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DEVELOPMENT REVIEW APPLICATION

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STAFF CONTACT Chris Myers	PROJECT NO	2/2)	20- 04				
Non-Refundable Fee(s) \$2100	REFUNDABL	E DEPOSIT(S)	-0-	Тота	L	\$2100	
Type of Review (Please check all that ar	pply):						
Annexation (ANX) Appeal and Review (AP) * Conditional Use (CUP) Design Review (DR) Easement Vacation Extraterritorial Ext. of Utilities Final Plat or Plan (FP)	Historic Review Legislative Plan or Lot Line Adjustme Minor Partition (N Non-Conforming L Planned Unit Deve Pre-Application Co Street Vacation	nt (LLA) */** IIP) (Preliminary I ots, Uses & Stru- lopment (PUD) nference (PA) *	/**	Water Res Willamett	ry Uses ension * (VAR) source A source A te & Tua	* rea Protecti rea Protecti llatin River	on/Single Lot (WAI on/Wetland (WAP Greenway (WRG) quire
Site Location/Address:			,	Assessor's N	/lap No	o.: 21e2	4BB
3706 CEDAROAK DRIVE, WEST LI	NN		-	Γax Lot(s):	•		
				Total Land A	rea: .	88 ACRE	
Brief Description of Proposal: REMO	ODEL OF EXIS	TING ROBI	NWOOD	STATION)		
Applicant Name: CITY OF WEST LIN	N		UN S	202 Phone:	503-7	742-604	7
Address: 22500 SALAMO RO			UN W	Email:	Personal Control Control		
City State Zip: WEST LINN OREGO	ON 97068	PLAN	NING & B		VER@	WESTLI	NNOREGON.
Owner Name (required): SAME AS APP	LICANT	INT.	TOF WEE	Phone:			
Address:		THE RESERVE ASSESSMENT OF THE PARTY OF THE P	CONTRACTOR SECTION AND AND SECTION SEC	Email:	accommon de la common de la com		
City State Zip:							
Consultant Name: ISELIN ARCHITECT	S, P.C.			Phone:	503-6	56-1942	2
Address: 1307 SEVENTH ST	REET			Email: 1	ODD	@ISELIN	ARCH.COM
City State Zip: OREGON CITY, OR							
1. All application fees are non-refundable (exc 2. The owner/applicant or their representative 3. A denial or approval may be reversed on ap 4. Three (3) complete hard-copy sets (single s One (1) complete set of digital application If large sets of plans are required in applica-	e should be prese peal. No permit ided) of applicat materials must a ation please subr	ent at all public will be in effec ion materials r ilso be submitt	hearings. t until the a must be sul ed on CD in	appeal period	has exp	nired	
No CD required / ** Only one hard-copy s							
The undersigned property owner(s) hereby authoric comply with all code requirements applicable to me to the Community Development Code and to other Approved applications and subsequent development	y application. Acce regulations adopte	ptance of this ap ed after the applic der the provisions	plication doe	es not infer a co	mplete s	submittal. A where appli plication.	II a ma a m al
Applicant's signature	Date	Ówn	er's signa	ature <i>(requi</i>	red)		Date

Application for Class 1 Design Review

Robinwood Station Community Center 3706 Cedaroak Dr West Linn, OR 97068

June 2, 2020

City of West Linn 22500 Salamo Rd West Linn, OR 97068

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Pre-Application Meeting Minutes

Neighborhood Association Documentation (audio recording available upon request, official meeting minutes not yet available)

Project Information:

Applicant/

Property Owner: City of West Linn

22500 Salamo Rd West Linn, OR 97068

Ken Warner, Parks and Recreation Director

503-557-4700

kwarner@westlinnoregon.gov

Architect: Iselin Architects, P.C.

1307 Seventh Street Oregon City, OR 97045 Todd Iselin, Project Architect

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Civil Engineer: Symons Engineering

12805 SE Foster Rd Portland, OR 97236 Dan Symons, Engineer

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Structural Engineer: Dwight Mason Structural Design

3300 NW Yeon, Suite 130

Portland, OR 97210

Dwight Mason, Structural Engineer

503-632-8863

Dwight.mason@dmstructural.com

Project: Robinwood Station Remodel and Improvements

Location: 3706 Cedaroak Drive

West Linn, OR 97068 2S 1E 24BB 2800

Site Area: 0.88 acres

Pre-Application: PA 19-20 September 5, 2019

Neighborhood

Association meeting: Robinwood Neighborhood Association March 10, 2020

Project Description:

The applicant is seeking approval to remodel the existing Robinwood Station Community Center. The building was originally constructed in 1964 as a two bay fire station. The building is owned by the City of West Linn and is currently run by the Friends of Robinwood Station with an operating agreement.

The proposed remodel includes improvements to the parking areas, site drainage, bicycle parking, garbage and generator enclosure, new pitched roof and entry porch, seismic and accessibility improvements, new interior finishes at Robinwood Station and limited remodel work to the City owned water utility building located at the south side of the property.

No increase in interior usable floor area is proposed with this application.

A consolidation of the three lots of record is also being requested simultaneously as a separate land use process to recognize the full extent of Tax lot 2800 as a single parcel.

West Linn Community Development Code Responses:

Chapter 11 Single-Family Residential Detached, R-10

11.010 PURPOSE

The purpose of this zone is to provide for urban development at levels which relate to the site development limitations, proximity to commercial development and to public facilities and public transportation. This zone is intended to implement the Comprehensive Plan policies and locational criteria, and is applicable to areas designated as Low Density Residential on the Comprehensive Plan Map and Type I and Type II lands identified under the Buildable Lands Policy.

11.020 PROCEDURES AND APPROVAL PROCESS

A. A use permitted outright, CDC 11.030, is a use which requires no approval under the provisions of this code. If a use is not listed as a use permitted outright, it may be held to be a similar unlisted use under the provisions of Chapter 80 CDC.

The community center use for this site is allowed outright per CDC 11.030.8.

- B. A use permitted under prescribed conditions (CDC 11.050) is a use for which approval will be granted provided all conditions are satisfied, and:
- 1. The Planning Director shall make the decision in the manner provided by CDC 99.060(A)(2), Administrative Procedures, except that no notice shall be required; and
- 2. The decision may be appealed by the applicant to the Planning Commission as provided by CDC 99.240(A).

No decision from the Planning Director is being sought for this allowed use.

- C. A conditional use (CDC 11.060) is a use the approval of which is discretionary with the Planning Commission. The approval process and criteria for approval are set forth in Chapter 60 CDC, Conditional Uses. If a use is not listed as a conditional use, it may be held to be a similar unlisted use under the provisions of Chapter 80 CDC.
 - D. The following code provisions may be applicable in certain situations:
 - 1. Chapter 65 CDC, Non-conforming Uses Involving a Structure.
- 2. Chapter 66 CDC, Non-conforming Structures.
- 3. Chapter 67 CDC, Non-conforming Uses of Land.
- 4. Chapter 68 CDC, Non-conforming Lots, Lots of Record.
- 5. Chapter 75 CDC, Variance.

No Conditional Use is being sought since the CDC allows this use on this specific site.

11.030 PERMITTED USES

The following are uses permitted outright in this zoning district:

- 1. Single-family detached residential unit.
- 2. Community recreation.
- 3. Family day care.
- 4. Residential home.
- 5. Utilities, minor.
- 6. Transportation facilities (Type I).
- 7. Manufactured home.
- 8. Community building on City-owned property at 3706 Cedaroak Drive and indicated on the map below.

The community center use for this site is allowed outright per CDC 11.030.8.

11.040 ACCESSORY USES

Accessory uses are allowed in this zone as provided by Chapter 34 CDC.

No accessory uses allowed by Chapter 34 CDC are proposed as part of this application.

11.050 USES AND DEVELOPMENT PERMITTED UNDER PRESCRIBED CONDITIONS

The following uses are allowed in this zone under prescribed conditions.

- 1. Home occupations, subject to the provisions of Chapter 37 CDC.
- 2. Sign, subject to the provisions of Chapter 52 CDC.
- 3. Temporary uses, subject to the provisions of Chapter 35 CDC.
- 4. Water-dependent uses, subject to the provisions of Chapters 28 and 34 CDC.
- 5. Agricultural or horticultural use; provided, that no retail or wholesale business sales office is maintained on the premises; and provided, that poultry or livestock shall not be permitted within 100 feet of any residence other than a dwelling on the same lot, nor on a lot of less than one acre, or which has less than 20,000 feet per head of livestock. These uses are subject to the nuisance provisions found in Section 5.400 et seq. of the West Linn Municipal Code.
 - 6. Wireless communication facilities, subject to the provisions of Chapter 57 CDC.

The existing community garden use is proposed to be continued and improved with site drainage improvements and the replacement of the existing attached greenhouse structure with a new code compliant structure.

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.

- 1. Cultural exhibits and library services.
- 2. Lodge, fraternal, community center and civic assembly.
- 3. Public safety facilities.
- 4. Public support facilities.
- 5. Recycle collection center.
- 6. Religious institution.
- 7. Schools.
- 8. Senior center.
- 9. Utilities, major.
- 10. Transportation facilities (Type II). See CDC 60.090 for additional approval criteria.

Section does not apply. No Conditional Use is required or being sought for this application.

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 the requirements for uses within this zone:

- 1. The minimum lot size shall be 10,000 square feet for a single-family detached unit. Tax lot 2800 is over 38,000 s.f.. Criteria is met.
- 2. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.
 - The front lot line facing Cedaroak Drive is more than 174'. Criteria is met.
- 3. The average minimum lot width shall be 50 feet.
 - The existing lot is approximately 198' deep. Criteria is met.
- 4. Repealed by Ord. 1622.
- 5. Except as specified in CDC 25.070(C)(1) through (4) for the Willamette Historic District, the minimum yard dimensions or minimum building setback area from the lot line shall be:
- a. For the front yard, 20 feet; except for steeply sloped lots where the provisions of CDC 41.010 shall apply.

The existing Robinwood Station building is set back over 40 meeting this requirement. The existing water utility building is located only 16.5' from the Kenthorpe side property line. The Kenthorpe right of way is 50' wide with an improved section less than 20' wide, providing a building setback appropriate

for the existing neighborhood and acceptable for fire separation and emergency vehicle access. This is an existing non-conforming condition that will not be worsened with the proposed work on the site.

b. For an interior side yard, seven and one-half feet.

The existing Robinwood Station building is located more than 59' from a side yard and the existing water utility building is located more than 37' from a side yard property line. This criteria is met.

c. For a side yard abutting a street, 15 feet.

The site does not have side yard abutting a street. Requirement does not apply.

d. For a rear yard, 20 feet.

The site is a through lot with no rear yard. Refer to response to item 5.a above.

6. The maximum building height shall be 35 feet, except for steeply sloped lots in which case the provisions of Chapter 41 CDC shall apply.

The height of the Robinwood Station building with the proposed new pitched roof will be approximately 24' to the ridge from the lowest point within 5' of the building perimeter; less than the 35' maximum.

7. The maximum lot coverage shall be 35 percent.

The lot coverage for all buildings with the proposed greenhouse and generator/ refuse additions to Robinwood Station will be 10.4%; less than the allowed 35%. (3,975 s.f./ 38,333 s.f.)

8. The minimum width of an accessway to a lot which does not abut a street or a flag lot shall be 15 feet.

Criteria does not apply. Site abuts streets on two sides with access from each street.

9. The maximum floor area ratio shall be 0.45. Type I and II lands shall not be counted toward lot area when determining allowable floor area ratio, except that a minimum floor area ratio of 0.30 shall be allowed regardless of the classification of lands within the property. That 30 percent shall be based upon the entire property including Type I and II lands. Existing residences in excess of this standard may be replaced to their prior dimensions when damaged without the requirement that the homeowner obtain a non-conforming structures permit under Chapter 66 CDC.

Buildings are both one level with F.A.R. equal to lot coverage of 0.10; less than the allowed 0.45.

10. The sidewall provisions of Chapter 43 CDC shall apply.

The sidewall provisions of Chapter 43 do not apply since both buildings on the site are more than 20' from neighboring properties.

11.080 DIMENSIONAL REQUIREMENTS, CONDITIONAL USES

Except as may otherwise be established by this code, the appropriate lot or parcel 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).

Criterion does not apply. No Conditional Use is being sought.

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.

Section is not applicable. No accessory structures, dwelling units or accessory uses are proposed with this application.

2. Chapter 35 CDC, Temporary Structures and Uses.

Section is not applicable. No temporary structure or use is proposed with this application.

3. Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.

Section is not applicable. No additional yard area is required for this application. No accessory structures, dwelling units or accessory uses are proposed with this application.

4. Chapter 41 CDC, Building Height, Structures on Steep Lots, Exceptions.

Section is not applicable. The site is not a steep lot and building is less than maximum 35' allowed.

5. Chapter 42 CDC, Clear Vision Areas.

Criterion of this section does not apply. No changes to accessway, landscaping or buildings are proposed that would alter existing clear vision areas.

6. Chapter 44 CDC, Fences.

A new 6' high section of 6' high cedar fencing is proposed adjacent to newly paved parking area at <u>west</u> side of site to provide screening. It is proposed to be a 6' high "good neighbor" type cedar fence constructed in accordance with provisions of Chapter 44.

7. Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.

Refer to following narrative addressing compliance with this Chapter.

8. Chapter 48 CDC, Access, Egress and Circulation.

Refer to following narrative addressing compliance with this Chapter.

9. Chapter 52 CDC, Signs.

Section is not applicable. City signs are exempt from provisions of this Chapter.

10. Chapter 54 CDC, Landscaping.

Refer to following narrative addressing compliance with requirements of this Chapter.

B. The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings, residential homes and residential facilities.

Refer to following narrative addressing compliance with provisions of this Chapter.

Chapter 46 Off-Street Parking, Loading and Reservoir Areas

46.010 PURPOSE

The purpose of this chapter is to provide standards for the number and arrangement of parking, loading, and reservoir areas. Most of these provisions relate to commercial, office, and industrial uses. Parking lot design has often been criticized for creating large expanses of paved areas, separating the business from the public street. That arrangement makes it less attractive for pedestrians to access these buildings. The challenge is balancing the business community's desire for ample visible parking to attract prospective customers with the community interest of encouraging safe, non-vehicular access, minimizing the visual impact of parking, and creating a more attractive streetscape and urban environment.

Most parking facilities in non-residential developments contain spaces which are infrequently used, available for the few days a year when parking is at a premium. For these spaces, permeable parking surfaces provide a suitable parking surface which can reduce surface runoff and increase water quality, as well as improve the aesthetic appearance of the parking lot. West Linn encourages the use of permeable parking surfaces in appropriate situations.

Modifications proposed to the existing parking lot serving this facility have been designed to have minimum environmental impact and enhance safety for vehicular and pedestrian uses.

46.020 APPLICABILITY AND GENERAL PROVISIONS

A. At the time a structure is erected or enlarged, or the use of a structure or unit of land is changed within any zone, parking spaces, loading areas and reservoir areas shall be provided in accordance with the requirements of this chapter unless other requirements are otherwise established as a part of the development approval process.

No new structure, expansion of usable floor area or change in use is proposed with this application. The existing parking is deficient for the current use and the proposed modifications bring the development closer to compliance with standards for new construction.

B. The provision and maintenance of off-street parking and loading spaces are the continuing obligation of the property owner.

The property owner (City of West Linn) will be obligated to maintain the off street parking and loading spaces and circulation areas. C. No building or other permit shall be issued until plans are approved that show the property that is and will remain available for exclusive use as off-street parking and loading space as required by this chapter.

This land use application shall be approved prior to obtaining building permits for the building improvements.

D. Required parking spaces and loading areas shall be improved to the standards contained in this chapter and shall be available for use at the time of the final building inspection except as provided in CDC 46.150.

Parking spaces approved through this land use application will be constructed and available for use prior to final building inspection.

46.030 SUBMITTAL REQUIREMENTS

For any application requiring design review approval, which includes parking areas, the applicant shall submit, within the design review package, a plan drawn to scale showing all the elements necessary to indicate that the requirements of Chapter 55 CDC are met and it shall include but not be limited to:

- A. The delineation of individual parking and loading spaces and their dimensions;
- B. The identification of compact parking spaces;
- C. The location of the circulation area necessary to serve spaces;
- D. The access point(s) to streets, alleys, and properties to be served;
- E. The location of curb cuts;
- F. The location and dimensions of all landscaping, including the type and size of plant material to be used, as well as any other landscape material incorporated into the overall plan;
- G. The proposed grading and drainage plans and the slope (percentage) of parking lot:
 - H. Specifications as to signs and bumper guards;
 - I. Identification of disabled parking spaces;
 - J. Location of pedestrian walkways and crossings; and
 - K. Location of bicycle racks. (Ord. 1463, 2000)

Refer to Architectural Site Plan and Civil drawings for specific items listed above.

46.040 APPROVAL STANDARDS

Approval shall be based on the standards set forth in this chapter and Chapter 48 CDC, Access, Egress and Circulation; Chapter 52 CDC, Signs; and Chapter 54 CDC, Landscaping. (Ord. 1463, 2000)

Refer to following narratives for compliance with applicable chapters listed above.

46.050 JOINT USE OF A PARKING AREA

- A. Joint use of required parking spaces may occur where two or more uses on the same or separate sites are able to share the same parking spaces because their parking demands occur at different times. Joint use of required parking spaces is allowed if the following documentation is submitted in writing to the Planning Director as part of a building or zoning permit application or land use review:
- 1. The names and addresses of the owners or tenants that are sharing the parking and the uses at those locations;
 - 2. The location and number of parking spaces that are being shared;
- 3. An analysis showing that the peak parking times of the uses occur at different times and that the parking area will be large enough for the anticipated demands of both uses: and
- 4. A legal instrument such as an easement or deed restriction that guarantees access to the parking for all uses.
- B. If a joint use arrangement is subsequently terminated, the requirements of this chapter will apply to each use separately.

No joint use of parking area is proposed with this application. Section is not applicable.

46.060 STORAGE IN PARKING AND LOADING AREAS PROHIBITED

Required parking spaces shall be available for the parking of passenger automobiles of residents, customers, patrons and employees only, and the required parking spaces shall not be used for storage of vehicles or materials or for the parking of trucks connected with the business or use with the exception of small (under one-ton) delivery trucks or cars.

No designated parking or loading areas will be used for storage of vehicles or materials.

46.070 MAXIMUM DISTANCE ALLOWED BETWEEN PARKING AREA AND USE

A. Off-street parking spaces for single- and two-family dwellings shall be located on the same lot with the dwelling.

Criterion does not apply. Development is not a residential use.

B. Off-street parking spaces for uses not listed in subsection A of this section shall be located not farther than 200 feet from an entryway to the building or use they are required to serve, measured in a straight line from the building, with the following exceptions:

- 1. Shared parking areas for commercial uses which require more than 40 parking spaces may provide for the spaces in excess of the required 40 spaces up to a distance of 300 feet from the entryway to the commercial building or use.
- 2. Industrial and manufacturing uses which require in excess of 40 spaces may locate the required spaces in excess of the 40 spaces up to a distance of 300 feet from the entryway to the building.
- 3. Employee parking areas for carpools and vanpools shall be located closer to the entryway to the building than general employee parking.
- 4. Stacked or valet parking is allowed if an attendant is present to move vehicles. If stacked parking is used for required parking spaces, the applicant shall ensure that an attendant will always be present when the lot is in operation. The requirements for minimum or maximum spaces and all parking area development standards continue to apply for stacked parking.
- 5. All disabled parking shall be placed closest to building entrances than all other parking. Appropriate ADA curb cuts and ramps to go from the parking lot to the ADA-accessible entrance shall be provided unless exempted by ADA code.

All off street parking for Robinwood Station Community Center is proposed to be within 90' of the main building entry. ADA parking is located closer to the main entry than other general parking spaces. Criteria is met.

46.080 COMPUTATION OF REQUIRED PARKING SPACES AND LOADING AREA

A. Where several uses occupy a single structure or unit of land, a combination of uses is included in one business, or a combination of uses in the same or separate buildings share a common parking area as in the case of a shopping center, the total off-street parking spaces and loading area shall be the sum of the requirements of the several uses, computed separately. For example, parking for an auto sales and repair business would be calculated using the "retail-bulky" calculation for the sales area and the "service and repair" calculation for the repair area. In another example, parking for a shopping center with a grocery store, a restaurant, and a medical office would be calculated using the "general retail store" calculation for the grocery store, the "restaurant" calculation for the restaurant, and the "medical/dental clinics" calculation for the medical office. The total number of required parking spaces may be reduced by up to 10 percent to account for cross-patronage (when a customer visits several commercial establishments during one visit to the commercial center) of adjacent businesses or services in a commercial center with five or more separate commercial establishments.

Parking calculation for the site has been based on the Community Center use only. The Water Utility Building will continue to be utilized primarily for City storage purposes and has adequate gravel surfaced parking area to serve this use. The parking needs for this use are also at different peak times than the community center use, so the gravel parking areas can be used as overflow for the community center and paved spaces for the community center use can also be utilized for the storage use if needed.

B. To calculate building square footage as a basis for determining how many parking spaces are needed, the area measured shall be gross floor area under the roof measured from the faces of the structure, including all habitable floors and excluding only space devoted to covered off-street parking or loading.

The gross floor area of the Robinwood Station Community Center (including garbage/ generator area and greenhouse) is 2624 s.f.. Community Centers require 1 parking space/ 200 s.f. based on Table 46.090. This equates to 13.12 spaces.

C. Where employees are specified, the employees counted are the persons who work on the premises including proprietors, executives, professional people, production, sales, and distribution employees, during the largest shift.

No full time employees work at this site. Criterion is not applicable.

- D. Fractional space requirements shall be counted as a whole space.
 - 13.12 spaces have been rounded up to 14 spaces for the parking computation, since this is a very minor fraction and additional overflow parking is available at existing gravel area.
- E. On-street parking along the immediate property frontage(s) may be counted toward the minimum parking requirement with approval from the City Engineer.

No on-street parking is proposed or has been used to meet minimum parking requirement for this application.

F. When an office or commercial development is proposed which has yet to identify its tenants, the parking requirement shall be based upon the "office" or "general retail" categories, respectively.

Criterion is not applicable. No speculative development is proposed.

G. As permitted uses are replaced with new permitted uses within an existing commercial or business center, modification of the number of parking spaces relative to the new mix of uses is not required unless other modifications of the site which require design review approval pursuant to Chapter 55 CDC are proposed.

Criterion is not applicable. No speculative development is proposed.

46.090 MINIMUM OFF-STREET PARKING SPACE REQUIREMENTS

Table has been abbreviated for brevity. See 46.080 above for computation of minimum parking spaces required.

- B. Public and semi-public buildings/uses.
 - 9. Youth center or community center.

One space per 200 square feet of covered floor area and drop-off facilities where required by CDC 46.120.

F. Maximum parking. Parking spaces (except for single-family and two-family residential uses) shall not exceed the minimum required number of spaces by more than 10 percent.

Maximum parking allowed would be 16 spaces. 13 spaces are proposed.

G. Parking reductions. An applicant may reduce parking up to 10 percent for development sites within one-quarter mile of a transit corridor or within a mixed-use commercial area, and up to 10 percent for commercial development sites adjacent to multi-family residential sites with the potential to accommodate more than 20 dwelling units.

The site is less than $\frac{1}{4}$ mile from the Hwy 43 transit corridor. A 10% reduction of the 14 required spaces allows a minimum of 12 spaces (11.8). 13 Spaces are proposed.

H. For office, industrial, and public uses where there are more than 20 parking spaces for employees on the site, at least 10 percent of the required employee parking spaces shall be reserved for carpool use before 9:00 a.m. on weekdays. The spaces will be the closest to the building entrance, except for any disabled parking and those signed for exclusive customer use. The carpool/vanpool spaces shall be clearly marked "Reserved – Carpool/Vanpool Before 9:00 a.m."

Criterion does not apply. Fewer than 20 parking spaces are proposed.

I. Existing developments along transit streets or near transit stops may redevelop up to 10 percent of the existing parking spaces to provide transit-oriented facilities, including bus pullouts, bus stops and shelters, park and ride stations, and other similar facilities.

Development is not on a transit street and no transit related amenities are proposed. Section is not applicable.

J. Development in water resource areas may reduce the required number of parking spaces by up to 25 percent. Adjacent improved street frontage with curb and sidewalk may also be counted towards the parking requirement at a rate of one parking space per 20 lineal feet of street frontage adjacent to the property.

Criterion does not apply. Site does not contain any water resource areas.

46.100 PARKING REQUIREMENTS FOR UNLISTED USES

- A. Upon application and payment of fees, the decision-making authority, as provided by CDC 99.060(B), may rule that a use not specifically listed in CDC 46.090 is a use similar to a listed use and that the same parking standards shall apply. The ruling on parking requirements shall be based on the requirements of Chapter 99 CDC and findings that:
 - 1. The use is similar to and of the same general type as a listed use;
 - 2. The use has similar intensity, density and off-site impacts as the listed use; and
 - 3. The use has similar impacts on the community facilities as the listed use.
- B. This section does not authorize the inclusion of a use in a zone where it is not listed, or a use which is specifically listed in another zone or which is of the same general type, and is similar to a use specifically listed in another zone.

Criteria do not apply. Use is specifically listed in Table 46.090.

46.110 RESERVOIR AREAS REQUIRED FOR DRIVE-IN USES

All uses providing drive-in service as defined by this code shall provide, on the same site, a reservoir space a minimum of 15 feet long for each car, as follows:

Criteria do not apply since no drive-in use is proposed. Table has been omitted for brevity.

46.120 DRIVEWAYS REQUIRED ON SITE

Any school or other meeting place which is designed to accommodate more than 25 people at one time shall provide a 15-foot-wide driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers.

Depending on functional requirements, the width may be increased with Planning Director approval.

The existing driveway connecting Cedaroak Dr and Kenthorpe Way allows for one way traffic in a continuous forward motion to allow for loading and unloading passengers, if needed for larger events held at Robinwood Station. A looped connection off Cedaroak is not feasible due to topography.

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:

Criterion is not applicable. Use is not one that receives or distributes material or merchandise by truck.

46.140 EXEMPTIONS TO PARKING REQUIREMENTS

To facilitate the design requirements of Chapter 58 CDC, properties in the Willamette Falls Drive Commercial Design District, located between 10th and 16th Streets, shall be exempt from the minimum parking and off-street loading requirements as identified in this chapter. Any off-street parking or loading spaces voluntarily provided shall be designed and installed per the dimensional standards of this code.

Criterion is not applicable. Site is not located within the Willamette Falls Drive Commercial Design District.

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. Parking for development in water resource areas may have 100 percent compact spaces.

Proposed parking layout consists of (9) standard parking stalls, (3) compact spaces and one Van Accessible ADA compliant stall. All stalls proposed meet dimensional standards.

2. Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.

ADA parking stall is designed to meet current ANSI and Oregon Transportation Commission (more restrictive) dimensional and signage standards for a van accessible space.

- 3. Repealed by Ord. 1622.
- 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.

Criterion does not apply. No dedicated service drive is proposed due to the nature of the community center use.

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.

No stacked parking spaces are proposed and all have clear access.

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.

All parking spaces will be stripped with permanent paint. Existing driveways from Cedaroak Dr allow for two way traffic with no directional guidance necessary. It is proposed that the existing driveway width of 16' at Kenthorpe be retained and have pavement marked one way exiting the site and "Do Not Enter" signage posted from Kenthorpe. This will reduce cut-thru traffic and allow for safer on site circulation during larger events where one way drop off is desirable. The secondary entrance to the east side of the site off Kenthorpe is proposed to

be retained as is, since this primarily serves the Water Utility Building and is used primarily by City Staff.

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. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.

All new paved areas will be constructed to City roadway standards. Existing paved areas are to be patched and sealed and assumed to meet City road design standards. Existing gravel areas being retained for overflow parking and are not proposed to be paved to minimize surface runoff from the site. Unpaved areas are located furthest from the main building entry.

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.

Criterion does not apply. Project does not include one or two family residences.

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.

The existing access drive to the overhead door bay is proposed to be retained.

The new parking spaces being added at this area are proposed perpendicular to this drive to minimize the risk of backing movements onto CedarOak. No other alterations to existing access drives are proposed. Existing access drives are

defined by landscaping, retaining walls and a drainage ditch at the east side of the site. No additional barriers are proposed.

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

No new access drives are proposed as part of this project and no new landscaping or fencing is proposed that would compromise clear vision areas.

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 four inches high located two feet back from the front of the parking stall. Such parking spaces may be provided without wheel stops if the sidewalks or landscaped areas adjacent the parking stalls are two feet wider than the minimum width.

All parking spaces are proposed to have wheel stops. Refer to Site Plan drawings.

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.

Refer to Civil drawings for proposed Storm drainage of parking and maneuvering areas.

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.

Parking areas are proposed to be illuminated with both wall mounted and pole mounted luminaries. All have been designed to minimize glare, direct light downward and minimize any light trespass on adjacent properties.

14. Directional arrows and traffic control devices which are placed on parking lots shall be identified.

Directional arrows and traffic control devices are illustrated on Site Plan(s).

15. The maximum driveway grade for single-family housing shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. Regardless, the last 18 feet in front of the garage must maintain a maximum grade of 12 percent as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.

Criterion does not apply. Project does not include single family dwellings.

- 16. Visitor or guest parking must be identified by painted "GUEST" or "VISITOR." All parking spaces on the site are for guest, since there are no employees at this site. A sign will be posted stating "Parking for Robinwood Station Only" will be posted to minimize parking by neighbors or others not using the facility.
 - 17. The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.

New and existing parking areas will have less than a 5% grade and do not drain across walkways.

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.

The existing and new parking lot and driveways occupy 54% of the Cedaroark frontage as proposed. All other area along this frontage is occupied by landscaping and the existing walkway to the building. The new parking lot at the east side of the property has been setback more than 17' and has a 1' high berm to mitigate the parking lot frontage.

- 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. Groups of 12 or less spaces are defined as:
- a. Twelve spaces in a row, provided there are no abutting parking spaces, as in the case when the spaces are abutting the perimeter of the lot; or
 - b. Twelve spaces in a group with six spaces abutting together; or
- c. Two groups of 12 spaces abutting each other, but separated by a 15-foot-wide landscape area including a six-foot-wide walkway.
- d. Parking areas improved with a permeable parking surface may be designed using the configurations shown in subsections (A)(19)(a), (b) and (c) of this section except that groups of up to 18 spaces are allowed.
- e. The requirements of this chapter relating to total parking lot landscaping, landscaping buffers, perimeter landscaping, and landscaping the parking lot islands and interior may be waived or reduced pursuant to CDC 32.110(F) in a WRA application without a variance being required.

The parking for the Project has a total of 13 spaces broken up into three areas that have between 2 and 6 spaces as proposed to comply with requirements of this section.

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.

Criterion does not apply. Site has fewer than 20 parking spaces.

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.

Parking areas are small and have clear circulation patterns as proposed. Parking has been configured to minimize traffic hazards and prevent maneuvering from occurring in public right of way.

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

All parking spaces are close to the building.

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

The use of pervious pavement is proposed at the 2 new parking spaces to the east of the existing overhead bay doors. It shall be designed and constructed per City Standards.

- 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 are more stringent:
 - 1. Minimum number of accessible parking space requirements (see following table):

- 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.
- 3. Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.
- 4. Where any differences exist between this section and current federal standards, those standards shall prevail over this code section.
- 5. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.
- 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.

One van accessible parking space is being proposed in compliance with State, Federal and local standards.

C. Landscaping in parking areas. Reference Chapter 54 CDC, Landscaping. Refer to Chapter 54 criteria for compliance with Landscaping requirements.

- D. Bicycle facilities and parking.
- 1. Provisions shall be made for pedestrian and bicycle ways if such facilities are shown on an adopted plan.
- 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.
 - 3. Bicycle parking must be provided in the following amounts:

LAND USE CATEGORY	MINIMUM REQUIRED BICYCLE PARKING SPACES	MINIMU M COVERED AMOUNT
Residential		
Multi-family Residential	1 space per unit	50%
Institutional		
Schools – Elementary	2 spaces per classroom	50%
Schools – Jr. High or Middle Schools	4 spaces per classroom	50%
Schools – Sr. High	2 spaces per classroom	50%

LAND USE CATEGORY	MINIMUM REQUIRED BICYCLE PARKING SPACES	MINIMU M COVERED AMOUNT
College	1 space per 4 students	50%
Transit Centers/Park & Ride Lots	5% of auto spaces, or 100% of demand, depending on location/accessibility to bicyclists	100%
Religious Institutions	1 space per 40-seat capacity	25%
Hospitals	1 space per 5 beds	50%
Doctor, Dentist Offices	2, or 0.5 spaces per 1,000 gross sq. ft., whichever is greater	25%
Libraries, Museums, Government Offices, etc.	2, or 1.5 spaces per 1,000 gross sq. ft., whichever is greater	25%
Commercial		
Retail Sales	0.33 spaces per 1,000 gross sq. ft.	50%
Auto-oriented Services (including 7-11s)	2, or 0.33 spaces per 1,000 gross sq. ft., whichever is greater	10%
Groceries/Supermarkets	0.33 spaces per 1,000 gross sq. ft./bldg.	10%
Office	2, or 0.5 spaces per 1,000 gross sq. ft., whichever is greater	10%
Quality Restaurant	1 space per 1,000 gross sq. ft.	25%
Drive-in Restaurant	2 spaces per 1,000 gross sq. ft.	25%
Shopping Center (by size)	0.33 spaces per 1,000 gross sq. ft./bldg.	50%
Financial Institutions	2, or 0.33 spaces per 1,000 gross sq. ft.	25%
Theaters, Auditoriums, etc.	1 space per 30 seats	25%
Industrial		
Industrial Park	2, or 0.5 spaces per 1,000 gross sq. ft.	50%
Warehouse	2, or 0.1 spaces per 1,000 gross sq. ft.	50%
Manufacturing, etc.	2, or 0.15 spaces per 1,000 gross sq. ft.	50%

Community Centers are not specifically listed in table above. 1.5 spaces per 1,000 s.f. have been utilized assuming use is similar to "Libraries, Museums, Government Offices, Etc" use. Robinwood Station will have 2,624 gross square feet as proposed requiring 3.9 bicycle parking spaces. Four spaces are proposed. All of which are under cover.

- 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:
- 1. Designate a transportation coordinator responsible for promoting public transit and ride-sharing among employees.
 - 2. Participate in region-wide ride matching program at the site.
 - 3. Provide free transit passes to employees.
 - 4. Provide showers and lockers for employees who commute by bicycle.
- 5. Charge employees for monthly parking and provide a transportation allowance to employees equal to the parking charge.
- 6. Install office technology, floor plans, and tenant regulations which are permanent, which effectively arrange for at least 10 percent of the employees to telecommute, thereby reducing employee automobile traffic by 10 percent.

The required demand management measures shall be included as conditions of approval for the proposed project. The property owner or manager shall file an annual affidavit with the City of West Linn stating that ongoing demand management measures required as conditions of approval have not been discontinued.

The use proposed is not an Office or Industrial use. Criteria do not apply.

F. (See Figures 1 and 2 below.)

All proposed parking is 90 degree configuration complying with the dimensional standards in the table below.

