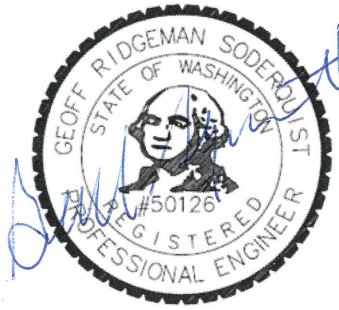
Lewis County
Department of Public Works
Engineering Division

CONTRACT
PROVISIONS AND PLANS
FOR CONSTRUCTION OF:
MICKELSEN PARKWAY
PROJECT
COUNTY ROAD PROJECT NO. 2121
June, 2020

Lewis County Public Works
2025 NE Kresky Ave.
Chehalis, WA 98532-2626



6/9/2020

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INTRODUCTION

The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, *** 2020 *** edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”).

SPECIAL PROVISIONS

The Special Provisions are made a part of this contract and supersede any conflicting provisions of the Standard Specifications. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or it is Project Specific Special Provision. The deletion, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

Special Provisions types are differentiated as follows:

(date)	WSDOT General Special Provision
(*date APWA GSP*)	APWA General Special Provision
(LCPW date)	Lewis County Public Works General Special Provision
(******)	Notes a revision to a General Special Provision and also notes a Project Specific Special Provision.

General Special Provisions are similar to Standard Specifications in that they typically apply to many projects. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a “fill-in”.

Project Specific Special Provisions normally appear only in the contract for which they were developed.

Division 1
General Requirements

DESCRIPTION OF WORK

(March 13, 1995)
This Contract provides for the improvement of *** Mickelsen Parkway in Lewis County by constructing new roadway, clearing, grading, subgrade preparation, surfacing, hot mix asphalt, drainage, utilities, signing, pavement marking, traffic control *** and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01 Definitions and Terms

1-01.3 Definitions

(January 4, 2016 APWA GSP)

Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them with the following:

Dates

Bid Opening Date
The date on which the Contracting Agency publicly opens and reads the Bids.

Award Date
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date
The date the Contracting Agency officially binds the Agency to the Contract.

Notice to Proceed Date
The date stated in the Notice to Proceed on which the Contract time begins.

Substantial Completion Date
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date
The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date
The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Final Acceptance Date
The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions, to the terms “Department of Transportation”, “Washington State Transportation Commission”, “Commission”, “Secretary of Transportation”, “Secretary”, “Headquarters”, and “State Treasurer” shall be revised to read “Contracting Agency”.

All references to the terms “State” or “state” shall be revised to read “Contracting Agency” unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to “State Materials Laboratory” shall be revised to read “Contracting Agency designated location”.

All references to “final contract voucher certification” shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

Additive
A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate
One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Business Day
A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond
The definition in the Standard Specifications for “Contract Bond” applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents
See definition for “Contract”.

Contract Time
The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Notice of Award
The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency’s acceptance of the Bid Proposal.

Notice to Proceed
The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

Traffic
Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

1-02 Bid Procedures and Conditions

1-02.1 Prequalification of Bidders

Delete this section and replace it with the following:

1-02.1 Qualifications of Bidder
(January 24, 2011 APWA GSP)

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

1-02.2 Plans and Specifications

(LCPW May, 2020)
The first paragraph of section 1-02.2 is revised to read:

Copies of the plans and specifications are on file in the office of:

Lewis County Public Works Department
2025 N.E. Kresky Avenue
Chehalis, Washington 98532
(360) 740-2612

The second paragraph of section 1-02.2 is revised to read:

Prospective bidders may obtain plans and specifications from Lewis County Public Works Department in Chehalis, Washington or download from Lewis County Website at: www.lewiscountywa.gov.

1-02.6 Preparation of Proposal

(July 11, 2018 APWA GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace them with the following:

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

1-02.9 Delivery of Proposal

(December 19, 2019 APWA GSP, Option A)

Delete this section and replace it with the following:

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- UDBE Written Confirmation Document from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification (WSDOT 272-056U)
- Good Faith Effort (GFE) Documentation
- UDBE Bid Item Breakdown (WSDOT 272-054)
- UDBE Trucking Credit Form (WSDOT 272-058)

These documents, if applicable, shall be received either with the Bid Proposal or as a supplement to the Bid. These documents shall be received **no later than 48 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (UDBE confirmations, or GFE documentation) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.10 Withdrawing, Revising, or Supplementing Proposal

(July 23, 2015 APWA GSP)

Delete this section, and replace it with the following:

After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

1-02.12 Public Opening Of Proposal

(LCPW May, 2020)
Section 1-02.12 is supplemented with the following:

Date and Time of Bid Opening
The Board of County Commissioners of Lewis County or designee, will open sealed proposals and publicly read them aloud on or after *** 12:30 p.m. *** on *** June 23, 2020 ***, at the Lewis County Courthouse, Chehalis, Washington, for the *** Mickelsen Parkway Project, County Road Project No. 2121 ***.

SEALED BIDS MUST BE DELIVERED BY OR BEFORE
***** 12:30 p.m. *** on *** June 23, 2020 *****
(Lewis County official time is displayed on Axxess Intertel phones in the office of the Board of County Commissioners. Bids submitted after 12:30:00 P.M. will not be considered for this project.)

Delivery and Marking of Sealed Bid Proposals
Sealed proposals must be delivered to the Clerk of the Board of Lewis County Commissioners (351 N.W. North Street, Room 210, CMS-01, Chehalis, Washington 98532) by or before **12:30 p.m.** on the date specified for opening, and in an envelope clearly marked: ****** SEALED BID FOR THE MICKELSEN PARKWAY PROJECT, COUNTY ROAD PROJECT NO. 2121, TO BE OPENED ON OR AFTER 12:30 P.M. ON JUNE 23, 2020 ***.***

1-02.13 Irregular Proposals

(December 19, 2019 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;
   g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
   h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
   i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
   j The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
   k. The Bidder fails to submit a UDBE Bid Item Breakdown form, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
   l. The Bidder fails to submit UDBE Trucking Credit Forms, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
   m. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
   n. More than one Proposal is submitted for the same project from a Bidder under the same or different names.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. Receipt of Addenda is not acknowledged;
   d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   e. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders

(May 17, 2018 APWA GSP, Option B)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-7 listed in this Section.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.

1. **Delinquent State Taxes**

   A Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.

   B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder does not owe delinquent taxes to the Washington State Department of Revenue, or if delinquent taxes are owed to the Washington State Department of Revenue, the Bidder must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

2. **Federal Debarment**

   A Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.

   B. Documentation: The Bidder shall not be listed as having an “active exclusion” on the U.S. government’s “System for Award Management” database (www.sam.gov).

3. **Subcontractor Responsibility**

   A Criterion: The Bidder’s standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder’s subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also “responsible” subcontractors as defined by RCW 39.06.020.

   B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting

Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. **Claims Against Retainage and Bonds**

A Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:

- Name of project
- The owner and contact information for the owner;
- A list of claims filed against the retainage and/or payment bond for any of the projects listed;
- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

5. **Public Bidding Crime**

A Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

6. **Termination for Cause / Termination for Default**

A Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances. .

7. **Lawsuits**

A Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency

B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts

As evidence that the Bidder meets the Supplemental Criteria stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets the supplemental criteria together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with the Supplemental Criteria. The Contracting Agency reserves the right to request further documentation as needed from the low Bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria.

The basis for evaluation of Bidder compliance with these mandatory and supplemental criteria shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Contracting Agency to modify the criteria. Such requests shall be in writing, describe the nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5) business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Contracting Agency in the Bid Documents.

1-02.15 Pre Award Information
(August 14, 2013 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03.2 Award of Contract
(LCPW GSP May 2020)

Section 1-03.2 is supplemented with the following:

The Contracting Agency reserves the right to delay the award until all right of way certifications and/or construction permits have been completed.

1-03 Award and Execution of Contract

1-03.3 Execution of Contract
(October 1, 2005 APWA GSP)

Revise this section to read:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within *** 15 *** calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of *** 5 *** additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
   a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
   b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the

authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-05 Control of Work

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer, or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.13 Superintendents, Labor and Equipment of Contractor

(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

1-06 Control of Material

Section 1-06 is supplemented with the following:

1-06 Buy America

(August 6, 2012)

In accordance with Buy America requirements contained in 23 CFR 635.410, the major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or $2,500.00, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

If domestically produced steel billets or iron ingots are exported outside of the area of coverage, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:

    a. Open hearth furnace.

    b. Basic oxygen.

    c. Electric furnace.

    d. Direct reduction.

2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products.

    a. Spinning wire into cable or strand.

    b. Corrugating and rolling into culverts.

    c. Shop fabrication.

A certification of materials origin will be required for any items comprised of, or containing, steel or iron construction materials prior to such items being incorporated into the permanent work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as DOT Form 350-109EF.

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form 350-075 Recycled Materials Reporting.

1-07 Legal Relations and Responsibilities to the Public

1-07.1 Laws to be Observed
(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.1 Laws to be Observed

Section 1-07.1 is supplemented with the following:

(May 13, 2020)
In response to COVID-19, the Contractor shall prepare a project specific COVID-19 health and safety plan (CHSP) in conformance with Section 1-07.4(2) as supplemented in these specifications, **COVID-19 Health and Safety Plan (CHSP)**.

1-07.2 State Taxes

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 State Sales Tax
(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.4 Sanitation

1-07.4(2) Health Hazards

Section 1-07.4(2) is supplemented with the following:

(May 13, 2020)
COVID-19 Health and Safety Plan (CHSP)
The Contractor shall prepare a project specific COVID-19 health and safety plan (CHSP). The CHSP shall be prepared and submitted as a Type 2 Working Drawing prior to beginning physical Work. The CHSP shall be based on the most current State and Federal requirements. If the State or Federal requirements are revised, the CHSP shall be updated as necessary to conform to the current requirements.

The Contractor shall update and resubmit the CHSP as the work progresses and new activities appear on the look ahead schedule required under Section 1-08.3(2)D. If the conditions change on the project, or a particular activity, the Contractor shall update and resubmit the CHSP. Work on any activity shall cease if conditions prevent full compliance with the CHSP.

The CHSP shall address the health and safety of all people associated with the project including State workers in the field, Contractor personnel, consultants, project staff, subcontractors, suppliers and anyone on the project site, staging areas, or yards.

