

INTERGOVERNMENTAL AGREEMENT

Agency Agreement No. 10888

Local Government Agreement No. ____

This Agreement is between the State of Oregon acting by and through its Parks and Recreation Department (“Agency or OPRD”) and the City of Portland, acting through its Bureau of Portland Parks & Recreation (“Local Government or PP&R”), each a “Party” and, together, the “Parties”.

RECITALS

- A. By the authority granted in ORS 190.110, units of local government may enter into agreements with units of state government for the performance of any or all functions and activities that the parties to the agreement, its officers, or agents have the authority to perform.
- B. OPRD has a goal to design and build the Tryon Creek State Natural Area to Marshall Park Trail Segment. This Project is a priority for OPRD and has been included in its work plan for the current and future fiscal years.
- C. PP&R has a goal to improve the Tryon Creek State Natural Area to Marshall Park trail segment. This project is a priority for PP&R and is included in the Habitat Management & Trail Plan for Marshall Park Natural Areas and the work plan for current and future fiscal years.
- D. OPRD and PP&R wish for PP&R to provide funding to OPRD, to complete design and construction of the portion of this segment of the trail within Marshall Park and owned by the City of Portland to be managed by PP&R, and therefore desire to enter into this Agreement to provide for the responsibilities and obligations of the parties, for the funding, design, and construction of the trail segment in accordance with this Agreement.

SECTION 1: DEFINITIONS

“Acceptance” or “Accepted” means written confirmation by Local Government that Agency has completed a Deliverable according to the Acceptance Criteria and accepted for purposes of interim payment.

“Agreement” means this Intergovernmental Agreement, including all terms and conditions herein and all Exhibits attached hereto.

“Authorized Representative” means a person representing a party to this Agreement who is authorized to make commitments and decisions on behalf of the party regarding the performance of this Agreement.

“Business Days” means Monday through Friday, 8:00 a.m. to 5:00 p.m., Pacific Time, excluding State of Oregon holidays and business closure days.

“Calendar Days” mean contiguous days.

“Deliverables” means all items that Agency is required to provide to Local Government under this Agreement, including Work Product.

“Documentation” means all documents, including documents that are Deliverables described in the Statement of Work that are to be delivered by Agency under this Agreement.

“DOJ” means the State of Oregon acting through its Department of Justice.

“Effective Date” means the date specified in Section 4 or the date on which this Agreement is fully executed and approved according to applicable laws, rules and regulations, whichever is later.

“Maximum Not-To-Exceed Compensation” is defined in Section 7.0.

“Milestone” means the completion date for a specific group of Tasks or Deliverables identified as a Milestone in the Statement of Work.

“Services” means all effort to be expended by Agency under the Agreement.

“State” means the State of Oregon.

“Statement of Work” or **“SOW”** means the documents that describe the Services to be provided by Agency, including the Tasks, Deliverables and Milestones, the attributes (including requirements and specifications) of each Deliverable, identification of the Deliverables and Services that are associated with each Task, and a completion date for each Milestone and Deliverable, the Payment Schedule for each Deliverable and Milestone, and any other items as agreed by the parties and attached hereto as Exhibit A, including as amended pursuant to Section 22. The SOW includes Accepted Deliverables, if specifically agreed upon in Exhibit A.

“Task” means a segment of the Services to be provided by Agency under this Agreement.

“Work Product” means everything that is specifically made, conceived, discovered, or reduced to practice by Agency or Agency’s subcontractor or agents (either alone or with others) pursuant to the Agreement, including every invention, modification, discovery, design, development, customization, configuration, improvement, process, software program, work of

authorship, documentation, formula, datum, technique, know how, secret, or intellectual property right whatsoever or any interest therein (whether patentable or not patentable or registerable under copyright or similar statutes or subject to analogous protection). Notwithstanding anything in the immediately preceding sentence to the contrary, Work Product is not Agency Intellectual Property, Local Government Intellectual Property, or Third-Party Intellectual Property.

SECTION 2: RESERVED

SECTION 3: RESERVED

SECTION 4: EFFECTIVE DATE AND DURATION

This Agreement is effective on the date of the last signature ("Effective Date") and terminates on **June 30, 2027**, unless terminated earlier in accordance with Section 16.

SECTION 5: AUTHORIZED REPRESENTATIVES

5.1 Agency's Authorized Representative is:

Michael Taylor
Oregon Parks and Recreation Department
503-800-7678
michael.l.taylor@opr.oregon.gov

5.2 Local Government's Authorized Representative is:

Robin Wilcox
City of Portland Parks & Recreation
1120 SW 5th Ave., Ste. 858
Portland, OR 97204
971-806-9358
robin.wilcox@portlandoregon.gov

5.3 A Party may designate a new Authorized Representative by written notice to the other Party.

SECTION 6: RESPONSIBILITIES OF EACH PARTY

6.1 OPRD agrees to:

- a) Furnish the necessary personnel, equipment, materials, and services required to perform the Work set forth in Exhibit A, Statement of Work.
- b) Perform all project management work related to the design, permitting, bidding, contracting, and construction of the Marshall Park to Tryon Creek State Park natural surface hiking trail and associated bridges.
- c) Perform the Work as an independent contractor and be exclusively responsible for all costs and expenses related to its employment of individuals performing the Work under this Agreement.
- d) Provide draft construction documents, specifications, and cost estimates for PP&R's review and approval in a timely manner prior to submitting final applications to permitting agencies for approval, prior to construction bidding, and prior to approving any design changes during construction. Documents will include a 90% and 100% construction document submittal and review.
- e) Keep the City of Portland Parks & Recreation representative informed of all actions related to the construction of the trail and bridges in the project in a timely fashion.

6.2 PP&R agrees to:

- a) Pay to OPRD a not-to-exceed amount of \$400,000.00 for the services performed under this Agreement. OPRD billing invoices shall include this Agreement number, remittance address, invoice date, invoice number, invoice amount, an itemized statement of work performed, and expenses incurred during the billing period, and will not be submitted more frequently than once per quarter. Invoice shall be sent electronically to robin.wilcox@portlandoregon.gov. Payment to OPRD for approved and completed work will be made within 30 days of the approved invoice.
- b) Certify at the time this Agreement is executed, that sufficient funds are available and authorized for expenditure to finance costs of this Agreement within PP&R current appropriation or limitation of current annual budget.
- c) Grant the authority and access for OPRD and its subcontractors to complete the Project on the portion of the trail owned by PP&R.
- d) Provide timely and thorough review and comments to OPRD of draft and final

construction documents and participate in on-site construction meetings.

SECTION 7: COMPENSATION AND PAYMENT TERMS

PP&R shall pay OPRD a maximum not-to-exceed amount of \$400,000.00 for completing all work and delivering all Deliverables required of Agency under this Agreement. Payment to OPRD will be made within 30 days of each approved invoice.

SECTION 8: REPRESENTATIONS AND WARRANTIES

8.1 Local Government represents and warrants to Agency that:

- 8.1.1** Local Government is a municipal corporation duly organized and validly existing. Local Government has the power and authority to enter into and perform this Agreement;
- 8.1.2** The making and performance by Local Government of this Agreement (a) have been duly authorized by all necessary action of Local Government, (b) do not and will not violate any provision of any applicable law, rule, regulation, or order of any court, regulatory commission, board, or other administrative agency or any provision of Local Government's charter or other organizational document and (c) do not and will not result in the breach of, or constitute a default or require any consent under any other agreement or instrument to which Local Government is party or by which Local Government may be bound or affected. No authorization, consent, license, approval of, or filing or registration with or notification to any governmental body or regulatory or supervisory authority is required for the execution, delivery or performance by Local Government of this Agreement, other than those that have already been obtained;
- 8.1.3** This Agreement has been duly executed and delivered by Local Government and constitutes a legal, valid and binding obligation of Local Government enforceable in accordance with its terms;
- 8.1.4** To the extent that Local Government provides services to Agency, Local Government and/or its agents, as applicable, has the skill and knowledge possessed by well-informed members of the industry, trade or profession most closely involved in providing the services under this Agreement, and Local Government will apply that skill and knowledge with care and diligence to perform its obligations under this Agreement in a professional manner and in accordance with the standards prevalent in the related industry, trade or profession; and
- 8.1.5** Local Government and/or its agents, as applicable, shall, at all times during the term of this Agreement, be qualified, professionally competent, and duly licensed to perform its

obligations under this Agreement.

8.2 Agency represents and warrants to Local Government that:

- 8.2.1** Agency has the power and authority to enter into and perform this Agreement;
- 8.2.2** The making and performance by Agency of this Agreement (a) have been duly authorized by all necessary action of Agency, (b) do not and will not violate any provision of any applicable law, rule, regulation, or order of any court, regulatory commission, board, or other administrative agency and (c) do not and will not result in the breach of, or constitute a default or require any consent under any other agreement or instrument to which Agency is party or by which Agency may be bound or affected. No authorization, consent, license, approval of, or filing or registration with or notification to any governmental body or regulatory or supervisory authority is required for the execution, delivery or performance by Agency of this Agreement, other than those that have already been obtained;
- 8.2.3** This Agreement has been duly executed and delivered by Agency and constitutes a legal, valid and binding obligation of Agency enforceable in accordance with its terms; and
- 8.2.4** To the extent that Agency provides services to Local Government, Agency and/or its agents, as applicable, has the skill and knowledge possessed by well-informed members of the industry, trade or profession most closely involved in providing the services under this Agreement, and Agency will apply that skill and knowledge with care and diligence to perform its obligations under this Agreement in a professional manner and in accordance with the standards prevalent in the related industry, trade or profession.
- 8.2.5** Agency and/or its agents, as applicable, shall, at all times during the term of this Agreement, be qualified, professionally competent, and duly licensed to perform its obligations under this Agreement.

The representations and warranties set forth in this section are in addition to, and not in lieu of, any other representations or warranties provided.

SECTION 9: DISPUTE RESOLUTION

The Parties should attempt in good faith to resolve any dispute arising out of this Agreement. This may be done at any management level, including at a level higher than persons directly responsible for administration of the agreement. In addition to other processes to resolve disputes arising under the Agreement, either Party may notify the other that it wishes to engage in a more guided dispute resolution process. Upon such notification, the Parties shall engage in non-binding arbitration to resolve the dispute. If the Parties do not reach agreement as a result of the non-binding discussion, the Parties may agree to consider further appropriate dispute resolution processes, including binding arbitration. The rights and remedies set forth in this Agreement are not intended to be exhaustive and the exercise by either Party of any right or remedy does not preclude the exercise of any other rights or remedies at law or in equity.

SECTION 10: GOVERNING LAW, CONSENT TO JURISDICTION

This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively, "Claim") between the parties that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within a circuit court for the State of Oregon of proper jurisdiction. THE PARTIES, BY EXECUTION OF THIS AGREEMENT, HEREBY CONSENT TO THE IN PERSONAM JURISDICTION OF SAID COURTS. Except as provided in this section, neither party waives any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the eleventh amendment to the Constitution of the United States or otherwise, from any Claim or from the jurisdiction of any court. The parties acknowledge that this is a binding and enforceable agreement and, to the extent permitted by law, expressly waive any defense alleging that either party does not have the right to seek judicial enforcement of this Agreement.

SECTION 11: RESERVED

SECTION 12: CONTRIBUTION

- 12.1** If any third party makes any claim or brings any action, suit or proceeding alleging a tort as now or hereafter defined in ORS 30.260 (a "Third Party Claim") against a Party (the "Notified Party") with respect to which the other Party (the "Other Party") may have liability, the Notified Party shall promptly notify the Other Party in writing of the Third Party Claim and deliver to the Other Party, along with the written notice, a copy of the claim, process and all legal pleadings with respect to the Third Party Claim that have been received by the Notified Party. Each Party is entitled to participate in the defense of a Third-Party Claim, and to defend a Third-Party Claim with counsel of its own choosing. Receipt by the Other Party of the notice and copies required in this Section and a meaningful opportunity for the Other Party to participate in the investigation, defense and settlement of the Third-Party Claim with counsel of its own choosing are conditions precedent to the Other Party's contribution obligation under this Section 13 with respect to the Third-Party Claim.
- 12.2** With respect to a Third Party Claim for which Agency is jointly liable with Local Government (or would be if joined in the Third Party Claim), Agency shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Local Government in such proportion as is appropriate to reflect the relative fault of Agency on the one hand and of Local Government on the other hand in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of Agency on the one hand and of Local Government on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. Agency's

contribution amount in any instance is capped to the same extent it would have been capped under Oregon law if the State had sole liability in the proceeding.

- 12.3** With respect to a Third Party Claim for which Local Government is jointly liable with Agency (or would be if joined in the Third Party Claim), Local Government shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Agency in such proportion as is appropriate to reflect the relative fault of Local Government on the one hand and of Agency on the other hand in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of Local Government on the one hand and of Agency on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. Local Government's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law if it had sole liability in the proceeding.

SECTION 13: RESERVED

SECTION 14: LOCAL GOVERNMENT DEFAULT

Local Government will be in default under this Agreement upon the occurrence of any of the following events:

- 14.1** Local Government fails to perform, observe or discharge any of its covenants, agreements or material obligations under this Agreement;
- 14.2** Any representation, warranty or statement made by Local Government in this Agreement or in any documents or reports relied upon by Agency to measure the delivery of services, the expenditure of funds or the performance by Local Government is untrue in any material respect when made;

SECTION 15: AGENCY DEFAULT

Agency will be in default under this Agreement upon the occurrence of any of the following events:

- 15.1** Agency fails to perform, observe or discharge any of its covenants, agreements, or material obligations under this Agreement; or
- 15.2** Any representation, warranty or statement made by Agency in this Agreement or in any documents or reports relied upon by Local Government is untrue in any material respect when made.

SECTION 16: REMEDIES

In the event a Party has materially failed to perform under the Agreement, the Party that is then not in default shall be entitled to seek all rights and remedies available to it under the Agreement or by law. Provided, however, all remedies, whether by under the Agreement or at law or equity, shall be subject to the limits of the Oregon Tort Claims Act and the Oregon Constitution. No remedy provided for is exclusive of any other available remedy. All remedies are cumulative and in addition to every other remedy available under the Agreement, at law, in equity, or by statute.

SECTION 17: RECOVERY OF OVERPAYMENTS

If payments to Agency under this Agreement, or any other agreement between Agency and Local Government (unless prohibited by law), exceed the amount to which Agency expends for completion of the Project, Agency shall make payment to Local Government in the amount equal to the difference between the total amount paid by Agency for completion of the Project and the amount paid to Agency by Local Government.

SECTION 18: LIMITATION OF LIABILITY

EXCEPT FOR LIABILITY ARISING UNDER OR RELATED TO SECTION 12 NEITHER PARTY WILL BE LIABLE FOR LOST PROFITS, INCIDENTAL, CONSEQUENTIAL, OR OTHER INDIRECT DAMAGES ARISING OUT OF OR RELATED TO THIS AGREEMENT, REGARDLESS OF WHETHER THE LIABILITY CLAIM IS BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PRODUCT LIABILITY OR OTHERWISE. NEITHER PARTY WILL BE LIABLE FOR ANY DAMAGES OF ANY SORT ARISING SOLELY FROM THE TERMINATION OF THIS AGREEMENT IN ACCORDANCE WITH ITS TERMS.

SECTION 19: TERMINATION

19.1 This Agreement may be terminated at any time by mutual written consent of the Parties.

19.2 Agency may terminate this Agreement as follows:

19.2.1 Immediately upon written notice to Local Government, if Agency fails to receive funding, or appropriations, limitations or other expenditure authority at levels sufficient in Agency's reasonable administrative discretion, to perform its obligations under this Agreement;

19.2.2 Immediately upon written notice to Local Government, if federal or state laws, rules, regulations or guidelines are modified or interpreted in such a way that Agency's performance under this Agreement is prohibited, or Agency is prohibited from paying for such performance from the planned funding source;

- 19.2.3** Immediately upon written notice to Local Government, if Local Government is in default under this Agreement and such default remains uncured 15 days after written notice thereof to Local Government; or
- 19.2.4** As otherwise expressly provided in this Agreement.
- 19.3** Local Government may terminate this Agreement as follows:
 - 19.3.1** Immediately upon written notice to Agency, if Agency fails to provide services under this Agreement within the time specified herein or any extension thereof.
 - 19.3.2** Immediately upon written notice to Agency, if Agency fails to perform any of the other provisions of this Agreement or fails to pursue the work as to endanger performance of this Agreement in accordance with its terms.
 - 19.3.3** Immediately upon written notice to Agency, if Local Government fails to receive funding, or appropriations, limitations or other expenditure authority at levels sufficient in Local Government's reasonable administrative discretion, to perform its obligations under this Agreement;
 - 19.3.4** Immediately upon written notice to Agency, if federal or state laws, rules, regulations or guidelines are modified or interpreted in such a way that Local Government's performance under this Agreement is prohibited, or Local Government is prohibited from paying for such performance from the planned funding source;
 - 19.3.5** Immediately upon written notice to Agency, if Agency is in default under this Agreement and such default remains uncured 15 days after written notice thereof to Agency; or
 - 19.3.6** As otherwise expressly provided in this Agreement.
- 19.4** Upon receiving a notice of termination of this Agreement, Agency will immediately cease all activities under this Agreement, unless Local Government expressly directs otherwise in such notice. Upon termination, Agency will deliver to Local Government all documents, information, works-in-progress, Work Product, and other property that are or would be Deliverables under the Agreement. If Agency is in default of this Agreement, upon Local Government's reasonable request, Agency will surrender all documents, research or objects or other tangible things reasonably needed to complete the work that was to have been performed by Agency under this Agreement, such documents, research, objects, or other tangible things not to include any third-party software licenses.

SECTION 20: INSURANCE

- 20.1** As applicable, Agency shall require its first-tier contractor(s) that are not units of Local Government as defined in ORS 190.003, if any, to obtain insurance specified in Exhibit C.

Provided, however, by mutual agreement, the Parties may set alternative insurance levels for such contractor(s) and memorialize same in an addendum to the Agreement.

20.2 RESERVED

SECTION 21: NONAPPROPRIATION

Both Parties' obligations to pay any amounts and otherwise perform its duties under this Agreement are conditioned upon the Party receiving funding, appropriations, limitations, allotments, or other expenditure authority sufficient to allow the Party, in the exercise of its reasonable administrative discretion, to meet its obligations under this Agreement. Nothing in this Agreement may be construed as permitting any violation of Article XI, section 7 of the Oregon Constitution or any other law limiting the activities, liabilities, or monetary obligations of a Party.

SECTION 22: AMENDMENTS

The terms of this Agreement may not be altered, modified, supplemented, or otherwise amended, except by written agreement signed by both Parties. To avoid ambiguity, the Parties may change their Authorized Representative(s) without amending the Agreement by providing the other Party with written notice of such change.

SECTION 23: NOTICE

Except as otherwise expressly provided in this Agreement, including any notices pursuant to Sections 12 and 19, all notices to be given relating to this Agreement must be given in writing by facsimile, personal delivery, or postage prepaid mail, to a Party's Authorized Representative at the physical address, fax number or email address set forth in this Agreement, or to such other addresses as either Party may indicate pursuant to this Section 23. Any notice so addressed and mailed becomes effective five (5) days after mailing. Any notice given by personal delivery becomes effective when actually delivered. Any notice given by facsimile becomes effective upon electronic confirmation of successful transmission to the designated fax number. Except as set forth above in this Section 23, the Parties may agree to provide operational notices such as delivery, acceptance or rejection of Services or Deliverables by email as may be mutually agreed in Exhibit A, Statement of Work.

SECTION 24: SURVIVAL

All rights and obligations of the Parties under this Agreement will cease upon termination of this Agreement, other than the rights and obligations arising under Sections 8, 9, 10, 14, 15 and 21 hereof and those rights and obligations that by their express terms survive termination of this Agreement; provided, however, that termination of this Agreement will not prejudice any rights or obligations accrued to the Parties under this Agreement prior to termination.

SECTION 25: SEVERABILITY

The Parties agree that if any term or provision of this Agreement is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected, and the rights and obligations of the Parties will be construed and enforced as if the Agreement did not contain the particular term or provision held to be invalid.

SECTION 26: COUNTERPARTS

This Agreement may be executed in several counterparts, all of which when taken together shall constitute one agreement, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of the Agreement so executed constitutes an original.

SECTION 27: COMPLIANCE WITH LAW

In connection with their activities under this Agreement, the Parties shall comply with all applicable federal, state and local law.

SECTION 28: INDEPENDENT CONTRACTORS

The Parties agree and acknowledge that their relationship is that of independent contracting parties and that Local Government is not an officer, employee, or agent of the State of Oregon as those terms are used in ORS 30.265 or otherwise.

SECTION 29: INTENDED BENEFICIARIES

Agency and Local Government are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement provides, is intended to provide, or may be construed to provide any direct or indirect benefit or right to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of this Agreement.

SECTION 30: FORCE MAJEURE

Neither Party is responsible for any failure to perform or any delay in performance of any obligations under this Agreement caused by fire, civil unrest, labor unrest, natural causes, or war, which is beyond that Party's reasonable control. Each Party shall, however, make all reasonable efforts to remove or eliminate such cause of failure to perform or delay in performance and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Agreement. Each Party may terminate this Agreement upon written notice to the other party after reasonably determining that the failure or delay will likely prevent successful performance of this Agreement.

SECTION 31: ASSIGNMENT AND SUCCESSORS IN INTEREST

Neither Party may assign or transfer its interest in this Agreement without the prior written consent of the other Party and any attempt by one Party to assign or transfer its interest in this Agreement without such consent will be void and of no force or effect. The consent of one Party to the other Partys assignment or transfer of its interest in this Agreement will not relieve either Party of any of its duties or obligations under this Agreement. The provisions of this Agreement will be binding upon and inure to the benefit of the Parties hereto, and their respective successors and permitted assigns.

SECTION 32: RESERVED

SECTION 33: TIME IS OF THE ESSENCE

Time is of the essence in each party's performance of its obligations under this Agreement.

SECTION 34: MERGER, WAIVER

This Agreement and all exhibits and attachments, if any, constitute the entire agreement between the Parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No wavier or consent under this Agreement will bind a Party unless signed by an authorized person representing the consenting or waiving Party, Such waiver or consent, if made, is effective only in the specific instance and for the specific purpose given. EACH PARTY, BY SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

SECTION 35: RECORDS MAINTENANCE AND ACCESS

Both Parties shall maintain all financial records relating to this Agreement in accordance with generally accepted accounting principles. In addition, the Parties shall maintain any other records, books, documents, papers, plans, records of shipments and payments and writings, whether in paper, electronic or other form, that are pertinent to this Agreement in such a manner as to clearly document the Party's performance. All financial records, other records, books, documents, papers, plans, records of shipments and payments and writings of the Parties, whether in paper, electronic or other form, that are pertinent to this Agreement, are collectively referred to as "Records." The Parties acknowledge and agree that the other Party and the Oregon Secretary of State's Office and the federal government and their duly authorized representatives will have access to all Records to perform examinations and audits and make excerpts and transcripts. Both Parties shall retain and keep accessible all Records for a minimum of six (6) years, or such longer period as may be required by applicable law, following termination of this Agreement, or until the conclusion of any audit, controversy or litigation

arising out of or related to this Agreement, whichever date is later. Subject to foregoing minimum records retention requirement, the Parties shall maintain Records in accordance with the records retention schedules set forth in OAR Chapter 166.

SECTION 36: HEADINGS

The headings and captions to sections of this Agreement have been inserted for identification and reference purposes only and may not be used to construe the meaning or to interpret this Agreement.

SECTION 37: AGREEMENT DOCUMENTS

This Agreement consists of the following documents, which are listed in descending order of precedence: this Agreement less all exhibits, attached Exhibit A (the Statement of Work), Exhibit B (Reserved), and Exhibit C (Subcontractor Insurance).

SECTION 38: ORDER OF PRECEDENCE

No term stated on any schedule, exhibit, attachment, or other document incorporated into the Agreement will take precedence over a conflicting term in the Agreement unless the term references the conflicting term in the Agreement and clearly recites the parties' intent that it takes precedence.

SECTION 39: SIGNATURES

The Parties have executed this Agreement as of the dates set forth below.

**STATE OF OREGON acting by and
through its Parks and Recreation
Department**

By: _____

Name: _____

Title: _____

Date: _____

**Approved for Legal Sufficiency in
accordance with ORS 291.047**

By: _____

Name: Jesse Ratcliffe

Title: Sr. Assistant Attorney General

Date: May 28, 2024

**CITY OF PORTLAND acting by and
through its Parks and Recreation
Bureau**

By: _____

Name: Adena Long

Title: Director, Portland Parks &
Recreation

Date: _____

Approved as to form

By: _____

Name: _____

Title: City Attorney

Date: _____

EXHIBIT A

STATEMENT OF WORK

1. PROJECT DESCRIPTION

The Oregon Parks and Recreation Department (OPRD), in partnership with Portland Parks and Recreation (PP&R) and Metro, will design and construct an approximately one half-mile natural surface hiking trail, between Marshall Park and Tryon Creek State Natural Area, filling a gap in the regional “Hillsdale to Lake Oswego Trail”. The proposed trail segment will replace a network of demand user trails that impact sensitive resources within the floodplain of Tryon Creek.

This project is located on parcels north of SW Boones Ferry Rd. and south of SW Maplecrest Drive, on land owned by the City of Portland, Metro and OPRD. The trail segment owned by PP&R is completely within Taxlot 04100, part of Marshall Park south of SW Maplecrest Drive.

2. OPRD OBLIGATIONS. OPRD shall perform the following tasks and provide the following deliverables.

TASK 1: PROJECT MANAGEMENT AND ADMINISTRATION

- Develop a project schedule and updates
- Monitor scope, schedule and budget
- Prepare reimbursement requests and expense reports
- Seek and incorporate PP&R input during design and construction
- Coordinate meetings and communicate with partners at least weekly during construction and at least monthly during design

DELIVERABLES:

- Submit preliminary project schedule prior to construction bidding
- Monthly updated project schedule and budget
- Funding reimbursement requests submitted on time as specified in Section 6.2
- Meeting summary and action items to PP&R within 3 days following coordination meetings

TASK 2: DESIGN

- Prepare complete trail plans, including:
 - Existing conditions
 - Site Development Plans
 - Construction Management/Erosion Control/Tree Protection Plans
 - Mitigation Plans
 - Trail Details
 - Bridge Profiles
 - Bridge Design Plans
- Update the 2015 GRI geotechnical report with the final bridge design & locations

DELIVERABLES:

- 90% and 100% trail plans sheet set, specifications, and cost estimate
- Updated geotechnical report

TASK 3: LAND USE AND DEVELOPMENT PERMITTING

- Secure land use approval for the proposed trail segment, from the City of Portland
- Secure building permits for the bridges
- Secure a Non-Park Use Permit (NPUP) from PP&R, for construction work on City of Portland property
- Secure Urban Forestry Tree Permit
- Secure any additional permits as required

DELIVERABLES:

- Approved Environmental Review (ER) Application
- Approved building permits for bridges
- Approved NPUP permit
- Approved Urban Forestry Tree Permit
- Other approved permits as required
- All application materials to support permits

TASK 4: CONSTRUCTION

- Bid and hire construction contractor using approved OPRD procurement processes
- Manage contractor-led construction of the proposed trail segment

Submit Change Orders, or RFIs for work to be completed on PP&R property for review and approval by PP&R Project Manager.

DELIVERABLES:

- Meeting agendas, materials, and records related to Construction services
- Construction log
- RFIs, ASIs, COs and submittal reviews
- Contractor led construction of the proposed trail segment, including obliteration of demand trails

TASK 5: ACKNOWLEDGEMENT OF PP&R AS A FUNDER FOR TRAIL PROJECT

- Install sign at project site, that acknowledges that PP&R is a funder for the trail project. Sign to be provided by PP&R and post to be provided by OPRD.

