion of utilities including but not limited to phone, cable TV, electrical, wastewater, storm drain, water or other utilities;

E. Installation of pathways, bridges, or other physical improvements which alter the lands within the stream corridor overlay subdistrict. [Ord. 2451, 12-2-96. Code 2001 § 151.466.]

Finding: Tax lot R3219DB 04690 is an 84,021 square foot lot that contains approximately 22,436 square feet of stream corridor overlay subdistrict. Subsection B of this section states that the stream corridor overlay subdistrict regulations apply to any action requiring a development permit. The Newberg Municipal Code (NMC) defines a development permit as any land use or construction permit. The proposal for a preliminary plat for a subdivision does require a land use permit per NMC 15.235.030 and is not listed as exempt activity in NMC 15.342.040. Therefore, the regulations of this chapter apply to the portion of this lot that is within the stream corridor overlay subdistrict.

15.342.040 Activities exempt from these regulations.
The following public or private uses and activities are exempt from the regulations of this chapter:

A. Emergency procedures or emergency activities undertaken by public or private parties which are necessary for the protection of public health, safety and welfare.

B. Maintenance and repair of buildings, structures, yards, gardens or other activities or uses that were in existence prior to the effective date of the ordinance codified in these regulations.

C. Alterations of buildings or accessory structures which do not increase building coverage.

D. The expansion of an existing structure, building, improvements, or accessory structures, provided the expansion is located completely outside of the stream corridor delineation boundary.

E. The following agricultural activities lawfully in existence as of December 4, 1996:

1. Mowing of hay, grass or grain crops.

2. Tilling, discing, planting, seeding, harvesting and related activities for pasture, trees, food crops or business crops; provided, that no additional lands within the stream corridor boundary are converted to these uses.

F. Operation, maintenance and repair of existing irrigation, drainage ditches, ponds, wastewater facilities, stormwater detention or retention facilities, and water treatment facilities.

G. Normal and routine maintenance of existing streets and utilities.

H. Normal and routine maintenance of any public improvement or public recreational area.

I. ***Measures to remove or abate hazards and nuisances including but not limited to removal of fallen, hazardous or diseased trees.***

J. ***Roadway and related improvements associated with a final alignment of the Newberg bypass road project.***

K. ***Maintenance and repair of existing railroad trackage and related improvements.***

L. ***Airport Area.***

1. ***The removal or pruning of trees or other vegetation located within the airport overlay subdistrict, as established on the City of Newberg zoning map, that either exceed the height limits established by the overlay subdistrict or are otherwise demonstrated to pose a threat to the health, safety, welfare, and general operation of the airport.***

2. ***The removal of undergrowth, within 500 feet east and west of the runway and 1,000 feet south of the runway, as necessary to maintain the safe operation of the airport facilities and activities.***

M. ***Utilities installed above or below existing street rights-of-way.***

N. ***Utility services using an existing pole or installation of other utilities where no more than 100 square feet of ground area is disturbed, no native trees are removed, and the area is replanted to preconstruction conditions using native plants selected from the Newberg plant list.***

O. ***Utility services within existing access roads or other previously improved areas where the utility service can be installed without expanding the previously improved area.***

P. ***The removal of any plant identified on the Newberg plant list as a nuisance plant such as Himalayan blackberry, English ivy, periwinkle, poison oak, or Scotch broom.***

Q. ***The planting or propagation of any plant identified as native on the Newberg plant list.***

R. ***The planting or propagation of any nonnative plant; provided, that the area to be planted covers less than 10 percent of the total site area within the SC overlay subdistrict and does not include any nuisance plants as identified on the Newberg plant list. [Ord. 2451, 12-2-96. Code 2001 § 151.468.]***

Finding: A subdivision preliminary plat land use action is not listed as an exempt activity, there for NMC 15.342.040 regulations apply.

15.342.050 Activities requiring a Type I process.
The following uses shall be processed as a Type I decision and shall be approved by the director upon submittal of a plan indicating compliance with the accompanying criteria and the restoration standards indicated in NMC 15.342.060.

A. The expansion of an existing single-family, duplex, triplex or quadplex dwelling, structure, building, improvements, or accessory structures inside the corridor delineation boundary, including any expansion associated with conversion of an existing single-family dwelling into a duplex, triplex or quadplex dwelling; provided, that the following criteria have been satisfied:

1. The expansion of a single-family, duplex, triplex or quadplex dwelling, structure or improvement (including decks and patios); provided, that it is located no closer to the stream or wetland area than the existing structure or improvement;

2. The coverage of all structures within the SC overlay subdistrict on the subject parcel shall not be increased by more than 1,000 square feet of the coverage in existence as of December 4, 1996;

3. The disturbed area is restored pursuant to NMC 15.342.060; and

4. No portion of the improvement is located within the 100-year flood boundary.

B. Private or public service connection laterals and service utilities extensions where the disturbed area shall be restored pursuant to NMC 15.342.060.

C. Private or public sidewalks, stairs and related lighting where the disturbed area is restored pursuant to NMC 15.342.060.

D. Bicycle and pedestrian paths; provided, that the area is restored pursuant to NMC 15.342.060.

E. Temporary construction access associated with authorized Type I uses. The disturbed area associated with temporary construction access shall be restored pursuant to NMC 15.342.060.

F. The removal of nonnative vegetation (such as blackberries) by mechanical means; provided, that the site is restored pursuant to NMC 15.342.060.

G. Single-family, duplex, triplex or quadplex dwellings or structures which are nonconforming to the standards of this chapter may be rebuilt in the event of damage due to fire or other natural hazard; provided, that the single-family, duplex, triplex or quadplex dwelling or structure is placed within the same foundation lines. [Ord. 2889 § 2 (Exh. B §§ 17, 18), 12-6-21; Ord. 2880 § 2 (Exh. B §§ 20, 21), 6-7-21; Ord. 2451, 12-2-96. Code 2001 § 151.469.]

Finding: The proposed preliminary plat shows that the proposed stormwater facility, Tract A, will encroach into the stream corridor overlay area and disturb two separate areas totaling approximately 665 square feet. The stormwater facility will discharge into Tract B, that is located within the stream corridor area. The applicant's narrative does address that this area will be replanted per the included mitigation plan, sheet 6. The proposed stormwater facility is not listed within an approved City of Newberg master infrastructure plan. Therefore, does not qualify as a Type II activity per NMC 15.342.070(D). The installation of a stormwater facility, not within an approved master plan, is most closely related to the activity described in subsection B and therefore, will processed as a Type I procedure. However, due to the requirements of NMC 15.235 that requires proposed subdivisions within a stream corridor to be decided by the Planning Commission, this criterion will also be reviewed by the Planning Commission and not the approved by the director as this section directs.

15.342.060 Restoration standards for Type I process.
A plan shall be approved only if the following standards can be met. This shall be shown on a plan submitted along with a Type I application.

A. ***Disturbed areas, other than authorized improvements, shall be regraded and contoured to appear natural. All fill material shall be native soil. Native soil may include soil associations commonly found within the vicinity, as identified from USDA Soil Conservation Service, Soil Survey of Yamhill Area, Oregon.***

B. ***Replanting shall be required using a combination of trees, shrubs and grasses. Species shall be selected from natives on the Newberg plant list.***

C. ***Removed trees over six inches in diameter, as measured at breast height, shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site.***

D. ***All disturbed areas, other than authorized improvements, shall be replanted to achieve 90 percent cover in one year.***

E. ***All disturbed areas shall be protected with erosion control devices prior to construction activity. The erosion control devices shall remain in place until 90 percent cover is achieved.***

F. ***Except as provided below, all restoration work must occur within the SC overlay subdistrict and be on the same property. The director may authorize work to be performed on properties within the general vicinity or adjacent to the overlay subdistrict; provided, that the applicant demonstrates that this will provide greater overall benefit to the stream corridor areas. [Ord. 2451, 12-2-96. Code 2001 § 151.470.]***

Finding: The applicants narrative states they will comply with all mitigation requirements for Type II activities, however, it was determined that this proposal most closely fits the Type I activities listed in NMC 15.342.040(B) as described in the previous finding. The mitigation requirements for Type I and Type II vary slightly. The applicant's mitigation and replanting plan noted on sheet 6 of submitted

plans meet all the requirements for a Type I mitigation plan. The only subsection not noted was subsection C regarding the removal of trees over six inches. It is unclear if trees of this size will be removed. If trees over six inches in diameter, as measured at breast height are to be removed, they shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site.

15.342.120 Density transfer.
For residential development proposals on lands which contain the SC overlay subdistrict, a transfer of density shall be permitted within the development proposal site. The following formula shall be used to calculate the density that shall be permitted for allowed residential use on the property:

A. Step 1. Calculate expected maximum density. The expected maximum density (EMD) is calculated by multiplying the acreage of the property by the density permitted within the Newberg comprehensive plan.

B. Step 2. The density that shall be permitted on the property shall be equal to the EMD obtained in Step 1, provided:

1. The density credit can only be transferred to that portion of the development site that is not located within the designated stream corridor; and

2. The minimum lot size required for residential dwellings, in the base zone, shall not be reduced by more than 20 percent; and

3. The maximum dwelling units per net acre of buildable land, outside the SC boundary, shall not be increased by more than 20 percent; and

4. The types of residential uses and other applicable standards permitted in the zone shall remain the same; and

5. All other uses shall comply with applicable standards and criteria of the Newberg development code. [Ord. 2451, 12-2-96. Code 2001 § 151.476.]

Finding: The applicant is not requesting a density transfer; these criteria do not apply.

15.342.130 Procedure for adjusting and amending the delineated stream corridor.

A. Type II Process. The manager shall authorize an adjustment to the delineated stream corridor by a maximum of 15 percent of the corridor width as measured from the centerline of the stream to the upper edge of the stream corridor boundary (from the boundary location originally adopted as part of this chapter), provided the applicant demonstrates that the following standards are met:

1. *The location of the delineated stream corridor boundary is not reduced to less than 50 feet from the edge of a wetland or 100-year flood elevation, whichever is higher; and*

2. *The lands to be eliminated do not contain sloped areas in excess of 20 percent; and*

3. *The lands to be eliminated do not significantly contribute to the protection of the remaining stream corridor for water quality, stormwater control and wildlife habitat; and*

4. *A stream corridor impact report which complies with the provisions of this chapter is provided; and*

5. *The line to be adjusted has not been previously adjusted from the boundary location originally adopted as part of this chapter.*

B. Type III Process. The applicant may propose to amend the delineated stream corridor boundary through a Type III quasi-judicial zone change proceeding consistent with the provisions of this code (see standard zone change criteria). [Ord. 2451, 12-2-96. Code 2001 § 151.477.]

Finding: The applicant is not requesting a stream corridor adjustment; these criteria do not apply.

15.342.140 Stream corridor impact report (SCIR) and review criteria.
A stream corridor impact report (SCIR) is a report which analyzes impacts of development within delineated stream corridors based upon the requirements of this section. The director shall consult with a professional with appropriate expertise to evaluate the report prepared under this section, in order to properly evaluate the conclusions reached in it. If outside consulting services are required to review the report, the cost of such review shall be paid by the applicant. By resolution, the city council shall establish a maximum fee which will be paid by the applicant.

A. Application Requirements. In addition to required materials for the site design review application, a stream corridor impact report (SCIR) must be submitted. The SCIR shall be conducted and prepared by experienced professionals who are knowledgeable and qualified to complete such a report. The qualifications of the person or persons preparing each element of the analysis shall be included with the SCIR. The SCIR shall include the following:

1. *Physical Analysis. The analysis shall include, at a minimum, a description of the soil types, geology, and hydrology of the site plus related development limitations. The analysis shall include development recommendations including grading procedures, soil erosion control measures, slope stabilization measures, and methods of mitigating hydrologic impacts. For projects which affect possible wetlands, a copy of the state wetland inventory map pertaining to the*

site shall be provided. Notice of the proposal shall be given to the Oregon Division of State Lands and the Army Corp of Engineers.

2. *Ecological Analysis. The analysis shall include, at a minimum, an inventory of plant and animal species occurring on the site, a description of the relationship of the plants and animals with the environment, and recommended measures for minimizing the adverse impacts of the proposed development on unique and/or significant features of the ecosystem, including but not limited to migratory and travel routes of wildlife.*

3. *Enhancement Proposal. The applicant must propose a stream corridor or wetland enhancement to be completed along with the proposed development. The enhancement shall increase the natural values and quality of the remaining stream corridor lands located on the lot.*

B. *SCIR Review Criteria. The following standards shall apply to the issuance of permits requiring an SCIR, and the SCIR must demonstrate how these standards are met in a manner that meets the project purpose.*

1. *Where possible, the applicant shall avoid the impact altogether.*

2. *Impact on the stream corridor shall be minimized by limiting the degree or magnitude of the action, by using appropriate technology, or by taking affirmative steps to avoid, reduce or mitigate impacts.*

3. *The impacts to the stream corridor will be rectified by restoring, rehabilitating, or creating comparable resource values on the site or within the same stream corridor.*

4. *The remaining resource values on the stream corridor site shall be protected and enhanced, with consideration given to the following:*

   a. Impacts to wildlife travel and migratory functions shall be maintained to the maximum extent possible; and

   b. Native vegetation shall be utilized for landscaping to the extent practicable; and

   c. The stream bed shall not be unnecessarily or detrimentally altered.

5. *The fill shall primarily consist of natural materials such as earth or soil aggregate, including sand, gravel, rock, and concrete. Culverts, bridges, reinforced retaining walls, or other similar structures which require manmade structural materials shall be permitted.*

6. The amount of fill used shall be the minimum required to practically achieve the project purpose.

7. If the fill or grading is within a designated floodway, the proposed action shall maintain the flood storage capacity of the site.

8. The proposed fill or grading shall not significantly increase existing hazardous conditions or create significant new hazardous conditions related to geology, hydrology, or soil erosion.

9. Stream turbidity shall not be significantly increased by any change in a watercourse that results from the fill. Measures shall be taken to minimize turbidity during construction.

10. The removal of trees over six inches in diameter shall be minimized to the extent possible to provide the necessary improvements authorized by this chapter. [Ord. 2451, 12-2-96. Code 2001 § 151.478.]

Finding: The applicant is not required by this code to submit a stream corridor impact report; these criteria do not apply.

Division 15.400 DEVELOPMENT STANDARDS

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:

1. In the R-1, R-2, R-3, R-P and AR districts, the following minimum lot area standards apply:

Zone	Minimum lot area for single family	Minimum lot area for duplex dwelling	Minimum lot area for triplex dwelling	Minimum lot area for quadplex dwelling	Minimum lot area for townhouse	Minimum lot area for cottage cluster	Minimum lot area per dwelling unit for multifamily
R-2	3,000 SF	3,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	3,000 SF

B. Maximum Lot or Development Site Area per Dwelling Unit.

2. In the R-2 and R-P districts, the average size of lots in a subdivision intended for single-family development shall not exceed 5,000 square feet.

Finding: The applicant has chosen to comply with lot size standard by averaging lot sizes. As described below, the average lot size per dwelling in the subdivision is 3,513.25 square feet. For R-2 the average minimum lot size is 3,000 and the average maximum lot size is 5,000 square feet. The criteria of subsections A and B are met.

C. In calculating lot area for this section, lot area for this section, lot area does not include land within public or private streets. In calculating lot area for maximum lot area/minimum density requirements, lot area does not include

land within stream corridors, land reserved for public parks or opens spaces, commons buildings, land for preservation of natural, scenic, or historic resources, land on slopes exceeding 15 percent or for avoidance of identified natural hazards, land in shared access easements, public walkways, or entirely used for utilities, land held in reserve in accordance with future development plan, or land for uses not appurtenant to the residence.

Finding: The applicant did not utilize any of the listed areas in the subsection to calculate lot area. This criterion is met.

D. Lot size averaging is allowed for any subdivision. Some lots may be under the minimum lot size required in the zone where the subdivisions is located, as long as the average size of all lots is at least the minimum lot size.

Finding: The lot sizes of each lot in the subdivision are as follows:

Lot Number	Lot Size in Square Feet
1	3,586
2	3,571
3	3,580
4	3,720
5	2,897
6	2,683
7	3,454
8	3,484
9	3,790
10	3,817
11	3,798
12	3,779
Average Lot Size: 3,513.25 square feet	

The average lot size in the subdivision is 3,513.25 square feet. Not required to be included in these calculations is Tract A Stormwater Facility of 1,875 square feet and the Tract B the delineated stream corridor overlay area, 22,495 square feet. Therefore, through lot size averaging in the subdivision, the average lot size is within the average minimum and average maximum square footage permitted by the NMC for R-2 and the criterion of this section is met.

15.405.030 Lot Dimension and Frontage

A. Width. Width of lots shall conform to the standards of this code.

Finding: See NMC 15.405.030(E)(b) for findings regarding width.

B. Depth to Width Ratio. Each lot and parcel shall have an average depth between the front and the rear lines of not more than two and one-half times the average width between the side lines. Depths of lots shall conform the standards of this code. Development of lots under 15,000 square feet are exempt from lot dept the width ration requirement.

Finding: The proposed lots are under 15,000 square feet. Therefore, the criterion of subsection B does not apply.

C. Area. Lot sizes shall conform to standards set forth in this code. Lot area calculations shall not include area contained in public or private streets as defined by this code.

Finding: The proposed lots conform to the lot area requirements for lots in the R-2 zone. The criteria are met as shown in the previous findings for NMC 15.405.010. See NMC 15.505.030(L)(3) for further information regarding number of dwellings permitted to have access on a cul-de-sac.

D. Frontage

1. No lot or development site shall have less than the following lot frontage standards:

a. ***Each lot or development site shall have either frontage on a public street for a distance of at least 25 feet or have access to a public street through and easement that is at least 25 feet wide. No new private streets, as defined in NMC 15.05.030, shall be created to* provide *frontage or access except as allowed by NMC 15.240.020(L)(2).***

Finding: Lots 1, 2, 3, and 4 share a 25-foot access easement to the cul-de-sac. Lots 7, 8, and 9 also share a 25-foot access easement to the cul-de-sac. Both access easements will need to be recorded with Yamhill County as part of this plat, including a maintenance agreement. Lots 10, 11 and 12 all have a direct 40 feet of frontage along the public street. This criterion is met. See NMC 15.505.030(L)(3) for further information regarding number of dwellings permitted to have access on a cul-de-sac.

b. Each lot in R-2 zone shall have a minimum width of 25 feet at the front building line and R-3 zone shall have a minimum width of 30 feet at the front building line, except that duplex, triplex, quadplex and cottage cluster project lots in the R-3 zone shall have a minimum width of 25 feet at the front building line.

Finding: Building locations are not proposed as a part of this subdivision plat application. All proposed lot widths are greater than 25 feet. This criterion will need to be met at time of building permit review process. See NMC 15.505.030(L)(3) for further information regarding number of dwellings permitted to have access on a cul-de-sac.

15.405.040 Lot coverage and parking coverage requirements.

Finding: This section of NMC will be reviewed, if applicable, during the building permit review process. This section is not applicable at this stage of the subdivision review process because it is more appropriately reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements.

Chapter 15.410 YARD SETBACK REQUIREMENTS

Finding: This section of NMC will be reviewed, if applicable, during the building permit review process. This section is not applicable at this stage of the subdivision review process because it is more appropriately reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements.

Chapter 15.415 BUILDING AND SITE DESIGN STANDARDS

Finding: This section of NMC will be reviewed, if applicable, during the building permit review process. This section is not applicable at this stage of the subdivision review process because it is more appropriately reviewed during the building permit review process. The applicant's narrative states that future structures will comply with lot coverage requirements. See NMC 15.505.030(L)(3) for further information regarding number of dwellings permitted to have access on a cul-de-sac.

Chapter 15.420 LANDSCAPING AND OUTDOOR AREAS

15.420.010 Required minimum standards.

B. Required Landscaped Area.

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.

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***

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. [Ord. 2880 § 2 (Exh. B §§ 42, 43), 6-7-21; Ord. 2720 § 1(16, 17), 11-2-09; Ord. 2647, 6-5-06; Ord. 2564, 4-15-02; Ord. 2561, 4-1-02; Ord. 2513, 8-2-99; Ord. 2451, 12-2-96. Code 2001 § 151.580.]

Finding: The applicant is showing creation of a planter strip along the proposed cul-de-sac. Street trees along the cul-de-sac and connecting street will need to be from the approved street trees species list. The applicant will also need to ensure the planter strip contains grass, shrubs, and ground cover per NMC 15.420.010 required minimum standards for landscaping. The street trees will need to be planted prior to occupancy of Lots 5, 6, 9, 10, 11, and 12. Final street tree locations will be determined through the infrastructure permitting process and an ownership and maintenance agreement shall be signed and recorded on the final plat concerning the responsibility of the street trees. If the landscaping cannot be completed prior to issuance of occupancy the applicant may place a security on file per NMC 15.420.010(C). Lots 1, 2, 3, 4, 7 and 8 do not have street frontage, only access to the cul-de-sac and public street through a 25-foot shared access and utility easement and therefore, it would be unreasonable to require the installation of street trees prior to their occupancy.

Chapter 15.425 EXTERIOR LIGHTING

Finding: This requirement will be reviewed during the building permit review application.

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: The submitted narrative and plans describe the relocation of existing power poles that are in conflict with proposed street improvements and undergrounding of existing overhead utility lines. In

addition all new utilities for the development are shown to be installed underground. Because final plans have not been submitted, final plans showing existing utilities within the property and project limits undergrounded and new utilities installed underground will be required with permit applications. Undergrounding of existing overhead utility lines might require work outside of the project work limits shown on the preliminary plans.

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

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 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 development site or within 400 feet of the development site which parking is required to serve. All required parking must be under the same ownership as the development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the development site.

Finding: The applicant states that each dwelling will provide a one car garage and one car driveway for a total of two parking places. Final review of off-street parking requirements will be reviewed at time of building permit review process.

Division 15.500

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), 1219-16.]

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).

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.

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: The applicant's preliminary plans show an extension of S Garfield Street, a local residential street. Because the applicant has not submitted construction plans, final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

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: Preliminary plans show an extension of an existing 4-inch water line in the extension of S Garfield Street. Because the applicant has not submitted construction plans, final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(D).

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: Preliminary plans show a new wastewater line connecting to an existing wastewater line in S Garfield Street. Preliminary plans also show service laterals to each proposed lot. Because the applicant has not submitted construction plans, final plans for the proposed wastewater line meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

This criterion will be met if all wastewater improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(E).

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 proposed development will create more than 500 square feet of impervious area, public and private. A new private 12-inch stormwater line is shown routed across S Garfield Street and

through the back side of proposed lots 1 through 9 terminating at a private underground stormwater detention facility in Tract A of the preliminary plat. The outfall of the private stormwater facility is shown within the stream corridor. The applicant proposes to manage both public and private stormwater runoff. Public stormwater runoff from the street is proposed to be managed through stormwater planters. Private stormwater runoff is proposed to be managed by an underground detention system. A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

This criterion will be met if all stormwater improvements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.050.

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's preliminary plans do no show 10-foot-wide public utility easements along the frontages of all proposed lots along the extension of S Garfield Street. The plans also show shared access and utility easements for Lots 1 through 4 and for Lots 7 through 9. Because the applicant has not submitted construction plans, final plans showing needed utility easements will be required as part of the public works improvement permit application.

This criterion will be met if all easements necessary to service the development meet City standards and are completed, see conditions in Section 15.505.040(F).

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 the improvements constructed prior to applying for the final plat and building permits.

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: As part of the proposed subdivision, the Applicant is proposing an extension of S Garfield Street, a local residential street. Because the applicant has not submitted construction plans, final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

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.

Finding: The Applicant is proposing an extension of S Garfield Street, a local residential street, with a cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate right-of-way for improving the street to the width specified in 505.505.030(G).

This criterion is met.

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.

Finding: The Applicant is proposing an extension of S Garfield Street, a local residential street, with a full width street improvement cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate for improving the street to the width specified in 505.505.030(G).

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

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.

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: The proposed development is a 12-lot subdivision. Improvements required as conditions of approval are required for the proposed development to be adequately served by public facilities as described in conditions in Sections 15.505.030, 15.505.040 and 15.505.050.

The criterion is met.

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: The Applicant is proposing an extension of S Garfield Street, a local residential street, with a full width street improvement cross section consisting of 60-feet of right-of-way and 32-feet of curb-to-curb pavement width terminating in a cul-de-sac with a right-of-way radius of 50-feet. The applicant's preliminary plat and plans also show existing S Garfield Street with 60-feet of existing right-of-way. This is adequate for improving the street to the width specified in 505.505.030(G). However, the plans submitted show 7-foot parking lanes on both sides of the proposed street extension and a cul-de-sac with a pavement radius of 36 feet. Approval of a cul-de-sac with a pavement diameter less than 96-feet and a right-of-way diameter less than 109-feet requires no parking on the street. See 15.505.030(L) below. Because construction plans have not been submitted, final plans showing the proposed street extension as a Local Residential street with no parking on both sides of the street, or with the cul-de-sac revised to consist of a minimum diameter of 96-feet curb to curb within a 111-foot minimum diameter right-of-way, shall be submitted as part of the public improvement permit. A 111-foot minimum diameter right-of-way is needed to accommodate 96-feet of curb to curb pavement, 0.5-foot curbs, a 6-foot-wide curb tight sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line in accordance with City of Newberg Public Works Design and Construction Standard. A minimum right-of-way diameter of 120-feet would be needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 5.5-foot-wide planter strip, a 5-foot-wide sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

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

Finding: No new collector or arterial streets are proposed.

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.

Finding: Bike lanes are not required on local residential streets.

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.

Finding: There are no collector or arterial streets proposed.

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: No center turn lanes are proposed and none are required.

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: Limited residential streets are not proposed.

This criterion is not applicable.

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

Finding: The submitted plans show 5-foot-wide sidewalks and the narrative describes 5-foot-wide sidewalks are proposed along the subject parcel frontages. Sidewalks along frontages of properties that are not part of the proposed development are not required as part of this development.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed, see conditions in Section 15.505.030.

8. Planter Strips. Except where infeasible, a pl. er 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 curbside 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: The submitted plans show 5.5-foot-wide planter strips and the narrative describes 5.5-foot-wide planter strips are proposed along the subject parcel frontages. Planter strips along frontages of properties that are not part of the proposed development are not required as part of this development.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed.

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

Finding: The applicant is not proposing a slope easement.

This criterion is not applicable**.**

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: The design of the intersection and street will be reviewed through the Public Improvement Permit process to meet requirements.

This criterion will be met if all improvements necessary to serve the development meet City standards and are completed.

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: Modifications to street standards for the purpose of ingress or egress are not proposed.

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: The applicant has not proposed modifications to these street standards.

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: The applicant is not proposing a temporary turnaround. This criterion does not apply.

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

Finding: The applicant has given suitable recognition to surrounding topographical conditions.

This criterion is met.

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: There are no possible future street extensions as part of this project.

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.

Finding: The project narrative and plans indicate that the physical and topographical characteristics of the property including the wetland/stream corridor in the northwest portion of the property make street connections impracticable.

This criterion is met.

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

Finding: Existing development adjacent to the property leave little potential for a future connection point for streets within this project.

This criterion is met.

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

Finding: There are no known leases or easements, or similar restrictions in the application proposal.

This criterion is not applicable.

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.

Finding: The streets or accessways associated with the proposed subdivision do not abut the urban growth boundary.

This criterion is not applicable

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).

Finding: The cul-de-sac measures less than 400 feet from the centerline of the intersection of S Garfield and E Eighth Street to the radius point of the bulb. This criterion is met.

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

Finding: The cul-de-sac is planned to serve 12 lots with duplex dwellings. This approximately equates to 24 single family dwellings. There are also five existing lots with single family dwelling served by this street terminating in a cul-de-sac. Because the equivalent of more than 18 single family dwellings are proposed, including the five existing dwellings, final plans indicating a maximum of 18 single family dwellings shall be submitted with permit applications.

This criterion is met.

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: The applicant's plans show the proposed street extension terminating in a cul-de-sac with a radius of 36 feet, curb-to-curb, within a 100-foot diameter right-of-way. The plans also show planter strips and setback sidewalks along the cul-de-sac. The plans submitted show the proposed street extension with parking on both sides. The narrative describes proposed residences along the street as planned to be sprinklered. It is not known if the exiting residences along this portion of S Garfield Street have fire sprinkler systems. Because the applicant has not submitted final construction plans, final plans addressing the requirements of Section 15.505.030(L), including the descriptions for no parking, mountable curbs, curbside sidewalks, and sprinkler systems for every building that will be part of this development, or with the cul-de-sac revised to consist of a minimum diameter of 96-feet curb to curb within a 111-foot minimum diameter right-of-way, shall be submitted as part of the public improvement permit. The 111-foot minimum diameter right-of-way is needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 6-foot-wide curb tight sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line in accordance with City of Newberg Public Works Design and Construction Standard. A minimum right-of-way diameter of 120-feet would be needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 5.5-foot-wide planter strip, a 5-foot-wide sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line.

Prior to issuance of building permits, building plans to be submitted showing fire sprinkler systems for every building that will be part of this development.

all improvements necessary to serve the development meet City standards and are completed.

> ***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: The applicant is not proposing street names of the proposed residential street. It should be noted that while reviewing this application it was determined that since the S Garfield Street will not be a through street but a cul-de-sac, readdressing for the five existing lots off of S Garfield Street will need to occur. The name of the street has not yet been determined, but the street type will be a "Court" to adhere to typical naming standards for cul-de-sacs. The applicant will be required to coordinate with the City Planning Division in selecting the name for the street and to adhere to typical naming standards for cul-de-sacs.

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

> ***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: The applicant is not proposing alleys.

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 R1 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: The applicant is not proposing blocks.

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: The applicant is not proposing private streets.

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: The applicant is not proposing traffic calming.

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: The project does not include an arterial of collector roadway and none are adjacent to the site.

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.

Finding: None of the proposed lots are proposed to have frontage onto more than one street.

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.

Finding: None of the proposed lots are proposed to have more than one driveway.

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: The applicant's property does not have alley access.

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: No existing access not used with the proposed development are proposed to be closed and none are required to be closed.

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.***

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

e. ***Where three lots or three dwellings 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.***

Finding: The applicant is proposing two shared driveways. One will serve Lots 1 through 4. The other will serve Lots 7 through 9. A 25-foot access and utility easement is shown on each of these shared driveways. Maintenance agreements are required as well. Access and utility easements and maintenance agreements for both shared driveways shall be recorded as part of the final plat approval.

This criterion will be met when the access easements and maintenance agreements are recorded and submitted to the city.

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 proposed lots do not front on an arterial or collector street.

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 property does not abut an ODOT or Yamhill County right-of-way.

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.

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: The applicant is not proposing any exceptions to the access standards.

These criteria are 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: Public walkways are not proposed and none are required.

These 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: The applicant is showing creation of a planter strip with preliminary tree locations. Please see findings NMC 15.420.010(B)(4) for further findings.

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: The applicant's plans show proposed street lighting. However, it is unclear if the City's requirements for street lighting are being met. Because a lighting analysis has not been provided, the applicant will be required to show via a lighting analysis that the proposed street lighting meets City standards or provide additional Option A street lighting that is compliant with the City's Public Works Design and Construction Standards.

The 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. 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 applicant is not proposing transit improvements and the site is not adjacent to existing or planned transit facilities.

These criteria are 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: Preliminary plans show an extension of an existing 4-inch water line in the extension of S Garfield Street. Because the applicant has not submitted construction plans, final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

Public improvements are to be completed prior to applying for the final plat and building permits.

Results of fire flow tests performed by a private contractor hired by the applicant shall be submitted as part of permit applications in accordance with requirements of the fire marshal.

This criterion will be met if all improvements necessary to service the development meet City standards and are completed.

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: Preliminary plans show a new wastewater line connecting to an existing wastewater line in S Garfield Street. Preliminary plans also show service laterals to each proposed lot. Because the

applicant has not submitted construction plans, final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

Any existing septic system is to be decommissioned according to Yamhill County standards. Documentation of the septic system abandonment or removal in accordance with Yamhill County standards shall be submitted with the public improvement permit application.

Public improvements are to be completed prior to applying for the final plat and building permits.

These criteria will be met if all wastewater improvements necessary to service the development meet City standards and are completed.

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: The applicant has submitted preliminary plans that do not show 10-foot public utility easements along all lot frontages. The plans do show shared access and utility easements for Lots 1 through 4 and for Lots 7 through 9. Because the applicant has not recorded all utility easements needed for the proposed development, the applicant will be required to submit recorded documents that include necessary utility easements meeting the specifications and standards of the City's Public Works Design and Construction Standards, this includes but not necessarily limited to:

1) 10-foot public utility easements along all public street frontages of the proposed lots
2) 25-foot access and utility easement for the water and sewer lines in both shared driveways
3) Maintain and protect all existing utilities easements encumbered on the property.

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

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 proposed development will create more than 500 square feet of impervious area, public and private. A new private 12-inch stormwater line is shown routed across S Garfield Street and through the back side of proposed lots 1 through 9 terminating at a private underground stormwater detention facility in Tract A of the preliminary plat. The outfall of the private stormwater facility is shown within Tract B of the preliminary plat and within the stream corridor. The applicant proposes to manage both public and private stormwater runoff. Public stormwater runoff from the street is proposed to be managed through stormwater planters. Private stormwater runoff is proposed to be managed by an underground detention system. A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

The 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's plans show site disturbance of greater than one acre. Because the applicant as not provided documentation of an erosion and sedimentation control permit for the development site, the applicant will be required to obtain and submit a DEQ 1200-C permit prior to issuance of a public improvement permit.

The applicant has submitted a preliminary stormwater management report. Because the applicant has not submitted a final stormwater report or construction plans, the applicant will need to submit a final stormwater report and construction plans meeting the City's Public Works Design and Construction Standards and NMC 13.25 Stormwater Management requirements and obtain a Public Improvement Permit.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

The final stormwater report and plans shall address erosion control downstream of the proposed stormwater outfall within the stream corridor.

The 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: A preliminary stormwater report prepared by Firwood Design Group was submitted as part of the application. Because a final stormwater management report has not been submitted and final stormwater plans have not been reviewed and approved, a final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to

demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

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

Exhibit B:
Conditions of Approval – SUB322-0001 – 100 S Garfield Street Subdivision Preliminary Plat

A. The applicant is conditioned to complete construction (i.e. required public improvements, utilities, streets) for the subdivision phase within two years of the preliminary plat approval.

The applicant is conditioned to record the final plat within the subdivision approval period. The applicant must provide the following information for review and approval prior to construction of any improvements:

1. Access easements and maintenance agreements shall be recorded for the shared driveways as part of the final platting process.

2. Construction plans must be submitted for all infrastructure, per the requirements below.

3. Future construction will be reviewed for compliance with all applicable lot and parking coverage requirements during the building permit review process.

General Requirements for the Public Improvement Permit:
The Public Works Design and Construction Standards require that the applicant submit engineered construction plans for review and approval of all utilities, public street improvements, and any new public streets being constructed. Please note that additional Engineering Department plan review application and fees apply for review of plans. Submit any required easements for review and approval and record approved easements. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved and all necessary permits have been obtained.

a. Public utility infrastructure improvements not limited to street improvements, public walkways, water, wastewater, and stormwater will require permits from partner agencies to authorize different work tasks. All other agency permitting will be required prior to the City of Newberg issuing a Public Improvement Permit.

B. The applicant must provide the following information for review and approval prior to construction of any improvements:

1. **Final Plat Name:**
   - **a.** A plat name not already recorded, and meeting ORS Chapter 92 will be required during the final plat review.

2. **Private Common Areas:**
   - **a.** Tract A and Tract B maintenance agreements will need to be recorded and accompany future development submittals.

3. **State Permits:**

a. The applicant is to provide copies of any State and/or Federal permits related to the wetland and onsite stream and show compliance with any State and/or Federal permits or provide documentation from State and/or Federal agencies that wetland/waters of the state related permits are not required, prior to issuance of permits from the City of Newberg.

4. **Stream Corridor Mitigation:**
   a. If trees over six inches in diameter, as measured at breast height are to be removed, they shall be replaced at a ratio of three new trees for every one removed. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any caliper may be used to further enhance the mitigation site**.**

5. **Easements:**
   a. Both access easements will need to be recorded with Yamhill County as part of this plat, including a maintenance agreement.

6. **Street Trees**
   a. Street trees along the cul-de-sac and connecting street will need to be from the approved street trees species list. The applicant will also need to ensure the planter strip contains grass, shrubs, and ground cover per NMC 15.420.010 required minimum standards for landscaping. The street trees will need to be planted prior to occupancy of Lots 5, 6, 9, 10, 11, and 12. Final street tree locations will be determined through the infrastructure permitting process and an ownership and maintenance agreement shall be signed and recorded on the final plat concerning the responsibility of the street trees. If the landscaping cannot be completed prior to issuance of occupancy the applicant may place a security on file per NMC 15.420.010(C).

7. **Underground Utilities:**
   a. Final plans showing existing utilities within the property and project limits undergrounded and new utilities installed underground will be required with permit applications. Undergrounding of existing overhead utility lines might require work outside of the project work limits shown on the preliminary plans.

8. **Public Improvements:**
   a. Final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

9. **Water:**
   a. Final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter. Public improvements are to be completed prior to applying for the final plat and building permits.

10. Wastewater:

a. Final plans for the proposed wastewater line meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

11. Stormwater:

a. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

b. As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

c. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

12. Utility Easements:

a. Final plans showing needed utility easements will be required as part of the public works improvement permit application.

13. Public Improvement Permits:

a. Any required public improvement permit(s) for this project must be submitted, approved and the improvements constructed prior to applying for the final plat and building permits.

14. Streets and Cul-de-sacs:

a. Final street improvement plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. Public improvements are to be completed prior to applying for the final plat and building permits.

b. Final plans showing the proposed street extension as a Local Residential street with no parking on both sides of the street, or with the cul-de-sac revised to consist of a minimum diameter of 96-feet curb to curb within a 111-foot minimum diameter right-of-way, shall be submitted as part of the public improvement permit. A 111-foot minimum diameter right-of-way is needed to accommodate 96-feet of curb to curb pavement, 0.5-foot curbs, a 6-foot-wide curb tight sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line in

accordance with City of Newberg Public Works Design and Construction Standard. A minimum right-of-way diameter of 120-feet would be needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 5.5-foot-wide planter strip, a 5-foot-wide sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line.

c. Final plans indicating a maximum of 18 single family dwellings shall be submitted with permit applications.

d. Final plans addressing the requirements of Section 15.505.030(L), including the descriptions for no parking, mountable curbs, curbside sidewalks, and sprinkler systems for every building that will be part of this development, or with the cul-de-sac revised to consist of a minimum diameter of 96-feet curb to curb within a 111-foot minimum diameter right-of-way, shall be submitted as part of the public improvement permit. The 111-foot minimum diameter right-of-way is needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 6-foot-wide curb tight sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line in accordance with City of Newberg Public Works Design and Construction Standard. A minimum right-of-way diameter of 120-feet would be needed to accommodate 96-feet of curb-to-curb pavement, 0.5-foot curbs, a 5.5-foot-wide planter strip, a 5-foot-wide sidewalk and 1-foot between the back of sidewalk and the right-of-way/ property line.

e. Prior to issuance of building permits, building plans to be submitted showing fire sprinkler systems for every building that will be part of this development.

f. The applicant will be required to coordinate with the City Planning Division in selecting the name for the street and to adhere to typical naming standards for cul-de-sacs.

15. Shared Driveways:

a. Access and utility easements and maintenance agreements for both shared driveways shall be recorded as part of the final plat approval.

16. Street Lights:

a. The applicant will be required to show via a lighting analysis that the proposed street lighting meets City standards or provide additional Option A street lighting that is compliant with the City's Public Works Design and Construction Standards.

17. Water Improvements:

a. Final water line plans meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. New water mains are to be a minimum of 8-inches in diameter.

b. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

c. Public improvements are to be completed prior to applying for the final plat and building permits.

d. Results of fire flow tests performed by a private contractor hired by the applicant shall be submitted as part of permit applications in accordance with requirements of the fire marshal.

18. Wastewater Improvements:

a. Final plans for the proposed wastewater line with individual service laterals to each lot meeting the requirements within the Newberg Public Works Design and Construction Standards will need to be submitted for approval as part of the public improvement permit application. The public main will need to terminate at a manhole within the public street right-of-way. Private service laterals are to be extended from the public main to each lot, and to each dwelling if under separate ownership. Private "party" wastewater service lines are not allowed.

b. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

c. Any existing septic system is to be decommissioned according to Yamhill County standards. Documentation of the septic system abandonment or removal in accordance with Yamhill County standards shall be submitted with the public improvement permit application.

d. Public improvements are to be completed prior to applying for the final plat and building permits.

19. Public and Private Utility Easements:

a. The applicant will be required to submit recorded documents that include necessary utility easements meeting the specifications and standards of the City's Public Works Design and Construction Standards, this includes but not necessarily limited to:

i. 10-foot public utility easements along all public street frontages of the proposed lots

ii. 25-foot access and utility easement for the water and sewer lines in both shared driveways

iii. Maintain and protect all existing utilities easements encumbered on the property.

20. Stormwater System Standards:

a. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

b. As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private

stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

c. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

d. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

21. Stormwater and Erosion Control:

a. The applicant will be required to obtain and submit a DEQ 1200-C permit prior to issuance of a public improvement permit.

b. The applicant will need to submit a final stormwater report and construction plans meeting the City's Public Works Design and Construction Standards and NMC 13.25 Stormwater Management requirements and obtain a Public Improvement Permit. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

c. The final stormwater report and plans shall address erosion control downstream of the proposed stormwater outfall within the stream corridor.

d. A final stormwater management report and construction plans meeting the City's Public Works Design and Construction Standards will be required as part of the public works improvement permit application. The applicant will need to demonstrate compliance with the facility selection hierarchy described in section 4.6.8 of the Public Works Design and Construction Standards.

e. As shown on the preliminary plans the entire proposed stormwater system would need to be private as public stormwater is to be separated from the management of private stormwater runoff. The responsibility for maintenance of private stormwater facilities or stormwater systems shall be the responsibility of a Homeowner's Association (HOA) or adjacent property owners.

f. A private stormwater facility maintenance agreement shall be required for any private stormwater facility or stormwater system. The private stormwater facility maintenance agreement shall be recorded as part of the final plat approval.

g. Utility designs and alignments will be reviewed as part of the Public Improvement Permit.

C. The applicant must complete the following <u>prior</u> to final plat approval.

1. **Substantially Complete the Construction Improvements:** Prior to final plat approval, the applicant must substantially complete the construction improvements

and secure for inspection with the Engineering Division (503-537-1273). In addition to those items listed below, the inspector will also be looking for completion of items such as sidewalks, street signs, streetlights, and fire hydrants.

ORS455.174 defines substantial completion as the completion of the:

a. Water supply system;
b. Fire hydrant system;
c. Sewage disposal system;
d. Storm water drainage system;
e. Curbs;
f. Demarcating of street signs acceptable for emergency responders; and
g. Roads necessary for access by emergency vehicles.

D. Final plat submission requirements and approval criteria: In accordance with NDC final plans showing utility easements will be required prior to submitting for building permits.15.235.070, final plats require review and approval by the director prior to recording with Yamhill County. The final plat submission requirements, approval criteria, and procedure are as follows:

1. Submission Requirements:

The applicant shall submit the final plat within two years, or as otherwise provided for in NMC 15.235.030. The format of the plat shall conform to ORS Chapter 92. The final plat application shall include the following items:

a. One original and one identical copy of the final plat for signature. The plat copies shall be printed on mylar, and must meet the requirements of the county recorder and county surveyor. The plat must contain a signature block for approval by the city recorder and community development director, in addition to other required signature blocks for county approval. Preliminary paper copies of the plat are acceptable for review at the time of final plat application.

b. Written response to any conditions of approval assigned to the land division.

c. A title report for the property, current within six months of the final plat application date.

d. Copies of any required dedications, easements, or other documents.

e. Copies of all homeowner's agreements, codes, covenants, and restrictions, or other bylaws, as applicable. This shall include documentation of the formation of a homeowner's association, including but not limited to a draft homeowner's association agreement regarding the maintenance of planter strips adjacent to the rear yard of proposed through lots.

f. Copies of any required maintenance agreements for common property.

g. A bond, as approved by the city engineer, for public infrastructure improvements, if the improvements are not substantially complete prior to the final plat.

h. Any other item required by the city to meet the conditions of approval assigned to the land division.

2. Approval Process and Criteria. By means of a Type I procedure, the director shall review and approve, or deny, the final plat application based on findings of compliance or noncompliance with the preliminary plat conditions of approval.

E. Filing and recording: In accordance with NMC 15.235.080, a new lot is not a legal lot for purposes of ownership (title), sale, lease, or development/land use until a final plat is recorded for the subdivision or partition containing the lot. The final plat filing and recording requirements are as follows:

1. Filing Plat with County. Within 60 days of the city approval of the final plat, the applicant shall submit the final plat to Yamhill County for signatures of county officials as required by ORS Chapter 92.

2. Proof of Recording. Upon final recording with the county, the applicant shall submit to the city a paper copy of all sheets of the recorded final plat. This shall occur prior to the issuance of building permits for the newly created lots.

3. Prerequisites to Recording the Plat.

   a. No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed on the tax roll have been paid in the manner provided by ORS Chapter 92;

   b. No plat shall be recorded until the county surveyor approves it in the manner provided by ORS Chapter 92.

Development Notes:

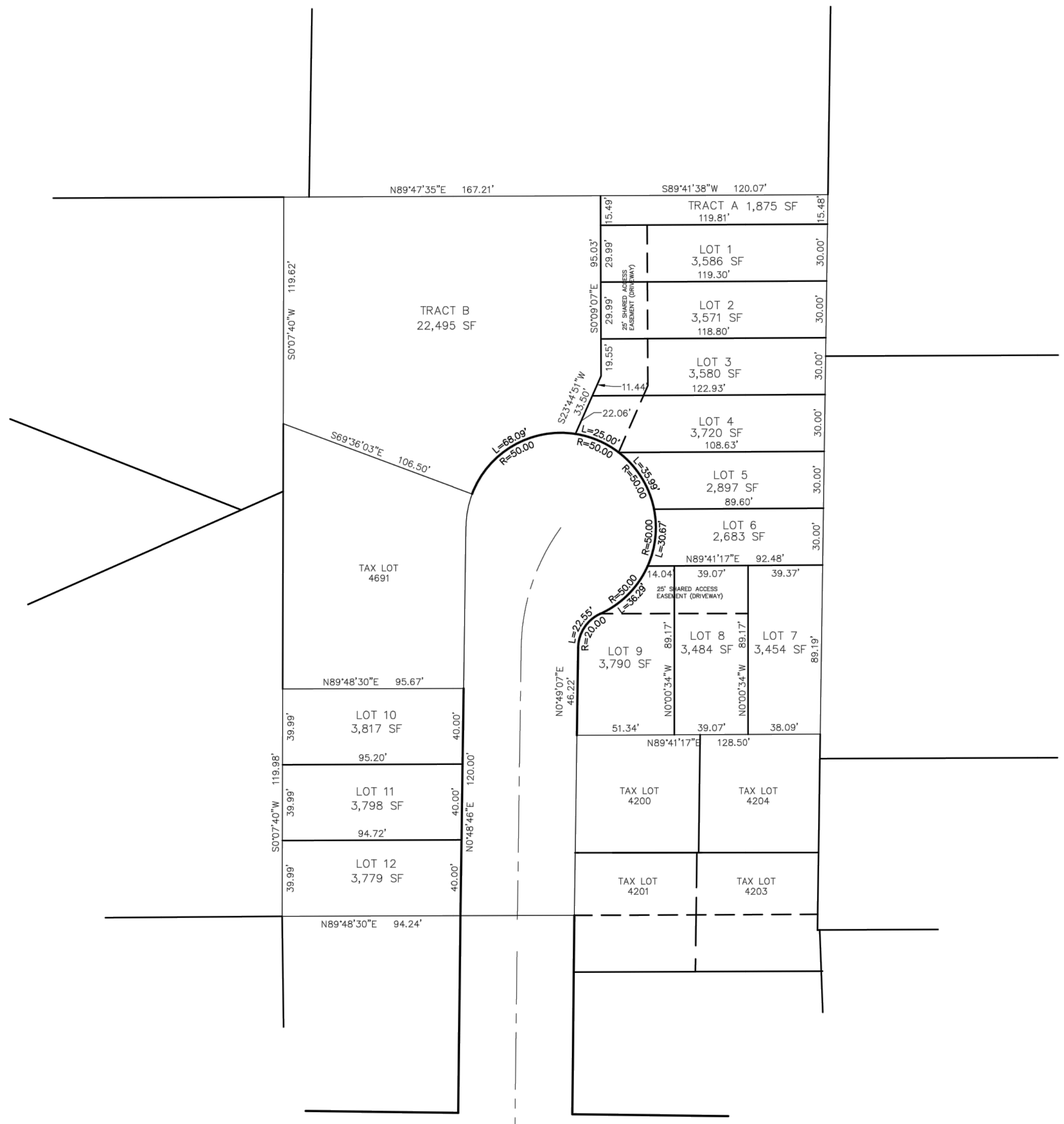
1. **Postal Service:** The applicant shall submit plans to the Newberg Postmaster for approval of proposed mailbox delivery locations. Contact the Newberg Post Office for assistance at 503-554-8014.

2. **PGE:** PGE can provide electrical service to the project under terms of the current tariff which will involve developer expense and easements. Contact the Service & Design Supervisor, PGE, at 503-463-4348.

3. **Ziply:** The developer must coordinate trench/conduit requirements with Ziply. Contact the Engineering Division, Ziply, at 541-269-3375.

4. **Addresses:** The Planning Division will assign address for the new subdivision. Planning Division staff will send out notice of the new address after they receive a recorded copy of the final subdivision plat.

Exhibit C:
Preliminary Plat



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
SEPTEMBER 22, 2022
DRAWN: JMR CHECKED: DMR
SCALE 1"=40' ACCOUNT #500-1106

Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY PLAT
12-LOT SUBDIVISION

Attachment 1:
Application

TYPE III APPLICATION (QUASI-JUDICIAL REVIEW)

File #: SUB322-0001

TYPES – PLEASE CHECK ONE:

- ☐ **Annexation**
- ☐ **Comprehensive Plan Amendment (site specific)**
- ☐ **Zoning Amendment (site specific)**
- ☐ **Historic Landmark Modification/alteration**
- ☐ **Conditional Use Permit**
- ☐ **Type III Major Modification**
- ☐ **Planned Unit Development**
- ☒ **Other: (Explain)** Subdivision in stream corridor

APPLICANT INFORMATION:

APPLICANT: Scott Holden
ADDRESS: 100 S. Garfield St., Newberg, OR 97132
EMAIL ADDRESS: Scottholden2007@outlook.com
PHONE: 503-502-8006 MOBILE: _____ FAX: _____
OWNER (if different from above): _____ PHONE: _____
ADDRESS: _____
ENGINEER/SURVEYOR: Kelli Grover PHONE: 503-668-3737
ADDRESS: 359 E Historic Columbia River Hwy, Troutdale, OR 97060

GENERAL INFORMATION:

PROJECT NAME: Garfield St. Partition PROJECT LOCATION: 100 S Garfield St., Newberg, OR 97132
PROJECT DESCRIPTION/USE: Create a 12 lot subdivision with new residences on each property.
MAP/TAX LOT NO. (i.e.3200AB-400): R3219DB 04690 ZONE: R-2 SITE SIZE: 1.95 SQ. FT. ☐ ACRE ☐
COMP PLAN DESIGNATION: _____ TOPOGRAPHY: _____
CURRENT USE: The lot currently contains a duplex
SURROUNDING USES:
NORTH: Unoccupied/Stream SOUTH: Residential
EAST: Business WEST: Residential/Stream

SPECIFIC PROJECT CRITERIA AND REQUIREMENTS ARE ATTACHED

General Checklist: ☐ Fees ☐ Public Notice Information ☐ Current Title Report ☐ Written Criteria Response ☐ Owner Signature

For detailed checklists, applicable criteria for the written criteria response, and number of copies per application type, turn to:

Annexation ……p. 15
Comprehensive Plan / Zoning Map Amendment (site specific) ……..p. 19
Conditional Use Permit ……p. 21
Historic Landmark Modification/Alteration ……p. 23
Planned Unit Development ……p.26

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.

Scott Holden — Digitally signed by Scott Holden Date: 2022.09.16 12:22:21 -07'00'
Applicant Signature Date

Scott Holden — Digitally signed by Scott Holden Date: 2022.09.16 12:22:35 -07'00'
Owner Signature Date

Scott Holden
Print Name

Scott Holden
Print Name

Type III Application Narrative

Project Name: **Garfield St. Newberg Partition**

Site Address: 100 S Garfield St., Newberg, OR 97132

Prepared By:

359 E. Historic Columbia River Highway
Troutdale, OR 97060
503.668.3737- fax 503.668.3788

Table of Contents

I Executive Summary

II Site Description/ Setting

III Applicable Review Criteria

IV Conclusions

I. Executive Summary

Location:
100 S Garfield St., Newberg, OR

Zoning:
R-2 Medium Density Residential

Site Size:
±1.95 acres

Legal Description:
3.2.19DB Tax Lot 4690

Applicant:
Scott Holden
100 S Garfield St., Newberg, OR 97132
Scottholden2007@outlook.com

Applicants Consultant:
Firwood Design Group LLC
359 E Historic Columbia River Hwy
Troutdale, OR 97060

Contact: Kelli Grover
Email: kg@firwooddesign.com
Phone: 503-668-3737

The applicant requests approval from the City of Newberg to divide the subject property into 12 lots with duplex residences. A preliminary plat and preliminary civil plans are provided that illustrate the proposed lot configurations, driveway approaches, utilities, stormwater management features, etc. The proposed improvements include extending S. Garfield Street with a full width section for 240 feet +/- and terminating in a modified cul-de-sac.

This written narrative includes responses to the approval criteria demonstrating the applicant's compliance with the applicable criteria. The narrative is supported by additional information provided with this application including preliminary plans, supporting studies and documentation. The information presented herein provides the City with the supporting documentation in request for approval of the application.

II. Site Description/ Setting :

The subject site for this proposed subdivision is located at 100 S Garfield St., Newberg, OR 97132. It is tax lot 4690 on assessors map T3.R2.Sectio19 DB and ±1.95 acres in total size. The lot is located north of E 8th St., east of S Garfield St., south and west of E 7th St.

The property includes an existing duplex, unpaved road and driveway, open grass area, mature trees, and a stream. There are mature trees and stream to the north, a residence directly to the west of the property, a business to the east, and residential properties to the south.

III. Applicable Review Criteria:

Below is a list of the criteria addressed followed by detailed sections.

NMC 15.100
NMC 15.235
NMC 15.342
NMC 15 400
NMC 15 410
NMC 15 420
NMC 15 500

Chapter 15.100 Land Use Processes and Procedures

15.100.050 Type III procedure – Quasi-judicial hearing

A. All Type III decisions shall be heard and decided by the planning commission. The planning commission's decision shall be final unless the decision is appealed or the decision is a recommendation to the city council.

B. Type III actions include, but are not limited to:

1. An appeal of a Type I or Type II decision: This action of the planning commission is a final decision unless appealed to the city council.

2. Conditional use permits: This action is a final decision unless appealed.

3. Planned unit developments: This action is a final decision unless appealed.

4. Substantial change to the exterior appearance of a historic landmark: This action is final unless appealed.

5. Establishment of a historic landmark: This is a final decision by the planning commission, unless appealed.

6. Establishment of a historic landmark subdistrict: This is a recommendation to the city council.

7. Comprehensive plan map amendments: This action is a recommendation to the city council.

8. Zoning map amendments and designation of subdistricts: This action is a recommendation to the city council.

9. Annexation: This action is a recommendation to the city council.

10. Subdivisions with certain conditions requiring them to be processed using the Type III process, pursuant to NMC 15.235.030(A).

C. Planning Commission Decisions and Recommendation Actions.

1. Planning Commission Decision. Development actions shall be decided by the planning commission for those land use actions that require a Type III procedure and do not require the adoption of an ordinance. The decision shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq. A Type III decision may be appealed to the city council by a Type III affected party in accordance with NMC 15.100.160 et seq.

2. Planning Commission Recommendation to City Council. Land use actions that would require the adoption of an ordinance shall be referred to the city council by the planning commission together with the record and a recommendation. The recommendation shall be made after public notice and a public hearing is held in accordance with the requirements of NMC 15.100.090 et seq.

D. City Council Action. If a recommendation to the city council is required, the matter shall be reviewed by the city council as a new hearing. The final decision on these actions is made by the city council.

E. The applicant shall provide notice pursuant to NMC 15.100.200 et seq.

F. The hearing body may attach certain conditions necessary to ensure compliance with this code.

G. If the application is approved, the director shall issue a building permit when the applicant has complied with all of the conditions and other requirements of this code.

H. If a Type III application is denied, or if the applicant wishes to make substantive modifications to an approved application, the applicant may modify the application after the planning commission hearing and request a new planning commission hearing to consider the application. An application so modified shall be considered a new application for purposes of the 120-day time limit for processing applications in accordance with NMC 15.100.100 and state statutes. The applicant shall acknowledge in writing that this is a new application for purposes of the 120-day rule. The city

council shall establish a fee for such a reconsideration or modification by resolution. Application of this provision is limited to three times during a continuous calendar year.

Response: This project falls under a Type III procedure due to the stream corridor overlay.

15.100.210 Mailed notice

B. Type II and Type III Actions. The applicant shall provide public notice to:

1. The owner of the site for which the application is made; and

2. Owners of property within 500 feet of the entire site for which the application is made. The list shall be compiled from the most recent property tax assessment roll. For purposes of review, this requirement shall be deemed met when the applicant can provide an affidavit or other certification that such notice was deposited in the mail or personally delivered.

3. To the owner of a public use airport, subject to the provisions ofORS 215.416 or 227.175.

C. The director may request that the applicant provide notice to people other than those required in this section if the director believes they are affected or otherwise represent an interest that may be affected by the proposed development. This includes, but is not limited to, neighborhood associations, other governmental agencies, or other parties the director believes may be affected by the decision.

Response: The applicant will mail notices upon notification of planning commission hearing date.

D. The director shall provide the applicant with the following information regarding the mailing of notice:

1. The latest date by which the notice must be mailed;

2. An affidavit of mailing (to be signed and returned) certifying that the notice was mailed, acknowledging that a failure to mail the notice in a timely manner constitutes an agreement by the applicant to defer the 120-day process limit and acknowledging that failure to mail will result in the automatic postponement of a decision on the application; and

3. A sample notice.

Response: Applicant acknowledges this process and will adhere to the requirements.

