HEARINGS EXAMINER MEETING AGENDA
Thursday, April 20, 2017, 6:00 PM
City Hall, 616 NE 4th Avenue

I. CALL TO ORDER

II. INTRODUCTION AND INSTRUCTIONS

III. HEARING ITEM

A. Camas School District Project Based Learning High School (SPRV17-01)
Details: The Camas School District (CSD) is proposing to build a new 89,000 square foot building for a new project based learning high school located at 5780 NW Pacific Rim Boulevard.
Presenter: Robert Maul, Planning Manager
Recommended Action: Staff recommends that the Hearings Examiner conduct a public hearing, deliberate and render a decision of approval.

Project Base Learning High School Staff Report (SPRV17-01)

Exhibit 1_Cover Letter from Applicant

Exhibit 2_Project Contacts

Exhibit 3_Permits Approval List

Exhibit 4_Applications

Exhibit 5_Applicant's Narrative

Exhibit 6_ Applicant's Code Narrative

Exhibit 7_Pre Application Notes

Exhibit 8_ Appendix 1

Exhibit 9_Site Plan Review drawings

Exhibit 10_Design Review drawings

Exhibit 11_Design Review Lighting Specifications

Exhibit 12_Preliminary Wetland and Habitat Assessment

Exhibit 13_Mailing labels

Exhibit 14_Additional mailing labels

Exhibit 15_CSD Additional Enclosure Mailing

Exhibit 16_Design Review Staff Report

Exhibit 17_Notice of Hearing

Exhibit 18_SEPA Notice

Exhibit 19_Camas School District presentation to Design Review Committee

Exhibit 20_SEPA checklist

Exhibit 21_SEPA checklist signed form

Exhibit 22_Technical Completeness Review Letter

Exhibit 23_Traffic Report

Exhibit 24_Revised Geotechnical Report

Exhibit 25_ public comment email- Jennifer Hanton

Exhibit 26_Rosenberg email to Jennifer Hanton

Exhibit 27_ Public Comment email- Jill Fuller

Exhibit 28_ Rosenberg email to Jill Fuller

Exhibit 29_ Public comment email- Mike Hanton

Exhibit 30_ Rosenberg email to Mike Hanton

Exhibit 31_ Public comment email- MacKay

Exhibit 32_ Rosenberg email to MacKay

Exhibit 33_ public comment email- Angelo

Exhibit 34_ public comment email- KC Fuller

Exhibit 35_ public comment email- Kwon

Exhibit 36_ public comment email- Jamison

Exhibit 37_Grand Ridge and Knight's Pointe public comment letter

Exhibit 38_ Jacobs email to Maul

Exhibit 39_ public comment email- Swettman

Exhibit 40_ SEPA email to Ecology

Exhibit 41_ SEPA email to Agencies

Exhibit 42_ public comment email- Schroeder

Exhibit 43_ Ecology comment letter

Exhibit 44_ public comment email- Woodward

Exhibit 45_ public comment email- Erickson

Exhibit 46_ public comment email- Pousche

Exhibit 47_ public comment email- Weithas

Exhibit 48_ public comment email- Tom Pousche

Exhibit List

IV. ADJOURNMENT

V. LAND USE DECISION

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call the City Clerk's Office at 360.817.1591.

STAFF REPORT
CAMAS SCHOOL DISTRICT PROJECT BASED LEARING HIGH SCHOOL
FILE NO. SPRV17-01 (ASSOCIATED FILES, SEPA17-03, DR17-01)

TO:	Hearings Examiner	**HEARING DATE**:	April 20th, 2017
BY:	Robert Maul	REPORT DATE:	April 13th, 2017

PROPOSAL: To request site plan approval to build a new 89,000 square foot high school for the district's new Project Based Learning program for high school students.

LOCATION: The site is located at 5780 NW Pacific Rim Boulevard, Camas, 98607, Tax id numbers 125661-000 and 986033).

APPLICANT: Camas School District
841 NE 22nd Ave
Camas, WA 98607
Contact: Chuck Stiller
(360) 335-3000 ext. 772123

PUBLIC NOTICE: Notice of application and public hearing was mailed to property owners within 300 feet of the site in addition to all Camas neighborhoods and property owners who abut the site on April 6th, 2017, and published in the Post Record on April 6th, 2017, legal publication #580238.

APPLICABLE LAW: The application was submitted on January 10th, 2017, and the applicable codes are those vested and in effect through Ordinance # 16-031 (12/05/16). Camas Municipal Code Chapters (CMC): Title 16 Environment, Title 17 Land Development; and Title 18 Zoning; Specifically (not limited to): Chapter 17.19 Design & Improvement Standards; Chapter 18.07 Use Authorization, Chapter 18.13 Landscaping; Chapter 18.43 Conditional Use Permits; and Chapter 18.55 Administrative Provisions. **[Note:** Citations from Camas Municipal Code (CMC) are indicated with ***italicized type*.]**

REPORT CONTENTS

I. SUMMARY

The Camas School District is proposing to build a new two story, 89,000 square foot high school for the new Project Based Learning Camas on 40 acres recently purchased from Sharp Laboratories of America. This facility will be located behind the new Project Based Learning middle school currently operating at the campus site.

The project area is located on an area of the property that has largely been previously graded and landscaped back when Sharp built the building that is now the Middle School. There is a general slope going north, which will afford some design opportunities for the facility both for view and functionality of the facility. The applicant is proposing to provide ample parking on site, well in excess of the required minimum 150 spaces for a total of 318 spaces. Additionally, there is a reserved area to accommodate future parking if needed.

The underlying zoning designation for the site is Business Park (BP), which lists schools as a permitted use outright per CMC 18.07.030 - Table 1. As such, this application is subject to the regulations of the Camas Municipal Code for a Type II Site Plan Review (administrative review and approval), Type II Major Design review, and SEPA review. At the School District's request, and with City support, a decision was made to have this application go before the Hearing Examiner for a formal public hearing and decision, as per CMC 18.55.020. Public noticing was done beyond the required 300' radius requirement listed in CMC 18.55.150 to include all abutting neighborhoods located in Camas and Winchester Hills, which is in unincorporated Clark County (See exhibit 13)

II. SITE PLAN REVIEW

18.18.060 - CRITERIA FOR APPROVAL FOR SITE PLAN REVIEW

The city shall consider approval of the site plans with specific attention to the following:

A. Compatibility with the city's comprehensive plan;

Findings: The city's comprehensive plan, Camas 2035, adopted the school district comprehensive plans along with specific land use goals that include schools. Policy LU-1.6, "*Ensure adequate public facilities (including roads, emergency services, utilities, and schools) exist to serve new development, and mitigate potential impacts to current residents*." The proposal is consistent with this goal, given that the project will extend utilities, construct public roadways, and provide educational services for new development to the north of the city. Policy LU-1.3 requires that new developments be compatible with the surrounding built and natural environments. The project has generous setbacks from the property lines given the existing development patterns that surround it and takes advantage of the sloping topography to maximize the footprint of the building and associated parking. The design of the development includes native landscape plantings to blend in with the natural areas that abut the site to the north including the existing facilities to the east.

B. Compliance with all applicable design and development standards contained in this title and other applicable regulations;

Findings: As mentioned previously the site is located in the Business Park zoning district, which allows High Schools as an allowed use outright as per CMC 18.07.030 Table 1. The dimensional standards for the BP district are contained in CMC 18.09.030 Table 1 - Density and dimensions for commercial and industrial zones. As proposed, this application can meet those minimum standards in great excess. The 40 acre site is above the minimum half acre requirement and all setbacks can be met as proposed. As noted in the background section the applicant requested that the land use action be considered under a public hearing by using CMC 18.55.020, which the city supported.

Parking standards are contained in CMC 18.11.130. Senior High Schools are required to provide a minimum of one space per employee, teacher, staff and 1 space per 10 students. The minimum amount based on the numbers provided by the school district is actually 150. The district is proposing to provide 318 total stalls including 8 fully ADA accessible parking spaces, which meets this requirement.

Other applicable Title 18 sections of Site Plan Review 18.18 and Design Review 18.19 are addressed herein this report. Landscaping as proposed meets the minimum requirements by providing adequate native landscape materials as well as appropriate design standards as reviewed by the Design Review Committee. Landscaping shall be installed prior to final building occupancy and maintained in accordance with the provisions of this section.

The applicant provided a Wetland Assessment Report, a Geotechnical Report and an Archaeological Predetermination report for the site. There are no wetlands, or other critical areas on site, nor were there any findings of any artifacts or other historic elements on site. As such, the application can meet the critical areas ordinance as proposed.

A SEPA determination of a DNS was issued on February 16th, 2017 with the comment period ending on March 2nd, 2017 (exhibit 18). Most of the public comments received were derived from this SEPA notice that was mailed to property owners within the required 300' radius. All of the public comments received were focused largely on traffic impacts to the area and are included in the exhibit list. There are also agency comment letter included in the exhibits as well.

C. Availability and accessibility of adequate public services such as roads, sanitary and storm sewer, and water to serve the site at the time development is to occur, unless otherwise provided for by the applicable regulations;
Findings:

Roads

NW 18th Avenue and SE Payne Road are existing streets that abut the southerly boundary of the applicant's property. Both streets have 60 feet of existing right-of-way (ROW) and are designated as existing two or three lane Collector Streets per the Transportation Element of the 2035 Comprehensive Plan. The southerly side of these streets contain multi-modal improvements such as separated asphalt paths, sidewalks and a shared use path for pedestrian and/or bicycle use; however, there are no street lights located along either side of NW 18th Avenue. The northerly side of these abutting streets are more rural in nature and lack sidewalks, curbs, bike lanes, left turn pockets at intersections and, stormwater control.

Although the applicant's property abuts portions of the northerly right-of-way (ROW) line of NW 18th Avenue and SE Payne Road, the applicant is not proposing to access the site from the public street frontage adjacent to the site. Site access is proposed to be through the use of the existing Sharp Drive, which is a private drive that currently serves the Sharp site from NW Pacific Rim Boulevard, and a new access point described further below.

Staff finds that some of the right of way adjacent to the applicant's property on SE Payne Road is currently in Clark County jurisdiction. Camas staff is working toward some form of agreement with Clark County or an annexation of the right of way to absolve the applicant's responsibility in complying with the Clark County road standards in the current Clark County right of way. Staff finds that a condition is warranted to ensure that, prior to approval of construction plans for the required improvements in the current Clark County right of way, the applicant waits for the verification of Clark County's consent to assigning the City of Camas with jurisdictional authority over the road standards; or until such time as said right of way is annexed by the City of Camas. Otherwise, the applicant will be required to follow the road standards codified and administered by Clark County.

Staff finds the applicant shall complete public improvements to meet the requirements of the Design Standards Manual and Title 17 of the Camas Municipal Code. As a result of having extensive existing infrastructure on site that was previously constructed by Sharp Microelectronics (prior owner of the applicant's property), the applicant is proposing deviations to the typical right-of-way dedication and frontage improvements. The applicant is proposing the following improvements to mitigate for the site impacts to NW 18th Avenue and SE Payne Road:

- Installation of street lighting on one side of NW 18th Avenue and SE Payne Road along the length of the applicant's property compliant with the City design standards.
- Installation of two pedestrian crossings on NW 18th Avenue; one at NW Deerfern Street and a second mid-block crossing on NW 18th Avenue near the westerly boundary of the site frontage.
- Construction of an 8-foot wide (4 feet expansion) multi-use pathway on the northerly side of Sharp Drive with connections to the pedestrian crossings on NW 18th Avenue and the boundary of the northwest limits of the applicants property with SE Payne Road. This sidewalk will provide pedestrian connection through the site in place of a sidewalk along the frontage of the property.
- Construction of a new east leg of the SE Lacey Way intersection with SE Payne Road to provide access to Sharp Drive and the applicant's proposed building. Construction will include left turn pockets and a

northbound right-turn deceleration lane. Additionally, with these intersection improvements, the Sharp drive access point on NW Pacific Rim Boulevard will be removed. Staff notes these improvements are proposed to be completed by Sharp as part of a three-way interlocal agreement dated June 29, 2016 between Sharp, the Camas School District (applicant) and the City of Camas.

- Construction of a west bound left turn pocket on NW 18th Avenue at NW Deerfern Street.

Staff concurs with the applicant's assertions and finds that the improvements as proposed are equivalent to those improvements identified in the Design Standards Manual and will provide enhanced corridor safety improvements such as dedicated left turn pockets, corridor lighting and adequate pedestrian crossings and circulation. As such, Staff finds that a condition shall be placed on the applicant to complete the improvements identified above.

Staff would note that under a separate Site Plan Review application that is currently under review by the City, Sharp Microelectronics is also proposing to construct corridor improvements to NW 18th Avenue that will benefit the applicant's project. Sharp will construct a new site access location in the southeast corner of their site, located east of the applicant's project, which would provide a direct access to the southeasterly parking areas of the site from NW 18th Avenue that will serve the one remaining Sharp building. This improvement will leave the proposed new access at SE Lacey Way for the sole purpose of accessing the applicant's school building. Once the improvements are completed, Sharp employees will use their new access location, which will provide for the separation of school related traffic and Sharp employee traffic on site. In addition to the new access, Sharp will also widen NW 18th Avenue to include a center left-turn lane from the new driveway access to the west of NW Whitman Street.

A Traffic Analysis Report (TAR) for the proposed project was completed by Charbonneau Engineering dated March 2017 and submitted in support of the application materials. The TAR found that the intersection at SE Payne Road and NW Pacific Rim Boulevard will operate at Level of Service F in the design year. Additionally, the TAR found that the intersection at NW 16th Avenue and NW Brady Road will operate at a Level of Service F in the design year. The TAR recommends that signals be installed at these two intersections to bring them up to minimum levels of service. As such, Staff finds that in addition to the corridor and access improvements identified above, the applicant shall be conditioned to install traffic signals at the intersection of SE Payne Road and NW Pacific Rim Boulevard as well as at the intersection of NW 16th Avenue and NW Brady Road.

Staff finds that the existing area roadways have available capacity for the proposed use based on the findings and results of the TAR submitted with the application materials prepared by Charbonneau Engineering. Additionally, Staff finds that the proposed improvements as a whole will adequately mitigate for the site's traffic impact.

Sanitary Sewage Disposal

This particular area of Camas is served by a Septic Tank Effluent Pump (STEP) sewer system. This system is not designed to convey sewer solids and requires sewage flows to gravity flow from the proposed building into appropriately sized community solids holding tank(s). The solids will remain in the large community STEP tank and the effluent will be pumped south to the existing 2 inch diameter STEP main line located in NW 18th Avenue.

Staff finds that the applicant shall be conditioned to evaluate and verify that there will be adequate capacity for the anticipated flows that will be directed into this small diameter STEP main. Should it be determined that there is not adequate existing capacity remaining in this existing 2 inch diameter main the applicant shall be required to upsize the line appropriately or direct sewer flows to the north to the existing STEP main located in NW Pacific Rim Boulevard, provided there is adequate existing capacity as determined through a capacity analysis of this alternate northerly system.

Storm Drainage
The applicant has submitted a preliminary stormwater Technical Information Report (TIR) in accordance with the provisions of the 2014 Stormwater Management Manual for Western Washington (SMMWW) and the Camas Stormwater Design Standards Manual (CSDSM).

Currently the site contains one existing stormwater detention facility and approximately 1.84 acres of impervious surfaces. The applicant is proposing two new additional stormwater detention facilities plus modification of the existing detention facility in order to control the stormwater runoff from the proposed site improvements that will total 11.78 acres of site impervious surfaces at project completion.

The applicant is proposing to provide onsite stormwater detention and treatment using large wet ponds and bio-retention treatment cells for basic treatment and phosphorus removal in accordance with the provisions and requirements of the 2014 SMMWW and Section 5.04 of the CSDSM. The ongoing maintenance and operation of the proposed on-site stormwater detention facilities and bio-retention areas will be the responsibility of the applicant. A condition of approval to this effect is warranted.

Staff finds that the applicant can or will make adequate provisions for stormwater control, treatment and disposal consistent with City requirements.

Water
The applicant is proposing to extend an appropriately sized water line to the north right of way line of NW 18th Avenue where the applicant will install appropriate isolation valving and metering by installing a double detector check valve and meter for billing purposes. The applicant will extend a private domestic water line to serve the new school and will extend a private dedicated fire line and connect with the existing on-site fire system that currently serves the site. The domestic and fire lines beyond the meter will be privately owned and maintained by the applicant.

The onsite private fire hydrants shall be painted red in accordance with requirements of the Camas Fire Department. A condition of approval to this effect is warranted. Additionally, a separate permit from the Fire Marshal's Office will be required for the installation of the dedicated fire line. A condition of approval to this effect is warranted.

D. Adequate provisions are made for other public and private services and utilities, parks and trails (e.g., provide copies of private covenant documents);

Findings: There is access to existing franchise utilities such as natural gas, telephone, cable and power utilities in the immediate area that will serve the site.

There are no required parks or trails identified in the 2014 Parks, Recreation and Open Space Plan on or over the subject property.

The applicant is proposing to install pedestrian crossings at two locations to provide pedestrian access across NW 18th Avenue to the site. The applicant will also install onsite pedestrian access routes via sidewalks and trails to provide access to and through the site.

Staff finds that the applicant can or will make adequate provisions for public and private facilities.

E. Adequate provisions are made for maintenance of public utilities; and

Findings: The city will maintain public improvements such as traffic signals, public street improvements including street lighting if located within the public right of way.

The applicant will be responsible for the maintenance of the onsite water and fire lines beyond the double detector check valve vault, the onsite stormwater conveyance systems, including the onsite stormwater detention facilities and bio-retention cells in the parking and drive areas on site. The applicant will also be responsible for the maintenance of the access road to the new school and the drive aisles, lanes and parking areas on site.

Staff concurs that the adequate provisions will or can be made for maintenance of public utilities.

F. All relevant statutory codes, regulations, ordinances and compliance with the same. The review and decision of the city shall be in accordance with the provisions of CMC Chapter 18.55 Administration and Procedures.

Findings: The proposed development has associated permits and approvals. As noted in this report, the project has been reviewed by the city's Design Review Committee and a SEPA decision was issued. As discussed in this Staff Report, the review and processing of the Site Plan Review and Critical Areas are consistent with the procedures of Chapter 18.55.

III. DESIGN REVIEW COMMITTEE RECOMMENDATION

The city held a Design Review Committee public meeting on February 28, 2017. The Design Review Committee reviewed the proposal for compliance with the City's adopted design principles and provided a recommendation to staff of approval as proposed.

Recommended Action:
It was moved by Committee to forward a recommendation of approval to the Director that the design review application for the Project Based Learning High School (DR17-01) was generally consistent with the principles of Design Review. The motion carried unanimously. The recommended conditions are included with this report.

IV. CONCLUSIONS OF LAW

Based on the above findings and discussion provided in this report, staff concludes that the Site Plan application for the Project Based Learning High School (File #SPRV17-01) should be approved, because it does or can comply with the applicable standards.

- The application materials are in conformance with CMC Chapter 18.55, Article III Application Requirements.
- As proposed, the development can satisfy the design standards of 17.19.030 Infrastructure Standards.
- As submitted, the development can comply with the requirements of CMC Chapter 18.18 Site Plan Review.

V. RECOMMENDATIONS

Staff recommends APPROVAL of the Project Based Learning High School (Site Plan File #SPRV17-01) with conditions. The recommendation is based on the application meeting the minimum requirements of Camas Municipal Codes, and conditioned as follows:

PROPOSED CONDITIONS

The following conditions are in addition to any conditions required from other permits or approvals issued to this project. Unless otherwise waived or modified in this decision, the development must comply with the minimum requirements of the Camas Municipal Code.

GENERAL CONDITIONS:

1) Stormwater treatment, including phosphorous removal, and detention facilities shall be designed in accordance with the 2014 Stormwater Management Manual for Western Washington and the Camas Stromwater Design Standards Manual. Final stormwater calculations shall be submitted at the time of final construction plan submittal.
2) All construction plans will be prepared in accordance with City Design Standards Manual and City Standards. The plans will be prepared by a licensed civil engineer in Washington State and submitted to the City for review and approval.
3) Underground (natural gas, CATV, power, street light and telephone) utility plans shall be submitted to the City for review and approval prior to approval of the construction plans.
4) The applicant will be required to purchase all permanent traffic control signs, street name signs, street lighting and traffic control markings and barriers for the improved subdivision. The applicant is

responsible for installation of all required signage and striping in accordance with requirements of the 2009 Manual on Uniform Traffic Control Devices (MUTCD).

5) A 3% construction plan review and inspection fee shall be required for this development. The fee will be based on an engineer's estimate or construction bid. The specific estimate will be submitted to the City for review and approval. The fee will be paid prior to the construction plans being signed and released to the applicant. Under no circumstances will the applicant be allowed to begin construction prior to approval of the construction plans.
6) Any entrance structures or signs proposed or required for this project will be reviewed and approved by the City. All designs will be in accordance with applicable City codes. The maintenance of the entrance structure will be the responsibility of the applicant.

ENGINEERING CONDITIOINS:

7) The applicant shall not construct improvements in the current Clark County right of way until such time as the City and County agree that jurisdictional authority for road standards is transferred to the City of Camas; otherwise, the applicant will be required to acquire the necessary permits from Clark County and adhere to Clark County's road standards for improvements within Clark County's right of way.
8) Prior to occupancy, the applicant shall construct: street lighting on one side of NW 18th Avenue and SE Payne Road; two pedestrian crossings on NW 18th Avenue; an 8-foot total width multi-use pathway along Sharp Drive; a new intersection with left-turn pockets and a northbound right-turn deceleration lane at SE Lacey Way and SE Payne Road; closure of the existing Sharp Drive at NW Pacific Rim Boulevard; and a west-bound left-turn pocket on NW 18th Avenue at NW Deerfern Street.
9) Prior to occupancy, the applicant shall install traffic signals at the intersection of SE Payne Road and NW Pacific Rim Boulevard as well as at the intersection of NW 16th Avenue and NW Brady Road.
10) The applicant shall verify there is sufficient capacity remaining in the existing 2 inch diameter STEP main located in NW 18th Avenue for the anticipated flows from the school improvements. Should it be determined that there is not sufficient capacity for the anticipated flows the applicant shall be required to either upsize the existing 2 inch diameter STEP main, or direct the STEP sewer flows to the north and into the existing 6 inch diameter STEP main located in NW Pacific Rim Boulevard, providing a capacity analysis determines that there is adequate capacity in this system for the anticipated flows.
11) The applicant shall be responsible for the ongoing maintenance and operation of the proposed on-site stromwater detention facilities and the associated bioretention water quality treatment areas.
12) All on site fire hydrants shall be painted red to indicate their private ownership. The CSD shall be responsible for the operation and maintenance of the onsite private fire hydrants.
13) A separate permit through the Fire Marshal's Office will be required for the installation of the dedicated fire line.

PLANNING:

14) The applicant shall install landscaping and irrigation prior to building occupancy permit issuance.
15) Site irrigation shall ensure vegetation and tree survival for the first three years after installation. Mitigation areas shall be irrigated for five years after installation.
16) The applicant shall comply with all required Fire Marshall Requirements for onsite fire protection and access measures.

DLR Group

Architecture Engineering Planning Interiors

EXHIBIT 1

DLR Group Architecture & Planning inc.

(an Oregon corporation)

421 SW Sixth Avenue, Suite 1212

Portland, OR 97204

January 18th, 2017

City of Camas
616 NE 4th Ave
Camas, WA 98607
Attn: Planning Department

Re: City of Camas Development Permit Application
Camas Project-Based Learning High School / Camas School District

Dear Mr. Maul,

Enclosed you will find our revised documents to submit for the development permit application for the new Project-Based Learning High School for Camas School District. This application is for Site Plan Review (Type II Permit) and Design Review (Type II Permit).

This a revised submission that includes the previously omitted SEPA Checklist, current mailing list and mailing labels of owners of real property within three hundred feet of the subject parcels, site lighting plans and specs for design review, Geotechnical Investigation (12/15/2016), Traffic Analysis Report (07/29/2016), Sharp Electronics Corporation Preliminary Wetland and Habitat Assessment (08/23/2013), City of Camas Archaeological Predetermination Report (05/20/2016), Environmental Noise Assessment (11/22/2016), and Preliminary Stormwater Technical Information Report (11/01/2016).

Thank you,

Levi Patterson, AIA
Project Manager DLR Group / Applicant

Cc: Heidi Rosenberg, Camas School District

EXHIBIT 2

Camas Project-Based Learning High School

CONTACTS

Applicant/Owner:	Camas School District 841 NE 22nd Ave Camas, WA 98607 Contact: Chuck Stiller (360) 335-3000 ext. 772123
Architect:	DLR Group 421 SW Sixth Ave Suite 1212 Portland, OR 972014 Contact: Brian Frey (503) 274-2675
Civil Engineer:	OTAK 700 Washington St Suite 401 Vancouver, WA 98660 Contact: Allen Hendy (360) 737-9613
Landscape Architect:	OTAK 700 Washington St Suite 401 Vancouver, WA 98660 Contact: David Haynes (360) 737-9613
Structural Engineer:	DLR Group 51 University St Suite 600 Seattle, WA 98101 Contact: Michael Ziemann (206) 461-6071

Mechanical / Plumbing Engineer:	DLR Group 51 University St Suite 600 Seattle, WA 98101 Contact: Chris Narramore (206) 461-6065
Electrical Engineer:	Reyes Engineering 10555 SE 82nd Ave Suite 203 Happy Valley, OR 97086 Contact: Flaviano Reyes (503) 771-1986
Acoustical Consultant:	BRC Acoustics 1932 First Ave Suite 620 Seattle, WA 98101 Contact: Anita Joh (206) 270-8910
Kitchen Consultant:	Halliday Associates 656 NW Norwood St Camas, WA 98607 Contact: Laura Bourland (360) 834-6657
Traffic Engineer:	Charbonneau Engineering LLC 10211 SW Barbur Blvd Portland, OR 97219 Contact: Frank Charbonneau (503) 293-1118

EXHIBIT 3

Permits Approval List

A pre-application meeting was held on October 27th, 2016. The pre-application meeting identified the following reviews and permits required for the project. The project will be administered under a Type II land use standard. Based on the Application Checklist, pre-application meeting notes and discussion with City staff, the project will be required to secure the following permit approvals:

- Site Plan Review (Type II)
- Design Review (Type II)
- SEPA Review
- Fire Department Review
- Engineering Review and Inspection

EXHIBIT 4

Community Development Department | Planning
616 NE Fourth Avenue | Camas, WA 98607
(360) 817-1568 | www.cityofcamas.us

General Application Form **Case Number:**

Applicant Information

Applicant/Contact:: DLR Group / Brian Frey Phone: (503) 274-2675

Address: 421 SW Sixth Ave, Suite 1212 bfrey@dlrgroup.com
Street Address *E-mail Address*

Portland OR 97204
City *State* *ZIP Code*

Property Information

Property Address: 5780 NW Pacific Rim Blvd Parcel 4 ASN 986033-962 & Parcel 5 ASN 125661-000
Street Address *County Assessor # / Parcel #*

Camas WA 98607
City *State* *ZIP Code*

Zoning District BP (Business Park) Site Size 39.25 Acres

Description of Project

Brief description:
New 89,000 sf, 600 student project-based learning high school for the Camas School District. Parking and bus drop-off facilities to support, reconfiguration of private entry drive, and site and off-site improvements to provide student access

Are you requesting a consolidated review per CMC 18.55.020(B)? YES ☐ NO ☒

Permits Requested: ☐ Type I ☒ Type II ☐ Type III ☐ Type IV, BOA, Other

Property Owner or Contract Purchaser

Owner's Name: Camas School District / Chuck Stiller Phone: (360) 335-3000 ext. 772123
Last *First*

Address: Zellerbach Administration Center - 841 NE 22nd Ave
Street Address *Apartment/Unit #*

E mail Address: charles.stiller@camas.wednet.edu
Camas WA 98607
City *State* *Zip*

Signature

I authorize the applicant to make this application. Further, I grant permission for city staff to conduct site inspections of the property.

Signature: [signature] **Date:** 01.06.2017

Note: If multiple property owners are party to the application, an additional application form must be signed by each owner. If it is impractical to obtain a property owner signature, then a letter of authorization from the owner is required.

Date Submitted: Pre-Application Date:	
Staff: Related Cases #	**Validation of Fees**

Revised: 01/14/13

Application Checklist and Fees [January 1, 2017]

◊ Annexation	$264 - 10% petition; $1,320 - 60% petition	001-00-345-890-00		$
◊ Appeal Fee		001-00-345-810-00	$355.00	$
◊ Archaeological Review		001-00-345-810-00	$122.00	$
◊ Binding Site Plan	$1,675 + $21 per unit	001-00-345-810-00		$
◊ Boundary Line Adjustment		001-00-345-810-00	$91.00	$
◊ Comprehensive Plan Amendment		001-00-345-810-00	$1,756.00	$
◊ Conditional Use Permit				
Residential	$3,045 + $96 per unit	001-00-345-810-00		$
Non-Residential		001-00-345-810-00	$3,857.00	$
◊ Continuance of Public Hearing		001-00-345-810-00	$305.00	$
◊ Critical or Sensitive Areas (fee per type)		001-00-345-810-00	$690.00	$
(wetlands, steep slopes or potentially unstable soils, streams and watercourses, vegetation removal, wildlife habitat)				
◊ Design Review				
Minor		001-00-345-810-00	$386.00	$
Committee		001-00-345-810-00	$1,776.00	$
◊ Development Agreement	$782 first hearing; $305 ea. add'l hearing	001-00-345-810-00		$
◊ Engineering Department Review				
Review Fee	3% of estimated construction costs	001.00.345.830.20		$
Modification to Approved Construction Plans		001.00.345.810.00	$370.00	$
◊ Fire Department Review				
Short Plat or other Development Review		001-00-345-830-10	$127.00	$
Short Plat or other Development Inspection		001-00-322-110-00	$127.00	$
Subdivision or PRD Review		001-00-345-830-10	$157.00	$
Subdivision or PRD Inspection		001-00-322-110-00	$157.00	$
Site Plan Review		001-00-322-110-00	$188.00	$
Site Plan Inspection		001-00-322-110-00	$188.00	$
◊ Home Occupation				
Minor - Notification (No fee)			$0.00	
Major		001-00-321-900-00	$61.00	$
◊ LI/BP Development	$3857 + $36.50 per 1000 sf of GFA	001-00-345-810-00		$
◊ Minor Modifications to approved development		001-00-345-810-00	$178.00	$
◊ Planned Residential Development	$30 per unit + subdivision fees	001-00-345-810-00		$
◊ Plat, Preliminary				
Short Plat	4 lots or less: $1725.00 per lot	001-00-345-810-00		$
Short Plat	5 lots or more: $6,400 + $225 per lot	001-00-345-810-00		$
Subdivision	$6,400 + $225 per lot	001-00-345-810-00		$
◊ Plat, Final:				
Short Plat		001-00-345-810-00	$178.00	$
Subdivision		001-00-345-810-00	$1,066.00	$
◊ Plat Modification/Alteration		001-00-345-810-00	$548.00	$
◊ Pre-Application (Type III or IV Permits)				
No fee for Type I or II				
General		001-00-345-810-00	$315.00	$
Subdivision		001-00-345-810-00	$812.00	$
◊ SEPA		001-00-345-890-00	$721.00	$
◊ Shoreline Permit		001-00-345-890-00	$782.00	$
◊ Sign Permit				
General Sign Permit	(Exempt if building permit is required)	001.00.322.400.00	$36.00	$
Master Sign Permit		001.00.322.400.00	$112.00	$
◊ Site Plan Review				
Residential	$1,025 + $30 per unit	001-00-345-810-00		$
Non-Residential	$2,562 + $61 per 1000 sf of GFA	001-00-345-810-00		$
Mixed Residential/Non Residential	$3,613 + $30 per res unit + $61 per 1000 sf of GFA	001-00-345-810-00		$
◊ Temporary Use Permit		001-00-321-990-00	$71.00	$
◊ Variance (Minor or Major)		001-00-345-810-00	$620.00	$
◊ Zone Change (single tract)		001-00-345-810-00	$1,746.00	$

Adopted by RES 1023 Aug 2005; Revised by RES 1113 Sept 2007; Revised by RES 1163 Oct 2009; Revised by RES 1204 Nov 2010
Revised by RES 15-001 Jan 2015; Revised by RES 15-007 May 2015; Revised by RES 15-018 Dec 2015; Revised by RES 16-019 Nov 2016

For office use only

Total Fees Due: $

CAMAS-WASHOUGAL FIRE DEPARTMENT
PREVENTION DIVISION

Permit Application

MAILING : 616 NE 4th Avenue
OFFICE: 605 NE 3rd Avenue
Camas, WA 98607-2197
Office 360-834-6191
Fax 360-834-8866
www.ci.camas.wa.us

Project Name Camas Project-Based Learning High School Date January 6th, 2017

Project Address 5780 NW Pacific Rim Blvd

APPLICANT DLR Group	CONTRACTOR No contractor yet - Site Plan Review
Contact Brian Frey	Contact
E-Mail bfrey@dlrgroup.com	E-mail
Address 421 SW Sixth Ave, Suite 1212	Address
City, State, Zip Portland, OR 97204	City, State, Zip
Phone (503) 274-2675 Fax ( )	Phone ( ) Fax ( )
Pager ( ) Mobile ( )	Pager ( ) Mobile ( )

Development Review
- ✓ Commercial site plans
- ___ Subdivisions
- ___ All other land use applications
- ✓ Site Plan Inspection

Building Const./Change Use
- ___ Minor remodel less than $1000.
- ___ A
- ___ B
- ___ E
- ___ Portable classroom
- ___ F
- ___ H-1
- ___ H-2
- ___ H-3
- ___ H-4
- ___ H-5
- ___ I
- ___ M
- ___ R
- ___ S
- ___ Change of use or occupancy
- ___ Special or temporary use

Fire Alarm System *
- ___ Fire alarm systems - one zone
- ___ Fire alarm systems - two or more zones

Fire Extinguishing System **
Automatic Sprinkler System
- ___ NFPA 13
- ___ NFPA 13R
- ___ NFPA 13D
- ___ Alteration
- ___ Standpipe system
- ___ Commercial cooking hood & duct system
- ___ Other extinguishing systems
- ___ Underground fire / sprinkler mains
- ___ Hydrant flow test

Hazardous Operations
- ___ Smoke Removal Systems
- ___ Fire Pump Systems
- ___ Application of Flammable and Combustible Finishes
- ___ Commercial Drying Ovens
- ___ Organic Coating Systems
- ___ Semiconductor Fabrication
  HPM Tool Install/System Change
- ___ Compressed Gas Systems
- ___ Magazines
- ___ LPG Tank Installation Greater than 124 Gallons
- ___ Aerosols
- ___ High-piled Combustible Storage

Hazardous Materials
Storage, dispensing and use of hazardous materials
- ___ < Exempt Amounts
- ___ > Exempt Amounts
- ___ HMIS
- ___ HMMP
- ___ Explosives storage and use
- ___ Retail Sales of Fireworks
- ___ Cryogenic Systems
- ___ Candles and Open Flames
- ___ Other Fire Department Permits

Description ___

In addition to any other penalty allowed by city code, double review fees will be charged where work has commenced prior to the owner obtaining the required reviews, approvals or permits.

APPLICANT'S SIGNATURE

01.06.2017
DATE SUBMITTED

CAMAS-WASHOUGAL FIRE DEPARTMENT
PLAN REVIEW, INSPECTION and PERMITS

In addition to permits issued by the Building Department, the Fire Department issues permits and conducts plan reviews and inspections for Fire Code compliance on new construction, alterations or change in use and installation or alteration of fire and life safety systems. Permits are also issued to maintain, store, use or handle materials, or to conduct processes which produce conditions hazardous to life or property, or to install equipment used in connection with such activities.

APPLICATION FOR A PERMIT. Applications for permits shall be made to the Fire Department on this form, accompanied with two sets of plans and specifications and other information as may be necessary to determine compliance with fire and life safety codes and standards.

APPLICATIONS may be made at the following locations:

Fire Marshal's Office
605 NE 3rd Avenue
Camas, WA 98607
Monday-Friday 8:00am-5:00pm

Building and Planning Office, Suite 4
616 NE 4th Avenue
Camas, WA 98607
Monday-Friday 8:00am-4:00pm

Camas City Hall, Suite 3
616 NE 4th Avenue
Camas, WA 98607
Monday-Friday 9:00am-5:00pm

QUESTIONS ABOUT PERMITS AND FEES. Call the Fire Marshal's Office at (360) 834-6191 or check out the Fire Department website at www.ci.camas.wa.us

* FIRE ALARM SUBMITTAL REQUIREMENTS: All fire alarm drawings are required to be stamped by a Fire Protection Engineer or a person with a minimum of NICET III Certification.

* FIRE ALARM INSTALLATION: Only personnel with a minimum of NICET II certification or factory training and certification on the system being installed shall do installation, maintenance, and testing of fire alarm systems. Technicians without NICET II qualifications may work under the supervision of a NICET II certified individual, or an individual with factory training and certification on the system being installed.

** AUTOMATIC FIRE SPRINKLER SUBMITTAL REQUIREMENTS: All fire sprinkler drawings shall be stamped by a person with the appropriate level license issued by the Washington State Fire Protection Bureau.

This Permit Application Available online @ www.ci.camas.wa.us

EXHIBIT 5

Project Narrative

Proposed Development

The new Camas Project-Based Learning High School will be a new high school facility that delivers a project-based learning approach to 9th – 12th education. This is a new program to the School District and therefore there are many typical parameters that are not in place to date as there would be with a new replacement school facility for and existing facility and program. This will be a facility that will be one of a very few ground-up new facilities designed around delivering project-based learning in the country. In addition, the School District and the design team have also planned on this facility to adapt to different modes of educational delivery models and therefore, the design is formed around the educational model of project-based learning, but the building is planned so to be able to adapt to more traditional learning modalities should it need to in the future.

This 89,000 square foot building is intended to provide another educational option for 600 9th – 12th grade students within the Camas School District. The criteria for acceptance into the school is completely student-interest based, all students who want to attend are accepted. If the number of applicants out-number the program capacity, then a lottery system will be used to determine acceptance.

Qualifying for an OSPI state construction assistance grant for un-housed students, it is necessitated by explosive growth in the community and overcrowding at the existing comprehensive Camas High School. The second high school in the district, Hayes Freedom High School, serves a smaller population with an emphasis on personalized learning and is at capacity as well. As the third high school in the district, this new PBL High School will help to alleviate crowding for the short term and provide students with another opportunity to learn in a different educational format.

The new facility is proposed to be open to new students for the start of the 2018-2019 school year. Construction is intended to begin in the Spring of 2017. The school will be located at 5780 NW Pacific Rim Blvd, Camas, what is often referred to as the Sharp Property. The District has recently purchased nearly 40 acres and a 55,000 SF two story office building from Sharp Laboratories of America, in the Prune Hill area of the community. The lab/office building has recently been converted to a project-based learning middle school, eventually designed to serve 450 students grades 6 through 8. With the addition of the new high school on the property, there are many opportunities to share resources (both educationally and operationally), create a unique culture and identity for the PBL program, accommodate the district's growing population, and streamline operating costs.

Beyond the requirement of additional space to house a growing student body, the school is needed to shift the way we think about secondary schools. We believe that we have models for

learning that currently work well for many students in our district - current CHS and HFHS. We also believe that the world we are preparing students for is changing. Students will be asked to collaborate, create, design and problem-solve more than they ever have before across disciplines. Because the world is changing we need to change too. This school gives us a chance to build on the success we have and learn more about what we can become.

The new program centers on collaborative, integrated learning teams with a STEAM focus. Each student will be assigned to a team comprised of 3 or 4 teachers that provide content support and facilitate learning focused on authentic community/industry problems. Schedules will be flexible to include traditional classroom time, blended self-directed learning time, team time, and exploration time with opportunities to explore beyond the walls of the school. Across the school, learning teams will be united based on common practices like design theory, research methods, inquiry cycles, and showcasing/demonstration of learning events. Learning Teams will develop unique identities that evolve based on student and teacher interest, but the school will all be connected by a common student-developed STEAM theme that unites them each school year. Students will make strong connections within and beyond their school with their peers, staff, and the community.

Existing Site Conditions

Camas School District purchased the site for the new school from Sharp Electronics of America in the summer of 2016. The site is roughly 39.25 acres and currently consists of two tax lots (Parcel 4 ASN 986033-962 and Parcel 5 ASN 125661-000) that make up the new project-based learning campus. The site is mostly previously developed with parking facilities, utilities, and an existing building. The site has access to view to the north of Mt. Saint Helens and view of the Columbia and Willamette river valleys to the south. The view to the south also includes a distant view of downtown Portland, Oregon.

The site is located on Prune Hill and therefore is a fairly elevated site with grades doping to the north, west, and south of the property. The site is bordered by the north and west by extremely sloped grades and forested land. These two conditions (and access to views) in particular were a major contributing factor to the site and building design. The project site is bordered by the south and west by the private "Sharp Drive" (a private two-lane road that is now our main school access point), as well the public streets of SE Payne Road, WE 40th Street, and NW 18th Avenue. The project site is bordered by residential development on the other side (south and west) of the public streets as listed previously. As the property purchased from Sharp was once a combined campus, the project site is bordered to the east by the remaining Sharp facilities, which includes Sharp offices and labs, as well as parking for employees.

Existing Buildings

With the purchase of property from Sharp Electronics of America, the property came with an existing structure that was previously used as an office and lab for Sharp and constructed for

that purpose in 1991. The structure consists of 55,000 square foot building that is located at 5750 NW Pacific Rim Blvd in Camas. The existing structure is a two-story structure of curtainwall glazing, concrete panels, and metal panels with a steel and concrete superstructure. The existing building has a parapet condition and a distinctive entry canopy. The structure takes advantage of sweeping views to the north of the valley below and Mt. Saint Helens in the distance.

The existing building has a horizontal banding expression around the facades. The metal panel and concrete exterior are white and light grey. The curtain wall has a green-blue tint. The entry canopy is the only expression that breaks up the rather cube-like structure. The canopy is a silvery metal clad projection at the southwest corner of the building. This is also logically the location of the main entry. The structure is roughly 34' tall from finish floor to top of the parapet.

Structure and Architecture

The new Camas Project-Based Learning High School is intended to be a contemporary educational facility. The building has mostly east to west orientation on the site to maximize the building's ability to control daylight and solar gain.

The project has been design with the idea of transition and connection. The term ecotone has been used throughout our design thinking. Ecotone is defined as a region or transition between two biological communities. This project serves as a transition for students between the world of secondary education and the worlds of post-secondary education and/or the working world. Project-based learning is a type of educational delivery that aims to blend the worlds of education and the professional environment. In addition, this project sits on a site that is a literal transition from the developed Sharp site to the natural and formidable forested edge and associated grade change to the north.

The 89,000 square foot structure is a two-story building of primarily steel superstructure. The massing could be summarized as a rectangular mass that has had voids carved out of the solid building. The voids include the main entry, the outdoor learning environments, and the gym and flex exhibition box. The gym and flex exhibition box have then been highlights and articulated to create something special. The special "box" has then been rotated to indicate and provide a sense of entry into the school.

The exterior design concept of the project is meant to do two things as it relates to the projects immediate context of the Sharp Campus and the City of Camas. First, the design team has attempted to have the new building "fit" with the existing building on our site (now the new PBL Middle School building). Second, the massing and exterior expression of the building is meant to recall the history of Camas as paper mill town and also reflect the city's current technology rich industry. The horizontal white and gray concrete panels speak to the paper mill in color and in shape but yet the regularity of the pattern reflects a precision seen in technological industrial processes. In addition, the weathered steel "box" has folding planes that are intended

to invoke the feel of folding planes of paper, but with a material that is both meant to feel the touch of time. The weathered steel material, however, is a technologically advanced material that does not deteriorate but rather uses the chemical properties of oxidation to protect itself.

Community Asset

It is anticipated that the new school will be a wonderful asset to the community as a whole and frequently used during after-school hours for formal and informal learning opportunities, as well as various community functions. Many Camas Community Education classes could be taught at the school and on the grounds.

Spaces that lend themselves most easily to community use are the gymnasium, exhibition space and outdoor theater, central hub with learning stairs for presentations and performances, café, and Fab Lab (with district educator supervision). Each of these spaces will be designed with easy after-hours access (either exterior doors directly into the space or close by) and access to restroom facilities, while securing as much of the rest of the school building as possible.

EXHIBIT 6

Code Narrative

TYPE II LAND USE SUBMITTAL

In accordance with Camas Municipal Code (CMC) 18.55, this project requires a Type II Permit for Site Plan Review and Design Review. In addition, a SEPA threshold determination is required. Based on a code review and the pre application notes, in addition to the requirements of CMC 18.55 this project is also subject to;

- CMC 14.02 Stormwater
- CMC 16.07 SEPA
- CMC 16.07 Archaeological
- CMC 17.19 and 17.21 Public Improvements
- CMC 18.11.130 Parking Standards
- CMC 18.13.060 and CMC 18.37.040 Landscape Standards
- CMC 18.18 Site Plan Review
- CMC 18.19 Design Review

STORMWATER (CMC 14.02)

A Preliminary Stormwater Technical Information Report was prepared in conformance with CMC 14.02 and is attached in Appendix 1.

Proposed stormwater improvements for this project include the installation of bioretention facilities, conveyance pipe system, and three detention ponds. Treatment will be achieved through the use of bioretention facilities. After treatment, stormwater will be routed to one of the detention ponds. The proposed project will retrofit the existing detention facility and construct two additional detention facilities within the project limits to satisfy flow control requirements. The detention ponds to the south and west of the school will discharge into the existing storm system located on SE 40th Street, while the detention pond north of the school will discharge over the slope onto the undeveloped portion of the property. A flow spreader will be used to disperse the discharge and avoid erosion. The proposed off site turn lane improvement on NW 18th at Deerfern is under the 5000 foot threshold and no additional treatment or flow control is proposed for this improvement.

NPDES Construction Permit
The improved area for this project is over the one-acre threshold and will require a NPDES construction stormwater permit prior to land disturbing activity along with additional stormwater requirements outlined in CMC 14.02.

SEPA (CMC 16.07.020)

See SEPA Checklist in Appendix 1.

PUBLIC IMPROVEMENTS (CMC 17.19 AND CMC 17.21)

The proposed site development will require public improvements. Site plan and utility maps provided in Appendix 1 show the location and layout of the public improvements. Improvements within the public right of way include;

- An 8" to 10" water system service line will be live tapped from the existing 12" DI water line in NW 18th to the meter assemblies located at the property line. Water services will include a fire line for onsite fire hydrants and building sprinkler systems, domestic water service and an irrigation service. The fire line on the property side of the double check valve vault will be a private system installed compliant with applicable Fire Codes including onsite private hydrants. There is an existing fire line that currently serves the middle school building that will be modified as part of this development. Final sizing will be submitted with the engineering drawings.

- A proposed STEP service lateral connecting to the existing 2" STEP main in NW 18th. This sewer lateral will connect to a proposed STEP system that will service the new high school and be located west of the high school building. The STEP tank sizing for the project will be submitted with the final engineering drawings and will be sized to accommodate the middle school in the future. The existing sewer service will be maintained for the middle school as part of this proposal. Otak will confirm the tank and discharge pipe sizing as part of the final engineering drawing submittals.

- The proposed site has approximately 1870 feet of frontage along NW 18th/Payne Road with no direct access proposed to the site. CMC 17.19.040(B) requires half street improvements along the site frontage. Pre-application notes indicate the proposed half street would need to meet Camas Design Standard Plan ST5 for Collector Streets, and also noted the potential for alternative designs. Camas School District is proposing a deviation from this requirement based on the proportionate impact the proposed development would have to NW 18th. CMC 17.19.040(B)(10)(d) allows for deviation from frontage improvements standards based upon the recommendation of the City Engineer. Based on preliminary discussions with City staff the school district is proposing the following improvements to mitigate the site impacts to NW 18th Avenue;
    - Install a left turn pocket on NW 18th at NW Deerfern
    - Install street lighting compliant with City Design Standards along the south side of NW 18th/Payne Road along the extent of the proposed school district property

- Provide pedestrian improvement for crossing on NW 18th Avenue at Deerfern and another pedestrian crossing at the west end of the property on Payne. These will be connected by an existing internal sidewalk that will be upgraded from 4 feet to 8 feet multiuse path along Sharp Drive
- Dedicate additional right of way along NW 18th Avenue/NW Payne Road for future street improvements.

- Connection to the gas main, telecommunication and power are not shown on the utility plans for this submittal but will be reflected on the final civil engineering drawings. Coordination with these utilities is ongoing. All installation within the current and future Right of Way will be installed in accordance with City standards.

PARKING STANDARDS (CMC 18.11.130)

CMC 18.11.130 – Standards requires the following parking space allocation for the proposed use:

Elementary/middle/ junior high school	1 space per employee, teacher, staff, and 1 space per 15 students
Senior high school	1 space per employee, teacher, staff, and 1 space per 10 students

Based on the City of Camas standards the site will require 60 spaces for high school students, 27 spaces for middle school students, 50 spaces of high school staff, and 40 spaces for middle school staff. The site requires a code minimum of 177 spaces for both facilities.

The project is providing a total of 276 parking spaces in the base bid of the project. These spaces include 151 student parking spaces, 93 staff parking spaces, 24 visitor parking spaces, and 8 ADA compliant parking spaces.

Camas School District has asked the design team to provide as much parking as feasible (financially and physically) on the site. Therefore, the design team is proposing an add alternate to the project to provide an additional 34 parking stalls in anticipation of the need for parking that has traditionally been needed at Camas schools. The base bid plus the alternate count would include 168 student parking spaces, 110 staff parking spaces, 24 visitor parking spaces, and 8 ADA compliant parking spaces.

LANDSCAPE STANDARDS AND GUIDELINES

Design guidelines from the City of Camas, the Camas School District, and national guidelines will be followed:

1. City of Camas Design Standard Manual, including
    a. Camas Plant Materials for City Rights-of-Way
    b. Camas Public Works Landscape Standards
2. City of Camas Stormwater Design Standards Manual
3. City of Camas Municipal Codes 18.13.060 and 18.37.040
4. Camas School District Policies and Procedures
    a. Series 6000 – Management Support
5. AASHTO guidelines for pedestrian and bicycle safety

Landscape Design Intent

The landscape design concept for New Camas High School addresses campus function, safety and comfort, and the method-driven elements supporting Project Based Learning. Creating a visually clear progression from the street to the main building entrances imparts a sense of welcome to the community. Functional priorities of campus design include safety, accessibility, and efficiency, and encompass site elements such as pedestrian walkways, vehicular drives, bicycle routes, passenger loading zones, and parking areas.

- Exterior spaces support the Project Based Learning method. Design includes outdoor area integration with building classrooms, showcasing outdoor infrastructure such as stormwater systems, and providing access to the wooded areas of the property. An amphitheater with 150-seat capacity is included to meet outdoor learning objectives. Exterior spaces provide comfortable settings for a range of uses including class activities, individual study, sports, or socializing. Design elements to support this objective include planting design and selection, surface treatment, furnishings, lighting, and interpretive elements.

Surface treatment includes patterned concrete at crossings, creative scoring patterns at main entry, and colored concrete out outdoor learning areas. Outdoor learning areas respond to and complement building interiors and the activities they support. Outdoor learning areas are designed for flexibility of curriculum-specific requirements.

- Campus circulation is designed to create a smooth flow of pedestrian, vehicular, and bicycle traffic through the site. This is accomplished using strong visual cues such as vertical elements (trees, bollards, flag poles), contrasting pavement finishes, softscape/hardscape edges, signage, identifying and accommodating 'desire lines,' and establishing visual corridors.

Circulation meets American Association of State Highway and Transportation Officials (AASHTO) minimum design standards. Pedestrian sidewalk facilities meet the Americans with Disabilities Act (ADA) design standards for maximum cross slopes and maximum slopes on ramps.

Continuous sidewalks are provided along the frontage road and key access driveways into the site. Sidewalks are a minimum of five feet wide. Pedestrian crossing facilities will include ADA-complaint curb ramps and appropriate crosswalk surface treatments.

Grade transitions are accommodated using a combination of ramps and stairs, each composed to complement the other to provide attractive, comfortable grade changes. These elements are integrated where appropriate with functional areas of the site such outdoor learning areas to provide cohesive site circulation and use.

Bicycle circulation is accommodated with bike lanes along the frontage road. Curb cuts will provide bike access into the site, where bike racks are provided.

- The landscape design includes planting of bioretention facilities for water quality and flow control. These features lend themselves to interpretive elements.

- Planting design complements the building design, and supports outdoor classrooms and the PBL method of the new high school. Species selection emphasizes plants that are native or naturalized/non-invasive and have low maintenance requirements.

- Streetscape design along NW 18th Ave. meet the City of Camas Streetscape design standards. Planting design supports the functional priorities of campus design including safety, accessibility, and efficiency, and address security concerns i.e. avoiding hedges, hiding places, and view obstructions.

- Irrigation system design meets standards set by the City of Camas and the 2009 Uniform Plumbing Code. Landscaped areas of the project will be irrigated by a highly efficient, automated irrigation system to support plant materials during hot or dry weather. Drip systems are used in shrub beds; large lawns and playing field areas are watered using spray heads. Separate zones are provided for the shrubs areas, lawn areas, shade/sun exposure, and stormwater facilities so water use can be fine-tuned to meet varying plant requirements.

SITE PLAN REVIEW (CMC 18.18)

These excerpts from CMC18.18 represent required information for approval:

18.18.040 - Submittal and contents of a complete application.
In addition to the submittal requirements under CMC Chapter 18.55 Administration and Procedures, each application for site plan review shall contain the following information. Items may be waived if, in the judgment of the community development department, the items are not applicable to the particular proposal.

A. *A written description addressing the scope of the project, the nature and size in gross floor area of each use, and the total amount of square feet to be covered by impervious surfaces; Included (see narrative)*

Response: A written description of the scope, size and nature in provided in the narrative located at the beginning of the document.

B. *A vicinity map showing site boundaries, and existing roads and accesses within and bounding the site;*

Response: A vicinity map is located in Appendix 1

C. *A topographic map based upon a site survey delineating contours, existing and proposed, at no less than five-foot intervals, and which locates existing streams, marshes, and other natural features*

Response: A topographic map is located in Appendix 1

D. *Site plans drawn to a scale no smaller than one inch equals fifty feet showing location and size of uses, buffer areas, proposed areas of disturbance or construction outside of the building footprint, yards, open spaces and landscaped areas, and any existing structures, easements and utilities*

Response: Site plans are located in Appendix 1

E. *A circulation plan drawn to a scale acceptable to the community development director illustrating all access points for the site, the size and location of all driveways, streets, and roads, with proposed width and outside turning radius, the location, size, and design of parking and loading areas, and existing and proposed pedestrian circulation system. If a project would generate more than one hundred average daily trips either based on the latest edition of the International Transportation Engineer's (ITE) Trip Generation Manual or evidence substantiated by a professional engineer licensed in the state of Washington with expertise in traffic engineering, a traffic impact study shall be submitted;*

Response: A circulation plan is located in Appendix 1. A traffic study is provided in Appendix 1

F. *A preliminary drainage and stormwater runoff plan*

Response: A preliminary drainage and stormwater runoff plan is provide in Appendix 1

G. *A utility plan;*

Response: A utility layout plan is located in Appendix 1

H. *A plot plan of all proposed landscaping including the treatment and materials used for open spaces, and the types of plants and screening to be used;*

Response: A landscaping plan is located in Appendix 1

I. *Typical building elevation and architectural style;*

Response: Rendered Building Elevations are located in Appendix 1

J. *An engineer estimate of costs for site improvements, both public and private;*

Response: An engineering estimate provided by the civil engineer and landscape architect is located below.

ITEM	UNIT	QTY	UNIT COST	TOTAL COST
			TOTAL:	**$3,600,300**
CIVIL			**SUBTOTAL - CIVIL**	**$2,526,900**
SITE CLEARING	SF	500,000	$0.05	$25,000
SITE DEMO	LS	1	$10,000.00	$10,000
ALLOWANCE FOR DISCONNECTS	LS	1	$10,000.00	$10,000
PAVEMENT DEMO	SY	6,480	$9.25	$59,900
CUT	CY	21,665	$20.00	$433,300
FILL (embankment compaction)	CY	17,413	$10.00	$174,100
EROSION CONTROL	LS	1	$50,000.00	$50,000
AC PAVING 5" DEPTH	TON	1,546	$100.00	$154,600
CSBC 12" DEPTH	TON	3,349	$27.00	$90,400
AC PAVING 4" DEPTH	TON	2,132	$100.00	$213,200

CSBC 8" DEPTH	TON	3,849	$27.00	$103,900
GEOTEXTILE FABRIC	SY	14,800	$1.25	$18,500
TRAFFIC CURB & GUTTER	LF	7,776	$20.00	$155,500
ROW IMPROVEMENTS ALLOWANCE	ITEM	1	$100,000.00	$100,000
WATER & FIRE SERVICE	ITEM	1	$250,000.00	$250,000
SANITARY SEWER	ITEM	1	$55,000.00	$55,000
STORM SEWER PIPE	LF	2,600	$30.00	$78,000
48" DIA MANHOLE	EA	8	$2,500.00	$20,000
CATCH BASIN TYPE 1	EA	1	$1,500.00	$1,500
AREA DRAIN	EA	7	$800.00	$5,600
CONNECT TO EXISTING SYSTEM	EA	3	$800.00	$2,400
BIORETENTION FACILITY	SY	460	$250.00	$115,000
STORM OUTLET CONTROL STRUCTURES	EA	3	$5,800.00	$17,400
STORM FACILITY ACCESS ROAD	SY	200	$18.00	$3,600
GAS SERVICE	ITEM	1	$30,000.00	$30,000
SITE UTILITIY ALLOWANCE	ITEM	1	$75,000.00	$75,000
ELECTRICAL DISTRIBUTION	ITEM	1	$125,000.00	$125,000
SITE LIGHTING	ITEM	1	$100,000.00	$100,000
SITE COMMUNICATIONS & SECURITY	ITEM	1	$50,000.00	$50,000
LANDSCAPE / HARDSCAPE			**SUBTOTAL - LANDSCAPE**	**$1,073,400**
TREES IN LAWN	EA	194	$300	$58,200
TREES OUTSIDE LAWN	EA	14	$300	$4,200
LAWN, MANICURED, SUN	AC	2.55	$2,500	$6,400
LAWN, MANICURED, SHADE	AC	0.24	$2,500	$600

GRASS, MEADOW	AC	2.70	$3,500	$9,500
SHRUB BEDS	SF	22,050	$2	$44,100
STORM PONDS, SEED MIX	AC	0.78	$4,500	$3,500
STORM SWALES, PKG LOT, WQ SOIL	CY	458.89	$50	$22,900
STORM SWALES, PKG LOT, PLANTS	SF	8,260	$3	$24,800
ROOT BARRIER	LF	1,380	$9	$12,400
BOLLARDS	EA	2	$800	$1,600
SEATWALLS - COMMON GREEN	LF	180	$90	$16,200
SEATWALLS - AMPHITHEATER	LF	315	$90	$28,400
STAIRS - AMPHITHEATER	LF	265	$50	$13,300
HANDRAILS	LF	137	$80	$11,000
BENCH, CONC- PRE-FAB	EA	12	$1,800	$21,600
PLATFORM BENCH, CONC - CIP	LF	90	$200	$18,000
PAVEMENT, OUTDOOR LEARNING	SF	2,920	$10	$29,200
PAVEMENT, STAMPED CONCRETE	SF	2,600	$30	$78,000
STRIPING AT MS PLAYGROUND	LS	1	$2,000	$2,000
STORM GARDEN - ALLOWANCE	LS	1	$15,000	$15,000
BIKE RACKS	EA	18	$1,000	$18,000
TRASH RECEPTACLES	EA	2	$1,500	$3,000
DRINKING FOUNTAIN	EA	1	$3,000	$3,000
TOPSOIL, IMPORT (6" DEPTH)	CY	2682.78	$40	$107,300
CONDITIONER (3" DEPTH)	CY	1341.39	$40	$53,700
TOPSOIL, STOCKPILE AND REPLACE	CY	1856.19	$25	$46,400
MULCH	CY	204.17	$55	$11,200
IRRIGATION	SF	187,180	$0.75	$140,400
CONCRETE WALKWAYS	SF	53,890	$5	$269,500

18.18.060 - Criteria for approval.

The city shall consider approval of the site plans with specific attention to the following:

A. *Compatibility with the city's comprehensive plan;*

Response: The Camas PBL High School is compatible with the Comprehensive Plan and supports the vision and policies for long term growth and development by providing improved education and learning opportunities to meet the needs of the residents in the City of Camas.

B. *Compliance with all applicable design and development standards contained in this title and other applicable regulations;*

Response: The Camas PBL High School will meet all applicable design and development standards and other applicable regulations required by the City, County and State.

C. *Availability and accessibility of adequate public services such as roads, sanitary and storm sewer, and water to serve the site at the time development is to occur, unless otherwise provided for by the applicable regulations;*

Response: The Camas PBL High School has adequate access to public services required to support the site such as roads, sanitary and storm sewer, water and other public utilities located on NW 18th Ave. A new access is being constructed by Sharp Facilities on SE Payne Rd. that will provide an intersection at Lacey Way. This is being handled under a separate review process.

D. *Adequate provisions are made for other public and private services and utilities, parks and trails (e.g., provide copies of private covenant documents);*

Response: The Camas PBL High School will have access to Natural Gas, Telephone, Cable and Power provided by other public and private utility companies. These services have been coordinated and are shown in the Utility Plan for the project. The site will also connect the local trail on the south side of NW 18th across the public right-of-way via two pedestrian crossings to access the pathway that is being expanded on the school property.

E. *Adequate provisions are made for maintenance of public utilities; and*

Response: The Camas PBL High School will provide adequate access for the maintenance of the public utilities on site. This will be done by using the City standards for the water and sewer connections. The STEP system will be located in an area that provides access for maintenance of the tanks.

F. *All relevant statutory codes, regulations, ordinances and compliance with the same. The review and decision of the city shall be in accordance with the provisions of CMC Chapter 18.55 Administration and Procedures.*

Response: The Camas PBL High school project will meet or exceed all relevant statutory codes, regulations, and ordinances that are applicable to the project and be in accordance with the provisions provided in CMC 18.55.

DESIGN REVIEW (CMC 18.19)

These excerpts from CMC 18.19 represent required information for approval

18.19.050 - Design principles.

The principles as provided in the DDM or DRM are mandatory and must be demonstrated to have been satisfied in overall intent in order for approval of a design review application to be granted. Standard principles shall apply to all commercial, mixed use, or multifamily uses. Specific principles are used in addition to the standard principles for gateways and corridors, commercial, mixed uses, and multifamily (e.g. apartments, townhouses, duplexes).

A. Standard Principles.

1. *Landscaping shall be done with a purpose. It shall be used as a tool to integrate the proposed development into the surrounding environment.*

   Response: See "Landscape Standards and Guidelines" narrative above.

2. *All attempts shall be made at minimizing the removal of significant natural features. Significant natural features shall be integrated into the overall site plan.*

   Response: The building and site design has been carefully developed to connect the users of the school to the existing forested edge to the north of the project site, as well as place the building and site development in manner that is safe for students, staff, and visitors, take advantage as much as possible the existing grades on the site, maintain existing vegetation, and maintain current view corridors from the existing building.