COVID-19 Health and Safety Plan (CHSP) Inspection
The Contractor shall grant full and unrestricted access to the Engineer for CHSP Inspections. The Engineer (or designee) will conduct periodic compliance inspections on the project site, staging areas, or yards to verify that any ongoing work activity is following the CHSP plan. If the Engineer becomes aware of a noncompliance incident either through a site inspection or other means, the Contractor will be notified immediately (within 1 hour). The Contractor shall immediately remedy the noncompliance incident or suspend all or part of the associated work activity. The Contractor shall satisfy the Engineer that the noncompliance incident has been corrected before the suspension will end.

1-07.5 Environmental Regulations

1-07.5(3) State Department of Ecology

Section 1-07.5(3) is supplemented with the following:

(April 2, 2018)
The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the Washington

State Department of Ecology. Throughout the work, the Contractor shall comply with the following requirements:

(April 1, 2019)
Stormwater, dewatering water, or other authorized non-stormwater discharges that has come into contact with pH modifying substances such as concrete rubble, cast concrete or amended soils, need to be maintained between 6.5 – 8.5 standard units (su). If pH exceeds 8.5 su, the Contractor shall immediately discontinue work and initiate treatment to prevent discharges outside the acceptable range from occurring. All neutralization methods used shall be in accordance with the permit. Work may resume once treatment has been implemented and pH of the stormwater or authorized non-stormwater discharge is between 6.5 - 8.5 su or it can be demonstrated that high pH waters will not discharge to surface waters.

Stormwater, dewatering water, and other authorized non-stormwater discharges are monitored weekly for compliance with the turbidity benchmark (25 nephelometric turbidity units (ntu)) and the phone reporting trigger value (250 ntu) by the Contracting Agency. When the turbidity benchmark is breached, the best management practices (BMPs) installed on-site are not working adequately and need to be adapted, maintained or more BMPs shall be installed. When the turbidity phone reporting trigger value is breached, immediate action is required in order to lower the turbidity to $\leq$25 ntu or to eliminate the discharge. Daily follow-up discharge samples will be collected at all locations where a discharge of 250 ntu or higher was collected unless the discharge was stopped or eliminated.

(April 2, 2018)
All costs to comply with this special provision are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the Contract.

1-07.6 Permits and Licenses

Section 1-07.6 is supplemented with the following:

(January 2, 2018)
The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional approvals (e.g. Request for Chemical Treatment Form). The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable Bid items for the Work involved.

***

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
NPDES Construction Stormwater General Permit	Department of Ecology	TBD

***

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(LCPW May, 2020)
If the sources of materials provided by the Contractor necessitates hauling over roads other than Lewis County Roads, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

Any vehicle providing project materials paid for by the ton will provide licensed tonnage for that vehicle.

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

(April 2, 2007)
Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

***

Century Link
411 S. Kaiser Roar
Olympia WA
Dioni Cariaga
Office: (206)733-5261
Cell: (360)250-2596
dioni.cariaga@centurylink.com

City of Winlock Water
323 NE First Street
Winlock, WA 98596
Rodney Cecil
(360) 785-3811 Ext. 202

Lewis County PUD No. 1
321 NW Pacific Avenue
Chehalis, WA 98532
(360) 748-9261

Toledo Telephone Company, Inc.
116 Ramsey Way
Toledo, WA 98591
(360) 864-4552

***

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance
(January 4, 2016 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.

E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency

G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3) Subcontractors

The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors.

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each Subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.

4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

$1,000,000	Each Occurrence
$2,000,000	General Aggregate
$2,000,000	Products & Completed Operations Aggregate
$1,000,000	Personal & Advertising Injury each offence
$1,000,000	Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:

$1,000,000	Combined single limit each accident

1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

Section 1-07.23(1) is supplemented with the following:

(February 3, 2020)
Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	10
40 mph	15
45 to 50 mph	20
55 to 60 mph	30
65 mph or greater	35

Minimum Work Zone Clear Zone Distance

1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters
(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference
(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work
(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than *** 3 *** prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1-08.1 Subcontracting

(May 30, 2019 APWA GSP, Option B)

Delete the ninth paragraph, beginning with "On all projects, the Contractor shall certify…".

1-08.3(2)A Type A Progress Schedule

(March 13, 2012 APWA GSP)

Revise this section to read:

The Contractor shall submit *** 3 *** copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.3(2)D Weekly Look-Ahead Schedule

(LCPW May, 2020)

Section 1-08.3(2)D is supplemented with the following:

If the Contractor proceeds with work not indicated on the weekly activity schedule, or in a sequence differing from that which has been shown on the schedule, ~~the Engineer may require the Contractor to delay unscheduled activities until they are included on a subsequent weekly activity schedule.~~ the Contractor shall pay all costs and accept all responsibility for any schedule delays associated with performing necessary inspections and testing.

Separately, and in addition to the weekly schedule, the Contractor shall submit weekly a summary of project activities to the Engineer. The summary of activities shall include a report of the nature and progress of each of the major activities that were advanced on the project within the previous week. It shall be sufficiently detailed that a composite history of the project develops. The locations and approximate quantity guardrail and traffic control work shall be reported. Unusual activity, and conditions or events that may affect the course of the project shall also be reported.

1-08.4 Prosecution of Work

Delete this section and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work

(July 23, 2015 APWA GSP)

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

1-08.5 Time for Completion

(November 30, 2018 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the *** 14TH *** calendar day after the Notice to Proceed date. If the Contractor starts work on the project at an earlier date, then contract time shall begin on the first working day when onsite work begins.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the

basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day, then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
   a. Certified Payrolls (per Section 1-07.9(5)).
   b. Material Acceptance Certification Documents
   c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification
   e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
   f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
   g. Property owner releases per Section 1-07.24

(March 13, 1995)
This project shall be physically completed within *** 55 *** working days.

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine that the work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the

Contractor shall furnish a written schedule for completing the physical Work on the Contract.

1-09 Measurement and Payment

1-09.6 Force Account

(October 10, 2008 APWA GSP)

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by Engineer.

1-09.9 Payments

(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer’s determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.

2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

1-09.11(3) Time Limitation and Jurisdiction

(November 30, 2018 APWA GSP)

Revise this section to read*:*

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13(3) Claims $250,000 or Less

(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total $250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

(November 30, 2018 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(4) Claims in Excess of $250,000

Section 1-09.13(4) is hereby deleted and replaced with the following:

CLAIMS RESOLUTION

(******)

Any dispute arising from the contract shall be processed in accordance with Section 1-04.5 and Sections 1-09.11 through 1-09.13(1) of the Standard Specifications. The provisions of these sections must be complied with in full as a condition precedent to the Contractor's right to seek claims resolution through arbitration or litigation. The Contractor may file with the Engineer a request for binding arbitration; the Engineer's decision regarding that request shall be final and unappealable. Nothing in this paragraph affects or tolls the limitations period as set forth in Section 1-09.11(3) of the Standard Specifications. However, if the Contractor files a lawsuit raising any claim(s) arising from the contract, the parties shall, if the Engineer so directs, submit such claim(s) to binding arbitration, subject to the rights of any party thereto to file with the Lewis County Superior Court motions to dismiss or for summary judgment at any time. In any binding arbitration proceeding, the provisions of subparagraphs (a) and (b) shall apply.

a) Unless the parties otherwise agree, all disputes subject to arbitration shall be heard in a single arbitration hearing, and then only after completion of the contract. The parties shall be bound by Ch. 7.04 RCW generally, and by the arbitration rules hereafter stated, and shall, for purposes of administration of the arbitration, comply where applicable with the 1994 Lewis County Superior Court Mandatory Arbitration Rules (LMAR) sections 1.1(b), 1.3, 2.3, 3.1, 3.2(a) and (b), 5.1, 5.2 (except as referenced to MAR 5.2), 5.3, 6.1, 6.2 (including the referenced MAR 6.2), and 8.6. There shall be one arbitrator, to be chosen by mutual agreement of the parties from the list provided by the Lewis County Superior Court Administrator. If the parties cannot agree on a person to serve as arbitrator, the matter shall be submitted for appointment of an arbitrator under LMAR 2.3. The arbitrator shall determine the scope and extent of discovery, except that the Contractor shall provide and update the information required by Section 1-09.11(2) of the Standard Specifications. Additionally, each party shall file a statement of proof with the other party and the arbitrator at least 20 calendar days before the scheduled arbitration hearing. The statement of proof shall include:

1. The name, business address and contact telephone number of each witness who will testify at the hearing.

2. For each witness to be offered as an expert, a statement of the subject matter and a statement of the facts, resource materials (not protected by privilege) and learned treatises upon which the expert is expected to testify and render an opinion(s), synopsis of the basis for such opinion(s), and a resume of the expert detailing his/her qualifications as an expert and pursuant to rendering such opinion(s). A list of documents and other exhibits the party intends to offer in evidence at the arbitration hearing. Either party may request a copy of any document listed, and a copy or description of any other exhibit listed. The party receiving the request shall provide the copies or description within five (5) calendar days. The parties or arbitrator may subpoena parties in accordance with the Superior Court Mandatory Arbitration Rules (MAR) of Washington, Rule 4.3, and witness fees and costs shall be provided for under Rule 6.4, thereof. The arbitrator may permit a party to call a witness or offer a document or other exhibit not included in the statement of proof only upon a showing of good cause.

b) The arbitration hearing shall be conducted at a location within Lewis County, Washington. The extent of application of the Washington Rules of Evidence shall be determined in the exercise of sound discretion of the arbitrator, except that such Rules should be liberally construed in order to promote justice. The parties should stipulate to the admission of evidence when there is no genuine issue as to its relevance or authenticity. The decision of the arbitrator and the specific grounds for the decision shall be in writing. The arbitrator shall use the contract as a basis for its decisions. The County and the Contractor agree to be bound by the decision of the arbitrator, subject to such remedies as are provided in Ch. 7.04 RCW. Judgment upon the award rendered by the arbitrator shall be entered as judgment before the presiding judge of the Superior Court for Lewis County. Each party shall bear its own costs in connection with the arbitration. Each party shall pay one-half of the arbitrator's fees and expenses.

1-10 Temporary Traffic Control

1-10.2 Traffic Control Management

1-10.2(1) General

Section 1-10.2(1) is supplemented with the following:

(January 3, 2017)

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701

1-10.4 Measurement

1-10.4(1) Lump Sum Bid for Project (No Unit Items)

Section 1-10.4(1) is supplemented with the following:

(August 2, 2004)
The proposal contains the item “Project Temporary Traffic Control”, lump sum. The provisions of Section 1-10.4(1) shall apply.

