

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <i>TOM SOPPE</i>	PROJECT NO(S) <i>CU-12-06 / DR-12-20 / LA-12-04 / UA-12-08</i>	
NON-REFUNDABLE FEE(S) <i>200 / 200 300 / 800 / 2400</i>	REFUNDABLE DEPOSIT(S) <i>4500 / 3000 20000 = 24500</i>	TOTAL <i>\$ 28700.00</i>

Type of Review (Please check all that apply):

- | | | |
|--|--|---|
| <input type="checkbox"/> Annexation (ANX)
<input type="checkbox"/> Appeal and Review (AP) *
<input checked="" type="checkbox"/> Conditional Use (CUP) <i>4700 - 4500 / 200 F</i>
<input checked="" type="checkbox"/> Design Review (DR) <i>2000 / 1300 D F</i>
<input type="checkbox"/> Easement Vacation
<input type="checkbox"/> Extraterritorial Ext. of Utilities
<input type="checkbox"/> Final Plat or Plan (FP)
<input type="checkbox"/> Flood Management Area
<input type="checkbox"/> Hillside Protection & Erosion Control | <input type="checkbox"/> Historic Review
<input type="checkbox"/> Legislative Plan or Change
<input checked="" type="checkbox"/> Lot Line Adjustment (LLA) */** <i>800-F</i>
<input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan)
<input type="checkbox"/> Non-Conforming Lots, Uses & Structures
<input type="checkbox"/> Planned Unit Development (PUD)
<input type="checkbox"/> Pre-Application Conference (PA) */**
<input type="checkbox"/> Street Vacation | <input type="checkbox"/> Subdivision (SUB)
<input type="checkbox"/> Temporary Uses *
<input type="checkbox"/> Time Extension *
<input checked="" type="checkbox"/> Variance (VAR) <i>CLASS II - 2900-F</i>
<input type="checkbox"/> Water Resource Area Protection/Single Lot (WAP)
<input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)
<input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)
<input type="checkbox"/> Zone Change |
|--|--|---|

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address: <i>1800 8th Ave</i> 1819 13 St, 1849 13 St, 1970 8 th Ave	Assessor's Map No.: 21E35C
	Tax Lot(s): 1900, 2000, 2100, 2200
	Total Land Area: 1.57 (post dedication)

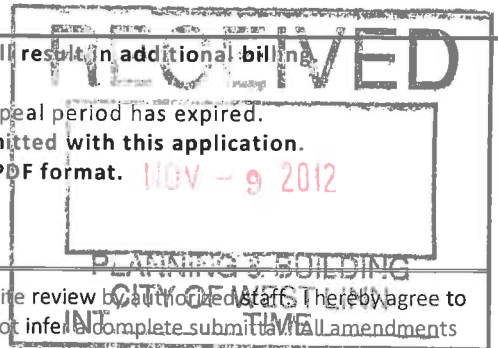
Brief Description of Proposal: A NEW PUBLIC SAFETY FACILITY FOR THE CITY'S POLICE DEPARTMENT

Applicant Name: <i>Robert Galante, on behalf of the City</i> (please print) Address: City State Zip:	Phone: <i>503 720 3609</i> Email: <i>bgalante@westlinnoregon.gov</i> <i>ragalante@comcast.net</i>
Owner Name (required): <i>City of West Linn - Chris Jordan</i> (please print) Address: <i>22500 Salamo Rd # 1000</i> City State Zip: <i>West Linn, OR 97068</i>	Phone: <i>503 657 0331</i> Email: <i>CLJORDAN@westlinnoregon.gov</i>
Consultant Name: RHYS KONRAD - GROUP MACKENZIE (please print) Address: 1515 SE WATER AVE, SUITE 100 City State Zip: PORTLAND, OR 97214	Phone: 503-224-9560 Email: rkonrad@grpmack.com

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.
 One (1) complete set of digital application materials must also be submitted on CD in PDF format.
 If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by the City of West Linn. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer I complete submitted all amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.



<i>[Signature]</i>	Date	<i>[Signature]</i>	Date
Applicant's signature		Owner's signature (required)	<i>11/8/2012</i>



TABLE OF CONTENTS

1. Project Summary 1
2. Introduction 2
3. Proposed Site Development 5
4. Base Zone Compliance 8
5. Applicable Development Standards 1
6. Chapter 55 Design Review 17
7. Chapter 60 Conditional uses 32
8. Class II Variance Request 36
9. Lot Line Adjustment 39
10. Conclusion 40
10. Exhibits 41

Conditional Use

Class II Design Review

Lot Line Adjustment Variance

ATTACHMENTS

- Transportation Impact Analysis
Stormwater Report
Neighborhood Meeting Materials

To
City of West Linn
Planning and
Building Department

For
West Linn Police
Department

Submitted
November 9, 2012

Project Number
2120180.00

1. PROJECT SUMMARY

Owner/Applicant: City of West Linn
 22500 Salamo Road
 West Linn, OR 97068
 Contact: Robert Galante
 (503) 720-3609

Representative: Group Mackenzie
 1515 SE Water Avenue, Suite 100
 Portland, OR 97214
 Contact: Rhys Konrad
 (503) 224-9560

Cross Streets: 13th Street & 8th Avenue

Tax Lots of Site: 2S 1E 35C Tax Lots 1900, 2000, 2100, 2200

Site Area: 1.54 acres (67,127 SF) after dedication

Zoning: R-10 Single Family Residential Detached
 MU Willamette Neighborhood Mixed-Use Transition

Requests: Conditional Use
 Class II Design Review
 Lot Line Adjustment
 Variance

Code Chapters

Addressed:	Chapter 11	R-10 District
	Chapter 28	Willamette and Tualatin River Protection
	Chapter 32	Water Resource Area Protection
	Chapter 33	Stormwater Quality and Detention
	Chapter 34	Accessory Structures, Accessory Dwelling Units, and Accessory Uses
	Chapter 35	Temporary Structures and Uses
	Chapter 36	Manufactured Homes
	Chapter 37	Home Occupations
	Chapter 38	Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.
	Chapter 41	Building Height, Structures on Steep Lots, Exceptions
	Chapter 42	Clear Vision Areas
	Chapter 44	Fences
	Chapter 46	Off-street Parking, Loading and Reservoir Areas
	Chapter 48	Access, Egress and Circulation
	Chapter 52	Signs
	Chapter 53	Sidewalk Use
	Chapter 54	Landscaping
	Chapter 55	Design Review
	Chapter 85.210	Lot Line Adjustment
	Chapter 60	Conditional Use
	Chapter 75	Variance

2. INTRODUCTION

The City of West Linn has been evaluating alternatives for a new Police Department facility to better support their operational requirements, meet their current needs and allow for future growth. Extensive site selection and evaluation has occurred over the course of the past 5 years, resulting in City Council’s direction on the subject 8th Avenue property. A bond was approved by West Linn voters in November 2011, the result of which is the acquisition of the property and now application for land use approval in order to construct the new facility.

The site’s vicinity is shown on the figure below, and is located near the City’s Historic Downtown. The site contains four existing tax lots, situated at the northeast corner of the intersection of 8th Avenue and 13th Street. The site is split zoned R-10 and MU-CBD, and the proposed public safety use is a conditional use in both zones.

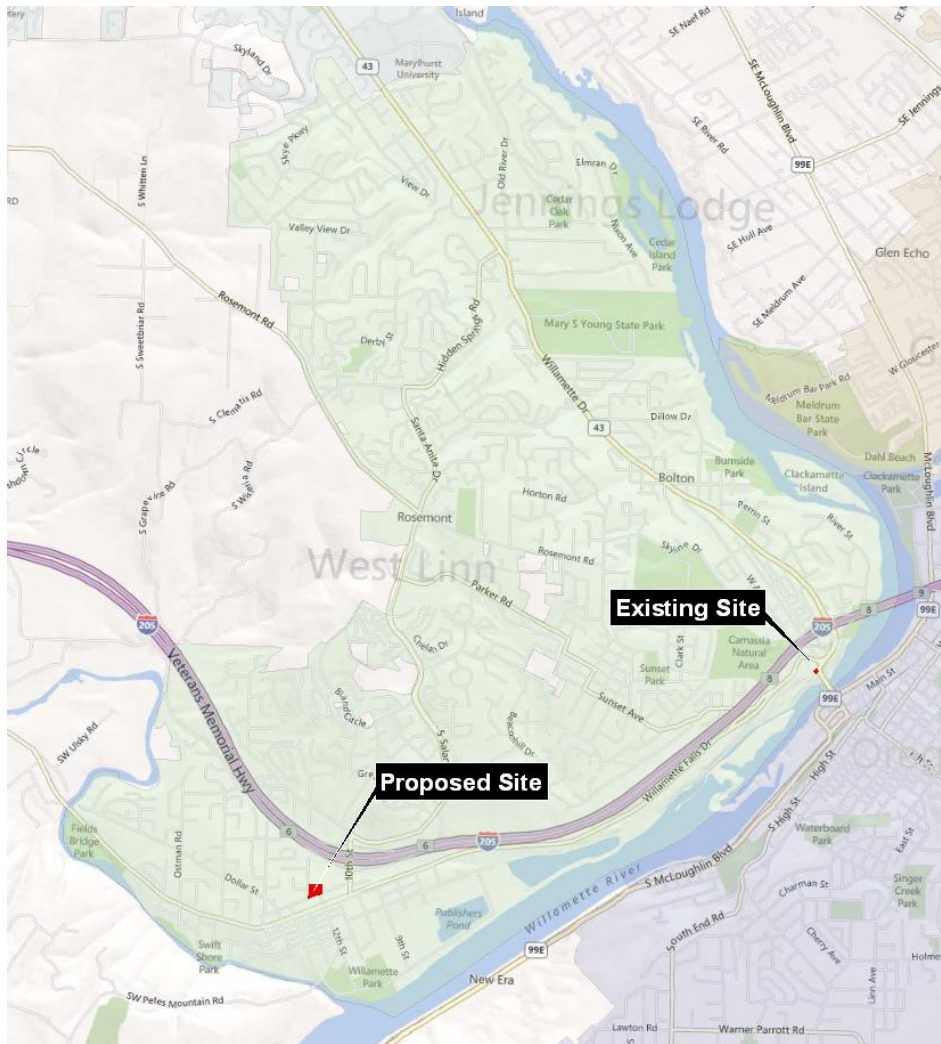


Figure 2.1 - Vicinity Map

EXISTING CONDITIONS

Surrounding Development

Surrounding development includes the following:

- West: Single-family residential
(Zoned R-10 – Low Density Residential)
- North: Single-family residential and commercial parking
(Zoned R-10 – Low Density Residential and GC – General Commercial)
- East: Morton’s Tree Service
(Zoned GC – General Commercial)
- South: Willamette Fire Station and a mixture of single-family and commercial development
(Zoned MU – Mixed-Use and GC – General Commercial)

Existing Development

The site currently contains three vacant single-family homes that have been purchased by the City. These homes will be moved prior to development of the proposed police station. The topography of the site slopes from the southeast to the northwest of the site, with approximately 20 feet of fall. However, there are no Type I or Type II lands identified on the subject site.

In addition the site contains several trees, with a majority of them located on the northerly one-third of the site. Only one tree (31" Walnut) has been deemed significant by Mike Perkins, City Arborist, and the remaining trees are non-significant.

No significant natural resources, according to the adopted City inventories exist on the subject site. In addition, nothing is shown on the City’s most recent Goal 5 inventory maps.

Streets

The site is located at the northeast corner of 8th Avenue and 13th Street, both local streets, with varying existing right-of-way widths.



Figure 2.2 - Aerial Map

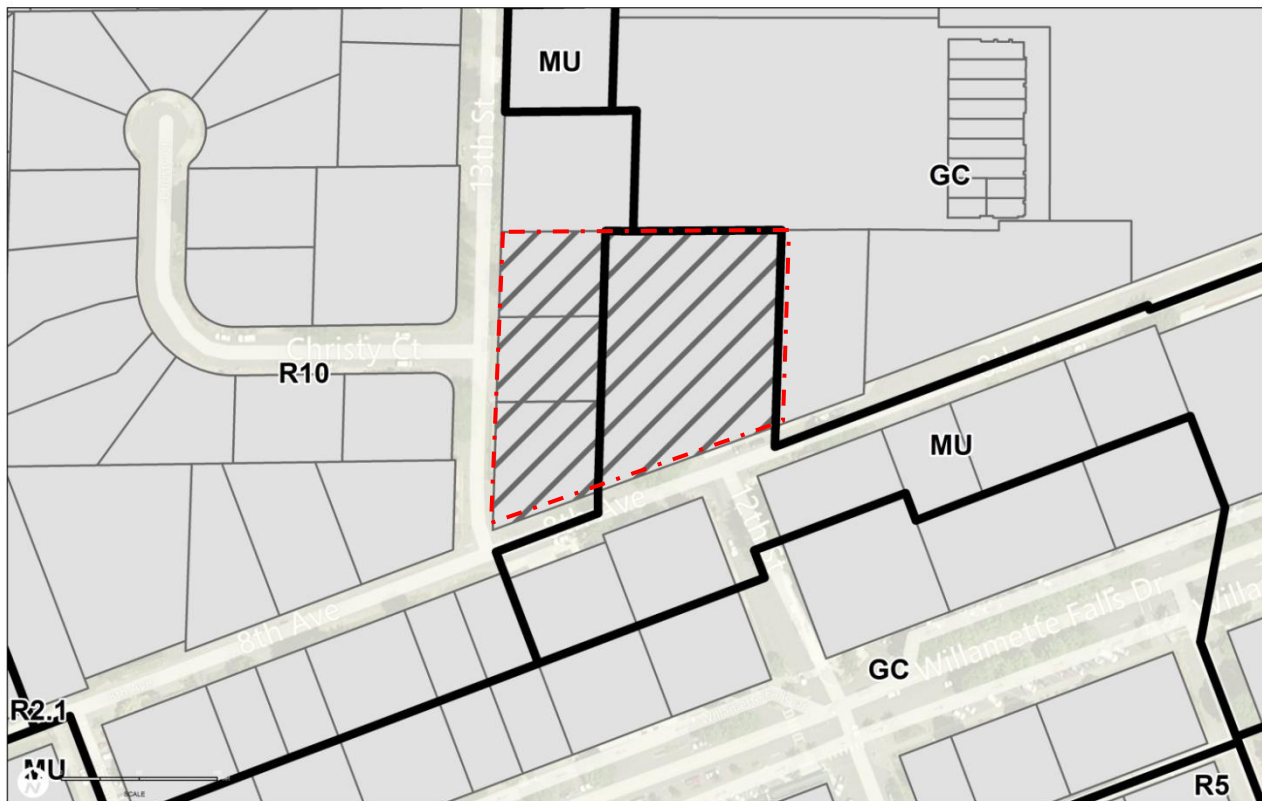


Figure 2.3 - Existing Zoning Map

3. PROPOSED SITE DEVELOPMENT

BUILDING

The scale of the 21,959 SF building has been carefully composed to provide a civic prominence to the site at the 8th Avenue entrance, while respecting the scale of the residential neighborhood to the north and west of the site. The west end of the building has been set into the natural slope of site, reducing the perception of height from the residential neighborhood. The scale of the building increases towards the east end of the site, which is closer to the commercial Willamette District of, and functionally provides a public entrance to the building. The proposed building is predominantly composed of structural brick, the colors of which have been selected to complement the brick color selected for the Tualatin Valley Fire Station, located across 8th Avenue. As the site is split zoned between residential and commercial, the façade design has attempted to respond to the surrounding area. The brick facades have been designed adjacent to the residential neighborhood. Where more contemporary material selections have been made, closer to the commercial areas to the east of the site, the colors are subdued greys, offset with dark window frames. Parapets, detailed to respond to the historic nature of the surrounding Willamette neighborhood, have been used for the roof forms, to convey the public and civic nature of the building. The windows at the secure, west end of the building are reduced in scale, with a more residential rhythm, similar to the Tualatin Valley Fire station across 8th Avenue. At the east end of the building the window system has been selected to provide larger, more open expanses of glazing, where the public interacts more with the building and the functions are adjacent to the existing commercial development to the east.

SITE IMPROVEMENTS

The proposed site improvements with this application include all the necessary grading, utility, landscape and other improvements needed for the development of the site. Code requires a minimum of 63 and a maximum of 70 off-street parking spaces under the Office Use category for 21,959 SF of building area. Proposed parking consists of 65 surface parking stalls split between the public and private secure areas. All proposed parking meets all of the parking and circulation development standards in the Code for the proposed zone. Landscaping of the site in the amount of 29% is proposed including areas devoted to stormwater quality and detention.

The site improvements necessary for the proposed development require the removal of 5 existing trees on the site. A sixth tree is proposed to be removed along 13th Street in order to construct required frontage improvements, which include a sidewalk and planter strip.

PUBLIC IMPROVEMENTS

Utilities

Stormwater

Coordination with the City Engineer is ongoing with regards to the most appropriate method of stormwater discharge for the site. On-site system of catch basins and pipe will direct water to the site's water quality and detention pond.

Sewer

An 8-inch public sanitary sewer main exists in 8th Avenue. A new 6-inch extension is proposed to this existing main to serve the proposed facility.

Water

A 6-inch public water main exists in 8th Avenue. A new extension is proposed into the site, including a backflow device adjacent to the property line. The City’s consultant will confirm that there is adequate water pressure for the proposed use.

Frontage Improvements

Public frontage improvements along 8th Avenue and 13th Street are proposed. In order to accommodate the full right-of-way width according to local street standard, 8-feet of the subject site’s frontage will be dedicated. A new 6-foot wide concrete sidewalk, 6-foot planter strip with street trees, and an ADA ramp will be provided along 13th Street. While we are proposing to save the existing significant walnut tree, the frontage improvements along 8th Avenue will vary and include a curb tight 4'-8' sidewalk along the site with street trees behind. Two new driveways are proposed including a 30-foot primary driveway on 8th Avenue, and a 22-foot one-way secure driveway for emergency egress to 13th Street.

Traffic

A complete transportation impact analysis has been prepared and submitted as part of the application package. The following summarizes the recommended mitigation measures for the proposed project:

REVIEW OF INTERSECTION SIGHT DISTANCE

- Adequate sight distance is available at the proposed site accesses along 8th Avenue and 13th Street.

BACKGROUND AND IN-PROCESS TRAFFIC

- Based on historical traffic growth trends for the 10th Street Corridor, the Willamette area has experienced little traffic growth over the past several years. However, to produce a conservative analysis of future traffic conditions, an annual traffic growth rate of 1.0% was utilized in this study.
- Additional in-process traffic to account for full occupancy at the Willamette Marketplace development was added to the roadway network using the directional distributions from Kittelson & Associates’ latest Transportation Impact Analysis of the site.

SITE DEVELOPMENT PLAN

- Access to the site will be provided by a primary full-access driveway to 8th Avenue opposite the 12th Street approach and a secondary full-access driveway to 13th Street for emergency use.
- Using the trip generation information gathered from existing police stations in the Portland metropolitan area, the proposed development is projected to generate 39 primary trips during the weekday AM and PM peak hours.
- The proposed development is expected to be completed by 2014.

TRAFFIC OPERATIONS

- Traffic operations at all study intersections will meet mobility standards for the weekday AM peak hour. However, two study intersections will not meet mobility standards in the PM peak hour. Mitigation measures are needed at the 8th Avenue/10th Street and Willamette Falls Drive/12th Street intersections to operate at mobility standards.

MITIGATION MEASURES

Based on the findings documented in this study, the following recommendations are made to ensure the proposed site development will not significantly or adversely impact traffic operations or safety at all study intersections and proposed site accesses:

1. Restrict northbound left-turn movements at the 8th Avenue/10th Street intersection by eliminating the left-turn lane, installing a pedestrian refuge island, and restricting potential left-turns from the through lane by posting “NO LEFT TURN” signage.
2. Implement one of two mitigation measures at the Willamette Falls Drive/12th Street intersection:
 - Option 1: Maintain two-way stop-control and construct short 50-foot left turn pockets on the eastbound and westbound approaches of Willamette Falls Drive.
 - Option 2: Implement all-way stop-control, and install crosswalks on all intersecting legs.

4. BASE ZONE COMPLIANCE

As discussed above, the subject site contains two zoning districts. In cases where requirements of the base zone cannot be met, the criterion of the conditional use section will be addressed, as allowed, rather than a variance to ensure compliance with the intent of the code. This section of the narrative addresses the standards of the underlying zoning districts.

CHAPTER 11 SINGLE-FAMILY RESIDENTIAL (R-10)

The following addresses the approval criteria identified in Chapter 11 Single-Family Residential Detached, R-10 of the West Linn Development Code:

11.060 Conditional Uses

The following are conditional uses which may be allowed in this zoning district subject to the provisions of Chapter 60 CDC, Conditional Uses.

3. Public Safety Facilities

Response: CDC 02.030 Specific words and terms, defines “Public safety facilities. Providing protection pursuant to fire, life, and safety code sections together with the incidental storage and maintenance of necessary vehicles. Typical uses include fire stations, **police stations**, and ambulance services.” The proposed police station would fall under this use description, and therefore, requires conditional use approval subject to Chapter 60.

11.070 Dimensional Requirements, Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

Except as may be otherwise provided by the provisions of this Code, the following are requirements for uses within this zone:

Response: All of these standards are met as shown below.

Table 4-1 Applicable Development Standards		
Standard	Requirement	Provided
1. Minimum Lot Size	See 11.080 below.	N/A, no single-family detached units proposed.
2. Minimum Front Lot Line	35'	N/A, no new lots are proposed.
3. Average Minimum Lot Width	50'	N/A, no new lots are proposed.
4. Average Lot Depth	Less than 2.5 times the lot width; more than 90'	N/A, no new lots are proposed.
5. Minimum Yard Dimensions	35'	N/A, no new lots are proposed.
<i>Front</i>	20'	23'
<i>Side – Interior Side Yard</i>	7.5'	N/A
<i>Side – Abutting a Street</i>	15'	22'
<i>Rear</i>	20'	133'
6. Maximum Height	35'	32'-6"
7. Maximum Lot Coverage	35%	28%
8. Minimum access width (non-street)	15'	N/A, all accesses are provided directly to abutting

Table 4-1 Applicable Development Standards		
Standard	Requirement	Provided
		streets.
9. Maximum Floor Area Ratio	0.45, 12,370 SF	0.35, 9,519 SF
10. Sidewall	See Chapter 43	N/A, no single-family or duplex residential units proposed.

11.080 Dimensional Requirements, Conditional Uses

Except as may otherwise be established by this code, the appropriate lot size for a conditional use shall be determined by the approval authority at the time of consideration of the application based upon the criteria set forth in CDC 60.070(A) and (B).

Response: As the proposed public safety facility is a conditional use in the R-10 zone, the appropriate lot size is regulated by CDC 60.070(A). However, the lot side requirement under 11.070.1 appears to apply only to a single-family detached unit. As this application is for a public safety facility, the minimum lot size standard does not apply.

11.090 Other Applicable Development Standards

A. *The following standards apply to all development including permitted uses:*

1. *Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*
2. *Chapter 35 CDC, Temporary Structures and Uses.*
3. *Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.*
4. *Chapter 40 CDC, Building Height Limitations, Exceptions.*
5. *Chapter 41 CDC, Structures on Steep Lots, Exceptions.*
6. *Chapter 42 CDC, Clear Vision Areas.*
7. *Chapter 44 CDC, Fences.*
8. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.*
9. *Chapter 48 CDC, Access, Egress and Circulation.*
10. *Chapter 52 CDC, Signs.*
11. *Chapter 54 CDC, Landscaping.*

Response: Please see Section 5 of this narrative which addresses these standards where applicable.

B. *The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings, residential homes and residential facilities. (Ord. 1590 § 1, 2009)*

Response: Chapter 55 applies to the proposed public safety facility use and is addressed in Section 6 of this narrative.

CHAPTER 59 WILLAMETTE NEIGHBORHOOD MIXED USE TRANSITIONAL ZONE (MU)

The following addresses the approval criteria identified in Chapter 59 Willamette Neighborhood Mixed-Use transitional Zone, MU, of the West Linn Development Code:

59.060 Conditional Uses

Only the following conditional uses are allowed in this zone subject to the provisions of Chapter 60 CDC, Conditional Uses:

7. *Public support and public safety facilities, including public parking lots.*

Response: CDC 02.030 Specific words and terms, defines “Public Safety Facilities. Providing protection pursuant to fire, life, and safety code sections together with the incidental storage and maintenance of necessary vehicles. Typical uses include fire stations, **police stations**, and ambulance services.” The proposed police station would fall under this use description, and therefore, requires conditional use approval subject to Chapter 60.

59.070 Dimensional Requirements, Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

A. *Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:*

Response: These standards are met as shown below. Please note that the ‘provided’ column assumes that the existing lots have been consolidated as addressed in Section 8 of this narrative.

Standard	Requirement		Provided
1. Minimum Front Lot Line	35'		N/A, no new lots are proposed.
2. Average Minimum Lot	50'		N/A, no new lots are proposed.
3. Average Lot Depth	Less than 2.5 times the lot width; more than 90'		N/A, no new lots are proposed.
4. Minimum Yard Dimensions	Min.	Max.	N/A, no new lots are proposed.
5. Front	12'	20'	16'
6. Side – Interior Side Yard	7.5'	N/A	75'
7. Side – Abutting a Street	12'	N/A	N/A
8. Rear	20'	N/A	124'
9. Maximum Height	Two Stories or 35', whichever is less		Two Stories, 32'-6"
10. Maximum Building Size	6,000 SF per above grade floor		7,981 SF
11. Maximum Floor Area Ratio	0.40, ground floor not to exceed 5,000 SF		0.29, ground floor 7,981 SF
12. Min/Max Lot Size	4,500/10,000 SF unless existing lot of record		N/A, existing lot of record.

A. *Design Standards. All uses in the mixed-use zone shall comply with the provisions of Chapter 55 CDC, except for CDC 55.100(B)(7)(a), (b), (c), (h), (i), and (j). Further, single-family and duplex residential uses shall also comply with the Class I design review standards. In addition, the design standards described below apply to all uses.*

Response: Chapter 55, except for the provisions noted in this standard, applies to the proposed public safety facility use and is addressed in Section 6 of this narrative.

1. *Residential-style building with single story porch on the front, and on the side where it abuts a street.*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B) (1) through (5) of this section. However, design considerations have been incorporated into the structure to respond to the existing character of the surrounding properties.

2. *New sidewalk construction shall be allowed to match the historical sidewalk standards in this zone.*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B)(1) through (5) of this section. However, new sidewalks are proposed along the site’s frontage of 8th Avenue and 13th Street and will meet City Public Works’ standards.

3. *Off-street parking shall be behind, under, or on the side of building.*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B)(1) through (5) of this section. However, proposed public and secure parking is located on the side and behind the building.

4. *Garages shall not extend any closer to the street than the street-facing facade of the house.*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B)(1) through (5) of this section. Further, this application does not include garages associated with a residential use.

5. *There shall be no illuminated outdoor advertising on accessory buildings, equipment, or vending machines*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B)(1) through (5) of this section. This application does not propose outdoor advertising or accessory buildings.

6. *These design standards, subsections (B)(1) through (5) of this section, shall not apply to public facilities such as reservoirs, water towers, treatment plants, fire stations, pump stations, power transmission facilities, etc. It is recognized that many of these facilities, due to their functional requirements, cannot readily be configured to meet these design standards. However, attempts shall be made to make the design sympathetic to surrounding properties through compatible architecture, enhanced landscaping, setbacks, buffers, and other reasonable means. (Ord. 1515, 2005; Ord. 1547, 2007; Ord. 1565, 2008)*

Response: As allowed under Subsection 6, the proposed public safety facility is not required to meet the design standards of (B)(1) through (5) of this section. However, as noted above, the proposed development meets several of the requirements.

59.080 Additional Use Requirements

In addition to all other provisions of this section, the following additional requirements may apply:

A. *Permitted uses may only be open from 6:00 a.m. to 10:00 p.m. and are subject to the noise provisions of Chapter 55 CDC.*

Response: The proposed public safety facility is a conditional use in this zone. As such this standard does not apply. The noise provisions of Chapter 55 are addressed in Section 6 below.

B. *Exterior business activity shall not take place beyond the rear wall of the building when the subject property abuts a residential district, except for parking and refuse storage. Refuse storage must be buffered or enclosed and may not abut a property line that adjoins a residential zone.*

Response: The rear of the site is proposed to be used for secure parking for police staff, and landscaping, stormwater, and refuse storage. The portion of the site zoned R-10 abuts a residential zone to the north and west. The proposed refuse storage is enclosed and buffered from the side residential property (zone) line by 11' and new site landscaping. This standard is met.

C. *If a qualified historic residential landmark in the Willamette neighborhood is destroyed, it may be rebuilt on the original building footprint. (Ord. 1515, 2005; Ord. 1547, 2007)*

Response: The existing structures located on the subject property are not qualified historic residential landmarks. This standard does not apply.

59.090 Dimensional Requirements, Conditional Uses

Except as may otherwise be established by this code, the appropriate lot size for a conditional use shall be determined by the approval authority at the time of consideration of the application based upon the criteria set forth in CDC 60.070(A) and (B). (Ord. 1515, 2005; Ord. 1547, 2007)

Response: As the proposed public safety facility is a conditional use in the MU zone, the provisions of this Chapter that are not met will be reviewed under the criteria set forth in CDC 60.070(A) and (B). These include 59.070(A).6 and (A).7 with regards to the maximum allowed building size and ground floor. Please refer to Section 7 of this narrative.

59.100 Other Applicable Development Standards

The provisions of CDC 25.060, 25.070, 25.080, and 25.090, apply to properties currently identified in the West Linn historic inventory, Chapter 26 CDC, Historic Landmarks. The following standards apply to all development including permitted uses:

1. *Chapter 28 CDC, Willamette and Tualatin River Protection.*
2. *Chapter 36 CDC, Manufactured Homes.*
3. *Chapter 32 CDC, Water Resource Area Protection.*
4. *Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*
5. *Chapter 35 CDC, Temporary Structures and Uses.*
6. *Chapter 37 CDC, Home Occupations.*
7. *Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.*
8. *Chapter 40 CDC, Building Height Limitations, Exceptions.*
9. *Chapter 42 CDC, Clear Vision Areas.*

10. *Chapter 44 CDC, Fences.*
11. *Chapter 48 CDC, Access, Egress and Circulation.*
12. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas, except for the provisions of CDC 46.140, apply to all uses.*
13. *Chapter 55 CDC, Design Review.*

14. *Chapter 54 CDC, Landscaping.*
15. *Chapter 53 CDC, Sidewalk Use. (Ord. 1547, 2007)*

Response: The subject property is not identified in the West Linn historic inventory, and as such, the provisions of CDC 25.060, 25.070, 25.080 and 25.090 do not apply. The remaining standards are addressed in Section 5 of this narrative.

5. APPLICABLE DEVELOPMENT STANDARDS

This section addresses the applicable Development Standards required by CDC 11.090.A and 55.100.A:

CHAPTER 28 WILLAMETTE AND TUALATIN RIVER PROTECTION

Response: The provisions of Chapter 28 do not apply to this site as it is not located within the Willamette and Tualatin River Protection Area overlay zone.

CHAPTER 32 WATER RESOURCE AREA PROTECTION

Response: The provisions of Chapter 32 do not apply to this site as there is no identified water resource areas located within the project boundary.

CHAPTER 33 STORM WATER QUALITY AND DETENTION

33.040 Approval Criteria

The Planning Director and City Engineer shall make written findings with respect to the following criteria when approving, approving with conditions, or denying applications for stormwater detention permits and stormwater quality permits.

A. *Stormwater quality facilities shall meet non-point source pollution control standards required by the Public Works Design Standards.*

Response: The proposed stormwater quality facilities will be specified to meet Public Works Design Standards. These will be reviewed during the building permit process.

B. *Design of stormwater detention and pollution reduction facilities and related detention and water quality calculations shall meet Public Works Design Standards and shall be prepared by a professional engineer licensed to practice in the State of Oregon.*

Response: The design and calculations of proposed stormwater facilities will meet Public Works Standards. These will be reviewed during the building permit process.

C. *Soil stabilization techniques, erosion control, and adequate improvements to accommodate the intended drainage through the drainage basin shall be used. Storm drainage shall not be diverted from its natural watercourse unless no feasible alternatives exist. Interbasin transfers of storm drainage will not be permitted.*

Response: Erosion control methods will be provided in accordance with DEQ standards. The proposed storm drainage will not be diverted from the site's current basin.

D. *Stormwater detention and treatment facilities shall encroach no further than 25 feet into the outside boundary of a water quality resource area. The area of encroachment must be replaced by adding an equal area to the water quality resource area on the subject property.*

Response: The site does not contain a water quality resource area. This standard does not apply.

E. *Stormwater detention and treatment facilities shall be vegetated with plants from the Metro’s Native Plant List as described in CDC 33.070.*

Response: Proposed plantings of the stormwater facilities are specified with plants per Metro’s Native Plant List according to Resolution 98-2708 as required by this standard. As there are no recommendations for groundcover within this list, we have specified a plant species from the City of Portland BES native plant list for stormwater facilities.

F. *Projects must either stockpile existing topsoil for reuse on the site or import topsoil, rather than amend subsoils. Soil amendments are allowed only where the applicant can demonstrate they are the only practical alternative for enabling the soil to support healthy plantings, promoting better stormwater treatment, or improving soil infiltration capacity (where appropriate).*

Response: This project will import topsoil for support of healthy plantings. This standard is met.

G. *Interim erosion control measures, such as mulching, shall be placed immediately upon completion of grading of the facilities. (Ord. 1463, 2000)*

Response: Erosion control measures as required by DEQ will be followed during site construction.

33.070 Plant Material for Water Quality Facilities

Metro’s Native Plant List is incorporated by reference as a part of this chapter. The applicant shall submit a detailed planting plan using species from Metro’s Native Plant List. The intent of this plan is to establish native vegetation to protect against erosion and sediment infiltration. A mix of low maintenance trees, shrubs, and groundcover is preferred with an even distribution.

A. *The planting plan shall be prepared by a professional landscape architect if the development site contains more than 5,000 square feet of impervious area. The planting plan shall include a table listing the scientific names, size, and quantity of plants.*

Response: The proposed planting plan has been prepared by a professional landscape architect.

B. *The plan shall include plant location, species, size, and quantity for stormwater detention and treatment facilities. Evergreen trees shall have a minimum height of four feet and deciduous trees shall be at least one-inch caliper in size at the time of planting. Shrubs shall be a minimum of one gallon in size at the time of planting. Spaces shall be filled at mature growth but not so that overplanting occurs and overcrowding results. Temporary irrigation systems or other means of ensuring establishment of the plantings must be specified.*

Response: This standard is met as shown on the attached landscape plan.

C. *Plantings shall be designed to minimize or eliminate the need for herbicides, fertilizers, pesticides, or soil amendments at any time before, during, or after construction, or on a long-term basis. Plantings shall be designed to minimize or eliminate the need for frequent mowing and irrigation.*

Response: Plant materials have been specified to comply with this standard. A temporary irrigation system is specified to establish plant materials, which will be shut down to meet LEED requirements.

D. *The applicant is responsible for implementing the planting plan during the next fall or spring planting season following permit approval. Prior to planting, noxious vegetation shall be removed. All soil areas must be covered with specified plants and mulch to prevent erosion.*

Response: Plant materials will be implemented during construction to be planted in accordance with best practices, which includes planting during the fall or spring.

E. *Plantings shall be incorporated into a public improvement guarantee agreement, which includes a maintenance bond as required by CDC 91.010(C). The maintenance bond is required for any project involving stormwater quality and detention facilities. (Ord. 1463, 2000)*

Response: A public improvement guarantee agreement will be provided if required.

CHAPTER 34 ACCESSORY STRUCTURES, ACCESSORY DWELLING UNITS, AND ACCESSORY USES

Response: No accessory structures, dwelling units or uses are proposed with this application. This chapter does not apply.

CHAPTER 35 TEMPORARY STRUCTURES AND USES

Response: The future construction of the proposed police facility will have associated temporary structures and uses in the form of construction trailers, equipment and activity. At this point there are no defined details, however as construction nears this information can be coordinated with the Planning Director. The provisions of this chapter are met.

CHAPTER 36 MANUFACTURED HOMES

Response: No manufactured homes are proposed with this application. This chapter does not apply.

CHAPTER 37 HOME OCCUPATIONS

Response: This application does not include a request for any home occupations. This chapter does not apply.

CHAPTER 38 ADDITIONAL YARD AREA REQUIRED

Response: All setbacks required in both site zoning districts are met with this application. This chapter does not apply.

CHAPTER 41 BUILDING HEIGHT, STRUCTURES ON STEEP LOTS, EXCEPTIONS

A. *For all zoning districts, building height shall be the vertical distance above a reference datum measured to the highest point of a flat roof or to the deck line of a mansard roof or to the highest gable, ridgeline or peak of a pitched or hipped roof, not including projections above roofs such as cupolas, towers, etc. The reference datum shall be selected by either of the following, whichever yields a greater height of building.*

1. For relatively flat sites where there is less than a 10-foot difference in grade between the front and rear of the building, the height of the building shall be measured from grade five feet out from the exterior wall at the front of the building; or

Response: The subject site has more than 10-feet of grade difference between the front and rear of the building. This standard does not apply.

2. *For steeper lots where there is more than a 10-foot difference in grade between the front and rear of the building, the height of the building is measured from grade at a point five feet out from the exterior wall on the lowest side (front or rear) of the building. One then measures vertically to the peak or ridgeline of the roof to determine the height.*

Response: The subject site has approximately 14 feet of grade difference between the front and rear of the building. As such the measurement of building height has been determined using this standard. The height of the building is 32'-6" measured at the northeast corner of the structure.

3. *Buildings on cross slopes or side slopes are measured at either the front or rear of the building using methods described in subsections (A)(1) and (2) of this definition only.*

Response: The proposed building is not on a cross or side slope. This standard does not apply.

CHAPTER 42 CLEAR VISION AREAS

Response: The subject site is a corner lot with a right-of-way width greater than 24 feet. As such, the appropriate clear vision triangle according to CDC 42.040 (30') has been provided along the intersection of 8th Avenue and 13th Street. Additionally, the two site driveways proposed meet the requirements of this section as shown on the site and landscape plan. The standards of this chapter have been met.

CHAPTER 44 FENCES & SCREENING OUTDOOR STORAGE

44.020 Sight-Obscuring Fence; Setback and Height Limitations

A. *A sight- or non-sight-obscuring fence may be located on the property line or in a yard setback area subject to the following:*

1. *The fence is located within:*
 - a. *A required front yard area, and it does not exceed three feet, except pillars and driveway entry features subject to the requirements of Chapter 42 CDC, Clear Vision Areas, and approval by the Planning Director;*

Response: This application does not include fences or walls within the front yard along 8th Avenue. This standard does not apply.

- b. *A required side yard which abuts a street and it is within that portion of the side yard which is also part of the front yard setback area and it does not exceed three feet;*

Response: The proposed wall along 13th Street is not within the front yard. This standard does not apply.

- c. *A required side yard which abuts a street and it is within that portion of the side yard which is not also a portion of the front yard setback area and it does not exceed six feet provided the provisions of Chapter 42 CDC are met;*

Response: The proposed wall along 13th Street will not exceed 6 feet. The wall will include a vehicle gate for security setback from the driveway with 13th Street,

meeting the vision clearance standards of Chapter 42. No other fences or walls are proposed along a side yard which abuts a street. This standard is met.

- d. *A required rear yard which abuts a street and it does not exceed six feet; or*

Response: The proposed fence and wall do not abut a street. This standard does not apply.

- e. *A required side yard area which does not abut a street or a rear yard and it does not exceed six feet.*

Response: The proposed fence within the rear yard does will not exceed 6 feet. The remainder of the secure wall is within the interior of the site, and outside of a required rear or side yard. This standard is met.

B. *Fence or wall on a retaining wall. When a fence is built on a retaining wall or an artificial berm, the following standards shall apply:*

1. *When the retaining wall or artificial berm is 30 inches or less in height from finished grade, the maximum fence or wall height on top of the retaining wall shall be six feet.*
2. *When the retaining wall or earth berm is greater than 30 inches in height, the combined height of the retaining wall and fence or wall from finished grade shall not exceed eight and one-half feet.*
3. *Fences or walls located on top of retaining walls or earth berms in excess of 30 inches above finished grade may exceed the total allowed combined height of eight and one-half feet; provided, that the fence or wall is located a minimum of two feet from the retaining wall and the fence or wall height shall not exceed six feet.*

Response: The proposed fence near the northern property line will be constructed on a 24-inch retaining wall. The fence will be 6 feet and the combined height of the fence and wall will not exceed 8.5 feet. This standard is met.

44.030 Screening of Outdoor Storage

A. *All service, repair, and storage activities carried on in connection with any commercial, business or industrial activity and not conducted within an enclosed building shall be screened from view of all adjacent properties and adjacent streets by a sight-obscuring fence.*

B. *The sight-obscuring fence shall be in accordance with provisions of Chapter 42 CDC, Clear Vision Areas, and shall be subject to the provisions of Chapter 55 CDC, Design Review.*

Response: This application does not include outdoor storage. This standard does not apply.

44.040 Landscaping

Landscaping which is located on the fence line and which impairs sight vision shall not be located within the clear vision area as provided in Chapter 42 CDC.

Response: Landscaping along the site’s 13th Street frontage will meet the requirements of Chapter 42.

44.050 Standards for Construction

- A. *The structural side of the fence shall face the owner’s property; and*
- B. *The sides of the fence abutting adjoining properties and the street shall be maintained. (Ord. 1291, 1990)*

Response: The construction of the fence near the northern property line will be specified to be constructed in compliance with (A). Coordination with the abutting property owners for maintenance of the fence will occur, although the fence is proposed to be located entirely on the subject property. This standard is met.

CHAPTER 46 OFF-STREET PARKING AND LOADING

46.090 Minimum Off-Street Parking Space Requirements

- C. *Commercial*
 - 5. *Professional offices, banks and savings and loans, and government offices. One space for every 350 sq. ft. of gross area.*

Response: The proposed gross area of the building is 21,959 SF. Per this use classification, a minimum of 63 spaces and a maximum of 70 spaces (per CDC 46.090.F). We are proposing to have 65 spaces meeting the minimum and maximum parking space requirements.

46.110 Reservoir Areas Required for Drive-In Uses

Response: The proposed public safety facility is not a listed drive-in use. This standard does not apply.

46.120 Driveways Required On Site

Response: The site design includes a primary publicly accessible driveway to 8th Avenue meeting this standard.

46.130 Off-Street Loading Spaces

Buildings or structures to be built or substantially altered, which receive and distribute material or merchandise by truck, shall provide and maintain off-street loading and maneuvering space. The dimensional standard for loading spaces is a minimum of 14 feet wide by 20 feet long or proportionate to accommodate the size of delivery trucks that typically serve the proposed use as follows:

Response: The proposed public safety facility does not receive and distribute material or merchandise by truck. As such no loading spaces are proposed. This standard does not apply.

46.140 Exemptions to Parking Requirements

Response: The subject site is not located within the Willamette Falls Drive Commercial District/Overlay Zone. This standard does not apply.

46.150 Design and Standards

The following standards apply to the design and improvement of areas used for vehicle parking, storage, loading, and circulation:

A. *Design Standards:*

1. *“One standard parking space” means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as “compact.” To accommodate larger cars, 50 percent of the required parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multi-family parking stalls back onto a main driveway, the stalls shall be nine feet by 20 feet.*

Response: As is shown on the attached site plan (Sheet C2.1), 48 “standard” (9'x18') parking spaces are proposed and 14 “compact” (9'x 16') parking spaces. This use requires a minimum of 63 parking spaces, and 14 (22%) are proposed. This standard is met.

2. *Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and Section 46.150(B) and placed nearest to accessible building entryways and ramps.*

Response: The 3 disabled parking spaces associated with the proposed development are consistent with all applicable dimensional standards. This standard is met.

3. *Parking spaces located in the public right-of-way that require backing movements or other maneuvering within a street or right-of-way are permitted with City Engineer approval as is in the case of Willamette Falls Drive parking facilities.*

Response: No parking spaces are proposed within the right-of-way. This standard does not apply.

4. *Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.*

Response: All proposed service drives have been designed to accommodate the site’s vehicular traffic and access, including minimizing conflicts of the pedestrian connection to the building from 8th Avenue. This standard is met.

5. *Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required.*

Response: All parking areas have been designed so that no double stacking areas exist. This standard is met.

6. *Except for single and two-family residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.*

Response: All areas proposed to be used for parking and drive aisles will be marked with a permanent paint and directional signage to facilitate safe circulation through the site. This standard is met.

7. *Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with*

asphalt or concrete surfaces according to the same standards required for the construction and acceptance of city streets.

Response: All proposed parking areas will be paved with asphalt concrete. This standard is met.

8. *Off-street parking spaces for single- and two-family residences shall be improved with an asphalt or concrete surface, or a permeable parking surface designed to reduce surface runoff, to specifications as approved by the Building Official. Other parking facilities for two- and single-family homes that are to accommodate additional vehicles, boats, recreational vehicles, and trailers, etc., need not be paved. All parking for multi-family residential development shall be paved with concrete or asphalt. Driveways shall measure at least 20 feet from the back of sidewalk to garage or the end of the parking pad to accommodate cars and sport utility vehicles without the vehicles blocking the public sidewalk.*

Response: Single and two family residences are not proposed. This standard does not apply.

9. *Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the minimum that will allow the property to accommodate and service the anticipated traffic. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.*

Response: The site's function as a police facility requires a minimum of two access points. The access point from 8th Avenue is intended to provide both police and public access to the site. The access point from 13th Street is intended to provide secure access for police only in the event of an emergency. Both access drives are easily identifiable with the proposed improvements associated with the development, and the construction of a standard commercial driveway apron. This standard is met.

10. *Access drives shall have a minimum vision clearance as provided in Chapter 42, Clear Vision Areas.*

Response: The proposed access drives meet the minimum vision clearance requirements in Chapter 42. This standard is met.

11. *Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least 4 inches high located 2 feet back from the front of the parking stall. Alternately, landscaped areas or sidewalks adjacent to the parking stalls without wheel stops shall be two feet wider.*

Response: Several parking spaces are proposed bordering interior landscape areas and sidewalks. The minimum dimension of parking lot landscaping and internal sidewalks is 5 feet and 6 feet, (CDC 46.150.A.20 and 54.020.E.3.f), respectively. Twenty-two (22) parking stalls have been specified for wheel stops in the secured parking area, where the abutting landscape area or sidewalk dimension is less than required by this standard. The remaining sidewalk and internal parking lot landscape areas have been increased to avoid installation of wheel stops. This standard is met.

12. *Off-street parking and loading areas shall be drained in accordance with plans and specifications approved by the City Engineer. Storm drainage at*

commercial sites may also have to be collected to treat oils and other residue.

Response: As shown on the attached utility plan, all stormwater associated with parking and loading areas will be collected via a series of catch basins and diverted into a water quality and detention pond. This standard is met.

13. *Artificial lighting on all off-street parking facilities shall be designed to deflect all light downward away from surrounding residences and so as not to create a hazard to the public use of any road or street.*

Response: The proposed site lighting associated with this application is designed to deflect light downward away from the northerly abutting residences as is shown on the attached photometric plan and cut sheet (See Exhibits B & F). This standard is met.

17. *The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.*

Response: All proposed parking areas have a grade no greater than 5% as shown on the site grading plan. No drainage across adjacent sidewalks or walkways is proposed. This standard is met.

18. *Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.*

Response: The main lot frontage of the subject site is 8th Avenue. The public parking area located to the side of the proposed building is setback from the frontage by a minimum of 15 feet of landscaping. This standard is met.

19. *Areas of the parking lot improved with asphalt or concrete surfaces shall be designed into areas of 12 or less spaces through the use of defined landscaped area.*

Response: Parking areas proposed with this application are designated into areas of 12 parking spaces or less through the use of internal landscape areas. This standard is met.

20. *Pedestrian walkways shall be provided in parking areas having 20 or more spaces. Walkways or sidewalks shall be constructed between major buildings/activity areas (an example in multi-family housing: between recreation center, swimming pool, manager's office, park or open space areas, parking lots, etc.) within a development, between adjacent developments and the new development, as feasible, and between major buildings/activity areas within the development and adjacent streets and all adjacent transit stops. Internal parking lot circulation and design should maintain ease of access for pedestrians from streets and transit stops. Walkways shall be constructed using a material that visually contrasts with the parking lot and driveway surface. Walkways shall be further identifiable to pedestrians and motorists by grade separation, walls, curbs, surface texture (surface texture shall not interfere with safe use of wheelchairs, baby carriages, shopping carts, etc.), and/or landscaping. Walkways shall*

be six feet wide. The arrangement and layout of the paths shall depend on functional requirements.

Response: A pedestrian walkway is proposed abutting the western public parking spaces. This walkway connects to the main link to the proposed plaza and public street system associated with 8th Avenue. This walkway is proposed to be constructed of scored concrete and protected by a raised curb, which is visually different than the abutting service drives. This walkway has been extended to 8 feet in width as required by CDC 46.150.A.11, where it abuts parking spaces. An additional walkway is proposed within the secured parking area that meets this standard. This standard is met.

21. *The parking and circulation patterns are easily comprehended and defined. The patterns shall be clear to minimize traffic hazards and congestion and to facilitate emergency vehicles.*

Response: The parking and vehicle circulation areas associated with the proposed development provide clear and accessible traffic patterns for emergency vehicles within both public and secure parking areas. This standard is met.

22. *The parking spaces shall be close to the related use.*

Response: The proposed parking spaces (both public and secure) are located as close to the proposed buildings as is possible, considering the slopes of the existing site. This standard is met.

23. *Permeable parking spaces shall be designed and built to City standards.*

Response: Permeable parking spaces are not proposed. This standard does not apply.

B. *Accessible Parking Standards for Persons With Disabilities: If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever is more stringent:*

1. *Minimum number of accessible parking space requirements:*

Response: The proposed 21,959 SF of building requires a minimum of 63 spaces (assuming an office use according to 46.090.C). As such three accessible (1 van accessible) spaces are required to be accessible and are provided. This standard is met.

2. *Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.*

Response: The proposed accessible parking spaces are provided nearest the building entrances. This standard is met.

3. *Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.*

Response: All accessible parking spaces and aisles meet the ADA standards. This standard is met.

5. *One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide. The van stall shall have an*

adjacent 8-foot wide aisle. All other accessible stalls shall have a 6-foot wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.

Response: Of the three ADA spaces provided, one is van accessible exceeding this standard.

6. *Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Van-accessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.*

Response: The proposed van-accessible parking space will include required signage in accordance with this standard as noted on the site plan.

D. Bicycle Facilities and Parking:

1. *Provisions shall be made for pedestrian and bicycle ways if such facilities are shown on an adopted plan.*

Response: Provisions have been provided for pedestrians and bicycles from the public system along 8th Avenue. This standard is met.

2. *Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate bicyclist's locks securing the frame and both wheels. The bicycle parking shall be no more than 50 feet from the entrance to the building, well lit, observable, and properly signed.*

Response: A total of 11 bicycle parking spaces are required with this application. Several locations of bicycle parking are proposed for the variety of uses associated with the proposed building. Four spaces are proposed near the main building entrance for the public, 4 spaces are proposed within the secured parking area near the lower employee entrance, and an additional 3 spaces are proposed within the sally port for police use. The 4 public spaces and 3 spaces within the sally port will be covered. Stationary racks are proposed at the exterior locations, and wall mounted racks will be provided within the interior location. This standard is met.

3. *Bicycle parking must be provided in the following amounts:
Office. 2, or 0.5 spaces per 1,000 gross sq. ft. whichever is greater. 10% covered.*

Response: The proposed public safety facility has been interpreted as an office for the purposes of determining required bicycle parking. The proposed 21,959 SF of building requires a minimum of 11 spaces and 3 to be covered. Several locations of bicycle parking are proposed for the variety of uses associated with the proposed building. Four spaces are proposed near the main building entrance for the public, 4 spaces are proposed within the secured parking area near the lower employee entrance, and an additional 3 spaces are proposed within the sally port for the police use. The 4 secure spaces and the 3 spaces within the sally port will be covered. This standard is met.

E. Office or industrial developments shall be allowed a 10 percent reduction in the number of required parking spaces when the property owner agrees to a demand management program that includes three or more of the following measures:

Response: A reduction in the number of required spaces is not proposed with this application. This standard does not apply.

CHAPTER 48 ACCESS

48.040 MINIMUM VEHICLE REQUIREMENTS FOR NON-RESIDENTIAL USES

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

- A. *Service drives for non-residential uses shall be fully improved with hard surface pavement:*
1. *With a minimum of 24-foot width when accommodating two-way traffic; or*
 2. *With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.*
 3. *Meet the requirements of CDC 48.030(E)(3) through (6).*
 4. *Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.*

Response: Two types of services drives are proposed. The site's primary public service drive from 8th Avenue will accommodate two-way traffic and is 30-foot wide. A secondary service drive from 13th Street is intended for emergency egress only and is one-way. This drive is 22-feet in width in order to accommodate emergency access and service of the site's refuse storage. CDC 48.030 does not apply as the proposed use is a non-residential use. No pickup windows are proposed. These standards are met.

48.060 WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS

- A. *Minimum curb cut width shall be 16 feet.*

Response: The proposed curb cut widths exceed this standard.

- B. *Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.*

Response: The proposed curb cuts are 36 feet from 8th Avenue and 24 feet from 13th Street meeting the maximum standard for an emergency service provider.

- C. *No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:*

1. *On an arterial when intersected by another arterial, 150 feet.*
2. *On an arterial when intersected by a collector, 100 feet.*
3. *On an arterial when intersected by a local street, 100 feet.*
4. *On a collector when intersecting an arterial street, 100 feet.*
5. *On a collector when intersected by another collector or local street, 35 feet.*
6. *On a local street when intersecting any other street, 35 feet.*

Response: Both 13th and 8th are classified as local streets. Both curb cuts are in excess of 35 feet from the intersection of 13th and 8th. This standard is met.

- D. *There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:*

1. *On an arterial street, 150 feet.*
2. *On a collector street, 75 feet.*
3. *Between any two curb cuts on the same lot on a local street, 30 feet.*

Response: Both 13th and 8th are classified as local streets. The curb cut proposed on 8th is approximately 50' from the nearest existing curb cut to the east. The curb cut

proposed on 13th is approximately 128' from the nearest existing curb cut to the north. This standard is met.

E. A rolled curb may be installed in lieu of curb cuts and access separation requirements.

Response: Rolled curbs are not proposed with this development. This standard does not apply.

F. Curb cuts shall be kept to the minimum, particularly on Highway 43. Consolidation of driveways is preferred. The standard on Highway 43 is one curb cut per business if consolidation of driveways is not possible.

Response: The subject site does not abut Highway 43. This standard does not apply.

G. Adequate line of sight pursuant to engineering standards should be afforded at each driveway or accessway. (Ord. 1270, 1990; Ord. 1584, 2008)

Response: Site distance requirements have been addressed in the traffic study.

CHAPTER 52 SIGNS

Response: Separate permits for building and site signage as required by Section 52.103 will be applied for independent of this land use application. Applicable provisions of this chapter will be reviewed at that time.

CHAPTER 53 SIDEWALK USE

Response: This application does not propose the display of merchandise or the service of food or beverages within the sidewalks. This chapter does not apply.

CHAPTER 54 LANDSCAPING

54.020 Approval Criteria

A. Every development proposal requires inventorying existing site conditions which include trees and landscaping. In designing the new project, every reasonable attempt should be made to preserve and protect existing trees and to incorporate them into the new landscape plan. Similarly, significant landscaping (e.g., bushes, shrubs) should be integrated. The rationale is that saving a 30-foot-tall mature tree helps maintain the continuity of the site, they are qualitatively superior to two or three two-inch caliper street trees, they provide immediate micro-climate benefits (e.g., shade), they soften views of the street, and they can increase the attractiveness, marketability, and value of the development.

Response: The attached existing conditions plan shows all existing trees located on the site. The proposed development includes the removal of 6 existing trees due to unavoidable impacts associated with the construction of the new facility. The existing significant walnut tree along the frontage of 8th Avenue will be preserved. All trees proposed to be removed will be replaced with the new landscaping as is shown on Sheet L1.0. This standard is met.

B. To encourage tree preservation, the parking requirement may be reduced by one space for every significant tree that is preserved in the parking lot area for a maximum reduction of 10 percent of the required parking. The City Parks supervisor or arborist shall determine the significance of the tree and/or landscaping to determine eligibility for these reductions.

Response: No significant trees, as identified by the city arborist, exist within the parking lot area. This standard does not apply.

C. Developers must also comply with the Municipal Code chapter on tree protection.

Response: Chapter 8.5 of the Municipal Code contains the Community Tree Ordinance. However, there are no specific details for tree protection other than for street trees. As such, the Tree Technical Manual has been consulted and the details specified on the submitted plans for tree protection. This standard is met.

D. Heritage trees. Heritage trees are trees which, because of their age, type, notability, or historical association are of special importance.

Response: No heritage trees are located on the subject site. This standard does not apply.

E. Landscaping - by type, location and amount.

2. Non-residential uses. A minimum of 20 percent of the gross site area shall be landscaped. Parking lot landscaping may be counted in the percentage.

Response: As shown on the attached Site Plan (Sheet C2.0), a total of 20,011 SF or 29% of the site is proposed to be landscaped. This standard is met.

3. All uses (residential uses [non-single family] and non-residential uses):

a. The landscaping shall be located in defined landscaped areas which are uniformly distributed throughout the parking or loading area. There shall be one shade tree planted for every eight parking spaces. These trees shall be evenly distributed throughout the parking lot to provide shade. Parking lots with over 20 spaces shall have a minimum 10 percent of the interior of the parking lot devoted to landscaping. Pedestrian walkways in the landscaped areas are not to be counted in the percentage. The perimeter landscaping, explained in subsection (E)(3)(d) of this section, shall not be included in the 10 percent figure. Parking lots with 10 to 20 spaces shall have a minimum five percent of the interior of the parking lot devoted to landscaping. The perimeter landscaping, as explained above, shall not be included in the five percent. Parking lots with fewer than 10 spaces shall have the standard perimeter landscaping and at least two shade trees. Non-residential parking areas paved with a permeable parking surface may reduce the required minimum interior landscaping by one-third for the area with the permeable parking surface only.

Response: The proposed parking area contains 65 spaces, and requires 8 shade trees. As shown on the attached landscape plan, 10 shade trees are proposed in addition to the trees intended for perimeter landscaping. In addition, 15 % of the parking area is proposed to be landscaped, excluding the perimeter landscaping. This standard is met.

b. The landscaped areas shall not have a width of less than five feet.

Response: All internal parking lot landscape areas with trees are at least five feet. This standard is met.

c. The soils, site, proposed soil amendments, and proposed irrigation system shall be appropriate for the healthy and long term maintenance of the proposed plant species.

Response: The proposed landscape improvements, accompanying planting specifications and irrigation system will ensure a long-lasting effect for the subject site. This standard is met.

- d. *A parking, loading, or service area which abuts a street shall be set back from the right-of-way line by perimeter landscaping in the form of a landscaped strip at least 10 feet in width. When a parking, loading, or service area, or driveway is contiguous to an adjoining parcel, there shall be an intervening five-foot wide landscape strip. The landscaped area shall contain:*
- 1) *Street trees spaced as appropriate to the species, not to exceed 50 feet apart on the average;*
 - 2) *Shrubs, not to reach a height greater than three feet six inches, spaced no more than five feet apart on the average; or,*
 - 3) *Vegetative ground cover such as grass, wild flowers, or other landscape material to cover 100 percent of the exposed ground within two growing seasons. No bark mulch shall be allowed except under the canopy of low level shrubs.*

Response: The parking areas near the abutting right-of-ways are setback approximately 17 feet from 8th Avenue and 19 feet from 13th Street. The parking along the eastern property line is setback a minimum of 12 feet and the parking along the northern property line a minimum of 6 feet.

Street trees are proposed along both site frontages. A mixture of trees, shrubs and ground cover are proposed within the perimeter landscape areas abutting all lot lines. This standard is met.

- e. *If over 50 percent of the lineal frontage of the main street or arterial adjacent to the development site comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet in width and shall include terrain variations (e.g., 1-foot high berm) plus landscaping. This extra requirement only applies to one street frontage.*

Response: The subject site does not front on a main street or arterial. This standard does not apply.

- f. *A parking, loading, or a service area which abuts a property line shall be separated from the property line by a landscaped area at least five feet in width and which shall act as a screen and noise buffer and the adequacy of the screen and buffer shall be determined by the criteria set forth in Section 55.100(C) and (D) except where shared parking is approved under Section 46.040. (ORD. 1408)*

Response: All parking areas are separated from perimeter lot lines by at least 6 feet. The landscaped area in this space will act as a screen and noise buffer, in particular where the secured parking is located as this area is enclosed with a fence, in addition to landscaping. This standard does not apply.

- g. *All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.*

Response: All parking areas not used for parking, maneuvering, or circulation are landscaped as is shown on Sheet L1.0. This standard is met.

- h. *The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation.*

Response: The proposed landscape has been specified to meet the maximum height allowed by Chapter 42 so as to not obstruct lines of sight as required by for safe traffic movements. This standard is met.

- i. *Outdoor storage areas, service areas (loading docks, refuse deposits, and delivery areas), and above-ground utility facilities shall be buffered and screened to obscure their view from adjoining properties and to reduce noise levels to acceptable levels at the property line. The adequacy of the buffer and screening shall be determined by the criteria set forth in Section 55.100(C)(1).*

Response: The proposed trash enclosure is proposed to be enclosed and screened using a 6-foot tall decorative CMU wall with brick accent similar to the materials used for the proposed buildings. This standard is met.

- j. *Crime prevention shall be considered and plant materials shall not be located in a manner which prohibits surveillance of public and semi-public areas (shared or common areas).*

Response: The proposed landscape areas and plant materials will not restrict surveillance of public and semi-public areas through proper spacing and grouping of materials that could adversely affect the safety of the site in terms of security. This standard is met.

- k. *Irrigation facilities shall be located so that landscaped areas can be properly maintained and so that the facilities do not interfere with vehicular or pedestrian circulation.*

Response: The proposed irrigation will be located so as to effectively enhance the proposed landscape improvements associated with this application, and will not affect the on-site circulation. This standard is met.

- l. *For commercial, office, multi-family, and other sites, the developer shall select trees that possess the following characteristics:*

- 1) *Provide generous "spreading" canopy for shade.*
- 2) *Roots do not break up adjacent paving.*
- 3) *Tree canopy spread starts at least six feet up from grade in, or adjacent to, parking lots, roads, or sidewalks unless the tree is columnar in nature.*
- 4) *No sticky leaves or sap dripping trees (no honey dew excretion).*
- 5) *No seed pods or fruit bearing trees (flowering trees are acceptable).*
- 6) *Disease resistant.*
- 7) *Compatible to planter size.*
- 8) *Drought tolerant unless irrigation is provided.*
- 9) *Attractive foliage or form all seasons.*

Response: All proposed landscape materials comply with the above-mentioned criteria as shown on the landscape plan. This standard is met.

- m. *Plant materials (shrubs, ground cover, etc.) shall be selected for their appropriateness to the site, drought tolerance, year-round greenery and coverage, staggered flowering periods, and avoidance of nuisance plants (Scotch broom, etc.).*

Response: Landscape materials have been selected to comply with LEED credits (including limited irrigation) as well as for native species in compliance with the above standards.

6. CHAPTER 55 DESIGN REVIEW

55.100.B. Relationship to the Natural and Physical Environment

1. *The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved...*

Response: No City designated Heritage Trees are located on the site. This standard is not applicable.

2. *All heritage trees, as defined in the municipal code, all trees and clusters of trees (“cluster” is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through (f) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist’s findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.*

Response: In the opinion of the city arborist using the criteria listed in this standard, the subject site contains one significant tree, a 31" walnut abutting 8th Avenue.

- a. *Non-residential and residential projects on Type I and Type II lands shall protect all heritage trees and all significant trees and tree clusters by either the dedication of these areas or establishing tree conservation easements. Development of Type I and II lands shall require the careful layout of streets, driveways, building pads, lots, and utilities to avoid heritage trees and significant trees and tree clusters, and other natural resources pursuant to this code. The method for delineating the protected trees or tree clusters (“dripline + 10 feet”) is explained in subsection (B)(2)(b) of this section. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply.*

Response: The subject site does not contain Type I and Type II lands. This standard does not apply.

- b. *Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10-foot measurement beyond the dripline shall be added. The square footage of the area inside this “dripline plus 10 feet” measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this*

code. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters, the developer shall not be required to save the excess trees, but is encouraged to do so.

Response: The subject site does not contain Type I or II lands, however does contain one significant tree according to the city arborist. Therefore, up to 20% of the subject site can be devoted to protection of this tree. The dripline of the significant tree has been surveyed and included in the attached plan set. An additional 10 feet has been added to the dripline in accordance with this standard.

The total square footage of the ‘dripline plus 10 feet’ is 5,043 SF, of which 2,322 SF is on the subject property. The portion of the tree located on site and outside of the public right-of-way is 3% of the subject site.

As shown on the attached plans, the proposed development does not avoid the ‘dripline plus 10 foot area. As required by this standard, the proposed design has been carefully considered in terms of tree protection and impact. Additionally, specific requirements have been provided by the City Arborist (Exhibit E) to ensure that the long-term health of the tree is maintained. A variance to this standard is included in this request to allow impact into the ‘dripline plus 10 feet of the site’s significant tree.

- c. Where stubouts of streets occur on abutting properties, and the extension of those streets will mean the loss of significant trees, tree clusters, or heritage trees, it is understood that tree loss may be inevitable. In these cases, the objective shall be to minimize tree loss. These provisions shall also apply in those cases where access, per construction code standards, to a parcel is blocked by a row or screen of significant trees or tree clusters.*

Response: Stubouts of streets do not exist on abutting properties. This standard is not applicable.

- d. For both non-residential and residential development, the layout shall achieve at least 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protection of stands or clusters of trees as defined in subsection (B)(2) of this section.*

Response: Please see the following breakdown:

Total Adjusted Site Area	68,497 SF
20% of Remaining Site Area	- (13,699 SF)
Net Developable Area	54,798 SF
6,000 SF (MU) & 35% (R-10)	6,000 SF/19,179 SF
70% of the Maximum Allowed Density	4,200 SF/ 13,425 SF
Proposed Building Coverage	15,285 SF

As shown on the above table the proposed layout achieves more than 70% of the maximum density allowed (by either zoning designation) for the site. This standard is met.

- e. *For arterial and collector street projects, including Oregon Department of Transportation street improvements, the roads and graded areas shall avoid tree clusters where possible. Significant trees, tree clusters, and heritage tree loss may occur, however, but shall be minimized.*

Response: This project is not an arterial or collector street project. This standard does not apply.

- f. *If the protection of significant tree(s) or tree clusters is to occur in an area of grading that is necessary for the development of street grades, per City construction codes, which will result in an adjustment in the grade of over or under two feet, which will then threaten the health of the tree(s), the applicant will submit evidence to the Planning Director that all reasonable alternative grading plans have been considered and cannot work. The applicant will then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an “inch by inch” basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four-inch). The mix of tree sizes and types shall be approved by the City Arborist.*

Response: The proposed impacts to the site’s significant tree are not related to a grading effort that will result in an adjustment of over or under two feet for the development of street grades. However, impacts are necessary for the development of public sidewalks, as required by City public works standards, modified to increase the health of the significant tree. This standard does not apply.

- 3. *The topography and natural drainage shall be preserved to the greatest degree possible.*

Response: The existing site slopes from the southeast to the northeast, where the low point of the site is located (thus, the natural drainage pattern). In order to accommodate development and provide acceptable grades for circulation, grading of the site must occur. The design of the proposed development takes into consideration the natural characteristics of the site and specifies retaining walls, and building basement walls to utilize the existing slope. As such, careful placement of structures and matching of existing grade lines have been provided to the best degree possible. This standard is met.

- 4. *The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report’s Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.*

Response: According to the Landslide Inventory Map of the Northeast Quarter of the Canby Quadrangle, dated 2009, the subject property does not contain areas subject to slumping and sliding. This standard is met.

- 5. *There shall be adequate distance between on site buildings and on site off site buildings on adjoining properties to provide for adequate light and air circulation and for fire protection.*

Response: The site separated from abutting structures on two sides by abutting rights-of-way. The proposed structure is oriented toward 8th Avenue, which creates the maximum distance between adjoining properties to the north as well as the east for light and air circulation. Fire protection can occur from abutting rights-of-way or by access through the internal drive aisles. This standard is met.

6. *Architecture*

- a. *The predominant architecture of West Linn identified in the West Linn vision process was contemporary vernacular residential designs emphasizing natural materials: wood with brick and stone detail. Colors are subdued earth tones: greys, brown, off-whites, slate, and greens. Pitched roofs with overhanging eaves, decks, and details like generous multi-light windows with oversized trim are common. Also in evidence are the 1890s Queen Anne style homes of the Willamette neighborhood. Neo-traditional homes of the newer subdivisions feature large front porches with detailed porch supports, dormers, bracketed overhanging eaves, and rear parking for cars. Many of these design elements have already been incorporated in commercial and office architecture.*

Response: The building is predominantly composed of structural brick, the colors of which have been selected to complement the brick color selected for the Tualatin Valley Fire Station, located across 8th Avenue. The brick facades have been designed adjacent to the residential neighborhood. Where more contemporary material selections have been made, closer to the commercial areas to the east of the site, the colors are subdued greys, offset with dark window frames. The parapets are detailed to respond to the historic nature of the surrounding Willamette neighborhood. This standard is met.

- b. *The proposed structure(s) scale shall be compatible with the existing structure(s) on site and on adjoining sites. Contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing, materials and colors of surrounding buildings in the proposed structure.*

Response: The scale of the building has been carefully composed to provide a civic prominence to the site at the 8th Avenue entrance, while respecting the scale of the residential neighborhood to the north and west of the site. The west end of the building has been set into the natural slope of site, reducing the perception of height from the residential neighborhood. The scale of the building increases towards the east end of the site, which is closer to the commercial district of Willamette, and functionally provides a public entrance to the building. Parapets have been used for the roof forms, to convey the public and civic nature of the building. The windows at the secure, west end of the building are reduced in scale, with a more residential rhythm, similar to the Tualatin Valley Fire station across 8th Avenue. At the east end of the building the window system has been selected to provide larger, more open expanses of glazing, where the public interacts more with the building and the functions are adjacent to the existing commercial development to the east. This standard is met.

- c. *While there has been discussion in Chapter 24 about transition, it is appropriate that new buildings should architecturally transition in terms of bulk and mass to work with or fit, adjacent existing buildings. This transition can be accomplished by selecting designs that “step down” or “step up” from small to big structures and vice versa (see figure below). Transitions may also take the form of carrying building patterns and lines (e.g., parapets, windows, etc.) from the existing building to the new one.*

Response: See response above, particularly related to the transition from the residential area to the west and commercial area to the east. This standard is met.

- d. *Contrasting architecture shall only be permitted when the design is manifestly superior to adjacent architecture in terms of creativity, design, and workmanship and/or it is adequately separated from other buildings by distance, screening, grade variations, or is part of a development site that is large enough to set its own style of architecture.*

Response: The adjacent structures include a mixture of single-family residential, civic structures, and commercial buildings. Given this mix of uses and corresponding architectural styles, the proposed building design has been selected to respond to the varying existing structures, and land uses surrounding the subject site. This standard is met.

- e. *Human scale is a term that seeks to accommodate the users of the building and the notion that building should be designed around the human scale (i.e., their size and the average range of their perception). Human scale shall be accommodated in all designs by, for example, multi-light windows that are broken up into numerous panes, intimately scaled entryways, and visual breaks (exaggerated eaves, indentations, ledges, parapets, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally.*

The human scale is enhanced by bringing the building and its main entrance up to the edge of the sidewalk. It creates a more dramatic and interesting streetscape and improves the “height and width” ratio referenced in this section.

Response: The public entrance of the building has been brought to the sidewalk through a combination of landscaped plaza space, entry canopy and integration of the existing walnut tree into the public area. Where large expanses of glazing are provided, the windows are broken up into numerous panes using mullions, both vertically and horizontally to reduce the perceived scale. The plaza has been designed to provide comfortable seating and interaction areas for visitors and passers-by. The façade along 8th Avenue and 13th Street have been broken into a more pedestrian-friendly scale, by stepping the building footprint at various depths away from the sidewalk and grouping the windows at the secure areas of the building to provide visual resting places for the casual onlooker. The landscaping along 8th Avenue and 13th Street has been designed to promote a pedestrian-friendly streetscape, an understanding of the buildings storm water system, and a reduction in the scale using a variety of sculptural hardscape and cultivated landscaping features, while providing security for the functions inside the building. This standard is met.

- f. *The main front elevation of commercial and office building shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting streetscape and window shopping opportunities. One side elevation shall provide at least 30 percent transparency. Any additional side or rear elevation, which is visible from a collector road or greater classification, shall also have at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100-foot-long building elevation shall have at least 60 feet (60 percent of 100 feet) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being used. When this exemption is applied to the main front elevation, the square footage of transparency that would*

ordinarily be required by the above formula shall be installed on the remaining elevations at pedestrian level in addition to any transparency required by a side elevation, and vice versa. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.

Response: This standard does not apply to the proposed public safety facility as it is not a commercial or office building with associated window shopping opportunities. However, the street-facing facades have provided window areas where internal functional constraints (safety and security) allow. The western elevation provides 33% of window transparency, and the combined southern elevation provides 54% of window transparency. Topographic constraints limit the amount of window area that can be used on the northeast elevation to attempt to meet the requirement.

- g. Variations in depth and roof line are encouraged for all elevations. To vary the otherwise blank wall of most rear elevations, continuous flat elevations of over 100 feet in length should be avoided by indents or variations in the wall. The use of decorative brick, masonry, or stone insets and/or designs is encouraged. Another way to vary or soften this elevation is through terrain variations such as an undulating grass area with trees to provide vertical relief.*

Response: The height of the parapet varies on all elevations, and each elevation has been broken up with a combination of building stepping, window openings, material choices and horizontal projections so that no continuous flat elevations over 100 feet are proposed. This standard is met.

- h. Consideration of the micro-climate (e.g., sensitivity to wind, sun angles, shade, etc.) shall be made for building users, pedestrians, and transit users, including features like awnings.*

Response: In response to sun angles, larger overhangs have been provided along the east elevation. An entry canopy extends to the sidewalk at the main building entrance. This standard is met.

- i. The vision statement identified a strong commitment to developing safe and attractive pedestrian environments with broad sidewalks, canopied with trees and awnings.*

Response: The landscaping along 8th Avenue and 13th Street has been designed to promote a pedestrian-friendly streetscape, an understanding of the buildings storm water system, and a reduction in the scale using a variety of sculptural hardscape and cultivated landscaping features, while providing security for the functions inside the building. Street trees and sidewalks will be provided along 8th Avenue and a double row along 13th Street. This standard is met.

- j. Sidewalk cafes, kiosks, vendors, and street furniture are encouraged. However, at least a four-foot-wide pedestrian accessway must be maintained.*

Response: Seating is provided in the entry plaza. Sidewalks along 8th and 13th will maintain a minimum clear accessway of four feet. This standard is met.

- 7. Transportation Planning Rule (TPR) compliance. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:*

- a. Commercial and office development shall be oriented to the street. At least one public entrance shall be located facing an arterial street or,*

if the project does not front on an arterial, facing a collector street; or, if the project does not front on a collector, facing the local street with highest traffic levels. Parking lots shall be placed behind or to the side of commercial and office development. When a large and/or multi-building development is occurring on a large undeveloped tract (three plus acres), it is acceptable to focus internally; however, at least 20 percent of the main adjacent right-of-way shall have buildings contiguous to it unless waived per subsection (B)(7)(c) of this section. These buildings shall be oriented to the adjacent street and include pedestrian-oriented transparencies on those elevations...

Response: The proposed building abuts two local streets. The building has been oriented toward 8th Avenue, as this is a more commercial frontage. Parking has been located on the side and behind the proposed structure. This standard is met.

b. Multi-family projects shall be required to keep the parking at the side or rear of the buildings or behind the building line of the structure as it would appear from the right-of-way inside the multi-family project...

Response: The proposed project is not a multi-family project. This standard is not applicable.

c. Commercial, office, and multi-family projects shall be built as close to the adjacent main right-of-way as practical to facilitate safe pedestrian and transit access. Reduced frontages by buildings on public rights-of-way may be allowed due to extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations, not just inconveniences or design challenges.

Response: Pedestrian access to the site is proposed from the site's 8th Avenue frontage to the main public entrance. The proposed building has been located as close as practical to this frontage, while maintaining the health of the existing walnut tree. This standard is met.

d. Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined footpaths at least six feet wide. Paths shall be eight feet wide when abutting parking areas or travel lanes. Paths shall be separated from parking or travel lanes by either landscaping, planters, curbs, bollards, or raised surfaces...

Response: Pedestrian circulation is proposed internal to the site through new sidewalks that are at least six feet wide and eight feet wide where abutting parking areas. These sidewalks are protected with raised curbs. This standard is met.

e. Paths shall provide direct routes that pedestrians will use between buildings, adjacent rights-of-way, and adjacent commercial developments. They shall be clearly identified. They shall be laid out to attract use and to discourage people from cutting through parking lots and impacting environmentally sensitive areas.

Response: The proposed internal sidewalks provide direct route to the main public entrance from the public parking area. Additionally, the proposed public entrance plaza facilitates direct access from the public sidewalks along 8th Avenue. This standard is met.

- f. *At least one entrance to the building shall be on the main street, or as close as possible to the main street. The entrance shall be designed to identify itself as a main point of ingress/egress.*

Response: A main entrance to the building has been provided to 8th Avenue. This standard is met.

- g. *Where transit service exists, or is expected to exist, there shall be a main entrance within a safe and reasonable distance of the transit stop. A pathway shall be provided to facilitate a direct connection.*

Response: There are no existing or planned transit stops along the site’s frontage. This standard does not apply.

- h. *Projects shall bring at least part of the project adjacent to or near the main street right-of-way in order to enhance the height-to-width ratio along that particular street. (The “height-to-width ratio” is an architectural term that emphasizes height or vertical dimension of buildings adjacent to streets. The higher and closer the building is, and the narrower the width of the street, the more attractive and intimate the streetscape becomes.) For every one foot in street width, the adjacent building ideally should be one to two feet higher. This ratio is considered ideal in framing and defining the streetscape.*

Response: The proposed building has been placed near the site’s main street right-of-way along 8th Avenue to enhance the height-to-width ratio. The suggested standard ratio of 1:1 or more of building height to right-of-way is not met with the proposed building. As indicated above, the site is located in a transition area between residential and commercial and the building’s scale has been designed to responsibly respond to the scale of the surrounding structures. The intent of this standard is met.

- i. *These architectural standards shall apply to public facilities such as reservoirs, water towers, treatment plants, fire stations, pump stations, power transmission facilities, etc. It is recognized that many of these facilities, due to their functional requirements, cannot readily be configured to meet these architectural standards. However, attempts shall be made to make the design sympathetic to surrounding properties by landscaping, setbacks, buffers, and all reasonable architectural means.*

Response: As this is a public facility, attempts to meet the standards above have been incorporated, where possible, given the functional requirements of the proposed use.

- j. *Parking spaces at trailheads shall be located so as to preserve the view of, and access to, the trailhead entrance from the roadway. The entrance apron to the trailhead shall be marked: “No Parking,” and include design features to foster trail recognition.*

Response: The site does not contain a trailhead. This standard does not apply.

C. Compatibility between adjoining uses, buffering, and screening.

- 1. *In addition to the compatibility requirements contained in Chapter 24, buffering shall be provided between different land uses; for example, buffering between single-family homes and apartment blocks. However, no buffering is required between single-family homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:*

- a. *The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.*
- b. *The size of the buffer required to achieve the purpose in terms of width and height.*
- c. *The direction(s) from which buffering is needed.*
- d. *The required density of the buffering.*
- e. *Whether the viewer is stationary or mobile.*

Response: As the subject site is split zoned, and abuts different zoning and land uses, and buffers for this project vary. As proposed, the site design contains a dual purpose visual and secure buffer between the secure parking area and the abutting residential uses to the north. A 6-foot tall fence is proposed to enclose the secure parking area in order to provide the required security for the police. In addition, by meeting the minimum perimeter landscape separation requirements, this visual separation is further enhanced. This standard is met.

2. *On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:*
 - a. *What needs to be screened?*
 - b. *The direction from which it is needed.*
 - c. *How dense the screen needs to be.*
 - d. *Whether the viewer is stationary or mobile.*
 - e. *Whether the screening needs to be year-round.*

Response: As indicated above, the proposed screening of the rear secure parking area will consist of a fence and landscaping. Additionally the proposed refuse area will be enclosed and separated from the abutting residential and street lot lines. This standard is met.

3. *Roof top air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.*

Response: The proposed rooftop mechanical units will be located away from the abutting right-of-way and screened with proposed parapets. This standard is met.

D. Privacy and Noise.

1. *Structures which include residential dwelling units shall provide private outdoor areas for each ground floor unit which is screened from view by adjoining units.*

Response: This proposal does not include residential units. This standard is not applicable.

2. *Residential dwelling units shall be placed on the site in areas having minimal noise exposure to the extent possible...*

Response: This proposal does not include residential units. This standard is not applicable.

3. *Structures or on site activity areas which generate noise, lights, or glare shall be buffered from adjoining residential uses in accordance with the standards in Section 55.100(C) where applicable.*

Response: The rear secure parking area may generate low levels of noise and light associated with police vehicle headlights. The impacts of this portion of the site from adjoining residential uses are mitigated with the proposed 6-foot tall fence and abutting landscape. This standard is met.

4. *Businesses or activities that can reasonably be expected to generate noise in excess of the noise standards contained in West Linn Municipal Code Section 5.487 shall undertake and submit appropriate noise studies and mitigate as necessary to comply with the code. (See CDC 55.110(B)(11) and 55.120(M).)*

Response: The proposed public safety facility is not intended to generate noise in excess of the standards contained in WLMC 5.487. The majority of in-cent responses will occur from vehicles already on patrol. Should any responses be necessary directly from this facility, the noise associated would be exempted under 5.487.(3). An emergency generator is necessary to serve the facility in the event of an emergency. Noise associated with this equipment will be encountered only in the event of an emergency. All other activities associated with the facility will occur within the building. This standard is met.

E. Private Outdoor Area.

Response: This section only applies to multi-family projects. This criterion is not applicable.

F. Shared Outdoor Recreation Areas.

Response: This section only applies to multi-family projects and projects with 10 or more duplexes or single-family attached dwellings on lots under 4,000 SF. This standard is not applicable.

- G. Demarcation of Public, Semi-Public, and Private Spaces. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas, and private outdoor areas are clearly defined in order to establish persons having a right to be in the space, to provide for crime prevention, and to establish maintenance responsibility. These areas may be defined by:*

1. *A deck, patio, fence, low wall, hedge, or draping vine;*
2. *A trellis or arbor;*
3. *A change in level;*
4. *A change in the texture of the path material;*
5. *Sign; or*
6. *Landscaping.*

Use of gates to demarcate the boundary between a public street and a private access driveway is prohibited.

