

# King's Landing

Subdivision Application

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# **DATA SHEET**

**Property Owner** 

Melvin Taylor, Trustee of the Melvin J. Taylor Revocable Trust

Dated June 19, 2013 Robert Phillips, Jr

John Lucescu, Georgeta Lucescu, Ruben Lucescu and

Jenna Lucescu

Applicant

Del Boca Vista LLC

PO Box 3189

Newberg, OR 97132 Phone: 971-706-2058

**Property Description** 

Tax lots R3207-600 (Tract B only)-700-800

located at 25300, 25020, 25040 N Valley Road

Newberg, OR 97132

Zoning:

R-1

Lot Size:

15.4 ac

Proposal:

76 Lot Subdivision

Minimum Lot Size per Code:

5,000sf

Proposed Lots sizes:

3060-6495 sf lots

Average Lot Size:

5029 sf

Target Density:

4.4 units per acre

Proposed Density:

4.9 units/acre

# PROJECT OVERVIEW

Del Boca Vista LLC is proposing a 76-lot subdivision for a detached single-family residential development. This subdivision will be known as King's Landing. This subdivision will occur on tax lots R3207-600 (Tract B only)-700-800 which are located at 25300, 25020, 25040 N Valley Road in Newberg, OR 97132. The property currently is primarily vacant land. Access to the new lots will be by public roads from Taylor Drive, Barbaras Way and North Valley Road that meet Public Works standards.

# PROJECT SITE PR

#### PUBLIC SERVICES

# Sanitary Sewer

All of the proposed lots will be served by gravity to the public sanitary sewer system. Sanitary sewer will be extended easterly to and through this development from two locations in the Gracie's Landing subdivision.

Sanitary flows from this development will discharge to the Chehalem Drive Pump Station. A capacity analysis for the undeveloped tributary area to the Chehalem Pump Stations was prepared by Keller Associates dated March 23, 2017. Refer to Exhibit H for a copy of this report. The report found that there is sufficient capacity for the pump station to serve all of the land yet to be developed without a need for upgrades to the station. The report assumed the creation of 107 lots from the properties that are a part of this development application. The proposal is to develop 76 total lots which are fewer than in the analysis, therefore it can be concluded that the Chehalem Pump Station has capacity to serve this development without the need for upgrades.

To accommodate future service to upstream development within the UGB, sanitary sewer will be extended to the east end of Barbaras Way. No sanitary sewer lines are proposed in North Valley Drive as Goal 11 does not support providing for accommodation of services to properties outside of the UGB or URA. In addition, the City has not identified a need to expand the UGB north or west of this property in the future.

#### Water Supply

All of the proposed lots will be served by municipal water. The water mainline will be extended from the existing system located in either Barbaras Way or Taylor Drive.

The entire site is located with the service area of the city's reservoir gravity service system. Therefore, adequate domestic and fire flow volume and pressure can be provided.

To accommodate future service to upstream development within the UGB, the water line will be extended through the development along Barbaras Way. No water mains are proposed in North Valley Drive as Goal 11 does not support providing for accommodation of services to properties outside of the UGB or URA. In addition, the City has not identified a need to expand the UGB north or west of this property in the future.

#### Storm Drainage

Because of the topography, storm water runoff from the site will be collected and discharged to two detention and water quality facilities where they will discharge into the existing drainage channel running through the middle of the site. Refer to <u>Exhibit C</u> for the preliminary stormwater report for runoff and sizing calculations.

Wetlands along the drainage channel have been identified and delineated on the plans. Where new residential lots or public rights-of-way impact the wetlands, onsite mitigation work or mitigation bank credits will be acquired. Approval of the wetland impact will be obtained through submission of a Joint Permit Application (JPA) to appropriate state and federal agencies.

In addition, a portion of the drainage channel in the southwest corner of the development will be relocated to its original location, also coordinated through the JPA permit.

#### Transportation

North Valley Road is classified as a Major Collector in the Transportation System Plan. Ten feet along development frontage will be dedicated as public right-of-way to allow for the full development. Jurisdiction of North Valley Drives remains with Yamhill County, so frontage improvements will be designed to city standards and constructed by permit through the County.

The interior streets (Barbaras Way and Taylor Drive) will be improved to local/residential standards.

The portion of Barbaras Way along the frontage of Lots 18 through 55 is proposed to be designed as a Limited Residential with parking on one side. There are 38 lots with frontage access to this section of road with an average daily traffic generation of 9.52 trips per day for a total of 362 trips which is less than the maximum permitted 600 trips. This is proposed due to the conflict presented by the Stream Corridor resulting in a narrow width available between the corridor and North Valley Road.

Taylor Drive will terminate in a cul-de-sac which exceeds the length and lot loading as permitted by Code. This is necessary given the restrains of wetlands and stream corridor.

The development of 76 single family homes in the three phases of the planned King's Landing in Newberg will add traffic to the transportation system.

The intersection of Hwy 219 at Foothills Dr. is functioning at LOS F with the existing and anticipated Gracie's Landing and Dutchman Ridge traffic. Signalization or a round-about at this intersection are potential mitigation actions. This is already recognized by the City as this intersection is identified as Project No. 102 in the Transportation SDC methodology to be completed in 6-10 years. Therefore, the Transportation SDC's paid by the future lots in King's Landing will go to fund this project.

North Valley Rd at Hwy 219 is functioning at LOS E in the PM Peak with existing and background traffic. It functions at LOS F (v/c 0.349) with King's Landing. This v/c is well within ODOT performance metrics. Review of mitigation alternatives suggest signalization should be considered in the future.

The other studied intersections will all function within accepted standards with traffic from King's Landing. The City and State should continue to monitor the performance metrics at the intersection of Hwy 219 at N Valley Rd. Improvements will be needed in the future if traffic volumes continue to increase as expected.

#### SUBDIVISION CRITERIA

#### 1. FUTURE USE

Approval does not impede the future best use of the property under the same ownership as the full extent of the property is being developed to its maximum extent practicable.

Adjoining land will not be adversely affected. The surrounding uses are: To the North: County EF-40; to the South: City R1; to the East: City R1; and to the West: City R1.

#### 2. APPLICABLE SUBDIVISION CRITERIA

#### 15.235.040A General Submission Requirements.

2. Traffic Analysis. A traffic analysis shall be submitted for any project that generates in excess of 40 trips per p.m. peak hour. A traffic analysis may be required for projects below the 40 trips per p.m. peak hour threshold when the development's location or traffic characteristics could affect traffic safety, access management, street capacity or a known traffic problem or deficiency. The traffic analysis shall be scoped in conjunction with the city and any other applicable roadway authority.

**RESPONSE:** A Traffic Impact Analysis report has been completed and is attached to this application as <u>Exhibit E</u>.

3. Public Utilities Analysis. The public facilities analysis shall be scoped with the city and shall address the impact of the proposed development on the public wastewater and water systems. The analysis shall identify any mitigation or improvements necessary to the public facilities to adequately serve the development per city standards under adopted ordinances and master plans.

**RESPONSE:** An analysis has been performed and no offsite improvements are needed downstream of this development.

4. Stormwater Analysis. The stormwater analysis shall address the criteria listed in Chapter 13.25 NMC.

**RESPONSE:** A Stormwater Analysis report has been completed and is attached to this application.

5. Wetland Delineation Approved by the Department of State Lands (DSL). An approved wetland delineation shall be submitted for any property listed in the National Wetlands Inventory (NWI) or that is located within the city's mapped stream corridor.

**RESPONSE:** The approved Wetland Delineation Report (WD#2017-0505) is attached to this application as <u>Exhibit D</u>. An approved Joint Permit Application to DSL and COE will be obtained before any work displacing identified wetlands begins; but has not yet been submitted.

6. Future Streets Concept Plan. The future streets concept shall show all existing subdivisions, streets, and unsubdivided land surrounding the subject property and show how proposed streets may be extended to connect with existing streets. At a minimum, the plan shall depict future street connections for land within 400 feet of the subject property

**RESPONSE:** Taylor Drive ends in a cul-de-sac with no further extension possible due to the adjacent CPRD ballfields. Barbaras Way begins at the Gracie's Landing subdivision terminus extending easterly to a dead end at Tax Lot 3307-00300. It is

anticipated that future development will continue this route to connect with Terrace Drive.

#### 15.235.040 Preliminary plat submission requirements.

- 3. Proposed Development. Except where the director deems certain information is not relevant, applications for preliminary plat approval shall contain all of the following information on the proposed development:
- a. Proposed lots, streets, tracts, open space and park land (if any); location, names, right-of-way dimensions, approximate radius of street curves; and approximate finished street centerline grades. All tracts that are being held for private use and all reservations and restrictions relating to such private tracts shall be identified;
- b. Easements. Location, width and purpose of all proposed easements;
- c. Lots and private tracts (e.g., private open space, common area, or street) with approximate dimensions, area calculation (e.g., in square feet), and identification numbers. Through lots shall be avoided except where necessary to provide separation of residential development from major traffic routes, adjacent nonresidential activities, or to overcome specific issues with topography or orientation;
- d. Proposed uses of the property, including all existing structures to remain, areas proposed to be dedicated as public right-of-way or preserved as open space for the purpose of stormwater management, recreation, or other use;
- e. Proposed grading:
- f. Proposed public street improvements, pursuant to NMC 15.505.030, including street cross sections;
- g. Information demonstrating that proposed lots can reasonably be accessed and developed without the need for a variance and in conformance with applicable setbacks and lot coverage requirements;
- h. Preliminary design for extending city water and wastewater service to each lot, per NMC 15.505.040;
- i. Proposed method of stormwater drainage and treatment, if required, pursuant to NMC 15.505.050;
- j. The approximate location and identity of other utilities, including the locations of street lighting fixtures, as applicable;
- k. Evidence of compliance with applicable overlay zones; and

1. Evidence of contact with the applicable road authority for proposed new street connections.

**RESPONSE:** All of the criteria a through k are addressed with the attached preliminary design plans. To satisfy Criteria l, applicant has sent a correspondence to and spoken with Bill Gille at Yamhill County alerting the County of the proposed improvements to North Valley Road. See attached email to Bill Gille as <u>Exhibit I</u>.

#### 15.235.050 Preliminary plat approval criteria.

A. Approval Criteria. By means of a Type II procedure for a subdivision, 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:** These provisions will be met with the submission of subdivision plans or are addressed in the Variance Application submitted as part of this subdivision request.

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:** These provisions will be met with the submission of subdivision plans.

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

**RESPONSE:** The proposed plat name of the subdivision is King's Landing and was approved by Marty Glass from Yamhill County Surveyors. See attached email as <u>Exhibit</u> <u>J</u>.

5. The proposed streets, utilities, and stormwater facilities 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:** These provisions will be met with the submission of subdivision plans.

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:** These provisions will be met with the submission of subdivision plans.

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

**RESPONSE:** These provisions will be met with the submission of subdivision plans.

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:** These provisions will be met with the submission of subdivision plans.

#### STREAM CORRIDOR

#### 15.342.070 Activities requiring a Type II process.

The installation, construction or relocation of the following improvements shall be processed as a Type II decision. The proposal shall be accompanied by a plan as identified in NMC 15.342.080 and conform to the mitigation standards contained in NMC 15.342.090.

A. Public or private street crossings, sidewalks, pathways, and other transportation improvements that generally cross the stream corridor in a perpendicular manner.

**RESPONSE:** The existing stream crossings will be improved to provide public walkways that meets City standards. See attached report in <u>Exhibit C.</u>

#### Paragraphs B-I: Not applicable.

J. Stream corridor enhancement activities which are reasonably expected to enhance stream corridor resource values and generally follow the restoration standards in NMC 15.342.060. [Ord. 2451, 12-2-96. Code 2001 § 151.471.]

**RESPONSE:** The stream corridor will be enhanced with new plantings and a redirection of the drainageway located in the proposed Phase One of this subdivision. Further, a conservation easement will be created to limit the activity and impacts on this wetland and stream corridor area. Detailed development plan will be submitted with the Public Works Permit application.

#### 15.342.080 Plan submittal requirements for Type II activities.

In addition to the design review plan submittal requirements, all applicants for Type II activities within the SC overlay subdistrict shall submit the following information:

- A. A site plan indicating all of the following existing conditions:
  - 1. Location of the boundaries of the SC overlay subdistrict.
- 2. Outline of any existing features including, but not limited to, structures, decks, areas previously disturbed, and existing utility locations.
- 3. Location of any wetlands or water bodies on the site and the location of the stream centerline and top of bank.
- 4. Within the area to be disturbed, the approximate location of all trees that are more than six inches in diameter at breast height must be shown, with size and species. Trees outside the disturbed area may be individually shown or shown as crown cover with an indication of species type or types.
  - 5. Topography shown by contour lines at five-foot vertical intervals or less.
- 6. Photographs of the site may be used to supplement the above information but are not required.

**RESPONSE:** See site plan attached as Exhibit B.

- B. Proposed development plan including all of the following:
  - 1. Outline of disturbed area including all areas of proposed utility work.
  - 2. Location and description of all proposed erosion control devices.
- 3. A landscape plan prepared by a landscape architect, or other qualified design professional, shall be prepared which indicates the size, species, and location of all new vegetation to be planted. [Ord. 2451, 12-2-96. Code 2001 § 151.472.]

**RESPONSE:** Detailed development plan will be submitted with the Public Works Permit application.

#### 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.
- 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.
- 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.
- 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 § 151.473.]

**RESPONSE:** A detailed development plan adhering to these requirements will be submitted with the Public Works Permit application.

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 district, each lot or development site shall have a minimum area of 5,000 square feet or as may be established by a subdistrict. The average size of lots in a subdivision intended for single-family development shall not exceed 10,000 square feet.
- 2. In the R-2, R-3, and RP districts, each lot or development site shall have a minimum area of 3,000 square feet or as may be established by a subdistrict. 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 AI, AR, C-1, C-2, and C-3 districts, each lot or development site shall have a minimum area of 5,000 square feet or as may be established by a subdistrict.

- 4. In the M-1, M-2 and M-3 districts, each lot or development site shall have a minimum area of 20,000 square feet.
- 5. Institutional districts shall have a minimum size of five contiguous acres in order to create a large enough campus to support institutional uses; however, additions to the district may be made in increments of any size.
- 6. Within the commercial zoning district(s) of the riverfront overlay subdistrict, there is no minimum lot size required, provided the other standards of this code can be met.
- B. Lot or Development Site Area per Dwelling Unit.
  - 1. In the R-1 district, there shall be a minimum of 5,000 square feet per dwelling unit.
  - 2. In the R-2, AR, and R-P districts, there shall be a minimum of 3,000 square feet of lot or development site area per dwelling unit. In the R-2 and R-P districts, lots or development sites in excess of 15,000 square feet used for multiple single-family, duplex or multifamily dwellings shall be developed at a minimum of one dwelling per 5,000 square feet lot area.
  - 3. In the R-3 district, there shall be a minimum of 1,500 square feet of lot or development site area per dwelling unit. Lots or development sites in excess of 15,000 square feet used for multiple single-family, duplex or multifamily dwellings shall be developed at a minimum of one dwelling per 2,500 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:**

Lot Number	Lot Size (SF)	Lot Number	Lot Size (SF)
1	5000	39	3060

2	5384	40	3060
3	5000	41	3060
4	5000	42	3060
5	5500	43	3060
6	5500	44	3060
7	5000	45	3060
8	4599	46	3060
9	3762	47	3060
10	3762	48	3060
11	3762	49	6754
12	3596	50	7524
13	3060	51	4775
14	3060	52	5280
15	3060	53	3841
16	3060	54	5035
17	3060	55	4429
18	3060	56	58041
19	3060	57	5571
20	3060	58	6334
21	3060	59	5000
22	3060	60	5572
23	3060	61	6408
24	3060	62	5009
25	3060	63	7254
26	3060	64	6284
27	3060	65	5971
28	3060	66	6966
29	3060	67	8137
30	3683	68	5053
31	3683	69	5348
32	3060	70	5151
33	3060	71	5087
34	3060	72	5512
35	3060	73	6224
36	3060	74	6495
37	3060	75	5605
38	3060	76	6258
			202100
		Total	382189
		Average	5029

The table above demonstrates that the proposed lot areas meet the code standard when taking into account lot size averaging.

#### 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.
- 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 an R-2 and R-3 zone shall have a minimum width of 25 feet at the front building line.
  - c. Each lot in an R-1 shall have a minimum width of 35 feet, and AI or RP zone shall have a minimum width of 50 feet at the front building line.
  - d. Each lot in an AR zone shall have a minimum width of 45 feet at the front building line.
  - 2. The above standards apply with the following exceptions:
  - a. Legally created lots of record in existence prior to the effective date of the ordinance codified in this code.
  - b. Lots or development sites which, as a process of their creation, were approved with sub-standard widths in accordance with provisions of this code.

c. 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. [Ord. 2822 § 1 (Exh. A), 2-5-18; Ord. 2730 § 1 (Exh. A (3)), 10-18-10; Ord. 2720 § 1(15), 11-2-09; Ord. 2647, 6-5-06; Ord. 2507, 3-1-99; Ord. 2451, 12-2-96. Code 2001 § 151.567.]

**RESPONSE:** The proposed lot configuration meets all of the provisions of this code section for depth to width ratio, area, and minimum frontage at front building line. Lot 12 will be increased in width by one foot via a lot line adjustment when Gracie's Landing Phase 3 is recorded.

#### 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. See the definitions in NMC 15.05.030 and Appendix A, Figure 4.
  - 1. Maximum Lot Coverage.
    - a. R-1: 30 percent, or 40 percent if all structures on the lot are one-story.
    - b. R-2 and RP: 50 percent.
    - c. AR and R-3: 50 percent.
  - 2. Maximum Parking Coverage. R-1, R-2, R-3, and RP: 30 percent.
  - 3. Combined Maximum Lot and Parking Coverage.
    - a. R-1, R-2 and RP: 60 percent.

b. R-3: 70 percent.

C. All other districts and uses not listed in subsection (B) of this section shall not be limited as to lot coverage and parking coverage except as otherwise required by this code. [Ord. 2746 § 1 (Exh. A § 1), 8-15-11; Ord. 2730 § 1 (Exh. A (3)), 10-18-10; Ord. 2647, 6-5-06; Ord. 2451, 12-2-96. Code 2001 § 151.568.]

**RESPONSE:** The development of the individual lots will meet this criterion. See the attached <u>Exhibit M</u> for demonstration of buildable house product placed on the smaller lots.

#### 15.505.030 G6 Street standards.

- 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.

**RESPONSE:** The proposed subdivision design follows TVF&R design standards for appropriate fire access and turn-arounds for dead end street greater than 150 feet. See attached email from Jason Arn as Exhibit L.

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

**RESPONSE:** The portion of Barbaras Way along the frontage of Lots 18 through 55 is proposed to be designed as a Limited Residential with parking on one side. There are 38 lots with frontage access to this section of road with an average daily traffic generation of 9.52 trips per day for a total of 362 trips which is less than the maximum permitted 600 trips.

c. Use for through streets or looped streets is preferred over cul-desac streets.

**RESPONSE:** Through streets are proposed with the exception of Taylor Drive in Phase 3 as it is constrained by stream corridor and CPRD ballfields.

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

**RESPONSE:** While the short block lengths are preferred, the code requirement 15.505.030(O)2 allows for 800-foot blocks. Where block lengths exceed 400 feet, a public walkway, where possible given topography and stream corridor constraints, is proposed to enhance connectivity.

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.

**RESPONSE:** The proposed Limited Residential street is bisected by a connection to North Valley Road with 13 lots west and 25 lots east of this connection. This results in fewer than 30 residences along any given section of roadway.

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 Fire Marshal indicated that the proposed limited residential street is acceptable provided parking is allowed only on one side of the street.

#### 15.505.030 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.

**RESPONSE:** The site conditions in the proposed subdivision make alternate street connections impracticable because of the constraints of the topography along Jones St. to Taylor St., the stream corridor and wetland areas that run through the middle of the site.

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).

**RESPONSE:** See variance criteria response below.

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:** See variance criteria response below.

#### 15.505.030 Street Standards.

#### 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.

**RESPONSE:** Barbaras Way between Bruce Drive and unnamed street to North Valley Road exceeds the 800 feet but is within 25% increase allowance (1000 feet) measuring approximately 892 feet. Taylor Drive from the cul-de-sac to Jones Street exceeds the 800 feet but is within 25% increase allowance (1000 feet) measuring approximately 898 feet. Both sections provide public walkways

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.

#### **RESPONSE:** Not applicable.

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.

**RESPONSE:** See plan submittal identifying the use of public walkways where practical given the existing neighboring developments, steep topography and stream corridor location, the block sizes are as small as possible. These site constraints restrict the street and walkway location and design. Applicant proposes the most practical design working with the limitations set forth while limiting the impacts to the wetlands and the stream corridor. While the Applicant maintains that the requested block lengths and perimeters in excess of the allowable standards are excepted under this provision, a variance application follows addressing those issues as well.

#### 15.505.030 Street Standards

#### 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.

**RESPONSE:** The proposed subdivision plan utilizes public walkways to connect the Taylor Drive cul-de-sac in Phase 2 to the CPRD ballfield to the south and to Phase 3 on the other side of the stream corridor. Similarly Phase 3 is connect to North Valley Road with public walkways to address block length.

2. Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.

**RESPONSE:** All proposed public walkways are 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.

**RESPONSE:** All public walkways in this project will meet this criterion.

4. Public walkways shall be designed to meet the Americans with Disabilities Act requirements.

**RESPONSE:** All public walkways will meet this criteria to the maximum extent practicable within the constraints of topography, natural obstructions and stream corridor restrictions.

5. Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.

**RESPONSE:** All public walkways in this project will meet this criterion.

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.

**RESPONSE:** All public walkways in this project will meet this criterion by identifying a responsible entity. See attached CC&Rs as <u>Exhibit K</u>. The City shall maintain any walkway adjacent to the stormwater facilities (pursuant to a discussion with City Engineer).

7. Lighting may be required for public walkways in excess of 250 feet in length.

**RESPONSE:** No walkways are proposed to be greater than 250 feet.

8. The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.

**RESPONSE:** Needs to modify requirements due to these conditions will be identified in the final design submitted for Engineering Permit approval.

#### VARIANCE, BLOCK LENGTH

This variance application proposes to increase the block length of Jones Street as identified in the proposed plan set. The proposed Jones Street block length is 899.49 feet.

# 15.235.060 Land division related code adjustments and variances.

Code adjustments and variances shall be processed in accordance with Chapters 15.210 and 15.215 NMC. Applications for code adjustments and variances related to the proposed land division shall be submitted at the same time an application for land division is submitted; the applications shall be reviewed concurrently.

#### 15.505.030 Street Standards.

#### 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

**RESPONSE:** This variance application proposes to increase the block length of Jones Street as identified in the proposed plan set. The design is set forth to be as efficient as possible considering the topography, stream corridor and existing street connections and development adjacent to the property.

#### 15.215.040 Type II variance criteria.

The Type II procedure shall be used to process a variance request. The hearing body shall grant the variance if the following criteria are satisfied:

A. That strict or literal interpretation and enforcement of the specified regulation would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of this code.

**RESPONSE:** A strict enforcement of this provision to the subject property would create both a practical difficulty and an unnecessary physical hardship. The existing street connections and the topography of Jones Street drive the proposed design. The site conditions prevent Taylor Street from being developed in any other manner without the crossing of the stream corridor. Further, the confines dictated by the stream corridor in concert with the topography result in longer block lengths.

B. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties classified in the same zoning district.

**RESPONSE:** The stream corridor and accompanying wetlands essentially divide this property into two separate sides of the development. This fact, in conjunction with the CPRD developed property into ballfields, creates an exceptional circumstance wherein strictly applying the block length conditions would render that section of the property undevelopable. The variance of the proposed block length allows for the development of this property in a practical manner as other property generally would be allowed to develop.

C. That strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges enjoyed by the owners of other properties classified in the same zoning district.

**RESPONSE:** The variance of the proposed block length allows for the development of this property in a practical manner as other property generally would be allowed to develop. A strict or literal interpretation would make it impracticable to develop the R1 zoned property.

D. That the granting of the variance will not constitute a grant of special privilege inconsistent with the limitations on other properties classified in the same zoning district.

**RESPONSE:** Other properties in the R-1 zoning district are afforded the same opportunity to maximize density according to the code standards for this zone. Granting this variance does not constitute a special privilege for the applicant but rather equalizes the development rights such that they are consistent with all R-1 zoned properties.

E. That the granting of the variance will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity. [Ord. 2451, 12-2-96. Code 2001 § 151.163

**RESPONSE:** The proposed block lengths do not create a detriment to the public's health, safety or welfare nor are they materially injurious to properties in the vicinity. The proposed subdivision blends well with the adjoining neighborhoods of Dutchman Ridge and Gracie's Landing.

Development	Application –	King's Landing
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#### VARIANCE, BLOCK PERIMETER

Applicant requests a variance to the block perimeters of Taylor Dr. identified as Blocks 5 and 8 on the attached Exhibit N. The proposed Block 5 perimeter is 3,718 feet. The proposed Block 8 perimeter is 3,446 feet. This variance is necessary due to the site constraints and existing neighboring developments.

#### 15.235.060 Land division related code adjustments and variances.

Code adjustments and variances shall be processed in accordance with Chapters 15.210 and 15.215 NMC. Applications for code adjustments and variances related to the proposed land division shall be submitted at the same time an application for land division is submitted; the applications shall be reviewed concurrently. [Ord. 2813 § 1 (Exh. A § 7), 9-5-17.]

#### 15.505.030 Street Standards.

#### 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

**RESPONSE:** Blocks 5 and 8 exceed the maximum block perimeter allowed.

#### 15.215.040 Type II variance criteria.

The Type II procedure shall be used to process a variance request. The hearing body shall grant the variance if the following criteria are satisfied:

A. That strict or literal interpretation and enforcement of the specified regulation would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of this code.

**RESPONSE:** A strict or literal interpretation of this Code Section would create an impractical difficulty due to the site constraints of topography, natural obstructions and stream corridor restrictions.

B. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties classified in the same zoning district.

**RESPONSE:** The stream corridor and accompanying wetlands essentially divide this property into two separate sides of the development. This fact, in conjunction with the CPRD developed property into ballfields, creates an exceptional circumstance wherein strictly applying the block perimeter conditions would render that section of the property undevelopable, or impracticable to develop.

C. That strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges enjoyed by the owners of other properties classified in the same zoning district.

**RESPONSE:** The variance of the proposed block perimeters served allows for the development of this property in a practical manner as other property generally would be allowed to develop. A strict or literal interpretation would make it impracticable to develop the R-1 zoned property.

D. That the granting of the variance will not constitute a grant of special privilege inconsistent with the limitations on other properties classified in the same zoning district.

**RESPONSE:** Other properties in the R-1 zoning district are afforded the same opportunity to maximize density according to the code standards for this zone. Granting this variance does not constitute a special privilege for the applicant but rather equalizes the development rights such that they are consistent with all R-1 zoned properties.

E. That the granting of the variance will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity. [Ord. 2451, 12-2-96. Code 2001 § 151.163

**RESPONSE:** The proposed block perimeters are not a detriment to the public health, safety or welfare nor materially injurious to properties in the vicinity. The proposed subdivision blends well with the adjoining neighborhoods of Dutchman Ridge and Gracie's Landing.

#### VARIANCE, CUL-DE-SAC LENGTH and NUMBER OF HOMES SERVED

#### 15.505.030 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.

**RESPONSE:** The proposed subdivision contains a cul-de-sac because the physical site constraints of the topography along Jones Street, the wetlands and stream corridor, and the neighboring existing development prevent other street connections from being made.

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).

**RESPONSE:** The proposed cul-de-sac length exceeds 400 feet.

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: The proposed cul-de-sac serves more than 18 single family dwellings.

# 15.215.040 Type II variance criteria.

The Type II procedure shall be used to process a variance request. The hearing body shall grant the variance if the following criteria are satisfied:

A. That strict or literal interpretation and enforcement of the specified regulation would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of this code.

**RESPONSE:** A strict or literal interpretation of this Code Section would create an impractical difficulty due to the site constraints of topography, natural obstructions and stream corridor restrictions.

B. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties classified in the same zoning district.

**RESPONSE:** The stream corridor and accompanying wetlands essentially divide this property into two separate sides of the development. This fact, in conjunction with the CPRD developed property into ballfields, creates an exceptional circumstance wherein strictly applying the cul-de-sac length and number of homes served would render that section of the property undevelopable.

C. That strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges enjoyed by the owners of other properties classified in the same zoning district.

**RESPONSE:** The variance of the proposed cul-de-sac length and number of homes served allows for the development of this property in a practical manner as other property generally would be allowed to develop. A strict or literal interpretation would make it impracticable to develop the R1 zoned property.

D. That the granting of the variance will not constitute a grant of special privilege inconsistent with the limitations on other properties classified in the same zoning district.

**RESPONSE:** Other properties in the R-1 zoning district are afforded the same opportunity to maximize density according to the code standards for this zone. Granting this variance does not constitute a special privilege for the applicant but rather equalizes the development rights such that they are consistent with all R-1 zoned properties.

E. That the granting of the variance will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity. [Ord. 2451, 12-2-96. Code 2001 § 151.163

**RESPONSE:** The proposed cul-de-sac length and number of homes served are not a detriment to the public health, safety or welfare nor materially injurious to properties in the vicinity. The proposed subdivision blends well with the adjoining neighborhoods of Dutchman Ridge and Gracie's Landing.

#### **SUMMARY**

The Applicant has presented evidence to demonstrate with all applicable approval criteria for the requested subdivision and variances and respectfully requests approval of the application.



# EXHIBIT A Application Forms



# TYPE III APPLICATION - 2017 (QUASI-JUDICIAL REVIEW)

File #: 5UB 317-0003

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) Tenlative Subdivision Plan with Stream Core Overlay
APPLICANT INFORMATION:	
APPLICANT DCI BCC VISIC LO ADDRESS: 500 E Hancock St. Newberg, OR 97132 EMAIL ADDRESS: jessica@dbvcorp.com	
PHONE: 971-706-2058 MOBILE: 971-	***************************************
OWNER (if different from above): Robert E. Phillips. Jr.	PHONE: 530 538-4808
ADDRESS: 25020 N. Valley Rd. Newberg, OR S	
ENGINEER/SURVEYOR: Westlake Consultants	PHONE: 503 684 0552
ADDRESS: 1515 SW Parkway, Ste. 150; Tigaro	LOR 97774
GENERAL INFORMATION:	
PROJECT DESCRIPTION/USE: 10 Lot Subdivision	PROJECT LOCATION: 25300/25020/25240 N. Valley Rd., Newberg OR 97132
MAP/TAX LOT NO. (i.e.3200AB-400): R3207-600-700-800  COMP PLAN DESIGNATION: PQ  CURRENT USE: Argricultural	ZONE: R-1 SITE SIZE: 15.4 SQ. FT. □ ACRE □  TOPOGRAPHY: Feirly Flat
SURROUNDING USES:  NORTH: County EF-40  EAST: Single Family Residence R-1	SOUTH: Schools District/CPRD R-1 WEST: Single Family Residence R-1
SPECIFIC PROJECT CRITERIA AND REQUIREMENTS A	ARE ATTACHED
l General Checklist: □ Fees □ Public Notice Information □ Current	
For detailed checklists, applicable criteria for the written criteri	a response, and number of copies per application type, turn to:
Annexation	(site specific)p. 19p. 21p. 23p. 25
The above statements and information herein contained are in all re Tentative plans must surstantially conform to all standards, regulations are supplication of supplications are supplication of supplications and supplication of supplications are supplications.	spects true, complete, and correct to the best of my knowledge and belief, ons, and procedures officially adopted by the City of Newberg. All owners must ng information may delay the approval process.
<b>4700</b> 11/21/17	MAS WM / 11/21/17
Applicant Signature Date	Owner Signature Date
Marc Willcuts	Robert E. Phillips, Jr.
Print Name	Print Name

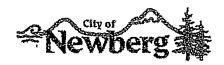
Atlachments: General Information, Fee Schedule, Noticing Procedures, Planning Commission Schedule, Criteria, Checklists



(QUASI-JUDICIAL REVIEW)
File #: 5 LB 317 - 0083

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) Tentalive Subdivision Plan with Stream Core Overlay
APPLICANT INFORMATION:	
APPLICANT DCL GCQ / IS+CL  ADDRESS: 500 E Hancock St. Newberg, OR 97132  EMAIL ADDRESS: Jessica@dbvcorp.com  PHONE: 971-706-2058 MOBILE: 971-998-  OWNER (if different from above): Melvin Taylor, Trustee of Melvin J.  ADDRESS: 13705 Retrac Way, Grass Valley, CA  ENGINEER/SURVEYOR: Westlake Consultants  ADDRESS: 1515 SW Parkway, Ste 150; Tigard C	78 PHONE: 530 559 4250  95949  PHONE: 503 684 0552
GENERAL INFORMATION:	
PROJECT NAME: King's Landing Subdivision PROJECT DESCRIPTION/USE: 76 Lot Subdivision MAP/TAX LOT NO. (i.e.3200AB-400): R3207-600-700-800 COMP PLAN DESIGNATION: PQ CURRENT USE: Argricultural	PROJECT LOCATION: 25300/25020/25240 N. Valley Rd., Newberg OR 97132  ZONE: R-1 SITE SIZE: 15.4 SQ. FT. ACRE TOPOGRAPHY: Fairly Flat
SURROUNDING USES: NORTH: County EF-40 EAST: Single Family Residence R-1	SOUTH: Schools District/CPRD R-1 WEST: Single Family Residence R-1
SPECIFIC PROJECT CRITERIA AND REQUIREMENTS A	RE ATTACHED
General Checklist: ☐ Fees ☐ Public Notice Information ☐ Current To detailed checklists, applicable criteria for the written criteria  Annexation	response, and number of copies per application type, turn to:
Applicant Signature Date	Owner Signature/ Date
Marc Willcuts Print Name	Melvin Taylor, Trustee of the Melvin J. Taylor Trust

Attachments: General Information, Fee Schedule, Nollcing Procedures, Planning Commission Schedule, Criteria. Checklists