E. The notice of a Type II and Type III development application shall be reasonably calculated to give actual notice and shall:

1. Set forth the street address or other easily understood geographical reference to the subject property;

2. List, by commonly used citation, the applicable criteria for the decision;

3. Include the name and phone number of a local government contact person, the telephone number where additional information may be obtained and where information may be examined;

4. Explain the nature of the application and the proposed use or uses which could be authorized;

5. State that a copy of the application, all documents and evidence relied upon by the applicant and applicable criteria are available for inspection at no cost and will be provided at a reasonable cost.

Response: Not applicable

F. Prior to mailing or posting any notice required by this code, the applicant shall submit a copy of the notice to the director.

[...]

H. The applicant shall mail the notice for Type III actions at least 20 days before the first new hearing, or if two or more new hearings are allowed, 10 days before the first new hearing. The applicant shall file with the director an affidavit of mailing as identified in subsection (D) of this section within two business days after notice is mailed.

Response: Applicant acknowledges this process and will adhere to the requirements

I. All public notices shall be deemed to have been provided or received upon the date the notice is deposited in the mail or personally delivered, whichever occurs first. The failure of a property owner to receive notice shall not invalidate an action if a good faith attempt was made to notify all persons entitled to notice. An affidavit of mailing issued by the person conducting the mailing shall be conclusive evidence of a good faith attempt to contact all persons listed in the affidavit.

J. Failure to mail the notice and affirm that the mailing was completed in conformance with the code shall result in:

1. Postponement of a decision until the mailing requirements have been met; or

2. Postponement of the hearing to the next regularly scheduled meeting or to such other meeting as may be available for the hearing; or

3. The entire process being invalidated; or

4. Denial of the application.

Response: Applicant acknowledges this process and will adhere to the requirements

15.100.230 Additional notice procedures for Type III quasi-judicial hearing.

In addition to the requirements of NMC 15.100.210, mailed notice for Type III development actions shall also contain the following:

A. State that an issue which may be the basis for an appeal to the Land Use Board of Appeals shall be raised not later than the close of the record at or following the final new hearing on the proposal before the city. Such issues shall be raised with sufficient specificity so as to afford the hearing body and the parties an adequate opportunity to respond to each issue;

B. State the date, time and location of the hearing;

C. State that the failure of an issue to be raised in a hearing, in person or by letter, or failure to provide sufficient specificity to afford the hearing body an opportunity to respond to the issue may preclude appeal to the Land Use Board of Appeals on that issue;

D. State that a copy of the staff report will be available for inspection at no cost at least seven calendar days prior to the hearing and will be provided at reasonable cost;

E. Include a general explanation of the requirements for submission of testimony and the procedure for conduct of hearings.

Response: Applicant acknowledges this process and will adhere to the requirements

Response:

Response:

15.100.270 Procedure for published notice on Type III and Type IV procedures.

A. Notice shall be provided within a newspaper of general circulation within the city at least 10 days prior to the first public hearing on the action

B. The notice shall reasonably describe:

1. Type III Proceedings. The proposed development permit request, location, file number, the name and phone number of a local government contact person and the location where information may be examined.

[...]

C. The notice shall include a statement that all interested persons may appear and provide testimony and that only those persons who participate either orally or in writing in the hearing proceedings leading to the adoption of the action may appeal the decision.

D. The notice shall state the place, date and time of the hearing.

E. See NMC 15.100.240 for Type III notice for annexations.

Response: Applicant acknowledges this process and will adhere to the requirements

Chapter 15.235 Land Divisions

15.235.020 General requirements.

A. Subdivision and Partition Approval through a Two-Step Process. Applications for subdivision or partition approval shall be processed by means of a preliminary plat evaluation and a final plat evaluation, according to the following two steps:

1. The preliminary plat must be approved before the final plat can be submitted for approval consideration; and

2. The final plat must demonstrate compliance with all conditions of approval of the preliminary plat.

Response: Applicant acknowledges this process and will adhere to the requirements

[...]

C. Compliance with ORS Chapter 92. All subdivision and partition proposals shall conform to state regulations in ORS Chapter 92, Subdivisions and Partitions.

D. Adequate Utilities. All lots created through land division shall have adequate public utilities and facilities such as streets, water, wastewater, gas, and electrical systems, pursuant to Chapters 15.430 and 15.505 NMC.

E. Adequate Drainage. All subdivision and partition proposals shall have adequate surface water drainage facilities that reduce exposure to flood damage and improve water quality. Water quality or quantity control improvements may be required, pursuant to NMC 15.505.050.

F. Adequate Access. All lots created or reconfigured shall have adequate vehicle access and parking, as may be required, pursuant to Chapter 15.440 NMC and NMC 15.505.030.

Response:

15.235.050 Preliminary plat approval criteria.

A. Approval Criteria. By means of a Type II procedure for a partition, or a Type II or III procedure for a subdivision per NMC 15.235.030(A), the applicable review body shall approve, approve with conditions, or deny an application for a preliminary plat. The decision shall be based on findings of compliance with all of the following approval criteria:

1. The land division application shall conform to the requirements of this chapter;

2. All proposed lots, blocks, and proposed land uses shall conform to the applicable provisions of NMC Division 15.400, Development Standards;

Response: SEE DETAILED 15.400 CODE RESPONSES BELOW

3. Access to individual lots, and public improvements necessary to serve the development, including but not limited to water, wastewater, stormwater, and streets, shall conform to NMC Division 15.500, Public Improvement Standards;

Response: SEE DETAILED 15.500 CODE RESPONSES BELOW

4. The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;

Response: A Plat name has not been decided upon at this time but will be provided for approval prior to final plat review.

5. The proposed streets, utilities, and stormwater facilities are adequate to serve the proposed development at adopted level of service standards, conform to city of Newberg adopted master plans and applicable Newberg public works design and construction standards, and allow for transitions to existing and potential future development on adjacent lands. The preliminary plat shall identify all proposed public improvements and dedications;

Response: The proposed streets, utilities and stormwater facilities are adequate and meet adopted level of service standards.

6. All proposed private common areas and improvements, if any, are identified on the preliminary plat and maintenance of such areas is assured through the appropriate legal instrument;

Response: Proposed common areas such as private access areas will have a maintenance agreement assured through recording and plat reference.

7. Evidence that any required state and federal permits, as applicable, have been obtained or can reasonably be obtained prior to development; and

Response: The applicant is not aware of any state or federal permits that apply to this application.

8. Evidence that improvements or conditions required by the city, road authority, Yamhill County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met.

Response: All required approvals and permits from City or other agency or jurisdiction will be secured and approvals will be provided to the City as necessary.

15.235.070 Final plat submission requirements and approval criteria.

Final plats require review and approval by the director prior to recording with Yamhill County. The final plat submission requirements, approval criteria, and procedure are as follows:

A. Submission Requirements. The applicant shall submit the final plat within two years, or as otherwise provided for in NMC 15.235.030. The format of the plat shall conform to ORS Chapter 92. The final plat application shall include the following items:

1. One original and one identical copy of the final plat for signature. The plat copies shall be printed on mylar, and must meet the requirements of the county recorder and county surveyor. The plat must contain a signature block for approval by the city recorder and community development director, in addition to other required signature blocks for county approval. Preliminary paper copies of the plat are acceptable for review at the time of final plat application.

2. Written response to any conditions of approval assigned to the land division.

3. A title report for the property, current within six months of the final plat application date.

4. Copies of any required dedications, easements, or other documents.

5. Copies of all homeowner's agreements, codes, covenants, and restrictions, or other bylaws, as applicable. This shall include documentation of the formation of a homeowner's association, including but not limited to a draft homeowner's association agreement regarding the maintenance of planter strips adjacent to the rear yard of proposed through lots.

6. Copies of any required maintenance agreements for common property.

7. A bond, as approved by the city engineer, for public infrastructure improvements, if the improvements are not substantially complete prior to the final plat.

8. Any other item required by the city to meet the conditions of approval assigned to the land division.

Response: A final plat conforming to the aforementioned standards will be submitted for approval.

Chapter 15.342 STREAM CORRIDOR OVERLAY (SC) SUBDISTRICT
15.342.090 Mitigation requirements for Type II activities.

The following mitigation requirements apply to Type II activities. The plans required pursuant to NMC 15.342.080 shall be submitted indicating the following mitigation requirements will be met.

A. Disturbed areas, other than authorized improvements, shall be regraded and contoured to appear natural. All fill material shall be native soil. Native

soil may include soil associations commonly found within the vicinity, as identified from USDA Soil Conservation Service, Soil Survey of Yamhill Area, Oregon.

B. Replanting shall be required using a combination of trees, shrubs and grass. Species shall be selected from the Newberg native plant list. Planting shall be as follows:

1. At least eight species of plants shall be used.

2. At least two species must be trees and two species must be shrubs.

3. No more than 50 percent of any seed mix used can be grass.

4. A minimum of one tree and three shrubs shall be used for every 500 square feet of planting area.

5. Areas to be replanted must be completed at the time of final inspection or completion of the work, except as otherwise allowed by this code.

6. Existing vegetation that can be saved and replanted is encouraged, although not required.

RESPONSE: All disturbed areas for construction of proposed stormwater facilities will be replanted according to this criteria. See sheet 6, Mitigation and Replanting Plan in the preliminary plan set.

C. Removed trees over six inches in diameter, as measured at breast height, shall be replaced as follows:

1. Trees from six to 18 inches in diameter shall be replaced with a minimum of three new trees for every tree removed.

2. Trees over 18 inches but less than 30 inches shall be replaced with a minimum of five trees for every tree removed.

3. Trees over 30 inches shall be replaced with a minimum of eight trees for every tree removed.

4. All trees replaced pursuant to this section shall have an average caliper measurement of a minimum of one inch. Additional trees of any size caliper may be used to further enhance the mitigation site.

RESPONSE: The applicant will adhere to this criteria.

D. All disturbed areas, other than authorized improvements, shall be replanted to achieve 90 percent cover in one year. The director may require a bond or other form of security instrument to insure completion of the restoration plan. The director shall authorize the release of the bond or other security instrument when, after one year, the restoration site has achieved the purposes and standards of this section.

RESPONSE: See sheet 6, Mitigation and Replanting Plan in the preliminary plan set.

E. All disturbed areas shall be protected with erosion control devices prior to construction activity. The erosion control devices shall remain in place until 90 percent cover is achieved.

RESPONSE: The applicant will adhere to this criteria.

Division 15.400 Development Standards

Chapter 15.405 LOT REQUIREMENTS

15.405.010 Lot area – Lot areas per dwelling unit.

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

1. In the R-1, R-2, R-3, R-P and AR districts, the following minimum lot area standards apply:

Zone	Minimum lot area for single family	Minimum lot area for duplex dwelling	Minimum lot area for triplex dwelling	Minimum lot area for quadplex dwelling	Minimum lot area for townhouse	Minimum lot area for cottage cluster	Minimum lot area per dwelling unit for multifamily
R-1	5,000 SF	5,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	Per conditional use review
R-2	3,000 SF	3,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	3,000 SF

Zone	Minimum lot area for single family	Minimum lot area for duplex dwelling	Minimum lot area for triplex dwelling	Minimum lot area for quadplex dwelling	Minimum lot area for townhouse	Minimum lot area for cottage cluster	Minimum lot area per dwelling unit for multifamily
R-3	2,500 SF	2,500 SF	4,500 SF	6,000 SF	1,500 SF	6,000 SF	1,500 SF
R-P	3,000 SF	3,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	3,000 SF
AR	5,000 SF	5,000 SF	5,000 SF	7,000 SF	1,500 SF	7,000 SF	—

[...]

B. Maximum Lot or Development Site Area per Dwelling Unit.

[...]

2. In the R-2 and R-P districts, the average size of lots in a subdivision intended for single-family development shall not exceed 5,000 square feet.

3. In the R-2, AR and R-P districts, lots or development sites in excess of 15,000 square feet used for multiple single-family, duplex, triplex, quadplex, multifamily dwellings or cottage cluster projects shall be developed at a minimum of one dwelling per 5,000 square feet lot area.

[...]

C. In calculating lot area for this section, lot area does not include land within public or private streets. In calculating lot area for maximum lot area/minimum density requirements, lot area does not include land within stream corridors, land reserved for public parks or open spaces, commons buildings, land for preservation of natural, scenic, or historic resources, land on slopes exceeding 15 percent or for avoidance of identified natural hazards, land in shared access easements, public walkways, or entirely used for utilities, land held in reserve in accordance with a future development plan, or land for uses not appurtenant to the residence.

D. Lot size averaging is allowed for any subdivision. Some lots may be under the minimum lot size required in the zone where the subdivision is located, as long as the average size of all lots is at least the minimum lot size.

Response: The average lot size for the twelve lot subdivision is 3513.25, therefore this criteria is met.

15.405.030 Lot dimensions and frontage.

A. Width. Widths of lots shall conform to the standards of this code.

B. Depth to Width Ratio. Each lot and parcel shall have an average depth between the front and rear lines of not more than two and one-half times the average width between the side lines. Depths of lots shall conform to the standards of this code. Development

of lots under 15,000 square feet are exempt from the lot depth to width ratio requirement.

Response: The proposed lots are under 15,000 square feet therefore this criteria does not apply.

C. Area. Lot sizes shall conform to standards set forth in this code. Lot area calculations shall not include area contained in public or private streets as defined by this code.

D. Frontage.

1. No lot or development site shall have less than the following lot frontage standards:

a. Each lot or development site shall have either frontage on a public street for a distance of at least 25 feet or have access to a public street through an easement that is at least 25 feet wide. No new private streets, as defined in NMC 15.05.030, shall be created to provide frontage or access except as allowed by NMC 15.240.020(L)(2).

b. Each lot in R-2 zone shall have a minimum width of 25 feet at the front building line and R-3 zone shall have a minimum width of 30 feet at the front building line, except that duplex, triplex, quadplex and cottage cluster project lots in the R-3 zone shall have a minimum width of 25 feet at the front building line.

[...]

2. The above standards apply with the following exceptions:

[...]

b. Legally created lots of record in existence prior to the effective date of the ordinance codified in this code.

c. Lots or development sites which, as a process of their creation, were approved with sub-standard widths in accordance with provisions of this code.

d. Existing private streets may not be used for new dwelling units, except private streets that were created prior to March 1, 1999, including paving to fire access roads standards and installation of necessary utilities, and private streets allowed in the airport residential and airport industrial districts. However, existing single-family detached dwellings on existing private streets may be converted to duplex, triplex, or quadplex dwellings.

Response: Each lot has a minimum frontage either on a public street or a private access.

15.405.040 Lot coverage and parking coverage requirements.

A. Purpose. The lot coverage and parking coverage requirements below are intended to:

1. Limit the amount of impervious surface and storm drain runoff on residential lots.

2. Provide open space and recreational space on the same lot for occupants of that lot.

3. Limit the bulk of residential development to that appropriate in the applicable zone.

B. Residential uses in residential zones shall meet the following maximum lot coverage and parking coverage standards; however, cottage cluster projects shall be exempt from the standards. See the definitions in NMC 15.05.030 and Appendix A, Figure 4.

1. Maximum Lot Coverage.

[...]

b. R-2 and RP: 60 percent.

[...]

2. Maximum Parking Coverage. R-1, R-2, R-3, and RP: 30 percent.

3. Combined Maximum Lot and Parking Coverage.

[...]

b. R-2, R-3, RP and townhouse dwellings in R-1: 70 percent.

[...]

Response: The future structures will adhere to the lot coverage requirements, this criteria can be satisfied through condition.

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.

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.

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.

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.

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.

[...]

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

15.410.020 Front yard setback.

A. Residential (see Appendix A, Figure 10).

1. AR, R-1 and R-2 districts shall have a front yard of not less than 15 feet. Said yard shall be landscaped and maintained.

[...]

3. The entrance to a garage or carport, whether or not attached to a dwelling, shall be set back at least 20 feet from the nearest property line of the street to which access will be provided. However, the foregoing setback requirement shall not apply where the garage or carport will be provided with access to an alley only.

[...]

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

15.410.030 Interior yard setback

A. Residential.

1. All lots or development sites in the AR, R-1, R-2 and R-3 districts shall have interior yards of not less than five feet, except that where a utility easement is recorded adjacent to a side lot line, there shall be a side yard no less than the width of the easement.

[...]

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

Chapter 15.415 BUILDING AND SITE DESIGN STANDARDS

15.415.010 Main buildings and uses as accessory buildings.

A. Hereinafter, any building which is the only building on a lot is a main building.

B. In any residential district except RP, there shall be only one main use per lot or development site; provided, that home occupations shall be allowed where permitted.

C. In any residential district, there shall be no more than two accessory buildings on any lot or development site.

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

15.415.020 Building height limitation.

A. Residential.

[...]

2. In the R-2, AR, and RP districts, no main building shall exceed 35 feet in height.

[...]

4. Accessory buildings in the R-1, R-2, R-3, AR, and RP districts are limited to 16 feet in height, except as follows:

[...]

C. The maximum height of buildings and uses permitted conditionally shall be stated in the conditional use permits.

Response: The future building structure will adhere to this standard, this criteria can be satisfied through condition of approval.

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.

Response: All proposed lots are fronting a public street except lots 1,2&3 which access a public street via a private access easement. This criteria is met.

Response:

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.

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.

Response: The applicant will adhere to this standard, this criteria can be satisfied through condition of approval.

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.

[...]

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.

Response: Off-street parking is provided via one car in each garage and one car in each driveway. This criteria is satisfied.

15.440.030 Parking spaces required.

Use	Minimum Parking Spaces Required
Dwelling, duplex	1 for each dwelling unit
Dwelling, triplex	1 for each dwelling unit, Except that conversion of a detached single-family dwelling to a triplex dwelling shall not be subject to this requirement

Notes:

* "1-E" refers to fraternities, sororities, cooperatives and dormitories that require one parking space for each three occupants for whom sleeping facilities are provided.

** "3.-G(1)" refers to establishments or enterprises of a recreational or an entertainment nature (spectator type, e.g., auditoriums, assembly halls, theaters, stadiums, places of public assembly) that require one parking space for each four seats.

Response: Off-street parking is provided via one car in each garage and one car in each driveway. This criteria is satisfied

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.

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

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

Response: The future building structure will adhere to this standard, this criteria can be satisfied through condition of approval.

Chapter 15.505 PUBLIC IMPROVEMENTS STANDARDS

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.

Response: The proposed project will extend Garfield Street therefore this section applies.

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.

Response: The proposed street improvements conform to the City standards with exception of the cul-de-sac which is constrained by platted right-of-way and the stream overlay. This criteria is satisfied.

[...]

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						
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

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.

Response: The proposed street improvements conform to the Local residential street design standards. This criteria is satisfied.

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.

Response: this criteria is not applicable for a local residential street.

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.

Response: Parking lanes on each side of the street improvements are proposed, this criteria is satisfied.

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

Response: this criteria is not applicable for a local residential street.

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.

Response: The street adheres to the short block criteria and falls under the limited residential street criteria. This standard can be satisfied through condition.

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.

Response: 5ft sidewalks are proposed along the subject parcel frontage, this criteria is satisfied.

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.

Response: 5.5ft planter strips are proposed along the subject parcel frontage, this criteria is satisfied.

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

Response: Not applicable

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.

Response: The street design standards are adhered to, this criteria is satisfied.

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.

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.

Response: A modification to the cul-de-sac standard may be required given topographical site constraints with the stream overlay and the existing right-of-way previously platted. This criteria can be satisfied through condition of approval.

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.

Response: Not applicable.

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

Response: This criterial is adhered to.

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.

Response: 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.

Response: A modification to the cul-de-sac standard may be required given topographical site constraints with the stream overlay and the existing right-of-way previously platted. This criteria can be satisfied through condition of approval.

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.

Response: 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.

Response: 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-2	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.

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.

Response: 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. 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]
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.

[...]

Response: 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.

Response: Only one driveway for each lot is proposed, criterial 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.

Response: 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.

Response: Not applicable7. 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.

Response: Three lots are proposed to be accessed via a proposed access easement at the north end of the cul de sac and two lots are proposed to be accessed via a separate proposed access easement to the east. The proposed access adheres to this standard.

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.

Response: Not applicable, no frontage along an arterial or collector exists.

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.

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.

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.

Response:

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.

Response: 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).

Response: Due to the small lots, cul-de-sac terminus and proximity of utilities only three street trees are proposed. This criteria can be satisfied through condition.

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.

Response: The applicant proposed 3 new street lights in conformance with City of Newberg requirements. This can be satisfied through condition of approval.

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.

Response: 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.

Response: The proposed improvements include connecting to the existing 4-inch water line and extending it to the end of the cul-de-sac street. The proposed Lots 1-4 will be constructed with a sprinkler system and the analysis prepared by Western Fire suppression indicates that the 4-inch pipe has adequate capacity to service the needs of the proposed improvements. This standard can be satisfied through condition of approval.

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.

Response: A public sanitary sewer main line is in Garfield Street and runs through a portion of the subject property through proposed lots 7-9. A new public mainline is proposed to connect into the existing system and extend north to provide lateral service connections to lots 1-6. This standard can be satisfied through condition of approval.

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.

Response: Proposed and existing easements are illustrated on the preliminary plat. This standard can be satisfied through condition of approval.

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.

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.

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.

Response: Public Stormwater runoff from the street is proposed to be managed through vegetated street planters and private stormwater will be managed via an underground detention system.

IV Conclusions:

The proposed application meets the criteria and or can be conditioned to conform to the standards.

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

NOTICE OF CITY COUNCIL HEARING ON A PLANNED SUBDIVISION

A property owner in your neighborhood submitted an application to the City of Newberg for a planned subdivision at 100 S Garfield St. The Newberg City Council will hold a hearing on ***Date of Hearing*** at 7pm at the Newberg Public Safety Building, 401 E. Third Street, Newberg, OR, to evaluate the proposal. You are invited to take part in the City's review of this project by sending in your written comments or testifying before the City Council. For more details about giving comments, please see the back of this sheet.

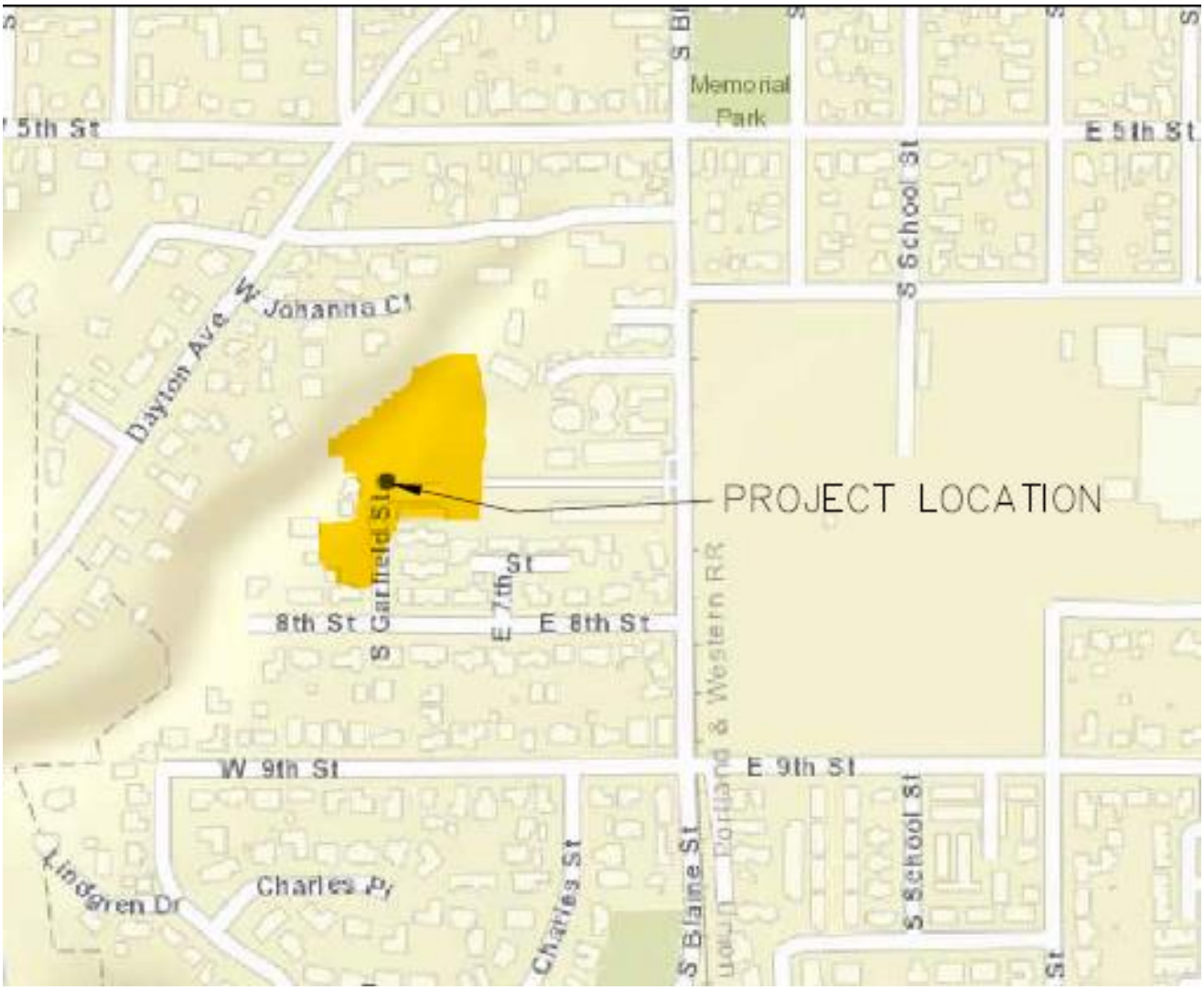
The application would create: ***(Include the reason for application, proposed uses, history of the property or application, allowed uses, etc.)***

APPLICANT: ***Scott Holden***
TELEPHONE: ***503-502-8006***

PROPERTY OWNER: ***Scott Holden***

LOCATION: ***100 S Garfield St., Newberg, OR 97132***

TAX LOT NUMBER: ***R3219DB 04690***



We are mailing you information about this project because you own land within 500 feet of the proposed comprehensive plan zone change. We invite you to participate in the land use hearing scheduled before the City Council. If you wish to participate in the hearing, you may do so in person or be represented by someone else. You also may submit written comments. Oral testimony is typically limited to five minutes per speaker.

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 of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

(City staff will give you the file number for your project at the time of application)

The City Council asks written testimony be submitted to the City Recorder before 5:00 p.m. on the preceding Thursday. Written testimony submitted after that will be brought before the Council on the night of the meeting for consideration and a vote to accept or not accept it into the record.

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. A staff report relating to the proposal will be available for inspection at no cost seven days prior to the public hearing. If you have any questions about the project, you can call the Newberg Community Development Division at 503-537-1240.

Any issue which might be raised in an appeal of this case to the Land Use Board of Appeals (LUBA) must be raised during the public hearing process. 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 a comprehensive plan map and zone change are found in Newberg Development Code Section 15.302.030(A) (3).

Prior to the conclusion of the initial evidentiary hearing, any participant may request an opportunity to present additional evidence, arguments or testimony regarding the application through a continuance or extension of the record. Failure of an issue to be raised in the hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the State Land Use Board of Appeals based on that issue.

The City Council will make a decision on the application at the end of the public hearing process. If you participate in the public hearing process, either by testifying at the public hearing, or by sending in written comments, you will be sent information about any decision made by the City relating to this project.

Date Mailed: ***Date notice is mailed***

Land Use Notice

FILE #:

PROPOSAL: 12-lot subdivision for single-family residences, street, and associated utilities

FOR FURTHER INFORMATION, CONTACT:

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

Owner Nar	Property A	City	State	ZIP Code	ZIP4	Complete (	Owner 1 Full Name	Mailing Ad	Mailing Str	Mailing Str	Mailing Str	Mailing Str	Mailing Un	Mailing Un	Mailing Cit	Mailing Sta	Mailing ZIP	Mailing Zip	Complete M	Do Not Ma	Latitude	Longitude	County Na	APN
Stewart &	115 W Johi	Newberg	OR	97132	3000	Yes	Weed, Stewart Wende	115 W Johi	115	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29585	-122.979	Yamhill Cor	R3219Ac 05902
Paul & Emi	120 W Johi	Newberg	OR	97132	3000	Yes	Bachand, Paul B	120 W Johi	120	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29559	-122.979	Yamhill Cor	R3219Ac 05906
Monica Ch	130 W Johi	Newberg	OR	97132	3000	Yes	Chapman, Monica	130 W Johi	130	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29523	-122.98	Yamhill Cor	R3219Ac 05907
John & Eka	140 W Johi	Newberg	OR	97132	3000	Yes	Lomperis, John	140 W Johi	140	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29545	-122.98	Yamhill Cor	R3219Ac 05908
Theodore &	124 W Johi	Newberg	OR	97132	3000	Yes	Reuter, Theodore W	124 W Johi	124	W	Johanna	Ct			Newberg	OR	97132	3000	Yes		45.29543	-122.979	Yamhill Cor	R3219Ac 05910
Harry Bani	128 W Johi	Newberg	OR	97132	3000	Yes	Banister, Harry S	128 W Johi	128	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29522	-122.979	Yamhill Cor	R3219Ac 05911
Rae Andrev	100 W Johi	Newberg	OR	97132	3000	Yes	Andrew, Rae J	100 W Johi	100	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29551	-122.979	Yamhill Cor	R3219Ac 05912
Theodore &	124 W Johi	Newberg	OR	97132		Yes	Reuter, Theodore W		124	W	Johanna	Ct			Newberg	OR	97132	3000	Yes	Exclude	45.29549	-122.98	Yamhill Cor	R3219Ac 05913
Timothy Th	606 S Dayt	Newberg	OR	97132	2536	Yes	Thielen, Timothy J	606 S Dayt	606	S	Dayton	Ave			Newberg	OR	97132	2536	Yes	Exclude	45.29547	-122.98	Yamhill Cor	R3219Ac 06000
Andrea & (	610 S Dayt	Newberg	OR	97132	2536	Yes	Mooney, Andrea Nicol	610 S Dayt	610	S	Dayton	Ave			Newberg	OR	97132	2536	Yes	Exclude	45.29523	-122.98	Yamhill Cor	R3219Ac 06100
Li Ren Equi	611 S Blain	Newberg	OR	97132	3329	No	Li Ren Equity Llc	13025 Sw A	13025	Sw	Allen	Blvd			Beaverton	OR	97005	4529	Yes	Exclude	45.29516	-122.977	Yamhill Cor	R3219Db 00100
School Dist	703 S Blain	Newberg	OR	97132	3333	No	School District No 29	535 Ne 5Th	535	Ne	5Th	St			Mcminnvill	OR	97128	4531	Yes	Exclude	45.29443	-122.977	Yamhill Cor	R3219Db 00300
Jose & Ani	207 E 7Th S	Newberg	OR	97132	2552	Yes	Baca, Jose Juan	2618 Nw H	2618	Nw	Hayes	Rd			Woodland	WA	98674	2219	Yes	Exclude	45.29422	-122.978	Yamhill Cor	R3219Db 00600
Timothy &	109 E 7Th S	Newberg	OR	97132	2509	Yes	Mueller, Timothy L	PO BOX 15	157		PO BOX				Carlton	OR	97111	157	Yes	Exclude	45.29416	-122.977	Yamhill Cor	R3219Db 00670
Timothy &	113 E 7Th S	Newberg	OR	97132	2509	Yes	Mueller, Timothy L	PO BOX 15	157		PO BOX				Carlton	OR	97111	157	Yes	Exclude	45.29423	-122.977	Yamhill Cor	R3219Db 00680
Jose Baca	201 E 7Th S	Newberg	OR	97132	2552	Yes	Baca, Jose Juan	201 E 7Th S	201	E	7Th	St			Newberg	OR	97132	2552	Yes	Exclude	45.2942	-122.978	Yamhill Cor	R3219Db 00690
Av & Claud	115 E 8Th S	Newberg	OR	97132	4601	Yes	Townsend, Av	115 E 8Th S	115	E	8Th	St			Newberg	OR	97132	4601	Yes	Exclude	45.29391	-122.978	Yamhill Cor	R3219Db 00700
Frank & Mi	201 E 8Th S	Newberg	OR	97132	2512	Yes	Roberts, Frank E	201 E 8Th S	201	E	8Th	St			Newberg	OR	97132	2512	Yes	Exclude	45.29391	-122.977	Yamhill Cor	R3219Db 00800
John Russe	205 E 8Th S	Newberg	OR	97132	2512	Yes	Russell, John M	205 E 8Th S	205	E	8Th	St			Newberg	OR	97132	2512	Yes	Exclude	45.29389	-122.977	Yamhill Cor	R3219Db 00900
Jack & Ang	200 E 8Th S	Newberg	OR	97132	2542	Yes	May, Jack B	2220 N Thc	2220	N	Thorne	St			Newberg	OR	97132	9517	Yes	Exclude	45.29351	-122.978	Yamhill Cor	R3219Db 01600
Daniel & Ju	116 E 8Th S	Newberg	OR	97132	2511	Yes	Olivas, Daniel	116 E 8Th S	116	E	8Th	St			Newberg	OR	97132	2511	Yes		45.29349	-122.978	Yamhill Cor	R3219Db 01700
Cozad Vent	114 E 8Th S	Newberg	OR	97132	2511	No	Cozad Ventures Llc	***Redact	3077	N	Pankratz	Ave			Meridian	ID	83646	7065	Yes	Exclude	45.29351	-122.978	Yamhill Cor	R3219Db 01800
Steven Por	107 E 9Th S	Newberg	OR	97132	2519	Yes	Porter, Steven Daniel	107 9Th St	107		9Th	St			San Francis	CA	94103		Yes	Exclude	45.29327	-122.978	Yamhill Cor	R3219Db 03300
Mark & Sai	110 W 8Th	Newberg	OR	97132	2517	Yes	Staples Kelley, Mark	110 W 8Th	110	W	8Th	St			Newberg	OR	97132	2517	Yes	Exclude	45.29345	-122.98	Yamhill Cor	R3219Db 03700
Christophe	106 W 8Th	Newberg	OR	97132	2517	Yes	Pucci, Christopher A	106 W 8Th	106	W	8Th	St			Newberg	OR	97132	2517	Yes		45.29347	-122.98	Yamhill Cor	R3219Db 03800
Ronald Nyr	102 E 8Th S	Newberg	OR	97132	2511	Yes	Nyman, Ronald W	102 E 8Th S	102	E	8Th	St			Newberg	OR	97132	2511	Yes	Exclude	45.29343	-122.979	Yamhill Cor	R3219Db 03900
Rodney & (	104 E 8Th S	Newberg	OR	97132	2511	Yes	Thrall, Rodney G	104 E 8Th S	104	E	8Th	St			Newberg	OR	97132	2511	Yes	Exclude	45.29352	-122.979	Yamhill Cor	R3219Db 04000
Joseph & B	110 E 8Th S	Newberg	OR	97132	2511	Yes	Campbell, Joseph	110 E 8Th S	110	E	8Th	St			Newberg	OR	97132	2511	Yes	Exclude	45.29353	-122.978	Yamhill Cor	R3219Db 04100
Deborah R	702 S Garfi	Newberg	OR	97132	2510	Yes	Roberts, Deborah R	702 S Garfi	702	S	Garfield	St			Newberg	OR	97132	2510	Yes	Exclude	45.29427	-122.979	Yamhill Cor	R3219Db 04200
Delmar & [	706 S Garfi	Newberg	OR	97132	2510	Yes	Washburn, Delmar C	10820 Ne S	10820	Ne	Stevenson	Rd			Newberg	OR	97132	6849	Yes	Exclude	45.29407	-122.979	Yamhill Cor	R3219Db 04201
Israel & Lai	111 E 8Th S	Newberg	OR	97132	4601	Yes	Allen, Israel E	111 E 8Th S	111	E	8Th	St			Newberg	OR	97132	4601	Yes	Exclude	45.29389	-122.979	Yamhill Cor	R3219Db 04202
Rodolfo Gc	708 S Garfi	Newberg	OR	97132	2510	Yes	Gonzales, Rodolfo	708 S Garfi	708	S	Garfield	St			Newberg	OR	97132	2510	Yes	Exclude	45.29407	-122.978	Yamhill Cor	R3219Db 04203
Ronnie & R	704 S Garfi	Newberg	OR	97132	2510	Yes	Palmer, Ronnie W	704 S Garfi	704	S	Garfield	St			Newberg	OR	97132	2510	Yes	Exclude	45.29427	-122.978	Yamhill Cor	R3219Db 04204
Timothy Va	101 W 8Th	Newberg	OR	97132	4603	Yes	Vanbergen, Timothy W	101 W 8Th	101	W	8Th	St			Newberg	OR	97132	4603	Yes	Exclude	45.29394	-122.979	Yamhill Cor	R3219Db 04300
Timothy &	109 W 8Th	Newberg	OR	97132	4603	Yes	Smith, Timothy A	109 W 8Th	109	W	8Th	St			Newberg	OR	97132	4603	Yes		45.29389	-122.98	Yamhill Cor	R3219Db 04400
Thomas & .	115 W 8Th	Newberg	OR	97132	4606	Yes	Birmingham, Thomas I	117 W 8Th	117	W	8Th	St			Newberg	OR	97132	4603	Yes	Exclude	45.29429	-122.98	Yamhill Cor	R3219Db 04500
Thomas & .	117 W 8Th	Newberg	OR	97132	4603	Yes	Birmingham Iii, Thoma	117 W 8Th	117	W	8Th	St			Newberg	OR	97132	4603	Yes	Exclude	45.29397	-122.98	Yamhill Cor	R3219Db 04501
Donald No	700 S Dayt	Newberg	OR	97132	2538	Yes	Norman, Donald E	700 S Dayt	700	S	Dayton	Ave			Newberg	OR	97132	2538	Yes	Exclude	45.295	-122.98	Yamhill Cor	R3219Db 04600
Kennedy R	618 S Dayt	Newberg	OR	97132	2536	No	Kennedy Reese C & Ru	618 S Dayt	618	S	Dayton	Ave			Newberg	OR	97132	2536	Yes	Exclude	45.29483	-122.98	Yamhill Cor	R3219Db 04602
Carrie Spra	712 S Dayt	Newberg	OR	97132	2538	Yes	Spray, Carrie E	712 S Dayt	712	S	Dayton	Ave			Newberg	OR	97132	2538	Yes	Exclude	45.29461	-122.981	Yamhill Cor	R3219Db 04603
Daniel Alle	614 S Dayt	Newberg	OR	97132	2536	Yes	Allenby, Daniel J	614 S Dayt	614	S	Dayton	Ave			Newberg	OR	97132	2536	Yes		45.29498	-122.98	Yamhill Cor	R3219Db 04605
Holden Ne	100 S Garfi	Newberg	OR	97132	2590	No	Holden New Berg Qozl	5652 Sw N	5652	Sw	Northwood	Ave			Portland	OR	97239		Yes	Exclude	45.29443	-122.979	Yamhill Cor	R3219Db 04690
David & De	733 S Garfi	Newberg	OR	97132	2560	Yes	Thomas, David	733 S Garfi	733	S	Garfield	St			Newberg	OR	97132	2560	Yes	Exclude	45.29459	-122.979	Yamhill Cor	R3219Db 04691
Andrew &	714 S Dayt	Newberg	OR	97132	2538	Yes	Parker, Andrew S	714 S Dayt	714	S	Dayton	Ave			Newberg	OR	97132	2538	Yes	Exclude	45.29438	-122.981	Yamhill Cor	R3219Db 04701

Property Detail Report

Prepared For:

Linda

Owner Name:

Holden Newberg Qozb LLC

Property Address:

100 S Garfield St

Newberg OR 97132

Tax Account #:

56478

Thank you for the opportunity to assist you!

Chad Cripe

Customer Service

503.581.1431

valleycs@ameritite.com

Mid-Willamette Valley Locations

Salem
320 Church St. NE
503.581.1431

South Salem
3240 Commercial St. SE, Ste. 140
971.701.2591

Silverton
105 N Water St.
503.873.7200

Albany
1393 Clay St. SE
541.928.3368

Corvallis
525 NW 2nd St. Ste. 2
541.752.3415

Lebanon
1475 S Main St
541.259.3736

Monmouth
283 N Pacific Hwy
503.838.2259

Yamhill County Parcel Detail

Site Address:	100 S Garfield St
	Newberg OR 97132 - 2590
Parcel ID:	56478
Tax Lot:	R3219DB04690
Owner:	Holden Newberg Qozb LLC
Owner2:	
Owner Address:	5652 NW Crady Ln
	Portland OR 97229 - 2341
Parcel Size:	1.95 Acres (84,942 SqFt)
Neighborhood:	
Subdivision:	
Lot / Block:	
Twn/Range/Section:	03S / 02W / 19 / SE
Legal	See Metes & Bounds

Assessment and Taxes

Market Land Value:	$1,000,145.00	**Levy Code Area:**	29.0	**Annual Tax History**
Market Improved Value:	$229,850.00	**Levy Rate:**	15.9711	**2021 : $4,042.43**
Market Total Value:	$1,229,995.00	**Tax Year:**	2021	**2020 : $3,640.13**
Assessed Value:	$253,109.00	**Exemption Desc:**		**2019 : $3,591.06**

Land Information

Land Use:	111 - Residential - Residential zone - Improved (typical of class)	**School District:**	29J - Newberg School District
Building Use:	22 - Duplex	**Watershed:**	Chehalem Creek-Willamette River
Zoning:	R-2 - Medium Density Residential	**Longitude:**	-122.978805
Primary School:	EDWARDS ELEMENTARY SCHOOL	**Latitude:**	45.294658
Middle School:	CHEHALEM VALLEY MIDDLE SCHOOL	**Recreation:**	
High School:	NEWBERG SENIOR HIGH SCHOOL		

Improvement Details

Year Built:	1970	**Bed:**	4	**Garage:**	576 SqFt
Stories:		**Baths:**	3	**Exterior Walls:**	Wood
Bldg SqFt:	2,004	**Bsmt SqFt:**		**Roof Cover:**	Shingle
Finished SqFt:	2,004	**Attic SqFt:**		**Heat:**	
Bldg Type:	MD0 - Duplex	**Flr 1/ Flr 2 SqFt:**	2,004 / 0	**A/C:**	

Transfer Information

Rec. Date:	08/26/2021	**Sale Price:**	$887,763.00	**Doc Num:**	2021-17494	**Doc Type:**	Deed
Owner:	Holden Newberg Qozb LLC			**Grantor:**	SURVIVORS D & E S TRUST		
Orig. Loan Amt:	$621,434.00			**Title Co:**	FIRST AMERICAN		
Finance Type:	ADJ	**Loan Type:**	Conventional	**Lender:**	FIRST REPUBLIC BK		

Assessor Map

Parcel ID: 56478

Site Address: 100 S Garfield St

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

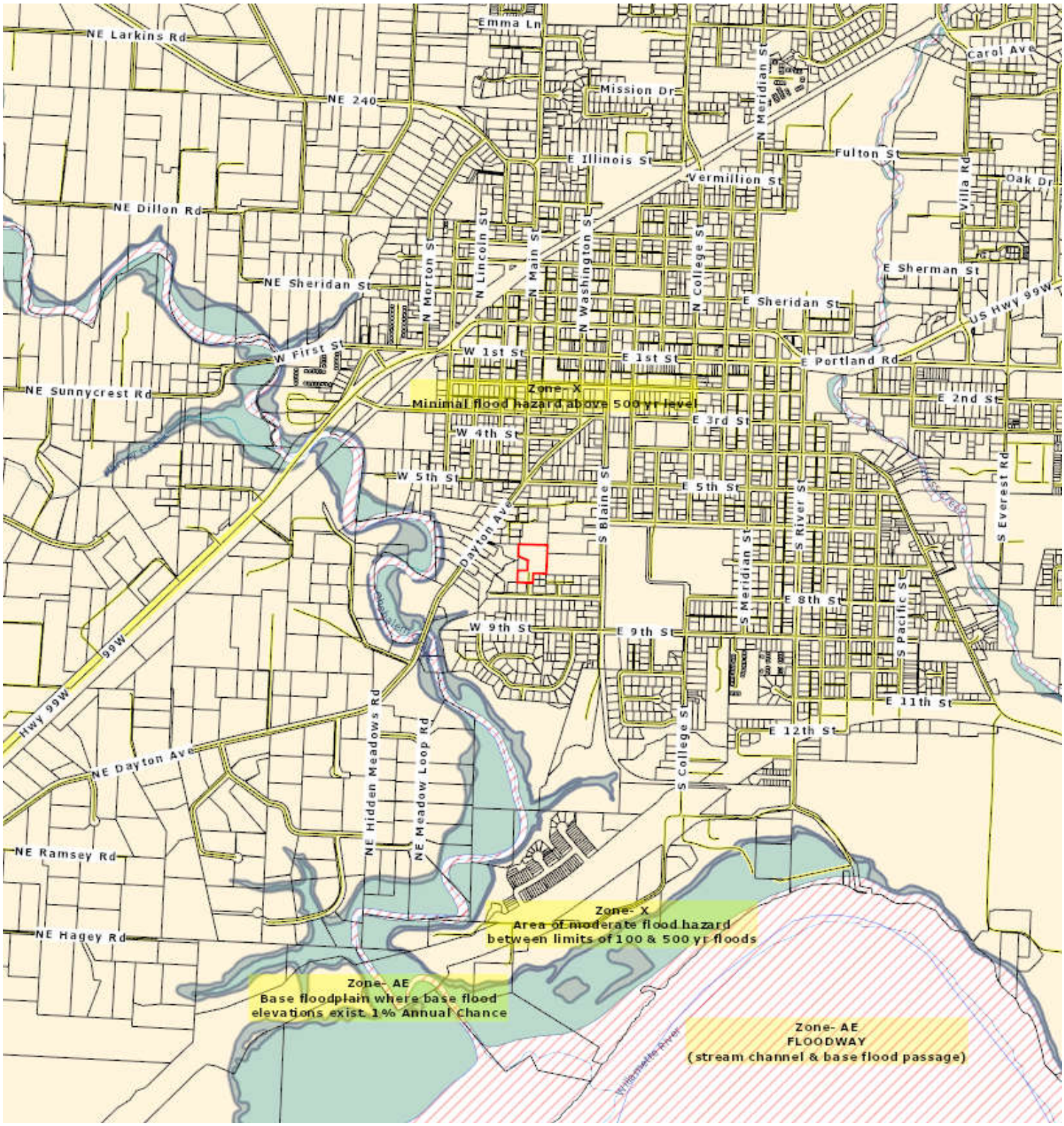
Aerial Map

AmeriTitle

Parcel ID: 56478

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Flood Map



AmeriTitle

Parcel ID: 56478

7/1/2021 to 6/30/2022 REAL PROPERTY TAX STATEMENT

YAMHILL COUNTY, OREGON 535 NE 5TH ST., ROOM 42, MCMINNVILLE, OR 97128 (503) 434-7521

PROPERTY LOCATION

100 S GARFIELD ST
NEWBERG, OR 97132

ALT NO: R3219DB 04690

Account Acres: 1.9500

ACCOUNT NO: 56478

Tax Code Area: 29.0

VALUES:	LAST YEAR	THIS YEAR
REAL MARKET VALUES (RMV):		
LAND	905,750	1,000,145
STRUCTURES	200,223	229,850
RMV TOTAL	1,105,973	1,229,995
ASSESSED VALUE:	245,737	253,109
TOTAL TAXABLE	245,737	253,109
PROPERTY TAXES:	3,640.13	4,042.43

2021 - CURRENT TAX BY DISTRICT:

NEWBERG SD 29J	1,179.89
PORTLAND C C	71.58
WILLAMETTE REG ESD	75.10
EDUCATION TOTAL:	**1,326.57**
CHEHALEM PARK & REC	229.72
NEWBERG	691.47
TUALATIN VALLEY F & R	386.04
TVF&R LOCAL OPTION	113.90
YAMHILL CO EXT SERVICE	11.36
YAMHILL CO SOIL & WATER	8.96
YAMHILL COUNTY	652.39
GENERAL GOVERNMENT TOTAL:	**2,093.84**
CHEHALEM PARK & REC BOND	101.85
NEWBERG SD 29J BOND	388.20
PORTLAND COMM COLEGE BOND	96.26
TUALATIN VALLEY F & R BOND	35.71
BONDS AND OTHER TOTAL:	**622.02**
2021 - 2022 TAX BEFORE DISCOUNT	**4,042.43**

When a mortgage company requests your tax information this statement is yellow and for your records only.

Online or Telephone payment options available - for instructions and conditions go to: www.co.yamhill.or.us/assessor

TOTAL (after discount): **3,921.16**

Delinquent tax amount is included in payment options listed below.

(See back of statement for instructions)

TAX PAYMENT OPTIONS

Payment Options	Date Due	Discount Allowed		Net Amount Due
FULL PAYMENT	Nov 15, 2021	121.27	3% Discount.....	$3,921.16
2/3 PAYMENT	Nov 15, 2021	53.90	2% Discount.....	$2,641.05
1/3 PAYMENT	Nov 15, 2021		No Discount.....	$1,347.47

NO STATEMENTS ARE SENT FOR THE FEBRUARY 15 OR MAY 15 INSTALLMENT DATES IF PAYING THE 2/3 OR 1/3 OPTION.

TEAR HERE **PLEASE RETURN THIS PORTION WITH YOUR PAYMENT See back of statement for instructions** TEAR HERE

2021 - 2022 Property Tax Payment Yamhill County, Oregon

ACCOUNT NO: 56478

PROPERTY LOCATION: 100 S GARFIELD ST

Delinquent tax amount is included in payment options listed below

FULL PAYMENT	**(Includes 3% Discount)**	**DUE Nov 15, 2021**	.....	**$3,921.16**
2/3 PAYMENT	**(Includes 2% Discount)**	**DUE Nov 15, 2021**	.....	**$2,641.05**
1/3 PAYMENT	**(No Discount offered)**	**DUE Nov 15, 2021**	.....	**$1,347.47**

DISCOUNT IS LOST AND INTEREST APPLIES AFTER DUE DATE

☐ Mailing address change on back

Enter Amount Paid

Please make payment to:
YAMHILL COUNTY TAX COLLECTOR
PO BOX 6369
PORTLAND, OR 97228-6369

1/1 13189

36 00056478 0000392116 0000264105 0000134747 1

FIRST AMERICAN 3684350

After recording return to:
Holden Newberg QOZB LLC
5652 Northwest Crady Lane
Portland, OR 97229

Until a change is requested all tax statements shall be sent to the following address:
Holden Newberg QOZB LLC
5652 Northwest Crady Lane
Portland, OR 97229

File No.: 1032-3684350 (kd)
Date: August 26, 2021

THIS SPACE RESERVED FOR RECORDER'S USE

Yamhill County Official Records **202117494**
DMR-DDMR
Stn=3 SUTTONS **08/26/2021 02:02:01 PM**
3Pgs $15.00 $11.00 $5.00 $60.00 **$91.00**

I, Brian Van Bergen, County Clerk for Yamhill County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.
Brian Van Bergen - County Clerk

STATUTORY WARRANTY DEED

Elaine M. Streed and Rowena E. Shafer and Roman D. Streed, Co-Trustees or their successors in trust under The D & E Streed Survivor's Trust dated June 8, 1995, Grantor, conveys and warrants to **Holden Newberg QOZB LLC, an Oregon limited liability company** , Grantee, the following described real property free of liens and encumbrances, except as specifically set forth herein:

See Legal Description attached hereto as Exhibit A and by this reference incorporated herein.

Subject to:
1. Covenants, conditions, restrictions and/or easements, if any, affecting title, which may appear in the public record, including those shown on any recorded plat or survey.
2. The **2021-2022** Taxes, a lien not yet payable.

The true consideration for this conveyance is **$887,763.00**. (Here comply with requirements of ORS 93.030)

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.

Dated this 13 day of AUGUST, 2021.

The D & E Streed Survivor's Trust dated June 8, 1995

Gwain E. Streed, Trustee

STATE OF Oregon)
)ss.
County of Lincoln)

This instrument was acknowledged before me on this 13th day of August, 2021 by Gwain E. Streed as Trustee of The D & E Streed Survivor's Trust dated June 8, 1995, on behalf of the Trustee.

OFFICIAL STAMP
DAWN E. BALLEW
NOTARY PUBLIC - OREGON
COMMISSION NO. 998783
MY COMMISSION EXPIRES APRIL 05, 2024

Notary Public for Oregon
My commission expires: 4/5/2024

EXHIBIT A

LEGAL DESCRIPTION: Real property in the County of Yamhill, State of Oregon, described as follows:

Part of Joseph B. Rogers Donation Land Claim #55 in Township 3 South, Range 2 West of the Willamette Meridian in Yamhill County, Oregon, described as follows:

Beginning at a point where the center line of Ninth Street in the City of Newberg producted West intersects the West line of said Claim; thence East along the center line of said Street, 660 feet; thence North 462 feet to the Northeast corner of that tract conveyed to Lewis C. Hodgdon et ux. by deed recorded June 23, 1948 in Book 149, Page 216, Deed records; thence North along the East line of that certain most Easterly tract conveyed to W.R. Weatherly et ux. by deed recorded May 28, 1948 in Book 148, Page 774, Deed records; 95 feet to the true point of beginning; thence continuing North along said East line 284.5 feet, more or less to the Northeast corner of said Weatherly tract, thence West along the North line of said Weatherly tract 287 feet to the Northeast corner of that tract conveyed to E.F. Hubert by deed recorded January 3, 1902 in Book 41, Page 593, Deed records; thence South along the East line of said Hubert tract 379.5 feet to the North line of the aforesaid Hodgdon tract; thence East along the said North line 158.5 feet to a point; thence North parallel to the East line of the aforesaid Weatherly tract, 95 feet to a point; thence East parallel to the North line of said Hodgdon tract, 128.5 feet to the true place of beginning.

SAVE AND EXCEPT that portion conveyed to Gwain E. Streed and Laurie J Streed in Warranty Deed recorded March 6, 1987 in Film Volume 211, Page 1126.

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

- **Under 50MB** - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- **50MB or larger** - A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☐ Applicant ☒ Owner Name, Firm and Address:
Scott Holden
Newburg QOZB LLC
5652 NW Crady Lane
Portland, OR 97229

Business phone # (503) 502-8006
Mobile phone # (optional)
E-mail: ScottHolden2007@outlook.com

☒ Authorized Legal Agent, Name and Address (if different):
Alex Sherman
Environmental Science & Assessment
4831 NE Fremont Street, Suite 2B
Portland, OR 97213

Business phone # (360) 979-8903
Mobile phone # (optional)
E-mail: alex@esapdx.com

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: Alex Sherman **Signature:** Alex Sherman

Date: 06/30/2022 Special instructions regarding site access: _____

Project and Site Information

Project Name: 100 S Garfield St

Latitude: 45.294456 Longitude: -122.978643
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
Subdivide parcel into 8 lots for duplex and tripelx residential development

Tax Map # 3219DB
Tax Lot(s) 04690

Tax Map #
Tax Lot(s)

Project Street Address (or other descriptive location):
100 S Garfield St

Township 3S Range 2W Section 19 QQ
Use separate sheet for additional tax and location information

City: Newburg County: Yamhill

Waterway: River Mile:

Wetland Delineation Information

Wetland Consultant Name, Firm and Address:
Alex Sherman
Environmental Science & Assessment LLC
4831 NE Fremont St, Ste. 2B
Portland, OR 97213

Phone # (360) 979-8903
Mobile phone # (if applicable)
E-mail: alex@esapdx.com

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: Alex Sherman Date: 06/30/2022

Primary Contact for report review and site access is ☒ Consultant ☐ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present? ☒ Yes ☐ No Study Area size: 1.95 Total Wetland Acreage: 0.0062

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Mitigation bank site
☐ EFSC/ODOE Proj. Mgr: _____
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # _____

☐ Fee payment submitted **$** _____
☐ Resubmittal of rejected report ($100)
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # _____ Expiration date _____
☐ LWI shows wetlands or waters on parcel
Wetland ID code _____

For Office Use Only

DSL Reviewer: _____ Fee Paid Date: ____ / ____ / ____ DSL WD # _____

Date Delineation Received: ___/___/___ DSL App.# _____

TABLE OF CONTENTS

INTRODUCTION **1**
LANDSCAPE SETTING AND LAND USE **1**
SITE ALTERATIONS **2**
PRECIPITATION DATA AND ANALYSIS **2**
SITE SPECIFIC METHODOLOGY **3**
WETLANDS **3**
DEVIATION FROM LWI OR NWI **4**
MAPPING METHOD **4**
ADDITIONAL INFORMATION **4**
RESULTS AND CONCLUSIONS **4**
DISCLAIMER **5**

LIST OF TABLES

TABLE 1. PRECIPITATION DATA PRIOR TO FIELD OBSERVATIONS 2
TABLE 2. MONTHLY OBSERVED PRECEDING FIELD DATA COLLECTION 2
TABLE 3. WETLANDS/WATERS SUMMARY 4

LIST OF APPENDICES

APPENDIX A. FIGURES
APPENDIX B. WETLAND DATA SHEETS
APPENDIX C. SITE PHOTOGRAPHS
APPENDIX D. REFERENCES

INTRODUCTION

Environmental Science & Assessment, LLC (ES&A) was contracted by Firwood Design Group to conduct a wetland delineation on a 1.95-acre site located at 100 S Garfield Street in Newburg, Yamhill County, Oregon (Figure 1). The study area includes one tax lot (TL 3219DB 4690) located in the northwest quarter and southeast quarter of Section 19, Township 3 South, Range 2 West on Yamhill County's assessor's map 3219DB (Figure 2).

LANDSCAPE SETTING AND LAND USE

The project site is bordered on the south by residential development and by an intermittent tributary to Chehalem Creek at its north and west boundaries. Residential development is present beyond the creek to the northwest. A sand and gravel stockpile yard with discarded heavy equipment and storage is located to the northwest of the property. Edwards Elementary School is located further east across S Blaine Street. Access to the site is via a cul-de-sac at the terminus of S Garfield St from the south side (Photo 1; Figure 5).

There is one residential structure present on tax lot 4690, which is located in the southeastern lot corner across the driveway at S Garfield Street (Photo 1). The structure is adjacent to offsite structures on tax lot 4691. There are no other structures except for wooden treehouse in the riparian forest that borders the northwest part of the open field (Photo 2).

The south portion of the site a mowed and maintained grassy field, which extends from the northeastern corner of the cul-de-sac to the eastern property boundary (Photo 1). The A forested upland plant community is present in the northeast property corner, which transitions to forested riparian plant community as the landscape slopes in the direction of the unnamed tributary that borders the site from the north and west (Photo 3).

Site topography is relatively flat within the mowed and maintained grassy field. The field slopes upward slightly to the treeline and then sharply downwards toward the offsite creek, where it terraces in the southeast corner before it reaches the incised stream channel.