TASK 6: PROJECT CLOSE OUT

- Conduct final inspection subject to PP&R approval for properties owned and managed by PP&R
- Compile draft and final O&M manuals for PP&R review and acceptance
- Prepare and submit draft and final punch list to PP&R
- Conduct final walk through with PP&R for work to be completed on PP&R property for review and approval by PP&R Project Manager

DELIVERABLES:

- Draft and final punch list
- Record documents
- Draft and final O&M manual in electronic searchable PDF form
- Final project inspection and report submitted to PP&R
- Digital files of contract documents for record purposes

EXHIBIT B
TRAIL PLANS

(ATTACHED SEPERATELY)

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



OREGON PARKS AND RECREATION DEPARTMENT

TITLE SHEET
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

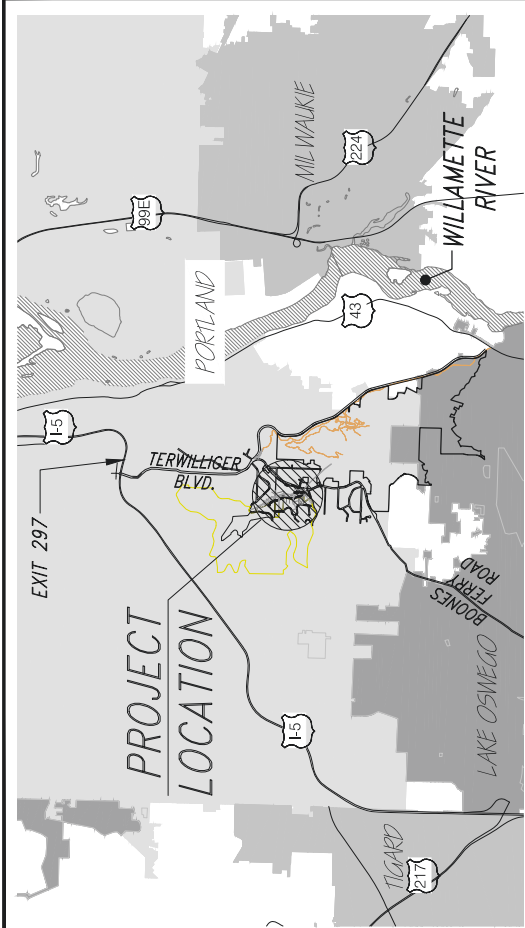
SHEET:	1 OF 37
OPRS #:	30757
CONTRACT #:	NA

CONTACTS

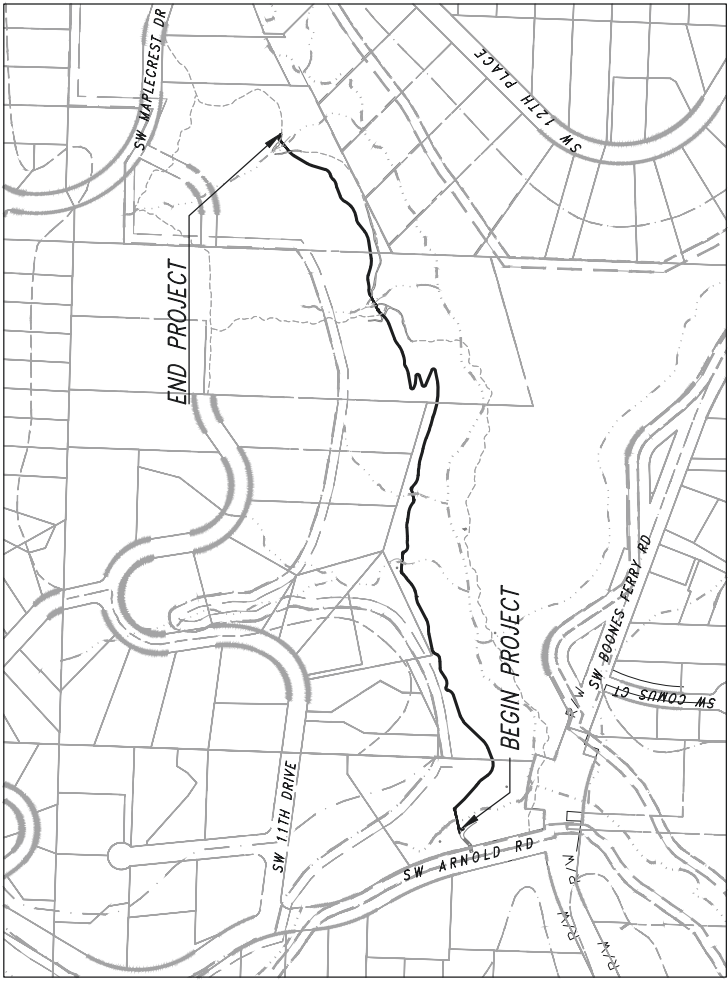
PROJECT MANAGER: IRIS BENSON 11321 S.W. TERWILLIGER BLVD. PORTLAND, OR. 97219 OFFICE: (503) 636-9886 EXT. 223 OFFICE: (503) 636-5318	STRUCTURAL ENGINEER: PETERSON STRUCTURAL ENGINEERS ERIK PETERSON, PE 9400 SW BARNES ROAD, SUITE 100 PORTLAND, OR. 97255 OFFICE: (503) 292-1635 EMAIL: ERIK.PETERSON@PSENGINEERS.COM
OWNER/APPLICANT: OREGON PARKS & RECREATION DEPT. 725 SUMMER ST. NE, STE. C SALEM, OR 97301-1271 OFFICE: (503) 986-0707 FAX: (503) 986-0792	GEOTECHNICAL ENGINEER: GRI THOMAS O'DELL, PE 16520 SW UPPER BOONES FERRY ROAD, SUITE 100 TIGARD, OR. 97224 OFFICE: (503) 641-3478 EMAIL: TO'DELL@GRI.COM
CIVIL ENGINEER: PBS ENGINEERING & ENVIRONMENTAL INC. KEN REHMS, PE 4412 S CORBETT AVENUE PORTLAND, OR. 97239 OFFICE: (503) 417-7720 EMAIL: KEN.REHMS@PBSUSA.COM	SURVEYOR: PBS ENGINEERING & ENVIRONMENTAL INC. TERRY GOODMAN, PLS 4412 S CORBETT AVENUE PORTLAND, OR. 97239 OFFICE: (503) 417-7596 EMAIL: TERRY.GOODMAN@PBSUSA.COM

LANDSCAPE ARCHITECT/ABORIST:
PBS ENGINEERING & ENVIRONMENTAL INC.
ROBERT PHIPPS, PLA, PWS, ISA-CA(TRAQ), CESCL
1325 SE TECH CENTER DRIVE, SUITE 140
VANCOUVER, WA. 98683
OFFICE: (360) 576-2127
EMAIL: ROBERT.PHIPPS@PBSUSA.COM

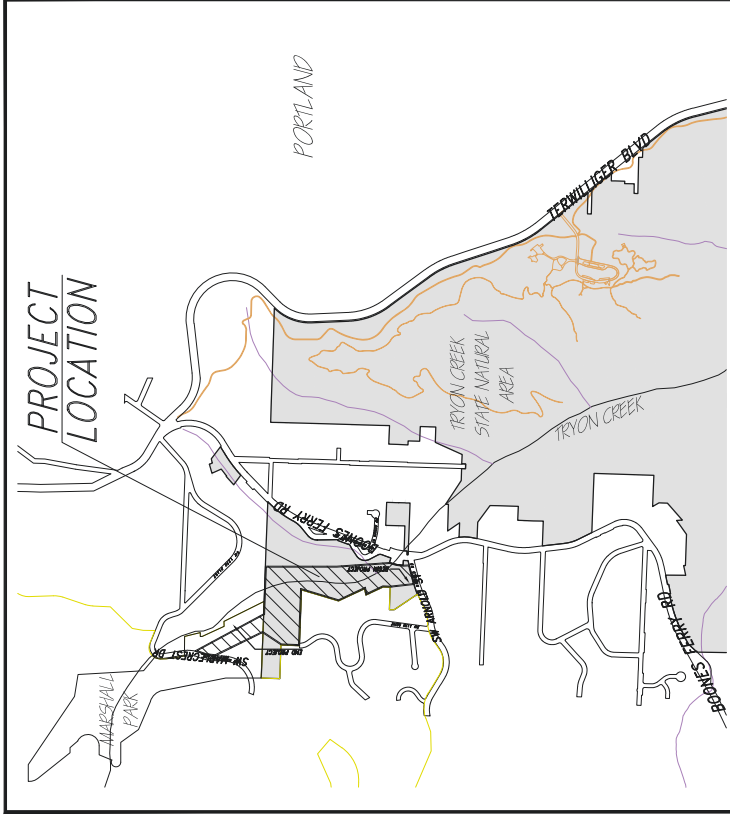
DRAWING INDEX	
1	TITLE SHEET
2	EXISTING CONDITIONS SITE PLAN - FULL SITE
3	KEY MAP
4	TRAIL DEVELOPMENT SITE PLAN - FULL SITE
5	TRAIL DEVELOPMENT SITE PLAN - AREA A
6	TRAIL PROFILE STA 0+00 - 5+00
7	TRAIL DEVELOPMENT SITE PLAN - AREA B
8	TRAIL DEVELOPMENT SITE PLAN - AREA C
9	TRAIL DEVELOPMENT SITE PLAN - AREA D
10	TRAIL PROFILE STA 10+00 - 15+60
11	TRAIL DEVELOPMENT SITE PLAN - AREA E
12	TRAIL PROFILE STA 15+60 - 21+20
13	TRAIL DEVELOPMENT SITE PLAN - AREA E
14	TRAIL PROFILE STA 21+20 - 23+20
15	TRAIL DETAILS & TREE TABLE
16	TRAIL DETAILS
17	TRAIL DETAILS
18	TRAIL DETAILS
19	TREE PROTECTION NOTES & NOTES
20	TREE MITIGATION DETAILS
21	TREE PROTECTION PLAN
22	TREE PROTECTION PLAN
23	TREE PROTECTION PLAN
24	TREE PROTECTION PLAN
25	TREE PROTECTION PLAN
26	EXISTING TRAIL OBLITERATION DETAILS
27	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - FULL SITE
28	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - NOTES
29	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA A
30	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA B
31	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA C
32	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA D
33	CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA E



VICINITY MAP
NOT TO SCALE



TRAIL ALIGNMENT MAP
1" = 250'
NORTH



LOCATION MAP
NOT TO SCALE
NORTH

MARSHALL PARK TRAIL

TRYON CREEK STATE NATURAL AREA

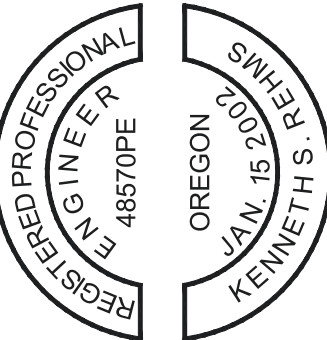
MULTNOMAH COUNTY, OREGON

PROJECT ADDRESS:
MARSHALL PARK
PORTLAND, OR 97219
45°26'56.2"N 122°41'17.6"W



COLOR CODES:
RED - ELECTRICAL POWER LINES, CABLES, OR CONDUIT, AND LIGHTING CABLES
YELLOW - GAS, OIL, STEAM, PETROLEUM, OR OTHER HAZARDOUS LIQUID OR GASEOUS MATERIALS.
ORANGE - COMMUNICATIONS, CABLE TV, ALARM OR SIGNAL LINES, CABLES OR CONDUITS.
BLUE - WATER, IRRIGATION, AND SLURRY LINES.
GREEN - SEWERS, DRAINAGE FACILITIES OR OTHER DRAIN LINES.
WHITE - PRE-MARKING OF THE OUTER LIMITS OF THE PROPOSED EXCAVATION OR MARKING THE CENTERLINE AND WIDTH OF PROPOSED LINEAL INSTALLATIONS OF BURIED FACILITIES.
PINK - TEMPORARY SURVEY MARKINGS
PURPLE - SLURRY AND RECLAIMED

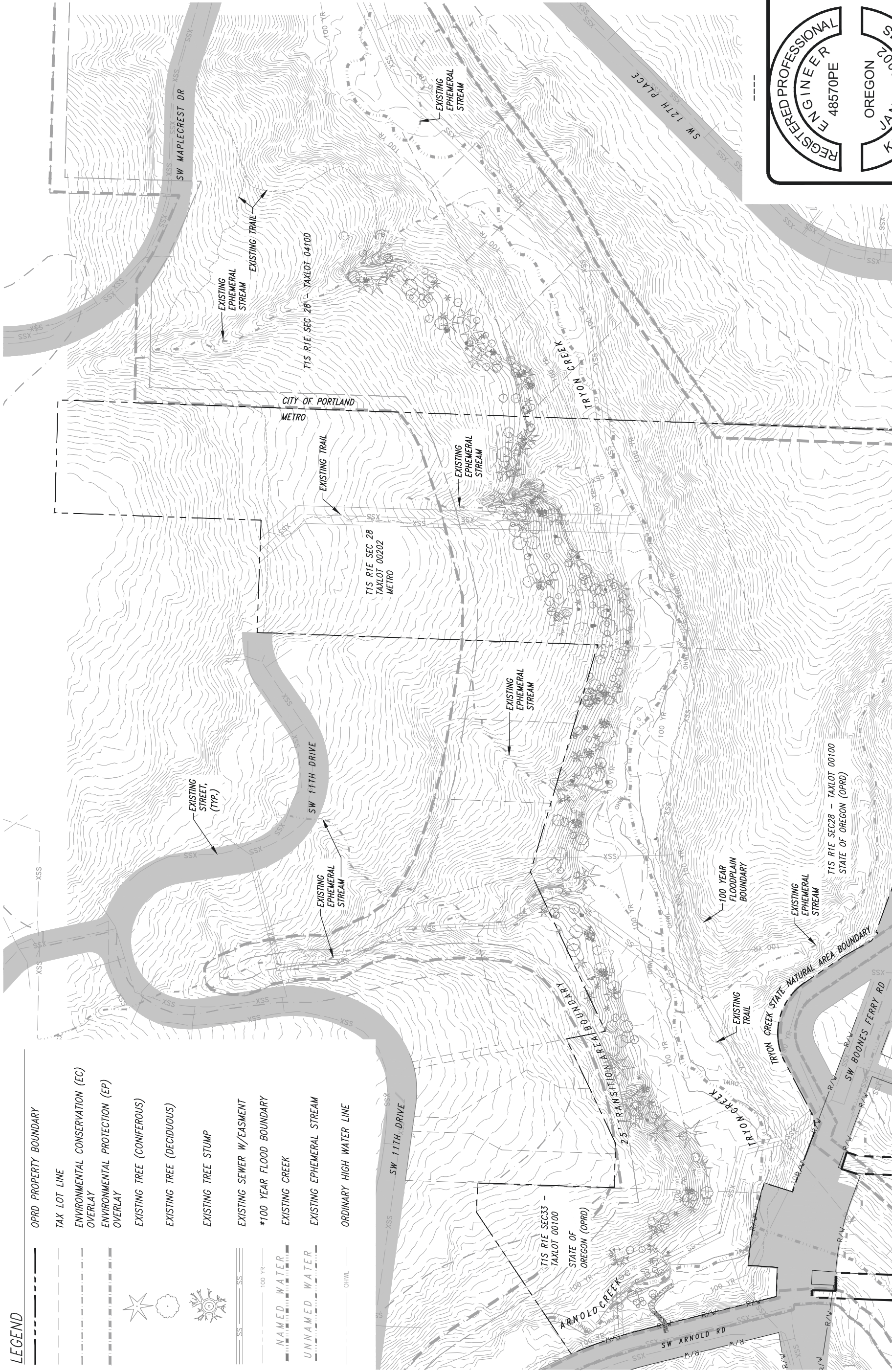
ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0001 THROUGH 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987.



EXPIRES: 12/31/2024

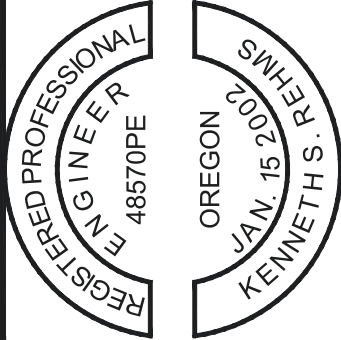
LEGEND

	OPRD PROPERTY BOUNDARY
	TAX LOT LINE
	ENVIRONMENTAL CONSERVATION (EC) OVERLAY
	ENVIRONMENTAL PROTECTION (EP) OVERLAY
	EXISTING TREE (CONIFEROUS)
	EXISTING TREE (DECIDUOUS)
	EXISTING TREE STUMP
	EXISTING SEWER W/EASMENT
	*100 YEAR FLOOD BOUNDARY
	EXISTING CREEK
	EXISTING EPHEMERAL STREAM
	ORDINARY HIGH WATER LINE
	SS
	100 YR
	NAMED WATER
	UNNAMED WATER
	OHWL



NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS



EXPIRES: 12/31/2024

SHEET: 2 OF 37
OPRIS #: 30757
CONTRACT #: NA

EXISTING CONDITIONS SITE PLAN - FULL SITE
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

OREGON PARKS AND RECREATION DEPARTMENT



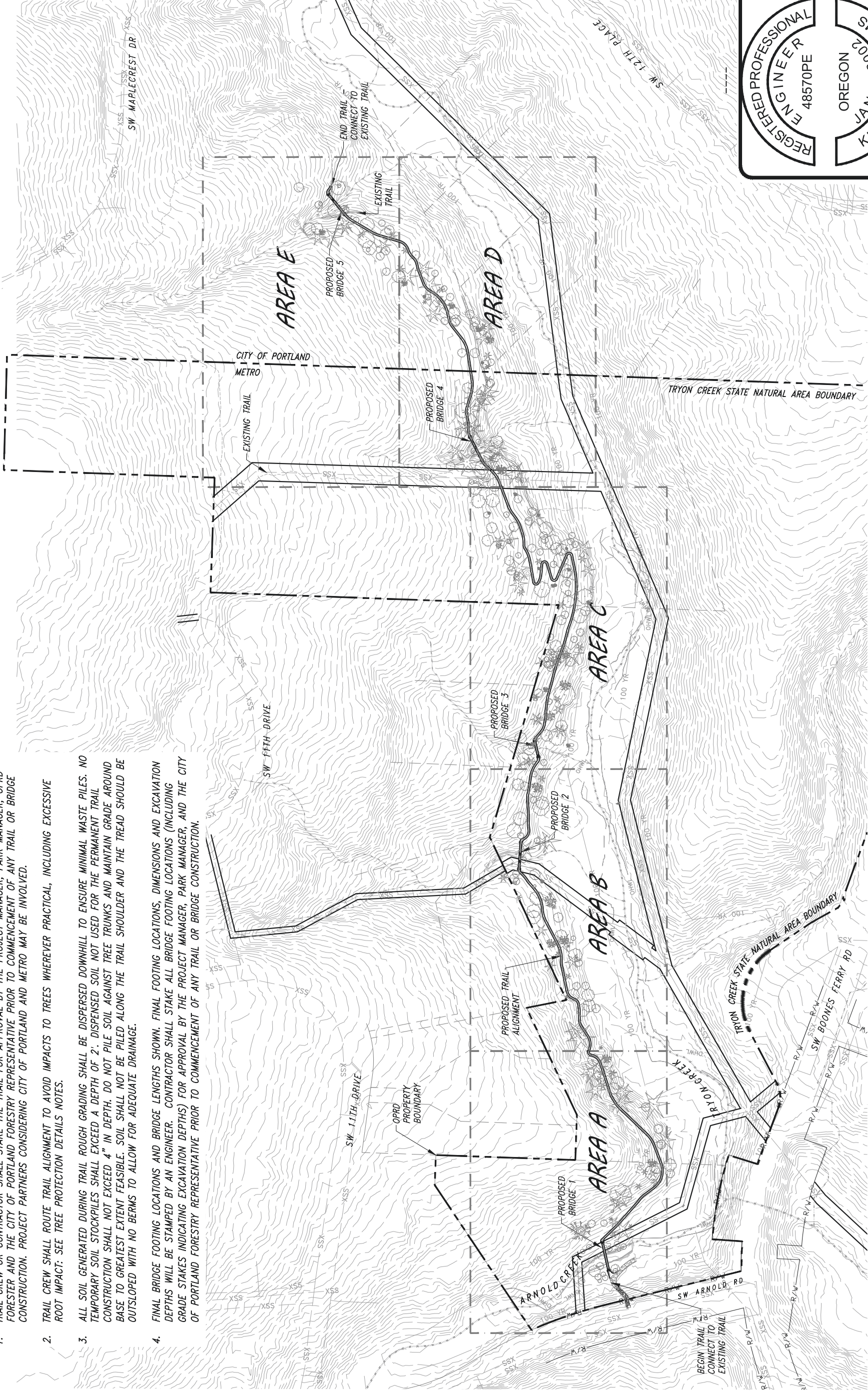
APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.246.1939
pbsusa.com

GENERAL CONSTRUCTION NOTES:

1. TRAIL CREW OR CONTRACTOR SHALL STAKE THE TRAIL FOR APPROVAL BY THE PROJECT MANAGER, PARK MANAGER, OPRD FORESTER AND THE CITY OF PORTLAND FORESTRY REPRESENTATIVE PRIOR TO COMMENCEMENT OF ANY TRAIL OR BRIDGE CONSTRUCTION. PROJECT PARTNERS CONSIDERING CITY OF PORTLAND AND METRO MAY BE INVOLVED.
2. TRAIL CREW SHALL ROUTE TRAIL ALIGNMENT TO AVOID IMPACTS TO TREES WHEREVER PRACTICAL, INCLUDING EXCESSIVE ROOT IMPACT: SEE TREE PROTECTION DETAILS NOTES.
3. ALL SOIL GENERATED DURING TRAIL ROUGH GRADING SHALL BE DISPERSED DOWNHILL TO ENSURE MINIMAL WASTE PILES. NO TEMPORARY SOIL STOCKPILES SHALL EXCEED A DEPTH OF 2'. DISPENSED SOIL NOT USED FOR THE PERMANENT TRAIL CONSTRUCTION SHALL NOT EXCEED 4" IN DEPTH. DO NOT PILE SOIL AGAINST TREE TRUNKS AND MAINTAIN GRADE AROUND BASE TO GREATEST EXTENT FEASIBLE. SOIL SHALL NOT BE PILED ALONG THE TRAIL SHOULDER AND THE TREAD SHOULD BE OUTSLOPED WITH NO BERMS TO ALLOW FOR ADEQUATE DRAINAGE.
4. FINAL BRIDGE FOOTING LOCATIONS AND BRIDGE LENGTHS SHOWN. FINAL FOOTING LOCATIONS, DIMENSIONS AND EXCAVATION DEPTHS WILL BE STAMPED BY AN ENGINEER. CONTRACTOR SHALL STAKE ALL BRIDGE FOOTING LOCATIONS (INCLUDING GRADE STAKES INDICATING EXCAVATION DEPTHS) FOR APPROVAL BY THE PROJECT MANAGER, PARK MANAGER, AND THE CITY OF PORTLAND FORESTRY REPRESENTATIVE PRIOR TO COMMENCEMENT OF ANY TRAIL OR BRIDGE CONSTRUCTION.



REGISTERED PROFESSIONAL
ENGINEER
48570PE

OREGON
JAN. 15 2002
KENNETH S. REHMS



EXPIRES: 12/31/2024



OREGON PARKS AND RECREATION DEPARTMENT

KEY MAP
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023

LEGEND

- OPRD PROPERTY BOUNDARY
- TAX LOT LINE
- EC OVERLAY
- EP OVERLAY
- EXISTING TREE
- EXISTING SEWER W/EASMENT
- *100 YEAR FLOOD BOUNDARY
- TOP OF BANK
- EXISTING CREEK
- EXISTING EPHEMERAL STREAM
- ORDINARY HIGH WATER LINE
- PROPOSED TRAIL ALIGNMENT
- NAMED WATER
- UNNAMED WATER
- OHWL



OREGON PARKS AND RECREATION DEPARTMENT

TRAIL DEVELOPMENT SITE PLAN - FULL SITE

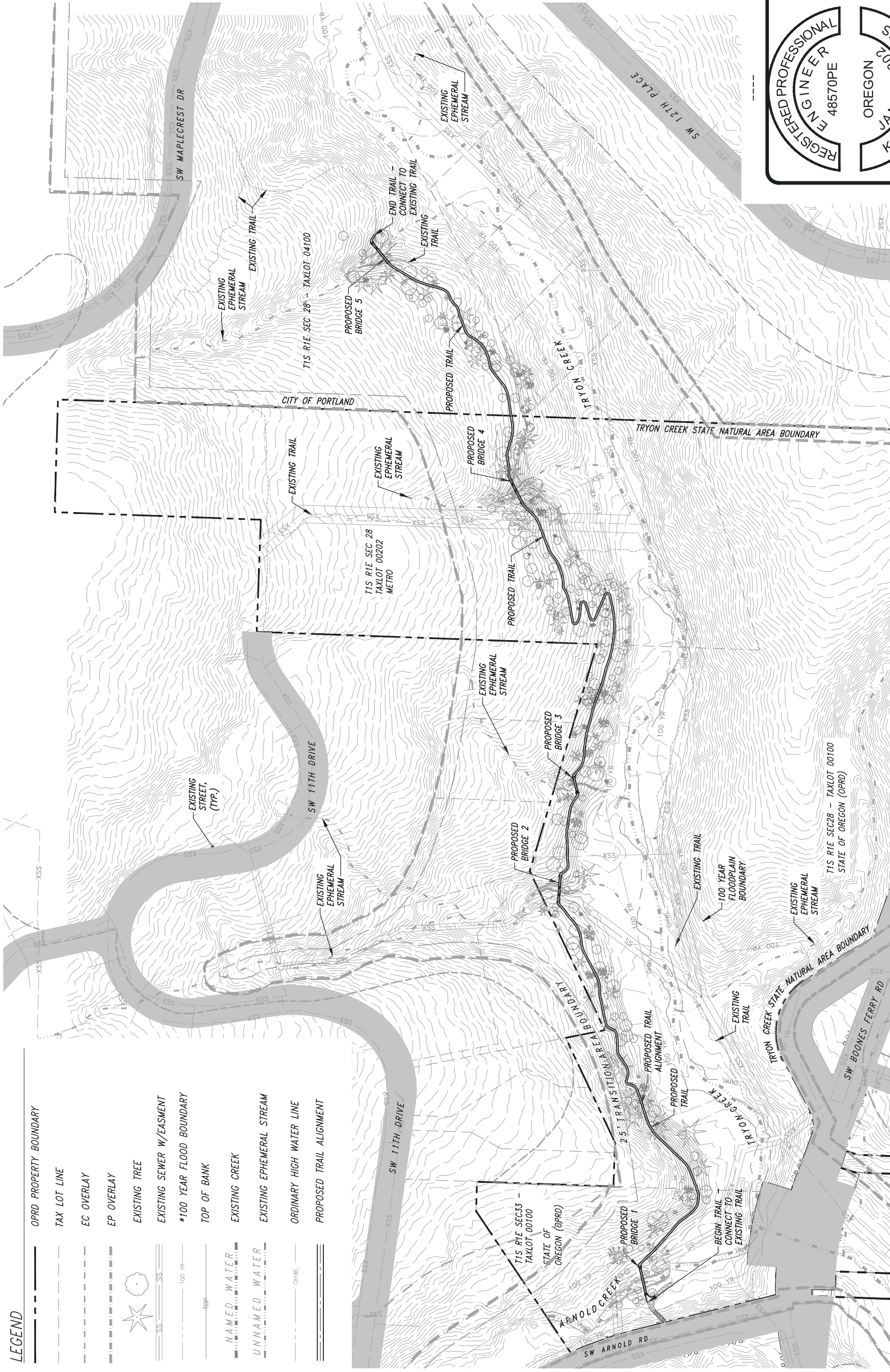
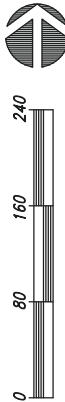
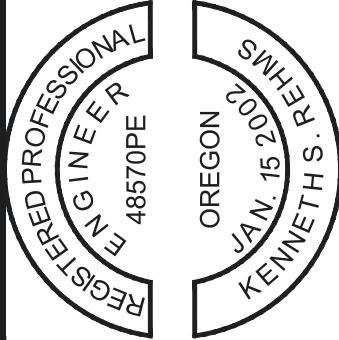
TRION CREEK STATE NATURAL AREA

MARSHALL PARK TRAIL

SHEET: 4 OF 37

OPRIS #: 30757

CONTRACT #: NA



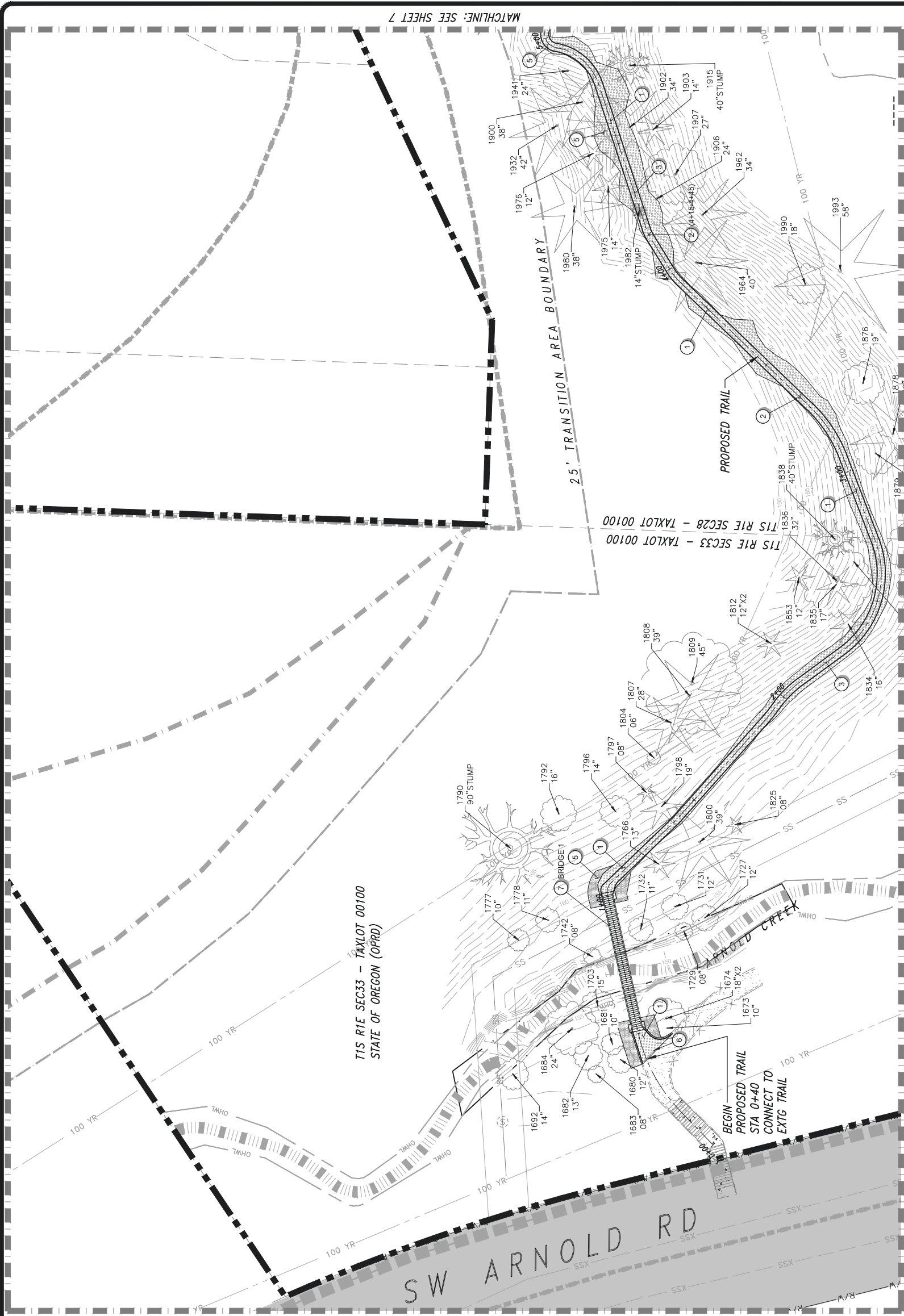
NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRION CREEK CHANNEL IMPROVEMENTS

APPROVED BY	KSR
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



SHEET:	5 OF 37
OPRS #:	30757
CONTRACT #:	NA

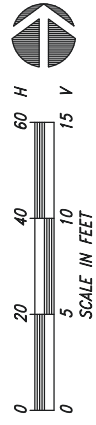


LEGEND

OPRD PROPERTY BOUNDARY	*100 YEAR FLOOD BOUNDARY
TAX LOT LINE	EXISTING CREEK
EC OVERLAY	EXISTING EPHEMERAL STREAM
EP OVERLAY	ORDINARY HIGH WATER LINE
PROPOSED TRAIL CENTER LINE	TOP OF BANK
PROPOSED TRAIL EDGE	EXISTING TREES (TO BE REMOVED)
PROPOSED BRIDGE	EXISTING SEWER W/EASMENT
PERMANENT DISTURBANCE AREA	
TEMPORARY DISTURBANCE AREA	

NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS
 - 1. AREA A **PERMANENT DISTURBANCE = 2,920 SF.
 - 2. AREA A ***TEMPORARY DISTURBANCE = 210 SF.
- ***PERMANENT DISTURBANCE INCLUDES TRAIL IMPACTS AND BRIDGE FOOTINGS.
***TEMPORARY DISTURBANCE INCLUDES WORK AREA AROUND BRIDGES AND ALONG TRAIL.



EXPIRES: 12/31/2024



CONSTRUCTION NOTES

1	CONSTRUCT TYPICAL TRAIL SECTION PER TRAIL DETAILS ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
2	CONSTRUCT TYPICAL ELEVATED TRAIL SECTION AS NECESSARY PER DETAIL ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
3	CONSTRUCT ROLLING DIP AS NECESSARY PER DETAIL ON SHEET 18. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
5	CONSTRUCT ARMORED SLOPE PER DETAIL ON SHEET 17.
7	CONSTRUCT BRIDGE PER BRIDGE PLAN AND DETAIL SHEETS.

TRAIL TYPICAL SECTION NOTES

TRAIL TYPICAL SECTIONS ARE PROVIDED FOR GENERAL CONSTRUCTION GUIDANCE. WHERE POSSIBLE, A FULL BENCH SECTION SHOULD BE CONSTRUCTED. LATERAL AND VERTICAL DEVIATION FROM THE PROPOSED ALIGNMENT IS ALLOWED WITHIN THE ASSOCIATED DESIGN PARAMETERS, INCLUDING MINIMIZING IMPACTS TO TREES AND ROOT STRUCTURES. MAJOR ALIGNMENT ADJUSTMENTS NEED TO BE APPROVED BY THE OPRD PROJECT MANAGER PRIOR TO CONSTRUCTION.