Response: As the site is a public facility, maintenance will be the responsibility of the City of West Linn. The public entrance of the building has been brought to the sidewalk through a combination of landscaped plaza space, entry canopy and integration of the existing walnut tree into the public area. The plaza has been designed to provide comfortable seating and interaction areas for visitors and passers-by. The landscaping along 8th Avenue and 13th Street has been designed to promote a pedestrian-friendly streetscape, an understanding of the buildings storm water system, and a reduction in the scale using a variety of sculptural hardscape and cultivated landscaping features, while providing security for the functions inside the building. This standard is met.

H. Public Transit.

Response: The site does not abut an existing or planned public transit route. This standard does not apply.

I. *Public Facilities.*

1. *Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to City's Improvement Standards and Specifications . . .*

Response: Sufficient right-of-way is planned to be dedicated on both 8th Avenue and 13th Street to meet the local street standard. This standard is met.

2. *Drainage. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff off site or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine off-site impacts from a 25-year storm. The City Engineer shall adjust storm drainage facilities for applications which contain permeable parking surfaces based upon a quantitative analysis of the increased water retention and water quality characteristics of the permeable parking surface.*

Catch basins shall be installed and connected to pipelines leading to storm sewers or drainageways.

All plans will then be reviewed by the City Engineer.

Response: As indicated in the attached preliminary Stormwater Report, there will be no adverse impacts from the increased intensity of runoff from the site. This standard is met.

3. *Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.*

Response: The City's consultant will confirm that sufficient water capacity is available for the proposed development from the public line located in 8th Avenue. Please refer to the attached utility plan for the proposed locations, size, and connection points to the existing public infrastructure. This standard is met.

4. *Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.*

Response: Sufficient sanitary sewer capacity is available for the proposed development via the public line located in 8th Avenue. Please refer to the attached utility plan for the proposed locations, size, and connection points to the existing public infrastructure. This standard is met.

5. *Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling areas shall be provided. Metro standards shall be used.*

Response: One appropriately sized solid waste and recycling storage area is proposed at the west of the site. The facility will be accessible via the secured, emergency access point from 13th Street. Please see the attached site plan (Sheet C2.1) for specific locations. This standard is met.

J. *Crime prevention and safety/defensible space.*

1. *Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.*

Response: Where the security and safety of the internal functions of the proposed police facility allow, windows have been located. Where the window areas are located, building users will have the ability to view the exterior site. In addition, sufficient lighting will be provided as is shown on the attached lighting plan (Sheet E1.0) which will provide adequate safety during night hours. This standard is met.

2. *Interior laundry and service areas shall be located in a way that they can be observed by others.*

Response: The proposed use does not contain interior laundry or service areas. This standard does not apply.

3. *Mail boxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.*

Response: All outdoor pedestrian areas (i.e., walkways, trash, and recycling areas, etc.) will be lighted. Mailboxes will be located within each building. This standard is met.

4. *The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.*

Response: The site design does not have areas vulnerable to crime. Even so, exterior lighting has been designed to provide adequate illumination during night hours to ensure that no areas become vulnerable to crime. This standard is met.

5. *Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.*

Response: The site lighting poles are located in such a way that it provides even illumination at the parking areas, drive aisles, and sidewalks. This standard is met.

6. *Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All commercial, industrial, residential, and public facility projects undergoing design review shall use low or high pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather than omni-directional. Omni-directional lights of an ornamental nature may be used in general commercial districts only.*

Response: Site lighting is proposed as shown on the attached photometric plan and LED luminaire cut sheet. The lighting will be directed downwards to shield light. This standard is met.

7. *Lines of sight shall be reasonably established so that the development site is visible to police and residents.*

Response: As shown on the site plan, the public area of the site is visible from 8th Avenue. The remainder of the site is contained within the secured parking area, and is intentionally not visible to the public for security and safety reasons. This standard is met.

8. *Security fences for utilities (e.g., power transformers, pump stations, pipeline control equipment, etc.) or wireless communication facilities may be up to eight feet tall in order to protect public safety...*

Response: This standard is not applicable.

K. Provisions for persons with disabilities.

1. *The needs of a person with a disability shall be provided for. Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.*

Response: All applicable regulations set forth in the ADA have been provided including the appropriate number of accessible parking spaces and walkways. This standard is met.

L. Signs.

Response: At this time, details of signage are unknown. Future permits will be sought for desired site and building signage.

M. Utilities

The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, as practical. The design standards of Tables 1 and 2 above, and of subsection 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section.

Response: The applicant will be responsible for arrangements with utility companies related to changes in electrical lines and other wires including, but not limited to communication, street lighting, and cable television.

N. Wireless Communication Facilities.

Response: This section is not applicable.

O. Refuse and recycling standards

1. *All commercial, industrial and multi-family developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted if the Planning Commission determines that the changes are consistent with the purpose of these provisions and the City receives written evidence from the local franchised solid waste and recycling firm that they are in agreement with the proposed modifications.*

Response: This section is applicable.

2. *Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.*

Response: The proposed solid waste and recycling area will be provided on a concrete pad and graded to avoid ponding. This standard is met.

3. *Recycling and solid waste service areas*
 - a. *Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.*
 - b. *The recycling area shall be located in close proximity to the garbage container areas and be accessible to the local franchised collection firm's equipment.*
 - c. *Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.*
 - d. *The location of the recycling area and method of storage shall be approved by the local fire marshal.*
 - e. *Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.*
 - f. *Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.*
 - g. *Recyclable material service areas shall be maintained in a clean and safe condition.*

Response: Recycling receptacles will be stored within the proposed recycling and solid waste enclosure which is on-grade near the western emergency access point. The individual receptacles will be covered and insect-resistive material as provided by the local hauler. This standard is met.

4. *Special wastes or recyclable materials.*
 - a. *Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed in a manner acceptable to the Oregon Department of Environmental Quality.*
 - b. *Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.*

Response: The proposed use will not generate special wastes or recyclable materials. This standard is not applicable.

5. *Screening and Buffering.*
 - a. *Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.*
 - b. *Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. They shall be located so as to conceal them from public view to the maximum extent possible.*
 - c. *All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry with a finish that is architecturally compatible with the project. Chain link fencing, with or without slats, will not be allowed.*

Response: The placement of the proposed enclosure is located in line with the proposed security fence associated with the police parking area, fully concealed from public view. The enclosure will be constructed of 6-foot CMU block with brick accents on all sides except where the access gate is located (to the north). It is

separated from the abutting 13th Street right-of-way by 11 feet, where new landscaping is proposed between the wall and the right-of-way. A continuous band of shrubs is proposed to be planted at the base of the new wall, along the western 13th Street facing side. The proposed opening of the enclosure is on the north side and will be treated with a 6-foot corrugated metal panel access gate. Landscaping on the north side of the emergency access drive will minimize visual access to the gate portion of the enclosure. The remaining sides of the enclosure will only be viewable from within the secure parking area. This standard is met.

6. Litter receptacles.

- a. Location. Litter receptacles may not encroach upon the minimum required walkway widths.*
- b. Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or his/her designee.*
- c. Number. The number and location of proposed litter receptacles shall be based on the type and size of the proposed uses. However, at a minimum, for non-residential uses, at least one external litter receptacle shall be provided for every 25 parking spaces for first 100 spaces, plus one receptacle for every additional 100 spaces. (Ord. 1547, 2007; Ord. 1604 § 52, 2011)*

Response: Litter receptacles are proposed to be located near the building's public entrance and within the parking areas as noted on the site and landscape plans. A total of 3 receptacles are proposed as required based upon 65 parking spaces. This standard is met.

7. CHAPTER 60 CONDITIONAL USES

60.070 Approval Standards and conditions

A. *The Planning Commission shall approve, approve with conditions, or deny an application for a conditional use, except for a manufactured home subdivision in which case the approval standards and conditions shall be those specified in CDC36.030, or to enlarge or alter a conditional use based on findings of fact with respect to each of the following criteria:*

1. *The site size and dimensions provide:*
 - a. *Adequate area for the needs of the proposed use; and*
 - b. *Adequate area for aesthetic design treatment to mitigate any possible adverse effect from the use on surrounding properties and uses.*

Response: The combined site area provides adequate space to provide a new facility, meeting the stringent safety and security requirements of the police. In addition, the site allows required parking areas for the public and secured parking needs. The proposed structure has been designed in order to respond to the site's dual zoning designations and mix of character between residential and commercial. The main façade has been particularly focused on preserving the site's significant tree along 8th Avenue. The site area is adequate and the building design meets this standard.

2. *The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, and natural features.*

Response: The site characteristics are suitable for the proposed use. In particular, the specific program and security requirements are able to be met while preserving the sites most predominant natural feature, the significant walnut tree along 8th Avenue.

3. *The granting of the proposal will provide for a facility that is consistent with the overall needs of the community.*

Response: As identified in this narrative, the proposed public facility is needed to protect the West Linn community including its future.

4. *Adequate public facilities will be available to provide service to the property at the time of occupancy.*

Response: Public facilities (specific to infrastructure) currently exist or will be constructed prior to occupancy of the new structure. Coordination with the city engineer is ongoing specific to stormwater discharge.

5. *The applicable requirements of the zone are met, except as modified by this chapter.*

Response: Public safety facilities have distinct program requirements that dictate the internal function of the structure. In addition, there are safety and security requirements that must be met in order to allow a certain level of public access, as a civic use, while ensuring the safety of the officers and staff. The site contains two separate zoning designations. The applicable requirements of the site's R-10 district are met with the proposed development. However, there are two provisions within the site's MU district that are unable to be met. These include the maximum building size and maximum floor area ratio standard (CDC 59.070.A.6&7). Since the proposed use requires conditional use approval, these two standards in the MU district are proposed to be modified by this chapter. With the exception of the requested variance, all other standards are met with the proposed development.

6. *The supplementary requirements set forth in Chapters 52 to 55 CDC, if applicable, are met.*

Response: Applicable requirements of Chapters 52 and 55 have been addressed in the preceding narrative.

7. *The use will comply with the applicable policies of the Comprehensive Plan.*

Response: Please see the following responses:

COMPREHENSIVE PLAN COMPLIANCE

Goal 1 Citizen Involvement

Response: Policies 1-7 are administered by the City and are not approval criterion for individual applications. The project team has conducted numerous opportunities for public involvement in addition to the required neighborhood associated meeting. These include the Citizen Steering Committee, Citizen Design Committee, Willamette Neighborhood Association, Art Selection Committee, Sustainability Committee as well as citizen involvement at Design Team meetings.

Goal 2 Land Use Planning

Response: Goal 2 is implemented by the City's adopted Community Development Code. This application demonstrates compliance with applicable provisions herein, and therefore demonstrate compliance with this Goal.

Goal 5 Open Spaces, Scenic and Historic Areas, and Natural Resources

Response: There are no Goal 5 resources located on the subject site, per review of the City's adopted Goal 5 inventory maps. This goal does not apply.

Goal 6 Air, Water and Land Resources Quality

Response: Policies 1-8 of Section 2 (Water Quality) are applicable to the proposed development; however are implemented by the development standards for erosion, wastewater, stormwater, etc. The proposed methods of handling the site's wastewater and new impervious areas through natural vegetated swales meets applicable development standards associated with this section.

Policies 1 and 3 of Section 3 [Land Resources (Solid Waste Management)] are applicable. This policy is met by having areas for both solid waste and recycling to occur within a proposed enclosure.

Policies 1-3 of Section 4 (Noise Control) are applicable. Noise control is implemented by Chapter 55 and through WLMC 5.487. The proposed use is not anticipated to generate noise that will negatively affect the surrounding residential uses. Perimeter walls and landscaping will assist in maintaining satisfactory levels of noise associated with the proposed public safety use.

Goal 7 Areas Subject to Natural Disasters and Hazards

Response: The site is not shown on any of the City's adopted natural hazards maps. This goal does not apply.

Goal 8 Parks and Recreation

Response: This goal does not apply.

Goal 9 Economic Development

Response: Policies 5 and 11 apply. The 8th Street right-of-way will be upgraded in accordance with City standards to facilitate economic activity in the commercial district and Willamette District. In addition, abutting commercial areas will benefit from the proposed users of the site.

Goal 10 Housing

Response: This application is for a new police facility. Therefore, this goal does not apply.

Goal 11 Public Facilities and Services

Response: Necessary public facilities and services exist for the proposed public safety facility as required in General Goals Policies 2-5. Policy 7 under the General Goals is also furthered with the proposed development as it converts land to a new public use. Policy 10 will be reviewed for compliance through the proposed design review process and through implementation of Chapter 55 of the CDC. The proposed development accepts responsibility to provide new infrastructure connections necessary to serve the proposed facility (Policy 11).

The Policies of Section 1 (Sewer System), Section 2 (Water System) and Section 3 (Storm Drainage) will be met through the review of construction permits for the installation of new facilities to serve the proposed use.

Section 4 (Fire and Police), Policy 5 will be met with the new police facility.

Goal 12 Transportation

Response: General Policy 1 (a-d) is applicable. This application includes a traffic study, dedication of right-of-way and frontage improvements that address this policy.

General Policy 2 (ADA) is implemented through compliance with local, state and federal standards.

General Policy 3 will be met with proposed frontage improvements.

Street Policy 3 requires a minimum level of service to meet or exceed LOS “D”. The proposed use meets this requirement as determined by the traffic study. Policy 8 will be met through new street lighting on abutting frontages.

Bicycles Policy 4 will be met with new bicycle parking on the subject site. Policy 5 will be met following completion of the proposed frontage improvements to City standards as reviewed by the City Engineer.

Goal 13 Energy Conservation

Response: Policy 6 encourages the use of energy-conscience design and materials in all public facilities. The proposed public facility meets this policy through design that is intended to meet LEED Silver.

Policy 7 encourages maintenance of sidewalks and bike paths. This maintenance will occur by the City.

Goal 14 Urbanization

Response: Policy 9 requires that new development pay for needed new infrastructure and impacts to existing infrastructure. The proposed facility will include extensions of existing infrastructure to serve its demand.

Goal 15 Willamette Greenway

Response: The site is not located within the Willamette Greenway. This goal does not apply.

B. An approved conditional use or enlargement or alteration of an existing conditional use shall be subject to the development review provisions set forth in Chapter 55 CDC.

Response: The provisions of Chapter 55 are addressed in the narrative above. This standard is met.

C. The Planning Commission may impose conditions on its approval of a conditional use which it finds are necessary to assure the use is compatible with other uses in the vicinity. These conditions may include, but are not limited to, the following:

- 1. Limiting the hours, days, place, and manner of operation.*
- 2. Requiring design features which minimize environmental impacts such as noise, vibration, air pollution, glare, odor, and dust.*
- 3. Requiring additional setback areas, lot area, or lot depth, or width.*
- 4. Limiting the building height, size or lot coverage, or location on the site.*
- 5. Designating the size, number, location and design of vehicle access points.*
- 6. Requiring street right-of-way to be dedicated and the street to be improved including all steps necessary to address future street improvements identified in the adopted Transportation System Plan.*
- 7. Requiring participation in making the intersection improvement or improvements identified in the Transportation System Plan when a traffic analysis (compiled as an element of a conditional use application for the property) indicates the application should contribute toward.*
- 8. Requiring landscaping, screening, drainage, and surfacing of parking and loading areas.*
- 9. Limiting the number, size, location, height, and lighting of signs.*
- 10. Limiting or setting standards for the location and intensity of outdoor lighting.*
- 11. Requiring berming, screening, or landscaping and the establishment of standards for their installation and maintenance.*
- 12. Requiring and designating the size, height, location, and materials for fences.*
- 13. Requiring the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas, and drainage areas.*

Response: The applicant acknowledges that the Planning Commission may include conditions of approval in accordance with this standard.

D. Aggregate extraction uses shall also be subject to the provisions of ORS 541.605.

Response: This application does not propose aggregate extraction uses. This standard does not apply.

8. CLASS II VARIANCE REQUEST

75.020 CLASSIFICATION OF VARIANCES

B. A Class II variance will involve a significant change from the zoning requirements and may create adverse impacts on adjacent property or occupants, and includes the following variances:

1. A variance which allows a structure to encroach into a required setback area as follows:

- a. Front yard setback by more than two feet.*
- b. Side yard setback by more than two feet.*
- c. Rear yard setback by more than five feet.*

2. Variances to the minimum lot dimensional requirements as follows:

- a. Lot width by more than five feet.*
- b. Lot frontage by more than five feet.*
- c. Lot depth by more than 10 feet.*
- d. Lot area by more than five percent of minimum required area.*

3. A variance to any of the other zoning provisions including, but not limited to, the lot coverage and building height.

Response: The proposed variance is to CDC 55.100.B.2.b regarding impacts within the ‘dripline plus 10 feet’ of significant trees. This request is allowed under subsection (3) of this standard.

F. No variances shall be granted which will allow a use which is not a permitted or a conditional use in the district, and no variance shall be granted to the density provisions.

Response: The proposed variance does not include any use or density provisions.

75.060 Approval Criteria

The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The approval authority shall deny the variance if any of the criteria are not met.

A. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape, legally existing prior to the date of this code, topography, or other circumstances over which the applicant has no control.

Response: The exceptional or extraordinary circumstances requiring a variance is the result of the existing property condition. The first circumstance is related to the existing natural condition of the subject property; the significant walnut tree along the site’s frontage of 8th Avenue. While other properties in the vicinity of this site may contain significant trees, the location of the tree (specifically its ‘dripline plus 10 feet’) provides a significant impact to the usable site area for the new police facility. The next circumstance is the dual zoning designations of the subject site (R-10 and MU) which creates conflicts between various goals and standards. The significant tree is located entirely within the portion of the site zoned MU. Per the zoning standards of the MU district, structures are to be located as close to the street as possible. As the location of the tree pre-existed the City’s control of this property, the City has no

control over its location, and the structure has been located as close to the street as possible in the MU portion of the site, these circumstances make it necessary to request a variance for to impact the trees ‘dripline plus 10 feet’.

B. The variance is necessary for the preservation of a property right of the applicant, which is substantially the same as a right possessed by owners of other property in the same zone or vicinity.

Response: The property right associated with this variance request is the development of the subject property in accordance with applicable regulating standards. Other property owners in the vicinity have the same right as is demonstrated with the surrounding development. As indicated above, the site’s split zoning is unique to this property as is the proposed police facility. Other properties in the surrounding area with significant trees would likely require a similar variance request as the site area is not large enough to comply with the ‘dripline plus 10 feet’ standard and allow the property right of development in the form that exists today. While the impacts proposed within the tree’s ‘dripline plus 10 feet’ are not allowed by the CDC, tree protection methods and specifications as recommended by the city arborist will be strictly adhered to and will mitigate any impacts (refer to ExhibitE). This will ensure the greatest potential for survivability and long-term health of the existing tree, while allowing the construction of a new public safety facility.

C. The authorization of the variance will not be materially detrimental to the purposes and standards of this code, will not be inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

Response: As the proposed use requires Conditional Use approval, demonstration of compliance with the goals and policies has been addressed in the preceding narrative. Additionally, the authorization of the requested variance does not affect the project’s compliance with the standards of the code or other applicable regulatory requirements.

D. The variance request is the minimum variance which would alleviate the exceptional and extraordinary circumstance.

Response: The standard subject to the variance is below:

55.100.B.2.b. Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10-foot measurement beyond the dripline shall be added. The square footage of the area inside this ‘dripline plus 10 feet’ measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this code. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters,

the developer shall not be required to save the excess trees, but is encouraged to do so.

The variance request is to allow impact into the ‘dripline plus 10 feet’ standard associated with the site’s significant tree. The total tree canopy plus 10 feet area is 5,043 SF. Of this area, 2,721 SF (54%) is within the public right-of-way (following dedication) and is outside of the control of the property. The tree canopy plus 10 feet on the subject property is 2,322 SF, of which 1,760 SF will be impacted with the site construction of foundation walls, utilities, and the public entrance plaza. proposed public plaza that helps to identify the building as a civic function and encourage pedestrian access. The standard requires up to 20% of the non Type I and II lands to be set aside for the protection of significant trees. The site area is 68,497 SF, and up to 13,699 SF could be required for protection. The site design requires impact to the total ‘dripline plus 10 feet’ area except for 562 SF (.8% of the subject site).

The exceptional or extraordinary circumstance requiring a variance is the result of an existing natural condition of the subject property; the significant walnut tree along the site’s frontage of 8th Avenue. The required encroachment into the significant tree’s ‘dripline plus 10 feet’ is dictated by meeting the public safety user’s (Police) external and internal requirements. Through the course of the design process, the building has been moved as far back from 8th Street as possible (contrary to the intent of the base zone) while still meeting the minimum requirements for setbacks, parking, etc.

E. The exceptional and extraordinary circumstance does not arise from the violation of this code.

Response: The exceptional and extraordinary circumstance requiring this variance request is the evolution of natural conditions (e.g. the growth of the existing tree over time) on the subject site where this tree has been established. This circumstance has not resulted from a violation of the code.

F. The variance will not impose physical limitations on other properties or uses in the area, and will not impose physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification.

Response: Allowing impact into the ‘dripline plus 10 feet’ will not impose physical limitations on other properties or uses in the area nor on future use of neighboring vacant (which does not exist) or underdeveloped properties. Allowing the impact to the significant tree’s ‘dripline plus 10 feet’ will continue a natural presence of the tree along the 8th Avenue street frontage associated with the proposed civic use. Specific measures to protect the health and character of the tree have been specified by the City Arborist (Exhibit E) and will be followed during construction.

9. LOT LINE ADJUSTMENT

As noted previously, the subject site currently consists of 4 existing tax lots. In order to accommodate the proposed development, the City is requesting consolidation of these lots. Please reference Tables 4-1 & 4-2 in the preceding narrative for demonstration of compliance with applicable zoning regulations (e.g. lot coverage, setbacks, etc).

85.210 LOT LINE ADJUSTMENTS – APPROVAL STANDARDS

A. *The Director shall approve or deny a request for a lot line adjustment based on the criteria stated below:*

1. *An additional lot or buildable lot shall not be created by the lot line adjustment and the existing parcel shall not be reduced in size by the adjustments below the minimum lot size established by the approved zoning for that district.*

Response: The proposed lot consolidation will combine the 4 existing lots into one. The minimum lot size requirements of the R-10 and MU-CBD zones are 10,000 SF and 4,500 SF, respectively. The combined acreage of the resultant parcel (following right-of-way dedication) is 1.57 acres, exceeding the minimum lot size standard. No additional lots will be created. This standard is met.

2. *By reducing the lot size, the lot or structure(s) on the lot shall not be in violation of the site development regulations for that district. For example, the lot line adjustment shall not result in an overall loss of density below 70 percent except as allowed by CDC Section 85.200(J)(7).*

Response: As demonstrated in tables 4.1 & 4.2 above, the resultant lot will meet the site development regulations of the two underlying zoning districts. This standard is met.

3. *The lot line adjustment is intended to allow minor lot line deviations, or to consolidate undersized or irregular shaped lots. It can also be used to change a limited number of property lines up to the point that the County Surveyor would determine a re-plat of the subdivision is in order. A replat is the complete reconfiguration and realignment of a subdivision's lot lines.*

Response: The proposed lot line adjustment is to consolidate the existing 4 lots at the subject site. As these lots were originally created with a subdivision, a revised plat document will be reviewed and recorded with the county surveyor. This standard is met.

4. *New lot lines shall be generally straight with only a few deviations. Lot lines shall not gerrymander or excessively zigzag along to accommodate tool sheds, accessory structures, other buildings, etc. The figure below serves as a guide to lot line adjustments.*

Response: This request is for a consolidation of lot lines; therefore, no new lot lines will result. This standard is met.

5. *The lot line adjustment will not affect existing public utility easements nor existing utilities unless an easement vacation is obtained and any required utility relocations are paid for by the applicant.*

Response: No existing public utilities or utility easements affected the property. This standard does not apply.

10. CONCLUSION

Based on the information presented and discussed in this narrative and the attached supporting plans and documents, the requested land use applications meet the established standards and approval criteria and therefore merit approval.

10. EXHIBITS

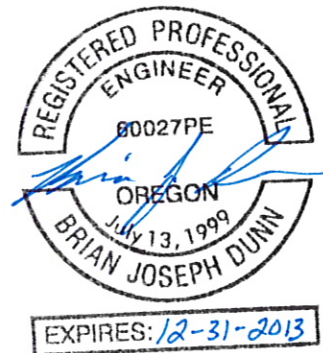
- A. Application Form
- B. Plan Set
- C. Color Building Elevations & Perspective
- D. Building Materials Example
- E. Arborist Letter
- F. Lighting cut sheets

GROUP
MACKENZIE

TRANSPORTATION
IMPACT ANALYSIS

CITY OF WEST LINN
POLICE STATION

West Linn, Oregon



Prepared For
City of West Linn

Completed On
November 9, 2012

Submittal To
City of West Linn

Project Number
2120180.00

GROUP MACKENZIE
Since 1960

RiverEast Center | PO Box 14310 | Portland, OR 97293
1515 SE Water Ave, Suite 100 | Portland, OR 97214
T 503.224.9560 | F 503.228.1285 | www.grpmack.com

TABLE OF CONTENTS	Page #
I. Introduction	2
II. Existing Conditions	3
III. Pre-development Conditions	7
IV. Site Development	8
V. Intersection and Roadway Analysis	10
VII. Summary	16
VIII. Appendices	19

LIST OF TABLES

Table 1 – Roadway Characteristics	3
Table 2 – Crash Data by Year	5
Table 3 – Crash Data by Crash Type	5
Table 4 – Trip Generation	9
Table 5 – Intersection Operation Analysis – AM peak hour	11
Table 6 – Intersection Operation Analysis – PM peak hour	11
Table 7 – 8 th Avenue/10 th Street mitigated Operations Analysis – PM peak hour	15
Table 8 – Willamette Falls Drive / 12 th Street Mitigated Operations Analysis – PM peak hour	15

LIST OF FIGURES

1. Site Vicinity Map
2. Site Plan
3. Existing Lane Configurations and Traffic Control Devices
4. 2012 Existing Traffic Volumes – Weekday AM Peak Hour
5. 2012 Existing Traffic Volumes – Weekday PM Peak Hour
6. 2-Year Background Traffic Growth and In-Process Trips – Weekday AM Peak Hour
7. 2-Year Background Traffic Growth and In-Process Trips – Weekday PM Peak Hour
8. 2014 Pre-Development Traffic Volumes - Weekday AM Peak Hour
9. 2014 Pre-Development Traffic Volumes - Weekday PM Peak Hour
10. Assumed Lane Configurations and Traffic Control Devices
11. Site Trip Distribution and Traffic Assignment – Weekday AM/PM Peak Hours
12. 2014 Post-Development Traffic Volumes – Weekday AM Peak Hour
13. 2014 Post-Development Traffic Volumes – Weekday PM Peak Hour

I. INTRODUCTION

This transportation impact analysis has been prepared for the City of West Linn to construct a new police station on the northeast corner of the 8th Avenue/13th Street intersection in West Linn, just west of the Willamette Town Center. A site vicinity map is shown in Figure 1. As shown, the development site is surrounded by 13th Street to the west, 8th Avenue to the south, and commercial properties to the north and east.

PROJECT DESCRIPTION

Figure 2 shows the proposed site plan, which includes the removal of three single-family residential units and construction of a new police station, up to 23,000 SF. The new building will include emergency dispatch capabilities, evidence processing facilities, training, storage, operations space, and K-9 unit accommodations.

Public access to the site will be provided by a single full-access driveway to 8th Avenue opposite the 12th Street approach, creating a common four-way intersection. A secondary limited-use full-access driveway will be established to 13th Street. This access will be gated and used by police vehicles in times of emergency.

Redevelopment of the subject site is expected to be complete by 2014.

SCOPE OF REPORT

This study supports the proposed site development and complies with the traffic impact study requirements of City of West Linn. Formal scoping discussions were held with City staff and outlined in the August 2, 2012 “Proposed Scope for Preparing Traffic Impact Study” letter. Through the scoping process, the following study intersections were identified for analysis:

- 8th Avenue/13th Street
- 8th Avenue/12th Street
- 8th Avenue/10th Street
- Willamette Falls Drive/12th Street
- Willamette Falls Drive/10th Street

This study analyzes the traffic-related impacts of the proposed development and addresses the following transportation items:

- Review of intersection crash histories and safety at all study intersections.
- Analysis of sight distance requirements at each site access.
- Existing year 2012 weekday AM and PM peak hour traffic volumes and operating conditions at all study intersections.
- Future background traffic growth estimates for the study area intersections.
- Site trip generation and distribution parameters based on custom trip generation rates, current traffic count patterns and engineering judgment.
- Forecast year 2014 pre- and post-development traffic volumes and operations during the AM and PM peak hours.
- Identification of measures to mitigate site traffic impacts on the public street system.

II. EXISTING CONDITIONS

EXISTING SITE CONDITIONS

The approximately 1.6-acre site currently has three existing single-family residential units, each on their own R-10 zoned parcels, and a larger vacant lot zoned for mixed-use (MU). No rezoning is required as both zones allow police stations as a conditional use.

TRANSPORTATION FACILITIES

The following is a summary of the study area roadway classifications and descriptions.

Roadway	Classification	Lanes	Speed Limit (mph)	Sidewalks	Bicycle Lanes	On-Street Parking
Willamette Falls Drive	Arterial	2	25	Yes	No	Yes
10 th Street	Arterial	3	25	Yes	No	No
12 th Street	Arterial/Local*	2	25	Yes	No	Yes
8 th Avenue	Local	2	25	East of site	No	Partial(West and East)
13 th Street	Local	2	NP	No	No	Yes-Shoulder

* 12th Street is classified as “Local” north of Willamette Falls Drive and “Arterial” south of Willamette Falls Drive.

Figure 3 presents the existing lane configurations and traffic control at each of the study intersections.

PEDESTRIAN/BICYCLE/TRANSIT FACILITIES

Continuous sidewalks are provided along both sides of Willamette Falls Drive, 10th Street, and 12th Street in the vicinity of the development, with a continuous sidewalk along the north side of 8th Avenue east of the site. Sidewalks are intermittent along the south side of 8th Avenue and non-existent west and north of the site along 8th Avenue and 13th Street.

No bicycle lanes are provided along any study area roadways in the vicinity of the development.

The site is located within a potential transit supportive area as identified by the West Linn Transportation System Plan (TSP). TriMet currently operates one public transit route in the site vicinity. Route #154 (Willamette) provides service along Willamette Falls Drive between the Oregon City Transit Center and the Willamette area of West Linn. Service is provided between the hours of 6:20 AM and 7:15 PM on weekdays at approximately 70-minute headways. This route has bus stops both inbound and outbound within two blocks of the site – inbound at the 10th Street/8th Avenue intersection and outbound along the south side of Willamette Falls Drive at 11th and 12th Streets. However, accessing these transit facilities requires crosswalk use at two-way stop-controlled intersections across the free flowing traffic movements. These uncontrolled vehicular volumes are significantly high during the PM peak hour.

EXISTING TRAFFIC

Existing turn movement traffic counts were obtained on a mid-week/school day in September 2012 during the morning (7:00-9:00 AM) and afternoon (4:00-6:00 PM) peak commute periods. Figures 4 and 5 present existing 2012 turning movement volumes at all study intersections during the weekday AM and PM peak hours, respectively. The system peak hour periods were identified to be 7:20-8:20 AM and 4:50-5:50 PM. It should be noted that peak hour traffic flows expressed in these figures account for a slight imbalance in traffic flows between several study intersections due to private driveway traffic, public and private parking turnover, and 11th Street access to Willamette Falls Drive between 10th and 12th Streets. All traffic count data is included in the Appendix.

The traffic counts collected for this study correlate well with the traffic counts taken for the West Linn TSP. However, the persistence of heavy PM peak hour through volumes on the major arterial streets in this district of West Linn when compared to daily traffic volumes is a sign of a high percentage of cut-through traffic and potential diversion away from I-205. The 24-hour counts included in the West Linn TSP taken on Willamette Falls Drive just west of the Fields Bridge across the Tualatin River indicate that greater than 20% of the daily eastbound traffic on Willamette Falls Drive occurs during the PM peak hour. This is twice the typical 10% rate that occurs for roadway in suburban settings.

The situation can likely be attributed to I-5/I-205 congestion which causes traffic to divert through the Stafford basin area onto other roadways such as Eck Road, Borland Road, and Johnson Road to pass through this district of West Linn. The influence this cut-through traffic has on traffic operations and safety in this district should be monitored by the City and considered with any future transportation studies and plans.

CRASH ANALYSIS

When evaluating intersection safety, consideration is given to the total number and types of crashes occurring and the number of vehicles entering the intersection. This leads to the concept known as “crash rate”, usually expressed in terms of the number of crashes occurring per one million vehicles entering the intersection (crashes/mev). Intersections having a crash rate less than 1.0/mev are generally considered relatively safe, and with crash rates higher than 1.0/mev, consideration may be given to correcting operational problems.

Intersection and segment crash data was provided by the Oregon Department of Transportation (ODOT) Crash Analysis and Reporting Unit (CARU) for January 2007 through December 2011. The following table summarizes crashes by year and calculated intersection crash rates for the five-year data period for all study intersections. All crash data is provided in the Appendix.

In calculating the crash rates shown in the table, annual traffic entering the intersections was estimated by multiplying the average daily traffic (ADT) entering the intersection by 365. ADT was estimated by multiplying the intersection PM peak hour volumes by a factor of 10.

TABLE 2 – CRASH DATA BY YEAR							
Intersection	2007	2008	2009	2010	2011	Total	Crash Rate (crashes/mev)
8 th Avenue/13 th Street	0	0	0	0	0	0	0.00
8 th Avenue/12 th Street	0	0	0	0	0	0	0.00
8 th Avenue/10 th Street	3	1	2	3	1	10	0.39
Willamette Falls Drive/12 th Street	0	0	0	1	1	2	0.08
Willamette Falls Drive/10 th Street	1	0	1	1	2	5	0.18

All study intersections have crash rates well below 1.0 crashes/mev threshold indicating no apparent safety hazard. Study intersection crash histories are summarized in the following table for intersections where crashes were reported, showing crashes by crash type.

TABLE 3 – CRASH DATA BY CRASH TYPE						
Intersection	Angle	Turning	Rear-End	Sideswipe	Non-Collision	Total
8 th Avenue/10 th Street	4	6	0	0	0	10
Willamette Falls Drive/12 th Street	1	1	0	0	0	2
Willamette Falls Drive/10 th Street	1	2	2	0	0	5
Total	6	9	2	0	0	17

As presented in Table 3, the most predominant crash type along in the study area is turning crashes (9 crashes). All of these crashes occurred due to a failure to yield right-of-way at a stop-controlled intersection.

Angle crashes are the next most predominant accident type (6 crashes). All of these crashes also occurred due to a failure to yield at a stop-controlled intersection.

The 2 rear-end crashes occurred due to following too closely.

Turning and angle crash severity is typically greater relative to rear-end crash severity. These crash types are of concern due to the higher chance of injury; however, there were no fatalities reported and all but 4 of the 17 crashes were property damage only. One of the injury crashes involved a bicyclist.

Despite the slightly increasing trends in the study area crash history, the crash rates and crash severities are typically low. Furthermore, most of these crashes occurred due to human error at stop-controlled intersections, not due to poor roadway design and/or conditions. Under current conditions, there is no apparent need for additional safety measures at these locations.

SIGHT DISTANCE ANALYSIS

Sight distance was evaluated at both proposed site accesses along 8th Avenue and 13th Street to ensure compliance with engineering standards.

Access to 8th Avenue

Sight distance along the site frontage to 8th Avenue is abundant with no sight obstructions exist at the proposed site access location. From the location of the proposed site access driveway, intersection sight distance was measured to be in excess of 335 feet in both directions along 8th Avenue. This distance exceeds the minimum 335-foot standard specified by AASHTO's 2011 publication, *A Policy on Geometric Design of Highways and Streets*, based on an assumed design speed of 30 MPH.

Access to 13th Street

Sight distance along the site frontage to 13th Street is adequate with no sight obstructions existing at the proposed site access location. Intersection sight distance is continuous the full length of this section of 13th Street from the dead end to the north to the 8th Avenue/13th Street intersection to the south. Therefore, drivers leaving the site access can see any vehicles approaching along 13th Street.

III. PRE-DEVELOPMENT CONDITIONS

BACKGROUND TRAFFIC

Background traffic growth is general growth not related to traffic from approved or in-process projects. Based on historical traffic growth trends for the 10th Street corridor, this area of West Linn has experienced little traffic growth over the past several years. This trend is summarized in the Appendix using current traffic counts matched with turning movement count information from the West Linn TSP.

For the purpose of producing a conservative analysis of future traffic conditions, a background traffic growth rate of 2.0% was applied to existing 2012 traffic volumes to reflect a 1% traffic growth rate over two years, to achieve year 2014 pre-development conditions.

IN-PROCESS TRAFFIC

In-process traffic volumes are generated by approved projects not yet complete at the time of this analysis. Even though the Willamette Marketplace development is fully built, site observation suggests the development is only 80% occupied. To account for full occupancy, 20% of the primary site trips projected in the Transportation Impact Analysis for Willamette Marketplace Redevelopment and supplemental trip generation letter prepared by Kittelson & Associates, Inc. were applied to the roadway network using the directional distributions from the same document.

Figures 6 and 7 present the combination of the 2-year background traffic growth estimates and the in-process trip volumes for the weekday AM and PM peak hours.

PLANNED TRANSPORTATION IMPROVEMENTS

Based on a review of West Linn's capital improvement plan and the ODOT STIP, there are no public transportation projects planned in the study area over the next two years.

PRE-DEVELOPMENT TRAFFIC

Pre-development traffic for the forecast year 2014 is the sum of existing traffic volumes, background traffic growth, and in-process traffic volumes. Figures 8 and 9 present the resulting 2014 pre-development traffic volumes from the weekday AM and PM peak hours.

IV. SITE DEVELOPMENT

DEVELOPMENT PLAN

The subject site will redevelop in a manner consistent with the site plan shown in Figure 2. This will consist of the removal of three single-family residential units. In their place, a new approximately 23,000 SF police station will be constructed with emergency dispatch capabilities, evidence processing facilities, training, storage, and operations space, and K-9 unit accommodations. Access to the site will be provided by a primary full-access driveway for the public to 8th Avenue opposite 12th Street, and a secondary emergency access driveway to 13th Street to be used in times of emergency.

SITE ACCESS IMPROVEMENTS

The following site access improvements are proposed:

- Construct a primary full-access driveway to 8th Avenue opposite 12th Street.
- Construct a gated secondary full-access driveway to 13th Street just north of Christy Court, for emergency purposes.

Figure 10 identifies the lane configurations and traffic control devices assumed in place at all study intersections and proposed site accesses for the 2014 post-development condition.

TRIP GENERATION

The Institute of Transportation Engineers (ITE) publishes trip generation rates for a variety of land uses in the *ITE Trip Generation, 8th Edition*. However, a police station is not included in the ITE publication. ITE's Government Office Building land use is not used for this study for a few reasons, one of which being insufficient sample size used to determine trip generation rates. ITE's *Trip Generation Handbook, 2nd Edition* recommends collecting local data when only 1 or 2 data points are provided by ITE, as is the case.

In 2009, Portland State University (PSU) published a research report titled "Police Station PM Peak Hour Trip Generation in the Portland Metro Area". This report published the findings of a PSU research team working in cooperation with Group Mackenzie to determine trip generation rates for police stations in Portland's metropolitan area. The police facilities selected for this study were located in various jurisdictions, including City of Portland, Multnomah County, City of Milwaukie, and City of Troutdale.

The PSU report showed that after eliminating one outlying sample point, a reasonable correlation exists between facility square footage and vehicle trips generated during the PM peak hour as defined by the following formula below where building size is expressed in terms of 1,000 square feet:

$$\text{Weekday PM Peak Hour Trip Rate} = 1.5787 \times \text{Building Size} + 2.87$$

Although the PSU study did not research AM peak hour conditions, the PM peak hour trip rate determined by this study should represent a conservative estimate of AM peak hour trips given that police activities are pretty consistent throughout a typical weekday. As

such, anticipated trip generation for the proposed development is shown in the following table.

TABLE 4 – TRIP GENERATION								
Land Use	Size (SF)	Trip Type	Weekday AM Peak Hour			Weekday PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Police Station	23,000	Total Trips	39	19	20	39	19	20
		Pass-by Trips	0	0	0	0	0	0
		Primary Trips	39	19	20	39	19	20

As shown in the previous table, during the weekday AM and PM peak hours, the proposed development will generate 39 primary trips (50% entering and 50% exiting was assumed). Due to the nature of the development, no pass-by trips were assumed.

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

The distribution of site trips is based on the site’s location relative to jurisdictional boundaries, available access to the adjacent street system, existing intersection turning movement patterns and professional judgment. The weekday AM and PM primary site trip distribution patterns selected for the development proposal are described as follows:

- 45% to and from the north on 10th Street
- 25% to and from the east on Willamette Falls Drive
- 20% to and from the west on Willamette Falls Drive
- 10% to and from the south on 12th Street

Figure 11 illustrates the primary site trip assignments for the weekday AM and PM peak hours.

POST-DEVELOPMENT TRAFFIC

Year 2014 post-development traffic volumes are the sum of the site trips shown in Figure 11 and the year 2014 pre-development traffic volumes.

Figures 12 and 13 illustrate the resulting 2014 post-development traffic volumes for the weekday AM and PM peak hours, respectively.

V. INTERSECTION AND ROADWAY ANALYSIS

OPERATIONS ANALYSIS

All intersection operations analyses described in this report were performed using 2010 *Highway Capacity Manual* methodologies. To ensure this analysis reflects reasonable "worst-case" conditions, peak 15-minute flow rates for the specified peak hour periods were used to evaluate intersection operations. As such, the analysis reflects conditions likely to occur during the peak 15-minute period of the specified peak hour. Operations during all other weekday hours will likely be better than those described in this analysis.

Intersection operation characteristics are generally defined by two mobility standards: volume-to-capacity (v/c) ratio and level-of-service (LOS). LOS is based on the average control delay per vehicle for a particular movement, lane, approach or entire intersection. The City of West Linn relies on LOS to evaluate intersection performance, with LOS D or better as the mobility standard for both signalized and unsignalized intersections.

Analysis of weekday AM and PM peak hour conditions were conducted at all study intersections for three scenarios: 2012 Existing, 2014 Pre-Development, and 2014 Post-Development.

ANALYSIS METHODOLOGY

Intersection capacity calculations were conducted using the software program *Synchro* (Version 8), which is based on *HCM* methodologies, and *SimTraffic* utilizing ODOT analysis procedures. The vehicle delay-based analysis capabilities of the latter were used because the *HCM* outputs of *Synchro* were not representative of real-world observations. This is due to *HCM*'s application being geared toward isolated intersections, whereas key intersections such as the 8th Avenue/10th Street intersection are affected by the presence of the I-205 signals to the north and the all way stop-controlled intersection with Willamette Falls Drive to the south. The *SimTraffic* program is better able to capture the traffic flow patterns that exist on the major roadways of 10th Street and Willamette Falls Drive, and account for the metering effects of individual intersection traffic controls.

It should also be emphasized that travel time runs were conducted in the field to measure actual travel time and driver delay along the study area roadways and key intersections so they could be compared to the operational analyses of existing conditions. The findings of three separate PM peak hour travel time runs indicated that heading eastbound on 8th Avenue from the development site and making a left-turn onto 10th Street averages just over 1 minute. The *SimTraffic* analysis closely reflects this level of delay with 5 unique vehicle simulation runs averaging 70.7 seconds of delay per vehicle in the PM peak hour. Therefore, in our professional opinion, the traffic flow characteristics of the *SimTraffic* model better represents real world conditions. Therefore, this model was used as the basis for all other analysis scenarios. All *SimTraffic* analysis outputs are included in the Appendix.

UNMITIGATED ANALYSIS RESULTS

The following tables summarize the unmitigated weekday AM and PM peak hour operation analysis results. Intersection numbers correspond to numbering presented in the report figures. The *SimTraffic* results are expressed in terms of average driver delay in seconds followed by the equivalent LOS “A” through “F” rating. Results are reported for the critical approach/lane at two-way stop-controlled intersections and the intersection as a whole for the all-way stop-control.

TABLE 5 – INTERSECTION OPERATION ANALYSIS – AM PEAK HOUR					
Intersection	Traffic Control	Mobility Standard	2012 Existing	2014 Pre-Dev.	2014 Post-Dev.
1. 8 th Avenue/13 th Street	Two-way Stop	LOS D	3.8 s (A)	3.8 s (A)	3.8 s (A)
2. 8 th Avenue/12 th Street	Two-way Stop	LOS D	2.3 s (A)	2.9 s (A)	4.5 s (A)
3. 8 th Avenue/10 th Street	Two-way Stop	LOS D	18.8 s (C)	23.2 s (C)	24.6 s (C)
4. Willamette Falls Drive/12 th Street	Two-way Stop	LOS D	7.3 s (A)	7.3 s (A)	7.1 s (A)
5. Willamette Falls Drive/10 th Street	All-way Stop	LOS D	7.8 s (A)	9.1 s (A)	9.1 s (A)

TABLE 6 – INTERSECTION OPERATION ANALYSIS – PM PEAK HOUR					
Intersection	Traffic Control	Mobility Standard	2012 Existing	2014 Pre-Dev.	2014 Post-Dev.
1. 8 th Avenue/13 th Street	Two-way Stop	LOS D	4.2 s (A)	3.4 s (A)	4.1 s (A)
2. 8 th Avenue/12 th Street	Two-way Stop	LOS D	4.4 s (A)	4.3 s (A)	5.2 s (A)
3. 8 th Avenue/10 th Street	Two-way Stop	LOS D	70.7 s (F)	153.1 s (F)	215.9 s (F)
4. Willamette Falls Drive/12 th Street	Two-way Stop	LOS D	26.4 s (D)	46.7 s (E)	66.8 s (F)
5. Willamette Falls Drive/10 th Street	All-way Stop	LOS D	10.7 s (B)	12.9 s (B)	13.2 s (B)

Based on the findings summarized in the two tables above, all intersections operate adequately at LOS C or better during the weekday AM peak hour under all analysis scenarios. However, during the weekday PM peak hour, the 8th Avenue/10th Street intersection and Willamette Falls Drive/12th Street intersection suffer excessive congestion in the PM peak hour under Pre- and Post-Development scenarios. Additional description of these two individual intersection operations analysis and potential mitigation measures is included below.

8th Avenue/10th Street

The PM peak hour deficiency at the 8th Avenue/10th Street intersection occurs because traffic volumes on 10th Street are heavy enough to significantly inhibit stop-controlled side street movements.

The critical movement that experiences the worst delay is the eastbound left-turn lane on 8th Avenue. With the increased traffic in each successive scenario, the delay increases significantly for this particular movement. However, the lane already operates at an LOS F today in the PM peak hour as confirmed by travel time runs.

Similarly, the westbound movements from 8th Court deteriorate toward an LOS E in the 2014 pre- and post-development scenarios.

Potential improvements to mitigate the heavy vehicle delays from 8th Avenue include signalization, additional lane treatments, and/or turn movement restrictions.

The West Linn TSP identifies two projects that will affect how this intersection functions in the future. One is the widening of 10th Street between the interchange and Willamette Falls Drive. The second is the restriction of left-turn movements, but only when 8th Court is extended to Willamette Falls Drive.

ODOT does not support the signalization of the 8th Avenue/10th Street intersection due to its proximity to the 10th Street/I-205 interchange ramps, and widening 10th Street will not significantly decrease side street delay. As such, restriction of turning movements is the only feasible mitigation measure to consider at this time.

Until 8th Court is extended to Willamette Falls Drive, only certain turn movements can be restricted without significantly affecting existing circulation and access to private property. Consequently, the northbound left-turn is a good candidate for interim turn restrictions because traffic demand for this movement is low and the affected traffic can easily reroute further west on Willamette Falls Drive and turn right onto 12th Street to access 8th Avenue.

The added benefit of blocking the northbound turn-lane is that it can improve pedestrian safety across 10th Street within the marked crosswalk on the south leg which connects directly at the Route #154 (Willamette) bus stop on the east side of 10th Street. The potential turn restriction would consist of converting the northbound left turn lane into a pedestrian refuge. Besides providing a safety benefit to pedestrians/transit users, it would also reduce conflicts between vehicular traffic movements, thereby reducing vehicular delay.

Willamette Falls Drive/12th Street

The PM peak hour deficiency at the Willamette Falls Drive/12th Street intersection occurs because traffic volumes on Willamette Falls Drive are heavy enough to significantly inhibit stop-controlled side street movements.

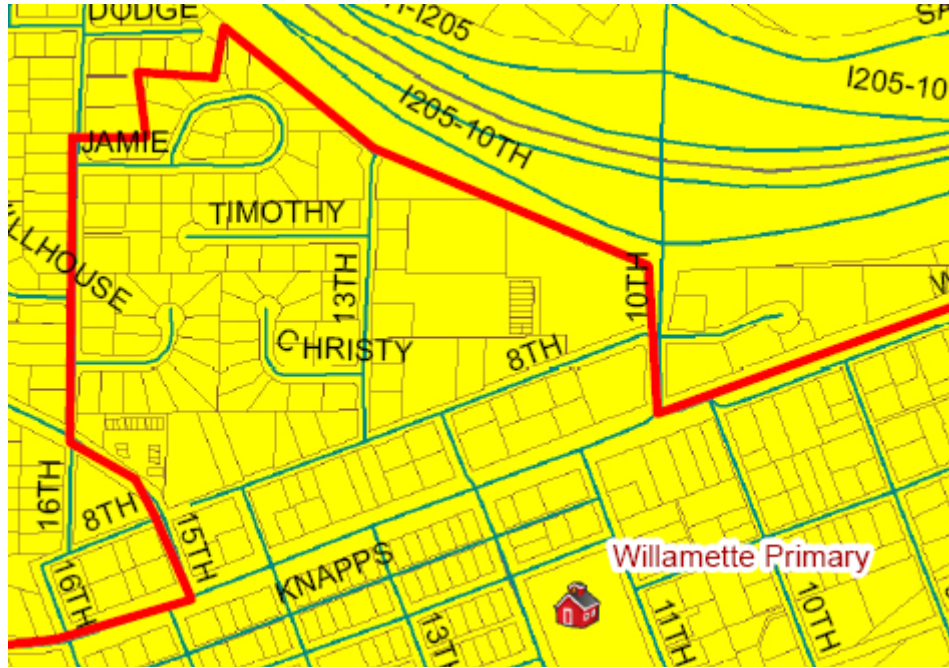
In a similar manner to the 8th Avenue/10th Street intersection, side street delay increases significantly in each successive scenario.

Future improvements identified in the West Linn TSP call for all-way stop or traffic signal when warrants are met. However, based on MUTCD criteria, forecast traffic volumes and the intersection crash history do not necessarily warrant such improvements. Nevertheless, some form of mitigation is necessary given the proposed site development will result in further deterioration of PM peak hour operations from LOS E to LOS F.

Two potential options have been identified to address the need for mitigation. One is to add short left-turn pockets on the Willamette Falls Drive approaches to increase mainline capacity movements and, thereby, decrease vehicle delay for the critical side-street approaches.

The second option is to proceed with transitioning this intersection into an all-way stop, even though MUTCD volume-based warrants are not yet satisfied. Besides benefitting the minor approach movements, all-way stop control would improve pedestrian access across Willamette Falls Drive, as crosswalks could be established on all intersecting legs. Today most pedestrians use the marked crosswalk on the west leg which connects directly at Route #154 (Willamette) bus stop on the south side of Willamette Falls Drive.

Additionally, this intersection is within the published walking boundary of Willamette Primary School to the south, and it is the most direct Willamette Falls Drive crosswalk between the school and the retail and residential land uses north of Willamette Falls Drive. Students are forced to cross free-flowing traffic at this location.



A change to all-way stop control will increase delay for eastbound traffic on Willamette Falls Drive, which in turn, may decrease cut-through potential; an issue that was described earlier in the *Existing Conditions* section of this report.

Other factors should also be considered in the context of adding all way stop-control at this intersection.

- This area is part of the Willamette Town Center, and as designated by Metro’s 2040 Growth Concept Map, it extends several blocks in all directions. The heart of this particular town center includes the historic Willamette central business district as identified as a “Main Street” corridor by the 2040 Growth Concept (Willamette Falls Drive from 10th to 16th Streets). This area is meant to meet the commercial needs of the immediate neighborhood, be accessible to pedestrians, and be well served by transit.
- All way stop-control at this intersection will have the added benefit of metering vehicular traffic, such that all other downstream vehicular movements will experience greater gaps and potential decreased delay.

RECOMMENDED MITIGATION MEASURES

After considering the array of mitigation measures identified above, the following public improvements are recommended for City consideration as proper conditions of approval to mitigate the traffic impacts of the proposed police station facility:

8th Avenue/10th Street

- Eliminate northbound left-turn movement on 10th Street approach by constructing a pedestrian refuge island, and restrict potential left-turns from the through lane by installing “NO LEFT TURN” signage. Supportive reasons for this improvement are as follows:
 - A northbound left-turn restriction decreases conflicts between vehicular traffic movements, thereby decreasing traffic delay (improving LOS) for the stop-controlled movements, particularly for the more critical eastbound left-turn movement.
 - Eliminating northbound left-turns moves in the direction of meeting the planned improvements for this intersection, as identified in the City’s TSP.
 - Providing a pedestrian refuge across 10th Street improves pedestrian/transit user safety by allowing pedestrians to cross the street in two stages.
 - The left-turn restriction is for a low-volume movement. Affected traffic will redirect easily to 12th Street on Willamette Falls Drive to access 8th Avenue.

Willamette Falls Drive/12th Street

- Option 1: Provide short 50-foot left-turn “pockets” on the eastbound and westbound approaches of Willamette Falls Drive. Supportive reasons for this improvement are as follows:
 - Left-turn pockets remove left-turning traffic from the through traffic stream, preventing vehicle blockage, thus allowing all movements to function more efficiently.
 - Short 50-foot pockets do not significantly affect on-street parking along Willamette Falls Drive. More storage length can be provided at the expense of on-street parking if necessary.
 - Left-turn pockets can be provided without any intersection widening.
- Option 2: Change two-way stop-control to all way stop-control, install crosswalks and provide left-turn “pockets” on the eastbound and westbound approaches of Willamette Falls Drive. Supportive reasons for this improvement are as follows:
 - All way stop-control and striped crosswalks enhances pedestrian crossing safety.
 - Reduces delay to side-street drivers.
 - Added delay to eastbound users discourages cut-through travel on Willamette Falls Drive.
 - The same benefits described in Option 1 for the left-turn turn pockets apply here.

MITIGATED ANALYSIS RESULTS

8th Avenue/10th Street

The table below shows the PM peak hour operations analysis results for the pre-development, post-development, and mitigated post-development scenarios. As shown, with northbound left-turns restricted, driver delay for the critical eastbound left turn

movement decreases from 216 seconds to 117 seconds. Although the level of service remained at LOS F, driver delay was still reduced to below pre-development levels. Additionally, driver delays on the less critical westbound approach are enhanced from LOS E to LOS D.

TABLE 7 – 8TH AVENUE / 10TH STREET MITIGATED OPERATIONS ANALYSIS – PM PEAK HOUR					
Approach/Movement	Traffic Control	Mobility Standard	2014 Pre-Dev.	2014 Post-Dev.	2014 Mitigated Post-Dev.
Eastbound Left	Stop-controlled	LOS D	153.1 s (F)	215.9 s (F)	116.6 s (F)
Eastbound Through-Right	Stop-controlled	LOS D	9.5 s (A)	12.8 s (B)	10.0 s (A)
Westbound Left-Through	Stop-controlled	LOS D	35.9 s (E)	45.3 s (E)	34.4 s (D)
Westbound Right	Stop-controlled	LOS D	33.3 s (D)	35.6 s (E)	30.0 s (D)
Southbound Left	-	LOS D	6.5 s (A)	6.5 s (A)	6.7 s (A)

Willamette Falls Drive/12th Street

As shown in the table below, mitigation Option 1 decreases delays on the critical side-street approaches, resulting in LOS D operations in the PM peak hour. Under mitigation Option 2, delays are decreased for the critical side-street movements and westbound movements, resulting in LOS B or better operations in the PM peak hour. However, the eastbound approach will perform poorly at LOS E/F during the PM peak hour.

TABLE 8 – WILLAMETTE FALLS DRIVE / 12TH STREET MITIGATED OPERATIONS ANALYSIS – PM PEAK HOUR					
Approach/Movement	Traffic Control	Mobility Standard	2014 Pre-Dev.	2014 Post-Dev.	2014 Mitigated Post-Dev.
OPTION 1					
Northbound Left-Through-Right	Stop-controlled	LOS D	46.7 s (E)	66.8 s (F)	29.9 s (D)
Southbound Left-Through-Right	Stop-controlled	LOS D	40.5 s (E)	39.5 s (E)	27.9 s (D)
Eastbound Left (50' feet)	-	LOS D	-	-	2.0 s (A)
Westbound Left (50' feet)	-	LOS D	-	-	10.1 s (B)
OPTION 2					
All-way stop-control		LOS D	-	-	76.7 s (F)*

*Northbound, Southbound, and Westbound approaches would experience LOS B or better at the expense of heavy Eastbound traffic which would experience delay in excess of LOS E & F thresholds.

VII. SUMMARY

The following are key findings supported by analysis results presented in this report:

SITE CONDITIONS

- The approximately 1.6-acre site currently has three existing single-family residences.

EXISTING TRANSPORTATION FACILITIES

- The proposed development site is in close proximity to public transit and some pedestrian facilities. There are no continuous bicycle lanes in the site vicinity.

REVIEW OF INTERSECTION CRASH DATA

- All study intersections have low crash rates below 1.0 crashes per million entering vehicles, based on five years of historical data.

REVIEW OF INTERSECTION SIGHT DISTANCE

- Adequate sight distance is available at the proposed site accesses along 8th Avenue and 13th Street.

BACKGROUND AND IN-PROCESS TRAFFIC

- Based on historical traffic growth trends for the 10th Street corridor, the Willamette area has experienced little traffic growth over the past several years. However, to produce a conservative analysis of future traffic conditions, an annual traffic growth rate of 1.0% was utilized in this study.
- Additional in-process traffic to account for full occupancy at the Willamette Marketplace development was added to the roadway network using the directional distributions from Kittelson & Associates' latest Transportation Impact Analysis of the site.

SITE DEVELOPMENT PLAN

- Site development will consist of removing the three existing single-family residences and constructing an approximately 23,000 SF police station.
- Access to the site will be provided by a primary full-access driveway to 8th Avenue opposite the 12th Street approach and a secondary full-access driveway to 13th Street for emergency use.
- Using the trip generation information gathered from existing police stations in the Portland metropolitan area, the proposed development is projected to generate 39 primary trips during the weekday AM and PM peak hours.
- The proposed development is expected to be completed by 2014.

TRAFFIC OPERATIONS

- Traffic operations at all study intersections will meet mobility standards for the weekday AM peak hour. However, two study intersections will not meet mobility standards in the PM peak hour. Mitigation measures are needed at both the 8th Avenue/10th Street and Willamette Falls Drive/12th Street intersections to operate at mobility standards.

MITIGATION MEASURES

- Recommended mitigation at the 8th Avenue/10th Street intersection includes eliminating the northbound left-turn lane, installing a pedestrian refuge island, and restricting potential left-turns from the through lane by posting “NO LEFT TURN” signage.
- Recommended mitigation at the Willamette Falls Drive/12th Street intersection includes two potential options:
 - Option 1: Maintain two-way stop-control and construct short 50-foot left turn pockets on the eastbound and westbound approaches of Willamette Falls Drive.
 - Option 2: Implement all-way stop-control, and install crosswalks on all intersecting legs.

VIII. CONCLUSIONS

Based on the findings documented in this study, the following recommendations are made to ensure the proposed site development will not significantly or adversely impact traffic operations or safety at all study intersections and proposed site accesses:

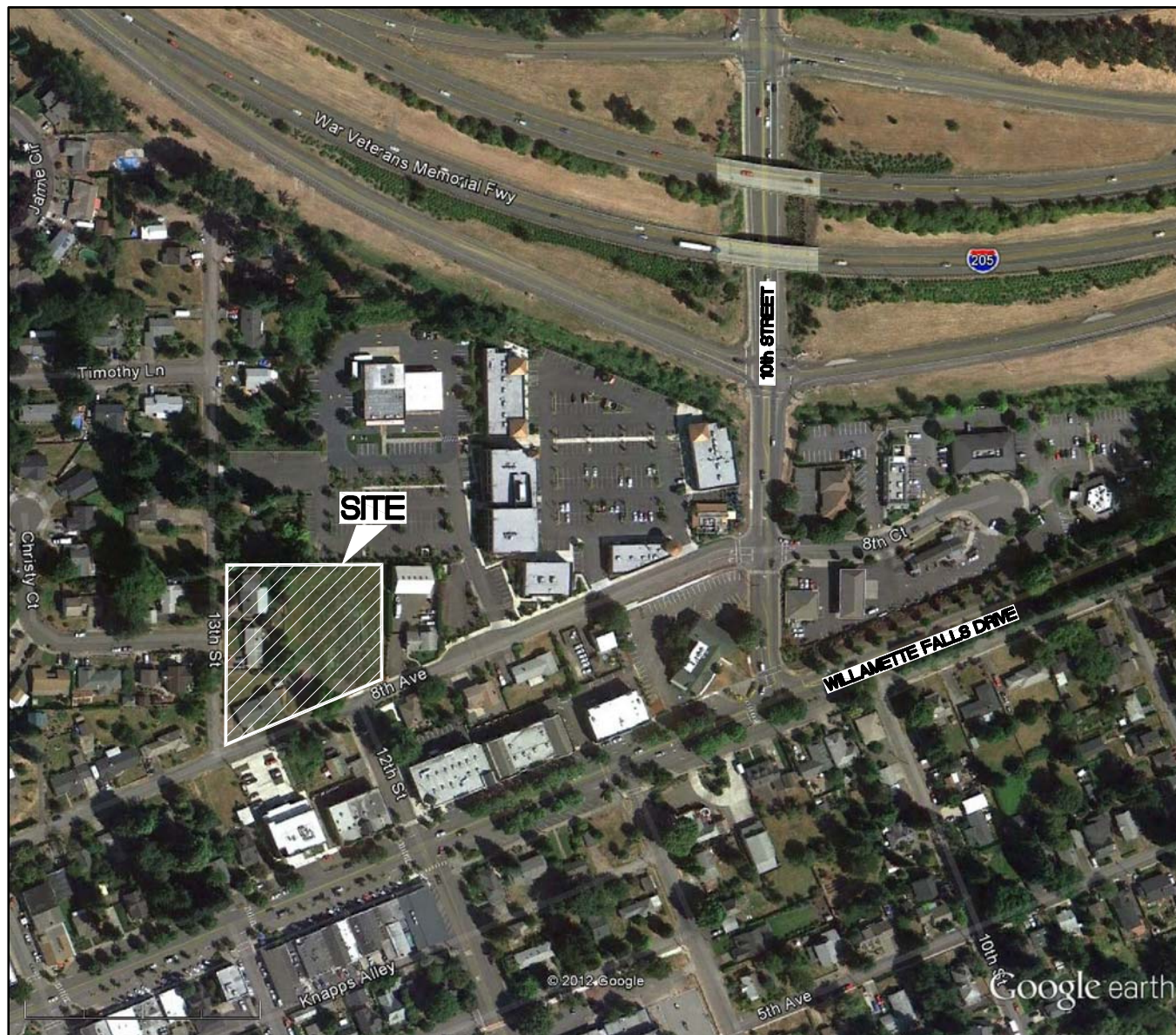
1. Restrict northbound left-turn movements at the 8th Avenue/10th Street intersection by eliminating the left-turn lane, installing a pedestrian refuge island, and restricting potential left-turns from the through lane by posting “NO LEFT TURN” signage.
2. Implement one of two mitigation measures at the Willamette Falls Drive/12th Street intersection:
 - Option 1: Maintain two-way stop-control and construct short 50-foot left turn pockets on the eastbound and westbound approaches of Willamette Falls Drive.
 - Option 2: Implement all-way stop-control, and install crosswalks on all intersecting legs.

VIII. APPENDICES

- A. Figures
- B. Traffic Count Data Sheets
- C. Intersection Crash Data
- D. Historical Traffic Growth
- E. Intersection Capacity Calculations



NOT TO SCALE



GROUP

MACKENZIE

Portland OR
503.224.9560

Vancouver WA
360.695.7879

Seattle WA
206.749.9993

DATE: 11.08.12

DRAWN BY: JRB

CHECKED BY: BJD

JOB NO:
2120180.00

SITE VICINITY MAP

**WEST LINN POLICE STATION
WEST LINN, OREGON**

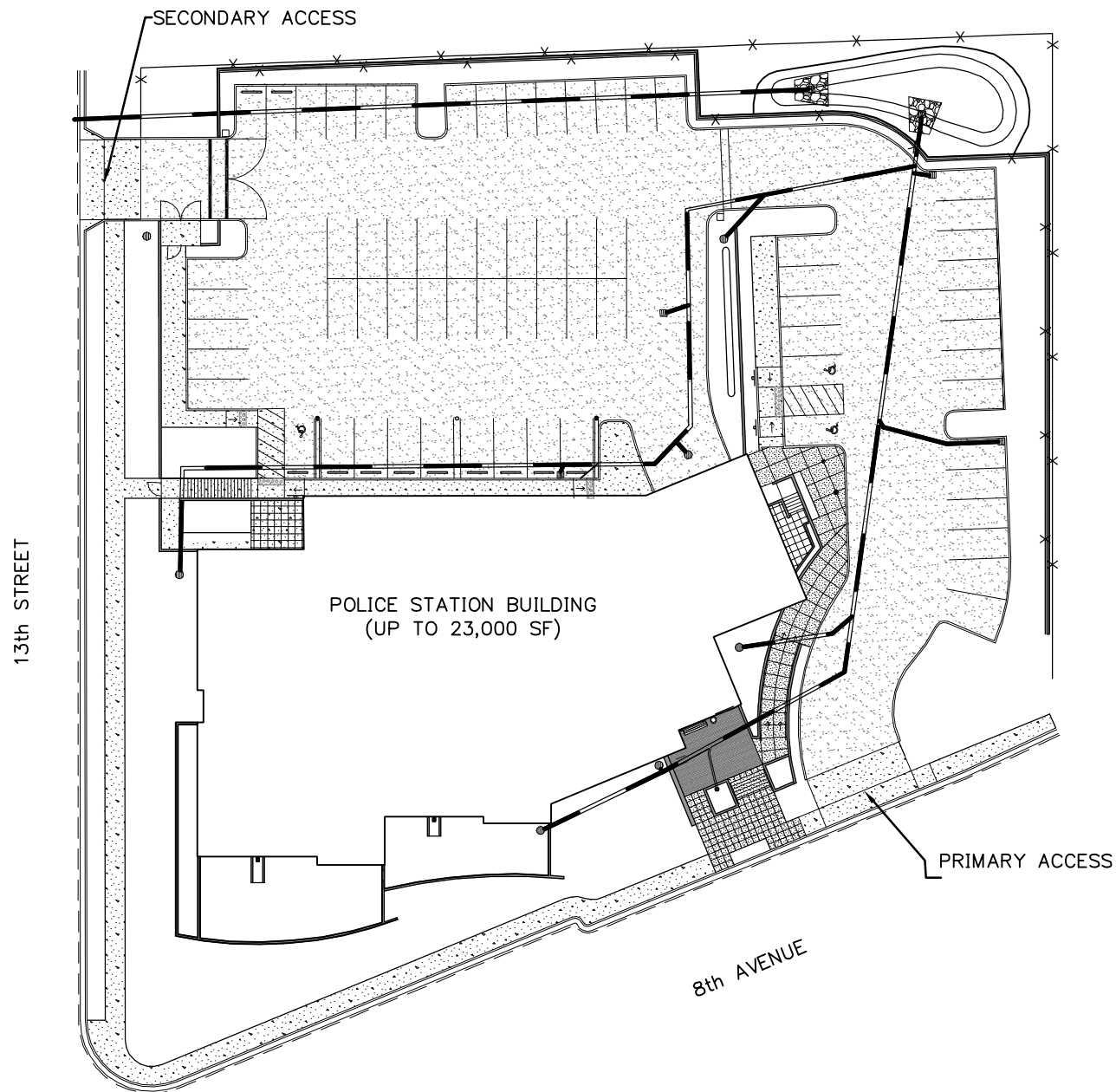
FIGURE

1

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE
USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
Vancouver WA 360.695.7879
Seattle WA 206.749.9993

DATE: 11.08.12

DRAWN BY: JRB

CHECKED BY: BJD

JOB NO:
2120180.00

SITE PLAN

**WEST LINN POLICE STATION
WEST LINN, OREGON**

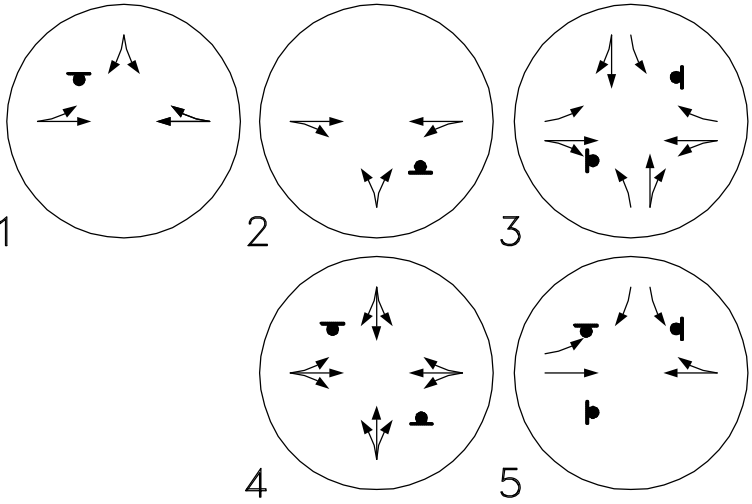
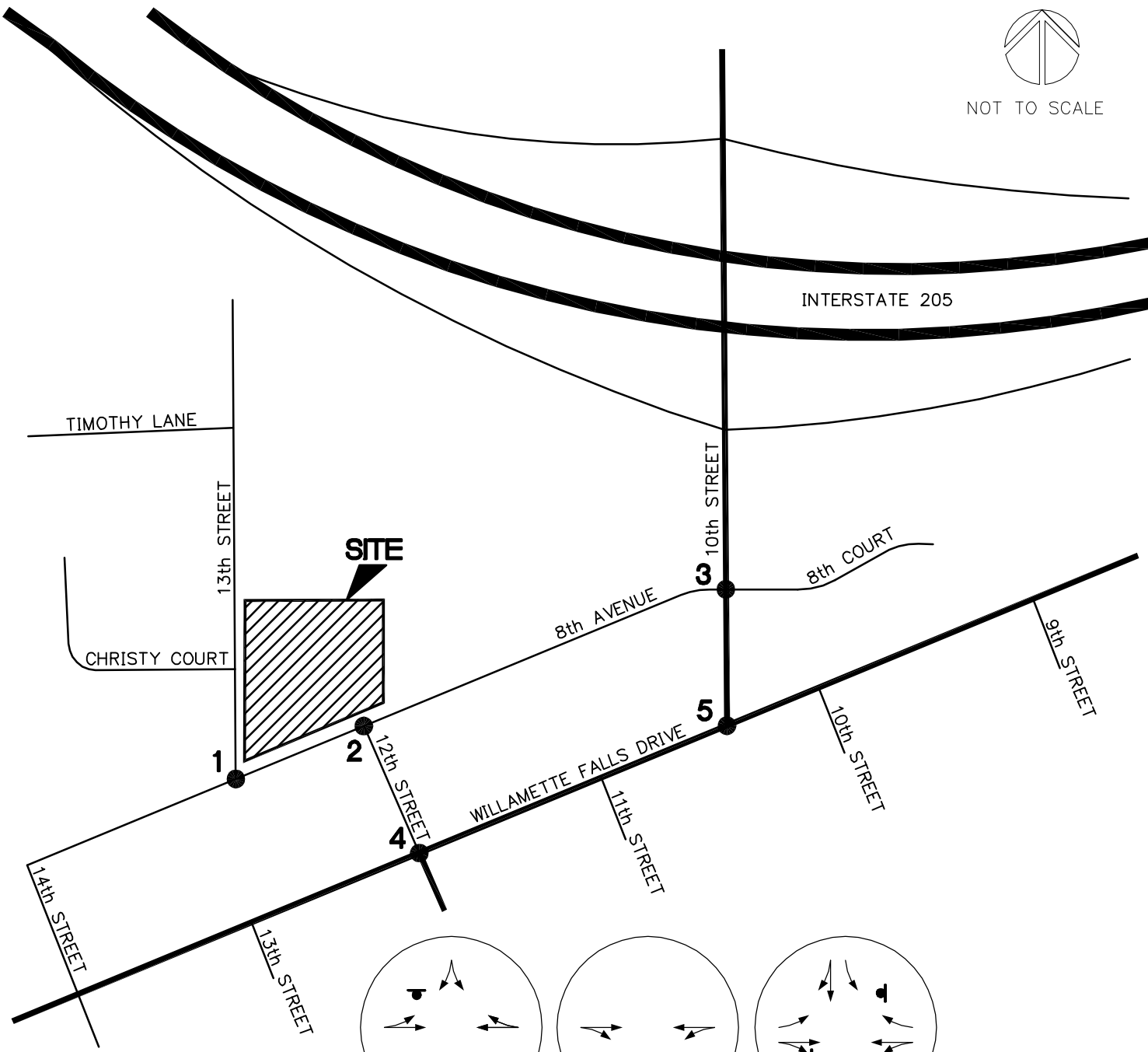
FIGURE

2

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE
USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

EXISTING LANE CONFIGURATIONS AND TRAFFIC CONTROL

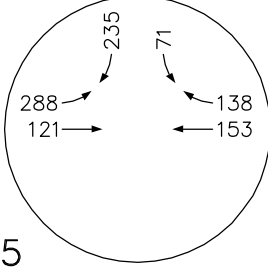
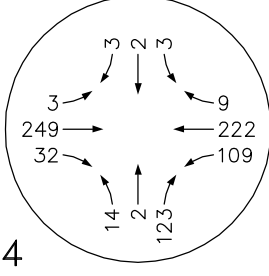
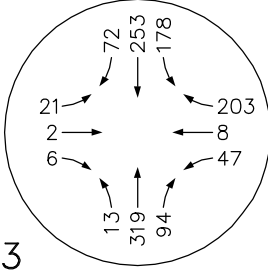
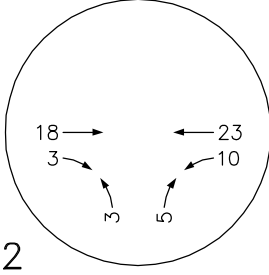
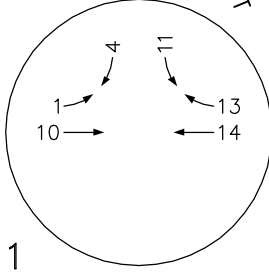
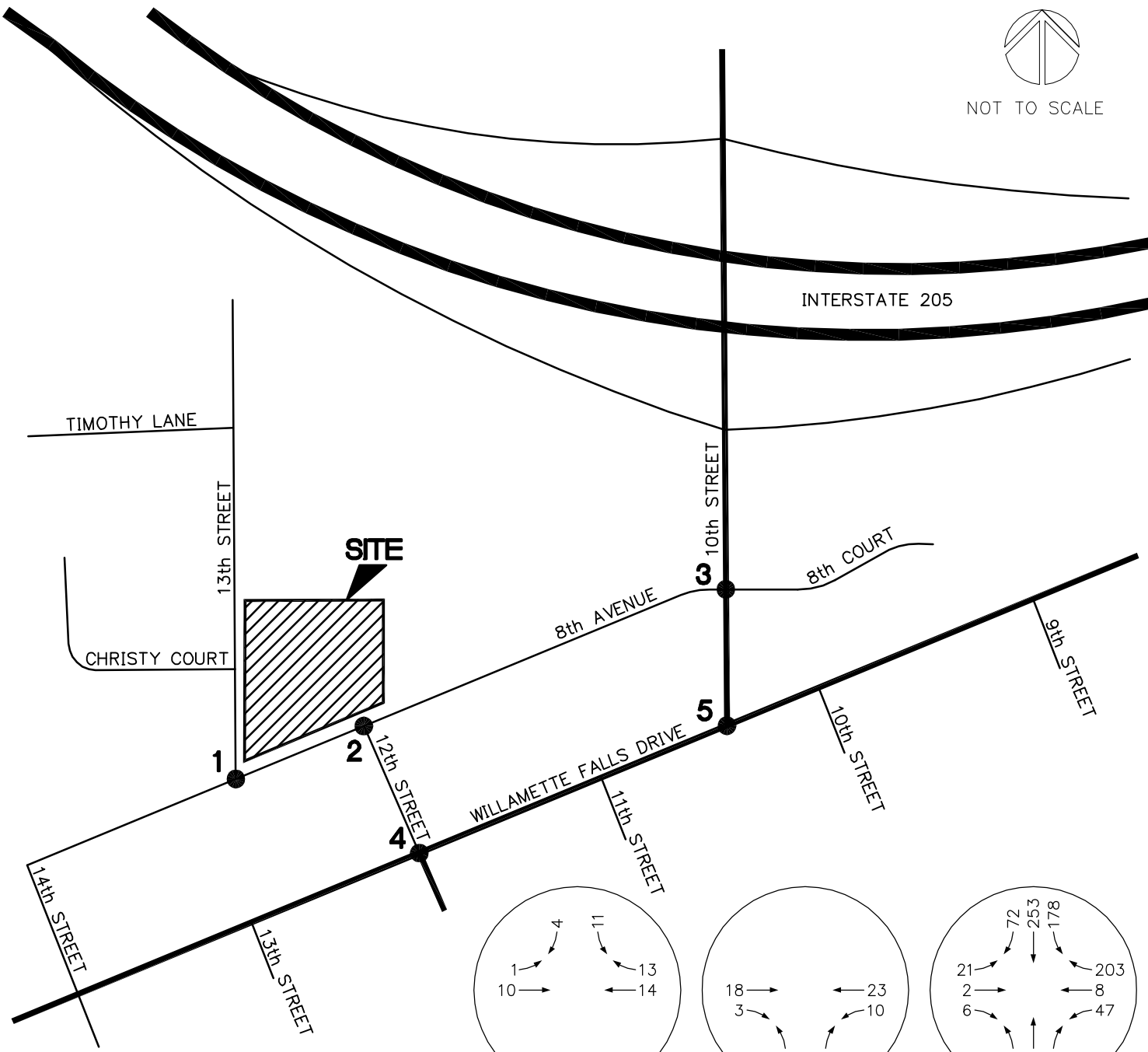
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 3**

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

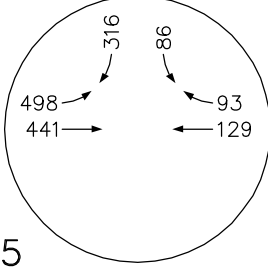
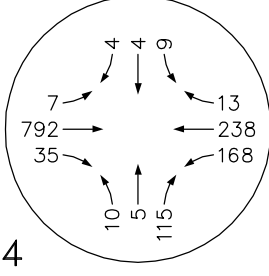
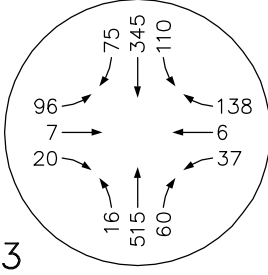
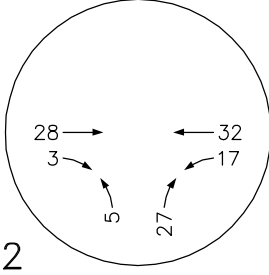
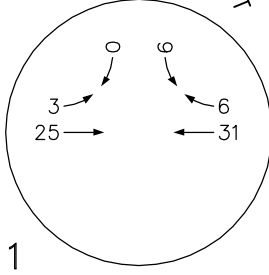
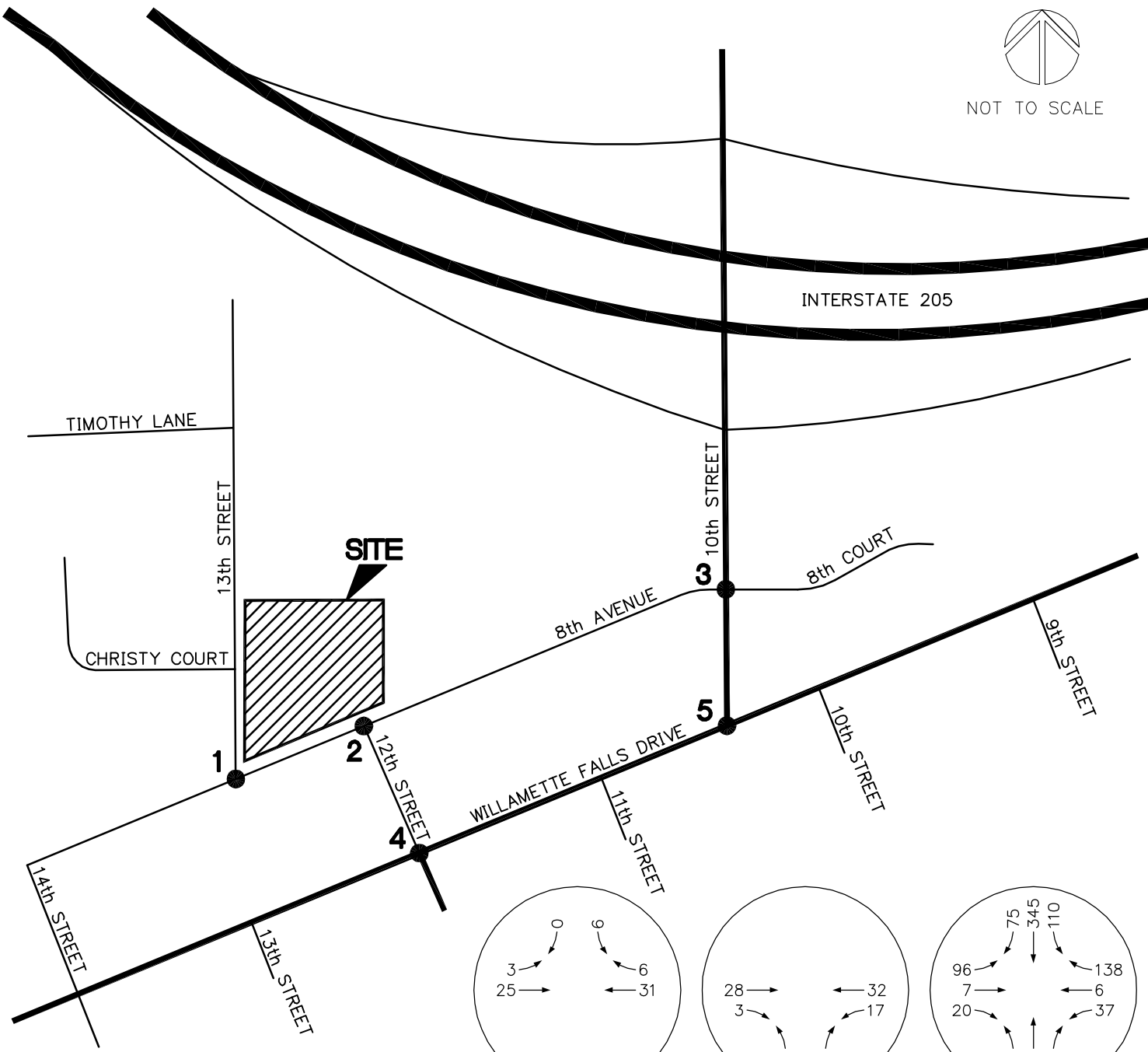
2012 EXISTING TRAFFIC VOLUMES - WEEKDAY AM PEAK HOUR
WEST LINN POLICE STATION WEST LINN, OREGON

FIGURE 4

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

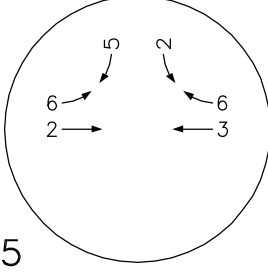
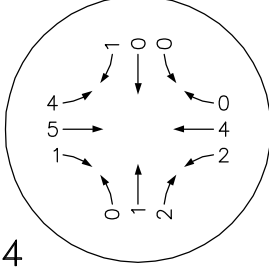
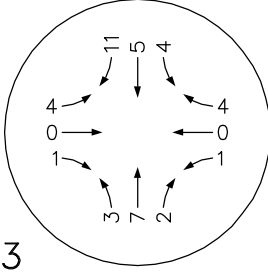
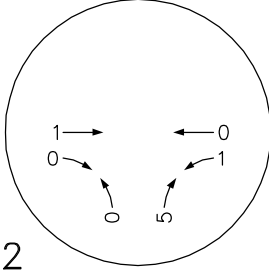
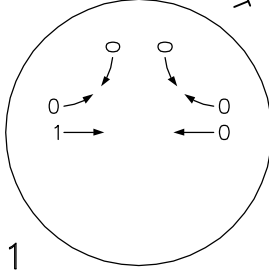
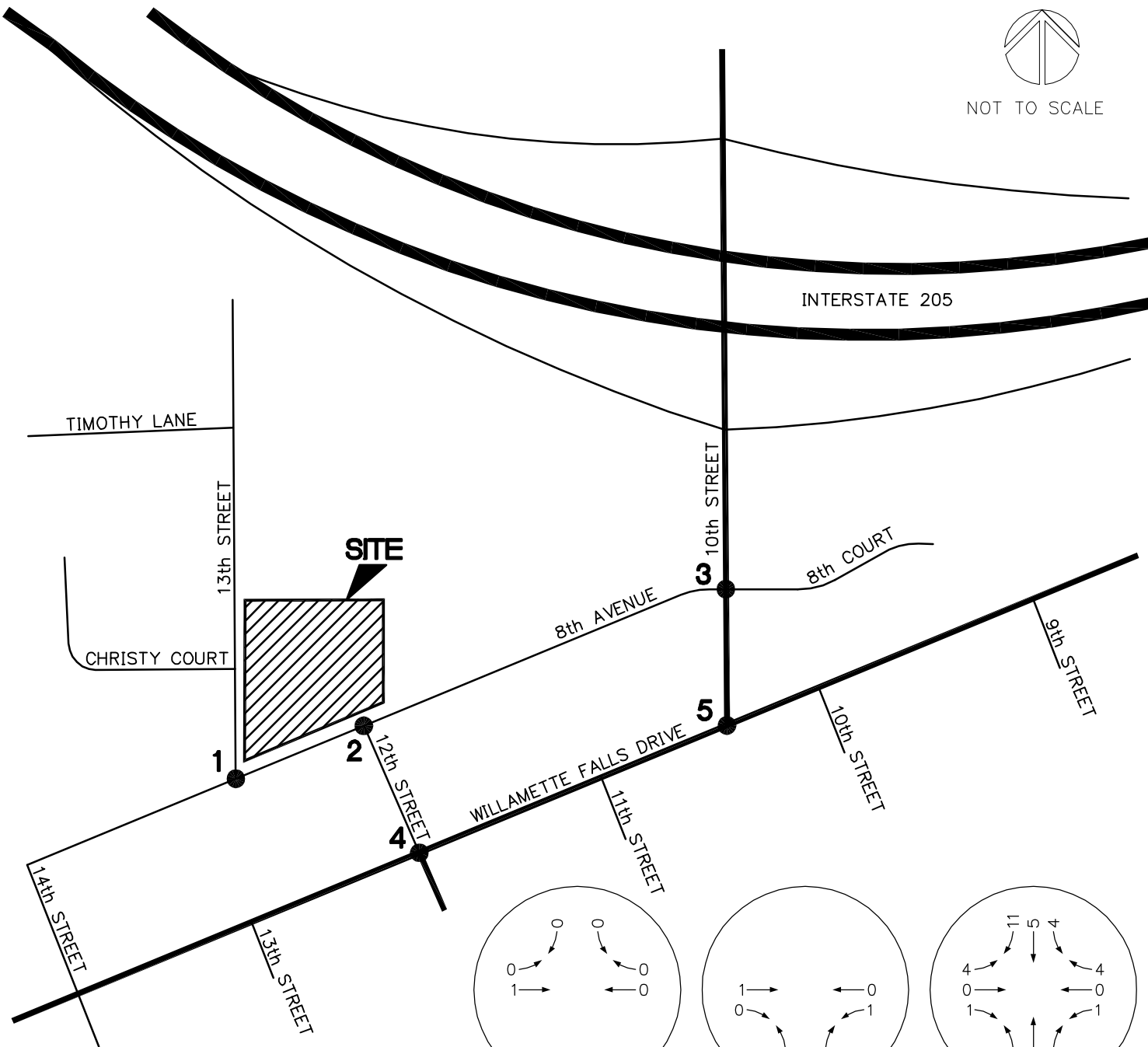
2012 EXISTING TRAFFIC VOLUMES - WEEKDAY PM PEAK HOUR
WEST LINN POLICE STATION WEST LINN, OREGON

FIGURE 5

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

2-YEAR BACKGROUND TRAFFIC GROWTH + IN-PROCESS TRIPS - WEEKDAY AM PEAK HOUR

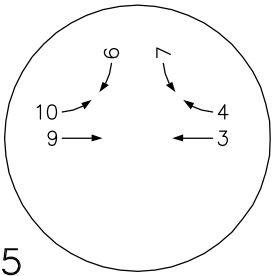
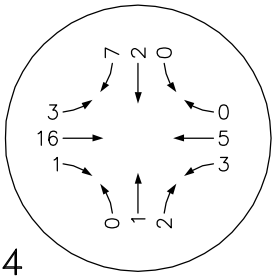
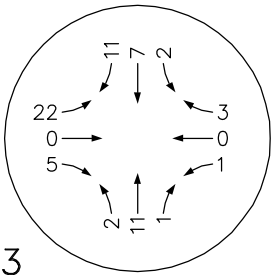
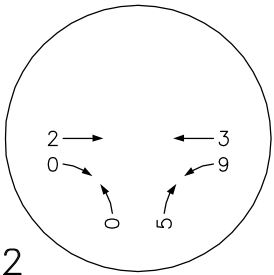
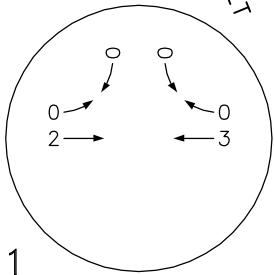
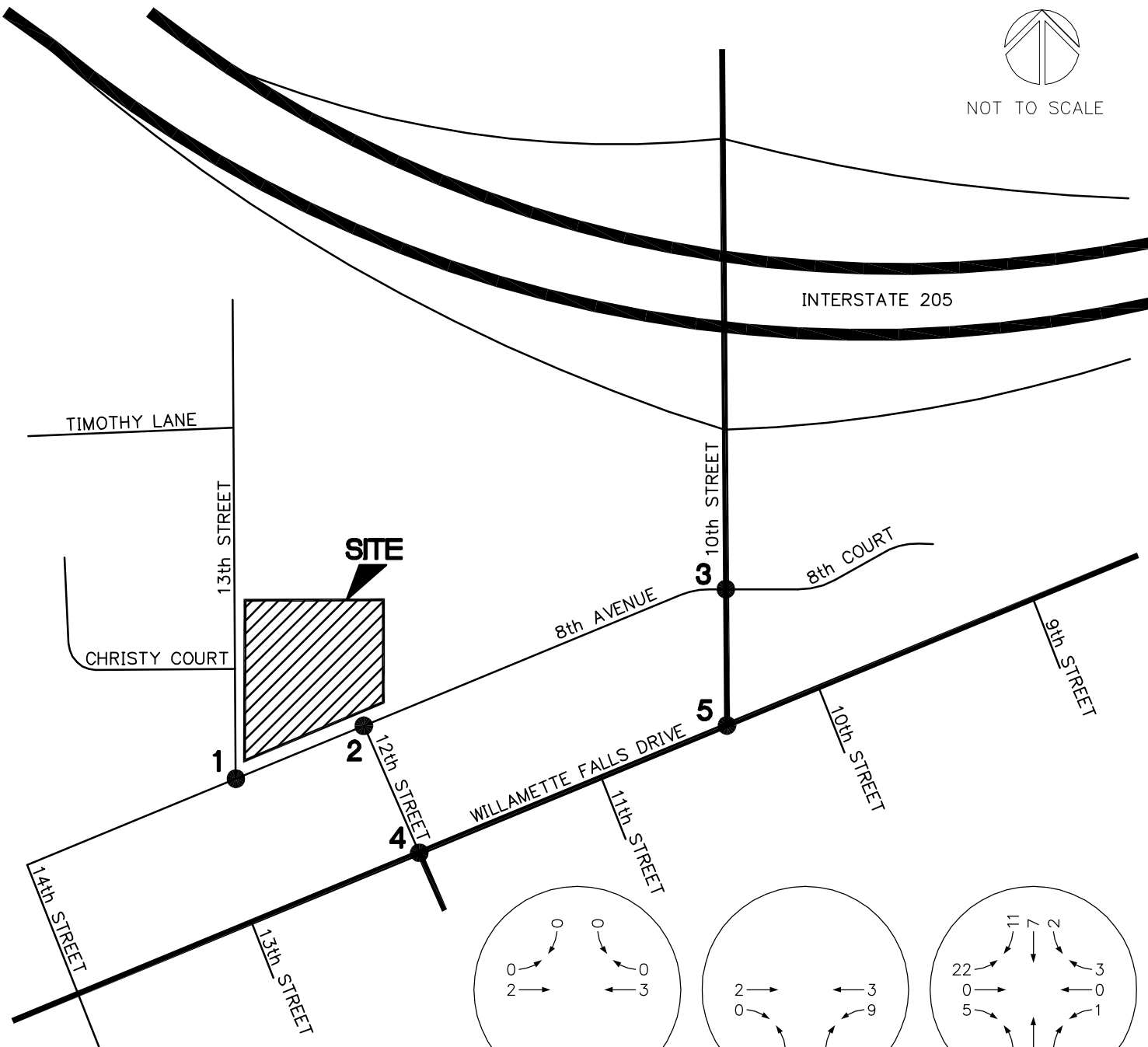
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 6**

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

2-YEAR BACKGROUND TRAFFIC GROWTH + IN-PROCESS TRIPS - WEEKDAY PM PEAK HOUR

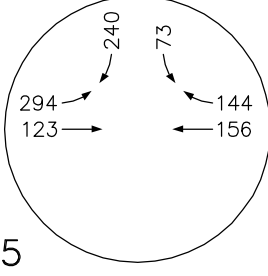
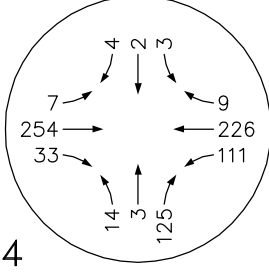
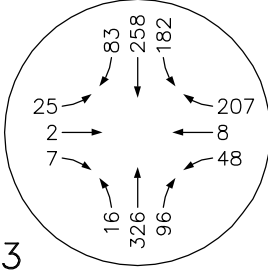
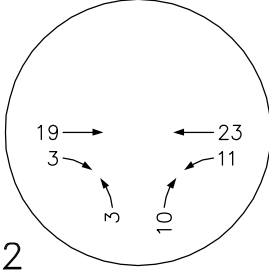
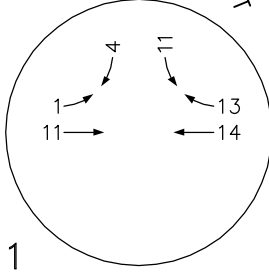
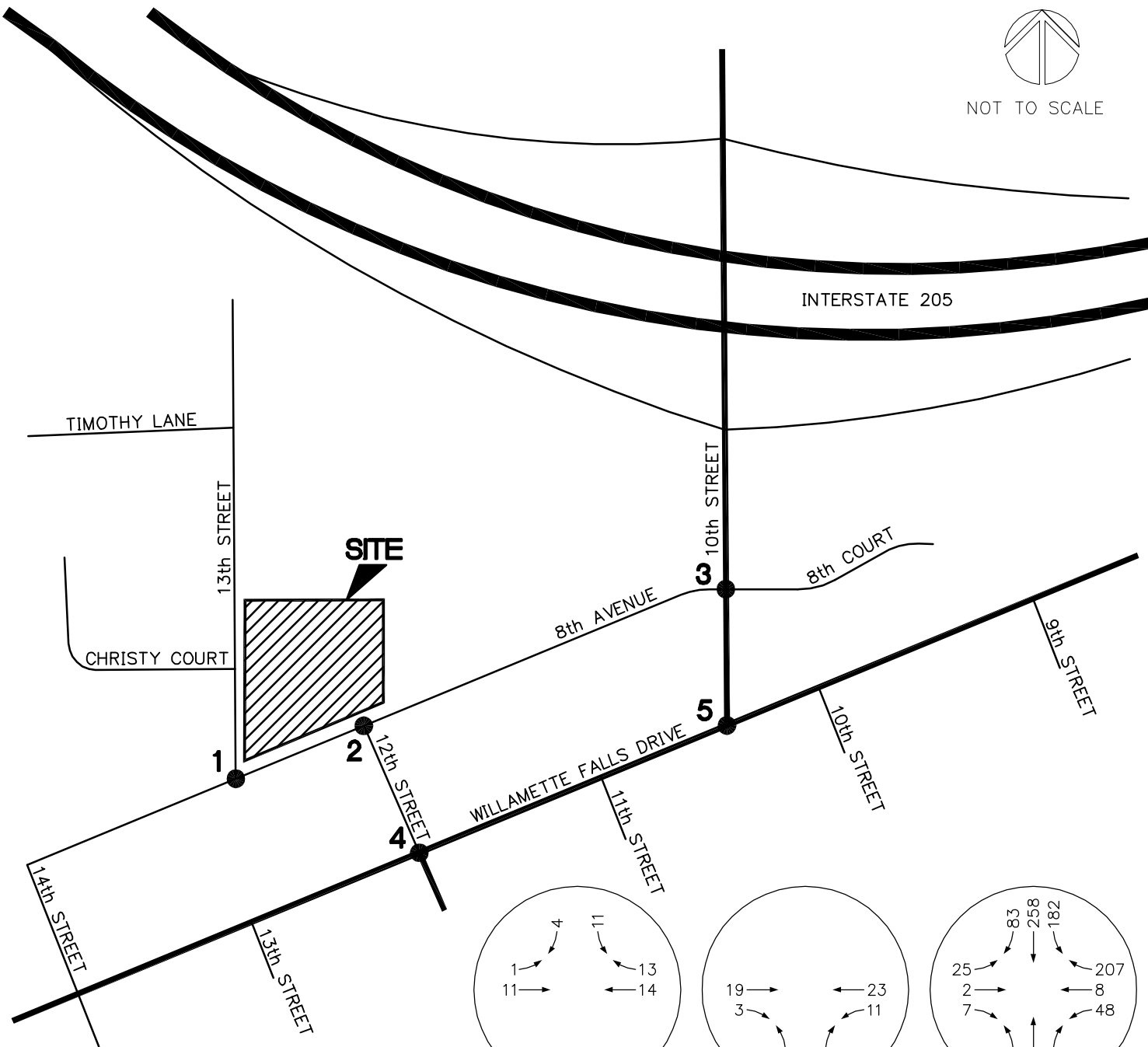
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 7**

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

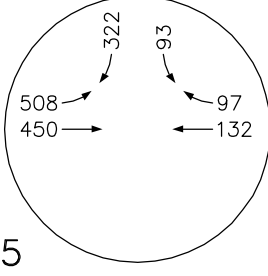
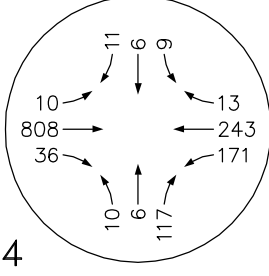
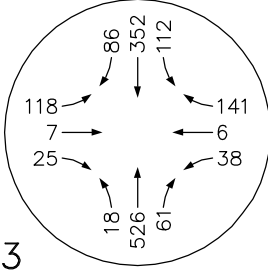
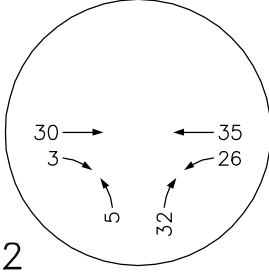
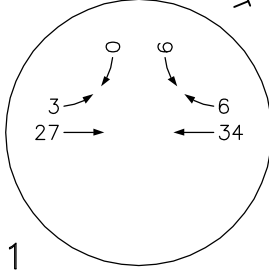
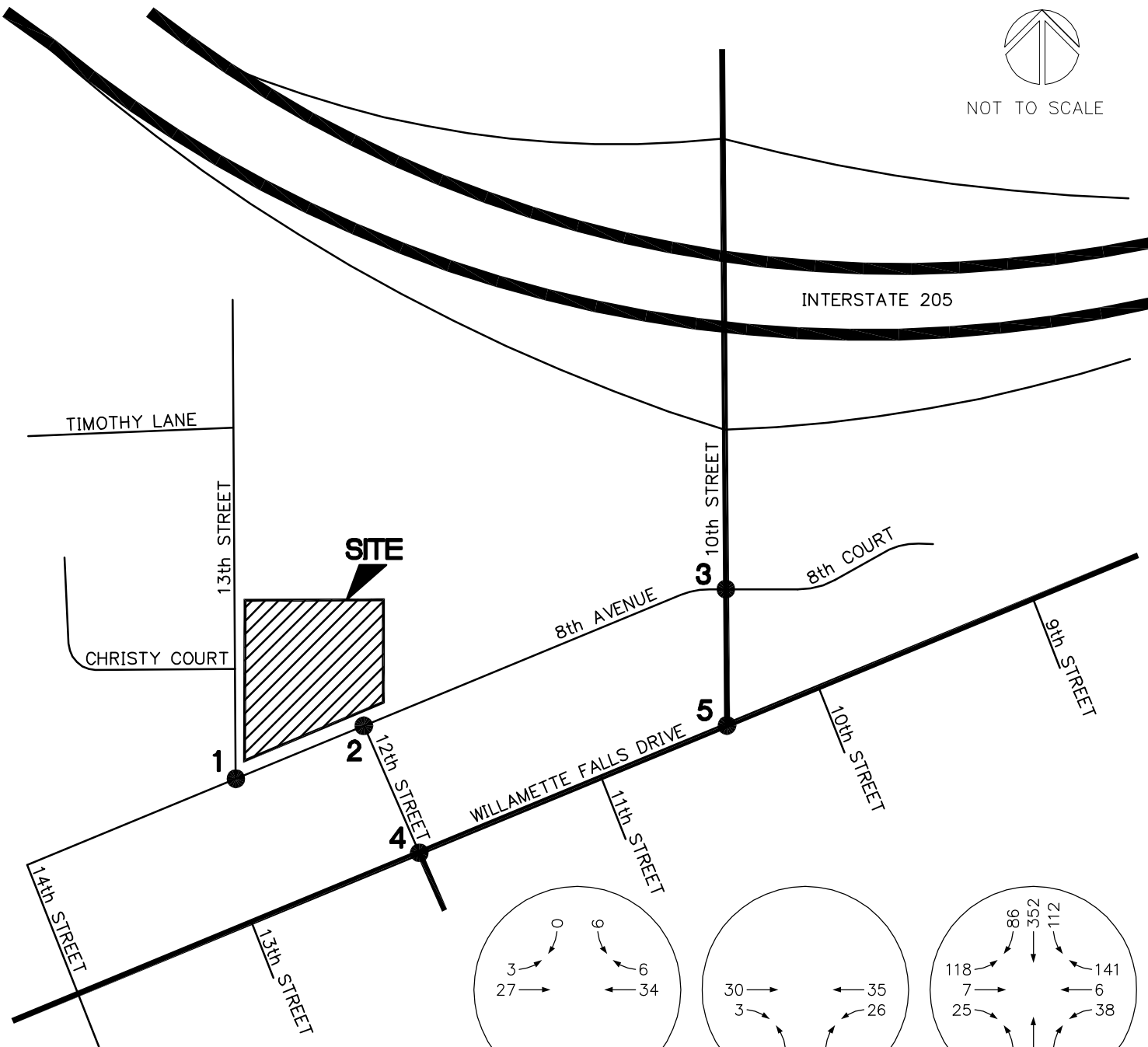
**2014 PRE-DEVELOPMENT
 TRAFFIC VOLUMES -
 WEEKDAY AM PEAK HOUR**
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

FIGURE
8

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

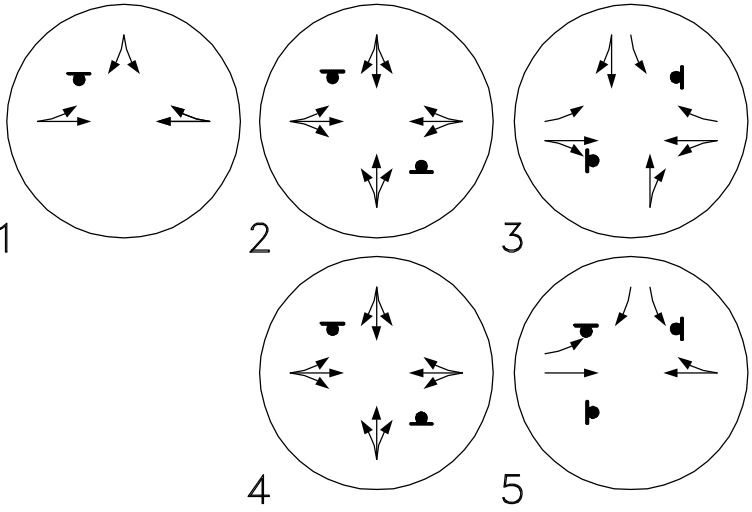
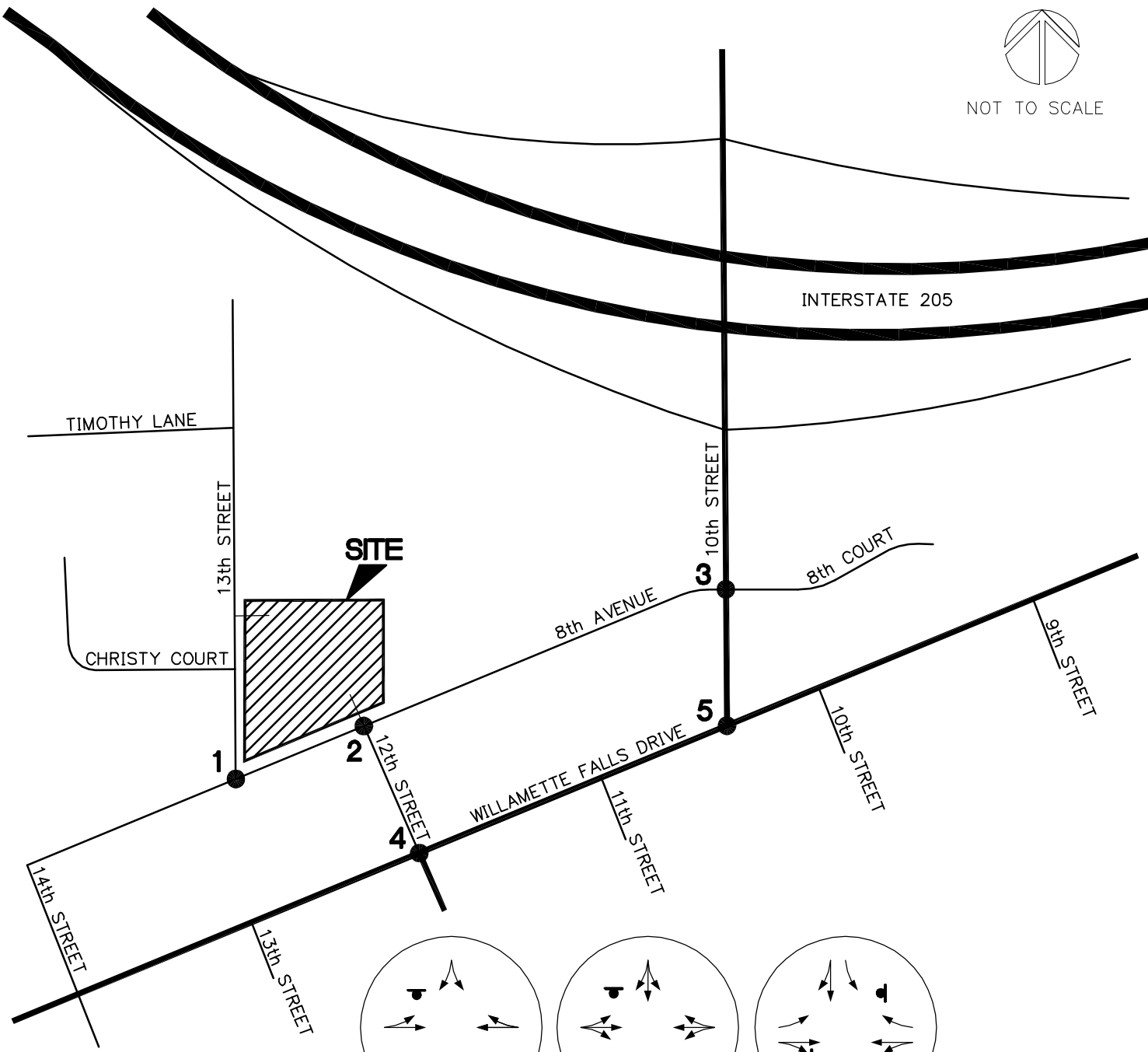
**2014 PRE-DEVELOPMENT
 TRAFFIC VOLUMES -
 WEEKDAY PM PEAK HOUR**

**WEST LINN POLICE STATION
 WEST LINN, OREGON**

FIGURE
9



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

ASSUMED LANE CONFIGURATIONS AND TRAFFIC CONTROL

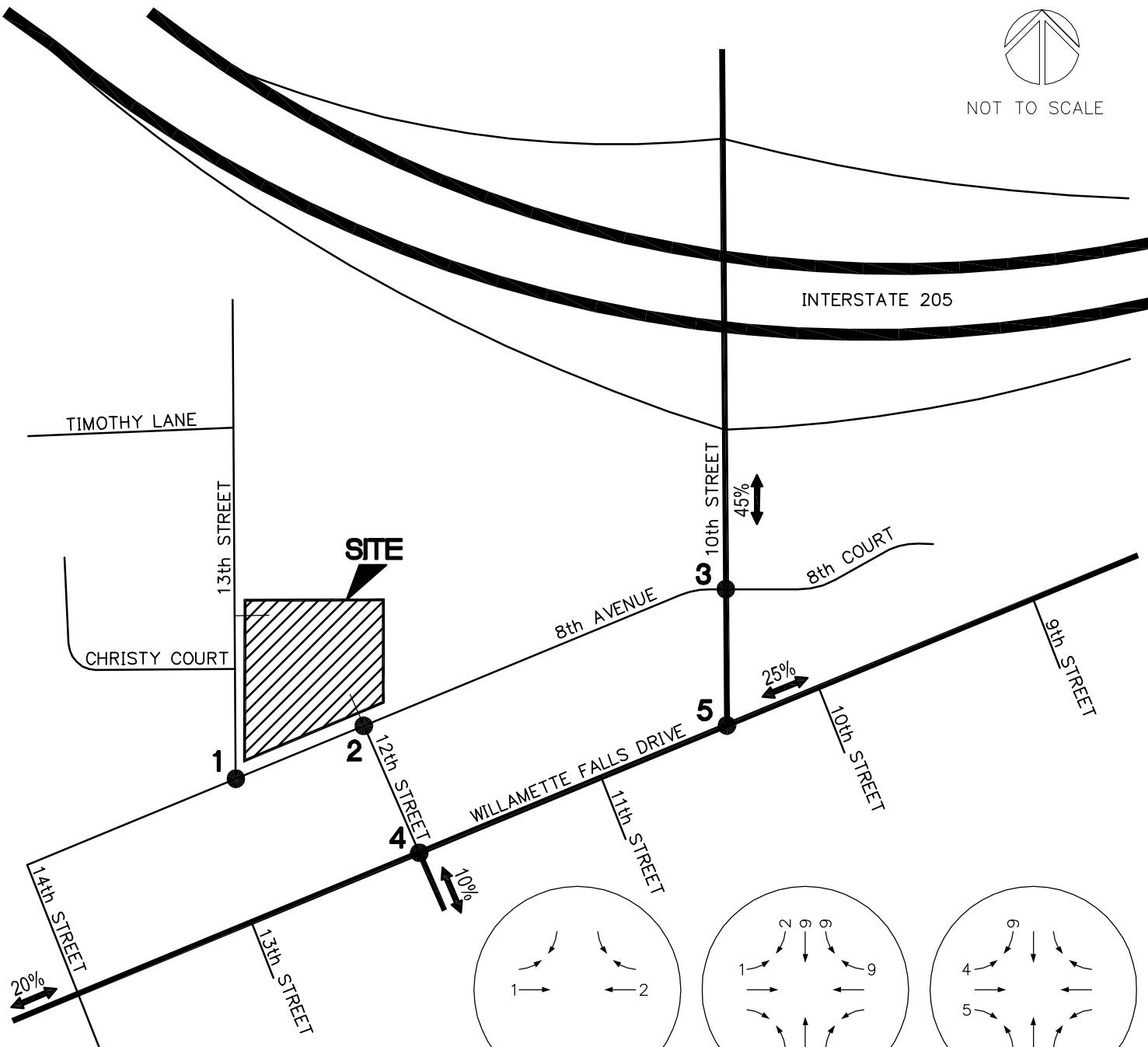
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 10**

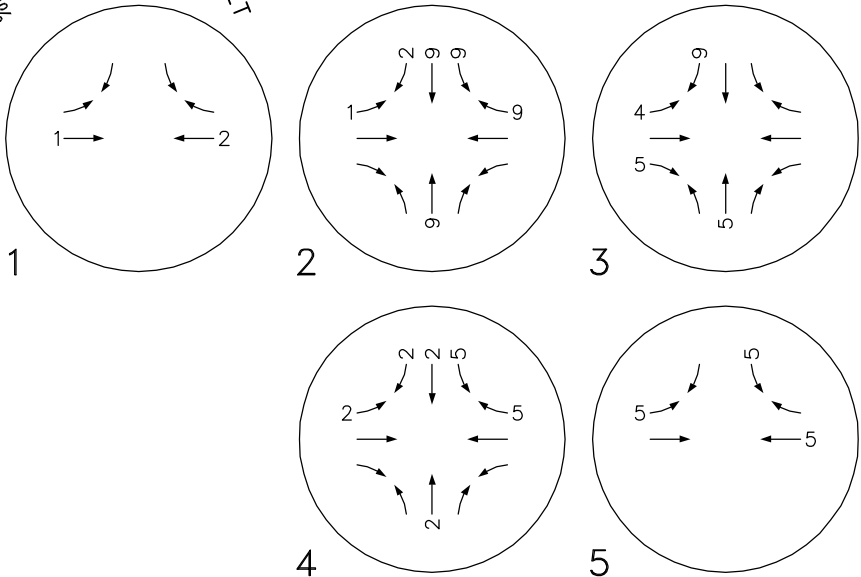
© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



PEAK HOUR TRIPS
 ENTER = 19
 EXIT = 20



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

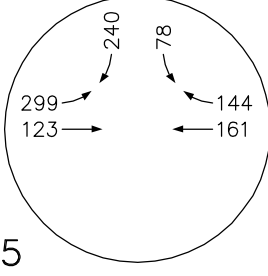
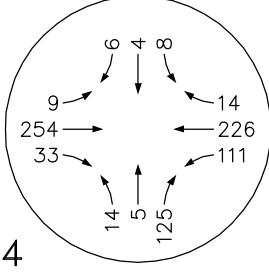
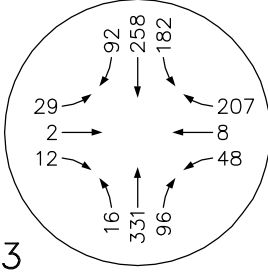
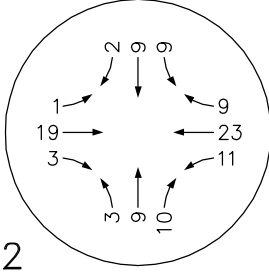
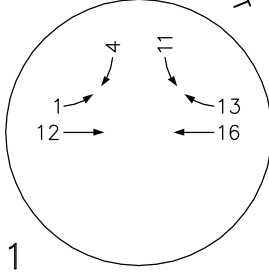
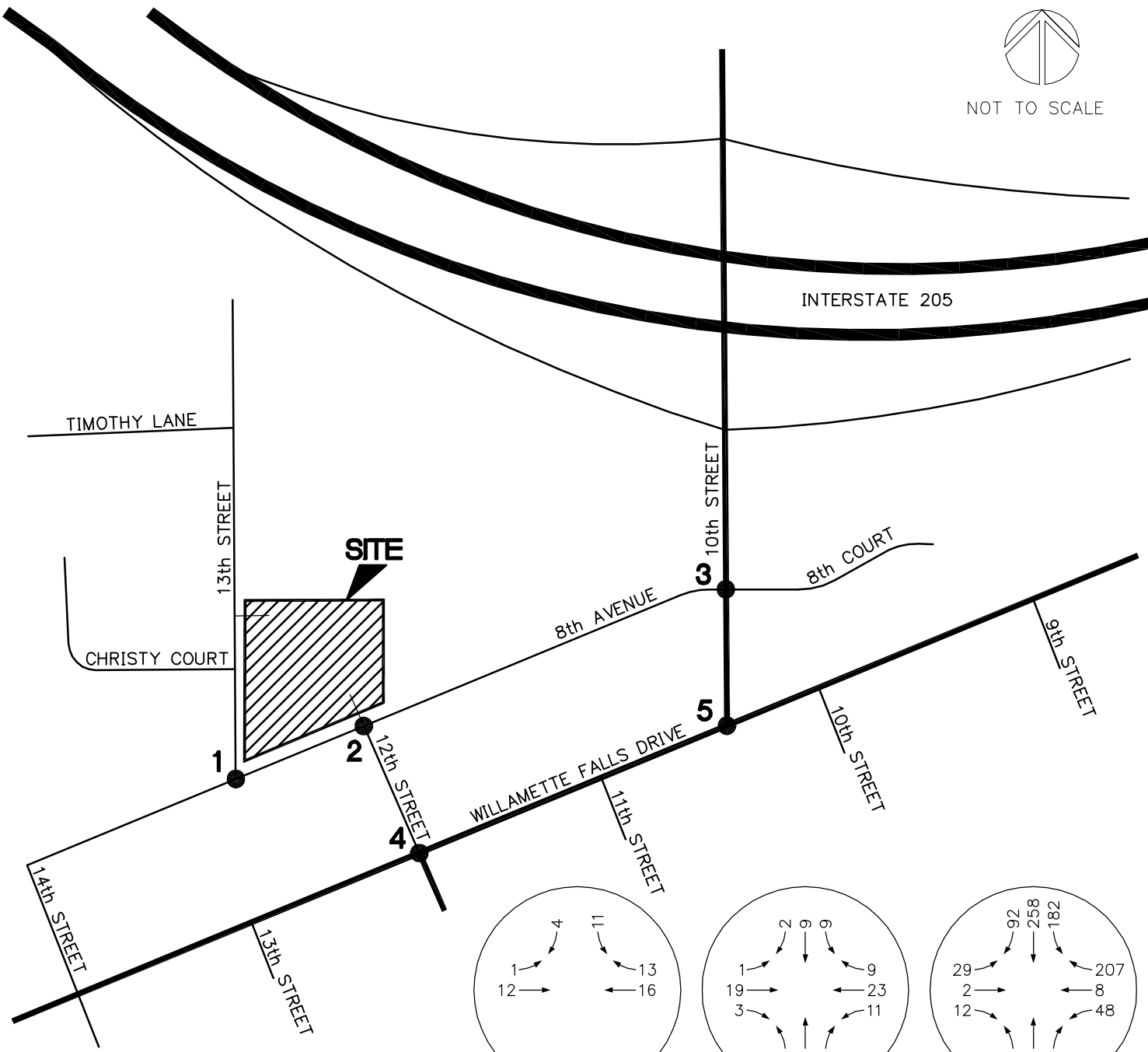
SITE TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT - WEEKDAY AM/PM PEAK HOURS
WEST LINN POLICE STATION
WEST LINN, OREGON

FIGURE
11

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

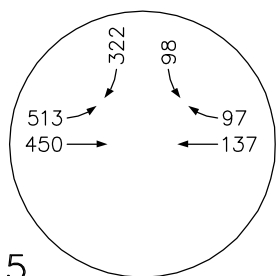
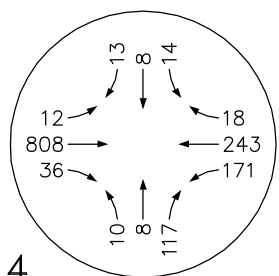
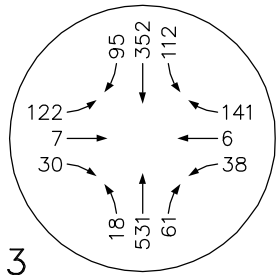
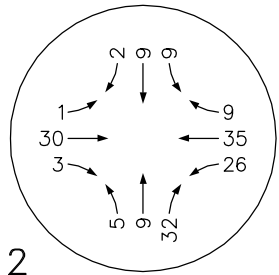
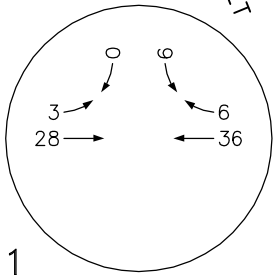
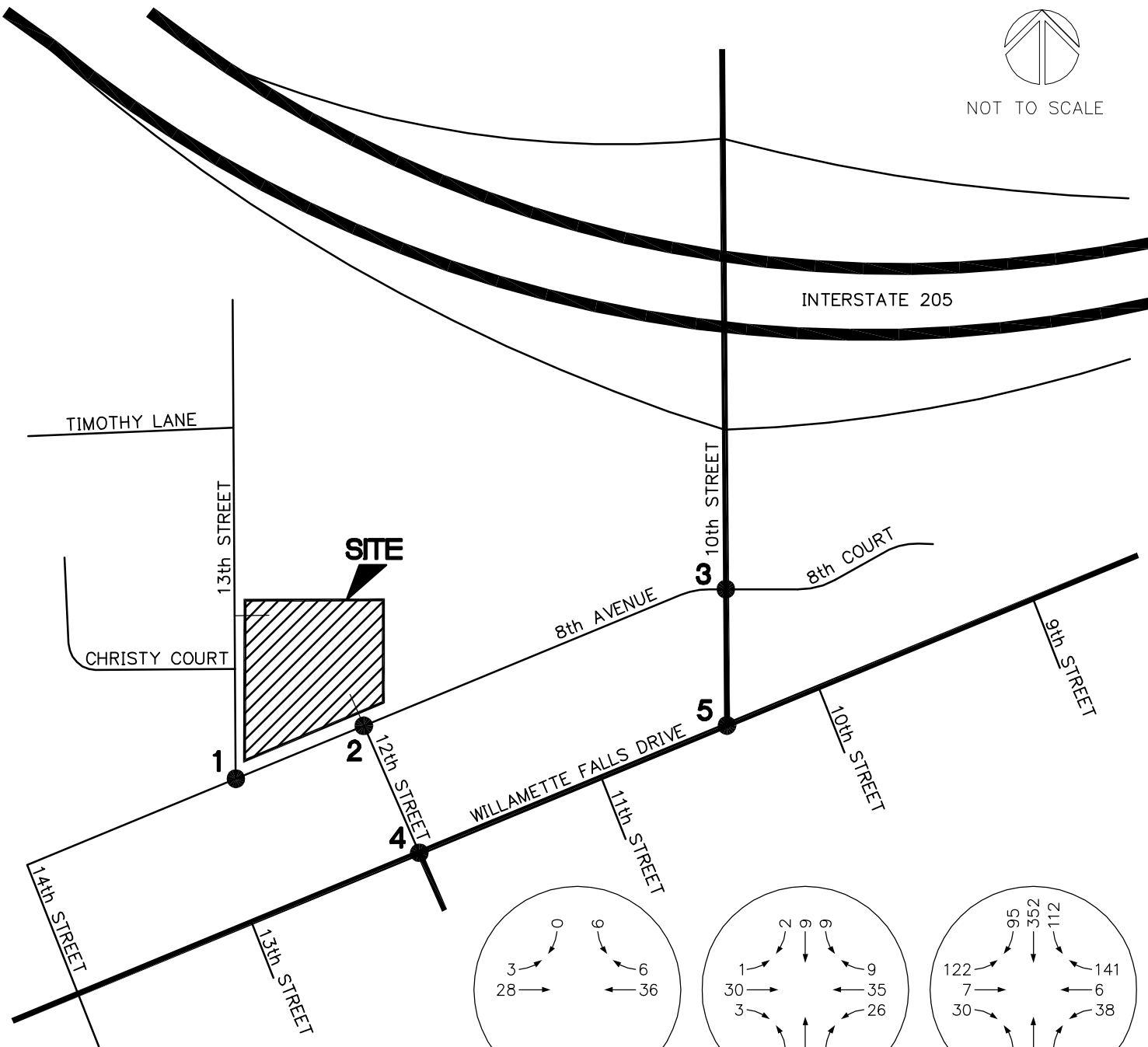
**2014 POST-DEVELOPMENT
 TRAFFIC VOLUMES -
 WEEKDAY AM PEAK HOUR**
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 12**

© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION



NOT TO SCALE



GROUP
MACKENZIE

Portland OR 503.224.9560
 Vancouver WA 360.695.7879
 Seattle WA 206.749.9993

DATE: 11.08.12
 DRAWN BY: JRB
 CHECKED BY: BJD
 JOB NO: 2120180.00

**2014 POST-DEVELOPMENT
 TRAFFIC VOLUMES -
 WEEKDAY PM PEAK HOUR**

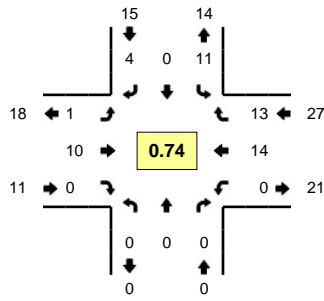
**WEST LINN POLICE STATION
 WEST LINN, OREGON**

**FIGURE
 13**

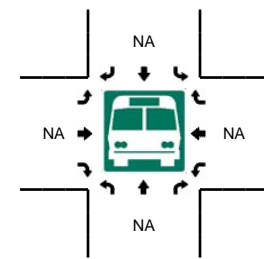
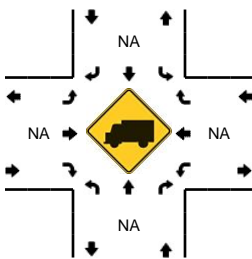
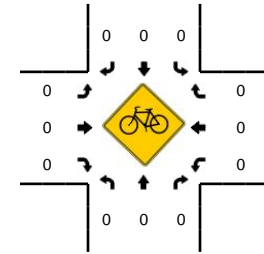
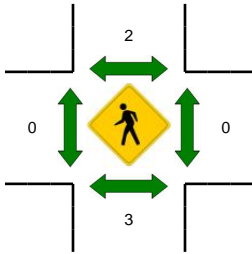
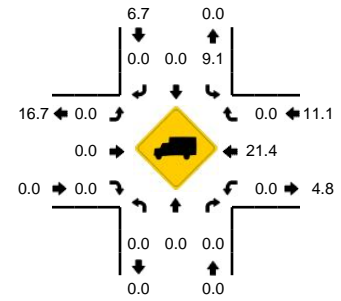
© GROUP MACKENZIE 2012 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION

LOCATION: 13th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805301
DATE: Tue, Sep 11 2012



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

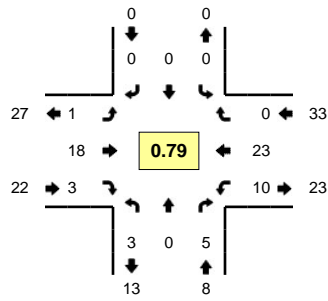


5-Min Count Period Beginning At	13th St (Northbound)				13th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U				
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	3		
7:05 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2		
7:10 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	7		
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3		
7:20 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	4		
7:25 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	3		
7:30 AM	0	0	0	0	4	0	1	0	0	2	0	0	0	0	0	0	0	7		
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2		
7:40 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	4		
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	6	0	8		
7:50 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2		
7:55 AM	0	0	0	0	2	0	0	0	0	4	0	0	0	0	2	0	0	8	53	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	51	
8:05 AM	0	0	0	0	2	0	0	0	1	1	0	0	0	0	3	0	0	7	56	
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	50	
8:15 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4	0	0	6	53	
8:20 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	5	54	
8:25 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3	54	
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	48	
8:35 AM	0	0	0	0	5	0	0	0	1	1	0	0	0	0	1	0	0	8	54	
8:40 AM	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3	53	
8:45 AM	0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	0	0	5	50	
8:50 AM	0	0	0	0	3	0	0	0	0	3	0	0	0	0	1	1	0	8	56	
8:55 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	2	0	6	54	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total			
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U				
All Vehicles	0	0	0	0	12	0	4	0	0	16	0	0	0	0	16	24	0	72		
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pedestrians						8				0					0			8		
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Railroad																				
Stopped Buses																				

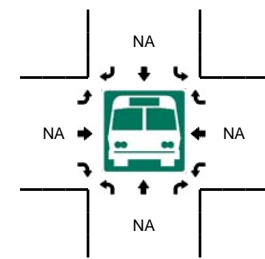
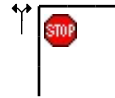
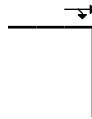
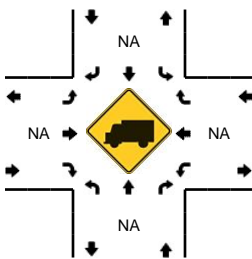
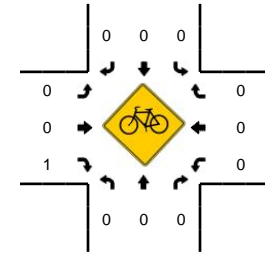
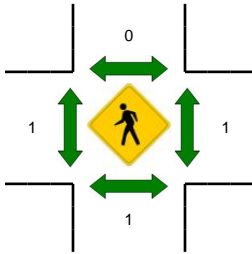
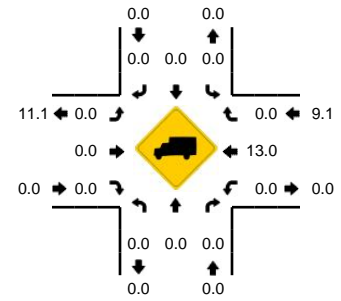
Comments:

LOCATION: 12th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805303
DATE: Tue, Sep 11 2012



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

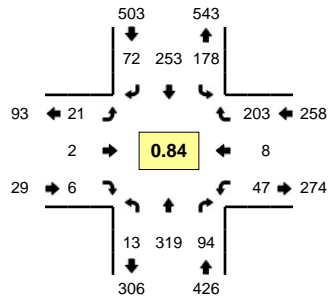


5-Min Count Period Beginning At	12th St (Northbound)				12th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:10 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	7	
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	4	
7:20 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3	0	0	6	
7:25 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	4	
7:30 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	
7:40 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
7:45 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	1	6	0	0	9	
7:50 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	
7:55 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	1	1	0	0	8	57
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	57
8:05 AM	1	0	1	0	0	0	0	0	0	2	0	1	0	1	2	0	0	8	65
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	60
8:15 AM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	4	0	0	7	63
8:20 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	3	0	0	7	64
8:25 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	4	64
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	1	0	0	5	63
8:35 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	1	0	0	10	69
8:40 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	4	70
8:45 AM	1	0	1	0	0	0	0	0	0	4	0	0	0	2	0	0	0	8	69
8:50 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	1	0	0	10	76
8:55 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	3	4	0	0	9	77
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	8	0	0	0	0	0	0	0	0	24	4	0	0	12	32	0	0	80	
Heavy Trucks	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	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																			
Stopped Buses																			

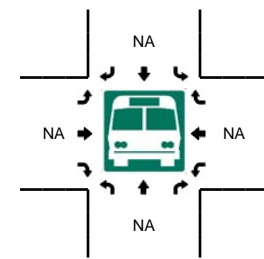
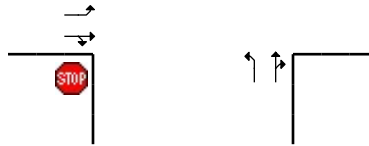
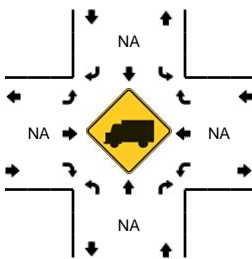
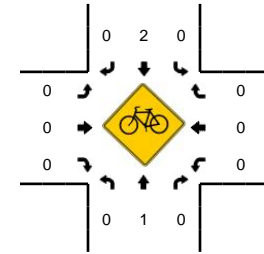
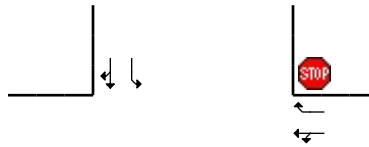
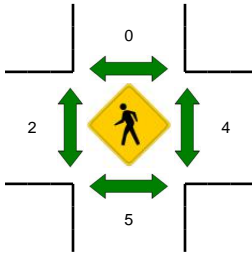
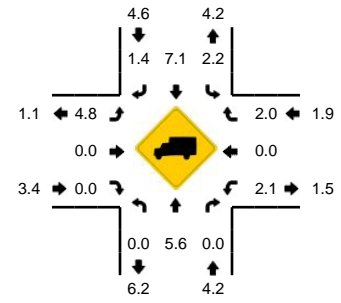
Comments:

LOCATION: 10th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805305
DATE: Tue, Sep 11 2012



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

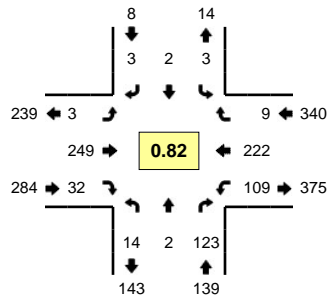


5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	16	3	0	9	9	1	0	0	1	0	0	0	2	0	7	0	48	
7:05 AM	0	23	3	0	18	10	1	0	1	0	0	0	1	0	9	0	66		
7:10 AM	0	32	5	0	14	11	1	0	0	1	0	0	3	1	15	0	83		
7:15 AM	3	22	10	0	14	6	4	0	3	0	1	0	4	0	14	0	81		
7:20 AM	0	20	9	0	20	13	7	0	1	0	1	0	4	2	18	0	95		
7:25 AM	1	27	8	0	12	21	6	0	3	0	1	0	4	1	21	0	105		
7:30 AM	0	25	6	0	16	17	0	0	3	0	2	0	4	1	19	0	93		
7:35 AM	2	25	5	0	11	24	6	0	0	0	0	0	6	2	9	0	90		
7:40 AM	1	29	6	0	15	37	6	0	0	0	0	0	1	0	16	0	111		
7:45 AM	0	47	5	0	19	27	12	0	1	0	0	0	3	0	17	0	131		
7:50 AM	2	39	10	0	16	22	8	0	0	0	0	0	2	1	13	0	113		
7:55 AM	4	32	13	0	17	23	5	0	3	1	1	0	6	0	13	0	118	1134	
8:00 AM	2	17	5	0	16	20	6	0	1	0	0	0	6	0	27	0	100	1186	
8:05 AM	1	18	6	0	16	17	8	0	6	1	1	0	2	1	15	0	92	1212	
8:10 AM	0	21	12	0	13	15	5	0	1	0	0	0	7	0	17	0	91	1220	
8:15 AM	0	19	9	0	7	17	3	0	2	0	0	0	2	0	18	0	77	1216	
8:20 AM	0	19	4	0	15	14	11	0	3	1	0	0	1	2	15	0	85	1206	
8:25 AM	0	19	9	0	15	19	7	0	2	0	1	0	2	1	15	0	90	1191	
8:30 AM	0	29	5	0	19	14	7	0	2	1	0	0	7	2	18	0	104	1202	
8:35 AM	2	18	3	0	13	10	4	0	5	0	0	0	2	1	17	0	75	1187	
8:40 AM	0	27	9	0	14	13	1	0	5	0	0	0	3	1	12	0	85	1161	
8:45 AM	1	31	12	0	13	23	7	0	4	0	0	0	4	1	15	0	111	1141	
8:50 AM	1	15	5	0	17	19	10	0	13	3	0	0	5	1	25	0	114	1142	
8:55 AM	2	13	5	0	12	17	9	0	6	0	1	0	1	2	17	0	85	1109	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	24	472	112	0	208	288	100	0	16	4	4	0	44	4	172	0	1448		
Heavy Trucks	0	28	0		4	12	4		0	0	0		0	0	4		52		
Pedestrians		4				0				0				0				4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0			0	
Railroad																			
Stopped Buses																			

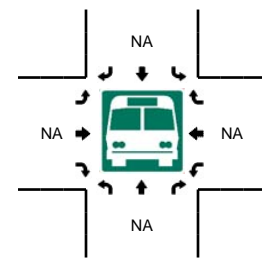
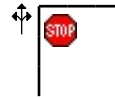
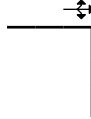
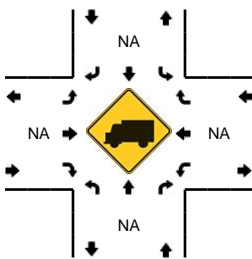
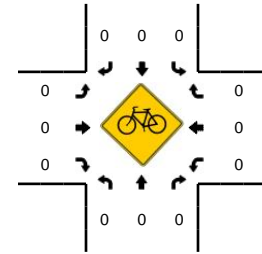
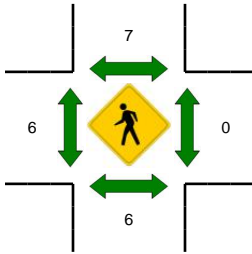
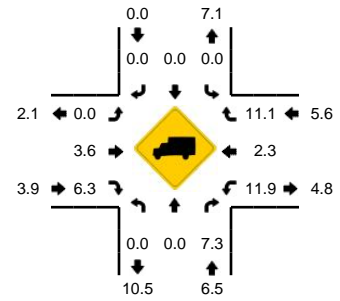
Comments:

LOCATION: 12th St -- Willamette Falls Dr
CITY/STATE: West Linn, OR

QC JOB #: 10805307
DATE: Tue, Sep 11 2012



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



5-Min Count Period Beginning At	12th St (Northbound)				12th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	3	0	0	0	0	0	0	16	0	0	4	9	1	0	33	
7:05 AM	0	0	5	0	0	0	0	0	0	18	1	0	4	10	0	0	38	
7:10 AM	1	0	5	0	0	0	0	0	0	25	1	0	4	12	0	0	48	
7:15 AM	0	0	3	0	0	0	0	0	0	21	0	0	6	17	0	0	47	
7:20 AM	0	0	8	0	0	0	0	0	1	21	2	0	11	11	0	0	54	
7:25 AM	0	0	6	0	0	0	0	0	0	19	2	0	6	22	1	0	56	
7:30 AM	1	0	4	0	0	0	0	0	0	15	0	0	7	14	0	0	41	
7:35 AM	0	0	8	0	1	0	0	0	0	16	4	0	11	24	2	0	66	
7:40 AM	2	0	18	0	1	1	0	0	0	20	6	0	16	18	1	0	83	
7:45 AM	1	0	21	0	0	1	1	0	0	26	6	0	19	17	1	0	93	
7:50 AM	5	1	19	0	0	0	0	0	0	24	4	0	8	15	0	0	76	
7:55 AM	1	0	8	0	0	0	1	0	0	21	2	0	11	23	0	0	67	702
8:00 AM	4	0	6	0	0	0	1	0	0	17	3	0	8	28	1	0	68	737
8:05 AM	0	1	8	0	1	0	0	0	0	23	1	0	2	16	1	0	53	752
8:10 AM	0	0	7	0	0	0	0	0	0	24	1	0	7	13	2	0	54	758
8:15 AM	0	0	10	0	0	0	0	0	2	23	1	0	3	21	0	0	60	771
8:20 AM	1	0	6	0	0	0	1	0	0	14	0	0	5	19	2	0	48	765
8:25 AM	1	0	5	0	0	0	0	0	0	20	0	0	14	20	0	0	60	769
8:30 AM	1	0	6	0	0	0	1	0	0	16	0	0	8	18	1	0	51	779
8:35 AM	0	0	7	0	0	1	1	0	0	14	1	0	4	11	0	0	39	752
8:40 AM	0	1	5	0	2	0	0	0	0	28	1	0	3	15	0	0	55	724
8:45 AM	0	0	13	0	0	0	0	0	1	22	1	0	3	25	0	0	65	696
8:50 AM	1	0	3	0	0	0	0	0	0	19	0	0	5	23	0	0	51	671
8:55 AM	1	0	3	0	2	1	0	0	0	13	1	0	3	17	2	0	43	647
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	28	4	192	0	0	4	8	0	0	284	48	0	152	220	4	0	944	
Heavy Trucks	0	0	12	0	0	0	0	0	0	12	0	0	16	0	0	0	40	
Pedestrians		4				8				8				0			20	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

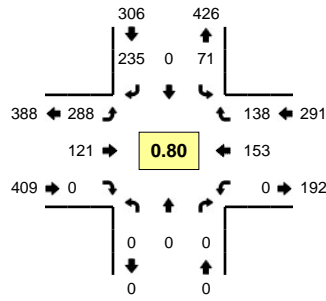
Comments:

Type of peak hour being reported: System Peak

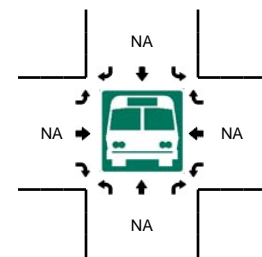
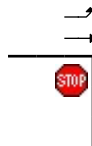
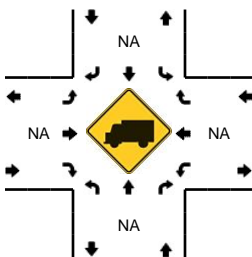
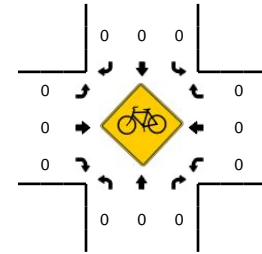
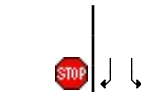
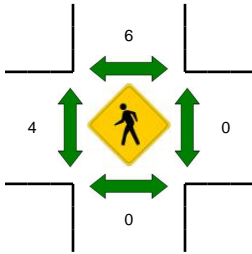
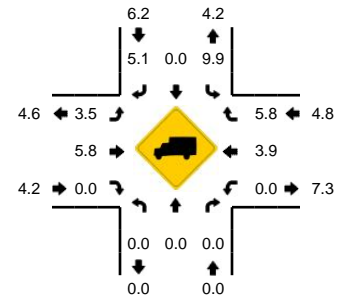
Method for determining peak hour: Total Entering Volume

LOCATION: 10th St -- Willamette Falls Dr
CITY/STATE: West Linn, OR

QC JOB #: 10805309
DATE: Tue, Sep 11 2012



Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

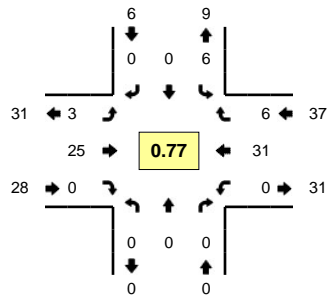


5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	4	0	6	0	15	5	0	0	0	10	2	0	42	
7:05 AM	0	0	0	0	4	0	7	0	21	4	0	0	0	9	6	0	51	
7:10 AM	0	0	0	0	3	0	11	0	26	4	0	0	0	6	10	0	60	
7:15 AM	0	0	0	0	1	0	8	0	20	3	0	0	0	13	16	0	61	
7:20 AM	0	0	0	0	7	0	13	0	21	7	0	0	0	10	7	0	65	
7:25 AM	0	0	0	0	4	0	20	0	20	5	0	0	0	11	16	0	76	
7:30 AM	0	0	0	0	4	0	14	0	21	6	0	0	0	11	11	0	67	
7:35 AM	0	0	0	0	2	0	27	0	24	6	0	0	0	16	7	0	82	
7:40 AM	0	0	0	0	1	0	36	0	26	8	0	0	0	14	10	0	95	
7:45 AM	0	0	0	0	5	0	29	0	41	10	0	0	0	16	13	0	114	
7:50 AM	0	0	0	0	9	0	15	0	37	13	0	0	0	10	12	0	96	
7:55 AM	0	0	0	0	9	0	19	0	33	9	0	0	0	17	16	0	103	912
8:00 AM	0	0	0	0	4	0	24	0	22	11	0	0	0	16	5	0	82	952
8:05 AM	0	0	0	0	10	0	12	0	11	12	0	0	0	9	11	0	65	966
8:10 AM	0	0	0	0	6	0	14	0	19	16	0	0	0	12	18	0	85	991
8:15 AM	0	0	0	0	10	0	12	0	13	18	0	0	0	11	12	0	76	1006
8:20 AM	0	0	0	0	4	0	12	0	15	6	0	0	0	15	8	0	60	1001
8:25 AM	0	0	0	0	2	0	20	0	17	9	0	0	0	20	8	0	76	1001
8:30 AM	0	0	0	0	3	0	15	0	16	7	0	0	0	14	18	0	73	1007
8:35 AM	0	0	0	0	5	0	9	0	14	4	0	0	0	6	8	0	46	971
8:40 AM	0	0	0	0	2	0	15	0	27	10	0	0	0	8	9	0	71	947
8:45 AM	0	0	0	0	3	0	17	0	30	9	0	0	0	13	13	0	85	918
8:50 AM	0	0	0	0	4	0	20	0	21	5	0	0	0	15	3	0	68	890
8:55 AM	0	0	0	0	4	0	15	0	17	4	0	0	0	9	3	0	52	839
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	0	0	0	0	92	0	252	0	444	128	0	0	0	172	164	0	1252	
Heavy Trucks	0	0	0	0	8	0	8	0	16	12	0	0	0	8	12	0	64	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

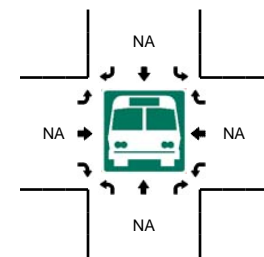
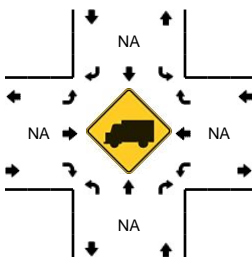
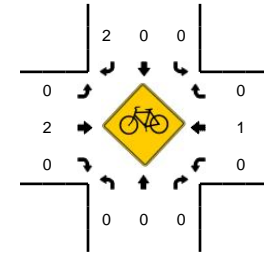
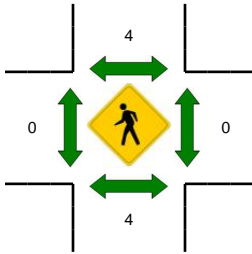
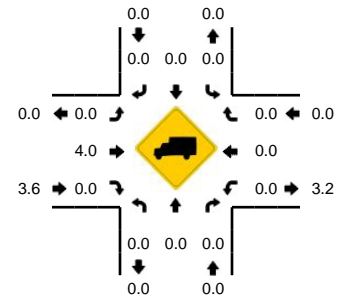
Comments:

LOCATION: 13th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805302
DATE: Tue, Sep 11 2012



Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

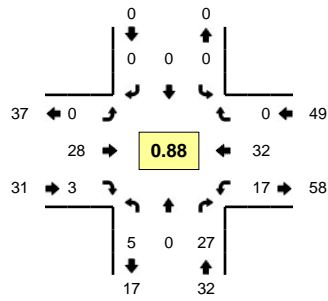


5-Min Count Period Beginning At	13th St (Northbound)				13th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	1	0	0	0	1	0	0	0	0	3	0	0	5	
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
4:10 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	7	
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	0	4	
4:20 PM	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	4	
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	4	
4:35 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	4	
4:40 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	
4:45 PM	0	0	0	0	1	0	0	0	1	4	0	0	0	1	2	0	9	
4:50 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	3	1	0	8	
4:55 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	54
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	6	55
5:05 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	4	0	0	7	60
5:10 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	4	2	0	10	63
5:15 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	3	1	0	6	65
5:20 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	0	5	66
5:25 PM	0	0	0	0	1	0	0	0	1	3	0	0	0	1	1	0	7	73
5:30 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	0	5	74
5:35 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7	77
5:40 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3	75
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	5	71
5:50 PM	0	0	0	0	0	0	0	0	0	2	0	1	0	2	0	0	5	68
5:55 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3	69
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	0	0	0	4	24	0	0	0	44	12	0	92	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians					0	4			0				0				4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

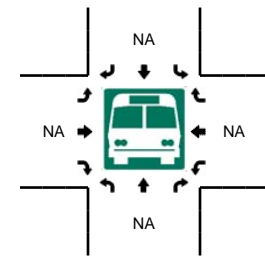
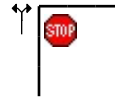
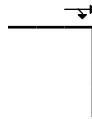
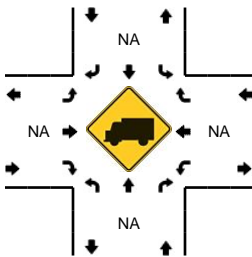
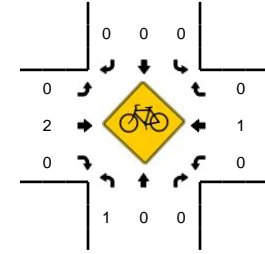
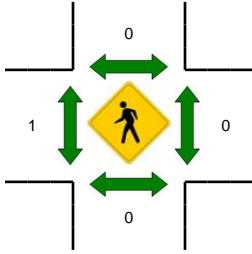
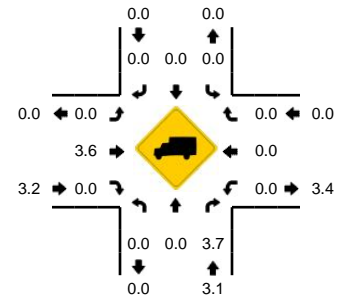
Comments:

LOCATION: 12th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805304
DATE: Tue, Sep 11 2012



Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

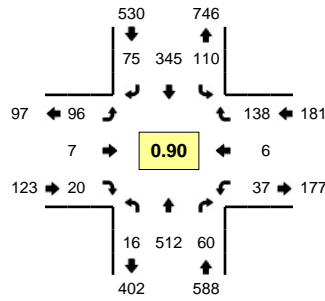


5-Min Count Period Beginning At	12th St (Northbound)				12th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	1	7	
4:05 PM	0	0	3	0	0	0	0	0	0	0	0	0	1	2	0	1	7	
4:10 PM	0	0	5	0	0	0	0	0	0	3	0	0	1	5	0	0	14	
4:15 PM	1	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	6	
4:20 PM	0	0	0	0	0	0	0	0	0	1	0	0	5	1	0	0	7	
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
4:30 PM	0	0	2	0	0	0	0	0	0	2	0	0	0	2	0	0	6	
4:35 PM	0	0	1	0	0	0	0	0	0	0	1	0	2	3	0	0	7	
4:40 PM	1	0	2	0	0	0	0	0	0	0	1	0	1	2	0	0	7	
4:45 PM	0	0	1	0	0	0	0	0	0	4	1	0	1	3	0	0	10	
4:50 PM	1	0	3	0	0	0	0	0	0	4	0	0	2	3	0	0	13	
4:55 PM	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	8	94
5:00 PM	0	0	3	0	0	0	0	0	0	1	0	0	1	5	0	0	10	97
5:05 PM	1	0	1	0	0	0	0	0	0	2	0	0	1	3	0	1	9	99
5:10 PM	0	0	3	0	0	0	0	0	0	3	1	0	0	6	0	0	13	98
5:15 PM	1	0	1	0	0	0	0	0	0	1	0	0	3	3	0	1	10	102
5:20 PM	1	0	2	0	0	0	0	0	0	3	0	0	2	2	0	0	10	105
5:25 PM	0	0	2	0	0	0	0	0	0	3	1	0	0	2	0	1	9	112
5:30 PM	0	0	4	0	0	0	0	0	0	2	0	0	0	3	0	0	9	115
5:35 PM	0	0	2	0	0	0	0	0	0	3	1	0	1	2	0	0	9	117
5:40 PM	0	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	5	115
5:45 PM	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	7	112
5:50 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6	105
5:55 PM	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	4	101
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	8	0	20	0	0	0	0	0	0	24	4	0	16	48	0	8	128	
Heavy Trucks	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	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

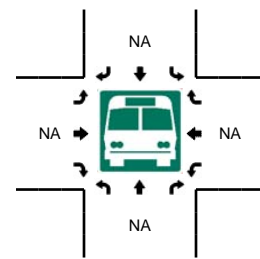
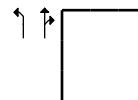
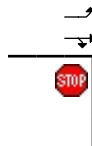
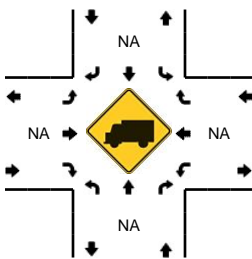
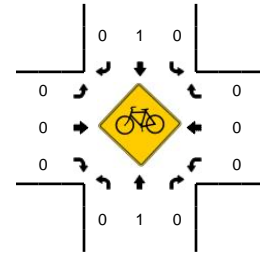
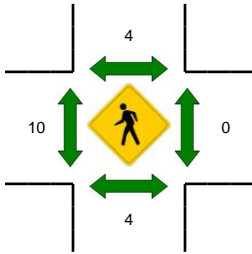
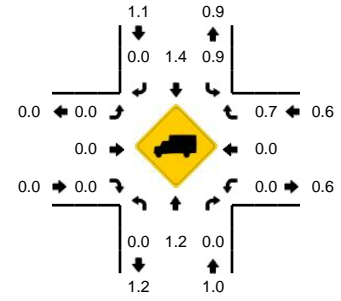
Comments:

LOCATION: 10th St -- 8th Ave
CITY/STATE: West Linn, OR

QC JOB #: 10805306
DATE: Tue, Sep 11 2012



Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

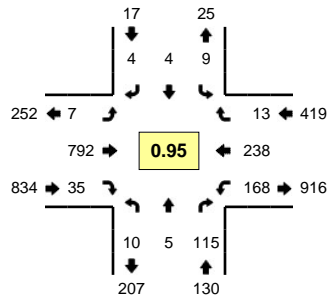


5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				8th Ave (Eastbound)				8th Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	34	7	0	6	27	8	0	4	0	1	0	3	1	15	0	106	
4:05 PM	3	27	4	0	14	24	6	0	8	0	1	0	1	0	17	0	105	
4:10 PM	2	35	1	0	14	19	7	0	5	1	2	0	2	0	13	0	101	
4:15 PM	2	28	7	0	12	19	6	0	8	1	4	0	1	0	13	0	101	
4:20 PM	2	32	8	0	9	25	5	0	2	1	3	0	5	0	17	0	109	
4:25 PM	0	42	6	0	7	17	11	0	7	1	1	0	4	1	14	0	111	
4:30 PM	0	36	3	0	9	18	4	0	9	3	1	0	2	1	11	0	97	
4:35 PM	1	42	10	0	9	24	8	0	4	0	2	0	2	0	17	0	119	
4:40 PM	3	27	5	0	12	18	4	0	3	1	1	0	4	0	12	0	90	
4:45 PM	1	35	2	0	5	30	8	0	7	2	0	0	3	0	7	0	100	
4:50 PM	0	36	4	0	7	34	11	0	8	1	2	0	4	0	15	0	122	
4:55 PM	1	37	6	0	4	39	4	0	8	0	3	0	0	1	8	0	111	1272
5:00 PM	1	56	3	0	8	22	3	0	9	0	3	0	0	0	6	0	111	1277
5:05 PM	2	52	4	0	6	27	4	0	9	0	2	0	4	0	11	0	121	1293
5:10 PM	1	49	6	0	10	29	10	0	11	0	0	0	5	1	13	0	135	1327
5:15 PM	1	52	6	0	10	33	10	0	14	0	1	0	5	0	7	0	139	1365
5:20 PM	1	35	5	0	14	26	4	0	8	1	4	0	3	0	13	0	114	1370
5:25 PM	2	34	5	0	12	27	8	0	9	0	1	0	3	2	10	0	113	1372
5:30 PM	2	44	5	0	11	28	3	0	8	1	1	0	1	0	10	0	114	1389
5:35 PM	1	40	6	0	10	21	7	0	6	1	2	0	3	0	18	0	115	1385
5:40 PM	2	39	5	0	9	29	3	0	3	2	0	0	1	2	15	0	110	1405
5:45 PM	2	38	5	0	9	30	8	0	3	1	1	0	8	0	12	0	117	1422
5:50 PM	2	26	3	0	6	25	5	0	8	0	2	0	1	1	17	0	96	1396
5:55 PM	1	32	2	0	9	35	8	0	6	0	0	0	2	0	12	0	107	1392
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	612	64	0	104	356	96	0	136	0	12	0	56	4	124	0	1580	
Heavy Trucks	0	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	16	
Pedestrians		8				8				12				0			28	
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1	
Railroad																		
Stopped Buses																		

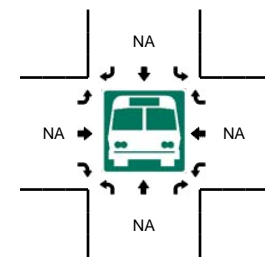
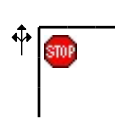
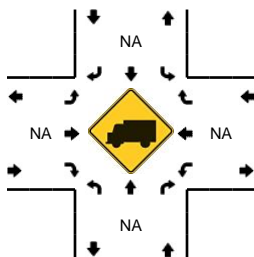
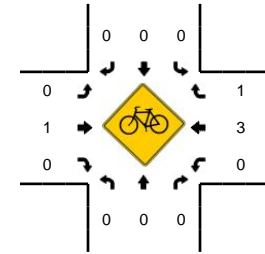
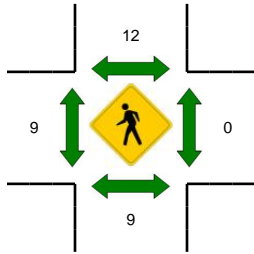
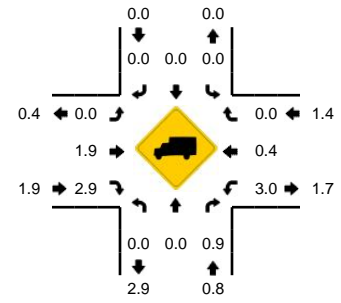
Comments:

LOCATION: 12th St -- Willamette Falls Dr
CITY/STATE: West Linn, OR

QC JOB #: 10805308
DATE: Tue, Sep 11 2012



Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

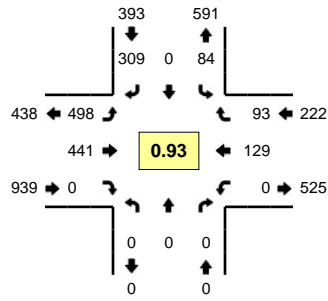


5-Min Count Period Beginning At	12th St (Northbound)				12th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	11	0	0	0	0	0	1	56	1	0	10	21	0	0	100	
4:05 PM	0	0	9	0	0	0	0	0	2	42	3	0	6	12	0	0	74	
4:10 PM	0	0	6	0	0	0	1	0	0	47	5	0	6	17	3	0	85	
4:15 PM	0	0	10	0	0	0	1	0	0	41	1	0	6	11	1	0	71	
4:20 PM	1	0	9	0	0	0	1	0	0	87	0	0	5	13	0	0	116	
4:25 PM	1	0	10	0	1	0	0	0	0	72	4	0	8	17	0	0	113	
4:30 PM	1	1	10	0	1	0	0	0	0	75	0	0	5	14	1	0	108	
4:35 PM	1	0	10	0	0	1	0	0	1	57	3	0	5	19	3	0	100	
4:40 PM	0	0	9	0	0	1	2	0	0	58	2	0	11	4	4	0	91	
4:45 PM	1	0	11	0	1	1	1	0	1	55	4	0	12	19	1	0	107	
4:50 PM	2	1	6	0	0	0	0	0	0	53	7	0	17	18	2	0	106	
4:55 PM	2	1	9	0	1	0	0	0	0	63	5	0	27	22	2	0	132	1203
5:00 PM	2	1	15	0	2	0	0	0	0	69	3	0	9	13	1	0	115	1218
5:05 PM	0	0	13	0	1	0	1	0	1	65	6	0	9	22	2	0	120	1264
5:10 PM	2	1	7	0	2	0	1	0	1	80	1	0	10	25	1	0	131	1310
5:15 PM	0	0	14	0	0	1	0	0	2	68	0	0	7	27	0	0	119	1358
5:20 PM	2	0	13	0	1	0	0	0	1	55	1	0	13	18	0	0	104	1346
5:25 PM	0	0	5	0	0	0	0	0	1	68	2	0	9	16	0	0	101	1334
5:30 PM	0	0	7	0	0	2	1	0	1	85	2	0	13	21	2	0	134	1360
5:35 PM	0	0	8	0	0	0	1	0	0	66	2	0	14	24	1	0	116	1376
5:40 PM	0	1	10	0	1	1	0	0	0	64	4	0	16	15	0	0	112	1397
5:45 PM	0	0	8	0	1	0	0	0	0	56	2	0	24	17	2	0	110	1400
5:50 PM	0	0	10	0	0	0	0	0	2	61	3	0	13	16	1	0	106	1400
5:55 PM	1	0	7	0	1	0	1	0	1	64	4	0	19	12	1	0	111	1379
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	4	136	0	12	4	8	0	16	852	28	0	104	296	12	0	1480	
Heavy Trucks	0	0	4	0	0	0	0	0	0	12	0	0	8	4	0	0	28	
Pedestrians		4			12					12				0			28	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
Railroad																		
Stopped Buses																		

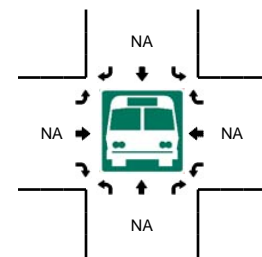
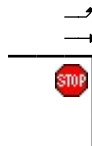
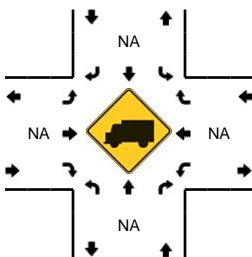
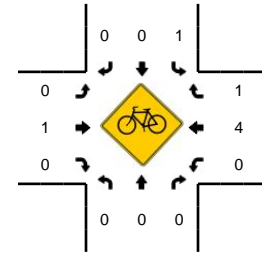
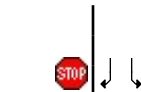
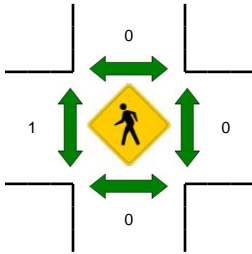
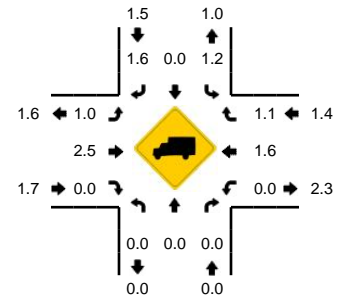
Comments:

LOCATION: 10th St -- Willamette Falls Dr
CITY/STATE: West Linn, OR

QC JOB #: 10805310
DATE: Tue, Sep 11 2012

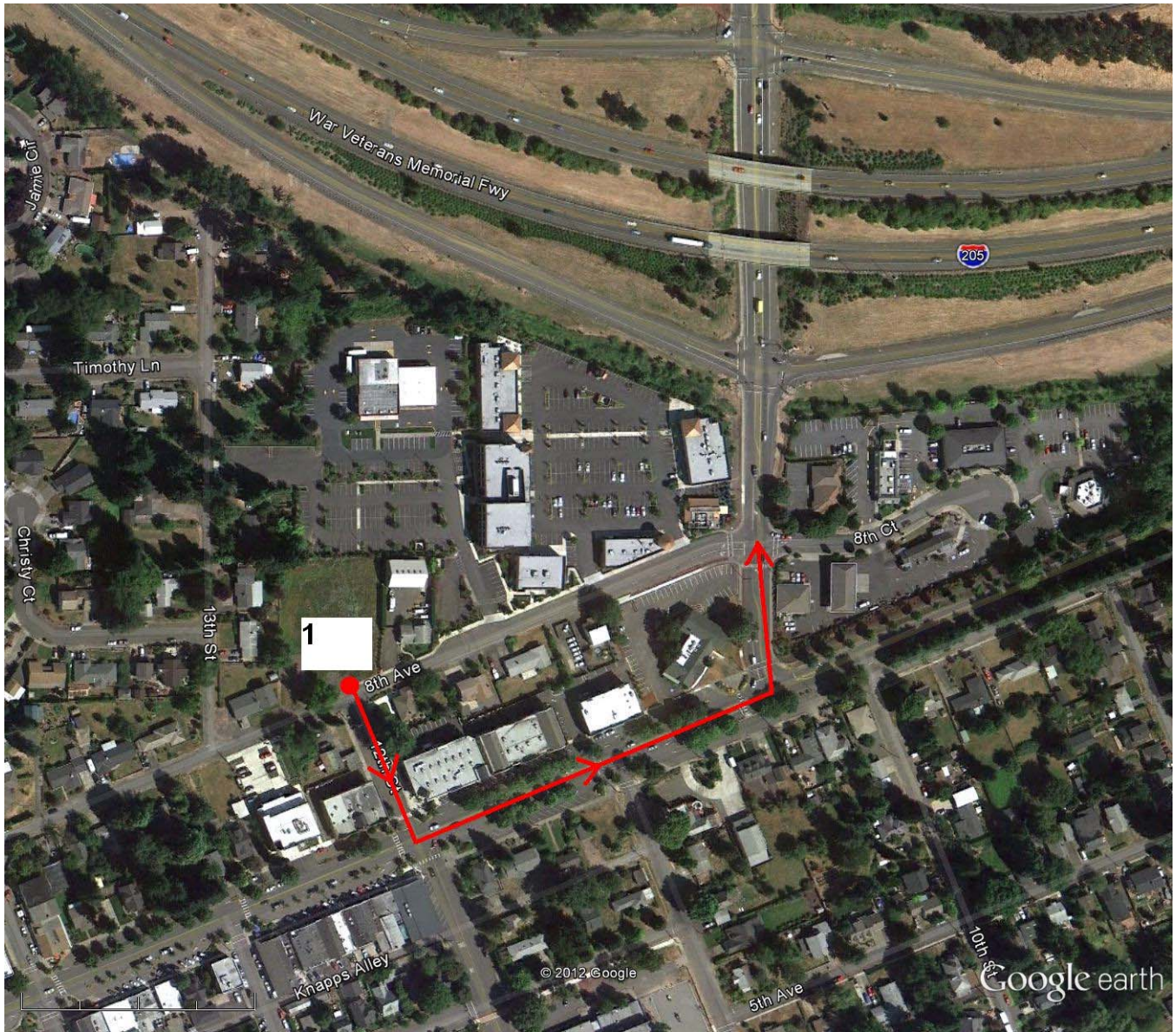


Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:05 PM -- 5:20 PM



5-Min Count Period Beginning At	10th St (Northbound)				10th St (Southbound)				Willamette Falls Dr (Eastbound)				Willamette Falls Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	6	0	27	0	33	36	0	0	0	7	7	0	116	
4:05 PM	0	0	0	0	11	0	17	0	28	21	0	0	0	5	5	0	87	
4:10 PM	0	0	0	0	3	0	15	0	29	26	0	0	0	5	11	0	89	
4:15 PM	0	0	0	0	10	0	14	0	28	28	0	0	0	7	5	0	92	
4:20 PM	0	0	0	0	12	0	19	0	38	50	0	0	0	4	6	0	129	
4:25 PM	0	0	0	0	4	0	16	0	40	52	0	0	0	9	11	0	132	
4:30 PM	0	0	0	0	8	0	19	0	33	46	0	0	0	5	4	0	115	
4:35 PM	0	0	0	0	8	0	16	0	45	34	0	0	0	10	8	0	121	
4:40 PM	0	0	0	0	12	0	13	0	27	32	0	0	0	7	7	0	98	
4:45 PM	0	0	0	0	6	0	23	0	32	37	0	0	0	7	6	0	111	
4:50 PM	0	0	0	0	8	0	31	0	37	34	0	0	0	11	7	0	128	
4:55 PM	0	0	0	0	8	0	35	0	29	33	0	0	0	10	10	0	125	1343
5:00 PM	0	0	0	0	4	0	20	0	50	26	0	0	0	9	9	0	118	1345
5:05 PM	0	0	0	0	9	0	26	0	49	39	0	0	0	7	10	0	140	1398
5:10 PM	0	0	0	0	8	0	22	0	50	40	0	0	0	13	6	0	139	1448
5:15 PM	0	0	0	0	8	0	31	0	50	35	0	0	0	7	7	0	138	1494
5:20 PM	0	0	0	0	11	0	22	0	36	42	0	0	0	8	6	0	125	1490
5:25 PM	0	0	0	0	6	0	22	0	35	37	0	0	0	8	8	0	116	1474
5:30 PM	0	0	0	0	5	0	26	0	46	43	0	0	0	12	6	0	138	1497
5:35 PM	0	0	0	0	5	0	23	0	40	41	0	0	0	14	8	0	131	1507
5:40 PM	0	0	0	0	3	0	24	0	43	34	0	0	0	15	5	0	124	1533
5:45 PM	0	0	0	0	9	0	27	0	33	37	0	0	0	15	11	0	132	1554
5:50 PM	0	0	0	0	12	0	21	0	28	35	0	0	0	10	2	0	108	1534
5:55 PM	0	0	0	0	8	0	29	0	31	38	0	0	0	8	4	0	118	1527
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	100	0	316	0	596	456	0	0	0	108	92	0	1668	
Heavy Trucks	0	0	0	0	0	0	12	0	8	8	0	0	0	4	0	0	32	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	
Railroad																		
Stopped Buses																		

Comments:







16285 SW 85th Ave, Ste 302

Tigard, OR 97224

503-620-4242

www.qualitycounts.net

West Linn Travel Times

Route 1	Start	End	Travel Time
1	5:00:00 PM	5:03:04 PM	0:03:04
2	5:09:33 PM	5:11:35 PM	0:02:02
3	5:22:30 PM	5:23:56 PM	0:01:26

Route 2	Start	End	Travel Time
1	5:05:30 PM	5:06:13 PM	0:00:43
2	5:15:50 PM	5:17:20 PM	0:01:30
3	5:27:00 PM	5:27:53 PM	0:00:53

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

8th Avenue @ 13th Street
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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

8th Avenue @ 12th Street
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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

8th Avenue from 10th Street to 13th Street excluding ending intersections
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2011														
SIDESWIPE - OVERTAKING	0	0	1	1	0	0	0	1	0	1	0	0	0	1
2011 TOTAL	0	0	1	1	0	0	0	1	0	1	0	0	0	1
YEAR: 2008														
REAR-END	0	1	0	1	0	1	0	0	1	1	0	0	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	1	1	0	0	0	0
2008 TOTAL	0	1	1	2	0	1	0	0	2	2	0	0	0	0
FINAL TOTAL	0	1	2	3	0	1	0	1	2	3	0	0	0	1

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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.

CITY OF WEST LINN, CLACKAMAS COUNTY

8th Avenue from 10th Street to 13th Street excluding ending intersections
 January 1, 2007 through December 31, 2011

SER#	S P E INVEST	D R A L C	O C H R K	DATE DAY TIME	CLASS DIST FROM	CITY STREET FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RDNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	SPCL USE TRLR QTY OWNER V#	MOVE FROM TO	PRTC P#	INJ SVRITY	A G E E X RES	S LICNS PED LOC	ERROR ERROR	ACTN EVENT	CAUSE
04950	N N N			12/16/2008 Tue 10A	19 50	8TH AVE 10TH ST	STRGHT SW 06	(NONE)	N UNKNOWN	N N N	SLT ICE DAY	ANGL-OTH TURN PDO	01 PRVTE PSNGR CAR	0 NW SW	01	DRVR NONE	00 M UNK		007	000 000	05 00 05
								(02)					02 PRVTE PSNGR CAR	0 SW NE	01	DRVR NONE	36 M OR-Y		000	011 000	00 00
04940	N N N			12/16/2008 Tue 3P	19 200	8TH AVE 10TH ST	STRGHT SW 08	(NONE)	N NONE	N N N	SNOW ICE DAY	S-1STOP REAR INJ	01 PRVTE PSNGR CAR	0 SW NE	01	DRVR NONE	46 M OR-Y		026,043	000 000	124 124 07
								(02)					02 PRVTE PSNGR CAR	0 SW NE	01	DRVR INJA	45 M OR-Y		000	011 000	124 00
02229	N N N N N			06/23/2011 Thu 9A	19 100	8TH AVE 12TH ST	STRGHT SW 07	(NONE)	N NONE	Y N N	CLR DRY DAY	PRKD MV SS-O PDO	01 PRVTE PSNGR CAR	0 NE SW	01	DRVR NONE	19 M OR-Y		080	000 038	003 10 10
								(02)					02 PRVTE PSNGR CAR	0 NE SW					008	008	00

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

8th Avenue/8th Court @ 10th Street
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2011														
ANGLE	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2011 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR: 2010														
ANGLE	0	0	1	1	0	0	0	0	1	0	1	1	0	0
TURNING MOVEMENTS	0	0	2	2	0	0	0	1	1	1	1	2	0	0
2010 TOTAL	0	0	3	3	0	0	0	1	2	1	2	3	0	0
YEAR: 2009														
TURNING MOVEMENTS	0	0	2	2	0	0	0	2	0	1	1	2	0	0
2009 TOTAL	0	0	2	2	0	0	0	2	0	1	1	2	0	0
YEAR: 2008														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2008 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR: 2007														
ANGLE	0	1	1	2	0	1	0	2	0	2	0	2	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2007 TOTAL	0	1	2	3	0	1	0	3	0	3	0	3	0	0
FINAL TOTAL	0	3	7	10	0	3	0	8	2	7	3	10	0	0

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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
 CONTINUOUS SYSTEM CRASH LISTING

064 EAST PORTLAND FREEWAY

8th Avenue/8th Court @ 10th Street
 January 1, 2007 through December 31, 2011

SER#	E L G H R DAY	DATE	COUNTY	RD# FC	CONN #	RD CHAR	INT-TYP			OFFRD WTHR	CRASH TYP	SPCL USE		MOVE	PRTC INJ	A S	G E LICNS	PED	ACTN EVENT	CAUSE	
							DIRECT	LEGS	TRAF-			TRLR QTY	OWNER								
INVEST	D C S L K	TIME	URBAN AREA	MILEPNT	SECOND STREET	LOCTN	(#LANES)	CNTL	DRVWY	LIGHT	SVRTY	V#	VEH TYPE	TO	P#	TYPE	SVRTY	E X RES	LOC ERROR		
03812	N N N	09/01/2007	CLACKAMAS	1 17 2	2	INTER	CROSS	N	N CLR	ANGL-OTH	01	NONE	0	STRGHT						02	
CITY		Sat	WEST LINN	6 0	8TH AVE	CN		UNKNOWN	N DRY	ANGL		PRVTE	N S						000	00	
		11A	PORTLAND UA	6.40	10TH ST	01	0		N DAY	PDO		PSNGR CAR		01	DRVR	NONE	52 M	OR-Y	000	000	OR<25
												02	NONE	0	STRGHT					000	00
												PRVTE	E W						028	000	02
												PSNGR CAR		01	DRVR	NONE	73 F	OR-Y	000	000	OR<25
00782	N N N	02/28/2009	CLACKAMAS	1 17 2	2	INTER	CROSS	N	N CLR	ANGL-OTH	01	NONE	0	TURN-L						02	
NONE		Sat	WEST LINN	6 0	8TH AVE	CN		STOP SIGN	N DRY	TURN		PRVTE	E S						015	00	
		11P	PORTLAND UA	6.40	10TH ST	01	0		N DARK	PDO		PSNGR CAR		01	DRVR	NONE	17 F	OR-Y	000	000	OR<25
												02	NONE	0	STRGHT					000	00
												PRVTE	N S						028	000	02
												PSNGR CAR		01	DRVR	NONE	62 F	OR-Y	000	000	OR<25
00798	N N N	02/20/2007	CLACKAMAS	1 17 2	2	INTER	CROSS	N	N CLR	ANGL-OTH	01	NONE	0	TURN-L						02	
CITY		Tue	WEST LINN	6 0	8TH CT	CN		UNKNOWN	N DRY	TURN		PRVTE	NW NE						000	00	
		11A	PORTLAND UA	6.40	10TH ST	02	0		N DAY	PDO		PSNGR CAR		01	DRVR	NONE	80 M	OR-Y	000	000	OR<25
												02	NONE	0	STRGHT					000	00
												PRVTE	SW NE						028	000	02
												PSNGR CAR		01	DRVR	NONE	60 F	OR-Y	000	000	OR<25
02624	N N N N N	06/22/2007	CLACKAMAS	1 17 2	2	INTER	CROSS	N	N CLR	ANGL-OTH	01	NONE	0	STRGHT						02	
CITY		Fri	WEST LINN	6 0	8TH CT	CN		STOP SIGN	N DRY	ANGL		PRVTE	S N						000	00	
		2P	PORTLAND UA	6.40	10TH ST	02	0		N DAY	INJ		PSNGR CAR		01	DRVR	INJC	63 F	OR-Y	000	000	OR<25
												02	NONE	0	STRGHT					000	00
												PRVTE	E W						028	000	02
												PSNGR CAR		01	DRVR	NONE	42 F	OR-Y	000	000	OR<25
01005	N N N N N	03/17/2009	CLACKAMAS	1 17 2	2	INTER	CROSS	N	N CLD	ANGL-OTH	01	NONE	0	TURN-L						02	
CITY		Tue	WEST LINN	6 0	8TH CT	CN		STOP SIGN	N DRY	TURN		PRVTE	E S						000	00	
		3P	PORTLAND UA	6.40	10TH ST	02	0		N DAY	PDO		PSNGR CAR		01	DRVR	NONE	47 M	OR-Y	000	000	OR>25
												02	NONE	0	STRGHT					000	00
												PRVTE	S N						000	000	00
												PSNGR CAR		01	DRVR	NONE	34 M	OR-Y	000	000	OR<25
02649	N N N	07/29/2010	CLACKAMAS	1 19 2	2	INTER	CROSS	N	N CLR	ANGL-OTH	01	NONE	0	TURN-L						02	
NONE		Thu	WEST LINN	6 0	8TH CT	CN		STOP SIGN	N DRY	TURN		PRVTE	NE SE						000	00	
		4P	PORTLAND UA	6.40	10TH ST	03	0		N DAY	PDO		PSNGR CAR		01	DRVR	NONE	00 F	UNK	028	000	OR<25

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

10th Street from Willamette Falls Drive to 8th Avenue excluding ending intersections
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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

Willamette Falls Drive @ 12th Street
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2011														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2011 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2010														
ANGLE	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2010 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
FINAL TOTAL	0	1	1	2	0	1	0	2	0	2	0	2	0	0

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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
 URBAN NON-SYSTEM CRASH LISTING

CITY OF WEST LINN, CLACKAMAS COUNTY

Willamette Falls Drive @ 12th Street
 January 1, 2007 through December 31, 2011

SER#	INVEST	S P E E	D R R L	C A L	O U G	DATE DAY TIME	CLASS DIST FROM	CITY STREET FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RDNBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	SPCL USE TRLR QTY OWNER V#	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE			
																											01	DRVR	NONE
03816	CITY	N	N	N		10/19/2010 Tue 3P	16 0	WILLAMETTE FALLS DR 12TH ST	INTER NE 06	CROSS 0	N STOP SIGN	N N N	CLR DRY DAY	BIKE ANGL INJ	01 PRVTE PSNGR CAR	0 SE SW		01	DRVR	NONE	38	F	OR-Y OR<25	027	000	000	02	00	02
																STRGHT SW NE	01	BIKE	INJC	43	M		01	000	035	00			
03006	NONE	N	N	N		08/18/2011 Thu 10A	16 0	WILLAMETTE FALLS DR 12TH ST	INTER CN 04	CROSS 0	N STOP SIGN	N N N	CLR DRY DAY	ANGL-OTH TURN PDO	01 PRVTE PSNGR CAR	0 SW NE		01	DRVR	NONE	60	F	OR-Y OR<25	000	000	000	02	00	00
																02 PRVTE PSNGR CAR	0 SE SW		01	DRVR	NONE	00	F	UNK UNK	028	000	015	00	02

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

Willamette Falls Drive @ 10th Street
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2011														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2011 TOTAL	0	0	2	2	0	0	0	2	0	2	0	2	0	0
YEAR: 2010														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2010 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2009														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2009 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2007														
ANGLE	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2007 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0
FINAL TOTAL	0	0	5	5	0	0	0	5	0	4	1	5	0	0

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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
 URBAN NON-SYSTEM CRASH LISTING

CITY OF WEST LINN, CLACKAMAS COUNTY

Willamette Falls Drive @ 10th Street
 January 1, 2007 through December 31, 2011

SER#	INVEST	S P E E	D R A L	C O U N T Y	DATE	CLASS DIST FROM	CITY STREET FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RDNBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	SPCL USE TRLR QTY OWNER V#	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE	
																										0
04581	NONE	N	N	N	11/30/2011	16	WILLAMETTE FALLS DR 10TH ST	INTER SW 06	3-LEG 0	N		N CLR DAY	S-1STOP REAR PDO	01 NONE PSNGR CAR	0 STRGHT SW NE		01	DRVR	NONE	00	M	UNK	026	000	000	07
					Wed 4P	0								02 NONE PSNGR CAR	0 STOP SW NE		01	DRVR	NONE	46	M	OR-Y OR<25	000	000	00	
02637	NONE	N	N	N	07/23/2011	16	WILLAMETTE FALLS DR 10TH ST	INTER CN 01	3-LEG 0	N		N CLR DAY	ANGL-OTH TURN PDO	01 NONE PSNGR CAR	0 TURN-R N SW		01	DRVR	NONE	00	M	OR-Y OR<25	028	000	000	02
					Sat 7P	0								02 NONE PSNGR CAR	0 STRGHT NE SW		01	DRVR	NONE	18	F	OR-Y OR<25	000	000	00	
03931	NONE	N	N	N	09/10/2007	19	WILLAMETTE FALLS DR 10TH ST	INTER CN 02	CROSS 0	N		N CLR DAY	ANGL-OTH ANGL PDO	01 NONE PSNGR CAR	0 STRGHT S N		01	DRVR	NONE	59	M	OR-Y OR<25	028	000	000	02
					Mon 10P	0								02 NONE UNKN UNKNOWN	9 STRGHT NE SW		01	DRVR	NONE	00	M	UNK UNK	000	000	00	
02189	NONE	N	N	N	06/28/2010	16	WILLAMETTE FALLS DR 10TH ST	INTER CN 02	3-LEG 0	N		N CLR DAY	S-1TURN REAR PDO	01 NONE PSNGR CAR	0 STRGHT NE SW		01	DRVR	NONE	38	F	OR-Y OR<25	026	000	000	07
					Mon 12P	0								02 NONE PSNGR CAR	0 STOP NE N		01	DRVR	NONE	65	F	OR-Y OR<25	000	000	004	00
																	02	PSNG	NO<5	04	M		000	000	00	
02098	NONE	N	N	N	06/09/2009	16	WILLAMETTE FALLS DR 10TH ST	INTER CN 03	3-LEG 0	N		N CLR DAY	ANGL-OTH TURN PDO	01 NONE PSNGR CAR	0 STRGHT W E		01	DRVR	NONE	21	F	OR-Y OR<25	028	000	000	02
					Tue 4P	0								02 NONE PSNGR CAR	0 TURN-L E S		01	DRVR	NONE	43	F	OR-Y OR<25	000	000	00	

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

Willamette Falls Drive from 12th Street to 10th Street excluding ending intersections
 January 1, 2007 through December 31, 2011

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2011														
REAR-END	0	1	0	1	0	1	0	0	1	0	1	0	0	0
2011 TOTAL	0	1	0	1	0	1	0	0	1	0	1	0	0	0
FINAL TOTAL	0	1	0	1	0	1	0	0	1	0	1	0	0	0

Disclaimer: A higher number of crashes are reported for the 2011 data file compared to previous 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.

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUIING OR ATTEMPTING TO STOP ANOTHER VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF-ROAD
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED)
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS--RAG	DISREGARDED R-A-G TRAFFIC SIGNAL.
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST CLOTHING NOT VISIBLE
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1TURN	FROM OPPOSITE DIRECTION - ONE TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNED FROM WRONG LANE
007	TO WRONG	TURNED INTO WRONG LANE
008	ILLEG U	U-TURNED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	FAILED TO DIM LIGHTS (UNTIL 4/1/97) / INATTENTION (AFTER 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY (DELIBERATELY TRAVELING ON WRONG SIDE)
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAYON RD	STANDING OR LYING IN ROADWAY
073	ELUDING	ELUDING
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVERCORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	PED INV	PEDESTRIAN INVOLVED (NON-PEDESTRIAN ACCIDENT)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	BIKE INV	TRICYCLE-BICYCLE INVOLVED
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE (OCCUPANTS ONLY)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSH	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BARS OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING (ON BRIDGE AND APPROACH)
047	BR ABUT	BRIDGE ABUTMENT (APPROACH ENDS)
048	BR COLMN	BRIDGE PILLAR OR COLUMN (EVEN THOUGH STRUCK PROTECTIVE GUARD RAIL FIRST)
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, ROCKS OFF OR ON ROAD, FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	SPEED BUMP, OTHER BUMP, POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	HOLE	CHUCKHOLE IN ROAD, LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ F MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY OTHER MOVING OR FLYING OBJECT
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTH ACDT	ACCIDENT RELATED TO ANOTHER SEPARATE ACCIDENT
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE (ON PAR OR REPORT)
093	CELL-POL	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL-WTN	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	UNKNOWN TYPE OF FIXED OBJECT
101	OTHER OBJ	OTHER OR UNKNOWN OBJECT, NOT FIXED
104	OUTSIDE V	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR/TROLLEY RIGHT-OF-WAY
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE
125	SHLDR	SHOULDER GAVE WAY

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY
2	INJA	INCAPACITATING INJURY - BLEEDING, BROKEN BONES
3	INJB	NON-INCAPACITATING INJURY
4	INJC	POSSIBLE INJURY - COMPLAINT OF PAIN
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYANCE
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OBJECT
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN OBJECT
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	UNK	UNKNOWN TYPE OF NON-MOTORIST

PEDESTRIAN LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILLUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
01	PSNGR CAR	PASSENGER CAR, PICKUP, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, MOTOR SCOOTER, OR MOTOR BICYCLE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

Traffic Growth Estimate

Historical Trend*

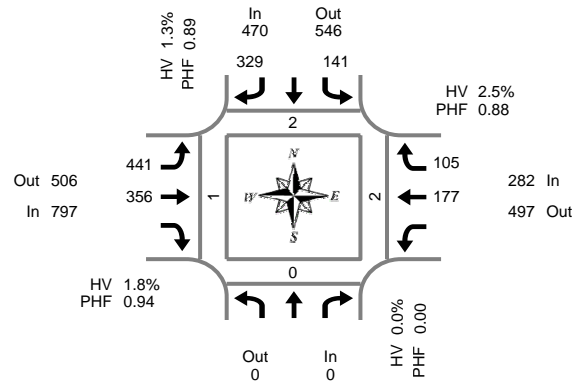
Year	Entering PM Peak Volume	Linear Annual Growth Rate
2006*	1549	
2012	1554	0.1%
	6-Year Average Change	0.1%

*- Volumes taken from West Linn TSP

Total Vehicle Summary



Clay Carney
(503) 833-2740



10th St & Willamette Falls Dr

Wednesday, October 25, 2006

3:30 PM to 6:30 PM

Peak Hour Summary
4:45 PM to 5:45 PM

15-Minute Interval Summary

3:30 PM to 6:30 PM

Interval Start Time	Northbound 10th St				Southbound 10th St				Eastbound Willamette Falls Dr				Westbound Willamette Falls Dr				Interval Total	Pedestrians Crosswalk			
	In	Out	Bikes	Total	L	R	Bikes	Total	L	T	Bikes	Total	T	R	Bikes	Total		North	South	East	West
3:30 PM			0		26	66	0		87	50			38	32	0		299	1	0	0	1
3:45 PM			0		34	56	0		98	65			30	23	0		306	0	0	0	0
4:00 PM			0		40	78	0		101	56			48	34	0		357	0	0	0	0
4:15 PM			0		28	54	0		96	88			28	23	0		317	0	0	1	0
4:30 PM			0		38	58	0		108	98			38	26	0		366	2	0	0	0
4:45 PM			0		49	83	0		82	103			44	27	0		388	0	0	0	0
5:00 PM			0		32	84	0		103	90			44	25	0		378	0	0	0	0
5:15 PM			0		30	72	0		123	84			51	29	0		389	1	0	1	1
5:30 PM			0		30	90	1		133	79			38	24	0		394	1	0	1	0
5:45 PM			0		23	63	0		119	94			44	33	0		376	1	0	2	0
6:00 PM			0		27	53	0		88	55			76	56	0		355	1	0	0	0
6:15 PM			0		14	63	0		87	42			79	59	0		344	0	0	0	0
Total Survey			0		371	820	1		1,225	904			558	391	0		4,269	7	0	5	2

Peak Hour Summary

4:45 PM to 5:45 PM

By Approach	Northbound 10th St				Southbound 10th St				Eastbound Willamette Falls Dr				Westbound Willamette Falls Dr				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	0	0	0	0	470	546	1,016	1	797	506	1,303	0	282	497	779	0	1,549	2	0	2	1
%HV			0.0%			1.3%				1.8%				2.5%			1.7%				
PHF			0.00			0.89				0.94				0.88			0.98				

By Movement	Northbound 10th St				Southbound 10th St				Eastbound Willamette Falls Dr				Westbound Willamette Falls Dr				Total
	In	Out	Total	Bikes	L	R	Total	Bikes	L	T	Total	Bikes	T	R	Total	Bikes	
Volume			0		141	329	470		441	356	797		177	105	282		1,549
%HV	NA	NA	NA	0.0%	2.1%	NA	0.9%	1.3%	2.0%	1.4%	NA	1.8%	NA	0.6%	5.7%	2.5%	1.7%
PHF			0.00		0.72	0.91	0.89		0.83	0.86	0.94		0.87	0.91	0.88		0.98

Rolling Hour Summary

3:30 PM to 6:30 PM

Interval Start Time	Northbound 10th St				Southbound 10th St				Eastbound Willamette Falls Dr				Westbound Willamette Falls Dr				Interval Total	Pedestrians Crosswalk			
	In	Out	Bikes	Total	L	R	Bikes	Total	L	T	Bikes	Total	T	R	Bikes	Total		North	South	East	West
3:30 PM			0		128	254	0		382	259			144	112	0		1,279	1	0	1	1
3:45 PM			0		140	246	0		403	307			144	106	0		1,346	2	0	1	0
4:00 PM			0		155	273	0		387	345			158	110	0		1,428	2	0	1	0
4:15 PM			0		147	279	0		389	379			154	101	0		1,449	2	0	1	0
4:30 PM			0		149	297	0		416	375			177	107	0		1,521	3	0	1	1
4:45 PM			0		141	329	1		441	356			177	105	0		1,549	2	0	2	1
5:00 PM			0		115	309	1		478	347			177	111	0		1,537	3	0	4	1
5:15 PM			0		110	278	1		463	312			209	142	0		1,514	4	0	4	1
5:30 PM			0		94	269	1		427	270			237	172	0		1,469	3	0	3	0

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.1	0.1	3.8	1.2

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Del/Veh (s)				0.0
Total Del/Veh (s)	0.4	0.4	2.3	0.6

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									0.2
Total Del/Veh (s)	18.4	9.6	18.8	9.7	1.9	1.3	4.4	1.3	4.2

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.1
Total Del/Veh (s)	0.7	2.8	7.3	4.6	2.8

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.2
Total Del/Veh (s)	7.9	8.5	9.3	5.5	6.2	7.8

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.2
Total Del/Veh (s)	30.4	7.2	11.6	4.1	37.4	3.6	14.3

Total Network Performance

Denied Del/Veh (s)			0.5
Total Del/Veh (s)			18.7

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.1	0.1	3.8	1.2

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Del/Veh (s)				0.0
Total Del/Veh (s)	0.4	0.4	2.9	0.7

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									0.2
Total Del/Veh (s)	17.6	9.1	23.2	12.0	2.9	1.5	5.3	1.3	5.0

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.1
Total Del/Veh (s)	0.8	2.8	7.3	4.7	2.9

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.2
Total Del/Veh (s)	9.3	8.9	12.1	5.3	6.2	9.1

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.2
Total Del/Veh (s)	30.3	7.3	12.3	4.5	35.3	3.9	14.1

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	19.9

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.1	0.1	3.8	1.1

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.0
Total Del/Veh (s)	0.4	0.4	3.5	4.5	1.3

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									0.2
Total Del/Veh (s)	20.5	9.3	24.6	10.5	2.8	1.5	4.6	1.3	4.8

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.1
Total Del/Veh (s)	0.8	2.7	7.1	5.5	2.9

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.3
Total Del/Veh (s)	9.1	8.8	12.0	5.4	6.9	9.1

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.2
Total Del/Veh (s)	30.7	7.7	12.8	4.6	36.0	4.1	14.4

Total Network Performance

Denied Del/Veh (s)			0.5
Total Del/Veh (s)			20.0

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.2	0.1	4.2	0.5

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Del/Veh (s)				0.0
Total Del/Veh (s)	0.1	0.5	4.4	1.3

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									0.2
Total Del/Veh (s)	70.7	10.8	30.7	19.5	3.5	1.7	5.6	1.1	9.8

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.5
Total Del/Veh (s)	2.8	8.8	26.4	24.9	7.0

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.1
Total Del/Veh (s)	12.9	12.2	9.0	6.3	7.4	10.7

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.3
Total Del/Veh (s)	32.2	7.6	14.4	6.0	36.6	3.1	14.5

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	27.3

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.1	0.1	3.4	0.4

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Del/Veh (s)				0.0
Total Del/Veh (s)	0.1	0.6	4.3	1.3

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									1.1
Total Del/Veh (s)	153.1	9.5	35.9	33.3	3.3	1.7	6.5	1.1	18.5

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.5
Total Del/Veh (s)	2.8	10.2	46.7	40.5	10.0

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.3
Total Del/Veh (s)	17.2	14.6	9.8	6.8	7.5	12.9

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.3
Total Del/Veh (s)	33.6	7.1	13.8	5.6	36.3	3.4	13.8

Total Network Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	35.2

1: 8th Avenue & 13th Street Performance by lane

Lane	EB	WB	SB	All
Movements Served	LT	TR	LR	
Denied Del/Veh (s)				0.1
Total Del/Veh (s)	0.2	0.2	4.1	0.4

2: 12th Street & 8th Avenue Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.0
Total Del/Veh (s)	0.1	0.7	4.5	5.2	1.7

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	LT	R	L	TR	L	TR	
Denied Del/Veh (s)									2.2
Total Del/Veh (s)	215.9	12.8	45.3	35.6	4.4	1.7	6.5	1.1	23.9

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.5
Total Del/Veh (s)	2.8	11.9	66.8	39.5	12.5

5: Willamette Falls Drive & 10th Street Performance by lane

Lane	EB	EB	WB	SB	SB	All
Movements Served	L	T	TR	L	R	
Denied Del/Veh (s)						0.1
Total Del/Veh (s)	17.8	14.5	10.0	7.2	8.1	13.2

90: 10th Street Performance by lane

Lane	EB	EB	NB	NB	SB	SB	All
Movements Served	LT	R	T	R	L	T	
Denied Del/Veh (s)							0.3
Total Del/Veh (s)	33.8	7.8	15.0	5.6	34.9	3.1	13.9

Total Network Performance

Denied Del/Veh (s)	1.9
Total Del/Veh (s)	39.5

3: 10th Street & 8th Avenue Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All
Movements Served	L	TR	LT	R	TR	L	TR	
Denied Del/Veh (s)								0.6
Total Del/Veh (s)	116.6	10.0	34.4	30.0	1.7	6.7	1.1	15.1

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	2.0	3.0	10.1	3.1	29.9	27.9	6.9

4: 12th Street & Willamette Falls Drive Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							139.1
Total Del/Veh (s)	5.3	136.9	5.8	8.1	7.4	5.4	76.7

GROUP

MACKENZIE

PORTLAND, OR | SEATTLE, WA | VANCOUVER, WA
RiverEast Center | 1515 Water Avenue, Suite 100 | Portland, OR 97214
P.O. Box 14310 | Portland, OR 97293
T: 503.224.9560 | F: 503.228.1285 | www.groupmackenzie.com

PRELIMINARY
STORMWATER
REPORT

WATER QUALITY
AND DETENTION

To
City of West Linn

For
West Linn Police Facility

Submitted for:
Design Review
November 2012

Project Number
2120180.00

Description

The 68,497 sq. ft. The West Linn Police facility is located at the NE corner of 8th Avenue and 13th Street. The site is comprised of three former residential homes and an empty lot. The homes are to be demolished and removed by the City prior to commencement of construction. The City of West Linn uses City of Portland water quality requirements and requires detention up to and including the 25 year event.

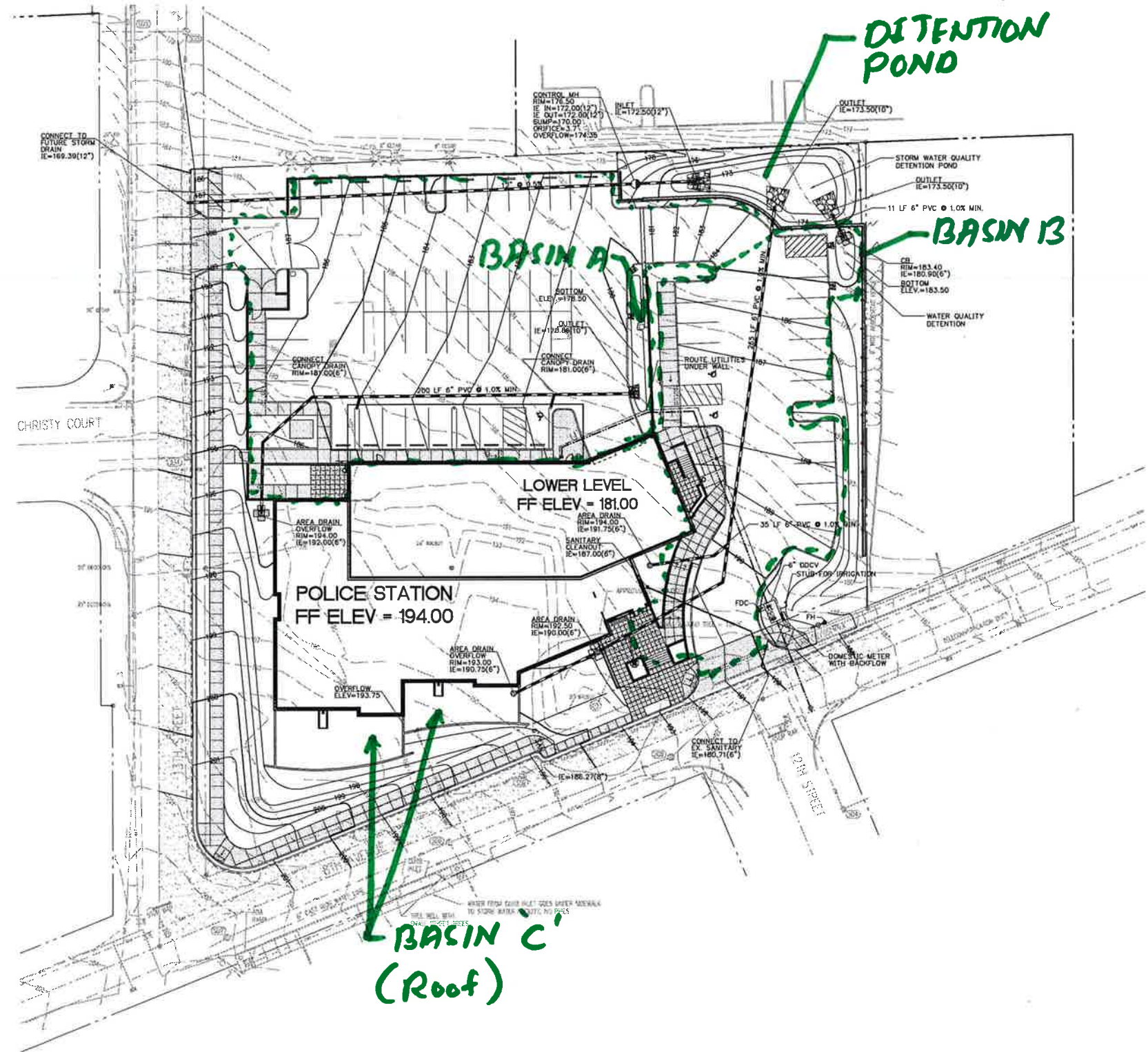
Water quality has been provided by use of low impact development basins (LID's) The roof water will be routed through the planters adjacent to the building. The secured area will drain through curb breaks at the east end of the secured area. The public parking will sheet flow through curb breaks to a LID basin at the NE corner of the lot. The basins adjacent to the building will be lined since they are within 15' of the building footings. The City of Portland PAC Calculator was used to verify if the basins have been sized for water quality.

Once treated the water will overflow to the detention facility located at the NE corner of the site. Due to the slopes on site, a retaining wall will be required to construct the detention facilities. A control manhole will be installed to release water from the site at the predeveloped runoff rate for storms up the 25 year event. The detention facility is proposed to be fenced access to the facility will be through a gate at the west end of the facility.

Once treated and detained stormwater will be released to the public storm system. The storm system currently does not exist at a depth to serve the site. Two options have been proposed to the City. One is to extend approximately 800 linear feet of storm pipe up 13th street. The other is to deepen approximately 250 of storm pipe in 8th avenue. In either case the public storm line will need to be installed prior to connecting the on-site storm system to it.

Index

- Site Map
- City of Portland PAC calculations
- Detention Calculation



GRADING NOTES

- ROUGH GRADING: BRING ALL FINISH GRADES TO APPROXIMATE LEVELS INDICATED. WHERE GRADES ARE NOT OTHERWISE INDICATED, FINISH GRADES ARE TO BE THE SAME AS ADJACENT SIDEWALKS, CURBS, OR THE OBVIOUS GRADE OF ADJACENT STRUCTURE. GRADE TO UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE GRADES ARE GIVEN. ROUND OFF SURFACES, AVOID ABRUPT CHANGES IN LEVELS. ROUGH GRADE TO ALLOW FOR DEPTH OF CONCRETE SLABS, WALKS, AND THEIR BASE COURSES. GRADE FOR PAVED DRIVES AND PAVED PARKING AREAS AS INDICATED AND SPECIFIED HEREIN AND PROVIDE FOR SURFACE DRAINAGE AS SHOWN, ALLOWING FOR THICKNESS OF SURFACING MATERIAL.
FINISH GRADING: AT COMPLETION OF JOB AND AFTER BACKFILLING BY OTHER CRAFTS HAS BEEN COMPLETED, REFILL AND COMPACT AREAS WHICH HAVE SETTLED OR ERODED TO BRING TO FINAL GRADES.
GRADING TOLERANCES:
ROUGH GRADE AT PAVED OR LANDSCAPED AREAS: ±0.1 FT.
FINISH GRADE PRIOR TO PLACING FINAL SURFACING: ±0.03 FT.
- EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL.
EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS 72 HOURS MINIMUM PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED MEETING THE ?????????????????? REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE SO ROUTED THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- SITE TOPSOIL SHALL BE STOCKPILED DURING CONSTRUCTION AND USED FOR LANDSCAPING.
- THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS BASED ON A SURVEY BY NW SURVEYING, INC. AND IS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS WITH HIS OWN RESOURCES PRIOR TO START OF ANY CONSTRUCTION.
- CONTRACTOR TO COORDINATE GRADES AT ENTRANCE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- 2% MAXIMUM SLOPE AT ALL ADA-COMPLIANT PARKING SPACES AND LOADING ZONES.
- 3% MAX SLOPE (EXCLUDING RAMPS) AT PEDESTRIAN SIDEWALK CONNECTIONS BETWEEN PUBLIC R.O.W. AND BUILDING ENTRANCES.
- WHERE SLOPES ARE STEEPER THAN 3:1, CONTRACTOR SHALL INSTALL JUTE MATTING. SLOPE SHALL BE PREPARED TO ENSURE COMPLETE AND DIRECT CONTACT OF MATTING WITH SOIL. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

LEGEND

	EXISTING 1-FT CONTOUR
	EXISTING 5-FT CONTOUR
	PROPOSED 1-FT CONTOUR
	PROPOSED 5-FT CONTOUR
	STORM PIPE
	CATCH BASIN WITH INLET PROTECTION
	FIRE HYDRANT
	WATER METER
	DDCV
	FDC

GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Civil Engineering
 Structural Engineering
 Transportation Planning
 Landscape Architecture
 Portland, OR
 Vancouver, WA
 Seattle, WA
 503.224.9660
 360.686.6779
 206.748.0983

Client:
 CITY OF WEST LINN
 2200 SALAMO ROAD
 WEST LINN, OR 97068



Project:
 WEST LINN POLICE
 DEPARTMENT
 800 8TH AVENUE
 WEST LINN, OR 97068

© GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

REVISIONS:

NO.	REVISION	REVISION DATE

SHEET TITLE:
 SITE
 UTILITY
 PLAN

DRAWN BY:
 CHECKED BY:
 SHEET

C2.3

JOB NO. 2120180.00

1 SITE UTILITY PLAN
 C2.3 1" = 20'





Presumptive Approach Calculator ver. 1.2

Catchment Data

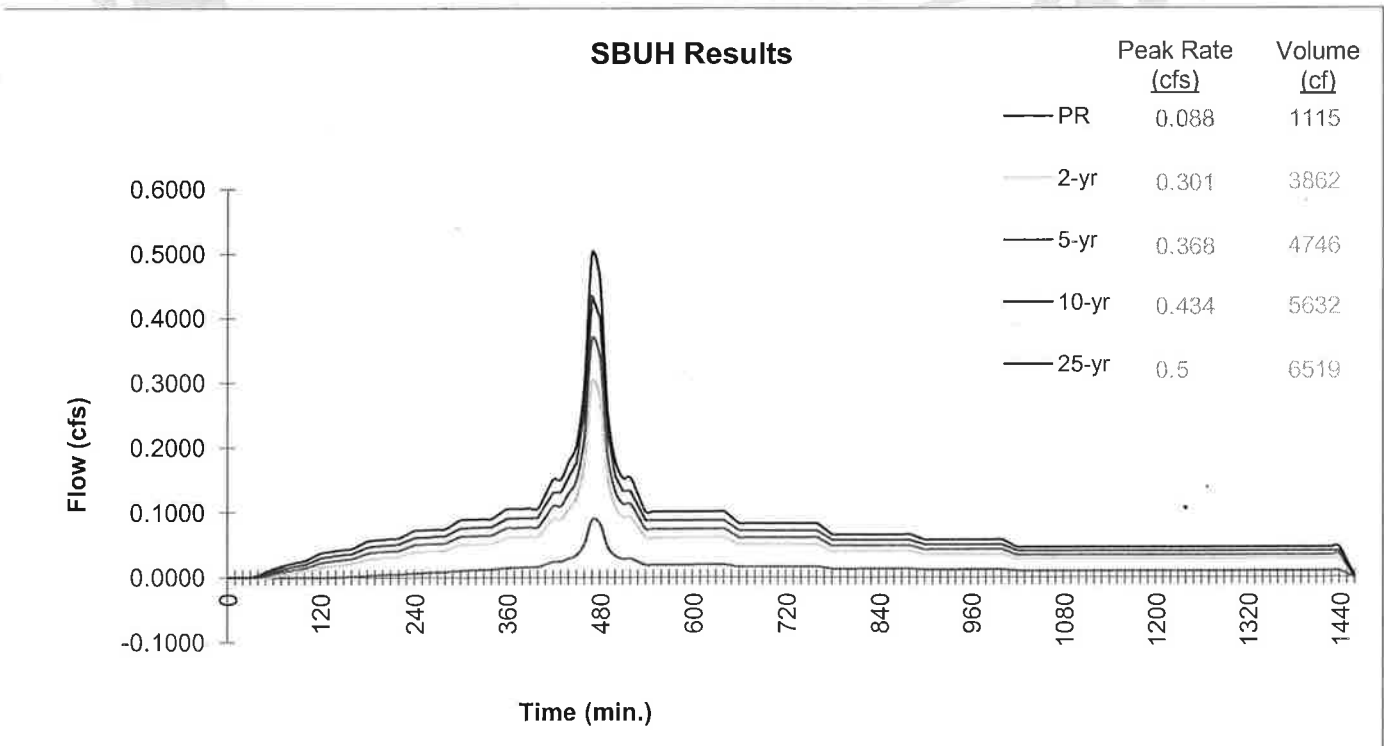
Project Name: West Linn
 Project Address: _____
 Designer: rif
 Company: Group Mackenzie

Catchment ID: A
 Date: 02/01/10
 Permit Number: 0

Run Time 11/8/2012 1:47:03 PM

Drainage Catchment Information	
Catchment ID	<u>A</u>
Catchment Area	
Impervious Area	<u>21,341</u> SF
Impervious Area	<u>0.49</u> ac
Impervious Area Curve Number, CN_{imp}	<u>98</u>
Time of Concentration, T_c , minutes	<u>5</u> min.
Site Soils & Infiltration Testing Data	
Infiltration Testing Procedure:	<u>Open Pit Falling Head</u>
Native Soil Field Tested Infiltration Rate (I_{test}):	<u>1</u> in/hr
Bottom of Facility Meets Required Separation From High Groundwater Per BES SWMM Section 1.4:	<u>Yes</u>
Correction Factor Component	
CF_{test} (ranges from 1 to 3)	<u>2</u>
Design Infiltration Rates	
I_{dsgn} for Native (I_{test} / CF_{test}):	<u>0.50</u> in/hr
I_{dsgn} for Imported Growing Medium:	<u>2.00</u> in/hr

Execute SBUH Calculations





Presumptive Approach Calculator ver. 1.2

Catchment ID: **A**

Run Time 11/8/2012 1:47:03 PM

Project Name: West Linn

Catchment ID: A

Date: 2/1/2010

Instructions:

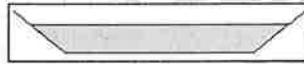
1. Identify which Stormwater Hierarchy Category the facility.
2. Select Facility Type.
3. Identify facility shape of surface facility to more accurately estimate surface volume, except for Swales and sloped planters that use the PAC Sloped Facility Worksheet to enter data.
4. Select type of facility configuration.
5. Complete data entry for all highlighted cells.

Catchment facility will meet Hierarchy Category: 3

Goal Summary:

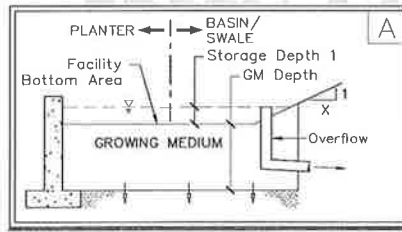
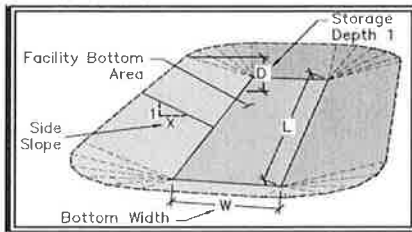
Hierarchy Category	SWMM Requirement	RESULTS box below needs to display...	
		Pollution Reduction as a	10-yr (aka disposal) as a
3	Off-site flow to drainageway, river, or storm-only pipe system.	PASS	N/A

Facility Type = Basin



Facility Shape: Rectangle/Square

Facility Configuration: A



DATA FOR ABOVE GRADE STORAGE COMPONENT

BELOW GRADE STORAGE

Facility Bottom Area = 302 sf
 Bottom Width = 4.0 ft
 Facility Side Slope = 3 to 1
 Storage Depth 1 = 12 in
 Growing Medium Depth = 18 in
 Freeboard Depth = N/A in
 Surface Capacity at Depth 1 = 553 cf
 Infiltration Area at 75% Depth 1 = 677 SF
 GM Design Infiltration Rate = 2.00 in/hr
 Infiltration Capacity = 0.031 cfs

Rock Storage Bottom Area = 677 sf
 Rock Storage Depth = 0 in
 Rock Storage Capacity = 0 cf
 Native Design Infiltration Rate = 0.50 in/hr
 Infiltration Capacity = 0.008 cfs

Calculation Guide
Max. Rock Stor.
Bottom Area
803 SF

Native Infiltration Rate Used in PA

RESULTS		Overflow Volume		Run PAC
Pollution Reduction	PASS	0 CF	<u>96%</u> Surf. Cap. Used	
Output File				
Peak cfs	<u>2-yr</u>	<u>5-yr</u>	<u>10-yr</u>	<u>25-yr</u>
	0.293	0.360	0.427	0.493

Auto Run

FACILITY FACTS	
Total Facility Area Including Freeboard =	#VALUE!
Sizing Ratio (Total Facility Area / Catchment Area) =	#VALUE!



Presumptive Approach Calculator ver. 1.2

Catchment Data

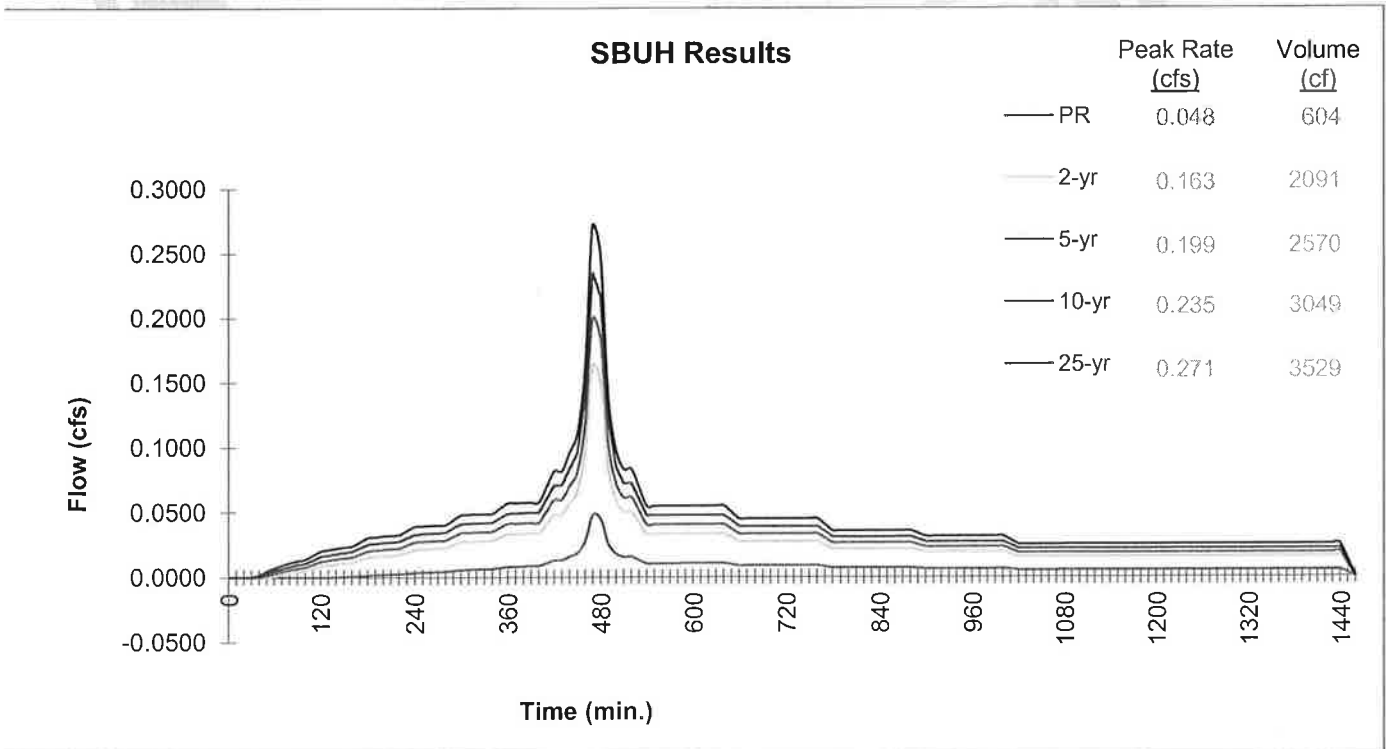
Project Name: West Linn
 Project Address: _____
 Designer: rlf
 Company: Group Mackenzie

Catchment ID: B
 Date: 02/01/10
 Permit Number: 0

Run Time 11/8/2012 1:56:28 PM

Drainage Catchment Information	
Catchment ID	<u>B</u>
Catchment Area	
Impervious Area	<u>11,554</u> SF
Impervious Area	<u>0.27</u> ac
Impervious Area Curve Number, CN_{imp}	<u>98</u>
Time of Concentration, T_c , minutes	<u>5</u> min.
Site Soils & Infiltration Testing Data	
Infiltration Testing Procedure:	<u>Open Pit Falling Head</u>
Native Soil Field Tested Infiltration Rate (I_{test}):	<u>1</u> in/hr
Bottom of Facility Meets Required Separation From High Groundwater Per BES SWMM Section 1.4:	<u>Yes</u>
Correction Factor Component	
CF_{test} (ranges from 1 to 3)	<u>2</u>
Design Infiltration Rates	
I_{dsgn} for Native (I_{test} / CF_{test}):	<u>0.50</u> in/hr
I_{dsgn} for Imported Growing Medium:	<u>2.00</u> in/hr

Execute SBUH Calculations





Presumptive Approach Calculator ver. 1.2

Catchment ID: **B**

Run Time 11/8/2012 1:56:28 PM

Project Name: West Linn

Catchment ID: B

Date: 2/1/2010

Instructions:

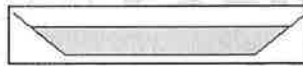
1. Identify which Stormwater Hierarchy Category the facility.
2. Select Facility Type.
3. Identify facility shape of surface facility to more accurately estimate surface volume, except for Swales and sloped planters that use the PAC Sloped Facility Worksheet to enter data.
4. Select type of facility configuration.
5. Complete data entry for all highlighted cells.

Catchment facility will meet Hierarchy Category: 3

Goal Summary:

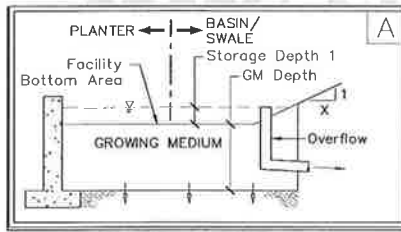
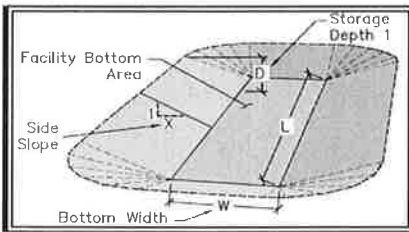
Hierarchy Category	SWMM Requirement	RESULTS box below needs to display...	
		Pollution Reduction as a	10-yr (aka disposal) as a
3	Off-site flow to drainageway, river, or storm-only pipe system.	PASS	N/A

Facility Type = Basin



Facility Shape: Rectangle/Square

Facility Configuration: A



DATA FOR ABOVE GRADE STORAGE COMPONENT

Facility Bottom Area = 200 sf
 Bottom Width = 5.0 ft
 Facility Side Slope = 3 to 1
 Storage Depth 1 = 12 in
 Growing Medium Depth = 18 in
 Freeboard Depth = N/A in
 Surface Capacity at Depth 1 = 347 cf
 Infiltration Area at 75% Depth 1 = 420 SF
 GM Design Infiltration Rate = 2.00 in/hr
 Infiltration Capacity = 0.019 cfs

BELOW GRADE STORAGE

Rock Storage Bottom Area = 420 sf
 Rock Storage Depth = 0 in
 Rock Storage Capacity = 0 cf
 Native Design Infiltration Rate = 0.50 in/hr
 Infiltration Capacity = 0.005 cfs

Calculation Guide
Max. Rock Stor.
Bottom Area
494 SF

Native Infiltration Rate Used in PA

RESULTS		Overflow Volume	
Pollution Reduction	PASS	0 CF	<u>70%</u> Surf. Cap. Used
Output File			
Peak cfs	<u>2-yr</u>	<u>5-yr</u>	<u>10-yr</u> <u>25-yr</u>
	0.158	0.194	0.230 0.266

Auto Run

FACILITY FACTS	
Total Facility Area Including Freeboard =	#VALUE!
Sizing Ratio (Total Facility Area / Catchment Area) =	#VALUE!



Presumptive Approach Calculator ver. 1.2

Catchment ID: **C**

Run Time 11/8/2012 2:18:09 PM

Project Name: West Linn

Catchment ID: C

Date: 2/1/2010

Instructions:

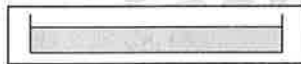
1. Identify which Stormwater Hierarchy Category the facility.
2. Select Facility Type.
3. Identify facility shape of surface facility to more accurately estimate surface volume, except for Swales and sloped planters that use the PAC Sloped Facility Worksheet to enter data.
4. Select type of facility configuration.
5. Complete data entry for all highlighted cells.

Catchment facility will meet Hierarchy Category: 3

Goal Summary:

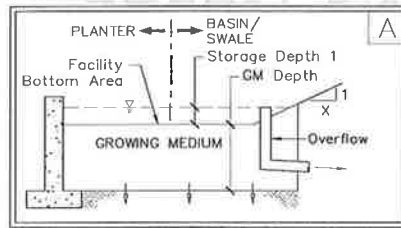
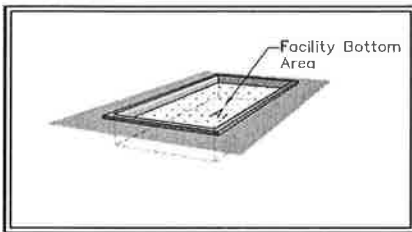
Hierarchy Category	SWMM Requirement	RESULTS box below needs to display...	
		Pollution Reduction as a	10-yr (aka disposal) as a
3	Off-site flow to drainageway, river, or storm-only pipe system.	PASS	N/A

Facility Type = Planter (Flat)



Facility Shape: Rectangle/Square

Facility Configuration: A



Calculation Guide
Max. Rock Stor.
Bottom Area
2,147 SF

DATA FOR ABOVE GRADE STORAGE COMPONENT

Facility Bottom Area = 2,147 sf
 Bottom Width = 116.0 ft
 Facility Side Slope = 0 to 1
 Storage Depth 1 = 6 in
 Growing Medium Depth = 18 in
 Freeboard Depth = N/A in

BELOW GRADE STORAGE

Rock Storage Bottom Area = 2,147 sf
 Rock Storage Depth = 0 in

Surface Capacity at Depth 1 = 1,074 cf
 GM Design Infiltration Rate = 2.00 in/hr
 Infiltration Capacity = 0.099 cfs

Rock Storage Capacity = 0 cf
 Native Design Infiltration Rate = 0.50 in/hr
 Infiltration Capacity = 0.025 cfs

Native Infiltration Rate Used in PA

RESULTS		Overflow Volume		Run PAC
Pollution Reduction	PASS	0 CF	<u>5%</u> Surf. Cap. Used	
Output File				
Peak cfs	<u>2-yr</u>	<u>5-yr</u>	<u>10-yr</u>	<u>25-yr</u>
	0.000	0.030	0.139	0.342

Auto Run

FACILITY FACTS	
Total Facility Area Including Freeboard =	2,147 SF
Sizing Ratio (Total Facility Area / Catchment Area) =	0.137



Presumptive Approach Calculator ver. 1.2

Catchment Data

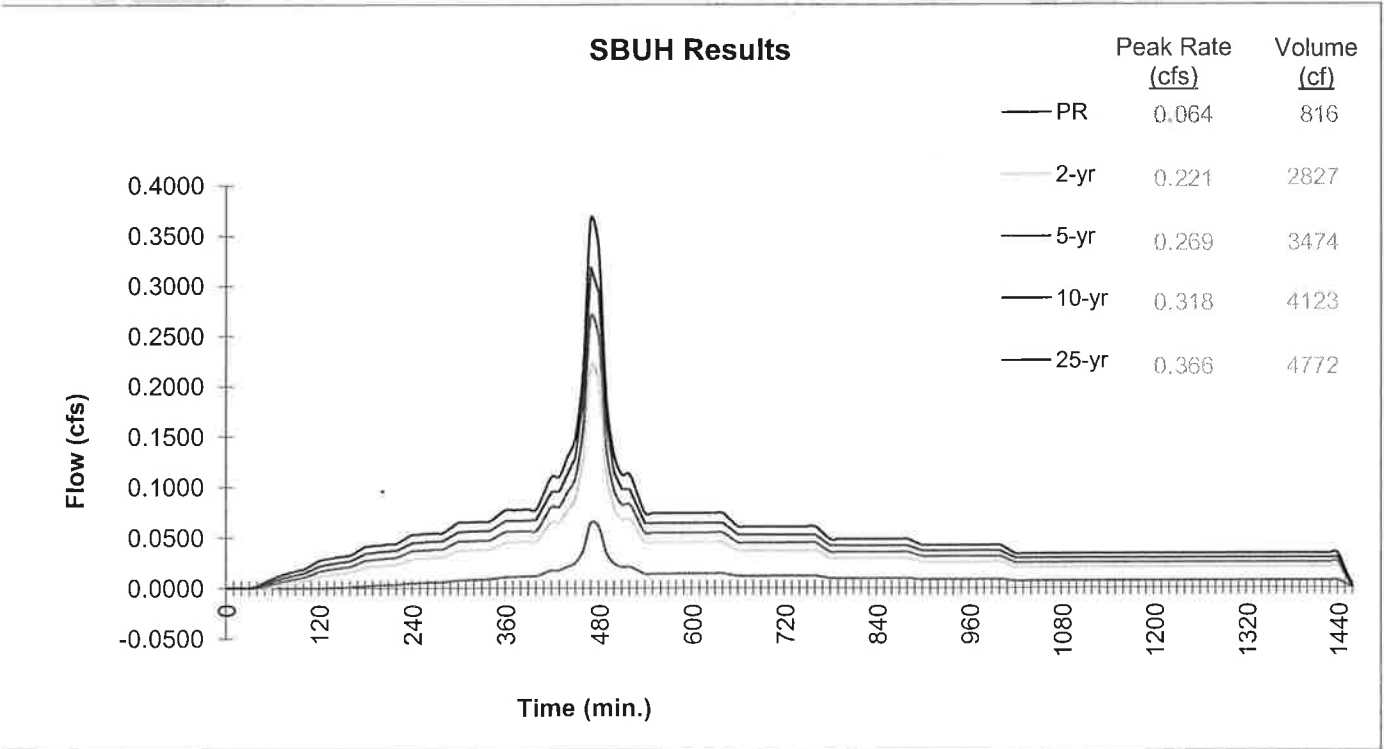
Project Name: West Linn
 Project Address: _____
 Designer: rjf
 Company: Group Mackenzie

Catchment ID: C
 Date: 02/01/10
 Permit Number: 0

Run Time 11/8/2012 2:18:09 PM

Drainage Catchment Information	
Catchment ID	<u>C</u>
Catchment Area	
Impervious Area	<u>15,623</u> SF
Impervious Area	<u>0.36</u> ac
Impervious Area Curve Number, CN_{imp}	<u>98</u>
Time of Concentration, T_c , minutes	<u>5</u> min.
Site Soils & Infiltration Testing Data	
Infiltration Testing Procedure:	<u>Open Pit Falling Head</u>
Native Soil Field Tested Infiltration Rate (I_{test}):	<u>1</u> in/hr
Bottom of Facility Meets Required Separation From High Groundwater Per BES SWMM Section 1.4:	<u>Yes</u>
Correction Factor Component	
CF_{test} (ranges from 1 to 3)	<u>2</u>
Design Infiltration Rates	
I_{dsgn} for Native (I_{test} / CF_{test}):	<u>0.50</u> in/hr
I_{dsgn} for Imported Growing Medium:	<u>2.00</u> in/hr

Execute SBUH Calculations



Detention Facilities for West Linn Police Facility

Prepared November 9, 2012

Project Number: 2120180.00

Running H:\\Projects\\212018000\\CALCS\\FACILITY Report.pgm on
Friday, November 09, 2012

Summary Report of all Detention Pond Data

Event	Precip (in)
other	2.1000
2 year	2.4000
5 year	2.9000
10 year	3.4000
25 year	3.9000
100 year	4.4000

LSTEND

BasinID	Event	Peak Q (cfs)	Peak T (hrs)	Peak Vol (ac-cf)	Area (ac)	Method/Loss	Raintype
EXISTING	2 year	0.4522	8.08	0.1697	1.57	SCS/SCS	TYPE1A
DEVELOPED	2 year	0.6971	8.01	0.2251	1.57	SCS/SCS	TYPE1A
EXISTING	10 year	0.8028	8.08	0.2852	1.57	SCS/SCS	TYPE1A
DEVELOPED	10 year	1.0827	8.01	0.3515	1.57	SCS/SCS	TYPE1A
EXISTING	25 year	0.9846	8.08	0.3453	1.57	SCS/SCS	TYPE1A
DEVELOPED	25 year	1.2747	8.01	0.4155	1.57	SCS/SCS	TYPE1A

Record Id: EXISTING

Design Method	SCS	Rainfall type	TYPE1A			
Hyd Intv	10.00 min	Peaking Factor	484.00			
		Abstraction Coeff	0.20			
Pervious Area (AMC 2)	1.57 ac	DCIA	0.00 ac			
Pervious CN	88.00	DC CN	0.00			
Pervious TC	20.00 min	DC TC	0.00 min			
Pervious CN Calc						
Description		SubArea	Sub cn			
Existing grass field		1.57 ac	88.00			
Pervious Compositd CN (AMC 2)			88.00			
Pervious TC Calc						
Type	Description	Length	Slope	Coeff	Misc	TT
Fixed						20.00 min
Pervious TC						20.00 min

Record Id: DEVELOPED

Design Method	SCS	Rainfall type	TYPE1A			
Hyd Intv	10.00 min	Peaking Factor	484.00			
		Abstraction Coeff	0.20			
Pervious Area (AMC 2)	1.57 ac	DCIA	0.00 ac			
Pervious CN	93.50	DC CN	0.00			
Pervious TC	5.00 min	DC TC	0.00 min			
Pervious CN Calc						
Description		SubArea	Sub cn			
DEVELOPED		1.57 ac	93.50			
Pervious Compositd CN (AMC 2)			93.50			
Pervious TC Calc						
Type	Description	Length	Slope	Coeff	Misc	TT
Fixed						5.00 min
Pervious TC						5.00 min

LPOOLCOMPUTE [FACILITY] SUMMARY using Puls

Start of live storage: 172.0000 ft

Event	Match Q (cfs)	Peak Q (cfs)	Peak Stg (ft)	Vol (cf)	Vol (acft)	Time to Empty
2 year	0.4522	0.4516	173.4457	409.72	0.0094	24.33
10 year	0.8028	0.5294	173.9862	1060.45	0.0243	24.33
25 year	0.9846	0.5701	174.3028	1517.01	0.0348	24.33

HYDLIST SUMMARY

[2 year out] [10 year out] [25 year out]

LSTEND

HydID	Peak Q (cfs)	Peak T (hrs)	Peak Vol (ac-ft)	Cont Area (ac)
2 year out	0.4516	8.17	0.2253	1.5700
10 year out	0.5294	8.50	0.3516	1.5700
25 year out	0.5701	8.50	0.4164	1.5700

STORLIST

[POND]

LSTEND

Record Id: POND

Descrip:	Prototype Record	Increment	0.10 ft
Start El.	173.0000 ft	Max El.	175.0000 ft
Stage Area			
Stage (ft)		Area (sf)	
173.00		788.0000	
174.00		1370.0000	
175.00		1873.0000	

DISCHLIST

[orifice]

LSTEND

Record Id: orifice

Descrip:	Prototype Structure	Increment	0.10 ft
Start El.	172.0000 ft	Max El.	176.0000 ft
Orif Coeff	0.62	Lowest Orif El.	172.00
Lowest Diam	3.7207 in	Dist to next	0.0000 ft

Licensed to: Group Mackenzie

AFFIDAVIT OF MAILING

STATE OF OREGON
COUNTY OF CLACKAMAS

KNOW ALL MEN BY THESE PRESENTS, that on this day, before me, a Notary Public, personally came and appeared Elissa Preston, as Affiant.

- 1. My name is Elissa Preston. I am over the age of eighteen years. I have personal knowledge of the facts stated below.
- 2. On 10/16/2012, I mailed a Request for Neighborhood Association Meeting, from Police Station Project Manager, Robert Galante. (copy attached)
- 3. I mailed the document(s) to the person(s) named below by enclosing the same in an envelope, postage prepaid, certified mail, with return receipt requested, and depositing it in a post office or an official depository under the care and custody of the United States Postal Service.

The person(s) and their respective, addresses are as follows:

Willamette Neighborhood Association
 Elizabeth Smolens, President
 1852 4th Ave
 West Linn, OR 97068

CC:
 Jim Milne
 2360 Michael Dr.
 West Linn, OR 97068

Certified mail return receipt number(s) 7011 3500 0002 3255 9919 and 7011 3500 0002 3255 9926

4. On the date(s) below, I received a return receipt/delivery confirmation from the United States Postal Service, as evidence that the above identified envelope(s) had been delivered as follows:

Certified mail return receipt number 7011 3500 0002 3255 9919, delivered on 10/17/12.
 Certified mail return receipt number 7011 3500 0002 3255 9926, delivered on 10/18/12.

- 5. On 10/16/2012, I mailed a Notice of Neighborhood Association Meeting to all owners and occupants within 500 feet of property, from Police Station Project Manager, Robert Galante. (copy attached)
- 6. I mailed the document(s) to the person(s) named attached by enclosing the same in an envelope, postage prepaid, and depositing it in a post office or an official depository under the care and custody of the United States Postal Service.
- 7. I have attached true copies of the document(s) mailed.

Signature of Affiant

Elissa Preston

SUBSCRIBED AND SWORN TO, OR AFFIRMED, before me on this 25th day of October, 2012

by Kathleen Mollusky

Notary Public
My Commission expires: 10-26-14





CITY OF
West Linn

October 16, 2012

Willamette Neighborhood Association
Elizabeth Smolens, President
1852 4th Ave
West Linn, OR 97068

Dear Ms. Smolens,

The City of West Linn is required by code to initiate a request to meet to discuss development applications prior to submitting an application for land use review. The request must be sent by certified mail and is required to ask for a meeting at least twenty days from the mailing date. The currently scheduled date of October 24, 2012 does not meet the City's code requirements for neighborhood contact (West Linn Code 99.038).

Please let me know if a meeting can be scheduled between November 5 and November 9. If that week does not work, we can try for the following week.

As you know, the City is proposing a 23,500 sq. ft. police station at the northeast corner of 13th Street and 8th Avenue. We would like to complete the formal requirements for neighborhood contact and complete our application for Planning Commission review.

Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'R Galante', is written over a horizontal line.

Robert Galante
Project Manager, Police Station
City of West Linn

CC: Jim Milne

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST LINN OR 97068

Postage	\$ 0.45
Certified Fee	\$2.95
Return Receipt Fee (Endorsement Required)	\$2.35
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 5.75

0155
 088
 OCT 16 2012
 Postmark Here
 10/16/2012

7011 3500 0002 3255 9919

Sent To

Street, Apt. No.,
 or PO Box No.

City, State, ZIP+4

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Elizabeth Smolens
 1852 4th Ave
 West Linn, OR 97068


2. Article Number

(Transfer from service)

7011 3500 0002 3255 9919

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X 

- Agent
 Addressee

B. Received by (Printed Name)

Elissa Helligas

C. Date of Delivery

10-17-12

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

WEST LINN OR 97068

OFFICIAL USE

Postage	\$	\$0.45	
Certified Fee		\$2.95	
Return Receipt Fee (Endorsement Required)		\$2.35	
Restricted Delivery Fee (Endorsement Required)		\$0.00	
Total Postage & Fees	\$	\$5.75	

10/16/2012

Sent To

Street, Apt. No.,
or PO Box No.

City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

7011 3500 0002 3255 9926

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p>
<p>1. Article Addressed to:</p> <p style="font-size: 1.2em; font-family: cursive;">Jim Milne 2360 Michael Dr West Linn, OR 97068</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Transfer from service label) 7011 3500 0002 3255 9926</p>	<p>3. Service Type</p> <p><input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540



CITY OF
West Linn

October 16, 2012

Dear Resident/Property Owner,

The City of West Linn proposes to construct a police station of up to 23,500 sq. ft. at the northeast corner of 13th Street and 8th Ave.

Notice has been sent to the officers of the Willamette Neighborhood Association requesting a meeting to discuss the proposal during the week of November 5, 2012. The Neighborhood Association will provide specific date, time, and location information for this meeting.

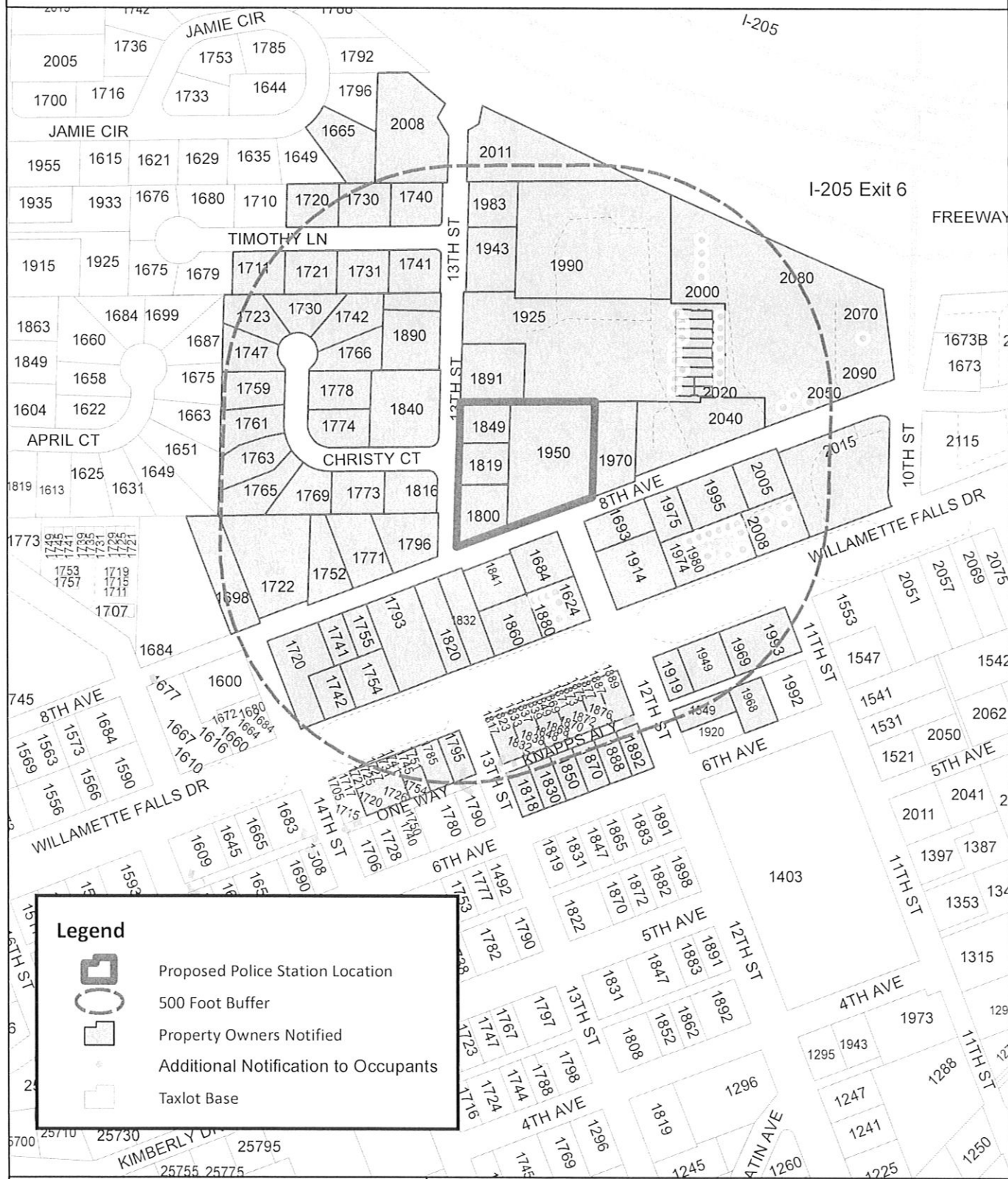
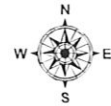
If you are not able to attend the meeting, but would like more information, please contact me at ragalante@comcast.net or 503-720-3609.

Sincerely,






A handwritten signature in black ink, appearing to read 'Robert Galante', written over a horizontal line.

Robert Galante
Project Manager, Police Station
City of West Linn

West Linn Police Station Notification Map

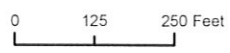


Legend

-  Proposed Police Station Location
-  500 Foot Buffer
-  Property Owners Notified
-  Additional Notification to Occupants
-  Taxlot Base

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Taxlot Base Source: Clackamas County GIS



SNAPNOTIFY.MXD / AHA APP 3-24-2011

User Name: AHA
Map Creation Date: Oct 10, 2012

TAX PAYER	MAILING ADDRESS	CITY	STATE	ZIP CODE	IN CARE OF
ADAMS STEPHEN	4111 N LOCUST ST	CANBY	OR	97013	
ANDERSON IRENE	1693 12TH ST	WEST LINN	OR	97068	
ARMOVIT HEIDI C	1765 CHRISTY CT	WEST LINN	OR	97068	
B & F PROPERTIES II LLC	2014 WILLAMETTE FALLS DR	WEST LINN	OR	97068	
BECKER CLAIRE T	25120 SW PETES MOUNTAIN RD	WEST LINN	OR	97068	
BECKER KIRK & CLAIRE	25120 SW PETES MOUNTAIN RD	WEST LINN	OR	97068	
BERNS ERIK J	1720 TIMOTHY LN	WEST LINN	OR	97068	
BROWN EDNA M	1773 CHRISTY CT	WEST LINN	OR	97068	
BROWN IAN & AUDRA	5111 SE GLEN ECHO AVE	MILWAUKIE	OR	97267	
BUTLER GLENN KENT TRUSTEE	11835 SW EBBERTS CT	BEAVERTON	OR	97008	
CHAY LLC	1980 WILLAMETTE FALLS DR STE 120-343	WEST LINN	OR	97068	
CHRISTIANSEN ROGER M & JUDITH A	1891 13TH ST	WEST LINN	OR	97068	
CITY OF WEST LINN	22500 SALAMO RD #100	WEST LINN	OR	97068	
CITY OF WEST LINN	22500 SALAMO RD #600	WEST LINN	OR	97068	
CLARK RICHARD K & ANGELA M	1774 CHRISTY CT	WEST LINN	OR	97068	
CORFF THOMAS A & TERRY A MOBERLY	19328 TOWERCREST DR	OREGON CITY	OR	97045	
CROPPER WALTER REUBEN & CHERYL ANN	1816 13TH ST	WEST LINN	OR	97068	
DNJ PROPERTIES LLC	3527 COEUR D ALENE DR	WEST LINN	OR	97068	
ELLIOTT ASSOCIATES INC	901 NE GLISAN ST	PORTLAND	OR	97232	
FARZA JAVAD & MAFAR ZAHRA	7110 SW CLINTON	TIGARD	OR	97223	
FIEDLER KEITH C	1890 13TH ST	WEST LINN	OR	97068	
FITZPATRICK RYAN M	1766 CHRISTY CT	WEST LINN	OR	97068	
FLETTER KURT R	1731 TIMOTHY LN	WEST LINN	OR	97068	
GRAEF KATHLEEN E	2545 SNOWBERRY RIDGE CT	WEST LINN	OR	97068	
HANDRIS EDWARD & TERESA M	2008 WILLAMETTE FALLS DR #B	WEST LINN	OR	97068	
HANDRIS HOLDINGS LLC	1980 WILLAMETTE FALLS DR #200	WEST LINN	OR	97068	
HANDRIS MARK	2008 WILLAMETTE FALLS DR #B	WEST LINN	OR	97068	
HART JULIA L	1755 8TH AVE	WEST LINN	OR	97068	
HAYS TOBY	1723 CHRISTY CT	WEST LINN	OR	97068	
HERRERA PATRICIA M	1740 TIMOTHY LN	WEST LINN	OR	97068	
HIEMSTRA PROPERTIES INC	17420 SW PARRETT MOUNTAIN RD	SHERWOOD	OR	97140	
HUSKEY LAURIE	2011 13TH ST	WEST LINN	OR	97068	
JOHN GALT HOLDINGS LLC	3857 SOUTH HAMPTON CT	WEST LINN	OR	97068	
JOHNSTON RYAN	1769 CHRISTY CT	WEST LINN	OR	97068	
KENNEDY WILLOW E	1747 CHRISTY CT	WEST LINN	OR	97068	
KIM BYONG	10354 HALFHITCH DR	ANCHORAGE	AK	99515	
KOTZAMICHALIS GRACE	1721 TIMOTHY LN	WEST LINN	OR	97068	
LARSON PATRICIA L	1752 8TH AVE	WEST LINN	OR	97068	
LAVITZ DARCI L	1759 CHRISTY CT	WEST LINN	OR	97068	
LEAVENWORTH ADRIANNE KRISTEN	1742 CHRISTY CT	WEST LINN	OR	97068	
LORIAUX D LYNN & TERESA CHOATE	1830 6TH AVE	WEST LINN	OR	97068	
MCFADDEN THOMAS A & SHARON L	1850 6TH AVE	WEST LINN	OR	97068	
MEURER STEPHAN	1892 6TH AVE	WEST LINN	OR	97068	
MOLES CLEMENT C JR & PATRICIA A	1995 8TH AVE	WEST LINN	OR	97068	
MORTON DON R & CYNTHIA SUE	1970 8TH AVE	WEST LINN	OR	97068	
NELSON LOLA	1711 TIMOTHY LN	WEST LINN	OR	97068	
PACIFIC WEST BANK	2040 8TH AVE	WEST LINN	OR	97068	ACCTS PAYABLE
PAKULA JENNY & SCOT GELFAND	2500 CRESTVIEW DR	WEST LINN	OR	97068	
PAZMOL WILLAMETTE PROPERTIES LLC	1832 WILLAMETTE FALLS DR	WEST LINN	OR	97068	
PEABODY RICHARD B & KATHY A	1665 JAMIE CIR	WEST LINN	OR	97068	
PETER ANGELA J L-EST	1840 13TH ST	WEST LINN	OR	97068	
PETERSEN ADAM A	1818 6TH AVE	WEST LINN	OR	97068	
PIOWATY THOMAS M	1761 CHRISTY CT	WEST LINN	OR	97068	
POTTER DONNA KAY & KENNETH C	22841 SW STAFFORD RD	TUALATIN	OR	97062	
SAKYS NICOLE H	1697 19TH ST	WEST LINN	OR	97068	
SCHAEFER DONALD M & MILYNN P	1877 WILLAMETTE FALLS DR	WEST LINN	OR	97068	
SCHAFFER EUGENE W JR & MARY ANN	1741 TIMOTHY LN	WEST LINN	OR	97068	
SCHREIBER DANIEL & NICOLE M	1870 6TH AVE	WEST LINN	OR	97068	
SFP-F LLC	PO BOX 5350	BEND	OR	97708	
SOUTHARDS WALTER E & DEBRA R	1778 CHRISTY CT	WEST LINN	OR	97068	
SPARKS JERRY B & LEANNA E	1796 8TH AVE	WEST LINN	OR	97068	
STELL INVESTMENTS LLC	1085 WILLAMETTE FALL DR	WEST LINN	OR	97068	
SUTHERLAND PROPERTIES LLC	1742 WILLAMETTE FALLS DR	WEST LINN	OR	97068	
TEKANDER STEVE	465 SW BORLAND RD	WEST LINN	OR	97068	
TRO LLC	1868 KNAPPS ALLEY #208	WEST LINN	OR	97068	AFFINITY GROUP
TSAI JAMES TARNG TRUSTEE	1037 MADSEN CT	PLEASANTON	CA	94566	
TUALATIN VALLEY FIRE & RESCUE	11945 SW 70TH AVE	TIGARD	OR	97223	COMMAND & BUSINESS OPERATIONS
VAIL DAVID B & CARLA S	1771 8TH AVE	WEST LINN	OR	97068	
VPC-OR WEST LINN LIMITED PARTNERSHIP	125 SIR FRANCIS DRAKE BLVD 3RD FLOOR	LARKSPUR	CA	94939	
WALTERS KARI M	1722 8TH AVE	WEST LINN	OR	97068	
WELLER RYAN R	1741 8TH AVE	WEST LINN	OR	97068	
WERST DEAN C & JEAN A	1785 WILLAMETTE FALLS DR STE 6	WEST LINN	OR	97068	
WILLAMETTE CAPITAL INVESTMENTS LLC	24979 SW QUARRYVIEW DR	WILSONVILLE	OR	97070	
WILLAMETTE FALLS ENTRPS LLC	1919 WILLAMETTE FALLS DR	WEST LINN	OR	97068	
WILLAMETTE FALLS HOLDINGS LLC	1980 WILLAMETTE FALLS DR #200	WEST LINN	OR	97068	
WILLIAMS RONALD M & TIFFANY A	1763 CHRISTY CT	WEST LINN	OR	97068	
WYNN R BRYAN & KARIN G	1730 TIMOTHY LN	WEST LINN	OR	97068	

NAME	SITE ADDRESS COWL MAF	CITY	STATE	ZIP CODE
OCCUPANT	1549 12TH ST	WEST LINN	OR	97068
OCCUPANT	1624 12TH ST	WEST LINN	OR	97068
OCCUPANT	1684 12TH ST	WEST LINN	OR	97068
OCCUPANT	1698 8TH AVE	WEST LINN	OR	97068
OCCUPANT	1720 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1720 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1721 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1725 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1726 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1727 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1730 CHRISTY CT	WEST LINN	OR	97068
OCCUPANT	1731 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1741 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1745 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1751 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1754 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1754 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1759 CHRISTY CT	WEST LINN	OR	97068
OCCUPANT	1785 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1793 8TH AVE	WEST LINN	OR	97068
OCCUPANT	1795 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1817 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1820 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1823 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1832 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1833 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1837 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1838 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1839 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1841 8TH AVE	WEST LINN	OR	97068
OCCUPANT	1848 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1849 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1860 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1868 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1869 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1870 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1871 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1872 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1873 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1875 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1876 KNAPPS ALY	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 100	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 111	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 200	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 230	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 240	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 250	WEST LINN	OR	97068
OCCUPANT	1880 WILLAMETTE FALLS DR STE 260	WEST LINN	OR	97068
OCCUPANT	1887 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1888 6TH AVE	WEST LINN	OR	97068
OCCUPANT	1889 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1914 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1943 13TH ST	WEST LINN	OR	97068
OCCUPANT	1949 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1968 6TH AVE	WEST LINN	OR	97068
OCCUPANT	1969 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1974 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	1975 8TH AVE	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 100	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 110	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 120	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 130	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 200	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 210	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 220	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 230	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 240	WEST LINN	OR	97068
OCCUPANT	1980 WILLAMETTE FALLS DR STE 250	WEST LINN	OR	97068

OCCUPANT	1980 WILLAMETTE FALLS DR STE 260	WEST LINN	OR	97068
OCCUPANT	1983 13TH ST	WEST LINN	OR	97068
OCCUPANT	1990 8TH AVE	WEST LINN	OR	97068
OCCUPANT	1993 WILLAMETTE FALLS DR	WEST LINN	OR	97068
OCCUPANT	2000 8TH AVE STE A	WEST LINN	OR	97068
OCCUPANT	2000 8TH AVE STE B	WEST LINN	OR	97068
OCCUPANT	2000 8TH AVE STE C	WEST LINN	OR	97068
OCCUPANT	2000 8TH AVE STE D	WEST LINN	OR	97068
OCCUPANT	2000 8TH AVE STE E	WEST LINN	OR	97068
OCCUPANT	2005 8TH AVE	WEST LINN	OR	97068
OCCUPANT	2008 13TH ST	WEST LINN	OR	97068
OCCUPANT	2008 WILLAMETTE FALLS DR STE 100A	WEST LINN	OR	97068
OCCUPANT	2008 WILLAMETTE FALLS DR STE 100B	WEST LINN	OR	97068
OCCUPANT	2008 WILLAMETTE FALLS DR STE 200A	WEST LINN	OR	97068
OCCUPANT	2008 WILLAMETTE FALLS DR STE 200B	WEST LINN	OR	97068
OCCUPANT	2015 8TH AVE	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 100	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 101	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 111	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 121	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 200	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 212	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 215	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 218	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 221	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE 222	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE A	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE B	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE C	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE D	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE E	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE F	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE G	WEST LINN	OR	97068
OCCUPANT	2020 8TH AVE STE H	WEST LINN	OR	97068
OCCUPANT	2040 8TH AVE	WEST LINN	OR	97068
OCCUPANT	2050 8TH AVE STE A	WEST LINN	OR	97068
OCCUPANT	2050 8TH AVE STE B	WEST LINN	OR	97068
OCCUPANT	2050 8TH AVE STE C	WEST LINN	OR	97068
OCCUPANT	2050 8TH AVE STE D	WEST LINN	OR	97068
OCCUPANT	2070 8TH AVE STE A	WEST LINN	OR	97068
OCCUPANT	2070 8TH AVE STE E	WEST LINN	OR	97068
OCCUPANT	2080 8TH AVE	WEST LINN	OR	97068
OCCUPANT	2090 8TH AVE	WEST LINN	OR	97068

AFFIDAVIT OF POSTING

STATE OF OREGON
COUNTY OF CLACKAMAS

KNOW ALL MEN BY THESE PRESENTS, that on this day, before me, a Notary Public, personally came and appeared Elissa Preston, as Affiant.

1. My name is Elissa Preston. I am over the age of eighteen years. I have personal knowledge of the facts stated below.

2. Pursuant to the West Linn Community Development Code 99.038, the City of West Linn posted a notice on the property subject to the proposed West Linn Police Department.

3. The City of West Linn's CDC requires that the notice shall be posted at a location visible from the public right-of-way. The sign is located at the front of the property located at:

1950 8th Ave, West Linn, OR 97068

4. A photo of the posted notice is attached.

Signature of Affiant

Elissa Preston

SUBSCRIBED AND SWORN TO, OR AFFIRMED, before me on this 7th day of November, 2012.

by Kathleen Mollusky


Notary Public
My Commission expires: 10-26-14



FUTURE HOME OF:

**WEST LINN
POLICE DEPARTMENT**

503-742-8606

 West Linn www.westlinnoregon.gov/policestation

D. On the same date the letters described in subsections A through C of this section are mailed, the applicant shall provide and post notice on the property subject to the proposed application. The notice shall be posted at a location visible from the public right-of-way. If the site is not located adjacent to a through street, then an additional sign shall be posted on the nearest through street. The sign notice shall be at least 11 inches by 17 inches in size on durable material and in clear, legible writing. The notice shall state that the site may be subject to a proposed development (e.g., subdivision, variance, conditional use) and shall set forth the name of the applicant and a telephone number where the applicant can be reached for additional information. The site shall remain posted until the conclusion of the meeting.

E. An application shall not be accepted as complete unless and until the applicant demonstrates compliance with this section by including with the application:

1. A copy of the certified letter to the neighborhood association with a copy of return receipt;
2. A copy of the letter to officers of the association and to property owners within 500 feet, including an affidavit of mailing and a copy of the mailing list containing the names and addresses of such owners and residents;
3. A copy of the required posted notice, along with an affidavit of posting;
4. A copy of the minutes of the meetings, produced by the neighborhood association, which shall include a record of any verbal comments received, and copies of any written comments from property owners, residents, and neighborhood association members. If there are no minutes, the applicant may provide a summary of the meeting comments. The applicant shall also send a copy of the summary to the chair of the neighborhood association. The chair shall be allowed to supplement the summary with any additional comments regarding the content of the meeting, as long as such comments are filed before the record is closed;
5. An audiotape of the meeting; and
6. In the event that it is discovered by staff that the aforementioned procedures of this section were not followed, or that a review of the audio tape and meeting minutes show the applicant has made a material misrepresentation of the project at the neighborhood meeting, the application shall be deemed incomplete until the applicant demonstrates compliance with this section. (Ord. 1425, 1998; Ord. 1474, 2001; Ord. 1568, 2008; Ord. 1590 § 1, 2009)

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT	PROJECT No(S).	
NON-REFUNDABLE FEE(S)	REFUNDABLE DEPOSIT(S)	TOTAL

Type of Review (Please check all that apply):

- | | | |
|--|---|--|
| <input type="checkbox"/> Annexation (ANX)
<input type="checkbox"/> Appeal and Review (AP) *
<input checked="" type="checkbox"/> Conditional Use (CUP)
<input checked="" type="checkbox"/> Design Review (DR)
<input type="checkbox"/> Easement Vacation
<input type="checkbox"/> Extraterritorial Ext. of Utilities
<input type="checkbox"/> Final Plat or Plan (FP)
<input type="checkbox"/> Flood Management Area
<input type="checkbox"/> Hillside Protection & Erosion Control | <input type="checkbox"/> Historic Review
<input type="checkbox"/> Legislative Plan or Change
<input checked="" type="checkbox"/> Lot Line Adjustment (LLA) */**
<input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan)
<input type="checkbox"/> Non-Conforming Lots, Uses & Structures
<input type="checkbox"/> Planned Unit Development (PUD)
<input type="checkbox"/> Pre-Application Conference (PA) */**
<input type="checkbox"/> Street Vacation | <input type="checkbox"/> Subdivision (SUB)
<input type="checkbox"/> Temporary Uses *
<input type="checkbox"/> Time Extension *
<input checked="" type="checkbox"/> Variance (VAR)
<input type="checkbox"/> Water Resource Area Protection/Single Lot (WAP)
<input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)
<input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)
<input type="checkbox"/> Zone Change |
|--|---|--|

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address: 1800 8th Ave, 1819 13 St, 1849 13 St, 1970 8 th Ave	Assessor's Map No.: 21E35C
	Tax Lot(s): 1900, 2000, 2100, 2200
	Total Land Area: 1.57 (post dedication)

Brief Description of Proposal: A NEW PUBLIC SAFETY FACILITY FOR THE CITY'S POLICE DEPARTMENT

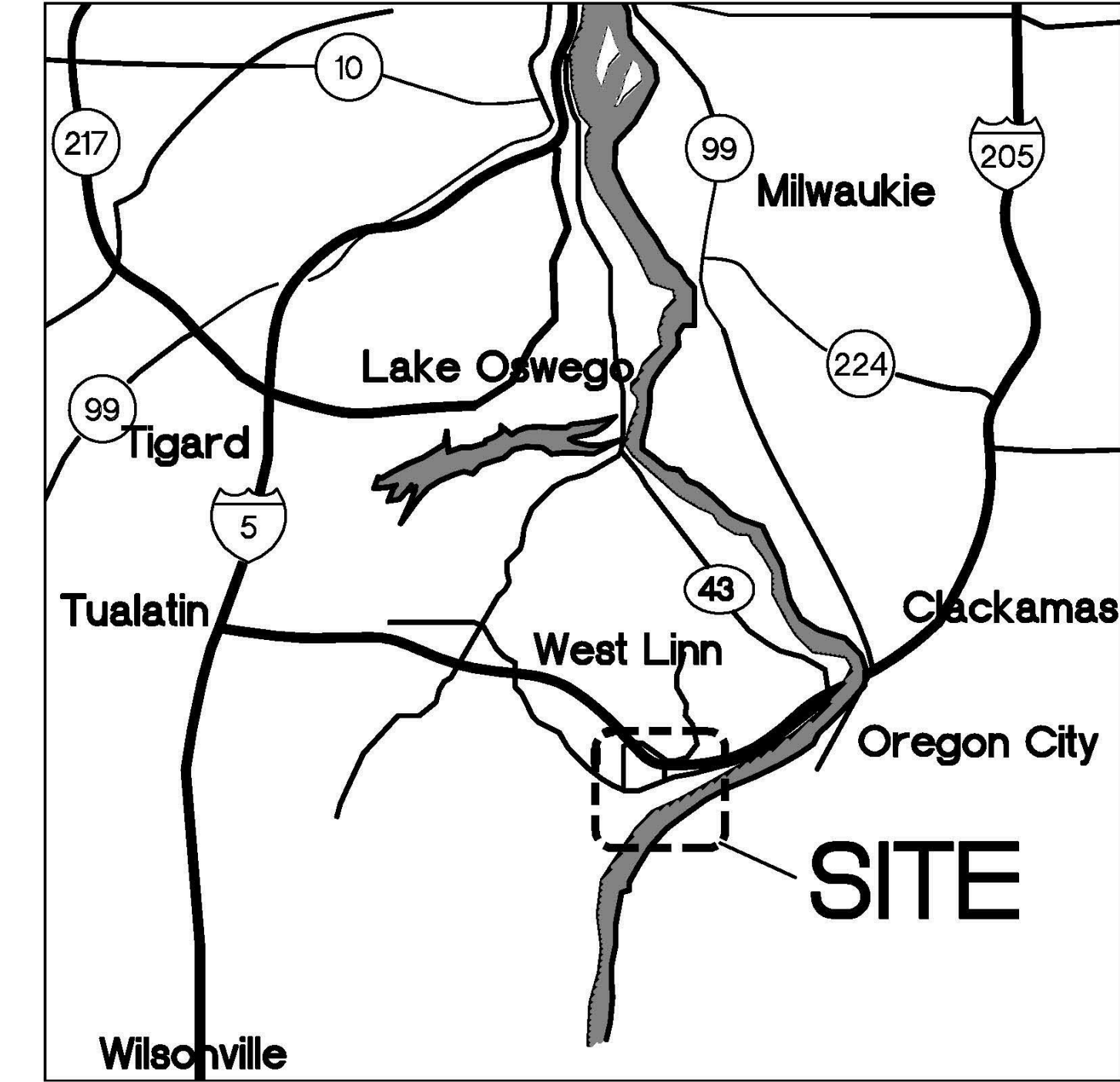
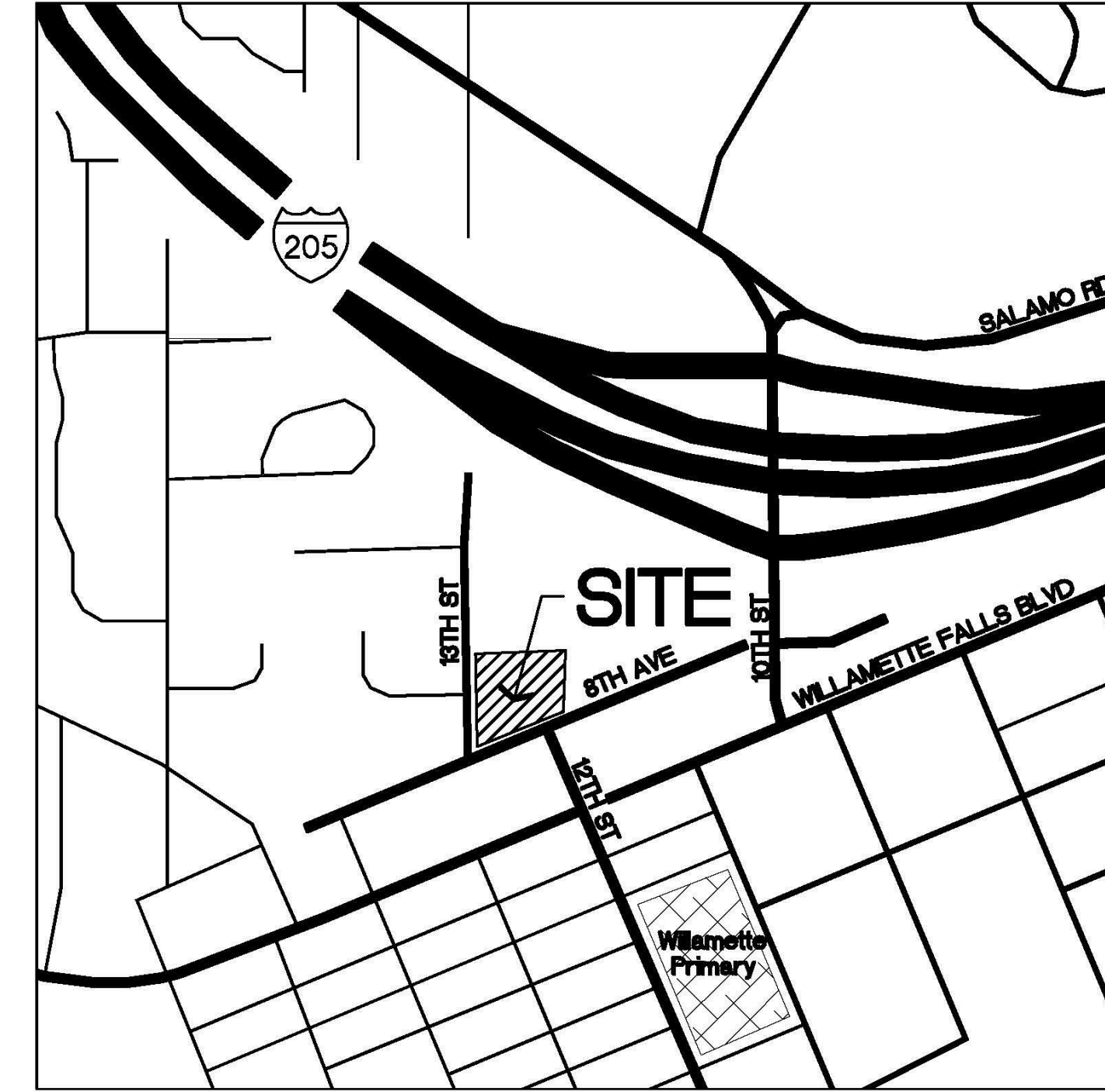
Applicant Name: (please print) Robert Galante, on behalf of the City	Phone: 503 720 3609
Address:	Email: bgalante@westlinnoregon.gov ragalante@comcast.net
City State Zip:	
Owner Name (required): (please print) City of West Linn - Chris Jordan	Phone: 503 657 0331
Address: 22500 Salamo Rd # 1000	Email: CJORDAN@westlinnoregon.gov
City State Zip: West Linn, OR 97068	
Consultant Name: (please print) RHYS KONRAD - GROUP MACKENZIE	Phone: 503-224-9560
Address: 1515 SE WATER AVE, SUITE 100	Email: rkonrad@grpmack.com
City State Zip: PORTLAND, OR 97214	

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.
One (1) complete set of digital application materials must also be submitted on CD in PDF format.
If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

Applicant's signature	Date	Owner's signature (required)	Date
			11/8/2012



GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Civil Engineering
 Structural Engineering
 Transportation Planning
 Landscape Architecture
 Vancouver, WA
 Seattle, WA
 Portland, OR
 503.224.9560
 200.749.9963

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

WEST LINN POLICE DEPARTMENT

ABBREVIATIONS

AB	ANCHOR BOLT	ENGR	ENGINEER	INFO	INFORMATION	R	RADIUS
AC	ASPHALTIC CONCRETE	EOP	EDGE OF PANEL	INSUL	INSULATION	RB	RADIAL
ADJ	ADJACENT/ADJUSTABLE	EPDM	ETHYLENE PROPYLENE	INT	INTERIOR	RBE	RUBBER BASE
ADA	AMERICAN DISABILITY ACT		DIENE MONOMER				ROOF BEARING ELEVATION
ADD'L	ADDITIONAL	EQ	EQUAL	JNT	JOINT	RCP	ROOF DRAIN
ADD	ABOVE FINISH FLOOR	ETC	EPOXY TRAFFIC COATING/ET CETERA	JST	JOIST	RD	REFLECTED CEILING PLAN
AL	ALUMINUM					REF	REFERENCE / REFRIGERATOR
ALT	ALTERNATE	EW	EACH WAY	L	ANGLE	REIN'	REINFORCING
AN	ANGLED	EXE/IST	EXISTING	LAM	LAMINATE	REQ'D	REQUIRED
APPROX	APPROXIMATE	EXP JT	EXPANSION JOINT	LAV	LAVATORY	REV	REVISION
ARCH	ARCHITECT(URAL)	EXT	EXTERIOR	LB	LIVE LOAD	RF	RESILIENT FLOORING
				LLV	LONG LEG VERTICAL	RM	ROOM
B/	BOTTOM OF	F	FLUSH	LLP	LONGITUDINAL	RO	ROUGH OPENING
BATT	BATTEN INSULATION	F/	FACE OF	LP	LOW POINT	ROW	RIGHT OF WAY
BOARD	BOARD	FB	FLAT BAR	LWC	LIGHT WEIGHT CONCRETE	S	STAIN
BLDG	BUILDING	FC	FACE OF CURB	M	MIRROR	SAT	SUSPENDED ACOUSTICAL TILE
BLK	BLOCK	FD	FLOOR DRAIN	M/E/P	MECHANICAL/ELECTRICAL/PLUMBING OR PROCESS	SC	SEALED CONCRETE/SOLID CORE
BLKG	BLOCKING	FDC	FIRE DEPARTMENT CONNECTION	MAS	MASONRY	SCM	SCHEDULE
BM	BENCH MARK/BEAM	FF	FIRE EXTINGUISHER	MATL	MATERIAL	SF	STRUCTURAL CLAY MASONRY
BN	BOUNDARY NAIL	FFI	FACTORY FINISH	MAX	MAXIMUM	SHTG	SQUARE FEET/STORE FRONT
BOTT	BOTTOM	FFE	FINISH FLOOR ELEVATION	MB	MACHINE BOLT	SIM	SHEATHING
BRT PL	BREAST PLATE	FIN	FINISH(FINISHED)	MDF	MEDIUM DENSITY FIBERBOARD	SLV	SIMILAR
BSMT	BASEMENT	FLR	FLOOR	MDO	MEDIUM DENSITY OVERLAY	SMS	SHORT LEG VERTICAL
BTWN	BETWEEN	FOC	FACE OF CONCRETE	MECH	MECHANICAL	SP	SHEET METAL SCREW
CAB	CABINET	FM	FACTORY MUTUAL	MFG	MANUFACTURED	SP(S)	SPACE(D)S
CB	CATCH BASIN	FN	FIELD NAILING	MFR	MANUFACTURER	SPEC(S)	SPECIFICATION(S)
CI	CAST IRON	FOF	FACE OF CONCRETE	MGR	MANAGER	SS	STAINLESS STEEL
CJ	CONTROL JOINT	FOF	FACE OF FINISH	MH	MAN HOLE	ST	STONE
CL	CENTER LINE	FOIC	FURNISH BY OWNER	MH	MAN HOLE	STA PT	STATION POINT
CL/CILING	CEILING	FOIC	INSTALL BY CONTRACTOR	MISC	MISCELLANEOUS	STAGG	STAGGERED
CLR	CLEAR	FOM	FACE OF MASONRY	MK	MARK	STD	STANDARD
CMR	CORRUGATED METAL PIPE	FOS	FACE OF STUD	MTL	METAL	STIFF	STIFFENER
CMU	CONCRETE MASONRY UNIT	FOF	FACE OF FINISH	NFPA	NATIONAL FIRE PROTECTION AGENCY	STL	STEEL
CNTR/CTR	CENTER	FOF	FACE OF FINISH	NIC	NOT IN CONTRACT	STRCT	STRUCTURAL
CO	CLEAR CUT	FOF	FACE OF FINISH	NO.#	NUMBER	SUSP	SUSPENDED
COL	COLUMN	FTG	FOOTING	NOM	NOMINAL	T&B	TOP AND BOTTOM
CONC	CONCRETE	FWC	FABRIC WALL COVERING	NR	NON-RATED	TJ	TOP OF
CONN	CONNECTION	GA	Gauge	NS	NEAR SIDE(D)	TEMP	TEMPERATURE/TEMPORARY
CONST	CONSTRUCTION	GB	GRAB BAR	NTE	NOT TO EXCEED	THK	THICKNESS
CONT	CONTINUOUS	GB	GRAB BAR	NTS	NOT TO SCALE	TL	TOTAL LOAD
CONTR	CONTRACTOR	GALV	GALVANIZED	O/A	OVERALL	TL	TOE NAIL
CORR	CORRUGATED(ION)	GEN	GENERAL	OC	ON CENTER	TO	TOP OF
COORD	COORDINATE	GLB	GLULAM BEAM	OH	OVERHEAD	TOS	TOP OF STEEL
CSP	CONCRETE SEWER PIPE	GR	GRADE	OH/OVHD	OVERHEAD DOOR	TOW	TOP OF WALL
CNTR	CENTER	GRD	GRID ONLY	OPNG	OPENING	TRANSV	TRANSVERSE
CSK	COUNTERSINK	CYP/SD	CYP/SUB BOARD	OS	OPPOSITE	TS	TUBE STEEL
CSP	CONCRETE SEWER PIPE	HOSE BB	HOSE BBS	OS/OF/FACE	OUTSIDE FACE	TU	TILT-UP
CTOP	COUNTERTOP	HC	HOLLOW CORE/HANDICAP	OSSC	OREGON STRUCTURAL SPECIALTY CODE	TYP	TYPICAL
		HDPE	HIGH DENSITY POLYETHYLENE	OTS	OPEN TO STRUCTURE	UIS	UNDERSIDE
DBA	DEFORMED BAR ANCHOR	HDR	HEADER	P	PAINT	UL	UNDERWRITERS LABORATORIES
DBL	DOUBLE	HDWR	HARDWARE	PB	PARTICLE BOARD	UNO	UNLESS NOTED OTHERWISE
DET/DTL	DETAIL	HGR	HOLLOW METAL KNOCKDOWN	PL	PLATE	USG	UNITED STATES GYPSUM
DF	DRINKING FOUNTAIN	HMK	HOLLOW METAL KNOCKDOWN	PLB	PARALLAM BEAM	V	VARIES
DIA	DIAMETER	HMT	HOLLOW METAL WELDED	PLM	PLUMBING	VERT	VERTICAL
DIAFH	DIAPHRAGM	HORIZ	HORIZONTAL	PLYWD	PLYWOOD	VEST	VESTIBULE
DIAM	DIAMETER	HOURS	HOURS	PNL	PANEL	W/	WITH
DN	DOWN	HS	HEADED STUD	PR	PAIR	W/O	WITHOUT
DN	DOWN	HSB	HIGH STRENGTH BOLT	PS	POUR STRIP	WB	WOOD BASE
DR	DOOR	HTG	HEATING	PSF	POUNDS PER SQUARE FEET	WC	WATER CLOSET/WALL COVERING
DS	DOWNSPOUT	HVAC	AIR CONDITIONING	PSI	POUNDS PER SQUARE INCH	WD	WOOD
DWG	DRAWING	HWS	HEATED WELD STUD	PT	PRESSURE TREATED/	WF	WIDE FLANGE
DWLS	DOWELS	IBC	INTERNATIONAL BUILDING CODE	PVC	POLYVINYL CHLORIDE	WH	WATER HEATER
EA/	EACH FACE	IFC	INTERNATIONAL FIRE CODE	PVMT	PAVEMENT	WP	WATER PROOF/WOOD PANELING
EF	EACH FACE	IMC	INTERNATIONAL MECHANICAL CODE			WR	WATER RESISTANT
EIFS	EXTERIOR INSULATION	IPC	INTERNATIONAL PLUMBING CODE			WS	WELDED WIRE FABRIC
ELEV	ELEVATION	ID	INSIDE DIMENSION			WVF	WELDED WIRE FABRIC
ELECT	ELECTRICAL	IE	INVERT ELEVATION			WWM	WELDED WIRE MESH
		IF	INSIDE FACE				

SPECIAL INSPECTIONS

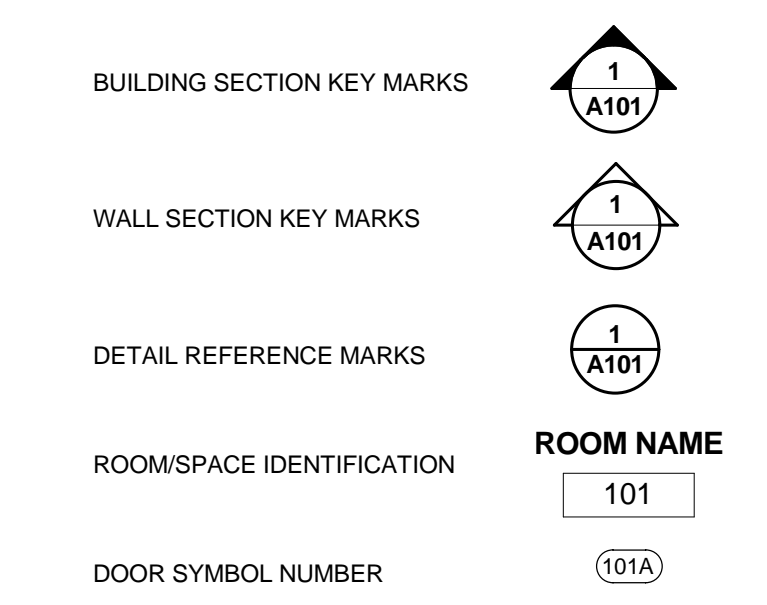
IN ACCORDANCE WITH IBC CHAPTER 17, THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTION. SEE THE SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL REQUIREMENTS FOR INSPECTION AND TESTING.

ITEM PER CHAPTER 17	DESCRIPTION	TYPE
1. CONCRETE	- VERIFY MIX DESIGNS BEING USED - PERFORM STRENGTH AND SLUMP TESTS	CONTINUOUS
2. BOLTS INSTALLED IN CONCRETE	- WEDGE ANCHOR INSTALLATION - ALL EPOXY ANCHORS - ANCHOR BOLTS	PERIODIC
3. REINFORCING STEEL	- REINFORCING STEEL PLACEMENT IN FOUNDATION AND WALLS	PERIODIC
4. WELDING	- ALL FIELD WELDING - ALL SHOP WELDING	PER CHAPTER 17, IBC
5. HIGH-STRENGTH BOLTS	- STRUCTURAL STEEL BOLTED CONNECTIONS PER IBC CHAPTER 22	PER CHAPTER 17, IBC
6. MASONRY WALLS	- REINFORCING & GROUT PLACEMENT - PRISM TEST	LEVEL 2, DCCS 1704.5

SITE INFORMATION

LEGAL DESCRIPTION: 41E0500405
 ADDRESS: 1175 NW 3rd Ave, CANBY, OR 97013

SYMBOLS AND REFERENCES



DRAWING CRITERIA

- ALL DRAWINGS ARE IDENTIFIED BY TWO DIGITS AS FOLLOWS:
- A. CATEGORY LETTER REFERRING TO THE DISCIPLINE OR MAJOR DIVISION.
- T. TITLE SHEET
 - C. CIVIL
 - L. LANDSCAPE
 - A. ARCHITECTURAL
 - S. STRUCTURAL
 - M. MECHANICAL
 - E. ELECTRICAL
 - D. TECHNOLOGY
 - P. PLUMBING
 - G. AGGREGATE PIER
- B. SUB-CATEGORY NUMBER REFERRING TO TYPE OF DRAWING OR GROUPING.
- 1. GENERAL
 - 2. PLANS
 - 3. EXTERIOR ELEVATIONS/BUILDING SECTIONS
 - 4. WALL SECTIONS
 - 5. ENLARGED PLANS AND INTERIOR ELEVATIONS
 - 6. REFLECTED CEILING PLANS
 - 7. STAIR AND ELEVATOR SECTIONS, PLANS, AND DETAILS
 - 8. DETAILS
 - 9. SCHEDULES

DEFERRED SUBMITTALS

- FIRE PROTECTION
- AUTOMATIC FIRE SPRINKLERS
- FIRE ALARM
- FIRE DETECTION
- DESIGN BUILD STAIRS AND RAILINGS
- ATTACHMENT OF MECHANICAL UNIT TO SUPPORT
- CONCRETE MIX DESIGN
- OPEN WEB STEEL JOISTS AND GIRDERS
- STOREFRONT AND CURTAIN WALL SYSTEM DESIGN, AND ATTACHMENT
- SUSPENDED CEILING SYSTEM

CLIENT

CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068
CONTACT: ROBERT GALANTE
 PROJECT MANAGER
 PHONE: 503-720-3609
 FAX: 503-650-9041
 EMAIL: RGalante@westlinnoregon.gov

WEST LINN POLICE DEPARTMENT
 22500 SALAMO ROAD
 WEST LINN, OR 97068
CONTACT: TERRY TIMEUS
 CHIEF OF POLICE
 PHONE: 503-655-6214
 EMAIL: TTimeus@westlinnoregon.gov

ARCH/STRUCT/CIVIL

GROUP MACKENZIE
 RIVEREAST CENTER
 1515 SE WATER AVE #100
 PORTLAND, OREGON 97214
CONTACT: JEFF HUMPHREYS, ARCHITECT
 PHONE: 503-224-9560
 FAX: 503-228-1285
 EMAIL: jhumphreys@grmack.com

M/E/P

INTERFACE ENGINEERING
 708 SW THIRD AVE, SUITE 400
 PORTLAND, OREGON 97204
CONTACT: STEVE DIACUS, PE
 PHONE: 503-382-2286
 FAX: 503-382-2292
 EMAIL: steve_d@ieice.com

LANDSCAPE ARCHITECT

GROUP MACKENZIE
 RIVEREAST CENTER
 1515 SE WATER AVE #100
 PORTLAND, OREGON 97214
CONTACT: ROBIN LAUGHLIN, LANDSCAPE ARCHITECT
 PHONE: 503-224-9560
 FAX: 503-228-1285
 EMAIL: rlaughlin@grmack.com

GENERAL CONTRACTOR

T&B

CONTACT:
 PHONE:
 FAX:
 EMAIL:

INDEX OF DRAWINGS

T1.1	TITLE SHEET AND DRAWING INDEX		
T1.2	CODE ANALYSIS		
CIVIL DRAWINGS			
C1.0	COVER SHEET - CIVIL	M0.1	COVER SHEET - MECHANICAL
C1.1	EXISTING CONDITIONS PLAN	M2.2	ROOF PLAN - MECHANICAL
C1.2	TREE PROTECTION / REMOVAL PLAN	M4.1	AXON VIEWS - MECHANICAL
C2.1	SITE PLAN		
C2.2	SITE GRADING PLAN		
C2.3	SITE UTILITY PLAN		
C2.4	EROSION AND SEDIMENT CONTROL PLAN		
LANDSCAPE DRAWINGS			
L2.1	ENLARGED PLAZA PLAN		
L4.1	LANDSCAPE PLANTING PLAN		
L8.1	IRRIGATION AND PLANTING DETAILS		
ARCHITECTURAL DRAWINGS			
A2.1	BASEMENT AND MAIN FLOOR PLANS		
A2.2	ROOF PLAN		
A3.1	BUILDING ELEVATIONS		
A3.2	BUILDING ELEVATIONS		
		E1.1	SITE PLAN - PHOTOMETRIC LAYOUT

STRUCTURAL DRAWINGS

TECHNOLOGY DRAWINGS

Revision Schedule		
Revision Delta	Issue Date	

SHEET TITLE:
TITLE SHEET AND DRAWING INDEX

DRAWN BY: CPC
 CHECKED BY: BLH
 SHEET

T1.1

JOB NO: **2120180.00**

Client

CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project

WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

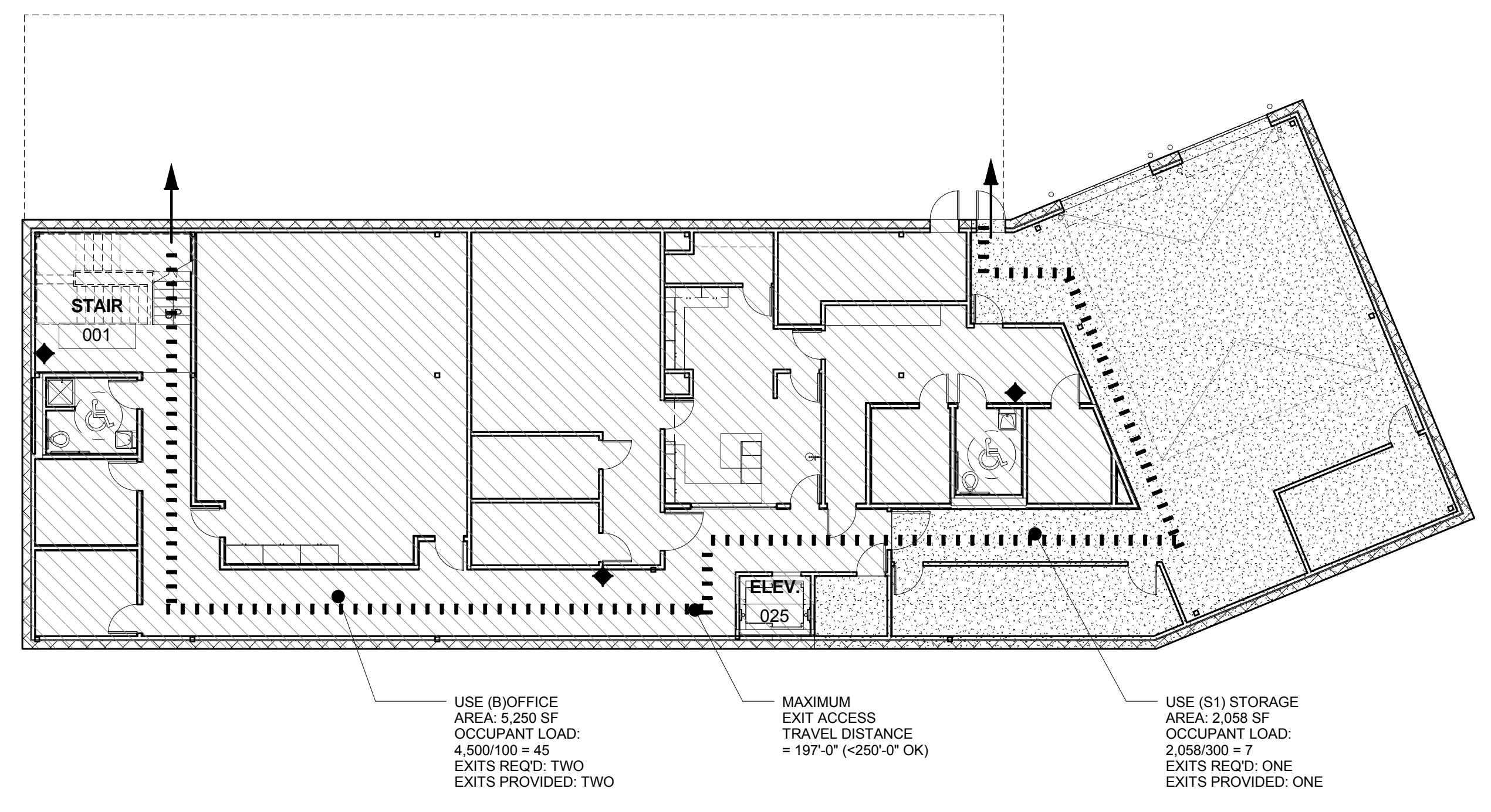
Revision	Delta	Issue Date

SHEET TITLE:
CODE ANALYSIS

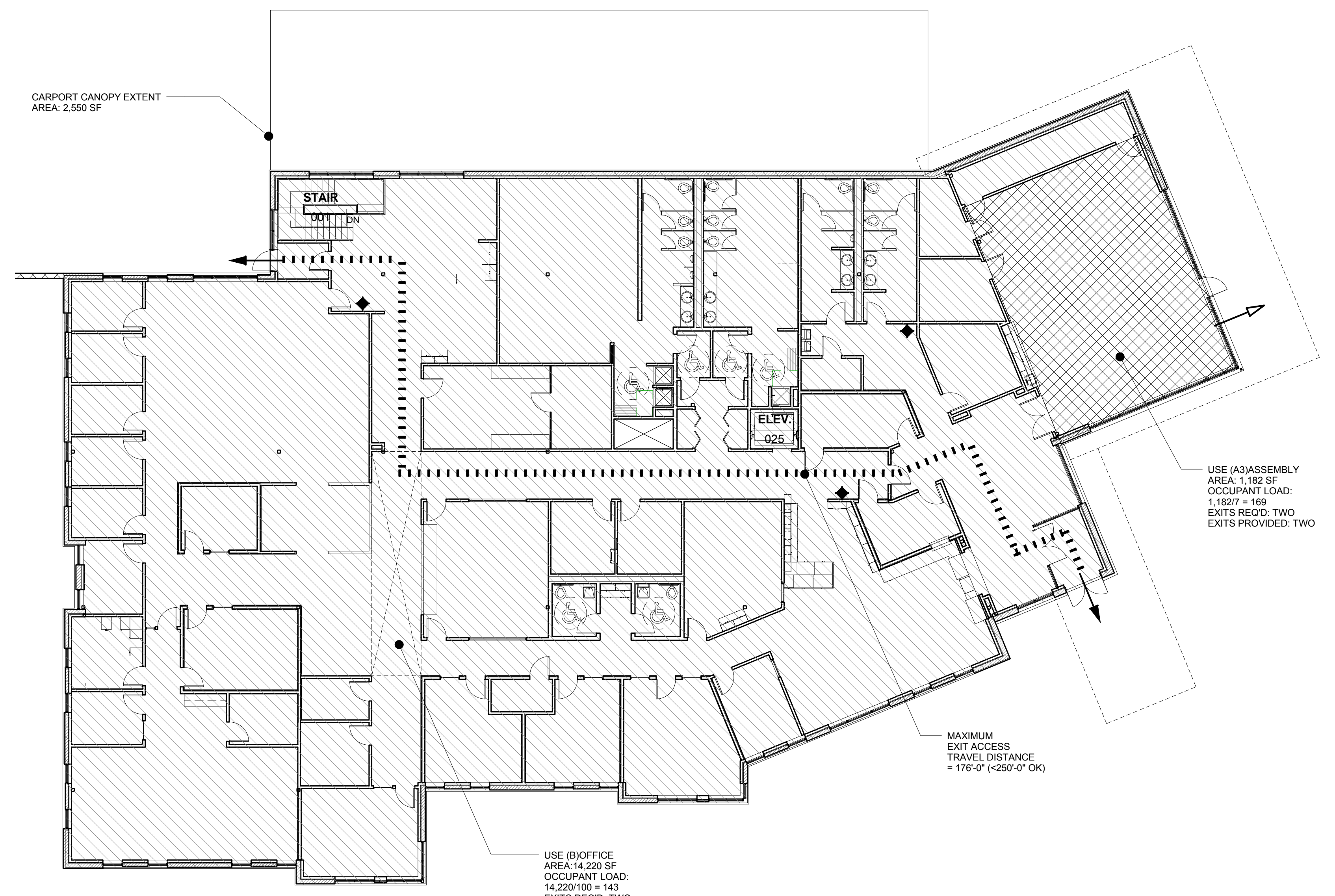
DRAWN BY: BLH
 CHECKED BY: BLH
 SHEET

T1.2

JOB NO. **2120180.00**



2 BASEMENT OCCUPANCY LOAD PLAN
 T1.2 3/32" = 1'-0"



1 FIRST FLOOR OCCUPANT LOAD PLAN
 T1.2 3/32" = 1'-0"

GENERAL NOTES

- A. SEE PLANS AND DETAILS FOR PARTITION TYPE AND CONSTRUCTION
- B. ALL RATE WALLS EXTEND FROM FLOOR TO STRUCTURE ABOVE
- C. SEE INDIVIDUAL FLOOR PLANS FOR ADDITIONAL INFORMATION
- D. THIS ANALYSIS WAS BASED ON 2010 OREGON STRUCTURAL SPECIALTY CODE
- E. SEE ELECTRICAL DRAWINGS FOR EXIT LIGHTING
- F. EMERGENCY POWER PROVIDED BY GENERATOR. SEE ELECTRICAL DRAWINGS

LEGEND

- OFFICE (B)
- SALLY PORT (S-1)
- COMMUNITY ROOM (A-3)
- FIRE EXTINGUISHER LOCATION - CONFIRM EXACT LOCATION WITH FIRE MARSHAL
- PRIMARY EXIT
- SECONDARY EXIT
- PATH OF EGRESS

CODE ANALYSIS

GENERAL CODE ANALYSIS
 BASED ON THE 2010 OSSC (OREGON STRUCTURAL SPECIALTY CODE)
 CONSTRUCTION TYPE: III-B
 TWO STORY (MAIN FLOOR / DAYLIGHT BASEMENT)
 FIRE PROTECTION: AUTOMATIC SPRINKLER SYSTEM PROVIDED THROUGHOUT
 AUTOMATIC SMOKE DETECTION THROUGHOUT (SECTION 9.3.1.1)
 OCCUPANCY: B (POLICE STATION)
 A3 (MULTI-PURPOSE ROOM)
 S1 (SALLY PORT GARAGE)

AREA PROVIDED	SQUARE FEET
BASEMENT FLOOR	7,326 SQ FT
MAIN FLOOR	15,402 SQ FT
TOTAL BUILDING AREA:	22,728 SQ FT
EXTERIOR CANOPY	2,550 SQ FT
TOTAL AREA PROVIDED	25,278 SQ FT

THE BUILDING CONSISTS OF A3, B AND S1 OCCUPANCIES. THE BUILDING HAS BEEN DESIGNED AS THE MOST STRINGENT OCCUPANCY (A3) BASED ON NON-SEPARATED OCCUPANCIES (SECTION 508.3.2)

ALLOWABLE BUILDING AREA FORMULA (SEE SECTION 506.1):
 $A_a = A_1 [A_1] + [A_1^2]$
 $A_a = 9,500 (9,500 \times .75) + (9,500 \times 2)$
 $A_a = 9,500 (7,125) + 19,000$
 $A_a = 35,625 \text{ SF}$

FRONTAGE INCREASE CALCULATION (SEE SECTION 506.2):
 $I_f = [F/P - 0.25] W/30$
 $I_f = [100 - 0.25] 30/30$
 $I_f = 0.75$

AREA DETERMINATION (SEE SECTION 506.4.1):
 $= 35,625 \times 2$
 $= 71,250 \text{ SF} - \text{TOTAL ALLOWABLE BUILDING AREA}$
 22,728 SF - TOTAL BUILDING AREA PROVIDED

PER SECTION 202 & 502.1, BOTH STORIES ABOVE GRADE PLANE

FIRE RESISTIVE RATING FOR EXTERIOR WALL BASED ON FIRE SEPARATION (TABLE 602)
 $\geq 30'$ NR

BUILDING HEIGHT
 ALLOWABLE: 55'-0" / 2 STORY
 PROVIDED: 35'-0" / 2 STORY

BUILDING FIRE RESISTIVE REQUIREMENTS (TABLE 601)	
STRUCTURAL FRAME	NR
EXTERIOR BEARING WALLS	NR
INTERIOR BEARING WALLS	NR
FLOORS	NR
ROOF	NR
SHAFTS (708.4)	NR
STAIRS	NR

CHAPTER 10 - MEANS OF EGRESS SECTION 1003 - GENERAL

- USE - MIXED - SEE PLAN FOR DEFINITION OF AREAS
- OCCUPANT LOAD - TABLE 1004.1.1

MAIN FLOOR

ASSEMBLY - A (A3)	1,182 SF / 7 = 169
TOTAL OCCUPANT LOAD	169
EXITING THROUGH DOORS 103A & 103B	

OFFICE - B

OFFICE - B	14,220 SF / 100 = 143
TOTAL OCCUPANT LOAD	143
EXITING THROUGH DOORS 101A & 144B	

BASEMENT FLOOR

OFFICE - B	5,250 SF / 100 = 53
TOTAL OCCUPANT LOAD	53
EXITING THROUGH DOOR 001A & 020B	

STORAGE - S1

STORAGE - S1	2076 SF / 300 = 7
TOTAL OCCUPANT LOAD	7
EXITING THROUGH DOOR 106D	

TOTAL BUILDING OCCUPIED AREA: 22,728 SF
 TOTAL OCCUPANTS: 372

SECTION 1005 - EXIT WIDTH

- WIDTH REQUIRED PER TABLE 1005.1

MAIN FLOOR - ASSEMBLY:	0.2 x 169 OCCUPANTS = 33.8" REQ'D (36" MIN) 108" PROVIDED AMONG DOORS 103A & 103B
MAIN FLOOR - OFFICE:	0.2 x 143 OCCUPANTS = 28.6" REQ'D (36" MIN) 108" PROVIDED AMONG DOORS 101A & 144B
BASEMENT - OFFICE:	0.2 x 53 OCCUPANTS = 10.6" REQ'D (36" MIN) 72" PROVIDED AMONG DOORS 001A & 020B
BASEMENT - STORAGE:	0.2 x 7 OCCUPANTS = 1.4" REQ'D (36" MIN) 36" PROVIDED AMONG DOOR 106D
STAIR - 001A:	0.3 x 143 OCCUPANTS = 42.9" REQ'D (44" MIN) 48" PROVIDED AMONG STAIR 001

SECTION 1006 - MEANS OF EGRESS ILLUMINATION

- MEANS OF EGRESS ILLUMINATION PROVIDED AT A MINIMUM OF ONE FOOT CANDLE AT PATH OF EGRESS SHOWN ON PLANS. TO MEET SECTION 1006 - SEE ELECTRICAL DRAWINGS

SECTION 1008 - DOORS, GATES, AND TURNSTILES

- DOORS RATED, SIZED AND HARDWARE PROVIDED TO MEET SECTION 1008 SEE INDIVIDUAL FLOOR PLANS AND SPECIFICATIONS.

SECTION 1009 - STAIRWAYS AND HANDRAILS

- WIDTH, ENCLOSURE, RISE AND RUN, AND ALL COMPONENTS OF STAIR TO MEET SECTION 1009 - SEE INDIVIDUAL SHEETS AND SPECIFICATIONS.
- WIDTH REQUIRED: 44"
WIDTH PROVIDED: 48" CLEAR
- FOR RISE AND RUN, LANDINGS, HEADROOM, HANDRAILS, STAIRWAY CONSTRUCTION, AND IDENTIFICATION, SEE SHEET A7.1

SECTION 1011 - EXIT SIGNS

- EXIT SIGNAGE PROVIDED TO MEET SECTION 1011 SEE ELECTRICAL PLANS

SECTION 1014 - EXIT ACCESS

- ALL SPACES EXIT DIRECTLY TO THE EXTERIOR, THROUGH AN ENTRY FOYER OR THROUGH AN INTERVENING ROOM. (SECTION 1014.2)

SECTION 1015.2.1 (EXCEPTION 2) - EXIT AND EXIT ACCESS DOORWAYS

- ALL OTHER ROOMS REQUIRE ONE EXIT, ONE PROVIDED, UNO

SECTION 1016 - EXIT ACCESS TRAVEL DISTANCE

- MAXIMUM TRAVEL DISTANCE = 250'-0" (TABLE 1016.1)

SECTION 1018 - CORRIDORS

- HEIGHT, WIDTH AND CONSTRUCTION TO MEET TABLE 1018.1 SEE INDIVIDUAL SHEETS AND SPECIFICATIONS

SECTION 1021 - NUMBER OF EXITS & CONTINUITY

- MINIMUM 2 EXITS REQUIRED ON BASEMENT FLOOR (TABLE 1021.1)
- MINIMUM 2 EXITS REQUIRED ON MAIN FLOOR (TABLE 1021.1)

PLUMBING FIXTURE CALCULATIONS PER 2010 OREGON STRUCTURAL SPECIALTY CHAPTER 29

ROOM TYPE	SF	OCC GRP	OCC LOAD	WATER CLOSETS		LAVATORIES	
				MEN	WOMEN	MEN	WOMEN
ASSEMBLY SPACES	1162	A3	79	1	3	1	1
BUSINESS OFFICE	19470	B	98	3	3	2	2
STORAGE	2076	S1	1	1	1	1	1
TOTAL REQUIRED	22,728	--	178	5	7	4	4
PROVIDED				8	6	4	4
UNI-SEX PROVIDED				2	2	2	2
TOTAL PROVIDED	--	--	--	10	7	6	6

SECTION 1020 - EXITS

- COMPONENTS AND OPENINGS ARE SHOWN ON THIS SHEET, INDIVIDUAL FLOOR PLANS, AND IN THE SPECIFICATIONS

SECTION 1027 - EXIT DISCHARGE

- ALL EXITS DISCHARGE AT THE GROUND LEVEL - SEE SITE PLANS

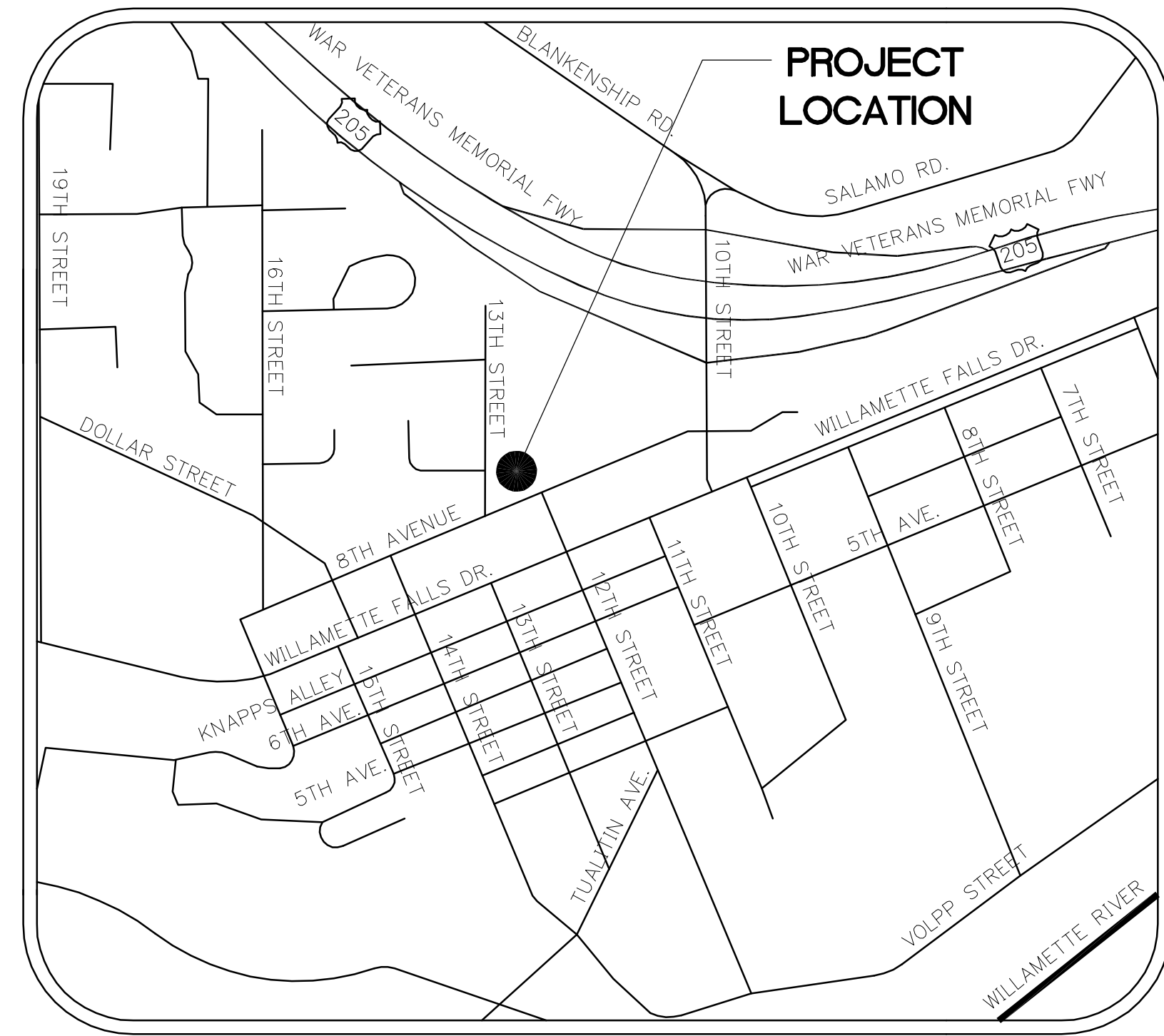
SECTION 1107 - AREA OF RESCUE ASSISTANCE

- AREA OF RESCUE ASSISTANCE NOT REQUIRED. (SECTION 1107.1 EXCEPTION 1)

WEST LINN POLICE STATION

WEST LINN, OREGON

GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Civil Engineering
 Structural Engineering
 Transportation Planning
 Landscape Architecture
 Portland, OR 97204
 Vancouver, WA 98685
 Seattle, WA 98101
 Phone: 503.224.9560
 Phone: 360.695.7879
 Phone: 206.749.9993



VICINITY MAP NOT TO SCALE

OWNERS

CITY OF WEST LINN

22500 SALAMO RD.
 WEST LINN, OR 97068
 PHONE: 503.657.0331
 CONTACT: BOB GALANTE
 BGALANTE@WESTLINNOREGON.GOV

CIVIL ENGINEER

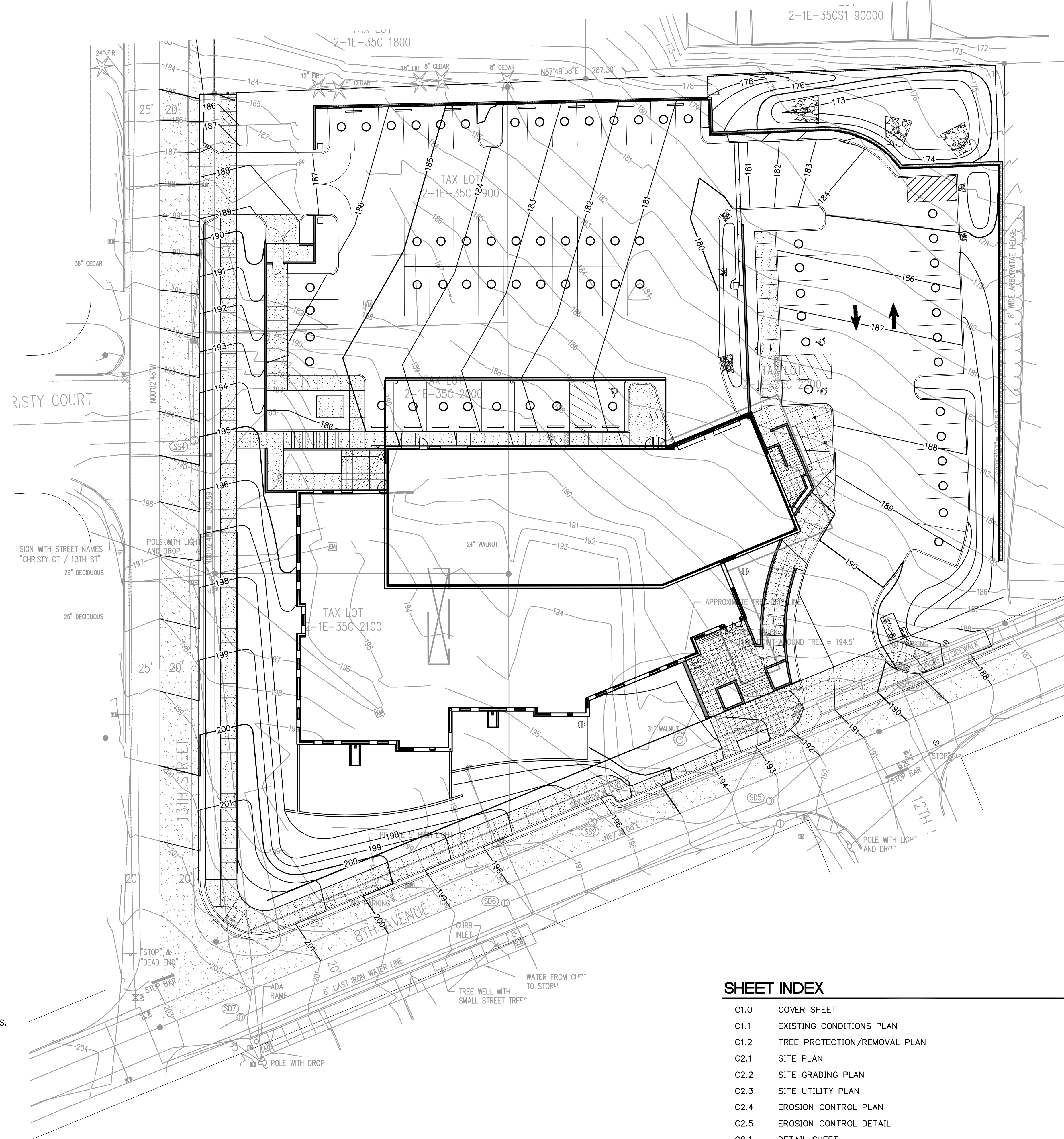
GROUP MACKENZIE

RiverEast Center
 1515 SE Water Avenue, Suite 100
 Portland, Oregon 97214
 P.O. Box 14310
 Portland OR 97293
 Phone: (503) 224-9560
 Fax: (503) 228-1285
 Civil Contact: Bob Frentriss
 rlf@grpmack.com

SURVEYOR

NW SURVEYING

1815 NW 169th Pl Suite 2090
 Beaverton, OR 97006
 Phone: (503) 848-2157
 Surveyor Contact: Clint Stubbs
 clint@nwsrvy.com



SHEET INDEX

C1.0	COVER SHEET
C1.1	EXISTING CONDITIONS PLAN
C1.2	TREE PROTECTION/REMOVAL PLAN
C2.1	SITE PLAN
C2.2	SITE GRADING PLAN
C2.3	SITE UTILITY PLAN
C2.4	EROSION CONTROL PLAN
C2.5	EROSION CONTROL DETAIL
C8.1	DETAIL SHEET
C8.2	DETAIL SHEET

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY OF PORTLAND AND THE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
- THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES LAYING WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDING SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
- EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED TO MEET CITY OF PORTLAND REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- CONTRACTOR SHALL ADJUST ALL STRUCTURES IMPACTED BY CONSTRUCTION IMPROVEMENTS TO NEW FINISH GRADES.
- EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS SEVENTY-TWO (72) HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. (ONE CALL LOCATE UTILITY NOTIFICATION CENTER - PORTLAND METRO AREA 246-6699, OREGON 696-4848, ALL OTHER AREAS 1-800-332-2344).
- WHERE CONNECTING TO AN EXISTING PIPE, AND PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE VERIFY THE LOCATION, SIZE, AND ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- REQUEST BY THE CONTRACTOR FOR CHANGES TO THE PLANS MUST BE APPROVED BY THE ENGINEER.
- ALL EARTHWORK, SITE PREPARATION, EXCAVATION, FILL, SURCHARGE, CUT/FILL SLOPES, FOUNDATION, SUBGRADE, AND PAVEMENT CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AS PREPARED BY GEODESIGN INC. SEE SHEET C2.2 FOR A PARTIAL LIST OF CONSTRUCTION REQUIREMENTS.
- THIS PERMIT INCLUDES ONLY PARTIAL GRADING AND UTILITY INSTALLATION. NO LANDSCAPING, WALLS, BUILDING SHELL OR FOUNDATION IS INCLUDED IN THIS PERMIT. THE SITE WILL BE PREPARED AND GRADED UP TO SUBGRADE PREPARATION, BASE ROCK INSTALLATION AND UTILITY INSTALLATION.

NOTICE TO EXCAVATORS:
 ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
 (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 1-800-332-2344 OR 811.)



UNDERGROUND UTILITY TELEPHONE NUMBERS

NW NATURAL GAS
 M-F 7am-6pm 503-226-4211 Ext.3047
 AFTER HOURS 503-226-4211
 PGE 503-570-4420
 QWEST 1-800-573-1311
 VERIZON 503-643-2016
 COMCAST 503-372-1384

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

© GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION.

REVISIONS:

REVISION	DATE	REVISION	DELTA	CLOSING DATE

SHEET TITLE:
COVER SHEET

DRAWN BY: MH

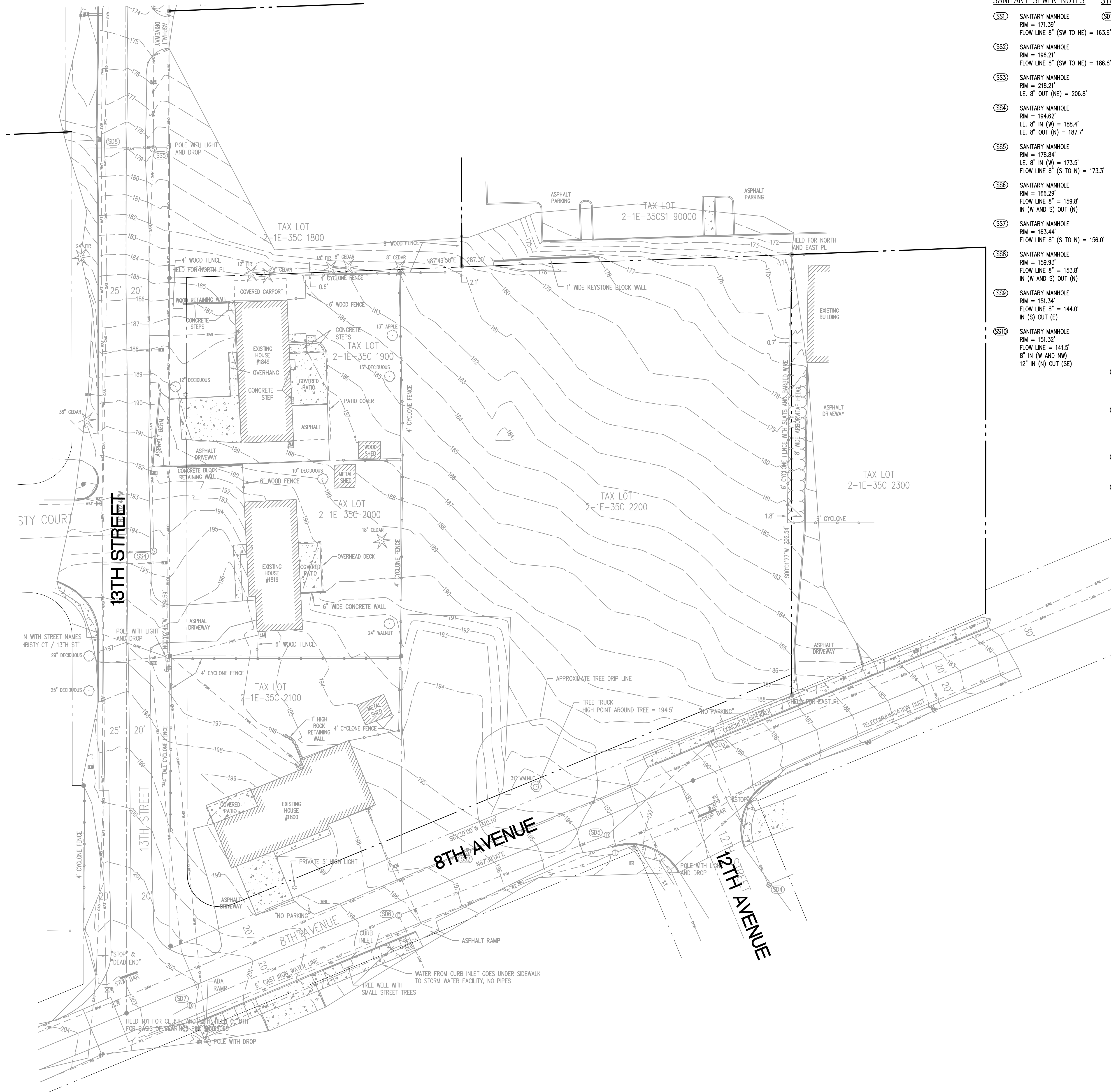
CHECKED BY: RLF

SHEET

C1.0

JOB NO. **2120180.00**

LAND-USE: 11/09/2012



- SANITARY SEWER NOTES**
- SS1 SANITARY MANHOLE
RIM = 171.39'
FLOW LINE 8" (SW TO NE) = 163.6'
 - SS2 SANITARY MANHOLE
RIM = 196.21'
FLOW LINE 8" (SW TO NE) = 186.8'
 - SS3 SANITARY MANHOLE
RIM = 218.21'
I.E. 8" OUT (NE) = 206.8'
 - SS4 SANITARY MANHOLE
RIM = 194.62'
I.E. 8" IN (W) = 188.4'
I.E. 8" OUT (N) = 187.7'
 - SS5 SANITARY MANHOLE
RIM = 178.84'
I.E. 8" IN (W) = 173.5'
FLOW LINE 8" (S TO N) = 173.3'
 - SS6 SANITARY MANHOLE
RIM = 166.29'
FLOW LINE 8" = 159.8'
IN (W AND S) OUT (N)
 - SS7 SANITARY MANHOLE
RIM = 163.44'
FLOW LINE 8" (S TO N) = 156.0'
 - SS8 SANITARY MANHOLE
RIM = 159.93'
FLOW LINE 8" = 153.8'
IN (W AND S) OUT (N)
 - SS9 SANITARY MANHOLE
RIM = 151.34'
FLOW LINE 8" = 144.0'
IN (S) OUT (E)
 - SS10 SANITARY MANHOLE
RIM = 151.32'
FLOW LINE = 141.5'
8" IN (W AND NW)
12" IN (N) OUT (SE)

- STORM DRAINAGE NOTES**
- SD1 CATCH BASIN
RIM = 175.03'
I.E. 12" PVC OUT (SE) = 173.0'
 - SD2 STORM MANHOLE
RIM = 174.88'
I.E. 12" DIP IN (SW) = 171.5'
I.E. 12" PVC IN (NW) = 171.5'
I.E. 15" PVC OUT (NE) = 168.9'
 - SD3 COMBINATION CURB INLET
RIM = 190.21'
TOP OF GRATE = 189.41'
I.E. 12" PVC IN (SW AND SE) = 186.9'
I.E. 12" DIP OUT (NE) = 186.8'
 - SD4 COMBINATION CURB INLET
RIM = 191.11'
TOP OF GRATE = 190.51'
I.E. 10" PVC IN (E) = 188.7'
I.E. 12" PVC OUT (NW) = 188.3'
 - SD5 MANHOLE
RIM = 193.19'
FLOW LINE 12" PVC = 188.7'
IN (SW) OUT (NE)
 - SD6 MANHOLE
RIM = 198.25'
I.E. 8" PVC IN (SE) = 195.5'
I.E. 12" PVC IN (SW) = 193.5'
I.E. 12" PVC OUT (NE) = 193.3'
 - SD7 MANHOLE
RIM = 202.10'
I.E. 12" PVC IN (SW) = 197.2' (STUB OUT)
I.E. 12" PVC OUT (NE) = 197.0'
 - SD8 SMALL CATCH BASIN
TOP OF GRATE = 178.07'
I.E. 12" CONC. OUT (W) = 176.1'
 - SD9 SMALL CATCH BASIN
TOP OF GRATE = 167.17'
I.E. 12" CONC. OUT (NW) = 165.2'
 - SD10 MANHOLE
RIM = 166.91'
FLOW LINE 12" = 164.7'
IN (SE AND W) OUT (N)
 - SD11 CATCH BASIN
TOP OF GRATE = 159.22'
I.E. 12" IN (S) = 156.6'
I.E. 12" IN (W) = 156.7'
I.E. 12" OUT (N) = 156.5'
 - SD12 SMALL CATCH BASIN
TOP OF GRATE = 159.43'
I.E. 8" OUT (N) = 158.2'
 - SD13 CATCH BASIN
TOP OF GRATE = 155.64'
I.E. 12" IN (S) = 153.9'
I.E. 12" OUT (N) = 153.8'

LEGEND

DECIDUOUS TREE	EXISTING	STORM SEWER CLEAN OUT	EXISTING
CONIFEROUS TREE	EXISTING	STORM SEWER CATCH BASIN	EXISTING
FIRE HYDRANT	EXISTING	STORM SEWER MANHOLE	EXISTING
FIRE DEPARTMENT CONNECTION	EXISTING	GAS METER	EXISTING
WATER BLOWOFF	EXISTING	GAS VALVE	EXISTING
WATER METER	EXISTING	GUY WIRE ANCHOR	EXISTING
WATER VALVE	EXISTING	UTILITY POLE	EXISTING
DOUBLE CHECK VALVE	EXISTING	POWER VAULT	EXISTING
SANITARY SEWER CLEAN OUT	EXISTING	POWER JUNCTION BOX	EXISTING
SANITARY SEWER MANHOLE	EXISTING	POWER RISER	EXISTING
SIGN	EXISTING	ELECTRICAL METER	EXISTING
STREET LIGHT	EXISTING	TELEPHONE/TELEVISION MANHOLE	EXISTING
MAILBOX	EXISTING	TELEPHONE/TELEVISION JUNCTION BOX	EXISTING
BOUNDARY LINE	EXISTING	TELEPHONE/TELEVISION RISER	EXISTING
PROPERTY LINE	EXISTING	STREET LIGHT JUNCTION BOX	EXISTING
CENTERLINE	EXISTING	FOUND PROPERTY CORNER MONUMENT	EXISTING
DITCH	EXISTING		
CURB	EXISTING		
EDGE OF PAVEMENT	EXISTING		
EASEMENT	EXISTING		
FENCE LINE	EXISTING		
GRAVEL EDGE	EXISTING		
POWER LINE	EXISTING		
OVERHEAD WIRE	EXISTING		
TELEPHONE LINE	EXISTING		
TELEVISION LINE	EXISTING		
GAS LINE	EXISTING		
STORM SEWER LINE	EXISTING		
SANITARY SEWER LINE	EXISTING		
WATER LINE	EXISTING		

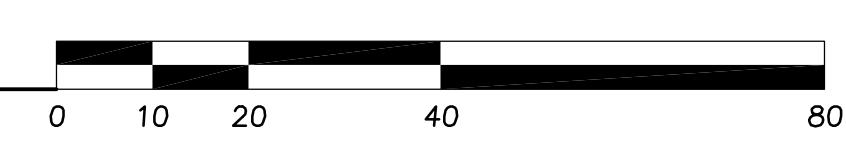
FIELD NOTES

- FIELD WORK WAS COMPLETED ON AUGUST 1, 2012.
- THE BASIS OF BEARINGS FOR THE SURVEY IS THE CENTERLINE OF 8TH AVENUE HOLDING THE FOUND MONUMENTS AND THE BEARING FROM THE PLAT OF WILLAMETTE TRACTS.
- ELEVATIONS ARE BASED ON AN OREGON STATE HIGHWAY DEPARTMENT REFERENCE POINT. THE POINT IS MARKED BY A BRASS DISK STAMPED "EPP 7 1983". IT IS LOCATED APPROXIMATELY 16 FEET SOUTH OF THE DRIVEWAY FOR THE HOUSE LOCATED AT 1935 HILL HOUSE DRIVE. THE BENCHMARK HAS A PUBLISHED NAVD 88 ELEVATION OF 259 FEET.
- THE UNDERGROUND UTILITIES ARE BASED ON THE MARKINGS PER LOCATE TICKET NUMBER 12140092.
- THE INTERIOR PROPERTY LINES BETWEEN TAX LOTS 1900, 2000, 2100 AND 2200 ARE APPROXIMATE AND SHOWN ONLY FOR REFERENCE.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

1
C11 EXISTING CONDITIONS PLAN
1" = 20'



GROUP MACKENZIE
Architecture
Interior Design
Land Use Planning
Civil Engineering
Structural Engineering
Transportation Planning
Landscape Architecture
Portland, OR
Vancouver, WA
Seattle, WA
206.749.8989
360.695.7879
503.224.9560

Client
CITY OF WEST LINN
22500 SALAMON ROAD
WEST LINN, OR 97088



Project
WEST LINN POLICE DEPARTMENT
1800 8TH AVENUE
WEST LINN, OR 97088

© GROUP MACKENZIE 2012
ALL RIGHTS RESERVED
THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION.

REVISIONS:

REVISION	DATE	REVISION	DATE

SHEET TITLE:
EXISTING CONDITIONS PLAN






DRAWN BY: MH
CHECKED BY: RLF
SHEET

C11

JOB NO. 2120180.00

LAND-USE: 11/09/2012

LEGEND

-  PROPERTY LINE
-  TREE TO REMAIN
-  TREE TO BE REMOVED
-  TREE PROTECTION FENCING
-  0.5' RADIUS FOR EVERY 1" TREE DIAMETER
ALL WORK WITHIN THIS AREA SHALL BE COORDINATED WITH ARBORIST (TPZ TREE PROTECTION ZONE)

TREE PROTECTION MEASURES
UNLESS OTHERWISE INDICATED FOR REMOVAL ALL TREES SHALL RECEIVE PROTECTIVE MEASURES FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH THE CITY OF WEST LINN REQUIREMENTS.

6' HIGH MINIMUM CHAIN LINK CONSTRUCTION FENCING, WITH 2" DIA. POSTS DRIVEN INTO THE GROUND A MINIMUM OF 2'. GALVANIZED IRON POSTS SHALL HAVE A MAXIMUM OF 10' SPACING AND SHALL BE MAINTAINED. FENCING SHALL COMPLETELY SURROUND AT MINIMUM THE TREE DRIP LINE FOR EACH TREE OR GROUP OF EXISTING TREES, OR AS SHOWN ON PLAN.

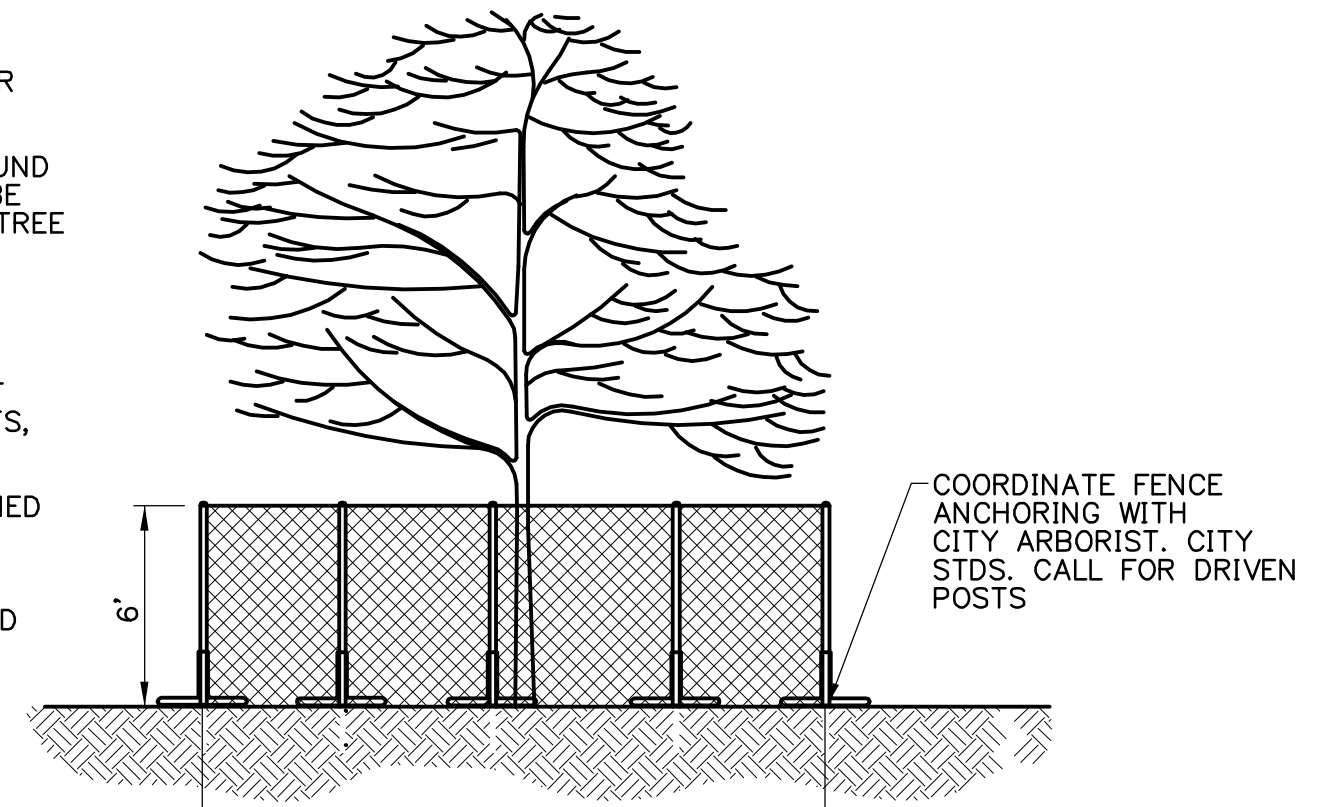
IN AREAS WHERE ROOT ZONE ENCROACHMENT IS UNAVOIDABLE A CERTIFIED ARBORIST SHALL DESIGNATE THE FENCING LOCATION PRIOR TO START OF WORK.

NO ACTIVITY MAY BE CONDUCTED WITHIN ANY DESIGNATED TREE PROTECTION AREA INCLUDING BUT NOT LIMITED TO PARKING EQUIPMENT, PLACING SOLVENTS, STORING MATERIALS AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT, OR OTHER DEBRIS, OR ANY EXCAVATION OR COMPACTION WORK.

DURING CONSTRUCTION NO OBJECTS SHALL BE ATTACHED TO ANY TREE DESIGNATED TO BE RETAINED AND PROTECTED.

MULCH COVER TO MINIMUM DEPTH OF 6", PLYWOOD, OR OTHER SIMILAR MATERIAL REQUIRED AT AREAS ADJOINING DESIGNATED TREE PROTECTION AREAS TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT. COORDINATE PLACEMENTS AND LOCATION WITH LANDSCAPE ARCHITECT.

PROTECTION FENCE SHALL BE MAINTAINED IN PLACE UNTIL REMOVAL IS AUTHORIZED BY CITY OR UNTIL A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED.

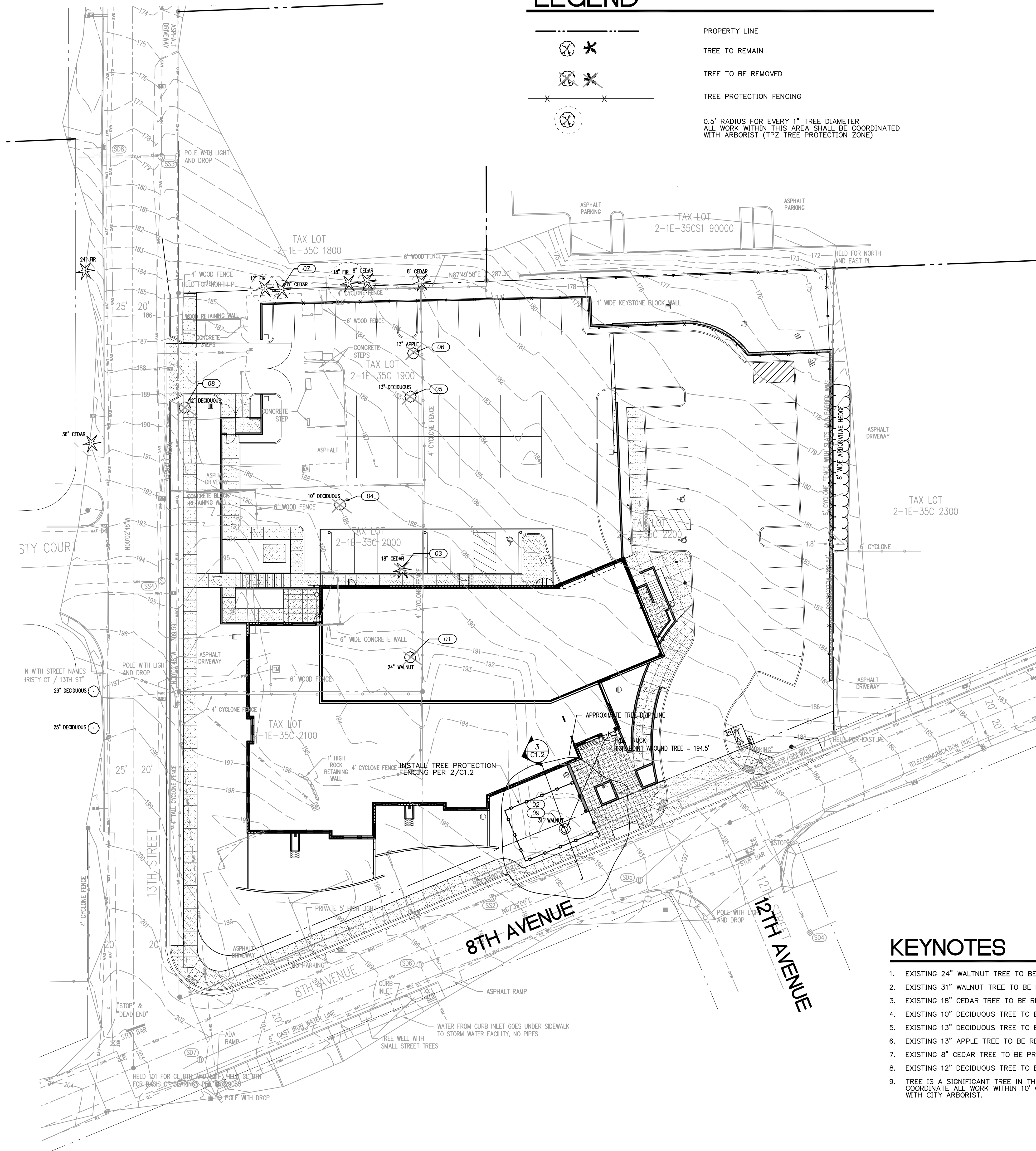


EXCAVATION / TRENCHING AROUND TREES
PROPOSED TRENCHING AND EXCAVATION AROUND TREES SHALL BE COORDINATED WITH THE CITY OF WEST LINN'S ARBORIST.

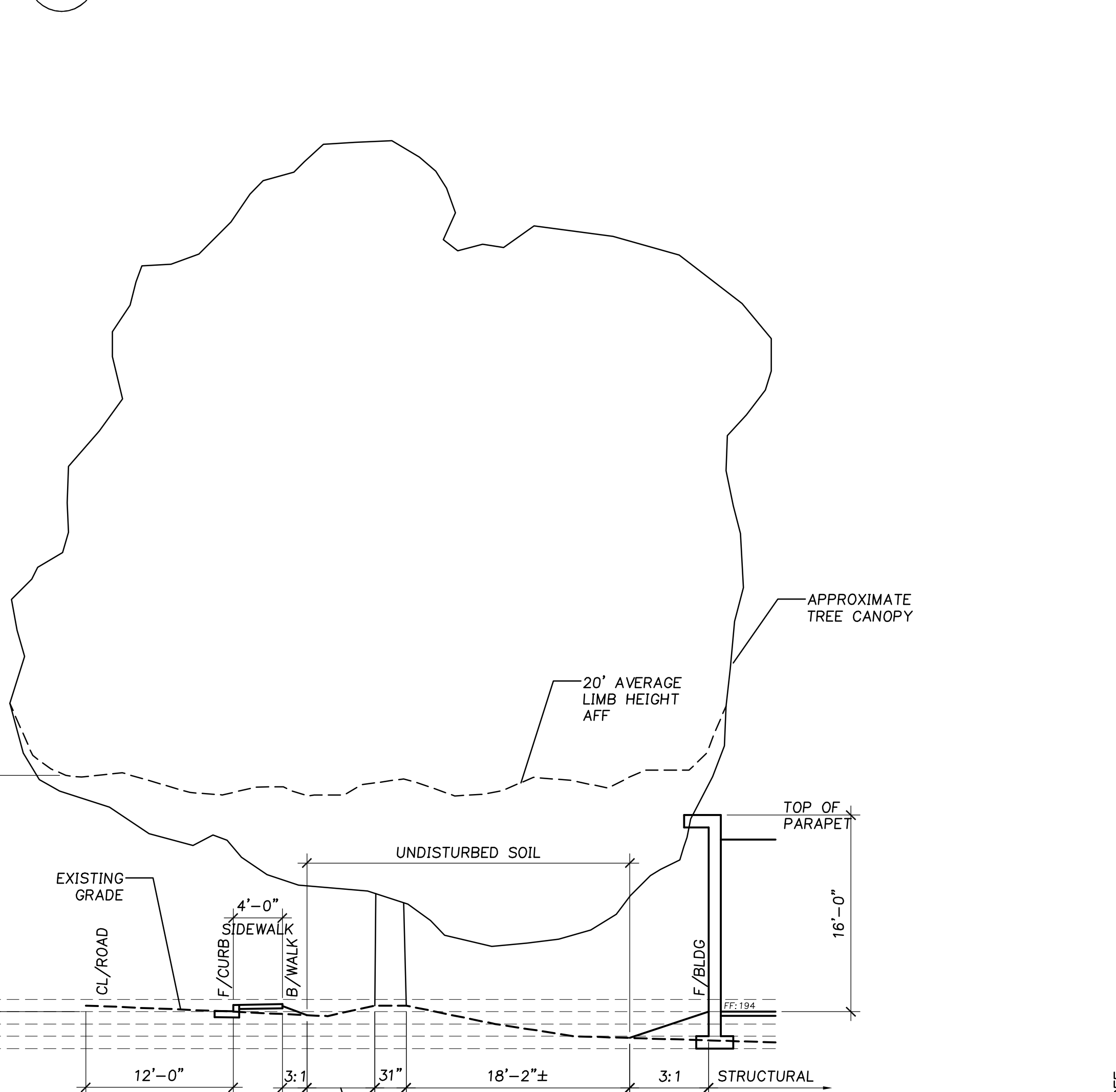
WHERE TRENCHING IS REQUIRED WITHIN CRITICAL ROOT ZONE, TUNNEL UNDER OR AROUND ROOTS BY HAND DIGGING OR BORING. DO NOT CUT MAIN LATERAL ROOTS OR TAP ROOTS. CLEANLY CUT/SEVER SMALLER ROOTS.

RELOCATE ROOTS IN BACKFILL AREAS WHEREVER POSSIBLE. DO NOT ALLOW EXPOSED ROOTS TO DRY OUT BEFORE PERMANENT BACKFILL IS PLACED, PROVIDE TEMPORARY EARTH COVER, OR PACK WITH PEAT MOSS AND WRAP WITH BURLAP. WATER AND MAINTAIN IN MOIST CONDITION UNTIL RELOCATED AND COVERED WITH BACKFILL.

NOTES:
TEMPORARY FENCE SHALL BE 6' IN HEIGHT AND SET AS SHOWN.
CITY SHALL APPROVE INSTALLED TREE PROTECTION FENCING PRIOR TO ON-SITE GRADING ACTIVITIES.
FENCE MATERIALS SHALL CONSIST OF CHAIN LINK CONSTRUCTION FENCING SECURED TO GALVANIZED IRON POSTS.
FENCE SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF CONSTRUCTION ACTIVITIES. MOVEMENT OR REMOVAL OF FENCE REQUIRES APPROVAL BY CITY'S AUTHORIZED REPRESENTATIVE.



2 TREE PROTECTION



3 SECTION AT EXISTING TREE

KEYNOTES

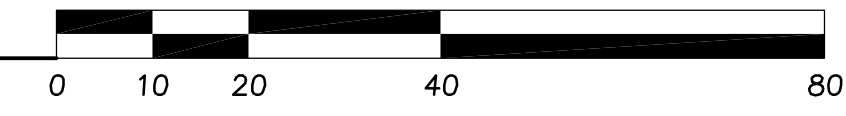
1. EXISTING 24" WALNUT TREE TO BE REMOVED
2. EXISTING 31" WALNUT TREE TO BE PROTECTED
3. EXISTING 18" CEDAR TREE TO BE REMOVED
4. EXISTING 10" DECIDUOUS TREE TO BE REMOVED
5. EXISTING 13" DECIDUOUS TREE TO BE REMOVED
6. EXISTING 13" APPLE TREE TO BE REMOVED
7. EXISTING 8" CEDAR TREE TO BE PROTECTED
8. EXISTING 12" DECIDUOUS TREE TO BE REMOVED
9. TREE IS A SIGNIFICANT TREE IN THE CITY OF WEST LINN COORDINATE ALL WORK WITHIN 10' OF DRIP LINE WITH CITY ARBORIST.

SIGNIFICANT TREE NOTES

1. SPECIAL ACTIVITY WITHIN THE TREE PROTECTION ZONE: WORK IN THIS AREA (TPZ REQUIRES THE DIRECT ON-SITE SUPERVISION OF THE CITY ARBORIST.)
2. ALL WORK SHALL COMPLY WITH THE APPLICABLE PORTIONS OF THE CITY OF WEST LINN TREE ORDINANCE (8.500-8.798) AND ANY REQUIREMENTS OF THE SPECIFIC LAND USE APPROVAL FOR THE PROJECT
3. PRIOR TO CONSTRUCTION, THE TREE SHALL BE PRUNED, FERTILIZED, RECEIVE MYCORRHIZAE TREATMENTS OR OTHER BENEFICIAL TREATMENTS TO BEST PRESERVE THE HEALTH AND CHARACTER OF THE TREE. THIS WORK TO BE COMPLETED BY A CERTIFIED ARBORIST.
4. A CERTIFIED ARBORIST SHALL BE AVAILABLE TO PROVIDE ADVICE THROUGHOUT THE DURATION OF THE PROJECT.
5. NO STORAGE OF MATERIAL, TOPSOIL, VEHICLES, OR EQUIPMENT SHALL BE PERMITTED WITHIN THE FENCED AREA THROUGHOUT THE DURATION OF THE PROJECT.
6. IF THE FENCING MUST BE BREACHED FOR PERIODS OF TIME DURING CONSTRUCTION, A PROTECTIVE ROOT BUFFER OF WOOD CHIPS, PLYWOOD, RUBBER MATS, OR OTHER MEASURES APPROVED BY THE ARBORIST SHALL BE UTILIZED. THE BUFFER MATERIAL SHALL BE REMOVED FOLLOWING AS SOON AS THE FENCING CAN BE RE-ESTABLISHED.
7. ROOT ZONE MOISTURE SHALL BE PRESERVED BY MULCHING AND WATERING AS DETERMINED BY THE ARBORIST.
8. ROOTS CUT OUTSIDE THE TREE PROTECTION ZONE SHALL BE CUT CLEANLY TO SOUND WOOD AND FLUSH WITH ANY EXCAVATION. THE EXCAVATIONS SHALL BE BACKFILLED IMMEDIATELY FOLLOWING THE WORK ACTIVITY. WHEN ROOTS OVER 3" IN DIAMETER ARE ENCOUNTERED THE ARBORIST SHALL BE CONSULTED PRIOR TO CUTTING.
9. TUNNELING 3' UNDER THE ROOT ZONE SHALL BE ALLOWED FOR UTILITIES AND ON-SITE STORM DRAINAGE, IF NO OTHER LOCATION OUTSIDE THE ROOT ZONE IS AVAILABLE.

1 TREE PROTECTION/REMOVAL PLAN

C12 1" = 20'

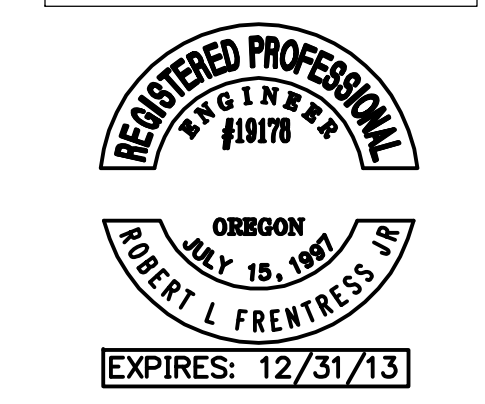


GROUP MACKENZIE
Architecture
Interior Design
Land Use Planning
Civil Engineering
Structural Engineering
Transportation Planning
Landscape Architecture
Portland OR 503.224.9560
Vancouver WA 360.695.7879
Seattle WA 206.749.8989

Client
CITY OF WEST LINN
22500 SALAMO ROAD
WEST LINN, OR 97088



Project
WEST LINN POLICE DEPARTMENT
1800 8TH AVENUE
WEST LINN, OR 97088



GROUP MACKENZIE 2012
ALL RIGHTS RESERVED
THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION.

REVISIONS:

NO.	REVISIONS	REVISION DATE	DELTA	CLOSING DATE

SHEET TITLE:
TREE PROTECTION/REMOVAL PLAN

DRAWN BY:
CHECKED BY: RLF
SHEET

C12

JOB NO. 2120180.00

LAND-USE: 11/09/2012



KEYNOTES

1. PROPOSED CONCRETE VERTICAL CURB,
2. PROPOSED VERTICAL CURB AND GUTTER
3. 4" WHITE PARKING STRIPE, 2 COATS TYP.
4. PROPERTY LINE
5. ADA COMPLIANT PARKING STALL,
6. ADA COMPLIANT CURB RAMP,
7. ADA 12:1 CURB RAMP
8. ADA COMPLIANT PARKING SIGN WITH VAN-ACCESSIBLE SIGN
9. NOT USED
10. NOT USED
11. LANDSCAPE AREA
12. MATCH EXISTING CURB
13. EDGE OF ASPHALT PAVEMENT
14. GENERATOR PAD
15. CONCRETE DRIVEWAY
16. CANOPY SUPPORT (REFER TO ARCHITECTURAL PLANS)
17. CURB BREAK
18. TAPER CURB
19. CONSTRUCT 6" PUBLIC SIDEWALK (MATCH EXISTING). NOTE: SIDEWALK WIDTHS VARIABLE ON SITE, REFER TO PLANS
20. 33" WALNUT TREE TO REMAIN
21. 8' HIGH DOUBLE-LEAF BLACK VINYL CHAIN LINK ACCESS GATE W/ BLACK SLATS,
22. EXISTING LIGHT POLE AND LUMINAIRE TO REMAIN
23. CONCRETE STAIR ON GRADE,
24. PRECAST CONCRETE CURB STOP,
25. STORM WATER QUALITY AND DETENTION POND,
26. ADA COMPLIANT PARKING SIGN,
27. MODULAR BLOCK WITH BLACK VINYL-COATED 8' CHAIN LINK FENCE,
28. BLACK VINYL-COATED 8' CHAIN LINK FENCE,
29. 8' CHAIN-LINK GATE ACCESS
30. 8' CHAIN-LINK BLACK VINYL ROLLING ACCESS GATE W/ SLATS,
31. MATCH EXISTING CONCRETE WALK
32. EXISTING LIGHT POLE AND LUMINAIRE TO BE RELOCATED
33. AREA DRAIN,
34. DOWN SPOUT, SEE DETAIL
35. 18" WIDE 5" THICK CONCRETE STRIP FOR ROLLING GATE
36. 4" WIDE STRIPE AT 2' O.C. FOR TURNAROUND
37. LITTER RECEPTACLE
38. CONCRETE SITE RETAINING WALL W/ 6' SITE OBSCURING FENCE
39. CMU SITE WALL WITH BRICK ACCENT
40. VISION TRIANGLE
41. NOT USED
42. TRASH ENCLOSURE W/ MIN. 4" CONCRETE FLOOR
43. FOUR BICYCLE SPACES (TOTAL)
44. NOT USED
45. DRIP LINE OF WALNUT TREE
46. ADA RAMP
47. FDC
48. FIRE VAULT
49. WATER METER
50. PROPOSED FIRE HYDRANT

SITE LEGEND

- SITE WALL, CMU WITH BRICK ACCENT
- SITE CONCRETE RETAINING WALL
- MODULAR BLOCK RETAINING WALL
- EXISTING PROPERTY LINE
- 6" VERTICAL CURB PER DETAIL 1/C8.1
- CATCH BASIN
- FIRE HYDRANT
- WATER METER
- DDCV
- FDC
- STANDARD COMPACT PARKING STALL
- ASPHALT CONCRETE PAVEMENT PER GEOTECHNICAL RECOMMENDATIONS
ALTERNATE PRICING TO REPLACE ASPHALT WITH PERVIOUS CONCRETE.
6" OF CONCRETE OVER 12" ROCK, MIN.

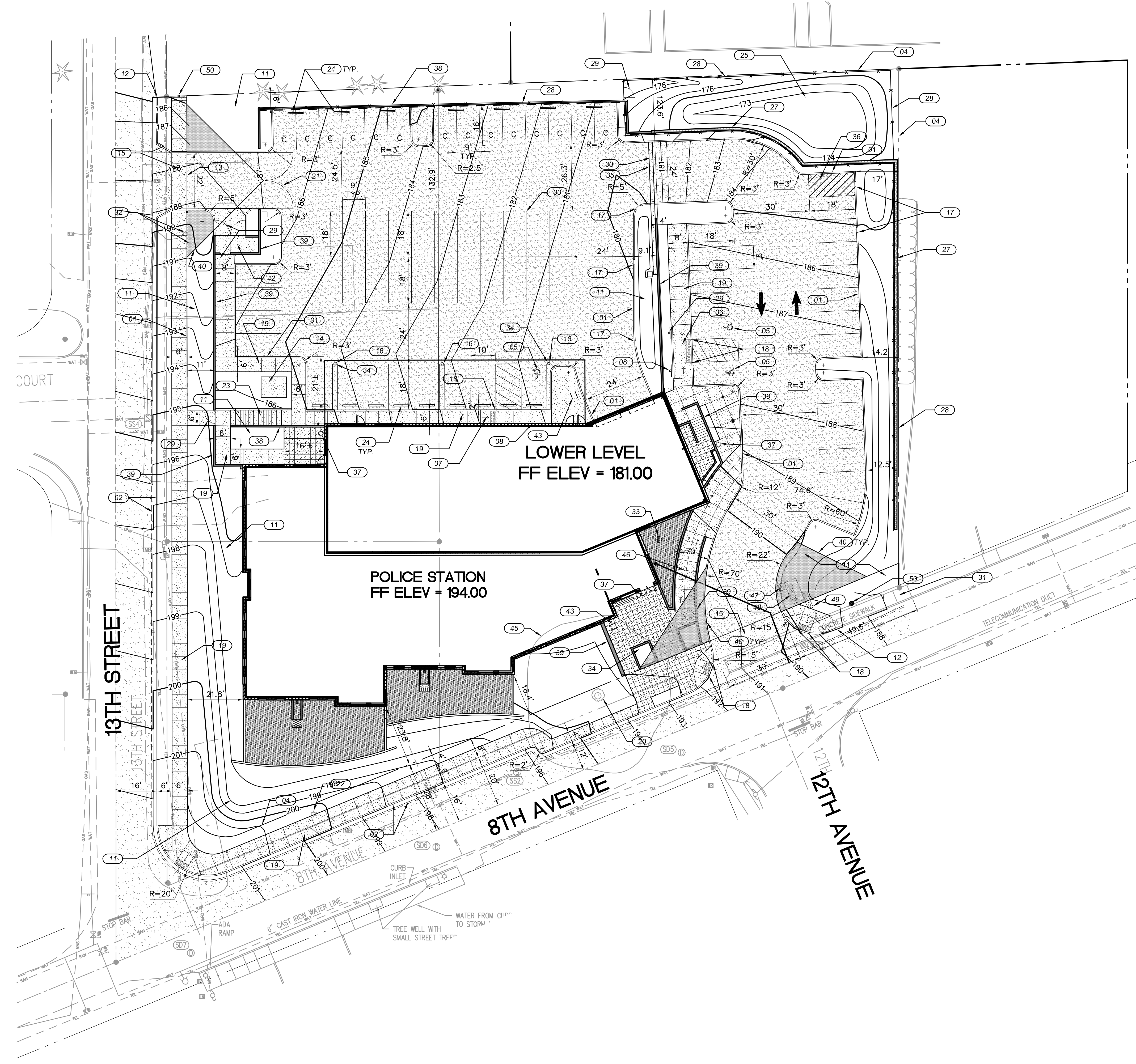
TOTAL SITE PARKING

BUILDING AREA	21,959 SF		
PROPOSED STANDARD	48 SPACES	(74%)	
PROPOSED COMPACT	14 SPACES	(22%)	
PROPOSED HANDICAP	3 SPACES	(4%)	
TOTAL PARKING PROVIDED	65 SPACES	(2.96/1,000 SF)	
PARKING AREA	23,352 SF		
PARKING LANDSCAPE AREA	3,564 SF	(15.3%)	

SITE INFORMATION

NET SITE AREA	68,497 SF	(1.57 AC)	(100%)
R-10 LOT AREA	27,490 SF	(0.63 AC)	(40.1%)
MU-CBD LOT AREA	41,007 SF	(0.94 AC)	(59.9%)
R-10 BLDG FLOOR AREA	9,519 SF	(0.35 AC)	
MU-CBD BLDG FLOOR AREA	12,440 SF	(0.15 AC)	
GROSS FLOOR AREA	21,959 SF	(0.50 AC)	

NET SITE AREA	68,497 SF	(100%)
BUILDING FOOT PRINT (R-10)	7,642 SF	(11.1%)
BUILDING FOOT PRINT (MU-CBD)	7,981 SF	(11.7%)
PARKING/SIDEWALK	32,863 SF	(48.0%)
LANDSCAPING	20,011 SF	(29.2%)



1 SITE PLAN
 C21 1" = 20'



© GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

REVISIONS:

NO.	REVISIONS	REVISION DELTA	CLOSING DATE

SHEET TITLE:
SITE PLAN

DRAWN BY: MH
 CHECKED BY: RLF
 SHEET

C21

JOB NO. 2120180.00

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97088



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97088

© GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER,
 WITHOUT PRIOR WRITTEN PERMISSION

REVISIONS:

NO.	REVISIONS	REVISION DELTA	CLOSING DATE

SHEET TITLE:
SITE GRADING PLAN

DRAWN BY: MH
 CHECKED BY: RLF
 SHEET

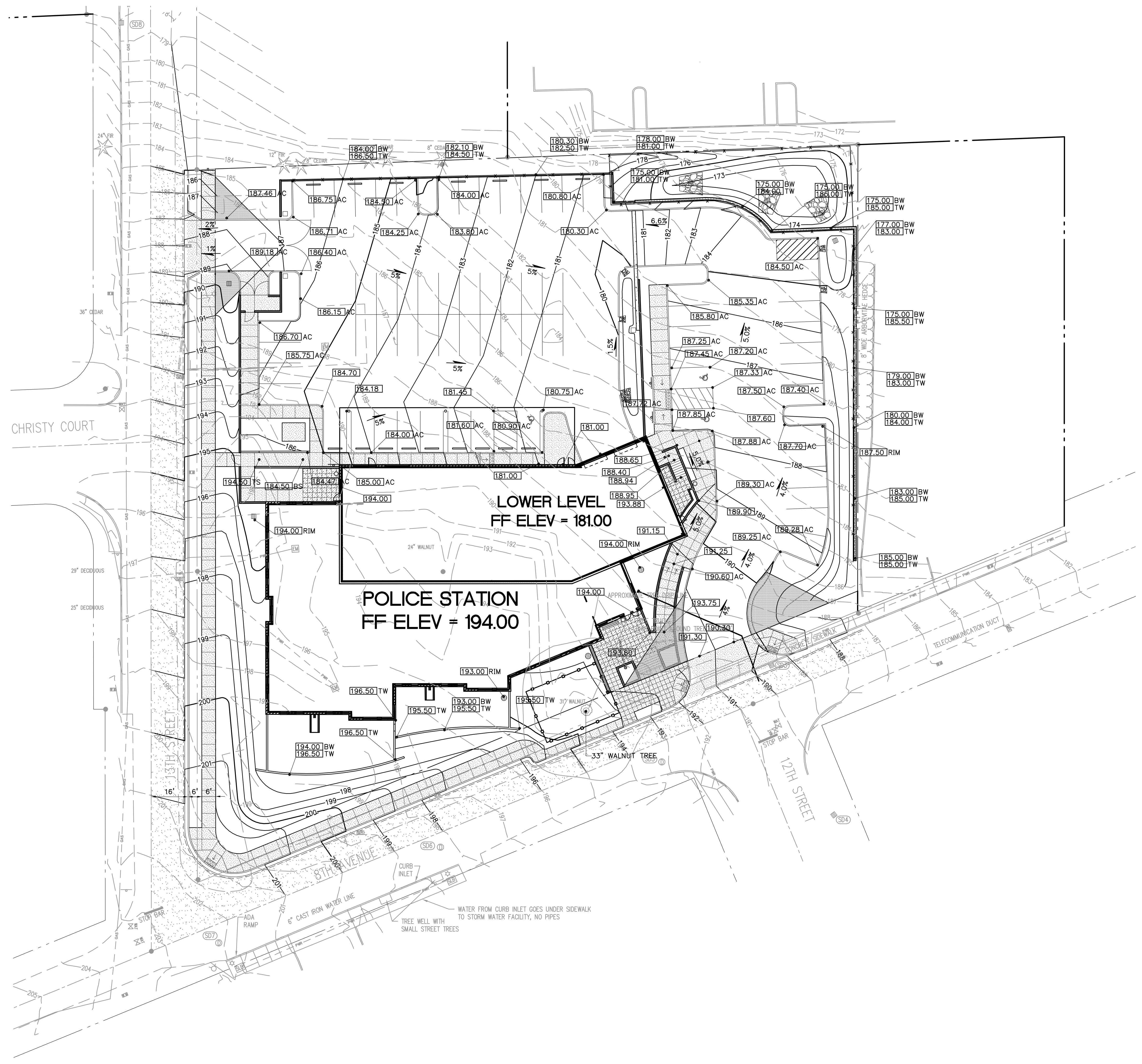
C2.2
 JOB NO. 2120180.00

GRADING NOTES

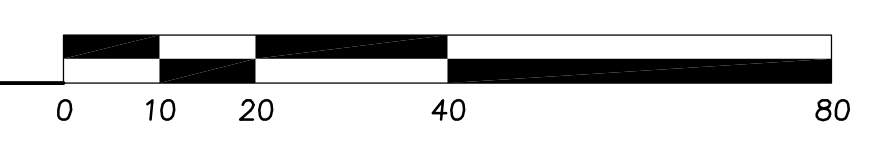
- ROUGH GRADING: BRING ALL FINISH GRADES TO APPROXIMATE LEVELS INDICATED. WHERE GRADES ARE NOT OTHERWISE INDICATED, FINISH GRADES ARE TO BE THE SAME AS ADJACENT SIDEWALKS, CURBS, OR THE OBVIOUS GRADE OF ADJACENT STRUCTURE. GRADE TO UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE GRADES ARE GIVEN. ROUND OFF SURFACES, AVOID ABRUPT CHANGES IN LEVELS. ROUGH GRADE TO ALLOW FOR DEPTH OF CONCRETE SLABS, WALKS, AND THEIR BASE COURSES. GRADE FOR PAVED DRIVES AND PAVED PARKING AREAS AS INDICATED AND SPECIFIED HEREIN, AND PROVIDE FOR SURFACE DRAINAGE AS SHOWN, ALLOWING FOR THICKNESS OF SURFACING MATERIAL. FINISH GRADING: AT COMPLETION OF JOB AND AFTER BACKFILLING BY OTHER CRAFTS HAS BEEN COMPLETED, REFILL AND COMPACT AREAS WHICH HAVE SETTLED OR ERODED TO BRING TO FINAL GRADES. GRADING TOLERANCES: ROUGH GRADE AT PAVED OR LANDSCAPED AREAS: ±0.1 FT. FINISH GRADE PRIOR TO PLACING FINAL SURFACING: ±0.03 FT.
- EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS 72 HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED MEETING THE CITY AND CWS REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE SO ROUTED THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- SITE TOPSOIL SHALL BE STOCKPILED DURING CONSTRUCTION AND USED FOR LANDSCAPING.
- THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS BASED ON A SURVEY BY WESTLAKE CONSULTANTS, AND IS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS WITH HIS OWN RESOURCES PRIOR TO START OF ANY CONSTRUCTION.
- CONTRACTOR TO COORDINATE GRADES AT ENTRANCE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- 2% MAXIMUM SLOPE AT ALL ADA-COMPLIANT PARKING SPACES AND LOADING ZONES.
- 5% MAX SLOPE (EXCLUDING RAMPS) AT PEDESTRIAN SIDEWALK CONNECTIONS BETWEEN PUBLIC R.O.W. AND BUILDING ENTRANCES.

LEGEND

232.80] AC	TOP OF FINISHED ASPHALT
231.00] TC	TOP OF CURB
231.00] BOT	BOTTOM OF SWALE OR BASIN
231.00] CONC	TOP OF FINISHED CONCRETE
231.00] TC	TOP OF CURB
231.00] RIM	CATCH BASIN RIM ELEVATION
199	EXISTING 1-FT CONTOUR
200	EXISTING 5-FT CONTOUR
199	PROPOSED 1-FT CONTOUR
200	PROPOSED 5-FT CONTOUR
○	TREE PROTECTION FENCE



1 SITE GRADING PLAN
 C2.1 1" = 20'



Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97088



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97088

GRADING NOTES

- ROUGH GRADING:** BRING ALL FINISH GRADES TO APPROXIMATE LEVELS INDICATED. WHERE GRADES ARE NOT OTHERWISE INDICATED, FINISH GRADES ARE TO BE THE SAME AS ADJACENT SIDEWALKS, CURBS, OR THE OBVIOUS GRADE OF ADJACENT STRUCTURE. GRADE TO UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE GRADES ARE GIVEN. ROUND OFF SURFACES, AVOID ABRUPT CHANGES IN LEVELS. ROUGH GRADE TO ALLOW FOR DEPTH OF CONCRETE SLABS, WALKS, AND THEIR BASE COURSES. GRADE FOR PAVED DRIVES AND PAVED PARKING AREAS AS INDICATED AND SPECIFIED HEREIN, AND PROVIDE FOR SURFACE DRAINAGE AS SHOWN, ALLOWING FOR THICKNESS OF SURFACING MATERIAL.
FINISH GRADING: AT COMPLETION OF JOB AND AFTER BACKFILLING BY OTHER CRAFTS HAS BEEN COMPLETED, REFILL AND COMPACT AREAS WHICH HAVE SETTLED OR ERODED TO BRING TO FINAL GRADES.
GRADING TOLERANCES:
 ROUGH GRADE AT PAVED OR LANDSCAPED AREAS: ±0.1 FT.
 FINISH GRADE PRIOR TO PLACING FINAL SURFACING: ±0.03 FT.
- EXCAVATION:** EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) MUST COMPLY WITH O.R.S. 757.541 THROUGH 757.571; EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS 72 HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED.** EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED MEETING THE "*****" REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED.** DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE SO ROUTED THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- SITE TOPSOIL SHALL BE STOCKPILED DURING CONSTRUCTION AND USED FOR LANDSCAPING.**
- THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS BASED ON A SURVEY BY NW SURVEYING, INC., AND IS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS WITH HIS OWN RESOURCES PRIOR TO START OF ANY CONSTRUCTION.**
- CONTRACTOR TO COORDINATE GRADES AT ENTRANCE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.**
- 2% MAXIMUM SLOPE AT ALL ADA-COMPLIANT PARKING SPACES AND LOADING ZONES.**
- 5% MAX SLOPE (EXCLUDING RAMP) AT PEDESTRIAN SIDEWALK CONNECTIONS BETWEEN PUBLIC R.O.W. AND BUILDING ENTRANCES.**
- WHERE SLOPES ARE STEEPER THAN 3:1, CONTRACTOR SHALL INSTALL JUTE MATTING. SLOPE SHALL BE PREPARED TO ENSURE COMPLETE AND DIRECT CONTACT OF MATTING WITH SOIL. FOLLOW MANUFACTURER'S RECOMMENDATIONS.**

LEGEND

- 199 — EXISTING 1-FT CONTOUR
- 200 — EXISTING 5-FT CONTOUR
- 199 — PROPOSED 1-FT CONTOUR
- 200 — PROPOSED 5-FT CONTOUR
- STORM PIPE
- CATCH BASIN WITH INLET PROTECTION
- FIRE HYDRANT
- WATER METER
- DDCV
- FDC

© GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, WITHOUT PRIOR WRITTEN PERMISSION.

REVISIONS:

NO.	REVISIONS	REVISION DELTA	CLOSING DATE

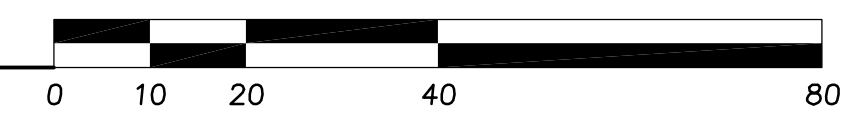
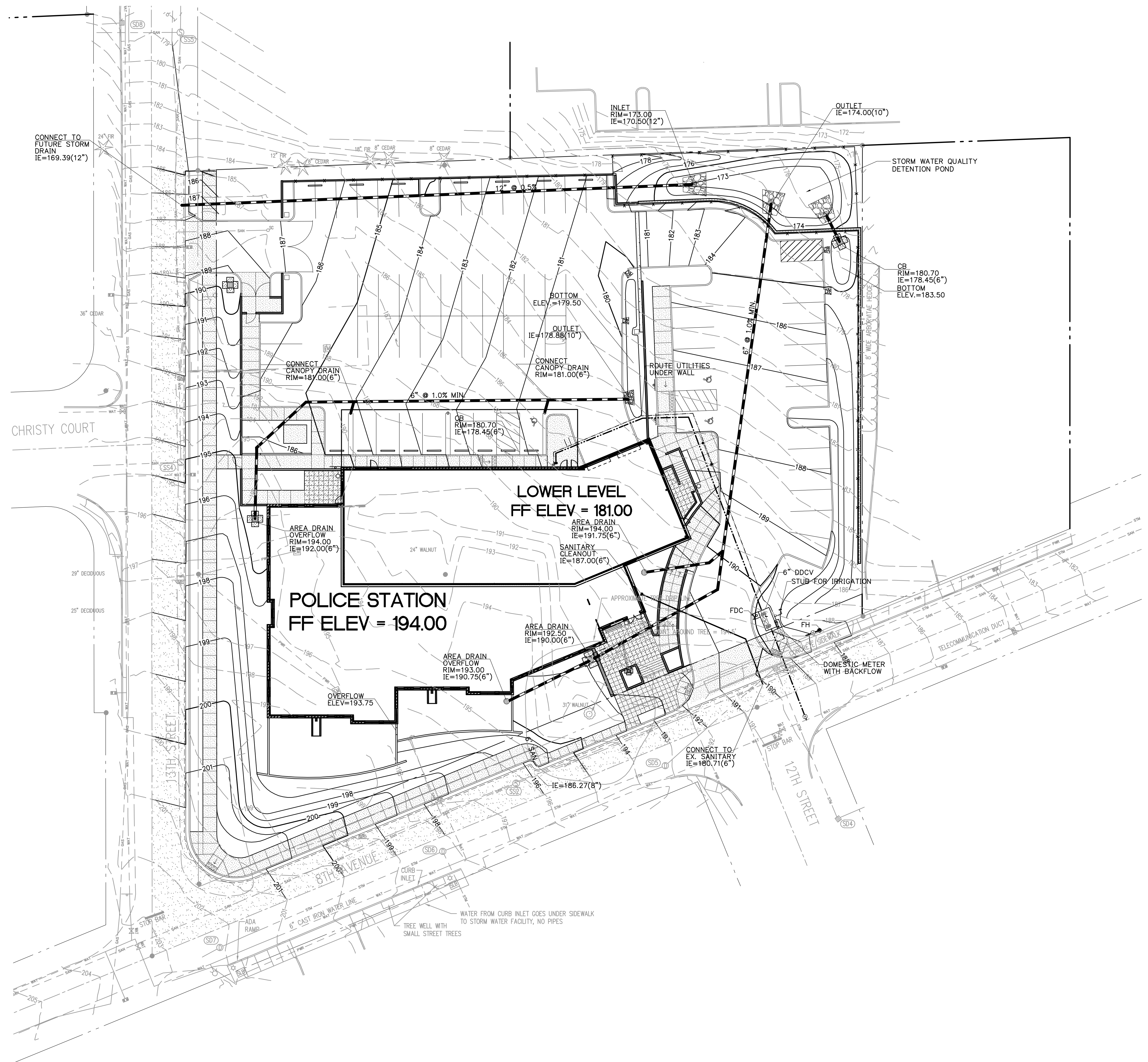
SHEET TITLE:
SITE UTILITY PLAN

DRAWN BY:
 CHECKED BY:
 SHEET

C2.3

JOB NO. 2120180.00

LAND-USE: 11/09/2012



INSPECTION FREQUENCY:	SITE CONDITION	MINIMUM FREQUENCY
1.	ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING
2.	PRIOR TO SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3.	INACTIVE PERIODS GREATER THAN (7) CONSECUTIVE CALENDAR DAYS	ONCE EVERY (2) TWO WEEKS
4.	PERIODS AT WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

- Hold a pre-construction meeting of project construction personnel that includes the inspector to discuss erosion and sediment control measures and construction limits. (Schedule A.8.c.i.(3))
- All inspections must be made in accordance with DEQ 1200-C permit requirements.
- Inspection logs must be kept in accordance with DEQ's 1200-C permit requirements.
- Retain a copy of the ESPCP and all revisions on site and make it available on request to DEQ, Agent, or the local municipality. During inactive periods of greater than seven (7) consecutive calendar days, retain the ESPCP at the construction site or at another location. (Schedule B.2.a)
- All permit registrants must implement the ESPCP. Failure to implement any of the control measures or practices described in the ESPCP is a violation of the permit. (Schedule A.8.a)
- The ESPCP measures shown on this plan are minimum requirements for anticipated site conditions. During the construction period, upgrade these measures as needed to comply with all applicable local, state, and federal erosion and sediment control regulations. (Schedule A.8.c.i.(1)(c))
- Submission of all ESPCP revisions is not required. Submit all of the ESPCP revisions is only under specific conditions. Submit all necessary revision to DEQ or Agent. (Schedule A.12.c.iii)
- Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion. (Schedule A.8.c.i.(1)(b))
- Identify, mark, and protect (by fencing off or other means) critical riparian areas and vegetation including important trees and associated rootland zones, and vegetation areas to be preserved. Identify vegetative buffer zones between the site and sensitive areas (e.g., wetlands), and other areas to be preserved, especially in perimeter areas. (Schedule A.8.c.i.(1) & (2))
- Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practicable before and after grading or construction. Identify the type of vegetative seed mix used. (Schedule A.7.b.iii(1) and A.7.b.iii(3))
- Erosion and sediment control measures including perimeter sediment control must be in place before vegetation is disturbed and must remain in place and be maintained, repaired, and promptly implemented following procedures established for the duration of construction, including protection for active storm drain inlets and catch basins and appropriate non-stormwater pollution controls. (Schedule A.7.d.i. and A.8.c)
- Establish concrete truck and other concrete equipment washout areas before beginning concrete work. (Schedule A.8.c.i.(6))
- Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses and for all roadways including gravel roadways. (Schedule A.8.c.i.(2))
- Establish material and waste storage areas, and other non-stormwater controls. (Schedule A.8.c.i.(7))
- Prevent tracking of sediment onto public or private roads using BMPs such as: gravelled (or paved) exits and parking areas, gravel all unpaved roads located onsite, or use an exit tire wash. These BMPs must be in place prior to land-disturbing activities. (Schedule A.7.d.ii.(1) and A.8.c.i.(4))
- When trucking saturated soils from the site, either use water-tight trucks or drain loads on site. (Schedule A.7.d.ii.(3))
- Use BMPs to prevent or minimize stormwater exposure to pollutants from spills, vehicle and equipment fueling, maintenance, and storage; other cleaning and maintenance activities; and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents, and glues from construction operations. (Schedule A.7.e.i.(2))
- Implement the following BMPs when applicable: written spill prevention and response procedures, employee training on spill prevention and response, proper cleanup procedures, spill kits, a regular maintenance schedule for vehicles and machinery, material delivery and storage controls, training and signage, and covered storage areas for waste and supplies. (Sch A.7.e.iii.)
- Use water, soil-binding agent or other dust control technique as needed to avoid wind-blown soil. (Schedule A.7.b.i.)
- The application rate of fertilizers used to reestablish vegetation must follow manufacturer's recommendations to minimize nutrient releases to surface waters. Exercise caution when using time-release fertilizers within any waterway riparian zone. (Schedule A.9.b.iii)
- If a stormwater treatment system (for example, electro-coagulation, flocculation, filtration, etc.) for sediment or other pollutant removal is employed, submit an operation and maintenance plan (including system schematic, location of system, location of inlet, location of discharge, discharge dispersion device design, and a sampling plan and frequency) before operating the treatment system. Obtain plan approval before operating the treatment system. Operate and maintain the treatment system according to manufacturer's specifications. (Schedule A.9.c)
- Temporarily stabilize soils at the end of the shift before holidays and weekends, if needed. The registrant is responsible for ensuring that soils are stable during rain events at all times of the year. (Schedule A.7.b)
- At the end of each workday soil stockpiles must be stabilized or covered, or other BMPs must be implemented to prevent discharges to surface waters or conveyance systems leading to surface waters. (Schedule A.7.e.i.(2))
- Construction activities must avoid or minimize excavation and creation of bare ground during wet weather. (Schedule A.7.a.i.)
- Sediment fence: remove trapped sediment before it reaches one third of the above ground fence height and before fence removal. (Schedule A.9.c.i.)
- Other sediment barriers (such as biobags): remove sediment before it reaches two inches depth above ground height. and before BMP removal. (Schedule A.9.c.ii.)
- Catch basins: clean before retention capacity has been reduced by fifty percent. Sediment basins and sediment traps: remove trapped sediments before design capacity has been reduced by fifty percent and at completion of project. (Schedule A.9.c.iii & iv)
- Within 24 hours, significant sediment that has left the construction site, must be remediated. Investigate the cause of the sediment release and implement steps to prevent it from recurring within the same 24 hours. Any in-stream clean up of sediment shall be performed according to the Oregon Division of State Lands required timeframe. (Schedule A.9.b.i.)
- The intentional washing of sediment into storm sewers or drainage ways must not occur. Vacuuming or dry sweeping and material pickup must be used to cleanup released sediments. (Schedule A.9.b.ii)
- The entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding, or other method should all construction activities cease for 30 days or more. (Schedule A.7.f.i.)
- Provide temporary stabilization for that portion of the site where construction activities cease for 14 days or more with a covering of blown straw and a tackifier, loose straw, or an adequate covering of compost mulch until work resumes on that portion of the site. (Schedule A.7.f.ii)
- Provide permanent erosion control measures on all exposed areas. Do not remove temporary sediment control practices until permanent vegetation or other cover of exposed areas is established. However, do remove all temporary erosion control measures as exposed areas become stabilized, unless doing so conflicts with local requirements. Properly dispose of construction materials and waste, including sediment retained by temporary BMPs. (Schedule A.7.b.iii(2) and A.8.c.iii)

TEMPORARY GRASSES, MULCH AND PERMANENT VEGETATIVE COVER

PURPOSE: TO MINIMIZE EROSION AND SEDIMENTATION BY STABILIZING EXPOSED SOILS WITH VEGETATION AND MULCHING.

NOTE: TEMPORARY ESTABLISHMENT MAY DIFFER FROM PERMANENT VEGETATED COVER (THE BEST EROSION PREVENTION TECHNIQUE) WHICH USES MANY OF THE SAME DESIGN AND IMPLEMENTATION PRINCIPLES AS SET OUT BELOW. CONDITIONS WHERE PRACTICE APPLIES

- GROUND SURFACES LIKELY TO BE EXPOSED DURING THE WET SEASON (OCTOBER 1 THROUGH APRIL 30) OR SURFACES LIKELY TO BE EXPOSED FOR MORE THAN 3 WEEKS DURING DRY SEASON. BMPs.
- AREAS THAT WILL NOT BE SUBJECT TO WEAR OR ARE NOT WORKING SOILS PILES USED BY ONGOING CONSTRUCTION TRAFFIC.
- EXPOSED GROUND SURFACES AT END OF CONSTRUCTION PERIOD (PERMANENT COVER MUST BE ESTABLISHED PRIOR TO REMOVAL OF ANY EROSION CONTROL - TEMPORARY OR PERMANENT STABILIZATION OF NEW OR DISTURBED DITCHES, PONDS, TRENCHES, DIKES OR SWALES DESIGN CRITERIA/SPECIFICATIONS.
- ALL VEGETATION SITES REQUIRE SOME SURFACE ROUGHENING: STAIR STEP, GROOVING, FURROWING OR TRACKING.

SOIL PREPARATION:

- TOPSOIL SHOULD BE PREPARED ACCORDING TO LANDSCAPE PLANS, IF AVAILABLE, OR RECOMMENDATIONS OF GRASS SEED SUPPLIER.

SEEDING:

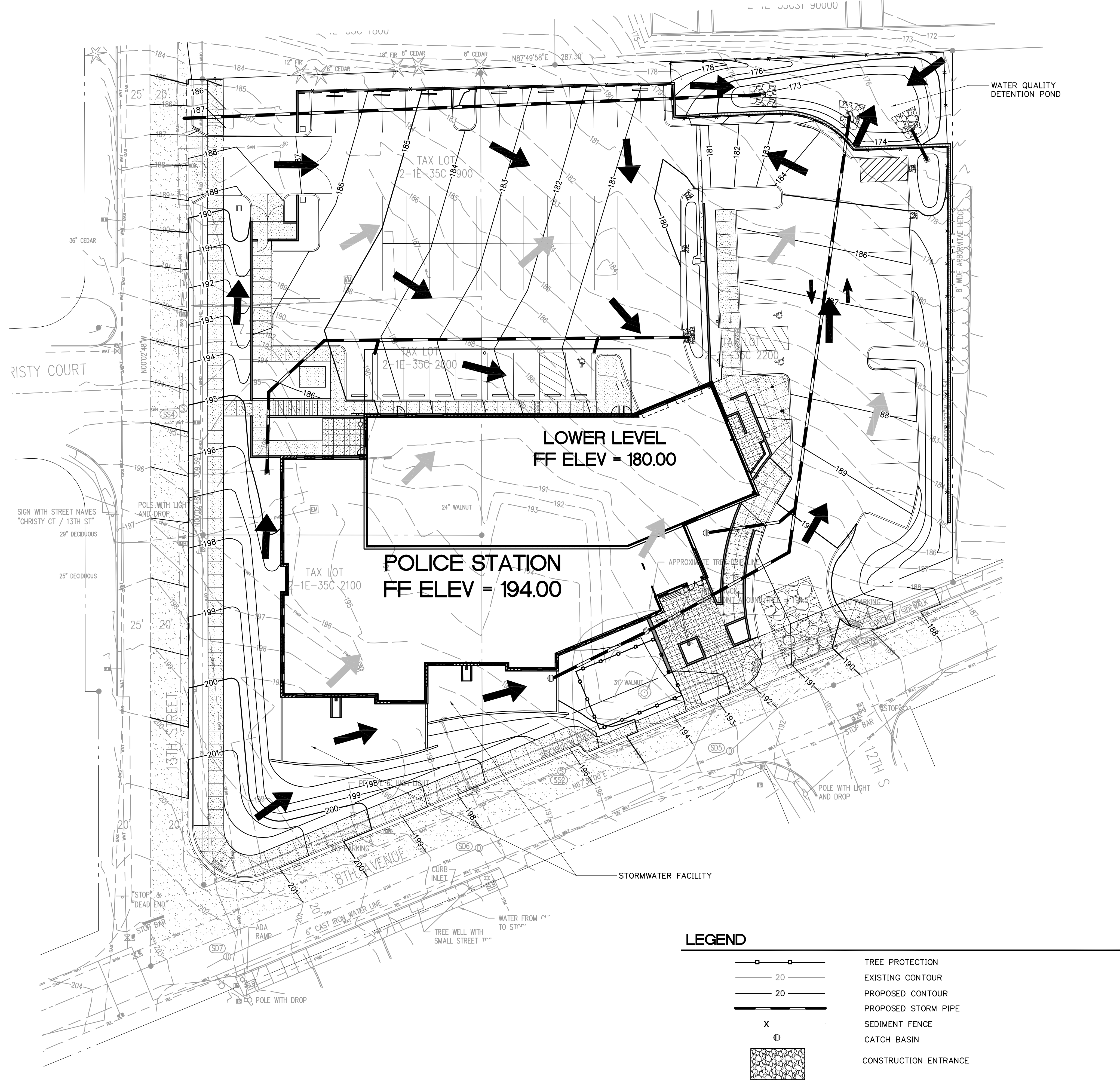
- RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS SPECIFIED BELOW. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED IF APPROVED BY JURISDICTION. IN GENERAL, USE OF QUICK GROWING, STERILE GRASSES AND GRAINS IN MIXTURE WITH PERMANENT VEGETATIVE COVER IS RECOMMENDED TO ACHIEVE QUICK COVER OF EXPOSED SOILS. THE DESIGNER OR CONTRACTOR ARE ENCOURAGED TO USE MIXES OF NATIVE GRASSES THAT CAN BE INCORPORATED INTO A PERMANENT VEGETATIVE COVER.
- HYDROSEED SHALL BE ECOFIBRE™ + TACKIFIER APPLIED AT A RATE OF 2000 LBS/ACRE USING SUNMARK SEEDS 000T MIX APPLIED AT 40 LBS/ACRE WITH THE FOLLOWING MIX COMPOSITION:
 - 30% PERENNIAL RYEGRASS
 - 25% CHEWINGS FESCUE
 - 25% CREEPING RED FESCUE
 - 7% HIGHLAND COLONIAL BENTGRASS
 - 4% WHITE CLOVER

ECOFIBRE™ + TACKIFIER IS COMPOSED OF THE FOLLOWING:

- THERMALLY PROCESSED WOOD FIBER
- QUAR BASE TACKIFIER - 3% ± 1%
- MOISTURE CONTENT - 12% ± 3%

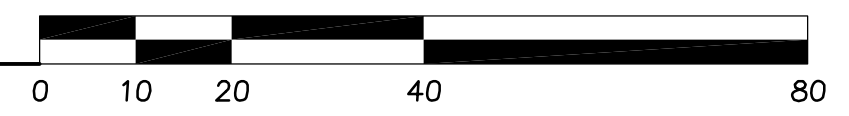
GENERAL NOTES

- APPROVAL OF THIS EROSION, SEDIMENT, AND POLLUTION CONTROL PLAN (ESPSCP) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF THE ESPCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED, AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE EVERY 2 WEEKS OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. GRAVEL CONSTRUCTION ENTRANCE MATERIAL SHALL BE 4"-6" QUARRY SPALLS. SLAG IS AN UNACCEPTABLE MATERIAL. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- STREET WASHING IS NOT ALLOWED. STREET CLEANING MUST BE DONE BY VACUUM SWEEPER.



LEGEND

- TREE PROTECTION
- 20 — EXISTING CONTOUR
- 20 — PROPOSED CONTOUR
- PROPOSED STORM PIPE
- X SEDIMENT FENCE
- ⊙ CATCH BASIN
- ▨ CONSTRUCTION ENTRANCE
- EXISTING DRAINAGE FLOW DIRECTION
- PROPOSED DRAINAGE FLOW DIRECTION
- ▭ CONCRETE WASHOUT SEE SHEET C2.5



Client
CITY OF WEST LINN
22500 SALAMO ROAD
WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
800 8TH AVENUE
WEST LINN, OR 97068

© GROUP MACKENZIE 2012
ALL RIGHTS RESERVED
THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISIONS:

NO.	REVISIONS	REVISION DELTA	CLOSING DATE

SHEET TITLE:

EROSION AND SEDIMENT CONTROL PLAN

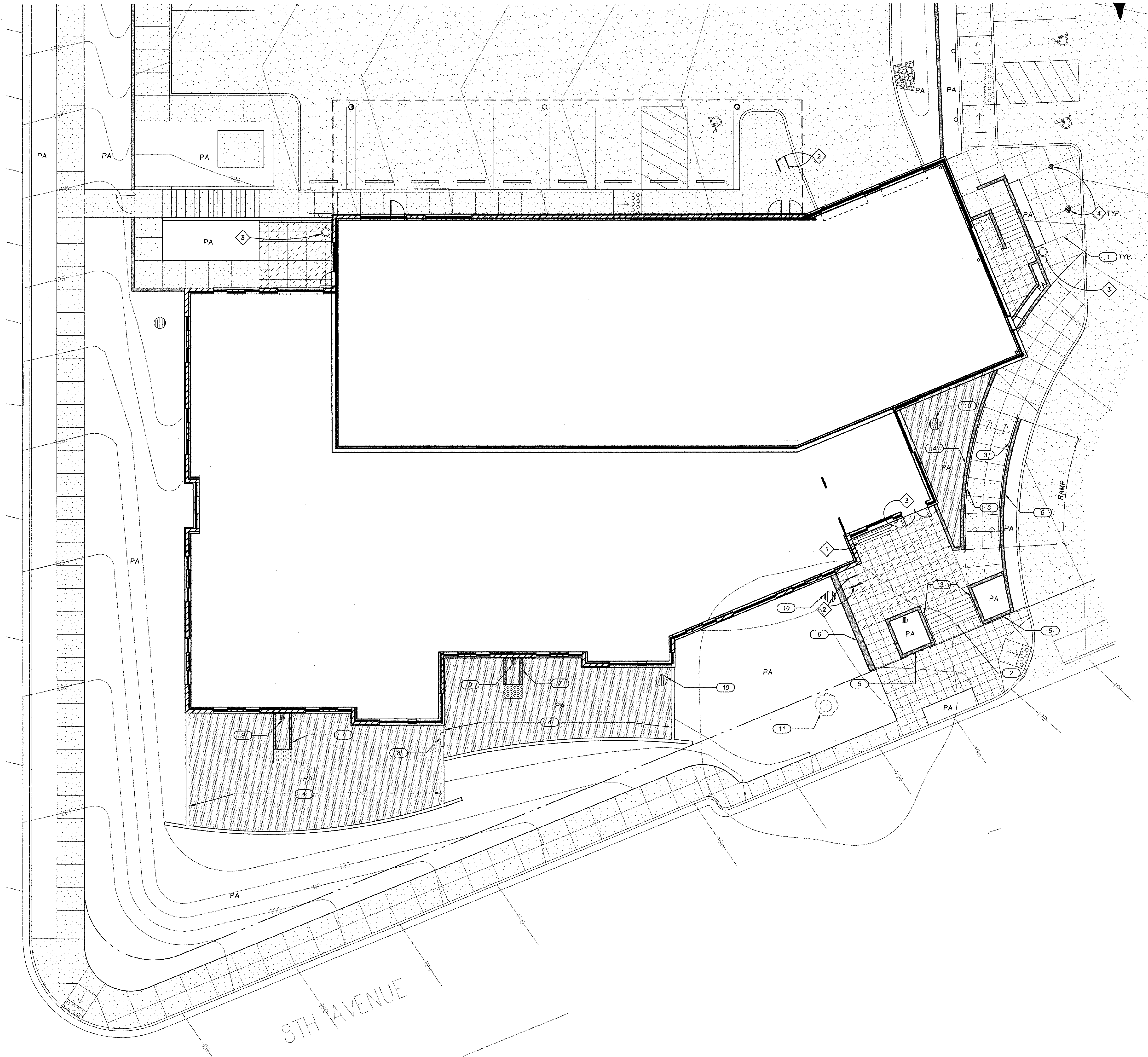
DRAWN BY: MH

CHECKED BY: RLf

SHEET

C2.4

JOB NO. 2120180.00



MATERIALS SCHEDULE

SYMBOL	NOTE	REFERENCE
[Symbol]	CONCRETE PAVING TYPE 1, STANDARD	TBD SPECS.
[Symbol]	CONCRETE PAVING TYPE 2, SAND FINISH	TBD SPECS.
[Symbol]	6-8" COBBLE, 12" DEPTH	SPECS.
[Symbol]	2-3" COBBLE, 6" DEPTH	SPECS.

ABBREVIATION LEGEND

ITEM	NOTE	REFERENCE
PA	PLANTING AREA	PLANTING
EJ	EXPANSION JOINT	TBD
FS	FINISH SURFACE	N/A
TW	TOP OF WALL	N/A

KEY NOTES

ITEM	NOTE	REFERENCE
1	CONTRACTION JOINT	TBD
2	CONCRETE STAIR	TBD
3	STAINLESS STEEL HANDRAIL	SPECS.
4	STORMWATER BASIN WALL	TBD
5	RETAINING WALL	TBD
6	RETAINING SEATWALL	TBD
7	STORMWATER TROUGH	TBD
8	METAL WEIR	TBD
9	SCUPPER	ARCH.
10	OVERFLOW	CIVIL
11	EXISTING 31" WALNUT TO REMAIN. PROTECT IN PLACE.	CIVIL SPECS.

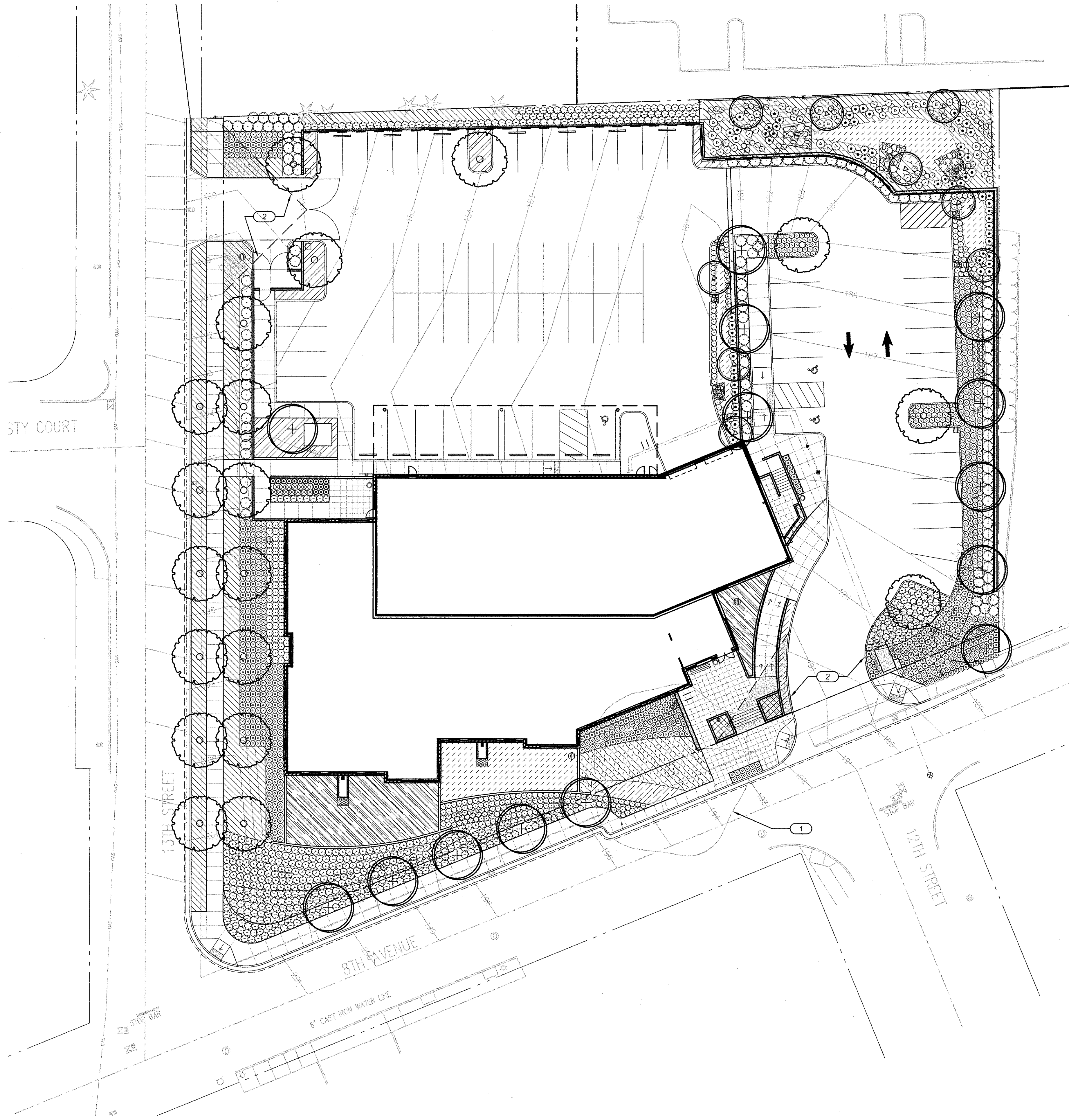
SITE FURNISHING SCHEDULE

ITEM	NOTE	REFERENCE
1	BENCH	SPECS.
2	BIKE RACK	SPECS.
3	TRASH RECEPTACLE	SPECS.
4	FLAGPOLE	SPECS.

GENERAL NOTES

- ALL NEW PLANTING AREAS TO HAVE AUTOMATIC IRRIGATION SYSTEM.
- PROVIDE EXPANSION JOINTS WHERE CONCRETE PAVING MEETS ANY FIXED STRUCTURE SUCH AS A BUILDING, LIGHT POST, DRAIN, ETC.
- NOT ALL EXPANSION JOINTS HAVE BEEN SHOWN ON PLAN FOR GRAPHIC CLARITY. PLEASE REFER TO THE DETAILS FOR OTHER OCCURRENCES.





PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	SIZE	SIZE	QTY
△	ACER CIRCINATUM / VINE MAPLE	1" CAL. MIN./B&B	10-12' HT	9
○	FRAXINUS OXYCARPA 'RAYWOOD' TM / RAYWOOD ASH	2.5" CAL.		19
+	QUERCUS PALUSTRIS 'GREEN PILLAR' / GREEN PILLAR OAK	2.5" CAL.		14
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT		QTY
⊕	BERBERIS THUNBERGII 'ATROPURPUREA NANA' / DWARF REDLEAF JAPANESE BARBERRY	2 GAL@ 2' OC		393
⊖	CORNUS SERICEA 'KELSEYI' / KELSEYI DOGWOOD	2 GAL@ 2' OC		278
⊙	DESCHAMPSIA CESPITOSA / TUFTED HAIR GRASS	1 GAL@ 2' OC		338
Ⓜ	FESTUCA MAIREI / ATLAS FESCUE	1 GAL@ 2' OC		269
Ⓝ	GAULTHERIA SHALLON / SALAL	2 GAL@ 2.50' OC		235
Ⓞ	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	2 GAL@ 2.50' OC		364
Ⓟ	MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	5 GAL@ 4' OC		122
Ⓠ	POLYSTICHUM MUNITUM / WESTERN SWORD FERN	1 GAL@ 2' OC		17
Ⓡ	RIBES SANGUINEUM / RED FLOWERING CURRANT	3 GAL@ 3' OC		26
Ⓢ	SALIX PURPUREA 'NANA' / DWARF ARCTIC WILLOW	3 GAL@ 3' OC		73
Ⓣ	SYMPHORICARPOS MOLLIS / CREEPING SNOWBERRY	2 GAL@ 2.50' OC		44
Ⓤ	VACCINIUM OVATUM / EVERGREEN HUCKLEBERRY	2 GAL@ 2.50' OC		65
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT		QTY
▨	ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	1 GAL@ 18" OC		2,340
▩	BARK MULCH	MULCH		804 SF
▪	CAREX TESTACEA 'PRAIRIE FIRE' / PRAIRIE FIRE SEDGE	1 GAL@ 12" OC		1,658
▫	FESTUCA GLAUCA 'ELIJAH BLUE' / BLUE FESCUE	1 GAL@ 18" OC		334
▬	FESTUCA IDAHOENSIS / IDAHO FESCUE	1 GAL@ 18" OC		147
▭	FRAGARIA CHILOENSIS / BEACH STRAWBERRY	1 GAL@ 18" OC		48
▮	JUNCUS PATENS / CALIFORNIA GRAY RUSH	1 GAL@ 12" OC		1,925

KEY NOTES

- EXISTING 31" WALNUT TO REMAIN. SEE TREE PROTECTION/REMOVAL PLAN FOR TREE PROTECTION MEASURES.
- VISION CLEARANCE

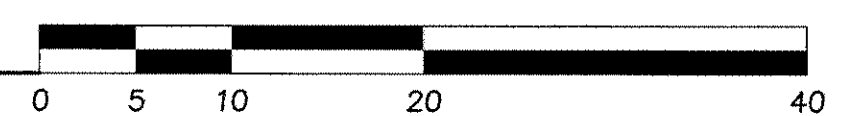
GENERAL NOTES

- ALL NEW PLANTING AREAS TO HAVE AUTOMATIC DESIGN/BUILD IRRIGATION SYSTEM.
- PROVIDE JUTE NETTING ON ALL SLOPES 3:1 OR GREATER.
- ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOW SHOWN TO RECEIVE PROPOSED PLANTINGS SHALL BE RESTORED TO EXISTING OR BETTER CONDITION.

SITE DATA

TOTAL PARKING PROVIDED	65	SPACES (2.96/1,000 SF)
PARKING AREA	23,352 SF	
PARKING LANDSCAPE AREA	3,564 SF	(15.3%)
NET SITE AREA	68,497 SF	(100%)
BUILDING FOOT PRINT (R-10)	7,642 SF	(11.1%)
BUILDING FOOT PRINT (MU-CBD)	7,981 SF	(11.7%)
PARKING/SIDEWALK	32,863 SF	(48.0%)
LANDSCAPING	20,011 SF	(29.2%)

1 LANDSCAPE PLANTING PLAN
L41 1" = 10'



Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

REGISTERED
 544

Robin M. Laughlin
 OREGON
 2/13/04
 LANDSCAPE ARCHITECT

GROUP MACKENZIE 2012
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

REVISIONS:

REVISION	DATE	REVISION	DATE
DELTA		DELTA	

SHEET TITLE:
LANDSCAPE PLANTING PLAN

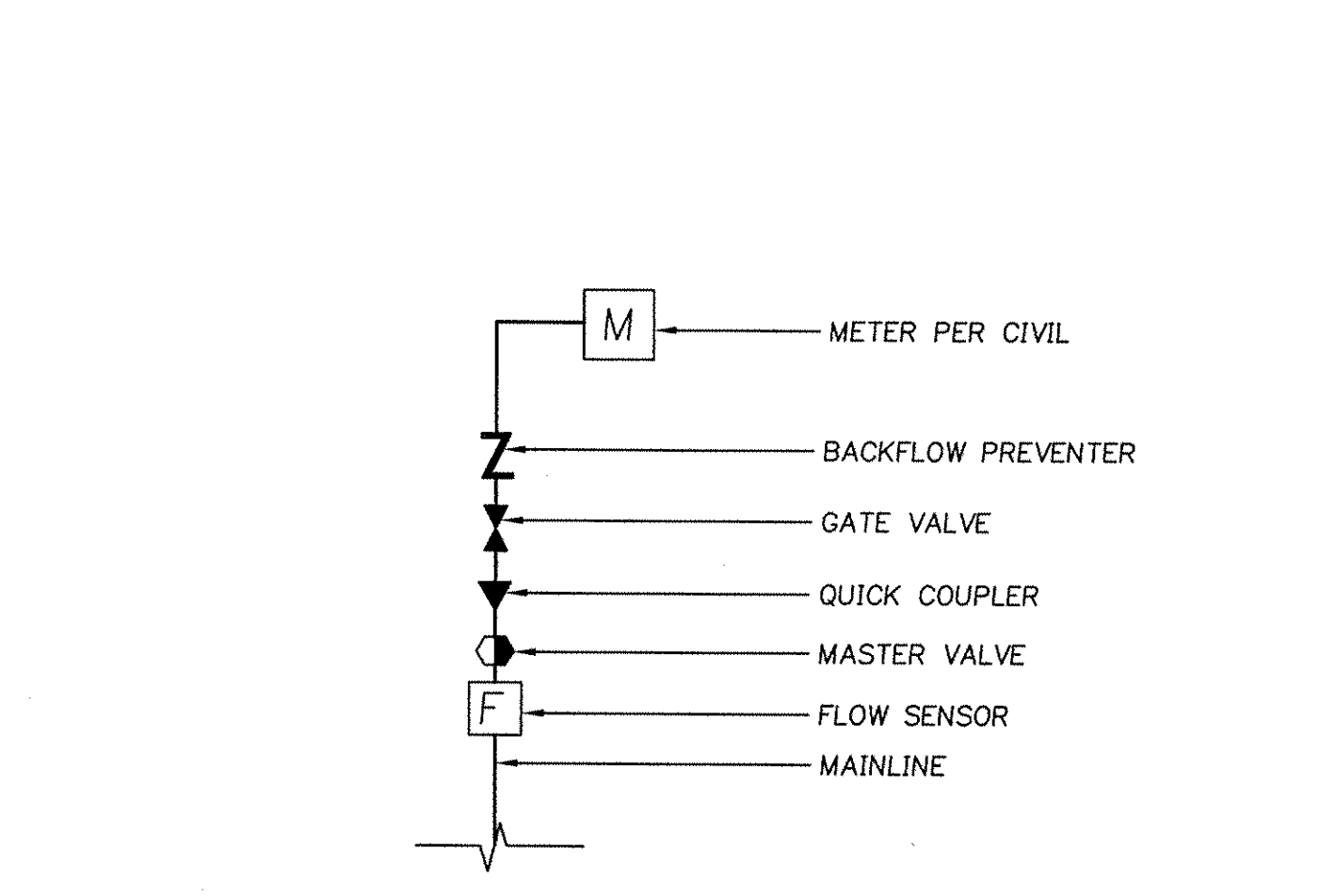
DRAWN BY: TMK, TEB
 CHECKED BY: RML
 SHEET

L41

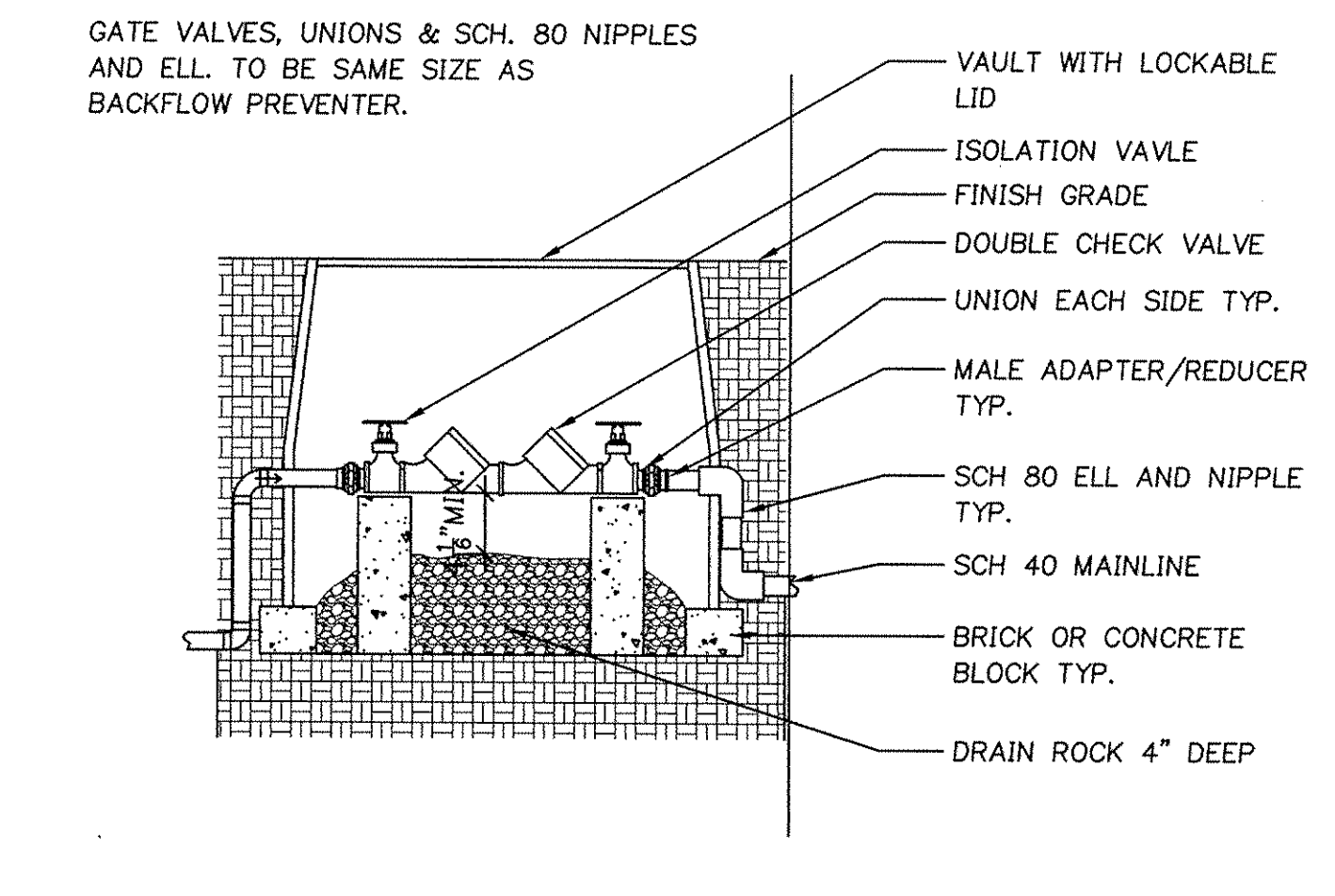
JOB NO. 2120180.00



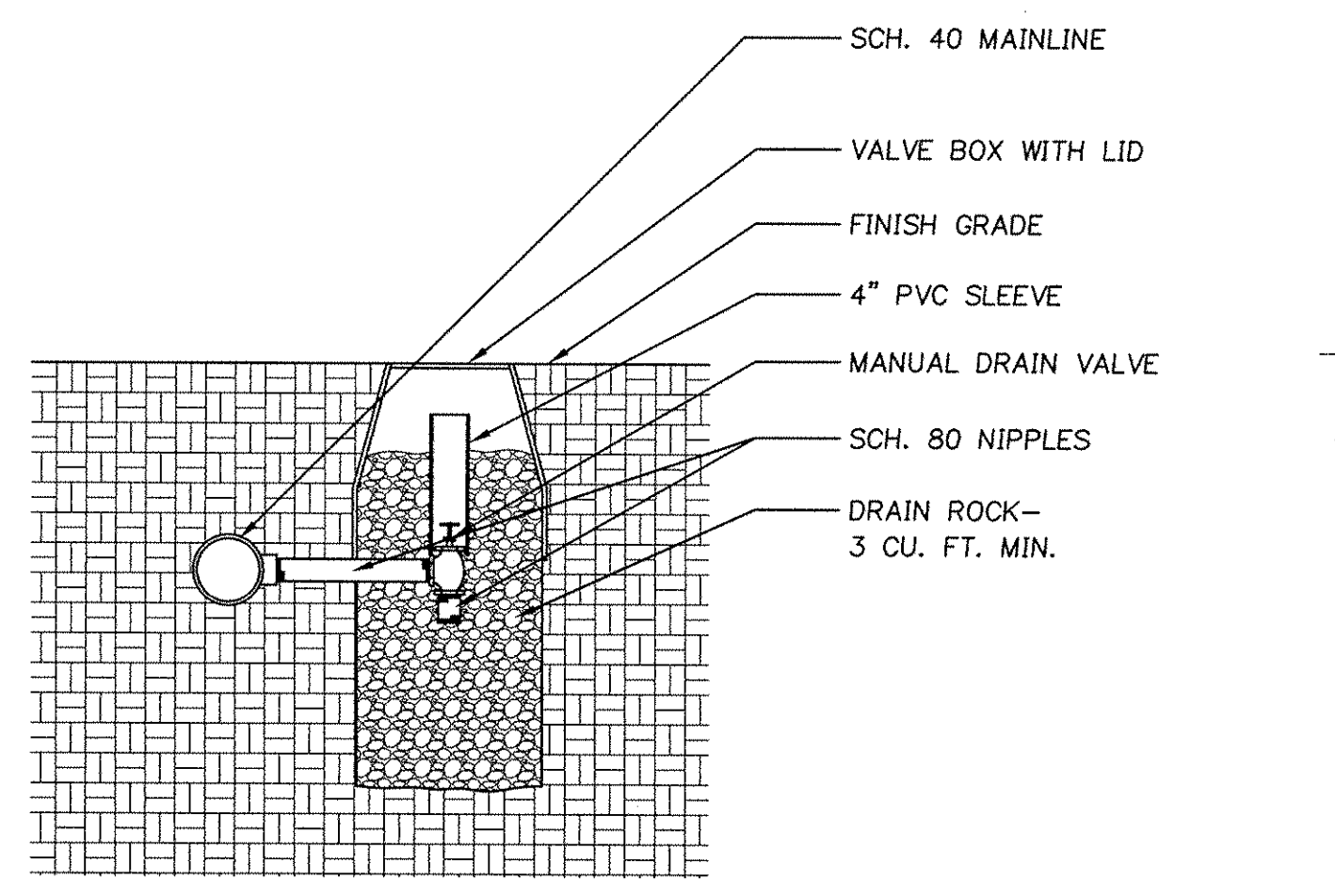
INSTALL BACKFLOW PREVENTER AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT. GATE VALVES, UNIONS & SCH. 80 NIPPLES AND ELL. TO BE SAME SIZE AS BACKFLOW PREVENTER.



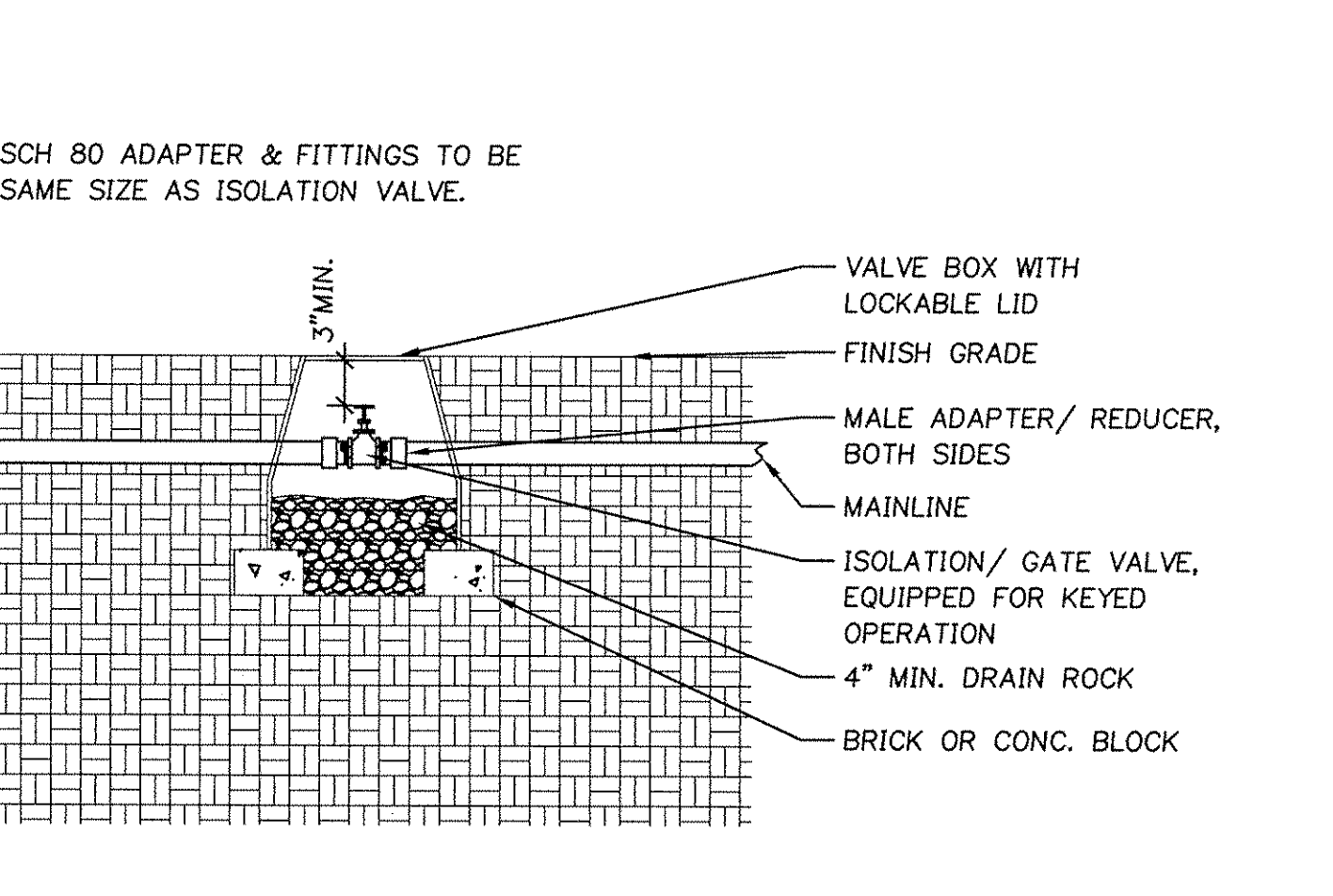
1 POINT OF CONNECTION
 L8.1 SCALE: NTS



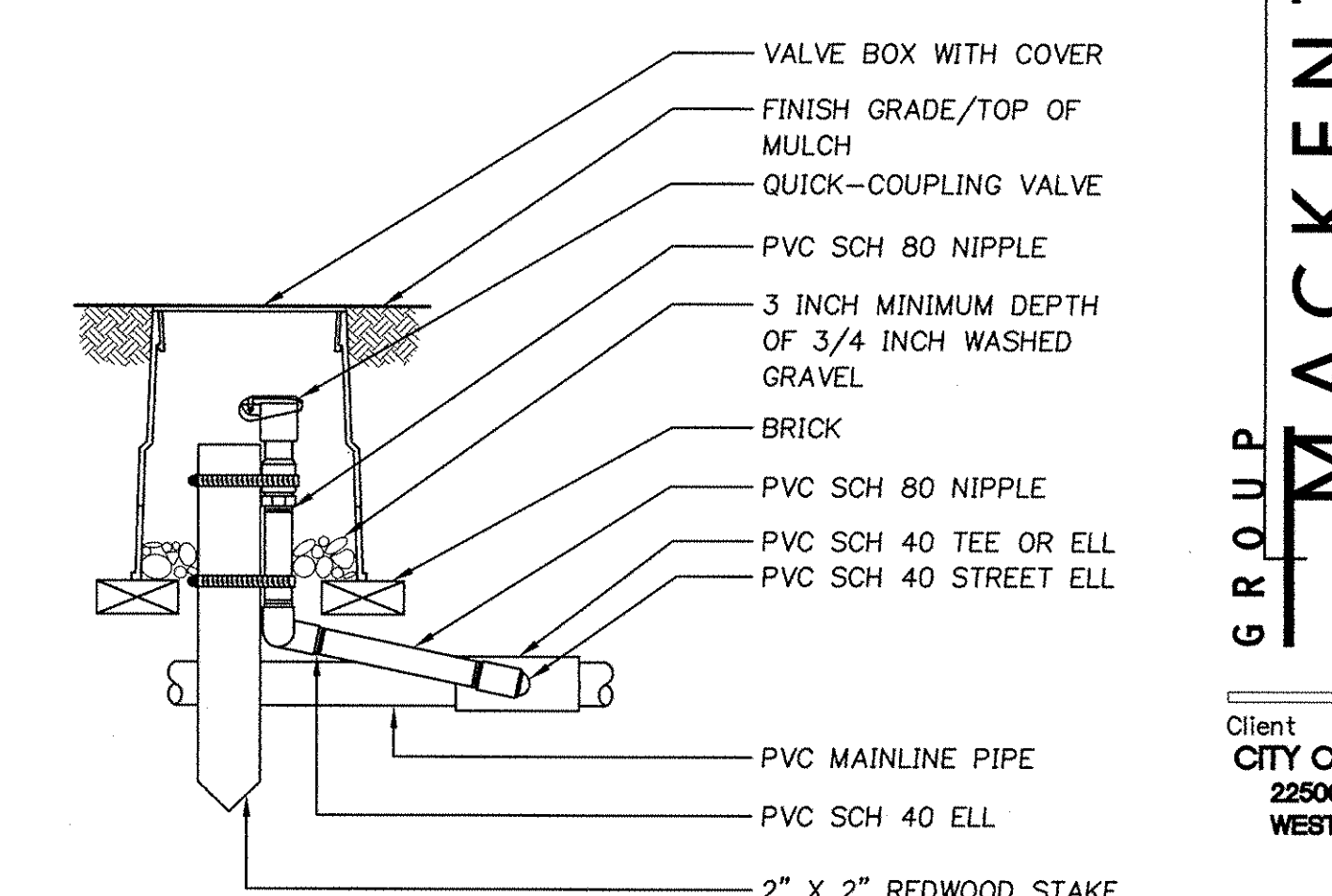
2 BACKFLOW PREVENTER
 L8.1 BELOW GRADE SCALE: NTS



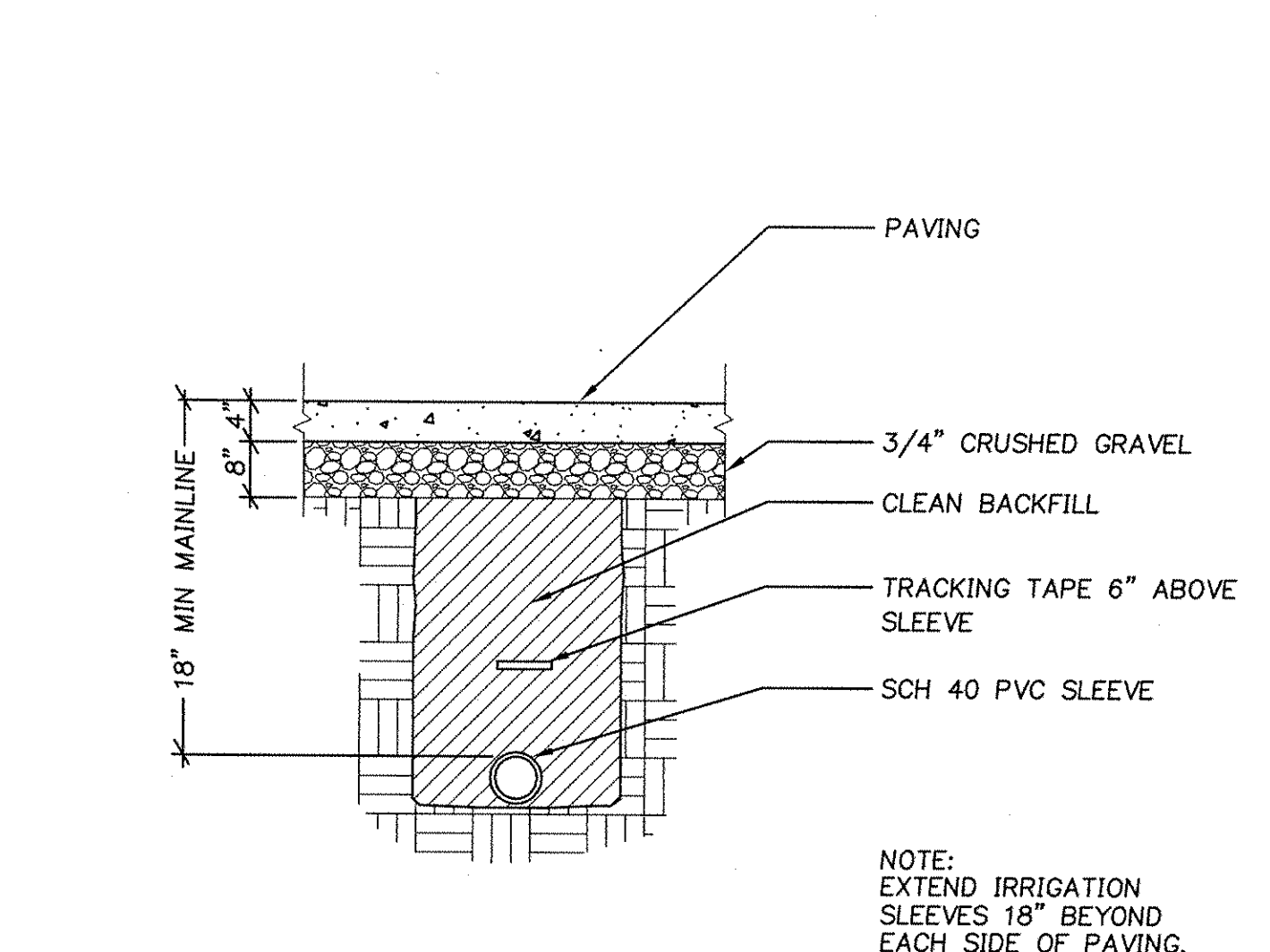
3 MANUAL DRAIN VALVE
 L8.1 SCALE: NTS



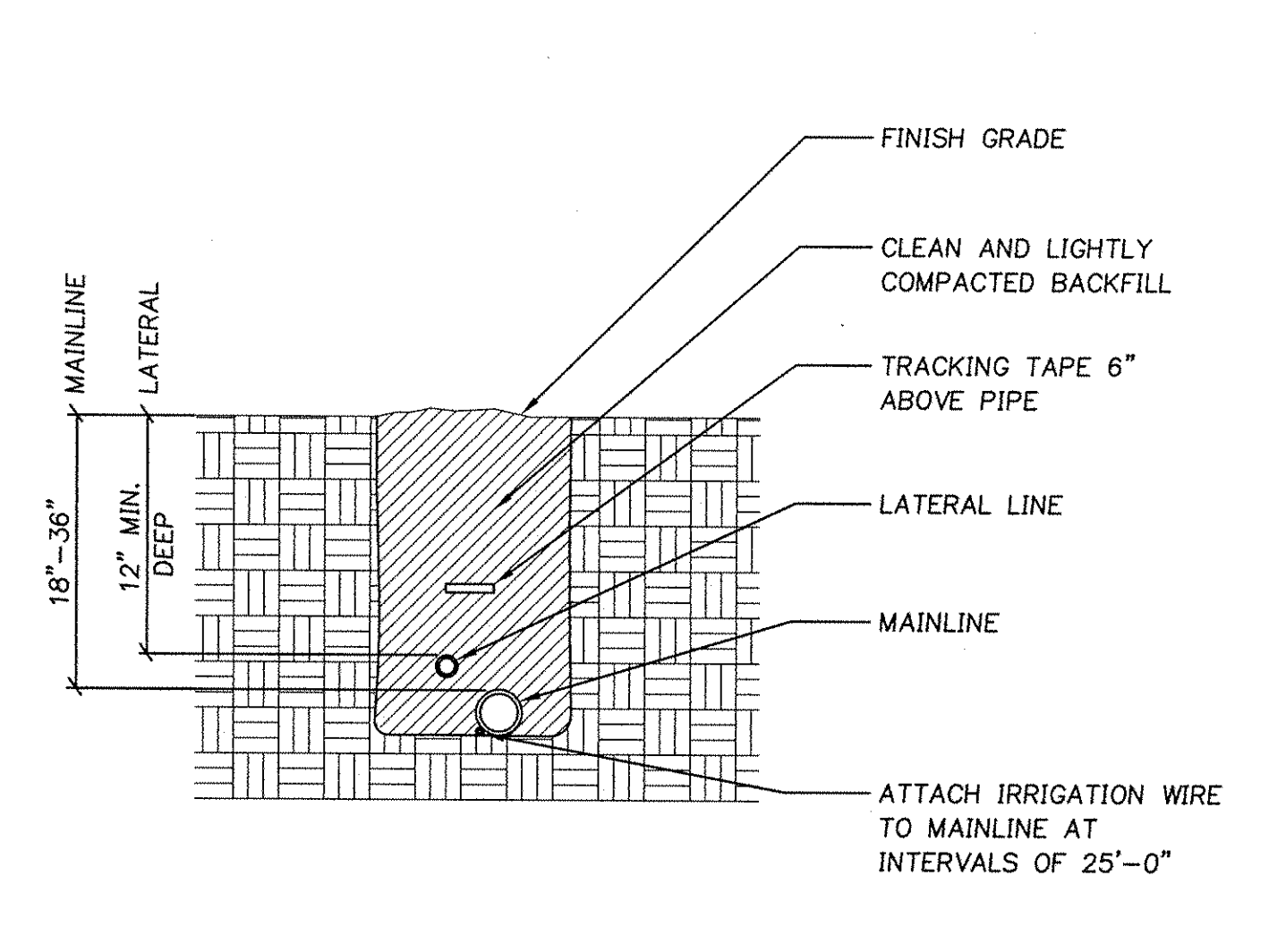
4 ISOLATION/GATE VALVE
 L8.1 SCALE: NTS



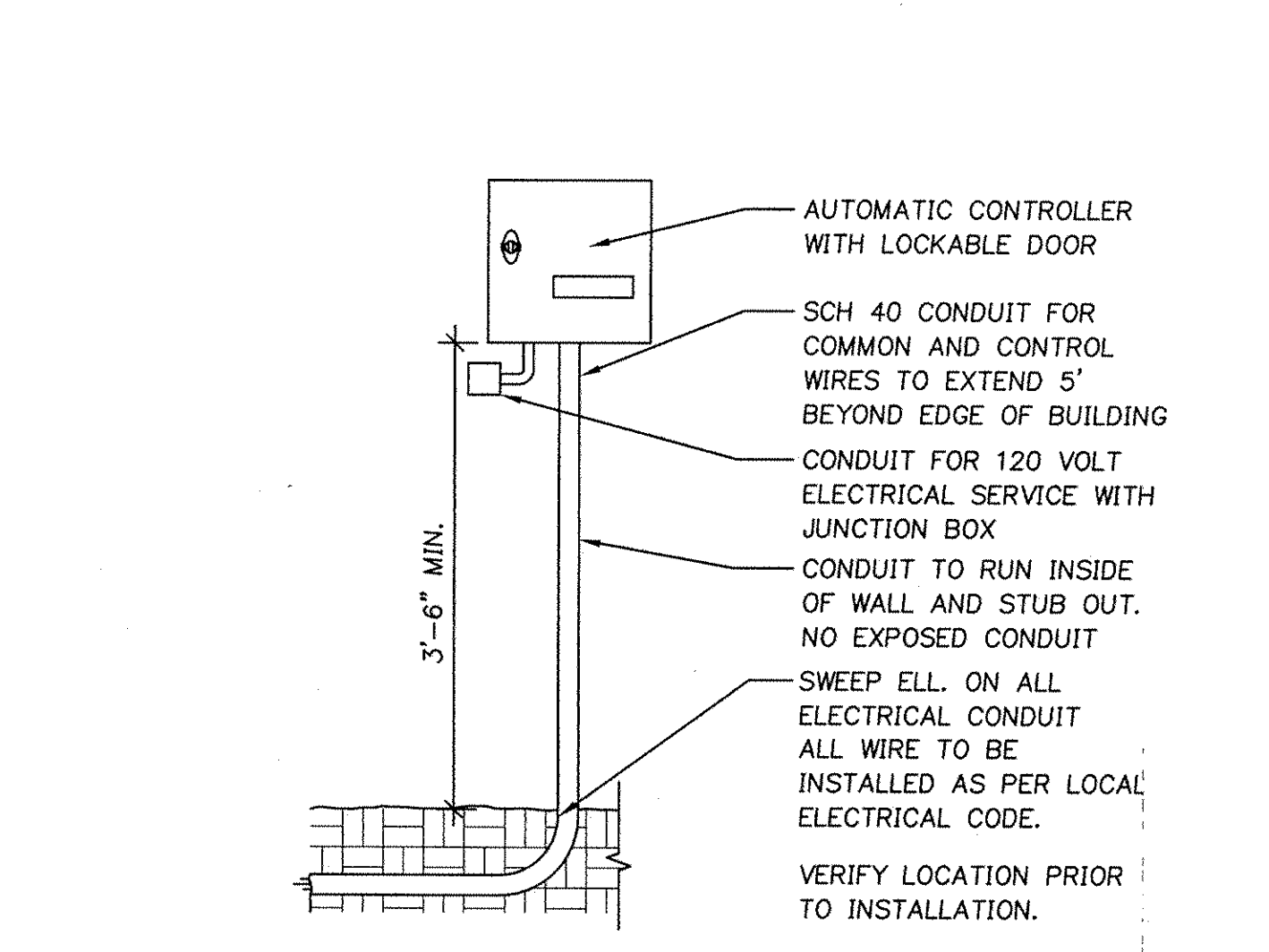
5 QUICK COUPLING VALVE
 L8.1 SCALE: NTS



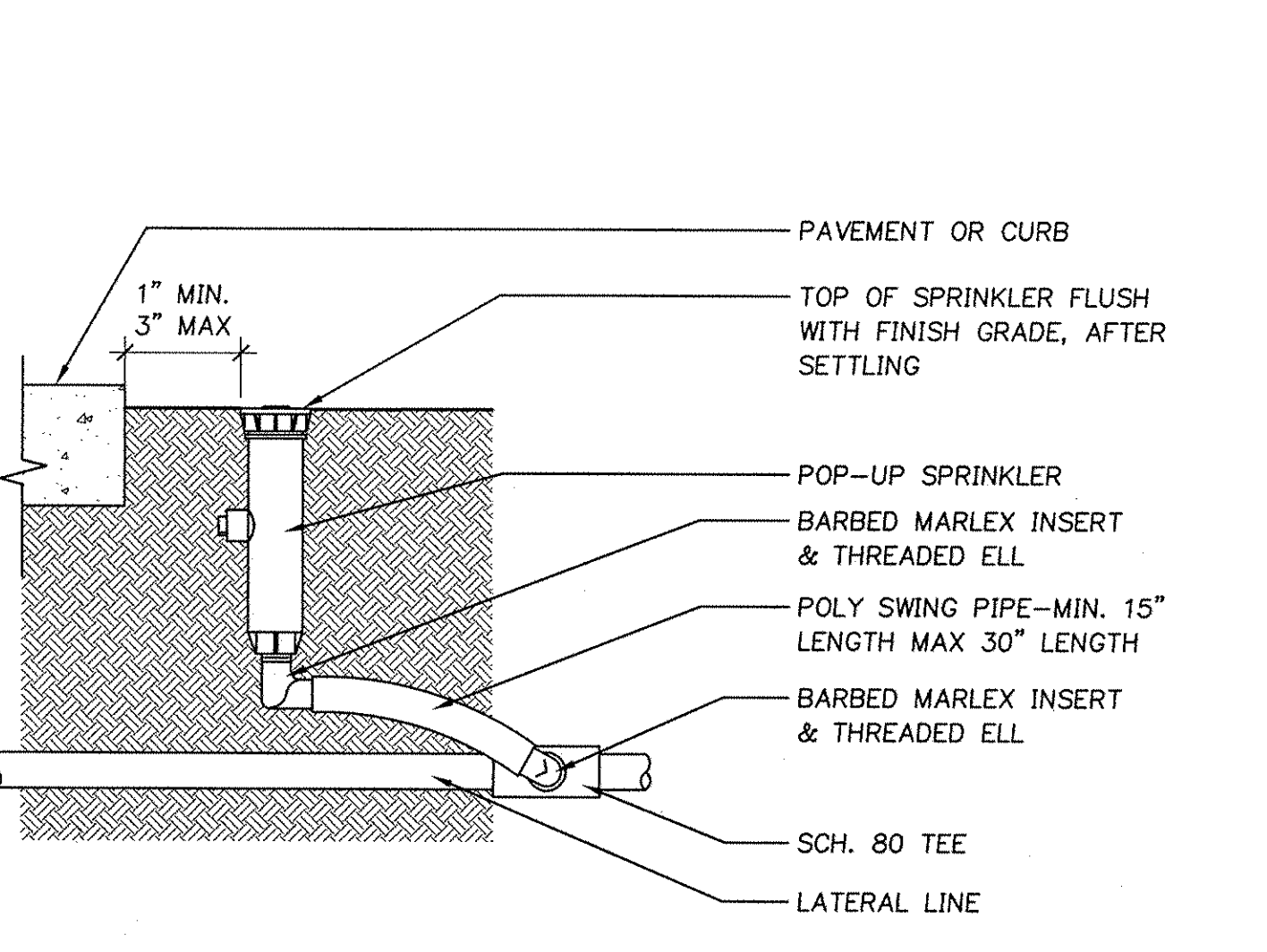
6 IRRIGATION SLEEVES AT PAVING
 L8.1 SCALE: NTS



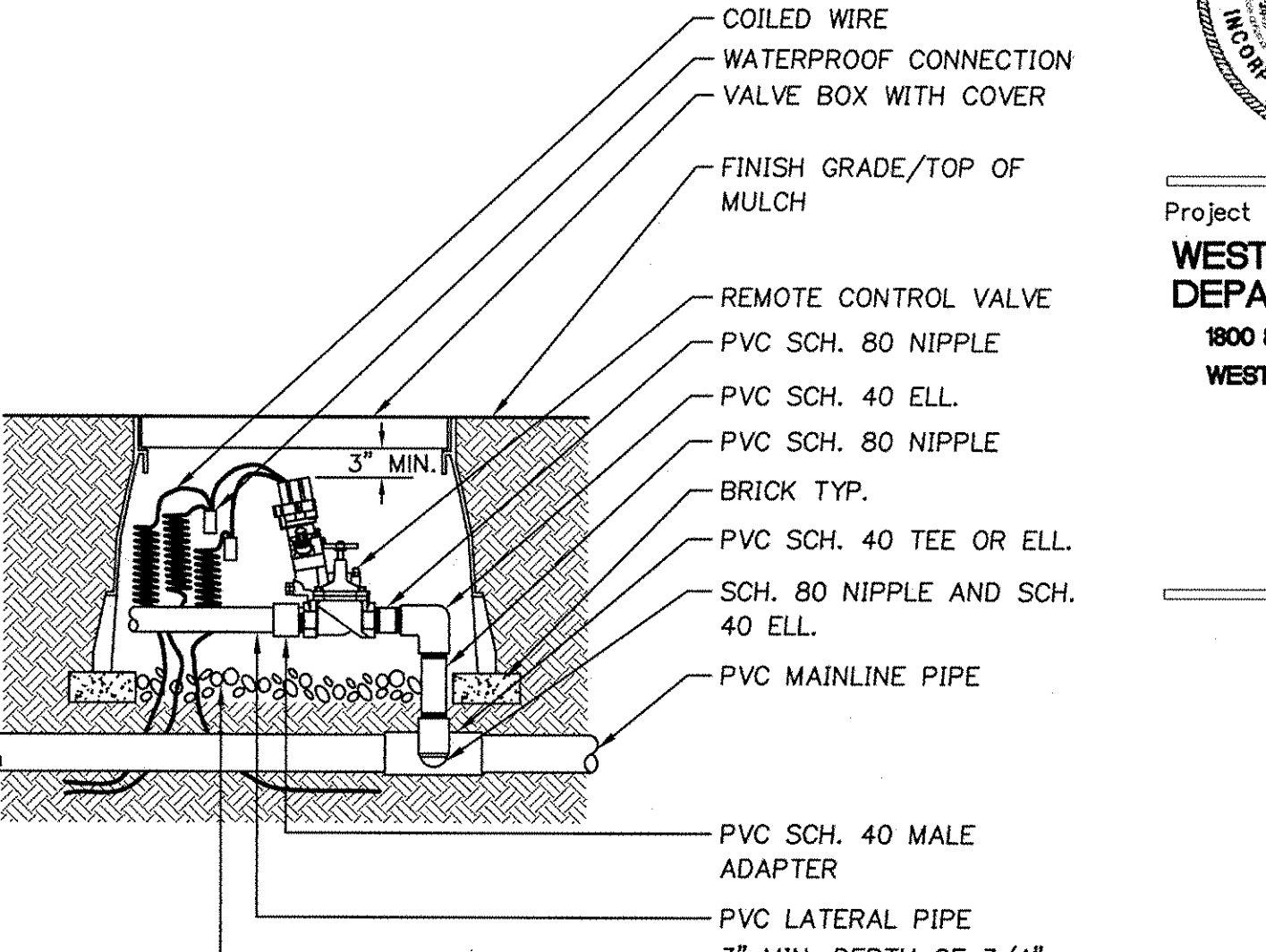
7 IRRIGATION TRENCH
 L8.1 SCALE: NTS



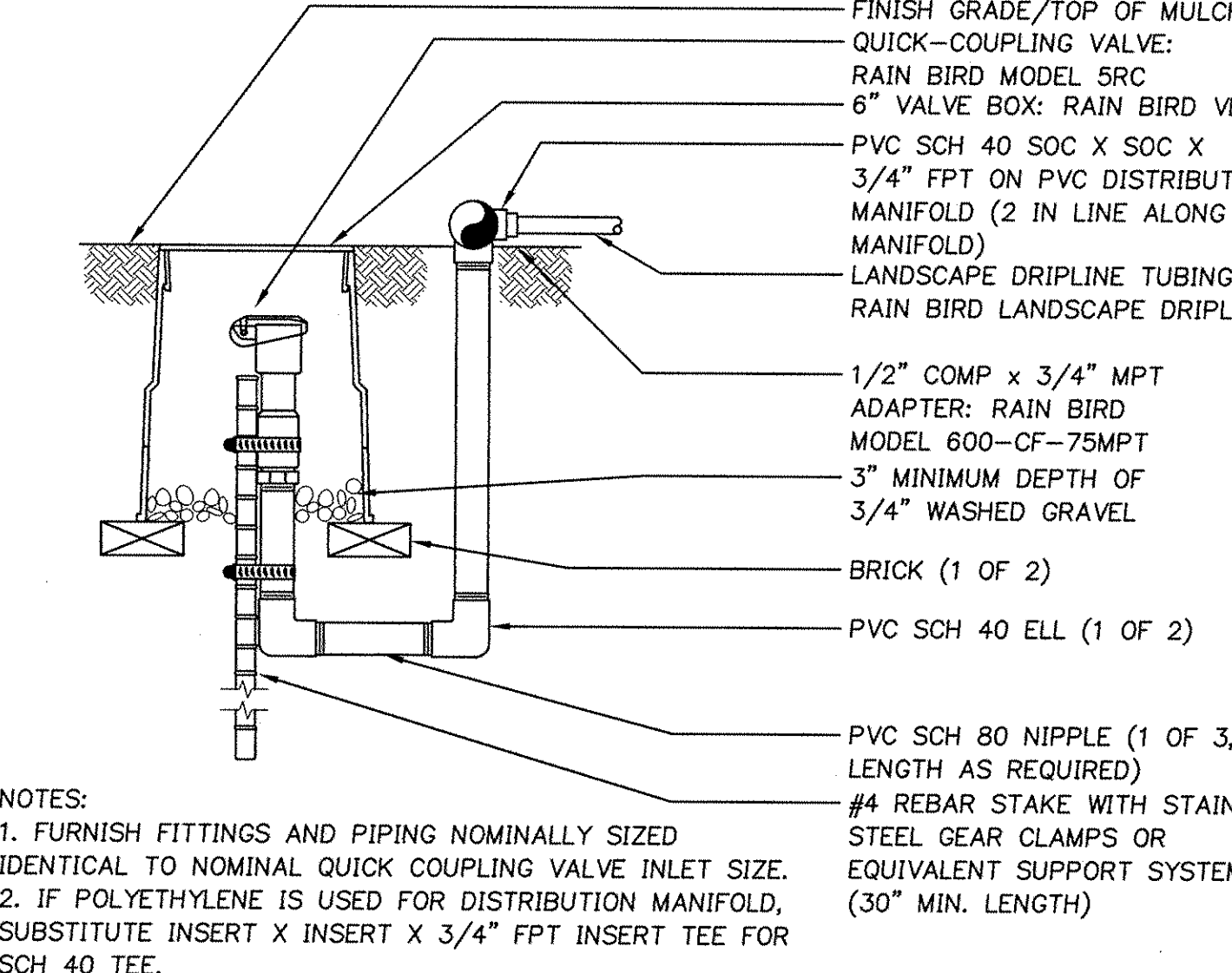
8 WALL MOUNT CONTROLLER
 L8.1 OUTSIDE BUILDING WALL SCALE: NTS



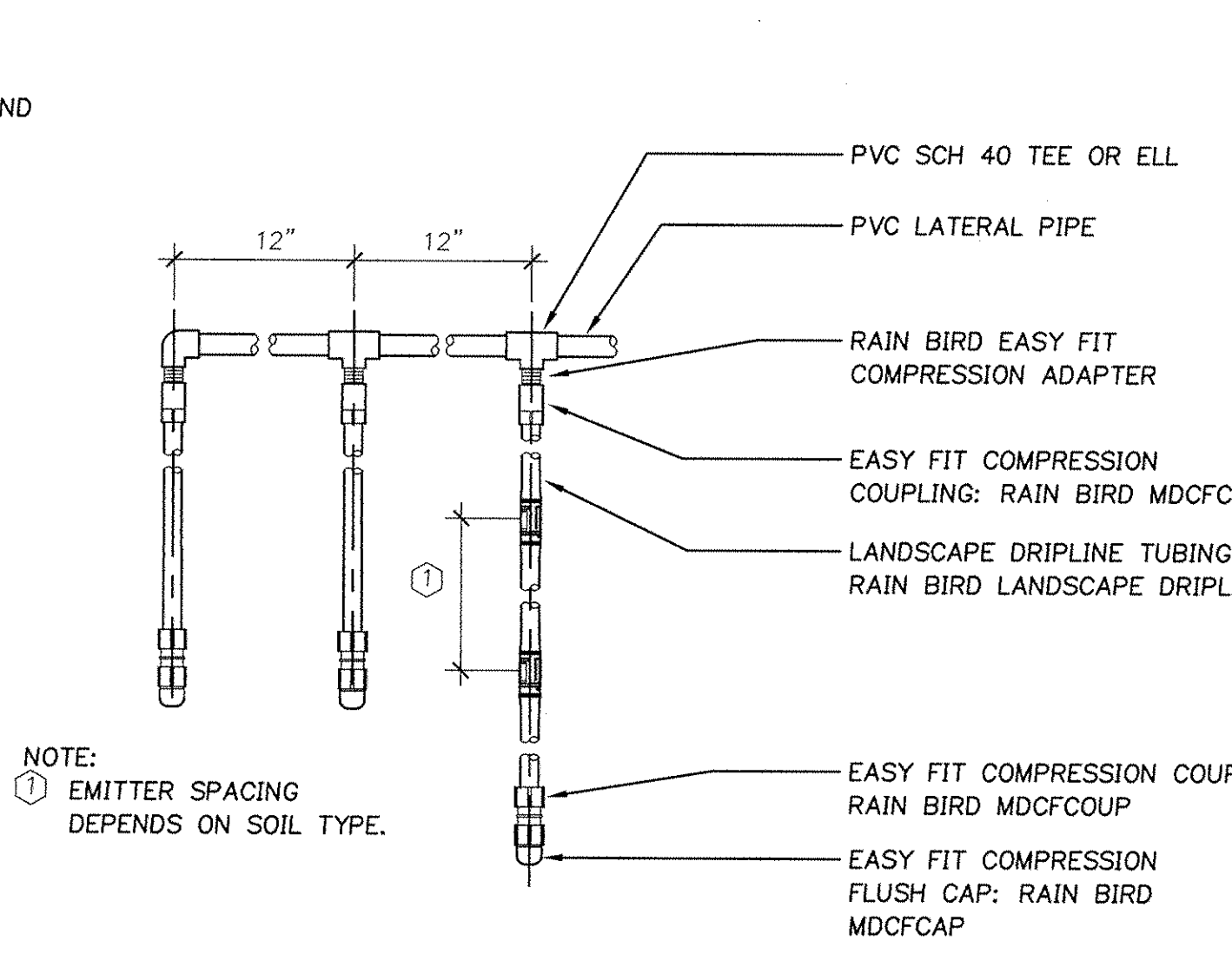
9 SPRAY POP-UP SPRINKLER
 L8.1 NTS



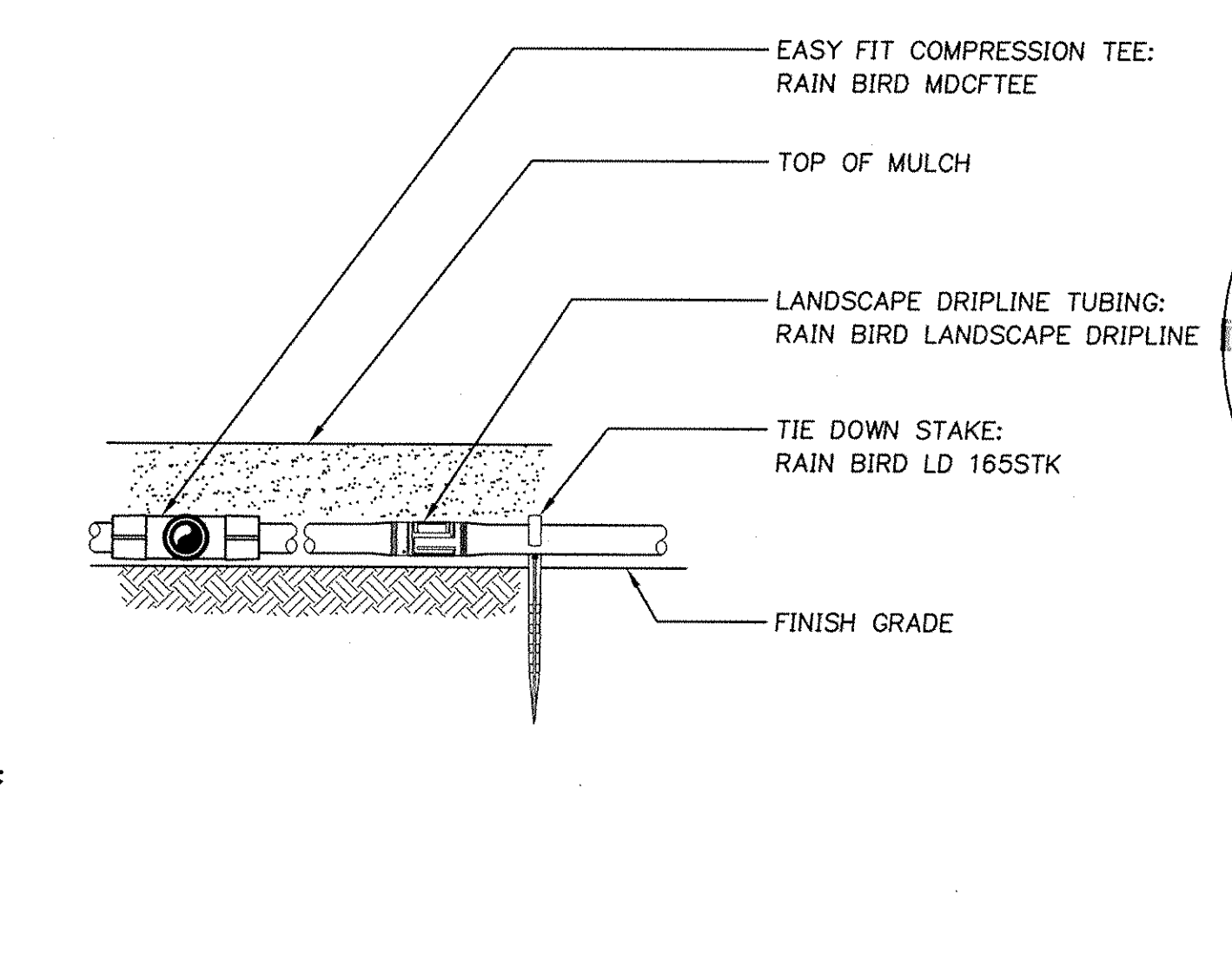
10 ELECTRIC REMOTE CONTROL VALVE
 L8.1 SCALE: NTS



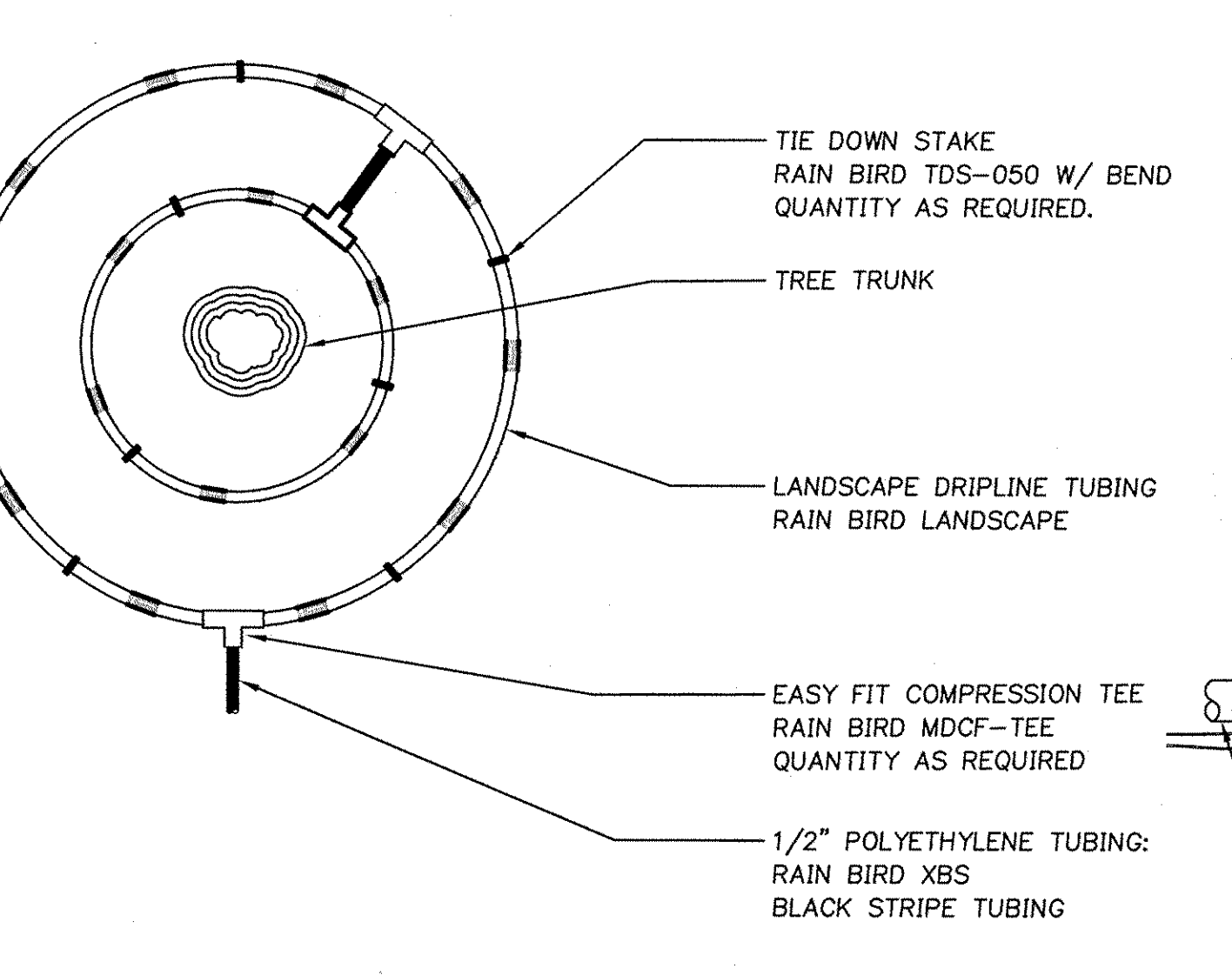
11 LANDSCAPE DRIPLINE FLUSH POINT
 L8.1 POTABLE SYSTEM NTS



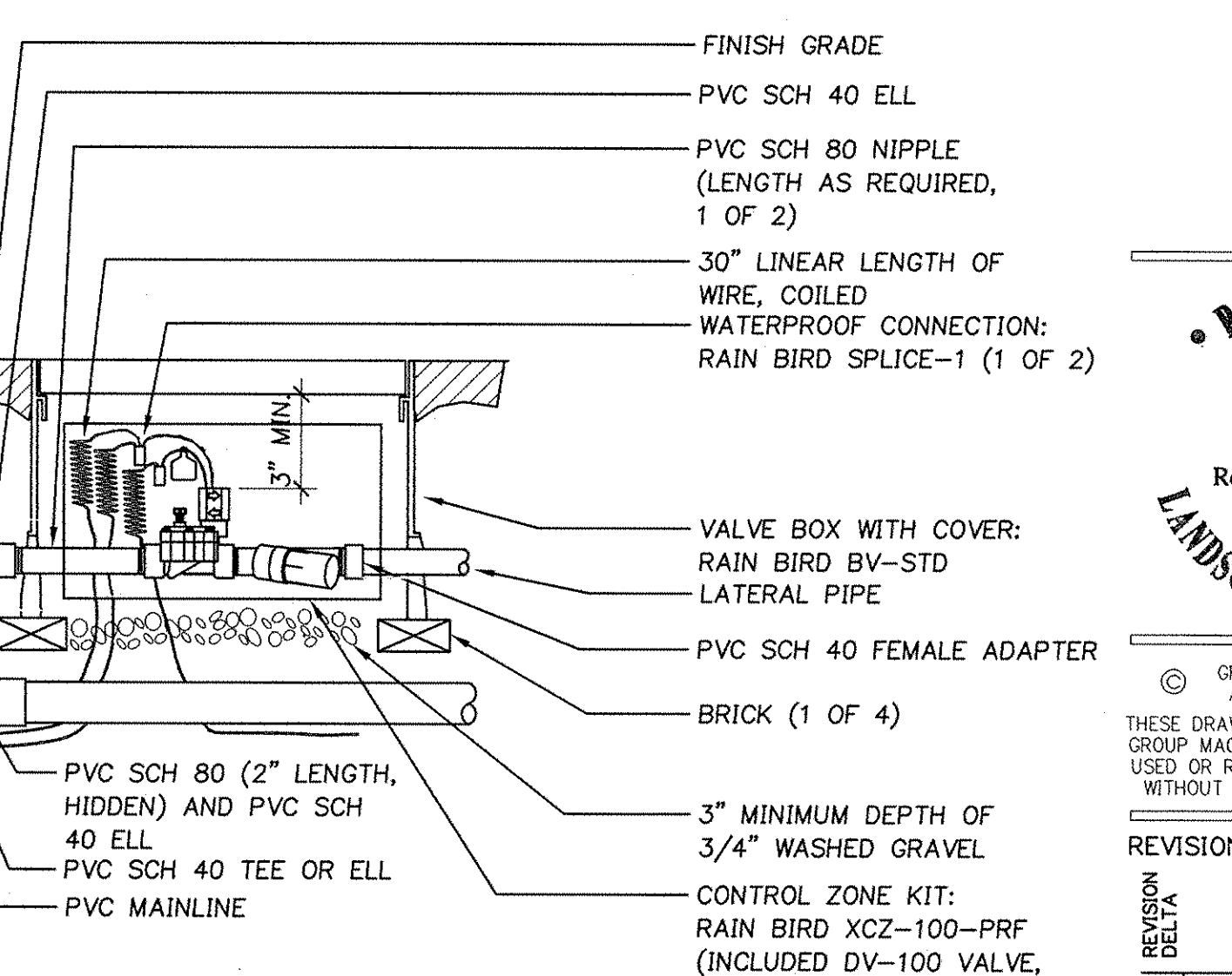
12 LANDSCAPE DRIPLINE LATERALS
 L8.1 POTABLE SYSTEM NTS



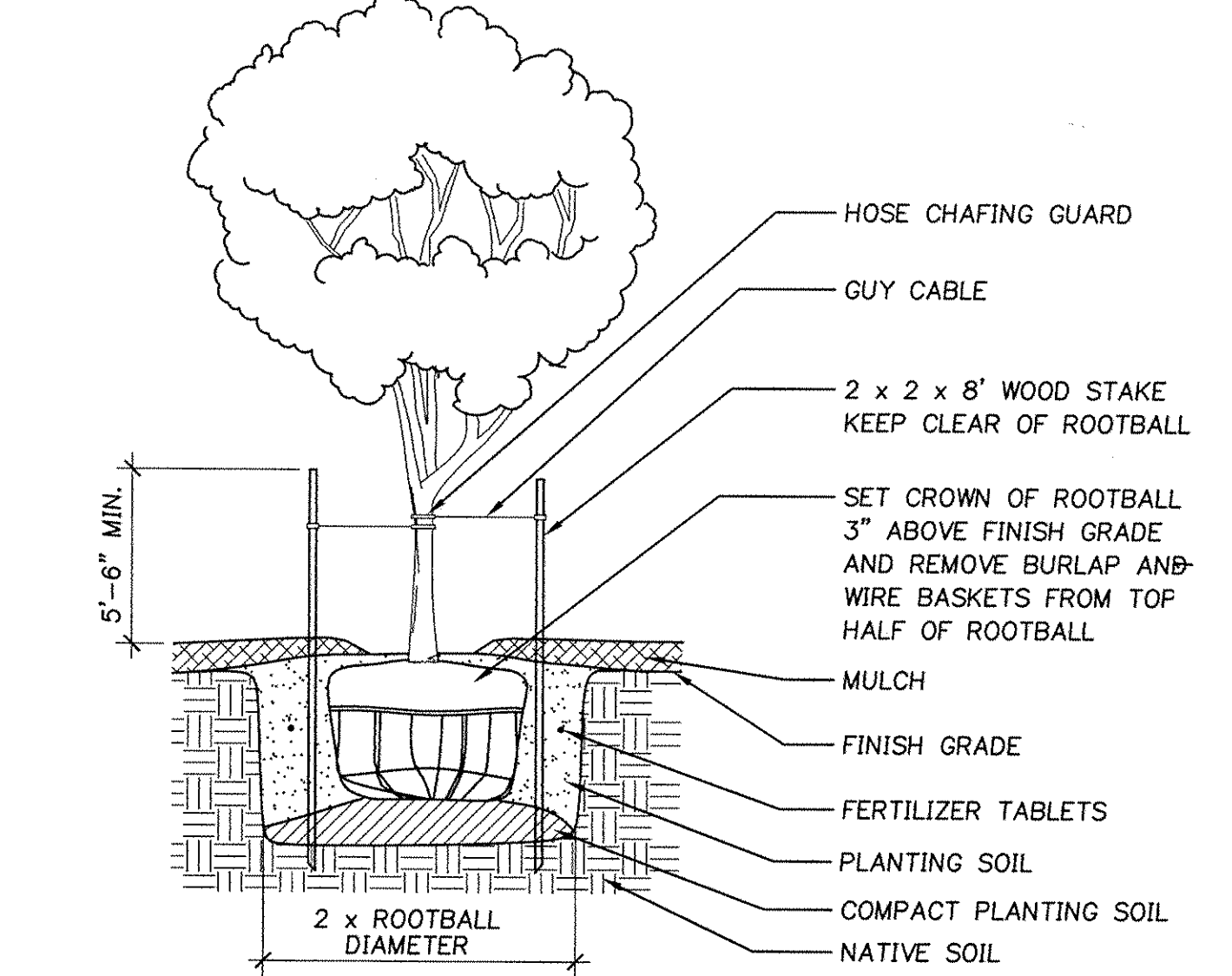
13 LANDSCAPE DRIPLINE ON GRADE
 L8.1 POTABLE SYSTEM NTS



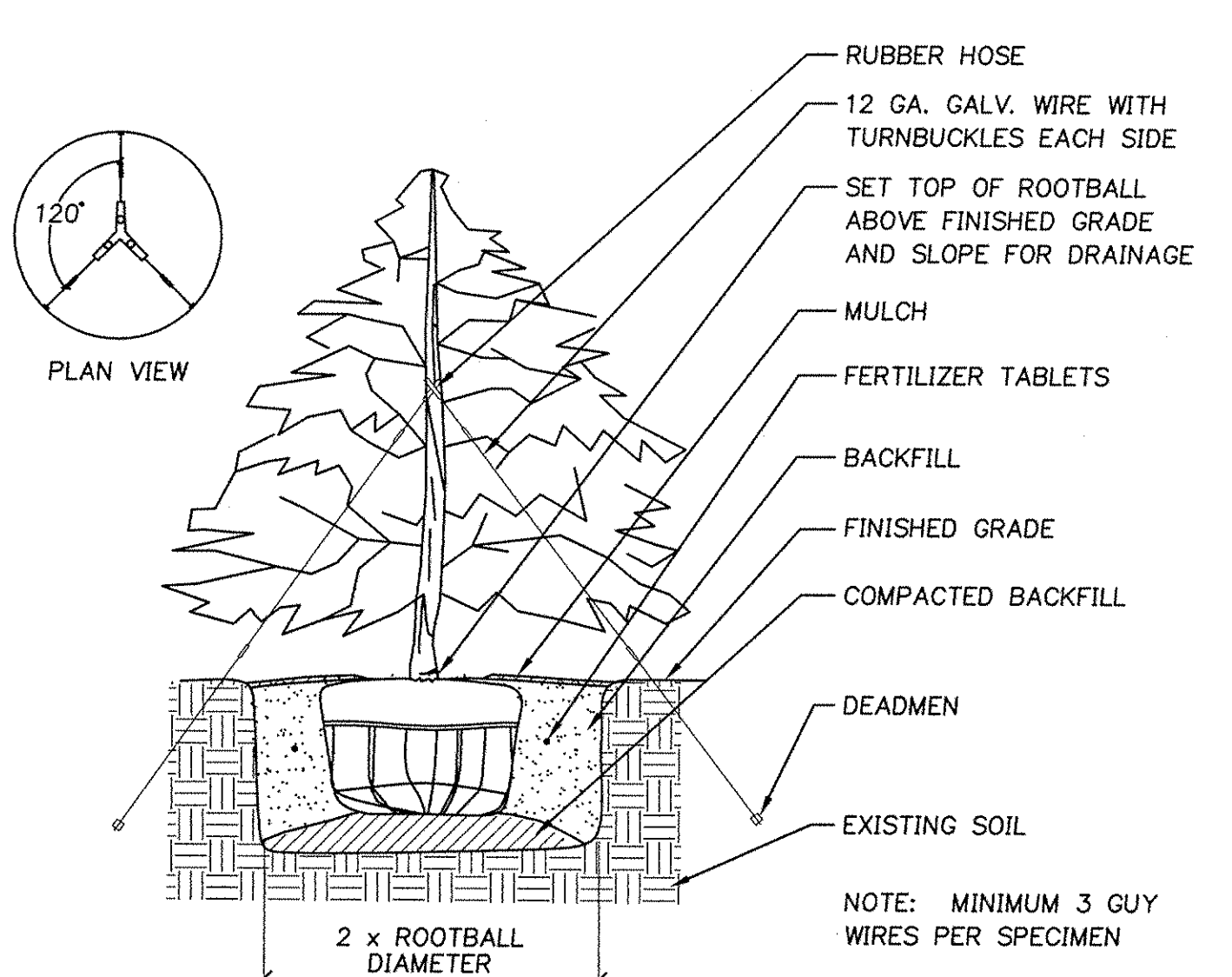
14 DRIPLINE AROUND TREE
 L8.1 NTS



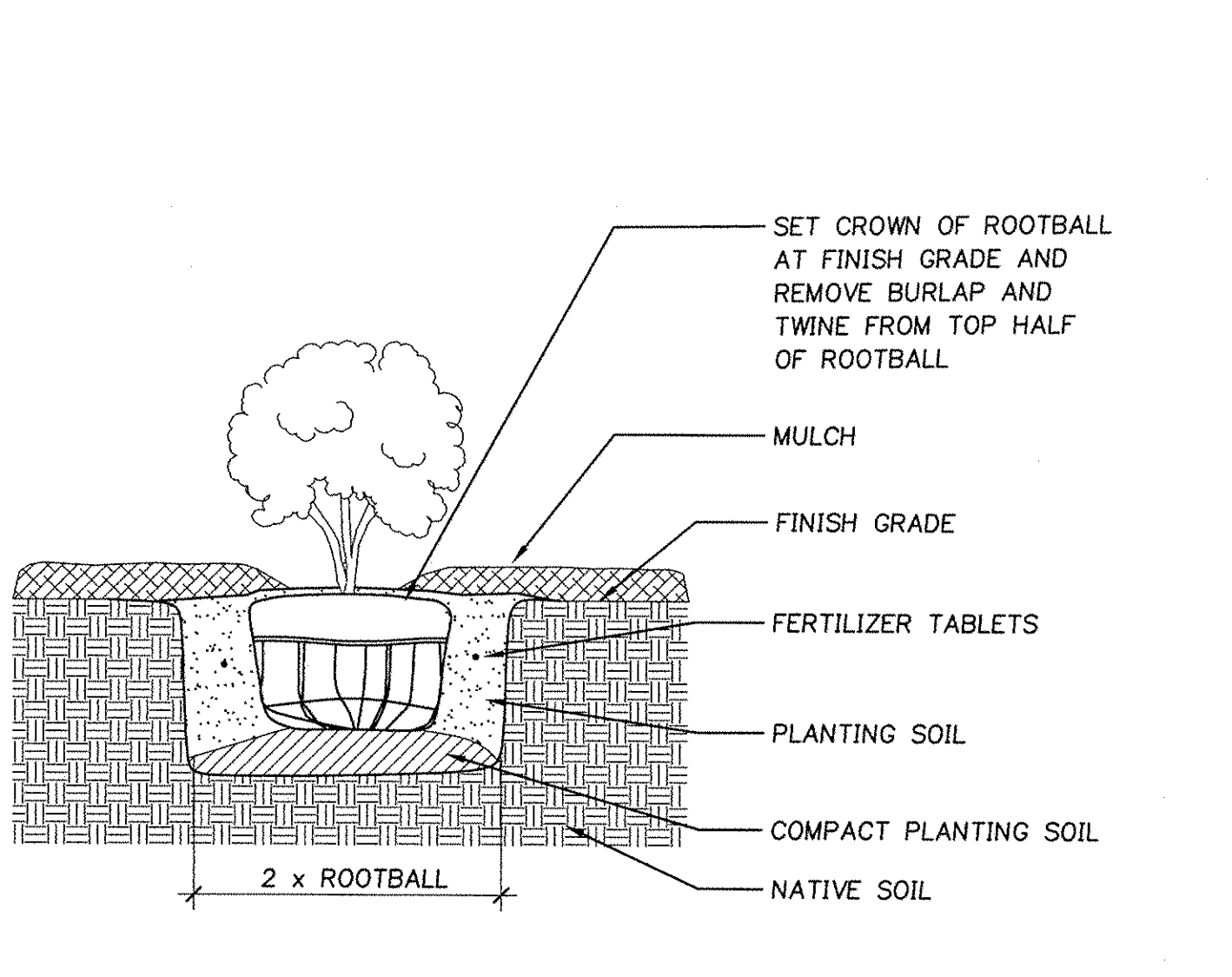
15 1' CONTROL ZONE KIT
 L8.1 WITH PRESSURE REGULATING FILTER: RAINBIRD XCZ-100-PRF NTS



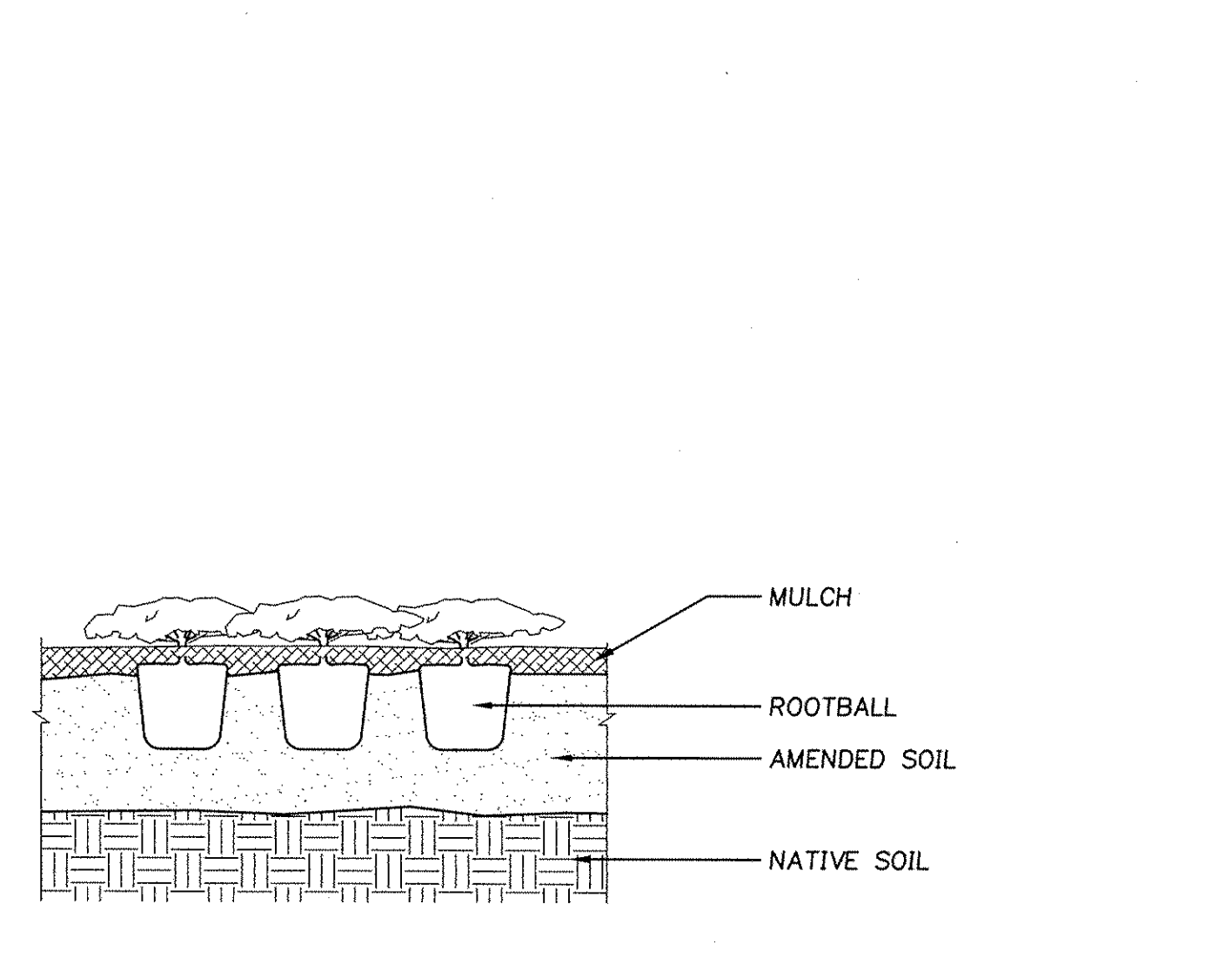
16 TREE PLANTING - DOUBLE STAKE
 L8.1 SCALE: NTS



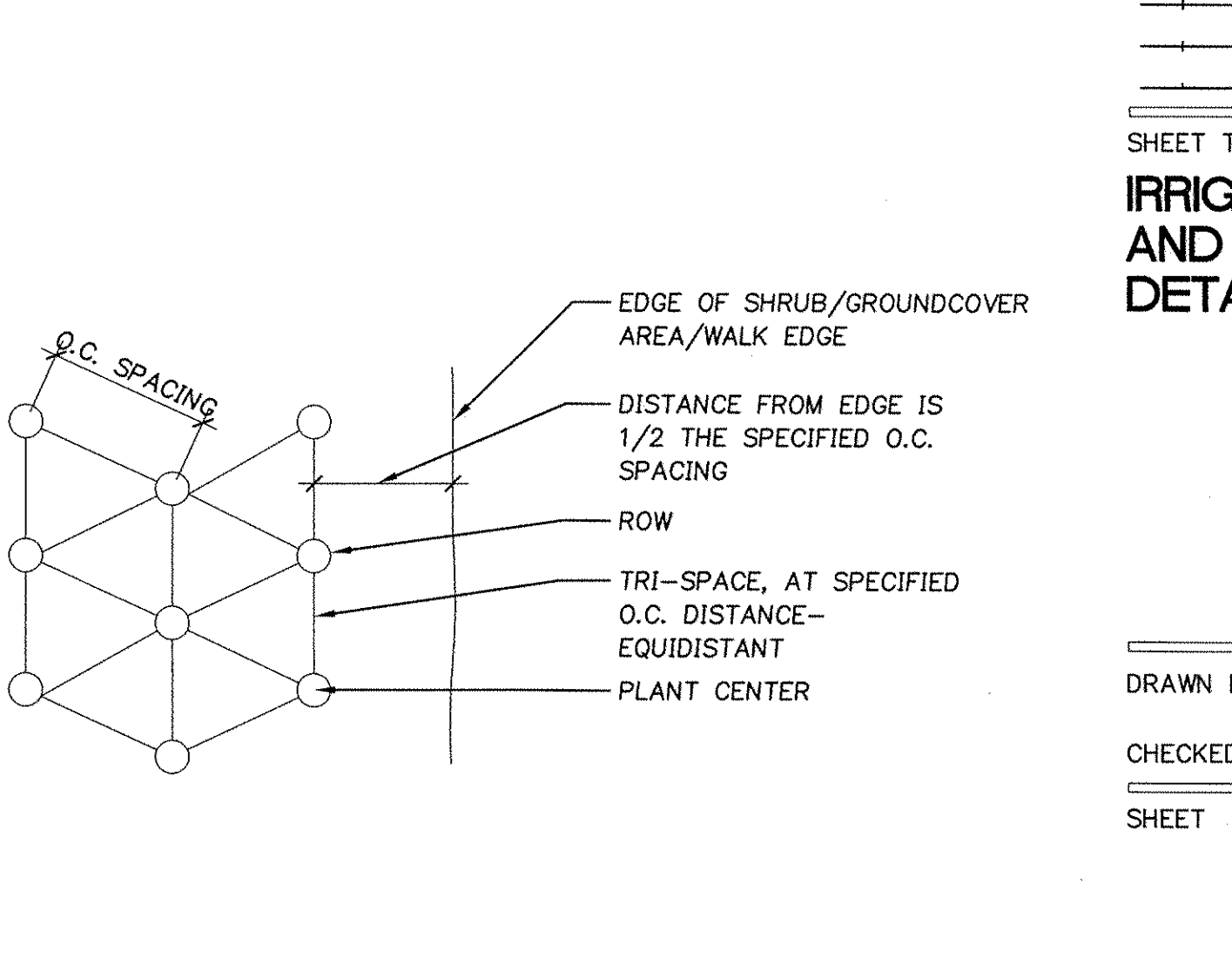
17 EVERGREEN TREE PLANTING
 L8.1 WITH GUY WIRES SCALE: NTS



18 CONTAINER/B+B SHRUB PLANTING
 L8.1 SCALE: NTS



19 GROUNDCOVER PLANTING
 L8.1 SCALE: NTS



20 SHRUB/GROUNDCOVER SPACING
 L8.1 SCALE: NTS



LEGEND

- 01-00 KEYNOTE
- 2 GRIDLINE
- TYPICAL CONCRETE WALL W/ FURRING - SEE STRUCTURAL
- TYPICAL MASONRY UNIT WALL W/ FURRING - SEE STRUCTURAL
- TYPICAL INTERIOR WALL
- PLUMBING WALL, SEE P2/A1.0
- FLOOR DRAIN, SEE PLUMBING
- WALL TYPE, SEE A1.0
- TYPICAL METAL PANEL WALL W/ FURRING
- F/MAS FACE OF MASONRY
- F/CONC FACE OF CONCRETE
- DS DOWNSPOUT - SEE PLUMBING AND CIVIL
- FUTURE BASEMENT ALTERNATE
- 1-HR RATED WALL, SEE A1.0
- FE FIRE EXTINGUISHER - SEE DETAIL --/--
- CJ MASONRY CONTROL JOINT - SEE DETAIL --/--

GENERAL NOTES

- A. SEE ELEVATIONS FOR EXTERIOR WINDOW TYPE DESIGNATION
- B. SEE FURNITURE AND EQUIPMENT PLANS FOR ADDITIONAL INFORMATION
- C. DIMENSIONS REFLECT FACE OF STUD / STRUCTURE UNLESS NOTED OTHERWISE
- D. WALL THICKNESSES ARE ACTUAL UNLESS NOTED OTHERWISE
- J. SEE SHEET A1.0 FOR WALL TYPE DEFINITION AND STANDARD DETAILS
- K. ELEVATION 100'-0" = 151.50 FINISH FLOOR ELEVATION MAIN FLOOR INDICATED IN CIVIL DRAWINGS
- M. SEE FINISH PLAN FOR CASEWORK AND FINISH RELATED INFORMATION
- P. CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS AND LAYOUT INFORMATION. NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS
- Q. REFER TO ENLARGED PLANS WHERE INDICATED FOR ADDITIONAL INFORMATION. ENLARGED PLANS TAKE PRECEDENCE OVER PLANS OF SMALLER SCALE
- S. DOORS NOT DIMENSIONED ARE TO BE LOCATED 4" FROM FACE OF WALL TO OUTSIDE EDGE OF JAMB, TYPICAL
- T. CONTRACTOR TO PROVIDE ADEQUATE GYPSUM BOARD CONTROL JOINTS AS REQUIRED THROUGHOUT ENTIRE BUILDING, INTERIOR AND EXTERIOR

KEY NOTES

- 00-02 LINE OF CANOPY ABOVE - SEE ROOF PLANS
- 00-03 PARTIAL HEIGHT WALL - SEE DETAIL 12/A1.1
- 05-10 STEEL BOLLARD - SEE DETAIL --/--
- 05-12 STEEL COLUMN, PAINT P= WHERE EXPOSED - SEE STRUCTURAL
- 08-21 INTERIOR WINDOW - SEE GLAZING SCHEDULE
- 11-15 COMPACT SHELVING - CONTRACTOR TO COORDINATE W/ VENDOR AND PROVIDE 1/2" RECESSED SLAB FOR ROLLING SHELVING W/ 1/4" MAXIMUM CUMULATIVE SLOPE OVER 10'-0". WHERE SET IN CONCRETE, CONTRACTOR TO VERIFY RECESSED SLAB DIMENSIONS W/ VENDOR PRIOR TO CONSTRUCTION. FILL RECESSED BLOCKOUT W/ NON-SHRINK GROUT AND COORDINATE WITH VENDOR FOR FLUSH TRACK INSTALLATION. CONTRACTOR RESPONSIBLE FOR CORRECTING ANY TRACK ELEVATIONS EXCEEDING 1/8" ABOVE ADJACENT FINISH FLOOR AS REQUIRED BY ARCHITECT.
- 11-19 2'X2' PERSONAL LOCKERS
- 13-05 BULLET RESISTANT EVIDENCE COUNTER AND SLIDING WINDOW ASSEMBLY - SEE INTERIOR DETAIL 10/K
- 22-09 TRENCH DRAIN - SEE PLUMBING AND STRUCT

© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

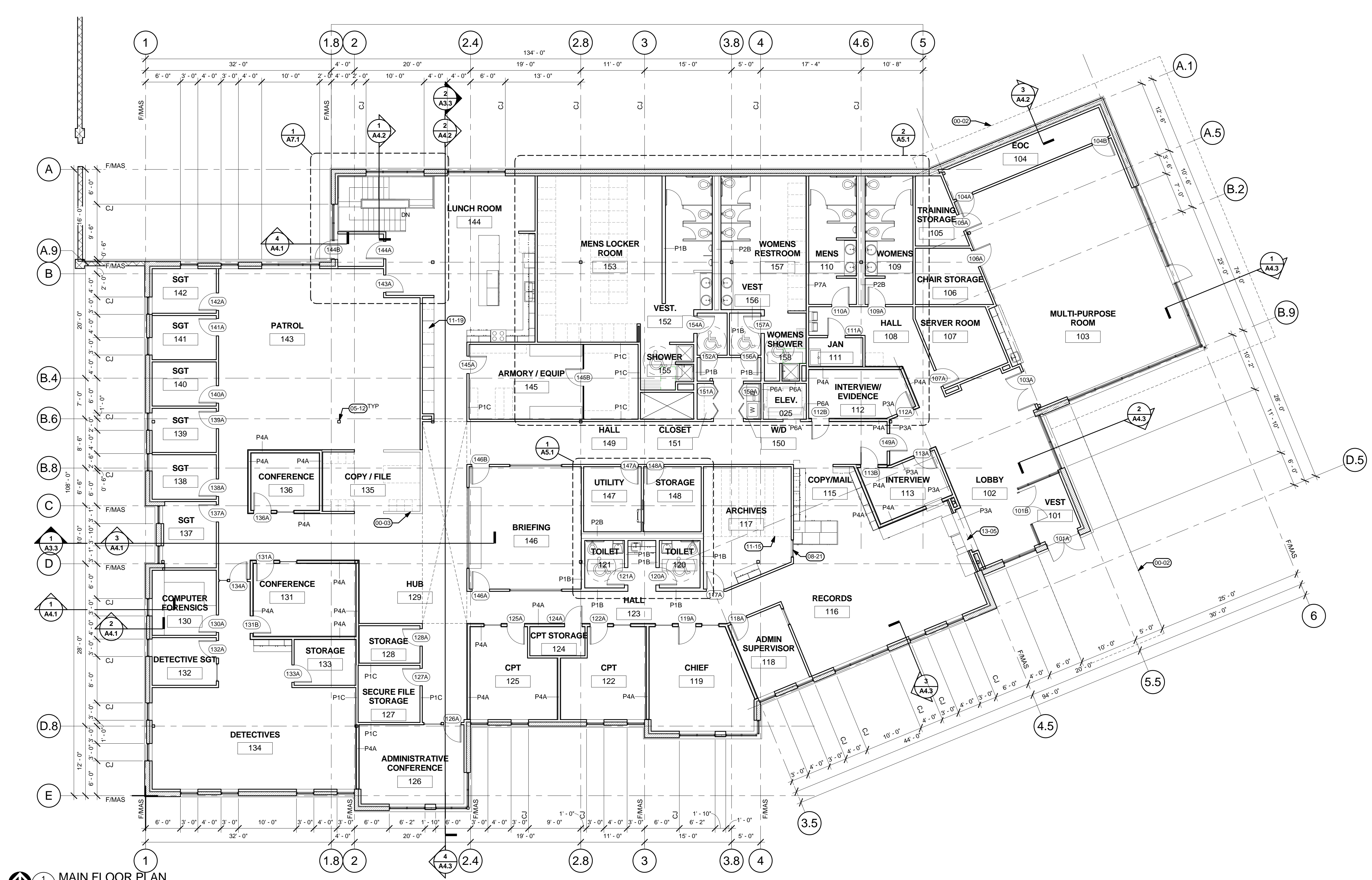
SHEET TITLE:
BASEMENT AND MAIN FLOOR PLANS

DRAWN BY: CPOJEC
 CHECKED BY: BLH
 SHEET

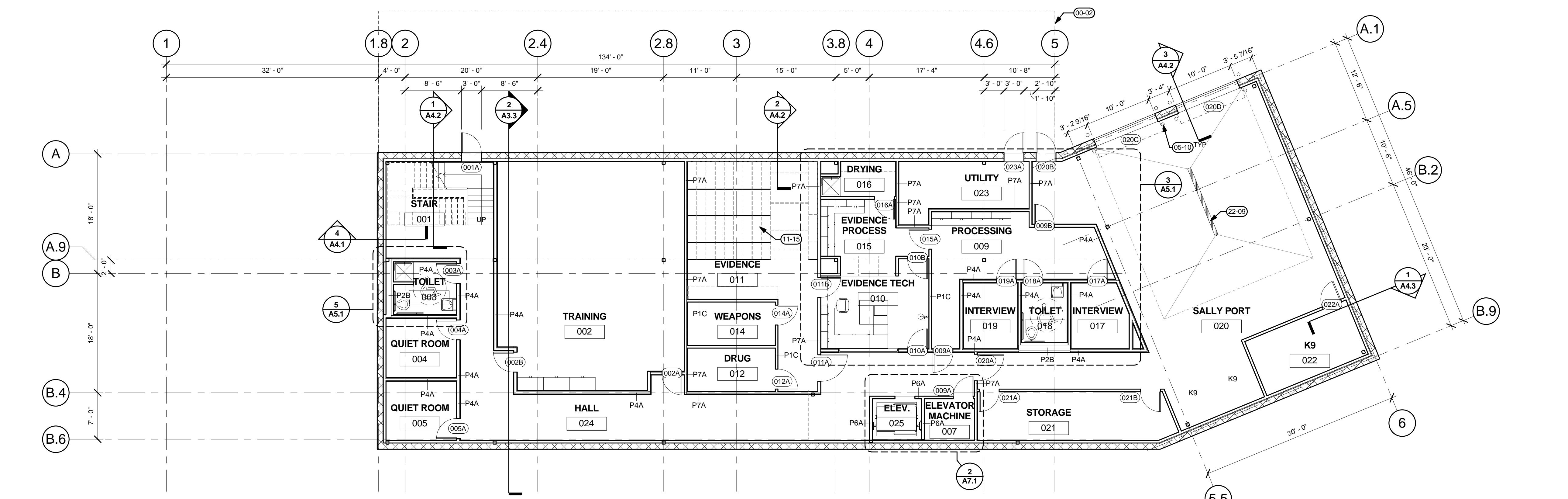
A2.1

JOB NO. **2120180.00**

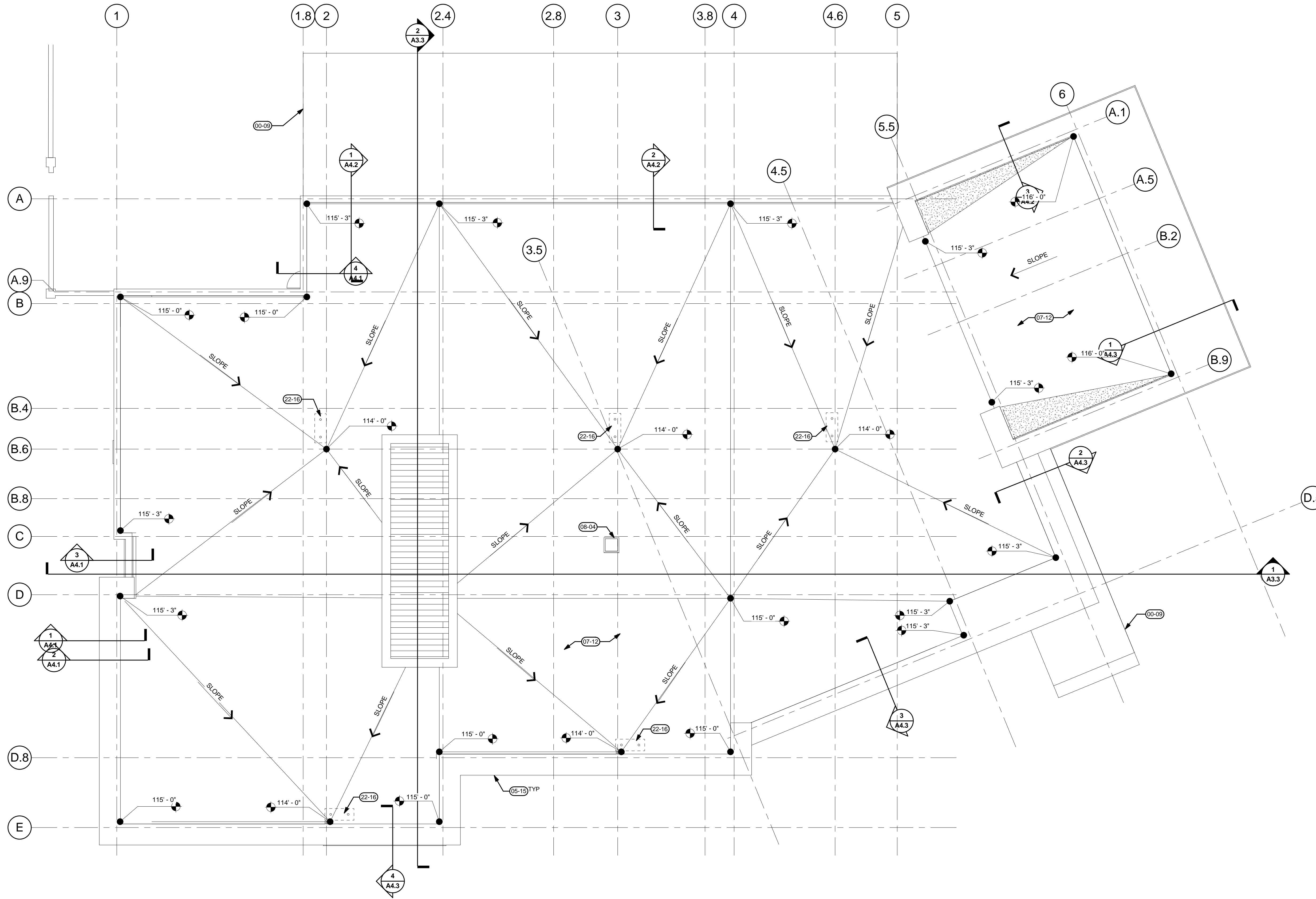
LAND-USE: 11/09/2012
 C:\Users\cpc\Desktop\110_Westlin-CPC.rvt 11/9/2012 6:52:50 PM 18" = 1'-0"



1 MAIN FLOOR PLAN
 1/8" = 1'-0"



2 BASEMENT FLOOR PLAN
 1/8" = 1'-0"



1 ROOF PLAN
A2.2 1/8" = 1'-0"

LEGEND

- RBE INDICATES ROOF BASE ELEVATION - SEE DETAIL 1/A8.1
- SLOPE 1/4" PER FOOT INDICATES DIRECTION OF FLOW TOWARD ROOF DRAIN
- DS DOWNSPOUT
- BUILT-UP ROOFING
- TAPERED INSULATION
- PV MODULES

GENERAL NOTES

- A. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE ONLY COORDINATE EXACT LOCATION OF ROOF/TOOP MECHANICAL EQUIPMENT WITH ARCHITECT/MECH
- B. FOR PIPE PENETRATIONS SEE MECHANICAL DRAWINGS AND DETAIL 2.3/A8.3
- C. FOR MECHANICAL EQUIPMENT CURB SEE MECHANICAL DRAWINGS AND DETAIL 9/A8.3
- D. REFER TO DETAIL 1/A8.3 FOR TYPICAL ROOFING
- E. ELEVATION 100'-0" = CIVIL (F5) 104.0 AT MAIN FLOOR, 180.0 AT BASEMENT INDICATED ON CIVIL DRAWINGS
- F. NO PENETRATIONS ARE ALLOWED IN METAL ROOF. ALL PIPING IS TO BE ROUTED TO AVOID PENETRATION IN METAL ROOF ASSEMBLY
- G. PLACE CRICKETS AT UP SLOPE SIDE OF ALL ROOF TOP EQUIPMENT, ROOF HATCHES, ETC. AND WHERE SHOWN - MAINTAIN 1/4" PER FOOT MINIMUM SLOPE TO ENSURE PROPER DRAINAGE AT ALL PORTIONS OF ROOF

KEY NOTES

- 00-09 LINE OF CANOPY BELOW
- 05-15 METAL FACIA W/ INTEGRAL GUTTER - FINISH TO MATCH -
- 07-12 BUILT-UP ROOFING ASSEMBLY WITH ENERGY STAR COATING, TYPICAL - SEE DETAIL -/-
- 08-04 ROOF HATCH ASSEMBLY - COORDINATE LOCATION W/ STRUCTURAL DETAIL XXX
- 22-16 INTERNAL ROOF DRAIN ASSEMBLY W/ OVERFLOW DEVICE - SEE PLUMBING

GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Seattle WA
 206.749.8963

Civil Engineering
 Structural Engineering
 Transportation Planning
 Landscape Architecture
 Portland OR
 Vancouver WA
 503.224.1890
 360.862.6779

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

SHEET TITLE:
ROOF PLAN

DRAWN BY: CPC/JEC
 CHECKED BY: BLH
 SHEET

A2.2

JOB NO. **2120180.00**

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

- LEGEND**
- ① WINDOW TYPE -- SEE A9.3
 - ①_B WINDOW TYPE, AS NOTED, BULLET RESISTANT -- SEE A9.3
 - ①_{OPP} WINDOW TYPE, AS NOTED, OPPOSITE
 - ①_F WINDOW TYPE, AS NOTED, BLASTGUARD FILM -- SEE A9.3
 - [Pattern] STRUCTURAL MASONRY UNIT - TYPE 1, ...
 - [Pattern] STRUCTURAL MASONRY UNIT - TYPE 2, ...
 - [Pattern] CONCRETE MASONRY UNIT CMU-1
 - [Pattern] CONCRETE WALL

- GENERAL NOTES**
- A. SEE ELEVATIONS FOR EXTERIOR WINDOW TYPE DESIGNATION
 - B. SEE FURNITURE AND EQUIPMENT PLANS FOR ADDITIONAL INFORMATION
 - C. DIMENSIONS REFLECT FACE OF STUD / STRUCTURE UNLESS NOTED OTHERWISE
 - D. WALL THICKNESSES ARE ACTUAL UNLESS NOTED OTHERWISE
 - J. SEE SHEET A1.0 FOR WALL TYPE DEFINITION AND STANDARD DETAILS
 - K. ELEVATION 100'-0" = 194.00' FINISH FLOOR ELEVATION MAIN FLOOR INDICATED IN CIVIL DRAWINGS
 - M. SEE FINISH PLAN FOR CASEWORK AND FINISH RELATED INFORMATION
 - P. CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS AND LAYOUT INFORMATION. NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS
 - Q. REFER TO ENLARGED PLANS WHERE INDICATED FOR ADDITIONAL INFORMATION. ENLARGED PLANS TAKE PRECEDENT OVER PLANS OF SMALLER SCALE
 - S. DOORS NOT DIMENSIONED ARE TO BE LOCATED 4" FROM FACE OF WALL TO OUTSIDE EDGE OF JAMB, TYPICAL
 - T. CONTRACTOR TO PROVIDE ADEQUATE GYPSUM BOARD CONTROL JOINTS AS REQUIRED THROUGHOUT ENTIRE BUILDING, INTERIOR AND EXTERIOR

- KEY NOTES**
- 00-17 CARPORT CANOPY
 - 04-17 STRUCTURAL CLAY MASONRY, LINTEL BLOCK
 - 05-16 EXTERIOR CANOPY -- SEE ROOF PLAN
 - 08-01 HOLLOW METAL DOOR & FRAME -- SEE DOOR SCHEDULE
 - 08-09 MOTORIZED SECTIONAL OVERHEAD DOOR -- SEE DOOR SCHEDULE
 - 08-13 ALUMINUM-FRAMED STOREFRONT SYSTEM -- SEE GLAZING SCHEDULE
 - 08-15 STOREFRONT DOOR ASSEMBLY -- SEE DOOR SCHEDULE

© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

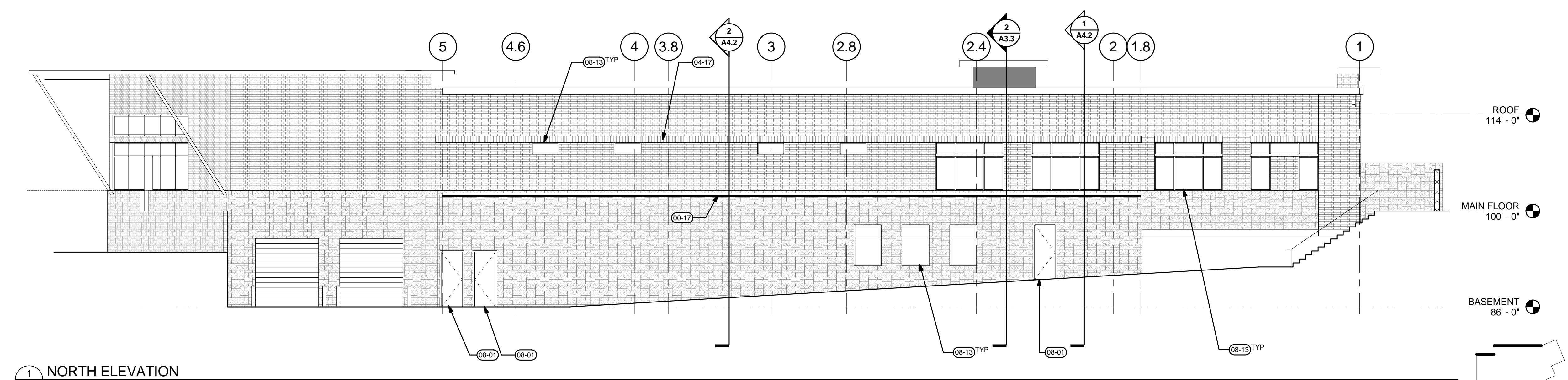
SHEET TITLE:
BUILDING ELEVATIONS

DRAWN BY: CPC/JEC
 CHECKED BY: BLH
 SHEET

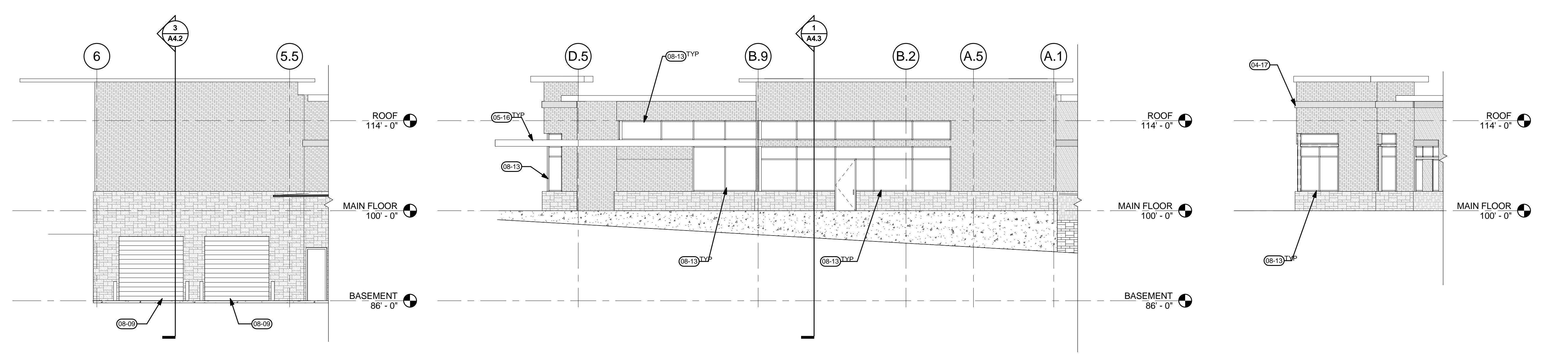
A3.1

JOB NO. **2120180.00**

LAND-USE: 11/09/2012
 L:\user\cpc\Desktop\1100_Westlin-CPC.rvt 11/9/2012 6:53:15 PM As Indicated



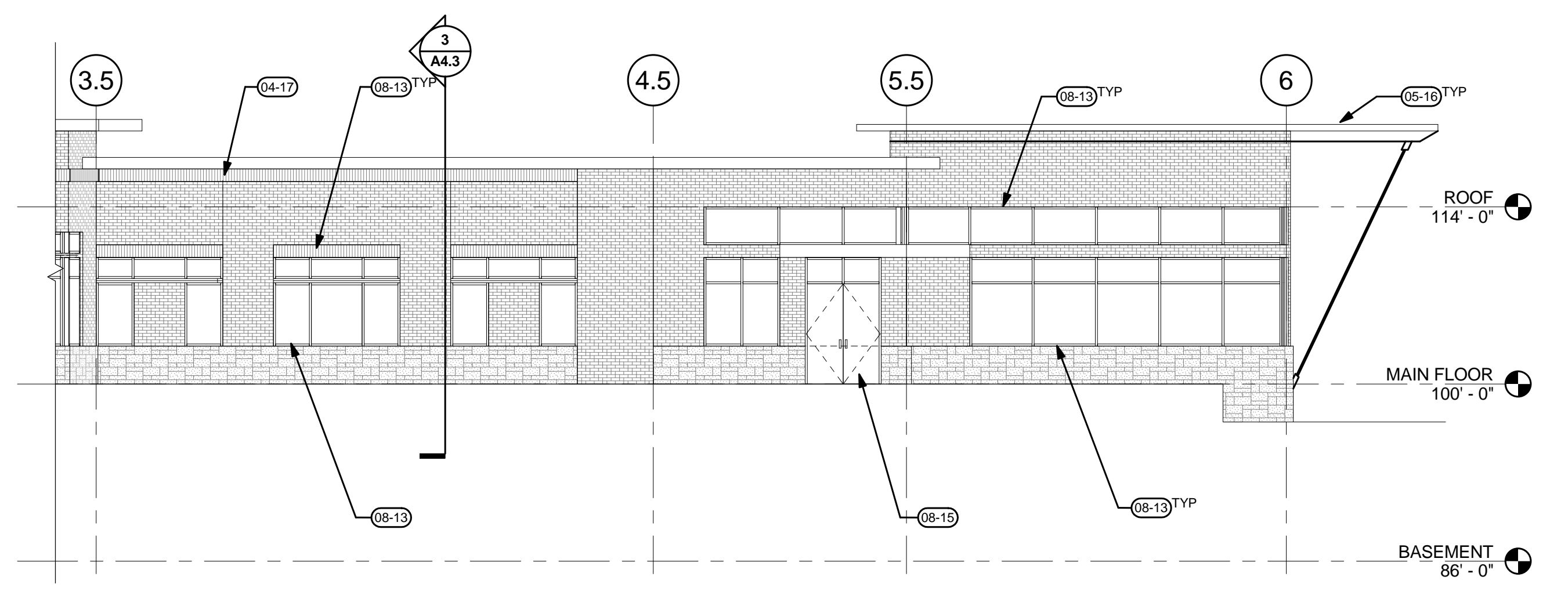
1 NORTH ELEVATION
 A3.1 1/8" = 1'-0"



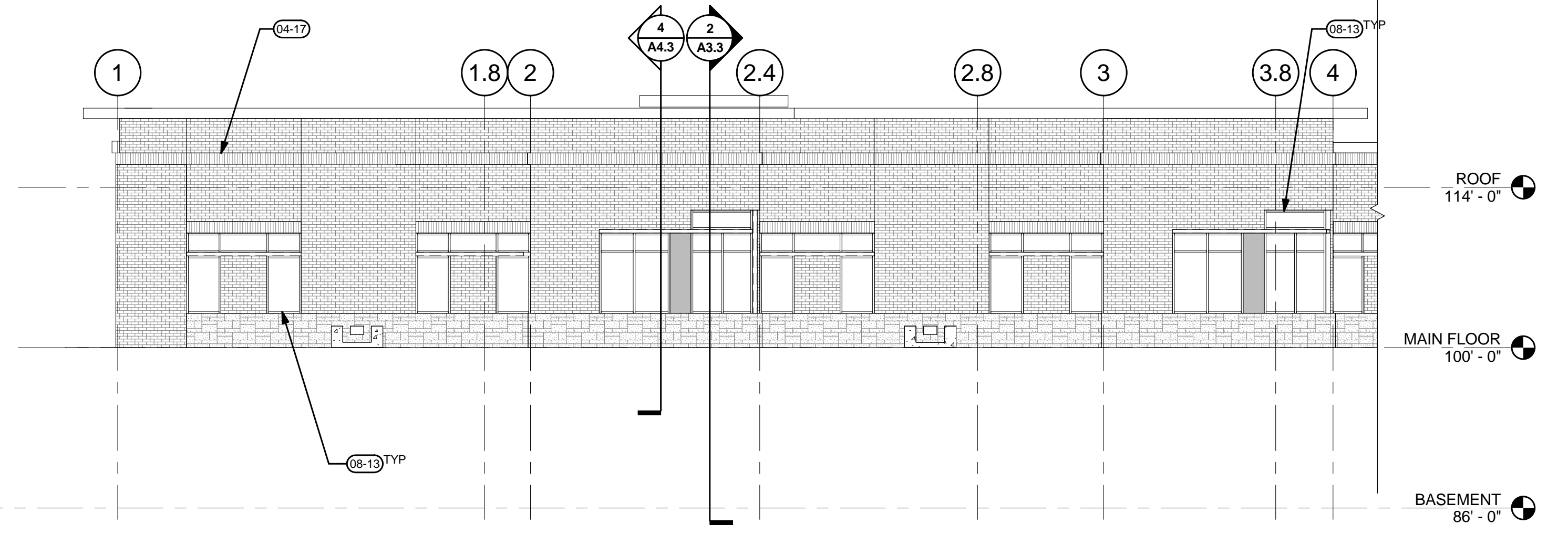
2 NORTHWEST ELEVATION
 A3.1 1/8" = 1'-0"

3 NORTHEAST ELEVATION
 A3.1 1/8" = 1'-0"

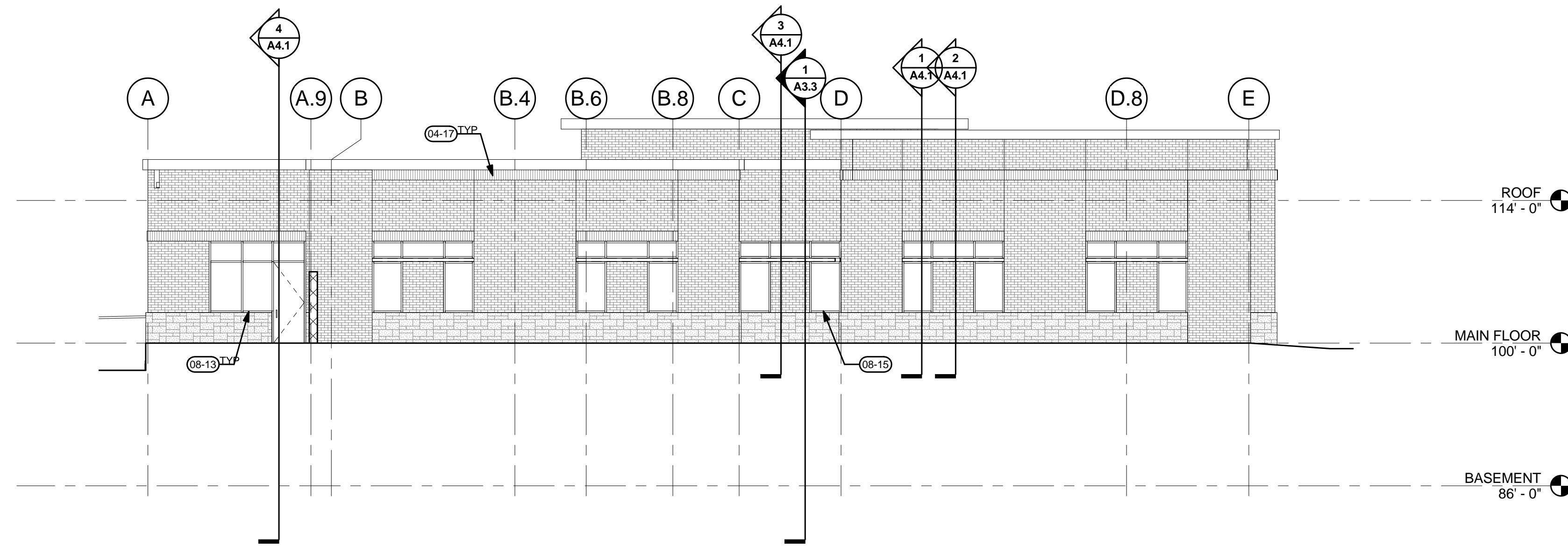
4 EAST ELEVATION
 A3.1 1/8" = 1'-0"



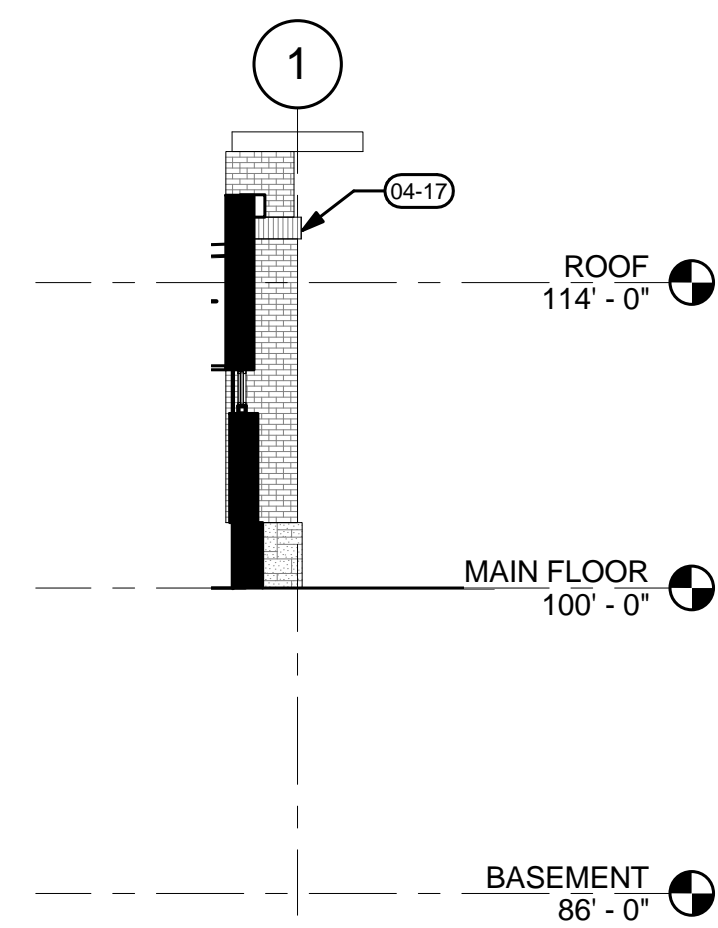
5 SOUTHEAST ELEVATION
 A3.1 1/8" = 1'-0"



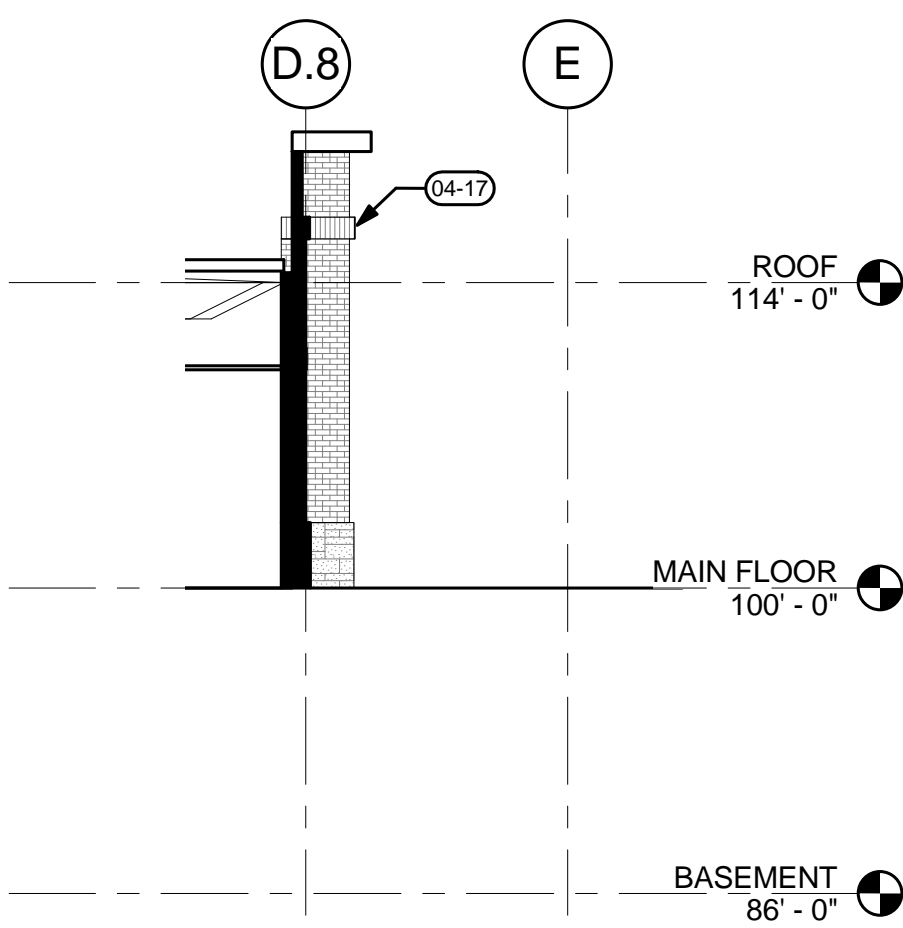
6 SOUTH ELEVATION
 A3.1 1/8" = 1'-0"



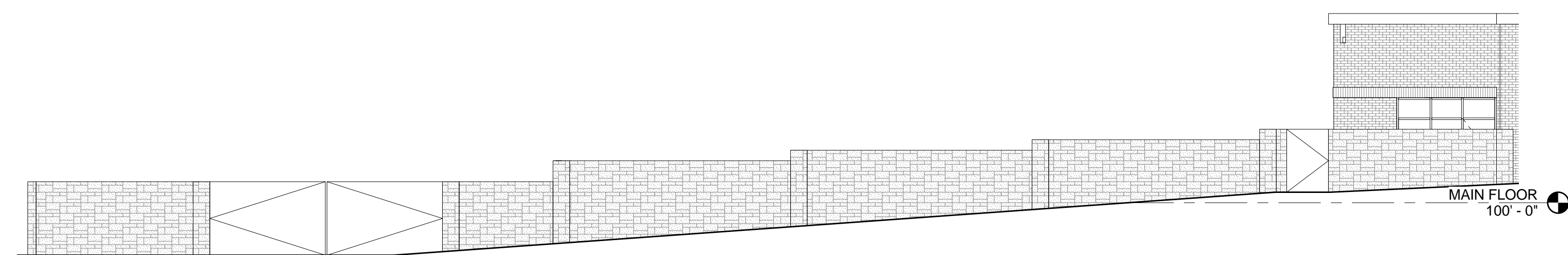
1 WEST ELEVATION
A3.2 1/8" = 1'-0"



2 NORTH / SOUTH ELEVATION ON WEST ELEVATION
A3.2 1/8" = 1'-0"



3 WEST ELEVATIONS ON SOUTH ELEVATION
A3.2 1/8" = 1'-0"



4 SECURITY WALL WEST ELEVATION
A3.2 1/8" = 1'-0"

LEGEND

- ① WINDOW TYPE -- SEE A9.3
- ①_b WINDOW TYPE, AS NOTED, BULLET RESISTANT -- SEE A9.3
- ①_{OPP} WINDOW TYPE, AS NOTED, OPPOSITE
- ①_F WINDOW TYPE, AS NOTED, BLASTGUARD FILM -- SEE A9.3
- [Symbol] STRUCTURAL MASONRY UNIT - TYPE 1, . .
- [Symbol] STRUCTURAL MASONRY UNIT - TYPE 2, . .
- [Symbol] CONCRETE MASONRY UNIT CMU-1
- [Symbol] CONCRETE WALL

GENERAL NOTES

- A. SEE ELEVATIONS FOR EXTERIOR WINDOW TYPE DESIGNATION
- B. SEE FURNITURE AND EQUIPMENT PLANS FOR ADDITIONAL INFORMATION
- C. DIMENSIONS REFLECT FACE OF STUD / STRUCTURE UNLESS NOTED OTHERWISE
- D. WALL THICKNESSES ARE ACTUAL UNLESS NOTED OTHERWISE
- J. SEE SHEET A1.0 FOR WALL TYPE DEFINITION AND STANDARD DETAILS
- K. ELEVATION 100'-0" = 194.00' FINISH FLOOR ELEVATION MAIN FLOOR INDICATED IN CIVIL DRAWINGS
- M. SEE FINISH PLAN FOR CASEWORK AND FINISH RELATED INFORMATION
- P. CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS AND LAYOUT INFORMATION. NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS
- Q. REFER TO ENLARGED PLANS WHERE INDICATED FOR ADDITIONAL INFORMATION. ENLARGED PLANS TAKE PRECEDENCE OVER PLANS OF SMALLER SCALE
- S. DOORS NOT DIMENSIONED ARE TO BE LOCATED 4" FROM FACE OF WALL TO OUTSIDE EDGE OF JAMB, TYPICAL
- T. CONTRACTOR TO PROVIDE ADEQUATE GYPSUM BOARD CONTROL JOINTS AS REQUIRED THROUGHOUT ENTIRE BUILDING, INTERIOR AND EXTERIOR

KEY NOTES

- 04-17 STRUCTURAL CLAY MASONRY: LINTEL BLOCK
- 08-13 ALUMINUM-FRAMED STOREFRONT SYSTEM -- SEE GLAZING SCHEDULE
- 08-15 STOREFRONT DOOR ASSEMBLY -- SEE DOOR SCHEDULE

GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Seattle, WA
 206.749.8963

Civil Engineering
 Structural Engineering
 Transportation Planning
 Landscape Architecture
 Portland, OR
 Vancouver, WA
 503.224.3590

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project
WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

SHEET TITLE:
BUILDING ELEVATIONS

DRAWN BY: CPC/JEC
 CHECKED BY: BLH
 SHEET

A3.2

JOB NO. **2120180.00**
 10/05/12
LAND-USE: 11/09/2012

MECHANICAL SYMBOL LIST

NOTE: This is a standard symbol list and not all items listed may be used.

Abbreviations

(E)	EXISTING
(N)	NEW
(R)	RELOCATE/RELOCATED LOCATION
A/C	AIR CONDITION(ED)
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
B	BOILER
BDD	BACKDRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
CD	CEILING DIFFUSER
CD	CONDENSATE DRAIN
CH	CHILLER
CL	CENTERLINE
CONT.	CONTINUATION
COP	COEFFICIENT OF PERFORMANCE
CT	COOLING TOWER
CU	CONDENSING UNIT
CV	CHECK VALVE
CW	COLD WATER
D	DROP
DB	DECIBEL
DB	DRY BULB
DG	DOOR GRILLE
DIA	DIAMETER
DP	DEW POINT, DIFFERENTIAL PRESSURE
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATING
EF	EXHAUST FAN
EFF	EFFICIENT
EL	ELEVATION
ELECT	ELECTRICAL
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
F	FAHRENHEIT
FA	FACE AREA
FC	FAN COIL
FC	FLEXIBLE CONNECTOR
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET
GAL	GALLONS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HEAD
HP	HEAT PUMP
HP	HORSEPOWER
HTG	HEATING
HTR	HEATER

HWC	HOT WATER COIL
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS.	POUNDS
LH	LATENT HEAT
LWT	LEAVING WATER TEMPERATURE
MA	MIXED AIR
MAX	MAXIMUM
MBH	THOUSAND BTU'S PER HOUR
MD	MOTORIZED DAMPER
MH	MOUNTING HEIGHT
MIN	MINIMUM
MS	MOTOR STARTER
MW	MAKE-UP WATER
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
P	PUMP
PD	PRESSURE DROP
PH	PHASE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
R	RISE
RA	RETURN AIR
REF	REFRIGERANT
RET	RETURN
RH	RELATIVE HUMIDITY
RL	REFRIGERANT LIQUID
RLD	RELIEF DAMPER
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
SA	SUPPLY AIR
SEER	SEASONAL ENERGY EFFICIENCY RATING
SF	SQUARE FEET
SH	SENSIBLE HEAT
SOV	SHUT OFF VALVE
SP	STATIC PRESSURE
T, TEMP	TEMPERATURE
TD	TEMPERATURE DIFFERENCE
TH	TOTAL HEAT
TP	TOTAL PRESSURE
UD	UNDERCUT DOOR
V	VOLT
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER (HAND OPERATOR)
VEL	VELOCITY
W	WITH

W	WATT
WB	WET BULB
WC	WATER COLUMN

Dampers

	FD	FIRE DAMPER
	FSD	FIRE/SMOKE DAMPER
	MD	MOTORIZED DAMPER
	SD	SMOKE DAMPER
	VD	VOLUME DAMPER

Diffusers and Grilles

	EA	EXHAUST AIR
	RA	RETURN AIR
	SA	SUPPLY AIR
	CD-1	DIFFUSER OR GRILLE IDENTIFICATION

Ductwork Fittings

	ALD	ACOUSTICALLY LINED DUCT (SIZES SHOWN ARE NET INSIDE)
	B	BELLMOUTH
	CS	CONCENTRIC SQUARE TO ROUND
	CTR	CONCENTRIC TRANSITION, RECTANGULAR OR ROUND
	ECTR	ECCENTRIC TRANSITION, RECTANGULAR OR ROUND
	FC	FLEXIBLE CONNECTION
	ME	MITERED ELBOW WITH TURNING VANES
	NSW	NON-SYMMETRICAL WYE
	RE	RADIUSED ELBOW
	RDD	RECTANGULAR DUCT DROP
	RDR	RECTANGULAR DUCT RISER
	RMB	RECTANGULAR MAIN WITH RECTANGULAR BRANCH
	RMR	RECTANGULAR MAIN WITH ROUND BRANCH
	ROF15	RECTANGULAR OFFSET LESS THAN 15°
	ROF15+	RECTANGULAR OFFSET MORE THAN 15°
	RDD	ROUND DUCT DROP
	RDR	ROUND DUCT RISER
	RDB	ROUND DUCT WITH ROUND BRANCH
	RW	ROUND WYE
	SWW	SYMMETRICAL WYE

Equipment

	CAC	CHILLER, AIR COOLED
	CWC	CHILLER, WATER COOLED
	CT	COOLING TOWER

General

	DEMOLISH
	EXISTING WORK
	NEW WORK

Piping Fittings, Appurtenances and Equipment

	AS	AIR SEPARATOR
	AAV	AUTOMATIC AIR VENT
	BFP	BACKFLOW PREVENTER
	CAP	CAP
	CONT	CONTINUATION
	EJ	EXPANSION JOINT
	EL	EXPANSION LOOP
	ET	EXPANSION TANK
	FS	FLOW SWITCH
	HE	HEAT EXCHANGER
	HB	HOSE BIBB
	MAV	MANUAL AIR VENT
	PBG	PIPE BELOW GRADE
	PDR	PIPE DROP
	PRD	PIPE REMOVED IN DEMOLITION
	PRI	PIPE RISE
	PTD	PIPE TO DRAIN
	PGC	PRESSURE GAUGE WITH COCK
	PRV	PRESSURE RELIEF VALVE
	PS	PRESSURE SENSOR
	P	PUMP
	SA	SHOCK ABSORBER
	TRV	T&P RELIEF VALVE WITH PIPE TO DRAIN
	TD	TEE DOWN ON PIPE
	TU	TEE UP ON PIPE
	TS	TEMPERATURE SENSOR
	TP	TEST PORT (PETE'S PLUG OR EQUAL)
	T	THERMOMETER
	VA	VENT TO ATMOSPHERE
	WM	WATER METER

Piping Systems

	CHWR	CHILLED WATER RETURN
	CHWS	CHILLED WATER SUPPLY
	CWR	CONDENSER WATER RETURN
	CWS	CONDENSER WATER SUPPLY
	HWR	HEATING WATER RETURN

	HWS	HEATING WATER SUPPLY
	RL	REFRIGERANT LIQUID
	RS	REFRIGERANT SUCTION

Piping Valves

	BV	BALANCING VALVE
	CV	CHECK VALVE
	GV	GATE VALVE
	GVB	GLOBE VALVE
	PRV	PRESSURE REDUCING VALVE
	QTV	QUARTER TURN VALVE
	V	VALVE
	VG	VALVE, GENERAL

GROUP MACKENZIE
 Architecture
 Interior Design
 Land Use Planning
 Landscape Architecture
 Portland, OR 97204
 Vancouver, WA 98686-7878
 503.294.8930

Client
CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068

Project

WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

REGISTERED PROFESSIONAL ENGINEER
 PRELIMINARY
 EXPIRES: 12/31/13

© GROUP MACKENZIE ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF GROUP MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION.

Revision Schedule	
Revision Delta	Issue Date

SHEET INDEX

M0.1	COVER SHEET - MECHANICAL
M2.2	ROOF PLAN - MECHANICAL
M2.3	ROOF PLAN - MECHANICAL ALTERNATE
M3.1	FLOOR PLANS - HVAC SYSTEMS
M3.2	FLOOR PLANS - HVAC SYSTEMS ALTERNATE
M3.3	FLOOR PLANS - HVAC ZONES
M4.1	AXON VIEWS - MECHANICAL

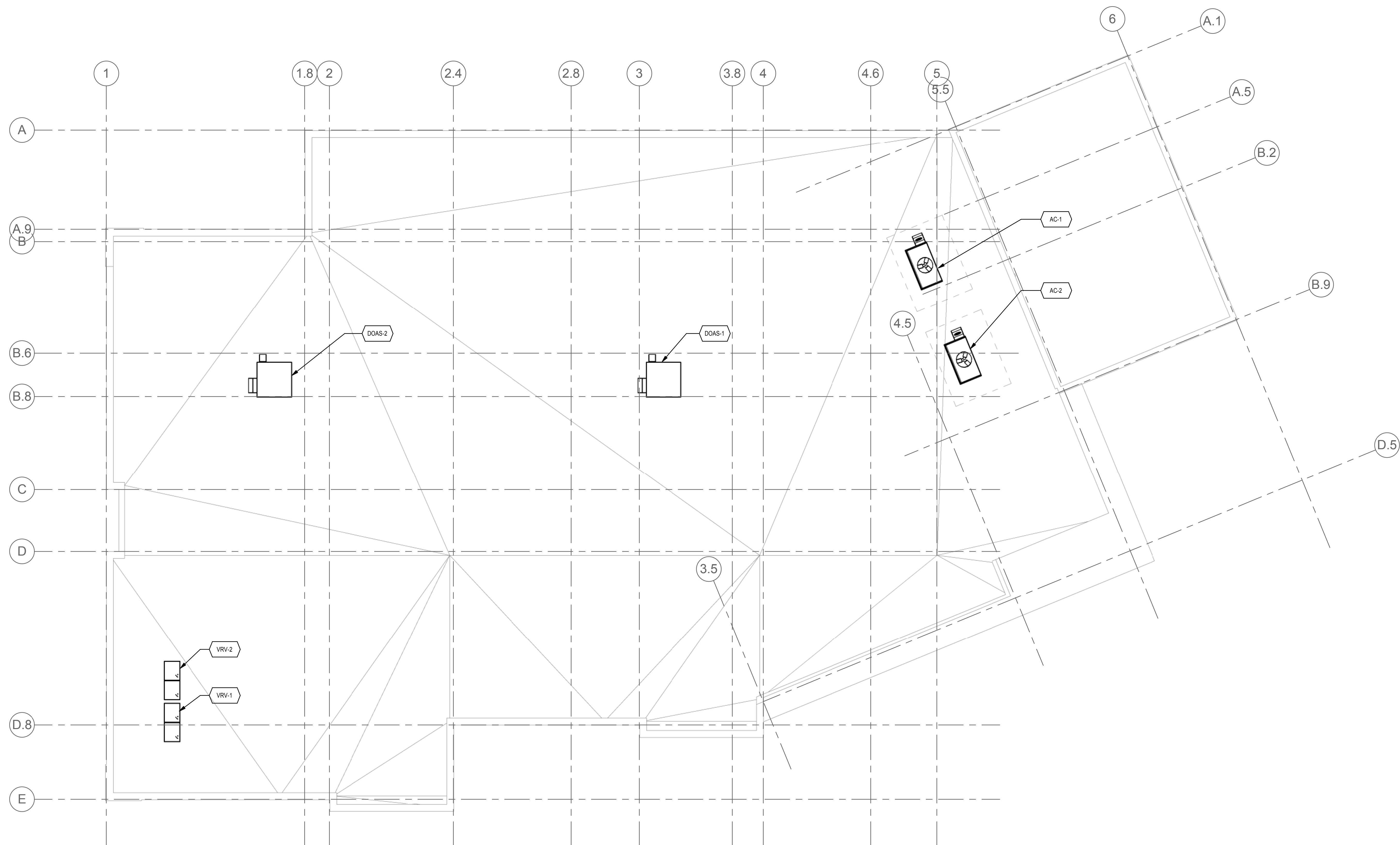
SHEET TITLE:
COVER SHEET - MECHANICAL

DRAWN BY: SR
 CHECKED BY: SH
 SHEET

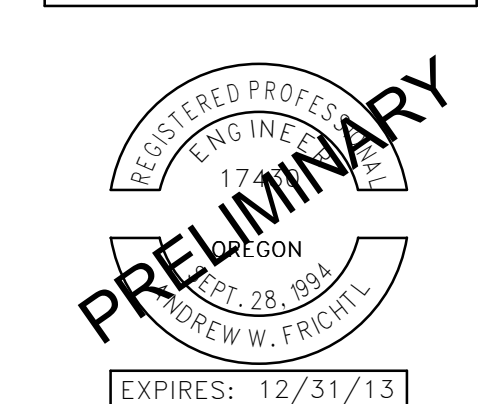
M0.1
 JOB NO. 2120180.00

PROJECT 2012-0312
 CONTACT Steve Dacus

708 SW Third Ave
 Suite 400
 Portland, OR 97204
 TEL 503.382.2266
 FAX 503.382.2262
 www.interfaceengineering.com



1 ROOF PLAN - MECHANICAL - BASELINE
 0' 4' 8' 16'
 1/8" = 1'-0"



© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

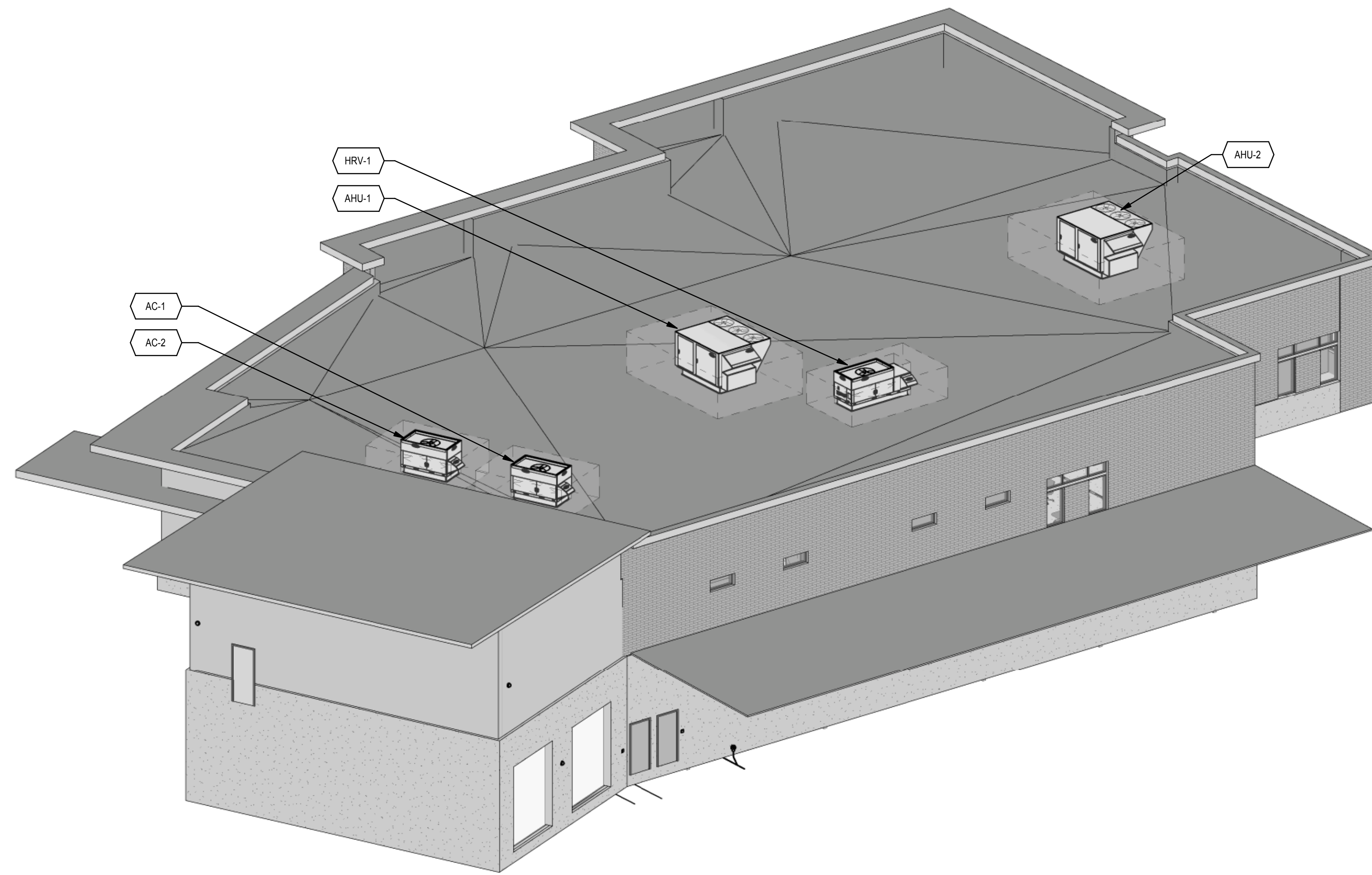
SHEET TITLE:
ROOF PLAN - MECHANICAL

DRAWN BY: SR
 CHECKED BY: SH
 SHEET

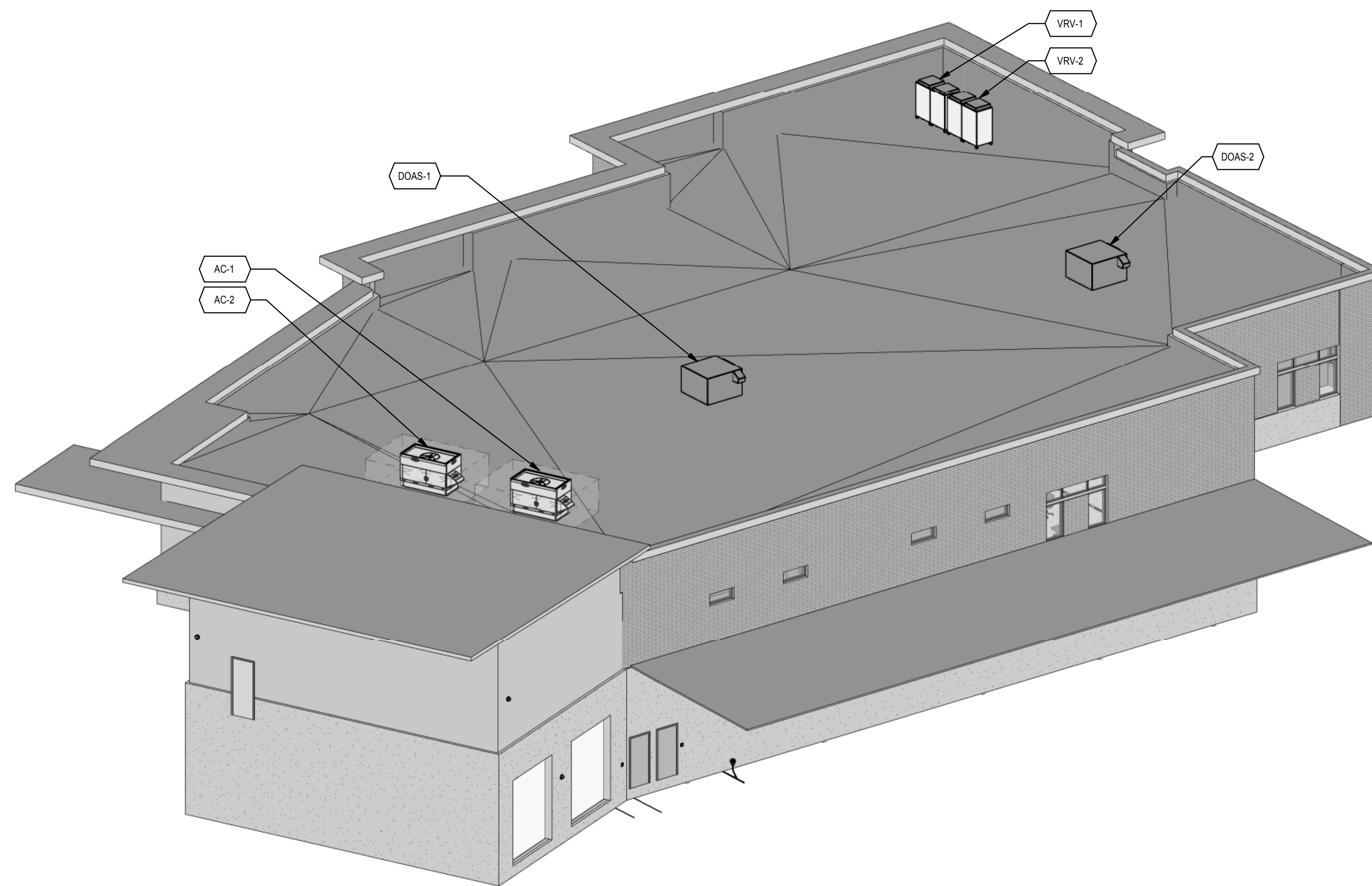
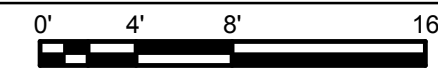
M2.2

JOB NO. **2120180.00**

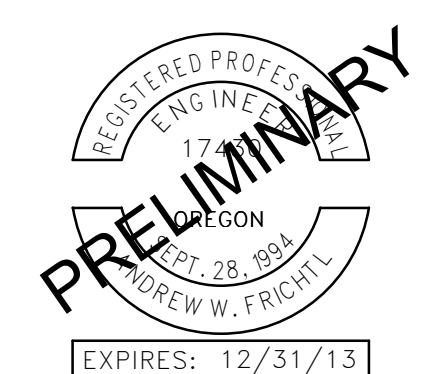
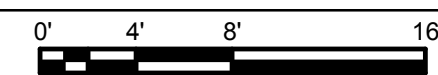
PROJECT 2012-0312
 CONTACT Steve Dacus
INTERFACE ENGINEERING
 708 SW Third Ave
 Suite 400
 Portland, OR 97204
 TEL 503.382.2266
 FAX 503.382.2262
 www.interfaceengineering.com



1 AXON VIEW - ALTERNATE ROOFTOP EQUIPMENT (VAV)



2 AXON VIEW - BASELINE ROOFTOP EQUIPMENT (VRV)



© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER
 WITHOUT PRIOR WRITTEN PERMISSION

Revision Schedule	
Revision Delta	Issue Date

SHEET TITLE:
AXON VIEWS - MECHANICAL

DRAWN BY: SR
 CHECKED BY: SH
 SHEET

M4.1

JOB NO. **2120180.00**

PROJECT 2012-0312
 CONTACT Steve Dacus
INTERFACE ENGINEERING
 708 SW Third Ave
 Suite 400
 Portland, OR 97204
 TEL 503.382.2266
 FAX 503.382.2262
 www.interfaceengineering.com

Client

CITY OF WEST LINN
 22500 SALAMO ROAD
 WEST LINN, OR 97068



Project

WEST LINN POLICE DEPARTMENT
 1800 8TH AVENUE
 WEST LINN, OR 97068

© GROUP MACKENZIE
 ALL RIGHTS RESERVED
 THESE DRAWINGS ARE THE PROPERTY OF
 GROUP MACKENZIE AND ARE NOT TO BE
 USED OR REPRODUCED IN ANY MANNER,
 WITHOUT PRIOR WRITTEN PERMISSION

Revision	Schedule
Revision Delta	Issue Date

SHEET TITLE:
**SITE PLAN -
 PHOTOMETRIC
 LAYOUT**

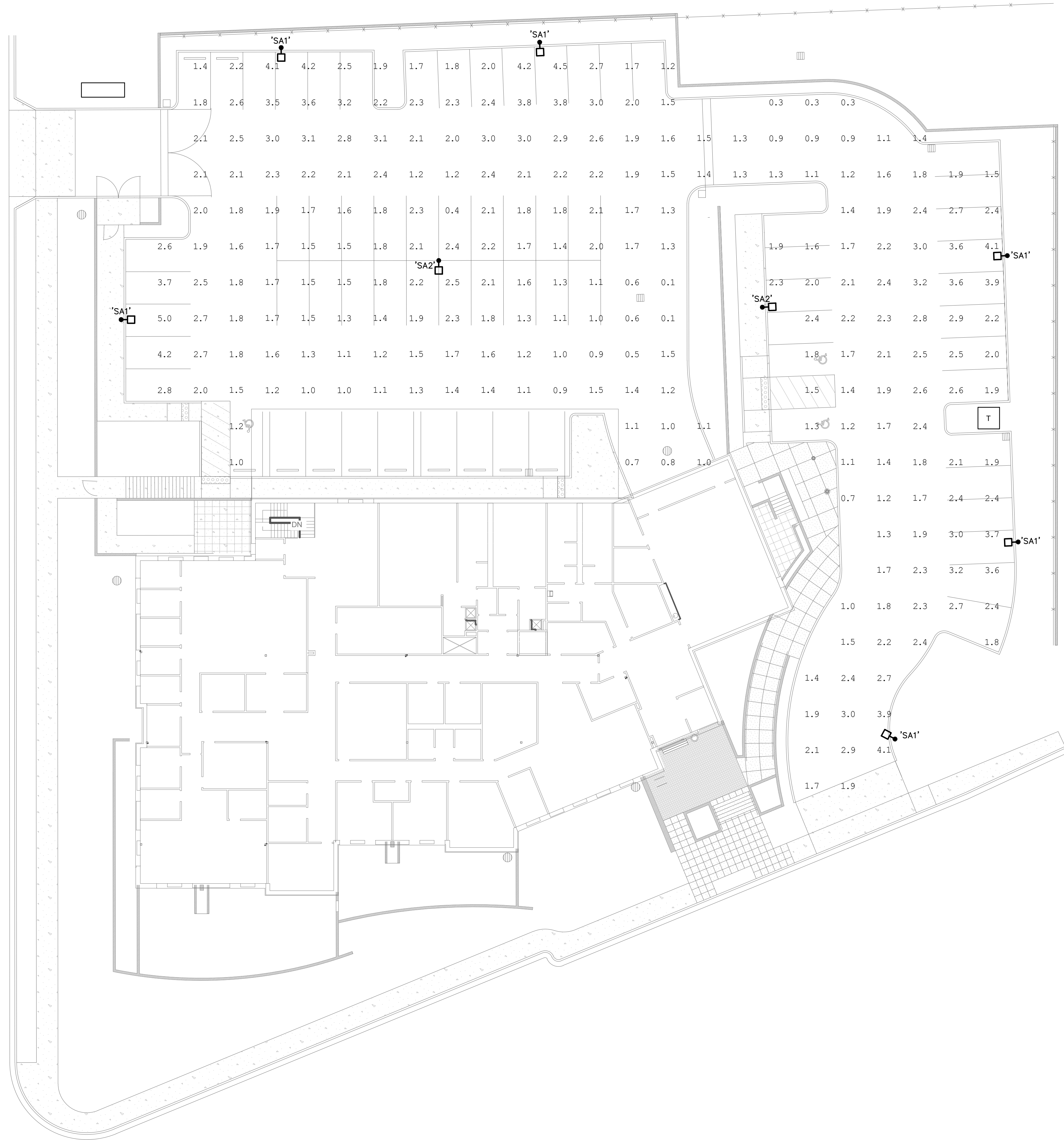
DRAWN BY: BA

CHECKED BY: CL

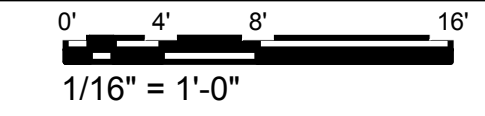
SHEET

E1.1

JOB NO. **2120180.00**



1 SITE PLAN - PHOTOMETRIC LAYOUT



PROJECT: 2012-0312
 CONTACT: Chris Larson

INTERFACE ENGINEERING

708 SW Third Ave
 Suite 400
 Portland, OR 97204
 TEL: 503.382.2266
 FAX: 503.382.2262
 www.interfaceengineering.com

LAND USE: 11/09/2012



SOUTH ELEVATION

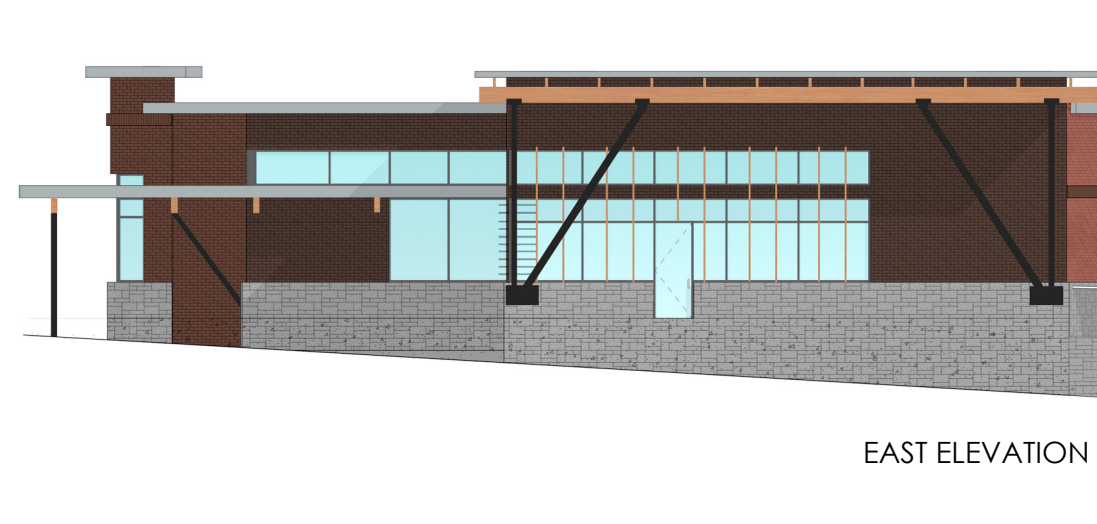


WEST ELEVATION

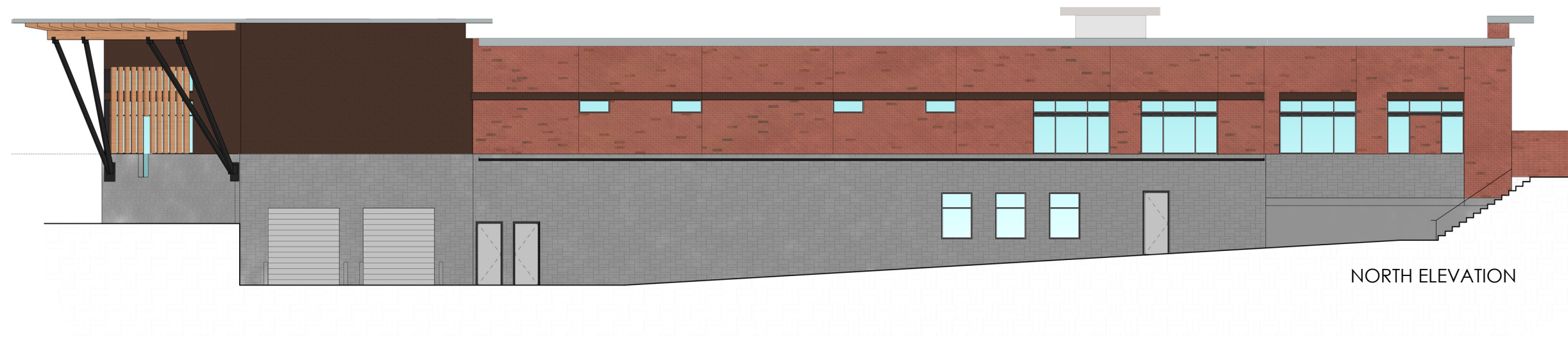
WEST LINN POLICE DEPARTMENT

LAND-USE APPLICATION
BUILDING ELEVATIONS

November 9, 2012



EAST ELEVATION



NORTH ELEVATION

WEST LINN POLICE DEPARTMENT

LAND-USE APPLICATION
BUILDING ELEVATIONS

November 9, 2012



WEST LINN POLICE DEPARTMENT

LAND-USE APPLICATION
BUILDING RENDERING

November 9, 2012

GROUP
MACKENZIE



WEST LINN POLICE DEPARTMENT

LAND-USE APPLICATION
BUILDING RENDERING

November 9, 2012

GROUP
MACKENZIE

STRUCTURAL BRICK



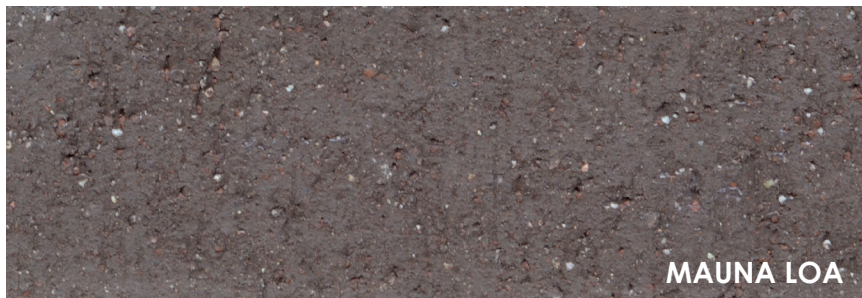
VINTAGE



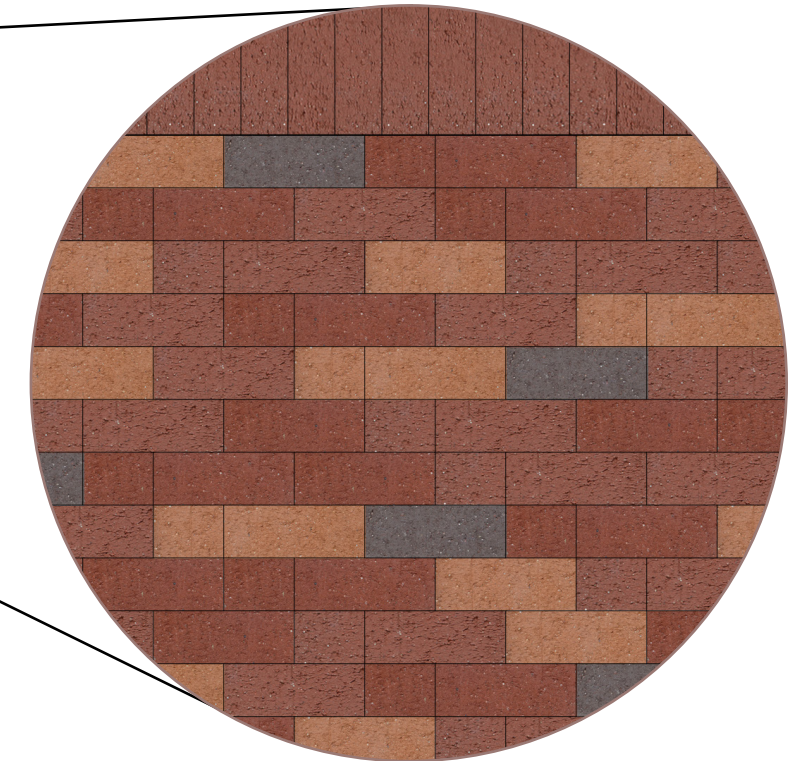
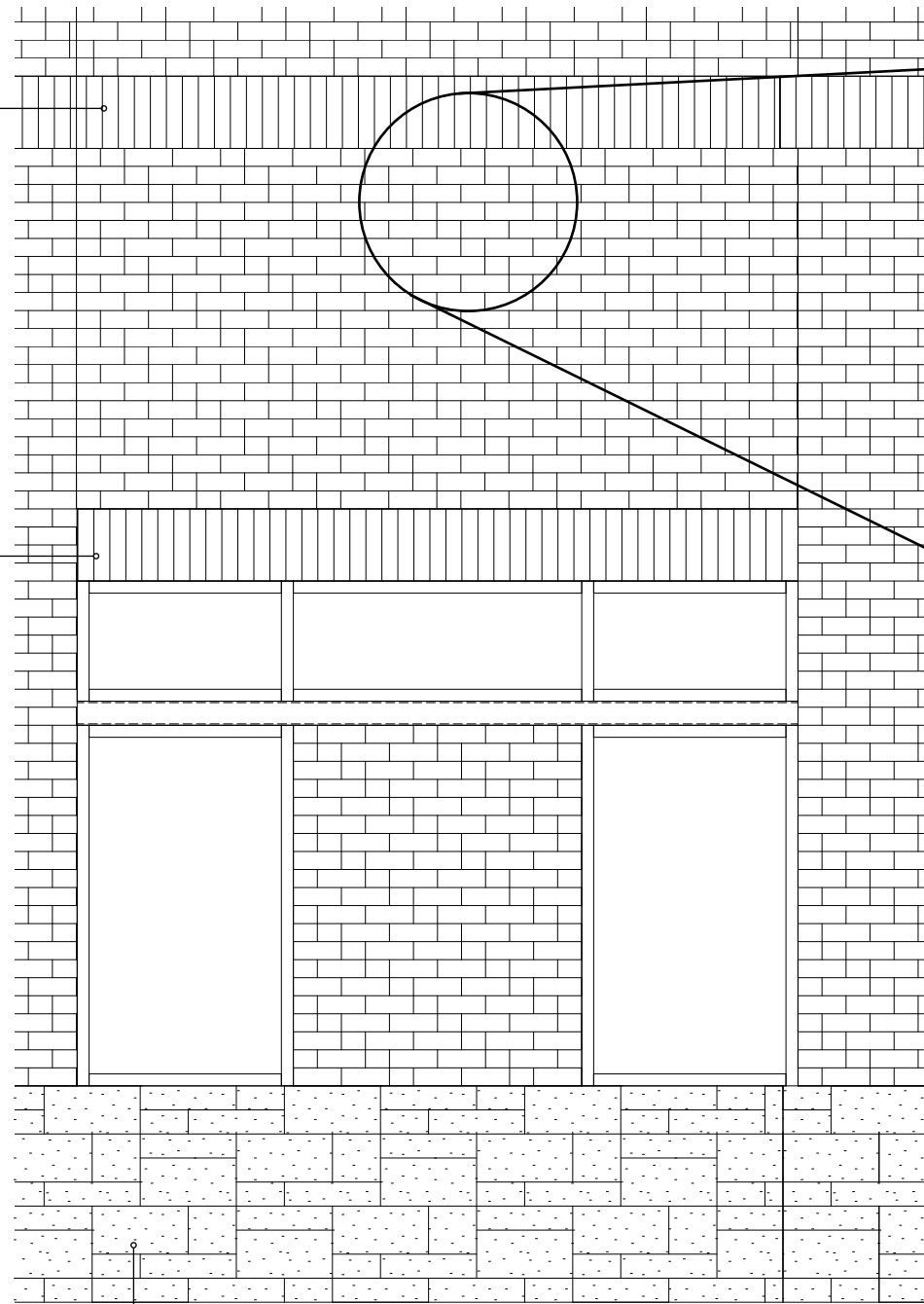
SIENNA



INCA



MAUNA LOA

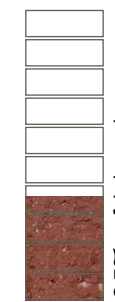


COMPOSITION OF BLEND



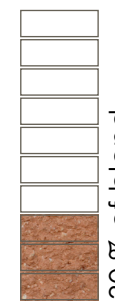
30% of blend

VINTAGE



35% of blend

SIENNA



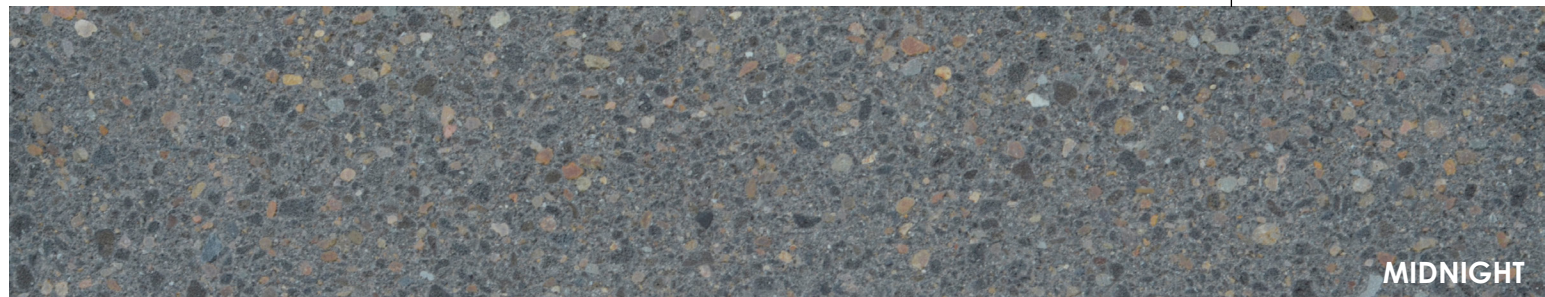
30% of blend

INCA



5% of blend

MAUNA LOA



MIDNIGHT

CMU



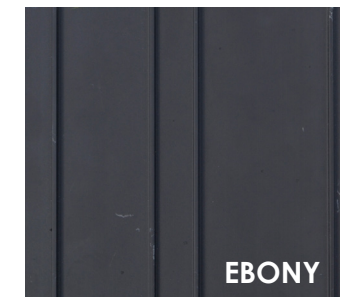
CHERRY

WOOD



MOUNTAIN CEDAR

FENCING



EBONY

FRAMES/MULLIONS

Job:
Type:
Notes:

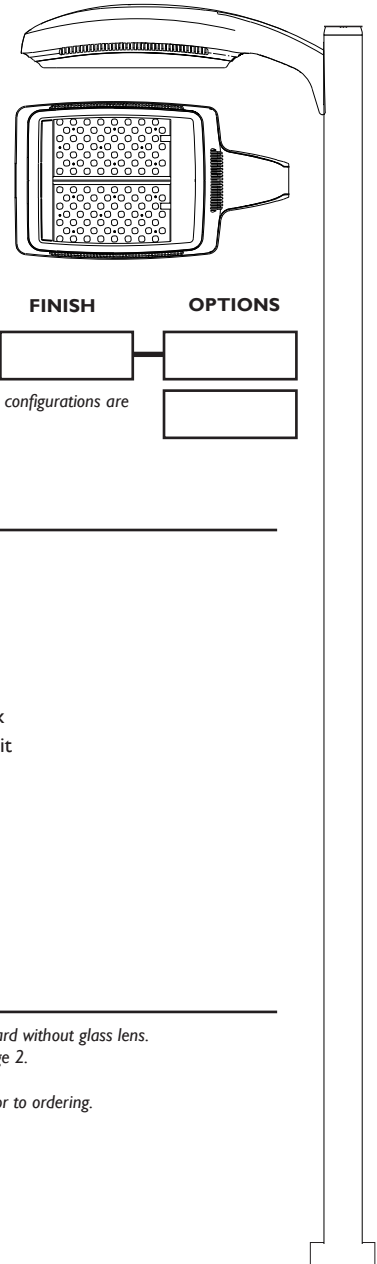


Gullwing LED

GL18 Area Luminaires

Page 1 of 7

Philips Gardco Gullwing LED luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. The Philips Gardco Gullwing LED is defined by its high performance, sleek profile and rugged construction. The housing is one-piece, die cast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The advanced LED optical systems provide IES Types II, III, IV and V distributions. The luminaire features a state of the art integral thermal control system to maximize LED performance and life, and to extend component life. All LED wattages utilize high performance Class 1 LED systems. The door frame is single-piece die cast aluminum. Luminaires are finished with a fade and abrasion resistant TGIC powdercoat. Gullwing LED luminaires provide full cutoff performance. Existing Philips Gardco Gullwing HID luminaires are suitable for field retrofit with the Gullwing LED retrofit kit.



PREFIX	MOUNTING	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

- Complete Luminaires** (See page 3 and page 4 for details on luminaire configurations.)
- GL18** 18" Gullwing LED Luminaire - Constant Wattage
 - GL18-DCC** 18" Gullwing LED with Dual Circuit Control
 - GL18-DIM** 18" Gullwing LED with 0-10V Dimming
 - GL18-MR50¹** 18" Gullwing LED with Motion Response - 50% Low
 - GL18-APD²** 18" Gullwing LED with Automatic Profile Dimming
 - GL18-APD-MRO¹** 18" Gullwing LED - APD with Motion Response Override

Retrofit Kit (See page 4 for details on retrofit kit configurations.)

- GL18-RK** 18" Gullwing LED Retrofit Kit - Constant Wattage

1. Motion Response luminaires require one motion sensor per pole, ordered separately.
See **Accessories** on page 2. Motion Response luminaires available 120V or 277V only.
2. Available 120V through 277V only.

MOUNTING

- 1** Single Pole Mount
- 2** Twin Pole Mount at 180°
- 2@90** Twin Pole Mount at 90°
- 3** 3-way Pole Mount at 90°
- 3@120°** 3-way Pole Mount at 120°
- 4** 4-way Pole Mount
- W** Wall Mount, Recessed J-Box
- WS** Wall Mount, Surface Conduit

OPTICAL SYSTEM³

Optic Type	Standard Optic Position	Optic Rotated Left ⁴ (90°)	Optic Rotated Right ⁴ (270°)
Type II	2	2-90	2-270
Type III	3	3-90	3-270
Type IV	4	4-90	4-270
Type V	5 ⁵		
Backlight Control	BLC	BLC-90	BLC-270

3. Luminaire door frame and optic assembly provided standard without glass lens. Specify CLR option for clear glass lens. See **Options** on page 2.

4. See pages 6 and 7 for information on optical rotation prior to ordering.

5. Features unitized lens.

1611 Clovis Barker Road, San Marcos, TX 78666
(800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 sitelighting.com

© 2012 Koninklijke Philips Electronics N.V. All Rights Reserved.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

G200-016/1012

PHILIPS





LED WATTAGE AND LUMEN VALUES

Ordering Code	Average System Watts ⁶	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens ^{7,8}				
				TYPE 2	TYPE 3	TYPE 4	TYPE 5	BLC
Single LED Arrays								
65LA	65	350	CW	5,211	4,988 (s)	4,986	6,025	3,433 (s)
95LA	95	530	CW	7,437	7,025	6,973	8,258	4,640 (s)
130LA	130	700	CW	8,868	8,658	8,478	10,223	5,614 (s)
Dual LED Arrays								
125LA	125	350	CW	9,953	9,550	9,360	11,241	5,917 (s)
200LA	200	530	CW	13,432	13,042	12,942	15,271	7,996 (s)
255LA	255	700	CW	16,209	15,740	15,529	18,254	9,436 (s)

6. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
7. Values shown are for luminaires without the HS or IS shield options. Tests are in process for many NW and all WW, as well as luminaires with the HS and IS options.
8. Lumen values based on tests performed in compliance with IESNA LM-79. "(s)" following value indicates that the value is scaled from tests on a similar, but not identical luminaire configuration. Contact Gardco.applications@philips.com if any approximate estimates are required for design purposes.

LED SELECTION

CW	Cool White - 6000°K - 75 CRI
NW	Neutral White - 4000°K - 70 CRI
WW	Warm White - 3000°K - 80 CRI

VOLTAGE

UNIV	120V through 277V, 50hz or 60hz
HVU	347V through 480V, 50hz or 60hz (High Voltage Universal)

FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
SC	Special Paint Specify. Must supply color chip.

OPTIONS (Options are not available in GL18-RK retrofit kits, except as specifically noted below. See Note 16)

LF¹⁶	In-Line/In-Pole Fusing	SPR^{16,17}	Surge Protection for 120V through 277V Input meeting ANSI C62.41.2
PC^{9,18}	Photocontrol and Receptacle	SPRH^{16,17}	Surge Protection for 347V through 480V Input meeting ANSI C62.41.2
PCR¹⁸	Photocontrol Receptacle only		
HS¹⁶	External Houseside Shield		
IS^{16,19}	Internal Houseside Shield		
RPA1¹⁰	3" Round Pole Adapter		
RPA2¹¹	4" and 5" Round Pole Adapter		
MF¹²	Mast Arm Fitter		
TR1¹³	Single Transition		
TR2¹³	Twin Transition		
PTF2¹⁴	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon		
PTF3¹⁴	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon		
PTF4¹⁴	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon		
SQPTF¹⁵	Square Pole Top Fitter		
DL¹⁶	Diffusing Lens (reduces performance significantly)		
CLR¹⁶	Clear Glass Lens (reduces performance)		

9. Not available above 277V. Provide specific input voltage.
10. Required for 3" O.D. round or tapered round poles where top O.D. is less than 4".
11. Required for 4"- 5" O.D. round poles.
12. Mounts to a 2-3/8" O.D. mast arm.
13. Mounts to a 2-3/8" Top Tenon. Specify a round pole with a 4.50" O.D. for a smooth transition.
14. Not available in 120° mounting configurations.
15. Requires a 2-3/8" O.D. x 4" tenon or a 2.4" round pole top O.D. Specify Drilling (1, 2, 2@90, 3 or 4 only.)
16. Available with GL18-RK retrofit kits (as well as other configurations.)
17. GL18-DCC requires 1 surge protector per circuit.
18. Available in GL18 Constant Wattage only.
19. Available with Type 2, Type 3 or Type 4 distributions only.

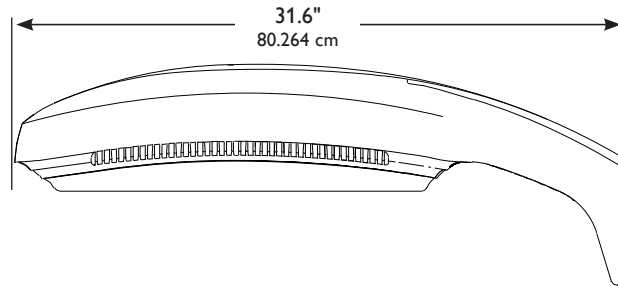
ACCESSORIES (Ordered separately)

MS-P	120V or 277V Input - Pedestrian Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)
MS-A-120V	120V Input - Area Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)
MS-A-277V	277V Input - Area Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)

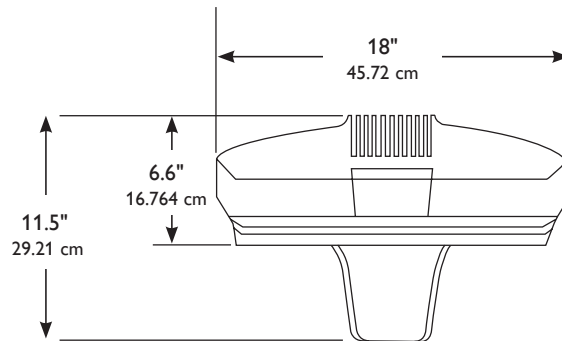
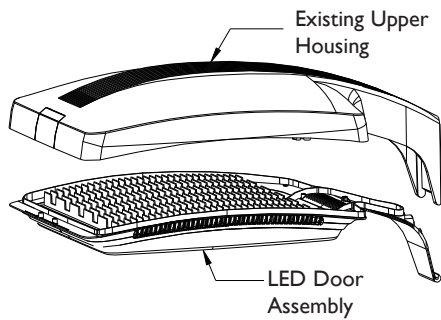
Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for GL18-MR or GL18-APD-MRO luminaires. See Luminaire Configuration Information on pages 4-5 for more details. Pedestrian sensor color is white. Area motion sensor color is Arctic White.



DIMENSIONS AND EPA



GL18-RK LED Retrofit Kit



Note: Removal of all components of existing G18 Gullwing luminaires, except the upper housing, is required to perform a retrofit.

GL18-RK includes all necessary retrofit components.

Note: TGIC polyester powdercoat will fade somewhat in exterior environments over time. Once the retrofit kit is installed, there is a possibility that the upper housing may have faded to a point where there is a noticeable paint difference between the upper housing (existing) and the new retrofit kit door frame.

EPA Data

1	2	3-4
1.2 ft ²	2.4 ft ²	3.2 ft ²
.12 m ²	.24 m ²	.30 m ²

Approximate Weight Single Luminaire

40 lbs / 18.144 kg



LUMINAIRE CONFIGURATION INFORMATION (CONTINUED ON PAGE 5)

GL18: Philips Gardco Gullwing LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

GL18-DCC: Philips Gardco Gullwing LED luminaire provided with dual circuiting, permitting separate switching of each led array. Available on luminaires with dual led arrays only.

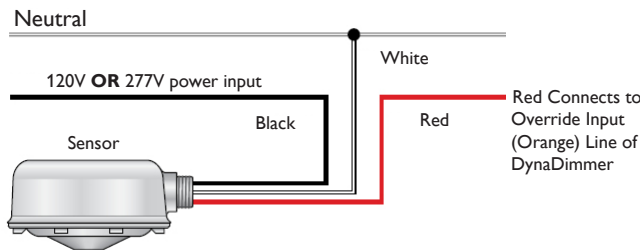
GL18-DIM: Philips Gardco Gullwing LED luminaire provided with 0 -10V dimming for connection to a control system provided by others.

GL18-MR-50: Philips Gardco Gullwing LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

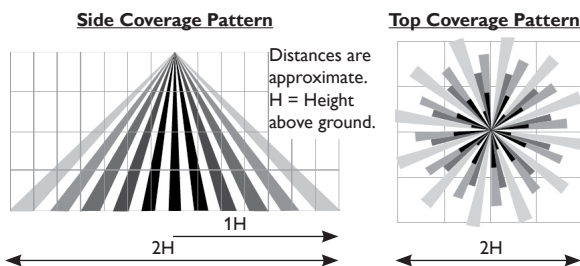
GL18-MR50 is available in 120V through 277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Pedestrian PIR motion sensor is the WattStopper HB350W-L3. One motion sensor per pole is required and is ordered separately as the MS-P accessory, see page 2. The Pedestrian sensor accept 120V through 277V input.

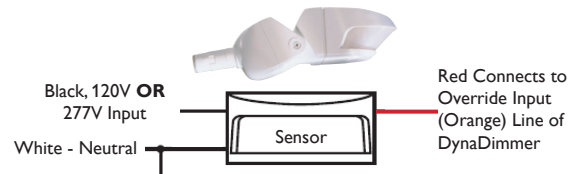


The pedestrian motion detector provides coverage equal to the sensor height above ground, in all directions from the sensor (360°).

Pedestrian PIR Motion Sensor Coverage Pattern:

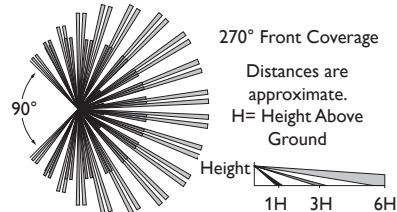


The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input - MS-GLA-120V) or the WattStopper EW-200-277-W (277V Input - MS-GLA-277V). One motion sensor per pole is required and is ordered separately. Area sensors require single voltage 120V or 277V input.



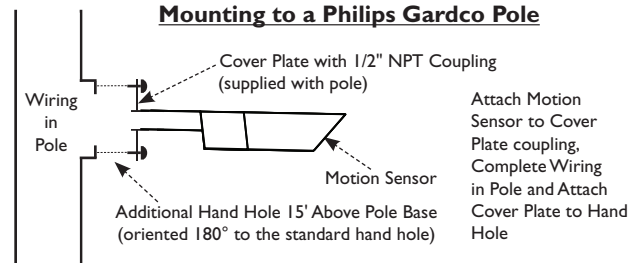
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. **If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.**

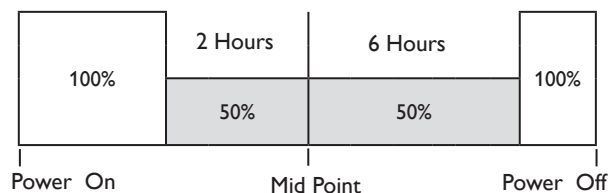
Mounting to a Philips Gardco Pole



GL18-APD: Philips Gardco Gullwing LED luminaire with Automatic Profile Dimming. Luminaire is provided with the Philips DynaDimmer module included. The DynaDimmer module is programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the DynaDimmer module based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

GL18-APD is available in 120V through 277V input only.

GL18-APD Dimming Profile:





LUMINAIRE CONFIGURATION INFORMATION (CONTINUED FROM PAGE 4)

GL18-APD is available in 120V through 277V input only.

The GL18-APD offers many of the advantages of a sophisticated control system, including an average energy savings of at least 33% versus constant wattage, constant light output systems, without the need for a control system.

GL18-APD-MRO: Philips Gardco Gullwing LED luminaire with Automatic Profile Dimming, with Motion Response Override. The GL18-APD-MRO combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the GL18-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

GL18-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The GL18-APD-MRO has the same pole requirements and utilizes the same motion sensors as the GL18-MR-50. The motion sensor mounts and wires identically as well. The GL18-APD-MRO utilizes the identical dimming profile as shown for the GL18-APD.

By combining the benefits of automatic profile dimming and motion response, the GL18-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

Note: All motion sensors utilized consume 0.0 watts in the off state.

GL18-RK: Philips Gardco Gullwing LED Retrofit kit for existing Gullwing luminaires. The retrofit kit provides a simple way to convert existing sites that utilize Gullwing luminaires to LED. The retrofit kit includes all necessary components to complete the retrofit conversion. The existing optic, ballast tray and door assembly are removed and replaced by retrofit kit components. The retrofit kit includes the complete door frame and the LED driver assembly.

The GL18-RK is available only in a constant wattage, constant light output design, and is not available with any Options, except as specifically indicated on page 2.

Note: TGIC polyester powdercoat will fade somewhat in exterior environments over time. Once the retrofit kit is installed, there is a possibility that the upper housing may have faded to a point where there is a noticeable paint difference between the upper housing (existing) and the new retrofit kit door frame.

SPECIFICATIONS

GENERAL DESCRIPTION: The Philips Gardco Gullwing LED is defined by its high performance, sleek profile and rugged construction. The housing is one-piece, die cast aluminum and mounts directly to a pole or wall without the need of a separate support arm. Gullwing LED luminaires combine LED performance excellence and advanced Philips Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing.

HOUSING: A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft² / .12 m².

IP RATING: Gullwing LED 18" luminaires have a rating of IP66.

LED RELIABILITY:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	Driver mA	L ₇₀ Hours ²⁰
25 °C	350 mA	130,000
	530 mA	100,000
	700 mA	70,000
40 °C	350 mA	100,000
	530 mA	70,000
	700 mA	50,000

20. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

THERMAL MANAGEMENT: The Philips Gardco Gullwing LED provides die cast aluminum integral thermal radiation fins combined with lateral air ways, to provide the excellent thermal management so critical to long LED system life.

OPTICAL SYSTEMS: LED arrays are set to achieve IES Type II, Type III, Type IV, Type V, and Backlight Control (BLC) distributions. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. All motion sensors utilized consume 0.0 watts in the off state.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WVP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

LABELS: All luminaires bear UL or CUL (where applicable) Wet Location labels.

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays and LED drivers. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See Warranty Information on www.sitelighting.com for complete details and exclusions.

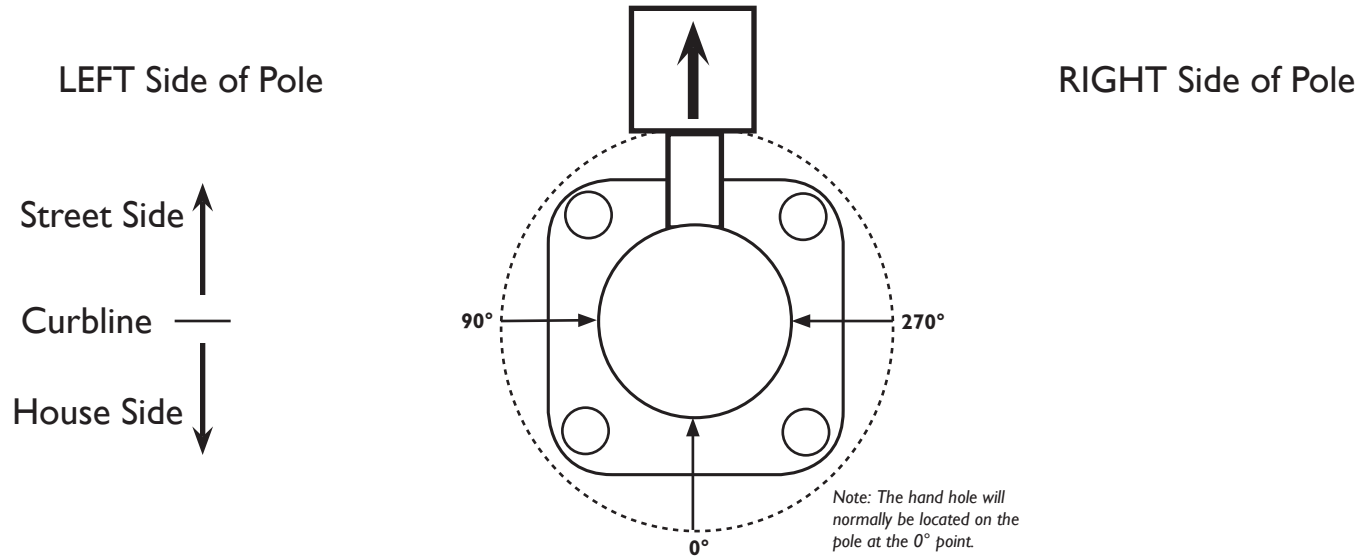
FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.



ASYMMETRIC OPTICAL ORIENTATION INFORMATION (CONTINUED ON PAGE 7)

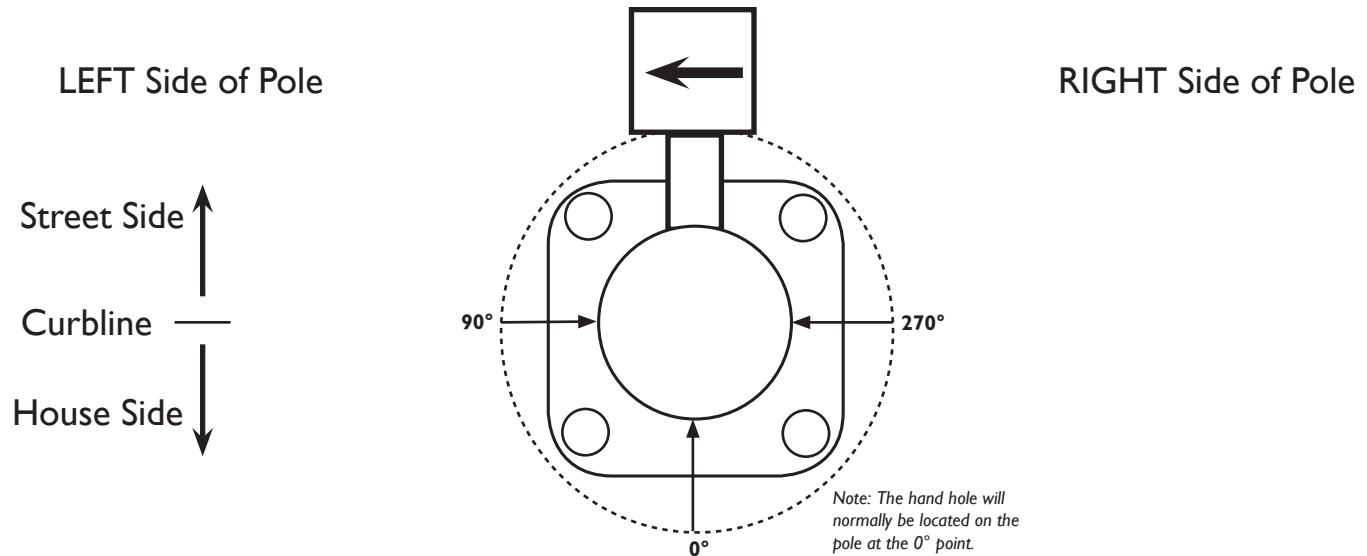
STANDARD OPTIC POSITION:

Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



OPTIC ROTATED LEFT (90°) OPTIC POSITION:

Luminaires ordered with asymmetric optical systems in the **OPTIC ROTATED LEFT (90°)** optic position will have the optical system oriented as shown below:

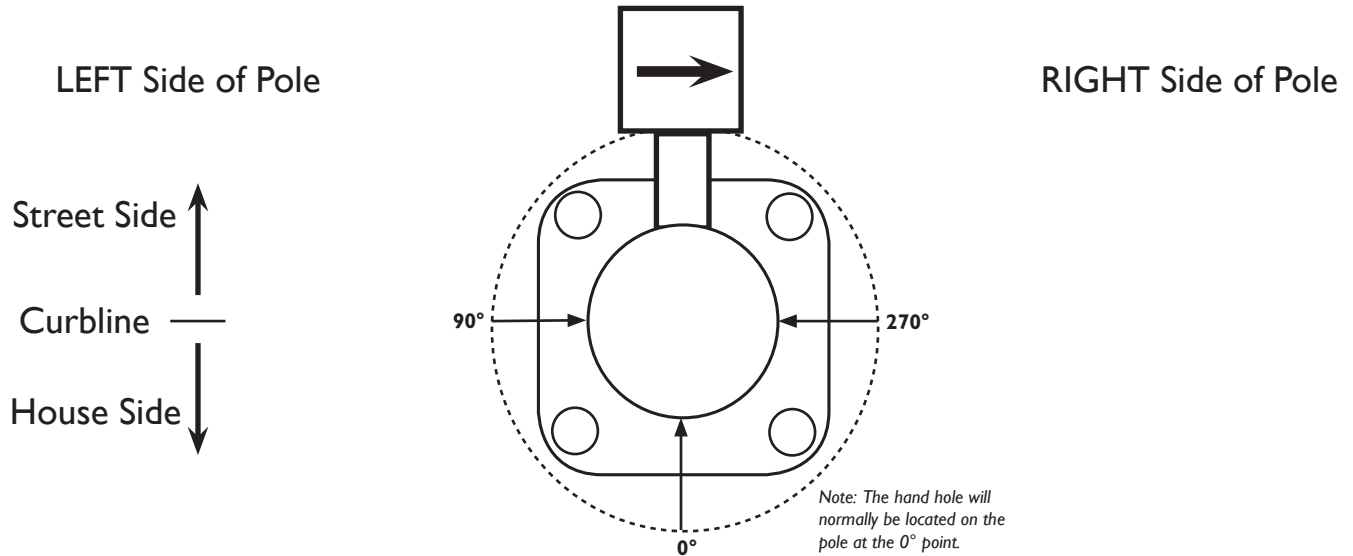




ASYMMETRIC OPTICAL ORIENTATION INFORMATION (CONTINUED FROM PAGE 6)

OPTIC ROTATED RIGHT (270°) OPTIC POSITION:

Luminaires ordered with asymmetric optical systems in the **OPTIC ROTATED RIGHT (270°)** optic position will have the optical system oriented as shown below:



TWIN LUMINAIRE ASSEMBLIES WITH ROTATED OPTICAL SYSTEMS:

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.