3. *Buildings shall have a "finished" look. Any use of panelized materials shall be integrated into the development in a manner that achieves a seamless appearance.*

   Response: The "finish" of the building is intended to create a contemporary building that announces the nature of its public use. Material choices have been selected based on several criteria; some of which are durability, low maintenance, aesthetics, and scale. Furthermore, one of the underlying concepts of the design is an interpretation of the

story of the City of Camas. The exterior design is intended to highlight the history of Camas as a paper mill town and also highlight the city's success as a technology rich area; there is a theme of natural materials that, through technology, are now used in vastly different way. For example, the glass reinforced concrete panels and Cor Ten (weathered) steel materials are both examples of simple materials that have been reimagined.

4. *A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.*

   Response: The exterior design concept of the project is meant to do two things as it relates to the projects immediate context of the Sharp Campus and the City of Camas. First, the design team has attempted to have the new building "fit" with the existing building on our site (now the new PBL Middle School building). Second, the massing and exterior expression of the building is meant to recall the history of Camas as paper mill town and also reflect the city's current technology rich industry. The horizontal white and gray concrete panels speak to the paper mill in color and in shape but yet the regularity of the pattern reflects a precision seen in technological industrial processes. In addition, the weathered steel "box" has folding planes that are intended to invoke the feel of folding planes of paper, but with a material that is both meant to feel the touch of time. The weathered steel material, however, is a technologically advanced material that does not deteriorate but rather uses the chemical properties of oxidation to protect itself.

B. *Specific Principles (Commercial Only)*

2. *Commercial and Mixed Uses.*

a. *On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All on-site parking areas along adjacent roadways shall be screened with landscaping. Downtown commercial and mixed-use areas shall not be required to provide on-site parking.*

   Response: The existing site conditions of our site, and the existing Sharp Drive, make the placement of the parking facilities behind the building challenging. The existing conditions, coupled with the desire to connect the building with the natural landscape and views to the north, make the decision to locate the building away from the public street and locate the parking, front door, and vehicular and pedestrian approach between the public way and our building the design team's preferred direction.

b. *Buildings shall be used to define the streetscape unless site conditions prove prohibitive.*

Response: The existing site conditions of our site, and the existing Sharp Drive make a more urban response to our project challenging. The existing conditions, coupled with the desire to connect the building with the natural landscape and views to the north, make the decision to locate the building away from the public street our preferred direction.

c. *Structures abutting, located in, or located near less intensive uses or zoned areas (such as commercial developments next to residential areas) shall be designed to mitigate size and scale differences.*

Response: The location of the building to the north of the site has mitigated the adjacencies to residential development. The residential development to the south and west of our project are a considerable distance from the building.

d. *Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance, or creates a cohesive development.*

Response: The project is intended for a singular use as an education facility. The architectural response in scale, massing, and expression are intended to convey the facilities use as a public structure.

e. *Mixed-use developments that place uses throughout the site (horizontal development) shall organize elements in a manner that minimizes their impact on adjacent lower intensity uses.*

Response: Does not apply. Not a mixed-use development.

f. *Walls shall be broken up to avoid a blank look and to provide a sense of scale.*

Response: The massing of the school is intended to add visual interest as well convey the building as a public institution. The new structure is articulated to respond to the existing PBL Middle School building. The rotated weather steel "box" with the folding planes is intended to not only break down the scale of the massing, but also create visual interest.

g. *Outdoor lighting shall not be directed off-site.*

Response: All site lighting will be design to not encroach onto adjacent properties. See lighting plan and specifications.

18.19.060 - Guidelines.

The subcategories below represent the design team's understanding of applicable guidelines:

A. *The guidelines include five major categories and subcategories (Commercial only) as outlined in the DRM:*

1. *Landscaping and screening;*

a. *The landscaping/vegetation plan needs to identify the type of plants or trees to be planted within the foreground of the visual area (or street intersection). The use of vegetation native to the Pacific Northwest (or Camas) should be encouraged, with the exception of noxious weeds. Low maintenance/hardy landscaping should also be encouraged.*

Response: See "Landscape Standards and Guidelines" narrative above and Landscape Plan in Appendix 1.

b. *Surrounding sites should be screened from parking and building lighting.*

Response: Site lighting will be designed to prevent building and parking lighting from encroaching on adjacent properties. See lighting plan and specification in Appendix 1.

c. *Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirements.*

Response: See "Landscape Standards and Guidelines" narrative above and Landscape Plan in Appendix 1.

2. *Architecture;*

a. *Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings)*

Response: See narrative section CMC 18.19.050(B)(2)(c) above.

b. *Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land uses designations on adjacent sites do not allow more than three story development.*

Response: Our design proposal only has two stories.

c. *Outdoor lighting shall be hooded or shielded so as not to directly light adjoining or neighboring properties.*

   Response: See narrative section CMC 18.19.050(B)(2)(g) above.

3. *Massing and setbacks;*

   a. *Since buildings define circulation routes, they should be placed as close to streets and roads as the zoning code allows before being set back to the interior or rear of the lot, unless site constraints make it impossible or characteristics of the surrounding properties already developed make it incompatible*

      Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

   b. *Commercial structures abutting residually zoned areas should be designed to mitigate size and scale differences*

      Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

   c. *On-site parking areas should be placed to the interior of the site whenever possible.*

      Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

4. *Historic and heritage preservation; The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.*
   Response: The design concepts have attempted to capture the history of Camas as well as reflect the facility as a public institution. The thematic use of the history of Camas as a paper mill town as well as its technology industry are infused in the concept design. The design also attempts to be complimentary to the existing structure on site.

5. *Circulation and connections.*
   Most vacant and redevelopable commercial land within the City of Camas will occur along existing roads or areas that have established circulation and connections. Therefore, the scope of appropriate regulations in regards to connections and circulation is limited.

   a. *Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements. Trees and/or planting strips shall be*

used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment.

Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

b. *New streets intersecting commercial properties should be designed to create a safe environment. "Coving" techniques and "round-a-bouts" should be considered for traffic calming when appropriate.*

Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above. The existing conditions of Sharp Drive have a significant impact on the design of the project, as well as the available site access points to our site.

B. *Each of the major guidelines include subcategories. Compliance with the guideline categories and subcategories demonstrate compliance with the principles. However, not every guideline may be deemed applicable, and therefore required, by the approval authority. Additionally, the approval authority may approve a variance from one or more guidelines, provided the overall intent of the principles is satisfied.*

EXHIBIT 7

Pre-Application Meeting Notes
Camas Project Based Learning High School
File PA16-30

Thursday, October 27th, 2016
616 NE Fourth Avenue, Camas, WA 98607

Applicant/ Contact: Heidi Rosenberg Camas School District	**Project Description:** Applicant proposes to construct a new high school on approximately 40 acres.
Representing City of Camas:	Robert Maul, Planning Manager Bob Cunningham, Building Official Steve Wall, Public Works Director Phil Bourquin, Community Development Director Ron Schumacher, Fire Marshall Randy Miller, Deputy Fire Marshall Norm Wurzer, Engineer
Location:	5780 Pacific Rim Boulevard Camas, WA 98607
Tax Account:	986033-962 & 125661-000
Zoning:	**Business Park (BP)**

NOTICE: Notwithstanding any representation by City staff at a pre-application conference, staff is not authorized to waive any requirement of the City Code. Any omission or failure by staff to recite to an applicant all relevant applicable code requirements shall not constitute a waiver by the City of any standard or requirement. [CMC 18.55.060 (C)] This pre-application conference shall be valid for a period of 180 days from the date it is held. If no application is filed within 180 days of the conference or meeting, the applicant must schedule and attend another conference before the City will accept a permit application. [CMC 18.55.060 (D)] Any changes to the code or other applicable laws, which take effect between the pre-application conference and submittal of an application, shall be applicable. [CMC 18.55.060 (D)]. A link to the Camas Municipal Code (CMC) can be found on the City of Camas website, http://www.cityofcamas.us/ on the main page under "Business and Development".

Development fees will be based on the adopted fees at the time of application submittal. The applicable fees include:

Site Plan Review	$2,525 + $60 per 1,000 of GFA
Design Review (major)	$1,750
SEPA	$710
Fire Department Review	$370
Engineering Review	3% of estimated construction costs
Building Permit and Plan Review	Based on the valuation of the project

PLANNING DIVISION **Robert Maul, Planning Manager (360) 817-7255**

The following pre-application notes are based on the application materials and site plan submitted to the City. The following general application materials must be submitted in combination with a Site Plan Review submittal per **CMC§18.55.110** as follows:

- A copy of a completed city application form and required fees;
- A complete list of the permit approvals sought by the applicant;
- A current (within thirty days prior to application) mailing list and mailing labels of owners of real property within three hundred feet of the subject parcel, certified as based on the records of Clark County assessor;
- A complete and detailed narrative description that describes the proposed development, existing site conditions, existing buildings, public facilities and services, and other natural features. The **narrative shall also explain how the criteria are or can be met**, and address any other information indicated by staff at the pre-application conference as being required;
- Necessary drawings- three sets and an electronic copy (send as a PDF by email or on a disc);
- Copy of the pre-application meeting notes;
- A SEPA checklist must be submitted.
- A development sign will need to be posted on the property, which is viewable from the public-right-of-way. The sign must be 4' x 8' and include information in regard to the application and the public hearing.

Permit Specifics:

1. Site Plan Review (Type II Permit)

An application for Site Plan Review shall also contain information outlined in CMC 18.18.040 (A-J). The application must include a written response to the **criteria for approval** in CMC 18.18.060 (A-F).

2. Design Review (Type II Permit)

The Design Review Committee reviews the application at a public meeting, and provides a recommendation to decision maker. Typically, the city will schedule the meeting to occur prior to issuing a Site Plan decision in order to consolidate the decisions. There are several design standards applicable to this property and may be found in the Design Review Manual and in CMC Chapter 18.19.050(A) *Standard Principles*. A submittal for design review should include a site plan drawing, landscape plan, exterior elevations, building materials and colors, lighting specs and plan, and sign plan (optional).

Landscaping & Parking Lot Design

A landscape plan must be submitted pursuant to CMC 18.13.050.

- Parking areas must be landscaped in compliance with CMC 18.13.060. Generally that means that all perimeters of the parking lot must be landscaped/screened, and that interior trees must be provided at a specified ratio of trees per parking stalls.
- Landscaping should be concentrated within the foreground of the visual area and should provide a safe and welcoming pedestrian environment.

ENGINEERING DIVISION **Norm Wurzer (360) 817-1562**

General Requirements:

1) Construction plans shall be prepared by a licensed Washington State engineer in accordance with City of Camas standards.
2) The applicant shall locate facilities per CMC 5.45.365. (underground)
3) The engineering plans shall show all Right of Way and easements acquired.

- Existing wells and septic tanks and septic drain fields shall be abandoned in accordance with state and county guide lines per CMC 17.19.020 (A3).

- A 1% plan review and 2% construction inspection fee will be required. The fee will be based on an engineer's estimate or construction bid. The fee is due prior to approved construction drawings being released by the City.
- Regulations for installation of public improvements, improvement agreements, bonding, final platting and final acceptance can be found at CMC 17.21.

Traffic/Transportation:

- A traffic study completed by Charbonneau Engineering dated July 2016 was submitted to City staff in August 2016. Preliminary discussions regarding the findings of the traffic study have been discussed with the applicant's representatives; however no formal review has been completed by the City. The applicant will need to confirm with the City whether or not the July 2016 Report is still valid and if it is the report they would like the City to review with the formal application for the project.
    - It has been discussed that a traffic signal at NW 16th & Brady will most likely be required based on the proposed number of new trips. The City is currently designing improvements to Brady Road from NW 16th to Pac Rim Blvd. with construction anticipated to be started in 2020. Improvements to the 16th and Brady intersection will need to be coordinated with the City's roadway improvements. The City is willing to look at partnership opportunities to complete the necessary projects.
    - Improvements to the 16th and Brady intersection would be eligible for TIF Creditable at the percentage/amount shown in the City's 2012 TIF Study Update.

Streets:

- NW 18th Avenue adjacent to the subject parcel is designated as a Collector Street. Improvements to NW 18th shall meet the requirements of City of Camas Design Standards for a three lane collector as shown on the design standard plan ST5, including but not limited to a 37-foot half-width right-of-way, 23-foot half width of asphalt, landscaping, street lights and drainage improvements.
    - Potential alternative designs were discussed with the applicant at the pre-application meeting. There may be alternatives to the design standards that could be considered by the City; however, the applicant would be required to show to the City's satisfaction how all major components of the standards and codes are being met with the proposals and design exception requests may be required.
- There is an existing three party agreement between the City, School District and Sharp which outlines improvement s to be completed by each party in the vicinity of the project site. The improvements identified in the agreement generally include a signal at Payne Road/Pac Rim Blvd.; a new easterly access at Payne Road/Lacey Way; a new cross walk on 18th Ave in the vicinity of Deerfern Street; and improvements to the Sharp access at their easterly property line. The new High School application will be reviewed separately from that agreement, and as such, the new High School may be conditioned with some of the same improvements identified in the agreement. Additional infrastructure improvements will likely also be conditioned above and beyond those identified in the agreement according to City codes and policies.
- The applicant will be responsible for all traffic control signs, street name signs, pavement markings and street lighting per CMC 17.19.030 (I) (J). LED street lighting is a requirement for all street lighting.
- The applicant will be responsible for the design and submittal of the utility plan showing the locations for underground power, telephone, gas, CATV, street lights and associated appurtenances.

- ADA compliant pedestrian ramps and ADA compliant street crossings are required. To provide ADA compliant pedestrian ramps and street crossings careful evaluation of street profile grades and intersection site grading will be required. The applicant is requested to submit a crosswalk design for each location for review and approval.

Stormwater:

- Per CMC 14.02 stormwater treatment and runoff control shall be designed in accordance with the 2012 Stormwater Management Manual for Western Washington and the City of Camas Stormwater Design Standards Manual.
- Stormwater facilities shall be located and landscaped per CMC 17.19.030 (F6) and CMC 17.19.040 (C3a). Stormwater facilities should be located within a separate tract.
- Maintenance of the storm water facilities will be the responsibility of the owner per CMC 17.19.040 (C3).
- The nearest public storm system to the subject parcel is located in NW Pacific Rim Blvd. Stormwater runoff from the site and/or discharge from any detention or treatment facilities shall not impact downstream properties. Flow spreaders and other similar designs have been proven to not work as effectively as they need to and the City will be carefully reviewing and working with the applicant during design to ensure downstream properties are not impacted.
- This development is subject to payment of stormwater utility fees in accordance with the provisions of CMC 13.89.
- Storm easements if required will be shown on the design prints.

Water:

- The nearest water connection point is available in NW 18th Avenue adjacent to the site which consists of an existing 12" water line.
- The Applicant shall be responsible for performing fire flow tests to ensure the site has adequate flows and pressures for the proposed use. Fire flow testing shall be coordinated with the City and completed prior to submittal of engineering plans.
- The water system shall be looped where ever practical.
- Commercial systems shall be properly sized, installed and maintained by the business/building owner.
- Water system piping shall be a minimum of 8" diameter and be consistent with the Camas Design Standards Manual (CDSM).
- The water systems serving commercial or industrial uses shall be privately owned and maintained beyond the water meter. Separation of private and public water systems is required through the use of an approved backflow prevention assembly and must be shown on the design prints. If an onsite fire line is required then a double detector check valve will be required at the right-of-way line. Irrigation systems will also require a separate meter and individual backflow prevention device. All fire hydrants on the private system shall be painted red to distinguish them from publicly maintained fire hydrants.

Sanitary Sewer:

- Currently the existing Sharp building and Camas Middle School gravity flow sewer to NW Pacific Rim Blvd to an 18" S.T.E.P mainline. For the applicant's information, there is also an existing 8" pressurized sewer mainline on NW 18th Ave. The applicant is encouraged, but not required, to install a S.T.E.F system that would flow to NW Pacific Rim Blvd.

- The applicant shall work with the City to determine if adequate sewer capacity exists to serve the proposed use prior to engineering approval. Any modeling or calculations shall be completed at the applicant's expense.
- Commercial systems shall be properly sized, installed and maintained by the business/building owner.

Parks/Trails:

- Trail segment T-23 is identified in the 2014 Parks Recreation & Open Space (PROS) Plan as being adjacent to or within the proposed development running north to south along the easterly boundary of the site. This trail segment is not PIF creditable. The applicant shall be required to construct a trail or pathway that meets the intent of the trail segment shown in the PROS Plan.

Impact/SDC Fees:

- Water and Sewer System Development Charges (SDC) are based on the water meter size. See CMC 13.52.060 for the Water SDC's and see CMC 13.72.060 for the Sewer SDC's.
- Traffic Impact Fees (TIF) are collected at the time of building permit issuance based on PM peak hour trips. TIF fees may be prepaid or deferred and paid prior to issuance of the final occupancy permit at the discretion of the Community Development Director.
- TIF and Fire Impact Fees (FIF) are calculated impact fees in accordance with the provisions of CMC 3.88.

FIRE DEPARTMENT **RANDY MILLER (360) 834-6191**

- Site Plan Permit
- NFPA 24 Fire main underground Permit, minimum level "U" license required.
- NFPA 13 Fire Sprinkler Permit, WA State licensed fire sprinkler contractor.
- NFPA 72 Fire Alarm Permit, minimum NICET III for design and NICET II for acceptance testing.
- NFPA 17A Commercial Hood Suppression System Permit. WA State License.
- NFPA 110 Emergency Generator Permit.

BUILDING DIVISION **BOB CUNNINGHAM (360) 817-1568**

- The structures will be reviewed under the most current building codes as adopted by The State of Washington.
- A code analysis and plans shall be prepared by an architect licensed by the State of Washington. The code analysis shall address types of occupancy, type of construction, building height, allowable area, Fire Life Safety elements and the ADA requirements.
- The structural drawings and calculations shall be prepared and stamped by a Professional Engineer licensed by the State of Washington.
- The new structure shall comply with the Washington Energy Code for building insulation, mechanical equipment, lighting, etc… All commercial energy forms shall be prepared by a licensed professional in accordance with section C103 of The Washington Energy Code.

- If applicable a set of detaled plans from a design professional are required for commercial kitchen equipment, ventilation equipment, the type 1 hood and suppression systems
- If applicable a properly sized grease interceptor or trap is required.
- A Health Department review and permit is required.

- The fire suppression and or fire alarm systems shall be in accordance with IBC and other applicable code standards, all fire suppression and or fire alarm systems shall be reviewed by the Camas Fire Marshal's office.
- Civil plans to be on separate 24" x 36" sheets with City of Camas Engineering Division signature block.
- Project shall be subject to applicable fees; System Development Charge's, Traffic Impact Fees, Planning's Site Plan Review, Design Review (committee or minor), Engineering project & review fees, Fire Department review, Building plan review and permit fees.
- Parking shall be in accordance with CMC 18.11

IMPACT, DEVELOPMENT, CONNECTION, LATECOMER FEES

SCHOOL IMPACT FEES

BUILDING TYPE	CAMAS	EVERGREEN	WASHOUGAL
Single Family Detached	5,371.00	6,100.00	5,600.00
Multi-Family	5,371.00	7,641.00	5,800.00

Accessory dwelling units shall be subject to impact fees at the following rates: 25% of the single family rate for internal conversions, and 35% for external conversions.

TRAFFIC, PARK/OPEN SPACE, FIRE IMPACT FEES

BUILDING TYPE	TIF North District	TIF South District	PARK/O.S.	FIRE
Single Family Detached	7,869.00	2,995.00	2,290.00	.20 psf
Duplex (both sides)	11,264.00	4,287.00	4,580.00	.20 psf
Rental Townhouse (per DU)	5,632.00	2,144.00	1,717.00	.20 psf
Apartment (per DU)	5,169.00	1967.00	1,717.00	.20 psf
Residential Condo/Townhouse	4,012.00	1,527.00	2,290.00	.20 psf
Accessory Dwelling Unit (Interior)	1,967.00	749.00	572.50	0
Accessory Dwelling Unit (Exterior)	2,754.00	1,048.00	801.50	.20 psf
Commercial	Calculated		Calculated	.40 psf

WATER SYSTEM DEVELOPMENT CHARGES & FEES

METER SIZE/TYPE	WATER & SEWER DEVELOPMENT CHARGES				WATER CONNECTION FEES
	ALL CUSTOMERS (EXCEPT INDUSTRIAL)		INDUSTRIAL		
	Non NUGAE[1]	NUGAE	Non NUGAE	NUGAE	COST
3/4"	4,778	7,310	28,270	44,723	360.00
1"	7,963	12,183	45,555	72,313	400.00
1.5"	15,925	24,365	88,632	141,151	765.00
1.5" Turbine	15,925	24,365	88,632	141,151	965.00
2"	25,480	38,984	140,568	223,999	1,865.00
3"	50,960	77,968	281,092	446,958	Meter purchased and installed by Developer
4"	79,625	121,825	436,781	695,386	Meter purchased and installed by Developer
6"	159,250	243,650	868,727	1,384,939	Meter purchased and installed by Developer
8"	254,800	389,840	1,386,905	2,212,246	Meter purchased and installed by Developer

SEWER DEVELOPMENT CHARGES[2]	**MISCELLANEOUS WATER & SEWER FEES**

METER SIZE	Non NUGAE	NUGAE	TIME AND MATERIAL MINIMUM CHARGE (When the City installs service lines)	
Residential	2,493	4,420	Water Connection by City[3]	1,520.00
Commercial 3/4"	3,740	6,630	Sewer Connection by City[3]	1420.00
Commercial 1"	6,234	11,050	STEP/STEF Inspection	155.00
Commercial 1.5"	12,467	22,101	Encroachment (Under $1,500 Value)	30.00
Commercial 2"	19,948	35,361		

Notes:

1. North Urban Growth Area (NUGA)
2. Rates apply to Commerical I customers. Rates for Industrial and Commercial II (higher than average flow or strength) are calculaed by Public Works Director.
3. Minimum charge. Fee may be higher based on Time and Materials as calculated by Public Works Director.
4. Some building sites will have water or sewer latecomer fees in addition to the fees noted above.

LIGHTING CUTSHEETS FOR DESIGN REVIEW

APPENDIX 1 EXHIBIT 11

DLR Group

Architecture
Planning
Interiors

CAMAS PBL HIGH SCHOOL
CAMAS SCHOOL DISTRICT
Camas, Washington

Design Review Lighting Specifications
DLR Group Project No. 73-16130-00

January 17, 2017

Contents:

1. Type SA, SA2, SC
2. Type SB
3. Type SD
4. Type SG
5. Type SH CAMAS STD
6. Type DN

REYES ENGINEERING

D-Series Size 1
LED Area Luminaire

Catalog Number

TYPES SA, SA2, SC

Notes

Type

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

Specifications

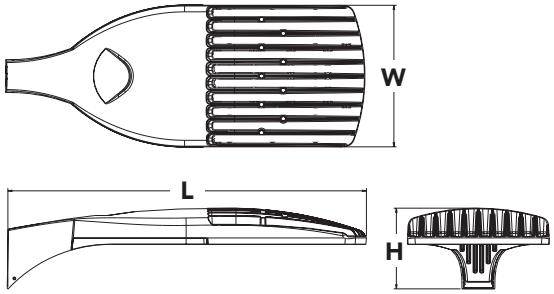
EPA: 1.01 ft² (0.09 m²)

Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height: 7-1/2" (19.0 cm)

Weight (max): 27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD

DSX1LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** 30C 30 LEDs (one engine) 40C 40 LEDs (two engines) 60C 60 LEDs (two engines) **Rotated optics** [1] 60C 60 LEDs (two engines)	530 530 mA 700 700 mA 1000 1000 mA (1 A) [2]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted [3]	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control [2,4] LCCO Left corner cutoff [2,4] RCCO Right corner cutoff [2,4]	MVOLT [5] 120 [5] 208 [5] 240 [5] 277 [5] 347 [6] 480 [6]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor [7] RPUMBA Round pole universal mounting adaptor [7] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) [8]

Control options

Shipped installed

PER	NEMA twist-lock receptacle only (no controls) [9]
PER5	Five-wire receptacle only (no controls) [9,10]
PER7	Seven-wire receptacle only (no controls) [9,10]
DMG	0-10V dimming driver (no controls) [11]
DCR	Dimmable and controllable via ROAM® (no controls) [12]
DS	Dual switching [13,14]
PIR	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc [15]
PIRH	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc [15]
PIR1FC3V	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc [15]
PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc [15]
BL30	Bi-level switched dimming, 30% [14,16]
BL50	Bi-level switched dimming, 50% [14,16]
PNMTDD3	Part night, dim till dawn [17]
PNMT5D3	Part night, dim 5 hrs [17]
PNMT6D3	Part night, dim 6 hrs [17]
PNMT7D3	Part night, dim 7 hrs [17]
FAO	Field adjustable output [18]

Other options

Shipped installed

HS	House-side shield [19]
WTB	Utility terminal block [20]
SF	Single fuse (120, 277, 347V) [21]
DF	Double fuse (208, 240, 480V) [21]
L90	Left rotated optics [22]
R90	Right rotated optics [22]
BS	Bird spikes [23]

Finish *(required)*

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

Accessories

Ordered and shipped separately.

Controls & Shields

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [24]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [24]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [24]
DSHORT SBK U	Shorting cap [24]
DSX1HS 30C U	House-side shield for 30 LED unit [19]
DSX1HS 40C U	House-side shield for 40 LED unit [19]
DSX1HS 60C U	House-side shield for 60 LED unit [19]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) [25]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [8]
DSX1BS U	Bird spikes

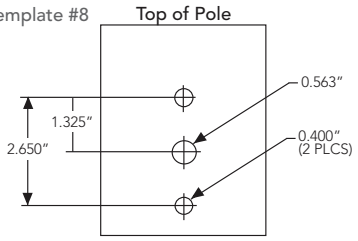
For more control options, visit DTL and ROAM online.

NOTES

1 Rotated optics available with 60C only.
2 Not available AMBPC.
3 Only available with 530mA or 700mA.
4 Not available with HS.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
6 Not available with single board, 530mA product (30C 530 or 60C 530 DS). Not available with BL30, BL50 or PNMT options.
7 Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
8 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option.
10 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming.
11 DMG option for 347V or 480V requires 1000mA.
12 Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR options, DS, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming.
13 Requires 40C or 60C. Provides 50/50 luminaire operation via two independent drivers on two separate circuits. N/A with PER, DCR, WTB, PIR or PIRH.
14 Requires an additional switched circuit.
15 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Outdoor Control Technical Guide for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required.
16 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7 or PNMT options. Not available with PIR1FC3V or PIRH1FC3V.
17 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V or PIRH1FC3V. Separate on/off required.
18 Dimming driver standard. Not available with PER5, PER7, DMG, DCR, DS, BL30, BL50 or PNMT, PIR, PIRH, PIR1FC3V or PIRH1FC3V.
19 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
20 WTB not available with DS.
21 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
22 Available with 60 LEDs (60C option) only.
23 Also available as a separate accessory; see accessories information.
24 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.
25 For retrofit use only.

Drilling

Template #8



DSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	**DM29AS**	2 at 90° *
DM28AS	2 at 180°	**DM39AS**	3 at 90° *
DM49AS	4 at 90° *	**DM32AS**	3 at 120° **

Example: SSA 20 4C **DM19AS** DDBXD

Visit Lithonia Lighting's POLES CENTRAL to see our wide selection of poles, accessories and educational tools.
**Round pole top must be 3.25" O.D. minimum.*
***For round pole mounting (RPA) only.*

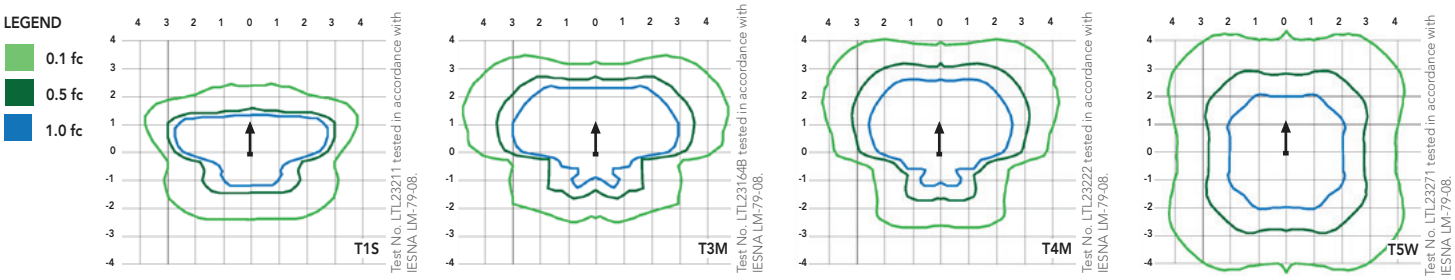
Tenon Mounting Slipfitter **

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.99

Electrical Load

			Current (A)					
Number of LEDs	Drive Current (mA)	System Watts	120	208	240	277	347	480
30	530	52	0.52	0.30	0.26	0.23	--	--
	700	68	0.68	0.39	0.34	0.30	0.24	0.17
	1000	105	1.03	0.59	0.51	0.45	0.36	0.26
40	530	68	0.67	0.39	0.34	0.29	0.23	0.17
	700	89	0.89	0.51	0.44	0.38	0.31	0.22
	1000	138	1.35	0.78	0.67	0.58	0.47	0.34
60	530	99	0.97	0.56	0.48	0.42	0.34	0.24
	700	131	1.29	0.74	0.65	0.56	0.45	0.32
	1000	209	1.98	1.14	0.99	0.86	0.69	0.50

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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
Lumen Maintenance Factor	DSX1 LED 60C 1000			
	1.0	0.98	0.96	0.91
	DSX1 LED 60C 700			
	1.0	0.99	0.99	0.99

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. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	5,948	1	0	1	114	6,387	1	0	1	123	6,427	1	0	1	124	3,640	1	0	1	70
			T2S	6,132	1	0	1	118	6,585	2	0	2	127	6,626	2	0	2	127	3,813	1	0	1	73
			T2M	5,992	1	0	2	115	6,434	1	0	2	124	6,475	1	0	2	125	3,689	1	0	1	71
			T3S	5,985	1	0	1	115	6,427	1	0	2	124	6,467	1	0	2	124	3,770	1	0	1	73
			T3M	6,039	1	0	2	116	6,485	1	0	2	125	6,525	1	0	2	125	3,752	1	0	1	72
			T4M	6,121	1	0	2	118	6,573	1	0	2	126	6,614	1	0	2	127	3,758	1	0	1	72
			TFTM	6,030	1	0	2	116	6,475	1	0	2	125	6,515	1	0	2	125	3,701	1	0	1	71
			T5VS	6,370	2	0	0	123	6,840	2	0	0	132	6,883	2	0	0	132	3,928	2	0	0	76
			T5S	6,417	2	0	0	123	6,890	2	0	0	133	6,933	2	0	0	133	3,881	2	0	0	75
			T5M	6,428	3	0	1	124	6,902	3	0	1	133	6,945	3	0	1	134	3,930	2	0	1	76
			T5W	6,334	3	0	1	122	6,801	3	0	1	131	6,844	3	0	1	132	3,820	3	0	1	73
			BLC	4,735	1	0	1	91	5,085	1	0	2	98	5,116	1	0	1	98					
			LCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
			RCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
	700 mA	68 W	T1S	7,554	1	0	1	111	8,112	2	0	2	119	8,163	2	0	2	120	4,561	1	0	1	67
			T2S	7,789	2	0	2	115	8,364	2	0	2	123	8,416	2	0	2	124	4,777	1	0	1	70
			T2M	7,610	1	0	2	112	8,172	2	0	2	120	8,223	2	0	2	121	4,622	1	0	2	68
			T3S	7,601	1	0	2	112	8,162	2	0	2	120	8,213	2	0	2	121	4,724	1	0	1	69
			T3M	7,670	1	0	2	113	8,236	2	0	2	121	8,288	2	0	2	122	4,701	1	0	2	69
			T4M	7,774	1	0	2	114	8,348	2	0	2	123	8,400	2	0	2	124	4,709	1	0	2	69
			TFTM	7,658	1	0	2	113	8,223	1	0	2	121	8,275	1	0	2	122	4,638	1	0	2	68
			T5VS	8,090	2	0	0	119	8,687	3	0	1	128	8,742	3	0	1	129	4,922	2	0	0	72
			T5S	8,150	2	0	0	120	8,751	3	0	0	129	8,806	3	0	0	130	4,863	2	0	0	72
			T5M	8,164	3	0	1	120	8,767	3	0	2	129	8,821	3	0	2	130	4,924	3	0	1	72
			T5W	8,044	3	0	1	118	8,638	3	0	2	127	8,692	3	0	2	128	4,787	3	0	1	70
			BLC	6,028	1	0	2	89	6,473	1	0	2	95	6,514	1	0	2	96					
			LCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
			RCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
	1000 mA	105 W	T1S	10,331	2	0	2	98	11,094	2	0	2	106	11,163	2	0	2	106					
			T2S	10,652	2	0	2	101	11,438	2	0	2	109	11,510	2	0	2	110					
			T2M	10,408	2	0	2	99	11,176	2	0	3	106	11,246	2	0	3	107					
			T3S	10,395	2	0	2	99	11,163	2	0	2	106	11,233	2	0	2	107					
			T3M	10,490	2	0	2	100	11,264	2	0	2	107	11,335	2	0	2	108					
			T4M	10,632	2	0	2	101	11,417	2	0	2	109	11,488	2	0	2	109					
			TFTM	10,473	2	0	2	100	11,247	2	0	3	107	11,317	2	0	3	108					
			T5VS	11,064	3	0	1	105	11,881	3	0	1	113	11,955	3	0	1	114					
			T5S	11,145	3	0	1	106	11,968	3	0	1	114	12,043	3	0	1	115					
			T5M	11,165	3	0	2	106	11,989	4	0	2	114	12,064	4	0	2	115					
			T5W	11,001	3	0	2	105	11,813	4	0	2	113	11,887	4	0	2	113					
			BLC	7,960	1	0	2	76	8,548	1	0	2	81	8,601	1	0	2	82					
			LCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					
			RCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					

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. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40C (40 LEDs)	530 mA	68 W	T1S	7,861	1	0	1	116	8,441	2	0	2	124	8,494	2	0	2	125	4,794	1	0	1	71
			T2S	8,105	2	0	2	119	8,704	2	0	2	128	8,758	2	0	2	129	5,021	1	0	1	74
			T2M	7,920	2	0	2	116	8,504	2	0	2	125	8,557	2	0	2	126	4,858	1	0	2	71
			T3S	7,910	1	0	2	116	8,494	2	0	2	125	8,547	2	0	2	126	4,966	1	0	1	73
			T3M	7,982	2	0	2	117	8,571	2	0	2	126	8,625	2	0	2	127	4,941	1	0	2	73
			T4M	8,090	1	0	2	119	8,687	2	0	2	128	8,741	2	0	2	129	4,950	1	0	2	73
			TFTM	7,969	1	0	2	117	8,558	2	0	2	126	8,611	2	0	2	127	4,875	1	0	2	72
			T5VS	8,419	2	0	0	124	9,040	3	0	1	133	9,097	3	0	1	134	5,174	2	0	0	76
			T5S	8,481	2	0	0	125	9,107	3	0	1	134	9,164	3	0	1	135	5,111	2	0	0	75
			T5M	8,496	3	0	1	125	9,123	3	0	2	134	9,180	3	0	2	135	5,175	3	0	1	76
			T5W	8,371	3	0	2	123	8,989	3	0	2	132	9,045	3	0	2	133	5,031	3	0	1	74
			BLC	6,255	1	0	2	92	6,717	1	0	2	99	6,759	1	0	2	99					
			LCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
			RCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
	700 mA	91 W	T1S	9,984	2	0	2	112	10,721	2	0	2	120	10,788	2	0	2	121	6,014	1	0	1	68
			T2S	10,294	2	0	2	116	11,054	2	0	2	124	11,123	2	0	2	125	6,299	2	0	2	71
			T2M	10,059	2	0	2	113	10,801	2	0	3	121	10,869	2	0	3	122	6,094	2	0	2	68
			T3S	10,046	2	0	2	113	10,788	2	0	2	121	10,855	2	0	2	122	6,229	1	0	2	70
			T3M	10,137	2	0	2	114	10,886	2	0	2	122	10,954	2	0	2	123	6,198	2	0	2	70
			T4M	10,275	2	0	2	115	11,033	2	0	2	124	11,102	2	0	2	125	6,209	1	0	2	70
			TFTM	10,122	2	0	2	114	10,869	2	0	2	122	10,937	2	0	2	123	6,115	1	0	2	69
			T5VS	10,693	3	0	1	120	11,482	3	0	1	129	11,554	3	0	1	130	6,490	2	0	0	73
			T5S	10,771	3	0	1	121	11,566	3	0	1	130	11,639	3	0	1	131	6,411	2	0	0	72
			T5M	10,790	3	0	2	121	11,587	4	0	2	130	11,659	4	0	2	131	6,492	3	0	1	73
			T5W	10,632	3	0	2	119	11,417	4	0	2	128	11,488	4	0	2	129	6,311	3	0	2	71
			BLC	7,963	1	0	2	89	8,551	1	0	2	96	8,605	1	0	2	97					
			LCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
			RCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
	1000 mA	138 W	T1S	13,655	2	0	2	99	14,663	3	0	3	106	14,754	3	0	3	107					
			T2S	14,079	2	0	2	102	15,118	3	0	3	110	15,212	3	0	3	110					
			T2M	13,756	2	0	3	100	14,772	3	0	3	107	14,864	3	0	3	108					
			T3S	13,739	2	0	2	100	14,754	2	0	2	107	14,846	3	0	3	108					
			T3M	13,864	2	0	2	100	14,888	3	0	3	108	14,981	3	0	3	109					
			T4M	14,052	2	0	2	102	15,090	3	0	3	109	15,184	3	0	3	110					
			TFTM	13,842	2	0	3	100	14,864	2	0	3	108	14,957	2	0	3	108					
			T5VS	14,623	3	0	1	106	15,703	4	0	1	114	15,801	4	0	1	115					
			T5S	14,731	3	0	1	107	15,818	3	0	1	115	15,917	3	0	1	115					
			T5M	14,757	4	0	2	107	15,846	4	0	2	115	15,945	4	0	2	116					
			T5W	14,540	4	0	2	105	15,614	4	0	2	113	15,711	4	0	2	114					
			BLC	10,516	1	0	2	76	11,292	1	0	2	82	11,363	1	0	2	82					
			LCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					
			RCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					

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. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			T5VS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			T5W	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			T5VS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			T5W	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			T5VS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			T5W	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

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. Contact factory for performance data on any configurations not shown here.

L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			T5VS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			T5W	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			T5VS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			T5W	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			T5VS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			T5W	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft^2) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine configurations consist of 30, 40 or 60 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV or 6kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

REYES ENGINEERING

TYPE SB

D-Series Size 0
LED Area Luminaire

Catalog Number

Notes

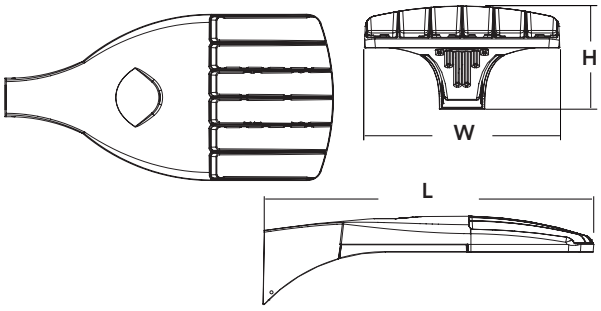
Type

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

d-series

Specifications

EPA:	0.95 ft² (.09 m²)
Length:	26″ (66.0 cm)
Width:	13″ (33.0 cm)
Height:	7″ (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

DSX0 LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	**Forward optics** 20C 20 LEDs (one engine) 40C 40 LEDs (two engines) **Rotated optics**[1] 30C 30 LEDs (one engine)	530 530 mA 700 700 mA 1000 1000 mA (1 A) [2]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted [3]	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control[2,4] LCCO Left corner cutoff[2,4] RCCO Right corner cutoff[2,4]	MVOLT [5] 120 [5] 208 [5] 240 [5] 277 [5] 347 [6] 480 [6]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor [7] RPUMBA Round pole universal mounting adaptor [7] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[8]

Control options

Shipped installed

PER	NEMA twist-lock receptacle only (no controls) [9]
PER5	Five-wire receptacle only (no controls) [9,10]
PER7	Seven-wire receptacle only (no controls) [9,10]
DMG	0-10V dimming driver (no controls) [11]
DCR	Dimmable and controllable via ROAM® (no controls) [12]
PIR	Bi-level, motion/ambient sensor, 8-15′ mounting height, ambient sensor enabled at 5fc [13]
PIRH	Bi-level, motion/ambient sensor, 15-30′ mounting height, ambient sensor enabled at 5fc [13]
PIR1FC3V	Bi-level, motion/ambient sensor, 8-15′ mounting height, ambient sensor enabled at 1fc[13]
PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30′ mounting height, ambient sensor enabled at 1fc[13]
BL30	Bi-level switched dimming, 30% [14,15]
BL50	Bi-level switched dimming, 50% [14,15]
PNMTDD3	Part night, dim till dawn [16]
PNMT5D3	Part night, dim 5 hrs [16]
PNMT6D3	Part night, dim 6 hrs [16]
PNMT7D3	Part night, dim 7 hrs [16]
FAO	Field adjustable output[17]

Other options

Shipped installed

HS	House-side shield [18]
SF	Single fuse (120, 277, 347V) [19]
DF	Double fuse (208, 240, 480V) [19]
L90	Left rotated optics [1]
R90	Right rotated optics [1]
DDL	Diffused drop lens[18]
BS	Bird spikes[20]

Finish *(required)*

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [21]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [21]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [21]
DSHORT SBK U	Shorting cap [21]
DSX0HS 20C U	House-side shield for 20 LED unit [18]
DSX0HS 30C U	House-side shield for 30 LED unit [18]
DSX0HS 40C U	House-side shield for 40 LED unit [18]
DSX0DDL U	Diffused drop lens (polycarbonate) [17]
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)[22]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [8]
DSX0BS U	Bird spikes

For more control options, visit DTL and ROAM online.

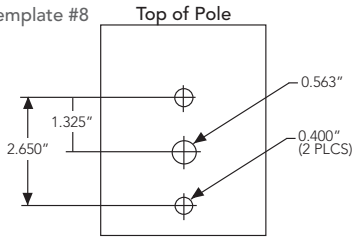
Controls & Shields

NOTES

1. 30 LEDs (30C option) and rotated options (L90 or R90) only available together.
2. Not available with AMBPC.
3. Only available with 530mA or 700mA.
4. Not available with HS or DDL.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
6. Not available with single board, 530mA product (20C 530 or 30C 530). Not available with BL30, BL50 or PNMT options.
7. Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
8. Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8″ mast arm (not included).
9. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories.
10. If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming.
11. DMG option for 347V or 480V requires 1000mA.
12. Specifies a ROAM® enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR options, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming.
13. PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Outdoor Control Technical Guide for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required. Not available with PNMT options.
14. Requires an additional switched circuit.
15. Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7 or PNMT options. Not available with PIR1FC3V and PIRH1FC3V.
16. Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V and PIRH1FC3V. Separate on/off required.
17. Dimming driver standard. Not available with PER5, PER7, DMG, DCR, BL30, BL50, PNMT, PIR, PIRH, PIR1FC3V and PIRH1FC3V.
18. Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
19. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
20. Also available as a separate accessory; see accessories information.
21. Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.
22. For retrofit use only.

Drilling

Template #8



DSX0 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

DM19AS	Single unit	**DM29AS**	2 at 90° *
DM28AS	2 at 180°	**DM39AS**	3 at 90° *
DM49AS	4 at 90° *	**DM32AS**	3 at 120° **

Example: SSA 20 4C **DM19AS** DDBXD

Visit Lithonia Lighting's POLES CENTRAL to see our wide selection of poles, accessories and educational tools.

*Round pole top must be 3.25" O.D. minimum.

**For round pole mounting (RPA) only.

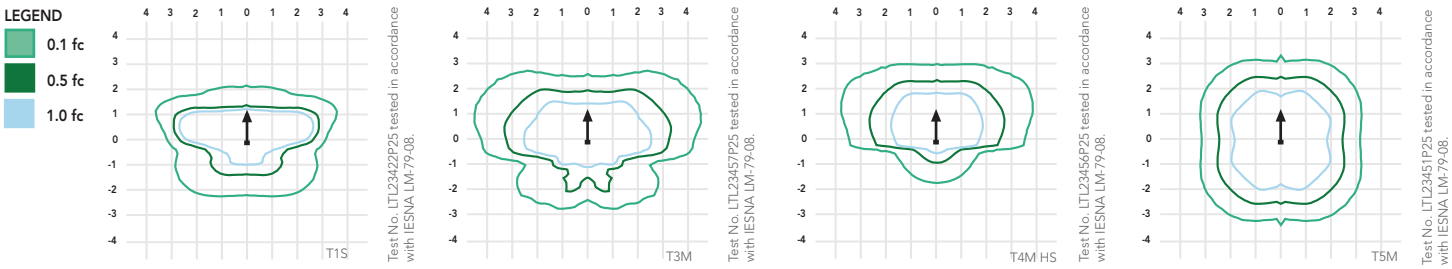
Tenon Mounting Slipfitter **

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8″	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8″	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4″	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 0 homepage.

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.99

Electrical Load

			Current (A)					
Number of LEDs	Drive Current (mA)	System Watts	120	208	240	277	347	480
20C	530	35	0.34	0.22	0.21	0.20	--	--
	700	45	0.47	0.28	0.24	0.22	0.18	0.14
	1000	72	0.76	0.45	0.39	0.36	0.36	0.26
30C	530	52	0.51	0.31	0.28	0.25	--	--
	700	70	0.72	0.43	0.37	0.34	0.25	0.19
	1000	104	1.11	0.64	0.56	0.49	0.47	0.34
40C	530	68	0.71	0.41	0.36	0.33	0.25	0.19
	700	91	0.94	0.55	0.48	0.42	0.33	0.24
	1000	138	1.45	0.84	0.73	0.64	0.69	0.50

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted 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
Lumen Maintenance Factor	DSX0 LED 20C 1000			
	1	0.98	0.96	0.93
	DSX0 LED 40C 1000			
	1	0.98	0.95	0.90
	DSX0 LED 40C 700			
	1	0.99	0.99	0.99

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. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20C (20 LEDs)	530 mA	35 W	T1S	4,079	1	0	1	117	4,380	1	0	1	125	4,408	1	0	1	126	2,541	1	0	1	73
			T2S	4,206	1	0	1	120	4,516	1	0	1	129	4,544	1	0	1	130	2,589	1	0	1	74
			T2M	4,109	1	0	1	117	4,413	1	0	1	126	4,440	1	0	1	127	2,539	1	0	1	73
			T3S	4,104	1	0	1	117	4,407	1	0	1	126	4,435	1	0	1	127	2,558	1	0	1	73
			T3M	4,142	1	0	1	118	4,447	1	0	1	127	4,475	1	0	1	128	2,583	1	0	1	74
			T4M	4,198	1	0	1	120	4,508	1	0	1	129	4,536	1	0	1	130	2,570	1	0	1	73
			TFTM	4,135	1	0	1	118	4,440	1	0	2	127	4,468	1	0	2	128	2,540	1	0	1	73
			T5VS	4,368	2	0	0	125	4,691	2	0	0	134	4,720	2	0	0	135	2,650	1	0	0	76
			T5S	4,401	2	0	2	126	4,725	2	0	0	135	4,755	2	0	0	136	2,690	1	0	0	77
			T5M	4,408	2	0	1	126	4,734	3	0	1	135	4,763	3	0	1	136	2,658	2	0	0	76
			T5W	4,344	3	0	1	124	4,664	3	0	1	133	4,693	3	0	1	134	2,663	2	0	1	76
			BLC	3,071	1	0	1	88	3,297	1	0	1	94	3,318	1	0	1	95					
			LCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92					
			RCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92					
	700 mA	45 W	T1S	5,181	1	0	1	115	5,563	1	0	1	124	5,598	1	0	1	124	3,144	1	0	1	70
			T2S	5,342	1	0	1	119	5,736	1	0	1	127	5,772	1	0	1	128	3,203	1	0	1	71
			T2M	5,219	1	0	1	116	5,605	1	0	1	125	5,640	1	0	1	125	3,141	1	0	1	70
			T3S	5,213	1	0	1	116	5,598	1	0	1	124	5,633	1	0	1	125	3,165	1	0	1	70
			T3M	5,260	1	0	1	117	5,649	1	0	2	126	5,684	1	0	2	126	3,196	1	0	1	71
			T4M	5,332	1	0	1	118	5,725	1	0	2	127	5,761	1	0	2	128	3,179	1	0	1	71
			TFTM	5,252	1	0	2	117	5,640	1	0	2	125	5,675	1	0	2	126	3,143	1	0	1	70
			T5VS	5,548	2	0	0	123	5,958	2	0	0	132	5,995	2	0	0	133	3,278	2	0	0	73
			T5S	5,589	2	0	0	124	6,002	2	0	0	133	6,039	2	0	0	134	3,328	2	0	0	74
			T5M	5,599	3	0	1	124	6,012	3	0	1	134	6,050	3	0	1	134	3,288	2	0	1	73
			T5W	5,517	3	0	1	123	5,924	3	0	1	132	5,961	3	0	1	132	3,295	2	0	1	73
			BLC	3,909	1	0	1	87	4,198	1	0	1	93	4,224	1	0	1	94					
			LCCO	3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91					
			RCCO	3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91					
	1000 mA	72 W	T1S	7,085	1	0	1	98	7,608	2	0	2	106	7,656	2	0	2	106					
			T2S	7,305	1	0	1	101	7,845	2	0	2	109	7,894	2	0	2	110					
			T2M	7,138	1	0	2	99	7,665	2	0	2	106	7,713	2	0	2	107					
			T3S	7,129	1	0	1	99	7,656	2	0	2	106	7,704	2	0	2	107					
			T3M	7,194	1	0	2	100	7,725	2	0	2	107	7,773	2	0	2	108					
			T4M	7,292	1	0	2	101	7,830	2	0	2	109	7,879	2	0	2	109					
			TFTM	7,183	1	0	2	100	7,713	1	0	2	107	7,761	1	0	2	108					
			T5VS	7,588	2	0	0	105	8,148	3	0	0	113	8,199	3	0	0	114					
			T5S	7,644	2	0	0	106	8,208	2	0	0	114	8,259	2	0	0	115					
			T5M	7,657	3	0	1	106	8,222	3	0	1	114	8,274	3	0	1	115					
			T5W	7,545	3	0	1	105	8,102	3	0	2	113	8,153	3	0	2	113					
			BLC	5,162	1	0	1	72	5,543	1	0	2	77	5,578	1	0	1	77					
			LCCO	5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75					
			RCCO	5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75					

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. Contact factory for performance data on any configurations not shown here.

Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40C (40 LEDs)	530 mA	68 W	T1S	7,926	2	0	2	117	8,511	2	0	2	125	8,564	2	0	2	126	4,878	1	0	1	72
			T2S	8,172	2	0	2	120	8,775	2	0	2	129	8,830	2	0	2	130	4,969	1	0	1	73
			T2M	7,985	2	0	2	117	8,574	2	0	2	126	8,628	2	0	2	127	4,874	1	0	1	72
			T3S	7,975	1	0	2	117	8,564	2	0	2	126	8,617	2	0	2	127	4,910	1	0	1	72
			T3M	8,047	2	0	2	118	8,642	2	0	2	127	8,696	2	0	2	128	4,958	1	0	2	73
			T4M	8,157	1	0	2	120	8,759	2	0	2	129	8,813	2	0	2	130	4,932	1	0	2	73
			TFTM	8,035	1	0	2	118	8,628	2	0	2	127	8,682	2	0	2	128	4,876	1	0	2	72
			T5VS	8,488	2	0	0	125	9,115	3	0	0	134	9,172	3	0	0	135	5,086	2	0	0	75
			T5S	8,550	2	0	0	126	9,182	3	0	1	135	9,239	3	0	1	136	5,163	2	0	0	76
			T5M	8,565	3	0	1	126	9,198	3	0	2	135	9,255	3	0	2	136	5,102	3	0	1	75
			T5W	8,440	3	0	2	124	9,063	3	0	2	133	9,120	3	0	2	134	5,112	3	0	1	75
			BLC	6,142	1	0	2	90	6,595	1	0	2	97	6,636	1	0	2	98					
			LCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95					
			RCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95					
	700 mA	91 W	T1S	10,066	2	0	2	111	10,810	2	0	2	119	10,877	2	0	2	120	6,206	2	0	2	68
			T2S	10,379	2	0	2	114	11,145	2	0	2	122	11,215	2	0	2	123	6,322	2	0	2	69
			T2M	10,141	2	0	2	111	10,890	2	0	2	120	10,958	2	0	2	120	6,201	2	0	2	68
			T3S	10,129	2	0	2	111	10,877	2	0	2	120	10,945	2	0	2	120	6,247	1	0	2	69
			T3M	10,221	2	0	2	112	10,975	2	0	2	121	11,044	2	0	2	121	6,308	2	0	2	69
			T4M	10,359	2	0	2	114	11,124	2	0	2	122	11,194	2	0	2	123	6,275	1	0	2	69
			TFTM	10,205	2	0	2	112	10,958	2	0	3	120	11,027	2	0	3	121	6,203	1	0	2	68
			T5VS	10,781	3	0	0	118	11,576	3	0	1	127	11,649	3	0	1	128	6,569	2	0	0	72
			T5S	10,860	3	0	1	119	11,662	3	0	1	128	11,734	3	0	1	129	6,569	2	0	0	72
			T5M	10,879	3	0	2	120	11,682	3	0	2	128	11,755	3	0	2	129	6,491	3	0	1	71
			T5W	10,719	3	0	2	118	11,511	4	0	2	126	11,583	4	0	2	127	6,504	3	0	2	71
			BLC	7,819	1	0	2	86	8,396	1	0	2	92	8,448	1	0	2	93					
			LCCO	7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90					
			RCCCO	7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90					
	1000 mA	138 W	T1S	13,767	2	0	2	100	14,783	3	0	3	107	14,876	3	0	3	108					
			T2S	14,194	2	0	2	103	15,242	3	0	3	110	15,338	3	0	3	111					
			T2M	13,869	2	0	2	101	14,893	3	0	3	108	14,986	3	0	3	109					
			T3S	13,852	2	0	2	100	14,875	2	0	2	108	14,968	2	0	2	108					
			T3M	13,978	2	0	2	101	15,010	3	0	3	109	15,104	3	0	3	109					
			T4M	14,168	2	0	2	103	15,214	3	0	3	110	15,309	3	0	3	111					
			TFTM	13,956	2	0	3	101	14,987	2	0	3	109	15,080	2	0	3	109					
			T5VS	14,744	3	0	1	107	15,832	3	0	1	115	15,931	4	0	1	115					
			T5S	14,852	3	0	1	108	15,948	3	0	1	116	16,048	3	0	1	116					
			T5M	14,878	4	0	2	108	15,976	4	0	2	116	16,076	4	0	2	116					
			T5W	14,660	4	0	2	106	15,742	4	0	2	114	15,840	4	0	2	115					
			BLC	10,325	1	0	2	75	11,087	1	0	2	80	11,156	1	0	2	81					
			LCCO	10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79					
			RCCO	10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79					

Performance Data

L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	6,130	2	0	2	118	6,583	2	0	2	127	6,624	2	0	2	127	3,841	2	0	2	74
			T2S	6,321	2	0	2	122	6,787	2	0	2	131	6,830	3	0	3	131	3,912	2	0	2	75
			T2M	6,176	2	0	2	119	6,632	3	0	3	128	6,673	3	0	3	128	3,837	2	0	2	74
			T3S	6,168	2	0	2	119	6,624	3	0	3	127	6,665	3	0	3	128	3,866	2	0	2	74
			T3M	6,224	3	0	3	120	6,684	3	0	3	129	6,726	3	0	3	129	3,904	2	0	2	75
			T4M	6,309	3	0	3	121	6,775	3	0	3	130	6,817	3	0	3	131	3,884	2	0	2	75
			TFTM	6,215	3	0	3	120	6,673	3	0	3	128	6,715	3	0	3	129	3,839	2	0	2	74
			T5VS	6,565	2	0	0	126	7,050	2	0	0	136	7,094	2	0	0	136	4,005	2	0	0	77
			T5S	6,613	2	0	0	127	7,102	2	0	0	137	7,146	2	0	0	137	4,065	2	0	0	78
			T5M	6,625	3	0	1	127	7,114	3	0	1	137	7,159	3	0	1	138	4,017	2	0	1	77
			T5W	6,528	3	0	1	126	7,010	3	0	2	135	7,054	3	0	2	136	4,025	3	0	1	77
			BLC	4,747	2	0	2	91	5,098	2	0	2	98	5,130	2	0	2	99					
			LCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
			RCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
	700 mA	70 W	T1S	7,786	2	0	2	111	8,361	3	0	3	119	8,413	3	0	3	120	4,783	2	0	2	68
			T2S	8,028	2	0	2	115	8,620	3	0	3	123	8,674	3	0	3	124	4,873	2	0	2	70
			T2M	7,844	3	0	3	112	8,423	3	0	3	120	8,476	3	0	3	121	4,779	2	0	2	68
			T3S	7,834	3	0	3	112	8,413	3	0	3	120	8,465	3	0	3	121	4,815	2	0	2	69
			T3M	7,905	3	0	3	113	8,489	3	0	3	121	8,542	3	0	3	122	4,862	3	0	3	69
			T4M	8,013	3	0	3	114	8,604	3	0	3	123	8,658	3	0	3	124	4,837	3	0	3	69
			TFTM	7,893	3	0	3	113	8,476	3	0	3	121	8,529	3	0	3	122	4,781	3	0	3	68
			T5VS	8,338	2	0	0	119	8,954	3	0	0	128	9,010	3	0	0	129	4,988	2	0	0	71
			T5S	8,400	2	0	0	120	9,020	3	0	1	129	9,076	3	0	1	130	5,063	2	0	0	72
			T5M	8,414	3	0	1	120	9,036	3	0	2	129	9,092	3	0	2	130	5,003	3	0	1	71
			T5W	8,291	3	0	2	118	8,903	3	0	2	127	8,959	3	0	2	128	5,013	3	0	1	72
			BLC	6,044	2	0	2	86	6,490	3	0	3	93	6,530	3	0	3	93					
			LCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
			RCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
	1000 mA	104 W	T1S	10,648	3	0	3	102	11,434	3	0	3	110	11,506	3	0	3	111					
			T2S	10,979	3	0	3	106	11,789	3	0	3	113	11,863	3	0	3	114					
			T2M	10,727	3	0	3	103	11,519	3	0	3	111	11,591	3	0	3	111					
			T3S	10,714	3	0	3	103	11,505	3	0	3	111	11,577	3	0	3	111					
			T3M	10,812	3	0	3	104	11,610	4	0	4	112	11,682	4	0	4	112					
			T4M	10,958	3	0	3	105	11,767	3	0	3	113	11,841	3	0	3	114					
			TFTM	10,795	3	0	3	104	11,592	3	0	3	111	11,664	4	0	4	112					
			T5VS	11,404	3	0	0	110	12,245	3	0	1	118	12,322	3	0	1	118					
			T5S	11,487	3	0	1	110	12,336	3	0	1	119	12,413	3	0	1	119					
			T5M	11,508	3	0	2	111	12,357	4	0	2	119	12,434	4	0	2	120					
			T5W	11,339	4	0	2	109	12,176	4	0	2	117	12,252	4	0	2	118					
			BLC	7,981	3	0	3	77	8,570	3	0	3	82	8,624	3	0	3	83					
			LCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					
			RCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft^2) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) configurations consist of 20, 30 or 40 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV or 6kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

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.

TYPE SD

Wall luminaires with cutoff optics

Housing: Constructed of copper free die-cast aluminum alloy. The housing uses stainless steel inserts for enclosure attachment. Mounts over a standard 3½" or 4" octagonal wiring box. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: Tempered, matte glass lens. One piece die-cast, copper free, louvered, aluminum face plate secured to the housing with four captive socket head, stainless steel screws. Semi specular, anodized aluminum internal reflector. Fully gasketed for water tight operation using a silicone rubber gasket.

Electrical: 26W LED luminaire, 32 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

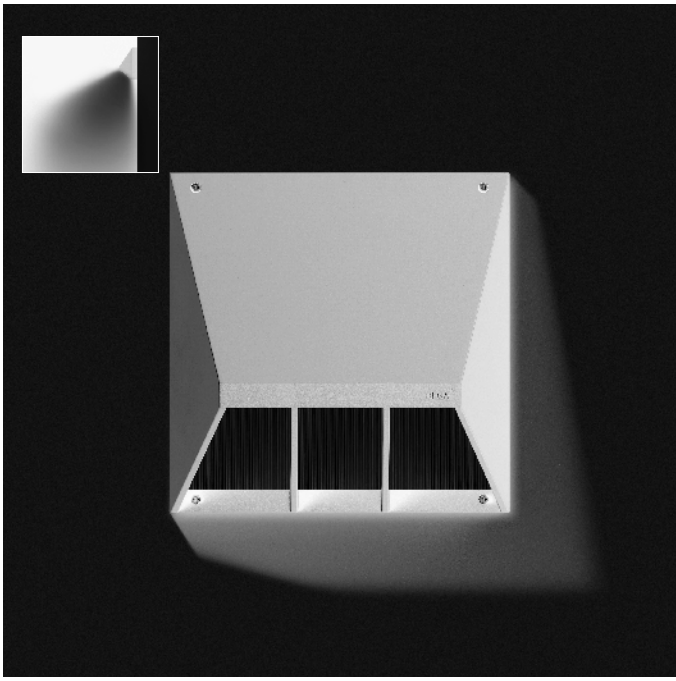
CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

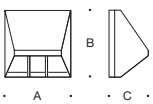
Weight: 4.0 lbs.

Luminaire Lumens: 1124

Tested in accordance with LM-79-08

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:





	Lamp	A	B	C
22256	26W LED	7⅞	7⅞	4½

BEGA-US 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com

M9410/M9430

Modular In-Grade Luminaire Single Lens LED

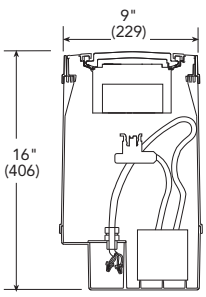
LED *IP68*

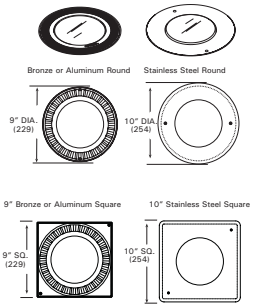
SUITABLE FOR WET LOCATIONS

CATALOG NUMBER	
NOTES	TYPE SG
TYPE	

Specifications

L:	9″
	229 mm
W:	9″
	229 mm
H:	16″
	407 mm





DESCRIPTION

Hydrel's M9410/M9430 Series modular in-grade lights are multi-purpose units designed for uplighting architectural and landscape features. These units can be flush mounted into a variety of substrates or landscape materials including concrete.

The M9410/M9430 consists of a factory-sealed lamp module and encapsulated power module. The components are secured inside a heavy-duty polymer rough-in housing designed with channeled convective cooling, an integral junction box, and finish door trim assembly.