Figure 1. MINIMUM STANDARDS FOR PARKING LOT LAYOUT

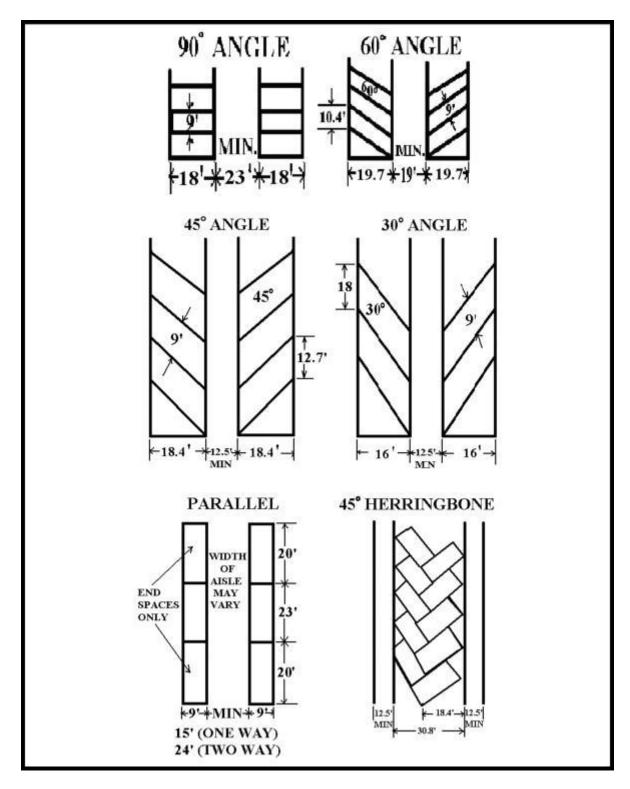
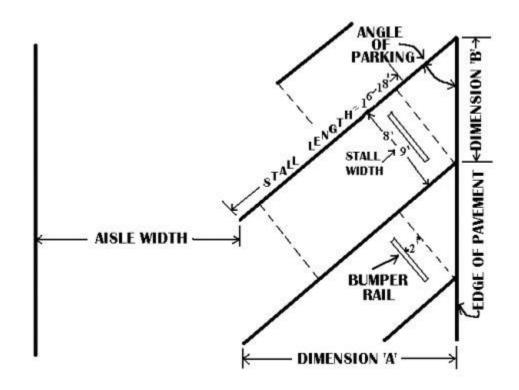


Figure 2. MINIMUM DISTANCE FOR PARKING STALLS



ANGLE	DIRECTION OF PARKING	AISLE WIDTH		DIMENSION 'A'		DIMENSION 'B'	
OF PARKING		STALL WIDTH		STALL WIDTH		STALL WIDTH	
		9.0'	8.0'	9.0'	8.0'	9.0'	8.0'
30°	DRIVE-IN	12.5'	12.5'	16.8'	13.8'	18.0'	16.0'
45°	DRIVE-IN	12.5'	12.5'	19.1'	17.0'	12.7'	11.3'
60°	DRIVE-IN	19.0'	18.0'	20.1'	17.8'	10.4'	9.2'
60°	BACK-IN	17.0'	17.0'	20.1'	17.8'	10.4'	9.2'
90°	DRIVE-IN	23.0'	23.0'	18.0'	16.0'	9.0'	8.0'
90°	BACK-IN	22.0'	22.0'	18.0'	16.0'	9.0'	8.0'

(Ord. 1425, 1998; Ord. 1463, 2000; Ord. 1513, 2005; Ord. 1547, 2007; Ord. 1590 § 1, 2009; Ord. 1604 § 46, 2011; Ord. 1622 § 25, 2014; Ord. 1623 § 4, 2014; Ord. 1635 § 24, 2014)

Chapter 48 Access, Egress and Circulation

48.010 PURPOSE

The purpose of this chapter is to ensure that efficient, safe, and well-directed vehicular, bicycle, and pedestrian access, circulation, and egress are designed into development proposals. Access management seeks to balance mobility, the need to provide efficient, safe and timely travel with the ability to allow access to individual properties. Proper implementation of access management techniques should guarantee reduced congestion, reduced accident rates, less need for roadway widening, conservation of energy, and reduced air pollution.

Access, egress and circulation for vehicles and pedestrians are existing with modifications limited to new or reconditioned asphalt and concrete surfaces indicated on plans.

48.020 APPLICABILITY AND GENERAL PROVISIONS

A. The provisions of this chapter do not apply where the provisions of the Transportation System Plan or land division chapter are applicable and set forth differing standards.

Provisions of this chapter are being conformed with unless noted as not applicable.

B. All lots shall have access from a public street or from a platted private street approved under the land division chapter.

Access serving the development is existing from both Cedaroak Drive and Kenthorpe Way.

C. No building or other permit shall be issued until scaled plans are presented to the City and approved by the City as provided by this chapter, and show how the access, egress, and circulation requirements are to be fulfilled. Access to State or County roads may require review, approval, and permits from the appropriate authority.

This land use application includes scaled plan for approval by the City.

D. Should the owner or occupant of a lot, parcel or building enlarge or change the use to which the lot, parcel or building is put, resulting in increasing any of the requirements of this chapter, it shall be unlawful and a violation of this code to begin or maintain such altered use until the provisions of this chapter have been met, and, if

required, until the appropriate approval authority under Chapter 99 CDC has approved the change.

Criterion does not apply. No change in use or increase in usable floor area is proposed with this application.

E. Owners of two or more uses, structures, lots, parcels, or units of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the requirements as designated in this code; provided, that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases, or contracts to establish joint use. Copies of said instrument shall be placed on permanent file with the City Recorder.

A consolidation of lots is being applied for concurrently with this land use, since the site contains two structures. Access and egress will remain joint from both street frontages; with not changes to the existing access system.

F. Property owners shall not be compelled to access their homes via platted stems of flag lots if other driveways and easements are available and approved by the City Engineer.

Criterion does not apply. No stem or flag lots are existing or proposed.

48.025 ACCESS CONTROL

A. Purpose. The following access control standards apply to public, industrial, commercial and residential developments including land divisions. Access shall be managed to maintain an adequate level of service and to maintain the functional classification of roadways as required by the West Linn Transportation System Plan.

No change in use or access is proposed from what is currently existing for the Project.

- B. Access control standards.
- 1. Traffic impact analysis requirements. The City or other agency with access jurisdiction may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements.

No traffic analysis was required at the pre-application meeting, since no changes to existing access is proposed for the Project.

2. The City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street and highway system. Access to and from off-street parking areas shall not permit backing onto a public street.

No new access permit is required or has been proposed for this redevelopment.

- 3. Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods (planned access shall be consistent with adopted public works standards and TSP). These methods are "options" as approved by the City Engineer.
- a) Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.
- b) Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.
- c) Option 3. Access is from a public street adjacent to the development lot or parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing standards in subsection (B)(6) of this section.

Existing access conforms with Option 3 above. No alteration from the existing has been proposed or identified as being necessary.

4. Subdivisions fronting onto an arterial street. New residential land divisions fronting onto an arterial street shall be required to provide alleys or secondary (local or collector) streets for access to individual lots. When alleys or secondary streets cannot be constructed due to topographic or other physical constraints, access may be provided by consolidating driveways for clusters of two or more lots (e.g., includes flag lots and midblock lanes).

No new subdivision is proposed as part of this application. Criterion does not apply.

5. Double-frontage lots. When a lot or parcel has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street. When a lot or parcel has frontage opposite that of the adjacent lots or parcels, access shall be provided from the street with the lowest classification.

The consolidated parcel will create a double frontage lot. Primary Access and egress is to be retained from Cedaroak and secondary egress from Kenthorpe Way.

- 6. Access spacing.
- a. The access spacing standards found in the adopted Transportation System Plan (TSP) shall be applicable to all newly established public street intersections and non-traversable medians. Deviation from the access spacing standards may be granted by the City Engineer if conditions are met as described in the access spacing variances section in the adopted TSP.

The access spacing standard with the two existing driveways from Cedaroak do not meet current access spacing standards. No modification to these driveways is proposed since they have not been identified as a hazard and would restrict the use and access to the community center. Modifications to these existing driveways would adversely affect the functionality of Robinwood Station due to its existing split level design which reflects the natural topography of the site.

b. Private drives and other access ways are subject to the requirements of CDC 48,060.

The existing private drives on the site comply with the requirements of CDC 48.060.

7. Number of access points. For single-family (detached and attached), two-family, and duplex housing types, one street access point is permitted per lot or parcel, when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection (B)(6) of this section. The number of street access points for multiple family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection (B)(8) of this section, in order to maintain the required access spacing, and minimize the number of access points.

The Site has four existing access points. Two on Cedaroak and two from Kenthorpe. No changes are proposed with this land use.

8. Shared driveways. The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site

design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:

- a. Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).
- b. Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.
- c. Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, lot or parcel configuration, and similar conditions) prevent extending the street/driveway in the future.

No shared driveways are proposed as part of this design review application with the existing driveways not being altered in location or dimensionally. The existing driveways are consistent with the development pattern for the neighborhood and topography of the site.

- C. Street connectivity and formation of blocks required. In order to promote efficient vehicular and pedestrian circulation throughout the City, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:
- 1. Block length and perimeter. The maximum block length shall not exceed 800 feet or 1,800 feet along an arterial.
- 2. Street standards. Public and private streets shall also conform to Chapter 92 CDC, Required Improvements, and to any other applicable sections of the West Linn Community Development Code and approved TSP.
- 3. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), in conformance with the provisions of CDC 85.200(C), Pedestrian and Bicycle Trails, or cases where extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations preclude implementation, not just inconveniences or design challenges.

Criteria do not apply. The project is not a large site development or land division. No new streets are proposed. New half street improvements per current CDC are not required within this neighborhood with the approved TSP.

48.030 MINIMUM VEHICULAR REQUIREMENTS FOR RESIDENTIAL USES

A. Direct individual access from single-family dwellings and duplex lots to an arterial street, as designated in the transportation element of the Comprehensive Plan, is prohibited for lots or parcels created after the effective date of this code where an alternate

access is either available or is expected to be available by imminent development application. Evidence of alternate or future access may include temporary cul-de-sacs, dedications or stubouts on adjacent lots or parcels, or tentative street layout plans submitted at one time by adjacent property owner/developer or by the owner/developer, or previous owner/developer, of the property in question.

In the event that alternate access is not available as determined by the Planning Director and City Engineer, access may be permitted after review of the following criteria:

- 1. Topography.
- 2. Traffic volume to be generated by development (i.e., trips per day).
- 3. Traffic volume presently carried by the street to be accessed.
- 4. Projected traffic volumes.
- 5. Safety considerations such as line of sight, number of accidents at that location, emergency vehicle access, and ability of vehicles to exit the site without backing into traffic.
 - 6. The ability to consolidate access through the use of a joint driveway.
- 7. Additional review and access permits may be required by State or County agencies.
- B. When any portion of any house is less than 150 feet from the adjacent right-of-way, access to the home is as follows:
- 1. One single-family residence, including residences with an accessory dwelling unit as defined in CDC 02.030, shall provide 10 feet of unobstructed horizontal clearance. Dual-track or other driveway designs that minimize the total area of impervious driveway surface are encouraged.
- 2. Two to four single-family residential homes equals a 14- to 20-foot-wide paved or all-weather surface. Width shall depend upon adequacy of line of sight and number of homes.
- 3. Maximum driveway grade shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. Regardless, the last 18 feet in front of the garage shall be under 12 percent grade as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.
- 4. The driveway shall include a minimum of 20 feet in length between the garage door and the back of sidewalk, or, if no sidewalk is proposed, to the paved portion of the right-of-way.
- C. When any portion of one or more homes is more than 150 feet from the adjacent right-of-way, the provisions of subsection B of this section shall apply in addition to the following provisions.
 - 1. A turnaround may be required as prescribed by the Fire Chief.
 - 2. Minimum vertical clearance for the driveway shall be 13 feet, six inches.
- 3. A minimum centerline turning radius of 45 feet is required unless waived by the Fire Chief.
- 4. There shall be sufficient horizontal clearance on either side of the driveway so that the total horizontal clearance is 20 feet.
- D. Access to five or more single-family homes shall be by a street built to full construction code standards. All streets shall be public. This full street provision may only be waived by variance.
- E. Access and/or service drives for multi-family dwellings 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. Minimum vertical clearance of 13 feet, six inches.
- 4. Appropriate turnaround facilities per Fire Chief's standards for emergency vehicles when the drive is over 150 feet long. Fire Department turnaround areas shall not exceed seven percent grade unless waived by the Fire Chief.
- 5. The grade shall not exceed 10 percent on average, with a maximum of 15 percent.
 - 6. A minimum centerline turning radius of 45 feet for the curve.
- F. Where on-site maneuvering and/or access drives are necessary to accommodate required parking, in no case shall said maneuvering and/or access drives be less than that required in Chapters 46 and 48 CDC.
- G. The number of driveways or curb cuts shall be minimized on arterials or collectors. Consolidation or joint use of existing driveways shall be required when feasible.
- H. In order to facilitate through traffic and improve neighborhood connections, it may be necessary to construct a public street through a multi-family site.
- I. Gated accessways to residential development other than a single-family home are prohibited.

Criteria do not apply. No residential development is proposed as part of this application.

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

Existing driveways from Cedaroak Drive are more than 24' wide. The driveway to the easternmost drive on Cedaroak is proposed to be narrowed to 24' to reduce the overall frontage allocated to parking area to be closer to compliance with current CDC requirements. Sidewalks are not proposed on this section of Cedaroak with pending TSP plan.

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.

The existing driveways from Kenthorpe Way are 16' wide. This westernmost drive is proposed to be converted to one way traffic to not change existing development patterns, minimize cut through trips on the site and allow for efficient one way movement of traffic for loading and unloading in conjunction with larger events.

- 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.

Criterion does not apply. No pickup window is proposed as part of the Project.

B. All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC 48.030(A). In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.

The proposed widening and stripping of the small, lower parking lot area that originally served the fire apparatus bays will provide on-site turnaround area for vehicles. The traffic circulation at this area is currently undefined and could lead to hazardous backing movements onto Cedaroak Drive.

C. All on-site maneuvering and/or access drives shall be maintained pursuant to CDC 46.130.

The City or operator of the facility will maintain the site per CDC 46.130 requirements.

D. Gated accessways to non-residential uses are prohibited unless required for public safety or security.

No gated accessway is proposed for this City owned property.

48.050 ONE-WAY VEHICULAR ACCESS POINTS

Where a proposed parking facility plan indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility, and the entrance drive shall be situated closest to oncoming traffic, and the exit drive shall be situated farthest from oncoming traffic.

The proposed parking plan includes both one and two way traffic flow on the site. It is anticipated that the two way traffic circulation off Cedaroak will be the dominant traffic pattern. The use of the proposed one way egress from the site is only anticipated being used for larger events where drop off and pick up of

guests will occur. Given the relatively small size of this venue, the use of the one way alternate traffic flow will be infrequent.

48.060 WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS

A. Minimum curb cut width shall be 16 feet.

No curbs, gutters or sidewalks exist in this neighborhood or are proposed for this Project, so "curb cut" is not a completely accurate term. The paved width of existing site access proposed to be retained is is 36' wide measured at the right of way. The western driveway at Kenthorpe Way proposed to be retained for one way use narrows to 16' at the property line due to the site topography and flares to 36' where it intersects the street pavement. The existing east driveways on Cedaroak Dr is 32' wide and no change is proposed. The existing east driveway off Kenthorpe is 12' at the right of way. No alteration to this driveway is proposed since it is a service drive used infrequently by City Staff for maintenance.

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.

Access drives are less than 36' wide. See discussion in 48.060.A above.

- 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.

No changes to existing access points to Site are proposed with this application. Cedaroak is listed as a neighborhood route in the 2016 TSP.

- 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 or parcel on a local street, 30 feet.

Existing accessways on Cedaroak currently have 58' separation. This is less than the 75' required for a collector street. No change is proposed as part of this development to maintain the existing frontage.

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

Rolled curbs exist at the existing access drives. No change is proposed.

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.

No new curb cuts are proposed.

G. Adequate line of sight pursuant to engineering standards should be afforded at each driveway or accessway.

Adequate lines of sight exist at all access drives.

48.070 PLANNING DIRECTOR'S AUTHORITY TO RESTRICT ACCESS APPEAL PROVISIONS

- A. In order to provide for increased traffic movement on congested streets and eliminate turning movement problems, the Planning Director and the City Engineer, or his or her designee, may restrict the location of driveways on said street and require the location of driveways on adjacent streets upon the finding that the proposed access would:
 - 1. Provide inadequate access for emergency vehicles; or
- 2. Cause or increase hazardous conditions to exist which would constitute a clear and present danger to the public health safety and general welfare.

No increase in traffic is anticipated with this continued use that would warrant reconfiguration of existing access drives.

B. A decision by the Planning Director may be appealed to the Planning Commission as provided by CDC 99.240(B).

The applicant does not intend to appeal any decision by the Planning Director, but reserves the right to do so.

48.080 BICYCLE AND PEDESTRIAN CIRCULATION

A. Within all multi-family developments (except two-family/duplex dwellings), each residential dwelling shall be connected to vehicular parking stalls, common open space, and recreation facilities by a pedestrian pathway system having a minimum width of six feet and constructed of an all-weather material. The pathway material shall be of a different color or composition from the driveway. (Bicycle routes adjacent to the travel lanes do not have to be of different color or composition.)

Criterion does not apply. Project is not a multi-family development.

B. Bicycle and pedestrian ways within a subdivision shall be constructed according to the provisions in CDC 85.200(A)(3).

Criterion does not apply. Project is not a subdivision.

C. Bicycle and pedestrian ways at commercial or industrial sites shall be provided according to the provisions of Chapter 55 CDC, Design Review.

Criterion does not apply. No bicycle or pedestrian ways have been identified under the current TSP for this site.

Chapter 54 Landscaping

54.010 PURPOSE

The purpose of this chapter is to provide for the design, selection, installation, and maintenance of landscaping. The landscaping is intended to provide an attractive natural balance to built areas, to reduce runoff, to provide shade, to screen or buffer uses, and to frame or complement views. The chapter also encourages the selection of plant materials that will provide long-term growth, a balance of year-round coverage and greenery, and a variety of species for a more healthy, disease-resistant plant inventory.

Most of the existing landscaping at this site is proposed to be retained without modification. A majority of the total landscape area has been created and maintained by community gardeners. This is proposed to be retained and enhanced.

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.

Existing landscaping has been inventoried and is proposed to be retained or restored at the site, except where otherwise identified.

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.

No trees are proposed to be removed at parking areas as part of this application. No parking reduction is being sought for tree preservation.

C. Developers must also comply with the municipal code chapter on tree protection. No trees will require protection during construction activites to ensure their survival, since no ground disturbing work is proposed adjacent to or under drip lines of any trees on site.

D. Heritage trees. Heritage trees are trees which, because of their age, type, notability, or historical association, are of special importance. Heritage trees are trees designated by the City Council following review of a nomination. A heritage tree may not be removed without a public hearing at least 30 days prior to the proposed date of removal. Development proposals involving land with heritage tree(s) shall be required to protect and save the tree(s). Further discussion of heritage trees is found in the municipal code.

No heritage trees exist on the site or are designated for removal. Criterion does not apply.

- E. Landscaping By type, location and amount.
- 1. Residential uses (non-single-family). A minimum of 25 percent of the gross area including parking, loading and service areas shall be landscaped, and may include the open space and recreation area requirements under CDC 55.100. Parking lot landscaping may be counted in the percentage.

Criterion does not apply. Project does not include residential uses.

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.

Approximately 17,567 s.f. of 38,333 s.f. site is proposed to be landscaped providing 46% landscape coverage.

- 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.

The parking areas for this redevelopment are in three existing distinct parking locations with 2 to 6 spaces each. The western parking areas have 6 existing mature trees that provide shade for these parking areas. The expanded 2 vehicle parking area to the northeast of the site will have two new shade trees planted to meet this requirement. Since each of these three distinct parking

areas is separated by landscaping no "interior landscape" islands are proposed.

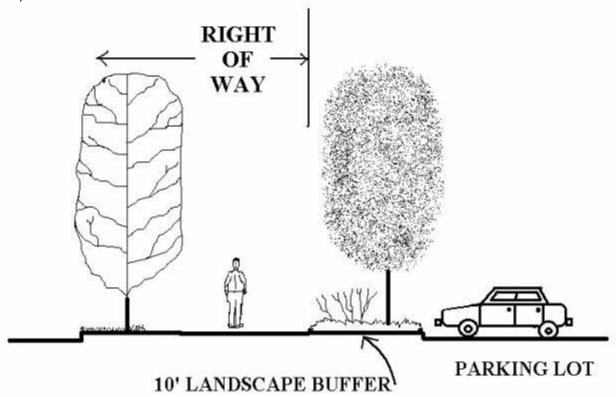
b. The landscaped areas shall not have a width of less than five feet.

All landscape area are 5' in width.

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.

The existing soil on the site has been amended by the community gardeners and is suitable for new proposed plant materials. No irrigation system has been proposed since community garden volunteers currently hand water the site and will continue to do so.

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 lot or 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, wildflowers, 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.

The existing 6 vehicle parking lot area is approximately 30" from the right of way. No changes are proposed to this parking are or the landscaping at this location. This existing landscaping serves as a storm drainage channel. The enlarged parking area at the north east is set back more than 17' from the property line and complies with the criteria above.

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., one-foot-high berm) plus landscaping. This extra requirement only applies to one street frontage.

The two new parking spaces at the north east of the site proposed will cause the parking lot and circulation area to exceed 50% of the frontage. Parking in front of the original fire station bay doors as currently exists creates a hazardous condition by not restricting backing movements onto Cedaroak Drive. Widening the frontage area as proposed minimizes the likelihood of backing movements onto the street. These parking spaces have been set back more than 17' and include a 1' high berm in conjunction with the landscape elements in criteria d above.

No changes are proposed at the existing north western parking area that is approximately 30" from the right of way line.

f. A parking, loading, or 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 CDC 55.100(C) and (D), except where shared parking is approved under CDC 46.050.

The existing parking lot area near the westernmost property line does not have the required 5' width with the existing retaining wall located approximately 18" from the property line. The parking area is 5'-7' below the neighboring property. This existing grade differential along with a proposed 6' high solid wood fence is proposed to provide a screen and noise buffer greater than that specified for a 5' wide landscape buffer.

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

All areas in parking lots will be used for parking maneuvering or circulation with the exception of the existing gravel areas to be retained for overflow parking.

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

All landscaping abutting parking areas (both existing and new) does not obstruct sight lines for safe vehicular and pedestrian use.

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 CDC 55.100(C)(1).

Outdoor service areas and mechanical equipment are screened from view by a combination of landscaping and fences or walls.

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).

New plant materials have been selected with crime prevention in mind. The project will also include cameras to provide surveillance of the site areas that are not visible from within the building.

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.

No irrigation is proposed as part of this Project. Criterion does not apply.

- I. 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 with planter size.
 - 8) Drought-tolerant unless irrigation is provided.
 - 9) Attractive foliage or form all seasons.

New trees at parking northeast parking area have been selected with criteria above in mind. All existing mature trees on site are proposed to be retained.

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.).

Plant materials have been selected to be drought tolerant, appropriate for the site and to have attractive year round greenery. No nuisance plants have been proposed.

- F. Landscaping (trees) in new subdivision.
- 1. Street trees shall be planted by the City within the planting strips (minimum six-foot width) of any new subdivision in conformity with the street tree plan for the area, and in accordance with the planting specifications of the Parks and Recreation Department. All trees shall be planted during the first planting season after occupancy. In selecting types of trees, the City Arborist may determine the appropriateness of the trees to local conditions and whether that tree has been overplanted, and whether alternate species should be selected. Also see subsection (C) of this section.
 - 2. The cost of street trees shall be paid by the developer of the subdivision.
- 3. The fee per street tree, as established by the City, shall be based upon the following:
 - a. The cost of the tree;
 - b. Labor and equipment for original placement;
- c. Regular maintenance necessary for tree establishment during the initial two-year period following the City schedule of maintenance; and
 - d. A two-year replacement warranty based on the City's established failure rate.

Section F above is not applicable. No subdivision is proposed.

G. Landscaping requirements in water resource areas (WRAs). Pursuant to CDC 32.110(E)(3) the requirements of this chapter relating to total site landscaping, landscaping buffers, landscaping around parking lots, and landscaping the parking lot interior may be waived or reduced in a WRA application without a variance being required.

Section G above is not applicable. Site is not within a WRA.

54.030 PLANTING STRIPS FOR MODIFIED AND NEW STREETS

All proposed changes in width in a public street right-of-way or any proposed street improvement shall, where feasible, include allowances for planting strips. Plans and specifications for planting such areas shall be integrated into the general plan of street improvements. This chapter requires any multi-family, commercial, or public facility which causes change in public right-of-way or street improvement to comply with the street tree planting plan and standards.

Section is not applicable. No new or modified streets are proposed.

54.040 INSTALLATION

- A. All landscaping shall be installed according to accepted planting procedures.
- B. The soil and plant materials shall be of good quality.
- C. Landscaping shall be installed in accordance with the provisions of this code.
- D. Certificates of occupancy shall not be issued unless the landscaping requirements have been met or other arrangements have been made and approved by the City such as the posting of a bond.

All new landscape materials shall be installed in accordance with best practices and be in place prior to issuance of Certificate of Occupancy.

54.050 PROTECTION OF STREET TREES

Street trees may not be topped or trimmed unless approval is granted by the Parks Supervisor or, in emergency cases, when a tree imminently threatens power lines.

No street trees exist or are proposed to be trimmed or topped as part of this project. Criterion does not apply.

54.060 MAINTENANCE

- A. The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of all landscaping which shall be maintained in good condition so as to present a healthy, neat, and orderly appearance and shall be kept free from refuse and debris.
- B. All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:
 - 1. It will not interfere with the maintenance or repair of any public utility;
 - 2. It will not restrict pedestrian or vehicular access; and
 - 3. It will not constitute a traffic hazard because of reduced visibility.

The Owner (City) or operator of will be responsible for all landscape maintenance in accordance with the provisions of this section.

54.070 SPECIFICATION SUMMARY

Refer to preceeding narrative for compliance with specification summary table.

	Area/Location	Landscaping Req'd.
1.	Between parking lot and R-O-W. CDC <u>54.020(E)(3)(d)</u> .	10 ft.
2.	Between parking lot and other lot. CDC <u>54.020(E)(3)(b)</u> .	5 ft.
3.	Between parking lot and R-O-W if parking lot comprises more than 50 percent of main R-O-W frontage. CDC <u>54.020(E)(3)(e)</u> .	15 ft.
4.	Percentage of residential/multi-family site to be landscaped.	25%

	Area/Location	Landscaping Req'd.
	CDC <u>54.020(</u> E)(1).	
5.	Percentage of non-residential (commercial/industrial/office) site to be landscaped. CDC <u>54.020(E)(2)</u> .	20%
6.	Percentage of $10-20$ car parking lot to be landscaped (excluding perimeter). CDC $\underline{54.020}(E)(3)(a)$.	5%
7.	Percentage of $1-9$ car parking lot to be landscaped (excluding perimeter). CDC $\underline{54.020}(E)(3)(a)$.	0%
8.	Percentage of 20+ car parking lot to be landscaped (excluding perimeter). CDC <u>54.020(E)(3)(a)</u> .	10%

Chapter 55 Design Review

55.010 PURPOSE AND INTENT - GENERAL

The purpose of the design review provisions is to establish a process and standards for the review of development proposals in order to conserve and enhance the appearance of the City and to promote functional, safe, and innovative site development. Attention will be paid to the proposal's scale, layout and design, its compatibility with the surrounding natural environment, and the character of the surrounding neighborhood or area. The intent is to ensure that there is general compatibility between adjoining uses, that private and common outdoor space is provided, that vehicular access and circulation are safe, and that areas of public use are made aesthetically attractive and safe. Also of concern are the needs of persons with disabilities.

Developers of multi-family, industrial, commercial, office, and public building projects are required to take steps to reduce reliance on the automobile by, in part, encouraging other modes of transportation such as transit, bicycles, and foot traffic, and through building orientation or location.

This Class 1 Design Review application is being submitted to ensure that all applicable standards in the City Development Code are complied with to ensure a safe, attractive, durable and accessible facility will be constructed that is compatible with the neighborhood.

55.020 CLASSES OF DESIGN REVIEW

- A. Class I Design Review. The following are subject to Class I Design Review:
- 1. Modification of an office, commercial, industrial, public or multi-family structure for purposes of enhancing the aesthetics of the building and not increasing the interior usable space (e.g., covered walkways or entryways, addition of unoccupied features such as cupolas, clock towers, etc.).

A Class 1 Design Review approval is being sought for this modification to the existing Robinwood Station Community Center. The project does not include any increase in the interior usable space.

2. Significant road realignment (when not part of a subdivision or partition plat process). "Significant" shall be defined by the length of the realignment and/or extent of redesign, and/or the natural features or manmade structures that will be impacted or removed.

No road realignment is proposed. Criterion does not apply.

3. Addition or reduction of less than five percent of total square footage of a commercial, office, public, multi-family, or industrial building.

A new 189 s.f. entry porch addition and covered garbage/ recycling and generator enclosure are proposed as part of this application as well as replacing the existing greenhouse with a new structure. No addition or reduction is proposed to the interior usable building area.

4. Modification of a landscape plan (including water features, ponds, pergolas, arbors, artwork, sculptings, etc.).

Modification to the existing landscaping include stormwater improvements and new parking lot landscaping.

5. Minor modifications and/or upgrades of pump stations, reservoirs, and storm detention facilities.

New storm detention facilities are proposed as part of this application to deal with increase in impervious area for paving of existing gravel parking areas.

6. Americans with Disability Act compliance that significantly alters the exterior of the building (ramps are exempt).

Exterior ADA alterations are limited to exempt items including parking stripping, signage and railings.

7. Freestanding art and statuary over five feet tall.

Criterion does not apply. No freestanding artwork over 5' tall is proposed.

8. Other land uses and activities may be added if the Planning Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.

No other land uses or activities are proposed as part of this application that would require findings from the Planning Director for approval.

- 9. No design review is required if the applicant proposes to repair or replace one of the listed items. The Planning Director shall make the determination of whether an applicant is proposing a repair or replacement. However, Class I design review applies when one of the following improvements is part of a minor redesign or remodel.
 - a. Sidewalks on private property.
 - b. Loading docks.
 - c. Addition or reduction of parking stalls.
 - d. Revised parking alignment.
 - e. Revised circulation.
 - f. Revised points of ingress/egress to a site.
- g. Heating, ventilation, and air conditioners (HVAC) that are visible from the public right-of-way.

This application seeks approval for the proposed sidewalks, parking reconfiguration, revised circulation and ground mounted HVAC units shown on the site plan as part of the Class 1 approval.

B. Class II Design Review. Class II design review applies to all uses/activities except those uses/activities listed under Class I design review, and the exemptions of CDC 55.025. Class II design review applies to the proposed improvements listed in this section when the proposed improvement (e.g., new sidewalk) is part of a major commercial, office, industrial, public, or multi-family construction project (e.g., a new shopping center).

Criterion does not apply. Class II Design Review is not being required or being applied for.

55.025 EXEMPTIONS

The following activities are exempt from the provisions of this chapter:

- A. Detached single-family residential construction, except as indicated otherwise in the base zone or this chapter;
 - B. Accessory structures;
- C. One to two duplexes or single-family attached structures except as indicated otherwise in the base zone or this chapter;
- D. Architectural replacements in kind, or replacement of building materials that are equal or superior to existing materials (in terms of performance or quality) but that do not alter the architectural style of the structure. Retrofitted awnings, changes in color schemes, wall art, and freestanding statuary or art under five feet tall are exempt from design review, but shall be subject to Planning Director review under the provisions of CDC 99.060(A)(2), prescribed conditions, and the approval criteria of CDC 55.100(B)(6)(a) and (b).

The replacement of the existing greenhouse structure with a more durable, better constructed structure is allowed as an exemption. Approval of this; however, is being sought as part of this application.

55.030 ADMINISTRATION AND APPROVAL PROCESS

A. A pre-application conference is required before submitting a development plan application for design review as provided by CDC 99.030(B).

A pre-application meeting was attended on September 5, 2019 for this project (PA 19-20).

B. The application shall be submitted by the record owner(s) of the property, authorized agent, or condemnor.

The application has been prepared by the Owner's representative and is being submitted by the Owner (City of West Linn).

- C. Action on the development plan application shall be as provided by Chapter 99 CDC, Procedures for Decision-Making: Quasi-Judicial, and the following:
- 1. The Planning Director for Class I design review applications, or Planning Commission for Class II design review applications, shall approve, approve with conditions, or deny the application based on findings related to the applicable criteria set forth in CDC 99.110 and this chapter.

Approval by the Planning Director is being sought for this Class 1 application.

- 2. A decision by the Planning Director may be reviewed by the City Council.
- D. Substantial modifications made to the approved development plan will require reapplication (e.g., more or fewer lots, different architectural design, etc.).

If substantial modifications are made to approved development plans the applicant will make a new application to reflect such changes.

55.040 EXPIRATION OR EXTENSION OF APPROVAL

If substantial construction has not occurred within three years from the date of approval of the development plan, the approved proposal will be void, unless an extension is granted under CDC 99.325.

Substantial completion of the project is anticipated within 12 months of this land use approval.

55.050 DESIGN REVIEW AMENDMENT TRIGGER

Amendments to design review shall be required when 10 percent or more of the housing type changes (e.g., from single-family units to multi-family units) from the tentatively approved design review plan, or when there is more than a 10 percent change in the number of units, or when the layout of streets and lots significantly changes, or adjusting more than 20 percent of the building footprint or site plan, or significant changes to the architecture that modify the style, mass, or result in elimination of significant design features. Changes in color or materials would not require an amendment unless the colors were non-earth tones and the materials were of poorer quality (for example, going from tile roof to composition roofing) than originally approved. Changes to the project/site plan to meet conditions of approval or legislative changes shall not trigger an amendment.

The Design Review shall be amended if any of the triggers above occur.

55.060 STAGED OR PHASED DEVELOPMENT

The applicant may elect to develop the site in stages. Staged development shall be subject to the provisions of CDC 99.125.

No staged or phased development is proposed for this Project.

55.070 SUBMITTAL REQUIREMENTS

A. The design review application shall be initiated by the property owner or the owner's agent, or condemnor.

The application has been prepared by the Owner's representative and is being submitted by the Owner (City of West Linn).

B. A pre-application conference, per CDC 99.030(B), shall be a prerequisite to the filing of an application.

A pre-application meeting was attended on September 5, 2019 for this project (PA 19-20).

C. Documentation of any required meeting with the respective City-recognized neighborhood association per CDC 99.038.

A neighborhood meeting was held on March 10, 2020. Documentation from this meeting is attached to this application.

- D. The applicant shall submit a completed application form and:
- 1. The development plan for a Class I design review shall contain the following elements:
 - a. A site analysis (CDC 55.110) only if the site is undeveloped;
 - b. A site plan (CDC 55.120);
- c. Architectural drawings, including building envelopes and all elevations (CDC 55.140) only if architectural work is proposed; and
 - d. Pursuant to CDC 55.085, additional submittal material may be required.

One original application form must be submitted. One copy at the original scale and one copy reduced to 11 inches by 17 inches or smaller of all drawings and plans must be submitted. One copy of all other items must be submitted. The applicant shall also submit one copy of the complete application in a digital format acceptable to the City. When the application submittal is determined to be complete, additional copies may be required as determined by the Community Development Department.

This application includes the required items listed above in paper and electronic formats.