TRAIL PROFILE STA 0+00 - 5+00
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

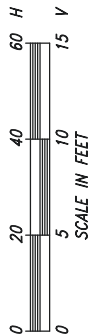
OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DPS	JUNE 2023
DATE	DRAWN BY

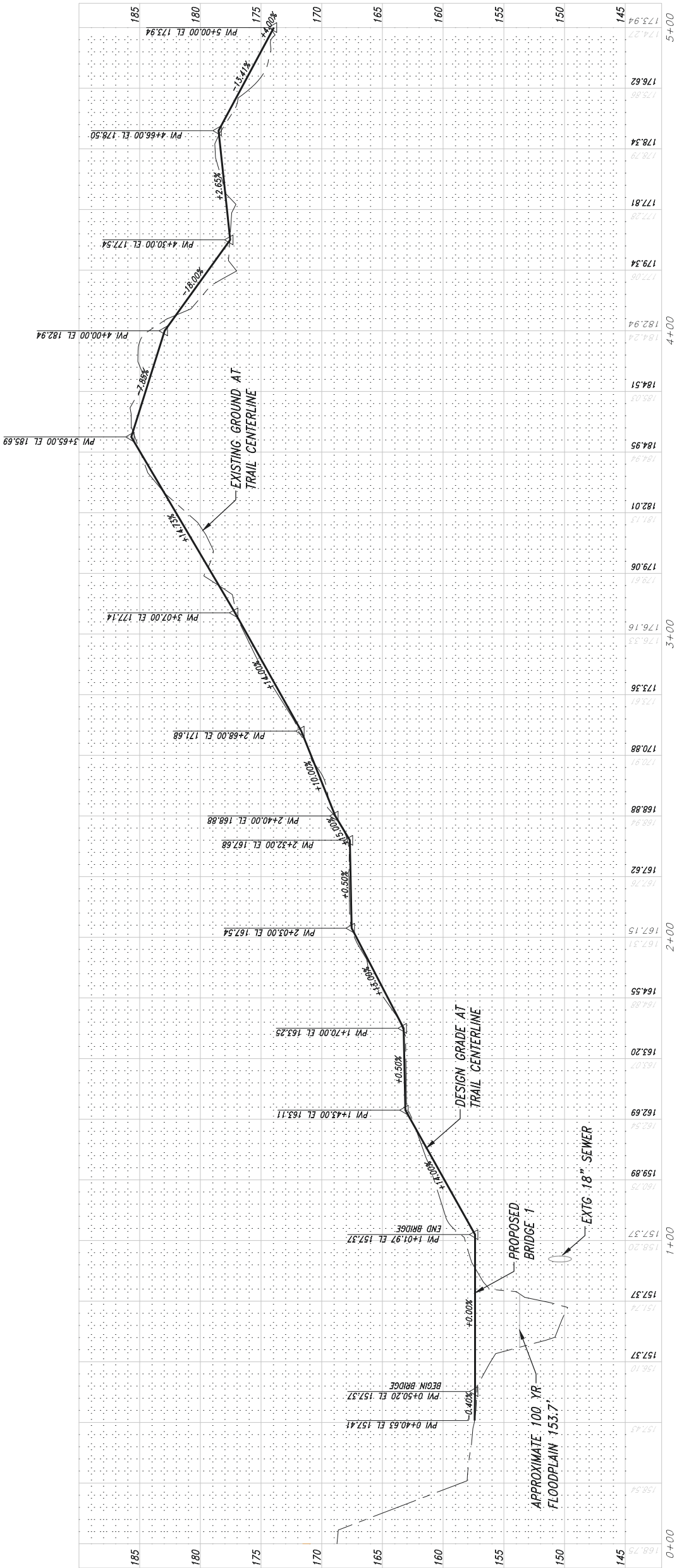
SHEET:	6 OF 37
OPRS #:	30757
CONTRACT #:	NA

EXPIRES: 12/31/2024



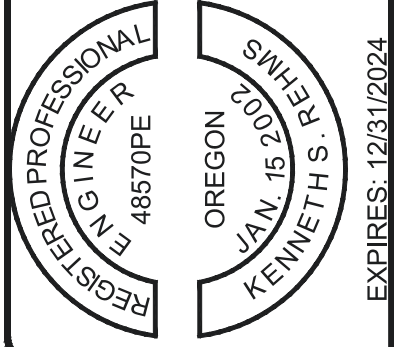
*TRAIL PVI'S SHALL BE SMOOTHED
OUT IN THE FIELD FOR GRADUAL TRANSITIONS

MARSHALL PARK TRAIL PROFILE 0+00 - 5+00 (AREA A)



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

SHEET: 7 OF 37
OPRIS #: 30757
CONTRACT #: NA



TRAIL TYPICAL SECTION NOTES

	OPRD PROPERTY BOUNDARY		*100 YEAR FLOOD BOUNDARY
	TAX LOT LINE		EXISTING CREEK
	EC OVERLAY		EXISTING EPHEMERAL STREAM
	EP OVERLAY		ORDINARY HIGH WATER LINE
	PROPOSED TRAIL CENTER LINE		TOP OF BANK
	PROPOSED TRAIL EDGE		EXISTING TREES (TO BE REMOVED)
	PROPOSED BRIDGE		EXISTING SEWER W/EASMENT
	PERMANENT DISTURBANCE AREA		
	TEMPORARY DISTURBANCE AREA		

LEGEND

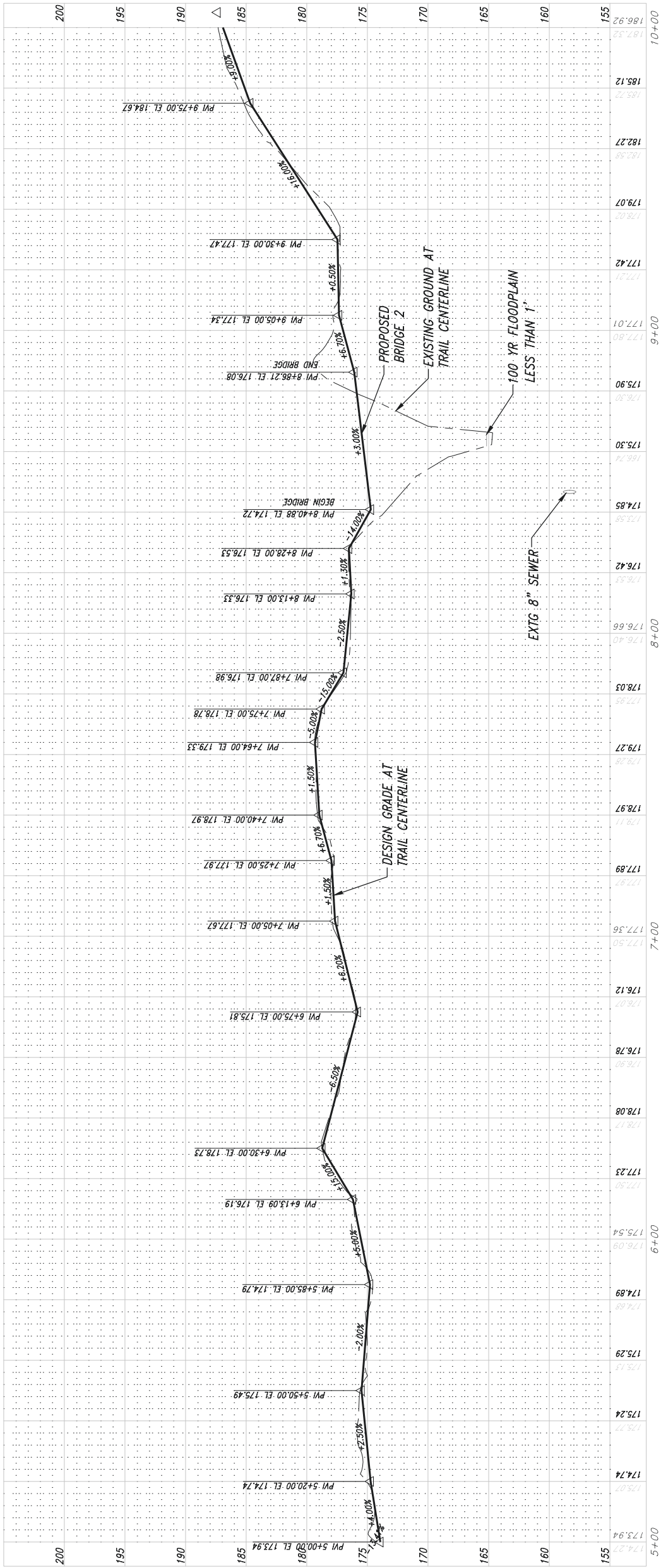
TRAIL PROFILE STA 5+00 - 10+00
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

OREGON PARKS AND RECREATION DEPARTMENT

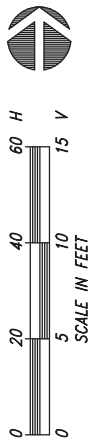


APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023

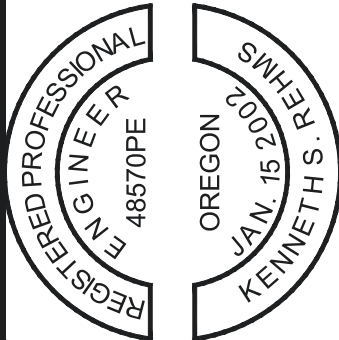
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com



***TRAIL PVI'S SHALL BE SMOOTHED OUT IN THE FIELD FOR GRADUAL TRANSITIONS**



MARSHALL PARK TRAIL PROFILE 5+00 - 10+00 (AREA B)



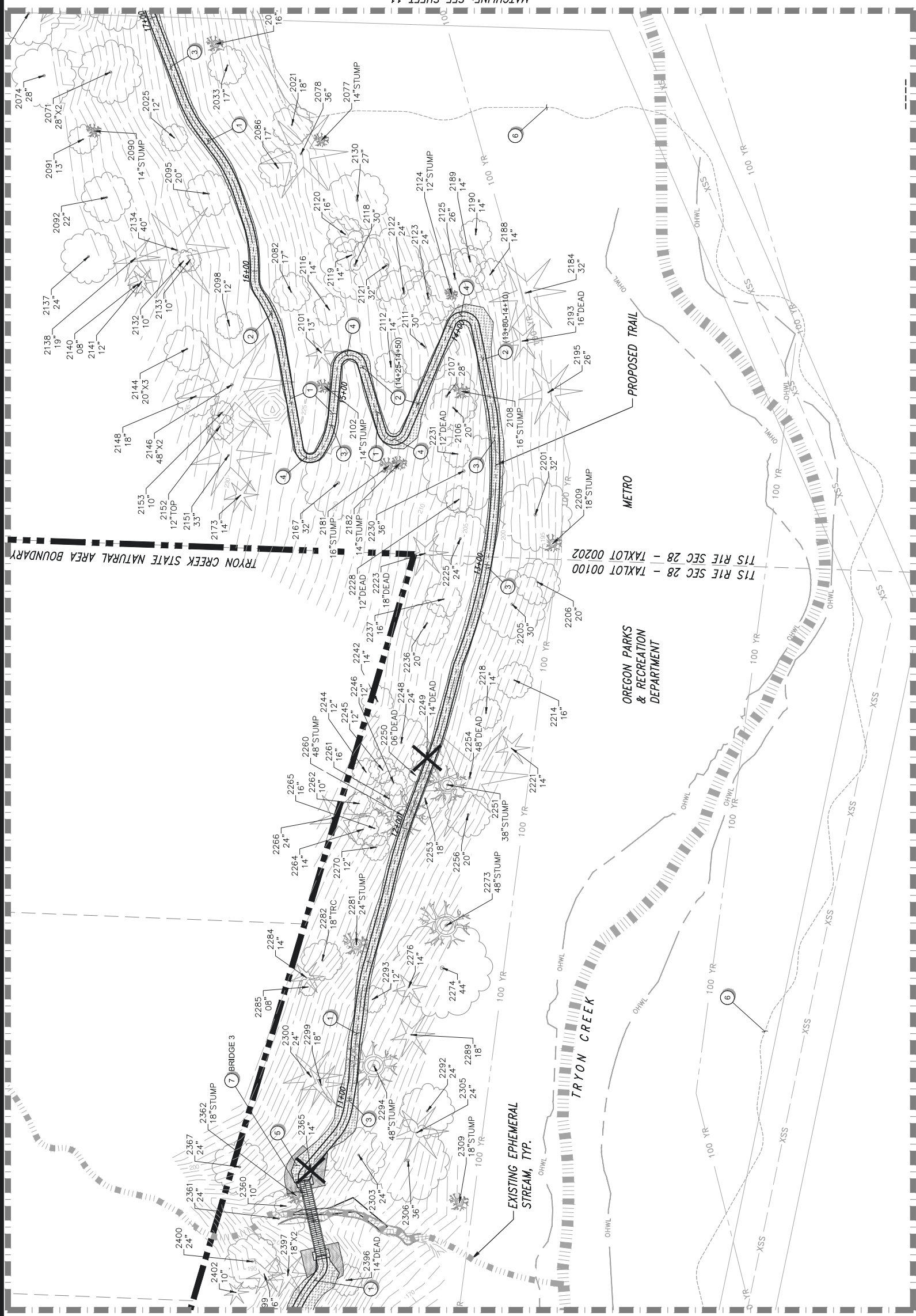
EXPIRES: 12/31/2024

APPROVED BY	KSR	CHECKED BY	DPS	DESIGNED BY	DPS	DRAWN BY	DPS	DATE	JUNE 2023
-------------	-----	------------	-----	-------------	-----	----------	-----	------	-----------



OREGON PARKS AND RECREATION DEPARTMENT
TRAIL DEVELOPMENT SITE PLAN - AREA C
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

SHEET:	9 OF 37
OPRS #:	30757
CONTRACT #:	NA



REGISTERED PROFESSIONAL
ENGINEER
48570PE
OREGON
JAN. 15 2002
KENNETH S. REHMS
EXPIRES: 12/31/2024



- NOTES:
- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS
 - 1. AREA C **PERMANENT DISTURBANCE = 3,200 SF.
 - 2. AREA C ***TEMPORARY DISTURBANCE = 180 SF.
 - **PERMANENT DISTURBANCE INCLUDES TRAIL IMPACTS AND BRIDGE FOOTINGS.
 - ***TEMPORARY DISTURBANCE INCLUDES WORK AREA AROUND BRIDGES AND ALONG TRAIL.

CONSTRUCTION NOTES	
1	CONSTRUCT TYPICAL TRAIL SECTION PER TRAIL DETAILS ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
2	CONSTRUCT TYPICAL ELEVATED TRAIL SECTION AS NECESSARY PER DETAIL ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
3	CONSTRUCT ROLLING DIP AS NECESSARY PER DETAIL ON SHEET 18. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
4	CONSTRUCT CLIMBING TURN PER DETAIL ON SHEET 18. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
5	CONSTRUCT ARMORED SLOPE PER DETAIL ON SHEET 17.
6	OBLITERATE AND RESTORE EXISTING TRAIL PER DETAILS ON SHEET 26.
7	CONSTRUCT BRIDGE PER BRIDGE PLAN AND DETAIL SHEETS.

TRAIL TYPICAL SECTION NOTES
TRAIL TYPICAL SECTIONS ARE PROVIDED FOR GENERAL CONSTRUCTION GUIDANCE. WHERE POSSIBLE, A FULL BENCH SECTION SHOULD BE CONSTRUCTED. LATERAL AND VERTICAL DEVIATION FROM THE PROPOSED ALIGNMENT IS ALLOWED WITHIN THE ASSOCIATED DESIGN PARAMETERS, INCLUDING MINIMIZING IMPACTS TO TREES AND ROOT STRUCTURES. MAJOR ALIGNMENT AND ROOT STRUCTURES NEED TO BE APPROVED BY THE OPRD PROJECT MANAGER PRIOR TO CONSTRUCTION.

LEGEND	
OPRD PROPERTY BOUNDARY	*100 YEAR FLOOD BOUNDARY
TAX LOT LINE	EXISTING CREEK
EC OVERLAY	EXISTING EPHEMERAL STREAM
EP OVERLAY	ORDINARY HIGH WATER LINE
PROPOSED TRAIL CENTER LINE	TOP OF BANK
PROPOSED TRAIL EDGE	EXISTING TREES (TO BE REMOVED)
PROPOSED BRIDGE	EXISTING SEWER W/EASEMENT
PERMANENT DISTURBANCE AREA	
TEMPORARY DISTURBANCE AREA	

REGISTERED PROFESSIONAL ENGINEER
48570PE
KENNETH S. REHMS
JAN. 15 2002
OREGON

EXPIRES: 12/31/2024

SHEET: 10 OF 37

OPRS #: 30757

CONTRACT #: NA

TRAIL PROFILE STA 10+00 - 15+60

MARSHALL PARK TRAIL

TRYON CREEK STATE NATURAL AREA

OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY

CHECKED BY KSR

DESIGNED BY DPS

DPS JUNE 2023

DRAWN BY

DATE



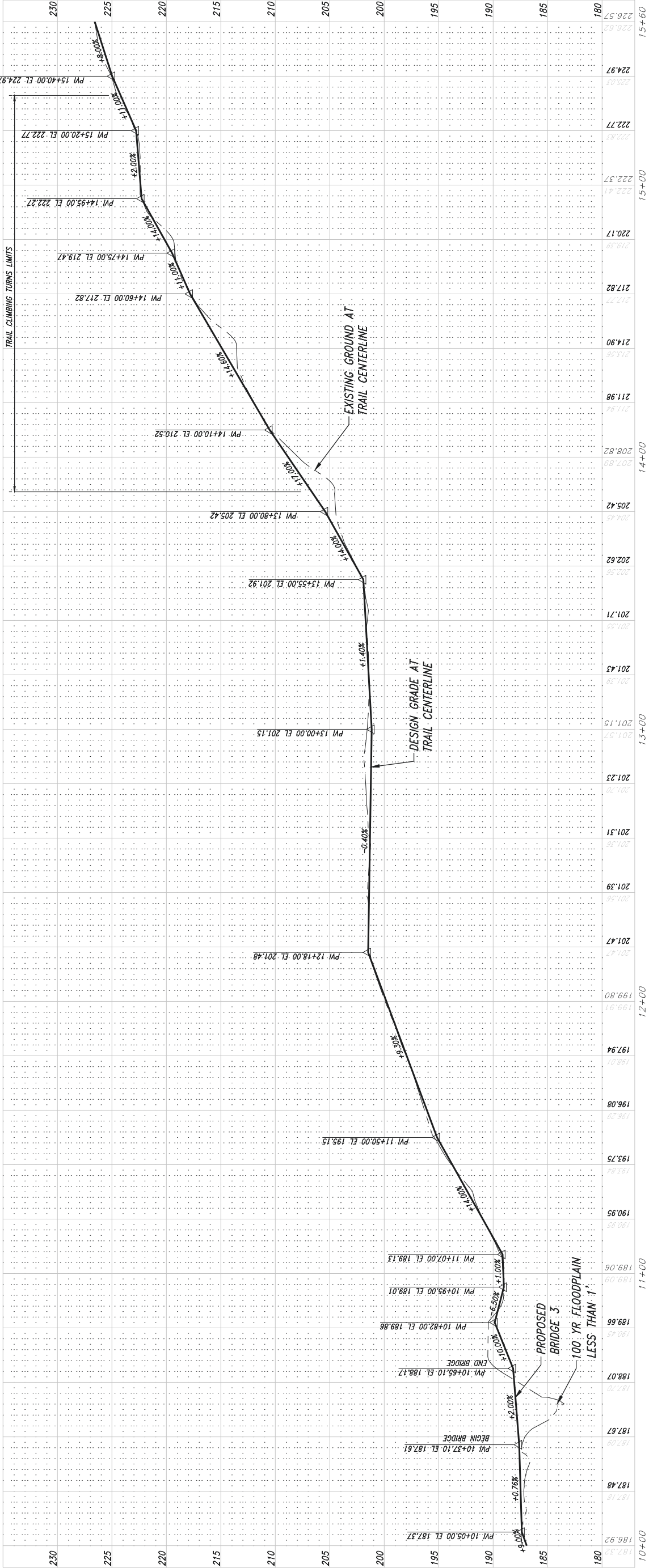
PBS Engineering and Environmental Inc.

4412 S Corbett Avenue

Portland, OR 97239

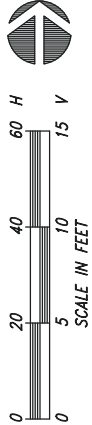
503.248.1939

pbsusa.com



MARSHALL PARK TRAIL PROFILE 10+00 - 15+60 (PORTION OF AREA C - CONTINUES ON NEXT PROFILE, SHEET 12)

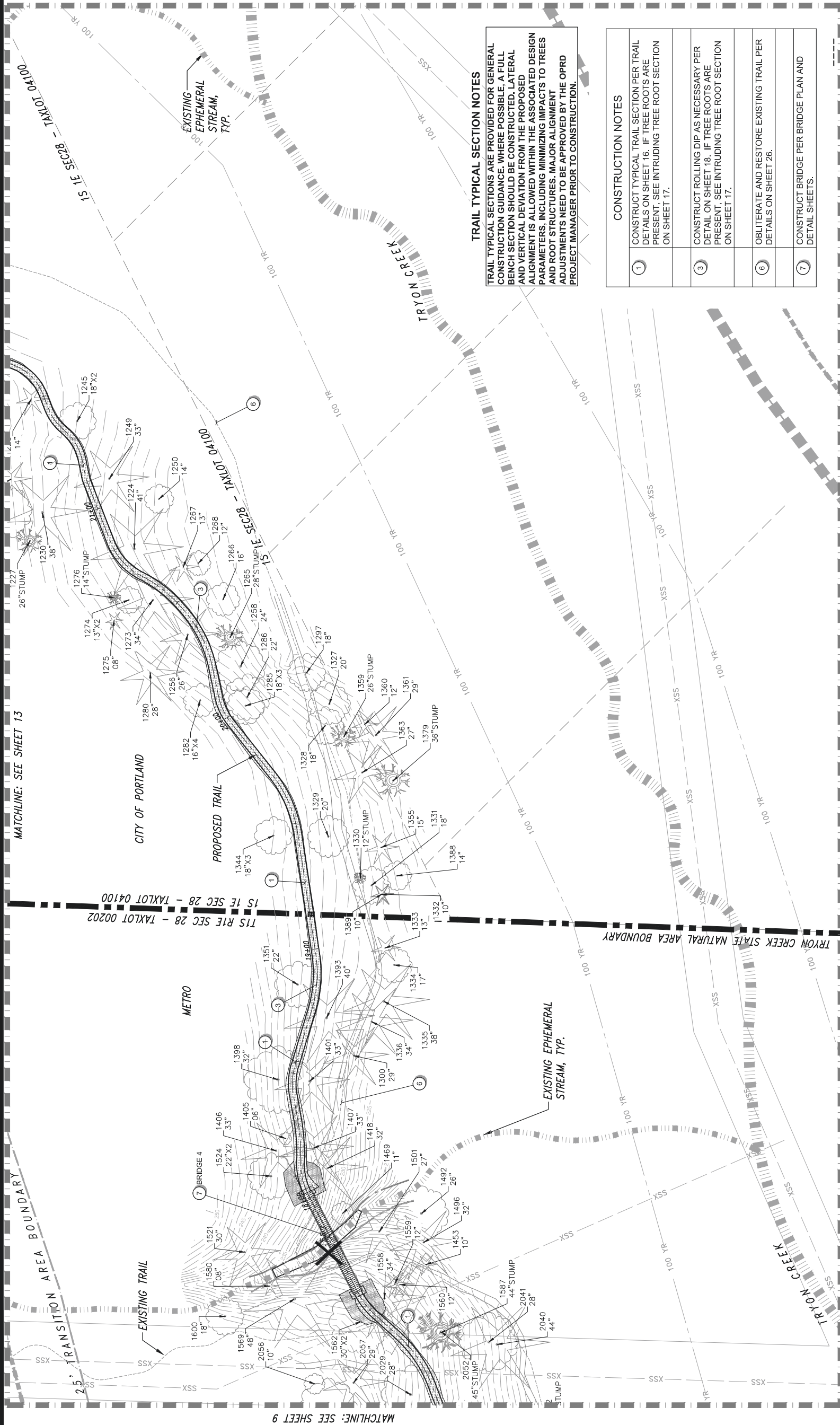
*TRAIL PVI'S SHALL BE SMOOTHED
OUT IN THE FIELD FOR GRADUAL TRANSITIONS



APPROVED BY	KSR
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



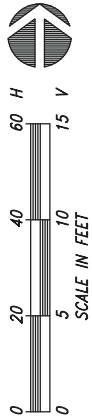
SHEET:	11 OF 37
OPRS #:	30757
CONTRACT #:	NA



TRAIL TYPICAL SECTION NOTES

TRAIL TYPICAL SECTIONS ARE PROVIDED FOR GENERAL CONSTRUCTION GUIDANCE. WHERE POSSIBLE, A FULL BENCH SECTION SHOULD BE CONSTRUCTED. LATERAL AND VERTICAL DEVIATION FROM THE PROPOSED ALIGNMENT IS ALLOWED WITHIN THE ASSOCIATED DESIGN PARAMETERS, INCLUDING MINIMIZING IMPACTS TO TREES AND ROOT STRUCTURES. MAJOR ALIGNMENT ADJUSTMENTS NEED TO BE APPROVED BY THE OPRD PROJECT MANAGER PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES	
1	CONSTRUCT TYPICAL TRAIL SECTION PER TRAIL DETAILS ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
3	CONSTRUCT ROLLING DIP AS NECESSARY PER DETAIL ON SHEET 18. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
6	OBLITERATE AND RESTORE EXISTING TRAIL PER DETAILS ON SHEET 26.
7	CONSTRUCT BRIDGE PER BRIDGE PLAN AND DETAIL SHEETS.



EXPIRES: 12/31/2024

- NOTES:
- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS
 - 1. AREA D **PERMANENT DISTURBANCE = 1,710 SF.
 - 2. AREA D ***TEMPORARY DISTURBANCE = 250 SF.
 - **PERMANENT DISTURBANCE INCLUDES TRAIL IMPACTS AND BRIDGE FOOTINGS.
 - ***TEMPORARY DISTURBANCE INCLUDES WORK AREA AROUND BRIDGES AND ALONG TRAIL.

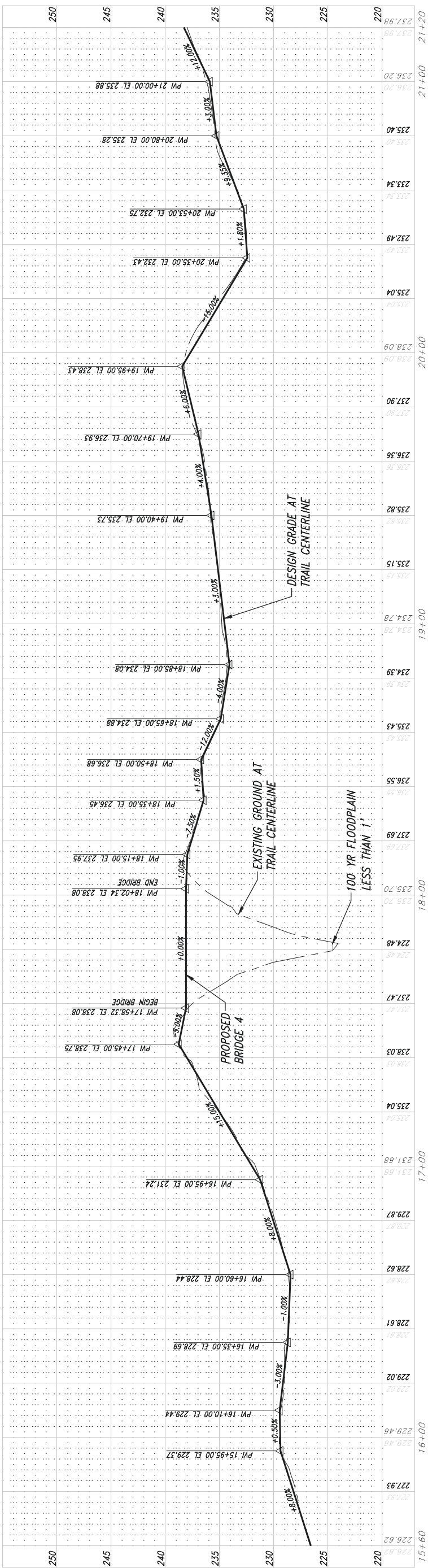
- LEGEND
- OPRD PROPERTY BOUNDARY
 - TAX LOT LINE
 - EC OVERLAY
 - EP OVERLAY
 - PROPOSED TRAIL CENTER LINE
 - PROPOSED TRAIL EDGE
 - PROPOSED BRIDGE
 - PERMANENT DISTURBANCE AREA
 - TEMPORARY DISTURBANCE AREA
 - *100 YEAR FLOOD BOUNDARY
 - EXISTING CREEK
 - EXISTING EPHEMERAL STREAM
 - ORDINARY HIGH WATER LINE
 - TOP OF BANK
 - EXISTING TREES (TO BE REMOVED)
 - EXISTING SEWER W/EASEMENT



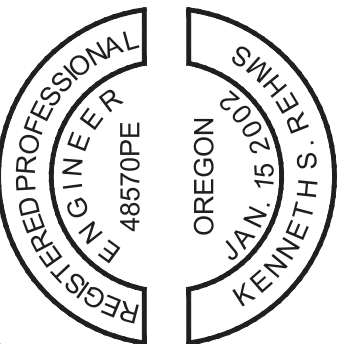
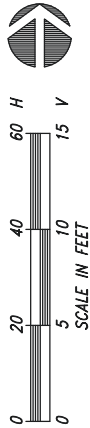
APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

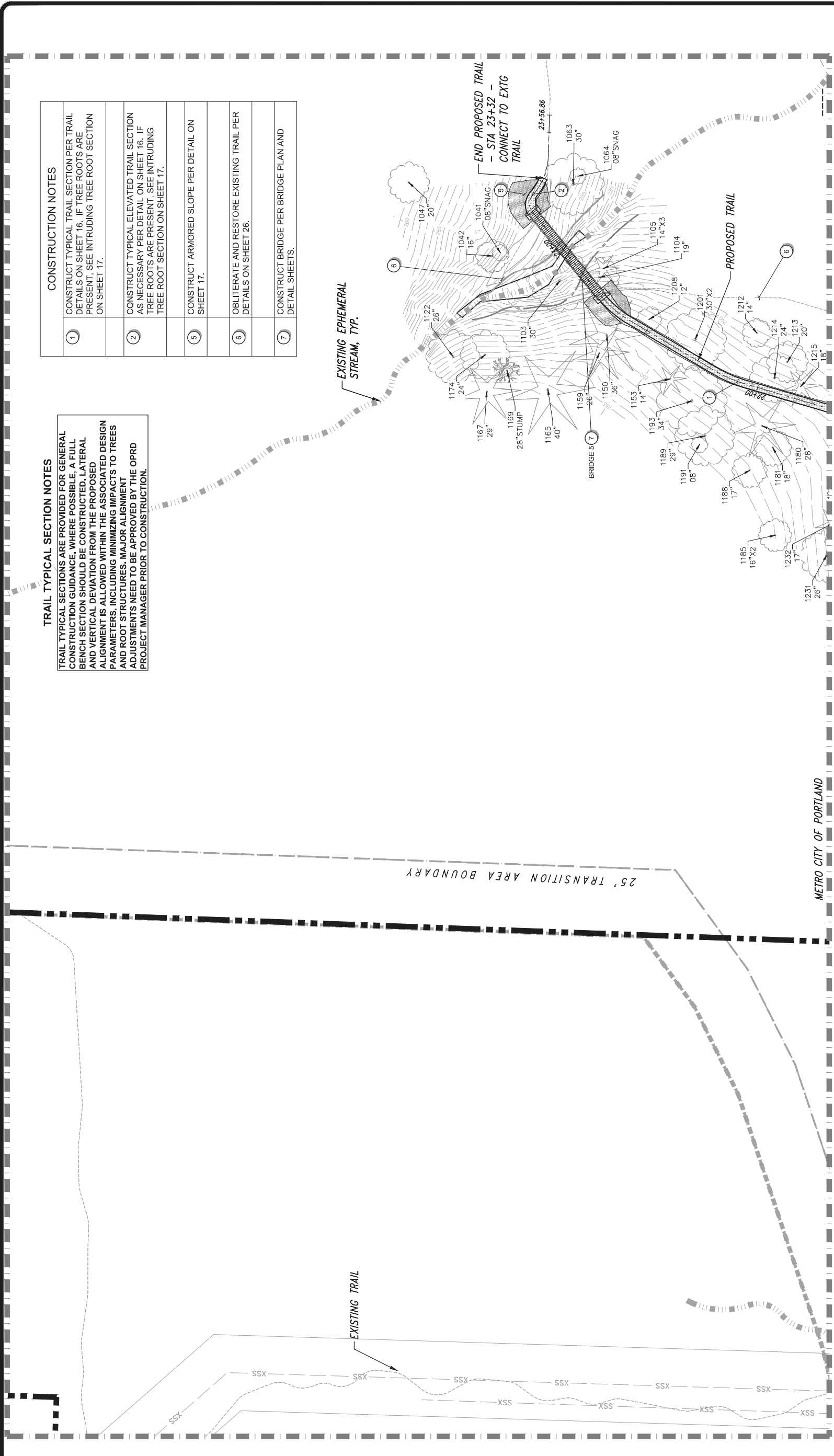


*TRAIL PVI'S SHALL BE SMOOTHED
OUT IN THE FIELD FOR GRADUAL TRANSITIONS



EXPIRES: 12/31/2024

MARSHALL PARK TRAIL PROFILE 15+60 - 21+20 (AREA C CONT'D - AREA D)



TRAIL TYPICAL SECTION NOTES

TRAIL TYPICAL SECTIONS ARE PROVIDED FOR GENERAL CONSTRUCTION GUIDANCE. WHERE POSSIBLE, A FULL BENCH SECTION SHOULD BE CONSTRUCTED. LATERAL AND VERTICAL DEVIATION FROM THE PROPOSED ALIGNMENT IS ALLOWED WITHIN THE ASSOCIATED DESIGN PARAMETERS, INCLUDING MINIMIZING IMPACTS TO TREES AND ROOT STRUCTURES. MAJOR ALIGNMENT ADJUSTMENTS NEED TO BE APPROVED BY THE OPRD PROJECT MANAGER PRIOR TO CONSTRUCTION.