The plant community within the open field consists predominately of annual blue grass (*Poa annua, FAC*), velvet grass (*Holcus lanatus, FAC)*, field meadow foxtail (*Alopecurus pratensis, FAC)*, spreading bent *(Agrostis stolonifera, FAC)*, with traces of ox eye daisy (*Leucanthemum vulgare, FACU)*, common dandelion *(Taraxacum officinale, FACU)*, Queen Anne's lace (*Daucus carota, FACU)*, and English plantain *(Plantago lanceolata, FACU)* with about 10% cover throughout of white clover (*Trifolium repens*), and scattered populations of hairy cat's ear (*Hypochaeris radicata*).

The plant community surrounding the grassy field along at the top of the slope consists of upland tree canopy consisting of Douglas-fir (*Pseudotsuga menziesii, FACU)*, big-leaf maple (*Acer macrophyllum, FACU)*, and cherry plum (*Prunus cerasifera* ,NL), an understory of beaked hazelnut (*Corylus cornuta, FACU)*, English holly (*Ilex aquifolium, FACU)*, Himalayan Blackberry (*Rubus armeniacus, FAC),* and a herbaceous stratum consisting of heavy cover of English ivy (*Hedera helix, FACU)* (VC-3).

Soils mapped on site are all rated non-hydric.Soils in the southeastern portion of the site are recorded as Aloha silt loam, 0 to 3 percent slopes (map unit 2300A, Hydric rating 3). The northwestern portion of the site that encompasses the area of the unnamed tributary is mapped as Woodburn silt loam, 20 to 55 percent slopes (map unit 2310F, Hydric rating 0) (NRCS Soil Survey, 2020).

SITE ALTERATIONS

Review of historic aerial photographs indicates that no major alterations have taken place on the site since at least 1994.

PRECIPITATION DATA AND ANALYSIS

Precipitation data collected during a field visit March 16th, 2022. Observed precipitation on the day of the field investigation totaled 0.07 inches. There were 4.21-inches of precipitation recorded in the two weeks prior to the March field visit. Water year-to-date (WYTD) total was 90% of normal during the March visit (Table 1). Observed data for the May field visit in Table 1 were recorded at CoCORaHS station NEWBURG 0.3 N, OR (1.3-miles to the north of the site). WTYD and WYTD normal value was collected at NWS station REX 1 S, OR (approximately 3-miles to the northeast).

According to the WETS table for NWS station REX 1 S, OR, observed precipitation in December 2021 was higher than normal. January and February 2022 were within normal range. (Table 2).

Table 1. Precipitation Data Prior to Field Observations

Field Date	Rainfall on Field Date	Rainfall Two Weeks Prior to Field Date	[1]Observed Rainfall for the Water Year-to- Date (WYTD)	[1]Percent Normal Water Year-to-Date
March 16, 2022	0.07	4.21	28.49	90

Source: Natural Resource Conservation Service (NRCS) Agricultural Climate Information System (AgCIS) for Washington County, CoCoRaHS station: NEWBURG 0.3 N, OR [1]WYTD and WYTD Normal is value from REX 1 S, OR station because closer stations for observed values have insufficient data for this product

Table 2. Monthly Observed Precipitation Preceding Three Field Dates of field observations

Prior Three Months	[1]Avg. Precip.	[1]30% Chance Will Have Less Than	[1]30% Chance Will Have More Than	Observed Precip.	Within Normal Range?
December 2021	7.24	5.18	8.57	8.78	No, higher
January 2022	6.30	4.31	7.52	5.55	Yes
February 2022	4.07	2.62	4.90	2.78	Yes

Source: Natural Resource Conservation Service (NRCS) Agricultural Climate Information System (AgCIS) for Washington County, WETS station: REX 1 S, OR. [1]Average and exceedance values based on years 2000-2021 to represent normal.

SITE SPECIFIC METHODOLOGY

All boundaries of wetlands and waterways were determined using the methodology provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (USACE, 2010). Field data was collected in accordance with the Oregon Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determination for the Purpose of Regulating Fill and Removal within Waters of the State (OAR 141-90-0005-141-90-0055).

Two levels of investigation for the wetland delineation included a review of existing information and an on-site investigation of the study area. Prior to conducting the on-site investigation, ES&A reviewed available data pertaining to the wetland delineation.

Reviewed data included:

- Aerial Photographs: 1952-1994 (USGS Earth Explorer); 1994-2021 (Google Earth);
- Natural Resource Conservation Service (NRCS) *Soil Survey of Yamhill County Area, Oregon* (Web Soil Survey, 2020);
- Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar Viewer;
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Map Yamhill County, OR area (Wetlands Mapper, 2020);

ES&A wetland scientists Alex Sherman and Racine Robinson conducted the site investigation on March 16th, 2022. ES&A collected wetland delineation data at four (4) locations to define the wetland boundaries or to document a lack of wetland conditions, and collected vegetation data at three (3) data plots (Figure 6).

Wetland A was delineated mainly based on a break in vegetation between water parsley (*Oenanthe sarmentosa*, OBL) and English ivy. Soils in data plot 2 (DP-2) showed prominent redox indications starting at 5 inches of the soil profile, and gley matrix colors starting at 10 inches. Soils at data plot 1 (DP-1) had less prominent redox colors with most of the indications occurring at nine inches and beyond.

WETLANDS

One wetland was delineated onsite, totaling 272 square feet. An unnamed tributary runs adjacent to the northern property boundary and meanders towards the northwestern corner.

Wetland A

Wetland A (Photo 4) is a 272-square foot Riverine Emergent Nonpersistent (REM2), or Riverine Impounding (RI) class wetland that is terraced and expands from the Ordinary High Water Line (OHWL) of the tributary to Chehalem Creek to the toe of the slope; The wetland is located near the convergence of two tributaries that flow into Chehalem Creek (Photo 4).

The primary hydrology of wetland A appears to be upslope surface runoff and subsurface flow, both of which drain towards the adjacent stream from habitat similar to that of Photo 5 – forested slopes. The wetland is likely to experience flooding at least once every two (2) years (biennial flooding) and impound overbank flow that create conditions conducive to hydric soils and hydrophytic vegetation.

The plant community is mature canopy cover of mostly Douglas-fir (*Pseudotsuga menzensii*, FACU) and big leaf maple *(Acer macrophyllum*, FACU), and an understory dominated by Himalayan blackberry. The herbaceous stratum of the wetland is comprised of water parsley, cleavers (*Galium aparine, FACU)*, and meadow foxtail (*Alopecurus pratensis, FAC)* (Photo 4).

The waters of Wetland A continue offsite to the west via the tributary to Chehalem Creek.

Tributary to Chehalem Creek
The tributary to Chehalem Creek is an unnamed tributary. It converges with another unnamed drainage north of the study area and then flows south offsite of the study area to the east (Photo 3). The tributary flows into Chehalem Creek. The average width based on the ordinary high water elevation is approximately 10 to 12 feet wide, with an incised channel narrowing the OHWL to approximately 8 feet in width (Photo 6)

DEVIATION FROM LWI OR NWI

The National Wetland Inventory does not map any wetlands or waters on the site. No Local Wetland Inventory is available for the study area.

MAPPING METHOD

Data plot locations, wetland boundary flags, and stream features were mapped utilizing a Trimble Catalyst GPS Receiver (Model: DA2), a piece of GPS hardware that connects to Trimble software on a cell phone called TerraFlex. Geographic features are mapped with an accuracy of 10 cm (0.1 m).

The GPS data is exported into a CSV file utilizing Trimble's web-based Connect application and subsequently converted into a DXF file for mapping in Computer Assisted Design (CAD) software. The collected GPS data is superimposed onto a base topographic or existing conditions map in CAD.

The flagging was recorded and surveyed by CMT Surveying and Consulting LLC, who also provided the tax lot boundaries.

ADDITIONAL INFORMATION

Other areas along the stream were investigated to see if conditions matched those of Wetland A, as the habitat at the bottom of the ravine suggested probability of such. However, but there were no other areas that hosted hydrophytic vegetation as it was mostly English ivy and Himalayan blackberry. The south side of the unnamed tributary was mostly sloped habitat (Photo 6), which is not the type of topography to allow for depressions that impound overbank flooding, at least enough to create hydric soils.

RESULTS AND CONCLUSIONS

ES&A delineated one wetland and one unnamed tributary on-site (Table 3).

Table 3. Waters/Wetlands Summary

Feature	Area (acres/square feet)	HGM Class	Cowardin Class	Notes
Wetland A	272 square feet	Riverine Impounding	Riverine Emergent Nonpersistent	Offsite to the northwest.
Tributary to Chehalem Creek	N/A		N/A	Onsite within the western area of the property.

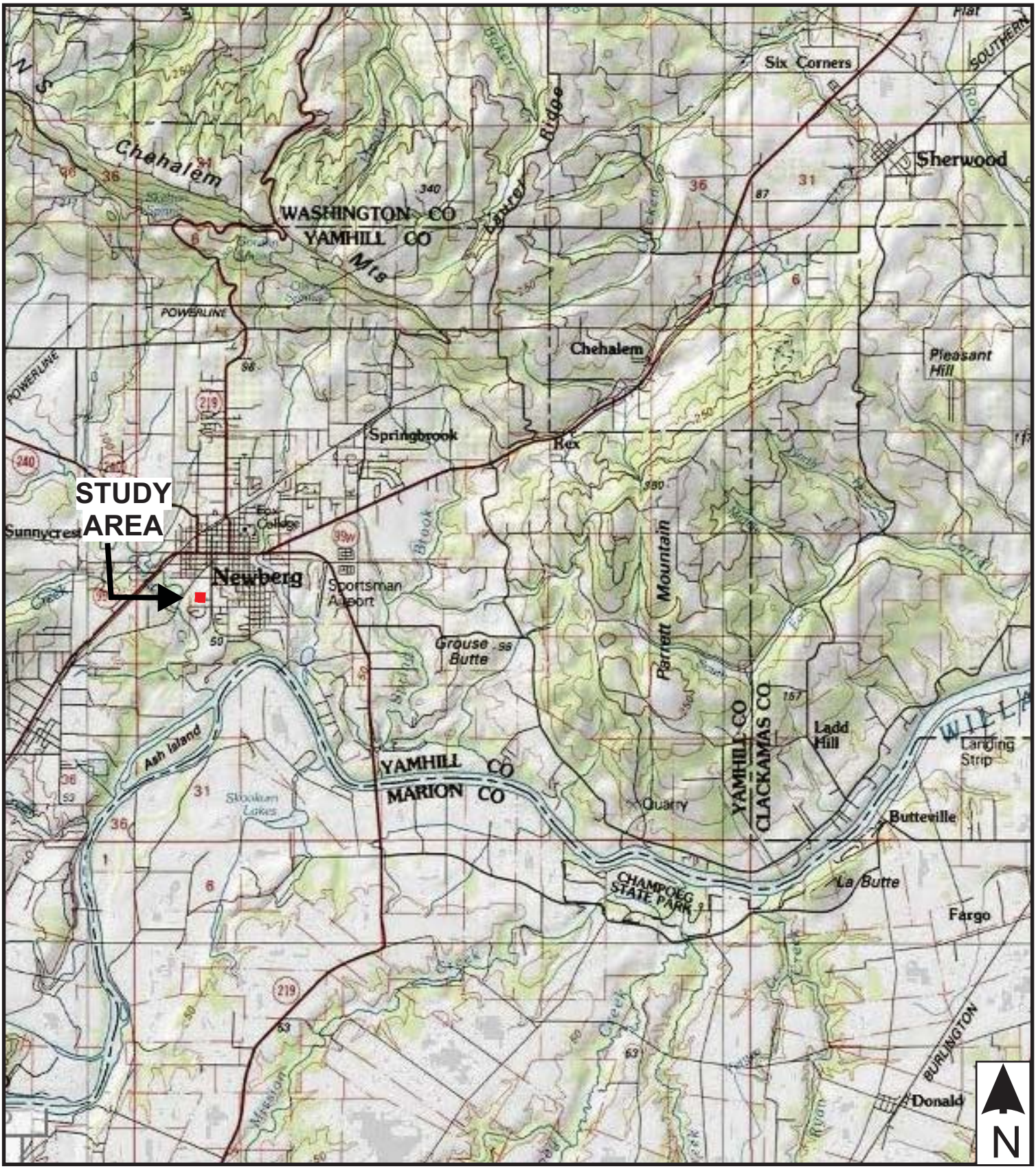
DISCLAIMER

As required by the Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determination for the Purpose of Regulating Fill and Removal within Waters of the State the following statement is made:

"This report documents the investigation, best professional judgment and conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055."

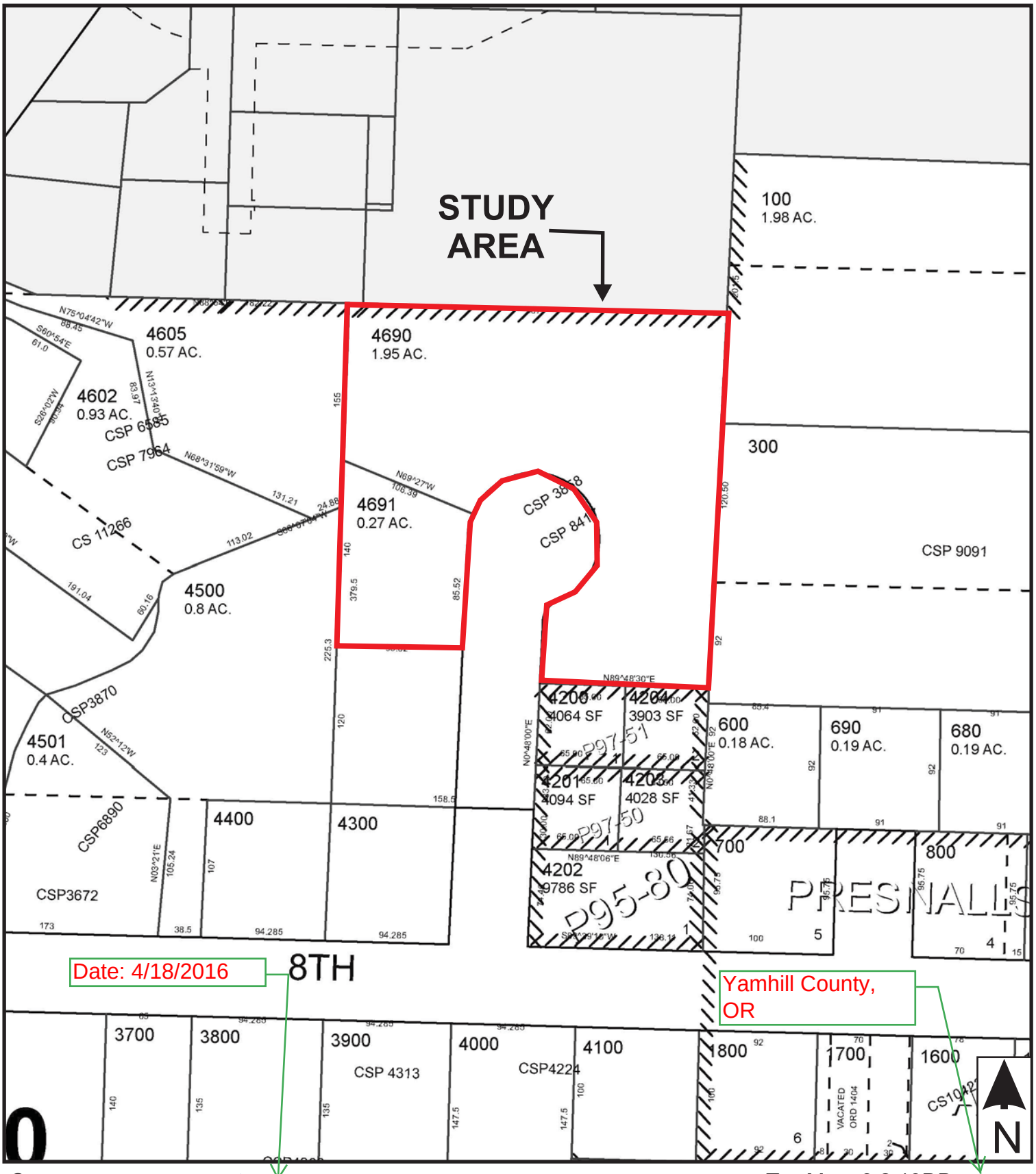
Wetlands are by definition transitional areas; wetland boundaries may change with time. All wetland delineations performed for this study, as well as the conclusions drawn in this report, should be reviewed by the appropriate regulatory agencies prior to any detailed site planning or construction activities. ES&A, therefore, recommends that this wetlands study be verified with the appropriate regulatory agencies as soon as practical. The results and conclusions of this report represent the authors' best professional judgment, based upon information provided by the project proponent in addition to that obtained during the course of this study. No other warranty, expressed or implied, is made by ES&A.

APPENDIX A. FIGURES



Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

Environmental Science & Assessment, LLC	Vicinity Map 100 S Garfield Street Newburg, Oregon	Figure 1 0 .625 1.25 mi



Source: www.ormap.net

Tax Map: 3 2 19DB

Environmental Science & Assessment, LLC	Tax Lot Map 100 S Garfield Street Newburg, Oregon	Figure 2 0 50 100 ft

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWI

Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

Environmental Science & Assessment, LLC	National Wetland Inventory 100 S Garfield Street Newburg, Oregon	0 330 660 ft	Figure 3

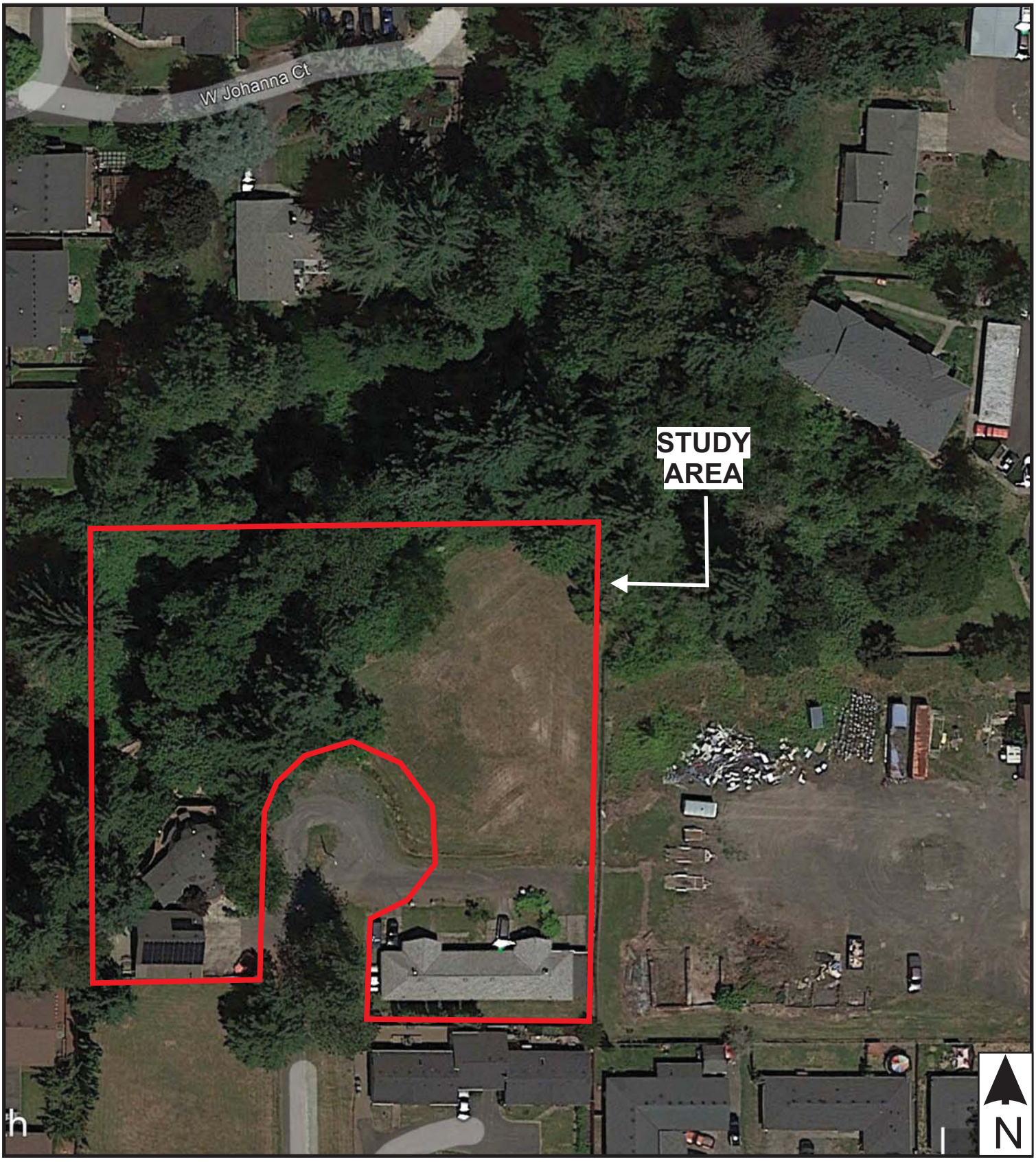
Mapped Soils:

2300A - Aloha silt loam, 0 to 3 percent slopes Hydric Rating = 3
2310F- Woodburn silt loam, 20 to 55 percent slopes Hydric Rating = 0

N

Source: Web Soil Survey, Yamhill County, Oregon http://websoilsurvey.nrcs.usda.gov/app/.

Environmental Science & Assessment, LLC e s & a	NRCS Soil Survey Map 100 S Garfield Street Newburg, Oregon	Figure 4 0 65 130 ft



Source: earth.google.com

Imagery Date: 06/17/2021

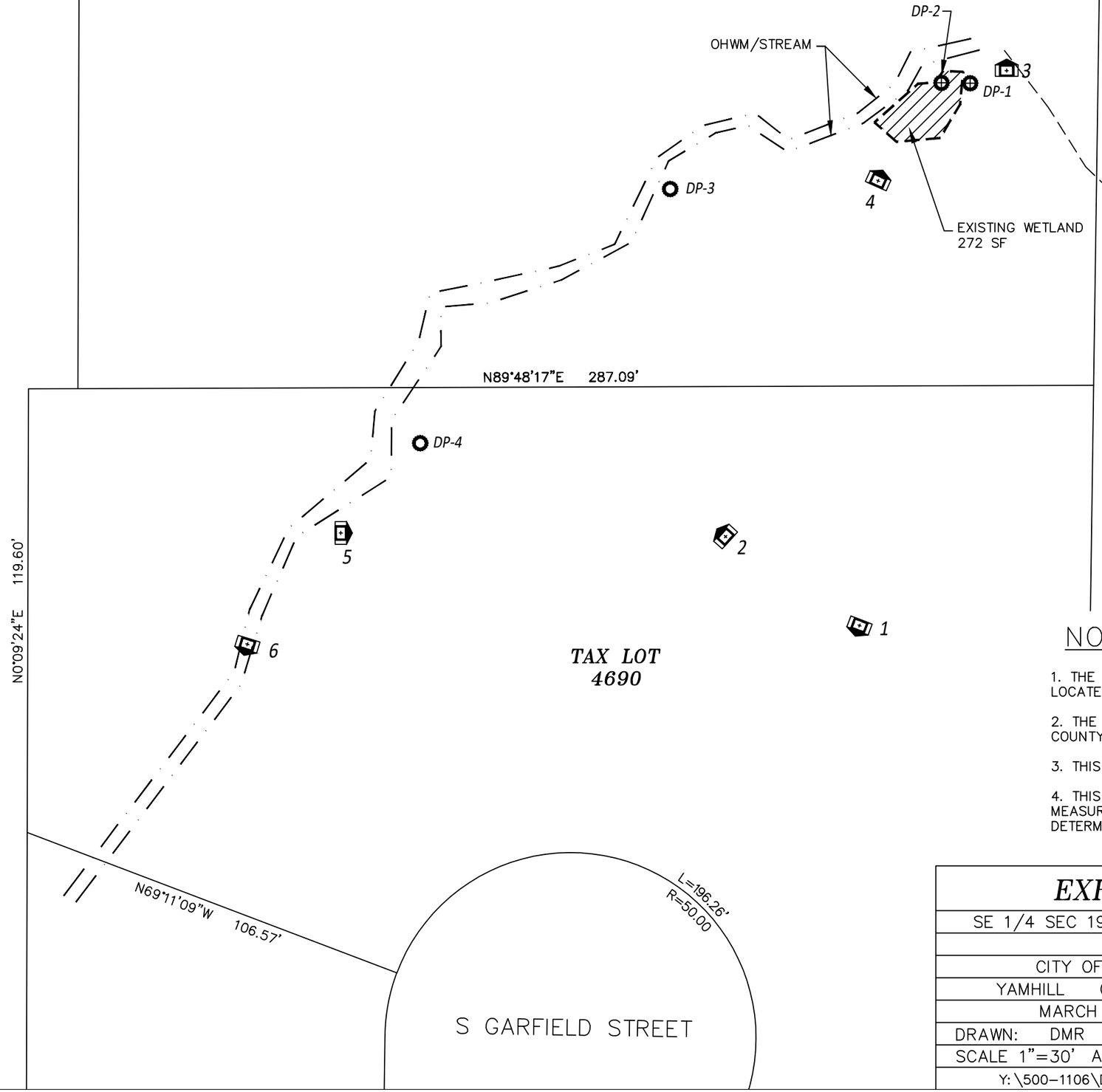
Environmental Science & Assessment, LLC

e s & a

Aerial Photograph
100 S Garfield Street
Newburg, Oregon

Figure 5

0 42.5 85 ft



LEGEND

- EXISTING WETLAND LINE
- EXISTING OHML/STREAM
- DP-1 DATA POINT
- 1 PHOTO POINT

TAX LOT
100

N

SCALE 1" = 30'

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
SEPTEMBER 11, 2018
DAVID ROEGER
86811

EXPIRES DECEMBER 31, 2022

NOTES

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE LOCATION OF WETLAND FLAGGING LOCATED AT 100 S. GARFIELD STREET.
2. THE BASIS OF BEARINGS WAS PER THE RECORD OF SURVEY NO. CSP–8417, YAMHILL COUNTY RECORDS.
3. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF HOLDEN NEWBERG Q02B LLC.
4. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED AT A DATE TO BE DETERMINED.

EXHIBIT	*100 S GARFIELD ST*
SE 1/4 SEC 19, T3S, R2W, W.M.	
CITY OF NEWBERG	
YAMHILL COUNTY, OREGON	
MARCH 28, 2022	
DRAWN: DMR CHECKED: SPF	
SCALE 1"=30' ACCOUNT #500–1106	
Y:\500–1106\DWG\5001106BASE	

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850–4672 FAX (503) 850–4590

APPENDIX B. DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-1

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.3953228 Long: -122.978375 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: At confluence of streams within the northwest property corner, plot long the wetland boundary of the wetland bench adjacent to stream.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	30	x	FACU
2. Pseudotsuga menziesii	20	x	FACU
3.			
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	95	x	FAC
2. Polystichum munitum	5		
3.			
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1. Oenanthe sarmentosa	3		OBL
2.			OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	3	= Total Cover	
Woody Vine Stratum (Plot size: 5')			
1. Hedera Helix	25	x	FACU
2.			
	25	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Silt clay loam	
5-9	10YR 3/2	98	7.5YR 3/3	2	C	M	Silt clay loam	
9-14	10YR 3/1	94	7.5YR 3/4	6	C	M	Silt clay loam	
14-16	10YR 3/1	92	10YR 4/4	8	C	M	Clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ×

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 13

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 7

Wetland Hydrology Present? Yes × No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Data plot was on the border of the wetland boundary, so hydric indicators were identified via saturation but did not meet for soils or vegetation.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-2

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45. 295308 Long: -122.978484 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks: Opposite of DP-1 inside wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	40	x	FAC
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5' diameter)			
1.			
2. Oenanthe sarmentosa	15	x	OBL
3. Galium aparine	5	x	FACU
4. Alopecurus pratensis	3		FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	23 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			FACU
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 2/1	98	10 YR 3/6	2	C	M	clay loam	
5-10	7.5 YR 2.5/1	92	10 YR 3/6	8	C	M	clay loam	
10-15	N 3/1	92	10 YR 3/6	8	C	M	clay loam	
15-17	10 YR 2/1	90						
	10 YR 3/2	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 2

Wetland Hydrology Present? Yes X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-3

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.295234 Long: -122.978768 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: Bench of bank adjacent to stream, between OHWL flags 13 and 15. Some saturation in soil but plot was determined as not within a wetland, saturation could come from seasonal rain and collect within animal paths.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	30	x	FACU
2. Acer macrophyllum	20	x	FACU
3.			
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	90	x	FAC
2. Corylus cornuta	10		FACU
3. Omeleria cerasiformis	T		FACU
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1. Rubus ursinus	T		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	1	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100					Silt clay loam	Small white roots in top four inches
9-11	10YR 3/2	98	7.5YR 3/3	2	C	M	Silt clay loam	
11-13	10YR 3/2	97	7.5YR 3/4	3	C	M	Silt clay loam	
13-17	10YR 3/1	95	7.5YR 4/4	5	C	M	Silt clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 5

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrological indicators likely due to water table of creek adjacent to bank.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Garfield Newburg City/County: Newburg / Yamhill County Sampling Date: 3/16/2022

Applicant/Owner: Firwood Design State: OR Sampling Point: DP-4

Investigator(s): Alex Yanez-Sherman, Racine Robinson Section, Township, Range: T3S R2W Sec 19

Landform (hillslope, terrace, etc.): forested terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.294277 Long: -122.979136 Datum: NAD 83

Soil Map Unit Name: Woodburn silt loam, 20 to 55 percent slopes (2310F), Hydric rating = 0 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: On bench from bank between OHWL flags 27-29.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	65	x	FACU
2.			
3.			
4.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Omeleria cerasiformis	30	x	FACU
2. Ilex aquifolium	20	x	FACU
3. Symphoricarpos albus	15	x	FACU
4. Rubus armeniacus	5		FAC
5.			
	70	= Total Cover	
Herb Stratum (Plot size: 5' diameter)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. Hedera helix	95	x	FACU
2.			
	95	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
6-10	10YR 3/2	100					Silt clay loam	
10-16	10YR 3/2	95	7.5YR 3/4	5	C	M	Silt clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ×

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 13

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 11

Wetland Hydrology Present? Yes × No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Watere table from adjacent creek was high along the bank, resulting in saturation coming in above a foot as a hydric indicator while the rest of the plot is upland.

APPENDIX C. SITE PHOTOGRAPHS

Photo 1: View southwest of open grass field in southeast portion of the study area.

Photo 2: View northeast of wooden structure onsite within tree dripline.

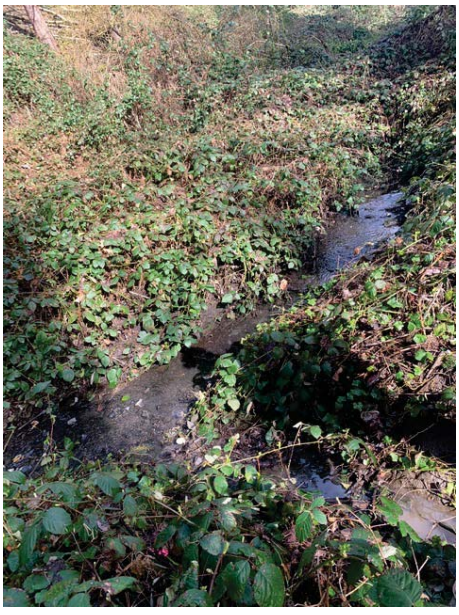


Photo 3: View north of confluence of unnamed tributaries to Chehalem Creek.

Photo 4: View north of wetland bench off of unnamed tributary after confluence.

Photo 5: View east of high incline slope and upland forest conditions near unnamed tributary.

Photo 6: View south of incised channel and upland plant community along banks of unnamed tributary.

APPENDIX D. REFERENCES

REFERENCES

Adamus, P.R. 2001. *Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites: Statewide Classification and Profiles*. Oregon Division of State Lands, Salem, Oregon.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

Department of State Lands. 1992. *Joint Permit Application Form FR# 8530*. Salem, OR.

Google Earth Aerial Photographs. 1990, 1994, 2000-2021. Available online at: www.earth.google.com. Accessed May 2022.

Natural Resources Conservation Service (NRCS). 2019. Official Soil Series Descriptions. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed May 2022.

Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Available online at: http://websoilsurvey.nrcs.usda.gov/. Accessed May 2022.

Oregon Administrative Rules. 2016. *Chapter 141, Division 85 Department of State Lands*.

Oregon Administrative Rules. 2016. *Chapter 141, Division 90 Department of State Lands*.

Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar Viewer. 2020. Available online at: gis.dogami.oregon.gov/maps/lidarviewer. Accessed May 2022.

The Oregon Map. 2019. Tax lot map 052W13, Section 13 Township 5S Range 2W W.M. Available online at http://www.ormap.net/. Accessed May 2022.

U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J.S. Wakeley, R. W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U. S. Fish and Wildlife Service. 2020. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available online at: https://www.fws.gov/wetlands/. Accessed May 2022.

U. S. Geological Survey. 2020. Earth Explorer. U.S. Department of the Interior, USGS, Washington, D.C. Available online at: earthexplorer.usgs.gov. Accessed May 2022.

U. S. Geological Survey. 2020. StreamStats. U.S. Department of the Interior, USGS, Washington, D.C. Available online at: streamstats.usgs.gov/ss/. Accessed May 2022.

Western States Fire Protection Co.
Protecting Lives and Property
POWERED BY APi Group

WSFP.COM
License #: 104570
(O) 503-657-5155 | (F) 503-657-5182
17500 SW 65th Ave. | Lake Oswego, OR 97035

August 26, 2022

100 S Garfield St
Newberg, OR

RE: 4-inch Water Line

The property at 100 S Garfield St is proposed to be subdivided into 12 new lots for duplex residences. These new duplex residences will be protected with NFPA 13D fire sprinkler systems. The planning documents propose that the sprinkler systems and domestic water systems will be supplied by an existing 4" water line serving the property. The 4" line also serves one existing house and one existing four-plex that will remain. There are no hydrants on the existing line.

NFPA 13D, 2016 ed. section 6.5.2 states *"In common water supply connections serving more than one dwelling unit, 5 gpm shall be added to the sprinkler system demand to determine the size of common piping and the size of the total water supply requirements where no provision is made to prevent flow into the domestic water system upon operation of a sprinkler."* This existing 4" water line can be viewed as a common water supply for these 12 new duplex residences, the existing four-plex, and the existing house. Accounting for 5 gpm per new duplex, 10 gpm for the existing four-plex, and 5 gpm for the existing house, that yields a domestic water allowance of 75 gpm.

NFPA 13D system calculations require up to two fire sprinklers flowing up to 20 gpm apiece, depending on spacing. These systems can easily operate on system pressure 50 psi or less. In those calculations, one sprinkler is provided with the minimum flow and the second receives slightly more than the required flow rate. 5 gpm is a conservative estimate to account for that overflow. This yields a total estimated fire sprinkler system demand of 50 psi flowing 45 gpm.

The combined domestic and fire sprinkler demands will be approximately 50 psi flowing 120 gpm. Friction loss in approximately 350' of 4" ductile iron pipe is 1.07 psi when flowing 120 gpm. Rounding up, the 4" line will need 52 psi when flowing 120 gpm at the point of connection to the larger city main.

A hydrant flow test was performed on 8/25/22 at the intersection of Garfield and 8th where the 4" line connects to larger city main. The resulting curve shows that there will be 95.8 psi available when flowing 120 gpm. The flow test report is attached.

A 4" ductile iron water line will be adequate to serve the demands of the development.

Feel free to contact me with any questions.

Sincerely,

Jared A. Hill
Fire Protection Engineer

Western States Fire Protection Co.
Protecting Lives and Property

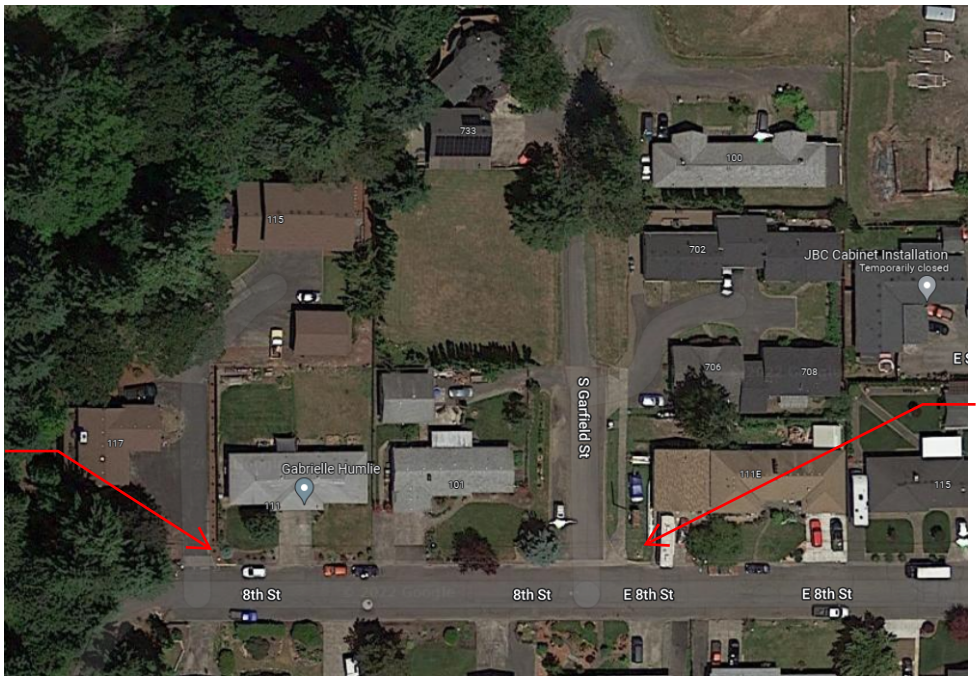
17500 SW 65th Avenue, Lake Oswego, OR 97035
Phone: (503) 657-5155 ● Fax: (503) 657-5182

HYDRANT FLOW TEST REPORT

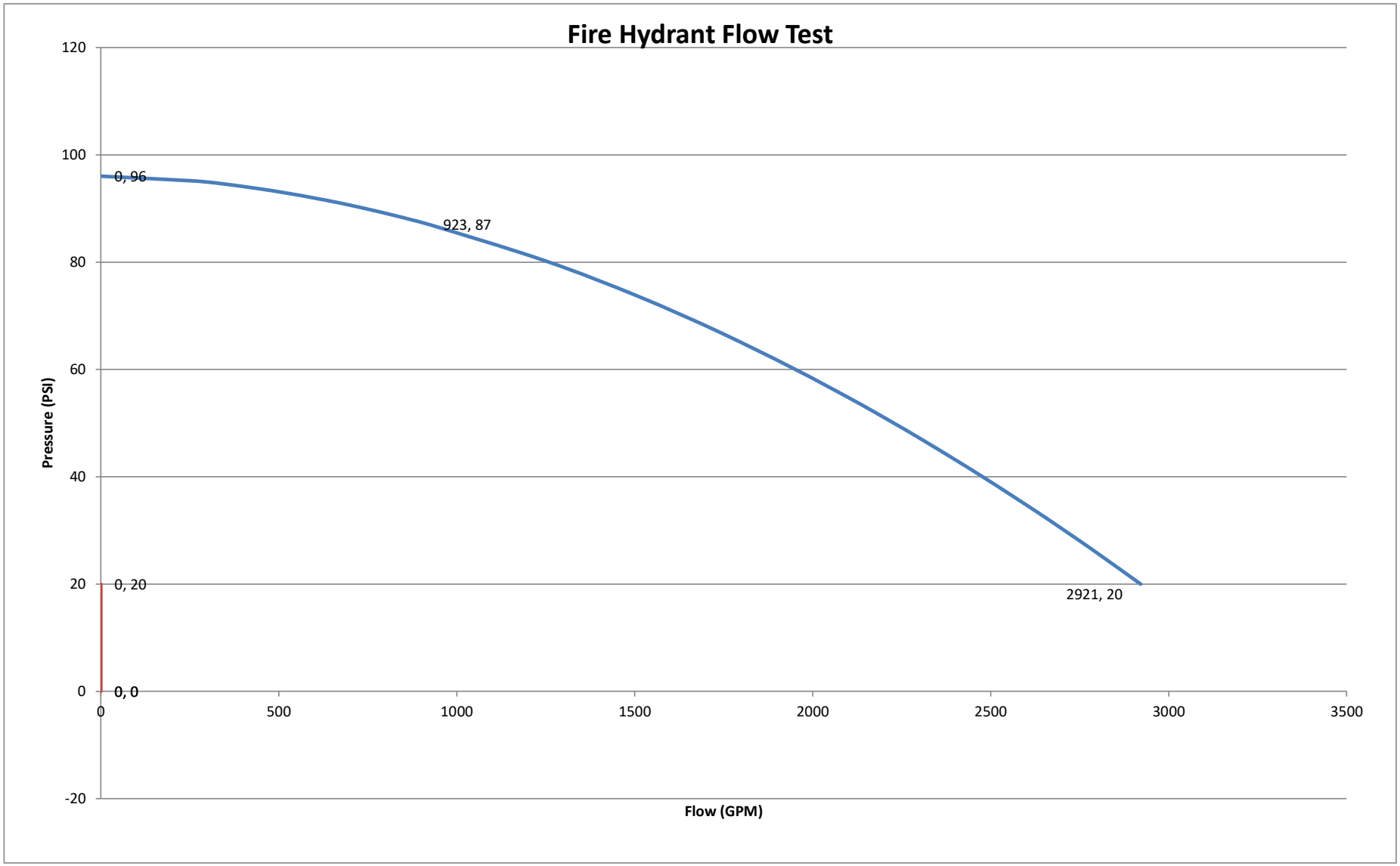
PROJECT:	Garfield Analysis	JOB NO:	
LOCATION:	100 S Garfield St.	DATE:	08/25/22
	Newberg, OR	TIME:	8:15 AM
MAJOR CROSS STREETS:	Garfield & 8th		
JURISDICTION:	Newberg Water		
TEST MADE BY:	Jared Hill		
REPRESENTING:	Western States Fire Protection		
WITNESSED BY:	Adam Clausen		
REPRESENTING:	Newberg Water		
PURPOSE OF TEST:	Water supply available for fire sprinkler system demand		

FLOW HYDRANTS	A-1	A-2	A-3	B-2	C-1	C-2	
SIZE NOZZLE - 2.50 / 4.00	2.50						INCH
PITOT READING	35						PSI
DISCHARGE COEFFICIENT	-	-	-				
FLOW	923						GPM
ELEVATION							FEET

STATIC PRESSURE:	96	PSI	STATIC HYDRANT ELEVATION:		FEET
RESIDUAL PRESSURE:	87	PSI			
TOTAL FLOW:	923	GPM	FLOW @ 20 PSI:	2924	GPM



REMARKS: Test conducted using a Little Hose Monster with 2" pitotless nozzle.


Fire Hydrant Flow Test
120
100
80
60
40
20
0
-20
Pressure (PSI)
0, 96
923, 87
0, 20
2921, 20
0, 0
0
500
1000
1500
2000
2500
3000
3500
Flow (GPM)

Scott Holden
503-502-8006
scottholden2007@outlook.com

31 August 2022

Re: Infiltration testing for 100 S Garfield Street, Newberg, OR

Dear Mr. Holden,

Field Investigation:
Rapid Soil Solutions (RSS) has attempted to performed one (1) infiltration tests. Figure 1 below shows the project site location. Soils found on site match those in by DOGMI. RSS found stiff fine grained flood deposits.

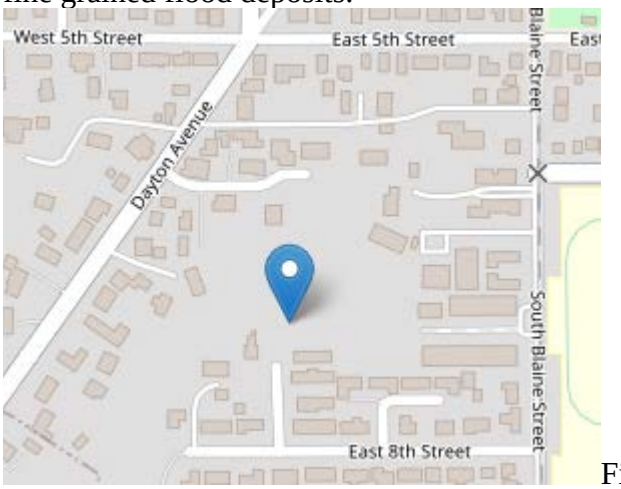


Figure 1

Infiltration Testing:
RSS perform an infiltration test per the Clean Water Services for Washington County. RSS excavated a 6ft deep holes into and started a pre-soak for four (4) hours then testing took place for three hours. The below table summarized the rates and depths. For soil details and locations please see the following infiltration testing sheets.

Location	rate (in/hr.)	Depth (ft)
HA#1	0.5	6
HA#2	2.0	6
HA#3	1.0	6

Groundwater
Based upon the three (3) well logs at are the closest to the site and of similar elevation ground water is 180-200 below the sites elevations.

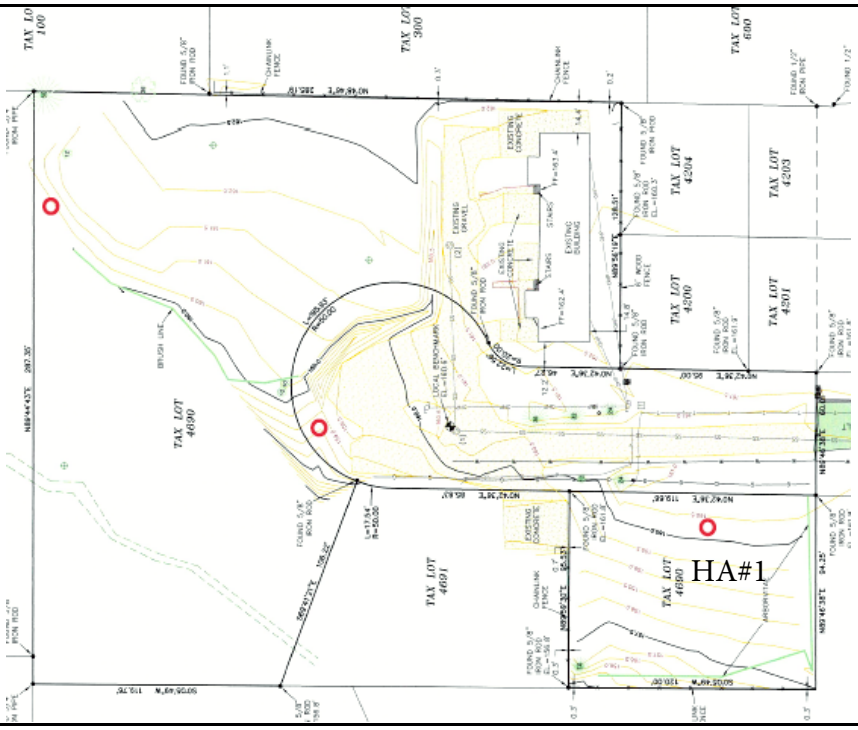
The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of explorations. Any questions regarding this report please contact me at the below number or email.

Sincerely,

Mia Mahedy, PE GE.

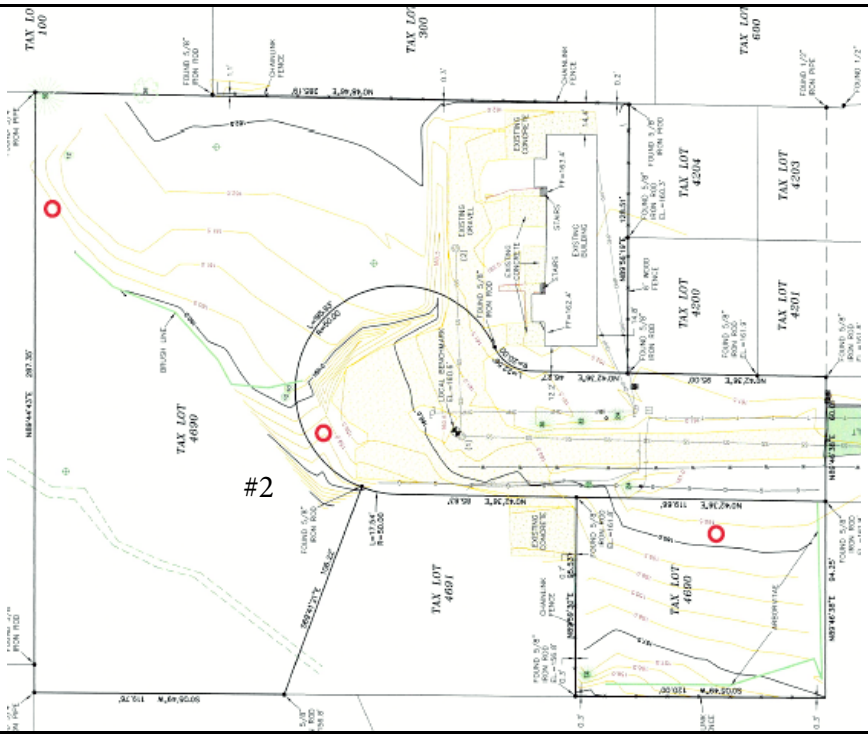
Rapid Soil Solutions INC 503-816-3689 mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft
HA #1			
Soil	2-4ft damp light brown silty clay , medium stiffness , 4-6ft, damp, brown , medium stiffness		
Presoak	9:00, 16.25, 10:00, 15, fill 18.75, 11:00, 18, fill 19:50, 12:00, 19, fill 21.75, 1:00, 21, fill 23,		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22.50		
1:40	22.50		
2:00	22.25	23.25	
2:20	24		
2:40	23.75		
3:00	23.50	25	
3:20	24.75		
3:40	24.75		
4:00	24.50		
Site Infiltration Rate (inches/hour)			**0.50in/hr**

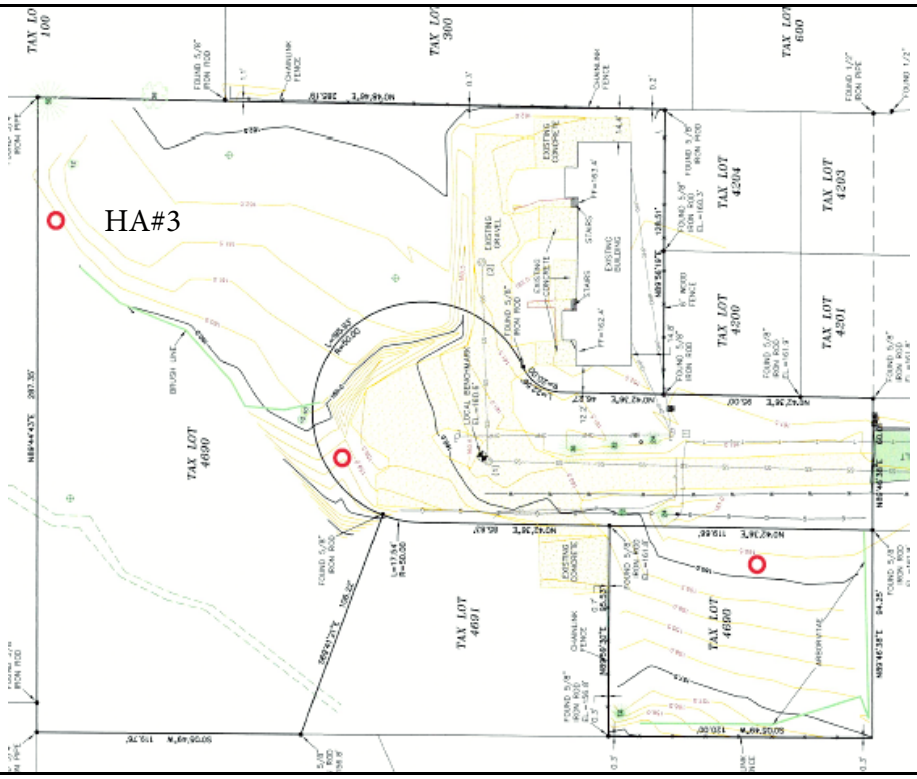
Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3-inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft
HA # 2			
Soil	2-4 ft, medium stiffness damp silty clay, brown , 4-6 ft, medium stiffness damp silty clay , brown		
Presoak	9:00, 15.25, 10:00, 12:25, fill 18.25, 11:00, 17, fill 18.50, 12:00, 16.50, fill 19, 1:00, 17, fill 19		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	18.25		
1:40	17.75		
2:00	17.25	19	
2:20	18.25		
2:40	17.25		
3:00	17	19.50	
3:20	18.50		
3:40	18		
4:00	17.50		
Site Infiltration Rate (inches/hour)			**2in/hr.**

Rapid Soil Solutions INC | 503-816-3689 | mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 3			
Soil	2-4 ft light brown silty clay medium stiffness damp, 4-6 ft, damp, brown , medium stiffness, silty clay		
Presoak	9:00, 19.50, 10:00, 18.25, fill 20, 11:00, 18.50, fill 20.75, 12:00, 20.25, fill 22, 1:00, 20.50, fill 22.25		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22		
1:40	21.25		
2:00	21.25	23.75	
2:20	23.25		
2:40	23		
3:00	22.75	24.25	
3:20	24		
3:40	23.50		
4:00	23.25’		
Site Infiltration Rate (inches/hour)			**1in/hr.**

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

Yamhill 302

State Well No. 3S/2W-19

State Permit No.

(1) OWNER:
Name Millard Ward
Address Rt 1 Box 333A
Newberg Ore

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
[illegible] ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☑
6 " Diam. from +14" ft. to 49 ft. Gage 1/4 wall
" Diam. from ft. to ft. Gage
4 " Diam. from 40 ft. to 80 ft. Gage SDR 26

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No
Type of perforator used Drill
Size of perforations 3/8 in. DIA by in.
perforations from ft. to ft.
100 perforations from 50 ft. to 80 ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom?
[illegible]: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 2 gal./min. with TOTAL ft. drawdown after 1 hrs.
Artesian flow — g.p.m.
Temperature of water NORMAL Depth artesian flow encountered — ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 29 ft.
Diameter of well bore to bottom of seal 9 1/2 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 12 sacks
How was cement grout placed? pressure Control
Was a drive shoe used? ☐ Yes ☑ No Plugs — Size: location — ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? — depth of strata —
Method of sealing strata off —
Was well gravel packed? ☐ Yes ☑ No Size of gravel: —
Gravel placed from — ft. to — ft.

(10) LOCATION OF WELL:
County Yamhill Driller's well number
¼ ¼ Section 19 T. 3S R. 2W W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 50 ft.
Static level 18 ft. below land surface. Date 15 Feb
Artesian pressure — lbs. per square inch. Date —

(12) WELL LOG:
Diameter of well below casing
Depth drilled 80 ft. Depth of completed well 79 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Brown Sandy Clay	0	23	
Grey Clay	23	45	
Lt Brown Gritty Clay	45	60	
Blue Grey " "	60	70	
Grey Brown " "	70	80	18

RECEIVED
MAR 11980
WATER RESOURCES DEPT
SALEM, OREGON

Work started 13 Feb 1980 Completed 15 Feb 1980
Date well drilling machine moved off of well 15 Feb 1980

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Stanley Gaunt (Drilling Machine Operator) Date 18 Feb, 19
Drilling Machine Operator's License No. 216

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name A J GAUNT & SON (Person, firm or corporation) (Type or print)
Address Aloha Ore
[Signed] Stanley Gaunt (Water Well Contractor)
Contractor's License No. 602 Date 18 Feb, 1980

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Yam B 2757

RECEIVED
MAR - 8 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19

(START CARD) # 44144

(1) OWNER:
Well Number 796
Name NSP Development/Brenneke
Address 2214 SW Hoffman
City Portland State OR Zip 97201

(2) TYPE OF WORK:
☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:
☒ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☒ No Depth of Completed Well 240 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12¼"	0'	30	Cement	0'	35'	42 Sacks
10"	30	40				
8"	40	240				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+ 2	38'	.25	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
100 GPM		240'	1 hr.

Temperature of Water 57° Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Yamhill Latitude Longitude
Township 3-S N or S. Range 2-W E or W. WM.
Section 19/30 ¼ ¼
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) Dayton Av, Newberg, Or 97132

(10) STATIC WATER LEVEL:
80' ft. below land surface. Date 3/1/93
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 190'

From	To	Estimated Flow Rate	SWL
190	220'	60 GPM	n/a

(12) WELL LOG:
Ground elevation

Material	From	To	SWL
Top Soil	0	3	
Brown Clay	3	25	
H. Brown Basalt	25	35	
H. Gray Basalt	35	55	
M.H. Brown Basalt	55	85	
H. Gray Basalt	85	105	
H. Gray Fractured Basalt	105	155	
H. Gray Frac./Broken Basalt	155	165	
Hard Gray Basalt	165	175	
Hard Brown Basalt	175	190	
Hard Severe Fractured Gray Bas	190	200	
H. Gray/Brown Porous Basalt	200	215	
Hard Gray Basalt	215	235	
Soft White Clay	235	240	

Date started 2/23/93 Completed 3/1/93

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 645
Signed Date 3/4/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

YAMH 2837

RECEIVED
JUL 13 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19C6

(START CARD) # 50236

(1) OWNER: Well Number 93-336

Name Tim & Robin Vachter

Address 24285 Zard Ln.

City Newberg State OR Zip 97132

(2) TYPE OF WORK:

xx New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:

☐ Rotary Air ☐ Rotary Mud ☒ Cable

☐ Other

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☒ No Depth of Completed Well 200 ft.

Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10	0	39	Cement	0	39	68 sk
6	39	200				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	84	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	40	200	160	☐	☒	☒	☐
					☐	☐	☐	☐

Final location of shoe(s) 84.5

(7) PERFORATIONS/SCREENS:

☒ Perforations Method skil saw

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
160	200	6"	30	1/8"		☐	☒
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☒ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
bailer 20	100		1 hr.
pump 20	50		1 hr

Temperature of Water 51 Depth Artesian Flow Found

Was a water analysis done? ☒ Yes By whom WFR

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County YAMHILL Latitude Longitude

Township 3s N or S. Range 2w E or W. WM.