Division 2
Earthwork

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3 Construction Requirements
(******)

This Section is supplemented with the following:

Removal of Obstructions
(February 17, 1998 WSDOT GSP)

Barbed Wire Fence: 200 linear feet

The removal of any existing improvements shall be conducted in such a manner as not to damage any portion of the infrastructure that is to remain in place. Any deviation in this matter will obligate the Contractor at his own expense, to repair, replace or otherwise make proper restoration to the satisfaction of the Contracting Agency.

Where the Plans call for the removal of a portion of an existing fence, the Contractor shall furnish and install a new fence end post (and concrete anchor) and attach or extend the existing fence that is to remain to the new fence end post.

Waste materials shall be loaded and hauled to a waste site secured by the Contractor and shall be disposed of in such a manner as to meet all requirements of state, county and municipal regulations regarding health, safety and public welfare.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.3(7)B Haul

(******)

Delete this Section and replace it with the following:

There shall be no separate payment for haul of excess or unsuitable excavated material, or debris to the Contractor provided disposal site. The Contracting Agency is not providing a disposal site for this Project. All costs for haul shall be included in the bid prices for other work.

2-03.3(7)C Contractor-Provided Disposal Site

(******)

Delete the first paragraph and replace it with the following:

The Contractor shall arrange for the disposal of the excess or unsuitable excavated material, or other materials at no expense to the Contracting Agency.

2-04 HAUL

2-04.1 Description

(******)

This Section is supplemented with the following:

If the sources of materials provided by the Contractor necessitates hauling over any public roads, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes. No separate monies will be due the Contractor for this work.

2-06 SUBGRADE PREPARATION

2-06.1 Description

(******)

This Section is supplemented with the following:

This work consists of preparing the roadway subgrade with cement treated base (CTB).

CTB consists of suitable subgrade soil, Portland cement, and water proportioned, mixed, placed, compacted, and cured in accordance with these Specifications; and shall conform to the details shown on the Plans.

2-06.3 Construction Requirements

(******)

This Section is supplemented with the following:

General

The Contractor shall not allow any vehicles to drive on the CTB until the time specified below:

Vehicle Type	Hours After CTB Compaction
Single-Passenger Vehicle	1
SU-30 (vans, buses)	24
Trucks Greater than SU-30	72

The Contractor shall coordinate and schedule this work accordingly to include providing adequate signing and barricades to accommodate this requirement.

Materials

Portland cement shall be Type 1 or Type 3.

Ten (10) pounds of cement shall be added to the imported gravel base and/or native soils per square foot of a 16-inch-thick CTB layer.

Equipment

CTB may be constructed with any machine or combination of machines, or equipment that will produce completed cement treated base meeting the requirements of these Specifications.

Mixing shall be accomplished using single or multiple shaft mixers.

The cement spreader shall be capable of uniformly distributing the cement at the specified rate.

Water may be applied through the mixer or with water trucks equipped with a pressurized spray bar.

CTB shall be compacted with one or a combination of the following: sheep's foot or grid roller, pneumatic tire roller, or vibratory steel drum roller.

Grade Preparation

The Contractor shall grade the imported gravel borrow and/or native material to achieve a consistent subgrade surface. During this process, any unsuitable subgrade material shall be removed and replaced with suitable material per Section 2-03. Any cobbles and/or rocks 4-inch diameter and larger shall also be removed and hauled to waste. Excess material shall be removed, hauled and disposed of at the Contractor's expense. When required, water shall be added to the subgrade material as needed during compaction operations to adhere optimum moisture content and required compaction.

Mixing

CTB shall not be mixed when the ground is frozen or when the air temperature is below 40 degrees Fahrenheit.

Portland cement shall be placed on the graded surface at the specified application rate, and uniformly mixed or blended with the underlying base and sub grade soils to the depths specified. The mixture shall be moisture conditioned during this process to meet specifications, as required. Following mixing and moisture conditioning, the resulting base shall be compacted to project specifications and graded to final elevations and lines, as shown on the Plans. The Contractor shall anticipate that the CTB will swell 1 to 2 inches. Compaction and grading of the CTB shall be completed within 3 hours after mixing with Portland cement.

Moisture

The Contractor shall moisture condition the CTB mixture to within 3 percent of the mixture's optimum moisture content (i.e., the optimum moisture content before addition of the cement), as determined by American Society for Testing and Materials (ASTM) Test Designation D698 (Standard Proctor).

Compaction

The Contractor shall compact the CTB mixture to a minimum unit weight equivalent to 95 percent of its maximum weight, as determined by ASTM Test Designation D1557 (Modified Proctor).

Cement Application Rate

The Contractor Agency will measure the application rate of the cement by pan weighing. Testing frequency will be one test for every 200 feet of roadway.

Cement Treated Base Depth

The Contractor Agency will measure the CTB depth by probe measurements. The Contractor shall remix to the required depth if the measured depth is more than 1/2 inch less than the specified depth required. Testing frequency will be one test for every 200 feet of roadway

Moisture Content

The moisture content of the CTB shall be verified by testing prior to compaction. Where testing indicates noncompliance with moisture specifications, the Contractor shall recondition and remix, as directed by the Engineer.

Compaction

Compaction testing will be completed by the Contracting Agency in accordance with ASTM Test Designation D2922. Testing frequency shall be one test for every 200 feet of roadway.

Compressive Strength
Samples of the CTB will be prepared by the Contracting Agency in the field in accordance with ASTM Test Designation D559 for compression testing.

2-06.5 Payment
(******)

This Section is supplemented with the following:

"Cement Treated Base," per square yard.

"Cement for Cement Treated Base," per ton.

The unit contract price per square yard for "Cement Treated Base" and the unit contract price per ton for "Cement for Cement Treated Base" shall be full pay for all labor, equipment, tools, and materials required to construct the cement treated base section including blending, grading, shaping, spreading, compacting, watering, mixing, curing, wastehaul of unsuitable and/or excess material and cobbles/rocks, and all other related work to provide a stabilized roadway base.

Division 4
Bases

Supplement Division 4 with the following:
(May 5, 2015 APWA GSP)

4-06 ASPHALT TREATED BASE (ATB)

4-06.1 Description

Asphalt treated base (ATB) consists of a compacted course of base material which has been weatherproofed and stabilized by treatment with an asphalt binder.

The Work shall consist of one or more courses of asphalt treated base placed on the Subgrade in accordance with these Specifications and in conformity with the lines, grades, thicknesses, and typical cross-sections shown in the Plans or as staked.

4-06.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt	9-02.1
Anti-Stripping Additive	9-02.4
Aggregates	9-03.6

The grade of paving asphalt shall be as required in the Contract.

4-06.3 Construction Requirements

4-06.3(1) Asphalt Mixing Plant

Asphalt mixing plants for asphalt treated base shall meet the following requirements:

Heating
The plant shall be capable of heating the aggregates to the required temperature.

Proportioning
The mixing plant shall be capable of proportioning: the aggregates to meet the Specifications, and the asphalt binder will be introduced at the rate specified in the approved mix design. If the aggregates are supplied in two or more sizes, means shall be provided for proportioning or blending the different sizes of aggregates to produce material meeting the Specification requirements.

Recycled asphalt pavement (RAP) may be used in the production of ATB. If utilized, the amount of RAP shall not exceed 30 percent of the total weight of the ATB. The final gradation and asphalt binder content will conform to the approved Job Mix Formula (JMF). ATB will be evaluated under Commercial Evaluation as shown in Section 9-03.8(7). Va limts under 9-03.8(7) are excluded from ATB evaluation criteria.

Mixing
The mixer shall be capable of producing a uniform mixture of uniformly coated aggregates meeting the requirements of these Specifications.

4-06.3(2) Preparation of Aggregates

Aggregates for asphalt treated base shall be stockpiled before use in accordance with the requirements of Section 3-02.

The aggregates shall be heated as required by the Engineer.

4-06.3(2)A Mix Design

The mix design requirements for asphalt treated base shall be as described in Section 9-03.6(3). N_{design} will be 100 gyrations for all ATB design applications. The asphalt binder shall be PG 64-22 unless specifically altered in the project specifications. The proposed mix design will be submitted for review on WSDOT Form 350-042 with included notes applicable to the ATB design evaluation.

4-06.3(3) Vacant

4-06.3(4) Mixing

The asphalt treated base shall be mixed in accordance with the requirements of Section 5-04.3(8).

4-06.3(5) Hauling Equipment

Hauling equipment for asphalt treated base shall conform to the requirements of Section 5-04.3(2).

4-06.3(6) Spreading and Finishing

Asphalt treated base shall be spread with a spreading machine equipped with a stationary, vibratory, or oscillating screed or cut-off device, subject to the approval of the Engineer. Approval of the equipment shall be based on a job demonstration that the finished product will meet all requirements of the Specifications. Automatic controls will not be required. Unless otherwise directed by the Engineer, the nominal compacted depth of any ATB layer shall not exceed 0.40 feet. On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

The internal temperature of the ATB mixture at the time compaction is achieved shall be a minimum of 185 degrees F. Rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175 degrees F.

4-06.3(6)A Subgrade Protection Course

Unless otherwise specified by the Engineer, the Contractor shall place the asphalt treated base as a protection for the prepared Subgrade on all sections of individual Roadways which are to receive asphalt treated base as soon as 10,000 square yards of Subgrade is completed. This requirement shall not be limited to contiguous areas on the project.

The surface of the Subgrade protection layer when constructed on a grading project shall conform to grade and smoothness requirements that apply to the Subgrade upon which it is placed.

4-06.3(6)B Finish Course

The final surface course of the asphalt treated base, excluding Shoulders, shall not deviate at any point more than 3/8 inch from the bottom of a 10-foot straightedge laid in any direction on the surface on either side of the Roadway crown. Failure to meet this requirement shall necessitate sufficient surface correction to achieve the required tolerance, as approved by the Engineer, at no expense to the Contracting Agency.

When portland cement concrete pavement is placed on an asphalt base, the surface tolerance of the asphalt base shall be such that no elevation lies more than 0.05 feet below nor 0.00 feet above the plan grade minus the specified plan depth of portland cement concrete pavement. Prior to placing the portland cement concrete pavement, any such irregularities shall be brought to the required tolerance by grinding or other means approved by the Engineer, at no expense to the Contracting Agency.