(QUASI-JUDICIAL REVIEW)
File #: 5 UB 2317 - 0005

Annexation Comprehensive Plan Amen Zoning Amendment (site s) Historic Landmark Modifica	dment (site specific) pecific)	Conditional Use Permit Type III Major Modification Planned Unit Development Cother: (Explain) Tentative Subdivision Plan with Stream Core Overlay
APPLICANT INFORMATION:		
APPLICANT DEL BO	ca Vista	·UC
ADDRESS: 500 E Hancock St. Newbo	319, UK 9/132	
EMAIL ADDRESS: [essica@dbvcorp PHONE: 971-705-2058	MOBILE: 971	1-998-7507 FAX:
OWNER (if different from above): FADDRESS: 25240 N ENGINEER/SURVEYOR: Westleke	Ruben Lucescu  UCLIE Rd  Consultants	PHONE: 503 883 - 312 \$  PHONE: 503 684 0552
ADDRESS: 1515 SW Parku	ay, Ste. 150; Ligar	m OR 97224
GENERAL INFORMATION:		
PROJECT NAME: King's Lending PROJECT DESCRIPTION/USE: 7 MAP/TAX LOT NO. (i.e.3200AB-41 COMP PLAN DESIGNATION: PO CURRENT USE: Agricultural	Schodivision 6 Lot Subdivision 30): R3207-600-700-800	PROJECT LOCATION: 25300/25020/25240 N. Valley Rd., Newberg OR 97132  ZONE: R-1 SITE SIZE: 15.4 SQ. FT.  TOPOGRAPHY: Fairly Flat
SURROUNDING USES:		o List pist upppp p 4
NORTH: County EF-40		SOUTH: Schools District/CPRD R-1
EAST: Single Family Residence R-1		WEST: Single Family Residence R-1
SPECIFIC PROJECT CRITERI	A AND REQUIREMENTS	S ARE ATTACHED
		rent Title Report 🗆 Written Criteria Response 🗆 Owner Signature
For detailed checklists, applicable	criteria for the written crit	iteria response, and number of copies per application type, turn to:
Comprehensive Pl Conditional Use P Historic Landmerk	an / Zoning Map Amendme ermit Modification/Alteration	p. 15 lent (site specific)p. 19p. 21p. 23p. 23
The above statements and informati Tentative plans must substantially of sign the application of substantiality of	on herein contained are in al p <del>oform to ell st</del> andards, regu of consent. Incomplete or m	all respects true, complete, and correct to the best of my knowledge and belief, ulations, and procedures officially adopted by the City of Newberg. All owners must missing information may delay the approval process.
911M	11/20/17	11/20/17
Applicant Signature	Date	Owner lignature Date
Marc Willcuts		Ruben Lucescu
Print Name	and the state of t	Print Name

Attachments: General Information, Fee Schedule, Noticing Procedures, Planning Commission Schedule, Criteria, Checklists

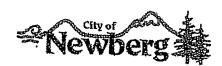


(QUASI-JUDICIAL REVIEW)

File# Sub 317-0063

TYPES – PLEASE CHECK ONE: AnnexationComprehensive Plan Amendment (site specific)Zoning Amendment (site specific)Historic Landmark Modification/alteration	Conditional Use Permit Type III Major Modification Planned Unit Development Other: (Explain) Tentative Subdivision Plan with Stream Core Overlay
APPLICANT INFORMATION:	
APPLICANT: DC QOCO VICTO ADDRESS: 500 E Hancock St. Newberg, OR 97132 EMAIL ADDRESS: Jessica@dbvcorp.com PHONE: 971-708-2058  OWNER (if dlifferent from above): John Lucescu ADDRESS: 75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-7507 FAX: PHONE: 503 883-3125 PHONE: 503 684 0552
ADDRESS: 1515 SW Parkway, Ste 150; Tigard (	
GENERAL INFORMATION:	
PROJECT NAME: King's Landing Subdivision PROJECT DESCRIPTION/USE: 76 Lot Subdivision MAP/TAX LOT NO. (i.e.3200AB-400): R3207-600-700-800 COMP PLAN DESIGNATION: PQ CURRENT USE: Argicultural	PROJECT LOCATION: 25300/25020/25240 N. Valley Rd., Newberg OR 97132  ZONE: R-1 SITE SIZE: 15.4 SQ. FT.  TOPOGRAPHY: Falriy Flat
SURROUNDING USES:  NORTH: County EF-40  EAST: Single Family Residence R-1	SOUTH: Schools District/CPRD R-1 WEST: Single Family Residence R-1
SPECIFIC PROJECT CRITERIA AND REQUIREMENTS A	RE ATTACHED
General Checklist: D Fees D Public Notice Information D Current 7	ille Report 🗆 Written Criteria Response 🗆 Owner Signature
For detailed checklists, applicable criteria for the written criteria	,
Annexation	site specific)
The above statements and information herein contained are in all res Tentative plans must substantially conform to all standards, regulations of substantial telters of consent. Incomplete or missing	pects true, complete, and correct to the best of my knowledge and belief.  ns, and procedures officially adopted by the City of Newberg. All owners must  g information may delay the approval process.
11/20/17	May 1/1 11/20/17
Applicant Signature Date	Owner Signature Date
Marc Willcuts	John Lucescu
Print Name .	Print Name

Attachments: General Information, Fee Schedule, Noticing Procedures, Planning Commission Schedule, Criteria, Checklists



### TYPE III APPLICATION - 2017 (QUASI-JUDICIAL REVIEW)

File # 506 317-0003

TYPES - PLEASE CHECK ONE: Annexation Comprehensive Plan Amend Zoning Amendment (site spe Historic Landmark Modification	ecific)	Conditional Use P Type III Major Mod Planned Unit Deve Other: (Explain) To	lification	on Plan wilh Stream Core Overlay
APPLICANT INFORMATION:				
APPLICANT DE L BOCO ADDRESS: 500 E Hancock St. Newberg EMAIL ADDRESS: Jessica@dbvcorp.cc PHONE: 971-706-2058 OWNER (if different from above): Geo ADDRESS: 25240 N ENGINEER/SURVEYOR: Westlake Co	MOBILE: 971- progeta Lucescu  On VO V	ed newbe	FAX:PHONE: S	503 883 3175 R 603 684 0552
ADDRESS: 1515 SW Parkway	y, Ste. 150; Tigaro	LOR 97224		
GENERAL INFORMATION:				
PROJECT NAME: King's Landing 5 PROJECT DESCRIPTION/USE: 76 L MAP/TAX LOT NO. (I.e.320DAB-400): COMP PLAN DESIGNATION: PQ CURRENT USE: Argicultural	ot Subdivision	F79 .d.	E SIZE: 15.4	ON. Velley Rd., Newberg OR 97132
SURROUNDING USES:  NORTH: County EF-40  EAST: Single Family Residence R-1	-	SOUTH: Schools District WEST: Single Family Re		
epeniero ano tear anti-				
SPECIFIC PROJECT CRITERIA			•	
General Checklist: 🗆 Fees 🗅 Public No For detailed checklists, applicable cri				
Annexation Comprehensive Plan / Conditional Use Perm Historic Landmark Mo	Zoning Map Amendmen	t (site specific)	p. 15	neauon type, turn to:
The above statements and information had tentalive plans must of basentially conformation the application of submit letters of conformation the application of submit letters of conformation the submit letters of conformation t		espects true, complete, and co ilons, and procedures officially sing information may delay the	orrect to the best adopted by the approval proces	
Applicant Signature		(-1608g	7-000	Conc 11/20/17
whowart afficients	Date	Owner Signatu	re	Dale
Marc Willcuts	-	······	a Lucescu	
		Print Name		

Attachments: General Information, Fee Schedule, Noticing Procedures, Planning Commission Schedule, Criteria, Checklists



(QUASI-JUDICIAL REVIEW)
File #: 5 UB 3 17-0003

TYPES – PLEASE CHECK ONE:AnnexationComprehensive Plan AmendZoning Amendment (site spHistoric Landmark Modifica	ecific)	Type III Planned	onal Use Perm Major Modific I Unit Develop Explain <u>) Tenlat</u>	ation ment	lan with Stream	.Core Overlay
APPLICANT INFORMATION:						
APPLICANT: PROPERTY OF ADDRESS: 500 E Hancook St. Newber EMAIL ADDRESS: Lessica@dbvcorp.	com	LEILLC				
PHONE: 971-706-2058	MOBILE: 971-9	998-7507		- FAX:	02 66	2 3100
OWNER (if different from above): Je ADDRESS: 25240 N.	TOULOU RA	Reuse	28.40	_PHONE: _22	02 00	3-0163
ENGINEER/SURVEYOR: Westlake C	Consultants		ر ا	_PHONE: 503	884 0552	
ADDRESS: 1515 SW Parkwa		OR 97224				
GENERAL INFORMATION:						
PROJECT NAME: King's Landing SPROJECT DESCRIPTION/USE: 76	Lot Subdivision			300/25020/25240 N	L Valley Rd., Newl	perg OR 97132
MAP/TAX LOT NO. (i.e.3200AB-400): R3207-600-700-800 ZONE: R-1 SITE SIZE: 15.4 SQ. FT. □ ACRE □ COMP PLAN DESIGNATION: PQ TOPOGRAPHY: Fairly Flat					CRE 🗀	
CURRENT USE: Argricultural	**************************************	<del></del>	· · · · · · · · · · · · · · · · · · ·	<del></del> ,	·	
SURROUNDING USES: NORTH: County EF-40			Schools District/Cf	2BU 8-1		
EAST: Single Family Residence R-1		SOUTH: _ MECT. SI	ngle Family Resid	ience R-1		
SPECIFIC PROJECT CRITERIA						
General Checklist: ☐ Fees ☐ Public	Notice Information 🗆 Current	t Tille Report 🗆	Written Criteria R	lesponse 🖸 Own	er Signature	
For detailed checklists, applicable of	riteria for the written criter	ria response, a	nd number of co	ples per applic	ation type, tur	n to:
Comprehensive Pla Conditional Use Per Historic Landmark I	n / Zoning Map Amendmen mit	ıf (site specific)	4788668800088088840688 PF-96696666888888888888888888888888888888	p. 19 p. 21 p. 23		
The above statements and information Tentalive plans must substantially con sign the application of submit letters of	n herein contained are in all r f <u>orm to all s</u> tandards, regula f consent. Incomplete or mis	respects true, co tions, and proce sing Information	mplete, and com dures officially ac may delay the a	ect to the best of dopted by the Cli pproval process.	my knowledge ly of Newberg.	and belief, All owners must
- ATTA	11/20/17	(	L. La		11/20/	17
Applicant Signature	Date	B	wner Signature		Date	
Marc Willcuts			Jenna Ma	rie Luces	cu	
Print Name		F	Print Name			**************************************

	•				
			•		
		경기 등 경기 등을 통시하는 것이다. 공원 경기를 통시하는 것들다면 있는 것			
			[경시] 등 기를 받는 것이다. 중 일시 : 기원 저 그 중요 등을	가는 이번째 생각한 것을 받아 있다. - 항상 보기로 보고 있는 사람들이 되었다.	
교통에 있는데 시작하다 하라 (1922년 ) 					
		1965 (19 - 19 - 20 19) (20 - 19 19) 1985 - 1985 (1987) (1981)			하다 그 것이 말라다면서 1912년 기가 전 등 기가입니다
		사업은 하다는 것이 되면 될까요? 당근 1905년에 하다리를 받았다.			
		요한다면 동안 취약하다. 다 보고 말하다 전 12.11년 12	경기 : 전 기본 (2) 기본 (2) 전 19 기본 (2) 전 기본 (2) 기본 (2) 전		
					경기 기계 전환 경환 기계 함께 보고 원리 기계
					하는 사람들이 되었습니다. 사람들이 하는 사람들이 하는 것이다.
는 하는 등 전통이 되었다. 그런 하는 그리고 하는 이 물론에는 그를 걸린 것이 되었다. 그리고 하는					
		소리 등을 하는 것으로 보고 있다. 나라 등을 하고 있는 하는 것으로 있을			



### TYPE II APPLICATION (LAND USE) -- 2017

File #:\_\_\_\_\_

TYPES PLEASE CHECK ONI Design review Tentative Plan for Partition Tentative Plan for Subdivi	n	Type II Majo Variance Other: (Exp	or Modification lock Length, Block Peri lain)	meter, Cul De SacLenghts
APPLICANT INFORMATION:				
APPLICANT: Del Boca Vista LLC ADDRESS: 5 OC C. HONCO EMAIL ADDRESS: jessica@dbvcor PHONE: 971-281-8073	o.com	971-998-7507	FAV.	
OWNER (if different from above):			FAX:	See attachment
ADDRESS: See attachment		,	FRONE.	
ENGINEER/SURVEYOR: Westlake ADDRESS: 15115 SW Sequoia Parkway			PHONE:	503-684-0652
GENERAL INFORMATION:				
PROJECT NAME: King's Landing PROJECT DESCRIPTION/USE: MAP/TAX LOT NO. (i.e.3200AB-4 COMP PLAN DESIGNATION: PQ CURRENT USE: Agricultural	00): <u>R3207- 600-700-800</u>		_ PROJECT VALUATI SITE SIZE: 15.4	240 North Valley Rd.; Newberg, OR 97132  ION: SQ. FT. □ ACRE ■
SURROUNDING USES: NORTH: County EF-40  EAST: Single Family Residence R-1		SOUTH: School	I District/CPRD R-1 Family Resicence R-1	
SPECIFIC PROJECT CRITERIA A	ND REQUIREMENTS A	RE ATTACHED		
Partition Tentative Subdivision Tenta Variance Checklis	criteria for the written	criteria response, and nu	ımber of copies per aş	pplication type, turn to: p. 12 p. 14 p. 17 p. 20
The above statements and information Tentative plans must substantially comust sign the application or submit leads to the application of submit leads to th	ontorm to all standards, re etters of consent. Incomp May 2, 2018	egulations, and procedures lete or missing information	officially adopted by the may delay the approva	e City of Newberg. All owners I process.
Applicant Ulgnature	Date	Owner Signatur	e	Date
Marc Willcuts		See attached sign	ature page	
Print Name		Print Name		**************************************

Attachments: General Information, Fee Schedule, Criteria, Checklists

**MELVIN TAYLOR** 

ADDRESS: 13705 Retrac Way Grass Valley, CA 95949

TELEPHONE No.: 530. 559.4250

Melvin Taylor, Trustee of Melvin J. Taylor Trust

LUCESCU 25240

ADDRESS: 2540 NORTH VALLEY ROAD, NEWBERG, OR 97132

TELEPHONE NO.: 503.883.3125

Ruben Lucescu

John Lucesucu

CHECK GRAGE

Jenna Marie Lucescu

ROBERT PHILLIPS

25020 NORTH VALLEY ROAD, NEWBERG, OR 97132

TELEPHONE NO.: 503.538.4808

Robert E. Phillips

**MELVIN TAYLOR** 

ADDRESS: 13705 Retrac Way Grass Valley, CA 95949

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**ROBERT PHILLIPS** 

25020 NORTH VALLEY ROAD, NEWBERG, OR 97132

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Robert E. Phillins

TELEPHONE No.: 530. 559.4250
Melvin Taylor, Trustee of Melvin J. Taylor Trust
LUCESCU ADDRESS: 2540 NORTH VALLEY ROAD, NEWBERG, OR 97132 TELEPHONE NO.: 503.883.3125
Ruben Lucescu
John Lucesucu
Georgeta Lucescu
Jenna Marie Lucescu
ROBERT PHILLIPS 25020 NORTH VALLEY ROAD, NEWBERG, OR 97132 TELEPHONE NO.: 503.538.4808
1 LLL 11014L 140 303.330.4000
Pohort E. Phillips
Robert E. Phillips



## EXHIBIT B Tentative Plan



# EXHIBIT C Stormwater Drainage Report

### **MEMO**

From: Daniel Danicic, PE

971-281-8074 dan@dbvcorp.com

Date: 4/20/18

Re: Stream Corridor Development Plan



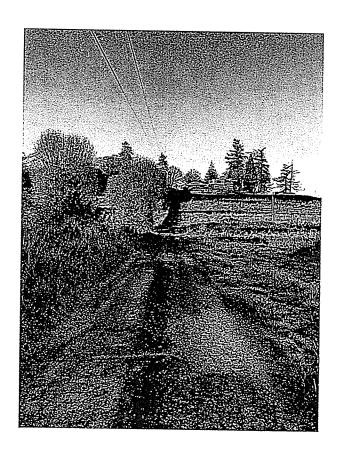
**NEED:** 

Two pedestrian walkways through the stream corridor are needed to comply with the block

perimeter code.

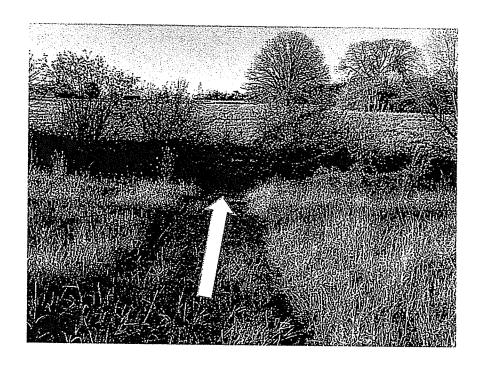
#### **EXISITNG CONDITIONS:**

The site plan is shown in Figure 1. Indicated on the plan are boundaries for identified wetlands, brush line and stream corridor. Following are photos of the proposed crossing locations.



### PHOTO A

Looking south at existing path through the Stream Corridor is gravel driveway passing over a culvert.



### PHOTO B

Looking south at existing path through the Stream Corridor is grass covered passing over a culvert.

#### PROPOSED DEVELOPMENT PLAN:

To facilitate pedestrian crossings through the stream corridor that are also ADA compliant, 10-foot wide concrete paths will be constructed meeting City of Newberg Public Works standards. No significant trees or wetlands will be affected.

Details of the construction, erosion control and landscaping will be prepared and submitted for approval with the subdivision plans for Public Works Permit Application .

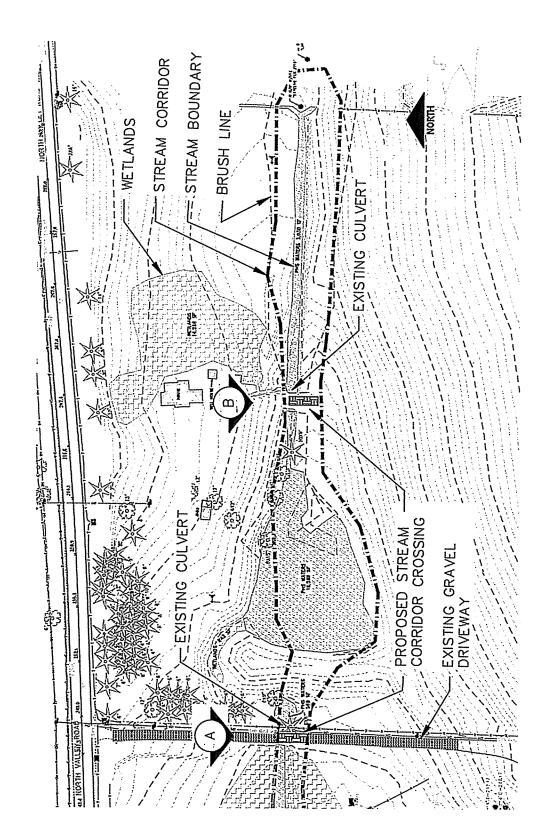


FIGURE 1



## EXHIBIT D Wetlands Analysis



Department of State Lands 775 Summer Street NE, Suite 100 Salem, OR 97301-1279 (503) 986-5200 FAX (503) 378-4844

www.oregon.gov/dsl

State Land Board

Kate Brown

Governor

January 11, 2018

Del Boca Vita Attn: Jessica Cain 500 E. Hancock Newberg, OR 97132

Re:

WD # 2017-0505 Wetland Delineation Report for Dutchman Ridge

Yamhill County; T3S R2W Sec. 7, TL 600, 700, 800

Dennis Richardson Secretary of State

Dear Ms. Cain:

Tobias Read State Treasurer

The Department of State Lands has reviewed the wetland delineation report prepared by Pacific Habitat Services for the site referenced above. Based upon the information presented in the report, we concur with the wetland and waterway boundaries as mapped in revised Figure 6 of the report. Please replace all copies of the preliminary wetland map with this final Department-approved map.

Within the study area, six wetlands, (A to F totaling approximately 2.96 acres) and a tributary to Chehalem Creek were identified. The wetlands and tributary are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in the wetlands or below the ordinary high water line (OHWL) of the waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the

to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5246 if you have any questions.

Sincerely,

Chris Stevenson Jurisdiction Coordinator Approved by

Kathy Verble, CPSS

Aquatic Resource Specialist

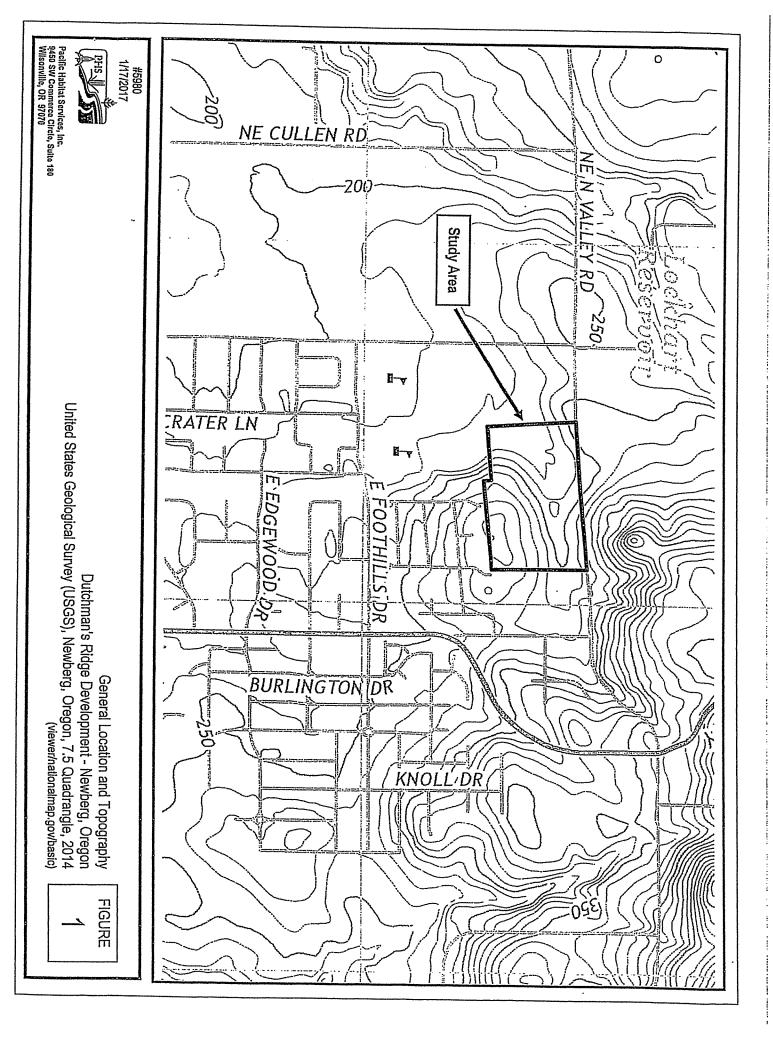
**Enclosures** 

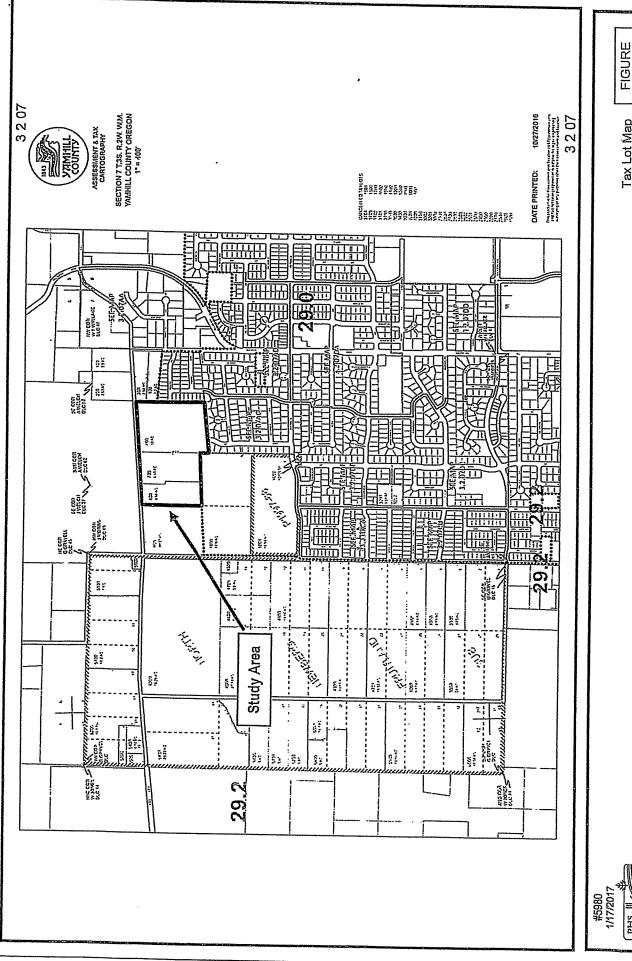
ec: John van Staveren, Pacific Habitat Services

City of Newberg Planning Department (Maps enclosed for updating LWI)

Kinsey Friesen, Corps of Engineers

Michael DeBlasi, DSL

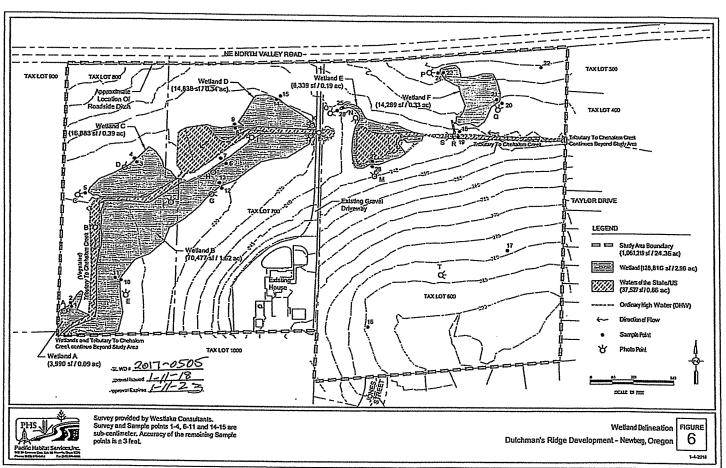




Tax Lot Map Dutchman's Ridge Development - Newberg, Oregon The Oregon Map (ormap.net)

2

PHS Pacific Habitat Services, Inc. 9450 SW Commerce Circle, Sulte 180 Wilsonville, OR 97070





# EXHIBIT E Traffic Study

## Revised Traffic Impact Analysis Kings Landing

in Newberg, Oregon

April 5, 2017

completed with Del Boca Vista, LLC Newberg, Oregon

Prepared by:
Associated Transportation Engineering & Planning, Inc.
Salem, Oregon
April 6, 2018
ATEP 17-367



## Revised Traffic Impact Analysis Kings Landing

in Newberg, Oregon

April 5, 2017



completed with Del Boca Vista, LLC Newberg, Oregon

Prepared by: Associated Transportation Engineering & Planning, Inc. Salem, Oregon April 6, 2018 ATEP 17-367



A.T.E.P., Inc. 1155 13th St. S.E. Salem, OR. 97302 Tel.: 503-364-5066 FAX: 503-364-1260 e-mail: kbirky@atepinc.com

### **Table of Contents**

### **Appendices**

Turning Movement Counts and Crash Data

**Computer Modeling Printouts** 

Mitigation Modeling Printouts

Revised
Traffic Impact Analysis
Kings Landing
Newberg, Oregon



#### Introduction:

Del Boca Vista intends to develop 76 single family home lots in three phases on a portion of tax lot 600 and tax lots 700 and 800 of tax map 3S2WSec07 in Newberg, Oregon in the proposed Kings Landing Subdivision. The site is south of North Valley Road, at the east end of the Gracies Landing Subdivision. Phases 1 and 2 (54 lots) will be developed with access to North Valley Rd and Barbara's Way. Phase 3 (20 lots) will be accessed from Taylor Dr extended to the west.

Residents of Kings Landing will use the Newberg transportation system and add traffic to the roadways. This analysis will consider the impacts of additional traffic at the intersections of

- Chehalem Dr at Foothills Dr
- N Valley Rd at Chehalem Dr
- N Valley Rd at Hwy 219
- Hwy 219 at Terrace Dr
- Hwy 219 at Foothills Dr
- Foothills Dr at Main St
- Bruce Dr at N Valley Rd
- West access onto Chehalem Dr
- East (Kings Landing) access onto N Valley Rd

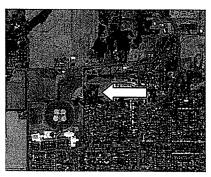


Figure 1 - Vicinity Map

### **Summary of Findings:**

The 76 single family homes in the Kings Landing will generate an estimated 724 trips each day. 57 of the trips will be in the AM Peak hour and 76 trips will be in the PM Peak hour.

The intersection of Hwy 219 at Foothills Dr will be functioning at LOS F with the existing traffic and anticipated traffic from Gracie's Landing and Dutchman Ridge (background traffic) in the AM Peak traffic period. The v/c is 0.705. There are discussions to signalize the intersection in the future, restoring the performance metric to City of Newberg performance standards.

The intersection of Hwy 219 at N Valley Rd is functioning at LOS E with v/c 0.433 (AM) and 0.324 (PM). The WBLT turning movement is experiencing extended delays. The addition of a WBLT lane would provide relief at the intersection, but the City will want to continue monitoring the performance as the City expands in the future.

The other studied intersections will all function within accepted standards with traffic from Kings Landing. The City and State should continue to monitor the performance metrics at the intersection of

Hwy 219 at N Valley Rd. Improvements will be needed in the future if traffic volumes continue to increase as expected. The performance metrics when the single family homes (existing and background) are occupied in 2018 at the studied intersections are shown in Figure 3.

Crash data from ODOT Crash Data Unit shows there have been 11 reported crashes at the N Valley at Hwy 219 intersection in the 5 year period from 2011 to 2015. None of them were fatal.

	Fatal	Injury	Property Damage	Total
Chehalem Dr at Foothills Dr	0	0	0	0
N Valley Rd at Chehalem Dr	0	6	0	6
N Valley Rd at Hwy 219	0	6	5	11
Hwy 219 at Foothills Dr	0	1	4	5
Foothills Dr at Main St	0	0	0	0

Figure 2 - ODOT Reported Crash Data 2011-2015

The "2015 Safety at Intersections in Oregon - A Preliminary Update of Statewide Intersection Crash Rates" by Hazel found an average of 0.434 crashes per million entering vehicles at rural 4 legged stop controlled intersections with a standard deviation of 0.534. Assuming that 10% of the daily traffic at the intersection of Hwy 219 at North Valley Rd occurs in the PM Peak hour and that there were 988 vehicles counted at the intersection in the PM Peak hour for this study, one can find the crash rate was 0.61 crashes per million entering vehicles over the past 5 years. There were no fatal crashes. The crash rate is less than one standard deviation above the mean.

### History, Existing Conditions and Background Traffic:

The site has been farmland in the recent past and has been annexed into the City. The site is zoned Single Family Residential (R-1). Traffic from the planned single family homes will travel east/west on Taylor Dr and N Valley Rd and north/south on Jones St and Chehalem Dr to access the transportation system. The studied intersections are TWSC (two way stop controlled) with the exception of Main St at Foothills which is AWSC (all way stop controlled). This study will assume that Hwy 219 is a commuter roadway and will adjust the turning movement counts up 9.5% (x 1.095) (1.0016/0.9149) to estimate the 30 HV (30th highest hourly annual volume) at the intersections. Turning movement counts for this analysis were completed in November 2017 at the studied intersections and are included in the appendix.

Contractors are building Gracies Landing in the SE quadrant of Chehalem Dr at N Valley Rd. Traffic from Gracies Landing will be considered background traffic. Dutchman Ridge Subdivision is located west of the end of Taylor Dr. and is in the planning process. Traffic from Dutchman Ridge will also be considered background traffic.. There will be 52 single family homes in Gracie's Landing and 46 homes in Dutchman Ridge when they are constructed. The Institute of Transportation Engineers (ITE) Trip Generation Manual estimates a single family home generates 9.52 trips each day. 0.75 trips in the AM Peak hour and 1.00 trips in the PM Peak hour. The 76 single family homes in the Kings Landing will generate an estimated 724 trips each day. 57 of the trips will be in the AM Peak hour and 76 trips will be in the PM Peak hour.

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	SB Thru	0.052	11.5	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.048	14.8	В
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.433	35.6	E
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.258	13.7	В
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.705	73.2	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.033	9.4	А
10	Main at Foothills	Two-way stop	HCM 6th Edition	NB Left	0.286	18.8	С
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.0	А

Existing & Background AM Peak Hour Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	NB Thru	0.042	12.0	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.018	18.4	С
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.324	48.1	Е
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.065	10.2	В
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.606	71.0	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.022	9.5	Α
10	Main at Foothills	Two-way stop	HCM 6th Edition	NB Left	0.057	11.9	В
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.4	В

Existing & Background PM Peak Hour Summary

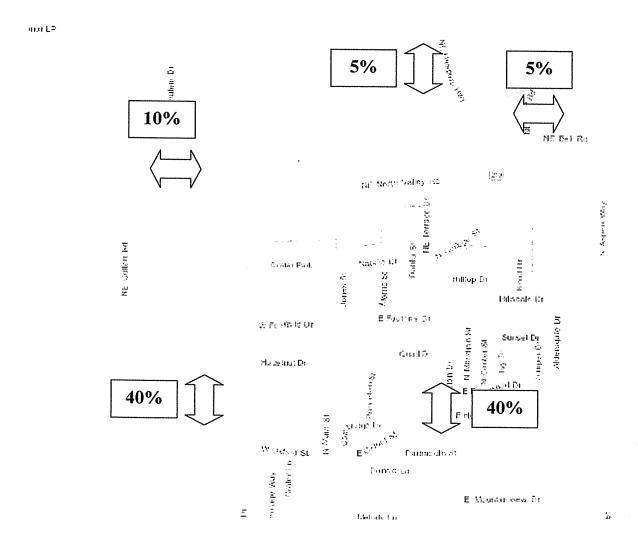
Figure 3 - Existing & Background Traffic Conditions

The WBLT traffic at the Foothills at Hwy 219 intersection in the AM Peak hour has a v/c of 0.705 with existing and background traffic. While it meets ODOT's performance metrics, the City is in discussion with ODOT to signalize the intersection.

### Traffic Conditions when Kings Landing is Complete:

Kings Landing will add 57 trips to the AM Peak hour traffic and 76 trips to the PM Peak hour traffic. This study will assume that 40% the traffic will travel north/south on Chehalem and 40% will travel north/south on College Ave north of Foothills and 5% will travel east/west on Bell Rd and 10% will travel east/west on N Valley Rd west of the site. Background (expected) traffic from Gracie's Landing and Dutchman Ridge has been included in the computer model. The study assumes that traffic volumes will increase linearly 1% per year to estimate the 2033 performance metrics. Traffic volumes were increased 9.5% at the studied intersections to estimate the traffic volumes at the 30th HV time period using ODOT methodology.

There is not a significant change in the performance metrics of the studied intersections with traffic from Kings Landing added to the model. The LOS at the intersection of Foothills at Hwy 219 will continue to be F with v/c 0.725 (AM) and within ODOT standards.



ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	NB Left	0.062	11.8	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.056	15.1	С
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.453	38.4	E
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.294	14.7	В
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.728	78.7	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.047	9.6	Α
10	Main at Foothills	Two-way stop	HCM 6th Edition	NB Left	0.292	19.2	С
12	KV Access at N Valley Rd	Two-way stop	HCM 6th Edition	NB Left	0.020	10.3	В
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.1	В

2018 AM Peak Hour Summary with Kings Landing

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	NB Thru	0.044	12.3	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.018	18.8	С
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.349	55.5	F
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.079	10.6	В
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.622	74.7	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.031	9.7	А
10	Main at Foothills	Two-way stop	HCM 6th Edition	NB Left	0.059	12.1	В
12	KV Access at N Valley Rd	Two-way stop	HCM 6th Edition	NB Left	0.008	8.8	Α
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.6	В

2018 PM Peak Hour Summary with Kings Landing

Figure 4 – 2018 Traffic Conditions with Kings Landing

The model for this study was run with mitigation alternatives at the Hwy 219 at Foothills and Hwy 219 at N Valley Rd intersections to recommend alternatives that will improve the performance at the intersections as traffic increases in the future. Printouts of the mitigation analysis are included in the Appendix on the last pages. It is noted that neither intersection is in the jurisdiction of the City of Newberg and the intersection of Hwy 219 at N Valley Rd is not in the City or the Urban Growth Boundary. Both intersections will function more efficiently when signalized. Signalization of Foothills at Hwy 219 and N Valley Rd at Hwy 219 is recommended.

#### **Future (2033) Traffic Conditions:**

This study estimated traffic conditions in 16 years (2033) by assuming the existing turning movement counts increase 16% (x1.16). Performance metrics at Hwy 219 at N Valley Rd and Hwy 219 at Foothills Dr will continue to be of concern if improvements are not made or mitigation measures are not taken. Mitigation alternatives are included in the appendix to this analysis after the printouts of the various scenarios near the end of the appendix.

In 2033, it is expected that v/c ratio will be 1.202 in the AM Peak hour at Foothills at Hwy 219 if it is not improved, well above the performance metrics ODOT has established for intersections in its jurisdiction. N Valley Rd at Hwy 219 will function at LOS F with v/c ratios of 0.715 (AM) and 0.556 (PM). While signalization may be the preferred alternative, the v/c ratios at N Valley Rd at Hwy 219 are within the performance standards ODOT has established for this type of intersection. Adding a WBLT lane at the intersection would improve the performance of the intersection to some extent. Continuing monitoring the performance of the intersection is recommended.

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	NB Left	0.076	12.6	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.071	16.8	С
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.715	101.8	F
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.352	16.5	С
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	1.202	233.5	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.049	9.7	Α
10	Main at Foothills	Two-way stop	HCM 6th Edition	INBLOTT		24.3	С
12	KV Access at N Valley Rd	Two-way stop	HCM 6th Edition	NB Left	0.021	10.6	В
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.4	В

2033 AM Peak Hour Summary with Kings Landing

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	Los
1,	N Valley Rd at Chehalem Dr	Two-way stop	HCM 6th Edition	NB Thru	0.055	13.1	В
3	NE Terrace Dr at Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.023	22.2	С
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.556	160.0	F
5	Chehalem Dr at Foothills Dr	Two-way stop	HCM 6th Edition	WB Left	0.091	11.0	В
6	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	1.074	212.4	F
7	West Access at Chehalem Dr	Two-way stop	HCM 6th Edition	WB Left	0.032	9.8	А
10	Main at Foothills	Two-way stop	HCM 6th Edition	MRIAH		12.8	В
12	KV Access at N Valley Rd	Two-way stop	HCM 6th Edition	NB Left	0.008	8.8	А
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	11.0	В

2033 PM Peak Hour Summary with Kings Landing

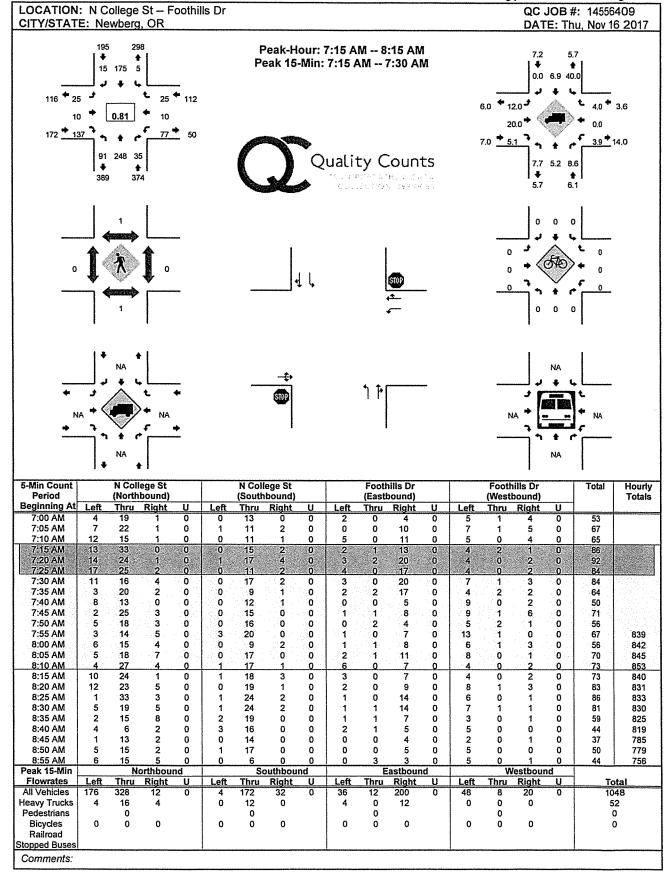
Figure 5 - 2033 Traffic Conditions with Kings Landing

### Summary:

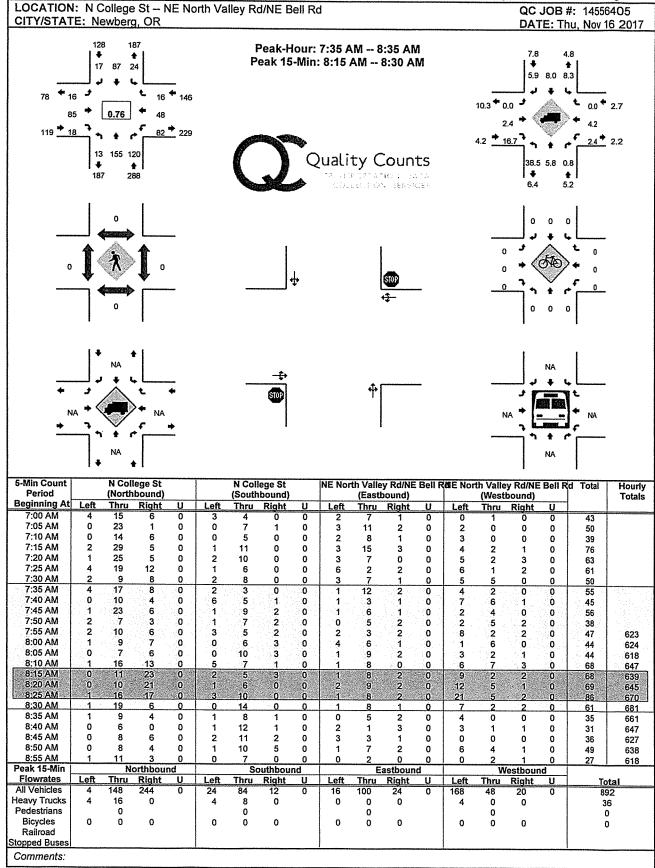
The development of 76single family homes in the three phases of the planned Kings Landing subdivision in Newberg will add traffic to the transportation system. The intersection of Hwy 219 at Foothills Dr is functioning at LOS F with the existing and expected traffic from Gracie's Landing and Dutchman Ridge. The v/c is 0.705 during the AM Peak hour with the WBLT experiencing long delays. Signalization of the intersection and is the recommended mitigation.

N Valley Rd at Hwy 219 is functioning at LOS E in the PM Peak with existing and background traffic. It will function at LOS F (v/c 0.349) with Kings Landing. The v/c is well within ODOT performance metrics. Review of mitigation alternatives suggests signalization should be considered in the future. The crash rate at the intersection of N Valley at Hwy 219 is higher than the mean for rural 4 legged stop controlled intersections in Oregon, but less than one standard deviation above the mean.

The other studied intersections will all function within accepted standards with traffic from Kings Landing. The City and State should continue to monitor the performance metrics at the intersections of Hwy 219 at Foothills and Hwy 219 at N Valley Rd. Improvements will be needed in the future if traffic volumes continue to increase as expected at these intersections.



LOCATIO CITY/STA	N: N TE: N	College Newber	e St — g, OR	N Te	rrace I	Or										JOB	#: 1455	6407 16 2017
18 <b>4</b>	12 0 + 30	0.79	0 0					5-Min	: 7:35 / n: 8:15 Quali	ty (	8:30 /	nts			6.6 50.0 16.7 0.0   0.0	0 5.7 (	5.5 0.0 0.0 0.0 0.0	• 0.0 0.0
	0	· **	1					4			<b>STOP</b>			(	0 + (		• • • • • • • • • • • • • • • • • • •	-
<u>+</u>	NA +	NA NA	NA NA	<b>+</b>						11		nava		ħ	) + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +	NA + C	₩ NA	
5-Min Count Period			bound)			(Souti	lege St (bound)				race Dr bound)				race Dr bound)		Total	Hourly Totals
7:00 AM	1	25	Right 0	0	Left 0	Thru 5	Right 0	<u>U</u>	Left 0	Thru 0	Right 6	U	Left 0	Thru 0	Right 0	U	37	
7:05 AM 7:10 AM	1 1	26 22	0	0	0	10 10	0	0	2	0	5	0	0	0	0	0	44	
7:15 AM	0	35	0	0	0	17	Õ	0	0	0	3 1	0	0	0	0	0	36 53	
7:20 AM 7:25 AM	1 2	30 28	0	0	0	15 12	0	0	1 3	0	4	0	0	0	0	0	51	
7:30 AM	0	23	0	0	0	15	1	0	0	0	3 2	0	0	0	0	0	48 41	
7:35 AM 7:40 AM	0 2	22 15	0	0	0	10	1	0	3	0	3	0	0	0	0	0	37	
7:45 AM	2	28	0	: 0	0	10 .9	2 0	0	0	0	3 5	0	0	0	0	0	33 44	
7:50 AM 7:55 AM	. 4	16 16	0	0	0	15 18	0	0	2	0	4	0	0	0	0	0	41	
8:00 AM	1	18	0	0	0	11	0	0	0	0	0	0	0	0	0	0	38 30	503 496
8:05 AM 8:10 AM	3	18 32	0	0	0	14 14	0	0	0 2	0	4	0	0	0	0	0	39	491
8:15 AM	0	28	0	0	0	19	0	0	0	0	3 2	0	0	0	0	0	52 49	507 503
8:20 AM 8:25 AM	1	29 35	0	- 0 - 0	0	18 32	1 0	0	1	0	0	0	0	0	. 0	Ö	50	502
8:30 AM	. 0	20	0	0	0	25	0	0	2	0	2	0 <u> </u>	0	0	0	0	68 49	522 530
8:35 AM 8:40 AM	2 3	15 5	0	0	0	14 18	0 1	0	1 0	0	4 2	0	0	0	0	0	36	529
		13	0	0	0	12	0	0	0	0	1	0	0	0	0	0	29 27	525 508
8:45 AM	1			•	0	16	0	0	0 2	0	2	0	0	0	0	0	33	500
8:50 AM	2	13	0	0	n	£		U		0	0	0	0	0	0	0	23	485
8:50 AM 8:55 AM Peak 15-Min	2 1	13 14 <b>N</b> o	0 rthboun	0 id	0		uthbour	ıd		E	astboun	d		W	estbour			703
8:50 AM 8:55 AM Peak 15-Min Flowrates	2 1 Left	13 14 No Thru	0 rthboun Right	0 Id U	Left	Sc Thru	uthbour Right	U	Left	Thru	Right	U	Left	Thru	estbound Right	i U	To	ital
8:50 AM 8:55 AM Peak 15-Min Flowrates All Vehicles Heavy Trucks	2 1	13 14 No Thru 368 20	0 rthboun	0 id		So	uthbour						0	Thru 0	Right 0	1	Tc	ital 88
8:50 AM 8:55 AM Peak 15-Min Flowrates All Vehicles Heavy Trucks Pedestrians	2 1 Left 4 0	13 14 No Thru 368 20 0	0 rthboun Right 0 0	0 Id U	Left 0 0	50 Thru 276 8 0	uthbour Right 4 4	U	Left 8 0	Thru 0 0 0	Right 8 0	U	0	<u>Thru</u> 0 0 0	Right 0 0	i U	Tc	ital 88 2
8:50 AM 8:55 AM Peak 15-Min Flowrates All Vehicles Heavy Trucks Pedestrians Bicycles Railroad	2 1 Left 4	13 14 No Thru 368 20	0 rthboun Right 0	0 Id U	Left 0	50 Thru 276 8	uthbour Right 4	U	Left 8	Thru 0 0	Right 8	U	0	<u>Thru</u> 0 0	Right 0	i U	To 66 3	tal 58 2
8:50 AM 8:55 AM Peak 15-Min Flowrates All Vehicles Heavy Trucks Pedestrians Bicycles Railroad Stopped Buses	2 1 Left 4 0	13 14 No Thru 368 20 0	0 rthboun Right 0 0	0 Id U	Left 0 0	50 Thru 276 8 0	uthbour Right 4 4	U	Left 8 0	Thru 0 0 0	Right 8 0	U	0	<u>Thru</u> 0 0 0	Right 0 0	i U	Tc	tal 58 2
8:50 AM 8:55 AM Peak 15-Min Flowrates All Vehicles Heavy Trucks Pedestrians Bicycles Railroad	2 1 Left 4 0	13 14 No Thru 368 20 0	0 rthboun Right 0 0	0 Id U 0	Left 0 0	50 Thru 276 8 0	uthbour Right 4 4	U	Left 8 0	Thru 0 0 0	Right 8 0	U	0	<u>Thru</u> 0 0 0	Right 0 0	i U	Tc	tal 58 2



LOCATIO	N: NE Che	halem Dr	- NE Nor	th Valley	Rd	***************************************	···	vicaiou ic	n deteri	mmy p		3 #: 1455	
CITY/STA	TE: Newbe	erg, OR			110							7 #. 1455 Thu, Nov	
76 <b>*</b>	7 + 0.85		' 60 . 135		k 15-Min	: 7:05 A	M 8:05 A AM 7:20 ty Cour	nts		3 <sup>♠</sup> 0.0 7.2 7 <del>▶</del> 6.3	7.7 0.0 8.3 0.0 22.2 9.8	18.2 10.0 33.3 8.2	13.3
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7:05 AM 7:10 AM 7:15 AM	1 0 1 5 2 1	2 3	0 1 0 0	2 2 2	0 0 0 0	0	14 6 16 5 16 1	0 0 0	1 0	1 0 2	0 0	28 32 26	
7:20 AM	1 0	- 2	0 1	-6	0 0	1	8 4	0	0	3	1 0	27	200200240000000
7:25 AM	2 0		0 1	3	0 0	2	6 4	0	0	2	0 0	21	al Y
7:30 AM 7:35 AM	5 0 1 0		0 2	1	1 0	0	10 3 9 2	0	1	6 5	1 0	31	
7:40 AM	0 2		0 0	1	1 0	1	4 1	0	2 0	5 6	0 0	22 16	
7:45 AM	2 0		0 2	2	0 0	0	6 1	0	0	5	0 0	18	54, 191
7:50 AM 7:55 AM	3 0		0 0	1	0 0	1 0	7 1	0	0	5	2 0	22	
8:00 AM	3 1	_	0 1	2	1 0	0	6 1 9 3	0	1 0	7	1 0	22 29	279 294
8:05 AM	2 1	0	0 2	1	1 0	0	11 0	0	1	5	1 0	25	291
8:10 AM 8:15 AM	0 0		0 0	1	3 0	0	5 1	0	2	5	0 0	19	278
8:20 AM	1 0		0 2	1 1	1 0	0	10 2 7 4	0	1 0	5	1 0	26	278
8:25 AM	1 2		0 1	1	0 1	1	9 1	0	0	4 4	0 0 2 0	21 25	272 276
8:30 AM	0 3	2	0 0	ò	0 0	o	7 3	ŏ	0	3	0 0	18	263
8:35 AM	1 0	_	0 2	0	1 0	0	7 1	0	ō	1	1 0	14	255
8:40 AM 8:45 AM	1 0		0 1	1	0 0	1	3 1	0	0	2	0 0	10	249
8:50 AM	0 2		0 0	0	0 0	1 1	6 1 8 0	0	2	0	0 0	12	243
8:55 AM	1 1		0 0	2	0 0	1 2	8 0 6 2	0	0 1	6 4	1 0	19 19	240 237
Peak 15-Min		Northbound		Souti	hbound	<del>-</del> _	Eastbou		·····	<del></del>	bound	13	231
Flowrates	Left Thr		U Left	Thru Ri	ight U	Left	Thru Right	U	Left -		ight U	т	tai
All Vehicles	16 24		0 4	24	4 0	4	184 48	0	4	12	0 0	34	4
Heavy Trucks	0 8	0	0	4 0	0	0	16 4		0	4	0	3	
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Pedestrians Bicycles	0 0	0	n		0	n		- 1	0		0		
Bicycles Railroad	0 0	0	0	ő	0	0	0 0		0	ŏ	0		
Bicycles Railroad Stopped Buses	0 0	0	0		0	0			0		0		
Bicycles Railroad	0 0	0	0		0	0			0		0		

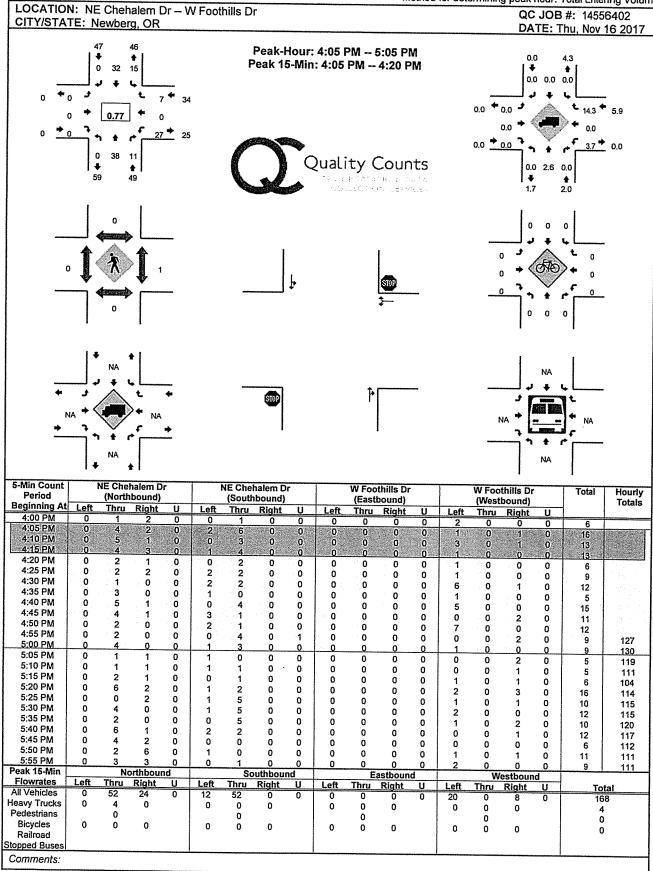
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7:20 AM 7:25 AM	0	<u>3</u> 1	20 20	0	6 5	<u>1</u> 5	<u>0</u> 0	0	0	<u>. 0</u>	<u>0</u> 0	<u>0</u> 0	10 5	<u>0</u> 0	<u>0</u> 4	0	40 40	
7:30 AM 7:35 AM	0	1 0	13 9	0	4 2	1	0	0	0	0	0	0	16 7	0	3 1	0	38 20	
7:40 AM	0	1	6	0	1	3	0	0	0	0	0	0	3	0	1	0	20 15	
7:45 AM 7:50 AM	0	2 7	2 3	0	0	2 3	0	0	0	0	0	0	0	0 0	0	0	6 14	
7:55 AM	0	2	4	0	1	2	0	0	0	0		ő	1	Ö	0	0	10	297
8:00 AM 8:05 AM	0	6 2	1 8	0	0	4 2	0	0	0	0	0	0	4	0	2	0	17	294
8:10 AM	0	1	2	0	2	2	0	0	0	0	0	0	2	0	0 1	0	15 12	296 267
8:15 AM	0	3	5	0	4	2	Ö	0	0	0	0	0	1	0	0	0	15	242
8:20 AM 8:25 AM	0	0 5	5 2	0	0	3 1	0	0	0	0	0	0	4	0	2	0	16	218
8:30 AM	0	4	1	o	0	5	0	0	0	0	0	0	4	0	1 2	0	13 16	191 169
8:35 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	152
8:40 AM 8:45 AM	0	2 3	0 1	0	0	2 2	0	0	0	0	0	0	3 2	0	1 0	0	8 9	145 148
8:50 AM	0	2	1	0	0	ő	Ö	0	0	0	0	0	0	0	0	0	3	148
8:55 AM	0	2	0	0	0	5	0	0	0	0	0	0	1	0	1	0	9	136
Peak 15-Min Flowrates	Left	Thru	orthbou Right	nd U	Left	S: Thru	outhbo Right		Left	Thru	Eastbour Right	nd U	Left	V Thru	estboun Right	d U	~	
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Pedestrians Bicycles Railroad Stopped Buses	0	0	0		0	0	0		0	0	0		0	8 0	0		6	

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S:00 PM	S:00 PM																			
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Sist PM	Sist PM				8		6	34	5 0		0	0	2	0						
Peak 15-Min   Northbound   Southbound   Eastbound   Westbound   Total	Peak 15-Min   Northbound   Southbound   Eastbound   Eastbound   Westbound   Total									- 1								-	74	918
Flowrates         Left         Thru         Right         U         Total           All Vehicles         96         208         92         0         24         516         12         0         20         4         72         0         44         4         12         0         1104           leavy Trucks         4         4         4         0         0         36         0         4         0         0         4         0         52           Pedestrians         0         0         0         0         0         0         0         0         0         0         0           Bicycles         0	Flowrates         Left         Thru         Right         U         Total           All Vehicles         96         208         92         0         24         516         12         0         20         4         72         0         44         4         12         0         1104           leavy Trucks         4         4         0         0         36         0         4         0         0         4         0         0         52           Pedestrians         0		<del>                                     </del>				3			_	0			0	4				72	904
All Vehicles 96 208 92 0 24 516 12 0 20 4 72 0 44 4 12 0 1104 leavy Trucks 4 4 4 0 0 36 0 4 0 0 0 4 0 52 Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 Railroad topped Buses	All Vehicles 96 208 92 0 24 516 12 0 20 4 72 0 44 4 12 0 1104 leavy Trucks 4 4 0 0 36 0 4 0 0 0 0 0 52 Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Left				Left			1	eff				1 of				-	 
Heavy Trucks	Heavy Trucks         4         4         0         0         36         0         4         0         0         4         0         0         52           Pedestrians         0 <td>All Vehicles</td> <td>96</td> <td></td>	All Vehicles	96																	
Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Heavy Trucks	4		0			36		- 1		0								
		Bicycles Railroad			0		0		0		0		0		0		0		0	
	Comments.		L		·····			···	····											

Second   Peak   Hours   4:30 PM   -4:55 PM   Second   Peak   15-Min: 4:40 PM   -4:55 PM   -4:55 PM   Second   Peak   15-Min: 4:40 PM   -4:55 P	LOCATION: N College St - CITY/STATE: Newberg, OF	– N Terrace Dr R			#: 14556408
S-Min Count Period Peri	442 192 10 432 0 46 + 2 0 + 0.84 19 + 17 36 190 0	Peak-Ho Peak 15-	Quality Counts	0.0	5.2 0.0 0.0 0.0 0.0 0.0 0.0
S-Min Count   N College St (Northbound)   N College St (Northbound)   N Terrace Dr (Westbound)   N Terrace Dr (Westbound)   Total   Hourly Totals		°4	<b></b>		• <u> </u>
Period   Reginning At   Left   Thru   Right   U   Left   Thru   Righ	NA + NA	<u></u>		NA NA	
4:00 PM	Period (Northbound	d) (Southbound)	(Eastbound)		
4:05 PM					<u> </u>
4:10 PM			1	1	
4:15 PM			-	1	
4:20 PM					5
4:25 PM			-		
4:30 PM			_	1	
4:35 PM					
4:40 PM	4:35 PM 5 19 0				
445 PM         3         20         0         0         40         5         0         0         0         0         0         0         71           4/50 PM         1         19         0         0         43         0         0         1         0         0         0         0         67           4/55 PM         2         21         0         51         630         0					
4:55 PM	4:45 PM 3 20 0	0 0 40 5			
4:55 PM		0 0 43 0			
Stopped   Stopped Buses   Stopped Buse   Stoppe					
Side   PM					
Si 10 PM					
5:20 PM         5         12         0         0         0         43         0         0         0         1         0         0         0         0         61         676           5:25 PM         2         16         0         0         0         34         0					1 1
5:25 PM         2         16         0         0         0         34         0         0         0         0         1         0         0         0         0         0         53         687           5:30 PM         3         12         0			- 1		
Sign					
5:35 PM 3 17 0 0 0 0 33 0 0 0 0 0 1 0 0 0 0 0 0 54 675 5:40 PM 1 15 0 0 0 0 26 0 0 0 0 0 1 0 0 0 0 0 0 0 43 652 5:45 PM 4 13 0 0 0 0 44 2 0 0 0 0 1 0 0 0 0 0 0 0 48 626 5:55 PM 1 16 0 0 0 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 48 626 5:55 PM 1 17 0 0 0 0 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0					
5:40 PM         1         15         0         0         0         26         0         0         0         1         0         0         0         0         0         43         652           5:45 PM         4         13         0         0         0         44         2         0         0         0         1         0         0         0         0         64         645           5:50 PM         1         16         0         0         0         28         0         0         0         0         0         0         0         0         48         626           5:55 PM         1         17         0         0         0         28         0         0         0         0         0         0         0         48         626           5:55 PM         1         17         0         0         0         0         0         0         0         0         0         48         626           Flowrates         Left         Thru         Right         U         Left         Thru         Right         U         Left         Thru         Right         U         Left					
5:45 PM         4         13         0         0         0         44         2         0         0         0         1         0         0         0         0         64         645         5:50 PM         1         16         0         0         0         28         0         44         626         525         525         PM         0	1	- 1		1	
Sist   PM   1		- 1		1	
Sist		- 1		1	1
Peak 15-Min   Northbound   Southbound   Eastbound   Westbound   Total		- 1	- 1		
Flowrates   Left   Thru   Right   U   Total					1 40   021
All Vehicles 32 216 0 0 0 508 24 0 4 0 32 0 0 0 0 0 816 Heavy Trucks 0 12 0 0 28 0 0 0 4 0 0 0 0 44 Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak 15-Will   Norman				Total
Heavy Trucks 0 12 0 0 28 0 0 0 4 0 0 0 44  Pedestrians 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					
Pedestrians         0         0         0         0           Bicycles         0	Flowrates Left Thru Righ	0 0 508 24			1 010
Bicycles 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Flowrates Left Thru Right All Vehicles 32 216 0				
Railroad Stopped Buses	Flowrates         Left         Thru         Righ           All Vehicles         32         216         0           Heavy Trucks         0         12         0	0 28 0	0 0 4	0 0 0	44
Stopped Buses	Flowrates         Left         Thru         Righ           All Vehicles         32         216         0           Heavy Trucks         0         12         0           Pedestrians         0         0         0	0 28 0	0 0 4	0 0 0	44 0
	Flowrates         Left         Thru         Righ           All Vehicles         32         216         0           Heavy Trucks         0         12         0           Pedestrians         0         0         0           Bicycles         0         0         0	0 28 0	0 0 4	0 0 0	44 0
COMMENS	Flowrates         Left         Thru         Righ           All Vehicles         32         216         0           Heavy Trucks         0         12         0           Pedestrians         0         0         0           Bicycles         0         0         0	0 28 0	0 0 4	0 0 0	44 0

Type of peak											Mei	noa	or aete	rminin	g peak i	nour: 1	otal Enter	ring Volume
LOCATIO	N: NC	College	∋ St N	IE No	orth Va	illey R	d/NE	3ell R	d						QC	JOB	#: 1455	6406
CITY/STA	TE: Ne	ewber	g, OR														hu, Nov	
160 <b>4</b>	40. 43. 43. 43. 43.	0.88	29 97 59	<b>→</b> 185				5-Min	: 4:40 Quali	ty (	3:30 PM 4:55 PM	n Es			3.2 \$2.3 12.5	3 3.4 (i	0.0 + 0.0 + 2.1	. 1.6
		· À	0	_				<b></b>			\$80°P ◆ <del>+</del>	-				\$ 100 miles	> + · ·	
	**************************************		NA NA	<b>+</b>	•		€ Sor		NG No.	<b>†</b>		-			NA +	NA +	₩ NA	
Period		(North	bound)			(South	nbound)			(East	y Rd/NE bound)			(West	bound)	: Bell R	d Total	Hourly Totals
Beginning At 4:00 PM	Left 1	Thru 11	Right	<u>U</u>	Left	Thru	Right	<u> </u>	Left	Thru	Right	<u>U</u>	Left	Thru	Right	U		
4:05 PM 4:10 PM 4:15 PM 4:20 PM 4:25 PM 4:30 PM 4:35 PM	2 3 2 3 3 2 2 3	12 12 10 12 10 4	1 3 2 2 3 3 4	0 0 0	1 1 1 0 0 2	23 19 17 17 19 21 28 26	6 3 3 1 0	0 0 0 0 0 0	3 2 0 1 2 1	5 5 2 3 4 5	3 2 1 6 1 2	0 0 0 0	7 2 3 8 4 4 3 3	10 8 7 7 8 6	0 3 0 3 2 5 3	0 0 0 0	71 62 51 62 59 62 64 70	
4:40 PM 4:45 PM	1	9 15	5 3	0	2 1	27 34	3 4	0	0 2	5 5	3 2	0	5 12	11 10	1 4	0	72 92	
4:50 PM	1	13	6	0	0	36	6	Ö	2	4	1	0	6	4	4	0	83	
4:55 PM 5:00 PM	2	16 7	2 4	0	0	20 45	1	0	1 0	5 3	1	0	2 7	9	2 3	0	61	809
5:05 PM	3	13	2	0	2	22	4	0	0	7	1	0	- 4	5	3 1	0	85 64	823 825
5:10 PM 5:15 PM	1	8	2	0	1	41	1	0	0	7	3	0	1	7	1	0	73	847
5:15 PM 5:20 PM	4	12 .8	2 1	0	2	17 25	3 4	0	1 0	1 10	4 3	0	- 4 7	7 7	1 5	0	58	843
5:25 PM	2	14	0	0	1	29	5	0	1	- 4	3 2	0	5	12	5	0	71 76	855 869
5:30 PM	2	7	3	0	0	18	4	0	1	3	3	0	1	12	2	0	56	861
5:35 PM 5:40 PM	3 1	11 12	3 3	0	1 4	30 23	3	0	1	0	1	0	2	5	3	0	63	854
5:45 PM	2	6	3	0	3	23 32	5 1	0	1	6 3	2 1	0	4 6	11 9	3 0	0	75 67	857 832
5:50 PM	3	9	4	ō	2	31	i	ō	i	4	ò	0	5	6	1	0	67	832 816
5:55 PM	1	11	4	0	2	23	2	0	1	9	0	0	5	6	1	0	65	820
Peak 15-Min Flowrates	Left		orthboun		1.54		outhbou				astbound				/estbour			
All Vehicles	<u>ι eπ</u>	Thru 148	Right 56	0	Left 12	<u>Thru</u> 388	Right 52	<u> </u>	Left 16	Thru 56	Right 24	0	Left 92	Thru 100	Right 36	0		tal
Heavy Trucks	Ô	12	0	٠	0	20	0	J	4	0	4	U	92	100	36	U	98 4	
Pedestrians	_	0	_			0				0				0			C	
Bicycles Railroad	0	0	0		0	0	0		0	0	0		0	0	0		C	) [
Stopped Buses																		
Comments:									<del></del>				·					

LOCATION: NE Chehalem Dr I CITY/STATE: Newberg, OR	NE North Valley Rd			#: 14556404 hu, Nov 16 2017
25 43 4 9 12 4 9 12 157 4 20 16 75 10.87 131 102 23 9 9 90 22 19 6 41 47	Peak 15-Min:	4:35 PM 5:35 PM 5:20 PM 5:35 PM	2.5 + 0.0 2.7 + 2.0 + 0.0 4.5 5.3 0	1.7 1.3 1.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
		4\$		
S-Min Count NE Chehalem Dr (Northbound)	- <del>‡</del> - NE Chehalem Dr (Southbound)	NE North Valley Rd	NE North Valley Rd	Total Hourly
Beginning At   Left   Thru   Right   U	Left   Thru   Right   U     1	Left Thru Right U   0	Columbia	31 26 30 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
4:25 PM     1     1     1     0       4:30 PM     0     1     1     0       4:35 PM     3     1     0     0       4:40 PM     3     1     1     0       4:45 PM     1     2     3     0       4:50 PM     2     0     0     0       4:55 PM     3     1     0     0       5:00 PM     3     2     0     0       5:05 PM     0     1     0     0       5:10 PM     0     4     0     0       5:15 PM     1     1     0     0	0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 8 2 0 1 11 3 0 0 9 2 0 0 5 1 0 0 6 2 0 1 5 2 0 0 4 4 0 0 8 1 0 0 4 1 0 0 11 0 0 1 5 1 0	1 7 2 0 1 7 0 0 0 13 1 0 2 14 2 0 2 7 2 0 0 10 0 0 1 14 1 0 0 9 3 0 0 9 1 0 2 4 4 0 0 12 1 0	23 26 25 30 31 26 24 31 332 28 329 18 321 25 316 25 312
5:20 PM 3 4 1 0 5:25 PM 2 0 0 0 5:30 PM 1 2 1 0 5:35 PM 3 1 1 0 5:40 PM 0 4 2 0 5:45 PM 2 2 0 0 5:50 PM 1 3 0 0 5:55 PM 3 0 0	1 2 0 0 2 0 0 0 0 1 1 0 0 2 2 0 0 1 0 0 1 0 0 0 0 0 0 0	1 9 0 0 1 4 5 0 0 5 4 0 0 3 0 0 1 4 2 0 0 3 0 0 0 7 0 0 0 7 1 0	1 13 1 0 1 10 3 0 0 16 1 0 2 9 1 0 1 17 1 0 0 9 0 0 1 9 2 0 0 7 1 0	36 325 28 327 32 334 24 328 33 330 17 321 23 320 22 311
Peak 15-Min	Southbound     Southbound     Southbound     Southbound     Southbound     Southbound   Southb	Eastbound     Left   Thru   Right   U     8   72   36   0   0   0   0   0   0   0   0   0	Westbound     Right U     Right U     Right U     Right U     Right U   Ri	Total 384 8 0 0



OFF-

INTER-SECTION

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WET SURF

DRY SURF

INTER-SECTION RELATED

# OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT CRASH SUMMARIES BY YEAR BY COLLISION TYPE

NE Chehalem Dr/St & Foothills Dr

January 1, 2011 through December 31, 2015

TRUCKS TOTAL PEOPLE PEOPLE CRASHES KILLED INJURED

ONLY NON- PROPERTY FATAL DAMAGE CRASHES CRASHES FATAL COLLISION TYPE

TOTAL

YEAR:

FINAL TOTAL

from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result Please be aware of this change when comparing pre-2011 crash statistics.

## OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT CRASH SUMMARIES BY YEAR BY COLLISION TYPE

CDS150 11/06/2017

January 1, 2011 through December 31, 2015 NE Chehalem Dr/St & NE North Valley Rd

RELATED INTER-SECTION 000 00 00 00 SECTION INTER-00 00 DARK DA≺ 00 WET SURF 000 00 00 DRY SURF 0 TO 00 TRUCKS 000 00 00 00 PEOPLE INJURED N 00 TOTAL PEOPLE CRASHES KILLED 000 00 00 00 ONLY 000 DAMAGE 00 00 00 NON- PROPERTY CRASHES 2 - 6 FATAL CRASHES 000 00 00 00 0 FATAL TURNING MOVEMENTS COLLISION TYPE FINAL TOTAL YEAR: 2015 ANGLE 2012 TOTAL YEAR: 2014 YEAR: 2012 2015 TOTAL YEAR: 2011 2011 TOTAL 2014 TOTAL ANGLE ANGLE ANGLE

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ROAD OFF.

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from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result Please be aware of this change when comparing pre-2011 crash statistics.

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## CDS150 11/06/2017

# OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT CRASH SUMMARIES BY YEAR BY COLLISION TYPE

NE Foothills Dr & Hillsboro-Silverton Hwy January 1, 2011 through December 31, 2015

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	TRICKS		0	0	0		0	0		0	0		0	0	
	PEOPLE N.II IRED	C	0	0	0		0	0		0	0		-	τ-	
	TOTAL PEOPLE	0	0	0	0		0 (	0		0	0		0	0	
	TOTAL		_	~	***		<del></del> ,	<del>-</del>		~	-		₹~	-	
NON- PROPERTY	DAMAGE	-	_	<del>4</del>	₹~		· ·	_		-	-		0	0	
-NON	FATAL CRASHES	0	0	0	0	•	0 0	>		0	0		Ψ-	-	
	FATAL CRASHES	0	0	0	0	ć	<b>&gt;</b> c	>		0	0		0	0	
	COLLISION TYPE	YEAR: 2015 TURNING MOVEMENTS	2015 TOTAL	YEAR: 2014 TURNING MOVEMENTS	2014 TOTAL	YEAR: 2013	2013 TOTAL	2010 C C C C C C C C C C C C C C C C C C	YEAR: 2012	ANGLE	2012 101AL	YEAR: 2011	ANGLE	2011 IOTAL	

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

NE Foothills Dr & Main St

January 1, 2011 through December 31, 2015

NON- PROPERTY

TRUCKS MAGE TOTAL PEOPLE PEOPLE ONLY CRASHES KILLED INJURED DAMAGE FATAL CRASHES

CRASHES

TOTAL

COLLISION TYPE YEAR:

FINAL TOTAL

from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result

PAGE: 1

RELATED ROAD

DARK SECTION

DAY

WET

DRY SURF

INTER-

INTER-SECTION

# OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT CRASH SUMMARIES BY YEAR BY COLLISION TYPE

CDS150 11/06/2017

NE North Valley Rd / NE Bell Rd & Hillsboro-Silverton Hwy January 1, 2011 through December 31, 2015

OFF.	ROAD		0	0	0		0	0		₹	0	τ-		0	0	-
INTER- SECTION	RELATED		0	0	0		0	0		0	0	0		0	0	0
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	DARK		0	0	0		0	0		_	0	-		0	0	-
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WET	SURF		~	0	~		0	0		0	0	0		<del>~~</del>	τ-	2
DRY	SURF		4	_	5		8	7		τ	~~	7		0	0	თ
	TRUCKS		0	0	0		0	0		0	0	0		0	0	0
PEOPLE	INJURED		7	0	7		τ	~~		-	0	τ-		0	0	တ
PEOPLE	ZELED		0	0	0		0	0		0	0	0		0	0	0
	CRASHES		5	τ	φ		7	2		-	~	2		~	τ-	=
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NON- F FATAL	CRASHES		4	0	4		-	-		-	0	~		0	0	ဖ
	CRASHES		0	0	0		0	0		0	0	0		0	0	0
	COLLISION TYPE	YEAR: 2015	ANGLE	TURNING MOVEMENTS	2015 TOTAL	YEAR: 2013	TURNING MOVEMENTS	2013 TOTAL	YEAR: 2012	FIXED / OTHER OBJECT	TURNING MOVEMENTS	2012 TOTAL	YEAR: 2011	ANGLE	2011 TOTAL	FINAL TOTAL

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

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Generated with PTV VISTRO Version 5.00-02

Kings Landing TIA Sconario 1: 1 AM Existing & Background

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Kings Landing TIA

Vistro File: J:\...\Kings Landing TIA - Newberg.vistro Report File: J:\...\AM Existing & Background.pdf

Scenario 1 AM Existing & Background 12/11/2017

## Intersection Analysis Summary

٥	Intersection Name	Control Type	Method	Worst Myrnt	VIC	Delay (s/veh) LOS	SOT
-	N Valley Rd at Chehalem Dr Two-way stop	Two-way stop	HCM 6th Edition	SB Thru	0.052	11.5	60
က	NE Terrace Dr al Hwy 219	Two-way stop	HCM 6th Edition	SB Left	0.048	14.8	æ
4	N Valley Rd at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.433	35.6	ш
5	Chehalem Dr at Foothills Dr Two-way stop	Two-way stop	HCM 6th Edition	WB Left	0.258	13.7	83
9	Foothills Dr at Hwy 219	Two-way stop	HCM 6th Edition	WB Left	0.705	73.2	L.
2	West Access at Chehalem Dr Two-way stop	Two-way stop	HCM 6th Edition	WB Left	0.033	9.4	<
10	Main at Foothills	Two-way stop	HCM 6th Edition	NB Left	0.286	18.8	ပ
13	N Valley Rd at Bruce Dr	Two-way stop	HCM 6th Edition	NB Left	0.000	10.0	4

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value, for all other control types, they are taken for the whole intersection.

Gonerated with PTV VISTRO Vorsion 5.00-02

Kings Landing TIA

Sconario 1: 1 AM Existing & Background Intersection Lavel Of Service Raport Intersection 1: N Valley Rd at Chehalem Dr

Dolay (sec / veh): Level Of Service: Volume to Capacity (v/c):

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Mothod; Analysis Period;

11.5 B 0.052

Intersection Setup

Left Thru Right 12.00 12.00 N Velloy Rd 45.00 00'0 Υes Right 12.00 N Valley Rd Eastbound Left Thru 12.00 12.00 45.00 Ves + Loft Thru Right 12.00 12.00 12.00 Chehalem Dr Southbound 35.00 Yes Left Thru Right 12.00 12.00 12.00 Chehalem Dr Northbound 35.00 Yes Turning Movement
Lane Width [fi]
No. of Lanes in Pocket
Pocket Length [fi]
Speed [inph]
Grede [fis]
Crosswalk Lane Configuration Approach

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Namo	0	Chehalem Dr	à	0	Chehalem Dr	Ž	١	N Valloy Rd	P		N Valloy Rd	_
Base Volume Input (veh/h)	22	6	4	9	ž	2	7	===	32	5	49	9
Base Volume Adjustment Factor	1,0948	1.0948	1.0948	1,0948	1.0948	1.0948	1.0948	1.0948	1.0948	1.0948	1.0948	1.0948
Heavy Vohiclos Porconlage [%]	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40
Growth Rate	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	8.	9,1	18
In-Process Volume (veh/h)	0	0	٥	٥	٥	٥	٥	0	o	°	٥	0
Site-Generated Trips [veh/h]	9	0	2	٥	۰	٥	0	0	~	2	٥	-
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	٥	٥	٥	0
Pass-by Trips [voh/h]	0	0	٥	0	0	°	0	0	0	0	٥	0
Existing Site Adjustment Volume (veh/h)	0	٥	٥	۰	0	٥	٥	0	٥	٥	0	0
· Other Volume [veh/h]	0	٥	۰	٥	۰	۰	٥	٥	0	۰	۰	0
Total Hourly Volumo (velvh)	99	10	4	=	8	5	8	122	37	-	22	1
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Other Adjustment Factor	1,0000	1.0000	1.0000	1.0000	1,0000	1.0000	1,0000	1.0000	1.0000	1.0000	1,0000	1.0000
Total 15-Minute Volume [veh/h]	6	င	9	င	8	-	2	98	Ξ	2	9	~
Total Analysis Volume [volvh]	35	12	8	53	5	9	6	144	44	8	2	8
Podestrian Volume [ped/h]		٥				Γ		۰			۰	
Podestrian Volume [ped/h]		0			0			٥				0

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Kings Landing TIA

Scenario 1: 1 AM Existing & Background

Free Free Stop 2 Stop ટ Storago Area (vch)
Two-Stage Gap Acceptance
Number of Storago Spaces in Median Intorsection Settings
Priority Scheme
Ffered Lano

			<	0.19	4.77	Ī	Ī		I
			٧	0.19	4.77	0.77	4		
	10.0	1.7.1	٧	0.19	4.77				
	5	87,43	<	0.46	11.52				
	1		4	0.46	11.52	9,34	4		
	10.0	7.45	٧	0.46	11.52			150	_
	0.01	9.19	4	0.26	6.40			3.6	-
	0.05	11.50	6	0.26	6.40	11.17	8		
	0.02	11.29	8	0.26	6.40				
	0.02	9.80	<	0.33	8.29				
	0.02	11.47	8	0.33	8.29	10.97	8		
silis	90.0	11,46	8	0.33	8.29				
Movement, Appreach, & Intersection Res	V/C, Movement V/C Ratio	d_M, Dalay for Movement [s/vah]	Movement LOS	95th-Percentile Queue Length (veh)	95th-Perconillo Quavo Length [ft]	d_A. Approach Dotay [s/vah]	Approach LOS	d_1, Intersection Dolay [s/veh]	Intersection LOS
	Movement, Appraach, & Intersection Results	6 0.02 0.02 0.02 0.05 0.01 0.01	6 0.02 0.02 0.02 0.03 0.01 0.01 0.01 0.00 0.00 0.00 0.00	66 0.02 0.02 0.02 0.05 0.01 0.01 0.01 0.00 0.00 0.00 0.00	6         0.02         0.02         0.02         0.03         0.04         0.01         0.	6         0.02         0.02         0.02         0.02         0.05         0.05         0.01         0.01         0.01         0.01           46         11.47         9.80         11.29         11.50         9.19         7.45         7.45         7.71         7.71           8         A <td>6         0.02         0.02         0.02         0.05         0.05         0.01         0.01         0.01           46         11.47         9.80         11.29         11.50         9.19         7.45         7.77           13         0.33         0.33         0.28         0.26         0.26         0.46         0.46         0.46         0.15         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         4.77         4.77           10.97         11.37         0.40         0.40         11.52         11.52         11.52         4.77         4.77           10.97         11.47         0.34         0.34         0.74         0.77         0.77         0.77</td> <td>6         0.02         0.02         0.02         0.03         0.01         0.01         0.01         0.01           46         11.47         9.80         11.29         11.50         9.19         7.45         7.771         7.771           13         0.33         0.33         0.26         0.26         0.46         0.46         0.46         0.49         0.19         0.19           1057         0.33         0.30         0.40         0.40         11.52         11.52         4.77         4.77         4.77           1057         0.31         0.23         0.26         0.26         0.46         0.46         0.49         0.19         0.19         0.19         0.19         0.17</td> <td>6         0.02         0.02         0.02         0.03         0.01         0.01         0.01         0.01           46         11.47         9.60         11.29         11.50         9.19         7.45         0.01         7.71         7.71           13         0.33         0.33         0.26         0.26         0.46         0.46         0.49         0.19         0.19           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.70         8.70         8.77         4.77         4.77         4.77           8</td>	6         0.02         0.02         0.02         0.05         0.05         0.01         0.01         0.01           46         11.47         9.80         11.29         11.50         9.19         7.45         7.77           13         0.33         0.33         0.28         0.26         0.26         0.46         0.46         0.46         0.15         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         11.52         4.77         4.77           10.97         11.37         0.40         0.40         11.52         11.52         11.52         4.77         4.77           10.97         11.47         0.34         0.34         0.74         0.77         0.77         0.77	6         0.02         0.02         0.02         0.03         0.01         0.01         0.01         0.01           46         11.47         9.80         11.29         11.50         9.19         7.45         7.771         7.771           13         0.33         0.33         0.26         0.26         0.46         0.46         0.46         0.49         0.19         0.19           1057         0.33         0.30         0.40         0.40         11.52         11.52         4.77         4.77         4.77           1057         0.31         0.23         0.26         0.26         0.46         0.46         0.49         0.19         0.19         0.19         0.19         0.17	6         0.02         0.02         0.02         0.03         0.01         0.01         0.01         0.01           46         11.47         9.60         11.29         11.50         9.19         7.45         0.01         7.71         7.71           13         0.33         0.33         0.26         0.26         0.46         0.46         0.49         0.19         0.19           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.29         8.40         8.40         11.52         11.52         4.77         4.77           10.97         8.70         8.70         8.77         4.77         4.77         4.77           8

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Two-way stop HCM 6th Edition 15 minutes

Kings Landing TIA
Scenario 1: 1 AM Existing & Background
Intersection Lavel Of Service Report
Intersection 3: NE Terrace Dr at Hwy 2:19
Deby (sec / voh):
Level Of Service:
Volumo to Capacity (v/c):

14.8 B 0.048

Intersection Setup

Control Type: Analysis Method: Analysis Period:

	_		·	-	_	1	_	-	
Hwy 219	Southwestbound		Right	12.00	0	15.1.41	40.00	0.00	Yes
Hwy	Southwe		Thru	12.00	0	****	40	0	۶
219	thound		Thru	12.00	0	17 - 566	8	0	8
Hwy 219	Northeastbound	`	Lea	12.00	-	300.00	40.00	00:0	Yes
ace Dr	punoc		Right	12.00	0	100	8	0	8
NE Terrace Dr	punoquinos	þ	no.i	12.00	0	14539	25.00	00:00	Yes
Name	Аррговсћ	Lane Configuration	Tuming Movement	Lane Width [R]	No. of Lanes in Pocket	Pocket Length (A)	Speed (mph)	Grade [%]	Crosswalk

	·	,		γ		_	<b></b>		,		_	<del>,</del>	,	<b></b>	<b></b> _	.,
Hwy 219	4	1,0948	4.80	1.00	0	0	0	0	0	0	4	0.7900	1,0000	-	5	
Hwy	193	1,0948	4.80	1,00	0	0	0	0	٥	۰	211	0.7900	1,0000	19	267	0
Hwy 219	277	1,0948	4.80	1.00	0	0	0	o	0	0	303	0.7900	1,0000	96	384	
ƙw <del>i</del> l	14	1.0948	4.80	1.00	0	-	0	0	۰	0	16	0.7900	1.0000	5	8	0
NE Terrace Dr	30	1.0948	4.80	1.00	0	4	0	0	0	0	37	0.7900	1,0000	22	47	
NE Ter	12	1,0948	4.80	1.00	0	2	0	0	0	0	15	0.7900	1,0000	ĸ	19	0
Name	Base Volume Input [veh/h]	Base Volumo Adjustment Factor	Heavy Vohicles Percentage [%]	Growth Rate	In-Pracess Volume (vervh)	Site-Generated Trips (veh/h)	Diverted Trips [veh/h]	Pass-by Trips [ven/h]	Existing Site Adjustment Volume (yeh/h)	Other Volume [velVh]	Total Hourly Volume (velufi)	Poak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Volumo (veh/h)	Podastrien Volumo [ped/h]

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Report File: J.Y...VAM Existing & Background.pdf Vistro File: J.Y...Kings Landing TIA - Newberg.vistro

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K Birky, PE PTOE

K Birky, PE PTOE

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Free Kings Landing TIA Scenario 1: 1 AM Existing & Background Stop Priority Scheme
Fined Lano
Slonge Ave Jehel
Two-Slonge Gap Acceptance
Number of Slonge Spaces in Median
Movement, Appraach, & Intersection Results

운

V/C, Movement V/C Ratio	0.05	90.0	0.02	8.1		
d_M, Dolay for Movement [s/veh]	14.76	10.45	78.7			
Movement LOS	9	8	٧	<	٧	4
95th-Percentile Queue Length (veh)	0.37	0.37	0.05	0.00	0.00	0.00
95th-Percentile Queue Length (ft)	9.16	9.16	1.19	0.00	0.00	0.00
d_A, Approach Dolay [s/veh]	11.	11.69	0.39	61	ő	0.00
Approach LOS	8		_			
d_I, Intersection Dolay [s/voh]			1.2	1.25		
Intersection LOS			9			
		***************************************		-		

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Kings Landing TIA

Scenario 1: 1 AM Existing & Background
Intersection Lavel Of Service Report
Intersection 4: N Valley Rd at Hwy 219
Dollay (sec / vah):
top
Lovel Of Service:
Volume to Capacity (v/c):

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Method: Analysis Period:

Freo

35.6 E 0.433

Intersection Setup

_		~~~	_	-	_			
_		Right	12.00	0	- 35			
Vestboun	+	The Same	12.00		2	45.00	8	Yes
^		Left	12.00	٥	20 Karel			
		Right	12.00	٥				
astbound	+	Thru	12.00			45.00	00.0	Yes
		Loft	12.00	0	2.5 2.5 2.5			
-		Right	12.00	0	 31			
unoquino	+		12.00	1		40.00	8.0	Yes
S		μgη	12.00	٥	100			
, q		Right	12.00	٥	0.004			
lorthboun	+	Thru	12.00		 	40.00	0.00	ξą,
٦		refi	12.00	0	14.1			
Approach	Lane Configuration	Turning Movoment	Lane Width [N]	No. of Lanes in Pocket	Pocket Length (fi)	Speed [mph]	Grade [%]	Crossweik
	Approach Northbound Southbound Eastbound Westbound	Narthbound Southbound Eastbound	Marthbound   Southbound   Eastbound   Westbound   We	Nenthbound   Southbound   Eastbound   Westbound   Southbound   South	Northbound   Southbound   Estbound   Westbound   Wes	Northbound   Southbound   Eastbound   Nesthound   Southbound   Southbound   Eastbound   Nesthound   Nesthound	Monthbound   Southbound   Eastbound   Westbound   We	Monthbound   Southbound   Ensitoound   Westiround   Wes

_	_	_	·			<b>,</b>		_								
P	9	1.0948	4.00	1.00	°	٥	٥	0	0	0	18	0.7600	1.0000	9	24	
N Valley Rd	48	1.0948	4,00	1.00	0	-	·	0	۰	•	Z	0.7600	1.0000	200	1.7	0
Z	82	1.0948	6,0	1.00	٥	٥	0		۰	۰	8	0.7600	1.0000	8	118	
F	18	1.0948	4.00	1.00	•	۰	0	ŀ	0	0	8	0.7600	1,0000	-	92	Ī
N Valloy Rd	88	1.0948	4.00	1.00	۰	-	٥	0	۰	۰	g	0.7600	1.0000	5	124	0
-	16	1.0948	4.8	1.00	٥	-	٥	٥	٥	٥	19	0.7600	1,0000 1,0000	9	22	
	11	1.0948	4.00	1.00	0	-	٥	۰	۰	۰	20	0.7600	1,0000	-	56	
Hwy 219	18	1,0948	4.00	1,00	0	٥	0	۰	۰	۰	95	0.7600	1.0000	34	125	۰
	24	1,0948	4.00	1.00	0	0	۰	٥	٥	0	56	0.7600	1.0000	6	g	
	120	1.0948	4.00	1.00	0	+	0	٥	٥	0	132	0.7600	1,0000	43	174	
Hwy 218	155	1,0948	4.00	1.00	0	1	0	0	0	0	171	0.7600	1,0000	26	225	0
	13	1.0948	4.00	1.00	٥	0	0	0	٥	٥	14	0.7600	1.0000	ĸ	18	
Name	Base Volume Input (veh/h)	Base Volume Adjustment Factor	Heavy Vohicles Porcentago [%]	Growth Rate	In-Process Volume [veh/h]	Site-Gonerated Trips [veh/h]	Diverted Trips (veh.m)	Pass-by Trips (veh/h)	Existing Site Adjustment Volume (veh/h)	Other Volume (veh/h)	Total Hourly Volume (velum)	Poak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Voluma (volvh)	Podestrian Voluma [pad/h]

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Kings Landing 71A Scenario 1: 1 AM Existing & Background

Intersection Settings

 
 Vic, Movement Approach, & Intersection Results
 0.01
 0.03
 0.03
 0.06
 0.03
 0.03
 0.03
 0.03
 0.03
 0.03
 0.03
 0.17
 0.03

 d. M. Deley for Movement LYCR Review
 0.01
 7.57
 8.23
 8.23
 7.55
 15.83
 35.59
 31.16
 27.34

 Abbreach Long In Intersection Gueue Length [vill]
 1.24
 1.24
 1.24
 1.24
 0.57
 0.57
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 Stop S ŝ ٥ Stop Š ş Free Free Number of Storage Spaces in Median Approach LOS
d\_l, Intersection Dolay [s/veh]
Intersection LOS Storago Area (veh) Two-Stage Gap Acceptance Priority Scheme Flored Lane

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Kings Landing TIA

Scenario 1: 1AM Existing & Background
Intersection Lavel of Sorvice Report
Intersection 5: Chehalem Dr at Foothills Dr
stop
Level Of Service:
Cédion
Volume to Capacity (VC): Two-way stop HCM 6th Edition 15 minutes

13.7 B 0.258

Intersection Setup

Control Type: Analysis Method: Analysis Period:

Right 12.00 Foothills Dr Westbound 25.00 Ves F 12.00 0 12.00 Chehalem Dr Southbound 35.00 Yes Left 12.00 Right 12.00 Chehalem Or Northbound 35.00 Yes 12.00 Turning Movement
Lane Width [it]
No. of Lanes in Pocket
Pocket Langli [it]
Speed (right)
Grade [%]
Crosswalk Lane Configuration Approach

11.25

	Г	Т	Т	Т	Г	Т	Т	Т	Т	Т	т-	1	T	Т	Т-	Т
Foothills Dr	17	1,0948	7.40	1.00	٥	ç	0	0	٥	0	24	0.6100	1,0000	5	39	
Footh	7.1	1.0948	7.40	1.00	o	13	0	0	o	°	91	0.6100	1.0000	37	149	0
em Dr	23	1,0948	7.40	1.00	0	18	0	0	٥	0	43	0.6100	1.0000	18	20	
Chehalem Dr	31	1.0948	7.40	1.00	0	7	0	0	0	0	41	0.6100	1.0000	11	1.9	0
lem Dr	129	1,0948	7.40	1.00	0	4	0	0	o	0	145	0.6100	1.0000	59	238	
Chehalem Dr	26	1.0948	7.40	1,00	0	9	0	o	o	0	34	0.6100	1,0000	14	8	0
Name	Base Volume Input (veh/h)	Base Volume Adjustment Factor	Heavy Vohicles Percentage [%]	Growth Rate	In-Process Volume (vetvh)	Site-Generated Trips [veh/h]	Diverted Trips [veh/h]	Pass-by Trips (ven/h)	Existing Site Adjustment Volume (vehuh)	Other Volume (veh/h)	Total Hourly Volume (valvh)	Poak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Volume [velVh]	Podestrian Volumo (ped/h)

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Intersection Settings

Stop Free Free Priority Schemo
Flored Lano
Storago Aras (vel)
Two-Stage Gap Acceptance
Number of Storago Spaces in Median

Number of Storage Spaces in Median						
Movement, Appreach, & Intersection Results	ults					
V/C, Movement V/C Ratio		27	0.05		0.26	0.05
d_M, Dolay for Movement [s/veh]		8	80.8		13.74	11.72
Movement LOS	٧	4	4	*	8	8
95th-Percentile Queue Length [veh]	0.00	0.00	0.37	0.37	1.28	1,28
95th-Percentile Queue Length (ft)	00'0	0.00	9.31	9.31	31.92	31.82
d_A. Approach Dolay (s/vah)	0.00	8	3.	3,95	13	13.32
Approach LOS						1
d_I, Intersection Dolay [s/veh]			4	4.92		
Intersection LOS				3		

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Kings Landing 71A

Sconario 1: 1 AM Existing & Background Intersection Lavel Of Service Report Intersection 6: Foothills Dr at Hwy 219

Dolay (sec / voh): Level Of Service: Volume to Capacity (v/c):

73.2 F 0.705

Control Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutos

Foothills Dr Westbound 25.00 0.00 Yes Foothills Dr Eastbound 25.00 0.00 Yes Hwy 219 35.00 Ves Hwy 219 Northbound 35.00 Yes Turning Movement
Lano Width [ii]
No. of Lanes in Pocket
Pocket Langth [ii]
Speed [mph]
Grade [%]
Grade [%] Lane Configuration Approach Intersection Setup

Volumos

Hwy 218			_		,			<b>,</b>	-								
Hwy 218	L	52	1,0946	5.00	9.	٥	٥	٥	0	0	0	27	0.8100	1.0000	8	8	
Hwy 218	oothills D	ç	1.0948	5.00	1.00	0	0	0	۰	0	٥	=	0.8100	1.0000	6	4	ŀ
Hwy 218   S   Hwy 218   Forbillis D		11	1,0948	5.00	1.00	٥	٥	٥	0	٥	٥	g	0.8100	1,0000	92	9	
Hwy 218	_	137	1.0948	6.00	1.00	0	0,	0	0	٥	٥	160	0.8100	1.0000	49	198	Γ
Hwy 218	Coothills D	ţ.	I	5.00	1.00	0	٥	0	٥	٥	٥	F	0.8100	1.0000	6	4.	ŀ
Hwy 218   Hwy	_	25		5.00	1.00	٥	۰	0	٥	٥	٥	27			8	8	
Hwy 219  31 246 35 5  1.0346 1.0346 1.0348 1.0348  1.00 1.00 1.00  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  0 0 0 0  103 273 38 5  0.6100 0.6100 0.6100  1.0000 1.0000 1.0000  1.2000 1.2000 1.2000  1.2000 1.2000 1.2000  1.2000 1.2000 1.2000		15		5.00	1.00	٥	٥	0	0	۰	٥	16	0.8100		2	20	
Hwy 218  1.0948 1.0948 1.0948 1.0048 1.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Hwy 219	175		6.00	1.00	۰	4	0	0	٥	۰	196	0.8100	1.0000	89	242	
Hwy 218 91 246 1.0346 1.0346 5.00 5.00 1.00 1.00 0		5	1.0948	5.00	1.00	٥	٥	٥	٥	0	0	5	0.8100	1,000	~	9	
91 1.0948 5.00 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		35	1.0948	5.00	1,00	٥	0	0	0	0	٥	38	0.8100		42	47	
	Hwy 219	248	1,0948	5.00	1.00	0	1	0	0	0	0	273	0.8100	1.0000	g	337	۰
Name See Volume Input (vehh) Volume Adjustment Factor Yokume Adjustment Factor Yokume Adjustment Factor Yokume John Factor Fracess Volume (vehh) Diverted Trips (vehh) Factor Till Adjustment (volume (vehh) Feak Hour Factor Till Adjustment Factor Till Schikutus (volume (vehh) Adjustment Factor		91	1.0948	5.00	1.00	0	ε	0	0	0	0	103	0.8100	1.0000	32	127	
Base Base Hos- In Siting 1 To- To- To- To- To-	Namo	Base Volume Input (veh/h)	Base Volume Adjustment Factor	Heavy Vehicles Percentage [1/4]	Growth Rate	In-Process Volume (veh/h)	Site-Generated Trips (veh/h)	Diverted Trips [veh/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume (veh/h)	Other Volume (veh/h)	Total Hourly Volume [veh/h]	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume [veh/h]	Total Analysis Voluma (volvh)	Pedestrian Volume (ped/h)

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Intersection Settings

Stop No Stop Free Free Priority Scheme Flared Lano Storage Area (veh)

		†					운			S.	
Movement, Approach, & Intersection Results											
0.10		r	10.0	Γ		0.15	90.0	0.25	0.70	90.0	0.05
9.11		-	8.12		-	27.59	25.43	15.41	73.18	20.31	11,25
٧	\ \	<b>∀</b>	<	<	4	۵	٥	o	ı.	o	8
0.33	0.00	0.00	0.02	0.00	90.0	2.44	2,44	2.44	4.09	0.35	0.35
8.21	0.00	0.00	0.38	0.00	0.00	60.95	60.95	80.95	102.24	8.70	8.70
	2.02	-		0.18			17.83			54.74	
	¥	Н		<			٥			L	Ī
					٦	11.63					T
											Ī

Generated with PTV VISTRO Version 5.00-02

Kings Landing TIA
Sconario 1: 1 AM Existing & Background
Intersection Level Of Service Report
Intersection 7: West Access at Chohalem Dr
Delay (sec / veh):
Lovel Of Service:
Volume to Capacity (v/c):

9.4 A 0.033

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Method: Analysis Period;

Right 12.00 West Access Westbound 30.00 Yes t2.00 12.00 Ę Chehalem Dr Southbound 30.00 Left 12.00 Right 12.00 Chehalem Dr Northbound 30.00 Yes 12.00 0 Turning Movement
Lane Width [ii]
No. of Lanes in Pocket
Pocket Langth [it]
Speed [imph]
Grade [ik]
Crosswalk Lane Configuration Intersection Sotup Approach

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Kings Landing TIA Scanario 1: 1 AM Existing & Background

Intersection Settings

Stop Free Free Priority Scheme Flared Lano

		_	_									
	No			0.01	8.77	¥	0.12	3.06	2			
_	2			0.03	9.44	A	0.12	3.06	9.32	*		
				27.14	:	٧	0.17	4.13	0.38		.91	
				0.00	7,42	<	0.17	4.13	0		Ŧ	1
				1.14	1.	4	0.00	00.00	0.00	_		
			sults		17, 5	٧	0.00	00:0	Ö	,		
Storage Area (veh)	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & Intersection Results	V/C, Movement V/C Ratio	d_M, Dolay for Movement (s/veh)	SOT lyoneway	95th-Percentile Queue Length (veh)	95ւԴ-Регсолії в Оивио Length [ft]	d_A. Approach Dolay [slvoh]	Approach LOS	d_I, Intersection Dotay (s/veh)	Intersection LOS

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Kings Landing TIA

Sconario 1: 1 AM Existing & Background Intersection Lavel Of Service Report Intersection 10: Main at Foothills

Dotay (sec / voh): Lovel Of Service: Votumo to Capacity (v/c):

Two-way slop HCM 6th Edition 15 minutos

Control Type: Analysis Method: Analysis Period:

18.8 C 0.266

Intersection Solup

Thru 12.00 Foothills Dr Westbound 25.00 Yes Left 12.00 0 Right 12.00 Foothills Dr Eastbound 25.00 0.00 Yes Thru 12.00 Right 12.00 Main St Northbound 25.00 0.00 Yes H 12.00 0 Turning Movoment
Lane Width [ii]
No. of Lanes in Pocket
Pocket Lengih [ii]
Speed [inph]
Grede [%]
Crosswalk Lane Configuration Approach Мато

Name	Mai	Main St	Footh	Foothills Dr	Foothalls Dr	als Dr
Base Volume Input [velth]	82	13	174	25	8	164
Base Voluma Adjustment Factor	1.0948	1,0948	1.0948	1,0948	1,0948	1,0948
Heavy Vehicles Percentage [%]	5.20	5.20	5.20	5.20	5.20	5.20
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Voluma (veh/h)	0	0	0	0	0	0
Sile-Generated Trips (velt/h)	0	0	ŧ	0	0	18
Diverted Trips [veh/h]	o	0	0	0	0	0
Pass-by Trips [vehits]	0	0	0	0	0	0
Existing Site Adjustment Volume (velv'h)	0	0	0	0	0	0
Other Volume [velvh]	0	0	0	0	0	٥
Total Hourly Volume [velvh]	63	14	201	37	6	198
Peak Hour Factor	0.5900	0.6900	0.5900	0.5900	0.5900	0.5900
Other Adjustment Factor	1,000	1.0000	1.0000	1.0000	1,0000	1.0000
Total 15-Minute Volume (veh/h)	27	9	85	16	4	2
Total Analysis Volume [velv/h]	107	24	341	63	15	336
Pedestrian Voluma [ped/h]	0				0	
			THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT			

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Intersection Settings

Free 8.21 0.01 Free 14.55 Stop 욷 0.20 Two-Slage Gap Acceptance Number of Storage Spaces in Median Storage Area (veh) Priority Scheme Flared Lane

4 1.32 33.02 0.35 1.32 33.02 0.00 0.00 A 2.80 0.0 0.00 1.37 34.26 19.00 1.37 34.26 Movement, Approach, & Intersection Results
VIC, Movement VIC Ratio

d\_M, Dolay for Movement [siven]

18

Sish-Percontia Queue Length [vet]

95th-Percontia Queue Length [i]

95th-Percontia Queue Length [i]

34.A. Approach Dolay [siven] d\_l, Intersection Dolay [s/veh] Intersection LOS Approach LOS

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Two-way stop HCM 6th Edition 15 minutes

Kings Landing TIA
Sconario 1: 1 AM Existing & Background
Intersection Lavel Of Service Report
Intersection 13: N Valley Rd at Bruce Dr
Dobay (sec / voh):
Level Of Service:
Volume to Capacity (v/c):

10.0 0.000

Intersection Setup

Control Type: Analysis Method: Analysis Period;

Thru 12.00 N Valloy Rd Westbound 45.00 0.00 Yes 12.00 Right 12.00 N Valley Rd Eastbound 45.00 Yes Thru 12.00 Right 12:00 Bruce Dr Northbound 30.00 Yes H Left 12.00 No. of Lanes in Pocket
Pocket Length [it]
Speed [mph]
Grade [%]
Crosswalk Turning Movement Lane Width [ft] Lane Configuration Approach

		·	<del>,</del>	τ	γ							<b>,</b>	,		·	<del>,</del>	
	ny Rd	69	1,0948	7.00	1.90	0	2	0	0	0	0	78	0.8500	1.0000	23	92	
	N Valley Rd	0	1.0948	7.00	1.00	o	0	0	0	0	0	0	0.8500	1.0000	0	°	0
***************************************	ay Rd	0	1,0948	7.00	1.00	°	0	0	0	0	°	0	0.8500	1,0000	0	0	
	N Valley Rd	127	1.0948	7.00	1,00	o	2	0	0	o	0	141	0.8500	1.0000	44	166	0
	ø Dr	0	1.0948	7.00	1,00	0	0	0	0	0	0	0	0.8500	1.0000	0	0	
	Bruce Dr	0	1,0948	7.00	1.00	0	0	o	o	0	0	0	0.8500	1,000	o	0	0
	Name	Base Volume Input (vehih)	Base Volumo Adjustmont Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume (velvh)	Sile-Generated Trips [veh/h]	Diverted Trips [veh/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume [veh/h]	Other Votume (vetyh)	Total Hourly Volume [velum]	Poak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Yoluma (velvh)	Pedestrian Volume [ped/h]

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Free Stop £ Intersection Settings
Phlority Scheme
Flored Lane
Storage Area (veh)
Two-Stage Gap Acceptence
Number of Storage Spaces in Median

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Kings Landing TIA Sconario 1: 1 AM Existing & Background

Kings Landing TIA

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Scenario 1 AM Existing & Background 12/11/2017