- 2. The development plan for a Class II design review shall contain the following elements:
 - a. A site analysis (CDC 55.110);
 - b. A site plan (CDC 55.120);
 - c. A grading plan (CDC 55.130);
 - d. Architectural drawings, indicating floor plan and elevation (CDC 55.140);
 - e. A landscape plan (CDC 55.150);
- f. A utility plan appropriate to respond to the approval criteria of CDC 55.100(l)(1) through (5) relating to streets, drainage, municipal water, sanitary sewers, solid waste, and recycling storage;
- g. A light coverage plan with photometric data, including the location and type of outdoor lighting, with specific consideration given to compliance with CDC 55.100(J) pertaining to crime prevention and, if applicable, CDC 46.150(A)(13) pertaining to parking lot lighting;
- h. If staff determines before or during the pre-application conference that the land use is expected to generate noise that may exceed DEQ standards, the application shall include a noise study conducted by a licensed acoustical engineer that demonstrates that the application and associated noise sources will meet DEQ standards. Typical noise sources of concern include, but are not limited to, vehicle drive-throughs, parking lots, HVAC units, and public address systems; and
 - i. Documents as required per the Tree Technical Manual.

Criteria above are not applicable. Application is for Class 1 Design Review.

3. A narrative, based on the standards contained in this code, which supports any requested exceptions as provided under CDC 55.170.

The narrative contained in this application includes documentation which supports requested exceptions as provided under CDC 55.170.

4. Submit full written responses to approval criteria of CDC 55.100 for Class II design review, or CDC 55.090 for Class I design review, plus all applicable referenced approval criteria.

This narrative includes written responses to approval criteria from all applicable sections of the CDC identified as necessary at the pre-application meeting.

E. The applicant shall submit samples of all exterior building materials and colors in the case of new buildings or building remodeling.

A material and color board is included in this application.

F. The applicant shall pay the required deposit and fee.

The applicant (City of West Linn) will pay all fees with the submittal of this application.

55.085 ADDITIONAL INFORMATION REQUIRED AND WAIVER OF REQUIREMENTS

A. The Planning Director may require additional information as part of the application subject to the provisions of CDC 99.035(A).

Additional information requested by the Planning Director will be submitted as necessary for this application.

B. The Planning Director may waive any requirements for the application subject to the provisions of CDC 99.035(B) and (C).

No waiver of any requirements for this application are currently be sought.

55.090 APPROVAL STANDARDS - CLASS I DESIGN REVIEW

The Planning Director shall make a finding with respect to the following criteria when approving, approving with conditions, or denying a Class I design review application:

- A. The provisions of the following sections shall be met:
- 1. CDC 55.100(B)(1) through (4), Relationship to the natural and physical environment, shall apply except in those cases where the proposed development site is substantially developed and built out with no remaining natural physical features that would be impacted.

- 2. CDC 55.100(B)(5) and (6), architecture, et al., shall only apply in those cases that involve exterior architectural construction, remodeling, or changes.
- 3. Pursuant to CDC 55.085, the Director may require additional information and responses to additional sections of the approval criteria of this section depending upon the type of application.
 - 4. The design standards or requirements identified in the base zone shall apply.
- B. An application may be approved only if adequate public facilities will be available to provide service to the property at the time of occupancy.
- C. The Planning Director shall determine the applicability of the approval criteria in subsection A of this section.

This application is intended to allow the Planning Director to make findings based on the criteria listed in this section.

55.100 APPROVAL STANDARDS - CLASS II DESIGN REVIEW

Section is not applicable and has been omitted for brevity. Application is for Class I Design Review.

55.110 SITE ANALYSIS

A site analysis is not required since this is a remodel of previously developed site. Section has been omitted from narrative for brevity.

55.120 SITE PLAN

The site plan shall be at the same scale as the site analysis (CDC 55.110) and shall show:

- A. The applicant's entire property and the surrounding property to a distance sufficient to determine the relationship between the applicant's property and proposed development and adjacent property and development.
- B. Boundary lines and dimensions for the perimeter of the property and the dimensions for all proposed lot or parcel lines.
 - C. Streams and stream corridors.
- D. Identification information, including the name and address of the owner, developer, project designer, lineal scale and north arrow.
- E. The location, dimensions, and names of all existing and proposed streets, public pathways, easements on adjacent properties and on the site, and all associated rights-of-way.
 - F. The location, dimensions and setback distances of all:
 - 1. Existing and proposed structures, improvements, and utility facilities on site; and
 - 2. Existing structures and driveways on adjoining properties.

- G. The location and dimensions of:
- 1. The entrances and exits to the site;
- 2. The parking and circulation areas;
- 3. Areas for waste disposal, recycling, loading, and delivery;
- 4. Pedestrian and bicycle routes, including designated routes, through parking lots and to adjacent rights-of-way;
 - 5. On-site outdoor recreation spaces and common areas;
 - 6. All utilities, including stormwater detention and treatment; and
 - 7. Sign locations.
 - H. The location of areas to be landscaped.

The submitted Site Plan illustrate all items listed above.

55.125 TRANSPORTATION ANALYSIS

Certain development proposals required that a Traffic Impact Analysis (TIA) be provided which may result in modifications to the site plan or conditions of approval to address or minimize any adverse impacts created by the proposal. The purpose, applicability and standards of this analysis are found in CDC 85.170(B)(2). (Ord. 1584, 2008)

No transportation analysis was identified as being necessary at the preapplication meeting for this existing site and use. None has been prepared as part of this application.

55.130 GRADING AND DRAINAGE PLANS

For Type I, II and III lands (refer to definitions in Chapter 02 CDC), a registered civil engineer must prepare a grading plan and a storm detention and treatment plan pursuant to CDC 92.010(E), at a scale sufficient to evaluate all aspects of the proposal, and a statement that demonstrates:

- A. The location and extent to which grading will take place indicating general contour lines, slope ratios, slope stabilization proposals, and location and height of retaining walls, if proposed.
- B. All proposed storm detention and treatment facilities comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards.
 - C. There is sufficient factual data to support the conclusions of the plan.
- D. Per CDC 99.035, the Planning Director may require the information in subsections A, B and C of this section for Type IV lands if the information is needed to properly evaluate the proposed site plan.

This developed site is classified as a Type IV land. Part of the project is dealing with seasonal storm drainage, so grading, and stormwater facilities have been designed to West Linn Public Works Design Standards by a registered Civil Engineer and included with this application.

- E. For Type I, II and III lands (refer to definitions in Chapter 02 CDC), the applicant must provide a geologic report, with text, figures and attachments as needed to meet the industry standard of practice, prepared by a certified engineering geologist and/or a geotechnical professional engineer, that includes:
- 1. Site characteristics, geologic descriptions and a summary of the site investigation conducted;
 - 2. Assessment of engineering geological conditions and factors;
- 3. Review of the City of West Linn's Natural Hazard Mitigation Plan and applicability to the site; and
- 4. Conclusions and recommendations focused on geologic constraints for the proposed land use or development activity, limitations and potential risks of development, recommendations for mitigation approaches and additional work needed at future development stages including further testing and monitoring.
- F. Identification information, including the name and address of the owner, developer, project designer, and the project engineer.

No assessment of geological conditions and factors has been deemed necessary for this previously developed site consisting of Type IV lands.

55.140 ARCHITECTURAL DRAWINGS

This section does not apply to single-family residential subdivisions or partitions, or up to two duplexes or single-family attached dwellings.

Architectural drawings shall be submitted showing:

- A. Building elevations and sections tied to curb elevation;
- B. Building materials: color and type; and
- C. The name of the architect or designer.

Architectural drawings in this application include the required information of this section.

55.150 LANDSCAPE PLAN

This section does not apply to detached single-family residential subdivisions or partitions, or up to two duplexes or single-family attached dwellings.

- A. The landscape plan shall be prepared and shall show the following:
- 1. Preliminary underground irrigation system, if proposed;
- 2. The location and height of fences and other buffering of screening materials, if proposed:
 - 3. The location of terraces, decks, patios, shelters, and play areas, if proposed;
- 4. The location, size, and species of the existing and proposed plant materials, if proposed; and
 - 5. Building and pavement outlines.
 - B. The landscape plan shall be accompanied by:
 - 1. The erosion controls that will be used, if necessary;

- 2. Planting list; and
- 3. Supplemental information as required by the Planning Director or City Arborist.

A landscape plan is included in this application with the required information in this section included.

55.170 EXCEPTIONS TO UNDERLYING ZONE, YARD, PARKING, SIGN PROVISIONS, AND LANDSCAPING PROVISIONS

- A. The Planning Director may grant an exception to the dimensional building setback or yard requirements in the applicable zone based on findings that the approval will satisfy the following criteria:
 - 1. A minor exception that is not greater than 20 percent of the required setback.
 - 2. A more efficient use of the site.
- 3. The preservation of natural features that have been incorporated into the overall design of the project.
- 4. No adverse affect to adjoining properties in terms of light, air circulation, noise levels, privacy, and fire hazard.
- 5. Safe vehicular and pedestrian access to the site and safe on-site vehicular and pedestrian circulation.

No exception to building setback or yard requirements within the underlying zone are being sought with this application. Criteria don't apply.

- B. The Planning Director may grant an exception to the off-street parking dimensional and minimum number of space requirements in the applicable zone so long as the following criteria are met:
 - 1. The minor exception is not greater than 10 percent of the required parking;
- 2. The application is for a use designed for a specific purpose which is intended to be permanent in nature (for example, a nursing home) and which has a low demand for off-street parking; or
- 3. There is an opportunity for sharing parking and there is written evidence that the property owners are willing to enter into a legal agreement; or
- 4. Public transportation is available to the site reducing the standards and will not adversely affect adjoining uses, and there is a community interest in the preservation of particular natural feature(s) of the site which make it in the public interest to grant an exception to parking standards.

No exception to the parking dimensional standards or minimum number of parking spaces are being sought with this application. Criteria are not applicable.

- C. The Planning Director may grant an exception to the sign dimensional requirements in the applicable zone when the following criteria are met:
- 1. The minor exception is not greater than 10 percent of the required applicable dimensional standard for signs;

- 2. The exception is necessary for adequate identification of the use on the property; and
- 3. The sign will be compatible with the overall site plan, the structural improvements, and with the structures and uses on adjoining properties.
- D. The Planning Director may grant an exception to the landscaping requirements in the applicable zone based on findings that the following criteria will be met:
- 1. A minor exception that is not greater than 10 percent of the required landscaped area.
 - 2. A more efficient use of the site.
- 3. The preservation of natural features that have been incorporated into the overall design of the project.
 - 4. No adverse effect to adjoining property.

Criteria are not applicable. No exception to sign dimensional standards are being sought.

55.180 MAINTENANCE

All on-site improvements shall be the ongoing responsibility of the property owner or occupant.

55.190 SHARED OPEN SPACE

Where the open space is designated on the plan as common open space, the following shall apply:

- A. The open space area shall be shown on the final plan and recorded with the Planning Director.
- B. The open space shall be conveyed in accordance with one of the following methods:
- 1. By dedication to the City as publicly owned and maintained as open space. Open space proposed for dedication to the City must be acceptable to it with regard to the size, shape, location, improvement, and budgetary and maintenance limitations.
- 2. By leasing or conveying title (including beneficial ownership) to a corporation, home association, or other legal entity with the City retaining the development rights to the property. The terms of such lease or other instrument of conveyance must include provisions suitable to the City Attorney for guaranteeing the following:
 - a. The continued use of such land for intended purposes.
 - b. Continuity of property maintenance.
 - c. When appropriate, the availability of funds required for such maintenance.
 - d. Adequate insurance protection.
 - e. Recovery for loss sustained by casualty and condemnation, or otherwise.
- 3. By any method that achieves the objectives set forth in subsection (B)(2) of this section.

Criteria are not applicable. Property is City owned.

55.195 ANNEXATION AND STREET LIGHTS

As a condition of approval for design review for any project that is being annexed to the City, the developer and/or homeowners association shall pay for all expenses related to street light energy and maintenance costs until annexed into the City. The approval for any property annexed must state: "This approval is contingent on voter approval of annexation of the subject property." This means that no permit, final plat, or certificate of occupancy may be issued or approved until annexation is complete.

Criterion does not apply. The project is within the City boundaries.

Chapter 85 General Provisions

85.010 PURPOSE

- A. The purpose of the land division provisions of this code is to implement the Comprehensive Plan; to provide rules and standards governing the approval of plats of subdivisions (four lots or more) and partitions (three lots or fewer); to help direct the development pattern; to lessen congestion in the streets; to increase street safety; to efficiently provide water, sewage, and storm drainage service; and to conserve energy resources.
 - B. The purpose is further defined as follows:
- 1. To improve our sense of neighborhood and community and increase opportunities for socialization.
- 2. To comply with the State's Transportation Planning Rule (TPR), which seeks to encourage alternate forms of transportation and reduce reliance upon the private automobile and vehicle miles traveled by increasing accessibility within and between subdivisions and neighborhoods. This may be accomplished by designing an easily understood, interconnected pattern of streets, bicycle and foot paths, and accommodation of transit facilities. Cul-de-sacs are to be discouraged unless site conditions dictate otherwise.
- 3. To reduce pedestrian/vehicle conflicts and create a safe and attractive environment for pedestrians and bicyclists.

- 4. To protect natural resource areas such as drainageways, Willamette and Tualatin River greenways, creeks, habitat areas, and wooded areas as required by other provisions of this code or by the layout of streets and graded areas so as to minimize their disturbance.
- 5. To protect the natural features and topography by minimizing grading and site disturbance and by requiring proper erosion control techniques.
- 6. To arrange the lots and streets so as to minimize nuisance conditions such as glare, noise, and vibration.
- 7. To maximize passive solar heating benefits by orienting the streets on an east-towest axis which increases exposure to the sun.
- 8. To arrange for the efficient layout of utilities and infrastructure as well as their extension to adjacent properties in a manner consistent with either adopted utility plans or sound engineering practices.
- 9. To arrange lots and roads to create reasonably buildable lots and acceptable driveway grades.
- 10. To encourage the arrangement of increased densities and smaller lots in proximity to needed services and schools as well as transportation corridors so as to reduce vehicle miles traveled and to encourage alternate modes of travel.
 - 11. To encourage design experimentation and creativity.
- 12. To arrange for the mitigation of impacts generated by new development. These impacts include increased automobile, foot, and bicycle traffic. These impacts are to be mitigated at the developer's cost, by the provision of streets, sidewalks, bicycle and foot paths, and traffic control devices within, contiguous to, and nearby the development site. Similarly, increased demand on local infrastructure such as water lines, sanitary sewer lines, and storm drainage and detention facilities, should be offset by improving existing facilities or providing new ones. (Ord. 1636 § 49, 2014; Ord. 1647 § 7, 2016)

85.020 SCOPE - CONFORMITY REQUIRED

- A. This division shall apply to all subdivisions and partitions within the City limits of West Linn.
- B. No person shall subdivide or create a partition except in conformity with the provisions of this code and Chapter 92 ORS. Chapter 92 ORS states that all partitions and subdivisions of land require a final plat to be prepared by a registered professional land surveyor; all corners must be monumented, the partition or subdivision plat must be approved by the City and County surveyor, as appropriate, and recorded with the County recorder.
- C. No building permit shall be issued for any parcel or lot which was created by subdivision or partition if it is not approved and in conformity with the provisions of this code.
- D. No excavation of land or construction of any public or private improvement shall take place or be commenced except in conformity with the provisions of this code. (Ord. 1636 § 50, 2014)

85.030 SALE OR NEGOTIATION TO SELL LOT OR PARCEL PRIOR TO APPROVAL OF TENTATIVE PLAN

- A. No person shall sell any lot in any subdivision to which approval is required until such approval is obtained. No person shall negotiate to sell any lot in a subdivision until the tentative plan has been approved.
- B. A person may negotiate to sell any parcel in a partition for which approval of a tentative plan is required, but shall not sell a parcel prior to approval.
- C. No building permits will be issued for tentatively approved lots or parcels. The final plat must be recorded before permits will be issued. (Ord. 1636 § 51, 2014)

85.040 SALE OF LOTS PROHIBITED UNTIL SUBDIVISION PLAT IS RECORDED

Repealed by Ord. 1636.

85.050 APPROVAL REQUIRED BEFORE CREATING STREET OR ROAD TO PARTITION LAND

- A. No person shall create a street or road for the purpose of partitioning an area or tract of land without approval by the approval authority under the provisions of CDC 99.060(A) and (B).
- B. No instrument dedicating land to public use shall be accepted for recording unless such instrument bears the approval of the Planning Director or City Engineer, as applicable, under the provisions of CDC 99.060(A) and (B), procedures for decision-making. (Ord. 1382, 1995)

85.060 INCOMPLETE APPLICATIONS – DECISION-MAKING PERIOD

- A. The Director shall not accept incomplete applications; however, if an application for approval of a tentative plan for a subdivision or partition is incomplete, the Planning Director shall notify the applicant of the fact within 30 days of the receipt of the application and allow the applicant to provide the additional required information.
- B. The approval authority shall take final action on an application for approval of a tentative plan for a subdivision or partition within 120 days after the application is found to be complete.
- C. If action is not taken within the 120-day period, the applicant may apply to the circuit court for a writ of mandamus to compel the issuance of approval. (Ord. 1382, 1995)

85.070 ADMINISTRATION AND APPROVAL PROCESS

- A. The application shall be filed by the record owner(s) of the property or by an authorized agent who has a letter of authorization from the property owners of record. The burden of proof will be upon the applicant to demonstrate the validity of the ownership, if challenged.
- B. Action on the application for a tentative plan shall be as provided by Chapter 99 CDC.
- 1. The Planning Director shall approve, deny, or approve with conditions an application for a partition subject to the provisions of CDC 85.200, 99.060(A), and 99.110.

The Director's decision may be appealed to the City Council as provided by CDC 99.240(A).

- 2. The Planning Commission shall approve, deny, or approve with conditions an application for a tentative plan for a subdivision subject to the provisions of CDC 85.200, 99.060(B), and 99.110. A petition for review of the Planning Commission's decision may be filed as provided by CDC 99.240.
- 3. Action on the final plat shall be ministerial and taken by the Planning Director and City Engineer, and the Planning Director and City Engineer shall approve a final subdivision or partition plat upon the finding that the approval criteria set forth in CDC 89.050 have been satisfied. The Planning Director's and City Engineer's decision may be appealed to the Planning Commission by the applicant, and the Planning Commission shall make its decision based on testimony from the applicant and the Director. (Ord. 1474, 2001)

85.080 SUBSTANTIAL DEVIATION FROM APPROVED PLAN PROHIBITED

- A. Approval of the tentative plan shall require that the final plat be in substantial conformance. Only such changes in the plat or map as are necessary for compliance with the terms of its approval, changes appropriate to meet accepted engineering practices due to grades or site conditions, or changes to satisfy legislative requirements are appropriate; however
- B. Approval of the tentative plan for the proposed subdivision or the partition shall not constitute final acceptance of the plat of the proposed subdivision or partition for recording.

85.085 SUBDIVISION/PARTITION AMENDMENT TRIGGER

Amendments to subdivision/partitions shall be required when 10 percent or more of the housing type changes (e.g., from single-family units to multi-family units) from the tentatively approved plan, or when there is more than a 10 percent change in the number of units, or when the layout of streets and lots significantly changes. (Ord. 1408, 1998)

85.090 EXPIRATION OR EXTENSION OF APPROVAL

The final plat map shall be submitted to the Planning Director and recorded with the County within three years from the date of approval of the tentative plan, or as approved under CDC 99.325. If the final plat is not recorded by that time, the approval expires. (Ord. 1408, 1998; Ord. 1589 § 1 (Exh. A), 2010)

85.100 NON-COMPLIANCE - BOND

- A. Non-compliance with an approved final plat shall be a violation of this code.
- B. The development and associated conditions of approval shall be completed in accordance with the approved final plat before any occupancy permits will be issued except that when the City Engineer or Planning Director determines that immediate execution of any feature of an approved final plat is impractical due to climatic conditions, unavailability of materials, or other temporary condition, the Planning Director or City Engineer shall, as a precondition of the issuance of a required permit, require a cashier's

check, cash, or other surety (generally 125 percent of an engineer's estimated cost of improvements), to secure execution of the feature at a time certain not to exceed one year.

85.110 STAGED DEVELOPMENT

The applicant may elect to develop the site in stages. Staged development shall be subject to the provisions of CDC 99.125. However, notwithstanding the provisions of CDC 99.125, in no case shall the time period for final platting and recording all stages with the County be greater than five years without refiling the application. (Ord. 1589 § 1 (Exh. A), 2010)

85.120 PARTIAL DEVELOPMENT

Where the tentative subdivision or partition plan is limited to only part of the potential development site, the approval authority may require that an applicant submit a tentative layout for the streets for the unsubdivided portion. A tentative street plan is required for sites where the unsubdivided portion of the property is greater than 300 percent of the minimum lot size allowed in the underlying zoning district. (Ord. 1650 § 1 (Exh. A), 2016)

85.130 LAND DIVISION APPLICATION IN CONJUNCTION WITH OTHER LAND USE APPLICATIONS

As provided by CDC 99.070, a land division application filed under this code may be heard concurrently with another application, upon applicant's request.

85.140 PRE-APPLICATION CONFERENCE REQUIRED

- A. An applicant shall participate in a pre-application conference with staff prior to the submission of a complete tentative plan.
- B. The Planning staff shall explain the applicable plan policies, ordinance provisions, opportunities, and constraints which may be applicable to the site and type of proposed land division.
- C. The City Engineering staff shall explain the public improvement requirements which may be applicable to the site and type of proposed land division, including potential for the applicant to apply for a waiver of street improvements. (Ord. 1544, 2007)

85.150 APPLICATION – TENTATIVE PLAN

- A. The applicant shall submit a completed application which shall include:
- 1. The completed application form(s).
- 2. Copies of the tentative plan and supplemental drawings shall include one copy at the original scale plus one copy reduced in paper size not greater than 11 inches by 17 inches. The applicant shall also submit one copy of the complete application in a digital format acceptable to the City. When the application submittal is determined to be complete, additional copies may be required as determined by the Community Development Department.
 - 3. A narrative explaining all aspects of land division per CDC 85.200.

B. The applicant shall pay the requisite fee. (Ord. 1401, 1997; Ord. 1408, 1998; Ord. 1442, 1999; Ord. 1613 § 19, 2013; Ord. 1621 § 25, 2014; Ord. 1622 § 19, 2014)

85.160 SUBMITTAL REQUIREMENTS FOR TENTATIVE PLAN

- A. A City-wide map shall identify the site. A vicinity map covering one-quarter-mile radius from the development site shall be provided in the application showing existing subdivisions, streets, and unsubdivided land ownerships adjacent to the proposed subdivision and showing how proposed streets and utilities may be extended to connect to existing streets and utilities.
- B. The tentative subdivision plan shall be prepared by a registered civil engineer and/or a licensed land surveyor. A stamp and signature of the engineer or surveyor shall be included on the tentative subdivision plan. A tentative minor partition plan (three lots or less) is only required to be drawn to scale and does not have to be prepared by an engineer or surveyor.
- C. The tentative plan of a subdivision or partition shall be drawn at a scale not smaller than one inch equals 100 feet, or, for areas over 100 acres, one inch equals 200 feet.
- D. The following general information shall be shown on the tentative plan of subdivision or partition:
- 1. Proposed name of the subdivision and streets; these names shall not duplicate nor resemble the name of any other subdivision or street in the City and shall be determined by the City Manager or designee. Street names should be easily spelled, pronounced, and of limited length. All new street names must, to the greatest extent possible, respect and be representative of the surrounding geography and existing street names. Street names should consider any prominent historical City figures or neighborhood themes that exist. Subdivision street names may not reference names of the builder or developer.
 - 2. Date, north arrow, scale of drawing, and graphic bar scale.
 - 3. Appropriate identification clearly stating the drawing as a tentative plan.
- 4. Location of the proposed division of land, with a tie to the City coordinate system, where established, and a description sufficient to define its location and boundaries, and a legal description of the tract boundaries.
 - 5. Names and addresses of the owner, developer, and engineer or surveyor.
- E. The following existing conditions shall be shown on the tentative plan of a subdivision or partition:
- 1. The location, widths, and names of all existing or platted streets and rights-of-way within or adjacent to the tract (within 50 feet), together with easements and other important features such as section lines, donation land claim corners, section corners, City boundary lines, and monuments.
- 2. Contour lines related to the U.S. Geological Survey datum or some other established benchmark, or other datum approved by the Planning Director and having the following minimum intervals:
 - a. Two-foot contour intervals for ground slopes less than 20 percent.
 - b. Five-foot contour intervals for ground slopes exceeding 20 percent.
 - 3. The location of any control points that are the basis for the applicant's mapping.
- 4. The location, by survey, and direction of all watercourses and areas subject to periodic inundation or storm drainageway overflow or flooding, including boundaries of

flood hazard areas as established by the U.S. Army Corps of Engineers or the City zoning ordinance.

- 5. Natural features such as rock outcroppings, wetlands tied by survey, wooded areas, heritage trees, and isolated trees (six-inch diameter at five feet above grade) identified by size, type, and location. All significant trees and tree clusters identified by the City Arborist using the criteria of CDC 55.100(B)(2), and all heritage trees, shall be delineated. Trees on non-Type I and II lands shall have their "dripline plus 10 feet" protected area calculated per CDC 55.100(B)(2) and expressed in square feet, and also as a percentage of total non-Type I and II area.
- 6. Existing uses of the property, including location of all existing structures. Label all structures to remain on the property after platting.
- 7. Identify the size and location of existing sewers, water mains, culverts, drain pipes, gas, electric, and other utility lines within the site, and in the adjoining streets and property.
 - 8. Zoning on and adjacent to the tract.
 - 9. Existing uses to remain on the adjoining property and their scaled location.
 - 10. The location of any existing bicycle or pedestrian ways.
 - 11. The location of adjacent transit stops.
- F. The following proposed improvements shall be shown on the tentative plan or supplemental drawings:
- 1. The street street location, proposed name, right-of-way width, and approximate radius of curves of each proposed street and street grades. Proposed street names shall comply with the street naming method explained in CDC 85.200(A)(12).
- 2. The type, method, and location of any erosion prevention and sediment control measures and/or facilities in accordance with the most current version of Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook, which are necessary to prevent and control visible or measurable erosion as determined by the following criteria:
- a. Deposition of soil, sand, dirt, dust, mud, rock, gravel, refuse, or any other organic or inorganic material exceeding one cubic foot in volume in a public right-of-way or public property, or into the City surface water management system either by direct deposit, dropping, discharge, or as a result of erosion; or
- b. Flow of water over bare soils, turbid or sediment-laden flows, or evidence of onsite erosion such as rivulets or bare soil slopes, where the flow of water is not filtered or captured on the development site; or
- c. Earth slides, mud flows, land slumping, slope failure, or other earth movement that is likely to leave the property of origin.

Additional on-site measures may later be required if original measures prove to be inadequate in meeting these attainment standards. For the purposes of this code, "one cubic foot in volume" is defined to include the volume of material, wet or dry, at the time of deposition and includes any water of a discolored or turbid nature.

- 3. Any proposed infrastructure improvements that address those identified in the City Transportation System Plan.
 - 4. Any proposed bicycle or pedestrian paths. The location of proposed transit stops.
 - 5. Any easement(s) location, width, and purpose of the easement(s).
- 6. The configuration including location and approximate dimensions and area of each lot or parcel, and in the case of a subdivision, the proposed lot and block number.
 - 7. A street tree planting plan and schedule approved by the Parks Department.
 - 8. Any land area to be dedicated to the City or put in common ownership.
 - 9. Phase boundaries shall be shown.

85.170 SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR TENTATIVE SUBDIVISION OR PARTITION PLAN

The following information shall be submitted to supplement the tentative subdivision plan:

A. General.

- 1. Narrative stating how the plan meets each of the applicable approval criteria and each subsection below.
- 2. Statement or affidavit of ownership of the tract (County Assessor's map and tax lot number).
 - 3. A legal description of the tract.
- 4. If the project is intended to be phased, then such a proposal shall be submitted at this time with drawing and explanation as to when each phase will occur and which lots will be in each phase.
- 5. Where the land to be subdivided or partitioned contains only a part of the contiguous land owned by the developer, the Commission or Planning Director, as applicable, shall require a master plan of the remaining portion illustrating how the remainder of the property may suitably be subdivided.
- 6. Where the proposed subdivision site includes hillsides, as defined in CDC 02.030 Type I and II lands, or any lands identified as a hazard site in the West Linn Comprehensive Inventory Plan Report, the requirements for erosion control as described in CDC 85.160(F)(2) shall be addressed in a narrative.
- 7. Table and calculations showing the allowable number of lots under the zone and how many lots are proposed.
- 8. Map and table showing square footage of site comprising slopes by various classifications as identified in CDC 55.110(B)(3).

B. Transportation.

- 1. Centerline profiles with extensions shall be provided beyond the limits of the proposed subdivision to the point where grades meet, showing the finished grade of streets and the nature and extent of street construction. Where street connections are not proposed within or beyond the limits of the proposed subdivision on blocks exceeding 330 feet, or for cul-de-sacs, the tentative plat or partition shall indicate the location of easements that provide connectivity for bicycle and pedestrian use to accessible public rights-of-way.
 - 2. Traffic Impact Analysis (TIA).
- a. Purpose. The purpose of this section of the code is to implement Section 660-012-0045(2)(e) of the State Transportation Planning Rule that requires the City to adopt a process to apply conditions to development proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards for when a proposal must be reviewed for potential traffic impacts; when a Traffic Impact Analysis must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; what must be in a Traffic Impact Study; and who is qualified to prepare the study.
- b. Typical average daily trips. The latest edition of the Trip Generation manual, published by the Institute of Transportation Engineers (ITE) shall be used as the standards by which to gauge average daily vehicle trips.
- c. When required. A Traffic Impact Analysis may be required to be submitted to the City with a land use application, when the following conditions apply:

- 1) The development application involves one or more of the following actions:
- (A) A change in zoning or a plan amendment designation; or
- (B) Any proposed development or land use action that ODOT states may have operational or safety concerns along a State highway; and
- (C) The development shall cause one or more of the following effects, which can be determined by field counts, site observation, traffic impact analysis or study, field measurements, crash history, Institute of Transportation Engineers Trip Generation manual; and information and studies provided by the local reviewing jurisdiction and/or ODOT:
- (1) An increase in site traffic volume generation by 250 average daily trips (ADT) or more (or as required by the City Engineer); or
- (2) An increase in use of adjacent streets by vehicles exceeding the 20,000-pound gross vehicle weights by 10 vehicles or more per day; or
- (3) The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles queue or hesitate on the State highway, creating a safety hazard; or
- (4) The location of the access driveway does not meet the access spacing standard of the roadway on which the driveway is located; or
- (5) A change in internal traffic patterns that may cause safety problems, such as backup onto the highway or traffic crashes in the approach area.
 - d. Traffic impact analysis requirements.
- 1) Preparation. A Traffic Impact Analysis shall be prepared by a professional engineer qualified under OAR 734-051-0040. The City shall commission the traffic analysis and it will be paid for by the applicant.
- 2) Transportation Planning Rule compliance. See CDC 105.050(D), Transportation Planning Rule Compliance.
- 3) Pre-application conference. The applicant will meet with West Linn Public Works prior to submitting an application that requires a traffic impact application. This meeting will determine the required elements of the TIA and the level of analysis expected.
 - e. Approval criteria.
- 1) Criteria. When a Traffic Impact Analysis is required, approval of the development proposal requires satisfaction of the following criteria:
- (A) The Traffic Impact Analysis was prepared by a professional traffic engineer qualified under OAR 734-051-0040; and
- (B) If the proposed development shall cause one or more of the effects in subsection (B)(2) of this section, or other traffic hazard or negative impact to a transportation facility, the Traffic Impact Analysis includes mitigation measures that meet the City's level of service and are satisfactory to the City Engineer, and ODOT when applicable; and
- (C) The proposed site design and traffic and circulation design and facilities, for all transportation modes, including any mitigation measures, are designed to:
 - (1) Have the least negative impact on all applicable transportation facilities; and
- (2) Accommodate and encourage non-motor vehicular modes of transportation to the extent practicable; and
 - (3) Make the most efficient use of land and public facilities as practicable; and
- (4) Provide the most direct, safe and convenient routes practicable between on-site destinations, and between on-site and off-site destinations; and
- (5) Otherwise comply with applicable requirements of the City of West Linn Community Development Code.

- f. Conditions of approval. The City may deny, approve, or approve the proposal with appropriate conditions.
- 1) Dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or accessways shall be required where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed use.
- 2) Improvements such as paving, curbing, installation or contribution to traffic signals, or construction of sidewalks, bikeways, accessways, paths, or streets that serve the proposed use where the existing transportation system may be burdened by the proposed use may be required.

C. Grading.

- 1. If areas are to be graded, a plan showing the location of cuts, fill, and retaining walls, and information on the character of soils, shall be provided. The grading plan shall show proposed and existing contours at intervals per CDC 85.160(E)(2).
- 2. The grading plan shall demonstrate that the proposed grading to accommodate roadway standards and create appropriate building sites is the minimum amount necessary.
- 3. The grading plan must identify proposed building sites and include tables and maps identifying acreage, location and type of development constraints due to site characteristics such as slope, drainage and geologic hazards. For Type I, II, and III lands (refer to definitions in Chapter 02 CDC), the applicant must provide a geologic report, with text, figures and attachments as needed to meet the industry standard of practice, prepared by a certified engineering geologist and/or a geotechnical professional engineer, that includes:
- a. Site characteristics, geologic descriptions and a summary of the site investigation conducted;
 - b. Assessment of engineering geological conditions and factors;
- c. Review of the City of West Linn's Natural Hazard Mitigation Plan and applicability to the site; and
- d. Conclusions and recommendations focused on geologic constraints for the proposed land use or development activity, limitations and potential risks of development, recommendations for mitigation approaches and additional work needed at future development stages including further testing and monitoring.

D. Water.

- 1. A plan for domestic potable water supply lines and related water service facilities, such as reservoirs, etc., shall be prepared by a licensed engineer consistent with the adopted Comprehensive Water System Plan and most recently adopted updates and amendments.
- 2. Location and sizing of the water lines within the development and off-site extensions. Show on-site water line extensions in street stubouts to the edge of the site, or as needed to complete a loop in the system.
 - 3. Adequate looping system of water lines to enhance water quality.
- 4. For all non-single-family developments, calculate fire flow demand of the site and demonstrate to the Fire Chief. Demonstrate to the City Engineer how the system can meet the demand.

E. Sewer.

1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan and subsequent updates and amendments. Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is efficient. The sewer system must be in the correct zone.

- 2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depths. Show how each lot or parcel would be sewered.
- 3. Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.
- 4. Sanitary sewer line should be at a depth that can facilitate connection with down-system properties in an efficient manner.
- 5. The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.
- 6. The sanitary sewer line shall minimize disturbance of natural areas and, in those cases where that is unavoidable, disturbance shall be mitigated pursuant to the appropriate chapters (e.g., Chapter 32 CDC, Water Resource Area Protection).
- 7. Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.
- 8. The sanitary sewer system shall be built pursuant to Department of Environmental Quality (DEQ), City, and Tri-City Service District sewer standards. This report should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.
- F. Storm. A storm detention and treatment plan and narrative compliant with CDC 92.010(E) must be submitted for storm drainage and flood control including profiles of proposed drainageways with reference to the most recently adopted Storm Drainage Master Plan. (Ord. 1382, 1995; Ord. 1401, 1997; Ord. 1425, 1998; Ord. 1442, 1999; Ord. 1584, 2008; Ord. 1604 § 65, 2011; Ord. 1635 § 33, 2014; Ord. 1636 § 54, 2014; Ord. 1650 § 1 (Exh. A), 2016; Ord. 1662 § 15, 2017)

85.180 REDIVISION PLAN REQUIREMENT

A redivision plan shall be required for a partition or subdivision, where the property could be developed at a higher density, under existing/proposed zoning, if all services were available and adequate to serve the use.