4-06.3(7) Density

The asphalt treated base shall be compacted to a density of not less than 80 percent of the maximum theoretical density established for the mix by WSDOT FOP for AASHTO T 209. The density of the base shall be determined by means of tests on cores taken from the Roadway or with the nuclear gauge in accordance with Section 5-04.3(10)B. The frequency of these tests shall be at the discretion of the Engineer, but in no case shall it be less than one control lot for each normal day's production. The use of equipment which results in damage to the materials or produces substandard workmanship will not be permitted.

4-06.3(8) Anti-Stripping Additive

An anti-stripping additive shall be added to the asphalt binder material in accordance with Section 9-02.4 in the amount designated in a WSDOT mix design/anti-strip evaluation report for a dense graded hot mix asphalt design from the same gravel source within the last 24 months or as evaluated separately by an accredited lab using current WSDOT test methods (AASHTO T324 – Hamburg or WSDOT TM T718 – Modified Lottman). Alternately, the ATB may be evaluated for anti-strip additive using ASTM D3625 (Standard Practice for Effect of Water on Bituminous-Coated Aggregate Using Boiling Water) by an accredited lab. The anti-stripping additive required will be the minimum amount necessary to achieve a passing evaluation.

4-06.4 Measurement

Asphalt treated base including paving asphalt will be measured by the ton.

4-06.5 Payment
(May 25, 2015 G&O)

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

"Asphalt Treated Base", per ton.

The unit contract price per ton for "Asphalt Treated Base" shall include the cost for all labor, materials, equipment and tools for furnishing, placing compacting, constructing asphalt treated base to the lines, cross section and grades in accordance with the Plans, to include anti-stripping additive, if required.

Division 5
Surface Treatments and Pavements

5-04, HOT MIX ASPHALT
(******)

Delete Section 5-04 and amendments, Hot Mix Asphalt and replace it with the following:

(******)

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these

Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

The term “Approach” shall include Road approaches, driveways, and extensions.

Superintendents, Labor, and Equipment of Contractor

The Contractor shall have a sufficient number of qualified personnel on the project to insure the following minimum crew size:

One paving superintendent
One paver operator
Two screed operators
Three roller operators
Two rakers

These workers shall be present and not assigned to dual activities that would stop them from fulfilling their assigned task while the paver is in operation. There will be one assigned supervisor who will be in charge of paving operations and who will be responsible for work performed.

Fiber Reinforced HMA:

This work shall consist of providing and placing Fiber Reinforced HMA in accordance with these Specifications and the lines, grades, thicknesses and typical cross-sections shown in the plans.

Definitions:

- Reinforcing Fibers: High tensile strength synthetic aramid fiber blend specially formulated to reinforce hot mix asphalt.
- Fiber Reinforced Asphalt Concrete (FRAC): A mixture of hot mix asphalt and reinforcing fibers that has greater resistance to rutting, thermal cracking, fatigue cracking, and reflective cracking as compared to conventional non-fiber asphalt mixes.
- Aramid Dispersion State Ratio (ADSR): A measure of the dispersion efficiency of the Reinforcing Fibers within asphalt mixes. ADSR is calculated by comparing the mass of aramid in the individual state to the total mass of extracted aramid fibers, expressed as a percentage.

(******)

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4

HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Portland Cement	9-01
Sand	9-03.1(2)
(As noted in 5-04.3(5)C for crack sealing)	
Joint Sealant	9-04.2
Foam Backer Rod	9-04.2(3)A

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

No recycled asphalt pavement (RAP) may be used in the production of HMA.

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

Production of aggregates shall comply with the requirements of Section 3-01.
Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

Reinforcing Fibers:

1. Provide a reinforcing fiber blend of virgin polyolefins and virgin aramids that meets the requirements in Table 1 and Table 2 below:

Table 1

Reinforcing Fiber Material Properties			
Property	**Standard**	**Polyolefin**	**Aramid**
Form	Manufacturer Certification	Serrated	Monofilament
Nominal Specific Gravity	ASTM D276	0.91	1.44
Tensile Strength (psi)	ASTM D7269	NA[1]	400,000
Length (in)	Manufacturer Certification	0.75	0.75

Table 2

Reinforcing Fiber Performance Properties			
Performance Measure	**Test Method**	**Standard**	**Requirement**

Dispersion Efficiency	Aramid Dispersion State Ratio (ADSR)	Modified ASTM D2172	≥ 85%
Field Performance Cracking Resistance	Pavement Condition Index	ASTM D6433	≥ 10 PCI Points increase, Minimum 4 years
Resistance to Permanent Deformation (Rutting)	Flow Number (FN)	AASTHO TP79	≥ 75% increase

2. Polyolefin fibers will melt or become plastically deformed during production
3. If an aramid-based fiber blend is proposed that does not meet all of the material properties in Table 1 above, performance test results meeting Table 2 above and complying with Part 2 of Section 5-04.2(2) below a substitute fiber blend shall be submitted at least one week prior to bid date for approval by engineer.

4. Non-aramid fiber blends will not be considered as acceptable alternatives to this specification

5-04.2(1) How to Get a HMA Mix Design on the QPL

If the contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A Vacant

5-04.2(2) Mix Design – Obtaining Project Approval

No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.

(******)
Commercial evaluation will be used for Commercial HMA and for other classes of HMA if approved by the Engineer, in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.

- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & sig-nature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Approval of a mix design for "Commercial Evaluation" will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.

Reinforcing Fibers:

1. Submit the following as part of the bid package:

    a. Representative fiber product sample.
    b. Fiber product data sheet and certification from the Manufacturer that the fiber product supplied meets the requirements of this specification.
    c. Manufacturer's instructions and general recommendations.
    d. Performance test results of ADSR testing from a minimum of three separate laboratory trials to validate dispersion efficiency.
    e. Performance results of PCI testing from a minimum of three separate field trials to validate cracking resistance.
    f. Performance test results of FN testing from a minimum of three separate laboratory trials to validate rutting resistance.

g. A minimum of five unique project examples and references where the reinforcing fiber product was used within 250 miles of the project location

****NOTE: Testing is NOT required on samples from the job mix. Submit previously completed lab testing only.**

2. Performance testing requirements

All historical test results submitted to validate the fiber's performance in asphalt mixes shall be from previously completed laboratory and field trials using plant-mixed FRAC only. **Testing is NOT required on samples from the job mix.**

Performance testing must be from laboratory trials at a fiber dosage rate equal to the rate proposed for the project. Tests must be performed by an AASHTO accredited laboratory or nationally recognized university testing lab and must be reviewed and approved by the project engineer.

a. Aramid Dispersion State Ratio (ADSR) Tests from a minimum of three (3) separate laboratory trials.
    1. Perform ADSR test based on modified ASTM D2172 procedures as provided in the document entitled "Extraction of Aramid Fibers from Fiber Reinforced Asphalt Concrete – Special Test Method". A copy of the modified extraction methodology can be obtained by making an inquiry to the Pavement and Materials Laboratory at Arizona State University at NCE@asu.edu.
    2. To validate ADSR results, average extracted aramid fiber quantity must equal 0.007 percent by total sample weight with no individual result less than 0.005 percent of the total sample weight.
    3. All tested fiber mixes must achieve a minimum ADSR of 85%.

b. Pavement Condition Index (PCI) side by side comparison from a minimum of three (3) field trails with a minimum in-service pavement age of four years.
    1. PCI surveys shall be performed according to ASTM D6433.
    2. Tests results shall include a control and a fiber reinforced pavement section. FRAC mix shall be identical to control mix except for the inclusion of fibers added at the same dosage as proposed on the project.
    3. In field performance sections shall be subject to the same environmental and traffic conditions. A minimum surface area of 500 yd^2 per FRAC and control section is required.
    4. PCI results from fiber sections shall show a minimum 10 PCI points greater than the control section after a minimum of 4 years.

c. Flow Number (FN) Tests from a minimum of three (3) separate laboratory trials.

1. Perform FN tests using the protocol from AASHTO TP79.
2. Tests results shall include a control and a fiber reinforced mix. FRAC mix shall be identical to control mix except for the inclusion of fibers added at the same dosage as proposed on the project.
3. Results from fiber specimens shall show an average FN increase of at least 75% over control specimens.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified below, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55◦F	45◦F
0.10 to .20	45◦F	35◦F
More than 0.20	35◦F	35◦F

5-04.3(2) Paving Under Traffic

When the Roadway being paved is open to traffic, the requirements of this Section shall apply.

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

Before closing an intersection, advance warning signs shall be placed and signs shall also be placed marking the detour or alternate route.

During paving operations, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

All costs in connection with performing the Work in accordance with these requirements shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Plants used for the preparation of HMA shall conform to the following requirements:

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:
    a. A mechanical sampling device attached to the HMA plant.
    b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F or when time from

loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after the completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled on the pavement shall be thoroughly removed before paving proceeds.

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5-04.3(3)D Material Transfer Vehicle

When used, the MTV shall mix the HMA after delivery by the hauling equipment and prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTV:

1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be connected to the hauling vehicle or paver.
3. May accept HMA directly from the haul vehicle.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

Direct transfer of the HMA mixture from the hauling equipment to the paving machine will not be allowed. The Contractor shall use a self-propelled material transfer vehicle (MTV) to deliver the HMA mixture from the hauling equipment to the paving machine when placing HMA pavement on travel lanes and shoulders, when shoulders are paved in conjunction with travel lanes. A material transfer vehicle is not required for small quantities such as driveways and is optional for shoulders that are paved separately from the driving lane(s). A windrow elevator is not acceptable as a transfer device.

The transfer vehicle's holding hopper shall have a minimum capacity of 15 tons. The material transfer vehicle shall mix the HMA after delivery by the hauling equipment but prior to lay down by the paving machine. Mixing of the HMA material shall be sufficient to obtain a consistent temperature throughout the mixture. If a transfer vehicle does not have holding or mixing capabilities, the paving machine shall be fitted with a holding and mixing hopper having a minimum capacity of 15 tons.

Prior to use, the Contractor shall submit the manufacturer and model number of the equipment to the Engineer for review and approval. All costs to incorporate the material transfer device or vehicle into the paving train shall be included in the unit contract price for the HMA.

The Contractor shall deliver the mixture to the paving machine at a rate that provides continuous operation of the paving machine, except for unavoidable delay or breakdown. If excessive stopping of the paving machine occurs during paving operations, the Engineer may suspend paving operations until the mixture deliver rate matches the paving machine operation.

