CAP

Jefferson County Early Learning and Family Support Center

CONTENTS

3 copies (full size)

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- Civil Drawings
- Landscape Drawings
- Architectural Site Plan

1 copy (letter sized)

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- Critical Areas Permit Application
- Property Deed
- Geotech Report
- Vicinity Map

87-294 DEEDS City of Ot to Joliet Dist No 1

SD 11-1-19

Beg at a point on the east side line of Pierce St in P. T., distant 100 feet North from the NE corner of Pierce and Blaine Streets and running thence North along said Pierce St 150 feet; thence at ra East 285.8 feet; thence at a ra South 250 feet to Blaine St; thence at a ra West along the North line of said Blaine Street 135.8 feet; thence at a ra North 100 feet and thence at a ra West 150 feet to the pob.

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Krazan & ASSOCIATES, INC.
GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

GEOTECHNICAL ENGINEERING INVESTIGATION
JEFFERSON COUNTY EARLY LEARNING CENTER
1500 VAN NESS STREET
PORT TOWNSEND, WASHINGTON

PROJECT NO. 102-23021
OCTOBER 5, 2023
REVISED JANUARY 31, 2024

Prepared for:

OLYMPIC PENINSULA YMCA
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CONSTRUCTION TESTING & INSPECTION

October 5, 2023
Revised January 31, 2024

KA Project No. 102-23021

Olympic Peninsula YMCA
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Reference: **Geotechnical Engineering Services**
Jefferson County Early Learning Center
1500 Van Ness Street
Port Townsend, Washington

Dear Ms. Bart,

In accordance with your request, we have completed a Geotechnical Engineering Investigation for the referenced site. The results of our investigation are presented in the attached report.

If you have any questions, or if we can be of further assistance, please do not hesitate to contact our office.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

Vijay Chaudhary, P.E.
Project Engineer

AG:EA:VC:SEW

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October 5, 2023
Revised January 31, 2024

KA Project No. 102-23021

GEOTECHNICAL ENGINEERING INVESTIGATION
JEFFERSON COUNTY EARLY LEARNING CENTER
1500 VAN NESS STREET
PORT TOWNSEND, WASHINGTON

INTRODUCTION.

This report presents the results of our geotechnical engineering investigation for the Proposed Jefferson County Early Learning Center project located at 1500 Van Ness Street in Port Townsend, Washington, as shown on the Vicinity Map in Figure 1. Discussions regarding site conditions are presented in this report, together with conclusions and recommendations pertaining to site preparation, excavations, structural fill, utility trench backfill, foundations, pavement design, stormwater infiltration, drainage, and erosion control.

For our use in preparing this report, we have reviewed the plan sheet A100 titled "Jefferson County Early Learning Center", prepared by Present Future Architects, dated May 25, 2023, a topographic survey, prepared by Van Aller Surveying, dated July 27, 2023.

A site plan showing approximate locations of the explorations is presented following the text of this report in Figure 2. A description of the field investigation and laboratory testing as well as the exploration logs are presented in Appendix A. Appendix B contains a guide to aid in the development of earthwork specifications. Pavement design guidelines are presented in Appendix C. The recommendations in the main text of the report have precedence over the more general specifications in the appendices

PURPOSE AND SCOPE.

This investigation was conducted to evaluate the subsurface soil and groundwater conditions at the subject property, to develop geotechnical engineering recommendations for use in the design of specific construction elements, and to provide criteria for site preparation and earthwork construction.

Our scope of services was performed in general accordance with our proposal for this project, dated August 2, 2023 (Proposal Number G23028WAP) and included the following:

- An exploration of the subsurface soil and groundwater conditions by advancing four (4) soil borings to a maximum depth of 31.5 feet below existing ground surface (bgs) using a subcontracted drill rig;

- An exploration of the subsurface soil and groundwater conditions by excavating two (2) test pits to a maximum depth of 7.5 feet bgs using a subcontracted excavator and operator;
- Provide a site plan showing the soil boring and test pit locations;
- Provide comprehensive boring and test pit logs including soil stratification and classification, and groundwater levels where applicable;
- Perform one (1) Large-Scale Pilot Infiltration Test (PIT) and provide opinions and recommendations regarding stormwater infiltration feasibility in accordance with Volume V, Chapter 5 of the 2019 Department of Ecology (DOE) Stormwater Management Manual for Western Washington (SWMMWW);
- Provide foundation recommendations for the proposed structures including foundation type, allowable bearing pressure, anticipated settlements (both total and differential), coefficient of horizontal friction, and frost penetration depth;
- Provide recommendations for seismic design considerations including site coefficient and ground acceleration based on the 2018 IBC;
- Provide recommendations for retaining wall design including lateral earth pressures (active and passive);
- Provide recommendations for structural fill materials, placement, and compaction;
- Provide recommendations regarding the suitability of on-site soils as structural fill;
- Discuss potential geological hazards and provide mitigation recommendations as applicable;
- Provide recommendations for temporary excavations;
- Provide recommendations for site drainage and erosion control;
- Provide recommendations for pavement design.

Environmental services, such as chemical analysis of soil and groundwater for possible environmental contaminants, are not included in our scope of services for this project.

PROPOSED DEVELOPMENT

We understand that the site development will include design and construction of one commercial buildings with an associated parking lot and driveway. We understand that development will also consist of design

and construction of associated utilities, bioswale, and landscape areas. We understand that onsite stormwater management is being considered.

SITE DESCRIPTION AND SURFACE CONDITIONS

The site is situated within the southeastern portion of a developed assessor parcel 001023006. The parcel covers an area of approximately 6.52 acres. The site is bordered by Harrison Street to the East, Blaine Street to the south, a paved access road to the west, ancillary school structures to the north. The site can be accessed via the paved road to the west.

The parcel is currently developed with school buildings, shed/ storage buildings, tennis courts, a gazebo, sidewalks, and paved parking and landscaped areas. The site is currently vacant field and appears to be previously graded. The site is generally flat at an elevation of approximately 192 feet with a steep, east-descending slope in the northeastern portion of the site. The steep slope is about 30 to 33 degrees (57 to 66 percent), with elevations ranging from approximately 190 feet to 165 feet. The slope along the eastern portion of the site is heavily vegetated with brush, brambles, and a few young to middle-aged trees. The remainder of the site is vegetated with grasses. There were two small concrete pads near the top of the slope in the northeastern portion of the site. We did not observe visual signs of shallow soil movement or soil creep along the slope, such as minor sloughing and curved tree trunks. We did not observe signs of significant erosion or accumulation of surface water during our site visit.

GEOLOGIC SETTING

The Geologic Map of Jefferson County Washington, (WA DNR Open File Report 2005-3, December 2005) indicates that the site vicinity is underlain by continental glacial till (Qgt) deposits. Glacial till is a compact deposit of clay, silt, sand, gravel, cobbles and boulders deposited at the base of the continental glacier. The soils exposed in our explorations were generally consistent with the mapped geology.

FIELD INVESTIGATION

Exploratory soil borings and test pits were completed to evaluate the subsurface soil and groundwater conditions at the site. The approximate locations of the explorations are shown on the Site Plan in Figure 2.

Soil Borings: Four (4) exploratory soil borings, designated B-1 through B-4 were completed on August 28, 2023 with a subcontracted drill rig. The soil borings were advanced to depths of approximately 9.0 to 31.5 feet bgs.

Test Pits: Test pits TP-1 and TP-2 was completed on August 28, 2023 with a subcontracted excavator and operator. The test pits were excavated to depths of about 6.0 to 7.5 feet bgs.

Large-Scale Pilot Infiltration Test (PIT): We performed one (1) Large-Scale PIT in accordance with the DOE 2019 SWMMWW, Volume V, Chapter 5. The PIT was performed at roughly 2 feet bgs in TP-1. The

area exposed for the PIT was at least 100 square feet. The testing included a pre-soak period, followed by determination of a steady-state infiltration rate and then a falling head infiltration rate testing. After the PIT was completed, the test pit was over-excavated to approximately 5.5 feet below the test elevation to document whether any restrictive layers or groundwater seepage were present.

A geologist from Krazan and Associates was present during the exploration, examined the soil and geologic conditions encountered, obtained samples of the different soil types, and maintained logs of the explorations. Representative samples of the subsurface soils encountered in the geotechnical explorations were collected and sealed in plastic bags. The soils encountered in the exploration were visually classified in general accordance with the Unified Soil Classification System (USCS). These samples were transported to our laboratory for further examination and testing.

SOIL PROFILE AND SUBSURFACE CONDITIONS

This section of the report is intended to provide a general description of the subsurface conditions. Detailed descriptions of the soils exposed in each of the explorations are presented in the exploration logs in Appendix A.

Undocumented Fill: Soil boring B-1, encountered moist, loose to medium dense brown to grayish brown silty sand with gravel to about 11.5 feet bgs, which was interpreted as undocumented fill.

Native Glacial Soils: Our explorations of the site generally encountered/exposed moist, medium dense to very dense, grayish brown to gray silty sand with gravel, brown to light brown sand with silt and gravel, and gray sand extending to the explored depths of 31.5 feet bgs. We interpreted these soils to be native glacial deposits. Cobbles and boulders were also encountered/exposed within this stratum.

Groundwater Observations: Groundwater seepage was not encountered during our explorations.

GEOLOGIC HAZARDS

Erosion Concern/Hazard

The Natural Resources Conservation Services (NRCS) map for the Jefferson County Area, Washington (WA635), classifies the site area as following:

- Townsend gravelly sandy loam (0 to 15 percent slopes), Hydrologic soil group C;

Hydrologic soil group C soils have moderate erosion potential when disturbed. These soils may erode rapidly if water is allowed to concentrate on steep slopes.

Based on our review of the City of Port Townsend Municipal Code, the existing slopes in the northeastern portion of the site would be considered erosion hazard area due to the steepness. During our site visit, we

did not observe signs of signification erosion along the slopes. Based on our explorations and visual site reconnaissance, it is our opinion that the proposed development will not adversely impact the erosion potential, provided that our recommendations are followed for both design and construction of the project. It has been our experience that soil erosion due to wind can be minimized by limiting the amount of stripped soil areas exposed during construction activities, frequently wetting the surface soils during construction, and with proper landscaping of the site following completion of construction. Typically, erosion of exposed soils will be most noticeable during periods of rainfall. The potential for erosion may be mitigated by the use of temporary erosion control measures, such as silt fences, hay bales, straw wattles, mulching, control ditches or diversion trenching, and contour furrowing. The walls of excavations should be covered with plastic sheeting, or other erosion control surfacing during periods of rainfall. Erosion control measures should be in place before the onset of wet weather. To minimize erosion concerns, the Erosion and Sediment Control section of this report should be followed. Stormwater runoff should not be allowed to flow over or concentrate on the steep slopes in the northeast portion of the site.

Landslide Hazard

We have reviewed the Washington State Department of Natural Resources (WADNR), Department of Energy (DOE), and Jefferson County published and interactive maps. The WADNR does not show any landslides mapped near the site vicinity. The DOE Coastal Zone Atlas map extends to the southern-half of the site and shows stable slopes. However, the steep slope along the northeastern portion of the site is not within the extent of the map. The Jefferson County Public Land Records online portal does not include any mapped landslide hazards on the project site.

We have reviewed the topographic map, prepared by Van Aller Surveying, dated July 27, 2023. Our review of the topographic map and surficial site reconnaissance indicate that there are east-descending steep slopes in the northeastern portion of the site. The slopes are inclined at about 19 to 33 degrees (35 to 66 percent), and the height ranges from 4 feet to 30 feet The site slopes meet the City of Port Townsend *critical slopes* criteria, which is defined as any slope of 40 percent or steeper that exceeds a vertical height of 10 feet over a 25-foot horizontal run. As the referenced slope extends horizontally to the south, the slope becomes less than 40 percent or less than 10 feet in vertical height and is no longer considered a critical slope per the City of Port Townsend criteria. Please note that the extent of the critical slope depicted in Figure 2 is approximate. At the time of the site visit, the steep slope was heavily vegetated with brush, brambles, and a few young to middle-aged trees. During our site visit we did not observe signs of recent slide scarps, tension cracks, or slumps within the site that would indicate current deep-seated instability on the steep slopes within the property. Signs of shallow soil movement and soil creep, such as curved tree trunks, were not observed on the slopes of the property. However, it should be noted that soil creep is the gradual, imperceptible downslope movement of surficial soils under the effect of gravity, and is typical on steep slopes.

Our explorations generally exposed/encountered medium dense to very dense native glacial soils, which is interpreted to form the core of the site slopes and are considered to have good shear strength.

The final grading plan was not available at the time this report was prepared. Based on our communication with the design team and review of the preliminary civil plan sheets, prepared by Atwell, dated August 24, 2023, we understand that the grading will be minimal. Based on our explorations and our review of the available data, and provided that the recommendations of this report is followed for design and construction, it is our opinion that the proposed onsite and offsite development will not adversely impact the site slopes and associated buffers. In our opinion, a minimum of a 10-foot buffer from the top of the slope, and a 15-foot building setback will be adequate for this project.

This buffer should not to be disturbed or modified through placement of any fill or removal of the existing vegetation. No material of any kind should be placed permanently on the buffer or slope or be allowed to reach the slope, such as excavation spoils, lawn clippings and other yard waste, trash, and soil stockpiles. Replacement of vegetation in the undisturbed buffer area should be performed in accordance with the City of Port Townsend code. Under no circumstances should water be allowed to concentrate on the steep slopes. Any sloping areas disturbed during construction should be planted with vegetation as soon as practical to reduce the potential for erosion.

Seismic Hazard

The 2018 International Building Code (IBC), Section 1613.2.2, refers to Chapter 20 of ASCE 7-16 for seismic Site Class Definitions. It is our opinion that the overall soil profile corresponds to Site Class C as defined by Table 20.3-1 "Site Class Definitions," according to the ASCE 7-16 Standard. Site Class C applies to a "very dense soil and soft rock" profile. The seismic site class is based on a soil profile extending to a depth of 100 feet. The soil explorations on this site extended to a maximum depth of 31.5 feet and this seismic site class designation is based on the assumption that very dense conditions continue below the depth explored.

We referred to the Applied Technology Council (ATC) website and 2018 IBC to obtain values for S_S, S_{MS}, S_{DS}, S_1, S_{M1}, S_{D1}, F_a, *and* F_v. The ATC website utilizes the most updated published data on seismic conditions from the United States Geological Survey. The seismic design parameters for this site are presented in the following table:

Seismic Design Parameters
(Reference: 2018 IBC Section 1613.2.2, ASCE 7-16, and ATC)

Seismic Item	Value
Site Coefficient F_a	1.200
S_S	1.350
S_{MS}	1.620
S_{DS}	1.080
Site Coefficient F_v	1.500
S_1	0.493
S_{M1}	0.739
S_{D1}	0.493

Additional seismic considerations include liquefaction potential and amplification of ground motions by soft soil deposits. The liquefaction potential is highest for loose sand with a high groundwater table. The native soils primarily consisting of medium dense to very dense granular soils interpreted to underlie the site are considered to have a low potential for liquefaction and amplification of ground motion.

The Liquefaction Susceptibility Map of Jefferson County, Washington, by Stephen Palmer, et al. (WADNR, September 2004) indicates that the site is mapped in an area of very low liquefaction susceptibility. Based on our explorations and review of the above-mentioned map, it is our opinion that the site has a low liquefaction hazard, and the proposed development should not increase the liquefaction hazard provided that our recommendations are followed for both design and construction.

CONCLUSIONS AND RECOMMENDATIONS

General

It is our opinion from a geotechnical standpoint that the site is compatible with the planned development, provided that the geotechnical engineering recommendations presented in this report are included in the project design and implemented during construction. We recommended that Krazan review the final development design plans.

Soil Conditions: Our explorations were advanced in the proposed development areas. With the exception of B-1, competent native glacial soils were exposed/encountered near surface in our explorations, and extended to the maximum explored depths of 6.0 to 31.5 feet bgs. Competent native glacial soils were encountered at about 11.5 feet bgs in B-1.

Most of the soils exposed/encountered at this site are considered moisture-sensitive and will be easily disturbed and difficult to compact when wet. We recommend that construction take place during extended

periods of dry weather in the summer months, if possible. If construction is to take place during wet weather, additional expenses and delays should be expected due to the wet conditions. Additional expenses could include the need for placing a blanket of rock spalls to protect exposed subgrades and construction traffic areas. The on-site soils may be suitable for use as structural fill material, provided the moisture content is near optimum and the soil could be suitably compacted to specifications. *This will depend on the moisture content of the soils at the time of construction.* Krazan and Associates should be retained to determine if the on-site soils can be used as structural fill material at the time of construction.

Foundations: Based on our explorations, conventional spread footings supported on medium dense or firmer native soil, or on structural fill extending to medium dense or firmer native soil, should provide adequate support for the proposed structures. Detailed geotechnical engineering recommendations for foundation design are presented in this report.

Stormwater Drainage: Proper site grading and drainage should help maintain current stability conditions. A comprehensive drainage plan will be an important part of a successful development project at this site. Surface water runoff should not be allowed to develop concentrated flow over the steep slopes on this property during or after construction. Proper grading and functional drainage systems are important for maintaining the currently stable condition of the site slopes. We understand that a bioswale in the southwest portion of the site is being considered for stormwater management. Further discussion of stormwater management and infiltration rate is provided in the Stormwater Infiltration section of this report.

Site Preparation

In general, site clearing should include removal of any vegetation and associated root systems; wood; abandoned utilities; structures including foundations, rubble; and rubbish. After stripping of organic topsoil is completed, the building pad and pavement areas should be proof-rolled with a loaded tandem-axle dump truck and be visually inspected to identify any loose/soft areas.

Building Foundation Subgrade Preparation: In the building footprint, any loose/soft soils should be excavated to expose the underlying firm native soils. The resulting excavations should be filled to the planned bottom of the structure's subgrade elevations with suitable soils as per the **Structural Fill** section of this report. *Based on our soil explorations, we interpret the medium dense or firmer native load bearing soils at this site to be at about 1.0 to 2.0 feet bgs.*

Exterior Flatworks and Pavement subgrade preparation: Undocumented fill or loose/soft soils in the pavement areas should be removed to *at least 1-foot* below the planned subgrade elevation. We recommend that a high-strength woven geotextile separation fabric then be placed over the entire over excavated grade, such as Miraffi 600X or equivalent. After the fabric is placed, the area should be filled to the planned subgrade elevation with suitable soils as recommended in the **Structural Fill** section of this report. In the exterior flatwork (sidewalk) areas, any loose/soft soil should be removed to *at least 6-inches* below the planned subgrade. The geotextile separation fabric will not be needed for sidewalk areas. *Deeper*

excavation may be required, if yielding soil conditions and trash or debris are exposed during over-excavation.

During wet weather conditions, which typically occur from October through May, subgrade stability problems and grading difficulties may develop due to excess moisture, disturbance of moisture sensitive soils and/or the presence of perched groundwater. Earthwork construction during extended periods of wet weather could create the need to remove wet disturbed soils if they cannot be suitably compacted due to elevated moisture contents. Most of the soils exposed/encountered at this site are considered moisture-sensitive. If over-excavation is necessary, it should be confirmed through continuous monitoring and testing by a qualified geotechnical engineer or geologist. Soils that have become unstable may require drying to near their optimal moisture content before compaction is feasible. Selective drying may be accomplished by scarifying or windrowing surficial material during extended periods of dry, warm weather (typically during the summer months). If the soils cannot be dried back to a workable moisture condition, remedial measures may be required. Preparation of the site for wet weather conditions may consist of the placement of a layer of aggregate base for the protection of exposed soils during construction.

It should be understood that even if Best Management Practices (BMPs) for soil protection are implemented for the wet season, there is a significant chance that additional soil mitigation work will be needed.

Any buried structures encountered during construction should be completely removed and backfilled with structural fill. Excavations, depressions, or soft and pliant areas extending below the planned subgrade elevations should be excavated to expose medium dense or firmer soil, and be backfilled with structural fill. In general, any septic tanks, underground storage tanks, debris pits, cesspools, or similar structures and deleterious materials should be completely removed. Any concrete footings encountered in the planned foundation area should be removed to depth of at least 3 feet below proposed footing elevations or as recommended by the geotechnical engineer. The resulting excavations should be backfilled with structural fill.

All fill on the sloping areas should be placed as structural fill. Where fills greater than 8 feet are to be constructed on original ground that slopes at inclinations steeper than 6:1 (horizontal to vertical), benches should be cut into the existing slope as the filling operations proceed. Each bench should consist of a level terrace, a minimum of 4 to 8 feet wide (based on the width of the equipment utilized), with the rise to the next bench held to 4 feet or less. Where fills of comparable height will be constructed on ground that slopes at an inclination steeper than 4:1 (horizontal to vertical), a keyway should be provided along the toe of the fill slope in addition to the benches. Each keyway should consist of a level trench at least 8 feet wide and at least 2 feet deep, with side slopes not exceeding 1:1 (horizontal to vertical), cut into the existing slope.

Permanent fill slopes should be no steeper than 2 to 1 (horizontal to vertical). Fill materials should not be placed in any section of the slope until the subgrade for that section has been suitably prepared and evaluated by a representative of the geotechnical engineer. Brush, roots, sod or any other organic, perishable or unsuitable material should not be placed in the fill slope.

Site grading near the crowns of the reconstructed slopes should be accomplished, such that, excessive sheet run-off is prevented. The completed slopes should be seeded or otherwise vegetated to protect from future erosion. Well vegetated slopes at the recommended configuration should be reasonably protected from typical erosional effects. However, vegetation on the slopes may not provide protection from unusual flow conditions, such as flood events or concentrations of stormwater runoff occurring on the slopes.

A representative of our firm should be available on request during all grading operations to observe, test and evaluate earthwork construction. These testing and observation processes are an integral part of our service, as acceptance of earthwork construction is dependent upon compaction and stability of the material. The geotechnical engineer may reject any material that does not meet compaction and stability requirements. Further recommendations, contained in this report, are predicated upon the assumption that earthwork construction will conform to the recommendations set forth in this section and in the Structural Fill section of this report.

Structural Fill

Fill placed beneath foundations or other settlement-sensitive structures should be placed as structural fill. Structural fill, by definition, is placed in accordance with prescribed methods and standards, and is monitored by an experienced geotechnical professional. Field monitoring procedures would include the performance of a representative number of in-place density tests to document the attainment of the desired degree of relative compaction. A representative of the geotechnical engineer should evaluate the subgrade prior to structural fill placement.

BMP's should be followed when considering the suitability of the existing materials for use as structural fill. The on-site soils including the undocumented fill may be suitable for reuse as structural fill, provided the soil is free of organic material and debris, and it is within ± 2 percent of the optimum moisture content. Laboratory testing of some of the on-site soils indicated percentage of silt and clay (passing no. 200 sieve) to be greater than 5. It should be noted that the on-site soils with silt and clay content greater than 5 percent will be difficult to compact during the wet weather. Cobbles and boulders were noted at the time of our exploration. *Cobbles and boulders should be removed from the soil prior to use as structural fill.* If the on-site soils are stockpiled for later use as structural fill, the stockpiles should be covered to protect the soil from wet weather conditions. We recommend that a representative of Krazan & Associates be on site during the excavation work to determine which soils are suitable for placement as structural fill.

Imported, all weather granular structural fill material should consist of well-graded gravel or a sand and gravel mixture with a maximum grain size of 3 inches and less than 5 percent fines (material passing the U.S. Standard No. 200 Sieve). Structural fill can also consist crushed rock, rock spalls and controlled density fill (CDF). All structural fill material should be submitted for approval to the geotechnical engineer at least 48 hours prior to delivery to the site.

Structural fill soils should be placed in horizontal lifts not exceeding 8 inches in thickness prior to compaction, moisture-conditioned as necessary, (moisture content of soil shall not vary by more than ±2 percent of optimum moisture) and the material should be compacted to at least 95 percent of the maximum dry density based on ASTM D1557 Test Method. In-place density tests should be performed on all structural fill to document proper moisture content and adequate compaction. Additional lifts should not be placed if the previous lift did not meet the compaction requirements or if soil conditions are not considered stable.

Temporary Excavations

The on-site soils have variable cohesion strengths, therefore the safe angles to which these materials may be cut for temporary excavations is limited, as the soils may be prone to caving and slope failures in temporary excavations deeper than 4 feet. Temporary excavations in the existing materials should be sloped no steeper than 1H:1V where room permits. Flatter inclinations may be necessary where caving conditions, and groundwater seepage are encountered.

All temporary cuts should be in accordance with Washington Administrative Code (WAC) Part N, Excavation, Trenching, and Shoring. The temporary slope cuts should be visually inspected daily by a qualified person during construction work activities and the results of the inspections should be included in daily reports. The contractor is responsible for maintaining the stability of the temporary cut slopes and minimizing slope erosion during construction. The temporary cut slopes should be covered with plastic sheeting to help minimize erosion during wet weather and the slopes should be closely monitored until the permanent retaining systems are complete. Materials should not be stored and equipment operated within 10 feet of the top of any temporary cut slope.A Krazan & Associates geologist or geotechnical engineer should observe the temporary cut slopes, at least periodically, during the excavation work. The reason for this is that all soil conditions may not be fully delineated by the limited sampling of the site from the geotechnical explorations. In the case of temporary slope cuts, the existing soil conditions may not be fully revealed until the excavation work exposes the soil. Typically, as excavation work progresses the maximum inclination of the temporary slope will need to be evaluated by the geotechnical engineer so that supplemental recommendations can be made. Soil and groundwater conditions can be highly variable. Scheduling for soil work will need to be adjustable, to deal with unanticipated conditions, so that the project can proceed smoothly and required deadlines can be met. If any variations or undesirable conditions are encountered during construction, Krazan & Associates should be notified so that supplemental recommendations can be made.

Shallow Foundations

General: The proposed structures may be supported on a conventional spread foundation system bearing on the medium dense or firmer native soils or on structural fill including granular soils, rock spalls or CDF extending to the medium dense or firmer native soils. Based on our soil explorations, we interpreted the

medium dense or firmer native load bearing soils at this site to be approximately 1.0 to 2.0 feet bgs in the proposed building area.

Soil Bearing: Footings supported as mentioned-above, may be designed using an allowable soil bearing pressure of **3,000 pounds per square foot (psf)** for dead plus live loads. This value may be increased by 1/3 for short duration loads such as wind or seismic loading. A representative of Krazan and Associates should evaluate the foundation bearing soil and observe structural fill placement, where utilized.

For frost protection and bearing capacity considerations, exterior footings should have a minimum embedment depth of 18 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Footing widths should be based on the anticipated loads and allowable soil bearing pressure. Footings should have a minimum width of at least 12 inches regardless of load. Water should not be allowed to accumulate in footing trenches. All loose or disturbed soils should be removed from the foundation excavations prior to placing concrete.

Structural Fill in Footing Areas: Structural fill placed for foundation support should follow these recommendations. If structural fill consisting of granular soils or rock spalls are used, then the foundation excavations would need to be widened on both sides of the footing a distance equal to one-half of the depth of the over-excavation below the bottom of the footing. Structural fill consisting of granular soils should be compacted to at least 95 percent of the maximum dry density based on ASTM Test Method D1557. To reduce the volume of extra excavation needed for the footing trenches and to simplify structural fill placement, it may be practical to place CDF to fill the deeper footing trenches to the planned footing subgrade elevations. If CDF is used, the trench may be excavated only slightly wider (6 inches wider on each side) than the footing.

Potential Foundation Settlement: For foundations constructed as recommended, the total settlement is not expected to exceed 1-inch. Differential settlement should be less than ½-inch. Most settlement is expected to occur during construction, as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. It should be noted that the risk of liquefaction is considered low, given the composition and density of the native glacial soils.

Design Parameters – Lateral Resistance: Resistance to lateral displacement can be computed using an allowable friction factor of 0.40 acting between the bases of foundations and the supporting subgrade soil. Lateral resistance for footings can alternatively be developed using an allowable equivalent fluid passive pressure of 300 pounds per cubic foot (pcf) acting against the appropriate vertical footing faces (neglecting the upper 12 inches). The allowable friction factor and allowable equivalent fluid passive pressure values include a factor of safety of 1.5. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

Foundation Drainage: Seasonal rainfall, water run-off, and the normal practice of watering trees and landscaping areas around the proposed structures, should not be permitted to flood and/or saturate

foundation subgrade soils. To reduce the buildup of water within the footing areas, continuous footing drains (with cleanouts) should be provided at the bases of the footings. The footing drains should consist of a minimum 4-inch diameter rigid perforated PVC pipe, sloped to drain, with perforations placed near the bottom and enveloped in all directions by washed rock and wrapped with filter fabric to limit the migration of silt and clay into the drain.

Floor Slabs and Exterior Flatwork

The floor slab and exterior flatwork subgrade should be prepared in accordance with the recommendations presented in the **Site Preparation** section of this report, and may be designed using a modulus of subgrade reaction value of k = 200 pounds per cubic inch (pci).

In areas where it is desired to reduce floor dampness, such as areas covered with moisture sensitive floor coverings, we recommend that concrete slab-on-grade floors be underlain by a water vapor retardant system. The system should consist of a vapor retardant sheeting underlain by a capillary break consisting of a minimum of 4-inches of compacted clean (less than 5 percent passing the U.S. Standard No. 200 Sieve), open-graded coarse rock of ¾-inch maximum size. The vapor retardant sheeting should be protected from puncture damage. In addition, ventilation of the structure may be prudent to reduce the accumulation of interior moisture.

The exterior flatwork should be placed separately in order to act independently of the walls and foundation system.

Lateral Earth Pressures and Retaining Walls

We have developed criteria for the design of retaining or below grade walls. Our design parameters are based on retention of the native soils or structural fill. The parameters are also based on level, well-drained wall backfill conditions. Walls may be designed as "restrained" retaining walls based on "at-rest" earth pressures, plus any surcharge on top of the walls as described below, if the walls are braced to restrain movement and/or movement is not acceptable. Unrestrained walls may be designed based on "active" earth pressure, if the walls are not part of the buildings and some movement of the retaining walls is acceptable. Acceptable lateral movement equal to at least 0.2 percent of the wall height would warrant the use of "active" earth pressure values for design. The following table, titled **Wall Design Criteria**, presents the recommended soil related design parameters for retaining walls with well-drained level backfill.

Wall Design Criteria	
"At-rest" Conditions (Lateral Earth Pressure)	55 pcf (Equivalent Fluid Density) (Triangular Distribution)
"Active" Conditions (Lateral Earth Pressure)	35 pcf (Equivalent Fluid Density) (Triangular Distribution)
Seismic Increase for "Active" Conditions (Lateral Earth Pressure)	11 psf x H (Uniform Distribution) Where H is the height of the wall in feet
Passive Earth Pressure on Low Side of Wall (includes factor of safety of 1.5)	Neglect upper 1-foot, then 300 pcf (Equivalent Fluid Density)
Soil-Footing Coefficient of Sliding Friction (includes factor of safety of 1.5)	0.40

If vehicular loads are expected to act behind the wall within a horizontal distance of less than or equal to one-half of the wall height, then a live load surcharge should be applied for the design. In this case, we recommend the addition of vehicle surcharges of 70 psf and 100 psf to the active and at-rest earth pressures, respectively.

The stated lateral earth pressures **do not** include the effects of hydrostatic pressure generated by water accumulation behind the retaining walls or loads imposed by construction equipment, foundations or roadways adjacent to the wall (surcharge loads). To minimize the lateral earth pressure and reduce the buildup of water pressure against the walls, continuous footing drains (with cleanouts) should be provided at the bases of the walls. The footing drains should consist of a minimum 4-inch diameter rigid PVC perforated pipe, sloped to drain, with perforations placed near the bottom. The drainpipe should be enveloped by 6 inches of washed gravel in all directions wrapped in filter fabric to prevent the migration of silt and clay into the drain.

The wall fills adjacent to and extending a lateral distance of at least 2 feet behind the walls should consist of free-draining granular material. All free-draining backfill should contain less than 3 percent fines (passing the U.S. Standard No. 200 Sieve) based upon the fraction passing the U.S. Standard No. 4 Sieve with at least 30 percent of the material being retained on the U.S. Standard No. 4 Sieve. **Alternatively,** a drainage composite may be used. It should be realized that the primary purpose of the free-draining material is the reduction of hydrostatic pressure. Some potential for the moisture to contact the back face of the wall may exist, even with treatment, which may require that more extensive waterproofing be specified for walls, which require interior moisture sensitive finishes.

We recommend that the wall fill be compacted to at least 95 percent of the maximum dry density based on ASTM D1557 Test Method. In-place density tests should be performed to verify adequate compaction. Soil compactors place transient surcharges on the backfill. Consequently, only light hand operated equipment is recommended for fill compaction within 3 feet of walls so that excessive stress is not imposed on the walls.

Erosion and Sediment Control

Erosion and sediment control (ESC) is used to minimize the transportation of sediment to wetlands, streams, lakes, drainage systems, and adjacent properties. Erosion and sediment control measures should be taken and these measures should be in general accordance with local regulations. At a minimum, the following basic recommendations should be incorporated into the design of the erosion and sediment control features of the site:

1) Phase the soil, foundation, utility, and other work, requiring excavation or the disturbance of the site soils, to take place during the dry season (generally May through September). However, provided precautions are taken using Best Management Practices (BMPs), grading activities can be undertaken during the wet season (generally October through April). It should be noted that this typically increases the overall project cost.

2) All site work should be completed and stabilized as quickly as possible.

3) Additional perimeter erosion and sediment control features may be required to reduce the possibility of sediment entering the surface water. This may include additional silt fences, silt fences with a lower Apparent Opening Size (AOS), construction of a berm, or other filtration systems.

4) Any runoff generated by dewatering discharge should be treated through construction of a sediment trap if there is sufficient space. If space is limited other filtration methods will need to be incorporated.

5) Surface water runoff should not be allowed to develop concentrated flow over the steep slopes on this property during or after construction.

Groundwater Influence on Structures and Earthwork Construction

Groundwater seepage was not encountered in our explorations. It should be recognized that groundwater elevations may fluctuate with time. The groundwater level will be dependent upon seasonal precipitation, irrigation, land use, and climatic conditions, as well as other factors. Therefore, groundwater levels at the time of the field investigation may be different from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

If groundwater seepage is encountered during construction, we should observe the conditions to determine if dewatering will be needed. Design of temporary dewatering systems to remove groundwater should be the responsibility of the contractor. If earthwork is performed during or soon after periods of precipitation, the subgrade soils may become saturated. These soils may "pump," and the materials may not respond to densification techniques. Typical remedial measures include: disking and aerating the soil during dry weather; mixing the soil with drier materials; removing and replacing the soil with an approved fill material. A qualified geotechnical engineering firm should be consulted prior to implementing remedial measures to observe the unstable subgrade conditions and provide appropriate recommendations.

Drainage and Landscape

Special attention to the drainage and irrigation adjacent to the buildings is recommended. Grading should establish drainage away from the structures and this drainage pattern should be maintained. Water should not be allowed to collect adjacent to the structures. Excessive irrigation within landscaped areas adjacent to the structure should not be allowed to occur.

The ground surface should slope away from building pads and pavement areas, toward appropriate drop inlets or other surface drainage devices. It is recommended that adjacent exterior grades be sloped a minimum of 2 percent for a minimum distance of 5 feet away from structures. Roof drains should be tightlined away from foundations. Roof drains should not be connected to the footing drains.

Pavement areas should be inclined at a minimum of 1 percent and drainage gradients should be maintained to carry all surface water to collection facilities, and suitable outlets. These grades should be maintained for the life of the project.

Utility Trench Backfill

We recommend that utility trench backfill be placed in general accordance with typical recommendations for structural fill placement. A firm and unyielding subgrade should allow for the proper placement of subsurface utilities. This could include the placement of geotextile and quarry rock in the bottom of utility trenches prior to placement of pipe bedding, utilities and trench backfill.

Utility trenches should be excavated according to accepted engineering practices following OSHA (Occupational Safety and Health Administration) standards, by a contractor experienced in such work. The responsibility for the safety of open trenches should be borne by the contractor. Traffic and vibration adjacent to trench walls should be minimized; cyclic wetting and drying of excavation side slopes should be avoided. Depending upon the location and depth of some utility trenches, groundwater flow into open excavations could be experienced, especially during or shortly following periods of precipitation.

All utility trench backfill for this project should follow the recommendation as per the Structural Fill section of this report. Utility trench backfill placed in or adjacent to buildings and exterior slabs should be compacted to at least 95 percent of the maximum dry density based on ASTM Test Method D1557. The

upper 5 feet of utility trench backfill placed in pavement areas should be compacted to at least 95 percent of the maximum dry density based on ASTM Test Method D1557. Below 5 feet, utility trench backfill in pavement areas should be compacted to at least 90 percent of the maximum dry density based on ASTM Test Method D1557.

Pipe bedding should be in accordance with the pipe manufacturer's recommendations. The contractor is responsible for removing all water-sensitive soils from the trenches regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

Stormwater Infiltration

A Large-Scale PIT was performed in accordance with the DOE 2019 SWMMWW, Volume V, Chapter 5. The PIT was performed in TP-1 at a depth of about 2 feet bgs. The exposed soils at the test depth consisted of moist, gray silty sand with gravel and extended to the maximum explored depth of about 7.5 feet bgs, where refusal was encountered. The entire stratum was interpreted as native glacial till soils. The measured steady-state infiltration rate was 0.19 inches per hour. A total correction factor of 0.41 should be applied to the measured steady-state infiltration rate when evaluating the size of the stormwater management system.

Based on our explorations, and the Large-Scale PIT result, the on-site native glacial soils are not considered suitable for stormwater infiltration at this site.

Pavement Design

The pavement subgrade should be prepared in accordance with the recommendations presented in the **Site Preparation** section of this report. It should be noted that subgrade soils that have relatively high silt contents may be highly sensitive to moisture conditions. The subgrade strength and performance characteristics of a silty subgrade material may be dramatically reduced if it becomes wet. Therefore, we recommend that the pavement subgrade not be exposed for long periods, especially during wet weather.

Traffic loads were not provided, however, based on our knowledge of the proposed project, we expect the traffic to range from light duty (passenger automobiles) to heavy duty (firetrucks). The following tables show the minimum recommended pavement sections for both light duty and heavy-duty traffic loads.

ASPHALTIC CONCRETE (FLEXIBLE) PAVEMENT
LIGHT DUTY

Asphaltic Concrete	Aggregate Base*
3.0 in.	6.0 in.

HEAVY DUTY

Asphaltic Concrete	Aggregate Base*
4.0 in.	6.0 in.

PORTLAND CEMENT CONCRETE (RIGID) PAVEMENT
LIGHT DUTY

Min. PCC Depth	Aggregate Base*
6.0 in.	6.0 in.

HEAVY DUTY

Min. PCC Depth	Aggregate Base*
8.0 in.	6.0 in.

* *95% compaction based on ASTM Test Method D1557*

The pavement specification in Appendix C provides additional recommendations. The asphaltic concrete depth in the flexible pavement tables should be a surface course type asphalt, such as Washington Department of Transportation (WSDOT) ½ inch HMA. The rigid pavement design is based on a Portland Cement Concrete (PCC) mix that has a 28-day compressive strength of 4,000 pounds per square inch (psi) with a fiber mesh. The design is also based on a concrete flexural strength or modulus of rupture of 575 psi.

Testing and Inspection

A representative of Krazan & Associates, Inc. should be present at the site during the earthwork activities to confirm that actual subsurface conditions, including foundation bearing soils, are consistent with those exposed during our exploratory field work. This activity is an integral part of our services as acceptance of earthwork construction is dependent upon compaction testing and stability of the material. This representative can also verify that the intent of our recommendations has been incorporated into the project design and construction. Krazan & Associates, Inc. will not be responsible for grades or staking, since this is the responsibility of the Prime Contractor. Furthermore, Krazan & Associates is not responsible for the contractor's procedures, methods, scheduling, or management of the work site.

LIMITATIONS

This report has been prepared for the exclusive use of the Olympic Peninsula YMCA and their assigns, for the specific application to the subject site. Geotechnical engineering is one of the newest divisions of Civil Engineering. This branch of Civil Engineering is constantly improving as new technologies and understanding of earth sciences improves. Although your site was analyzed using the most appropriate current techniques and methods, undoubtedly there will be substantial future improvements in this branch of engineering. In addition to improvements in the field of geotechnical engineering, physical changes in the site either due to excavation or fill placement, new agency regulations, or possible changes in the proposed structure after the time of completion of the soils report may require the soils report to be professionally reviewed. In light of this, the owner should be aware that there is a practical limit to the usefulness of this report without critical review. Although the time limit for this review is strictly arbitrary, it is suggested that three years be considered a reasonable time for the usefulness of this report.

Foundation and earthwork construction are characterized by the presence of a calculated risk that soil and groundwater conditions have been fully revealed by the original geotechnical investigation. This risk is derived from the practical necessity of basing interpretations and design conclusions on limited sampling of the earth. Our report, design conclusions, and interpretations should not be construed as a warranty of the subsurface conditions. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report.

The recommendations made in this report are based on the assumption that soil conditions do not vary significantly from those encountered during our field investigation. The findings and conclusions of this report can be affected by the passage of time, seasonal weather conditions, manmade influences such as construction on or adjacent to the site, and natural events such as earthquakes, slope instability, flooding, or groundwater fluctuations. If any variations or undesirable conditions are encountered during construction, the geotechnical engineer should be notified so that supplemental recommendations can be made.

The conclusions of this report are based on the information provided regarding the proposed construction. If the proposed construction is relocated or redesigned, the conclusions in this report may not be valid. The geotechnical engineer should be notified of any changes so that the recommendations can be reviewed and re-evaluated.

Misinterpretations of this report by other design team members can result in project delays and cost over-runs. These risks can be reduced by having Krazan & Associates, Inc. involved in the design team's meetings and discussions prior to and following submission of the geotechnical report. Krazan & Associates, Inc. should also be retained to review pertinent elements of the design team's plans and specifications. To reduce the risk of contractors misinterpreting the recommendations of this report, Krazan & Associates should participate in pre-bid and preconstruction meetings, and provide construction observations and testing during the site work.

This report is a geotechnical engineering investigation with the purpose of evaluating the soil conditions in terms of foundation design. The scope of our geotechnical engineering services did not include any environmental site assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater or atmosphere, or the presence of wetlands. Any statements, or absence of statements, in this report or on any boring log regarding odors, unusual or suspicious items, or conditions observed are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessments.

The geotechnical information presented herein is based upon professional interpretation utilizing standard engineering practices and a degree of conservatism deemed proper for this project. It is not warranted that such information and interpretation cannot be superseded by future geotechnical developments. We emphasize that this report is valid for this project as outlined above, and should not be used for any other site. Our report is prepared for the exclusive use of our client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (360) 598-2126.