Turning Movement Volume: Summary

			I											
ike	Mamo	N <sub>C</sub>	rthbour	ď	ŭ	noqypon	ğ	ш	astboun	Ð	3	estbour	P	Total
200	Omean	Let	- Direct	Right	yon T	Thru	Right	ğ		Right	Ę	Ę	R.	Volumo
Rdatt	Shehalem Dr	ន	5	12	Ħ	8	20	8	122	2	-	2	-	ğ

3 NE Terraco Dr at Hwy 219 15 37		fortess and an inches	South	ponuq	Northea	stbound	Southwe	stbound	Tota
3 NE Tanaca Dr at Hwy 219 15 37	2	HIGH SECTION INGHIE	Left	Right	μoη	Thro	현	Right	Volumo
	6	NE Tarraco Dr at Hwy 219	15	37	16	303	211	4	586

	Southbound	Eastbound	-	Westbound	pur	Total
Left Thru Right Left Thru Right Left Thru Right Left Thru Right	Thru Right	Left Thru	Right	of Thru	Right	Volume
14 171 132 28 95 20 19 94 20 90 54 18	95 20	2	8	2	18	753

	fotomostan Mama	North	ponoc	South	punoq	West	puno	Total
,	microcondi nami	Thru	Right	reft	Thru	Left	Right	Volume
2	shalem Or at Foothilts Dr	g	145	41	43	9	24	378

Total	Volumo	951	
٦	Right	27	
Vestbound	를	=	
5	Ę	ತ	
ē	Right	160	
Enstbound		Ξ	
ш	Feff	27	
٩	Right	9	
Southbound	Thu	<del>1</del> 36	
So	LeR	2	
þ	Right	38	
orthbound		103 273	
ž	Left	103	
Interesting Name	200000000000000000000000000000000000000	Foothills Dr at Hwy 219	
9	2	9	

West Access at Chehalem Dr 51 6 3 63 24 5	_	omen achaertel	North	bound	South	punoquna	West	punox	Total
West Access at Chehalem Dr 51 8 3 63 24 5		מווסו ווספיספוסווו	Thru	Right	go-q	Thru	Loft	Right	Volumo
		West Access at Chehalem Dr	51	8	9	8	24	s	152

_	Johnsonkon Mamo	North	punoq	qısez	puno	West	punox	Total
2	illiciocenti regilo	Left	Right	Thru	Right	Left	Thro	Volume
9	Main at Foothills	63	14	201	37	6	198	522

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Kings Landing 71A Scenario 1: 1 AM Existing & Background

Left Right N Valley Rd at Bruce Dr Intersection Name 13

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

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Kings Landing TIA

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Scenario 1 AM Existing & Background 12/11/2017

**Turning Movement Volume: Detail** 

 
 Final Base
 24
 10
 15
 11
 26
 5
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 122
 55
 54
 7

 Growth Rate
 1,00
 1,00
 1,00
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 Left Thru Right Left Thru Right Left Thru Right Left Thru Volume Type N Valloy Rd at Chehalem Or Intersection Name

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325

	Intersection	Wolling Tuno	South	Southbound	Northeastbound	stbound	Southwe	Southwestbound	Total
2	Name	The same	Left	Right	Left	Thru	Thru	Right	Volume
		Final Base	13	33	15	303	211	4	579
		Growth Rate	1.00	1,00	1.00	1.00	1.00	1.00	
	NE Terrace Dr	In Process	0	0	0	0	0	٥	٥
,	at Hwy 219	Net New Trips	2	4	1	0	0	٥	7
		Other	0	0	0	0	۰	٥	0
_	_	Future Total	15	37	16	303	211	4	586

ç	Intersection	Mahima Tina		Northbound	ğ	တိ	Southbound	pu	ū	Eastbound	9	₹	Westbound	ē	Total
ũ	Namo	odki minoo	Left	Thru	Right	ųe-		Right	Feb	Ę	Right	197	개	Right	Volumo
		Final Base	1	170	131	38	8	19	18	ន	8	8	ន	2	747
		Growth Rate	1.00	1.00	1,00	1.00	1.00	1.00	1.00	1.8	1,00	1.00	1,00	8,	
•	N Valloy Rd et	In Process	0	0	0	0	۰	۰	۰	0	۰	۰	٥	•	0
•	Hwy 219	Net New Trips	0	-		٥	٥	-	-	-	0	0	-	0	9
		Other	0	0	0	0	٥	0	0	۰	٥	٥	۰	٥	٥
		Future Total	1,4	171	132	26	38	20	ş	a	2	8	z	9	753

ç	Intersection		North	Northbound	South	Southbound	West	Westbound	Total
2	Name	voiume 1ypo	Thru	Right	Left		ā	Right	Volume
		Final Base	28	141	\$	গ্ন	82	19	325
		Growth Rate	1.00	1.00	1.00	1,00	9.	<del>1</del> .00	·
¥	Chehalem Dr at	In Process	0	0	0	0		٥	٥
,	Foothalls Dr	Net New Trips	9	4	7	18	t	2	23
		Other	0	0	0	0	0	0	٥
		Future Total	ಸ	145	17	87	16	22	378

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ç	Intersection	Volume Tune		Northbound	Southbo	Southbound	West	Westbound	Total
5	Name	odki sumo	Thru	Right	Left	Thru	Left	Right	Volume
		Final Baso	48	0	0	62	0	0	110
		Growth Rate	1,00	1.00	1.00	1,00	1.00	1,00	
,	West Access at	In Process	٥	٥	٥	0	٥	0	0
_	Chehalem Or	Net New Trips	9	æ	9	-	24	5	44
		Other	0	0	0	0	0	0	0
		Future Total	25	80		ន	72	\$	154

Intersection	2	North	Northbound	qıseg	Eastbound	Westbound	puno	Total
Namo	odki punio	Left	Right	Thru	Right	Lei	Thr	Volume
	Final Baso	63	14	190	37	6	180	493
	Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	
 Main at	In Process	0	0	0	0	0	۰	٥
Foothilis	Net New Trips	0	0	11	0	0	18	29
 	Olher	0	0	0	0	0	0	0
	Future Total	63	7.	201	37	6	198	522

ç	Intersection	Volume Time	North	Northbound	East	Eastbound	West	Westbound	Total
5	Namo	voiume rype	Loft	Right	The	Right	Left	Thru	Volume
		Final Baso	0	0	139	0	0	92	215
		Growth Rate	1.00	1.00	1,00	1.00	1.00	1.00	
\$	N Valloy Rd at	In Process	0	0	0	٥	0	0	٥
2	Bruce Dr	Net New Trips	0	0	2	0	0	2	4
		Olher	0	0	0	0	0	0	0
		Future Total	٥		141	۰	۰	78	219

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Vanion 5.00-02
Signal Warrants Report For Intersection 1: N Valley Rd at Chehalem Dr

#### Warrants Summary

Warrant	Name	Met?
	Eight Hour Vehicular Volume	No
	Four Hour Vehicular Volume	No
	Peak Hour	ON

	E,W	ω,χ	Yes	No	70%
Intersection Warrants Parameters	Major Approaches	Minor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

## Warrant Analysis Traffic Volumes

	Major	Major Streets	Minor	Minor Streets
	3	w	z	S
	68	167	42	57
2	65	160	40	55
3	64	151	39	25
*	54	134	34	46
5	52	127	32	43
9	46	114	29	39
7	43	105	26	38
8	45	100	25	ಸ
6	33	80	20	27
10	31	75	19	58
- 11	31	75	19	92
12	29	72	18	25
13	27	65	16	22
14	24	99	15	21
15	24	60	15	21
16	24	58	15	50
17	14	33	8	11
18	7	18	S	9
19	7	17	4	9
20	3	7	2	2
21	2	5	+	7
22	2	2		2
23	1	3		-
\$3	-	3	-	*

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Kings Landing 71A Sconario 1: 1 AM Existing & Background

Warrant Analysis by Hour

Warrant 3	Condition B	ž	ş	Š	S	ş	£	운	£	ટ	ž	ž	Q.	ž	ટ્ટ	ş	ş	ž	ş	S.	ş	Š	2	Ş	ş	٥
Warrant 2 Warrant 3		δ	δ	Ν̈́ο	No	No No	Ş	2	Š	2	ž	ş	οŅ	£	ટ્ટ	ş	£	Š	Š	ş	ş	ž	2	ş	ž	o
	%95	Š	Š	No	No	S	ટ	٥	ş	ş	ş	Š	ž	Š	S	ટ્ટ	ž	2	S.	٥٧	Š	ž	ş	ş	Š	٥
Condition B	%02	ΝO	Νo	Ν̈́o	No	Νο	٥	ş	ટ	ş	ş	ટ્ટ	Ñ	욷	ž	ž	ş	ž	No	οN	Š	ş	Ş	ş	Š	٥
Warrant 1 Condition B	%08	Νo	No	No	No	νo	No	No	No	Š	δ	ş	Š	Š	ž	Š	ž	ž	ν	Š	No	S.	No	ž	Š	٥
	%00 <b>1</b>	οŅ	οN	ON	No	Νo	No	ν	No No	ON.	٥N	Ş	ON.	٥	e N	No	ટ્ટ	Š	Š	No	8	Š	No	ş	Š	0
1	%95	Νo	٥N	ON.	Š	οŅ	ON	No	Νo	ON	ν̈́	No	No	No	٥N	٥	ş	ટ્ટ	Š	٥	ŝ	٥N	oN N	ž	Š	0
Warrant 1 Condition A	%02	ş	οŅ	ON	No	οN	οŅ	Ş.	No	٥	٩	Š	No	No	No	No	Š	Š	Š	οN	No	No	No	S.	No	0
Varrant 1	%08	Ş	οŅ	No	Š	S	Q.	ş	õ	ş	No	ş	So.	No	Š	No	Ş	ş	No	o <sub>N</sub>	Š	S,	No	ş	Νo	0
	100%	No	No	οN	Νo	Š	Š	ş	δ	οŅ	ટ	ş	٥	Š	ş	No	٥٤	S.	No	νo	No	No	S	ş	No	0
Minor Lanas	Volume	88	88	93	8	75	89	62	29	47	45	45	43	38	38	36	35	19	#	10	4	က	က	2	2	
Minor	Number	2	7	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2	7	2	2	
Lanes	Volume	235	225	221	188	179	160	148	141	113	106	£	101	92	2	8	83	47	25	24	10	1	7	4	4	
Major Lanes	Number	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	7	2	2	
Hour		-	2	c	4	2	9	-	8	6	õ	Ξ	12	13	44	15	18	17	18	19	50	21	22	ន	24	Hours

#### Warrant 3 Condition A

_	·	,	_		_	<b>,</b>		,			_
ø	11	-	0;10	No	25	ON.	334	4	SNO.	o <sub>X</sub>	0
Z	11.2	-	20:0	No	42	No	334	4	No	No	7
Orientation	Total Stopped Delay Per Vehicle on Minor Approach (s)	Numbor of Lanes on Minor Street Approach	VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	Dolay Condition Mot	Volume on Minor Street Appreach During Seme Hour	High Minor Volume Condition Met	Total Entering Volume on All Approaches During Same Hour	Number of Approaches on Intersection	Total Volume Condition Met	Warrant Met for Approach	Warrant Met for Intersection

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#### Warrants Summary

Met?	cular Volume No	wlar Volume No	lour	
Name	Eight Hour Vehicula	Four Hour Vehicular V	Peak Hour	
Warrant	1#	#2	#3	

## Intersection Warrants Parameters

Major Approaches	NE, SW
Ninor Approaches	~
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

Minor Streets	Z	52	88	49	42	40	35	33	31	25	23	23	22	20	19	19	18	10	8	20	2	2	2	-	
Major Streets	MS.	319	306	300	255	242	217	201	191	153	144	144	137	124	115	115	112	64	35	32	13	10	10	9	9
Mejor	NE	215	206	202	172	163	146	135	129	103	97	26	35	84	7.7	π	75	43	24	22	6	9	9	4	4
Hour		-	2	3	4	5	9	7	8	6	10	14	12	13	14	15	16	17	18	19	20	21	22	23	24

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Report File: J.L., VAM Existing & Background.pdf Vistro File: J.L., VKIngs Landing TIA - Newberg. vistro

Generated with PTV VISTRO Version 5.00-02

Kings Landing TIA Scenario 1: 1 AM Existing & Background

## Warrant Analysis by Hour

Warrant 3	Condition	2	2	Š	ž	£	2	2	2	ž	2	ટ	ટ્ટ	ક	2	2	ž	ž	2	ž	2	ž	δ	£	ž	۰
Warrani 2 Warrani		ş	2	ž	2	ž	£	2	£	2	2	2	S	ş	ટ્ટ	£	ş	ş	£	ž	ટ	ş	ş	ş	ş	0
3	%99	χοχ	χes	2	2	£	ક	2	ş	ટ	ş	No	Š	ટ્ટ	Š	Š	ş	ş	2 S	2	å	å	ž	2	Š	2
Condition	%02	2	ş	οŅ	Š	ş	ş	운	ટ	ટ	ş	ž	ž	Š	ş	ş	ક્ર	ş	ş	S <sub>S</sub>	ટ્ટ	ટ	å	2	2	0
Warrant 1 Condition B	%08	ટ્ટ	Š	8	ž	Š	ž	ž	ş	ş	ž	ž	ટ્ટ	ş	S	ş	ટ	ž	ş	ş	£	ž	2	٤	ş	۰
	100%	ટ્ટ	ž	ş	ž	ş	ž	ž	£	ş	£	ž	Š	운	Ş	£	ş	£	£	2	ş	ş	£	ş	ş	۰
	%95	δÑ	οN	ş	ž	£	٥	2	ટ્ટ	ş	શ્	Š	Š	ş	Νo	ov.	οŅ	ş	٥	٥٧	ş	ş	£	ş	2	٥
Warrant 1 Condition A	70%	ş	ž	ş	Š	Š	Š	ş	Š	S.	ş	οŅ	Š	No	٥	οN	ŝ	Š	Š	No	ş	ş	ş	ž	ž	0
Varrant 1 (	%09 %09	ž	Š	S.	ş	No	2	운	S.	δ	Ñ	Š	Š	SN SN	No	No.	ž	No	No	No	S.	Š	운	ટ્ટ	2	0
	100%	Ş	No	Š	S <sub>O</sub>	No	No	Š	No	No	Νo	ş	Š	Š	ş	ş	No	No	Š	No	ş	οN	Š	Š	ş	0
Lanes	Volumo	52	22	49	42	40	35	33	31	52	23	23	22	50	13	19	18	0	9	2	2	2	7	-	-	
Minor Lanes	Number		-	1	1	-	1		ļ	-		-		-	-	-	-	-	-	٠	+	-	-	Ŧ	-	
sous	Volume	534	512	502	427	405	383	336	320	256	241	241	229	208	192	192	187	107	29	¥	75	16	16	10	0	
Major Lanas	Number	3	c	ç	3	6		3	6	6		6	6	6	-	-	6	-	-	6	3	9	3	3	9	
Hour		-	2	6	4	2	9	,	8	6	ç	Ξ	12	2	7	5	92	=	2	ş	2	5	55	23	24	Hours

#### Warrant 3 Condition A

Total Stoppod Dalay Por Volticle on Minor Approach (s) Number of Lenes en Minor Steel Approach (s) Number of Lenes en Minor Steel Approach Vehiclotheurs af Stoppod Dolay on Minor Approach (fihlh.mm) Dolay Condision Minor Volume on Minor Steel Approach During Same Hour High Minor Volume Condition Met Total Enterin High Minor Volume Condition Met Number of Approaches on Intersection	11.7 1.7 1.0.10 0.10 No 5.2 5.2 5.2 5.3 8.6
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

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#### Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

## Intersection Warrants Parameters

N.O.	EW	No	No	100%
Major Approaches	Alinor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

## Warrant Analysis Traffic Volumes

Г	Т	T	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	Τ	Т	Т	Т	Т	T	Т	Т	Т
Minor Streets	W	644	128	125	106	101	96	84	80	75	8	99	19	52	48	48	47	27	45	13	2	4	4	3	
Minor	W	162	156	152	130	123	110	102	97	7.8	73	73	70	63	58	58	25	32	18	16	9	5	v.	3	-
treets	z	141	135	133	113	107	96	89	85	89	63	8	61	55	51	51	49	28	16	14	9	4	4	3	
Major Streets	S	317	304	298	254	241	216	200	190	152	143	143	136	124	114	114	111	63	35	32	13	10	10	9	4
Hour		-	2	J	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	z	23	24

ATEP Inc. 12/11/2017

Gonerated with PTV VISTRO Vorsion 5.00-02

Kings Landing TIA Scenario 1: 1 AM Existing & Background

Warrant Analysis by Hour

Warrant 2 Warrant 3	Condition	No	٥N	٥N	ON	No	Ñ	οN	No	οN	Ŷ	οN	Νo	No	No	ş	ş	Š	No	Ş	Š	욷	S.	ş	£	0
Warrant 2		Š	No.	o <sub>N</sub>	ON.	No	No	양	No	Νο	οŅ	οŅ	οN	ON N	ON	No	οŅ	Νo	Νo	Q.	SN.	Νo	οN	No	Š	0
_	56%	ν	Š	٥	οN	No	Š	٥N	No	No	٥N	٥	No	οN	ON	ν	No	٥N	No	Νo	Νo	οN	No	٥N	No	0
Warrant 1 Condition B	70%	ν	Š	٥N	No	No	Νο	No	No	ON	ON	앲	δ	ON	ON	Š	οN	No	No	No	S S	2	٥	ş	Š	0
Warran! ! !	%08	No	No	No	No	δ	οŅ	Νo	No	νo	No	ν	Š	Š	No	Š	No	No	No	No	Š	Š	Š	Š	No	0
,	100%	No	2	Š	No	No	S	٥	No	õ	SN N	No	S <sub>O</sub>	No	No	ş	No	No.	No	No	No	No	No	2	No	0
	56%	Yes	Yes	Yes	Yes	Yes	ν	Š	No	οN	Š	ş	SN N	οŅ	٥٧	No	٥N	No	No	No	No	No	No	No	No	5
Warrant 1 Condition A	70%	Yes	Yes	Yes	No	Š	S	Š	No	No	No	No	οÑ	No	No	٥X	No	οN	No	No	No	νo	νo	No	No	6
Variant 1 (	80%	ş	No.	Š	Š	S.	ş	No	No	Ş	Q.	Š	£	Š	No	S <sub>S</sub>	No	Š	No	No	No	Se Se	No	S <sub>O</sub>	No	0
	100%	No	Š	No	Š	S	ş	No	No	Š	Š	So	οN	οN	No	No	No	No	No	No	No	Š	No	Νo	No	0
Sove	Volumo	295	284	277	236	224	200	186	177	142	133	133	127	115	106	106	3	29	33	29	11	6	6	9	9	
Minor Lanes	Number	2	7	2	2	2	2	7	7	2	2	2	2	2	2	2	~	2	2	2	2	2	2	7	2	
Lanes	Volumo	458	439	431	367	348	312	289	275	220	506	206	197	179	165	165	160	91	51	46	19	14	14	6	6	
Major Lanes	Number	7	2	~	2	2	2	2	7	2	~	2	2	2	2	2	2	2	2	2	2	2	2	7	2	
Hour		-	2	ç	4	22	9	7	8	6	9	=	12	2	14	15	18	4	18	19	20	21	22	æ	24	Hours

#### Warrant 3 Condition A

	,	,			_			,	,		
>	20.9	-	0:46	ON	133	Yes	153	7	ON	NO	٥
ш	33.2	•	1:29	No	162	Yes	753	4	No	No	Z
Orientation	Total Stopped Dalay Per Vehicle on Minor Approach (s)	Number of Lanes on Minor Street Approach	VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	Dolay Condition Mat	Volume on Minor Street Approach During Same Hour	High Minor Volume Condition Met	Total Entering Volume on All Approaches During Same Hour	Number of Approaches on Intersection	Total Volume Condition Met	Warrant Mel for Approach	Warrant Met for Intersection

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Scenario 1: 1 AM Existing & Background
Signal Warrants Report For Intersection 5: Chehalem Dr at Foothills Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	ON

Intersection Warrants Parameters

ທ	ш	OX.	No	100%
Major Approaches	Ninor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

Warrant Analysis Traffic Volumes

		Γ	Γ		Γ	<u> </u>	Γ	Γ	Γ	Γ		Γ				Γ	Γ	Γ		Γ	Γ	Γ	Γ	Γ	Γ	Γ
	Minor Streets	8	115	110	108	92	87	78	72	69	55	52	52	49	45	41	41	40	23	13	12	5	3	3	2	2
	itroots	ø	179	172	168	143	136	122	113	107	88	81	84	77	70	64	64	63	æ	20	18	7	ş	ıcı	4	4
as	Mejor Streets	z	84	81	79		64	57	53	920	40	38	38	36	33	30	30	29	- 47	6	8	3	3	3	2	2
Warrant Analysis Trainc Volumes	Hour		-	2	3	4	S	9	7	8	6	10	11	12	13	14	15	16	17	18	19	50	. 21	22	23	24

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Report File: J.Y...VAM Existing & Background.pdf Vistro File: J.Y...VKIngs Landing TIA - Newberg.vistro

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Warrant Analysis by Hour

Warrant 3	Condition B	£	Š	Ş	ş	ş	£	Š	S	Š.	ટ્ટ	£	£	£	ş	£	ટ્ટ	No	£	ş	2	2	ş	ટ્ટ	ž	٥
Warrant 2 Warrant		Š	δ	Š	S <sub>N</sub>	ş	운	Νo	옷	SN N	£	οN	ટ્ટ	ş	£	Š	oN N	No	No	No	No	ş	ş	ટ્ટ	ş	0
_	%95	No	οŅ	No	٥N	Νo	Š	No	No	ON	οN	No	No	Νo	Š	No	νo	No	No.	οN	ş	õ	ž	ş	ş	0
Condition E	%02	£	No	Ş	Ş	٥N	Š	No	S.	Νo	애	٥N	οN	No	No	٥Ņ	ON	No	No	οŅ	οŅ	£	2	ટ્ટ	ş	0
Warrant 1 Condition B	%08	οN	No	οN	٥N	٥N	Νo	Νo	No	٥N	SN No	οŅ	No	No	No	No	No	No	No	No	No	ν	Š	Š	Ş	0
	100%	Νο	ΝO	No	٥N	OΝ	οN	No	οŅ	οN	ON	ON	QV.	No	No	No	Q.	٥V	νo	No	٩	No	Ş	ž	Ş	0
_	%95	οŅ	No	No	٥N	٥N	Νo	Νo	Νo	٥N	ON	٥N	Ν̈́ο	ON	٥N	٥N	No	No	No	Š	No	No	No	ž	No	0
Warrant 1 Condition A	%02	No	٥	Νo	٥N	No	Š	No	οN	Ŷ	٥N	Νο	No	No	٥N	٥N	Νo	No	No	No	No	No	٥N	νo	No	0
Warrant 1	%08	No.	ΝO	Ñ	ON.	Νo	Ş	οN	٥N	o <sub>N</sub>	ΝO	٥N	No	οN	No	οN	ON	No	No	No	No No	No	Ν̈	Š	No	٥
	100%	No	ON.	οN	ON	No	No	No	٥N	ON.	ON	٥N	No	٥Ņ	٥N	٥N	No	No	No	No	No	No	οN	οN	No	0
Minor Lanes	Volume	115	110	108	26	87	82	72	69	93	25	25	49	45	41	41	40	23	13	12	2	3	3	2	2	
Minor	Number	1	1		1	1	-	+	1		1		1	-		-	+	-			-			,	1	
Major Lanes	Volumo	263	253	247	210	200	179	166	157	126	119	119	113	103	8	æ	92	53	29	26	10	8	8	9	9	
Major	Number	2	2	2	7	2	2	7	2	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Hour			2	3	4	2	9	7	9	6	10	11	12	13	14	15	16	17	18	13	50	21	22	23	24	Hours Mot

Warrant 3 Condition A

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Vention 5:00-02
Signal Warrants Report For Intersection 6: Foothills Dr at Hwy 219

Warrants Summary

Warrant	Name	Met?
1#	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters	
Major Approaches	N, W
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major	Major Streets	Minor	Minor Streets
	Z	S	ш	W
1	217	414	122	198
2	208	397	117	190
3	204	389	115	186
4	174	331	88	158
ç	165	315	93	150
9	148	282	83	135
7	137	261	77	125
8	130	248	73	119
6	104	199	59	95
10	86	186	55	89
11	86	186	55	89
12	93	178	52	85
13	85	161	48	- 11
14	78	149	44	71
15	78	149	44	7.1
16	76	145	43	69
11	43	83	24	40
18	24	46	£1	ន
19	22	41	12	20
20	9	- 43	50	8
21	7	12	4	9
22	7	12	4	9
23	4	8	2	4
24	4	8	2	4

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

Warrant Analysis by Hour

Warrant 2 Warrant 3	Condition B	ž	ş	ž	Š	ટ્ટ	ę.	ş	ş	2	2	ટ્ટ	٤	£	ş	ž	ş	ž	ş	ş	ž	ş	S.	ક	2	•
Warrant 2		ટ્ટ	ž	ટ	ટ	2	£	ş	ž	ş	ş	ş	οŅ	ટ્ટ	٥	£	ટ્ટ	ş	٤	ş	£	ş	2	ક	ş	٥
1	%95	şĝ	Yes	Ϋ́es	Yes	ટ્ટ	٩ وي	2	ş	ş	Š	Š	ş	ž	ટ્ટ	ž	ટ્ટ	ş	ş	ş	Š	å	ş	ž	ş	4
Condition E	%02	Yes	Š	δ	δ	Š	운	ş	Ş	ş	£	ž	ş	ş	ş	S	ş	Š	ş	ş	ş	£	ş	ş	ş	-
Warrant 1 Condition B	80%	ž	No	No	No	٥٧	ž	Š	No	£	ş	ž	νo	ž	ž	δÑ	Š	ž	Š	ž	ş	ž	ş	Š	ş	۰
	100%	S.	No	οN	No	No	ş	Š	ž	g	Š	ž	Š	£	운	Š	ş	No.	Š	ş	ટ્ટ	£	ON.	ટ્ટ	2	۰
	%99	Yes	Yes	Yes	Yes	Yes	Yes	Yos	Yes	Š	S.	δ	No	No	No	Š	οŅ	Š	٥V	ş	£	ž	٥	ş	ş	
Warrant 1 Condition A	70%	Yes	Yes	Yes	Yes	Yes	Yes	٥	No	Ş	٥N	Š	ν	No	No	Νo	No	No	νo	°N	ş	νo	ž	ş	ž	·
Warrant 1	30%	Yes	Yes	\$9,k	\$0 A	say	٥N	οN	Νo	SN No	No	No	Νo	No	No	운	No.	No.	oN O	No	Š	Š	ş	S.	οN	3
	100%	Yes	Yes	٥N	οN	οŅ	οN	No	No	ΝO	No	No	No	No	νo	Š	οN	No	No	No	ž	Š	No	ν	No	~
Minor Lanes	Volume	320	307	301	256	243	218	202	192	2	144	144	137	125	115	115	112	64	35	32	5	10	9	9	9	
Minor	Number	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	9	6	3	6	3	3	
Major Lanes	Volume	631	605	593	505	480	430	398	378	303	264	284	275	246	227	227	221	126	70	63	56	19	19	12	15	
Major	Number	4	4	4	4	4	4	4	4		4	4	4	7	4	4	7	Þ	4	4	4	4	4	4	4	
Hour		-	2	3	4	S	9		8	6	10	11	12	13	4	15	16	17	‡9	19	70	21	22	23	24	Hours

Warrant 3 Condition A

_	,	,		_			_	<del></del>	_	<del></del>	_
M	17.6		0:58	No	198	Yes	951	4	Yes	No	0
W	54.7	2	1:51	No	122	No	951	4	Yes	No	*
Orientation	Total Stopped Delay Per Vehicle on Minor Approach (s)	Number of Lanes on Minor Street Approach	VohicleHours of Stopped Delay on Minor Approach ([h]h:mm)	Dolay Condition Mot	Volume on Minor Street Approach During Same Hour	High Minor Volume Condition Met	Total Entering Volume on All Approaches During Same Hour	Number of Approaches on Intersection	Total Volume Condition Met	Warrant Met for Approach	Warrant Met for Intersection

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Version 5:00-02
Signal Warrants Report For Intersection 7: West Access at Chehalem Dr

Warrants Summary

Warrant	Name	Met?
##	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

	Г	T	Т	Т
o, z		No	Ŋ	%001
Major Approaches	Minor Approaches	Spend > 40mph	Population < 10,000	Warrant Factor

	Minor Streets	я	29	28	27	23	22	20	18	17	14	13	13	12	11	10	10	10	9	3	3		-	-	_	-
	Major Streets	S	53	57	SG	47	45	40	37	35	28	27	27	25	23	21	21	21	12	9	9	2	2	2	-	-
es	Major	Z	99	63	62	53	90	45	42	40	32	30	30	28	28	24	24	23	13	7	7	0	2	2		-
Warrant Analysis Traffic Volumes	Hour			2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

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Gonerated with [21] VISTRO Varsion 5.00-02

Kings Landing TIA Scenario 1: 1 AM Existing & Background

### Warrant Analysis by Hour

Warrant 3	Condition B	ž	ş	S.	ž	Ş	ş	ş	£	ş	οχ	ş	S.	ક	Š	S.	£	ş	ş	2	£	£	욷	ş	ž	٥
Warrant 2 Warrant		ž	S	No No	Ş	Š	No	Ş	No	ટ્ટ	δ	ş	οŅ	£	ž	£	ટ્ટ	οN	δÑ	QV.	ş	Q.	욷	ę.	2	0
_	%95	ž	Š	No	Š	No	ş	Š	Š	γo	Ş.	ş	No	Š	Š	No	ş	No	οŅ	Š	ę.	Š	Νo	No	No	0
Condition E	%02	Š	Š	No	٥N	٥N	οN	ş	No	ş	Νο	Š	Š	ş	οN	S.	ž	N <sub>O</sub>	No	Š	٩	Š	S	ş	S.	0
Warrant 1 Condition B	%08	No	ΝO	No	No	οN	No	No	No	ક્ર	Š	Š	Š	ટ્ટ	Š	ž	ş	οN	ν	No	Š	No	S S	οN	No	0
	100%	Š	Νo	No	No	ջ	Ŷ	No	No	£	Ş	٤	No	Š	ş	No	ş	S.	S	oN N	ş	Š	Ş	Š	Š	0
	56%	ş	δ	No	No	δ	No	No	οN	Š	οN	ş	No	Νo	٥٤	No	No	Š	οN	Š	No	No	ν	No	οN	٥
Warrant 1 Condition A	70%	ş	No	No	Š	Š	Š	No	No	ν	Š	Š	No	No	ş	No	No	Š	No	No	oN N	No	ν̈́	S.	No	0
Variant 1 (	80%	ટ્ટ	Š	No	No	οN	ş	No	٥N	Š	δ	No	No	Š	οN	No	οN	<u>ي</u>	No No	No	S.	ž	Ş	2	Q.	٥
	100%	ν	No	No	No	οN	No	No	No	Š	Š	S.	No	No	Š	No	S <sub>S</sub>	Ñ	No	No	δ.	No	No	No	No	٥
Minor Lanos	Volumo	53	28	27	23	22	50	18	17	4	13	5	12	11	ç	40	9	9	3	3	•		,		,	
Minor	Number	-	-	-	٠		٠	1		-	-	-	1	,	Ţ	1	-	1	-	+	1	-	-	-		
Lanes	Volumo	125	120	117	100	95	85	79	7.5	8	25	25	53	49	45	45	44	25	5	13	2	4	4	2	7	
Major Lanes	Number	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	~	2	2	2	2	2	2	
Hour		-	2	3	4	2	9	7	8	6	10	Ξ	12	13	14	15	16	17	18	19	50	21	22	23	54	Hours Mot

#### Warrant 3 Condition A

w	6.3		0:04	γo	29	No	151	€	No	No	No
Orientation	Total Stopped Dalay Por Vahicle on Minor Approach (s)	Number of Lanes on Minor Street Approach	VohicieHours of Stopped Delay on Minor Approach ([h]h:mm)	Dolay Condition Mot	Volume on Minar Street Approach During Same Hour	High Minor Volume Condition Met	Total Entering Volume on All Approaches During Same Hour	Number of Approaches on Intersection	Total Volume Condition Met	Warrant Mei for Approach	Warrant Met for Intersection

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Version 5:00-02

Scenario 1: 1 AM Existing & Background
Signal Warrants Report For Intersection 10: Main at Foothills

#### Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

## Intersection Warrants Parameters

Major Approaches	₩ 3
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

Hour	Major	Major Straels	Minor Streets
	M	≆	8
-	207	238	77
2	199	228	74
3	195	224	72
4	166	061	62
2	157	181	59
9	141	162	52
1	130	150	49
8	124	143	46
6	88	114	37
10	93	201	35
7	83	107	35
12	68	102	33
13	81	93	30
14	75	98	28
15	75	98	28
16	72	83	27
17	41	48	15
18	23	26	80
19	21	24	80
20	8	10	9
21	9	7	2
22	9	7	2
23	4	2	2
24	Þ	9	2

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Kings Landing TIA Scenario 1: 1 AM Existing & Background

## Warrant Analysis by Hour

Warrani 2 Warrani 3	Condition B	S	ş	ο <sub>N</sub>	δ	δ	ž	ž	ž	ટ્ટ	ş	ક	£	2	운	2	ž	ž	£	Š	ş	S	ž	ž	£	o
Warrant 2		Ş	οŅ	Q.	ş	ş	ક	£	ş	ટ	ę	ş	Ν̈	No	No	ž	ટ્ટ	No	Ñ	Q.	ON	οŅ	ş	ş	ş	0
3	26%	Š	Νo	٥N	۶	ş	ž	No	ટ	ટ્ટ	ş	ş	ş	Š	S.	οN	ν	No	Š	No	No	SN N	Š	ş	Νο	0
Warrant 1 Condition B	70%	۶	ટ્ટ	οN	ž	٤	£	å	ş	2	ę	ž	S S	No	애	٥N	No	양	S,	No	οN	οŅ	οŅ	S	Ñ	0
Warrant 1	80%	Νo	S.	No	ž	No	Š	٥Ş	No	٥٧	oN.	δÃ	Š	No	٥N	O,N	No	No	οN	NG	No	No	No	٥N	Š	0
	100%	No	Q.	No	٩	No	οN	٧	٥	οN	ջ	Q.	ON	Š	No.	٥N	ΟŅ	οN	No	No	No	No	Νo	οN	SN N	0
-	26%	No	2	No	νo	No	ν	٥	No	No	No	٥	Š	δ	oN.	٥N	No	No	٥N	No	No	No	No	νo	No	0
Warrant 1 Condition A	70%	No	ν	S N	No	οŅ	S	õ	٥	٥N	No	No	No	No	Š	٩	No	No	٥N	ν	No	No	No	No	No	0
Warrant 1	80%	No	ν <sub>0</sub>	2	٥N	No	Ş.	8	Š	Š	οN	શ્	No	Š	Š	٩	No	No	No	νo	No	No	No	Š	No	0
	100%	No	No.	No	ě	No	S.	No.	Νo	οŅ	No	Š	No	No	νo	No	No	No	ON	No	No	No	No	No	No	0
Minor Lanes	Volume	11	74	72	62	59	25	49	46	37	35	35	33	30	28	28	27	15	8	8	3	2	2	2	2	
Minor	Number	-		-	-	-	-	-	-		-	·		ŧ			ŀ	1	1	-	-		1	1	,	
Major Lanes	Volume	445	427	419	356	338	303	280	267	213	88	200	161	174	181	161	155	89	49	45	18	13	13	9	6	
Major	Number	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~	2	2	2	2	2	2	
Hour		-	2	3	4	2	9	7	8	0	10	. 11	12	13	14	15	16	17	18	ŧ	20	21	22	ន	24	Hours Met