5-04.3(3)E Rollers

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in crushing of

the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Paved Surfaces

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted; except that tack coat may be omitted from clean, newly paved surfaces at the discretion of the Engineer. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

Equipment shall not operate on tacked surfaces until the tack has broken and cured. If the Contractor's operation damages the tack coat it shall be repaired prior to placement of the HMA.

The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted once with water at a rate not to exceed one part water to one part emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer.

5-04.3(4)A Crack Sealing

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5-04.3(4)A1 General

When the Proposal includes a pay item for crack sealing, seal all cracks ¼ inch in width and greater. If the Proposal does not include an item for crack sealing or sealed joints it shall be incidental to and included in the unit contract price per ton for the HMA

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

Sand Slurry: For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 cationic emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the cracks. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

In areas where HMA will be placed, use sand slurry to fill the cracks.

In areas where HMA will not be placed, fill the cracks as follows:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2. Cracks greater than 1 inch in width – fill with sand slurry.

Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

5-04.3(4)A2 Crack Sealing Areas Prior to Paving

In areas where HMA will be placed, use sand slurry to fill the cracks.

5-04.3(4)A3 Crack Sealing Areas Not to be Paved

In areas where HMA will not be placed, fill the cracks as follows:

A. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
B. Cracks greater than 1 inch in width – fill with sand slurry.

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

All planning bituminous pavement shall be complete before performing pavement repair. The Contractor shall excavate pavement repair areas and shall backfill these with HMA in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy application of tack coat shall be applied to all surfaces of existing pavement in the pavement repair area.

Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished with the approval of the Engineer. Each lift shall be thoroughly compacted by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates and RAP

Aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(5)A Vacant

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5-04.3(6) Mixing

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

Reinforcing Fibers:

1. Delivery & Storage: Deliver fiber-reinforcement to plant in sealed, undamaged containers with labels intact and legible, indicating material name and lot number. Store materials covered and off the ground. Keep sand and dust out of boxes and do not allow boxes to become wet.

2. Add aramid and polyolefin reinforcing fiber blends at a dosage rate of one (1) pound per one (1) ton of asphalt.

3. Add alternative aramid fiber blends at a rate proposed by the manufacturer that achieves the ADSR, PCI, and FN results required in Section 5-04.2.

4. Have a fiber manufacturer’s representative on site during mixing and production. This requirement can be waived if fiber manufacturer and asphalt producer can supply evidence of manufacturer’s brand of fiber being successfully produced a minimum of three times at the asphalt plant to be used for the project.

5. Batch Plant. When a batch plant is used, add fiber to the aggregate in the weigh hopper and increase both dry and wet mixing times. Ensure that the fiber is uniformly distributed before the injection of asphalt cement into the mixture.

6. Drum Plant:
   a. Inject fibers through the RAP collar by feeding them with a blower tube system. Rate the feeding of fibers with the rate the plant is producing asphalt mix. If there is any evidence of fiber balls at the discharge chute,

increase the mixing time and/or temperature or change the angle of the fiber feeder line to increase dry mixing time.

b. When using a blower tube system, add fibers continuously and in a steady uniform manner. Provide automated proportioning devices and control delivery within ±10% of the mass of the fibers required. Perform an equipment calibration to the satisfaction of the fiber manufacturer's representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following with the blower tube system:

- Low level indicators
- No-flow indicators
- A printout of feed rate status in pounds/minute
- A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.
- Manufacturer's representative's approval of fiber addition system

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5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜"	0.20 feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

For HMA accepted by nonstatistical evaluation the aggregate properties of sand equivalent, uncompacted void content and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

Spreading and Finishing

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The Contractor shall meet with the Engineer or representative by the end of each working day to verify and confirm in writing and by signature the daily yields and quantities.

If the Contractor fails to follow this procedure, the Contractor accepts the Engineer's estimated quantities for the work completed that day.

Overages

The Contractor shall not exceed the negotiated quantity on any section by more than **five percent (5%)**, unless directed by the Engineer. Any material placed on each individual section in excess of the five percent shall be at the Contractor's expense.

This provision shall not relieve the Contractor of his/her responsibility to complete each section in its entirety.

Reinforcing Fibers:

1. Follow manufacturer's representative's recommendations for placement of FRAC.
2. Collect a small sample (10-20kg) of mix from the discharge chute during first 50 tons of production. If there are one or more undistributed fiber clips or bundles, adjust mixing operations per manufacturer's recommendations to eliminate fiber bundles.
3. Visually observe FRAC mix in the back of first three trucks and every tenth truck thereafter to confirm adequate blending of the fiber.
4. Remove any observed fiber bundles from placed mixture and adjust operations per the manufacturer's recommendation to eliminate future fiber bundle development.

HMA Tolerances and Adjustments

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

   For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

   For Aggregates in the mixture:

   a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-5%	+/- 8%
No. 8 Sieve	+/- 4%	+/-8%
No. 200 sieve	+/- 1.0%	+/- 3.0%

   b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

   a. **Aggregates** –2 percent for the aggregate passing the 1½″, 1″, ¾″, ½″, ⅜″, and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).

   b. **Asphalt Binder Con**tent – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 800 tons, whichever is less except that the final sublot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per sublot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASH-TO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall to be tested.

Sampling and testing HMA in a Structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a Composite Pay Factor (CPF) shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing

Testing of HMA for compliance of V_a will be at the option of the Contracting Agency. If tested, compliance of V_a will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a Composite Pay Factor (CPF) using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	**Factor "f"**
All aggregate passing: 1½″, 1″, ¾″, ½″, ⅜″ and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (Va) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests

The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a. The results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of $500 per sample.

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for ASSHTO T 355, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures WSDOT FOP for ASSHTO T 355 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item “Roadway Core” the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item “Roadway Core” the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the sublot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of $200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

5-04.3(10)B HMA Compaction – Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A $500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per sublot per WSDOT T 738. The compaction test locations will be determined by the Engineer in accordance with WSDOT Test Method T 716.

The sublot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each sublot, with one test per sublot. The Contracting Agency will determine the random sample location using WSDOT Test Method T 716.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a sublot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in

accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92% a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original

sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the Composite Pay Factor (CPF) of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PFi for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint seals to be placed at the bridge ends, and at interior joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified ion the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with the detail shown in the Standard Plan. Construct the sawcut in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

5-04.3(12)B2 Paved Panel Joint Seal

Construct the paved panel joint seal in accordance with the requirements specified in Section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than ⅛ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of $500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving planning (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

5-04.3(14) Planing (Milling) Bituminous Pavement

The planing plan must be approved by the Engineer and a pre planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing submittals.

Locations of existing surfacing to be planed are as shown in the Drawings.

For mainline planing operations, use equipment with automatic controls and with sensors for either or both sides of equipment. The controls shall be capable of sensing the grade from an outside reference line, or a mat-referencing device. The automatic controls shall have a transverse slope controller capable of maintaining the mandrel at the desired transverse slope (expressed as a percentage) within plus or minus 0.1 percent.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

The Contractor where necessary shall plane or grind, and provide any hand work necessary to work around utility appurtenances, castings, lids, curbs, gutters, sidewalks, manholes, and catch basins to provide smooth transition of pavement to the finished thickness and grade as staked in the field or approved by the Engineer.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(14)A.

5-04.3(14)A Pre-Planing Metal Detection Check

Before starting planing of pavements, and before any additional depth planing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
   a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial

closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.

c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.

d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.

e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.

2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.

3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals – Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.

3. Haul routes from Supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA Supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving, and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.
10. Tonnage of HMA to be placed each day.
11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, Metro transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both Paving Plan and for Planing Plan:
    a. The actual times of starting and ending daily operations.
    b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
    c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other con-tractors who may operate in the Project Site.
    d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
    e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and to paving.
    f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed

g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planning, see Section 5-04.3(14)B2.

h. Description of how flaggers will be coordinated with the planing, paving, and related operations.

i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.

j. Other items the Engineer deems necessary to address.

2. Paving – additional topics:

a. When to start applying tack and coordinating with paving.

b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.

c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.

d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.

e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

(******)

5-04.4 Measurement

"HMA Class 3/8 In. PG 58H-22 Fiber Reinforced" per Ton.

(******)

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

"HMA Class 3/8 In. PG 58H-22 Fiber Reinforced" per Ton.

The unit contract price per ton for "HMA Class 3/8 In. PG 58H-22 Fiber Reinforced" shall be full compensation for all costs, including paving reinforcing fiber, anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

(******)

5-04.5(1) Quality Assurance Price Adjustment

In the event that test results indicate the HMA does not meet specifications, a change order will be issued for the price adjustments for Quality of HMA Mixture and Quality of HMA Compaction based upon these specifications.

(******)

5-04.5(1)B Price Adjustments for Quality of HMA Compaction

The maximum CPF of a compaction lot is 1.00.

For each compaction lot of HMA when the CPF is less than 1.00, a Nonconforming Compaction Factor (NCCF) will be determined. THE NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of the NCCF, the quantity of HMA in the lot in tons and the unit contract price per ton of the mix.

(******)

The CPF shall be as follows:

Compaction	CPF
91.0% to 91.9%	95%
90.0% to 90.9%	90%
89.0% to 89.9%	80%
88.0% to 88.9%	75%
At or below 87.9%	Mix is removed

Division 7
Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains, and Conduits

7-04 STORM SEWERS

7-04.5 Payment

(January 7, 2013 G&O)

Delete all paragraphs under this section and replace with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"Storm Trash Rack," per each.

The unit contract price per each of "Storm Trash Rack" shall constitute full compensation to furnish and install the storm trash rack where noted on the Plans.

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.5 Payment
(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"Catch Basin, Type 2, ____ In. Diam. w/Flow Control," per each.

The unit contract price per each for "Catch Basin, Type 2, ____ In. Diam. w/Flow Control" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, lids, frames and grates, fittings, orifice plates, overflow pipe, foundation gravel, compaction, removal and wastehaul of excess or unsuitable excavated material, pipe connection, dewatering, bypass pumping and maintaining storm flows, and adjusting to finished grade.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.2 Materials
(January 4, 2010 G&O)

This Section is supplemented with the following:

The pipe used on this project shall be the type and size specified on the Plans.

Gravel borrow shall meet the requirements of Section 9-03.14(1).

7-08.3(1)A Trenches
(November 24, 2010 G&O)

Delete the first three paragraphs under this Section and replace them with the following:

The length of trench excavation in advance of pipe laying shall be kept to a maximum of 100 feet. Excavation shall either be closed up at the end of the day or protected per Section 1.07.23(1).