Respectfully submitted,

KRAZAN & ASSOCIATES, INC.

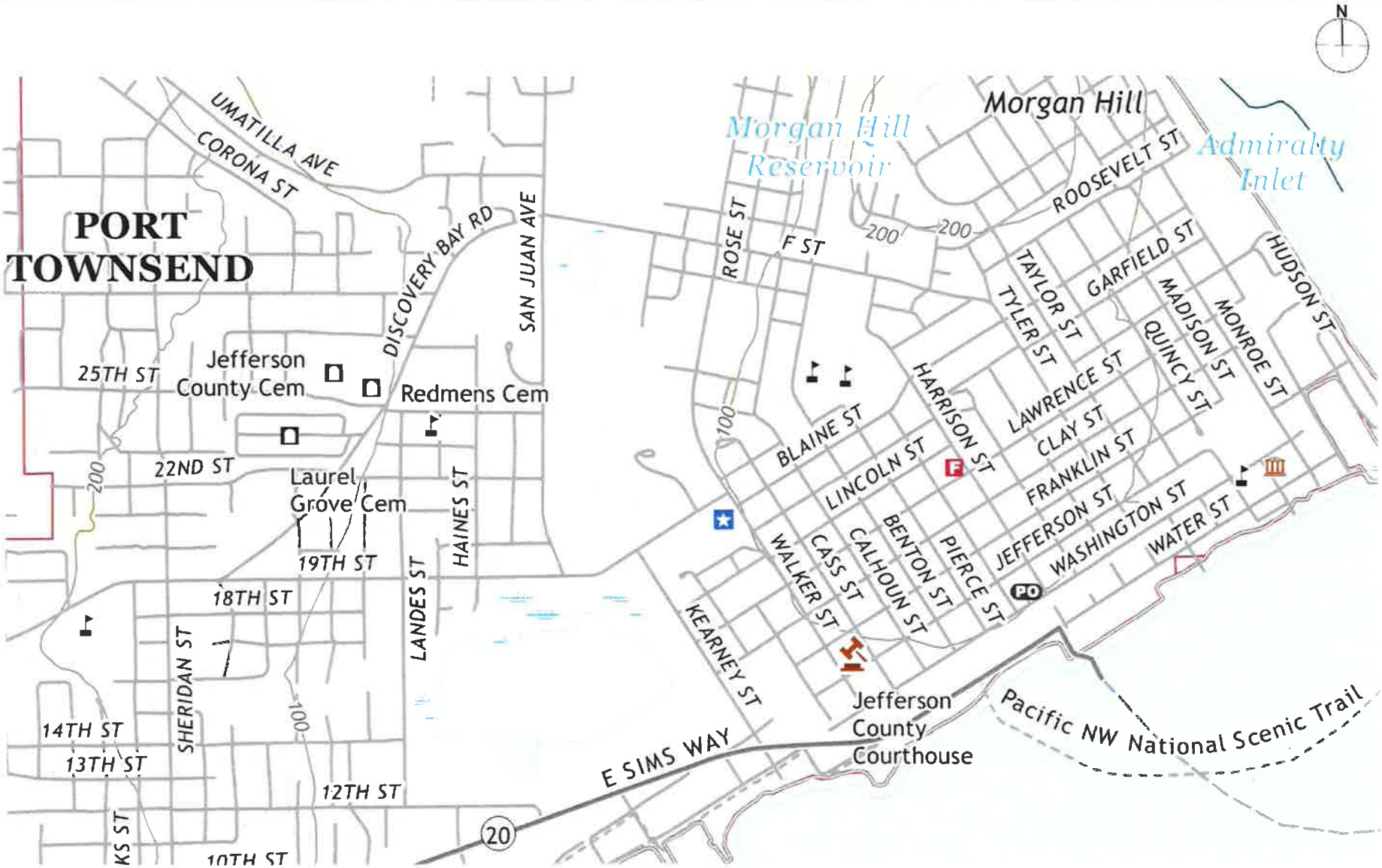
01/31/24

01/31/24

Vijay Chaudhary, P.E
Project Engineer

Shawn Williams, L.E.G.
Engineering Geologist

AG:EA:VC:SEW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PORT TOWNSEND
UMATILLA AVE
CORONA ST
DISCOVERY BAY RD
SAN JUAN AVE
25TH ST
Jefferson County Cem
Redmens Cem
22ND ST
Laurel Grove Cem
19TH ST
18TH ST
HAINES ST
LANDES ST
SHERIDAN ST
14TH ST
13TH ST
12TH ST
10TH ST
200
100
Morgan Hill Reservoir
Morgan Hill
Admiralty Inlet
ROSE ST
F ST
ROOSEVELT ST
TAYLOR ST
TYLER ST
GARFIELD ST
MADISON ST
QUINCY ST
MONROE ST
HUDSON ST
HARRISON ST
LAWRENCE ST
CLAY ST
FRANKLIN ST
JEFFERSON ST
WASHINGTON ST
WATER ST
BLAINE ST
LINCOLN ST
WALKER ST
CASS ST
CALHOUN ST
BENTON ST
PIERCE ST
KEARNEY ST
PO
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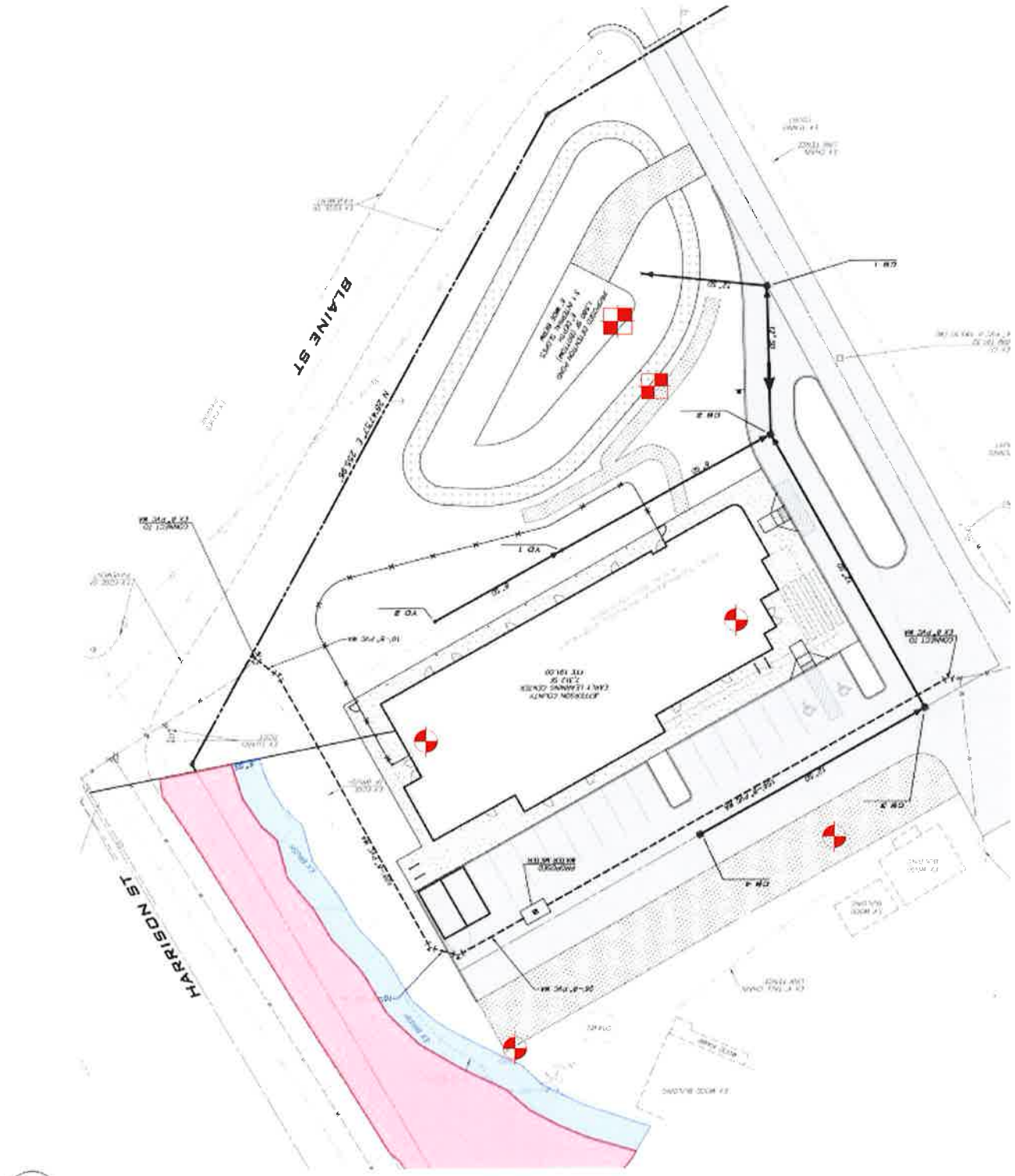
20
Jefferson County Courthouse
Pacific NW National Scenic Trail

Krazan


BLAINE ST
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APPENDIX A

FIELD INVESTIGATION AND LABORATORY TESTING

Field Investigation

The field investigation consisted of a surface reconnaissance and a subsurface exploration program. Four (4) soil borings and two (2) test pits were conducted and sampled to evaluate the subsurface soil and groundwater conditions at the project site. The soil borings, designated B-1, B-2, B-3, and B-4 were drilled on August 28, 2023 using a subcontracted drill rig. The soil borings were advanced to depths between 9.0 feet and 31.5 feet bgs. The test pits, designated TP-1 and TP-2 were excavated on August 28, 2023 using an excavator subcontractor. The test pits were excavated to depths of about 6.0 and 7.5 feet bgs. The approximate boring and test pit locations are shown on the Site Plan (Figure 2). The depths shown on the attached boring and test pit logs are from the existing ground surface at the time of our exploration.

Soil boring samples were obtained by using the Standard Penetration Test (SPT) as described in ASTM Test Method D1586. The Standard Penetration Test and sampling method consists of driving a standard 2-inch outside-diameter, split barrel sampler into the subsoil with a 140-pound hammer free falling a vertical distance of 30 inches. The summation of hammer-blows required to drive the sampler the final 12-inches of an 18-inch sample interval is defined as the Standard Penetration Resistance, or N-value. The blow count is presented graphically on the boring log in this appendix. The resistance, or "N" value, provides a measure of the relative density of granular soils or of the relative consistency of cohesive soils.

Additionally, we performed one (1) Large-Scale PIT in accordance with the DOE 2019 SWMMWW, Volume V, Chapter 5. The PIT was performed at roughly 2 feet bgs in the TP-1. The area exposed for the PIT was at least 100 square feet. The testing included a pre-soak period, followed by determination of a steady-state infiltration rate and then a falling head infiltration rate testing. After the PIT was completed, the test pit was over-excavated to approximately 5.5 feet below the test elevation to document whether any restrictive layers or groundwater seepage were present.

A field geologist from Krazan and Associates was present during the explorations, continuously examined and visually classified the soils in general accordance with the Unified Soil Classification System (USCS), and maintained logs of the explorations, which are presented in this appendix. Representative samples of the soils encountered in the geotechnical explorations were collected and transported to our laboratory for further examination and testing.

Laboratory Testing

The laboratory testing program was developed primarily to determine the index properties of the soils. Test results were used for soil classification and as criteria for determining the engineering suitability of the surface and subsurface materials encountered. Sieve analysis and natural moisture content tests were performed on selected samples. The laboratory test results are included in this appendix.

Soil Classification

USCS Soil Classification				
Major Division			Group Description	
Coarse-Grained Soils < 50% passes #200 sieve	Gravel and Gravelly Soils < 50% coarse fraction passes #4 sieve	Gravel (with little or no fines)	GW	Well-Graded Gravel
			GP	Poorly Graded Gravel
		Gravel (with > 12% fines)	GM	Silty Gravel
			GC	Clayey Gravel
	Sand and Sandy Soils > 50% coarse fraction passes #4 sieve	Sand (with little or no fines)	SW	Well-Graded Sand
			SP	Poorly Graded Sand
		Sand (with > 12% fines)	SM	Silty Sand
			SC	Clayey Sand
Fine-Grained Soils > 50% passes #200 sieve	Silt and Clay Liquid Limit < 50		ML	Silt
			CL	Lean Clay
			OL	Organic Silt and Clay (Low Plasticity)
	Silt and Clay Liquid Limit > 50		MH	Inorganic Silt
			CH	Inorganic Clay
			OH	Organic Clay and Silt (Med. to High Plasticity)
Highly Organic Soils			PT	Peat

Relative Density with Respect to SPT N-Value			
Coarse-Grained Soils		Fine-Grained Soils	
Density	N-Value (Blows/Ft)	Density	N-Value (Blows/Ft)
Very Loose	0 - 4	Very Soft	0 - 1
Loose	5 -10	Soft	2 - 4
Medium Dense	11 - 30	Medium Stiff	5 - 8
Dense	31 - 50	Stiff	9 - 15
Very Dense	> 50	Very Stiff	16 - 30
		Hard	> 30

Krazan & ASSOCIATES, INC.

Proposed Jefferson County Early Learning Center

Date: Sep 2023 | References: USCS

Drawn By: AG | | Project Number: 102-23021

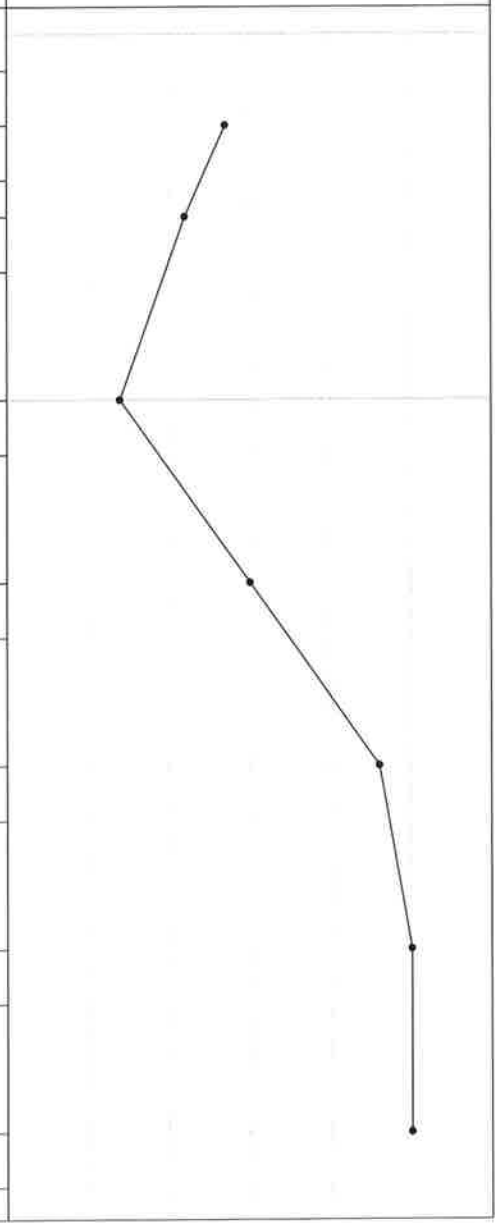
Krazan & Associates, Inc.

LOG OF BORING No. B-1

Date Drilled: 8/28/23	Project: Jefferson County Early Learning Center	Notes:
Location: Port Townsend, WA	Ground Elevation: ~190 ft.	Logged By: AG
Hammer Type: Manual ☑ Automatic ☐ Other ☐		
Water Level: Not encountered.	Drilling Method: HSA	

Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample No. /Type	1st 6"	2nd 6"	3rd 6"	N Value
	Ground Surface						
0	Brown to grayish brown, silty sand with gravel (undocumented fill) (moist, loose to medium dense)						
1							
2	-Becomes grayish brown and medium dense.		S1/GB	-	-	-	-
3			S2/SS	19	15	12	27
4							
5			S3/SS	7	9	13	22
6							
7							
8							
9							
10			S4/SS	7	7	7	14
11							
12	Light brown, sand with silt and gravel (SP-SM) (moist, medium dense to dense)						
13							
14							
15			S5/SS	22	11	19	30
16	-Gravel no longer observed.						
17							
18							
19							
20	-Becomes dense.		S6/SS	17	20	26	46
21							
22							
23							
24							
25	Gray, sand (SP) (moist, very dense)		S7/SS	23	50/6"		50
26							
27							
28							
29							
30			S8/SS	50/6"			50
31							
32	End of Exploratory Boring						

N VALUE GRAPH (Last 12")



LEGEND

SAMPLER TYPE

SS - Split Spoon	NQ - Rock Core, 1-7/8"
ST - Shelby Tube	CU - Cuttings-
AWG - Rock Core, 1-1/8"	CT - Continuous Tube

DRILLING METHOD

HSA - Hollow Stem Auger	RW - Rotary Wash
CFA - Continuous Flight Augers	RC - Rock Core
D C - Driving Casing	

Krazan & Associates, Inc.

LOG OF BORING No. B-2

Date Drilled: 8/28/23	Project: Jefferson County Early Learning Center	Notes:
Location: Port Townsend, WA	Ground Elevation: ~190 ft.	Logged By: AG
Hammer Type: Manual ☑ Automatic ☐ Other ☐		
Water Level: Not encountered.	Drilling Method: HSA	

Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample No. /Type	1st 6"	2nd 6"	3rd 6"	N Value	N VALUE GRAPH (Last 12") 10 20 30 40 50
0	Ground Surface							
1	Grayish brown to gray, silty sand with gravel and cobbles (SM) (moist, very dense)		S1/GB	-	-	-	-	
2								
3	-Becomes gray.		S2/SS	50/6"			50	
4								
5			S3/SS	50/6"			50	
6								
7								
8								
9								
10	Gray, sand (SP) (moist, very dense)		S4/SS	23	25	50/5"	50	
11	-0.3' silty sand lens was encountered.							
12								
13								
14								
15			S5/SS	50/6"			50	
16								
17								
18								
19								
20			S6/SS	28	50/6"		50	
21								
22	End of Exploratory Boring							
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

LEGEND

SAMPLER TYPE		DRILLING METHOD	
SS - Split Spoon	NQ - Rock Core, 1-7/8"	HSA - Hollow Stem Auger	RW - Rotary Wash
ST - Shelby Tube	CU - Cuttings-	CFA - Continuous Flight Augers	RC - Rock Core
AWG - Rock Core, 1-1/8"	CT - Continuous Tube	D C - Driving Casing	

Krazan & Associates, Inc.

LOG OF BORING No. B-3

Date Drilled: 8/28/23	Project: Jefferson County Early Learning Center	Notes:
Location: Port Townsend, WA	Ground Elevation: ~190 ft.	Logged By: AG
Hammer Type: Manual ☑ Automatic ☐ Other ☐		
Water Level: Not encountered.	Drilling Method: HSA	

Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample No. /Type	1st 6"	2nd 6"	3rd 6"	N Value	N VALUE GRAPH (Last 12") 10 20 30 40 50
0	Ground Surface							
0-8	Gray, silty sand with gravel (SM) (moist, very dense)		S1/SS	50/6"			50	
			S2/SS	50/6"			50	
			S3/SS	50/6"			50	
9	End of Exploratory Boring							

LEGEND

SAMPLER TYPE

SS - Split Spoon	NQ - Rock Core, 1-7/8"
ST - Shelby Tube	CU - Cuttings-
AWG - Rock Core, 1-1/8"	CT - Continuous Tube

DRILLING METHOD

HSA - Hollow Stem Auger	RW - Rotary Wash
CFA - Continuous Flight Augers	RC - Rock Core
D C - Driving Casing	

Krazan & Associates, Inc.

LOG OF BORING No. B-4

Date Drilled: 8/28/23	Project: Jefferson County Early Learning Center	Notes:
Location: Port Townsend, WA	Ground Elevation: ~190 ft.	Logged By: AG
Hammer Type: Manual ☑ Automatic ☐ Other ☐		
Water Level: Not encountered.	Drilling Method: HSA	

Depth (ft)	MATERIAL DESCRIPTION	Graphic Log	Sample No. /Type	1st 6"	2nd 6"	3rd 6"	N Value
	Ground Surface						
0	Gray, silty sand with gravel (SM) (moist, very dense)						
1			S1/GB	-	-	-	-
2							
3			S2/SS	19	50/6"	-	50
4							
5			S3/SS	18	50/6"	-	50
6							
7			S4/SS	50/3"	-	-	50
8							
9	End of Exploratory Boring						
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

N VALUE GRAPH (Last 12")

LEGEND

SAMPLER TYPE

SS - Split Spoon	NQ - Rock Core, 1-7/8"
ST - Shelby Tube	CU - Cuttings-
AWG - Rock Core, 1-1/8"	CT - Continuous Tube

DRILLING METHOD

HSA - Hollow Stem Auger	RW - Rotary Wash
CFA - Continuous Flight Augers	RC - Rock Core
D C - Driving Casing	

KRAZAN AND ASSOCIATES, INC.

LOG OF EXPLORATORY TEST PIT TP-1

PROJECT: JCELC
PROJECT NO.: 102-23021
CONTRACTOR: Bull's Eye Excavation
SAMPLE METHOD: Grab

DATE: 8/28/23
PAGE: 1 of 1
SURFACE ELEV.: ~191 ft.
LOCATION: Port Townsend, WA

DEPTH (ft)	USC SYMBOL	WATER LEVEL	MATERIAL DESCRIPTION	SAMPLE No.	SAMPLE TYPE	Moisture Content and Atterberg Limits ■ 10 20 30 40 50 60 70 80 ■
1			Brown to gray, silty sand with gravel and cobbles (SM) (moist, very dense)	S1		
			-Becomes gray at 1.5 ft.			
2			-15" boulder noted at 2.0 ft.	S2		
3						
4						
				S3		
5						
6						
7				S4		
			-Refusal at 7.5 ft.			
			End of Exploratory Test Pit			
8						

Water Level Initial: ▽ Final: ▼

Water Observations: Groundwater seepage was not encountered.

Notes: Caving was not encountered. Pilot Infiltration Test performed at 2.0 ft.

Logged By: EA

KRAZAN AND ASSOCIATES, INC.

LOG OF EXPLORATORY TEST PIT TP-2

PROJECT: JCELC
PROJECT NO.: 102-23021
CONTRACTOR: Bull's Eye Excavation
SAMPLE METHOD: Grab

DATE: 8/28/23
PAGE: 1 of 1
SURFACE ELEV.: ~191 ft.
LOCATION: Port Townsend, WA

DEPTH (ft)	USC SYMBOL	WATER LEVEL	MATERIAL DESCRIPTION	SAMPLE No.	SAMPLE TYPE	Moisture Content and Atterberg Limits ■ 10 20 30 40 50 60 70 80 ■
0			Brown to gray, silty sand with gravel and cobbles (SM) (moist, very dense)			
1			-Becomes gray at 1.5 ft.			
2				S1		
3						
4						
5				S2		
			-Refusal at 6.0 ft.	S3		
6			End of Exploratory Test Pit			
7						
8						

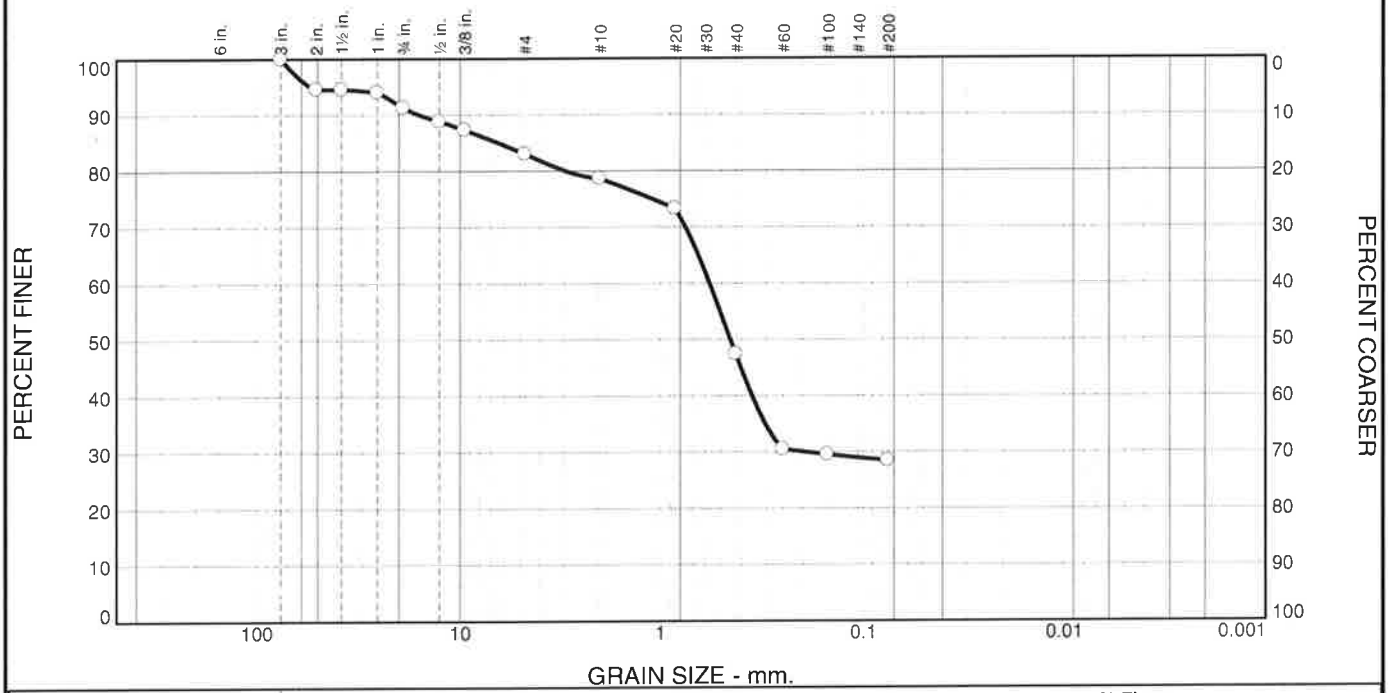
Water Level Initial: ▽ Final: ▼

Water Observations: Groundwater seepage was not encountered.

Notes: Caving was not encountered.

Logged By: EA

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	9	8	4	32	19	28	

Test Results (ASTM D6913 & ASTM D 1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3	100		
2	95		
1.5	95		
1	94		
.75	91		
.5	89		
.375	87		
#4	83		
#10	79		
#20	73		
#40	47		
#60	31		
#100	30		
#200	28		

* (no specification provided)

Material Description

Gray Silty Sand with Gravel

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-2-4(0)

Coefficients

D_{90}= 15.9353 D_{85}= 6.4387 D_{60}= 0.5721
D_{50}= 0.4514 D_{30}= 0.1930 D_{15}=
D_{10}= C_u= C_c=

Remarks

Sample Location: TP1 - S2
Moisture Content: 3.4%

Date Received: 8/29/23 **Date Tested:** 8/30/23

Tested By: AC

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: TP-1 **Depth:** 2.0' **Date Sampled:** 8/28/23

Sample Number: 1049

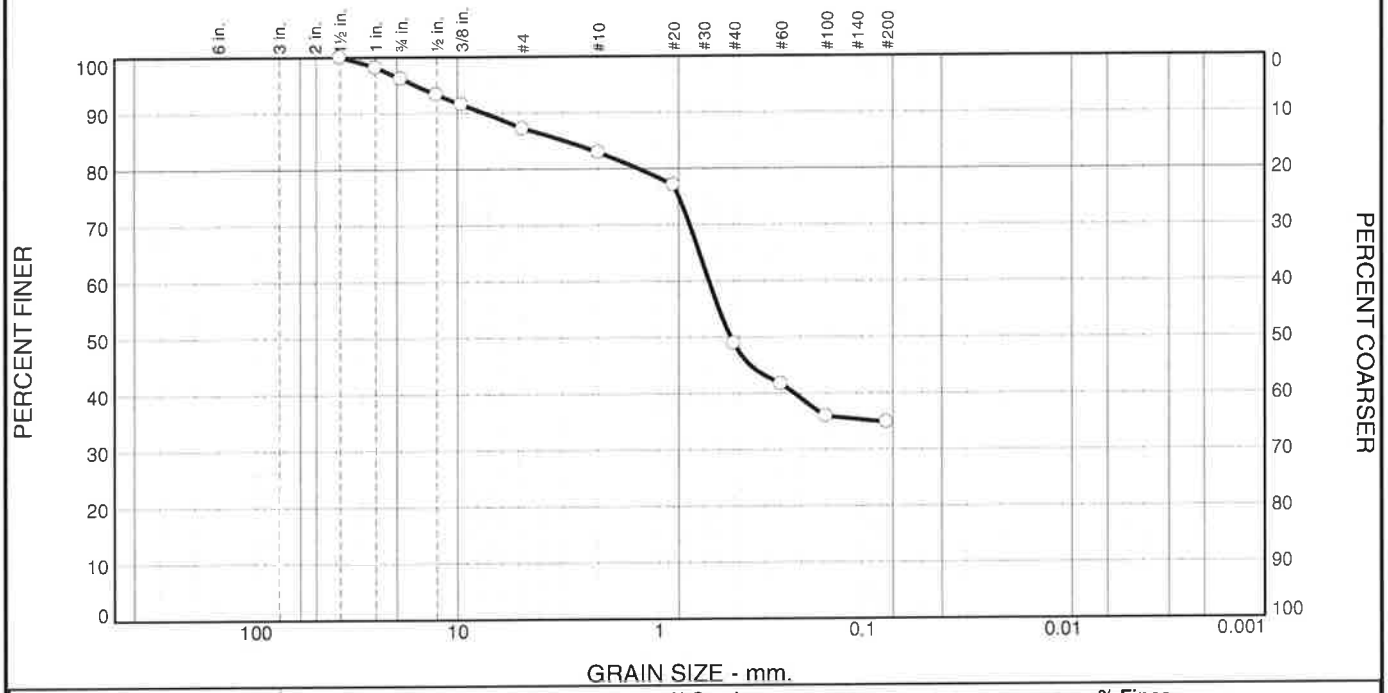
Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	4	9	4	34	14	35	

Test Results (ASTM D6913 & ASTM D 1140)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5	100		
1	98		
.75	96		
.5	93		
.375	92		
#4	87		
#10	83		
#20	77		
#40	49		
#60	42		
#100	36		
#200	35		

* (no specification provided)

Material Description

Gray Silty Sand

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI= NP

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-2-4(0)

Coefficients

D_{90}= 7.3633 D_{85}= 2.9312 D_{60}= 0.5650
D_{50}= 0.4407 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Sample Location: TP1 - S4
Moisture Content: 6.4%

Date Received: 8/29/23 **Date Tested:** 8/30/23

Tested By: JP

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: TP-1 **Depth:** 7.5' **Date Sampled:** 8/28/23

Sample Number: 1048

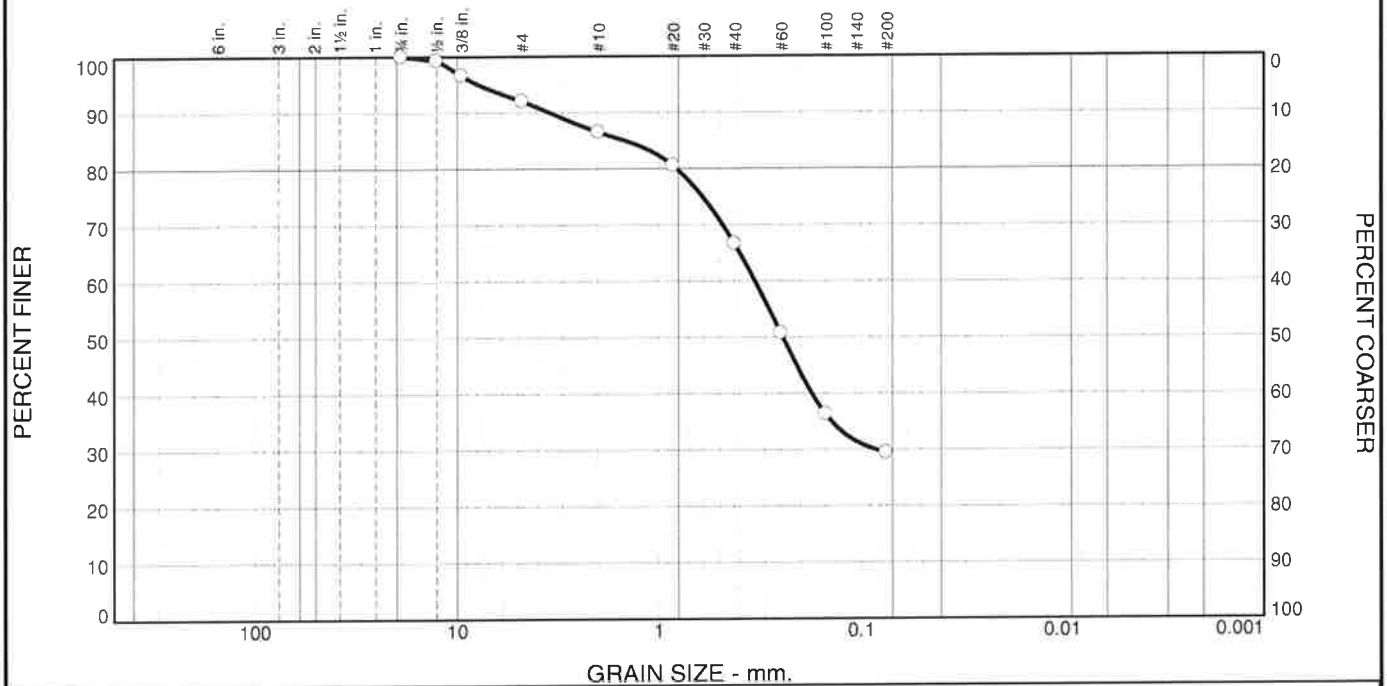
Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	8	5	20	38	29	

Test Results (ASTM D6913 & ASTM D2216)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	100		
.5	99		
.375	97		
#4	92		
#10	87		
#20	81		
#40	67		
#60	51		
#100	36		
#200	29		

* (no specification provided)

Material Description

Grayish Brown Silty Sand

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-2-4(0)

Coefficients

D_{90}= 3.4682 D_{85}= 1.4782 D_{60}= 0.3368
D_{50}= 0.2446 D_{30}= 0.0847 D_{15}=
D_{10}= C_u= C_c=

Remarks

Sample Location: B1-S3
Moisture Content: 3.5%

Date Received: 8/29/23 **Date Tested:** 8/30/23

Tested By: AC

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: B-1 **Depth:** 5.0' **Date Sampled:** 8/28/23

Sample Number: 1050

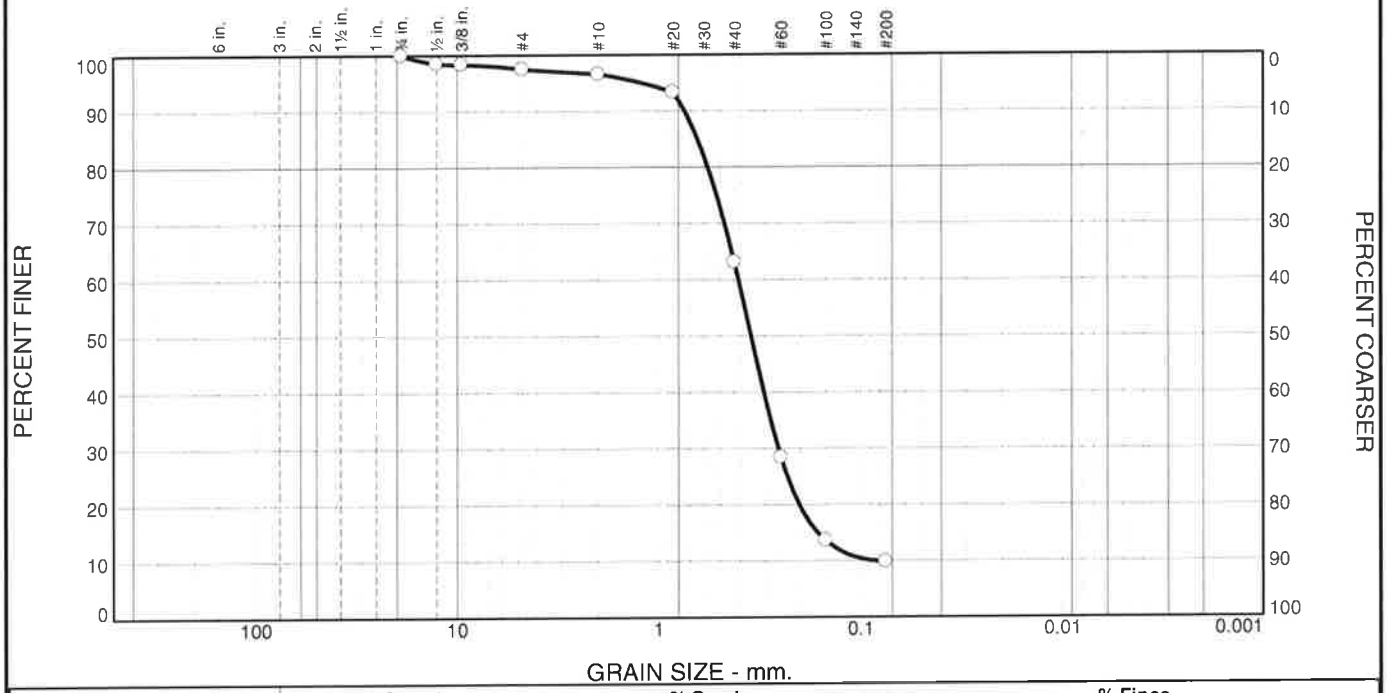
Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	3	0	34	53	10	

Test Results (ASTM D6913 & ASTM D2216)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.75	100		
.5	99		
.375	98		
#4	97		
#10	97		
#20	93		
#40	63		
#60	28		
#100	14		
#200	9.8		

* (no specification provided)

Material Description

Light Brown Poorly Graded Sand w/ Silt

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-3

Coefficients

D_{90}= 0.7458 D_{85}= 0.6456 D_{60}= 0.4054
D_{50}= 0.3510 D_{30}= 0.2578 D_{15}= 0.1644
D_{10}= 0.0856 C_u= 4.74 C_c= 1.91

Remarks

Sample Location: B1-S5
Moisture Content:4.7%

Date Received: 8/30/23 **Date Tested:** 8/30/23

Tested By: AC

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: B-1 **Depth:** 15.0' **Date Sampled:** 8/28/23

Sample Number: 1051

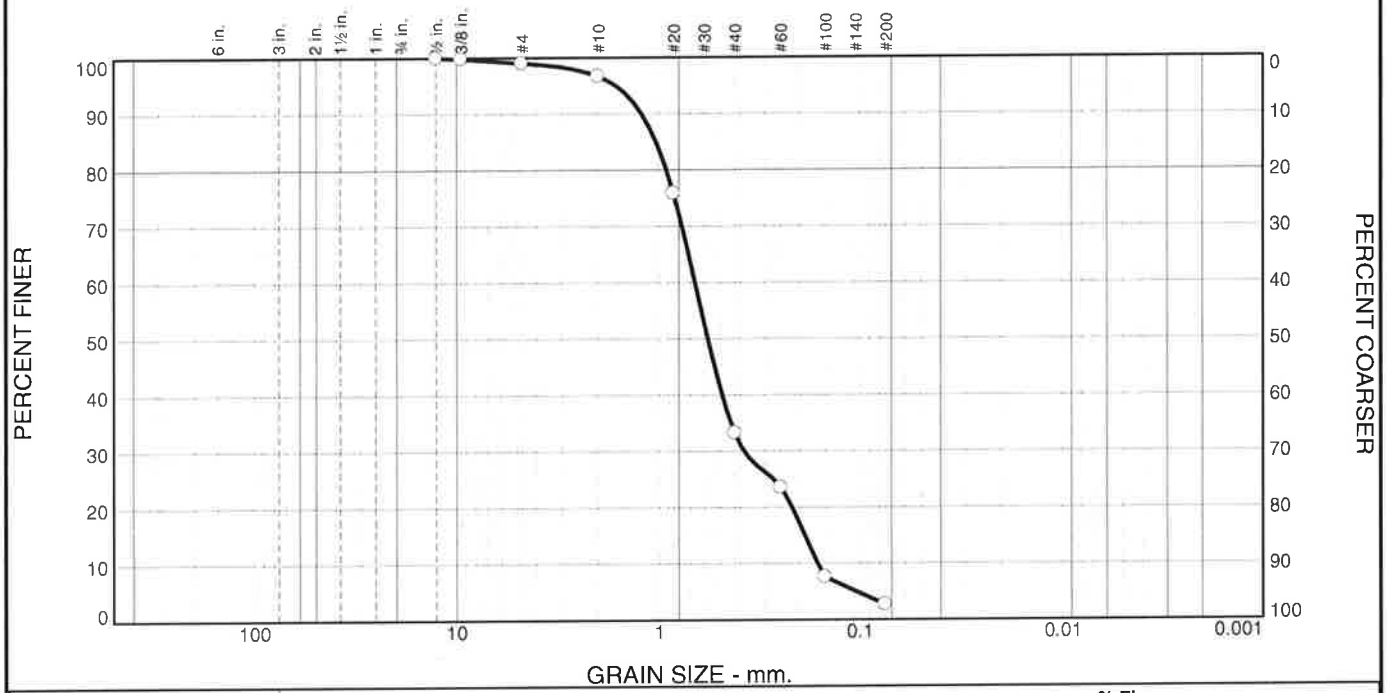
Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	1	2	64	30	3	

Test Results (ASTM D6913 & ASTM D2216)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.5	100		
.375	100		
#4	99		
#10	97		
#20	76		
#40	33		
#60	24		
#100	8		
#200	2.7		

* (no specification provided)

Material Description

Gray Poorly Graded Sand

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

Classification

USCS (D 2487)= SP AASHTO (M 145)= A-1-b

Coefficients

D_{90}= 1.2200 D_{85}= 1.0376 D_{60}= 0.6649
D_{50}= 0.5754 D_{30}= 0.3811 D_{15}= 0.1892
D_{10}= 0.1632 C_u= 4.08 C_c= 1.34

Remarks

Sample location: B2-S6
Moisture Content:7.5%

Date Received: 8/30/23 **Date Tested:** 8/30/23

Tested By: AC

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: B-2 **Depth:** 20.0' **Date Sampled:** 8/28/23

Sample Number: 1052

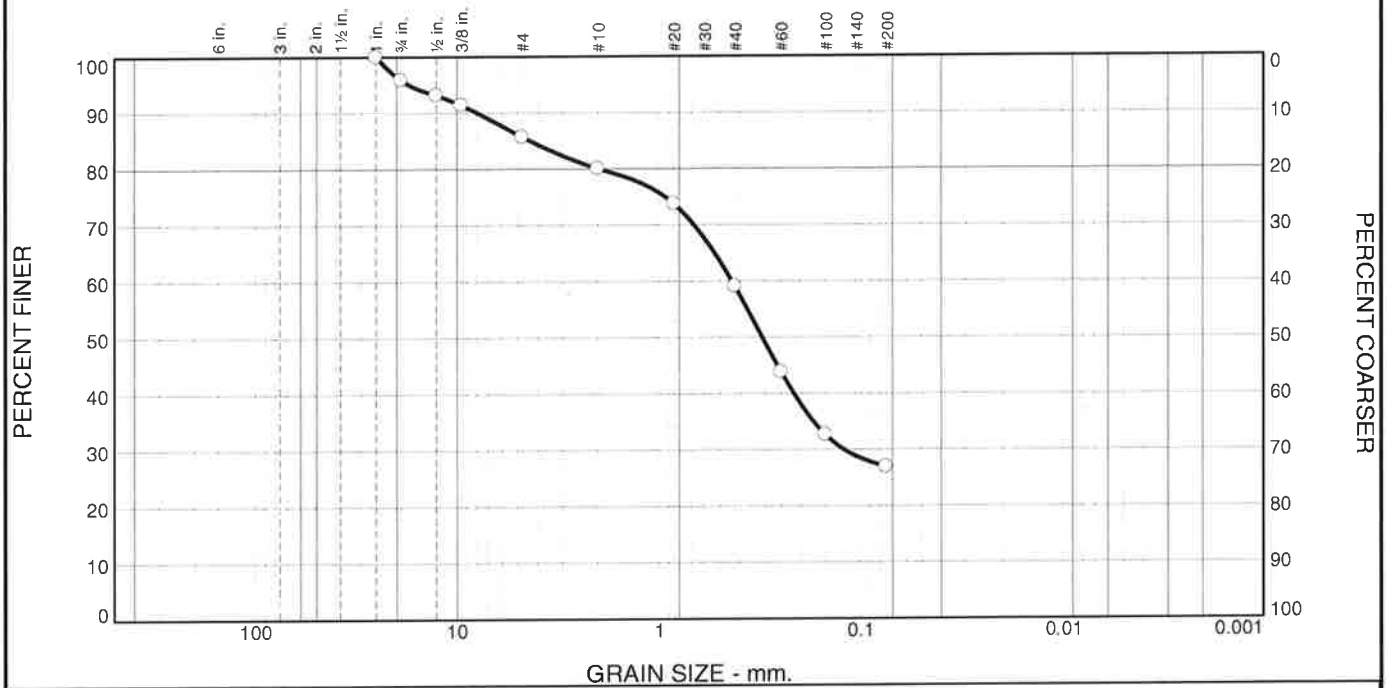
Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	4	10	6	21	32	27	

Test Results (ASTM D 6913 & ASTM D 2216)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1	100		
.75	96		
.5	93		
.375	91		
#4	86		
#10	80		
#20	74		
#40	59		
#60	44		
#100	33		
#200	27		

* (no specification provided)

Material Description

Gray Silty Sand

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-2-4(0)

Coefficients

D_{90}= 7.9287 D_{85}= 4.3373 D_{60}= 0.4396
D_{50}= 0.3104 D_{30}= 0.1211 D_{15}=
D_{10}= C_u= C_c=

Remarks

Sample Location: B3-S2
Moisture Content:5.5%

Date Received: 8/30/23 **Date Tested:** 9/5/23

Tested By: AC

Checked By: Aaron Clyde

Title: Laboratory Manager

Source of Sample: B-3 **Depth:** 5.0' **Date Sampled:** 8/28/23

Sample Number: 1053

Krazan

Client: Olympic Peninsula YMCA

Project: Jefferson County Early Learning Center

Project No: 10223021 **Figure**

APPENDIX B

EARTHWORK SPECIFICATIONS

GENERAL

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including but not limited to the furnishing of all labor, tools, and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans, and disposal of excess materials.

PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of Krazan and Associates, Inc., hereinafter known as the Geotechnical Engineer and/or Testing Agency. Attainment of design grades when achieved shall be certified to by the project Civil Engineer. Both the Geotechnical Engineer and Civil Engineer are the Owner's representatives. If the contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary readjustments until all work is deemed satisfactory as determined by both the Geotechnical Engineer and Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Geotechnical Engineer, Civil Engineer or project Architect.

No earthwork shall be performed without the physical presence or approval of the Geotechnical Engineer. The Contractor shall notify the Geotechnical Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner of the Engineers.

TECHNICAL REQUIREMENTS: All compacted materials shall be densified to a density not less than 95 percent of maximum dry density as determined by ASTM Test Method D1557 as specified in the technical portion of the Geotechnical Engineering Report. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Geotechnical Engineer.

SOIL AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the soil report. The Contractor shall make his own interpretation of the data contained in said report, and the Contractor shall not be relieved of liability under the contractor for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including Court costs of codefendants, for all claims related to dust or windblown materials attributable to his work.

SITE PREPARATION

Site preparation shall consist of site clearing and grubbing and preparations of foundation materials for receiving fill.

CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter, and all other matter determined by the Geotechnical Engineer to be deleterious. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed building areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots larger than 1 inch. Tree root removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill or tree root excavation should not be permitted until all exposed surfaces have been inspected and the Geotechnical Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

SUBGRADE PREPARATION: Subgrade should be prepared as described in our site preparation section of this report.

EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence of the Geotechnical Engineer. Material from the required site excavation may be utilized for construction site fills provided prior approval is given by the Geotechnical Engineer. All materials utilized for constructing site fills shall be free from vegetable or other deleterious matter as determined by the Geotechnical Engineer.

PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. However, compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Geotechnical Engineer.

Both cut and fill shall be surface compacted to the satisfaction of the Geotechnical Engineer prior to final acceptance.

SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Geotechnical Engineer indicates that the moisture content and density of previously placed fill are as specified.

APPENDIX C

PAVEMENT SPECIFICATIONS

1. DEFINITIONS – The term "pavement" shall include asphalt concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

2. SCOPE OF WORK – This portion of the work shall include all labor, materials, tools and equipment necessary for and reasonable incidental to the completion of the pavement shown on the plans and as herein specified, except work specifically noted as "Work Not Included."

3. PREPARATION OF THE SUBGRADE – The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans and as per the pavement design section of this report. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum compaction of 95 percent of maximum dry density as determined by test method ASTM D1557. The finished subgrades shall be tested and approved by the Geotechnical Engineer prior to the placement of additional pavement of additional pavement courses.

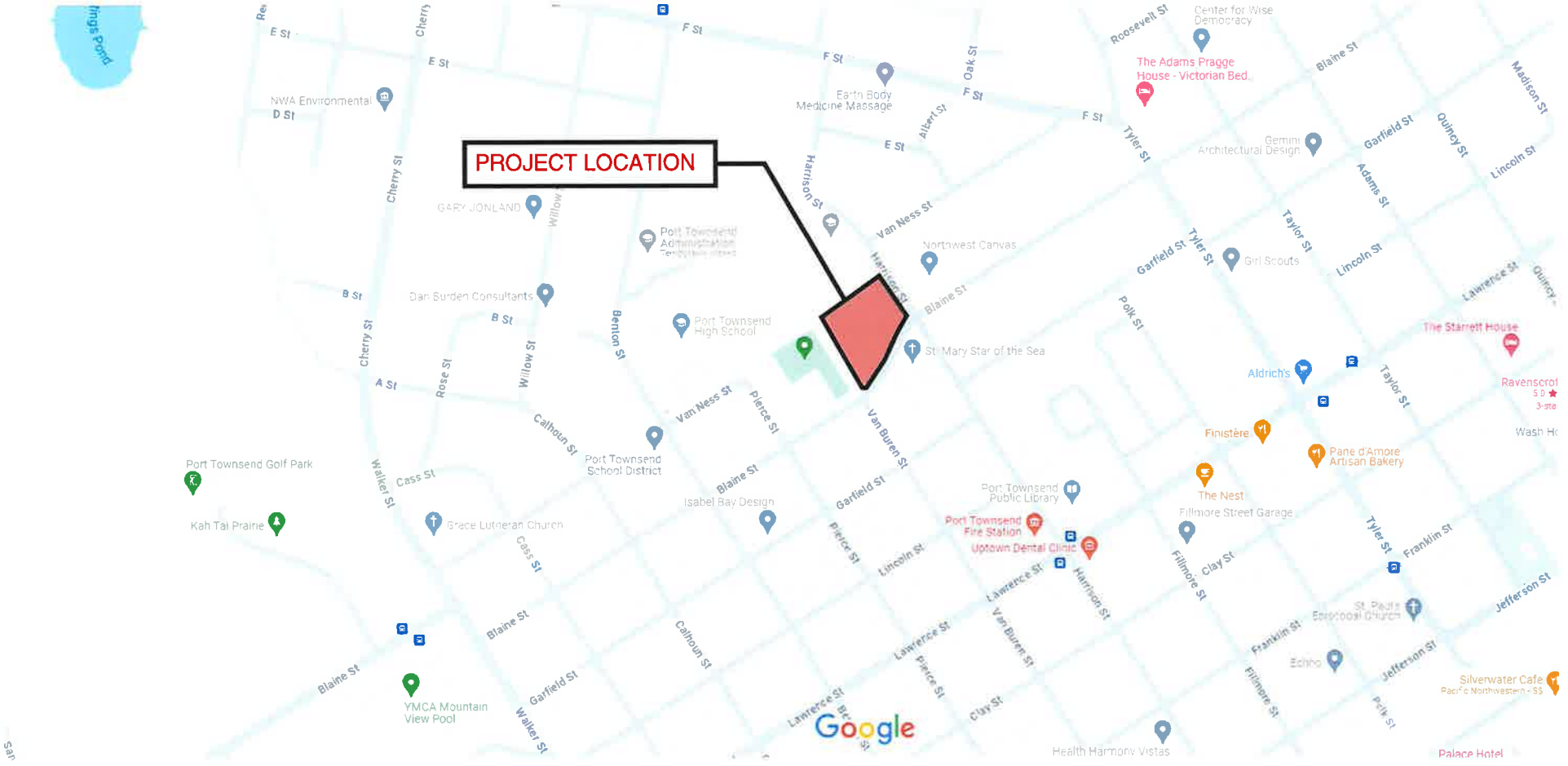
4. AGGREGATE BASE – The aggregate base shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base should conform to WSDOT Standard Specification for Crushed Surfacing Base Course or Top Course (Item 9-03.9(3)). The base material shall be compacted to a minimum compaction of 95 percent as determined by ASTM D1557. Each layer of subbase shall be tested and approved by the Geotechnical Engineer prior to the placement of successive layers.

5. ASPHALTIC CONCRETE SURFACING – Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades, and dimensions shown on the plans. The drying, proportioning, and mixing of the materials shall conform to WSDOT Specifications.

The prime coat, spreading and compacting equipment, and spreading and compacting the mixture shall conform to WSDOT Specifications, with the exception that no surface course shall be placed when the atmospheric temperature is below 50 degrees F. The surfacing shall be rolled with combination steel-wheel and pneumatic rollers, as described in WSDOT Specifications. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

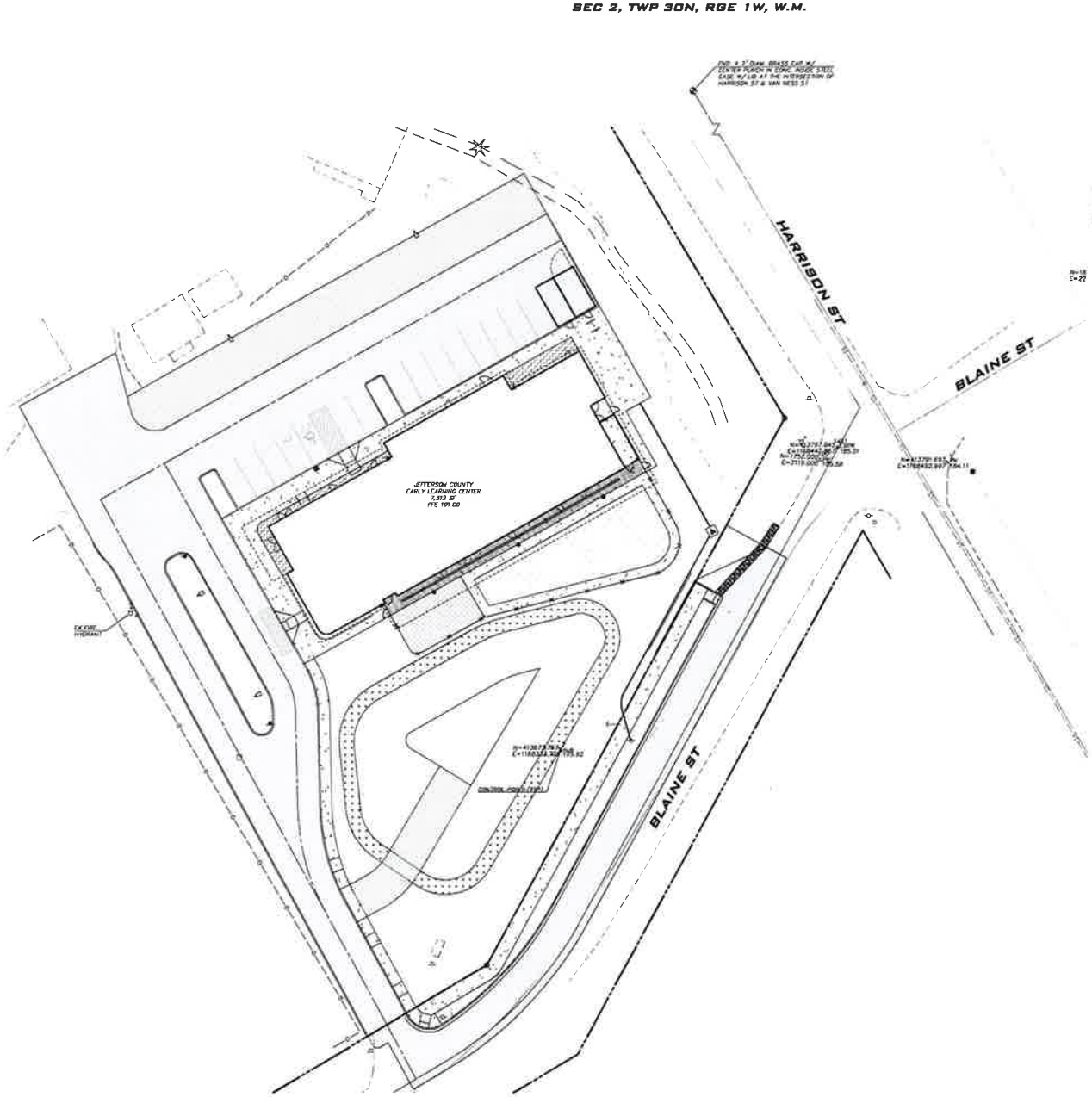
6. TACK COAT – The tack (mixing type asphaltic emulsion) shall conform to and be applied in accordance with the requirements of WSDOT Specifications.

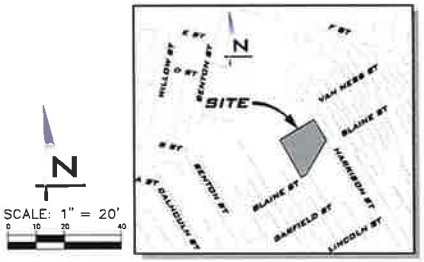
Google Maps



Map data ©2024 200 ft

SEC 2, TWP 30N, RGE 1W, W.M.





VICINITY MAP

SCALE 1"=200

N

SCALE: 1" = 20'

0 10 20 40

BASIS OF BEARINGS

WASHINGTON COORDINATE SYSTEM OF 1983, ADJUSTMENT 1991, NORTH ZONE, NORTH AMERICAN DATUM (NAD 83/91), DETERMINED FROM FIELD MEASUREMENTS TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281
DISTANCES SHOWN HEREON ARE GROUND DISTANCES

VERTICAL DATUM

NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988
ESTABLISHED BY FIELD TIES TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281

SURVEY NOTES

1) THIS MAP IS BASED ON FIELD SURVEY CONDUCTED DURING JULY, 2023

2) UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON FIELD LOCATED STRUCTURES AND THE CITY OF PORT TOWNSEND GIS MAP AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. NO UNDERGROUND UTILITY LOCATES WERE PERFORMED FOR THIS SURVEY.

PROJECT TEAM

ARCHITECT
PRESENT FUTURE ARCHITECTS
1147 N OHIO STREET, #504
CHICAGO, IL 60642
(312) 961-1297
CONTACT: TBD

CIVIL ENGINEER
ATWELL
25 CENTRAL WAY, SUITE 400
KIRKLAND, WA 98033
(425) 250-7234
ENGINEER OF RECORD: BRADY BERRY, PE

OWNER
OLYMPIC PENINSULA YMCA
875 N 5TH AVE, SUITE 3A
SEQUIM, WA 98382
(360) 504-0526
CONTACT: TBD

SURVEYOR
VAN ALLER SURVEYING
P.O. BOX 757
CARLSBORG, WA 98324
(360) 683-3438
CONTACT: BRIAN VAN ALLER, PLS

SITE DATA

SITE ADDRESS: 1300 VAN NESS ST, PORT TOWNSEND, WASHINGTON 98368

TAX ACCOUNT NO
001023006

ZONING
P-I-PUBLIC INFRASTRUCTURE (CITY).
CHILD DAY CARE CENTERS ARE AN ALLOWED USE WITHIN THE P-I ZONING

ZONING AGENCY
CITY OF PORT TOWNSEND PLANNING AND COMMUNITY DEVELOPMENT
250 MADISON STREET
PORT TOWNSEND, WA 98368
(360) 379-5095

THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE GOVERNING JURISDICTION INDICATES THAT STRUCTURES ON THIS PROPERTY COMPLIED WITH MINIMUM SETBACK AND HEIGHT REQUIREMENTS FOLLOWING CONSTRUCTION

SHEET INDEX

1	CV-01	COVER SHEET
2	GN-01	GENERAL NOTES
3	EC-01	EXISTING CONDITIONS
4	TP-01	TESC & DEMO PLAN
5	TP-02	TESC PHASE 2 PLAN
6	TD-01	TESC NOTES & DETAILS
7	HC-01	HORIZONTAL CONTROL PLAN
8	GP-01	GRADING PLAN
9	UP-01	UTILITY PLAN
10	RP-01	ROAD PROFILES
11	RD-01	DETAILS
12	RD-02	DETAILS
13	WA-01	DETAILS
14	DT-01	DETAILS
15	DT-02	DETAILS

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL
25 CENTRAL WAY, SUITE 400
KIRKLAND, WA 98033
PHONE: 425.250.7234
WWW.ATWELL-GROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAMEE, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRUSHNOVA
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

COVER SHEET
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

EXPIRES: 09/29/2025

JOB NUMBER: 23-157
SHEET NAME: CV-01
SHT 1 OF 15

Plot By: Nadia Krushnova
Plot Date: 02/28/2024 - 11:25am - User Name
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GENERAL CONDITIONS

a. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY PRIOR TO THE START OF CONSTRUCTION
b. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF PORT TOWNSEND STANDARDS, THE CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, AND ANY PROJECT-SPECIFIC SPECIAL PROVISIONS OR CONDITIONS AND REQUIREMENTS.
III. TEMPORARY EROSION CONTROL MEASURES ARE REQUIRED AND SHALL COMPLY WITH THE STORMWATER MGT. MANUAL, CHAPTER 5 OF THESE STANDARDS AND WASHINGTON SPECIFICATION 1-07.15 AS FOLLOWS:
(1) EROSION CONTROL PLANS SHALL BE SUBMITTED TO THE CITY, APPROVED BY THE CITY, AND IMPLEMENTED BY THE CONTRACTOR PRIOR TO DISTURBING ANY SOIL ON THE SITE. SUBMITTAL AND APPROVAL OF THESE PLANS SHALL PRECEDE ANY CONSTRUCTION ACTIVITY ON THE SITE.
(2) ALL PERMANENT STORAGE AND RETENTION/DETENTION AREAS USED AS PART OF THE TEMPORARY EROSION CONTROL AND WATER POLLUTION/FLOOD ACTIVITIES AND CONVEYANCE SYSTEMS SHALL BE CLEANED OF ALL SILTS, SAND AND OTHER MATERIALS FOLLOWING COMPLETION OF CONSTRUCTION AND THE PERMANENT FACILITIES SHALL THEN BE COMPLETED INCLUDING PERMANENT INFILTRATION AREAS.
IV. HORIZONTAL AND VERTICAL CONTROL/DATUM AS ADOPTED BY THE CITY SHALL BE USED, UNLESS APPROVED OTHERWISE.
V. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING UNDERGROUND LOCATE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION WORK.
VI. ALL NON-FERROUS PIPE AND SERVICES SHALL BE INSTALLED WITH CONTINUOUS TRACER TAPE INSTALLED 12" TO 18" UNDER THE FINAL GROUND SURFACE, IN MANNER TAPE SHALL BE 4" MDC MINIMUM PLASTIC NON-BIODEGRADABLE METAL CORE OR BACKING MARKED AND COLOR CODED FOR THE UTILITY TO BE MARKED WHICH SHALL BE DETECTED BY A STANDARD METAL DETECTOR. TAPE SHALL BE TERRA TAPE "D" OR APPROVED EQUAL IN ADDITION TO TRACER TAPE, FORCE MAIN SHALL BE MARKED WITH 12 GAUGE COATED COPPER WIRE, WRAPPED AROUND THE PIPE, BROUGHT UP, COATING STRIPPED, AND TIED OFF AT THE VALVE STEM OR MANHOLE. THE TAPE AND WIRE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR
VII. TEMPORARY STREET PATCHING MAY BE ALLOWED WITH THE APPROVAL OF THE CITY ENGINEER. TEMPORARY STREET PATCHING SHALL BE AS DESCRIBED IN CHAPTER 8
VIII. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN(S) FOR REVIEW AND APPROVAL BY THE CITY ENGINEER IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
IX. THE CONTRACTOR SHALL HAVE A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE AT ALL TIMES
X. SPECIAL STRUCTURES SHALL BE INSTALLED PER PLANS AND MANUFACTURERS' RECOMMENDATIONS
XI. ALL DISTURBED AREAS SHALL RECEIVE TEMPORARY AND PERMANENT EROSION CONTROL IN THE FORM OF VEGETATION ESTABLISHMENT SUCH AS GRASS SEEDING. A MEANS SHALL BE ESTABLISHED TO PROTECT THE PERMANENT STORM DRAIN SYSTEM PRIOR TO ESTABLISHMENT OF THE PERMANENT EROSION CONTROL MEASURES. THESE METHODS SHALL BE INCLUDED IN THE EROSION AND SEDIMENT CONTROL PLANS IN ACCORDANCE WITH CHAPTER 5 OF THESE STANDARDS
XII. CONSTRUCTION WORK HOURS SHALL BE RESTRICTED TO 7 A.M. TO 6 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE APPROVED IN WRITING
XIII. THE CITY PUBLIC WORKS INSPECTOR SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF THE NEED FOR AN INSPECTION. EVERY EFFORT WILL BE MADE TO ACCOMMODATE "SAME-DAY" INSPECTIONS IF THE CITY IS NOTIFIED BEFORE 8 AM

WATER GENERAL NOTES

1. GENERAL REQUIREMENTS
a. WATER SYSTEM REFERS TO WATER TREATMENT, STORAGE AND TRANSMISSION FACILITIES FOR DOMESTIC, FIRE PROTECTION, COMMERCIAL AND INDUSTRIAL IRRIGATION, RECREATION AND OTHER USES
b. TREATMENT OF WATER SHALL COMPLY WITH WASHINGTON STATE DEPARTMENT OF HEALTH REQUIREMENTS.
c. ANY EXTENSION OF THE PORT TOWNSEND WATER SYSTEM MUST BE APPROVED BY THE PUBLIC WORKS DEPARTMENT AND ALL EXTENSIONS MUST CONFORM TO THESE STANDARDS, THE PORT TOWNSEND WATER SYSTEM PLAN, THE RULES AND REGULATIONS OF THE DEPARTMENT OF HEALTH (CHAPTER 246-290 WAC), THE PORT TOWNSEND FIRE DEPARTMENT REQUIREMENTS, AND THE WASHINGTON SURVEYING AND RATING BUREAU (SRB)
d. THESE STANDARDS APPLY TO BOTH THE IN-CITY AND OUT-OF-CITY WATER SERVICE AREAS.
e. IN DESIGNING AND PLANNING FOR ANY DEVELOPMENT, IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADEQUATE WATER FOR BOTH DOMESTIC AND FIRE PROTECTION USE IS ATTAINABLE. THE DEVELOPER MUST SHOW, IN THE PROPOSED PLANS, HOW WATER WILL BE PROVIDED, WHETHER THE EXISTING SYSTEM WILL BE ADVERSELY IMPACTED, AND HOW ADEQUATE WATER WILL BE SUPPLIED AT THE REQUIRED PRESSURES IN CASE OF FIRE. A DETAILED HYDRAULIC ANALYSIS OF THE SYSTEM MAY BE REQUIRED, IF IT APPEARS THAT THE SYSTEM MIGHT BE INADEQUATE.
f. ANYONE THAT WISHES TO EXTEND OR CONNECT TO THE CITY'S WATER SYSTEM SHOULD CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR PRELIMINARY INFORMATION AND DISCUSSION OF THE EXTENSION PROPOSED. THE DESIGN OF A WATER SYSTEM EXTENSION IS THE RESPONSIBILITY OF THE DEVELOPER PROPOSING THE CONSTRUCTION AND UPGRADING OF THE PUBLIC WATER SYSTEM
g. PRIOR TO THE INSTALLATION OF ANY WATER METERS, ALL PUBLIC WORKS IMPROVEMENTS MUST BE COMPLETED AND APPROVED INCLUDING GRADING OF RIGHT-OF-WAY OR EASEMENTS, AND ALL APPLICABLE FEES AS SET FORTH IN CHAPTER 3.38 PTWC MUST BE PAID
h. ISSUANCE OF BUILDING PERMITS FOR NEW CONSTRUCTION OF SINGLE FAMILY RESIDENCES WITHIN NEW SUBDIVISIONS SHALL NOT OCCUR UNTIL FINAL PUBLIC WORKS APPROVAL OF ALL IMPROVEMENTS IS GIVEN, UNLESS OTHERWISE ALLOWED THROUGH AN APPROVED IMPROVEMENT METHODS REPORT AND/OR CONSTRUCTION BOND. FOR COMMERCIAL PROJECTS, BUILDING PERMITS MAY BE ISSUED UPON COMPLETION AND ACCEPTANCE OF THE REQUIRED FIRE PROTECTION FACILITIES, PROVIDING THE NECESSARY EASEMENTS HAVE BEEN FILED AND ALL REQUIRED FEES AND CONNECTION CHARGES PAID. CERTIFICATES OF OCCUPANCY WILL NOT BE GRANTED UNTIL FINAL PUBLIC WORKS APPROVAL AND ACCEPTANCE ALL IMPROVEMENTS IS GIVEN.
i. STANDARD REFERENCES
j. EXCEPT AS OTHERWISE SUPERSEDED IN THESE STANDARDS, WATER SYSTEM DESIGN, INSTALLATION, MODIFICATION, AND OPERATION IS SUBJECT TO THE RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH REGARDING PUBLIC WATER SYSTEMS, LATEST REVISION, WAC 246-290
k. WATER FACILITIES DESIGN AND CONSTRUCTION SHALL CONFORM TO APPROPRIATE AWWA AND WSDOT/APWA STANDARD SPECIFICATIONS IN CASES WHERE CONFLICTS EXIST BETWEEN SPECIFICATIONS, THE MORE STRINGENT SHALL BE GIVEN PRECEDENCE BY CITY OF PORT TOWNSEND STANDARDS, AWWA, WASHINGTON DOT/APWA, AND WASHINGTON UNIFORM PLUMBING CODE STANDARDS (LATEST REVISION).
l. WARRANTY. THE DEVELOPER OR OWNER SHALL WARRANTY WATER LINES AND OTHER WATER SYSTEM IMPROVEMENTS FOR ONE YEAR AFTER INSTALLATION, APPROVAL AND ACCEPTANCE BY THE CITY AND SHALL BE RESPONSIBLE FOR ONE YEAR FOR ANY UNANTICIPATED SETTLING OF EXCAVATIONS OR REPAIRS TO RESTORED STREET SURFACES. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY OR THE CITY SHALL PERFORM THE REPAIRS AT THE DEVELOPER'S EXPENSE.
m. TRAFFIC CONTROL. FOR WORK IN OPENED STREETS AND RIGHTS-OF-WAY, THE CONTRACTOR SHALL FOLLOW PROCEDURES DESCRIBED IN CHAPTER 1 OF THESE STANDARDS.
n. NONCOMPLIANCE PENALTY. UTILITY DEVELOPMENT PERMITS MAY BE REVOKED FROM ANY CONTRACTOR NOT COMPLYING WITH THESE SPECIFICATIONS.
o. SURVEY. SEE CHAPTER 1 OF THESE STANDARDS
p. STANDARD DETAILS. ALL CONSTRUCTION SHALL COMPLY WITH CITY STANDARD DETAILS FOR PUBLIC WORK AND AS DETAILED ON THESE PLANS FOR PRIVATE WORK

SEWER GENERAL NOTES

1. GENERAL REQUIREMENTS
a. WASTEWATER SYSTEMS REFER TO THE FACILITIES THAT TRANSPORT, TREAT, AND DISCHARGE WATER-CARRIED WASTE MATERIALS FROM DOMESTIC, COMMERCIAL, AND INDUSTRIAL SOURCES. THIS CHAPTER OF THE STANDARDS ADDRESSES SERVICE CONNECTIONS TO THE EXISTING MAINS AS WELL AS EXTENSIONS, REPAIRS, LIFT STATIONS, AND OTHER SYSTEM IMPROVEMENTS. ANY EXTENSION, REPLACEMENT, OR OTHER IMPROVEMENT OF THE PORT TOWNSEND WASTEWATER SYSTEM MUST BE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ALL EXTENSIONS MUST CONFORM TO THE CURRENT STANDARDS OF THE CITY OF PORT TOWNSEND AND TO DEPARTMENT OF ECOLOGY REGULATIONS. THE MATERIAL CONTAINED IN THESE STANDARDS SHALL BE USED IN CONJUNCTION WITH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY REGULATIONS TO DEVELOP ALL PLANS AND SPECIFICATION FOR CONSTRUCTION OF WASTEWATER FACILITIES. WHERE THERE ARE CONFLICTS OR DIFFERENCES BETWEEN THESE STANDARDS, DOH REGULATIONS AND CITY ORDINANCES, THE DOH REGULATIONS SHALL APPLY FOLLOWED IN ORDER OF PRECEDENCE BY CITY ORDINANCES AND THESE STANDARDS. CITY SEWER SERVICE SHALL NOT BE EXTENDED OUTSIDE THE CITY LIMITS.
b. IN DESIGNING AND PLANNING FOR ANY DEVELOPMENT, IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADEQUATE WASTEWATER SYSTEMS ARE PROVIDED. THE DEVELOPER MUST SHOW, IN THE PROPOSED PLANS, HOW THE DEVELOPMENT WILL BE SERVED BY SEWERS AND WHETHER THE EXISTING SYSTEM CAN ADEQUATELY HANDLE THE FLOWS AND IMPROVEMENTS NECESSARY TO ASSURE THAT THE EXISTING SYSTEM WILL NOT BE ADVERSELY IMPACTED ARE THE RESPONSIBILITY OF THE DEVELOPER. A DETAILED ANALYSIS OF THE SYSTEM MAY BE REQUIRED TO EVALUATE THE CAPACITY OF THE EXISTING HYDRAULIC SYSTEM TO HANDLE THE NEW LOADS.
c. ANYONE THAT WISHES TO EXTEND OR CONNECT TO THE CITY'S WASTEWATER SYSTEM SHOULD CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR PRELIMINARY INFORMATION AND DISCUSSION OF THE EXTENSION PROPOSED. THE DESIGN OF WASTEWATER SYSTEM IMPROVEMENTS IS THE RESPONSIBILITY OF THE DEVELOPER PROPOSING THE CONSTRUCTION AND UPGRADING OF THE PUBLIC WASTEWATER SYSTEM. PRIOR TO ACCEPTANCE BY THE CITY AND THE DISCHARGE OF ANY WASTEWATER, ALL IMPROVEMENTS MUST BE COMPLETED AND APPROVED, AS-BUILTS SUBMITTED, ALL RIGHTS-OF-WAY OR EASEMENTS FILED, AND ALL APPLICABLE FEES AS SET FORTH IN CHAPTER 3.36 PTWC MUST BE PAID.
d. COMMERCIAL PROJECTS. BUILDING PERMITS MAY BE ISSUED UPON COMPLETION AND APPROVAL BY THE PUBLIC WORKS DIRECTOR OF A WASTEWATER DISCHARGE PLAN (INCLUDING PRETREATMENT WHEN NECESSARY). CERTIFICATES OF OCCUPANCY WILL NOT BE GRANTED UNTIL FINAL PUBLIC WORKS APPROVAL AND ACCEPTANCE OF ALL WASTEWATER SYSTEM IMPROVEMENTS IS GIVEN. ALL REQUESTS FOR INSPECTIONS AND FOR WITNESSING TESTS SHALL BE SCHEDULED WITH THE PUBLIC WORKS DEPARTMENT 24 HOURS IN ADVANCE. FAILURE TO GIVE ADEQUATE ADVANCE NOTICE MAY RESULT IN DELAYS TO THE CONTRACTOR FOR REQUIRED INSPECTIONS.
e. WARRANTY. THE DEVELOPER SHALL WARRANTY SEWER MAINS AND OTHER WASTEWATER SYSTEM IMPROVEMENTS FOR ONE YEAR AFTER INSTALLATION, APPROVAL AND ACCEPTANCE BY THE CITY AND SHALL BE RESPONSIBLE FOR ONE YEAR FOR ANY UNANTICIPATED SETTLING OF EXCAVATIONS OR REPAIRS TO RESTORED STREET SURFACES. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY OR THE CITY SHALL PERFORM THE REPAIRS AT THE DEVELOPER'S EXPENSE.
f. TRAFFIC CONTROL. FOR WORK IN OPENED STREETS AND RIGHTS-OF-WAY, THE CONTRACTOR SHALL FOLLOW PROCEDURES DESCRIBED IN CHAPTER 1 OF THESE STANDARDS.
g. NONCOMPLIANCE PENALTY. UTILITY DEVELOPMENT PERMITS MAY BE REVOKED FROM ANY CONTRACTOR NOT COMPLYING WITH THESE SPECIFICATIONS.
h. SURVEY. SEE CHAPTER 1 OF THESE STANDARDS
i. STANDARD DETAILS. ALL CONSTRUCTION SHALL COMPLY WITH CITY STANDARD DETAILS

STORM GENERAL NOTES

1. GENERAL
a. THE STANDARDS ESTABLISHED BY THIS CHAPTER ARE INTENDED TO REPRESENT THE MINIMUM STANDARDS FOR THE DESIGN AND CONSTRUCTION OF STORM DRAINAGE FACILITIES DRAINAGE CONTROL AND STORMWATER QUALITY ENHANCEMENT SHALL BE PROVIDED ON ALL DEVELOPED PROPERTY WITHIN THE CITY OF PORT TOWNSEND PER THESE STANDARDS, THE CITY'S DRAINAGE ORDINANCE, STORMWATER MANAGEMENT PLAN AND THE ENVIRONMENTALLY SENSITIVE AREAS ORDINANCE.
b. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED LOCAL, STATE AND FEDERAL PERMITS RELATED TO STORMWATER
c. EROSION CONTROL REQUIREMENTS COVERED UNDER CHAPTER 5 OF THESE STANDARDS SHALL ALSO BE REQUIRED AND SHALL BE CONSIDERED IN CONJUNCTION WITH THIS SECTION IN DESIGNING DRAINAGE CONTROL.
d. CITY CITY BUT SHALL BE MADE FOR SURFACE WATER ENTERING THE SUBJECT PROPERTY TO BE RECEIVED AT THE NATURALLY OCCURRING LOCATION AND SURFACE WATER EXITING THE SUBJECT PROPERTY SHALL BE DISCHARGED AT THE NATURALLY OCCURRING LOCATION WITH ADEQUATE ENERGY DISSIPATERS TO PREVENT EROSION. THE DISCHARGE RATE OF FLOW AFTER DEVELOPMENT SHALL NOT EXCEED THE RATE OF FLOW PRIOR TO DEVELOPMENT FOR THE DESIGN STORM(S)
e. SURFACE WATER ENTERING THE SUBJECT PROPERTY SHALL BE CONVEYED TO THE NEAREST ESTABLISHED, STABLE DRAINAGE COURSE BY PIPE OR AN APPROVED SWALE IN A MANNER THAT WILL NOT RESULT IN EROSION OR FLOODING. SUFFICIENT DOWNSTREAM INFORMATION AND ANALYSIS SHALL BE PROVIDED TO ENABLE THE CITY TO DETERMINE THAT THIS REQUIREMENT IS BEING MET. PRIVATE EASEMENTS WILL BE REQUIRED IF CONVEYANCE MUST OCCUR ACROSS PRIVATE PROPERTY
f. ROOFTOP DRAINAGE SHALL BE ADDRESSED FOR ALL DEVELOPMENT PROJECTS. IN ALL CASES, THE METHOD SELECTED WILL BE SUBJECT TO APPROVAL BY THE PUBLIC WORKS DEPARTMENT, WITH CONSIDERATIONS GIVEN TO SITE SOIL TYPES, SLOPE CONDITIONS, AND THE NATURE OF THE DEVELOPMENT. THE ACCEPTABLE METHODS FOR DISPOSAL OF ROOFTOP DRAINAGE ARE
i. DISCHARGE TO THE SITE'S STORM DRAIN SYSTEM (PRIVATE OR PUBLIC)
ii. DISCHARGE TO A SUITABLE RESIDENTIAL ROOF DOWNSPOUT ON SITE DISPOSAL SYSTEM

2. MINIMUM REQUIREMENTS
a. ALL DEVELOPMENTS SHALL COMPLY WITH THE DOE STORMWATER MANAGEMENT MANUAL, CITY ENGINEERING DESIGN STANDARDS, CITY STORMWATER MASTER PLAN AND ADOPTED DRAINAGE BASIN PLANS FOR ALL CLEARING AND GRADING ACTIVITIES, FOR EROSION CONTROL DURING CONSTRUCTION AND FOR PERMANENT DRAINAGE SYSTEM IMPROVEMENTS
b. SURFACE WATER ENTERING THE SUBJECT PROPERTY SHALL BE RECEIVED AT THE NATURALLY OCCURRING LOCATIONS AND SURFACE WATER EXITING THE SUBJECT PROPERTY SHALL BE DISCHARGED AT THE NATURAL LOCATIONS WITH ADEQUATE ENERGY DISSIPATERS WITHIN THE SUBJECT PROPERTY TO MINIMIZE DOWNSTREAM DAMAGE
c. ALL DEVELOPERS SHALL DO THE NECESSARY ANALYSIS AND INSTALL THE NECESSARY MITIGATION MEASURES TO ENSURE THAT SURFACE WATER ENTERING OR EXITING THE PROPERTY IS DISCHARGED AT A SAFE LOCATION WHICH WILL NOT IMPACT OTHER PROPERTY OWNERS.
d. ALL STRUCTURES SHALL BE BUILT SUCH THAT FINISHED FLOOR ELEVATIONS ARE IN CONFORMANCE WITH SECTION 1806.4.5 ("FOUNDATION ELEVATION") OF THE UNIFORM BUILDING CODE.
e. BUILDING PLANS SHALL CLEARLY SHOW LOCATIONS OF DRAINAGE SYSTEM AND STORMWATER CONTROLS WITHIN PROPERTY LIMITS AND ANY OFF-SITE DRAINAGE IMPROVEMENTS.
f. WAIVERS FROM THE REQUIREMENTS OF THIS SECTION MAY BE PERMITTED ONLY AFTER A DETERMINATION BY THE PUBLIC WORKS DIRECTOR, USING THE STORMWATER MASTER PLAN AND/OR USING THE FOLLOWING CRITERIA
i. SUFFICIENT CAPACITY OF DOWNSTREAM FACILITIES UNDER DESIGN CONDITIONS;
ii. MAINTENANCE OF THE INTEGRITY OF THE RECEIVING WATERS;
iii. POSSIBILITY OF ADVERSE EFFECTS OF RETENTION/DETENTION
iv. UTILITY OF REGIONAL RETENTION/DETENTION FACILITIES
v. DIFFICULTY OF MAINTENANCE OF THE SYSTEM, AND
vi. STRUCTURAL INTEGRITY OF ABUTTING FOUNDATIONS AND STRUCTURES
g. REQUESTS FOR WAIVERS SHALL BE FILED IN WRITING TO THE DIRECTOR AND SHALL ADEQUATELY DETAIL THE BASIS FOR THE REQUEST. ALL DEVELOPERS NOT PROVIDING PERMANENT STORMWATER CONTROL FACILITIES WILL BE REQUIRED TO SIGN A NO-PROTEST AGREEMENT FOR FUTURE PARTICIPATION IN A STORMWATER-RELATED LID

LEGAL NOTES

1. ALL LABOR, MATERIALS, WORKMANSHIP, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS OF ANY AND ALL APPLICABLE AGENCIES, PERMITTING AUTHORITIES, AND OTHER GOVERNMENTAL ENTITIES, AND THE PLANS. WHERE CONFLICTS OR OMISSIONS EXIST, THE MORE STRINGENT OF THE PLANS OR APPLICABLE JURISDICTIONAL STANDARDS SHALL DICTATE. CONTRACTOR SHALL BRING ALL CONFLICTS TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK RELATED TO SUCH CONFLICT. SUBSTITUTION AND/OR DEVIATION FROM THE PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
2. THIS PLAN IS NOT VALID UNLESS IT BEARS THE SIGNATURE AND SEAL OF THE LICENSED PROFESSIONAL IDENTIFIED IN THIS PLAN. THIS PLAN IS NOT VALID IF IT IS COPIED, OR IF IT IS WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THE LICENSED PROFESSIONAL SHOWN HEREON.
3. THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMED HEREON. THIS PLAN DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WITHOUT EXPRESS WRITTEN CERTIFICATION BY THE LICENSED PROFESSIONAL NAMING SAID PERSON, PERSONS, OR ENTITY.
4. THE LICENSED PROFESSIONAL SHALL NOT BE HELD LIABLE FOR ANY THIRD PARTY'S USE OR INTERPRETATION OF THE DRAWINGS OR REVISIONS TO SAME WITHOUT THE APPROVAL OF THE LICENSED PROFESSIONAL.
5. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATIONS OF PROJECT FEATURES IN ACCORDANCE WITH THE SEALED PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
6. CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.
7. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, AND TECHNIQUES OF EXECUTING ITS WORK, INCLUDING SAFETY.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S ACTS OR OMISSIONS AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER AND APPLICABLE JURISDICTION.
9. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE CONSTRUCTION. ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER. ANY WORK DONE WITHOUT VERIFICATION IS DONE SO AT THE CONTRACTORS RISK AND EXPENSE IF ERRORS OCCUR.
10. THE EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN LOCATED BASED ON THE INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE PROFESSIONAL ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. CONTRACTOR SHALL PROMPTLY CONTACT THE APPLICABLE ONE CALL AUTHORITY PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE LOCATION OF EXISTING FACILITIES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR TO THE EXTENT OF CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
11. THE CONTRACTOR SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), THE STATE DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARD INDEXES, AND MUNICIPAL STANDARDS. IF APPLICABLE, PRIOR TO START OF CONSTRUCTION WITHIN ANY RIGHT-OF-WAY, THE CONTRACTOR SHALL PROVIDE A FULL MAINTENANCE OF TRAFFIC PLAN TO THE APPROPRIATE JURISDICTION FOR REVIEW AND APPROVAL. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND WARNINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC ALONG ALL EXISTING ROADWAYS.
12. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, STANDARD DETAILS, AND ANY APPLICABLE LAWS, REGULATIONS, AND STANDARDS ISSUED BY THE CONTROLLING AGENCY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN HAND BEFORE BEGINNING ANY CONSTRUCTION. ANY PENALTIES, STOP WORK ORDERS OR ADDITIONAL WORK RESULTING FROM THE CONTRACTOR BEING IN VIOLATION OF THE REQUIREMENTS ABOVE SHALL BE FULLY BORNE BY THE CONTRACTOR.

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAIR, PE
PROJECT ENGINEER: BRADY BORYC, PE
DESIGNER: NADIA KRISHNOVA
ISSUE DATE: 01/28/2024

NO	DATE	BY	REVISIONS

GENERAL NOTES
JCELC
CIVIL PLANS
03/28/2024
CITY OF PORT TOWNSEND WASHINGTON

DRAFTED BY

JOB NUMBER: 23-157
SHEET NAME: GN-01
SHT 2 OF 15

24-16
Feb 29, 2024 - 11:25am - User Name
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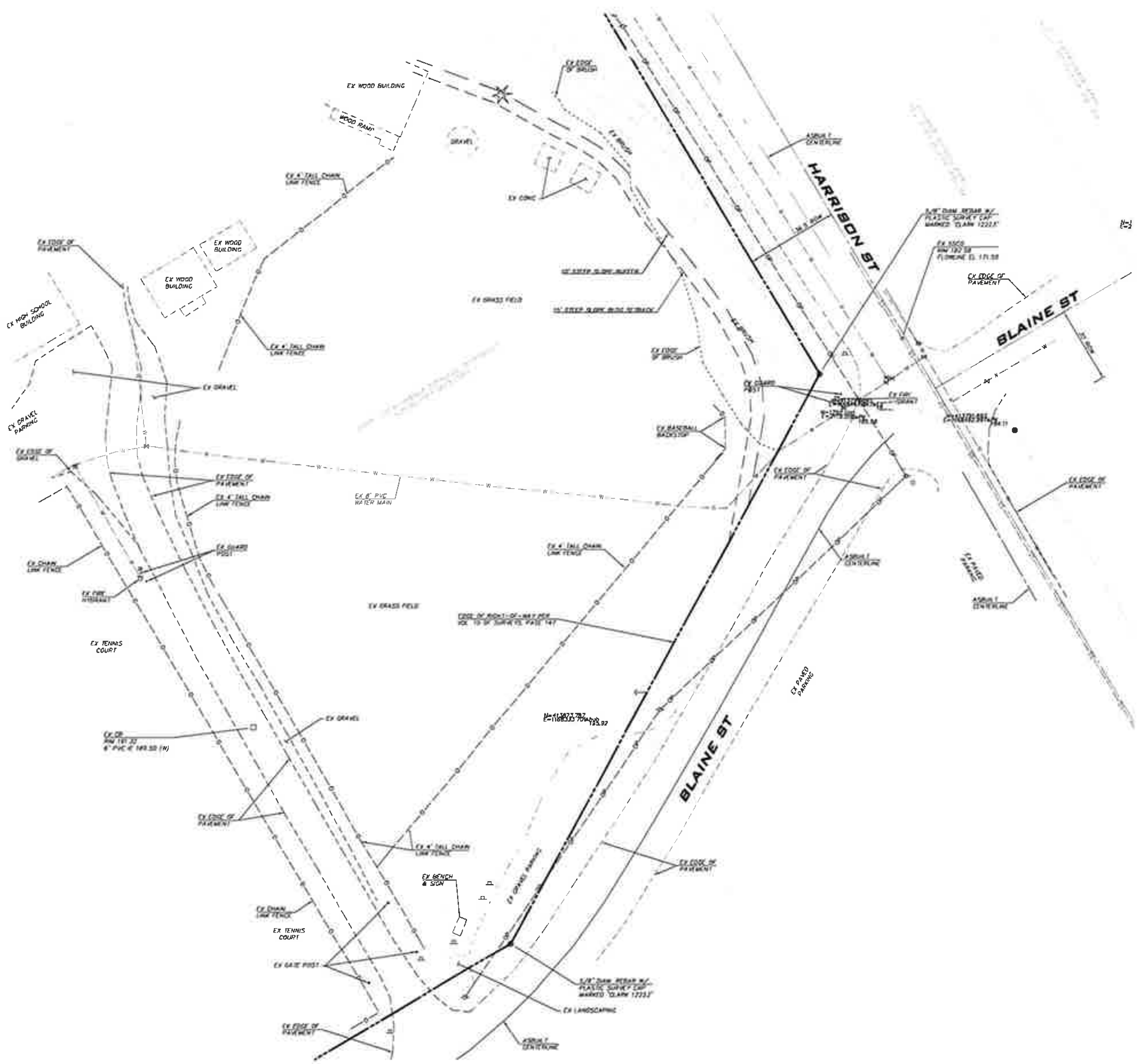
SEC 2, TWP 30N, RGE 1W, W.M.



SCALE: 1" = 20'

EXISTING FEATURES

- ADJACENT PLAT/PARCEL LINE
- ADJACENT RIGHT-OF-WAY
- CENTERLINE
- EASEMENT
- SURFACE FEATURES
- BUILDING FOOTPRINT
- TOP OF 40% SLOPE
- STEEP SLOPE BUFFER
- EDGE OF WETLAND
- WETLAND BUFFER
- 10' CONTOURS
- 2' CONTOURS
- SD — STORM DRAIN PIPE
- SS — SEWER MAIN
- SSS — SANITARY SEWER SERVICE
- FM — SEWER FORCE MAIN
- W — WATER MAIN
- OHP — AERIAL POWER LINE
- P — BURIED POWER LINE
- G — GAS MAIN
- C — BURIED CABLE
- TV — BURIED TV
- OTV — AERIAL TV
- T — BURIED TELEPHONE LINE
- OHT — AERIAL TELEPHONE LINE
- P/T — BURIED POWER/TELEPHONE
- OHPT — AERIAL POWER/TELEPHONE
- OHU — AERIAL UTILITIES
- FO — BURIED FIBER OPTIC CABLE
- X — WIRE FENCE
- O — CHAINLINK FENCE
- □ — BOARD FENCE
- DITCH OR SWALE
- RAILROAD
- GUARD RAIL
- RETAINING WALL
- ROCKERY
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- SD PIPE FLOW
- YARD DRAIN
- STORM CLEANOUT
- STORM DRAIN STUB
- STORM CULVERT END
- SEWER MANHOLE
- SEWER CLEANOUT
- SS PIPE FLOW
- SEWER STUB
- SEPTIC LID
- FIRE HYDRANT
- WATER METER
- GATE VALVE
- WATER MANHOLE
- AIR/VAC RELEASE VALVE
- BLOW OFF
- IRRIGATION METER
- IRRIGATION VALVE
- WATER WELL
- HOSE BIB
- POWER POLE
- GUY ANCHOR
- STREET LIGHT
- POLE LIGHT
- POWER VAULT
- TRANSFORMER
- POWER METER
- JUNCTION BOX
- GAS METER
- GAS VALVE
- FIBER OPTICS MANHOLE
- TV RISER
- TELECOMM VAULT
- TELECOMM RISER
- TELECOMM JUNCTION BOX
- TRAFFIC SIGNAL
- MAIL BOX
- SIGN
- BOLLARD
- SOIL LOG TEST PIT
- CONIFEROUS TREE
- DECIDUOUS TREE
- CONIFEROUS TREE TO BE SAVED
- DECIDUOUS TREE TO BE SAVED

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KROUNOVA
ISSUE DATE: 02/28/2024

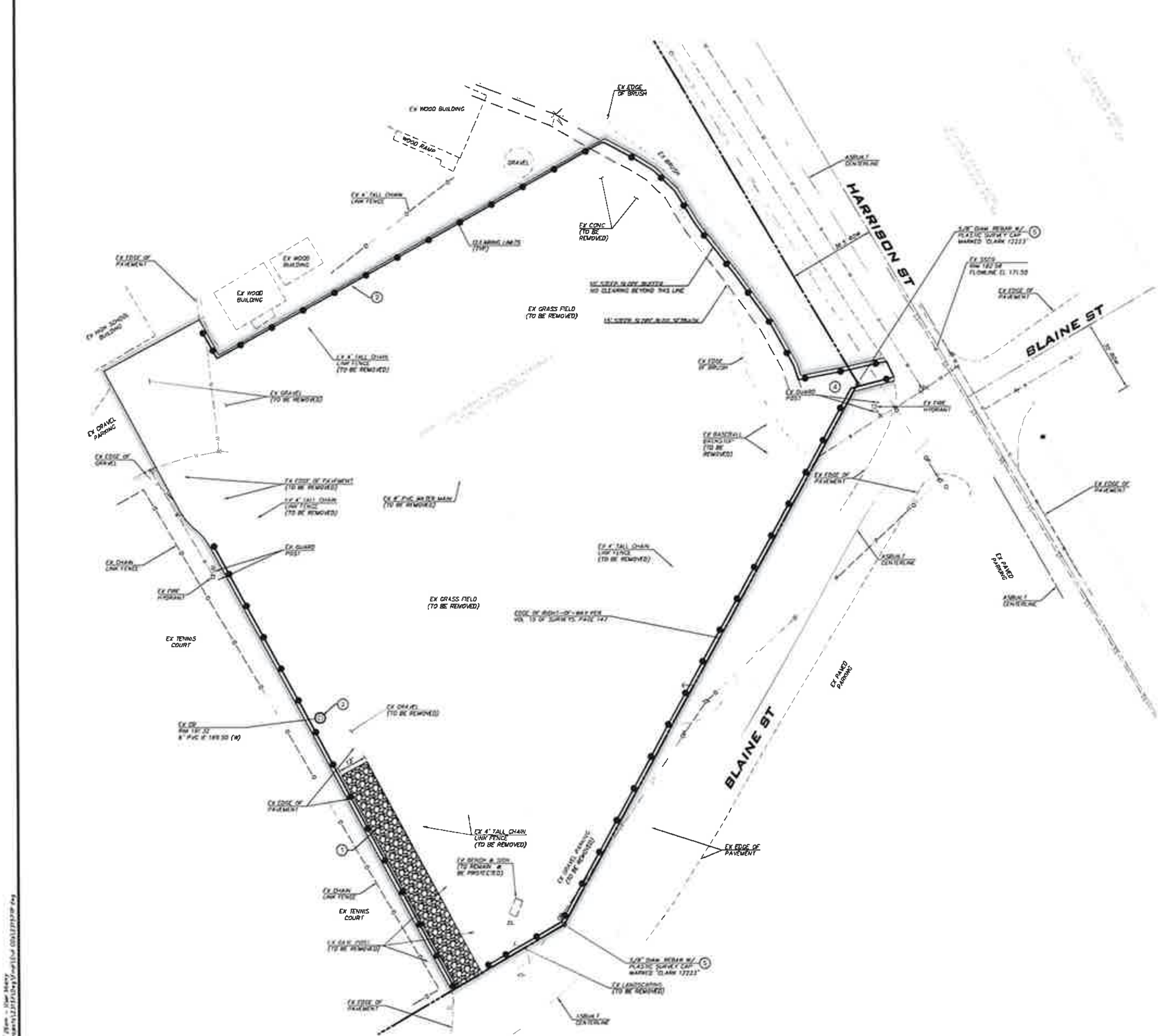
NO	DATE	BY	REVISIONS

EXISTING CONDITIONS

JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157
SHEET NAME: EC-01
SHT 3 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



N

SCALE: 1" = 20'

0 10 20 40

KEY NOTES

1. GRAVEL CONSTRUCTION ENTRANCE PER CITY DETAIL EC-6
2. FILTER FABRIC FENCE PER CITY DETAIL EC-7
3. FILTER FABRIC INLET FENCE PER CITY DETAIL EC-3
4. ON STEEP SLOPES FOR UTILITY TRENCHING, PLACE JUTE MAT OVER ROUGHENED SURFACE AND SEED AND MULCH WITH STRAW COVER.
5. PROTECT OR REFERENCE AND REPLACE PER STATE AND LOCAL REQUIREMENTS

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

WWW.ATWELL-GROUP.COM

SCALE: AS NOTED

PROJECT MANAGER: KIMBERLY MCNABB, PE

PROJECT ENGINEER: BRADY BERRY, PE

DESIGNER: NADIA KRGUMOVA

ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

TESC & DEMO PLAN

JCELC

CIVIL PLANS

02/28/2024

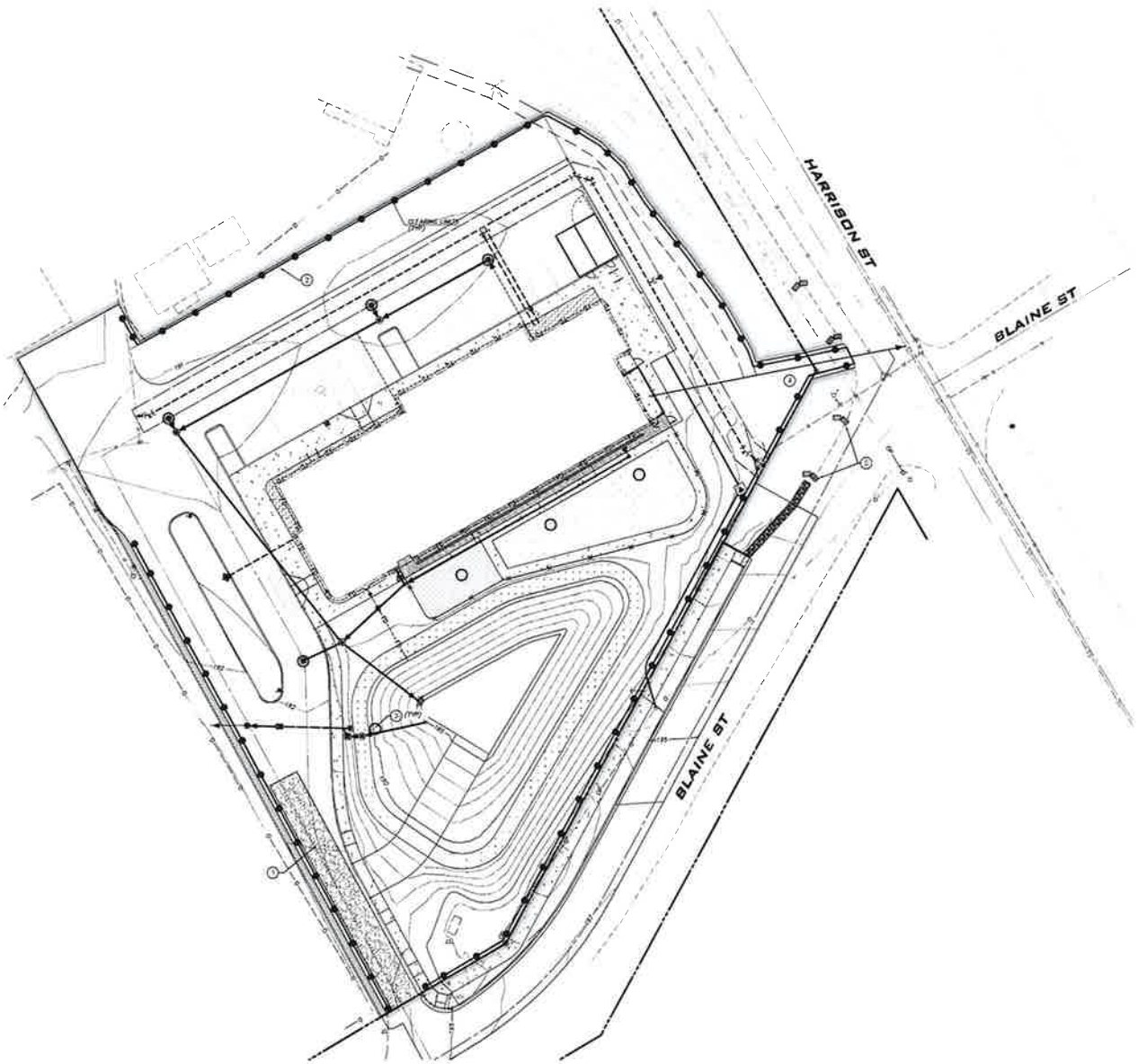
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157

SHEET NAME: TP-01

SHT 4 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



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SCALE: 1" = 20'

KEY NOTES

1. GRAVEL CONSTRUCTION ENTRANCE PER CITY DETAIL EC-6. MAINTAIN UNTIL FINAL SURFACING
2. FILTER FABRIC FENCE PER CITY DETAIL EC-7. ADJUST AS NECESSARY TO ALLOW FOR COMPLETION OF THE WORK. INSTALL WADDLES AS NECESSARY TO SUPPLEMENT FENCING WHEN PROTECTING NEW SLOPES
3. FILTER FABRIC INLET FENCE PER CITY DETAIL EC-3. PROTECT UNTIL FINAL SURFACING IN PLACE. INSTALL SILT SACKS AS NECESSARY TO PROTECT DURING FINAL SURFACING.
4. ON STEEP SLOPES FOR UTILITY TRENCHING, PLACE JUTE MAT OVER ROUGHENED SURFACE AND SEED AND MULCH WITH STRAW COVER.
5. INSTALL HAY BALES OR WADDLES AT EDGE OF PAVEMENT AT 20 O.C. TO PROVIDE SLOPE/DITCH PROTECTION UNTIL ALL WORK IS COMPLETE AND FINAL STABILIZATION ESTABLISHED.

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: KINDLY KRUGANOVA
ISSUE DATE: 03/28/2024

NO	DATE	BY	REVISIONS

TESC PHASE 2 PLAN

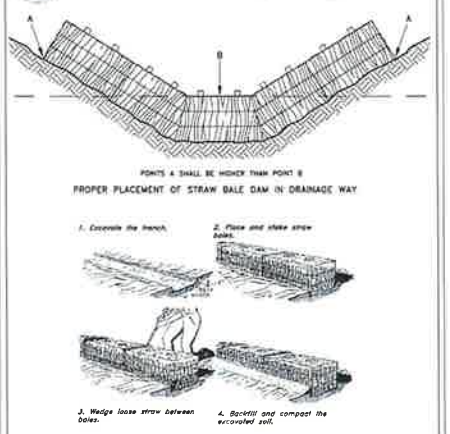
JCELC
CIVIL PLANS
03/28/2024

CITY OF PORT TOWNSEND WASHINGTON

03/28/24

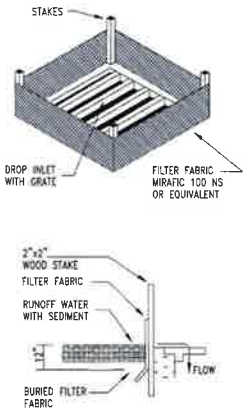
JOB NUMBER: 23-157
SHEET NAME: TP-02
SHT 5 OF 15

City of Port Townsend - Public Works Department
Standard Detail



Erosion Control
Straw Bale Barrier
Detail: EC-1

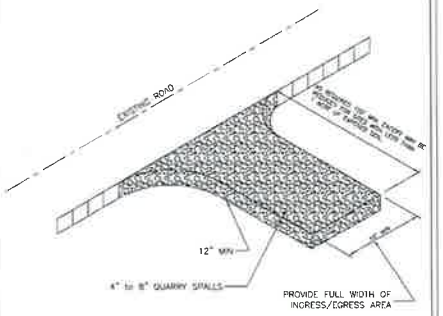
City of Port Townsend - Public Works Department
Standard Detail



NOTE:
SAND BAGS MAY BE USED IN PLACE OF FILTER FENCE WHEN FILTER FABRIC IS IMPRACTICAL.

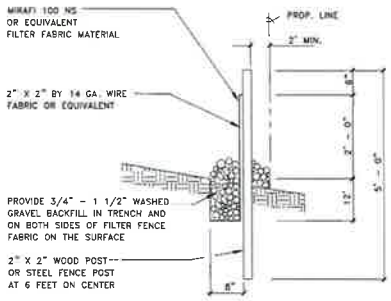
Erosion Control
Filter Fabric Inlet Fence
Detail: EC-3

City of Port Townsend - Public Works Department
Standard Detail



Erosion Control
Construction Entrance
Detail: EC-6

City of Port Townsend - Public Works Department
Standard Detail



Detail: EC-7

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTONB11.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAMEE, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: HAIDA KRISUNOVA
ISSUE DATE: 03/28/2024

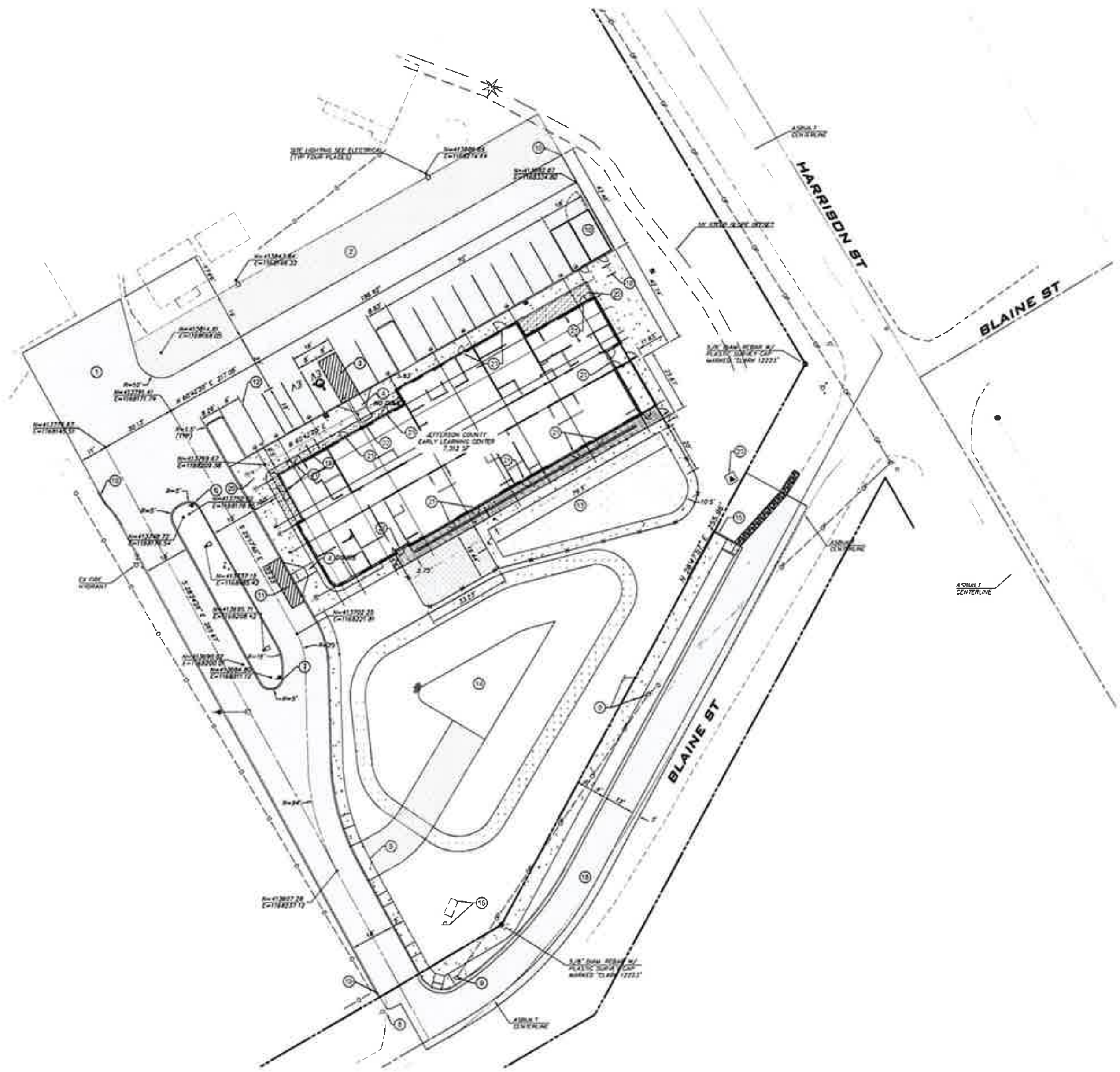
NO	DATE	BY	REVISIONS

TESC NOTES & DETAILS
JCELC
CIVIL PLANS
03/28/2024
CITY OF PORT TOWNSEND WASHINGTON

DP.M/11/25

JOB NUMBER: 23-157
SHEET NAME: TD-01
SHT 6 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



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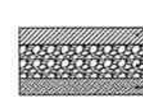
SCALE: 1" = 20'

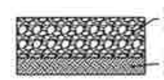
KEY NOTES

1. ASPHALT PAVING SEE DETAIL THIS SHEET
2. GRAVEL PAVING SEE DETAIL THIS SHEET
3. ACCESSIBLE STRIPING AND SIGNING SEE DETAIL SHEET 11
4. CURB RAMP SEE DETAILS 11
5. DRIVEWAY APRON. SEE DETAILS 11
6. "DO NOT ENTER" SIGN 10
7. "ONE WAY" SIGN 10
8. EXISTING STOP SIGN TO REMAIN
9. POWER POLES AND GUY LINES TO REMAIN
10. TRASH ENCLOSURE AND FREEZER. SEE ARCHITECTURAL
11. YELLOW LOADING ZONE STRIPING
12. 4" WHITE PARKING TRAFFIC RATED PAINT
13. OUTDOOR PLAY AREA. SEE LANDSCAPE PLANS
14. STORMWATER POND. SEE GRADING AND LANDSCAPE PLANS
15. DESIGN BUILD KEYSTONE (OR EQUAL) MSE RETAINING/LANDSCAPE WALL
16. EXISTING SIGN AND BENCH TO REMAIN
17. BLAIN STREET IMPROVEMENTS SEE SHEET 9
18. BIKE PARKING SEE ARCHITECTURAL
19. CURB ENDING SEE DETAILS
20. SEE ARCHITECTURAL FOR SIDEWALK DETAILING AT EXTERIOR COLUMNS AND STRUCTURE FOR LOCATION
21. EXTERIOR DOORS (TYP). SEE STRUCTURAL FOR DETAILING OF SIDEWALK AT DOOR CONDITIONS.
22. PIGMENTED CONCRETE (TYP). SEE ARCHITECTURAL FOR PIGMENT COLOR
23. TRANSFORMER SEE UTILITY AND ELECTRICAL PLANS



ASPHALT PAVING SECTION DETAIL
SCALE N.T.S.

NOTE: PAVEMENT SECTIONS DETERMINED BY THE GEOTECHNICAL ENGINEERING INVESTIGATION FROM KRAZEN & ASSOCIATES INC. DATED JANUARY 31, 2024



GRAVEL PAVING SECTION DETAIL
SCALE N.T.S.

EXISTING UTILITY NOTE

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ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KROUMOVA
ISSUE DATE: 02/28/2024

REVISIONS

NO	DATE	BY

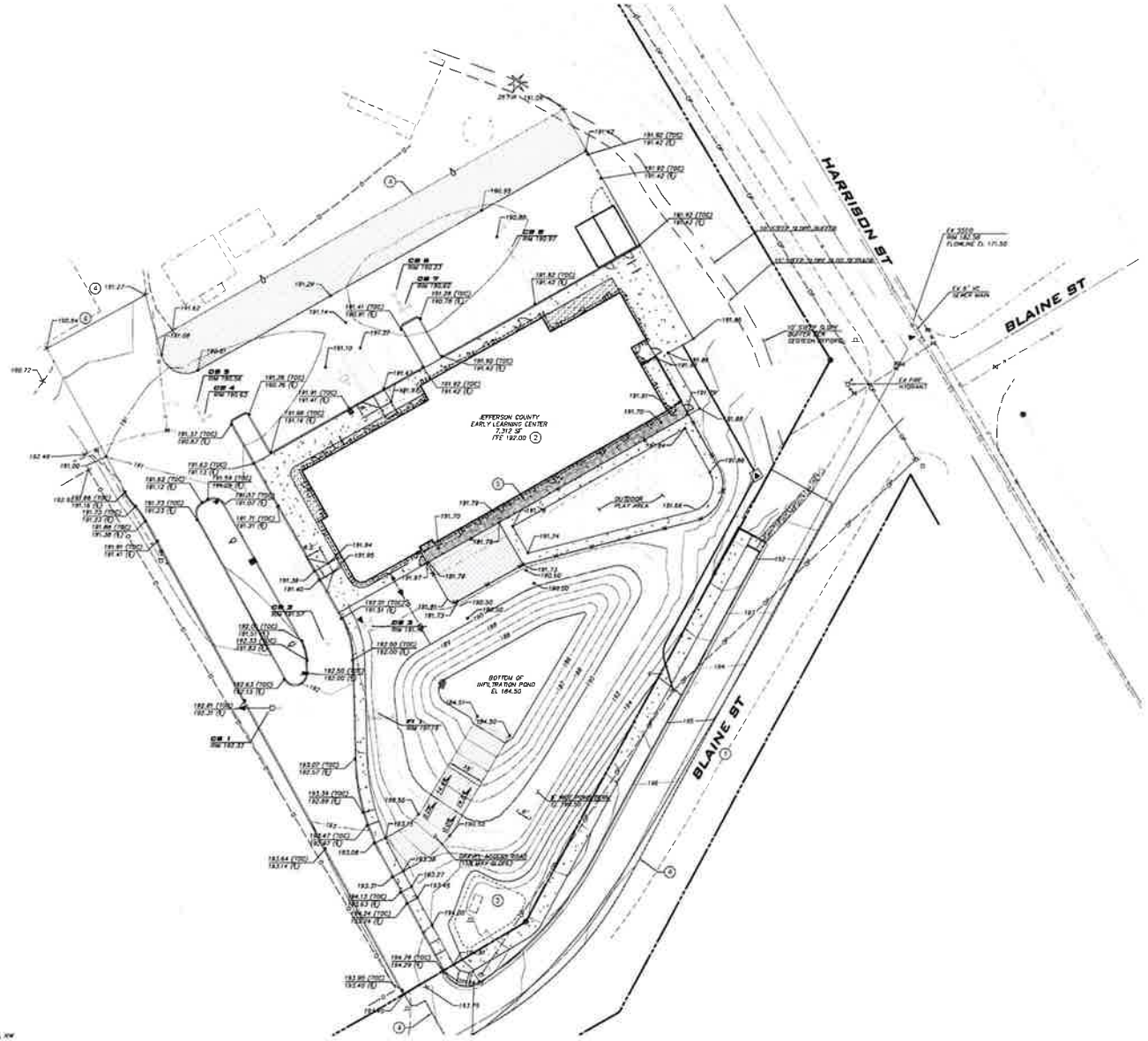
HORIZONTAL CONTROL PLAN

JCELC
CIVIL PLANS
02/28/2024

CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157
SHEET NAME: HC-01
SHT 7 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



N

SCALE: 1" = 20'

0 10 20 40

KEY NOTES

1. SEE BLAIN STREET PLAN AND PROFILE FOR ROADWAY GRADING DETAIL
2. ASSURE GRADING AWAY FROM STRUCTURE MIN. OF 7' FROM FF TO LANDSCAPE AREAS
3. EXISTING TO REMAIN PROTECT FROM DAMAGE
4. MATCH EXISTING
5. RECESSED CONCRETE SLAB UNDER COMPOSITE DECKING. RECESS 2.5" FROM FF (191.79) AND DRAIN TO SLOT DRAIN

GENERAL
SLOPE ALL HARD SURFACES AWAY FROM THE BUILDING AT A MINIMUM OF 1.5% AND MAXIMUM OF 2%

EXISTING UTILITY NOTE

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ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MONAME, PE
PROJECT ENGINEER: BRADY BOWER, PE
DESIGNER: NADIA KRISNADHI
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

GRADING PLAN

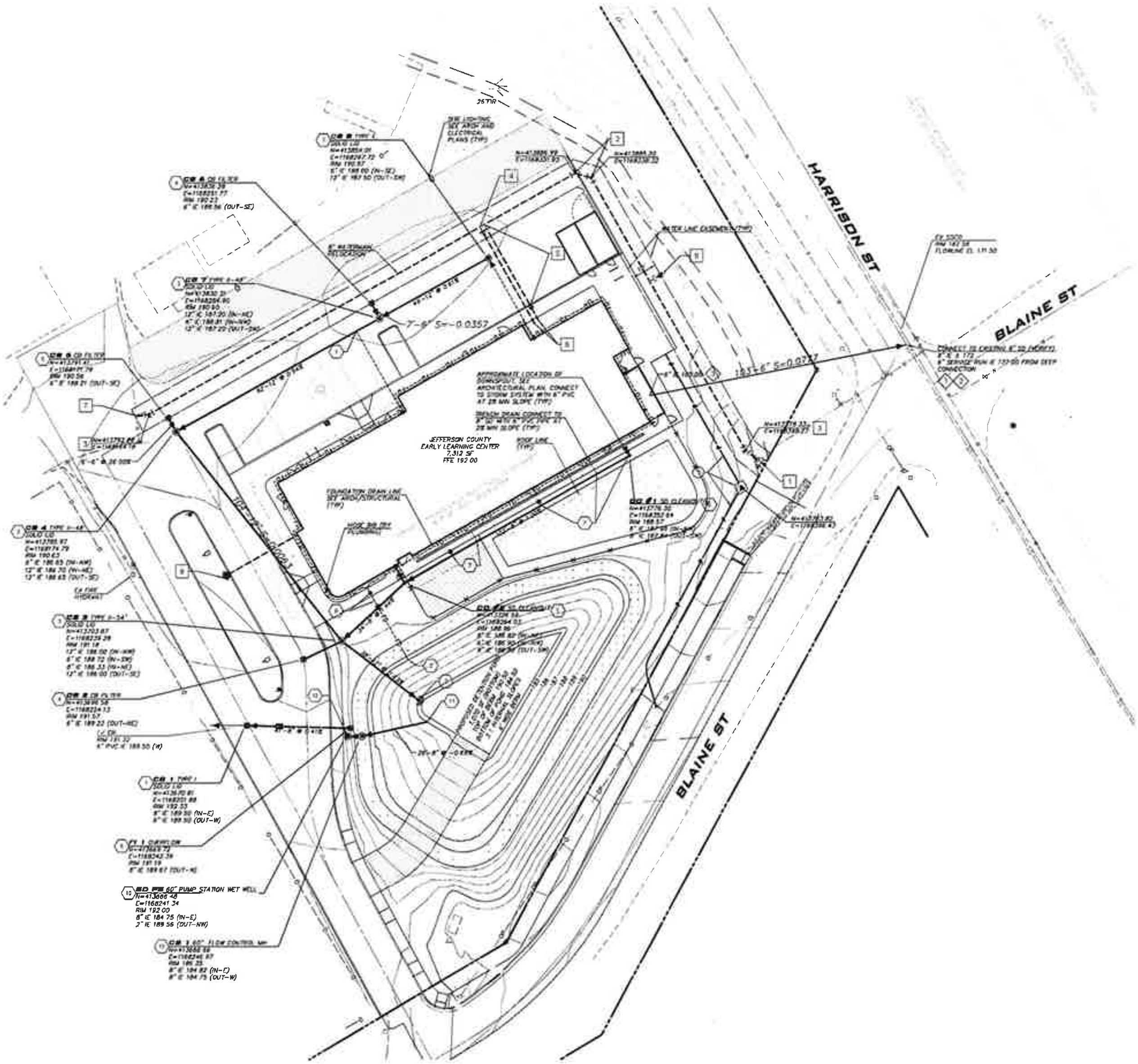
JCELC
CIVIL PLANS
02/28/2024

CITY OF PORT TOWNSEND WASHINGTON

02/28/24

JOB NUMBER: 23-157
SHEET NAME: GP-01
SHT 8 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



N

SCALE: 1" = 20'

0 10 20 40

WATER KEY NOTES

1. INSTALL REPLACEMENT PIPE, TEST AND CHLORINATE PRIOR TO ISOLATING AND DRAINING THE EXISTING LINE. COORDINATE WITH THE CITY, FIRE MARSHAL AND SCHOOL DISTRICT TO SCHEDULE CUT-OVER DURING OFF HOURS. CUT EXISTING 8" PIPE, INSTALL 90° BEND W/TB AND CONNECT TO NEW 8" GATE VALVE.
2. 45° HORIZONTAL BEND WITH THRUST BLOCK OR MECHANICAL RESTRAINT
3. 22.5° HORIZONTAL BEND WITH THRUST BLOCK OR MECHANICAL RESTRAINT
4. 3-INCH FIRE SERVICE PER CITY DETAIL 2-3 (MODIFIED)
5. 2" WATER METER PER CITY DETAIL 2-2. INCREASE TO 2.5" AFTER METER TO BUILDING
6. SERVICE CONNECTION SEE PLUMBING AND FIRE PLANS FOR CONTINUATION
7. HOT TAP EXISTING WATER LINE - INSTALL 8"X8" SS TAPPING SLEEVE ON EXISTING WATER LINE W/TB, 8" GATE VALVE (FLG XMJ).
8. INSTALL FDC PER CITY DETAIL 2-14 AND 1/13
9. 1" IRRIGATION "DEDUCT" METER. SEE LA PLANS FOR BACKFLOW AND CONTINUATION

SANITARY SEWER KEY NOTES

1. CONNECT TO EXISTING 8" SANITARY SEWER MAIN USING CITY DETAIL SS-1C
2. REPAIR ROAD TRENCH USING CITY DETAIL SS-2A
3. SERVICE CONNECTION SEE PLUMBING FOR CONTINUATION

STORM DRAIN KEY NOTES

1. TYPE 1 CB WITH SOLID LID, CITY DETAIL SW-3
2. OUTFALL TO POND IE 189.55
3. TYPE 2 CB 48" OR 54" WITH SOLID LID, CITY DETAIL 4B
4. CONTECH STORMFILTER CB WITH 1 CARTRIDGE, SEE SHEET 14
5. CLEANOUT DETAIL SEE SHEET 14
6. FIELD INLET OVERFLOW STRUCTURE SEE SHEET 14
7. IE 185.00 - INSTALL A WATERMAIN BACKWATER VALVE ON THE PIPE OUTFALL, ASSURE THAT THERE IS SUFFICIENT CLEARANCE ALL AROUND THE OUTFALL FOR CLEAR OPERATION. PROVIDE RIP RAP OUTFALL - MIN. 2' EITHER SIDE OF PIPE AND 3' BEYOND THE END OF PIPE. 1.5' DEEP.
8. 6" SOLID HDPE FOUNDATION DRAIN OUTFALL - INSTALL PVC BACKWATER VALVE AFTER TURN TO POND. INSTALL RISER TO SURFACE WITH LID. IE ±190.00. DRAIN TO DISCHARGE TO POND @ 1.5% MIN.
9. CONNECT ROOF DRAIN LEADERS AND TRENCH DRAIN LEADERS TO 8" SD WITH TEE/WYE CONNECTIONS
10. PACKAGE PUMP STATION SEE SHEET 15
11. 8" OUTFALL TO FLOW CONTROL STRUCTURE IE 185.00
12. CONNECT PUMP DISCHARGE PIPE TO SD WITH TEE/WYE
13. 60" FLAT TOP MANHOLE FLOW CONTROL STRUCTURE WITH RESTRICTOR UNIT AND LIFT GATE ASSEMBLY SEE SHEET 15

GENERAL KEY NOTES

1. 3-PHASE POWER SERVICE FROM EXISTING POLE AND POWER TRANSFORMER. SEE ELECTRICAL SITE PLAN FOR SIZE AND NUMBER OF CONDUIT REQUIRED AND CONTINUATION TO MECHANICAL ROOM.

EXISTING UTILITY NOTE

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ATWELL
WWW.ATWELLGROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MOHABIR, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA HROUMOVA
ISSUE DATE: 02/28/2024

REVISIONS

NO	DATE	BY

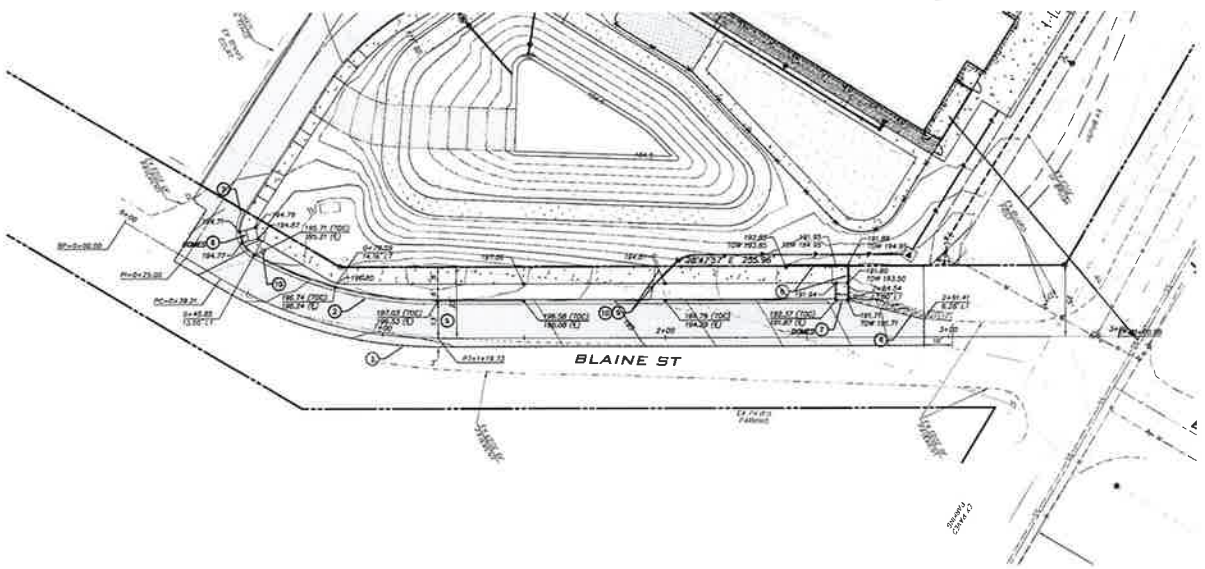
UTILITY PLAN

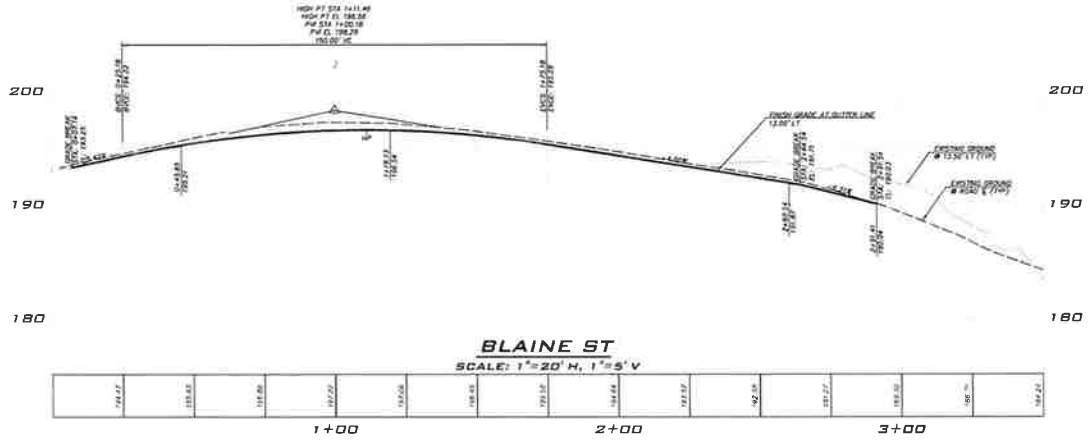
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

EXP. 01/11/25

JOB NUMBER: 23-157
SHEET NAME: UP-01
SHT 9 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.





SCALE: 1" = 20'

0 10 20 40

1. SAW CUT (APPARENT HIGH POINT)
2. CURB AND GUTTER SEE CITY DETAIL T-13
3. TRANSITION FROM CURB AND GUTTER TO STANDARD CURB
4. RIP-RAP AT END OF CURB AND GUTTER, MIN. 3' WIDE AND 18" DEEP SHAPE TO FORM SLIGHT SWALE.
5. TYPICAL SECTION SEE CITY DETAIL T-8 (MODIFIED)
6. CURB RAMP – TYPE A SEE DETAIL SHEET 13
7. CURB RAMP – TYPE B SEE DETAIL SHEET 13
8. DESIGN BUILD KEYSTONE (OR EQUAL) MSE RETAINING/LANDSCAPE WALL
9. POWER SERVICE FROM EXISTING POLE, COORDINATE WITH POWER COMPANY AND SEE UTILITY AND ELECTRICAL PLANS FOR SIZE AND NUMBER OF CONDUITS
10. EXISTING POWER EQUIPMENT TO REMAIN, PROTECT

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAMEE, PE
PROJECT ENGINEER: BRADY BORRE, PE
DESIGNER: RADIM KRYZANOVA
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

ROAD PROFILES

JCELC
CIVIL PLANS
02/28/2024
WASHINGTON
CITY OF PORT TOWNSEND

JOB NUMBER: 23-157
SHEET NAME: RP-01
SHT 10 OF 15

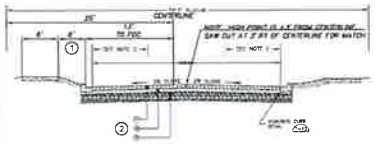
City of Port Townsend - Public Works Department
Standard Detail

	MINOR ARTERIAL	COLLECTOR	LOCAL ACCESS
① ASPHALT CLASS B	4.0"	3.0"	3.0"
② CRUSHED SURFACING TOP COURSE	4.0"	3.0"	3.0"
③ GRAVEL BASE (1)	10.0"	10.0"	8.0"

NOTES:
(1) BASE MAY NEED TO BE INCREASED DEPENDING ON SUITABILITY OF NATIVE MATERIAL.

Detail T-2

City of Port Townsend - Public Works Department
Standard Detail

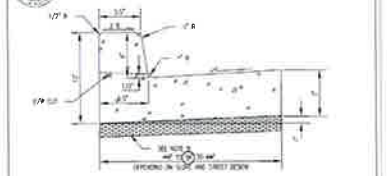


KEY NOTES:
1. VARIES AT CORNER TO MATCH PROPERTY LINE
2. REMOVE EXISTING PAINT AND BASE FROM SAW CUT LINE AND INSTALL NEW SECTION ON COMPACTED SUBGRADE

NOTE:
(1) DUE TO PRESENCE OF SUBSTRATE FOR CONSTRUCTION FOR ONE OF WORK IN THE FOLLOWING LOCATIONS:
HIGH LEVEL STREET VARIANCE OR ½ LID LANES, SCHOOL CONTEXTS, WITH NO SIDEWALKS OR ADJACENT PARKING, CONSIDERED AS "PEDESTRIAN LESS THAN 60 FEET"
(2) REMOVE TRAFFIC CALMING SUCH AS, PINCH POINTS CURB, PLANTER PARKING OR TRAFFIC CIRCLES AT INTERSECTIONS NOT COMPLETE IN APPENDIX "B"

Detail T-4

City of Port Townsend - Public Works Department
Standard Detail

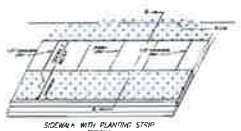


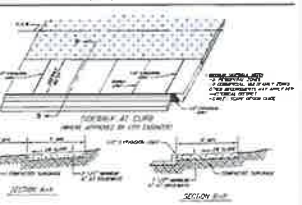
TYPICAL SECTION

NOTES
1. FORMS SHALL BE TRUE TO LINE AND GRADE AND SUFFICIENTLY STAKED.
2. DUMMY JOINTS SHALL BE PLACED ON 10 FOOT CENTERS. DUMMY JOINTS SHALL BE 1/2" x 1-1/2".
3. DUMMY JOINTS SHALL BE PLACED ADJACENT TO CATCH BASINS INLETS AND AT POINTS OF TANGENCY ON STREETS, ALLEY AND DRIVEWAY RETURNS. MINIMUM SPACING SHALL BE 20 FT. PRE-MOLDED JOINT FILLER SHALL BE 1/2" WIDE AND CONFORM TO AASHTO DESIGN M213.
4. ALL JOINTS SHALL BE CLEAN AND EDGED.
5. CONCRETE SHALL BE CEMENT CONCRETE CLASS 3000.
6. STEEL FORMS ONLY SHALL BE USED ON TANGENT SECTIONS. WOOD FORMS MAY BE USED ON CURVED SECTIONS.
7. FINISH SHALL BE LIGHT BROOM FINISH.
8. THE FINISHED CURB SHALL BE SPRAYED WITH A TRANSPARENT CURING COMPOUND AND COVERED BY WATERPROOF PAPER OR PLASTIC MEMBRANE IN THE EVENT OF RAIN OR OTHER UNAVOIDABLE WEATHER. CURING TIME SHALL BE A MINIMUM OF 72 HOURS.
9. ALL CURB AND GUTTER SHALL BE PLACED ON A MINIMUM OF 3" OF CRUSHED SURFACING TOP COURSE.
10. DEPARTMENT JOINT 1/2" x 1-1/2" BETWEEN 4:1 CURB AND GUTTER AND THE SIDEWALK.

Cement Concrete Curb and Gutter, Type "A-1"
Detail: T-13

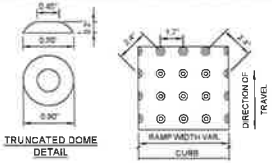
City of Port Townsend - Public Works Department
Standard Detail


SIDEWALK WITH PLANTING STRIP (TYPICAL)



NOTES:

Detail T-15

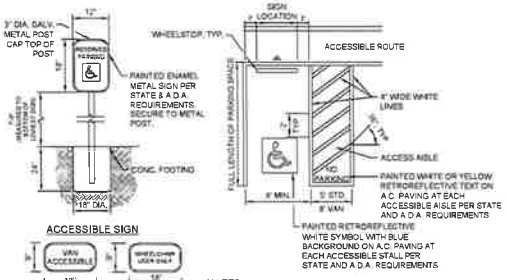


TRUNCATED DOME DETAIL

RAMP TEXTURE PATTERN DETAIL

NOTES:
1. PLACE TRUNCATED DOME DETECTABLE WARNING TEXTURE IN THE LOWER 24" OF THE THROAT OF THE RAMP ONLY. ARRANGE DOMES USING IN-LINE PATTERN ONLY AS SHOWN IN DETAIL BELOW. COLOR OF TEXTURE TO BE YELLOW.

① TRUNCATED DOMES
SCALE: N.T.S.



ACCESSIBLE SIGN

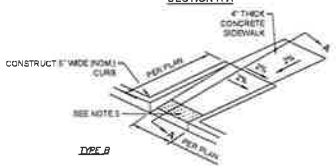
"VAN ACCESSIBLE" SIGN

"WHEELCHAIR USER ONLY" SIGN

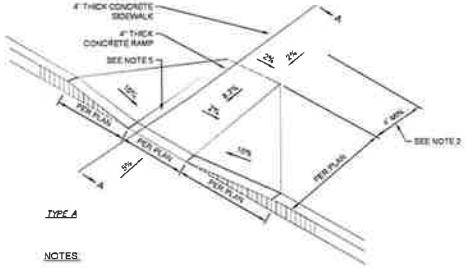
NOTES:
1. ALL ACCESSIBLE PARKING PAVEMENT MARKINGS ARE TO BE WHITE AS SPECIFIED OR APPROVED.
2. INSTALL ACCESSIBLE PARKING SIGN AT EACH DESIGNATED STALL. SIGNAGE SHALL COMPLY WITH CURRENT STATE REGULATIONS AND DENOTE "VAN ACCESSIBLE" AND "WHEELCHAIR USER ONLY" SPACES WHERE SHOWN. LOCATE SIGN WHERE SHOWN ON PLAN.

③ ACCESIBLE STALL SIGNING AND MARKING
SCALE: N.T.S.

SECTION A-A



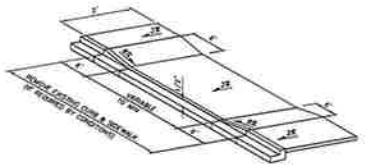
TYPE B



TYPE A

NOTES:
1. ALL SLOPES SHOWN BELOW ARE MAXIMUM ALLOWABLE VALUES.
2. TOOLED JOINTS ARE REQUIRED AT ALL CURB RAMP SLOPE BREAK LINES.
3. CONCRETE COMPRESSIVE STRENGTH SHALL BE PER SPECS.
4. CURB RAMP SLOPES ARE RELATIVE TO TO THE TRUE LEVEL HORIZON (ZERO BUBBLE).
5. DETECTABLE WARNING SURFACE SHALL EXTEND MIN. 2' IN DIRECTION OF PEDESTRIAN TRAVEL AND FULL WIDTH OF RAMP. TRUNCATED DOMES SEE THIS SHEET. ONLY USED WHEN RAMP EXPOSES PEDESTRIANS TO TRAFFIC.

③ CURB RAMPS
SCALE: N.T.S.



NOTES:

	ALTERNATIVE 2 – NO PLANTER STRIP
JOINTS	WHERE DRIVEWAY EXCEEDS 16' WIDTH, A 3" EXPANSION JOINT SHALL BE PLACED LONGITUDINALLY ALONG CENTERLINE. CLEAN AND EDGE ALL JOINTS. TRANSVERSE DRIVEWAY JOINTS, AS SHOWN OR DIRECTED BY ENGINEER
FLARES	MUST BE OF EQUAL WIDTH
BASE COURSE	4" OF 5/8" MINUS CRUSHED ROCK OR AS DIRECTED BY ENGINEER
CONCRETE	HIGH EARLY STRENGTH, CLASS 4000 PSI MINIMUM, AIR ENTRAINED
PROCEDURES	FORMS, PLACING, FINISHING AND CURING PER STANDARD SPECIFICATIONS
THICKNESS	SIDEWALK AND DRIVEWAY APRON SHALL BOTH BE 6" MINIMUM AT DRIVEWAY

④ DRIVEWAY APPROACH
SCALE: N.T.S.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRYUKOVA
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

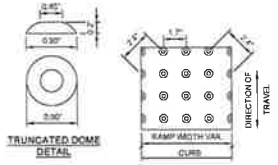
DETAILS
JCELC
CIVIL PLANS
03/28/2024
CITY OF PORT TOWNSEND WASHINGTON

EXPIRES: 10/11/25

JOB NUMBER: 23-157
SHEET NAME: RD-01
SHT 11 OF 15

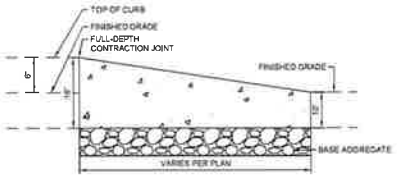
ACCESSIBLE PAVEMENT STALL MARKINGS

NOT TO SCALE



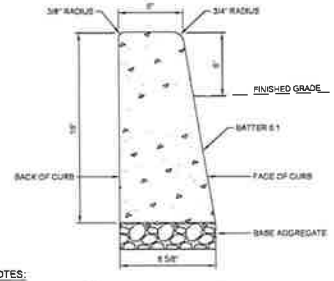
NOTES:
1. PLACE TRUNCATED DOME DETECTABLE WARNING TEXTURE IN THE LOWER 24" OF THE THROAT OF THE RAMP ONLY. ARRANGE DOMES USING IN-LINE PATTERN ONLY AS SHOWN IN DETAIL BELOW. COLOR OF TEXTURE TO BE YELLOW.

1 TRUNCATED DOMES
SCALE N.T.S.



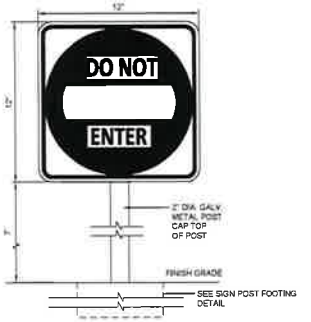
NOTES:
1. CURB EXPOSURE IS 6", VARY STANDARD CURB ONLY AS DIRECTED.
2. CONSTRUCT CONTRACTION JOINTS AT 15' MAXIMUM SPACING AND SPACING AND AT ENDS OF EACH INLET AND RAMP.
3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 1.5% MAX. (MAX 2.0% FINISHED SURFACE SLOPE), UNLESS OTHERWISE SHOWN, OR AS DIRECTED.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE PER SPECS.
5. BASE AGGREGATE TO BE PLACED ON COMPACTED FILL PER SPECS.

2 CURB ENDING
SCALE N.T.S.



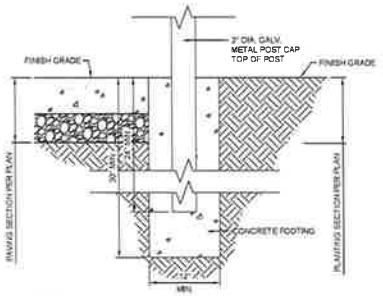
NOTES:
1. CURB EXPOSURE IS 6", VARY CURB ONLY AS DIRECTED.
2. CONSTRUCT CONTRACTION JOINTS AT 15' MAXIMUM SPACING AND AT ENDS OF EACH INLET AND RAMP.
3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE FACE OF CURB AT 1.5% MAX. (MAX 2.0% FINISHED SURFACE SLOPE), UNLESS OTHERWISE SHOWN, OR AS DIRECTED.
4. CONCRETE COMPRESSIVE STRENGTH SHALL BE PER SPECS.
5. BASE AGGREGATE TO BE PLACED ON COMPACTED FILL PER SPECS.

3 STANDARD CURB
SCALE N.T.S.



NOTES:
1. SIGN SHALL HAVE WHITE LETTERS ON RED REFLECTIVE BACKGROUND. SIGN MUST COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

4 "DO NOT ENTER" SIGN
SCALE N.T.S.

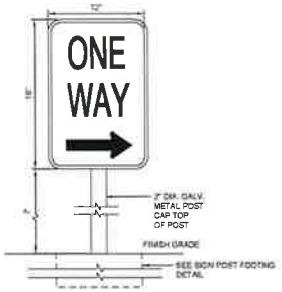


NOTES:
1. FOR PIPE SIGN POST INSTALLATION IN LANDSCAPE OR PAVING SECTION.
2. SIGN POST SHALL BE VERTICAL.
3. FOR OTHER INSTALLATION DETAILS FOLLOW MANUFACTURER'S INSTRUCTIONS.

5 SIGN POST FOOTING
SCALE N.T.S.

NOTES:
1. SIGN SHALL HAVE WHITE LETTERS ON RED REFLECTIVE BACKGROUND. SIGN MUST COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

6 "LOADING ZONE ONLY" SIGN
SCALE N.T.S.



NOTES:
1. SIGN SHALL HAVE WHITE LETTERS ON RED REFLECTIVE BACKGROUND. SIGN MUST COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

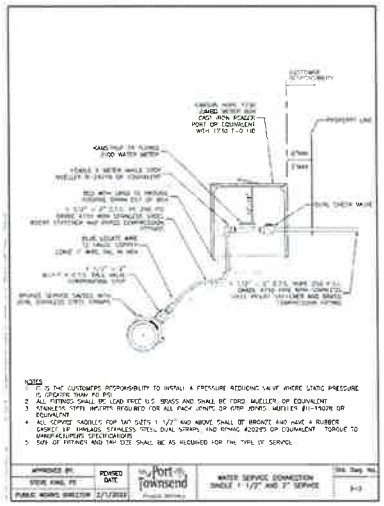
7 "ONE WAY" SIGN
SCALE N.T.S.

ATWELL
SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRGUMOVA
ISSUE DATE: 03/28/2024

NO	DATE	BY	REVISIONS

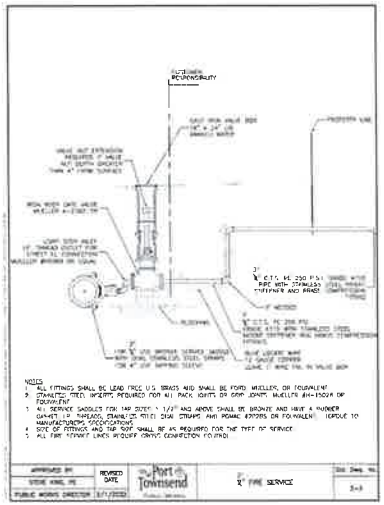
DETAILS
JCELC
CIVIL PLANS
03/28/2024
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157
SHEET NAME: RD-02
SHT 12 OF 15



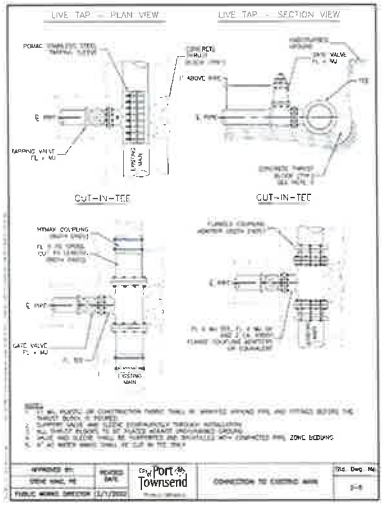
NOTES
1. IT IS THE CUSTOMER'S RESPONSIBILITY TO INSTALL A PRESSURE REDUCING VALVE WHERE STATIC PRESSURE IS EXPECTED TO EXCEED 150 PSI.
2. ALL FITTINGS SHALL BE LEAD FREE U.S. BRASS AND SHALL BE FORD, MUELLER, OR EQUIVALENT.
3. STAINLESS STEEL NUTS/PTS REQUIRED FOR ALL PACK JOINTS OR GRIP JOINTS. MUELLER #H-15026 OR EQUIVALENT.
4. ALL COPPER SADDLES FOR TAP SIZES 1 1/2" AND ABOVE, SHALL BE BRONZE AND HAVE A RUBBER GASKET OR MANUAL STAINLESS STEEL DUAL STRAPS, AND ROMAC 420QSS OR EQUIVALENT. TORQUE TO MANUFACTURERS SPECIFICATIONS.
5. SIZE OF FITTINGS AND TAP SIZE SHALL BE AS REQUIRED FOR THE TYPE OF SERVICE.
6. SIZE OF PIPING AND TAP SIZE SHALL BE AS REQUIRED FOR THE TYPE OF SERVICE.

APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	WATER SERVICE CONNECTION SINGLE 1 1/2" AND 2" SERVICE
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-13



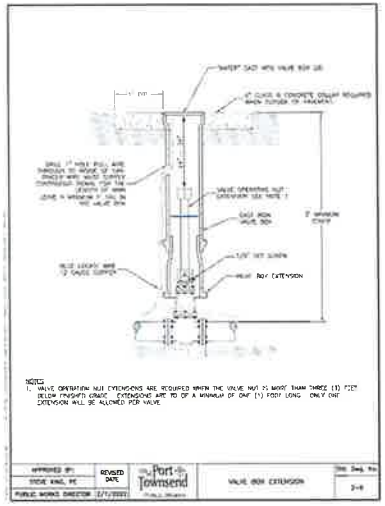
NOTES
1. ALL FITTINGS SHALL BE LEAD FREE U.S. BRASS AND SHALL BE FORD, MUELLER, OR EQUIVALENT.
2. STAINLESS STEEL NUTS/PTS REQUIRED FOR ALL PACK JOINTS OR GRIP JOINTS. MUELLER #H-15026 OR EQUIVALENT.
3. ALL SERVICE SADDLES FOR TAP SIZES 1 1/2" AND ABOVE SHALL BE BRONZE AND HAVE A RUBBER GASKET OR THREADED STAINLESS STEEL DUAL STRAPS AND ROMAC 420QSS OR EQUIVALENT. TORQUE TO MANUFACTURERS SPECIFICATIONS.
4. SIZE OF FITTINGS AND TAP SIZE SHALL BE AS REQUIRED FOR THE TYPE OF SERVICE.
5. ALL FIRE HYDRANT LINES SHOULD HAVE DOUBLE CHECK CONNECTION TO MAIN.

APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	6" FIRE SERVICE
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-3



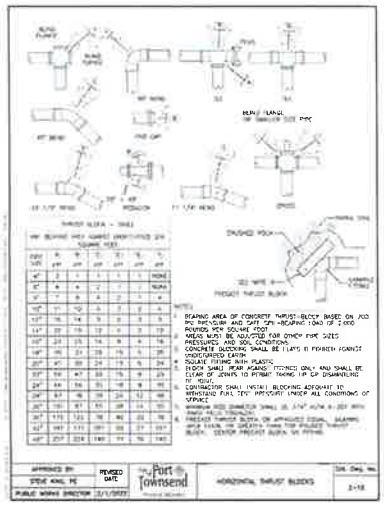
NOTES
1. ALL PLASTIC OF CONSTRUCTION THERE SHALL BE WRAPPED AROUND PIPE AND FITTINGS BEFORE THE THRUST BLOCK IS POURED.
2. SUPPORT VALVE AND SLEEVE ECONOMICALLY THROUGH INSTALLATION.
3. ALL THRUST BLOCKS TO BE PLACED AGAINST UNDISTURBED GROUND.
4. VALVE AND SLEEVE SHALL BE SUPPORTED AND INSTALLED WITH COMPACTED PIPE ZONE BEDDING.
5. 6" AC WATER MAINS SHALL BE CUT IN THE ONLY.

APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	CONNECTION TO EXISTING MAIN
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-6

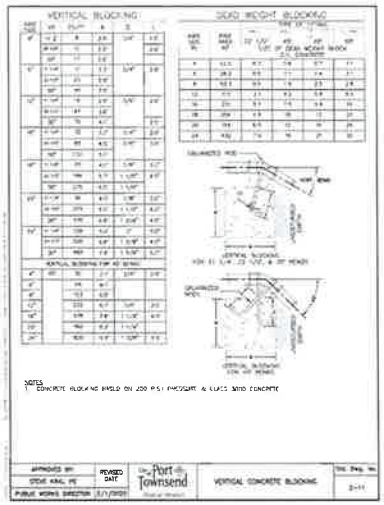


NOTE
1. VALVE OPERATION NUT EXTENSIONS ARE REQUIRED WHEN THE VALVE NUT IS MORE THAN THREE (3) FEET BELOW FINISHED GRADE. EXTENSIONS ARE TO BE A MINIMUM OF ONE (1) FOOT LONG. ONLY ONE EXTENSION WILL BE ALLOWED PER VALVE.

APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	VALVE BOX EXTENSION
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-8

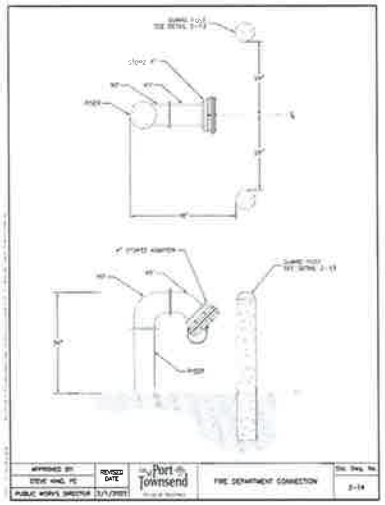


APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	HORIZONTAL THRUST BLOCKS
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-10

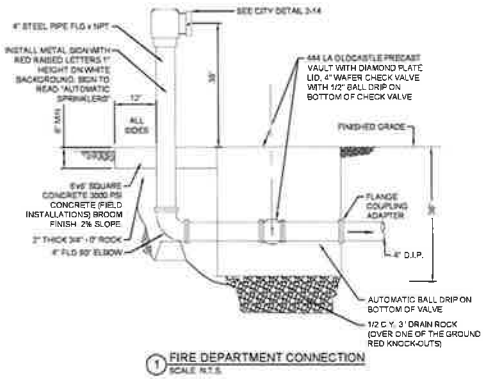


NOTES
1. CONCRETE BLOCKING SHALL BE ON 200 PSI PRESSURE AT 3 DAYS 3000 CONCRETE

APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	VERTICAL CONCRETE BLOCKING
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-11



APPROVED BY:	REVISED DATE		
STEVE KING, PE		Port Townsend	FIRE DEPARTMENT CONNECTION
PUBLIC WORKS DIRECTOR 2/1/2022			Std. Dwg. No. 3-14



1 FIRE DEPARTMENT CONNECTION
SCALE: N.T.S.

ATWELL
2 CENTRAL PLACE SUITE 100
PORT ANGELES, WA 98362
P 360.452.4158
WWW.ATWELL-GROUP.COM

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MONAGER, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRYLOVA
ISSUE DATE: 02/28/2024

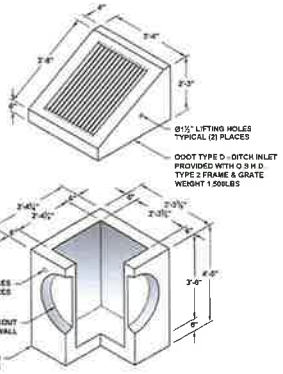
NO	DATE	BY	REVISION#

DETAILS
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157
SHEET NAME: WA-01
SHT 13 OF 15

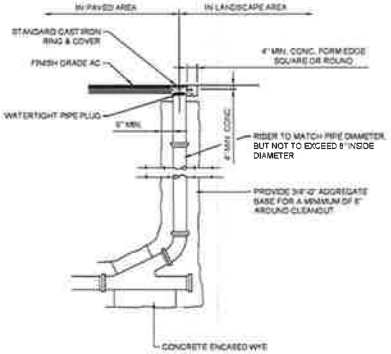
SEC 2, TWP 30N, RGE 1W, W.M.

O.D.O.T. - G2 CATCH BASIN WITH DITCH INLET

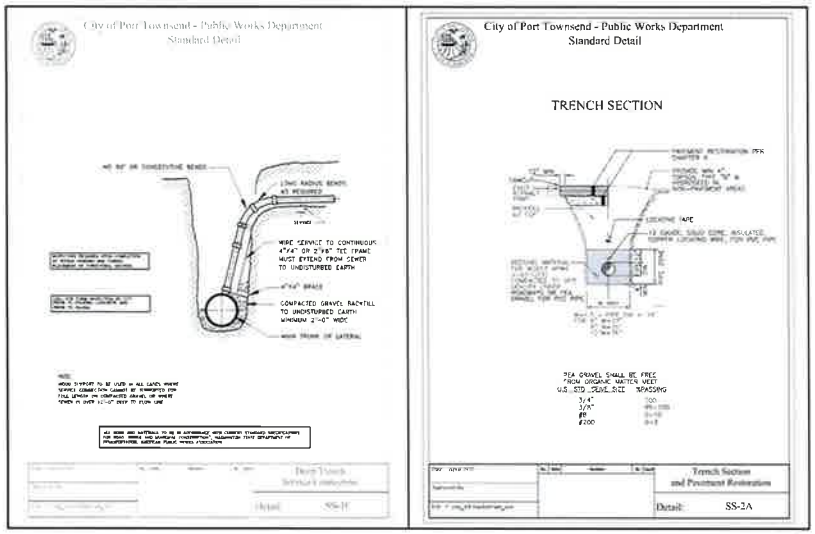


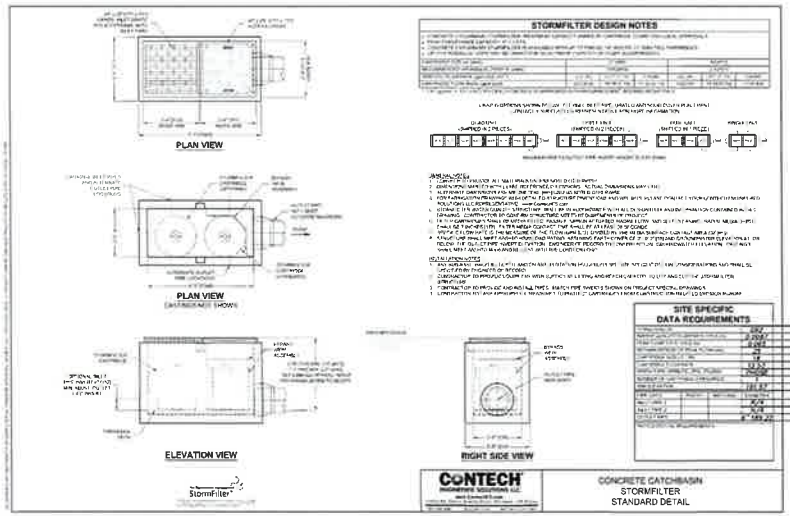
NOTES
1. MEETS OR EXCEEDS ODOT STANDARD DRAWING RD 01.10
2. ALL DIMENSIONS SUBJECT TO ALLOWABLE TOLERANCES

CPP Columbia PRECAST PRODUCTS



1 CLEAN OUT (C.O.)
SCALE N.T.S.





ATWELL

SCALE:
AS NOTED
PROJECT MANAGER:
KIMBERLY MCNAMEE, PE
PROJECT ENGINEER:
BRADY BORPS, PE
DESIGNER:
NADIA KRYLOVICH
ISSUE DATE:
02/28/2024

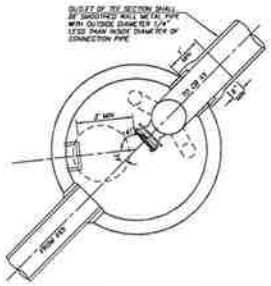
NO	DATE	BY	REVISIONS

DETAILS
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

DP-01-11-19

JOB NUMBER: 23-157
SHEET NAME: DT-01
SHT 14 OF 15

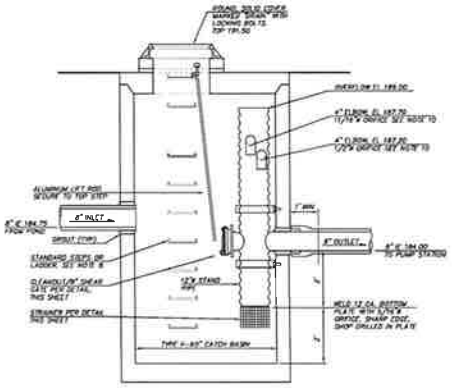
PLOT: Feb 28, 2024 - 11:14am - Nan Merry
\\atwellpnwfs\Projects\23\157\Dwg\Final Civil CDs\23157DT.dwg



PLAN VIEW

NOTES
ATTACH SCREEN TO CMP CROSS W/ 6-1" METAL SCREWS-2 PER STRAP, OR USE STAINLESS STEEL PIPE CLAMP

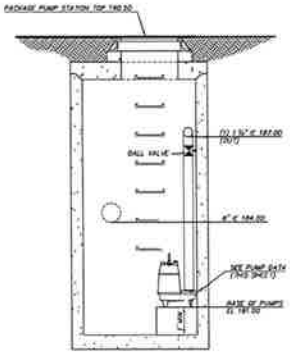
STRAINER



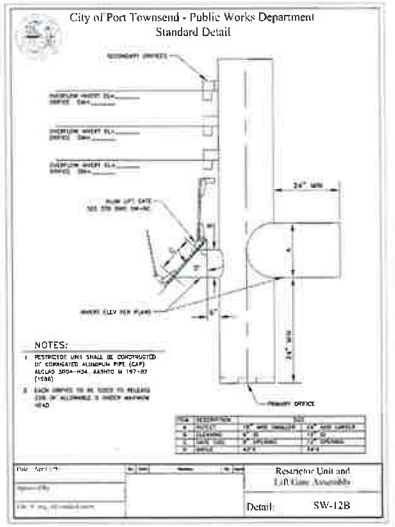
SECTION VIEW

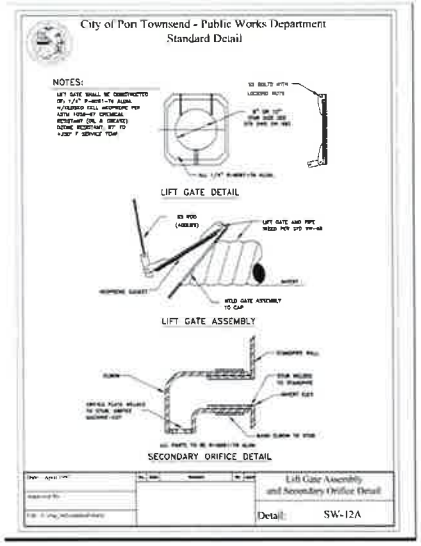
NOTES:
1. PIPE SIZES AND SLOPES PER PLANS.
2. OUTLET CAPACITY NOT LESS THAN COMBINED INLETS.
3. EXCEPT AS SHOWN OR NOTED, UNITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR CATCH BASIN TYPE II, 60" MIN DIA.
4. PIPE SUPPORTS AND RESTRICTOR/SEPARATOR SHALL BE OF SAME MATERIAL, AND BE ANCHORED AT 3' MAX SPACING BY 5/8"ø STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED 2" IN WALL.
5. THE RESTRICTOR/SEPARATOR SHALL BE FABRICATED FROM 0.060" ALUMINUM OR 0.064 ALUMINIZED STEEL, OR 0.064" GALVANIZED STEEL PIPE, IN ACCORDANCE WITH AASHTO M 36, M 196, M 197 AND M 274. GALVANIZED STEEL SHALL HAVE TREATMENT 1.
6. OUTLET SHALL BE CONNECTED TO CULVERT OR SEWER PIPE WITH A STANDARD COUPLING BAND FOR CORRUGATED METAL PIPE, OR GROUTED INTO WELL FOR CONCRETE PIPE.
7. THE VERTICAL RISER STEM OF THE RESTRICTOR/SEPARATOR SHALL BE THE SAME DIA AS THE HORIZONTAL OUTLET PIPE, WITH AN 8" MIN DIA.
8. FRAME AND LADDER OR STEPS OFFSET SO THAT:
   A. CLEANOUT GATE IS VISIBLE FROM TOP.
   B. CLIMB DOWN SPACE IS CLEAR OF RISER & CLEANOUT GATE
   C. FRAME IS CLEAR OF CURB
9. 9" METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE TO HAVE SMOOTH OUTSIDE DIAMETER EQUAL TO CONCRETE PIPE ID LESS 1/4".
10. MULTI-ORIFICE ELBOWS MAY BE LOCATED AS SHOWN OR ALL ON ONE SIDE OF RISER TO ASSURE LADDER CLEARANCE.
11. PACKAGE PUMP STATION
    11.1. TWO ALTERNATING PUMPS
    11.2. PUMPS 30 GPM AT 70ft TO FEET
    11.3. MINIMUM 36" DIAMETER WET WELL
    11.4. PUMP SWITCHING
    190.00 ALARM
    188.50 LAG PUMP ON
    187.00 LAG PUMP OFF
    184.00 LEAD PUMP ON
    183.50 LEAD PUMP OFF
    11.5. LID WITH LOCKING CLASP
    11.6. ALARM AND CONTROL PANEL AT THE PUMP STATION COORDINATE WITH ELECTRICAL FOR SERVICE FROM BUILDING
    11.7. CONTRACTOR TO PROVIDE SUBMITTAL PACKAGE FOR APPROVAL

1 FLOW CONTROL STRUCTURE TYPE II CB, 60"
SCALE NTS



2 PACKAGE PUMP STATION CONCRETE OR FIBERGLASS
SCALE NTS





ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAIR, PE
PROJECT ENGINEER: BRADY BOWYER, PE
DESIGNER: NADIA KRISUNOVA
ISSUE DATE: 03/28/2024

NO	DATE	BY	REVISIONS

DETAILS
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

03/28/24

JOB NUMBER: 23-157
SHEET NAME: DT-02
SHT 15 OF 15

EXTERIOR FINISH MATERIAL SCHEDULE (XX-X)

TAG	DESCRIPTION	BASIS OF DESIGN	FINISH/COLOR	REMARKS
WD-1	1X6 WOOD CLADDING	MONTANA TIMBER, AQUAFIR, WESTERN RED CEDAR, TCX CAP 1/8"	TBD / TBD	VERTICAL ORIENTED, BLIND FASTENED
EP-1	EXTERIOR PAINT	VARIES BY SUBSTRATE, SEE SPECS FOR ADDL INFO.	TBD	PRIMARY COLOR
EP-2	EXTERIOR PAINT	VARIES BY SUBSTRATE, SEE SPECS FOR ADDL INFO.	TBD	ACCENT COLOR
FC-1	CEMENT BOARD SIDING	HARDIE SHINGLE SIDING	STRAIGHT EDGE / EP-1	PRIMED FOR PAINT
FC-2	CEMENT BOARD PANELS	HARDIE PANEL	SMOOTH / EP-2	PRIMED FOR PAINT
FC-3	CEMENT BOARD SIDING	HARDIE PLANK LAP SIDING	SMOOTH / EP-1	PRIMED FOR PAINT
FC-4	CEMENT BOARD TRIM	1" HARDIE TRIM	SMOOTH / EP-1	WIDTH VARIES (SEE DETAILS), PRIMED FOR PAINT
FC-5	CEMENT BOARD TRIM	1" HARDIE TRIM	SMOOTH / EP-2	WIDTH VARIES (SEE DETAILS), PRIMED FOR PAINT

EXTERIOR WALL ASSEMBLY SCHEDULE (XX-X)

TAG	COMPOSITE R-VALUE	FIRE RESISTANCE	DESCRIPTION	ASSEMBLY
EW-1	R-21	NON-BEARING	SHINGLE SIDING FACADE OVER WD STUD FRAMING W/ EXT INSUL	CEMENT BD SIDING, SEE EXTERIOR FINISH MATERIAL SCHEDULE
		0HR		1x FIRE TREATED VERTICAL WD FURRING
				DUPONT ARMORSEAL @ ALL FASTENERS AND SEAMS
				3 3/4" (3" WHERE NOTED) DUPONT ARMORWALL PLUS
				2X6 WOOD STUD FRAMING @ 16" OC MAX (5.5" MINERAL WOOL INSULATION WHERE NOTED)
				5/8" TYPE-X GYP BD, RE: ROOM FINISH SCHEDULES, AND WALL GENERAL PARTITION NOTES
EW-2	R-21	NON-BEARING	WOOD CLADDING FACADE OVER WD STUD FRAMING W/ EXT INSUL	WOOD CLADDING, SEE FINISH SCHEDULE
		0HR		7/8" VENTILATED MTL HAT CHANNEL
				DUPONT ARMORSEAL @ ALL FASTENERS AND SEAMS
				3 3/4" DUPONT ARMORWALL PLUS
				2X6 WOOD STUD FRAMING @ 16" OC MAX
				5/8" TYPE-X GYP BD, RE: ROOM FINISH SCHEDULES, AND WALL GENERAL PARTITION NOTES

ELEVATION KEYNOTES

E01	STEEL CANOPY SUPPORT. SEE STRUCTURAL DWGS. PAINTED, COLOR BY ARCH.
E04	EXPOSED WD ROOF JOIST. PAINTED, COLOR BY ARCH.
E05	STEEL BEAM. SEE STRUCTURAL DWGS. PAINTED, COLOR BY ARCH.
E06	WD-1 @ UNDERSIDE OF CANOPY.
E07	STANDING SEAM MTL ROOF. SEE ROOF PLAN.
E08	PREFINISHED ALUMINUM LETTER SIGNAGE, EXTERNALLY ILLUMINATED.
R02	PREFIN ALUMINUM SHOP FABRIGATED BOX GUTTER W/ CONCEALMENT FASICA. COLOR BY ARCH. SEE 7/A304. SLOPE 1/16" PER FOOT TOWARDS DOWNSPOUT.
R03	PREFIN ALUMINUM ROOF RIDGE CAP BY ROOF MNFR, COLOR BY ARCH.
R04	PREFIN ALUMINUM PEAK FLASHING BY ROOF MNFR, COLOR BY ARCH.
R06	PREFIN ALUMINUM GABLE FLASHING BY ROOF MNFR, COLOR BY ARCH.
R10	PREFIN ALUMINUM COPING, COLOR BY ARCH.

OWNER — OLYMPIC PENINSULA YMCA, 675 N 5TH AVE, SUITE 2A, SEQUIM, WA 98382, (360) 504-0526

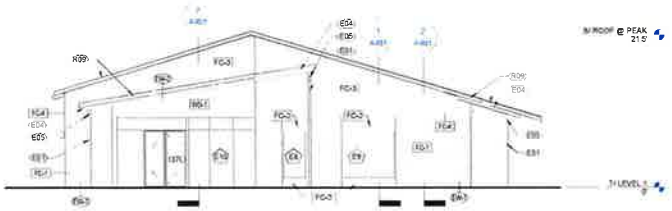
ARCHITECT — PRESENT FUTURE ARCHITECTS, 1147 W OHIO STREET, #304, CHICAGO, IL 60642, (312) 951-1252

DESIGNER — STUDIO STL, 804 LAWRENCE STREET, PORT TOWNSEND, WA 98368, (360) 649-4614

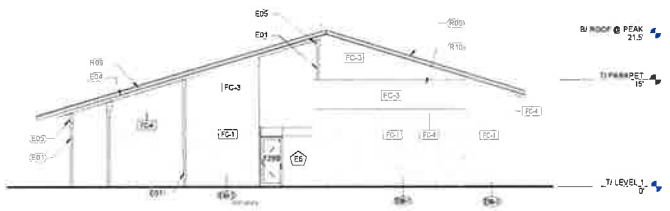
CIVIL — ATWELL, LLC, 1106 BROADWAY, SUITE 210, TACOMA, WA 98402, (425) 250-7234

STRUCTURAL — MEYER BORGMAN JOHNSON, 1 N LASALLE STREET, SUITE 3250, CHICAGO, IL 60602, (630) 551-4256

MEP — MCGUIRE ENGINEERS, 200 S RIVERSIDE PLAZA, SUITE 350, CHICAGO, IL 60606, (312) 930-2247



4 EXTERIOR ELEVATION - WEST



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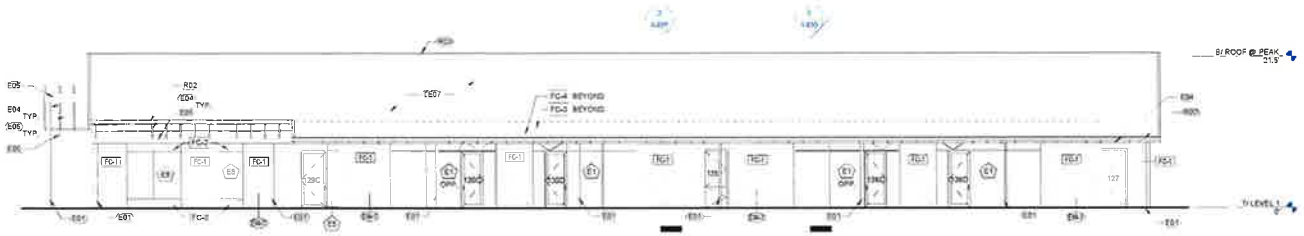
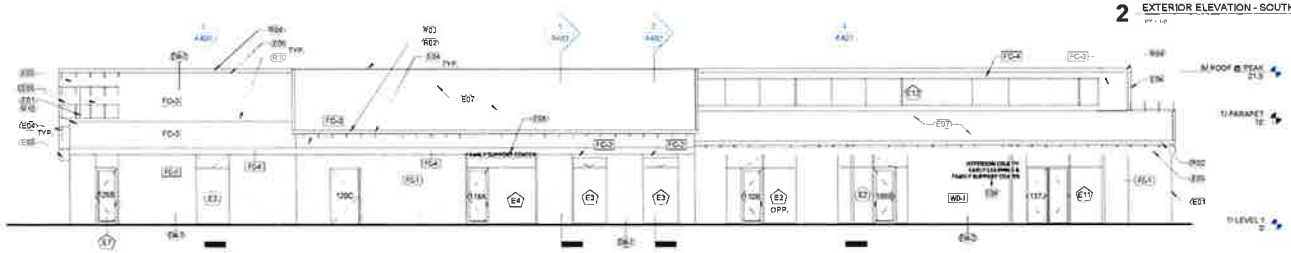


2 EXTERIOR ELEVATION - SOUTH



1 EXTERIOR ELEVATION - NORTH

JEFFERSON COUNTY EARLY LEARNING CENTER

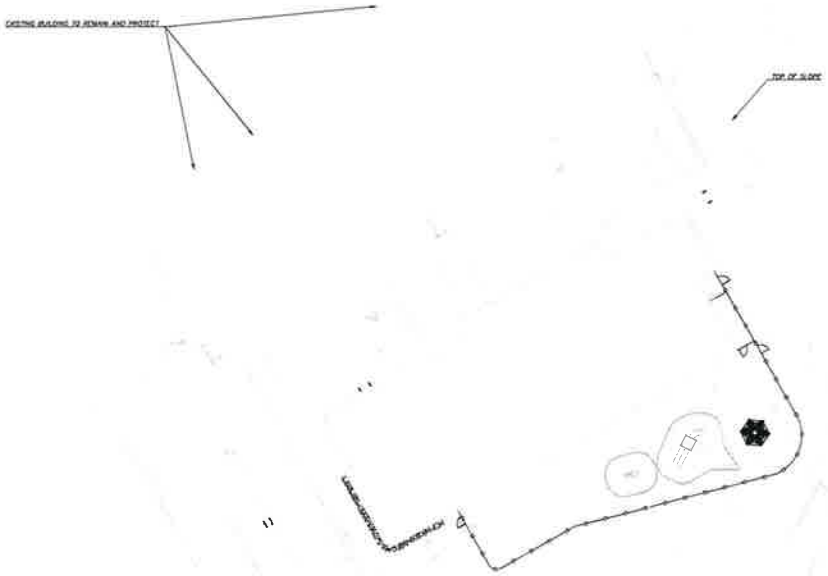
STREET,
PORT TOWNSEND, WA 98368

3	PERMIT	2023-03-29
2	DESIGN DEVELOPMENT	2023-10-20
1	SCHEMATIC DESIGN	2023-06-05

BULL #	DESCRIPTION	DATE
ARCHITECT'S PROJECT NO.		2217

EXTERIOR ELEVATIONS

A200



Sheet List Table		
Sheet Number	Sheet Title	Sheet Description
1	L0-00	LANDSCAPE COVER SHEET & SHEET INDEX
2	L1-00	MATERIALS SCHEDULE
3	L1-01	MATERIALS PLAN
4	L2-00	IRRIGATION SCHEDULE & NOTES
5	L2-01	IRRIGATION PLAN
6	L3-00	PLANTING SCHEDULE & NOTES
7	L3-01	PLANTING PLAN
8	L4-01	PLANTING DETAILS
9	L4-02	IRRIGATION DETAILS
10	L4-03	IRRIGATION DETAILS
11	L4-04	DETAILS

ATWELL

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MEP: SIEGLER ENGINEERS
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CHICAGO, IL 60606
(312) 930-0747

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

BID # DESCRIPTION	DATE
ARCHITECT'S PROJECT NO.	2217

N

SCALE: 1" = 20'

0 10 20 40

UNDERGROUND UTILITY NOTE

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

STATE OF WASHINGTON
MARK MCVEIGH
REGISTERED LANDSCAPE ARCHITECT

02/23/2024

LANDSCAPE COVER SHEET & SHEET INDEX

L0-00

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY
	Athletic & Recreational Special Construction	
13-28-03	PLAY STRUCTURE – SELECTION AND LOCATIONS TO BE DETERMINED BY VENDOR	1
13-28-04	PLACE STRUCTURE – SELECTION AND LOCATIONS TO BE DETERMINED BY VENDOR	1
13-28-05	PLAY STRUCTURE – SELECTION AND LOCATIONS TO BE DETERMINED BY VENDOR	1
	Fences & Gates	
SYMBOL	DESCRIPTION	QTY
32-31-06	FENCE – REFER TO A100 FOR SELECTION	228 lf
32-31-07	GATE – REFER TO A100 FOR SELECTION	4
	Site Furnishings	
SYMBOL	DESCRIPTION	QTY
32-33-04	BICYCLE PARKING – PACIFIC OUTDOORS – STEEL– POWDER COAT BLACK	4
	Wood Decking	
SYMBOL	DESCRIPTION	QTY
	DECKING – REFER TO A100 FOR SELECTION	684 sf
	Athletic & Recreational Special Construction	
SYMBOL	DESCRIPTION	QTY
	RESILIENT PLAY SURFACE – POURED–IN–PLACE – REFER TO A100 FOR SELECTIONS	1,787 sf
	Rigid Paving	
SYMBOL	DESCRIPTION	QTY
	PEDESTRIAN SURFACE – REFER TO CIVIL	5,774 sf
	PEDESTRIAN SURFACE – PIGMENTED CONCRETE – REFER TO CIVIL	504 sf
	Aggregate Surfaces	
SYMBOL	DESCRIPTION	QTY
	VEHICULAR SURFACE – 3/8–INCH MINUS CRUSHED – 4–INCH DEPTH – AGGREGATE – LOCALLY SOURCED – COMPACT 90–PERCENT	4,554 sf
	Planting Preparations	
SYMBOL	DESCRIPTION	QTY
	PLANTING FINISH – BARK MULCH – 3–INCH DEPTH	287 sf
	PLANTING FINISH – BLACK SLATE CHIP MULCH – 3–INCH DEPTH – COMMODITY BLACK SLATE 1–INCH AVAILABLE THROUGH THE HOME DEPOT – homedepot.com	104 sf

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(888) 564-8539

ARCHITECT: PRESENT FUTURE ARCHITECTS
[illegible]
CHICAGO, IL 60642
[illegible]

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(630) 837-4288

MEP: MCGUIRE ENGINEERS
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CHICAGO, IL 60606
(312) 930-9247

JEFFERSON COUNTY EARLY LEARNING CENTER

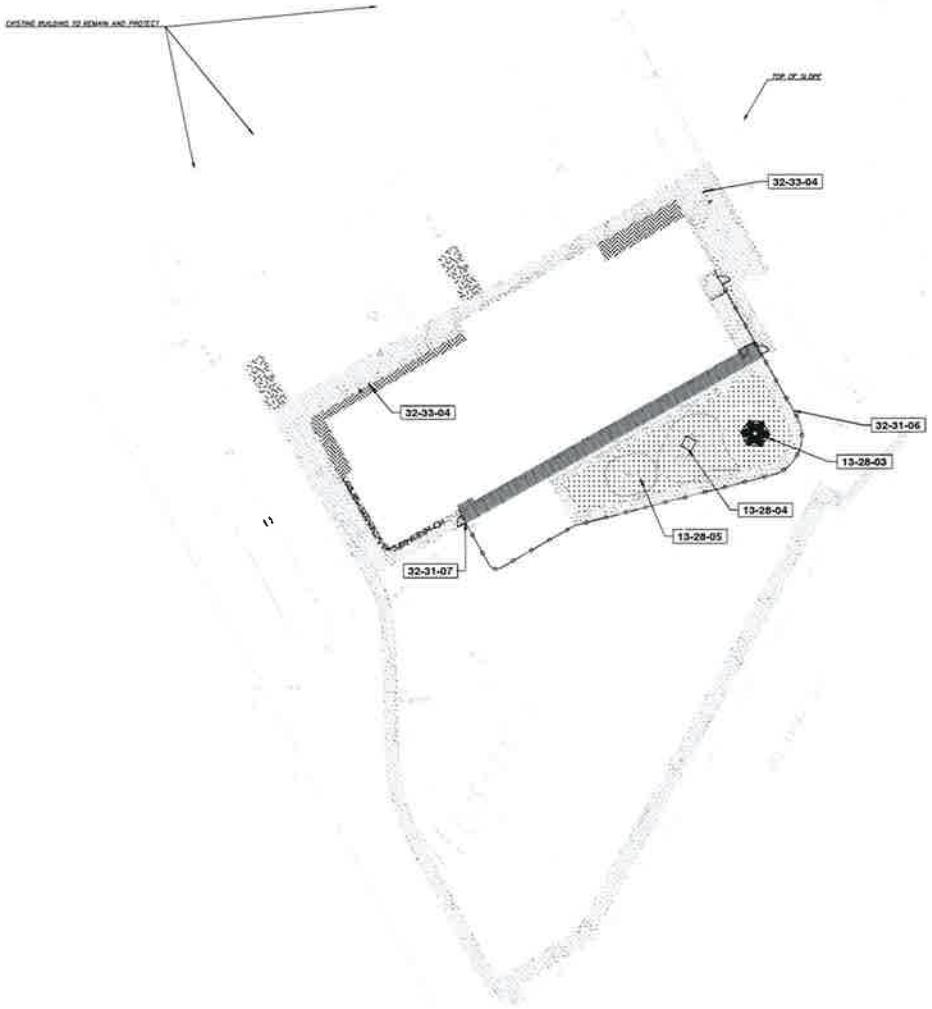
PORT TOWNSEND, WA 98368

NO.	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

01/29/2021

MATERIALS SCHEDULE

L1-00



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32-31-06	FENCE – REFER TO A100 FOR SELECTION	228 lf
32-31-07	GATE – REFER TO A100 FOR SELECTION	4

SYMBOL	Site Furnishings DESCRIPTION	QTY
32-33-04	BICYCLE PARKING – PACIFIC OUTDOORS – STEEL– POWDER COAT BLACK	4

SYMBOL	Wood Decking DESCRIPTION	QTY
	DECKING – REFER TO A100 FOR SELECTION	584 sf

SYMBOL	Athletic & Recreational Special Construction DESCRIPTION	QTY
	RESILIENT PLAY SURFACE – POURED-IN-PLACE – REFER TO A100 FOR SELECTIONS	1,787 sf

SYMBOL	Rigid Paving DESCRIPTION	QTY
	PEDESTRIAN SURFACE – REFER TO CIVIL	5,774 sf
	PEDESTRIAN SURFACE – PIGMENTED CONCRETE – REFER TO CIVIL	504 sf

SYMBOL	Aggregate Surfaces DESCRIPTION	QTY
	VEHICULAR SURFACE – 5/8–INCH MINUS CRUSHED – 4–INCH DEPTH – AGGREGATE – LOCALLY SOURCED – COMPACT 90–PERCENT	4,554 sf

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	PLANTING FINISH – BLACK SLATE CHIP MULCH – 3–INCH DEPTH – COMMODITY BLACK SLATE 1–INCH AVAILABLE THROUGH THE HOME DEPOT – homedepot.com	104 sf

ATWELL

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MEP: MCGUIRE ENGINEERS
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CHICAGO, IL 60606
(312) 930-7941

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

NO. #	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

N

SCALE: 1" = 20'

0 10 20 40

UNDERGROUND UTILITY NOTE

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02/29/2024

MATERIALS PLAN

L1-01

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI			TOTAL
4 ADJ 360	Hunter PSU-06 10 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.	19	30			
4 ADJ 360	Hunter PSU-06 15 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.	15	30			
4 ADJ 360	Hunter PSU-06 17 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.	5	30			
CS LCS RCS CS SS	Hunter PROS-06 Strip Series Turf Spray, 6in. Pop-Up. Co-molded wiper seal with UV Resistant Material.	14	30			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	NOZZLE	TOTAL
1.5	Hunter PGP-06 1.5 Turf Rotor, 6in. Pop-Up. Adjustable to Full Circle.	28	25	1.2	29	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				TOTAL
	Netafim LVCZ10075-HFHP Pre-Assembled Control Zone Kit, with 1in. Series 80 Control Valve, 3/4in. Disc Filter, and High Flow Pressure Regulator 4.5GPM to 17.5GPM.	1				
	Area to Receive Dripline Netafim TLCV-06-12 Techline Pressure Compensating Landscape Dripline with Check Valve. 0.6 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. 12mm.	389.2 l.f.				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY				TOTAL
	Hunter ICV-G 1in., 1-1/2in., 2in., and 3in. Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	6				
	Hunter HQ-JRC Quick coupler valve, yellow rubber cover, red brass and stainless steel, with 3/4in. NPT inlet, 1-piece body.	1				
MV	Hunter IBV 1" 1in., 1-1/2in., 2in., and 3in. Brass Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	1				
D	Drain Valve	1				
BF	Febco 825Y 1" Reduced Pressure Backflow Preventer	1				
C	Hunter I2C-080-M 8 Station Outdoor Modular Controller. No Module Required. Commercial Use. Metal Cabinet.	1				
FC	Hunter FREEZE-CLIK Freeze Sensor installs easily to shut system off to avoid dangerous, icy conditions. 5 year warranty.	1				
WS	Hunter MWS (2) Weather Station with rain sensor, wind sensor, 120 VAC, 5 amp. 5 year warranty.	1				
FL	Hunter W-HC-FLOW-R Wireless HC Flow Meter Kit, receiver only (domestic 900 MHZ)	1				
M	Water Meter 1" REFER TO CIVIL ENGINEER DRAWINGS	1				
	Irrigation Lateral Line: PVC Class 200 SDR 21	1,825 l.f.				
	Irrigation Mainline: PVC Schedule 40	504.7 l.f.				
	Pipe Sleeve: PVC Schedule 40	172.8 l.f.				

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	MIN.	PSI	PSI RATING	PRECIP.
C1	Netafim LVCZ10075-HFHP	1"	Area for Dripline	3.9	435.4	27.3		0.96 in/h
C3	Hunter ICV-G	1"	Turf Spray	28.78	45.8	40.8		1.22 in/h
C4	Hunter ICV-G	1"	Turf Rotor	14.4	103.7	29.6		0.32 in/h
C5	Hunter ICV-G	1"	Turf Spray	16.9	148.9	37.7		1.53 in/h
C6	Hunter ICV-G	1"	Turf Spray	9.24		33.6		1.44 in/h
C7	Hunter ICV-G	1"	Turf Rotor	19.2	278.0	32.9		0.39 in/h
C8	Hunter ICV-G	1"	Turf Spray	15.85	338.0	33.8		1.67 in/h
	Common Wire				504.7			

IRRIGATION NOTES:

1. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR TO VERIFY STATIC WATER PRESSURE AT POINT OF CONNECTION.
2. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR TO VERIFY THE AMOUNT OF WATER AVAILABLE AT POINT OF CONNECTION MEETS OR EXCEEDS PROJECT DEMANDS.
3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR MARKING & PROTECTING ALL UTILITIES ENCOUNTERED THROUGHOUT THE SCOPE OF WORK.
4. ALL PLANS ARE DIAGRAMMATIC & SCHEMATIC. ARCHITECT TO BE NOTIFIED IMMEDIATELY IF FIELD VARIANCES REQUIRING MODIFICATIONS TO PLAN SHALL BE REQUIRED
5. MAINLINE LAYOUT IS DIAGRAMMATIC AND HAS BEEN SHOWN OUTSIDE OF LANDSCAPE AREAS FOR PURPOSE OF CLARITY. ALL IRRIGATION PIPING AND COMPONENTS SHALL BE INSTALLED IN WITHIN PROJECT LANDSCAPED AREAS UNLESS SHOWN AS SLEEVED OR OTHERWISE NOTED ON PLAN.
6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY SLEEVING UNDER SIDEWALKS, ROADWAY OR ANY OTHER PROJECT PAVING OR HARDSCAPE FOR THE PROPER INSTALLATION OF THIS SYSTEM REGARDLESS OF PRESENCE ON PLAN. ARCHITECT TO BE NOTIFIED IMMEDIATELY IF ADDITIONAL SLEEVING IS REQUIRED.
7. MAINLINE SLEEVES & WIRE CHASES TO HAVE CONTINUOUS DETECTABLE MARKING TAPE INSTALLED WITH PIPE AND/OR WIRE. ALL OTHER SLEEVING TO BE MARKED WITH ½"x36" STEEL REBAR PLACED AT EACH END OF SLEEVE & FLUSH TO SOIL GRADE LEVEL.
8. SLEEVING TO EXTEND BEYOND PAVEMENT SUBGRADE MATERIALS & REMAIN COVERED UNTIL PIPE IS INSTALLED & LANDSCAPE AREA BACKFILLED
9. PIPING MAY BE INSTALLED IN COMMON TRENCHES - 3 PIPES MAXIMUM.
10. SPRINKLER HEADS IN PLANTING AREAS SHALL BE A UNIFORM DISTANCE FROM HARDSCAPE EDGE - 4" MAXIMUM & TOP OF SPRINKLER BODY SHALL BE FLUSH WITH SOIL GRADE PRIOR TO ADDITION OF SEED, SOD OR MULCH.
11. CONTRACTOR IS RESPONSIBLE FOR ON-SITE ADJUSTMENTS TO SPRINKLER HEAD SPACING & NOZZLE CHOICE TO ENSURE COMPLETE COVERAGE & TO MINIMIZE OVERSPRAY. ADJUSTMENTS TO SPACING INCLUDE INSTALLING ADDITIONAL SPRINKLER HEADS IF NECESSARY.
12. VERIFY CONTROLLER LOCATION WITH OWNER. VERIFY PROPER ELECTRICAL SERVICE IS PROVIDED PRIOR TO INSTALLATION OF ANY CONDUIT OR PEDESTAL BASE. ANY PENETRATIONS OF BUILDING WALLS OR SURFACES MUST BE APPROVED BY GENERAL CONTRACTOR.
13. CONTRACTOR IS RESPONSIBLE FOR WINTERIZATION OF IRRIGATION SYSTEM WITH COMPRESSED AIR APPLIED AT THE WINTERIZATION VALVE. REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.
14. THE LOCATION OR ANY PROJECT SPECIFIC SENSORS OR WEATHER STATIONS WILL BE COORDINATED WITH THE GENERAL CONTRACTOR & APPROVED BY LANDSCAPE ARCHITECT.
15. NO SUBSTITUTIONS TO PLAN OR APPROVED MATERIALS IS ALLOWED WITHOUT APPROVAL OF LANDSCAPE ARCHITECT.
16. ALL WORKMANSHIP WILL BE COMPLETE AND IN ACCORDANCE WITH THE LATEST ACCEPTED STANDARDS OF THE INDUSTRY.
17. ALL WORK TO BE DONE IN ACCORDANCE WITH AUTHORITY HAVING JURISDICTION'S SPECIFICATIONS AND DESIGN STANDARDS.
18. LEED WATER EFFICIENCY OUTDOOR WATER USE REDUCTION: PEAK WATERING MONTH (JULY) -AVERAGE MONTHLY REFERENCE ETo (4.99 INCHES/MONTH) - LANDSCAPE WATER ALLOWANCE (LWA) (52,717 GALLONS/MONTH) - LANDSCAPE WATER BASELINE (102,886 GALLONS/MONTH) -LANDSCAPE WATER REQUIREMENT (LWR) (45,848 GALLONS/MONTH) - PERCENTAGE REDUCTION FROM BASELINE (30%)

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ATWELL

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STRUCTURAL: MEYER BORGMAN JOHNSON, 1 N LASALLE STREET, SUITE 3150, CHICAGO, IL 60602, (630) 871-4266

MEP: MCGUIRE ENGINEERS, 200 S RIVERSIDE PLAZA, SUITE 350, CHICAGO, IL 60606, (312) 939-2247

JEFFERSON COUNTY EARLY LEARNING CENTER

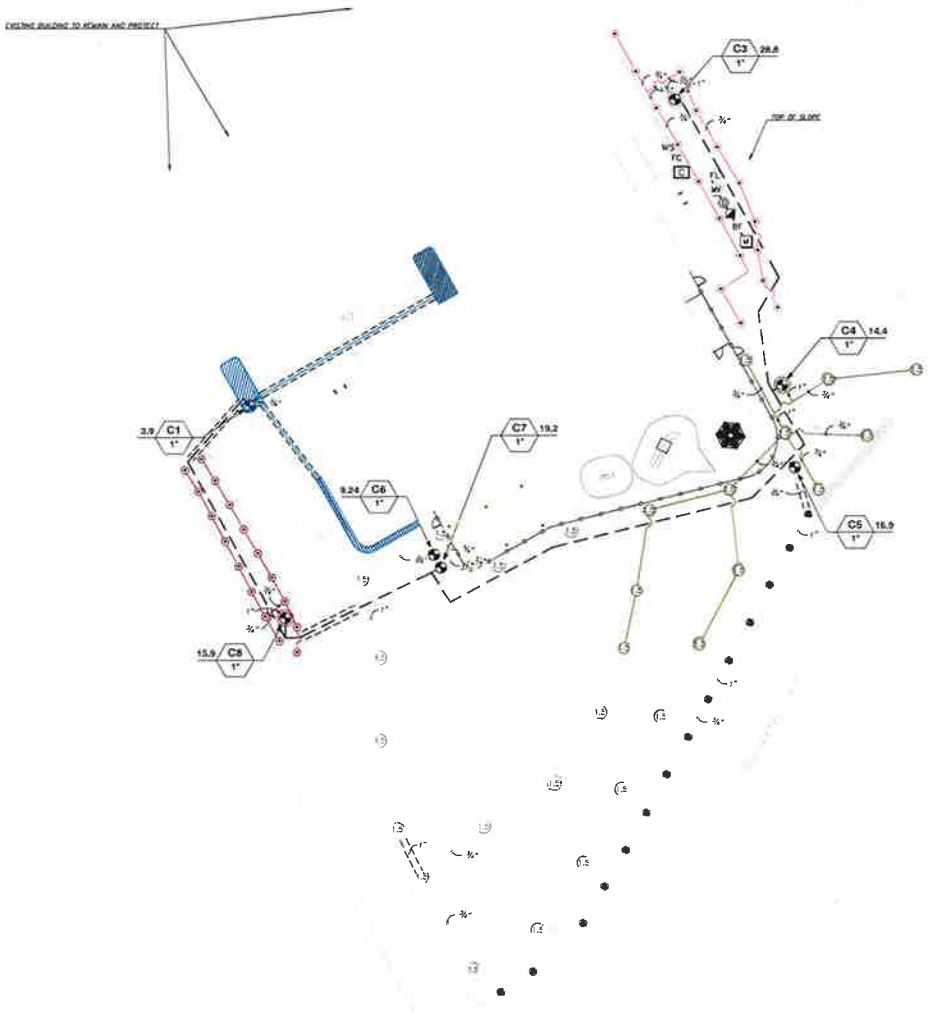
PORT TOWNSEND, WA 98368

NO.	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

01/29/2024

IRRIGATION SCHEDULE & NOTES

L2-00



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
ADJ 360	Hunter PSU-06 10 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.
ADJ 360	Hunter PSU-06 15 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.
ADJ 360	Hunter PSU-06 17 Series Turf Spray, 6in. Pop-Up. Adjustable and Full Circle. Drain Check Valve.
LS LCS RCS CS SS	Hunter PROS-06 Strip Series Turf Spray, 6in. Pop-Up. Co-molded wiper seal with UV Resistant Material.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
1.5	Hunter PGP-06 1.5 Turf Rotor, 6in. Pop-Up. Adjustable to Full Circle

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Netafim LVC210075-HFNP Pre-Assembled Control Zone Kit, with 1in. Series 80 Control Valve, 3/4in. Disc Filter, and High Flow Pressure Regulator 4.5GPM to 17.6GPM.
	Area to Receive Dripline Netafim TLCV-04-12 Techline Pressure Compensating Landscape Dripline with Check Valve. 0.6 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. 17mm.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Hunter ICV-G 1in., 1-1/2in., 2in., and 3in. Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.
	Hunter HQ-JRC Quick coupler valve, yellow rubber cover, red brass and stainless steel, with 3/4in. NPT inlet, 1-piece body.
	Hunter IBV 1" 1in., 1-1/2in., 2in., and 3in. Brass Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.
	Drain Valve
BF	Febco 825Y 1" Reduced Pressure Backflow Preventer
C	Hunter I2C-0800-M 8 Station Outdoor Modular Controller. No Module Required. Commercial Use. Metal Cabinet.
FC	Hunter FREEZE-CLIK Freeze Sensor installs easily to shut system off to avoid dangerous, icy conditions. 5 year warranty.
WS	Hunter MWS (2) Weather Station with rain sensor, wind sensor, 120 VAC, 5 amp. 5 year warranty.
FL	Hunter W-HC-FLOW-R Wireless HC Flow Meter Kit, receiver only (domestic 900 MHZ)
M	Water Meter 1" REFER TO CIVIL ENGINEER DRAWINGS
	Irrigation Lateral Line: PVC Class 200 SDR 21
	Irrigation Mainline: PVC Schedule 40
	Pipe Sleeve: PVC Schedule 40
	Valve Callout Valve Number Valve Plan Valve Size

ATWELL
OWNER: OLYMPIC PENINSULA YMCA, 875 14TH AVE, SUITE 3A, SEQUIM, WA 98382, (360) 504-4528
ARCHITECT: PRESENT FUTURE ARCHITECTS, CHICAGO IL 60641
DESIGNER: STUDIO STL, 1044 LAWRENCE STREET, PORT TOWNSEND WA 98368
CIVIL: ATWELL, LLC, TACOMA, WA 98402, (425) 259-7234
STRUCTURAL: MEYER BORGMAN JOHNSON, CHICAGO IL 60603
MEP: MCGUIRE ENGINEERS, 200 S RIVERSIDE PLAZA SUITE 250, CHICAGO, IL 60606, (312) 930-0247

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

ISS. #	DESCRIPTION	DATE
	ARCHITECTS PROJECT NO.	2217

N

SCALE: 1" = 20'

0 10 20 40

UNDERGROUND UTILITY NOTE

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

02/23/2024

IRRIGATION PLAN

L2-01

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	ROOT COND.	SIZE	DETAIL
TREES					
	17	*Acer campestre 'Evelyn' / Queen Elizabeth™ Hedge Maple*	B & B	2" Cal	
	8	*Ulmus x 'Homestead' / Homestead Elm*	B & B	2" Cal	
SHRUBS					
	10	*Bergenia cordifolia 'Red Beauty' / Red Beauty Heartleaf Bergenia*	1 Gal		
	17	*Imperata cylindrica 'Red Baron' / Japanese Blood Grass*	1 Gal	9" Ht	
	30	*Mahonia repens / Creeping Mahonia*	1 Gal	12" Ht	
SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING	DETAIL
GROUND COVERS					
	211 sf	*Arctostaphylos uva-ursi / Kinnikinnick*	4" Pot	18" O.C.	
	6,887 sf	*Festuca x 'Eco-Lawn' / Eco-Lawn Fescue*	Seed		
	13,112 sf	*Wildflower Meadow Mix / Wildflower Meadow Mix*	Seed		

GENERAL NOTES

1. ALL LANDSCAPE INSTALLATION WILL COMPLY WITH STANDARD DETAILS AND SPECIFICATIONS.
2. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF ALL SITE UTILITIES PRIOR TO LANDSCAPE IMPLEMENTATION. PLANT LOCATIONS MAY BE ADJUSTED TO AVOID CONFLICT.
3. LANDSCAPE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SITE IMPROVEMENTS, PAVING, WALLS, AND UNDERGROUND UTILITIES. DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AND AT NO ADDITIONAL COST.
4. PLANT COUNT IS FOR THE CONTRACTOR'S CONVENIENCE; IF THERE IS A DISCREPANCY, THE PLAN SHALL GOVERN. ACTUAL PLANT QUANTITIES TO BE DETERMINED BY REQUIRED PLANT SPACING.
5. SUBSTITUTION OF PLANT VARIETIES DUE TO LACK OF AVAILABILITY SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT.
6. DO NOT CUT LEADER, PRUNE ALL DAMAGED OR DEAD WOOD AFTER PLANTING, STAKING, AND MULCHING. KEEP CROWN SHAPE TYPICAL OF SPECIES.
7. REMOVE PLANTING LABELS AFTER FINAL ACCEPTANCE BY LANDSCAPE ARCHITECT.
8. FINISH GRADE OF MULCHED LANDSCAPE AREAS SHALL BE GRADED TO 1/2" MAX. BELOW CONCRETE OR OTHER PAVED SURFACES.
9. ALL LANDSCAPE AREAS ARE TO BE MAINTAINED BY A LICENSED PROFESSIONAL LANDSCAPE MAINTENANCE COMPANY.
10. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR MINIMUM FROM SUBSTANTIAL COMPLETION TO INCLUDE ONE FULL GROWING SEASON (THROUGH SEPT. 30).
11. ALL AREAS LEFT UNPLANTED SHALL BE DRESSED WITH 3" DEPTH BARK MULCH.
12. BARK MULCH SHALL BE MEDIUM BARK MULCH CONSISTING OF DOUGLAS FIR, PINE, OR HEMLOCK BARK. IT SHALL BE GROUND SO THAT ON A LOOSE VOLUME BASIS, A MINIMUM OF 95% PASSES A 2-INCH SIEVE AND NO MORE THAN 30 PERCENT PASSES A NO. 4 SIEVE. THE BARK MULCH SHALL NOT CONTAIN SALTS, RESIN, TANNIN, OR ANY OTHER DELETERIOUS MATERIAL IN QUANTITIES THAT WOULD BE DETRIMENTAL TO PLANT LIFE.
13. ALL IMPROVED LANDSCAPE AREAS SHALL RECEIVE 12-INCH MIN. COMPACTED DEPTH (85% COMPACT) IMPORT TOPSOIL. FIRST TWO-INCH LIFT SHALL BE THOROUGHLY MIXED INTO EXISTING SUBSOIL TO A 4" MIN. DEPTH. FILL TO BE USED AS SUBSOIL IN RAISED PLANTERS SHALL BE CLEAN, WELL-DRAINED, NOT OVER-COMPACTED MATERIAL WITH NO DELETERIOUS MATERIAL POTENTIALLY HARMFUL TO PLANTS.
14. IMPORT TOPSOIL FOR PLANTING BEDS SHALL CONSIST OF APPROX. 33-50% COMPOST AND 50-65% SAND OR SANDY LOAM AND MEET THE FOLLOWING SPECIFICATIONS:
    ORGANIC MATTER (DRY WEIGHT): 15-20%
    CONDUCTIVITY (MMHS/CM): <3
    pH: 6.0-7.5
    CEC: >10 meq/100g
    USDA TEXTURE: SANDY LOAM
    WAC METALS: PASS
    IMPORTED TOPSOIL SHALL NOT INCLUDE SOILS DEFINED BY THE NATURAL RESOURCES CONSERVATION SERVICE WEB SURVEY AS PRIME FARMLAND, UNIQUE FARMLAND OR FARMLAND OF STATEWIDE OR LOCAL IMPORTANCE OR SOILS FROM OTHER GREENFIELD SITES UNLESS THE SOILS ARE A BYPRODUCT OF A CONSTRUCTION PROCESS.
15. WILDFLOWER MEADOW (PACIFIC NORTHWEST WILDFLOWER SEED MIX 800.769.0300 plants@highcountrygardens.com) BY HIGH COUNTRY GARDENS SEED AT RATE OF 1-POUND PER 1,000 SF. SEED MIX INCLUDES: *Achillea millefolium (White Yarrow), Aquilegia vulgaris (Wild Columbine), Centaurea cyanus (Cornflower / Bachelor Button), Cheiranthus allionii (Siberian Wallflower), Chrysanthemum maximum (Shasta Daisy), Clarkia amoena (Godetia), Clarkia unguiculata (Farewell-to-Spring), Collinsia heterophylla (Chinese Houses), Coreopsis lanceolata (Lance-Leaf Coreopsis), Coreopsis tinctoria (Plains Coreopsis), Delphinium elatis (Rocket Larkspur), Dianthus barbatus (Sweet William), Eschscholzia californica (California Poppy), Gaillardia aristata (Blanket Flower), Gypsophila elegans (Baby's Breath), Iberis umbellata (Candytuft), Linanthus grandiflorus (Mountain Phlox), Linaria maroccana (Baby Snapdragon), Lilium grandiflorum rubrum (Scarlet Flax), Linum perenne lewisii (Blue Flax), Lobularia maritima (Sweet Alyssum), Lupinus succulentus (Arroyo Lupine), Nemophila menziesii (Baby Blue Eyes), Oenothera lamarckiana (Evening Primrose), Papaver rhoeas (Red Poppy / Shirley Poppy), Rudbeckia hirta (Black Eyed Susan), and Silene armeria (None-so-Pretty).*
16. LEED SS PROTECT OR RESTORE HABITAT: 4,631 SF UNDISTURBED VEGETATION ON-SITE. ALL IMPROVED LANDSCAPE AREAS ON SITE (20,390 SF) SHALL RECEIVE 12-INCH DEPTH IMPORTED TOPSOIL FOR INFILTRATION AND TO SUPPORT HEALTHY PLANT GROWTH. ALL PLANT MATERIALS ARE NATIVE OR ADAPTED FOR THE PACIFIC NORTHWEST.
17. LEED SS OPEN SPACE: SITE AREA IS 54,040 SF - TOTAL OPEN SPACE IS 31,873 SF (59.0% PROVIDED OPEN SPACE) - ON-SITE LANDSCAPE OPEN SPACE IS 25,021 SF (80% LANDSCAPE OPEN SPACE)- 391 SF IS PLANTING AREAS WHICH INCLUDE TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, AND GROUNDCOVERS (1.6%) - 6,887 SF IS ECO LAWN AREA WHICH INCLUDES DROUGHT TOLERANT ROUGH GRASS AND TWO SPECIES OF DECIDUOUS TREE (27.5%) - 13,112 SF IS WILDFLOWER MEADOW WHICH INCLUDES SEEDED WILDFLOWER MEADOW MIX WHICH INCLUDES 28 DIFFERENT WILDFLOWER SPECIES AND ONE TREE SPECIES (52.4%) - 4,631 SF IS UNDISTURBED EXISTING VEGETATION WHICH INCLUDE AT LEAST TWO TYPES OF VEGETATION (18.5%). 100% OF LANDSCAPE AREAS INCLUDE AT LEAST TWO TYPES OF VEGETATION.

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ATWELL

OWNER: OLYMPIC PENINSULA YMCA
615 NORTH AVE, SUITE 3A
SEQUIM, WA 98382
(360) 504-9504

ARCHITECT: PRESENT FUTURE ARCHITECTS
1107 OHIO STREET, #604
CHICAGO, IL 60642
(312) 991-1292

DESIGNER: STUDIO ETC
1044 LAWRENCE STREET
PORT TOWNSEND, WA 98368
(360) 385-8818

CIVIL: ATWELL, LLC
1148 BROADWAY, SUITE 310
TACOMA, WA 98402
(863) 858-7524

STRUCTURAL: MEYER BORGMAN JOHNSON
9 N LASALLE STREET, SUITE 3050
CHICAGO, IL 60602
(630) 833-4255

MEP: MCGUIRE ENGINEERS
300 S RIVERSIDE PLAZA, SUITE 750
CHICAGO, IL 60606
(312) 930-0747

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

NO.	DESCRIPTION	DATE
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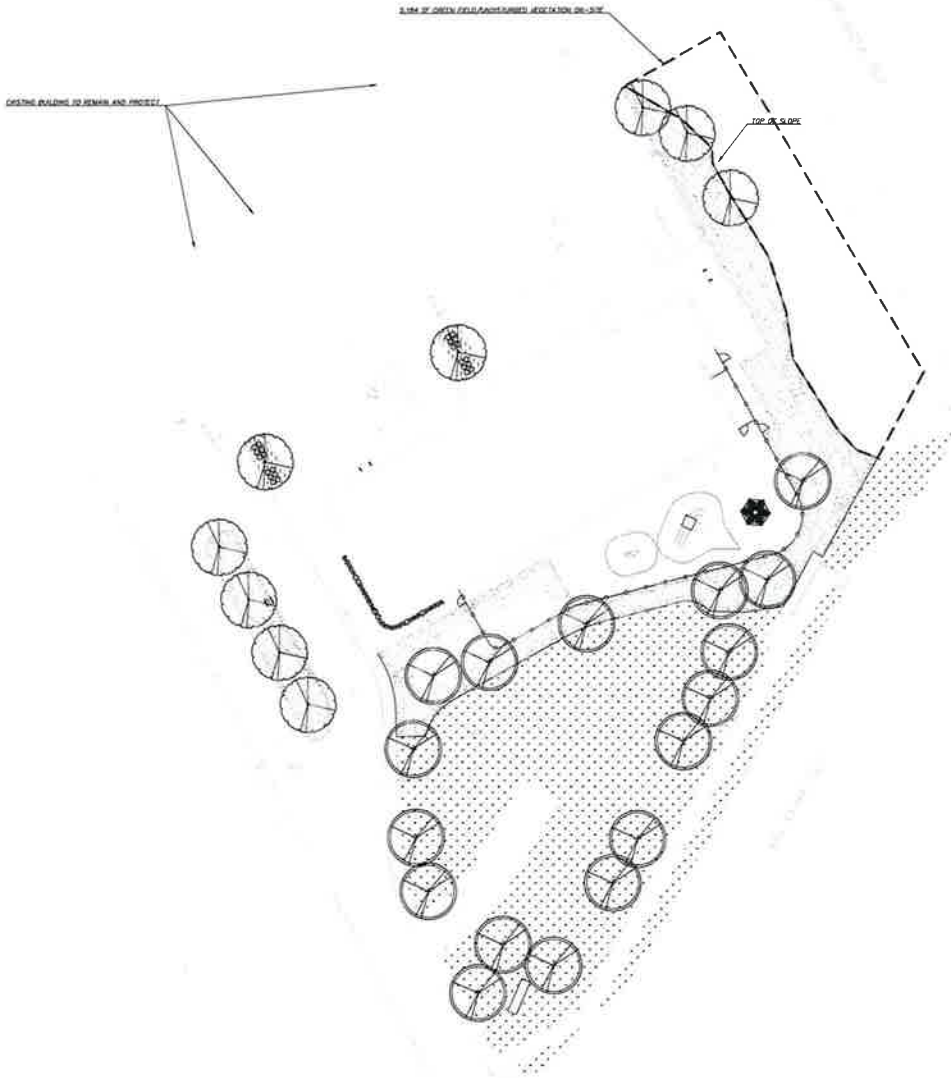
01/29/2021

PLANTING SCHEDULE & NOTES

L3-00



PLANT SCHEDULE

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0 10 20 40

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ATWELL
OWNER: OLYMPIC PENINSULA YMCA, 975 NORTH AVE, SUITE 3A, SEQUIM, WA 98382, (360) 504-3578
ARCHITECT: PRESENT FUTURE ARCHITECTS, 1401 W OHIO STREET, #624, CHICAGO, IL 60642, (312) 881-1282
DESIGNER: STUDIO STL, 1044 LAWRENCE STREET, PORT TOWNSEND WA 98368, (360) 940-8898
CIVIL: ATWELL, LLC, 1143 BROADWAY, SUITE 310, TACOMA WA 98402, (253) 358-7234
STRUCTURAL: MEYER BORGMAN JOHNSON, 1 N LASALLE STREET, SUITE 2010, CHICAGO, IL 60602, (630) 871-4288
MEP: MCGUIRE ENGINEERS, 310 S RIVERSIDE PLAZA, SUITE 350, CHICAGO, IL 60606, (312) 930 0247

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

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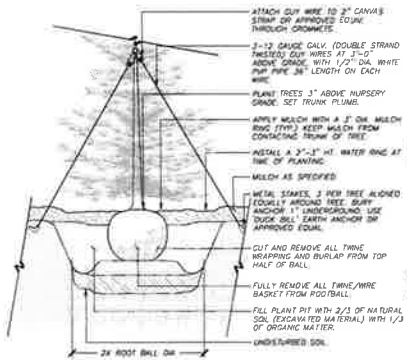
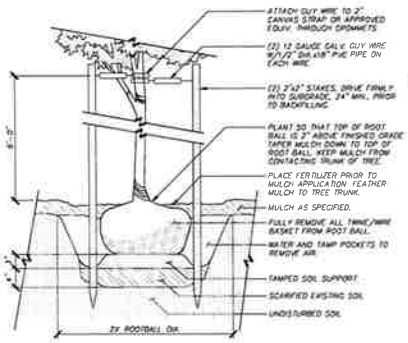
01/29/2021

PLANTING PLAN

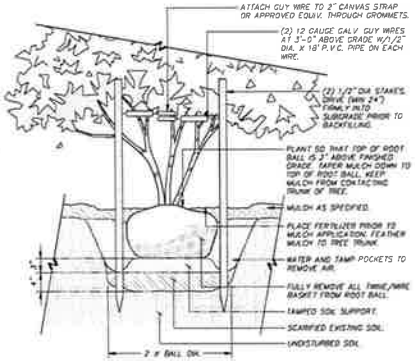
L3-01



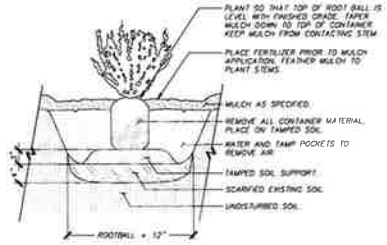
1 EVERGREEN TREE PLANTING
1" = 1'-0"



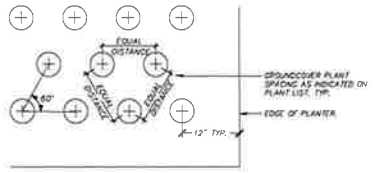
2 DECIDUOUS TREE PLANTING
1" = 1'-0"

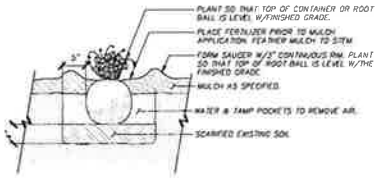


3 MULTI STEM TREE PLANTING
1" = 1'-0"



4 SHRUB PLANTING
1" = 1'-0"





5 GROUND COVER PLANTING
1" = 1'-0"

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ATWELL
719 SECOND AVE, SUITE 1201
SEATTLE, WA 98104
T 206.357.4400 | F 425.774.4555
WWW.ATWELL-GROUP.COM

OWNER — OLYMPIC PENINSULA YMCA, 875 NINTH AVE, SUITE 3A, SEQUIM, WA 98382, (360) 504-0526
ARCHITECT — PRESENT FUTURE ARCHITECTS, 1147 W OHIO STREET, #504, CHICAGO, IL 60642, (312) 851-1292
DESIGNER — STUDIO STL, 1044 LAWRENCE STREET, PORT TOWNSEND, WA 98368, (360) 840-8614
CIVIL — ATWELL, LLC, 1148 BROADWAY, SUITE 210, TACOMA, WA 98402, (253) 518-7206
STRUCTURAL — MEYER BORGMAN JOHNSON, 1 N LASALLE STREET, SUITE 3250, CHICAGO, IL 60602, (630) 631-4268
MEP — MCGUIRE ENGINEERS, 310 S RIVERSIDE PLAZA, SUITE 2114, CHICAGO, IL 60606, (312) 930-0247

JEFFERSON COUNTY EARLY LEARNING CENTER

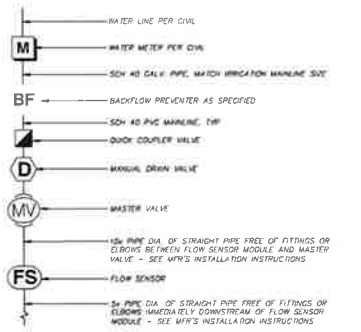
PORT TOWNSEND, WA 98368

REV. #	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

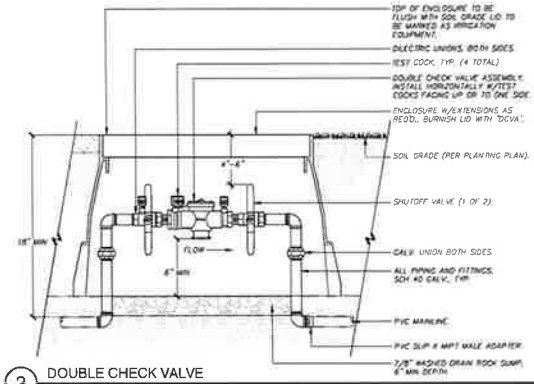
01/29/2021

PLANTING DETAILS

L4-01



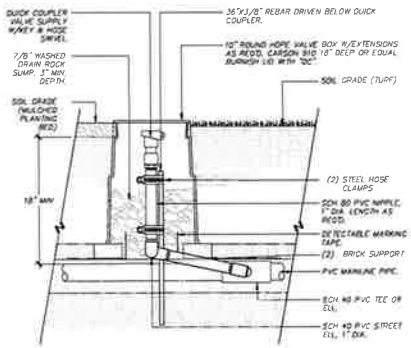
1 POC LAYOUT
1 1/2" = 1'-0"



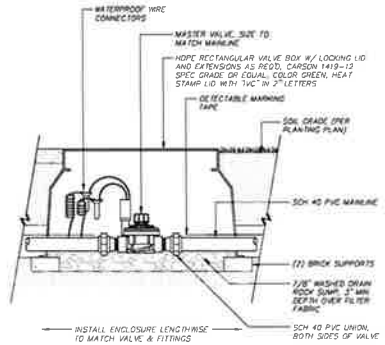
2 DOUBLE CHECK VALVE
1 1/2" = 1'-0"

NOTES:

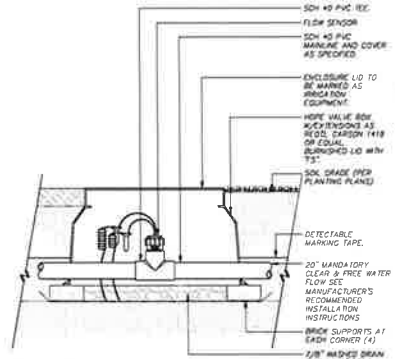
1. ENCLOSURE SHALL BE TWO STACKED METER BOXES OR ONE OVERSIZED METER BOX. METER BOX SHALL HAVE REMOVABLE BOLT-DOWN COVER. METER BOX AND LID SHALL BE RATED FOR ANTICIPATED LOAD CONDITIONS.
2. BOX SHALL BE SIZED TO PROVIDE 6" MIN. CLEARANCE BETWEEN SIDE WALLS AND UNIONS OR TEST COCKS IF FACING SIDEWAYS, AND 4" MIN./6" MAX. BETWEEN UNDERSIDE OF LID AND HIGHEST POINT OF DEVICE.
3. ENCLOSURE LOCATED IN SIDEWALK OR AREAS WITH VEHICULAR TRAFFIC SHALL BE METAL. OLYMPIC FOUNDRY SM30 METER BOX OR APPROVED EQUAL. BOXES IN OTHER NON-TRAFFIC AREAS TO BE CARSON INDUSTRIES 1730 18" DEPTH HDPE METER BOX WITH 1720 SOLID FLUSH OR T-COVER, OR APPROVED EQUAL.
4. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND MINIMUM STANDARDS OF THE UNIFORM PLUMBING CODE (UPC) AND WASHINGTON STATE DEPT. OF HEALTH (WSDOH) APPROVED INSTALLATION LIST.
5. TESTING TO BE PERFORMED BY WSDOH CERTIFIED BACKFLOW ASSEMBLY TESTER UPON INSTALLATION; ANNUALLY THEREAFTER; AFTER ASSEMBLY IS REPAIRED OR MOVED, OR AFTER AN INCIDENT AT OWNER'S EXPENSE. THE SATISFACTORY TEST REPORT SHALL BE SUBMITTED TO THE AGENCY HAVING JURISDICTION PER WSDOH REQUIREMENTS.
6. DCVA IS TO BE OWNED, OPERATED, AND MAINTAINED BY PROPERTY OWNER.



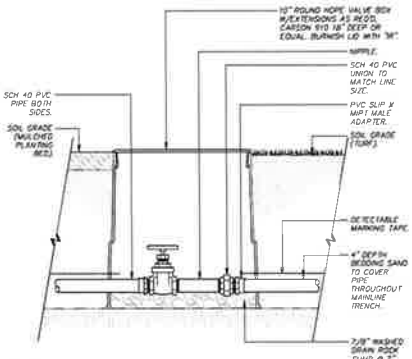
3 QUICK COUPLER VALVE
1 1/2" = 1'-0"



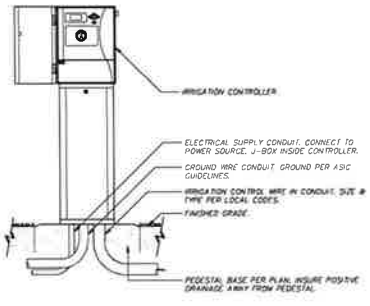
4 MASTER VALVE
1 1/2" = 1'-0"



5 FLOW SENSOR
1 1/2" = 1'-0"



6 MAINLINE ISOLATION VALVE
1 1/2" = 1'-0"



7 PEDESTAL MOUNT CONTROLLER
1" = 1'-0"

UNDERGROUND UTILITY NOTE

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

OWNER: OLYMPIC PENINSULA YMCA, 829 N 5TH AVE, SUITE 2A, SEQUIM, WA 98382, (360) 504-8529
ARCHITECT: PRESENT FUTURE ARCHITECTS, 1147 W OHIO STREET, #604, CHICAGO, IL 60642, (312) 915-1392
DESIGNER: STUDIO STL, 1044 LAWRENCE STREET, PORT TOWNSEND, WA 98368, (360) 840-8914
CIVIL: ATWELL, LLC, 1148 BROADWAY, SUITE 710, TACOMA, WA 98402, (425) 253-7234
STRUCTURAL: MEYER BORGMAN JOHNSON, 140 LASALLE STREET, SUITE 3250, CHICAGO, IL 60603, (630) 831-4283
MEP: MCGUIRE ENGINEERS, 300 S RIVERSIDE PLAZA, SUITE 550, CHICAGO, IL 60606, (312) 838-0347

JEFFERSON COUNTY EARLY LEARNING CENTER

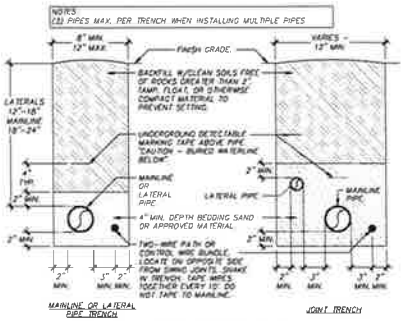
PORT TOWNSEND, WA 98368

NO. #	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

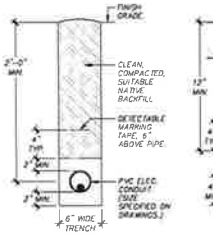
01/25/2024

IRRIGATION DETAILS

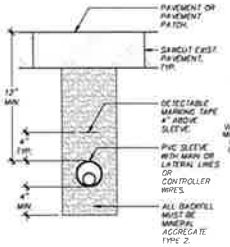
L4-02

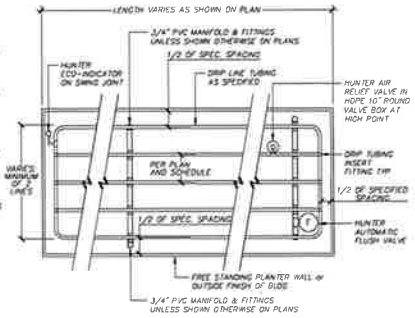


1 IRRIGATION TRENCHING AND BACKFILL
NOT TO SCALE

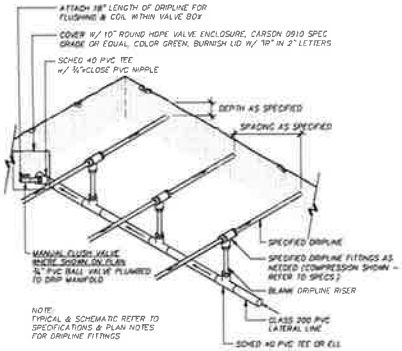


2 ELECTRICAL CONDUIT & SLEEVE TRENCHING
NOT TO SCALE

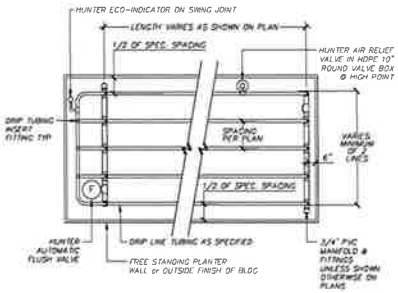




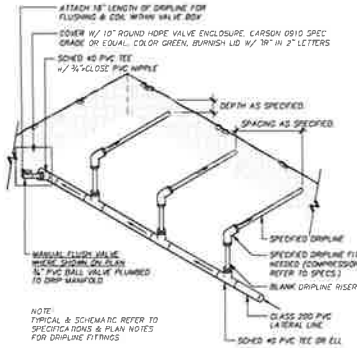
3 DRIPLINE LAYOUT: CENTER DISTRIBUTION
1 1/2" = 1'-0"



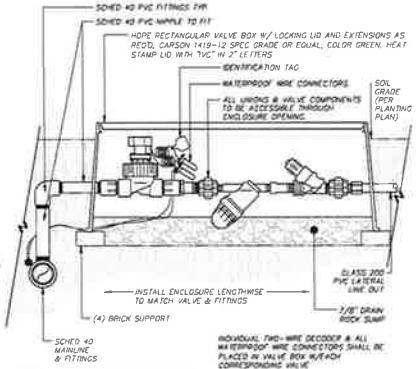
4 DRIP MANIFOLD: CENTER DISTRIBUTION
1 1/2" = 1'-0"



5 DRIPLINE LAYOUT: END DISTRIBUTION
1 1/2" = 1'-0"



6 DRIP MANIFOLD: END DISTRIBUTION
1 1/2" = 1'-0"



7 DRIP ZONE VALVE KIT
1 1/2" = 1'-0"

UNDERGROUND UTILITY NOTE

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL
OWNER: OLYMPIC PENINSULA YMCA, 821 14TH AVE SUITE 3A, SEQUIM, WA 98382, (360) 504-4928
ARCHITECT: PRESENT FUTURE ARCHITECTS, 1147 W OHIO STREET, #604, CHICAGO, IL 60642, (312) 961-1232
DESIGNER: STUDIO STL, 1344 LAWRENCE STREET, PORT TOWNSEND, WA 98368, (360) 643-8816
CIVIL: ATWELL, LLC, 1141 BROADWAY, SUITE 310, TACOMA, WA 98402, (425) 336-7234
STRUCTURAL: MEYER BORGMAN JOHNSON, 170 LASALLE STREET, SUITE 2150, CHICAGO, IL 60572, (630) 611-4268
MEP: MCGUIRE ENGINEERS, 200 S RIVERSIDE PLAZA, SUITE 350, CHICAGO, IL 60606, (312) 930-9747

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

NO.	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

02/25/2021

IRRIGATION DETAILS

L4-03

SE-5585 BY PACIFIC OUTDOORS,
OR APPROVED EQUAL

DESCRIPTION

CONTINUOUS LOOP BIKE RACK. FABRICATED OUT OF 1-7/8" HEAVY DUTY STEEL TUBING. AVAILABLE IN STANDARD 3-13 BIKE CAPACITY, OR CAN BE MADE TO CUSTOM LENGTH. AVAILABLE GALVANIZED OR POWDER COATED IN A WIDE RANGE OF COLORS. IN-GROUND OR SURFACE MOUNT INSTALLATION

1 BIKE RACK

ATWELL

ONE CENTRAL WAY, SUITE 400
KIRKLAND, WA 98033
PHONE 206.957.1600
WWW.ATWELL-GROUP.COM

OWNER	OLYMPIC PENINSULA YMCA 615 N 5TH AVE, SUITE 3A SEQUIM, WA 98382 (360) 504-0528
ARCHITECT	PRESENT FUTURE ARCHITECTS 5147 W OHIO STREET, #504 CHICAGO, IL 60644 (312) 961-1293
DESIGNER	STUDIO STL 1044 LAWRENCE STREET PORT TOWNSEND, WA 98368 (360) 940-9514
CIVIL	ATWELL, LLC 1148 BROADWAY, SUITE 210 TACOMA, WA 98402 (425) 259-7239
STRUCTURAL	MEYER BORGMAN JOHNSON 1 N LASALLE STREET, SUITE 2210 CHICAGO, IL 60602 (630) 631-4268
MEP	MCGUIRE ENGINEERS 200 S RIVERSIDE PLAZA, SUITE 350 CHICAGO, IL 60606 (312) 233-2247

JEFFERSON COUNTY EARLY LEARNING CENTER

PORT TOWNSEND, WA 98368

NO.	DESCRIPTION	DATE
	ARCHITECT'S PROJECT NO.	2217

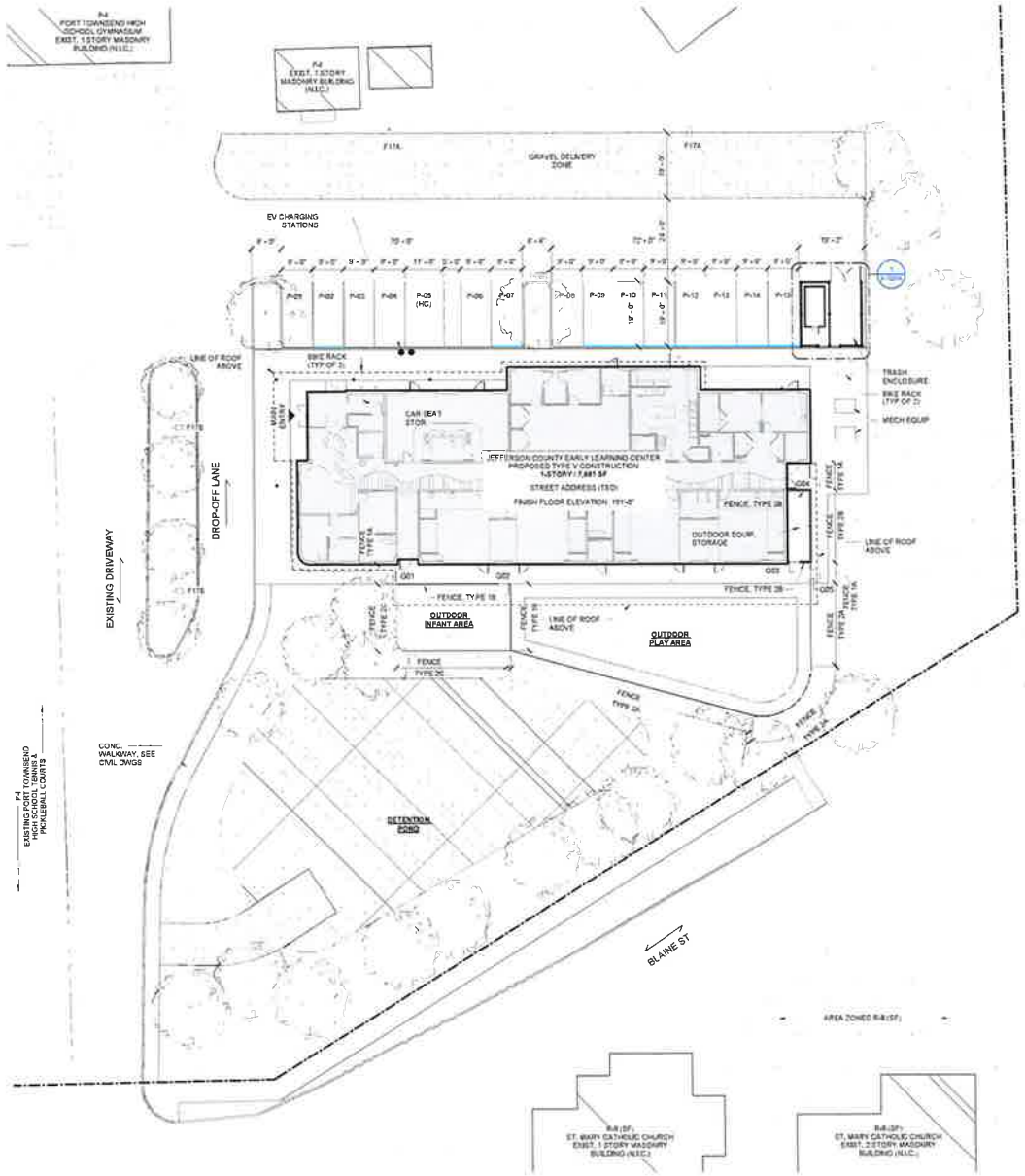
01/29/2024

DETAILS

L4-04

UNDERGROUND UTILITY NOTE

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.



1 SITE PLAN

SITE PLAN GENERAL NOTES

1. SEE CIVIL DWGS FOR ADD L INFO
2. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING AT ALL EXTERIOR FACADE LOCATIONS
3. VERIFY EXISTING CONDITIONS IN FIELD
4. SEE A101A FOR FENCE TYPES
5. SEE A700 FOR GATE INFORMATION

SITE PLAN LEGEND

ASPHALT PAVING	GRASS	RUBBERIZED PLAY SURFACE (6 COLORS)	STONE
CONCRETE	COLOR PIGMENTED CONCRETE	DETENTION POND	NOT IN CONTRACT
COMPOSITE DECKING OVER RECESSED CONC SLAB (TIMBERTECH ADVANCED PVC, VINTAGE COLLECTION)			

OWNER: OLYMPIC PENINSULA YMCA
615 N 5TH AVE, SUITE 3A
SEQUIM, WA 98382
(360) 504-0535

ARCHITECT: PRESENT FUTURE ARCHITECTS
1147 W OHIO STREET, #524
CHICAGO, IL 60642
(312) 951-1292

DESIGNER: STUDIO ET1
1044 LAWRENCE STREET
PORT TOWNSEND, WA 98368
(360) 649-8574

CIVIL: ATWELL, LLC
1148 BROADWAY, SUITE 210
TACOMA, WA 98402
(425) 250-7234

STRUCTURAL: MEYER BORGMAN JOHNSON
1N LASALLE STREET, SUITE 3250
CHICAGO, IL 60602
(630) 571-4050

MEP: MCGUIRE ENGINEERS
200 S RIVERSIDE PLAZA, SUITE 350
CHICAGO, IL 60606
(312) 930-2047

JEFFERSON COUNTY EARLY LEARNING CENTER

STREET,
PORT TOWNSEND, WA 98368

3	PERMIT	2023-12-29
2	DESIGN DEVELOPMENT	2023-10-20
1	SCHEMATIC DESIGN	2023-08-25

BID # DESCRIPTION	DATE
ARCHITECT'S PROJECT NO.	2217

REGISTERED ARCHITECT
JOE STOELZLE
STATE OF WASHINGTON

SITE PLAN

A100

TOPOGRAPHIC MAP

A PORTION OF PORT TOWNSEND HIGH SCHOOL

A.P.N. 001-023-00

CITY OF PORT TOWNSEND
JEFFERSON COUNTY, WASHINGTON
PREPARED FOR
STUDIO STL

PROCEDURES:
THIS SURVEY IS BASED ON A GROUND SURVEY UTILIZING CONVENTIONAL TRAVERSE METHODS WITH CLOSURES THAT MEET OR EXCEED THE STANDARDS CONTAINED IN WAC 332-130-090

EQUIPMENT:
TRIMBLE S8 3" ROBOTIC TOTAL STATION
TRIMBLE TSC2 DATA COLLECTOR

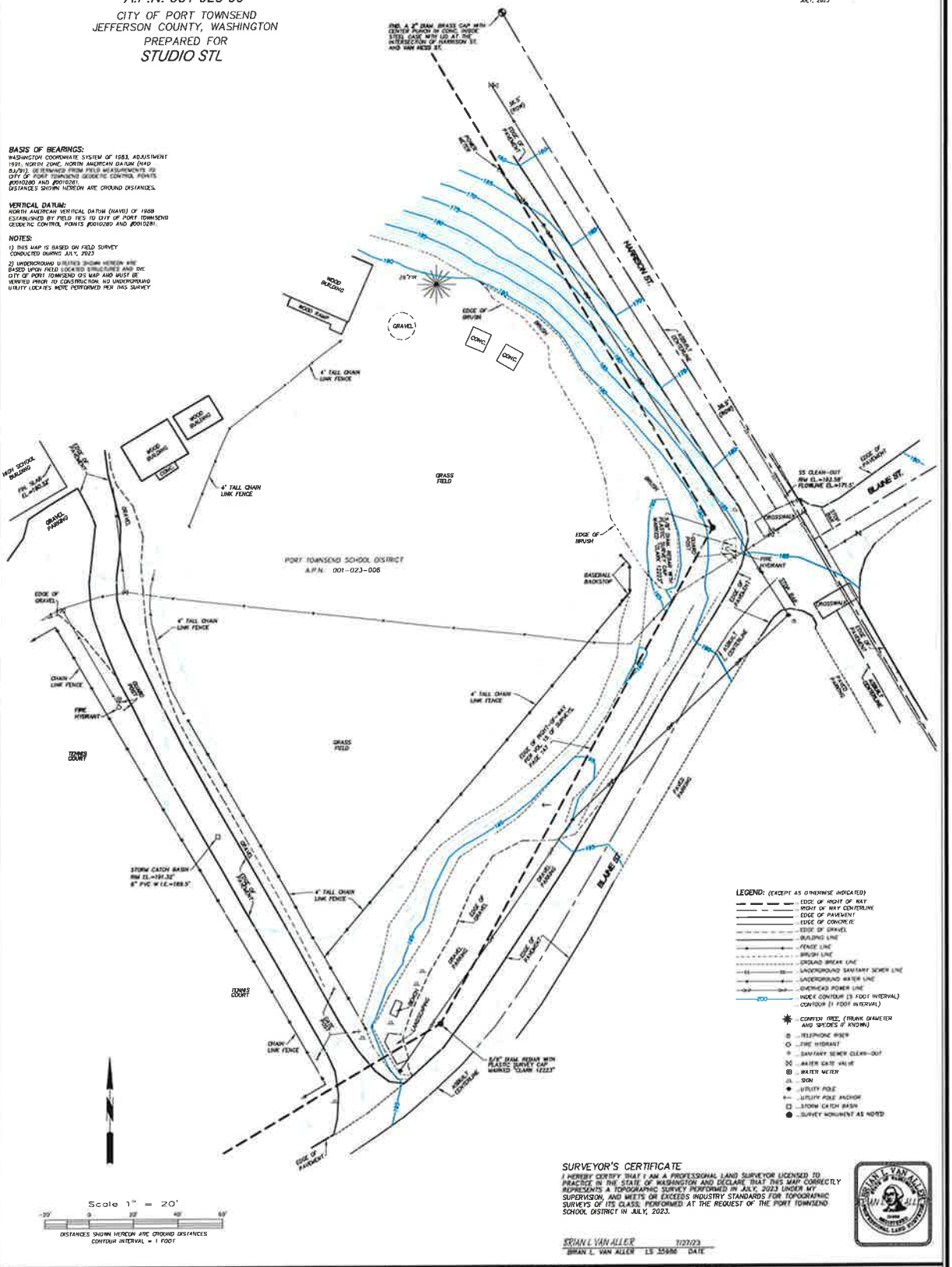
DATE OF FIELD SURVEY:
JULY, 2023

BASIS OF BEARINGS:
WASHINGTON COORDINATE SYSTEM OF 1983, ADJUSTMENT 1991, NORTH ZONE, NORTH AMERICAN DATUM (NAD 83/91). DETERMINED FROM FIELD MEASUREMENTS TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281. DISTANCES SHOWN HEREON ARE GROUND DISTANCES.

VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 ESTABLISHED BY FIELD TIES TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281.

NOTES:
1) THIS MAP IS BASED ON FIELD SURVEY CONDUCTED DURING JULY, 2023

2) UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON FIELD LOCATED STRUCTURES AND THE CITY OF PORT TOWNSEND GIS MAP AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. NO UNDERGROUND UTILITY LOCATES WERE PERFORMED FOR THIS SURVEY



LEGEND: (EXCEPT AS OTHERWISE INDICATED)

- EDGE OF RIGHT OF WAY
- RIGHT OF WAY CENTERLINE
- EDGE OF PAVEMENT
- EDGE OF CONCRETE
- EDGE OF GRAVEL
- BUILDING LINE
- FENCE LINE
- BRUSH LINE
- GROUND BREAK LINE
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND WATER LINE
- OVERHEAD POWER LINE
- 200 INDEX CONTOUR (5 FOOT INTERVAL)
- CONTOUR (1 FOOT INTERVAL)
- CONIFER TREE, (TRUNK DIAMETER AND SPECIES IF KNOWN)
- TELEPHONE RISER
- FIRE HYDRANT
- SANITARY SEWER CLEAN-OUT
- WATER GATE VALVE
- WATER METER
- SIGN
- UTILITY POLE
- UTILITY POLE ANCHOR
- STORM CATCH BASIN
- SURVEY MONUMENT AS NOTED

Scale 1" = 20'

-20' 0 20' 40' 60'

DISTANCES SHOWN HEREON ARE GROUND DISTANCES
CONTOUR INTERVAL = 1 FOOT

SURVEYOR'S CERTIFICATE

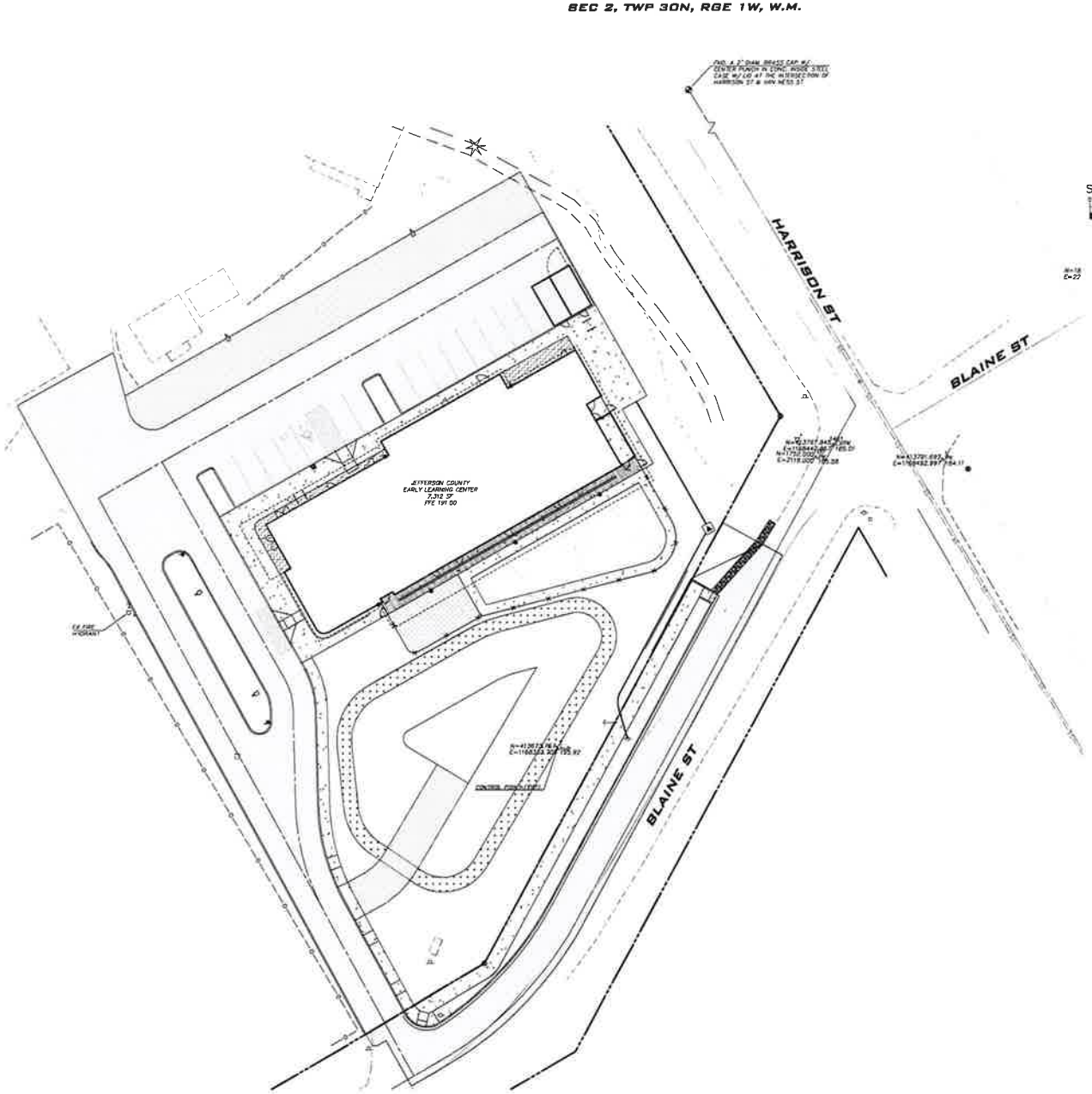
I HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF WASHINGTON AND DECLARE THAT THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY PERFORMED IN JULY, 2023 UNDER MY SUPERVISION, AND MEETS OR EXCEEDS INDUSTRY STANDARDS FOR TOPOGRAPHIC SURVEYS OF ITS CLASS, PERFORMED AT THE REQUEST OF THE PORT TOWNSEND SCHOOL DISTRICT IN JULY, 2023.

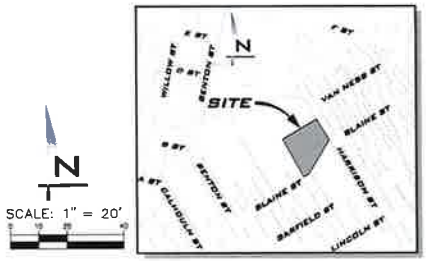
BRIAN L. VAN ALLER LS 35886 — 7/27/23 DATE

BRIAN L. VAN ALLER — 35886 — REGISTERED LAND SURVEYOR

SHEET 1 OF 1 SHEETS	VAN ALLER SURVEYING P.O. BOX 757 - CARLSBORG, WA. - 98324 PHONE: (360) 683-3438 - FAX: (360) 683-3241	TITLE: TOPOGRAPHIC MAP A PORTION OF P.T. HIGH SCHOOL A.P.N. 001-023-00 CLIENT: STUDIO STL 1005 LAWRENCE ST. PORT TOWNSEND, WA 98368	REVISIONS: DATE / MARK / NOTE

SEC 2, TWP 30N, RGE 1W, W.M.





VICINITY MAP

SCALE: 1" = 20'

BASIS OF BEARINGS

WASHINGTON COORDINATE SYSTEM OF 1983, ADJUSTMENT 1991, NORTH ZONE, NORTH AMERICAN DATUM (NAD 83/91) DETERMINED FROM FIELD MEASUREMENTS TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281
DISTANCES SHOWN HEREON ARE GROUND DISTANCES

VERTICAL DATUM

NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 ESTABLISHED BY FIELD TIES TO CITY OF PORT TOWNSEND GEODETIC CONTROL POINTS #0010280 AND #0010281

SURVEY NOTES

1) THIS MAP IS BASED ON FIELD SURVEY CONDUCTED DURING JULY, 2023

2) UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON FIELD LOCATED STRUCTURES AND THE CITY OF PORT TOWNSEND GIS MAP AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. NO UNDERGROUND UTILITY LOCATES WERE PERFORMED FOR THIS SURVEY.

