Adam Ofstad

Pro Automotive Expansion

Type II Site Design Review Permit
Major Variances to Setback Requirements
Sign Review

Prepared by Lower Columbia Engineering
Submitted to Columbia County
Planning Department
September 2023

Table of Contents

List of Exhibits

Exhibit A: Plan Set (provided under separate cover)

1. Proposal Summary Information

Internal File No:	3090
Pre-Application No:	PRE 22-18
Applicant:	Pro-Automotive & Diesel Adam Ofstad 50038 Columbia River Hwy Scappoose, OR 97056 503-358-3717 aofstad@msn.com
Applicants Representative:	Matt Alexander Lower Columbia Engineering 58640 McNulty Way St. Helens, OR 97051 503-366-0399 matt@lowercolumbiaengr.com
Request:	Site Design Review Permit Major Variances (Setback Requirements) Sign Review
Location:	50088 Columbia River Hwy Scappoose, OR, 90756
Tax Lot ID:	3224-C0-04501
Zoning Designation:	Existing Commercial (EC)

2. Project Team

Owner/Developer
Pro-Automotive & Diesel
Adam Ofstad, Owner
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Land Use Planners
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Matt Alexander, Project Manager
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Land Surveyor
K.L.S Surveying INC.
Donald Wallace, Professional Land Surveyor
1224 Alder Street
Vernonia, OR 97064
(503) 429-6115

3. Project Narrative

Where
The subject property (tax lot 4501) is situated on the east side of Highway 30 just south of Scappoose and in Columbia County. It is located one lot north of the Columbia/Multnomah County line and is adjacent to the railroad right-of-way. The property is zoned Existing Commercial (EC).

Who
The land owner, Adam Ofstad, owns and runs Pro-Automotive & Diesel which is located on the adjacent lot to the south. Mr. Ofstad bought this property in order to build an additional repair facility that could supplement the existing repair shop and handle overflow. The existing building on the adjacent property was constructed in 2017 and the company has grown at a rapid pace. Mr. Ofstad has hired Lower Columbia Engineering to provide land use planning as well as civil and architectural design services. Matthew Alexander is the project manager for Lower Columbia Engineering and will be the primary point of contact.

What
The proposed use would be a new Pro-Automotive & Diesel auto repair shop to supplement the existing repair shop to the south. The existing Pro Automotive & Diesel is one of the only repair shops in Columbia County that provides dealer-level repairs on large, resource-based equipment and vehicles such as tractors, semis, and box trucks. There is a dearth of repair shops providing these services in the area and – as a result - the existing facility has been extremely busy since day one. Pro Automotive works on vehicles for resource-based organizations such as Means Nursery, Paulsen Logging, ODFW, ODF, Pihl Logging, Beickel Farms, and many more. Unfortunately, due to the limited capacity of the current building and the volume of interested customers, many resource-based businesses are forced to service or repair their vehicles in Portland or Longview and Pro Automotive has had to stage vehicles waiting to be serviced. The proposed building will have more than double the capacity of the existing facility and will be capable of servicing larger vehicles. This should alleviate the vehicle staging and reduce the time customers wait for their vehicles to be serviced.

The new building will be a Pre-Engineered Metal Building (PEMB) to match the existing facility and will have a split-faced CMU block base, metal panel siding, and a standing seam metal roof. This structure will be employee-only and all public relations will continue to take place in the existing Pro-Auto building. The proposed structure is 26,000 square feet total which includes 24,000 square feet of service area and 2,000 square feet of administrative space. A 20-foot-wide drive aisle is proposed through the center of the building for vehicle circulation and loading/unloading. This internal drive will align with the proposed and existing exterior drive aisles to facilitate circulation of customer vehicles from the existing Pro Auto property to the proposed expansion.

Site improvements include new off-street parking facilities, pedestrian circulation and access paths, stormwater infrastructure, and landscaping. An existing septic system and septic easement are in the northeast portion of the property and include existing 1,500 gallon and 1,000-gallon septic tanks. Both tanks were recently inspected and pumped. There are two 24-foot-wide driveways proposed onto Highway 30 on the north and south ends of the property. They will be used almost exclusively by employees as customers' vehicles will be moved between the two Pro-Automotive and Diesel properties via a continuous drive aisle.

When
The applicant would like to submit for land use approval before the September deadline and hopes to be through the land use phase by the end of January, 2023. The owner would like see the building permit phase finish by April or May of that year and begin construction in June or July while the weather is ideal. The owner would like to occupy the proposed building in late fall of 2023.

Site Conditions

The 1.31-acre site is located on Highway 30 one lot north of the Columbia/Multnomah County line and adjacent to the railroad. The site is currently vacant, but was previously used as the Waller Mobile Home Park with primary access off of Columbia River Highway. The site has approximately 32,000 square feet of existing impervious area (asphalt and concrete) which made up the foundations, driveways, and drive aisles within the mobile home park. These impervious surfaces will mostly be removed to make way for the new building and improvements. A septic system, small community water system, gas, electricity, and telecommunications services are all on or available to the site. A vicinity map is provided in Figure 1.

Figure 1. Pro Auto Vicinity Map

Requested Approvals

In order to receive the necessary land use permits to construct the new buildings and improvements, the applicant is requesting the following approvals:

- **Site Design Review.** As a new development of over 5,000 square feet, the project will be reviewed through the Type 2 Site Design Review process and approval standards.

- **Major Variance to Setback Requirement.** The proposed building is 3-feet from the eastern (rear) property line and 13-feet from the wester (front) property line. Both will require Major Variances to the setback requirements of the Existing Commercial (EC) zone.

- **Sign Review.** Two identical 50 sq. ft. signs are proposed and a sign review application is required.

The above applications are being submitted with this package and the Applicant understands that they will be reviewed by a County planner with an additional review and hearing by the Planning Commission. This narrative contains written responses to all applicable standards, requirements, and approval criteria for each application. Applicable provisions were identified during the pre-application conference with County planning staff on March 24th, 2022.

4. Conformance with the Columbia County Zoning Ordinance

This section of the narrative demonstrates the project's conformance with all applicable provisions of () of the Columbia County Zoning Ordinance. All text in *italics* are direct quotes from the code, which are followed by applicant responses.

Section 670 – Existing Commercial Uses, Standards & Determination of Similar Use

671 – Purpose

This District is intended to assure the continuation and limited expansion of all lawful commercial activities occurring on the date of this Ordinance, regardless of type or location. This zone will be used to implement the Existing Commercial plan designation. This zoning designation is intended to recognize the legitimacy of the existing commercial use of a parcel while not directly implying that commercial activities are appropriate for a specific area.

Response: The applicant understands the purpose of this chapter and demonstrates conformances with its applicable provisions below.

672 – Permitted uses

(1) All permitted and conditional uses allowed in the Neighborhood Commercial (C-4) District.

Response: The use as an auto repair shop is permitted per section 812 in the Neighborhood Commercial (C-4) chapter. Per section 812: *the Planning Commission has found the following to be similar to the above uses: "Autosales, repair, detailing."* The adjacent property is used as an automotive repair shop for large trucks, farm equipment, and other diesel vehicles used to support resource-based industry within the County. The subject property will be used as an expansion of that existing repair shop (Pro Automotive & Diesel) and will provide the same services. Therefore, this criterion is met.

673 – Uses Subject to Administrative Review

The following uses are permitted, subject to review and approval under prescriptive standards specified herein and as may otherwise be indicated by federal, state and local permits or regulations using the process contained in Section 1601.

(1) Marijuana retailing subject to standards in Section 1803.

Response: There is no marijuana retailing proposed. Therefore, this criterion is not applicable.

674 – Conditional Uses

(1) Lawful commercial activities existing on the effective date of this Ordinance.

(2) Accessory buildings may be allowed if they fulfill the following requirements:

A. If attached to the main building or separated by a breezeway, they shall meet the front and side yard requirements of the main building.

B. If detached from the main building, they must be located behind the main building or a minimum of 30 feet from the front lot or parcel line, whichever is greater.

C. Detached accessory buildings shall have a minimum setback of 5 feet from the rear and/or side lot line.

(3) Signs as provided in Section 1300.

(4) Off-street parking and loading as provided in Section 1400.

(5) Home occupations consistent with ORS 215.448.

(6) Churches when sited in accordance with Section 1550, Site Design Review, and other provisions of this ordinance

Response: The use as an auto repair shop is permitted per sections 672 and 812. Therefore, this criterion is not applicable. Please see narrative responses to sections 1300 and 1400 for signage and off-street parking.

675 – Standards

(1) The minimum lot or parcel size for uses permitted under Sections 672, 673 and 674 shall be 5 acres

Response: The subject property is 1.3 acres but was lawfully conveyed in 1970. Therefore, the subject property is exempt per section 676 below.

(2) The minimum lot or parcel size for uses permitted under Section 672, 673 and 674 shall be 2 acres when it can be shown that:

A. The use is served by a public or community water system;

B. Adequate area exists on the property to facilitate an individual subsurface sewage system; or, the property is served by a public or community sewer system;

C. The property has direct access onto a public right-of-way; and,

D. The property is within, and is capable of being served by, a rural fire district.

Response: The subject property is 1.3 acres but was lawfully conveyed in 1970. Therefore, this standard is met per section 676 below. The property is served by a small public water system (see Exhibit F), has an existing subsurface septic system, has direct access onto Highway 30, and is served by a rural fire district. There is no permitted access onto Highway 30 but the applicant is working with ODOT to move an existing, unused access on tax lot 4500 to the subject property through the Indenture Process.

(3) No primary structure shall be constructed closer than 30 feet to a property line. Where the property abuts resource zoning, the setback shall be increased to 50 feet.

Response: See the Proposed Site Plan (Sheet C-3, Exhibit A). As the railroad right-of-way has a resource zone designation, the rear yard setback is 50 feet. The proposed building is sited within 50 feet of the east (rear) property line and within 30 feet of the west (front) property lines. A major variance to the rear and front yard setback requirements is requested for this development. Please see narrative responses to variance section 1504 for more information.

(4) Unless otherwise prohibited, the maximum building height shall be 35 feet or 2- 1/2 stories, whichever is less.

Response: See Exterior Elevations (Sheet A-3, Exhibit A). The proposed building height is 29 feet or 2 stories. Therefore, this standard is met.

(5) Unless otherwise prohibited, structures such as barns, silos, windmills, antennas, chimneys, or similar

Response: There are no additional structures proposed for this development. Therefore, this standard is not applicable.

(6) Churches may be allowed if they fulfill the following requirements:

A. Minimum Lot Area: 20,000 square feet for pre-existing, non-conforming parcels;

B. Minimum Public Street Frontage: 100 feet;

C. Shall be located within 1000 ft. of a collector or arterial road;

D. Shall be capable of providing adequate fire flow;

E. Shall be capable of treating sewage on-site if not connected to sewer;

F. Maximum coverage of the parcel shall not exceed 50% of land area;

G. Shall meet the setback standards for residential structures;

H. Conceptual Site Plan demonstrating compliance with the standards of this section shall be submitted with all applications;

I. A new Conditional Use Permit shall be required for the following modifications to a prior Conditional Use Permit granted for a church use:

a. The addition of usable building area on the site;

b. The addition of site area;

c. The establishment of additional uses such as full-time day schools or full-time day care centers

Response: No church is proposed for this development. Therefore, this standard is not applicable.

676 – Lots of Record

Lots or parcels lawfully created by a subdivision plat, or by a deed or sales contract, and of record in the County Clerk's office, shall be eligible to receive a building permit for any use permitted by Sections 672, 673 and 674, if such permit would have been issued otherwise but for the lot or parcel width, depth, or area, but subject to all other regulations of this zone.

Response: The subject property was lawfully conveyed in 1970. Therefore, the proposed use as a repair shop is eligible for a building permit regardless of the subject property's width, depth, or area.

677 – Subdivisions and Partitions

All subdivision and partition requests shall conform to the applicable standards of the Subdivision and Partitioning Ordinance.

Response: The applicant understands the purpose of this section but does not propose a subdivision or partition.

Section 1300 – Signs

[…]

1302 – General Provisions

1. *<u>Design Review:</u> In addition to complying with the standards in this Section, the design and color of commercial and industrial signs and supporting structures of signs 100 square feet or larger in size shall be compatible with the architectural design and color of existing and proposed buildings on the site as determined during site design review according to the provisions of Section 1550 of this Ordinance.*

2. *<u>Setbacks:</u>*

   A. *All signs shall be situated in a manner so as not to adversely affect safety, corner vision, or other similar conditions and shall not overhang or encroach upon public rights of way.*

   B. *Unless otherwise specified, all signs in residential zoning districts shall observe the yard setback requirements of the zoning district in which they are located.*

   C. *No setbacks from property lines shall be required for signs in non- residential zoning districts except that in all zoning districts, setbacks shall be required at corners as may be necessary to provide adequate corner vision or in cases where a sign is placed adjacent to a street, as provided is 1302.2(D), below.*

D. *Setbacks shall be required which comply with setback requirements of the abutting residential zoning district when a sign is placed on a parcel abutting a street (except Highway 30), which separates a non-residential parcel from a residential parcel or when a sign is placed on a property line separating a non-residential parcel from a residential parcel.*

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. The subject property is zoned Existing Commercial, does not abut a residential zoning district, and is not on or near a corner. Therefore, no setbacks from the property lines are required. Therefore, these setback standards are met.

Visual Obstructions: No sign shall be situated in a manner which results in the complete visual obstruction of an existing sign.

3. *Illuminated Signs: Artificially illuminated signs, or lights used to indirectly illuminate signs, shall be placed, shielded, or deflected so as not to shine into residential dwelling units or structures. The light intensity of an illuminated sign shall not exceed the following standards:*

   A. *No exposed reflective type bulb, par spot or incandescent lamp, which exceeds twenty-five (25) Watts, shall be exposed to direct view from a public street or highway, but may be used for indirect light illumination of the display surface of a sign.*

   B. *When neon tubing is employed on the exterior or interior of a sign, the capacity of such tubing shall not exceed three hundred (300) milliamperes rating for white tubing or one hundred (100) milliamperes rating for any colored tubing.*

   C. *When fluorescent tubes are used for the interior illumination of a sign, such illumination shall not exceed:*

      1) *Within Residential Zoning Districts: Illumination equivalent to four hundred twenty-five (425) milliamperes rating tubing behind a Plexiglas face with tubes spaced at least seven (7) inches apart, center to center.*

      2) *Within Non-Residential Zoning Districts: Illumination equivalent to eight hundred (800) milliamperes rating tubing behind a Plexiglas face spaced at least nine (9) inches apart, center to center.*

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. These signs will not exceed the equivalent of 800 milliamperes described above. Given their proposed orientation, these signs will not shine into residential dwelling units or structures. Therefore, these standards are met.

4. *Non-conforming Signs: Signs and sign structures not conforming to the requirements of this ordinance shall be subject to the provisions of Section 1506, Non-Conforming Uses, except that:*

   A. *Copy: The Copy of a legal non-conforming sign may be changed. For purposes of this Section, "Copy" is defined as text or images on the face of the sign.*

   B. *Discontinuance: A non-conforming sign shall be considered to be abandoned and discontinued if there is no Copy on the display surface for a period of six (6) consecutive months. If the discontinuance is for a period greater than six (6) consecutive months, the building or land on which is the sign is located shall thereafter be occupied and used only for a conforming use.*

C. *Non-conforming Signs of Size Greater than 200 Square Feet: Signs with a sign area greater than 200 square feet are prohibited except that legal non-conforming signs greater than 200 square feet which are documented in "A Photo Inventory of Billboard Signs Existing Within Unincorporated Columbia County," are permitted to the extent that they comply with this Section, and Section 1506, Non-conforming Uses.*

D. *Notwithstanding Section 1506.9 and 1506.5, a legal non-conforming sign may not be expanded.*

5. *Sign Clearance: A minimum of 8 feet above sidewalks and 15 feet above driveways shall be provided under free-standing signs.*

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. These signs are 5-feet tall by 10-feet long with a combined area of 100 square feet. The proposed signs are not non-conforming. Therefore, these standards are not applicable.

[…]

1313 – Commercial and Industrial Districts

(1) Signs Permitted: Signs shall be permitted in Commercial and Industrial zoning districts subject to the provisions of this Section, except to the extent such provisions conflict with the specific development standards for signs in the underlying zoning district.

(2) Limit on Sign Area: Except as otherwise permitted in Section 1302.5, no sign having a sign area greater than 200 square feet shall be permitted.

(3) Aggregate Sign Area Per Parcel.

A. Except as otherwise provided herein, the maximum permitted area of all signs, including the total area of each face of a double-faced sign, or the sole face of a single faced sign for each parcel, is as follows: 40 square feet; plus 1) For the first fifty (50) linear feet of building frontage on a public road, an additional square foot of sign area per linear foot of building frontage on such public road; plus 2) For the next two hundred and twenty (220) linear feet of building frontage on a public road, an additional one-half (½) square foot of sign area per linear foot of building frontage on such public road.

B. For the purpose of this section, "building frontage" means the linear length of a building facing a public right of way or the linear length of the public right of way facing a building, whichever is smaller.

C. The area of any legal non-conforming sign which is greater than 200 square feet in size shall not be included in the calculation of maximum sign area per parcel under this Section.

D. The area of any temporary sign permitted under 1313.7 shall not be included in the calculation of maximum sign area per parcel under this section.

(4) Free Standing Signs: Free standing signs, including ground mounted signs, must comply with the following additional standards:

A. Height: Free standing signs shall not exceed 20 feet in height above grade or above road grade, whichever is higher.

B. Total Area: The total sign area of all freestanding signs allowed by this section plus the area of all other allowed signs on the parcel shall not exceed the aggregate sign limits for the parcel as provided in Section 1313.3.

C. Center/Complex Signs: Only one freestanding sign shall be allowed for a center/complex even when there is more than one parcel in or owner of the center/complex, unless one additional sign is needed to provide identification of the development at a major public access point on a different roads. No more than two freestanding signs will be allowed. For purposes of this Section, "Center/Complex" means any number of businesses greater than one which share the same site using common points of ingress and egress and/or common parking facilities. Legal nonconforming signs shall not be included in the calculation of the number of freestanding signs per parcel under this Section.

D. Illumination: Free standing signs may be illuminated subject to subsection 1302.4.

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). The proposed building has 300 feet of frontage on Highway 30 which allows the applicant 200 square feet of total sign area. There are two building- mounted LED digital reader board signs proposed on the north and south facades. These single-face signs are 5-feet tall by 10-feet long with a combined area of 100 square feet. No free-standing signs or center/complex signs are proposed for this development. Therefore, these standards are met.

(5) Building Mounted Signs: Signs mounted or painted on buildings must comply with the following additional standards:

A. Area. The total sign area of all building mounted signs allowed pursuant to this section in addition to the area of all other allowed signs per parcel shall not exceed the aggregate sign limits for the parcel as provided in section 1313.3.

B. Height. Building mounted signs shall not extend more than four (4) feet above the roof of the building on which it is mounted.

C. Illumination. Building mounted signs may be illuminated subject to the illumination standards set forth in subsection 1302.4.

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. The combined area of these signs is less than the maximum areas allowed by section 1313.3 and meet the illumination requirements of 1302.4. The proposed signs will no extend above the roof of the building. Therefore, these standards are met. See narrative responses to sections 1313.3 and 1302.4 for additional information.

(6) Traffic Control/Directional Signs: On-site traffic control and directional identification signs shall be required as may be necessary, commensurate with the size and use of the site, in conjunction with site design review, if such review is required. Centers/ complexes combining several uses shall provide tenant directories, or building identification and directional signing oriented toward onsite vehicle and pedestrian circulation.

Response: Please see the Proposed Site Plan and Access, Parking, and Circulation Plan (Sheets C-3 and C-6, Exhibit A). Directional flow arrows are proposed as seen in the site plans. The applicant understands the County may require additional traffic control or directional signs.

(7) Temporary Signs: Signs of a temporary nature may be allowed provided they meet the following standards. For purposes of this section, "temporary" shall mean not to exceed one year.

A. The temporary sign area shall not exceed 60 square feet.

B. The temporary sign shall observe the setback provisions under subsection 1302.2.

C. Only one temporary sign shall be permitted per parcel.

D. The temporary sign shall not be artificially illuminated.

E. The temporary sign shall be removed from the premises after the one-year temporary sign period has expired.

Response: Temporary signs are not proposed with this development. Therefore, this standard is not applicable.

(8) Animated or Video Signs Prohibited: No sign shall contain, include, or be illuminated by any flashing, intermittent, revolving, rotating, or moving light or move or have any animated or moving parts except that this Section shall not apply to:

A. Traffic control signs.

B. Signs, displays, devices, or portions thereof with lights that may be changed at intermittent intervals by electronic process or remote control. The maximum size of the display area for such changing numbers or letters is ten (10) square feet

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. These will not display flashing, intermittent, revolving, rotating or moving light and will display the Pro Automotive & Diesel logo. These LED signs can be turned on and off with a remote control. Therefore, these standards are met.

1314 – Calculating Sign Area

The structure supporting or appearing to support a freestanding sign shall not be included in the area of the sign, unless such structural element is typically used to carry signage. In calculating the square footage of a sign, the width shall be measured at the widest part of the sign, including any cut-outs, and the length shall be measured at the longest part of the sign, including any cut-outs. The maximum square footage limitation of the sign shall be calculated such that no cutouts or other Copy shall be permitted outside of the size limitation.

[…]

Response: Please see Exterior Elevations and Sign Elevations (Sheets A-3 and C-9, Exhibit A). There are two building-mounted LED digital reader board signs proposed on the north and south facades. These signs have a combined area of 100 square feet and the area was calculated using the standards listed above and in section 1313.3.

Section 1400 – Off Street Parking and Loading Requirements

1401 – General Provisions

At the time of the erection of a new building, or an addition to an existing building, or any change in the use of an existing building, structure, or land which results in an intensified use by customers, occupants, employees, or other persons, off-street parking and loading shall be provided according to the requirements of this section.

1402 – Continuing Obligation

The provisions for and maintenance of off-street parking and loading facilities shall be a continuing obligation of the property owner. No building or any other required permit for a structure or use under this or any other applicable rule, ordinance, or regulation shall be issued with respect to off-street parking and loading, or land served by such land, until satisfactory evidence is presented that the property is, and will remain, available for the designated use as a parking or loading facility

1403 – Use of Space

(1) Required parking spaces shall be available for parking of vehicles of customers, occupants, and employees.

Response: Please see the Access, Parking, and Circulation Plan (Sheet C-6, Exhibit A). Parking spaces are proposed with this development for the use of employees only. The proposed building will not be open to the public and all customer service will continue to take place in the existing Pro Automotive & Diesel building on the adjacent property (lot 4500) to the south.

(2) No parking of trucks, equipment, or the conduct of any business activity shall be permitted on the required parking spaces.

Response: The applicant understands that no trucks, equipment, or conduct of any business activity will be allowed on or within the required parking spaces.

(3) Required loading spaces shall be available for the loading and unloading of vehicles concerned with the transportation of goods and services.

Response: Please see the Access, Parking, and Circulation Plan and First Floor Plan (Sheets C-6 and A-1, Exhibit A). A 20-foot-wide drive aisle is proposed through the center of the building for customer vehicle circulation and the loading and unloading of goods. A dedicated loading space measuring 12 feet by 44 feet has also been provided outside of the drive aisle on the south end of the building. The applicant asserts that an exterior loading space would not be utilized given the convenience of the interior drive aisle and loading space.

(4) Excepting residential and local commercial districts only, loading areas shall not be used for any other purpose than for loading and unloading.

Response: Please see the First Floor Plan (Sheet A-1, Exhibit A). The applicant understands that the dedicated 12-foot by 44-foot loading space shall only be used for loading and unloading.

(5) In any district it shall be unlawful to store or accumulate goods in a loading area in a manner which would render the area temporarily or permanently incapable of immediate use for loading operations.

Response: The applicant understands that the loading space shall only be used for loading and unloading.

1404 – Joint Usage of Facilities

Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same parking and loading spaces when hours of operation do not overlap, provided that satisfactory legal evidence is presented to the Planning Director in the form of deeds, leases, or contracts securing full access to such parking or loading areas for all the parties jointly using them.

Response: Joint usage of facilities is not proposed for this development. Therefore, this standard is not applicable.

1405 – Plans Required

A plot plan shall be submitted in duplicate to the Director with each application for a building permit or for a change of classification to OP. The plot plan shall include the following information:

(1) Dimensions of the parking lot.

(2) Access to streets and location of curb cuts.

(3) Location of individual parking spaces.

(4) Circulation pattern.

(5) Grade and drainage.

(6) Abutting property.

(7) A landscaping plan which shall include the location and names of all vegetation, and the location and size of fencing or other screening material.

Response: Please see the Grading Plan, Stormwater Plan, Landscape Plan, and Access, Parking, and Circulation Plan (Sheets C-4, C-5, C-6, and C-7, Exhibit A). The information listed above has been provided on the site plans.

1406 – Location

(1) Spaces required by this section shall be provided on the site of the primary uses, provided that, when practical difficulties prevent their establishment upon the same site, the Planning Director may permit the facility to be located within 300 feet therefrom, measured in a straight line (including streets and alleys) from the nearest property line to the nearest parking space; but in any case the location shall meet all provisions of this ordinance which apply.

(2) Loading spaces and maneuvering area shall be located only on or abutting the property served.

Response: Please see the Access, Parking, and Circulation Plan and First Floor Plan (Sheets C-6 and A-1, Exhibit A). All proposed parking and loading spaces for this development will be located on the subject property. The proposed parking lot will connect to the existing parking on the abutting property (lot 4500) through a continuous drive aisle but off-site parking is not proposed. Therefore, these standards are met.

[…]

1408 – Design Standards

(1) Scope:

A. These design standards shall apply to all parking, loading, and maneuvering areas except those for single and two-family residential dwellings on individual lots.

B. All parking and loading areas shall provide for the turning, maneuvering, and parking of all vehicles on the lots.

1409 – Loading Spaces:

(1) Apartment: Each required space shall be at least 12 feet in width and 25 feet in length.

(2) Commercial: Each required space shall be at least 12 feet in width and 35 feet in length.

(3) Industrial: Each required space shall be at least 12 feet in width and 60 feet in length.

(4) Clearance: The height of each required loading space shall provide a minimum vertical clearance of 13 feet.

Response: Please see the Access, Parking, and Circulation Plan and First Floor Plan (Sheets C-6 and A-1, Exhibit A). A 20-foot-wide drive aisle is proposed through the center of the building for customer vehicle circulation and the loading and unloading of goods. A dedicated loading space measuring 12 feet by 44 feet has also been provided outside of the drive aisle on the south end of the building. The proposed use as an auto repair shop is commercial; therefore, these dimensional standards are met.

1410 – Size:

(1) The standard size of a parking space shall be 9 feet by 18 feet.

(2) Handicapped parking spaces shall be 12 feet by 18 feet.

(3) Parallel parking, the length of the parking space shall be increased to 22 feet.

[…]

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). All proposed parking stalls are the standard 9 feet by 18 feet. The one accessible parking stall required is also 9 feet by 18 feet with an adjacent 9 foot by 18 foot access aisle. Therefore, these dimensional standards are met.

1411 – Aisles:

Aisles shall not be less than:

(1) *25'-0" in width for 90 degree parking;*

(2) *20'-0" in width for 60 degree parking;*

(3) *20'-0" in width for 45 degree parking;*

(4) *12'-0" in with for parallel parking.*

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). All proposed parking spaces are 90-degree stalls and their associated drive aisles exceed the 25-foot minimum width. The loading stall within the proposed building is in the parallel parking configuration and the adjacent drive aisle exceeds the 12-foot minimum width. Therefore, these dimensional standards are met.

1412 – Access:

There shall be no more than one 45 foot wide curb cut driveway per 150 feet of street frontage, or fraction thereof, permitted per site.

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). Two 24-foot-wide curb cut driveways are proposed on the north and south of the property. The proposed accesses are 345 feet apart. Therefore, this standard is met.

1413 – Surfacing and Marking:

(1) The surfacing of each parking area shall meet minimum County standards to handle the weight of the vehicles which will use the parking area. All areas used for parking and maneuvering of vehicles shall be marked in accordance with the approved plan and such marking shall be continuously maintained. Handicapped parking spaces shall be marked with a wheelchair symbol.

(2) The parking and loading areas for commercial, industrial, or apartment uses shall be paved with concrete, asphaltic concrete, or another comparable surface.

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). All proposed parking areas will be paved with asphaltic concrete, will be marked per the approved drawings, and shall be continuously maintained. Therefore, these standards are met.

1414 – Drainage and Lighting:

Adequate drainage shall be provided to dispose of the run-off generated by the impervious surface area to the parking area. The drainage system shall function so it will not adversely affect adjoining property. Artificial lighting shall be provided in such a manner as to ensure the safety of the parking area without interfering with adjoining properties or creating traffic hazards on adjoining streets.

Response: Please see the Stormwater Plan and Illumination Plan (Sheets C-5 and C-8, Exhibit A). The proposed grading in the parking lots has been designed to adequately drain each lot to catch basins and trench drains. These impervious driving surfaces have a minimum slope of 1 percent and a maximum slope of 4.5 percent. All on-site stormwater will be routed to a large bio-retention swale where it will be infiltrated. Adjoining properties will not be adversely affected as all stormwater will be retained on site.

Exterior lighting has been provided in the form of pole-mounted parking lot fixtures and wall-mounted fixtures on the exterior of the building. The illumination plan has been designed to ensure safety on site with minimal spillover onto adjoining properties or rights-of-way. Therefore, these standards are met.

1415 – Parking Areas:

All parking areas, excluding one and two-family dwellings, shall meet the following requirements:

(1) *All parking areas of less than 20 parking spaces shall have one handicapped parking space. Parking areas with more than 20 spaces shall provide one handicapped parking space for every 50 standard parking spaces.*

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). There are 12 total parking stalls proposed including one accessible stall with associated access aisle. Therefore, this standard is met.

(2) *All parking areas shall be divided into bays of not more than 20 parking spaces. Between, and at the end of each parking bay, there shall be planters which have a minimum width of 5 feet and be at least 17 feet in length. Each planter shall contain one major structural tree and ground cover which has been deemed appropriate by the Director. Truck loading areas need not comply with the preceding requirements.*

Response: Please see the Access, Parking and Circulation Plan and Landscape Plan (Sheets C-6 and C-7, Exhibit A). There are 12 total parking stalls proposed in two bays of six stalls. Both bays have 5-foot-wide planters proposed in front and on each end of the parking surface. These planters include one major structural tree (Chinese Dogwood), ground cover (Kinnikinic), and screening shrubs/trees (Oregon Grape/Northern White Cedar). Therefore, this standard is met.

(3) *Parking areas shall be separated from the exterior wall of a structure, exclusive of paved pedestrian entranceways, by a 5 foot strip of landscaping.*

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). Paved pedestrian walks and entranceways separate the parking lot from the proposed building. Therefore, this standard is met.

(4) *Industrial or commercial parking areas, which abut a residential or apartment district, shall meet the building setback of the most restrictive adjoining residential or apartment district.*

Response: Please see the Existing Conditions Plan and Access, Parking and Circulation Plan (Sheets C-1 and C-6, Exhibit A). The subject property does not abut a residential or apartment district. The adjacent property to the north is

zoned Existing Commercial (EC), the railroad right-of-way to the east is zoned Primary Agriculture (PA-80), and the adjacent property to the south is zoned Resource Industrial Planned Development (RIPD). Therefore, this standard is not applicable.

(5) *When industrial or commercial parking areas adjoin a residential or apartment district, there shall be a sight obscuring planting, which is at least 80 percent opaque and when viewed horizontally from between 2 and 8 feet above ground level. This planting shall be composed of materials which are an adequate size so as to achieve the required degree of screening within 12 months after installation.*

Response: Please see narrative response to subsection (4) above. This standard is not applicable. However, screening trees (Northern White Cedar) and shrubs (Oregon Grape) are proposed in the landscape areas between the parking lots and the adjacent properties to the north, east, and south. These landscape areas are a minimum of 5-feet-deep.

(6) *Parking areas shall be set back from a lot or parcel line adjoining a street. The setback area shall be landscaped.*

Response: Please see the Access, Parking and Circulation Plan and Landscape Plan (Sheets C-6 and C-7, Exhibit A). The proposed parking areas to the north and south are set back a minimum of 5-feet from the property lines and the area between is landscaped. These parking areas do not abut the street-side property line except for a drive aisle on the south side of the development. The applicant plans to connect the drive aisle of the proposed parking lot to the drive aisle of the existing lot on the adjoining property (lot 4500) for vehicle circulation. This configuration allows employee and customer vehicles to move between the two repair shops and avoids unnecessary traffic/congestion on Highway 30.

(7) *All parking area setbacks shall be landscaped with major trees, shrubs, and ground cover as approved by the Director.*

Response: Please see the Access, Parking and Circulation Plan and Landscape Plan (Sheets C-6 and C-7, Exhibit A). Screening trees (Northern White Cedar), shrubs (Oregon Grape), and ground cover (Kinnikinic) are proposed in the landscape areas between the parking lots and the adjacent properties to the north, east, and south. These landscape areas are a minimum of 5-feet-deep. Therefore, this standard is met.

(8) *A minimum of 10 percent of the parking area shall be landscaped and maintenance of the landscaping shall be the owner's responsibility.*

Response: Please see the Access, Parking and Circulation Plan and Landscape Plan (Sheets C-6 and C-7, Exhibit A). The landscape areas exceed 10 percent of the total parking area. Depending on how this is calculated, the landscape area represents between 17 and 25 percent of the parking area. Therefore, this standard is met.

(9) *Internal pedestrian connections shall be provided in parking lots with greater than ten (10) parking spaces. These connections shall be a minimum of five (5) feet wide and distinguished from vehicular areas through changes in elevation or contrasting paving materials (such as light-color concrete inlay between asphalt). Paint or thermo-plastic striping and similar types of nonpermanent applications may be approved for crossings of parking lot areas that do not exceed 24 feet in crossing length.*

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). Both proposed parking lots contain six spaces. Therefore, this standard is not applicable.

(10) *In urban growth boundaries and urban unincorporated communities, parking lots for commercial, industrial, and public/quasi-public uses that have designated employee parking and more than 20 parking spaces shall provide at least 10% of the employee parking spaces (with a minimum of two spaces) as preferential long-term carpool and vanpool parking spaces. Preferential carpool and vanpool parking spaces shall be closer to the entrances of the building than other parking spaces, with the exception of ADA accessible parking spaces.*

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). The development is not within the urban growth boundary and only 12 parking spaces are proposed. Therefore, this standard is not applicable.