The Contractor shall limit his excavation to the limits of the maximum payment width and depth shown on the Plans. If the Contractor purposely or neglectfully excavates trenches to a width or depth beyond the neat line payment limit of the trench as shown on the Plans, the expenses associated with any additional trenching, wastehaul, trench backfill, compaction and testing, and surface restoration as a result of excavating beyond the neat line payment limits shall be borne by the Contractor.

It is not anticipated that solid rock will be encountered. Should such material be encountered, the excavation, removal and wastehaul will be paid for by change order per Section 1-04.4. Boulders or broken rock less than 2 cubic yards in volume, shall not be classified as rock, nor will so-called "hard-pan" or cemented gravel, even though it may be advantageous to use special equipment in its removal.

Trench excavation shall also include wastehauling all excess and/or unsuitable material encountered, including but not limited to, abandoned pipelines, concrete, asphalt, tree stumps, trees, logs, abandoned rail ties, piling, and riprap.

The Contractor shall furnish all equipment necessary to dewater the excavation. Before operations begin, the Contractor shall have sufficient pumping equipment and/or other machinery available on site to assure that the operation of any dewatering system can be maintained.

The Contractor shall dispose of the water in such a manner as not to cause a nuisance or menace to the public, and comply with all codes, regulations, and ordinances of applicable governing authorities with regard to drilling, dewatering, and erosion control.

The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soil, prevent disturbance of backfill and prevent movement of structures and pipelines.

The dewatering system shall be installed and operated by the Contractor so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Should settlement of the surrounding area and/or structures be observed, the Contractor shall cease dewatering operations and implement contingency plans. The cost of repairing any damage to adjacent structures, underground facilities or utilities and satisfactory restoration of above ground facilities to include fences, paving, concrete, etc., shall be the responsibility of the Contractor.

The Contractor shall be required to comply with all conditions and requirements mandated by the Department of Ecology for the construction, operation, and decommissioning of dewatering facilities.

The Contractor shall obtain approved grading and filling permits for all spoils material sites, from the Contracting Agency, County, or both as required. These permits shall be secured and paid for by the Contractor.

7-08.3(2)B Pipe Laying – General
(January 4, 2010 G&O)

This Section is supplemented with the following:

All pipe shall be unloaded from delivery vehicles with mechanical equipment. Dropping of pipe onto the ground or mats will not be permitted. All pipe and fittings shall be carefully lowered into the trench in such a way as to prevent damage to pipe materials and protective coatings and linings. Under no circumstances shall materials be dropped or dumped into the trench.

All pipe shall be laid in straight lines and at uniform rate for grade between structures. Variation in the invert elevation between adjoining ends of pipe due to non-concentricity of joining surface and pipe interior surfaces shall not exceed 1/64 inch per inch of pipe diameter, or 1/2-inch maximum.

Every precaution shall be taken to prevent foreign material from entering the pipe while it is being laid. After placing a length of pipe in the trench, the spigot end shall be centered in the bell and pipe forced home and brought to correct line and grade. The pipe shall be secured in place with pipe bedding tamped under it. Precaution shall be taken to prevent dirt from entering the joint space. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug or other means approved by the Contracting Agency. If water is in the trench when work resumes, the seal shall remain in place until the trench is dewatered as specified for groundwater control. Tee branches shall be blocked and sealed with the same joint and pipe material as used for pipes.

Care shall be taken to properly align, clean and lubricate the spigot and socket area of the pipes before joining. The pipe spigot shall be forced into the socket until the reference mark on the spigot is flush with the bell end.

All connections to existing pipe of differing materials shall be made with adapters which are specifically manufactured for this purpose. If the band type adapters are used, then only stainless steel bands will be allowed.

The Contractor shall obtain approved grading and filling permits for all spoils material sites, from the Contracting Agency, County, or both as required. These permits shall be secured and paid for by the Contractor.

7-08.3(3) Backfilling
(January 4, 2010 G&O)

Delete the second paragraph under this Section and replace with the following:

Pipe zone backfill shall be gravel backfill for pipe zone bedding conforming to the requirements of Section 9-03.12(3).

7-09 WATER MAINS

7-09.3(5) Grade and Alignment
(June 16, 2006 G&O)

Delete the first sentence of the third paragraph under this Section and replace it with the following:

The depth of trenching for water mains shall be such as to give a minimum cover of 36 inches over the top of the pipe unless otherwise specified on the Plans.

This Section is supplemented with the following:

Except where necessary, in making connections with other lines and unless authorized by the Contracting Agency and City of Winlock, pipes shall be laid with bells facing in the direction of laying. Bells shall be placed on the uphill side for lines installed on an appreciable slope.

Water mains shall be laid on a continuous positive grade as shown on the Plans to minimize the number of high or low points in the pipeline profile unless approved by

the Contracting Agency and City of Winlock. The Contractor shall, based on his review of the site and the Plans, note areas where additional depth beyond the minimum pipe cover is required to avoid certain utility conflicts and provide adequate bury at ditches, and adjust the pipeline profile accordingly to maintain a continuous grade.

7-09.3(11) Compaction of Backfill
(******)

This Section is supplemented with the following:

The Contractor Agency will provide the services of a soils testing laboratory to conduct materials testing to determine the maximum compaction values and in-situ density tests of the compacted materials used for backfilling trenches to ensure their placement is in compliance with the Contract Documents.

Retesting and reinspection required because of defective work and testing performed for the convenience of the Contractor shall be the responsibility of the Contractor at no additional cost to the Contracting Agency. Testing shall not be cause for claims for delay by the Contractor.

7-09.3(13) Handling of Pipe
(June 16, 2006 G&O)

This Section is supplemented with the following:

Pipe shall be stacked in such a manner as to prevent damage to the pipe, to prevent dirt and debris from entering the pipe, and to prevent any movement of the pipe. Stacking layers shall be limited to the recommendations in the DIP Installation Guide.

Pipe shall not be strung across driveways, in ditches, or within 10 feet of the edge of the travel lane.

7-09.3(16) Cleaning and Assembling Joints
(June 16, 2006 G&O)

This Section is supplemented with the following:

All joints in the pipe, fittings, valves, flexible couplings, ductile iron sleeves, etc., shall be fully seated with small clearances allowed for pipe expansion. Where flexible couplings and ductile iron sleeves are called for, the space between pipe ends shall not exceed 1/4 inch, to prevent pipe movement such as would possibly be caused by the resultant thrust of a nearby closed valve.

When the space between pipe ends is excessive, a short section (1" to 2") of pipe may be inserted as a spacer ring to limit such pipe movement within the coupling (or sleeve), to obtain the 1/4 inch limitation stipulated herein.

7-09.3(19)A Connections to Existing Mains
(June 16, 2006 G&O)

This Section is supplemented with the following:

The location, type, and size of existing facilities have been determined from available records and are approximate. It is anticipated that connections can be made, in general, as shown on the Plans. It shall be the responsibility of the Contractor to determine the exact location and to ascertain the type and size of the existing facilities prior to starting work on each connection and to provide minor alteration as may be required at no additional cost to the Contracting Agency and City of Winlock.

If the connection to the existing system involves turning off the water, the Contractor shall provide a minimum notice of 5 working days to the Inspector, the Contracting Agency and City of Winlock, and Fire Marshal, prior to scheduling shutoff. The Contractor shall notify (i.e., by distributing door hangers) all water customers affected by a scheduled shutdown. The notices shall be hand delivered not less than 48 hours nor more than 72 hours before the scheduled shutdown. The Contracting Agency will advise the Contractor which property owners are to be notified, and provide door hangers that the Contractor will be required to hang on each residential or commercial service location. No service shall be shut down for more than 4 hours per day without prior approval of the Contracting Agency and City of Winlock.

The Contractor shall maintain service in the existing facilities at each connection until such time that the connection is actually made. Final connection will be permitted under the supervision of the Contracting Agency and City of Winlock after receiving satisfactory water quality tests, and a continuous safe supply of water is available through the new facilities.

The Contractor shall furnish, install and remove all temporary plugs, caps, blowoffs, temporary blocking, and all other items of a temporary nature required to construct the proposed facilities up to the point of connection for the pressure and purity tests.

7-09.3(19)B Maintaining Service
(June 16, 2006 G&O)

This Section is supplemented with the following:

No Contracting Agency owned utility service will be allowed to be shutdown for more than 4 hours per day without prior approval.

7-09.3(21) Concrete Thrust Blocking
(June 16, 2006 G&O)

This Section is supplemented with the following:

All fittings requiring a thrust or anchor concrete block shall first be covered with 4-mil Visqueen plastic sheets, before concrete is poured. At no time shall the concrete be allowed to cover pipe joints, bolt heads, or nuts.

The poured in place concrete thrust and/or anchor blocks shall be in place at least 24 hours before beginning the pressure test, to allow the concrete to set. Longer durations may be required to ensure adequate curing has been established to conduct the necessary testing.

7-09.3(22) Blowoff Assemblies
(June 16, 2006 G&O)

Delete all paragraphs under this Section and replace with the following:

Blowoff Assemblies shall be constructed at the locations shown on the Plans and in accordance with the detail provided on the Plans.

7-09.3(23) Hydrostatic Pressure Test
(June 16, 2006 G&O)

This Section is supplemented with the following:

Testing pressure against closed gate valves shall not exceed 150 psi differential between upstream and downstream pressures.

Delete the ninth paragraph and replace it with the following:

There shall not be an appreciable or abrupt loss in pressure during the 2-hour test period.

7-09.3(24)A Flushing
(June 16, 2006 G&O)

This Section is supplemented with the following:

The Contractor shall check the downstream capacity of the drainage system proposed to facilitate disposal of flushing water prior to starting the flushing process.

The City of Winlock will furnish the water necessary to fill and flush the pipelines for testing purposes at a time of day when sufficient quantities of water are available for normal system operation.

The Contractor shall monitor the rate of disposal to prevent flooding of any areas downstream of the Contractor flushing operations.

7-09.3(24)J Preventing Reverse Flow
(June 16, 2006 G&O)

This Section is supplemented with the following:

The configuration of the installation of an approved backflow prevention device shall be submitted to the Contracting Agency and City of Winlock for review and approval prior to the installation and use of the device and making the connection.

7-09.3(24)N Final Flushing and Testing
(June 16, 2006 G&O)

Delete the third paragraph under this Section and replace with the following:

Before placing the line into service, a satisfactory report shall be received on samples collected from representative points in the new system. Samples will be collected and bacteriological tests obtained by the Contractor.