Section 19 nw ¼ sw ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

69 ft. below land surface. Date 6/23/93

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 132'

From	To	Estimated Flow Rate	SWL
132	199	20	69

(12) WELL LOG:

Ground elevation 200

Material	From	To	SWL
Topsoil	0	2	
Clay Brwn	2	31	
clay & decomposed rockGR	31	34	
Clay Gray	34	63	
Rock decomposed w/clay brwn	63	74	
Rock decomposed	74	111	
Rock fractured/decomposed	111	140	69
Rock fractured	140	200	

Date started 6/4/93 Completed 6/24/93

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number

Signed Date

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 203

Signed Tom Bryant Date 6/24/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

PRELIMINARY STORMWATER MANAGEMENT PLAN

S Garfield St 12-Lot Subdivision (PRE#22-0002)

Submitted:	September 2022
Owner:	Scott Holden Scottholden2007@outlook.com (503) 502-8006
Engineer:	Firwood Design Group Contact: Kelli Grover kg@firwooddesign.com 359 E. Historic Columbia River Highway Troutdale, OR 97060 (503) 668 - 3788
Site Location:	100 S Garfield St Newberg, OR 97132

Table of Contents

1. Site Information
2. Stormwater Management Strategy
3. Design Methodology
4. Facility Selection & Design Results
5. Conveyance

Appendices

APPENDIX A HydroCAD Report

APPENDIX B Infiltration Testing Report

SITE INFORMATION

The project is located at 100 S Garfield St in Newberg, OR. The property is a split tax lot that totals 1.5 acres. The larger portion of the tax lot is at the north end of the Garfield St ROW and is encumbered by over 20,000 sf of un-developable area that contains wetlands and the City's Stream Corridor Overlay district. The smaller portion of the tax lot is to the south and is 11,400 sf. There is an existing duplex on the lot that will be removed as a part of this project. The vicinity map in Figure 1 illustrates the location of the subject site.

The site is generally flat with grades of ~5% that slope down to the northwest to the existing stream. There is no existing stormwater infrastructure on S Garfield St in the vicinity of the project.

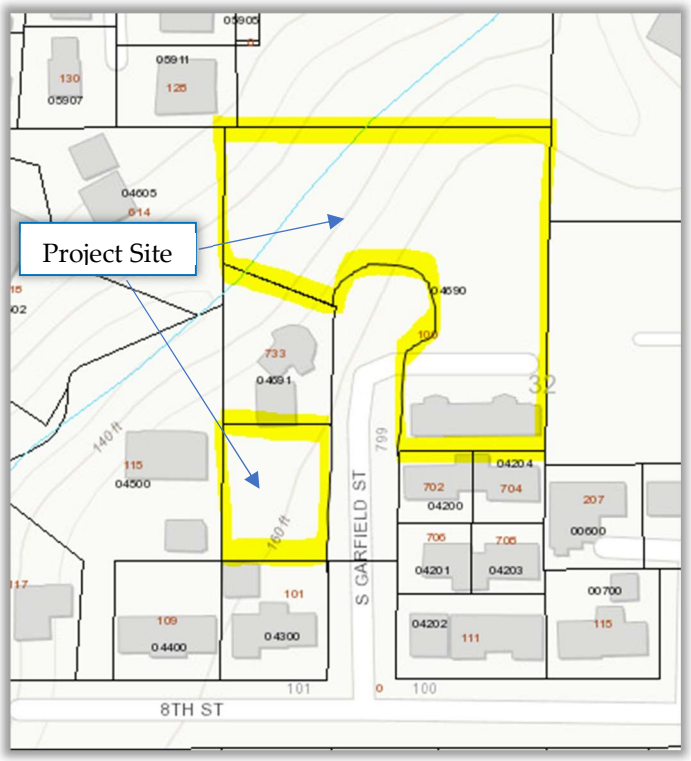


Figure 1 – Vicinity Map

The project proposes to subdivide the property into 12 lots ranging from 2,600 sf to 3,800 sf in size. All lots will be for future duplex development. Two tracts will be created in the subdivision; Tract A (1,864 sf) will be dedicated for stormwater management while tract B (22,495 sf) will

contain the wetlands and Stream Corridor Overlay area on site and is to be un-developed and remain as an environmental tract. Additionally, the project proposes to extend S Garfield St with full street improvements and construct a cul-de-sac turnaround. Public utilities will be extended into the cul-de-sac to service the future duplexes.

Proposed stormwater improvements as a part of this project will treat and detain area from both newly created public improvements and private roof and driveways. New impervious areas associated with these areas are shown in Table 1 below. Due to the proposed grading plan and existing site constraints, Lot 12 impervious area will drain to the south, away from the proposed stormwater improvements, to be collected in the existing catch basins at the intersection of 8th St and S Garfield St. Therefore, Lot 12 area is not accounted for in this design.

Table 1 – Proposed Impervious Areas

	Description	**Impervious Area Created**
S Garfield St	32' wide AC, 5' wide sidewalk (both sides), 12' wide driveway approaches	10,968 sf
Lots 1-11	Impervious area assumption of 50% of lot coverage	21,180 sf
	TOTAL	**32,148 sf**

A geotechnical study and infiltration test was done for the site on August 31st, 2022 by Rapid Soil Solutions (See Appendix B). Infiltration testing was at three locations and found the field infiltration rate to be 0.5 to 2.0 in/hr. The study did not encounter groundwater in this area at the tested depths. The tested area #2 that produced a infiltration rate of 2.0 in/hr will be the locations for the proposed vegetated infiltration facilities. The underground detention facility will be located in Tract A near test location #1 that produced an infiltration rate of 0.5 in/hr. Infiltration is not proposed in this area. As mentioned previously, the site contains wetlands and the City's Stream Corridor Overlay boundary. The proposed stormwater management facilities will be located outside of both restricted areas. However, the outfall for the detention facility will be located within the Stream Corridor Overlay and will be mitigated for and re-planted in accordance with City standards.

STORMWATER MANAGEMENT STRATEGY

This project will utilize a combination of infiltration and detention to treat and detain all net new impervious area created, in accordance with the design flow chart in section 4.6 of the City's Stormwater Design Manual. All stormwater from surface impervious area (i.e. roads and driveways) will be directed to vegetated roadside planters for treatment. Lots 1-9 will have private stormwater laterals from the proposed stormwater main for connection of roof drains of the duplexes. This stormwater main will convey stormwater to an underground detention facility for detention of stormwater from the applicable design storms. Overflow from two of the roadside planters will also be directed to the detention facility. Peak flows from the post-developed site will match peak flows from the existing site for the design storms.

DSEIGN METHODOLOGY

The Santa Barbara Urban Hydrograph Method (calculated with HydroCAD with SCS Type 1A rainfall distribution) was used to create the hydrographs and to estimate the peak flows for the design storms. A curve number (CN) value of 98 was assigned to all impervious areas (road, driveway, sidewalk and roofs). A curve number value of 84 was assigned to the existing pervious basin area corresponding to grass cover in fair condition with HSG D soils.

The assumed void space in the growing medium and drain rock of the planters was assumed at 25% and 40%, respectively. The assumed exfiltration from the top of the growing medium through the facility was assumed at 1.0 in/hr, which accounts for a safety factor of 2 applied to the field infiltration rate of 2.0 in/hr.

Drainage conditions for impervious areas, when calculated, are generally less than the acceptable minimum 6-minute time of concentration. Therefore, the 6-minute minimum is applied.

Precipitation depths used for the design correlate to City of Newberg design storms and can be seen in Table 2 below.

Table 2 – Design Storm Volumes

Recurrence Interval (yr.)	***Total Precipitation Depth (In)***
2	*2.50*
5	*3.00*
10	*3.50*
25	*4.00*

FACILITY SELECTION & DESIGN RESULTS

The post-developed site is divided into four smaller sub-basins for stormwater management and are delineated in Table 3. Please reference the preliminary utility and grading plan submitted in this land use application for more detail.

Table 3 – Sub-Basin Areas

	Area Description	**Facility**	**Impervious Area (sf)**	**Outflow**
Basin 1	Public road and sidewalk, cul-de-sac, north	Planter 1, 40 LF	7,319 sf	Sheet Flow to Stream
Basin 2	Public road and sidewalk, east	Planter 2, 20 LF	1,860 sf	To Detention Facility
Basin 3	Public road and sidewalk, west, Lots 10-11	Planter 3, 25 LF	5,590 sf	To Detention Facility
Basin 4	Lots 1-9 Roof drains	60" Detention Pipe, 70 LF	17,379 sf	Outfall at Stream

Planters 1-3 will be constructed with a 1.5' gravel layer, 1.5' soil medium, and 1' ponding depth and will all have an open bottom to allow for exfiltration. Planter 1 will have an overflow notch to allow stormwater to sheet flow to the north when the facility is inundated. No outflow piping is proposed for Planter 1. Planters 2 and 3 will have a perforated pipe underdrain with a 1" flow control orifice and an overflow orifice set above the design ponding depth. Outflows from Planters 2 and 3 will be conveyed into the 12" storm main to the detention facility.

The 60″ diameter underground detention pipe will be constructed with a flow control manhole with a 1.5″ flow control orifice at the invert, a 2″ upper orifice located 2.2′ above the invert and a 12″ overflow orifice 4′ above the invert to allow sufficient freeboard during large storm events.

Collectively, all four facilities will detain stormwater such that peak flows exiting the site in the post-development condition or less than or equal to peak flows in the existing condition for the 2-, 5-, 10-, and 25-year design storms. Table 4 below shows the results of the design.

Table 4 – Site Peak Flows

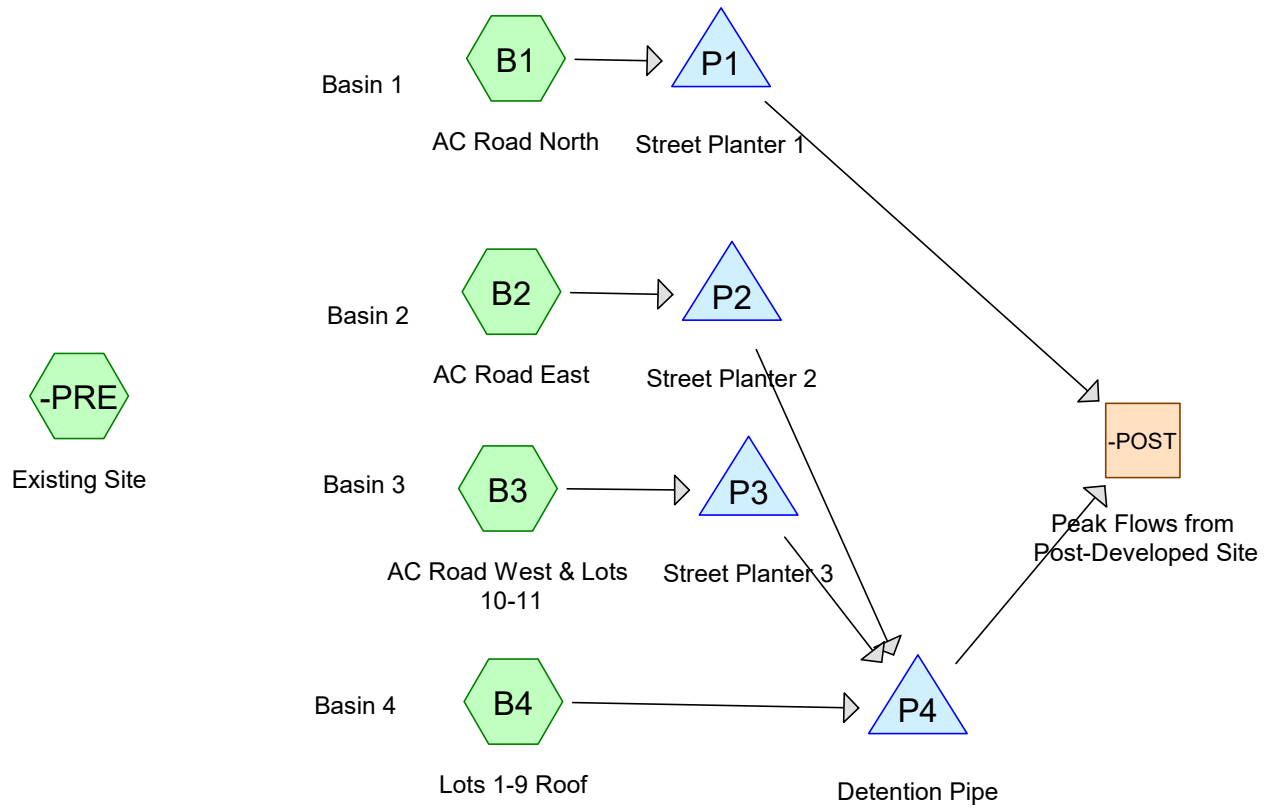
	Pre-Existing Peak Flows (cfs)	**Post-Development Peak Flows (cfs)**
2-Year	0.18	0.18
5-Year	0.26	0.26
10-Year	0.34	0.32
25-Year	0.43	0.37

To meet water quality and treatment standards, the three planters are designed to retain and infiltrate stormwater from surface impervious areas during the 1-inch water quality storm. The method of treatment is filtration through the vegetation and engineered soil medium.

See Appendix A for the HydroCAD report for more detail on the stormwater design.

CONVEYANCE

All on-site stormwater mains will be 12″ diameter HDPE at a minimum slope of 0.5%. The capacity of this pipe when flowing full is 2.93 cfs, per Manning's equation. As demonstrated above, the peak flows existing the site during the 25-year design storm is 0.37 cfs. Therefore, all proposed stormwater pipe is of adequate capacity for the proposed design. Additionally, all roadside planters will be constructed with grated overflow inlets to allow for the safe conveyance of stormwater if the facilities were to be inundated, and to prevent negative impacts to public roads and downstream neighboring properties.



Subcat Reach Pond Link

Routing Diagram for E21-049 Storm
Prepared by Firwood Design Group, Printed 9/27/2022

Summary for Subcatchment -PRE: Existing Site

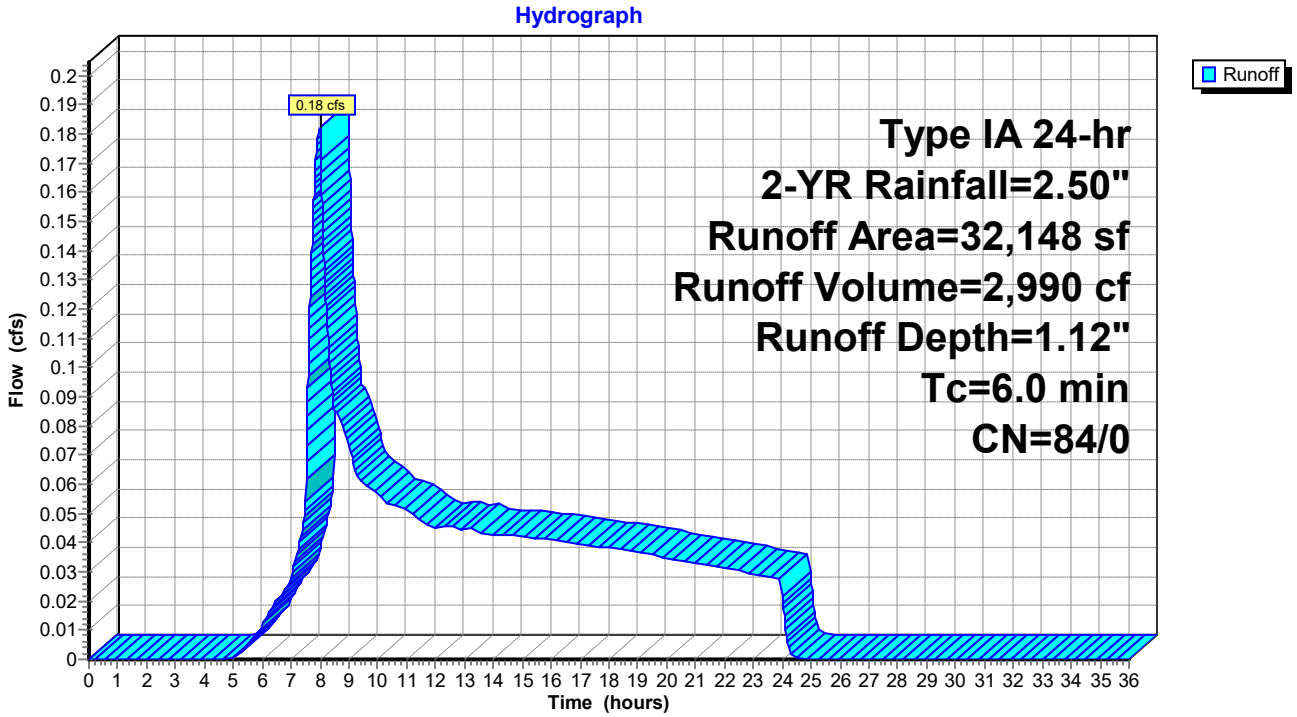
Runoff = 0.18 cfs @ 8.00 hrs, Volume= 2,990 cf, Depth= 1.12"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

Area (sf)	CN	Description
32,148	84	50-75% Grass cover, Fair, HSG D
32,148	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment B1: AC Road North

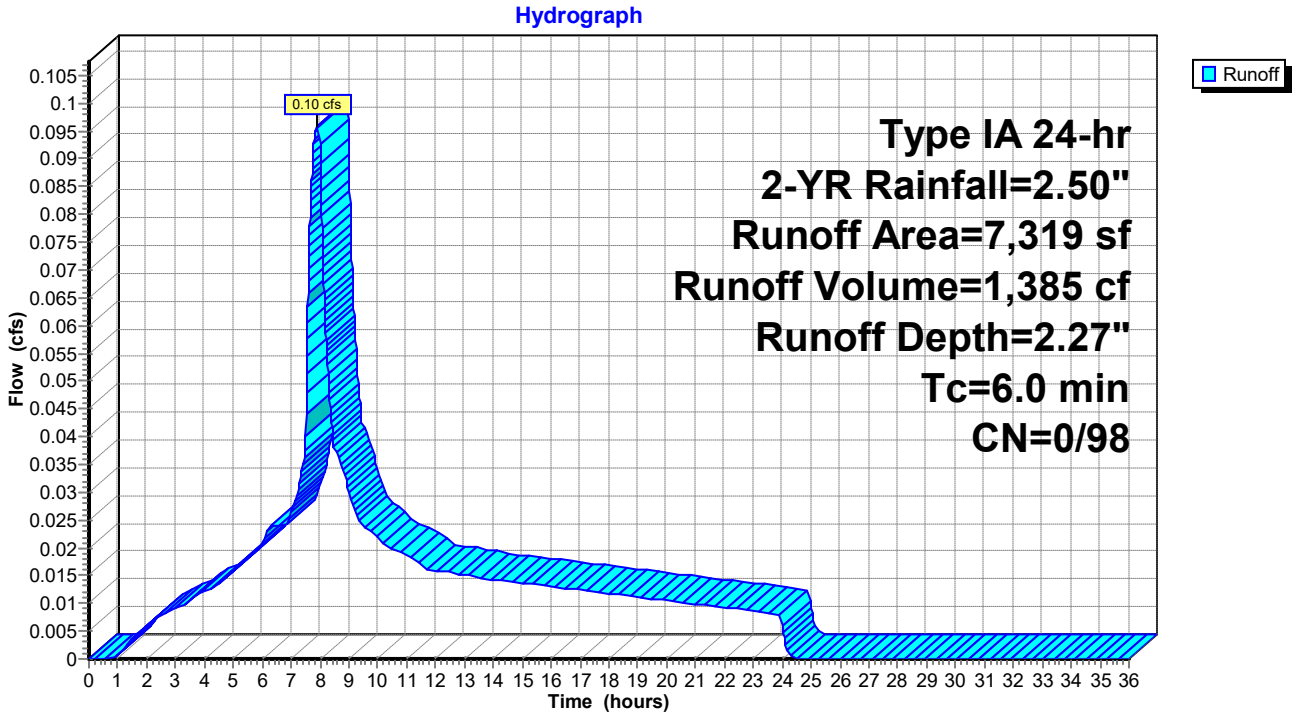
Runoff = 0.10 cfs @ 7.90 hrs, Volume= 1,385 cf, Depth= 2.27"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	7,319	98	AC
	7,319	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: AC Road North



Summary for Subcatchment B2: AC Road East

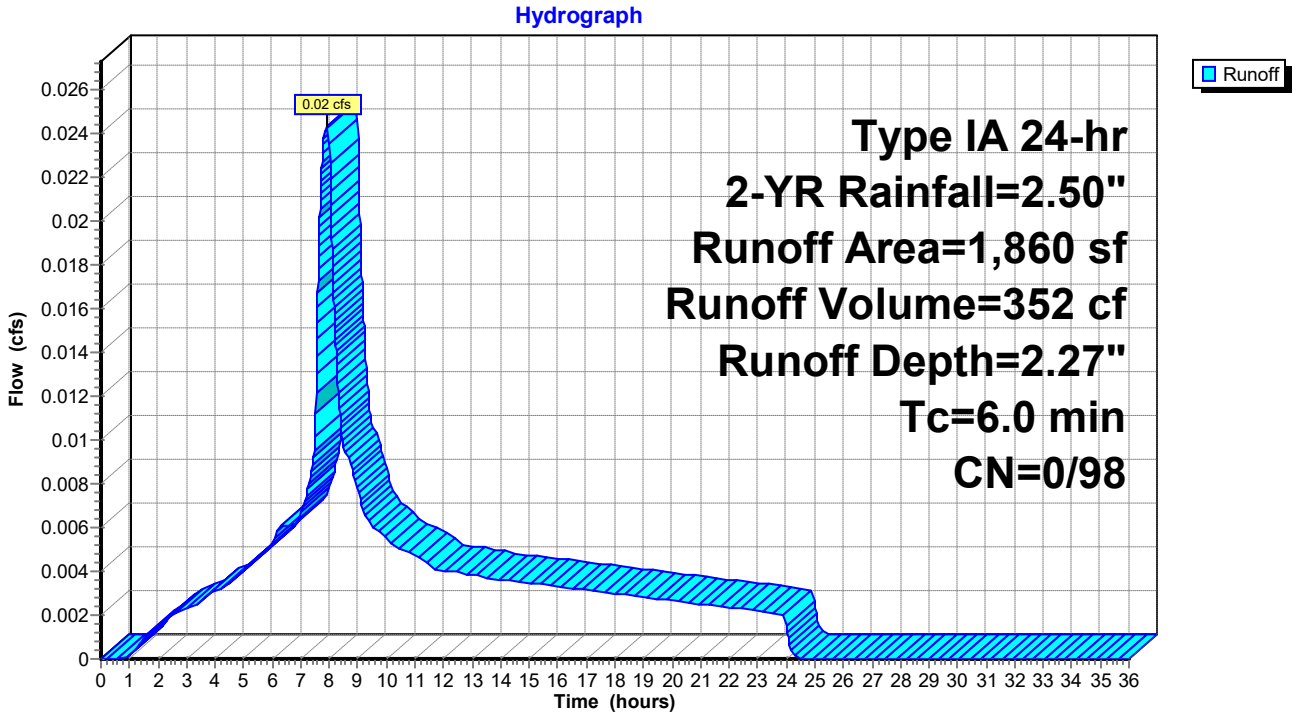
Runoff = 0.02 cfs @ 7.90 hrs, Volume= 352 cf, Depth= 2.27"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	1,860	98	Public Impervious
	1,860	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: AC Road East



Summary for Subcatchment B3: AC Road West & Lots 10-11

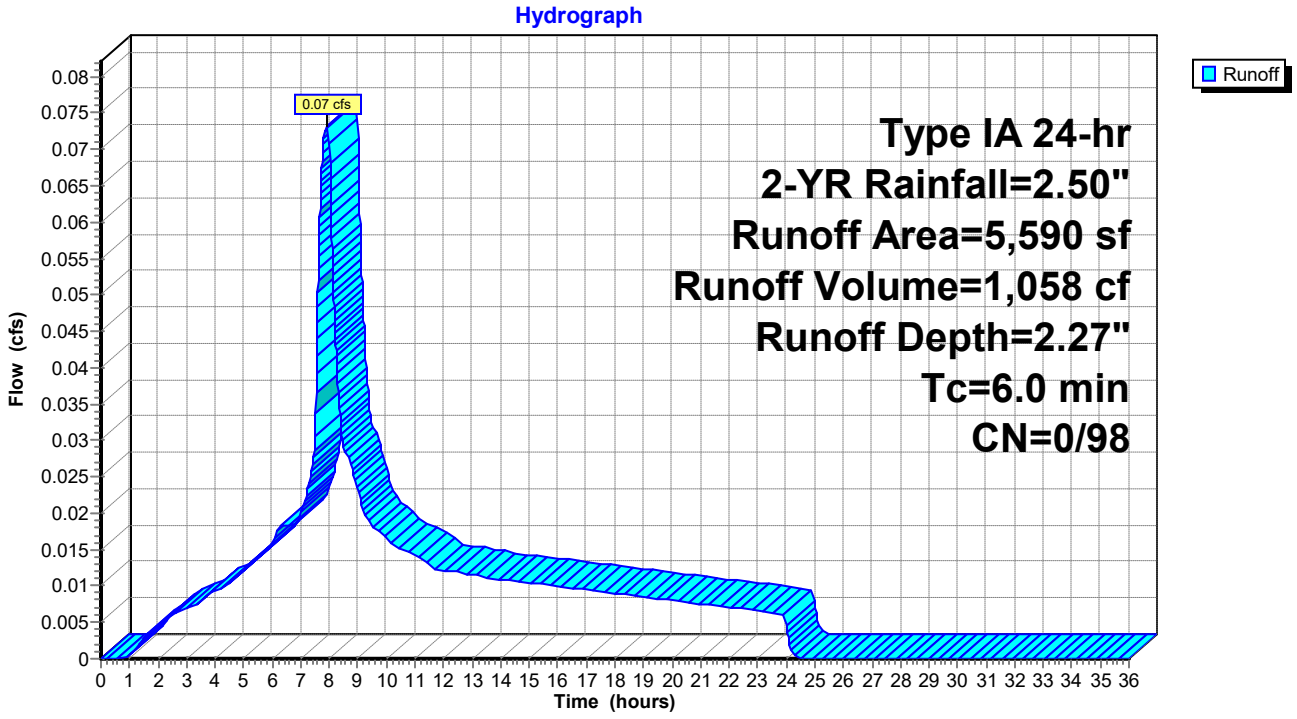
Runoff = 0.07 cfs @ 7.90 hrs, Volume= 1,058 cf, Depth= 2.27"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	1,790	98	Public Impervious
*	3,800	98	Roof/Driveway Lot 10/11
	5,590	98	Weighted Average
	5,590	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: AC Road West & Lots 10-11



Summary for Subcatchment B4: Lots 1-9 Roof

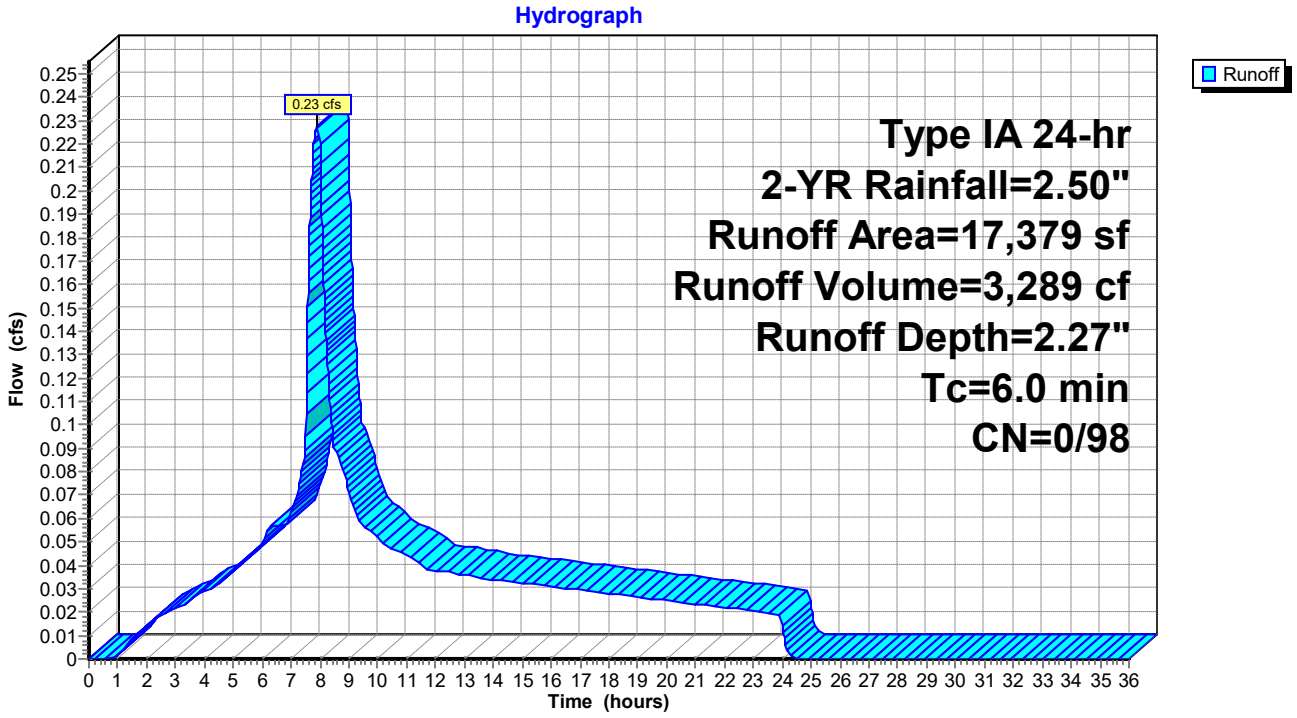
Runoff = 0.23 cfs @ 7.90 hrs, Volume= 3,289 cf, Depth= 2.27"
Routed to Pond P4 : Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2-YR Rainfall=2.50"

	Area (sf)	CN	Description
*	17,379	98	Roof Area
	17,379	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: Lots 1-9 Roof



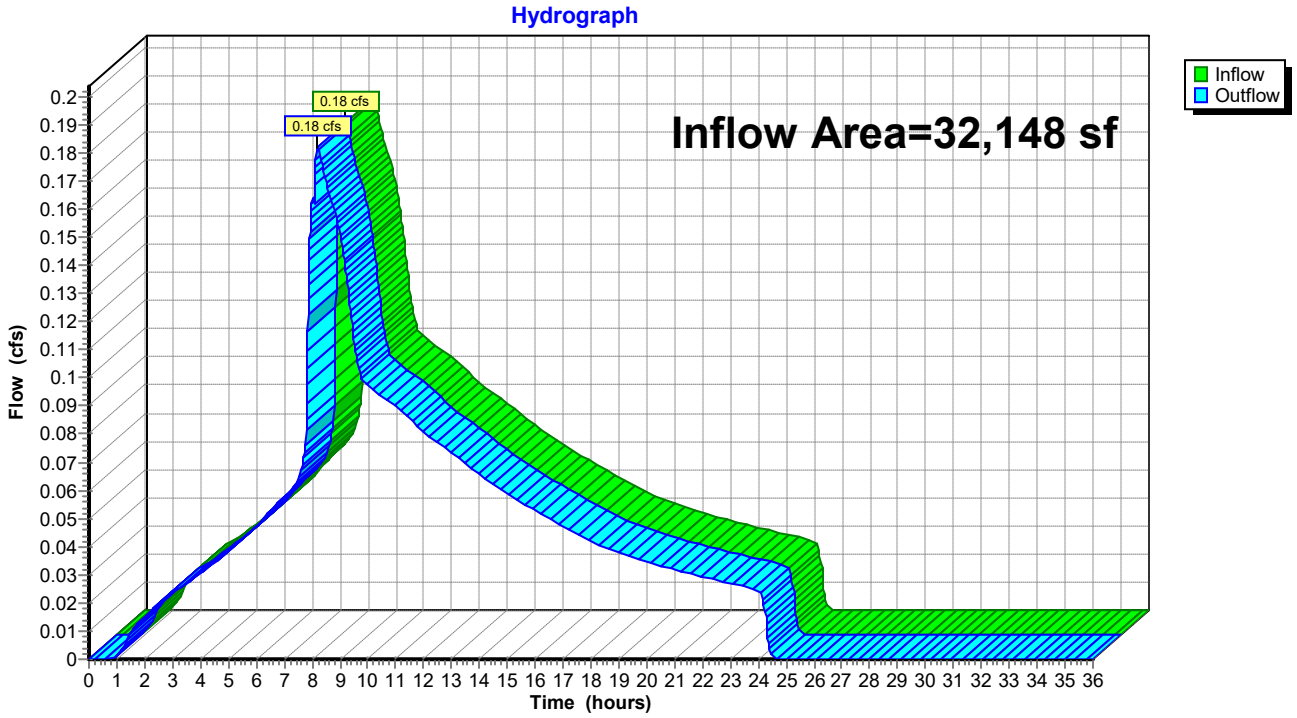
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 32,148 sf,100.00% Impervious, Inflow Depth = 1.73" for 2-YR event
Inflow = 0.18 cfs @ 8.21 hrs, Volume= 4,639 cf
Outflow = 0.18 cfs @ 8.21 hrs, Volume= 4,639 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond P1: Street Planter 1

Inflow Area = 7,319 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.10 cfs @ 7.90 hrs, Volume= 1,385 cf
Outflow = 0.09 cfs @ 8.01 hrs, Volume= 1,385 cf, Atten= 5%, Lag= 6.7 min
Discarded = 0.01 cfs @ 7.00 hrs, Volume= 1,081 cf
Primary = 0.08 cfs @ 8.01 hrs, Volume= 304 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.66' @ 8.01 hrs Surf.Area= 540 sf Storage= 295 cf

Plug-Flow detention time= 242.7 min calculated for 1,385 cf (100% of inflow)
Center-of-Mass det. time= 242.8 min (916.4 - 673.6)

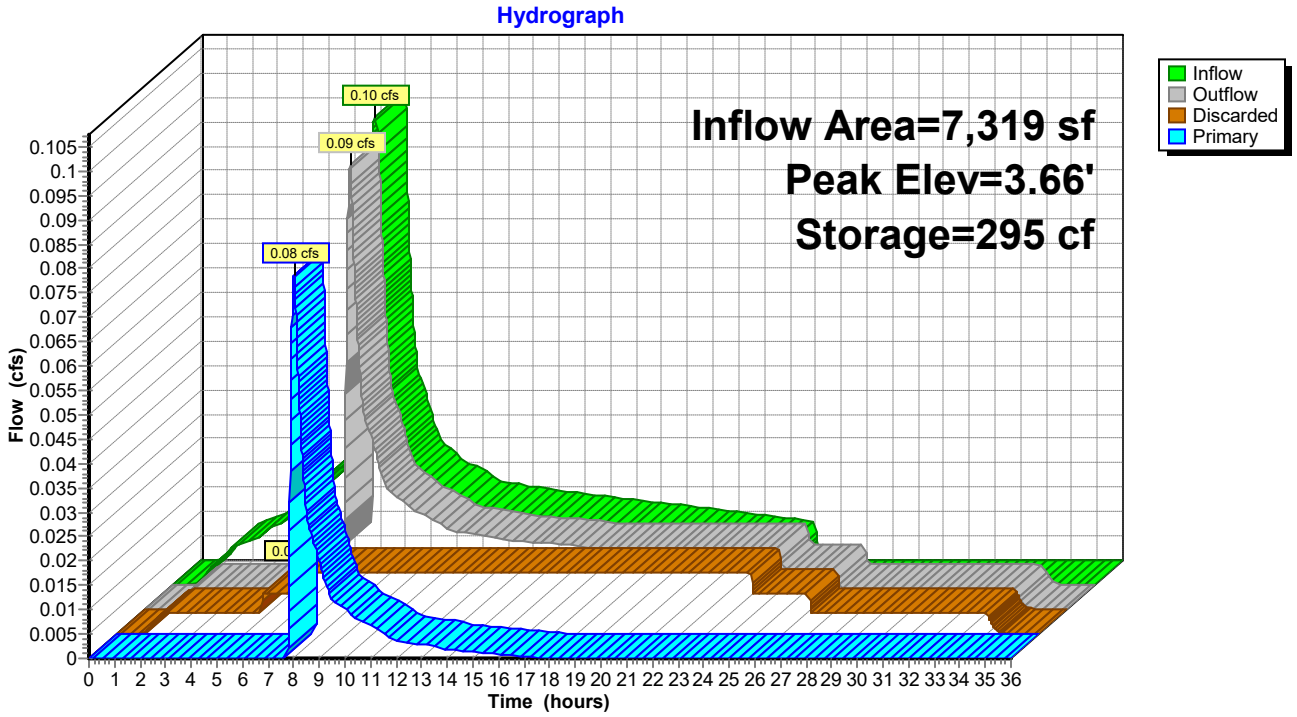
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	108 cf	**4.50'W x 40.00'L x 1.50'H Rock** 270 cf Overall x 40.0% Voids
#2	1.50'	68 cf	**4.50'W x 40.00'L x 1.50'H Growing Medium** 270 cf Overall x 25.0% Voids
#3	3.00'	180 cf	**4.50'W x 40.00'L x 1.00'H Ponding**
		356 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.00 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.08 cfs @ 8.01 hrs HW=3.66' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.08 cfs @ 1.38 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 1,860 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.02 cfs @ 7.90 hrs, Volume= 352 cf
Outflow = 0.02 cfs @ 8.08 hrs, Volume= 352 cf, Atten= 22%, Lag= 11.0 min
Discarded = 0.00 cfs @ 4.97 hrs, Volume= 141 cf
Primary = 0.02 cfs @ 8.08 hrs, Volume= 211 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.46' @ 8.08 hrs Surf.Area= 90 sf Storage= 17 cf

Plug-Flow detention time= 7.6 min calculated for 352 cf (100% of inflow)
Center-of-Mass det. time= 7.6 min (681.2 - 673.6)

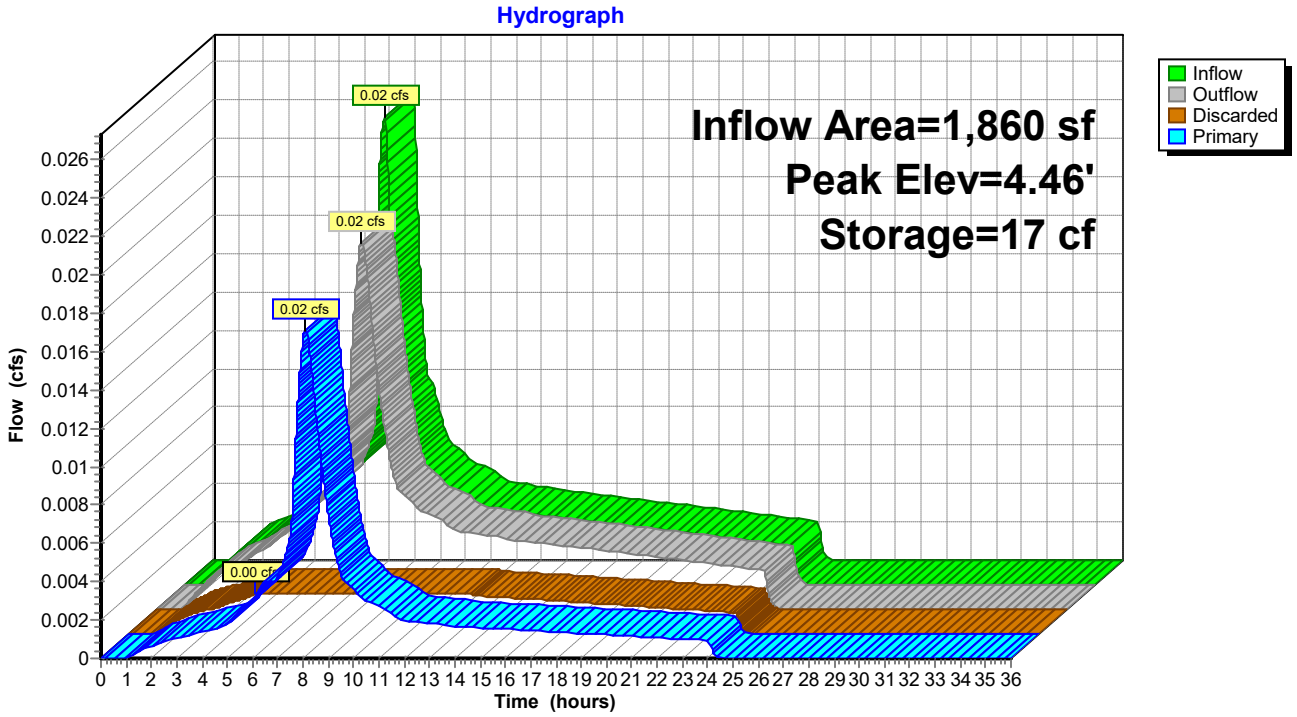
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	54 cf	**4.50'W x 20.00'L x 1.50'H Rock** 135 cf Overall x 40.0% Voids
#2	5.50'	34 cf	**4.50'W x 20.00'L x 1.50'H Growing Medium** 135 cf Overall x 25.0% Voids
#3	7.00'	90 cf	**4.50'W x 20.00'L x 1.00'H Ponding**
		178 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 4.97 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.02 cfs @ 8.08 hrs HW=4.46' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.02 cfs @ 3.13 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 5,590 sf,100.00% Impervious, Inflow Depth = 2.27" for 2-YR event
Inflow = 0.07 cfs @ 7.90 hrs, Volume= 1,058 cf
Outflow = 0.05 cfs @ 8.19 hrs, Volume= 1,058 cf, Atten= 38%, Lag= 17.7 min
Discarded = 0.01 cfs @ 7.87 hrs, Volume= 223 cf
Primary = 0.04 cfs @ 8.19 hrs, Volume= 835 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 6.35' @ 8.19 hrs Surf.Area= 225 sf Storage= 91 cf

Plug-Flow detention time= 16.3 min calculated for 1,057 cf (100% of inflow)
Center-of-Mass det. time= 16.3 min (689.9 - 673.6)

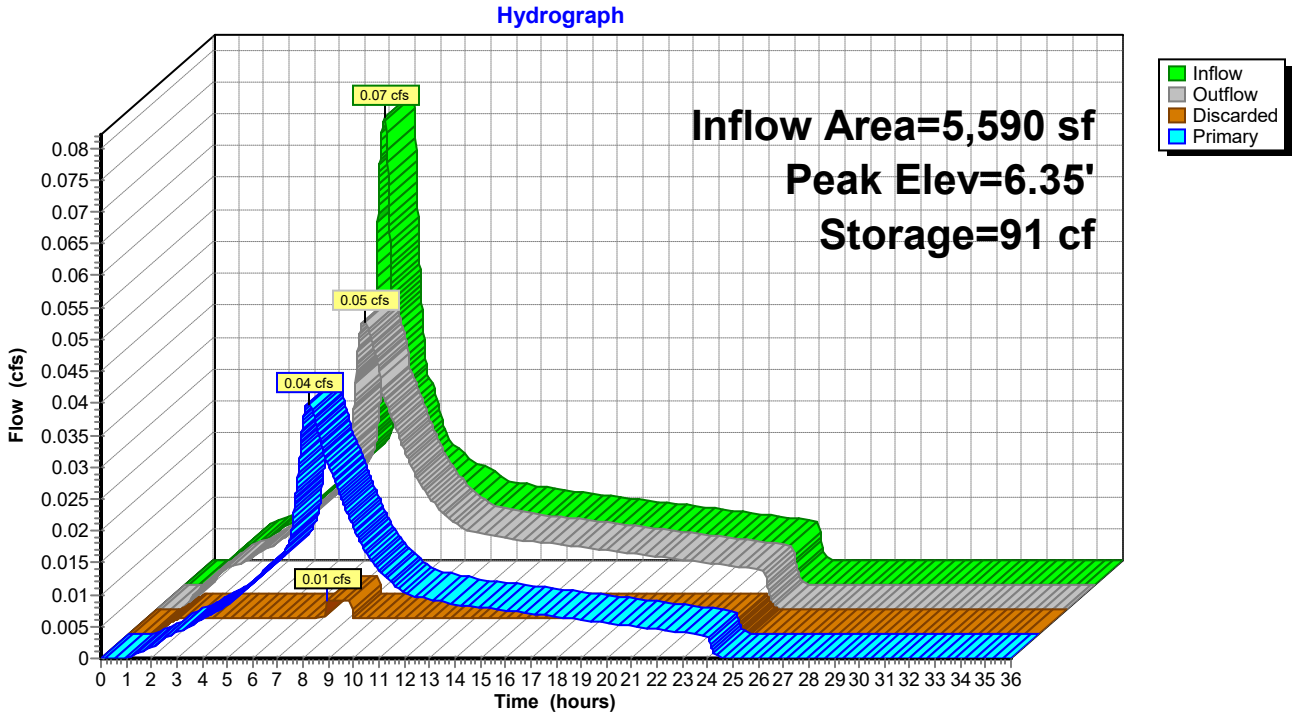
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	68 cf	**4.50'W x 25.00'L x 1.50'H Rock** 169 cf Overall x 40.0% Voids
#2	5.50'	42 cf	**4.50'W x 25.00'L x 1.50'H Growing Medium** 169 cf Overall x 25.0% Voids
#3	7.00'	113 cf	**4.50'W x 25.00'L x 1.00'H Ponding**
		222 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.87 hrs HW=5.50' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.04 cfs @ 8.19 hrs HW=6.35' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.04 cfs @ 7.32 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: Detention Pipe

Inflow Area = 24,829 sf,100.00% Impervious, Inflow Depth = 2.10" for 2-YR event
Inflow = 0.28 cfs @ 7.95 hrs, Volume= 4,335 cf
Outflow = 0.14 cfs @ 8.49 hrs, Volume= 4,335 cf, Atten= 50%, Lag= 32.6 min
Primary = 0.14 cfs @ 8.49 hrs, Volume= 4,335 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 2.41' @ 8.49 hrs Surf.Area= 350 sf Storage= 656 cf

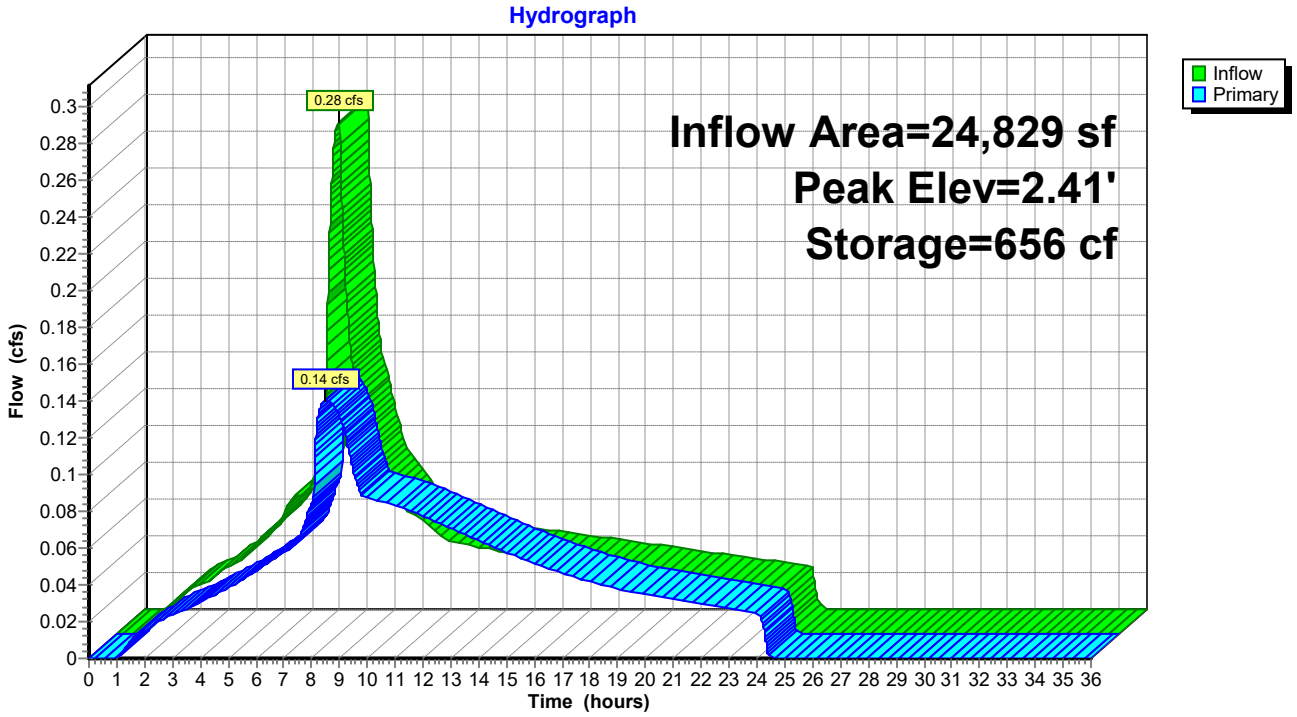
Plug-Flow detention time= 59.1 min calculated for 4,334 cf (100% of inflow)
Center-of-Mass det. time= 59.1 min (730.4 - 671.3)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	1,374 cf	**60.0" Round Pipe Storage** L= 70.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.5" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	4.00'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.14 cfs @ 8.49 hrs HW=2.41' (Free Discharge)
- **1=Control Orifice** (Orifice Controls 0.09 cfs @ 7.48 fps)
- **2=Upper Orifice** (Orifice Controls 0.05 cfs @ 2.21 fps)
- **3=Overflow** (Controls 0.00 cfs)

Pond P4: Detention Pipe



Summary for Subcatchment -PRE: Existing Site

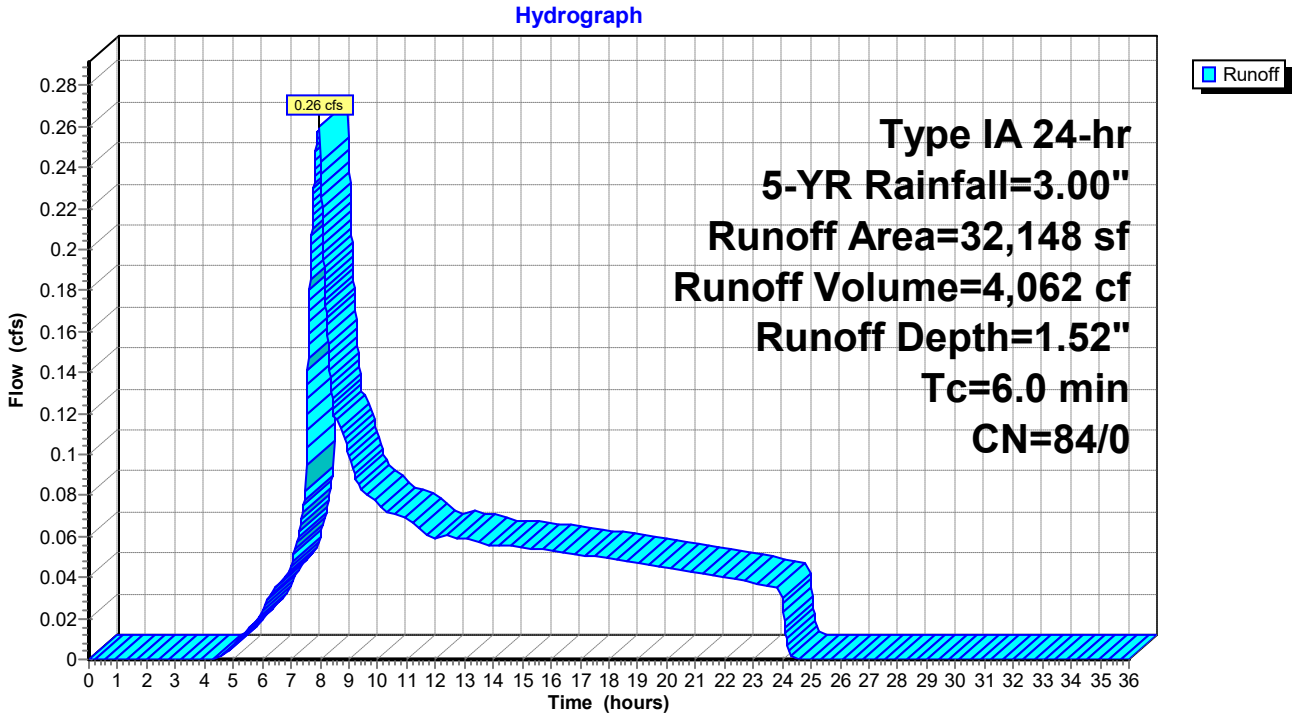
Runoff = 0.26 cfs @ 7.99 hrs, Volume= 4,062 cf, Depth= 1.52"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.00"

Area (sf)	CN	Description
32,148	84	50-75% Grass cover, Fair, HSG D
32,148	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment B1: AC Road North

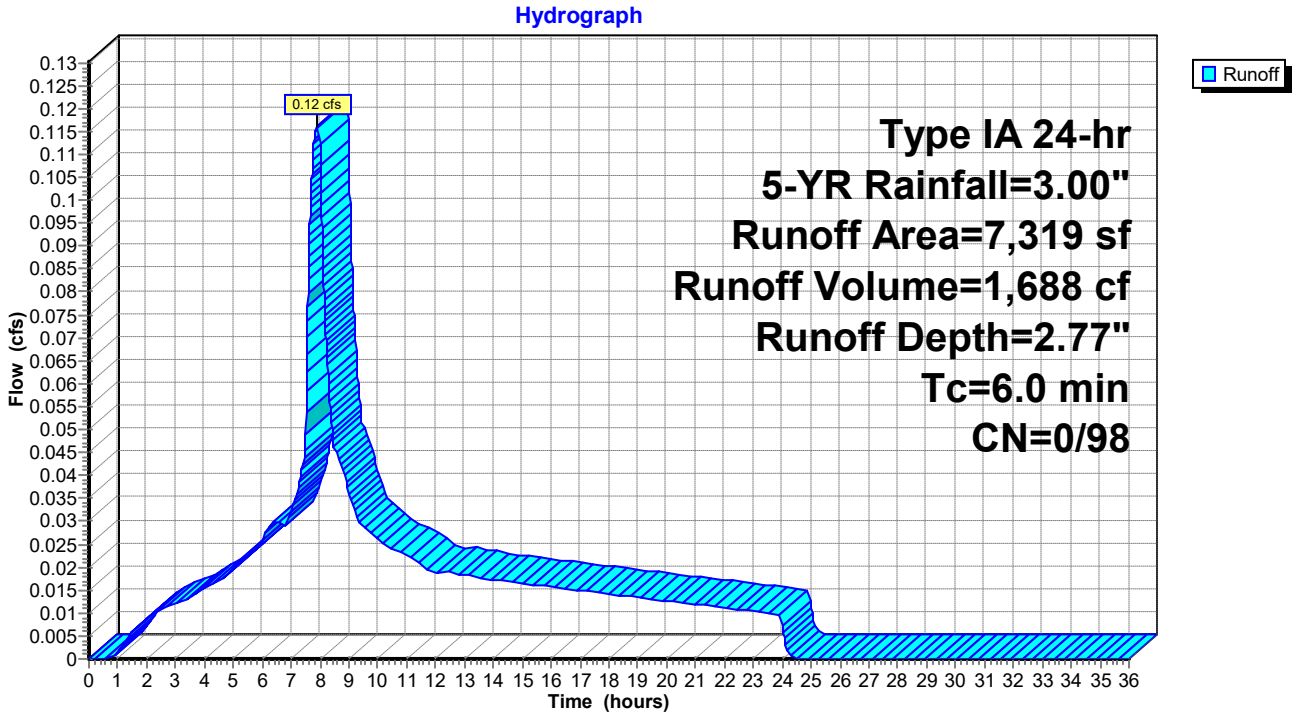
Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,688 cf, Depth= 2.77"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.00"

	Area (sf)	CN	Description
*	7,319	98	AC
	7,319	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: AC Road North



Summary for Subcatchment B2: AC Road East

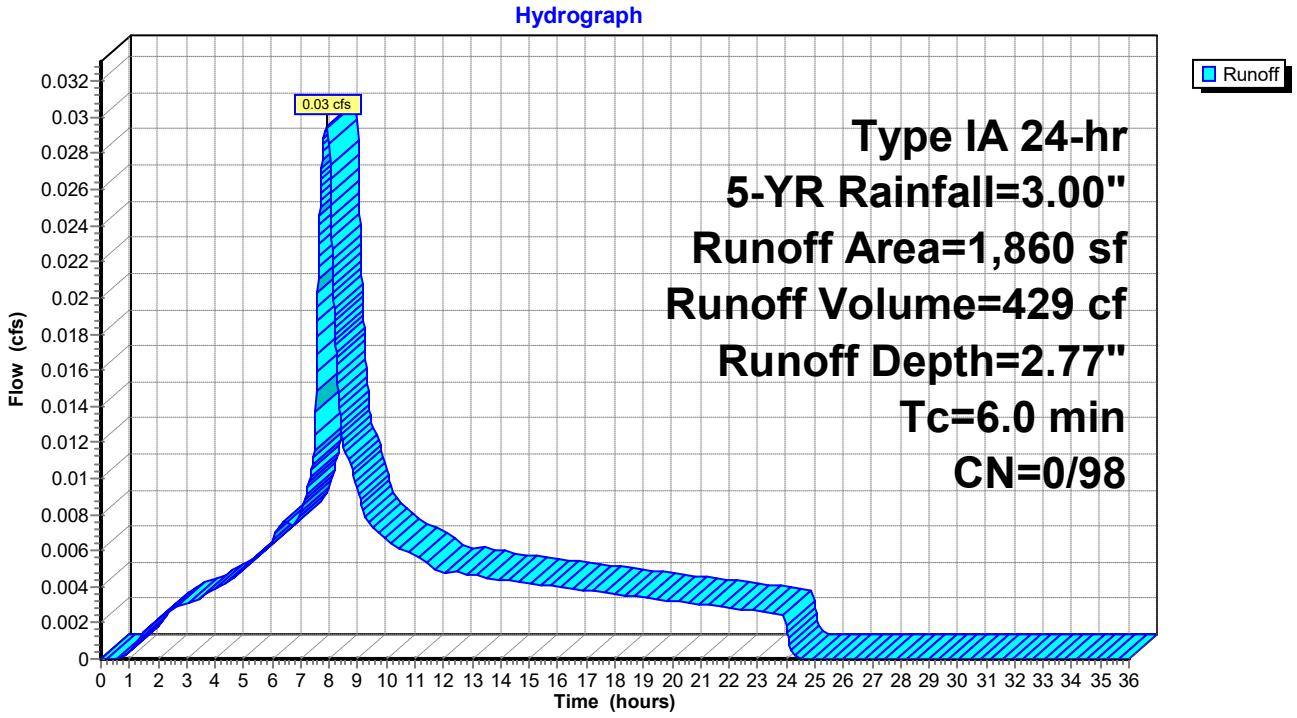
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 429 cf, Depth= 2.77"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.00"

	Area (sf)	CN	Description
*	1,860	98	Public Impervious
	1,860	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: AC Road East