#### Warrant 3 Condition A

Orientation	Ø
Total Stopped Delay Per Vehicle on Minor Approach (s)	18
Number of Lanes on Minor Street Approach	
VehicleHours of Stopped Delay on Minor Approach ((h)h.mm)	0:23
Delay Condition Met	No
Volume on Miner Street Approach During Same Hour	1.1
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	522
Number of Approaches on Intersection	9
Total Volume Condition Met	No
Warrant Mel for Approach	No
Warrant Met for Intersection	No

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Sconario 1: 1 AM Existing & Background
Signal Warrants Report For Intersection 13: N Valley Rd at Bruce Dr

#### Warrants Summary

Met?	No	No	No
Name	Eight Hour Vehicular Volume	Four Hour Vehicular Volume	Peak Hour
Warrant	#1	#2	#3

## Intersection Warrants Parameters

٠.				_
₩.	8	Yes	ON	%02
Major Approaches	Ninor Approaches	Speed > 40mph	Population < 10,000	Warrani Factor

raffic Volumes	Major Streets Minor Streets	<i>γ</i>	141		133	113	107	96	89	85	89		63	61	55	51	70	49	28		*			4	3 0	
Warrant Analysis Traffic Volumes	Hour		-	2	3	4	2	8	7	8	9	10	14	12	13	14	15	16	17	18	19	20	21	7.7	23	

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Scenario 1: 1 AM Existing & Background Kings Landing TIA

Warrant Analysis by Hour

56% 80% 100% 28% 70% 80% 100% Volume Hour Major Lanes Minor Lanes Number Volumo Number

Warrant 3 Condition A

8 8 2 Total Stopped Dolby Per Vehicle on Minor Approach (s)

Numbor of Lance on Minor Street Approach
Vehiclehlours of Stopped Delsy on Minor Approach (li)Numm)

Delsy Condition Mot
Vehima on Minor Street Approach During Same Hour
High Minor Volume on MI Approache During Same Hour
Number of Approaches on Intersection

Total Entering Volume on MI Approaches on Intersection

Number of Approaches on Intersection

Vehicle Minor Vehicle Condition Met
Total Vehicle Occidion Met
Total Vehicle Occidion Met

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Scenario 1: 1 AM Existing & Background Kings Landing 71A

Kings Landing TIA

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Scenario 1 AM Existing & Background

12/11/2017

Trip Generation summary

Added Trips

Zone ID: Name	Land Use variables Code Ind. Rate	Code	A A	Rato	Quantity	<b>%</b> E	% Out	Trips in	% Out Trips in Trips Out	Total	% of Total Trips
8: Dutchman's Ridge	Homes	1TE 210	11E Dwellin 0.750	0.750	46.000	25.00	75.00	89	92	¥	
10: Gracie's Landing	Homes	17E 210	TE Owellin 0.750	0.750	52.000	25.00	75.00	õ	ส	39	53,42
					Added	dded Trips Total	-=	18	55	23	100.00

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Kings Landing 11A Scenario 1: 1 AM Existing & Background

Kings Landing TIA

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Scenario 1 AM Existing & Background

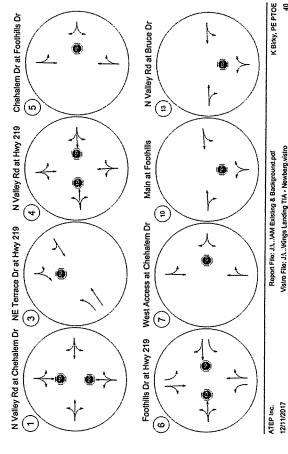
12/11/2017

## Trip Distribution summary

			8	\$2	18			L								
_	Γ.	_	Γ	_	_	_	_	_	_	_	_		_		_	_
96	From Dutchman's Ridge:	Trips	۰	0	٥	٥	-	-	80	٥		55	3	0	۰	56
Zone B: Dutchman's Ridge	From Du Ric	Share %	0.00	0.00	0.00	0.00	5.00	5.00	30.00	0.00	0.00	50.00	10.00	0.00	0.00	100.00
one B: Duto	To Dutchman's Ridge:	Trips		0	0	۰	٥	0	2	٥	0	þ	ı	0	0	2
ž	To Dute Ric	Share %	0.00	0.00	0.00	00'0	5.00	2.00	30.00	0.00	0.00	00'05	10.00	00'0	0.00	100.00
		Zone / Gate	10: Gracie's Landing	15: Kings Landing N	16: Kings Landing S	1; Gate	2: Gate	3: Gate	4: Gate	5; Gate	6: Gate	7: Gate	9: Gate	11: Gate	12; Gate	Total

	97	Lone 10: Gracie & Landing	CIO S L'ANGII	9
	To Gracie'	To Gracio's Landing:	From Gracie's Landing:	om Gracie's Landing:
Zone / Gate	Share %	Trips	Share %	Trips
8: Dutchman's Ridge	0.00		0.00	0
15: Kings Landing N	0.00	٥	9.00	
16: Kings Landing S	0.00	٥	0.00	0
t: Gate	0.00	0	0.00	0
2: Gale	5.00	-	5.00	-
3: Gate	5.00	-	5.00	-
4; Gate	20.00	2	20.00	٥
5: Gate	0.00	0	0.00	٥
6: Gate	0.00	•	0.00	
7: Gate	90.09	9	60.00	8
9; Gate	10.00	-	10.00	6
11: Gate	0.00	0	0.00	٥
12; Gate	00'0	0	0.00	٥
Total	100,00	÷	100.00	2

Scenario 1: 1 AM Existing & Background Kings Landing TIA Report Figure 1: Lane Configuration and Traffic Control Generated with PTV VISTRO Version 5.00-02



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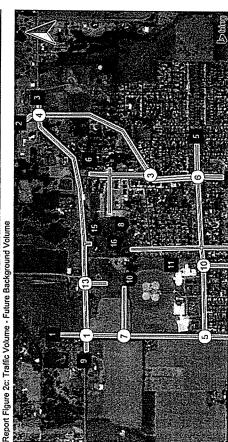
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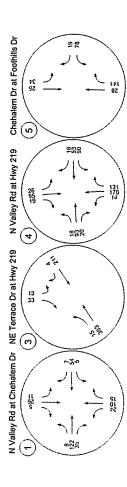
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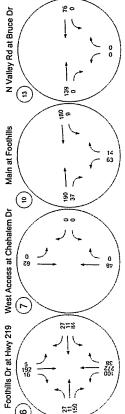
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Kings Landing 11A Scenario 1: 1 AM Existing & Background Varsion 5.00-02







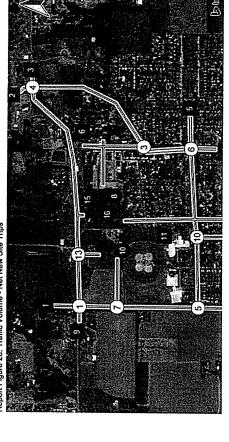
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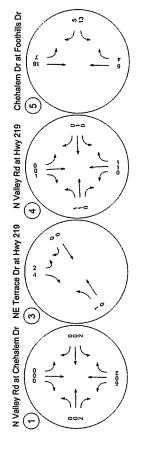
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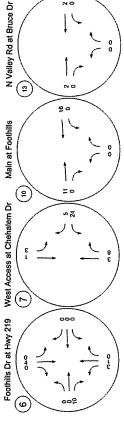
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Kings Landing TIA Scenario 1: 1 AM Existing & Background

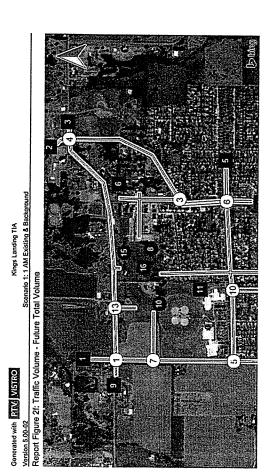






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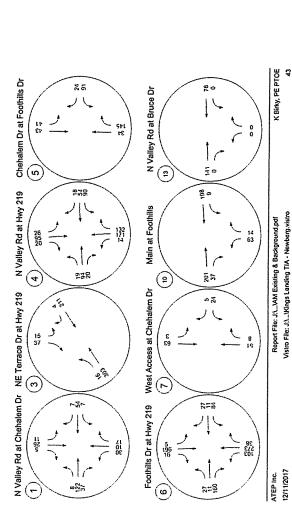
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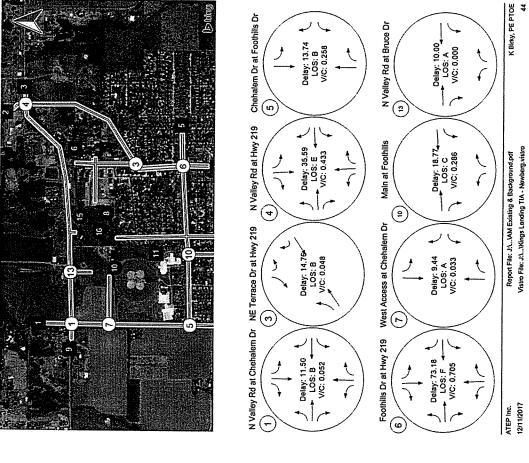


Kings Landing TIA Scenario 1: 1 AM Existing & Background

Report Figure 3: Traffic Conditions Generated with PTV VISTRO

Version 5,00-02





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Kings Landing TIA

Sconario 2: 2 PM Existing & Background

Kings Landing TIA

Scenario 2 PM Existing & Background

12/11/2017

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## Intersection Analysis Summary

	<b></b>							
SOT	æ	O	ш	80	u.	< −	æ	63
Delay (s/veh) LOS	12.0	18.4	48.1	10.2	71.0	9.5	11.9	10.4
A/C	0.042	0.018	0.324	0.065	0.606	0.022	0.057	0.000
Worst Mymt	NB Thru	SB Left	พอ Left	WB Left	WB Left	WB Left	NB Left	NB Left
Method	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition
Control Type	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop
Intersection Name	N Valley Rd at Chehalem Dr Two-way stop	NE Terrace Dr at Hwy 219	N Valley Rd at Hwy 219	Chehalem Dr at Foothills Dr Two-way stop	Foothills Dr at Hwy 219	West Access at Chehalem Dr Two-way stop	Main at Foothills	N Valley Rd at Bruce Dr
QI	-	3	4	5	9	7	10	13

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value, for all other control types, they are taken for the whole intersection.

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Two-way stop HCM 6th Edition 15 minutes

Sconario 2: 2 PM Existing & busing.
Intersection tavel Of Service Report
Intersection 1: N Valley Rd at Chehalem Dr
Doby (sec / veh):
Lovel Of Service:
Volume to Capacity (v/c):

12.0 B 0.042

Intersection Setup

Control Type: Analysis Method: Analysis Period:

_												
Namo	٥	Chehalem Dr	ă	٥	Chehalem Dr	ă	_	N Valloy Rd		L	N Valloy Rd	
Approach	-	Northbound	p	ω,	Southbound	l,		Easlbound		_	Westbound	Ĺ
Lane Configuration		+			+			+			+	
Turning Movement	Left	դա	Right	yon	Thru	Right	Left	ᄱ	Right	Ę	Thr	Right
Lans Width [ft]	12.00	12,00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0		0	٥	-	٥	٥	-	٥	٥		•
Pockel Length [ft]	Green	Tite sel	365.00	2 12 2	11.67	Majora	25,000	47.00	j.	1 2 2	1	11, 11, 12
Speed (mph)		35.00			35.00			45.00			45.00	
Grade [%]		0.00			0.00			0.00			0.00	
Grosswalk		Yes			Yes			Yes			Yes	

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		-			-			-			ŀ	
Turning Movement	Left		Right	Loft	Thru	Right	Left	Thru	Right	Leil Leil	The	Right
Lane Width [ft]	12.00	12,00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0		0	0	1	٥	٥		٥	۰		۰
Pockel Length [ft]	Act. 0.0	E. Al	55.76)	14. (2.4)	and solds	Pathy.	184 - 241	2	÷	-		24° c 32
Speed (mph)		35.00			35.00			45.00			45.00	
Grada [%]		0.00			0.00			0.00			0.00	
Crosswalk		Yes			Yes			Yes			Yes	
Volumos												
Namo	ō	Chehelem Dr	ž	0	Chehalem Dr	ā	Ĺ	N Valloy Rd	-		N Valley Rd	
Base Volume Input [veh/h]	22	19	8	12	6	4	4	75	23	6	131	8
Base Volume Adjustment Factor	1,0948	1,0948	1,0948	1,0948	1.0948	1.0948	1,0948	1.0948	1.0948	1.0948	1,0948	1.0946
Heavy Vohicles Percentage [%]	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2,10	2.10	2.10	2.10	2.10
Growth Rate	1,00	1.00	1.00	1,00	1.00	1,00	1.00	1.80	1.00	1.00	1.00	1.00
In-Process Voluma (veh/h)	0	0	0	٥	0	0	٥	0	o	٥	0	o
Site-Generated Trips (veh/h)	4	٥	2	٥	٥	٥	۰	۰	9	4	0	۰
Diverted Trips [vah/h]	0	0	0	0	٥	·	٥	0	٥	0	٥	٥
Pass-by Trips [veh/h]	0	0	0	0	0	٥	٥	0	0	0	٥	٥
Existing Site Adjustment Volume (veh/h)	0	0	0	0	0	0	0	۰	۰	۰	٥	۰
Other Volume [veh/h]	0	0	0	0	0	0	0	٥	۰	0	٥	۰
Total Hourly Volume (veh/h)	28	21	6	13	10	4	4	85	٤	3	143	a
Peak Hour Factor	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1,0000	1,0000	1.0000	1.0000
Total 15-Minuta Volume (veh/h)	8	9	3	4	3	1	-	24	6	4	.4	9
Total Analysis Voluma (volum)	32	24	10	15	11	5	s	2	36	16	2	82
Pedestrian Volums [pod/h]		0			0			٥			0	Γ

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Kings Landing 11A Scenario 2: 2 PM Existing & Background Intersection Sattings Version 5.00-02

										1	
- 2-		7.50	 1, 14	7.61	9.48	11.68	11.60 11.68 9.48 7.61	9.52	12.01	11.74	d_M, Dolay for Movement [s/voh] 11.74 12.01 9.52
	1	0.01	9	0.00	10'0	0.02	0.05 0.04 0.01 0.03 0.02 0.01 0.00	0.01	0.04	0.05	V/C, Movement V/C Ratio
										tults	Movement, Approach, & Intersection Results
	-										Number of Storage Spaces in Median
						S.			No		Two-Stage Gap Acceptance
											Storage Area (veh)
						νo			No		Flared Lano
	Free		Free			Stop			Stop		Priority Schomo

Γ	I.	<b>4</b>	0.49	12.26		Τ	Γ	Π
-		<b>4</b>	0.49	12.26	0.59	<		
10.0	7.50	<	0.49	12.26	0			
		<	0.32	8.00		l		
9		4	0.32	8.09	0.28	4		
0.00	7.61	4	0.32	8.09			٥	
0.01	9.48	<	0.16	4.05			2.90	8
0.02	11.68	8	0.16	4.05	11,29	В		
0.03	11.60	8	0.16	4.05				
10.0	9.52	4	96.0	8.90				
0.04	12.01	В	0.38	8.90	11.50	8		
0.05	11.74	8	0.36	8.90				
V/C, Movement V/C Ratio	d_M, Dolay for Movement (s/voh)	Movement LOS	95th-Percentile Queue Length (veh)	95th-Percentile Quevo Length (ft)	d_A. Approach Dolay [skeh]	Approach LOS	d_I, Intersection Dalay [s/veh]	Intersection LOS

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Sconario 2: 2 PM Existing & Backyr...
Intersection Lavel Of Service Report
Intersection 3: NE Terrace Dr at Hwy 219
Intersection 3: NE Terrace Dr at Hwy 219
Lovol (Soc / veh):
Lovol Of Sorvice:
Volume to Capacity (VIC):

£8.4 0.018

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Mothod: Analysis Period:

Right 12.00 40.00 Yes Thru 12.00 12.00 Hwy 219 Northeastbound 40.00 7es Left 12.00 300.00 Right 12.00 NE Terrace Dr Southbound 25.00 Ves Loft 12.00 Turning Movement
Lane Width [ii]
No. of Lanes in Pocket
Pocket Length [it]
Speed [mph]
Grede [it]
Crosswalk Lane Configuration Approach Namo Intersection Setup

-
ö
2
5
-7
9

Мато	NE Ter	NE Terrace Dr	Hwy	Hwy 219	- F	Hwy 219
Base Volume Input (veh/h)	2	11	38	190	432	10
Base Volume Adjustment Factor	1.0948	1.0948	1.0948	1.0948	1,0948	1.0948
Heavy Vohicles Percentage (%)	5.40	5.40	5.40	5.40	5.40	5.40
Growth Rate	1.00	1,00	1,00	1.00	1,00	1.90
In-Process Volume (veh/h)	0	0	0	0	0	0
Sito-Generated Trips (veh/h)	2	3	9	0	0	2
Diverted Trips [veh/h]	0	0.	0	0	0	0
Pass-by Trips (veh/h)	0	0	0	0	0	0
Existing Site Adjustment Volume (velvh)	o	0	0	0	0	0
Other Volume (veh/h)	o	0	0	0	0	0
Total Hourly Volums (valuh)	4	22	44	208	473	13
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1,000	1,0000	1.0000	1,0000	1.0000	1.0000
Total 15-Minute Volume (veh/h)	-	7	5	62	141	4
Total Analysis Volume (veh/h)	40	92	52	248	583	15
Pedestrian Volume (ped/h)	٥		0			
						The second name of the last of

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

P. G Freo Stop Intersection Settings
Priority Schemo
Flaved Lano
Storago Avas (veh)
Two-Stago Gap Acceptano

		_								
		¥ .		<	0.00	0.00	Q			
			1,72	۷	0.00	0.00	0.0	<		
		47.4	74.74	٧	0.00	00.0	3		26	
		0.05	8.88	٧	0.17	4.20	1.5	4	9.0	0
		90.0	12.58	8	0.22	5.49	53	-		
	ults	0.02	18.45	O	0.22	5.40	5	_		
Number of Storage Spaces in Median	Movement, Approach, & Intersection Res	V/C, Movement V/C Ratio	d_M, Dolay for Movement [s/veh]	Movement LOS	95th-Percentile Queue Length (veh)	95th-Percentile Queue Length [ft]	d_A, Approach Dolay [sNeh]	Approach LOS	d_J, intersection Dolay [s/veh]	Intersection LOS
	Number of Storage Spaces in Median	Number of Slorage Spaces in Median Movement, Approach, & Inforsection Results	0.05 0.05 0.05	0.02 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.02 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.02 0.05 0.05 0.05 0.05 0.00 0.00 0.00	0.02 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.02 0.05 0.05	0.02 0.05 0.05	0.02 0.05 0.05

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Kings Landing TIA
Sconario 2: 2 PM Existing & Background
Intersection Lavel Of Service Roport
Intersection 4: N Valley Rd at Hwy 219
Delay (sec / veh):
Level Of Service:
Volumo to Capacity (v/c):

Two-way stop HCM 6th Edition 15 minutos

48.1 E 0.324

Intersection Setup

Control Type: Analysis Method; Analysis Period;

 
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 12.00 N Valley Rd Westbound 45.00 0.00 Yes N Valley Rd Eastbound 45.00 Yes Hwy 219 Southbound 40.00 Yes Hwy 219 Northbound 40.00 Yes Turning Movement
Lane Width (ii)
No. of Lanes in Pocket
Pocket Langih (ii)
Speed (ngh)
Grade (%) Lane Configuration Approach

Volumes

					,		,	·		,	,			,	,	
-	53	1.0948	4.00	1,00	۰	۰	۰	0	0	٥	35	0.8800	1.0000	6	æ	
N Valloy Rd	97	1,0948	4.00	1.00	۰	2	٥	0	٥	۰	108	0.8800	1,0000	31	123	۰
z	59	1.0948	4.00	1.8	•	-	۰		٥	۰	8	0.8800	1.0000	13	75	
Ţ	26	1.0948	4.00	1,00	·	٥	٥	0	٥	0	28	0.8800	1,0000	8	32	
N Valloy Rd	62	1.0948	4.00	1.00	•	-	0	۰	٥	۰	69	0.8800	1.0000	50	78	0
Z	8	1.0948	4.00	1.00	-	-	0	0	0	۰	10	0.8800	1.0000	e	Ξ	
	43	1,0948	4.00	1,00	٥	2	0	۰	0	0	49	0.8800	1.0000	14	8	
Hwy 219	350	1.0948	4.00	1.00	0		0	0	0	o	384	0.8800	1.0000	109	436	0
	11	1.0948	4.00	1.00	0	0	0	٥	0	0	12	0.8800	1,0000	3	14	
	34	1.0948	4.00	1.00	٥		0	٥	0	0	38	0.8800	1.0000	11	43	
Hwy 219	130	1.0948	4.00	1.00	0	1	0	٥	0	0	143	0.8800	1,0000	41	163	0
	20	1.0948	4.00	1.00	o	0	0	0	0	0	22	0.8800	1,0000	9	25	
Name	Base Volume Input [veh/h]	Base Volumo Adjustment Factor	Heavy Vohiclos Porconlago [%]	Growth Rate	In-Process Volume (veh/h)	Sita-Ganerated Trips (veh/h)	Diverted Trips [veh/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume (veh/h)	Other Voluma (veh/h)	Total Hourly Volume (veh/h)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Volume (velvh)	Padestrian Volumo (pod/h)

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Kings Landing TIA Sconario 2: 2 PM Existing & Background

Stop Stop No Intersection Settings
Priority Scheme
Flared Lane

•					0.04	36.74	<u></u>	5.66	141.49				
		ş			96.0	43.70	w	5.66	141.49	44.03	ш		
_					0.32	48.06	w	5.66	141.49			·	
					0.05	16.58	O	25.	38.38				
		No			0,24	21.61	U	1,54	38.38	20.95	٥		
					90.0	29.01	a	1.54	38.38			12.05	
							<	1.76	44.05			12	
					-	137.	٧	1.76	44.05	0.21	4		
					0.01	7.69	٧	1.78	44.05				
					3		۷	0.83	20.70				
							۷	0.83	20.70	0.92	<		
				sults	0.02	8.47	٧	0.83	20.70				
	Storage Area [veh]	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & Intersection Results	V/C, Movement V/C Retio	d_M, Dolay for Movament [s/vah]	Movement LOS	95th-Percentile Queue Length (veh)	95th-Percantile Queue Length [ft]	d_A. Approach Delay [s/veh]	Approach LOS	d_I, Intersection Delay [s/veh]	Intersection LOS

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Version 5.00-02

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Mothod: Analysis Period:

Kings Landing TIA
Scenario 2: 2 PM Existing & Background
Intersection Lavel Of Service Report
Intersection 5: Chehalem Dr at Foothills Dr
Date (sec /veh):
Level Of Service:
Volume to Capacity (vic):

10.2 B 0.065

Intersection Setup

Chenalem Dr	ed	.o.	Chehalem Dr	ea O	Footh	Foothalls Dr
Northbound	porte	2	punoquinos	punoc	West	Westbound
<u>.</u>			*		F	t
Thre		Right	Left	Thro	Loft	Right
12.00		12.00	12.00	12.00	12.00	12.00
0		0	0	0	0	0
250-52-90		( ) P()		11. 12.42.44	3.3.1	The Address
35.00	8		35.00	8	25.	25.00
00:00	8		0.00	S	0.0	00:00
Yes	\$8		Yes	9	7	Yes
	ı					

Г	Τ	1	_	_	·		_	<del>,</del>	_	,	γ	·	_	_		
als Dr	7	1,0948	2.40	1.00	0	6	0	0	0	0	17	0.7700	1,0000	9	22	
Foothals Dr	27	1.0948	2.40	1,00	0	8	0	0	0	0	38	0.7700	1.0000	12	49	0
em Or	32	1.0948	2.40	1.00	0	11	0	0	°	٥	46	0.7700	1.0000	15	99	
Chehalem Dr	15	1.0948	2.40	1,00	0	7	0	0	o	٥	23	0.7700	1.0000	2	8	0
em Dr	:	1.0948	2.40	1.00	0	15	0	0	0	0	27	0.77.00	1.0000	6	35	
Chehalem Dr	38	1,0948	2.40	1.00	0	20	0	0	0	0	62	0.7700	1,0000	20	160	0
Namo	Base Volume Input [veh/h]	Base Volumo Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume (veh/h)	Site-Generated Trips [veh/h]	Diverted Trips [vah/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume (veh/h)	Other Volume [veh/h]	Total Hourly Volume (velum)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Totel Analysis Volume (velvh)	Podestrian Volume [pod/h]

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

Stop Free Free Intersection Settings
Priority Schemo
Flared Lano
Slorago Avas (seh)

							,					_
	,			0.02	9.20	٧	0.29	7.22	o			
	ON			20.0	10.21	8	0.29	7.22	9:90	¥		
					27.74	٧	02:0	4.89	2.50		3.35	
,				0.02	05'1	٧	0.20	4.89	7	/	3.	
				24, 6	131.45	٧	0:00	0.00	00'0			
		×	ults	17.7		٧	0.00	00'0	ö	,		
Slorage Area (ven)	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Appreach, & Intersection Results	V/C, Movoment V/C Ratio	d_M, Dolay for Movement (s/voh)	Movement LOS	95th-Percentile Queue Length (veh)	95th-Perconilo Quano Length [ft]	d_A, Approach Dolay [s/veh]	Approach LOS	d_i, intersection Delay [s/veh]	Intersection LOS

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71.0 F 0.606

Two-way stop HCM 6th Edition 15 minutes Control Type: Analysis Method: Analysis Period:

Kings Landing TIA
Scenario 2: 2 PM Existing & Background
Intersection Lavel Of Sorvice Roport
Intersection 6: Foolbills Dr at Hwy 219
Dablay (soc / vbh):
Lavel Of Sarvica:
Volumo to Capacity (v/c):

Intersection Setup

| The | The | Right | Left | The | Right | The | The | Right | The | T Foothills Dr Westbound 25.00 0.00 Yes 90.00 Foothills Dr Easlbound 25.00 Yes Southbound Hwy 219 35.00 0.00 Yes 150.00 Northbound Hwy 219 35.00 Yes 125.00 Tunning Movement
Lane Width [ft]
No. of Lanes in Pocket
Pocket Langh [ft]
Speed [mph]
Grade [%]
Grade [%] Lane Configuration Approach

Volumos

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

Stop Stop Free Free Intersection Settings Priority Scheme

					0.02	10.93	8	0.22	5.53				
Š		No			90.0	27.45	a	0.22	5.53	59,95	ıL		
					0.61	71.05	4	3.07	76.68				
					0.13	15.04	U	1,01	25.35				
δ		ν			0.04	31.70	a	1.01	25.35	18.75	U		
					60.0	33.35	O.	1.01	25.35			7.03	L
					70.		٧	00'0	00'0			7.(	*
					7.11		٧	0.00	0.00	0.52	٧		
					0.03	8.19	٧	0.10	2.39				
							4	0.00	00'0				
					-		<	0.00	0.00	2.14	٧		
				ults	0.12	8.97	4	0.39	9.80				
Flared Lane	Storage Area (veh)	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & Intersection Results	V/C, Movement V/C Ratio	d_M, Dolay for Movement [s/veh]	Movement LOS	95th-Percentile Queue Length (veh)	95th-Perconilo Queue Length [ft]	d_A, Approach Dotay [s/veh]	Approach LOS	d_i, intersection Dolay [s/veh]	Intersection LOS

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Kings Landing TIA
Scenario 2: 2 PM Existing & Background
Intersection Lavel Of Sarvice Report
Intersection 7: West Access at Chohalem Dr
Dobley (sec /veh);
Lovel Of Sarvior:
Volume to Capacity (vic): Two-way stop HCM 6th Edition 15 minutes

9.5 A 0.022

Control Type: Analysis Method: Analysis Period:

Namo	Cheha	Chehalem Or	Chehalem Or	em Or	AYOSL	Wost Accoss
Approach	typroN	Northbound	Southbound	punoc	199W	Westbound
Lane Configuration			<b>T</b>		± _	Ł
Turning Movement	Thru	Right	Len	Thru	Left	Right
Lano Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length (ft)	1.1.4	13.04	25.754	27.500	- F - 1	
Speed (mph)	:0C	30.00	30.00	00	OE 30	30.00
Grade [%]	)'0	00'00	00:00	00	o.	0.00
Crosswalk	3,	Yes	Yes	şı	<i>γ</i>	Yes

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Kings Landing TIA Sconario 2: 2 PM Existing & Background

Intersection Settings

욷 Two-Stage Gap Acceptance Number of Storage Spaces in Median Priority Scheme Flared Lane Storago Area [veh]

3.63 0.0 A 21.0 7.42 3.63 A 00.0 9,0 0.00 Movement, Approach, & Intersection Results
VIC, Movement VIC Ratio
d\_M, Datay for Movement [s/koh] Movement LOS 95h-Percentile Queue Length [th] 95h-Percentile Queue Length [tt] d\_A. Approach Doiay (shoh)

9.79 A 0.08 Stops -9.35 0.02 9.46 A 0.08 1.45 Free 0.86 Free 0.00 Approach LOS
d\_I, Intersection Delay (s/veh)
Intersection LOS

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Kings Landing TIA
Sconario 2: 2 PM Existing & Background
Intersection Lavel Of Service Report
Intersection 10: Main at Foothills

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Method: Analysis Period:

Delay (sec / veh): Level Of Service: Volume to Capacity (v/c):

11.9 B 0.057

Intersection Setup

Thru 12.00 Foothills Dr Westbound 25.00 0.0 ×es 12.00 reu 12.00 Right Foothills Dr Eastbound 25.00 Yes Thru 12.00 Right 12.00 Main St Northbound 7es 0.00 F 12.00 Turning Movement
Lano Width [fi]
No. of Lanes in Pocket
Pocket Length [fi]
Speed [mph]
Grade [%]
Crosswalk Lane Configuration

Г	Г	_	Γ	Γ	_	Г	Γ-	Γ	Γ		Г	_	Γ	Г	Γ	_
lls Dr	159	1.0948	1.00	1.00	0	17	0	0	0	0	191	0.8200	1,0000	28	233	
Foothals Dr	=	1.0948	1.00	1,00	0	0	0	0	٥	0	12	0.8200	1.0000	4	15	0
is Dr	14	1,0948	1.00	1.00	0	o	0	0	٥	o	15	0.8200	1,0000	ហ	18	
Foothills Dr	116	1.0948	1.00	1,00	0	22	0	0	o	0	149	0.8200	1.0000	45	182	0
Main St	7	1.0948	1.00	1,00	0	0	0	0	0	0	8	0.8200	1.0000	2	40	
Mai	74	1.0948	1.00	1,00	0	0	0	0	0	0	26	0.8200	1.0000	8	32	
Namo	Base Volume Input (velvh)	Base Volume Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume [veh/h]	Site-Generated Trips [veh/h]	Diverted Trips [veh/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume (veh/h)	Other Volume (volvh)	Total Hourly Volume (velvh)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume [velvh]	Total Analysis Volumo [voluh]	Pedestrian Voluma (ped/h)

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

Free Stop Intersection Settings Priority Scheme

					4.2		٧	0.66	16.38	9			
					0.01	7.64	٧	99.0	16.38	0.4	¥		
							٧	0.00	0.00	00	٨	21	9
					10.00		٧	0:00	0.00	0.	`	+:	
o		o			0.01	9.68	٧	0.22	5.54	35	3		
Z		Z		olts	90:0	11.88	8	0.22	5.54	1	_		
Flored Lano	Storage Area (veh)	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & intersection Res	V/C, Movement V/C Ratio	d_M, Dolay for Movement [s/voh]	Movement LOS	95th-Percentile Queue Length [veh]	95th-Percentile Queue Length [ft]	d_A, Approach Dalay [s/veh]	Approach LOS	d_i, intersection Dolay (s/veh)	Intersection LOS
	Flored Land No				sults	No No 0.06	No No 0.06 0.01 11.88 9.66	No No 11.18 9.66 A A A	No 0.06 0.01 0.01 11.88 9.66 7.64 B A A A A A A A A A A 0.22 0.00 0.00 0.06	No No 0.06 0.01 0.01 11.88 9.66 7.54 8 A A A A A A A A A A A B S C C C C C C C C C C C C C C C C C C	No No No 0.06 0.01 11.88 0.60 0.02 0.00 0.00 0.00 0.00 0.00 0.00	No N	No N

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Kings Landing TIA Sconario 2: 2 PM Existing & Background Intersection Lavel Of Service Report Intersection 13: N Valley Rd at Bruce Dr

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Method: Analysis Period:

10.4 B 0.000 Dolay (sec / veh): Lovel Of Service: Volume to Capacity (v/c):

Intersection setup						
Name	Bruc	Bruce Dr	IFAN	N Valley Rd	₽A N	N Valloy Rd
Approach	North	Northbound	East	Eastbound	West	Westbound
Lane Configuration	F	•	-	•	•	
Turning Movement	Left	Right	Thru	Right	Left	Siff
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	o	o
Pocket Length [ft]	(10,100)	12 + 13/3	65.15	57650	25.469	Theorem.
Speed (mph)	30	30.00	45	45.00	45	45.00
Grade [%]	Ö	0.00	0	0.00	0.	000
Crosswelk	*	Yes	۶	Yes	*	Yes
		,				1

Volumes

									· · · · ·	_						
by Rd	160	1,0948	4.00	1,00	0	4	o	o	o	0	179	0.8700	1.0000	51	206	
N Valloy Rd	o	1,0948	4.00	1.00	0	0	0	o	0	a	0	0.8700	1.0000	o	o	0
y Rd	0	1.0948	4.00	1,00	0	0	o	0	0	0	0	0.8700	1,0000	0	0	
N Valley Rd	8	1.0948	4.00	1,00	o	2	0	0	0	0	106	0.8700	1.0000	30	122	0
JO.	0	1.0948	4.00	1.00	o	o	o	o	0	0	0	0.8700	1,0000	0	0	
Bruco Dr	o	1,0948	4.00	1.00	0	0	o	0	0	0	0	0.8700	1,0000	0	0	0
Namo	Base Volume input [velufi]	Base Volume Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume [velvh]	Site-Generated Trips (veh/h)	Diverted Trips [veh/h]	Pass-by Trips [venuit]	Existing Site Adjustment Volume (vehth)	Other Volume [velv/h]	Total Hourly Volume [velv[h]	Peak Hour Fector	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Volume [velv/h]	Pedestrian Volume [ped/h]

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Varsion 5.00-02

Kings Landing TIA Sconario 2: 2 PM Existing & Background

Intersection Settings

	Freo				
	Free				
Sloo	ACC.	Col		νo	
Priority Scheme	Ffared Lane	Storage Area fushi	Two Class Care	wordings to Acceptance	Number of Storage Spaces in Median

1			Г		Т	_	Г		T		T		1		Т		7		7		
							•	<	33.4	3		0.0									
			00.00		7.48		4		000	200	000	6.9		0.00		<					
							<		0.00		000	2010									
						•		30.0	90.0		000		000		*		0.00		8		
		000		08.80		<		000	2000	000	500		_							***************************************	
217		00.0		10.44				0.00		000		590	0.5	•							
SUPSON HOUSE SHIP IN THE STATE OF THE STATE	V/C. Movement V/C Date	Olley NA Highland Co.	d M Dolan for Montes	WAY IN MOVORED SYADI	Movement LOS		95th-Perronfile Quere to and	מביים ביים ביים ביים ביים ביים ביים ביים	Och Barren in C	מיייד מירים מחסתס רביים (וו		q.A. Approach Dotay (s/veh)		Approach LOS		d_l, Intersection Delay [s/veh]		Intersection LOS			

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Kings Landing 71A Sconario 2: 2 PM Existing & Background

Kings Landing TIA

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Scenario 2 PM Existing & Background 12/11/2017

Turning Movement Volume: Summary

Nestbound Nght Left Thru Right 31 14 143 22	Total Volume 381
10 Intersoction Namo Northbound Southbound 1 N Valley Rd at Chehalem Dr 28 21 9 13 10 4 4	Westbound Left Thru Right 14 143 22
1 N Valley Rd at Chehalem Dr. 28 21 9 13 10 4	Eastbound Left Thru Right 4 82 31
10 Intersoction Namo Left Thru Right 1 N Valley Rd at Chehalem Dr. 28 21 9	Southbound Left Thru Right 13 10 4
ID Intersoction Namo 1 N Valley Rd at Chehalem Dr	Northbound Left Thru Right 28 21 9
9 -	Intersection Name N Valley Rd at Chehalem Dr
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	Volume	764
Selbound	Right	13
Southe	The	473
Stbound	Thru	208
Northea	Loft	44
ponoq	Right	22
South	Left	4
Intersection Name	7.00	in tellecolor at rwy 219
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	Total	voiume	961	
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Eastbound	Left Thru Right Left Thru Right Left The Bicks	22 143 38 12 384 49 10 co 02 02	62   58	Washing
Sauthbound	Loft Thru Right	12 384 49		Southbound
Monthooning	Left Thru Right	22 143 38		Northbound
Intersection Name		N Vallay Rd at Hwy 219		Intersection Name
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Intersection Name

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	Chebalem Or at Easteding	TO SHI LOOUTHS D			Intersection Name		Cooth M. D	1 COUNTY OF BIT HAY 219		
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	Volume	157
policy	Right	4
West	Loft	15
bound	The s	54
South	ŧ97	
puno	Right	
North	Thru	
Intersection Name	West Access at Chehelem Dr	
9	-	

125	Volume	1	401
punoque	F	n n	191
West	l of		2
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East	The	1	2
punoq	Right		•
Sec.	eg F	8	
Intersection Namo		Main at Foothills	
Ω	ŀ	2	

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Kings Landing TIA Sconario 2: 2 PM Existing & Background

Warrant Analysis by Hour
Hour Major Lenes Minor Lanes

	_																													
	Warrant 2 Warrant 3	Condition		o <sub>N</sub>	2	ş	2	2	2	2	ž	ş	ź		2	2	٤	2	Ş	ž	2	ş	ę	2	2	£	2	£	6	
	Warrant			ž	ž	S.	Š	ş	ş	Š	ž	ž	ž	2	2 2		2	٤	2	ş	£	S.	No	ş	Š	운	2	2	0	
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	Warrant 1 Condition B	20%	1		٤.	٤	2	Ž	٤	2	ž	ş	ટ	ž	ş	2	ž				2	2	2	2	2	2	ş	ş	•	
	Warrant	80%	ž	2				2	2	2	2	٤	Š	٤	ş	Š	ž	Š	2	2					2 2		2	2	•	
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Warrant 1 Condition A		Š	Š	ž	ş	2	ž	ž	ž	ž	2	ž	ž		2 2	2	Ş	ž	Š	ŝ	ž	Š	ş	ž	2	ž	ž	T,	•	
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		-	~	ဂ	₹	2	۵	-	-	6	2	-	5	ا ا		-	2	\$	17	8	19	20	22	22	R	2	Hours	Met		

Intersection Warrants Parameters

Met?