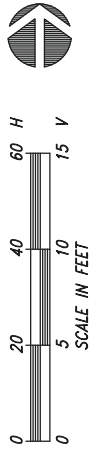
CONSTRUCTION NOTES	
1	CONSTRUCT TYPICAL TRAIL SECTION PER TRAIL DETAILS ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
2	CONSTRUCT TYPICAL ELEVATED TRAIL SECTION AS NECESSARY PER DETAIL ON SHEET 16. IF TREE ROOTS ARE PRESENT, SEE INTRUDING TREE ROOT SECTION ON SHEET 17.
5	CONSTRUCT ARMORED SLOPE PER DETAIL ON SHEET 17.
6	OBLITERATE AND RESTORE EXISTING TRAIL PER DETAILS ON SHEET 26.
7	CONSTRUCT BRIDGE PER BRIDGE PLAN AND DETAIL SHEETS.

LEGEND

OPRD PROPERTY BOUNDARY		*100 YEAR FLOOD BOUNDARY	
TAX LOT LINE	---	NAMED WATER	=====
EC OVERLAY	- - - - -	EXISTING CREEK	=====
EP OVERLAY	- . - . -	EXISTING EPHEMERAL STREAM	=====
PROPOSED TRAIL CENTER LINE	---	ORDINARY HIGH WATER LINE	-----
PROPOSED TRAIL EDGE	---	TOP OF BANK	-----
PROPOSED BRIDGE	=====	EXISTING TREES (TO BE REMOVED)	✕
PERMANENT DISTURBANCE AREA	=====	EXISTING SEWER W/EASEMENT	=====
TEMPORARY DISTURBANCE AREA	=====		

NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINENWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS
- 1. AREA E **PERMANENT DISTURBANCE = 460 SF.
- 2. AREA E ***TEMPORARY DISTURBANCE = 300 SF.
- **PERMANENT DISTURBANCE INCLUDES TRAIL IMPACTS AND BRIDGE FOOTINGS.
- ***TEMPORARY DISTURBANCE INCLUDES WORK AREA AROUND BRIDGES AND ALONG TRAIL.



EXPIRES: 12/31/2024

SHEET: 13 OF 37	CONTRACT #:
OPRS #:	NA
30757	

TRAIL DEVELOPMENT SITE PLAN - AREA E
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

SHEET: 14 OF 37	CONTRACT #:
OPRS #: 30757	NA

TRAIL PROFILE STA 21+20 - 23+20
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

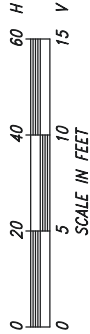
OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

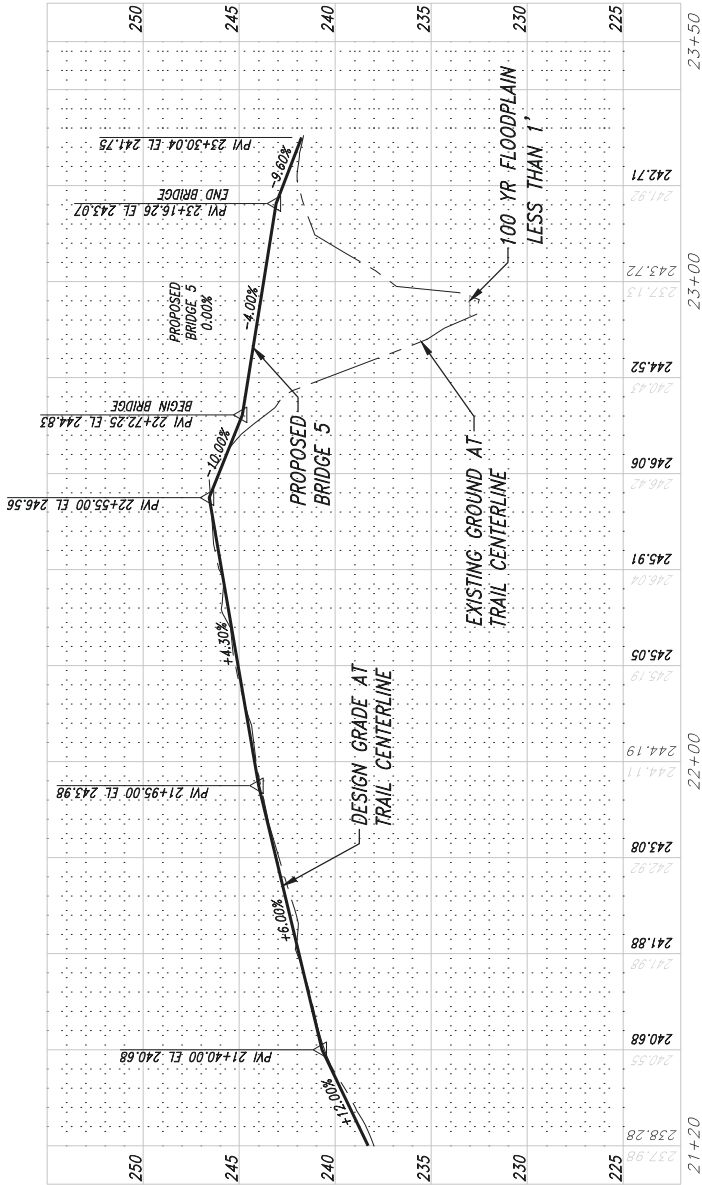




EXPIRES: 12/31/2024

MARSHALL PARK TRAIL PROFILE 21+20 - 23+50 (AREA E)

*TRAIL PVI'S SHALL BE SMOOTHED
OUT IN THE FIELD FOR GRADUAL TRANSITIONS



Tree Data			
Tree No.	Species	Tree Condition	
1042	ACEMAC	good	
1047	ACEMAC	good	
1063	ACEMAC	fair	
1103	ACEMAC	fair	
1104	THUPLI	fair	
1105	ACEMAC	poor	
1122	ACEMAC	fair	
1150	THUPLI	good	
1153	THUPLI	good	
1159	THUPLI	good	
1165	THUPLI	fair	
1167	PSEMAC	fair	
1174	ACEMAC	fair	
1181	ACEMAC	fair	
1181	THUPLI	good	
1189	ACEMAC	good	
1193	THUPLI	fair	
1208	ACEMAC	poor	
1212	ACEMAC	fair	
1213	ACEMAC	fair	
1214	ACEMAC	fair	
1215	THUPLI	poor	
1220	THUPLI	good	
1224	PSEMAC	good	
1230	PSEMAC	fair	
1231	ACEMAC	fair	
1232	THUPLI	good	
1245	ACEMAC	fair	
1249	PSEMAC	fair	
1250	ACEMAC	fair	
1256	PSEMAC	good	
1258	ACEMAC	fair	
1266	ACEMAC	poor	
1267	THUPLI	good	
1268	ACEMAC	fair	
1273	PSEMAC	fair	
1274	ACEMAC	poor	
1275	THUPLI	poor	
1280	PSEMAC	good	
1282	ACEMAC	fair	
1285	ACEMAC	poor	
1286	ACEMAC	poor	
1297	THUPLI	good	
1300	PINSTO	fair	
1328	ACEMAC	fair	
1329	ACEMAC	fair	
1331	ACEMAC	good	
1333	ACEMAC	good	
1334	THUPLI	poor	
1335	PSEMAC	fair	
1336	PSEMAC	fair	
1344	ACEMAC	fair	
1351	ACEMAC	good	
1355	THUPLI	good	
1360	THUPLI	dead	
1361	THUPLI	fair	
1363	PSEMAC	dead	
1388	ACEMAC	fair	
1393	PSEMAC	fair	
1398	ACEMAC	good	
1401	THUPLI	good	
1405	ACEMAC	poor	
1406	PSEMAC	good	
1407	PSEMAC	fair	
1418	PSEMAC	good	
1453	THUPLI	fair	
1456	PSEMAC	good	
1469	ACEMAC	fair	
1492	ACEMAC	good	
1501	THUPLI	poor	
1507	ACEMAC	fair	
1521	THUPLI	fair	
1524	ACEMAC	poor	
1558	THUPLI	fair	

Tree Data			
Tree No.	Species	Tree Condition	
1559	THUPLI	fair	
1560	THUPLI	fair	
1562	ACEMAC	poor	
1569	PSEMAC	poor	
1580	PSEMAC	poor	
1600	ACEMAC	good	
1618	ALNRUB	poor	
1673	ACEMAC	poor	
1674	ACEMAC	good	
1680	ALNRUB	poor	
1681	ALNRUB	poor	
1683	THUPLI	good	
1684	ALNRUB	fair	
1692	ALNRUB	fair	
1703	ALNRUB	fair	
1727	ALNRUB	dead	
1729	ALNRUB	poor	
1731	ALNRUB	fair	
1732	ALNRUB	fair	
1742	ALNRUB	poor	
1766	THUPLI	fair	
1771	ALNRUB	fair	
1778	ALNRUB	poor	
1792	ACEMAC	poor	
1796	ACEMAC	poor	
1797	THUPLI	poor	
1798	THUPLI	fair	
1800	THUPLI	fair	
1804	ACEMAC	fair	
1807	TSUHET	fair	
1808	THUPLI	poor	
1808	ACEMAC	fair	
181	ALNRUB	poor	
1812	THUPLI	poor	
1825	THUPLI	fair	
1834	TSUHET	fair	
1835	ACEMAC	fair	
1835	THUPLI	fair	
1837	ACEMAC	fair	
1841	THUPLI	poor	
1844	ACEMAC	poor	
1853	PSEMAC	dead	
1876	ALNRUB	poor	
1878	PSEMAC	fair	
1879	ACEMAC	poor	
1900	THUPLI	fair	
1902	THUPLI	fair	
1903	THUPLI	poor	
1906	TSUHET	fair	
1907	ACEMAC	fair	
1932	PSEMAC	good	
1941	ACEMAC	fair	
1947	THUPLI	fair	
1954	ACEMAC	fair	
1955	THUPLI	fair	
1956	ACEMAC	poor	
1962	PSEMAC	poor	
1964	THUPLI	fair	
1975	PSEMAC	fair	
1976	TSUHET	good	
1980	PSEMAC	fair	
1990	ACEMAC	fair	
1993	THUPLI	fair	
2021	ALNRHO	dead	
2025	ACEMAC	good	
2029	ACEMAC	good	
2033	ACEMAC	poor	
2040	THUPLI	fair	
2041	ACEMAC	fair	
2056	ACEMAC	poor	
2057	THUPLI	poor	
2058	ACEMAC	good	
2071	ACEMAC	fair	
2074	ACEMAC	good	
2078	THUPLI	poor	

Tree Data			
Tree No.	Species	Tree Condition	
2082	THUPLI	good	
2086	ACEMAC	fair	
2091	ACEMAC	fair	
2092	ACEMAC	fair	
2095	ACEMAC	good	
2098	ACEMAC	poor	
2101	PSEMAC	poor	
2107	ACEMAC	fair	
2111	ACEMAC	good	
2118	ACEMAC	good	
2119	ACEMAC	dead	
2120	ACEMAC	fair	
2121	PSEMAC	fair	
2122	THUPLI	fair	
2123	ACEMAC	poor	
2130	ACEMAC	good	
2132	PSEMAC	fair	
2133	PSEMAC	fair	
2134	THUPLI	good	
2137	ACEMAC	fair	
2138	PSEMAC	fair	
2140	ACEMAC	poor	
2141	THUPLI	fair	
2144	ACEGRA	poor	
2146	PSEMAC	fair	
2148	ACEMAC	fair	
2150	PSEMAC	good	
2152	ACEMAC	fair	
2153	ACEMAC	dead	
2166	ACEMAC	good	
2173	THUPLI	good	
2184	THUPLI	poor	
2185	ACEMAC	good	
2188	ACEMAC	good	
2190	ACEMAC	fair	
2198	THUPLI	poor	
2201	ACEMAC	fair	
2205	ACEMAC	fair	
2206	ACEMAC	good	
22106	ACEMAC	good	
2214	ACEMAC	good	
2216	ACEMAC	poor	
2218	ACEMAC	fair	
2221	THUPLI	poor	
2225	ACEMAC	good	
2230	ACEMAC	good	
2236	ACEMAC	fair	
2237	ACEMAC	good	
2242	ACEMAC	fair	
2244	ACEMAC	poor	
2245	ACEMAC	poor	
2246	ACEMAC	poor	
2248	ACEMAC	fair	
2253	ACEMAC	poor	
2256	ACEMAC	fair	
2261	ACEMAC	fair	
2262	ACEMAC	poor	
2264	ACEMAC	poor	
2265	ACEMAC	fair	
2266	THUPLI	fair	
2270	ACEMAC	poor	
2276	THUPLI	poor	
2282	THUPLI	poor	
2284	THUPLI	good	
2285	THUPLI	fair	
2289	THUPLI	poor	
2292	ACEMAC	poor	
2293	ACEMAC	poor	
2299	THUPLI	fair	
2300	THUPLI	fair	
2303	ACEMAC	poor	
2305	THUPLI	fair	
2306	ACEMAC	poor	
2360	ACEMAC	poor	
2361	ACEMAC	poor	

Tree Data			
Tree No.	Species	Tree Condition	
2365	THUPLI	poor	
2367	ACEMAC	fair	
2396	ALNRUB	dead	
2397	THUPLI	fair	
2412	ACEMAC	poor	
2418	THUPLI	fair	
2427	ACEMAC	poor	
2436	ACEMAC	poor	
2438	ACEMAC	fair	
2444	THUPLI	fair	
2453	ACEMAC	poor	
2456	ACEMAC	fair	
2457	ACEMAC	poor	
2464	ACEMAC	poor	
2465	PSEMAC	dead	
2467	THUPLI	fair	
2531	THUPLI	fair	
2541	ALNRUB	dead	
2545	ALNRUB	poor	
2549	ACEMAC	poor	
2550	PSEMAC	good	
2554	ACEMAC	poor	
2555	ACEMAC	poor	
2562	ACEMAC	dead	
2564	ACEMAC	poor	
2565	ACEMAC	poor	
2568	THUPLI	good	
2570	ACEMAC	poor	
2570	ALNRUB	poor	
2580	ACEMAC	poor	
2581	ACEMAC	poor	
2585	PSEMAC	dead	
2588	ACEMAC	poor	
2593	THUPLI	fair	
2594	ACEMAC	fair	
2599	PSEMAC	poor	
2611	THUPLI	fair	
2613	PSEMAC	dead	
2615	ACEMAC	poor	
2623	ALNRUB	poor	
2628	TSUHET	fair	
2641	ALNRUB	poor	
2648	TSUHET	fair	
2650	ALNRUB	poor	
2652	ACEMAC	fair	
2663	PSEMAC	fair	
2664	PSEMAC	fair	
2671	THUPLI	poor	
2676	TSUHET	poor	
2682	ACEMAC	poor	
2685	TSUHET	fair	
2686	ACEMAC	fair	
2693	ACEMAC	poor	

Tree Removal Table Summary			
Tree No.	Species	DBH	Condition
1507	ACEMAC	15"	fair
2249	ACEMAC	14"	dead
2365	THUPLI	14"	poor
2845	ALNRUB	12"	poor

Tree Survey Table Legend		Species
Abbreviation	Species	
ACEMAC	Acer macrophyllum	
ALNRUB	Alnus rubra	
PSEMAC	Pseudotsuga menziesii	
THUPLI	Thuja plicata	
TSUHET	Tsuga heterophylla	
ALNRHO	Alnus rhombifolia	
PINSTO	Quercus Palustrus	



TYPICAL TRAIL DISTURBANCE & CONSTRUCTION IMPACT AREA

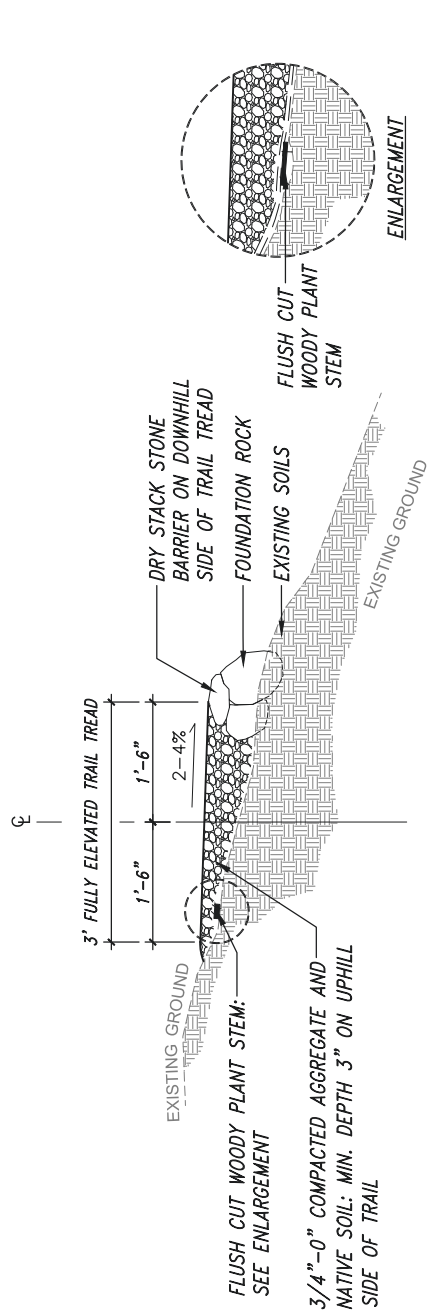
NTS

11.50.050 On-Site Tree Density Standards							
Number of Required Trees and Minimum Planting Area				Determining Required Tree Area			
Canopy size category (at maturity)	Number of trees required per size of tree area	Min. required planting area per tree (min. dimension)		Development Type		Option A	
		1 per 1,000 s.f.	150 s.f.(10'x10')	Other	25 percent of Development Impact Area		
		1 per 500 s.f.	75 s.f.(5'x5')				
		1 per 300 s.f.	50 s.f.(3'x3')				
Tree Density Calculations							
		AREA A	AREA B	AREA C	AREA D	AREA E	TOTAL
Development Impact Area		24,840 s.f	25,529 s.f.	31,181 s.f.	23,525 s.f.	8,266 s.f.	113,341 s.f.
25% of Development Impact Area required		6,210 s.f.	6,382 s.f.	7,795 s.f.	5,881 s.f.	1,595 s.f.	27,863 s.f.
Existing Tree Canopy (within Development Impact Area only)		53,000 s.f.	62,000 s.f.	85,500 s.f.	75,000 s.f.	28,500 s.f.	304,000 s.f.

Note: Development Impact Area calculated using 25 feet offset in each direction of existing trail centerline.

Title 33 Planning and Zoning Chapter 33.430 Environmental Zones			
Table 430-3 Tree Replacement in Environmental Overlay Zone			
Size of tree to be removed (inches in diameter)	Option A (no. of native tree to be planted)		Option B (combination of native trees and shrubs)
	At least 6 and up to 12	2	not applicable
	More than 12 and up to 20	3	1 tree and 3 shrubs
	More than 20 and up to 25	5	3 tree and 6 shrubs
	More than 25 and up to 30	7	5 tree and 9 shrubs
	More than 30	10	7 tree and 12 shrubs
Trees to be Removed			
Tree ID	DBH	Species	Required Tree Replacement Count
1507	15"	ACEMAC	1 tree and 3 shrubs
2249	14"	N/A (Dead)	1 tree and 3 shrubs
2365	14"	THUPLI	1 tree and 3 shrubs
2545	12"	ALNRUB	1 tree and 3 shrubs
		TOTAL	4 trees and 12 shrubs
*See Sheet 20 for Buffer/ Tree Mitigation Planting List			

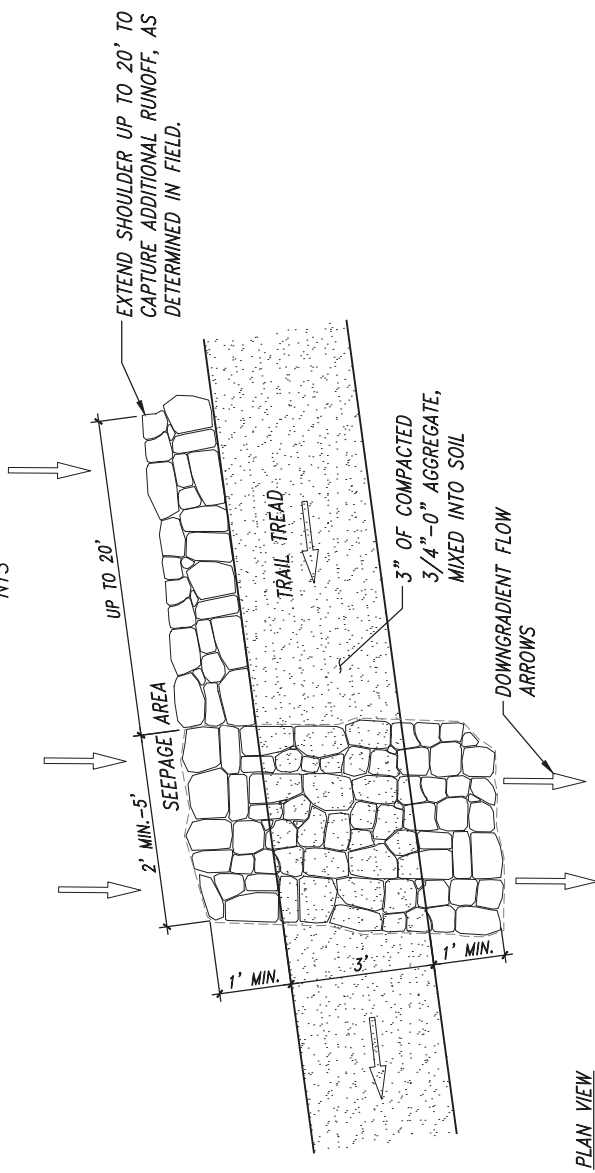
EXPIRES: 12/31/2024



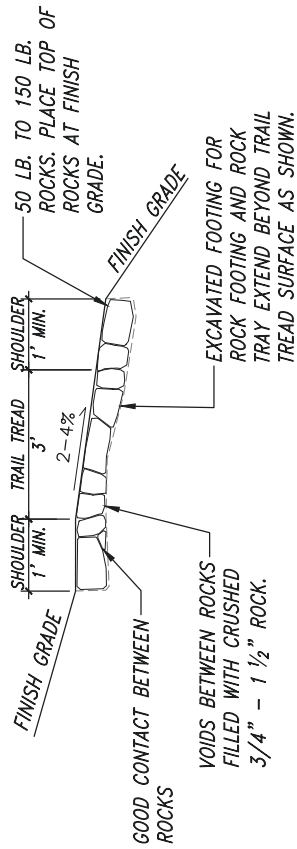
NOTES:

1. IMPLEMENT 2%~4% OUTSLOPE FOR CONSISTENT DRAINAGE.
2. REMOVE SURFACE ORGANIC MATERIAL AND TOPSOIL DOWN TO MINERAL SOIL AND THEN CUT VEGETATION WITHIN TRAIL TREAD ALIGNMENT FLUSH WITH EXISTING SURFACE.
3. DRY STACK STONE BARRIER SHALL USE ONE ROCK MIN. TO CREATE DOWNSLOPE RETAINER.
- 3.1. STACK ENOUGH ROCKS VERTICALLY & HORIZONTALLY TO CREATE A STABLE & LASTING BARRIER.
- 3.2. FOUNDATION STONES MUST BE COUNTER-SUNK MINIMUM 1/3 TOTAL HEIGHT.

TYPICAL ELEVATED TRAIL SECTIONS
NTS



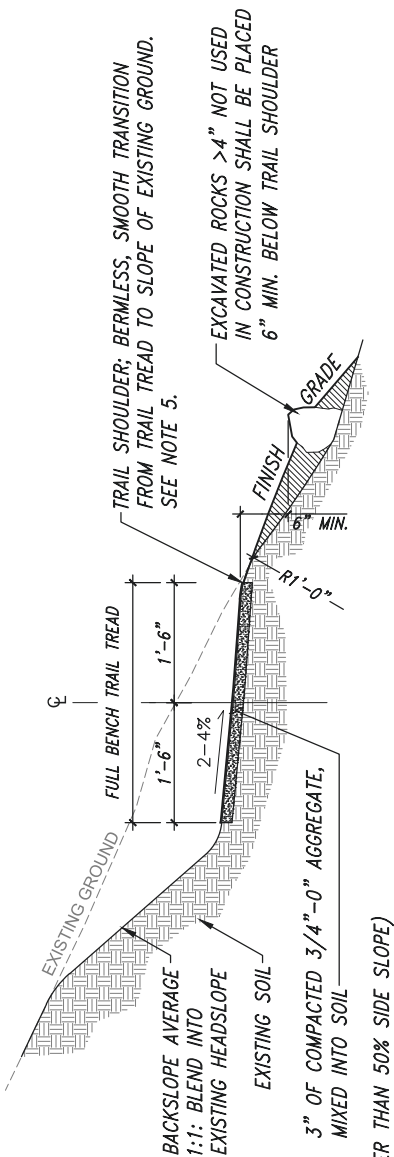
SECTION VIEW



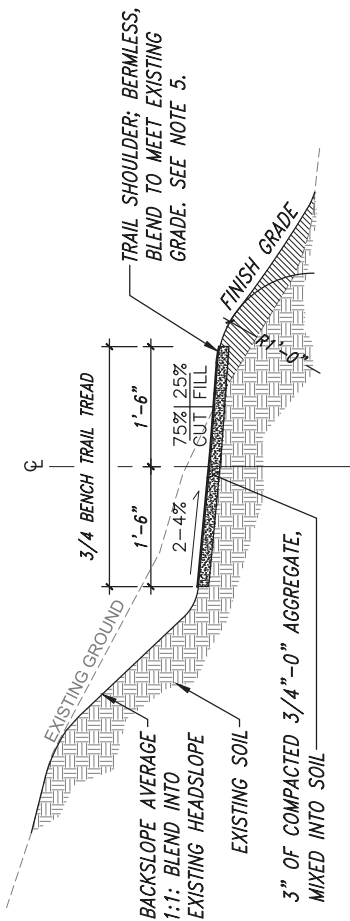
NOTES:

1. FIELD ADJUST LOCATIONS TO CAPTURE GREATEST AMOUNT OF SEEPAGE OR RUNOFF.

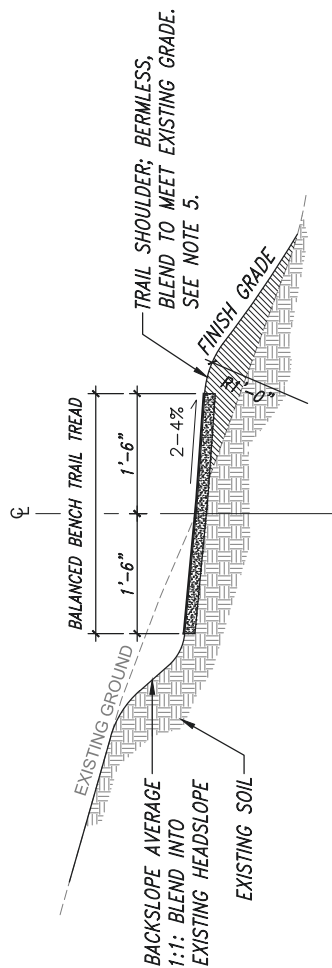
ARMORED DRAIN SWALE
NTS



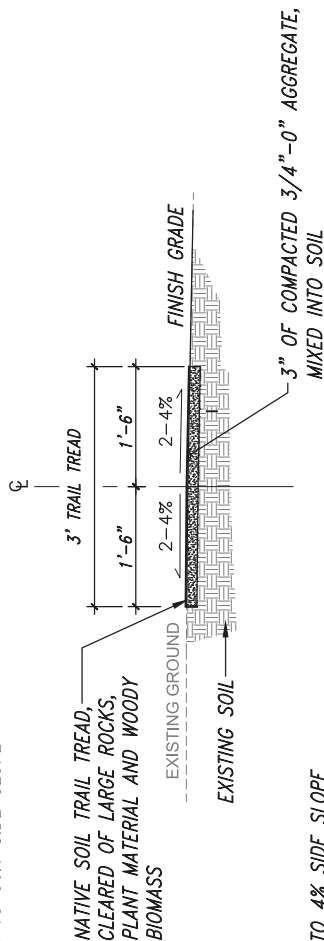
FULL BENCH: (GREATER THAN 50% SIDE SLOPE)



3/4 BENCH: 30% TO 50% SIDE SLOPE



BALANCED BENCH: 5% TO 30% SIDE SLOPE



CROWNED TRAIL: 0% TO 4% SIDE SLOPE

NOTES:

1. IMPLEMENT 2%-4% OUTSLOPE FOR CONSISTENT DRAINAGE.
2. REMOVE ALL BERMS FROM TRAIL EDGE TO FACILITATE PROPER DRAINAGE.
3. REMOVE ROCKS THAT PROTRUDE A VERTICAL DISTANCE OF GREATER THAN 3" FROM NEW TRAIL FINISHED TREAD SURFACE.
4. ARCHAEOLOGICAL MONITORING REQ. FOR SECTION 1, SECTION 2, AND SECTION 3.
5. WHERE FEASIBLE COMPACT SHOULDERS AND EMBANKMENTS WITH MECHANICAL EQUIPMENT IN 6" LIFTS. INSTALL COIR FABRIC AND PLACE NATIVE SEED MIX IN AREAS WITH FILL GREATER THAN OR EQUAL TO ONE FOOT IN HEIGHT. COORDINATE THESE AREAS WITH THE ENGINEER.