ORDERING INFORMATION

EXAMPLE: M9410 SS 12LED WHT41K MVOLT NSP FLC10 34B IHL

Model	Door Material	Lamp Type	LED Color	Voltage	Distribution	Lens
M9410 Round	**A** Aluminum	**12LED**	**WHT30K** White	**MVOLT** (120-277)	**NSP** Narrow Spot	**FLC** Flat Lens Clear
M9430 Square	**B** Bronze		**WHT41K** White		**MFL** Medium Flood	**FLC10** Flat Lens Clear, 10° tilt
	SS Stainless Steel		**WHT53K** White		**FL** Flood	**FLC20** Flat Lens Clear, 20° tilt
			AMB Amber		**WFL** Wide Flood	**FLF** Flat Lens Frosted
			BLU Blue		**VWFL**[1] Very Wide Flood (no optics)	**FLCAS** Flat Lens Clear, Anti-Slip
			GRN Green		**HSP** Horizontal Spot	**FLCSR**[2] Flat Lens, Slip Resistant
			RED Red		**HFL** Horizontal Flood	**CLC** Convex Lens, Clear
						CLF Convex Lens, Frosted

Conduit Entries	Accessories	Options	Finish[8]	Listing
12B 1/2″ NPT Bottom	**Internal**[5]	**LDIM** 0-10V Dimming (dims to 40%)	**BL** Black	**IEC**[4] International Electrotechnical Commission
12S 1/2″ NPT Side	**IHL** Internal Honeycomb Louver		**BZ** Bronze	
34B[3] 3/4″ NPT Bottom	**LSF**[6] Linear Spread Filter		**DDB** Dark Bronze	
34S 3/4″ NPT Side	**FRF** Frosted Filter		**DNA** Natural Aluminum	
25S[4] Two 25mm Side	**External**[5,7]		**GN** Green	
	GS Glare Shield		**GR** Gray	
	LC Lexan Cover		**SND** Sand	
	RG[6] Rock Guard		**STG** Steel Gray	
	Trim Ring[5,7]		**TVG** Terra Verde Green	
	BTR Brass Round		**WH** White	
	BTS Brass Square		**__Z**[9] Zinc Undercoat (i.e. BLZ)	
	STR Stainless Round			
	STS Stainless Square			

M9400 Series Assembly consists of the following individual components parts	MRIS94 Rough-In Housing
	MFS94 Finishing Section
	MACS Lamp Module
	MHSL94 Power Module

Notes:
1. FRF filter needed with VWFL.
2. Meets ADA requirements for coefficient of friction.
3. Default conduit entry.
4. Only for use in 50HZ applications.
5. Accessories are mutually exclusive, choose one only.
6. Not available with CLC or CLF convex lens.
7. Accessory not available with SS door material.
8. Paint only available with "A" material.
9. Add Zinc undercoat for harsh environments.

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Phone: 866.533.9901 • www.hydrel.com

06/01/16
M9410_M9430_LED_MONO

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. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivered Lumens
3000K 80CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	50	700
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	50	700
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	36	500
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	43	600
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	50	700
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	43	600
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	31	400
4000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700
5000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700

LED LIFE: L70/60,000 hours

OPERATING TEMPERATURE: -30°C Through 40°C

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **Fixture** platform in a **25°C ambient**, based on 8400 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.

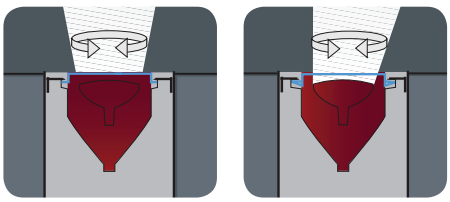
Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1	0.99	0.98	0.96

Electrical Load

			Current (A)					
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
12 LED	350mA	14	0.117	0.067	0.058	0.051	0.040	0.029

Slip Resistance and Load Rating

M9400
MAXIMUM LOAD RATING
Peak compression force of 7,700 lbs. (single lens) or 2,550 lbs. (double lens).
LENS STATIC COEFFICIENT OF FRICTION
M9400 Anti-Slip Lens (FLCAS): Dry = 0.76; Wet = 0.10
M9400 Slip Resistant Lens (FLSR): Dry = 0.84; Wet = 0.65



Single lensed fixture can be aimed using 10° and 20° tilt lenses only.

FEATURES & SPECIFICATIONS

DOOR MATERIAL: Cast Aluminum, cast bronze, cast aluminum or bronze with stainless perforated trim insert or Stainless Steel. Available in round or square door trim.

ROUGH-IN SECTION: Injection molded polymer with integral junction box for thru- branch wiring. The housing is U.V. stabilized, impact and corrosion resistant for use in all types of environments. The rough-in has a cylinder configuration and houses the lamp components and top door finishing section.

LAMP MODULE: Stainless steel housing, factory-sealed and purged of all moisture for longer component life. Lens is sealed with silicone gasket and stainless steel clamp band assembly with single fastener. Electrical connection to lamp module is done through a submersible quick pull plug connector with gold-plated contacts. (Lamp Included)

LAMP TYPE: LED: Monochromatic LEDs, (Lamp Included).

VOLTAGE: See ordering guide.

LIGHT DISTRIBUTION: See ordering guide.

FINISHING SECTION: Single lens design includes door assembly with 360° Aim-Lock™ lamp module support ring. Module indexing provides easy maintenance and relamping without re-aiming. Active optical lenses are also available. Door trim locks into position with two stainless steel captive, tamper-resistant fasteners.

POWER MODULE: LED driver is encapsulated in a custom designed heat-dissipating epoxy resin that also eliminates all moisture intrusion. Module is provided with submersible rated cord leads for connection to integral junction box and lamp module.

CONDUIT ENTRIES: Two (2) bottom or side entries available. Box suitable for through-branch wiring. Splicing volume is 25 in^3 (410 ccm)

NOTE: Potting compound (PC21) recommended for junction box splices. PC21 sold separately.

ACCESSORIES: See Ordering Guide.

FINISH: Finish is natural aluminum or bronze. Stainless steel door is brushed finish. Aluminum doors may be painted. See ordering guide.

LISTING: U.L., C.U.L., C.E.

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.

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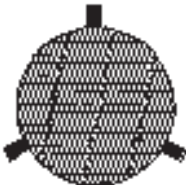
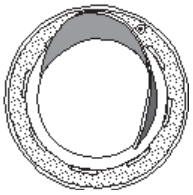
INTERNAL



INTERNAL HONEYCOMB LOUVERS
Hexagonal cell louver with 45° cut-off.

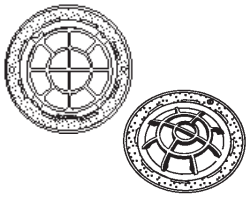
IHL

EXTERNAL



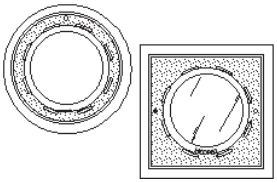
QUARTER GLARE SHIELDS
Rolled sheet aluminum or brass. 360° of adjustment on fixture door, with lock down. May be field installed to door as shown.
(Not recommended for foot traffic areas.)

GS



ROCKGUARD (EXTERNAL)
Cast aluminum or cast bronze material.
(Not recommended for foot traffic areas.)

RG



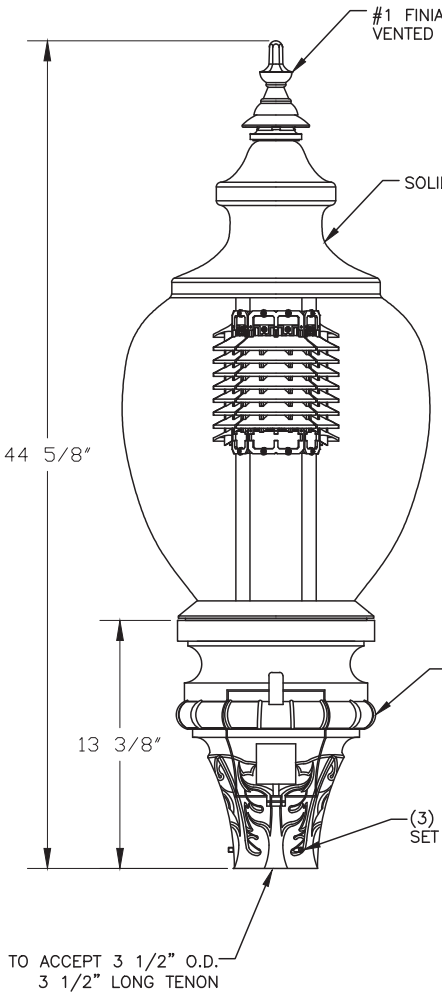
STAINLESS STEEL or BRONZE TRIM RINGS
A decorative escutcheon used when a high finish look is wanted. For finishing marble, tile or other installations. Available in round or square. Door is flush with escutcheon. Not available on SS doors.

BTR
BTS
STR
STS

LEXAN DOME
A Lexan protective cover for use in areas where loose debris such as leaves and pine needles accumulate.
(Not recommended for foot traffic areas.)

LC

TYPE SH
CAMAS
STD



NOTE:
LONG LIFE PHOTOCELL
RIPLEY 6390LL-BK BY
OTHERS

REV.	ALTERATION	DATE	BY
A	NOT ADDED	04/19/16	T.B
B	LONG LIFE PHOTOCELL SPECIFIED AS 6390LL-BK BY RIPLEY LIGHTING CONTROLS.	5/3/16	M.Y
C	OPTICS WAS R1AR WITH TYPE III DISTRIBUTION	06/06/16	T.B

LUMINAIRE SPECIFICATIONS

CATALOGUE NO.:	K118R-B3AR-IV-60(SSL) -1036-120:277V-K14-PR7-SST
QUANTITY:	
POLE ADAPTOR:	K14
OPTICAL SYSTEM:	BAFFLED ARRAY ACRYLIC RIPPLED
IES LTG. CLASS.:	TYPE IV
INPUT WATTS:	60W SOLID STATE LIGHTING
SERIES:	1036
CCT / DIODE:	4000K / HE5
LINE VOLTAGE:	120:277V
PAINT:	TEXTURED BLACK
OPTIONS:	C/W SOLID SPUN TOP & 7-PRONG TWISTLOCK PHOTOCELL RECEPTACLE ANSI STANDARD C136.41 (PHOTO-EYE BY OTHERS)

OPTIONS
QUICK DISCONNECT [X]

NOTE:
"NOTE THAT THIS FIXTURE IS BY DEFAULT SHIPPED IN 'NON-ADAPTIVE MODE'. THE FIXTURE IS FIELD SWITCHABLE TO 'ADAPTIVE-MODE' IF ADAPTIVE TECHNOLOGY IS TO BE UTILIZED. NOTE THAT SWITCHING TO 'ADAPTIVE MODE' MAY INCREASE THE NOMINAL INPUT POWER OF THE FIXTURE. PLEASE CONTACT THE FACTORY FOR FURTHER DETAILS"

CUSTOMER APPROVAL & DATE: _____

CUSTOMER ORDER No:	
STRESSCRETE ORDER No:	
KMFG. ORDER No:	
KING U.S. ORDER No:	

King Luminaire • StressCrete • Est. 1953
STRESSCRETE GROUP

Manufacturing Locations:
Burlington, Ontario 1-800-268-7809
Northport, Alabama 1-800-435-6563
Atchison, Kansas 1-800-837-1024
Jefferson, Ohio 1-800-268-7809

PROJECT/CUSTOMER: CITY OF CAMAS, WA

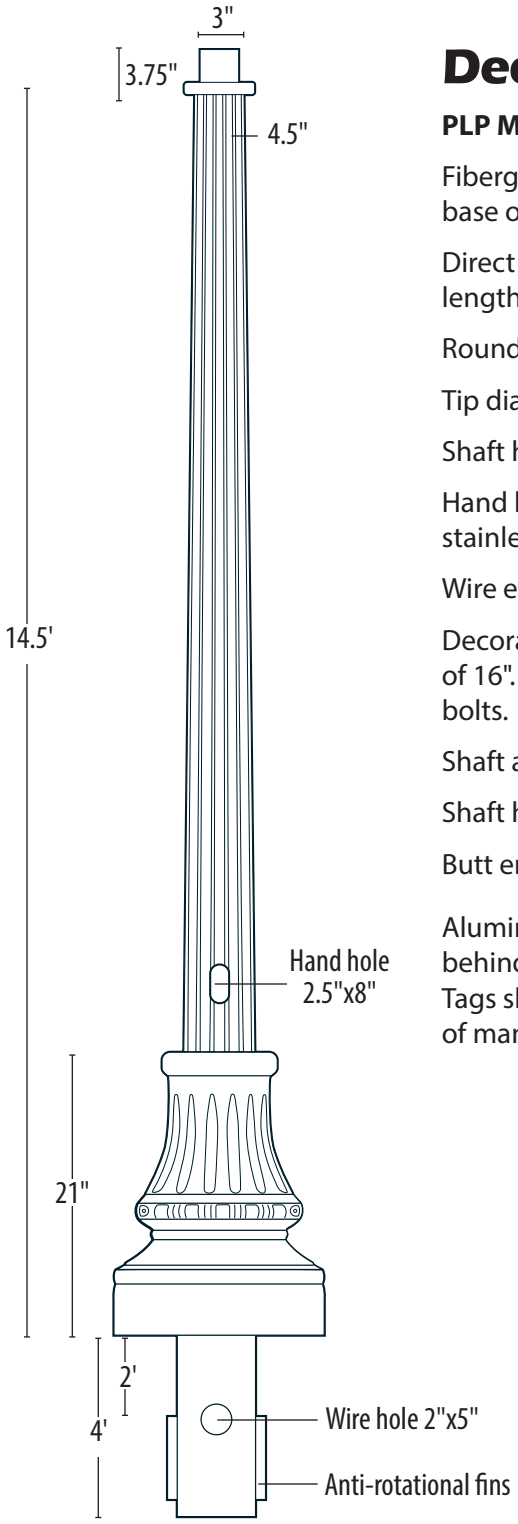
DRAWN BY:	AT:	CHECKED BY:	DATE:	REVISION:
TASHI B.	SC1		02/29/16	C

DRAWING TYPE:	DRAWING NUMBER:
APPROVAL/MFG. DWG.	CAMAS-1

Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

TYPE SH
CAMAS
STD



Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

Fiberglass reinforced composite fluted shaft with decorative 2-piece (clam shell) base of casting urethane.

Direct burial (embedded) style with a 14.5' mounting height and an overall length of 18.5' allowing 4 feet to be buried below grade.

Round tapered fluted shaft.

Tip diameter is 4.5" and ground level diameter is 6.5".

Shaft hand hole is 2.5"x8" above the decorative base.

Hand hole is equipped with a non-conductive cover with vandal resistant 1/4-20 stainless steel screws.

Wire entrance hole of 2"x5" with nylon grommet 2' below grade.

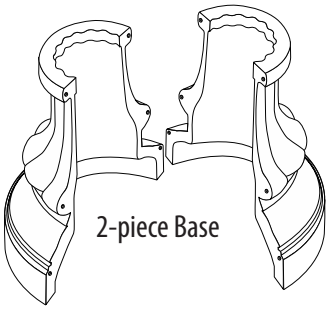
Decorative base for the PLP "Dominion" design is 21" high with a base diameter of 16". The 2-piece "clam shell" design is secured together with stainless steel bolts.

Shaft and decorative base are black with a textured satin "cast iron" finish.

Shaft has a post top steel tenon of 3"x3.75"

Butt end of the shaft has anti-rotational/anti-lift fins.

Aluminum identification tags are fixed to the shaft behind the base and on the inside of the base itself. Tags show manufacturer, model number and date of manufacture.



Project/Customer: _____

Date: _____

Revision: _____

Drawing Number: _____

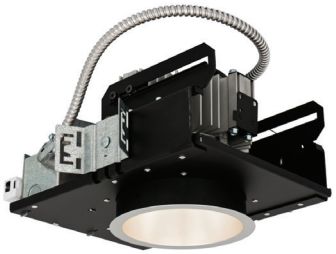
PLP Composite Technologies, Inc.

57 Creamery Road • PO Box 429 • Fitzwilliam, NH 03447 • Tel: 603-585-9100 • Fax: 603-585-3470 • www.plpcomp.com

TYPE DN

gotham®

Luminaire Type:
Catalog Number (autopopulated):



Gotham Architectural Downlighting
LED Downlights

6" Incito®
Downlight

Solid-State Lighting
(US and International Patents Pending)

FEATURES

INTENDED USE
- Achieve the lowest installed power density and operating costs while achieving every layer of light via the optimized general illumination distributions from the EVO family, and the high centerbeam accent layers from the highly flexible Incito family. The EVO and Incito families maintain consistent luminous apertures, dimming characteristics, and color quality to ensure the blending of families in common spaces renders an unparalleled, tailored visual experience.

OPTICAL SYSTEM
- Ten optimized distribution patterns allow designers to achieve tailored effects.
- Self-flanged semi-specular or matte-diffuse lower reflector utilized in combination with a highly transmissive lens.
- Patented Bounding Ray™ Optical Principle design (U.S. Patent No. 5,800,050) provides smooth and continuous transition from lensed source to the top of the reflector down to the bottom of the reflector.

MECHANICAL SYSTEM
- Light engine and driver are accessible from above or below ceiling.
- 16-gauge black painted steel mounting frame with C-channel mounting bars included. Post-installation adjustment possible from above or below ceiling.
- Galvanized steel junction box with hinged access covers and spring latch. Three combination 1/2"-3/4" and one 1/2" knockout for straight-through conduit runs. Capacity: 8 (4in, 4out) No. 12 AWG conductors rated for 90°C.
- Accommodates up to 1½"-thick ceilings.

ELECTRICAL SYSTEM
- Solid-state LED light engine available in 2700 K, 3000 K, 3500 K or 4000 K color temperatures. CRI: 85 typical.
- eldoLED ecoDrive 0-10V driver available with 10% dimming level.
- eldoLED ecoDrive 0-10V driver available with 1% dimming level.
- eldoLED SOLOdrive 0-10V driver available with <1% dimming level.
- eldoLED SOLOdrive DALI driver available with <1% dimming level.
- eldoLED POWERdrive DMX with RDM (remote device management) available with <1% dimming level.
- Rated system life of 60,000 hours at >70% output.
- Emergency battery pack with remote test switch available.
- Tested in accordance with LM-79 and LM-80 standards.

LISTINGS
- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling.

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.

ORDERING INFORMATION

A+ Capable options indicated by this color background.

EXAMPLE: ICO 30/50 6ARFL LD 20D 120 EZB

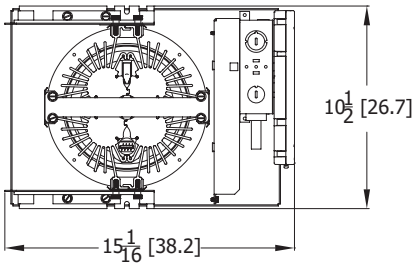
Series	Color temperature	Nominal delivered lumen values[1]	Aperture/Trim color	Trim style	Finish	Beam	Voltage
ICO	**27/** 2700 K **30/** 3000 K **35/** 3500 K **40/** 4000 K	**20** 2000 lumens **25** 2500 lumens **30** 3000 lumens **35** 3500 lumens **40** 4000 lumens **45** 4500 lumens **50** 5000 lumens **55** 5500 lumens **60** 6000 lumens **65** 6500 lumens **70** 7000 lumens **75** 7500 lumens **80** 8000 lumens **85** 8500 lumens	**6AR** Clear **6PR** Pewter **6WTR** Wheat **6GR** Gold **6WR**[2] White **6BR**[2] Black	(blank) Self-flanged **FL** Flangeless	**LSS** Semi-specular **LD** Matte diffuse	**20D** 20° beam angle **25D** 25° beam angle **30D** 30° beam angle **35D** 35° beam angle **40D** 40° beam angle **45D** 45° beam angle **55D** 55° beam angle **60D** 60° beam angle **65D** 65° beam angle **70D** 70° beam angle	**120** **277** **347**[3]

Driver		Options			
EZ10	eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	**SF**	Single fuse	**HAO**	High ambient capability up to 40°C. Fixture height is 10-3/8"
EZ1	eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	**TRW**[4]	White painted flange	**NPS80EZ**	nLight® dimming pack controls 0-10V eldoLED drivers.
EZB	eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	**TRBL**[5]	Black painted flange	**NPS80EZ ER**[8]	nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit.
EDAB	eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.	**ELR**[6]	Emergency battery pack with remote test switch	**LTVI**[9]	Lutron ECOsystem interface for compatibility with 0-10V EZ10, EZ1 or EZB.
EDXB	eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to DMXR Manual.	**CP**[7]	Chicago plenum	**RRL__**	RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.
		BGTD	Bodine generator transfer device		
		CRI90	High CRI (90+)		

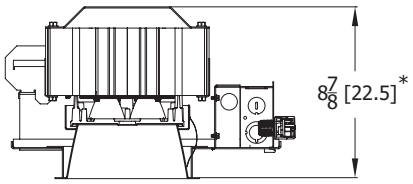
ACCESSORIES order as separate catalog numbers (shipped separately)	
SCA	Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D. Refer to TECH-190.

DIMENSIONAL DATA

All dimensions are inches (centimeters) unless otherwise noted.



Aperture: 6-1/4 [15.8]
Ceiling opening: 6-15/16 [17.6]
Overlap trim: 7-1/2 [19.1] self-flanged
6-5/8 [16.8] flangeless



* HIGH AMBIENT FIXTURE HEIGHT - 10-5/8"

Incito Round Downlight - Flanged

Incito Round Downlight – Flangless (FL)

ELECTRICAL

WATTAGE CONSUMPTION MATRIX										
LUMENS	BEAM ANGLES									
	20	25	30	35	40	45	55	60	65	70
8500	93 W	93 W	93 W	93 W	93 W	106 W	106 W	106 W	106 W	106 W
8000	88 W	88 W	88 W	88 W	88 W	97 W	97 W	97 W	97 W	97 W
7500	80 W	80 W	80 W	80 W	80 W	93 W	93 W	93 W	93 W	93 W
7000	73 W	73 W	73 W	73 W	73 W	84 W	84 W	84 W	84 W	84 W
6500	69 W	69 W	69 W	69 W	69 W	80 W	80 W	80 W	80 W	80 W
6000	62 W	62 W	62 W	62 W	62 W	72 W	72 W	72 W	72 W	72 W
5500	57 W	57 W	57 W	57 W	57 W	65 W	65 W	65 W	65 W	65 W
5000	49 W	49 W	49 W	49 W	49 W	62 W	62 W	62 W	62 W	62 W
4500	45 W	45 W	45 W	45 W	45 W	54 W	54 W	54 W	54 W	54 W
4000	40 W	40 W	40 W	40 W	40 W	43 W	43 W	43 W	43 W	43 W
3500	34 W	34 W	34 W	34 W	34 W	37 W	37 W	37 W	37 W	37 W
3000	29 W	29 W	29 W	29 W	29 W	31 W	31 W	31 W	31 W	31 W
2500	26 W	26 W	26 W	26 W	26 W	29 W	29 W	29 W	29 W	29 W
2000	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W

EL/ELR AVAILABILITY / COMPATIBILITY – Initial Lumens				
LED			Initial Lumens	
Product	Lumens	Watts	EL/ ELR	ELRHL
ICO 6"	2000-8500	24-101	580	N/A

nLight® Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX [color]	Wide view (PIR / dual tech)	nWV 16 / nWV PDT 16
Photocell controls	**Model number**	Wall Switch w/ Raise/Lower (PIR / dual tech)	nWSX LV DX / nWSX PDT LV DX
On/Off & Dimming	nCM ADCX	**Cat-5 cables (plenum rated)**	**Model number**
		10', CAT5 10FT	CAT5 10FT J1
		15', CAT5 15FT	CAT5 15FT J1

NOTES

ORDERING NOTES

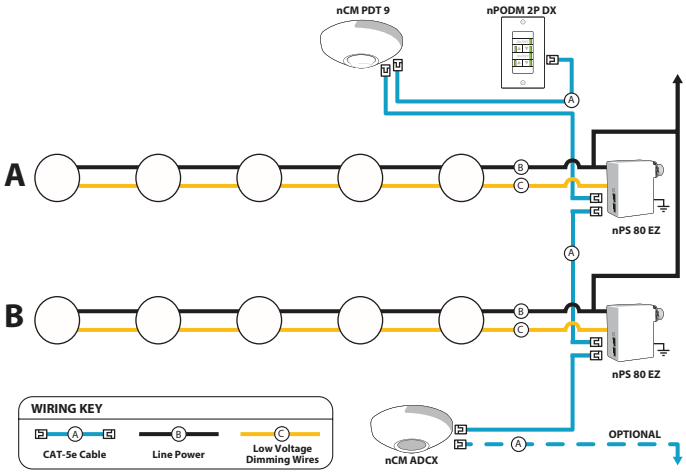
1. Nominal downlight lumens.
2. Not available with finishes. Not available with flangeless (FL) trim style.
3. Add 2" to overall height.
4. Not available with white reflector. Not applicable with FL option.
5. Not available with black reflector. Not applicable with FL option.
6. For dimensional changes, refer to TECH-140. Not available with CP option. Must specify 120V or 277V. Not available with 347V.
7. Chicago plenum available 5500 lumens and below.
8. For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
9. Shipped installed from the factory. Not available with CP.

CONSULT WWW.GOTHAMLIGHTING.COM FOR PHOTOMETRY

Choose Wall Controls.
nLIGHT o□ers multiple styles of wall controls – each with varying features and user experience.

Push-Button WallPod
Traditional tactile buttons and LED user feedback

Graphic WallPod
Full color touch screen provides a sophisticated look and feel



EXAMPLE
Group Fixture Control*
*Application diagram applies for fixtures with eldoLED drivers only.

nPS 80 EZ Dimming/Control Pack (qty 2 required)
nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
nCM ADCX Daylight Sensor with Automatic Dimming Control
nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

EXHIBIT 12

Sharp Electronics Corporation

PRELIMINARY WETLAND AND HABITAT ASSESSMENT

5700 NW Pacific Rim Blvd.
Camas, Washington

Prepared for:
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

Prepared by:
The Resource Company, Inc.
915 Broadway, Ste. 250
Vancouver, WA 98660
(360) 693-4555

August 28, 2013

The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION

PRELIMINART WETLAND AND HABITAT ASSESSMENT

Project/Applicant: Sharp Electronics Corporation
Location: 5700 NW Pacific Rim Blvd, Camas, WA
Legal Description: SE ¼ of Section 05, T01N, R03E, W. M.; Clark County
Tax ID No.: 125651-000
Zoning: LI/BP
ComPlan: LI/BP
Project Type: Unknown
Assessment by: Kevin Grosz, P.W.S.
Site Visit: August 07& 23, 2013
Report Date: August 28, 2013

INTRODUCTION

This report details the results of a preliminary wetland and habitat assessment conducted for Sharp Electronics Corporation, Camas, Washington. The study site (approx. 118 acres) is located at 5700 NW Pacific Rim Boulevard (Fig. 1). This report identifies the extent of any sensitive lands found within the study area as defined by the City of Camas Critical Areas Ordinance (CCAO – 16.51) – Wetlands (16.53) and Fish and Wildlife Habitat Conservation Area (16.61) and Sensitive Areas and Open Space (SAOS) 18.31.

The study site currently contains two buildings and several parking lots that serve as the Sharp Electronics Corporation campus in the southeast portion of the property. The buildings and parking lots make up approximately one-fourth of the property. The remaining three-fourths of the property exists mostly as urban forestland dominated by big-leaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*). Blackberry (*Rubus* spp.) occurs throughout the project area. Remnants of an old fruit orchard occur on portions of the property. The property slopes moderately to steeply from south to north as shown in Figure 2. Through the course of the preliminary assessment four potential wetlands were identified within the project area. In addition, the site contains "significant trees" as defined under CMC 18.03.050.

BASELINE CONDITIONS

The project area is located within Water Resources Inventory Area (WRIA) 28. WRIA 28 is located in Southwest Washington, with boundaries that extend to the western margins of the Wind River to the east, the Columbia River to the south, and the East Fork Lewis River to the north. The inventory area includes the south and eastern portions of Clark County and southwestern Skamania County.

The project area is located within the Lacamas Creek watershed. The Lacamas Creek watershed area is approximately 67 square miles in size, its headwaters are located in forestland on private lands and in the Yacolt Burn State Forest. From its headwaters near Larch Mountain, the stream flows southwest for 11.8 miles, then turns and flows in a southeasterly direction for 10.5 miles

until its confluence with the Washougal River. The land use in the watershed consists of a multitude of different uses, including forestry, agriculture, and residential.

WETLANDS (16.530

The wetland assessment was conducted according to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (USACE, 2010) hereafter, referred to as the manual. According to the manual, jurisdictional wetlands are defined as:

> *Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*

The manual uses three parameters in making wetland determinations: hydrophytic vegetation, hydric soils and wetland hydrology. Except in certain situations defined in the manual, evidence of a minimum of one positive indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.

FISH AND WILDLIFE HABITAT CONSERVATION AREAS (16.61)

The habitat assessment was conducted in accordance with the CCAO 16.61. The CCAO was enacted to designate and classify ecologically sensitive and hazardous areas and to protect these areas, their functions and values while allowing for some reasonable use of property. Identified fish and wildlife habitat conservation areas are to be preserved to the greatest extent possible. Any adverse impacts shall be mitigated so that there is no net loss of habitat functions or area. Regulated fish and wildlife habitat conservation areas include:

1. Areas with which State or Federally Designated Endangered, Threatened and Sensitive Species have a Primary Association. Field studies shall be conducted to determine the presence of these species within the study area.
2. State Priority Habitats and Areas Associated with State Priority Species. These areas are identified by Washington Department of Fish and Wildlife. A description of priority species and habitats is outlined in 16.61.010(3) of the CCAO.
3. Locally Important Habitats and Species – specifically Oregon White Oak and Camas Lily. Protection requirements for each of these species are outlined in 16.61.010(3)(a) for Oregon white oak and (b) for Camas lily.
4. Naturally occurring Ponds under 20-acres – these ponds and their submerged aquatic beds provide valuable fish and wildlife habitat.
5. Waters of the State – as defined by WAC 222-16-031
6. Bodies of water planted with game fish by a governmental or tribal entity
7. State Natural Area Preserves and Natural Resource Conservation Areas which are defined, established and managed by the Washington Department of Natural Resources.

SENITIVE AREAS AND OPEN SPACE (18.31)

According to Chapter 18.31.080, the City requires that to the extent practical, that existing healthy significant trees or preferably groups of significant trees be retained as undeveloped open space. Significant trees are defined under CMC 18.03.050 (environmental definitions) as: evergreen trees eight inches diameter breast height (dbh), and deciduous trees, other than red alder or cottonwood, 12 inches dbh.

REVIEW OF EXISTING INFORMATION

Prior to the on-site visit, a review was made of any existing information that would assist in conducting the wetland assessment. This included a review of aerial photos, Clark County Environmental Constraints Atlas, Clark County GIS Maps On-Line, National Wetland Inventory, Clark County Soil Survey, and Clark County Drainage maps.

The National Wetland Inventory (NWI) has not identified any wetlands within the study site. However, NWI maps are compiled from aerial photos and soil survey maps, and are not intended to represent the extent of jurisdictional wetlands.

The Clark County Soil Survey (Fig. 3) identifies the following soil mapping units within the subject parcel:

Dollar loam, 0 to 5 percent slopes (DoB). This soil is above the poorly drained McBee, coarse variant, soil and Hockinson and Cove soils, all of which occupy depressions. In a typical profile of Dollar loam, the surface layer is dark-brown loam about 6 inches thick. Below this is a friable heavy loam about 26 inches thick. It is dark reddish brown in the upper part and dark brown in the lower part. This soil is moderately well drained and is classified as a **nonhydric** soil according to the Clark County hydric soils list.

Olympic clay loam, 3 to 8 percent slopes (OlB). This soil is on ridge tops and benches. It is similar to Olympic clay loam, 8 to 20 percent slopes, except that it is not so steep and the surface layer is generally 1 to 3 inches thicker. This soil is classified as a **nonhydric** soil according to the Clark County hydric soils list.

Olympic clay loam, 8 to 20 percent slopes (OlD). This soil is on rolling, strongly sloping mountain foot slopes and long straight side slopes below ridgetops. In a typical profile, the upper 7 inches is friable, dark reddish-brown clay loam; the next 12 inches is firm, reddish-brown heavy clay loam. This soil is well drained and moderately slowly permeable. This soil is classified as a **nonhydric** soil according to the Clark County hydric soils list.

Olympic stony clay loam, 3 to 30 percent slopes (OmE). This soil is on ridgetops, on long side slopes, and short slopes along drainageways. It is similar to Olympic clay loam, 8 to 20 percent slopes, except that the surface layer is stony and the slope range is greater. This soil is classified as a **nonhydric** soil according to the Clark County hydric soils list.

Powell silt loam, 0 to 8 percent slopes (PoB). This soil is on ridge tops, benches, and gently sloping side slopes that lead into valleys in the Prune Hill area. In most places, the surface layer is smooth and convex, and the slope is less than 6 percent. In a typical profile, the surface layer is dark-brown silt loam about 17 inches thick. Below the surface layer is friable, mottled, grayish-brown, and brown silt loam about 6 inches thick. The next layer is brittle and about 22 inches thick. The soil is moderately well drained. The subsoil is slowly permeable. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

Powell silt loam, 8 to 20 percent slopes (PoD). This soil is on long, smooth side slopes below ridges and at the foot slopes of steep areas. It is similar to Powell silt loam, 0 to 8 percent slopes, except that it is steeper and the surrounding surface layer is 1 to 3 inches thinner. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

Powell silt loam, 20 to 30 percent slopes (PoE). This soil is on long, smooth side slopes. It is similar to Powell silt loam, 0 to 8 percent slopes, except that it is steeper and the surface layer is 1 to 3 inches thinner. In about 10 percent of the acreage, the slope is more than 30 percent. Surface runoff is medium to rapid, and the erosion hazard is moderate to severe if the surface is left bare. It is classified as a **non-hydric soil** according to the Clark County hydric soils list.

RESULTS AND DISCUSSION

Field visits were conducted on August 3 and 23, 2013 to observe soils, vegetation, and hydrology conditions. In addition to the wetland investigation, the site was also inspected for critical areas regulated under CMC 16.61 and SAOS 18.31.080.

Potential Wetland Areas

The study site exists primarily has an urban forestland. Through the course of the preliminary assessment, four potential wetland areas were identified within the study area. Three occur on the northern portion of the property and one in the southwest corner of the site as shown in Figure 4. Descriptions of these areas are found below.

Vegetation in the three wetland areas on the northern portion of the site have an Oregon ash (*Fraxinus latifolia*), black cottonwood (*Populus balsamifera*), and red alder overstory. The shrub layer consists of red-osier dogwood (*Cornus alba*), Scouler willow (*Salix scouleriana*), vine maple (*Acer circinatum*) and rose (*Rosa* spp.). Ground cover is a predominantly blackberry, with small patches of slough sedge (*Carex obnupta*) and stinging nettle (*Uticia dioica*). Vegetation in the wetland area in the southwestern portion of the site consists of bird's-foot trefoil (*Lotus corniculatus*), bentgrass (*Agrostis* spp.), soft rush (*Juncus effusus*), and tall fescue (*Festuca arundinacea*). The soil in these areas was a very dark gray (10YR 3/1) to very dark grayish brown (10YR 3/2) with brightly colored concentrations indicating the movement of water in the soil column. No primary hydrology indicators where observed. Considering that there has been no recordable precipitation since June 20, 2013, the lack of wetland hydrology was expected.

The potential wetlands on this site were not rated according Ecology's rating system for western Washington. However based on their small size, it is assumed that all four potential wetlands would rate as Category IV wetlands.

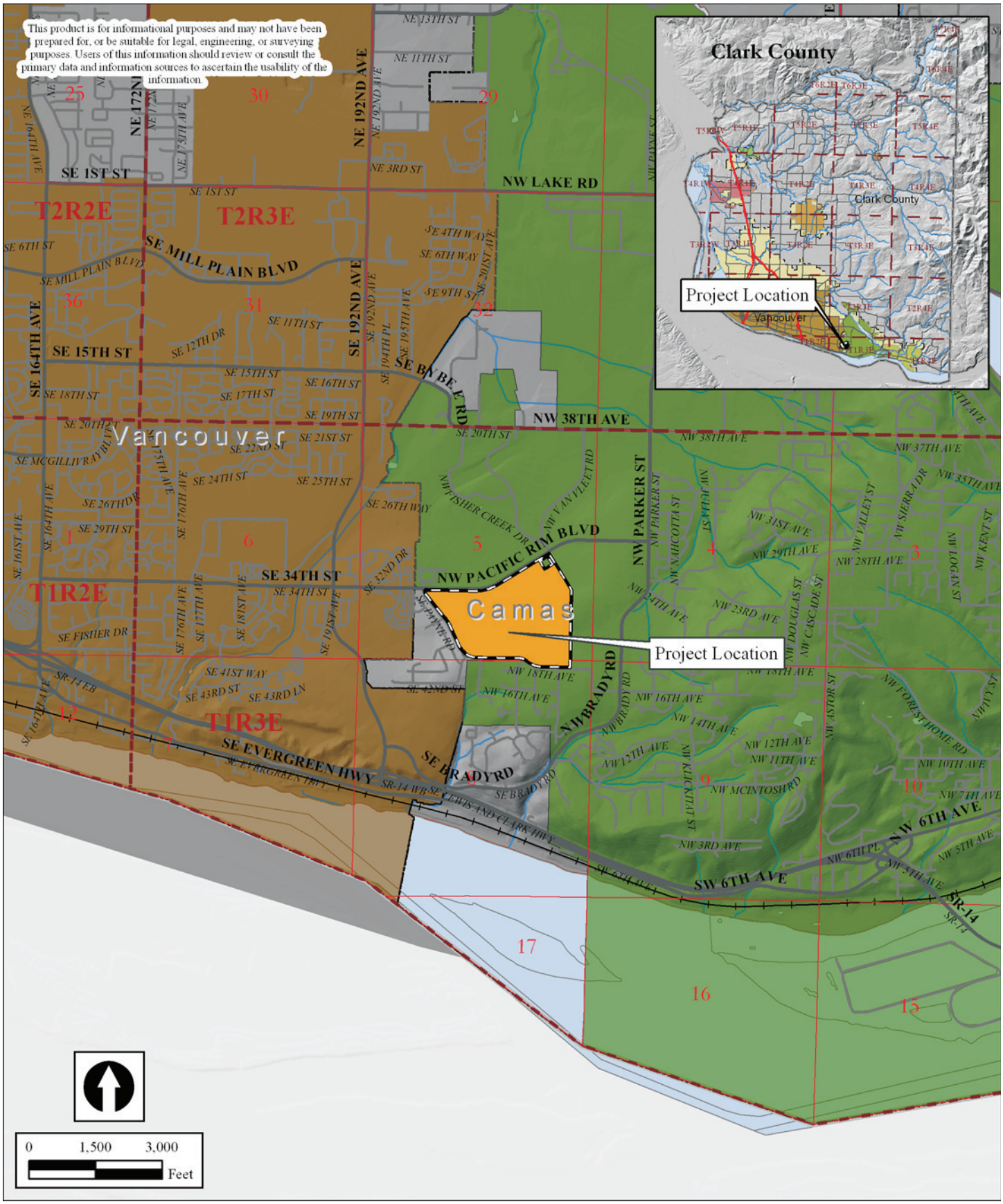
Fish & Wildlife Habitat Conservation Areas.
No fish and wildlife habitat areas as defined above were observed in the project area.

Sensitive Areas and Open Space
The site contains numerous coniferous and deciduous trees that meet the definition of significant as outlined in 18.03.050. A tree survey will need to be conducted to identify individual and groups of trees that meet this definition.

Upland Areas
The southern one-third on the property is predominantly open grassland that appears to be maintained on a regular basis. Blackberry thickets occur throughout this portion of the site. Portions of the study are remnant orchard areas that contain fruit trees (plums, apples, pears). The remainder of the site is forested. Vegetation in the forested portions of the site is dominated by big-leaf maple and red alder. Other trees that occur include black cottonwood, black locust, Douglas-fir (*Psudotsuga menziesii*) and western red cedar (*Thuja plicata*). Shrubs consist of vine maple, hazelnut (*Corylus cornuta*), snowberry (*Symphoricarpos occidentalis*), osoberry (*Oemleria cerasiformis*), and hawthorne (*Crataegus monogyna*). Ground cover consists of blackberry, swordfern (*Polystichum munitum*) and stinging nettle.

REGULATORY ISSUES

Four potential wetlands and numerous significant trees occur on the property that are regulated under the City's CAO and SAOP. The wetlands appear to meet the criteria of Category IV wetlands which have a buffer width of 50 feet under high intensity land use. A ditch has been dug along the northern edge of the property that parallels Pacific Rim Boulevard. The portion of the ditch on the western edge of the site originates from a catch basin along SE Payne Road and directs water to the western culvert shown in Figure 4. The portion of the ditch east of this culvert intercepts surface water and diverts it to this culvert (Fig. 4). These ditches were not dug in wetlands and do not appear to drain wetlands, therefore they were not considered jurisdictional wetlands. More detailed studies will be needed to delineate and rate the wetlands and to identify the locations of the significant trees.



APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

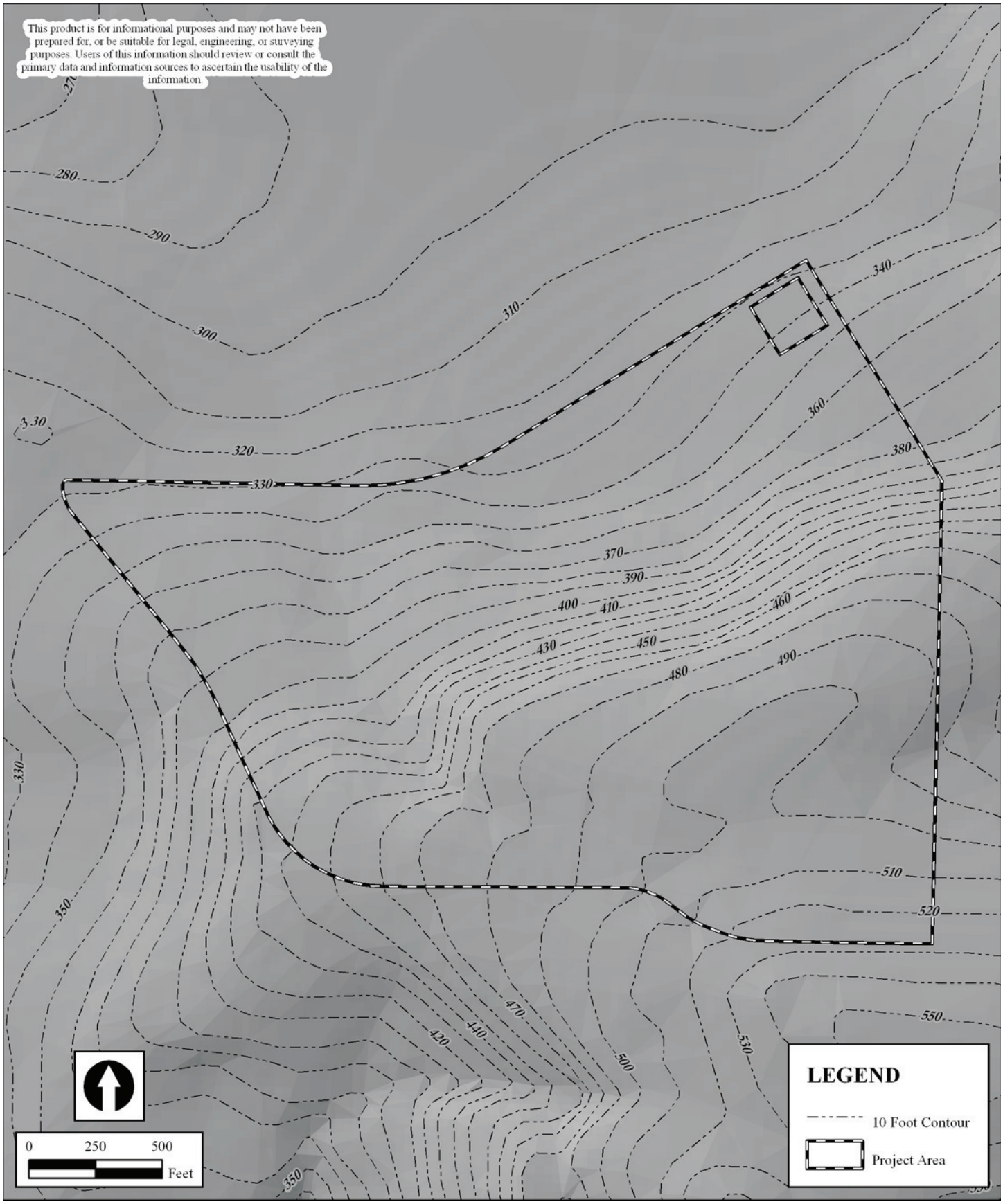
PURPOSE: Preliminary Wetland/Habitat Assessment

Project Location Map
Sharp Electronics Corporation
Camas, Washington

The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION
915 Broadway, Suite 250, Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Figure 1



APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Clark County LiDAR Topography
Sharp Electronics Corporation
Camas, Washington

The Resource Company, Inc.
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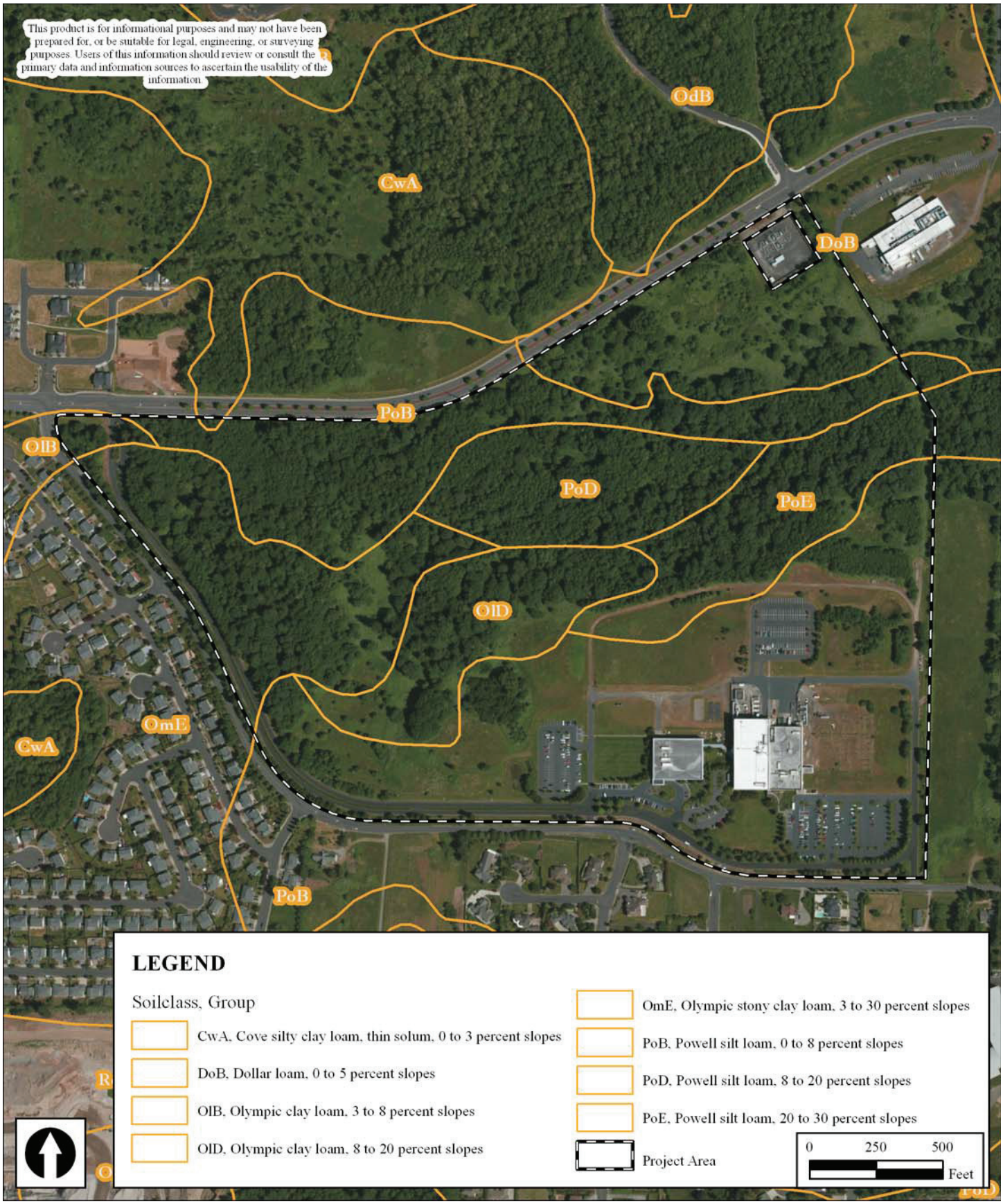
915 Broadway, Suite 250, Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Figure 2



APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Clark County Soil Survey Map
Sharp Electronics Corporation
Camas, Washington

The Resource Company, Inc.
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PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Figure 3

APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Approximate Environmental Constraints
Sharp Electronics Corporation
Camas, Washington

The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION
915 Broadway, Suite 250, Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Figure 4

APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Project Photographs
Sharp Electronics Corporation
Camas, Washington

The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION
915 Broadway, Suite 250, Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Photo Sheet 1

APPLICANT:
Mr. Casey O'Dell
Sharp Electronics Corporation
5700 NW Pacific Rim Blvd.
Camas, WA 98607

PURPOSE: Preliminary Wetland/Habitat Assessment

Project Photographs
Sharp Corp. Project
Camas, Washington

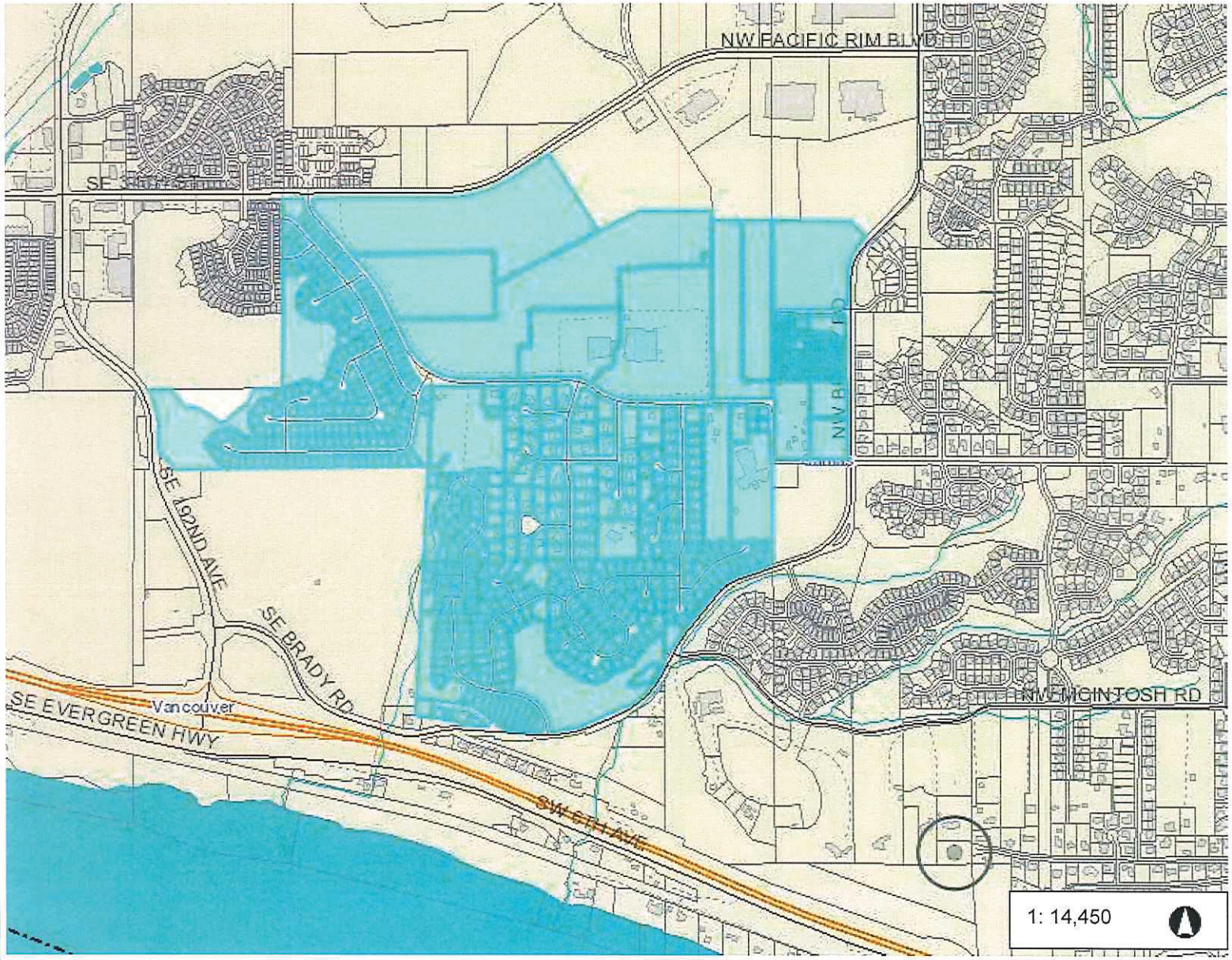
The Resource Company, Inc.
ENVIRONMENTAL SERVICES • GIS • HABITAT RESTORATION
915 Broadway, Suite 250, Vancouver, WA 98660 ph: 360-693-4555 fax: 360-699-6242

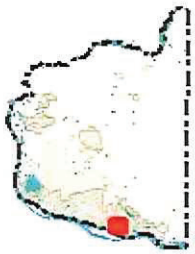
PROPOSED ACTIVITIES IN:
Lacamas Creek Watershed
LEGAL: S ½ of Section 5, T1N, R3E, W. M.,
NEAR: Camas, Washington
COUNTY: Clark County
DATE: August 28, 2013

Photo Sheet 2

Exhibit 13

PBL High School Public notice map





Legend

- Building Footprints
- Taxlots
- Cities Boundaries
- Urban Growth Boundaries

Notes:

2,408.3 0 1,204.17 2,408.3 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
Clark County, WA. GIS - http://gis.clark.wa.gov