Summary for Subcatchment B3: AC Road West & Lots 10-11

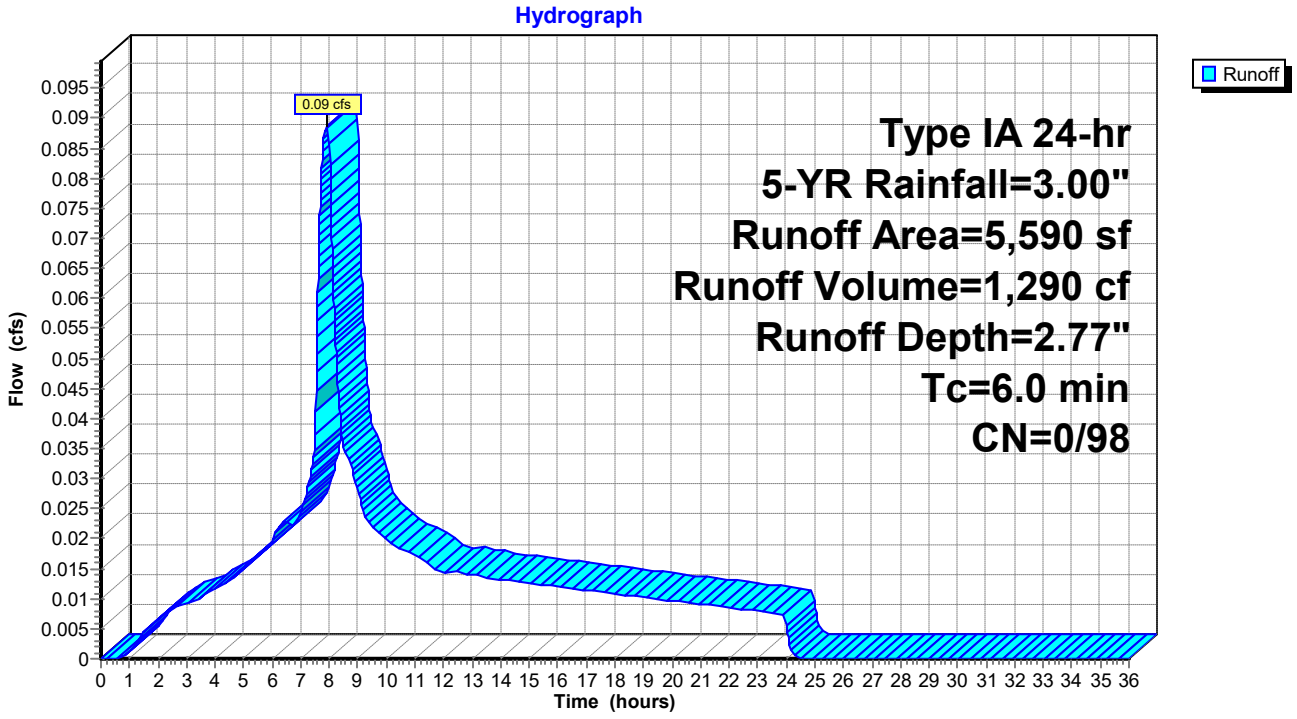
Runoff = 0.09 cfs @ 7.90 hrs, Volume= 1,290 cf, Depth= 2.77"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.00"

	Area (sf)	CN	Description
*	1,790	98	Public Impervious
*	3,800	98	Roof/Driveway Lot 10/11
	5,590	98	Weighted Average
	5,590	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: AC Road West & Lots 10-11



Summary for Subcatchment B4: Lots 1-9 Roof

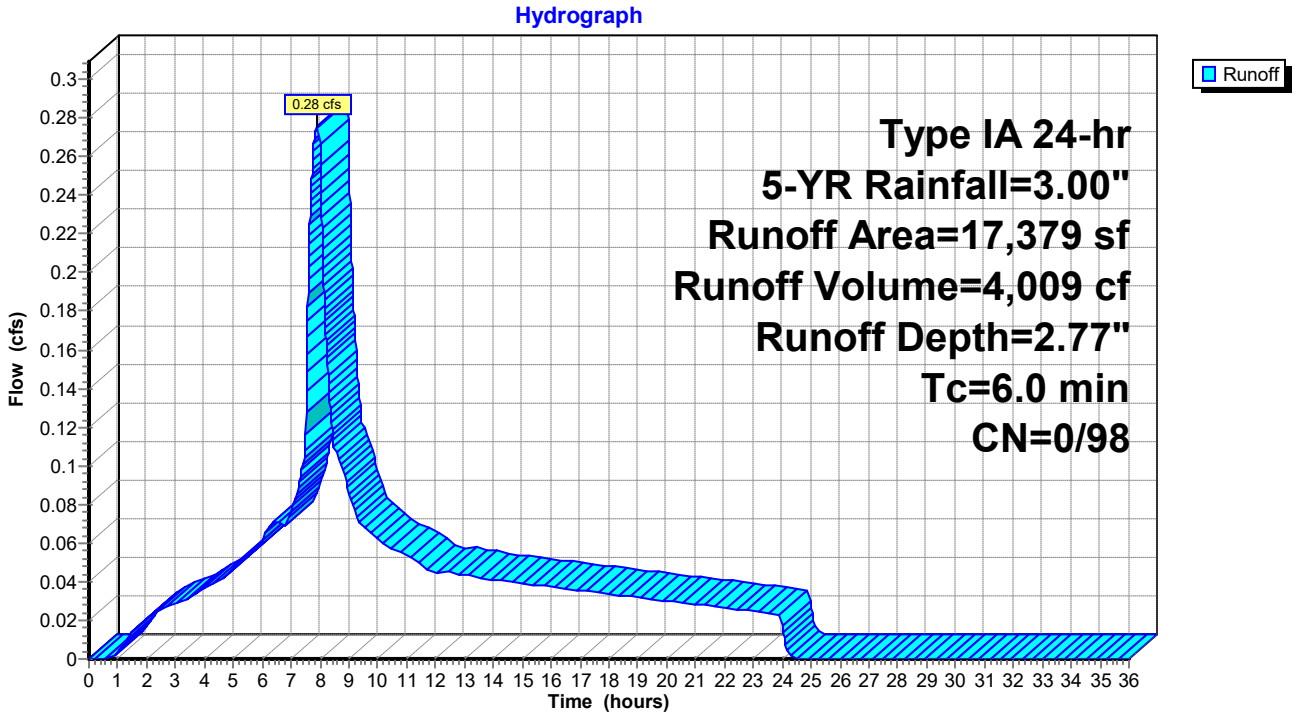
Runoff = 0.28 cfs @ 7.90 hrs, Volume= 4,009 cf, Depth= 2.77"
Routed to Pond P4 : Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5-YR Rainfall=3.00"

	Area (sf)	CN	Description
*	17,379	98	Roof Area
	17,379	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: Lots 1-9 Roof



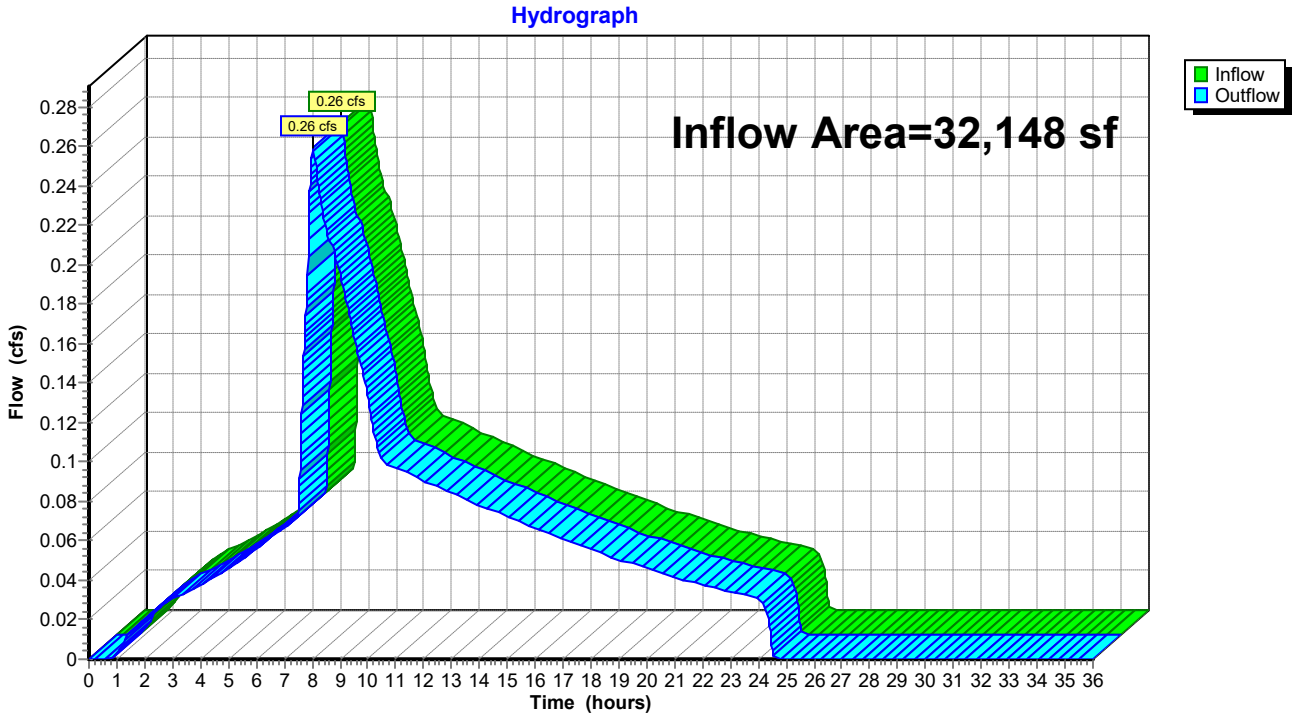
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 32,148 sf,100.00% Impervious, Inflow Depth = 2.20" for 5-YR event
Inflow = 0.26 cfs @ 8.03 hrs, Volume= 5,881 cf
Outflow = 0.26 cfs @ 8.03 hrs, Volume= 5,881 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond P1: Street Planter 1

Inflow Area = 7,319 sf,100.00% Impervious, Inflow Depth = 2.77" for 5-YR event
Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,688 cf
Outflow = 0.12 cfs @ 7.95 hrs, Volume= 1,688 cf, Atten= 1%, Lag= 3.2 min
Discarded = 0.01 cfs @ 6.20 hrs, Volume= 1,145 cf
Primary = 0.10 cfs @ 7.95 hrs, Volume= 543 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.69' @ 7.95 hrs Surf.Area= 540 sf Storage= 300 cf

Plug-Flow detention time= 217.9 min calculated for 1,688 cf (100% of inflow)
Center-of-Mass det. time= 218.0 min (886.0 - 668.0)

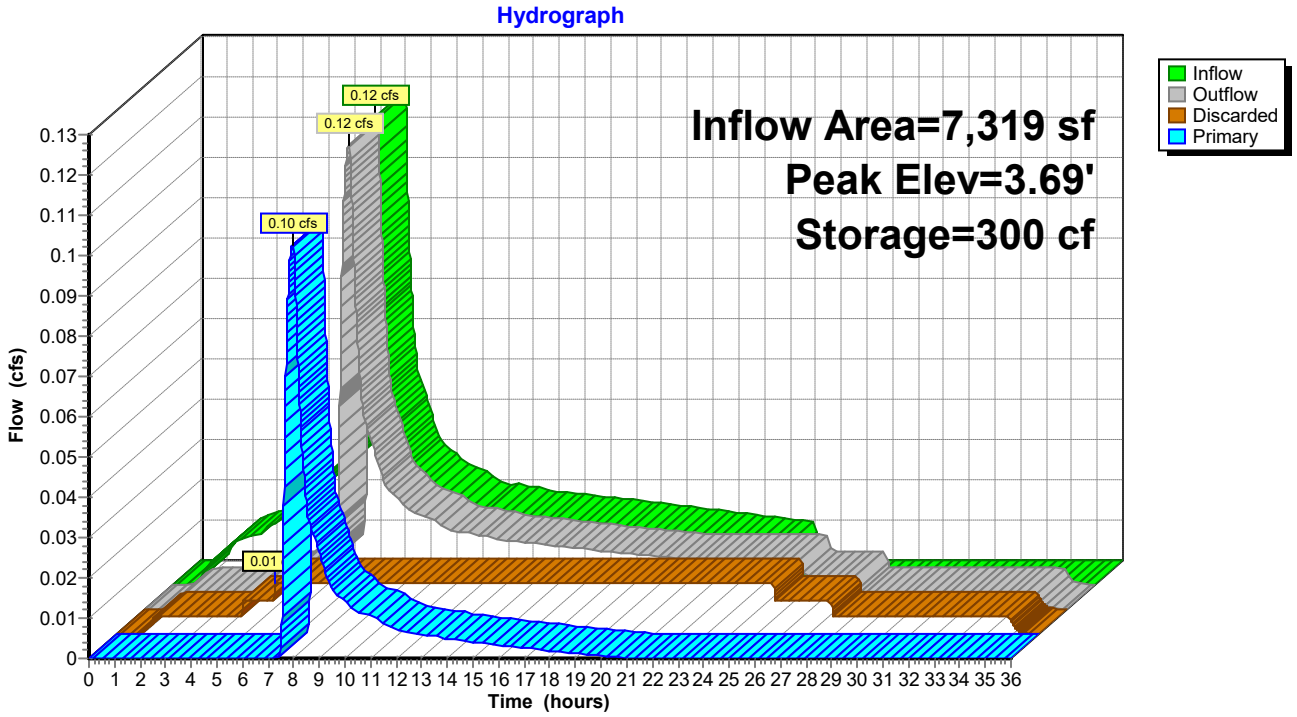
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	108 cf	**4.50'W x 40.00'L x 1.50'H Rock** 270 cf Overall x 40.0% Voids
#2	1.50'	68 cf	**4.50'W x 40.00'L x 1.50'H Growing Medium** 270 cf Overall x 25.0% Voids
#3	3.00'	180 cf	**4.50'W x 40.00'L x 1.00'H Ponding**
		356 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 6.20 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.10 cfs @ 7.95 hrs HW=3.69' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.10 cfs @ 1.49 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 1,860 sf,100.00% Impervious, Inflow Depth = 2.77" for 5-YR event
Inflow = 0.03 cfs @ 7.90 hrs, Volume= 429 cf
Outflow = 0.02 cfs @ 8.10 hrs, Volume= 429 cf, Atten= 25%, Lag= 12.2 min
Discarded = 0.00 cfs @ 3.99 hrs, Volume= 155 cf
Primary = 0.02 cfs @ 8.10 hrs, Volume= 274 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.63' @ 8.10 hrs Surf.Area= 90 sf Storage= 23 cf

Plug-Flow detention time= 8.1 min calculated for 429 cf (100% of inflow)
Center-of-Mass det. time= 8.1 min (676.2 - 668.0)

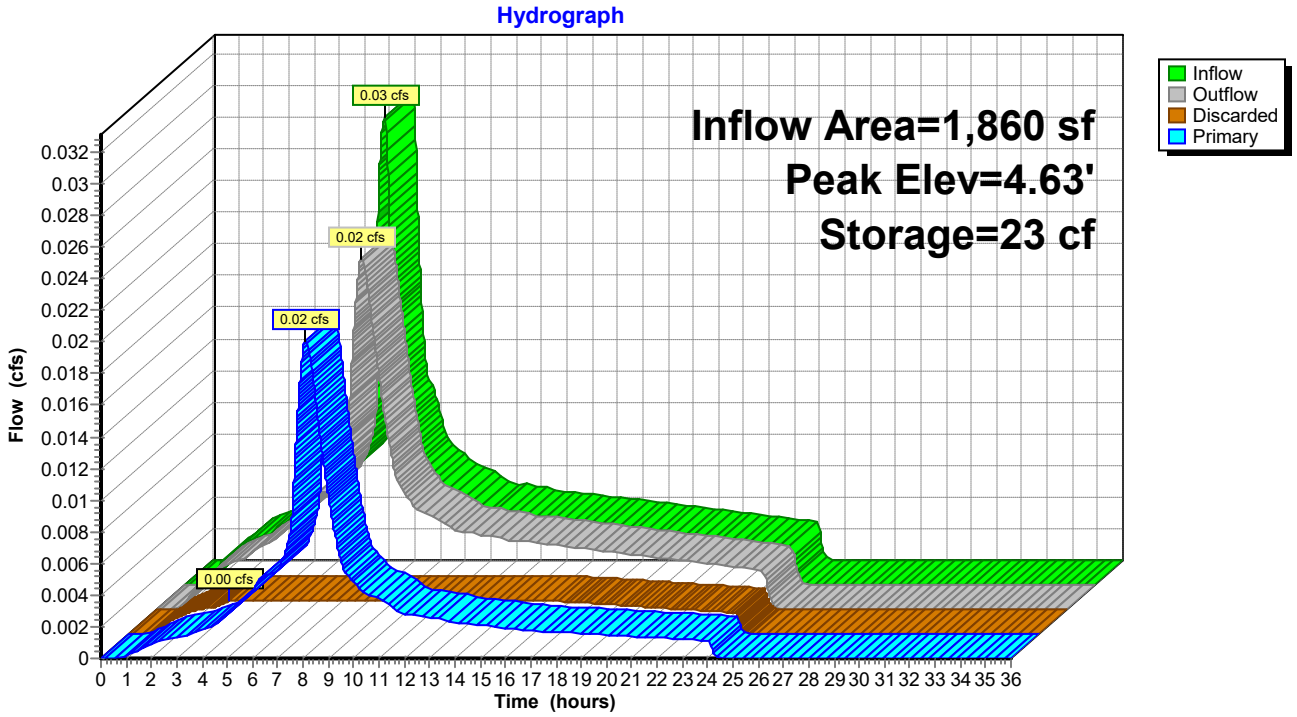
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	54 cf	**4.50'W x 20.00'L x 1.50'H Rock** 135 cf Overall x 40.0% Voids
#2	5.50'	34 cf	**4.50'W x 20.00'L x 1.50'H Growing Medium** 135 cf Overall x 25.0% Voids
#3	7.00'	90 cf	**4.50'W x 20.00'L x 1.00'H Ponding**
		178 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 3.99 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.02 cfs @ 8.10 hrs HW=4.63' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.02 cfs @ 3.68 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 5,590 sf,100.00% Impervious, Inflow Depth = 2.77" for 5-YR event
Inflow = 0.09 cfs @ 7.90 hrs, Volume= 1,290 cf
Outflow = 0.05 cfs @ 8.21 hrs, Volume= 1,290 cf, Atten= 40%, Lag= 18.4 min
Discarded = 0.01 cfs @ 8.03 hrs, Volume= 235 cf
Primary = 0.05 cfs @ 8.21 hrs, Volume= 1,055 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 7.07' @ 8.21 hrs Surf.Area= 338 sf Storage= 118 cf

Plug-Flow detention time= 18.6 min calculated for 1,289 cf (100% of inflow)
Center-of-Mass det. time= 18.6 min (686.6 - 668.0)

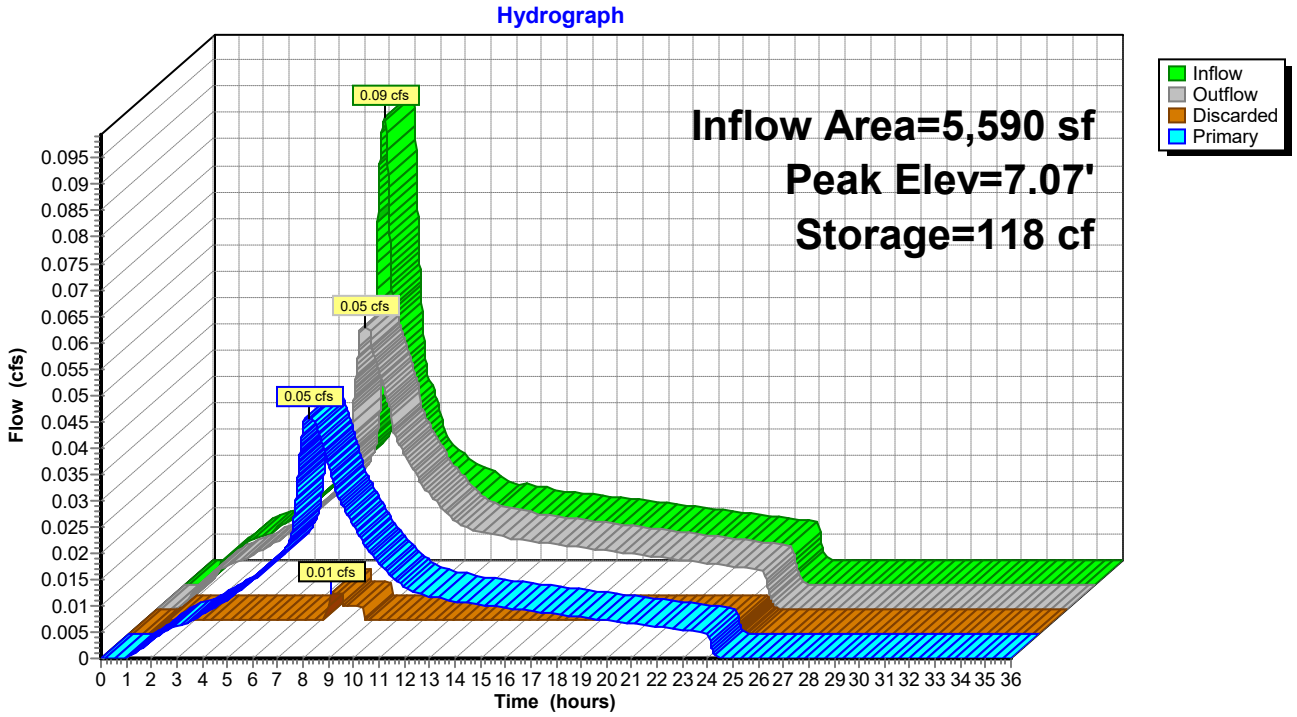
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	68 cf	**4.50'W x 25.00'L x 1.50'H Rock** 169 cf Overall x 40.0% Voids
#2	5.50'	42 cf	**4.50'W x 25.00'L x 1.50'H Growing Medium** 169 cf Overall x 25.0% Voids
#3	7.00'	113 cf	**4.50'W x 25.00'L x 1.00'H Ponding**
		222 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 8.03 hrs HW=7.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.05 cfs @ 8.21 hrs HW=7.07' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.05 cfs @ 8.38 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: Detention Pipe

Inflow Area = 24,829 sf,100.00% Impervious, Inflow Depth = 2.58" for 5-YR event
Inflow = 0.34 cfs @ 7.94 hrs, Volume= 5,338 cf
Outflow = 0.18 cfs @ 8.42 hrs, Volume= 5,338 cf, Atten= 46%, Lag= 28.7 min
Primary = 0.18 cfs @ 8.42 hrs, Volume= 5,338 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 2.81' @ 8.42 hrs Surf.Area= 347 sf Storage= 796 cf

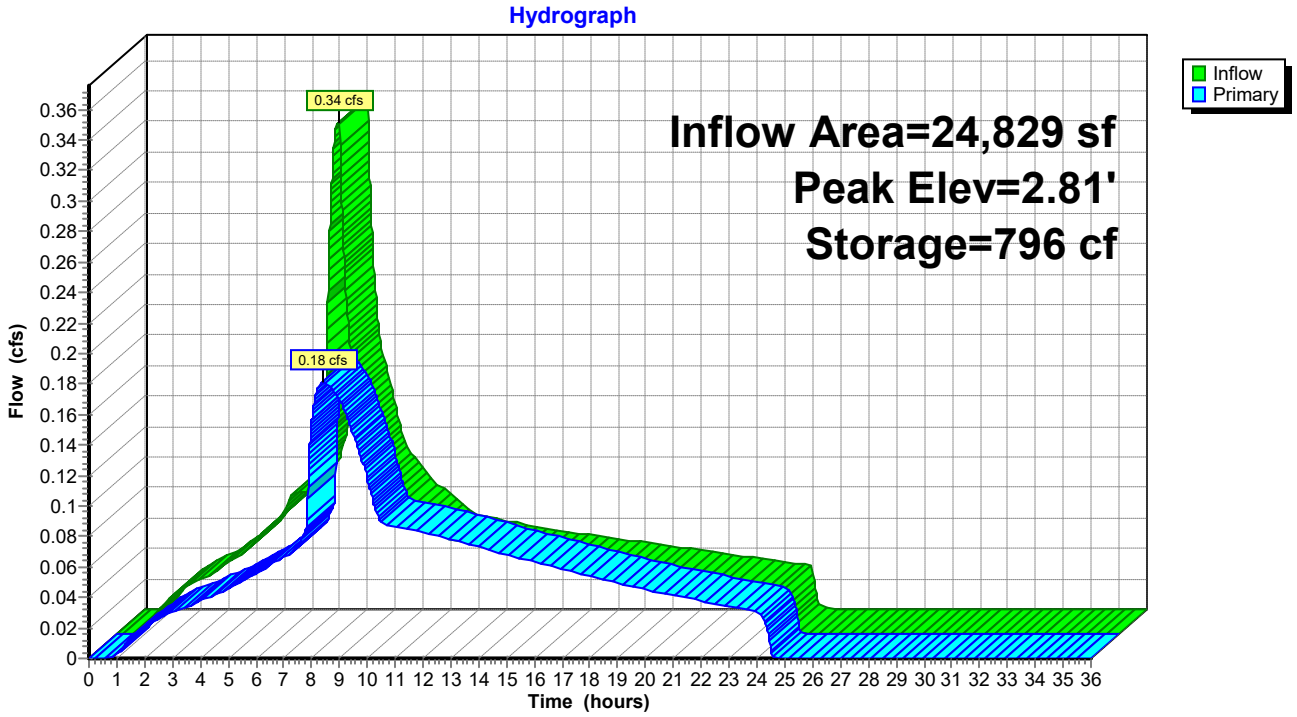
Plug-Flow detention time= 64.8 min calculated for 5,338 cf (100% of inflow)
Center-of-Mass det. time= 64.8 min (732.0 - 667.2)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	1,374 cf	**60.0" Round Pipe Storage** L= 70.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.5" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	4.00'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.18 cfs @ 8.42 hrs HW=2.81' (Free Discharge)
- **1=Control Orifice** (Orifice Controls 0.10 cfs @ 8.07 fps)
- **2=Upper Orifice** (Orifice Controls 0.08 cfs @ 3.76 fps)
- **3=Overflow** (Controls 0.00 cfs)

Pond P4: Detention Pipe



Summary for Subcatchment -PRE: Existing Site

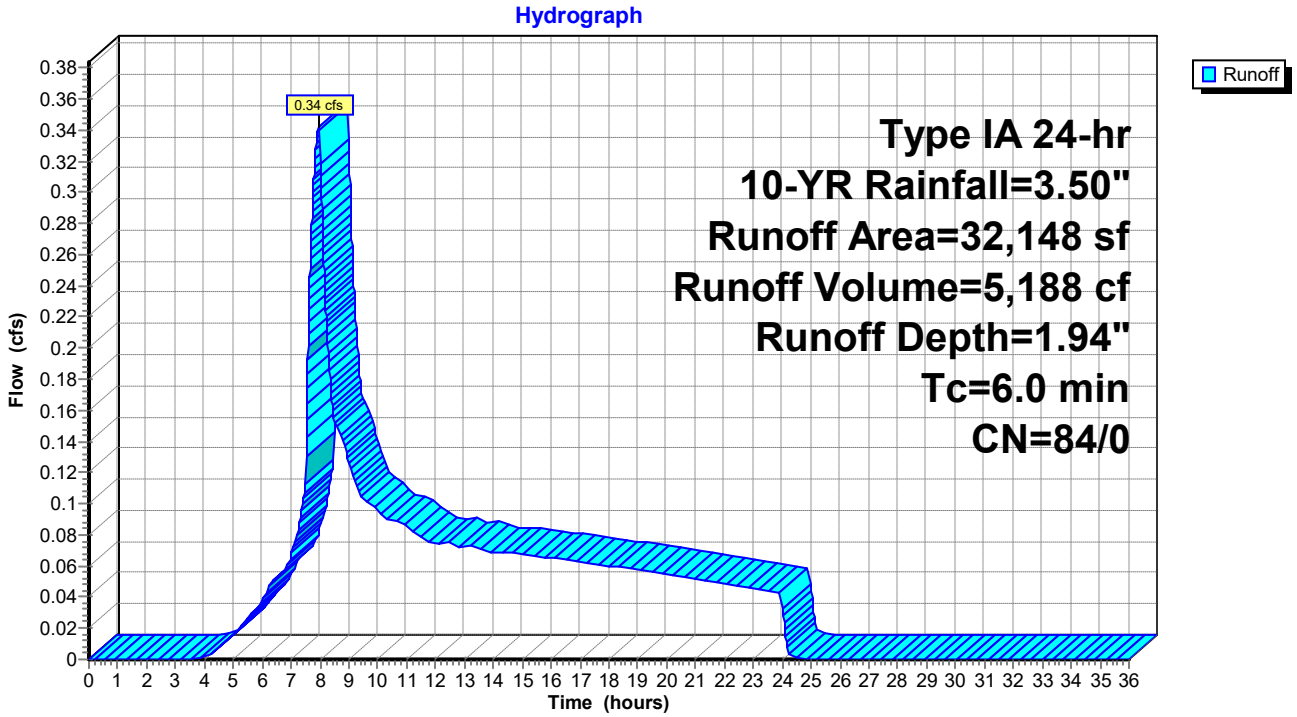
Runoff = 0.34 cfs @ 7.97 hrs, Volume= 5,188 cf, Depth= 1.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

Area (sf)	CN	Description
32,148	84	50-75% Grass cover, Fair, HSG D
32,148	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment B1: AC Road North

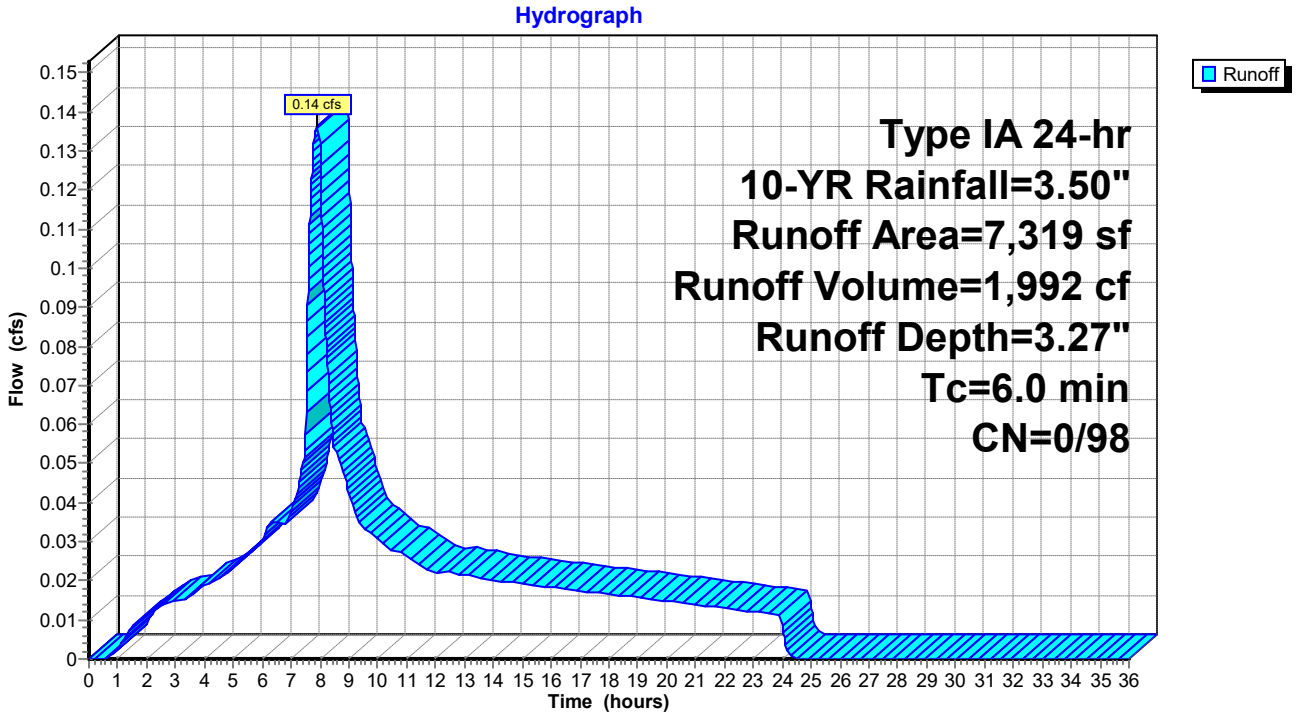
Runoff = 0.14 cfs @ 7.90 hrs, Volume= 1,992 cf, Depth= 3.27"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	7,319	98	AC
	7,319	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: AC Road North



Summary for Subcatchment B2: AC Road East

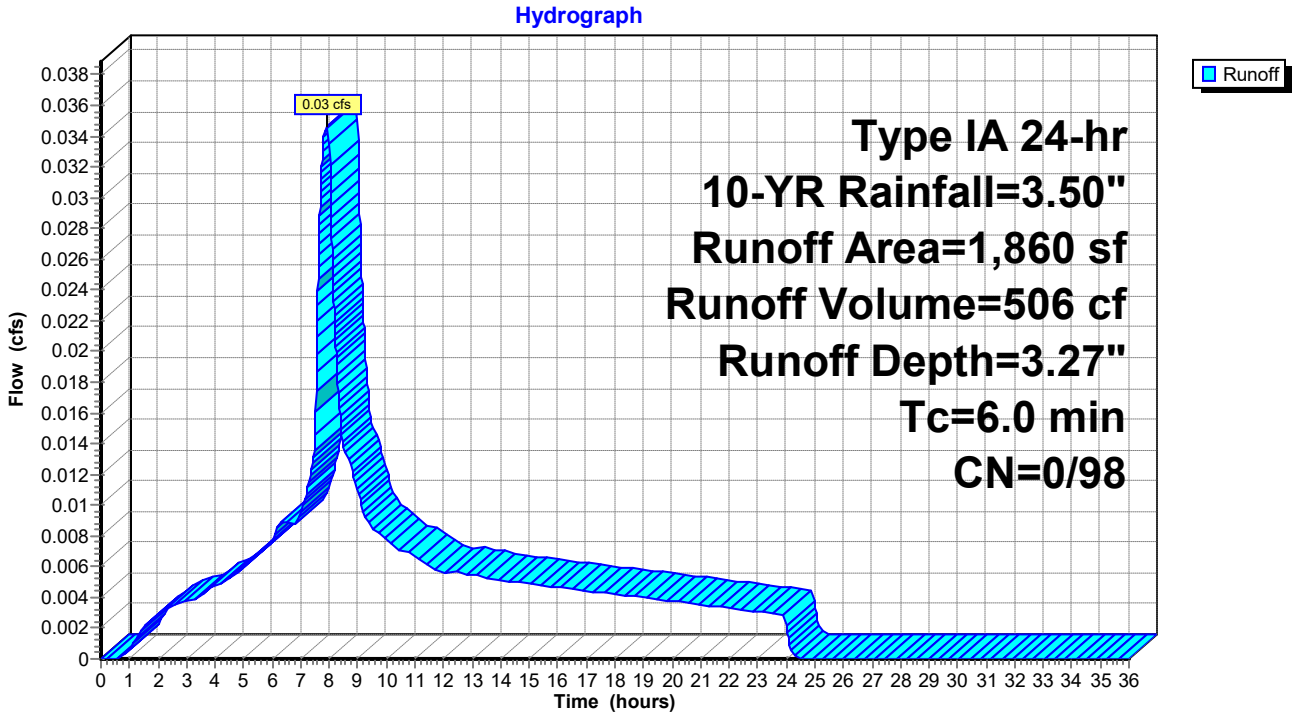
Runoff = 0.03 cfs @ 7.90 hrs, Volume= 506 cf, Depth= 3.27"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	1,860	98	Public Impervious
	1,860	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: AC Road East



Summary for Subcatchment B3: AC Road West & Lots 10-11

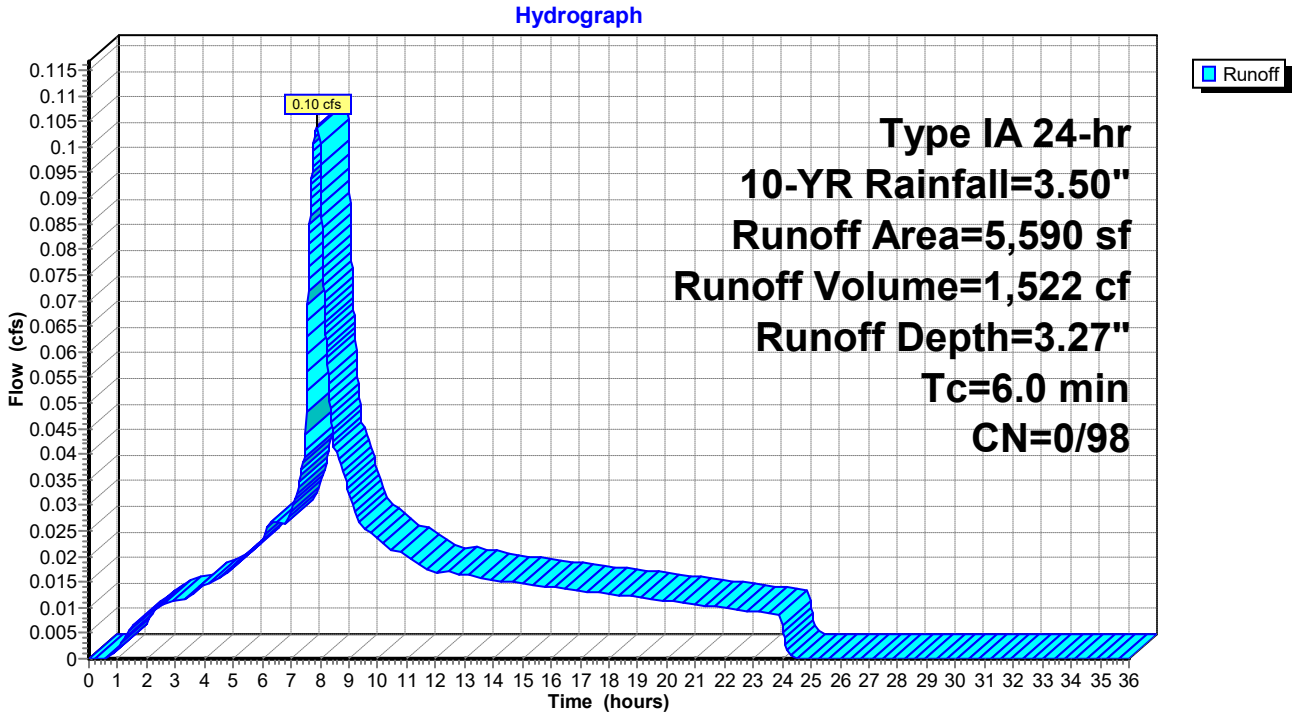
Runoff = 0.10 cfs @ 7.90 hrs, Volume= 1,522 cf, Depth= 3.27"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	1,790	98	Public Impervious
*	3,800	98	Roof/Driveway Lot 10/11
	5,590	98	Weighted Average
	5,590	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: AC Road West & Lots 10-11



Summary for Subcatchment B4: Lots 1-9 Roof

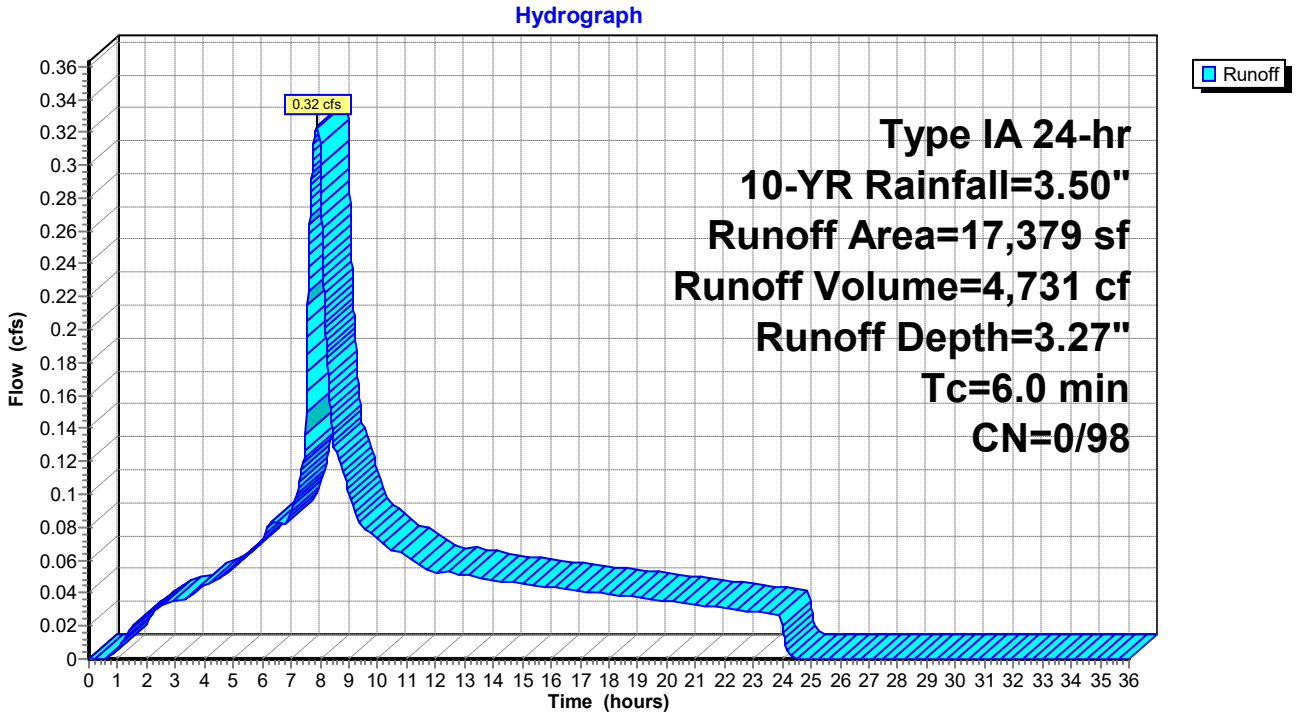
Runoff = 0.32 cfs @ 7.90 hrs, Volume= 4,731 cf, Depth= 3.27"
Routed to Pond P4 : Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10-YR Rainfall=3.50"

	Area (sf)	CN	Description
*	17,379	98	Roof Area
	17,379	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: Lots 1-9 Roof



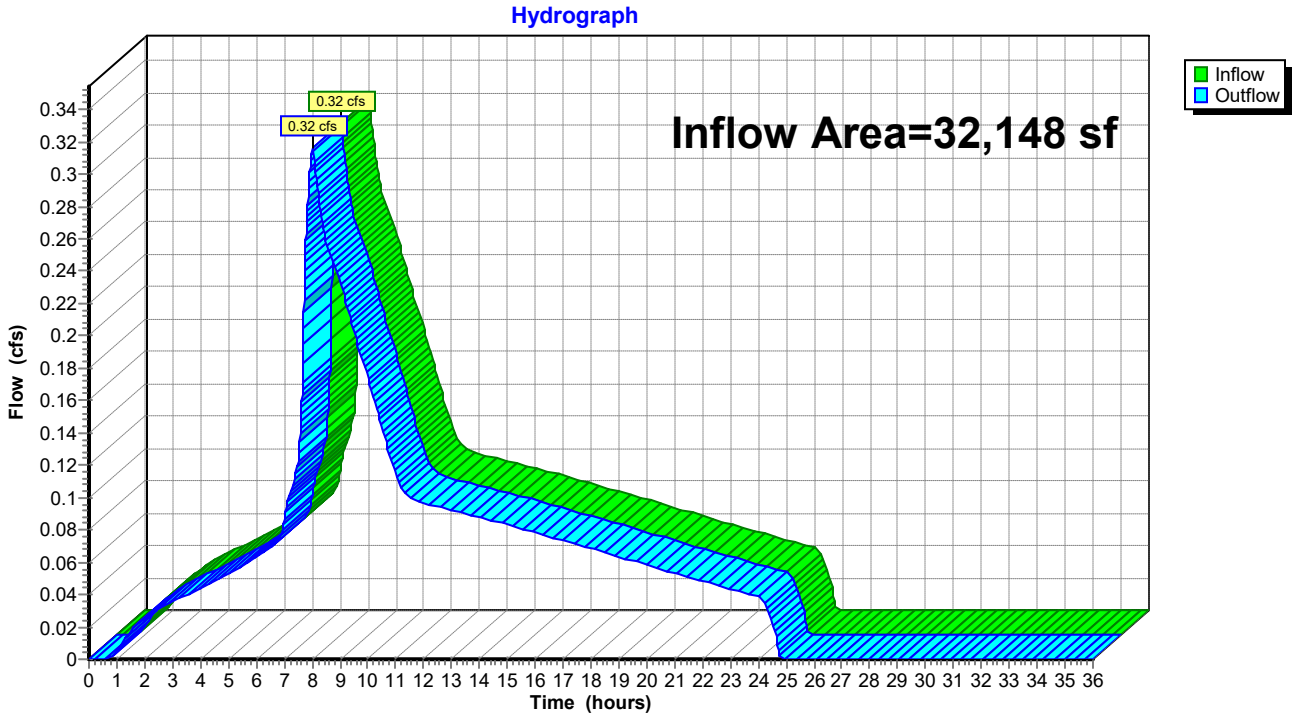
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 32,148 sf,100.00% Impervious, Inflow Depth = 2.67" for 10-YR event
Inflow = 0.32 cfs @ 8.02 hrs, Volume= 7,154 cf
Outflow = 0.32 cfs @ 8.02 hrs, Volume= 7,154 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond P1: Street Planter 1

Inflow Area = 7,319 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.14 cfs @ 7.90 hrs, Volume= 1,992 cf
Outflow = 0.14 cfs @ 7.95 hrs, Volume= 1,992 cf, Atten= 1%, Lag= 3.1 min
Discarded = 0.01 cfs @ 5.56 hrs, Volume= 1,184 cf
Primary = 0.12 cfs @ 7.95 hrs, Volume= 809 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.71' @ 7.95 hrs Surf.Area= 540 sf Storage= 303 cf

Plug-Flow detention time= 194.2 min calculated for 1,992 cf (100% of inflow)
Center-of-Mass det. time= 194.3 min (858.2 - 663.8)

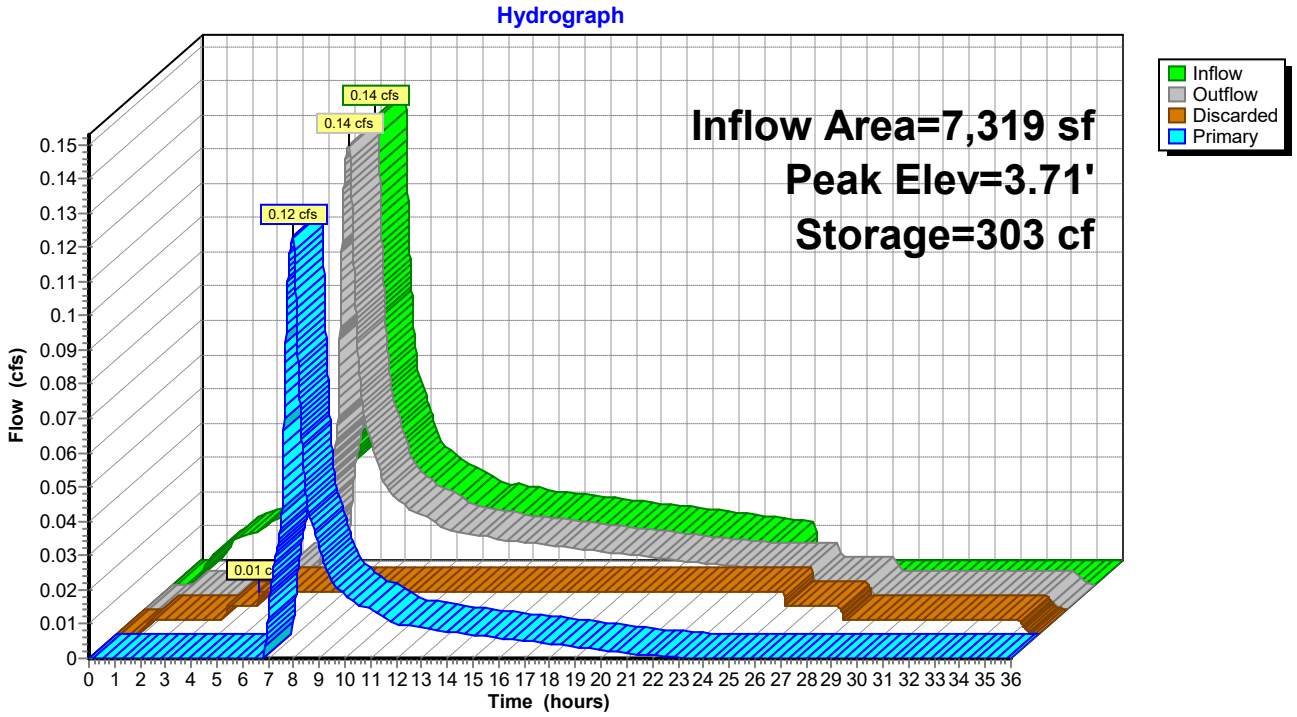
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	108 cf	**4.50'W x 40.00'L x 1.50'H Rock** 270 cf Overall x 40.0% Voids
#2	1.50'	68 cf	**4.50'W x 40.00'L x 1.50'H Growing Medium** 270 cf Overall x 25.0% Voids
#3	3.00'	180 cf	**4.50'W x 40.00'L x 1.00'H Ponding**
		356 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 5.56 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.12 cfs @ 7.95 hrs HW=3.71' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.12 cfs @ 1.56 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 1,860 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.03 cfs @ 7.90 hrs, Volume= 506 cf
Outflow = 0.02 cfs @ 8.12 hrs, Volume= 506 cf, Atten= 28%, Lag= 13.3 min
Discarded = 0.00 cfs @ 3.33 hrs, Volume= 164 cf
Primary = 0.02 cfs @ 8.12 hrs, Volume= 342 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.80' @ 8.12 hrs Surf.Area= 90 sf Storage= 29 cf

Plug-Flow detention time= 8.8 min calculated for 506 cf (100% of inflow)
Center-of-Mass det. time= 8.8 min (672.6 - 663.8)

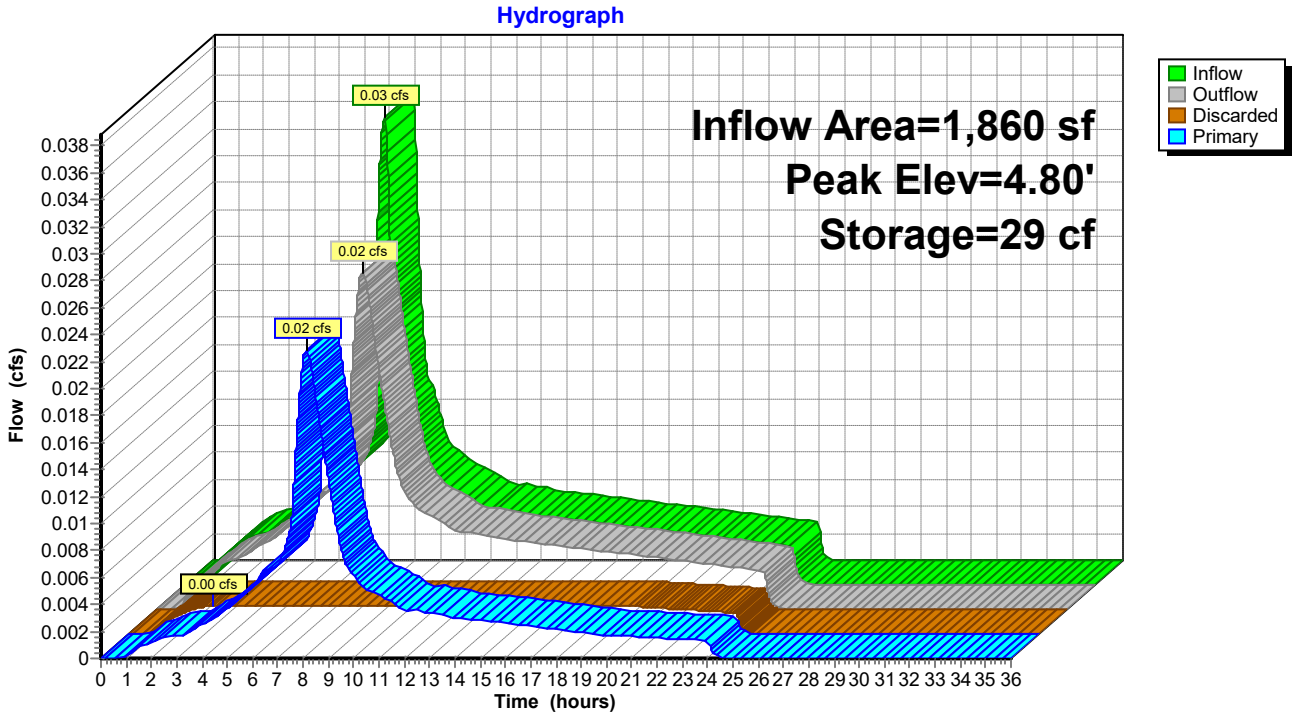
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	54 cf	**4.50'W x 20.00'L x 1.50'H Rock** 135 cf Overall x 40.0% Voids
#2	5.50'	34 cf	**4.50'W x 20.00'L x 1.50'H Growing Medium** 135 cf Overall x 25.0% Voids
#3	7.00'	90 cf	**4.50'W x 20.00'L x 1.00'H Ponding**
		178 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 3.33 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.02 cfs @ 8.12 hrs HW=4.80' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.02 cfs @ 4.20 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 5,590 sf,100.00% Impervious, Inflow Depth = 3.27" for 10-YR event
Inflow = 0.10 cfs @ 7.90 hrs, Volume= 1,522 cf
Outflow = 0.06 cfs @ 8.27 hrs, Volume= 1,522 cf, Atten= 47%, Lag= 22.6 min
Discarded = 0.01 cfs @ 7.88 hrs, Volume= 249 cf
Primary = 0.05 cfs @ 8.27 hrs, Volume= 1,273 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 7.37' @ 8.27 hrs Surf.Area= 338 sf Storage= 151 cf

Plug-Flow detention time= 21.5 min calculated for 1,522 cf (100% of inflow)
Center-of-Mass det. time= 21.5 min (685.3 - 663.8)

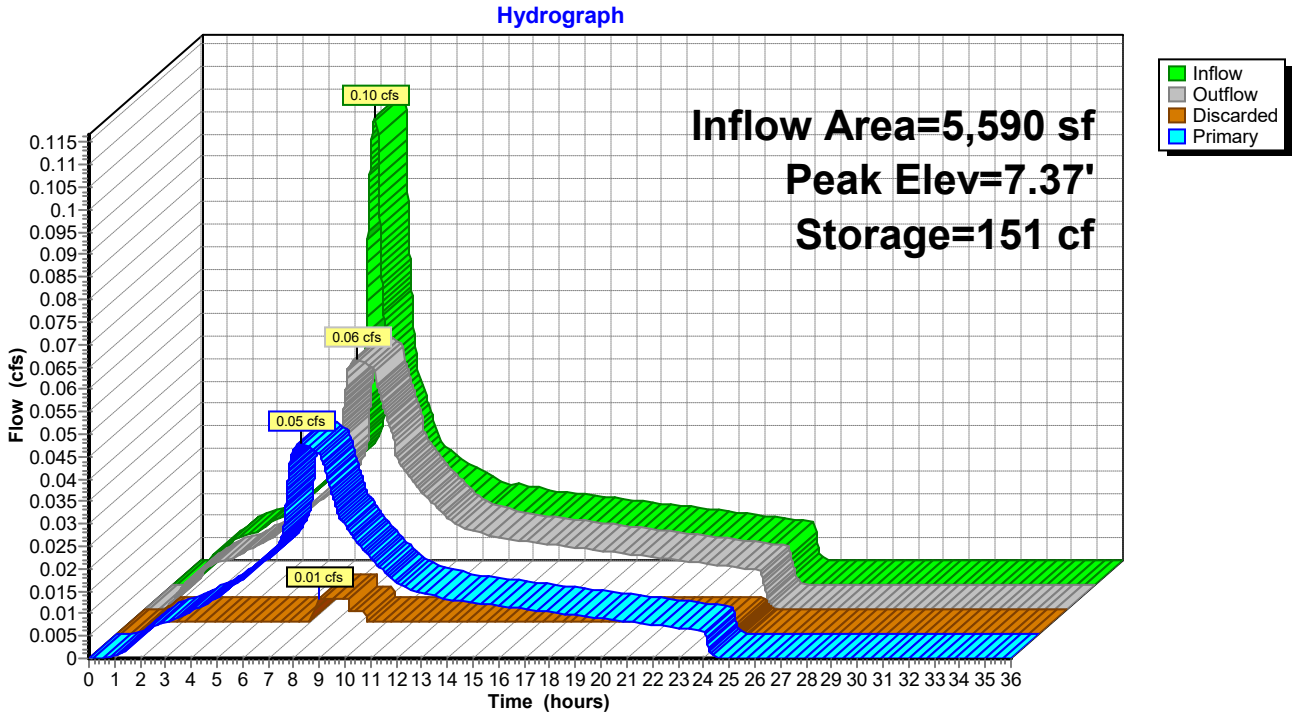
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	68 cf	**4.50'W x 25.00'L x 1.50'H Rock** 169 cf Overall x 40.0% Voids
#2	5.50'	42 cf	**4.50'W x 25.00'L x 1.50'H Growing Medium** 169 cf Overall x 25.0% Voids
#3	7.00'	113 cf	**4.50'W x 25.00'L x 1.00'H Ponding**
		222 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.88 hrs HW=7.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.05 cfs @ 8.27 hrs HW=7.37' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.05 cfs @ 8.78 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Summary for Pond P4: Detention Pipe

Inflow Area = 24,829 sf,100.00% Impervious, Inflow Depth = 3.07" for 10-YR event
Inflow = 0.39 cfs @ 7.92 hrs, Volume= 6,345 cf
Outflow = 0.21 cfs @ 8.39 hrs, Volume= 6,345 cf, Atten= 45%, Lag= 28.2 min
Primary = 0.21 cfs @ 8.39 hrs, Volume= 6,345 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.25' @ 8.39 hrs Surf.Area= 334 sf Storage= 945 cf