- A. The redivision plan is a sketch plan. A land survey and an engineering drawing are not required except where there are unique soil, topographic, or geologic conditions. Under the provisions of CDC 99.035, administrative procedures, the Planning Director may require additional information.
- B. The applicant shall submit a topographic map based on available information and a subdivision layout in accordance with standards set forth in this chapter and the zoning district in which the property is located.
- C. A building permit issued shall be for a specified future lot or parcel and the building shall meet the setback provisions of the zoning district in which the property is located.
- D. The redivision plan is considered a guide. Its purpose is to assure the efficient use of land and orderly growth. At such time as the property owner applies to redivide the land, a different proposal may be submitted for approval provided it meets all of the requirements. The redivision plan is not binding on the applicant or the City at the time a formal application is submitted under this chapter.
- E. The Planning Director shall approve the redivision plan in the manner set forth in CDC 99.060(A)(2), except that no notice shall be given. The applicant may appeal the Planning Director's decision as provided by CDC 99.240(A).

- F. The Planning Director's decision shall be based on the following findings:
- 1. The redivision plan complies with the applicable requirements of this chapter and zoning district in which the property is located.
- 2. There are adequate water and sewage systems available for the proposed use. (Ord. 1636 § 55, 2014)

85.190 ADDITIONAL INFORMATION REQUIRED AND WAIVER OF REQUIREMENTS

- A. The Planning Director may require additional information as part of the application subject to the provisions of CDC 99.035(A).
- B. The applicant may request a waiver of any requirements for the application subject to the provisions of CDC 99.035(B) and (C).

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by condition of approval.

A. Streets.

1. General. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the generalized or reasonable layout of streets on adjacent undeveloped lots or parcels, to topographical conditions, to public convenience and safety, to accommodate various types of transportation (automobile, bus, pedestrian, bicycle), and to the proposed use of land to be served by the streets. The functional class of a street aids in defining the primary function and associated design standards for the facility. The hierarchy of the facilities within the network in regard to the type of traffic served (through or local trips), balance of function (providing access and/or capacity), and the level of use (generally measured in vehicles per day) are generally dictated by the functional class. The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto.

To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-desacs. Deviation from this pattern of connected streets should only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent-plus), hazard areas, steep drainageways, wetlands, etc. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed. Streets should be oriented with consideration of the sun, as site conditions allow, so that over 50 percent of the front building lines of homes are oriented within 30 degrees of an east-west axis.

Internal streets are the responsibility of the developer. All streets bordering the development site are to be developed by the developer with, typically, half-street improvements or to City standards prescribed by the City Engineer. Additional travel lanes

may be required to be consistent with adjacent road widths or to be consistent with the adopted Transportation System Plan (TSP) and any adopted updated plans.

An applicant may submit a written request for a waiver of abutting street improvements if the TSP prohibits the street improvement for which the waiver is requested. Those areas with numerous (particularly contiguous) under-developed or undeveloped tracts will be required to install street improvements. When an applicant requests a waiver of street improvements and the waiver is granted, the applicant shall pay an in-lieu fee equal to the estimated cost, accepted by the City Engineer, of the otherwise required street improvements. As a basis for this determination, the City Engineer shall consider the cost of similar improvements in recent development projects and may require up to three estimates from the applicant. The amount of the fee shall be established prior to the Planning Commission's decision on the associated application. The in-lieu fee shall be used for in kind or related improvements.

Streets shall also be laid out to avoid and protect tree clusters and significant trees, but not to the extent that it would compromise connectivity requirements per this subsection (A)(1), or bring the density below 70 percent of the maximum density for the developable net area. The developable net area is calculated by taking the total site acreage and deducting Type I and II lands; then up to 20 percent of the remaining land may be excluded as necessary for the purpose of protecting significant tree clusters or stands as defined in CDC 55.100(B)(2).

- 2. Right-of-way widths shall depend upon which classification of street is proposed. The right-of-way widths are established in the adopted TSP.
- 3. Street widths. Street widths shall depend upon which classification of street is proposed. The classifications and required cross sections are established in the adopted TSP.

The following table identifies appropriate street width (curb to curb) in feet for various street classifications. The desirable width shall be required unless the applicant or his or her engineer can demonstrate that site conditions, topography, or site design require the reduced minimum width. For local streets, a 12-foot travel lane may only be used as a shared local street when the available right-of-way is too narrow to accommodate bike lanes and sidewalks.

City of West Linn Roadway Cross-Section Standards

Street Element	Characteristic	Width/Options
Vehicle Lane	Minor Arterial	11 – 12 feet
	Collector	10 – 12 feet
Widths (Typical widths)	Neighborhood Route	10 – 12 feet
	Local	10 – 12 feet
On-Street Parking	Minor Arterial	Limited (in designated commercial zones)
	Collector	Optional (8 feet typical width)
	Neighborhood Route	Optional (8 feet typical width)

City of West Linn Roadway Cross-Section Standards

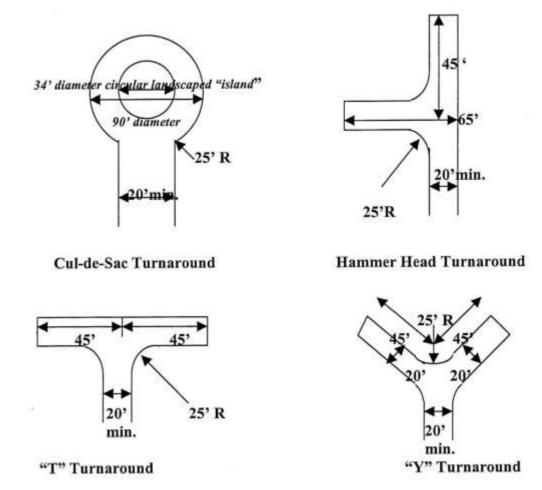
Street Element	Characteristic	Width/Options		
	Local	Optional (8 feet typical width)		
	Arterial	5 feet		
Bicycle Lanes	Collector	5 feet		
(Typical widths)	Neighborhood Route	5 feet		
Cycle Track	Minor Arterial (30 MPH or greater)	7 feet		
	Collector (30 MPH or greater)	7 feet		
	Minor Arterial	6 feet, 10 - 12 feet in commercial zones		
Sidewalks (Typical widths)	Collector	6 feet, 8 feet in commercial zones		
	Along Cycle Track	6 feet, 10 – 12 feet in commercial zones		
	Neighborhood Route/Local	6 feet (4 – 5 feet in Willamette Historical District), 8 feet in commercial zones		
Landscape Strips	Can be included on all streets	6 feet typical (5 feet for minor arterials)		
	5-Lane	Optional		
Raised Medians	3-Lane	Optional		
	2-Lane	Consider if appropriate		
	Arterials	None		
Neighborhood Traffic Management	Collectors	None		
	Neighborhood Route/Local	At the discretion of the City Engineer		
	Minor Arterial/Collector	Appropriate		
Transit	Neighborhood Route	Only in special circumstances		
	Local	Not recommended		

4. The decision-making body shall consider the City Engineer's recommendations on the desired right-of-way width, pavement width and street geometry of the various street

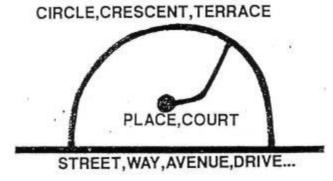
types within the subdivision after consideration by the City Engineer of the following criteria:

- a. The type of road as set forth in the Transportation Master Plan.
- b. The anticipated traffic generation.
- c. On-street parking requirements.
- d. Sidewalk and bikeway requirements.
- e. Requirements for placement of utilities.
- f. Street lighting.
- g. Drainage and slope impacts.
- h. Street trees.
- i. Planting and landscape areas.
- j. Existing and future driveway grades.
- k. Street geometry.
- I. Street furniture needs, hydrants.
- 5. Additionally, when determining appropriate street width, the decision-making body shall consider the following criteria:
- a. When a local street is the only street serving a residential area and is expected to carry more than the normal local street traffic load, the designs with two travel and one parking lane are appropriate.
- b. Streets intended to serve as signed but unstriped bike routes should have the travel lane widened by two feet.
- c. Collectors should have two travel lanes and may accommodate some parking. Bike routes are appropriate.
- d. Arterials should have two travel lanes. On-street parking is not allowed unless part of a Street Master Plan. Bike lanes are required as directed by the Parks Master Plan and Transportation Master Plan.
- 6. Reserve strips. Reserve strips or street plugs controlling the access to streets are not permitted unless owned by the City.
- 7. Alignment. All streets other than local streets or cul-de-sacs, as far as practical, shall be in alignment with existing streets by continuations of the centerlines thereof. The staggering of street alignments resulting in "T" intersections shall, wherever practical, leave a minimum distance of 200 feet between the centerlines of streets having approximately the same direction and otherwise shall not be less than 100 feet.
- 8. Future extension of streets. Where necessary to give access to or permit a satisfactory future subdivision of adjoining land, streets shall be extended to the boundary of the subdivision and the resulting dead-end streets may be approved without turnarounds. (Temporary turnarounds built to Fire Department standards are required when the dead-end street is over 100 feet long.)
- 9. Intersection angles. Streets shall be laid out to intersect angles as near to right angles as practical, except where topography requires lesser angles, but in no case less than 60 degrees unless a special intersection design is approved. Intersections which are not at right angles shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles. Right-of-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet. Other street intersections shall have curb radii of not less than 25 feet. All radii shall maintain a uniform width between the roadway and the right-of-way lines. The intersection of more than two streets at any one point will not be allowed unless no alternative design exists.

- 10. Additional right-of-way for existing streets. Wherever existing street rights-of-way adjacent to or within a tract are of inadequate widths based upon the standards of this chapter, additional right-of-way shall be provided at the time of subdivision or partition.
 - 11. Cul-de-sacs.
- a. New cul-de-sacs and other closed-end streets (not including stub streets intended to be connected) on sites containing less than five acres, or sites accommodating uses other than residential or mixed use development, are not allowed unless the applicant demonstrates that there is no feasible alternative due to:
- 1) Physical constraints (e.g., existing development, the size or shape of the site, steep topography, or a fish bearing stream or wetland protected by Chapter 32 CDC), or
 - 2) Existing easements or leases.
- b. New cul-de-sacs and other closed-end streets, consistent with subsection (A)(11)(a) of this section, shall not exceed 200 feet in length or serve more than 25 dwelling units unless the design complies with all adopted Tualatin Valley Fire and Rescue (TVFR) access standards and adequately provides for anticipated traffic, consistent with the Transportation System Plan (TSP).
- c. New cul-de-sacs and other closed-end streets (not including stub streets intended to be connected) on sites containing five acres or more that are proposed to accommodate residential or mixed use development are prohibited unless barriers (e.g., existing development, steep topography, or a fish bearing stream or wetland protected by Chapter 32 CDC, or easements, leases or covenants established prior to May 1, 1995) prevent street extensions. In that case, the street shall not exceed 200 feet in length or serve more than 25 dwelling units, and its design shall comply with all adopted TVFR access standards and adequately provide for anticipated traffic, consistent with the TSP.
- d. Applicants for a proposed subdivision, partition or a multifamily, commercial or industrial development accessed by an existing cul-de-sac/closed-end street shall demonstrate that the proposal is consistent with all applicable traffic standards and TVFR access standards.
- e. All cul-de-sacs and other closed-end streets shall include direct pedestrian and bicycle accessways from the terminus of the street to an adjacent street or pedestrian and bicycle accessways unless the applicant demonstrates that such connections are precluded by physical constraints or that necessary easements cannot be obtained at a reasonable cost.
- f. All cul-de-sacs/closed-end streets shall terminate with a turnaround built to one of the following specifications (measurements are for the traveled way and do not include planter strips or sidewalks).



12. Street names. No street names shall be used which will duplicate or be confused with the names of existing streets within the City. Street names that involve difficult or unusual spellings are discouraged. Street names shall be subject to the approval of the Planning Commission or Planning Director, as applicable. Continuations of existing streets shall have the name of the existing street. Streets, drives, avenues, ways, boulevards, and lanes shall describe through streets. Place and court shall describe cul-de-sacs. Crescent, terrace, and circle shall describe loop or arcing roads.



13. Grades and curves. Grades and horizontal/vertical curves shall meet the West Linn Public Works Design Standards.

- 14. Access to local streets. Intersection of a local residential street with an arterial street may be prohibited by the decision-making authority if suitable alternatives exist for providing interconnection of proposed local residential streets with other local streets. Where a subdivision or partition abuts or contains an existing or proposed major arterial street, the decision-making authority may require marginal access streets, reverse-frontage lots with suitable depth, visual barriers, noise barriers, berms, no-access reservations along side and rear property lines, and/or other measures necessary for adequate protection of residential properties from incompatible land uses, and to ensure separation of through traffic and local traffic.
- 15. Alleys Alleys shall be provided in commercial and industrial districts unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the decision-making authority. While alley intersections and sharp changes in alignment should be avoided, the corners of necessary alley intersections shall have radii of not less than 10 feet. Alleys may be provided in residential subdivisions or multi-family projects. The decision to locate alleys shall consider the relationship and impact of the alley to adjacent land uses. In determining whether it is appropriate to require alleys in a subdivision or partition, the following factors and design criteria should be considered:
- a. The alley shall be self-contained within the subdivision. The alley shall not abut undeveloped lots or parcels which are not part of the project proposal. The alley will not stub out to abutting undeveloped parcels which are not part of the project proposal.
- b. The alley will be designed to allow unobstructed and easy surveillance by residents and police.
- c. The alley should be illuminated. Lighting shall meet the West Linn Public Works Design Standards.
 - d. The alley should be a semi-private space where strangers are tacitly discouraged.
- e. Speed bumps may be installed in sufficient number to provide a safer environment for children at play and to discourage through or speeding traffic.
 - f. Alleys should be a minimum of 14 feet wide, paved with no curbs.
- 16. Sidewalks. Sidewalks shall be installed per CDC 92.010(H), Sidewalks. The residential sidewalk width is six feet plus planter strip as specified below. Sidewalks in commercial zones shall be constructed per subsection (A)(3) of this section. See also subsection C of this section. Sidewalk width may be reduced with City Engineer approval to the minimum amount (e.g., four feet wide) necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or to match existing sidewalks or right-of-way limitations.
- 17. Planter strip. The planter strip is between the curb and sidewalk providing space for a grassed or landscaped area and street trees. The planter strip shall be at least 6 feet wide to accommodate a fully matured tree without the boughs interfering with pedestrians on the sidewalk or vehicles along the curbline. Planter strip width may be reduced or eliminated, with City Engineer approval, when it cannot be corrected by site plan, to the minimum amount necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or in response to right-of-way limitations.
 - 18. Streets and roads shall be dedicated without any reservations or restrictions.
- 19. All lots in a subdivision shall have access to a public street. Lots created by partition may have access to a public street via an access easement pursuant to the standards and limitations set forth for such accessways in Chapter 48 CDC.
- 20. Gated streets. Gated streets are prohibited in all residential areas on both public and private streets. A driveway to an individual home may be gated.

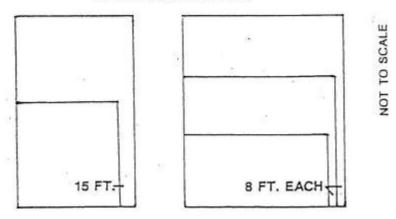
- 21. Entryway treatments and street isle design. When the applicant desires to construct certain walls, planters, and other architectural entryway treatments within a subdivision, the following standards shall apply:
- a. All entryway treatments except islands shall be located on private property and not in the public right-of-way.
- b. Planter islands may be allowed provided there is no structure (i.e., brick, signs, etc.) above the curbline, except for landscaping. Landscaped islands shall be set back a minimum of 24 feet from the curbline of the street to which they are perpendicular.
- c. All islands shall be in public ownership. The minimum aisle width between the curb and center island curbs shall be 14 feet. Additional width may be required as determined by the City Engineer.
- d. Brick or special material treatments are acceptable at intersections with the understanding that the City will not maintain these sections except with asphalt overlay, and that they must meet the Americans with Disabilities Act (ADA) standards. They shall be laid out to tie into existing sidewalks at intersections.
- e. Maintenance for any common areas and entryway treatments (including islands) shall be guaranteed through homeowners association agreements, CC&Rs, etc.
- f. Under Chapter 52 CDC, subdivision monument signs shall not exceed 32 square feet in area.
- 22. Based upon the determination of the City Manager or the Manager's designee, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 85.170(B)(2) that are required to mitigate impacts from the proposed subdivision. The proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed subdivision provides improvements in rough proportion to identified impacts of the subdivision. Off-site transportation improvements will include bicycle and pedestrian improvements as identified in the adopted City of West Linn TSP.
 - B. Blocks and lots.
- 1. General. The length, width, and shape of blocks shall be designed with due regard for the provision of adequate building sites for the use contemplated; consideration of the need for traffic safety, convenience, access, circulation, and control; and recognition of limitations and opportunities of topography and solar access.
- 2. Sizes. The recommended block size is 400 feet in length to encourage greater connectivity within the subdivision. Blocks shall not exceed 800 feet in length between street lines, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation. Designs of proposed intersections shall demonstrate adequate sight distances to the City Engineer's specifications. Block sizes and proposed accesses must be consistent with the adopted TSP. Subdivisions of five or more acres that involve construction of a new street shall have block lengths of no more than 530 feet. If block lengths are greater than 530 feet, accessways on public easements or right-of-way for pedestrians and cyclists shall be provided not more than 330 feet apart. Exceptions can be granted when prevented by barriers such as topography, rail lines, freeways, pre-existing development, leases, easements or covenants that existed prior to May 1, 1995, or by requirements of Titles 3 and 13 of the UGMFP. If streets must cross water features protected pursuant to Title 3 UGMFP, provide a crossing every 800 to 1,200 feet unless habitat quality or the length of the crossing prevents a full street connection.

3. Lot size and shape. Lot or parcel size, width, shape, and orientation shall be appropriate for the location of the subdivision or partition, for the type of use contemplated, for potential utilization of solar access, and for the protection of drainageways, trees, and other natural features. No lot or parcel shall be dimensioned to contain part of an existing or proposed street. All lots or parcels shall be buildable. "Buildable" describes lots that are free of constraints such as wetlands, drainageways, etc., that would make home construction impossible. Lot or parcel sizes shall not be less than the size required by the zoning code unless as allowed by planned unit development (PUD).

Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

- 4. Access. Access to subdivisions, partitions, and lots shall conform to the provisions of Chapter 48 CDC, Access, Egress and Circulation.
- 5. Double frontage lots and parcels. Double frontage lots and parcels have frontage on a street at the front and rear property lines. Double frontage lots and parcels shall be avoided except where they are essential to provide separation of residential development from arterial streets or adjacent non-residential activities, or to overcome specific disadvantages of topography and orientation. A planting screen or impact mitigation easement at least 10 feet wide, and across which there shall be no right of access, may be required along the line of building sites abutting such a traffic artery or other incompatible use.
- 6. Lot and parcel side lines. The lines of lots and parcels, as far as is practicable, should run at right angles to the street upon which they face, except that on curved streets they should be radial to the curve.
- 7. Flag lots. Flag lots can be created where it can be shown that no other reasonable street access is possible to achieve the requested land division. A single flag lot shall have a minimum street frontage of 15 feet for its accessway. Where two to four flag lots share a common accessway, the minimum street frontage and accessway shall be eight feet in width per lot. Common accessways shall have mutual maintenance agreements and reciprocal access and utility easements. The following dimensional requirements shall apply to flag lots:

FLAGLOT STEMS



- a. Setbacks applicable to the underlying zone shall apply to the flag lot.
- b. Front yard setbacks may be based on the rear property line of the lot or parcel which substantially separates the flag lot from the street from which the flag lot gains access. Alternately, the house and its front yard may be oriented in other directions so

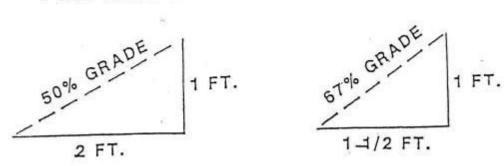
long as some measure of privacy is ensured, or it is part of a pattern of development, or it better fits the topography of the site.

- c. The lot size shall be calculated exclusive of the accessway; the access strip may not be counted towards the area requirements.
- d. The lot depth requirement contained elsewhere in this code shall be measured from the rear property line of the lot or parcel which substantially separates the flag lot from the street from which the flag lot gains access.
 - e. As per CDC 48.030, the accessway shall have a minimum paved width of 12 feet.
- f. If the use of a flag lot stem to access a lot is infeasible because of a lack of adequate existing road frontage, or location of existing structures, the proposed lot(s) may be accessed from the public street by an access easement of a minimum 15-foot width across intervening property.
- 8. Large lots or parcels. In dividing tracts into large lots or parcels which, at some future time, are likely to be redivided, the approval authority may:
- a. Require that the blocks be of such size and shape, and be so divided into building sites, and contain such easements and site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size; or
- b. Alternately, in order to prevent further subdivision or partition of oversized and constrained lots or parcels, restrictions may be imposed on the subdivision or partition plat.
 - C. Pedestrian and bicycle trails.
- 1. Trails or multi-use pathways shall be installed, consistent and compatible with federal ADA requirements and with the Oregon Transportation Planning Rule, between subdivisions, cul-de-sacs, and streets that would otherwise not be connected by streets due to excessive grades, significant tree(s), and other constraints natural or manmade. Trails shall also accommodate bicycle or pedestrian traffic between neighborhoods and activity areas such as schools, libraries, parks, or commercial districts. Trails shall also be required where designated by the Parks Master Plan.
- 2. The all-weather surface (asphalt, etc.) trail should be eight feet wide at minimum for bicycle use and six feet wide at minimum for pedestrian use. Trails within 10 feet of a wetland or natural drainageway shall not have an all-weather surface, but shall have a soft surface as approved by the Parks Director. These trails shall be contained within a corridor dedicated to the City that is wide enough to provide trail users with a sense of defensible space. Corridors that are too narrow, confined, or with vegetative cover may be threatening and discourage use. Consequently, the minimum corridor width shall be 20 feet. Sharp curves, twists, and blind corners on the trail are to be avoided as much as possible to enhance defensible space. Deviations from the corridor and trail width are permitted only where topographic and ownership constraints require it.
- 3. Defensible space shall also be enhanced by the provision of a three- to four-foothigh matte black chain link fence or acceptable alternative along the edge of the corridor. The fence shall help delineate the public and private spaces.
- 4. The bicycle or pedestrian trails that traverse multi-family and commercial sites should follow the same defensible space standards but do not need to be defined by a fence unless required by the decision-making authority.
- 5. Except for trails within 10 feet of a wetland or natural drainageway, soft surface or gravel trails may only be used in place of a paved, all-weather surface where it can be shown to the Planning Director that the principal users of the path will be recreational, non-destination-oriented foot traffic, and that alternate paved routes are nearby and accessible.

- 6. The trail grade shall not exceed 12 percent except in areas of unavoidable topography, where the trail may be up to a 15 percent grade for short sections no longer than 50 feet. In any location where topography requires steeper trail grades than permitted by this section, the trail shall incorporate a short stair section to traverse the area of steep grades.
 - D. Transit facilities.
- 1. The applicant shall consult with Tri-Met and the City Engineer to determine the appropriate location of transit stops, bus pullouts, future bus routes, etc., contiguous to or within the development site. If transit service is planned to be provided within the next two years, then facilities such as pullouts shall be constructed per Tri-Met standards at the time of development. More elaborate facilities, like shelters, need only be built when service is existing or imminent. Additional rights-of-way may be required of developers to accommodate buses.
- 2. The applicant shall make all transit-related improvements in the right-of-way or in easements abutting the development site as deemed appropriate by the City Engineer.
- 3. Transit stops shall be served by striped and signed pedestrian crossings of the street within 150 feet of the transit stop where feasible. Illumination of the transit stop and crossing is required to enhance defensible space and safety. ODOT approval may be required.
- 4. Transit stops should include a shelter structure bench plus eight feet of sidewalk to accommodate transit users, non-transit-related pedestrian use, and wheelchair users. Tri-Met must approve the final configuration.
- E. Grading. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:
- 1. All cuts and fills shall comply with the excavation and grading provisions of the Uniform Building Code and the following:
- a. Cut slopes shall not exceed one and one-half feet horizontally to one foot vertically (i.e., 67 percent grade).
- b. Fill slopes shall not exceed two feet horizontally to one foot vertically (i.e., 50 percent grade). Please see the following illustration.

FILL SLOPE

CUT SLOPE



- 2. The character of soil for fill and the characteristics of lot and parcels made usable by fill shall be suitable for the purpose intended.
- 3. If areas are to be graded (more than any four-foot cut or fill), compliance with CDC 85.170(C) is required.
- 4. The proposed grading shall be the minimum grading necessary to meet roadway standards, and to create appropriate building sites, considering maximum allowed driveway grades.

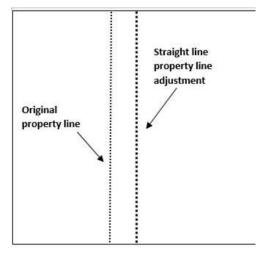
- 5. Type I lands shall require a report submitted by an engineering geologist, and Type I and Type II lands shall require a geologic hazard report.
- 6. Per the submittals required by CDC 85.170(C)(3), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.
- 7. On land with slopes in excess of 12 percent, cuts and fills shall be regulated as follows:
- a. Toes of cuts and fills shall be set back from the boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. Where an exception is required from that requirement, slope easements shall be provided.
- b. Cuts shall not remove the toe of any slope where a severe landslide or erosion hazard exists.
- c. Any structural fill shall be designed by a registered engineer in a manner consistent with the intent of this code and standard engineering practices, and certified by that engineer that the fill was constructed as designed.
- d. Retaining walls shall be constructed pursuant to Section 2308(b) of the Oregon State Structural Specialty Code.
- e. Roads shall be the minimum width necessary to provide safe vehicle access, minimize cut and fill, and provide positive drainage control.
- 8. Land over 50 percent slope shall be developed only where density transfer is not feasible. The development will provide that:
 - a. At least 70 percent of the site will remain free of structures or impervious surfaces.
 - b. Emergency access can be provided.
 - c. Design and construction of the project will not cause erosion or land slippage.
- d. Grading, stripping of vegetation, and changes in terrain are the minimum necessary to construct the development in accordance with subsection J of this section.
 - F. Water.
- 1. A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Plan, plan update, March 1987, and subsequent superseding revisions or updates.
 - 2. Adequate location and sizing of the water lines.
 - 3. Adequate looping system of water lines to enhance water quality.
- 4. For all non-single-family developments, there shall be a demonstration of adequate fire flow to serve the site.
- 5. A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.
 - G. Sewer.
- 1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the current Sanitary Sewer Master Plan and subsequent updates and amendments applicable at the time the proposal is submitted. Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and should allow for full gravity service.

- 2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.
- 3. Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.
- 4. Sanitary sewer line should be at a depth that can facilitate connection with down-system properties in an efficient manner.
- 5. The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.
- 6. The sanitary sewer line shall avoid disturbance of wetland and drainageways. In those cases where that is unavoidable, disturbance shall be mitigated pursuant to Chapter 32 CDC, Water Resource Area Protection, all trees replaced, and proper permits obtained. Dual sewer lines may be required so the drainageway is not disturbed.
- 7. Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.
- 8. The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.
- 9. A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.
- H. Storm detention and treatment. All proposed storm detention and treatment facilities comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and there is sufficient factual data to support the conclusions of the submitted plan.
- I. Utility easements. Subdivisions and partitions shall establish utility easements to accommodate the required service providers as determined by the City Engineer. The developer of the subdivision shall make accommodation for cable television wire in all utility trenches and easements so that cable can fully serve the subdivision.
 - J. Supplemental provisions.
- 1. Wetland and natural drainageways. Wetlands and natural drainageways shall be protected as required by Chapter 32 CDC, Water Resource Area Protection. Utilities may be routed through the protected corridor as a last resort, but impact mitigation is required.
- 2. Willamette and Tualatin Greenways. The Willamette and Tualatin River Greenways shall be protected as required by Chapter 28 CDC, Willamette and Tualatin River Protection.
- 3. Street trees. Street trees are required as identified in the appropriate section of the municipal code and Chapter 54 CDC.
- 4. Lighting. All subdivision street or alley lights shall meet West Linn Public Works Design Standards.
- 5. Dedications and exactions. The City may require an applicant to dedicate land and/or construct a public improvement that provides a benefit to property or persons outside the property that is the subject of the application when the exaction is roughly proportional. No exaction shall be imposed unless supported by a determination that the exaction is roughly proportional to the impact of development.

- 6. Underground utilities. All utilities, such as electrical, telephone, and television cable, that may at times be above ground or overhead shall be buried underground in the case of new development. The exception would be in those cases where the area is substantially built out and adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, would also be exempted. Where adjacent future development is expected or imminent, conduits may be required at the direction of the City Engineer. All services shall be underground with the exception of standard above-grade equipment such as some meters, etc.
- 7. Density requirement. Density shall occur at 70 percent or more of the maximum density allowed by the underlying zoning. These provisions would not apply when density is transferred from Type I and II lands as defined in CDC 02.030. Development of Type I or II lands are exempt from these provisions. Land divisions of three lots or less would also be exempt.
- 8. Mix requirement. The "mix" rule means that developers shall have no more than 15 percent of the R-2.1 and R-3 development as single-family residential. The intent is that the majority of the site shall be developed as medium high density multi-family housing.
- 9. Heritage trees/significant tree and tree cluster protection. All heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. All non-heritage trees and clusters of trees (three or more trees with overlapping dripline; however, native oaks need not have an overlapping dripline) that are considered significant by virtue of their size, type, location, health, or numbers shall be saved pursuant to CDC 55.100(B)(2). Trees are defined per the municipal code as having a trunk six inches in diameter or 19 inches in circumference at a point five feet above the mean ground level at the base of the trunk.

85.210 PROPERTY LINE ADJUSTMENTS – APPROVAL STANDARDS

- A. The Director shall approve or deny a request for a property line adjustment based on the criteria stated below:
 - 1. An additional lot or parcel shall not be created by the property line adjustment.
- 2. The existing property shall not be reduced in size by the adjustments below the minimum lot or parcel size established by the approved zoning for that district. The property line adjustment shall not enlarge, increase or extend the non-conformity of a non-conforming lot or non-conforming structure.
 - 3. Property line adjustments shall be either:
 - a. A straight line (see Figure 1 example);
 - b. A line with maximum of two 45- to 90-degree turns (see Figure 2 example); or
 - c. A maximum of three turns less than 45 degrees (see Figure 3 example). (The following figures are only intended as examples.)



Property line adjustment with two turns of 45-90 degrees

Original property line

Figure 1.

Original property line Property line adjustment with three turns up to 44 degrees

Figure 2.

Figure 3.

- 4. The property line adjustment shall not create a lot or parcel that violates applicable site development regulations.
- 5. The property line adjustment will not adversely affect existing easements or existing utilities unless an easement vacation is obtained, replacement easements are established, or any required utility relocations are paid for by the applicant.
- 6. Proposed property line adjustments that cannot meet these standards are subject to review under CDC 99.060(B)(2)(e).
 - 7. Any appeal must be filed in accordance with CDC 99.240.
 - B. The provisions of CDC 85.070 shall also apply to property line adjustments.

Chapter 92 Required Improvements

92.010 PUBLIC IMPROVEMENTS FOR ALL DEVELOPMENT

The following improvements shall be installed at the expense of the developer and meet all City codes and standards:

- A. Streets within subdivisions.
- 1. All streets within a subdivision, including alleys, shall be graded for the full right-of-way width and improved to the City's permanent improvement standards and specifications which include sidewalks and bicycle lanes, unless the decision-making authority makes the following findings:
- a. The right-of-way cannot be reasonably improved in a manner consistent with City road standards or City standards for the protection of wetlands and natural drainage ways.
- b. The right-of-way does not provide a link in a continuous pattern of connected local streets, or, if it does provide such a link, that an alternative street link already exists or

the applicant has proposed an alternative street which provides the necessary connectivity, or the applicant has proven that there is no feasible location on the property for an alternative street providing the link.

- 2. When the decision-making authority makes these findings, the decision-making authority may impose any of the following conditions of approval:
- a. A condition that the applicant initiate vacation proceedings for all or part of the right-of-way.
 - b. A condition that the applicant build a trail, bicycle path, or other appropriate way.

If the applicant initiates vacation proceedings pursuant to subsection (A)(2)(a) of this section, and the right-of-way cannot be vacated because of opposition from adjacent property owners, the City Council shall consider and decide whether to process a City-initiated street vacation pursuant to Chapter 271 ORS.

Construction staging area shall be established and approved by the City Engineer. Clearing, grubbing, and grading for a development shall be confined to areas that have been granted approval in the land use approval process only. Clearing, grubbing, and grading outside of land use approved areas can only be approved through a land use approval modification and/or an approved Building Department grading permit for survey purposes. Catch basins shall be installed and connected to pipe lines leading to storm sewers or drainage ways.

Criteria do not apply. No new streets are proposed as part of this Class 1 Design Review application.

B. Extension of streets to subdivisions. The extension of subdivision streets to the intercepting paving line of existing streets with which subdivision streets intersect shall be graded for the full right-of-way width and improved to a minimum street structural section and width of 24 feet.

Criterion does not apply. Project is not a subdivision and does not include street extensions.

C. Local and minor collector streets within the rights-of-way abutting a subdivision shall be graded for the full right-of-way width and approved to the City's permanent improvement standards and specifications. The City Engineer shall review the need for street improvements and shall specify whether full street or partial street improvements shall be required. The City Engineer shall also specify the extent of storm drainage improvements required. The City Engineer shall be guided by the purpose of the City's systems development charge program in determining the extent of improvements which are the responsibility of the subdivider.

Criterion does not apply. No subdivision is proposed with this application.

D. Monuments. Upon completion of the first pavement lift of all street improvements, monuments shall be installed and/or reestablished at every street intersection and all points of curvature and points of tangency of street centerlines with an iron survey control rod. Elevation benchmarks shall be established at each street intersection monument with a cap (in a monument box) with elevations to a U.S. Geological Survey datum that exceeds a distance of 800 feet from an existing benchmark.

Criterion does not apply. Proposal does not include any street improvements, partition or subdivision.

- E. Storm detention and treatment. For Type I, II and III lands (refer to definitions in Chapter 02 CDC), a registered civil engineer must prepare a storm detention and treatment plan, at a scale sufficient to evaluate all aspects of the proposal, and a statement that demonstrates:
- 1. The location and extent to which grading will take place indicating general contour lines, slope ratios, slope stabilization proposals, and location and height of retaining walls, if proposed.
- 2. All proposed storm detention and treatment facilities comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards.
- 3. There will be no adverse off-site impacts, including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream.
 - 4. There is sufficient factual data to support the conclusions of the plan.
- 5. Per CDC 99.035, the Planning Director may require the information in subsections (E)(1), (2), (3) and (4) of this section for Type IV lands if the information is needed to properly evaluate the proposed site plan.

Criterion does not apply. Site is classified as a Type IV land. New or redeveloped impervious area is less than 5,000 s.f., so no detention is required. Stormwater improvements designed by registered civil engineer are limited to redirection of surface water and providing water quality control.