TOLIVER RYAN & TOLIVER JODIE
4060 SE 196TH CT
CAMAS WA, 98607

TONEY CHARLES E TRUSTEE
CHARLES E TONEY LIVING TRUST
CAMAS WA, 98607

TORVE STEVEN
1215 NW GOODWIN ST
CAMAS WA, 98607

TRINH EDWARD
4004 SE SUNRISE DR
CAMAS WA, 98607

TSAI JAMES WEN & TSAI RINA
1421 NW GOODWIN ST
CAMAS WA, 98607

TU CHIH HSIEN & KU YI JIN
19617 SE 41ST ST
CAMAS WA, 98607

TUCKER DAVID J & TUCKER
4014 SE 199TH AVE
CAMAS WA, 98607

TUDOR ALINA & TUDOR SEBASTIAN
19813 SE LACY WAY
CAMAS WA, 98607

TYGER JOHN & TYGER JENNIFER
4018 SE 199TH AVE
CAMAS WA, 98607

TYRRELL STEVE E & TYRRELL
19811 SE 38TH CIR
CAMAS WA, 98607

ULMER DAVID & ULMER LINDA
1031 NW DEERFERN LOOP
CAMAS WA, 98607

UNDERWOOD JASON CRAIG
19808 SE 36TH ST
CAMAS WA, 98607

UNDERWOOD NICHOLAS S &
5249 NW FERNRIDGE DR
CAMAS WA, 98607

UNELL RENEE L
1058 NW AUTUMN CT
CAMAS WA, 98607

USMANI SHAHID A & USMANI KAHN
1233 NW WHITMAN ST
CAMAS WA, 98607

VAILEA IKA
C/O LAND TRUST
CAMAS WA, 98607

VAN FLEET RICHARD N & VAN FLEET
1326 NW WHITMAN
CAMAS WA, 98607

VASILE HOUSE LLC
1312 NW GOODWIN ST
CAMAS WA, 98607

VEA CHRIS C & VEA YOLANDA L
1424 NW DEERFERN ST
CAMAS WA, 98607

VELAYUTHAM RAVI & VEERAPPAN
5245 NW FERNRIDGE DR
CAMAS WA, 98607

VOLLSTEDT WILL N & VOLLSTEDT
3509 SE SUNRISE DR
CAMAS WA, 98607

VOSE MARTIN A & VOSE TERRI M
1046 NW DEERFERN LOOP
CAMAS WA, 98607

WALES KAREN A & WALES BILLY R
1420 NW GOODWIN ST
CAMAS WA, 98607

WALKER DOUGLAS E & WALKER AMY B
1649 NE BEECH ST
CAMAS WA, 98607

WALTERS MIKE W & WALTERS
19400 SE 42ND CIR
CAMAS WA, 98607

WANG XIAODONG & WANG HONG
6418 TUCKER DR
SAN JOSE CA, 95129

WANG YUNSONG & SHOU YIXIN
1019 NW FERNRIDGE CT
CAMAS WA, 98607

WARNER MICHAEL & WARNER
715 NW BRADY RD
CAMAS WA, 98607

WEEDMAN DAVID S & THOMAS LEONA
5241 NW FERNRIDGE DR
CAMAS WA, 98607

WEITHAS RICHARD T
4626 NW 11TH CIR
CAMAS WA, 98607

WELLS AMANDA M & WELLS KENT M
5329 NW GOODWIN LOOP
CAMAS WA, 98607

WESTBY JOSEPH N & WESTBY
19408 SE 42ND CIR
CAMAS WA, 98607

WESTFALL JOSEPH R & WESTFALL
1431 NW WHITMAN ST
CAMAS WA, 98607

WHITCOMB JAMES RILEY
5310 NW 13TH CIR
CAMAS WA, 98607

WHITE PETER T & WHITE TOUTOU P
PO BOX 489
CAMAS WA, 98607

WILCOX AARON S & WILCOX AUBREY L
5209 NW 14TH CIR
CAMAS WA, 98607

WILDE MICHAEL & WILDE SUSAN
1249 NW WHITMAN CT
CAMAS WA, 98607

WILLIAMS ROB J
1252 NW WHITMAN ST
CAMAS WA, 98607

WILLIAMSON JEFFREY & WILLIAMSON
2705 SOUTH SHORE BLVD
LAKE OSWEGO OR, 97034

WILSON PAUL & WILSON NATALIE
1423 NW BEECH CT
CAMAS WA, 98607

WINCHESTER HILLS HOMEOWNERS
13000 NE 93RD ST
VANCOUVER WA, 98682

WINCHESTER HILLS HOMEOWNERS
16320 NE 77TH CIR
VANCOUVER WA, 98682

WINSTON ADAM C & WINSTON
WINSTON FAMILY TRUST
CAMAS WA, 98607

WOLFRAM KRISTOPHER S & WOLFRAM
942 NW GRAND RIDGE DR
CAMAS WA, 98607

WONG BENTAL H & WONG REBEKAH A
5204 NW 17TH CIR
CAMAS WA, 98607

WONG GENE & WONG KAREN
4232 NW SAGE LP
CAMAS WA, 98607

WONG VINCENT
1205 NW DEERFERN ST
CAMAS WA, 98607

WONG WADE & WONG KIMBERLEE
3922 SE SUNRISE DR
CAMAS WA, 98607

WOOD DANIEL J & WOOD CYNTHIA
4032 SE 199TH AVE
CAMAS WA, 98607

WOODWARD JOHN R & YEE ELAINE M
5354 NW 18TH AVE
CAMAS WA, 98607

WORKMAN DAWN
4609 NW BASS ST
CAMAS WA, 98607

WRIGHT DAN W & WRIGHT JANICE A
1022 NW FERNRIDGE CT
CAMAS WA, 98607

WUNDERLICH KEVIN & WUNDERLICH
4041 SE HARMONY PLACE
CAMAS WA, 98607

XAVIER EUGENE A & XAVIER DEANNA
EUGENE A & DEANNA M XAVIER
CAMAS WA, 98607

YABLONSKIY VASILIY & YABLONSKIYA
703 SE 201ST AVE
CAMAS WA, 98607

YAN MAN PUI & YAN SUET HA ETAL
4112 SE 201ST AVE
CAMAS WA, 98607

YANG HYONG MO & YANG CARRIE
1234 NW WHITMAN ST
CAMAS WA, 98607

YANG PROPERTIES OF WASHINGTON
309 W 16TH ST
VANCOUVER WA, 98660

YBALLE LIZA S & CARAG HENRY
4551 NW 11TH CIR
CAMAS WA, 98607

YE GANG & JIANG LUYEE
845 NW GRAND RIDGE DR
CAMAS WA, 98607

RETCHLESS GREGORY & RETCHLESS
19815 SE 42ND ST
CAMAS WA, 98607

RICHARDS MARIA C
14202 SE 17TH CIR
VANCOUVER WA, 98683

RITTER THOMAS W & RITTER YAN NL
5226 14TH CIR
CAMAS WA, 98607

ROSEBRAUGH FRED E & ROSEBRAUGH
1601 NW DEERFERN ST
CAMAS WA, 98607

ROSENBERG NEVIN M & KREMER
5309 NW 13TH CIR
CAMAS WA, 98607

SAARINEN SEPPO & SAARINEN EVA
5215 NW 14TH CIR
CAMAS WA, 98607

SACCENTI JOHATHAN & SACCENTI
4054 SE 196TH CT
CAMAS WA, 98607

SADORRA CARLOS & SADORRA LEIGH
23822 VIA MONTE
TRABUCO CANYON CA, 92679

SALTI OSAMA & ALYA SIREEN ABU
1325 NW GOODWIN ST
CAMAS WA, 98607

SAMPSON JEROME & SAMPSON MARLA
19618 SE 41ST ST
CAMAS WA, 98607

SCHNELL WILLIAM & SCHNELL
20003 SE 42ND ST
CAMAS WA, 98607

SCHRADER DERRIN & SCHRADER
4804 NW 16TH CIR
CAMAS WA, 98607

SCHREIBER RANDY B & SCHREIBER
1035 NW WHITMAN ST
CAMAS WA, 98607

SCHREINER RODERIC WILLIAM &
1511 NW BEECH CT
CAMAS WA, 98607

SCHROEDER JAMES & SCHROEDER
1602 NW BEECH ST
CAMAS WA, 98607

SCHULL GARY M
929 NW GRAND RIDGE DR
CAMAS WA, 98607

SCHWOCHERT LU
19913 SE 42ND ST
CAMAS WA, 98607

SCOTT JEFF & SCOTT ELLEN
3615 NW 24TH CIR
CAMAS WA, 98607

SEYMOUR LEN I TRUSTEE
PO BOX 677
SOLDOTNA AK, 99669

SEYOUM MELKAM
19509 SE 42 CIRCLE
CAMAS WA, 98607

SHARP ELECTRONICS CORPORATION
5700 NW PACIFIC RIM BLVD
CAMAS WA, 98607

SHENG-WEN WANG & MING-SHAN
1051 NW DEERFERN LOOP
CAMAS WA, 98607

SHEPHERD GORDON E & SHEPHERD
4747 NW 16TH CIR
CAMAS WA, 98607

SHERBAN COMPANY INC
PO BOX 368
WASHOUGAL WA, 98671

SHIRA ERIC & SHIRA SHAYE
1416 NW GOODWIN ST
CAMAS WA, 98607

SHOJAEI MEHRDAD & BAVILIOLYAEI
5218 NW 14TH CIR
CAMAS WA, 98607

SHRESTHA BIBEK & SHRESTHA
1012 NW FERNRIDGE CT
CAMAS WA, 98607

SIKKEMA MARK EDWARD & SIKKEMA
5120 NW 17TH CIR
CAMAS WA, 98607

SILVA ROBERT J & SILVA HYADES L
19809 SE 42ND ST
CAMAS WA, 98607

SIMONSON MILO R & SIMONSON
19713 SE 42ND ST
CAMAS WA, 98607

SIRRAH HOMEONWERS ASSOCIATION
PO BOX 905
CAMAS WA, 98607

SISON LIANNE & SISON VINCENT L
830 VIA ALAMEDA
SAN DIMAS CA, 91773

SLR HOLDINGS LLC
1345 NW BEECH CT
CAMAS WA, 98607

SMITH SANDRA J
4106 SE 201ST AVE
CAMAS WA, 98607

SNELL JEFFREY
4040 SE HARMONY PL
CAMAS WA, 98607

SODERBERG PATRICK A & SODERBERG
5023 NW GOLDENBACK CIR
CAMAS WA, 98607

SOH BIN TECK & LU LI WEN
4910 NW HIGHPOINT DR
CAMAS WA, 98607

SORK TERESA D
1031 NE 277TH AVE
CAMAS WA, 98607

SOSA JOSE I JR
3 SHER NAN DR
MARYVILLE IL, 62062

STOCKWELL MICHAEL S & STOCKWELL
810 NW DEERFERN LOOP
CAMAS WA, 98607

SUETRONG PRODPRAN & ANDERSON
4044 SE HARMONY PL
CAMAS WA, 98607

SULLIVAN ROBERT L
1550 NW WHITMAN ST
CAMAS WA, 98607

SULLIVAN WILMA L TRUSTEE
2314 NE 160TH LOOP
VANCOUVER WA, 98684

SULTANI PAUL N & SULTANI LESLIE A
19517 SE 42ND CIR
CAMAS WA, 98607

SUMMERS QUENTIN W & JONES SARA
1026 NW DEERFERN LOOP
CAMAS WA, 98607

SUYEMATSU CURTIS & SUYEMATSU
1311 NW DEERFERN ST
CAMAS WA, 98607

SWAN KEVIN C & SWAN JULIE A
1003 NW WHITMAN ST
CAMAS WA, 98607

SWENSON GREGORY R & SWENSON
5314 NW 13TH CR
CAMAS WA, 98607

SWETTMAN WILLIAM P JR &
1248 NW DEERFERN ST
CAMAS WA, 98607

TALBITZER HOWARD & TALBITZER
4850 NW 18TH AVE
CAMAS WA, 98607

TANG GUO RONG & CHEN WENHUI
19807 SE 36TH ST
CAMAS WA, 98607

TATE TIM
934 NW GRAND RIDGE DR
CAMAS WA, 98607

TAYLOR MARLON A & TAYLOR
15805 NE 79TH ST
VANCOUVER WA, 98682

THIEMAN LARRY & THIEMAN ARLENE
5216 NW 17TH CIR
CAMAS WA, 98607

THORBURN ANDREW A & DE LOS
844 NW GRAND RIDGE DR
CAMAS WA, 98607

TIANTAWACH CHART
1058 NW DEERFERN LP
CAMAS WA, 98607

TIEASKIE SHANNON L & TIEASKIE
19816 SE 42ND ST
CAMAS WA, 98607

TIEN VIET HUYNH
594 W Y STREET
WASHOUGAL WA, 98671

TINGKAI LI & ZHEN ZHONG
1013 NW WHITMAN ST
CAMAS WA, 98607

TISHENKO PETER & TISHENKO NELLY
5234 NW FERNRIDGE DR
CAMAS WA, 98607

MILLER THOMAS M & MILLER OLGA P
4615 SE 202ND AVE
CAMAS WA, 98607

MITCHELL ROBERT KEVIN & MITCHELL
5338 NW GOODWIN LP
CAMAS WA, 98607

MONTLER MARIANNE
3610 SE SUNRISE DR
CAMAS WA, 98607

MOON VANESSA D
19506 SE 42ND CIR
CAMAS WA, 98607

MORELAND DENNIS J & MORELAND
1012 NW GOODWIN ST
CAMAS WA, 98607

MORRIS JAMES H
12804 ANGELINA DR
PEYTON CO, 80831

MORRIS ROSEMARIE
705 NW GRAND RIDGE DR
CAMAS WA, 98607

MORRIS TAMARA J
1440 170TH ST
HAMPTON IA, 50441

MUNION HEATHER
19816 SE LACY WAY
CAMAS WA, 98607

MUNSON-YOUNG ADAM J &
1018 NW FERNRIDGE CT
CAMAS WA, 98607

MURATA MASAYUKI
1405 NW WHITMAN CT
CAMAS WA, 98607

MURCH ANDREW & MURCH CARISSA
3906 SE SUNRISE DR
CAMAS WA, 98607

MURROW MARK DAVID & MURROW
1055 NW DEERFERN LOOP
CAMAS WA, 98607

MYERS MARY M
19609 SE 42ND ST
CAMAS WA, 98607

NAFFZIGER MARC C & NAFFZIGER
1711 NW WHITMAN ST
CAMAS WA, 98607

NAITO VERNER R
5264 NW FERNRIDGE DR
CAMAS WA, 98607

NAYLOR JEFFREY W
1501 NW WHITMAN ST
CAMAS WA, 98607

NESBITT JILL
1430 NW GOODWIN ST
CAMAS WA, 98607

NESTER DAVID & NESTER RHONDA
1041 NW DEERFERN LOOP
CAMAS WA, 98607

NGO HUY N & NGUYEN THOA K
5010 NW GOLDENBACK CIR
CAMAS WA, 98607

NGUYEN KIM
918 NW 31ST AVE
CAMAS WA, 98607

NGUYEN TAI D & NGUYEN HONG V
5341 NW GOODWIN LOOP
CAMAS WA, 98607

NIELSEN MICHAEL & NIELSEN META
5195 CAPES LOOP
NETARTS OR, 97143

NIELSEN MICHAEL & NIELSEN META
5303 NW 13TH CIR
CAMAS WA, 98607

NOUVE IMPRESE LLC
PO BOX 874090
CAMAS WA, 98607

NUSAIR MAEN & NAGGAR LEYLA E
5256 NW FERNRIDGE DR
CAMAS WA, 98607

OBEROI DEVINDER S & OBEROI
917 NW DEERFERN LOOP
CAMAS WA, 98607

OLANDER DONALD & OLANDER
655 NW BRADY RD
CAMAS WA, 98607

OLSON LANCE E & OLSON SUE A
1110 NW GOODWIN ST
CAMAS WA, 98607

ONOFREI SAMUEL & ONOFREI SANDA
812 NW SACAJAWEA ST
CAMAS WA, 98607

OTT ANDREW L
3804 SE SUNRISE DR
CAMAS WA, 98607

OUBARI AYMAN & JALLAD RIMA
13000 NE 242ND CRT
BRUSH PRAIRIE WA, 98606

OXFORD WADE A & OXFORD DEANNA
4022 SE 199TH AVE
CAMAS WA, 98607

PAGE JAMES R & MADDEN NORMA
4533 NW 11TH CIR
CAMAS WA, 98607

PARASA RAVI K & KILAMBI VAISHNAVI
1313 NW GOODWIN ST
CAMAS WA, 98607

PARK JEONGHO
824 NW DEERFERN LOOP
CAMAS WA, 98607

PARKER GEORGE & PARKER JANET
19713 SE 41ST ST
CAMAS WA, 98607

PARKER JAMES B & RODAKOWSKI
4906 NW HIGHPOINT DR
CAMAS WA, 98607

PARKER VILLAGE HOA
800 NE TENNEY RD #110-348
VANCOUVER WA, 98685

PARKER VILLAGE LLC
800 NE TENNEY RD #110-348
VANCOUVER WA, 98685

PATEL JESSICA C & PATEL CHIRAG R
747 NW GRAND RIDGE DR
CAMAS WA, 98607

PAUK BENJAMIN A & PAUK KRISTEN M
19507 SE 41ST CIR
CAMAS WA, 98607

PENG CHIN TE & KUAN YU PING
1062 NW DEERFERN LOOP
CAMAS WA, 98607

PETERSON SCOTT & PETERSON
4017 SE 199TH AVE
CAMAS WA, 98607

PIEN GENE C & PIFER-PIEN LESLIE
PIEN LIVING TRUST
CAMAS WA, 98607

PIKE JOSE M & PIKE SHANNON R
1251 NW WHITMAN ST
CAMAS WA, 98607

PILEGGI SANTINA & PILEGGI
1415 NW GOODWIN ST
CAMAS WA, 98607

PIZOT LAURENT P & PIZOT JENNIFER
19602 SE 41ST ST
CAMAS WA, 98607

POLICAR RICK & POLICAR LORIE
832 NW DEERFERN LOOP
CAMAS WA, 98607

POUSCHE TOMMY R & POUSCHE
4000 SE HARMONY PL
CAMAS WA, 98607

PRIOR CECIL W & PRIOR ISABELLA B
19501 SE 42ND CIR
CAMAS WA, 98607

PULLEN REBECCA G
4015 SE SUNRISE DR
CAMAS WA, 98607

PUSHKARIC SCOTT & PUSHKARIC
5430 NW 15th Cir
Camas WA, 98607

QIAN XIAN
5345 NW GOODWIN LOOP
CAMAS WA, 98607

RADY DORIAN & RADY MARIE
1312 NW GOODWIN ST
CAMAS WA, 98607

RAHIM MAINODEEN & RAHIM HUMA
19716 SE 42ND ST
CAMAS WA, 98607

RALSTON RICHARD ANTHONY &
5420 NW 15TH CIR
CAMAS WA, 98607

RANDOLPH DAVID E & RANDOLPH
1027 NW FERNRIDGE CT
CAMAS WA, 98607

REESE JEFF & REESE TRINA
823 NW GRAND RIDGE DR
CAMAS WA, 98607

REID ABIGAIL & REID DOUGLAS
4007 SE 199TH AVE
CAMAS WA, 98607

KINONEN CARL E & KINONEN L IRENE
3625 SE SUNRISE DR
CAMAS WA, 98607

KISELEV VITALY & KISELEV LARISA
5257 NW FERNRIDGE DR
CAMAS WA, 98607

KLEINMAN GRETCHEN H
5213 NW 17TH CIR
CAMAS WA, 98607

KONDO FLOYD & KONDO JANET
1227 NW DEERFERN ST
CAMAS WA, 98607

KOPPES LARRY J & KOPPES PEGGY A
813 NW DEERFERN LOOP
CAMAS WA, 98607

KOTKA GREGORY L & KOTKA JULIA M
1324 NW GOODWIN ST
CAMAS WA, 98607

KUO WALTER W & CHAO SOPHIA H
1719 NW DEERFERN ST
CAMAS WA, 98607

KUSSAD JAMAL & MORAD BOCHRA
4813 NW HIGHPOINT DR
CAMAS WA, 98607

KWON KEVIN Y & KWON MIRA
1432 NW DEERFERN STREET
CAMAS WA, 98607

LACHENMEIER KEVIN & LACHENMEIER
1246 NW WHITMAN CT
CAMAS WA, 98607

LAIRD GREGORY & LAIRD CAROL
1406 NW DEERFERN ST
CAMAS WA, 98607

LAM TUYET NHUNG & LE HOANG N
1000 NW 184TH ST
RIDGEFIELD WA, 98642

LANKIREDDY PRAVEEN K
1223 NW GOODWIN ST
CAMAS WA, 98607

LAPE GARY L JR & LAPE SARA A
19413 SE 42ND CIR
CAMAS WA, 98607

LARSON DAVID & LARSON GAIL
4120 SE 201ST AVE
CAMAS WA, 98607

LE ANDREW & HUYNH THUY
928 NW GRAND RIDGE DR
CAMAS WA, 98607

LE CHAU T & LE QUOC Q
5228 NW 14TH CIRCLE
CAMAS WA, 98607

LEE DAVID C & LEE KIMBERLEY C
5317 NW GOODWIN LOOP
CAMAS WA, 98607

LEE DAVID T & LEE TAMMY H
1055 NW AUTUMN CT
CAMAS WA, 98607

LEE HSING-HO
765 FOLSOM CIR
MILPITAS CA, 95035

LEE KAREN L
5261 NW FERNRIDGE DR
CAMAS WA, 98607

LEE SUNGHOON JAMES & LEE YOUNG
817 NW DEERFERN LOOP
CAMAS WA, 98607

LEETHAM KEVIN M & LEETHAM AMY L
4640 NW 11TH CIRCLE
CAMAS WA, 98607

LEHMAN LANCE I & LEHMAN ANDREA
1012 NW WHITMAN ST
CAMAS WA, 98607

LEIGHTON MARK & LEIGHTON SUE
1413 NW WHITMAN CT
CAMAS WA, 98607

LENARD TROY M & LENARD COLLEEN
4050 SE 196TH CRT
CAMAS WA, 98607

LENNAR NORTHWEST INC
11807 NE 99TH ST SUITE #1170
VANCOUVER WA, 98682

LEVENICK CHRISTIAN E & LEVENICK
C/O OWNER ACTION REQUIRED
CAMAS WA, 98607

LI JUE-MIN & CAI EDWARD Z
1054 NW AUTUMN CT
CAMAS WA, 98607

LI JUE-MIN & CAI EDWARD Z
4607 SE AUTUMN CT
CAMAS WA, 98607

LIESER RICHARD M & LIESER TAMARA
19404 SE 42ND CIR
CAMAS WA, 98607

LILIENTHAL FRANCES S TRUSTEE
FRANCES S LILIENTHAL REV
CAMAS WA, 98607

LIOU JIANN LIANG & WEN YU CHEN
811 NW DEERFERN LOOP
CAMAS WA, 98607

LOPEZ ANDREW & LOPEZ ASAMI
7918 KIPLING CIR
GILROY CA, 95020

LU YUAN
806 NW DEERFERN LOOP
CAMAS WA, 98607

LUCESCU DANIEL & LUCESCU SILVIA
5265 NW FERNRIDGE DR
CAMAS WA, 98607

LUDT JULIE
19907 SE 42ND ST
CAMAS WA, 98607

LYONS JENNIFER MICHELLE & LYONS
1015 NW FERNRIDGE CT
CAMAS WA, 98607

MACKAY FAMILY PROP LLC 50%
14712 NE 82ND AV
VANCOUVER WA, 98662

MACKAY JOHN G
4345 NW 16TH AVE
CAMAS WA, 98607

MALLARD TAYLOR & MALLARD
4536 NW 11TH CIRCLE
CAMAS WA, 98607

MANUEL JOHN L
1671 NW WHITMAN DR
CAMAS WA, 98607

MANZER MANZOOR A & MANZER
3505 SE SUNRISE DR
CAMAS WA, 98607

MARLATT SHAWN R
3818 SW VESTA ST
PORTLAND OR, 97219

MARQUIS ERIC J & MARQUIS TAMARA
19513 SE 42ND CIR
CAMAS WA, 98607

MARRS THERON-JAY TRUSTEE
TJM TRUST
CAMAS WA, 98607

MASONER JOHN W
4035 SE 199TH AVE
CAMAS WA, 98607

MATTHEWS ANN E & MATTHEWS
920 NW DEERFERN LOOP
CAMAS WA, 98607

MCCALLUM SEAN P TRUSTEE
5121 NW 17TH CIR
CAMAS WA, 98607

MCCONNELL MARK & MCCONNELL
5440 NW 15TH CIR
CAMAS WA, 98607

MCCRACKEN KENNETH & MCCRACKEN
1325 NW WHITMAN ST
CAMAS WA, 98607

MCDOLE KIM
4611 NW 11TH CIR
CAMAS WA, 98607

MCMANUS ROBERT B & MCMANUS
1430 NW WHITMAN ST
CAMAS WA, 98607

MCMULLIN JEFFREY M & MCMULLIN
1308 NW WHITMAN ST
CAMAS WA, 98607

MEACHAM KELLY J
19813 SE 41ST ST
CAMAS WA, 98607

MELCHER BENJAMIN S & MELCHER
4043 SE HARMONY PL
CAMAS WA, 98607

MEYER RYAN S & MEYER JESSICA B
19610 SE 42ND ST
CAMAS WA, 98607

MIAN AFNAN A
4024 SE SUNRISE DR
CAMAS WA, 98607

MICHAELIS ROGER & MICHAELIS
MICHAELIS LIVING TRUST
CAMAS WA, 98607

MILLER DANNETTE L & MILLER STEVE
19804 SE 42ND ST
CAMAS WA, 98607

HARDIN CRAIG A
19412 SE 42ND CIR
CAMAS WA, 98607

HARDING PAUL S & HARDING MEGAN J
1016 NW FERNRIDGE CT
CAMAS WA, 98607

HARRISON MARILYN A TRUSTEE
MARILYN HARRISON MARITAL
CAMAS WA, 98607

HARSTON DORI
1116 NW WHITMAN ST
CAMAS WA, 98607

HART JOSEPH L
945 NW GRAND RIDGE DR
CAMAS WA, 98607

HAWES RICHARD A
19603 SE 41ST ST
CAMAS WA, 98607

HAYES RICHARD L & HAYES BRENDA M
PO BOX 87174
VANCOUVER WA, 98687

HAYS CHRISTOPHER R & HAYS HANNA
3500 SE 165TH AVE
VANCOUVER WA, 98683

HEARN PHILIP J & KENNEDY MONNICA
3226 NW 46TH LOOP
CAMAS WA, 98607

HECK WILLIAM III & HECK SHIRLEY
3721 SE SUNRISE DR
CAMAS WA, 98607

HEGSTAD BYRON & HEGSTAD NEOMI
6330 NE 124TH ST
VANCOUVER WA, 98686

HELMS JANET
1400 S BARTON ST APT 406
ARLINGTON VA, 22204

HENDARGO CLIFFORD & PAOLI SARAH
1032 NW GOODWIN ST
CAMAS WA, 98607

HENDRICKSON CHRISTOPOHER G &
9313 NE 152ND AVE
VANCOUVER WA, 98682

HENRY ELIZABETH A & HENRY
3903 SE SUNRISE DR
CAMAS WA, 98607

HERBER SCOTT A
4817 NW HIGHPOINT DR
CAMAS WA, 98607

HEREFORD FARMS LLC
8403 SE LIESER POINT DR
VANCOUVER WA, 98664

HILL STEVEN F & BISHOP REBECCA A
645 NE BRADY RD
CAMAS WA, 98607

HOM ANGELA TRUSTEE
14858 SW 161ST AVE
TIGARD OR, 97224

HORVATH JOHN & HORVATH MARY
26104 NE 52ND WAY
VANCOUVER WA, 98682

HOWARD SHARON R TRUSTEE
4554 NW 11TH CIR
CAMAS WA, 98607

HSU ALARIC H & HSU PATRICIA M
735 NW GRAND RIDGE DR
CAMAS WA, 98607

HU QINGSONG & XU JIN
1328 NW DEERFERN ST
CAMAS WA, 98607

HUANG QUINSHENG & YANG QING
2109 SE 187TH AVE
VANCOUVER WA, 98683

HULL JARED M & HULL CARA E
4033 SE 199TH AVE
CAMAS WA, 98607

HUYNH NHAN B & PHAM ANH HUONG
19908 SE 42ND ST
CAMAS WA, 98607

HUYNH NHAN B & PHAM ANHHUONG
3907 SE SUNRISE DR
CAMAS WA, 98607

HUYNH THONG & NGUYEN CHI
1118 NW GOODWIN STREET
CAMAS WA, 98607

HYLAND CURTIS S & HYLAND BRANDI
5411 NE 15TH CIR
CAMAS WA, 98607

ISAACSON JOHN & ISAACSON DEANNE
14608 NE 271ST AVE
BRUSH PRAIRIE WA, 98606

ITO TATSUO & ITO YUHKI
5213 NW FERNRIDGE DR
CAMAS WA, 98607

JACOBS BENJAMIN J & HOLLY G
THE JACOBS LIVING TRUST
CAMAS WA, 98607

JAIN NARESH K & JAIN DIVYA
3506 SE 172ND AVE
VANCOUVER WA, 98683

JALLAD RIMA H & OUBARI AYMAN
13000 NE 242ND CRT
BRUSH PRAIRIE WA, 98606

JAMISON WILLIAM C
4009 SE SUNRISE DR
CAMAS WA, 98607

JANASIK KIMBERLY L
19804 SE LACY WAY
CAMAS WA, 98607

JANG STEPHEN
606 SE 201ST AVE
CAMAS WA, 98607

JANUTKA STEVEN & JANUTKA
1448 NW WHITMAN ST
CAMAS WA, 98607

JANZEN BRIAN R
4646 NW 11TH CIR
CAMAS WA, 98607

JIANG LEI & CHENG XIN TRUSTEES
946 NW GRANDRIDGE DR
CAMAS WA, 98607

JIANG TAO & JIANG NGOCNGA THI
5016 NW GOLDENBACK CIR
CAMAS WA, 98607

JIMENEZ SCOTT & JIMENEZ NICHOLE
19405 SE 42ND CIR
CAMAS WA, 98607

JOHNSON KEITH A & BACHELDER
1216 NW WHITMAN ST
CAMAS WA, 98607

JOHNSON KRISTI L
4016 SE SUNRISE DR
CAMAS WA, 98607

JOHNSON ROBERT J & JOHNSON
4238 NW SAGE LP
CAMAS WA, 98607

JONES NATHAN D & JONES COLLEEN
1036 NW DEERFERN LOOP
CAMAS WA, 98607

JONES RON J & JONES BETTY J
1447 NW DEERFERN ST
CAMAS WA, 98607

JONES SCOTT M & JONES ERIN
4027 SE 199TH AVE
CAMAS WA, 98607

JUANG MIKE & JUANG ANNA
5779 NW HOOD LOOP
CAMAS WA, 98607

KANDARIAN NEAL B & TURNER KARI L
5237 NW FERNRIDGE DR
CAMAS WA, 98607

KARNES HARRY S & KARNES BARBARA
1849 NW SAGE ST
CAMAS WA, 98607

KEEN CHRISTOPHER S & JEWELL KIM
1026 NW FERNRIDGE CT
CAMAS WA, 98607

KHAI TIEN TRAN & BUI CHAU THI
1040 NW DEERFERN LOOP
CAMAS WA, 98607

KIM BOYEONG
820 NW DEERFERN LOOP
CAMAS WA, 98607

KIM DONALD D
1030 NW DEERFERN LOOP
CAMAS WA, 98607

KIM JONGHOON & YUN JAHAE
3807 SE SUNRISE DR
CAMAS WA, 98607

KIM LANCE C & KIM MINJUNG C
1100 NW AUTUMN CT
CAMAS WA, 98607

KIM RICHARD & KIM PAULINE
16146 BOONES FERRY RD #850
LAKE OSWEGO OR, 97035

KIM YOUNG TAE & KIM YOUNG SOON
PO BOX 928
CARSON WA, 98610

KING DANIEL W
835 NW GRAND RIDGE DR
CAMAS WA, 98607

DUNNA PAVAN KUMAR & GUNDU
1315 NW GOODWIN ST
CAMAS WA, 98607

EICHEN STEPHEN L & TERRI

CAMAS WA, 98607

ELLIS JASON DANIEL & ELLIS JULIE
5360 NW 18TH AVE
CAMAS WA, 98607

EMBERLIN WILLIAM P & EMBERLIN
808 NW DEERFERN LOOP
CAMAS WA, 98607

ENQUIST ERIC G & ENQUIST TRUDI L
4744 NW 16TH CIRCLE
CAMAS WA, 98607

ER SU WAN & HON YEUNG FEI
19817 SE 41ST ST
CAMAS WA, 98607

ERICKSON DALE P & ERICKSON JUDITH
836 NW DEERFERN LOOP
CAMAS WA, 98607

ERICSON-ANDERSON ZADA C TRUSTEE
ZADA ERICSON TRUST
CAMAS WA, 98607

ERWIN JILL L
PO BOX 771
CAMAS WA, 98607

ESHGHI MAHSA & TOOBAEI MEHDI
4924 SE GRAND RIDGE DR
CAMAS WA, 98607

FABRE BYRON SCOTT
3818 SE SUNRISE DR
CAMAS WA, 98607

FACKLAM NATHANIEL D & FACKLAM
5325 NW GOODWIN LOOP
CAMAS WA, 98607

FEATHERSTONE PAUL C
4811 NW HIGHPOINT DR
CAMAS WA, 98607

FEESS THOMAS J
PO BOX 570
CAMAS WA, 98607

FEIK JOHN & FEIK MARILYN
5201 NW 17TH CIR
CAMAS WA, 98607

FELICIANO BEEJAY A & FELICIANO
1401 NW DEERFERN ST
CAMAS WA, 98607

FERDOWS MEHDI S & FERDOWS
809 NW DEERFERN LOOP
CAMAS WA, 98607

FERMENICK DONALD L & FERMENICK
1024 NW GOODWIN ST
CAMAS WA, 98607

FIORILLO ROSEMARIE
926 NW DEERFERN LOOP
CAMAS WA, 98607

FIRESTONE STAN
PO BOX 61928
VANCOUVER WA, 98666

FISHER JARED S
20002 SE 42ND ST
CAMAS WA, 98607

FLAMMANG JEANNETTE S &
1657 NW WHITMAN ST
CAMAS WA, 98607

FLECK PAUL & FLECK TAMERA
19515 SE 41ST CIR
CAMAS WA, 98607

FOGG ADAM L & FOGG CALEY V
19803 SE 42ND ST
CAMAS WA, 98607

FOSTER ANTHONY L & FOSTER
3609 SE SUNRISE DR
CAMAS WA, 98607

FRAWLEY STEVEN D & FRAWLEY
1325 NW EAGLE ST
CAMAS WA, 98607

FREDRICKSON REBECCA E H &
5242 NW FERNRIDGE DR
CAMAS WA, 98607

FRENCH ROBERT & FRENCH JOYCE
828 NW DEERFERN LOOP
CAMAS WA, 98607

FRIEDEMAN ANDREW &
4510 NW 11TH CIR
CAMAS WA, 98607

FU JIBIN
1221 NW GOODWIN ST
CAMAS WA, 98607

FUJIHARA PATRICIA SARAI KAIULANI &
5450 NW 15TH CR
CAMAS WA, 98607

FULLER ERIC D & FULLER JUDITH D
9000 NW LAKESHORE AVE
VANCOUVER WA, 98665

GABRIO WILLIAM G & GABRIO JANET I
4320 NW SAGE LOOP
CAMAS WA, 98607

GALLAS SAMUEL & GALLAS LAUREN M
19416 SE 42ND CR
CAMAS WA, 98607

GAMILES DONALD
3620 SE SUNRISE DR
CAMAS WA, 98684

GIL KEVIN J & GIL TARA L
5215 NW 16TH CIR
CAMAS WA, 98607

GILMORE CLIFF W & GILMORE DEBRA
1455 NW BEECH CT
CAMAS WA, 98607

GIUSTI FRANCISCO J & MIRANDA
5015 NW GOLDENBACK CIR
CAMAS WA, 98607

GJERSWOLD GREGG & GJERSWOLD
4803 NW 16TH CIR
CAMAS WA, 98607

GLASSER JODY L & PASIBE-GLASSER
GLASSER FAMILY TRUST
CAMAS WA, 98607

GOLB RICHARD & GOLB GEORGENE B
5260 NW FERNRIDGE DR
CAMAS WA, 98607

GONZALEX MIGUEL ANGEL &
4005 SE SUNRISE DR
CAMAS WA, 98607

GOOD DONALD E
4025 SE 201ST AVE
CAMAS WA, 98607

GRAHAM JESSICA L & GRAHAM BRIAN
1621 NW BEECH ST
CAMAS WA, 98607

GRAHAM RICHARD F & GRAHAM
1310 NW WHITMAN CT
CAMAS WA, 98607

GRAND RIDGE HOMEOWNERS
12503 SE MILL PLAIN BLVD
VANCOUVER WA, 98684

GRANDRIDGE CAMAS LLC
811 NW 19TH AVE STE 102
PORTLAND OR, 97209

GRANT DARIN LYLE & SWEARINGEN
1717 NE TIDLAND ST
CAMAS WA, 98607

GREAVES WESLEY C & GREAVES
1424 NW GOODWIN ST
CAMAS WA, 98607

GREEN GAIL TRUSTEE
2927 SE VILLAGE LP #314
VANCOUVER WA, 98683

GRIFFIN KEVIN M & GRIFFIN LYNETTE
4810 POINT FOSDICK DR NW
GIG HARBOR WA, 98335

GRIFFITH BRIAN PAUL & GRIFFITH
4037 SE 199TH AVE
CAMAS WA, 98607

GU JIANQPING & CAO XIAN CO-
GU/CAO LIVING TRUST
CAMAS WA, 98607

GYALNUB MIGMAR T & GYALNUB
4816 NW HIGHPOINT DR
CAMAS WA, 98607

H-TWO-O ASSOCIATION
% HOWARD TALBITZER
CAMAS WA, 98607

HALL EDWIN & HALL BROWYN
19505 SE 42ND CIR
CAMAS WA, 98607

HALLER WALTER N & ALVAREZ-
2826 NW LACAMAS DR
CAMAS WA, 98607

HAMADEH SHAFIQ & HAMADEH
1319 NW GOODWIN ST
CAMAS WA, 98607

HANCOCK CHAD E & HANCOCK
1668 NW WHITMAN ST
CAMAS WA, 98607

HANTON MICHAEL C & HANTON
1422 NW BEECH CT
CAMAS WA, 98607

CARR WILLIAM E & CARR CASEY M
3819 SE SUNRISE DR
CAMAS WA, 98607

CASABONA GARY & COZZA MARY
840 NW DEERFERN LOOP
CAMAS WA, 98607

CASE-STOTT ANGELINE & STOTT
1114 NW GOODWIN ST
CAMAS WA, 98607

CAVITT J ROBERT
6900 SE RIVERSIDE DR APT 21
VANCOUVER WA, 98664

CHAI JIN RU & LE JIANNING
1799 ATHERTON DR
LAKE OSWEGO WA, 97034

CHAN NORMAN & CHIU MAN CHUN
4048 SE 196TH CT
CAMAS WA, 98607

CHAN PATRICK TRUSTEE
C/O THE EYE CLINIC TRUST
PORTLAND OR, 97210

CHANG IL SUN
3710 SE SUNRISE DR
CAMAS WA, 98607

CHANG TABON C
24850 SW STAFFORD SUMMIT CT
WEST LINN OR, 97068

CHANG YEN & CHOU MING
5333 NW GOODWIN LP
CAMAS WA, 98607

CHANTHAVONG KHAMSOUK &
9906 NE 130TH AVE
VANCOUVER WA, 98682

CHARLSON GARY & CHARLSON
1506 NW BEECH ST
CAMAS WA, 98607

CHAVEZ MAURICIO RENAN & CHAVEZ
1404 NW WHITMAN ST
CAMAS WA, 98607

CHEN JOHN T & CHEN EILEEN E
840 NW GRAND RIDGE DR
CAMAS WA, 98607

CHEN MICHAEL Y & CHEN DEBBIE J
4228 NW SAGE LP
CAMAS WA, 98607

CHEN SHUPING & WEN LING
937 W ALDER CT
WASHOUGAL WA, 98671

CHERNICHENKO VIKTOR &
4008 SE SUNRISE DRIVE
CAMAS WA, 98607

CHEUNG PETER & CHEUNG TERRIE
1303 NW DEERFERN ST
CAMAS WA, 98607

CHILDERS BURK & CHILDERS ROBYN
3502 SE SUNRISE DR
CAMAS WA, 98607

CHIN-MOU LIN & LIN LING CHEN
5219 NW FERNRIDGE DR
CAMAS WA, 98607

CHOONG DOMINIC A JR & HENG IRENE
819 NW DEERFERN LOOP
CAMAS WA, 98607

CHOU PHILIP & CHOU WENDY
9205 SUNSHINE PL
DOWNEY CA, 90240

CHRISS MICHAEL
4240 NW SAGE LP
CAMAS WA, 98607

CIOBANU IONICA & CIOBANU LIDIA
19817 SE LACY WAY
CAMAS WA, 98607

CITY OF CAMAS
606 NE 4TH AVE
CAMAS WA, 98607

CITY OF CAMAS
C/O SEWER PUMP STATION
CAMAS WA, 98607

CITY OF VANCOUVER
PO BOX 1995
VANCOUVER WA, 98668

CLARK COUNTY CLEAN WATER
CLEAN WATER
VANCOUVER WA, 98666

CLEGG MICHAEL & CLEGG DENISE
933 NW GRAND RIDGE DR
CAMAS WA, 98607

COAKLEY PAUL
1050 NW DEERFERN LOOP
CAMAS WA, 98607

COLEMAN PETER C & COLEMAN CASEY
1227 NW GOODWIN ST
CAMAS WA, 98607

CONNOLLY JAMES & CONNOLLY DIANE
4030 SE HARMONY PL
CAMAS WA, 98607

COPELAND KERRY & COPELAND
4039 SE 199TH AVE
CAMAS WA, 98607

CORBETT MARCUS S & CORBETT
1654 NW WHITMAN ST
CAMAS WA, 98607

CORREIA ERIC A & CORREIA SASHA
19508 SE 41ST CIR
CAMAS WA, 98607

CORVIN AARON R & NILLES NANCY M
19902 SE 42ND ST
CAMAS WA, 98607

COX RAYMOND & COX KIMBERLY
4049 SE 196TH CT
CAMAS WA, 98607

CROWN POINTE HOMEOWNERS
1708 NW WHITMAN ST
CAMAS WA, 98607

CRUZ AMOR DELA & CRUZ JOHANN
1425 NW GOODWIN ST
CAMAS WA, 98607

CULVER KEVIN L & CULVER NANCY A
1115 NW GOODWIN ST
CAMAS WA, 98607

CUTHBERT DAVID L & CUTHBERT MAY
1650 NW DEERFERN ST
CAMAS WA, 98607

CYMOREK JAROSLAW H & CYMOREK
930 NW DEERFERN LOOP
CAMAS WA, 98607

DALBEY KURT H
7125 SW HAMPTON
PORTLAND OR, 97228

DALEY DENNIS W ETAL
462 STEVENS AVE STE 201
SOLANA BEACH CA, 92075

DAVIDSON GENE & DAVIDSON JUDITH
3920 SE HARMONY PL
CAMAS WA, 98607

DAVIS KEA & DAVIS JAMES
3910 SE HARMONY PL
CAMAS WA, 98607

DAVIS KURT W & DAVIS NADIA A
829 NW GRAND RIDGE DR
CAMAS WA, 98607

DAVIS SEAN E & DAVIS STACEY A
9886 FOX VALLEY WAY
SAN DIEGO CA, 92127

DEAN NATHAN DANIEL
4001 SE SUNRISE DR
CAMAS WA, 98607

DEGROAT JOHN M & DEGROAT
1047 NW DEERFERN LOOP
CAMAS WA, 98607

DELANO CHRISTOPHER R & DELANO
19615 SE 42ND ST
CAMAS WA, 98607

DEOCHAND LENARD & DEOCHAND
938 NW GRAND RIDGE DR
CAMAS WA, 98607

DEWITT LEONA
PO BOX 674
CAMAS WA, 98607

DITTIRCH KENNETH C & DITTIRCH
5144 NW 16TH CIR
CAMAS WA, 98607

DIXON MONIKA L & DIXON GREG J
1614 NW WHITMAN ST
CAMAS WA, 98607

DO SON T & LAM MAI T
936 NW DEERFERN LOOP
CAMAS WA, 98607

DOBSON BRETT E & DOBSON JODI R
4500 NW 11TH CIR
CAMAS WA, 98607

DOMINGE BENJAMIN D & DOMINGE
5248 NW FERNRIDGE DR
CAMAS WA, 98607

DUDLEY BRIAN C
5321 NW GOODWIN LOOP
CAMAS WA, 98607

DULCICH JEFFREY TRUSTEE
PO BOX 1416
CLACKAMAS OR, 97015

BESEN AARON J & BESEN JENNIFER J
1337 NW WHITMAN CT
CAMAS WA, 98607

BETEA ALEXANDRU & BETEA FELICIA
3716 SE SUNRISE DR
CAMAS WA, 98607

BHAT RAGHURAM B & BHAT DAWN
851 NW GRAND RIDGE DR
CAMAS WA, 98607

BIAS DONNA R & BIAS RANDY L
BIAS TRUST
CAMAS WA, 98607

BIRCHEM NICHOLAS & BIRCHEM
19708 SE 41ST ST
CAMAS WA, 98607

BIRDSELL RODNEY & BADOLATO DINA
4041 SE 199TH AVE
CAMAS WA, 98607

BOLIO WAYNE & BOLIO GRACE
5011 NW GOLDENBACK CIR
CAMAS WA, 98607

BOUSQUET JAMES & BOUSQUET
1600 NW DEER FERN ST
CAMAS WA, 98607

BREITENBUCHER JASON P &
19504 SE 41ST CIR
CAMAS WA, 98607

BRISC IOAN & BRISC CORNELIA
19812 SE LACY WAY
CAMAS WA, 98607

BROCK BRANDON W
3803 SE SUNRISE DR
CAMAS WA, 98607

BROOKS JOANN
19800 SE 36TH ST
CAMAS WA, 98607

BROWN JODI A
19512 SE 41ST CIR
CAMAS WA, 98607

BROWNING MARGARET H TRUSTEE
MARGARET H BROWNING TRUST
CAMAS WA, 98607

BRUST DAVID M
4013 SW 199TH AVE
CAMAS WA, 98607

BUCHANAN LAWRENCE & GILLIAN

CAMAS WA, 98607

BUI TAN D & NGUYEN CATHY H
19610 SE 41ST ST
CAMAS WA, 98607

BURDICK BRETT D & BURDICK
3717 SE SUNRISE DR
CAMAS WA, 98607

BURDICK ROBERT B & VAN NATTA
1617 NW WHITMAN ST
CAMAS WA, 98607

BURRIS KIRK S & FYFFE-BURRIS
4909 NW HIGHPOINT DR
CAMAS WA, 98607

BUSIEK KURT & BUSIEK ANN
1023 NW FERNRIDGE CT
CAMAS WA, 98607

CADY JEFFREY L & CADY CLAUDIA M
4506 NW 11TH CIR
CAMAS WA, 98607

CALLAHAM C DAVID & CALLAHAM
10804 NE HIGHWAY 99
VANCOUVER WA, 98686

CALLAHAN CHRISTOPHER ALAN &
1632 NW WHITMAN ST
CAMAS WA, 98607

CAMAS SCHOOL DISTRICT #117
841 NE 22ND AVE
CAMAS WA, 98607

CAMAS SCHOOL DISTRICT #117
C/O PRUNE HILL ELEMENTARY
CAMAS WA, 98607

CAMPBELL COLIN G & CAMPBELL
1028 N GOODWIN ST
CAMAS WA, 98607

CANDEAUX NICHOLAS A
4618 NW 11TH CIR
CAMAS WA, 98607

CARLSMITH DAVID SUTTON &
5415 NW 15TH CIR
CAMAS WA, 98607

CARLSON JONATHAN W & CARLSON
1027 NW GOODWIN ST
CAMAS WA, 98607

AARHUS JAMES D & AARHUS
PO BOX 465
CAMAS WA, 98607

ACUESTA DIANA M
5220 NW FERNRIDGE DR
CAMAS WA, 98607

ADDEMAN FRANK & SCHNEIDER
2403 S SILVER BEACH RD
COEUR D ALENE ID, 83814

AFENTAKIS THEMIS
19808 SE LACY WAY
CAMAS WA, 98607

AHSAN MUHAMMAD & AHSAN FAIZA
2424 NW IRIS CT
CAMAS WA, 98607

ALBRECHT JOE'L A
4058 SE 196TH CT
CAMAS WA, 98607

ALLEN GREGORY RENALDO & ALLEN
5209 NW FERNRIDGE DR
CAMAS WA, 98607

ALLIZADEH JAMES J & ALLIZADEH
5012 NW GOLDENBACK CIR
CAMAS WA, 98607

ALLMAN DERRYL & ALLMAN DEBORAH
19805 SE LACY WAY
CAMAS WA, 98607

ANDERSON MICHAEL B
20011 SE 42ND ST
CAMAS WA, 98607

ANDERSON NEIL & ANDERSON DIANA
1410 NW WHITMAN ST
CAMAS WA, 98607

ANGELO ALBERT C III & ANGELO
1722 NW DEERFERN ST
CAMAS WA, 98607

APACIBLE MARGIE & APACIBLE JERRY
1320 NW GOODWIN ST
CAMAS WA, 98607

ARAQUE JUDY B & ARAQUE LORENZO
916 NW DEERFERN LOOP
CAMAS WA, 98607

ATTAR EMILE T
1234 NW DEERFERN ST
VANCOUVER WA, 98607

AYRES JEREMY C & AYRES MOLLY B
3810 SE SUNRISE DR
CAMAS WA, 98607

BACKSTRAND KARL A
4905 NW HIGHPOINT DR
CAMAS WA, 98607

BADIEI BASHEER A
1059 NW DEERFERN LOOP
CAMAS WA, 98607

BAILOR STEPHEN & BAILOR ANITA
19708 SE 42ND ST
CAMAS WA, 98607

BARNETT NICKY & BARNETT LAURA
3915 SE SUNRISE DR
CAMAS WA, 98607

BARRETT ALEXANDER J
3705 SE SUNRISE DR
CAMAS WA, 98607

BARRON HATFIELD FAMILY LLLP
5511 NW 234th ST
RIDGEFIELD WA, 98642

BATES JAY A III & BATES BRENDA J
5233 NW FERNRIDGE DR
CAMAS WA, 98607

BAZZAZ ALA & BAZZAZ FATMA
20017 SE 42ND ST
CAMAS WA, 98607

BECERRA TERRY M & BECERRA
937 NW GRAND RIDGE DR
CAMAS WA, 98607

BEETS ROY H
2451 ROBIN SONG CT
CASTLE ROCK CO, 80109

BENHAM JACK
1002 NW WHITMAN ST
CAMAS WA, 98607

BENTON PAUL W
19510 SE 42ND CIR
CAMAS WA, 98607

BERNARD MICHAEL
19401 SE 42ND CIR
CAMAS WA, 98607

BERNAZZANI MICHAEL & BERNAZZANI
4246 NW SAGE LOOP
CAMAS WA, 98607

YING RICHARD & YING GLORIA
1635 NW DEERFERN ST
CAMAS WA, 98607

YOUNG DAWNRAY H & YOUNG KITTY
5220 NW 16TH CIR
CAMAS WA, 98607

YOUNG PETER F & YOUNG JOY P
5230 NW 16TH CIR
CAMAS WA, 98607

ZAKHARYUK PAVEL
1202 NE 147TH AVENUE
VANCOUVER WA, 98684

ZALUTKO THOMAS & ZALUTKO
5216 NW FERNRIDGE DR
CAMAS WA, 98607

ZARZANA BRANDON M & ZARZANA
3207 SE 197TH CT
CAMAS WA, 98607

ZATTA SANDRA L
2240 GATEWAY OAKS DR APT 320
SACRAMENTO CA, 95833

ZHANG FAN & JIN JUAN JUAN
741 NE 38TH AVE
CAMAS WA, 98607

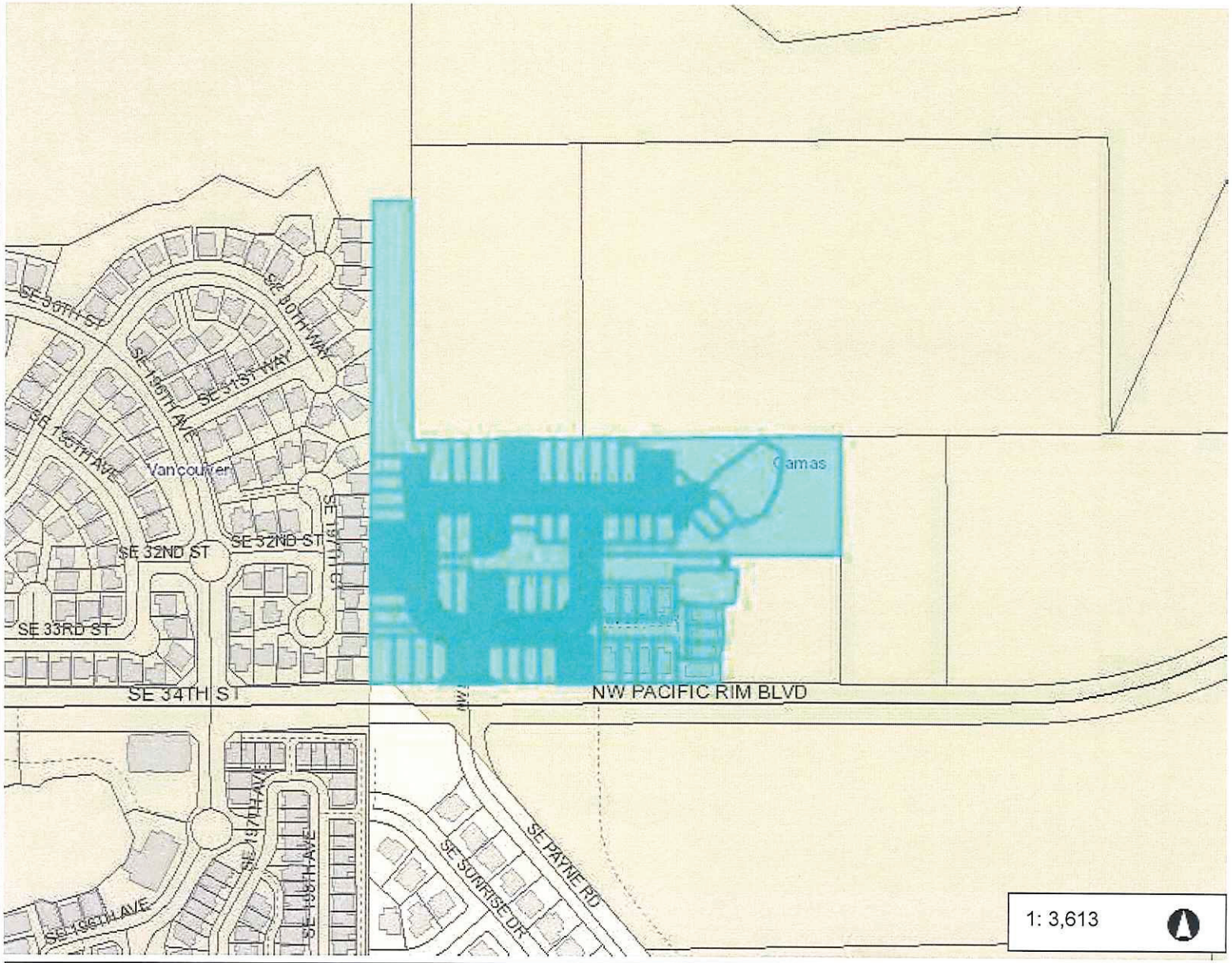
ZHANG RICK YUKAI & YING GONG
1407 NW WHITMAN ST
CAMAS WA, 98607

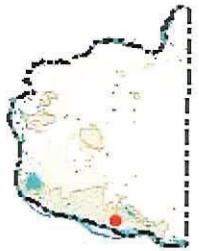
ZHANG SHIGUO & SHENBO LI
19516 SE 41ST CIR
CAMAS WA, 98607

ZIMMERMAN DOUGLAS G &
4615 NW 11TH CT
CAMAS WA, 98607

ZWEIGER JON T
19616 SE 42ND ST
CAMAS WA, 98607

Additional map for high school





Legend

- Building Footprints
- Taxlots
- Cities Boundaries
- Urban Growth Boundaries

Notes:

602.1 0 301.04 602.1 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
Clark County, WA. GIS - http://gis.clark.wa.gov

ALTIERO BRIAN A
5826 NW 25TH ST
CAMAS WA, 98607

AMANEHA THIAAGO-JERONIMO RB &
2507 NE 176TH AVE
VANCOUVER WA, 98684

ASCH RICHARD P TRUSTEE
RICHARD P ASCH REV TRUST
CAMAS WA, 98607

CAULFIELD MICHAEL & CAULFIELD
5724 NW 25TH CIR
CAMAS WA, 98607

CITY OF CAMAS
616 NE 4TH AVE
CAMAS WA, 98607

CLEARWATER DARCI
5723 NW 26th AVE
CAMAS WA, 98607

COFFEY DUANE L JR & COFFEY
5730 NE 26TH AVE
CAMAS WA, 98607

CURL WES W & CURL MARY
5835 NW 26TH AVE
CAMAS WA, 98607

DAVIS PAUL H
5716 NW 26TH AVE
CAMAS WA, 98607

DENNIS PAUL
PO BOX 372
CAMAS WA, 98607

DUGGAL KYNAL & DEWAN UPASNA
5820 NW 25TH AVE
CAMAS WA, 98607

EASTSIDE RENTALS LLC
800 NE TENNEY RD #110-2
VANCOVUER WA, 98685

FARRIS GEORGE C & FARRIS
5722 NW 26TH AVE
CAMAS WA, 98607

GNANANANTHAN RAJANAYAGAM E &
5840 NW 26TH AVE
CAMAS WA, 98607

HANLON WENDEE & HANLON JASON
2515 NW LORENZ STREET
CAMAS WA, 98607

HARRIS EARL S & HARRIS JANET L
5807 NW 25TH AVE
CAMAS WA, 98607

HOTCHKIN SHANNON M
5658 NW 26TH AVE
CAMAS WA, 98607

JARVIS ROBERT A & JARVIS MARLENE
5749 NW 26TH AVE
CAMAS WA, 98607

JELLISON TRACIE L & JELLISON
2511 NW LORENZ ST
CAMAS WA, 98607

JHAVERI HARSHIL
5708 NW 25TH CIR
CAMAS WA, 98607

KABAT JOHN C & KABAT DOROTHY L
5847 NW 25TH AVE
CAMAS WA, 98607

KALASKY JAMES F TRUSTEE
5809 NW 26TH AVE
CAMAS WA, 98607

KIM YOUNG TAE & KIM YOUNG SOON
PO BOX 928
CARSON WA, 98610

KRISHNAPPA AMBRISH GOWDA &
5710 NW 25TH CIR
CAMAS WA, 98607

LAKAMP ROBIN R
5834 NW 26TH AVE
CAMAS WA, 98607

LEE HYUNGSUP & KWON DOOHYANG
5810 NW 26TH AVE
CAMAS WA, 98607

LIU LEONARD Y & LIU BETSY S
5735 NW 26TH AVE
CAMAS WA, 98607

LO WEN-FENG & LO CHIEN-SHI
5812 NW 25TH AVE
CAMAS WA, 98607

LOWE DIANNA L TRUSTEE
DIANNA L LOWE TRUST
CAMAS WA, 98607

MCCARVILLE ANDREW J
5816 NW 25TH AVE
CAMAS WA, 98607

MCINTOSH W SCOTT & MCINTOSH
5733 NW 25TH CIR
CAMAS WA, 98607

MELBY TERRY & MELBY LISA
5828 NW 26TH AVE
CAMAS WA, 98607

MEZURASHI SUNDAY L & LENTZ ALLEN
SUNDAY L MEZURASHI TRUST
WAIKOLOA HI, 96738

NELSON TOMI KAY
5843 NW 26TH AVE
VANCOUVER WA, 98607

NEWMAN KIMBERLY A & NEWMAN
5711 NW 25TH CIR
CAMAS WA, 98607

NGUYEN DAN & TRINH THANH K
2507 NW LORENZ ST
CAMAS WA, 98607

OPSTAD THOMAS A & OPSTAD
604 W 2ND ST
ABERDEEN WA, 98520

PARMER JAKE & PARMER ROBIN K
2451 NW LORENZ ST
CAMAS WA, 98607

PARTHASARATHY SUNDARAVARADAN
5714 NW 25TH CIR
CAMAS WA, 98607

PINELLI FRANK V & PINELLI JOANNE A
5729 NW 25TH CT
CAMAS WA, 98607

RIVERO MELANIE J
5732 NW 25TH CIR
CAMAS WA, 98607

ROETTGER BRADLEY & ELLIOTT
5803 NW 26TH AVE
CAMAS WA, 98607

ROSS GEORGE & ROSS JOY
2465 NW LORENZ ST
CAMAS WA, 98607

ROSS STANLEY H & ROSS BARBARA
5819 NW 25TH AVE
CAMAS WA, 98607

SCHEUCH DAVID & SCHEUCH JUDI
PO BOX 87306
TUCSON AZ, 85745

SCHLOTH DONALD F & PEARSON
5846 NW 26TH AVE
CAMAS WA, 98607

SCHWETTMANN SANDRA L
5829 NW 26TH AVE
CAMAS WA, 98607

SESHACHALAM SRINIVASAN &
2611 NW LORENZ ST
CAMAS WA, 98607

SHIWA EDSON & SHIWA SILVIA MARIA
2605 NW LORENZ STREET
CAMAS WA, 98607

SIEBENTHALER ROBERT C JR
5801 NW 25TH AVE
CAMAS WA, 98607

SIMKO KATHERINE M
5725 NE 25TH CIR
CAMAS WA, 98607

SIMMONS SCOTT W & SIMMONS JULIE
9436 NW SKYVIEW DR
PORTLAND OR, 97231

SNOWDEN JAMES S
19215 SE 34TH ST
CAMAS WA, 98607

STONE MICHELE RENEE
2535 NW LORENZ ST
CAMAS WA, 98607

STONELEAF LLC
16420 SE MCGILLIVRAY BLVD #103
VANCOUVER WA, 98683

STONELEAF SUBDIVISION HOA
800 NE TENNEY RD #110-348
VANCOUVER WA, 98685

TANG ANDREA T
2461 NW LORENZ ST
CAMAS WA, 98607

THOMPSON LAWRENCE JR &
5806 NW 25TH AVE
CAMAS WA, 98607

TRUITT WARREN V III & TRUITT
5706 NW 25TH CIR
CAMAS WA, 98607

VASAT JIRI L & VASAT IRMA M
19616 SE 25TH ST
CAMAS WA, 98607

WALKER GAVIN L & WALKER ANGELA
2455 NW LORENZ ST
CAMAS WA, 98607

WALLER JENNIFER ANNE
5717 NW 26TH AVE
CAMAS WA, 98607

WANGER EMORY R
2208 H ST
VANCOUVER WA, 98663

WAPAC INVESTMENTS LLC
4762 COHO LANE
WEST LINN OR, 97068

WOODEN KARI L
5815 NW 26TH AVE
CAMAS WA, 98607

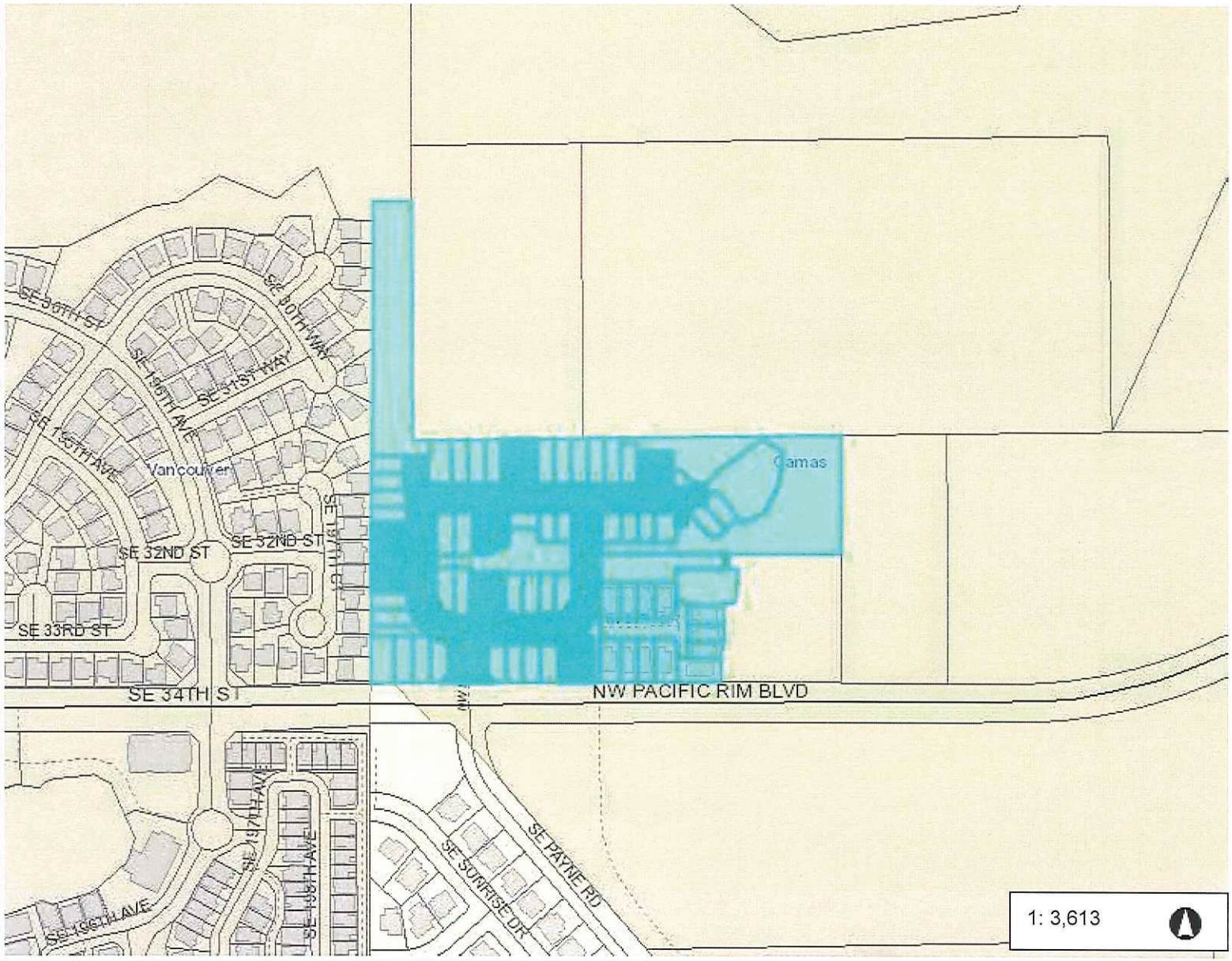
XU HONGSHI & JU MANQING
5849 NW 26TH AVE
CAMAS WA, 98607

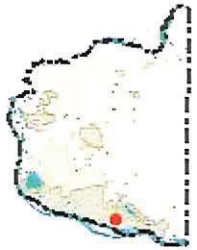
YOUNG TRACY L
2539 NW LORENZ ST
CAMAS WA, 98607

ZABETIAN MORTEZA
922 NW 11TH AVE UNIT 407
PORTLAND OR, 97209

EXHIBIT 14

Additional map for high school





Legend

- Building Footprints
- Taxlots
- Cities Boundaries
- Urban Growth Boundaries

Notes:

602.1 0 301.04 602.1 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
Clark County, WA. GIS - http://gis.clark.wa.gov

ALTIERO BRIAN A
5826 NW 25TH ST
CAMAS WA, 98607

AMANEHA THIAAGO-JERONIMO RB &
2507 NE 176TH AVE
VANCOUVER WA, 98684

ASCH RICHARD P TRUSTEE
RICHARD P ASCH REV TRUST
CAMAS WA, 98607

CAULFIELD MICHAEL & CAULFIELD
5724 NW 25TH CIR
CAMAS WA, 98607

CITY OF CAMAS
616 NE 4TH AVE
CAMAS WA, 98607

CLEARWATER DARCI
5723 NW 26th AVE
CAMAS WA, 98607

COFFEY DUANE L JR & COFFEY
5730 NE 26TH AVE
CAMAS WA, 98607

CURL WES W & CURL MARY
5835 NW 26TH AVE
CAMAS WA, 98607

DAVIS PAUL H
5716 NW 26TH AVE
CAMAS WA, 98607

DENNIS PAUL
PO BOX 372
CAMAS WA, 98607

DUGGAL KYNAL & DEWAN UPASNA
5820 NW 25TH AVE
CAMAS WA, 98607

EASTSIDE RENTALS LLC
800 NE TENNEY RD #110-2
VANCOVUER WA, 98685

FARRIS GEORGE C & FARRIS
5722 NW 26TH AVE
CAMAS WA, 98607

GNANANANTHAN RAJANAYAGAM E &
5840 NW 26TH AVE
CAMAS WA, 98607

HANLON WENDEE & HANLON JASON
2515 NW LORENZ STREET
CAMAS WA, 98607

HARRIS EARL S & HARRIS JANET L
5807 NW 25TH AVE
CAMAS WA, 98607

HOTCHKIN SHANNON M
5658 NW 26TH AVE
CAMAS WA, 98607

JARVIS ROBERT A & JARVIS MARLENE
5749 NW 26TH AVE
CAMAS WA, 98607

JELLISON TRACIE L & JELLISON
2511 NW LORENZ ST
CAMAS WA, 98607

JHAVERI HARSHIL
5708 NW 25TH CIR
CAMAS WA, 98607

KABAT JOHN C & KABAT DOROTHY L
5847 NW 25TH AVE
CAMAS WA, 98607

KALASKY JAMES F TRUSTEE
5809 NW 26TH AVE
CAMAS WA, 98607

KIM YOUNG TAE & KIM YOUNG SOON
PO BOX 928
CARSON WA, 98610

KRISHNAPPA AMBRISH GOWDA &
5710 NW 25TH CIR
CAMAS WA, 98607

LAKAMP ROBIN R
5834 NW 26TH AVE
CAMAS WA, 98607

LEE HYUNGSUP & KWON DOOHYANG
5810 NW 26TH AVE
CAMAS WA, 98607

LIU LEONARD Y & LIU BETSY S
5735 NW 26TH AVE
CAMAS WA, 98607

LO WEN-FENG & LO CHIEN-SHI
5812 NW 25TH AVE
CAMAS WA, 98607

LOWE DIANNA L TRUSTEE
DIANNA L LOWE TRUST
CAMAS WA, 98607

MCCARVILLE ANDREW J
5816 NW 25TH AVE
CAMAS WA, 98607

WALKER GAVIN L & WALKER ANGELA
2455 NW LORENZ ST
CAMAS WA, 98607

WALLER JENNIFER ANNE
5717 NW 26TH AVE
CAMAS WA, 98607

WANGER EMORY R
2208 H ST
VANCOUVER WA, 98663

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4762 COHO LANE
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WOODEN KARI L
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5849 NW 26TH AVE
CAMAS WA, 98607

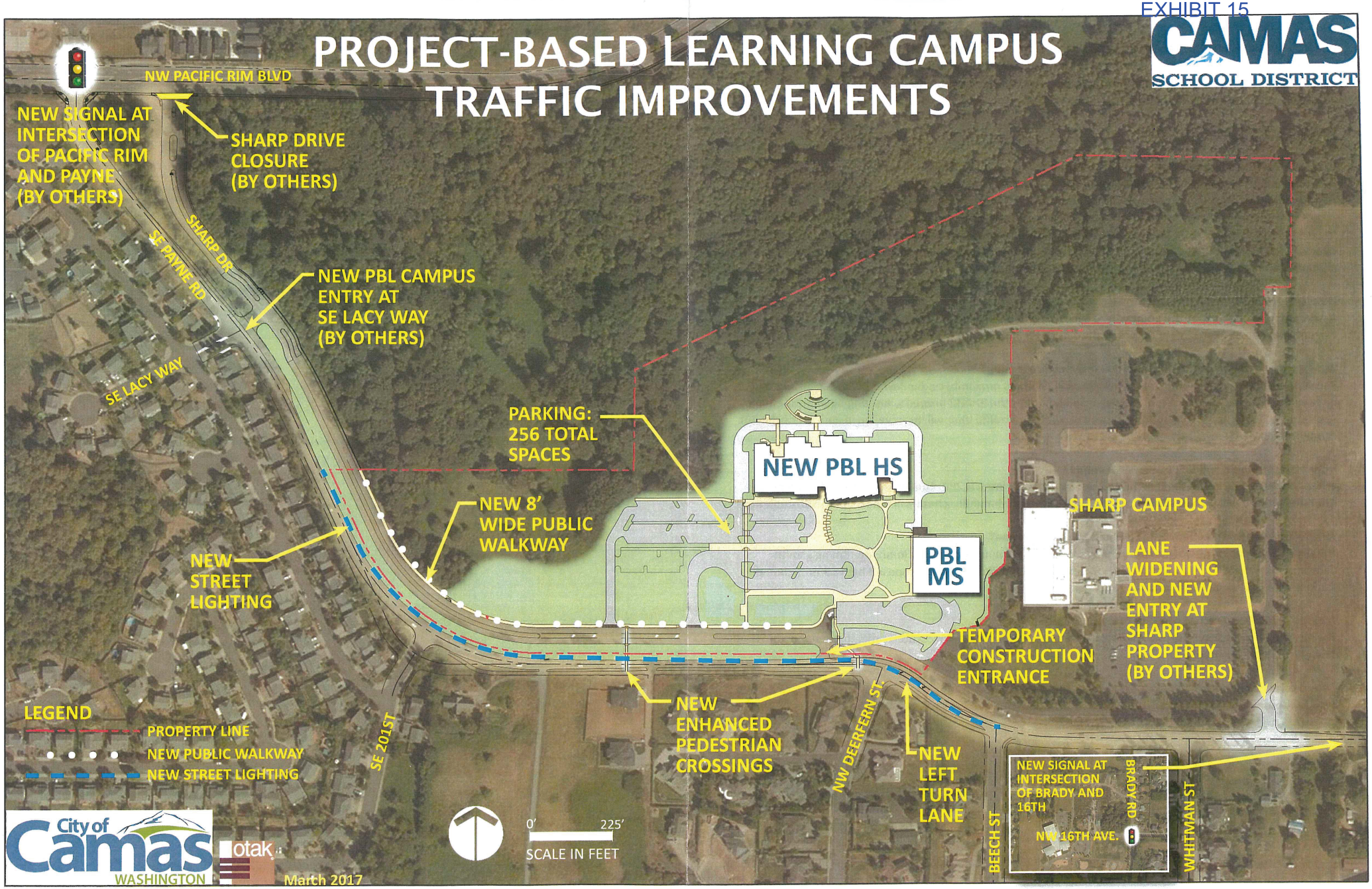
YOUNG TRACY L
2539 NW LORENZ ST
CAMAS WA, 98607

ZABETIAN MORTEZA
922 NW 11TH AVE UNIT 407
PORTLAND OR, 97209

EXHIBIT 15

PROJECT-BASED LEARNING CAMPUS TRAFFIC IMPROVEMENTS

CAMAS SCHOOL DISTRICT



City of Camas WASHINGTON

otak

March 2017

The City of Camas will hold a public hearing on April 20, 2017, at 6 PM at City Hall related to Camas School District's Project-Based Learning (PBL) initiatives at what was previously known as the SHARP property. Thanks to the support of Camas voters, the district was able to purchase this property as well as SHARP's Microelectronics Lab in the spring of 2016.