This Section is supplemented with the following:

All water mains shall be flushed within 48 hours of chlorination. No flushing will be allowed on weekends or on holidays. The Contracting Agency and City of Winlock shall be notified by the Contractor a minimum of 48 hours in advance of any flushing or flow testing.

7-09.3(24)O Repetition of Flushing and Testing
(May 1, 2006 G&O)

This Section is supplemented with the following:

The Contractor shall be responsible for payment of all repeat bacteriological testing. Testing shall not be cause for claims for delay by the Contractor and all expenses accruing there from shall be borne by the Contractor. Retesting and reinspection required because of defective work and testing performed for the convenience of the Contractor shall be paid by the Contractor.

7-09.3(25) Temporary Blowoff Assemblies (New Section)
(June 16, 2006 G&O)

Any temporary blowoff assemblies required for the Project shall be furnished and installed by the Contractor at no expense to the Contracting Agency and City of Winlock. Blowoffs shall be sized to provide a minimum pipe flow (scouring velocity) of 2.5 feet per second. Only brass plugs will be allowed to be utilized to plug pipelines where these temporary facilities were installed.

7-09.4 Measurement
(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Measurement for payment of pipe for water mains will be by the linear foot of pipe laid and tested and shall be measured along the pipe through fittings, valves and couplings at grade.

Measurement for payment of blowoff assembly will be per each.

No measurement shall be made for extra trench excavation as defined in Section 7-09.3(7)C.

Measurement of Additional Ductile Iron Fittings shall be per pound, based on the weight of fittings as listed in the AWWA Standards, ANSI/AWWA C110/A21.10-87. Fittings not listed in the above standards will be paid for at the weight listed in the Manufacturer's catalog. Weight will be based on the fitting body only and will not include accessory items such as bolts, glands, etc. Only those extra fittings required during construction, but which are not shown on the Plans, will be paid for under the bid item for Additional Ductile Iron Fittings.

Measurement for connection to the existing water main will be per each.

7-09.5 Payment
(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"PVC Pipe for Water Main, ____ In. Diam.," per linear foot.

The unit contract price per linear foot for the respective diameters of "PVC Pipe for Water Main, ____ In. Diam." shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, trench excavation, bedding, laying and jointing pipe and fittings, bedding, compaction, and removal and wastehaul of excess or unsuitable trench excavation material, dewatering, fittings, connections, marker tape, copper tracer wire, restrained joint systems, Megalugs, concrete blocking, installation and removal of temporary blowoff assemblies, pressure testing, flushing, disinfection and disposal of hypochlorinated water.

"Additional Ductile Iron Fittings," per pound.

The unit contract price per pound for "Additional Ductile Iron Fittings" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, fittings, follower glands, bolts, grip rings, Megalugs, concrete thrust/anchor blocks, testing, flushing, and disinfection.

"Connection to Existing Water Main," per each.

The unit contract price per each for "Connection to Existing Water Main" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, pumps, hoses, temporary blocking (and waste hauling of same), plugs, locating the existing main line, cutting into the main line, dewatering, waste hauling existing pipe, miscellaneous fittings and appurtenances as shown on the Plans, all temporary materials, including temporary blowoffs, miscellaneous fittings and pipe, testing, flushing, disinfection and all work associated with making a complete connection. Fire hydrant or blow-off connections or reconnections shall not be subject to payment under this bid item.

"In-Line Blow-Off Assembly," per each.

"End Blow-Off Assembly," per each.

The unit contract price for per each "In-Line Blow-Off Assembly" or "End Blow-Off Assembly" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, backfill, compaction, remove

and wastehaul of surplus excavated material, dewatering, testing, flushing, disinfection, concrete pads and accessories to furnish and install a complete Blow-Off assembly as shown on the Plans.

All work associated with providing temporary blowoff assemblies to include the necessary valve, fittings, piping, thrust blocks, connection, and any and all incidentals as required shall be merged into the price bid for the various sizes of water mains.

7-12 VALVES FOR WATER MAINS

7-12.3 Construction Requirements

(June 16, 2006 G&O)

This Section is supplemented with the following:

The required field inspection shall include operating the valve over the full range of opening to closed to ensure the valve firmly seals and fully clears the flow path.

The ears of the valve box cover shall be aligned along the pipe centerline.

7-12.5 Payment

(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"Gate Valve, ____ In.," per each.

The unit contract price per each for "Gate Valve, ____ In." shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, compaction, removal and wastehaul of excess or unsuitable trench excavation material, dewatering, valve box, valve stem extension, testing, flushing, disinfection and final adjustment of the valve box to finished grade.

"Comb. Air Relief/Air Vacuum Valve Assembly, ____ In.," per each.

The unit contract price per each for "Comb. Air Relief/Air Vacuum Valve Assembly" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, compaction, removal and wastehaul of excess or unsuitable trench excavation material, dewatering, valve box, service pipe, bollard, riser pipes, valve stem extension, testing, flushing, disinfection and final adjustment of the valve boxes to finished grade.

7-14 HYDRANTS

7-14.3(1) Setting Hydrants
(June 16, 2006 G&O)

Delete the first paragraph under this Section and replace it with the following:

Where shown in the Plans, hydrants shall be installed in accordance with the detail provided on the Plans. In addition, a minimum 3-foot radius unobstructed working area shall be provided around all hydrants. The safety flange shall be set 2 inches above finished grade.

This Section is supplemented with the following:

The Contractor shall furnish fire hydrants with the correct bury depth (trench depth), in accordance with the specified pipe depth and special conditions of the Project. The fire hydrants shall be installed to provide the mounting height above finished grade as shown on the Plans. The hydrant shall be installed plumb on the vertical axis.

Hydrants shall be equipped with one Storz pumper nozzle. The pumper port shall be turned to face the street.

After installation, each hydrant shall receive two field coats of paint. The first coat shall be thoroughly dried before applying the second coat. The exact colors shall be per Contracting Agency's current standards.

One blue lane marker, Type 2, shall be installed at all fire hydrant locations. It shall be installed on the adjacent pavement at locations designated by the Contracting Agency and in accordance with the provisions of Section 8-09 and Section 9-21.

7-14.3(2) Hydrant Connections
(June 16, 2006 G&O)

Delete all paragraphs under this Section and replace with the following:

Hydrant laterals shall consist of one continuous section of 6-inch Class 52 ductile iron pipe from the main to the hydrant and shall include as auxiliary gate valve set vertically and placed in accordance with the detail provide on the Plans.

7-14.3(2)A Hydrant Restraints
(June 16, 2006 G&O)

Delete the first sentence of the first paragraph under this Section and replace with the following:

The thrust created in the hydrant lateral shall be restrained as shown on the detail provided on the Plans.

7-14.5 Payment
(January 7, 2013 G&O)

Delete all paragraphs in this Section and replace it with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"Hydrant Assembly," per each.

The unit contract price per each for "Hydrant Assembly" shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, compaction, removal and wastehaul of excess or unsuitable trench excavation material, dewatering, painting, blocking, restraint systems, gate valve, main line tee, valve box, hydrant extensions, Storz adaptors, fittings, gravel drywell, concrete pads, the 6-inch hydrant stub, turning the pumper port to face the street, testing, flushing, and disinfection.

7-20 SEWER FORCE MAINS (NEW SECTION)

7-20.1 Description

This work shall consist of constructing sewer force main in accordance with the Plans and these specifications.

7-20.2 Materials

7-20.2(1) High Density Polyethylene (HDPE) Pipe

All HDPE shall be butt welded PE 3608 HDPE pipe conforming to ASTM D3350 having a cell classification of PE 345434C or better for 3608 or PE 445574 or better for 4710 and ASTM D1248 pipe grade resin type III, Class C, Category 5, grade P34 polyethylene compound. Pipe dimensions and workmanship shall conform to ASTM F714. Pipe shall be Iron Pipe Size (IPS). HDPE pipe shall have an SDR of 13.5. Manufacturer shall provide certification that stress regression testing has been performed on the product. Stress regression testing shall be done in accordance with ASTM D2837. Pipe shall be free of cracks, holes, inclusions, voids or other inclusions. Pipe manufacturer shall meet the minimum quality control requirements of ASTM D3035 and ASTM F174.

Fittings shall be standard HDPE fittings, meet the above HDPE pipe specifications, and be manufactured by injection molding or extrusion and machining. All fittings shall have the same working pressure as the pipe.

Pipe sections shall be joined by butt fusion complying with ASTM F2620 and the joints shall be equal or greater in strength than the pipe. Socket fusion joints shall not be used. Class 150, ANSI B16.5 flanges shall be use for connections for flanged connections of another material. Flange backing rings used shall be cast iron, hot dipped galvanized with galvanized nuts, bolts and washers.

Instead of butt fused joints electrofusion couplings may be used if the couplings have the same SDR ratio and working pressure rating of the pipe.

All bolts, buried and unburied, shall be coated with Armite Anti-Seize Compound No. 609, or equal, prior to installation.

7-20.2(2) Miscellaneous Fittings

A. Flexible Couplings

Flexible couplings shall be Romac 501 or equal. Middle ring and follower shall have fusion bonded epoxy coating. All buried flexible couplings shall be furnished with stainless steel bolts and nuts.

B. Flanged Coupling Adapters

Flanged coupling adapters shall be Smith-Blair Type 912 Dresser Style 127, or equal.

C. Adapter Flanges

Adapter flanges for ductile iron pipe shall be manufactured of high strength ductile iron, ASTM A536, Grade 65-45-12. Flange dimensions shall be in accordance with ANSI B16.1, 125-lb. pattern. Gasket shall be Buna-N. Setscrews shall be AISI 4140, high strength, low alloy steel. The adapter flanges shall be Uni-Flange Series 400, or equal.

D. Restrained Flanged Coupling Adapters

Restrained flanged coupling adapters shall comply with AWWA C219 and shall be manufactured of high-strength ductile iron, ASTM A536, Grade 64-45-12. Gaskets shall be compounded for wastewater service in accordance with ASTM D2000. Restrained flanged coupling adapters shall be Smith-Blair Type 911, Romac RFCA, or equal.

E. Dielectric Insulated Unions

Dielectric insulated unions shall be used to connect dissimilar metals. They shall separate the metals so that the passage of more than 1 percent of the galvanic current, which would exist with metal to metal contact, is prevented. Unions shall be of the same material as the pipe to which attached, and pressure and temperature ratings shall be no lower than that of the piping system in which it is installed.