(11) *A portion of existing parking areas may be redeveloped for transit-oriented improvements, such as a bus stops and pullouts, bus shelters, park and ride stations, transit-oriented developments, and similar facilities, where identified in or consistent with an adopted County transit plan. Subject sites incorporating transit improvements as part of a development proposal are eligible for up to a 10% reduction in required vehicular parking spaces.*

Response: This standard is not applicable.

1416 – Minimum Required Off-Street Parking Spaces:

[…]

(3) *Retail Uses*

Service and Repair shop and retail store handling bulky merchandise such as automobiles and furniture: One space for each 600 square feet of gross floor area plus 1 space for each 2 employees.

[…]

Response: Please see the Access, Parking and Circulation Plan (Sheet C-6, Exhibit A). As the proposed building will not being open to the public, required off-street parking numbers have been based on the maximum number of employees that could be working simultaneously during the busiest shift. The applicant has stated that an average of ten employees will be working on a shift. The proposed development includes 12 parking stalls for employees only and the applicant feels this is more than adequate for this use.

1418 – MINIMUM REQUIRED OFF-STREET LOADING SPACES:

USE	*SQUARE FEET OF FLOOR OR LAND AREA*	*MINIMUM LOADING SPACES REQUIRED*
(1) *Commercial*	*under 5,000*	*0*
	5,000 - 24,999	*1*
	25,000 - 59,999	*2*
	60,000 - 99,999	*3*
	100,000 - 159,999	*4*
	160,000 - 249,999	*5*
	250,000 - 369,999	*6*
	370,000 - 579,999	*7*
	580,000 - 899,999	*8*
	900,000 - 2,999,999	*9*
	over 3,000,000	*10*

[…]

(3) Apartment Residential: One loading space for each 50 dwelling units.

Response: Please see the Access, Parking, and Circulation Plan and First Floor Plan (Sheets C-6 and A-1, Exhibit A). A 20-foot-wide drive aisle is proposed through the center of the building for customer vehicle circulation and the loading and unloading of goods. A dedicated loading space measuring 12 feet by 44 feet has also been provided outside of the drive aisle on the south end of the building. The applicant feels that a single dedicated loading space will be sufficient given the 6,000 square feet of 20-foot-wide drive aisle proposed throughout the building.

1416 – Minimum Required Bicycle Parking Spaces:

[…]

(1) *All Public and Semi-Public buildings and uses, Retail uses, Apartment Dwelling uses and Commercial Recreation uses where required new vehicle parking areas exceed 10 motor vehicle spaces must include a designated area for bicycle parking within 50 feet of a public entrance.*

(2) *The following are the required number of bicycle parking spaces:*

[…]

(B) Parking Lots. Parking Lots. All public and commercial parking lots and parking structures shall provide a minimum of one (1) bicycle parking space for every 10 motor vehicle parking spaces.

[…]

Response: Please see the Access, Parking, and Circulation Plan and First Floor Plan (Sheets C-6 and A-1, Exhibit A). There are 12 proposed vehicular parking spaces requiring two bicycle parking spaces. The proposed building contains locker rooms, a mechanical room, and undeveloped floor space which can be used for bicycle storage. The applicant owns the existing Pro Automotive building and none of his employees commute to work using a bicycle. Given the nature of the proposed development as an expansion of the existing Pro Automotive, the applicant feels that the aforementioned interior spaces will be adequate for bicycle storage.

Section 1450 – Transportation Impact Analysis

1450 – Transportation Impact Analysis

A Transportation Impact Analysis (TIA) must be submitted with a land use application if the proposal is expected to involve one or more of the conditions in 1450.1 (below) in order to minimize impacts on and protect transportation facilities, consistent with Section 660-012-0045(2)(b) and (e) of the State Transportation Planning Rule.

(1) Applicability – A TIA shall be required to be submitted to the County with a land use application if the proposal is expected to involve one (1) or more of the following:

A. Changes in land use designation, or zoning designation that will generate more vehicle trip ends.

B. Projected increase in trip generation of 25 or more trips during either the AM or PM peak hour, or more than 400 daily trips.

C. Potential impacts to intersection operations.

D. Potential impacts to residential areas or local roadways, including any non- residential development that will generate traffic through a residential zone.

E. Potential impacts to pedestrian and bicycle routes, including, but not limited to school routes and multimodal roadway improvements identified in the TSP.

F. The location of an existing or proposed access driveway does not meet minimum spacing or sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, thereby creating a safety hazard.

G. A change in internal traffic patterns may cause safety concerns.

H. A TIA is required by ODOT pursuant with OAR 734-051.

I. Projected increase of five trips by vehicles exceeding 26,000-pound gross vehicle weight (13 tons) per day, or an increase in use of adjacent roadways by vehicles exceeding 26,000-pound gross vehicle weight (13 tons) by 10 percent.

Response: Please see the Trip Generation Memorandum (Exhibit D). A trip generation analysis was performed for the proposed development as well as a trip generation analysis for the site's previous use as a mobile home park. The estimated daily trips for the previous use were 25 per day. The estimated trips for the proposed use – with 10 employees working at once – is 10 per day. This represents a 60 percent decrease in total daily trips from the existing site use. Customer vehicles will enter the subject property on a drive aisle connected to the adjoining Pro Automotive property to the south.

The driveway accesses off Highway 30 are both unused permitted accesses the applicant proposes to move from his existing properties (lot 1800 and 4500) to the subject property (lot 4501) through the Indenture Process. The applicant has been in contact with Scott Nelson and Richard Kearns at ODOT who have said moving the access will be possible. This new location will increase the distance between the Highway 30/Waller Road intersection and the driveway and will not negatively impact intersection operations. Vehicles exceeding 26,000-pounds will not be serviced at this development and 0 daily trips are estimated for vehicles of that size.

(2) Consistent with the County's Guidelines for Transportation Impact Analysis (TIA), a landowner or developer seeking to develop/redevelop property shall contact the County at the project's outset. The County will review existing transportation data to establish whether a TIA is required. It is the responsibility of the applicant to provide enough detailed information for the County to make a determination. An applicant should have the following prepared, preferably in writing:

A. Type of uses within the development

B. The size of the development

C. The location of the development

D. Proposed new accesses or roadways

E. Estimated trip generation and source of data

F. Proposed study area

If the County cannot properly evaluate a proposed development's impacts without a more detailed study, a TIA will be required. The County will provide a scoping summary detailing the study area and any special parameters or requirements, beyond the requirements set forth in the County's Guidelines for Transportation Impact Analysis, when preparing the TIA.

Response: The applicant understands that a Transportation Impact Analysis may be required by the County.

(3) Approval Criteria. When a TIA is required, a proposal is subject to the following criteria:

A. The TIA addresses the applicable elements identified by the County Public Works Director and the County's Guidelines for Transportation Impact Analysis;

B. The TIA demonstrates that adequate transportation facilities exist to serve the proposed development or, identifies mitigation measures that resolve identified traffic safety problems in a manner that is satisfactory to the County Public Works Director and, when state highway facilities are affected, to ODOT;

C. For affected non-highway facilities, the TIA establishes that mobility standards adopted by the County have been met; and

D. Proposed public improvements are designed and will be constructed consistent with County Road Standards and access spacing standards in the Transportation System Plan.

(4) Conditions of Approval.

A. The County may deny, approve, or approve a proposal with conditions necessary to meet operational and safety standards; provide the necessary right-of-way for improvements; and to require construction of improvements to ensure consistency with the future planned transportation system.

B. Construction of off-site improvements may be required to mitigate impacts resulting from development that relate to capacity deficiencies and public safety; and/or to upgrade or construct public facilities to County Standards. Improvements required as a condition of development approval, when not voluntarily provided by the applicant, shall be roughly proportional to the impact of the development on transportation facilities. Findings in the development approval shall indicate how the required improvements directly relate to and are roughly proportional to the impact of development

Response: The applicant understands that a Transportation Impact Analysis may be required by the County.

Section 1500 – DISCRETIONARY PERMITS

[…]

Section 1504 – Variances

1504.1 – Major Variances

Except as provided in Section 1504.4 below, there are 2 classes of variances to the standards established in this ordinance. A Minor Variance is defined as a request for a variance of less than 25% from a dimensional requirement such as setbacks, height, lot or parcel coverage, lot or parcel width, or lot or parcel depth, or a request for a variance of less than 10% from a minimum lot or parcel size requirement. All other variances are defined as Major Variances. Use variances are not permitted under this ordinance except as permitted under Section 1505.1 "Temporary Permits: Use Not Allowed in District".

Major Variances from the lot or parcel size requirements of the Primary Agriculture (PA-38), Forest Agriculture (FA-19), Primary Forest (PF-76) and Rural Residential (RR-5) zones are not permitted under this ordinance.

(1) Major Variances: The Planning Commission may permit and authorize a variance from the requirements of this ordinance when unusual circumstances cause undue hardship in the application of it. The granting of such a variance shall be in the public interest.

A. A variance shall be made only when all the following conditions and facts exist:

1. The granting of the variance will not be detrimental to the public safety, health, or welfare, or injurious to other property;

Response: A major variance is requested for the proposed building's encroachments into the 50-foot resource zone setback on the eastern property line and the 30-foot front setback on west property line. The granting of variance will not be detrimental to public safety, health, or welfare or injurious to other properties. The rear yard setback is adjacent to the railroad right-of-way and the applicant would like to reduce the setback to 3-feet for the 50-foot width of building encroachment. This reduction will not disturb railroad operations and – because the railroad right-of-way is private – it will not affect the public in any way. The existing Pro Automotive & Diesel building on the adjacent lot abuts the railroad right-of-way and has not caused any problems for adjacent properties or the public.

The front yard setback is adjacent to the Highway 30 right-of-way and the applicant would like to reduce the setback to 13-feet. There are many along Highway 30 that are zoned Existing Commercial (EC) which have buildings located within the front yard setback or abut the right-of-way itself. The applicant feels that the requested variance is not unique and maintains the look of other EC zoned properties south of Scappoose. The requested variance would not be detrimental to the public and would not affect surrounding properties.

2. The conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property;

Response: The subject property is the only available lot the applicant could purchase adjacent to his existing repair shop as the existing lot is surrounded on three sides by rights-of-way. The proposed use is an expansion of the existing repair facility and an adjacent lot was necessary for vehicle circulation between the buildings/lots. The existing building has far more interested customers than it can handle and an expansion is sorely needed. Unfortunately, the subject property is not very deep and there is roughly 50-feet of buildable width between the front and rear setbacks. In order to adequately supplement the existing facility, the building needed to be wide enough to accommodate repair bays on either side of a central drive aisle. Because of the lot's ratio of length to depth, the proposed building's orientation was the only feasible configuration. Given these constraints, the business's extreme need for additional repair facilities, and the requirement that the lot be adjacent to the existing facility, the applicant feels that the conditions upon which the request is based are unique to the subject property.

The existing Pro Automotive & Diesel is one of the only repair shops in Columbia County that provides dealer-level repairs on large, resource-based equipment and vehicles such as tractors, semis, and box trucks. There is a dearth of repair shops providing these services in the area and – as a result - the existing facility has been extremely busy since day one. Pro Automotive works on vehicles for resource-based organizations such as Means Nursery, Motts Nursery, Paulsen Logging, ODFW, Pihl Logging, Beickel Farms, Cal Farms, and many more. Unfortunately, due to the limited capacity of the current building and the volume of potential customers, many resource-based businesses are forced to service or repair their vehicles in Portland or Longview. The proposed building will have more than double the capacity of the existing facility and will be capable of servicing larger vehicles. The applicant believes that the use itself is unique and essential for Columbia County.

3. Approval of the application will allow the property to be used only for purposes authorized by the Zoning Ordinance;

Response: The use as a repair shop is permitted per sections 672 and 812. The applicant understands that the property is only to be used for the purpose authorized by the zoning ordinance and has no plans to use the lot or facility for anything else. Approval of the variance will allow the subject property to adequately supplement the existing repair shop on the adjacent lot.

4. Strict compliance with the Zoning Ordinance would create an unnecessary hardship;

Response: As previously stated, the subject property is the only lot on which the applicant can reasonably locate an expansion of the existing facility. The proposed building will handle overflow from the existing Pro Automotive & Diesel and an adjacent lot is necessary for vehicle circulation. Strict compliance with the Zoning Ordinance would make a Pro Automotive building expansion unfeasible as the available area between the setbacks is not adequate for the building required. Pro Automotive & Diesel is one of the only facilities in the County that provides dealer-level repairs for large trucks, farm equipment, tractors, and other diesel vehicles used in resource-based industries. In addition to handling

overflow, the proposed building has been designed to accommodate vehicles and equipment too large for the existing facility to service (i.e. large Means Nursery tractors). These vehicles must be serviced out of the County and the proposed facility will provide a local option. Adhering strictly to the Zoning Ordinance's setback standards would not only be a hardship to the applicant, it would be a hardship for resource-based companies in the County.

> *5. The granting of the variance will not adversely affect the realization of the Comprehensive Plan nor violate any other provision of the Zoning Ordinance.*

Response: The requested variance, if granted, will not adversely affect the realization of the Comprehensive Plan or violate any other provisions of the Zoning Ordinance.

> *B. A variance so authorized shall become void after the expiration of 1 year if the next step in the development process has not been applied for.*

Response: The applicant understands and will comply with this standard.

> *C. The Planning Commission may impose whatever reasonable requirements it feels will fulfill the intent of this ordinance.*

[…]

Response: The applicant understands and will comply with the Planning Commission's requirements.

Section 1550 – Site Design Review

The Site Design Review process shall apply to all new development, redevelopment, expansion, or improvement of all community, governmental, institutional, commercial, industrial and multi-family residential (4 or more units) uses in the County.

1551 – Types of Site Design Review

[…]

(B) Type 2: Projects, developments and building expansions which meet any of the following criteria:

(1) *have an area of 5,000 sq.ft. or more, or are 10% or more of the square footage of an existing structure.*

(2) *Change the category of use (e.g., commercial to industrial, etc.)*

(3) *New off-site advertising signs or billboards.*

(4) *Any project meeting any of the Type 2 criteria shall be deemed a Type 2 Design Review application.*

Response: The proposed development includes a building area greater than 5,000 square feet and is therefore subject to the Type 2 Site Design Review standards.

[…]

1563 – Standards for Approval

The Planning Commission or Director shall make a finding with respect to each of the following criteria when approving, approving with conditions, or denying an application:

A. Flood Hazard Areas: See CCZO §1100, Flood Hazard Overlay Zone. All development in Flood Hazard Areas must comply with State and Federal Guidelines.

Response: The proposed development is not within any flood hazard area or a flood hazard overlay zone. Therefore, this criterion is not applicable.

B. Wetlands and Riparian Areas: Alteration of wetlands and riparian areas shall be in compliance with State and Federal laws.

Response: The subject property does not contain any wetlands or riparian areas. Therefore, this criterion is not applicable.

C. Natural Areas and Features: To the greatest practical extent possible, natural areas and features of the site shall be preserved.

Response: The proposed development has been designed to preserve natural areas to the greatest extent possible while satisfying the needs of Pro Automotive & Diesel. The site's previous use as a mobile home park left very little natural area. The proposed bioretention swale and landscaping will be a vast improvement to the existing conditions.

D. Historic and Cultural sites and structures: All historic and culturally significant sites and structures identified in the 1984 Comprehensive Plan, or identified for inclusion in the County Periodic Review, shall be protected if they still exist.

Response: No historic and culturally significant structures are known to existing on the subject property.

E. Lighting: All outdoor lights shall be shielded so as to not shine directly on adjacent properties and roads.

Response: Please see the Illumination Plan (Sheet C-8, Exhibit A). Lighting has been designed to minimize spillover onto adjacent properties and rights-of-way. All exterior light fixtures will be shielded.

F. Energy Conservation: Buildings should be oriented to take advantage of natural energy saving elements such as the sun, landscaping and land forms.

Response: Please see the Proposed Site Plan (Sheet C-3, Exhibit A). The proposed building has been orientated in a manner as to maximize the use of energy saving elements. Clerestory windows have been proposed on the north, west, and south façades to reduce the amount of artificial illumination required during daylight hours. Natural drainage patterns and a bioretention swale have been utilized to reduce the amount of subsurface drainage equipment needed for stormwater collection.

G. Transportation Facilities: Off-site auto and pedestrian facilities may be required by the Planning Commission, Planning Director or Public Works Director consistent with the Columbia County Road Standards and the Columbia County Transportation Systems Plan.

Response: The applicant understands these requirements and will work with Columbia County if off-site pedestrian or auto facilities are deemed necessary.

COLUMBIA COUNTY
LAND DEVELOPMENT SERVICES
COURTHOUSE
230 STRAND
ST. HELENS, OREGON 97051
(503) 397-1501

General Application File No._____

GENERAL LAND USE PERMIT APPLICATION

TYPE OF PERMIT: _____ Zone Change _____ Temporary Permit
__X__ Site Design Review _____ Resource Management Plan

Other:_____

APPLICANT: Name: Matthew Alexander

Mailing address: 58640 McNulty Way, St. Helens, OR 97051

Phone No.: Office (503) 366-0399 Home (971) 404-4110

Are you the _____property owner? __X__owner's agent?

PROPERTY OWNER: _____same as above, OR:

Name: Adam Ofstad

Mailing Address: 21340 Watson Road, Scappoose, OR 97056

PROPERTY ADDRESS (if assigned): 50088 Columbia River Hwy. Scappoose, OR 97056

_____

TAX ACCOUNT NO.: 3224-C0-04501 Acres: 1.31 Zoning: Existing Commercial

_____ Acres:_____ Zoning:_____

_____ Acres:_____ Zoning:_____

PRESENT USES: (farm, forest, bush, residential, etc.)

Use:	Approx. Acres
Vacant (Previously Waller Mobile Home Park)	
Total acres (must agree with above):	1.31

PROPOSED USES:

The project involves one proposed building - a 26,000 square foot repair shop - to supplement the existing Pro Automotive & Diesel building directly to the south. Site improvements include new off-street parking facilities, pedestrian circulation and access paths, stormwater infrastructure, right-of-way improvements, and landscaping.

WATER SUPPLY: _____Private well. Is the well installed? X Yes ____No

X Community system. Name_____

METHOD OF SEWAGE DISPOSAL: _____Community Sewer. Name_____
_____ Not applicable.
X Septic System.

If Septic, does the subject property already have a system? X Yes _____No
If no, is the property approved for a Septic System?_____Yes _____ No

CONTIGUOUS PROPERTY: List all other properties you own which have boundary lines touching this property:

Tax Account No.	Acres	Co-owners (if any)
3224-C0-04500	0.88	

CERTIFICATION:
I hereby certify that all of the above statements, and all other documents submitted, are accurate and true to the best of my knowledge and belief.

Date: 9/28/22 Signature:_____

NOTE: Please attach an accurate and detailed plot plan, including property lines, existing and proposed structures, location of septic tank and drainfield, farm - forest areas, large natural features (cliffs, streams, etc.).

++

Planning Department Use Only

Date Rec'd._____ Hearing Date:_____
Or: Administrative_____

Receipt No._____Stormwater & Erosion Control Fees _____

Zoning:_____ Staff Member:_____

++

VARIANCE APPLICATION
COLUMBIA COUNTY ZONING ORDINANCE
General Information

APPLICANT: Name: Matthew Alexander

Mailing address: 58640 McNulty Way, St. Helens, OR 97051

Phone No.: Office (503) 366-0399 Home (971) 404-4110

Are you the _____property owner? X _____owner's agent?

PROPERTY OWNER: _____same as above, OR:

Name: Adam Ofstad

Mailing Address: 21340 Watson Road, Scappoose, OR 97056

PROPERTY ADDRESS (if assigned): 50088 Columbia River Hwy, Scappoose, OR 97056

TAX ACCOUNT NO.: 3224-C0-04501 Acres: 1.31 Zoning: Existing Commercial

TYPE OF VARIANCE: Major Variance to Setback Requirements	Ordinance Requires:	Change to:
_____Lot size:		
_____Setback: 30' front 30' side 50' rear	FRONT 30' REAR 50'	FRONT 13' REAR 3'
Other:		

PRESENT LAND USES: (farm, forest, bush, swamp, residential, etc.)

Use:	Approx. Acres
Most recently operated as Waller Mobile Home Park. Currently vacant lot.	1.31
Total acres (should agree with above):	1.31

Variance File No. V_____

PROPOSED LAND USES: The project involves one proposed building - a 26,000 square foot repair shop - to supplement the existing Pro Automotive & Diesel building directly to the south.

WATER SUPPLY: ____Private well. Is the well installed? X Yes ____No
X Community system. Name_____

METHOD OF SEWAGE DISPOSAL: ____Community Sewer. Name_____
____ Not applicable.
X Septic System.
If Septic, does the subject property already have a system? X Yes ____No
If no, is the property approved for a Septic System?____Yes ____ No

CONTIGUOUS PROPERTY: List all adjacent property you own with boundaries touching the subject property: ____None

Tax Acc't. No.	Acres	Co-owners (if any)
3224-C0-04500	0.88	

++

CERTIFICATION:
I hereby certify that all of the above statements, and all other documents submitted, are accurate and true to the best of my knowledge and belief.

Date: 09/28/22 Signature: 

NOTE: Please attach an accurate detailed plot plan, including existing and proposed structures, septic tanks and drain fields, farm and forest areas, large natural features (e.g. cliffs, streams, ravines, etc.), roads and driveways, property lines, easements, etc.

++

Planning Department Use Only

Date Rec'd._____ Hearing Date:_____
Or: Administrative_____
Receipt No._____

Zoning:_____ Staff Member:_____
++

VARIANCE FACT SHEET

Variance Standards:

Please answer the following (attach extra pages if needed):

The following 5 requirements are from Section 1504.1A of the Columbia County Zoning Ordinance:

"A variance shall be made only when all of the following conditions and facts exist:

1. **The granting of the variance will not be detrimental to the public safety, health, or welfare, or injurious to other property;"**

1. State how the granting of your variance will not injure other property in the vicinity, nor be detrimental to the public safety, health or welfare:

Please see responses to section 1504.1A in attached narrative.

"2. **The conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property;"**

2. Describe the conditions, unique to the property (NOT the owner), over which you have no control, on which you base this variance request (parcel size, shape, location; topography; natural features; etc.):

Please see responses to section 1504.1A in attached narrative.

"3. **Approval of the application will allow the property to be used only for purposes authorized by the Zoning Ordinance;"**

3. What uses or structures do you intend to place on the property?

Please see responses to section 1504.1A in attached narrative.

"4. **Strict compliance with the Zoning Ordinance would create an unnecessary hardship;"**

4. Explain in detail the unnecessary hardship. This may be a personal or physical hardship, but it must arise out of the unique physical conditions on the property described in 2 above.

Please see responses to section 1504.1A in attached narrative.

"5. **The granting of the variance will not adversely affect the realization of the Comprehensive Plan nor violate any other provision of the Zoning Ordinance.**"

5. Will this variance be consistent with the Comprehensive Plan and other requirements of the Zoning Ordinance?

Please see responses to section 1504.1A in attached narrative.

++

Please submit all of the following:

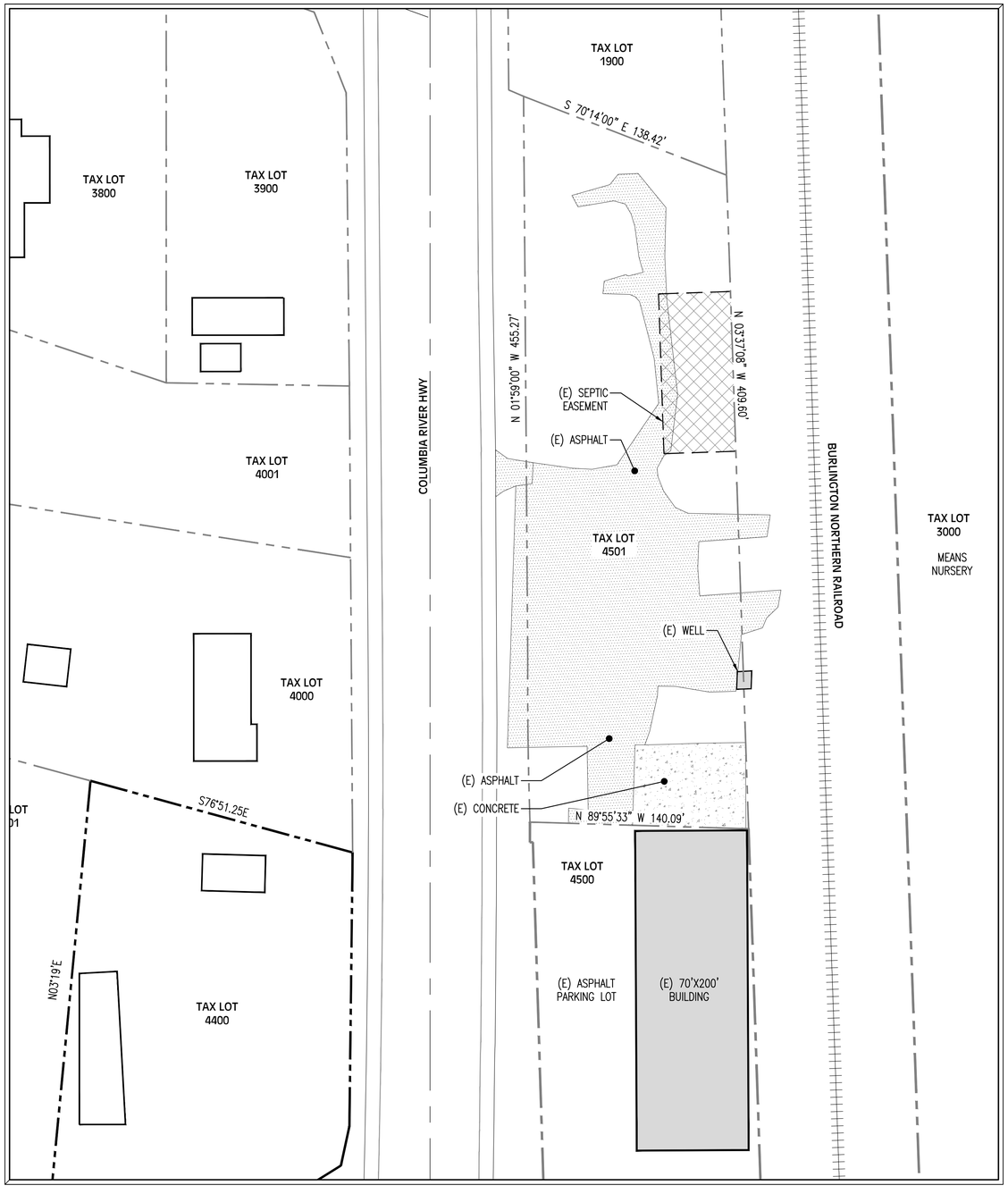
1. The attached "VARIANCE APPLICATION General Information".
2. Answers to the above questions.
3. A good measured sketch of your property, showing all existing structures, septic tanks and drain fields, large natural features, roads and driveways, property lines, easements, etc. Don't forget the North arrow and the scale of the drawing.
4. A vicinity map, with North arrow and scale.
5. The application fee.

++

PRO AUTOMOTIVE & DIESEL

NEW MAINTENANCE & REPAIR FACILITY

50084 COLUMBIA RIVER HIGHWAY, SCAPPOOSE, OR 97056



PLOT PLAN
SCALE: 1" = 40'-0"

NORTH

100' 80' 60' 40' 20' 0' 100' 200'

MASTER LEGEND

(E)	EXISTING
(N)	NEW
G	GAS RISER
C	CTV RISER
	POWER POLE
	TRAFFIC FLOW ARROW
	SIGN
	GUY WIRE ANCHOR
	POWER POLE
	SUBJECT PROPERTY LINE
	ADJACENT PROPERTY LINE
	LINE OF SETBACK
101'	(E) MINOR CONTOUR
100'	(E) MAJOR CONTOUR
101'	(N) MINOR CONTOUR
100'	(N) MAJOR CONTOUR
	CURB
	FENCE LINE
GAS	(E) GAS LINE
PWR	(E) POWER LINE
STM	(E) STORM LINE
SAN	(E) SANITARY SEWER
H2O	(E) WATER LINE
	(E) CONCRETE
	(N) ASPHALT
	(E) ASPHALT
	(N) GRAVEL
	EASEMENT

UTILITY LOCATES

(48 HOUR NOTICE PRIOR TO EXCAVATION)

OREGON LAW REQUIRES YOU TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0100. (YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER BY CALLING 503-246-1987.)

ONE CALL SYSTEM.....1 800 332 2344 or 811
ON LINE .... http://www.callbeforeyoudig.org/

THE PUBLIC WORKS MAINTENANCE SUPERVISOR, DARREN CANIPAROLI (503) 925-2334, MUST BE NOTIFIED 48 HRS IN ADVANCE TO COORDINATE ANY TAPS OR WATER VALVE OPERATION. THE CONTRACTOR IS NOT ALLOWED TO OPERATE ANY WATER VALVES CONTROLLING FLOW TO NEW PIPING FROM CITY'S POTABLE WATER SYSTEM.

A COUNTY PERMIT IS REQUIRED TO WORK IN THE PUBLIC R.O.W.

PROJECT TEAM

OWNER/CLIENT

ADAM OFSTAD
50038 COLUMBIA RIVER HWY
SCAPPOOSE, OR 97056
PHONE: (503) 987-4000

CIVIL ENGINEER

LOWER COLUMBIA ENGINEERING, LLC
58640 McNULTY WAY
ST. HELENS, OR 97051 PHONE:
PHONE: (503) 366-0399
CONTACT: ANDREW NIEMI, P.E.
andrew@lowercolumbiaengr.com

SURVEYOR

K.L.S. SURVEYING INC.
1224 ALDER STREET
VERNONIA, OR 97064
PHONE: (503) 429-6115
CONTACT: DONALD WALLACE, SURVEYOR

SITE AREA CALCULATIONS

EXISTING SITE AREA CALCULATIONS

GROSS LOT AREA:	57,920 SQ FT	(100%)
IMPERVIOUS / PAVED AREA:	32,448 SQ FT	(56.0%)
OPEN / LANDSCAPED AREAS:	25,472 SQ FT	(44.0%)
BUILDING FOOTPRINT AREA:	0 SQ FT	(0.00%)

PROPOSED SITE AREA CALCULATIONS

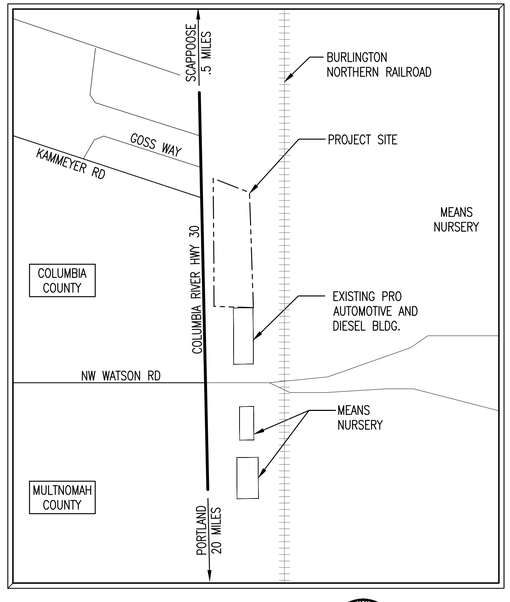
GROSS LOT AREA:	57,920 SQ FT	(100%)
IMPERVIOUS / PAVED AREA:	39,852 SQ FT	(68.8%)
OPEN / LANDSCAPED AREAS:	18,068 SQ FT	(31.2%)
BUILDING FOOTPRINT:	26,000 SQ FT	(44.9%)

DEFERRED SUBMITTALS

PLANS AND SPECIFICATIONS REQUIRED FOR THE WORK OF SPECIALTY TRADES MAY BE SUBMITTED AS DEFERRED SUBMITTALS IN ACCORDANCE WITH OSSC SECTION 107.3.4.1. THE FOLLOWING SPECIALITY TRADES WILL BE DESIGN-BUILD AND THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE OBTAINING SEPARATE PERMITS FOR THIS WORK AND RESPONSIBLE FOR ANY NECESSARY DESIGN AND/OR ENGINEERING TO MEET THE APPLICABLE CODE REQUIREMENTS:

+ ELECTRICAL + MECHANICAL + PLUMBING

DRAWING INDEX



VICINITY MAP
SCALE: NTS

NORTH

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO.	3090	COVER SHEET	
DWG. BY	JDN	PRO AUTOMOTIVE & DIESEL EXPANSION	
APPR. BY		ADAM OFSTAD	SHEET G-1
FILE	D-3090-G-1	DATE 08/31/2020	

CODE SUMMARY

GENERAL INFORMATION

PROJECT NAME:	PRO AUTOMOTIVE AND DIESEL EXPANSION
SCOPE OF WORK:	A NEW 24,000 SQ FT AUTOMOTIVE REPAIR FACILITY AND SUPPORTING BUSINESS AREAS.
ADDRESS:	50038 COLUMBIA RIVER HWY, SCAPPOOSE, OR 97056
LATITUDE/LONGITUDE:	45°43'20.2"N 122°52'30.1"W
JURISDICTION:	COLUMBIA COUNTY
ZONING:	EXISTING COMMERCIAL (EC)
MAP TAX LOT NUMBER:	3224-C0-04501
LOT SIZE:	57,920 SQ FT (1.33 ACRES)

BUILDING CONSTRUCTION TYPE, HEIGHT AND AREA:

BUILDING CODE EDITION:	2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
OCCUPANCY GROUP:	(S-1) AUTOMOTIVE REPAIR GARAGE & (B) BUSINESS
TYPE OF CONSTRUCTION:	TYPE II-B NON-SPRINKLERED
ALLOWABLE BUILDING HEIGHT:	55 FEET PER TABLE 504.3 > 29.5' FEET ACTUAL
ALLOWABLE NUMBER OF STORIES:	(S-1) 2 STORIES ABOVE GRADE PLANE PER TABLE 504.4 > 1 ACTUAL (B) 3 STORIES ABOVE GRADE PLANE PER 504.4 > 2 ACTUAL
ALLOWABLE BUILDING AREA:	(S-1) 17,500 SQ FT ALLOWABLE PER STORY
(PER TABLE 506.2)	(B) 23,000 SQ FT ALLOWABLE PER STORY
ALLOWABLE AREA INCREASE:	BUILDING PERIMETER = 840'; 790' > 30' FROM PROPERTY LINE
(PER TABLE 506.3.3)	94% PERIMETER > 30' = 0.75 FRONTAGE INCREASE FACTOR
ALLOWABLE AREAS W/ INCREASE:	(S-1) 30,625 SQ FT > 23,495 SQ FT ACTUAL
.	(B) 40,250 SQ FT > 1,914 SQ FT ACTUAL (PER FLOOR)
SUM OF RATIOS PER 508.4.2:	(S-1) 0.767 + (B) 0.083 = 0.85 < 1

FIRE AND SMOKE PROTECTION:

SEPARATE OCCUPANCIES:	OCCUPANCIES TO BE SEPARATED TO MEET REQUIREMENTS OF CHAPTER 9 EVEN THOUGH NOT REQUIRED BY TABLE 508.4.
FIRE SPRINKLERS:	SPRINKLERS NOT REQUIRED. S-1 FIRE AREAS NOT EXCEEDED.
FIRE AREAS (PER 903.2.9.1):	INDIVIDUAL REPAIR GARAGE AREA: 11,724 SQ FT < 12,000 MAX TOTAL REPAIR GARAGE AREAS: 23,448 SQ FT < 24,000 MAX NO COMMERCIAL VEHICLES WILL BE STORED/REPAIRED IN THIS BLDG.
MINIMUM FIRE RESISTIVE RATING:	PER TABLE 601: BUILDING ELEMENTS NOT REQUIRED TO BE RATED BUT TO BE OF NON-COMBUSTIBLE CONSTRUCTION OR HEAVY TIMBER.
BUILDING SEPARATION:	SEPARATION > THAN 30' EXCEPT FOR EAST WALL OF (B) USE. PER TABLE 705.5: EAST EXTERIOR WALL FIRE RATING = 1-HOUR WEST, NORTH, SOUTH & REMAINDER OF EAST RATING = 0-HOURS
FIRE AREAS/AREA SEPARATION:	FIRE BARRIER WALLS (SECT 707) REQUIRED PER CHAPTER 9:
(PER TABLE 707.3.10)	BETWEEN S-1 & S-1 = 3-HOUR BETWEEN S-1 & B = 3-HOUR
ALLOWABLE AREA OF OPENINGS:	UNLIMITED UNPROTECTED OPENINGS PER TABLE 705.8. EXCEPT EAST (B) OCCUPANCY WALL IN WHICH NO OPENINGS ARE PERMITTED.
VERTICAL SEPARATION OF OPENINGS:	VERTICAL SEPARATION OF OPENINGS NOT REQUIRED PER SECTION 705.8.5 EXCEPTION 1.
FIRE ALARMS AND DETECTION:	MANUAL ALARM NOT REQ'D FOR 'S-1' OCC. PER 907.2.10 OR 'B' OCC. PER 907.2.2. MINIMUM CONDITIONS NOT MET FOR REQUIREMENT.