FREQUENTLY ASKED QUESTIONS

Why did the PBL HS move from the CHS campus to the SHARP site?
We moved the PBL HS to the SHARP property for a few reasons, such as forming synergy between the middle and high school programs, creating greater opportunity for outdoor learning, and helping to alleviate the usage of the current high school campus. The district sought out public opinion on the move, holding two listening posts where residents could come to the district and talk about their concerns, a mailing notice, and emails to staff and parents. The school board voted in July 2016 to change the location of the high school to the SHARP site.

How will students and staff access the PBL Campus?
A new entry will be built at the point where Lacey Way intersects Payne Road to access the existing roadway currently known as Sharp Drive. Access to the future HS and current MS will be off of this roadway.

Why is the SHARP Drive/Pacific Rim Blvd. intersection closing?
This intersection is considered a failed intersection. With its proximity to the Payne Road/Pacific Rim Blvd. intersection just steps away, traffic travelling in and out of the SHARP property has long been problematic. This intersection is not sufficient to support the additional traffic that will be traveling in and out of the PBL campus in 2018.

How many students will be at the new campus?
When the PBL HS opens in the fall of 2018, we anticipate a total of 250 students in ninth and tenth grades. Ultimately, there will be 600 students in the high school. The middle school will house up to 500 students.

What about the intersection of Brady Road and 16th Avenue?
The district will construct a signalized intersection at 16th Avenue and Brady Road, the timing is to be determined in coordination with the City. This work is not included in the proposed high school scope of work. It will be designed and constructed separately.

Why isn't the PBL entrance right in front of the building?
The intersection at Lacey Way will utilize the existing roadway and allow school traffic to queue up on SHARP Drive instead of City roads.

Where can I learn more?
Details about this project, as well as all of the 2016 Bond Program Projects, can be found at:
https://goo.gl/WJVCZl

City of Camas WASHINGTON

CAMAS SCHOOL DISTRICT

EXHIBIT 16

Community Development Department
616 NE Fourth Avenue
Camas, WA 98607
(360) 817-1568

STAFF REPORT
Design Review Application for Camas School District PBL High School
City File No. DR17-01
(Related Files: SP17-01)

TO:	Design Review Committee
FROM:	Robert Maul, Planning Manager
APPLICANT:	Camas School District
LOCATION:	5780 NW Pacific Rim Boulevard Camas, WA 98607

APPLICABLE LAW: The application was submitted on January 6th, 2017. The applicable codes are those codes that were in effect at the date of application. Camas Municipal Code Chapters (CMC): Title 18 Zoning (not exclusively): CMC Chapter 17.21 Procedures for Public Improvements; CMC Chapter 18.19 Design Review; Camas Design Review Manual (2016); and CMC Chapter 18.55 Administration and Procedures; and RCW 58.17.

BACKGROUND:

The Camas School District is looking to build a new 89,000 square foot high school for the new Project Based Learning Camas on 40 acres recently purchased from Sharp Laboratories of America. This facility will be located behind the new Project Based Learning middle school currently operating at the campus site. This new school will include all associated parking and bus drop off facilities as well as some on and off site pedestrian improvements.

Included in the application is a detailed narrative, building elevations, site plan and landscaping plans to help illustrate compliance with design review principles for the project.

PURPOSE:

Design Review is required under CMC Chapter 18.19. Design review is not intended to determine the appropriate use on a parcel but rather review a proposed development for compliance with City codes and plans related to landscaping, architectural elevations and other elements relative to required improvements. The recommendations from the Design Review Committee (DRC) must consider the general design review standards (CMC Chapter 18.19.050.A and the Camas Design Review Manual "DRM" pages 4-7), along with the the specific standards for multi-family (CMC Chapter 18.19.050.B.3.c and the DRM page 19); which are included in the enclosed Design Review Checklist.

STANDARD, GATEWAY AND MULTI-FAMILY DESIGN PRINCIPLES AND GUIDELINES:

The standard principles are required and must be demonstrated to have been satisfied in overall intent for design review approval. The standard design guidelines are developed to assist a project in meeting the established principles and each guideline should be adequately addressed. If the proposal cannot

meet a specific guideline, then an explanation should be provided by the applicant as to why and how it will be mitigated to satisfy the intent of the design principles. The development guidelines include five major categories: 1) Landscaping and Screening, 2) Architecture, 3) Massing and Setbacks, 4) Historic & Heritage Preservation, and 5) Circulation and Connections. **The Design Review Checklist is enclosed to help guide the DRC in reviewing the standard applicable specific design review principles and guidelines.**

RECOMMENDATION:

That the Design Review Committee reviews the submitted materials, deliberates, and forwards a recommendation to the Director for a final decision.

EXHIBIT 17

City of Camas WASHINGTON

Community Development Department

Notice of Public Hearing
Camas School District
Project Based Learning High School

File No. SPRV17-01

A public hearing will be held on Thursday, April 20, 2017 at 6:00 p.m., or soon thereafter before the city's Hearings Examiner for the new Project Based Learning High School. The hearing will be located at City Hall at 616 NE 4th Avenue, Camas, WA 98607. The Camas School District has proposed to build a new two-story 89,000 square foot high school located at 5780 NW PACIFIC RIM BLVD, CAMAS, 98607 (Tax Parcel #125661-000 and 986033-962). The new school will be located next to the Project Based Learning Middle School already in operation at the same campus. The project will include new on-site parking, outdoor recreation and traffic improvements on and off site. The application was considered to be technically complete on February 1, 2017. The development proposal requires site plan approval which is done administratively as a Type II decision, however the Camas School District has requested that the City hold an optional public hearing. The development proposal includes other standard procedural elements including Environmental Permits and Design Review. The standards for evaluating the application are generally contained in the Camas Municipal Code, namely Title 16 Environment, Title 17 Land Development, and Title 18 Zoning, which are available online at: https://www.municode.com/library/wa/camas/codes/code_of_ordinances.

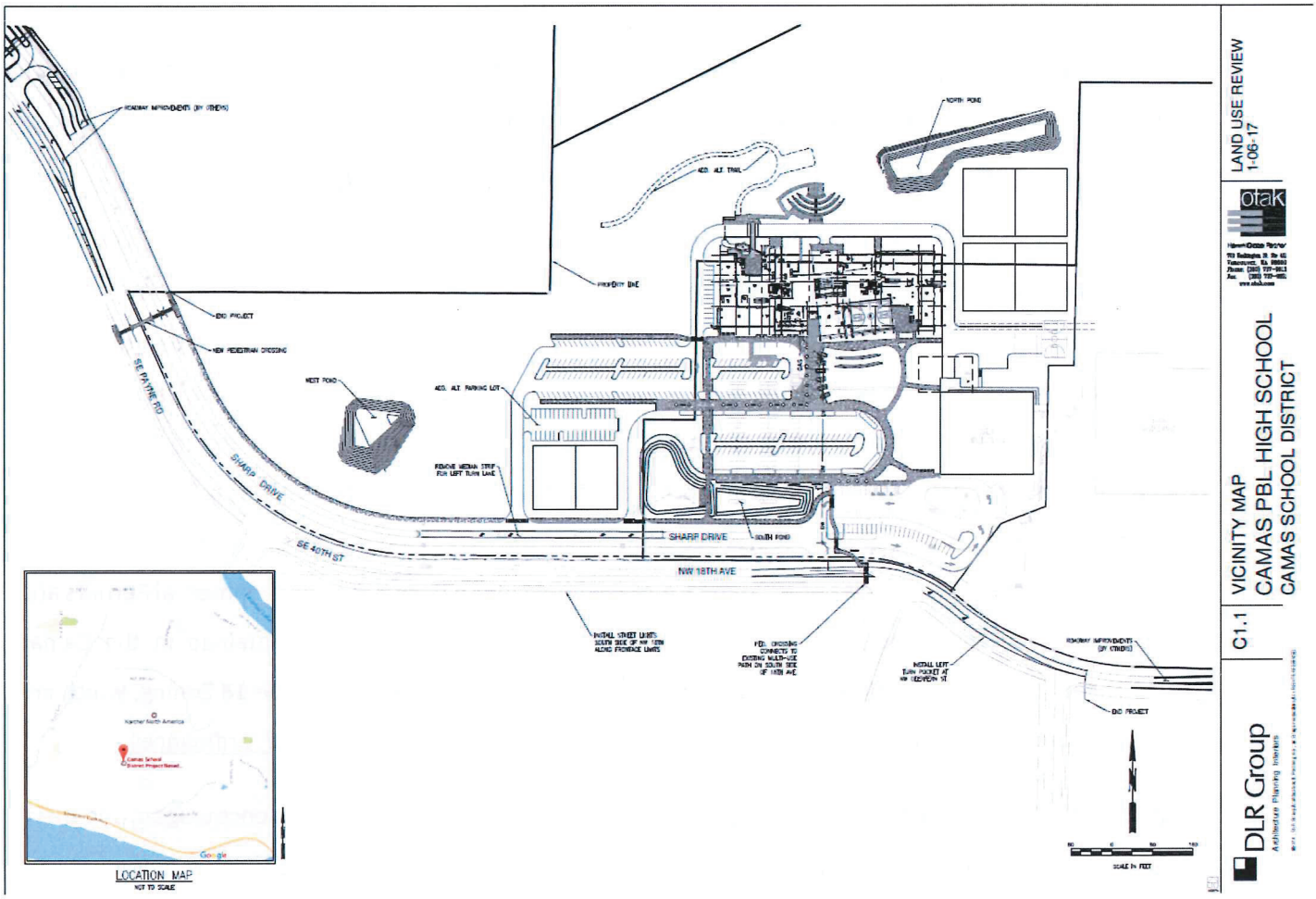
Questions/Comments/Participate: Public comments and questions are encouraged, and there are several opportunities available to interested citizens. It is preferable that written comments be received at least a week prior to the public hearing, in order to be available with the online agenda and materials. Comments can also be accepted during the public hearing. Please contact Robert Maul, Planning Manager, at (360) 817-7255 or by email at communitydevelopment@cityofcamas.us, with any questions or to provide comments.

Notice was published in the Post Record on April 6, 2017 Legal Publication No. 580238
Posted at Camas City Hall, Camas Library, City of Camas web site at: http://www.cityofcamas.us
Mailed to property owners in abutting neighborhoods and within 300-feet on April 6, 2017

Application Materials: The Project Based Learning High School application included the following: Project Narrative; Drawings; Preliminary Stormwater Report; Traffic Study; Geotechnical Report; Archaeological Predetermination & Survey *, and other required submittal documents. A State Environmental Policy Act (SEPA) determination was issued by the City on February 16, 2017. The application documents are available for viewing at the Community Development Department (616 NE 4th Avenue, Camas, WA) during regular business hours Monday – Friday 8am-5pm.

New Project Based Learning High School

(File #SPRV17-01)



*Consistent with RCW 42.56.300, Archaeological information is exempt from public disclosure.

EXHIBIT 18

State Environmental Policy Act
Determination of Non-Significance

CASE NO: SEPA17-03

APPLICANT: Camas School District, Project Based Learning High School
Attn: Heidi Rosenberg
841 NE 22nd Avenue
Camas, WA 98607

REQUEST: The applicant is proposing to build a new 89,000 square foot building for a Project Based Learning High School located on 39.25 acres. Associated parking, bus drop off area and other general outdoor amenities.

LOCATION: 5780 NW Pacific Rim Blvd
Camas, WA 98607

LEGAL DESCRIPTION: South half of Section 5, T1N, R3E of WM,
#4 Lot 1 SP-2-109 29.48A ASN#986033-962; #5 Lot 1 SP-2-109 9.76A, ASN#125661-000

SEPA DETERMINATION: Determination of Non-Significance (DNS)

COMMENT DEADLINE: February 16, 2017, at 5:00 p.m.

As lead agency under the State Environmental Policy Act (SEPA) Rules [Chapter 197-11, Washington Administrative Code (WAC)], the City of Camas must determine if there are possible significant adverse environmental impacts associated with this proposal. The options include the following:

- DS = Determination of Significance (The impacts cannot be mitigated through conditions of approval and, therefore, requiring the preparation of an Environmental Impact Statement (EIS).
- MDNS = Mitigated Determination of Non-Significance (The impacts can be addressed through conditions of approval), or;
- DNS = Determination of Non-Significance (The impacts can be addressed by applying the Camas Municipal Code).

Published in the Post Record on February 16, 2017 Legal publication No. #577723
Posted on bulletin boards at Camas City Hall, Camas Post Office, Camas Library and on the City's website

Determination:

Determination of Non-Significance (DNS). The City of Camas, as lead agency for review of this proposal, has determined that this proposal does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(e). This decision was made after review of a completed environmental checklist, and other information on file with the City of Camas.

Date of Publication & Comment Period:

Publication date of this DNS is **February 16, 2017**, and is issued under WAC 197-11-340. The lead agency will not act on this proposal until the close of the 14-day comment period which ends on **March 2, 2017**. Comments may be sent by email to communitydevelopment@cityofcamas.us.

SEPA Appeal Process:

An appeal of any aspect of this decision, including the SEPA determination and any required mitigation, must be filed with the Community Development Department within fourteen (14) calendar days from the date of the decision notice. The letter of appeal should contain the following information.

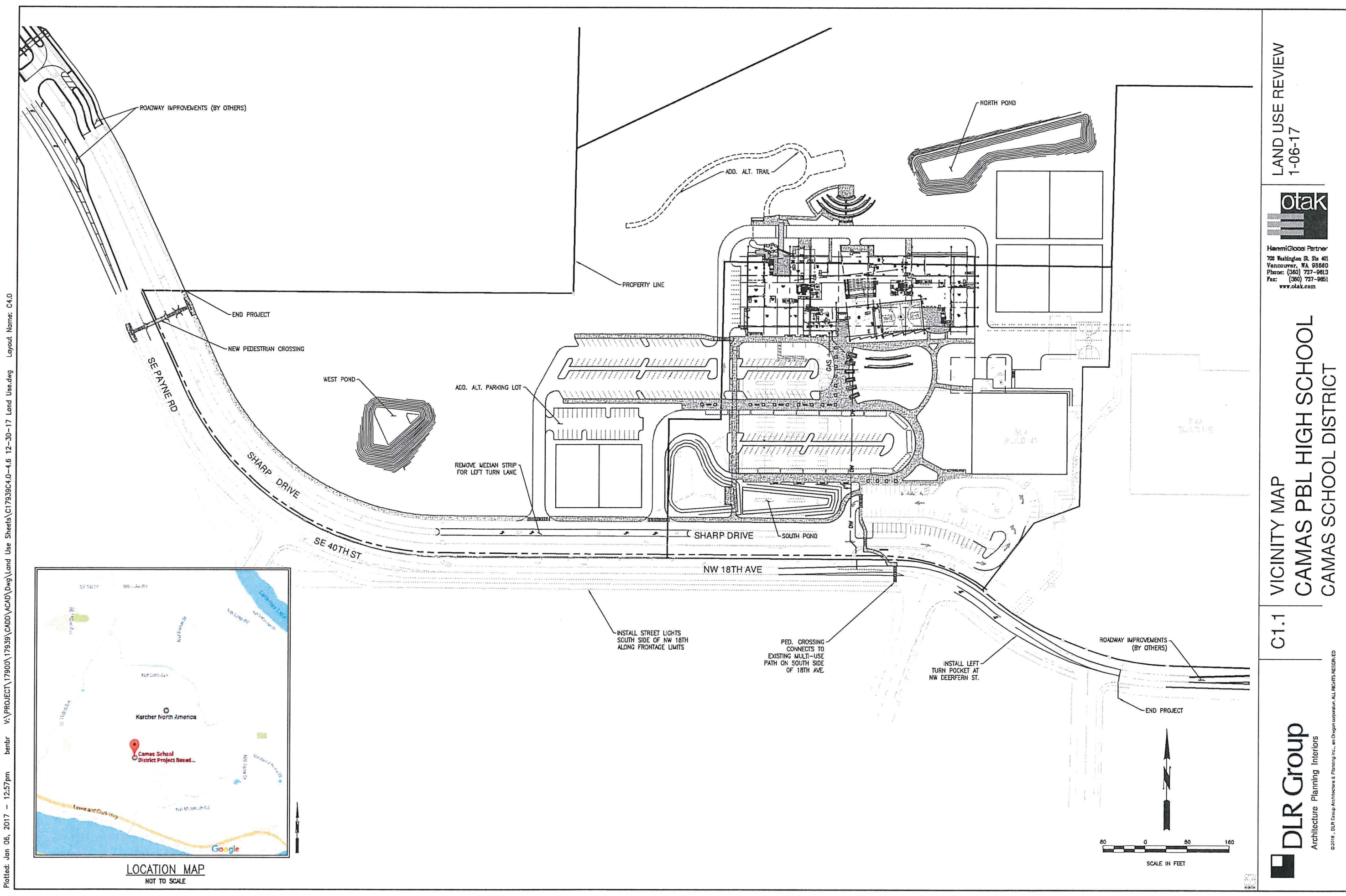
1. The case number designated by the City of Camas and the name of the applicant; and,
2. The name and signature of each person or group (petitioners) and a statement showing that each petitioner is entitled to file an appeal as described under Title 16 of the Camas Municipal Code. If multiple parties file a single petition for review, the petition shall designate one party as the contact representative with the City Planner. All contact with the City Planner regarding the petition, including notice, shall be with this contact person.

The appeal request and appropriate fee of **$355** must be submitted to the Community Development Department between 8:00 a.m., and 5:00 p.m., Monday through Friday, at the address listed below:

Appeal to the City of Camas SEPA Official
Community Development Department
616 NE Fourth Avenue
Camas, Washington 98607

Responsible Official: Robert Maul (360) 817-1568

Robert Maul, Planning Manager and Responsible Official	**February 16, 2017** **Date of publication**


ROADWAY IMPROVEMENTS (BY OTHERS)
NORTH POND
ADD. ALT. TRAIL
PROPERTY LINE
END PROJECT
NEW PEDESTRIAN CROSSING
WEST POND
ADD. ALT. PARKING LOT
SE PAYNE RD
SHARP DRIVE
REMOVE MEDIAN STRIP FOR LEFT TURN LANE
SOUTH POND
SE 40TH ST
NW 18TH AVE
INSTALL STREET LIGHTS SOUTH SIDE OF NW 18TH ALONG FRONTAGE LIMITS
PED. CROSSING CONNECTS TO EXISTING MULTI-USE PATH ON SOUTH SIDE OF 18TH AVE.
INSTALL LEFT TURN POCKET AT NW DEERFERN ST.
ROADWAY IMPROVEMENTS (BY OTHERS)
END PROJECT
SCALE IN FEET
LOCATION MAP
NOT TO SCALE
Karcher North America
Camas School District Project Based...
Google
Plotted: Jan 06, 2017 – 12:57pm benbr V:\PROJECT\17900\17939\CADD\ACAD\Dwg\Land Use Sheets\C17939C4.0-4.6 12-30-17 Land Use.dwg Layout Name: C4.0
LAND USE REVIEW
1-06-17
otak
708 Washington St. Ste 401
Vancouver, WA 98660
Phone: (360) 737-9613
Fax: (360) 737-9651
www.otak.com
C1.1
VICINITY MAP
CAMAS PBL HIGH SCHOOL
CAMAS SCHOOL DISTRICT
DLR Group
Architecture Planning Interiors

CAMAS SCHOOL DISTRICT

Guiding Principles:

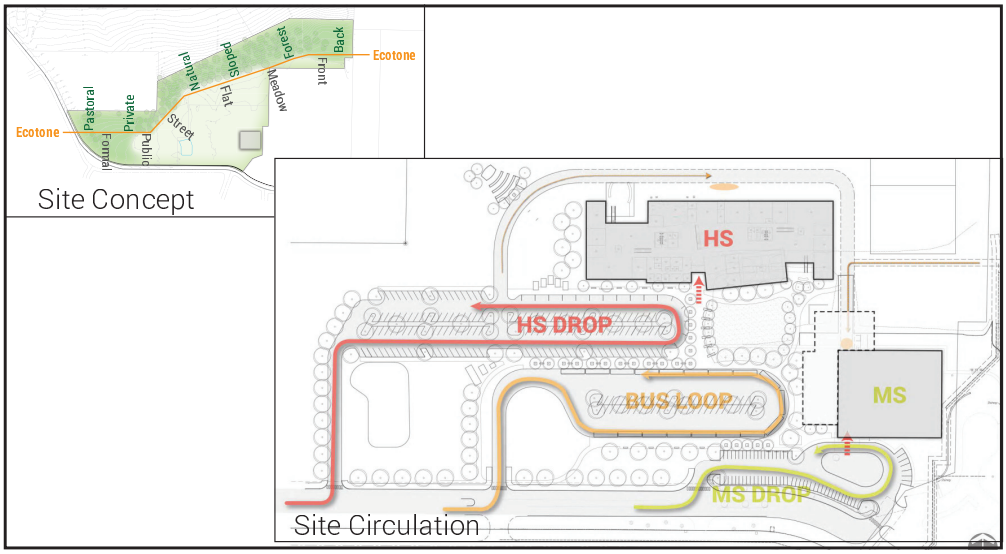
- Personalized Learning that's Engaging, Active, and Inspiring
- Collaboratively Designed Learning by Students and Teacher
- Flexible and Adaptable
- Contribution to Community

Design Evaluation Criteria to Consider:

- How the design supports the vision
- Value Added Design features

Major Themes:

- All spaces are learning spaces
- Highly visible, transparent, open
- Flexible, Adaptable & Multi-Use spaces – now/future
- Connection to Outdoors & Outdoor Learning spaces
- Presentation everywhere
- Active and Completed Projects on display
- Equipment and Furniture play key roles
- 2-way connection to the community
- One Heavy Fabrication and multiple Medium/Light Production Labs, with a separate Digital Lab
- Non-tradition PE --> Lifelong Fitness Exploration
- Spaces for individuals, small groups and large groups
- Efficient, Sustainable & Healthy Design
- Food brings people together



Site Plan

BASE BID

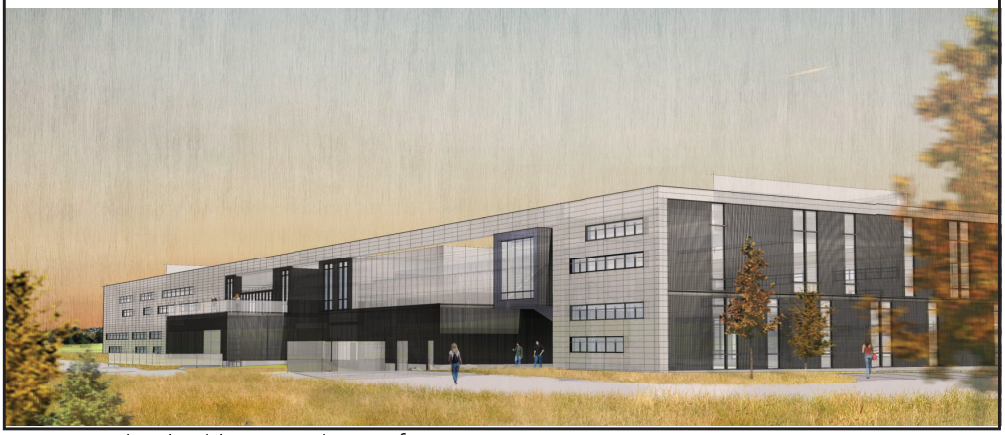
Student = 151
Staff = 93
Visitor = 24
ADA = 8
Total = 276

BASE BID + ADD ALT. LOT

Student = 168
Staff = 110
Visitor = 24
ADA = 8
Total = 310

Perspective looking Northeast from Access Road

Perspective looking North from Middle School



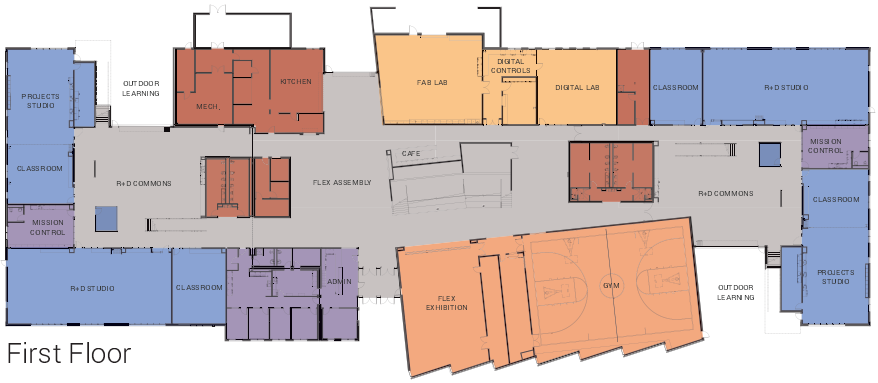
Perspective looking Southeast from Forest

Massing / Building Organization

EXTERIOR MATERIALS

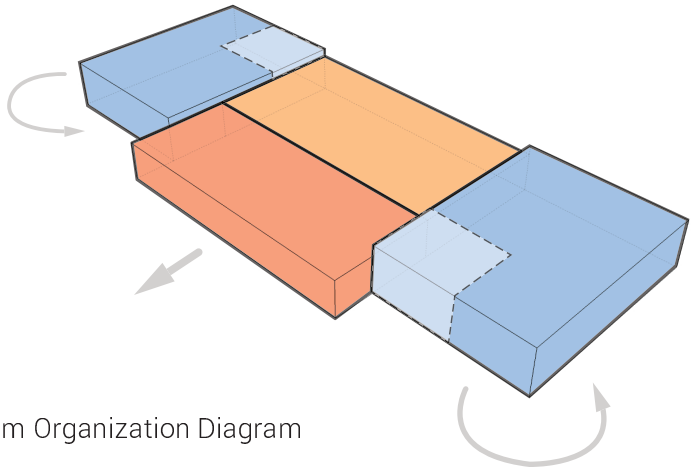
Glazing
Concrete Panels
Corrugated Metal
Metal Panel
Concrete

Second Floor



First Floor

COMMON SPACE | HI-TECH LEARNING | GYM/EXHIBITION
LEARNING POD | LEADERSHIP | BUILDING SERVICES



Program Organization Diagram

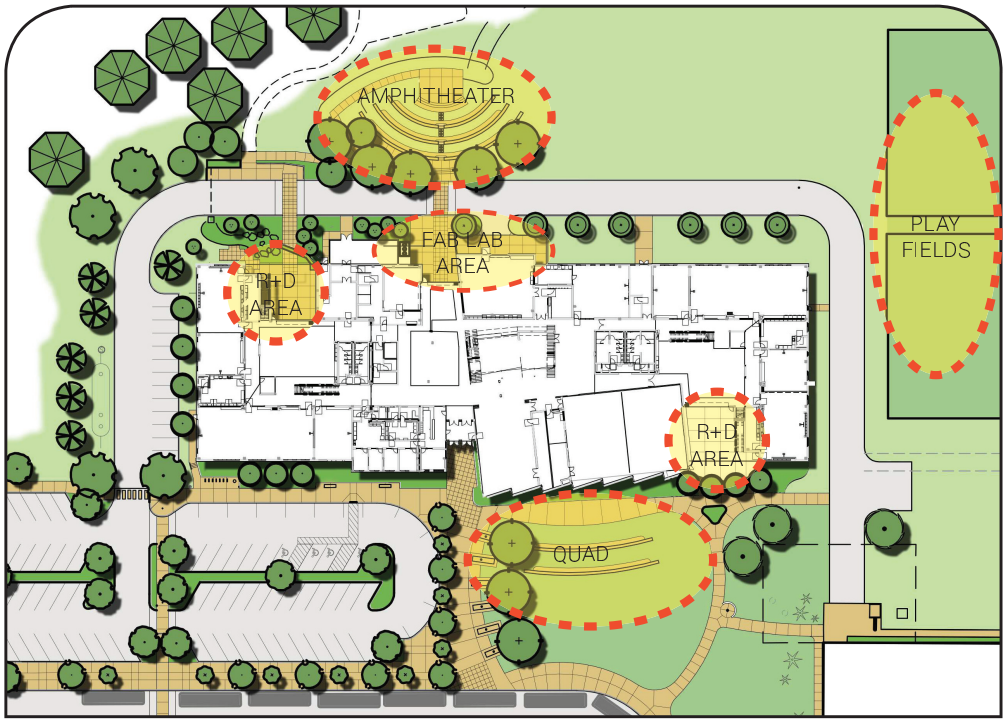
Floor Plans

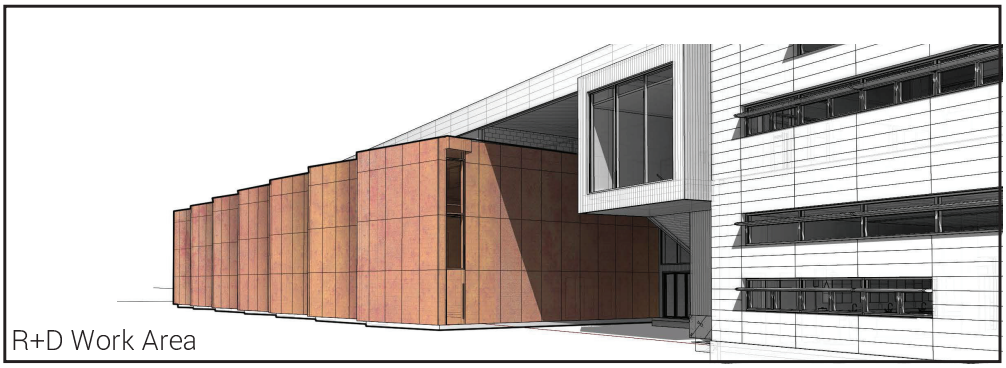
PROGRAM ELEMENTS

- Administration
- HUB
- Flex Exhibition & Fitness
- Research Node
- FAB Lab
- R+D Pods
- Cores / Building Support

INTERIOR DESIGN

- Canvas/warehouse for Student Work
- Professional Workshop





R+D Work Area

Amphitheater

OUTDOOR LEARNING

PROGRAM DESCRIPTION

- Amphitheater
- Covered Outdoor FAB Lab Work Area
- Covered Outdoor R + D Work Areas
- Learning Quad
- Play Fields

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:**

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:
Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [help]

1. Name of proposed project, if applicable: [help]

Camas Project Based Learning High School

2. Name of applicant: [help]

Camas School District No. 117

3. Address and phone number of applicant and contact person: [help]

Owner:
Camas School District, No. 117
841 NE 22nd Ave, Camas, WA 98607
Phone: 360.335.3000

Contact:
Heidi Rosenberg, Director Capital Programs
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4. Date checklist prepared: [help]

January 17, 2017

5. Agency requesting checklist: [help]

City of Camas

6. Proposed timing or schedule (including phasing, if applicable): [help]

Site work for the project is anticipated to start in the spring of 2017 with substantial completion scheduled for summer 2018.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]

No additional plans or further related activities are anticipated at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]

- **Existing Conditions Survey for Sharp Electronics prepared by Olson Land Surveyors, dated May 2015; Topographic Survey prepared by Otak, Inc., dated June 2016**

- **Civil plans prepared by OTAK, Inc. Include Storm Drainage and grading, sewer, water, off-site road improvements and a Technical information Report for Storm Drainage. These plans will be submitted to the City of Camas and other applicable agencies for review and approval.**

- **Landscape and Conceptual Planting Plan prepared by OTAK, Inc.**

- **Geotechnical Report, dated December 15, 2016 as prepared by GRI.**

- **Traffic Analysis Report(s) for Camas Middle & High Schools, Sharp Drive by Charbonneau Engineering (dated May 27, 2016; April 27, 2016; May 9, 2016; August 2, 2016)**

- **Sharp Electronics Corporation Preliminary Wetland and Habitat Assessment, as prepared by the Resource Company, Inc., dated August 28, 2013**

- **City of Camas Archaeological Predetermination Report prepared by Archaeological Investigations Northwest, Inc. dated May 20, 2016**

- **Environmental Noise Assessment of proposed site by BRC Acoustics dated November 22, 2016**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]

There are no other pending applications affecting this property

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

SEPA Review and Determination	**City of Camas**
Land Use Review	**City of Camas**
NDPES Permit for Construction	**Department of Ecology**
Building Permit	**City of Camas**
Fire System Permit	**Camas-Washougal Fire Department**
Electrical Permit	**WA State Department of Labor and Industries**

Food Services/ School Review	**Clark County Public Health Department**
Sign Permit	**City of Camas**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

The new Camas School District (CSD) Project-Based Learning (PBL) High School will be a new high school facility that delivers a project-based learning approach to 9th – 12th education for an estimated 600 students. The new facility will be approximately 88,000 square feet, and two stories (42 feet high). It is type IIB Construction, designed to fit into the context of the existing office/ industrial park site.

The new facility is proposed to be open to new students for the start of the 2018-2019 school year. Construction is intended to begin in the Spring of 2017. The school will be located at 5780 NW Pacific Rim Blvd, Camas, what is often referred to as the Sharp Property. The District has recently purchased nearly 40 acres and a 55,000 SF two story office building from Sharp Laboratories of America, in the Prune Hill area of the community. The lab/office building has recently been converted to house a project-based learning middle school program, eventually designed to serve 450 students grades 6 through 8. With the addition of the new high school on the property, there are many opportunities to share resources (both educationally and operationally), create a unique culture and identity for the PBL program, accommodate the district's growing population, and streamline operating costs.

The high school is composed of four research and development pod(s), comprised of core learning spaces and a commons where 150 students (per pod) will spend the majority of their day. Additional spaces include a fabrication lab, projects lab, classrooms, Mission Control (faculty studio/ work area and supervision) and Think Tanks (Quiet study areas). Commons spaces for the whole school are housed in the "Mixing Chamber" (center of the culture and community of the school) housing the Learning stair, Assembly area, Kitchen and Café, Gym, and a flex exhibition space.

Approximately 271 parking spaces will be provided on site, including reuse of some existing parking spaces adjacent to the existing middle school building. Proposed parking will serve both the new high school and the middle school. There will be 150 parking spaces provided in the North Parking lot for high school students, along with a parent drop off zone and additional accessible parking. The central parking lot contains staff parking spaces for 50, and active bus drop off space for up to 18 buses

unloading and loading at one time. The southern parking area contains 40 existing parking stalls, (3) accessible stalls and adds 25 new parking stalls for middle school staff and visitors, as well as high school student overflow parking. Site amenities include an amphitheater, and play and practice fields for PE and informal school and community use.

The CSD property is approximately 40 acres. The area of the site being developed for the school is approximately 15.7 acres of the total site – predominantly at the southernmost flat area.

Adjusted Parcel 4 – (29.48 Acres)

Adjusted Parcel 5 – (9.76 Acres)

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

The new Camas School District Project-Based Learning High School is located at 5780 NW Pacific Rim Blvd, Camas, WA 98607. The property is located in the South half of Section 5, Township 1 North, Range 3 East of the Willamette Meridian, City of Camas, Clark County, Washington.

Abbreviated Legal Description: #4 LOT 1 SP 2-109 29.48A ASN # 986033-962; #5 LOT 1 SP 2-109 9.76A, ASN #125661-000

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth [help]

a. General description of the site: [help]

(circle one): Flat, **rolling**, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)? [help]

The steepest slope on the site is approximately 45 percent. This is located on the north edge of the property that is to remain undeveloped. The general slope across the existing site that is proposed to be developed is approximately 3.5%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

General soil conditions throughout the site are Powell Silt Loam and Olympic Clay Loam which are classified as Type C soils.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

There are approximately 15.7 acres of land that will be disturbed during construction of the project. Of this, there will be approximately 21,500 CY of excavated material and 17,000 CY of fill material. It is anticipated that most of the excavated material will be used onsite for fill material.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]
Yes, erosion can occur, but by following Best Practices in conformance with the Department of Ecology, it will be minimized during construction.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]

24.3% of the completed project site will be impervious. There is approximately 9.94 acres of impervious area on the site for the project. 8.54 acres are new impervious and 1.40 acres are existing or replaced impervious.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]

The proposed project will follow the recommendations of the geotechnical report dated December 15, 2016, by GRI Consultants, as well as the Stormwater Management Design criteria adopted by the City of Camas and Best Practices set forth by the Department of Ecology. The project will implement temporary erosion control measures in accordance with City of Camas and DOE standards during construction to prevent silt-laden stormwater from leaving the project site and from entering permanent stormwater facilities. All disturbed areas will be planted with permanent vegetation to minimize long-term erosion.

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Demolition and construction activities on the project site could stir up dust particles. Construction vehicles and equipment will also be a potential source of exhaust emissions. Both demolition and construction activities will follow the appropriate regulations and provide necessary mitigation for controlling emissions to the air. After project completion, the primary sources and amounts of emissions will be the same as they are now, minimal.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]

The Sharp Microelectronics of America (SMA) Building on the property remaining under Sharp ownership is considered a B occupancy. Sharp Microelectronics provides LCD, Optoelectronics, Imaging, and RF components to the world's leading technology manufacturers. SMA is not a manufacturing site. However, the building contains an R&D lab and two chemical storage facilities utilizing small quantities of hazardous chemicals. In more than 20 years of operation, no emissions have been released from the SMA facility. The SMA building is designed to prevent unplanned emissions and has an internal air scrubber system, chemical storage secondary containment, and a robust Emergency Response Plan.

A K-12 educational facility is allowed outright in a business park.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]

Watering the ground as needed before and during clearing and grading activities will control dust particles. Vehicles that are not being used in construction activities will be shut off.

The new PBL high school will have an Emergency Response Plan and the building is designed to allow for HVAC system shut down of outside air intake in the event of an unsafe air emission from any off-site source.

3. **Water** [help]

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [help]

A Preliminary Wetland and Habitat Assessment prepared by the Resource Company Inc., dated August 28, 2013 analyzed the entire Sharp Microelectronics property. No wetlands were located within parcels 4 and 5.

The school district site contains an existing stormwater pond that will be replaced as the parking is reconfigured.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

The existing stormwater pond at the developed area will be replaced. The project work will not impact any other surface water body or wetland.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]
None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

No

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]
No

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]

The scope of the project involves installing a new STEP service lateral connecting to the existing 2" STEP main in NW18th Street to serve the new high school. The system will be sized to accommodate approximately 1200 building occupants (600 students; 90-100 teachers/staff and guests at the HS; 550 Middle School). There is

an existing STEP system located on the adjacent Sharp SMA site that serves the existing middle school facility.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]

Runoff from roof and impervious surfaces will be collected in bioswales located adjacent to the parking and via conveyance systems to the treatment ponds. The site drainage is designed to flow toward one pond at the north, and two ponds to the west. After treatment and detention, water will be released to the City of Camas storm system. The proposed project will retrofit the existing detention facility and construct two additional facilities within the project limits to satisfy flow control requirements. The detention ponds to the south and west of the school will discharge into the existing storm system located on SE 40th Street, while the detention pond north of the school will discharge over the slope onto the undeveloped portion of the property. A flow spreader will be used to disperse the discharge and avoid erosion.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]

Any time that runoff is exposed to pollutant generating surfaces like roads and parking areas there is a chance for waste materials like oils and heavy metals to enter the downstream system. However, this will be mitigated by the treatment ponds described above.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]

No. The goal of stormwater design at this proposal is to maintain existing drainage patterns

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [help]

The project will be designed to meet the requirements of the City of Camas Stormwater Standards.

4. **Plants** [help]

a. Check the types of vegetation found on the site: [help]

X___deciduous tree: **alder**, maple, aspen, other
X___evergreen tree: **fir, cedar,** pine, other
X___shrubs
X___grass
____pasture
____crop or grain
X___ Orchards, vineyards or other permanent crops. **(Portions of the site are remnant orchard areas: plums, apples, pears)**
__X__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, **other**
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [help]

The approximate construction disturbance area is 683,258 sf or 15.7 acres. Of this, approximately 51,890 sf is the existing parking lot to be removed and replaced. The balance of vegetated area removal is 631,368 sf or 14.5 acres of rough lawn. In addition, 28 deciduous trees and 18 evergreen trees will be removed. Species include pine, maple, pear, poplar and tulip tree. Other vegetation to be removed includes a few shrubs (less than 10), including burning bush, and an unidentified evergreen shrub and the existing storm pond vegetation, including trees, shrubs and water plants such as cattails.

The 7 pines on the west side of the middle school will be retained. There will be no disturbance of the forested area along the north side of the site.

c. List threatened and endangered species known to be on or near the site. [help]

To our knowledge, there are no threatened or endangered plant species on or near the project site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

The proposal includes street trees, site trees, storm facilities, shrub beds and lawn.

209 trees are currently proposed to be planted at the site, including: 5 species of maples, Northern Catalpa, Katsura, Eastern Redbud, Yellowwood, Dogwood, Tulip Trees, Dawn Redwood, Black Tupleo, Flowering Cherry, Flowering Pear, Scarlet Oak and Oregon White Oak. Three of these (Vine Maple, Big Leaf Maple, and Oregon White Oak) are native.

Approximately 34,098 sf of shrub beds will be planted. Species include Burning Bush, Lily Turf, Tall Oregon Grape, Nandina, Daffodils, Western Swordfern, English Laurelcherry, Rhaphiolepis, Rose, Spirea and Viburnum. Tall Oregon Grape and Western Swordfern are native.

The storm facilities (approx. 44,570 sf) will be planted in well-recognized storm plants such as Slough Sedge and Soft Rush. Black Tupelo may be included in the parking lot facilities.

The remainder of the area will be planted in seeded lawn. Some of this will be "manicured," implying import topsoil and irrigation. The rest will be "rough lawn," implying lower

maintenance and no irrigation.

e. List all noxious weeds and invasive species known to be on or near the site. [help]

Himalayan Blackberry/ Rubus armenaicus

5. **Animals** [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

birds: **hawk,** heron, **eagle**, **songbirds**, other:
mammals: deer, bear, elk, beaver, other: **raccoons, squirrels, rabbits, opossum**, **small rodents**
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. [help]

To our knowledge, there are no threatened or endangered species known to be on or near the site. The Preliminary Wetland and Habitat Assessment notes that no fish and wildlife habitat conservation areas as defined in this report were observed in the project area.

c. Is the site part of a migration route? If so, explain. [help]

Western Washington is included in the Puget Flyway, which is a migratory bird route

d. Proposed measures to preserve or enhance wildlife, if any: [help]

None

e. List any invasive animal species known to be on or near the site. [help]

None known

6. **Energy and Natural Resources** [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]

Gas will be used for heating and electricity will be used for lighting

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

No, the building is too far from adjacent properties to influence use of solar energy.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]

Solar orientation and the use of shading will reduce heat gain which will reduce air handling unit energy use. Careful daylighting strategies and the use of automatic dimming will reduce lighting energy use. Careful detailing of the envelope will reduce heat loss due to infiltration. LED lighting, as well as a high efficiency mechanical system, will reduce energy usage. The building will be Washington Sustainable Schools Protocol (WSSP) equivalent."

7. **Environmental Health** [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]

No environmental health hazards are foreseen

1) Describe any known or possible contamination at the site from present or past uses. [help]

There are no known contaminants at the site from present or past uses

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]

The Sharp Microelectronics of America (SMA) Building on the property remaining under Sharp ownership contains an R&D lab and two chemical storage facilities utilizing small quantities of hazardous chemicals. In more than 20 years of operation, no emissions have been released from the SMA facility. The SMA building is designed to prevent unplanned emissions and has an internal air scrubber system, chemical storage secondary containment, and a robust Emergency Response Plan.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]

There will be the standard cleaning supplies used in the school, chemicals used for maintaining the landscaping, and chemicals used in student instruction spaces such as science labs and fab labs (shops) once the project is complete.

4) Describe special emergency services that might be required. [help]

Standard fire, ambulance, and police services are all that might be required.

5) Proposed measures to reduce or control environmental health hazards, if any: [help]

Standard procedures for handling cleaning supplies used in the school, chemicals used for maintaining the landscaping, and chemicals used in the student instruction spaces such as labs and shops shall be enforced.

The new PBL high school will have an Emergency Response Plan and the building is designed to allow for HVAC system shut down of outside air intake in the event of an unsafe air emission from any off-site source.

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]

The acoustical report and site measurements taken by BRC acoustics (November 22, 2016) indicates that the sources of noises that impact the site are due to road traffic noise, HVAC noise from the nearby Sharp Laboratories, and aircraft overflights.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [help]

Temporary, short-term noise impacts typical of construction projects will occur with operation of equipment during construction. Construction will occur within acceptable City of Camas noise ordinance hours of operation.

There will be some noise generated by regular, ongoing school activities such as students and bus traffic. Some noise-generating events will occur occasionally after school and on weekends.

2) Proposed measures to reduce or control noise impacts, if any: [help]

Noise impacts associated with construction of the project will be limited in duration. To mitigate general noise impacts during construction, measures such as using efficient mufflers and quieting devices on all construction equipment will be taken. Construction equipment will be located as far away as possible from areas sensitive to noise, and construction hours will occur within acceptable City of Camas noise ordinance hours of operation.

8. **Land and Shoreline Use** [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The current use of the existing building on parcel #5 is to house the Project-Based Learning Middle School Program, per the recent sale of the Sharp Labs property to Camas School District. The adjacent property to the east, on parcel #6, continues to be used by Sharp

Microelectronics of America. The proposed project will maintain the use of parcel #5 for Camas School District facility use. The northwestern adjacent vacant property is owned by the City of Vancouver and is the future site of a potable water tower. The northern adjacent properties are currently owned by Sharp, but are vacant and for sale. All properties to the south are residential and are separated by a municipal roadway.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

No

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]

No

c. Describe any structures on the site. [help]

There is an existing two story, 55,000 sf facility on the site, which houses the Camas School District Project-Based Learning Middle School program.

d. Will any structures be demolished? If so, what? [help]

There is a small Photovoltaic (PV) installation that will be demolished and/or relocated as part of this project.

e. What is the current zoning classification of the site? [help]

The current zoning is BP – Business Park

f. What is the current comprehensive plan designation of the site? [help]

Industrial

g. If applicable, what is the current shoreline master program designation of the site? [help]

Not applicable

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

The slopes to the north side of the property, in the undeveloped area of the site, are critical areas as they are considered landslide and erosion hazards.

i. Approximately how many people would reside or work in the completed project? [help]

The proposed High School will house 600 Students, and approximately 50 teachers, staff and guests.

j. Approximately how many people would the completed project displace? [help]

No one will be displaced by the completed project

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]

No measures are proposed

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]

A high school is a permitted use within the permitted zoning. The building is designed to meet the zoning requirements set forth.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: [help]

Not applicable

9. **Housing** [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]

The proposed project will not include the addition of any new housing units

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]

None

c. Proposed measures to reduce or control housing impacts, if any: [help]

Not applicable

10. **Aesthetics** [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]

The tallest part of the structure is 42 feet. Exterior building material will be a rainscreen panelized system and concrete masonry units. Roofing will be a single-ply system.

b. What views in the immediate vicinity would be altered or obstructed? [help]

No views are anticipated to be obstructed, as the height and massing of the proposed structure is comparable to the existing building on site

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]

The site will be landscaped to meet City of Camas code requirements and will have some streetscape planting as a part of the frontage improvements. The building is designed to complement the aesthetic of the existing buildings adjacent.

11. **Light and Glare** [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]

Glare may result from window surfaces. Interior lighting from the building may be noticeable. Exterior building lighting will be used for safety and security purposes. Lighting will also be used along sidewalks, in the parking areas, in the landscaped areas, and along the frontage improvements.

Glare from window surfaces would result during the early or late portions of the day, when the sun is lowest, and glare from interior lighting or exterior lighting would occur when the school is used in the evening hours. Typical school hours are 8:30 to 3:30; with before or after school activities typical from 7 am to 5 pm. Additional late evening activities could occasionally occur.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]

No. Light or glare from the finished school is not expected to be a safety hazard, interfere with views, or affect wildlife.

c. What existing off-site sources of light or glare may affect your proposal? [help]
No off-site source of light or glare affect this proposal.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]
Strategies such as cut-off louvers and/or dark scar compliant fixtures will be used to prevent light glare escaping to adjacent properties.

12. **Recreation** [help]

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]
Informal playfields exist (now and as proposed) on the site, and informal recreational opportunities exist within the natural wooded area to the north.
The Grass Valley Park and Trail is located approximately 2 miles to the east of the site, and Prune Hill Sports Park is located less than a mile to the south of the site, adjacent to Prune Hill Elementary School.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]

No. As the property is developed, an informal field area will be maintained on site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]
The proposed frontage improvements include a second pedestrian crossing and pedestrian/bike multiuse path located north and east of Sharp Drive. Such improvements will facilitate a better connection from the site to the adjacent recreational amenities listed above.

13. **Historic and cultural preservation** [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe. [help]

There are no known buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

The project is within an area identified as moderate-high to low-moderate probability under the Clark County Predictive Model . For this reason, an archaeological assessment was performed in May 20, 2016 by Archaeological Investigations NW. Both a pedestrian survey of the surface and subsurface probing were performed. No evidence of pre-contact or historic-period archaeological material was identified during the pedestrian survey and shovel testing. From this assessment AINW recommended no further archaeological work for the proposed project and concluded that an archaeological resource survey was not necessary.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of

archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

Methodology of Background Research (per the report): Prior to performing fieldwork, AINW completed a records search and literature review to identify previously recorded sites and surveys in or near the project area. This included a search of records and reports held by Washington State Department of Archaeology and Historic Preservation, examining historic cadastral survey maps held by the U.S. Bureau of Land Management, and reviewing documents and maps on file at AINW to determine the potential for archaeological and historic-period resources in the project area.

The records indicated no archaeological sites have been previously recorded in the project area.

Methodology of surface investigation procedures (per the report): AINW performed a pedestrian survey of the project area on April 28,2016. The survey crew was equipped with a handheld global positioning system and digital cameras for photographs.

The crew performed the pedestrian survey systematically by walking parallel transects spaced no more than 15 m (49.21 ft) apart while carefully inspecting the surface for archaeological material and to identify areas that may yield subsurface archaeological deposits. No historic-period or pre-contact artifacts were encountered on the surface of the project area.

Methodology of Subsurface Inspection (per the report):

AINW excavated 14 shovel tests within the project area on May 2, 2016, to determine if subsurface archaeological material was present. No historic-period or pre-contact artifacts were encountered during excavation of the 14 shovel tests.

Based on the altered conditions of much of the project area and results of the fieldwork, the project area is unlikely to yield intact archaeological deposits. Shovel testing demonstrated that the soil in the project area has been previously disturbed, probably during the development of the Sharp facilities, and agriculturally prior to that.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]

If cultural or archeological objects are found during site preparation work, the Washington State Office of Archaeology and Historic Preservation will be notified, and appropriate regulatory measures will be taken.

14. **Transportation** [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

The project site includes the private two-lane "Sharp Drive" along its south and west boundary. The public streets of SE Payne Road, NE 40th Street, and NW 18th Avenue are located immediately south and west of the site. Current access is via Pacific Rim Boulevard, and future access will be from SE Payne Road at a newly constructed Lacy Way intersection.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

The Site is not directly served by public transit. A C-tran connector route 92 connects Camas & Washougal to the Vancouver, WA service area. The closest location of this route to the site is 2.5 miles away at the Fisher's Landing Transit Center in Vancouver, WA.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]
Currently there are 135 parking spots in the existing parking lot that will be demolished and replaced, and there are 45 spots in the parking area adjacent to the middle school building that will remain. An additional 91 parking spaces will be added, for a total of 271 parking spaces on the completed site.

e. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The Traffic Analysis Report for Camas Middle & High Schools, Sharp Drive by Charbonneau Engineering (last updated August 2, 2016) indicates a failure at the NW 16th Street and Brady Road intersection precipitated by the new high school. As a result, Camas School District will contribute to signalized intersection improvements at NW 16th Street and Brady Road. These improvements have not yet been fully defined and are not part of this proposal's scope of work.

The proposed site has approximately 1,870 feet of frontage along NW 18th Ave/SE Payne Road with no direct access to the site. Half street improvements are indicated along the site frontage. Based on preliminary discussions with City staff, the school district is proposing the following improvements:

- **Install a westbound left turn pocket on NW 18th Ave at NW Deerfern St. to provide the function of a center lane where it is needed within the property street frontage;**

- **Install street lighting compliant with City Design Standards along one side of NW 18th Ave/SE/Payne Road along the extent of the property.**

- **Provide two pedestrian and bicycle crossings on NW 18th Ave/SE Payne Road; one at NW 18th Ave/ NW Deerfern St at the southeastern extent of the property in association with the property purchase and change of use agreement between the City, CSD and Sharp; and a second mid-block crossing on SE Payne Road south of SE Lacey Way at the northwestern extent of the property;**

- **Upgrade the existing 4 foot wide internal asphalt walkway on the north and east side of Sharp Drive to an 8 foot wide multiuse path to accommodate pedestrians and bicyclists;**

- **Dedicate an additional width of Right of Way along NW 18th Ave/ SE Payne Road to allow for potential future half street improvements by others; and**

- **Maintain existing emergency access along NW 18th Ave in front of the proposed school.**

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

The project is within 10 miles of the Portland Airport, and 13 miles of the Vancouver, WA train station.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

The Traffic Analysis Report for Camas Middle & High Schools, Sharp Drive by Charbonneau Engineering (last updated August 2, 2016) includes the following information:

The two schools, the current Middle School with a500 student peak capacity) and the proposed 600 student high school, are projected to generate 1,836 trips per day: 810 by the Middle School and 1026 by the High School, based on a 24 hour period.

Individual Peak Volumes are as follows:

AM Peak Hour, A total of 528 trips (270 at the MS and 258 at the HS)
Mid Afternoon Peak Hour, A total of 324 trips (150 at the MS and 174 at the HS)
PM Peak Hour, A total of 158 trips (80 at the MS and 78 at the HS).

These trips include bus trips but do not identify other commercial and nonpassenger vehicles.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]

No.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

The agreement between the City, CSD, and Sharp related to the property purchase and change of use to school use provides for the construction of the new SE Payne Road/Lacey intersection, the signalization of the Pacific Rim/SE Payne Rd intersection, a new separate entrance for Sharp employees off SE 18th Ave, and a pedestrian crossing at NW Deerfern Street.

The high school proposal includes the installation of a westbound left turn pocket on NW 18th Ave at NW Deerfern Street to provide the function of a center lane where it is needed within the property street frontage; street lighting along one side of NW 18th Ave/SE Payne Road; a second mid-block pedestrian crossing on SE Payne Road; an 8 foot wide multiuse path to accommodate pedestrians and bicyclists; dedication of additional Right of Way; and maintenance of an existing emergency access gate.

Camas School District will also contribute to signalized intersection improvements at NW 16th Street and Brady Road, which are not part of this proposal's scope of work.

15. **Public Services** [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

Although the school provides a needed public service itself, it will result in an increased need for fire and police protection.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

The project will supplement public services by providing an educational facility for the residents within the Camas School District. The proposed development will incorporate design concepts to reduce impacts to public services such as a standby emergency generator, controlled access, and emergency access. Lighting systems, site fencing, parking lot layout, and landscaping are designed to be sensitive to providing on site visibility for safety. The project will be equipped with a monitored fire alarm system as well as a monitored security system. Additionally, there will be installation of new on-site fire protection infrastructure such as public water mains, fire hydrants, automatic sprinkler system, and fire apparatus access roads.

16. **Utilities** [help]

a. Circle utilities currently available at the site: [help]
electricity, natural gas, water, refuse service, telephone, STEP sanitary sewer system,
storm water system
other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]

Private storm drainage components will be installed on-site to manage storm water runoff from the school site. System will connect to existing storm system located on SE 40th Street

The City of Camas (water, sanitary sewer, refuse) Waste Connections (recycling and compost disposal), Clark Public Utilities (electricity), NW Natural (natural gas), and Wave and Comcast (communications) will serve the project.

An 8" to 10" water system service line will be live tapped from the existing 12" DI water line in NW 18th to the meter assemblies located at the property line. Water services will include a fire line for onsite fire hydrants and building sprinkler systems, domestic water service and an irrigation service. The fire line on the property side of the double check valve vault will be a private system installed compliant with applicable Fire Codes including onsite private hydrants. There is an existing fire line that currently serves the middle school building that will be modified as part of this development.

There is an existing gas service from 18th Avenue to the Project Based Learning Middle School. The gas service to the new high school will be provided by a tie in to this line for gas to support the utility needs (HVAC) at the new High School. It will be metered at the high school building.

Electrical service for the new High School will be provided from Clarke PUD, via an existing vault located north of the Sharp Microelectronics of America (SMA) building to the east. Utility service raceways will be provided onsite to the east and north of the new high school. Two (2) new 12.47 KW Clark Utilities transformers will be provided to the north of the site, adjacent to the electrical room.

A fiber backbone communications line will be tied in from the Project Based Learning Middle School to the new Project Based Learning High School to serve telephone backup for the fire alarm and elevator.

C. Signature [help]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee ___Jeff Snell_____

Position and Agency/Organization _Superintendent, Camas School District #117

Date Submitted: _____

D. supplemental sheet for nonproject actions [help]

(**IT IS NOT NECESSARY** to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise? Proposed measures to avoid or reduce such increases are:
2. How would the proposal be likely to affect plants, animals, fish, or marine life?
   Proposed measures to protect or conserve plants, animals, fish, or marine life are:
3. How would the proposal be likely to deplete energy or natural resources?
   Proposed measures to protect or conserve energy and natural resources are:
4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
   Proposed measures to protect such resources or to avoid or reduce impacts are:
5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
   Proposed measures to avoid or reduce shoreline and land use impacts are:
6. How would the proposal be likely to increase demands on transportation or public services and utilities?
   Proposed measures to reduce or respond to such demand(s) are:
7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

Community Development
616 NE Fourth Avenue • Camas, WA 98607
(360) 817-1568
http://www.cityofcamas.us

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]

h. Proposed measures to reduce or control transportation impacts, if any: [help]

15. **Public Services** [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

16. **Utilities** [help]

a. Circle utilities currently available at the site: [help]
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]

C. Signature [help]

Under the penalty of perjury, the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: J. Snell

Name of signee JEFF SNELL

Position and Agency/Organization SUPERINTENDENT, CAMAS SCHOOL DISTRICT

Date Submitted: 2-7-17

EXHIBIT 22

COMMUNITY DEVELOPMENT DEPARTMENT
616 NE 4th Avenue
Camas, WA 98607

February 1, 2017

Brian Frey
DLR Group
421 SW Sixth Avenue
Portland, OR 97204

RE: Camas Project Based Learning High School Site Plan Review (file #SPRV17-01)

Dear Mr. Frey:

This letter is to inform you that the above application submitted on January 10th, 2017 has been deemed technically complete in accordance with Camas Municipal Code (CMC) 18.55.130.

Staff is reviewing the materials and will contact you if there are is additional information needed for a decision.

Respectfully,

Robert Maul

Planning Manager

EXHIBIT 24

GRI
1101 Broadway, Suite 130
Vancouver, WA 98660
p| 360-213-1690 f| 360-213-1697

January 19, 2017

W1199 GEOTECHNICAL RPT
(REVISED)

DLR Group
421 SW Sixth Avenue
Suite 1212
Portland, OR 97204-1613

Attention: Scott Rose

SUBJECT: Geotechnical Investigation
Camas Project-Based Learning High School
5780 NW Pacific Rim Blvd
Camas, Washington

At your request, GRI has completed a geotechnical investigation for the proposed Camas Project-Based Learning (PBL) High School in Camas, Washington. The Vicinity Map, Figure 1, shows the general location of the site. The investigation was conducted to evaluate subsurface conditions at the site and to develop recommendations for design and construction of the site development including; earthwork, seismic design criteria, foundations, slab-on-grades, retaining walls, pavements, and stormwater facilities. Our investigation included a review of available geologic and geotechnical information for the site, subsurface explorations, laboratory testing, and engineering analyses. This report describes the work accomplished and summarizes our conclusions and recommendations for design and construction of the proposed high school.

The following reports were reviewed to assist in our investigation:

> "Phase I Foundation Investigation, RCA/Sharp Microelectronics Facility, Camas, Washington," dated August 2, 1985; prepared by L. R. Squier Associates, Inc. for Shimizu America Corporation.
>
> "Geotechnical Exploration for Phase I, Proposed Shimizu/RSM Project, Camas, Washington," dated October 1985; prepared for CH2M Hill IDC/Shimizu by CH2M Hill.

PROJECT DESCRIPTION

The proposed development will include a two-story, steel-framed high school building that is approximately 420 ft long and 130 ft wide. As shown on Figure 2, the proposed high school building will be located in the north-central portion of the project site. The planned top of slab for the first floor of the school is at elevation 489 ft and existing site grades within the school footprint range between 479 and 490 ft, necessitating fills of up to 10 ft to establish site grades within the building area. Based on information provided by DLR Group, we understand that the maximum building column loads will be on the order of 350 kips and that maximum tolerable total and differential settlement will be 1 in. and 3/4 in. between adjacent footings, respectively.

Asphalt concrete (AC) parking areas and access drives are planned for the south and west of the school. Up to 18 school busses will access the high school and middle school staff parking lot twice daily. Heavy vehicle use in the remaining parking lots will be limited to occasional heavy vehicles such as garbage trucks and emergency vehicles. We understand that construction of the school will start in the spring of 2017 with the school being operational for the 2018 / 2019 school year.

We also understand that three stormwater detention facilities will be constructed for the project and that the base of these facilities will be located within 5 to 10 ft of adjacent site grades. One pond is planned west of the parking lot with a maximum design water level of 447 ft and one pond is planned northeast of the proposed school and about 35 ft from the crest of an approximate 2H:1V (Horizontal:Vertical) fill slope and will have a maximum design water level of 479.32. A third pond is planned for the area south of the bus / unloading area. As currently envisioned, this pond will have two ponding sections separated by a weir. The east side of this pond will have a maximum design water elevation of 483.5 ft while the west side of this pond will have a maximum water elevation of 479.5 ft.

All elevations referenced in this report refer to the National Geodetic Vertical Datum of 1929 (NGVD 29), unless otherwise noted.

SITE DESCRIPTION

General

The Camas PBL High School is planned for a relatively flat portion of the former Sharp Laboratories property at 5780 NW Pacific Rim Boulevard in Camas, Washington. The subject property is bounded to the east by the existing Sharp Laboratory building; to the south and west by Sharp Drive, SE Payne Rd, SE 40th Street, NW 18th Avenue, and residential developments; and to the north by undeveloped and a heavily forested slope and NW Pacific Rim Boulevard. In the flatter portion of the property, site grades slope downwards to the west and north from about elevation 500 ft at the southeast corner of the site to about elevation 470 ft. The ground surface slopes downward below the flatter portion of the project site at grades between 3H:1V and 4H:1V to about elevation 375, at which point the grades further flatten out to about elevation 325 ft along NW Pacific Rim Boulevard.

The Camas PBL middle school is located in the southeast corner of the property. Asphalt paved parking areas are located to the south and west of the PBL middle school. Two stormwater ponds and undeveloped, brush-covered property are located further to the west of the western parking lot. Based on our review of aerial photographs available on the Clark County webpage, a series of small buildings were located on this portion of the property until at least the mid-1980s.

The proposed high school will be located to the northwest of the PBL middle school. Fill, likely associated with the development of the Sharp Laboratories facility, has been placed within this portion of the site and partially extends over the 3H:1V to 4H:1V slope along the west and north side of the site. Based on a site plan included in the L.R. Squier geotechnical report, site grades within this portion of the site were situated between elevation 470 and 490 ft. Existing site grades range from elevation 479 to 490 ft, indicating that upwards of 20 ft of fill has been placed over this portion of the site. Documentation of fill placement in this area has not been provided to us.

SUBSURFACE CONDITIONS

Geology

Based on our review of published geologic maps (Evarts and O'Connor, 2008), near surface conditions at the site consist of basaltic andesite rock correlated with the Volcanic Rocks of the Boring Lava Field. This rock was sourced by a volcanic vent on the west side of Prune Hill. The upper portion of the Boring Lava is locally decomposed to a stiff to hard, silty residual soil that grades to gravel-size fragments of very soft to soft, decomposed to moderately weathered basalt. Medium hard to hard, slightly weathered basalt is present below the residual soils. Fill soil associated with past site development is present at the location of the proposed high school building and in the western portion of the site.

General

Subsurface materials and conditions at the site were investigated between August 29 and September 2, 2016, with four borings, designated B-1 through B-4, and nine test pits, designated TP-1 through TP-8 and TP-7A. Subsurface conditions were further explored on December 19, 2016, with four additional test pits, designated TP-9 through TP-12. The borings were advanced to depths of 32.5 to 53 ft, and the test pits were advanced to depths of 8 to 15 ft. The locations of the explorations advanced for this study are shown on the Site Plan, Figure 2. A detailed discussion of the field exploration and laboratory testing program for this investigation are described in Appendix A. Logs of the borings and test pits are shown on Figures 1A through 4A and Figures 5A through 11A, respectively. The terms and symbols used to describe the soil and rock encountered in the test pits and borings are defined in Tables 1A and 2A and the attached legend. The results of laboratory testing are summarized in Table 3A, and graphical representations are provided on Figures 12A through 16A.

Infiltration Testing

Four small-scale pilot infiltration tests were attempted at the base of test pits TP-3, TP-5, TP-6, and TP-7A and at depths of 10.5, 9.25, 9.75, 9.5 ft, respectively. Approximately 12-in. of water was added to the base of the excavation and the water level was continuously monitored for several hours. During the time period monitored, the water level in the test pits remained constant. On-site stormwater disposal is not recommend for this site.

Soils

For the purpose of discussion, the soils disclosed by the explorations have been grouped into the following categories based on their physical characteristics and engineering properties:

1. **FILL(Building Area)**
2. **FILL(West Site)**
3. **FILL (Northeast Detention Pond Site)**
4. **SILT (Residual Soil)**
5. **Silty SAND and Silty GRAVEL (Residual Soil)**
6. **BASALT**

A detailed description of each soil unit and a discussion of groundwater conditions at the site are provided below. A 5- to 6-in.-thick, heavily rooted zone was typically encountered at the ground surface across the site.

1. FILL (Building Area). Fill was encountered to depths of 17.5, 7.5, 10, and 3 ft in borings B-1 through B-4 and to the maximum depths explored, about 10.5 ft, in test pits TP-1 through TP-3. Each of these explorations was made near the footprint of the proposed high school. The building area fill typically consists of silt with some clay and trace fine-grained sand. Fine roots, wood debris, organics, and grass were encountered throughout the fill and gravel and cobbles were also encountered at select locations and depths. Based on SPT N-values between 2 and 15 blows/ft and Torvane shear strength values between 0.35 and 0.90, the relative consistency of the silt fill is soft to stiff, and is typically medium stiff to stiff. The natural moisture content of the silt fill ranges from 16 to 45%. The results of Atterberg limits determinations on two samples of the silt indicate that the soil has a liquid limit (LL) of between 28 and 32% and a plasticity index (PI) of about 6%. Two one-dimensional consolidation tests were completed on representative samples of the silt. The silt typically exhibits a relatively low compressibility in the existing range of overburden stresses and a moderate compressibility in overburden stresses in excess of the existing overburden stresses. The results of the Atterberg limits and one-dimensional consolidation tests of the fill are provided on Figures 12A, 13A, and 15A.

Medium dense, gravel fill was encountered to a depth of about 3 ft in boring B-4. The gravel fill is silty, and contains some fine- to coarse-grained sand.

2. Fill (Northeast Detention Pond Site). Fill was encountered at the ground surface in test pits TP-10 through TP-12, which were made within the planned footprint of the northeast detention facility. The fill extends to depths of between 4 and 8 ft and consists of silt with a trace of clay and variable sand content up to some. Scattered subangular to subrounded gravel and cobbles were encountered at select locations and depths within the fill. Based on observations during digging, the relative consistency of the fill in this portion of the site is medium stiff to stiff. The fill has a natural moisture content of the fill encountered in the northeast detention pond varies from 20 to 27%.

3. FILL (West Site). Fill was encountered at the ground surface in test pits TP-4, TP-7, and TP-7A, which were advanced in the western portion of the site near the location of some demolished historical buildings. The fill extends to the maximum depth explored, about 10.5 ft, in test pit TP-4, to refusal on basalt rock at a depth of 8 ft in test pit TP-7, and to a depth of about 8 ft in test pit TP-7A. The fill encountered in the western portion of the site typically consists of silt with trace to some clay, trace to some fine-grained sand, and trace subrounded and subangular gravel. Cobbles and boulders up to 3 ft in diameter were encountered in test pit TP-4 from between 1.5 and 3.5 ft and throughout the fill in test pits TP-7 and TP-7A. The fill contains fine roots and grass, and the fill encountered below 6 ft in test pits TP-7 and TP-7A contains debris, including dimensional lumber, steel pipe, and plastic. Based on Torvane shear strength values of 0.4 to 0.6 tsf, the relative consistency of the fill observed in the west side of the site is medium stiff to stiff. The fill encountered in this portion of the site has a natural moisture content of between 18 and 30%.

4. SILT (Residual Soil). Residual soil consisting of silt was encountered from 17.5 to 34 ft in boring B-1, from 7.5 ft to 32 ft in boring B-2, from 10 to 31 ft in boring B-3, from 3 to 25 ft in boring B-4, from the ground surface to about 10 ft (the maximum depth explored) in test pit TP-5, from the ground surface to about 8 ft in test pit TP-6, from 8 to 9 ft in test pit TP-7A, from 3 to 10.5 ft (maximum depth explored) in test pit TP-8, from the ground surface to 15 ft (maximum depth explored) in test pit TP-9, from 8 to 15 ft (maximum depth explored) in test pit TP-10, from 4 to 14 ft (maximum depth explored) in test pit TP-11,

and from 6 to 12 ft (maximum depth explored) in test pit TP-12. The upper portion of the residual soils is typically brown mottled gray and rust and contains trace to some fine-grained sand and some clay. The deeper residual silt soils are typically red mottled black, clayey, and contain a trace of fine-grained sand and variable gravel content up to gravelly. Up to 10-in.-diameter Basalt cobbles were observed in test pit TP-5 below about 6 ft, in test pit TP-9 below about 4 ft and in test pit TP-11 below about 10 ft. A 16-in.-diameter basalt boulder was encountered in test pit TP-12 at a depth of about 10 ft. Based on SPT N-values of 0 to 26 blows/ft, Torvane shear strength values of between 0.20 and 0.85, and the results of unconfined compressive strength tests completed by L. R. Squires, the residual silts are soft to very stiff and are typically stiff to very stiff.

The natural moisture content of the residual silt ranges from 16 to 67, with the higher moisture contents typically corresponding to the deeper, more clayey residual silt soils. The results of Atterberg limits determinations on two samples of the clayey silt indicate that the clayey silts have a liquid limit (LL) of between 72 and 77% and a plasticity index (PI) of between 26 and 33%. Two one-dimensional consolidation tests were completed on representative samples of the residual silt. The testing indicates that the residual silt is moderately to heavily overconsolidated and exhibits a relatively low compressibility in the pre-consolidated range of stresses and a moderate to high compressibility in the normally consolidated range of stresses. The results of the Atterberg limit and one-dimensional consolidation tests of the residual silts are provided on Figures 12A, 14A, and 16A.

5. Silty GRAVEL and Silty SAND (Residual Soil). Residual soil consisting of silty, angular basalt gravel with some fine- to coarse-grained sand was encountered in boring B-1 from 34 to 38 ft and from 42 to 48 ft, in boring B-2 from 32 to 39 ft, in boring B-4 from 25 to refusal on basalt at 33.5 ft, and in test pit TP-6 from 8 to 10.5 ft (maximum depth explored). Based on SPT N-values of between 32 and more than 50 blows for 6 in. of sampler penetration, defined as refusal conditions, the silty gravel is dense to very dense. The silty gravel has a natural moisture content of 40 to 49%.

Silty sand with trace to some angular basalt gravel was encountered in boring B-3 from 31 ft to refusal on basalt at 32.5 ft. Based on a SPT N-value of 73 blows/ft, the relative density of the silty sand is very dense. The silty sand has a natural moisture content of about 49%.

6. BASALT. Basalt was encountered in boring B-1 at depths of between 38 and 42 ft and 48 to 53 ft (maximum depth explored), in boring B-2 from 39 to 50.2 ft (maximum depth explored), and in TP-7A from 9 to 10 ft (maximum depth explored). Borings B-3, B-4, and test pit TP-7 were terminated when encountering basalt at depths of 32.5, 33.5, and 8 ft, respectively. The basalt observed in test pit TP-7A is soft to medium to medium hard (R2 to R3) and slightly to moderately weathered. The basalt observed in borings B-1 and B-2 is typically medium hard to very hard (R3 to R5) and is slightly weathered to fresh. Rock core recovery ranged from 40 to 100 percent and the RQD ranges from 6 to 76%. Photographs of the basalt obtained from the borings are provided in Appendix B.

Groundwater

Groundwater was encountered in test pit TP-8 at a depth of about 9 ft (elevation 480 ft). Groundwater was also measured at a depth of 32 ft (elevation 457) in boring B-1, which was drilled using mud-rotary drilling techniques and was left open for about 24 hours to allow the water level to stabilize. All other borings were completed using mud-rotary drilling techniques, which do not permit the measurement of

groundwater levels. L.R. Squier Associates installed a piezometer in boring B-7 located near the west portion of the proposed school. The groundwater in this piezometer was measured at elevation 457.2 ft on July 18, 1985. We anticipate that the groundwater level will fluctuate in response to seasonal precipitation and that perched groundwater could approach the ground surface during periods of sustained wet weather.

CONCLUSIONS AND RECOMMENDATIONS

General

Subsurface explorations made for this investigation and for nearby projects indicate the site is typically mantled with stiff to very stiff, residual silts that are underlain by basalt. Up to 17.5 ft of fill was observed at the location of the proposed high school building. Fill was also observed in the western portion of the site in the footprint of future parking areas and in the northeast corner of the site at the location of the proposed detention facility. Groundwater was observed at a depth of 8 ft in test pit TP-8 and at a depth of 32 ft in boring B-1. During periods of wet weather, we anticipate that perched groundwater may approach the ground surface.

The near-surface soils at the site contain an appreciable amount of silt and fine-grained sand and are considered to be moisture-sensitive. Earthwork activities will be most efficiently accomplished during the warm, dry summer to early-fall months when the moisture content of the site soils can be more easily controlled near-optimum. The use of granular haul roads or work pads should be anticipated, especially if construction extends into the wetter portions of the year. The existing fill will not provide suitable support of the proposed building loads. In our opinion, the structural loads of the proposed buildings can be supported by either conventional spread footings placed on ground improvement or on structural fill placed extending to the underlying residual silts (i.e. complete removal of existing fill).

The following sections of this report provide our conclusions and recommendations earthwork, seismic design criteria, slab-on-grades, lateral earth pressures, and pavements. Evaluation of the need for a liner for the west and northeast detention pond is also provided.

Earthwork

Demolition, Stripping, and Work Pads. All debris from the demolition of existing pavement and utilities should be removed from the site. Excavations required to remove existing improvements, including underground utilities, should be backfilled with structural fill. Surface vegetation and other organic materials within the limits of new fills, buildings, and other structures, such as pavements and sidewalks, should be stripped. Based on the conditions observed in our explorations, we anticipate a stripping depth of around 4 to 6 in. will be required to remove light vegetation and organics. In currently undeveloped portions of the sites, deeper stripping and grubbing depths should be anticipated to remove the stumps and roots larger than about 1/2 in. associated with the larger trees and shrubs present on the site. The strippings will not be suitable for structural fill and should only be used in landscape areas or removed from the site.

Following site stripping, the exposed subgrade in areas to receive structural fill or other improvements should be evaluated by a qualified geotechnical engineer. Any soft areas or areas of unsuitable material should be overexcavated to firm undisturbed soil and backfilled as described below in the Structural Fill section of this report. Due to the presence of fill and localized zones of soft silt, it should be anticipated that some overexcavation of the subgrade will be required.

Due to the moisture-sensitive nature of the silty soils that mantle the site, site preparation and earthwork phases of this project will be accomplished most efficiently during the dry, summer months. However, if construction is to proceed during the wet months of the year, or if wet ground conditions exist, we recommend making all excavations using large hydraulic excavators (backhoes) equipped with smooth cutting edges, in lieu of scrapers and/or bulldozers, to prevent softening of the subgrade soils. Also, the contractor should plan the earthwork operations such that no construction equipment, i.e., bulldozers, dump trucks, etc., traffic the exposed silty soils. This will require the placement of imported granular fill for a working pad and/or haul roads as the excavation progresses. If the subgrade is disturbed during construction, soft, disturbed soils should be overexcavated to firm soil and backfilled with clean, granular materials.

In our experience, granular haul roads and work pads generally require a minimum of 18 to 24 in. of relatively clean, fragmental rock to support construction traffic. If the subgrade is particularly soft, it may be advisable to place a woven stabilization fabric such as Mirafi 600X, or equivalent, on the exposed subgrade prior to placement and compaction of the granular work pad.

The test pits disclosed debris and near-surface boulders and rock fragments up to 3 ft in diameter. It should be anticipated that these materials may be encountered during earthwork activities.

Structural Fill. The existing ground surface within limits of the proposed high school building footprint is irregular, and in some locations up to 10 ft of structural fill may be required to establish planned site grades for the building. Grading plans for the remainder of the site have not been provided to us. As design continues, GRI should review the impact of fills placed adjacent to the 3H:1V to 4H:1V slope located north of the proposed building. At a minimum and for preliminary planning purposes only, the toe of any proposed fill slope should be setback a minimum of 20 ft from the crest of slopes on the north and west side of the site.

On-site or imported, organic-free soils approved by the geotechnical engineer may be used to construct structural fills. However, the onsite soil is fine-grained and sensitive to moisture content and should only be placed during the dry, summer and early fall months. Organics and debris should also be removed from the onsite fill soils if they will be used as structural fill on the project. If construction is to proceed during the wet, winter and spring months, fills should be constructed using imported, relatively clean, granular materials.

All fill placed for buildings, paved areas, sidewalks, and hardscape areas should be installed as compacted, structural fill. In general, approved, organic-free, fine-grained soils used to construct structural fills should be placed in 9-in.-thick (loose) lifts and compacted using segmented-pad rollers to at least 95% of the maximum dry density, as determined by ASTM D698. Fill placed in landscaped areas should be compacted to about 90% of the maximum dry density, as determined by ASTM D698. At the time of compaction, the moisture content of silt soil should be controlled to within 3% of the optimum moisture content as determined by ASTM D698. It has been our experience that it is difficult to adequately compact wetter soils. If the fill is compacted at a moisture content wetter than recommended, pronounced pumping and rutting of the material will occur under the wheels or treads of construction equipment. The pumping and rutting are indications that the fill material is too wet, relatively weak and compressible, and may require replacement.

Imported granular material used to construct structural fills or work pads during wet weather should consist of material up to 6-in. maximum size and with not more than about 5% passing the No. 200 sieve (washed analysis). Care should be taken during compaction of the initial lift of granular soil placed over the silt subgrade to avoid disturbance of the subgrade. The first lift of imported fill material placed over the silt subgrade should range from 12 to 18 in. thick (loose) and should be compacted with a medium-weight (48-in.-diameter drum), smooth, steel-wheeled, vibratory roller until well keyed. Subsequent lifts of granular fill should not exceed 12 in. and should be compacted to a density not less than 95% of the maximum dry density as determined by ASTM D698. Smaller lift thicknesses may be required if walk-behind plate compactors, jumping jacks, or small vibratory rollers are used to compact granular structural fill.

Where fills are to be placed on existing slopes steeper than about 5H:1V, the area to be filled should be terraced or benched to provide a relatively level surface for fill placement. Typical benching requirements are illustrated on Figure 3. Final graded slopes of native soils or structural fill should be no steeper than 2H:1V. Structural fill should be placed and compacted a minimum of 2 ft beyond the final slope configuration and then trimmed back to final grade.

Seeps or springs that emerge on cut slopes may require drainage provisions depending on the actual conditions observed during construction. These provisions could include French drains, drainage blankets, and subdrains (possibly placed in utility trenches), to collect and remove water.

Fill Settlement. For the purpose of our settlement evaluation, we have assumed fills on the order of 5 to 10 ft in height may be needed to achieve final site grades within the footprint of the proposed school. Larger fills may be needed to achieve site grades at other locations at the site. We estimate total settlement due to placement of 10 ft of fill will be less than 1 in. We anticipate the majority of this settlement will occur within three to four months following placement of the fill. We recommend that any mass grading to raise site grades be accomplished early in the construction schedule to allow the majority of settlement associated with fill placement to occur prior to installation of utilities, hardscapes, and buildings. Where the fills are greater than 10 ft thick, we recommend that the completion of settlement be evaluated by monitoring several survey points on the surface of the finished structural fill prior to constructing settlement sensitive improvements. The survey data should be evaluated by GRI.

Utility Excavations. We understand that utility trench excavations associated with the proposed improvements will generally be less than about 10 ft deep and will primarily encounter properly compacted new structural fill, existing medium stiff to stiff silt fill, and stiff to very stiff residual silt. In our opinion, compacted structural fill or the existing medium stiff to stiff silt fill would be classified as a Type C soil according to the most recent Occupational Safety and Health Administration (OSHA) regulations. Stiff to very stiff residual soils would classify as a Type B soil according to OSHA regulations. In our opinion, these materials can be excavated with conventional excavation equipment. Boulders, up to 3 ft in diameter, were observed in the test pits advanced for this study. The contractor should be prepared to handle oversize materials, if encountered in the fill.

Medium hard to hard (R2 to R3) basalt that is slightly to moderately weathered was observed at a depth of about 8 to 9 ft in test pits TP-7 and TP-7A, which were advanced in the western portion of the site. We

anticipate that rock excavation methods such as chipping, drilling and splitting, or blasting will be required for excavations extending into the basalt.

We anticipate that relatively small groundwater inflows will be encountered within the silt soils across the majority of the site, particularly if utility construction takes place during the dry summer months. Dewatering across the majority of the site can most likely be accomplished by pumping from sumps. If groundwater is encountered within utility excavations, it will be necessary to overexcavate the trench bottom to permit installation of a granular working blanket to reduce bottom instability and facilitate pumping from sumps. We estimate the required thickness of the granular working blanket will be on the order of 1 ft, or as required to maintain a stable trench bottom, depending on the conditions exposed in the trench and the effectiveness of the contractor's dewatering efforts. The thickness of the granular blanket must be evaluated on the basis of field observations during construction. We recommend the use of relatively clean, free-draining material, such as 2- to 4-in.-minus crushed rock, for this purpose. If the ground is extremely soft, it may be necessary to install a woven geotextile fabric, such as Mirafi 500X (or equivalent), over the subgrade prior to placing the granular blanket.

All backfill placed in utility trench excavations within the limits of paved areas or in future improvement areas should consist of sand, sand and gravel, or crushed rock with a maximum size of up to 2½ in. and with not more than 5% passing the No. 200 sieve (washed analysis). The granular backfill should be placed in 12-in.-thick lifts (loose) and compacted using vibratory plate compactors or tamping units to at least 95% of the maximum dry density as determined by ASTM D698. Thicker lifts may be appropriate if hoe-mounted vibratory compactors are used. Flooding or jetting the backfilled trenches with water to achieve the recommended compaction should not be permitted.

Seismic Considerations

We understand the proposed improvements will be designed in conformance with the 2015 *International Building Code* (IBC), which references the American Society of Civil Engineers (ASCE) *Minimum Design Loads for Buildings and Other Structures* (ASCE 7-10). The IBC design methodology uses two spectral response parameters, S_S and S_1, corresponding to periods of 0.2 and 1.0 second, to develop the Risk-Targeted Maximum Considered Earthquake (MCE_R) response spectrum. The spectral response parameters were obtained from the U.S. Geological Survey (USGS) Hazard Response Spectra Curves for the coordinates of 45.5936° N latitude and 122.4621° W longitude (USGS, 2008a). The S_S and S_1 parameters identified for the site are 0.93 and 0.38 g, respectively. These spectral response parameters are adjusted for Site Class with the 0.2 and 1.0 second period site coefficients, F_a and F_v, based on the soil profile in the upper 100 ft. Based on the conditions observed in the borings completed for this study, the site would classify as Site Class E (Soft Clay Soil). For Site Class E, a value of 0.98 should be used for site coefficient F_a and 2.46 should be used for site coefficient F_v. The design-level response spectrum is calculated as two-thirds of the Site Class-adjusted MCE_R spectrum.

Based on the types of the soils present at the site, it is our opinion that the risk of liquefaction, liquefaction-induced settlement and lateral spreading is low. Geologic literature indicates the inferred northwest-southeast-trending Portland Hills fault is about 10 miles southwest of the site, and the Lacamas Lake fault zone is about 2 miles northeast of the site (USGS, 2008b). Given the relatively low level of activity associated with these fault zones, the risk of ground rupture at the site is low during the expected design

life of the proposed improvements unless occurring on an unknown or unmapped fault. The risk of tsunami and/or seiche at the site is absent.

Foundation Support

General. Based on our conversation with DLR Group, we understand that the maximum building column loads will be on the order of 350 kips and that maximum tolerable total and differential settlement will be 1-in. and 3/4-in. between adjacent footings, respectively. The borings and test pits advanced for this study disclosed up to 17.5 ft of fill under the proposed footing subgrade. The history of fill placement is not available to us and the fill includes fine roots, wood debris, organics, and grass. Our analysis indicates that the existing fill soils are compressible and will provide poor support of shallow foundations. Consequently, it our opinion that foundation support for the building can be most-economically provided by conventional column-type and continuous spread footings founded on ground improvement such as engineered aggregate piers. Overexcavation and replacement of undocumented fill may also be an option and is discussed below.

Engineered Aggregate Piers. Engineered aggregate pier foundations are a proprietary system; the suitability of the engineered aggregate pier foundation system should be evaluated by GeoPier Foundation Company, Geotech Foundation Company - West, Hayward-Baker, or another contractor/designer of engineered aggregate pier foundations. In general, an engineered aggregate pier foundation system consists of drilling a shaft with or without casing and backfilling the excavation with crushed rock while compacting with a compaction mandrel. The installation of the engineered aggregate piers may be somewhat challenging due to the presence of undocumented fill soils, cobbles and boulders, zones of relatively soft silt, and the potential for encountering shallow perched groundwater. As a result, it would be prudent for the aggregate pier contractor to assume that casing will be required to retain the overburden soils in some, if not all, of the pier locations.

We recommend engineered aggregate piers extend through the fill and a minimum of 5 ft into the underlying residual soils. The actual pier depth will need to be designed by the foundation contractor based on the footing bearing pressure and settlement information presented below.

The aggregate pier foundation contractor should evaluate the soil conditions at the site and determine the length, spacing, and diameter of aggregate piers that can provide a suitable bearing pressure while limiting settlement to less than 1 in. of total settlement and 3/4-in. of differential settlement at the design dead plus live load. Based on our experience and our discussions with a local engineered aggregate pier contractor/designer, we anticipate that an allowable bearing pressure for this type of system at this site will range from 4,000 to 6,000 psf. However, further analysis will be required by the specialty contractor to provide the actual maximum allowable bearing capacity.

We recommend establishing shallow spread and continuous footings supported by aggregate pier foundations at a minimum depth of 1.5 ft below the lowest adjacent finished grade. The footing width should not be less than 4 ft for isolated column footings and 2 ft for continuous wall footings. Excavations for all foundations should be made with a smooth-edged bucket and should be examined by the geotechnical engineer. This includes confirming the engineered aggregate piers are exposed in the foundation bottom.

Horizontal shear forces can be resisted partially or completely by frictional forces developed between the base of wall or spread footings and the underlying soil and by soil passive resistance. The total frictional resistance between the footing and the soil is the normal force times the coefficient of friction between the soil and the base of the footing. We recommend an ultimate value of 0.40 for the coefficient of friction for footings cast on engineered aggregate piers or crushed rock. The normal force is the sum of the vertical forces (dead load plus real live load). If additional lateral resistance is required, passive earth pressures against embedded footings can be computed on the basis of an equivalent fluid having a unit weight of 250 pcf in soil. This design passive earth pressure would be applicable only if the footing is cast neat against undisturbed soil, or if backfill for the footings is placed as granular structural fill. This value also assumes the ground surface in front of the foundation is horizontal, i.e., does not slope downward away from the toe of the footing.

Subgrade Overexcavation Option. Building or retaining wall loads can also be supported on a subgrade that has been overexcavated to the underlying residual silt soil and replaced with compacted crushed rock structural fill to the limits indicated on Figure 4. Alternatively, all of the fill soils within the building footprint could be overexcavated and replaced with structural fill as discussed in the Earthwork section of this report. Excavations for all footings should be made using a smooth-edged bucket. Prior to placing the structural fill, the geotechnical engineer should observe the base of the overexcavation to confirm that the fill soils have been adequately removed. Soft, loose, or otherwise unsuitable soils, if encountered at the base of the footing overexcavation, should be removed to firm subgrade material and replaced with structural fill. Based on the conditions observed in our borings, the depth of overexcavation could extend from between 3 and 17.5 ft.

Footings placed on structural fill should meet the minimum embedment depth and footing sizes described in the section of this report titled *Engineered Aggregate Piers*. Footings established on structural fill extending to the residual silt soils can be designed to impose an allowable soil bearing pressure of 2,500 psf. This value applies to the total of dead load plus frequently and/or permanently applied live loads and can be increased by one-third for the total of all loads; dead, live, and wind or seismic. We estimate the total settlement of spread footings supporting column loads of up to 350 kips or wall loads less than 10 kips/ft will be about 1 in. We estimate that differential settlements will be about one-half of the total settlement. Our experience indicates these settlements will occur rapidly, with the majority of the settlement occurring during construction.

Recommendations for resistance to lateral loads are provided in the section of this report titled *Engineered Aggregate Piers*.

Slab-on-Grade Floors

Slab-on-grade floors that are established at or above adjacent final site grades should be underlain by a minimum 8-in.-thick granular base course. To provide a capillary break between the silty subgrade and the floor, the base course material should consist of open-graded, angular, crushed rock up to 1 1/2 in. in size with no more than about 2% passing the No. 200 sieve (washed analysis). Crushed rock meeting the gradation requirements for Gravel Backfill for Drains in Section 9-03.12(4) of the Washington State Department of Transportation (WSDOT) Standard Specifications is suitable for this purpose. The base course material should be installed in a single lift and compacted until well keyed using a minimum of four passes with a medium- to heavy-weight vibratory roller. To facilitate compaction of the granular base and

limit contamination from construction activities prior to placing the concrete slab, it may be desirable to replace the upper 2 in. of the open-graded base course material with 3/4-in.-minus crushed rock having less than 5% passing the No. 200 sieve (washed analysis). Where the potential for damp slab surfaces is not a concern, the slabs may be underlain by an 8-in. thickness of 3/4-in.-minus, angular, crushed rock having less than 5% passing the No. 200 sieve (washed analysis).

In moisture-sensitive floor areas, such as those to be covered with vinyl flooring or carpet, or where moisture-sensitive material may be stored directly on the concrete floor slab, it may be prudent to install a suitable vapor-retarding membrane beneath slab-on-grade floors. Vapor-retarding membranes should be installed in accordance with the manufacturer's recommendations.

Based on the subsurface explorations, non-engineered fill will be encountered in a portion of the building floor slab area. Structural fill will be present at the planned slab-on-grade subgrade elevation. Non-engineered fill encountered in floor slab areas should be overexcavated to a minimum depth of 2 ft below the crushed rock elevation and replaced with properly compacted structural fill. In our opinion, for the design of the slabs on grade, it is appropriate to assume a coefficient of subgrade reaction, k, of 150 pci for point loading.

Retaining Walls

Design lateral earth pressures for retaining walls depend on the drainage condition behind the wall and the ability of the wall to yield. We recommend that foundation drainage be provided behind the retaining walls. The two possible conditions regarding the ability of the wall to yield include the at-rest and active earth pressure cases. The at-rest earth pressure case is applicable to a wall that is relatively rigid and laterally supported at the top and bottom and therefore is unable to yield. The active earth pressure case is applicable to a wall that is capable of yielding slightly away from the backfill by either sliding or rotating about its base.

Assuming the top of the backfill will be horizontal and the backfill will be completely drained, yielding (active) and non-yielding (at-rest) walls with a maximum height less than 10 ft can be designed on the basis of a hydrostatic pressure based on an equivalent fluid unit weight of 35 and 55 pcf, respectively. Additional lateral pressures due to surcharge loadings in the backfill area, such as vehicle traffic and/or adjacent footings, can be estimated using the guidelines provided on Figure 5.

To account for seismic loading, the Mikola and Sitar method (2013) was used to develop lateral earth pressures on permanent embedded structures. Using this method, the static lateral earth pressures should be increased by an equivalent fluid unit weight of 11 pcf for yielding walls and 21 pcf for non-yielding walls with a level back slope. This results in a triangular distribution with the resultant acting at 1/3H up from the base of the wall, where H is the height of the wall in feet. The lateral force induced by an earthquake is in additional to the lateral earth pressures acting on the wall during static conditions.

We recommend that a foundation drainage system be provided behind all retaining walls. A typical drainage system for retaining walls is shown on Figure 6. Wall backfill material should meet the requirements of structural fill provided earlier of this report and should and be compacted to about 95% of the maximum dry density according to ASTM D698. Overcompaction of the backfill should be avoided. Heavy compactors and large pieces of construction equipment should be kept a minimum distance of 5 ft

from any embedded wall to avoid the buildup of excessive lateral pressures. Compaction close to walls should be accomplished using hand-operated, vibratory plate compactors.

Pavement Design

We understand that parking areas and access lanes will be paved with asphalt concrete pavement. We understand that the project plans include a designated bus loading and unloading area that can accommodate up to 18 busses at a time. In developing our recommended pavement section, we have assumed a 20-year pavement design period. In the bus loading and unloading area, we have assumed a total of 36 passes with a fully loaded bus per day every weekday and that the busses include a 12 kip front axle and a 24 kip rear axle. For drive aisles and access roads, we have assumed a total of 10 heavy vehicles (i.e., school busses, garbage trucks, delivery trucks, etc.). Based on our experience with similar projects and subgrade materials, we recommend the following pavement sections as detailed in Table 1.

Table 1: RECOMMENDED PAVEMENT SECTIONS FOR VEHICLE DRIVE AISLES AND PARKING AREAS

	AC Thickness, in.	CRB Thickness, in.
Bus Loading and Unloading Area	5	12
Drive Aisles and Access Roads	4	8
Vehicle Parking Area (Truck Restricted Areas)	3	8

A woven geotextile fabric should be placed beneath the crushed rock base (CRB) for all pavement sections.

The recommended pavement sections should be considered minimum thicknesses, and it should be assumed some maintenance will be required over the life of the pavement. The sections are based on the assumption that pavement construction will be accomplished during the dry season and after construction of the building has been completed. If wet-weather or wet-ground pavement construction is considered, it will likely be necessary to increase the thickness of CRB to support construction equipment and protect the subgrade from disturbance. The indicated sections are not intended to support extensive construction traffic, such as loaded dump trucks and concrete trucks. Pavements subject to construction traffic may require repair.

For the recommended sections, drainage is an essential aspect of pavement performance. We recommend all paved areas be provided with positive drainage to remove surface water and water within the CRB. This will be particularly important in cut sections or at low points within the paved areas, such as at catch basins. Effective methods to prevent saturation of the CRB materials include providing weep holes in the sidewalls of catch basins, subdrains in conjunction with utility excavations, and separate trench drain systems.

To provide quality materials and construction practices, we recommend the pavement work conform to WSDOT standards. Prior to placing CRB, all planned pavement areas should be proof rolled with a fully loaded 10-cy dump truck and observed by a qualified geotechnical engineer. Any soft areas detected by the proof rolling should be overexcavated to firm ground and backfilled with compacted structural fill.

Detention Facility Liner Evaluation

General. We understand that three stormwater detention facilities are planned as part of the proposed improvements. The western and northern detention facilities are planned on or adjacent to sloping ground. GRI completed a seepage and slope stability analysis in order to evaluate the need for a liner for each of these facilities. Additional discussions regarding the conditions at the west and north detention facilities are provided below.

- **West Detention Facility.** This detention facility is planned for the western portion of the site on ground that is sloping downward to the north at about 6.5H:1V. The base of the detention facility is situated between elevation 441 and 442 ft and the design maximum water level in the facility is planned for elevation 447 ft. Based on the conditions observed in test pit TP-9, which was advanced within the proposed footprint of the facility, subsurface conditions at the location of the relatively pond primarily consist of silt with some sand, gravel- and cobble-sized pieces basalt. Groundwater was not encountered within the maximum elevation explored, about elevation 438 ft.

- **North Detention Facility.** This detention facility is planned in a grass-covered area northeast of the proposed Camas PBL High School. The ground surface at the pond site is currently situated between about elevation 475 and 485 ft. The detention facility is located about 35 ft from the crest of an approximate 2H:1V fill slope that partially extends over a 3H:1V to 4H:1V native slope. The base of this detention facility is planned for elevation 476 ft and the design maximum water level in the facility is planned for elevation 479.3 ft. Test pits TP-10 through TP-12 were advanced within the footprint of this facility. Subsurface conditions consist of up 4 to 6 ft of silt fill underlain by residual silt. Groundwater was not encountered within the maximum elevation explored, about elevation 438 ft.

Seepage Evaluation. The groundwater module of the Slide Version 7.009 software developed by Rocscience, Inc. of Toronto, Ontario was used to estimate the impact to the groundwater table that may occur if the water levels in the detention facilities are kept at their maximum level for an extended period of time (i.e., steady-state conditions). Basic inputs for the models included the existing and proposed topography and the subsurface conditions as disclosed in the field exploration program advanced for this study. The permeability used in the seepage evaluation was estimated based on our experience with similar soils. We assumed a permeability of 10^{-5} cm/sec for the west detention facility where the subsurface conditions primarily consist of silt with some sand, gravel, and cobble-sized basalt pieces. For the fill and silt residual soils observed at the north detention facility, a lower permeability of 10^{-7} cm/sec was used. For both the north and west detention facilities and for steady-state conditions, our seepage analysis indicates that a groundwater mound may develop below each of the facilities and that groundwater seepage may emerge on the slope below the facilities.

Slope Stability Evaluation. The stability of the slopes below the detention facilities were estimated using the Slide software and the same model (i.e., slope configuration and subsurface profile) that was used in our seepage evaluation. For both the north and west detention facility, the strength of the soil was conservatively modeled using a drained friction angle of 30°. The steady-state groundwater level used estimated in the seepage analysis was used in our slope stability evaluation. Our analysis indicates that the slope located below the west detention facility has a factor of safety of about 1.4 during static conditions

while the slope located below the north detention facility has a factor of safety of less than 1.0. Computed factors of safety less than 1.0 indicate instability and lateral movement will likely occur.

Liner Recommendations. Based on the results of our seepage and stability evaluation, it is our opinion that the north detention facility should be lined. If this facility is not lined, there is a significant risk of seepage and slope instability, which may undermine the access road located to the north of proposed facility. Our analysis indicates that a liner is not necessary for the west facility, as long as occasional seepage in the slope below the pond is tolerable. Based on the location of the southern pond located south of the bus loading / unloading facility, it is our opinion that a liner is not necessary for this pond.

DESIGN REVIEW AND CONSTRUCTION SERVICES

We welcome the opportunity to review and discuss construction plans and specifications for this project as they are being developed. In addition, GRI should be retained to review all geotechnical-related portions of the plans and specifications to evaluate whether they are in conformance with the recommendations provided in our report. In addition, to observe compliance with the intent of our recommendations, design concepts, and the plans and specifications, we are of the opinion that all construction operations dealing with earthwork and foundations should be observed by a GRI representative. Our construction-phase services will allow for timely design changes if site conditions are encountered that are different from those described in our report. If we do not have the opportunity to confirm our interpretations, assumptions, and analyses during construction, we cannot be responsible for the application of our recommendations to subsurface conditions that are different from those described in this report.

LIMITATIONS

This report has been prepared to aid the project team in the design of this project. The scope is limited to the specific project and location described herein, and our description of the project represents our understanding of the significant aspects of the project relevant to site preparation and earthwork and design and construction of foundation and floor support, embedded walls, and pavements. In the event that any changes in the design and location of the project elements as outlined in this report are planned, we should be given the opportunity to review the changes and to modify or reaffirm the conclusions and recommendations of this report in writing. No geotechnical investigations were completed within the footprint of the west and northeast stormwater facilities. Additional site investigations and engineering analysis should be completed prior to completing final design of these stormwater facilities.

The conclusions and recommendations submitted in this report are based on the data obtained from the borings and test pits made at the locations indicated on Figure 2 and from other sources of information discussed in this report. In the performance of subsurface investigations, specific information is obtained at specific locations at specific times. However, it is acknowledged that variations in soil conditions may exist between exploration locations. This report does not reflect any variations that may occur between these explorations. The nature and extent of variation may not become evident until construction. If, during construction, subsurface conditions differ from those encountered in the explorations, we should be advised at once so that we can observe and review these conditions and reconsider our recommendations where necessary.

Please contact the undersigned if you have any questions regarding this report.

Submitted for GRI,

Renews 11/2017

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Principal

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Senior Engineer

This document has been submitted electronically.

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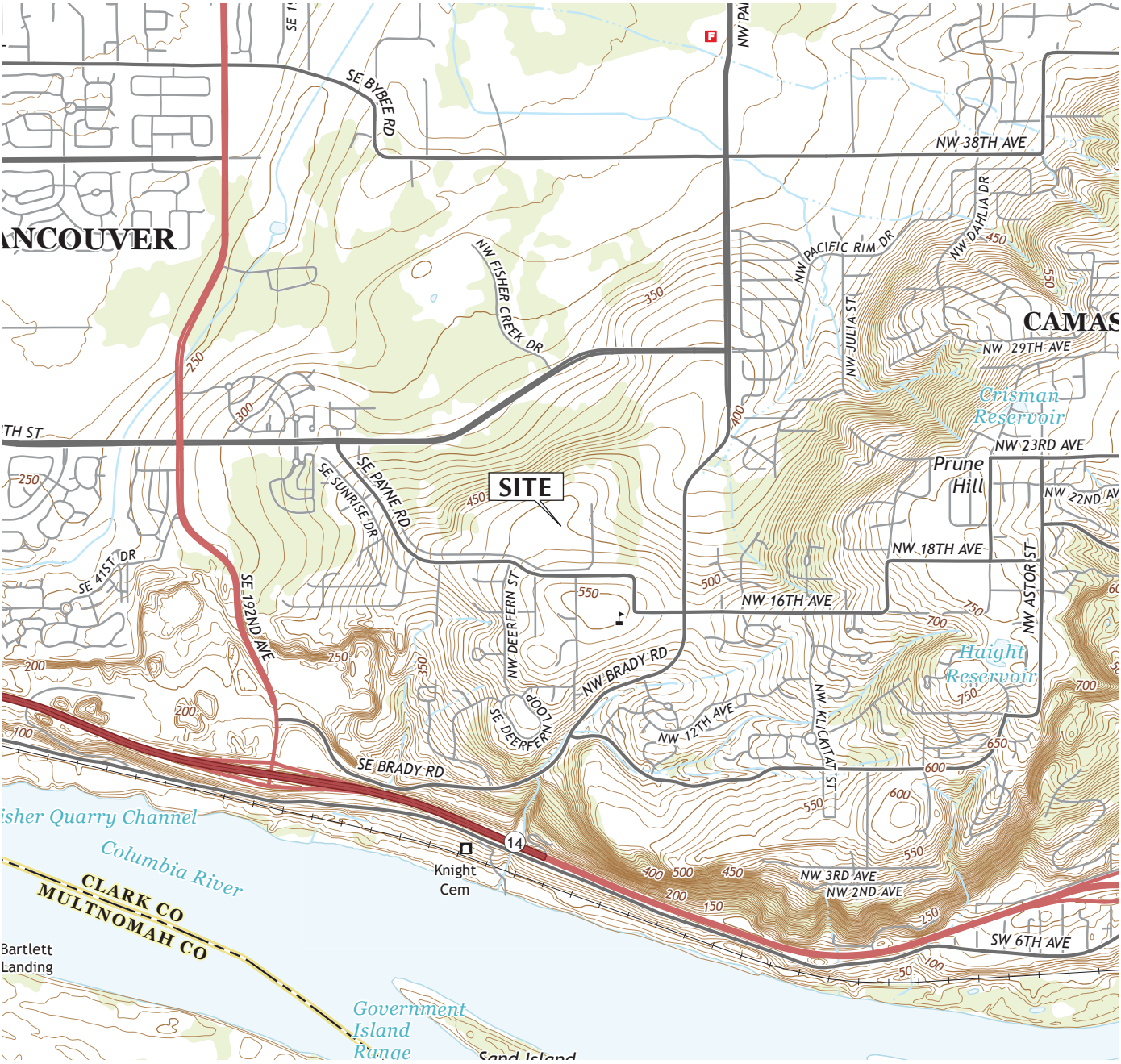


USGS TOPOGRAPHIC MAP
CAMAS, WASHINGTON (2013)

North

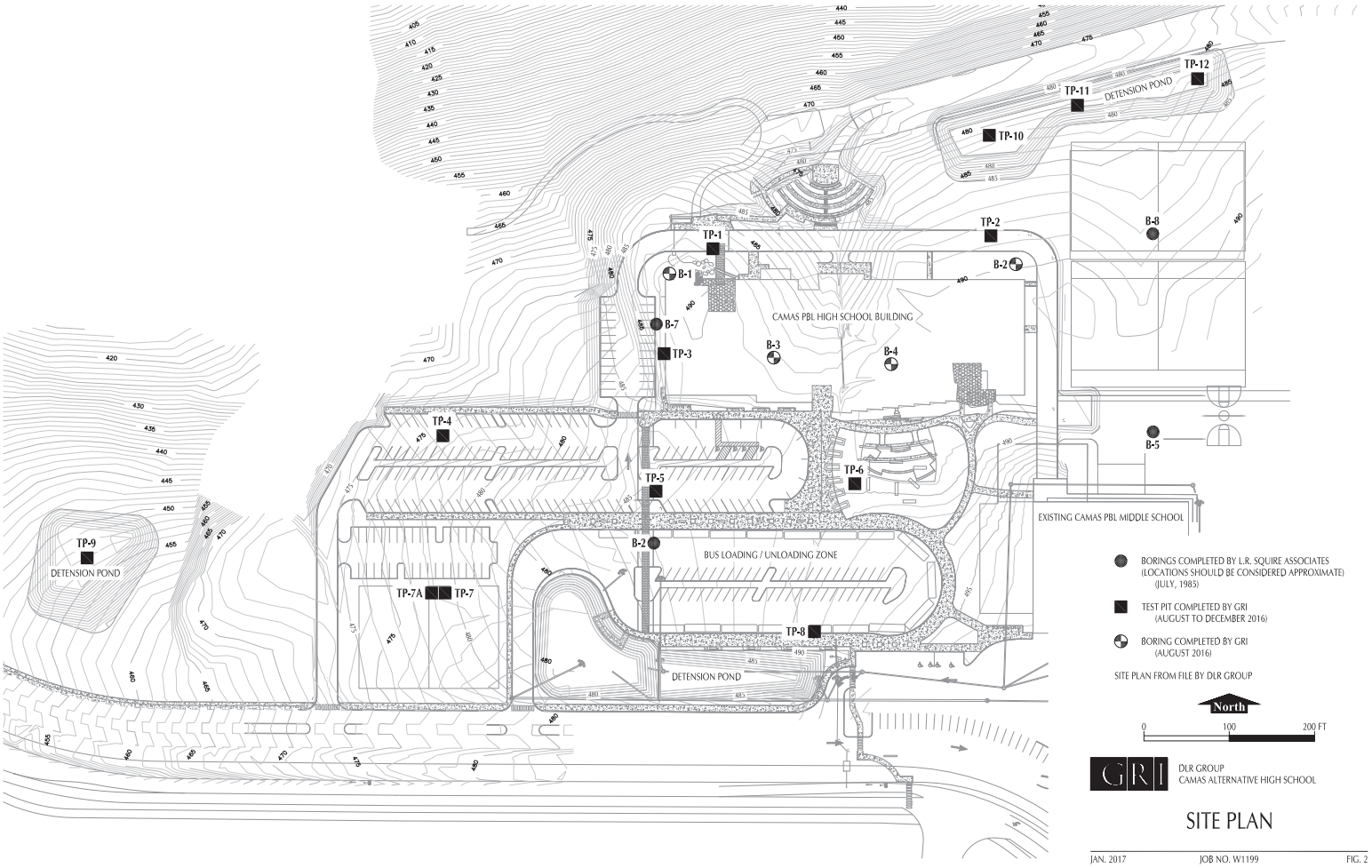
0 1/2 1 MILE

GRI

DLR GROUP
CAMAS ALTERNATIVE HIGH SCHOOL

VICINITY MAP

JAN. 2017 JOB NO. W1199 FIG. 1



GRI

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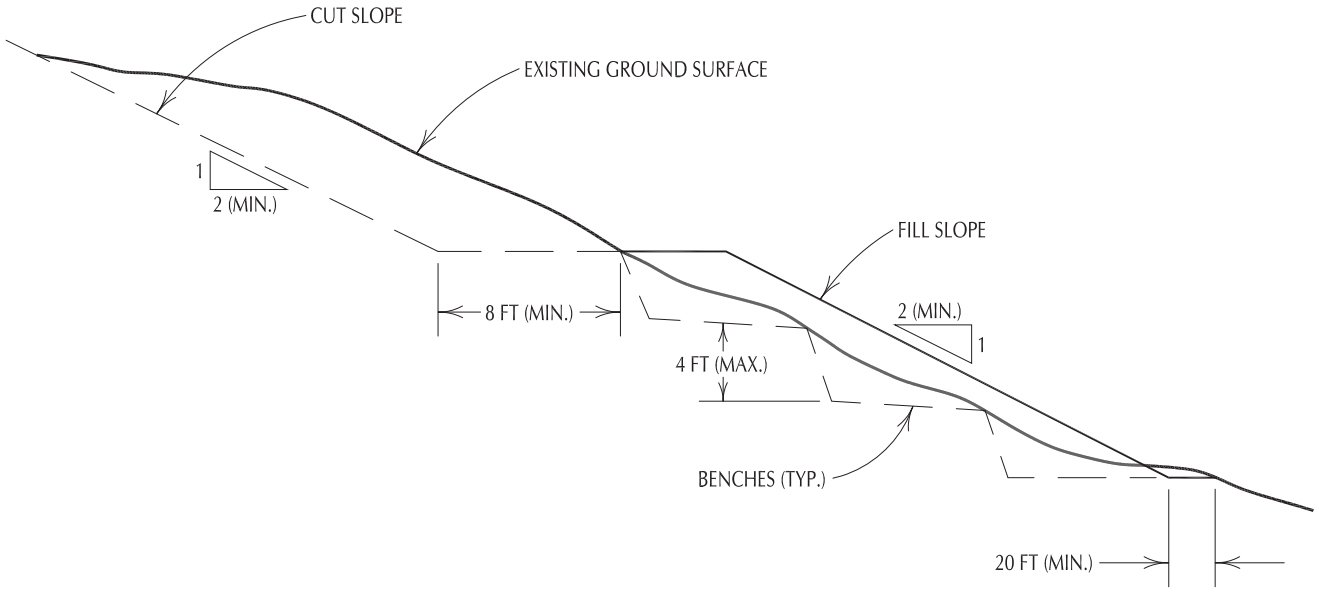
CAMAS ALTERNATIVE HIGH SCHOOL

SITE PLAN

JAN. 2017 JOB NO. W1199 FIG. 2



NOT TO SCALE

GRI

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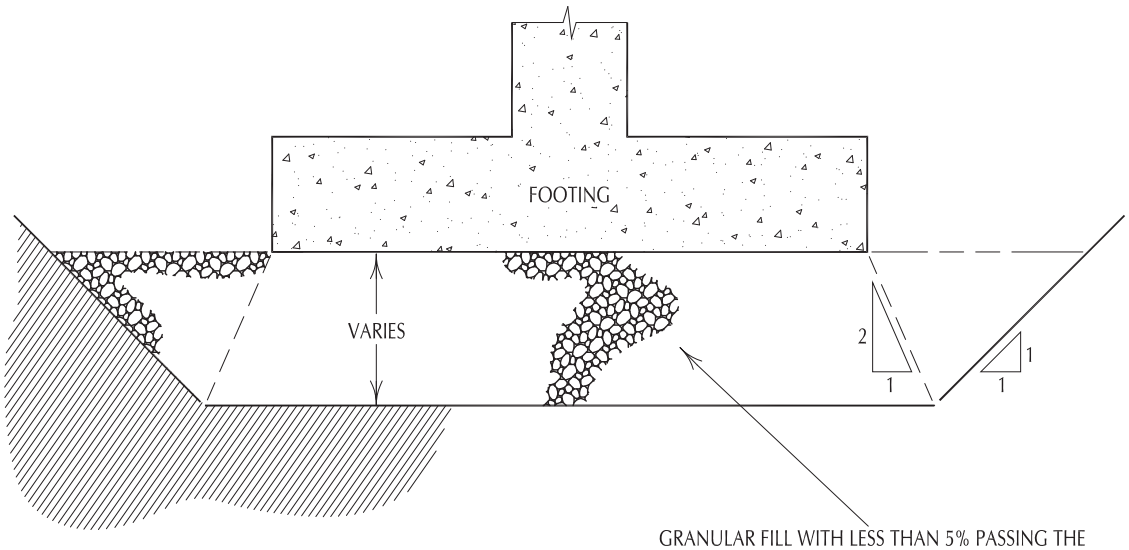
CAMAS ALTERNATIVE HIGH SCHOOL

TYPICAL DETAIL FOR FILLING ON SLOPES

JAN. 2017 JOB NO. W1199 FIG. 3



NOT TO SCALE

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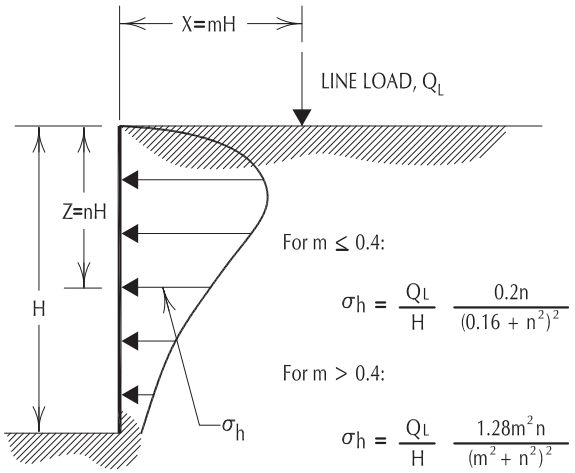
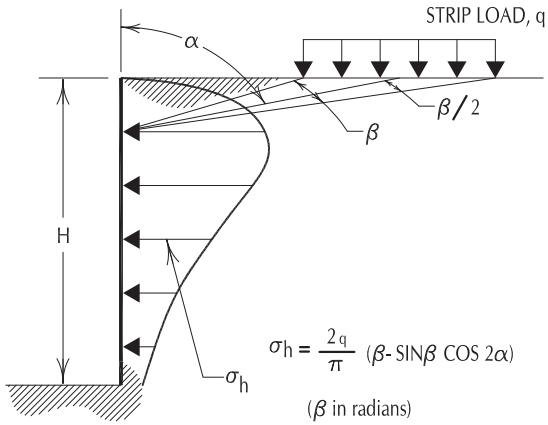
CAMAS ALTERNATIVE HIGH SCHOOL

FOOTING OVEREXCAVATION DETAIL

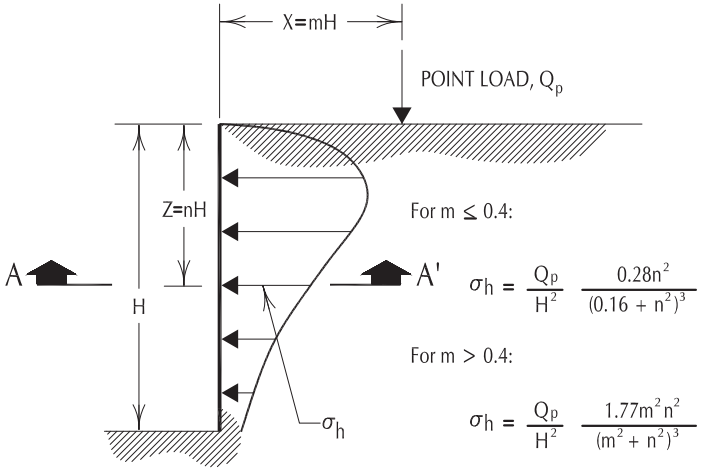
JAN. 2017 JOB NO. W1199 FIG. 4

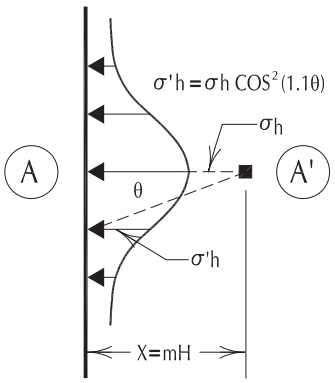


LINE LOAD PARALLEL TO WALL



STRIP LOAD PARALLEL TO WALL





DISTRIBUTION OF HORIZONTAL PRESSURES

VERTICAL POINT LOAD

NOTES:

1. THESE GUIDELINES APPLY TO RIGID WALLS WITH POISSON'S RATIO ASSUMED TO BE 0.5 FOR BACKFILL MATERIALS.

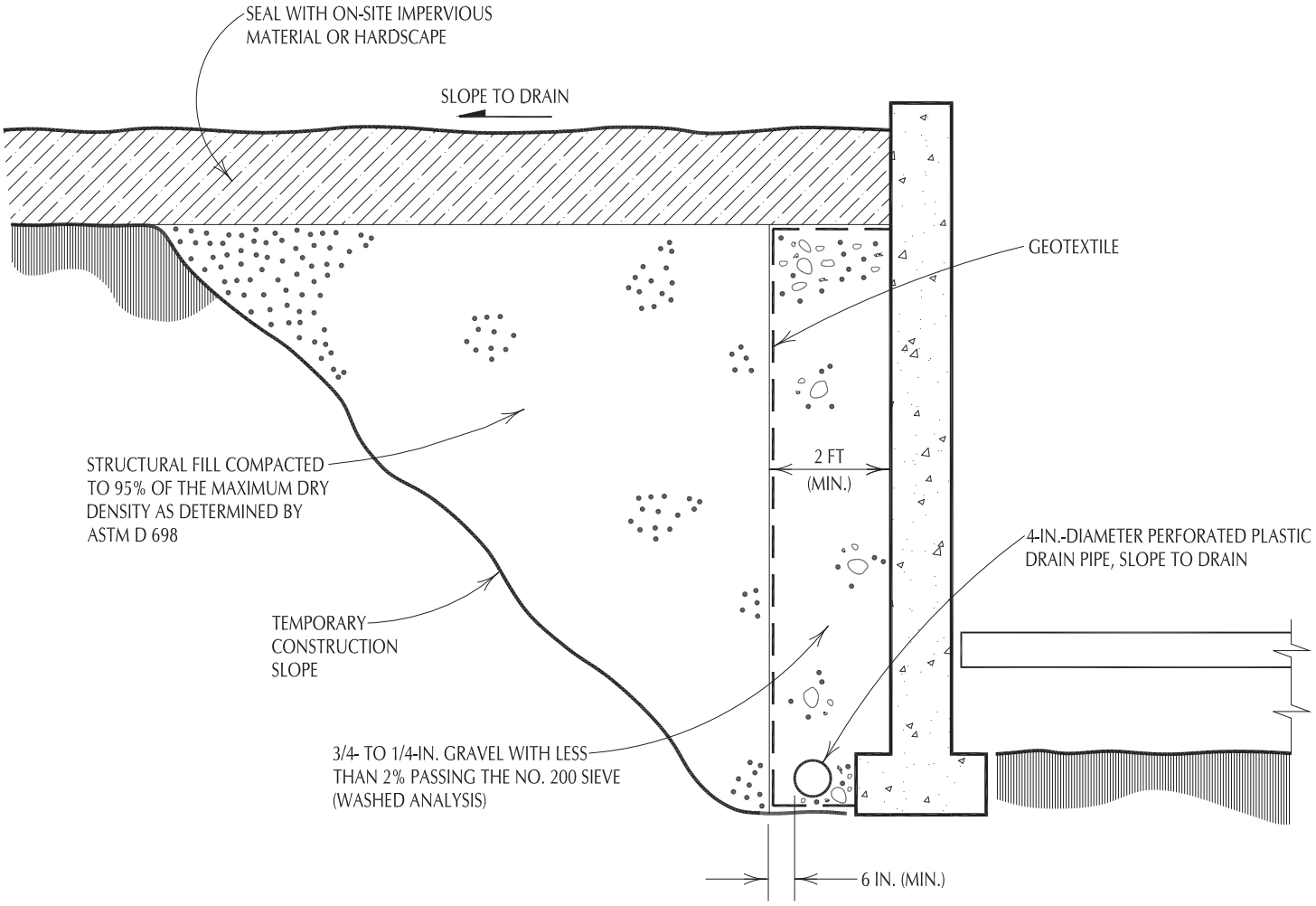
2. LATERAL PRESSURES FROM ANY COMBINATION OF ABOVE LOADS MAY BE DETERMINED BY THE PRINCIPLE OF SUPERPOSITION.

GRI

DLR GROUP
CAMAS ALTERNATIVE HIGH SCHOOL

SURCHARGE-INDUCED LATERAL PRESSURE

JAN. 2017 JOB NO. W1199 FIG. 5



GRI

DLR GROUP
CAMAS ALTERNATIVE HIGH SCHOOL

TYPICAL SUBDRAINAGE DETAIL

JAN. 2017 JOB NO. W1199 FIG. 6

APPENDIX A

Field Explorations and Laboratory Testing

APPENDIX A

FIELD EXPLORATIONS AND LABORATORY TESTING

FIELD EXPLORATIONS

Subsurface materials and conditions at the site were investigated between August 29 and 31, 2016 with four borings, designated B-1 through B-4; between August 29 and September 2, 2016, with 9 test pits, designated TP-1 through TP-8 and TP-7A; and on December 19, 2016, with four additional test pits, designated TP-9 through TP-12. The locations of the explorations made for this study are shown on the Site Plan, Figure 2. The field exploration work was directed by an experienced geotechnical engineer from GRI, who maintained a detailed log of the materials disclosed during the course of the work and obtained samples at frequent samples of the depth.

The borings were completed using mud-rotary and rock coring techniques with a CME 75, truck-mounted drill rig supplied and operated by Hard Core Drilling, Inc. of Dundee, Oregon under subcontract to GRI. The borings were advanced to depths of 32.5 and 53 ft below the ground surface. Disturbed samples were obtained from the borings at 2.5-ft intervals in the upper 15 to 20 ft and 5-ft intervals of depth below this depth using standard split-spoon sampler. At the time of sampling, the Standard Penetration Test (SPT) was conducted. This test consists of driving a standard split-spoon sampler into the soil a distance of 18 in. using a 140-lb, automatic hammer dropped 30 in. The number of blows required to drive the sampler the last 12 in. is known as the standard penetration resistance, or N-value. The N-values provide a measure of the relative density of granular soils, such as sand, and the relative consistency, or stiffness, of cohesive soils, such as silt. The split-spoon samples were carefully examined in the field and representative portions were saved in airtight jars. Relatively undisturbed samples of fine-grained, cohesive soils were obtained by pushing 3-in.-O.D. Shelby tubes into the undisturbed soil a maximum distance of 24 in. using the drill rig or the excavator bucket. The soils exposed in the ends of the Shelby tubes were examined and classified in the field. After classification, the tubes were sealed with rubber caps and tape to preserve the natural moisture content of the soils. All samples were returned to our laboratory for further examination and testing.

Rock Coring was performed in borings B-1 and B-2 using wireline drilling techniques and cored using an HQ diamond core bit attached to a split-core barrel. The rock core samples were classified in the field, the percentage of rock core recovered and the Rock Quality Designation (RQD), an index for determining the relative number of fractures and amount of softening or alteration of the rock mass, were calculated for each core sample. The samples were placed into core boxes and returned to our laboratory for further examination and testing. Photographs of the rock core collected are provided in Appendix B.

Test pits TP-1 through TP-8 and TP-7A were advanced to depths of between 8 and 10.5 ft using a track-mounted excavator owned and operated by Dan J. Fischer Excavating, Inc. of Forest Grove, Oregon. Test pits TP-9 through TP-12 were advanced to depths of between 12 and 15 ft using a track-mounted excavator owned and operated by Scott Lee Excavating, Inc. of Battle Ground, Washington. Disturbed samples of the soils obtained from the test pits were examined in the field and saved in airtight jars for further examination in our laboratory. The test pit excavations were backfilled with the excavated materials, and the backfill was graded to match the adjacent ground surface. Minimal compactive effort was applied to the backfill.

Logs of the borings and test pits are provided on Figures 1A through 4A and Figures 5A through 11A, respectively. Each log presents a descriptive summary of the various types of materials encountered in the boring and notes the depth at which the materials and/or characteristics of the materials change. To the right of the descriptive summary, the numbers and types of samples are indicated. Further to the right, natural moisture content, Torvane shear strength, and Atterberg limits are shown. N-values, rock coring intervals, run lengths, percent core recovered, and RQDs are also summarized on the boring logs. Measured groundwater depths and other observations are noted on the far right of the logs. The terms used to describe the soil and rock encountered in the explorations are defined in Tables 1A and 2A and the attached legend.

LABORATORY TESTING

General

Soil and rock samples obtained from the explorations were returned to our laboratory for examination and testing. The physical characteristics were noted, and the field classifications were modified where necessary. The laboratory program included determinations of natural moisture content, washed sieve analyses, Atterberg limit determinations, Torvane shear strengths, one-dimensional consolidation tests, and dry unit weights. The following paragraphs describe the testing program in more detail.

Natural Moisture Content

Natural moisture content determinations were made in conformance with ASTM 2216. The results are shown on the exploration logs, Figures 1A through 11A, and are summarized in Table 3A.

Grain Size (Washed-Sieve Analysis)

Washed sieve analyses were performed on selected samples to determine the percentage of material passing the No. 200 sieve. The test is performed by taking a sample of known dry weight and washing it over a No. 200 sieve. The material retained on the sieve is oven-dried and weighed, and the percentage of material passing the No. 200 sieve is calculated. The test results are provided on Figures 9A through 11A and are summarized in Table 3A.

Atterberg Limits

Atterberg limits tests were performed on four representative samples of the fine-grained soil in substantial conformance with ASTM D4318. The test data is summarized in Table 3A; on the boring logs, Figures 1A through 4A; and are shown graphically on Figure 12A.

Torvane Shear Strength

The approximate undrained shear strength of relatively undisturbed fine-grained soil samples was determined using a Torvane shear device. The Torvane is a hand-held apparatus with vanes that are inserted into the soil. The torque required to fail the soil in shear around the vanes is measured using a calibrated spring. The results of the Torvane shear tests are summarized on Figures 1A through 9A.

Dry Unit Weight

The dry unit weight of four undisturbed samples was determined in the laboratory in accordance with ASTM D2937 by cutting a cylindrical specimen of soil from a Shelby tube sample. The dimensions of the specimen were carefully measured, the volume calculated, and the specimen weighed. After oven-drying, the specimen was reweighed and the water content calculated. The dry unit weight was then computed.

The dry unit weights are summarized in Table 3A and are also presented on the boring logs, Figures 1A through 4A.

One-Dimensional Consolidation

One-dimensional consolidation testing was performed on select samples of relatively undisturbed fine-grained soil from the Shelby tubes in accordance with ASTM D2435 to obtain data on the compressibility characteristics and stress history of the soil. The results of testing on four samples are summarized on Figures 13A through 16A in the form of a curve showing effective stress versus percent strain. The initial moisture content and dry unit weight of each sample are provided on the figures.

Table 1A

GUIDELINES FOR CLASSIFICATION OF SOIL

Description of Relative Density for Granular Soil

Relative Density	Standard Penetration Resistance (N-values) blows per foot
very loose	0 – 4
loose	4 – 10
medium dense	10 – 30
dense	30 – 50
very dense	over 50

Description of Consistency for Fine-Grained (Cohesive) Soils

Consistency	Standard Penetration Resistance (N-values) blows per foot	Torvane or Undrained Shear Strength, tsf
very soft	0 - 2	less than 0.125
soft	2 - 4	0.125 - 0.25
medium stiff	4 - 8	0.25 - 0.50
stiff	8 - 15	0.50 - 1.0
very stiff	15 - 30	1.0 - 2.0
hard	over 30	over 2.0

Grain-Size Classification	Modifier for Subclassification		
Boulders: > 12 in.		Primary Constituent SAND or GRAVEL	Primary Constituent SILT or CLAY
Cobbles: 3 - 12 in.	Adjective	Percentage of Other Material (by weight)	
Gravel:	trace:	5 - 15 (sand, gravel)	5 - 15 (sand, gravel)
1/4 - 3/4 in. (fine)	some:	15 - 30 (sand, gravel)	15 - 30 (sand, gravel)
3/4 - 3 in. (coarse)	sandy, gravelly:	30 - 50 (sand, gravel)	30 - 50 (sand, gravel)
Sand:	trace:	< 5 (silt, clay)	*Relationship of clay and silt determined by plasticity index test*
No. 200 - No. 40 sieve (fine)	some:	5 - 12 (silt, clay)	
No. 40 - No. 10 sieve (medium)	silty, clayey:	12 - 50 (silt, clay)	
No. 10 - No. 4 sieve (coarse)			
Silt/Clay: pass No. 200 sieve			

GRI

Table 2A: GUIDELINES FOR CLASSIFICATION OF ROCK

RELATIVE ROCK WEATHERING SCALE

Term	Field Identification
Fresh	Crystals are bright. Discontinuities may show some minor surface staining. No discoloration in rock fabric.
Slightly Weathered	Rock mass is generally fresh. Discontinuities are stained and may contain clay. Some discoloration in rock fabric. Decomposition extends up to 1 in. into rock.
Moderately Weathered	Rock mass is decomposed 50% or less. Significant portions of rock show discoloration and weathering effects. Crystals are dull and show visible chemical alteration. Discontinuities are stained and may contain secondary mineral deposits.
Predominantly Decomposed	Rock mass is more than 50% decomposed. Rock can be excavated with geologist's pick. All discontinuities exhibit secondary mineralization. Complete discoloration of rock fabric. Surface of core is friable and usually pitted due to washing out of highly altered minerals by drilling water.
Decomposed	Rock mass is completely decomposed. Original rock "fabric" may be evident. May be reduced to soil with hand pressure.

RELATIVE ROCK HARDNESS SCALE

Term	Hardness Designation	Field Identification	Approximate Unconfined Compressive Strength
Extremely Soft	R0	Can be indented with difficulty by thumbnail. May be moldable or friable with finger pressure.	< 100 psi
Very Soft	R1	Crumbles under firm blows with point of a geology pick. Can be peeled by a pocket knife and scratched with fingernail.	100 - 1,000 psi
Soft	R2	Can be peeled by a pocket knife with difficulty. Cannot be scratched with fingernail. Shallow indentation made by firm blow of geology pick.	1,000 - 4,000 psi
Medium Hard	R3	Can be scratched by knife or pick. Specimen can be fractured with a single firm blow of hammer/geology pick.	4,000 - 8,000 psi
Hard	R4	Can be scratched with knife or pick only with difficulty. Several hard hammer blows required to fracture specimen.	8,000 - 16,000 psi
Very Hard	R5	Cannot be scratched by knife or sharp pick. Specimen requires many blows of hammer to fracture or chip. Hammer rebounds after impact.	> 16,000 psi

RQD AND ROCK QUALITY

Relation of RQD and Rock Quality

RQD (Rock Quality Designation), %	Description of Rock Quality
0 - 25	Very Poor
25 - 50	Poor
50 - 75	Fair
75 - 90	Good
90 - 100	Excellent

Terminology for Planar Surface

Bedding	Joints and Fractures	Spacing
Laminated	Very Close	< 2 in.
Thin	Close	2 in. – 12 in.
Medium	Moderately Close	12 in. – 36 in.
Thick	Wide	36 in. – 10 ft
Massive	Very Wide	> 10 ft

Table 3A

SUMMARY OF LABORATORY RESULTS

Sample Information						Atterberg Limits			
Location	Sample	Depth, ft	Elevation, ft	Moisture Content, %	Dry Unit Weight, pcf	Liquid Limit, %	Plasticity Index, %	Fines Content, %	Soil Type
B-1	S-1	2.5	486.5	23	--	--	--	--	FILL
	S-2	5.0	484.0	36	--	--	--	--	FILL
	S-4	9.5	479.5	37	--	--	--	--	FILL
	S-5	12.8	476.2	33	87	--	--	--	FILL
	S-5	14.2	474.8	34	--	32	6	--	FILL
	S-6	14.5	474.5	30	--	--	--	--	FILL
	S-7	17.5	471.5	26	--	--	--	--	SILT
	S-8	20.0	469.0	49	--	--	--	--	Clayey SILT
	S-9	25.0	464.0	54	--	--	--	--	Clayey SILT
	S-10	27.0	462.0	63	--	--	--	--	Clayey SILT
	S-10	28.3	460.7	50	73	77	33	--	Clayey SILT
	S-11	30.0	459.0	59	--	--	--	--	Clayey SILT
B-2	S-1	2.5	487.5	22	--	--	--	--	FILL
	S-2	5.0	485.0	22	--	--	--	--	FILL
	S-3	7.5	482.5	25	--	--	--	--	SILT
	S-4	10.0	480.0	35	--	--	--	--	Clayey SILT
	S-5	12.5	477.5	45	--	--	--	--	Clayey SILT
	S-6	15.0	475.0	54	--	--	--	--	Clayey SILT
	S-7	20.0	470.0	53	--	--	--	--	Clayey SILT
	S-8	25.0	465.0	63	--	--	--	--	Clayey SILT
	S-9	30.0	460.0	67	--	--	--	--	Clayey SILT
	S-10	35.0	455.0	40	--	--	--	--	Silty GRAVEL
B-3	S-1	2.5	486.0	25	--	--	--	--	FILL
	S-2	5.7	482.8	34	84	28	6	--	FILL
	S-3	7.0	481.5	27	--	--	--	--	FILL
	S-4	10.0	478.5	24	--	--	--	--	SILT
	S-5	12.5	476.0	41	--	--	--	--	Clayey SILT
	S-6	15.0	473.5	49	--	--	--	--	Clayey SILT
	S-8	21.2	467.3	58	--	--	--	--	Clayey SILT
	S-9	25.0	463.5	52	--	--	--	--	Clayey SILT
	S-10	30.0	458.5	49	--	--	--	--	Clayey SILT
	S-10	31.0	457.5	49	--	--	--	--	Silty SAND
B-4	S-1	2.5	487.0	17	--	--	--	--	FILL
	S-1	3.3	486.3	17	--	--	--	--	Clayey SILT
	S-2	5.0	484.5	23	--	--	--	--	Clayey SILT
	S-3	7.5	482.0	24	--	--	--	--	Clayey SILT
	S-4	10.0	479.5	35	--	--	--	--	Clayey SILT
	S-5	12.5	477.0	49	--	--	--	--	Clayey SILT
	S-6	15.6	473.9	58	66	72	26	--	Clayey SILT
	S-7	17.0	472.5	54	--	--	--	--	Clayey SILT

Table 3A

SUMMARY OF LABORATORY RESULTS

Sample Information						Atterberg Limits			
Location	Sample	Depth, ft	Elevation, ft	Moisture Content, %	Dry Unit Weight, pcf	Liquid Limit, %	Plasticity Index, %	Fines Content, %	Soil Type
B-4	S-8	20.0	469.5	58	--	--	--	--	Clayey SILT
	S-10	25.5	464.0	49	--	--	--	--	Silty GRAVEL
TP-1	S-1	2.0	486.0	16	--	--	--	--	FILL
	S-2	4.0	484.0	21	--	--	--	--	FILL
	S-3	6.0	482.0	23	--	--	--	--	FILL
	S-4	8.0	480.0	30	--	--	--	--	FILL
	S-5	10.0	478.0	30	--	--	--	--	FILL
TP-2	S-1	2.0	486.5	16	--	--	--	--	FILL
	S-2	4.0	484.5	20	--	--	--	--	FILL
	S-3	6.0	482.5	28	--	--	--	--	FILL
	S-4	8.0	480.5	23	--	--	--	--	FILL
	S-5	10.0	478.5	24	--	--	--	--	FILL
TP-3	S-1	1.0	487.0	24	--	--	--	--	FILL
	S-2	2.0	486.0	26	--	--	--	--	FILL
	S-3	3.0	485.0	28	--	--	--	--	FILL
	S-4	5.0	483.0	45	--	--	--	--	FILL
	S-5	7.0	481.0	25	--	--	--	--	FILL
	S-6	10.0	478.0	23	--	--	--	--	FILL
TP-4	S-1	2.0	474.0	20	--	--	--	--	FILL
	S-2	4.0	472.0	22	--	--	--	--	FILL
	S-3	6.0	470.0	25	--	--	--	--	FILL
	S-4	10.0	466.0	18	--	--	--	--	FILL
TP-5	S-1	3.0	483.0	16	--	--	--	--	SILT
	S-2	6.0	480.0	25	--	--	--	--	SILT
	S-3	8.0	478.0	38	--	--	--	--	SILT
	S-4	9.3	476.8	32	--	--	--	--	SILT
TP-6	S-1	2.0	489.5	19	--	--	--	--	SILT
	S-2	4.0	487.5	21	--	--	--	--	SILT
	S-3	6.0	485.5	25	--	--	--	--	SILT
	S-4	8.0	483.5	45	--	--	--	--	Silty GRAVEL
	S-5	10.0	481.5	47	--	--	--	--	Silty GRAVEL
TP-7	S-1	2.0	475.0	21	--	--	--	--	FILL
	S-2	4.0	473.0	28	--	--	--	--	FILL
	S-3	6.0	471.0	25	--	--	--	--	FILL
	S-4	7.5	469.5	30	--	--	--	--	FILL
TP-7A	S-1	8.0	469.0	26	--	--	--	--	Clayey SILT
	S-2	9.5	467.5	31	--	--	--	--	BASALT
TP-8	S-2	2.0	487.0	27	--	--	--	--	FILL
	S-3	4.0	485.0	26	--	--	--	--	SILT
	S-4	6.0	483.0	27	--	--	--	--	SILT

Table 3A

SUMMARY OF LABORATORY RESULTS

Sample Information						Atterberg Limits			
Location	Sample	Depth, ft	Elevation, ft	Moisture Content, %	Dry Unit Weight, pcf	Liquid Limit, %	Plasticity Index, %	Fines Content, %	Soil Type
TP-8	S-5	8.0	481.0	26	--	--	--	--	Clayey SILT
	S-6	10.0	479.0	24	--	--	--	--	Clayey SILT
TP-9	S-1	2.0	451.0	32	--	--	--	87	SILT
	S-2	4.0	449.0	25	--	--	--	--	SILT
	S-3	6.0	447.0	39	--	--	--	--	SILT
	S-4	8.0	445.0	50	--	--	--	83	SILT
	S-5	10.0	443.0	55	--	--	--	--	SILT
	S-6	12.0	441.0	60	--	--	--	76	SILT
	S-7	14.5	438.5	61	--	--	--	--	SILT
TP-10	S-1	2.0	479.0	27	--	--	--	74	FILL
	S-3	6.0	475.0	26	--	--	--	--	FILL
	S-4	8.0	473.0	22	--	--	--	81	SILT
	S-5	10.0	471.0	26	--	--	--	--	SILT
	S-6	12.0	469.0	26	--	--	--	--	Clayey SILT
	S-7	14.5	466.5	42	--	--	--	--	Clayey SILT
TP-11	S-1	2.0	478.0	20	--	--	--	85	FILL
	S-2	4.0	476.0	21	--	--	--	--	SILT
	S-4	8.0	472.0	23	--	--	--	83	SILT
	S-5	10.0	470.0	26	--	--	--	--	SILT
	S-6	12.0	468.0	39	--	--	--	--	Clayey SILT
	S-7	13.5	466.5	50	--	--	--	--	Clayey SILT
TP-12	S-1	2.0	481.0	20	--	--	--	87	FILL
	S-2	4.0	479.0	22	--	--	--	88	FILL
	S-3	6.0	477.0	24	--	--	--	--	SILT
	S-4	8.0	475.0	28	--	--	--	--	SILT
	S-5	10.0	473.0	42	--	--	--	--	Clayey SILT
	S-6	11.5	471.5	43	--	--	--	--	Clayey SILT

BORING AND TEST PIT LOG LEGEND

SOIL SYMBOLS

Symbol	Typical Description
	LANDSCAPE MATERIALS
	FILL
	GRAVEL; clean to some silt, clay, and sand
	Sandy GRAVEL; clean to some silt and clay
	Silty GRAVEL; up to some clay and sand
	Clayey GRAVEL; up to some silt and sand
	SAND; clean to some silt, clay, and gravel
	Gravelly SAND; clean to some silt and clay
	Silty SAND; up to some clay and gravel
	Clayey SAND; up to some silt and gravel
	SILT; up to some clay, sand, and gravel
	Gravelly SILT; up to some clay and sand
	Sandy SILT; up to some clay and gravel
	Clayey SILT; up to some sand and gravel
	CLAY; up to some silt, sand, and gravel
	Gravelly CLAY; up to some silt and sand
	Sandy CLAY; up to some silt and gravel
	Silty CLAY; up to some sand and gravel
	PEAT

BEDROCK SYMBOLS

Symbol	Typical Description
	BASALT
	MUDSTONE
	SILTSTONE
	SANDSTONE

SURFACE MATERIAL SYMBOLS

Symbol	Typical Description
	Asphalt concrete PAVEMENT
	Portland cement concrete PAVEMENT
	Crushed rock BASE COURSE

SAMPLER SYMBOLS

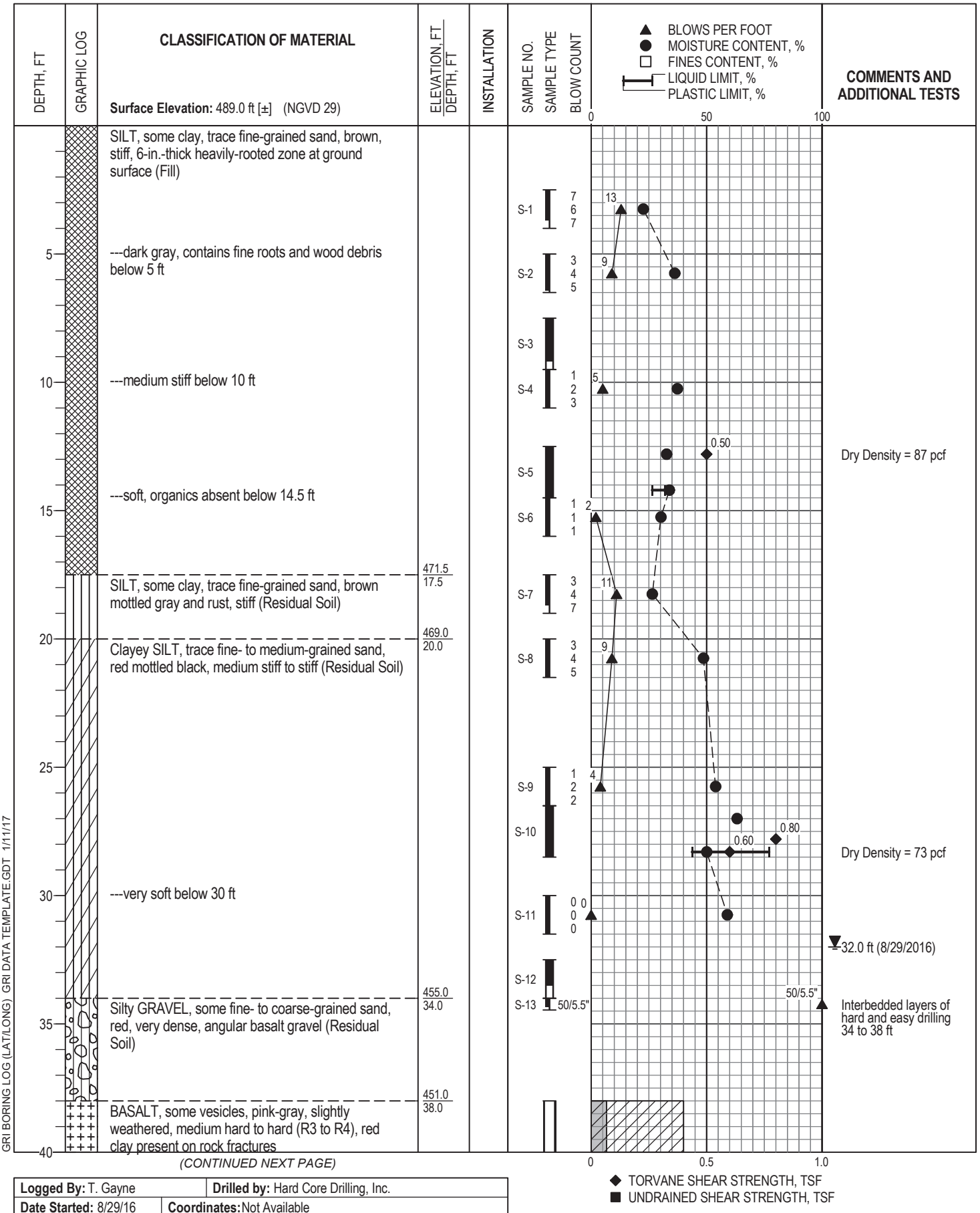
Symbol	Sampler Description
	2.0-in. O.D. split-spoon sampler and Standard Penetration Test with recovery (ASTM D1586)
	Shelby tube sampler with recovery (ASTM D1587)
	3.0-in. O.D. split-spoon sampler with recovery (ASTM D3550)
	Grab Sample
	Rock core sample interval
	Sonic core sample interval
	Geoprobe sample interval

INSTALLATION SYMBOLS

Symbol	Symbol Description
	Flush-mount monument set in concrete
	Concrete, well casing shown where applicable
	Bentonite seal, well casing shown where applicable
	Filter pack, machine-slotted well casing shown where applicable
	Grout, vibrating-wire transducer cable shown where applicable
	Vibrating-wire pressure transducer
	1-in.-diameter solid PVC
	1-in.-diameter hand-slotted PVC
	Grout, inclinometer casing shown where applicable

FIELD MEASUREMENTS

Symbol	Typical Description
	Groundwater level during drilling and date measured
	Groundwater level after drilling and date measured
	Rock core recovery
	Rock quality designation (RQD)

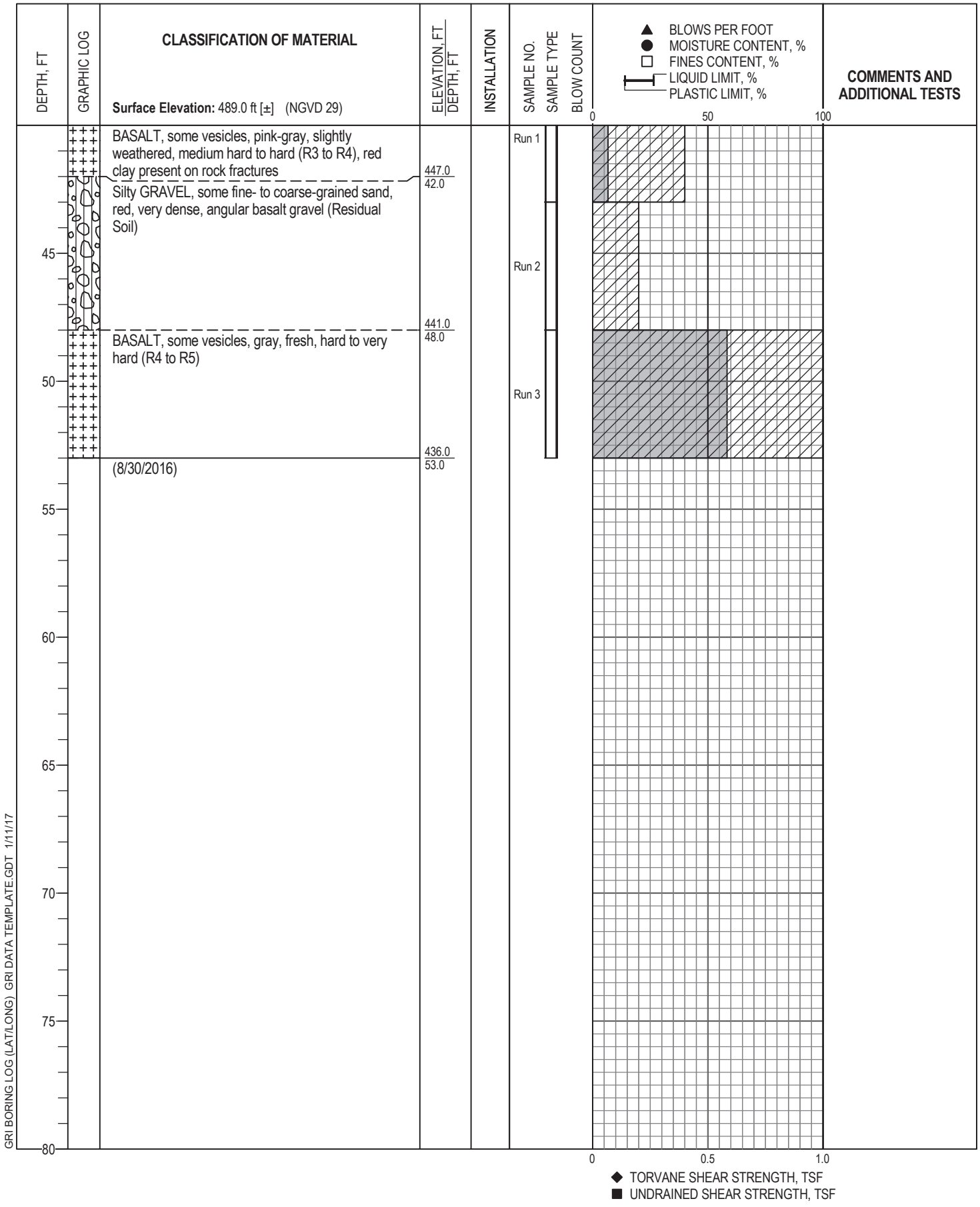


GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

Logged By: T. Gayne	**Drilled by:** Hard Core Drilling, Inc.
Date Started: 8/29/16	**Coordinates:** Not Available
Drilling Method: Mud Rotary **Equipment:** CME 75 Truck-Mounted Drill Rig **Hole Diameter:** 5 in.	**Hammer Type:** Auto Hammer **Weight:** 140 lb **Drop:** 30 in. **Energy Ratio:** 72%
Note: See Legend for Explanation of Symbols	

BORING B-1

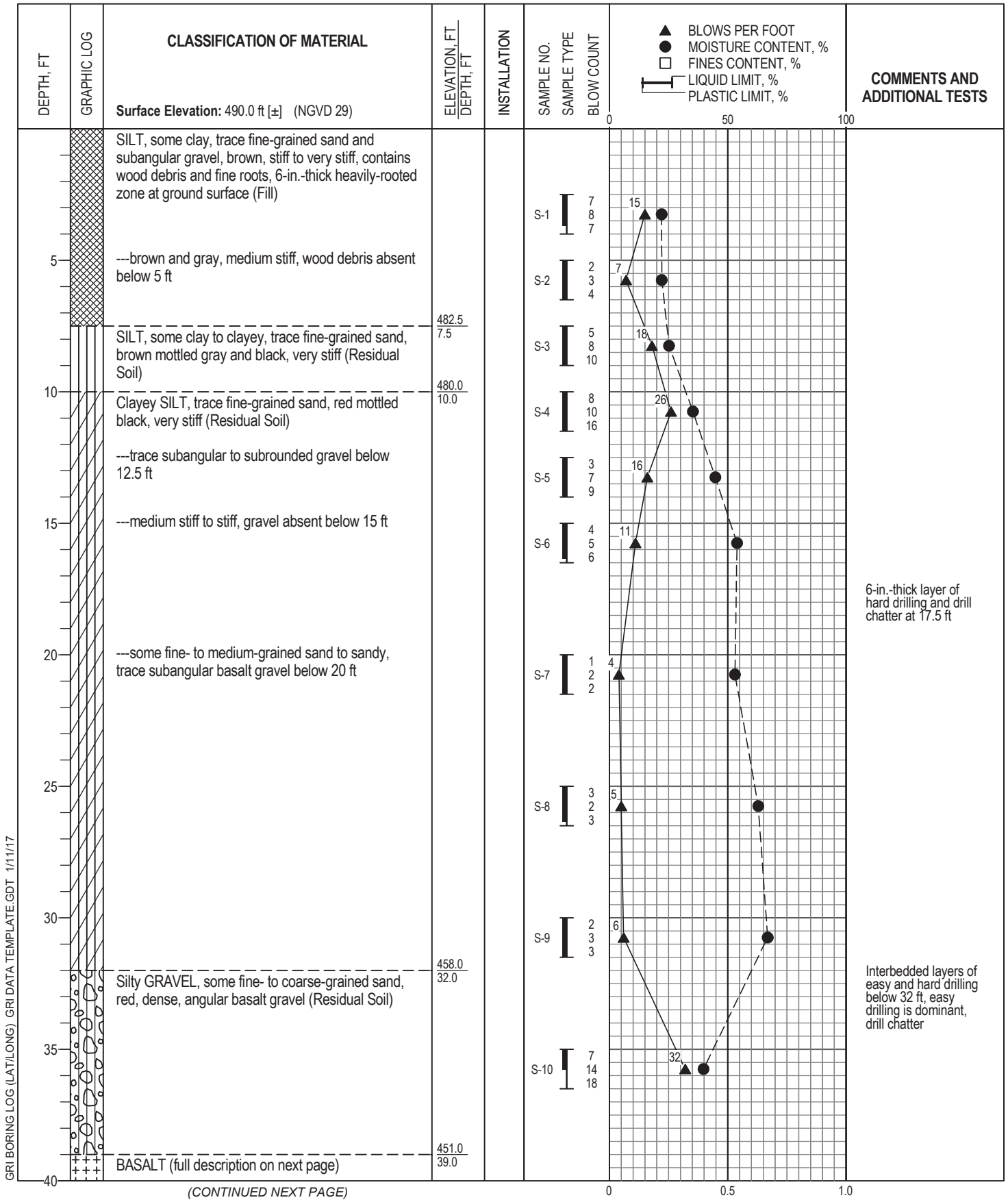
JAN. 2017 JOB NO. W1199 FIG. 1A



GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

BORING B-1

JAN. 2017 JOB NO. W1199 FIG. 1A



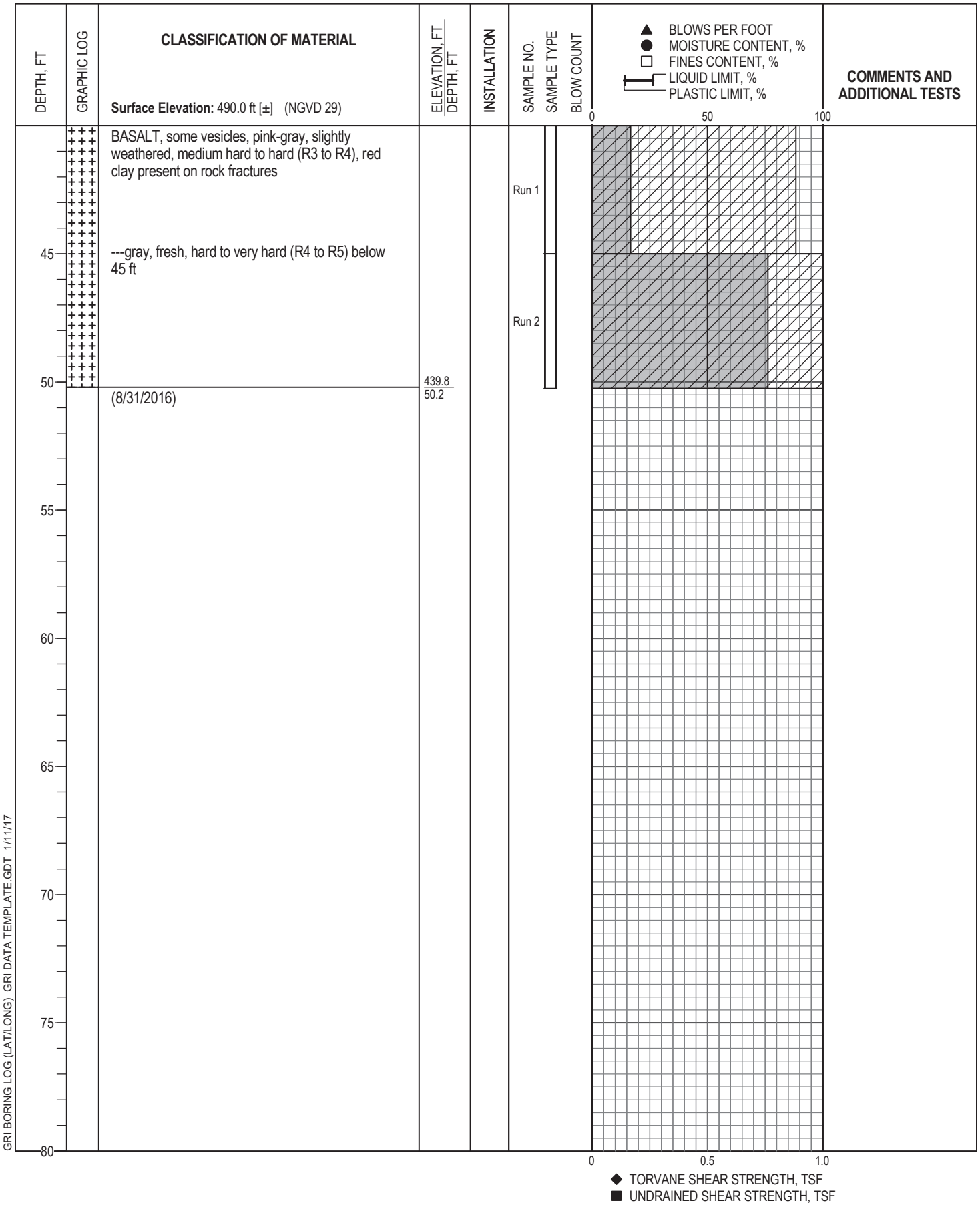
(CONTINUED NEXT PAGE)

GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

Logged By: T. Gayne	**Drilled by:** Hard Core Drilling, Inc.
Date Started: 8/30/16	**Coordinates:** Not Available
Drilling Method: Mud Rotary **Equipment:** CME 75 Truck-Mounted Drill Rig **Hole Diameter:** 5 in.	**Hammer Type:** Auto Hammer **Weight:** 140 lb **Drop:** 30 in. **Energy Ratio:** 72%
Note: See Legend for Explanation of Symbols	

BORING B-2

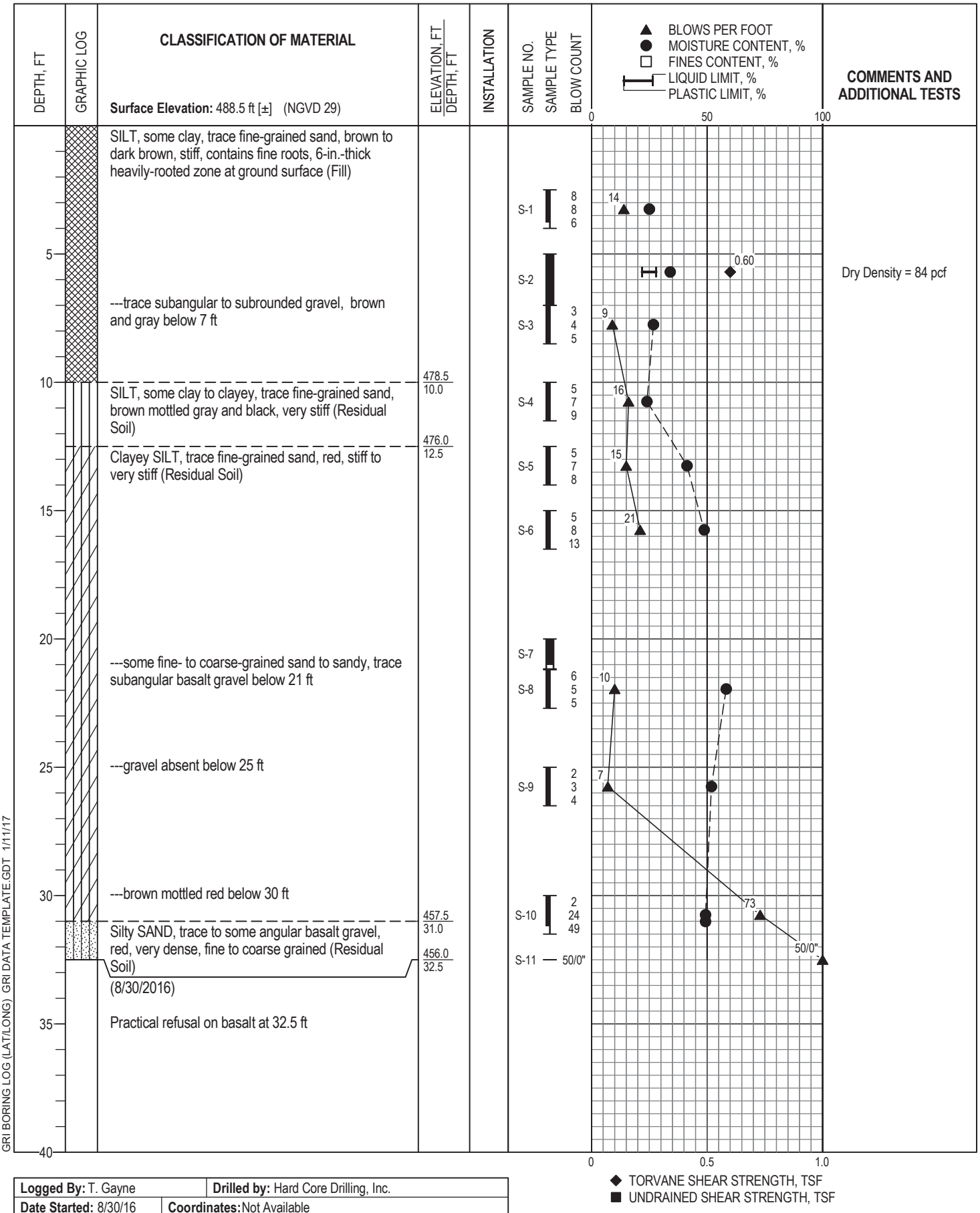
JAN. 2017 JOB NO. W1199 FIG. 2A



GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

BORING B-2

JAN. 2017 JOB NO. W1199 FIG. 2A

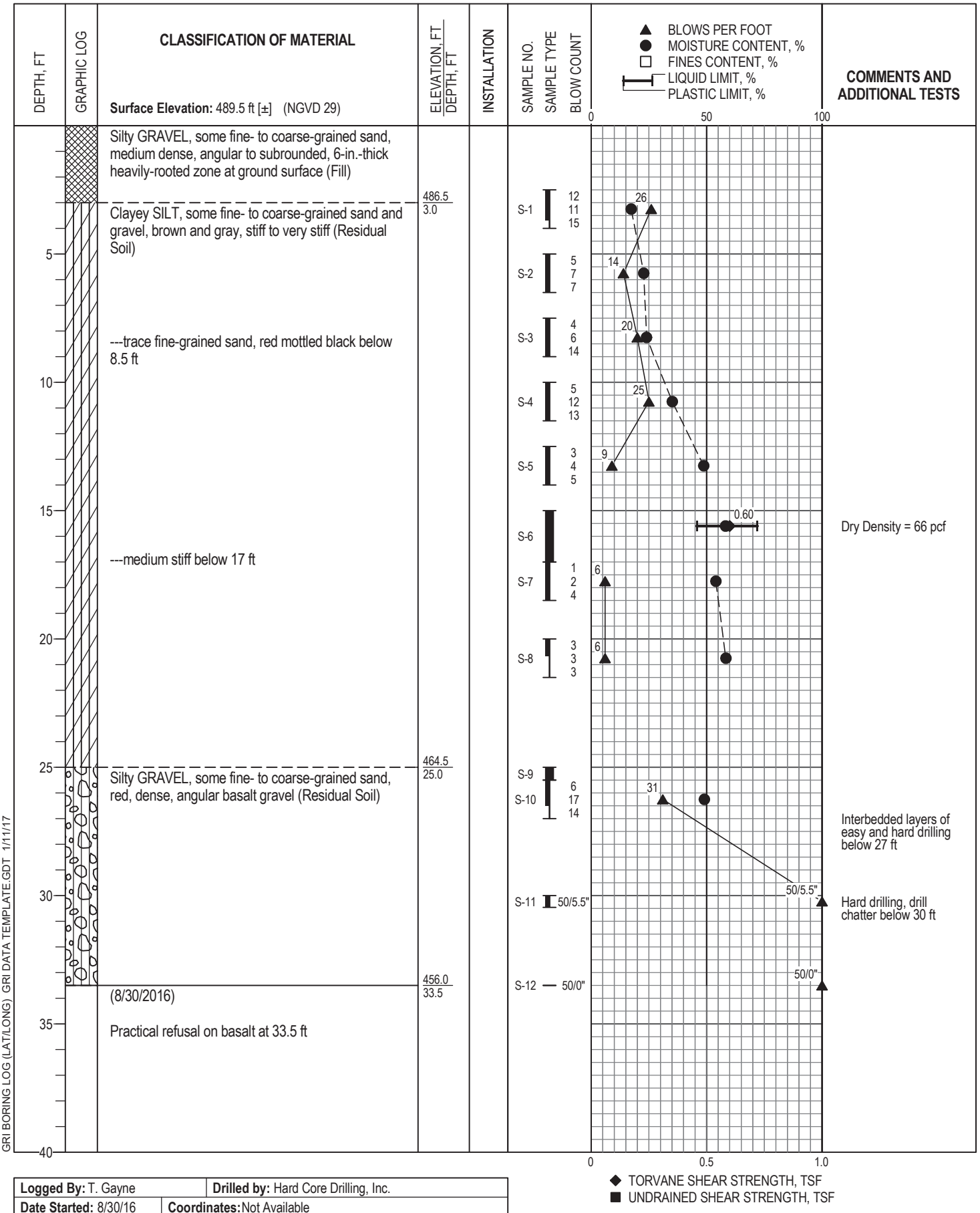


GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

Logged By: T. Gayne	**Drilled by:** Hard Core Drilling, Inc.
Date Started: 8/30/16	**Coordinates:** Not Available
Drilling Method: Mud Rotary **Equipment:** CME 75 Truck-Mounted Drill Rig **Hole Diameter:** 5 in.	**Hammer Type:** Auto Hammer **Weight:** 140 lb **Drop:** 30 in. **Energy Ratio:** 72%
Note: See Legend for Explanation of Symbols	

BORING B-3

JAN. 2017 JOB NO. W1199 FIG. 3A



GRI BORING LOG (LAT/LONG) GRI DATA TEMPLATE.GDT 1/11/17

Logged By: T. Gayne	**Drilled by:** Hard Core Drilling, Inc.
Date Started: 8/30/16	**Coordinates:** Not Available
Drilling Method: Mud Rotary **Equipment:** CME 75 Truck-Mounted Drill Rig **Hole Diameter:** 5 in.	**Hammer Type:** Auto Hammer **Weight:** 140 lb **Drop:** 30 in. **Energy Ratio:** 72%
Note: See Legend for Explanation of Symbols	

BORING B-4

JAN. 2017 JOB NO. W1199 FIG. 4A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0, 50, 100)	COMMENTS AND ADDITIONAL TESTS

TP-1 **Surface Elevation:** 488.0 ft [±] (NGVD 29)

SILT, some clay, trace fine-grained sand, brown, medium stiff to stiff, 6-in.-thick heavily-rooted zone at ground surface (Fill)

---trace clay, some sand, gray below 4 ft

---organic odor below 6 ft

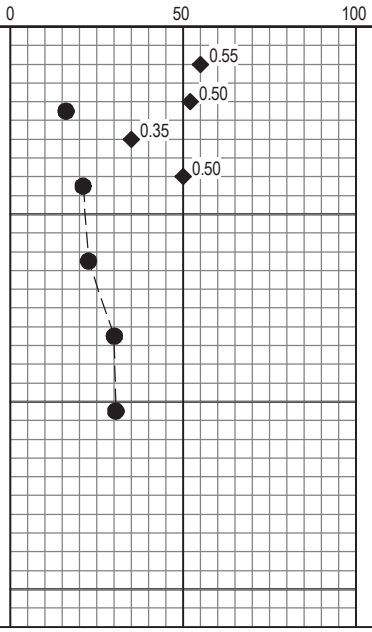
---medium stiff, contains fine roots below 8 ft

---contains fine roots and wood debris below 10 ft — 477.5 / 10.5

(8/29/2016)

Groundwater not encountered

S-1 0.55, 0.50; S-2 0.35, 0.50; S-3; S-4; S-5



Logged By: B. Cook **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator

Date Started: 8/29/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

TP-2 **Surface Elevation:** 488.5 ft [±] (NGVD 29)

SILT, some subangular gravel and fine- to coarse-grained sand, trace clay, brown, stiff, 6-in.-thick heavily-rooted zone at ground surface (Fill)

---gray, contains fine roots, wood, and grass below 4.5 ft

---trace to some subangular gravel below 6 ft

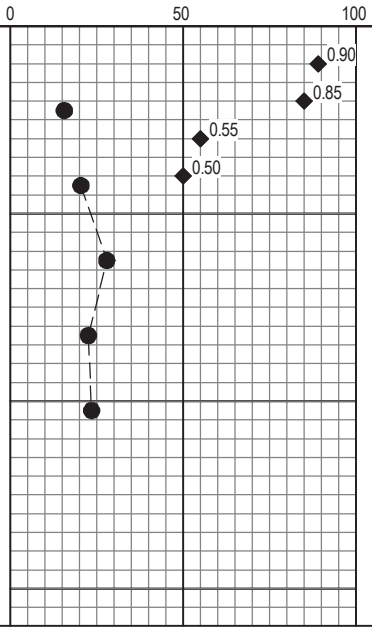
---trace to some fine-grained sand, gravel and organics absent below 8 ft

---medium stiff below 10 ft — 478.0 / 10.5

(8/29/2016)

Groundwater not encountered

S-1 0.90, 0.85; S-2 0.55, 0.50; S-3; S-4; S-5



Logged By: B. Cook **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator

Date Started: 8/29/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

GRI

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 5A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0 – 50 – 100)	COMMENTS AND ADDITIONAL TESTS

TP-3 **Surface Elevation:** 488.0 ft [±] (NGVD 29)

SILT, some clay, trace subangular gravel and fine- to coarse-grained sand, brown, stiff, contains cobbles up to 10-in. diameter, 6-in.-thick heavily-rooted zone at ground surface (Fill)
---medium stiff to stiff below 2 ft
---gravel and cobbles absent below 4 ft
---trace subangular gravel, dark gray below 5 ft
---rust mottled gray below 7 ft

477.5 / 10.5

(8/29/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4, S-5, S-6

0.80, 0.50, 0.35

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: B. Cook **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator
Date Started: 8/29/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

TP-4 **Surface Elevation:** 476.0 ft [±] (NGVD 29)

SILT, some clay, trace fine-grained sand and subrounded gravel, brown, 6-in.-thick heavily-rooted zone at ground surface (Fill)

474.5 / 1.5

GRAVEL, COBBLES, and BOULDERS, some dark brown silt and clay, trace to some fine- to coarse-grained sand, dense, angular to subrounded gravel (Fill)

472.5 / 3.5

SILT, some clay and fine- to coarse-grained sand, dark brown, medium stiff, contains fine roots and grass, organic odor (Fill)

465.5 / 10.5

(9/2/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4

0.40

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: T. Gayne **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator
Date Started: 9/2/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

GRI

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 6A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0, 50, 100)	COMMENTS AND ADDITIONAL TESTS

TP-5 **Surface Elevation:** 486.0 ft [±] (NGVD 29)

SILT, trace fine-grained sand, brown mottled gray and rust, stiff 5-in.-thick heavily-rooted zone at ground surface (Residual Soil)

---soft to medium stiff below 3 ft

480.0 / 6.0

SILT, some clay and subrounded to subangular gravel, trace fine-grained sand, brown mottled rust, medium stiff to stiff, contains cobbles up to 10-in. diameter (Residual Soil)

476.2 / 9.8

(9/2/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4

0.20

TORVANE SHEAR STRENGTH, TSF (0, 0.5, 1.0)

Logged By: T. Gayne **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator

Date Started: 9/2/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

TP-6 **Surface Elevation:** 491.5 ft [±] (NGVD 29)

SILT, trace to some clay and fine-grained sand, brown mottled rust and gray, stiff, 6-in.-thick heavily-rooted zone at ground surface (Residual Soil)

485.5 / 6.0

SILT, some gravel to gravelly, trace to some fine- to coarse-grained sand, brown, stiff (Residual Soil)

483.5 / 8.0

Silty GRAVEL, some fine- to coarse-grained sand, very dense, subangular (Residual Soil)

481.0 / 10.5

(8/29/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4, S-5

0.85, 0.80, 0.55, 0.60

TORVANE SHEAR STRENGTH, TSF (0, 0.5, 1.0)

Hard excavating below 7 ft

Logged By: B. Cook **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator

Date Started: 8/29/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

GRI

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 7A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0 – 50 – 100)	COMMENTS AND ADDITIONAL TESTS

TP-7 **Surface Elevation:** 477.0 ft [±] (NGVD 29)

SILT, some fine-grained sand, brown, stiff, contains fine roots and grass, contains cobbles and boulders up to 3 ft diameter, 6-in.-thick heavily-rooted zone at ground surface (Fill)

---gray, medium stiff to stiff below 4 ft

---trace clay and subangular gravel, contains dimensional lumber, steel pipe, plastic, and other debris below 6 ft

469.0 / 8.0

(9/2/2016)

Refusal on BASALT at 8 ft
Groundwater not encountered

S-1, S-2, S-3, S-4

0.60, 0.50, 0.55, 0.45

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: T. Gayne **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator
Date Started: 9/2/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

TP-7A **Surface Elevation:** 477.0 ft [±] (NGVD 29)

SILT, some fine-grained sand, brown, stiff, contains fine roots and grass, contains cobbles and boulders up to 3 ft diameter, 6-in.-thick heavily-rooted zone at ground surface (Fill)

---gray, medium stiff to stiff below 4 ft

---trace clay and subangular gravel, contains dimensional lumber, steel pipe, plastic, and other debris below 6 ft

469.0 / 8.0

Clayey SILT, some angular to subrounded gravel, trace fine-grained sand, gray, medium stiff to stiff, contains cobbles (Residual Soil)

468.0 / 9.0

BASALT, gray, slightly to moderately weathered, soft to medium hard (R2 to R3), in a matrix of gray clayey silt

467.0 / 10.0

(9/2/2016)

Groundwater not encountered

Test pit located 20 ft west of TP-7

S-1, S-2

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: T. Gayne **Excavated by:** Dan J. Fischer Excavating, Inc. **Equipment:** Track-Mounted Excavator
Date Started: 9/2/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

GRI TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 8A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0, 50, 100)	COMMENTS AND ADDITIONAL TESTS

TP-8 **Surface Elevation:** 489.0 ft [±] (NGVD 29)

Silty GRAVEL, some fine- to coarse-grained sand, medium dense, subrounded gravel, 6-in.-thick heavily-rooted zone at ground surface (Fill) — 487.7 / 1.3

SILT, some fine-grained sand, trace clay, dark brown, stiff, contains wood debris (Fill) — 486.0 / 3.0

SILT, some fine-grained sand, trace clay, gray mottled rust, soft to medium stiff (Residual Soil)

Clayey SILT, trace fine-grained sand, red-brown, soft to medium stiff (Residual Soil) — 481.0 / 8.0

(8/29/2016) — 478.5 / 10.5

S-1, S-2, S-3, S-4, S-5, S-6

0.50, 0.60, 0.35, 0.25

▽ 9.0 ft (8/29/2016)
Moderate seepage at 9 ft

TORVANE SHEAR STRENGTH, TSF (0, 0.5, 1.0)

Logged By: B. Cook | **Excavated by:** Dan J. Fischer Excavating, Inc. | **Equipment:** Track-Mounted Excavator
Date Started: 8/29/16 | **Coordinates:** Not Available | **Note:** See Legend for Explanation of Symbols

TP-9 **Surface Elevation:** 453.0 ft [±] (NGVD 29)

SILT, some clay, trace fine- to coarse-grained sand, brown mottled gray and rust, stiff, 6-in.-thick heavily rooted zone at ground surface (Residual Soil)

SILT, some clay and subangular to subrounded gravel and cobbles up to 10 in. diameter, trace fine- to coarse-grained sand, red and brown mottled black (Residual Soil) — 449.0 / 4.0

---gray and brown with yellow and black staining below 10 ft

(12/19/2016) — 438.0 / 15.0

S-1, S-2, S-3, S-4, S-5, S-6, S-7

Groundwater not encountered

TORVANE SHEAR STRENGTH, TSF (0, 0.5, 1.0)

Logged By: T. Meskele | **Excavated by:** Scott Lee Excavating, Inc. | **Equipment:** CAT 308E Track-Mounted Excavator
Date Started: 12/19/16 | **Coordinates:** Not Available | **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

GRI

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 9A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0 – 50 – 100)	COMMENTS AND ADDITIONAL TESTS

TP-10 **Surface Elevation:** 481.0 ft [±] (NGVD 29)

SILT, some fine- to medium-grained sand, trace clay, brown, medium stiff to stiff, contains scattered subangular to subrounded gravel and cobbles, 6-in.-thick heavily rooted zone at ground surface (Fill)

---some clay, gray, organic smell below 4 ft

473.0 / 8.0

SILT, some clay and fine- to coarse-grained sand, brown mottled gray, stiff (Residual Soil)

---brown mottled rust below 10 ft

---clayey, red-brown below 12 ft

---red mottled black below 14 ft

466.0 / 15.0

(12/19/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4, S-5, S-6, S-7

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: T. Meskele **Excavated by:** Scott Lee Excavating, Inc. **Equipment:** CAT 308E Track-Mounted Excavator

Date Started: 12/19/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

TP-11 **Surface Elevation:** 480.0 ft [±] (NGVD 29)

SILT, some fine-grained sand, trace clay, brown, medium stiff to stiff, contains scattered subangular to subrounded gravel and cobbles, 6-in.-thick heavily rooted zone at ground surface (Fill)

476.0 / 4.0

SILT, some clay and fine- to coarse-grained sand, brown mottled gray, stiff (Residual Soil)

---brown mottled black below 8 ft

---red-brown mottled black, contains about 10-in. diameter cobble at 10 ft

---clayey, red mottled black below 12 ft

466.0 / 14.0

(12/19/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4, S-5, S-6, S-7

0 – 0.5 – 1.0 TORVANE SHEAR STRENGTH, TSF

Logged By: T. Meskele **Excavated by:** Scott Lee Excavating, Inc. **Equipment:** CAT 308E Track-Mounted Excavator

Date Started: 12/19/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 10A

DEPTH, FT	GRAPHIC LOG	CLASSIFICATION OF MATERIAL	ELEVATION, FT / DEPTH, FT	SAMPLE NO. / SAMPLE TYPE	MOISTURE CONTENT, % / FINES CONTENT, % / LIQUID LIMIT, % / PLASTIC LIMIT, % (0, 50, 100)	COMMENTS AND ADDITIONAL TESTS

TP-12 **Surface Elevation:** 483.0 ft [±] (NGVD 29)

SILT, trace clay and fine-grained sand, brown mottled black and rust, medium stiff to stiff, 6-in.-thick heavily rooted zone at ground surface (Fill)

---contains fine roots at 4 ft

477.0 / 6.0

SILT, some clay, trace fine- to coarse-grained sand, brown mottled gray and rust, stiff, contains scattered subangular to subrounded gravel and cobbles (Residual Soil)

---red mottled black below 8 ft

---clayey, some cobbles and boulders up to 16 in. diameter, red below 10 ft

471.0 / 12.0

(12/19/2016)

Groundwater not encountered

S-1, S-2, S-3, S-4, S-5, S-6

0 0.5 1.0

TORVANE SHEAR STRENGTH, TSF

Logged By: T. Meskele **Excavated by:** Scott Lee Excavating, Inc. **Equipment:** CAT 308E Track-Mounted Excavator

Date Started: 12/19/16 **Coordinates:** Not Available **Note:** See Legend for Explanation of Symbols

GRI TP LOG (LAT/LONG) - 2 PP GRI DATA TEMPLATE.GDT 1/16/17

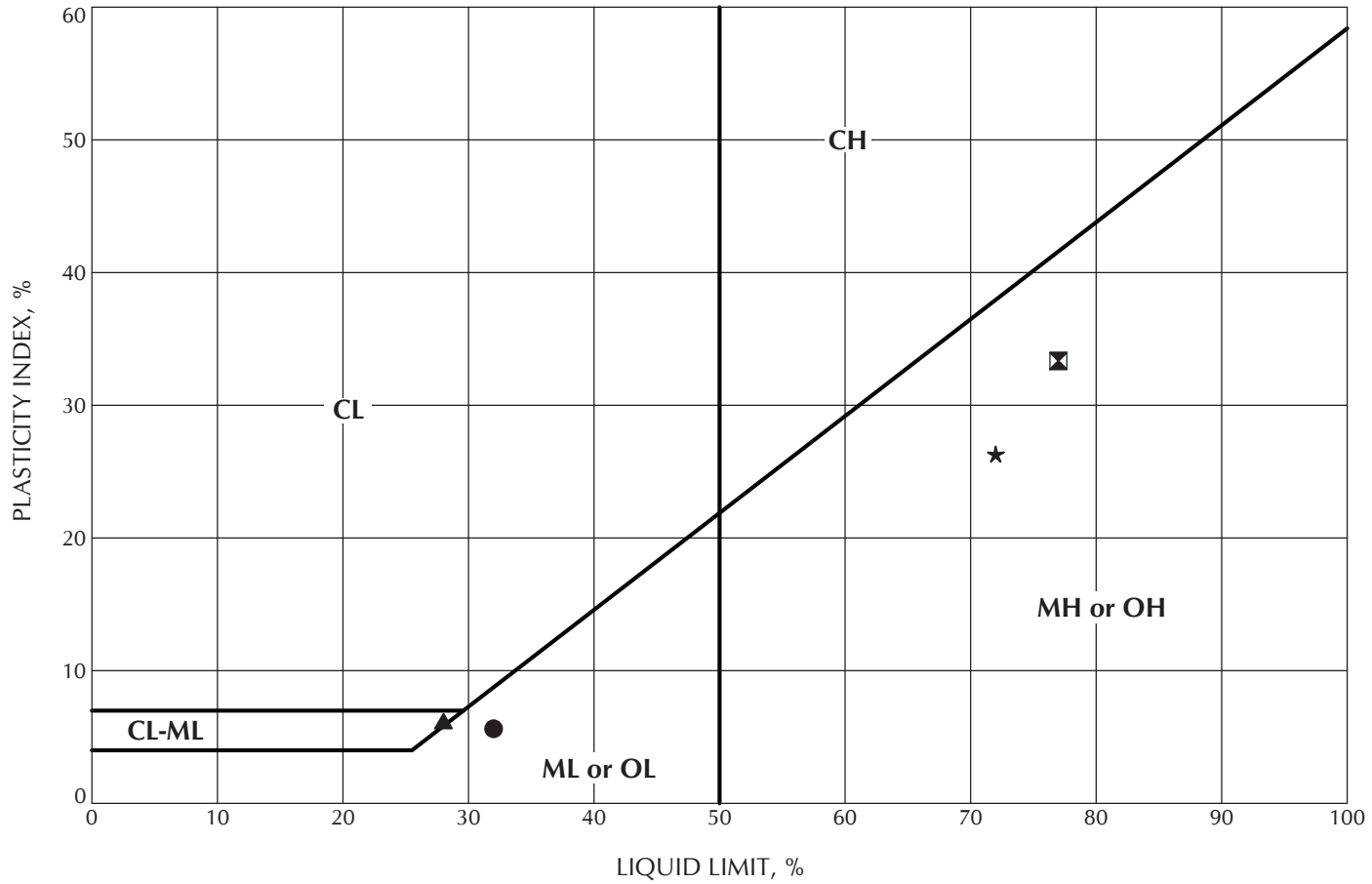
GRI

TEST PITS

JAN. 2017 JOB NO. W1199 FIG. 11A

GROUP SYMBOL	UNIFIED SOIL CLASSIFICATION FINE-GRAINED SOIL GROUPS
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
ML	INORGANIC CLAYEY SILTS TO VERY FINE SANDS OF SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY

GROUP SYMBOL	UNIFIED SOIL CLASSIFICATION FINE-GRAINED SOIL GROUPS
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
MH	INORGANIC SILTS AND CLAYEY SILT
CH	INORGANIC CLAYS OF HIGH PLASTICITY