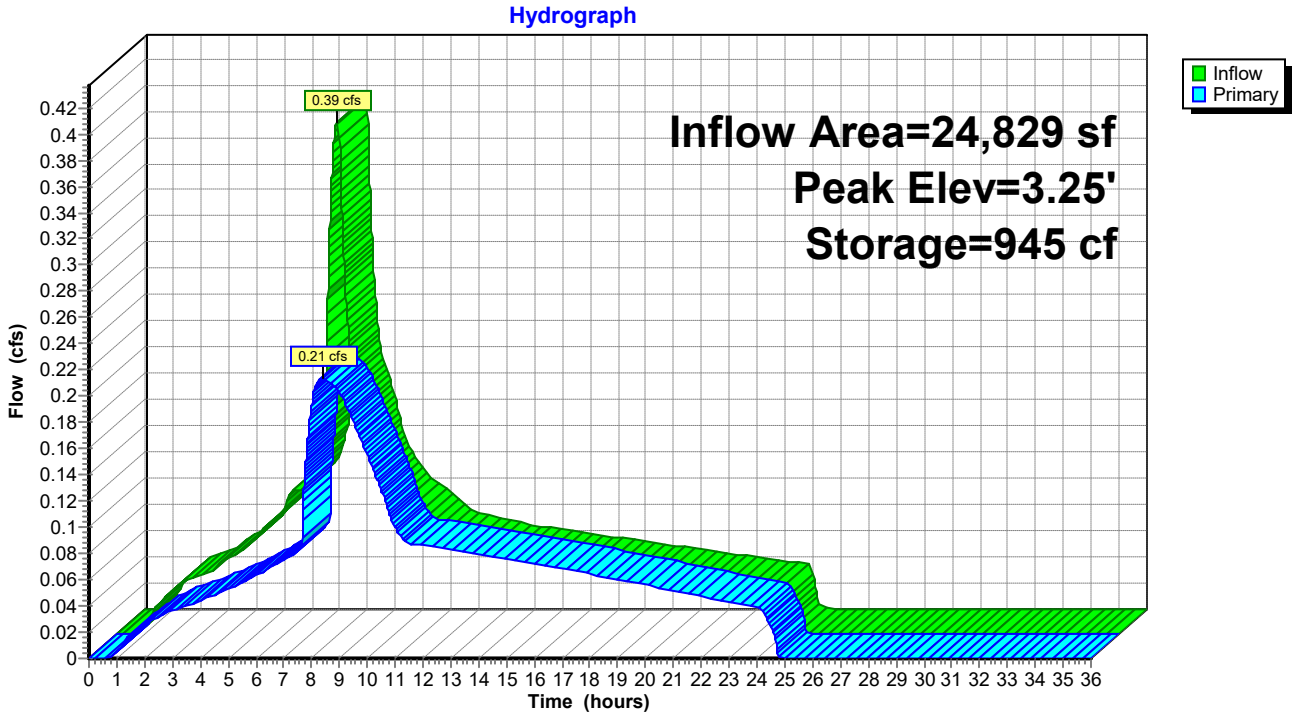
Plug-Flow detention time= 70.5 min calculated for 6,344 cf (100% of inflow)
Center-of-Mass det. time= 70.5 min (734.9 - 664.4)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	1,374 cf	**60.0" Round Pipe Storage** L= 70.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.5" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	4.00'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.21 cfs @ 8.39 hrs HW=3.25' (Free Discharge)
- **1=Control Orifice** (Orifice Controls 0.11 cfs @ 8.68 fps)
- **2=Upper Orifice** (Orifice Controls 0.11 cfs @ 4.93 fps)
- **3=Overflow** (Controls 0.00 cfs)

Pond P4: Detention Pipe



Summary for Subcatchment -PRE: Existing Site

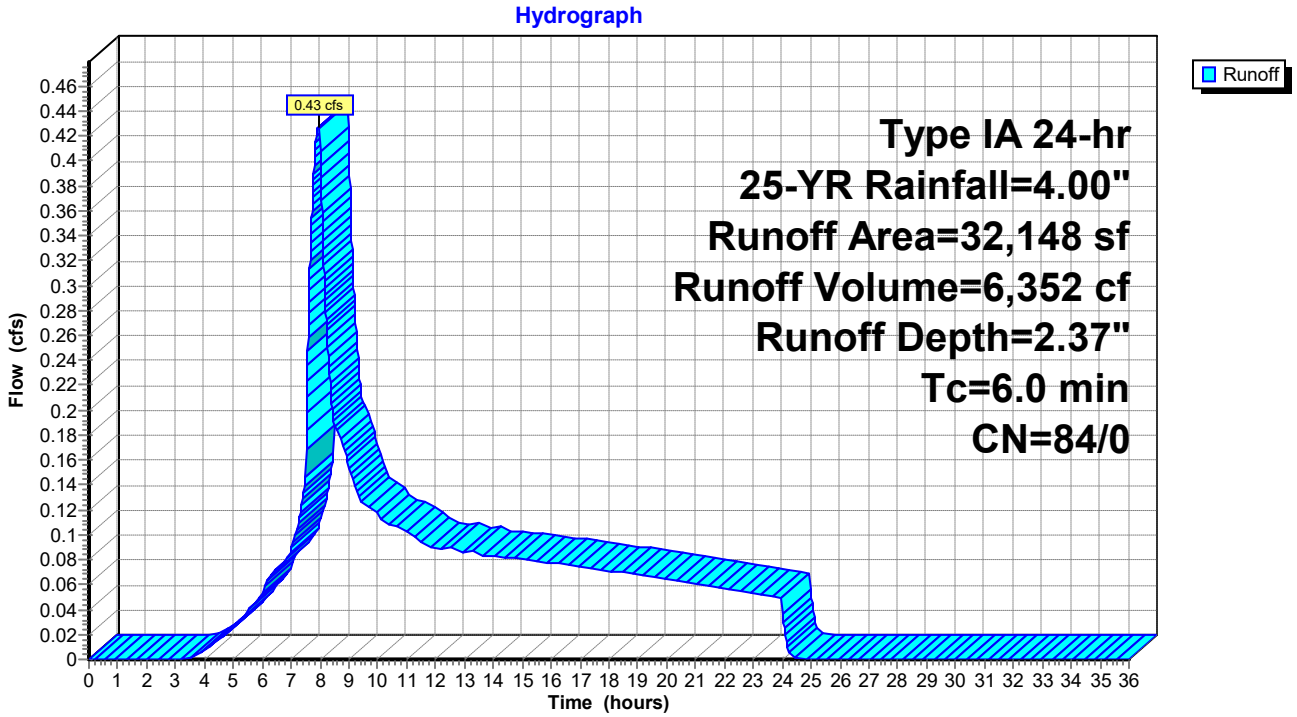
Runoff = 0.43 cfs @ 7.96 hrs, Volume= 6,352 cf, Depth= 2.37"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

Area (sf)	CN	Description
32,148	84	50-75% Grass cover, Fair, HSG D
32,148	84	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment -PRE: Existing Site



Summary for Subcatchment B1: AC Road North

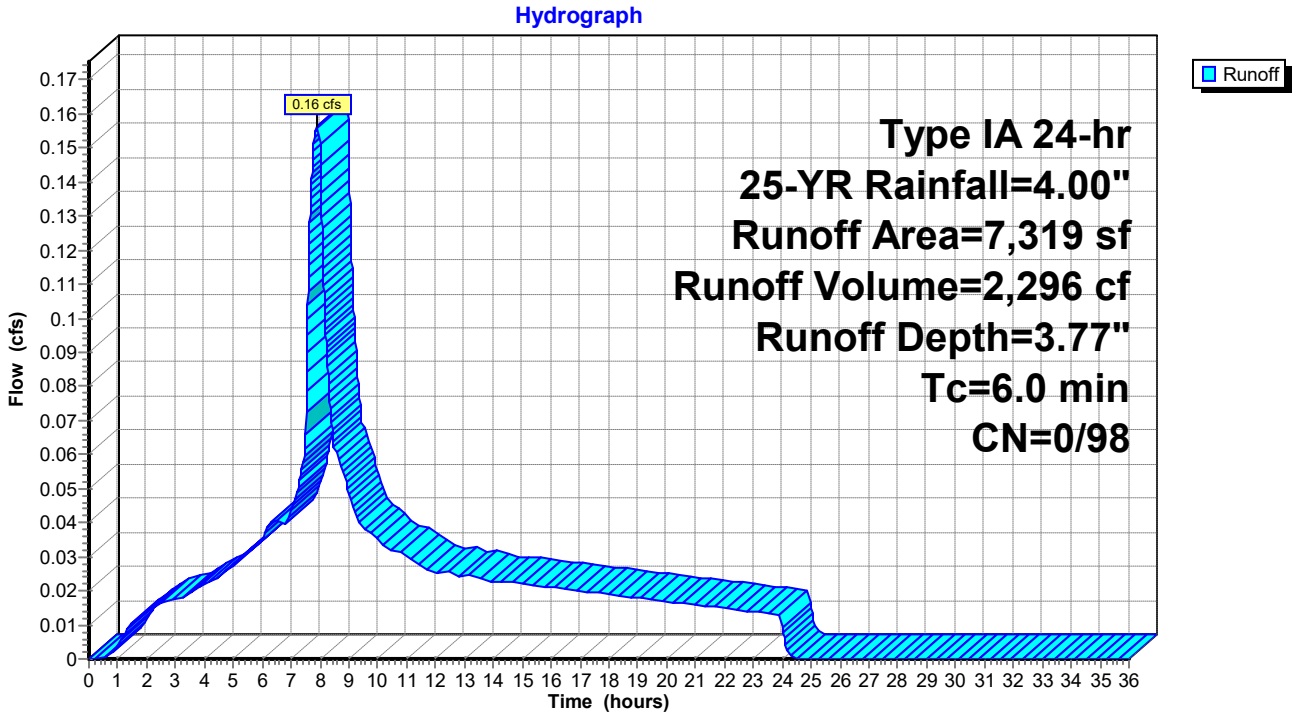
Runoff = 0.16 cfs @ 7.90 hrs, Volume= 2,296 cf, Depth= 3.77"
Routed to Pond P1 : Street Planter 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	7,319	98	AC
	7,319	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B1: AC Road North



Summary for Subcatchment B2: AC Road East

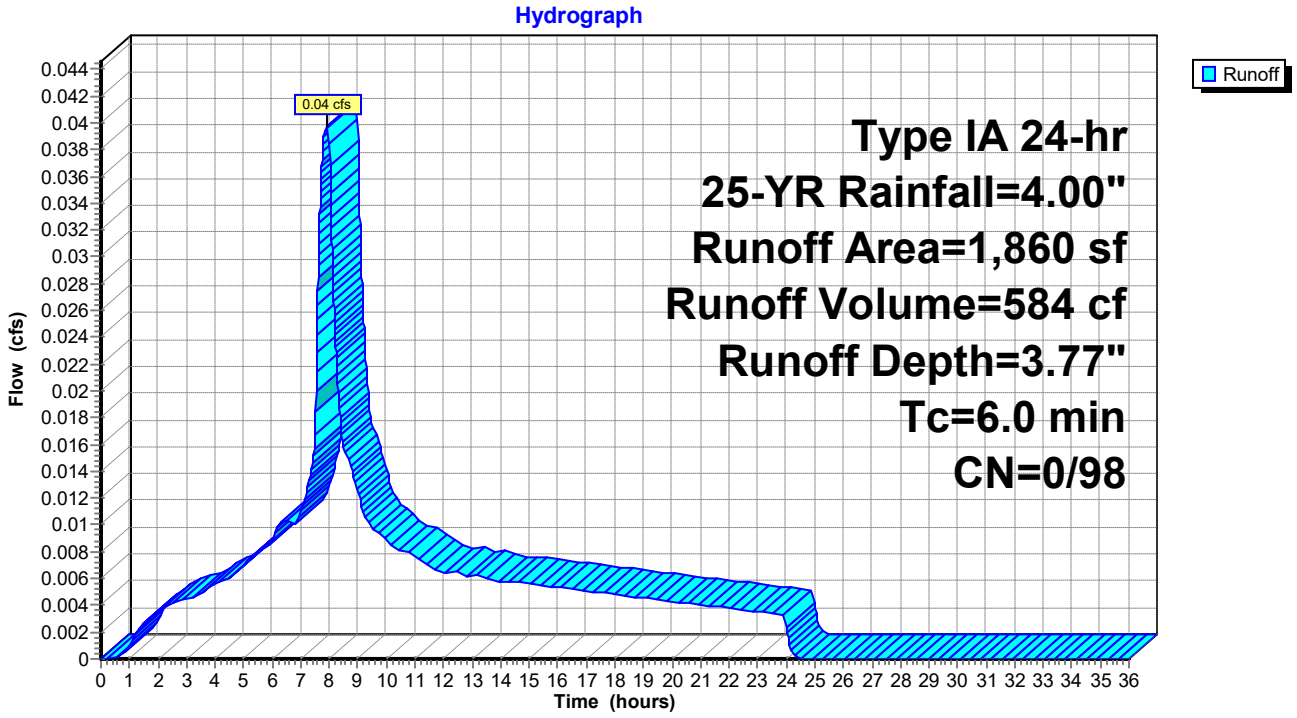
Runoff = 0.04 cfs @ 7.90 hrs, Volume= 584 cf, Depth= 3.77"
Routed to Pond P2 : Street Planter 2

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	1,860	98	Public Impervious
	1,860	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B2: AC Road East



Summary for Subcatchment B3: AC Road West & Lots 10-11

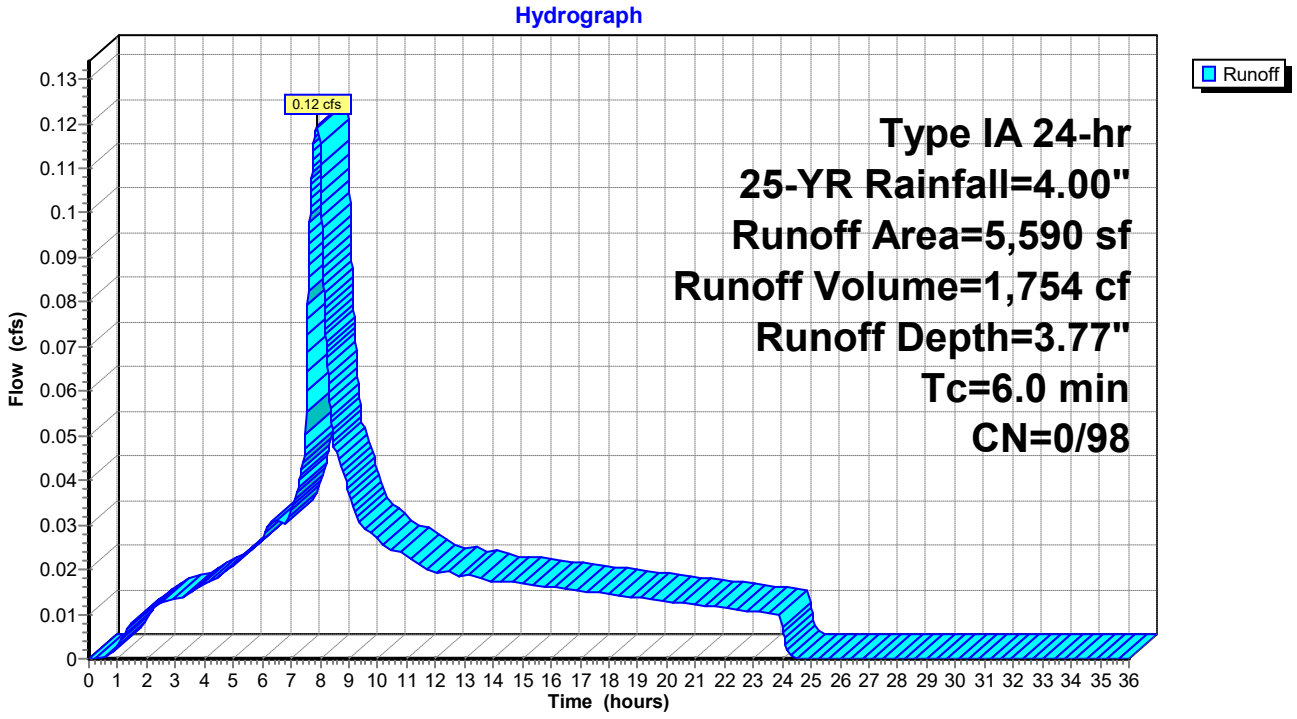
Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,754 cf, Depth= 3.77"
Routed to Pond P3 : Street Planter 3

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	1,790	98	Public Impervious
*	3,800	98	Roof/Driveway Lot 10/11
	5,590	98	Weighted Average
	5,590	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B3: AC Road West & Lots 10-11



Summary for Subcatchment B4: Lots 1-9 Roof

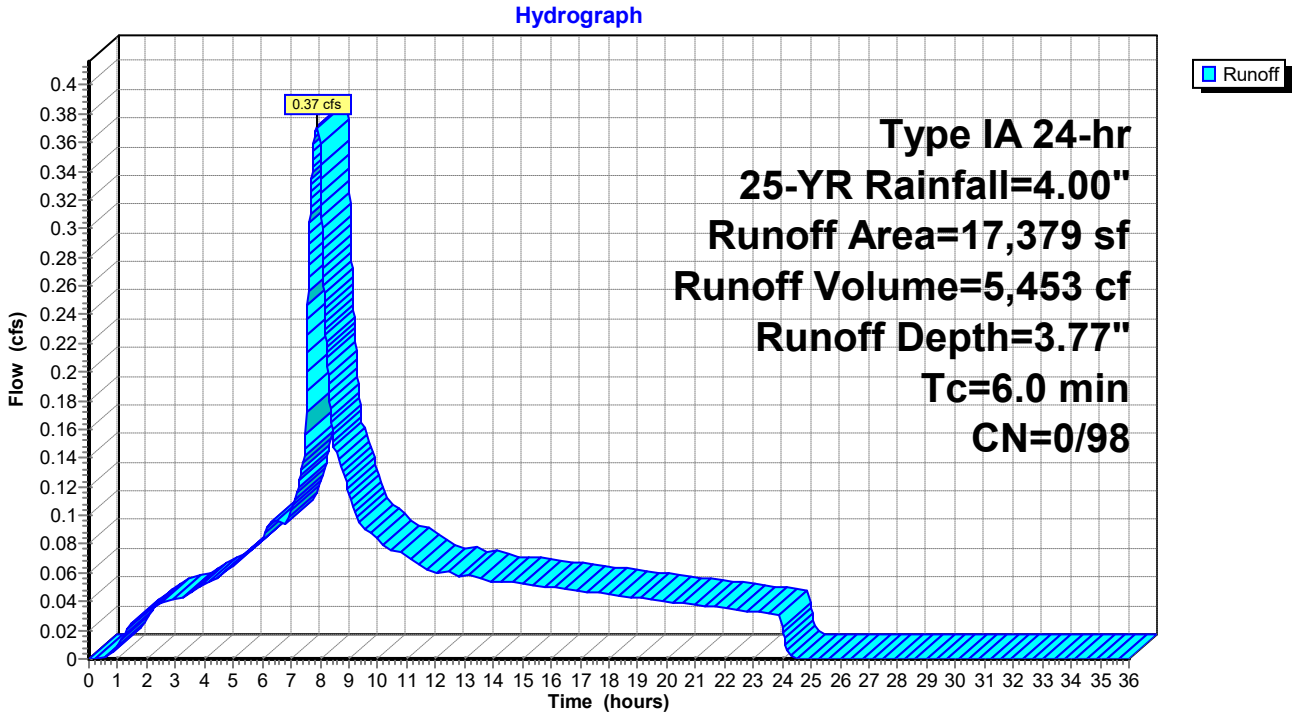
Runoff = 0.37 cfs @ 7.90 hrs, Volume= 5,453 cf, Depth= 3.77"
Routed to Pond P4 : Detention Pipe

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description
*	17,379	98	Roof Area
	17,379	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Minimum**

Subcatchment B4: Lots 1-9 Roof



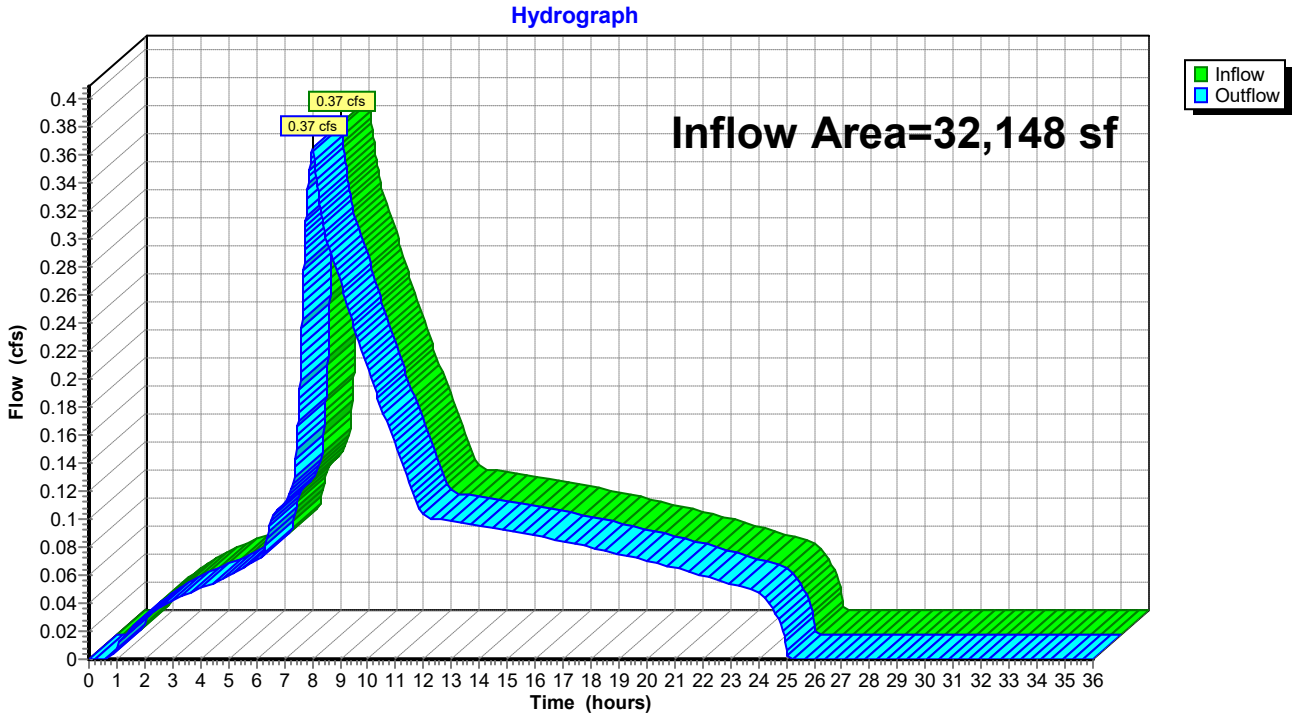
Summary for Reach -POST: Peak Flows from Post-Developed Site

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 32,148 sf,100.00% Impervious, Inflow Depth = 3.15" for 25-YR event
Inflow = 0.37 cfs @ 8.02 hrs, Volume= 8,452 cf
Outflow = 0.37 cfs @ 8.02 hrs, Volume= 8,452 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach -POST: Peak Flows from Post-Developed Site



Summary for Pond P1: Street Planter 1

Inflow Area = 7,319 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.16 cfs @ 7.90 hrs, Volume= 2,296 cf
Outflow = 0.16 cfs @ 7.94 hrs, Volume= 2,296 cf, Atten= 1%, Lag= 2.8 min
Discarded = 0.01 cfs @ 5.02 hrs, Volume= 1,206 cf
Primary = 0.14 cfs @ 7.94 hrs, Volume= 1,090 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.73' @ 7.94 hrs Surf.Area= 540 sf Storage= 307 cf

Plug-Flow detention time= 173.7 min calculated for 2,296 cf (100% of inflow)
Center-of-Mass det. time= 173.8 min (834.4 - 660.5)

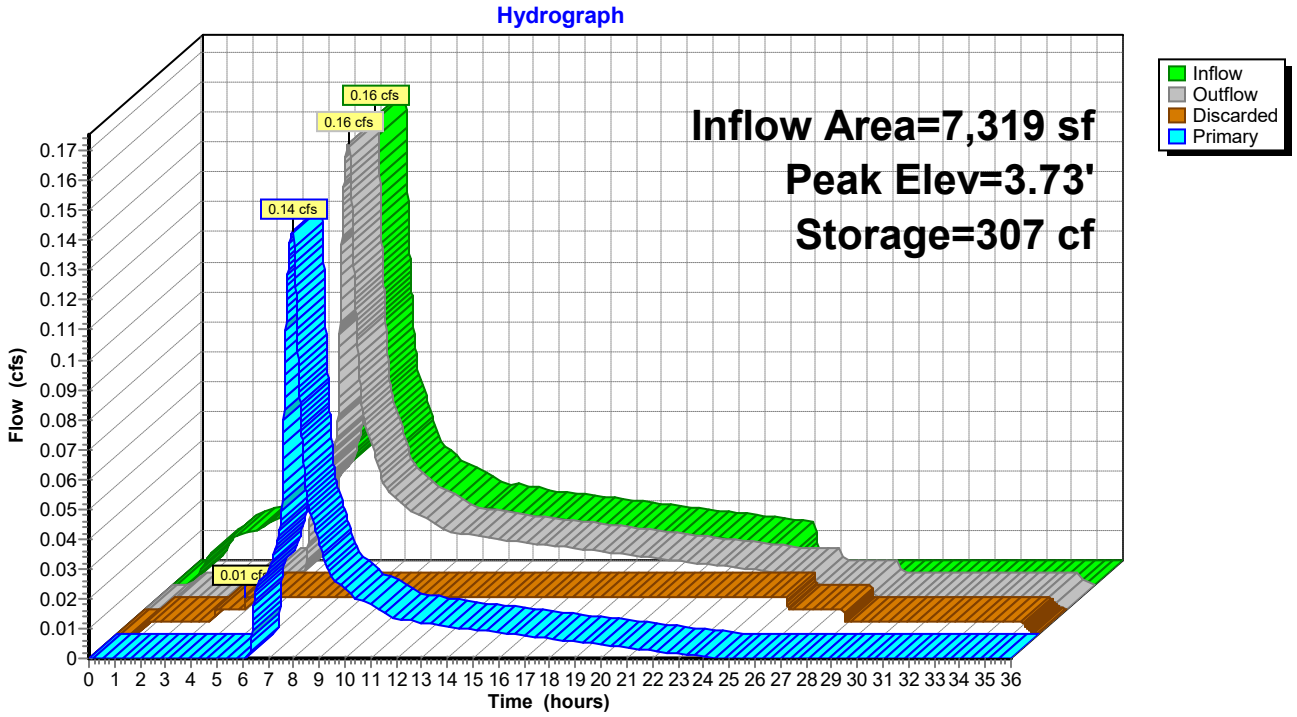
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	108 cf	**4.50'W x 40.00'L x 1.50'H Rock** 270 cf Overall x 40.0% Voids
#2	1.50'	68 cf	**4.50'W x 40.00'L x 1.50'H Growing Medium** 270 cf Overall x 25.0% Voids
#3	3.00'	180 cf	**4.50'W x 40.00'L x 1.00'H Ponding**
		356 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 5.02 hrs HW=3.00' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.14 cfs @ 7.94 hrs HW=3.73' (Free Discharge)
↑—**2=Overflow Orifice** (Orifice Controls 0.14 cfs @ 1.63 fps)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 1,860 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.04 cfs @ 7.90 hrs, Volume= 584 cf
Outflow = 0.03 cfs @ 8.13 hrs, Volume= 584 cf, Atten= 30%, Lag= 14.3 min
Discarded = 0.00 cfs @ 2.33 hrs, Volume= 169 cf
Primary = 0.03 cfs @ 8.13 hrs, Volume= 414 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.99' @ 8.13 hrs Surf.Area= 90 sf Storage= 36 cf

Plug-Flow detention time= 9.4 min calculated for 583 cf (100% of inflow)
Center-of-Mass det. time= 9.4 min (670.0 - 660.5)

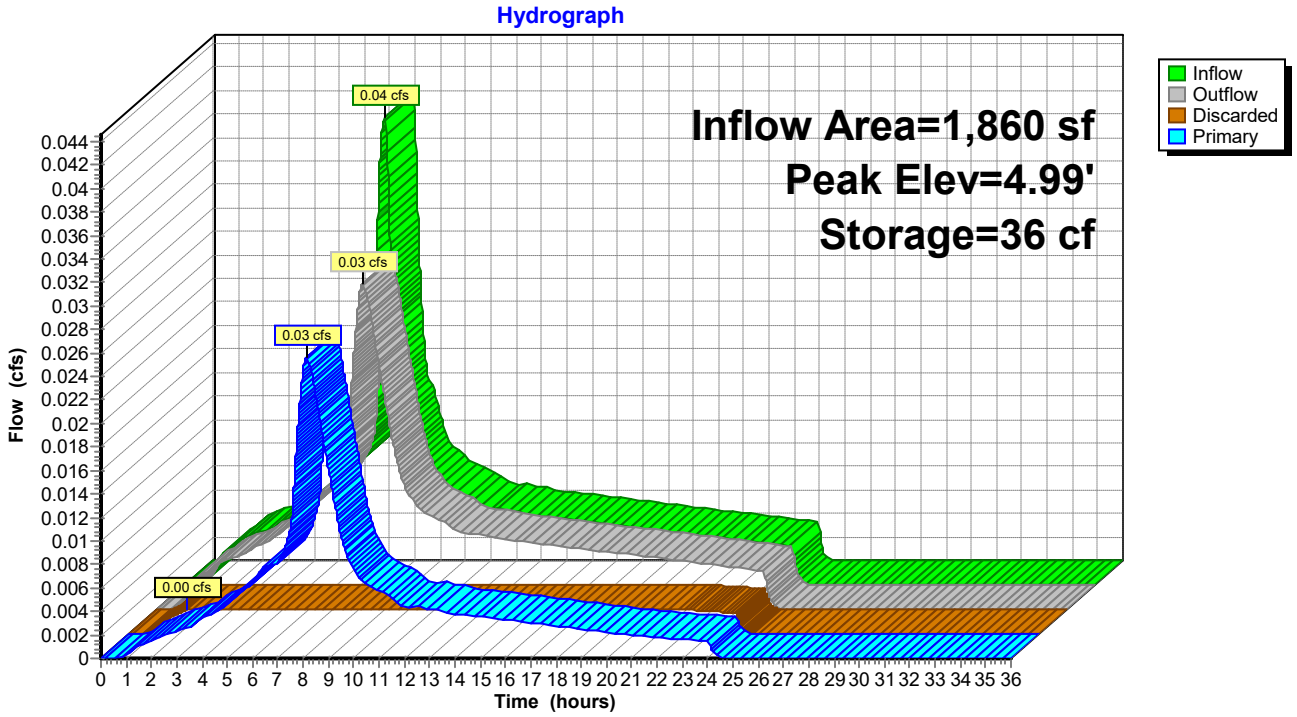
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	54 cf	**4.50'W x 20.00'L x 1.50'H Rock** 135 cf Overall x 40.0% Voids
#2	5.50'	34 cf	**4.50'W x 20.00'L x 1.50'H Growing Medium** 135 cf Overall x 25.0% Voids
#3	7.00'	90 cf	**4.50'W x 20.00'L x 1.00'H Ponding**
		178 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 2.33 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.03 cfs @ 8.13 hrs HW=4.99' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.03 cfs @ 4.69 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 5,590 sf,100.00% Impervious, Inflow Depth = 3.77" for 25-YR event
Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,754 cf
Outflow = 0.09 cfs @ 8.08 hrs, Volume= 1,754 cf, Atten= 21%, Lag= 11.0 min
Discarded = 0.01 cfs @ 7.78 hrs, Volume= 259 cf
Primary = 0.09 cfs @ 8.08 hrs, Volume= 1,495 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 7.54' @ 8.08 hrs Surf.Area= 338 sf Storage= 170 cf

Plug-Flow detention time= 23.6 min calculated for 1,753 cf (100% of inflow)
Center-of-Mass det. time= 23.6 min (684.1 - 660.5)

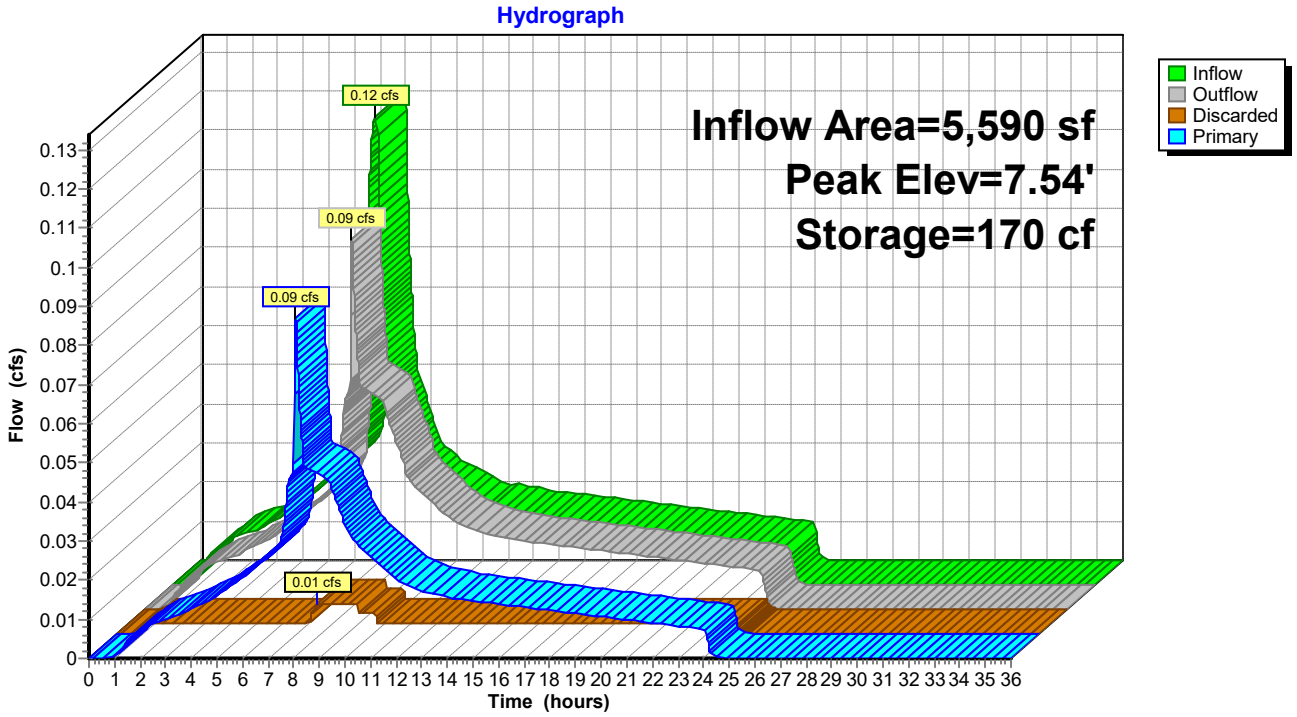
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	68 cf	**4.50'W x 25.00'L x 1.50'H Rock** 169 cf Overall x 40.0% Voids
#2	5.50'	42 cf	**4.50'W x 25.00'L x 1.50'H Growing Medium** 169 cf Overall x 25.0% Voids
#3	7.00'	113 cf	**4.50'W x 25.00'L x 1.00'H Ponding**
		222 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.78 hrs HW=7.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.08 cfs @ 8.08 hrs HW=7.54' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.05 cfs @ 9.00 fps)
└**3=Overflow Orifice** (Weir Controls 0.03 cfs @ 0.61 fps)

Pond P3: Street Planter 3



Summary for Pond P4: Detention Pipe

Inflow Area = 24,829 sf,100.00% Impervious, Inflow Depth = 3.56" for 25-YR event
Inflow = 0.44 cfs @ 7.92 hrs, Volume= 7,362 cf
Outflow = 0.25 cfs @ 8.37 hrs, Volume= 7,362 cf, Atten= 44%, Lag= 27.0 min
Primary = 0.25 cfs @ 8.37 hrs, Volume= 7,362 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 3.78' @ 8.37 hrs Surf.Area= 301 sf Storage= 1,114 cf

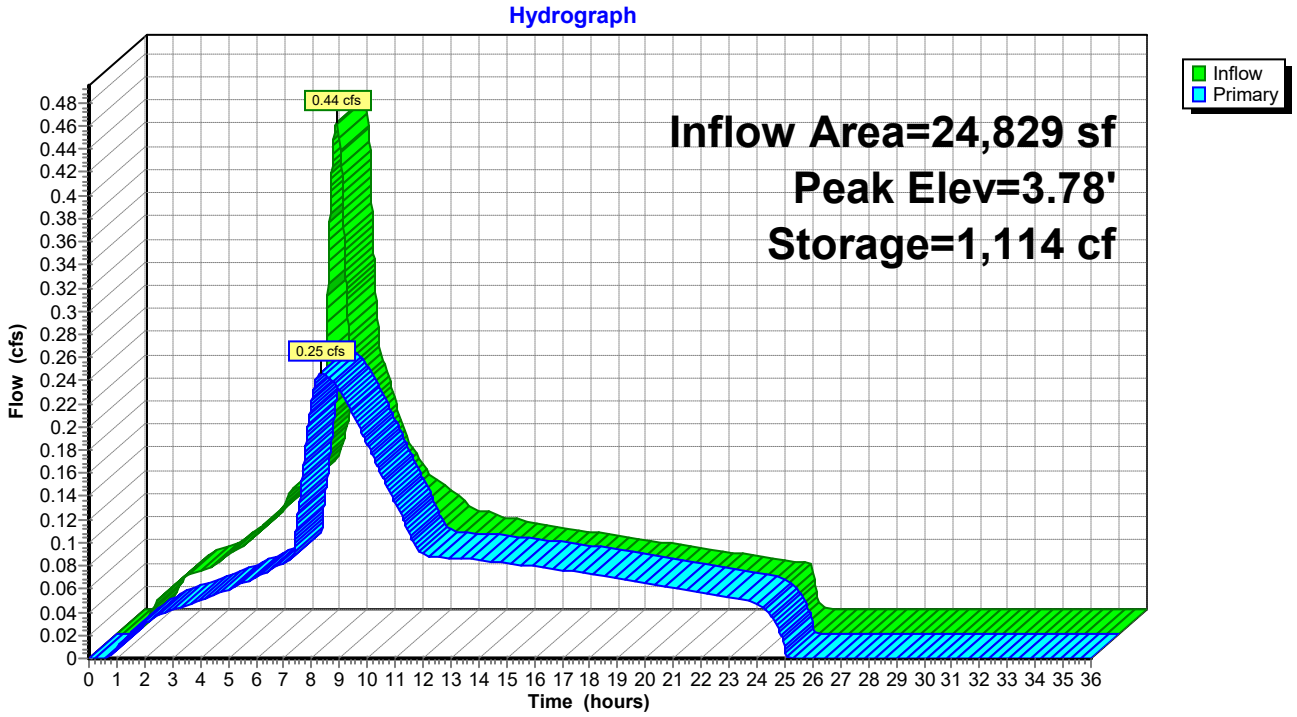
Plug-Flow detention time= 75.7 min calculated for 7,360 cf (100% of inflow)
Center-of-Mass det. time= 75.7 min (738.0 - 662.3)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	1,374 cf	**60.0" Round Pipe Storage** L= 70.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**1.5" Horiz. Control Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	2.20'	**2.0" Horiz. Upper Orifice** C= 0.600 Limited to weir flow at low heads
#3	Primary	4.00'	**12.0" Vert. Overflow** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.25 cfs @ 8.37 hrs HW=3.78' (Free Discharge)
- **1=Control Orifice** (Orifice Controls 0.11 cfs @ 9.36 fps)
- **2=Upper Orifice** (Orifice Controls 0.13 cfs @ 6.05 fps)
- **3=Overflow** (Controls 0.00 cfs)

Pond P4: Detention Pipe



Summary for Pond P1: Street Planter 1

Inflow Area = 7,319 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.03 cfs @ 7.92 hrs, Volume= 482 cf
Outflow = 0.01 cfs @ 8.63 hrs, Volume= 482 cf, Atten= 76%, Lag= 42.7 min
Discarded = 0.01 cfs @ 8.63 hrs, Volume= 482 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach -POST : Peak Flows from Post-Developed Site

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 1.69' @ 9.91 hrs Surf.Area= 360 sf Storage= 117 cf

Plug-Flow detention time= 261.3 min calculated for 482 cf (100% of inflow)
Center-of-Mass det. time= 261.3 min (974.9 - 713.6)

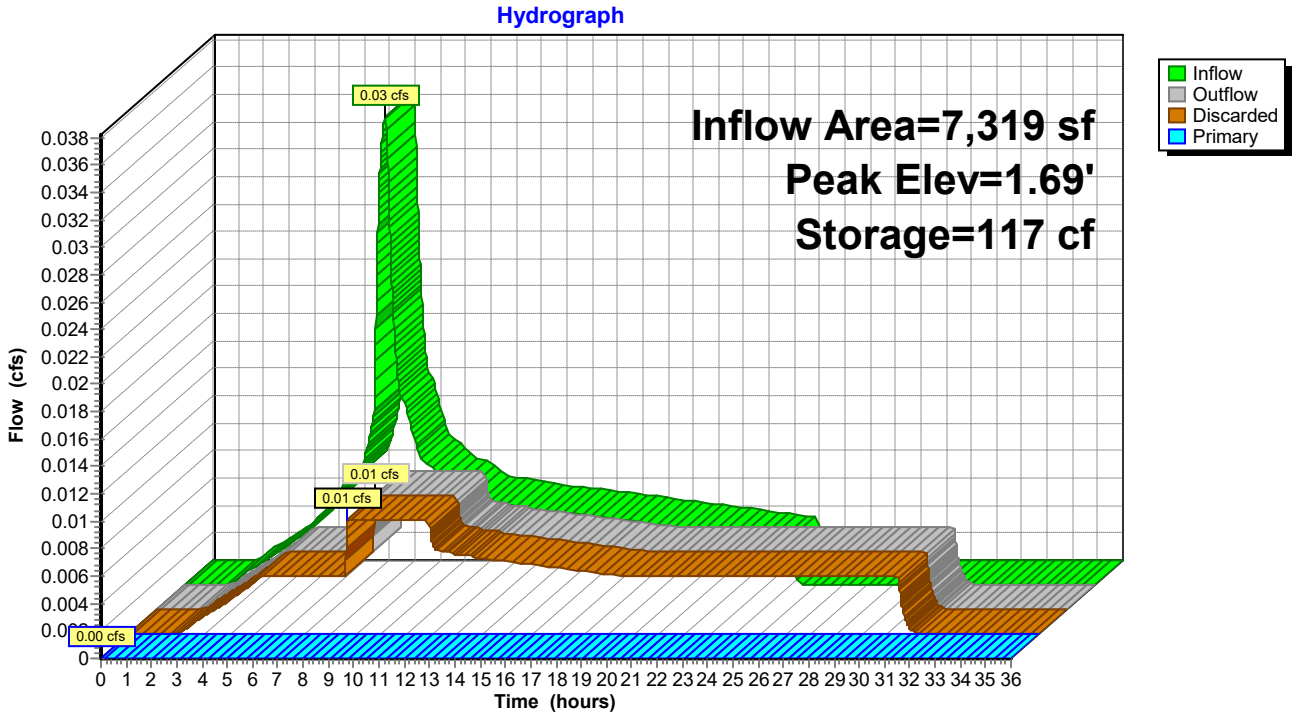
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	108 cf	**4.50'W x 40.00'L x 1.50'H Rock** 270 cf Overall x 40.0% Voids
#2	1.50'	68 cf	**4.50'W x 40.00'L x 1.50'H Growing Medium** 270 cf Overall x 25.0% Voids
#3	3.00'	180 cf	**4.50'W x 40.00'L x 1.00'H Ponding**
		356 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	3.50'	**6.0" Vert. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 8.63 hrs HW=1.50' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Overflow Orifice** (Controls 0.00 cfs)

Pond P1: Street Planter 1



Summary for Pond P2: Street Planter 2

Inflow Area = 1,860 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.01 cfs @ 7.92 hrs, Volume= 123 cf
Outflow = 0.01 cfs @ 8.02 hrs, Volume= 123 cf, Atten= 6%, Lag= 6.1 min
Discarded = 0.00 cfs @ 7.59 hrs, Volume= 62 cf
Primary = 0.01 cfs @ 8.02 hrs, Volume= 61 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.10' @ 8.02 hrs Surf.Area= 90 sf Storage= 3 cf

Plug-Flow detention time= 6.3 min calculated for 123 cf (100% of inflow)
Center-of-Mass det. time= 6.3 min (720.0 - 713.6)

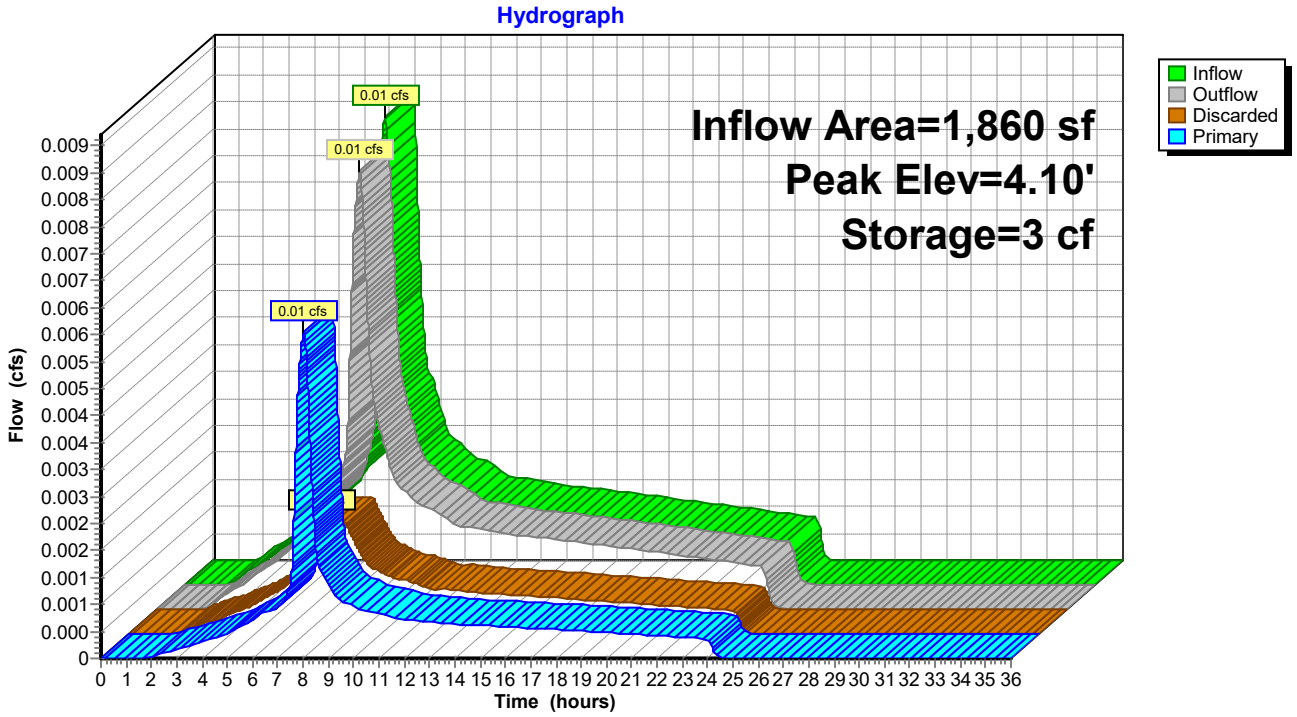
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	54 cf	**4.50'W x 20.00'L x 1.50'H Rock** 135 cf Overall x 40.0% Voids
#2	5.50'	34 cf	**4.50'W x 20.00'L x 1.50'H Growing Medium** 135 cf Overall x 25.0% Voids
#3	7.00'	90 cf	**4.50'W x 20.00'L x 1.00'H Ponding**
		178 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 7.59 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.01 cfs @ 8.02 hrs HW=4.10' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.01 cfs @ 1.12 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P2: Street Planter 2



Summary for Pond P3: Street Planter 3

Inflow Area = 5,590 sf,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.03 cfs @ 7.92 hrs, Volume= 368 cf
Outflow = 0.02 cfs @ 8.11 hrs, Volume= 368 cf, Atten= 26%, Lag= 11.7 min
Discarded = 0.00 cfs @ 5.88 hrs, Volume= 166 cf
Primary = 0.02 cfs @ 8.11 hrs, Volume= 203 cf
Routed to Pond P4 : Detention Pipe

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 4.44' @ 8.11 hrs Surf.Area= 113 sf Storage= 20 cf

Plug-Flow detention time= 8.7 min calculated for 368 cf (100% of inflow)
Center-of-Mass det. time= 8.7 min (722.4 - 713.6)

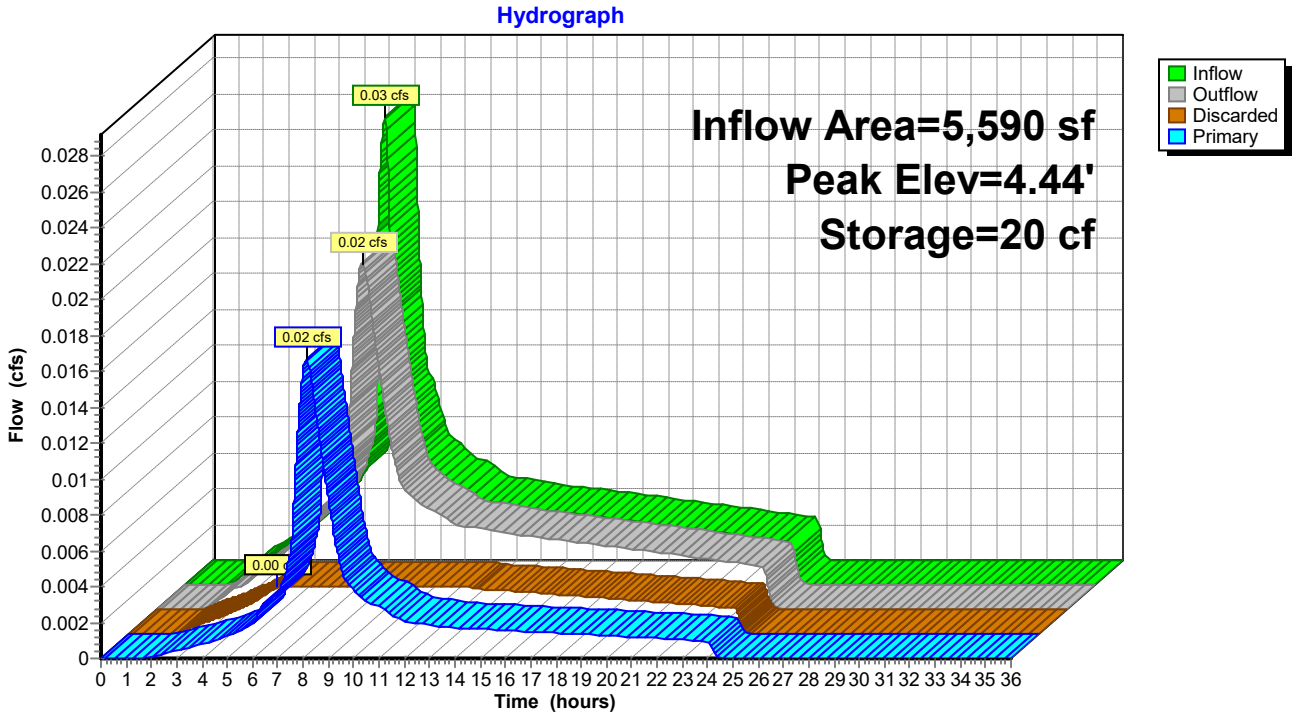
Volume	Invert	Avail.Storage	Storage Description
#1	4.00'	68 cf	**4.50'W x 25.00'L x 1.50'H Rock** 169 cf Overall x 40.0% Voids
#2	5.50'	42 cf	**4.50'W x 25.00'L x 1.50'H Growing Medium** 169 cf Overall x 25.0% Voids
#3	7.00'	113 cf	**4.50'W x 25.00'L x 1.00'H Ponding**
		222 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	4.00'	**1.000 in/hr Exfiltration over Horizontal area**
#2	Primary	4.00'	**1.0" Vert. Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Primary	7.50'	**6.0" Horiz. Overflow Orifice** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 5.88 hrs HW=4.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.02 cfs @ 8.11 hrs HW=4.44' (Free Discharge)
├**2=Underdrain** (Orifice Controls 0.02 cfs @ 3.06 fps)
└**3=Overflow Orifice** (Controls 0.00 cfs)

Pond P3: Street Planter 3



Scott Holden
503-502-8006
scottholden2007@outlook.com

31 August 2022

Re: Infiltration testing for 100 S Garfield Street, Newberg, OR

Dear Mr. Holden,

Field Investigation:
Rapid Soil Solutions (RSS) has attempted to performed one (1) infiltration tests. Figure 1 below shows the project site location. Soils found on site match those in by DOGMI. RSS found stiff fine grained flood deposits.

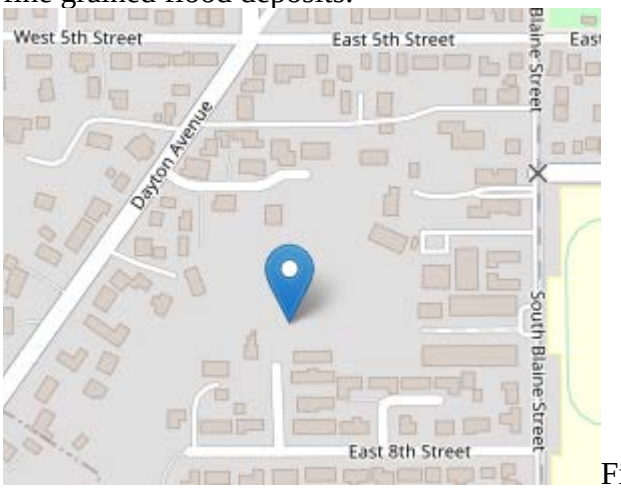


Figure 1

Infiltration Testing:
RSS perform an infiltration test per the Clean Water Services for Washington County. RSS excavated a 6ft deep holes into and started a pre-soak for four (4) hours then testing took place for three hours. The below table summarized the rates and depths. For soil details and locations please see the following infiltration testing sheets.

Location	rate (in/hr.)	Depth (ft)
HA#1	0.5	6
HA#2	2.0	6
HA#3	1.0	6

Groundwater
Based upon the three (3) well logs at are the closest to the site and of similar elevation ground water is 180-200 below the sites elevations.

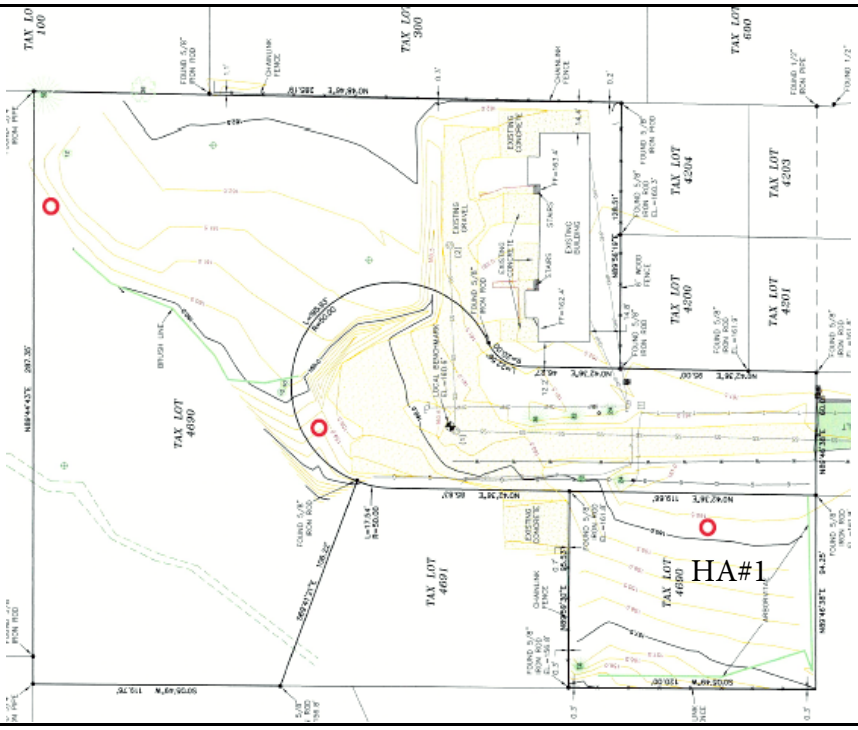
The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of explorations. Any questions regarding this report please contact me at the below number or email.

Sincerely,

Mia Mahedy, PE GE.