TYPICAL TRAIL SECTIONS
NTS

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



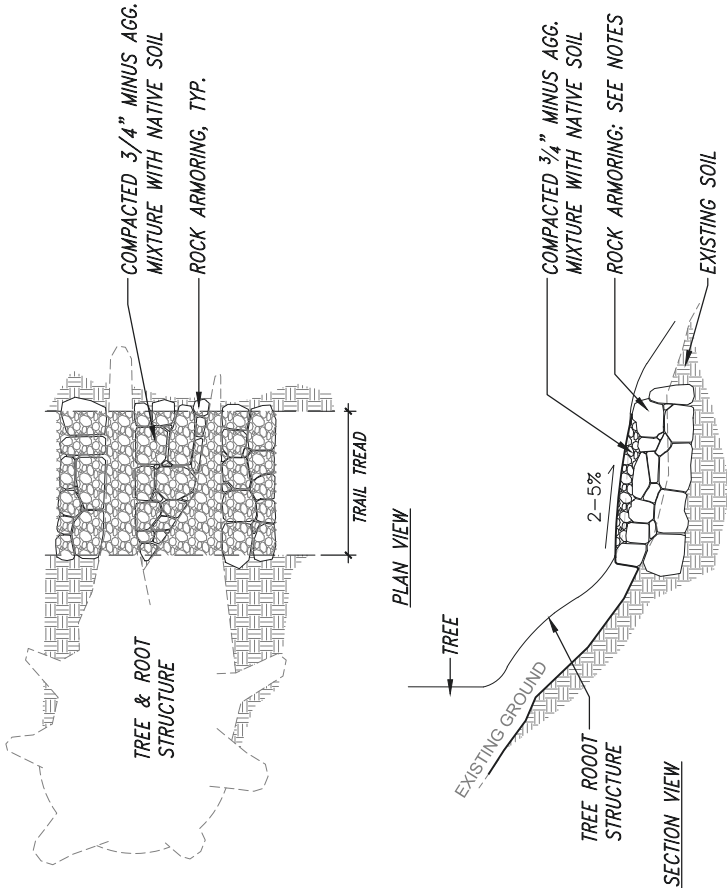
OREGON PARKS AND RECREATION DEPARTMENT

TRAIL DETAILS
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

SHEET:	17 OF 37
HUB #:	30757
CONTRACT #:	NA



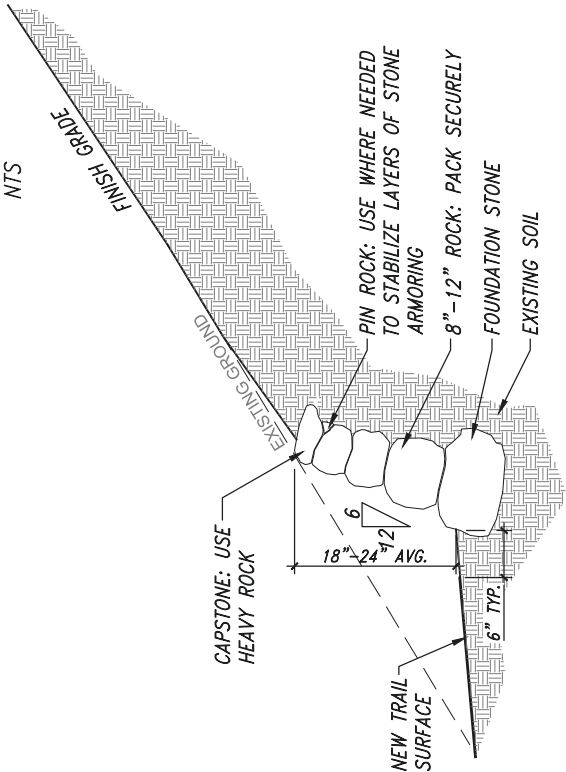
EXPIRES: 12/31/2024



- NOTES:
1. IMPLEMENT 2%-4% OUTSLOPE FOR CONSISTENT DRAINAGE.
 2. LAY ROCK TIGHT IN ROOT CREVICES W/ MINIMUM OF 3 POINTS OF CONTACT W/ ADJACENT ROCKS.
 3. FILL VOIDS W/ BROKEN ROCK OR 1:1 MIXTURE OF NATIVE SOIL AND 3/4\"-1 1/2\" AGG.
 4. FINISHED ROCK ARMORING TRAIL TREAD SHALL BE LEVEL W/ NATURAL SURFACE TRAIL TREAD.

ROCK ARMORING ROOTS

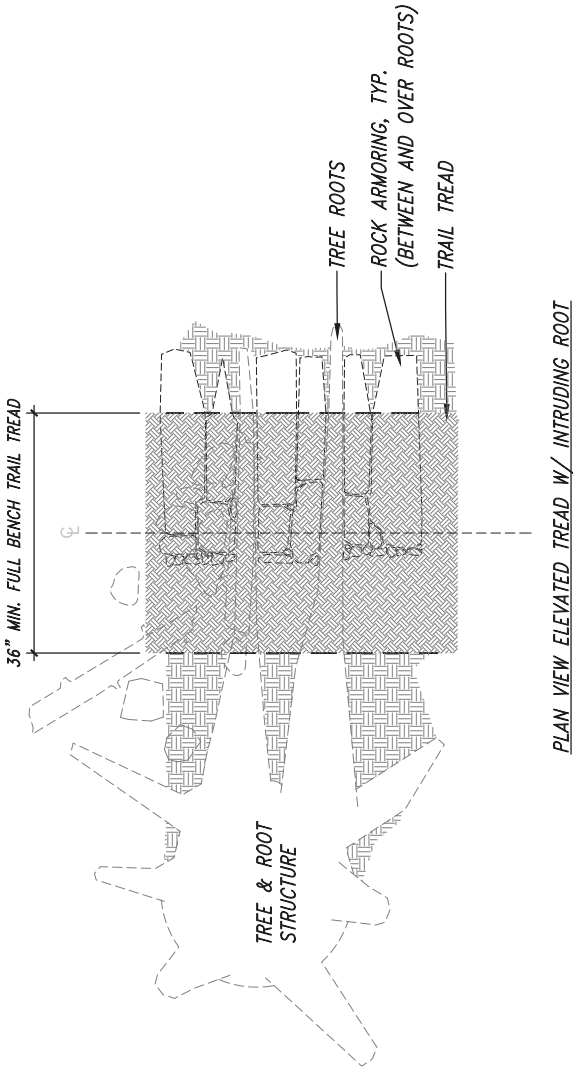
NTS



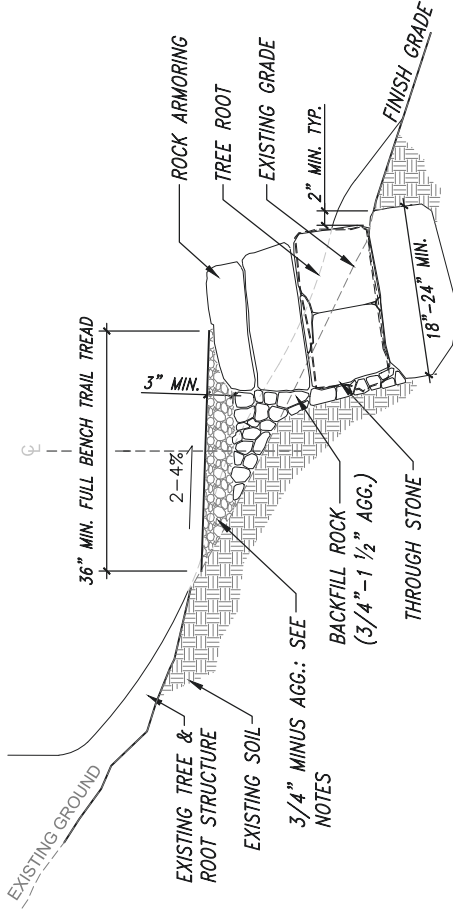
- NOTES:
1. ARMORED SLOPE PLACED AT CLIMBING TURNS INSIDE RADIUS TO PREVENT EROSION AND DISCOURAGE TRAIL USERS CUTTING CORNER.
 2. FOUNDATION STONE SHALL BE BURIED 2/3 TOTAL HEIGHT MIN. AND PROTRUDE OUT FROM FACE OF WALL.

ARMORED SLOPE SECTION

NTS



PLAN VIEW ELEVATED TREAD W/ INTRUDING ROOT



ELEVATED TREAD W/ INTRUDING ROOT

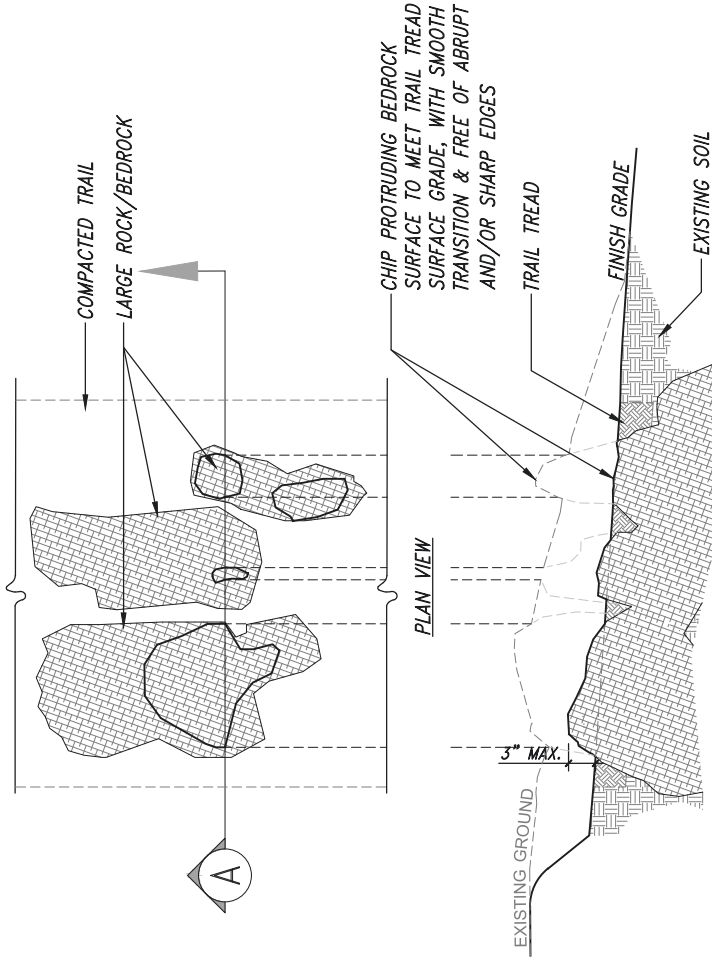
- NOTES:
1. LEAVE ROOT INTACT. BUILD TREAD FOUNDATION UP AROUND ROOTS. TAKE CARE NOT TO DAMAGE/SCAR ROOT AND OR TREE STRUCTURE. WALL PLACEMENT CAN BE ADJUSTED TO MINIMIZE ROOT IMPACTS - SET FURTHER DOWNSLOPE FOR LARGE ROOTS THAT SIGNIFICANTLY PROTRUDE ABOVE EXISTING SURFACE.
 2. FOUNDATION STONES MUST BE COUNTER-SUNK MINIMUM 1/3 TOTAL HEIGHT.
 3. USE LARGEST STONES AT BOTTOM TO BARE WEIGHT OF WALL ADEQUATELY.
 4. THROUGH STONES SHALL BE LARGE ENOUGH TO EXTEND FACE TO BACK OF WALL, PLACED WITH RELATIVE FREQUENCY ON VARYING WALL COURSES.
 5. FILL ALL NON-WALL FACE CREVICES AND CRANNIES WITH SMALLER ROCKS.
 6. BACKFILL DRY STACK RETAINING WALL W/ 3/4\"-1 1/2\" BALLAST CAPPED WITH 3/4\" MINUS AGGREGATE, TIGHTLY COMPACTING IN LIFTS, TO ALLOW FOR WATER DRAINAGE AND FREEZE/THAW CYCLE.
 7. MAINTAIN FINISH TRAIL TREAD SURFACE OUTSLOPE OF 2%-4%.
 8. FILL TREAD W/ 1:1 MIX OF 3/4\" MINUS AGGREGATE AND NATIVE SOIL. COMPACT IN LIFTS.

TYPICAL ELEVATED TRAIL SECTIONS WITH INTRUDING TREE ROOT(S)

NTS

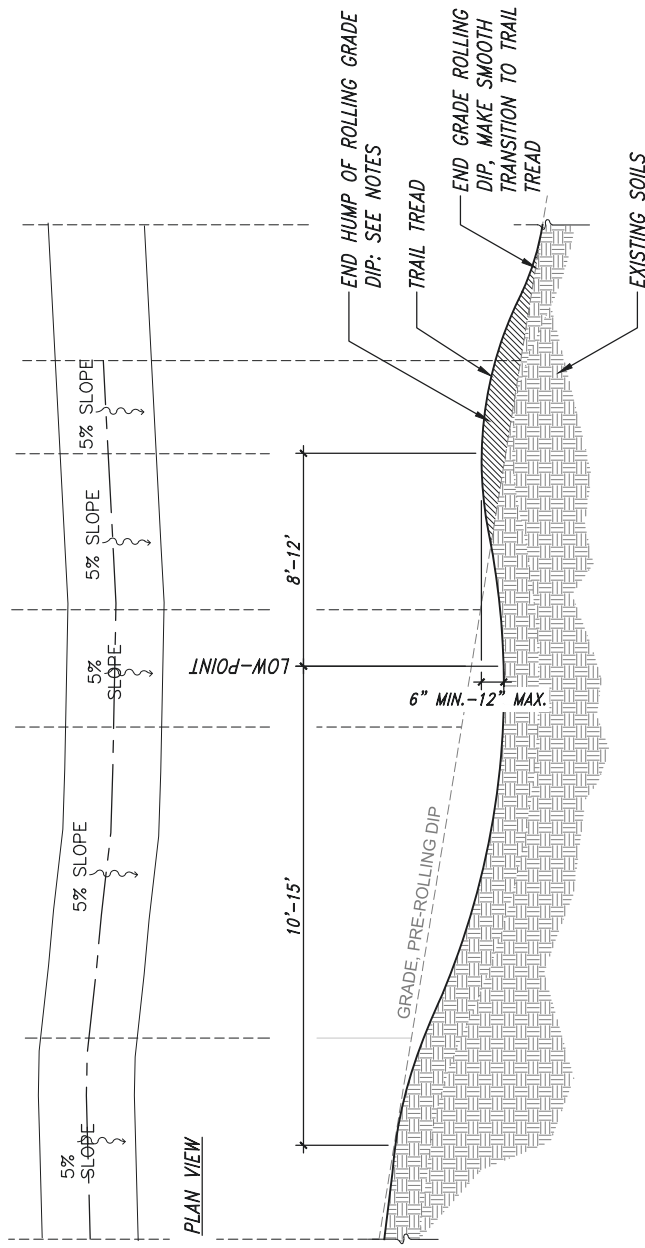
NOTES:

1. PROTRUDING BEDROCK SHALL BE SHAPED TO OBLITERATE SHARP EDGES. AREAS IN BETWEEN BEDROCK SHALL BE GRADED TO CONSISTENT HEIGHT WITH FINISHED TRAIL SURFACE VARYING WITHIN 2".
2. IMPLEMENT 2%-4% OUTSLOPE FOR CONSISTENT DRAINAGE.
3. REMOVE ALL BERMS FROM TRAIL OUTSIDE EDGE TO FACILITATE PROPER DRAINAGE.
4. IF EXISTING GRADE IS LESS THAN 2% OUTSLOPE GRADE TRAILBED TO HAVE 2% OUTSLOPE.



TRAIL TREAD WITH LARGE ROCK/BEDROCK

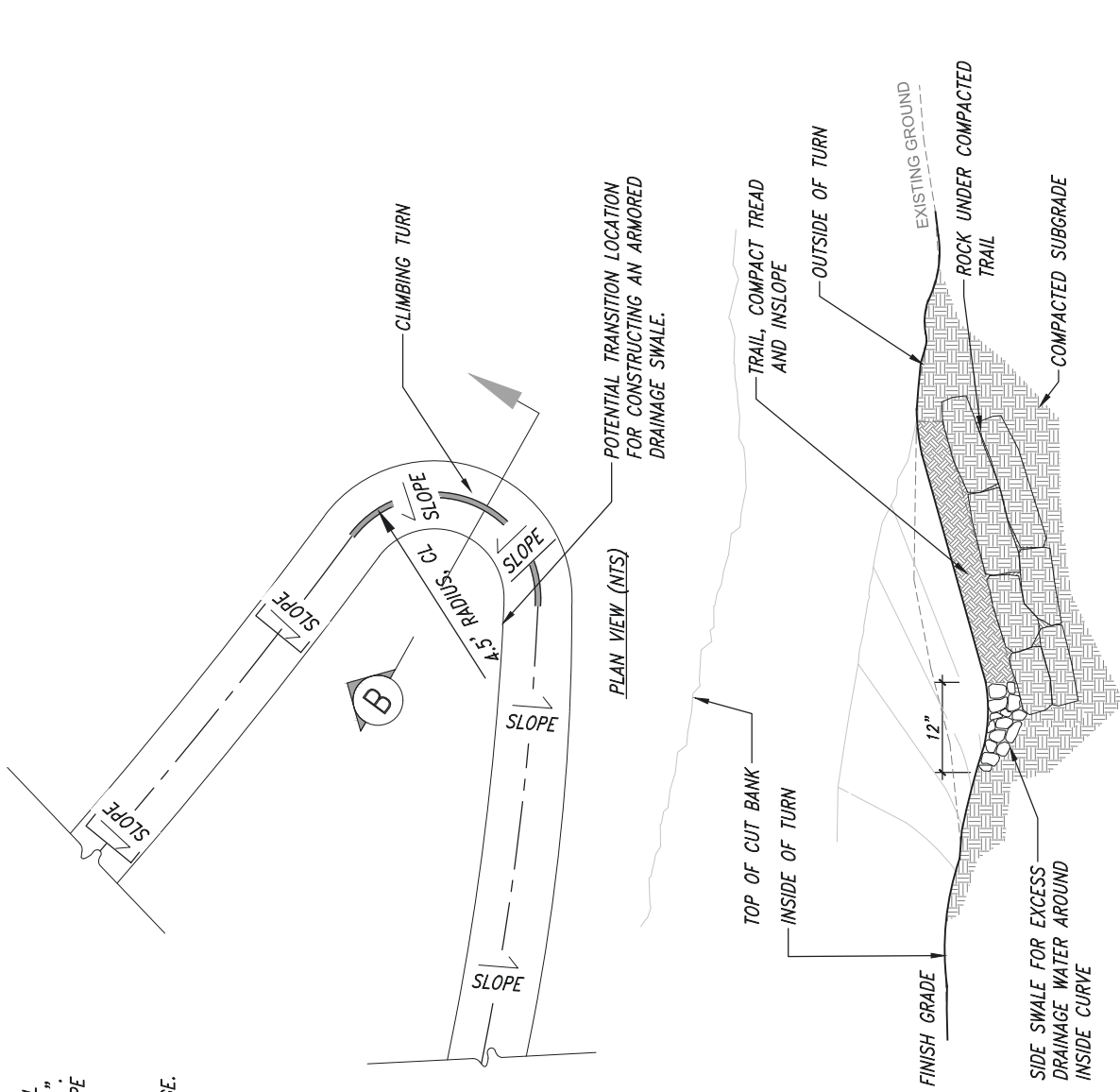
NTS



- NOTES:
1. GRADE TRAILLED TO 2% OUTSLOPE FOR CONSISTENT DRAINAGE.
 2. REMOVE ALL BERMS FROM TRAIL EDGE TO FACILITATE PROPER DRAINAGE.
 3. ROLLING DIP CAN BE PLACED ON STRAIGHT AND TURNING SECTIONS OF TRAIL.
 4. USE COMPACTED EXCAVATION MATERIAL TO CREATE END HUMP AT END OF ROLLING GRADE DIP.

ROLLING DIP

NTS



- NOTES:
1. STABILIZE TREAD BY PLACING ROCK UP TO 6" BELOW COMPACTED TRAIL SURFACE.
 2. SIDE SWALE SHALL RUN DURATION OF INSLOPED TRAIL, 6" DEEP MIN. WITH COMPACTED MIX OF TRAIL SOIL AND $\frac{3}{4}$ "-1 $\frac{1}{2}$ " AGGREGATE.

CLIMBING TURN

NTS



EXPIRES: 12/31/2024

11.60.030 TREE PROTECTION SPECIFICATIONS

PERFORMANCE PATH. WHEN THE APPLICANT DETERMINES THAT PRESRIPTIVE PATH IS NOT PRACTICABLE, THE APPLICANT MAY PROPOSE ALTERNATIVE MEASURES TO MODIFY THE PRESRIPTIVE PROTECTIVE PATH, PROVIDED THE FOLLOWING STANDARDS ARE MET:

- A. INTENT. TREE PROTECTION DURING DEVELOPMENT HELPS TO REDUCE THE NEGATIVE IMPACTS OF CONSTRUCTION. THE TREE PROTECTION REGULATIONS KEEP THE FOLIAGE CROWN, BRANCH STRUCTURE AND TRUNK CLEAR FROM DIRECT CONTACT AND INJURY BY EQUIPMENT, MATERIALS OR DISTURBANCES; PRESERVE ROOTS AND SOIL IN AN INTACT AND NON-COMPACTED STATE; AND VISIBLY IDENTIFY THE ROOT PROTECTION ZONE IN WHICH NO SOIL DISTURBANCE IS PERMITTED AND OTHER ACTIVITIES ARE RESTRICTED. MAINTAINING THESE PROTECTIONS THROUGH DEVELOPMENT WILL LESSEN UNDESIRABLE CONSEQUENCES THAT MAY RESULT FROM UNINFORMED OR CARELESS ACTS, PRESERVE BOTH TREES AND PROPERTY VALUES, AND REDUCE RISKS ASSOCIATED WITH DAMAGED OR DESTABILIZED TREES.
- B. APPLICABILITY. THESE STANDARDS APPLY TO ANY TREE THAT IS REQUIRED TO BE RETAINED ON SITE OR IN THE STREET DURING A DEVELOPMENT ACTIVITY. PROPOSED TREE PROTECTION SHALL MEET THE REQUIREMENTS OF SUBSECTION C., BELOW, EXCEPT THAT THE CITY FORESTER MAY APPROVE OR REQUIRE ALTERNATE PROTECTION METHODS FOR STREET OR CITY TREES.
- C. PROTECTION METHODS. THE TREE PLAN SHALL SHOW THAT TREES RETAINED ARE ADEQUATELY PROTECTED DURING CONSTRUCTION USING ONE OF THE METHODS DESCRIBED BELOW:
- D. THE ALTERNATIVE ROOT PROTECTION ZONE IS PREPARED BY AN ARBORIST WHO HAS VISITED THE SITE AND EXAMINED THE SPECIFIC TREE'S SIZE, LOCATION, AND EXTENT OF ROOT COVER, EVALUATED THE TREE'S TOLERANCE TO CONSTRUCTION IMPACT BASED ON ITS SPECIES AND HEALTH, AND IDENTIFIED ANY PAST IMPACTS THAT HAVE OCCURRED WITHIN THE ROOT ZONE:
- E. THE ARBORIST HAS PREPARED A PLAN PROVIDING THE RATIONALE USED TO DEMONSTRATE THAT THE ALTERNATE METHOD PROVIDES AN ADEQUATE LEVEL OF PROTECTION BASED ON THE FINDINGS FROM THE SITE VISIT DESCRIBED ABOVE, INCLUDING A DEVELOPMENT SITE PLAN TO DEMONSTRATE HOW THE PROTECTION PLAN CONFORMS TO THE SITE AND THE PROPOSED DEVELOPMENT ACTIVITY;
- F. THE PROTECTION ZONE SHALL BE MARKED WITH SIGNAGE, STATING THAT PENALTIES WILL APPLY FOR VIOLATIONS, AND PROVIDING CONTACT INFORMATION FOR THE ARBORIST;
- G. IF THE ALTERNATIVE METHODS REQUIRE THE ARBORIST BE ON SITE DURING CONSTRUCTION ACTIVITY, THE APPLICANT SHALL SUBMIT A COPY OF THE CONTRACT FOR THOSE SERVICES PRIOR TO PERMIT ISSUANCE AND A FINAL REPORT FROM THE ARBORIST DOCUMENTING THE INSPECTIONS AND VERIFYING THE VIABILITY OF THE TREES PRIOR TO THE CITY'S FINAL INSPECTION;
- H. IF THE ALTERNATIVE TREE PROTECTION METHOD INVOLVES ALTERNATIVE CONSTRUCTION TECHNIQUES, AN EXPLANATION OF THE TECHNIQUES AND MATERIALS USED SHALL BE SUBMITTED;
- I. THE ARBORIST SHALL SIGN THE TREE PRESERVATION AND PROTECTION PLAN AND INCLUDE CONTACT INFORMATION.

ARBORIST TREE PROTECTION NOTES:

THE FOLLOWING NOTES REFLECT SPECIFIC PERFORMANCE PATH MEASURES BASED ON SITE INVESTIGATIONS AND ANTICIPATED CONSTRUCTION ACTIVITIES.

PRIOR TO CONSTRUCTION

1. SEGMENTS OF THE TRAIL WILL BE FIELD STAKED AND APPROVED BY OWNER'S REPRESENTATIVE OR PROJECT ARBORIST PRIOR TO CONSTRUCTION. THE PROJECT ARBORIST WILL ADDRESS POTENTIAL TREE IMPACTS WITH THE PROPOSED STAKED ALIGNMENT AND IDENTIFY ADAPTIVE BEST MANAGEMENT OPPORTUNITIES IN ADVANCE.
2. A PRECONSTRUCTION MEETING SHALL TAKE PLACE TO IDENTIFY GENERAL RISKS TO PROTECTED AREAS, POTENTIAL HAZARDS AND SPECIFIC PROJECT REQUIREMENTS AS IDENTIFIED IN THE PLANS.
3. ALL EROSION CONTROL BWPS SHALL BE INSTALLED AND IN WORKING CONDITION. SIGNAGE DESIGNATING THE PROTECTION ZONE AND ANY PENALTIES FOR VIOLATIONS SHALL BE SECURED AT EACH CONSTRUCTION ACCESS POINT IN A PROMINENT VISIBLE LOCATION.
4. THE PREVENTION OF DAMAGE TO OVERHANGING BRANCHES THAT COULD BE CAUSED BY CONSTRUCTION EQUIPMENT SHALL BE IDENTIFIED BY THE CONTRACTOR AND COURSE OF ACTION AGREED BEFORE CONSTRUCTION BEGINS. THE PROJECT ARBORIST OR OWNER'S REPRESENTATIVE SHALL APPROVE OF THE PLAN PRIOR TO THE WORK COMMENCING.
5. ALL TREE REMOVAL AND FELLING WORK SHALL BE PERFORMED BY A CERTIFIED ARBORIST WITH A DEMONSTRATED HISTORY PERFORMING TREE CUTTING AND FELLING FOR A MINIMUM OF FIVE YEARS. THE CONTRACTOR SHALL SUBMIT A RESUME OF PERSONNEL RESPONSIBLE FOR TREE REMOVALS ON THIS PROJECT DOCUMENTING THIS REQUIREMENT.
6. A SAFETY WORK PLAN SHALL BE SUBMITTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR PROJECT ARBORIST PRIOR TO COMMENCING TREE REMOVAL ACTIVITIES.

DURING CONSTRUCTION

1. ALL WORK WITHIN THE RPZ SHALL BE PERFORMED UNDER THE OVERSIGHT OF THE PROJECT ARBORIST AS REQUIRED BY THE PERFORMANCE PATH PROTECTIVE MEASURES.
2. DIRECTIONAL FELLING OF TREES SHALL BE CONDUCTED IN A MANNER THAT WILL NOT JEOPARDIZE THE PUBLIC SAFETY OR DAMAGE OF STRUCTURES, INCLUDING UTILITY LINES OR SERVICES, OR ADJACENT TREES. TREES REMOVED SHALL BE LEFT IN PLACE FOR HABITAT VALUE. ANY DAMAGES DURING TREE REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL REMOVED TREES SHALL LEAVE THE STUMP IN GROUND. THE CONTRACTOR MAY MAKE MINOR DEVIATION OF TRAIL ALIGNMENT TO AVOID STUMPS WITH APPROVAL FROM THE OWNER'S REPRESENTATIVE OR PROJECT ARBORIST.
4. ALL OTHER REMAINING VEGETATION SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION.
5. NO HEAVY EQUIPMENT, CONSTRUCTION MATERIALS, OR STOCKPILING SHALL OCCUR WITHIN THE RPZ OF EXISTING TREES.
6. ALL EXCAVATION WITHIN THE RPZ SHALL BE PERFORMED WITH CARE TO UNCOVER ROOTS CAREFULLY. AT THE DISCRETION OF THE PROJECT ARBORIST, HAND TOOLS MAY BE REQUIRED TO EXPOSE ROOTS.
7. ALL ROOT PRUNING SHALL BE PERFORMED USING CLEAN EQUIPMENT BY CUTTING A PERPENDICULAR ANGLE TO THE GROWTH OF THE ROOTS. ALL ROOTS ¼" TO 2" IN DIAMETER MAY BE APPROVED BY THE PROJECT ARBORIST. IF ROOTS GREATER THAN 2" ARE OBSERVED AND NEED TO BE CUT, PORTLAND URBAN FORESTRY SHALL BE CONTACTED FOR INSPECTION AND APPROVAL.
8. EXPOSURE OF ROOTS SHALL BE BACKFILLED BY THE END OF DAY OR IMMEDIATELY IF WORK IS COMPLETE. BETWEEN THE MONTHS OF JUNE TO AUGUST, THE PROJECT ARBORIST MAY REQUIRE SUPPLEMENTAL WATERING IN AREAS OF EXPOSED ROOTS.
9. CHANGES TO THE TREE PROTECTION MEASURES DURING THE COURSE OF CONSTRUCTION MAY BE APPROVED AS A REVISION PROVIDED THAT THE CHANGE IS NOT THE RESULT OF AN UNAUTHORIZED ENCROACHMENT INTO A ROOT PROTECTION ZONE, AND TREE PROTECTION STANDARDS CONTINUE TO BE MET.