OCCUPANT LOADING AND MEANS OF EGRESS:

OCCUPANT LOAD FACTORS	PER TABLE 1004.5: INDUSTRIAL 100 GROSS BUSINESS 150 GROSS
OCCUPANT LOADS:	INDUSTRIAL: 23,495 SQ FT / 100 OCC. FACTOR = 235 BUSINESS: 3,828 SQ FT / 150 OCC. FACTOR = 26
SPACES WITH ONE EXIT (BUSINESS):	MAXIMUM OCCUPANT LOAD PER STORY: 49 > 13 ACTUAL MAX. EXIT ACCESS TRAVEL DISTANCE (UPPER): 75' > 73' ACTUAL MAX. EXIT ACCESS TRAVEL DISTANCE (LOWER): 100' > 68' ACTUAL
MEANS OF EGRESS – STAIRWAYS	MIN. STAIRWAY WIDTH PER 1011.2 EXCEPT #1 = 36" < 42" ACTUAL
MEANS OF EGRESS – DOORWAYS	MIN. EGRESS DOORWAY WIDTH PER 1010.1.1 = 32" < 34" (CLEAR)
EXIT ACCESS FROM REPAIR AREA (S-1):	COMMON PATH = 75' PER TABLE 1006.2.1. TWO EXITS REQUIRED BASED ON TRAVEL DISTANCE. MAXIMUM TRAVEL DISTANCE PER 1017.2 = 200' > 120' ACTUAL
SEPARATION OF EXITS (PER 1007.1.1):	(EACH FIRE AREA) 168' DIAG. – 84' HALF DISTANCE < 157' ACTUAL

ACCESSIBILITY AND ACCESSIBLE ROUTES:

SITE ARRIVAL POINTS:	THE SITE WILL HAVE AN ACCESSIBLE ROUTE FROM THE PUBLIC RIGHT-OF-WAY AS WELL AS ACCESSIBLE ACCESS FROM THE PARKING AREA AT BUILDING ENTRANCE.
MULTISTORY BUILDINGS:	THE F-1 OCCUPANCY IS EXEMPTED UNDER SECTION 1104.4 EXCEPTION #7. THE MAIN FLOOR BUSINESS AREAS AND RESTROOMS ARE ACCESSIBLE AS REQUIRED UNDER CHAPTER 11. THE UPPER FLOOR OF THE BUSINESS OCCUPANCY IS EXEMPT FROM ACCESSIBILITY REQUIREMENTS SINCE THE AREA IS LESS THAN 3000 SQ FT PER SECTION 1104.4 EXCEPTION #1.
TOILET AND BATHING FACILITIES:	THE RESTROOM FACILITIES ARE ACCESSIBLE AS REQUIRED TO SERVE THE MINIMUM FIXTURE COUNT PER CHAPTER 29.

REQUIRED PLUMBING FIXTURES / FACILITIES:

REQUIRED FIXTURES:	3 W.C. AND 3 LAVATORY FOR 261 OCCUPANTS PER TABLE 2902.1
ACTUAL FIXTURES:	4 WATER CLOSETS, 5 LAVATORIES, AND 2 URINALS DIVIDED BETWEEN TWO SINGLE USER RESTROOMS AND A LOCKER ROOM PER 2902.2.1 EXCEPT #5.

MECHANICAL AND INTERIOR ENVIRONMENT:

TEMPERATURE CONTROL:	THE MAIN FLOOR IS NOT REQUIRED TO BE HEATED FOR HUMAN COMFORT PER SECTION 1203.1 EXCEPTION #2.
RESTROOM VENTING:	VERIFY RESTROOMS HAVE EXHAUST FANS WITH MINIMUM VENTING OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS PER OSMC TABLE 403.3.1.1.
OTHER VENTING:	ALL OTHER MECHANICAL DESIGN TO BE PART OF SEPARATE PERMIT.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSSC (WITH APPROPRIATE AMENDMENTS) NDS, AISC AND ACI SPECIFICATIONS.
2. ALL ROOF FRAMING AND ANCHORAGE IS BY OTHERS, UNLESS NOTED OTHERWISE.
3. CONTACT ENGINEER WITH ANY UNCERTAINTIES PRIOR TO PROCEEDING.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SUPPORT OF STRUCTURES AND EMBANKMENTS.
5. WINDOWS WITHIN 18" OF FINISHED FLOOR, ANY GLAZING IN DOORS OR WITHIN 24" OF ANY DOOR AND TUB ARE TO BE TEMPERED.
6. DO NOT SCALE DRAWINGS.
7. ALL SITE DESIGN ISSUES ARE THE RESPONSIBILITY OF OTHERS.
8. ALL DRAINAGE PIPES SHALL MEET THE REQUIREMENTS OF THE CURRENT UNIFORM PLUMBING CODE.
9. PROVIDE DOWNSPOUTS AND GUTTERS MEETING THE REQUIREMENTS OF ROOF DRAINAGE PER THE UNIFORM BUILDING CODE.

ELECTRICAL & MECHANICAL NOTES

1. ALL WORK SHALL BE DONE PER LOCALLY ADOPTED ELECTRICAL AND MECHANICAL CODE AND COMMONLY ACCEPTED STANDARDS.

EXCAVATION & FOUNDATION NOTES

1. CONCRETE DESIGN IS BASED ON A COMPRESSIVE STRENGTH OF 4,000 PSI AFTER 28 DAYS, ALL REINFORCING STEEL SHALL BE A-615 GRADE 60.
2. ALL REINFORCING SHALL BE SPLICED AND/OR BENT TO FULLY DEVELOP THE CAPACITY OF THE BAR (38 BAR DIAMETERS MINIMUM).
3. ALL FOUNDATIONS SHALL BE CARRIED DOWN TO THE ELEVATIONS SHOWN OR TO SUITABLE UNDISTURBED, FULLY CONSOLIDATED SOIL, FREE OF ORGANIC MATERIAL, WHICHEVER IS LOWER.
4. ANY FILL MATERIAL UNDER FOUNDATIONS SHALL BE 3/4" MINUS CRUSHED ROCK, PLACED IN LAYERS NOT EXCEEDING 8" IN DEPTH AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY, OR PER GEOTECHNICAL ENGINEERING REPORT.
5. ALL BACKFILL SHALL BE EVENLY PLACED IN LAYERS NOT EXCEEDING 8" IN DEPTH AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. REMOVE ANY STANDING WATER PRIOR TO BACKFILLING. BACKFILL SHALL NOT BE PLACED AGAINST WALL UNTIL SUFFICIENT STRENGTH AND SUPPORT HAS BEEN ACHIEVED.
6. VERIFY THAT ALL APPROPRIATE UTILITIES HAVE BEEN INSTALLED PRIOR TO EACH PHASE OF WORK.
7. ALL CONCRETE MIX POURED IN A NON-CONTROLLED ENVIRONMENT SHALL CONTAIN 5% AIR ENTERTAINMENT PER ASTM C260. ALL WALKING SURFACES SHALL RECEIVE A SLIP RESISTANT SURFACE.
8. INSTALL SUITABLE CONSTRUCTION JOINTS IN ALL SLABS AT 16'-0" MAXIMUM, ALL DIRECTIONS.
9. FOR STUD FRAMED WALLS, INSTALL (2) #4 CONT. REBAR IN FOUNDATION WALL AND (2) #4 CONT. REBAR IN FOUNDATION BASE MINIMUM, 3" TYPICAL FROM ALL EDGES. INSTALL 5/8" DIAMETER ANCHOR BOLTS AT 4'-0" O.C. WITH (2) MIN. PER PLATE AND 6" FROM PLATE ENDS. BOLTS SHALL HAVE AN EMBEDMENT DEPTH OF 10" AND A 2" HOOK. FOUNDATION DETAILS ON PLANS TAKE PRECEDENT. CONTACT ENGINEER FOR ANY WALLS OVER 4'-0" IN HEIGHT.
10. PERMANENT FILLS AND CUTS SHALL NOT SLOPE MORE THAN 2 UNITS HORIZONTAL TO 1 UNIT VERTICAL.
11. CONTRACTOR IS RESPONSIBLE FOR ALL SITE DRAINAGE ISSUES. ALL FINISHED GRADES SHALL SLOPE AWAY FROM ALL BUILDINGS WITH APPROPRIATE COLLECTION SYSTEM.

PROJECT SPECIFIC PLANS, DETAILS, & NOTES TAKE PRECEDENCE OVER THESE GENERAL NOTES

ENTRANCE & EXIT NOTES

1. ALL ENTRANCES AND EXTERIOR GROUND FLOOR EXIT DOORS TO BUILDINGS AND FACILITIES SHALL BE MADE ACCESSIBLE TO PERSONS WITH DISABILITIES.
2. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
3. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED. WHEN EXIT DOORS ARE USED IN PAIRS AND APPROVED AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF HAVING THE AUTOMATIC FLUSH BOLTS SHALL HAVE NO DOOR KNOB OR SURFACE MOUNTED HARDWARE. THE UNLATCHED LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
4. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE. PANIC BARS, PUSH/PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. LOCKED EXIT DOORS SHALL OPERATE AS ABOVE IN EGRESS DIRECTION.
5. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR PER ICC A117.1, SECTION 404.
6. THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL PROVIDE A LENGTH IN THE DIRECTION OF A DOOR SWING OF AT LEAST 60" AND THE LENGTH OPPOSITE THE DIRECTION OF A DOOR SWING OF 48" AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN THE CLOSED POSITION.
7. THE BOTTOM 10" OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH AND UNINTERRUPTED SURFACE.
8. LOCKABLE BUILDING EXIT DOORS MUST HAVE SIGNAGE THAT READS "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED." PER OSSC SECTION 1010.1.9.4 #2.2.

STEEL NOTES

1. ALL STEEL SHALL BE NEW DOMESTIC STOCK. HOT ROLLED SHAPES AND PLATES SHALL CONFORM TO ASTM A36 WITH A MINIMUM YIELD STRENGTH OF 36,000 PSI. SQUARE AND RECTANGULAR TUBING SHALL BE COLD FORMED, ELECTRIC RESISTANCE WELDED AND CONFORM TO ASTM A500-GRADE B, WITH A MINIMUM YIELD STRENGTH OF 46,000 PSI. ROUND PIPE SHALL CONFORM TO ASTM A53-GRADE B, WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI.
2. ALL WELDING SHALL BE OF SIZE AND TYPE APPROPRIATE FOR THE MEMBERS BEING WELDED PER APPROPRIATE AWS SPECIFICATIONS USING E70XX ELECTRODES. IN GENERAL ALL JOINTS SHALL BE FULLY WELDED WITH A FILLET WELD THAT IS 1/16" LESS THAN THE THINNEST MEMBER BEING JOINED, UNLESS NOTED OTHERWISE. CONTACT ENGINEER WITH ANY UNCERTAINTIES PRIOR TO PROCEEDING. TAKE EXTREME CARE TO NOT OVERHEAT EMBEDS IN CONCRETE.
3. ALL TEMPORARY SHORING FOR CONSTRUCTION PURPOSES IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL STEEL SHALL BE POWDER COATED PER INDUSTRIAL STANDARDS.
5. ALL BOLT ASSEMBLIES SHALL INCLUDE BOLT, NUT AND LARGE HARDENED FLAT WASHER. BOLTS SHALL CONFORM TO ASTM A325, UNLESS NOTED OTHERWISE. TIGHTEN ALL BOLTS UTILIZING THE "TURN-OF-NUT" METHOD.
6. INSTALL ALL ITEMS PER MANUFACTURER'S SPECIFICATIONS.
7. ANY UNCERTAINTIES SHALL BE ADDRESSED PRIOR TO PROCEEDING, LOWER COLUMBIA ENGINEERING IS NOT RESPONSIBLE FOR THE PROPER IMPLEMENTATION OF THE SPECIFICATIONS CONTAINED ON THESE DRAWINGS.

APPLICABILITY

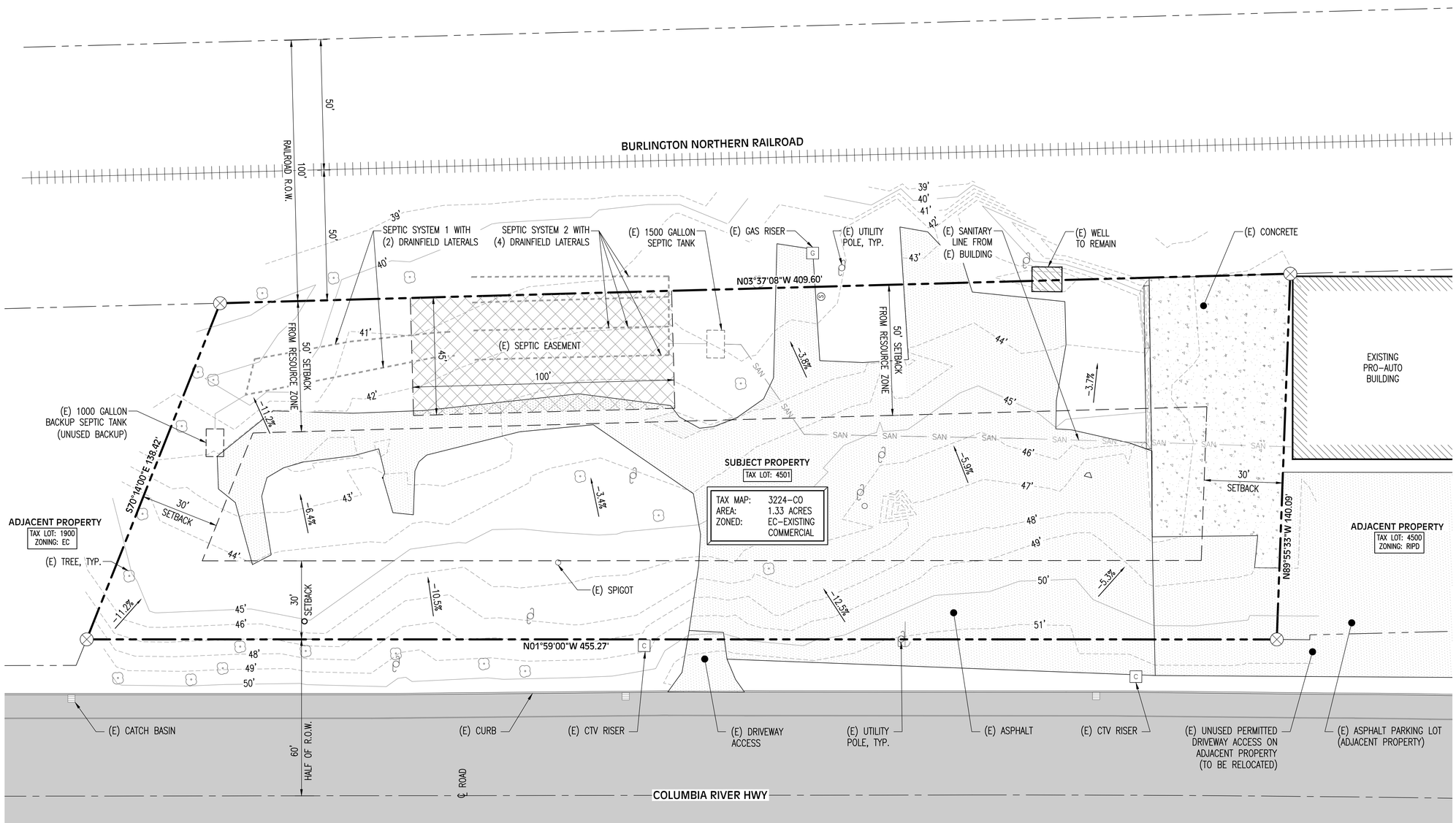
THE PURPOSE OF THIS SHEET IS TO PROVIDE GENERAL INFORMATION AND REQUIREMENTS FOR ITEMS THAT ARE NOT SPECIFICALLY ADDRESSED WITHIN THE DESIGN PLANS. NOT ALL OF THE GENERAL NOTES OR SPECIFICATIONS PROVIDED ON THIS SHEET ARE APPLICABLE TO THIS PROJECT. SPECIFIC INFORMATION INCLUDED IN THE DESIGN PLANS TAKES PRECEDENT OVER THE GENERAL NOTES PROVIDED ON THIS SHEET. FOR ASPECTS OF THE PROJECT THAT ARE NOT SPECIFICALLY ADDRESSED IN THE DESIGN PLANS OR ON THIS SHEET, THE CONTRACTOR SHOULD FOLLOW COMMON INDUSTRY STANDARDS AND LEVEL OF CARE FOR THIS TYPE OF CONSTRUCTION. FOR SUCH ITEMS, THE CONTRACTOR SHALL PROVIDE A SUBMITTAL THAT DESCRIBES THE PROPOSED WORK IN DETAIL. APPROVAL OF THIS SUBMITTAL BY THE OWNER OR THEIR REPRESENTATIVE IS REQUIRED PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY. CONTACT THE OWNER OR THEIR REPRESENTATIVE WITH ANY QUESTIONS OR UNCERTAINTIES PRIOR TO PROCEEDING WITH BIDDING OR EXECUTING ANY CONSTRUCTION ACTIVITY.

DATE: 08/05/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	GENERAL NOTES		
DWG. BY RM2	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	G-2
FILE D-3090-G-2	DATE 05/26/2022		



EXISTING SITE CONDITIONS

SCALE: 1" = 20'-0"

NORTH

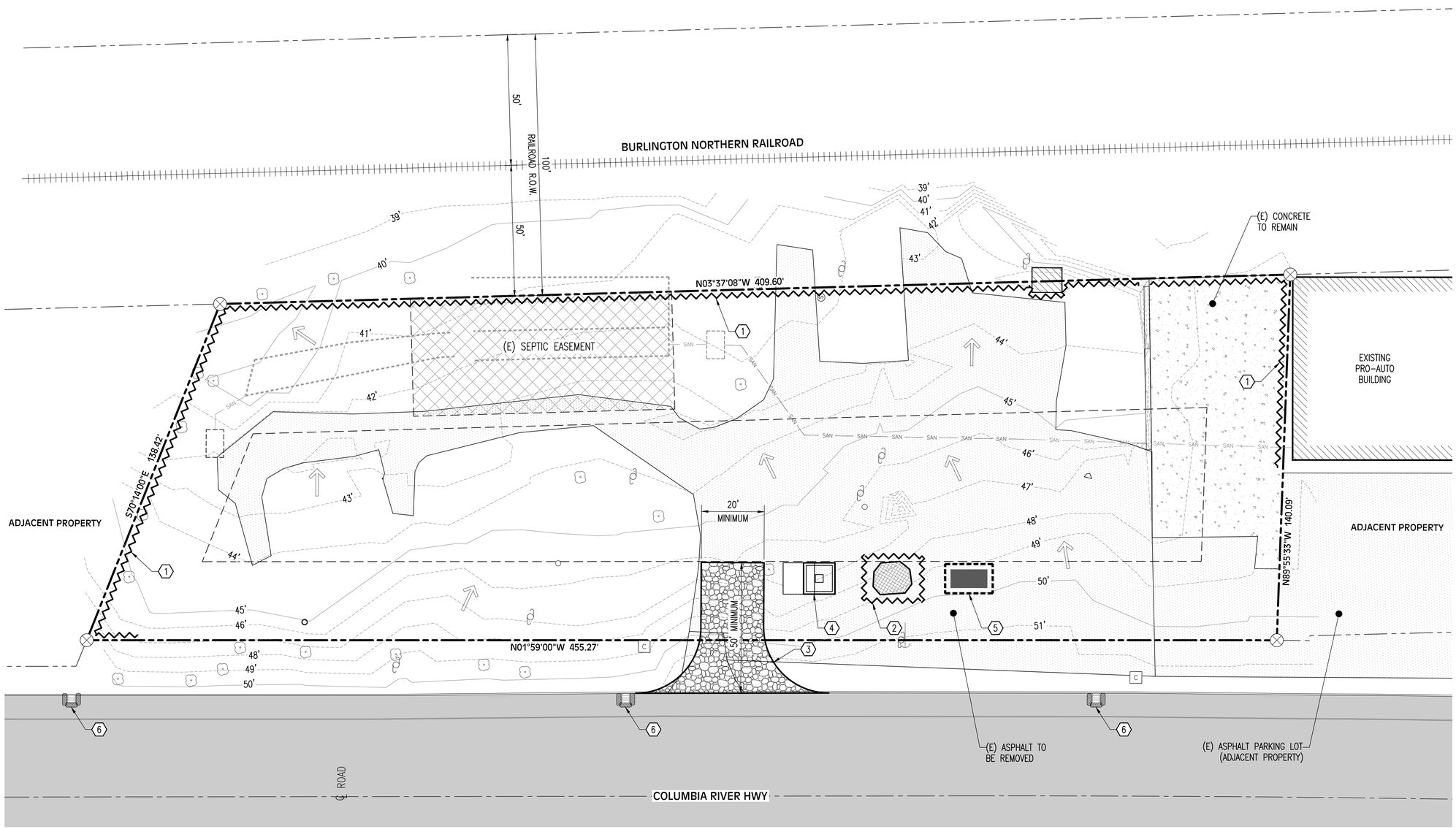
50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	EXISTING CONDITIONS PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-1
FILE D-3090-C-1	DATE 08/31/2020		



ESC LEGEND

E.O.G.	EDGE OF GRAVEL
E.O.P.	EDGE OF PAVEMENT
(E)	EXISTING
(N)	NEW
	SEDIMENT FENCE (AS REQUIRED)
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	FLOW DIRECTION
	CONSTRUCTION ENTRANCE SEE DETAIL 855 ON SHEET D-1
	CATCH BASIN W/ INLET PROTECTION SEE DETAIL 915 ON SHEET D-1
	TEMPORARY STOCKPILE
	CONCRETE WASHOUT AREA SEE DETAIL 900 ON SHEET D-1
	STORAGE AREA FOR POLLUTANT STORAGE CONTAINERS

EROSION CONTROL KEYNOTES

1. INSTALL SEDIMENT FENCING AT THE PERIMETER OF SITE DEMOLITION AND GRADING ACTIVITIES. SEE DETAIL 875 ON SHEET D-1.
2. PROPOSED SOILS STOCKPILE AREA. PROTECT STOCKPILE WITH PLASTIC SHEETING AS REQUIRED PER DETAIL 810 ON SHEET D-1. PROVIDE SEDIMENT FENCE AROUND SOILS STOCKPILES PER DETAIL 875 ON SHEET D-1.
3. PROVIDE TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL 855 ON SHEET D-1. VERIFY LOCATION IN FIELD.
4. PROVIDE CONCRETE WASHOUT AREA PER DETAIL 900 ON SHEET D-1.
5. NON-EROSION POLLUTANT STORAGE AREA (IF NECESSARY). PROVIDE LEAK-PROOF, COVERED STORAGE CONTAINERS FOR NON-EROSION POLLUTANTS.
6. EXISTING STORMWATER INFRASTRUCTURE TO HAVE INLET PROTECTION AS NECESSARY PER DETAIL 915 ON D-1

EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. THE "STAGING", SHALL BE MOVED TO AN APPROPRIATE LOCATION TO ACCOMMODATE IMPROVEMENTS.
3. INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

EROSION AND SEDIMENT CONTROL

SCALE: 1" = 20'-0"

NORTH

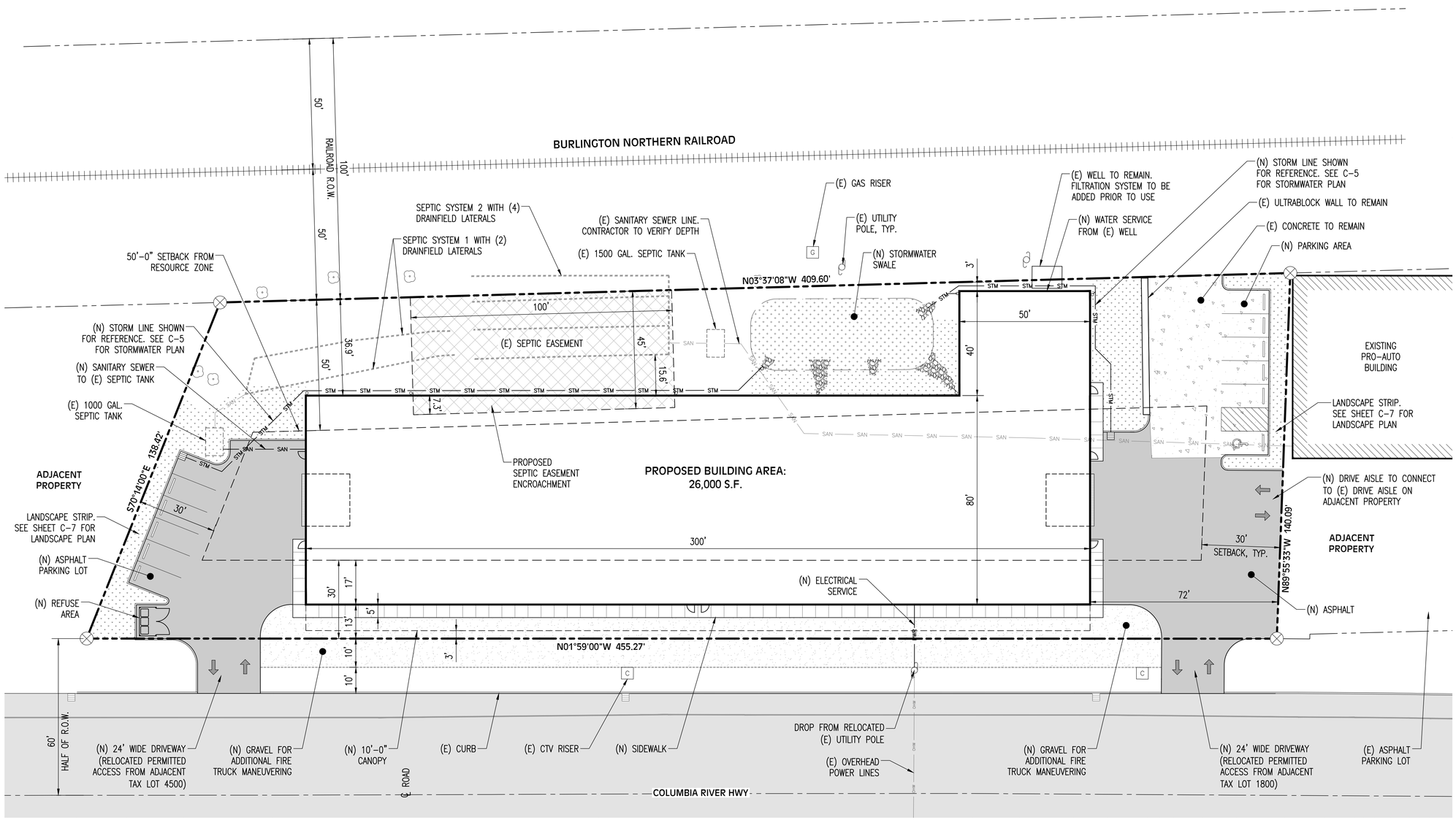
50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	EROSION AND SEDIMENT CONTROL PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-2
FILE D-3090-C-2	DATE 08/31/2020		



PROPOSED SITE PLAN

SCALE: 1" = 20'-0"

NORTH

50' 40' 30' 20' 10' 0' 50' 100'

SITE PLAN NOTES

1. ALL PROPERTY LINES AND EASEMENTS MUST BE VERIFIED PRIOR TO CONSTRUCTION.
2. ALL LOTS MUST BE VERIFIED BY THE PROPER JURISDICTIONS PRIOR TO CONSTRUCTION.
3. ALL EXISTING HIGHWAY STREET SIGNAGE TO BE PROTECTED IN PLACE.
4. NEIGHBORING BUSINESS OPERATIONS ARE TO REMAIN UNINTERRUPTED AND ONGOING DURING CONSTRUCTION.

AREA CALCULATIONS

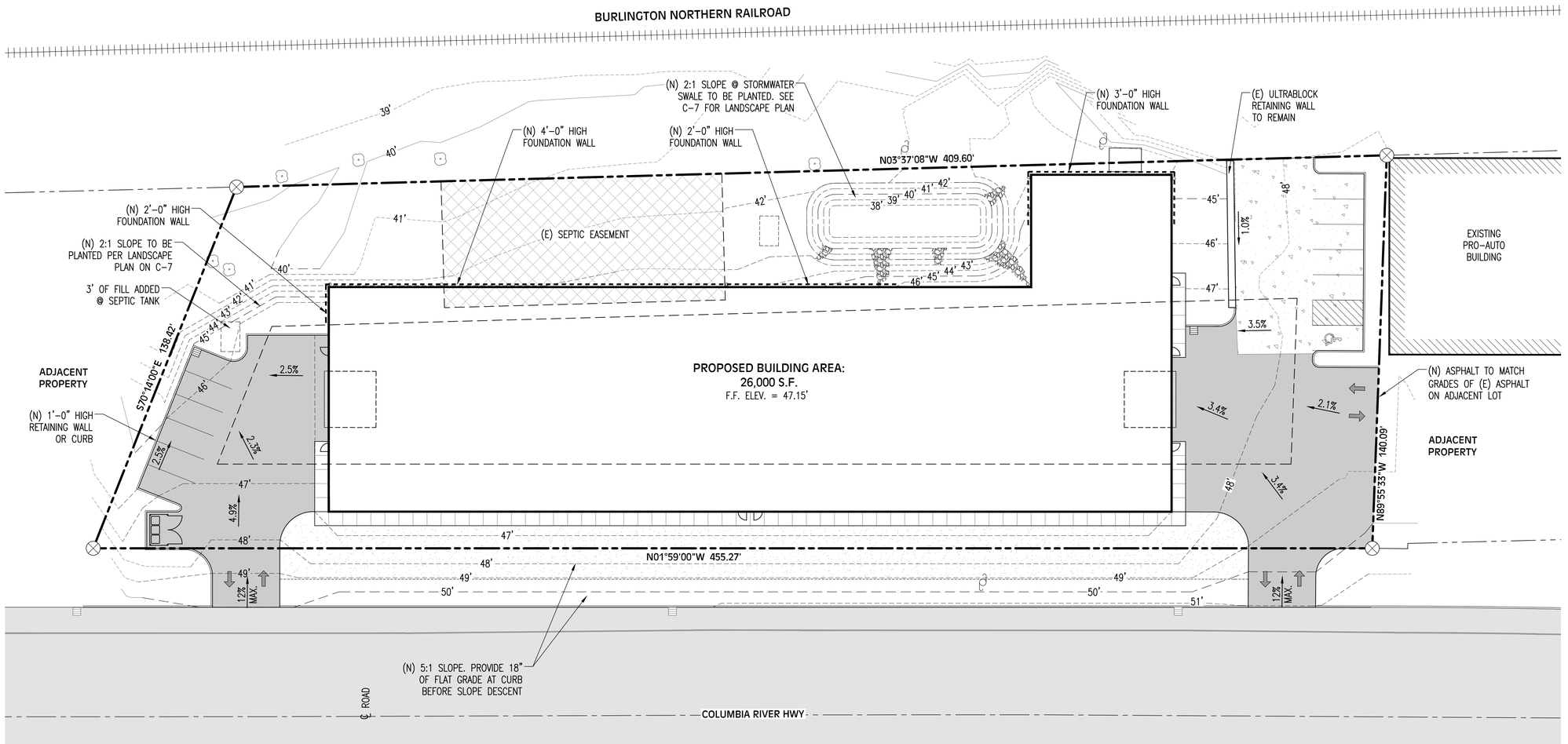
GROSS LOT AREA:	57,920 SQ FT (100%)
IMPERVIOUS / PAVED AREA:	39,852 SQ FT (68.8%)
-BUILDING FOOTPRINT:	26,000 SQ FT (44.9%)
OPEN / LANDSCAPED AREAS:	18,068 SQ FT (31.2%)
TOTAL PARKING SPACES	12 SPACES
TOTAL LOADING ZONES	1 SPACE (INTERIOR)

DATE: 09/29/2023
PRELIMINARY NOT FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	PROPOSED SITE PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-3
FILE D-3090-C-3	DATE 08/31/2020		



GRADING PLAN NOTES

1. ALL IMPERVIOUS SURFACES SHALL HAVE A MINIMUM 1.0% SLOPE TOWARDS COLLECTION SYSTEM.
2. ALL WALKWAYS SHALL HAVE A MAXIMUM SLOPE OF 5.0% IN THE DIRECTION OF TRAVEL AND MAXIMUM 2.0% CROSS SLOPE.
3. PLAN CAN BE PROVIDED IN CAD FORMAT TO ACCOMMODATE CONSTRUCTION STAKING. (NOT ALL DIMENSIONS ARE SHOWN)
4. LANDSCAPE AREAS SHALL BE SLOPED TOWARDS DRAINAGE AREAS AS REQUIRED TO PREVENT PUDDLES.
5. THE EXISTING SITE DOES NOT CONTAIN WETLANDS OR WATER BODIES.