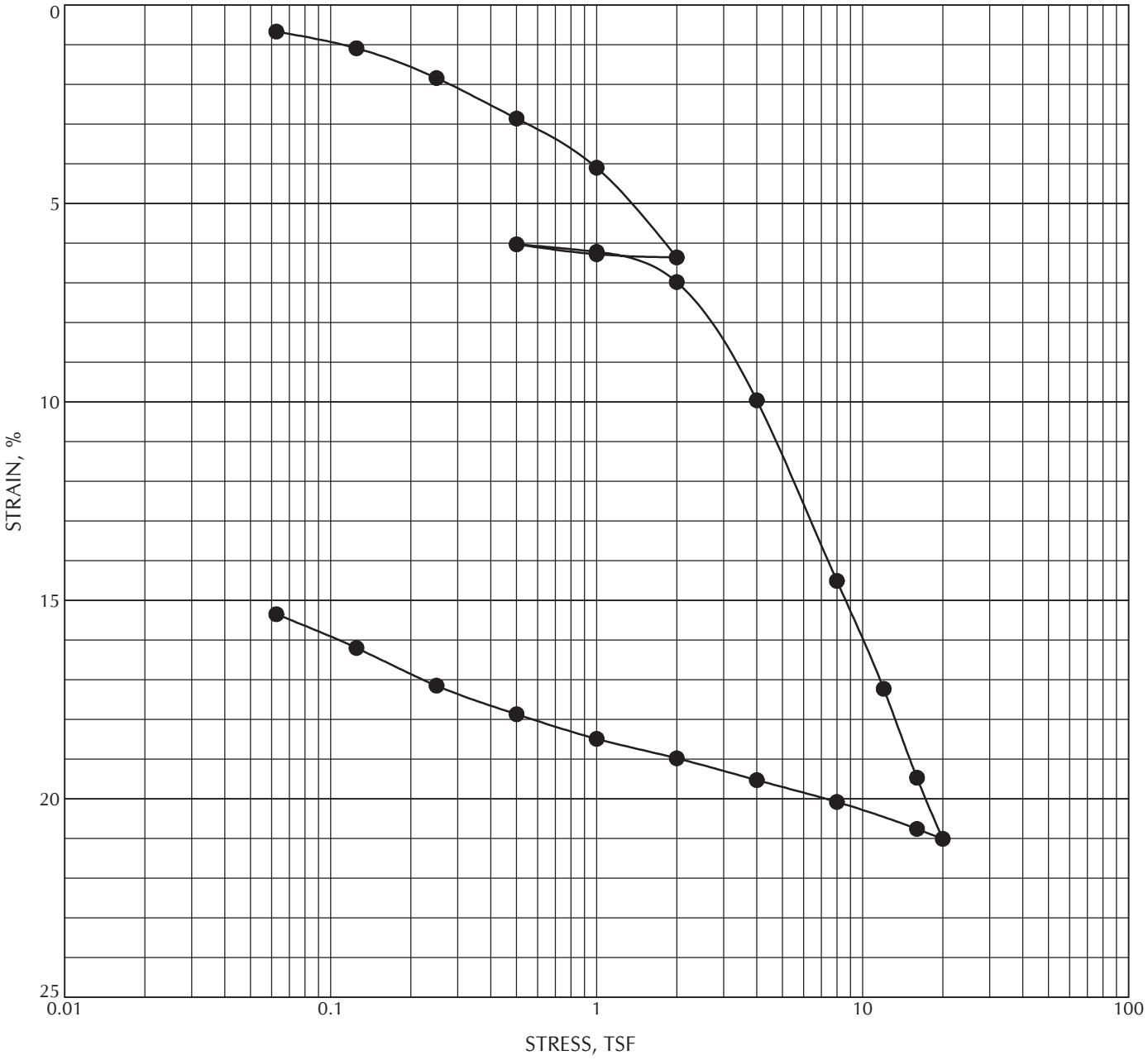
	Location	Sample	Depth, ft	Classification	LL	PL	PI	MC, %
●	B-1	S-5	14.2	SILT, some clay, trace fine- grained sand, dark gray, contains fine organics (Fill)	32	26	6	34
⊠	B-1	S-10	28.3	Clayey SILT, trace fine- to medium-grained sand, red mottled black (Residual Soil)	77	44	33	50
▲	B-3	S-2	5.7	SILT, some clay, trace fine-grained sand, brown to dark brown, contains fine roots (Fill)	28	22	6	34
★	B-4	S-6	15.6	Clayey SILT, trace fine-grained sand, red mottled black (Residual Soil)	72	46	26	58

GRI

PLASTICITY CHART

JAN. 2017 JOB NO. W1199 FIG. 12A

ATTERBERG-PLASTICITY 4 PER PAGE GRI DATA TEMPLATE.GDT 1/16/17

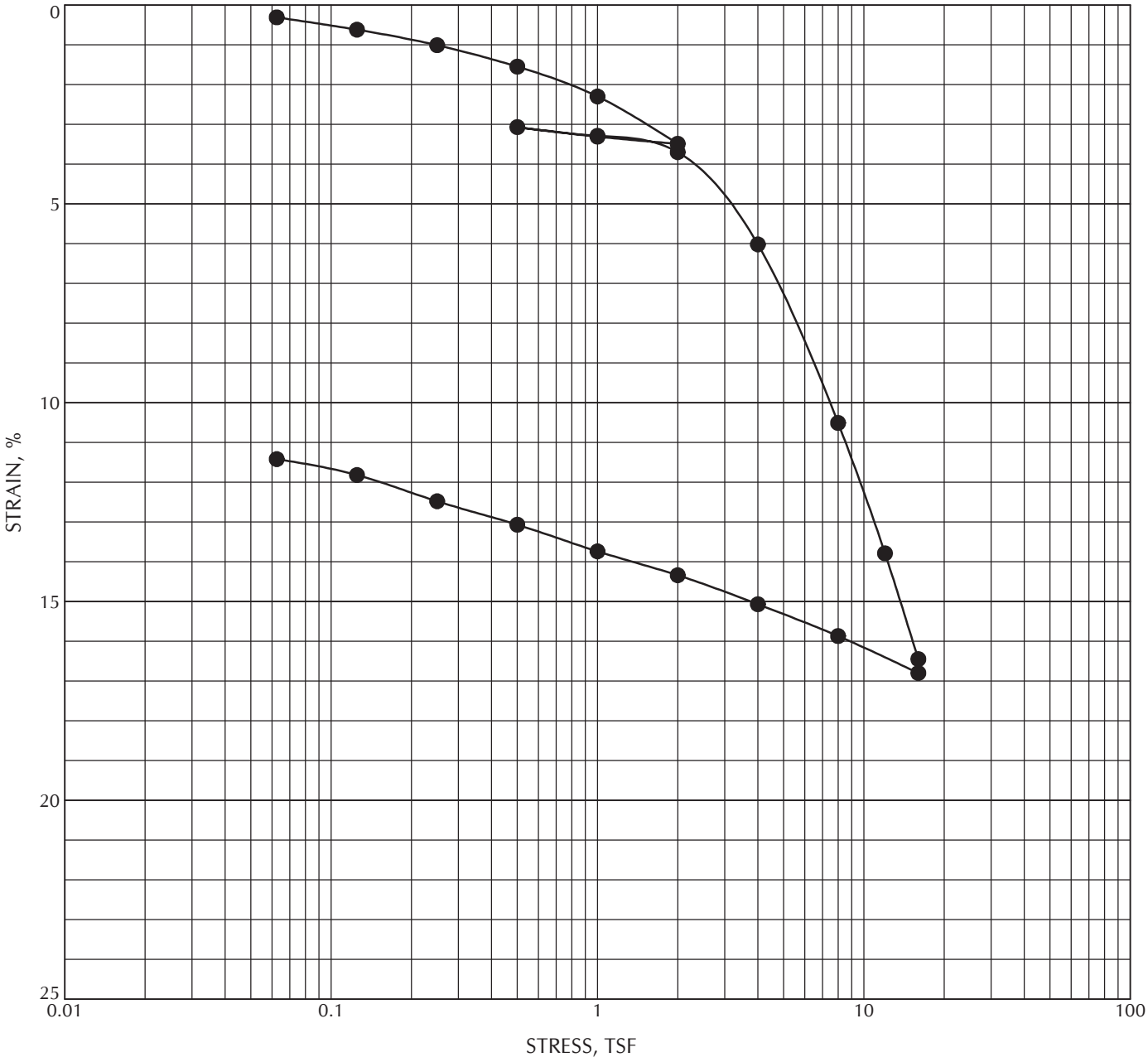


	Location	Sample	Depth, ft	Classification	Initial γ_d, pcf	Initial MC, %
●	B-1	S-5	14.0	SILT, some clay, trace fine- grained sand, dark gray, contains fine organics (Fill)	83	36

GRI

CONSOLIDATION TEST

JAN. 2017 JOB NO. W1199 FIG. 13A



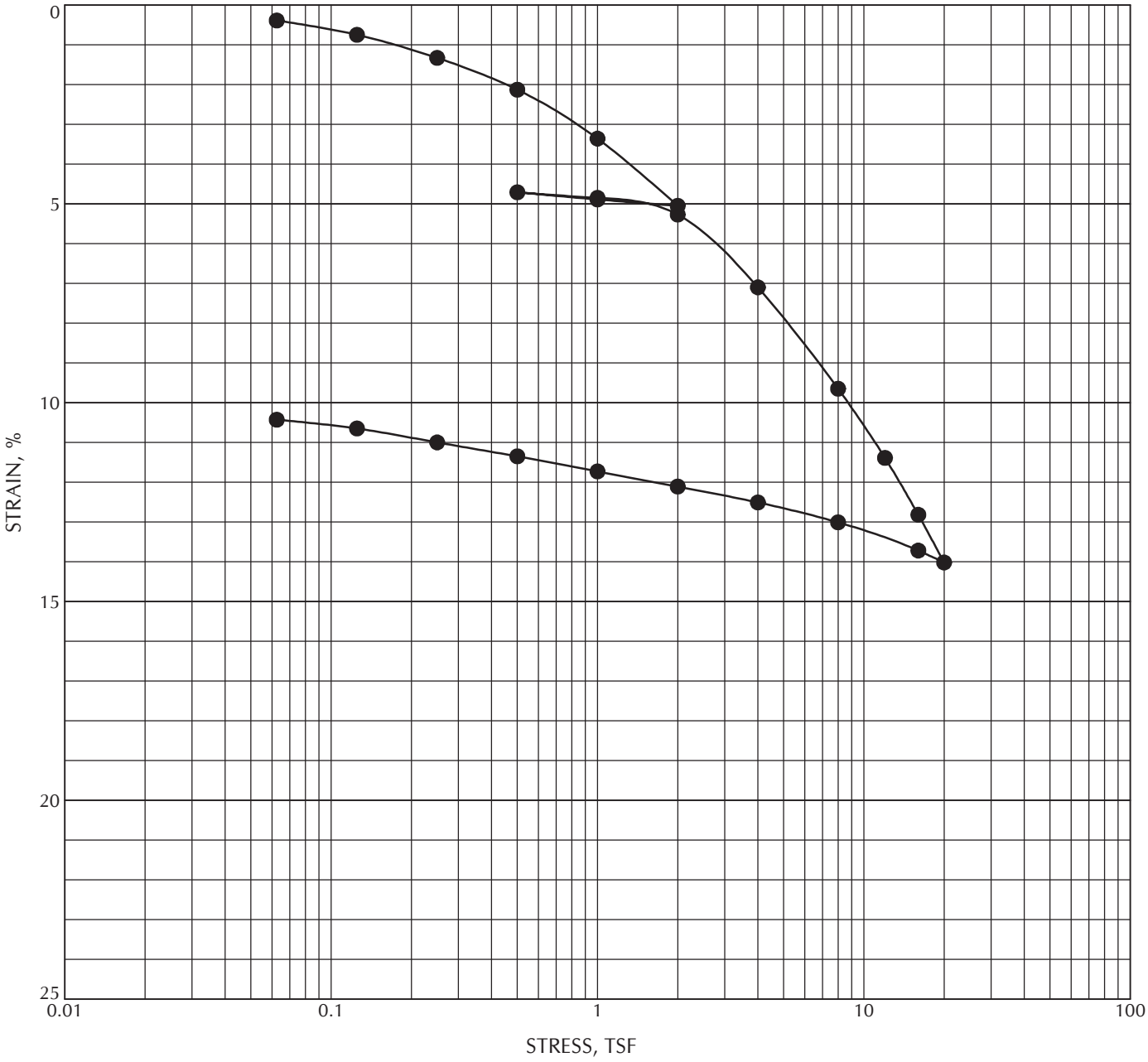
	Location	Sample	Depth, ft	Classification	Initial γ_d, pcf	Initial MC, %
●	B-1	S-10	27.0	Clayey SILT, trace fine- to medium-grained sand, red mottled black (Residual Soil)	65	60

GRI

CONSOLIDATION TEST

JAN. 2017 JOB NO. W1199 FIG. 14A

CONSOL STRAIN GRI-0 TO 25-1 PER PAGE GRI DATA TEMPLATE.GDT 1/16/17

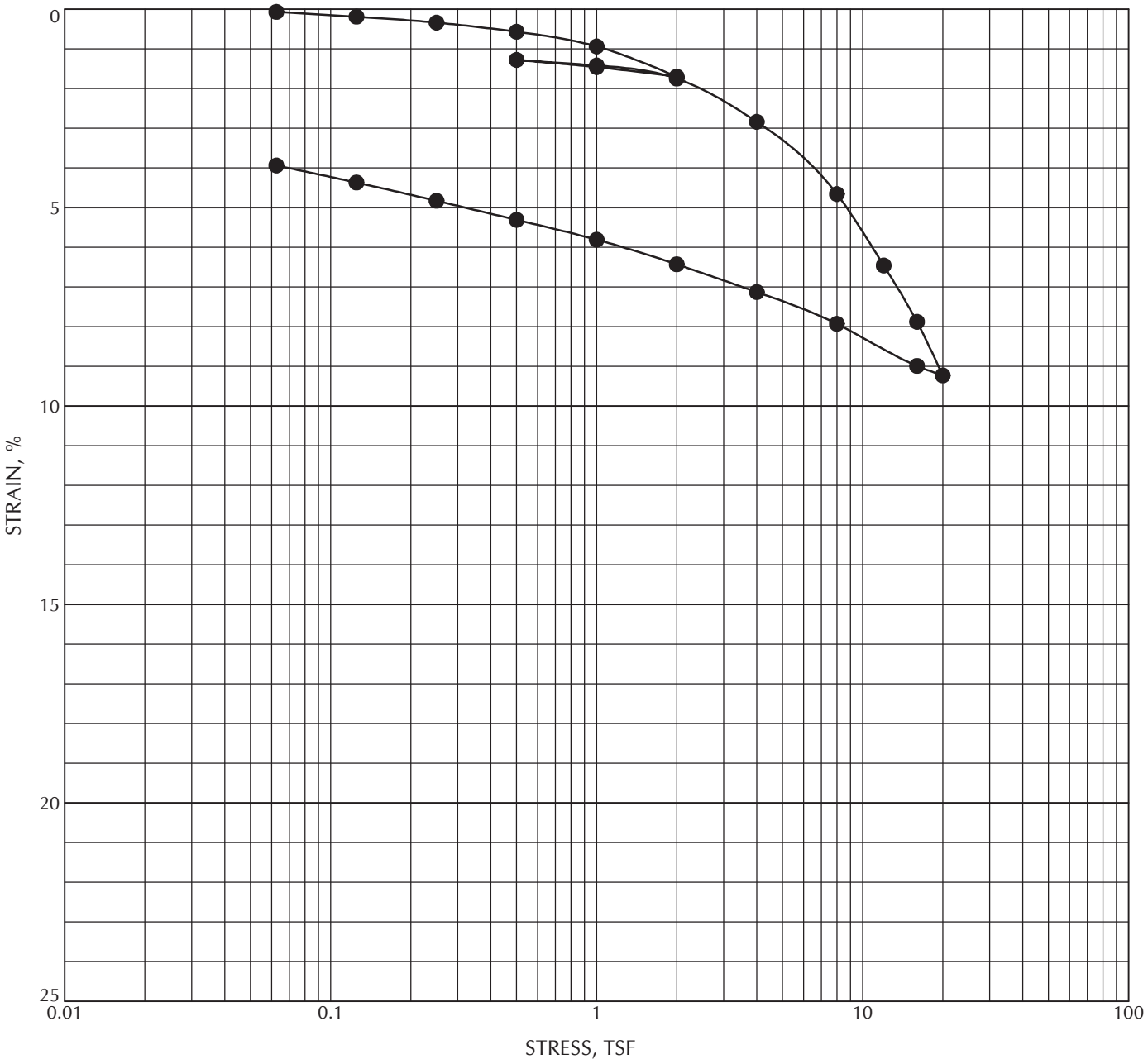


	Location	Sample	Depth, ft	Classification	Initial γ_d, pcf	Initial MC, %
●	B-3	S-2	6.5	SILT, some clay, trace fine-grained sand, brown to dark brown, contains fine roots (Fill)	96	29

GRI

CONSOLIDATION TEST

JAN. 2017 JOB NO. W1199 FIG. 15A



	Location	Sample	Depth, ft	Classification	Initial γ_d, pcf	Initial MC, %
●	B-4	S-6	16.0	Clayey SILT, trace fine-grained sand, red mottled black (Residual Soil)	69	56

GRI

CONSOLIDATION TEST

JAN. 2017 JOB NO. W1199 FIG. 16A

CONSOL STRAIN GRI-0 TO 25-1 PER PAGE GRI DATA TEMPLATE.GDT 1/16/17

APPENDIX B

Rock Core Photographs

Boring B-1 – 38 to 53 ft

Boring B-2 – 40 to 50 ft

GRI

ROCK CORE PHOTOGRAPHS

EXHIBIT 25

Lauren Hollenbeck

From: jennifer hanton <hanton5@me.com>
Sent: Thursday, March 02, 2017 9:16 AM
To: Community Development Email
Subject: PBL High School

To whom it may concern,

My name is Jenn Hanton. I live on Beech Ct in Camas, off of Payne Rd, directly across from Sharp Electronics and the new Camas PBL Middle School.

A neighbor of mine has brought to my attention that the PBL High School building that we passed to be constructed at the soccer field location at the current Camas High School, is now going in at the end of our street, just a couple hundred feet from my door step. I cannot believe this was passed without any of our neighborhoods getting notice in the mail or a sign going up stating that this change was being considered. It feels like a bait and switch tactic. I've been asking neighbors and most are unaware. We would NOT have voted to pass this school, in this location and of this size with access to our little road!

Our small country road at the end of our street (Payne) is already so busy with traffic, especially from Prune Hill Elem. It is not a mane thoroughfare! There is a 4 lane business road, Pacific Rim Blvd, on the other side of the proposed school property. This road could handle the traffic of 1200 students and a large school staff. Why create a traffic mess and a safety hazard on a neighborhood road when there's another option?

Having said all of this, I haven't even touched on the fact that Sharp and the PBL Middle School will have egress/regress on Payne as well.

In the very least, we need a public forum to get information. Please advise.

Jenn Hanton
1422 NW Beech Ct
Camas, WA 98607
360-921-2150

EXHIBIT 26

Lauren Hollenbeck

From: Rosenberg, Heidi <Heidi.Rosenberg@camas.wednet.edu>
Sent: Thursday, March 02, 2017 7:13 PM
To: Community Development Email; Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell; McKercher, Doreen
Subject: RE: PBL High School

I understand that there was a flyer that was posted and it may have had some wrong information regarding the school size. Several of the emails mention a 1200 student high school. As you all know, it is a 600 student high school with a 500 student middle school.

As was mentioned in a previous email response, there was public notice of the change in location and neighborhood representatives attended the listening posts.

From: Community Development Email [mailto:communitydevelopment@cityofcamas.us]
Sent: Thursday, March 02, 2017 9:42 AM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell
Subject: FW: PBL High School

From: jennifer hanton [mailto:hanton5@me.com]
Sent: Thursday, March 02, 2017 9:16 AM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: PBL High School

To whom it may concern,

My name is Jenn Hanton. I live on Beech Ct in Camas, off of Payne Rd, directly across from Sharp Electronics and the new Camas PBL Middle School.

A neighbor of mine has brought to my attention that the PBL High School building that we passed to be constructed at the soccer field location at the current Camas High School, is now going in at the end of our street, just a couple hundred feet from my door step. I cannot believe this was passed without any of our neighborhoods getting notice in the mail or a sign going up stating that this change was being considered. It feels like a bait and switch tactic. I've been asking neighbors and most are unaware. We would NOT have voted to pass this school, in this location and of this size with access to our little road!

Our small country road at the end of our street (Payne) is already so busy with traffic, especially from Prune Hill Elem. It is not a mane thoroughfare! There is a 4 lane business road, Pacific Rim Blvd, on the other side of the proposed school property. This road could handle the traffic of 1200 students and a large school staff. Why create a traffic mess and a safety hazard on a neighborhood road when there's another option?

Having said all of this, I haven't even touched on the fact that Sharp and the PBL Middle School will have egress/regress on Payne as well.

In the very least, we need a public forum to get information. Please advise.

Jenn Hanton
1422 NW Beech Ct
Camas, WA 98607
360-921-2150

EXHIBIT 27

Lauren Hollenbeck

From: Jill FULLER <monkeyfuller@msn.com>
Sent: Thursday, March 02, 2017 9:40 AM
To: Community Development Email
Cc: Kc Fuller
Subject: PBL Highschool

To Whom it May Concern:
I am writing this email feeling very frustrated and deceived as a Camas resident. The fact that we were not notified of specific changes that will directly impact our neighborhood, which is adjacent to the new site for the PBL high school, is completely unacceptable. Why would you add the entrance on Payne street when there is a more reasonable and feasible option on the lower Pacific Rim road? As a resident in this neighborhood, I am concerned about the negative impact this proposed entrance will have on our neighborhood. Excessive traffic, overflow parking into our streets, students in neighborhoods when not in class, littering, etc. Have you seen the traffic on 16th and Tidland with Prune Hill Elementary?

Please advise on having a public forum to discuss options for the new entrance.

Jill Fuller
1434 NW Beech Court
Camas Wa 98607
503-703-7978

Thank you.
Jill Fuller

EXHIBIT 28

Lauren Hollenbeck

From: Rosenberg, Heidi <Heidi.Rosenberg@camas.wednet.edu>
Sent: Thursday, March 02, 2017 7:06 PM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell; McKercher, Doreen
Subject: RE: PBL High school

Nothing to add except that the SEPA process IS the means of notifying nearby residents. One question for Robert – Who all was notified under SEPA? Was it a 300 foot radius from the school site? The difficult part about this project is that the new entrance at Lacey/Payne is not part of our project, so we're actually only hearing from the neighborhood adjacent to our site, not the folks that are most impacted, which are the folks that exit at Lacey/Payne. They could have a beef, unless there will be a SEPA process with the Sharp transportation improvements, which should include them.

Heidi

From: Community Development Email [mailto:communitydevelopment@cityofcamas.us]
Sent: Thursday, March 02, 2017 9:43 AM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell
Subject: FW: PBL Highschool

From: Jill FULLER [mailto:monkeyfuller@msn.com]
Sent: Thursday, March 02, 2017 9:40 AM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Cc: Kc Fuller <KFuller@ef-inc.com>
Subject: PBL Highschool

To Whom it May Concern:
I am writing this email feeling very frustrated and deceived as a Camas resident. The fact that we were not notified of specific changes that will directly impact our neighborhood, which is adjacent to the new site for the PBL high school, is completely unacceptable. Why would you add the entrance on Payne street when there is a more reasonable and feasible option on the lower Pacific Rim road? As a resident in this neighborhood, I am concerned about the negative impact this proposed entrance will have on our neighborhood. Excessive traffic, overflow parking into our streets, students in neighborhoods when not in class, littering, etc. Have you seen the traffic on 16th and Tidland with Prune Hill Elementary?

Please advise on having a public forum to discuss options for the new entrance.

Jill Fuller
1434 NW Beech Court
Camas Wa 98607

503-703-7978

Thank you.
Jill Fuller
This e-mail, related attachments and/or any response may be subject to public disclosure under state and federal law.

EXHIBIT 29

Lauren Hollenbeck

From: Mike Hanton <Mike.Hanton@usbakery.com>
Sent: Thursday, March 02, 2017 9:56 AM
To: Community Development Email
Subject: PBL High School

Dear Community Development,

My name is Mike Hanton. I live across the street from Sharp Electronics and the new Camas PBL Middle School on Beech Ct. I was recently informed about the location of the new PBL High School. I will always vote for expanding our great education in the Camas Community. I was under the impression this new school was going to be located on the current High School Campus. I'm sure there is an argument stating it was crystal clear on the location. I for one will argue it wasn't! I would venture to guess others are in my side of the fence on this issue. This new school is less than a 1/8 of mile from my house. We already have safety concerns in our community about the condition of Payne Road that runs between our street and the new campus. As our population and community has grown, the city has done little to improve this road! We have too much traffic on this road right now. I can't imagine what it will be with the new school? I know there has been a plan to improve the road by making it wider and putting in a turn lane. It sounds great, but I'm telling you this is not the solution to making everything better!

It sounds like the bill passed and the school is going in regardless of popular demand. I'm telling you now, the school entrance can't be placed on Payne Road! We still need improvements to this road. I would be greatly appreciative if your planning committee puts together a plan to have the school entrance off Pacific Rim Blvd!

At the end of the day, we should all work together to find a common solution on this issue. If you gathered 100 residents in my immediate neighborhoods I'm confident 80-90% would have the same arguments and concerns I stated above.

Thank you for taking the time to read my concerns.

Mike Hanton
1422 NW Beech Ct
Camas, WA 98604

Home Phone: 360-834-9478

Franz Family Bakeries
Purchasing
503-731-5679 X 4203
mike.hanton@usbakery.com

** Please consider the environment before printing this e-mail. **

EXHIBIT 30

Lauren Hollenbeck

From: Rosenberg, Heidi <Heidi.Rosenberg@camas.wednet.edu>
Sent: Thursday, March 02, 2017 6:44 PM
To: Robert Maul
Cc: McKercher, Doreen; Steve Wall; Phil Bourquin
Subject: RE: PBL High School

I'm taking these one at a time. I liked your general traffic response to Coleen Swettman. Thank you.

I'm not sure how the City could respond for the school district in regards to the relocation of the new PBL high school, but it needs to be clarified that there was a public process in changing the new PBL High School from CHS to the Sharp site, which included a mailing to all residents within Camas School District boundaries, newspaper articles in the Columbian and the Post Record, public meetings with the school board and a public vote of the school board to approve the new location.

Heidi

From: Community Development Email [mailto:communitydevelopment@cityofcamas.us]
Sent: Thursday, March 02, 2017 10:16 AM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell
Subject: FW: PBL High School

From: Mike Hanton [mailto:Mike.Hanton@usbakery.com]
Sent: Thursday, March 02, 2017 9:56 AM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: PBL High School

Dear Community Development,

My name is Mike Hanton. I live across the street from Sharp Electronics and the new Camas PBL Middle School on Beech Ct. I was recently informed about the location of the new PBL High School. I will always vote for expanding our great education in the Camas Community. I was under the impression this new school was going to be located on the current High School Campus. I'm sure there is an argument stating it was crystal clear on the location. I for one will argue it wasn't! I would venture to guess others are in my side of the fence on this issue. This new school is less than a 1/8 of mile from my house. We already have safety concerns in our community about the condition of Payne Road that runs between our street and the new campus. As our population and community has grown, the city has done little to improve this road! We have too much traffic on this road right now. I can't imagine what it will be with the new school? I know there has been a plan to improve the road by making it wider and putting in a turn lane. It sounds great, but I'm telling you this is not the solution to making everything better!

It sounds like the bill passed and the school is going in regardless of popular demand. I'm telling you now, the school entrance can't be placed on Payne Road! We still need improvements to this road. I would be greatly appreciative if your planning committee puts together a plan to have the school entrance off Pacific Rim Blvd!

At the end of the day, we should all work together to find a common solution on this issue. If you gathered 100 residents in my immediate neighborhoods I'm confident 80-90% would have the same arguments and concerns I stated above.

Thank you for taking the time to read my concerns.

Mike Hanton
1422 NW Beech Ct
Camas, WA 98604

Home Phone: 360-834-9478

Franz Family Bakeries
Purchasing
503-731-5679 X 4203
mike.hanton@usbakery.com

EXHIBIT 31

Lauren Hollenbeck

From: Community Development Email
Sent: Thursday, March 02, 2017 8:25 AM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin
Subject: FW: PBL High School

From: jgmackay@comcast.net [mailto:jgmackay@comcast.net]
Sent: Wednesday, March 01, 2017 8:19 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: PBL High School

To Whom It May Concern;

My name is John MacKay. I am the Owner and operator of the Hidden Gardens Nursery located at 4345 NW 16th Ave. Camas, WA 98607 (directly across from Prune Hill Elementary). It has come to my recent attention that the Camas School district is planning on building a "Project Based High School for up to 1200 students and, is remodeling the former Sharp Laboratories building into a Project Based Middle School. I studied the plan posted on the city of Camas website. I have no objections to the two schools and their prospective locations. However, I do have great concern that the traffic to the two schools and Sharp employees shall now egress and regress from SE Lacy Way onto SE Payne Rd. The impacts to the surrounding neighborhoods and, my own personal business shall suffer from this decision of dumping such high traffic counts on roads that possibly do not even meet current county standards. When the Prune Hill School is in session, it is almost impossible for my customers to enter or leave my property at peak school hours. The plan posted on the city of Camas website shows that there will be minimal or no improvements to NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd for the new schools.

The roads of NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd and all the lateral roads connected to neighborhoods shall suffer from the high traffic counts generated on a daily basis from these two, new PBL schools and Sharp employees. All one has to do is go and look at the line of cars at Prune Hill elementary every weekday in the morning and afternoon on NW 16th Ave. and the intersection of NW 16th Ave. and Brady Rd. OR, to look at the traffic that ensues from at the Camas High School each morning and afternoon to know that the amount of trips generated by these public facilities put a great impact upon the roads that surround said facilities. I dare say that the city of Camas would not allow a business to open and even operate this way if that business impacted the roads in this same manner as this PBL schools shall do to Brady Rd., NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd.

There have been rumors that road improvements may be still in the works for the egress and regress of these new schools however, none of the improvement or modifications have been shown to the public. I formally request that a public meeting be arranged for concerned citizens, home owners and business owners to get better clarity on why such high traffic generating school campuses and an existing business (Sharp) can use already burdened roads without significant impact to the neighborhoods and business's surrounding said PBL school projects.

Sincerely,
John G. MacKay
4345 NW 16th Ave.
Camas,WA 98607
(360) 518-4716
Hidden Gardens Nursery

EXHIBIT 32

Lauren Hollenbeck

From: Rosenberg, Heidi <Heidi.Rosenberg@camas.wednet.edu>
Sent: Thursday, March 02, 2017 7:30 PM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin; Peter Capell; McKercher, Doreen
Subject: RE: PBL High School

This is a repeat of the flyer. The mention of Prune Hill Elementary School's traffic is in addition to the rest. We need to discuss the intersection at 16th and Brady at tomorrow's meeting. I was hoping to hold off the design and construction of that intersection until after 2018, but maybe that needs to be included in the mix. Just imagine the traffic impacts all these construction projects happen at the same time will have on residents.

Heidi

From: Community Development Email [mailto:communitydevelopment@cityofcamas.us]
Sent: Thursday, March 02, 2017 8:25 AM
To: Robert Maul; Curleigh (Jim) Carothers; Steve Wall
Cc: Phil Bourquin
Subject: FW: PBL High School

From: jgmackay@comcast.net [mailto:jgmackay@comcast.net]
Sent: Wednesday, March 01, 2017 8:19 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: PBL High School

To Whom It May Concern;

My name is John MacKay. I am the Owner and operator of the Hidden Gardens Nursery located at 4345 NW 16th Ave. Camas, WA 98607 (directly across from Prune Hill Elementary). It has come to my recent attention that the Camas School district is planning on building a "Project Based High School for up to 1200 students and, is remodeling the former Sharp Laboratories building into a Project Based Middle School. I studied the plan posted on the city of Camas website. I have no objections to the two schools and their prospective locations. However, I do have great concern that the traffic to the two schools and Sharp employees shall now egress and regress from SE Lacy Way onto SE Payne Rd. The impacts to the surrounding neighborhoods and, my own personal business shall suffer from this decision of dumping such high traffic counts on roads that possibly do not even meet current county standards. When the Prune Hill School is in session, it is almost impossible for my customers to enter or leave my property at peak school hours. The plan posted on the city of Camas website shows that there will be minimal or no improvements to NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd for the new schools.

The roads of NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd and all the lateral roads connected to neighborhoods shall suffer from the high traffic counts generated on a daily basis from these two, new PBL schools and Sharp employees. All one has to do is go and look at the line of cars at Prune Hill elementary every weekday in the morning and afternoon on NW 16th Ave. and the intersection of NW 16th Ave. and Brady Rd. OR, to look at the traffic that ensues from at the Camas High School each morning and

afternoon to know that the amount of trips generated by these public facilities put a great impact upon the roads that surround said facilities. I dare say that the city of Camas would not allow a business to open and even operate this way if that business impacted the roads in this same manner as this PBL schools shall do to Brady Rd., NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd.

There have been rumors that road improvements may be still in the works for the egress and regress of these new schools however, none of the improvement or modifications have been shown to the public. I formally request that a public meeting be arranged for concerned citizens, home owners and business owners to get better clarity on why such high traffic generating school campuses and an existing business (Sharp) can use already burdened roads without significant impact to the neighborhoods and business's surrounding said PBL school projects.

Sincerely,
John G. MacKay
4345 NW 16th Ave.
Camas,WA 98607
(360) 518-4716
Hidden Gardens Nursery

EXHIBIT 33

Lauren Hollenbeck

From: Albert Angelo III <albert@alangelo.com>
Sent: Thursday, March 02, 2017 11:08 AM
To: Community Development Email
Subject: URGENT

To Whom It May Concern;

My name is AL Angelo III.

I am a home owner at 1722 Deerfern (Knights Pointe HOA) and directly on the path of the new entrance being proposed at SHARP property.

Many of my neighbors and others have expressed major concern for safety and security of our families and children especially.

I formally request that a public meeting be arranged for concerned citizens, home owners to get better clarity on why such high traffic generating school campuses and an existing business (Sharp) can use already burdened roads without significant impact to the neighborhoods and business's surrounding said PBL school projects.

Best,
AA3

the AL ANGELO company
Albert Angelo III | Vice President
360.694.3343 Office
Albert@alangelo.com
400 East Mill Plain Blvd.
Suite 500
Vancouver, WA 98660

EXHIBIT 34

Lauren Hollenbeck

From: KC Fuller <kfuller@ef-inc.com>
Sent: Thursday, March 02, 2017 8:58 AM
To: Community Development Email
Subject: Request Public Hearing

To Whom It Concerns,

I formally request that a public meeting be arranged to fully understand the traffic impact/congestion of 1,200 students, Sharp and the Project Based Middle School will be handled with regards to egress and ingress from Payne Rd and the surrounding neighborhoods. Also I have a big issue with not getting notified by mail of this project and would like clarification on why Beech St was not included in the mailing. If you have any questions feel free to call me.

Let me know when the meeting will take place,

Regards,

KC Fuller
Vice President
Real Estate Broker
Eric Fuller & Associates, Inc.
900 Washington Street., Suite 850
Vancouver, WA 98660
(360) 597-0569
Cell 503-706-4331
(360) 750-5594, fax
kfuller@ef-inc.com
www.ericfullerinc.com
Click here to view all of our current listings.

Law of Real Estate Agency

EXHIBIT 35

Lauren Hollenbeck

From: KEVIN KWON <kykwon1432@gmail.com>
Sent: Monday, March 13, 2017 1:24 PM
To: Community Development Email; bill.swettman@gmail.com; hspd@earthlink.net; albert@alangelo.com
Subject: New Middle School on SHARP property

To whom it may concern:

Regarding the new middle school that I just heard that it's going be built on SHARP property near our neighborhood, Knight Point, I must raise my humble voice to address the current and future traffic issues.

The Payne Rd (aka nw 18th ave) is already congested with all the commuters from east side of Prune Hills on only two lane traffics.
The location of the school being right at NW 18th Ave and NW Deerfern St. (main entrance to Knight Point) would cause a very serious traffic congestion issues with school buses and student commuter traffics on Payne Rd. Moreover it would cause a great inconvenience to all of us at Knight Points and surrounding neighbors. I'm not sure when and how this plan was placed in action without a public hearing that would address people's concerns.... And if the city of Camas has a plan to improve the traffic situation as part of this plan we, all need to be heard thru a public hearing...!!! Thanks in advance for your time.. I'm looking forward to hearing from the city of Camas regarding this matter...

Kevin Kwon
(Owner in Knight Points)
360-216-7560
503-381-9841

EXHIBIT 36

Lauren Hollenbeck

From: Kris Jamison <kris.jamison@yahoo.com>
Sent: Thursday, March 02, 2017 1:35 PM
To: Community Development Email
Cc: Thea Jamison
Subject: Proposed Development

Hello,

We are writing to give notice that we oppose changing the current entrance to the Sharp and Camas school properties to an entrance from NW 18th Ave or SE Payne Rd.

We already have great difficulty getting in and out of our neighborhood twice each day due to Prune Hill Elementary. While we support the new schools location, to further burden the neighborhoods by adding additional traffic is unreasonable and unnecessary.

Pacific Rim Blvd is lightly traveled at most times of the day and has more than twice the capacity to handle traffic vs NW 18th Ave. Let's use that capacity intelligently to relieve the already burned Neighborhoods as opposed to increasing it greatly.

Please keep us posted as to opportunities to further discuss this with the city.

Thanks for your consideration.

Kris and Thea Jamison

EXHIBIT 37

To: Robert Maul, City of Camas
From: Physician homeowners of Grand Ridge and Knight's Pointe neighborhoods in Camas
Re: Development related road delays and physician on-call response time

Thursday, March 23, 2017

Dear Mr. Maul:

We are writing to you as residents of the Grand Ridge and Knight's Pointe neighborhoods in Camas. We are residents who love Southwest Washington and are invested in our community. It is not news that the Camas area is experiencing a surge in population and development. Our neighborhoods sit at the literal intersection of two major development projects, both of which are slated to kick off this spring/summer and will provide some significant traffic hassles and delays while they are in process. The Camas School District's Project Based High School campus on the former Sharp property and Vancouver's Columbia Palisades project on the Cemex Fisher Quarry are both significant projects in our area, parts of which have been many years in the making. We fully understand the need for expanded infrastructure, roads, schools, housing, corporate space, and retail. This letter comes with appreciation for the forward-looking view that the cities of Camas and Vancouver are taking with respect to traffic management and safety in the area as the roads surrounding our neighborhoods are expected to become much busier over the next several years.

It is the overlapping timing of these two projects and the fact that they lie within different municipal boundaries that is of concern to us. Road improvements for the school campus, coupled with school construction will make entering/exiting our neighborhoods from Payne/18th Ave slow and delayed. Quarry construction and the related road improvements will inevitably create delays along Brady Road. As these are the two possible ways out of our neighborhoods, we could find ourselves in a protracted "land-lock" situation with no non-delayed way out of the neighborhood. While this will be inconvenient for all of our neighbors, this is of particular concern to those of us who are physicians in these neighborhoods. Grand Ridge and Knight's Pointe are home to a large number of physicians, many of whom are often "on call" and are required to have an expeditious transit time to the hospital when we are called in. Proximity and reliable access to SR14 is a key reason that vascular surgeons, anesthesiologists, orthopedic surgeons, interventional cardiologists, and a host of other doctors and medical professionals who are required to have rapid on-call response times chose to purchase homes in Grand Ridge and Knight's Pointe, as opposed to living further north or east in Camas. In very real circumstances, unexpected traffic delays for a physician can mean a delay in care for a sick or injured patient. We ask that Vancouver, Camas, and their contractors please take this very-real concern into account when scheduling road work that will require lane closures and delays on Payne/18th Ave and/or Brady Road. It is not a safe or responsible plan to have both of these exits from Grand Ridge and Knight's Pointe delayed at the same times and days. Further, we would like to know your proposal for announcing delays on each these roads to our neighborhoods so drivers can make the efficient decision when exiting/entering the neighborhoods.

Please find our signatures and addresses on the following page. You may contact Grand Ridge HOA President Katie O'Donnell at 503-939-4454 or katieomy@gmail.com at any time to discuss these concerns. Thank you.

Respectfully,

Physician Name	Signature	Address	Email
Chau Le		5228 NW 14th Cir Camas WA 98607	drchau811@gmail.com
Benjamin Jacobs		1241 NW Deerfern St Camas WA 98607	jacobs5l@gmail.com
Yolanda Vera		1424 NW Deerfern Pl Camas WA 98607	ylvera@aol.com
Maen Nusair		5256 NW Fernridge Dr. Camas, WA 98607	Maen_nusair@hotmail.com
BEEJAY FELICIANO		1401 NW DEERFERN ST CAMAS WA 98607 beejayf@gmail.com	
Brita Feliciano		1401 NW Deerfern St Camas WA 98607	bfeliciano@tvc.org
Mark Munn		1055 NW Deerfern Loop Camas, WA 98607	Makus1644@gmail.com
BEATA CYMOREK		930 NW DEERFERN LOOP CAMAS WA 98607	bjcymorek@comcast.net
Jarek Cymorek		930 NW Deerfern Loop Camas WA 98607	
Adam Munson-Young		1018 NW Fernridge Ct Camas, WA 98607	munsonyoung@gmail.com

cc: Jon Wagner, City of Vancouver Senior Planner

EXHIBIT 38

Lauren Hollenbeck

From: Holly Jacobs <hollyjacobs@gmail.com>
Sent: Wednesday, March 29, 2017 8:33 AM
To: Robert Maul
Cc: Katie Odonnell; Bill and Colleen Swettman
Subject: Letter from the Physician residents of Grand Ridge and Knight's Pointe
Attachments: City of Camas - Grand RidgeKnight's Pointe.pdf

Good morning, Robert.

I know you've been in touch with Katie O'Donnell, who is also concerned about the construction and long-term traffic impacts of the PBL to our the Grand Ridge neighborhood. This became doubly troubling last week when we were made aware that the Fisher Quarry construction is likely to begin with very similar timing to the PBL, putting our neighborhood in a potential land-lock of construction at both of our exits. Due to the high number of physicians in our neighborhood who take call and require quick access to the highway/hospital, this is particularly concerning. I'm attaching a letter signed by several of the physicians who live in our neighborhood (and adjacent Knight's Pointe) explaining this concern and requesting consideration with regard to traffic slowdowns that might occur with the projects. The letter is signed by 10 of the 15 or so physicians in our neighborhood - several folks are out of town due to spring break and other schedule conflicts and we wanted to get this to you quickly. Please know that this is an issue that impacts many residents in our neighborhoods. Jon Wagner, in at the city of Vancouver, is also receiving a copy and I will get the original in the mail to each of you today.

Thank you for all of your work to help Camas grow safely,

Holly

EXHIBIT 39

Lauren Hollenbeck

From: Robert Maul
Sent: Wednesday, March 01, 2017 10:29 AM
To: Rosenberg, Heidi (Heidi.Rosenberg@camas.wednet.edu)
Subject: FW: Skadsen Camas School

Good morning, Heidi. Here is my correspondence for your records.

From: Robert Maul
Sent: Wednesday, March 01, 2017 10:29 AM
To: 'Coleen Swettman'
Cc: Steve Wall; Curleigh (Jim) Carothers
Subject: RE: Skadsen Camas School

Good morning, Coleen.

Thank you for the follow up. I will make sure your comment letter is part of the record.

As we have discussed on the phone the City is working with both the School District and Sharp Electronics to help find acceptable solutions for the traffic impacts in that area. Sharp will be taking the lead on building a signal at the intersection of SE Payne and Pac Rim, closing off the Sharp access to off of Pac Rim, and installing a new intersection at Payne and SE Lacy Way. There will also be new pedestrian crossings and on-site pedestrian improvements to accommodate the new facility that will be put in by the District. They have been working with the city for over a year to come up with some design and built improvements that can actually help the situation out there.

You and I also talked about why a separate access point off of Payne will not work. Primarily Sharp still owns all of the land along Pac Rim before it hits the transfer station and they are not willing to sell access for a site that is already served. Additionally the lower elevation of Pac Rim has environmental constraints and steep slopes to deal with, so that adds a considerable cost to the project. We as a city can only require improvements based on legal nexus and proportionality. In other words, do their impacts necessitate some fixes and are the fixes a fair ratio based on the actual impact to the corridor? It's also required that the applicant provide a detailed traffic study that analyzes the proposed project and it's impacts. We do have their traffic study and are reviewing it for compliance with our transportation master plan.

In the end you will see increased traffic in the area, which is really a fact of life now regionally not just in Camas. The school will add traffic to the area and we are doing what we can legally and collaboratively with our partners to make it work for the area, and I believe we are heading in the right direction. Camas overall is experiencing increased traffic city wide and we as a city are tracking those changes to anticipate future road improvements to accommodate that capacity change.

I have copied Steve Wall, the Public Works Director, and Jim Carothers, City Engineer, on this email so they can add anything that I may have missed. Again, thank you for reaching out and please don't hesitate to ask any other questions.

Regards,

Robert Maul
Planning Manager
City of Camas
616 NE 4th Ave.
Camas, WA 98607
rmaul@cityofcamas.us
(360) 817-1568 Ext. 4255

From: Coleen Swettman [mailto:coleen.swettman@gmail.com]
Sent: Tuesday, February 28, 2017 4:18 PM
To: Robert Maul
Subject: Skadsen Camas School

Hello Robert,

Thank you for taking the time to talk to me and tell me about the Skadsen School letter. Our neighbors are quite concerned about the traffic that will be generated by this new school. The streets involved do not seem to be wide enough or well enough structured to support the additional traffic a school will bring into the area. High school means that many of the students will be of driving age and will have access to a vehicle for their personal transportation to and from school.

With the additional homes that will be built in the area North of Breckenridge, there will already be increased traffic on the planned access street. Adding the school and bus traffic may really clog up the access to our homes. Many neighbors are wondering why it is not possible to route the school access off of Pacific Rim Drive. This four lane road is divided and well-structured to support the High School traffic without a negative impact on the surrounding home areas.

Thank you,
Coleen Swettman
Coleen.swettman@gmail.com

EXHIBIT 40

Lauren Hollenbeck

From: Jan Coppola
Sent: Wednesday, February 15, 2017 3:54 PM
To: ECY RE SEPA REGISTER (separegister@ecy.wa.gov)
Subject: Camas SEPA Determination (SEPA17-03)
Attachments: SEPA17-03 CSD Distribution copy.pdf

Please place the attached Determination of Non-Significance (DNS) for the **Camas School District Project Based Learning High School (SEPA17-03)** on the SEPA Resister.

Request: The applicant is proposing to build a new 89,000 square foot building for a Project Based Learning High School located on 39.25 acres along with associated parking, bus drop off area and other general outdoor amenities.

Publication: The publication date for this DNS is Thursday, February 16, 2017. The SEPA comment and appeal period ends on Thursday, March 2, 2017, at 5:00 p.m.

Comments: may be sent by email to communitydevelopment@cityofcamas.us or by standard mail to the City of Camas SEPA Official, Community Development Department at 616 NE Fourth Avenue, Camas, WA 98607.

Thank you,

Jan Coppola
City of Camas, Community Development
616 NE Fourth Avenue
Camas, WA 98607
(360) 817-7239; Fax (360) 834-1535
jcoppola@cityofcamas.us

EXHIBIT 41

Lauren Hollenbeck

From:	Jan Coppola
Sent:	Wednesday, February 15, 2017 4:09 PM
To:	Camas Washougal Post Record; Cialita Keys, Yakama Nation; Clark County Dept of Environmental Services; Clark County Natural Resources; Clark Public Utilities (lsmith@clarkpud.com); Cowlitz Tribe; DAHP SEPA Contact (sepa@dahp.wa.gov); David Jardin; Department of Natural Resources SEPA Center; Emelie McKain; Heidi Rosenberg; Vancouver-Clark Parks & Recreation; WSDOT SW Region
Subject:	Camas Project Based Learning High School SEPA Determination
Attachments:	SEPA17-03 CSD Distribution copy.pdf

Attached is a Determination of Non-Significance (DNS) for the **Camas School District Project Based Learning High School (SEPA17-03)** for your review and comments.

Request: The applicant is proposing to build a new 89,000 square foot building for a Project Based Learning High School located on 39.25 acres along with associated parking, bus drop off area and other general outdoor amenities.

Publication: The publication date for this DNS is Thursday, February 16, 2017. The SEPA comment and appeal period ends on Thursday, March 2, 2017, at 5:00 p.m.

Comments: may be sent by email to communitydevelopment@cityofcamas.us or by standard mail to the City of Camas SEPA Official, Community Development Department at 616 NE Fourth Avenue, Camas, WA 98607.

Kind Regards,

Jan Coppola
City of Camas, Community Development
616 NE Fourth Avenue
Camas, WA 98607
(360) 817-7239; Fax (360) 834-1535
jcoppola@cityofcamas.us

EXHIBIT 42

Lauren Hollenbeck

From: Jim Schroeder <jschroederj2k2@comcast.net>
Sent: Wednesday, March 01, 2017 11:33 PM
To: Community Development Email
Subject: SEPA17-03 Applicant: Camas School District, PBL Attn: Heidi Rosenberg

Begin forwarded message:

From: Jim Schroeder <jschroederj2k2@comcast.net>
Date: March 1, 2017 at 11:08:38 PM PST

To Whom It May Concern;
Our names are Jim and Jean Schroeder who lives at 1602 NW Beech Street. It has come to our recent attention that the Camas School district is planning on building a "Project Based High School for up to 1200 students and, is remodeling the former Sharp Laboratories building into a Project Based Middle School. We studied the plan posted on the city of Camas website and have no objections to the two schools and their prospective locations. However, there is great concern that the traffic to the two schools and Sharp employees shall now egress and regress from SE Lacy Way onto SE Payne Rd. The impacts to the surrounding neighborhoods and their entrances from this decision of dumping such high traffic counts impacts many of us. The plan posted on the city of Camas website shows that there will be minimal or no improvements to NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd for the new schools.
The roads of NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd and all the lateral roads connected to neighborhoods shall suffer from the high traffic counts generated on a daily basis from these two, new PBL schools and Sharp employees. All one has to do is look at the line of cars at Prune Hill elementary every weekday in the morning and afternoon on NW 16th Ave. and the intersection of NW 16th Ave. and Brady Rd. OR, one could observe the heavy line of traffic that ensues from Camas High School each morning and afternoon to know that the amount of trips generated by these public facilities impact greatly the roads that surround said facilities. I dare say that the city of Camas would not allow a business to open and even operate this way if that business impacted the roads in this same manner as the PBL schools shall do to Brady Rd., NW 16th Ave, NW Tidland, NW 18th Ave, SE 40th St., SE Payne Rd.
There have been rumors that road improvements may be still in the works for the egress and regress of these new schools, however; none of the improvements or modifications have been shown to the public. Who would pay for these road improvements? I formally request that a public meeting be arranged for concerned citizens, home owners and business owners to get better clarity on why The City of Camas and Camas School District would even consider proposing an entrance other than somewhere along Pacific Rim Blvd. Not only will there be over 1,000 cars daily traveling on these roads which would include students, parents, staff and support personnel; but buses will also add to the congestion issues. Our community is growing, and having neighborhood schools isn't the issue. Without a formal public meeting to discuss this project further, it will feel as if our neighborhoods have not been given a chance to communicate our concerns in person. Help us understand why an entrance wouldn't be

considered off of Pacific Rim Blvd where the roads have already been improved, and the impact to Camas residents and their access into and out of their neighborhoods or businesses would not be affected.

Sincerely,
Jim and Jean Schroeder
1602 NW Beech St
Camas,WA 98607
(360) 834-1174

EXHIBIT 43

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

March 2, 2017

City of Camas, SEPA Official
Community Development Department
616 NE Fourth Avenue
Camas, WA 98607

Dear SEPA Official:

Thank you for the opportunity to comment on the determination of nonsignificance for the Camas School District-Based Learning High School Project (SEPA 17-03) located at 5780 Northwest Pacific Rim Boulevard as proposed by Heidi Rosenberg, Camas School District. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):

WATER QUALITY: Chris Montague-Breakwell (360) 407-6364

Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or stormdrains that lead to waters of the state. Sand, silt, clay particles, and soil will damage aquatic habitat and are considered to be pollutants.

The following construction activities require coverage under the Construction Stormwater General Permit:

1. Clearing, grading and/or excavation that results in the disturbance of one or more acres **and** discharges stormwater to surface waters of the State; and
2. Clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more **and** discharge stormwater to surface waters of the State.
    a) This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, **and** discharge to surface waters of the State; and
3. Any size construction activity discharging stormwater to waters of the State that Ecology:

a) Determines to be a significant contributor of pollutants to waters of the State of Washington.
b) Reasonably expects to cause a violation of any water quality standard.

If there are known soil/ground water contaminants present on-site, additional information (including, but not limited to: temporary erosion and sediment control plans; stormwater pollution prevention plan; list of known contaminants with concentrations and depths found; a site map depicting the sample location(s); and additional studies/reports regarding contaminant(s)) will be required to be submitted.

You may apply online or obtain an application from Ecology's website at: http://www.ecy.wa.gov/programs/wq/stormwater/construction/ - Application. Construction site operators must apply for a permit at least 60 days prior to discharging stormwater from construction activities and must submit it on or before the date of the first public notice.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(SM:17-0825)

cc: Chris Montague-Breakwell, WQ
Heidi Rosenberg, Camas School District (Applicant)

EXHIBIT 44

Lauren Hollenbeck

From: Community Development Email
Sent: Wednesday, April 12, 2017 1:54 PM
To: Robert Maul
Cc: Lauren Hollenbeck
Subject: FW: Camas School District Project Based Learning High School Public Hearing

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From: John Woodward [mailto:jwoodward@envirodatasolutions.com]
Sent: Wednesday, April 12, 2017 11:36 AM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Camas School District Project Based Learning High School Public Hearing

My comments on the proposal are:

1. An enhanced pedestrian crossing is shown directly in front of my house on NW 18th Avenue. What does an "enhanced" crossing entail? How long of a culvert will be installed in the ditch? What are the possibilities of moving the crossing either east or west of my house?
2. If vehicle access to the school is only at Lacy and Payne Road, it appears street lights would also be needed at this intersection. There is no identification of a crosswalk at this intersection. How will the school district prevent students from crossing at this intersection?

Thanks!

John Woodward
5354 NW18th Avenue
Camas, WA
360-817-2506

EXHIBIT 45

Lauren Hollenbeck

From: Community Development Email
Sent: Thursday, April 13, 2017 12:20 PM
To: Robert Maul
Cc: Lauren Hollenbeck
Subject: FW: Project Based Learning High School

Follow Up Flag: Follow up
Flag Status: Flagged

From: maxntosh@comcast.net [mailto:maxntosh@comcast.net]
Sent: Thursday, April 13, 2017 12:06 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Project Based Learning High School

Dear. Mr. Maul,

I just received the "Notice of Public Hearing" for the new Project Based Learning High School and I have a number of concerns about the use of Payne Road as an entrance/exit to the campus and Sharp. I live on NW Deerfern Loop and use Payne Road on a regular basis. I have already notice in my five years living here the additional amount of traffic due to construction of new housing on the east side. At the bottom of the hill, where Payne Road dead ends into NW Pacific Rim Blvd, at certain times of the day, as many as 4 to 6 cars are waiting to make a left turn. Even with a proposed new signal, it will not solve the current problem. The projected addition of 3 new entrances on Payne Road to the school campus plus the new entry to Sharp property, entering and exiting from Knight's Point and Grand Ridge neighborhoods will be near impossible.

I know of 6 doctors that live here that are required to live within 20 minutes of the hospital when they are on call. The additional traffic on Payne Road will cause delays and could result in lose of life.

All of the commuting out of our neighborhoods will be further impacted by the residential and commercial development at the intersection of Brady Road and SE 92nd Avenue. This development will cause us to use Payne Road even more.

Please reconsider and not use Payne Road as a means to enter and depart the Learning Campus. In my opinion this is not a "Traffic Improvement".

Sincerely,

Dale Erickson
836 NW Deerfern Loop
Camas, WA 98607
360-210-4484
maxntosh@comcast.net

Exhibit 46

Lauren Hollenbeck

From: Community Development Email
Sent: Thursday, April 13, 2017 1:31 PM
To: Robert Maul
Cc: Lauren Hollenbeck
Subject: FW: Payne Road

From: Kathy Pousche [mailto:kathypousche@yahoo.com]
Sent: Thursday, April 13, 2017 1:26 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Payne Road

Dear Mr. Maul, we are homeowners in Winchester Hills and are very disappointed how the plans have been drawn up that will only cause congestion in our neighborhood. The ease of coming and going will be strained. I have a piano studio in our home and this will affect the students and their families, as well. Tom and I do not understand why the plans could not have been drawn up to have a merging of Payne road and Sharps (schools) entrance at the 34th St light that is coming in. Please reconsider the placement of the entrance to the school using Payne road.
Sincerely,
Tom and Kathy Pousche
4000 SE Harmony Pl
(Winchester Hills)

EXHIBIT 47

Lauren Hollenbeck

From: Community Development Email
Sent: Tuesday, April 18, 2017 10:40 AM
To: Robert Maul; Lauren Hollenbeck
Subject: FW: Road Rerouting to Accommodate New PBL HS

From: Rick Weithas [mailto:rickweithas@gmail.com]
Sent: Thursday, April 13, 2017 6:10 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Road Rerouting to Accommodate New PBL HS

My name is Rick Weithas and I spoke with Robert Maul a couple of days ago regarding my strong objections and concerns related to the rerouting of the entrance into the PBL schools.

As you know, the entrance is currently on a wide 4 lane divided road that was designed to move traffic into commercial as well as residential areas. This road rarely is impacted by snow and ice in the winter and has proven over the years to move vast amounts of traffic into the heart of West Camas.

The proposed entrance is being moved to a narrow and winding two lane road that is barely adequate to support the existing residential areas and elementary school as evidenced by the current condition of the road with the existing traffic. The road was barely driveable several weeks ago due to the pot holes and that was only from the current levels of traffic.

For a significant portion of the winter, there is ice on several key points of that road in the morning caused by irrigation and steep slopes of road that approach Payne. This will be a major child safety issue as children are crossing roads with ice. This water and ice problem has further contributed to the poor condition of the road.

Relocating the entrance onto this narrow two lane road with four pinch points in a one mile stretch from 34th to Prune Hill Elementry. This road is in very poor condition. The shoulders have eroded in several spots and pot holes mark a large portion of the mid section. It also suffers from uneven leveling attributed to it age and poor construction. My concerns are real and the neighborhood will be living with this mistake for years to come. The current entrance was designed to accommodate traffic and it would seem a much better design decision to simply move the entrance down a bit from its current location. This would keep it on a road designed for heavy amounts of traffic with a dedicated entrance for the schools making it safer and honestly more practical for everyone.

Again, I will be coming to the meeting on Thursday and need this input to be known from a 15 year resident of this neighborhood who has the wisdom of experience and knowledge of this road. I will be disappointed if and when this change happens and there isn't any accountability or contingency plan to deal with the fallout of the decision. The high school area has had to deal with a similar issue for years and my kids have a one hour bus ride to a school that is only 5 miles away. That is absolutely absurd and demonstrates the track record of these types of school and city planning mistakes. I am compelled to speak as I don't feel these mistake should be repeated. We need the voice of experience, reason and practicality of people who live in the adjoining area.

Regards,

Rick Weithas
4626 NW 11th Circle, Camas, WA

EXHIBIT 48

Lauren Hollenbeck

From: Community Development Email
Sent: Tuesday, April 18, 2017 10:41 AM
To: Robert Maul; Lauren Hollenbeck
Subject: FW: Camas PBL High School

From: Kathy Pousche [mailto:kathypousche@yahoo.com]
Sent: Friday, April 14, 2017 5:30 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Fwd: Camas PBL High School

Sent from my iPhone

Begin forwarded message:

> **From:** Tom Pousche <drpousche@comcast.net>
> **Date:** April 14, 2017 at 4:47:47 PM PDT
> **To:** Kathy Pousche <kathypousche@yahoo.com>
> **Subject: Re: Camas PBL High School**
>
> Dear Mr. Maul,
>
> I wanted to piggy back off from my wife, Kathy Pousche's comment.
>
> I'm so disappointed in learning about the idea of making a new entrance for the high school right across from Winchester Hill's entrance.
>
> Out of all the different locations why here? Did you and the others know that this is already a very dangerous intersection.
>
> People come flying off the hill, and the visual both ways is not good. I'm a professional driver, and it is even difficult for me to maneuver out of our entrance safely.
>
> I ask you and the others to reconsider this place of entry to the school. Traffic is at an all time chaotic & busy.
>
> We as residents of Winchester Hills would appreciate your reconsideration of a bad idea.
>
> Sincerely,
>
> Tom Pousche
>
> Sent from my iPhone

On Apr 14, 2017, at 4:25 PM, Kathy Pousche <kathypousche@yahoo.com> wrote:

Sent from my iPhone

Begin forwarded message:

From: Robert Maul <RMaul@cityofcamas.us>
Date: April 14, 2017 at 11:21:12 AM PDT
To: "kathypousche@yahoo.com" <kathypousche@yahoo.com>
Subject: Camas PBL High School

Good morning, Kathy.

Thank you for your insight and comments. We are aware of the traffic concerns and have been looking into it very early on before the school project was even submitted. What you may not be aware of is that the City, the School District and Sharp electronics have all been working together on coming up with a traffic mitigation solution that meets safety and concurrency standards. Sharp has submitted under separate cover their project application which actually contains many of the necessary infrastructure improvements to the area included, but not limited to, a new signal at Pac Rim Blvd. and Payne, closing off the Sharp access off of Pac Rim, pedestrian crossings, and a new access at Payne and Lacy to name a few. They will pay for many of the improvements with some to be done by the district. All of our records are available for review at city hall if you need to take a look.

The current design that you have seen in the flyer was derived from those discussions that I mentioned that included design by civil engineers hired by Sharp and the school district and our own civil engineering department. The overall goal is to fix a bad situation that currently exists on Pac Rim with the two road entrances next to each other (Payne and Sharp Drive), and to mitigate the increased traffic on Payne itself as well as 18th. Both parties also had to provide detailed traffic studies that are used in the overall analysis when designing mitigation and other improvements. The alignment of a new intersection at Payne and Lacy to access the private system is necessary to make sure entrance points align with existing roadways so we don't have offset intersections, which can be more dangerous. Also, Lacy is closer to Pac Rim than the other intersection options from 18th which is important to focus the actual bulk of the traffic to go to Pac Rim.

Your email is going to be part of the record, so if you are unable to attend the hearing next week you will still have standing. Thank you again for reaching out and giving us your insight and feedback.

Please do not hesitate to contact me if you have other questions, comments, or concerns.

Regards,

Robert Maul
Planning Manager
City of Camas
616 NE 4th Ave.
Camas, WA 98607
rmaul@cityofcamas.us
(360) 817-1568 Ext. 4255


<Picture (Device Independent Bitmap) 1.jpg>

From: Kathy Pousche [mailto:kathypousche@yahoo.com]
Sent: Thursday, April 13, 2017 1:26 PM
To: Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Payne Road

Dear Mr. Maul, we are homeowners in Winchester Hills and are very disappointed how the plans have been drawn up that will only cause congestion in our neighborhood. The ease of coming and going will be strained. I have a piano studio in our home and this will affect the students and their families, as well. Tom and I do not understand why the plans could not have been drawn up to have a merging of Payne road and Sharps (schools) entrance at the 34th St light that is coming in. Please reconsider the placement of the entrance to the school using Payne road.
Sincerely,
Tom and Kathy Pousche
4000 SE Harmony Pl
(Winchester Hills)