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.246.1939
pbsusa.com

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DPS	JUNE 2023
DRAWN BY	DATE



OREGON PARKS AND RECREATION DEPARTMENT

TREE PROTECTION NOTES
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

SHEET:	19 OF 37
HUB #:	30757
CONTRACT #:	NA



APPROVED BY	RWP
CHECKED BY	OAG
DESIGNED BY	OAG
DRAWN BY	OAG
DATE	JUNE 2023



SHEET:	20 OF 37
OWMS #:	30757
CONTRACT #:	NA

GENERAL NOTES:

- REFER TO CIVIL ENGINEER'S DRAWINGS FOR PROPOSED UTILITY INFORMATION; INCLUDING STORM DRAIN, SEWER, WATER, ELECTRICAL, GAS, TELEPHONE AND CABLE.
 - REFER TO AGENCY STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATING OF EXISTING UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ALL DAMAGES CAUSED AS A RESULT OF THEIR WORK.
 - CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCE EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
- PLANTING NOTES:
- ALL MITIGATION AND RESTORATION SHRUBS AND TREE SHALL BE MARKED IN THE FIELD BY A TAG ATTACHED TO THE TOP OF THE PLANT FOR EASY IDENTIFICATION BY THE CITY INSPECTOR; OR THE APPLICANT SHALL ARRANGE TO ACCOMPANY THE BDS INSPECTOR TO THE SITE TO LOCATE MITIGATION PLANING FOR INSPECTION.
 - ANY NECESSARY SUBMITTALS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO START OF WORK.
 - ALL PLANT MATERIAL SHALL BE GROWN FOR THIS REGION OR SHALL BE ADEQUATELY CLIMATIZED AND FOLLOW STANDARDS OF ANSI Z60.1 AND AMERICAN STANDARD NURSERY STOCK (ASNS), AS UPDATED.
 - VERIFY LOCATIONS OF ALL PERTINENT SITE IMPROVEMENTS UNDER OTHER SECTIONS. IF ANY PART OF THIS PLAN CANNOT BE FOLLOWED DUE TO SITE CONDITIONS, CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT FOR INSTRUCTION PRIOR TO COMMENCING WORK.
 - DO NOT MAKE SUBSTITUTIONS.
 - CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT FOR PLANT MATERIAL INSPECTION 2-3 DAYS PRIOR TO INSTALLATION.
 - CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING LANDSCAPE AFFECTED BY CONSTRUCTION TO IT'S ORIGINAL CONDITION. CONTACT OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT IF ANY AREAS NOT ORIGINALLY LANDSCAPED, BECOME LANDSCAPE.

CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT FOR PLANT MATERIAL INSPECTION 2-3 DAYS PRIOR TO INSTALLATION.

CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING LANDSCAPE AFFECTED BY CONSTRUCTION TO IT'S ORIGINAL CONDITION. CONTACT OWNER'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT IF ANY AREAS NOT ORIGINALLY LANDSCAPED, BECOME LANDSCAPE.

BUFFER / TREE MITIGATION PLANTING LIST				
QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
TREES				
4	<i>Pseudotsuga menziesii</i>	Douglas Fir	6' min. height	10 Gallon Min
SHRUBS				
6	<i>Maionia aquifolium</i>	Tall Oregon Grape	1 gallon	Container
6	<i>Symphoricarpos albus</i>	Common Snowberry	1 gallon	Container

NOTES: LOCATION SHOWN ON THE PLANS ARE FOR REFERENCE FINAL LOCATION TO BE DETERMINED BY APPLICANT AND BDS DIRECTOR.

FAILURE TO COMPLY WITH ANY OF THESES CONDITIONS MAY RESULT IN THE CITY'S RECONSIDERATION OF THIS LAND USE APPROVAL PURSUANT TO PORTLAND ZONING CODE SECTION 33.700.040 AND / OR ENFORCEMENT OF THESE CONDITIONS IN ANY MANNER AUTHORIZED BY LAW.

AN ESTIMATE OF PERCENT COVER OF INVASIVE SPECIES (ENGLISH IVY, HIMALAYAN BLACKBERRY, REED CANARYGRASS, TEASEL, CLEMATIS) WITHIN 10 FEET OF ALL PLANTING. INVASIVE SPECIES MUST NOT EXCEED 15 PERCENT COVER DURING THE MONITORING PERIOD.

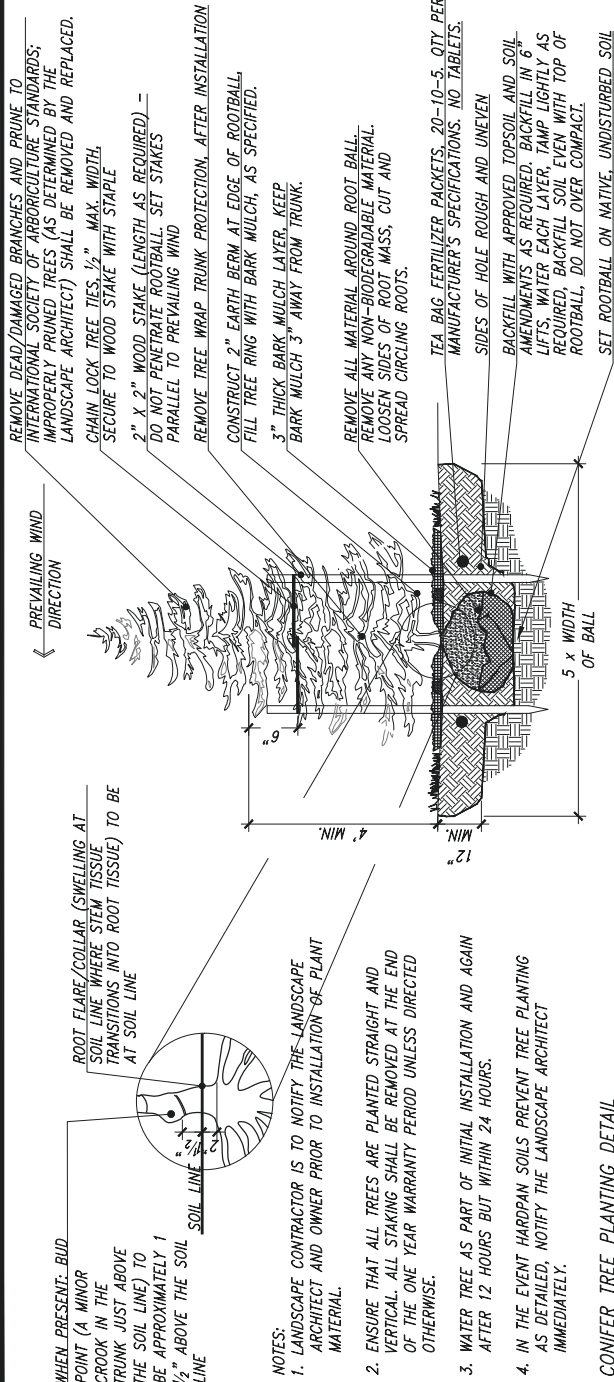
PLANTING SHALL BE INSTALLED BETWEEN OCTOBER 1 AND MARCH 31 (THE PLANTING SEASON)

PRIOR TO INSTALLING REQUIRED MITIGATION PLANTINGS, NON-NATIVE INVASIVE PLANTS SHALL BE REMOVED FROM ALL AREAS WITHIN 10 FEET OF MITIGATION PLANTING, USING HANDHELD EQUIPMENT

IF PLANTING ARE INSTALLED PRIOR TO COMPLETION OF CONSTRUCTION, A TEMPORARY ORANGE, 4-FOOT HIGH CONSTRUCTION FENCE SHALL BE PLACED TO PROTECT PLANTING FROM CONSTRUCTION ACTIVITIES.

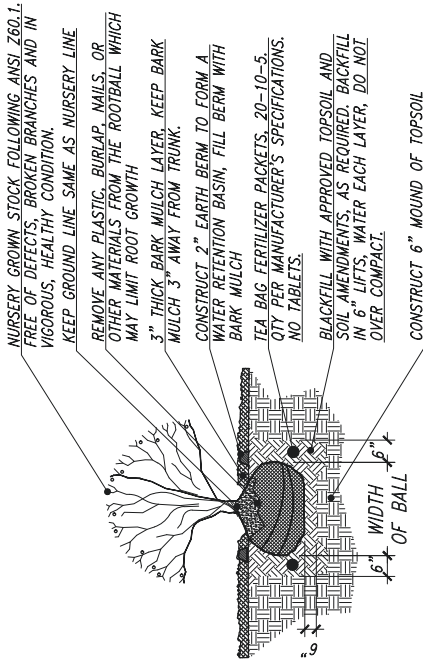
ALL MITIGATION AND RESTORATION SHRUBS AND TREES SHALL BE MARKED IN THE FIELD BY A TAG ATTACHED TO THE TOP OF THE PLANT FOR EASY IDENTIFICATION BY THE CITY INSPECTOR; OR THE APPLICANT SHALL ARRANGE TO ACCOMPANY CONTRASTING COLOR THAT IS EASILY SEEN AND IDENTIFIED.

AFTER INSTALLING THE ROQUIRED MITIGATION PLANTING AND PLACING THE LARGE WOOD/SNAGS, THE APPLICANT SHALL REQUEST INSPECTION OF MITIGATION PLANTING AND FINAL THE ZONING PERMIT.



CONIFER TREE PLANTING DETAIL

NOT TO SCALE



NOTES:

- LANDSCAPE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO INSTALLATION OF PLANT MATERIAL.
- WATER SHRUB AS PART OF INITIAL INSTALLATION AND AGAIN AFTER 12 HOURS BUT WITHIN 24 HOURS.
- IN THE EVENT HARDPAN SOILS PREVENT TREE PLANTING AS DETAILED, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.

SHRUB PLANTING

NOT TO SCALE

Typical Spacing Detail
NOT TO SCALE

NOTES:

- THE APPLICANT SHALL INDICATE ON THE PLANS SELECTION OF EITHER TAGGING PLANTS FOR IDENTIFICATION OR ACCOMPANYING THE BDS INSPECTOR FOR AN ON-SITE INSPECTION

GENERAL TREE PROTECTION NOTES:

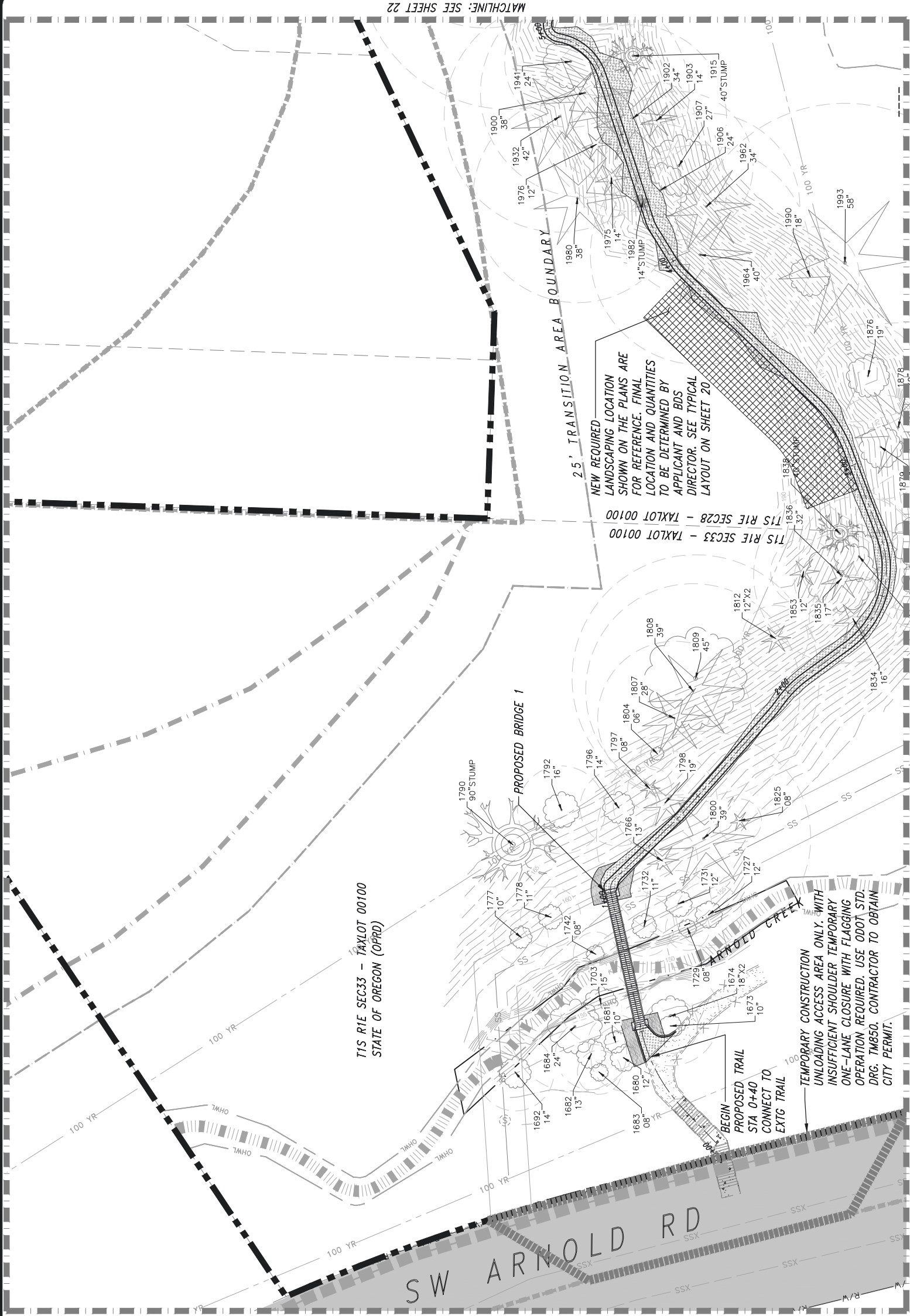
- ALL WORK WITHIN THE RPZ SHALL BE PERFORMED UNDER THE OVERSIGHT OF THE PROJECT ARBORIST AS REQUIRED BY THE PERFORMANCE PATH PROTECTIVE MEASURES.
- ALL EXCAVATION WITHIN THE RPZ SHALL BE PERFORMED WITH CARE TO UNCOVER ROOTS CAREFULLY. AT THE DISCRETION OF THE PROJECT ARBORIST, HAND TOOLS MAY BE REQUIRED TO EXPOSE ROOTS.
- ALL ROOT PRUNING SHALL BE PERFORMED USING CLEAN EQUIPMENT BY CUTTING A PERPENDICULAR ANGLE TO THE GROWTH OF THE ROOTS. ALL ROOTS ¼" TO 2" IN DIAMETER MAY BE APPROVED BY THE PROJECT ARBORIST. IF ROOTS GREATER THAN 2" ARE OBSERVED AND NEED TO BE CUT, PORTLAND URBAN FORESTRY SHALL BE CONTACTED FOR INSPECTION AND APPROVAL.
- EXPOSURE OF ROOTS SHALL BE BACKFILLED BY THE END OF DAY OR IMMEDIATELY IF WORK IS COMPLETE. BETWEEN THE MONTHS OF JUNE TO AUGUST, THE PROJECT ARBORIST MAY REQUIRE SUPPLEMENTAL WATERING IN AREAS OF EXPOSED ROOTS.
- SEE SHEET 16 FOR MORE SPECIFIC TREE PROTECTION MEASURES.

LEGEND

	OPRD PROPERTY BOUNDARY		*100 YEAR FLOOD BOUNDARY
	TAX LOT LINE		EXISTING CREEK
	EC OVERLAY		EXISTING EPHEMERAL STREAM
	EP OVERLAY		ORDINARY HIGH WATER LINE
	PROPOSED TRAIL CENTER LINE		TOP OF BANK
	PROPOSED TRAIL EDGE		EXISTING TREES (TO BE REMOVED)
	PROPOSED BRIDGE		EXISTING SEWER W/EASMENT
	PERMANENT DISTURBANCE AREA		POTENTIAL PLANTING AREA
	TEMPORARY DISTURBANCE AREA		

NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS



REGISTERED
690
ROBERT W. PHIPPS
OREGON
5-31-2024
LANDSCAPE ARCHITECT

PROJECT ARBORIST
CONTACT INFORMATION:
ROBERT PHIPPS
robert.phipps@pbsusa.com
360-567-2127

SHEET: 21 OF 37
OWS #: 30757
CONTRACT #: NA



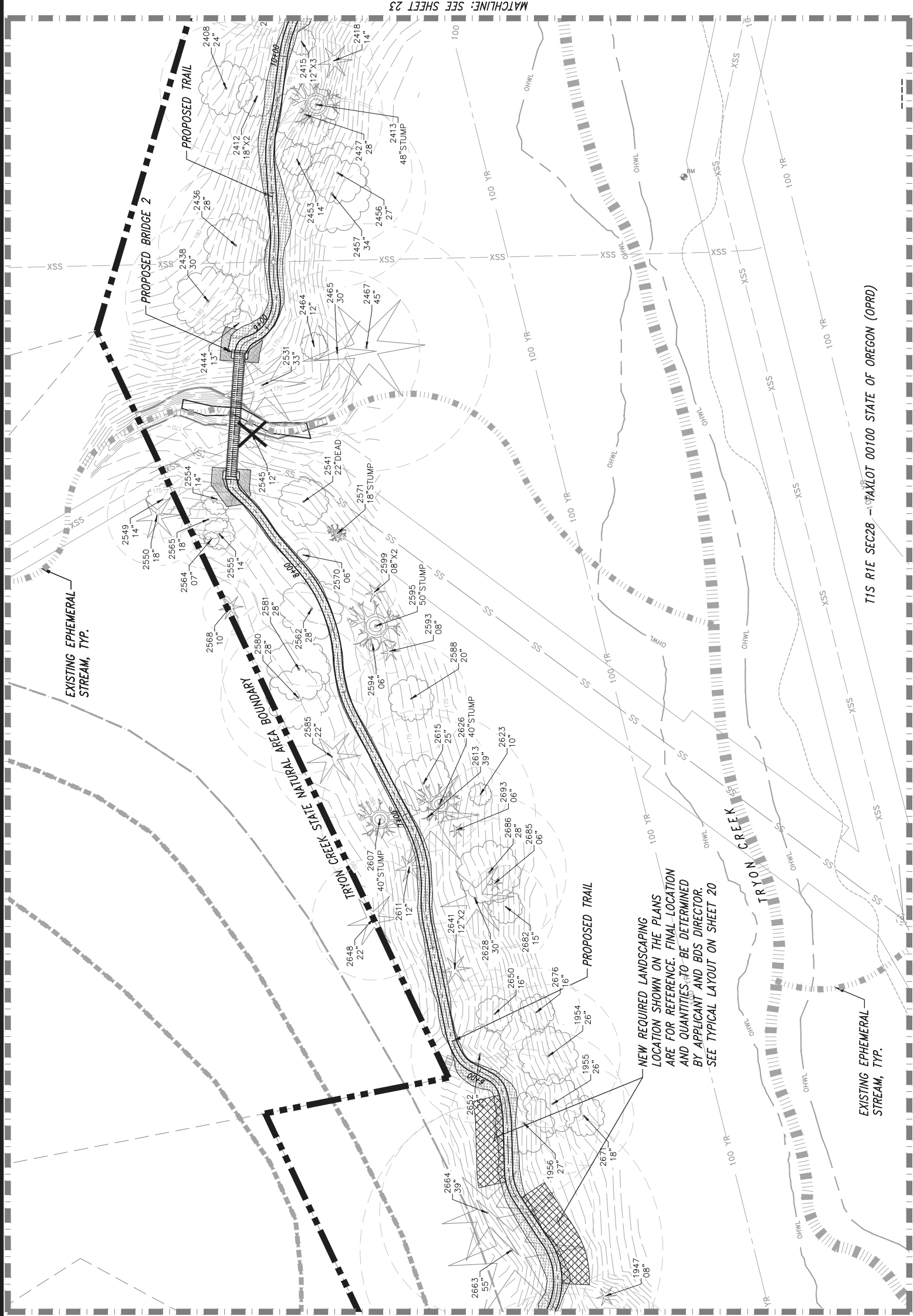
OREGON PARKS AND RECREATION DEPARTMENT
TRYON CREEK STATE NATURAL AREA
MARSHALL PARK TRAIL
TREE PROTECTION PLAN - AREA A

APPROVED BY	RWP
CHECKED BY	OAG
DESIGNED BY	OAG
DRAWN BY	OAG
DATE	MAR 2023

GENERAL TREE PROTECTION NOTES:

- ALL WORK WITHIN THE RPZ SHALL BE PERFORMED UNDER THE OVERSIGHT OF THE PROJECT ARBORIST AS REQUIRED BY THE PERFORMANCE PATH PROTECTIVE MEASURES.
- ALL EXCAVATION WITHIN THE RPZ SHALL BE PERFORMED WITH CARE TO UNCOVER ROOTS CAREFULLY. AT THE DISCRETION OF THE PROJECT ARBORIST, HAND TOOLS MAY BE REQUIRED TO EXPOSE ROOTS.
- ALL ROOT PRUNING SHALL BE PERFORMED USING CLEAN EQUIPMENT BY CUTTING A PERPENDICULAR ANGLE TO THE GROWTH OF THE ROOTS. ALL ROOTS $\frac{1}{4}$ " TO 2" IN DIAMETER MAY BE APPROVED BY THE PROJECT ARBORIST. IF ROOTS GREATER THAN 2" ARE OBSERVED AND NEED TO BE CUT, PORTLAND URBAN FORESTRY SHALL BE CONTACTED FOR INSPECTION AND APPROVAL.
- EXPOSURE OF ROOTS SHALL BE BACKFILLED BY THE END OF DAY OR IMMEDIATELY IF WORK IS COMPLETE. BETWEEN THE MONTHS OF JUNE TO AUGUST, THE PROJECT ARBORIST MAY REQUIRE SUPPLEMENTAL WATERING IN AREAS OF EXPOSED ROOTS.
- SEE SHEET 16 FOR MORE SPECIFIC TREE PROTECTION MEASURES.

6/20/2023 4:31 PM - L:\Projects\71000\71743\71743-V1\743-000\Civil\CAD\Working\Sheets\71743-000-033-037-TREEPROTECTION\PLAN.dwg - Phillip Grigorov

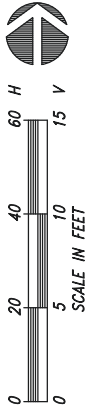


LEGEND

	OPRD PROPERTY BOUNDARY		*100 YEAR FLOOD BOUNDARY
	TAX LOT LINE		EXISTING CREEK
	EC OVERLAY		EXISTING EPHEMERAL STREAM
	EP OVERLAY		ORDINARY HIGH WATER LINE
	PROPOSED TRAIL CENTER LINE		TOP OF BANK
	PROPOSED TRAIL EDGE		EXISTING TREES (TO BE REMOVED)
	PROPOSED BRIDGE		EXISTING SEWER W/EASMENT
	PERMANENT DISTURBANCE AREA		POTENTIAL PLANTING AREA
	TEMPORARY DISTURBANCE AREA		

NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS



REGISTERED
690
ROBERT W. PHIPPS
OREGON
5-31-2024
LANDSCAPE ARCHITECT

PROJECT ARBORIST
CONTACT INFORMATION:
ROBERT PHIPPS
robert.phipps@pbsusa.com
360-567-2127

SHEET: 22 OF 37
OWMS #: 30757
CONTRACT #: NA



OREGON PARKS AND RECREATION DEPARTMENT
TREE PROTECTION PLAN - AREA B
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

APPROVED BY	RWP
CHECKED BY	OAG
DESIGNED BY	OAG
DRAWN BY	OAG
DATE	MAR 2023



GENERAL TREE PROTECTION NOTES:

- ALL WORK WITHIN THE RPZ SHALL BE PERFORMED UNDER THE OVERSIGHT OF THE PROJECT ARBORIST AS REQUIRED BY THE PERFORMANCE PATH PROTECTIVE MEASURES.
- ALL EXCAVATION WITHIN THE RPZ SHALL BE PERFORMED WITH CARE TO UNCOVER ROOTS CAREFULLY. AT THE DISCRETION OF THE PROJECT ARBORIST, HAND TOOLS MAY BE REQUIRED TO EXPOSE ROOTS.
- ALL ROOT PRUNING SHALL BE PERFORMED USING CLEAN EQUIPMENT BY CUTTING A PERPENDICULAR ANGLE TO THE GROWTH OF THE ROOTS. ALL ROOTS $\frac{1}{4}$ " TO 2" IN DIAMETER MAY BE APPROVED BY THE PROJECT ARBORIST. IF ROOTS GREATER THAN 2" ARE OBSERVED AND NEED TO BE CUT, PORTLAND URBAN FORESTRY SHALL BE CONTACTED FOR INSPECTION AND APPROVAL.
- EXPOSURE OF ROOTS SHALL BE BACKFILLED BY THE END OF DAY OR IMMEDIATELY IF WORK IS COMPLETE. BETWEEN THE MONTHS OF JUNE TO AUGUST, THE PROJECT ARBORIST MAY REQUIRE SUPPLEMENTAL WATERING IN AREAS OF EXPOSED ROOTS.
- SEE SHEET 16 FOR MORE SPECIFIC TREE PROTECTION MEASURES.

NEW REQUIRED LANDSCAPING
LOCATION SHOWN ON THE PLANS
ARE FOR REFERENCE. FINAL LOCATION
AND QUANTITIES TO BE DETERMINED
BY APPLICANT AND BDS DIRECTOR.
SEE TYPICAL LAYOUT ON SHEET 20

EXISTING EPHEMERAL
STREAM, TYP.

OREGON PARKS
& RECREATION
DEPARTMENT

T1S R1E SEC 28 - TAXLOT 00100
T1S R1E SEC 28 - TAXLOT 00202

METRO

TRYON CREEK

MATCHLINE: SEE SHEET 22

MATCHLINE: SEE SHEET 24

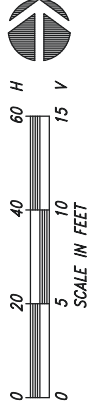
LEGEND

	OPRD PROPERTY BOUNDARY
	TAX LOT LINE
	EC OVERLAY
	EP OVERLAY
	PROPOSED TRAIL CENTER LINE
	PROPOSED TRAIL EDGE
	PROPOSED BRIDGE
	PERMANENT DISTURBANCE AREA
	TEMPORARY DISTURBANCE AREA

	*100 YEAR FLOOD BOUNDARY
	EXISTING CREEK
	EXISTING EPHEMERAL STREAM
	ORDINARY HIGH WATER LINE
	TOP OF BANK
	EXISTING TREES (TO BE REMOVED)
	EXISTING SEWER W/EASMENT
	POTENTIAL PLANTING AREA

NOTES:

- * THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS



REGISTERED
690
ROBERT W. PHIPPS
OREGON
5-31-2024
LANDSCAPE ARCHITECT

PROJECT ARBORIST
CONTACT INFORMATION:
ROBERT PHIPPS
robert.phipps@pbsusa.com
360-567-2127

SHEET:
23 OF 37
OPWS #:
30757
CONTRACT #:
NA

TREE PROTECTION PLAN - AREA C
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

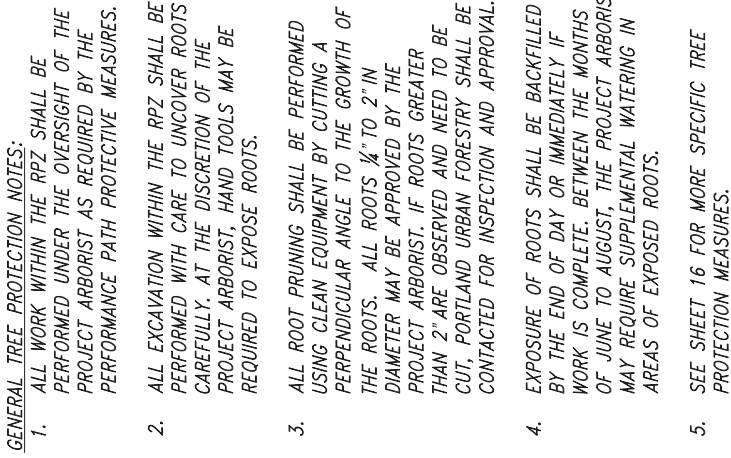
OREGON PARKS AND RECREATION DEPARTMENT




















APPROVED BY	RWP
CHECKED BY	OAG
DESIGNED BY	OAG
DRAWN BY	OAG
DATE	MAR 2023

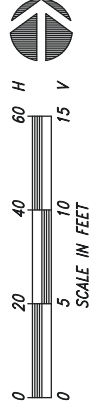


PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.246.1939
pbsusa.com



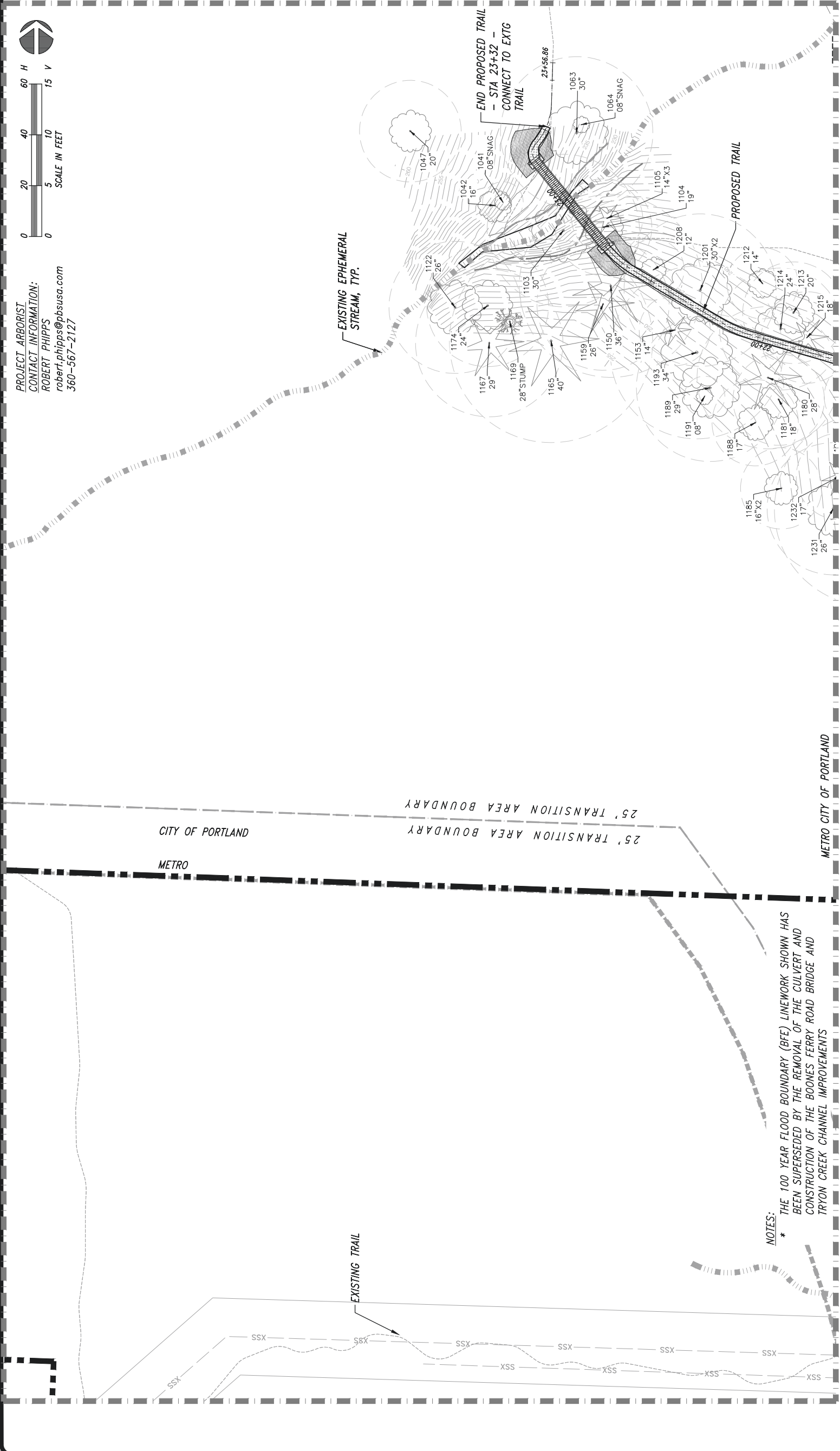
	<i>OPRD PROPERTY BOUNDARY</i>		<i>*100 YEAR FLOOD BOUNDARY</i>
	<i>TAX LOT LINE</i>		<i>EXISTING CREEK</i>
	<i>EC OVERLAY</i>		<i>EXISTING EPHEMERAL STREAM</i>
	<i>EP OVERLAY</i>		<i>ORDINARY HIGH WATER LINE</i>
	<i>PROPOSED TRAIL CENTER LINE</i>		<i>TOP OF BANK</i>
	<i>PROPOSED TRAIL EDGE</i>		<i>EXISTING TREES (TO BE REMOVED)</i>
	<i>PROPOSED BRIDGE</i>		<i>EXISTING SEWER W/EASEMENT</i>
	<i>PERMANENT DISTURBANCE AREA</i>		<i>POTENTIAL PLANTING AREA</i>
	<i>TEMPORARY DISTURBANCE AREA</i>		

ROBERT W. PHIPPS
OREGON
5-31-2024
LANDSCAPE ARCHITECT



NOTES:

* THE 100 YEAR FLOOD BOUNDARY (BFE) LINENWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS



LEGEND

	OPRD PROPERTY BOUNDARY		*100 YEAR FLOOD BOUNDARY
	TAX LOT LINE		EXISTING CREEK
	EC OVERLAY		EXISTING EPHEMERAL STREAM
	EP OVERLAY		ORDINARY HIGH WATER LINE
	PROPOSED TRAIL CENTER LINE		TOP OF BANK
	PROPOSED TRAIL EDGE		EXISTING TREES (TO BE REMOVED)
	PROPOSED BRIDGE		EXISTING SEWER W/EASMENT
	PERMANENT DISTURBANCE AREA		POTENTIAL PLANTING AREA
	TEMPORARY DISTURBANCE AREA		

NOTES:
* THE 100 YEAR FLOOD BOUNDARY (BFE) LINEWORK SHOWN HAS BEEN SUPERSEDED BY THE REMOVAL OF THE CULVERT AND CONSTRUCTION OF THE BOONES FERRY ROAD BRIDGE AND TRYON CREEK CHANNEL IMPROVEMENTS

GENERAL TREE PROTECTION NOTES:

- ALL WORK WITHIN THE RPZ SHALL BE PERFORMED UNDER THE OVERSIGHT OF THE PROJECT ARBORIST AS REQUIRED BY THE PERFORMANCE PATH PROTECTIVE MEASURES.
- ALL EXCAVATION WITHIN THE RPZ SHALL BE PERFORMED WITH CARE TO UNCOVER ROOTS CAREFULLY. AT THE DISCRETION OF THE PROJECT ARBORIST, HAND TOOLS MAY BE REQUIRED TO EXPOSE ROOTS.
- ALL ROOT PRUNING SHALL BE PERFORMED USING CLEAN EQUIPMENT BY CUTTING A PERPENDICULAR ANGLE TO THE GROWTH OF THE ROOTS. ALL ROOTS 1/4" TO 2" IN DIAMETER MAY BE APPROVED BY THE PROJECT ARBORIST. IF ROOTS GREATER THAN 2" ARE OBSERVED AND NEED TO BE

MATCHLINE: SEE SHEET 24

CUT, PORTLAND URBAN FORESTRY SHALL BE CONTACTED FOR INSPECTION AND APPROVAL.