BENCHMARK AND DUTUM

1. ALL TOPOGRAPHIC INFORMATION WAS COLLECTED UTILIZING A VERTICAL DATUM OF NAVD88. FIELD VERIFY ELEVATIONS AS NECESSARY.
2. ALL EXISTING TOPOGRAPHIC AND UTILITY INFORMATION WAS BASED ON A SURVEY FROM KLS SURVEYING, INC. DATED FEBRUARY 2ND, 2022.

GRADING PLAN

SCALE: 1" = 20'-0"

NORTH

50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
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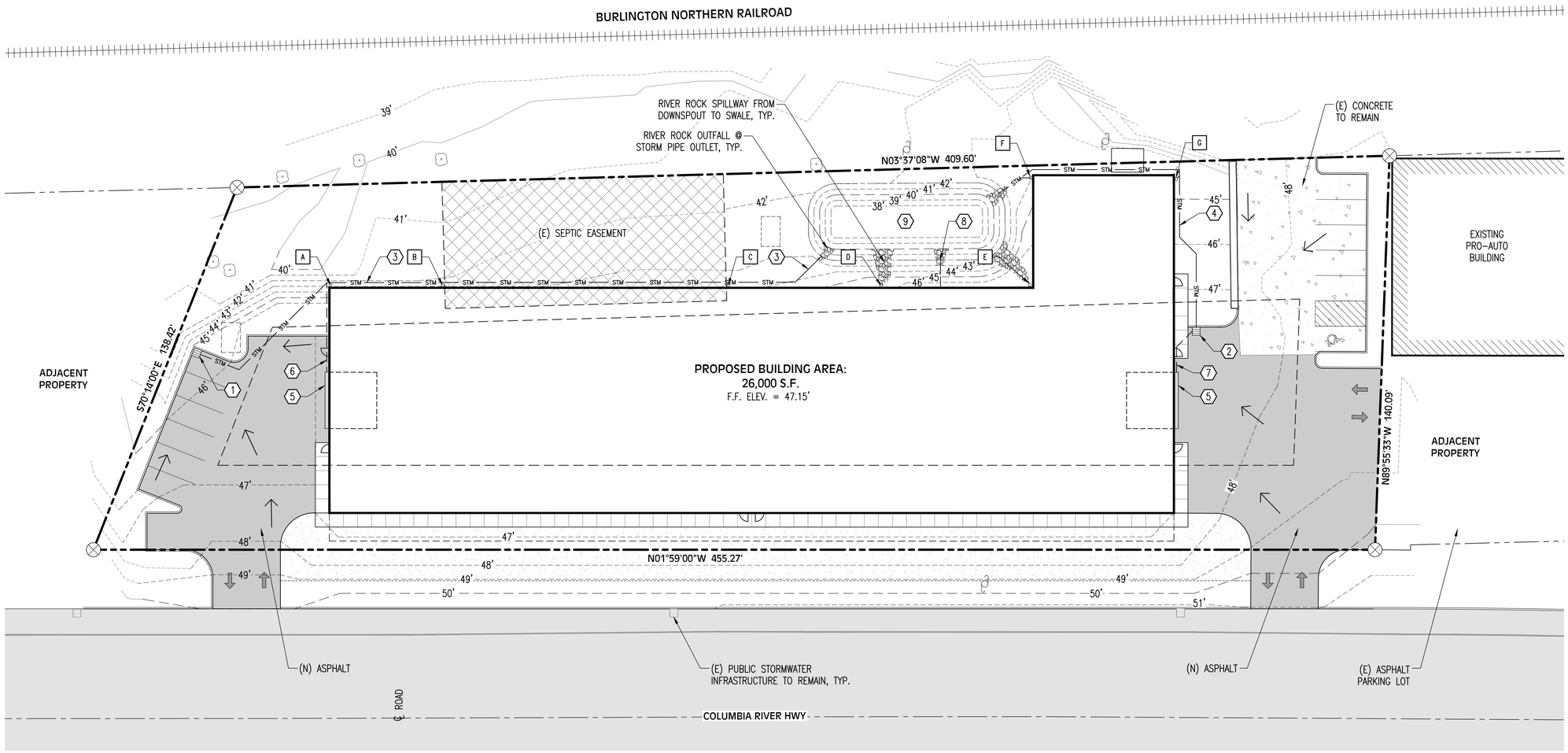
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	GRADING PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-4
FILE D-3090-C-4	DATE 08/31/2020		



STORMWATER PLAN

SCALE: 1" = 20'-0"

NORTH

50' 40' 30' 20' 10' 0' 50' 100'

STORMWATER KEYNOTES

1. (N) CATCH BASIN
   RIM ELEV. = 45.75'
   6" I.E. OUT = 43.75'
2. (N) CATCH BASIN
   RIM ELEV. = 46.90'
   4" I.E. IN = 45.19'
   6" I.E. OUT = 44.90'
3. (N) 238 L.F. OF 6" PVC @ 0.75% SLOPE.
   I.E. @ (N) CB = 43.75'
   I.E. @ OUTFALL = 42.00'
4. (N) 126 L.F. OF 6" PVC @ 3.4% SLOPE.
   I.E. @ (N) CB = 44.90'
   I.E. @ OUTFALL = 42.00'
5. (N) 6"x20'-0" TRENCH DRAIN AT OVERHEAD DOORS (2 TOTAL)
6. (N) 31' OF 4" PVC FROM TRENCH DRAIN.
7. (N) 16' OF 4" PVC FROM TRENCH DRAIN.
8. (N) 10' OF 4" PVC FROM FOUNDATION DRAIN TO STORMWATER SWALE. PROVIDE RIVER ROCK SPILLWAY AT SWALE.
9. (N) STORMWATER SWALE
   T.O. SWALE = 42.00'
   B.O. SWALE = 38.00'

DOWNSPOUT TABLE

DOWNSPOUT #	SIZE	ROOF AREA
1	6"	4,000 FT²
2	6"	4,000 FT²
3	6"	4,000 FT²
4	6"	4,000 FT²
5	6"	4,000 FT²
6	4"	3,000 FT²
7	4"	3,000 FT²

4.7" PER HOUR 100 YEAR

DATE: 09/29/2023
PRELIMINARY
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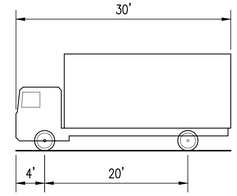
REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	STORMWATER PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-5
FILE D-3090-C-5	DATE 08/31/2020		

VEHICLE MANEUVERING NOTE

A LARGE TRUCK HAS BEEN USED FOR MANEUVERING TO DEMONSTRATE THAT THE PROPOSED ACCESSES AND CIRCULATION ROUTES PROVIDE AMPLE SPACE FOR LARGER VEHICLES. HOWEVER, ALL CUSTOMER VEHICLES WILL BE MOVED TO AND FROM THE EXISTING FACILITY TO THE OVERFLOW BUILDING VIA A CONNECTED DRIVE (SHOWN IN THE PLAN ON THIS SHEET). THE PROPOSED ACCESSES WILL PRIMARILY BE USED FOR EMPLOYEES AND CUSTOMER VEHICLES WILL BE KEPT OUT OF THE PUBLIC RIGHTS-OF-WAY. CUSTOMERS WILL DROP-OFF AND PICK-UP THEIR VEHICLES VIA THE WATSON ROAD DRIVEWAY ON THE EXISTING P.A.D. PROPERTY.



SU-30 – SINGLE UNIT TRUCK

OVERALL LENGTH:	30.0 FT
OVERALL WIDTH:	8.00 FT
OVERALL BODY HEIGHT:	13.5 FT
MIN BODY GROUND CLEARANCE:	1.36 FT
TRACK WIDTH:	8.00 FT
LOCK-TO-LOCK TIME:	5.00 S
MAX STEERING ANGLE:	31.80°

TURNING MANEUVER VEHICLE

SCALE: 1" = 10'-0"

VEHICULAR PARKING

VEHICULAR STAFF SPACES (12):

(12) 90 DEGREE STALLS

(1) ADA VAN ACCESSIBLE STALL

*LOADING AND UNLOADING WILL TAKE PLACE INSIDE THE BUILDING WITHIN THE 20'-0" WIDE DRIVE AISLE. SEE SHEET A-1 FOR MORE INFORMATION.

PARKING NOTES

1. THE PROPOSED SERVICE SHOP WILL NOT BE OPEN TO THE PUBLIC AND PROPOSED PARKING NUMBERS ARE BASED ON ANTICIPATED MAXIMUM STAFF LEVEL. 8-10 EMPLOYEES ARE PREDICTED TO BE THE MAXIMUM NUMBER WORKING SIMULTANEOUSLY.
2. LOADING AND UNLOADING WILL TAKE PLACE INSIDE THE BUILDING WITHIN A 20'-0" WIDE DRIVE AISLE. SEE SHEET A-1 FOR LOCATION.
3. REPAIR SHOP WILL SERVICE SEMI TRUCKS (TRACTOR ONLY), TRACTORS, BOX TRUCKS, AND PICKUPS. TURNING MANEUVERS DEPICTED IN PLAN ARE BASED ON BOX TRUCKS AS THEY HAVE THE LARGEST TURNING RADIUS.
4. THE PROPOSED BUILDING WILL BE USED TO SUPPLEMENT THE EXISTING REPAIR SHOP ON THE ADJACENT PROPERTY. THE MAJORITY OF TRAFFIC INVOLVING VEHICLES TO BE SERVICED WILL OCCUR BETWEEN THE TWO PROPERTIES AND NOT OFF THE HIGHWAY. HOWEVER, MANEUVERING HAS BEEN SHOWN OFF THE HIGHWAY TO DEMONSTRATE FUNCTIONALITY.

BURLINGTON NORTHERN RAILROAD
50'
100'
RAILROAD R.O.W.
50'
N03°37'08"W 409.60'
S70°14'00"E 139.42'
(E) SEPTIC EASEMENT
28'
DRIVE AISLE
(N) WHEEL STOP, TYPICAL
6"
5' MIN. LANDSCAPE
EXISTING PRO-AUTO BUILDING
18' TYP.
9' TYP.
63'
(6) 9'x18' STALLS
(1) 9'x18' ACCESS AISLE
(E) CONCRETE TO REMAIN AS PARKING SURFACE
VEHICLES FROM (E) FACILITY AND (E) PERMITTED ACCESS OFF WATSON ROAD (ALL CUSTOMER VEHICLES)
5'
6'
6.5' LANDSCAPE
26' MIN. DRIVE AISLE
ADJACENT PROPERTY
54'
(6) 9'x18' STALLS
18'
PROPOSED BUILDING
20'
20'
DIRECTION OF TRAVEL. DRIVE AISLE WITHIN BUILDING TO BE TWO-WAY
(N) 5'-0" WIDE CONCRETE SIDEWALK
ADJACENT PROPERTY
(N) ASPHALT TO CONNECT TO EXISTING ASPHALT DRIVE AISLE ON ADJACENT PROPERTY
N89°55'33"W 140.09
(N) REFUSE AREA
13'
12'
24'
N01°59'00"W 455.27'
24'
(E) ASPHALT PARKING LOT
(N) 20'-0" WIDE ACCESS EASEMENT THROUGH ADJACENT PROPERTY (IF REQUIRED)
(N) ASPHALT
(N) 24' WIDE DRIVEWAY (RELOCATED PERMITTED ACCESS FROM ADJACENT TAX LOT 4500)
℄ DRIVE
(N) ASPHALT
HOLD FOR 5'-0" SIDEWALK
(N) 5'-0" WIDE CONCRETE SIDEWALK
60' HALF OF EXISTING R.O.W.
(E) CURB
(N) GRAVEL FOR ADDITIONAL FIRE TRUCK MANEUVERING
(N) 24' WIDE DRIVEWAY (RELOCATED PERMITTED ACCESS FROM ADJACENT TAX LOT 1800)
(N) DRIVEWAYS TO BE USED BY EMPLOYEE VEHICLES ONLY
COLUMBIA RIVER HWY
BODY OUTLINE, TYP.
CHASIS OUTLINE, TYP.
BODY OUTLINE, TYP.
CHASIS OUTLINE, TYP.
℄ ROAD

ACCESS, PARKING, AND CIRCULATION PLAN

SCALE: 1" = 20'-0"

NORTH

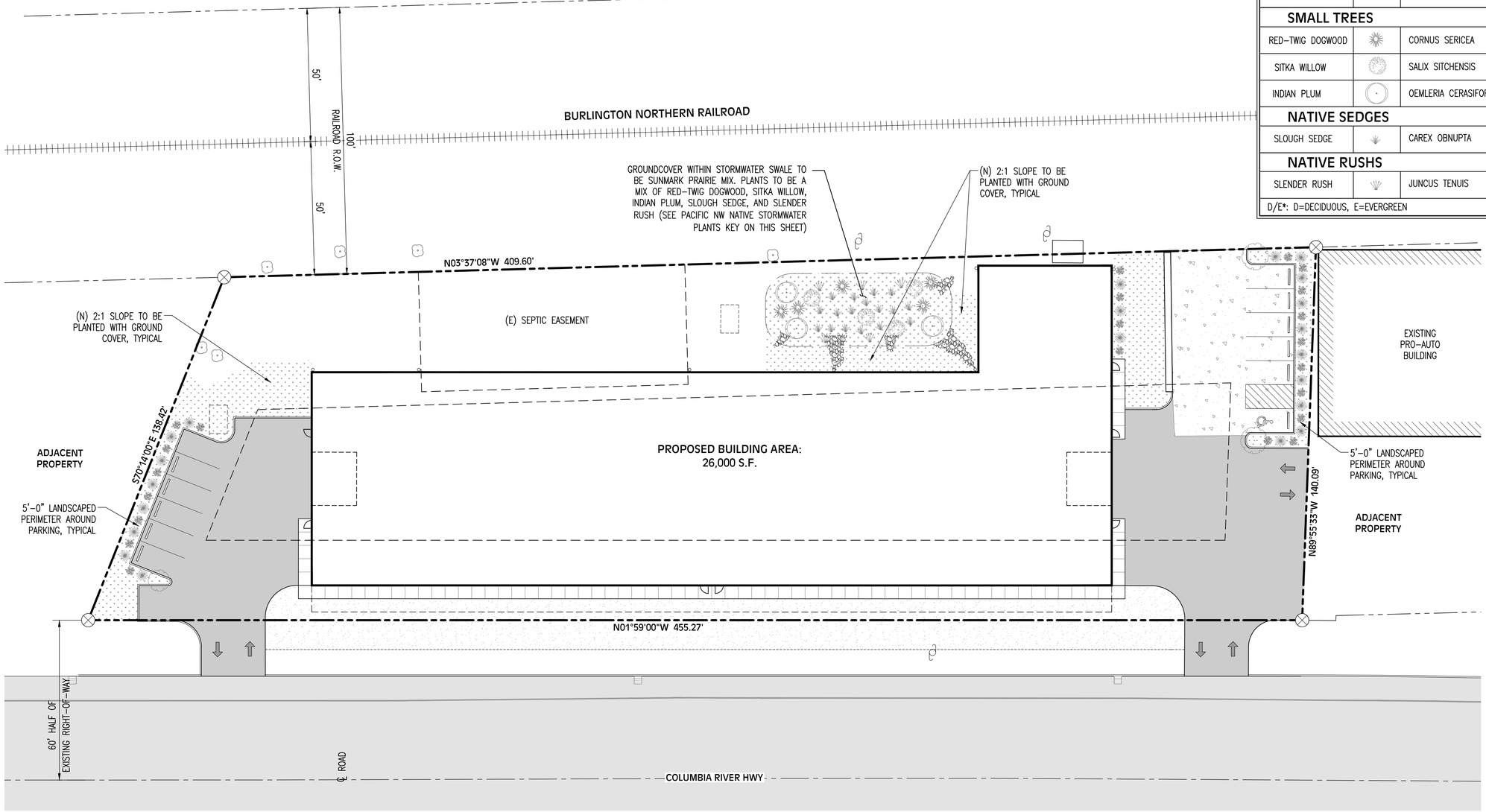
50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	ACCESS, PARKING, AND CIRCULATION PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD		SHEET C-6
FILE D-3090-C-6		DATE 08/31/2020	



PACIFIC NW NATIVE STORM WATER PLANTS KEY

COMMON NAME	SYMBOL	BOTANICAL NAME	MATURITY WIDExTALL	CHARACTERISTICS	CONDITIONS	D/E*
SMALL TREES						
RED-TWIG DOGWOOD		CORNUS SERICEA	6'x10'	WHITE LATE SPRING FLOWERS, BLUE FRUIT, STRIKING RED BARK, SPREADING	☼ ☼	D
SITKA WILLOW		SALIX SITCHENSIS	3'-25'	LOOSE VELVETY LEAVES, LONG HAIRY CATKINS, WETLAND	☼ ☼	D
INDIAN PLUM		OEMLERIA CERASIFORMIS	6'x12'	WHITE EARLY SPRING FLOWERS, PLUM-LIKE FRUIT	☼ ☼	D
NATIVE SEDGES						
SLOUGH SEDGE		CAREX OBNUPTA	22"-60"	DENSE TAN FLOWERS ON BRIGHT GREEN STALKS, PREFERS WET/MOIST	☼ ☼	E
NATIVE RUSHS						
SLENDER RUSH		JUNCUS TENUIS	5"-24"	STURDY, TUFFED PERENNIAL, GREENISH TAN FLOWERS, PREFERS WET/MOIST	☼ ☼	E

D/E*: D=DECIDUOUS, E=EVERGREEN

TREE & SHRUB TYPE LEGEND

STREET TREE (NOT REQUIRED): SUMMER LINDEN
DECIDUOUS STREET TREE AT 25' O.C.
NO LESS THAN 10 FEET TALL AT TIME OF PLANTING
20'x15' AT MATURITY
(QUANTITY: 0)

SCREENING TREES
N. WHITE CEDAR
4'x8' AT MATURITY
(QUANTITY: 20 – 25)

SCREENING SHRUBS
OREGON GRAPE (MAHONIA AQUIFOLIUM)
2' TALL AT MATURITY
(QUANTITY: 20 – 25)

ISLAND TREES – CHINESE DOGWOOD (COMUS KOUSA 'CHINENSIS')
QUANTITY: 3

GROUNDCOVER
KINNIKINNICK
(ARCTOSTAPHYLOS UVA-URSI)

SWALE GROUNDCOVER
SUNMARK® PRAIRIE MIX

NOTE:
INTALL 24" MINIMUM OF TOP SOIL IN ALL LANDSCAPE AREAS WITH 2" OF GARDEN MULCH ON SURFACE.

LANDSCAPE PLAN

SCALE: 1" = 20'-0"

NORTH

50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
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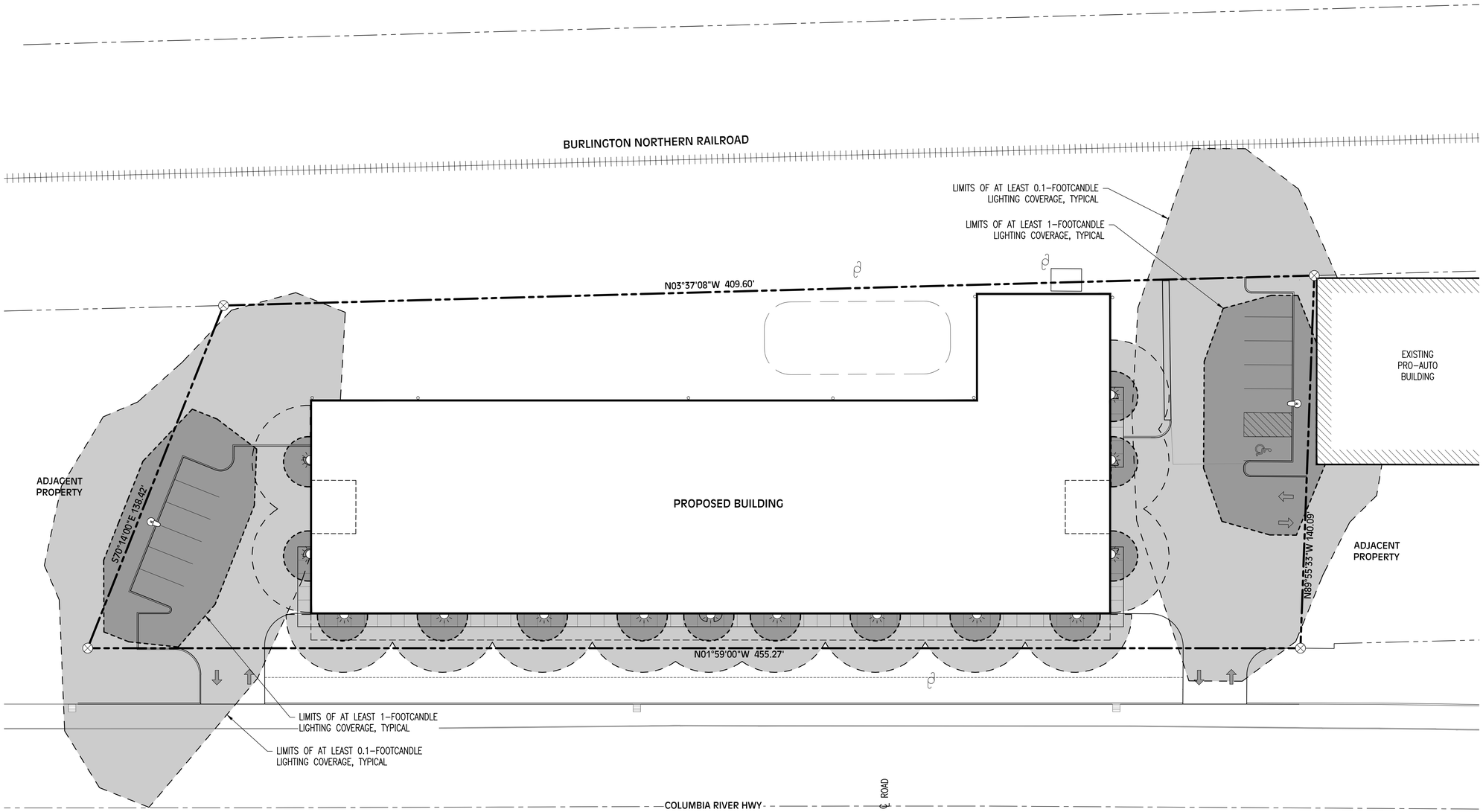
Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	LANDSCAPE PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-7
FILE D-3090-C-7	DATE 08/31/2020		



ILLUMINATION PLAN LEGEND

(E)	EXISTING
(N)	NEW
TYP.	TYPICAL
FC	FOOTCANDLE
⊗	PROPERTY CORNER
○	WOOD UTILITY POLE
	PARKING LOT LIGHT
	WALL MOUNTED LIGHT
	PROJECT PARCEL PROPERTY LINE
	ADJACENT PARCEL PROPERTY LINE
	BOUNDARY OF 1–FOOTCANDLE
	BOUNDARY OF 0.1–FOOTCANDLE
	AREA OF AT LEAST 1–FOOTCANDLE
	AREA OF AT LEAST 0.1–FOOTCANDLE

LIGHTING FIXTURE LEGEND

PARKING LOT FIXTURE
LUMARK PRV PREVAIL SERIES AREA LUMINAIRE
SINGLE HEAD MOUNTED AT 20' AGL

WALL MOUNTED FIXTURE
LITHONIA LIGHTING OLWX1 13W 4000K LED WALL PACK MOUNTED TO BUILDING AT 8' AGL

CONTRACTOR TO PROVIDE FOOTCANDLE (fc) LEVELS AND SHIELDING AS RECOMMENDED BY (I.E.S.) ILLUMINATING ENGINEERING SOCIETY, AND AS SHOWN IN OREGON ENERGY TRUST'S LATEST "FOOTCANDLE LIGHTING GUIDE" TO ILLUMINATE AND ASSURE SAFETY AT WALKWAYS, EXTERIOR ACTIVITY AREAS (DELIVERY AND LOADING), PARKING, MAIN ENTRANCE, AND ALL OTHER EXTERIOR ENTRANCES AND EXITS. ASSURE NO GLARE INTO PUBLIC RIGHT–OF–WAYS OR NEAR BY RESIDENCES.

HORIZONTAL (fc)
BUILDING EXTERIOR:
AVERAGE MAINTAINED (fc) 1 fc
RANGE OF MAINTAINED (fc) .5 – 2 fc

PARKING AREA:
AVERAGE MAINTAINED (fc) 1 fc
RANGE OF MAINTAINED (fc) .5 – 2 fc

PROVIDE CUT OFF SHIELDS AT EACH LIGHT FIXTURE AS REQUIRED TO COMPLY WITH I.E.S. STANDARDS.

ILLUMINATION PLAN

SCALE: 1" = 20'–0"

NORTH

50' 40' 30' 20' 10' 0' 50' 100'

DATE: 09/29/2023
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St. Helens, Oregon
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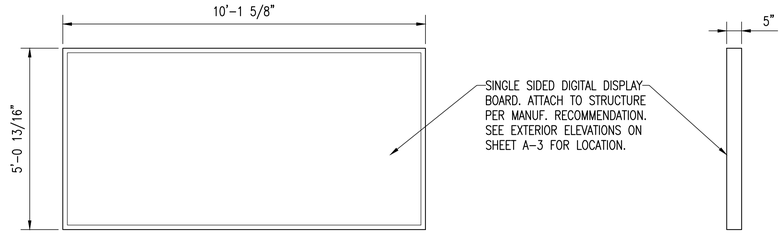
PROJ. NO. 3090	ILLUMINATION PLAN		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-8
FILE D–3090–C–8	DATE 08/31/2020		

FRONT W/ DISPLAY SIGNAGE



FRONT

SIDE

LED DIGITAL SIGN ELEVATIONS

SCALE: 1/2" = 1'-0"

DATE: 09/29/2022
PRELIMINARY
NOT
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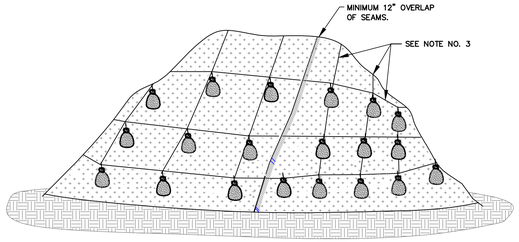
REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	SIGN ELEVATIONS		
DWG. BY MLA	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	C-9
FILE D-3090-C-9	DATE 08/31/2020		

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



PLASTIC SHEETING

NOTES:

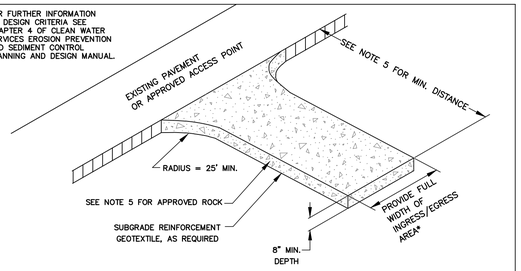
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. PERIMETER SEDIMENT CONTROL BMP TO BE INSTALLED A MIINIMUM OF 3' FROM TOE OF STOCKPILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR APPROVED EQUAL ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.
4. PLASTIC TO EXTEND MINIMUM 1' BEYOND TOE OF SLOPE.
5. AS APPROPRIATE, BMP'S SHALL BE INSTALLED TO CONVEY WATER DISCHARGE FROM STOCKPILE AREAS.

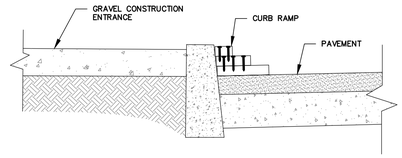
PLASTIC SHEETING

DRAWING NO. 810 REVISED 10-31-19

CleanWater Services

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.





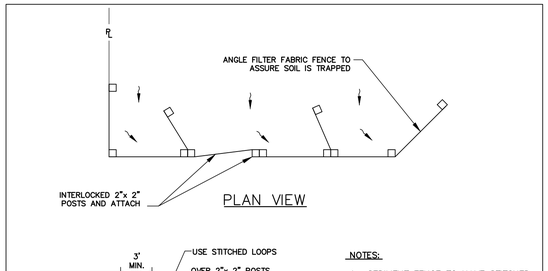
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF- WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS
   SINGLE FAMILY
   20' LONG BY 20' WIDE 8" DEEP OF ¾" MINUS CLEAN ROCK.
   COMMERCIAL/SITE DEVELOPMENT
   50' LONG BY 20' WIDE 3-6" CLEAN ROCK, GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

CONSTRUCTION ENTRANCE

DRAWING NO. 855 REVISED 10-31-19

CleanWater Services

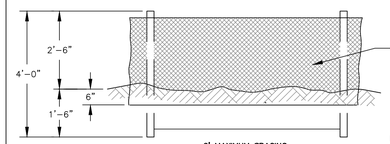


PLAN VIEW

PROFILE

NOTES:

1. SEDIMENT FENCE TO HAVE STITCHED LOOPS AROUND 2" x 2" POSTS.
2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
3. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
4. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
5. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
6. PANELS MUST BE PLACED ACCORDING TO SPACING ON DRAWING NO. 940.



FRONT VIEW

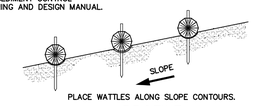
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SEDIMENT FENCE

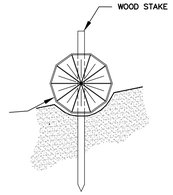
DRAWING NO. 875 REVISED 10-31-19

CleanWater Services

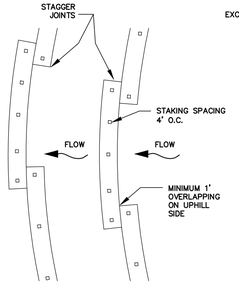
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



PROFILE



SECTION



PLAN VIEW

NOTES:

1. STAKING SPECIFICATIONS:
   a. 1"X2" WOODEN STAKES
   b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY ERODIVE SOILS.
2. SPACING IN ACCORDANCE WITH DETAIL 940.
3. REMOVE ALL ROCKS, CLODS, VEGETATION OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED WATTLES WILL HAVE DIRECT CONTACT WITH THE SOIL.
4. INSTALL THE WATTLES IN A 2" DEEP TRENCH, INSURING THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE WATTLE. THE ENDS OF ADJACENT WATTLES SHALL BE OVERLAPPED 1 FT. MINIMUM TO PREVENT SEDIMENT PASSING THROUGH THE FIELD JOINT.

WATTLES

DRAWING NO. 880 REVISED 10-31-19

CleanWater Services

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

NOTES:

1. DIRECT THE OUTLET SIDE OF THE ROCK/COMPOST FILTER BERMS ONTO A STABILIZED AREA, SUCH AS VEGETATION AND/OR ROCK.
2. EMBED ROCK FILTER BERM A MIN. OF 4" INTO THE EXISTING GROUND/EMBANKMENT.
3. USE ROCK FILTER BERM ON 3H:1V OR FLATTER SIDE SLOPES. WITHIN THE SAFETY CLEAR ZONE. USE 6H:1V OR FLATTER ON SIDE SLOPES.
4. PLACE COMPOST FILTER BERMS ALONG OR ON THE GROUND CONTOUR WITH THE ENDS TURNED UP SLOPE.
5. PRIOR TO INSTALLING A COMPOST FILTER BERM IN A VEGETATED AREA, ENSURE THAT THE VEGETATION IS CUT TO A HEIGHT OF NO GREATER THAN 3" PRIOR TO INSTALLATION.
6. VERIFY THAT COMPOST HAS NOT BEEN CHEMICALLY TREATED AND IS WEED-FREE, PLASTIC-FREE, DECOMPOSED, NON-WOODY PLANT MATERIAL; ANIMAL WASTE IS NOT ALLOWED.

ROCK FILTER BERM

COMPOST FILTER BERM

FILTER BERMS ROCK/COMPOST

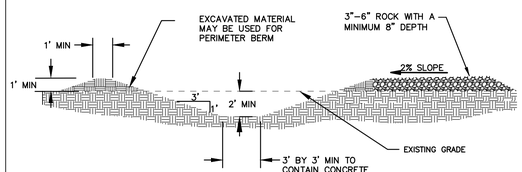
DRAWING NO. 890 REVISED 10-31-19

CleanWater Services

NOTES:

1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATER SOURSES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.