Name Eight Hour Vehltodar Volume Four Hour Vehltodar Volume Peak Hour

Warrant # 芸 哉

Warrants Summary

Noncated with TAIN VISIGO

Senato 5:00.02

Signal Warrants Report For Intersection 4: N Valley Rd at Hwy 219

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Minor Streets

Major Streets

Warrant Analysis Traffic Volumes

Hour

Warrant 3 Condition A

	N	13.5		0:05	No	26	χο	784	6	Y68	No	χο	The same of the sa
Total State of the Contentiation	Wirth	VahiclaHoure of St.	Supped Colay on Minor Approach (hilh:mm)	Volume on Mines St.	Lich At Sund Approach During Somo Hour	Total Enterior Vet.	Young on All Approaches During Same Hour	Number of Approaches on Intersection	folal Volume Condition Mel	Warrant Met for Approach	Warrant Met for Intersection		

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Kings Landing 71A Sconario 2: 2 PM Existing & Background

Warrant Analysis by Hour

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Warrant 2 Warrant	Condition		2	Š	Ş	ž	2	ટ	ž	2	ź	2		2	٤	Ş	Ş	ş	Š	No	2	£	Ī	2	ĝ	ş	£	욷	۰
Warrant			2	ę	ž	ş	£	S.	ટ	ž	ž	Ş			2	٤	å	S.	Š	ž	ž	2	1		2	ž	ş	Š	0
	28%		200	۶	Υes	Yes	Š	Š	٥	ટ	2	ž	2		2	Q Z	ž	ş	ž	ş	Š	ž	2	2		٤	ž	Š	4
Warrant 1 Condition	70%	,	2	٤	ž	ž	ž	ş	Š	ટ	ટ્ટ	2	ž	ź		2	ž	2	Š	Š	ž	ş	2	2		٤	ş	ž	-
Warrant 1	80%			Ş	2	ž	ž	ž	ž	ž	ş	g	2	ž	2		ş	ş	ş	No	No	ž	No.	2		2	٤	٤	۰
L	100%	1		2	٤	ş	٤	2	ટ	S	2	o <sub>N</sub>	ž	2	2		2	2	ž	ş	Š	No	No	ş	1	2	2	٤	•
V	%95	7	;		ğ	g	ē	S	Ş	Yes	Š	No	Š	ž	ž		٤.	2	ĝ	ž	ž	No	Š	2	52			20	80
Warrant 1 Condition A	20%	Xu's	1	;	ş	<u>چ</u>		g .	٤	2	ž	Š	Š	ş	ž	5	2	٤ :	2	ş	2	٤	ž	ž	S.				9
Warrant 1	%08	Ş.	,		1	8		2	2	Ş	ş	٤	Νo	ş	2	52		2	2	2	2	2	ş	ş	Q.	2	1		40
	100%	Yes	ž	Ş				2	2	2	Ş	ŝ	Š	Š	ş	52	1	2	2	٤.	2	ş	No.	٥	SN N	ź	2		3
Minor Lanes	Volume	313	301	20%	ž	300	200	200		3	3	ž	141	135	122	113	=	2 2	3 6	3	3	2	12	6	6	4	ļ		
Minor	Number	~	~	,		,	•	1	,,	1	,	2	~	2	2	2	-	-		,	,	,	?	2	2	-	2		
Major Lanes	Volume	648	922	608	518	402	1	408	200	3	5	5	Š	278	253	233	233	202	35	3		8	ę	2	13	5	2	T	1
Major	Number	2	2	~	2	-	ſ	1	-	1	,	1	7	~	7	7	2	2	ľ	1	•	,,	,	~	2	7	~		
Fog		-	7	3	4	2		,	-	6	, !	2		2	5	ã	15	9	-	-	٤	2 8		5	22	23	54	Hours	Met

Warrant 3 Condition A

	_															
	(3)	14	21			0.37	No	404	101	Yes	188		4	\$0,	Ma	ON
	w	77	At.		2:31	No	011	208	Vos		298	A	Voc	50.	200	32
Orientation	Cupillano	Total Stopped Delay Per Vehicle on Minor Approach (s)	Number of Lanes on Minns Steed Assessed	Variable of the second	variciarious of Stopped Delay on Minor Approach ((h)h:mm)	Delay Condition Met	Volume on Minar Street Anomach During Some Unit	HOLL WHICH COUNTY TO THE HOLD	High Minor Volume Condition Met	Total Entering Volume on All Approaches Origina Committee	IOOL BUILD BUILD STICKED A	Number of Approaches on Intersection	Total Volume Condition Met	Wasser Mar Car Amara and	TOPOLOGICAL MET TOT APPLICACE	Warrant Met for Intersection

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Scenario 2: 2 PM Existing & Background
Signal Warrants Report For Intersection 5: Chehalem Dr at Foothills Dr

Warrants Summary

11-11	Jaw	N	0.0	- N		No.	
Name		Eight Hour Vehicular Volume		rour Hour Venicular Volume		Peak Hour	
Warrant	***	*	C#	7.4	C#	- C*	

Intersection Warrants Parameters

N G		No	No.	100%
Major Approaches	Minor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

5 6 7 7 7 9 9 10 11 12	55 52 54 47 43 41	78	55 53
7 8 9 10 11 11	43	71	52 44 42
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		61 56 53 43	37 35 33
13	31	40 40 38 35	25 23 24 21
16 16 17 17	25 25 24 14	32 32 31 18	20 20 19 11
20 21 22 23	- 12 12 13 14	0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6 6 2 2 2 2

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Warrant Analysis by Hour

Kings Landing TIA Sconario 2: 2 PM Existing & Background

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	Warrant 2 Warrant	L		ž	2		2	ž	Š	ş	2	2	2	2	2	2 2		2	Ş	ş	ş	ş	ž	2	2		2	٤.	2	Š
	8	707	3	ž	2	2		2	٤	Š	ş	ş	ž	Š	ž	ž	í		2	2	No S	Š	No	ž	ž	ž			2	ž
	Warrant 1 Condition B	70%		£	2	ž		2	ON	2	Ş	S S	ş	ž	ž	ž	ž		2	g	ટ્ટ	ž	٥	ş	2	ź	2			2
	Warrant 1	80%		Ñ	No	SN.	ž	2		2	No.	No	Š	ş	ş	ş	οN	2		2	2	ş	ş	e S	Š	£	Š	ź	2	
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Minor Lanes		NUMBER	-	-	-		1	-	-	-	-	-	-	ŀ	-	+	1	1	-	-	-	-	-	-	†		- -	-	-	
Lanes	Value	e coming	158	151	5	136		2 5	200	8	8	92	12	12	8	9	1	+	à	22	35	18	20	2	5		,	, ,	+	-
Major Lanes	Nimbor	100	2	7	~	~	1	1	1	~	2	2	2	~	2	~	,	,	,	1	~	2	2	2	2	2	-	+	+	
		1	-	~	6	4		,	,	-		6	9	=	72	5	2	ž	,	2		=	=	20	2	22	2	22		

## Warrant 3 Condition A

	3	0.6	***		0.03	No	KI	60	No	213			No	No	No
Orientation	Total Stopped Dolay Par Vehicle on Minor Assessed (2)	Number of 1 page on Miss. Co. 1	Vokiels User	Vincional of Stopped Delay on Minor Approach ((h)h:mm)	Dolay Condition Mot	Volume on Minar Street Approach During	TOOL DUING COUNTY TO THE HOUSE	High Minor Volume Condition Met	Total Entering Volume on All Approaches Dispasses	Mirrhord Assessment Country Country	Total of Appropries on Intersection	folal Volume Condition Met	Werrant Met for Approach	Warrent Met for Interestion	TOTAL CALLED

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Scenario 2: 2 PM Existing & Background
Signal Warrants Report For Intersection 6: Foothills Dr at Hwy 219

Warrants Summary

	Met?	No	NO NO
Name	Eight Hour Vehicular Volume	Four Hour Vehicular Volume	Peak Hour
Warrant	#1	#2	#3

Intersection Warrants Parameters

	N,N	E, W	No	No	2000
major Approaches	Minor Approaches	Speed > 40mph	Papulation < 10,000	Warrant Factor	

Warrant Analysis Traffic Volumes

Hour Malor Stream	etanno info	3	439 A4	476	413	6/	377 321	900	312 673	298 277 53	2378 250	223 211 40	2223 196 38	213 198 38	169 36	171 33	179 30	174 154 30		55 40 (7	6 0, 09	20 44 8	16 3	15 3	3	10 2	
Hour		-		7	3	4	2	9		8	65	10	+	12	13	14	15	93	17	18	19	82	21	22	23	24	

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

Warrant Analysis by Hour

Warrant 3	Condition B	ક	ž	£	2	ş	운	ş	ş	ş	£	S S	ş	ş	ટ્ટ	શ્	ş	ž	ટ્ટ	ş	ટ	운	£	ž	£	0
Warrant 2 Warrant		ટ	ટ્ટ	ş	ş	δ	Š	No	Ş	οN	No	S <sub>O</sub>	ş	£	2	ž	ટ્ટ	ટ્ર	ş	ş	ž	£	ş	ş	2	٥
L	%95	Yes	Yes	Yes	Yes	Yas	Yes	ş	ž	2	ટ્ટ	ટ્ટ	£	οN	ş	Š	Š	Š	ş	ž	ž	ž	ટ્ટ	ş	ž	
Condition	%02	Yos	Yes	Yes	ν	Ş	2	£	Ş	Ş	£	Ş	ş	ş	ş	ş	Š	ž	£	ş	ž	ş	ટ્ટ	ટ્ટ	Š	
Warrant 1 Condition B	%08	Yes	Yes	No	ş	Š	ş	2	ş	ş	ş	٥٤	Š	ž	ž	ş	ş	ટ્ટ	ş	ž	2	ş	ş	2	ş	~
	%001	ક્	No	٩	Š	Š	2	ş	Ş	Š	No	οŽ	Š	οÑ	Š	Š	δ	ş	ž	Š	Š	S	ટ્ટ	ž	ş	•
,	%95	oN.	No	No	Š	No	Š	Š	ν	Š	Š	٥	No	ν	Š	νo	No	δ	No	No	Š	ν	٥N	ş	ş	۰
Condition A	70%	οN	٥Ņ	No	No	No	No	Š	Νo	Š	S	νo	Ş.	No	Ņ	Š	ν	Š	Νo	No	S N	٥N	οŅ	٩	ž	۰
Warrant 1 Condition A	80%	ON	ON	No	No	Νo	οN	No	٩	οN	٥	Ñ	νo	Se Se	No	Š	o <sub>N</sub>	οN	Ş	No	No No	SNo.	양	Š	£	•
	100%	οN	No	No	No	٥N	No	٥N	٥N	οN	No	No	No	No	No	٥	No	νo	Ņ	No	No	No	Νo	No	οN	٥
Minor Lanes	Voluma	163	157	153	130	124	111	103	97	7.8	7.4	74	70	64	28	58	23	33	18	16	9	2	5	٧	4	
Minor	Number	3	ຕ	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Major Lanes	Volume	935	897	879	748	711	636	589	561	449	421	421	402	364	337	337	328	187	103	94	38	28	28	19	13	
Major	Number	4	4	4	4	4	4	¥	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Hour		+	2	6	4	2	9	7	8	6	ĵ	Ξ	12	£	14	15	48	17	18	18	ន	2	22	23	54	Hours

## Warrant 3 Condition A

*	18.8		0:24	No	79	No	1098	4	Yes	No	0
w	99	2	1:23	No	æ	No	1098	4	Yes	No	Z
Orientation	Total Stopped Dalay Per Vehicle on Minor Approach (s)	Number of Lanes on Minor Street Approach	VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	Datay Condition Mot	Volumo on Minor Stroat Approach During Samo Hour	High Minor Volume Condition Met	Total Entering Volume on All Approaches During Same Hour	Number of Approaches on Intersection	Total Voluma Condition Mat	Warrant Met for Approach	Warrant Met for Intersection

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Venton 5.02.2 PM Existing & Beolground
Signal Warrants Report For Intersection 7: West Access at Chehatem Dr

Warrants Summary

Warrant	Name	Met?
1#	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	ON.

Intersection Warrants Parameters

Z, S	3	No	No	100%
Major Approaches	Minor Approaches	Speed > 40mph	Population < 10,000	Warranl Factor

Warrant Analysis Traffic Volumes	ıes		
Hour	Major	Major Streets	Minor Streets
	Z	တ	3
+	58	80	19
2	56	7.7	18
3	55	75	18
4	46	25	15
5	44	61	14
9	39	X	13
7	37	50	12
в	35	48	41
6	28	38	6
10	26	36	6
11	28	38	6
12	25	86	8
13	23	31	7
14	21	29	7
15	21	29	7
16	20	28	7
17	12	16	4
18	9	6	2
19	9	8	2
20	2	6	
21	2	2	+
22	2	2	7
23	1	2	0
24	-	2	0

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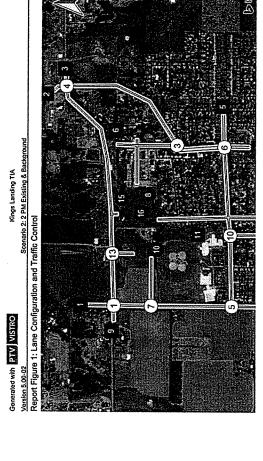
Kings Landing TIA Scenario 2; 2 PM Existing & Background

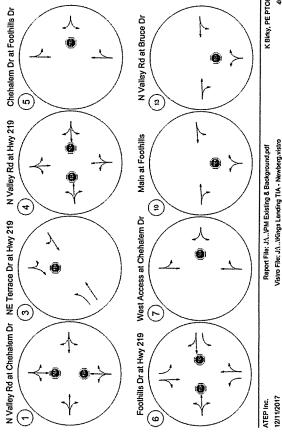
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Scenario 2 PM Existing & Background

Trip Distribution summary

	3	COME TO CHOCK & CURLING		9	_
	To Gracie'	To Gracio's Landing:	Ē	om Gracle's Landing:	
Zone / Gate	Shore %	Trips	Share %	Trips	
8: Dutchman's Ridge	0.00	٥	0.00	٥	T
15: Kings Landing N	00.0	0	9.8	0	r
16: Kings Landing S	00'0	0	90.0	۰	_
t: Gate	0.00	0	0.00	0	
2; Gate	5.00	2	2.00	-	_
 3: Gale	5.00	2	5.00	-	_
 4; Gate	20.00	7	20.00	4	
 5: Gate	00.0	0	0.00	0	_
6: Gate	0.00	0	0.00	•	_
7: Gate	00.00	50	80.00	F	-
9: Gate	10.00	3	10.00	7	-
 11; Gate	0.00	0	0.00	0	
 12: Gate	0.00	0	0.00	0	
Total	100.00	34	100.00	ĝ	





Report File: J.Y., VPM Existing & Background, pdf Vistro File: J.Y., Wings Landing TIA - Newbarg, vistro

K Birky, PE PTOE

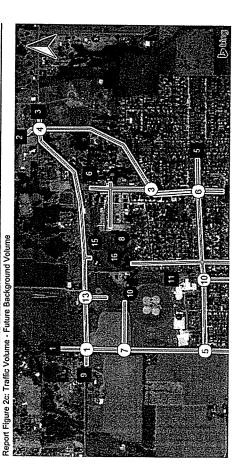
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Scenario 2: 2 PM Existing & Background Kings Landing TIA



N Valley Rd at Hwy 219 Chehalem Dr at Foothills Dr (e) **⊕** N Valley Rd at Chehalem Dr NE Terrace Dr at Hwy 219

855

N Valley Rd at Bruce Dr Main at Foothills (2) Foothills Dr at Hwy 219 West Access at Chehalem Dr

(9)

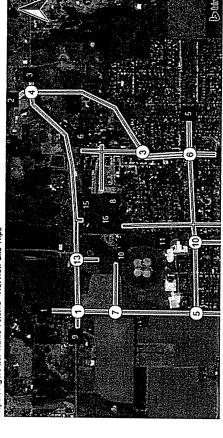
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Sconario 2: 2 PM Existing & Background Kings Landing TIA

Figure 2d: Traffic Volume - Net New Site Trips



Chehalem Dr at Foothills Dr N Valley Rd at Hwy 219 N Valley Rd at Chehalem Dr NE Terrace Dr at Hwy 219



Main at Foothills West Access at Chehalem Dr Foothills Dr at Hwy 219

N Valley Rd at Bruce Dr

(2



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Kings Landing TIA

Scenario 2: 2 PM Existing & Background Report Figure 2f: Traffic Volume - Future Total Volume Version 5.00-02

Chehalem Dr at Foothills Dr N Valley Rd at Bruce Dr (s) (2) N Valley Rd at Hwy 219 Main at Foothills 288 25 (2 West Access at Chehalem Dr N Valley Rd at Chehalem Dr NE Terrace Dr at Hwy 219 Foothills Dr at Hwy 219 322

Report File: J.L.,VPM Existing & Background.pdf Visiro File: J.L.,VGngs Landing TIA - Newborg.vistro

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Kings Landing TIA Scenario 2: 2 PM Existing & Background

Report Figure 3: Traffic Conditions

Chehalem Dr at Foothills Dr N Valley Rd at Bruce Dr Delay: 10.44 LOS: B V/C: 0.000 Delay: 10.21 LOS: B V/C: 0.065 (P) (2) N Valley Rd at Hwy 219 Main at Foothills Delay: 11.88\_ LOS: B V/C: 0.057 V/C: 0.324 N Valley Rd at Chehalem Dr. NE Terrace Dr at Hwy 219 Foothills Dr at Hwy 219 West Access at Chehalem Dr Delay: 9.46 LOS: A V/C: 0.022 (m)

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Kings Landing TIA Revised Vistro File: J.\...\Kings Landing TIA - Newberg.vistro Report File: J.\...\AM Developed.pdf

Scenario 3 AM Developed

4/5/2018

## Intersection Analysis Summary

S	Ι	To	T w	T	Τ.,	Т.	Т	<del>1</del>	1
글	┸	<u>                                     </u>	w		L	<	0	8	60
Delay (s/veh) LOS	11.8	15.1	38.4	14.7	78.7	9.6	19.2	10.3	10.1
VIC	0.062	0.056	0.453	0.294	0.728	0.047	0.292	0.020	0.000
Worst Mymt	NB Left	SB Left	WB Left	WB Left	WB Left	WB Left	NB Left	NB Left	NB Left
Method	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition	HCM 6th Edition
Control Type	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop	Two-way stop
Intersection Name	N Valley Rd at Chehalem Dr Two-way stop	NE Terrace Dr at Hwy 219	N Valley Rd at Hwy 219	Chehalem Dr at Foothills Dr Two-way stop	Foothills Dr at Hwy 219	West Access at Chehalem Dr Two-way stop	Main at Foothills	KV Access at N Valley Rd	N Valley Rd at Bruce Dr
Ω	-	ဗ	4	5	9	7	10	12	13

W.C., Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value, for all other control types, they are taken for the whole intersection,

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Two-way stop HCM 6th Edition 15 minutes

Kings ...
Scenario 3: 3 AM Devolope.
Interaction 1: N Vailey Rd at Chehalem Dr
Dobay (sec / veh):
Loval Of Service:
Volume to Capacity (v/c):

11.8 B 0.062

Intersection Setup

Control Type: Analysis Method; Analysis Period;

Γ		Г	T	Т	Т	Т	7	-	Т	Т	_	_
		Ļ		1	E S	8 .	-	16000				
	N Valloy Rd	Westbound	+			12.00		2 - 2	45.00	8	3	ŝ
ľ	Z	5		1	100	3	,	7.7. I				
	_			Hold	2 5	3 ,	,	3		T	T	
LO. Tally	V SHOY PK	Eastbound	+	1	5 50	2	1	100	45.00	000	Yes	
	2			987	13.83	3	·	80.00				
		-		Right	12.00	6	1	100				
Cheholem Dr		Southbound	+	E S	12.00				35.00	0.00	Yes	
٥		Ø		Left	12.00	•	Ī					
١		~		Right	12.00	ŀ	1			Ī	Ī	
Chehalem Dr		Northbound	+		12.00	ü	T		35.00	0.00	Yes	
٥		Z		Left	12.00	٥						
Namo	A A	Approach	Lane Configuration	Turning Movoment	Lane Width (ft)	No. of Lanes in Pocket	Pocket Length (f)		Speed (mph)	Grade [%]	Crosswalk	
	l	١							ı			١

Chehalem Dr	hehalem Dr	ŏ	Ы	١	Chehalem Dr	à	Ĺ	N Valloy Rd	-	L	N Velloy Rd	P
22 9 14	_	14		10	2	2	,	Ξ	32	20	- 65	9
1.0948 1.0948 1.0948	1.0948	_		1.0948		1.0948 1.0948	1.0948	1.0948	1.0948	1.0948	1 0948	1 0948
10.40 10.40 10.40	10.40	10.40		10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40
1.00 1.00 1.00	┝	1.00		1.00	1.00	9.	- 6	1.00	1.00	8	9	100
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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Version 5.00-02

Free Stop ş Š Stop Intersection Settings
Priority Scheme
Flored Lano
Storago Area (sel)
Twe-Stage day Acceptance
Number of Storage Spaces in Median
Movement, Appress to Appr

				623	5.87	T	T	I	Ī
			<	0.23	567	158	<	:	
	0.01	7.73	<	0.23	5.67				
	Ŀ	1	4	0.46	11.62				
			4	0.46	11,62	8	4		
	10.0	7.46	4	0.46	11.62			3.85	
	0.01	9.25	٧	0.27	6.73		Ī	Ĩ	
	0.05	11.81	8	0.27	8.71	11.46	6		
	0.02	11.66		0.27	6.71				
	0.03	9.89	<	0.37	9.23				
	0.02	11.81	8	0.37	9.23	11.18	8		
enits	90.0	11.84	8	0.37	9.23				
movement, Approach, & Intersection Results	V/C, Movement V/C Ratio	d_M, Dolay for Movement [s/veh]	Movement LOS	95th-Percentile Queue Length [veh]	95th-Percontilo Queuo Length (ft)	d_A. Approach Dolay [s/veh]	Approach LOS	d_I, intersection Datay (s/veh)	Intersection LOS

Generated with PTV VISTRO Version 5.00-02

Kings Landing TIA Rovised

Scanario 3: 3 AM Developed Intersection Lavel Of Service Report Intersection 3: NE Terrace Dr at Hwy 219

Two-way stop HCM 6th Edition 15 minutes

Delay (sec / veh): Level Of Service: Volume to Capacity (v/c):

15.1 C 0.056

Intersection Setup

Control Type: Analysis Method; Analysis Period;

~	Ψ.								
Hwv 219	sthound		i deiga	19 00				2 0	
A.	Southwesthound		The	12.00		0 100	90.00	800	Yes
Hwy 219	Northeastbound		- Page	12.00	6	1456-171	8	8	8
Hwy	Northea		Left	12.00	-	300,00	40.00	0.00	Yes
NE Terraco Dr	Southbound		Right	12.00	٥	2.63%	8	0	8
NE Ter	South		Left	12.00	۰	25.50	25.00	0.00	Yes
Name	Approach	Lane Configuration	Turning Movement	Lane Width [ft]	No. of Lanes in Pocket	Pocket Length (ft)	Speed [mph]	Grade [%]	Crosswalk

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1,0948
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32

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Vistro File: J.Y...Ndngs Landing TIA - Newborg.vistro Report File: J.f...VAM Developed.pdf

Report File: Jh...VAM Developed.pdf Vistro File: Jh...VKings Landing TIA - Newberg.vistro

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Free Free Stop No 2 Intorsection Settings
Priority Scheme
Flared Lano
Storage Avan (veh)
Two-Slage Gap Acceptience
Number of Storage Spaces in Median

Movement, Approach, & Intersection Re

	. + 2 - 7 ;	93.5	\ \ \	0.00	000	000	A			
			<	0.00	000					
		15.12	\ \ -	0.00	0.00	0.43	V	1,35	0	
	0.02	7.89	٧	0.05	1.33	0		1		
	90.0	10.62	9	0.41	10.29	12.00				
	90.0	15.07	O	0.41	10.29	12.	3			
morement, Applicatel, & missession results	V/C, Movoment V/C Ratio	d_M, Dolay for Movoment (s/veh)	Movement LOS	95th-Percentile Quave Length (veh)	95th-Percontile Queue Length (ft)	d_A. Approach Dolay [s/veh]	Approach LOS	d_1, Intersection Dolay [s/veh]	Intersection LOS	

Generated with PTV VISTRO Version 5,00.02

38.4 E 0.453

Control Type: Analysis Method: Analysis Period;

Two-way stop HCM 6th Edition 15 minutes

Kings Landing TIA Revised

Scenario 3: 3 AM Developed
Intersection Level Of Service Roport
Intersection 4: N Valley Rd at Hwy 219
Dobby (sec/voh):
Lovel Of Service:
Volume to Capacity (v/c):

Intersection Setup

Т	7	Т	Т	_	Т	. [	_	_	-
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or od so/	+	. P	5			45.00	8	Š	
		Feb.	12.00	c					
		Right	12.00	٥				Ī	
astbound	+	Three sales	12.00			45.00	0.00	Yes	
		Len	12.00	ŀ	360,100				
,		Right	12.00	0	1000				-
nuodylno	+	PH.	12.00		10 100	40.09	0.00	\$8. *	
s		Loft	12.00	°	16,000				
_		Right	12.00	۰	Sp. Land	Γ			
orthbound	+	THE	12.00	Ŀ	0.000	40.00	0.00	Yes	
z		Loft	12.00	۰	Proces				
Approach	Lane Configuration	Turning Movoment	Lane Width [it]	No. of Lanes in Pocket	Pocket Length [ft]	Speed (mph)	Grade (%)	Crosswalk	
	Northbound Southbound Eastbound	Northbound Southbound Eastbound	Northbound   Sputibound   Elistbound   Westbound   Left   Thru   Right   Thru   Thru	Northbound   Southbound   Eastbound   Westbound   Section	Morthbound   Southbound   Eastbound   Westbound   We	Morthbound   Southbound   Eastbound   Westbound   Mastbound   Ma	Northbound   Southbound   Eastbound   Northbound   Nort	Northbound   Sunthbound   Eastbound   Northbound   Nort	Northbound   Sunthbound   Eastbound   Nestbound   Ne

	-	Hwy 218			Hwy 219		١	N Valloy Rd	9	L	N Valloy Rd	,
ţ	_	155	120	24	87	4	9	88	18	85	49	9
1,0948		1.0948	1.0948	1.0948	1,0948	1,0948	1.0948	1.0948	1.0948	1,0948	13	1.0948
4.00	-	4.00	4.00	4.00	4.00	4.00	4.00	4.00	8.4	8.8	8	4 00
1.00	<b>L</b>	9,	1.00	1.00	1.00	1.00	1,00	1.8	1.00	8	8	1 00
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91		172	8	56	35	53	21	8	92	96	55	18
0.7600		0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600
1.0000		1,0000	1.0000	1.0000	1.0000	1,0000	1,0000 1,0000	1.0000	1.0000	1,0000	1.0000	1,0000
2		23	4	6	31	7	-	32	6	30	9	9
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Kings Landing TIA Revised

Scenario 3: 3 AM Developed

Version 5.00-02

Stop 2 Stop ટ્ટ Free Intersection Settings
Phiority Scheme
Flared Lano
Storago Area (veh)
Two-Stage Gap Acceptence
Number of Storago Spaces in Median

Movement, Approach, & Intersection Results

VIC, Movement VIC Alloin         0.01         0.02         0.03         0.03         0.04         0.45         0.16         0.05         0.04         0.04         0.45         0.16         0.05         0.04         0									
0.01	0.03	29.58	٥	4.47	111.63			I	T
0.01	0.18	33.53	٥	4.47	111.63	35.77	u		
0.01	0.45	38.40	В	1	111.63				
0.01	90.0	16.65	U	2.42					
0.01	9.3	22.51	U	2.42	80.62	21.64	o		
0.01	0.09	23.79	ပ	2.42	60.62			93	ļ.,
0.01 0.03 7.58 8.23 A A A A A A A A 1.26 1.26 1.26 1.26 1.26 0.59 3.154 31.54 31.54 14.54 A A A A A A A A A A A A A A A A A A A	27	3	<	0.58	14.54			12	ľ
7.58 A A A A A A A A A A A A A A A A A A A	7		∢	0.58	14.54	1.50	4		
7.58 A A 1.26 1.26 31.54 31.54 0.38	 0.03	8.23	<	0.58					
0.00 7.56 A A A 1.26 31.5			<	1.26	31.54				
0.00 7.56 A A A 1.26 31.5			4	1.26	31,54	0.38	<		
	0.01	7.58	٧	1.26	31.54				
	V/C, Movement V/C Ratio	d_M, Dolay for Movement [s/veh]	Movement LOS	95th-Percentile Quoue Length (veh)		d_A, Approach Delay [s/veh]	Approach LOS	d_f, Intersection Dotay [s/veh]	Intersection LOS

Generated with PTV VISTRO Version 5.00-02

Two-way stop HCM 6th Edition 15 minutes

14.7 B 0.294 Kings Landing TIA Revised

Scenario 3: 3 AM Developed
Intersection Lavel Of Sarvice Report
Intersection 5: Chehalem Dr at Foothilfs Dr
Daby (soc / veh);
Level Of Sarvice:
Volume to Capacity (v/c):

Intersection Setup

Control Type: Analysis Method; Analysis Period;

-		_	~	_	_	-	_	
puno	•	Right	12.00	0	2000	8	9	9.
West		Loft	12.00	0	1.75%	25.1	0.0	Yes
puno		Thre	12.00	0	25 - 245	00		
South		Left	12.00	٥	057.46	35.0	0.0	Yes
puno		Right	12.00	o	2,450.7	8	0	5
North		Thr.	12.00	٥	forter?	35.	0.0	Yes
Approach	Lane Configuration	Turning Movement	Lane Width [N]	No. of Lanes in Pocket	Pocket Length [ft]	Speed (mph)	Grade (%)	Crosswalk
	Approach Northbound Southbound Westbound	Northbound Southbound	Northbound   Southbound   Westbound   Westbound	Northbound Southbound Wiestbound   Wiestbound   Wiestbound   Wiestbound   Wiestbound   Wiestbound   Wiestbound   Thru Left   Thru Left	Northbound   Southbound   Westbound   We	Northbound   Southbound   Wiestbound   Wiestbound	Northbound   Southbound   Westbound   Westbound   Westbound   Westbound   Westbound   Westbound   Westbound   Thru   Left   Thru   Thru   Left   Thru   Th	Northbound   Southbound   Wistbound   Wi