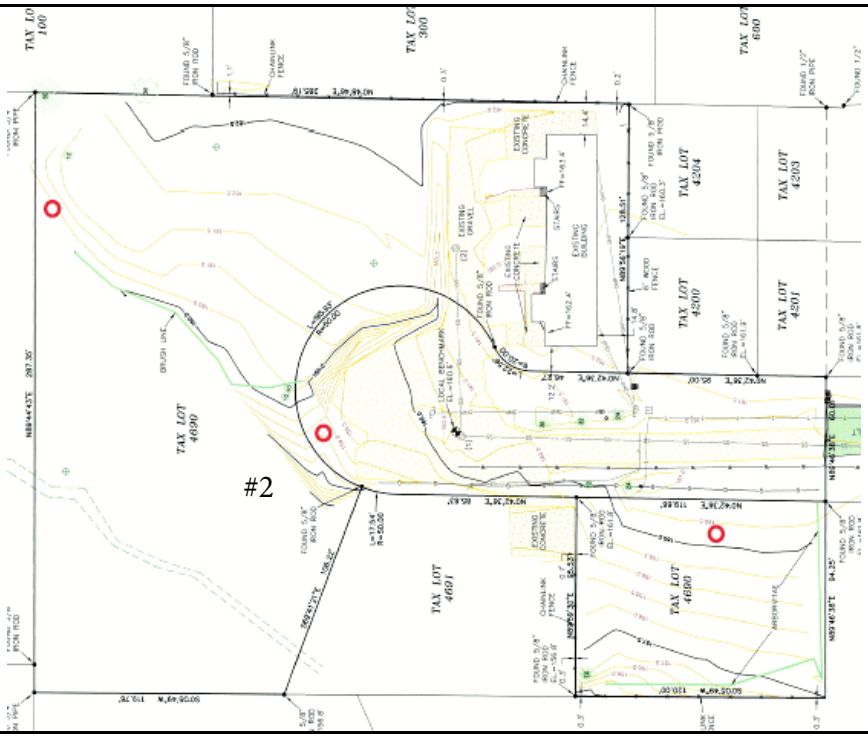
Rapid Soil Solutions INC 503-816-3689 mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft
HA #1			
Soil	2-4ft damp light brown silty clay , medium stiffness , 4-6ft, damp, brown , medium stiffness		
Presoak	9:00, 16.25, 10:00, 15, fill 18.75, 11:00, 18, fill 19:50, 12:00, 19, fill 21.75, 1:00, 21, fill 23,		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22.50		
1:40	22.50		
2:00	22.25	23.25	
2:20	24		
2:40	23.75		
3:00	23.50	25	
3:20	24.75		
3:40	24.75		
4:00	24.50		
Site Infiltration Rate (inches/hour)			**0.50in/hr**

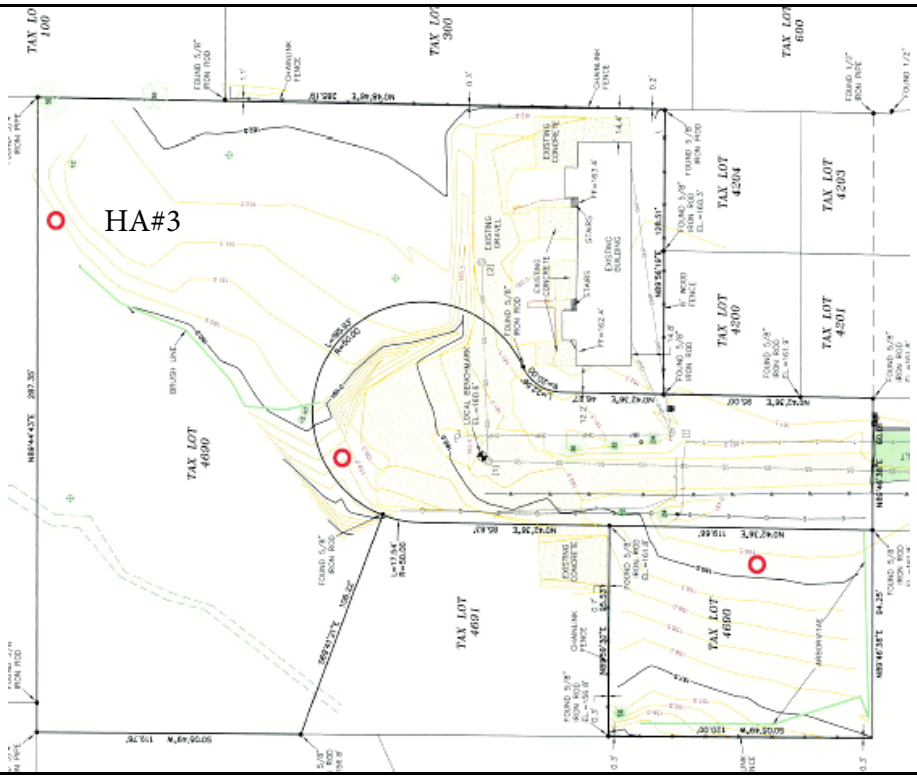
Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3-inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft
HA # 2			
Soil	2-4 ft, medium stiffness damp silty clay, brown , 4-6 ft, medium stiffness damp silty clay , brown		
Presoak	9:00, 15.25, 10:00, 12:25, fill 18.25, 11:00, 17, fill 18.50, 12:00, 16.50, fill 19, 1:00, 17, fill 19		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	18.25		
1:40	17.75		
2:00	17.25	19	
2:20	18.25		
2:40	17.25		
3:00	17	19.50	
3:20	18.50		
3:40	18		
4:00	17.50		
Site Infiltration Rate (inches/hour)			**2in/hr.**

Rapid Soil Solutions INC | 503-816-3689 | mia@rapidsoilsolutions.com

Rapid Soil Solutions Infiltration Test Results



Preliminary Information			
Location:	100 S Garfield St, Newberg OR.	**Performed By: (Supervised by Mia Mahedy, PE, GE)**	Rick Sands
Date & Time:	8-29-22, 8:45 am	**Instrument Used:**	3 inch hand auger
Weather:	Sunny, 65	**Depth:**	6 ft

HA # 3			
Soil	2-4 ft light brown silty clay medium stiffness damp, 4-6 ft, damp, brown , medium stiffness, silty clay		
Presoak	9:00, 19.50, 10:00, 18.25, fill 20, 11:00, 18.50, fill 20.75, 12:00, 20.25, fill 22, 1:00, 20.50, fill 22.25		
Time	**Measurement (inches)**	**Level Refilled To (inches)**	**Rate (inches/hour)**
1:20	22		
1:40	21.25		
2:00	21.25	23.75	
2:20	23.25		
2:40	23		
3:00	22.75	24.25	
3:20	24		
3:40	23.50		
4:00	23.25’		
Site Infiltration Rate (inches/hour)			**1in/hr.**

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

Yamhill 302

State Well No. 3S/2W-19

State Permit No.

(1) OWNER:
Name Millard Ward
Address Rt 1 Box 333A
Newberg Ore

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☑ Jetted ☐
[illegible] ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☑
6 " Diam. from +14" ft. to 49 ft. Gage 1/4 wall
" Diam. from ft. to ft. Gage
4 " Diam. from 40 ft. to 80 ft. Gage SDR 26

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No
Type of perforator used Drill
Size of perforations 3/8 in. DIA by in.
perforations from ft. to ft.
100 perforations from 50 ft. to 80 ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom?
[illegible]: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test 2 gal./min. with TOTAL ft. drawdown after 1 hrs.
Artesian flow — g.p.m.
Temperature of water NORMAL Depth artesian flow encountered — ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 29 ft.
Diameter of well bore to bottom of seal 9 1/2 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 12 sacks
How was cement grout placed? pressure Control
Was a drive shoe used? ☐ Yes ☑ No Plugs — Size: location — ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? — depth of strata —
Method of sealing strata off —
Was well gravel packed? ☐ Yes ☑ No Size of gravel: —
Gravel placed from — ft. to — ft.

(10) LOCATION OF WELL:
County Yamhill Driller's well number
¼ ¼ Section 19 T. 3S R. 2W W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 50 ft.
Static level 18 ft. below land surface. Date 15 Feb
Artesian pressure — lbs. per square inch. Date —

(12) WELL LOG:
Diameter of well below casing
Depth drilled 80 ft. Depth of completed well 79 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Brown Sandy Clay	0	23	
Grey Clay	23	45	
Lt Brown Gritty Clay	45	60	
Blue Grey " "	60	70	
Grey Brown " "	70	80	18

RECEIVED
MAR 11980
WATER RESOURCES DEPT
SALEM, OREGON

Work started 13 Feb 1980 Completed 15 Feb 1980
Date well drilling machine moved off of well 15 Feb 1980

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Stanley Gaunt (Drilling Machine Operator) Date 18 Feb, 19
Drilling Machine Operator's License No. 216

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name A J GAUNT & SON (Person, firm or corporation) (Type or print)
Address Aloha Ore
[Signed] Stanley Gaunt (Water Well Contractor)
Contractor's License No. 602 Date 18 Feb, 1980

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Yam B 2757

RECEIVED
MAR - 8 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19

(START CARD) # 44144

(1) OWNER:
Well Number 796
Name NSP Development/Brenneke
Address 2214 SW Hoffman
City Portland State OR Zip 97201

(2) TYPE OF WORK:
☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:
☒ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:
☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☒ No Depth of Completed Well 240 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12¼"	0'	30	Cement	0'	35'	42 Sacks
10"	30	40				
8"	40	240				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+ 2	38'	.25	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
100 GPM		240'	1 hr.

Temperature of Water 57° Depth Artesian Flow Found
Was a water analysis done? ☐ Yes By whom
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County Yamhill Latitude Longitude
Township 3-S N or S. Range 2-W E or W. WM.
Section 19/30 ¼ ¼
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) Dayton Av, Newberg, Or 97132

(10) STATIC WATER LEVEL:
80' ft. below land surface. Date 3/1/93
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 190'

From	To	Estimated Flow Rate	SWL
190	220'	60 GPM	n/a

(12) WELL LOG:
Ground elevation

Material	From	To	SWL
Top Soil	0	3	
Brown Clay	3	25	
H. Brown Basalt	25	35	
H. Gray Basalt	35	55	
M.H. Brown Basalt	55	85	
H. Gray Basalt	85	105	
H. Gray Fractured Basalt	105	155	
H. Gray Frac./Broken Basalt	155	165	
Hard Gray Basalt	165	175	
Hard Brown Basalt	175	190	
Hard Severe Fractured Gray Bas	190	200	
H. Gray/Brown Porous Basalt	200	215	
Hard Gray Basalt	215	235	
Soft White Clay	235	240	

Date started 2/23/93 Completed 3/1/93

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 645
Signed Date 3/4/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

16

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

YAMH 2837

RECEIVED
JUL 13 1993
WATER RESOURCES DEPT.
SALEM, OREGON

3S/2W/19C6

(START CARD) # 50236

(1) OWNER: Well Number 93-336

Name Tim & Robin Vachter

Address 24285 Zard Ln.

City Newberg State OR Zip 97132

(2) TYPE OF WORK:

xx New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:

☐ Rotary Air ☐ Rotary Mud ☒ Cable

☐ Other

(4) PROPOSED USE:

☒ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☒ No Depth of Completed Well 200 ft.

Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10	0	39	Cement	0	39	68 sk
6	39	200				

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	84	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	40	200	160	☐	☒	☒	☐
					☐	☐	☐	☐

Final location of shoe(s) 84.5

(7) PERFORATIONS/SCREENS:

☒ Perforations Method skil saw

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
160	200	6"	30	1/8"		☐	☒
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☒ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
bailer 20	100		1 hr.
pump 20	50		1 hr

Temperature of Water 51 Depth Artesian Flow Found

Was a water analysis done? ☒ Yes By whom WFR

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County YAMHILL Latitude Longitude

Township 3s N or S. Range 2w E or W. WM.

Section 19 nw ¼ sw ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

69 ft. below land surface. Date 6/23/93

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 132'

From	To	Estimated Flow Rate	SWL
132	199	20	69

(12) WELL LOG:

Ground elevation 200

Material	From	To	SWL
Topsoil	0	2	
Clay Brwn	2	31	
clay & decomposed rockGR	31	34	
Clay Gray	34	63	
Rock decomposed w/clay brwn	63	74	
Rock decomposed	74	111	
Rock fractured/decomposed	111	140	69
Rock fractured	140	200	

Date started 6/4/93 Completed 6/24/93

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number

Signed Date

(bonded) Water Well Constructor Certification:

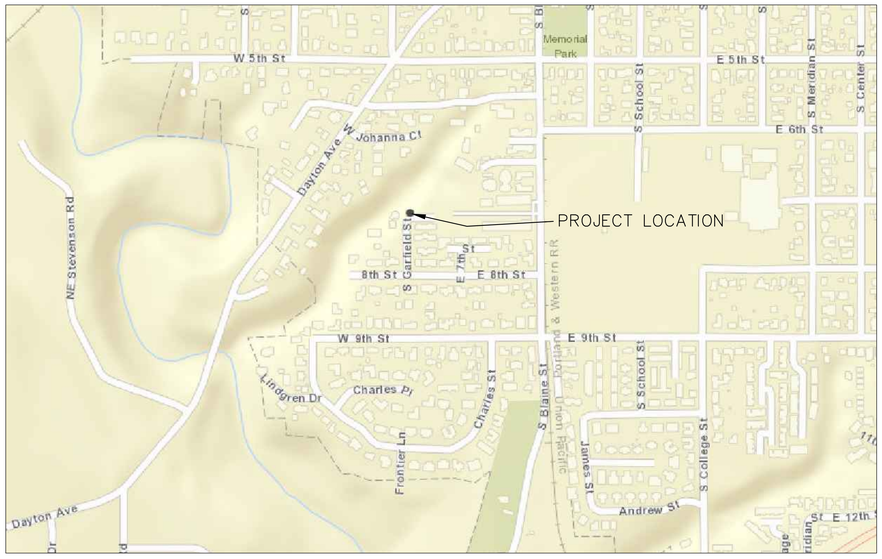
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 203

Signed Tom Bryant Date 6/24/93

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

GARFIELD ST 12-LOT SUBDIVISION
TYPE III SITE IMPROVEMENTS
LAND USE APPLICATION
100 S GARFIELD ST, NEWBERG, OR 97132



N

VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

1 – COVER SHEET
2 – EXISTING CONDITIONS & DEMO PLAN
3 – PRELIMINARY PLAT
4 – PRELIMINARY SITE & UTILITY PLAN
5 – PRELIMINARY GRADING & ESC PLAN
6 – MITIGATION & RE-PLANTING PLAN
7 – ESC DETAILS & NOTES

PROPOSED LEGEND

- PROPERTY LINE
- EASEMENT
- ROAD CENTERLINE
- STANDARD 6" CURB
- PAVEMENT SAWCUT
- AC PAVEMENT
- CONCRETE SIDEWALK
- PLANTER STRIP
- VEGETATED STORMWATER PLANTER
- WATER LINE
- WATER SERVICE & METER
- DEAD-END BLOWOFF
- VALVE
- SANITARY SEWER LINE
- SANITARY MANHOLE (SS)
- SANITARY CLEANOUT
- STORM DRAIN PIPE
- CURB INLET
- STORM DRAIN MANHOLE (D)
- MAJOR CONTOUR 100
- MINOR CONTOUR 101
- STREET TREE
- STREET LIGHT

OWNER
SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132
PHONE: (503) 502-8006
EMAIL: scottholden2007@outlook.com

PROJECT ENGINEER
KELLI A. GROVER, P.E.
FIRWOOD DESIGN GROUP, LLC
359 E. HISTORIC COLUMBIA RIVER HWY.
TROUTDALE, OR 97060
PHONE: (503) 668-3737
EMAIL: kg@firwooddesign.com

PROJECT SURVEYOR
DAVE ROEGER, PLS
CMT SURVEYING & CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE: (503) 850-4672
EMAIL: dave@cmtsc.net

LEGAL DESCRIPTION:
TAX LOT 4690
MAP # R3219DB
YAMHILL COUNTY, OREGON

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: _____

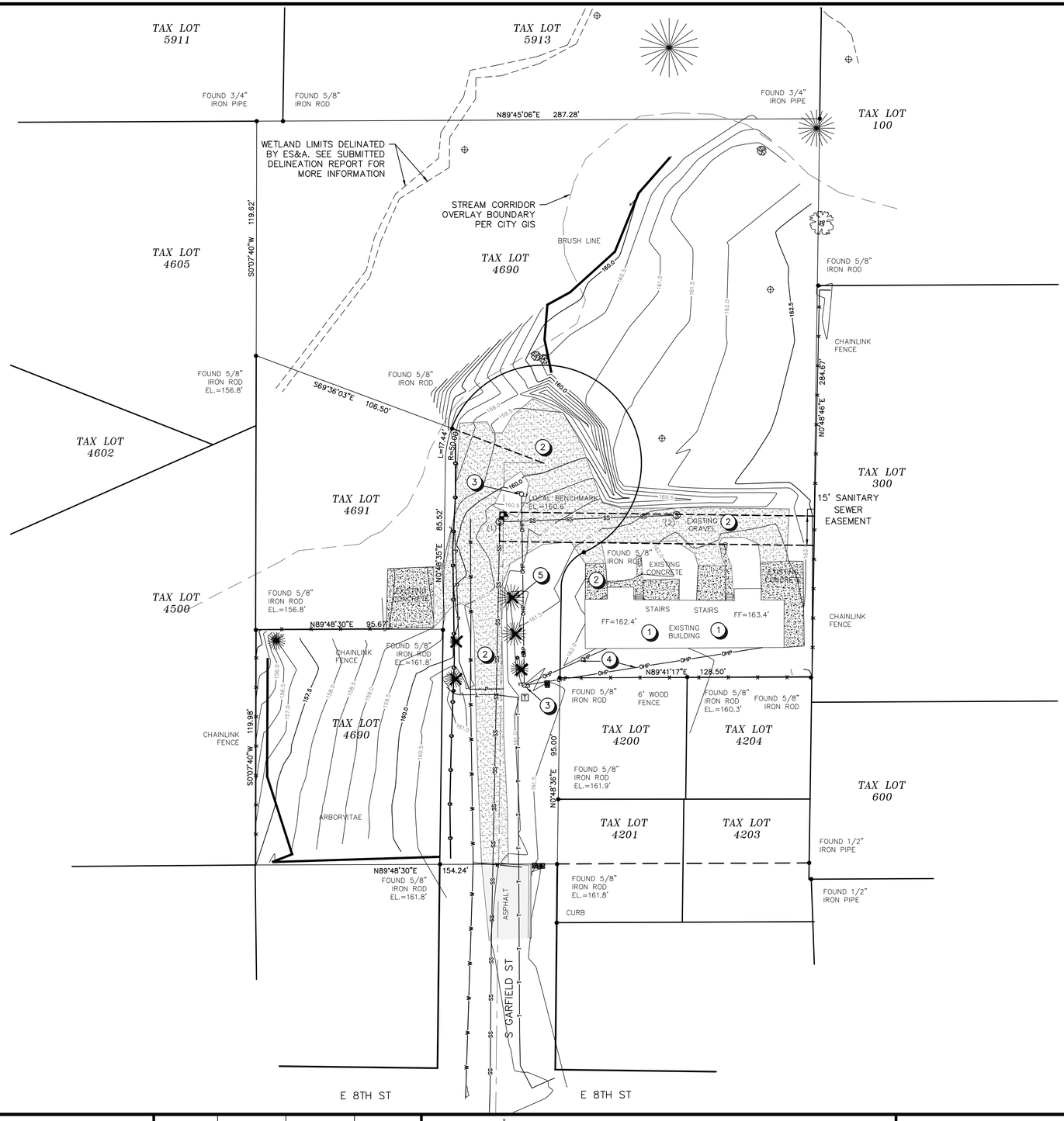
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

COVER SHEET
12-LOT SUBDIVISION



SCALE 1" = 30'

KEY NOTES

1. DEMO EXISTING DUPLEX IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. REMOVE ALL EXISTING CONCRETE AND GRAVEL ROAD / DRIVEWAYS AS NECESSARY FOR NEW ROAD CONSTRUCTION.
3. RELOCATE EXISTING POWER POLES
4. ABANDON EXISTING OVERHEAD POWER LINES
5. REMOVE TREES WITHIN CONSTRUCTION AREA (TYP)

SANITARY STRUCTRES

(1) SSMH
RIM EL.=160.6'
I.E. IN EAST=154.7'
I.E. OUT SOUTH=154.4'

(2) SSMH
RIM EL.=161.8'
I.E. IN EAST=155.9'
I.E. OUT WEST=155.8'

NOTES

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE EXISTING CONDITIONS FOR 100 S GARFIELD STREET.
2. THE BASIS OF BEARINGS WAS PER RECORD OF SURVEY NO. CSP-8417 YAMHILL COUNTY RECORDS.
3. LOCAL DATUM WAS ESTABLISHED BY GPS OBSERVATION, NAVD88.
4. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF HOLDEN NEWBERG QOZB LLC.
5. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED AT A DATE TO BE DETERMINED.
6. ALL UTILITY LOCATIONS ARE SHOWN BY ABOVE GROUND FEATURES AND LOCATION OF PAINT MARKS SUPPLIED BY THE LOCAL UTILITY COMPANIES. CMT TAKES NO RESPONSIBILITY OF UNDERGROUND LOCATION. PLEASE NOTIFY THE UTILITY NOTIFICATION CENTER BEFORE ANY DIGGING 1-800-332-2344.

LEGEND

- EXISTING DECIDUOUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING CONIFEROUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING UNDERGROUND TELEPHONE
- EXISTING POWER POLE
- EXISTING UNDERGROUND POWER LINES
- EXISTING OVERHEAD POWER LINES
- EXISTING WATER METER
- EXISTING UNDERGROUND WATER
- EXISTING UNDERGROUND GAS LINE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING UTILITY RISER
- EXISTING FENCE
- FOUND MONUMENTS
- LOCAL BENCHMARK ESTABLISHED
- EXISTING WETLAND DATA POINT
- EXISTING WETLAND LIMITS
- EXISTING GRAVEL
- EXISTING CONCRETE
- EXISTING ASPHALT

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
SEPTEMBER 11, 2018
DAVID ROEGER
86811

EXPIRES DECEMBER 31, 2022

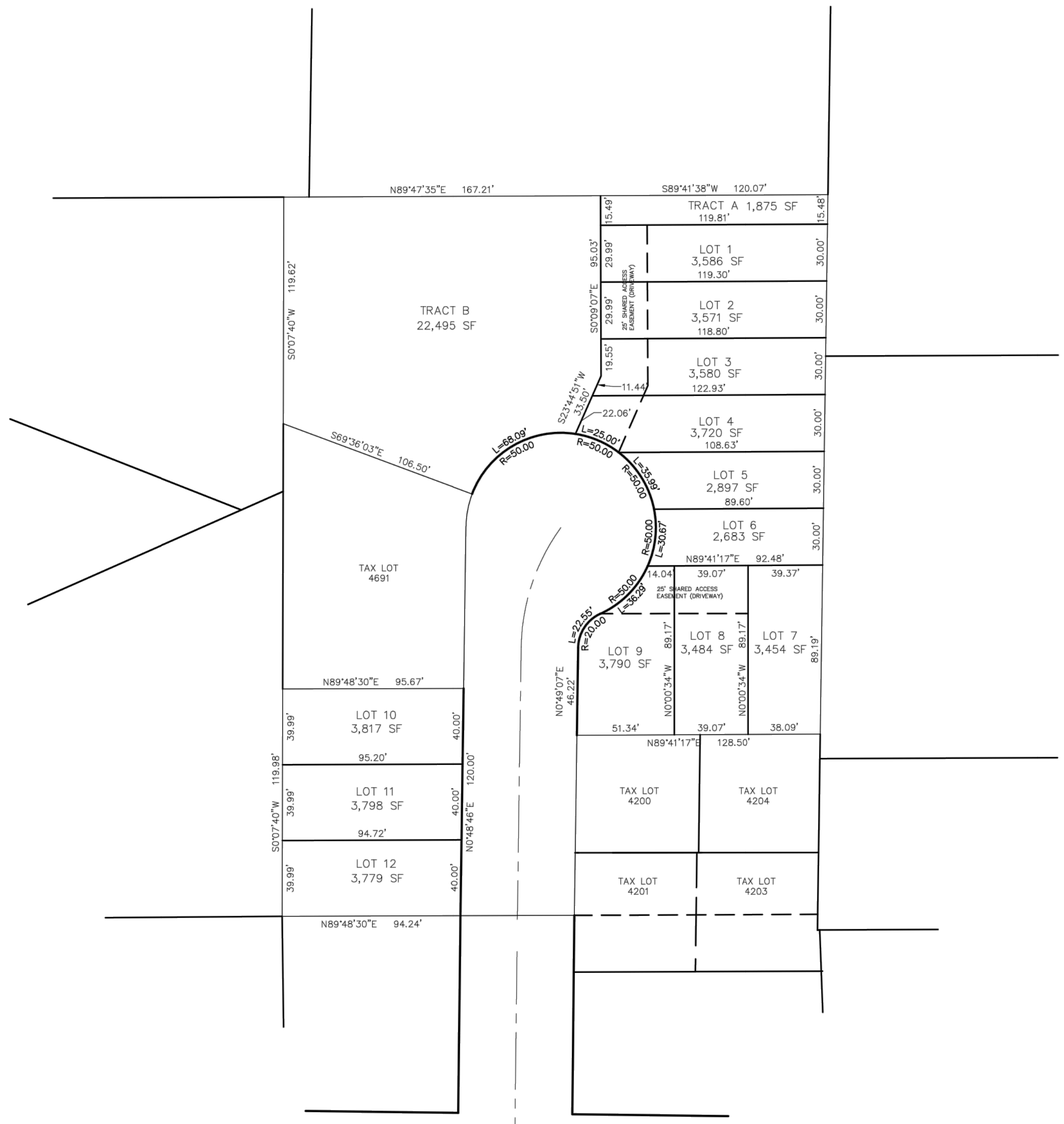
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

EXISTING CONDITIONS & DEMO PLAN
12-LOT SUBDIVISION



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
SEPTEMBER 22, 2022
DRAWN: JMR CHECKED: DMR
SCALE 1"=40' ACCOUNT #500-1106

Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

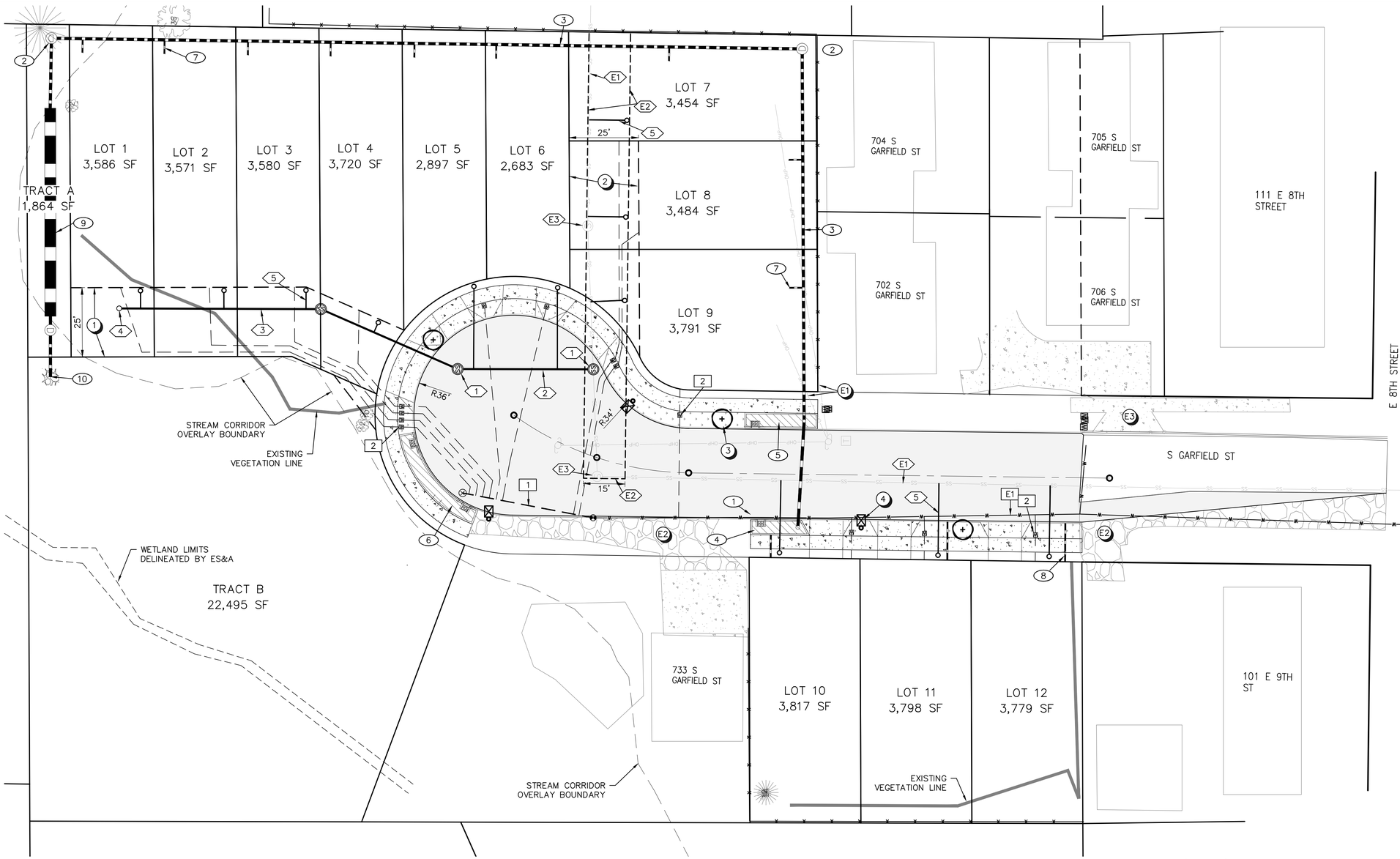
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY PLAT
12-LOT SUBDIVISION



SITE NOTES:

- E1 EXISTING OVERHEAD TO BE UNDERGROUNDED (BY OTHERS).
- E2 EXISTING GRAVEL TO REMAIN
- E3 EXISTING CONCRETE APPROACH TO REMAIN
- 1 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 1–4
- 2 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 7–9
- 3 NEW STREET TREE (TYP).
- 4 NEW STREET LIGHT (TYP), SEE NOTE 3 THIS SHEET.

WATER NOTES:

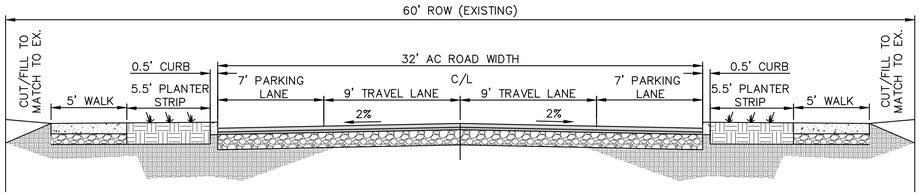
- E1 EXISTING PUBLIC 4" DUCTILE IRON WATER MAIN. SEE NOTE 8 THIS SHEET.
- 1 EXTEND PUBLIC 4" WATER MAIN AND CONSTRUCT BLOWOFF ASSEMBLY AT TERMINUS.
- 2 NEW 3/4" WATER SERVICE & METER (TYP, ALL LOTS). WATER METER TO BE PLACED IN PLANTER STRIP.

STORM NOTES:

- 1 NEW CURB INLET (TYP, 4 TOTAL)
- 2 NEW PRIVATE STORM DRAIN MANHOLE (TYP, 2 TOTAL)
- 3 NEW PRIVATE 12" HDPE STORM MAIN
- 4 NEW PUBLIC 20' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 5 NEW PUBLIC 25' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 6 NEW PUBLIC 45' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH OVERFLOW NOTCH TO SHEET FLOW TO THE NORTH INTO STREAM CORRIDOR.
- 7 NEW 4" STORM DRAIN LATERAL FOR LOTS 1–9 ROOF DRAINS (TYP)
- 8 LOTS 10–12 TO BE CONSTRUCTED WITH WEEP HOLE IN CURB FOR ROOF DRAINS.
- 9 NEW PRIVATE 60" DIAMETER, 70 LF CMP FOR UNDERGROUND DETENTION, CONSTRUCT WITH FLOW CONTROL MANHOLE.
- 10 NEW 12" OUTFALL INTO STREAM CORRIDOR WITH RIP–RAP EROSION CONTROL PROTECTION. 12" IE = 593.8'. DISTURBED AREA TO BE MITIGATED PER MITIGATION PLAN (BY OTHERS)

SANITARY NOTES:

- E1 EXISTING PUBLIC 8" SANITARY MAIN
- E2 EXISTING 15' SANITARY EASEMENT
- E3 EXISTING SANITARY MANHOLE
- 1 NEW SANITARY SEWER MANHOLE (TYP, 3 TOTAL)
- 2 NEW PUBLIC 6" PVC SANITARY MAIN
- 3 NEW PRIVATE 6" PVC SANITARY MAIN CONTAINED WITHIN EASEMENT
- 4 NEW PRIVATE MAINLINE CLEANOUT
- 5 NEW 4" SANITARY SEWER SERVICE AND CLEANOUT (TYP, ALL LOTS)



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

NOTES:

1. DEVELOPER / CONTRACTOR RESPONSIBLE FOR COORDINATION OF INSTALLATION OF OTHER UTILITIES NOT SHOWN ON THESE PLANS, INCLUDING GAS, ELECTRICITY, AND COMMUNICATIONS.
2. ALL STORMWATER MANAGEMENT FACILITIES AS A PART OF THIS PROJECT ARE PROPOSED TO MANAGE BOTH NEWLY CREATED PUBLIC IMPERVIOUS AREA AND STORMWATER FROM FUTURE IMPERVIOUS AREA ON EACH OF THE LOTS. SEE SUBMITTED STORMWATER REPORT FOR MORE INFORMATION. NEWLY CREATED TRACT A WILL BE DEDICATED TO STORMWATER MANAGEMENT FOR LOTS 1–9 AND PUBLIC OVERFLOW STORMWATER.
3. STREET LIGHTING TO BE INSTALLED ALONG NEW STREET AS NECESSARY TO COMPLY WITH NEWBERG PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS. STREET LIGHTS SHOWN CONCEPTUALLY ON THIS PLAN. FINAL STREET LIGHTING & PHOTOMETRIC PLAN TO BE PROVIDED WITH CONSTRUCTION PLAN SET.
4. 12' WIDE STANDARD DRIVEWAYS SHOWN CONCEPTUALLY FOR EACH LOT PER CITY OF NEWBERG STANDARD DETAIL 508.

NOTES (CONT.):

5. NEW S GARFIELD ST FULL ROAD SECTION TO BE CENTERED ON THE EXISTING ROW. NO ROW DEDICATION IS PROPOSED. SEE TYPICAL ROAD SECTION THIS SHEET. NO FRONTAGE IMPROVEMENTS WILL BE CONSTRUCTED ALONG NEIGHBORING LOTS (SIDEWALK & PLANTER STRIP)
6. A REDUCED RADIUS CUL–DE–SAC (36') IS PROPOSED DUE TO THE EXISTING ROW WIDTH. AS A RESULT, THE BUILDINGS ON LOTS 1–9 WILL ALL BE SPRINKLERED, IN ACCORDANCE WITH FIRE ACCESS STANDARDS
7. PUE = PUBLIC UTILITY EASEMENT WITH THE CITY OF NEWBERG
   10' PUE TO BE CREATED ON ALL PROPERTY FRONTAGES
8. THE EXISTING 4" WATER MAIN IN S GARFIELD ST IS UNDERSIZED PER CITY STANDARDS. HOWEVER, A WATER SYSTEM ANALYSIS WAS PERFORMED BY WESTERN STATES FIRE PROTECTION TO VERIFY THE MAIN IS OF ADEQUATE SIZE TO SERVICE THE NEW SUBDIVISION. A COPY OF THIS ANALYSIS REPORT IS SUBMITTED WITH THE LAND USE APPLICATION TO THE CITY.

NORTH

0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

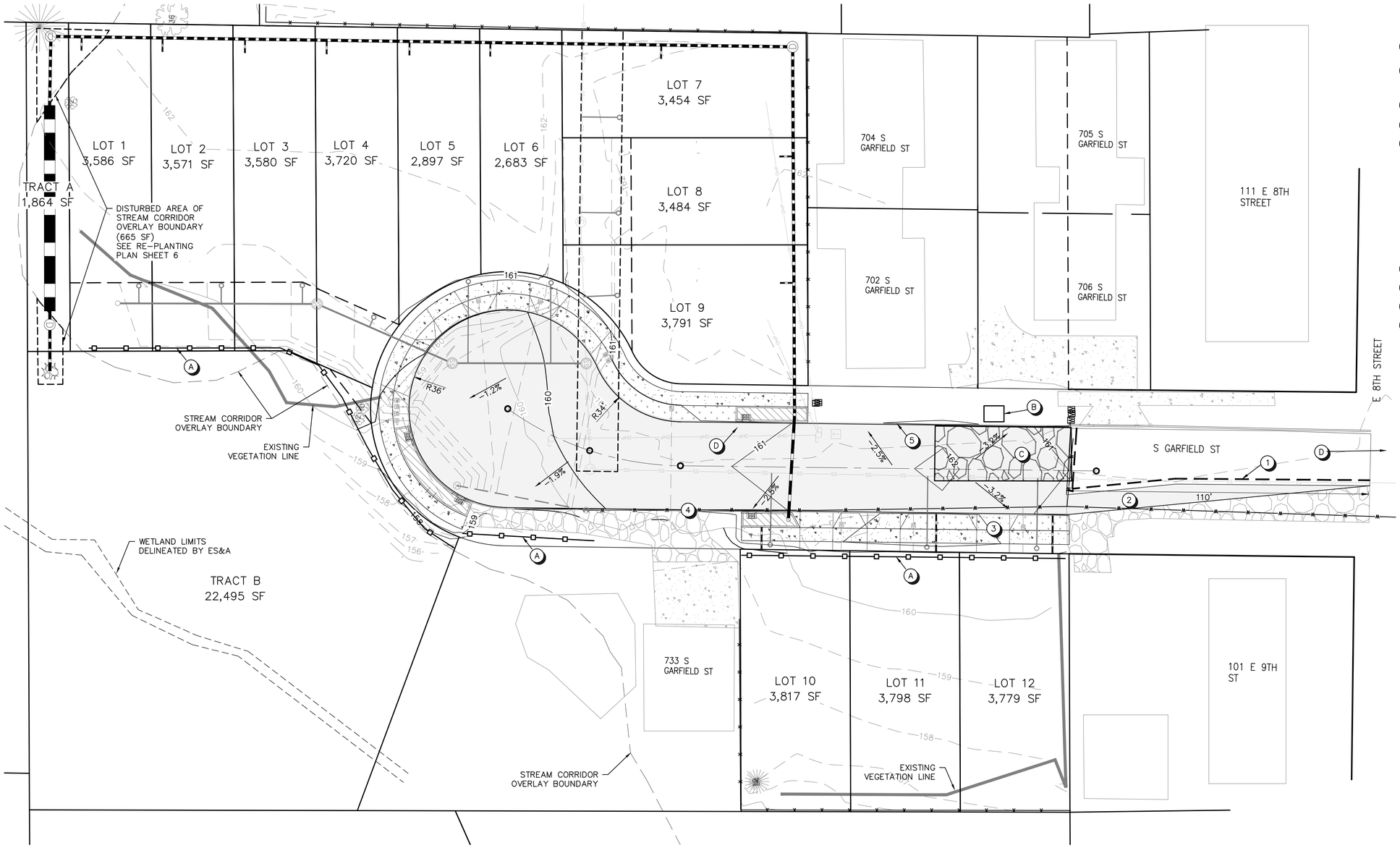
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21–049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY SITE & UTILITY PLAN
12-LOT SUBDIVISION

4 / 7



STREET NOTES:

1. SAWCUT LINE, MIN. 2' INTO EXISTING ASPHALT
2. 110' ASPHALT TAPER TO EXISTING ROAD EDGE, PER AASTHO GREEN BOOK CHAPTER 5C-2, BASED ON 25 MPH DESIGN SPEED AND 11' ROAD WIDTH LOSS.
3. NEW 12' DRIVEWAY APPROACH FOR EACH LOT (TYP)
4. 12' CURB CUT FOR EXISTING HOME AT 733 S GARFIELD ST
5. NEW 6" EXPOSURE STANDARD CUTB AND GUTTER ALONG NEW S GARFIELD ST

ESC NOTES:

- A INSTALL SEDIMENT FENCE DOWNHILL OF ALL GRADING ACTIVITIES
- B CONCRETE WASH OUT
- C GRAVEL CONSTRUCTION ENTRANCE
- D INSTALL INLET PROTECTION ON ALL EXISTING AND PROPOSED STORM DRAIN INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE.

ESTIMATED SITE DATA:

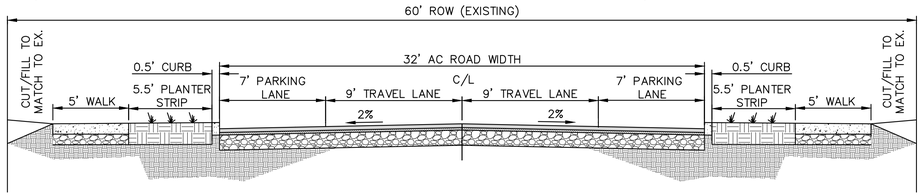
AREA OF DISTURBANCE: 60,550 SF [1.4 ACRES] (INCLUDE ALL OF LOTS 1-12 AND TRACT A, AND DISTURBED AREA OF TRACT B)

NEW ASPHALT ROAD: 10,410 SF

NEW CONCRETE SIDEWALK: 2,520 SF

PROPOSED FINISH GRADE TO EXISTING GRADE
CUT: 135 CY
FILL: 205 CY

ENGINEER'S ESTIMATE IS APPROXIMATE AND PROVIDED FOR REFERENCE ONLY. CONTRACTOR RESPONSIBLE FOR TAKEOFFS USED IN BIDDING AND ACTUAL QUANTITIES OF IMPORTED/EXPORTED MATERIAL AS NEEDED FOR CONSTRUCTION



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

MITIGATION REPLANTING DETAIL

NORTH

0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

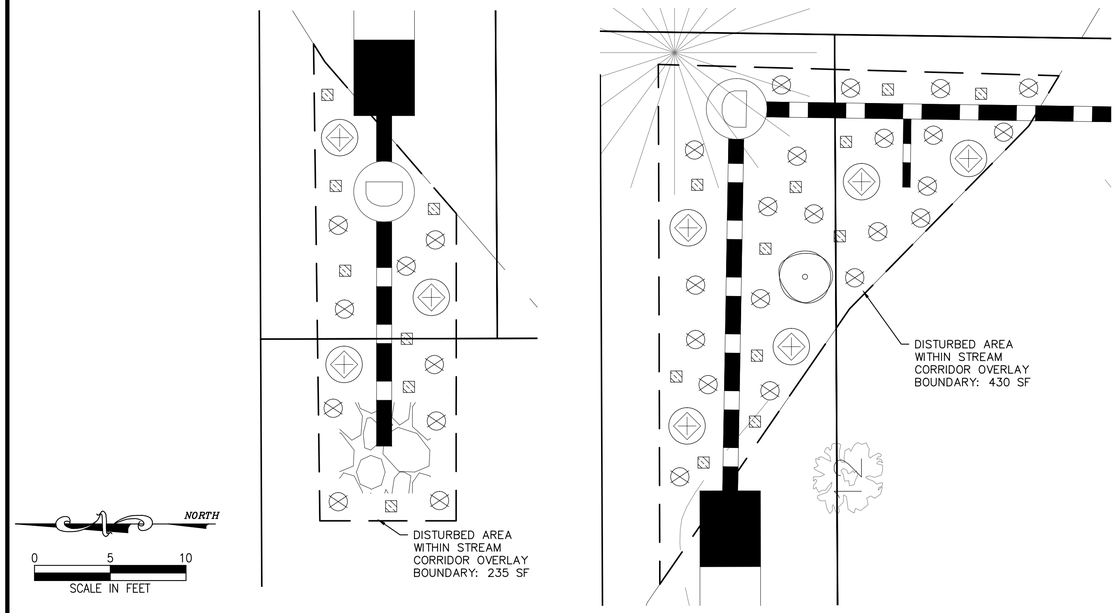
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY GRADING & ESC PLAN
12-LOT SUBDIVISION

5/7



MITIGATION REPLANTING DETAIL
SCALE: 1"=5'

MITIGATION NOTES:

- ALL DISTURBED AREAS SHALL BE REGRADED AND CONTOURED TO APPEAR NATURAL.
- ALL FILL MATERIAL SHALL BE NATIVE SOIL
- REPLANTING SHALL BE REQUIRED USING A COMBINATION OF TREES, SHRUBS AND GRASS
- AREAS TO BE REPLANTED MUST BE COMPLETED AT THE TIME OF FINAL INSPECTION OR COMPLETEION OF THE WORK
- EXISTING VEGETATION THAT CAN BE SAVED AND REPLANTED IS ENCOURAGED, ALTHOUGH NOT REQUIRED
- ALL DISTURBED AREAS SHALL BE REPLANTED TO ACHIEVE 90 PERCENT COVER IN ONE YEAR.
- ALL DISTURBED AREAS SHALL BE PROTECTED WITH EROSION CONTROL DEVICES PRIOR TO CONSTRUCTION ACTIVITY. THESE DEVICES SHALL REMAIN IN PLACE UNTIL 90 PERCENT COVER IS ACHIEVED.

LEGEND

- TREE
- LARGE SHRUB
- SMALL SHRUB
- GRASSES, GROUNDCOVER

PLANTING NOTES:

1. ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF NEWBERG STANDARDS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
3. SOIL PREPARATION: GROWING MEDIUM SHALL MEET CITY OF NEWBERG AND YAMHILL COUNTY STANDARDS FOR NATIVE SOIL MIXES.
4. PLANTING SYMBOLS ARE MEANT TO CONVEY GENERAL PLANT LOCATION. PLANT COVERAGE, SPACING, AND LAYOUT SHALL BE CONSISTENT WITH THE SPACING LISTED IN THE PLANT LEGEND FOR FULL COVERAGE. ADJUST AS NECESSARY TO AVOID CONFLICTS WITH UTILITIES, LIGHTS, EXISTING VEGETATION, ETC.

PLANTING SCHEDULE

TYPE	QTY	BOTANICAL NAME	COMMON NAME	SIZE/HEIGHT	SPACING/WIDTH
○	1	RHAMNUS PURHSIANA	CASCARA	30'	20'
⊕	4	AMELANCHIER ALNIFOLIA	WESTERN SERVICEBERRY	6'	10'
	4	SAMBUCUS RACEMOSA	RED ELDERBERRY	8'	6'
⊗	10	SYMPHORICARPOS ALBUS	COMMON SNOWBERRY	3'	2'
	10	RIBES LOBBI	GUMMY GOOSEBERRY	4'	4'
	10	ROSA GYMNOCARPA	BALDHIP ROSE	5'	2'
▨	AS NECESSARY	JUNCUS ENSIFOLIUS	DAGGER-LEAF RUSH	1'	1'
		ATHYRIUM FILIX-FEMINA	LADY FERN	4'	2'

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
JAN. 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

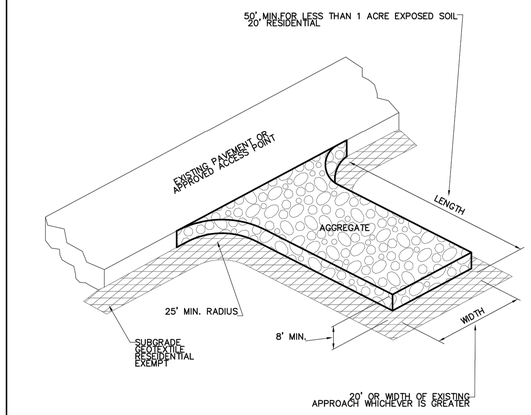
FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

MITIGATION & RE-PLANTING PLAN
12-LOT SUBDIVISION

CITY OF NEWBERG EROSION CONTROL GENERAL NOTES

1. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED, APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
2. THE ESC PLAN, ANY REVISIONS, AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.
3. THE ESC MEASURES SHOWN ON THE PLAN ARE THE MINIMUM REQUIREMENTS FOR THE PROJECT SITE AND SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
4. ALL ESC MEASURES SHALL BE APPROVED, IN PLACE, AND FUNCTIONAL PRIOR TO ANY GROUND DISTURBANCE OF THE SITE. CONTRACTOR SHALL MAINTAIN ALL ESC MEASURES THROUGHOUT CONSTRUCTION.
5. CLEARING LIMITS, CRITICAL RIPARIAN AREAS, BUFFER ZONES, AND PRESERVED VEGETATION (INCLUDING IMPORTANT TREES AND ASSOCIATED CRITICAL ROOT ZONES) SHALL HAVE HIGH VISIBILITY FENCE INSTALLED BEFORE GRADING OR CONSTRUCTION TO IDENTIFY, MARK, AND PROTECT THE AREAS.
6. CONSTRUCTION ACTIVITIES WILL AVOID OR MINIMIZE ANY EXCAVATION OR OTHER SOIL DESTABILIZATION FROM OCTOBER 1ST TO MAY 31ST OF THE FOLLOWING YEAR.
7. TEMPORARY SITE STABILIZATION MEASURES WILL BE INSTALLED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND OR AT THE END OF EACH WORKDAY IF RAIN IS FORECAST IN THE NEXT 24 HOURS.
8. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ALONG THE SITE PERIMETER ON ALL DOWN-GRADIENT SIDES OF THE CONSTRUCTION SITE AND AT ALL ACTIVE AND OPERATIONAL INTERNAL STORMDRAINS AT ALL TIMES DURING CONSTRUCTION.
9. DRY METHODS MUST BE USED TO REMOVE SEDIMENT AND CONCRETE SWEEPINGS FROM AREAS WHERE DISCHARGE IS LIKELY TO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
10. ALL DIRT AND DEBRIS TRACKED ONTO STREETS MUST BE REMOVED IMMEDIATELY IF IT CAN BE SPREAD BY TRAFFIC OR OTHERWISE REACH STORM DRAINS, WATERCOURSES, OR SENSITIVE AREAS.
11. SEDIMENT DISCHARGED OFFSITE MUST BE PLACED BACK ONSITE WITHIN 24 HOURS AND STABILIZED. IN-STREAM WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROCEDURES AND TIMEFRAMES OF THE OREGON DEPARTMENT OF STATE LANDS.
12. NO SEDIMENT-LADEN WATER MAY BE PUMPED, DIVERTED, OR OTHERWISE DISCHARGED OFFSITE UNLESS APPROVED BY THE ESC PLAN.
13. SEDIMENT MUST BE REMOVED WHEN IT HAS REACHED THE LEVEL SPECIFIED IN THE STANDARD DETAIL.
14. SEDIMENT MUST BE REMOVED FROM SUMPED STRUCTURES WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 1/3RD AND WITHIN 30 DAYS OF PROJECT COMPLETION.
15. WHEN REMOVING SATURATED SOILS FROM THE SITE, EITHER WATERTIGHT TRUCKS MUST BE USED OR LOADS MUST BE DRAINED ONSITE UNTIL DRIPPING HAS BEEN REDUCED TO MINIMIZE SPILLAGE.
16. EROSION CONTROL MEASURES WILL BE INSPECTED ON ACTIVE SITES AT LEAST WEEKLY OR AFTER PRECIPITATION IN EXCESS OF 0.5 INCHES IN 24 HOURS. IF A SITE WILL BE INACTIVE MORE THANFOURTEEN (14) DAYS, EROSION CONTROL MEASURES WILL BE INSPECTED PRIOR TO THE INACTIVE PERIOD AND EVERY TWO (2) WEEKS DURING THE INACTIVE PERIOD.
17. ALL CONSTRUCTION SITES MUST FOLLOW PROPER STORAGE, APPLICATION, AND DISPOSAL PROCEDURES OF CONSTRUCTION MATERIALS. NO DUMPING OR DISPOSAL OF CONSTRUCTION DEBRIS, WASTE, OR SPOIL MATERIAL WILL OCCUR IN ANY STREAM, STORMWATER SYSTEM, WETLANDS, SURFACE WATERS, OR OTHER WATERCOURSES OR SENSITIVE AREAS.
18. WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES ARE REQUIRED FOR ALL SITES.
19. TOXIC AND HAZARDOUS MATERIALS MUST HAVE COVER AND SECONDARY CONTAINMENT.
20. CONCRETE TRUCKS SHALL NOT DISCHARGE WASHWATER WHERE IT IS LIKELY TO FLOW INTO STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
21. PAVING ACTIVITIES SHALL BE MINIMIZED BETWEEN OCTOBER 1ST AND MAY 31ST OF THE FOLLOWING YEAR TO AVOID POTENTIAL DISCHARGE OF PAVING CHEMICALS INTO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
22. ALL ESC MEASURES SHALL BE REMOVED FROM THE SITE 30 DAYS AFTER CONSTRUCTION IS COMPLETED AND APPROVED BY THE CITY.



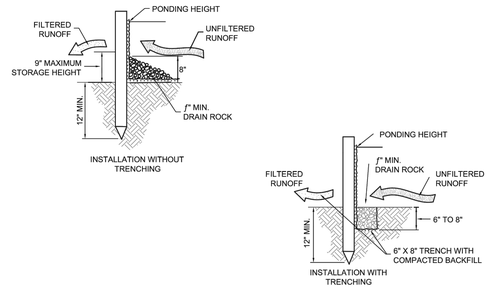
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-RIGH-OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT-LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS
   SINGLE FAMILY AND DUPLEX
   20' LONG BY 20' WIDE, 8" DEEP OF 3/4 " MINUS CLEAN ROCK.
   COMMERCIAL
   50' LONG BY 20' WIDE, 3-6" DEEP CLEAN ROCK.
   GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

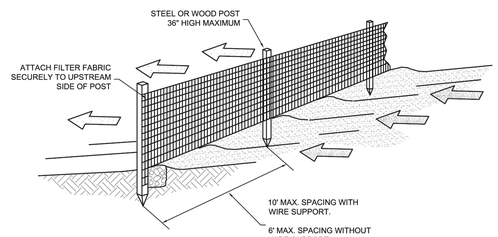
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	

CONSTRUCTION ENTRANCE

SCALE:	N.T.S
DATE:	May 2007
APPROVED BY:	D. Danicic
STANDARD DRAWING	601



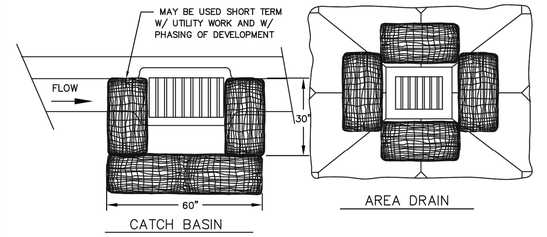


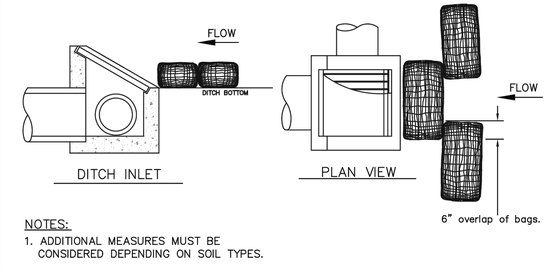
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	

SILT FENCE

SCALE:	N.T.S.
DATE:	MAY 2007
APPROVED BY:	D. DANICIC
STANDARD DRAWING	602





NOTES:
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2"WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:	
12/10/2013	

INLET PROTECTION

SCALE:	N.T.S.
DATE:	04/04/2009
APPROVED BY:	PAUL CHIU
STANDARD DRAWING	605

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
Jan. 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

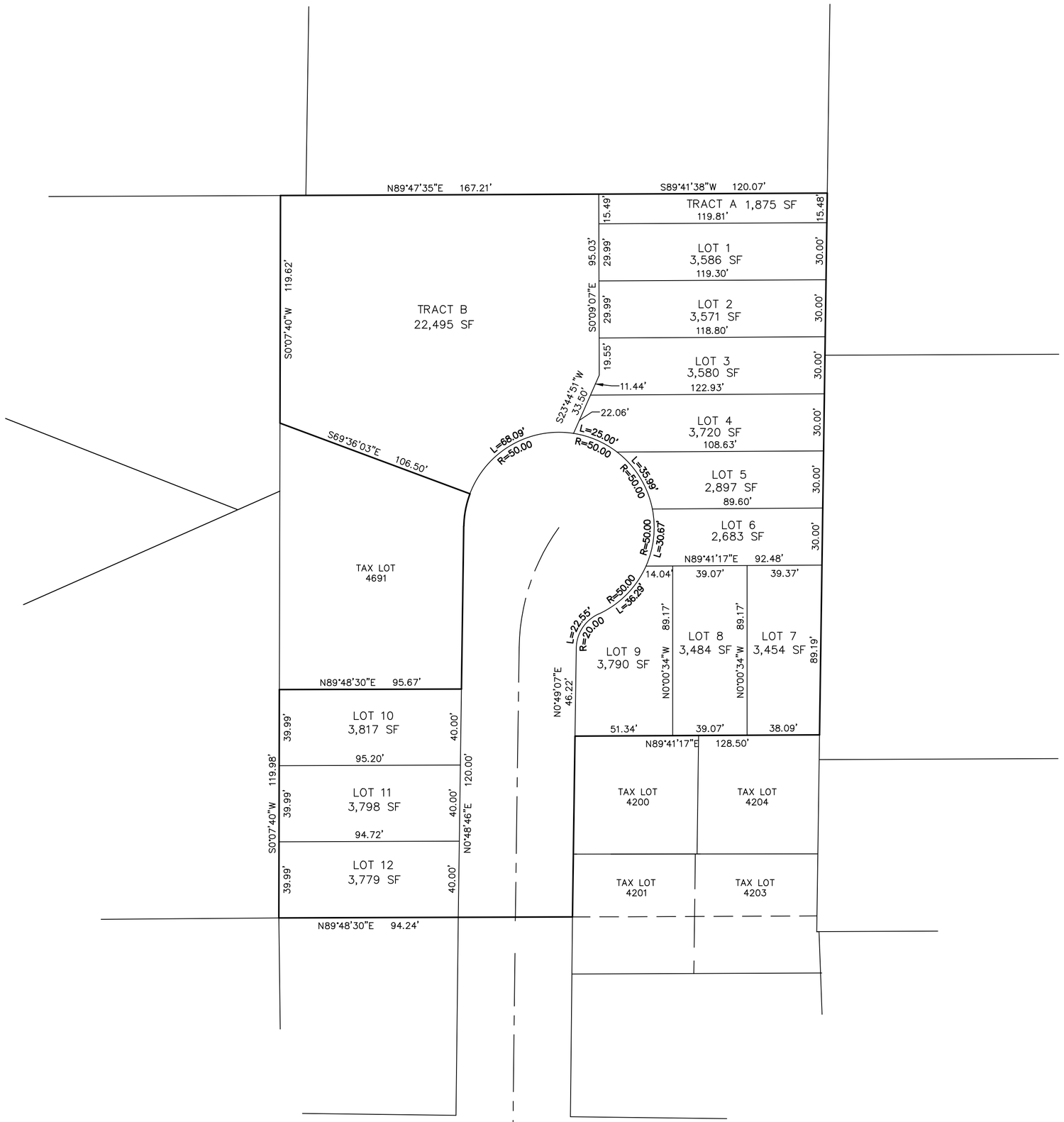
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

ESC DETAILS & NOTES
12-LOT SUBDIVISION

7/7



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

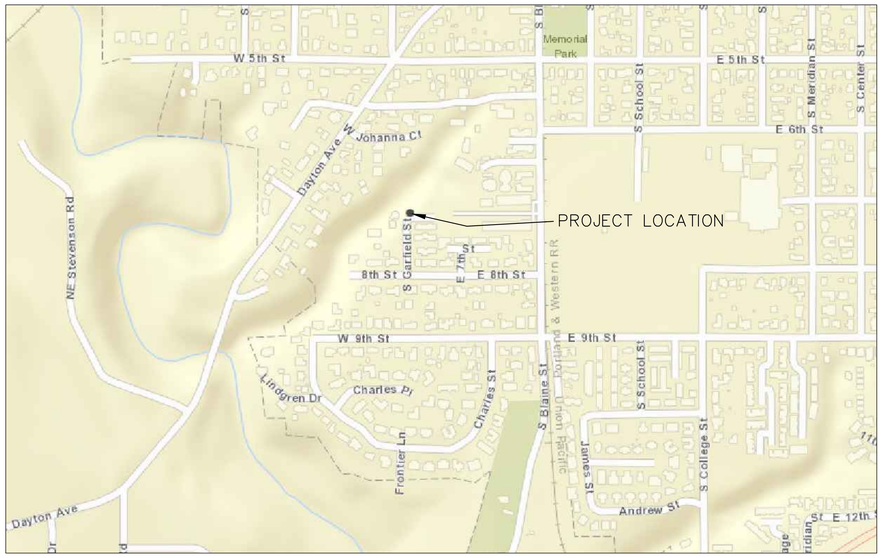
100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
SEPTEMBER 22, 2022
DRAWN: JMR CHECKED: DMR
SCALE 1"=40' ACCOUNT #500-1106
Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

GARFIELD ST 12-LOT SUBDIVISION
TYPE III SITE IMPROVEMENTS
LAND USE APPLICATION
100 S GARFIELD ST, NEWBERG, OR 97132



N

VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

1 – COVER SHEET
2 – EXISTING CONDITIONS & DEMO PLAN
3 – PRELIMINARY PLAT
4 – PRELIMINARY SITE & UTILITY PLAN
5 – PRELIMINARY GRADING & ESC PLAN
6 – MITIGATION & RE-PLANTING PLAN
7 – ESC DETAILS & NOTES

PROPOSED LEGEND

- PROPERTY LINE
- EASEMENT
- ROAD CENTERLINE
- STANDARD 6" CURB
- PAVEMENT SAWCUT
- AC PAVEMENT
- CONCRETE SIDEWALK
- PLANTER STRIP
- VEGETATED STORMWATER PLANTER
- WATER LINE
- WATER SERVICE & METER
- DEAD-END BLOWOFF
- VALVE
- SANITARY SEWER LINE
- SANITARY MANHOLE (SS)
- SANITARY CLEANOUT
- STORM DRAIN PIPE
- CURB INLET
- STORM DRAIN MANHOLE (D)
- MAJOR CONTOUR 100
- MINOR CONTOUR 101
- STREET TREE
- STREET LIGHT

OWNER
SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132
PHONE: (503) 502-8006
EMAIL: scottholden2007@outlook.com

PROJECT ENGINEER
KELLI A. GROVER, P.E.
FIRWOOD DESIGN GROUP, LLC
359 E. HISTORIC COLUMBIA RIVER HWY.
TROUTDALE, OR 97060
PHONE: (503) 668-3737
EMAIL: kg@firwooddesign.com

PROJECT SURVEYOR
DAVE ROEGER, PLS
CMT SURVEYING & CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE: (503) 850-4672
EMAIL: dave@cmtsc.net

LEGAL DESCRIPTION:
TAX LOT 4690
MAP # R3219DB
YAMHILL COUNTY, OREGON

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY

EXPIRES: 06/30/23
SIGNATURE DATE: _____

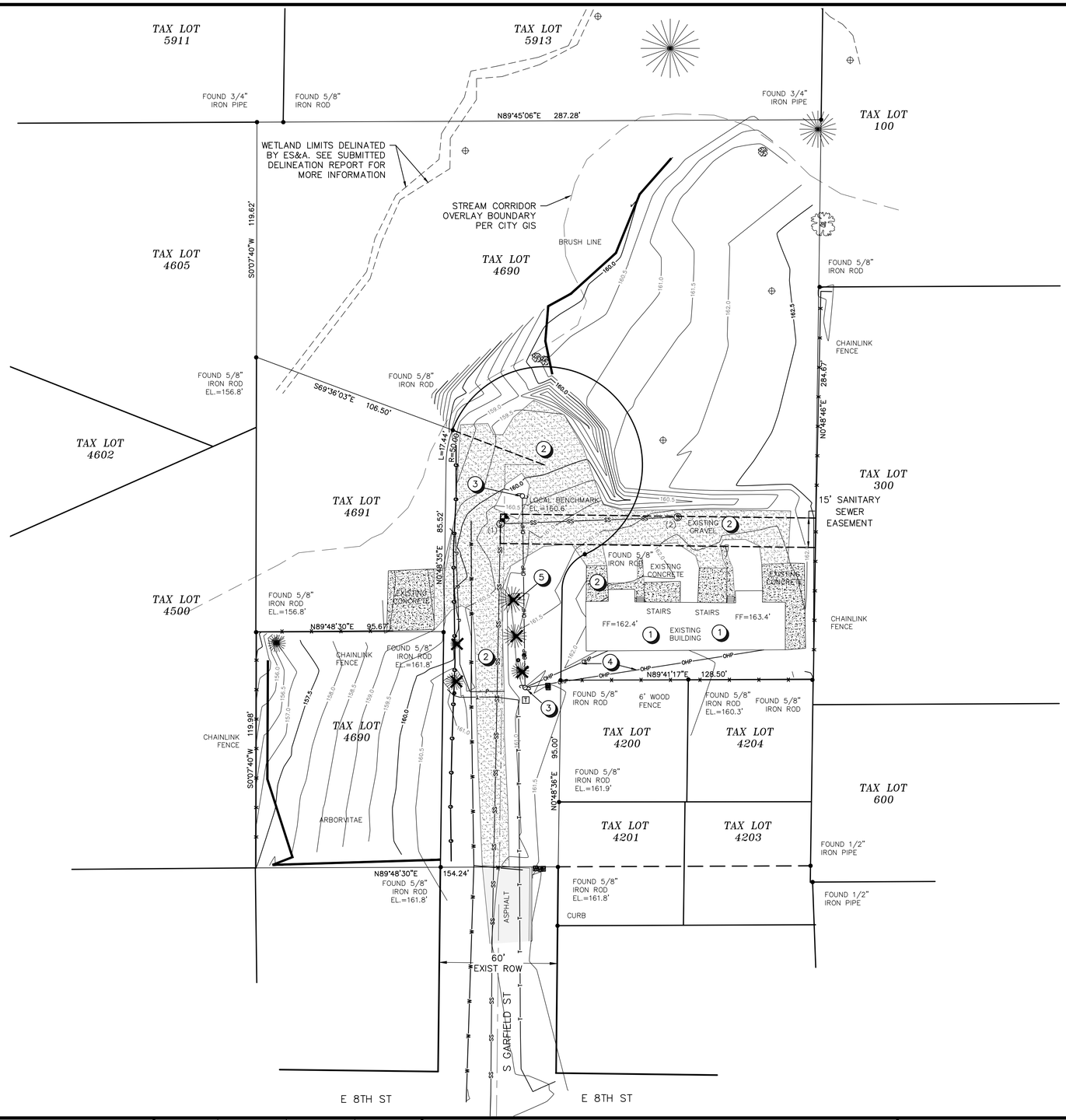
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

COVER SHEET
12-LOT SUBDIVISION



SCALE 1" = 30'

KEY NOTES

1. DEMO EXISTING DUPLEX IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. REMOVE ALL EXISTING CONCRETE AND GRAVEL ROAD / DRIVEWAYS AS NECESSARY FOR NEW ROAD CONSTRUCTION.
3. RELOCATE EXISTING POWER POLES
4. ABANDON EXISTING OVERHEAD POWER LINES
5. REMOVE TREES WITHIN CONSTRUCTION AREA (TYP)

SANITARY STRUCTRES

(1) SSMH
RIM EL.=160.6'
I.E. IN EAST=154.7'
I.E. OUT SOUTH=154.4'

(2) SSMH
RIM EL.=161.8'
I.E. IN EAST=155.9'
I.E. OUT WEST=155.8'

NOTES

1. THE PURPOSE OF THIS MAP WAS TO SHOW THE EXISTING CONDITIONS FOR 100 S GARFIELD STREET.
2. THE BASIS OF BEARINGS WAS PER RECORD OF SURVEY NO. CSP-8417 YAMHILL COUNTY RECORDS.
3. LOCAL DATUM WAS ESTABLISHED BY GPS OBSERVATION, NAVD88.
4. THIS MAP WAS PREPARED FOR THE EXCLUSIVE USE OF HOLDEN NEWBERG QOZB LLC.
5. THIS MAP WAS PREPARED BY PLAT RECORDS, CALCULATED DATA, AND FIELD MEASUREMENTS, A RECORDED BOUNDARY SURVEY WILL BE FILED AT A DATE TO BE DETERMINED.
6. ALL UTILITY LOCATIONS ARE SHOWN BY ABOVE GROUND FEATURES AND LOCATION OF PAINT MARKS SUPPLIED BY THE LOCAL UTILITY COMPANIES. CMT TAKES NO RESPONSIBILTY OF UNDERGROUND LOCATION. PLEASE NOTIFY THE UTILITY NOTIFICATION CENTER BEFORE ANY DIGGING 1-800-332-2344.