PLAN

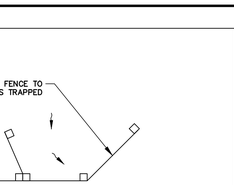


SECTION A-A

CONCRETE WASHOUT

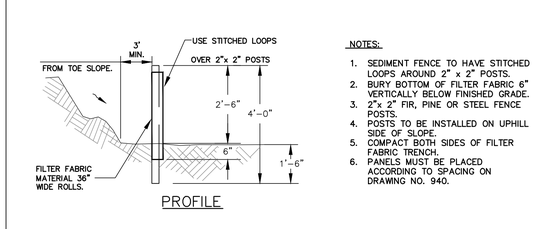
DRAWING NO. 900 REVISED 10-31-19

CleanWater Services



AREA DRAIN

CATCH BASIN



DITCH INLET

DITCH INLET PLAN VIEW

NOTES:

1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

INLET PROTECTION TYPE 4

DRAWING NO. 915 REVISED 10-31-19

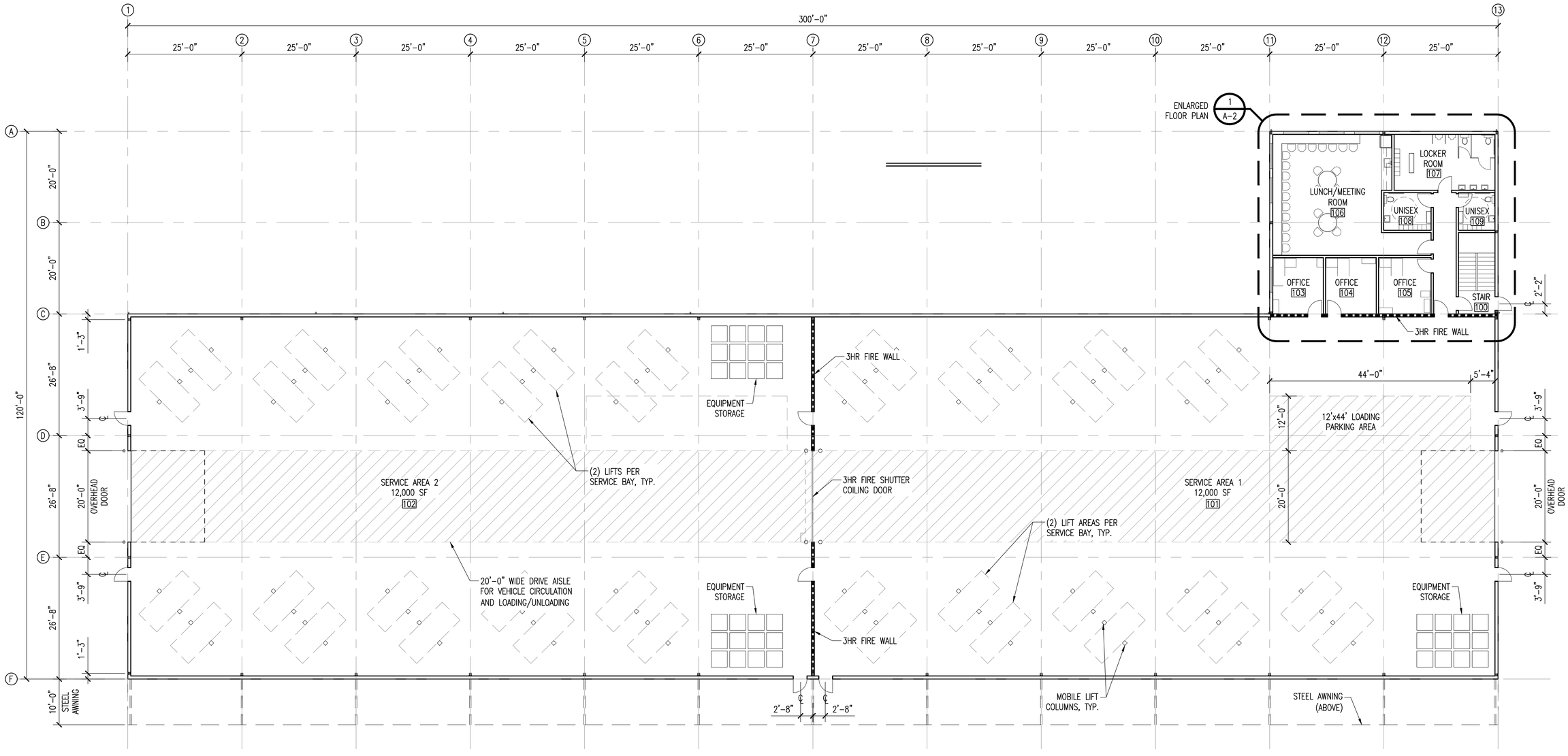
CleanWater Services

DATE: 09/29/2022
PRELIMINARY NOT FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	ESC DETAILS
DWG. BY RM2	PRO AUTOMOTIVE & DIESEL EXPANSION
APPR. BY	ADAM OFSTAD
FILE D-3090-D-1	DATE 08/01/2022
	SHEET D-1



FIRST FLOOR PLAN

SCALE: 3/32" = 1'-0"

NORTH

NOTE:
COORDINATE FINAL LOCATION OF 3 HOUR RATED WALL WITH ENGINEER AFTER STEEL FRAMES ARE IN PLACE.

WALL TYPE LEGEND

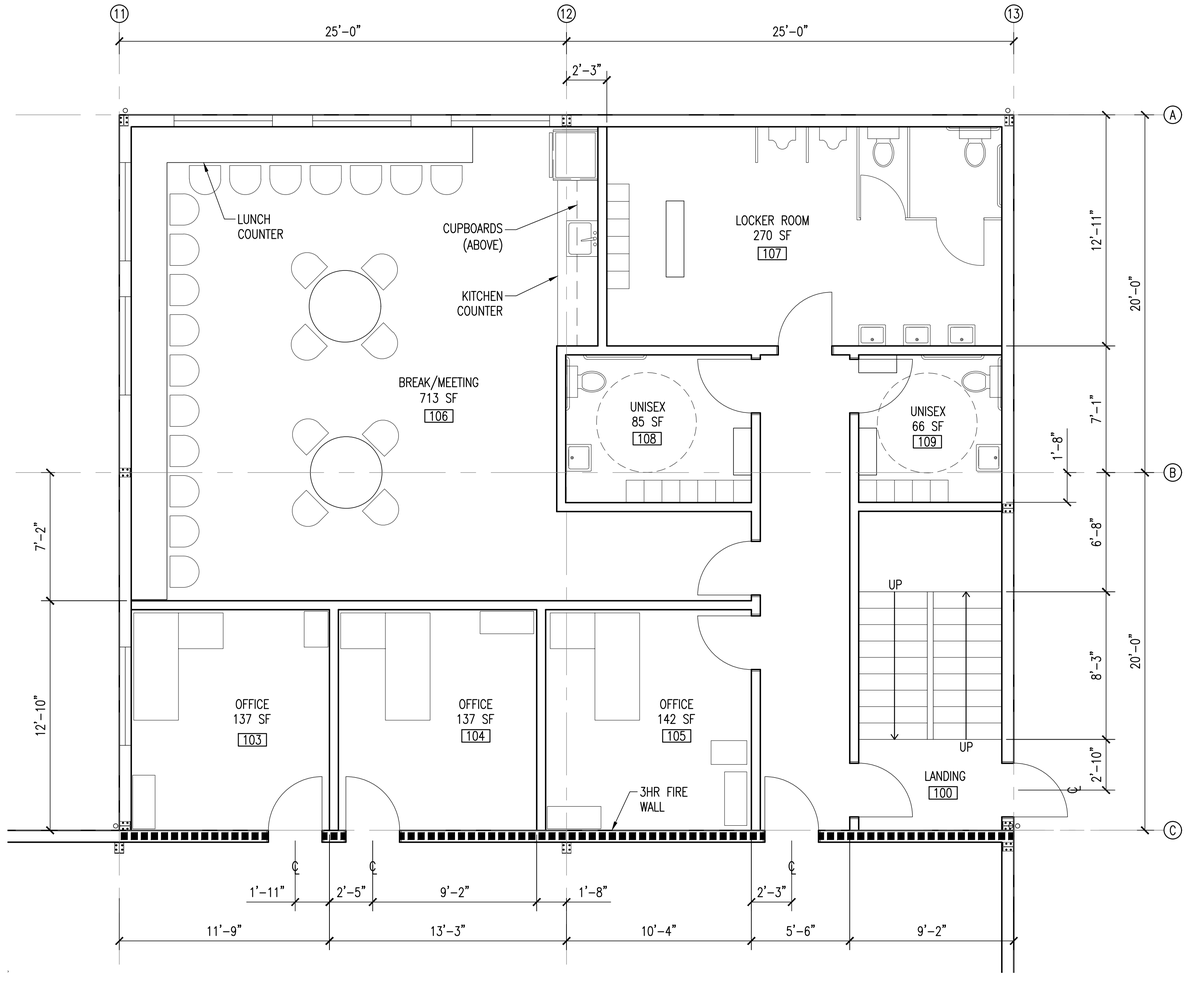
- 3-HOUR RATED FIRE SEPARATION WALL
- 2-HOUR RATED FIRE SEPARATION WALL
- NON-RATED WALL

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

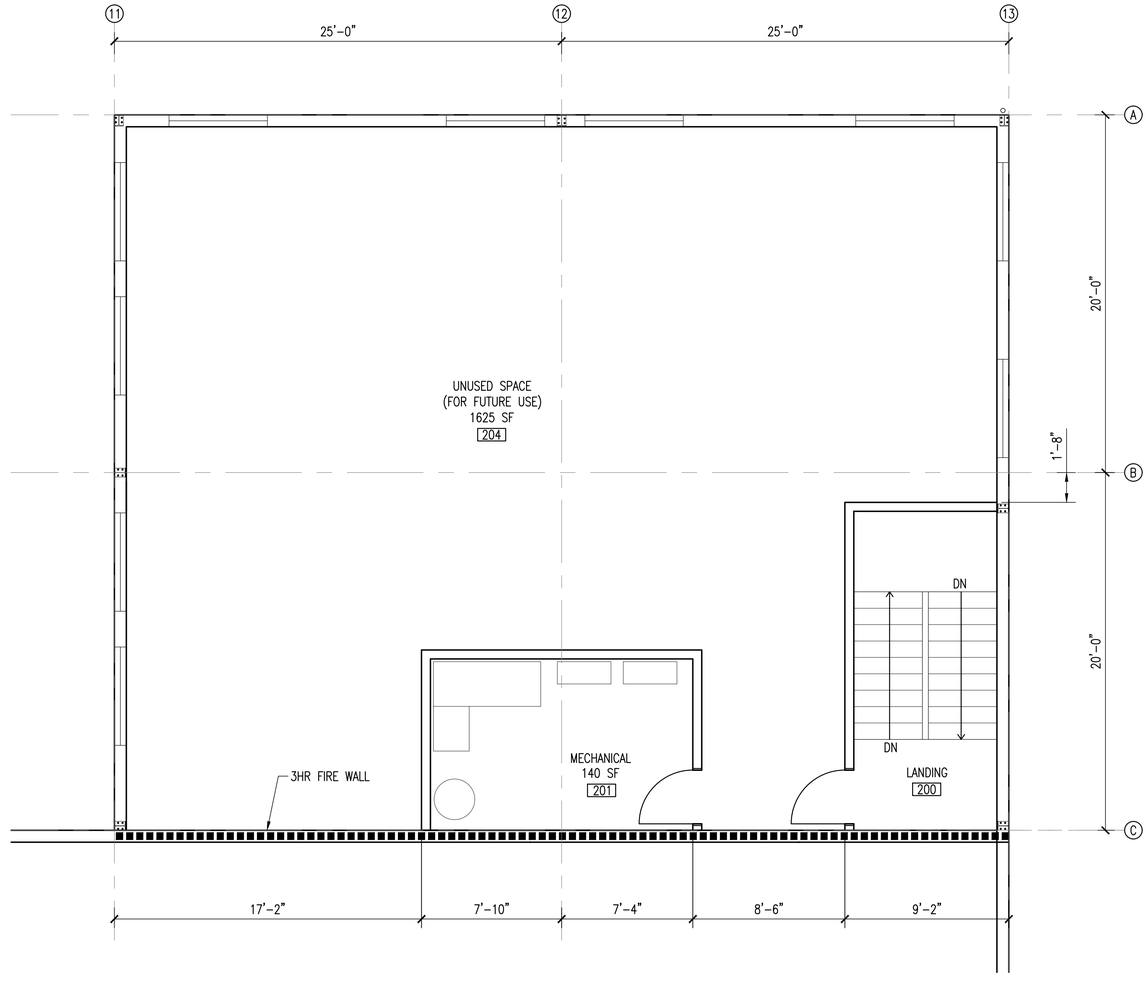
Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	FIRST FLOOR PLAN		
DWG. BY RM2	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	A-1
FILE D-3090-A-1	DATE 05/14/2022		



1 A-2 **ENLARGED FIRST FLOOR PLAN**
SCALE: 1/4" = 1'-0"

NORTH



2 A-2 **ENLARGED SECOND FLOOR PLAN**
SCALE: 1/4" = 1'-0"

NORTH

WALL TYPE LEGEND

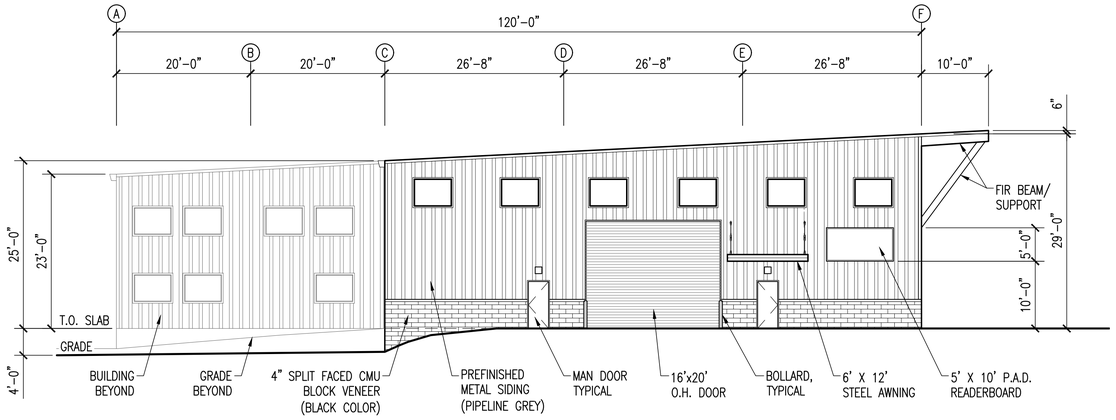
- 3-HOUR RATED FIRE SEPARATION WALL
- 2-HOUR RATED FIRE SEPARATION WALL
- NON-RATED WALL

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

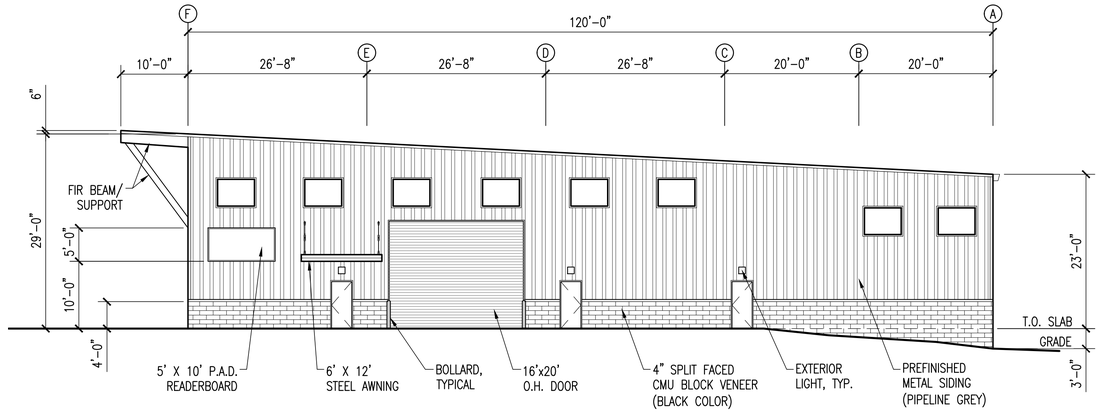
Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	ENLARGED FLOOR PLANS		
DWG. BY PCD	PRO AUTOMOTIVE & DIESEL EXPANSION		
APPR. BY	ADAM OFSTAD	SHEET	A-2
FILE D-3090-A-2	DATE 06/27/2022		



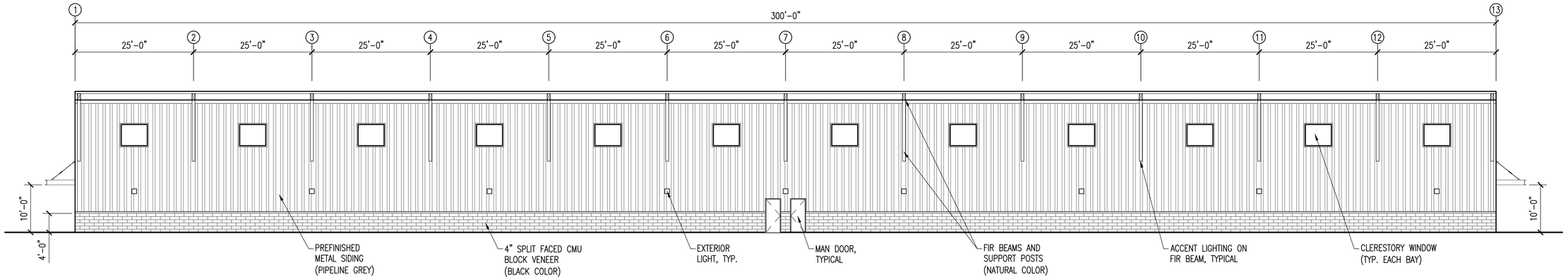
NORTH ELEVATION

SCALE: 1/32" = 1'-0"



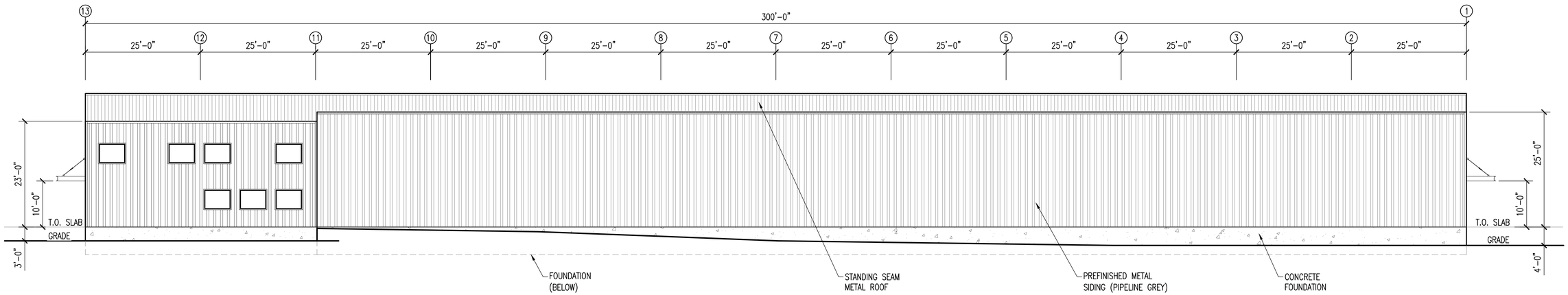
SOUTH ELEVATION

SCALE: 1/32" = 1'-0"



WEST ELEVATION

SCALE: 1/32" = 1'-0"



EAST ELEVATION

SCALE: 1/32" = 1'-0"

DATE: 09/29/2023
PRELIMINARY
NOT
FOR CONSTRUCTION

REV.	REVISION RECORD	DATE

Lower Columbia Engineering
St. Helens, Oregon
(503) 366-0399

PROJ. NO. 3090	EXTERIOR ELEVATIONS	
DWG. BY RM2	PRO AUTOMOTIVE & DIESEL EXPANSION	
APPR. BY	ADAM OFSTAD	SHEET A-3
FILE D-3090-A-3	DATE 04/21/2022	

Lower Columbia Engineering
58640 McNulty Way
St. Helens, OR 97051
503.366.0399

Client: Adam Ofstad

Project: Pro Automotive Expansion
Type of Project: Commercial
Scappoose, OR

Stormwater Report
September 2nd, 2022
LCE Project No. 3090

The above Seal certifies that Andrew D. Niemi, P.E. has general knowledge of the Columbia County Stormwater and Erosion Control Ordinance. The Drainage Modifications proposed for this site have been designed in general compliance with this ordinance.

Table of Contents

This report pertains to the proposed private improvements described below based on specific requests by our client. Lower Columbia Engineering is not responsible for complying with any conditions of approval or adjacent storm drainage issues that are outside of the project area. Contact Lower Columbia Engineering with any questions or uncertainties. Maintenance of this system and verification of property line locations are the responsibility of others.

STORMWATER NARRATIVE

Project Description

The subject property is located in Scappoose along Highway 30, North of the Columbia/Multnomah County line and adjacent to the railroad (45º43'20"N 122º52'30"W). The land owner, Adam Ofstad, owns and runs Pro-Automotive & Diesel which is located on the adjacent lot to the South. The subject property is zoned Existing Commercial (EC) and the proposed land use would be for a new Pro-Automotive & Diesel auto repair shop to supplement the existing repair shop to the south. The new building will be employee-only and all public relations will take place in the existing building on the adjacent property. The proposed building will be 26,000 square feet with 12,265 square feet of paved parking/driveway. Currently, the 1.3AC site consists of 32,907 square feet of concrete and compacted gravel drive paths with the remaining site area consisting of impacted vegetation. This site is currently used for temporary storage of the vehicles being worked on by the southern lot.

Stormwater Analysis

Stormwater runoff for the project has been calculated using the SBUH method given a Type 1A storm within the HydroCAD software system. Columbia County Stormwater and Erosion Control Ordinance was referenced for the 2-year, 10-year, and 100-year recurrence storm event depths which respectively equal 2.4in, 3.3in, and 4.7in. Infiltration tests were performed in two locations at the site on July 14th, 2022, see EXHIBIT A for infiltration test results. Given adequate infiltration test results, a stormwater basin was used for designing the stormwater system for these site improvements. This basin was analyzed using a 2in/hr infiltration rate as facilitated by the media composition and surrounding soils infiltration capacity.

Stormwater Management

In order to manage stormwater generated by the site, this development will feature a stormwater basin intended to treat and detain the development's runoff. This basin is intended to act as a biodetention swale which will fully infiltrate the Water-Quality, 2-year, and 10-year storm events while also detaining the 100-year storm event below its predeveloped equivalent. Placed 10' from the building to align with City of Portland standards, this basin will handle runoff from the roof and impervious driving surfaces as fed by downspouts, catch basins, and trench drains. Filtering vegetation and grasses will be planted in the basin to accomplish additional bioremediation of the expected pollutants which include standard motor oil and metals from the parking area. For adequate handling of the 100-year storm event, a broad overflow channel shall be installed 3" below the top of the basin and shall be directed to the East. This will help control outflow during the extreme events and prevent damage to the swale. See the corresponding plan set for further illustration of the storm system and overall improvements.

Conclusion

By constructing a stormwater basin in layers of native subgrade, drainage rock, growing medium, and stormwater basin plantings the system is intended to meet LIDA specifications as well as the requirements set forth by the Columbia County Stormwater and Erosion Control Ordinance. This swale will infiltrate and detain stormwater runoff to necessary rates. It is the owner's responsibility to construct, operate, and maintain the facilities. See the following Operations and Maintenance Plan for further information. Please contact Lower Columbia Engineering with uncertainties.

Operation and Maintenance Plan

Proper maintenance and operation of the proposed facilities is critical to their longevity and effectiveness. It is the owner's responsibility to operate and maintain the proposed basin and stormwater system as intended.

During construction, the proposed basin location shall be kept free of large-vehicle-traffic in order to avoid over compaction of the soils. The basin shall be constructed with layers as shown in the corresponding plans. Upon completing construction, the basin shall be seeded and planted. Initially the plantings may need to be watered, especially during the summer to ensure proper establishing. Plantings shall be monitored for the first two years to make sure there is not an excessive failure to take hold, if there is, alternative plants may need to be selected and replanted in the basin. The basin shall be cleared of debris and build up at least once a year. This shall include trash and large vegetative debris as well as sediment or oils accumulated that may have accumulated at the bottom. Additionally, the catch basins and trench drains collecting surface runoff shall be inspected periodically to ensure that blockages don't impede conveyance. During these inspections the catch basin sumps shall be observed to determine if it is necessary to empty out the accumulated debris. Further maintenance shall include systematic sweeping of the driving surfaces to minimize pollutant transfer to the basin. Contact Lower Columbia Engineering If problems arise with the system.

EXHIBIT 1 - INFILTRATION TEST RESULTS

Test Hole 1

Location: Pro Automotive, Scappoose			**Date:**07/14/2022	**Test Hole Number:** 1 **Test Trial Numer:** 1	
Depth to bottom of hole: 24 inches			**Diameter of hole:** 18 inches	**Test Method:** Simplified	
Tester's Name: Skylar Carlson (RPB)					
Tester's Company: Lower Columbia Engineering					
Tester's Contact: (503) 366-0399					
Depth (feet):			**Soil Texture:**		
			Loam		
Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:
14:30	0	16	-		*Rounded to 1/2 inch measurements
14:40	10	14.5	1.5	9	
14:50	10	13.5	1	6	
15:00	10	13	0.5	3	
15:10	10	12	1	6	
15:20	10	11.5	0.5	3	
15:30	10	11	0.5	3	
TOTAL	**60**	**11**	**5**	**5.0**	

Location: Pro Automotive, Scappoose			**Date:**07/14/2022	**Test Hole Number:** 1 **Test Trial Numer:** 2	
Depth to bottom of hole: 24 inches			**Diameter of hole:** 18 inches	**Test Method:** Simplified	
Tester's Name: Skylar Carlson (RPB)					
Tester's Company: Lower Columbia Engineering					
Tester's Contact: (503) 366-0399					
Depth (feet):			**Soil Texture:**		
			Loam		
Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:
15:39	0	16	-		*Rounded to 1/2 inch measurements
15:49	10	15	1	6	
15:59	10	14.5	0.5	3	
16:09	10	14	0.5	3	

16:19	10	13.5	0.5	3	
16:29	10	13	0.5	3	
16:39	10	13	0	0	
TOTAL	**60**	**13**	**3**	**3.0**	

Location: Pro Automotive, Scappoose			**Date:**07/14/2022		**Test Hole Number:** 1 **Test Trial Numer:** 3
Depth to bottom of hole: 24 inches			**Dianeter of hole:** 18 inches		**Test Method:** Simplified
Tester's Name: Skylar Carlson (RPB)					
Tester's Company: Lower Columbia Engineering					
Depth (feet):			**Soil Texture:**		
			Loam		
Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:
16:42	0	16	-		*Rounded to 1/2 inch measurements
16:52	10	15.5	0.5	3	
17:02	10	15	0.5	3	
17:12	10	14.5	0.5	3	
17:22	10	14	0.5	3	
17:32	10	13.5	0.5	3	
17:42	10	13	0.5	3	
TOTAL	**60**	**13**	**3**	**3.0**	

Test Hole 2

Location: Pro Automotive, Scappoose			**Date:**07/14/2022		**Test Hole Number:** 2 **Test Trial Numer:** 1
Depth to bottom of hole: 24 inches			**Diameter of hole:** 18 inches		**Test Method:** Simplified
Tester's Name: Emme Salisbury					
Tester's Company: Lower Columbia Engineering					
Tester's Contact: (503) 366-0399					
Depth (feet):			**Soil Texture:**		
			Loam		
Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:

14:45	0	15	-		*Rounded to 1/2 inch measurements
14:55	10	12	3	18	
15:05	10	10.5	1.5	9	
15:15	10	9.5	1	6	
15:25	10	9	0.5	3	
15:35	10	8	1	6	
					Missed
TOTAL	**50**	**8**	**7**	**8.4**	

Location: Pro Automotive, Scappoose			**Date:**07/14/2022		**Test Hole Number:** 2 **Test Trial Numer:** 2
Depth to bottom of hole: 24 inches			**Diameter of hole:** 18 inches		**Test Method:** Simplified
Tester's Name: Emme Salisbury					
Tester's Company: Lower Columbia Engineering					
Tester's Contact: (503) 366-0399					
Depth (feet):			**Soil Texture:**		
			Loam		
Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:
15:40	0	16	-		*Rounded to 1/2 inch measurements
15:50	10	13	3	18	
16:00	10	12	1	6	
16:10	10	11	1	6	
16:20	10	10	1	6	
16:30	10	9.5	0.5	3	
16:40	10	9	0.5	3	
TOTAL	**60**	**9**	**7**	**7.0**	

Location: Pro Automotive, Scappoose	**Date:**07/14/2022	**Test Hole Number:** 2 **Test Trial Numer:** 3
Depth to bottom of hole: 24 inches	**Diameter of hole:** 18 inches	**Test Method:** Simplified
Tester's Name: Emme Salisbury		
Tester's Company: Lower Columbia Engineering		
Tester's Contact: (503) 366-0399		
Depth (feet):	**Soil Texture:**	
	Loam	

Time:	Time interval (mins):	Water Depth (inches):	Drop in water level (inches):	Infiltration Rate (inches per hour):	Comments/Notes:
16:40	0	16	-		*Rounded to 1/2 inch measurements
16:50	10	14	2	12	
17:00	10	13	1	6	
17:10	10	12.5	0.5	3	
17:20	10	11.5	1	6	
17:30	10	11	0.5	3	
17:40	10	10.5	0.5	3	
TOTAL	**60**	**10.5**	**5.5**	**5.5**	

EXHIBIT 2 - SOIL SURVEY MAP (USGS WEBMAPS)

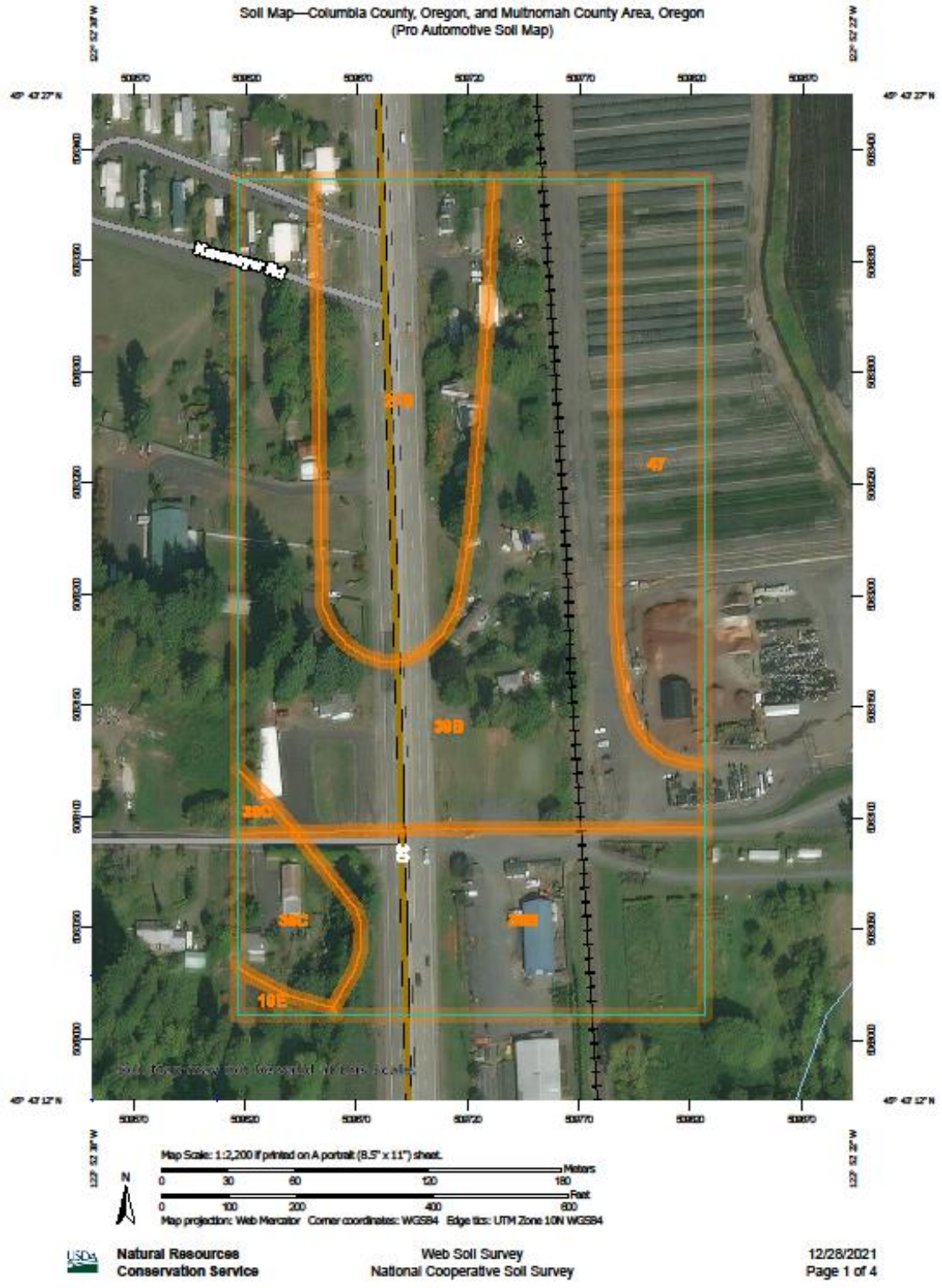
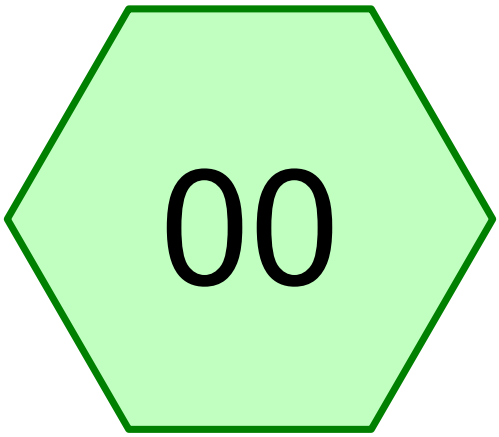


EXHIBIT 3 - STORMWATER CALCULATIONS



Existing Site Runoff

Subcat Reach Pond Link

Routing Diagram for 3090 Storm Calcs September2022
Prepared by Lower Columbia Engineering, Printed 8/29/2022

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00: Existing Site Runoff Runoff Area=57,920 sf 0.00% Impervious Runoff Depth=0.05"
Tc=0.0 min CN=73/0 Runoff=0.01 cfs 0.006 af

Total Runoff Area = 1.330 ac Runoff Volume = 0.006 af Average Runoff Depth = 0.05"
100.00% Pervious = 1.330 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 00: Existing Site Runoff