- EXPOSURE OF ROOTS SHALL BE BACKFILLED BY THE END OF DAY OR IMMEDIATELY IF WORK IS COMPLETE. BETWEEN THE MONTHS OF JUNE TO AUGUST, THE PROJECT ARBORIST MAY REQUIRE SUPPLEMENTAL WATERING IN AREAS OF EXPOSED ROOTS.

- SEE SHEET 16 FOR MORE SPECIFIC TREE PROTECTION MEASURES.

REGISTERED
690

ROBERT W. PHIPPS
OREGON
5-31-2024
LANDSCAPE ARCHITECT

SHEET: 25 OF 37
OWMS #: 30757
CONTRACT #: NA

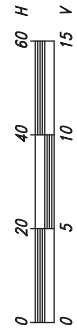
TREE PROTECTION PLAN - AREA E
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY	RWP
CHECKED BY	OAG
DESIGNED BY	OAG
DRAWN BY	OAG
DATE	MAR 2023

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com

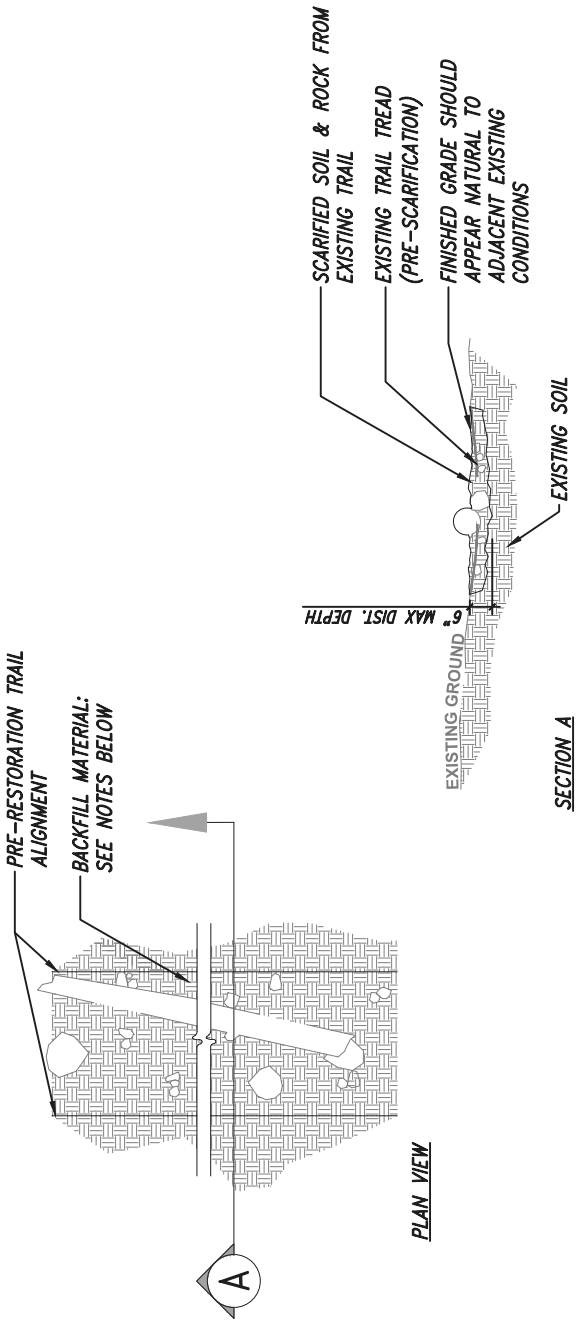


PROJECT ARBORIST
CONTACT INFORMATION:
ROBERT PHIPPS
robert.phipps@pbsusa.com
360-567-2127

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DATE	JUNE 2023
DRAWN BY	DPS



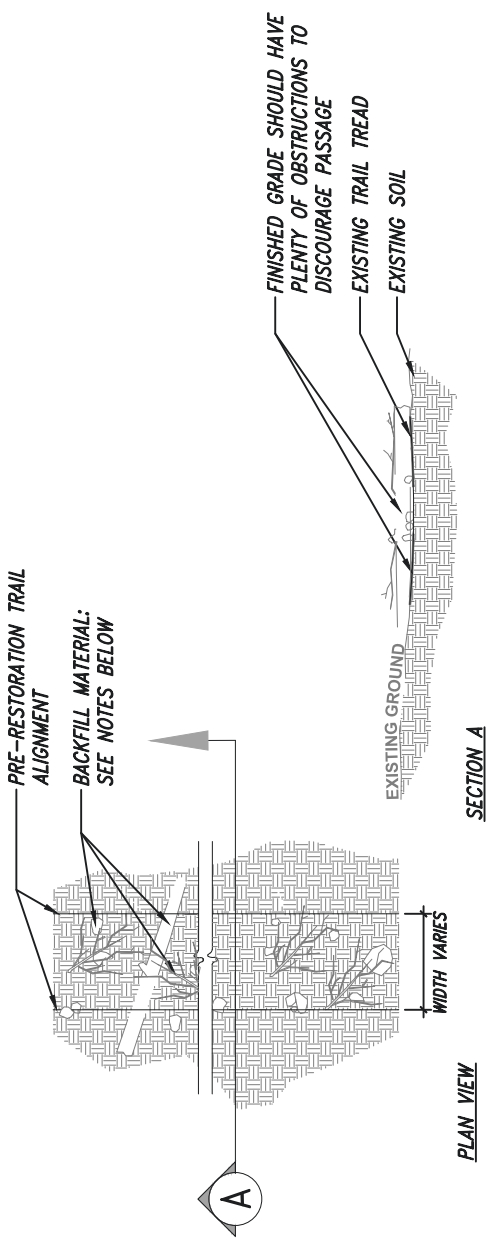
SHEET:	26 OF 37
HUB #:	30757
CONTRACT #:	NA



- NOTES:
1. RIP AND SCARIFY TO DECOMPACT EXISTING TRAIL SURFACE TO VARIABLE HEIGHT AND CONSISTENCY.
 2. WHERE AVAILABLE, PLACE WOODY DEBRIS INTO SCARIFIED CORRIDOR FROM ADJACENT ONSITE LOCATION AND NEW TRAIL CONSTRUCTION.
 3. SEED ALL EXPOSED SOIL AREAS.

EXISTING TRAIL: MECHANICAL OBLITERATE & RESTORE

NTS



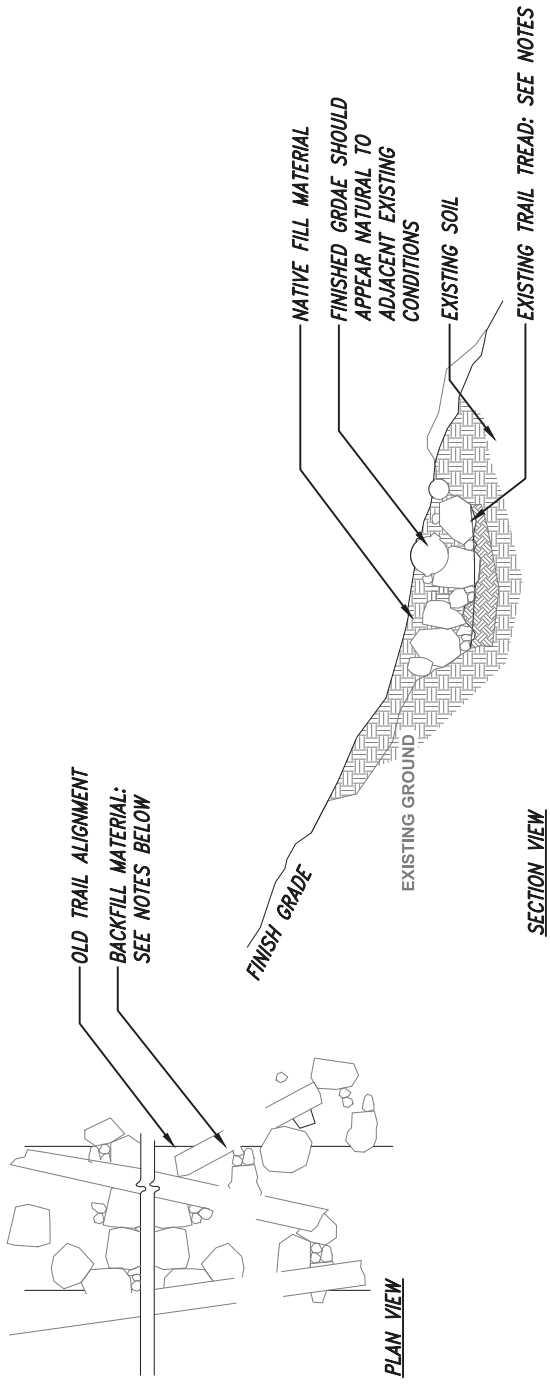
- NOTES:
1. EXISTING TRAIL HAND RESTORATION SEGMENTS SHALL NOT HAVE SOIL DISTURBANCE.
 2. PLACE WOODY MATERIALS AND STONES FROM ONSITE PLACED OVER EXISTING TRAIL CORRIDOR FROM ADJACENT ONSITE LOCATION AND NEW TRAIL CONSTRUCTION.
 3. SEED ALL EXPOSED SOIL AREAS.

EXISTING TRAIL: HAND OBLITERATE & RESTORE

NTS



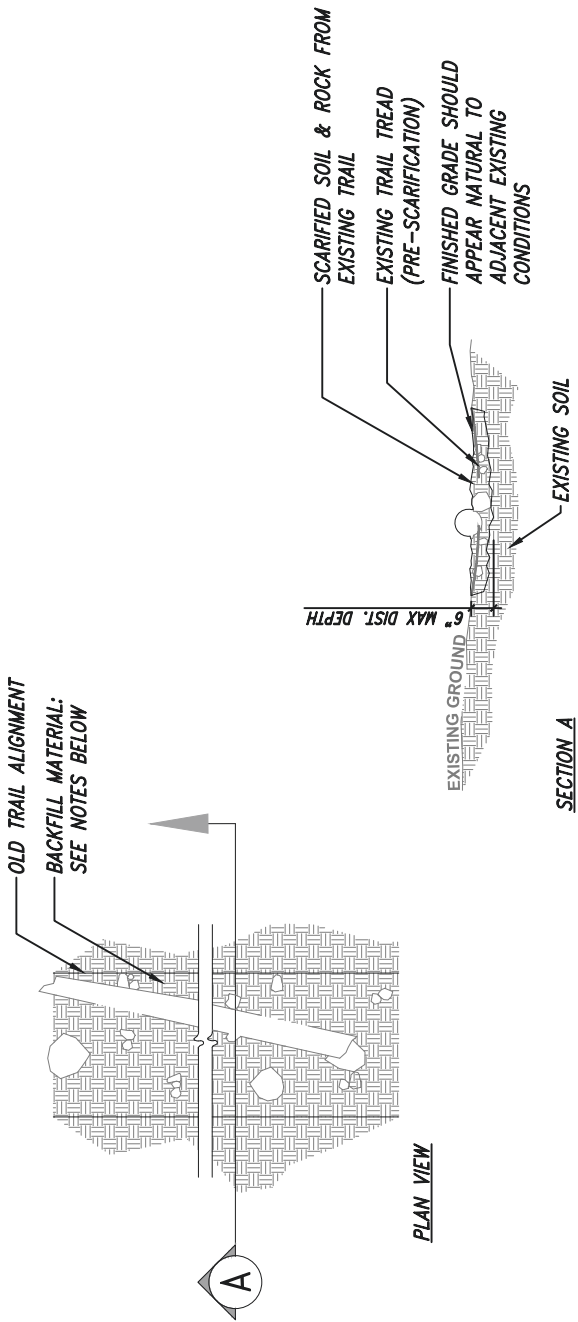
EXPIRES: 12/31/2024



- NOTES:
1. RIP AND SCARIFY TO DECOMPACT EXISTING TRAIL SURFACE TO VARIABLE HEIGHT AND CONSISTENCY.
 2. BACKFILL SCARIFIED TRAIL CORRIDOR WITH NATIVE SOIL, ROCKS, AND WOODY DEBRIS FROM ADJACENT ONSITE LOCATION AND NEW TRAIL CONSTRUCTION.
 3. SEED ALL EXPOSED SOIL AREAS.

TRAIL OBLITERATION

NTS



- NOTES:
1. RIP AND SCARIFY TO DECOMPACT EXISTING TRAIL SURFACE TO VARIABLE HEIGHT AND CONSISTENCY.
 2. WHERE AVAILABLE, PLACE WOODY DEBRIS INTO SCARIFIED CORRIDOR FROM ADJACENT ONSITE LOCATION AND NEW TRAIL CONSTRUCTION.
 3. SEED ALL EXPOSED SOIL AREAS.

EXISTING TRAIL: REMOVE & RESTORE

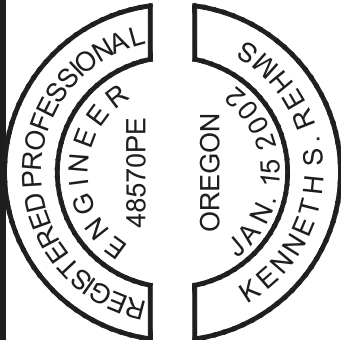
NTS



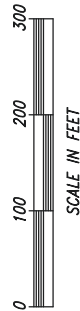
OREGON PARKS AND RECREATION DEPARTMENT

CONSTRUCTION ACCESS & EROSION CONTROL PLAN - FULL SITE
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

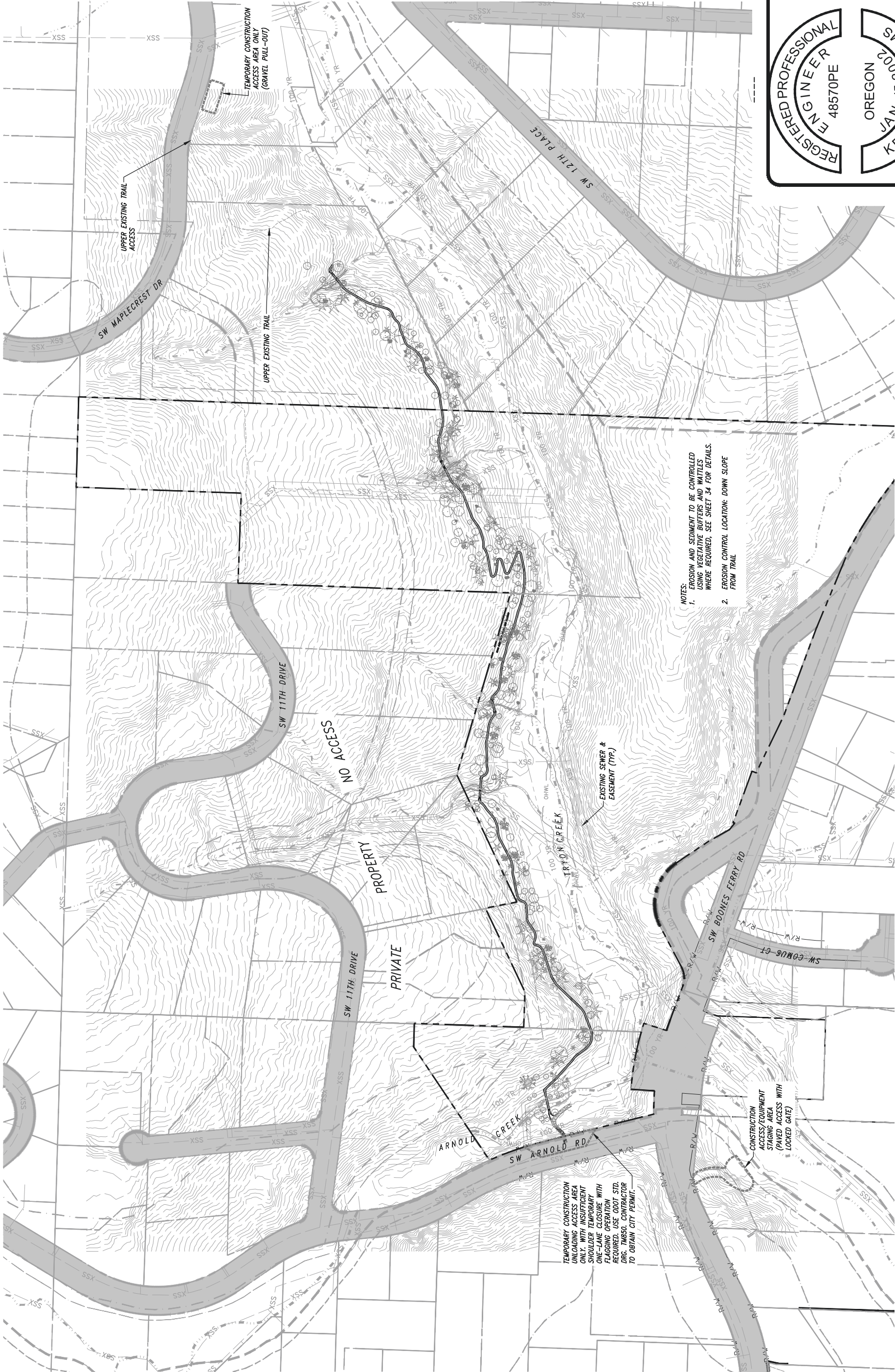
SHEET: 27 OF 37
HUB #: 30757
CONTRACT #: NA



EXPIRES: 12/31/2024



- NOTES:
1. EROSION AND SEDIMENT TO BE CONTROLLED USING VEGETATIVE BUFFERS AND MATS WHERE REQUIRED, SEE SHEET 34 FOR DETAILS.
 2. EROSION CONTROL LOCATION: DOWN SLOPE FROM TRAIL



APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DPS	JUNE 2023
DATE	DRAWN BY



PBS Engineering and
Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.246.1939
pbsusa.com

OREGON DEQ EROSION CONTROL NOTES:

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-CA PERMIT REQUIREMENTS.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-CA PERMIT REQUIREMENTS.
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (SCHEDULE B.2.A)
- ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
- THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. (SCHEDULE A.8.C.II.(1)(C))
- SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT. (SCHEDULE A.12.C.III)
- PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.8.C.II.(1)(D))
- IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) & (2))
- PRESERVE EXISTING VEGETATION WHEN PRACTICAL. (SCHEDULE A.7.B.III.(3))
- EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (SCHEDULE A.7.D.I AND A.8.C)
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.8.C.II.(2))
- ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
- PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A.7.D.II.(1) AND A.8.C.I(4))
- WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(3))
- USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
- IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES; EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES; SPILL KITS IN ALL VEHICLES; REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY; MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCH A.7.E.III.)
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.B.II)
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
- IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE

- OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
- TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
- AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.E.II.(2))
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.A.I)
- SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
- OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT, AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.II)
- CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
- WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A REURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
- THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
- THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
- PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE. (SCHEDULE A.7.F.II)
- PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMPS. (SCHEDULE A.7.B.III(2) AND A.8.C.III)

PROJECT SPECIFIC EROSION CONTROL NOTES:

- CONSTRUCTION ACTIVITIES ON THIS SITE ARE SUBJECT TO THE REQUIREMENTS OF DEQ'S NPDES 1200CA PERMIT (DEQ FILE NO. 113597) WHICH REGULATES STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EROSION CONTROL MEASURES SHOWN ON THIS PLAN REPRESENT ANTICIPATED BMPS FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND ADJUSTING THE APPROPRIATE EROSION CONTROL MEASURES TO ADDRESS CHANGING SITE CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN EROSION, SEDIMENT AND POLLUTION CONTROL PLAN FOR THIS PROJECT.

CITY'S STANDARD EROSION CONTROL NOTES:

- ALL EROSION, SEDIMENT AND POLLUTION CONTROL PLAN (ESPCP) MEASURES SHOWN SHALL BE INSTALLED AS PER THE DETAIL DRAWINGS IN THE CITY OF PORTLAND - EROSION CONTROL MANUAL (AVAILABLE THROUGH THE OFFICE OF PLANNING AND DEVELOPMENT REVIEW, 1900 SW 4TH AVE, PORTLAND OR 97201).
- TEMPORARY ESPCP MEASURES SHALL BE INSTALLED, INSPECTED AND APPROVED BY A CITY INSPECTOR BEFORE STARTING GROUND DISTURBING ACTIVITIES.
- ESPCP MEASURES SHALL NOT BE REMOVED UNTIL PERMANENT LANDSCAPING HAS BEEN INSTALLED AND A FINAL INSPECTION HAS BEEN REQUESTED AND APPROVED BY A CITY INSPECTOR.
- INSPECTIONS MAY BE REQUESTED BY TELEPHONING THE INSPECTION REQUEST NUMBER (503) 823-7000 ONE DAY PRIOR TO THE TIME OF INSPECTION.
- APPROVAL OF THIS EROSION, SEDIMENT AND POLLUTION CONTROL PLAN (ESPCP) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF THIS ESPCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND LANDSCAPING IS ESTABLISHED.
- THE ESPCP FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BETWEEN OCTOBER 1 AND APRIL 30 BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. ALL INSPECTIONS SHALL BE NOTED IN AN INSPECTION LOG MAINTAINED ON SITE, AND WHICH SHALL BE MADE AVAILABLE TO THE CITY INSPECTOR UPON REQUEST.
- THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT. ESPCP FACILITIES SHALL BE INSPECTED DAILY DURING RAINFALL.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- APPLY PERMANENT OR TEMPORARY SOIL STABILIZATION TO DENUDED DEVELOPMENT SITE AREAS IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:
 - BETWEEN OCTOBER 1 AND APRIL 30, ALL DENUDED SITES SHALL IMMEDIATELY BE PROVIDED WITH EITHER TEMPORARY OR PERMANENT SOIL STABILIZATION.
 - BETWEEN MAY 1 AND SEPTEMBER 30, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPLIED AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER GROUND DISTURBING ACTIVITY OCCURS.
 - TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE ESTABLISHED.
- SECURE OR PROTECT SOIL STOCKPILES THROUGHOUT THE PROJECT WITH TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES. THE RESPONSIBLE PARTY IS ACCOUNTABLE FOR THE PROTECTION OF ALL STOCKPILES ON THE SITE, AND THOSE TRANSPORTED FROM THE SITE. DEPOSITION OF SOIL MAY BE SUBJECT TO ADDITIONAL REGULATIONS REQUIRING PERMIT. REVIEW OR EROSION CONTROL.



EXPIRES: 12/31/2024

SHEET: 28 OF 37
HUB #: 30757
CONTRACT #: NA

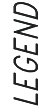
CONSTRUCTION ACCESS & EROSION CONTROL PLAN - NOTES
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA
OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY
CHECKED BY KSR
DESIGNED BY DPS
DATE JUNE 2023
DRAWN BY



PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939
pbsusa.com



- PROPOSED TRAIL ALIGNMENT
STRAW WATTLE, TYPE
CONSTRUCTION FENCING TYPE

- MAXIMUM TEMPORARY DISTURBANCE
AREA FOR CONSTRUCTION, TYPE
STAGING, STOCKPILING AND
EQUIPMENT MANEUVERING AREA
VEGETATED BUFFER LINE

CONSTRUCTION FENCING:

1. MECHANIZED EQUIPMENT, MATERIAL STOCKPILING, AND STAGING SHALL REMAIN WITHIN THE CONFINES OF THE EXISTING AND PROPOSED TRAIL CORRIDORS.
2. LABORERS WITH HAND TOOLS MAY WORK BEYOND THE FENCING TO INSTALL EROSION CONTROL AND SEEDING.

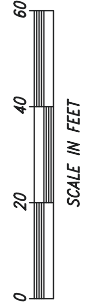
REVEGETATION NOTES:

1. AT THE END OF BRIDGE CONSTRUCTION, STAGING AREAS AND OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDDED WITH THE NATIVE SEED MIX AND MULCHED WITH WEED-FREE STRAW.

		NATIVE SEED MIX		
Grass:Forbs	Common	Latin	Percent composition of mix	PLS
60%	Spike Bentgrass	<i>Agrostis exarata</i>	15.0%	0.75
	Western fescue	<i>Festuca occidentalis</i>	15.0%	0.75
	Fowl Mannagrass	<i>Glyceria elata</i>	15.0%	0.75
	California Brome	<i>Bromus carinatus</i>	15.0%	0.75
40%	Streambank lupine	<i>Lupinus rivularis</i>	10.0%	0.50
	Miner's lettuce	<i>Claytonia perfoliata</i>	10.0%	0.50
	Bleeding heart	<i>Dicentra formosa</i> ssp. <i>formosa</i>	10.0%	0.50
	Pacific waterleaf	<i>Hydrophyllum tenuipes</i>	10.0%	0.50

APPLICATION RATE:

Pounds of Pure Live Seed (PLS) per acre.



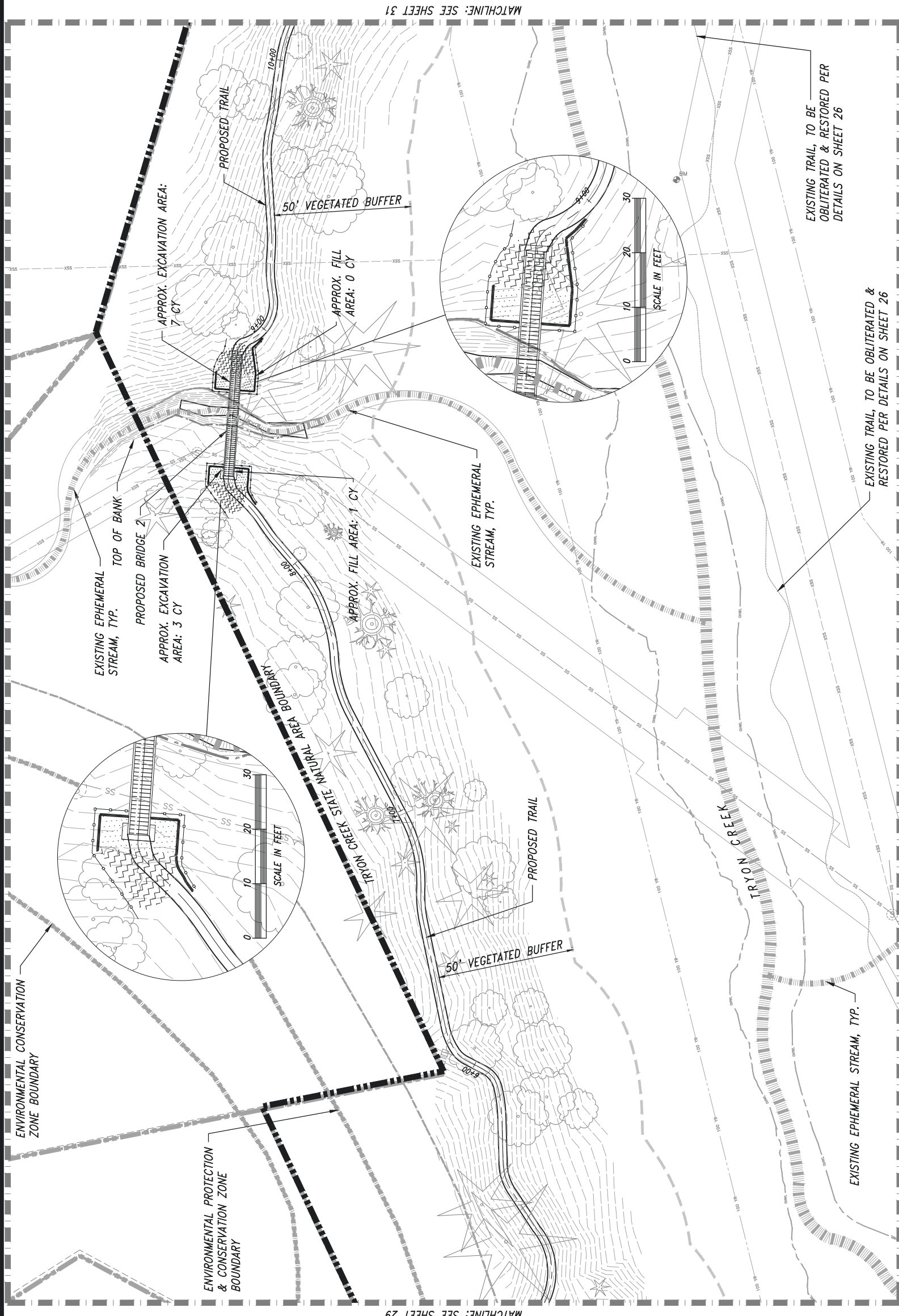
EXPIRES: 12/31/2024

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DATE	JUNE 2023
DRAWN BY	DPS



OREGON PARKS AND RECREATION DEPARTMENT
CONSTRUCTION ACCESS & EROSION CONTROL PLAN – AREA B
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA

SHEET:	30 OF 37
HUB #:	CONTRACT #:
30757	NA



MATCHLINE: SEE SHEET 29

MATCHLINE: SEE SHEET 31

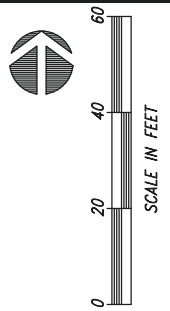
LEGEND

- PROPOSED TRAIL ALIGNMENT
- STRAW WATTLE, TYP
- CONSTRUCTION FENCING, TYP
- MAXIMUM TEMPORARY DISTURBANCE AREA FOR CONSTRUCTION, TYP
- STAGING, STOCKPILING AND EQUIPMENT MANEUVERING AREA
- VEGETATED BUFFER LINE

- CONSTRUCTION FENCING:
- MECHANIZED EQUIPMENT, MATERIAL STOCKPILING, AND STAGING SHALL REMAIN WITHIN THE CONFINES OF THE EXISTING AND PROPOSED TRAIL CORRIDORS.
 - LABORERS WITH HAND TOOLS MAY WORK BEYOND THE FENCING TO INSTALL EROSION CONTROL AND SEEDING.
- REVEGETATION NOTES:
- AT THE END OF BRIDGE CONSTRUCTION, STAGING AREAS AND OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDDED WITH THE NATIVE SEED MIX AND MULCHED WITH WEED-FREE STRAW.