- F. Sanitary sewers. Sanitary sewers shall be installed to City standards to serve the subdivision and to connect the subdivision to existing mains.
- 1. If the area outside the subdivision to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the Planning Commission may recommend to the City Council construction as an assessment project with such arrangement with the subdivider as is desirable to assure financing his or her share of the construction.
- 2. If the installation is not made as an assessment project, the City may reimburse the subdivider an amount estimated to be a proportionate share of the cost for each connection made to the sewer by property owners outside of the subdivision for a period of 10 years from the time of installation of the sewers. The actual amount shall be determined by the City Administrator considering current construction costs.

Criterion does not apply. No subdivision is proposed and existing sanitary sewer system serving the Site is sufficient.

G. Water system. Water lines with valves and fire hydrants providing service to each building site in the subdivision and connecting the subdivision to City mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the subdivision and to adequately grid the City system. Hydrant spacing is to be based on accessible area served according to the City Engineer's recommendations and City standards. If required water mains will directly serve property

outside the subdivision, the City may reimburse the developer an amount estimated to be the proportionate share of the cost for each connection made to the water mains by property owners outside the subdivision for a period of 10 years from the time of installation of the mains. If oversizing of water mains is required to areas outside the subdivision as a general improvement, but to which no new connections can be identified, the City may reimburse the developer that proportionate share of the cost for oversizing. The actual amount and reimbursement method shall be as determined by the City Administrator considering current or actual construction costs.

Criterion does not apply. Site is served by existing water service with no modifications necessary.

H. Sidewalks.

1. Sidewalks shall be installed on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of primary or secondary arterials, or special type industrial districts, or special site conditions, the Planning Commission may approve a subdivision without sidewalks if alternate pedestrian routes are available.

In the case of the double-frontage lots, provision of sidewalks along the frontage not used for access shall be the responsibility of the developer. Providing front and side yard sidewalks shall be the responsibility of the land owner at the time a request for a building permit is received. Additionally, deed restrictions and CC&Rs shall reflect that sidewalks are to be installed prior to occupancy and it is the responsibility of the lot or homeowner to provide the sidewalk, except as required above for double-frontage lots.

- 2. On local streets serving only single-family dwellings, sidewalks may be constructed during home construction, but a letter of credit shall be required from the developer to ensure construction of all missing sidewalk segments within four years of final plat approval pursuant to CDC 91.010(A)(2).
- 3. The sidewalks shall measure at least six feet in width and be separated from the curb by a six-foot minimum width planter strip. Reductions in widths to preserve trees or other topographic features, inadequate right-of-way, or constraints, may be permitted if approved by the City Engineer in consultation with the Planning Director.
- 4. Sidewalks should be buffered from the roadway on high volume arterials or collectors by landscape strip or berm of three and one-half-foot minimum width.
- 5. The City Engineer may allow the installation of sidewalks on one side of any street only if the City Engineer finds that the presence of any of the factors listed below justifies such waiver:
 - a. The street has, or is projected to have, very low volume traffic density;
 - b. The street is a dead-end street;
 - c. The housing along the street is very low density; or
- d. The street contains exceptional topographic conditions such as steep slopes, unstable soils, or other similar conditions making the location of a sidewalk undesirable.

Criterion does not apply. It was determined at the pre-application meeting that sidewalks were not required on this site for the redevelopment proposed.

I. Bicycle routes. If appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of separate bicycle lanes within streets and separate bicycle paths.

It was determined that no right of way improvements were warranted with the proposed Work. Criterion does not apply.

J. Street name signs. All street name signs and traffic control devices for the initial signing of the new development shall be installed by the City with sign and installation costs paid by the developer.

No subdivision is proposed. Criterion is not applicable.

K. Dead-end street signs. Signs indicating "future roadway" shall be installed at the end of all discontinued streets. Signs shall be installed by the City per City standards, with sign and installation costs paid by the developer.

No new streets are proposed as part of this application. Criterion is not applicable.

L. Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.). Sign and installation costs shall be paid by the developer.

The property is owned by City of West Linn. Criterion does not apply.

M. Street lights. Street lights shall be installed and shall be served from an underground source of supply. The street lighting shall meet IES lighting standards. The street lights shall be the shoe-box style light (flat lens) with a 30-foot bronze pole in residential (non-intersection) areas. The street light shall be the cobra head style (drop lens) with an approximate 50-foot (sized for intersection width) bronze pole. The developer shall submit to the City Engineer for approval of any alternate residential, commercial, and industrial lighting, and alternate lighting fixture design. The developer and/or homeowners association is required to pay for all expenses related to street light energy and maintenance costs until annexed into the City.

No new street lights are proposed for this application that is within an existing facility within an existing neighborhood. Criterion is not applicable.

N. 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.

Existing utilities are adequate to serve the site. Criterion is not applicable.

O. Curb cuts and driveways. Curb cuts and driveway installations are not required of the subdivider at the time of street construction, but, if installed, shall be according to City standards. Proper curb cuts and hard-surfaced driveways shall be required at the time buildings are constructed.

No new curb cuts or driveways are proposed. Existing is sufficient and proposed to be retained.

P. Street trees. Street trees shall be provided by the City Parks and Recreation Department in accordance with standards as adopted by the City in the Municipal Code. The fee charged the subdivider for providing and maintaining these trees shall be set by resolution of the City Council.

No new street trees are proposed since this is not a subdivision proposal. Criterion does not apply.

Q. Joint mailbox facilities shall be provided in all residential subdivisions, with each joint mailbox serving at least two, but no more than eight, dwelling units. Joint mailbox structures shall be placed in the street right-of-way adjacent to roadway curbs. Proposed locations of joint mailboxes shall be designated on a copy of the tentative plan of the subdivision, and shall be approved as part of the tentative plan approval. In addition, sketch plans for the joint mailbox structures to be used shall be submitted and approved by the City Engineer prior to final plat approval.

No subdivision is proposed. Criterion is not applicable.

92.020 IMPROVEMENTS IN PARTITIONS

The same improvements shall be installed to serve each parcel of a partition as are required of a subdivision. However, if the approval authority finds that the nature of development in the vicinity of the partition makes installation of some improvements unreasonable, at the written request of the applicant those improvements may be waived. If the street improvement requirements are waived, the applicant shall pay an in-lieu fee for off-site street improvements, pursuant to the provisions of CDC 85.200(A)(1).

In lieu of accepting an improvement, the Planning Director may recommend to the City Council that the improvement be installed in the area under special assessment financing or other facility extension policies of the City.

No partition is proposed as part of this application. Criterion is not applicable.

92.030 IMPROVEMENT PROCEDURES

In addition to other requirements, improvements installed by the developer, either as a requirement of these regulations or at the developer's own option, shall conform to the requirements of this title and permanent improvement standards and specifications adopted by the City and shall be installed in accordance with the following procedure:

A. Improvement work shall not be commenced until plans have been checked for adequacy and approved by the City. To the extent necessary for evaluation of the proposal, the improvement plans may be required before approval of the tentative plan of a subdivision or partition. Plans shall be prepared in accordance with the requirements of the City.

No improvements will be done on the site until plans have been reviewed and approved by the City.

B. Improvement work shall not be commenced until the City has been notified in advance, and if work has been discontinued for any reason, it shall not be resumed until the City has been notified.

The contractor will notify the City in advance prior to commencement of Work associated with this Project.

C. Improvements shall be constructed under the Engineer. The City may require changes in typical sections and details in the public interest if unusual conditions arise during construction to warrant the change.

The Engineer of Record will coordinate any changes in Work necessary with the City Engineer to ensure conformity with City Standards.

D. All underground utilities, sanitary sewers, and storm drains installed in streets by the subdivider or by any utility company shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length obviating the necessity for disturbing the street improvements when service connections are made.

No new underground utility within the right of way or street surfacing is proposed with this application. Criteria do not apply.

E. A digital and mylar map showing all public improvements as built shall be filed with the City Engineer upon completion of the improvements.

No public improvements are proposed with this application. Criterion is not applicable.

92.040 SPECIFICATIONS FOR IMPROVEMENTS

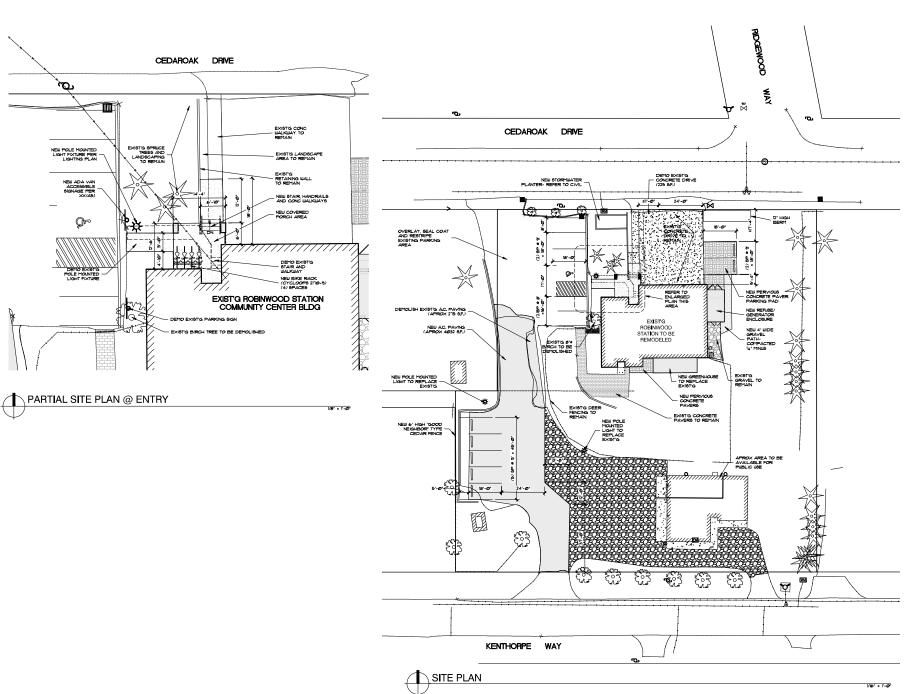
The City Engineer shall prepare and submit to the City Council specifications to supplement the standards of this title based on engineering standards appropriate for the improvements concerned. Specifications shall be prepared for the design and construction of required public improvements, such other public facilities as a developer may elect to install, and private streets.

Should any public improvements become necessary for this Project, they will conform to City Standards and Specifications.

92.050 CHANGES IN SUBDIVISION PHASE NUMBERS PROHIBITED

Subdivision phase numbers shall remain the same from tentative approval through final platting. The only permitted change would be the addition of an alphabetic suffix. For example, tentatively approved Columbia Heights III could be broken down at final platting into Columbia Heights III-A, III-B, III-C, etc. It could not be broken down numerically into Columbia Heights III, IV, and V.

No subdivision is proposed. Criterion is not applicable.





PRELIMINARY

CITY OF WEST LINN
ROBINWOOD STATION IMPROVEMENTS

CITY OF WEST LINN

ROBINWOOD STA

ROBINWOOD STA

BUSINES

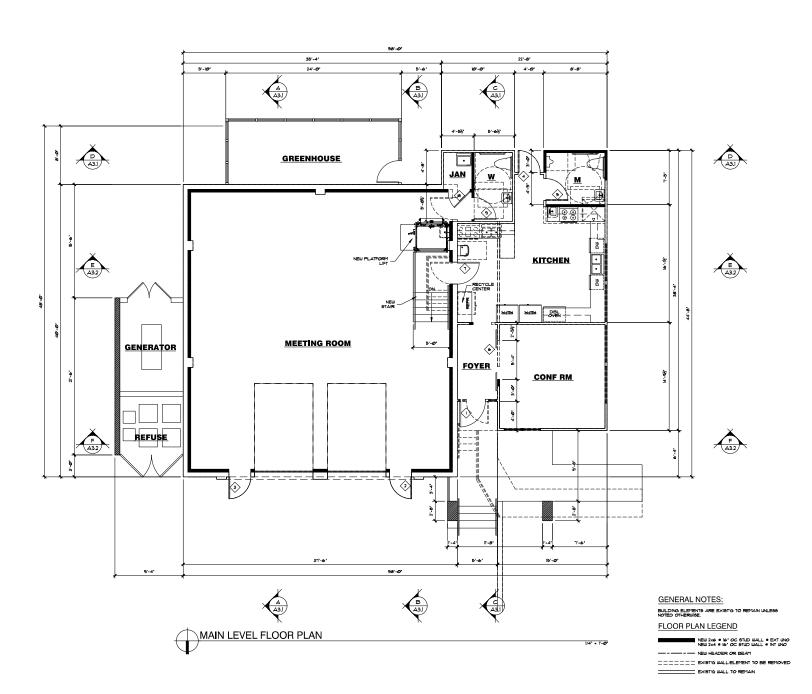
1883

STOB CEDAROAK DRIVE

WEST LINN, OR 970668

A1.1

SITE PLAN





1307 Seventh Street Oregon City, OR 97045 503-656-1942 www.iselinarchitects.com



CITY OF WEST LINN ROBINWOOD STATION IMPROVEMENTS

ROBINWOOD STATIO 3706 CEDAROAK DRIVE WEST LINN, OR 97068

PROJ. NO.: 1932 FILE: A-FP DATE: 4/22/2020

SHEET #

A1.3

MAIN LEVEL FLOOR PLAN





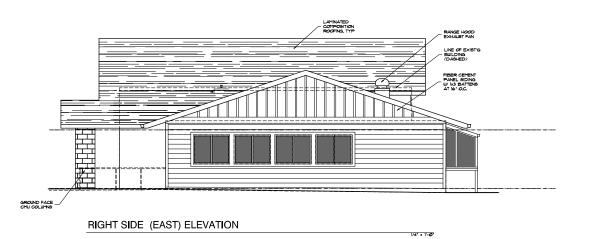
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PROJ. NO. : FILE : DATE : 1932 A-FP 4/22/2020

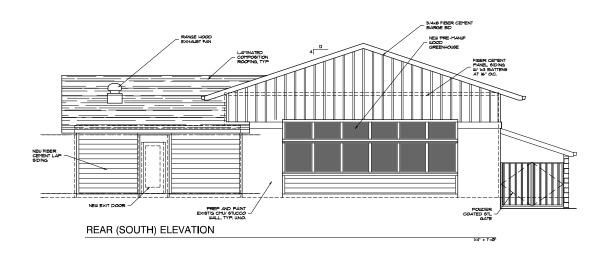
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S1.2

ROOF FRAMING PLAN



ELEVATIONS



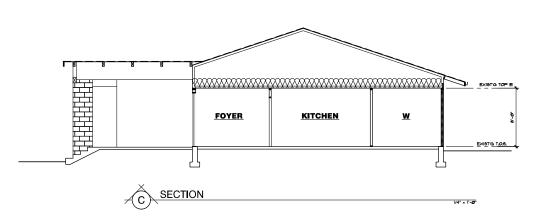


3706 CEDAROAK DRIVE WEST LINN, OR 97068 1932 A-ELEV 4/22/2020

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SHEET #

ELEVATIONS





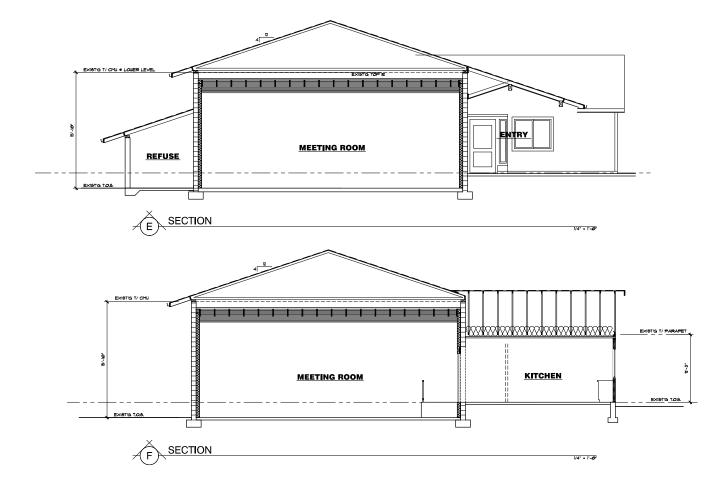


3706 CEDAROAK DRIVE WEST LINN, OR 97068

PROJ. NO.:	1932
FILE:	A-SECT
DATE:	4/22/2020

SHEET #

SECTIONS



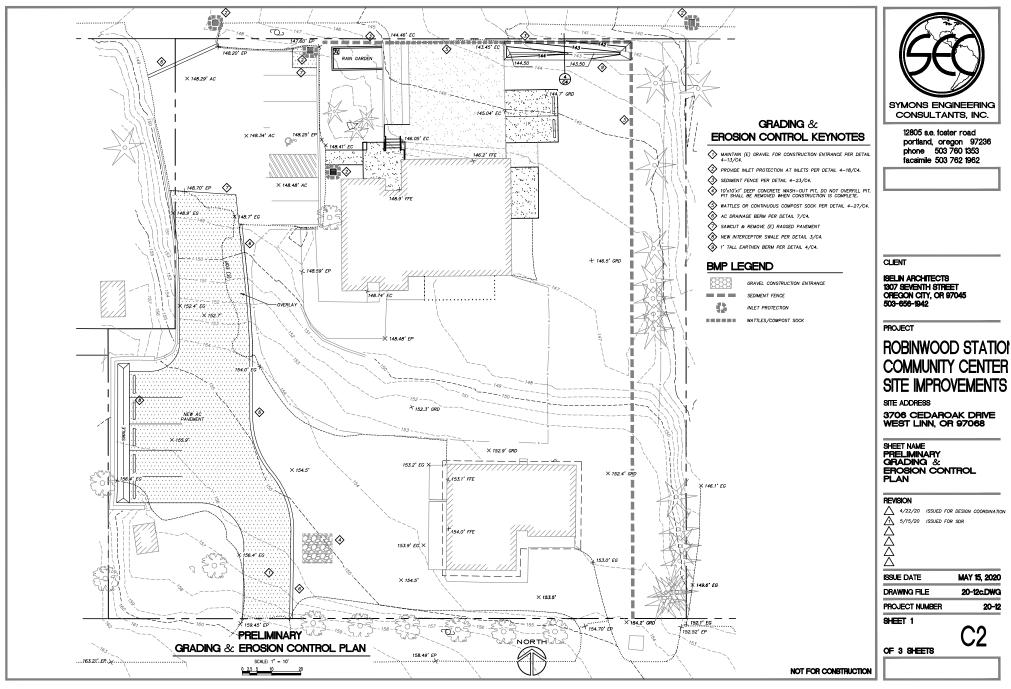


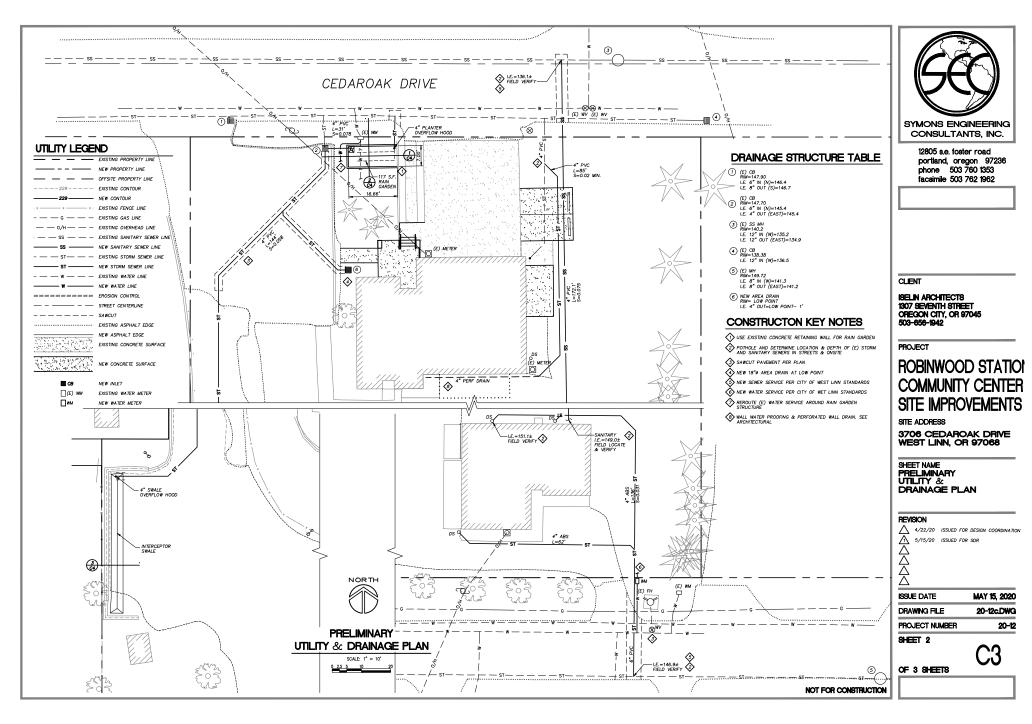


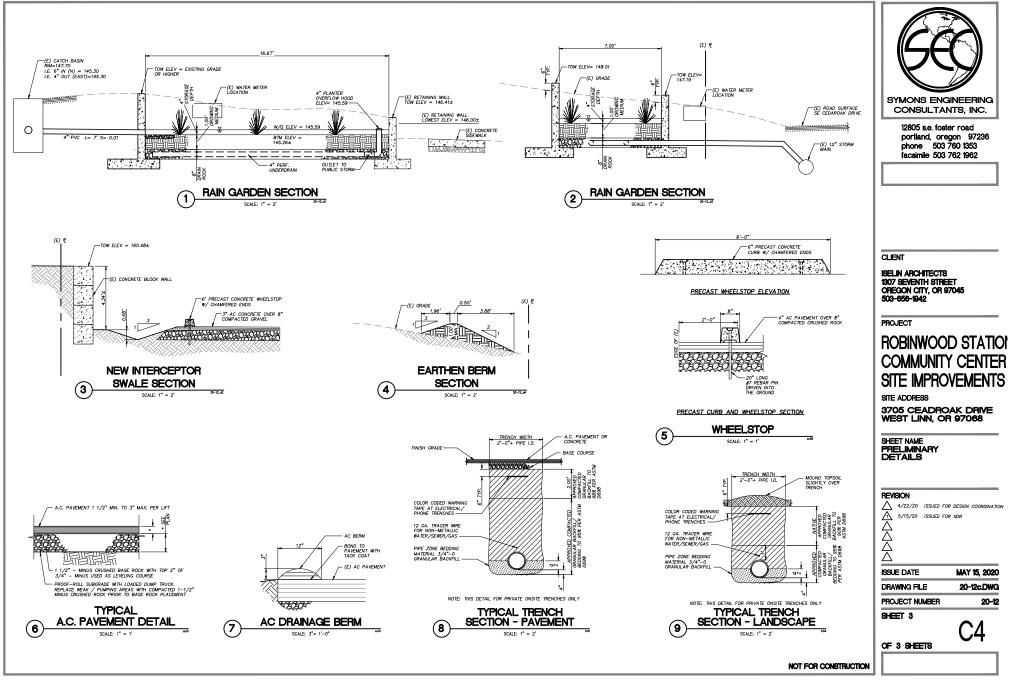
PROJ. NO. : FILE : DATE : 1932 A-SECT 4/22/2020

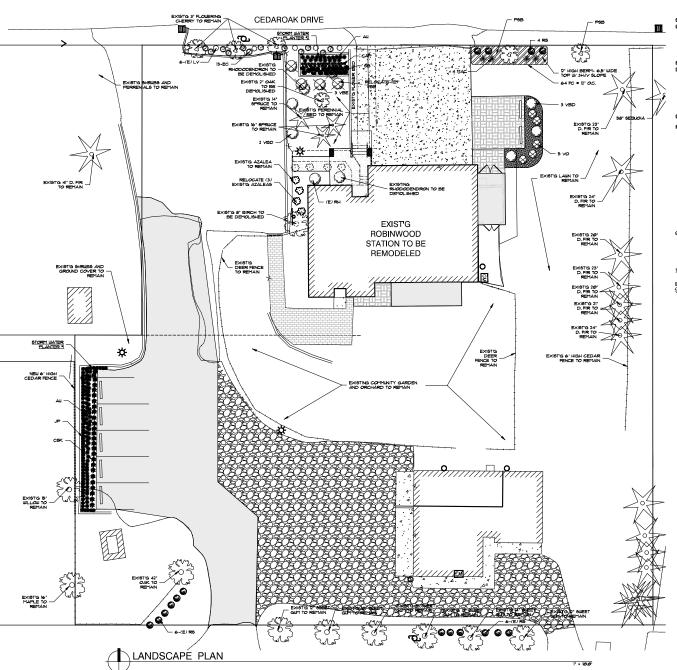
SHEET #

SECTIONS









SYMBOL	ABBR	COMMON NAME	BOTANICAL NAME	SIZE	QTY
•	JP	GROOVED RUSH	JUNCUS PATENS	1 GAL	68
	ΑU	KINNICKINNIK	ARCHTOSTOPHYLLOS UVA-URSI	1 GAL	36
*	CSK	RED TWIG DOGWOOD	CONUS SERICEA KELSEYII	1 GAL	26
		8 8F/ 100 = 1.2 × 50 = 59 PLANTS \$			
SYMBOL	ABBR.	COMMON NAME	BOTANICAL NAME	SIZE	atr
	CAP	COLUMBIA SEDGE	CAREX APERTA	1 GAL	20
	Αu	KINNICKINNIK	ARCHTOSTOPHYLLOS UVA-URSI	1 GAL	20
•	8 B	BIRCHLEAF SPIREA	SPRIREA BETULFOLIA	1 GAL	19
SHRUBS					
BYMBOL	ABBR.	COMMON NAME	BOTANICAL NAME	SIZE	QΤΥ
0	LY	LAVENDER	LAVENDULA		6 (E
0	EC	'SPRINGWOOD PINK' HEATH	ERICA CANALICULATA	1 GAL	12
0	VBD	'DAVIDII' VIBURNUM	VIBURNUM DAVIDII	2 GAL	ъ
Ø	∨BE	OREGON VIBURNUM	VIBURNUM ELIPTICUM	2 GAL	1 (E),
\otimes	VO	EVERGREEN HUCKLEBERRY	YACCINIUM OYATUM	2 GAL	5
©	AZ	EVERGREEN AZALEA	RHODODENDRON		4 Œ.
0	R6	RED FLOWERING CURRANT	RIBES SANGUINEUM	2 GAL	12 (E
*	MAC	COMPACT OREGON GRAPE	MAHONIA AQUIFOLIUM COMP.	2 GAL	5
GROUND CO	VER				
*****	ΑU	KINNIKINICK	ARCTOSTAPHLOS UVA-URSI	4'	48
	FC	COAST STRAUBERRY	FRAGARIA CHILOENSIS	4'	64
TREES					

(E) INDIGATED EXISTING ELEMENT





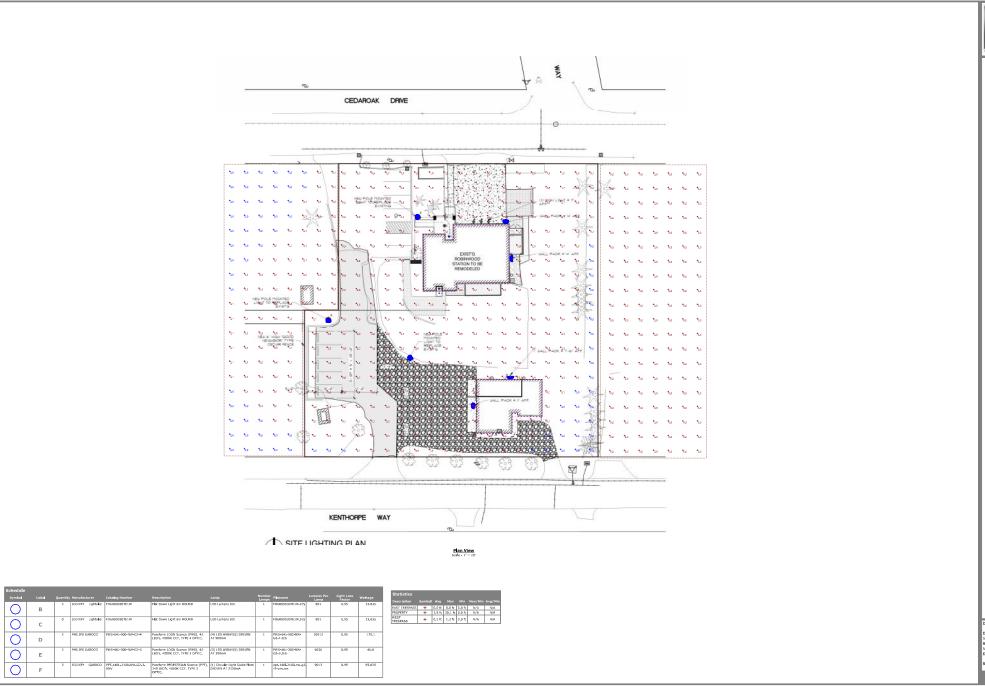
CITY OF WEST LINN
ROBINWOOD STATION IMPROVEMENTS

3706 CEDAROAK DRIVE WEST LINN, OR 97068

PROJ. NO. : FILE : DATE : 1932 L-S**I**T 4/22/2020

SHEET #

LANDSCAPE PLAN



Robinwo

Designer

Date
5/28/2020
Scale
Not to Scale
Drawing No.
Summary

1 01 1

ROBINWOOD STATION EXTERIOR MATERIALS



Roofing- GAF Timberline Charcoal



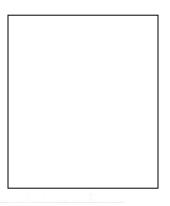
Board and Batt Siding- Hardie Panel Prefinished Khaki Brown color



CMU- Willamette Graystone has ground face block- espresso color



Lap Siding- Hardie Plank prefinished Timber Bark color



Trim and Stucco color- Hardie Trim Cobblestone color (match color at stucco)



Doors- Miller Paint #1096 "The Ego landed"



12805 S.E. Foster Road Portland, OR 97236 (**503) 760-1353** Fax 762-1962

STORMWATER REPORT for ROBINWOOD STATION COMMUNITY CENTER SITE IMPROVEMENTS WEST LINN, OREGON

May 2020

Prepared For: Iselin Architects, PC 1307 Seventh Street Oregon City, OR 97045

Site Location: 3706 Cedaroak Drive West Linn, OR 97068



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	0.2	Operator	
	0.3	Reviewing Agency	3
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	1.2	Existing Conditions	4
2.0	Meth	odology	4
	2.1	Analysis Method	
	2.2	Drainage & Conveyance	
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	3.3	Downstream Analysis	
		•	

APPENDIX A

Basin Map

APPENDIX B

PAC Report

APPENDIX C

Operation & Maintenance

0.0 PROJECT INFORMATION

0.1 OWNER:

City of West Linn

0.2 OPERATOR:

Friends of Robinwood Station

0.3 REVIEWING AGENCY:

City of West Linn 22500 Salamo Rd. West Linn, OR 97068 503.657.0331

0.4 PROJECT ENGINEER:

Dan Symons, P.E. Symons Engineering Consultants 12805 SE Foster Rd Portland, OR 97236 503.760.1353

1.0 PROJECT OVERVIEW AND DESCRIPTION

The intent of this report is to demonstrate stormwater design for collection, water quality treatment, and conveyance for this project and to comply with the requirements of City of West Linn for private stormwater facilities.

1.1 PROJECT DESCRIPTION

Proposed is minor site and building improvements to the existing Robinwood Station Community Center.

The site re-development improvements include:

- Paving and overlaying portions of the existing parking lot
- · Adding two parking stalls along the existing driveway and a berm along Cedaroak
- Proving new water, sewer, and storm connections for the existing building on the south side of the site
- Control seepage coming from the vicinity of the west retaining wall
- · Create a new trash enclosure pad
- Pedestrian access improvements
- Construct a rain garden to treat runoff from new impervious surfaces

1.2 EXISTING CONDITIONS

This site consists of two buildings, some gravel and paved parking and access areas, and various garden spaces. The lot slopes appreciably south to north and west to east.

The site does not currently provide any surface water treatment but provides partial collection and conveyance with an existing catch basin at the lower end of the existing parking lot connected to the public storm sewer in Cedaroak. Rain drains from the old fire house also have a separate connection to the same public storm sewer.

2.0 METHODOLOGY

2.1 ANALYSIS METHOD

First, the site was evaluated as separate basins where flows were able to be collected and treated to design standards.

The rain garden was sized to meet treatment standards using the City of Portland's PAC calculator and the result was increased by 25% to meet the City of West Linn's requirements.

A portion of the new pavement proposed is located below the proposed rain garden and will not reach it for treatment. The existing pavement will be routed for the water quality event to the new rain garden as a "trade-off" for the small portion of new pavement that can't reach the new facility.

The proposed project does not develop or re-develop more than 5000 s.f. therefore a detention facility is not required or proposed.

2.2 DRAINAGE AND CONVEYANCE

A 4" low flow pipe to be installed in the existing catch basin will direct the water quality event to the new rain garden with an unerdrain and overflow connected to a new storm sewer service lateral in Cedaroak. The existing 6" lateral from the catch basin will convey higher flows directly to the public storm sewer via the existing service lateral.

2.3 Infiltration Testing

Poor infiltration rates in this area are anticipated. Infiltration was not relied upon for system design so no infiltration testing was performed, instead conservative USDA published rates for the area were utilized but at 0.1" per hour have a negligible impact on design when a Factor of Safety of 2 is applied.

2.4 PROPOSED STORMWATER SYSTEMS

Vegetated rain garden located onsite adjacent to Cedaraok to collect pavement runoff for water quality treatment and disposal. One new public storm service lateral.

3.0 ANALYSIS

3.1 PAC RESULTS

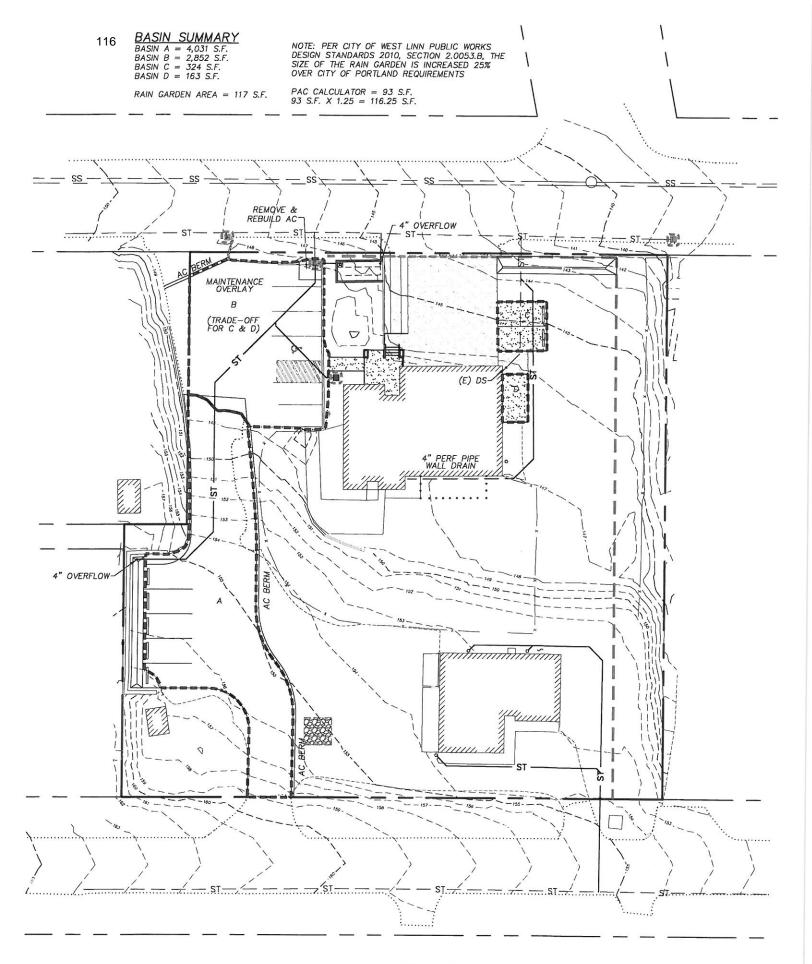
Appendix B contains the results of the PAC calculator. Pollution Reduction shows a "Pass". Flow Control shows a "Fail" but is disregarded as flow control is not required for this project. It should be noted that the existing gravel areas that are proposed to be paved are well consolidated and probably have a runoff Curve Number much higher than assumed by the PAC; closer to the CNpost for pavement than for CNpre for vegetation. The proposed planter will provide more attenuation benefit to the downstream condition than indicated by the PAC as a result and should be considered as a slight improvement to the currently non-existent flow control regime.