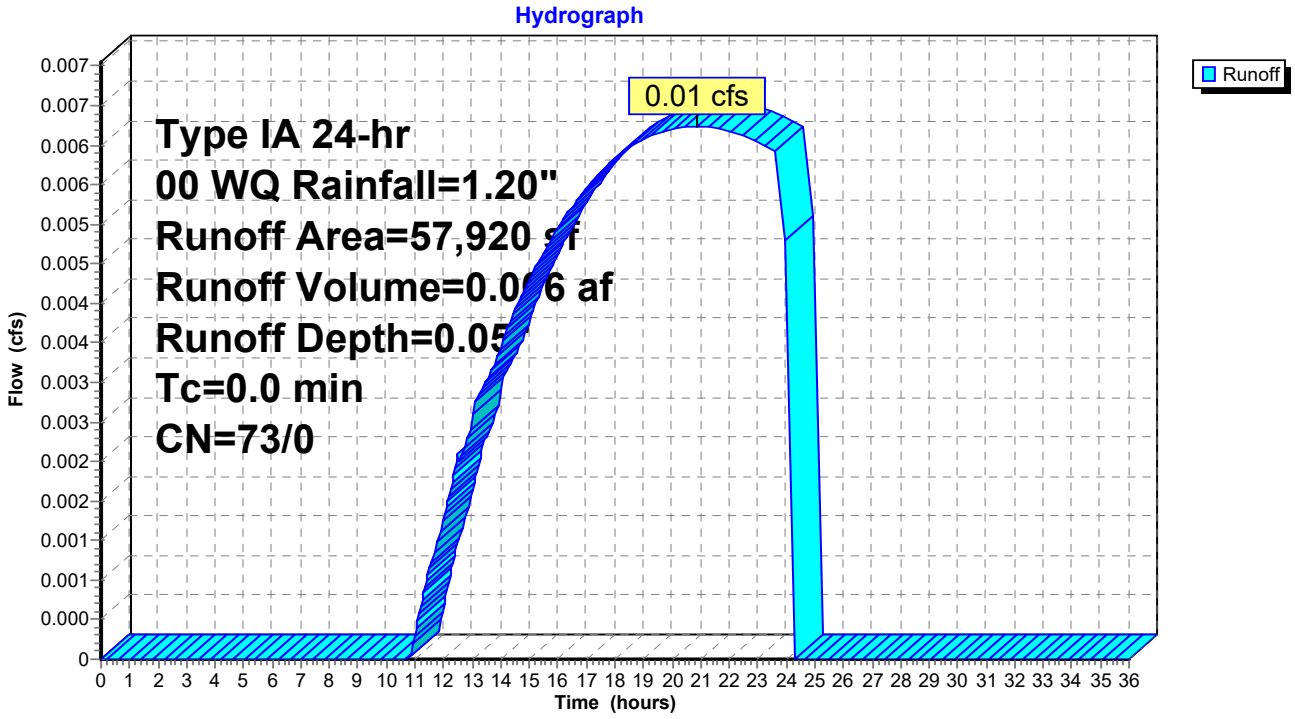
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.01 cfs @ 20.86 hrs, Volume= 0.006 af, Depth= 0.05"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 00 WQ Rainfall=1.20"

	Area (sf)	CN	Description
*	32,907	76	Existing Gravel and Imp
*	25,013	68	Existing Landscape
	57,920	73	Weighted Average
	57,920	73	100.00% Pervious Area

Subcatchment 00: Existing Site Runoff



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00: Existing Site Runoff Runoff Area=57,920 sf 0.00% Impervious Runoff Depth=0.51"
Tc=0.0 min CN=73/0 Runoff=0.09 cfs 0.057 af

Total Runoff Area = 1.330 ac Runoff Volume = 0.057 af Average Runoff Depth = 0.51"
100.00% Pervious = 1.330 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 00: Existing Site Runoff

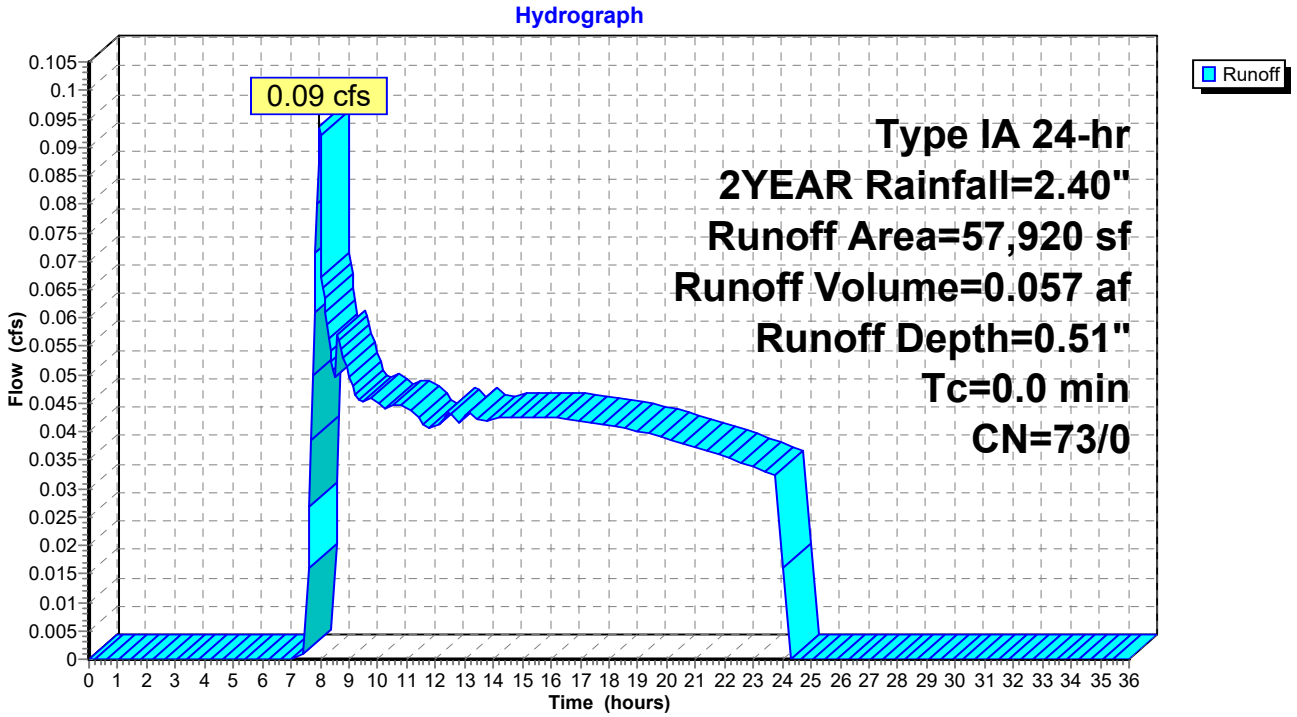
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.09 cfs @ 7.98 hrs, Volume= 0.057 af, Depth= 0.51"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 2YEAR Rainfall=2.40"

	Area (sf)	CN	Description
*	32,907	76	Existing Gravel and Imp
*	25,013	68	Existing Landscape
	57,920	73	Weighted Average
	57,920	73	100.00% Pervious Area

Subcatchment 00: Existing Site Runoff



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00: Existing Site Runoff Runoff Area=57,920 sf 0.00% Impervious Runoff Depth=1.05"
Tc=0.0 min CN=73/0 Runoff=0.28 cfs 0.116 af

Total Runoff Area = 1.330 ac Runoff Volume = 0.116 af Average Runoff Depth = 1.05"
100.00% Pervious = 1.330 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 00: Existing Site Runoff

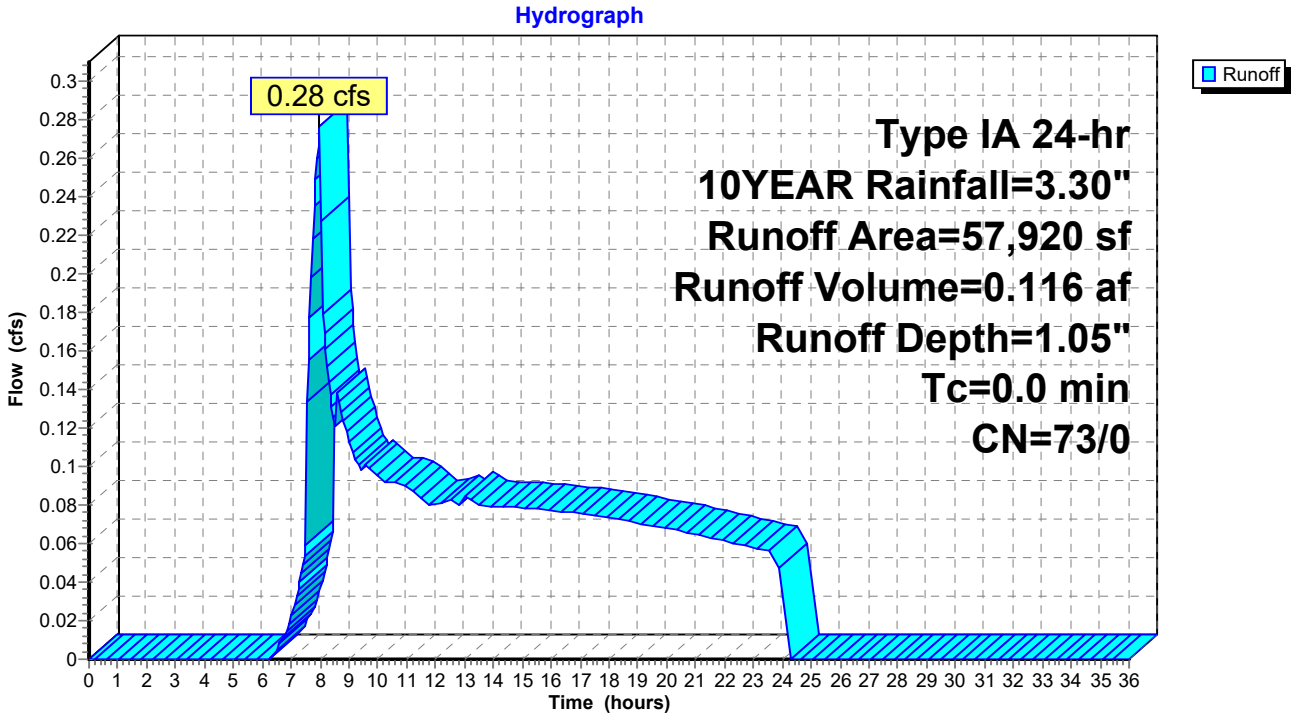
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.28 cfs @ 7.98 hrs, Volume= 0.116 af, Depth= 1.05"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	32,907	76	Existing Gravel and Imp
*	25,013	68	Existing Landscape
	57,920	73	Weighted Average
	57,920	73	100.00% Pervious Area

Subcatchment 00: Existing Site Runoff



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00: Existing Site Runoff Runoff Area=57,920 sf 0.00% Impervious Runoff Depth=2.05"
Tc=0.0 min CN=73/0 Runoff=0.61 cfs 0.227 af

Total Runoff Area = 1.330 ac Runoff Volume = 0.227 af Average Runoff Depth = 2.05"
100.00% Pervious = 1.330 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 00: Existing Site Runoff

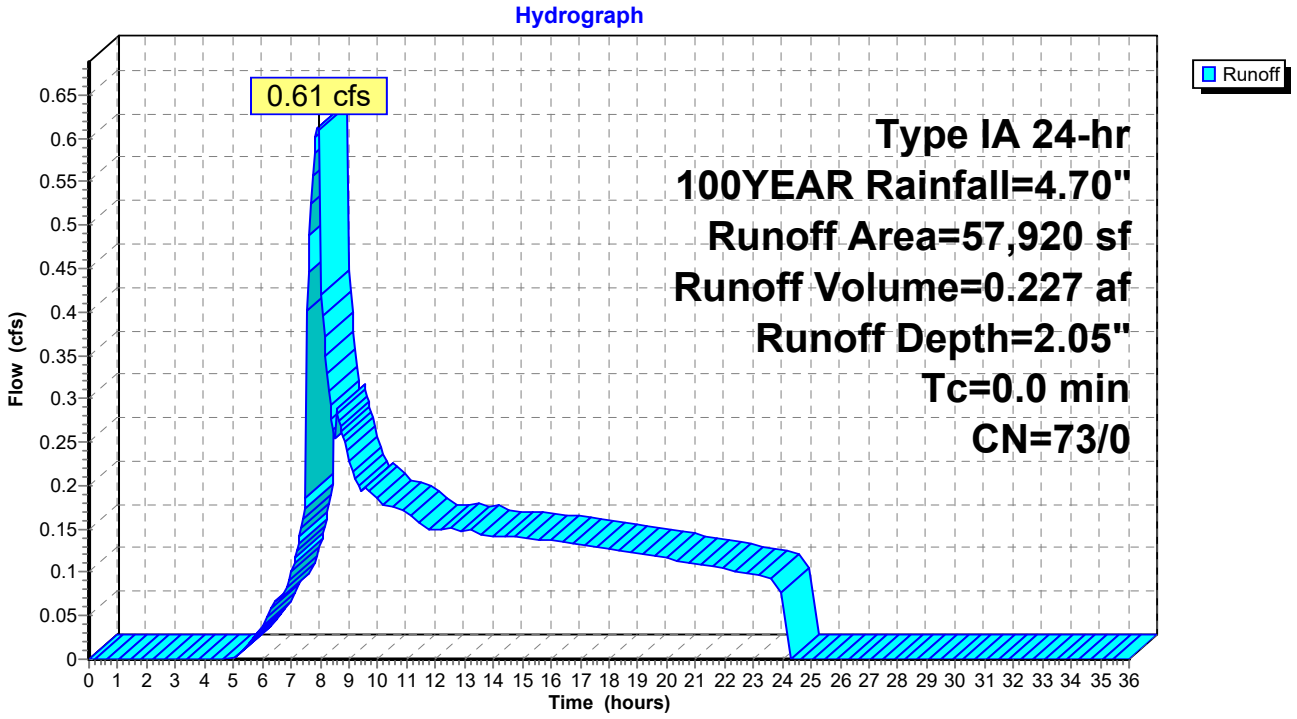
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

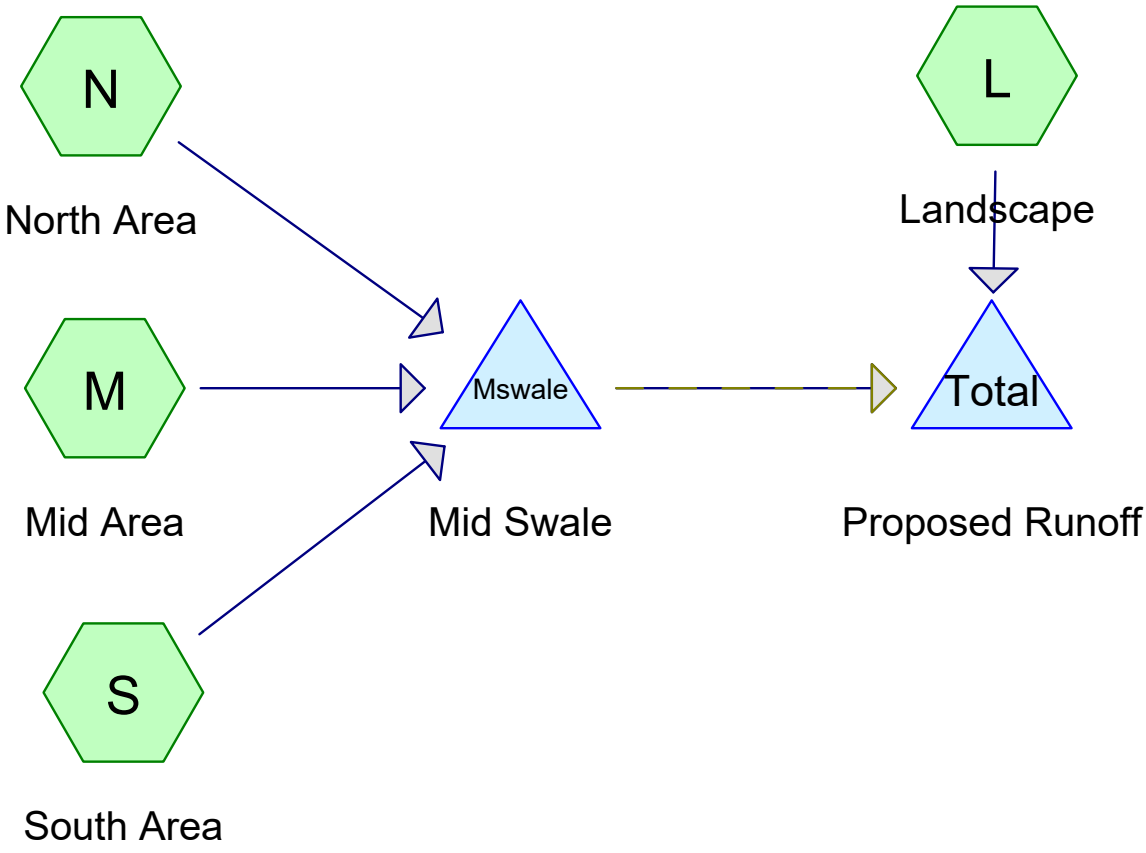
Runoff = 0.61 cfs @ 7.93 hrs, Volume= 0.227 af, Depth= 2.05"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 100YEAR Rainfall=4.70"

	Area (sf)	CN	Description
*	32,907	76	Existing Gravel and Imp
*	25,013	68	Existing Landscape
	57,920	73	Weighted Average
	57,920	73	100.00% Pervious Area

Subcatchment 00: Existing Site Runoff





Subcat Reach Pond Link

Routing Diagram for 3090 Storm Calcs September2022
Prepared by Lower Columbia Engineering, Printed 8/29/2022

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment L: Landscape Runoff Area=19,442 sf 0.00% Impervious Runoff Depth=0.00"
Tc=0.0 min CN=58/0 Runoff=0.00 cfs 0.000 af

Subcatchment M: Mid Area Runoff Area=15,881 sf 100.00% Impervious Runoff Depth=0.99"
Tc=0.0 min CN=0/98 Runoff=0.09 cfs 0.030 af

Subcatchment N: North Area Runoff Area=9,879 sf 94.46% Impervious Runoff Depth=0.93"
Tc=0.0 min CN=68/98 Runoff=0.06 cfs 0.018 af

Subcatchment S: South Area Runoff Area=12,725 sf 88.16% Impervious Runoff Depth=0.87"
Tc=0.0 min CN=68/98 Runoff=0.07 cfs 0.021 af

Pond Mswale: Mid Swale Peak Elev=39.00' Storage=733 cf Inflow=0.22 cfs 0.069 af
Discarded=0.04 cfs 0.069 af Tertiary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.069 af

Pond Total: Proposed Runoff Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 1.330 ac Runoff Volume = 0.069 af Average Runoff Depth = 0.62"
37.11% Pervious = 0.493 ac 62.89% Impervious = 0.836 ac

Summary for Subcatchment L: Landscape

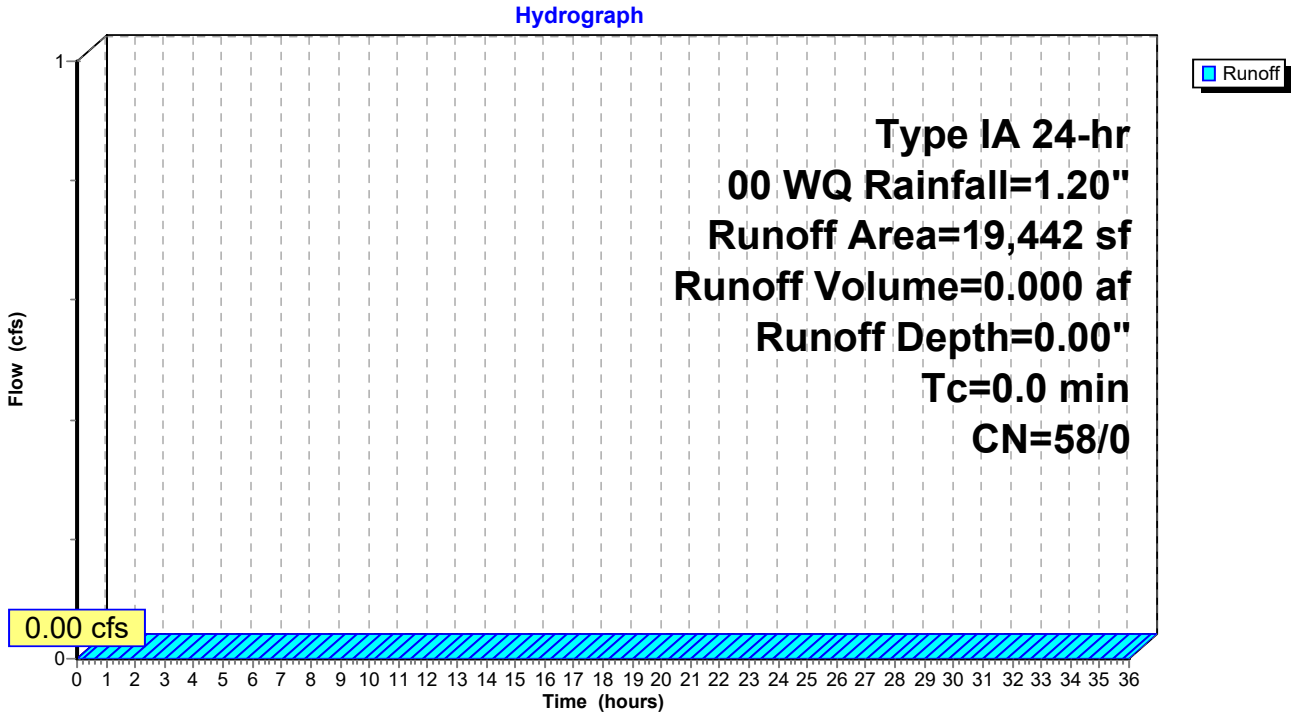
[46] Hint: Tc=0 (Instant runoff peak depends on dt)
[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 00 WQ Rainfall=1.20"

	Area (sf)	CN	Description
*	19,442	58	Improved Landscape
	19,442	58	100.00% Pervious Area

Subcatchment L: Landscape



Summary for Subcatchment M: Mid Area

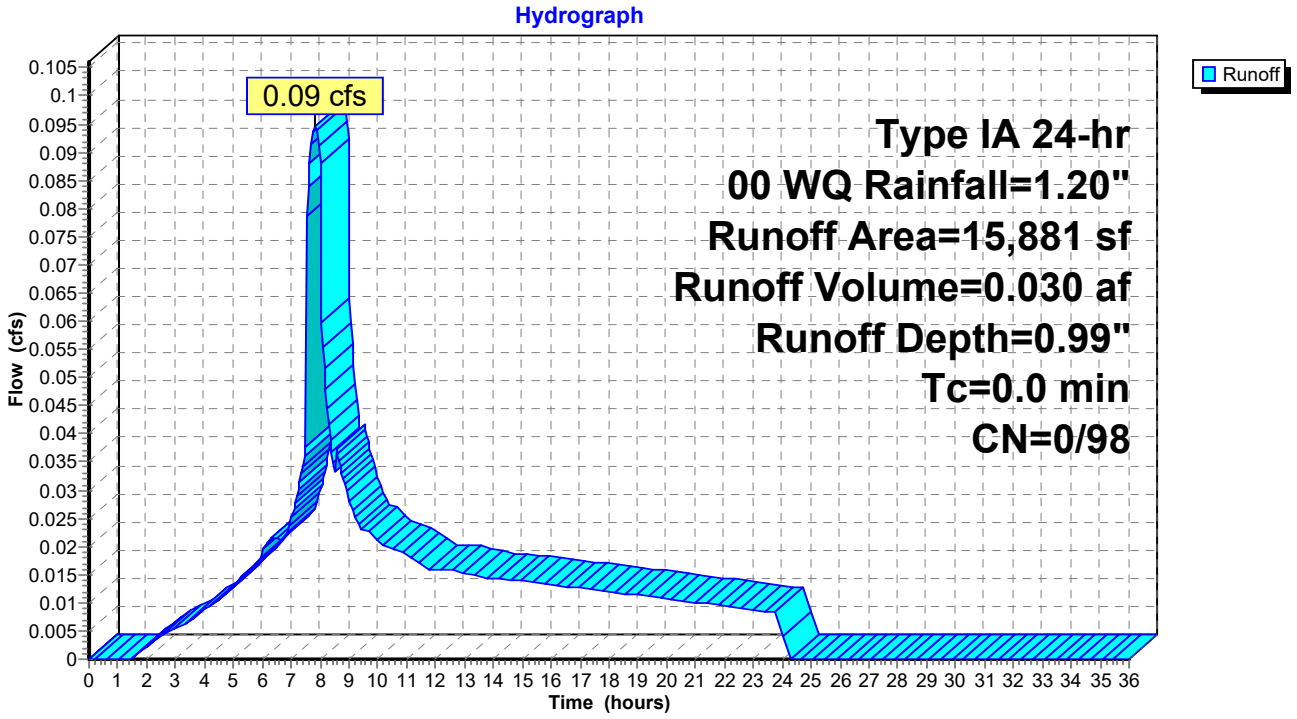
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.09 cfs @ 7.83 hrs, Volume= 0.030 af, Depth= 0.99"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 00 WQ Rainfall=1.20"

	Area (sf)	CN	Description
*	15,881	98	Buildings and Pavement
	15,881	98	100.00% Impervious Area

Subcatchment M: Mid Area



Summary for Subcatchment N: North Area

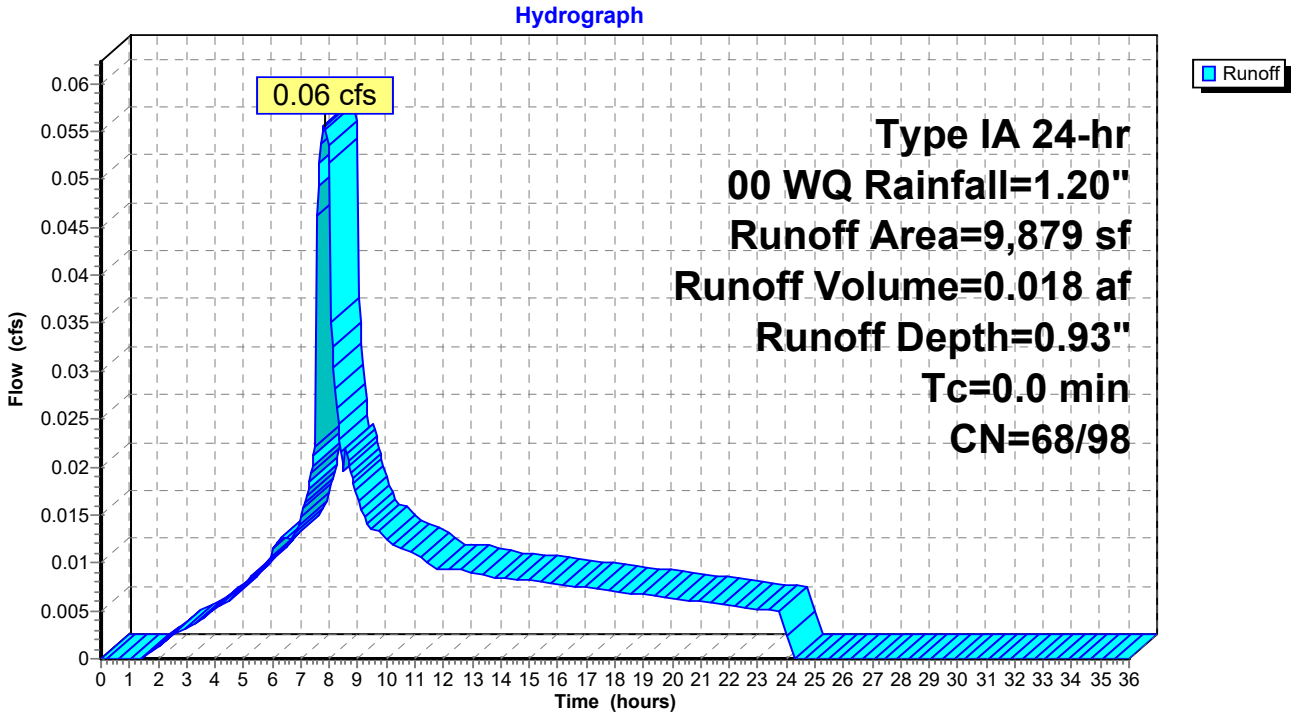
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.06 cfs @ 7.83 hrs, Volume= 0.018 af, Depth= 0.93"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 00 WQ Rainfall=1.20"

	Area (sf)	CN	Description
*	9,332	98	Buildings and Pavement
*	547	68	Landscape Gravel
	9,879	96	Weighted Average
	547	68	5.54% Pervious Area
	9,332	98	94.46% Impervious Area

Subcatchment N: North Area



Summary for Subcatchment S: South Area

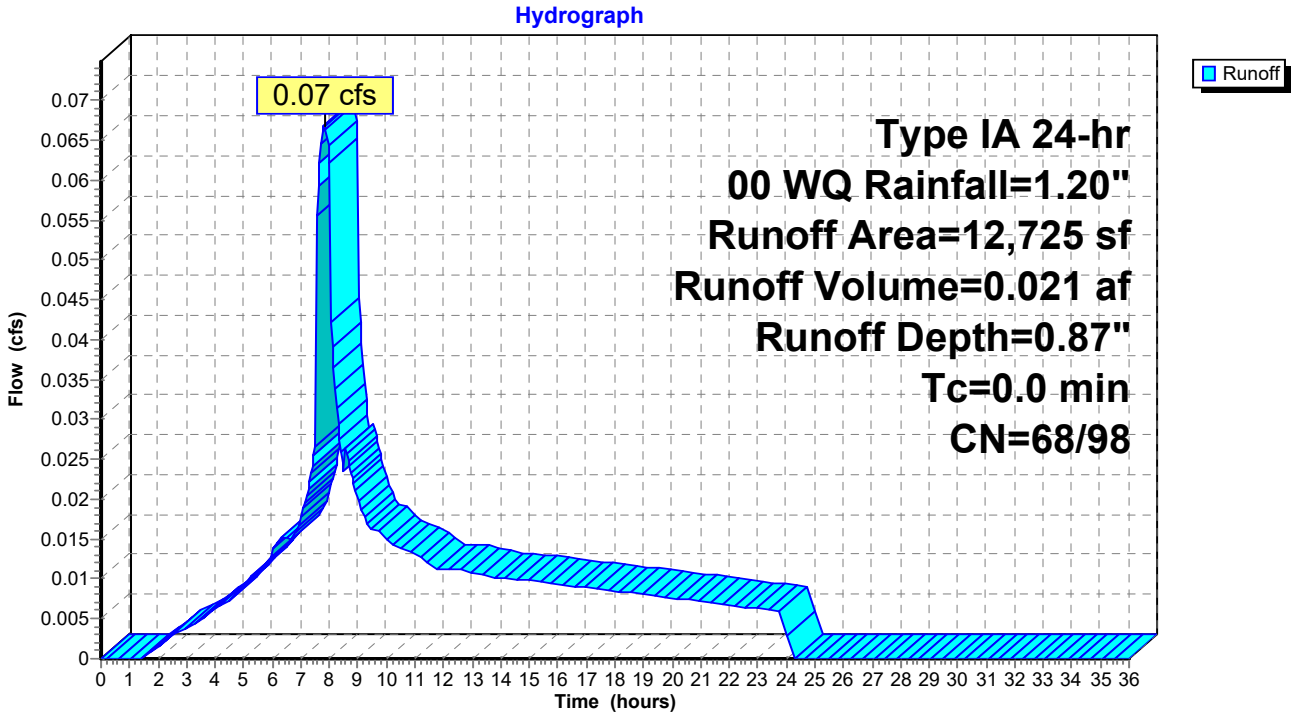
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 0.07 cfs @ 7.83 hrs, Volume= 0.021 af, Depth= 0.87"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 00 WQ Rainfall=1.20"

	Area (sf)	CN	Description
*	11,218	98	Buildings and Pavement
*	1,507	68	Landscape Gravel
	12,725	94	Weighted Average
	1,507	68	11.84% Pervious Area
	11,218	98	88.16% Impervious Area

Subcatchment S: South Area



Summary for Pond Mswale: Mid Swale

Inflow Area = 0.883 ac, 94.66% Impervious, Inflow Depth = 0.93" for 00 WQ event
Inflow = 0.22 cfs @ 7.83 hrs, Volume= 0.069 af
Outflow = 0.04 cfs @ 11.08 hrs, Volume= 0.069 af, Atten= 81%, Lag= 195.4 min
Discarded = 0.04 cfs @ 11.08 hrs, Volume= 0.069 af
Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 39.00' @ 11.08 hrs Surf.Area= 872 sf Storage= 733 cf

Plug-Flow detention time= 195.2 min calculated for 0.069 af (100% of inflow)
Center-of-Mass det. time= 195.1 min (894.7 - 699.5)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	4,722 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