Grass:Forbs	NATIVE SEED MIX			PLS
	Common	Latin	Percent composition of mix bulk	
60%	Spike Bentgrass	Agrostis exarata	15.0%	0.75
	Western fescue	Festuca occidentalis	15.0%	0.75
	Fowl Mannagrass	Glyceria elata	15.0%	0.75
	California Brome	Bromus carinatus	15.0%	0.75
40%	Streambank lupine	Lupinus rivularis	10.0%	0.50
	Miner's lettuce	Claytonia perfoliata	10.0%	0.50
	Bleeding heart	Dicentra formosa ssp. formosa	10.0%	0.50
	Pacific waterleaf	Hydrophyllum tenuipes	10.0%	0.50

APPLICATION RATE:
Pounds of Pure Live Seed (PLS) per acre.



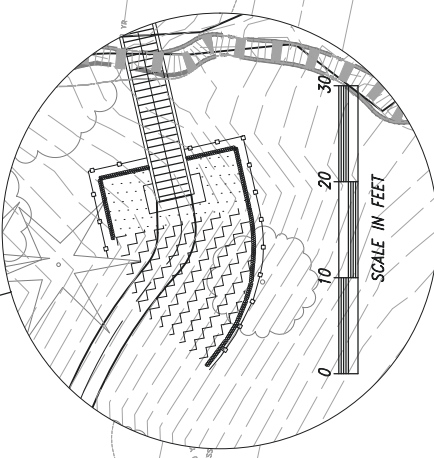
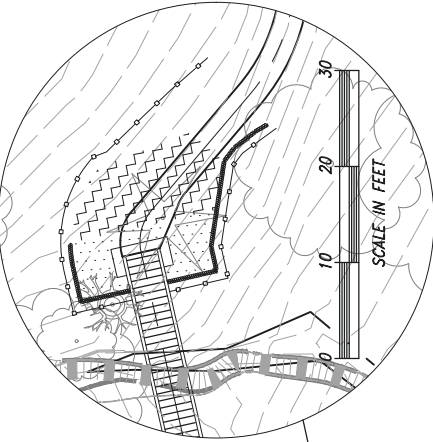
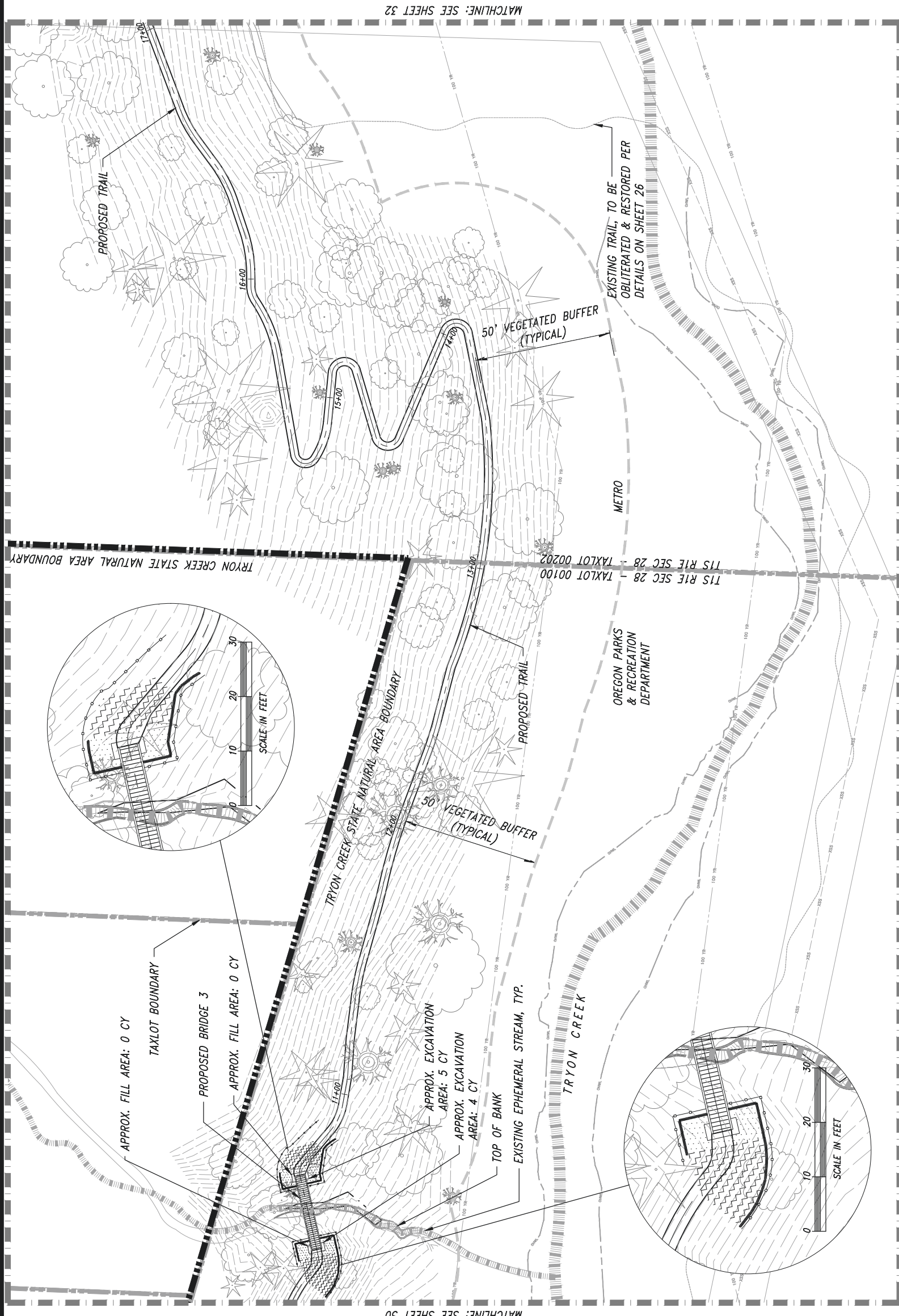
EXPIRES: 12/31/2024

APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



OREGON PARKS AND RECREATION DEPARTMENT
CONSTRUCTION ACCESS & EROSION CONTROL PLAN – AREA C
TRYON CREEK STATE NATURAL AREA
MARSHALL PARK TRAIL

SHEET:	31 OF 37
HUB #:	CONTRACT #:
30757	NA



LEGEND

- PROPOSED TRAIL ALIGNMENT
- STRAW WATTLE, TYP
- CONSTRUCTION FENCING, TYP
- MAXIMUM TEMPORARY DISTURBANCE AREA FOR CONSTRUCTION, TYP
- STAGING, STOCKPILING AND EQUIPMENT MANEUVERING AREA
- VEGETATED BUFFER LINE

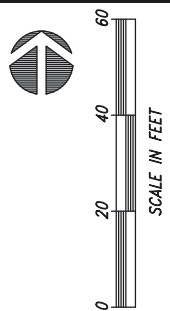
- CONSTRUCTION FENCING:
- MECHANIZED EQUIPMENT, MATERIAL STOCKPILING, AND STAGING SHALL REMAIN WITHIN THE CONFINES OF THE EXISTING AND PROPOSED TRAIL CORRIDORS.
 - LABORERS WITH HAND TOOLS MAY WORK BEYOND THE FENCING TO INSTALL EROSION CONTROL AND SEEDING.
- REVEGETATION NOTES:
- AT THE END OF BRIDGE CONSTRUCTION, STAGING AREAS AND OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDING WITH THE NATIVE SEED MIX AND MULCHED WITH WEED-FREE STRAW.

Grass:Forbs	Common	Latin	Percent composition of mix bulk	PLS
60%	Spike Bentgrass	Agrostis exarata	15.0%	0.75
	Western fescue	Festuca occidentalis	15.0%	0.75
	Fowl Mannagrass	Glyceria elata	15.0%	0.75
	California Brome	Bromus carinatus	15.0%	0.75
	Streambank lupine	Lupinus rivularis	10.0%	0.50
40%	Miner's lettuce	Claytonia perfoliata	10.0%	0.50
	Bleeding heart	Dicentra formosa ssp. formosa	10.0%	0.50
	Pacific waterleaf	Hydrophyllum tenuipes	10.0%	0.50

APPLICATION RATE:
Pounds of Pure Live Seed (PLS) per acre.

REGISTERED PROFESSIONAL
ENGINEER
48570PE
OREGON
JAN. 15 2002
KENNETH S. REHMS

EXPIRES: 12/31/2024

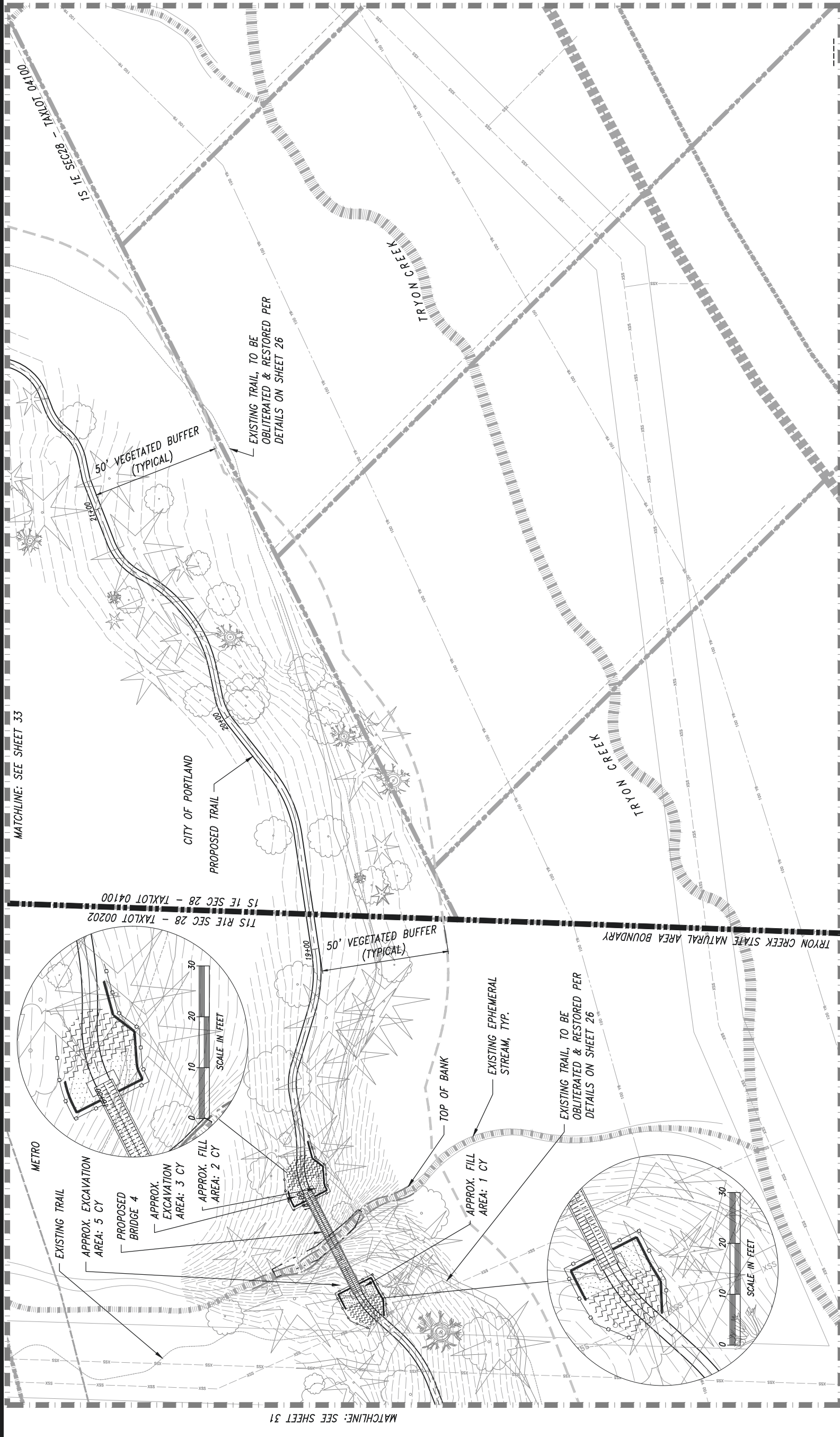


APPROVED BY	
CHECKED BY	KSR
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023



OREGON PARKS AND RECREATION DEPARTMENT
CONSTRUCTION ACCESS & EROSION CONTROL PLAN – AREA D
TRYON CREEK STATE NATURAL AREA
MARSHALL PARK TRAIL

SHEET:	32 OF 37
HUB #:	30757
CONTRACT #:	NA



LEGEND

- PROPOSED TRAIL ALIGNMENT
- STRAW WATTLE, TYP
- CONSTRUCTION FENCING, TYP
- MAXIMUM TEMPORARY DISTURBANCE AREA FOR CONSTRUCTION, TYP
- STAGING, STOCKPILING AND EQUIPMENT MANEUVERING AREA
- VEGETATED BUFFER LINE

CONSTRUCTION FENCING:

- MECHANIZED EQUIPMENT, MATERIAL STOCKPILING, AND STAGING SHALL REMAIN WITHIN THE CONFINES OF THE EXISTING AND PROPOSED TRAIL CORRIDORS.
- LABORERS WITH HAND TOOLS MAY WORK BEYOND THE FENCING TO INSTALL EROSION CONTROL AND SEEDING.

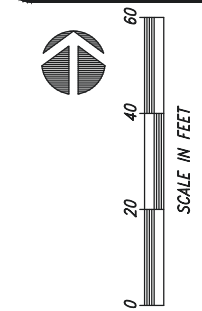
REVEGETATION NOTES:

- AT THE END OF BRIDGE CONSTRUCTION, STAGING AREAS AND OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED WITH THE NATIVE SEED MIX AND MULCHED WITH WEED-FREE STRAW.

Grass:Forbs	NATIVE SEED MIX			PLS
	Common	Latin	Percent composition of mix bulk	
60%	Spike Bentgrass	Agrostis exarata	15.0%	0.75
	Western fescue	Festuca occidentalis	15.0%	0.75
	Fowl Mannagrass	Glyceria elata	15.0%	0.75
	California Brome	Bromus carinatus	15.0%	0.75
40%	Streambank lupine	Lupinus rivularis	10.0%	0.50
	Miner's lettuce	Claytonia perfoliata	10.0%	0.50
	Bleeding heart	Dicentra formosa ssp. formosa	10.0%	0.50
	Pacific waterleaf	Hydrophyllum tenuipes	10.0%	0.50

APPLICATION RATE:

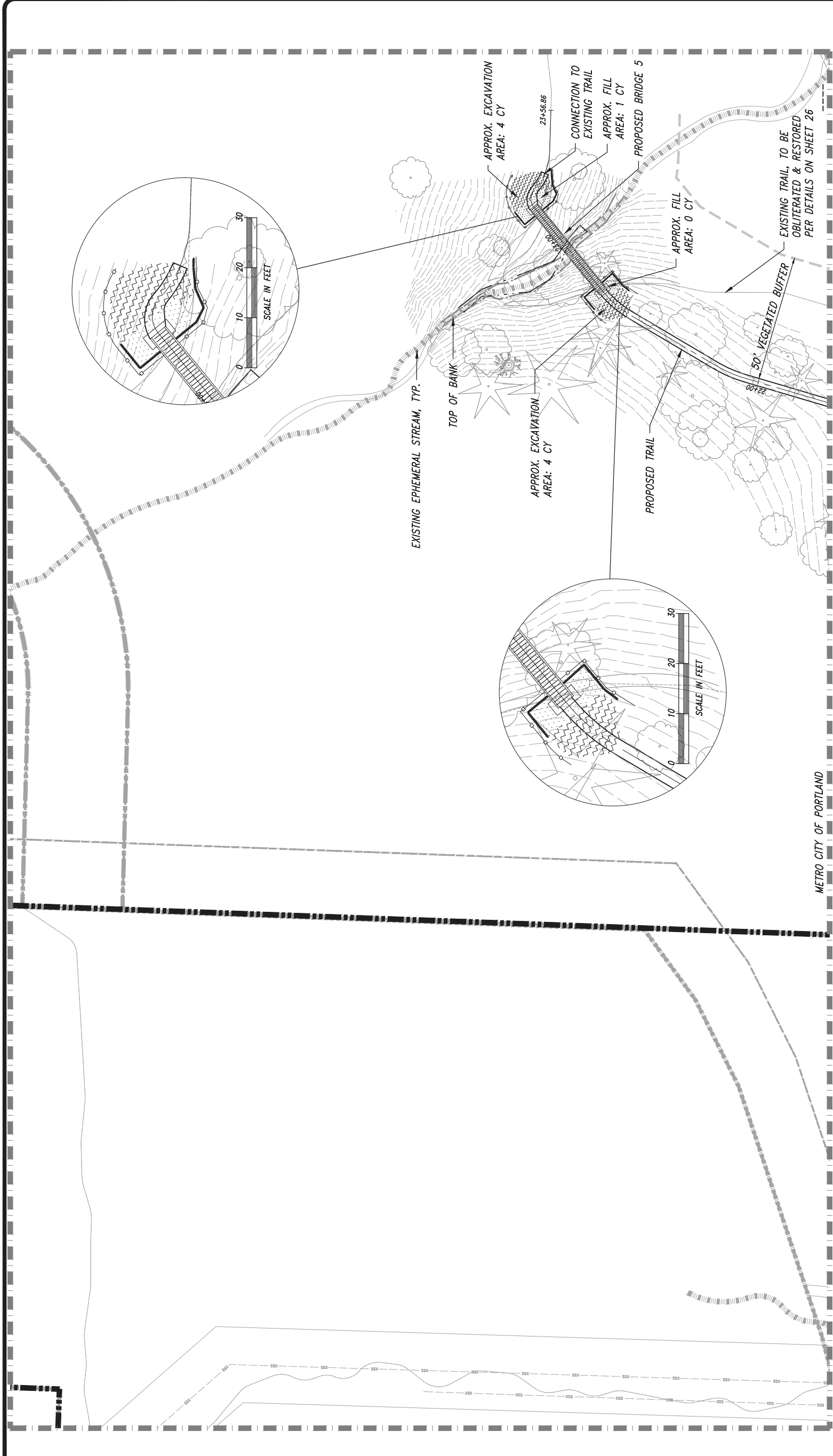
Pounds of Pure Live Seed (PLS) per acre.



REGISTERED PROFESSIONAL
ENGINEER
F 48570PE

OREGON
JAN. 15 2002
KENNETH S. REHMS

EXPIRES: 12/31/2024



LEGEND

- PROPOSED TRAIL ALIGNMENT
- STRAW WATTLE, TYP
- CONSTRUCTION FENCING, TYP
- MAXIMUM TEMPORARY DISTURBANCE AREA FOR CONSTRUCTION, TYP
- STAGING, STOCKPILING AND EQUIPMENT MANEUVERING AREA
- VEGETATED BUFFER LINE

- CONSTRUCTION FENCING:
- MECHANIZED EQUIPMENT, MATERIAL STOCKPILING, AND STAGING SHALL REMAIN WITHIN THE CONFINES OF THE EXISTING AND PROPOSED TRAIL CORRIDORS.
 - LABORERS WITH HAND TOOLS MAY WORK BEYOND THE FENCING TO INSTALL EROSION CONTROL AND SEEDING.
- REVEGETATION NOTES:
- AT THE END OF BRIDGE CONSTRUCTION, STAGING AREAS AND OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDDED WITH THE NATIVE SEED MIX AND MULCHED WITH WEED-FREE STRAW.

Grass:Forbs	Common	Latin	NATIVE SEED MIX	
			Percent composition of mix bulk	PLS
60%	Spike Bentgrass	Agrostis exarata	15.0%	0.75
	Western fescue	Festuca occidentalis	15.0%	0.75
	Fowl Mannagrass	Glyceria elata	15.0%	0.75
	California Brome	Bromus carinatus	15.0%	0.75
	Streambank lupine	Lupinus rivularis	10.0%	0.50
40%	Miner's lettuce	Claytonia perfoliata	10.0%	0.50
	Bleeding heart	Dicentra formosa ssp. formosa	10.0%	0.50
	Pacific waterleaf	Hydrophyllum tenuipes	10.0%	0.50

APPLICATION RATE: Pounds of Pure Live Seed (PLS) per acre.



- PROJECT SITE SPECIFIC NOTES:
- SILT FENCING MAY BE USED IN PLACE OF STRAW WATTLES AS AN EROSION CONTROL MEASURE AT BRIDGE #5.
 - ALL STRAW WATTLES USED MUST BE REMOVED FROM SITE POST CONSTRUCTION ACTIVITIES AND PRIOR TO COMMENCEMENT OF PROJECT WORK. NO STRAW IS TO BE DISPERSED AT BRIDGE #5



EXPIRES: 12/31/2024

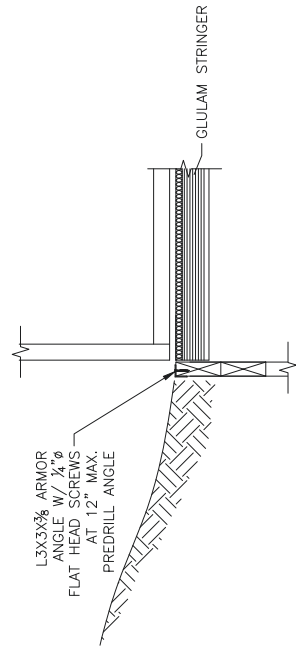
CONSTRUCTION ACCESS & EROSION CONTROL PLAN - AREA E
MARSHALL PARK TRAIL
TRYON CREEK STATE NATURAL AREA
OREGON PARKS AND RECREATION DEPARTMENT



APPROVED BY	KSR
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	DPS
DATE	JUNE 2023

SHEET:	33 OF 37
HUB #:	30757
CONTRACT #:	NA

WATTLES - NO STAKE
NTS



ARMOR ANGLE DETAIL

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

5 38



BRIDGE SCHEDULE (FIELD VERIFY BRIDGE SPAN BASED ON SITE CONDITIONS)							
Bridge ID	Approx. Span ft	Width ft	Approx. Grade	Stringer Section	Stringer Style	Abutment	
						Size	Reinforcement
Bridge 1	52	4	0%	8.75" x 27"	Gulam DF/DF 24F-V4	6'-0" x 2'-6" x2'-0"	#6 @ 12" o.c. E/W T&B
Bridge 2	45	4	3%	8.75" x 22.5"	Gulam DF/DF 24F-V4	6'-0" x 2'-6" x2'-0"	#6 @ 12" o.c. E/W T&B
Bridge 3	28	4	2%	5.125" x 18"	Gulam DF/DF 24F-V4	6'-0" x 2'-6" x2'-0"	#6 @ 12" o.c. E/W T&B
Bridge 4	44	4	0%	8.75" x 22.5"	Gulam DF/DF 24F-V4	6'-0" x 2'-6" x2'-0"	#6 @ 12" o.c. E/W T&B
Bridge 5	44	4	4%	8.75" x 22.5"	Gulam DF/DF 24F-V4	6'-0" x 2'-6" x2'-0"	#6 @ 12" o.c. E/W T&B

EXHIBIT C

SUBCONTRACTOR INSURANCE

Agency shall require its first tier contractor(s) (Contractor) that are not units of local government as defined in ORS 190.003, if any, to: i) obtain insurance specified under TYPES AND AMOUNTS and meeting the requirements under ADDITIONAL INSURED, “TAIL” COVERAGE, NOTICE OF CANCELLATION OR CHANGE, and CERTIFICATES OF INSURANCE before the contractors perform under contracts between Agency and the contractors (the “Subcontracts”), and ii) maintain the insurance in full force throughout the duration of the Subcontracts. The insurance must be provided by insurance companies or entities that are authorized to transact the business of insurance and issue coverage in the State of Oregon and that are acceptable to Local Government. Agency shall not authorize contractors to begin work under the Subcontracts until the insurance is in full force. Thereafter, Agency shall monitor continued compliance with the insurance requirements on an annual or more frequent basis. Agency shall incorporate appropriate provisions in the Subcontracts permitting it to enforce contractor compliance with the insurance requirements and shall take all reasonable steps to enforce such compliance. Examples of “reasonable steps” include issuing stop work orders (or the equivalent) until the insurance is in full force or terminating the Subcontracts as permitted by the Subcontracts or pursuing legal action to enforce the insurance requirements. In no event shall Agency, permit a contractor to work under a Subcontract when the Agency is aware that the contractor is not in compliance with the insurance requirements. As used in this section, a “first tier” contractor is a contractor with which the county directly enters into a contract. It does not include a subcontractor with which the contractor enters into a contract.

TYPES AND AMOUNTS

WORKERS’ COMPENSATION & EMPLOYERS’ LIABILITY:

All employers, including Contractor, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and shall provide workers' compensation insurance coverage for those workers, unless they meet the requirement for an exemption under ORS 656.126(2). Contractor shall require and ensure that each of its subcontractors complies with these requirements. If Contractor is a subject employer, as defined in ORS 656.023, Contractor shall also obtain employers' liability insurance coverage with limits not less than **\$500,000** each accident. If contractor is an employer subject to any other state’s workers’ compensation law, Contractor shall provide workers’ compensation insurance coverage for its employees as required by applicable workers’ compensation laws including employers’ liability insurance coverage with limits not less than \$500,000 and shall require and ensure that each of its out-of-state subcontractors complies with these requirements.

COMMERCIAL GENERAL LIABILITY:

Commercial General Liability Insurance covering bodily injury and property damage in a form and with coverage that are satisfactory to the Agency. This insurance shall include personal and advertising injury liability, products and completed operations, contractual liability coverage for the indemnity

provided under this contract, and have no limitation of coverage to designated premises, project, or operation. Coverage shall be written on an occurrence basis in an amount of not less than **\$2,000,000** per occurrence. Annual aggregate limit shall not be less than **\$4,000,000**.

AUTOMOBILE LIABILITY INSURANCE:

Automobile Liability Insurance covering Contractor's business use including coverage for all owned, non-owned, or hired vehicles with a combined single limit of not less than **\$2,000,000** for bodily injury and property damage. This coverage may be written in combination with the Commercial General Liability Insurance (with separate limits for Commercial General Liability and Automobile Liability). Use of personal automobile liability insurance coverage may be acceptable if evidence that the policy includes a business use endorsement is provided.

PROFESSIONAL LIABILITY:

Professional Liability insurance covering any damages caused by an error, omission or any negligent acts related to the services to be provided under the Subcontract by the Contractor and Contractor's subcontractors, agents, officers or employees in an amount not less than **\$2,000,000** per occurrence. Annual aggregate limit shall not be less than **\$4,000,000**. If coverage is on a claims made basis, then either an extended reporting period of not less than 24 months shall be included in the Professional Liability insurance coverage, or the Contractor shall provide Tail Coverage as stated below.

EXCESS/UMBRELLA INSURANCE:

A combination of primary and excess/umbrella insurance may be used to meet the required limits of insurance.

ADDITIONAL COVERAGE REQUIREMENTS:

Contractor's insurance shall be primary and non-contributory with any other insurance. Contractor shall pay for all deductibles, self-insured retention and self-insurance, if any.

ADDITIONAL INSURED:

The Commercial General Liability insurance and Automobile liability insurance required under the Subcontract must include an additional insured endorsement specifying the State of Oregon and the City of Portland, their officers, employees, and agents as Additional Insureds, including additional insured status with respect to liability arising out of ongoing operations and completed operations, but only with respect to Contractor's activities to be performed under this Subcontract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The Additional Insured endorsement with respect to liability arising out of Contractor's ongoing operations must be on ISO Form CG 20 10 07 04 or equivalent and the Additional Insured endorsement with respect to completed operations must be on ISO form CG 20 37 04 13 or equivalent.

TAIL COVERAGE:

If any of the required insurance is on a claims made basis and does not include an extended reporting period of at least 24 months, Contractor shall maintain either tail coverage or continuous claims made liability coverage, provided the effective date of the continuous claims made coverage is on or before

the effective date of this Subcontract, for a minimum of 24 months following the later of (i) Contractor's completion and Local Government's acceptance of all Services required under this Subcontract, or, (ii) The expiration of all warranty periods provided under this Subcontract.

CERTIFICATE(S) AND PROOF OF INSURANCE:

Agency shall obtain from the Contractor a Certificate(s) of Insurance for all required insurance before delivering any Goods and performing any Services required under this Contract. The Certificate(s) shall list the State of Oregon and the City of Portland, their officers, employees and agents as a Certificate holder and as an endorsed Additional Insured. If excess/umbrella insurance is used to meet the minimum insurance requirement, the Certificate of Insurance must include a list of all policies that fall under the excess/umbrella insurance. As proof of insurance Agency has the right to request copies of insurance policies and endorsements relating to the insurance requirements in this Contract.

NOTICE OF CHANGE OR CANCELLATION:

The Contractor or its insurer must provide at least 30 days' written notice to Agency before cancellation of, material change to, potential exhaustion of aggregate limits of, or non-renewal of the required insurance coverage(s).

INSURANCE REQUIREMENT REVIEW:

Contractor agrees to periodic review of insurance requirements by Agency under this Agreement and to provide updated requirements as mutually agreed upon by Contractor and Local Government.

STATE ACCEPTANCE:

All insurance providers are subject to Agency acceptance. If requested by Agency, Contractor shall provide complete copies of insurance policies, endorsements, self-insurance documents and related insurance documents to Agency's representatives responsible for verification of the insurance coverages required under this Exhibit C.

EXHIBIT D

ADDITIONAL REQUIREMENTS