3.2 DOWNSTREAM ANALYSIS

No downstream analysis is required or provided.

APPENDIX A

Basin Map



BASIN MAP

APPENDIX B

PAC Report

PAC Report

Project Name

Robinwood Station

Community Center Site

Improvements

Permit No.

Created

4/16/20 3:05 PM

Project Address

3706 Cedaroak Drive West Linn, OR 97068 Designer

Last Modified

Tim Oyen

5/8/20 11:15 AM

Company

Symons Engineering Consultants, Inc.

Report Generated 5/8/20 11:15 AM

Project Summary

Add impervious area by paving the existing gravel parking area, design rain garden (water quality only) facility to manage the additional runoff from the increased paving.

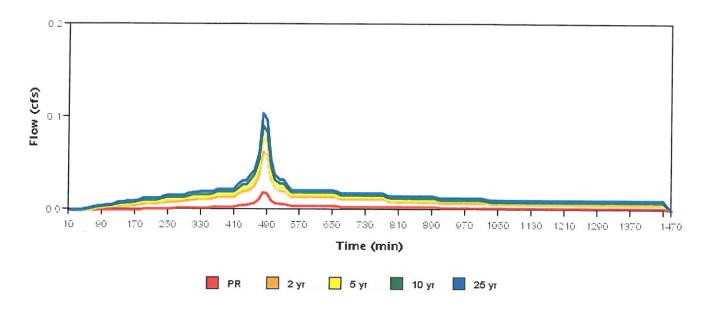
Catchment Name	Impervious Area (sq ft)	Native Soil Design Infiltration Rate	Hierarchy Category	Facility Type	Facility Config	Facility Size (sq ft)	Facility Sizing Ratio	PR Results	Flow Control Results
Α	4445	0.10	3	Planter (Flat)	С	93	2.1%	Pass	Fail

Catchment A

Site Soils & Infiltration Testing Data	Infiltration Testing Procedure	Open Pit Falling Head
	Native Soil Infiltration Rate (I _{test})	0.10 📤
Correction Factor	CF _{test}	2
Design Infiltration Rates	Native Soil (I _{dsgn})	0.05 in/hr 🚣
	Imported Growing Medium	2.00 in/hr
Catchment Information	Hierarchy Category	3
	Disposal Point	C
	Hierarchy Description	Off-site flow to drainageway, river, or storm-only pipe system
	Pollution Reduction Requirement	Pass
	10-year Storm Requirement	N/A
	Flow Control Requirement	The post-development peak rates for the 2, 5 and 10-year design storms must be equal or less than the pre-development rates.
	Impervious Area	4445 sq ft 0.102 acre
	Time of Concentration (Tc)	5
	Pre-Development Curve Number ($\mathrm{CN}_{\mathrm{pre}}$)	72
	Post-Development Curve Number (CN _{post})	98

A Indicates value is outside of recommended range

SBUH Results



	Pre-Development Ra	ate and Volume	Post-Development Rate and Volu		
	Peak Rate (cfs)	Volume (cf)	Peak Rate (cfs)	Volume (cf)	
PR	0	0.256	0.018	232.264	
2 yr	0.006	176.877	0.063	804.304	
5 yr	0.013	277.535	0.077	988.53	
10 yr	0.021	391.178	0.09	1173.032	
25 yr	0.03	515.029	0.104	1357.708	

Facility A

Facility Details	Facility Type	Planter (Flat)
	Facility Configuration	C: Infl. with RS and underdrain (Ud)
	Facility Shape	Planter
	Above Grade Storage Data	
	Bottom Area	93 sq ft
	Bottom Width	7.00 ft
	Storage Depth 1	4.0 in 📤
	Growing Medium Depth	12 in 📤
	Surface Capacity at Depth 1	31.0 cu ft
	Design Infiltration Rate for Native Soil	0.000 in/hr
	Infiltration Capacity	0.004 cfs
	Below Grade Storage Data	
	Below Grade Storage Data Rock Storage Depth	8 in
	0. 000.00 % 60.00 € 00 PC000000000	8 in 0.30 in
	Rock Storage Depth	
Facility Facts	Rock Storage Depth Rock Porosity	0.30 in
Facility Facts	Rock Storage Depth Rock Porosity Storage Depth 3	0.30 in 3.0 in 🔔
Facility Facts Pollution Reduction Results	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard	0.30 in 3.0 in 4 93.00 sq ft
	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard Sizing Ratio	0.30 in 3.0 in 4 93.00 sq ft 2.1%
	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard Sizing Ratio Pollution Reduction Score	0.30 in 3.0 in 4 93.00 sq ft 2.1% Pass
	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard Sizing Ratio Pollution Reduction Score Overflow Volume	0.30 in 3.0 in 4 93.00 sq ft 2.1% Pass 217.622 cf
	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard Sizing Ratio Pollution Reduction Score Overflow Volume Surface Capacity Used	0.30 in 3.0 in 4 93.00 sq ft 2.1% Pass 217.622 cf 99%
Pollution Reduction Results	Rock Storage Depth Rock Porosity Storage Depth 3 Total Facility Area Including Freeboard Sizing Ratio Pollution Reduction Score Overflow Volume Surface Capacity Used Rock Capacity Used	0.30 in 3.0 in 4 93.00 sq ft 2.1% Pass 217.622 cf 99% 100%

Rock Capacity Used

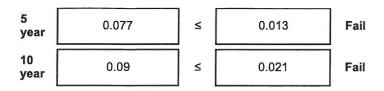
Indicates value is outside of recommended range

Post-development outflow (cfs)

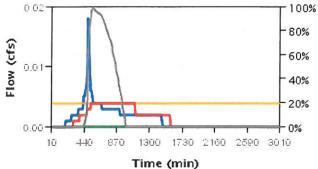
Pre-development inflow (cfs)

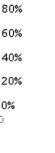
2 year 0.063 ≤ 0.006 Fail

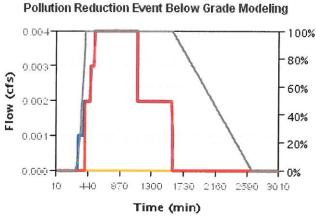
100%







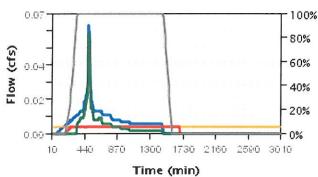


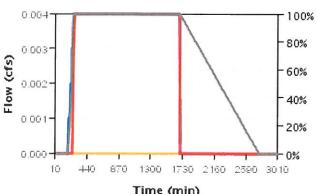




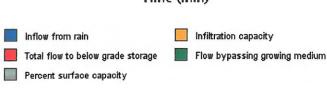


2 Year Event Surface Facility Modeling

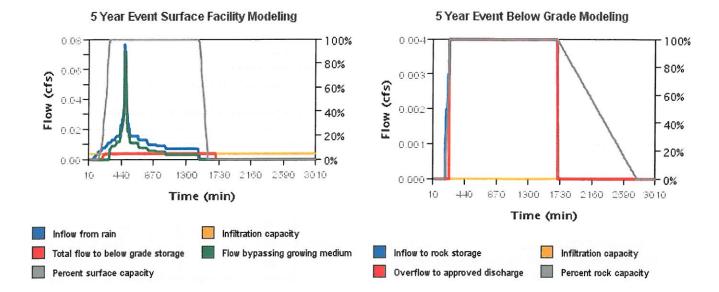




2 Year Event Below Grade Modeling



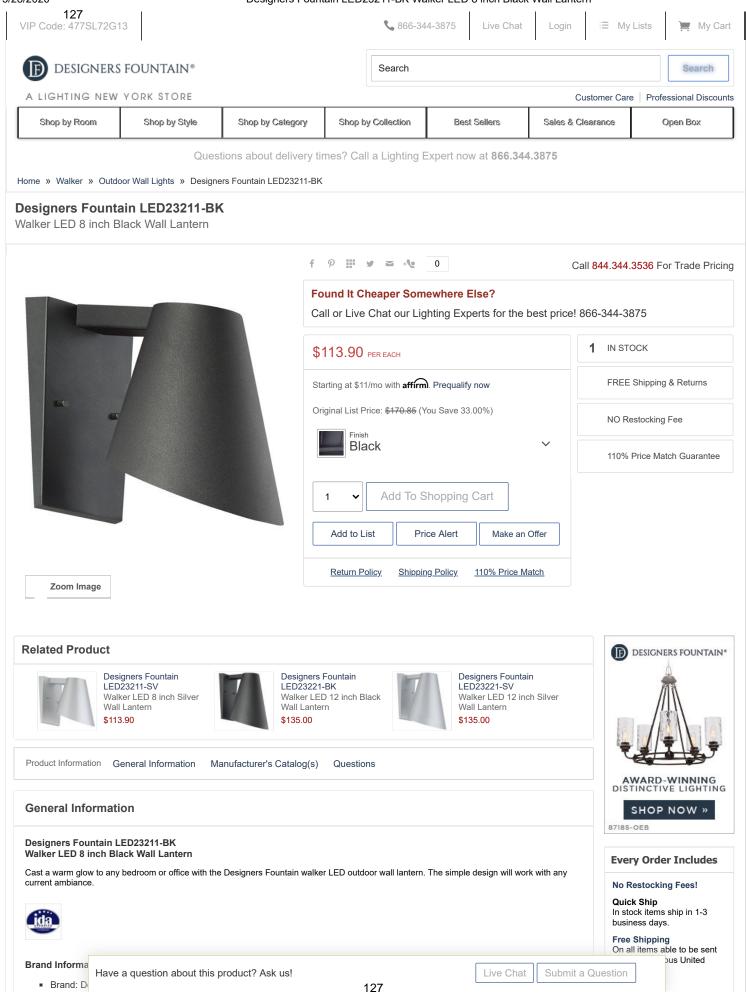




Overflow to approved discharge

Percent rock capacity

Percent surface capacity



128

VIP Code: 477SL72G13

% 866-344-3875

UPC: 46335059627

Dimensions and Weight

Length: 8.50 in.

Width: 6.00 in.

Height: 8.00 in.

Max Height: 8.00 in.

■ Backplate/Canopy Width: 5.00 in. ■ Backplate/Canopy Length: 8.00 in.

Height from Center of Wall Opening: 3.75 in.

Weight: 1.60 lb.

Other Specifications

■ Ships Via: Ground (FREE SHIPPING)

Warranty: 3yr

Additional Details

 Walker LED Outdoor Wall Lantern LED Outdoor Wall Lantern

Motion Detector: No

Dual Mount: No

Photocell: No

Interior / Exterior: Exterior

Bulb Information

Bulbs Included: No

Dimmable: No

Bulb Category: LED

Primary Bulb(s): 1 x 10.00 watts LED

Color Temperature: 3000K

Total Lumens: 417

Product Rating

Voltage: 120V

Outdoor Rating: Suitable for Damp Locations

Safety Rating: UL/CUL Wet

Dark-Sky Approved

866.344.3875 for more information.

Free Returns

Within 30 days of purchase for like new, uninstalled

110% Price Match

Find a lower price and we'll beat it by 10% of the difference.

Lighting New York Business Hours

Call For Our Best Price -866.344.3875

Lighting Experts

Mon - Fri 8am to 12am EST Sat & Sun 9am to 12am EST

Customer Care

Mon - Fri 8am to 6pm EST

Designers Fountain's Catalogs

Click on the catalog to view the PDF in your browser or right-click and hit "Save As" to save the PDF to your computer.









Customer Reviews

There are no reviews for this product. Currently review requests are being sent to Lighting New York customers that have already purchased and received the product.

Product Questions

Questions about Designers Fountain LED23211-BK

Ask us a question...

Be the first to ask a question about this product!

Have a question about this product? Ask us!

Live Chat

Submit a Question

Lighting Lights

Shop Now

128

LIGHTOLIER

by (s) ignify

Downlighting

Flat Downlight LED

FDR Round 4" & 6" Apertures



Lightolier LED Flat downlight provides an easy and quick downlight solution without the traditional frame and reflector. Perfect for installation in existing ceilings or new construction with the benefits of energy saving LED technology.

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

example: FD6R09930TE1W

Fixture

Family FD	Size	Lumens	CRI 9	сст 30	Dimming TE	Voltage	Finish W
FD Flat Downlight	4R 4-inch Round	07 700 lm	9 90	30 3000K	TE Triac & ELV	1 120V	W White (matte)
	6R 6-inch Round	09 900 lm	9 90	30 3000K	TE Triac & ELV	1 120V	W White (matte)

Accessories

example: FDRN

Family FD	Model
FD Flat Downlight	RN Round new construction plate06C 6' extension cable20C 20' extension cable

Features

- 1. Flange: aluminum, painted white.
- **2. Lens:** hard plastic material with diffused light pattern.
- 3. Junction Box: steel, $4^{7}/8" \times 1^{1}/4" \times 4^{1}/8"$ (124mm x 32.6mm x 105.2mm). Clip attached on the side of the J-box to connect with fixture or new construction plate to meet NEC (National Electric Code). J-box also has key holes on the side for mounting on joist (see page 2).
- 4. Connector: locking power connection is used to connect J-box and fixture. Standard length of the connection is 16" (400mm). Extension cable available as accessory.
- Ceiling cutout: installation template on adhesive backed label is supplied with the product.
 - 4" round: 4 3/16" (106mm) diameter.
 - **6" round:** 6" (152mm) diameter.
- **6. Gasket:** foam gasket supplied with fixture.
- 7. New Construction plate: steel. 10" x 17 1/2" (254mm x 445mm). Holes on the side of the plate for mounting.

Electrical

Electronic power supply:

RoHS compliant.* Class 2 power unit.

Remote power supply can only accommodate one LED module and cannot be shared with other LED module

Fixture can be through wired.

Dimming: Intended for ELV/TRIAC (120V) dimming. For more details, refer to LED-DIM-DL spec sheet.

Labels

cULus listed (UL 1598) for wet locations (covered ceiling only). IC rated for direct contact with thermal insulation.

AirSeal for minimal air leakage.

ENERGY STAR® certified.

Title 24 compliant.

Warranty

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty (visit philips.com/warranties for details).

	Lumen output		Input freq	Max. input current	Max. input power		Power factor
4" Round	700lm	120V	60Hz	0.13A	13W	15.3%	1
6" Round	900lm	120V	60Hz	0.15 A	15.5W	14%	1

^{*} Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.







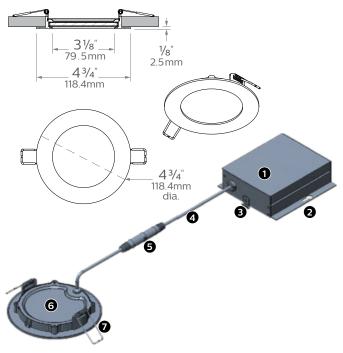


FDR[®] Flat Downlight LED

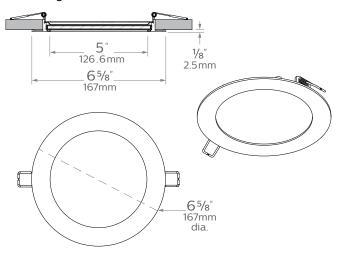
Round 4" & 6" Apertures

Dimensions





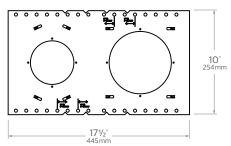
Flat Downlight 6"



Components

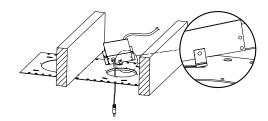
- 1. Electrical Box with knockouts
- 2. Mounting keyhole
- 3. Remodel NEC* clip
- 4.19.5" (0.5m) cord
- 5. Locking power connector
- 6. Integrated LED Luminaire
- 7. Spring clip for easy mounting
- * National Electric Code

Frame plate

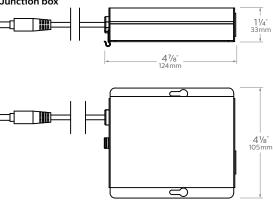


Secure J-Box to frame plate:

slide junction box clip into slot and catch finger tab.

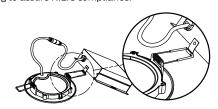


Junction box



Remodeler applications:

attach junction box clip to installation spring to assure N.E.C compliance.

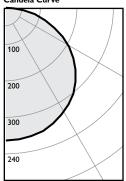


FDR Flat Downlight LED

Round 4" & 6" Apertures

4-inch, 12W, 61.3 lm/W

Candela Curv



Fixture: FD4R07930KTE1W

Output lumens:	705 lm
Input watts:	11.5 W
CRI:	90 min
CCT1:	3000K
Spacing Crit.:	1.3
Ream Angle:	112°

Zonal summary

Zone	Lumens	%Luminaire
0-30	188	27.0%
0-40	308	44.2%
0-60	544	78.2%
0-90	696	100.0%

Angle Mean CP Lumens

0 5	242 241	23
10 15	238 233	66
20 25	225 216	99
30 35	204 191	120
40 45	177 161	124
50 55	144 126	112
60 65	107 87	86
70 75	68 48	51
80 85	29 12	15

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	10	6.5'
6'	/	7.8'
7'	5	9.1'
8'	4	10.4'
9'	3	11.7'

^{*} Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Initial center beam foot-candles	Watts per sq. ft.
27.8 18.3	0.51 0.33
13.0	0.24
10.9	0.20
8.7	0.16
	27.8 18.3 13.0 10.9

 $38' \times 38' \times 10'$ Room, Workplane 2.5' above floor, 80/50/20% Reflectances

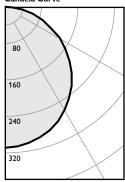
Efficacy: 61.3 lm/w Report²: PR7060901

Coefficients of utilization

Ceiling	80%			70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zo	Zonal cavity method - Effective floor reflectance = 20%									0%
Room Cavity Ratio 06 8 2 9 5 7 8 5 1 0	119 109 99 90 82 75 70 65 60 56	119 104 90 79 70 62 56 51 46 43 39	119 99 83 71 61 53 47 42 38 34 31	119 95 77 64 54 47 41 36 32 29 26	116 101 88 77 69 61 55 50 46 42 39	116 94 76 64 54 46 40 36 32 29 26	111 97 85 74 66 59 53 49 44 41 38	111 91 75 62 53 46 40 35 32 29 26	106 93 81 72 64 57 52 47 43 40 37	106 88 73 61 52 45 40 35 31 28 26	100 83 69 58 49 43 37 33 29 26 24

6-inch, 14W, 71.2 lm/W

Candela Curve



Fixture: FD6R07930KTE1W

982 lm

13.8 W

90 min 3000K

1.3

Output lumens:

Input watts:

Spacing Crit.:

Beam Angle:

CRI: CCT1:

Zone Lumens %Luminaire

Zonal summary

302	
295	83
286	
274	126
260	
244	153
226	
206	159
184	
161	144
137	
112	111
87	
62	66
39	
17	20
0	
	295 286 274 260 244 226 206 184 161 137 112 87 62 39

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	12	6.5'
6'	9	7.8'
7'	6	9.1'
8'	5	10.4'
9'	4	11.7'

Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5' 6'	35.6 23.3	0.61 0.40
7'	16.7	0.29
8'	13.9	0.24
9'	11.1	0.19

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 71.2 lm/w Report²: PR7060903

Coefficients of utilization

Cei	ling		80%			70%		50%		30%		0%
Wa	ıll	70	50	30	10	50	10	50	10	50	10	0
RC	R	Zonal cavity method - Effective floor reflectance = 20									0%	
Room Cavity Ratio	0 1 2 3 4 5 6 7 8 9	119 108 98 90 82 75 70 64 60 56 53	119 104 90 79 70 62 56 51 46 43 39	119 99 83 71 61 53 47 42 38 34 31	119 95 77 64 54 46 41 36 32 29 26	116 101 88 77 68 61 55 50 46 42 39	116 94 76 63 54 46 40 36 32 29 26	111 97 85 74 66 59 53 48 44 41 38	111 91 75 62 53 46 40 35 32 28 26	106 93 81 72 64 57 52 47 43 40 37	106 88 73 61 52 45 40 35 31 28 26	100 83 69 58 49 43 37 33 29 26 24



^{1.} Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

^{2.} Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.



by (Signify

Linear

TruGroove

Suspended



TruGroove suspended, surface & wall is driving performance beyond the edge. Innovative optics deliver exceptional uniformity and wide row spacing from a 3" aperture continuous line-of light. An extended family and refined design are perfect for lighting any professional space.

Project:		
Location:		
Cat.No:		
Type:		
Line ID:	Qty:	
Notes:		

Ordering guide

example: 2905LBCQQ087DET, A3-48

Family 290	Version ¹	Source	CRI/CCT ¹	Lumens ¹	Optics	Run Length	Wiring ²	Voltage	Driver ³	Finish	Controls
290 TruGroove Suspended	1 Direct 3 Indirect 5 Indirect/Direct 6 Direct /Indirect	L LED	A 80CRI/4000K B 80CRI/3500K C 80CRI/3000K S 90CRI/3500K	G 2200 lm/4ft	WW Asymmetric MesoOptics	02 2ft 04 4ft 06 6ft 08 8ft A4 2 x 2ft Corner xx Total Run Length in 2ft increments	7 1cct w/Dimming M 1cct w/Dimming + Aux. Wiring N 1cct w/Dimming + Battery Pack G 2cct w/Dimming (Up/Down) K 2cct w/ Dimming (Up/Down) + Aux. Wiring L 2cct w/ Dimming (Up/Down) + Battery Pack	(120-277V) 3 347V	E Advance 0-10V (1% Dim) S Advance Sensor Ready (5% Dim)	W Standard White T Titanium Silver B Black C Custom	SZ SpaceWise DT
A2 T-grid Fixe A3 Non-acces A5 T-grid 24"	ssible ceiling, 0'-15' Sla ed Position Mount ssible ceiling, 0'-90' S Span Mount (non tegu grid Mount 15/16" (no	lope Mou ılar tile or	nly)	Suspension 24 24" 48 48" 96 96" 144 144"							

- $1. \quad \text{Nominal values within a range. Consult photometry data for CRI, color temp, lumens \& distribution of chosen configuration.} \\$
- 2. Not all wiring types are available with all configurations. Consult Ledalite for a complete list of available options.
- 3. Consult Signify representative for other supported drivers.

A6-2 T-grid On-grid Mount 9/16" (non tegular tile only)
A6-3 T-grid On-grid Mount 9/16" x 5/16" (slot tee & tegular tile)









Tru^{to}Groove linear suspended

Ordering guide - Connected systems

example: 2901LBGQN087DSWNIP, A2-48

Family	Version ¹	Source	CRI/CCT ¹	Lumens ¹	Optics	Run Length	Wiring ²	Voltage	Driver	Finish	Options	System/ Controls ^{2,3}
290 TruGroove Suspended	1 Direct	L LED	A 80CRI/4000K B 80CRI/3500K C 80CRI/3000K	G 2200 lm/4ft	QN Symmetric MesoOptics Lens	04 4ft 06 6ft 08 8ft	7 1cct Dimming N 1cct Dimming + Battery Pack	D UNV (120-277V) 3 347V	S Advance Sensor Ready (5% Dim)	W Standard White T Titanium Silver	N No Option	IP Interact Pro
	5 Indirect/Direct 6 Direct/Indirect		2 2-channel Tunable White 80CRI / 2700-6500K	B 5200 lm/4ft (60% Up) C 4600 lm/4ft (70% Up) D 3500 lm/4ft (60% Up) D 3500 lm/4ft (60% Down)	QQ Symmetric MesoOptics Lens + Symmetric Performance Len	xx Total Run Length in 2ft increments		L Low Voltage (48-54V DC)		B Black C Custom		IO Interact Office Wired (PoE) w/ Daylight & Occupancy
Mount Type		•		Suspension ⁴								
A1 Non-acc	essible ceiling, 0°-15° S	lope Mou	nt	24 24"								
A2 T-grid Fix	ed Position Mount			48 48"								
	essible ceiling, 0°-90° s			96 96"								
_	' Span Mount (non teg		• •	144 144"								
_	-grid Mount 15/16" (no	-	• • • • • • • • • • • • • • • • • • • •	192 192"								
1	-grid Mount 9/16" (no -grid Mount 9/16" x 5/	-		240 240"								

Note: Options with the same color coding must be paired together.

- 1. Nominal values within a range. Consult photometry data for CRI, color temp, lumens & distribution of chosen configuration.
- 2. Not all wiring types or sensors are available with all configurations. Consult Ledalite for a complete list of available options. Battery Packs available in 8ft lengths only.
- 3. Sensors only available in white, sensors can be combined with any luminaire finish.
- 4. For PoE, the CAT5/CAT6 cable to be provided by others. Specifier should coordinate the desired cable color with the contractor

Connected systems

Interact Pro

- A wireless IoT connected lighting solution for small and medium-sized businesses.
- · Commissioning via Android or iOS mobile device and Interact Pro app.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- · Open APIs for light control and data exchange.

www.interact-lighting.com/pro

Interact Office Wired (PoE), Tunable White

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Human centric lighting through tunable white technology Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.

www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Note: Signify Interact Office Luminaires are not sold individually and are only compatible with Signify's Interact Office control system & software. The system requires a compatible back-end IT infrastructure for normal operations, please consult your Signify representative for additional information.

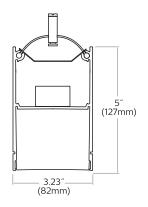
Tru³Groove linear suspended

Direct & Direct/Indirect

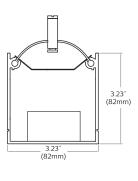


Cross Section View





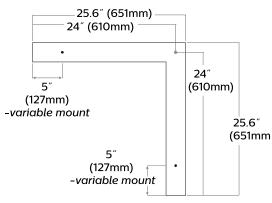




Module Details & Dimensions

Top View

Suspended 2'x2' Corners Without Endcaps

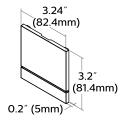


Note: In corners, the upper hemisphere is always symmetric.

Cross Section View – Endcaps

Indirect Endcap

Indirect

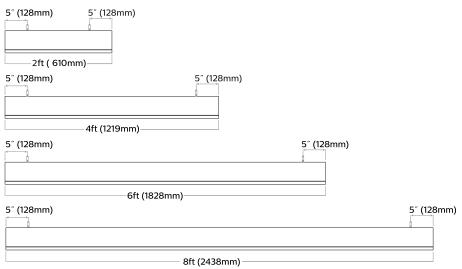




5" (127mm) 0.2" (5mm)

Side View

Suspended Linear Modules Without Endcaps



Tru³⁵roove linear suspended

Specifications

Optical System

Upper hemisphere: White light emitted from a linear array of upward-facing LEDs is shaped into a homogeneous, wide-throw batwing distribution using either a freeform elliptical lens or an engineered light guide panel. Lower hemisphere: White light emitted from a linear array of downward-facing LEDs is laterally redirected using either a biconvex lens or optical microstructures embedded in a layer of MesoOptics DX film. An extruded acrylic lens and MesoOptics film assembly then generates an optimal batwing distribution and a uniform continuum of light. The available Flush Silk Lens optics is a value-oriented option that provides a lambertian distribution while maintaining a uniform continuum of light.

Endcaps

Diecast flat aluminum endcaps with integral groove to match housing.

Finish

High quality powder coated, available in matte white, black or titanium silver. Other custom colors available on request. White sensors only.

Housing

Precision aluminum extrusion, post painted.

Weight

Maximum: Suspended & Surface 3.9lb/ft, Wall 4.1lb/ft & 2'x2' Corner unit 21lb.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

QuickShip

Available for certain configurations upon request. Limit 500 linear ft per order. For more information visit www.signify.com/en-us/brands/ledalite/quickship

Standard Drivers

Advance Xitanium 0-10V, 1-100%. Advance Xitanium Sensor Ready (SR), 5-100% (for SpaceWise DT). Class 2 rated output. Consult Ledalite for other available drivers.

Standard Battery Pack

Bodine, 90 min, 10W, Class 2 rated output, Battery pack lumen output = 10W x luminaire efficacy x 1.1. Typical output: 1100lm.

Lumen Maintenance

At an ambient temperature of 25°C, the LED lumen maintenance expectation according to IES TM-21-11 is: L80 (12k) 60,000 hrs (Reported methodology) L80 (6k) 110,000 hrs (Projected methodology).

Source Color

LEDs rated for color rendering CRI >80, R9 >0 and fixture to fixture color accuracy within 2 SDCM.

Controls

Suspended version available with SpaceWise DT occupancy & daylight sensor w/advanced grouping & dwell time. SpaceWise DT commissioning via Android phone App. Compatible dimming wireless wall switches are available.

Mounting

Suspended: Variable sling mount allows +/- 5" of horizontal adjustment from joint or end. Aircraft cable and tamper-resistant gripper provide unlimited vertical adjustment and are independently tested to stringent safety standards.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Approvals

Certified to UL, CSA and IES standards. Certain symmetric indirect/direct and indirect versions are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (www.designlights.org/QPL).

Warranty

Five-year indoor professional luminaire limited warranty including LED boards and driver. www.signify.com/warranties

Environment

Rated for dry or damp locations in operating ambient temperatures 0-40°C (32-104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants in the area of operation are not covered under warranty. Not suitable for natatorium environments.

Tru³Groove linear suspended

Photometrics

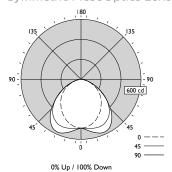
Direct Distribution (2901) (Click "PDF" or "IES" text to download)

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	4071	39	104	81	6	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
	4000 lm/4ft	80CRI, 3500K	3963	39	102	82	12	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
	4000 1111/411	80CRI, 3000K	3898	39	100	83	10	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
		90CRI, 3500K	3911	47	84	94	71	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric		80CRI, 4000K	3099	28	110	81	6	0% Up / 100% Down	N/A	Standard	PDF	<u>IES</u>
MesoOptics	3000 lm/4ft	80CRI, 3500K	3032	28	107	82	12	0% Up / 100% Down	N/A	Standard	<u>PDF</u>	<u>IES</u>
Lens - QN	3000 1111/411	80CRI, 3000K	2954	28	104	83	10	0% Up / 100% Down	N/A	Standard	<u>PDF</u>	<u>IES</u>
		90CRI, 3500K	2967	33	89	94	71	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
		80CRI, 4000K	2180	19	112	81	6	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
Spacing	2200 lm/4ft	80CRI, 3500K	2122	19	109	82	12	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
Criteria:	2200 (111/41)	80CRI, 3000K	2087	19	108	83	10	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
1.16/1.57		90CRI, 3500K	2177	24	92	94	71	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
		80CRI, 4000K	1528	14	109	81	6	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
	1500 lm/4ft	80CRI, 3500K	1488	14	106	82	12	0% Up / 100% Down	Critcal spaces	Standard	PDF	<u>IES</u>
	1500 (111/411	80CRI, 3000K	1446	14	103	83	10	0% Up / 100% Down	Critcal spaces	Standard	PDF	<u>IES</u>
		90CRI, 3500K	1478	16	92	94	71	0% Up / 100% Down	Critcal spaces	N/A	PDF	<u>IES</u>

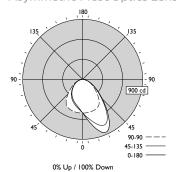
Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	4200	39	108	81	6	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
	4000 lm /4ft	80CRI, 3500K	4088	39	105	82	12	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
	4000 lm/4ft	80CRI, 3000K	4021	39	103	83	10	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
		90CRI, 3500K	4035	47	87	94	71	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
-1 1 6:11		80CRI, 4000K	3214	28	114	81	6	0% Up / 100% Down	N/A	Standard	PDF	<u>IES</u>
-lush Silk	2000 lm /4ft	80CRI, 3500K	3129	28	111	82	12	0% Up / 100% Down	N/A	Standard	PDF	<u>IES</u>
Lens - LN	I N 3000 lm/4ff	80CRI, 3000K	3077	28	109	83	10	0% Up / 100% Down	N/A	Standard	PDF	<u>IES</u>
		90CRI, 3500K	3061	33	92	94	71	0% Up / 100% Down	N/A	N/A	PDF	<u>IES</u>
~		80CRI, 4000K	2249	19	116	81	6	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
Spacing Criteria:	2200 lm/4ft	80CRI, 3500K	2189	19	113	82	12	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
.24/1.22	2200 (111/4) (80CRI, 3000K	2153	19	111	83	10	0% Up / 100% Down	Normal spaces	Standard	PDF	<u>IES</u>
.24/ 1.22		90CRI, 3500K	2246	24	94	94	71	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
	1500 lm/4ft	80CRI, 4000K	1577	14	113	81	6	0% Up / 100% Down	Critcal spaces	Standard	PDF	IES
		80CRI, 3500K	1535	14	110	82	12	0% Up / 100% Down	Critcal spaces	Standard	PDF	<u>IES</u>
		80CRI, 3000K	1510	14	108	83	10	0% Up / 100% Down	Critcal spaces	Standard	PDF	<u>IES</u>
		90CRI, 3500K	1525	16	95	94	71	0% Up / 100% Down	Critcal spaces	N/A	PDF	IES

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	3713	39	95	81	6	0% Up / 100% Down	N/A	N/A	<u>PDF</u>	<u>IES</u>
	4000 lm/4ft	80CRI, 3500K	3614	39	93	82	12	0% Up / 100% Down	N/A	N/A	<u>PDF</u>	<u>IES</u>
	4000 1111/411	80CRI, 3000K	3555	39	91	83	10	0% Up / 100% Down	N/A	N/A	<u>PDF</u>	<u>IES</u>
		90CRI, 3500K	3567	47	77	94	71	0% Up / 100% Down	N/A	N/A	<u>PDF</u>	<u>IES</u>
Asymmetric		80CRI, 4000K	2827	28	100	81	6	0% Up / 100% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
MesoOptics	3000 lm/4ft	80CRI, 3500K	2766	28	98	82	12	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
Lens - WN	3000 (111/4)(80CRI, 3000K	2694	28	95	83	10	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	2706	33	81	94	71	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
		80CRI, 4000K	1988	19	103	81	6	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
Spacing	2200 lm/4ft	80CRI, 3500K	1935	19	100	82	12	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
Criteria:	2200 111/411	80CRI, 3000K	1904	19	98	83	10	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
1.66/1.34		90CRI, 3500K	1986	24	83	94	71	0% Up / 100% Down	Normal spaces	N/A	PDF	<u>IES</u>
		80CRI, 4000K	1394	14	100	81	6	0% Up / 100% Down	Critcal spaces	N/A	PDF	<u>IES</u>
	1500 lm/4ft	80CRI, 3500K	1357	14	97	82	12	0% Up / 100% Down	Critcal spaces	N/A	PDF	<u>IES</u>
	15()() lm/4ff	80CRI, 3000K	1319	14	94	83	10	0% Up / 100% Down	Critcal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	1348	16	84	94	71	0% Up / 100% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>

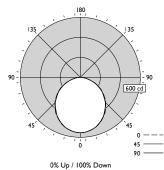
Symmetric MesoOptics Lens - QN



Asymmetric MesoOptics Lens - WN



Flush Silk Lens - LN



Candela shown is for 1500 lm/4ft, 3500K, 80 CRI configuration.