LEGEND

- EXISTING DECIDUOUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING CONIFEROUS TREE W/ TRUNK DIAMETER (INCHES)(CL=CLUSTER)
- EXISTING UNDERGROUND TELEPHONE
- EXISTING POWER POLE
- EXISTING UNDERGROUND POWER LINES
- EXISTING OVERHEAD POWER LINES
- EXISTING WATER METER
- EXISTING UNDERGROUND WATER
- EXISTING UNDERGROUND GAS LINE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING UTILITY RISER
- EXISTING FENCE
- FOUND MONUMENTS
- LOCAL BENCHMARK ESTABLISHED
- EXISTING WETLAND DATA POINT
- EXISTING WETLAND LIMITS
- EXISTING GRAVEL
- EXISTING CONCRETE
- EXISTING ASPHALT

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
SEPTEMBER 11, 2018
DAVID ROEGER
86811

EXPIRES DECEMBER 31, 2022

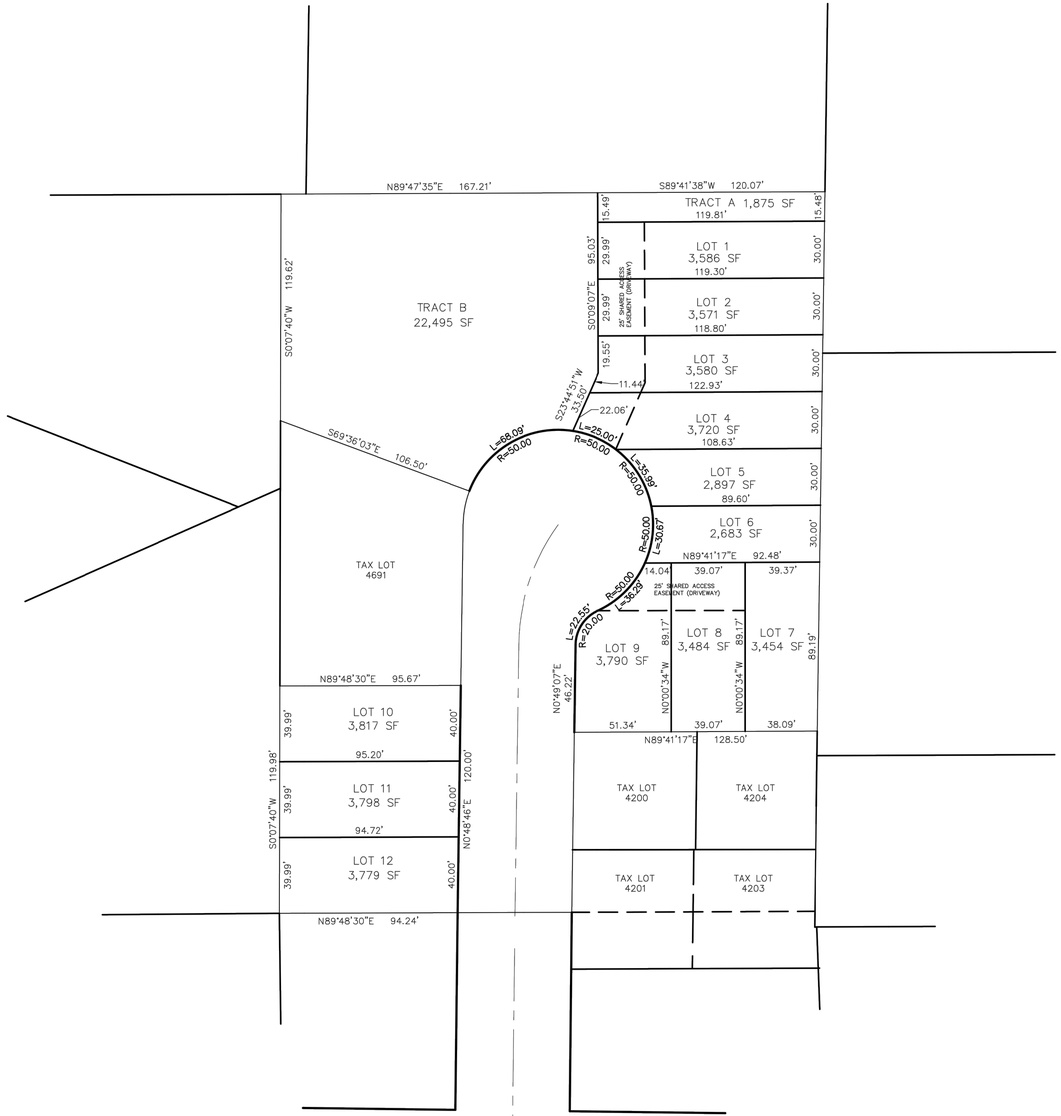
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

EXISTING CONDITIONS & DEMO PLAN
12-LOT SUBDIVISION



N

SCALE 1" = 40'

PRELIMINARY SUBDIVISION PLAT

100 S GARFIELD STREET

SE 1/4 SEC 19, T3S, R2W, W.M.

CITY OF NEWBERG
YAMHILL COUNTY, OREGON
SEPTEMBER 22, 2022
DRAWN: JMR CHECKED: DMR
SCALE 1"=40' ACCOUNT #500-1106
Y:\500-1106\DWG\5001106PRELIM

CMT SURVEYING AND CONSULTING
20330 SE HIGHWAY 212
DAMASCUS, OR 97089
PHONE (503) 850-4672 FAX (503) 850-4590

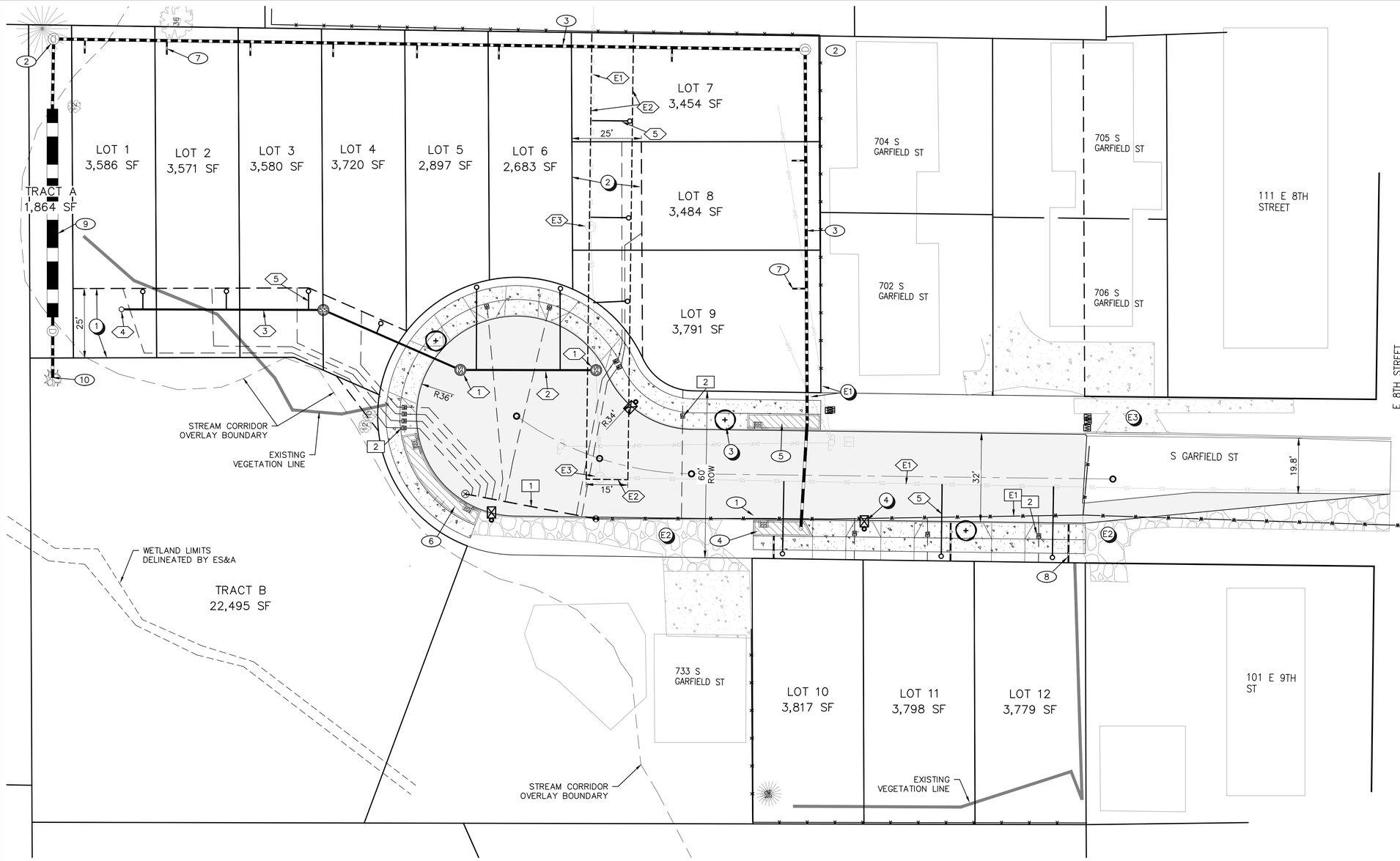
DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY PLAT
12-LOT SUBDIVISION



SITE NOTES:

- E1 EXISTING OVERHEAD TO BE UNDERGROUNDED (BY OTHERS).
- E2 EXISTING GRAVEL TO REMAIN
- E3 EXISTING CONCRETE APPROACH TO REMAIN
- 1 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 1–4
- 2 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 7–9
- 3 NEW STREET TREE (TYP).
- 4 NEW STREET LIGHT (TYP), SEE NOTE 3 THIS SHEET.

WATER NOTES:

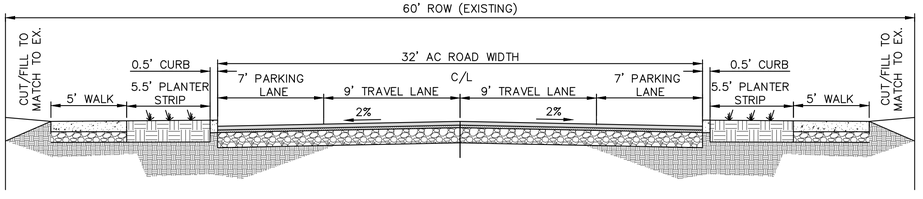
- E1 EXISTING PUBLIC 4" DUCTILE IRON WATER MAIN. SEE NOTE 8 THIS SHEET.
- 1 EXTEND PUBLIC 4" WATER MAIN AND CONSTRUCT BLOWOFF ASSEMBLY AT TERMINUS.
- 2 NEW 3/4" WATER SERVICE & METER (TYP, ALL LOTS). WATER METER TO BE PLACED IN PLANTER STRIP.

STORM NOTES:

- 1 NEW CURB INLET (TYP, 4 TOTAL)
- 2 NEW PRIVATE STORM DRAIN MANHOLE (TYP, 2 TOTAL)
- 3 NEW PRIVATE 12" HDPE STORM MAIN
- 4 NEW PUBLIC 20' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 5 NEW PUBLIC 25' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 6 NEW PUBLIC 45' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH OVERFLOW NOTCH TO SHEET FLOW TO THE NORTH INTO STREAM CORRIDOR.
- 7 NEW 4" STORM DRAIN LATERAL FOR LOTS 1–9 ROOF DRAINS (TYP)
- 8 LOTS 10–12 TO BE CONSTRUCTED WITH WEEP HOLE IN CURB FOR ROOF DRAINS.
- 9 NEW PRIVATE 60" DIAMETER, 70 LF CMP FOR UNDERGROUND DETENTION, CONSTRUCT WITH FLOW CONTROL MANHOLE.
- 10 NEW 12" OUTFALL INTO STREAM CORRIDOR WITH RIP-RAP EROSION CONTROL PROTECTION. 12" IE = 593.8'. DISTURBED AREA TO BE MITIGATED PER MITIGATION PLAN (BY OTHERS)

SANITARY NOTES:

- E1 EXISTING PUBLIC 8" SANITARY MAIN
- E2 EXISTING 15' SANITARY EASEMENT
- E3 EXISTING SANITARY MANHOLE
- 1 NEW SANITARY SEWER MANHOLE (TYP, 3 TOTAL)
- 2 NEW PUBLIC 6" PVC SANITARY MAIN
- 3 NEW PRIVATE 6" PVC SANITARY MAIN CONTAINED WITHIN EASEMENT
- 4 NEW PRIVATE MAINLINE CLEANOUT
- 5 NEW 4" SANITARY SEWER SERVICE AND CLEANOUT (TYP, ALL LOTS)



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

NOTES:

1. DEVELOPER / CONTRACTOR RESPONSIBLE FOR COORDINATION OF INSTALLATION OF OTHER UTILITIES NOT SHOWN ON THESE PLANS, INCLUDING GAS, ELECTRICITY, AND COMMUNICATIONS.
2. ALL STORMWATER MANAGEMENT FACILITIES AS A PART OF THIS PROJECT ARE PROPOSED TO MANAGE BOTH NEWLY CREATED PUBLIC IMPERVIOUS AREA AND STORMWATER FROM FUTURE IMPERVIOUS AREA ON EACH OF THE LOTS. SEE SUBMITTED STORMWATER REPORT FOR MORE INFORMATION. NEWLY CREATED TRACT A WILL BE DEDICATED TO STORMWATER MANAGEMENT FOR LOTS 1–9 AND PUBLIC OVERFLOW STORMWATER.
3. STREET LIGHTING TO BE INSTALLED ALONG NEW STREET AS NECESSARY TO COMPLY WITH NEWBERG PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS. STREET LIGHTS SHOWN CONCEPTUALLY ON THIS PLAN. FINAL STREET LIGHTING & PHOTOMETRIC PLAN TO BE PROVIDED WITH CONSTRUCTION PLAN SET.
4. 12' WIDE STANDARD DRIVEWAYS SHOWN CONCEPTUALLY FOR EACH LOT PER CITY OF NEWBERG STANDARD DETAIL 508.

NOTES (CONT.):

5. NEW S GARFIELD ST FULL ROAD SECTION TO BE CENTERED ON THE EXISTING ROW. NO ROW DEDICATION IS PROPOSED. SEE TYPICAL ROAD SECTION THIS SHEET. NO FRONTAGE IMPROVEMENTS WILL BE CONSTRUCTED ALONG NEIGHBORING LOTS (SIDEWALK & PLANTER STRIP)
6. A REDUCED RADIUS CUL-DE-SAC (36') IS PROPOSED DUE TO THE EXISTING ROW WIDTH. AS A RESULT, THE BUILDINGS ON LOTS 1–9 WILL ALL BE SPRINKLERED, IN ACCORDANCE WITH FIRE ACCESS STANDARDS
7. PUE = PUBLIC UTILITY EASEMENT WITH THE CITY OF NEWBERG
   10' PUE TO BE CREATED ON ALL PROPERTY FRONTAGES
8. THE EXISTING 4" WATER MAIN IN S GARFIELD ST IS UNDERSIZED PER CITY STANDARDS. HOWEVER, A WATER SYSTEM ANALYSIS WAS PERFORMED BY WESTERN STATES FIRE PROTECTION TO VERIFY THE MAIN IS OF ADEQUATE SIZE TO SERVICE THE NEW SUBDIVISION. A COPY OF THIS ANALYSIS REPORT IS SUBMITTED WITH THE LAND USE APPLICATION TO THE CITY.

NORTH

0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
JAN. 14, 2003
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

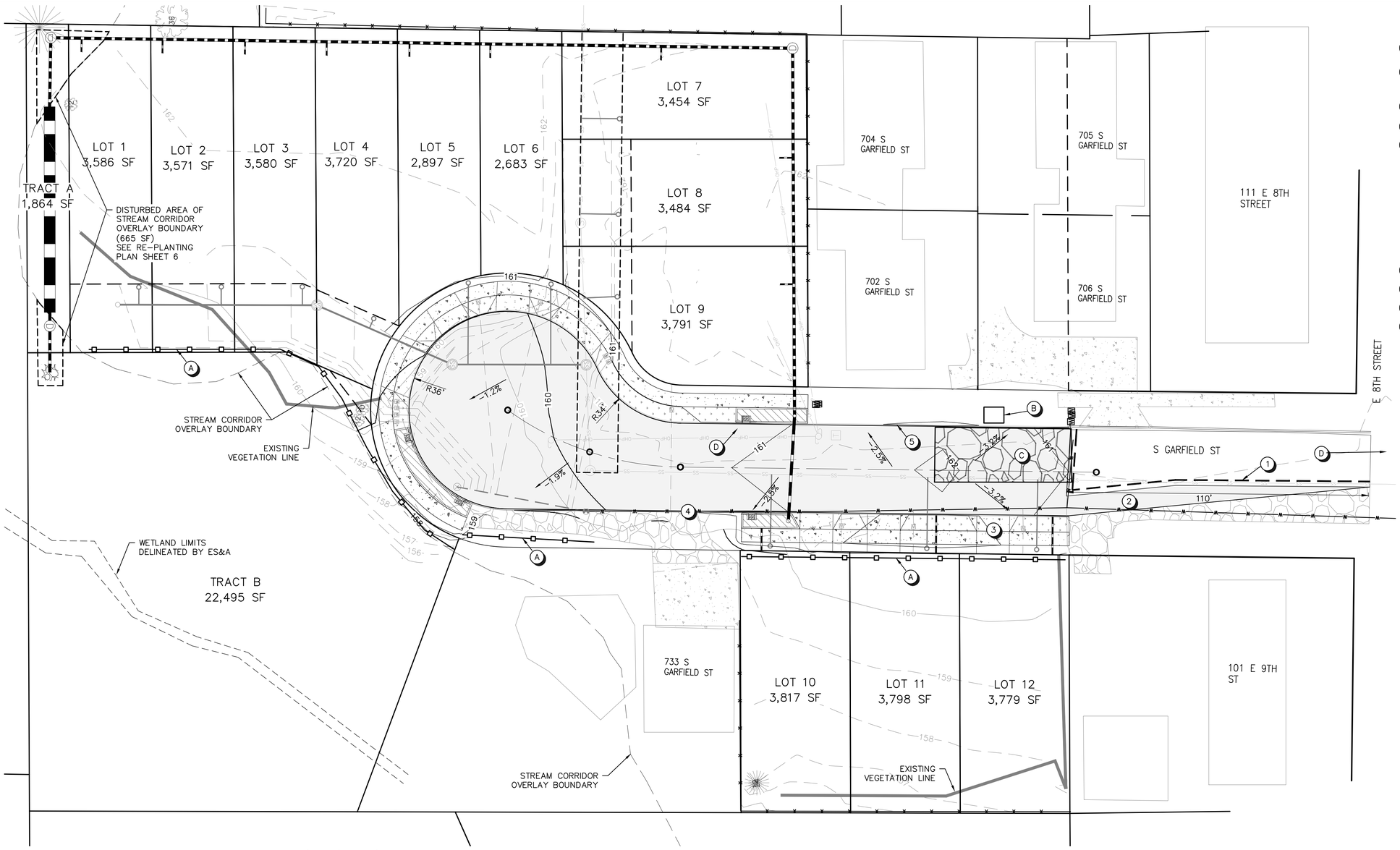
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY SITE & UTILITY PLAN
12-LOT SUBDIVISION

4 / 7



STREET NOTES:

1. SAWCUT LINE, MIN. 2' INTO EXISTING ASPHALT
2. 110' ASPHALT TAPER TO EXISTING ROAD EDGE, PER AASTHO GREEN BOOK CHAPTER 5C-2, BASED ON 25 MPH DESIGN SPEED AND 11' ROAD WIDTH LOSS.
3. NEW 12' DRIVEWAY APPROACH FOR EACH LOT (TYP)
4. 12' CURB CUT FOR EXISTING HOME AT 733 S GARFIELD ST
5. NEW 6" EXPOSURE STANDARD CUTB AND GUTTER ALONG NEW S GARFIELD ST

ESC NOTES:

- A. INSTALL SEDIMENT FENCE DOWNHILL OF ALL GRADING ACTIVITIES
- B. CONCRETE WASH OUT
- C. GRAVEL CONSTRUCTION ENTRANCE
- D. INSTALL INLET PROTECTION ON ALL EXISTING AND PROPOSED STORM DRAIN INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE.

ESTIMATED SITE DATA:

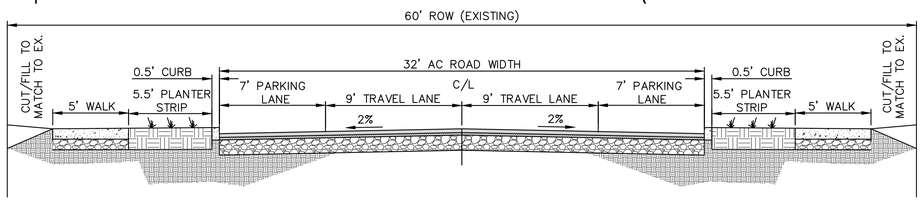
AREA OF DISTURBANCE: 60,550 SF [1.4 ACRES] (INCLUDE ALL OF LOTS 1-12 AND TRACT A, AND DISTURBED AREA OF TRACT B)

NEW ASPHALT ROAD: 10,410 SF

NEW CONCRETE SIDEWALK: 2,520 SF

PROPOSED FINISH GRADE TO EXISTING GRADE
CUT: 135 CY
FILL: 205 CY

ENGINEER'S ESTIMATE IS APPROXIMATE AND PROVIDED FOR REFERENCE ONLY. CONTRACTOR RESPONSIBLE FOR TAKEOFFS USED IN BIDDING AND ACTUAL QUANTITIES OF IMPORTED/EXPORTED MATERIAL AS NEEDED FOR CONSTRUCTION



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

MITIGATION REPLANTING DETAIL

NORTH
0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2005
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

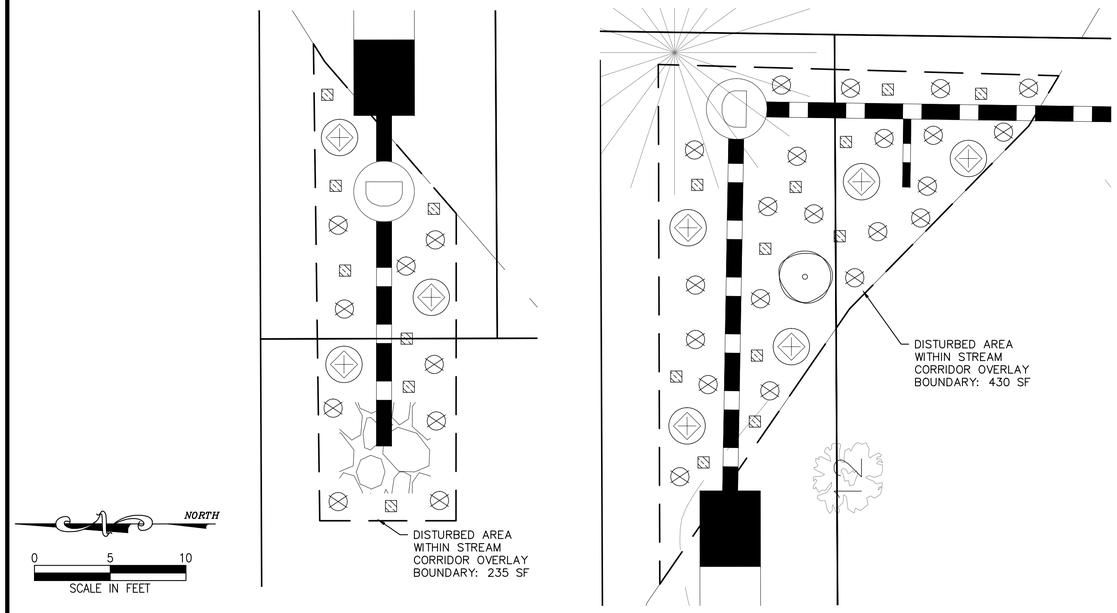
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY GRADING & ESC PLAN
12-LOT SUBDIVISION

5 / 7



MITIGATION REPLANTING DETAIL
SCALE: 1"=5'

MITIGATION NOTES:

- ALL DISTURBED AREAS SHALL BE REGRADED AND CONTOURED TO APPEAR NATURAL.
- ALL FILL MATERIAL SHALL BE NATIVE SOIL
- REPLANTING SHALL BE REQUIRED USING A COMBINATION OF TREES, SHRUBS AND GRASS
- AREAS TO BE REPLANTED MUST BE COMPLETED AT THE TIME OF FINAL INSPECTION OR COMPLETEION OF THE WORK
- EXISTING VEGETATION THAT CAN BE SAVED AND REPLANTED IS ENCOURAGED, ALTHOUGH NOT REQUIRED
- ALL DISTURBED AREAS SHALL BE REPLANTED TO ACHIEVE 90 PERCENT COVER IN ONE YEAR.
- ALL DISTURBED AREAS SHALL BE PROTECTED WITH EROSION CONTROL DEVICES PRIOR TO CONSTRUCTION ACTIVITY. THESE DEVICES SHALL REMAIN IN PLACE UNTIL 90 PERCENT COVER IS ACHIEVED.

LEGEND

- TREE
- LARGE SHRUB
- SMALL SHRUB
- GRASSES, GROUNDCOVER

PLANTING NOTES:

1. ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF NEWBERG STANDARDS.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
3. SOIL PREPARATION: GROWING MEDIUM SHALL MEET CITY OF NEWBERG AND YAMHILL COUNTY STANDARDS FOR NATIVE SOIL MIXES.
4. PLANTING SYMBOLS ARE MEANT TO CONVEY GENERAL PLANT LOCATION. PLANT COVERAGE, SPACING, AND LAYOUT SHALL BE CONSISTENT WITH THE SPACING LISTED IN THE PLANT LEGEND FOR FULL COVERAGE. ADJUST AS NECESSARY TO AVOID CONFLICTS WITH UTILITIES, LIGHTS, EXISTING VEGETATION, ETC.

PLANTING SCHEDULE

TYPE	QTY	BOTANICAL NAME	COMMON NAME	SIZE/HEIGHT	SPACING/WIDTH
○	1	RHAMNUS PURHSIANA	CASCARA	30'	20'
⊕	4	AMELANCHIER ALNIFOLIA	WESTERN SERVICEBERRY	6'	10'
	4	SAMBUCUS RACEMOSA	RED ELDERBERRY	8'	6'
⊗	10	SYMPHORICARPOS ALBUS	COMMON SNOWBERRY	3'	2'
	10	RIBES LOBBI	GUMMY GOOSEBERRY	4'	4'
	10	ROSA GYMNOCARPA	BALDHIP ROSE	5'	2'
AS NECESSARY		JUNCUS ENSIFOLIUS	DAGGER-LEAF RUSH	1'	1'
		ATHYRIUM FILIX-FEMINA	LADY FERN	4'	2'

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
JAN. 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

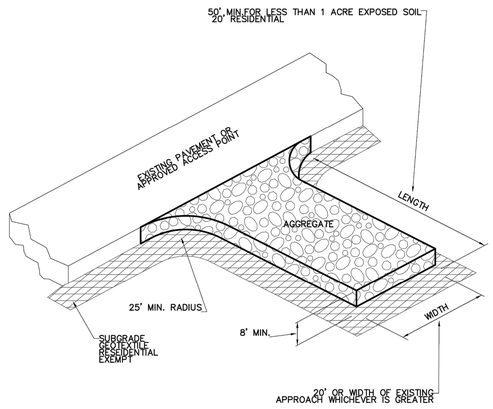
FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

MITIGATION & RE-PLANTING PLAN
12-LOT SUBDIVISION

CITY OF NEWBERG EROSION CONTROL GENERAL NOTES

1. THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED, APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
2. THE ESC PLAN, ANY REVISIONS, AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.
3. THE ESC MEASURES SHOWN ON THE PLAN ARE THE MINIMUM REQUIREMENTS FOR THE PROJECT SITE AND SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
4. ALL ESC MEASURES SHALL BE APPROVED, IN PLACE, AND FUNCTIONAL PRIOR TO ANY GROUND DISTURBANCE OF THE SITE. CONTRACTOR SHALL MAINTAIN ALL ESC MEASURES THROUGHOUT CONSTRUCTION.
5. CLEARING LIMITS, CRITICAL RIPARIAN AREAS, BUFFER ZONES, AND PRESERVED VEGETATION (INCLUDING IMPORTANT TREES AND ASSOCIATED CRITICAL ROOT ZONES) SHALL HAVE HIGH VISIBILITY FENCE INSTALLED BEFORE GRADING OR CONSTRUCTION TO IDENTIFY, MARK, AND PROTECT THE AREAS.
6. CONSTRUCTION ACTIVITIES WILL AVOID OR MINIMIZE ANY EXCAVATION OR OTHER SOIL DESTABILIZATION FROM OCTOBER 1ST TO MAY 31ST OF THE FOLLOWING YEAR.
7. TEMPORARY SITE STABILIZATION MEASURES WILL BE INSTALLED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND OR AT THE END OF EACH WORKDAY IF RAIN IS FORECAST IN THE NEXT 24 HOURS.
8. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ALONG THE SITE PERIMETER ON ALL DOWN-GRADIENT SIDES OF THE CONSTRUCTION SITE AND AT ALL ACTIVE AND OPERATIONAL INTERNAL STORMDRAINS AT ALL TIMES DURING CONSTRUCTION.
9. DRY METHODS MUST BE USED TO REMOVE SEDIMENT AND CONCRETE SWEEPINGS FROM AREAS WHERE DISCHARGE IS LIKELY TO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
10. ALL DIRT AND DEBRIS TRACKED ONTO STREETS MUST BE REMOVED IMMEDIATELY IF IT CAN BE SPREAD BY TRAFFIC OR OTHERWISE REACH STORM DRAINS, WATERCOURSES, OR SENSITIVE AREAS.
11. SEDIMENT DISCHARGED OFFSITE MUST BE PLACED BACK ONSITE WITHIN 24 HOURS AND STABILIZED. IN-STREAM WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROCEDURES AND TIMEFRAMES OF THE OREGON DEPARTMENT OF STATE LANDS.
12. NO SEDIMENT-LADEN WATER MAY BE PUMPED, DIVERTED, OR OTHERWISE DISCHARGED OFFSITE UNLESS APPROVED BY THE ESC PLAN.
13. SEDIMENT MUST BE REMOVED WHEN IT HAS REACHED THE LEVEL SPECIFIED IN THE STANDARD DETAIL.
14. SEDIMENT MUST BE REMOVED FROM SUMPED STRUCTURES WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 1/3RD AND WITHIN 30 DAYS OF PROJECT COMPLETION.
15. WHEN REMOVING SATURATED SOILS FROM THE SITE, EITHER WATERTIGHT TRUCKS MUST BE USED OR LOADS MUST BE DRAINED ONSITE UNTIL DRIPPING HAS BEEN REDUCED TO MINIMIZE SPILLAGE.
16. EROSION CONTROL MEASURES WILL BE INSPECTED ON ACTIVE SITES AT LEAST WEEKLY OR AFTER PRECIPITATION IN EXCESS OF 0.5 INCHES IN 24 HOURS. IF A SITE WILL BE INACTIVE MORE THANFOURTEEN (14) DAYS, EROSION CONTROL MEASURES WILL BE INSPECTED PRIOR TO THE INACTIVE PERIOD AND EVERY TWO (2) WEEKS DURING THE INACTIVE PERIOD.
17. ALL CONSTRUCTION SITES MUST FOLLOW PROPER STORAGE, APPLICATION, AND DISPOSAL PROCEDURES OF CONSTRUCTION MATERIALS. NO DUMPING OR DISPOSAL OF CONSTRUCTION DEBRIS, WASTE, OR SPOIL MATERIAL WILL OCCUR IN ANY STREAM, STORMWATER SYSTEM, WETLANDS, SURFACE WATERS, OR OTHER WATERCOURSES OR SENSITIVE AREAS.
18. WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES ARE REQUIRED FOR ALL SITES.
19. TOXIC AND HAZARDOUS MATERIALS MUST HAVE COVER AND SECONDARY CONTAINMENT.
20. CONCRETE TRUCKS SHALL NOT DISCHARGE WASHWATER WHERE IT IS LIKELY TO FLOW INTO STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
21. PAVING ACTIVITIES SHALL BE MINIMIZED BETWEEN OCTOBER 1ST AND MAY 31ST OF THE FOLLOWING YEAR TO AVOID POTENTIAL DISCHARGE OF PAVING CHEMICALS INTO THE STORM DRAINS, STREETS, WATERCOURSES, OR SENSITIVE AREAS.
22. ALL ESC MEASURES SHALL BE REMOVED FROM THE SITE 30 DAYS AFTER CONSTRUCTION IS COMPLETED AND APPROVED BY THE CITY.



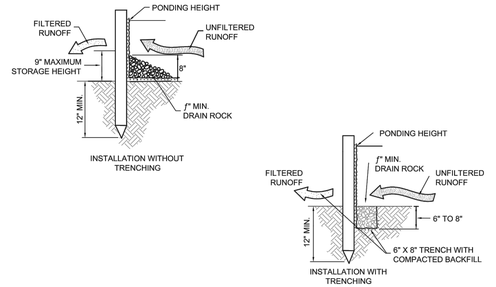
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-RIGH-OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT-LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS:
   SINGLE FAMILY AND DUPLEX
   20' LONG BY 20' WIDE, 8" DEEP OF 3/4 " MINUS CLEAN ROCK.
   COMMERCIAL
   50' LONG BY 20' WIDE, 3-6" DEEP CLEAN ROCK.
   GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

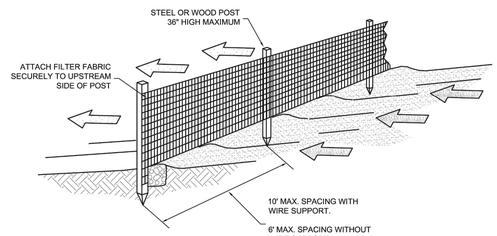
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:

CONSTRUCTION ENTRANCE

SCALE: N.T.S
DATE: May 2007
APPROVED BY: D. Danicic
STANDARD DRAWING 601



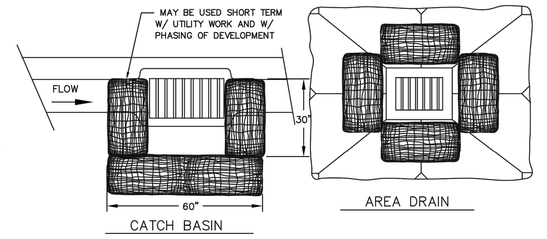


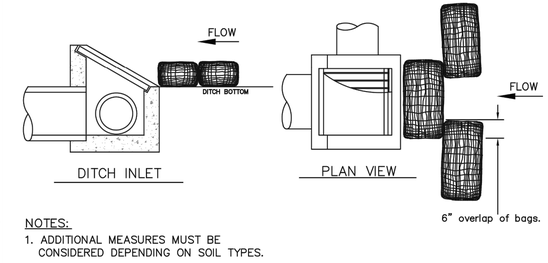
City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS:

SILT FENCE

SCALE: N.T.S.
DATE: MAY 2007
APPROVED BY: D. DANICIC
STANDARD DRAWING 602





NOTES:
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2"WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

City of Newberg
PUBLIC WORKS ENGINEERING DIVISION
414 E. FIRST STREET NEWBERG, OR 97132
PHONE: 503-537-1240
FAX: 503-537-1277

REVISIONS: 12/10/2013

INLET PROTECTION

SCALE: N.T.S.
DATE: 04/04/2009
APPROVED BY: PAUL CHIU
STANDARD DRAWING 605

REGISTERED PROFESSIONAL ENGINEER
67149PE
PRELIMINARY
OREGON
JUNE 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

ESC DETAILS & NOTES
12-LOT SUBDIVISION

7/7

Attachment 2:
Agency Comments

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

REFERRAL TO: Building Official: 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: Nov 29, 2022. Please refer questions and comments to Ashley Smith .

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St.
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

Project Information is Attached & can be viewed online at:
https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

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: _____ Date: 11.23.22

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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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:

11/14/22
Date:

Will Worthey CM
Organization:

COMMUNITY DEVELOPMENT
LAND USE APPLICATION REFERRAL

RECEIVED
NOV 13 REC'D
By

REFERRAL TO: Community Development Director: 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: Nov 29, 2022. Please refer questions and comments to Ashley Smith .

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St.
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

1. Check with Engineer Dept on frontage improvements or not for 733 S Garfield.
2. Did not see a mitigation plan for the storm outfall in the Stream Corridor
3. Need confirmation on the Wetland Delineation prior to going before the Planning Commission

---

Project Information is Attached & can be viewed online at:
https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

---

_____ Reviewed, no conflict.

_____ Reviewed; recommend denial for the following reasons:

_____ Require additional information to review. (Please list information required)

_____ Meeting requested.

__v__ Comments. (Attach additional pages as needed)

Doug Rux
Reviewed By:

11/15/22
Date:

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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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:

11/14/22
Date:

Finance
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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/21/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [✔] 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:

11/21/22
Date:

Newberg-Dundee Police Department
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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

☐ 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)

All development street and utility plans shall be reviewed, approved, and appropriate permit issued to ensure compliance with construction specifications by Newberg Public Works Engineering Division prior to construction.

Reviewed By:

11/28/22

Date:

Public Works Director, City of Newberg

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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

☐ 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: 11/15/22

Maintenance Superintendent
Organization:

1. Now water or wastewater connection shall be allowed to under a stormwater facilitiy

2.All of the stormwater facilitiies being installed here will be private and the responsibility of the maintenance will fall upon HOA or adjacent home owner.

3. Location of stormwater pipe is in a poor location and the city will never accept owner ship of the this pipe in the future at its current proposed location and will be unable to assist in case of backups

4. There needs to be a 6" clean out installed at back of ROW for the shared wastewater lateral

5. No mater what the water study concluded the new city standard is 8" ductile iron pipe and that is what should be installed.

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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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)

Daniel L Wilson
Reviewed By:

11/15/22
Date:

City of Newberg Operations
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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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)

April Catan
Digitally signed by April Catan
DN: C=US, OU=Operations, O=City of Newberg, CN=April Catan, E=april.catan@newbergoregon.gov
Reason: I am the author of this document
Location:
Date: 2022.11.15 06:38:02-08'00'
Foxit PDF Editor Version: 12.0.0

Reviewed By:

11/15/22
Date:

City of Newberg
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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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: _____ Date: 11/15/22

City of Newberg
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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/18/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [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)

0806

Reviewed By:

11/18/20

Date:

TVF&R / Permit # 2022-0136

Organization:

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: Scott Holden

Address: _____

Phone: 503-502-8006

Email: scottholden2007@outlook.com

Site Address: 100 S. Garfield St.

City: Newberg, 97132

Map & Tax Lot #: R3219DB 04690

Business Name: _____

Land Use/Building Jurisdiction: Newberg

Land Use/ Building Permit # N/A

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

Construct improvements in support of a New 12 lot subdivision with new single family and/or duplex's on each lot.

Four of the lots will have fire suppression sprinkler systems due to lack of fire turnaround.

NOT REQUIRED PER TVF&R 11/17/22 TY DARDT

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 # 2022-0136

Permit Type: SPP

Submittal Date: 11/17/22

Assigned To: DARDT

Due Date: —

Fees Due: —

Fees Paid:

Approval/Inspection Conditions
(For Fire Marshal's Office Use Only)

This section is for application approval only

_____ 11/17/22
Fire Marshal or Designee Date

Conditions:

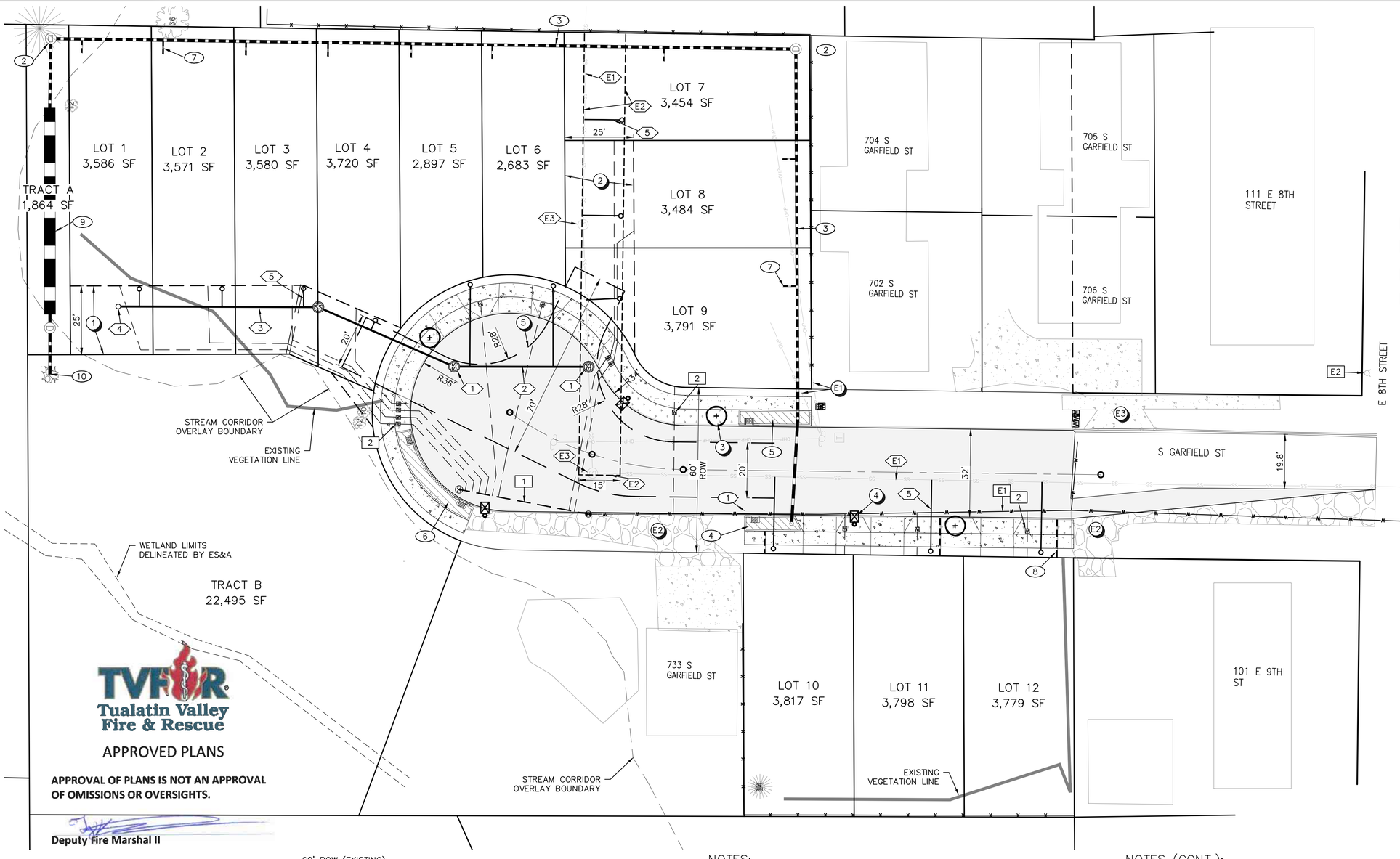
See Attached Conditions: ☐ Yes ☑ No

Site Inspection Required: ☐ Yes ☑ No

This section used when site inspection is required

Inspection Comments:

_____
Final TVFR Approval Signature & Emp ID Date



SITE NOTES:

- E1 EXISTING OVERHEAD TO BE UNDERGROUNDED (BY OTHERS).
- E2 EXISTING GRAVEL TO REMAIN
- E3 EXISTING CONCRETE APPROACH TO REMAIN
- 1 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 1–4
- 2 NEW 25' UTILITY AND ACCESS EASEMENT FOR LOTS 7–9
- 3 NEW STREET TREE (TYP).
- 4 NEW STREET LIGHT (TYP), SEE NOTE 3 THIS SHEET.
- 5 FIRE TRUCK TURNAROUND

WATER NOTES:

- E1 EXISTING PUBLIC 4" DUCTILE IRON WATER MAIN. SEE NOTE 8 THIS SHEET.
- 1 EXTEND PUBLIC 4" WATER MAIN AND CONSTRUCT BLOWOFF ASSEMBLY AT TERMINUS.
- 2 NEW 3/4" WATER SERVICE & METER (TYP, ALL LOTS). WATER METER TO BE PLACED IN PLANTER STRIP.
- E2 EXISTING FIRE HYDRANT.

STORM NOTES:

- 1 NEW CURB INLET (TYP, 4 TOTAL)
- 2 NEW PRIVATE STORM DRAIN MANHOLE (TYP, 2 TOTAL)
- 3 NEW PRIVATE 12" HDPE STORM MAIN
- 4 NEW PUBLIC 20' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 5 NEW PUBLIC 25' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH BEEHIVE GRATE WITH OVERFLOW TO PRIVATE STORM MAIN.
- 6 NEW PUBLIC 45' LONG VEGETATED STORM PLANTER, CONSTRUCTED WITH OVERFLOW NOTCH TO SHEET FLOW TO THE NORTH INTO STREAM CORRIDOR.
- 7 NEW 4" STORM DRAIN LATERAL FOR LOTS 1–9 ROOF DRAINS (TYP)
- 8 LOTS 10–12 TO BE CONSTRUCTED WITH WEEP HOLE IN CURB FOR ROOF DRAINS.
- 9 NEW PRIVATE 60" DIAMETER, 70 LF CMP FOR UNDERGROUND DETENTION, CONSTRUCT WITH FLOW CONTROL MANHOLE.
- 10 NEW 12" OUTFALL INTO STREAM CORRIDOR WITH RIP-RAP EROSION CONTROL PROTECTION. 12" IE = 593.8'. DISTURBED AREA TO BE MITIGATED PER MITIGATION PLAN (BY OTHERS)

SANITARY NOTES:

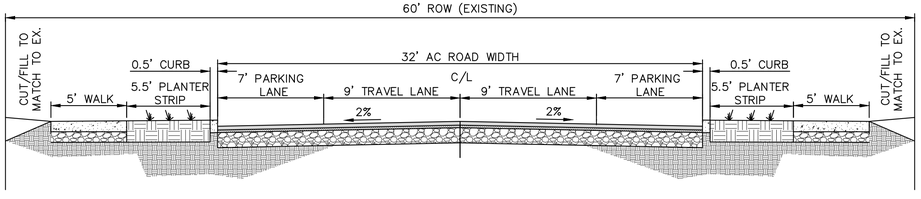
- E1 EXISTING PUBLIC 8" SANITARY MAIN
- E2 EXISTING 15' SANITARY EASEMENT
- E3 EXISTING SANITARY MANHOLE
- 1 NEW SANITARY SEWER MANHOLE (TYP, 3 TOTAL)
- 2 NEW PUBLIC 6" PVC SANITARY MAIN
- 3 NEW PRIVATE 6" PVC SANITARY MAIN CONTAINED WITHIN EASEMENT
- 4 NEW PRIVATE MAINLINE CLEANOUT
- 5 NEW 4" SANITARY SEWER SERVICE AND CLEANOUT (TYP, ALL LOTS)

TVFR Tualatin Valley Fire & Rescue

APPROVED PLANS

APPROVAL OF PLANS IS NOT AN APPROVAL OF OMISSIONS OR OVERSIGHTS.

Deputy Fire Marshal II



S GARFIELD ST TYPICAL SECTION
SCALE: N.T.S.

NOTES:

1. DEVELOPER / CONTRACTOR RESPONSIBLE FOR COORDINATION OF INSTALLATION OF OTHER UTILITIES NOT SHOWN ON THESE PLANS, INCLUDING GAS, ELECTRICITY, AND COMMUNICATIONS.
2. ALL STORMWATER MANAGEMENT FACILITIES AS A PART OF THIS PROJECT ARE PROPOSED TO MANAGE BOTH NEWLY CREATED PUBLIC IMPERVIOUS AREA AND STORMWATER FROM FUTURE IMPERVIOUS AREA ON EACH OF THE LOTS. SEE SUBMITTED STORMWATER REPORT FOR MORE INFORMATION. NEWLY CREATED TRACT A WILL BE DEDICATED TO STORMWATER MANAGEMENT FOR LOTS 1–9 AND PUBLIC OVERFLOW STORMWATER.
3. STREET LIGHTING TO BE INSTALLED ALONG NEW STREET AS NECESSARY TO COMPLY WITH NEWBERG PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS. STREET LIGHTS SHOWN CONCEPTUALLY ON THIS PLAN. FINAL STREET LIGHTING & PHOTOMETRIC PLAN TO BE PROVIDED WITH CONSTRUCTION PLAN SET.
4. 12' WIDE STANDARD DRIVEWAYS SHOWN CONCEPTUALLY FOR EACH LOT PER CITY OF NEWBERG STANDARD DETAIL 508.

NOTES (CONT.):

5. NEW S GARFIELD ST FULL ROAD SECTION TO BE CENTERED ON THE EXISTING ROW. NO ROW DEDICATION IS PROPOSED. SEE TYPICAL ROAD SECTION THIS SHEET. NO FRONTAGE IMPROVEMENTS WILL BE CONSTRUCTED ALONG NEIGHBORING LOTS (SIDEWALK & PLANTER STRIP)
6. A REDUCED RADIUS CUL-DE-SAC (36') IS PROPOSED DUE TO THE EXISTING ROW WIDTH. AS A RESULT, THE BUILDINGS ON LOTS 1–9 WILL ALL BE SPRINKLERED, IN ACCORDANCE WITH FIRE ACCESS STANDARDS
7. PUE = PUBLIC UTILITY EASEMENT WITH THE CITY OF NEWBERG
   10' PUE TO BE CREATED ON ALL PROPERTY FRONTAGES
8. THE EXISTING 4" WATER MAIN IN S GARFIELD ST IS UNDERSIZED PER CITY STANDARDS. HOWEVER, A WATER SYSTEM ANALYSIS WAS PERFORMED BY WESTERN STATES FIRE PROTECTION TO VERIFY THE MAIN IS OF ADEQUATE SIZE TO SERVICE THE NEW SUBDIVISION. A COPY OF THIS ANALYSIS REPORT IS SUBMITTED WITH THE LAND USE APPLICATION TO THE CITY.

NORTH

0 20 40
SCALE IN FEET

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2003
KELLI A. GROVER
PRELIMINARY
EXPIRES: 06/30/23
SIGNATURE DATE: _____

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: SEPTEMBER 2022
PROJECT NO. E21-049

FIRWOOD DESIGN GROUP
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

SCOTT HOLDEN
100 S GARFIELD ST
NEWBERG, OR 97132

PRELIMINARY SITE & UTILITY PLAN
12-LOT SUBDIVISION

4 / 7

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: Nov 29,2022
Please refer questions and comments to: Ashley Smith.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT:	Scott Holden
REQUEST:	12 Lot Subdivision
SITE ADDRESS:	100 E Seventh St
LOCATION:	N/A
TAX LOT:	R3219DB 04690
FILE NO:	SUB322-0001
ZONE:	R-2 (Medium Density Residential)
HEARING DATE:	12/8/2022

RECEIVED
11/16/202
batesf

Project Information: https://www.newbergoregon.gov/planning/page/sub322-0001-garfield-street-12-lot-subdivision

- [✔] 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: 11/14/22 Date:

Ziply Fiber Scott Albert - OSP Engineer
Organization: