Maury Island Open Space Property Engineering Design Report

Prepared for

King County Parks & Recreation Division

King Street Station 201 South Jackson Street M.S. KSC-NR-700 Seattle, Washington 98104-3855

Prepared by

Parametrix

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CITATION

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CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.

07/27/20



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KEY TERMS

μg micrograms

μg/kg micrograms per kilogram

μg/L micrograms per liter

Cleanup Unit Cleanup Action for the Maury Island Open Space Property Cleanup Unit

COCs contaminants of concern

County King County

DCAP Draft Cleanup Action Plan

Ecology Washington State Department of Ecology

EDR Engineering Design Report

FS Feasibility Study

HAZWOPER Hazardous Waste Operations and Emergency Response

IAP Interim Action Plan

kg kilogram mg milligram

mg/kg milligrams per kilogram

MTCA Model Toxics Cleanup Act

MTCA Model Toxics Control Act

NEBA Net Environmental Benefit Analysis
PAHs Polycyclic Aromatic Hydrocarbons

RI/FS Remedial Investigation/Feasibility Study

SCO Sediment Cleanup Objective

SCUM II Sediment User's Cleanup Manual II

TCLP Toxicity Characteristic Leaching Procedure

TEF toxicity equivalency factors

TSP Tacoma Smelter Plume

WAC Washington Administrative Code

WSDOT Washing State Department of Transportation

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1. INTRODUCTION AND BACKGROUND

This Engineering Design Report (EDR) describes the engineering concepts and design criteria to be used for design of the Cleanup Action for the Maury Island Open Space Property (Cleanup Unit) (Facility Site I.D. #2901216). It is intended to provide sufficient information for the development and review of construction plans and specifications. The report has been formatted to address the information requirements for EDRs contained in the Model Toxics Cleanup Act (MTCA) Cleanup Regulations, Section Washington Administrative Code (WAC) 173-340-400(4)(a).

This EDR has been prepared per the requirements of Agreed Order No. DE 8439 (dated January 31, 2013) (Ecology 2013), between the Washington State Department of Ecology (Ecology) and King County (CDM 2014a). The Cleanup Unit is located on the southeast side of Maury Island in unincorporated King County (County), Washington (Figure 1), and lies within the larger Tacoma Smelter Plume Site.

1.1 Goals of the Cleanup Action

The goals of the cleanup action are to:

- Meet the conditions of the Cleanup Unit's Agreed Order with Ecology.
- Implement the preferred remedial alternative selected during the site's Remedial Investigation/Feasibility Study (RI/FS; Parametrix 2017a).
- Attain the selected cleanup standards for each hazardous substance and each medium of concern throughout the site.
- Implement, monitor, and maintain institutional controls as described in Draft Cleanup Action Plan (DCAP; Parametrix 2017b).

1.2 General Facility Information

The Cleanup Unit is approximately 266 acres in size and is the former location of a sand and gravel mine operated by CalPortland (Figure 2). The mine was located within the central portion of the Cleanup Unit, most of which is steeply sloped and all of which is now sparsely vegetated, primarily with scotch broom and Pacific madrone. The remainder of the Cleanup Unit consists of over 100-year-old forests, younger forests, blackberry patches, and sea bluffs covered in blackberries, poison oak, and Pacific madrone. The public have created a series of footpaths through the forests and utilize these, as well as former graded dirt roads, as casual walking trails (CDM 2014a).

All of Maury Island lies within the plume fallout area from the former ASARCO Tacoma Smelter. The copper ores used by the ASARCO smelter contained high concentrations of arsenic and other metals. Over the years of operation, metals released from the Tacoma Smelter's smokestack, particularly arsenic and lead, were carried by wind, ultimately settling over a 1,000-square-mile area. As a result of this, surface soils within much of the Tacoma Smelter Plume (TSP) fallout area contain arsenic and lead concentrations that are many times greater than natural background concentrations. The soils on Maury Island are among those most significantly impacted from the TSP, and the Cleanup Unit itself lies within an area most greatly impacted by the TSP on Maury Island.

In June of 2014, CDM Smith Inc. (CDM 2014a) completed a RI for the Cleanup Unit. The RI determined that metal concentrations in forest duff and surface soil throughout the Cleanup Unit, with the exception of recently mined areas and the beach, consistently exceed Model Toxics Control Act (MTCA)

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cleanup Levels. Research of the Cleanup Unit's land use history identified one additional source of contamination – an area that had previously been utilized as a private skeet shooting range (Figure 2). The RI confirmed that former skeet shooting activities resulted in an area of relatively greater lead concentrations than found throughout the rest of the Cleanup Unit, as well as an area where surface soils are impacted by Polycyclic Aromatic Hydrocarbons (PAHs) from skeet shards.

In May 2014, CDM Smith completed a Net Environmental Benefit Analysis (NEBA) for the Cleanup Unit (CDM 2014b.). The NEBA concluded that the bluffs and much of the upland areas are eligible for the application of NEBA because these areas contain "especially valuable habitat." Therefore, a cleanup alternative involving removal of soil would result in greater environmental harm than an alternative of leaving the contaminated topsoil in place. Ecology concurred with the NEBA determination. Therefore, based on the NEBA, remedial alternatives developed for the Cleanup Unit additionally took into account the protection of the environment for those Units that qualify for the NEBA.

Decision units within the Cleanup Unit that did not qualify for the NEBA included three upland areas that have been cleared in the past and are now vegetated primarily with grass, blackberry bushes, and scotch broom (Units 3c, 3e, and 5; Figure 3).

Following the 2014 RI and NEBA, King County conducted an additional investigation of the wetland soils/sediments in Unit 5 to document the nature and extent of impacts to indicator species from arsenic, lead, and PAHs.

In April 2017, Parametrix completed a Feasibility Study (FS) for the Cleanup Unit (Parametrix 2017a). The FS developed and assessed five remedial alternatives that implement a combination of cleanup approaches including limited contaminated soil removal, soil capping, and institutional controls. The alternatives are summarized below:

- Alternative 1 Closure of selected trail spurs. Capping the entire network of forest footpaths. Excavating soils on roads/trails that exceed cleanup levels. Excavating contaminated surface soils in areas that do not pass the NEBA.
- Alternative 2 Same as Alternative 1, except that soils will be contained below grade in two separate areas that did not pass the NEBA, one of which will be capped by a visitor parking lot to be constructed in the portion of the former trap range area that does not pass the NEBA.
- Alternative 3 Closure of selected trail spurs. Capping the entire network of forest footpaths.
 Conducting soil mixing for soils cleanup levels. In the portion of the former trap range area
 (Unit 5) that does not pass the NEBA, strip off the organic layer and cap with gravel for use as an
 equestrian parking lot. Soils in the other two areas that do not pass the NEBA (Decision Units 3c
 and 3e) will be left in place because both of these areas are heavily vegetated with blackberry
 bushes and virtually impassible by humans.
- Alternative 4 Same as Alternative 3, except that capping of the footpaths will be limited to a
 main thoroughfare.
- Alternative 5 Modification of Alternative 4 including revegetation of Units 3c and 3e. Cap graded roads with a minimum of 3 to 4 inches of compacted gravel and a 3-inch-thick layer of mineral soil (or equivalent) to protect horse's hooves and dog's feet. Trails to be eliminated will be decommissioned by the cessation of trail maintenance. Hygiene stations will be placed at all main trail heads. In Unit 5, clearing and grubbing will only be performed for an area large enough to construct a 40- to 50-stall gravel parking lot. The cleared area will be graded and a gravel parking lot and driveway will be constructed by placing a minimum of a 6-inch-thick layer

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of compacted gravel. A 6-foot chain link fence will be placed around the perimeter of the gravel parking lot and driveway to discourage visitors from walking through the former skeet range area. Limited remediation in the adjacent wetland will be done where lead exceeds allowed levels.

The result of the FS was selection of Alternative 5 as the preferred alternative. The FS was approved by Ecology on May 18, 2017 (Figure 4).

1.3 Property Ownership

The Maury Island Open Space owned by the King County Department of Parks and Recreation, 201 South Jackson Street, Suite 700, Seattle, Washington, 91804. King County Parks will own, maintain, and operate the cleanup unit in perpetuity.

1.4 Facility Maps

Cleanup Unit site features prior to any cleanup activities are shown on Figure 2. Figure 3 shows decision units developed as part of the RI/FS as well as monitoring well locations. Figure 4 presents the preferred cleanup alternative selected during the RI/FS (Alternative 5). Figure 5 provides a graphical representation of cleanup work performed to date.

1.5 Characteristics of the Cleanup Unit

1.5.1 Geologic and Hydrogeologic Conditions

The Cleanup Unit is underlain primarily by sediments deposited during and between repeated glacial advances and retreats in the Pleistocene Epoch. The upland areas are mantled by Vashon till and recessional outwash including stratified sand and gravel ranging from approximately 3- to 12 feet thick. Limited perch water may be present seasonally on a discontinuous basis in areas where till is present.

Groundwater at the site occurs at depths of approximately 200 feet below ground surface with a consistent flow direction towards the Puget Sound. Springs occur at the contact between the Vashon advance outwash and the underlying less-pervious silt and clay of the pre-Vashon unit where exposed near sea level along the beach (AESI 1998). The primary surface water feature is the Puget Sound, which forms the southeastern boundary around the Cleanup Unit at a distance of approximately 4,800 feet.

1.5.2 Soil Characteristics

Summary statistics for arsenic, lead, and PAHs in soil are provided below.

Contaminants Exceeding Cleanup Levels:

- Arsenic: Up to 2,600 milligrams/kilograms (mg/kg) and 2,550 mg/kg in duff and surface soil, respectively,
- Lead: Up to 2,600 mg/kg and 2,520 mg/kg in duff and surface soil respectively , and
- PAHs (based on benzo(a)pyrene: Up to 112,617 micrograms/kilograms (μg/kg) in forest duff.
- Cadmium did not exceed cleanup levels in surface soil samples.

Overall, metal concentrations decline rapidly with depth. The data suggests that when subsurface soils (i.e., 9 inches and deeper) contain elevated metals concentrations, it is because of physical transport mechanisms other than leaching, such as fill, inexact sampling practices that may have caused cross

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contamination from surface soils, and/or bioturbation (soil disturbance due to organismal movement) (CDM 2014a.).

The beach sands are not contaminated. This is because of the low cation exchange capacity of sand (the result is that the metals have very little ability to adsorb to the sand), combined with the constant movement of beach sands. Samples were collected at the bluff face at the edge of the beach and from slough accumulations along the base of the bluff. Arsenic concentrations ranged from 1.8 to 27 mg/kg. Lead concentrations ranged from 1.5 to 31 mg/kg.

The skeet range was inspected for the presence of shards and an area of shards were identified just to the north and east of the eastern trap station. Samples were collected from this area, specifically for PAH analysis. Several of the prior sample locations were inspected for the possible presence of shot in forest duff and soil. Shot was confirmed at most of the locations, although sometimes it was difficult to ascertain shot from small gravel due to the discoloration that occurs with weathering. These observations substantiate the premise that the relatively higher lead concentrations in a portion of Unit 5 are the result of historical skeet shooting activities (Parametrix 2017a).

1.5.3 Groundwater Characteristics

The results of spring water sampling conducted for the RI and historical sampling data from seeps and on-site observation wells demonstrate that groundwater and spring water have not been impacted by metals and that ingestion of impacted groundwater is not a potential human exposure pathway at the site (Parametrix 2017a). Groundwater was not evaluated for the presence of PAHs during the RI because these hazardous substances were not identified as contaminants of concern (COCs) for groundwater.

1.5.4 Wetland Soil Characteristics

Arsenic and lead in most of the wetland soil samples exceeded cleanup screening levels and toxicity was observed in some of the bioassays. The bioassay toxicity appeared to be primarily related to elevated lead levels, but not related to arsenic.

1.6 Cleanup Levels

Applicable cleanup levels were established during the RI/FS and consist of the following:

1.6.1 Human Health

1.6.1.1 Soil

The Final Interim Action Plan (IAP) for the Tacoma Smelter Plume (Ecology 2012) established that the MTCA Method A soil cleanup levels for unrestricted land use are applicable within the TSP. As the Cleanup Unit falls within the TSP, MTCA Method A cleanup levels are applicable. Because forest duff is an integral part of the soil matrix, Method A cleanup levels also apply to forest duff. The IAP also determined that arsenic and lead cleanups driven by TSP will also address all other hazardous substances from the smelter emissions. This is because, while other metals sometimes exceed MTCA cleanup levels, the frequency of this is much less. The Method A unrestricted land use soil cleanup levels are: 20 mg/kg for arsenic and 250 mg/kg for lead.

The Method A cleanup level for PAHs is based on the toxic equivalency method with the Method A cleanup level for benzo(a)pyrene (0.1 mg/kg) being the basis for comparison. For this method, toxicity

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equivalency factors (TEF) are used to calculate the toxicity of individual cPAH on an equivalent basis with benzo(a)pyrene. The adjusted concentrations are then summed and compared to the Method A cleanup level for benzo(a)pyrene.

1.6.1.2 Water

There are various drinking water and marine criteria for metals in addition to Method A, including the National Toxics Rule criteria, state groundwater and drinking water standards. Under MTCA, the cleanup standards are based on the most stringent of all regulatory standards, or background, whichever is greater. Since the MTCA Method A standard for arsenic is based on background for Washington State, the groundwater cleanup standard defaults to Method A, which is 5 micrograms per liter (μ g/L). For cadmium, the lowest of the groundwater and marine standards is Method A, which is 5 μ g/L. For lead, the lowest value is the chronic marine standard for protection of aquatic life, which is 8.1 μ g/L. None of these standards were exceeded for groundwater or spring/seep water, so no remedial actions are required for groundwater or spring/seep water.

1.6.2 Terrestrial Ecological

1.6.2.1 Soil

The NEBA concluded that cleanup alternatives involving removal of soil in Units 1a, 1b, 2c, 3a, 4a, 4b, 4c, and a portion of 5 would result in greater environmental harm than an alternative of leaving the contaminated topsoil in place. Therefore, the remedial alternatives developed for the Cleanup Unit considered the protection of the environment for those Units regardless of the arsenic and lead concentrations.

1.6.3 Wetlands

Wetland areas that are inundated for more than 6 or more consecutive weeks per year are regulated under WAC 173-204 (Sediment Management Standards) and should therefore be assessed for toxicity using the Sediment User's Cleanup Manual II (SCUM II). The bioassay analyses conducted for the wetland located in Decision Unit 5 found elevated lead levels as the primary concern. The NEBA already concluded that the non-inundated areas of Decision Unit 5 are applicable for the application of NEBA because they contain "especially valuable habitat." For inundated wetland areas, WAC 173-204-560 establishes initial sediment cleanup levels Sediment Cleanup Objective (SCO) of 360 mg/kg for lead in freshwater. An upward adjustment can be made to the SCO of 360 mg/kg (Pb) if it can be shown that by achieving the SCO there will be a net adverse environmental impact on the aquatic environment. However, the limitation is that the upward adjustment may not exceed the Cleanup Screening Level of (>1300 mg/kg)

For this reason, inundated wetland areas under 1,300 mg/kg would not be proposed for remediation because, similarly to the terrestrial habitat, it would do more harm to the habitat than good. For areas over 1,300 mg/kg some level of remediation is required. The soil and duff samples taken as part of the RI and bioassay analysis show that only a portion of the inundated wetland area exceeds this threshold for lead, and in those areas that do exceed the threshold, the high lead levels

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2. ENGINEERING DESIGN CRITERIA

Engineering design criteria for the cleanup unit are based on Alternative 5 from the RI/FS. Design criteria and approach for implementing the criteria are described below.

1. Limited soil removal shall occur in Decision Units 3c and 3e (Figure 2) along with the clearing of invasive plants. The area will then be covered with a minimum 3 inches of a compost cap and revegetated with native plants in phases. This will be done in phases with 3 acres being cleared and then covered with weed fabric for 3 years prior to removing the weed fabric in and planting. See Table 1 for of a proposed construction schedule. The objective is to provide dense mature native plantings that will provide a physical barrier that will discourage foot traffic. The compost layer will provide a physical barrier that will reduce the potential for direct contact with underlying soils.

Table 1. Proposed Schedule*

| Work Element | Period or Completed By |
|---|-------------------------|
| Interim Action | Q3 2016 – Q1 2017 |
| Phase 1 Implementation/Construction | Q4 2019 - Q2 2021 |
| Phase 2 Construction Contract Documents Ready to Advertise | Q2 2023 |
| Phase 2 Implementation/Construction | Q2 2023 - Q4 2023 |
| Phase 3 Implementation/Construction | Q2 2023 - Q4 2026 |
| First 5-Year Summary Monitoring Report | Q2 2025 |
| First 5-Year Review | Q4 2025 |
| Phase 4 Implementation/Construction | Q2 2029 – Q4 2029 |
| Phase 5 Implementation/Construction | Q2 2032 – Q4 2032 |
| * Interim Action included revegetation of 3 Acres of Area 3C Phase 1 includes trail/road capping, parking lot construction, and clearing of 3 Phase 2 includes replanting of 3 acres of Area 3C, clearing 3 more acres of 3C a Phase 3 includes replanting of 3 more acres of Area 3C and clearing 3 more acre Phase 4 includes replanting of the final acres of Area 3C and clearing Area 3E | and Wetland Remediation |
| Phase 5 includes replanting of Area 3E | |

- 2. Cleanup work may include removal of non-historic obstructions including chain link fence along SW 260th Street. Other structures, such as the old mining apparatus, may be completely or partially removed if it is deemed necessary for safety reasons.
- 3. Gravel roads and all existing trails with contamination values over the cleanup threshold shall be capped with a minimum of 3 to 4 inches of compacted, crushed gravel meeting the Washing State Department of Transportation (WSDOT) specifications for Crushed Surfacing Top Course (CSTC) or equivalent. A 3-inch-thick layer of compacted mineral soil (or equivalent) shall be placed on top of the gravel in selected areas of trail to protect horse's hooves and dog's feet. Areas of trail and gravel road cap subject to erosion from surface water runoff shall be protected by underlying the CSTC with a 6- to 8-inch-thick layer of crushed rock meeting the WSDOT specification for Permeable Ballast.

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- 4. Institutional controls in the form of signage shall be placed at selected locations along the trails and gravel road to indicate that hikers should stay on maintained trails due to the presence of lead and arsenic contaminants in off-trail forest areas.
- 5. Benches, picnic tables, picnic shelters, signage, and kiosks shall be located adjacent to the capped trails at several locations. Historical markers or signage may be added in this area to document the farm. These amenities shall be located on pads constructed of 3 to 4 inches of the same compacted gravel used for the trail cap.
- 6. In Unit 5, clearing and grubbing will only be performed for an area large enough to construct a parking lot which will accommodate both cars and equestrian trailers. The parking lot will be constructed using clean imported materials and shall be designed to meet applicable King County traffic and drainage requirements.
- 7. Decorative wood fencing shall be placed around the perimeter of the parking lot backed with dense thorny native vegetation to encourage visitors to stay on the capped parking lot and trail areas. A new connector trail shall be constructed to connect the parking lot to the existing trail network. New trails would be constructed using the same treatment described above for the capped trails.
- 8. Additional testing shall be conducted in the inundated areas of the Decision Unit 5 wetland to determine where lead levels exceed the Cleanup Screening Level of >1,300 mg/kg lead. Remediation would be done in these areas to bring lead levels below 1,300 mg/kg. Based on existing data, this remediation can likely be achieved by removing the duff layer and surface soil in select locations only. Any remediation performed would be the minimum necessary to meet cleanup requirements while protecting the existing habitat. This remediation would be coordinated with the phased revegetation of Units 3c and 3e.
- 9. Vegetation mixed with soil and soil removed during clearing and grubbing for revegetation, trail construction, and parking lot construction shall be disposed of at a permitted off-site landfill. These materials shall be segregated and tested for arsenic and lead prior to disposal. Waste manifests shall be used to track the materials during transportation to the disposal landfill. Testing requirements shall be determined by the landfill. Sample collection frequency and testing methods shall meet the requirements of MTCA and the Ecology document *Guidance for the Remediation of Petroleum Contaminated Sites*, dated October 2011. This document specifies sample collection methods and testing frequency for stockpiled soil. The required number of samples is based on the volume in cubic yards of individual stockpiles. At a minimum, tests shall include total lead and arsenic and leachable lead and arsenic using the Toxicity Characteristic Leaching Procedure (TCLP). The testing laboratory shall be accredited by Ecology for the tests being performed.
- 10. Clean vegetation may be disposed of in off-trail wooded areas.
- 11. Imported materials such as mineral soil or crushed surfacing shall be tested for total lead and arsenic at a minimum frequency of one test per 200 tons. Samples shall be collected from material stockpiles located at the production facility. Materials soil containing arsenic and/or lead exceeding MTCA cleanup levels established for the site (20 milligrams per kilogram arsenic and 250 milligrams per kilogram lead) shall not be accepted for delivery to the site. Test results shall be provided to the Engineer for acceptance at least 2 days prior to delivery of the material. Individual truck tickets shall be provided upon the truck's arrival at the site that indicate which

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test results (including sample numbers) correspond to the material in the truck. Truck tickets shall include tonnage for that truck.

The above criteria were applied to the design of the Interim Action performed at the site in 2016/2017 (Parametrix 2016). This work involved revegetation of approximately 3 acres of Decision Unit 3C.

Trail and gravel road capping was conducted in 2019 and 2020 as part of Phase 1 construction at the site. The new section of trail connecting the future parking lot to the existing trail system was also constructed. Refer to the record drawings provided in Appendix A.

Parking lot construction is currently planned for late 2020, early 2021 as the second part of Phase 1 construction. This work will include clearing of an additional 3 acres of Unit 3C and covering the area with weed fabric for three years before replanting to kill the invasive vegetation seedbank. Refer to Appendix B for draft final construction plans.

The plans provided in Appendices A and B, as well as the associated construction specifications shall be used as templates for preparation of plans and specification for future phases of cleanup work.

2.1 Compliance Monitoring

Compliance monitoring must be performed such that protection of human health and the environment can be confirmed. As described above, confirmation sampling will be conducted for imported soils and for vegetation and soil destined for disposal at an off-site landfill. Health and safety compliance monitoring shall be conducted during construction including monitoring during excavation activities to ensure that any necessary actions to control discharges of dust are taken before it poses a potential health/environmental issue. Finally, compliance monitoring will be conducted during construction to ensure that the work meets design specifications (e.g., thickness of gravel caps will be spot measured).

Following construction, County staff will inspect the site quarterly to check for vandalism and maintenance issues such as the presence of large eroded cap areas that require repair or areas of dead vegetation in the revegetation area that require replanting. Maintenance to correct these issues will be performed in a timely fashion in order to protect the integrity of the cleanup action. Annual trail maintenance will consist of blowing the organics off the trails and brush cutting along the trail edges. A formal maintenance plan and schedule will be provided in the Compliance Monitoring and Institutional Controls Plan developed for the site under the Agreed Order.

2.2 Health and Safety During Construction

All project construction workers who enter the work site, handle contaminated materials, and the Site Safety and Health Officer all must have current Hazardous Waste Operations and Emergency Response (HAZWOPER) Training Certification. Contractors shall be required to plan, implement, and maintain a site-specific health and safety program that complies with all applicable state and federal health and safety regulations. Compliance will be confirmed through submission of health and safety documentation such as worker HAZWOPER training certificates and a written Site Specific Health and Safety Plan.

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3. REFERENCES

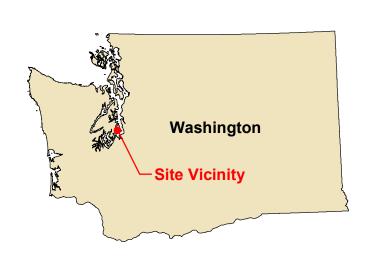
- AESI (Associated Earth Sciences, Inc.). 1998. Soils, Geology, Geologic Hazards and Ground Water Report, Existing Conditions, Impacts, and Mitigations. Maury Island Pit, King County, Washington. Prepared for Lone Star Northwest, Inc. Revised April 27, 1998.
- CDM Smith. 2014a. Final, Remedial Investigation, Maury Island Open Space Property, Maury Island, Washington. Project No. 19897-99064. June 2.
- CDM Smith. 2014b. Draft Net Environmental Benefit Analysis, Maury Island Open Space Property, Maury Island, Washington. Project No. 19897-99064. May 29.
- Ecology. 2007. Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC. October 12.
- Ecology. 2012. Final Interim Action Plan for the Tacoma Smelter Plume, Asarco Tacoma Smelter Site. Publication No. 12-09-086-A. June.
- Ecology. 2013. Effective Date of Agreed order No. 8439 for Remedial Investigation/Feasibility Study and Draft Cleanup Action Plan, Maury Island Open Space Site, Maury Island, King County, WA. January 2013.
- Parametrix. 2017a. Draft Final Feasibility Study, Maury Island Open Space Property, Maury Island, Washington. April 17.
- Parametrix. 2017b. Draft Cleanup Action Plan, Maury Island Open Space Property, Maury Island, Washington. July 17.
- Parametrix. 2016. Interim Action Work Plan (Agreed Order 8439) Technical Memorandum. Prepared by Parametrix April 19, 2016, Job No. 233-1521-175.

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Figures

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FIGURE 1 VICINITY AND LOCATION MAP Maury Island Open Space Cleanup Unit EDR



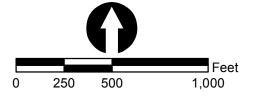
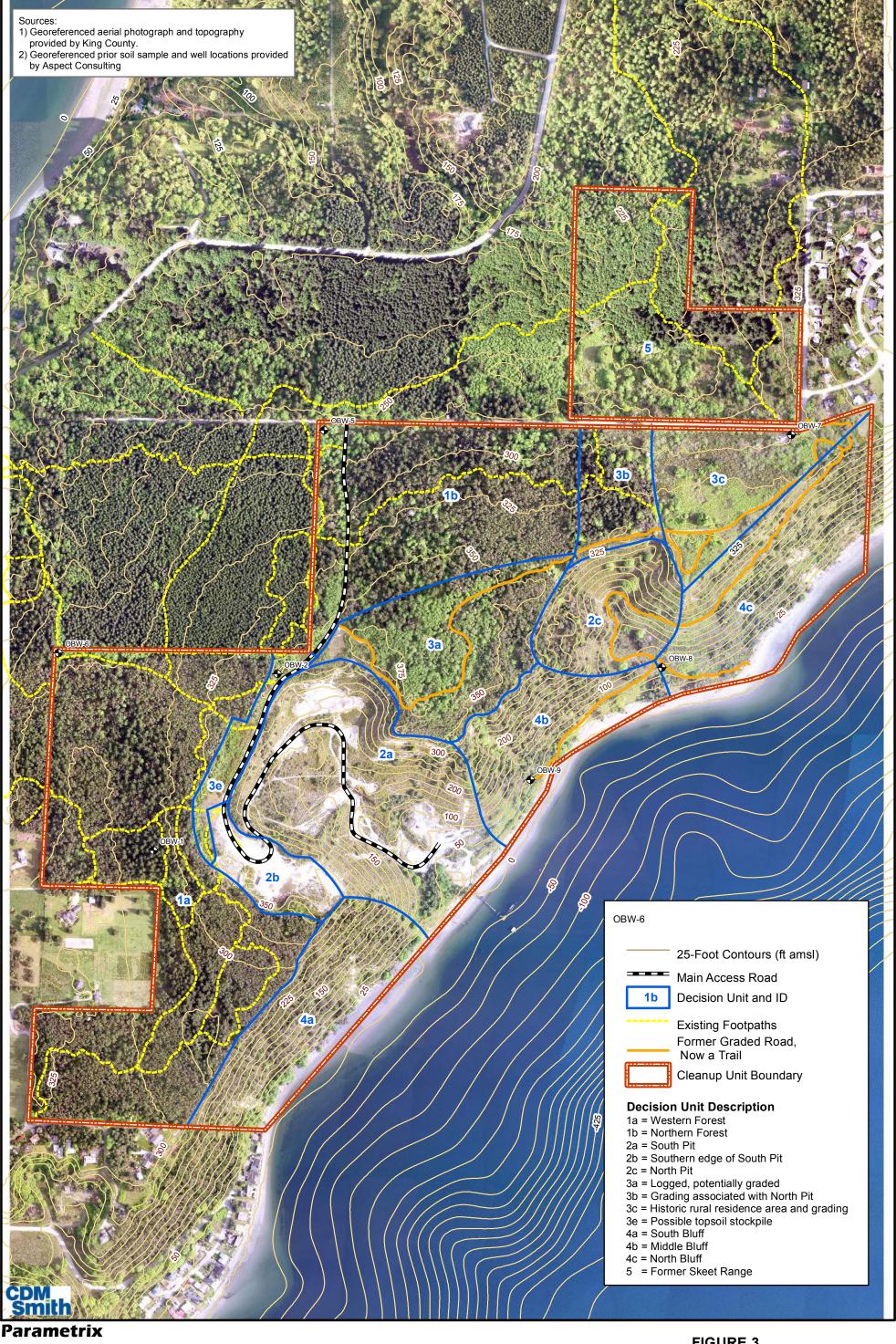


FIGURE 2 **CLEANUP UNIT AND** VICINITY FEATURES
Maury Island Open
Space Cleanup Unit EDR



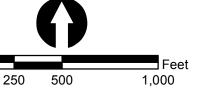
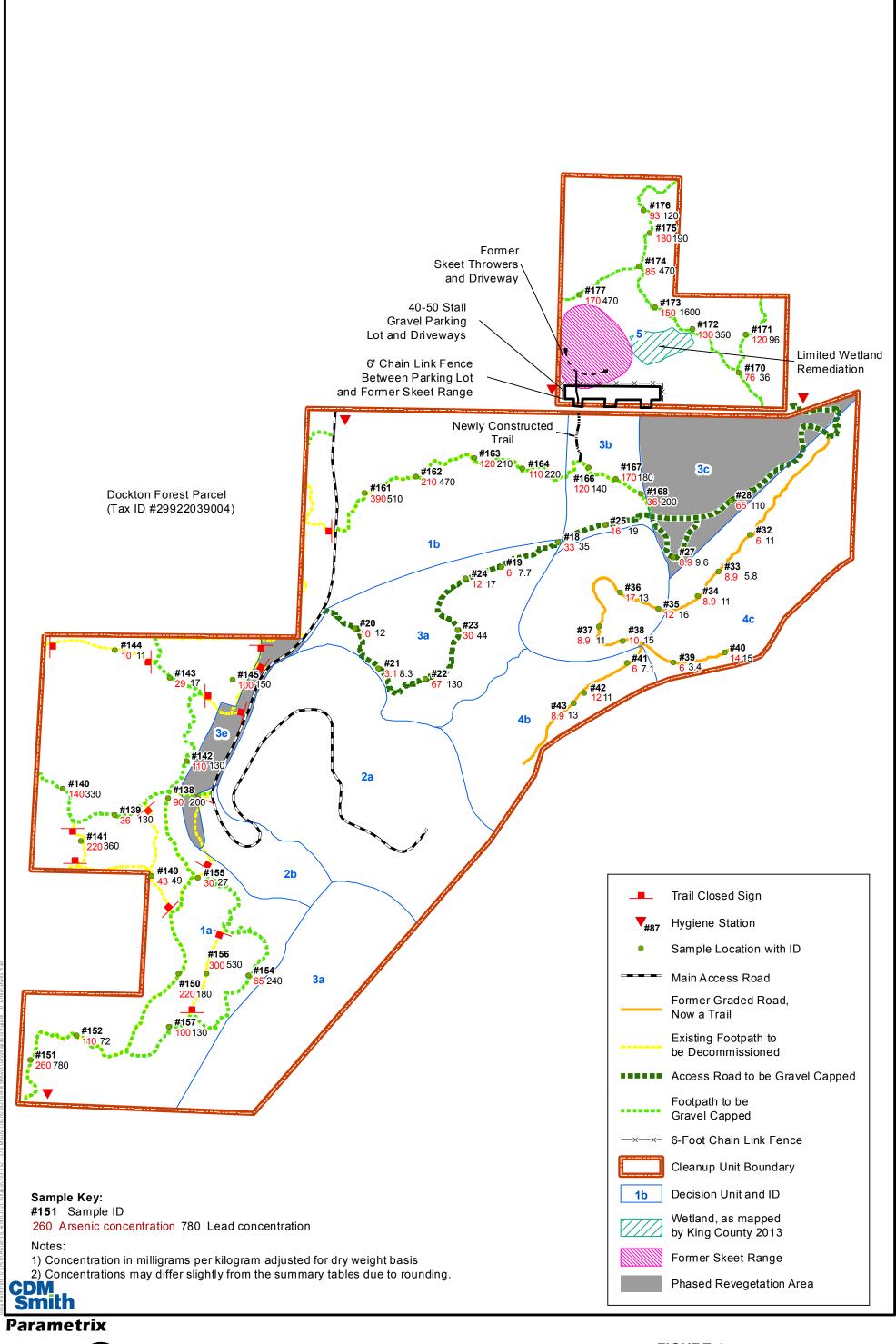


FIGURE 3 **DECISION UNITS AND MONITORING WELL LOCATIONS** Maury Island Open Space Cleanup Unit EDR



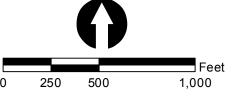
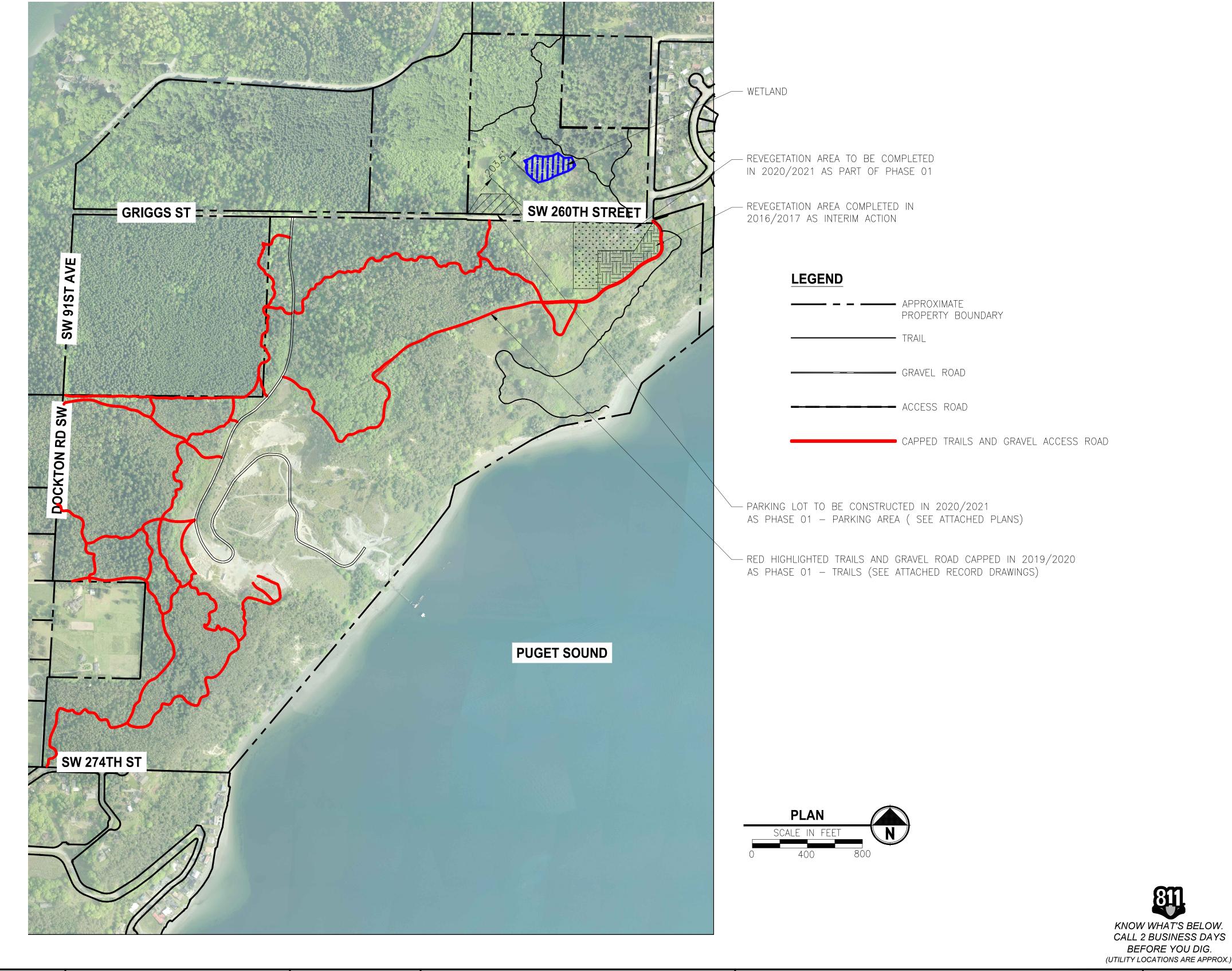


FIGURE 4 CLEANUP ALTERNATIVE SELECTED DURING THE RIFS (ALTERNATIVE 5)

Maury Island Open Space Cleanup Unit EDR



| PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | |
|-----------------------------|----------|----|-------------|--------------|-----------|
| REV# | REVISION | BY | DATE | ARCH. | N/A |
| 1> | | | | STRUCT. ENG. | N/A |
| 2> | | | | CIVIL ENG. | D.DINKUHN |
| 3> | | | | LAND. ARCH. | N/A |
| | | | | | |

Maury Island Natural Area

D. DINKUHN

A. MISIURAK

PROJECT#

APPROVED

REVIEWED M. YAND

ISSUED

DATE

05/09/2019

05/09/2019

05/09/2019

King County
Department of Natural Resources and Parks

Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 SUMMARY OF CLEANUP WORK TO DATE (JUNE 2020) Christie True, Director

| King County Maury Island Open Space Cleanup Unit EDR 7911 SW 260th Street Maury Island, WA 98070 | |
|--|--|
| | |

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OF

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FIG 5

Appendix A

Record Drawings

Interim Action (2017)

Phase 1A – Trail Capping (2020)

VICINITY MAP



KING COUNTY **MAURY ISLAND OPEN SPACE** REMEDIATION

OWNER: KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

PARKS AND RECREATION DIVISION - CAPITAL PROJECTS SECTION 201 SOUTH JACKSON STREET, SUITE 700, SEATTLE, WA 98104-3855 CONTACT: LINDSEY MILLER

PH: 206-477-3549 EMAIL: LINDSEY.MILLER@KINGCOUNTY.GOV

SURVEYOR: COMPANY NAME

ARCHITECT/ENGINEER/LANDSCAPE ARCHITECT: PARAMETRIX

PARAMETRIX

CONTACT: DAVID DINKUHN, PE

PH: 360-850-5319 EMAIL: DDINKUHN@PARAMETRIX.COM

PROJECT DATA

PROJECT ADDRESS: 7911 SW 260th Street, Maury Island, WA 98070

TAX PARCEL NUMBER:

LEGAL DESCRIPTION

NW QTR NW QTR STR 28-22-03; EXC NE QTR THEREOF; & EXC PORTION THEREOF LYING WITHIN SW 260TH ST & 79TH AVE SW; TGW GOVT LOT 4 IN NW OTR STR 28-22-03, EXC PORTION THEREOF LYING WITHIN SW 260TH ST; TGW SE QTR NE QTR STR 29-22-03; EXC PORTION THEREOF LYING WITHIN SW 260TH ST; TGW GOVT LOT 4 IN SE QTR STR 29-22-03; TGW NW QTR SE QTR STR 29-22-03; TGW GOVT LOT 4 IN SE QTR STR 29-22-03; TGW GOVT LOT 5 IN SE OTR STR 29-22-03; EXC W 672 2/7 FT OF N 700 FT THEREOF; TGW 2ND CLASS TIDELANDS ADJOINING GOVT LOTS 3 & 4 OF SECTION 28 AND GOVT LOTS 4 & 5 OF SECTION 29 ALL IN TWP 22 RANGE 3 EXTENDING TO LINE OF EXTREME LOW TIDE

PROJECT DESCRIPTION

THIS PROJECT PROVIDES FOR THE IMPROVEMENT OF THE MAURY ISLAND OPEN SPACE PROPERTY LOCATED AT APPROXIMATELY 7911 SW 260TH STREET IN VASHON ISLAND IN KING COUNTY. THE PROJECT INCLUDES CLEARING AND GRUBBING, DEER FENCE, LANDSCAPING, AND OTHER WORK, ALL IN ACCORDANCE WITH THE ATTACHED PLANS, THESE SPECIAL PROVISIONS, THE STANDARD SPECIFICATIONS, AND THE APWA/WSDOT STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

ZONING

EXISTING: PARK, PUBLIC EXISTING USE: PARK, PUBLIC

PROPOSED USE: SAME AS EXISTING

EXISTING SITE STRUCTURES

NEW / ALTERED STRUCTURES

ALTERED SITE AREAS NEW LOT COVERAGE: N/A

NEW IMPERVIOUS SURFACE AREA: N/A ALTERED IMPERVIOUS SURFACE AREA: N/A OFF STREET PARKING: N/A RECYCLABLE STORAGE: N/A

APPLICABLE CODES AND DESIGN CRITERIA

APWA/WSDOT STANDARD SPECIFICATIONS AND STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (CURRENT EDITION)

BID SET

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPE

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| Maury Island Natural Area | | PROJECT MANAGER: D. Dinkuhn | | | DESIGN TEAM | | | |
|---------------------------|------------|-----------------------------|------|----------|-------------|------|--------------|------------|
| PROJECT# | | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |
| ISSUED | D. Dinkuhn | 8/11/2016 | 1 | | | | STRUCT. ENG. | N/A |
| APPROVED | | | 2> | | | | CIVIL ENG. | D. Dinkuhn |
| REVIEWED | M. Yand | 8/11/2016 | 3> | | | | LAND. ARCH. | N/A |
| DRAWN | J. Ceralde | 8/11/2016 | 4> | | | | | |
| | | | | | | | | |

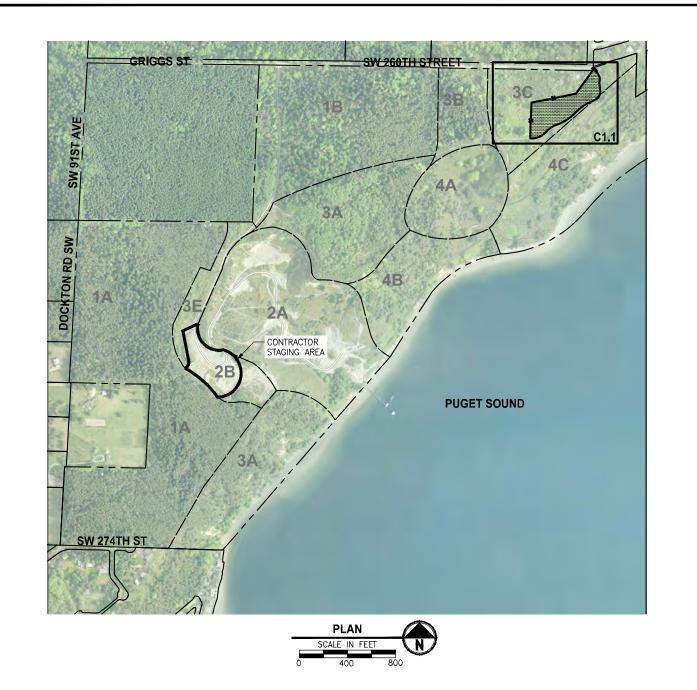




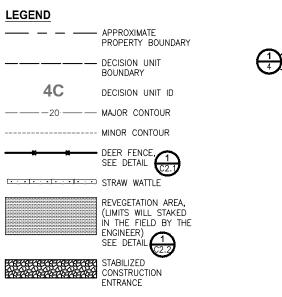
Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County |
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| Maury Island Open Space Remediatior |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

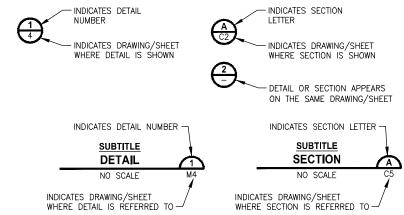
| COVER SHEET | G0.1 |
|-------------------------------------|--------|
| Maury Island, WA 98070 | SHEETS |
| 7911 SW 260th Street | 6 |
| Maury Island Open Space Remediation | OF |



| SHEET INDEX | | |
|---------------------|--|---|
| DWG NO. | SHT NO. | SHEET TITLE |
| GENERAL 1 2 3 4 5 6 | G0.1 C1.0 C1.1 C2.1 C2.2 C3.0 | COVER SHEET SHEET INDEX, KEY MAP, NOTES SITE PLAN DETAILS DETAILS TEMP TRAFFIC CONTROL PLAN |



DETAIL AND SECTION DESIGNATION



SOURCE:

- ELEVATION CONTOURS FROM KING COUNTY GIS.
- 2. PROPERTY BOUNDARIES FROM KING COUNTY GIS.

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX

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SHEETS

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| Maury Island Natural Area | | | PROJECT MANAGER: D. Dinkuhn | | | DESIGN TEAM | | |
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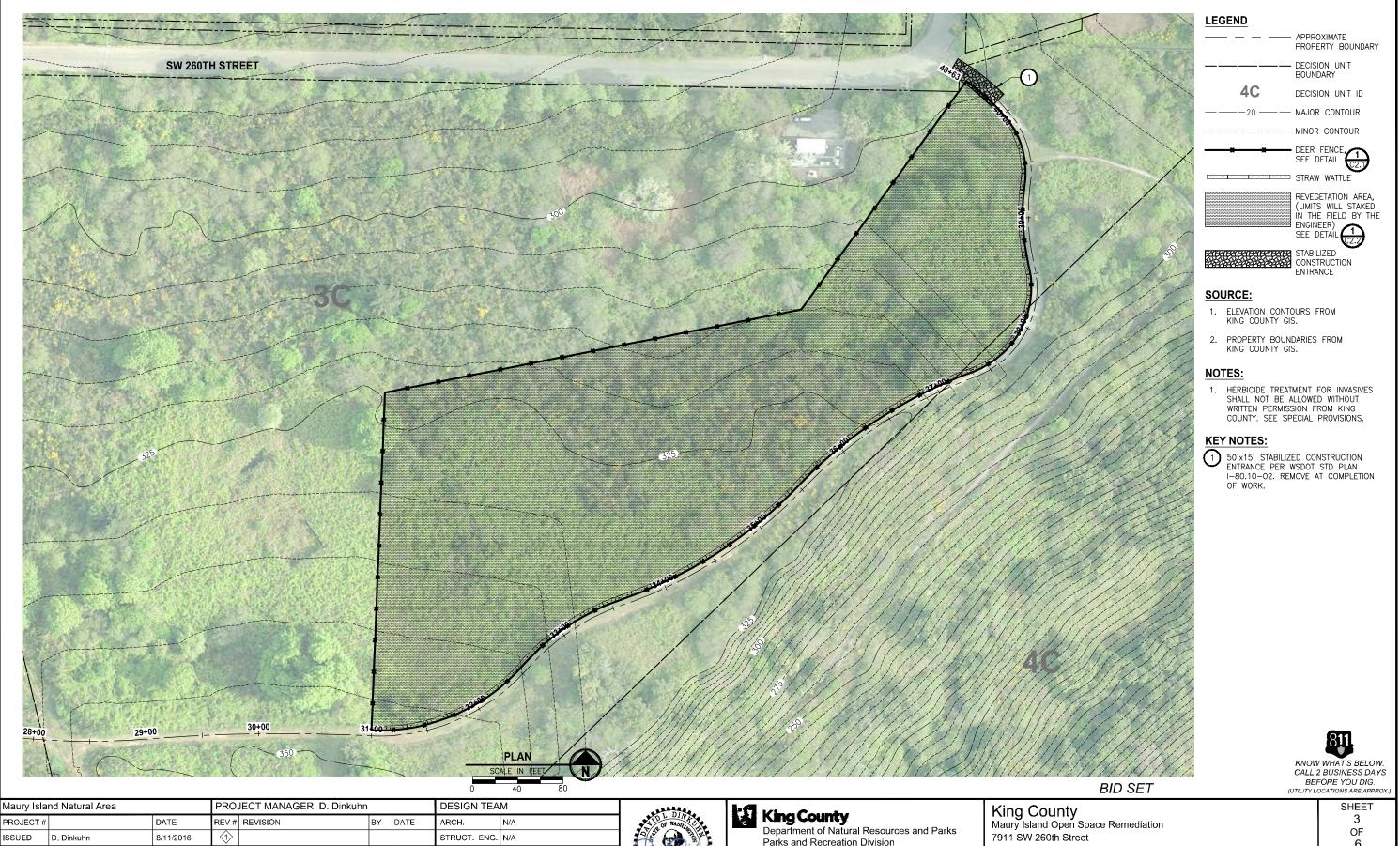


King County

Department of Natural Resources and Parks
Parks and Recreation Division
Capital Projects Section
201 S. Jackson St., Suite 700, Seattle, WA 98104
Christie True, Director

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| King County Maury Island Open Space Remediation 911 SW 260th Street Maury Island, WA 98070 | |

SHEET INDEX, KEY MAP, NOTES



| Maury Island Natural Area | | | PROJECT MANAGER: D. Dinkunn | | | DESIGN TEAM | | |
|---------------------------|------------|-----------|-----------------------------|----------|----|-------------|--------------|------------|
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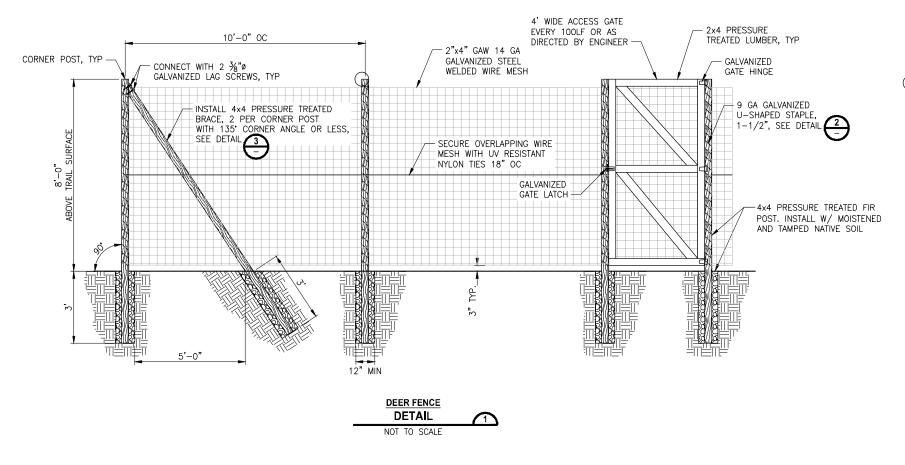


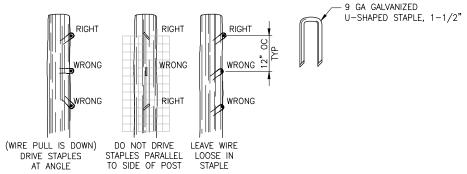
Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County |
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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

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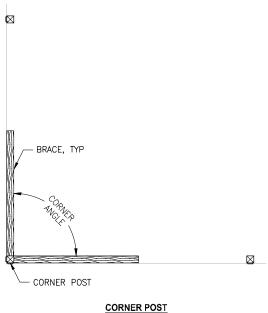
SITE PLAN C1.1





9 GA STAPLE ATTACHMENT

DETAIL NO SCALE



DETAIL NO SCALE

> 811 KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPRO

> > SHEET

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King County Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104

Christie True, Director

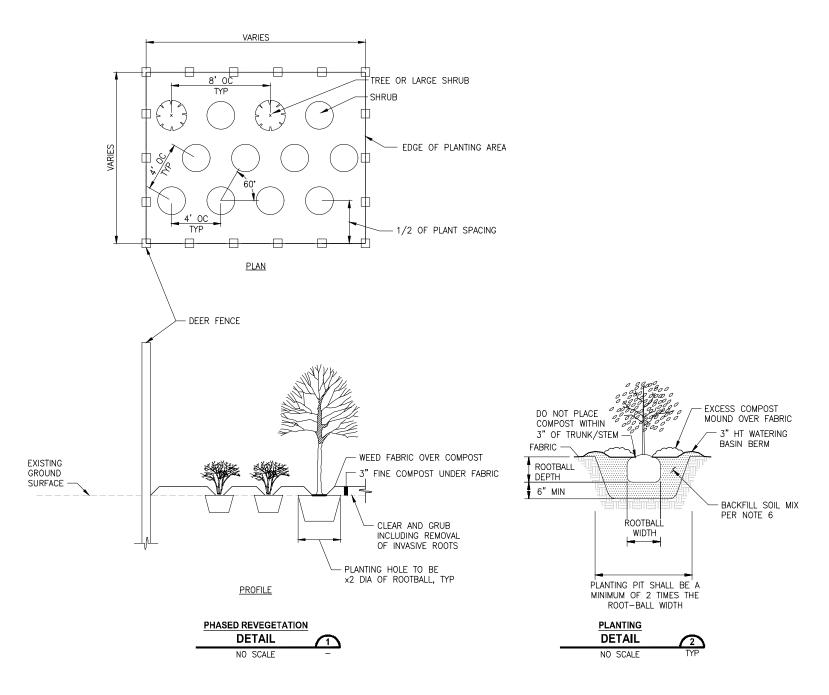
| ŧ | DETAILS | C2 1 |
|---|---|------------------------|
| 1 | Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | 4 OF 6 SHEETS |
| | King County | SHEET |

| Maury Island Natural Area | | | PROJECT MANAGER: D. Dinkuhn | | | DESIGN TEAM | | |
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| DRAWN | J. Ceralde | 8/11/2016 | 4 | | | | | |



Revised

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| PLANTING SCHEDU | JLE: | | | | |
|----------------------------------|-----------------------|---------------------------------|----------|-----------|-----------------------------|
| SCIENTIFIC NAME | QTY | COMMON NAME | MIN SIZE | CONDITION | NOTES |
| CONIFER TREES | | | | | |
| PINUS MONTICOLA Picea Sitchensis | 300 300 | WESTERN WHITE PINE Sitka Spruce | 18" TALL | CONT | SPACE PLANTS 8' OC |
| PSEUDOTSUGA MENZIESII | 900 | DOUGLAS-FIR | 18" TALL | CONT | |
| THUJA PLICATA | 200 | WESTERN RED CEDAR | 18" TALL | CONT | PLANT IN PARTIAL SHADE ONLY |
| DECIDUOUS TREES | | | | | |
| ACER MACROPHYLLUM | 200 | BIG LEAF MAPLE | 18" TALL | CONT | SPACE PLANTS 8' OC |
| PRUNUS EMARGINATA | 200 | BITTER CHERRY | 18" TALL | CONT | |
| QUERCUS GARRYANA | 200 | GARRY OAK | 18" TALL | CONT | |
| LARGE EVERGREEN SHRUBS | | | | | |
| MAHONIA AQUIFOLIUM | 1100 | TALL OREGON GRAPE | 1 GAL | CONT | SPACE PLANTS 8' OC |
| VACCINIUM OVATUM | 200 | EVERGREEN HUCKLEBERRY | 1 GAL | CONT | PLANT IN PARTIAL SHADE ONLY |
| LARGE DECIDUOUS SHRUBS | | | | | |
| HOLODISCUS DISCOLOR | 675 | OCEANSPRAY | 1 GAL | CONT | SPACE PLANTS 8' OC |
| OEMLERIA CERASIFORMIS | 200 | INDIAN PLUM | 1 GAL | CONT | PLANT IN PARTIAL SHADE ONLY |
| INFILL SHRUB MIX | | | | | |
| ROSA PISOCARPA | 1500 | PEAFRUIT ROSE | 1 GAL | CONT | SPACE PLANTS 4' OC |
| ROSA NUTKANA | 1500 | NOOTKA ROSE | 1 GAL | CONT | |
| SYMPHORICARPOS ALBUS | 1000 | COMMON SNOWBERRY | 1 GAL | CONT | PLANT IN PARTIAL SHADE ONLY |
| | | | | | |

PLANTING NOTES:

- PLANT SHRUBS IN SINGLE SPECIES GROUPS OF 7 TO
 12 PLANTS EACH PLANT TREES IN SINGLE SPECIES
 GROUPS OF 1 TO 5 PLANTS EACH.
- 2. LAYER MATERIAL:
 NATIVE GROUND
 FINE COMPOST
 WEED FABRIC OVER COMPOST

DI ANTINO COLIEDINE

- 3. INSTALL PLANTS THROUGH WEED FABRIC BY CUTTING 'X' IN FABRIC, REMOVING SOIL / COMPOST THROUGH HOLE, PLACING PLANT IN HOLE, AND BACKFILLING WITH SOIL/COMPOST. MOUND EXCESS COMPOST AROUND PLANT BASE ON TOP OF FABRIC.
- 4. PLANT MATERIALS SHALL MEET STANDARDS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARD (ANSI Z60.1) AND WASHINGTON STATE STANDARDS FOR NURSERY STOCK ORDER NO. 1627. ALL PLANT MATERIALS SHALL HAVE SUFFICIENT ROOT DEVELOPMENT TO ASSURE SURVIVAL AND HEALTHY GROWTH. CONTAINER GROWN PLANT MATERIALS ARE REQUIRED TO HAVE SUFFICIENT ROOT GROWTH TO HOLD THE SOIL INTACT WHEN REMOVED FROM THE CONTAINER, BUT SHALL NOT BE ROOT BOUND.

PLANTING NOTES:

- 5. ALL PLANT MATERIALS AND PLANT LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL PLANTS SHALL BE THOROUGHLY WATERED IMMEDIATELY AFTER PLANTING.
- 6. PLANT LIST QUANTITIES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR INSTALLING PLANTINGS PER THE LANDSCAPE PLAN.
- 7. ALL PLANT QUANTITIES TO BE DETERMINED BY REQUIRED SPACING.
- 8. LANDSCAPE MATERIALS & QUANTITIES WILL BE FIELD ADJUSTED TO FIT ACTUAL CONDITIONS IF NECESSARY. COORDINATE LANDSCAPE CONSTRUCTION AND REVIEW WITH ENGINEER.
- 9. BACKFILL SOIL MIX SHALL CONSIST OF A MIXTURE OF 1/3 COMPOST AND 2/3 SUITABLE NATIVE SOIL.

IRRIGATION NOTES:

 ALL VEGETATION SHALL BE WATERED BY CONTRACTOR FOR FOUR MONTHS AFTER SUBSTANTIAL COMPLETION OF THE PROJECT.

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG.

BID SET

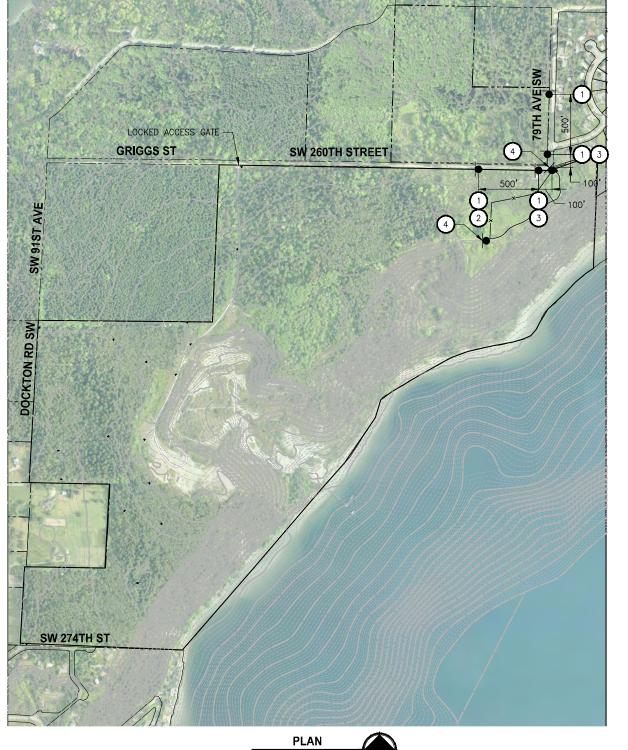
| Maury Island Natural Area | | | PROJECT MANAGER: D. Dinkuhn | | | DESIGN TEAM | | |
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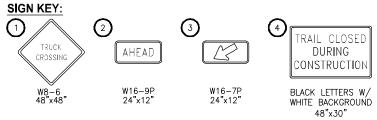


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Department of Natural Resources and Parks
Parks and Recreation Division
Capital Projects Section
201 S. Jackson St., Suite 700, Seattle, WA 98104
Christie True, Director

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|---|---------------------------------|
| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 5 OF 6 SHEETS |
| DETAILS | C2.2 |





SYMBOL LEGEND:

TEMPORARY TRAFFIC CONTROL SIGN

NOTES:

- 1. TRAIL SHALL BE CLOSED DURING CONSTRUCTION WORKING HOURS WHILE CONSTRUCTION EQUIPMENT IS PRESENT.
- 2. ACCESS GATE SHALL REMAIN LOCKED AT ALL TIMES EXCEPT FOR EQUIPMENT ENTRY/EXIT.

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPRO

BID SET

| Maury Isla | Island Natural Area | | PROJECT MANAGER: D. Dinkuhn | | DESIGN TEA | M | | | |
|------------|---------------------|-----------|-----------------------------|----------|------------|------|--------------|------------|---|
| PROJECT# | | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |] |
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| APPROVED | | | 2> | | | | CIVIL ENG. | D. Dinkuhn | |
| REVIEWED | M. Yand | 8/11/2016 | 3> | | | | LAND. ARCH. | N/A | |
| DRAWN | J. Ceralde | 8/11/2016 | 4 | | | | | | |



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King CountyDepartment of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County |
|-------------------------------------|
| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

| TEMP TRAFFIC CONTROL PLAN | C3.0 |
|---|---------------------------------|
| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 6 OF 6 SHEETS |



Project: Maury Island Open Space Remediation

| Plant Name/Size | Specified | Quantity Delivered | Delivered to King County Unplanted | Planted During 1st Effort | Warranty Planting 4/13/2017 |
|---|-----------|-----------------------|--|---------------------------------|-----------------------------|
| Picea Sitchensis 'Sitka Spruce' (#2 Cont/18" HT) | 300 | 310 | 109 | 201 | 0 |
| Pseudotsuga Menziesii/Douglas Fir (#2 Cont/18" HT) | 900 | 930 | 541 | 389 | 0 |
| Thuja Plicata/Western Red Cedar (#2 Cont/18" HT) | 200 | 204 | 35 | 169 | 10 |
| Acer Marcophyllum/Big Leaf Maple (#2 Cont/18" HT) | 200 | 204 | 44 | 160 | 0 |
| Prunus Emarginata/Bitter Cherry (#2 Cont/18" HT) | 200 | 204 | 138 | 66 | 0 |
| Quercus Garryana/Garry Oak (#2 Cont/18" HT) | 200 | 210 | 84 | 126 | 0 |
| Mahonia Aquifolium/Tall Oregon Grape (#1 Cont/12" HT) | 1100 | 1122 | 0 | 1122 | 75 |
| Vaccinium Ovatum/Evergreen Huckleberry (#1 Cont/12" HT) | 200 | 205 | 0 | 205 | 25 |
| Holodiscus Discolor/Oceanspray (#1 Cont/12" HT) | 675 | 688 | 0 | 688 | 0 |
| Oemleria Cerasiformis/Indian Plum (#1 Cont/12" HT) | 200 | 200 | 117 | 83 | 0 |
| Rosa Pisocarpa/Peafruit Rose (#1 Cont/12" HT) | 1500 | 1530 | 0 | 1530 | 0 |
| Rosa Nutkana/Nootka Rose (#1 Cont/12" HT | 1500 | 1530 | 0 | 1530 | 0 |
| Symphoricarpos Albus/Common Snowberry (#1 Cont/12" HT) | 1000 | 1020 | 0 | 1020 | 0 |



KING COUNTY MAURY ISLAND OPEN SPACE **REMEDIATION - PHASE 01 - TRAILS**

OWNER: KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

PARKS AND RECREATION DIVISION - CAPITAL PROJECTS SECTION 201 SOUTH JACKSON STREET, SUITE 700, SEATTLE, WA 98104-3855 CONTACT: LINDSEY MILLER

PH: 206-477-3549 EMAIL: LINDSEY.MILLER@KINGCOUNTY.GOV

SURVEYOR: KING COUNTY ROAD SERVICES DIVISION KING COUNTY ROAD SERVICES DIVISION - SURVEY UNIT

ARCHITECT/ENGINEER/LANDSCAPE ARCHITECT: PARAMETRIX

PARAMETRIX

CONTACT: DAVID DINKUHN

PH: 360-850-5319 EMAIL: DDINKUHN@PARAMETRIX.COM

PROJECT DATA

PROJECT ADDRESS

7911 SW 260th Street, Maury Island, WA 98070

TAX PARCEL NUMBER: 282203-9023

LEGAL DESCRIPTION

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PROJECT DESCRIPTION

THIS PROJECT PROVIDES FOR THE IMPROVEMENT OF THE MAURY ISLAND OPEN SPACE PROPERTY LOCATED AT APPROXIMATELY 7911 SW 260TH STREET IN VASHON ISLAND IN KING COUNTY. THE PROJECT INCLUDES CLEARING AND GRUBBING, CAPPING TRAILS AND ACCESS ROADS WITH GRAVEL, GRAVEL CHECK DAMS, 12-INCH CULVERTS, SIGNS, AND OTHER WORK, ALL IN ACCORDANCE WITH THE ATTACHED PLANS, THESE SPECIAL PROVISIONS, THE STANDARD SPECIFICATIONS, THE KCRDCS, THE APWA/WSDOT STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, AND THE USDA FOREST SERVICE STANDARD TRAIL PLANS AND SPECIFICATIONS.

ZONING EXISTING: PARK, PUBLIC EXISTING USE: PARK, PUBLIC

PROPOSED USE: SAME AS EXISTING

EXISTING SITE STRUCTURES

NEW / ALTERED STRUCTURES NONE

ALTERED SITE AREAS

NEW LOT COVERAGE: N/A NEW IMPERVIOUS SURFACE AREA: 40,664 SF ALTERED IMPERVIOUS SURFACE AREA: NA OFF STREET PARKING: N/A RECYCLABLE STORAGE: N/A

APPLICABLE CODES AND DESIGN CRITERIA

APWA/WSDOT STANDARD SPECIFICATIONS AND STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (CURRENT EDITION)

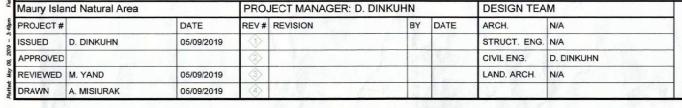
USDA FOREST SERVICE STANDARD TRAIL PLANS AND SPECIFICATIONS (CURRENT EDITION)

APPLICABLE CODES AND DESIGN CRITERIA NOTES:

1.) USDA FOREST SERVICE STANDARD TRAIL PLANS AND SPECIFICATIONS SHALL APPLY FOR ALL WORK NOT OTHERWISE SHOWN OR NOTED IN THE PROJECT PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG

05/09/2019





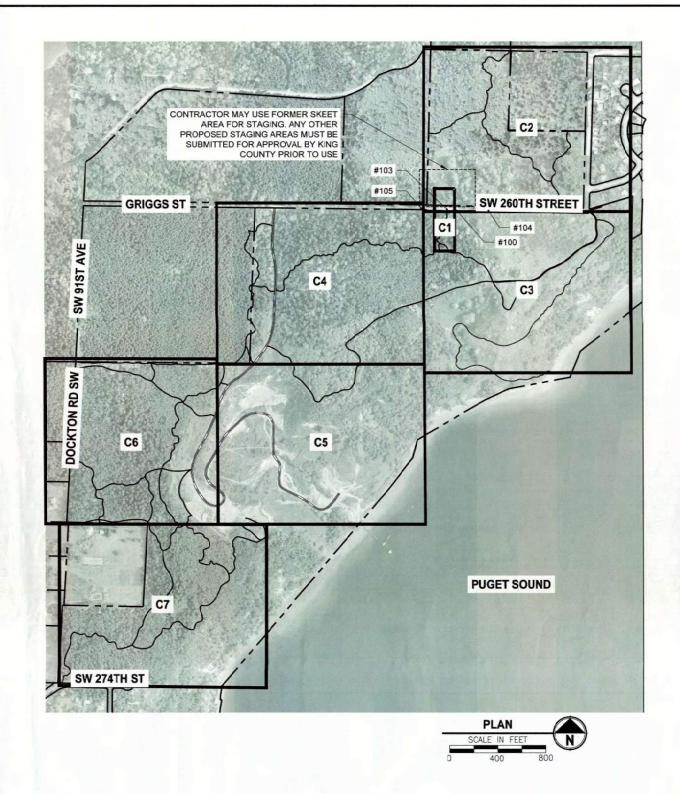
King County

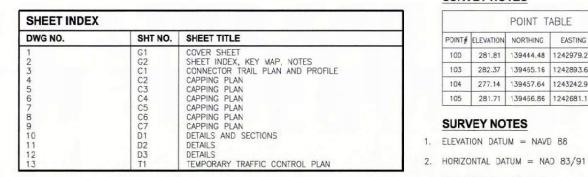
Department of Natural Resources and Parks 7911 Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

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| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 1 OF 13 SHEETS |
| COVER SHEET | G1 |

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- APPROXIMATE

- GRAVEL ROAD

- ACCESS ROAD

- TRAIL

PROPERTY BOUNDARY

SURVEY NOTES

SURVEY NOTES

NORTH ZONE

WASHINGTON STATE PLANE,

SURVEY LEGEND

MAGS = MAGNAIL

| FI EVATION | NORTHING | FASTING | DESCRIPTION |
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| | 750000000000000000000000000000000000000 | | MAGS |
| | 281.81 282.37 277.14 | 281.81 139444.48 282.37 139465.16 | 281.81 139444.48 1242979.28 282.37 139455.16 1242893.62 277.14 139457.64 1243242.94 |

SOURCE:

ELEVATION CONTOURS FROM KING CCUNTY GIS, EXCEPT FOR SHEET C1.

2. PROPERTY BOUNDARIES FROM KING COUNTY GIS, EXCEPT FOR SHEET C1.

DETAIL AND SECTION DESIGNATION

LETTER NUMBER INDICATES DRAWING/SHEET INDICATES DRAWING/SHEET WHERE DETAIL IS SHOWN WHERE SECTION IS SHOWN

> DETAIL OR SECTION APPEARS ON THE SAME DRAWING/SHEET INDICATES SECTION LETTER -SUBTITLE SECTION NO SCALE

INDICATES DETAIL NUMBER SUBTITLE DETAIL NO SCALE INDICATES DRAWING/SHEET WHERE DETAIL IS REFERRED TO

INDICATES DRAWING/SHEET WHERE SECTION IS REFERRED

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| King County | |
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| Maury Island Open Space Remediation | |
| 7911 SW 260th Street | |
| Maury Island, WA 98070 | |
| | |

SHEETS

SHEET

2

OF

13

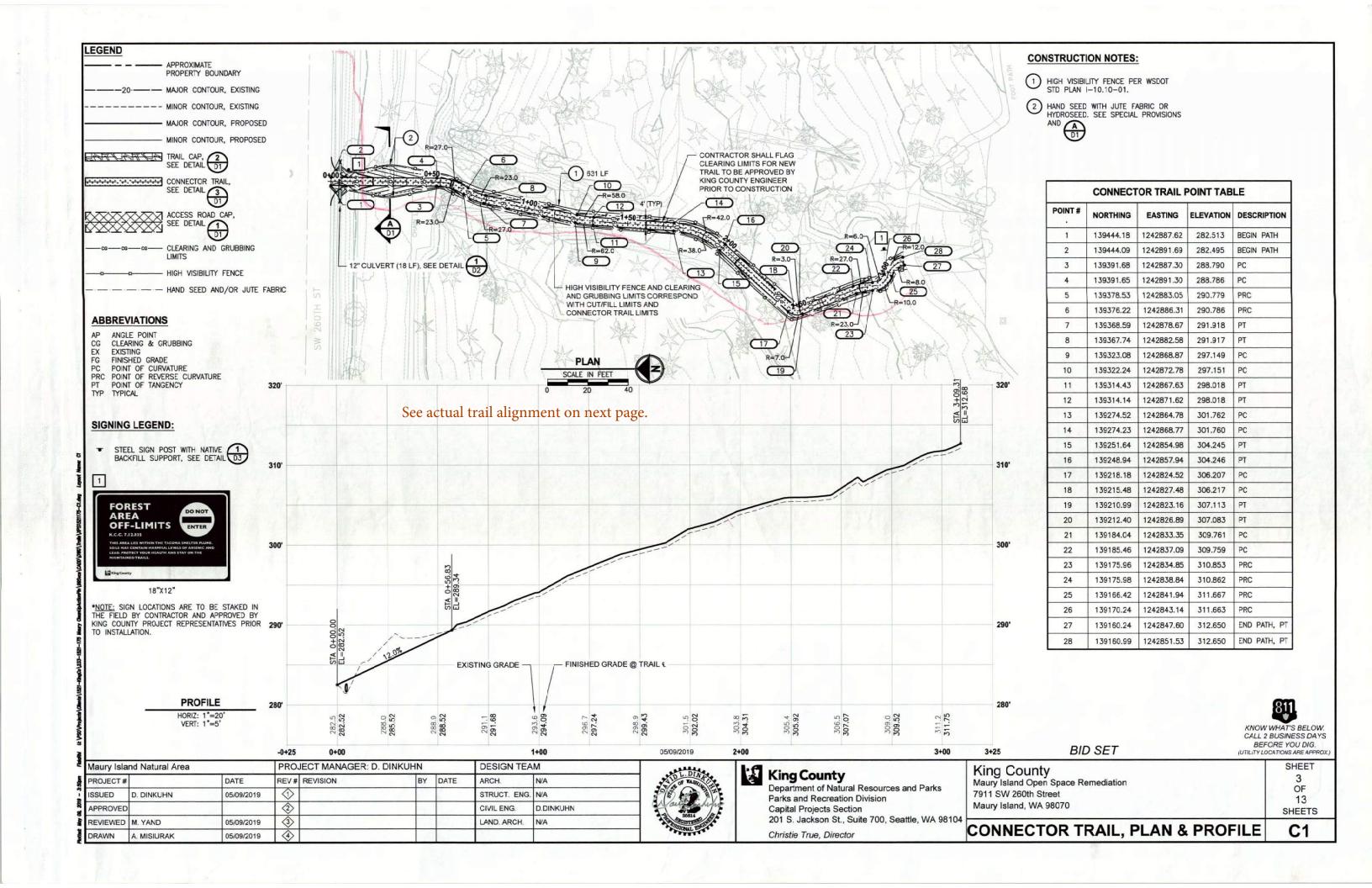
SHEET INDEX, KEY MAP, NOTES

BID SET

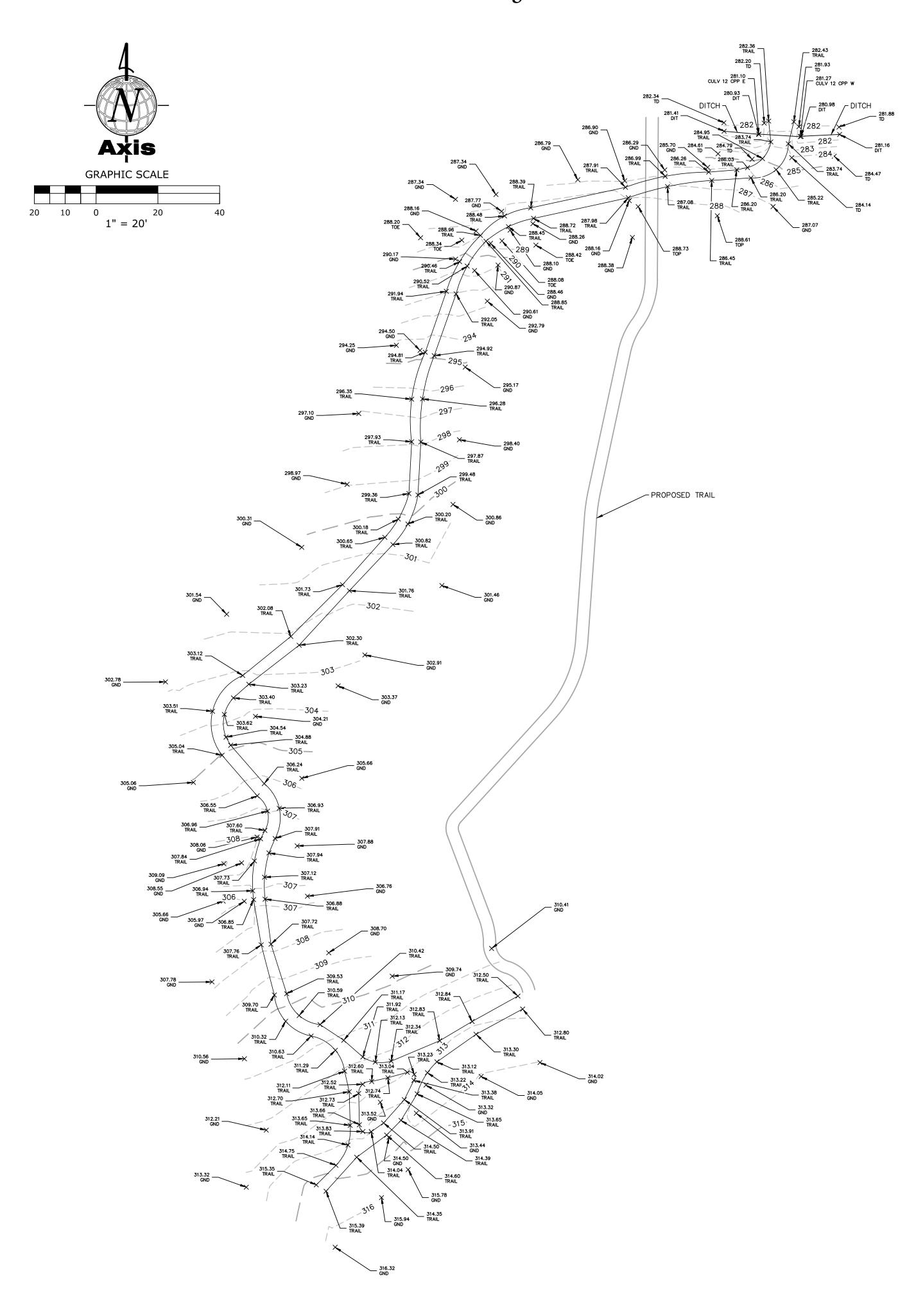
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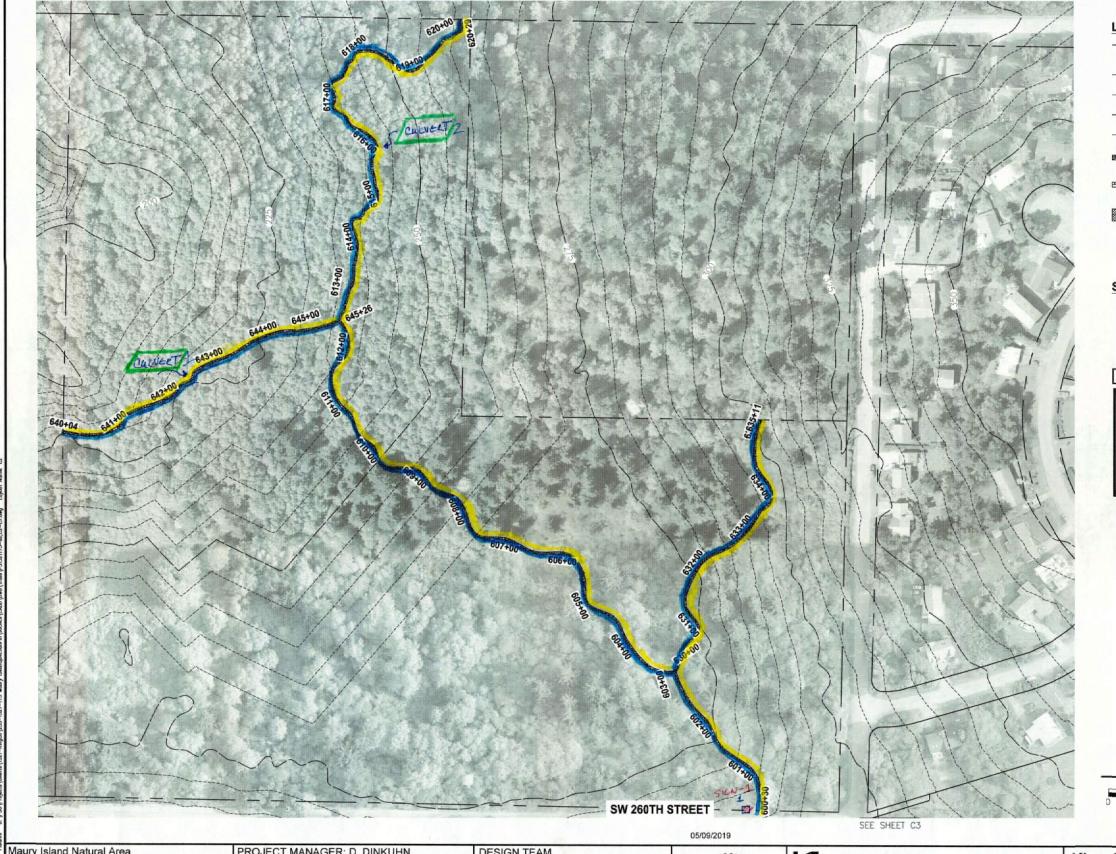
| Maury Isla | nd Natural Area | | PRO. | PROJECT MANAGER: D. DINKUHN | | DESIGN TEAM | | | |
|--------------------|-----------------|------------|------|-----------------------------|----|-------------|--------------|-----------|--|
| PROJECT # | | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A | |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | 3.7 | | 100 | STRUCT. ENG. | N/A | |
| ISSUED APPROVED | | | 2 | | | | CIVIL ENG. | D.DINKUHN | |
| REVIEWED | | 05/09/2019 | 3 | May 15 House | | | LAND. ARCH. | N/A | |
| DRAWN | A. MISIURAK | 05/09/2019 | 4 | | | | | | |

LEGEND



Connector Trail - Final Actual Alignment







SIGNING LEGEND:

* STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3



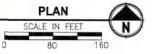


MINERAL SOIL

CULVERT

12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX.)

BID SET

| Maury Island Natural Area | | PRO | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|---------------------------|-------------|------------|-----------------------------|----------|-----------|-------------|--------------|-----------|--|
| PROJECT# | | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A | |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | | Pr. Calle | | STRUCT. ENG. | N/A | |
| APPROVED | | | 2 | | | | CIVIL ENG. | D.DINKUHN | |
| REVIEWED | | 05/09/2019 | 3 | | | | LAND. ARCH. | N/A | |
| DRAWN | A. MISIURAK | 05/09/2019 | 4> | | | | | | |



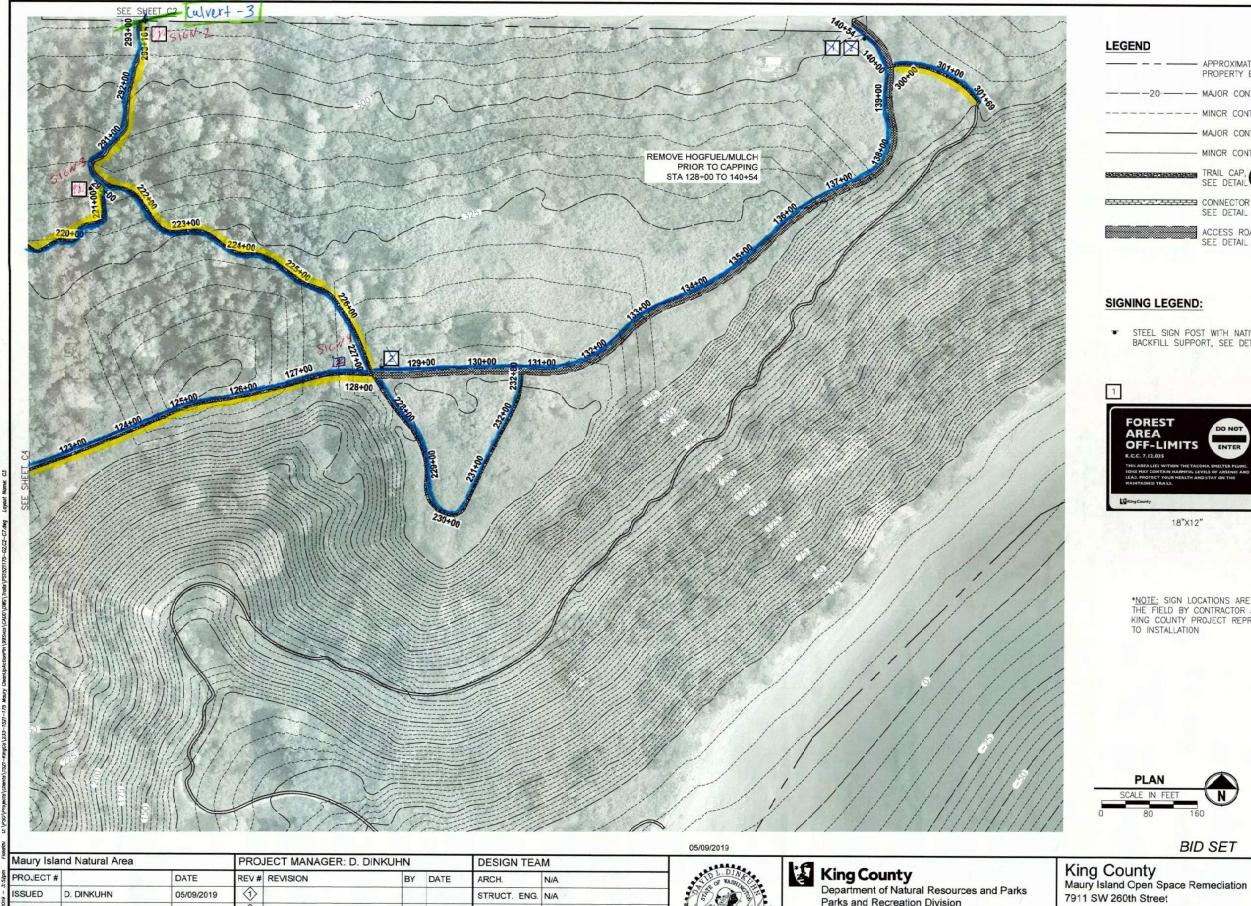
King County

Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County |
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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

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| SHEETS |
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| 4 |
| SHEET |

CAPPING PLAN



STRUCT. ENG. N/A

D.DINKUHN

CIVIL ENG.

LAND. ARCH.

SSUED

APPROVED

REVIEWED M. YAND

D. DINKUHN

A. MISIURAK

05/09/2019

05/09/2019

05/09/2019

3



APPROXIMATE PROPERTY BOUNDARY

- MAJOR CONTOUR, EXISTING ---- MINCR CONTOUR, EXISTING

MAJOR CONTOUR, PROPOSED MINOR CONTOUR, PROPOSED

TRAIL CAP, 2
SEE DETAIL D1

CONNECTOR TRAIL, 3
SEE DETAIL

ACCESS ROAD CAP. 1



CSTC

MINERAL



| SIGNING | LEGEND: |
|---------|---------|
|---------|---------|

* STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3





18"X12"



12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX

BID SET

OF 13 SHEETS



Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

CAPPING PLAN

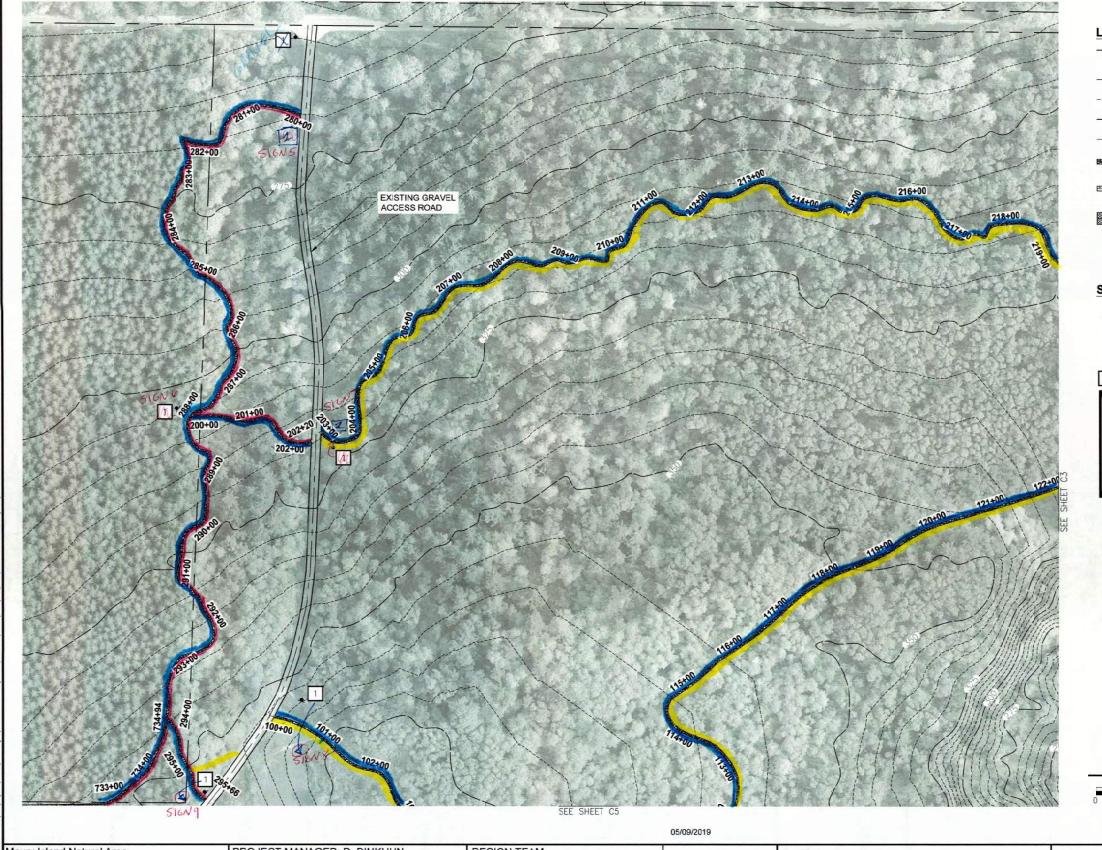
7911 SW 260th Street

Maury Island, WA 98070

C3

SHEET

5



LEGEND

APPROXIMATE PROPERTY BOUNDARY

--- MAJOR CONTOUR, EXISTING ---- MINOR CONTOUR, EXISTING

MINOR CONTOUR, PROPOSED

MAJOR CONTOUR, PROPOSED

TRAIL CAP, 2
SEE DETAIL D1

CONNECTOR TRAIL, 3
SEE DETAIL

ACCESS ROAD CAP, 1 SEE DETAIL D1

CSTC





SIGNING LEGEND:

* STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3

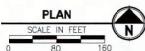


18"X12"

NOTICE This segment is naintained as a King County Parks Road and not as a backcountry trail.

12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS

BID SET

BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX.

| Maury Island Natural Area | | PRO. | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | |
|---------------------------|-------------|------------|-----------------------------|----------|----|-------------|--------------|-----------|
| PROJECT# | The second | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | | 4 | | STRUCT. ENG. | N/A |
| APPROVED | | 3 - 1 - 2 | 2 | | | | CIVIL ENG. | D.DINKUHN |
| REVIEWED | M. YAND | 05/09/2019 | 3 | 11-11 | | | LAND. ARCH. | N/A |
| DRAWN | A. MISIURAK | 05/09/2019 | 4 | | | L. Paul | | |



King County

Department of Natural Resources and Parks

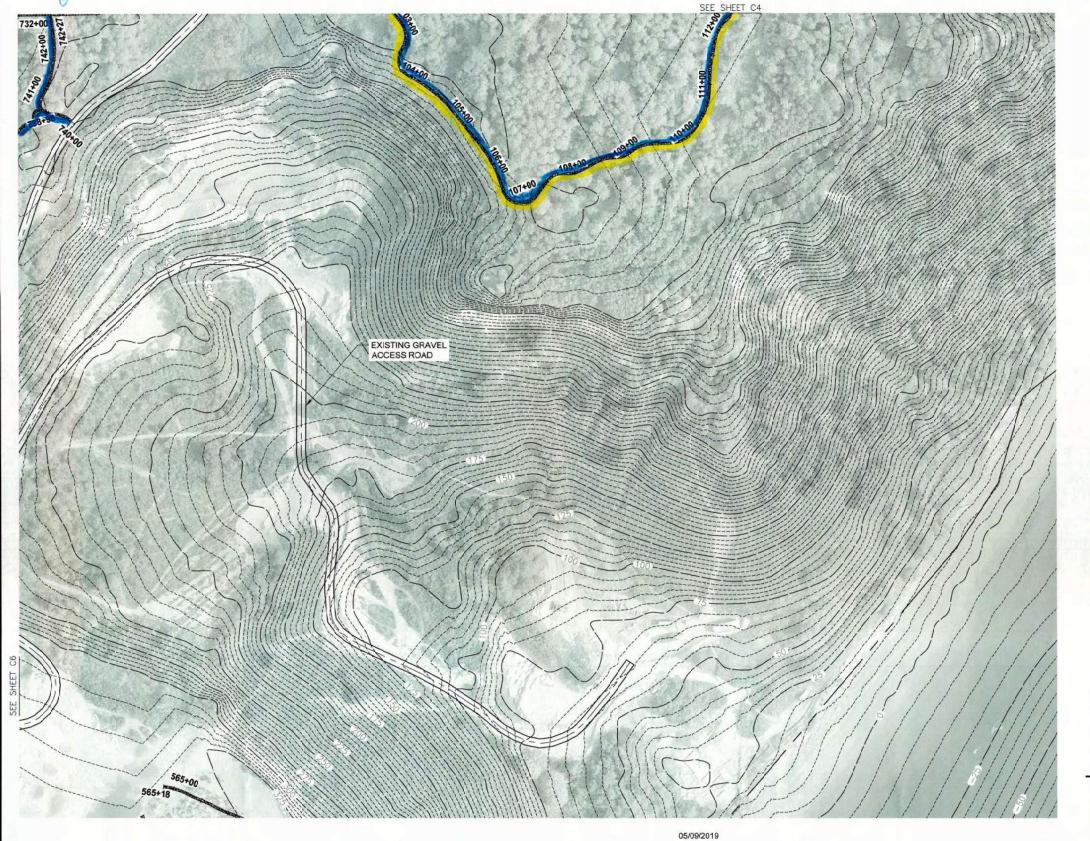
Department Decreation Division Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County |
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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |
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CAPPING PLAN

64



LEGEND APPROXIMATE PROPERTY BOUNDARY -- MAJOR CONTOUR, EXISTING ----- MINOR CONTOUR, EXISTING - MAJOR CONTOUR, PROPOSED MINOR CONTOUR, PROPOSED TRAIL CAP, 2 SEE DETAIL D1 CONNECTOR TRAIL 3
SEE DETAIL D1 SEE DETAIL ACCESS ROAD CAP.
SEE DETAIL





SOIL

SIGNING LEGEND:

▼ STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3







12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG.

King County Maury Island Open Space Remediation

SHEET 7 OF 13 SHEETS

CAPPING PLAN

7911 SW 260th Street Maury Island, WA 98070 201 S. Jackson St., Suite 700, Seattle, WA 98104

C5

| Maury Island Natural Area | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|---------------------------|------------|-----------------------------|---------------|----|-------------|--------------|-----------|--|
| PROJECT# | | DATE | REV# REVISION | BY | DATE | ARCH. | N/A | |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | | | STRUCT. ENG. | N/A | |
| APPROVED | | | ② | | | CIVIL ENG. | D.DINKUHN | |
| REVIEWED | M. YAND | 05/09/2019 | 3 | | | LAND. ARCH. | N/A | |

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05/09/2019

DRAWN A. MISIURAK



King County

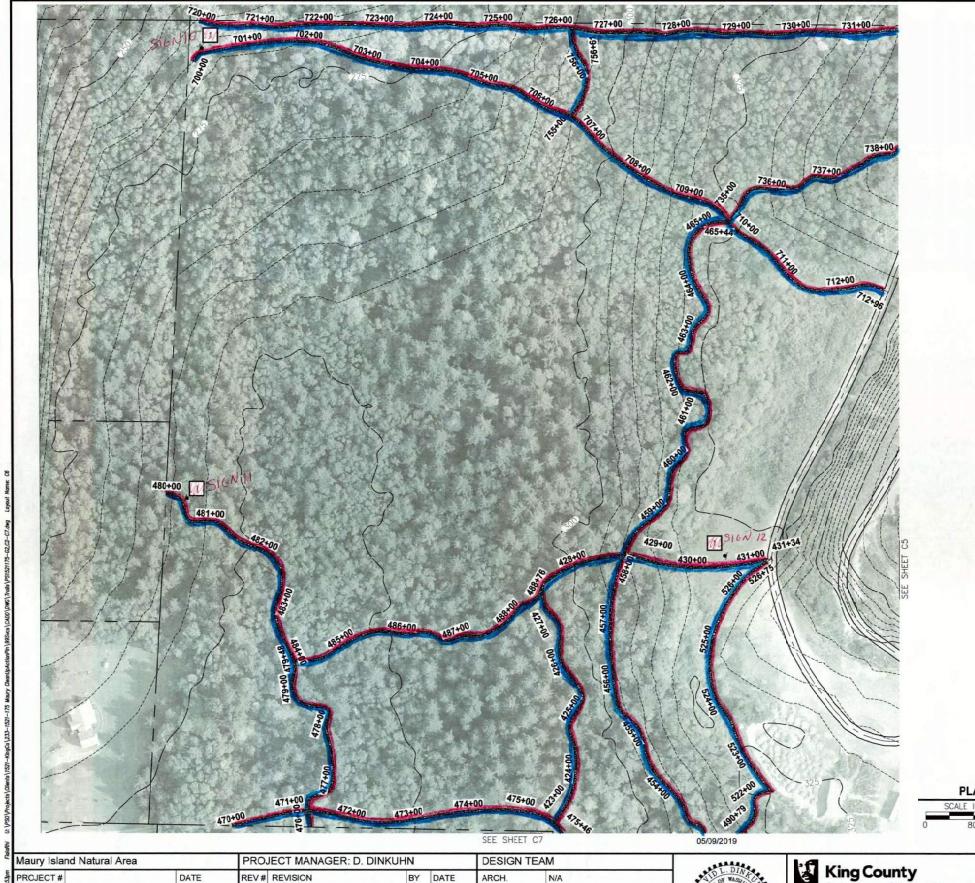
Department of Natural Resources and Parks

Department of Natural Resources and Parks

Parks and Recreation Division

Capital Projects Section

Christie True, Director



STRUCT. ENG. N/A

LAND. ARCH. N/A

D.DINKUHN

CIVIL ENG.

SSUED D. DINKUHN

REVIEWED M. YAND

DRAWN A. MISIURAK

APPROVED

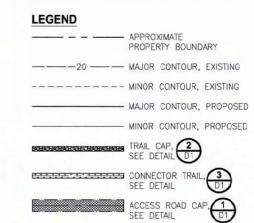
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05/09/2019

1

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SIGNING LEGEND:

▼ STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3



18"X12"



12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX

BID SET

SHEET 8 OF 13

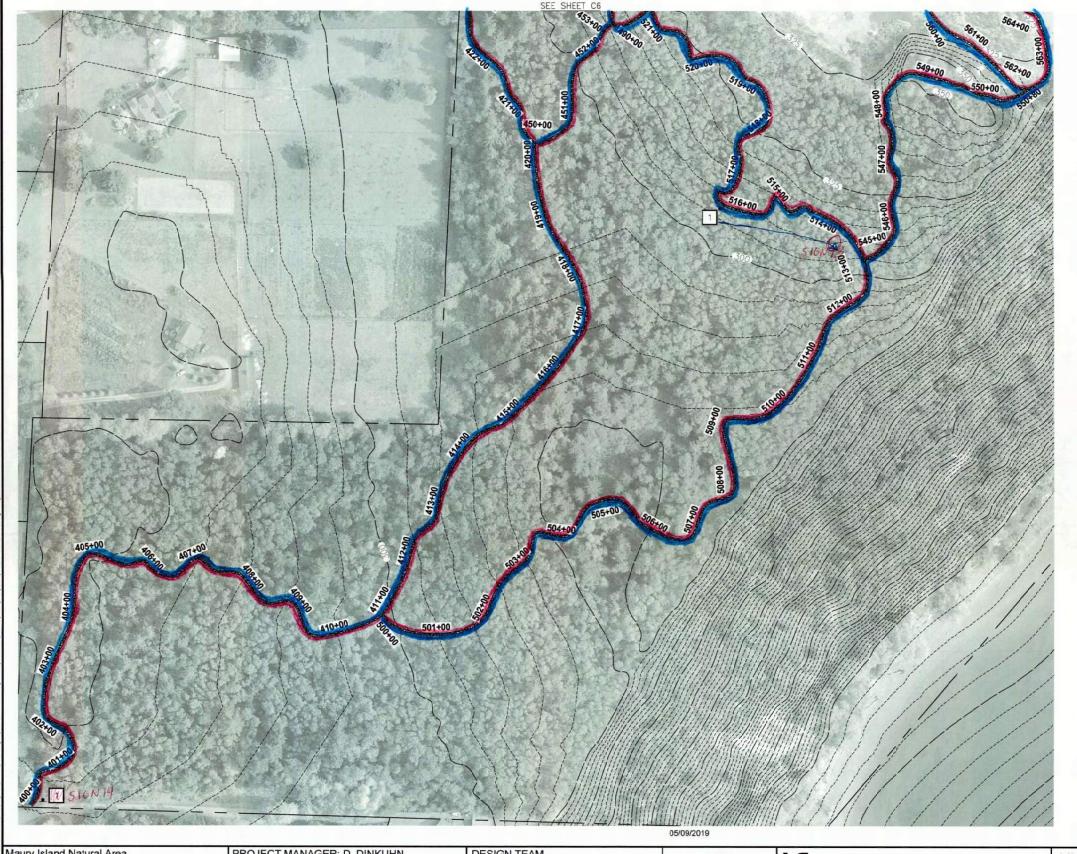
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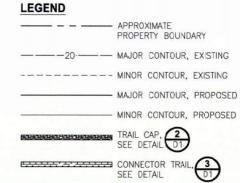
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| Maury Island, WA 98070 | |

SHEETS C6

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King County
Department of Natural Resources and Parks
Decreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director





ACCESS ROAD CAP, D1







SIGNING LEGEND:

▼ STEEL SIGN POST WITH NATIVE BACKFILL SUPPORT, SEE DETAIL D3







12"X18"

*NOTE: SIGN LOCATIONS ARE TO BE STAKED IN THE FIELD BY CONTRACTOR AND APPROVED BY KING COUNTY PROJECT REPRESENTATIVES PRIOR TO INSTALLATION



KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS

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| CONTROL OF THE CONTRO | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|--|-------------|-----------------------------|---------------|----|-------------|--------------|-----------|--|
| PROJECT# | | DATE | REV# REVISION | BY | DATE | ARCH. | N/A | |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | | | STRUCT. ENG. | N/A | |
| ISSUED APPROVED | | | 2 | | | CIVIL ENG. | D.DINKUHN | |
| REVIEWED | | 05/09/2019 | 3 | | | LAND, ARCH. | N/A | |
| DRAWN | A. MISIURAK | 05/09/2019 | 4 | | | | | |



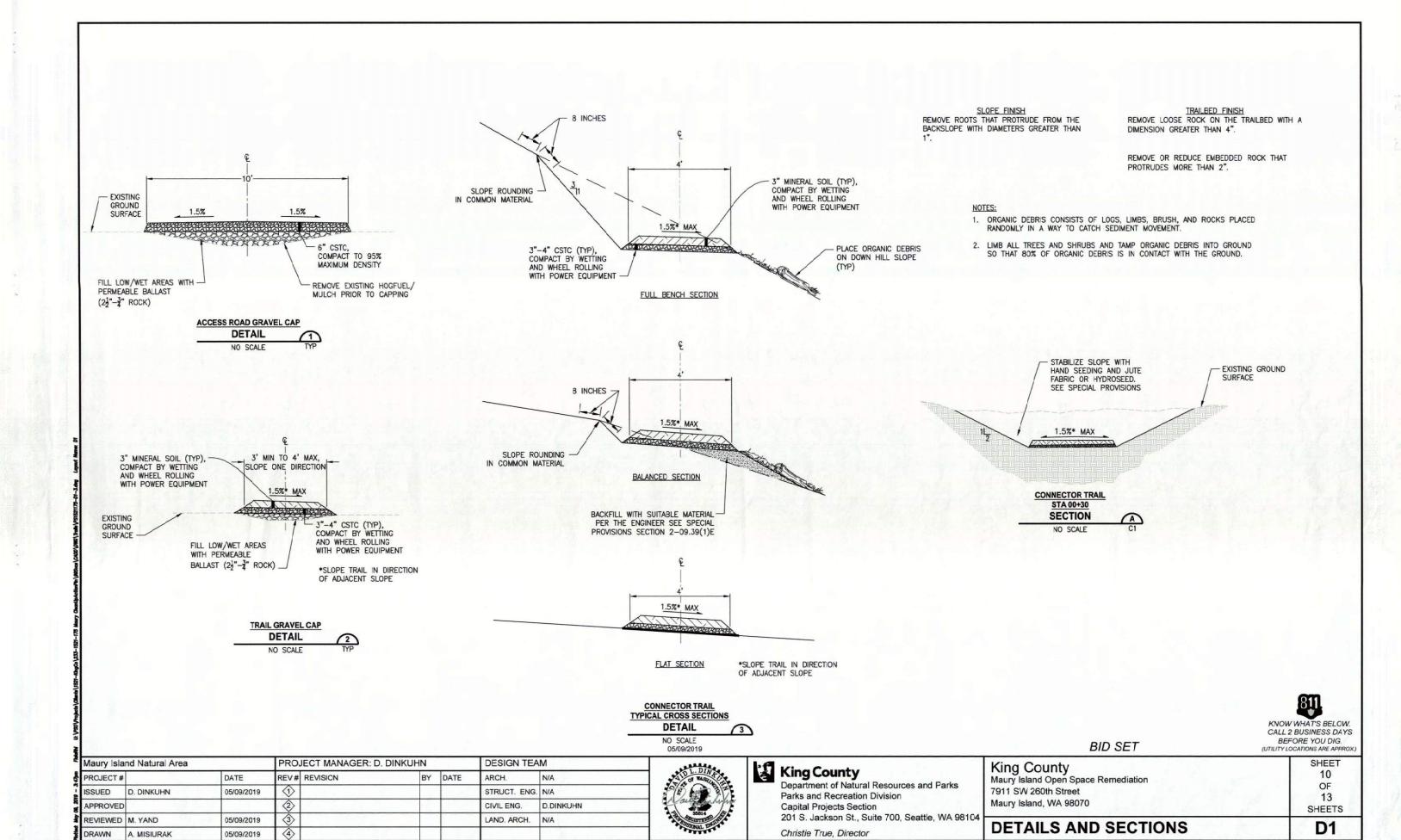
King County

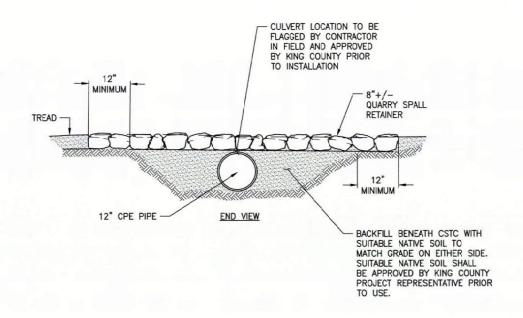
Department of Natural Resources and Parks

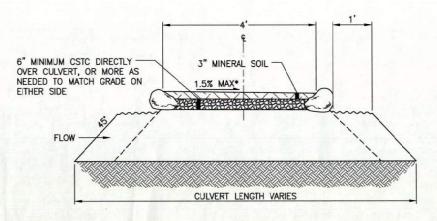
Department of Pacception Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

| CAPPING PLAN | C7 |
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| Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | 9 OF 13 SHEETS |
| King County | SHEET |







ELEVATION VIEW

PROJECT MANAGER: D. DINKUHN

REV# REVISION

2

3

4

NOTES:

1. COMPACT BACKFILL IN 6 INCH LIFTS UNTIL NO VISUAL DISPLACEMENT.

2. NO ROCK LARGER THAN 1 1 INCHES WITHIN 12 INCHES OF

*SLOPE TRAIL IN DIRECTION OF ADJACENT SLOPE

DATE

05/09/2019

05/09/2019

05/09/2019

12" TRAIL CULVERT

DATE

DETAIL NO SCALE

ARCH.

- EXCAVATE SLIGHT DEPRESSION IN SURFACE TO DIRECT STORMWATER TOWARDS CHECK DAM AS DIRECTED BY KING COUNTY PROJECT REPRESENTATIVE EXTEND CHECK DAM TO FULLY VEGETATED GRADE (PERCENT) 5 8 10 15 DOWN SLOPE AREA -CHECK DAM SPACING 50 40 30 20 (D)(FEET) NOTE: CONTRACTOR SHALL FLAG CHECK DAM LOCATIONS
IN THE FIELD FOR KING
COUNTY TO APPROVE PRIOR TO INSTALLATION. LOCATE CHECK -DAMS PER ENGINEER RUNNING SLOPE TRAIL TREAD 6" THICK PERMEABLE BALLAST (2½"-¾" ROCK).

TYPICAL TRAIL CHECK DAM

DETAIL NO SCALE

05/09/2019

DESIGN TEAM N/A STRUCT. ENG. N/A CIVIL ENG. D.DINKUHN LAND. ARCH. N/A

King County

King Co Maury Islan Department of Natural Resources and Parks 7911 SW 26 Parks and Recreation Division Maury Island, WA 98070 Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| BID SET | BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX |
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| County nd Open Space Remediation 260th Street | SHEET 11 OF |

DETAILS

Maury Island Natural Area PROJECT # ISSUED

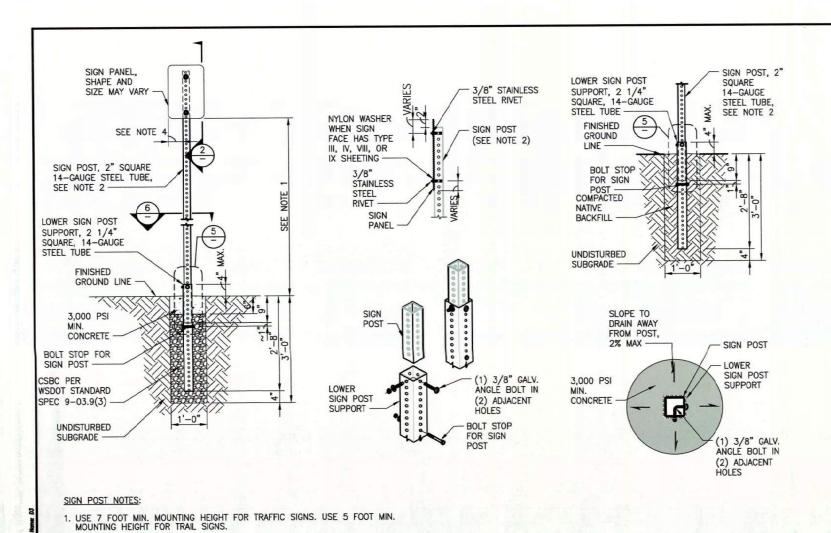
APPROVED REVIEWED M. YAND A. MISIURAK DRAWN

D. DINKUHN

D2

SHEETS

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS



1 **FOREST** DO NOT AREA **OFF-LIMITS** ENTER K.C.C. 7.12.035 THIS AREA LIES WITHIN THE TACOMA SMELTER PLUME. SOILS MAY CONTAIN HARMFUL LEVELS OF ARSENIC AND LEAD. PROTECT YOUR HEALTH AND STAY ON THE MAINTAINED TRAILS. King County 18"X12"

NOTICE This segment is maintained as a King **County Parks Maintenance Access** Road and not as a backcountry trail. King County 12"X18"

2

SIGNS DETAIL NO SCALE

SIGN NOTES:

- SIGN MATERIAL SHALL BE 18" X 12" OR 12"X18" 4MM ALUMINUM COMPOSITE MATERIAL (ACM) WITH HIGH INTENSITY PRISMATIC SIGN FINISH AND ANTI-GRAFFITI COATING.
- SIGNS SHALL BE COATED IN AVERY OL-100 ANTI-GRAFFITI PM 01000PMA1 AND 3M PROTECTIVE OVERLAY FILM 1150 TRANSPARENT OR APPROVED EQUALS.

- SIGN COLOR BACKGROUND SHALL BE PANTONE MATCHING SYSTEM (PMS) COLOR KING BLUE 049. SIGN TEXT SHALL BE PMS COLOR BEIGE #A8220-0.

STEEL SIGN POST

DETAIL

NO SCALE

05/09/2019

King County

Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

BID SET

CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX SHEET 12 OF 13

KNOW WHAT'S BELOW.

DETAILS

D3

SHEETS

| Maury Isla | Maury Island Natural Area | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | |
|--------------------------------|---------------------------|------------|-----------------------------|-----|----|-------------|--------------|-----------|
| PROJECT# | | DATE | REV# REVIS | ION | BY | DATE | ARCH. | N/A |
| PROJECT# ISSUED APPROVED | D. DINKUHN | 05/09/2019 | 1 | | | | STRUCT. ENG. | N/A |
| APPROVED | | | 2 | | | | CIVIL ENG. | D.DINKUHN |
| REVIEWED | | 05/09/2019 | 3 | | | | LAND. ARCH. | N/A |
| DRAWN | A. MISIURAK | 05/09/2019 | 4 | | | | -1-1 | |

2. PERFORATED SQUARE STEEL POST SHALL MEET REQUIREMENTS OF STANDARD

USE ONLY BASE CONNECTION HARDWARE THAT MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS 9-06 AND 9-28.

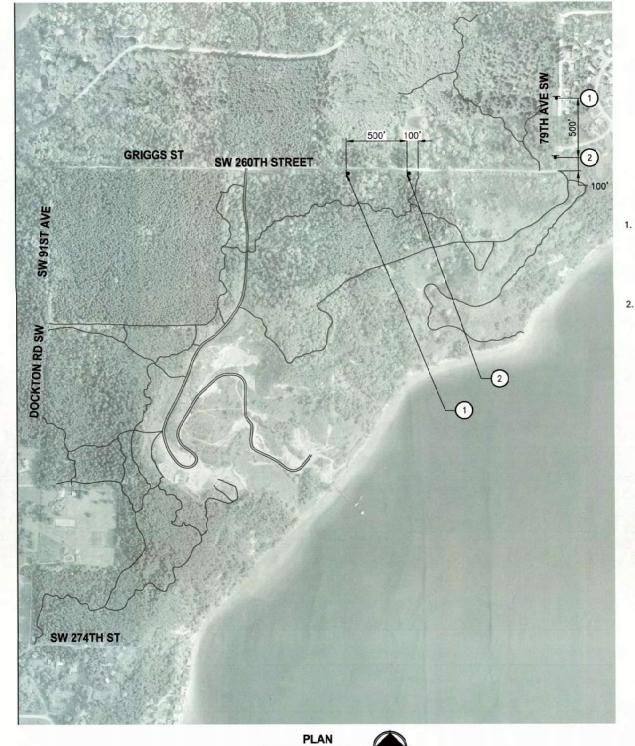
4. USE OF CONCRETE FOOTING SIGN SUPPORT (DETAIL 1) OR NATIVE BACKFILL SIGN SUPPORT (DETAIL 4) PER KC PARKS ENGINEER'S DECISION.

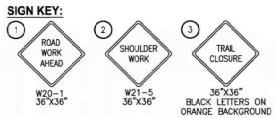
LATERAL CLEARANCE DISTANCES FOR TRAIL AND TRAFFIC SIGNS SHALL BE PER KC PARKS STANDARDS, MUTCD OR WSDOT REQUIREMENTS, LOCAL JURISDICTION, OR AS APPROVED BY THE ENGINEER.

7. DIMENSIONS FOR THE PARTS USED TO ASSEMBLE THE BASE CONNECTIONS ARE INTENTIONALLY NOT SHOWN. BASE CONNECTIONS ARE PATENTED, MANUFACTURED PRODUCTS THAT ARE IN COMPLIANCE WITH NCHRP 350 CRASH TEST CRITERIA. BASE CONNECTION DETAILS ARE SHOWN ONLY TO ILLUSTRATE ASSEMBLY OF PARTS.

6. REFLECTOR ADDED TO SIGN POST PER KC PARKS ENGINEER'S DETERMINATION.

King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070



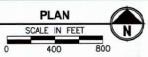


SYMBOL LEGEND:

TEMPORARY TRAFFIC CONTROL SIGN

TRAFFIC CONTROL NOTES:

- TRAFFIC CONTROL SHOWN IS FOR SHOULDER WORK ONLY AND DOES NOT INCLUDE LANE CLOSURE. CONTRACTOR—PROPOSED LANE CLOSURES SHALL BE APPROVED BY THE KING COUNTY PROJECT REPRESENTATIVE AND SHALL BE IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN, MEETING THE MINIMUM REQUIREMENTS OF WID TIME THAT TO THE LANE TWO—WAY TRAFFIC CONTROL WITH ELACCEPS. TRAFFIC CONTROL WITH FLAGGERS.
- TRAIL CLOSURE SIGNS SHALL BE PLACED AT BEGINNING AND END OF CLOSED TRAIL SEGMENTS IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.



05/09/2019

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX. BID SET

| Maury Island Natural Area | | PRO. | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|---------------------------|-------------|------------|-----------------------------|----------|----|-------------|--------------|-----------|--|
| PROJECT# | | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A | |
| ISSUED | D. DINKUHN | 05/09/2019 | 1 | | | | STRUCT, ENG. | N/A | |
| APPROVED | | | 2 | | | | CIVIL ENG. | D.DINKUHN | |
| REVIEWED | M. YAND | 05/09/2019 | 3 | | | | LAND, ARCH. | N/A | |
| DRAWN | A. MISIURAK | 05/09/2019 | 4 | | | | | | |



King County

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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

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| 260th Street | 13 |
| nd, WA 98070 | SHEETS |
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TEMPORARY TRAFFIC CONTROL PLAN

Appendix B

Draft Final Construction Plans

Phase 1B – Skeet Range Cleanup



KING COUNTY MAURY ISLAND OPEN SPACE REMEDIATION - PHASE 01 - PARKING AREA

OWNER: KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

PARKS AND RECREATION DIVISION - CAPITAL PROJECTS SECTION 201 SOUTH JACKSON STREET, SUITE 700, SEATTLE, WA 98104-3855 CONTACT: LINDSEY MILLER

PH: 206-477-3549 EMAIL: LINDSEY.MILLER@KINGCOUNTY.GOV

SURVEYOR: COMPANY NAME

KING COUNTY ROAD SERVICES DIVISION - SURVEY UNIT

ARCHITECT/ENGINEER/LANDSCAPE ARCHITECT: PARAMETRIX

PARAMETRIX

CONTACT: DAVID DINKUHN

PH: 360-850-5319 EMAIL: DDINKUHN@PARAMETRIX.COM

PROJECT DATA

PROJECT ADDRESS:

7911 SW 260th Street, Maury Island, WA 98070

TAX PARCEL NUMBER:

282203-9023

LEGAL DESCRIPTION

NW QTR NW QTR STR 28-22-03; EXC NE QTR THEREOF; & EXC PORTION THEREOF LYING WITHIN SW 260TH ST & 79TH AVE SW; TGW GOVT LOT 4 IN NW QTR STR 28-22-03. EXC PORTION THEREOF LYING WITHIN SW 260TH ST: TGW SE QTR NE QTR STR 29-22-03; EXC PORTION THEREOF LYING WITHIN SW 260TH ST; TGW GOVT LOT 4 IN SE QTR STR 29-22-03; TGW NW QTR SE QTR STR 29-22-03; TGW GOVT LOT 4 IN SE QTR STR 29-22-03; TGW GOVT LOT 5 IN SE QTR STR 29-22-03; EXC W 672 2/7 FT OF N 700 FT THEREOF; TGW 2ND CLASS TIDELANDS ADJOINING GOVT LOTS 3 & 4 OF SECTION 28 AND GOVT LOTS 4 & 5 OF SECTION 29 ALL IN TWP 22 RANGE 3 EXTENDING TO LINE OF EXTREME LOW TIDE.

PROJECT DESCRIPTION

THIS PROJECT PROVIDES FOR THE IMPROVEMENT OF THE MAURY ISLAND OPEN SPACE PROPERTY LOCATED AT APPROXIMATELY 7911 SW 260TH STREET IN VASHON ISLAND IN KING COUNTY. THE PROJECT INCLUDES CLEARING AND GRUBBING, SITE PREPARATION, EROSION CONTROL, TRAFFIC SAFETY CONTROL AND RELATED WORK, PLASTIC GRID SYSTEM, COMMERCIAL HMA, SIGNS, RAIL FENCING, WEED FABRIC, PLANTING, AND OTHER WORK ALL IN ACCORDANCE WITH THE ATTACHED PLANS. THESE SPECIAL PROVISIONS, THE STANDARD SPECIFICATIONS, THE KCRDCS, AND THE APWA/WSDOT STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

ZONING

EXISTING: PARK. PUBLIC EXISTING USE: PARK, PUBLIC

PROPOSED USE: SAME AS EXISTING

EXISTING SITE STRUCTURES

NEW / ALTERED STRUCTURES

ALTERED SITE AREAS

NEW LOT COVERAGE: N/A NEW IMPERVIOUS SURFACE AREA: 29.395 SF ALTERED IMPERVIOUS SURFACE AREA: NA OFF STREET PARKING: N/A RECYCLABLE STORAGE: N/A

APPLICABLE CODES AND DESIGN CRITERIA

APWA/WSDOT STANDARD SPECIFICATIONS AND STANDARD PLANS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (CURRENT EDITION)

BID SET

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG.

SHEET

| lien | Maury Island Open Space | | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | |
|------|-------------------------|------------|----------|-----------------------------|----------|----|-------------|--------------|-----------|
| | PROJECT# | C01456C20 | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |
| jec | ISSUED | D. DINKUHN | 04/22/20 | 1> | | | | STRUCT. ENG. | N/A |
| ą, | APPROVED | | | 2> | | | | CIVIL ENG. | D.DINKUHN |
| SS | REVIEWED | | | 3> | | | | LAND. ARCH. | N/A |
| 彡 | | R.FIALA | 03/27/20 | 4 | | | | | |



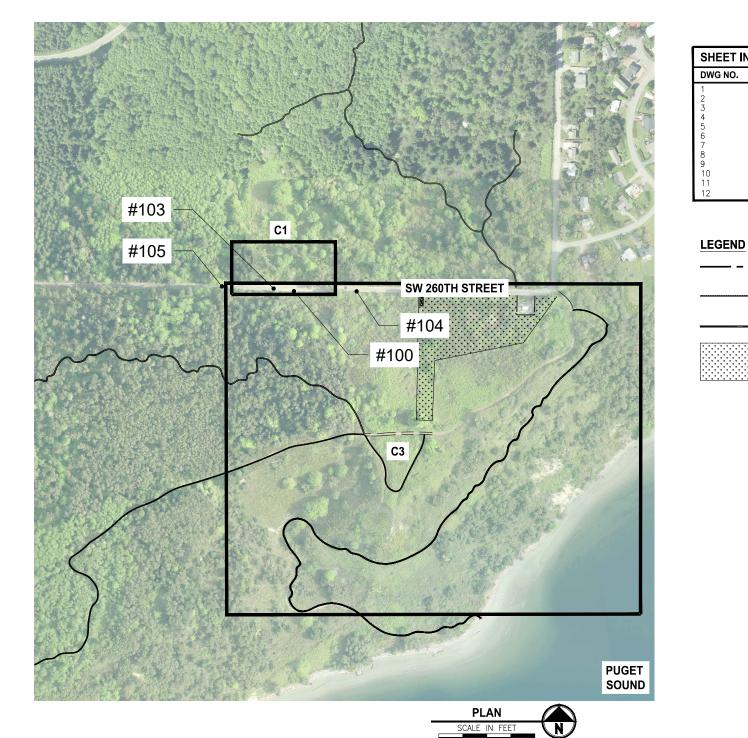
King County

Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104

Christie True, Director

| King County | |
|-------------------------------------|--|
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| 7911 SW 260th Street | |
| Maury Island, WA 98070 | |

OF 12 SHEETS **COVER SHEET G1**



| SHEET INDEX | | |
|---|--|---|
| DWG NO. | SHT NO. | SHEET TITLE |
| 1 2 3 4 5 6 7 8 9 10 | G1 G2 SP1 C1 C2 C3 LS1 D1 D2 D3 D4 | COVER SHEET SHEET INDEX, KEY MAP, NOTES SITE PREPARATION AND DEMOLITION PARKING LOT GRADING AND LAYOUT STRIPING AND SIGNING PLAN INVASIVE PLANT CLEARING PLAN PARKING LOT PLANTING PLAN DETAILS DETAILS DETAILS DETAILS DETAILS |
| 12 | T1 | TEMPORARY TRAFFIC CONTROL PLAN |

APPROXIMATE

ACCESS ROAD

WEED FABRIC AREA

- TRAIL

PROPERTY BOUNDARY

SURVEY NOTES

SURVEY LEGEND

MAGS = MAGNAIL

| POINT# | ELEVATION | NORTHING | EASTING | DESCRIPTIO |
|--------|-----------|-----------|------------|------------|
| 100 | 281.81 | 139444.48 | 1242979.28 | MAGS |
| 103 | 282.37 | 139465.16 | 1242893.62 | MAGS |
| 104 | 277.14 | 139457.64 | 1243242.94 | MAGS |
| 105 | 281.71 | 139466.86 | 1242681.16 | MAGS |

SURVEY NOTES

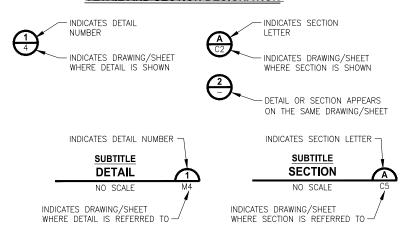
- 1. ELEVATION DATUM = NAVD 88
- 2. HORIZONTAL DATUM = NAD 83/91

WASHINGTON STATE PLANE, NORTH ZONE

SOURCE:

- 1. ELEVATION CONTOURS FROM KING COUNTY GIS, EXCEPT FOR SHEETS C1 AND C2.
- 2. PROPERTY BOUNDARIES FROM KING COUNTY GIS, EXCEPT FOR SHEETS C1 AND C2.

DETAIL AND SECTION DESIGNATION



KNOW WHAT'S BELOW.
CALL 2 BUSINESS DAYS
BEFORE YOU DIG.
(UTILITY LOCATIONS ARE APPROX

SHEET

2

OF

12

SHEETS

BID SET

King County
Department of Natural Resources and Parks
Parks and Recreation Division
Capital Projects Section
201 S. Jackson St., Suite 700, Seattle, WA 98104
Christie True, Director

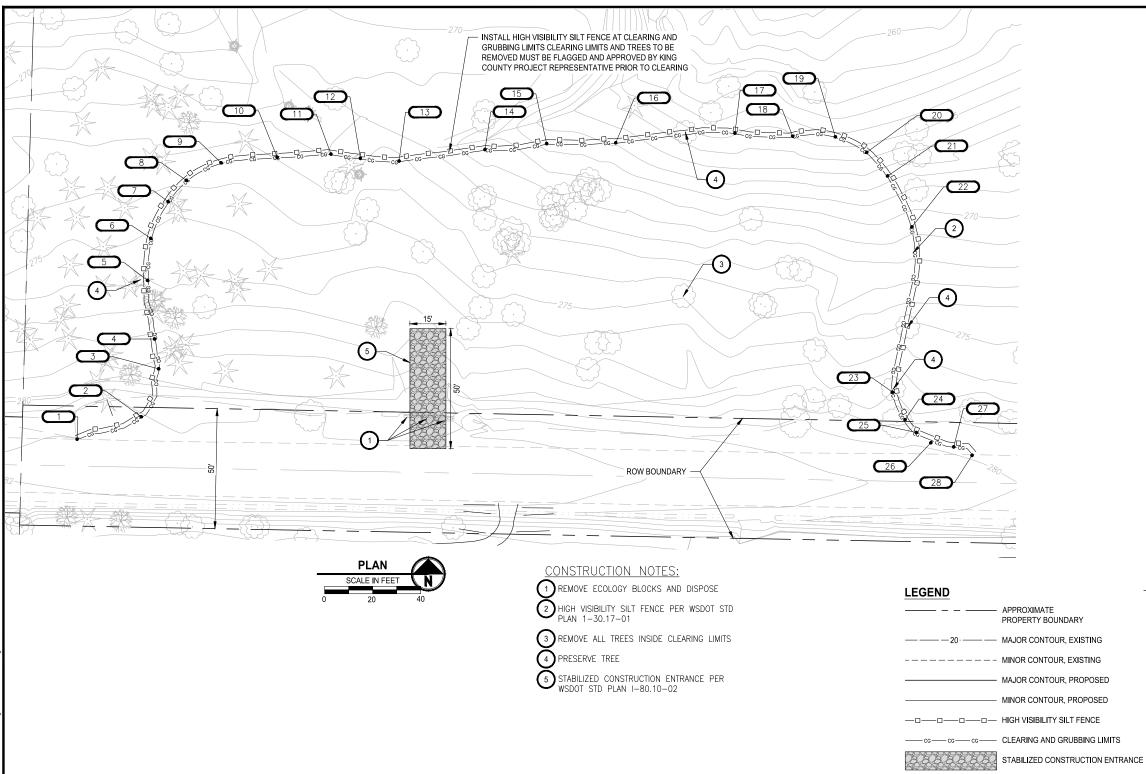
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| King County | |
|-------------------------------------|--|
| Maury Island Open Space Remediation | |
| 7911 SW 260th Street | |
| Maury Island, WA 98070 | |

| ET INDEX, KEY MAP, NOTES | G2 |
|--------------------------|----|
|--------------------------|----|

| Maury Island Open Space | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|-------------------------|------------|-----------------------------|------------|----------|-------------|------|--------------|-----------|
| PROJECT# | C01456C20 | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |
| ISSUED | D. DINKUHN | 04/22/20 | (1) | | | | STRUCT. ENG. | N/A |
| APPROVED | | | 2> | | | | CIVIL ENG. | D.DINKUHN |
| REVIEWED | | | 3> | | | | LAND. ARCH. | N/A |
| DRAWN | R.FIALA | 03/27/20 | 4 | | | | | |





| | | POINT | TABLE | |
|---------|-----------|------------|-----------|-----------------------|
| POINT # | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 1 | 139469.18 | 1242749.40 | 282.107 | CLEARING AND GRUBBING |
| 2 | 139478.62 | 1242776.39 | 282.174 | CLEARING AND GRUBBING |
| 3 | 139498.69 | 1242783.65 | 279.605 | CLEARING AND GRUBBING |
| 4 | 139511.18 | 1242782.01 | 278.257 | CLEARING AND GRUBBING |
| 5 | 139535.37 | 1242779.05 | 275.979 | CLEARING AND GRUBBING |
| 6 | 139552.92 | 1242780.41 | 275.363 | CLEARING AND GRUBBING |
| 7 | 139568.20 | 1242787.61 | 274.704 | CLEARING AND GRUBBING |
| 8 | 139577.08 | 1242795.20 | 273.972 | CLEARING AND GRUBBING |
| 9 | 139584.35 | 1242809.66 | 273.626 | CLEARING AND GRUBBING |
| 10 | 139586.65 | 1242832.86 | 273.082 | CLEARING AND GRUBBING |
| 11 | 139587.97 | 1242855.29 | 272.240 | CLEARING AND GRUBBING |
| 12 | 139586.19 | 1242867.48 | 273.070 | CLEARING AND GRUBBING |
| 13 | 139585.07 | 1242883.52 | 273.562 | CLEARING AND GRUBBING |
| 14 | 139589.89 | 1242919.32 | 270.674 | CLEARING AND GRUBBING |
| 15 | 139592.34 | 1242945.10 | 269.079 | CLEARING AND GRUBBING |
| 16 | 139592.69 | 1242973.74 | 268.363 | CLEARING AND GRUBBING |
| 17 | 139596.68 | 1243023.48 | 265.363 | CLEARING AND GRUBBING |
| 18 | 139595.42 | 1243047.64 | 265.639 | CLEARING AND GRUBBING |
| 19 | 139595.16 | 1243065.44 | 265.102 | CLEARING AND GRUBBING |
| 20 | 139588.76 | 1243078.14 | 265.860 | CLEARING AND GRUBBING |
| 21 | 139578.95 | 1243086.87 | 267.739 | CLEARING AND GRUBBING |
| 22 | 139557.60 | 1243097.02 | 270.672 | CLEARING AND GRUBBING |
| 23 | 139488.89 | 1243089.39 | 278.013 | CLEARING AND GRUBBING |
| 24 | 139477.30 | 1243094.19 | 278.386 | CLEARING AND GRUBBING |
| 25 | 139472.17 | 1243099.39 | 279.476 | CLEARING AND GRUBBING |
| 26 | 139468.23 | 1243105.38 | 279.807 | CLEARING AND GRUBBING |
| 27 | 139465.97 | 1243114.61 | 279.834 | CLEARING AND GRUBBING |
| 28 | 139462.97 | 1243122.48 | 279.897 | CLEARING AND GRUBBING |

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG.

BID SET

PROJECT MANAGER: D. DINKUHN **DESIGN TEAM** Maury Island Open Space PROJECT # | C01456C20 DATE REV # REVISION BY DATE ARCH. N/A ISSUED D. DINKUHN 04/22/20 STRUCT. ENG. N/A APPROVED CIVIL ENG. D. DINKUHN REVIEWED LAND. ARCH. N/A DRAWN R.FIALA 03/27/20



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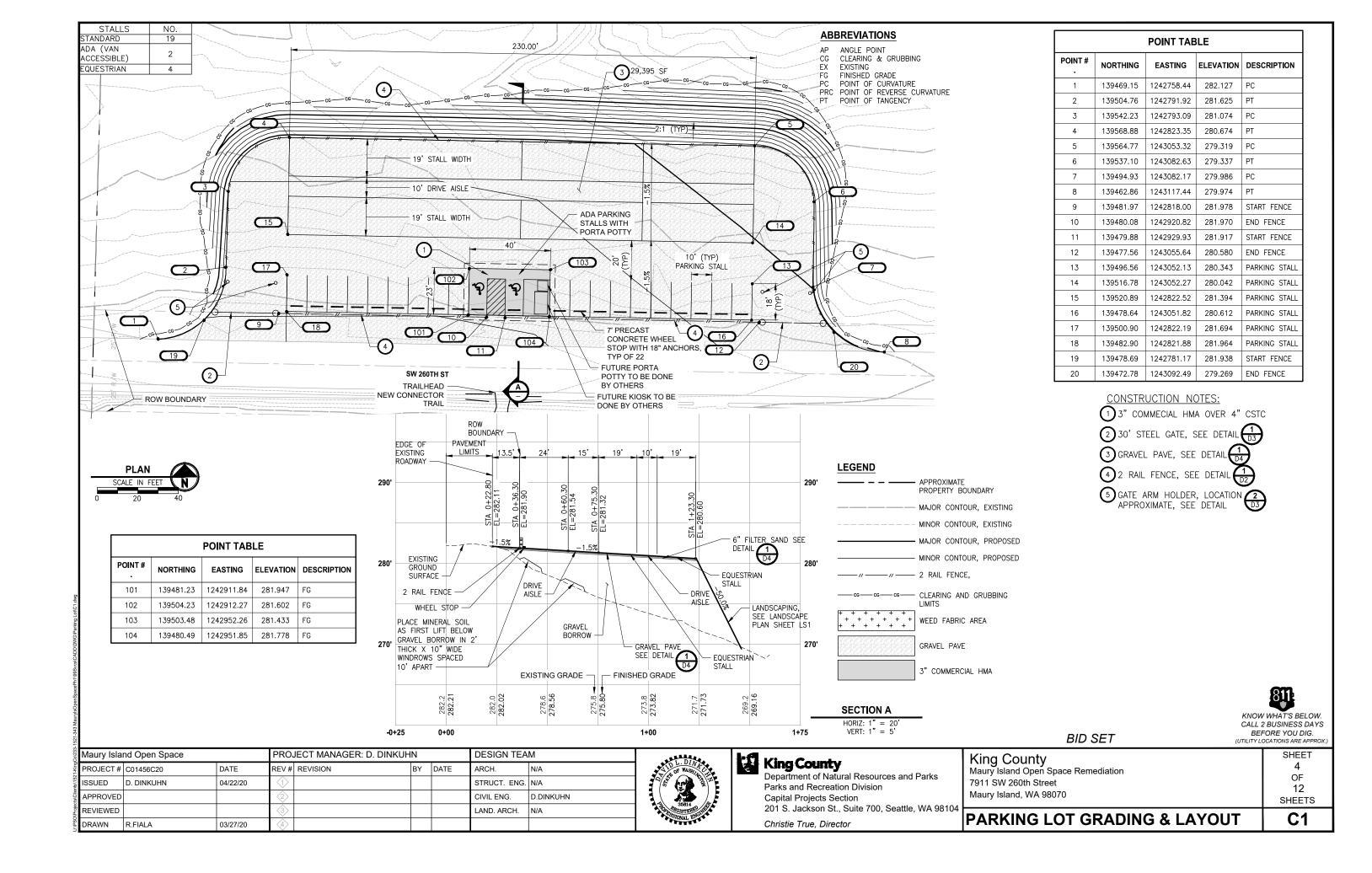
King CountyDepartment of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

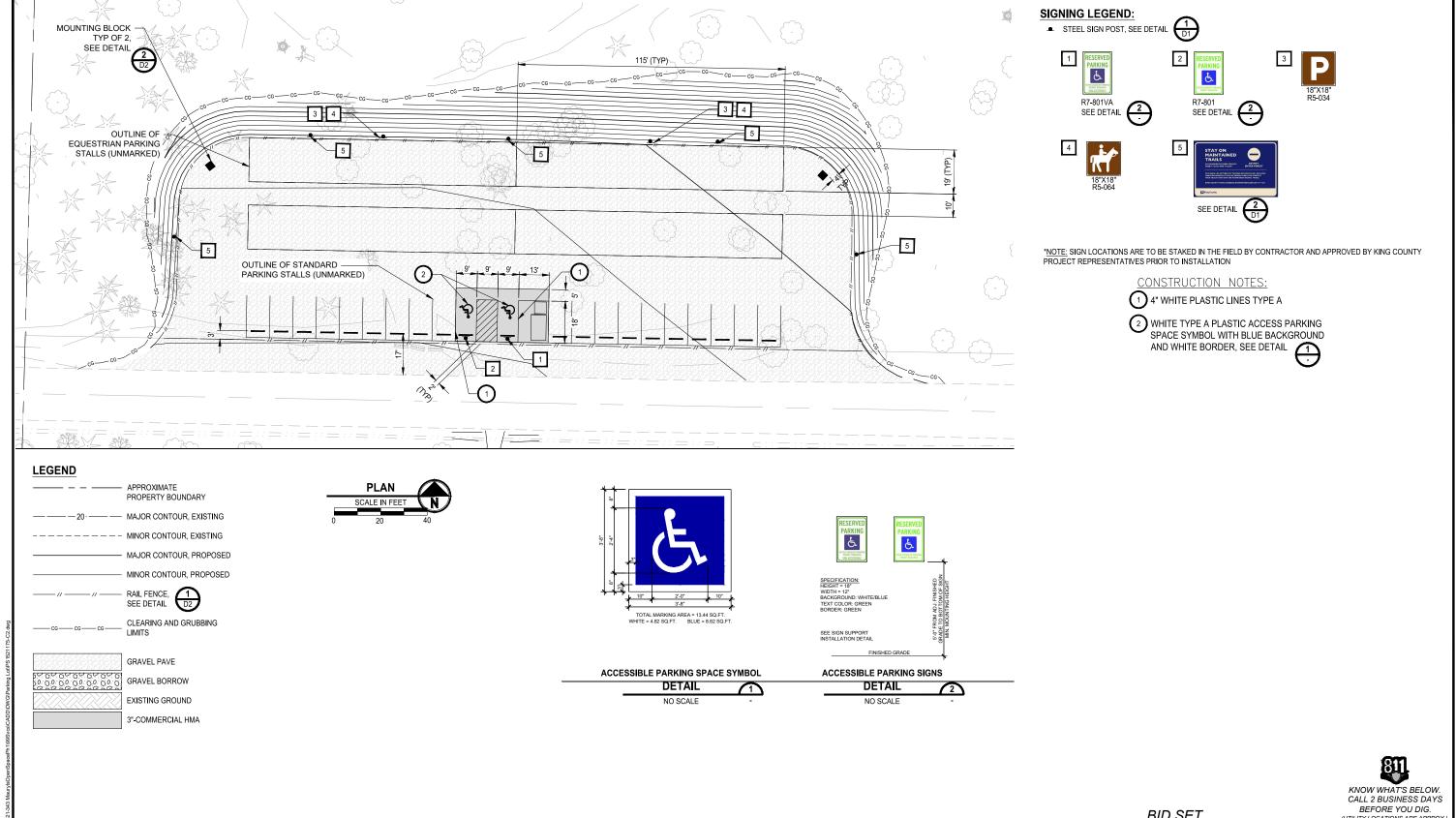
| King County |
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| Maury Island Open Space Remediation |
| 7911 SW 260th Street |
| Maury Island, WA 98070 |

| SHEET |
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| 3 |
| OF |
| 12 |
| SHEETS |
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SITE PREPARATION AND DEMOLITION

SP1





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 DATE
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 D. DINKUHN

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 LAND. ARCH.
 N/A

DESIGN TEAM

PROJECT MANAGER: D. DINKUHN

Maury Island Open Space

R.FIALA

D. DINKUHN

DATE

04/22/20

03/27/20

PROJECT # | C01456C20

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King County

Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| BID SET | KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX.) |
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| King County Maury Island Open Space Remediation 7911 SW 260th Street | SHEET 5 OF |

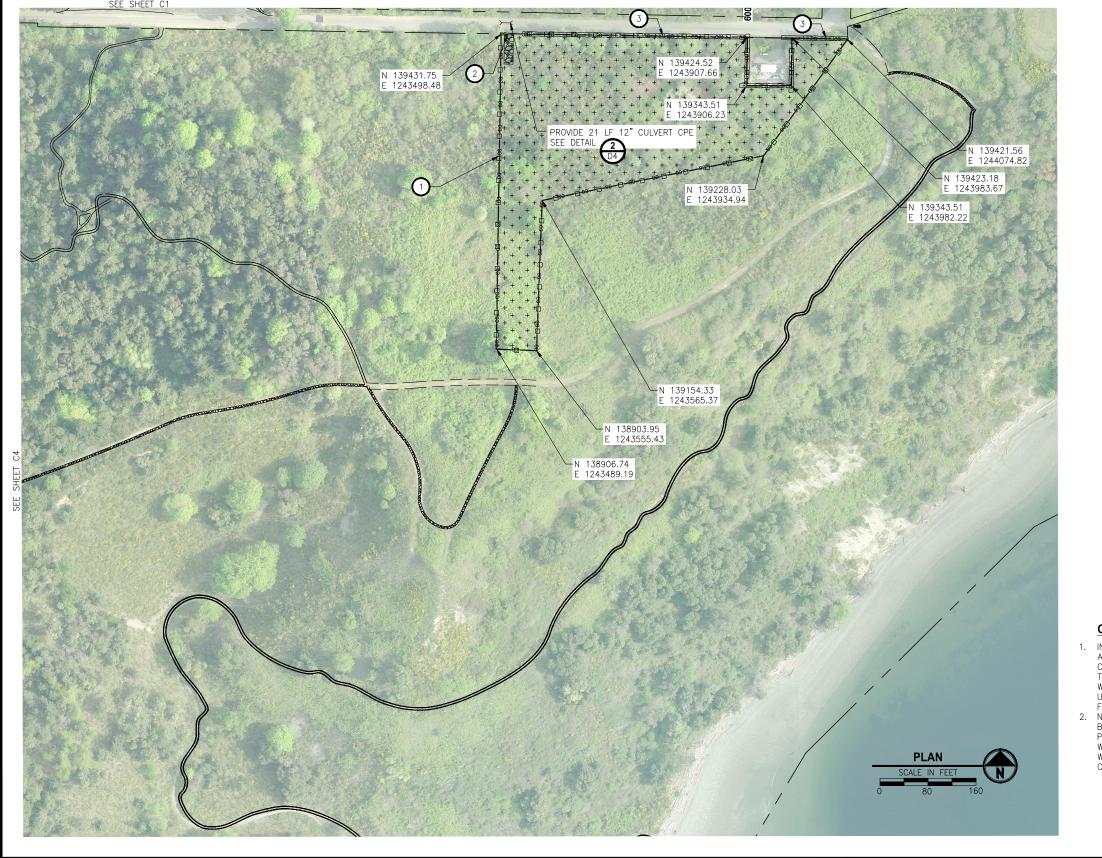
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Maury Island, WA 98070

C2

12

SHEETS



LEGEND

APPROXIMATE PROPERTY BOUNDARY

---- MINOR CONTOUR, EXISTING

MAJOR CONTOUR, PROPOSED

+ + + + + + + + + WEED FABRIC AREA

 CLEARING AND GRUBBING LIMITS

STRAW WATTLE

STABILIZED CONSTRUCTION ENTRANCE

MINOR CONTOUR, PROPOSED

CONSTRUCTION NOTES

HIGH VISIBILITY FENCE PER WSDOT STD PLAN I-10.10-01

2 STABILIZED CONSTRUCTION ENTRANCE PER WSDOT STD PLAN I-80.10-02

3 STRAW WATTLE

CLEARING AND GRUBBING NOTE:

- INVASIVE CLEARING AREA TO BE
 ACCESSED VIA ROADWAY SIDE.
 CONTRACTOR WILL ESTABLISH A
 TEMPORARY CONSTRUCTION ENTRANCE,
 WHICH WILL REMAIN IN PLACE TO BE USED LATER AS THE ACCESS POINT FOR PLANTING.
- 2. NO CONSTRUCTION EQUIPMENT WILL BE PERMITTED UNDER THE DRIP LINE. PRIOR TO CLEARING, THE CONTRACTOR WILL FLAG MATURE TREES TO RETAIN, WHICH WILL BE APPROVED BY KING COUNTY ENGINEERING.



BID SET

| Maury Isla | y Island Open Space PROJECT MANAGER: D. DINKUHN DESIGN TEAM | | M | | | | | |
|------------|---|------------|------|----------|----|------|--------------|-----------|
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| DRAWN | A. MISIURAK | 03/27/20 | 4 | | | | | |



King County

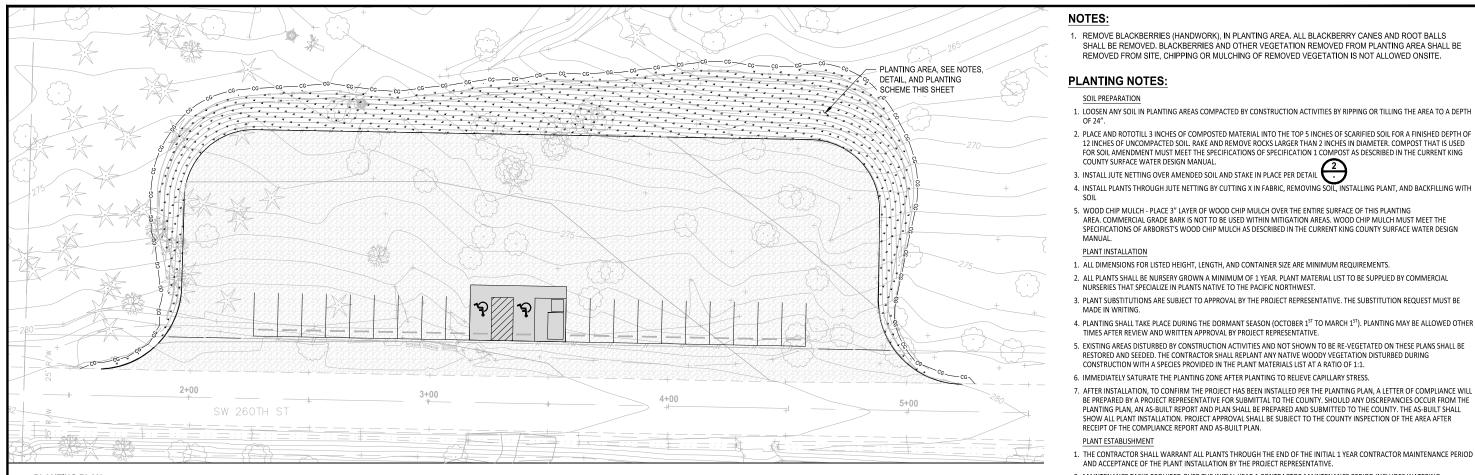
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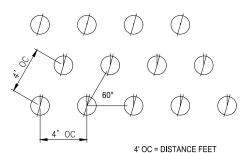
INVASIVE PLANT CLEARING PLAN

C3



PLANTING PLAN PLAN

| PLANTING SCHEDULE: | | | | | |
|----------------------|-------------|----------|-----|------------------|---------|
| SCIENTIFIC NAME | COMMON NAME | AREA | QTY | SIZE & CONDITION | SPACING |
| PLANTING AREA SHRUBS | | | | | |
| ROSA NUTKANA | NOOTKA ROSE | 8,822 SF | 552 | 1 GAL | 4' OC |



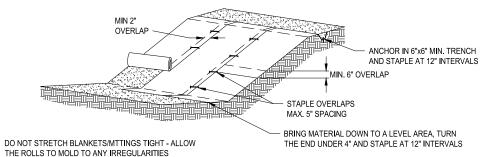
ON CENTER

SHRUB SPACING DETAIL NO SCALE

SLOPE SURFACE SHALL BE SMOOTH BEFORE PLACEMENT FOR PROPER SOIL

STAPLING PATTERN AS PER MANUFACTURER'S RECOMMENDATIONS

IF THERE IS A BERM AT THE TOP OF SLOPE, ACHOR UPSLOPE OF THE BERM



PLANTING OF SHRUBS, TREES, ETC. SHOULD OCCUR AFTER INSTALLATION.

JUTE NETTING SLOPE INSTALLATION

Christie True, Director

DETAIL NO SCALE

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| DRAWN | R.FIALA | 03/27/20 | 4 | | | | | |



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Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98

| PARKING | | ANITINIA | |
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| DARKING | 1 () 1 () 1 | | |
| | | | |

| | PARKING LOT PLANTING PLAN | LS1 |
|------|---|-------------------------|
| 3104 | King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | 7 OF 12 SHEETS |

SOIL PREPARATION

4. INSTALL PLANTS THROUGH JUTE NETTING BY CUTTING X IN FABRIC. REMOVING SOIL. INSTALLING PLANT. AND BACKFILLING WITH

5. WOOD CHIP MULCH - PLACE 3" LAYER OF WOOD CHIP MULCH OVER THE ENTIRE SURFACE OF THIS PLANTING AREA. COMMERCIAL GRADE BARK IS NOT TO BE USED WITHIN MITIGATION AREAS. WOOD CHIP MULCH MUST MEET THE SPECIFICATIONS OF ARBORIST'S WOOD CHIP MULCH AS DESCRIBED IN THE CURRENT KING COUNTY SURFACE WATER DESIGN MANUAL

12 INCHES OF UNCOMPACTED SOIL. RAKE AND REMOVE ROCKS LARGER THAN 2 INCHES IN DIAMETER. COMPOST THAT IS USED FOR SOIL AMENDMENT MUST MEET THE SPECIFICATIONS OF SPECIFICATION 1 COMPOST AS DESCRIBED IN THE CURRENT KING

REMOVE BLACKBERRIES (HANDWORK), IN PLANTING AREA. ALL BLACKBERRY CANES AND ROOT BALLS SHALL BE REMOVED. BLACKBERRIES AND OTHER VEGETATION REMOVED FROM PLANTING AREA SHALL BE REMOVED FROM SITE, CHIPPING OR MULCHING OF REMOVED VEGETATION IS NOT ALLOWED ONSITE.

PLANT INSTALLATION

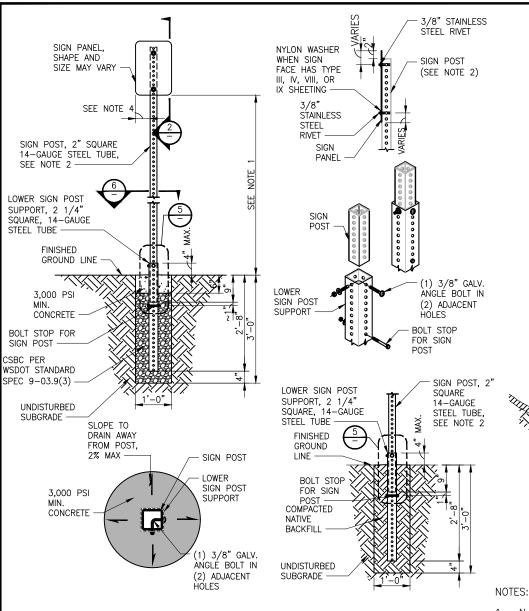
- 1. ALL DIMENSIONS FOR LISTED HEIGHT, LENGTH, AND CONTAINER SIZE ARE MINIMUM REQUIREMENTS.
- 2. ALL PLANTS SHALL BE NURSERY GROWN A MINIMUM OF 1 YEAR. PLANT MATERIAL LIST TO BE SUPPLIED BY COMMERCIAL NURSERIES THAT SPECIALIZE IN PLANTS NATIVE TO THE PACIFIC NORTHWEST.
- 3. PLANT SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT REPRESENTATIVE. THE SUBSTITUTION REQUEST MUST BE
- 4. PLANTING SHALL TAKE PLACE DURING THE DORMANT SEASON (OCTOBER 1ST TO MARCH 1ST). PLANTING MAY BE ALLOWED OTHER TIMES AFTER REVIEW AND WRITTEN APPROVAL BY PROJECT REPRESENTATIVE.
- 5. EXISTING AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT SHOWN TO BE RE-VEGETATED ON THESE PLANS SHALL BE RESTORED AND SEEDED. THE CONTRACTOR SHALL REPLANT ANY NATIVE WOODY VEGETATION DISTURBED DURING CONSTRUCTION WITH A SPECIES PROVIDED IN THE PLANT MATERIALS LIST AT A RATIO OF 1:1.
- 6. IMMEDIATELY SATURATE THE PLANTING ZONE AFTER PLANTING TO RELIEVE CAPILLARY STRESS.
- 7. AFTER INSTALLATION, TO CONFIRM THE PROJECT HAS BEEN INSTALLED PER THE PLANTING PLAN, A LETTER OF COMPLIANCE WILL BE PREPARED BY A PROJECT REPRESENTATIVE FOR SUBMITTAL TO THE COUNTY. SHOULD ANY DISCREPANCIES OCCUR FROM THE PLANTING PLAN, AN AS-BUILT REPORT AND PLAN SHALL BE PREPARED AND SUBMITTED TO THE COUNTY. THE AS-BUILT SHALL SHOW ALL PLANT INSTALLATION. PROJECT APPROVAL SHALL BE SUBJECT TO THE COUNTY INSPECTION OF THE AREA AFTER RECEIPT OF THE COMPLIANCE REPORT AND AS-BUILT PLAN.

PLANT ESTABLISHMENT

- 1. THE CONTRACTOR SHALL WARRANT ALL PLANTS THROUGH THE END OF THE INITIAL 1 YEAR CONTRACTOR MAINTENANCE PERIOD AND ACCEPTANCE OF THE PLANT INSTALLATION BY THE PROJECT REPRESENTATIVE.
- 2. MAINTENANCE TASKS REQUIRED OVER THE INITIAL YEAR 1 CONTRACTOR MAINTENANCE PERIOD INCLUDES WATERING: WEEDING, ESPECIALLY NON-NATIVE, INVASIVE SPECIES; REPLANTING ANY PLANT THAT HAS SETTLED SIGNIFICANTLY, WERE INSTALLED TOO SHALLOW, OR TILTED; PRUNING; REPLACING ALL DEAD, DYING, AND DISEASED PLANTS AS DETERMINED BY THE PROJECT REPRESENTATIVE; AND ANY OTHER MEASURES REQUIRED FOR NOT ONLY PLANT SURVIVAL BUT THE ULTIMATE SUCCESS

THERE IS NO SOURCE OF WATER ON SITE. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPLEMENTAL WATERING VIA A 200' HOSE AND CONNECTION TO A WATER TRUCK AS NEEDED TO ENSURE PLANT SURVIVAL.

3. AT THE END OF THE 1-YEAR WARRANTY AND MAINTENANCE PERIOD, ANOTHER FIELD MEETING WITH THE CONTRACTOR AND PROJECT REPRESENTATIVE SHALL OCCUR TO DETERMINE IF ANY WARRANTY ISSUES NEED TO BE ADDRESSED.



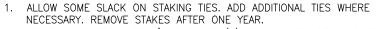
SIGN POST NOTES:

2. PERFORATED SQUARE STEEL POST SHALL MEET REQUIREMENTS OF STANDARD SPECIFICATION 9-06.

1. USE 7 FOOT MIN. MOUNTING HEIGHT FOR TRAFFIC SIGNS. USE 5 FOOT MIN. MOUNTING HEIGHT FOR

- 3. USE ONLY BASE CONNECTION HARDWARE THAT MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS 9-06 AND 9-28.
- 4. USE OF CONCRETE FOOTING SIGN SUPPORT (DETAIL 1) OR NATIVE BACKFILL SIGN SUPPORT (DETAIL 4) PER KC PARKS ENGINEER'S DECISION.
- 5. LATERAL CLEARANCE DISTANCES FOR TRAIL AND TRAFFIC SIGNS SHALL BE PER KC PARKS STANDARDS, MUTCD OR WSDOT REQUIREMENTS, LOCAL JURISDICTION, OR AS APPROVED BY THE ENGINEER.
- 6. REFLECTOR ADDED TO SIGN POST PER KC PARKS ENGINEER'S DETERMINATION.
- 7. DIMENSIONS FOR THE PARTS USED TO ASSEMBLE THE BASE CONNECTIONS ARE INTENTIONALLY NOT SHOWN. BASE CONNECTIONS ARE PATENTED, MANUFACTURED PRODUCTS THAT ARE IN COMPLIANCE WITH NCHRP 350 CRASH TEST CRITERIA. BASE CONNECTION DETAILS ARE SHOWN ONLY TO ILLUSTRATE





1'-6"

- STAKE ALL TREES OVER 5' HT; THREE (3) STAKES REQUIRED FOR TREES WITH 3 IN. CALIPER OR GREATER.
- 3. SEE DWG 1/LA-1-1 + 2/LA-1-1 FOR TYPICAL STAKING DETAIL.

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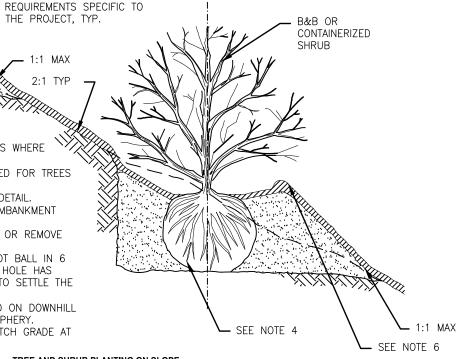
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- SLOPES STEEPER THAN 2:1 MAY REQUIRE AN APPROVED EMBANKMENT STABILIZATION SYSTEM TO CREATE A LEVEL TREE PIT.
- REMOVE ALL WIRE, STRINGS, AND BURLAP FROM ROOTBALL OR REMOVE PLANT FROM CONTAINER.
- PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 6 INCH LIFTS. DO NOT OVER COMPACT. WHEN THE PLANTING HOLE HAS BEEN BACKFILLED, POUR WATER AROUND THE ROOT BALL TO SETTLE THE SOIL
- 7. 4" HIGH X 8" WIDE ROUND-TOPPED SOIL BERM, CENTERED ON DOWNHILL SIDE OF ROOTBALL. BERM SHALL BEGIN AT ROOTBALL PERIPHERY.
- DO NOT BURY ROOT CROWN. TOP OF ROOTBALL SHALL MATCH GRADE AT WHICH THE TREE GREW AT THE NURSERY.



STAY ON

- SIGN MATERIAL SHALL BE 18" X 12" OR 12"X18" 4MM ALUMINUM COMPOSITE MATERIAL (ACM) WITH HIGH INTENSITY PRISMATIC SIGN FINISH AND ANTI-GRAFFITI COATING.
- 2. SIGNS SHALL BE COATED IN AVERY OL-100 ANTI-GRAFFITI PM 01000PMA1 AND 3M PROTECTIVE OVERLAY FILM 1150 TRANSPARENT OR APPROVED EQUALS.
- 3. SIGN COLOR BACKGROUND SHALL BE PANTONE MATCHING SYSTEM (PMS) COLOR KING BLUE 049. SIGN TEXT SHALL BE PMS COLOR BEIGE #A8220-O.



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TREE AND SHRUB PLANTING ON SLOPE **DETAIL** NO SCALE

B & B TREES (AS

TREE TIES OR

- SEE NOTE 4

- SEE NOTE 6

SPECS

NOTE THE PARTY OF THE PARTY OF

MULCH DEPTH PER

1:1 MAX 2:1 TYP

PROVIDE AMENDED SOIL TO

MEET THE SPECIFICATIONS AND

EXISTING GRADE

APPROVED EQUAL

2 IN. DIA. UNTREATED

HARDWOOD STAKES

SET ALL PLANTS PLUMB

#5 'CHAINLOCK' PLASTIC

SPECIFIED)

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG. **BID SET**

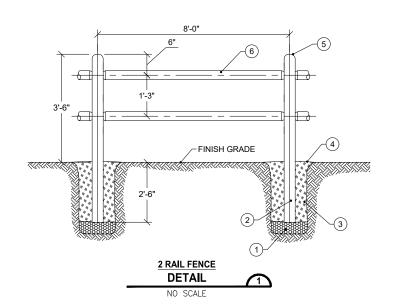
PROJECT MANAGER: D. DINKUHN **DESIGN TEAM** Maury Island Open Space PROJECT # | C01456C20 DATE REV# REVISION BY DATE ARCH N/A D. DINKUHN 04/22/2020 STRUCT. ENG. N/A SSUED APPROVED CIVIL ENG. D.DINKUHN REVIEWED LAND, ARCH. N/A 4 DRAWN R.FIALA 03/27/20



King County Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section

201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 8 OF 12 SHEETS |
|---|----------------------------------|
| DETAILS | D1 |



CONSTRUCTION NOTES:

1) SET POST ON CRUSHED SURFACING BASE COURSE, COMPACTED TO 95% DRY DENSITY

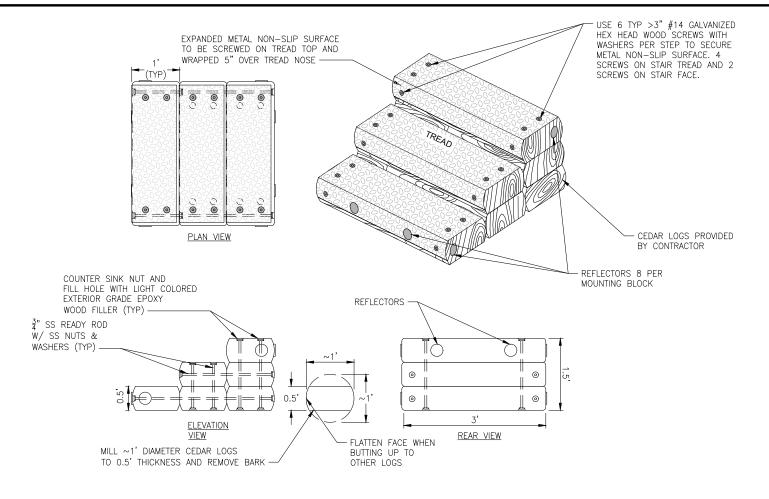
TREATED FIR POST SET PLUM AND AT PROPER GRADE AND ALIGNMENT

3 BACKFILL & COMPACT WITH NATIVE SOIL TO 95% DRY DENSITY

4 SLOPE AWAY FROM POST FOR DRAINAGE

5 LINE POST SHALL BE 5.5" WITH END AND CORNER POST 6.5" O

6 RAILS SHALL BE 4.5"ø



LOG-EQUESTRIAN MOUNTING BLOCK

DETAIL NO SCALE

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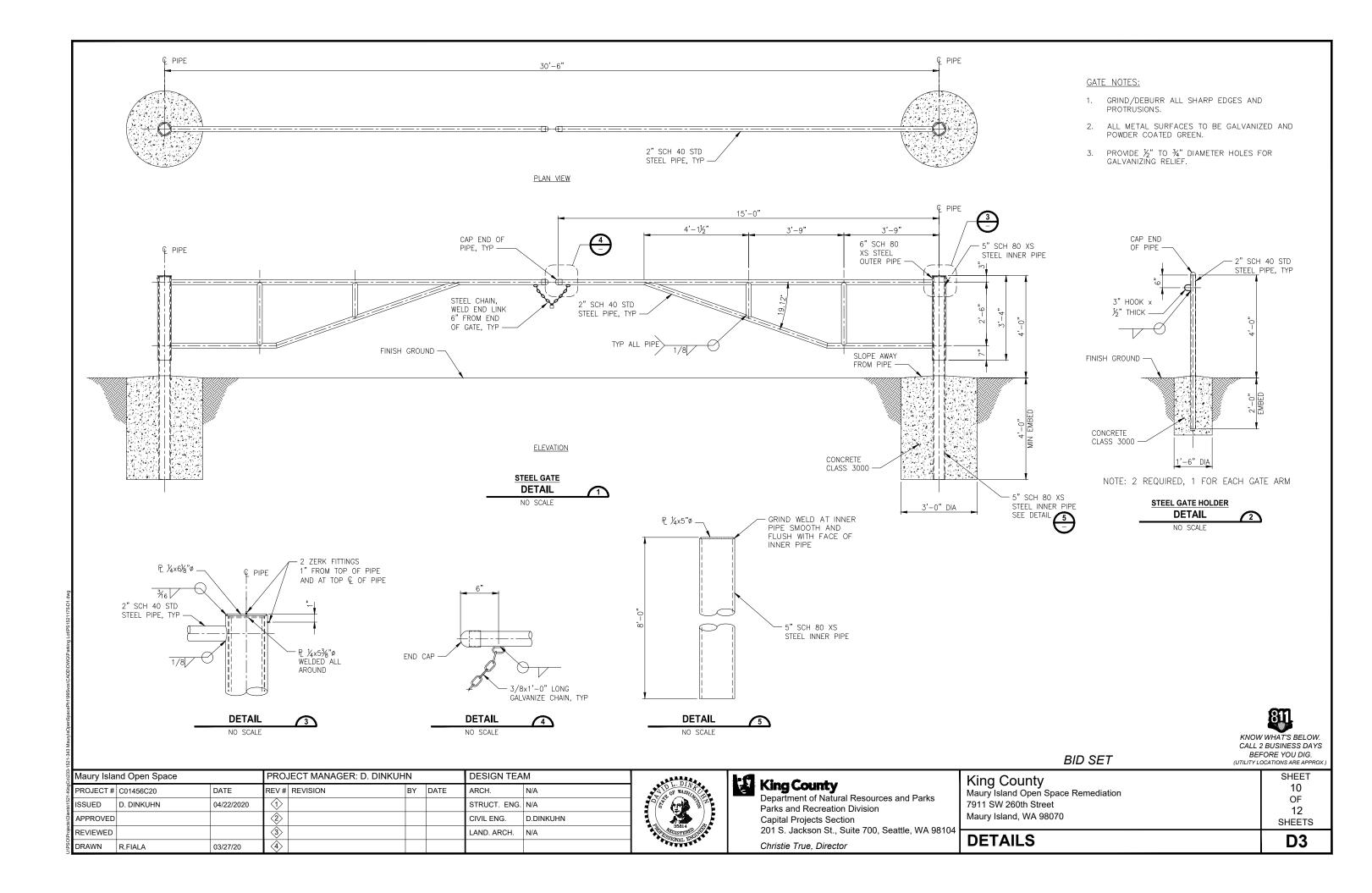
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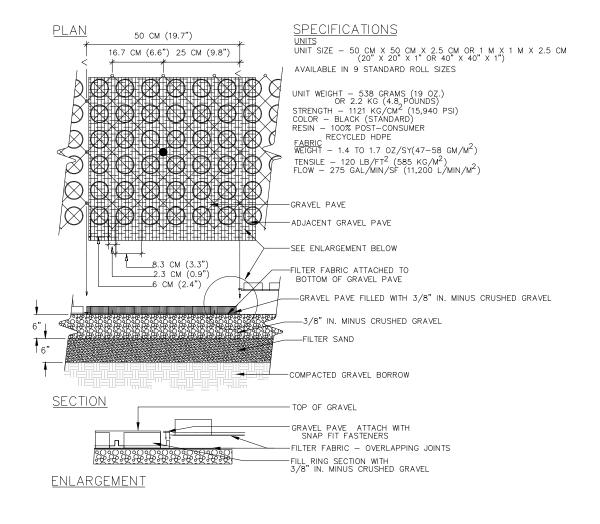
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| KNOW WHAT'S BELOW. |
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| DRAWN | R.FIALA | 03/27/20 | 4 | | | | | |

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| DETAILS | D2 |

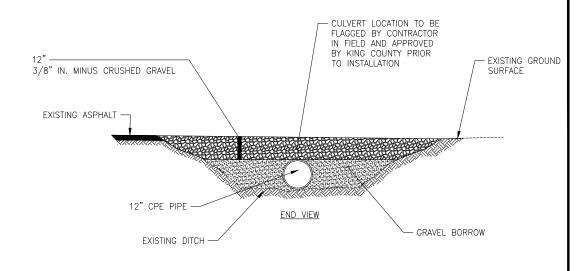


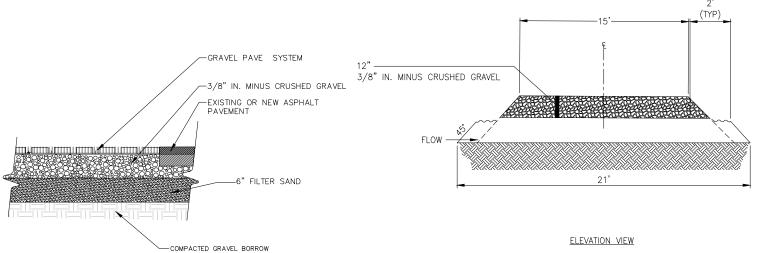


TYPICAL GRAVEL PAVE DETAIL

DETAIL

NO SCALE





GRAVEL PAVE AT ASPHALT EDGE **DETAIL** NO SCALE

12" CULVERT DETAIL NO SCALE

BEFORE YOU DIG.

| Co/2: | Maury Island Open Space | | PROJECT MANAGER: D. DINKUHN | | | DESIGN TEAM | | | |
|---------|-------------------------|------------|-----------------------------|------|----------|-------------|------|--------------|-----------|
| 1-King | PROJECT# | C01456C20 | DATE | REV# | REVISION | BY | DATE | ARCH. | N/A |
| nts\152 | ISSUED | D. DINKUHN | 04/22/2020 | 1 | | | | STRUCT. ENG. | N/A |
| ects | APPROVED | | | 2> | | | | CIVIL ENG. | D.DINKUHN |
| | REVIEWED | | | 3> | | | | LAND. ARCH. | N/A |
| J:\PSC | DRAWN | R.FIALA | 03/27/20 | 4> | | | | | |



King County Department of Natural Resources and Parks Parks and Recreation Division

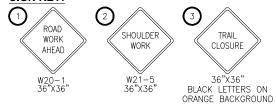
Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| DETAILS | D4 |
|--|--|
| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 11 OF 12 SHEETS |
| BID SET | BEFORE YOU DIG. (UTILITY LOCATIONS ARE APPROX |

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS







SYMBOL LEGEND:

TEMPORARY TRAFFIC CONTROL SIGN

TRAFFIC CONTROL NOTES:

- TRAFFIC CONTROL SHOWN IS FOR SHOULDER WORK ONLY AND DOES NOT INCLUDE LANE CLOSURE. CONTRACTOR—PROPOSED LANE CLOSURES SHALL BE APPROVED BY THE KING COUNTY PROJECT REPRESENTATIVE AND SHALL BE IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN, MEETING THE MINIMUM REQUIREMENTS OF WSDOT STD PLAN TC1 ONE LANE TWO—WAY TRAFFIC CONTROL WITH FLAGGERS.
- TRAIL CLOSURE SIGNS SHALL BE PLACED AT BEGINNING AND END OF CLOSED TRAIL SEGMENTS IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.

KNOW WHAT'S BELOW. CALL 2 BUSINESS DAYS BEFORE YOU DIG.
(UTILITY LOCATIONS ARE APPROX

SHEET

BID SET

King County Department of Natural Resources and Parks Parks and Recreation Division Capital Projects Section 201 S. Jackson St., Suite 700, Seattle, WA 98104 Christie True, Director

| TEMPORARY TRAFFIC CONTROL PLAN | T1 |
|---|-----------------------|
| King County Maury Island Open Space Remediation 7911 SW 260th Street Maury Island, WA 98070 | SHEET 12 OF 12 SHEETS |

Maury Island Open Space PROJECT MANAGER: D. DINKUHN **DESIGN TEAM** PROJECT # C01456C20 REV # REVISION DATE BY DATE ARCH. N/A STRUCT. ENG. N/A ISSUED D. DINKUHN 04/22/2020 APPROVED CIVIL ENG. D.DINKUHN LAND. ARCH. REVIEWED N/A 4> DRAWN R.FIALA 03/27/20