PROJECT TEAM

ARCHITECT
PRESENT FUTURE ARCHITECTS
1147 W OHIO STREET, #304
CHICAGO, IL 60647
(312) 281-1292
CONTACT: TBD

CIVIL ENGINEER
ATWELL
25 CENTRAL WAY, SUITE 400
KIRKLAND, WA 98033
(425) 250-7234
ENGINEER OF RECORD: BRADY BERRY, PE

OWNER
OLYMPIC PENINSULA YMCA
615 N. 5TH AVE, SUITE 3A
SEQUIM, WA 98382
(360) 504-0526
CONTACT: TBD

SURVEYOR
VAN ALLEN SURVEYING
P.O. BOX 757
CARLSBORG, WA 98324
(360) 683-3438
CONTACT: BRIAN VAN ALLEN, PLS

SITE DATA

SITE ADDRESS: 1500 VAN NESS ST, PORT TOWNSEND, WASHINGTON 98368

TAX ACCOUNT NO.
001023006

ZONING
P-I=PUBLIC INFRASTRUCTURE (CITY).
CHILD DAY CARE CENTERS ARE AN ALLOWED USE WITHIN THE P-I ZONING

ZONING AGENCY
CITY OF PORT TOWNSEND PLANNING AND COMMUNITY DEVELOPMENT
250 MADISON STREET
PORT TOWNSEND, WA 98368
(360) 379-5095

THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE GOVERNING JURISDICTION INDICATES THAT STRUCTURES ON THIS PROPERTY COMPLIED WITH MINIMUM SETBACK AND HEIGHT REQUIREMENTS FOLLOWING CONSTRUCTION

SHEET INDEX

1	CV-01	COVER SHEET
2	GN-01	GENERAL NOTES
3	EC-01	EXISTING CONDITIONS
4	TP-01	TESC & DEMO PLAN
5	TP-02	TESC PHASE 2 PLAN
6	TD-01	TESC NOTES & DETAILS
7	HC-01	HORIZONTAL CONTROL PLAN
8	GP-01	GRADING PLAN
9	UP-01	UTILITY PLAN
10	RP-01	ROAD PROFILES
11	RD-01	DETAILS
12	RD-02	DETAILS
13	WA-01	DETAILS
14	DT-01	DETAILS
15	DT-02	DETAILS

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTONB11.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MONASO, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRIVOKHIZHINA
ISSUE DATE: 02/26/2024

NO	DATE	BY	REVISION

COVER SHEET
JCELC
CIVIL PLANS
02/26/2024
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157
SHEET NAME: CV-01
SHT 1 OF 15

GENERAL CONDITIONS

a. A. THE FOLLOWING GENERAL CONDITIONS AND THOSE CONTAINED IN THE SPECIFIC CHAPTERS DEALING WITH WATER, WASTEWATER, TRANSPORTATION AND OTHER FACILITIES SHALL BE INCLUDED ON ANY PLANS WHEN A PERMIT IS REQUIRED.
i. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY PRIOR TO THE START OF CONSTRUCTION
ii. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF PORT TOWNSEND STANDARDS, THE CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, AND ANY PROJECT-SPECIFIC SPECIAL PROVISIONS OR CONDITIONS AND REQUIREMENTS
iii. TEMPORARY EROSION CONTROL MEASURES ARE REQUIRED AND SHALL COMPLY WITH THE STORMWATER CODE, CHAPTER 5 OF THESE STANDARDS AND WDOT/APWA SPECIFICATION 1-07.15 AS FOLLOWS
(1) EROSION CONTROL PLANS SHALL BE SUBMITTED TO THE CITY, APPROVED BY THE CITY, AND IMPLEMENTED BY THE CONTRACTOR PRIOR TO DISTURBING ANY SOIL ON THE SITE. SUBMITTAL AND APPROVAL OF THESE PLANS SHALL PRECEDE ANY CONSTRUCTION ACTIVITY ON THE SITE.
(2) ALL PERMANENT STORAGE AND RETENTION/DETENTION AREAS USED AS PART OF THE TEMPORARY EROSION CONTROL AND WATER POLLUTION/FLOOD ACTIVITIES AND CONVEYANCE SYSTEMS SHALL BE CLEANED OF ALL SILTS, SAND AND OTHER MATERIALS FOLLOWING COMPLETION OF CONSTRUCTION AND THE PERMANENT FACILITIES SHALL THEN BE CONFIGURED INCLUDING PERMANENT INFILTRATION AREAS.
iv. HORIZONTAL AND VERTICAL CONTROL/DATUM AS ADOPTED BY THE CITY SHALL BE USED, UNLESS APPROVED OTHERWISE
v. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING UNDERGROUND LOCATE AT 1-800-424-5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION WORK
vi. ALL NON-FERROUS PIPE AND SERVICES SHALL BE INSTALLED WITH CONTINUOUS TRACER TAPE INSTALLED 12" TO 18" UNDER THE FINAL GRADE. TRACER TAPE SHALL BE 4" WIDE MINIMUM PLASTIC NON-BIODEGRADABLE METAL CORE OR BACKING MARKED AND COLOR CODED FOR THE UTILITY OVER THE BURIED LINE. DETECTED BY A STANDARD METAL DETECTOR. TAPE SHALL BE TERRA TAPE "D" OR APPROVED EQUAL IN ADDITION TO TRACER TAPE, FORCE MAIN SHALL BE LOCATED WITH #12 AWG SOLID COATED COPPER WIRE, WRAPPED AROUND THE PIPE, BROUGHT UP, COATING STRIPPED, AND TIED OFF AT THE VALVE STEM OR MANHOLE. THE TAPE AND WIRE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR
vii. TEMPORARY STREET PATCHING MAY BE ALLOWED WITH THE APPROVAL OF THE CITY ENGINEER. TEMPORARY STREET PATCHING SHALL BE AS DESCRIBED IN CHAPTER 8
viii. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN(S) FOR REVIEW AND APPROVAL BY THE CITY ENGINEER IN ACCORDANCE WITH CHAPTER 6 TRAFFIC CONTROL DEVICES (MUTCD)
ix. THE CONTRACTOR SHALL HAVE A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE AT ALL TIMES
x. SPECIAL STRUCTURES SHALL BE INSTALLED PER PLANS AND MANUFACTURERS' RECOMMENDATIONS
xi. ALL DISTURBED AREAS SHALL RECEIVE TEMPORARY AND PERMANENT EROSION CONTROL IN THE FORM OF VEGETATION ESTABLISHMENT SUCH AS GRASS SEEDING. A MEANS SHALL BE ESTABLISHED TO PROTECT THE PERMANENT STORM DRAIN SYSTEM PRIOR TO ESTABLISHMENT OF THE PERMANENT EROSION CONTROL MEASURES. THESE METHODS SHALL BE INCLUDED IN THE EROSION AND SEDIMENT CONTROL PLANS IN ACCORDANCE WITH CHAPTER 5 OF THESE STANDARDS
xii. CONSTRUCTION WORK HOURS SHALL BE RESTRICTED TO 7 A.M. TO 6 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE APPROVED IN WRITING
xiii. THE CITY PUBLIC WORKS INSPECTOR SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF THE NEED FOR AN INSPECTION. EVERY EFFORT WILL BE MADE TO ACCOMMODATE SAME-DAY INSPECTIONS IF THE CITY IS NOTIFIED BEFORE 8 AM

WATER GENERAL NOTES

1 GENERAL REQUIREMENTS
a. WATER SYSTEM REFERS TO WATER TREATMENT, STORAGE AND TRANSMISSION FACILITIES FOR DOMESTIC FIRE PROTECTION, COMMERCIAL AND INDUSTRIAL IRRIGATION, RECREATION AND OTHER USES
b. TREATMENT OF WATER SHALL COMPLY WITH WASHINGTON STATE DEPARTMENT OF HEALTH REQUIREMENTS
c. ANY EXTENSION OF THE PORT TOWNSEND WATER SYSTEM MUST BE APPROVED BY THE PUBLIC WORKS DEPARTMENT AND ALL EXTENSIONS MUST CONFORM TO THESE STANDARDS, THE PORT TOWNSEND WATER SYSTEM PLAN, THE RULES AND REGULATIONS OF THE DEPARTMENT OF HEALTH (CHAPTER 246-290 WAC), THE PORT TOWNSEND FIRE DEPARTMENT REQUIREMENTS, AND THE WASHINGTON SURVEYING AND RATING BUREAU (SRB)
d. THESE STANDARDS APPLY TO BOTH THE IN-CITY AND OUT-OF-CITY WATER SERVICE AREAS
e. IN DESIGNING AND PLANNING FOR ANY DEVELOPMENT, IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADEQUATE WATER FOR BOTH DOMESTIC AND FIRE PROTECTION USE IS ATTAINABLE. THE DEVELOPER MUST SHOW IN THE PROPOSED PLANS, HOW WATER WILL BE PROVIDED, WHETHER THE EXISTING SYSTEM WILL BE ADVERSELY IMPACTED, AND HOW ADEQUATE WATER WILL BE SUPPLIED AT THE REQUIRED PRESSURES IN CASE OF FIRE. A DETAILED HYDRAULIC ANALYSIS OF THE SYSTEM MAY BE REQUIRED IF IT APPEARS THAT THE SYSTEM MIGHT BE INADEQUATE
f. ANYONE THAT WISHES TO EXTEND OR CONNECT TO THE CITY'S WATER SYSTEM SHOULD CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR PRELIMINARY INFORMATION AND DISCUSSION OF THE EXTENSION PROPOSED. THE DESIGN OF A WATER SYSTEM EXTENSION IS THE RESPONSIBILITY OF THE DEVELOPER PROPOSING THE CONSTRUCTION AND UPGRADING OF THE PUBLIC WATER SYSTEM
g. PRIOR TO THE INSTALLATION OF ANY WATER MAINS, ALL PUBLIC WORKS IMPROVEMENTS MUST BE COMPLETED AND APPROVED INCLUDING DRAWING OF RIGHT-OF-WAY OR EASEMENTS, AND ALL APPLICABLE FEES AS SET FORTH IN CHAPTER 3.36 PTWC MUST BE PAID
h. ISSUANCE OF BUILDING PERMITS FOR NEW CONSTRUCTION OF SINGLE FAMILY RESIDENCES WITHIN NEW SUBDIVISIONS SHALL NOT OCCUR UNTIL FINAL PUBLIC WORKS APPROVAL OF ALL IMPROVEMENTS IS GIVEN, UNLESS OTHERWISE ALLOWED THROUGH AN APPROVED IMPROVEMENT METHODS REPORT AND/OR CONSTRUCTION BOND. FOR COMMERCIAL PROJECTS, BUILDING PERMITS MAY BE ISSUED UPON COMPLETION AND ACCEPTANCE OF THE REQUIRED FIRE PROTECTION FACILITIES, PROVIDING THE NECESSARY EASEMENTS HAVE BEEN FILED AND ALL REQUIRED FEES AND CONNECTION CHARGES AND CERTIFICATES OF OCCUPANCY WILL NOT BE GRANTED UNTIL FINAL PUBLIC WORKS APPROVAL AND ACCEPTANCE OF ALL IMPROVEMENTS IS GIVEN
i. STANDARD REFERENCES
i. EXCEPT AS OTHERWISE SUPERSEDED IN THESE STANDARDS, WATER SYSTEM DESIGN, INSTALLATION, MODIFICATION, AND OPERATION IS SUBJECT TO THE RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH AS GOVERNING PUBLIC WATER SYSTEMS," LATEST REVISION, WAC 246-290
ii. WATER FACILITIES DESIGN AND CONSTRUCTION SHALL CONFORM TO APPROPRIATE AWWA AND WDOT/APWA STANDARD SPECIFICATIONS IN CASES WHERE CONFLICTS EXIST BETWEEN SPECIFICATIONS, THE ORDER OF PRECEDENCE SHALL BE CITY OF PORT TOWNSEND STANDARDS, AWWA, WASHINGTON DOT/APWA, AND WASHINGTON UNIFORM PLUMBING CODE STANDARDS LATEST REVISIONS
j. WARRANTY. THE DEVELOPER OR OWNER SHALL WARRANTY WATER LINES AND OTHER WATER SYSTEM IMPROVEMENTS FOR ONE YEAR AFTER INSTALLATION, APPROVAL AND ACCEPTANCE BY THE CITY AND SHALL BE RESPONSIBLE FOR ONE YEAR FOR ANY UNANTICIPATED SETTLING OF EXCAVATIONS OF REPAIRS TO RESTORED STREET SURFACES. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY OR THE CITY SHALL PERFORM THE REPAIRS AT THE DEVELOPER'S EXPENSE
k. TRAFFIC CONTROL. FOR WORK IN OPENED STREETS AND RIGHTS-OF-WAY, THE CONTRACTOR SHALL FOLLOW PROCEDURES DESCRIBED IN CHAPTER 1 OF THESE STANDARDS
l. INSPECTION. FOR CONSTRUCTION OUTSIDE OF BUSINESS HOURS, ANY WORK PERFORMED IN ANY STREET RIGHT OF WAY AT ANY TIME OTHER THAN MONDAY TO FRIDAY 7 AM TO 6 PM, MUST HAVE THE APPROVAL OF THE PUBLIC WORKS DEPARTMENT
m. NONCOMPLIANCE PENALTY. UTILITY DEVELOPMENT PERMITS MAY BE REVOKED FROM ANY CONTRACTOR NOT COMPLYING WITH THESE SPECIFICATIONS
n. SURVEY. SEE CHAPTER 1 OF THESE STANDARDS
o. STANDARD DETAILS. ALL CONSTRUCTION SHALL COMPLY WITH CITY STANDARD DETAILS FOR PUBLIC WORK AND AS DETAILED ON THESE PLANS FOR PRIVATE WORK

SEWER GENERAL NOTES

1 GENERAL REQUIREMENTS
a. WASTEWATER SYSTEMS REFER TO THE FACILITIES THAT TRANSPORT, TREAT, AND DISCHARGE WATER-CARRIED WASTE MATERIALS FROM DOMESTIC, COMMERCIAL AND INDUSTRIAL SOURCES. THIS CHAPTER OF THE STANDARDS ADDRESSES SEWAGE CONNECTIONS TO THE EXISTING MAINS AS WELL AS EXTENSIONS, REPAIRS, LIFT STATIONS, AND OTHER SYSTEM IMPROVEMENTS. ANY EXTENSION, REPLACEMENT, OR OTHER IMPROVEMENT OF THE PORT TOWNSEND WASTEWATER SYSTEM MUST BE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ALL EXTENSIONS MUST CONFORM TO THE CURRENT STANDARDS OF THE CITY OF PORT TOWNSEND AND TO DEPARTMENT OF ECOLOGY REGULATIONS. THE MATERIAL CONTAINED IN THESE STANDARDS SHALL BE USED IN CONJUNCTION WITH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY REGULATIONS TO DEVELOP ALL PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF WASTEWATER FACILITIES. WHERE THERE ARE CONFLICTS OR DIFFERENCES BETWEEN THESE STANDARDS, DOH REGULATIONS AND CITY ORDINANCES, THE DOH REGULATIONS SHALL APPLY FOLLOWED IN ORDER OF PRECEDENCE BY CITY ORDINANCES AND THESE STANDARDS. CITY SEWER SERVICE SHALL NOT BE EXTENDED OUTSIDE THE CITY LIMITS
b. IN DESIGNING AND PLANNING FOR ANY DEVELOPMENT, IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADEQUATE WASTEWATER SYSTEMS ARE PROVIDED. THE DEVELOPER MUST SHOW, IN THE PROPOSED PLANS, HOW THE DEVELOPMENT WILL BE SERVED BY SEWERS, AND WHETHER THE EXISTING SYSTEM WILL NOT BE ADVERSELY IMPACTED ARE THE RESPONSIBILITY OF THE DEVELOPER A DETAILED ANALYSIS OF THE SYSTEM MAY BE REQUIRED TO EVALUATE THE CAPACITY OF THE EXISTING HYDRAULIC SYSTEM TO HANDLE THE NEW LOADS
c. ANYONE THAT WISHES TO EXTEND OR CONNECT TO THE CITY'S WASTEWATER SYSTEM SHOULD CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR PRELIMINARY INFORMATION AND DISCUSSION OF THE EXTENSION PROPOSED. THE DESIGN OF WASTEWATER SYSTEM IMPROVEMENTS IS THE RESPONSIBILITY OF THE DEVELOPER PROPOSING THE CONSTRUCTION AND UPGRADING OF THE PUBLIC WASTEWATER SYSTEM. PRIOR TO ACCEPTANCE BY THE CITY AND THE DISCHARGE OF ANY WASTEWATER, ALL IMPROVEMENTS MUST BE COMPLETED AND APPROVED, AS-BUILTS SUBMITTED, ALL RIGHTS-OF-WAY OR EASEMENTS FILED, AND ALL APPLICABLE FEES AS SET FORTH IN CHAPTER 3.36 PTWC MUST BE PAID.
d. COMMERCIAL PROJECTS, BUILDING PERMITS MAY BE ISSUED UPON COMPLETION AND APPROVAL BY THE PUBLIC WORKS DIRECTOR OF A WASTEWATER DISCHARGE PLAN (INCLUDING PRETREATMENT WHEN NECESSARY). CERTIFICATES OF OCCUPANCY WILL NOT BE GRANTED UNTIL FINAL PUBLIC WORKS APPROVAL AND ACCEPTANCE OF ALL WASTEWATER SYSTEM IMPROVEMENTS IS GIVEN. ALL REQUESTS FOR INSPECTIONS AND FOR WITNESSING TESTS SHALL BE SCHEDULED WITH THE PUBLIC WORKS DEPARTMENT 24 HOURS IN ADVANCE. FAILURE TO GIVE ADEQUATE ADVANCE NOTICE MAY RESULT IN DELAYS TO THE CONTRACTOR FOR REQUIRED INSPECTIONS
e. APPROVAL FOR CONSTRUCTION OUTSIDE OF BUSINESS HOURS. ANY WORK PERFORMED IN ANY STREET RIGHT OF WAY AT ANY TIME OTHER THAN MONDAY THROUGH FRIDAY 7 AM TO 6 PM MUST HAVE THE APPROVAL OF THE PUBLIC WORKS DEPARTMENT
f. TRAFFIC CONTROL. FOR WORK IN OPENED STREETS AND RIGHTS-OF-WAY, THE CONTRACTOR SHALL FOLLOW PROCEDURES DESCRIBED IN CHAPTER 1 OF THESE STANDARDS
g. WARRANTY. THE DEVELOPER OR OWNER SHALL WARRANTY SEWER MAINS AND OTHER WASTEWATER SYSTEM IMPROVEMENTS FOR ONE YEAR AFTER INSTALLATION, APPROVAL AND ACCEPTANCE BY THE CITY AND SHALL BE RESPONSIBLE FOR ONE YEAR FOR ANY UNANTICIPATED SETTLING OF EXCAVATIONS OR REPAIRS TO RESTORED STREET SURFACES. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY OR THE CITY SHALL PERFORM THE REPAIRS AT THE DEVELOPER'S EXPENSE
h. TRAFFIC CONTROL. FOR WORK IN OPENED STREETS AND RIGHTS-OF-WAY, THE CONTRACTOR SHALL FOLLOW PROCEDURES DESCRIBED IN CHAPTER 1 OF THESE STANDARDS
i. APPROVAL FOR CONSTRUCTION OUTSIDE OF BUSINESS HOURS. ANY WORK PERFORMED IN ANY STREET RIGHT OF WAY AT ANY TIME OTHER THAN MONDAY THROUGH FRIDAY 7 AM TO 6 PM MUST HAVE THE APPROVAL OF THE PUBLIC WORKS DEPARTMENT
j. NONCOMPLIANCE PENALTY. UTILITY DEVELOPMENT PERMITS MAY BE REVOKED FROM ANY CONTRACTOR NOT COMPLYING WITH THESE SPECIFICATIONS
k. SURVEY. SEE CHAPTER 1 OF THESE STANDARDS
l. STANDARD DETAILS. ALL CONSTRUCTION SHALL COMPLY WITH CITY STANDARD DETAILS

STORM GENERAL NOTES

1. GENERAL
a. THE STANDARDS ESTABLISHED BY THIS CHAPTER ARE INTENDED TO REPRESENT THE MINIMUM STANDARDS FOR THE DESIGN AND CONSTRUCTION OF STORM DRAINAGE FACILITIES DRAINAGE CONTROL AND STORMWATER QUALITY ENHANCEMENT SHALL BE PROVIDED ON ALL DEVELOPED PROPERTY WITHIN THE CITY OF PORT TOWNSEND PER THESE STANDARDS, THE CITY'S DRAINAGE ORDINANCE, STORMWATER MANAGEMENT PLAN AND THE ENVIRONMENTALLY SENSITIVE AREAS ORDINANCE
b. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED LOCAL, STATE AND FEDERAL PERMITS RELATED TO STORMWATER
c. EROSION CONTROL REQUIREMENTS COVERED UNDER CHAPTER 5 OF THESE STANDARDS SHALL ALSO BE REQUIRED AND SHOULD BE CONSIDERED IN CONJUNCTION WITH THIS SECTION IN DESIGNING DRAINAGE CONTROL
d. EVERY EFFORT SHALL BE MADE FOR SURFACE WATER ENTERING THE SUBJECT PROPERTY TO BE RECEIVED AT THE NATURALLY OCCURRING LOCATION AND SURFACE WATER LEAVING THE SUBJECT PROPERTY SHALL BE DISCHARGED AT THE NATURALLY OCCURRING LOCATION WITH ADEQUATE ENERGY DISSIPATERS TO PREVENT EROSION. THE DISCHARGE RATE OF FLOW AFTER DEVELOPMENT SHALL NOT EXCEED THE RATE OF FLOW PRIOR TO DEVELOPMENT FOR THE DESIGN STORM(S)
e. SURFACE WATER LEAVING THE SUBJECT PROPERTY SHALL BE CONVEYED TO THE NEAREST ESTABLISHED, STABLE DRAINAGE COURSE BY PIPE OR AN APPROVED SWALE IN A MANNER THAT WILL NOT RESULT IN EROSION OR FLOODING. SUFFICIENT DOWNSTREAM INFORMATION AND ANALYSIS SHALL BE PROVIDED TO ENABLE THE CITY TO DETERMINE THAT THIS REQUIREMENT IS BEING MET. PRIVATE EASEMENTS WILL BE REQUIRED IF CONVEYANCE MUST OCCUR ACROSS PRIVATE PROPERTY
f. ROOFTOP DRAINAGE SHALL BE ADDRESSED FOR ALL DEVELOPMENT PROJECTS. IN ALL CASES, THE METHOD SELECTED WILL BE SUBJECT TO APPROVAL BY THE PUBLIC WORKS DEPARTMENT. WITH CONSIDERATIONS GIVEN TO SITE SOIL TYPES, SLOPE CONDITIONS, AND THE NATURE OF THE DEVELOPMENT. THE ACCEPTABLE METHODS FOR DISPOSAL OF ROOFTOP DRAINAGE ARE
i. DISCHARGE TO THE SITE'S STORM DRAIN SYSTEM (PRIVATE OR PUBLIC)
ii. DISCHARGE TO A SUITABLE RESIDENTIAL ROOF DOWNSPOUT ON SITE DISPOSAL SYSTEM

2. MINIMUM REQUIREMENTS
a. ALL DEVELOPMENTS SHALL COMPLY WITH THE DOE STORMWATER MANAGEMENT MANUAL. CITY ENGINEERING DESIGN STANDARDS, CITY STORMWATER MASTER PLAN AND ADOPTED DRAINAGE BASIN REPORTS FOR ALL CLEARING AND GRADING ACTIVITIES FOR EROSION CONTROL DURING CONSTRUCTION AND FOR PERMANENT DRAINAGE SYSTEM IMPROVEMENTS
b. SURFACE WATER ENTERING THE SUBJECT PROPERTY SHALL BE RECEIVED AT THE NATURALLY OCCURRING LOCATIONS AND SURFACE WATER EXITING THE SUBJECT PROPERTY SHALL BE DISCHARGED AT THE NATURAL LOCATIONS WITH ADEQUATE ENERGY DISSIPATERS WITHIN THE SUBJECT PROPERTY TO MINIMIZE DOWNSTREAM DAMAGE
c. ALL DEVELOPERS SHALL DO THE NECESSARY ANALYSIS AND INSTALL THE NECESSARY MITIGATION MEASURES TO INSURE THAT STORMWATER LEAVING THEIR PROPERTY IS DISCHARGED AT A SAFE LOCATION WHICH WILL NOT AFFECT OTHER PROPERTY OWNERS
d. ALL STRUCTURES SHALL BE BUILT SUCH THAT FINISHED FLOOR ELEVATIONS ARE IN CONFORMANCE WITH SECTION 1806.4.3 (FOUNDATION ELEVATION) OF THE UNIFORM BUILDING CODE
e. REQUESTS FOR ANY WAIVERS SHALL BE FILED IN WRITING TO THE DIRECTOR AND SHALL ADEQUATELY DETAIL THE BASIS FOR THE REQUEST. ALL DEVELOPERS NOT PROVIDING PERMANENT STORMWATER CONTROL FACILITIES WILL BE REQUIRED TO SIGN A NO-PROTEST AGREEMENT FOR FUTURE PARTICIPATION IN A STORMWATER-RELATED LID

LEGAL NOTES

1. ALL LABOR, MATERIALS, WORKMANSHIP, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS OF ANY AND ALL APPLICABLE AGENCIES, PERMITTING AUTHORITIES, AND OTHER GOVERNMENTAL ENTITIES, AND THE PLANS. WHERE CONFLICTS OR OMISSIONS EXIST, THE MORE STRINGENT OF THE PLANS OR APPLICABLE JURISDICTIONAL STANDARDS SHALL DICTATE. CONTRACTOR SHALL BRING ALL CONFLICTS TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK RELATED TO SUCH CONFLICT. SUBSTITUTION AND/OR DEVIATION FROM THE PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER

2. THIS PLAN IS NOT VALID UNLESS IT BEARS THE SIGNATURE AND SEAL OF THE LICENSED PROFESSIONAL IDENTIFIED IN THIS PLAN. THIS PLAN IS NOT VALID IF IT IS COPIED, OR IF IT IS WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THE LICENSED PROFESSIONAL SHOWN HEREON

3. THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMED HEREIN. THIS PLAN DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WITHOUT EXPRESS WRITTEN IDENTIFICATION BY THE LICENSED PROFESSIONAL NAMING SAID PERSON, PERSONS, OR ENTITY

4. THE LICENSED PROFESSIONAL SHALL NOT BE HELD LIABLE FOR ANY THIRD PARTY'S USE OR INTERPRETATION OF THE DRAWINGS OR REVISIONS TO SAME WITHOUT THE APPROVAL OF THE LICENSED PROFESSIONAL

5. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATIONS OF PROJECT FEATURES IN ACCORDANCE WITH THE SEALED PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

6. CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS

7. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, AND TECHNIQUES OF EXECUTING ITS WORK, INCLUDING SAFETY

8. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY CONTRACTOR'S ACTS OR OMISSIONS AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER AND APPLICABLE JURISDICTION

9. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE CONSTRUCTION. ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER. ANY WORK DONE WITHOUT VERIFICATION IS DONE SO AT THE CONTRACTOR'S RISK AND EXPENSE IF ERRORS OCCUR

10. THE EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN LOCATED BASED ON THE INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE PROFESSIONAL ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. CONTRACTOR SHALL PROMPTLY CONTACT THE APPLICABLE ONE CALL AUTHORITY PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE LOCATION OF EXISTING FACILITIES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR TO THE EXTENT OF CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES

11. THE CONTRACTOR SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), THE STATE DEPARTMENT OF TRANSPORTATION REGIONAL AND TRAFFIC DESIGN STANDARD INDEXES, AND MUNICIPAL STANDARDS IF APPLICABLE, PRIOR TO START OF CONSTRUCTION WITHIN ANY RIGHT-OF-WAY THE CONTRACTOR SHALL PROVIDE A FULL MAINTENANCE OF TRAFFIC PLAN TO THE APPROPRIATE JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND WARNINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC ALONG ALL EXISTING ROADWAYS

12. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, STANDARD DETAILS, AND ANY APPLICABLE LAWS, REGULATIONS, AND STANDARDS ISSUED BY THE CONTROLLING AGENCY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN HAND BEFORE BEGINNING ANY CONSTRUCTION. ANY PENALTIES, STOP WORK ORDERS OR ADDITIONAL WORK RESULTING FROM THE CONTRACTOR BEING IN VIOLATION OF THE REQUIREMENTS ABOVE SHALL BE FULLY BORNE BY THE CONTRACTOR

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTONB11.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

26-16
Feb 29, 2024 - 11:25am - User: Barry
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ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRIVONOVA
ISSUE DATE: 02/29/2024

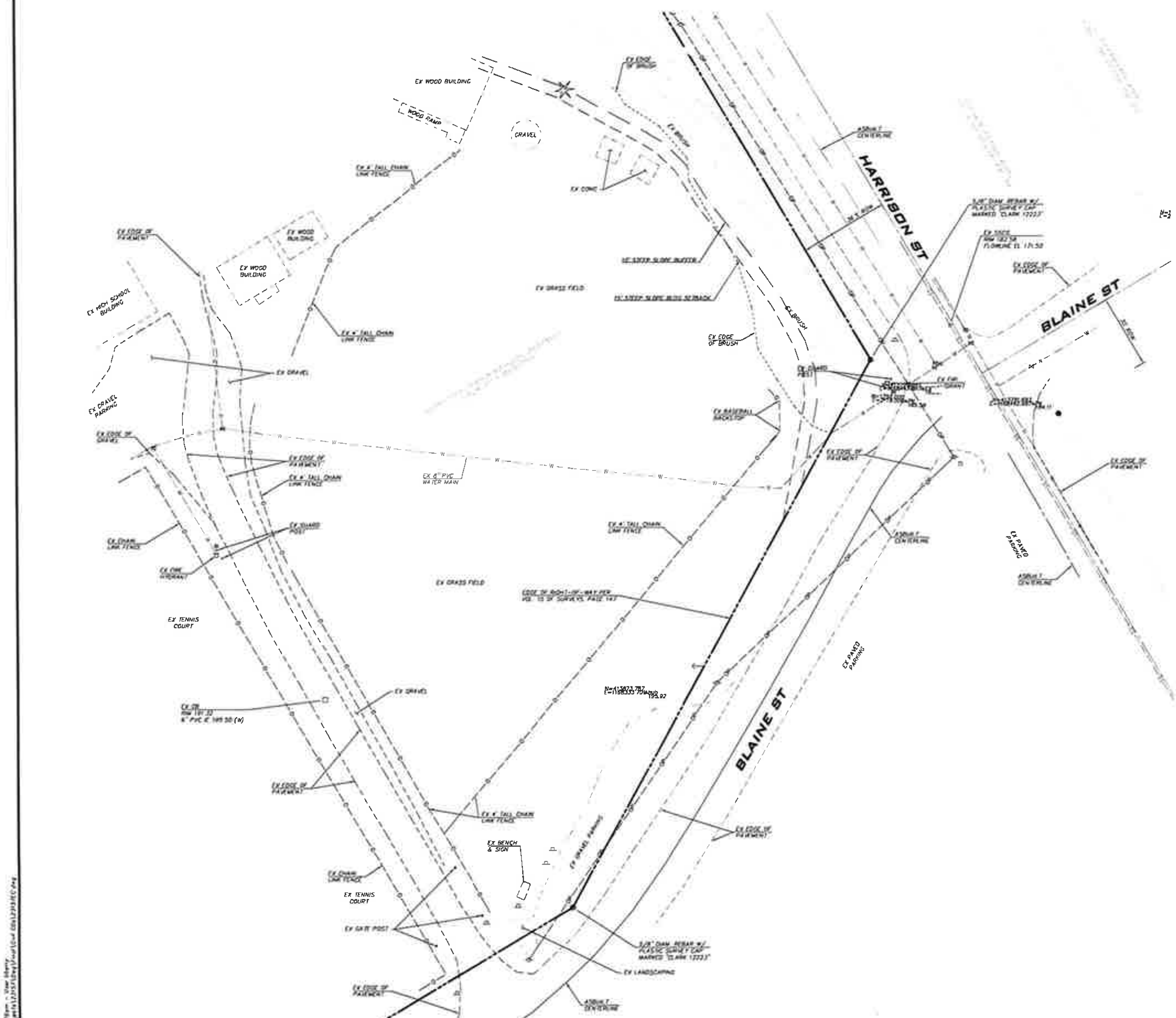
NO	DATE	BY	REVISIONS

GENERAL NOTES
JCELC
CIVIL PLANS
02/29/2024
CITY OF PORT TOWNSEND WASHINGTON

02/29/24

JOB NUMBER: 23-157
SHEET NAME: GN-01
SHT 2 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



N

SCALE: 1" = 20'

0 10 20 40

EXISTING FEATURES

- ADJACENT PLAT/PARCEL LINE
- ADJACENT RIGHT-OF-WAY
- CENTERLINE
- EASEMENT
- SURFACE FEATURES
- BUILDING FOOTPRINT
- TOP OF 40% SLOPE
- STEEP SLOPE BUFFER
- EDGE OF WETLAND
- WETLAND BUFFER
- 10' CONTOURS
- 2' CONTOURS
- SD — STORM DRAIN PIPE
- SS — SEWER MAIN
- SSS — SANITARY SEWER SERVICE
- FM — SEWER FORCE MAIN
- W — WATER MAIN
- OHP — AERIAL POWER LINE
- P — BURIED POWER LINE
- G — GAS MAIN
- C — BURIED CABLE
- TV — BURIED TV
- OTV — AERIAL TV
- T — BURIED TELEPHONE LINE
- OHT — AERIAL TELEPHONE LINE
- P/T — BURIED POWER/TELEPHONE
- OHPT — AERIAL POWER/TELEPHONE
- OHU — AERIAL UTILITIES
- FO — BURIED FIBER OPTIC CABLE
- X — WIRE FENCE
- O — CHAINLINK FENCE
- □ — BOARD FENCE
- DITCH OR SWALE
- RAILROAD
- GUARD RAIL
- RETAINING WALL
- ROCKERY
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- SD PIPE FLOW
- YARD DRAIN
- STORM CLEANOUT
- STORM DRAIN STUB
- STORM CULVERT END
- SEWER MANHOLE
- SEWER CLEANOUT
- SS PIPE FLOW
- SEWER STUB
- SEPTIC LID
- FIRE HYDRANT
- WATER METER
- GATE VALVE
- WATER MANHOLE
- AIR/VAC RELEASE VALVE
- BLOW OFF
- IRRIGATION METER
- IRRIGATION VALVE
- WATER WELL
- HOSE BIB
- POWER POLE
- GUY ANCHOR
- STREET LIGHT
- POLE LIGHT
- POWER VAULT
- TRANSFORMER
- POWER METER
- JUNCTION BOX
- GAS METER
- GAS VALVE
- FIBER OPTICS MANHOLE
- TV RISER
- TELECOMM VAULT
- TELECOMM RISER
- TELECOMM JUNCTION BOX
- TRAFFIC SIGNAL
- MAIL BOX
- SIGN
- BOLLARD
- SOIL LOG TEST PIT
- CONIFEROUS TREE
- DECIDUOUS TREE
- CONIFEROUS TREE TO BE SAVED
- DECIDUOUS TREE TO BE SAVED

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED

PROJECT MANAGER: KIMBERLY MCNABB, PE

PROJECT ENGINEER: BRADY BERRY, PE

DESIGNER:

ISSUE DATE: 02/28/2024

REVISIONS

NO	DATE	BY

EXISTING CONDITIONS

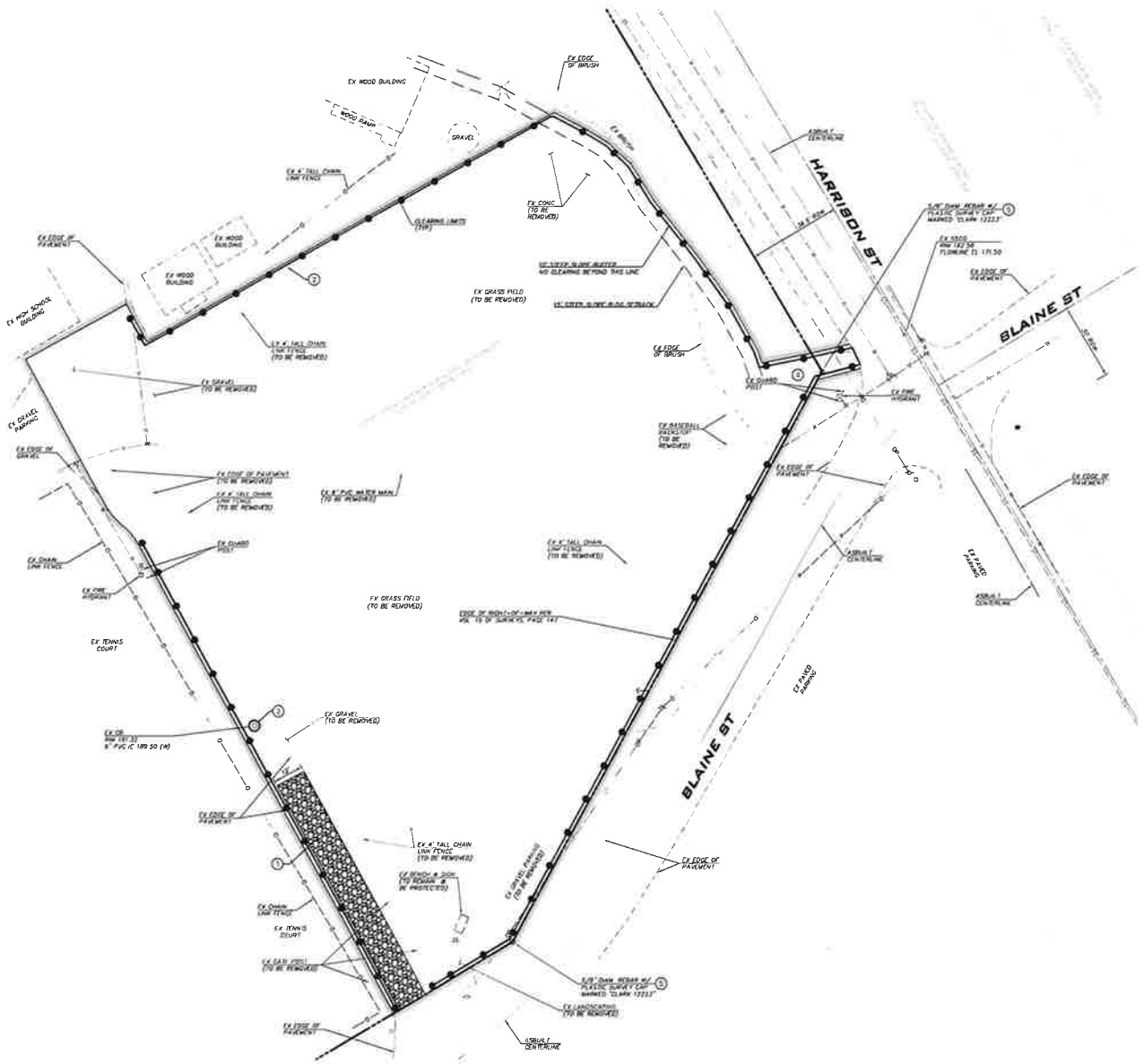
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

JOB NUMBER: 23-157

SHEET NAME: EC-01

SHT 3 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



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SCALE: 1" = 20'

0 10 20 40

KEY NOTES

1. GRAVEL CONSTRUCTION ENTRANCE PER CITY DETAIL EC-6
2. FILTER FABRIC FENCE PER CITY DETAIL EC-7
3. FILTER FABRIC INLET FENCE PER CITY DETAIL EC-3
4. ON STEEP SLOPES FOR UTILITY TRENCHING, PLACE JUTE MAT OVER ROUGHENED SURFACE AND SEED AND MULCH WITH STRAW COVER.
5. PROTECT OR REFERENCE AND REPLACE PER STATE AND LOCAL REQUIREMENTS

EXISTING UTILITY NOTE

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ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNABB, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: NADIA KRUSHINA
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

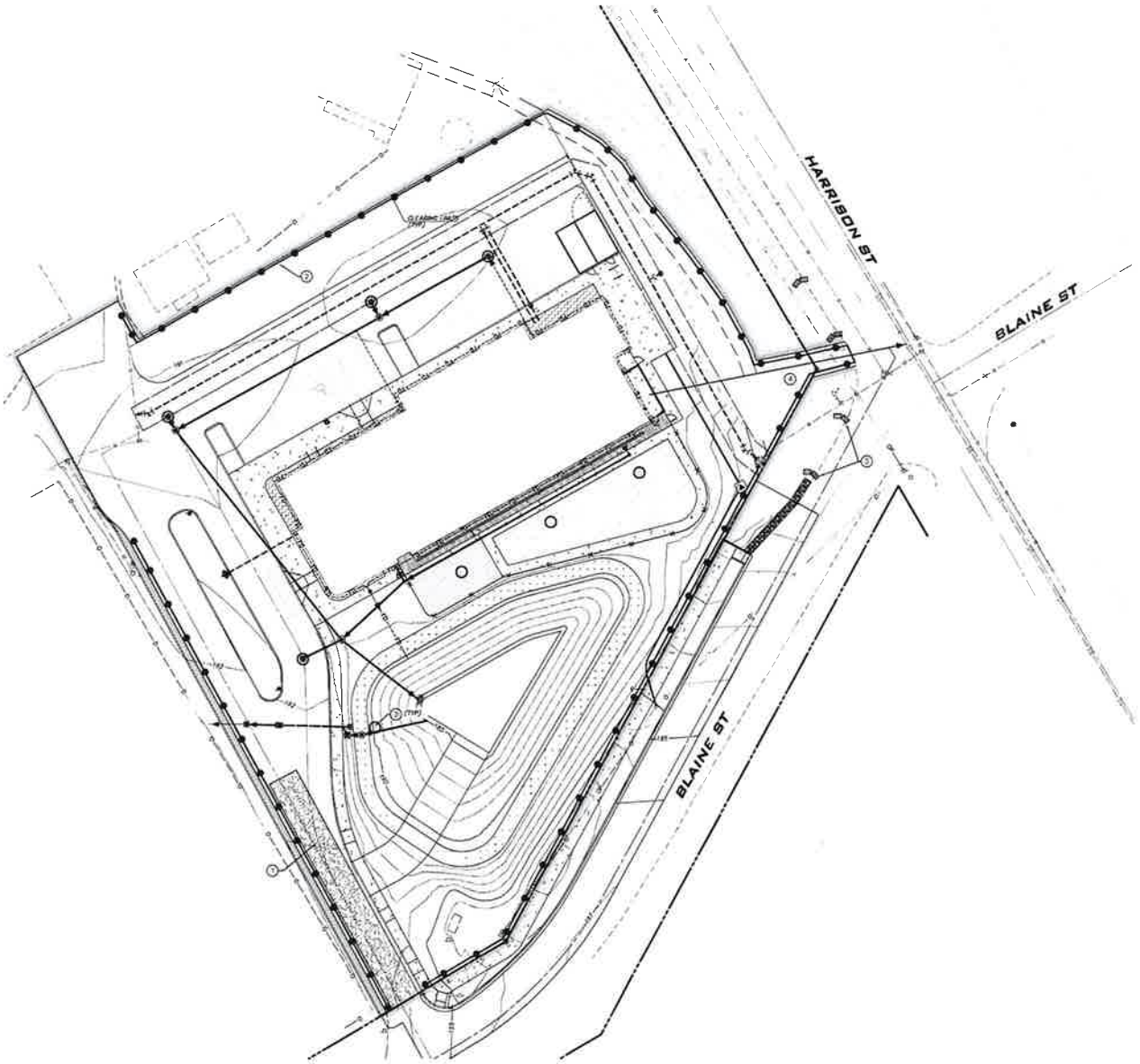
TESC & DEMO PLAN

JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

02/28/24

JOB NUMBER: 23-157
SHEET NAME: TP-01
SHT 4 OF 15

SEC 2, TWP 30N, RGE 1W, W.M.



N

SCALE: 1" = 20'

0 10 20 40

KEY NOTES

1. GRAVEL CONSTRUCTION ENTRANCE PER CITY DETAIL EC-6. MAINTAIN UNTIL FINAL SURFACING
2. FILTER FABRIC FENCE PER CITY DETAIL EC-7. ADJUST AS NECESSARY TO ALLOW FOR COMPLETION OF THIS WORK. INSTALL WADDLES AS NECESSARY TO SUPPLEMENT FENCING WHEN PROTECTING NEW SLOPES.
3. FILTER FABRIC INLET FENCE PER CITY DETAIL EC-3. PROTECT UNTIL FINAL SURFACING IN PLACE. INSTALL SILT SACKS AS NECESSARY TO PROTECT DURING FINAL SURFACING.
4. ON STEEP SLOPES FOR UTILITY TRENCHING, PLACE JUTE MAT OVER ROUGHENED SURFACE AND SEED AND MULCH WITH STRAW COVER.
5. INSTALL HAY BALES OR WADDLES AT EDGE OF PAVEMENT AT 25 O.C. TO PROVIDE SLOPE/DITCH PROTECTION UNTIL ALL WORK IS COMPLETE AND FINAL STABILIZATION ESTABLISHED.

EXISTING UTILITY NOTE

EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTONB11.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCHASE, PE
PROJECT ENGINEER: BRADY BERRY, PE
DESIGNER: HADA ABOUGOUSH
ISSUE DATE: 03/28/2024

NO	DATE	BY	REVISIONS

TESC PHASE 2 PLAN

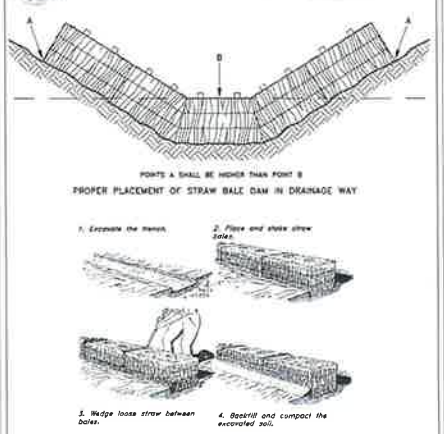
JCELC
CIVIL PLANS
03/28/2024

CITY OF PORT TOWNSEND WASHINGTON

03/28/2024

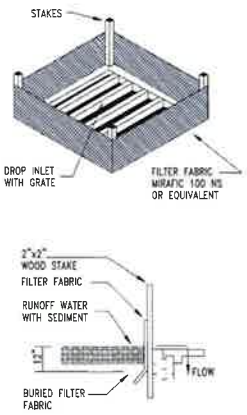
JOB NUMBER: 23-157
SHEET NAME: TP-02
SHT 5 OF 15

City of Port Townsend - Public Works Department
Standard Detail



Erosion Control
Straw Bale Barrier
Detail: EC-1

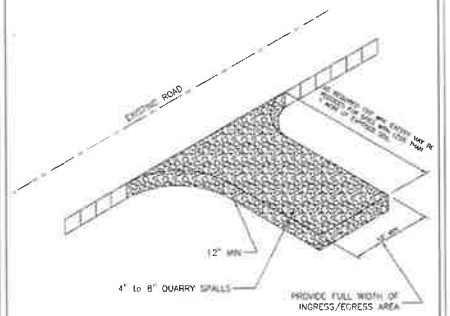
City of Port Townsend - Public Works Department
Standard Detail



NOTE:
SAND BAGS MAY BE USED IN PLACE OF FILTER FENCE WHEN FILTER FABRIC IS IMPRACTICAL.

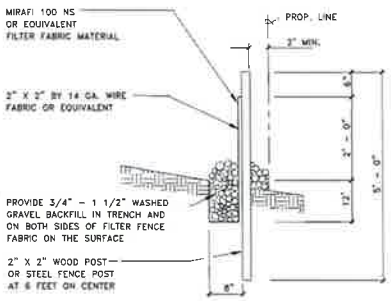
Erosion Control
Filter Fabric Inlet Fence
Detail: EC-3

City of Port Townsend - Public Works Department
Standard Detail



Erosion Control
Construction Entrance
Detail: EC-6

City of Port Townsend - Public Works Department
Standard Detail



Erosion Control
Silt Fence
Detail: EC-7

EXISTING UTILITY NOTE

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ATWELL

SCALE: AS NOTED
PROJECT MANAGER: KIMBERLY MCNAIR, PE
PROJECT ENGINEER: BRADY BORYC, PE
DESIGNER: NADIA ARDLINGOUR
ISSUE DATE: 02/28/2024

NO	DATE	BY	REVISIONS

TESC NOTES & DETAILS
JCELC
CIVIL PLANS
02/28/2024
CITY OF PORT TOWNSEND WASHINGTON

EXP 10/11/25

JOB NUMBER: 23-157
SHEET NAME: TD-01
SHT 6 OF 15