_	_	т-	_	_		_	~	т-	_				_		- <sub>1</sub>	
IIs Dr	17	1.0948	7.40	1.00	0	9	0	0	0	0	25	0.6100	1,0000	10	41	
Foothills Dr	7.	1.0948	7.40	1.00	°	88	°	0	0	•	86	0.6100	1.0000	40	161	0
lem Dr	23	1,0948	7.40	1.00	0	35	٥	0	°	0	99	0.6100	1.0000	25	88	
Chehalem Dr	31	1.0948	7.40	1.00	٥	7	0	0	٥	0	¥	0.6100	1.0000	17	19	0
Chehalem Or	129	1,0948	7.40	1.00	0	9	0	0	0	0	147	0.6100	1.0000	99	241	
Снена	26	1,0948	7.40	1.00	0	12	0	0	0	0	40	0.6100	1.0000	16	99	0
Name	Base Volume Input [veh/h]	Base Volumo Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume [veh/h]	Site-Generated Trips (veh/h)	Diverted Trips (veh.fh)	Pass-by Trips (ven/ti)	Existing Site Adjustment Volume (veh/h)	Other Volume [veh/h]	Total Hourly Volume (vetyln)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veh/h)	Total Analysis Volume (velv/h)	Pedestrian Volume [pod/h]

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Report File: J.L..VAM Developed.pdf Vistro File: J.N...VGngs Lending TIA - Newberg.vistro

ATEP Inc. 4/5/2018

K Birky, PE PTOE

Kings Landing TIA Ravised Scenario 3: 3 AM Developed

Stop ટ્ટ Free Fro Storago Araa (yeh) Two-Slago Gap Acceptance Number of Storago Spaces in Median Priority Schame Flared Lane Intersection Settings Varsion 5.00-02

Movement, Approach, & Intersection Results

V/C, Movement V/C Retio	27	14,45	0.05	0.0	0.29	0.05
d_M. Dolay for Movement [s/veh]	1 2	10.4	8.11	2.4	14,73	12.43
	<	<	٧	¥	8	8
95th-Percentile Queue Length (veh)	0.00	0.00	0.47	0.47	1.52	1.52
95th-Percentile Queue Length [ft]	0.00	0.00	11.65	11.65	37.94	37.94
d_A, Approach Delay [s/veh]	00:0	0	3.28	6:	1	14.27
-	<					
d_1, Intersection Dolay (s/veh)			5.08	8		
			8			

Generated with PTV VISTRO Version 5.00-02

Kings Landing TIA Revised

Scenario 3:3 AM Developed Intersection Lavel Of Service Report Intersection 6: Foothilis Dr at Hwy 219

Two-way stop HCM 6th Edition 15 minutes

Control Type: Analysis Method: Analysis Period;

78.7 F 0.728 Delay (sec / veh): Level Of Service: Volume to Capacity (v/c):

Intersection Salup

| The Right Left Thru Right Thru Foothills Dr Westbound 25.00 7.03 90.00 Foothills Dr Eastbound 25.00 Hwy 219 Southbound 35.00 Yes 150.00 Hwy 219 Northbound 35.00 Yes 125.00 Turning Movament
Lano Width [it]
No. of Lanes in Pocket
Pocket Length [it]
Speed [ingh]
Grade [it]
Crosswelk Lane Configuration Approach

Volumes

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Footbills Dr	ş	1 0048	2	8	6	,	,	, -	, ,	,	,   =	0 8100	1 0000				•
	11	Ŀ		1.00	٥		-		-	,	. 2	0.8100	1,000	8	Ē		
Ļ	137	1-		1.00	0	12	6		6		162	0.8100	1,0000	8	200		
Foothills Dr	10	1.0948	5.00	1.00	٥	•	ŀ	0	6		=	0.8100		1.	4	۰	
	22	1.0948	5.00	1,00	٥	٥	۰	0		•	23	0.8100	1.0000		33		
	15	1.0948	5.00	1.00	٥	٥	•	0	0	•	16	0.8100	1.0000	2	2	Ī	-
Hwy 219	175	1.0948	6.00	1.00	٥	12	٥	0	·	0	202		1.0000	8	252	۰	-
	20	1.0948	5.00	1.00	٥	۰	٥	•	٥	۰	2	0.8100 0.8100	1,0000	7	9		
	35	1.0948	6.00	1.00	۰	٥	۰	۰	۰	۰	88	0.8100	1.0000	2	47		*
Hwy 219	248	1.0948	5.00	1.00	۰	4	0	۰	٥	٥	276	0.8100	1,0000	82	ğ		
	94	1.0948	2.00	1.00	0	င	0	٥	0	•	£03	0.8100	1.0000	35	127		
Namo	Base Volume Input [veh/h]	Base Volume Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate	In-Process Volume (velvh)	Site-Generated Trips (veh/h)	Divarted Trips [ven/h]	Pass-by Trips [veh/h]	Existing Site Adjustment Volume (vet/h)	Other Volume [veh/h]	Total Hourly Volume (veh/h)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume [veh/h]	Total Anatysis Volume (volum)	Pedastrian Volume [ped/h]	

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Intersection Settings

Kings Landing TIA Revised Scenario 3: 3 AM Developed

Slop No S Stop Stop 2 Free Free Two-Stage Gap Acceptance Storage Area (veh) Priority Scheme Flared Lane

 
 Movement, Approach, & Intersection Results
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 0.05< 58.56 19.06 12,08 0.18 Number of Storage Spaces in Median Approach LOS
d\_i, Intersection Delay [s/veh]
Intersection LOS d\_A, Approach Dotay [s/veh]

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Two-way stop HCM 6th Edition 15 minutes

Kings common 3:3 AM Developed Scenario 3:3 AM Developed Intersection Toward Of Service Report Intersection 7: West Access at Chohalem Dr Deby (sec / veh): Level Of Service: Volume to Capacity (v/c):

9.6 A 0.047

Control Type: Analysis Method: Analysis Period;

Right 12.00 West Access Westbound 30.00 Yes Ē 12.00 Thru 12.00 Chenalem Dr Southbound 90.00 Υes Left 12.00 Right 12.00 Chehalem Dr Northbound 30.00 Yes 12.00 0 Turning Movement
Lane Width [ii]
No. of Lanes in Pocket
Pocket Length [ii]
Speed [inph]
Grade [is]
Crosswalk Lane Configuration Approach Intersection Setup

Г						
	Cheha	Chehalem Dr	Chehi	Chehalem Dr	West	West Access
	44	0	0	23	°	٥
1,0	1.0948	1.0948	1.0948	1,0948	1.0948	1.0948
9.	8.50	8.50	8.50	8.50	2.00	2:00
1,5	1.00	1,00	1.00	1.00	1.00	1.00
٥		0	0	0	o	0
7		11	3	10	33	ç
0		0	0	o	o	0
0		o	0	0	0	0
0		0	٥	0	0	0
0		o	0	0	٥	0
55		11	9	72	33	. 9
0.8500	0	0.8500	0.8500	0.8500	0.8500	0.8500
1,0000	0	1,0000	1,0000	1.0000	1.0000	1.0000
16		3	-	23	10	1
65		13	4	85	39	9
	٥				0	

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Scenario 3: 3 AM Developed Kings Landing TIA Revised

Intersection Settings

Sop 운 Free Free Two-Stage Gap Acceptance Number of Storage Spaces in Median Storage Area (veh) Priority Schome Flored Lane

8.87 0.17 4.22 9.61 4.22 A 0.19 4.79 A 2.16 0.00 A 7.44 0.19 < 000 000 0.00 < 0.00 0.00 Movement, Approach, & Intersection Results
VIC, Movement VIC Ratio

d\_M. Delay for Movement [s/ver]

Movement LOS

95th-Percentile Outsue Length [ver]

gish-Percentile Outsue Length [ver]

d\_A. Approach Delay [s/ver]

Approach LOS

d\_I. Intersection Dolay [s/ver]

intersection LOS

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Kings Landing TIA Revised

Scenario 3: 3 AM Developed Intersection Lavel Of Service Report Intersection 10: Main at Foothills

Delay (sec / veh): Levol Of Service: Volume to Capacity (v/c):

19.2 C 0.282

Two-way stop HCM 6th Edition 15 minutos

Control Type: Analysis Method: Analysis Period:

Intersection Solup

Thru 12.00 Foothals Dr Westbound 7es Left 12.00 Right 12,00 Foothills Dr Eastbound 25.00 Yes 12.00 Right 12.00 Northbound Main St 7es 7 Left 12.00 Turning Movement
Lane Width [It]
No. of Lanes in Pocket
Pocket Length [It]
Speed (mph)
Grade [%]
Grade [%] Lane Configuration Approach

г	-			_	_	_	_	т-	γ-	γ	_	_	_	т	_		_
16.0	200	\$	1.0948	5.20	1.00	0	52	0	0	0	°	206	0.5900	1,0000	87	349	
Exothate D.	9	0	1.0948	5.20	1.00	0	0	0	°	0	·	6	0.5900	1.0000	4	15	0
200	**	5	1,0948	6.20	1.00	o	0	0	0	°	0	37	0.5900	1,0000	16	63	
Footbills Dr	17.4		1,0948	5.20	1.00	0	t3	0	0	o	0	203	0.5900	1.0000	98	344	0
St	\$		1.0948	5.20	1.00	0	0	o	0	o	0	14	0.5900	1,0000	9	24	
Main St	85	8	1.0948	6.20	1,00	0	0	0	0	0	0	63	0.5900	1.0000	27	107	٥
Name	Base Volume logut (veh/h)	functional and the company of the co	Base Voluma Adjustment Factor	Heavy Vehicles Porcentage (%)	Growth Rate	in-Process Volume (veluh)	Sito-Generated Trips (velvh)	Diverted Trips (vahh)	Pass-by Trips (velvin)	Existing Site Adjustment Volume (veh/h)	Other Volume [vehth]	Total Hourly Volume (velvh)	Peak Hour Factor	Other Adjustment Factor	Total 15-Minute Volume (veb/h)	Total Analysis Volume (veh/h)	Pedestrian Volume [ped/h]

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Intersection Settings

Free								<b>*</b>	1.40	34.92	4			
F						0.01	8.22	4	1.40	34.92	0.34	×		
Free								4	0.00	000	Q		=	
Fr		^		-				٧	0.00	00.0	00:0	×	2.81	O
Stop	S.		No			0.04	14.78	8	1.41	35.21	18.38	0		
is	z		Z	-	cults	0.28	19.19	o	1.41	35.21	18.	O		
Priority Scheme	Flored Lano	Storage Area (veh)	Two-Stage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & Intersection Results	V/C, Movoment V/C Ratio	d_M, Doloy for Movement [s/veh]	Movement LOS	95th-Percentile Queue Length (veh)	95th-Percentilo Queue Length [ft]	d_A, Approach Delay [s/veh]	Approach LOS	d_1, Intersection Dalay (s/veh)	Intersection LOS

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Two-way stop HCM 6th Edition 15 minutes

Kings Landing TIA Revised

Scenario 3.3 AM Developed
Intersection Lavel Of Santice Report
Intersection 12: KV Access at N Valley Rd
Debay (sec /veh):
Level Of Sontice
Volume to Capacity (vic):

10.3 B 0.020

Intersection Setup

Control Type: Analysis Method: Analysis Period:

ſ		Т	T-	т-	1	_	_	_	_	_
	N Valloy Rd	Westbound		The	12.00	0	1,7,1,77	90	Q	
	N Vel	Wost		Loft	12.00	0	1.16.1	45.00	0.00	Yes
	N Valley Rd	puno		Right	12.00	°	4474.52	8		
	e>x	Eastbound		Thru	12.00	0	1797.45	45.00	00:0	Yes
	cess	Northbound	•	Right	12.00	0	16,000	8	9	\$
	KV Access	North	<b>L</b>	Left	12.00	0	449.00	30.00	0.00	Yes
Marie	Name	Approach	Lane Configuration	Turning Movement	Lane Width [R]	No. of Lanes in Pocket	Pocket Length (ft)	Speed (mph)	Grade [%]	Crosswalk

ĺ	ΥA	KV Access	eV N	N Valley Rd	2 × 8	N Velloy Rd
-	0	0	127	0	0	69
	1.0948	1,0948	1.0948	1.0948	1,0948	1.0948
	7.00	7.00	7.00	7.00	7.00	7.00
	1.00	1.00	1.00	1,00	1,00	1,00
	0	0	°	٥	°	0
	12	0+	2	4	4	2
	0	0	0	0	0	0
	0	0	0	0	0	0
	0	0	0	°	°	0
	0	0	0	0	°	0
	5	10	141	4	4	78
_	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
	1.0000	1,0000	1.0000	1,0000	1,0000	1,0000
	4	9	14	-	+	23
	41	12	166	5	5	85
					0	
l						

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Free Kings Landing TIA Revised Scenario 3: 3 AM Developed Stop No £ Intersection Settings
Priority Scheme
Fibred Lano
Storage Area (veh)
Twe-Slage Gep Acceptance
Number of Storage Spaces in Median Vorsion 5.00-02

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	4.		900	
d_M, Dolay for Movement (s/voh)	10.27	22.6				
		5			19:	
Movement LOS	83	۷	٧	4	<	4
95th-Percentile Queue Langth [veh]	0.10	0.10	0.00	0.00	0.33	
95th-Percentile Queue Length [ft]	2.62	2.62	000	000	200	0.23
The state of the s				2000	0.00	000
o"v" whiteners neigh [swen]	ਨ ਂ	9.6	000	2	-	39
Approach LOS		1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
d_1. Intersection Dolay (s/veh)			110	8		
Intersection LOS						

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Kings Landing TIA Revised

Scenario 3: 3 AM Developed Intersection Lavel Of Service Report Intersection 13: N Valley Rd at Bruce Dr Two-way stop HCM 6th Edition 15 minutes

Delay (sec / veh): Level Of Service: Volume to Capacity (v/c):

10.1 B 0.000

Intersection Setup

Control Type: Analysis Mothod: Analysis Period:

7hru 12.00 N Valley Rd Westbound 45.00 Yes 12.00 Right 12.00 N Valley Rd 0.00 Thru
12.00 Right 12.00 Bruco Dr Northbound 30.00 Yes H 12.00 Turning Movement
Lane Width [ii]
No. of Lanes in Pocket
Pocket Lungth [ii]
Speed [ingh]
Grade [is]
Crossweik Lane Configuration Approach

Volumes

Γ	T	T	T	٦		Τ	Т	T	T	_	Т	T	Т	Т		Γ	Т	Т	Т
N Vallov Rd	89	5 50	1,0946	7.00	6.		,  5			0	•	,		3	0.8500	1,0000	25	2   5	90
NVB	c	1 0040	OLON.	00.7	2.0	0	c		,	0	0	-			0.8500	1.0000	-	,	
N Valley Rd	٥	1 0948	200	20.7	1.00	0	0	0		2	0	c		2000	0.8300	1.0000	o		
- N	127	1.0948	2.00		00,1	٥	9	0	c	,	•	0	145	0000	0.6500	1,0000	43	121	0
Bruce Dr	۰	1.0948	7.00	90,	20.1	0	٥	0	-		•	0	0	O RSON		1.0000	٥	٥	
Bru	0	1,0948	7.00	8.	201	o	o	0	0		٥	0	0	0.8500		1,000	0	0	
Name	Base Volume Input [velvh]	Base Volumo Adjustment Factor	Heavy Vehicles Percentage [%]	Growth Rate		In-Process Volume (velvh)	Site-Generated Trips (veh/h)	Diverted Trips (veh/h)	Pass-by Trips [veh/h]	Eviation Che Adirectment Maliana	CAISURY SILE AUJUSUNENI VOIUME (VEIVI)	Other Volume [veh/h]	Total Hourly Volume [veh/h]	Poak Hour Factor	Other Adicalment Engles	CORT AGUSTINETIL FECTOR	Total 15-Minute Volume (veh/h)	Total Analysis Voluma [vehth]	Podestrian Volume [pod/h]

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Kings Landing 71A Revised

Scenario 3: 3 AM Developed Intersection Settings Priority Scheme Vorsion 5.00.02

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					0.00	7.62	¥	0.00	0.00	00'0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
							4	0.00	0.00	9		9	
			)				<	00.0	0.00	00:0	¥	000	0
No		No			0.00	9.19	4	0.00	0.00	9.66			
z		z		iults	0.00	10.13	8	0.00	00.0	9.6	4	***************************************	
Flored Lane	Storage Area (veh)	Two-Slage Gap Acceptance	Number of Storage Spaces in Median	Movement, Approach, & Intersection Results	V/C, Movement V/C Ratio	d_M, Dolay for Movoment [s/veh]	Movement LOS	95th-Percentile Quave Length (veh)	95th-Percentile Queue Length [ft]	d_A, Approach Dolay (skeh)	Approach LOS	d_i, intersection Datay (s/veh)	Intersection LOS

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Scenario 3 AM Developed 4/5/2018

Turning Movement Volume: Summary

Northbound Southbound Eastbound Intersection Name

Ω

	Left	Thru	Left   Thru   Right   Left   Thru   Right   Left   Thru   Right   Left   Th	Loft		Right	Left	Die.	Right	Loft	F
N Valley Rd at Chehalem Dr 31	31	5	8	11	56	ş	-	123	33	å	۱۳
											1
Intersection Name	&	Southbound	2	Nor	Northeastbound	pun	Soul	Southwestbound	pun	Total	
	-	•	O take	1.00	ŧ			L		Malina	,

₽

g	intersection Name	ž	lorthbound	g	Š	nogqtno	٩	ű	astbound	Ĺ	\$	bunodisa,	P	Total
		Left	ם	Right	Teft.	Thru	Right	Ę		Right	100	를	Right	Volume
4	N Volloy Rd at Hwy 219	16	172	133	8	S	72	ā	8	26	8	55	Ę	769

	Intertection Name	North	puno	South	puno	West	ponoq	Total
-	Diller I reconstruction	Thr	Right	Left		Left	Right	Volume
_	Chehatem Or at Foothills Dr	40	147	41	8	g	25	154

	. 2	Т	7
Total	Volumo	88	
ž	Richt	22	ij
Westbound	200	=	
<u> </u>	Ę	Z	
2	Right	189	
estbound	ם	Ξ	
w	ğ	23	
5	Right	9	
Southbound	Thru	ă	
ŏ	Left	2	
70	Right	æ	
Normbound	ם	103 276	
Ž	Ę	ā	
Intersection Name		Foothills Dr at Hwy 219	
9		9	

Thu Right Left Thru Left Right	 omen concession	North	onno	South	punoq	West	puno	Total
	Billott Honogerbilli	Tare	Right	Left	Thru	Lof	Right	Volume

bound Eastbound Right Thu Right	Eastbour	Eastbour
bound Eastb	Northbound Eastb	Intersection Name Left Right Thru
bound	Northbound Left Right	Intersection Name Left Right
	North	Intersection Name Left

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Eastbound Left Right KV Access at N Valley Rd Intersection Name Version 5.00-02 12 ₽

	fotoreceion Namo	North	punoq	Eostb	puno	West	punoc	Total
, ]	Dillocation and the state of th	Left	Right	Tha	Right	lel.	Thru	Volume
3	N Valley Rd at Bruce Dr	۰	٥	145	۰	٥	8	235

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Kings Landing TIA Revised
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Scenario 3 AM Developed 4/5/2018

**Turning Movement Volume: Detail** 

	Intersection	To be a second	Ź	Northbound	g	Š	Southbound	g	ш	Eastbound	2	₹	Westbound	2	Total.
	Name	votume 1ype	reg		Right	ğ		Right	Fed.		Right	F	56	Richt	Volume
_		Final Baso	74	2	15	Ξ	82	5		122	35	2	z	-	322
		Growth Rate	1.00	1.00	1.00	1.00	1.00	1.0	8.	8.	1.00	8:	1.00	6.	
	N Valloy Rd at	In Process	0	0	۰	۰	٥	•	0	0	٥	۰	•	•	0
	Chehalem Dr	Net New Trips	7	0	2	٥	0	۰	۰	-	2	F	-		29
		Other	0	0	٥	٥	٥	٥	•	۰	0	0	٥	0	0
		Future Total	=	2	ន	¥	26	5	8	52	2	ş	G	,	364

-	organion		South	Southbound	Northon	Northopethons	Counting	Confiningly	L
Ē	il de la constante	Volume Two			2	2000	2000	S COOKE	ğ
	Мате	246	Loft	Right	Loft	Thru	Thru	Right	Volume
		Final Baso	13	33	15	303	211	4	579
		Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	
뿢	E Terrace Dr	In Process	0	0		۰	٥	٥	۰
ω.	at Hwy 219	Net New Trips	4	0	2	2	9	۰	50
		Other	0	0	0	۰	0	•	0
- 1		Future Total	17	39	17	305	217	+	505

Left Thru Right Loft Thru Right Left 2-8 9.5 19 18 59 20 90 1.00 1.00 1.00 1.00 1.00 0 0 0 0 0 0 0	Intersection			ž	Northbound	ğ	So	Southbound	2	ũ	Eastbound	Ę	3	Westhound	Ę	
26 15 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Volume Type	Loft Thus	Loft Thus	1	ட	Richt	10	É		43	į	1470	1			Volume
26         95         19         16         33         20         90         63         16           1,00         1,00         1,00         1,00         1,00         1,00         1,00         1,00           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           2         2         2         3         3         4         6         0         0         0           3         2         2         2         3         3         4         6         0					1						2		5	2	1	
1.00         0         0	Final Base 14 170	4.	14 170	170		131	56	95	19	18	93	8	8	8	22	747
2 3 5 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Growth Rate 1.00 1.00	1.00	_	1,00		1.00	1,00	1.00	1.00	8	8.	8.	8.	8	9,	
2 3 3 6 0 2 0 0 0 0 0 0 0 0 21 21 96 26 90 55 18	Valloy Rd at In Process 0 0		0 0	0		0	٥	۰	۰	0	۰	0	•	0	•	۰
21 21 86 28 90 55 18	Hwy 219 Net New Trips 2 2	Net New Trips 2 2	2	2		2	۰	٥	7	e			•	2	۰	22
21 21 96 26 90 55 18	Other 0 0	Other 0 0	0	۰	_	0	۰	0	0	0	٥	٥	۰	۰	•	۰
	Future Total 16 172	=	7	2		133	56	92	2.1	×	8	2	ន	S	2	769

Westbound Tatal	Left Right Volume	78 19 325	1.00 1.00	0 0	20 6 86	0 0 0	98 25 444
punoc		22	1,00	0	35	0	8
Southbound	Left	8	1.00	٥	7	0	ş
punox	Right	141	1.00	0	9	0	147
Northbound	ם	28	1.00	0	12	٥	9
Volume Tune	odi mino	Final Baso	Growth Rate	In Process	Net New Trips	Other	Future Total
Intersection	Name			Chehalem Dr at	Foothals Dr		
2	!			4	1		

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Kings Landing TIA Revised Scanario 3: 3 AM Developed

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Version 5.00-02
Intersection Volume Type

Final Baso Growth Rate In Process Net New Trips

N Valloy Rd at Bruce Dr

t

01510h 3.00-02	70.00						-	-							
			Ž	Northbound	2	Sc	Southbound	5	ш	Eastbound		\$	Westbound	9	Total
	Intercoction		•					1	1	ľ		ľ	1	11110	Volume
0	Name	Volume 1ype	40.	Thni	Rich	Ę		Right	Left	Ę	E SOL	5	משט	i du	
				1		4	502	ě	2	=	150	æ	Ξ	23	933
_		Final Baso	3	7/7	ક	,				1	-				
		Someth Bete	8	100	1.8	1.00	6.5	8	8:	8	9.	9.1	8	8	
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ç	Intersection	Volume Type				į	1001	Richt	Volume
2	Namo		Ę	Z G	Len	1880	1		
		Cioni Baco	8.8	٥	0	85	0	0	110
		Card land						50.	
		Growth Rate	9.	8	8:	3.	3.00	3	
		1	6	٥	0	٥	0	0	0
	West Access at				-				*
-	Chehalem Dr	Met New Trips	7	F	e	5	33	ç	3
		1		6	۰	٥	0	0	0
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							100	******	
	00,000		North	Northbound	Eastbound	onno	West	Westbound	iotel
2	Name	Volume Type	reg	Right	Thru	Right	Left	Thru	Volume
		Cinet Born	63	4	8	37	6	180	493
		This Color	5	8	1.00	1.00	1.00	1,0	
		to Brocogo	6	٥	0	0	0	٥	٥
5	Main at Foothills	Met Mou Trine	,	0	5	٥	٥	56	39
		other man	,	•	0	0	٥	٥	0
		Future Total	8	7	203	37	6	206	532
			_						

	e		٦		34		<b>5</b> 2
Total	Ş	215		٥	8	٥	2
Westbound	Thro	7.6	1,00	0	2	0	78
West	teft	0	1.00	0	4	0	¥
puno	Right	0	1.00	0	4	0	7
Easibound	The	139	1.00	0	2	0	141
Northbound	Right	0	1.00	0	9	٥	ę
North	le l	0	8	0	5	0	12
	Volume Type	Final Baso	Groudh Bale	In Process	Mat New Trips	Office	Future Total
onjine - 1-1	Namo				Valley Rd		
	<u>_</u>				2		

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Generated with RTX VISTRO Kings Landing TIA Revised Scenario 5.9.3 AM Developed Scenario 5.9.3 AM Developed Signal Warrants Report For Intersection 1: N Valley Rd at Chehalem Dr

Warrants Summary

Met?	No	No	No	
Name	Fight Hour Vehicular Volume	Four Hour Vehicular Volume	Peak Hour	
Manne	Warrain	14	7#	?⊭

	W.a	N. 5.	N	7904	62.01
Intersection Warrants Parameters	Major Approaches	Alinor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

Warrant Analysis Traffic Volumes

Major	Major Stroots	Minor	Minor Streets
١		z	S
Ę	333	42	61
80	001	40	59
- 11	100	39	25
75	200	34	49
64	800	32	46
61	87	29	41
8	300	26	38
89	200	25	37
48		20	29
38	10	-10	27
36	9/	10	27
36	/b	48	26
34	72	9	24
31	db db	4.	22
28	09	7.	22
29	09	÷	21
28	SG	9	12
16	P	4	7
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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Generated with PTV VISTRO Varsion 5.00-02 Warrant Analysis by Hour

Mindred Little   Mind	1												
Volume         100%         60%         70%         60%         70%         80%         70%         80%         70%         80%         70%         80%         70%         80%         70%         80%         70%         80%         70%         80%         70%         80%		1	en a		-	ľ	ı	1		1			Condition
103   No   No   No   No   No   No   No   N	~	lumber	Volume	100%	%08 %08	70%	26%	100%	80%	20%	20%		8
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Warrant 3 Condition A

Colored C	2	
Chemanon	5 1 1	11.2
Total Stopped Delay Per Vehicle on Minor Approach (5)		-
Minister of I page on Minor Street Approach		
Number of cortes of the season (lath-ma)	0:08	0:11
VehicleHours of Stopped Detay on while Approach (1)	No	No.
Delay Condition Met		61
Mathematical Street American During Same Hour	44	
Volume of miles of the Community of the	cN.	NO
High Minor Volume Corcillori moi	200	351
Tales Entering Volume on All Approaches During Same Hour	100	
Solution of the solution of th	4	4
Number of Approaches on Intersection	110	8
Total Volume Condition Met	740	110
	2	CO.
Warrant Mel for Approach	2	92
Warrant Met for Intersection		

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Scenario 5:00-02
Version 5:00-02
Signal Warrants Report For Intersection 3: NE Terrace Dr at Hwy 219

Warrants Summary

Crew Carry		No	S.	NA.	000	
	Name	Cichi Hour Vehicular Volume	mile in the second with the second se	Four Hour Venicular Volume	Peak Hour	
,	Manager	Wallan	#4	2#	#3	2#

Intersection Warrants Parameters

12 O.	Z	No	No	190%	
11.1.1. American Page	Major Approacing	Ninor Approaches	Speed > 40mph	Population < 10,000	Warrant Factor

Warrant Analysis Traffic Volumes

	T	Ţ	1		_	Γ	T	T	1	٦	٦	٦			Γ	Γ			T	T	1							
Minor Streets		z	95	22	53	46	C*	43	38	35	34	27	25	25	24	22	30	00	07	20	++	8	ي	2	2	2	-	-
		MS	322	990	200	303	258	245	249	203	103	145	446	***	143	136	120	116	116	113	64	35	Cb.	53	100	10	9	
	Major Streets		NE.	221	212	208	4.6.7	37.5	168	150	139	133	106	66	66	95	98	80	00	35		44	24	22	9	7	7	4
Varrant Attatysis Hanne Volume		Hour		-	6		3	*	5	9	7	8	6	10	***				14	15	16	- 47	18	19	20	21	22	23

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Warrant Analysis by Hour

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Warrant 3 Condition A

C T	12		D. 6.4	17.0	No		CN	002	AAC	7		No	ON	L.		
Orientation	(a) 4500 - 4	Total Stopped Delay Per Vehicle on Minor Approach (2)	Number of Lanes on Minor Street Approach	(milliant Angelon (latherman)	VohicleHours of Stopped Detay on mind Approach	Delay Condition Mel	Volume on Minor Street Approach During Same Hour	Link Minor Volume Condition Met	The state of the s	Total Entering Volume on All Approaches During Same nour	the at Appearance on Intersection	Multiple of Appropriate Approp	Total Volume Condition Met	Warrant Mel for Approach	in the for the section	Warrant mes to: mission of the

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Scenario 3:3 AM Developed
Senario 5:3 AM Developed
Signal Warrants Report For Intersection 4: N Valley Rd at Hwy 219

Warrants Summary

Met?	oN.	CN.	N.	ON	
Name	Tital Unit Vahionlar Volume	בוחות שמון אמווים אווים	Four Hour Vehicular Volume	Peak Hour	
***	Warrant	##	#2	#3	25

	X.S.	No	No	100%
Intersection Warrants Parameters	Major Approaches	Minor Approaches	Speed > 40mpn	Warrant Factor

Warrant Analysis Traffic Volumes

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

			١		3	Worden 1 Condition	A notition		S	Warrant 1 Condition B	ondilion B		Warrani 2 Warrani	Variants
Hour	Major Lanes	Lanes	Minor Lanes	Bries	-	110115		T	1		135	200		Condition
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Warrant 3 Condition A

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,	35.8			1:37	Ala	244	163	Yes	20%	ROJ	4	No.	Out	2			
Octobalo	Clanano	Total Stopped Dalay Par Vehicle on Minor Approach (s)	Minches of Lance on Minor Street Approach	Control of Control of Children	VohicleHours of Stopped Delay on Minor Approach (Injuriant)	Dotay Condition Mot	The Property Angel Angel Printer Same Hour	Volume on milital cucker special series	High Minor Volume Condition met	Tario Carios Volume on All Approaches During Same Hour	וסופו בעומנונות אסייונים וויי	Number of Approaches on mersecutin	Total Volume Condition Met		Warrant Mel for Approact	Warrant Met for Intersection	

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Warrants Summary

	Mama	Merc
Warrant	Maille	Al.A
11.4	Elaht Hour Vehicular Volume	
1#1	omilas Valenda	02
6#	Four Hour Venicular Volume	
7.4	Dook Hour	NO
£	Lean 1001	

w,ż	E	No	100%
Intersection Warrants Parameters	Major Approaches Ninor Approaches	Speed > 40mph	Varrant Factor

Warrant Analysis Traffic Volumes

Allema Allemander			Minor Streets
House	Major Streets		
Hour	1	8	<b>E</b>
	N	187	123
1	101	180	118
2	97	176	116
3	95	150	98
4	83	142	65
5	77	127	84
9	69	118	77
7	64	112	74
8	10	86	59
6	40	84	55
10	45	28	55
-11	45	980	53
12	43	2.3	48
13	39	67	44
14	36	67	44
15	36	65	43
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23	2	4	2
24	2		

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Kings Landing TIA Revised Scenario 3: 3 AM Developed

Warrant Analysis by Hour

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Warrant 3 Condition A

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Octobrolo	Offensandi	Total Stopped Delay Per Vehicle on Minor Approach (s)	Number of Lanes on Minor Street Approach	VahiclaHours of Stopped Delay on Minor Approach ((h)h:mm)	Poten Condition Mai	Company Company	Volume on Minor Street Appread Duning Samo	High Minor Volume Condition Mel	Total Entaine Volume on All Approaches During Same Hour	The standards on Interestion	Number of Appropriate 2	Total Volume Condition wer	Warrant Met for Approach	Warrant Met for intersection	

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Scanario 3:3 AM Developed

Vorsion 5:00-02

Signal Warrants Report For Intersection 6: Foothills Dr at Hwy 219

No.73	111	ON	NO	No	
	Name	Elaht Hour Vehicular Volume	Four Hour Vehicular Volume	Peak Hour	
Warrants Summary	Warrant	**	- #	7#	2#

on z	E, W	No	100%
Intersection Warrants Parameters	Major Apptoaches Minor Apptoaches	Speed > 40mph	Populabon < 10,000 Warrani Factor

Warrant Analysis Traffic Volumes

- Jacob		*	200	405	721	188	160	152	136	126	120	96	8	8	86	78	72	72	70	40	22	20	8	9	9	4	4	
alaceto and the	SISIE	я	193	126	117	115	88	60	83	77	73	59	55	£4.	63	48	AA	44	7.7	24	13	12	4	Y	*	6	6	
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Oranica	Major Stroots	١	z	225	3,0	216	212	180	171	153	142	135	108	101	101	76	88	81	81	79	45	25	23	6	7	7	2	5
Varrant Analysis Italiic Voiding		Hour				2	3	4	ç	9	7	8	6	10	11	12	13	14	15	16	- 23	18	19	30	21	22	23	

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Gonerated with PTV VISTRO Version 5.00-02

Kings Landing TIA Revised Scenario 3: 3 AM Developed

Warrant Analysis by Hour

56%         100%         80%         70%         56%           Yes         No         No         Yes         No           Yes         No         No         No         No           Yes         No         No         No         No           Yes         No         No         No         No           No         No         No         No         No	90%         70%         56%         100%         80%         70%         56%         No           Vess         Vess         Vess         Vess         Vess         Vess         Vess         No	-	۱,			Γ.		Variant 1	Warrant 1 Condition A		×	Warrant 1 Condition	andilion B		Warrant 2 Warrant 3	Warrent 3
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Warrant 3 Condition A

	58.6		7	1:50	(Inhitian)	NO SOC	122	Yos	786	ame Hour	4	γος γος	1 03	CV.	No.	
Ocionistico	Citemanon	Total Stooped Delay Per Vehicle on Minor Approach (s)	Andread Angraed	Number of Lanes on minor outer Action	VahicteHours of Stopped Delay on Minor Approach (Injustration)	Datay Condition Mot	Society Prints Society	Volume on Minor Street Approach Cuming Sound 1021	High Mingr Volume Condition Met	The Party on All Anomaches During Same Hour	Total Entenng Volunia on Automotion	Number of Approachos on Intersection	Total Volume Condition Met	200000000000000000000000000000000000000	Warrent Mel for Approach	Warrant Met for Intersection

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