 * DLC is only available with Advance 0-10V (1% dim) drivers. Battery Packs and 2ft modules are also not available on DLC. TruGroove_Suspended_SpecSheet 06/19 page 5 of 11 136

Trugroove linear suspended

Photometrics

Indirect Distribution (2903)

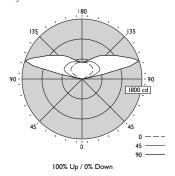
(Click "PDF" or "IES" text to download)

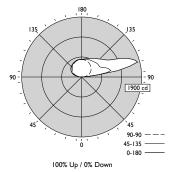
Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	4982	36	140	81	6	100% Up / 0% Down	Critcal spaces	Standard	PDF	<u>IES</u>
	4800 lm/4ft	80CRI, 3500K	4851	36	136	82	12	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
Symmetric	4000 111/411	80CRI, 3000K	4771	36	134	83	10	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
Performance		90CRI, 3500K	4835	43	112	94	71	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
Lens - NQ		80CRI, 4000K	3305	23	143	81	6	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
Lens - NQ	3200 lm/4ft	80CRI, 3500K	3219	23	139	82	12	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
3200 lm	3200 1111/411	80CRI, 3000K	3165	23	136	83	10	100% Up / 0% Down	Critcal spaces	Standard	<u>PDF</u>	<u>IES</u>
		90CRI, 3500K	3227	27	120	94	71	100% Up / 0% Down	Critcal spaces	Standard	PDF	<u>IES</u>

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	4667	36	131	81	6	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
	4800 lm/4ft	80CRI, 3500K	4545	36	127	82	12	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
Asymmetric Performance	4000 111/411	80CRI, 3000K	4470	36	125	83	10	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
		90CRI, 3500K	4530	43	105	94	71	100% Up / 0% Down	Critcal spaces	N/A	PDF	<u>IES</u>
Lens - NW		80CRI, 4000K	3096	23	133	81	6	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
Lens - MVV	3200 lm/4ft	80CRI, 3500K	3015	23	130	82	12	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
3	3200 1111/411	80CRI, 3000K	2965	23	128	83	10	100% Up / 0% Down	Critcal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	3023	27	112	94	71	100% Up / 0% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>

Symmetric Performance Lens - NQ

Asymmetric Performance Lens - NW





Candela shown is for 3200 lm/4ft, 3500K, 80 CRI configuration.

Tru¹³⁸roove linear suspended

Photometrics

Indirect/Direct Distribution (2905)

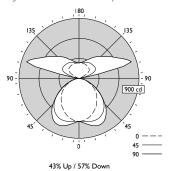
(Click "PDF" or "IES" text to download)

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	6964	52	134	81	6	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
	C000 I (464	80CRI, 3500K	6781	52	130	82	12	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric	6800 lm/4ft	80CRI, 3000K	6669	52	128	83	10	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
MesoOptics		90CRI, 3500K	6813	63	108	94	71	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Lens +		80CRI, 4000K	5063	38	133	81	6	43% Up / 57% Down	N/A	Standard	PDF	<u>IES</u>
Symmetric	5200 lm/4ft	80CRI, 3500K	4930	38	129	82	12	43% Up / 57% Down	N/A	Standard	PDF	<u>IES</u>
Performance	5200 (111/41)	80CRI, 3000K	4848	38	127	83	10	43% Up / 57% Down	N/A	Standard	PDF	<u>IES</u>
Lens - QQ		90CRI, 3500K	5060	48	106	94	71	43% Up / 57% Down	N/A	N/A	PDF	<u>IES</u>
Lens - QQ		80CRI, 4000K	4833	36	133	81	6	32% Up / 68% Down	N/A	Standard	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4706	36	130	82	12	32% Up / 68% Down	N/A	Standard	PDF	<u>IES</u>
Consina	4600 (111/41)	80CRI, 3000K	4628	36	128	83	10	32% Up / 68% Down	N/A	Standard	PDF	<u>IES</u>
Spacing Criteria:		90CRI, 3500K	4705	42	112	94	71	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
		80CRI, 4000K	3550	28	128	81	6	43% Up / 57% Down	Normal spaces	Standard	PDF	<u>IES</u>
1.16/1.57	1.57 3500 lm/4ft	80CRI, 3500K	3456	28	125	82	12	43% Up / 57% Down	Normal spaces	Standard	PDF	<u>IES</u>
	3300 tiil/41t	80CRI, 3000K	3399	28	123	83	10	43% Up / 57% Down	Normal spaces	Standard	PDF	<u>IES</u>
		90CRI, 3500K	3433	32	109	94	71	43% Up / 57% Down	Normal spaces	N/A	PDF	<u>IES</u>

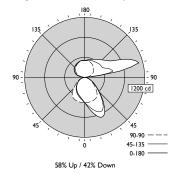
Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	7033	52	135	81	6	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
	6800 lm/4ft	80CRI, 3500K	6848	52	131	82	12	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
	0800 (111/4) (80CRI, 3000K	6735	52	129	83	10	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Flush Silk		90CRI, 3500K	6882	63	109	94	71	33% Up / 67% Down	N/A	N/A	PDF	<u>IES</u>
Lens +		80CRI, 4000K	5132	38	134	81	6	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric	5200 lm/4ft	80CRI, 3500K	4997	38	131	82	12	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
Performance	5200 (11)/411	80CRI, 3000K	4915	38	129	83	10	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
Lens - LQ		90CRI, 3500K	5129	48	108	94	71	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
		80CRI, 4000K	4881	36	135	81	6	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4753	36	131	82	12	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Spacing	4600 (111/41)	80CRI, 3000K	4675	36	129	83	10	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Criteria:		90CRI, 3500K	4752	42	113	94	71	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
1.24/1.22		80CRI, 4000K	3598	28	130	81	6	44% Up / 56% Down	Normal spaces	N/A	PDF	<u>IES</u>
	3500 lm/4ft	80CRI, 3500K	3504	28	127	82	12	44% Up / 56% Down	Normal spaces	N/A	PDF	<u>IES</u>
		80CRI, 3000K	3446	28	124	83	10	44% Up / 56% Down	Normal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	3480	32	111	94	71	44% Up / 56% Down	Normal spaces	N/A	PDF	<u>IES</u>

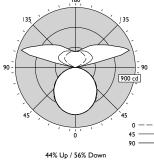
Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	6470	52	124	81	6	69% Up / 31% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
	6800 lm/4ft	80CRI, 3500K	6300	52	121	82	12	69% Up / 31% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
Asymmetric	0000 111/411	80CRI, 3000K	6196	52	119	83	10	69% Up / 31% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
MesoOptics		90CRI, 3500K	6329	63	100	94	71	69% Up / 31% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
Lens +		80CRI, 4000K	4689	38	123	81	6	58% Up / 42% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
Asymmetric	5200 lm/4ft	80CRI, 3500K	4566	38	120	82	12	58% Up / 42% Down	Normal spaces	N/A	PDF	<u>IES</u>
Performance	5200 (111/4)(80CRI, 3000K	4491	38	118	83	10	58% Up / 42% Down	Normal spaces	N/A	PDF	<u>IES</u>
Lens - WW		90CRI, 3500K	4686	48	98	94	71	58% Up / 42% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>
Lens - www		80CRI, 4000K	4490	36	124	81	6	69% Up / 31% Down	Critcal spaces	N/A	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4372	36	120	82	12	69% Up / 31% Down	Critcal spaces	N/A	PDF	<u>IES</u>
Consing	4000 1111/411	80CRI, 3000K	4300	36	119	83	10	69% Up / 31% Down	Critcal spaces	N/A	PDF	<u>IES</u>
Spacing		90CRI, 3500K	4371	42	104	94	71	69% Up / 31% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>
Criteria:		80CRI, 4000K	3288	28	119	81	6	58% Up / 42% Down	Critcal spaces	N/A	PDF	<u>IES</u>
1.66/1.34	3500 lm/4ft	80CRI, 3500K	3201	28	116	82	12	58% Up / 42% Down	Critcal spaces	N/A	PDF	<u>IES</u>
	3300 111/411	80CRI, 3000K	3148	28	114	83	10	58% Up / 42% Down	Critcal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	3180	32	101	94	71	58% Up / 42% Down	Critcal spaces	N/A	<u>PDF</u>	<u>IES</u>

Symmetric MesoOptics Lens - QQ



Asymmetric MesoOptics Lens - WW





Flush Silk Lens - LQ

Candela shown is for 3500 lm/4ft, 3500K, 80 CRI configuration.

 * DLC is only available with Advance 0-10V (1% dim) drivers. Battery Packs and 2ft modules are also not available on DLC. TruGroove_Suspended_SpecSheet 06/19 page 7 of 11 138

TruGroove linear suspended

Photometrics

Direct/Indirect Distribution (2906)

(Click "PDF" or "IES" text to download)

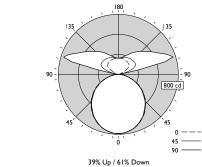
Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	6901	58	119	81	6	41% Up / 59% Down	N/A	N/A	PDF	<u>IES</u>
	6800 lm/4ft	80CRI, 3500K	6719	58	116	82	12	41% Up / 59% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric	0800 1111/411	80CRI, 3000K	6608	58	114	83	10	41% Up / 59% Down	N/A	N/A	PDF	<u>IES</u>
MesoOptics		90CRI, 3500K	6723	69	98	94	71	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
Lens +		80CRI, 4000K	5246	43	121	81	6	41% Up / 59% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric	5200 lm/4ft	80CRI, 3500K	5107	43	118	82	12	41% Up / 59% Down	N/A	Standard	PDF	<u>IES</u>
Performance	5200 (111/4) (80CRI, 3000K	5023	43	116	83	10	41% Up / 59% Down	N/A	N/A	PDF	<u>IES</u>
Lens - QQ		90CRI, 3500K	5146	51	102	94	71	42% Up / 58% Down	N/A	N/A	PDF	<u>IES</u>
Lens - QQ		80CRI, 4000K	4586	39	118	81	6	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4465	39	115	82	12	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Consing	4600 (111/41)	80CRI, 3000K	4391	39	113	83	10	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
Spacing		90CRI, 3500K	4422	45	98	94	71	33% Up / 67% Down	N/A	N/A	PDF	<u>IES</u>
Criteria:		80CRI, 4000K	3595	30	122	81	6	39% Up / 61% Down	Normal spaces	Standard	PDF	<u>IES</u>
1.16/1.57	3500 lm/4ft	80CRI, 3500K	3501	30	119	82	12	39% Up / 61% Down	Normal spaces	Standard	PDF	<u>IES</u>
	3300 (11)/411	80CRI, 3000K	3443	30	117	83	10	39% Up / 61% Down	Normal spaces	Standard	PDF	<u>IES</u>
		90CRI, 3500K	3494	35	99	94	71	38% Up / 62% Down	Normal spaces	N/A	PDF	<u>IES</u>

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	7030	58	122	81	6	40% Up / 60% Down	N/A	N/A	PDF	<u>IES</u>
	6800 lm/4ft	80CRI, 3500K	6844	58	118	82	12	40% Up / 60% Down	N/A	N/A	PDF	<u>IES</u>
	0800 (111/4) (80CRI, 3000K	6731	58	117	83	10	40% Up / 60% Down	N/A	N/A	PDF	IES
Flush Silk		90CRI, 3500K	6843	69	100	94	71	43% Up / 57% Down	N/A	N/A	PDF	<u>IES</u>
Lens +		80CRI, 4000K	5344	43	124	81	6	40% Up / 60% Down	N/A	N/A	PDF	<u>IES</u>
Symmetric	E200 lm /4ft	80CRI, 3500K	5203	43	120	82	12	40% Up / 60% Down	N/A	N/A	PDF	<u>IES</u>
Performance	5200 lm/4ft 80	80CRI, 3000K	5118	43	119	83	10	40% Up / 60% Down	N/A	N/A	PDF	<u>IES</u>
Lens - LQ		90CRI, 3500K	5240	51	103	94	71	42% Up / 58% Down	N/A	N/A	PDF	<u>IES</u>
		80CRI, 4000K	4685	39	120	81	6	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4561	39	117	82	12	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
Spacing	4600 (111/41)	80CRI, 3000K	4486	39	115	83	10	31% Up / 69% Down	N/A	N/A	PDF	<u>IES</u>
Criteria:		90CRI, 3500K	4516	45	100	94	71	32% Up / 68% Down	N/A	N/A	PDF	<u>IES</u>
1.24/1.22	4/1.22	80CRI, 4000K	3665	30	124	81	6	39% Up / 61% Down	Normal spaces	N/A	PDF	<u>IES</u>
		80CRI, 3500K	3568	30	121	82	12	39% Up / 61% Down	Normal spaces	N/A	PDF	<u>IES</u>
	3500 lm/4ft	80CRI, 3000K	3509	30	119	83	10	39% Up / 61% Down	Normal spaces	N/A	PDF	<u>IES</u>
		90CRI. 3500K	3610	35	102	94	71	38% Up / 62% Down	Normal spaces	N/A	PDF	IES

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	DLC*	PDF File	IES File
		80CRI, 4000K	6364	58	110	81	6	42% Up / 58% Down	N/A	N/A	PDF	<u>IES</u>
	6800 lm/4ft	80CRI, 3500K	6196	58	107	82	12	42% Up / 58% Down	N/A	N/A	<u>PDF</u>	<u>IES</u>
Asymmetric	0800 111/411	80CRI, 3000K	6094	58	105	83	10	42% Up / 58% Down	N/A	N/A	PDF	<u>IES</u>
MesoOptics		90CRI, 3500K	6204	69	90	94	71	44% Up / 56% Down	N/A	N/A	PDF	<u>IES</u>
Lens +		80CRI, 4000K	4837	43	112	81	6	41% Up / 59% Down	Normal spaces	N/A	PDF	<u>IES</u>
	5200 lm/4ft	80CRI, 3500K	4710	43	109	82	12	41% Up / 59% Down	Normal spaces	N/A	PDF	<u>IES</u>
Asymmetric Performance	5200 (111/4)(80CRI, 3000K	4632	43	107	83	10	41% Up / 59% Down	Normal spaces	N/A	PDF	<u>IES</u>
Lens - WW		90CRI, 3500K	4748	51	94	94	71	43% Up / 57% Down	Normal spaces	N/A	PDF	<u>IES</u>
Lens - www		80CRI, 4000K	4219	39	108	81	6	33% Up / 67% Down	Normal spaces	N/A	PDF	<u>IES</u>
	4600 lm/4ft	80CRI, 3500K	4108	39	105	82	12	33% Up / 67% Down	Normal spaces	N/A	PDF	<u>IES</u>
C	4000 1111/411	80CRI, 3000K	4040	39	104	83	10	33% Up / 67% Down	Normal spaces	N/A	PDF	<u>IES</u>
Spacing		90CRI, 3500K	4070	45	90	94	71	34% Up / 66% Down	Normal spaces	N/A	PDF	<u>IES</u>
Criteria:		80CRI, 4000K	3314	30	112	81	6	40% Up / 60% Down	Normal spaces	N/A	PDF	<u>IES</u>
1.66/1.34	3500 lm/4ft	80CRI, 3500K	3227	30	109	82	12	40% Up / 60% Down	Normal spaces	N/A	PDF	<u>IES</u>
	3300 111/411	80CRI, 3000K	3174	30	108	83	10	40% Up / 60% Down	Normal spaces	N/A	PDF	<u>IES</u>
		90CRI, 3500K	3220	35	91	94	71	38% Up / 62% Down	Normal spaces	N/A	<u>PDF</u>	<u>IES</u>

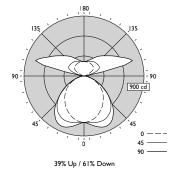
Symmetric MesoOptics Lens - QQ

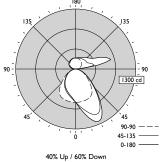
Asymmetric MesoOptics Lens - WW



Flush Silk Lens - LQ

Candela shown is for 3500 lm/4ft, 3500K, 80 CRI configuration.





*DLC is only available with Advance 0-10V (1% dim) drivers. Battery Packs and 2ft modules are also not available on DLC. $TruGroove_Suspended_SpecSheet \quad 06/19 \quad page \ 8 \ of \ 11$

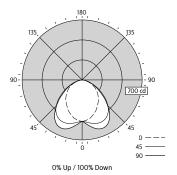
Tru¹Groove linear suspended

Photometrics

Direct Distribution (2901) (Click "PDF" or "IES" text to download)

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	PDF File	IES File
		80CRI, 2700K	3191	32.4	98.5	82	8	0% Up / 100% Down	N/A		
		80CRI, 3000K	3192	31.9	100.1	84	14	0% Up / 100% Down	N/A		
	3000 lm/4ft	80CRI, 3500K	3193	31.1	102.6	86	23	0% Up / 100% Down	N/A	PDF	IES
	3000 (111/4)(80CRI, 4000K	3194	30.5	104.8	87	28	0% Up / 100% Down	N/A	PDF	<u>IES</u>
		80CRI, 5000K	3195	29.6	108.1	87	26	0% Up / 100% Down	N/A		
Symmetric		80CRI, 6500K	3197	28.4	112.6	84	13	0% Up / 100% Down	N/A		
MesoOptics		80CRI, 2700K	2304	22.7	101.5	83	9	0% Up / 100% Down	Normal spaces		
Lens - QN		80CRI, 3000K	2304	22.4	102.7	84	16	0% Up / 100% Down	Normal spaces		
	2200 lm/4ft	80CRI, 3500K	2304	22.1	104.5	86	24	0% Up / 100% Down	Normal spaces	PDF	IES
	2200 1111/411	80CRI, 4000K	2304	21.7	106	87	28	0% Up / 100% Down	Normal spaces	PDF	<u>IE3</u>
Spacing		80CRI, 5000K	2303	21.3	108.3	87	27	0% Up / 100% Down	Normal spaces		
Criteria:		80CRI, 6500K	2303	20.7	111.4	84	12	0% Up / 100% Down	Normal spaces		
1.15/1.63		80CRI, 2700K	1522	14.5	104.9	83	10	0% Up / 100% Down	Normal spaces		
		80CRI, 3000K	1522	14.4	105.7	85	17	0% Up / 100% Down	Normal spaces		
	1500 lm/4ft 8	80CRI, 3500K	1521	14.2	106.8	87	25	0% Up / 100% Down	Normal spaces	DDE	IEC
		80CRI, 4000K	1521	14.1	107.8	87	29	0% Up / 100% Down	Normal spaces	<u>PDF</u>	<u>IES</u>
		80CRI, 5000K	1520	13.9	109.3	87	28	0% Up / 100% Down	Normal spaces		
		80CRI, 6500K	1519	13.7	111.3	84	11	0% Up / 100% Down	Normal spaces		

Symmetric MesoOptics Lens - QN



Candela shown is for 1500 lm/4ft, 3500K, 80 CRI configuration.

Tru¹Groove linear suspended

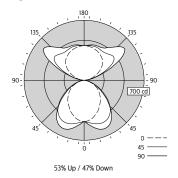
Photometrics

Indirect/Direct Distribution (2905)

(Click "PDF" or "IES" text to download)

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	PDF File	IES File
		80CRI, 2700K	4892	44.0	111.1	83	9	53% Up / 47% Down	Normal spaces		
		80CRI, 3000K	4894	43.3	113.0	84	16	53% Up / 47% Down	Normal spaces		
	5200 lm/4ft	80CRI, 3500K	4898	42.3	115.8	86	24	53% Up / 47% Down	Normal spaces	PDF	IES
Symmetric	5200 1111/411	80CRI, 4000K	4901	41.4	118.3	87	28	53% Up / 47% Down	Normal spaces	PUF	IES
MesoOptics		80CRI, 5000K	4905	40.2	122.2	87	27	53% Up / 47% Down	Normal spaces		
Lens +		80CRI, 6500K	4911	38.6	127.3	84	12	53% Up / 47% Down	Normal spaces		
Symmetric		80CRI, 2700K	4440	40.7	109.1	83	9	66% Up / 34% Down	Normal spaces		
Performance		80CRI, 3000K	4442	40.3	110.3	84	16	66% Up / 34% Down	Normal spaces		
Lens - QQ	4600 lm/4ft	80CRI, 3500K	4444	39.6	112.2	86	24	66% Up / 34% Down	Normal spaces	PDF	IES
Lelis - QQ	4000 1111/411	80CRI, 4000K	4446	39	113.9	87	28	66% Up / 34% Down	Normal spaces	PDF	IE3
		80CRI, 5000K	4449	38.2	116.3	87	27	66% Up / 34% Down	Normal spaces		
Charing		80CRI, 6500K	4452	37.2	119.6	84	12	66% Up / 34% Down	Normal spaces		
Spacing Criteria:		80CRI, 2700K	3232	27.9	115.7	83	9	53% Up / 47% Down	Normal spaces		
		80CRI, 3000K	3234	27.6	117.0	84	16	53% Up / 47% Down	Normal spaces		
1.14/1.62	3500 lm/4ft	80CRI, 3500K	3236	27.2	119.0	86	24	53% Up / 47% Down	Normal spaces	DDE	IES
	3300 111/411	80CRI, 4000K	3238	26.8	120.6	87	28	53% Up / 47% Down	Normal spaces	S PDF	<u>1E3</u>
		80CRI, 5000K	3241	26.3	123.1	87	27	53% Up / 47% Down	Normal spaces		
		80CRI, 6500K	3244	25.7	126.4	84	12	53% Up / 47% Down	Normal spaces		

Symmetric MesoOptics Lens + Symmetric Performance Lens - QQ



Candela shown is for 3500 lm/4ft, 3500K, 80 CRI configuration.

Tru¹Groove linear suspended

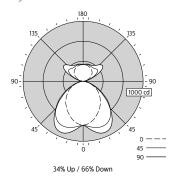
Photometrics

Indirect/Direct Distribution (2906)

(Click "PDF" or "IES" text to download)

Optics	Lumen Package	Nominal CRI & CCT	Flux (lm)	Watts (W)	Efficacy (LPW)	CRI	R9	Distribution	RP-1 VDT	PDF File	IES File
Symmetric MesoOptics	3500 lm/4ft	80CRI, 2700K	3492	32.9	106.0	82	8	34% Up / 66% Down	Normal spaces	PDF	
Lens + Symmetric Performance Lens - QQ Spacing Criteria: 1.14/1.62		80CRI, 3000K	3490	32.6	107.0	84	14	34% Up / 66% Down			
		80CRI, 3500K	3486	32.2	108.4	86	23	34% Up / 66% Down			<u>IES</u>
		80CRI, 4000K	3483	31.8	109.6	87	28	34% Up / 66% Down	Normal spaces		
		80CRI, 5000K	3479	31.2	111.5	87	26	34% Up / 66% Down			
		80CRI, 6500K	3473	30.5	113.9	84	13	34% Up / 66% Down			

Symmetric MesoOptics Lens + Symmetric Performance Lens - QQ



Candela shown is for 3500 lm/4ft, 3500K, 80 CRI configuration.

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by (s) ignify

Wall Mount

PureForm





Gardco PureForm LED wall sconce PWS with precision optics offers a sleek, low profile design that will complement a range of architectural styles. PureForm wall sconce provides up to 21,800 lumens to accommodate multiple mounting heights, and is available with Type 2, 3, 4, as well as our back light control optics. A full range of control options is available for additional energy savings. Optional emergency battery backup option is available for path-of-egress and is integral to the luminaire.

Project:	
ocation:	
Cat.No:	
ype:	
amps:	Qty:
lotes:	

Ordering guide

example: PWS-48L-500-NW-G2-2-UNV-DGY

	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options Dimming controls	Motion-sensing lens	Photo-sensing	Electri	ical	Finish	
Pure- Form wall sconce	48L 48 LEDs 64L 64 LEDs	300 300 mA ¹ 400 400 mA 500 500 mA 600 600 mA 700 mA 600 600 mA 700 mA 800 800 mA 900 900 mA	WW-G2 Warm White 3000K, 70 CRI Generation 2 NW-G2 Neutral White 4000K, 70 CRI Generation 2 CW-G2 Cool White 5000K, 70 CRI Generation 2 WY-G2 Warm Yellow 2700K, 80 CRI Generation 2 2 BW-G2 Balanced White 3500K, 80 CRI Generation 2 2 AM-G2 Direct Amber (590nm) Generation 2 2.13	2 Type 2 3 Type 3 4 Type 4 BLC Back light control	EBPC Emergency Battery Pack Cold Weather 1,3,10 Leave blank to omit an emergency option	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DCC Dual Circuit Control 4.5.6.9 FAWS Field Adjustable Wattage	IMRI2 ¹⁶ Integral with #2 Iens IMRI3 ¹⁶ Integral with #3 Iens	PCB Photocontrol Button ^{7,8,12}	F2 F3 Surge F (10kA is	Single (120, 277, 347VAC)® Double (208, 240, 480VAC)® Canadian Double Pull (208, 240, 480VAC)® Protection standard) Increased 20kA	MGY	Black White Bronze Dark Gray Medium Gray

- Only 300mA can be used with battery backup (EBPC) configuration.
- Extended lead times apply. Contact factory for details.
- 3. Available only in 120 or 277V.
- 4. Not available with other dimming control options.
- $5. \ \ Not available with motion sensor.$
- 6. Not available with photocontrol.
- 7. Not available in 347 or 480V.
- 8. Must specify input voltage.
- 9. Available with two modules per circuit (64L) at 600mA.
- 10. Not available with DCC, SW, and CS/CM/CE/DA.
- 11. Not available in 800 or 900mA.

- 12. Not available with 64L.
- 13. Limited to max. 600mA configurations
- 14. Must specify a motion sensor lens.
- Not available with DD, DCC, and FAWS dimming control options.

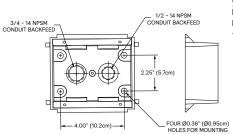






Luminaire Accessories (order separately)

Mounting Accessories Wall Mount PWS-WS-G2 Wall Mounted Box for Surface Conduit Painted



Black

System accessories

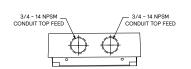
Wireless system remote mount module

LLCR2-(F) #2 lens - specify finish in place of (F) LLCR3-(F) #3 lens - specify finish in place of (F)

Central Remote Motion Response

(used connected to SiteWise main panel)

MS2-A-FVR-3 MS2-A-FVR-7

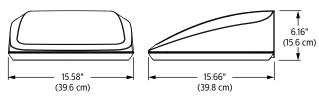


Wireless system remote controller accessory

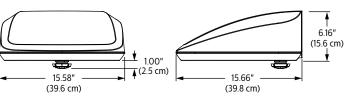
Wireless system offers a remote radio/sensor module that allows connection to a Limelight system (sold by others). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers.

Dimensions

Standard Luminaire

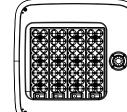


Motion Response and Wireless System









3 modules



Luminaire Weights

wall mount

LED Wattage and Lumen Values - 3000K

		LED		Average		Type 2		Type 3				Type 4		BLC			
Ordering Code	LED Qty	Current (mA)	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)										
PWS-48L-300-WW-G2-x	48	300	3000	47	5755	B2-U0-G1	123	5667	B1-U0-G2	121	5744	B1-U0-G2	123	4406	B0-U0-G1	94	
PWS-48L-400-WW-G2-x	48	400	3000	61	7469	B2-U0-G2	122	7357	B1-U0-G2	120	7455	B1-U0-G2	122	5720	B0-U0-G2	93	
PWS-48L-500-WW-G2-x	48	500	3000	76	9072	B2-U0-G2	120	8935	B2-U0-G2	118	9056	B2-U0-G2	119	6947	B0-U0-G2	92	
PWS-48L-600-WW-G2-x	48	600	3000	91	10657	B2-U0-G2	117	10496	B2-U0-G2	115	10637	B2-U0-G2	117	8160	B1-U0-G2	90	
PWS-48L-700-WW-G2-x	48	700	3000	105	12339	B3-U0-G2	118	12154	B2-U0-G2	116	12317	B2-U0-G2	117	9449	B1-U0-G2	90	
PWS-64L-600-WW-G2-x	64	600	3000	118	14257	B3-U0-G2	121	14043	B2-U0-G3	120	14231	B2-U0-G3	121	10918	B1-U0-G2	93	
PWS-64L-700-WW-G2-x	64	700	3000	137	16076	B3-U0-G3	117	15834	B2-U0-G3	115	16046	B2-U0-G3	117	12311	B1-U0-G2	90	
PWS-64L-800-WW-G2-x	64	800	3000	158	17922	B3-U0-G3	113	17653	B3-U0-G3	112	17889	B3-U0-G3	113	13724	B1-U0-G3	87	
PWS-64L-900-WW-G2-x	64	900	3000	179	19692	B3-U0-G3	110	19396	B3-U0-G3	108	19656	B3-U0-G4	110	15080	B1-U0-G3	84	

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and Lumen Values - 4000K

		LED		Average		Type 2		Type 3				Type 4			BLC	
Ordering Code	LED Qty		Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)									
PWS-48L-300-NW-G2-x	48	300	4000	47	6394	B2-U0-G1	137	6298	B1-U0-G2	135	6386	B1-U0-G2	136	4899	B0-U0-G1	105
PWS-48L-400-NW-G2-x	48	400	4000	61	8299	B2-U0-G2	135	8175	B1-U0-G2	133	8290	B1-U0-G2	135	6360	B0-U0-G2	104
PWS-48L-500-NW-G2-x	48	500	4000	76	10080	B2-U0-G2	133	9929	B2-U0-G2	131	10072	B2-U0-G2	133	7727	B0-U0-G2	102
PWS-48L-600-NW-G2-x	48	600	4000	91	11841	B3-U0-G2	130	11664	B2-U0-G2	128	11833	B2-U0-G2	130	9078	B1-U0-G2	100
PWS-48L-700-NW-G2-x	48	700	4000	105	13710	B3-U0-G2	131	13505	B2-U0-G2	129	13702	B2-U0-G3	130	10512	B1-U0-G2	100
PWS-64L-600-NW-G2-x	64	600	4000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15814	B2-U0-G3	135	12132	B1-U0-G2	103
PWS-64L-700-NW-G2-x	64	700	4000	137	17862	B3-U0-G3	130	17594	B3-U0-G3	128	17830	B3-U0-G3	130	13679	B1-U0-G2	100
PWS-64L-800-NW-G2-x	64	800	4000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19878	B3-U0-G4	126	15250	B1-U0-G3	97
PWS-64L-900-NW-G2-x	64	900	4000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21839	B3-U0-G4	122	16756	B1-U0-G3	94

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and Lumen Values - 5000K

		LED		Average		Type 2			Type 3			Type 4		BLC			
Ordering Code	LED Qty		Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)										
PWS-48L-300-CW-G2-x	48	300	5000	47	6394	B2-U0-G1	137	6297	B1-U0-G2	135	6382	B1-U0-G2	136	4896	B0-U0-G2	105	
PWS-48L-400-CW-G2-x	48	400	5000	61	8299	B2-U0-G2	135	8174	B2-U0-G2	133	8283	B2-U0-G2	135	6355	B0-U0-G2	104	
PWS-48L-500-CW-G2-x	48	500	5000	76	10080	B2-U0-G2	133	9928	B2-U0-G2	131	10062	B2-U0-G2	133	7719	B1-U0-G2	102	
PWS-48L-600-CW-G2-x	48	600	5000	91	11841	B3-U0-G2	130	11662	B2-U0-G2	128	11819	B2-U0-G2	130	9067	B1-U0-G2	100	
PWS-48L-700-CW-G2-x	48	700	5000	105	13710	B3-U0-G2	131	13504	B2-U0-G2	129	13685	B2-U0-G3	130	10499	B1-U0-G2	100	
PWS-64L-600-CW-G2-x	64	600	5000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15812	B2-U0-G3	135	12131	B1-U0-G2	103	
PWS-64L-700-CW-G2-x	64	700	5000	137	17862	B3-U0-G3	130	17593	B3-U0-G3	128	17829	B3-U0-G3	130	13679	B1-U0-G3	100	
PWS-64L-800-CW-G2-x	64	800	5000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19877	B3-U0-G4	126	15249	B1-U0-G3	97	
PWS-64L-900-CW-G2-x	64	900	5000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21840	B3-U0-G4	122	16756	B1-U0-G3	94	

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

wall mount

LED Wattage and Lumen Values (Emergency Mode)

			Lumen Outputs										
				Avg. Sys	stem Watts	Type 2		Type 3		Type 4		E	BLC
Ordering Code	LED Qtv	LED Current (mA)	Color Temp.		Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency
Ordering Code	LLD Gity	(IIIA)	Color reliip.	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode
PWS-48L-300-NW-G2-x-EBPC	48	300	4000	47	14	6394	2110	6297	2078	6382	2106	4896	1615

For emergency EBPC option, publish values are based on initial lumens.

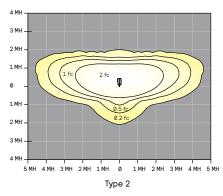
Predicted Lumen Depreciation Data

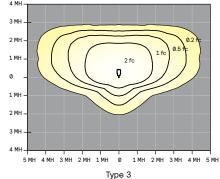
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

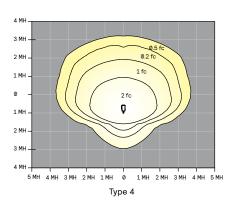
25°C	up to 900 mA	>100.000 hours	>54.000 hours	>96%
Ambient Temperature °C	Drive current	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs

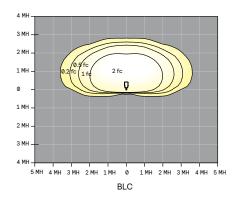
Optical Distributions

Based on 20' mounting height









wall mount

Specifications

Housing

Main body housing and door frame made of low copper die cast aluminum alloy for a high resistance to corrosion. Door hinges secured by aircraft cable to allow access to driver or other electronic components for servicing. The door frame acts as the main heat transfer component and it is optimized to allowing the main housing to have no fins, giving the freedom to have a clean minimalist aesthetic design while allowing it to house emergency battery backup equipment and various other options. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 3 and 4 modules or 48 and 64 LEDs. Module is RoHS compliant. Standard color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K, 3500K, and Direct Amber with extended lead times. Direct Amber LED is narrow spectrum with dominant wavelength at 596 nm (peak wavelength at 601 nm). Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 137 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, and 4 distributions available, including a dedicated BLC optic to provide the best backlight control possible to reduce light on the wall. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (UO per IESNA TM-15).

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Luminaire ships fully assembled, ready to install.

Control options

0–10V dimming (DD): Access to 0–10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of 2 modules each at 800mA (64L models), controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

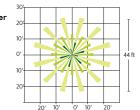
- CS50/CS30: Security for 7 hours night duration (Ex., 11 PM 6 AM)
- CM50/CM30: Median for 8 hours night duration (Ex., 10 PM 6 AM)
- CE50/CE30: Economy for 9 hours night duration (Ex., 9 PM 6 AM)
- CA50/CA30: for all night (during all dark hours)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1, 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

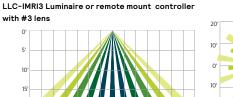
Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Emergency battery pack is used with 48L configuration in 300mA wired in parallel, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #2 lens (LLC-IMRI2) for 8' to 15' mounting height" or #3 lens (LLC-IMRI3) for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

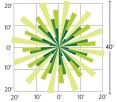
LLC-IMRI2 Luminaire or remote mount controller with #2 lens







12' 15' 18' 20'



wall mount

Specifications (cont'd)

Motion response options

Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

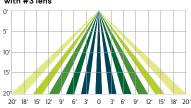
Infrared Motion Response with Other Controls (SW-IMRI3): When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be reprogrammed via the controller.

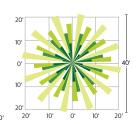
Infrared Motion Response Lenses (IMRI2/IMRI3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 (IMRI2) is designed for lower mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

IMRI2 Luminaire or remote mount controller with #2 lens



IMRI3 Luminaire or remote mount controller with #3 lens





Electrical

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208–277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Listings

UL/cUL listed to the UL 1598 standard, suitable for wet locations when mounted downward facing. Also listed for damp locations when inverted upward facing when mounted in covered ceiling application. Suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most PureForm PWS configurations are qualified under Premium DesignLights Consortium® category. Consult DLC Qualified Products list for more details. CCTs 3000K and warmer are IDA Dark Sky Approved..

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

44 ft

PureForm luminaires feature a 5-year limited warranty.

See signify.com/warranties for complete details and exclusions.





by (s) ignify

Wall Mount

PureForm

LED wall sconce



Gardco PureForm LED wall sconce PWS with precision optics offers a sleek, low profile design that will complement a range of architectural styles. PureForm wall sconce provides up to 21,800 lumens to accommodate multiple mounting heights, and is available with Type 2, 3, 4, as well as our back light control optics. A full range of control options is available for additional energy savings. Optional emergency battery backup option is available for path-of-egress and is integral to the luminaire.

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

Ordering guide

example: PWS-48L-500-NW-G2-2-UNV-DGY

								•					
Prefix PWS	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options Dimming controls	Motion-sensing lens	Photo-sensing	Electric	cal	Finish	5
PWS Pure- Form wall sconce	48L 48 LEDs 64L 64 LEDs	300 300 mA ¹ 400 400 mA 500 500 mA 600 mA 700 mA 600 600 mA 700 mA 800 mA 900 mA	WW-G2 Warm White 3000K, 70 CRI Generation 2 NW-G2 Neutral White 4000K, 70 CRI Generation 2 CW-G2 Cool White 5000K, 70 CRI Generation 2 WY-G2 Warm Yellow 2700K, 80 CRI Generation 2 2 BW-G2 Balanced White 3500K, 80 CRI Generation 2 2 AM-G2 Direct Amber (590nm) Generation 2 2-13 Generation 2 (590nm) Generation 2 (590nm)	2 Type 2 3 Type 3 4 Type 4 BLC Back light control	EBPC Emergency Battery Pack Cold Weather 1.3.00 Leave blank to omit an emergency option	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DD 0-10V External dimming (controls by others) ⁴ DCC Dual Circuit Control ^{4,5,6,9} FAWS Field Adjustable Wattage Selector ^{4,5} SW Interface Module for SiteWise ^{3,4,6} LLC Integral wireless module ^{4,6,7,11,1} BL Bi-level functionality ^{4,14} DynaDimmer: Automatic Profile Dimming ^{4,7} CS50 Security 50% Dimming, 7 hours CM50 Median 50% Dimming, 8 hours CE50 Economy 50% Dimming CS50 Security 30% Dimming DA50 All Night 50% Dimming, 8 hours CM50 Median 30% Dimming, 9 hours DA50 All Night 30% Dimming		PCB Photocontrol Button ^{7,8,12}	F2 [() () () () () () () () () (Double (208, 240, 480VAC) ⁸ Canadian Double Pull (208, 240, 480VAC) ⁸		Black White Bronze Dark Gray Medium Gray mer specified Specify optional color or RAL (ex: RAL7024) Custom color (Must supply color required factory quote)

- 1. Only 300mA can be used with battery backup (EBPC) configuration.
- $2. \ \, {\sf Extended \, lead \, times \, apply. \, Contact \, factory \, for}$ details.
- 3. Available only in 120 or 277V.
- 4. Not available with other dimming control options.
- 5. Not available with motion sensor.
- 6. Not available with photocontrol.
- 7. Not available in 347 or 480V. 8. Must specify input voltage.
- 9. Available with two modules per circuit (64L) at 600mA.
- 10. Not available with DCC, SW, and CS/CM/CE/DA.
- 11. Not available in 800 or 900mA.

- 12. Not available with 64L.
- 13. Limited to max. 600mA configurations
- 14. Must specify a motion sensor lens.
- 15. Not available with DD, DCC, and FAWS dimming control options.



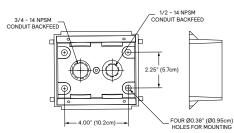




wall mount

Luminaire Accessories (order separately)

Mounting Accessories Wall Mount PWS-WS-G2 Wall Mounted Box for Surface Conduit Painted Black



System accessories

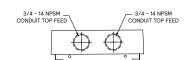
Wireless system remote mount module

LLCR2-(F) #2 lens - specify finish in place of (F) LLCR3-(F) #3 lens - specify finish in place of (F)

Central Remote Motion Response

(used connected to SiteWise main panel)

MS2-A-FVR-3 MS2-A-FVR-7

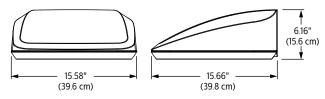


Wireless system remote controller accessory

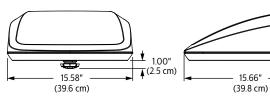
Wireless system offers a remote radio/sensor module that allows connection to a Limelight system (sold by others). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers.

Dimensions

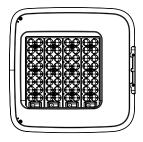
Standard Luminaire



Motion Response and Wireless System









6.16"

(15.6 cm)

3 modules



Luminaire	Weights
-----------	---------

PureForm LED wall sconce PWS	Weight
Luminaire	24 lbs
Luminaire - EBPC (EM battery pack)	27 lbs

wall mount

LED Wattage and Lumen Values - 3000K

		LED		Average		Type 2		Type 3				Type 4		BLC			
Ordering Code	LED Qty		Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)										
PWS-48L-300-WW-G2-x	48	300	3000	47	5755	B2-U0-G1	123	5667	B1-U0-G2	121	5744	B1-U0-G2	123	4406	B0-U0-G1	94	
PWS-48L-400-WW-G2-x	48	400	3000	61	7469	B2-U0-G2	122	7357	B1-U0-G2	120	7455	B1-U0-G2	122	5720	B0-U0-G2	93	
PWS-48L-500-WW-G2-x	48	500	3000	76	9072	B2-U0-G2	120	8935	B2-U0-G2	118	9056	B2-U0-G2	119	6947	B0-U0-G2	92	
PWS-48L-600-WW-G2-x	48	600	3000	91	10657	B2-U0-G2	117	10496	B2-U0-G2	115	10637	B2-U0-G2	117	8160	B1-U0-G2	90	
PWS-48L-700-WW-G2-x	48	700	3000	105	12339	B3-U0-G2	118	12154	B2-U0-G2	116	12317	B2-U0-G2	117	9449	B1-U0-G2	90	
PWS-64L-600-WW-G2-x	64	600	3000	118	14257	B3-U0-G2	121	14043	B2-U0-G3	120	14231	B2-U0-G3	121	10918	B1-U0-G2	93	
PWS-64L-700-WW-G2-x	64	700	3000	137	16076	B3-U0-G3	117	15834	B2-U0-G3	115	16046	B2-U0-G3	117	12311	B1-U0-G2	90	
PWS-64L-800-WW-G2-x	64	800	3000	158	17922	B3-U0-G3	113	17653	B3-U0-G3	112	17889	B3-U0-G3	113	13724	B1-U0-G3	87	
PWS-64L-900-WW-G2-x	64	900	3000	179	19692	B3-U0-G3	110	19396	B3-U0-G3	108	19656	B3-U0-G4	110	15080	B1-U0-G3	84	

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and Lumen Values - 4000K

		LED		Average		Type 2		Туре 3				Type 4			BLC	
Ordering Code	LED Qty		Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)									
PWS-48L-300-NW-G2-x	48	300	4000	47	6394	B2-U0-G1	137	6298	B1-U0-G2	135	6386	B1-U0-G2	136	4899	B0-U0-G1	105
PWS-48L-400-NW-G2-x	48	400	4000	61	8299	B2-U0-G2	135	8175	B1-U0-G2	133	8290	B1-U0-G2	135	6360	B0-U0-G2	104
PWS-48L-500-NW-G2-x	48	500	4000	76	10080	B2-U0-G2	133	9929	B2-U0-G2	131	10072	B2-U0-G2	133	7727	B0-U0-G2	102
PWS-48L-600-NW-G2-x	48	600	4000	91	11841	B3-U0-G2	130	11664	B2-U0-G2	128	11833	B2-U0-G2	130	9078	B1-U0-G2	100
PWS-48L-700-NW-G2-x	48	700	4000	105	13710	B3-U0-G2	131	13505	B2-U0-G2	129	13702	B2-U0-G3	130	10512	B1-U0-G2	100
PWS-64L-600-NW-G2-x	64	600	4000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15814	B2-U0-G3	135	12132	B1-U0-G2	103
PWS-64L-700-NW-G2-x	64	700	4000	137	17862	B3-U0-G3	130	17594	B3-U0-G3	128	17830	B3-U0-G3	130	13679	B1-U0-G2	100
PWS-64L-800-NW-G2-x	64	800	4000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19878	B3-U0-G4	126	15250	B1-U0-G3	97
PWS-64L-900-NW-G2-x	64	900	4000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21839	B3-U0-G4	122	16756	B1-U0-G3	94

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and Lumen Values - 5000K

		LED		Average	Type 2 Type 3				Type 4		BLC					
Ordering Code	LED Qty		Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)									
PWS-48L-300-CW-G2-x	48	300	5000	47	6394	B2-U0-G1	137	6297	B1-U0-G2	135	6382	B1-U0-G2	136	4896	B0-U0-G2	105
PWS-48L-400-CW-G2-x	48	400	5000	61	8299	B2-U0-G2	135	8174	B2-U0-G2	133	8283	B2-U0-G2	135	6355	B0-U0-G2	104
PWS-48L-500-CW-G2-x	48	500	5000	76	10080	B2-U0-G2	133	9928	B2-U0-G2	131	10062	B2-U0-G2	133	7719	B1-U0-G2	102
PWS-48L-600-CW-G2-x	48	600	5000	91	11841	B3-U0-G2	130	11662	B2-U0-G2	128	11819	B2-U0-G2	130	9067	B1-U0-G2	100
PWS-48L-700-CW-G2-x	48	700	5000	105	13710	B3-U0-G2	131	13504	B2-U0-G2	129	13685	B2-U0-G3	130	10499	B1-U0-G2	100
PWS-64L-600-CW-G2-x	64	600	5000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15812	B2-U0-G3	135	12131	B1-U0-G2	103
PWS-64L-700-CW-G2-x	64	700	5000	137	17862	B3-U0-G3	130	17593	B3-U0-G3	128	17829	B3-U0-G3	130	13679	B1-U0-G3	100
PWS-64L-800-CW-G2-x	64	800	5000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19877	B3-U0-G4	126	15249	B1-U0-G3	97
PWS-64L-900-CW-G2-x	64	900	5000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21840	B3-U0-G4	122	16756	B1-U0-G3	94

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

wall mount

LED Wattage and Lumen Values (Emergency Mode)

									Lumen Outputs								
				Avg. Sys	stem Watts	Ту	rpe 2	Ту	/pe 3	Ту	/pe 4	E	BLC				
		LED Current		Normal	Emergency	Normal	Emergency	Normal	Emergency	Normal	Emergency	Normal	Emergency				
Ordering Code	LED Qty	(mA)	Color Temp.	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode	Mode				
PWS-48L-300-NW-G2-x-EBPC	48	300	4000	47	14	6394	2110	6297	2078	6382	2106	4896	1615				

For emergency EBPC option, publish values are based on initial lumens.

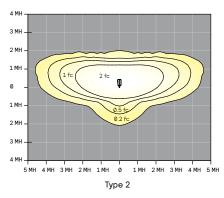
Predicted Lumen Depreciation Data

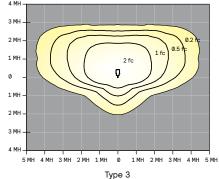
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

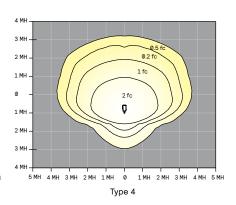
25°C	up to 900 mA	>100,000 hours	>54,000 hours	>96%
Ambient Temperature °C	Drive current	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs

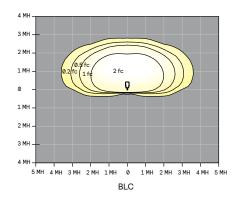
Optical Distributions

Based on 20' mounting height









wall mount

Specifications

Housing

Main body housing and door frame made of low copper die cast aluminum alloy for a high resistance to corrosion. Door hinges secured by aircraft cable to allow access to driver or other electronic components for servicing. The door frame acts as the main heat transfer component and it is optimized to allowing the main housing to have no fins, giving the freedom to have a clean minimalist aesthetic design while allowing it to house emergency battery backup equipment and various other options. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 3 and 4 modules or 48 and 64 LEDs. Module is RoHS compliant. Standard color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K, 3500K, and Direct Amber with extended lead times. Direct Amber LED is narrow spectrum with dominant wavelength at 596 nm (peak wavelength at 601 nm). Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 137 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, and 4 distributions available, including a dedicated BLC optic to provide the best backlight control possible to reduce light on the wall. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (UO per IESNA TM-15).

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Luminaire ships fully assembled, ready to install.

Control options

0–10V dimming (DD): Access to 0–10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of 2 modules each at 800mA (64L models), controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

- CS50/CS30: Security for 7 hours night duration (Ex., 11 PM 6 AM)
- CM50/CM30: Median for 8 hours night duration (Ex., 10 PM 6 AM)
- CE50/CE30: Economy for 9 hours night duration (Ex., 9 PM 6 AM)
- CA50/CA30: for all night (during all dark hours)

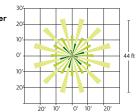
All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1, 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Emergency battery pack is used with 48L configuration in 300mA wired in parallel, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

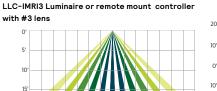
Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #2 lens (LLC-IMRI2) for 8' to 15' mounting height" or #3 lens (LLC-IMRI3) for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

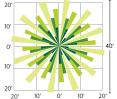
12' 15' 18' 20'

LLC-IMRI2 Luminaire or remote mount controller with #2 lens









wall mount

Specifications (cont'd)

Motion response options

Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

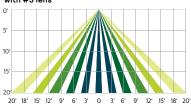
Infrared Motion Response with Other Controls (SW-IMRI3): When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be reprogrammed via the controller.

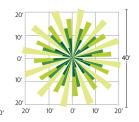
Infrared Motion Response Lenses (IMRI2/IMRI3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 (IMRI2) is designed for lower mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

IMRI2 Luminaire or remote mount controller with #2 lens



IMRI3 Luminaire or remote mount controller with #3 lens





Electrical

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208–277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Listings

UL/cUL listed to the UL 1598 standard, suitable for wet locations when mounted downward facing. Also listed for damp locations when inverted upward facing when mounted in covered ceiling application. Suitable for use in ambient temperatures from -40° to 40° C (-40° to 104°F). Most PureForm PWS configurations are qualified under Premium DesignLights Consortium® category. Consult DLC Qualified Products list for more details. CCTs 3000K and warmer are IDA Dark Sky Approved..

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

44 ft

PureForm luminaires feature a 5-year limited warranty.

See signify.com/warranties for complete details and exclusions.





by (s) ignify

Site & Area

PureForm

PPT post top
with comfort optics





Gardco PureForm LED post top features a sleek, low profile design. Comfort optics are designed to enhance visual comfort by reducing glare. Type 1, 2, 3, and 5 optical distributions are available with lumen output up to 9000 lumens. A full range of control options provides additional energy savings. Optional integral emergency battery backup is available for path-of-egress illumination.

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
N-+	

Ordering guide

example: PPT-140L-450-NW-G2-T3-1-UNV-DGY

Prefix PPT		Numb	er of LEDs	Drive	Current	LED Colo	r - Gener	ration	Мо	unting		Distribution	Emergene	су		Voltage	
1 1	t top,	140L	140 LEDs	450 650	450 mA 650 mA	WW-G2		Vhite 3000K Generation 2	Т3	Mounts to a 3" x Tenon (standard		1 Comfort Type 1 2 Comfort Type 2	Leave bla	ınk for ı tery	no	120 120V 208 208V	
com	fort optics			1150 1675 2100	1150 mA ¹ 1675 mA ¹ 2100 mA ¹²	NW-G2		White 4000 Generation 2	К, Т2	Tenon (must be		3 Comfort Type 3		tery pa	ack	240 240V 277 277V 347 347V	
						CW-G2		hite 5000K, Generation 2	_	ordered and ship a separate acces		5 Common Type 3	EBP Em	ergenc	her ^{2,4,5,6,7} :y ack ^{1,4,5,7}	480 480V UNV 120-2	77V (50/60Hz)
						WY-G2	Warm Yo 2700K, General	80 CRI					Dai	itery po	ick .	HVU 347-4 (50/6	
						BW-G2		ed White 350) Generation									
						AM-G2	Amber (Generation 2	3,12								
Options Dimming of	controls				Motion sensi	ng		Photo-sensir	ng		Electr	ical/Shield		Finish	1		
DD FAWS			mming (by oth Vattage Selec			egral with				ol Button ^{7,9}	Fusing	-		Textu			
SW LLC BL	Interface m Integral win Bi-level fur	odule f eless m nctiona	for SiteWise 4 nodule 4,6,7,14	6,8	#-	i teris "	-	TLRD7 Twis	t Lock f			Single (120, 277, 347VAC; Double (208, 240, 480V, Canadian Double Pull (208, 240, 480VAC) ⁹			Black White Bronze Dark Gra Medium	у	
CS50	Security 50)% Dim	ming, 7 hours								Surge	Protection (10kA standard	d)		mer spec		
CM50 CE50 DA50		0% Din	ning, 8 hours nming, 9 hour ming	S							SP2 EHS	Increased 20kA External house side shie	·	CC	Custom	RAL (ex: RAL color	•
CS30 CM30 CE30 DA30	Median 30	% Dimr 0% Din	ming, 7 hours ning, 8 hours nming, 9 hour ming									(factory installed)				pply color ch factory quot	

- 1. 1150, 1675, and 2100mA not available with emergency battery backup (EBP).
- 2. 2100mA not available with emergency battery backup cold weather (EBPC).
- 3. Extended lead times apply. Contact factory for details.
- 4. Not available with other control options.
- 5. Not available with motion sensor.

- $6. \ \ \, \text{Not available with photocontrol}.$
- 7. Not available in 347 or 480V.
- 8. Available only in 120 or 277V.
- 9. Must specify input voltage.
- Dimming will not be connected to NEMA receptacle if ordering with other control options.
- 11. Not available in 480V.
- 12. Not available in 2100mA.
- 13. Not available with DD and FAWS dimming control options.
- 14. Must specify a motion sensor lens.
- 15. Cannot be combined with HVU and BL-IMR13.









with comfort optics

PureForm Accessories (order separately)

PPT-T2

Post top tenon adapter for 2 3/8" x 4"

FSIR-100

BL Optional Remote Programming Tool

LED Wattage and Lumen Values - 3000K

		LED		Average		Type 1			Type 2			Type 3			Type 5		
	Total	Current	Color	System	Lumen	BUG	Efficacy										
Ordering Code	LEDs	(mA)	Temp.	Watts	Output	Rating	(LPW)										
PPT-140L-450-WW-G2-x-UNV	140	450	3000	22	1903	B1-U0-G1	85	1884	B1-U0-G1	84	2338	B1-U0-G1	105	2176	B1-U0-G1	98	
PPT-140L-650-WW-G2-x-UNV	140	650	3000	30	2545	B1-U0-G1	84	2519	B1-U0-G1	83	3126	B1-U0-G1	103	2910	B2-U0-G1	96	
PPT-140L-1150-WW-G2-x-UNV	140	1150	3000	52	4573	B2-U0-G2	88	4525	B2-U0-G2	87	5616	B2-U0-G2	108	5229	B3-U0-G2	100	
PPT-140L-1675-WW-G2-x-UNV	140	1675	3000	75	6348	B3-U0-G3	84	6282	B2-U0-G2	83	7796	B2-U0-G3	103	7258	B3-U0-G2	96	
PPT-140L-2100-WW-G2-x-UNV	140	2100	3000	96	7600	B3-U0-G3	79	7521	B3-U0-G3	78	8701	B3-U0-G3	91	8689	B3-U0-G2	91	

LED Wattage and Lumen Values - 4000K

		LED		Average		Type 1		Type 2			Type 3			Type 5		
	Total	Current	Color	System	Lumen	BUG	Efficacy									
Ordering Code	LEDs	(mA)	Temp.	Watts	Output	Rating	(LPW)									
PPT-140L-450-NW-G2-x-UNV	140	450	4000	22	1971	B1-U0-G1	88	1951	B1-U0-G1	87	2421	B1-U0-G1	109	2254	B1-U0-G1	101
PPT-140L-650-NW-G2-x-UNV	140	650	4000	30	2636	B1-U0-G1	87	2609	B1-U0-G1	86	3237	B1-U0-G1	106	3014	B2-U0-G1	99
PPT-140L-1150-NW-G2-x-UNV	140	1150	4000	52	4736	B2-U0-G2	91	4686	B2-U0-G2	90	5816	B2-U0-G2	111	5415	B3-U0-G2	104
PPT-140L-1675-NW-G2-x-UNV	140	1675	4000	75	6574	B3-U0-G3	87	6506	B2-U0-G2	86	8074	B2-U0-G3	106	7517	B3-U0-G2	99
PPT-140L-2100-NW-G2-x-UNV	140	2100	4000	96	7871	B3-U0-G3	82	7789	B3-U0-G3	81	9011	B3-U0-G3	94	8999	B3-U0-G2	94

LED Wattage and Lumen Values - 5000K

		LED		Average		Type 1			Type 2			Type 3			Type 5		
	Total	Current	Color	System	Lumen	BUG	Efficacy										
Ordering Code	LEDs	(mA)	Temp.	Watts	Output	Rating	(LPW)										
PPT-140L-450-CW-G2-x-UNV	140	450	5000	22	2050	B1-U0-G1	92	2029	B1-U0-G1	91	2518	B1-U0-G1	113	2344	B2-U0-G1	105	
PPT-140L-650-CW-G2-x-UNV	140	650	5000	30	2741	B1-U0-G1	90	2713	B1-U0-G1	89	3366	B1-U0-G2	111	3135	B2-U0-G1	103	
PPT-140L-1150-CW-G2-x-UNV	140	1150	5000	52	4925	B2-U0-G2	94	4873	B2-U0-G2	93	6049	B2-U0-G2	116	5632	B3-U0-G2	108	
PPT-140L-1675-CW-G2-x-UNV	140	1675	5000	75	6837	B3-U0-G3	90	6766	B3-U0-G3	89	8397	B3-U0-G3	111	7818	B3-U0-G2	103	
PPT-140L-2100-CW-G2-x-UNV	140	2100	5000	96	8186	B3-U0-G3	85	8101	B3-U0-G3	85	9372	B3-U0-G3	98	9359	B3-U0-G2	98	

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and lumen values (Emergency Mode) **Lumen Outputs** Avg. System Watts Type 1 Type 2 Type 5 LED Temp. Current Color Range Normal Emergency Normal Emergency Normal Emergency Normal Emergency Normal Emergency **Ordering Code LED Qty** (mA) Mode Temp. PPT-140L-450-NW-G2-x-EBP-UNV 140 4000 0 to 40 1971 1526 1951 2421 2254 1744 PPT-140L-650-NW-G2-x-EBP-UNV 4000 0 to 40 10 2636 1526 2609 1510 3237 3014 1744 PPT-140L-450-NW-G2-x-EBPC-UNV 140 450 4000 -20 to 40 18 1971 2178 1951 2155 2421 2493 2254 2490 PPT-140L-650-NW-G2-x-EBPC-UNV 140 650 4000 -20 to 40 30 18 2636 2178 2609 2155 3237 2493 3014 2490 PPT-140L-1150-NW-G2-x-EBPC-UNV 140 1150 4000 -20 to 40 18 4736 2178 4686 2155 5816 2493 5415 2490 PPT-140L-1675-NW-G2-x-EBPC-UNV 140 1675 4000 -20 to 40 6574 2178 6506 2155 8074 2493 2490

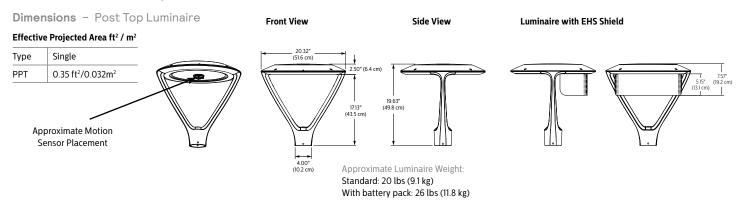
For emergency EBPC and EBP option, published values are based on initial lumens. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right$

Predicted Lumen Depreciation Data

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. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

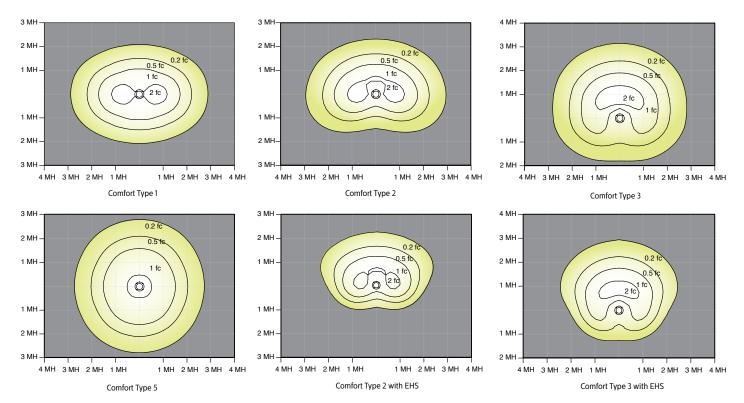
25°C	up to 2100mA	>100,000 hours	>60,000 hours	>84%
Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs

with comfort optics



Optical Distributions

Based on configuration PPT-140L-2100-NW-G2 (96W) mounted at 20ft.



Asymmetric Optical Orientation Information

Symbol to indicate the direction of the street side

Aimed Between The Yoke Supports

Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

Street Side
Curbline
House Side

with comfort optics

Specifications

Housing

Two-piece sealed enclosure with main part of the housing designed as the structural and heat sink frame, enclosed by cover to give its unique form. It also includes yoke arm with arm covers. All die-cast parts are made of low-copper, die-cast aluminum alloy for a high resistance to corrosion. The sleek profile with optimized surface area allows housing to provide excellent convection heat transfer with minimum use of heat fins, giving the freedom to have a clean minimalist aesthetic design. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2010. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Light engine

Light guide technology provides low-glare, uniform illumination. Composed of 140 LEDs strategically positioned on the edge of the optical plate. Light engine luminous opening size optimized to best achieve a balance between lumen output and optical performance with the need to provide visual comfort. Light engine frame ensures contact with housing to provide heat conduction and sealing against the elements. Light engine is RoHS compliant. Standard color temperatures: 3000K +/- 130K, 4000K+/- 130K, 5000K +/- 225K. Minimum CRI of 70. Also available in 2700K and Amber (Dominant wavelength 589nm, peak wavelength 633nm, and minimum wavelength 486nm) with extended lead times. Contact factory for details.

Energy saving benefits

System efficacy up to 111 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

The advanced LED comfort optical system provides Types 1, 2, 3, and 5. Composed of high performance UV-stabilized optical grade lens with molded micro-optics to achieve desired distribution optimized to get a exceptional lighting uniformity. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

PureForm Post Top mounts standard to a $3" \times 4"$ Tenon, but can also be mounted to a $2-3/8" \times 4"$ Tenon if a separate sleeve is ordered as an accessory.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through the yoke of the luminaire (for secondary dimming controls by others). Cannot be used with other control options.

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

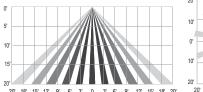
- CS50/CS30: Security for 7 hours night duration (Ex., 11 PM 6 AM)
- CM50/CM30: Median for 8 hours night duration (Ex., 10 PM 6 AM)
- CE50/CE30: Economy for 9 hours night duration (Ex., 9 PM 6 AM)
- CA50/CA30: for all night (during all dark hours)

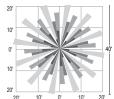
All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1, 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

Emergency Battery Backup (EBP/EBPC): Emergency battery packs included integral to the luminaire, allowing for a consistent look between emergency and non-emergency luminaires. EBP is suitable for use in ambient temperature conditions from 0°C (32°F) to 40°C (104°F) available on 450mA and 650mA only. EBPC cold weather rated down to -20°C (-4°F) available on all wattage except the 2100mA configuration. Both systems are designed to have a secondary driver with relay to immediately detect AC power loss to power luminaire for a minimum of 90 minutes from the time power is lost. Available with 120–277V, or 'UNV' only.

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens (LLC3-IMRI3) for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC-IMIR3 Luminaire with #3 lens





with comfort optics

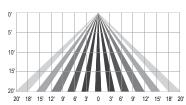
Motion response options

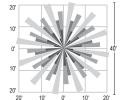
Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI3 is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls (SW-IMRI3): When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

Infrared Motion Response Lenses (IMRI3): Infrared Motion Response Integral module is available lens #3 (IMRI3), which is designed for mounting heights up to 20' with a 40' diameter coverage area. See chart for approximate detection patterns:

IMRI3 Luminaire with #3 lens





Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering Twist-lock receptacle (TLRD5 or TLRD7), photocell or shorting cap is not included.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208–277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most PureForm PPT comfort configurations are qualified under Standard DesignLights Consortium® category. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

PureForm luminaires feature a 5-year limited warranty.
See signify.com/warranties for complete details and exclusions.

 $The information\ presented\ in\ this\ document\ is\ not\ intended\ as\ any\ commercial\ offer\ and\ does\ not\ form\ part\ of\ any\ quotation\ or\ contract.$



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Signify North America Corporatior 200 Franklin Square Drive, Somerset, NJ 08873 Telephone 855–486–2216 signify Canada Ltd. 181 Hillmount Road, Markham, ON, Canada L6C 2S3 Jalenhone 800-668-9008

City of West Linn

PRE-APPLICATION CONFERENCE MEETING SUMMARY NOTES

September 5, 2019

SUBJECT: Robinwood Station Improvements

FILE: PA-19-20

ATTENDEES: Applicant: Ken Warner and Ken Worcester (West Linn Parks & Rec)

Dan Symons and Todd Iselin (Consultants

Public: Kevin Bryck (Friends of Robinwood Station)

Staff: Darren Wyss (Planning), Amy Pepper (Engineering)

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

Site Information

Site Address: 3706 Cedaroak Drive Tax Not No.: 2S 1E 24BB 2800 Site Area: 0.88 acres

Neighborhood: Robinwood Neighborhood Association

Comp. Plan: Low Density Residential

Zoning: R-10

Applicable code: CDC Chapter 11: Single-Family Residential Detached, R-10

CDC Chapter 46: Off-Street Parking, Loading and Reservoir Areas

CDC Chapter 48: Access, Egress and Circulation

CDC Chapter 54: Landscaping
CDC Chapter 55: Design Review
CDC Chapter 85: General Provisions
CDC Chapter 92: Required Improvements

Project Details

The applicant proposes to make aesthetic improvements to the exterior of the building. No increase in interior usable space is proposed. New parking areas and landscaping will be installed on the west side of the existing building to meet code provisions. New parking stalls and landscaping is proposed on the east side of the building and will utilize the existing driveway.

The existing garage in the rear of the property is non-conforming as it only has a 15-foot setback. No changes are proposed at this time, but any expansion of the structure would require a non-conforming structure permit.

Public Comments

N/A

Engineering Division Comments

Contact Amy Pepper at apepper@westlinnoregon.gov or 503-722-3437 for engineering requirements.

Tualatin Valley Fire & Rescue Comments

Contact Jason Arn at jason.arn@tvfr.com or 503-259-1510

Process

The proposal requires a Class I Design Review. The land use review is performed by the Planning Manager. No public hearing is required. For the proposal, address the submittal requirements and standards for decision-making in Community Development Code (CDC) Chapters 11, 46, 48, 54, 55, and 92. N/A is not an acceptable response to the approval criteria.

The property is comprised of three legal lots of record (Kenthorpe Tracts Plat). The three lots must be combined into one legal lot. A lot line adjustment application should be submitted to accomplish this requirement. Address the submittal requirements and standards for decision-making in Community Development Code (CDC) Chapter 85.200.

The submittal requirements may be waived under CDC 99.035.B, but the applicant must first identify the specific submittal requirement and request, in letter form, that it be waived by the Planning Manager and must identify the specific grounds for that waiver.

There is a fee of \$2,100 for the Class I Design Review. Lot Line Adjustment fee is \$1,000.

You may access the West Linn Community Development Code (CDC) online at http://westlinnoregon.gov/cdc.

A neighborhood meeting is required per CDC 99.038.

Once the application and fee is submitted, the City has 30 days to determine if the application is complete or not. If the application is not complete, the applicant has 180 days to make it complete or provide written notice to staff that no other information will be provided.

Once the submittal is deemed complete, staff will provide notice per CDC Chapter 99 and schedule a decision date. Appeals are heard by City Council.

Typical land use applications can take 6-10 months from beginning to end.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application *or provide any assurance of potential outcomes*. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. Pre-application notes are void after 18 months. After 18 months with no application approved or in process, a new pre-application conference is required. Any changes to the CDC standards may require a different design or submittal. Substantive changes to the design may require a new pre-application conference.

1307 Seventh Street Oregon City, OR 97045 p: 503-656-1942 f: 503-656-0658

Robinwood Neighborhood Association Attn: Dennis Pollman, President City of West Linn Neighborhood Presidents 22500 Salamo Rd. West Linn, OR 97068 February 20, 2020

Mr. Pollman,

We would like to make a presentation and get feedback from the neighborhood association regarding proposed renovation and improvements to Robinwood Station, located at 3706 Cedaroak Dr, West Linn.

If we can be included on the agenda for the next meeting in March, we would like to do so. If we are too late to be included on this evening, then we would like to do so at the next possible opportunity.

Please contact me by phone or email to confirm the availability.

Respectfully,

Todd L Iselin, Principal

FOBINIVOOD STATION

OREGON CITY 19300 MOLALLA AVE OREGON CITY, OR 97045-0821 406432-0108 (800)275-8777 02/21/2020 02:33 PM

Product Qty Unit Price

First-Class Mail® 1 \$0.55 \$0.55 Letter

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Certified (USPS Certified Mail #) (70191120000140805975)

Total: \$4.10

\$3.55

Credit Card Remitd \$4.10 (Card Name:VISA) (Account #:XXXXXXXXXXXXX7001) (Approval #:611223) (Transaction #:156) (AID:A0000000031010 Chip)

(AL:Visa Credit) (PIN:Not Required)

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ROBINWOOD NEIGHBORHOOD ASSOCIATION

Date 63.10.2020

News		Number of Attendees
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Sharon Pollman	3879 Kentherpe	on file
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Anthony M. Brans	2411 01 111	anthony in bracco of yohro, co
minonyagam	2116KOBMWOOD Way	anthony in state of
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ROBINWOOD NEIGHBORHOOD ASSOCIATION

Date 3-10-1020		Number of Attendees
Name (Please Print)	Address	F-Mail Address

Name (Please Print)	Address	E-Mail Address
Jim & Laine OTode	Robinwood way	on file c
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