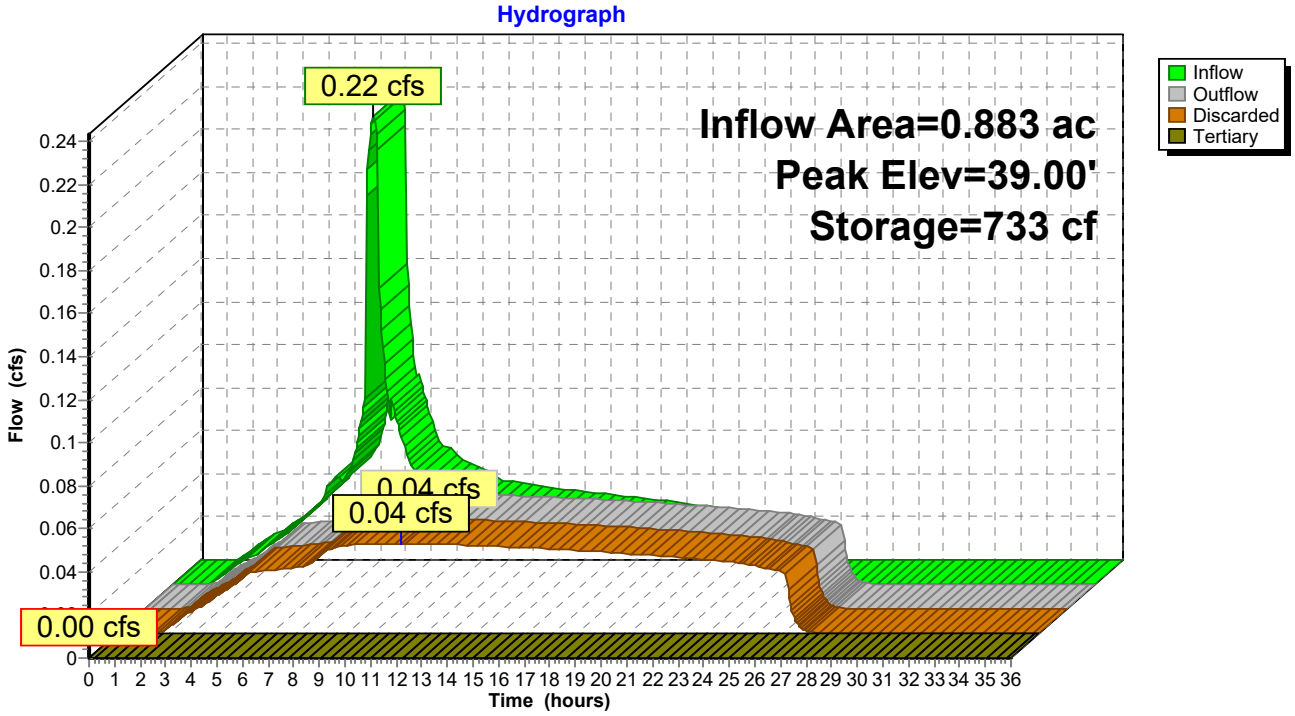
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
38.00	607	126.9	0	0	607
39.00	873	139.5	736	736	905
40.00	1,165	152.1	1,015	1,751	1,232
41.00	1,482	164.6	1,320	3,072	1,585
42.00	1,824	177.2	1,650	4,722	1,968

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.00'	**2.000 in/hr Exfiltration over Wetted area**
#2	Tertiary	41.75'	**10.0' long (Profile 6) Broad-Crested Rectangular Weir** Head (feet) 0.49 0.98 1.48 Coef. (English) 3.12 3.41 3.59

Discarded OutFlow Max=0.04 cfs @ 11.08 hrs HW=39.00' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Tertiary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond Mswale: Mid Swale



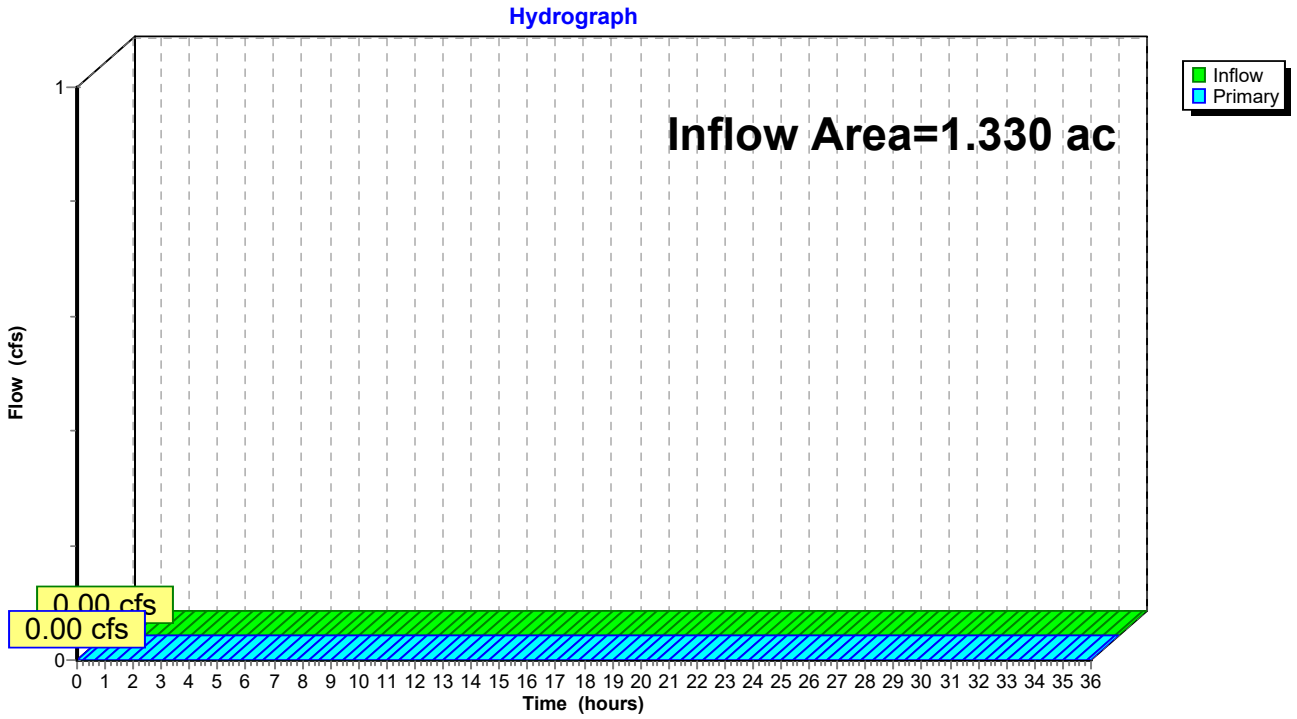
Summary for Pond Total: Proposed Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.330 ac, 62.89% Impervious, Inflow Depth = 0.00" for 00 WQ event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Pond Total: Proposed Runoff



Summary for Pond Mswale: Mid Swale

Inflow Area = 0.883 ac, 94.66% Impervious, Inflow Depth = 2.07" for 2YEAR event
Inflow = 0.47 cfs @ 7.81 hrs, Volume= 0.153 af
Outflow = 0.07 cfs @ 14.83 hrs, Volume= 0.150 af, Atten= 86%, Lag= 421.2 min
Discarded = 0.07 cfs @ 14.83 hrs, Volume= 0.150 af
Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 40.60' @ 14.83 hrs Surf.Area= 1,352 sf Storage= 2,510 cf

Plug-Flow detention time= 464.8 min calculated for 0.150 af (98% of inflow)
Center-of-Mass det. time= 449.9 min (1,122.7 - 672.8)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	4,722 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

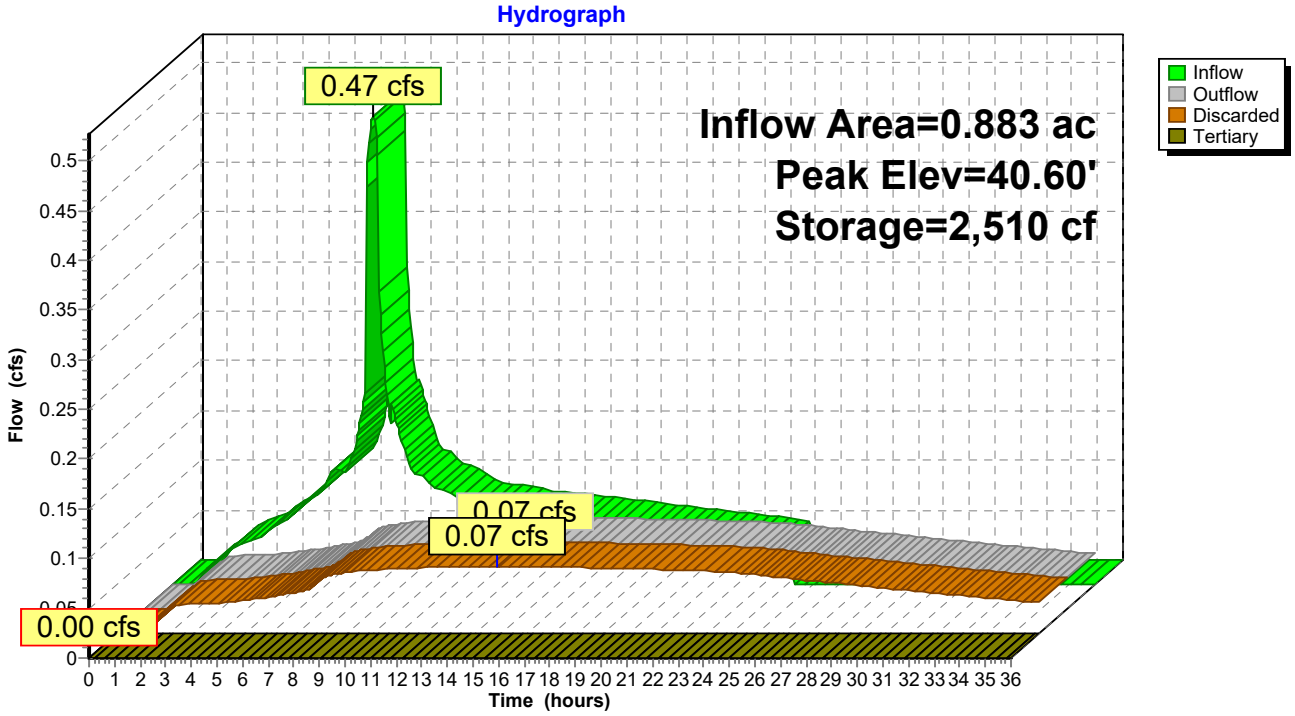
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
38.00	607	126.9	0	0	607
39.00	873	139.5	736	736	905
40.00	1,165	152.1	1,015	1,751	1,232
41.00	1,482	164.6	1,320	3,072	1,585
42.00	1,824	177.2	1,650	4,722	1,968

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.00'	**2.000 in/hr Exfiltration over Wetted area**
#2	Tertiary	41.75'	**10.0' long (Profile 6) Broad-Crested Rectangular Weir** Head (feet) 0.49 0.98 1.48 Coef. (English) 3.12 3.41 3.59

Discarded OutFlow Max=0.07 cfs @ 14.83 hrs HW=40.60' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Tertiary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond Mswale: Mid Swale



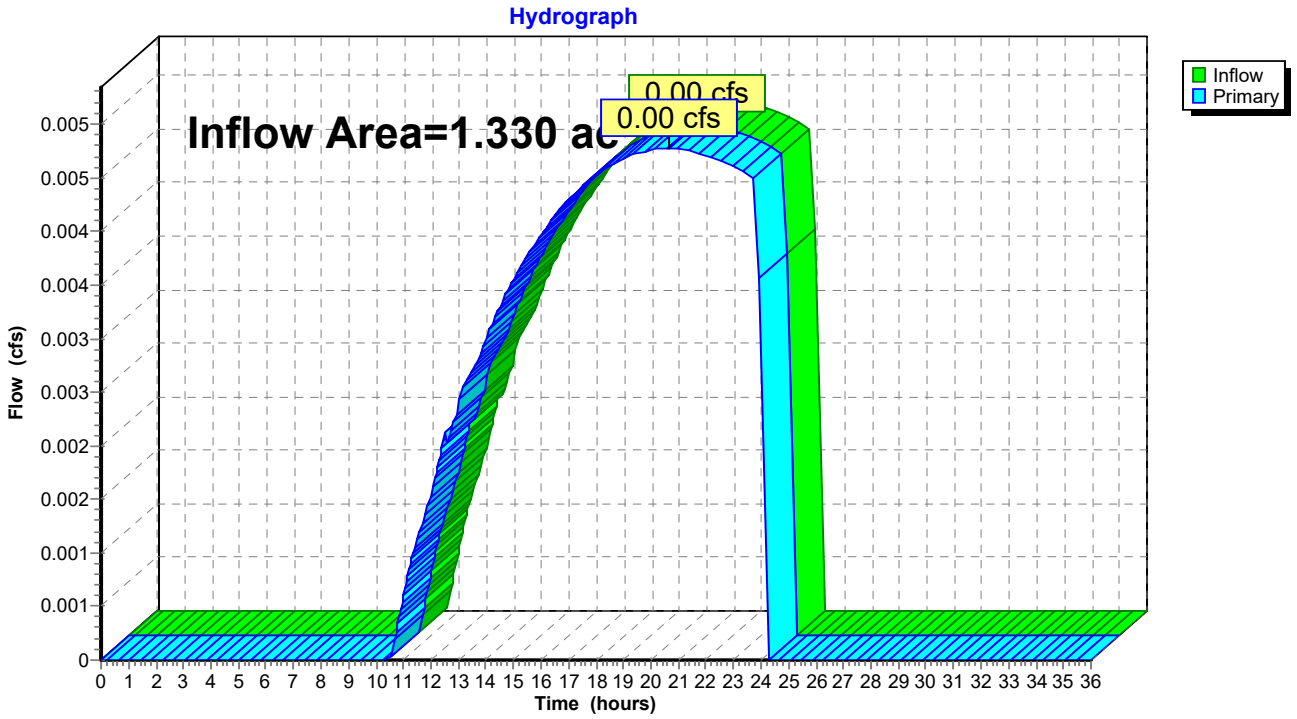
Summary for Pond Total: Proposed Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.330 ac, 62.89% Impervious, Inflow Depth = 0.04" for 2YEAR event
Inflow = 0.00 cfs @ 20.63 hrs, Volume= 0.004 af
Primary = 0.00 cfs @ 20.63 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Pond Total: Proposed Runoff



Summary for Pond Mswale: Mid Swale

Inflow Area = 0.883 ac, 94.66% Impervious, Inflow Depth = 2.95" for 10YEAR event
Inflow = 0.66 cfs @ 7.81 hrs, Volume= 0.217 af
Outflow = 0.08 cfs @ 16.80 hrs, Volume= 0.194 af, Atten= 87%, Lag= 539.7 min
Discarded = 0.08 cfs @ 16.80 hrs, Volume= 0.194 af
Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 41.65' @ 16.80 hrs Surf.Area= 1,699 sf Storage= 4,098 cf

Plug-Flow detention time= 560.8 min calculated for 0.193 af (89% of inflow)
Center-of-Mass det. time= 485.0 min (1,149.0 - 664.0)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	4,722 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

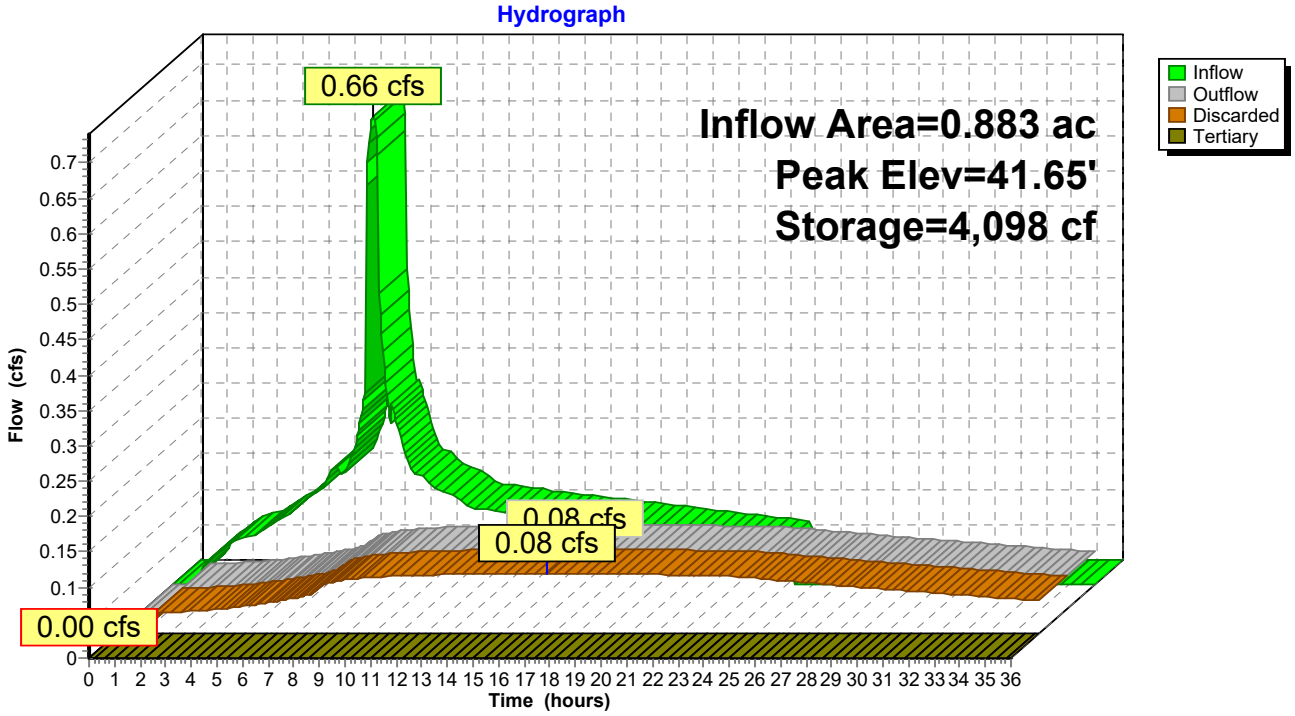
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
38.00	607	126.9	0	0	607
39.00	873	139.5	736	736	905
40.00	1,165	152.1	1,015	1,751	1,232
41.00	1,482	164.6	1,320	3,072	1,585
42.00	1,824	177.2	1,650	4,722	1,968

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.00'	**2.000 in/hr Exfiltration over Wetted area**
#2	Tertiary	41.75'	**10.0' long (Profile 6) Broad-Crested Rectangular Weir** Head (feet) 0.49 0.98 1.48 Coef. (English) 3.12 3.41 3.59

Discarded OutFlow Max=0.08 cfs @ 16.80 hrs HW=41.65' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Tertiary OutFlow Max=0.00 cfs @ 0.00 hrs HW=38.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond Mswale: Mid Swale



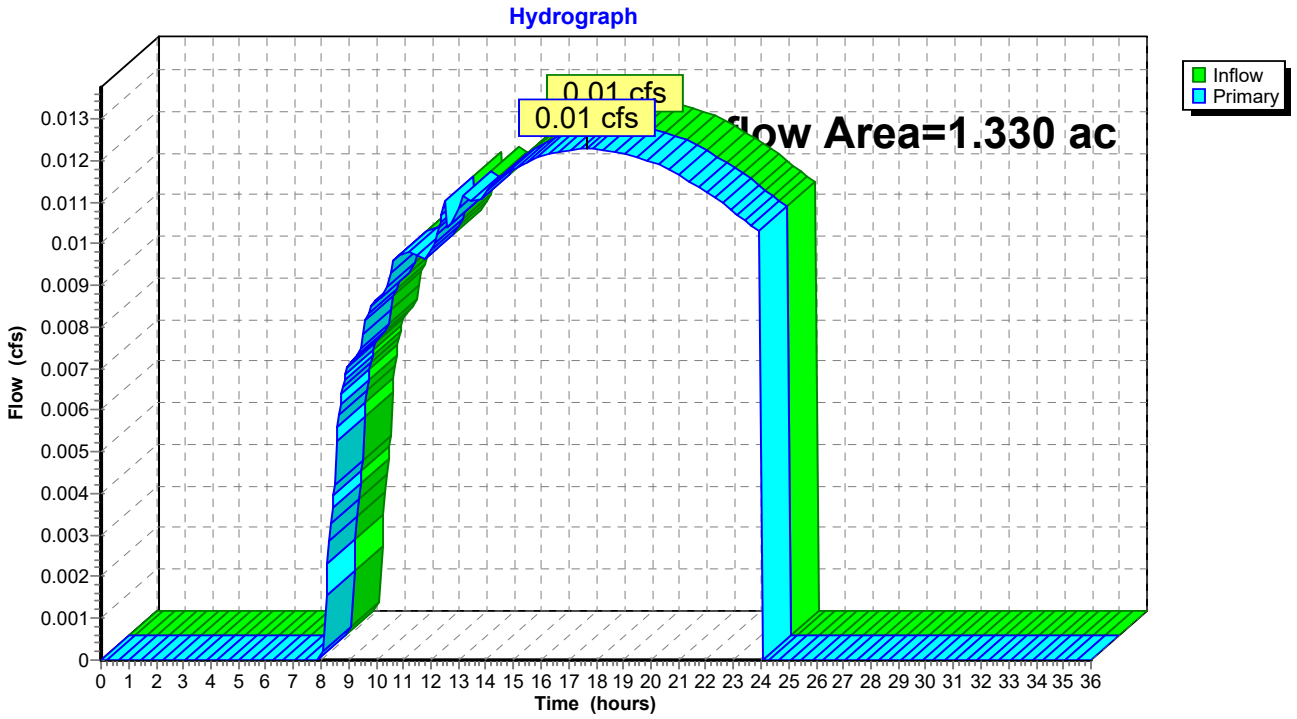
Summary for Pond Total: Proposed Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.330 ac, 62.89% Impervious, Inflow Depth = 0.13" for 10YEAR event
Inflow = 0.01 cfs @ 17.66 hrs, Volume= 0.014 af
Primary = 0.01 cfs @ 17.66 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Pond Total: Proposed Runoff



Summary for Pond Mswale: Mid Swale

Inflow Area = 0.883 ac, 94.66% Impervious, Inflow Depth = 4.31" for 100YEAR event
Inflow = 0.96 cfs @ 7.81 hrs, Volume= 0.318 af
Outflow = 0.48 cfs @ 8.21 hrs, Volume= 0.287 af, Atten= 50%, Lag= 24.4 min
Discarded = 0.09 cfs @ 8.21 hrs, Volume= 0.210 af
Tertiary = 0.39 cfs @ 8.21 hrs, Volume= 0.078 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 41.80' @ 8.21 hrs Surf.Area= 1,754 sf Storage= 4,370 cf

Plug-Flow detention time= 431.4 min calculated for 0.287 af (91% of inflow)
Center-of-Mass det. time= 362.4 min (1,018.6 - 656.2)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	4,722 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

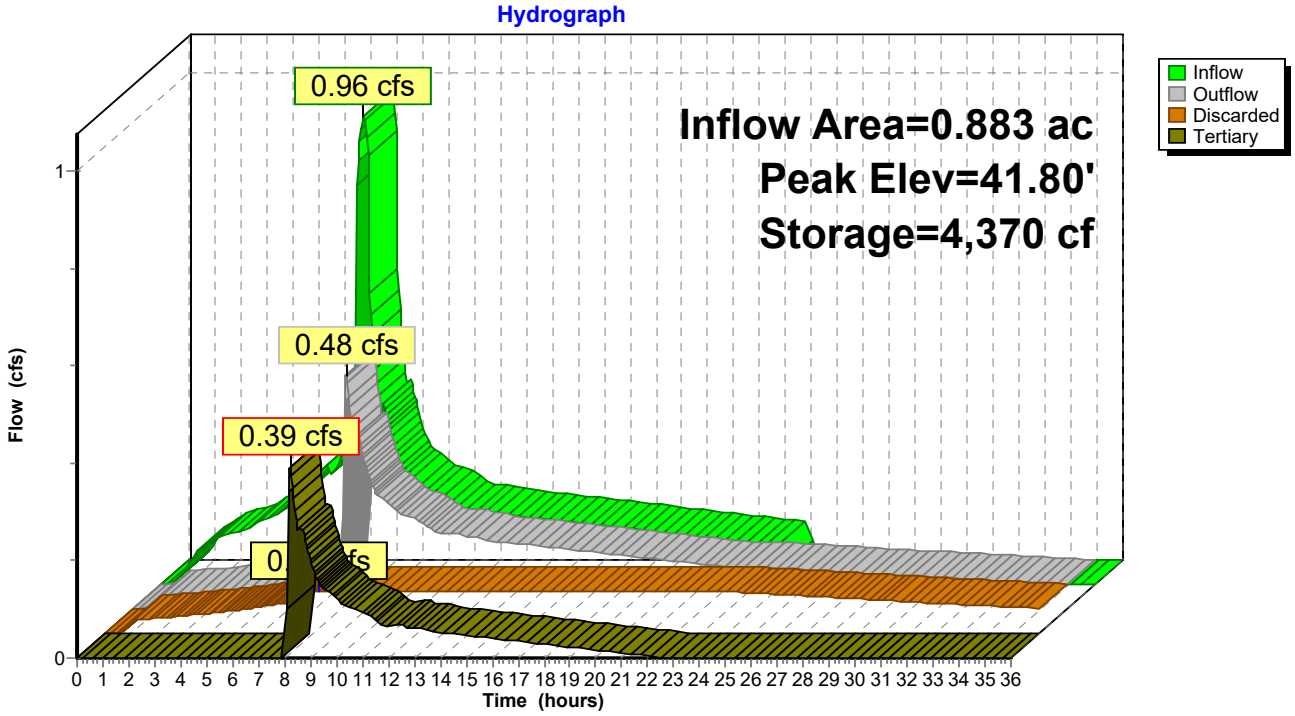
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
38.00	607	126.9	0	0	607
39.00	873	139.5	736	736	905
40.00	1,165	152.1	1,015	1,751	1,232
41.00	1,482	164.6	1,320	3,072	1,585
42.00	1,824	177.2	1,650	4,722	1,968

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.00'	**2.000 in/hr Exfiltration over Wetted area**
#2	Tertiary	41.75'	**10.0' long (Profile 6) Broad-Crested Rectangular Weir** Head (feet) 0.49 0.98 1.48 Coef. (English) 3.12 3.41 3.59

Discarded OutFlow Max=0.09 cfs @ 8.21 hrs HW=41.80' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Tertiary OutFlow Max=0.38 cfs @ 8.21 hrs HW=41.80' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.38 cfs @ 0.72 fps)

Pond Mswale: Mid Swale



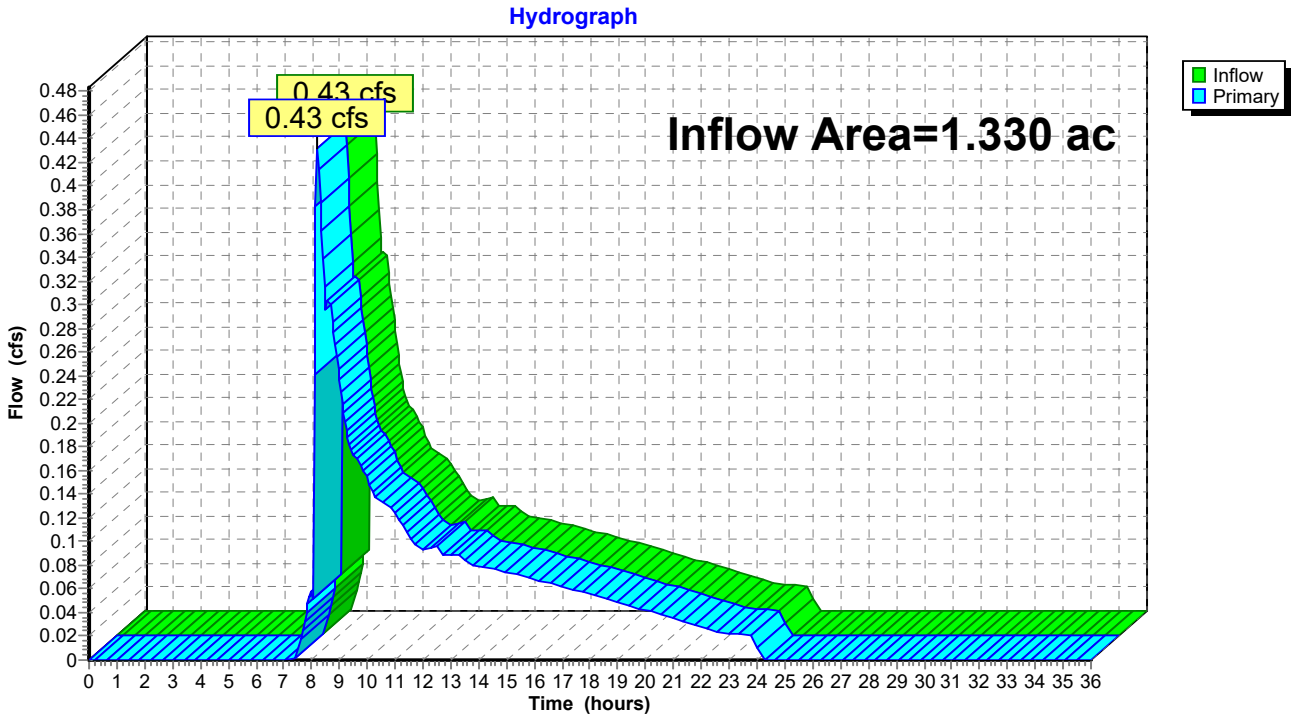
Summary for Pond Total: Proposed Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.330 ac, 62.89% Impervious, Inflow Depth = 1.04" for 100YEAR event
Inflow = 0.43 cfs @ 8.21 hrs, Volume= 0.115 af
Primary = 0.43 cfs @ 8.21 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Pond Total: Proposed Runoff



TOPOGRAPHIC SURVEY FOR
ADAM OFSTAD
IN THE SW 1/4 OF SECTION 24,
T3N, R2W, W.M.,
COLUMBIA COUNTY, OREGON
SCALE 1" = 30'

0 30'

DWG NO. 19-189 TOPO
JOB NO. 14-075
2-25-2022

LEGEND

- POWER POLE
- POLE ANCHOR
- TREE
- SPIGOT

ELEVATIONS ARE BASED ON NGS BENCHMARK X 101 (PID RD0562). VERTICAL DATUM IS NAVD88.

K.L.S. SURVEYING INC.
1224 ALDER STREET
VERNONIA, OREGON 97064
(503) 429-6115

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JANUARY 19, 1993
DONALD D WALLACE, JR
2601
RENEWS 6/30/20

Traverse PC

Lower Columbia Engineering
58640 McNulty Way
St. Helens, OR 97051
503.366.0399

Technical Memorandum

To: Columbia County Transportation Division
From: Andrew Niemi, P.E.
Date: September 27, 2022
Subject: Pro Automotive & Diesel Expansion - Trip Generation Analysis
Project: 3090

We have performed a simple trip generation analysis for the proposed Pro Automotive and Diesel expansion at 50088 Columbia River Highway in Scappoose as well as a trip generation analysis for the site's previous use as a mobile home park.

The proposed development consists of a new service building with 26,000 square feet of total floor area, an estimated 8 employees, and a maximum of 10 employees. The proposed building will augment the existing Pro Automotive service/repair shop on the adjacent lot by handling spill-over when the existing service shop is full. It will also service larger tractors and trucks (i.e. semi-tractors) than the existing facility can accommodate. The proposed expansion will not be open to the public (employees only) and all customer service will continue to be handled in the existing facility. The project site was most recently occupied by the Wallers Mobile Home Park which housed 5 to 7 mobile homes and/or recreational vehicles. We developed trip generation estimates for the proposed and previous use, based on data from the 10th Edition of the ITE Trip Generation Handbook.

PREVIOUS USE TRIP ESTIMATION SUMMARY

ITE	DESCRIPTION	No. of Dwellings	Trips/Dwelling	WEEKDAY #Dwellings	Total Trips
240	Mobile Home Park	5	5.00	5	25
	PREVIOUS USE TRIPS				**25**

PROPOSED USE TRIP ESTIMATION SUMMARY

ITE	DESCRIPTION	Employees	Trips/Employee	WEEKDAY #Employees	Total Trips
942	Automobile Care Center	10 Max.	1.00	10	10
	PROPOSED USE TRIPS				**10**

OLWX1 LED
LED Wall Luminaire

Catalog Number

Notes

Type

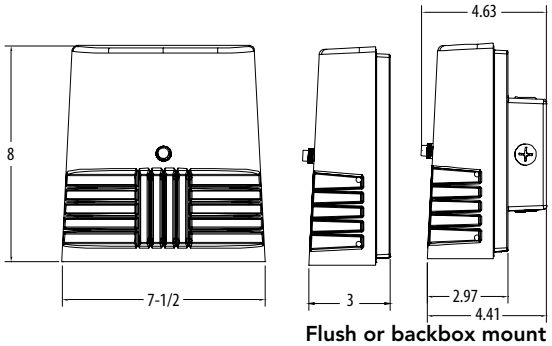
Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The OLWX1 is versatile and energy efficient. It is designed to replace up to 250W metal halide while saving over 87% in energy costs. Whether you are mounting it to a recessed junction box, conduit/ through wiring, as an up light, as a down light, or as a flood light – the OLWX1 has all applications covered.

Specifications

Width:	7-1/2" *(19 cm)*
Height:	8" *(20.3 cm)*
Depth:	3" *(7.62 cm)*
Weight:	5 lbs *(2.27kg)*



Flush or backbox mount

Ordering Information

EXAMPLE: OLWX1 LED 20W 50K

OLWX1 LED											
Series	**Performance Package**		**Color Temperature**		**Voltage**		**Controls**		**Finish**	
OLWX1 LED	13W	13 watts	40K	4000 K [1]	(blank)	MVOLT [2]	(blank)	None	(blank)	Dark bronze
	20W	20 watts	50K	5000 K	120	120V [3]	PE	120V button photocell [1,3]		
	40W	40 watts			347	347V				

Accessories

Ordered and shipped separately.

OLWX1TS	Slipfitter – size 1
OLWX1YK	Yoke – size 1
OLWX1THK	Knuckle – size 1

NOTES

1 Not available with 347V option.
2 MVOLT driver operates on any line voltage from 120-277V (50/60Hz).
3 Specify 120V when ordering with photocell (PE option).

FEATURES & SPECIFICATIONS

INTENDED USE

The versatility of the OLWX1 LED combines a sleek, low-profile wall pack design with energy efficient, low maintenance LEDs for replacing up to 250W metal halide fixtures. Mounting accessories are available to convert the OLWX1 LED into an energy efficient flood light.

OLWX1 LED is ideal for outdoor applications such as building perimeters, loading areas, driveways and sign and building flood lighting.

CONSTRUCTION

Cast-aluminum housing with textured dark bronze polyester powder paint for durability. Integral heat sinks optimize thermal management through conductive and convective cooling. LEDs are protected behind a glass lens. Housing is sealed against moisture and environmental contaminants (IP65 rated). See Lighting Facts label and photometry reports for details.

ELECTRICAL

Light engine consists of 1 high-efficiency Chip On Board (COB) LED with integrated circuit board mounted directly to the housing to maximize heat dissipation and promote long life (L73/100,000 hours at 25°C). Electronic drivers have a power factor >90% and THD <20% and a minimum 2.5kV surge rating. Flood light mounting accessories include an additional 6kV surge protection device. LEDs are available in 4000K and 5000K CCTs.

INSTALLATION

Easily mounts to recessed junction boxes with the included wall mount bracket, or for surface mounting and conduit entry - with the included junction box with five 1/2" threaded conduit entry hubs. Flood light mounting accessories (sold separately) include knuckle, integral slipfitter and yoke mounting options. Each flood mount accessory comes with a top visor and vandal guard. Luminaire may be wall or ground mounted in downward or upward orientation.

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations. Rated for -40° C minimum ambient. Tested in accordance with IESNA LM-79 and LM-80 standards. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

Fixture Model Number	CCT	System Watts	Lumens	LPW	B	U	G	CRI
OLWX1 LED 13W 40K	4000 K	14 W	1,271	91	1	0	0	>70
OLWX1 LED 13W 50K	5000 K	14 W	1,289	92	1	0	0	>80
OLWX1 LED 20W 40K	4000 K	20 W	2,697	135	1	0	0	>70
OLWX1 LED 20W 50K	5000 K	19 W	2,663	140	1	0	0	>70
OLWX1 LED 40W 40K	4000 K	39 W	4,027	101	2	0	0	>70
OLWX1 LED 40W 50K	5000 K	37 W	4,079	110	2	0	0	>70

Electrical Load

Fixture Model Number	Rated Power (watts)	Input current at given input voltage (amps)				
		120V	208V	240V	277V	347V
OLWX1 LED 13W 40K	14 W	0.12	0.07	0.06	0.06	0.04
OLWX1 LED 13W 50K	14 W	0.12	0.07	0.06	0.06	0.04
OLWX1 LED 20W 40K	20 W	0.20	0.12	0.10	0.09	0.06
OLWX1 LED 20W 50K	19 W	0.20	0.12	0.10	0.09	0.06
OLWX1 LED 40W 40K	39 W	0.37	0.21	0.19	0.16	0.11
OLWX1 LED 40W 50K	37 W	0.37	0.21	0.19	0.16	0.11

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

	0°C	10°C	20°C	25°C	30°C	40°C
13W	1.06	1.03	1.01	1.00	0.99	0.96
20W	1.06	1.04	1.01	1.00	0.99	0.96
40W	1.07	1.04	1.01	1.00	0.99	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
OLWX1 LED 13W	1.00	0.92	0.85	0.73
OLWX1 LED 20W	1.00	0.92	0.85	0.73
OLWX1 LED 40W	1.00	0.94	0.88	0.79

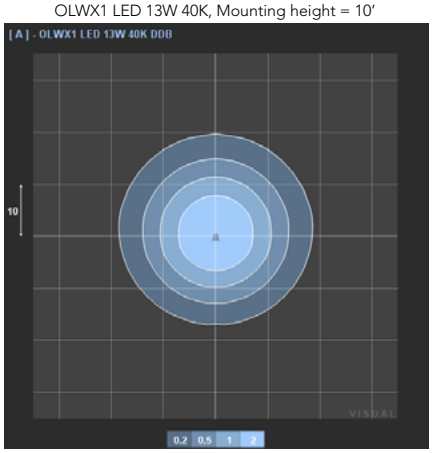
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting OLWX1 LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

LEGEND

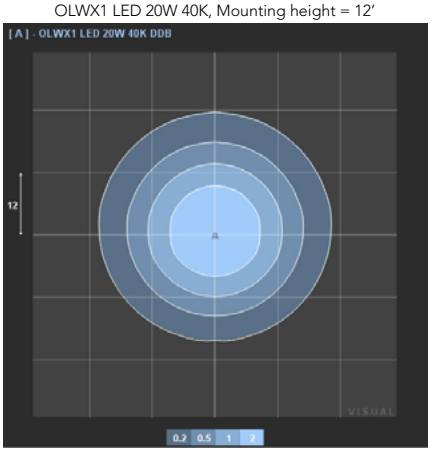
- 0.2 fc
- 0.5 fc
- 1.0 fc
- 2.0 fc

OLWX1 LED 13W 40K, Mounting height = 10'



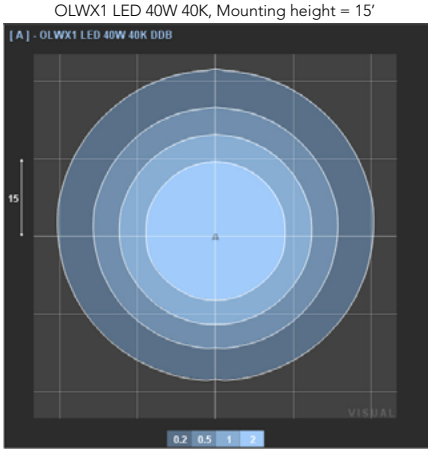
Test No. LTL22697 tested in accordance with IESNA LM-79-08.

OLWX1 LED 20W 40K, Mounting height = 12'



Test No. LTL22696 tested in accordance with IESNA LM-79-08.

OLWX1 LED 40W 40K, Mounting height = 15'



Test No. LTL22695 tested in accordance with IESNA LM-79-08.

Accessories

OLWX1TS
Slipfitter – size 1

Standard size tenon is 2 1/8".
The slip fitter has a range of 2" to 2 3/8".

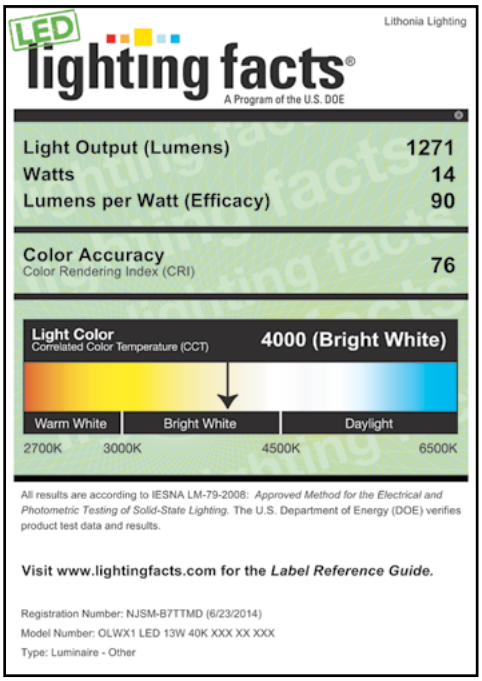
OLWX1YK
Yoke – size 1

OLWX1THK
Knuckle – size 1

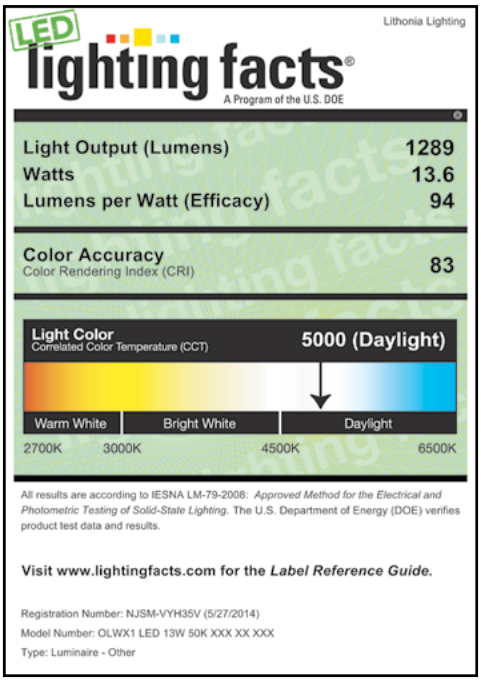
Top Visor and Vandal Guard included with accessories

Lighting Facts Labels

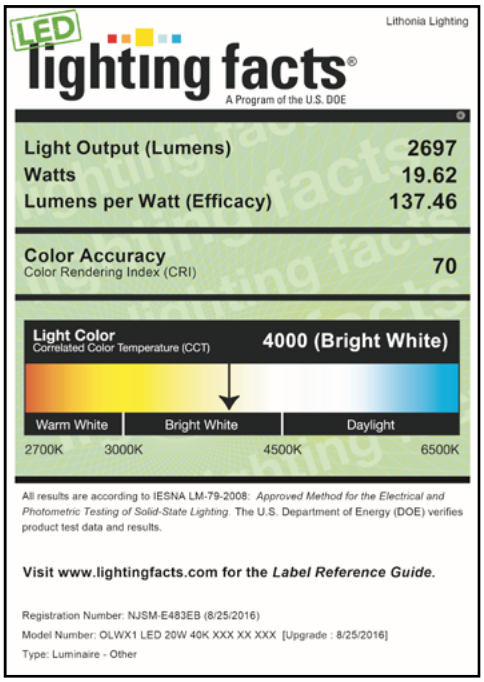
OLWX1 LED 13W 40K XXX XX XXX



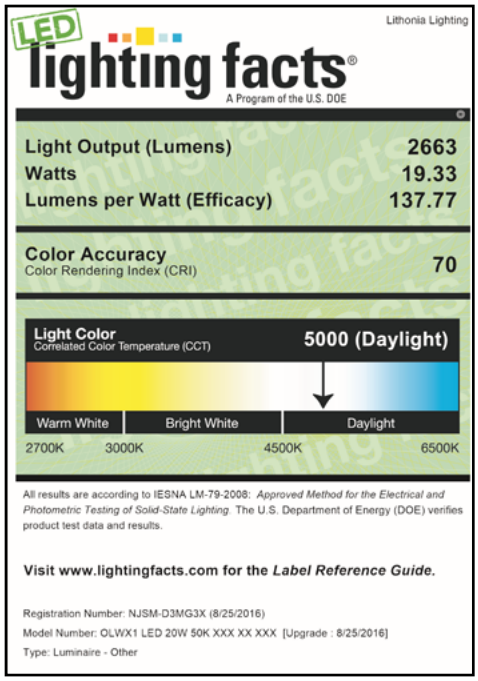
OLWX1 LED 13W 50K XXX XX XXX



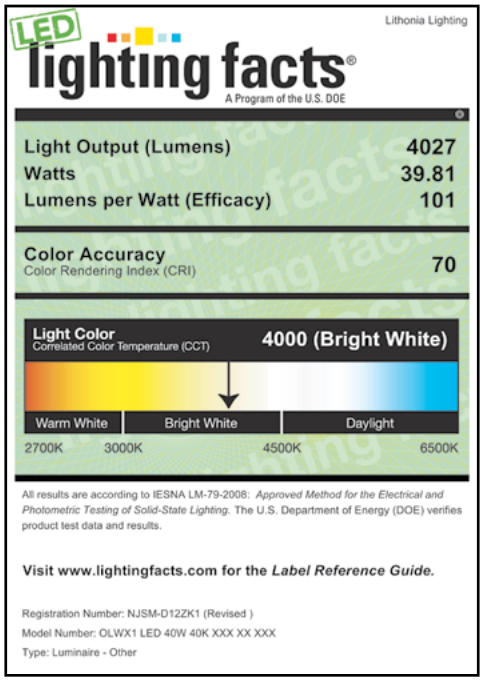
OLWX1 LED 20W 40K XXX XX XXX



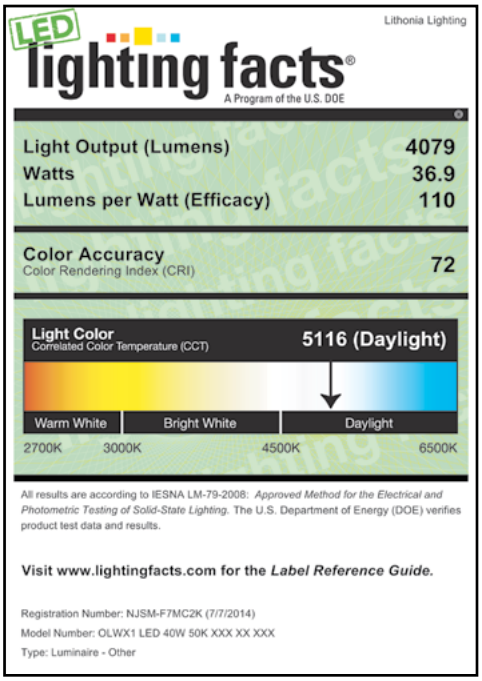
OLWX1 LED 20W 50K XXX XX XXX



OLWX1 LED 40W 40K XXX XX XXX



OLWX1 LED 40W 50K XXX XX XXX



Lumark

DESCRIPTION

The Prevail LED area, site luminaire combines optical performance, energy efficiency and long term reliability in an advanced, patent pending modern design. Utilizing the latest LED technology, the Prevail luminaire delivers unparalleled uniformity resulting in greater pole spacing. A versatile mount standard arm facilitates ease of installation for both retrofit and new installations. With energy savings greater than 62%, the Prevail fixture replaces 150-400W metal halide fixtures in general area lighting applications such as parking lots, walkways, roadways and building areas.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
Construction is comprised of a heavy-duty, single-piece die-cast aluminum housing. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. A one-piece silicone gasket seals the door to the fixture housing. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31) to insure strength of construction and longevity in the selected application.

Optics
Precision molded, high efficiency optics are precisely designed to shape the distribution, maximizing efficiency and application spacing. Available in Type II, III, IV and V distributions with lumen packages ranging from 6,100 to 15,100 nominal lumens. Light engine configurations consist of 1 or 2 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/60,000 hours at 25°C) per IESNA TM-21. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed.

Electrical
LED drivers are mounted to the fixture for optimal heat sinking and ease of maintenance. Thermal management incorporates both conduction and convection to transfer heat rapidly away from the LED source for optimal efficiency and light output. Class 1 electronic drivers have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Available in 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. 10kV/10 kA surge protection standard. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such as dimming and occupancy. Suitable for ambient temperatures from -40°C to 40°C. Optional 50°C HA (high ambient) available. Standard NEMA 3-PIN twistlock photocontrol receptacle and NEMA 7-PIN twistlock photocontrol receptacles are available as options.

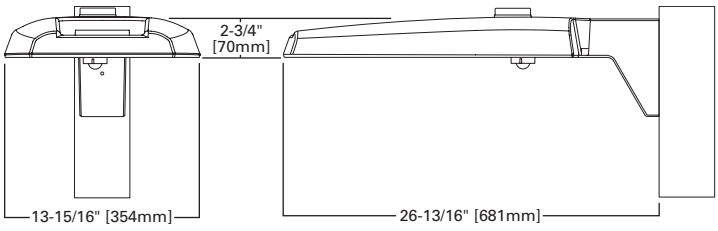
Controls
The Prevail LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MSP) and bi-level dimming (MSP/DIM) operation. The optional LumaWatt system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting
Standard pole mount arm is bolted directly to the pole and the fixture slides onto the arm and locks in place with a bolt facilitating quick and easy installation. The versatile, patent pending, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the standard mounting arm enables wiring of the fixture without having to access the driver compartment. A knock-out on the standard mounting arm enables round pole mounting. Wall mount and mast arm mounting options are available. Mast arm adapter fits 2-3/8" O.D. tenon.

Finish
Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is bronze. Additional colors available in white, grey, black, dark platinum and graphite metallic.

Warranty
Five-year warranty.

DIMENSIONS



PRV PREVAIL

LED

AREA / SITE / ROADWAY LUMINAIRE

CERTIFICATION DATA
UL and cUL Wet Location Listed
IP66-Rated
3G Vibration Rated
ISO 9001
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

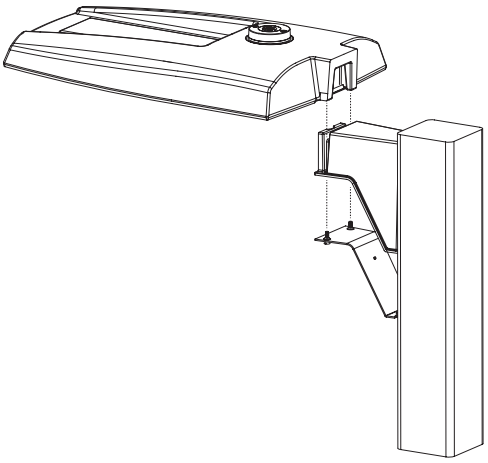
EPA
Effective Projected Area (Sq. Ft.): 0.75

SHIPPING DATA
Approximate Net Weight:
20 lbs. (9.09 kgs.)

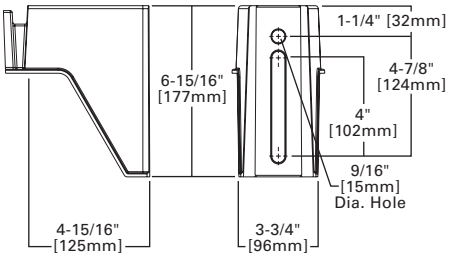
Powering Business Worldwide

*www.designlights.org

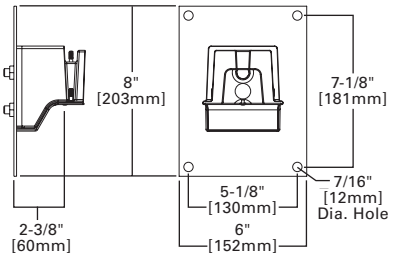
VERSATILE MOUNT SYSTEM



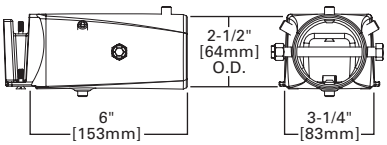
POLE MOUNT ARM



WALL MOUNT

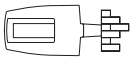


MAST ARM MOUNT

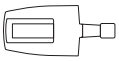


MOUNTING CONFIGURATIONS AND EPAS

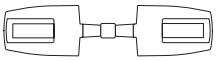
Wall Mount



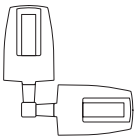
Arm Mount Single
EPA 0.75



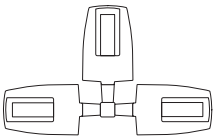
Arm Mount 2 @ 180°
EPA 1.50



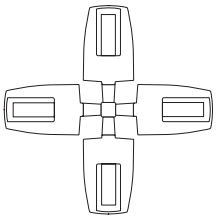
Arm Mount 2 @ 90°
EPA 1.50



Arm Mount 3 @ 90°
EPA 2.25

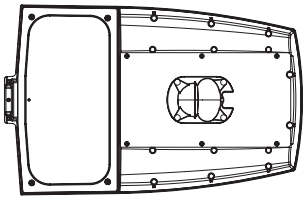


Arm Mount 4 @ 90°
EPA 3.00

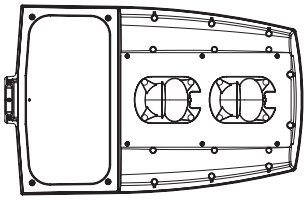


OPTICAL CONFIGURATIONS

A15 (6,100 Nominal Lumens)



A25/A40 (10,200/15,100 Nominal Lumens)



POWER AND LUMENS

Light Engine		A15	A25	A40
Nominal Power (Watts)		57W	87W	143W
Input Current @ 120V (A)		0.49	0.76	1.23
Input Current @ 277V (A)		0.22	0.35	0.54
Input Current @ 347V (A)		0.18	0.28	0.45
Input Current @ 480V (A)		0.13	0.21	0.33
Type II	Lumens	6,139	10,204	15,073
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3
Type III	Lumens	6,192	10,292	15,203
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3
Type IV	Lumens	6,173	10,261	15,157
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4
Type V	Lumens	6,393	10,627	15,697
	BUG Rating	B3-U0-G3	B4-U0-G3	B4-U0-G4

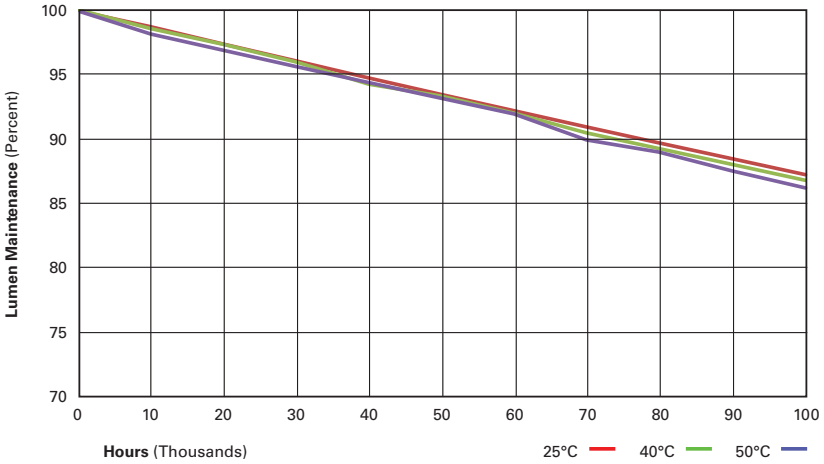
NOTE: Lumen output for standard bronze fixture color. Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	Theoretical 100,000 Hours	Theoretical L70 (Hours)*
25°C	> 96%	> 93%	> 92%	> 87%	> 260,000
40°C	> 96%	> 93%	> 92%	> 87%	> 255,000
50°C	> 95%	> 92%	> 91%	> 86%	> 250,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99



Powering Business Worldwide

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

ORDERING INFORMATION

Sample Number: PRV-A25-D-UNV-T3-SA-BZ

Product Family [1, 2]	Light Engine [3]	Driver [4]	Voltage	Distribution	Mounting	Color [6]
PRV=Prevail	**A15**=(1 LED) 6,100 Nominal Lumens **A25**=(2 LEDs) 10,200 Nominal Lumens **A40**=(2 LEDs) 15,100 Nominal Lumens	**D**=Dimming (0-10V)	**UNV**=Universal (120-277V) **347**=347V **480**=480V [5]	**T2**=Type II **T3**=Type III **T4**=Type IV **T5**=Type V	**SA**=Standard Versatile Arm **MA**=Mast Arm **WM**=Wall Mount Arm	**AP**=Grey **BZ**=Bronze (Standard) **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	**Accessories** (Order Separately) [11]
7030=70 CRI / 3000K CCT [7] **7050**=70 CRI / 5000K CCT [7] **10K**=10kV/10kA UL 1449 Fused Surge Protective Device **DIMRF-LW**=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [8, 9] **DIMRF-LN**=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [8, 9] **MSP/DIM-L12**=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height **MSP/DIM-L30**=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height **MSP-L12**=Integrated Sensor for ON/OFF Operation, 8' - 12' Mounting Height **MSP-L30**=Integrated Sensor for ON/OFF Operation, 12' - 30' Mounting Height **PER**=NEMA 3-PIN Twistlock Photocontrol Receptacle [10] **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [10] **HSS**=House Side Shield **HA**=50°C High Ambient Temperature	**PRVWM-XX**=Wall Mount Kit **PRVMA-XX**=Mast Arm Mounting Kit **PRVSA-XX**=Standard Arm Mounting Kit **HS/VERD**=House Side Shield **MA1010-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1011-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1012-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1013-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1014-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1015-XX**=2@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1016-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1017-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1018-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1019-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1045-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1048-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1049-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon **OA/RA1013**=Photocontrol Shorting Cap **OA/RA1014**=NEMA Photocontrol - 120V **OA/RA1016**=NEMA Photocontrol - Multi-Tap 105-285V **OA/RA1027**=NEMA Photocontrol - 480V **OA/RA1201**=NEMA Photocontrol - 347V **ISHH-01**=Integrated Sensor Programming Remote

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
2. DesignLights Consortium™ Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
3. Standard 4000K CCT and 70 CRI.
4. Consult factory for driver surge protection values.
5. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
6. Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.
7. Extended lead times apply. Use dedicated IES files for 3000K and 5000K when performing layouts. These files are published on the Prevail luminaire product page on the website.
8. LumaWatt wireless sensors are factory installed and require network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See website for LumaWatt application information.
9. LumaWatt wireless system is not available with photocontrol receptacle (Not needed).
10. Not availale with MSP or DIMRF options.
11. Replace XX with paint color.

STOCK ORDERING INFORMATION

Stock Sample Number: PRVS-A25-UNV-T3

Product Family	Light Engine	Voltage	Distribution	**Options** (Add as Suffix)
PRVS=Prevail	**A15**=(1 LED) 6,100 Nominal Lumens **A25**=(2 LEDs) 10,200 Nominal Lumens **A40**=(2 LEDs) 15,100 Nominal Lumens	**UNV**=Universal (120-277V) **347**=347V	**T3**=Type III **T4**=Type IV	**MSP/DIM-L30**=Integrated Sensor for Dimming Operation, Maximum 30' Mounting Height

NOTE: Bronze only, 4000K CCT, 120-277V, 347V, standard mounting arm, standard non-fused 10kV MOV and 0-10V dimming.

Matthew Alexander

From: Daniel Osborn <Daniel.Osborn@columbiacountyor.gov>
Sent: Wednesday, October 11, 2023 8:18 AM
To: Matthew Alexander; Suzie Dahl
Cc: HOUGH Daniel L; Pete Farrelly; Jaime Aanensen
Subject: RE: Pro Automotive Site Design DR 23-04/V 23-01

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Matthew,

The requirement of a community or public water system for this property just means that there is some sort of drinking water source available, if it is not able to connect to City water.
A water system that serves less than 10 people on average for 60 days or more per year is not regulated by the County or the State of Oregon Drinking Water Services. It is considered, by our rules, "not a public water system". This, based on my understanding, does not infringe upon *our* rules if the building were to use it; it just is not a well that we would regulate yet.

Once this water system serves a population 10 people or more on average for 60 days or more per year, it will *become* categorized as an "Oregon Very Small Water System". This means that routine water sampling will be required and also the well will need to meet Oregon Water Resources Department (OWRD) standards, at that time. Is there a well log present, or well ID number (ex: COLU123, or L123) for this intended well?

After checking with a representative from Oregon Drinking Water Services, he replied that the well will need to meet OWRD standards, and also have an initial round of water tests/sampling, including coliform bacteria, nitrate and arsenic.

If the population served by this well is 9 people or less, well construction standards approval and those initial water sampling/tests are not technically requirements by Columbia County. In other words, if the system is intended to serve less than 10 people for 60+ days per year, the well is allowed at this time for this purpose.

However, the sampling and source approvals will *become* requirements once the water source's population reaches *10 or more people* on average for 60+ days in a year. If the well is determined to not meet OWRD standards, once the population served becomes 10 people or more, the well may no longer be approved at that time. I have copied representatives from Oregon Drinking Water Services on this email as well.

Hopefully this helps and please let me know if you have any further questions,

Daniel Osborn, REHS/RS
Columbia County Public Health
(971) 757-5031

P.S. A filtration system is not necessarily required by County standards at this time, but it is a good idea.

From: Matthew Alexander <matt@lowercolumbiaengr.com>
Sent: Monday, October 9, 2023 9:18 AM
To: Suzie Dahl <Suzie.Dahl@columbiacountyor.gov>; Daniel Osborn <Daniel.Osborn@columbiacountyor.gov>
Subject: FW: Pro Automotive Site Design DR 23-04/V 23-01

Good morning Suzie and Daniel,

Please see Deb Jacob's email below (specifically item 1). I've discussed Adam Ofstad's well with you both but I need written verification that Adam's is acceptable as long as a filtration system is installed and annual well tests are provided to the County. Can you please provide written verification for our LUP application?

Thanks,

Matt Alexander
LOWER COLUMBIA ENGINEERING, LLC
Project Manager
58640 McNulty Way
St Helens, Oregon 97051
CELL 971-404-4110
OFFICE 503-366-0399
EMAIL matt@lowercolumbiaengr.com

From: Deborah Jacob <Deborah.Jacob@columbiacountyor.gov>
Sent: Friday, October 6, 2023 4:16 PM
To: Matthew Alexander <matt@lowercolumbiaengr.com>
Cc: Hayden Richardson <Hayden.Richardson@columbiacountyor.gov>
Subject: Pro Automotive Site Design DR 23-04/V 23-01

Matt,

I have called you a couple times this week and have yet to hear back from you.
I have been reviewing the documents that were submitted on Oct 2, 2023 in response to the Incomplete letter from Hayden Richardson dated October 11, 2022.

After reviewing the new information, LDS still needs the Applications to include the following items:

1. The requirement in Section 675.2(A) of the County Zoning Ordinance that new uses permitted in Section 672 need to be supported by a public or community water system as directed in Section 676 of the CCZO.

   Your response on your Sept. 29, 2023, Memo does not provide written confirmation from the County Public Health Department that this existing well meets the definitions of a public or community water system. The statement that *"this issue has been discussed with Daniel Osborne and Suzie Dahl and it has been determined that the existing well will be appropriate for this use but will require a filtration system and yearly water quality test submitted to the County"* is not accompanied with any written documentation from Daniel, representing County Public Health. Before Land Development Services can deem these two applications complete, we will need this written confirmation from County Public Health.

2. In addition, Land Development Services will need 2 new sets of 11'" by 17" Plans labeled G, C, and A that match the 24" x 36" Plans that were submitted on October 2, 2023. The 10/28/23 dated 11" by 17" plans do not match the 24 by 36 plans that were submitted on October 2, 2023.

Best regards,

Deborah S. Jacob
Senior Planner

503-397-7260
Deborah.jacob@columbiacountyor.gov

Lower Columbia Engineering
58640 McNulty Way
St. Helens, OR 97051
503.366.0399

Technical Memorandum

To: Columbia County Transportation Division
From: Andrew Niemi, P.E.
Date: November 21st, 2023
Subject: Pro Automotive & Diesel Expansion - Trip Generation Analysis
Project: 3090

We have performed a simple trip generation analysis for the proposed Pro Automotive and Diesel expansion at 50088 Columbia River Highway in Scappoose as well as a trip generation analysis for the site's previous use as a mobile home park.

The proposed development consists of a new service building with 26,000 square feet of total floor area, an estimated 8 employees, and a maximum of 10 employees. The proposed building will augment the existing Pro Automotive service/repair shop on the adjacent lot by handling spill-over when the existing service shop is full. It will also service larger tractors and trucks (i.e. semi-tractors) than the existing facility can accommodate. The proposed expansion will not be open to the public (employees only) and all customer service will continue to be handled in the existing facility. The project site was most recently occupied by the Wallers Mobile Home Park which housed 5 to 7 mobile homes and/or recreational vehicles. We developed trip generation estimates for the proposed and previous use, based on data from the 10th Edition of the ITE Trip Generation Handbook.

PREVIOUS USE TRIP ESTIMATION SUMMARY

				WEEKDAY	
ITE	DESCRIPTION	No. of Dwellings	Trips/Dwelling	#Dwellings	Total Trips
240	Mobile Home Park	5	5.00	5	25
	PREVIOUS USE TRIPS				**25**

PROPOSED USE TRIP ESTIMATION SUMMARY

				WEEKDAY	
ITE	DESCRIPTION	Employees	Trips/employee	#Employees	Total Trips
942	Automobile Care Center	10 Max.	1.00	10	10
	PROPOSED USE TRIPS				**10**

Mobile Home Park
(240)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

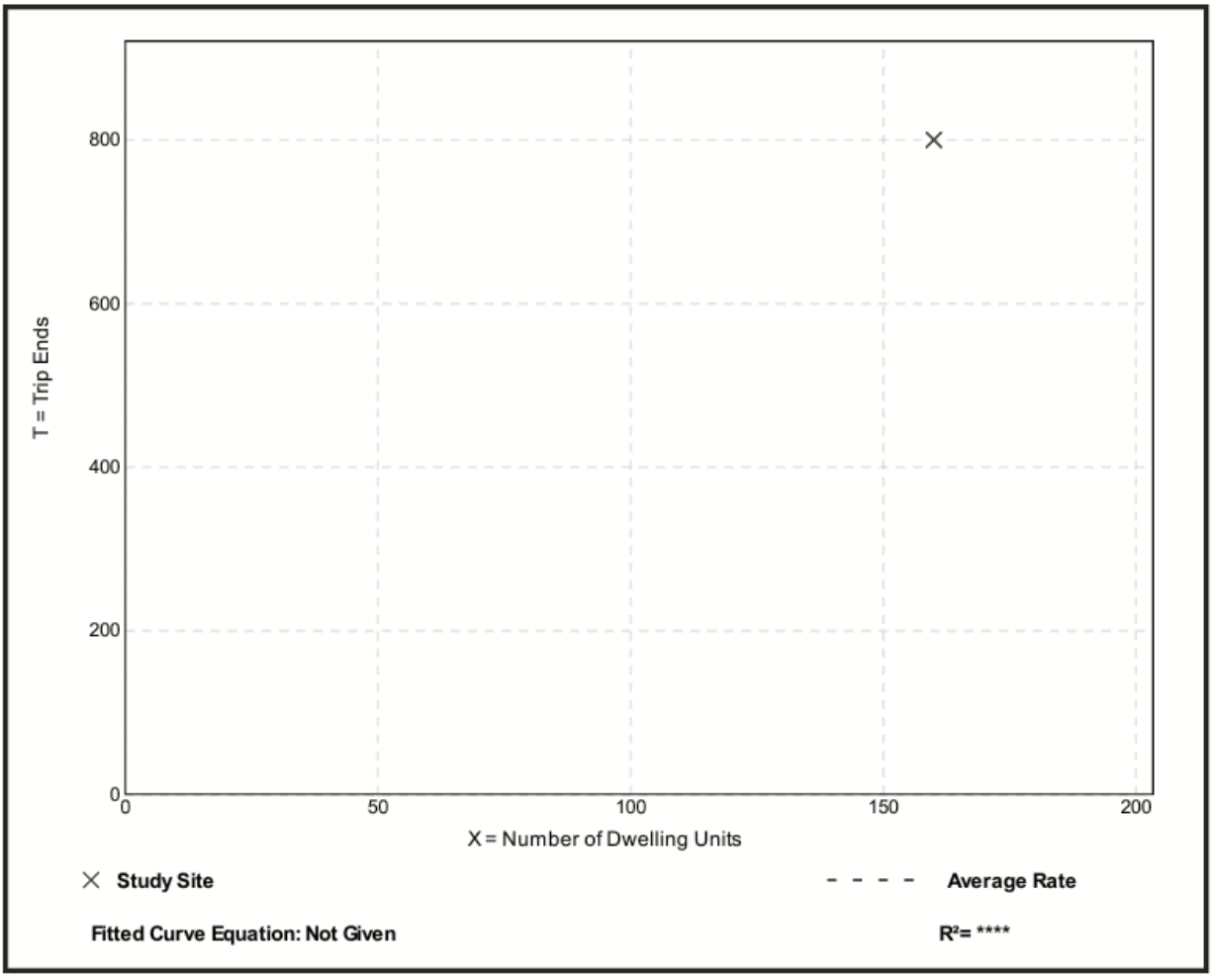
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. Num. of Dwelling Units: 160
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.00	5.00 - 5.00	*

Data Plot and Equation

Caution – Small Sample Size



Automobile Care Center
(942)

Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 1
Avg. Num. of Employees: 44
Directional Distribution: 68% entering, 32% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.00	1.00 - 1.00	*

Data Plot and Equation

Caution – Small Sample Size