7-20.2(3) Detectable Marking Tape

The Contractor shall furnish and install detectable marking tape over all force mains as shown on the Plans. The tape shall extend its full length. Detectable marking tape shall be as manufactured by Pro-Line Safety Products, or equal, and shall be a minimum of six inches in width, a minimum of five mil (0.0050”) overall thickness, and shall have no less than 0.35 mil solid aluminum foil core.

The foil shall be visible from both sides of the tape and shall be Brown in color to identify buried sewer systems and shall be printed to identify same. Printing shall be encased in the plastic jacket to avoid ink rub-off. Adhesives used to bond the plastic jacket to the foil shall not contain any dilatants, pigments, or contaminants and shall be specifically formulated to resist degradation by elements normally encountered in the soil.

In addition, the Contractor shall furnish and install 12-gauge coated copper wire, taped to the top of the force main.

7-20.3 Construction Requirements

7-20.3(1) Excavation

All earthwork, excavation, bedding, backfill and compaction shall meet the requirements of 7-08 General Pipe Installation Requirements.

7-20.3(2) Dewatering

Dewatering of excavations, if necessary, shall meet the requirements of 7-08 General Pipe Installation Requirements.

7-20.3(3) Temporary Shoring and Bracing

Temporary shoring and bracing, including trench excavation safety systems, shall meet the requirements of 7-08 General Pipe Installation Requirements.

7-20.3(4) High Density Polyethylene (HDPE) Pipe

HDPE pipe shall be installed in accordance with the manufacturer's instructions as shown on the Plans and as specified herein. Pipe trenching shall be done in accordance with ASTM D2321

7-20.3(5) Compaction of Backfill

The Contractor Agency will provide the services of a soils testing laboratory to conduct materials testing to determine the maximum compaction values and in-situ density tests of the compacted materials used for backfilling trenches to ensure their placement is in compliance with the Contract Documents.

Retesting and reinspection required because of defective work and testing performed for the convenience of the Contractor shall be the responsibility of the Contractor at no additional cost to the Contracting Agency. Testing shall not be cause for claims for delay by the Contractor.

7-20.3(6) Handling of Pipe

Pipe shall be stacked in such a manner as to prevent damage to the pipe, to prevent dirt and debris from entering the pipe, and to prevent any movement of the pipe. Stacking layers shall be limited to the recommendations in the HDPE Installation Guide.

Pipe shall not be strung across driveways, in ditches, or within 10 feet of the edge of the travel lane.

7-20.3(7) Grade and Alignment

The depth of trenching for sewer force main shall be such as to give a minimum cover of 48 inches over the top of the pipe unless otherwise specified on the Plans.

Sewer force main shall be laid on a continuous positive grade as shown on the Plans to minimize the number of high or low points in the pipeline profile unless approved by the Contracting Agency and City of Winlock. The Contractor shall, based on his review of the site and the Plans, note areas where additional depth beyond the minimum pipe cover is required to avoid certain utility conflicts and provide adequate bury at ditches, and adjust the pipeline profile accordingly to maintain a continuous grade.

7-20.3(8) Cleaning

All lines shall be flushed clean of all debris prior to acceptance. Water for this purpose shall be furnished by the City of Winlock. Disposal of the flushing water will be to a point approved by the Contracting Agency.

7-20.3(9) Pressure Testing

All pipelines shall be tested and disinfected prior to acceptance of work. All pumps, gauges, plugs, saddles, corporation stops, miscellaneous hose and piping, and measuring equipment necessary for performing the test shall be furnished, installed and operated by the Contractor. The Contractor shall provide an oil-filled pressure gauge with a range of 0 to 300 psi.

The pipeline shall be backfilled sufficiently to prevent movement of the pipe under pressure. All thrust blocks shall be in place and time allowed for the concrete to cure before testing.

All piping systems will be tested to demonstrate leak tightness prior to acceptance. The Contractor shall provide all equipment and labor necessary to perform all testing required herein. Gauges used in testing shall be certified by an approved laboratory.

All force mains and appurtenances shall be tested at a pressure of 225 psi. Testing is to be done in sections between valves with no back pressure against the valves to ensure water tightness of the valves in either direction.

The pipeline shall be backfilled sufficiently to prevent movement of the pipe under pressure. All thrust blocks shall be in place for at least 24 hours to allow concrete to cure before testing.

After the pipe is filled with water and all air expelled, it shall be pumped to a test pressure of 1.5 times the design operating pressure at the lowest point in the section under test pressure and minimum of 1.25 times the highest point on the line. If test is not completed due to leakage, equipment failure, etc. depressurize the test section and allow it to relax for eight hours before retesting. The test procedure consists of initial expansion phase of three hours and a test phase of 1 hour.

During the initial expansion phase the test section is pressurized to the test pressure and enough make-up liquid is added each hour to maintain the test pressure for 3 hours.

During the test phase, reduce pressure by 10 psi and hold pressure for one hour. IF pressure remains steady (within 5 percent of target value) no leakage is indicated. Allowable makeup water for the test phase per hundred feet of pipe is 1.7 gallons of water for 16-inch pipe, 1.1 gallons for 12-inch pipe and 0.5 gallons for 8-inch pipe.

7-20.4 Measurement

Delete all paragraphs under this Section and replace with the following:

The length of sewer force main pipe will be the number of linear feet of completed installation measured along grade and will include the length through elbows, tees and fittings.

7-20.5 Payment

(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the Proposal:

"Sewer Force Main, ____ In. Diam.," per linear foot.

The unit contract price per linear foot of material "Sewer Force Main, ____ In. Diam." shall constitute full compensation for all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete all work to furnish and install this item to include, but not limited to, excavation, pipe bedding, compaction, removal and wastehaul of excess or unsuitable trench excavation material, bypass pumping and maintaining sanitary sewer flows, dewatering, connections to existing and new systems, flushing and cleaning, pressure testing, copper tracer wire and detectable marking tape.

Division 8
Miscellaneous Construction

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.1 Description

(May 4, 2020 G&O GSP)

This Section is supplemented with the following:

This work also consists of transfer of coverage of the National Pollution Discharge Elimination System Construction Stormwater General Permit (CSWGP) from the Contracting Agency to the Contractor.

8-01.3 Construction Requirements

(May 4, 2020 G&O GSP)

This Section is supplemented with the following:

The Contractor shall take all necessary precautions and utilize the Department of Ecology's (ECY) Best Management Practices to prevent sediment and fugitive dust from construction activities from entering into storm water systems, natural waterways, or environmentally sensitive areas and from otherwise being carried away from the construction area by stormwater or air.

Temporary erosion protection shall be furnished, installed, and maintained for the duration of this Project to protect environmentally sensitive areas, sloped surfaces, adjacent areas and/or water bodies or conveyance systems. Temporary erosion

protection may include the use of straw, jute matting, wattles, heavy plastic sheeting, or other forms of ground cover on areas disturbed by construction. Sloped surfaces shall be restored and protected in such a manner that surface runoff does not erode the embankments, slopes, or ground surfaces, nor create surface channels, or ruts.

Any damage caused by the Contractor's failure to keep the erosion materials maintained shall be borne by the Contractor alone.

The Contractor shall prepare and submit a Stormwater Pollution Prevention Plan, in conformance with DOE requirements, to the Engineer before any Work begins.

8-01.3(1)A Submittals
(May 4, 2020 G&O GSP)

This Section is supplemented with the following:

The Contractor shall be required to prepare, maintain, and update the TESC plan, as may be required during the course of the Project. The TESC plan and details included are provided solely for the establishment of basic erosion control measures and are not intended to be a complete plan.

8-01.3(9)D Inlet Protection
(May 4, 2020 G&O GSP)

This Section is supplemented with the following:

All catch basins grates within the project limits and adjacent areas shall have inlet protection installed to prevent sedimentation from entering the storm system. The inlet protection shall be routinely cleaned of sediment to prevent plugging. This sediment shall be regularly removed, loaded, and hauled to waste whenever it presents a potential surface accumulation problem or concern to the Contracting Agency.

8-02 ROADSIDE RESTORATION

8-02.1 Description
(******)

This Section is supplemented with the following:

This work also consists of installing plant material within the stormwater wetland.

8-02.3(3)B Chemical Pesticides
(January 7, 2013 G&O)

This Section is supplemented with the following:

No chemical herbicides will be allowed in planting areas.

8-02.3(5) Planting Area Preparation
(January 7, 2013 G&O)

This Section is supplemented with the following:

Finish grades shall be inspected and accepted by the Contracting Agency prior to commencing planting.

The costs of removing all excess material and debris shall be considered incidental to the Project and as such merged in the various items bid.

Final Acceptance

Final acceptance by the Contracting Agency for soil preparation will be contingent on the approval of all inspections, and that the soil preparation is consistent with these specifications and with the Plans.

8-02.3(8) Planting
(January 7, 2013 G&O)

This Section is supplemented with the following:

Plants shall be handled so as to avoid all damage, including breaking, brushing, root damage, sunburn, drying, freezing, or other injury. Plants must be covered during transport. Plants shall not be bound with wire or rope in a manner that could damage branches. Protect plant roots with shade and wet soil in the time period between delivery and installation. Do not lift container stock by trunks, stems, or tops. Do not remove from containers until ready to plant.

The Contractor shall provide supplemental water to all plants as necessary to keep moisture levels appropriate to the species' horticultural requirements. Plants shall not be allowed to dry out. All plants shall be watered thoroughly immediately upon installation. Soak all containerized plants thoroughly prior to installation. Plants whose roots have dried out from exposure will not be accepted at installation inspection. All rejected plants shall be immediately removed from the site.

Plants shall be normal in pattern of growth, healthy, well branched, vigorous, with well-developed root systems, and free of pests and disease. Damaged, diseased, pest-infested, scraped, bruised, dried-out, burned, broken, or defective plants will be rejected.

Plant substitutions are not permitted without the permission of the Contracting Agency. Same-species substitutions of larger or smaller sized plants and the substitution of bare-root plants for container plants also require permission of the Contracting Agency. Small plants and bare root plants often experience less transplant shock and adapt more quickly to site conditions, resulting in a higher success rate. However, same-species substitutions will only be approved based on certain site-specific conditions. Landscaping varieties are not acceptable substitutes.

Immediately before installation, plants with minor root damage (some broken and/or twisted roots) must be root-pruned. Matted or circling roots of containerized plantings must be pruned or straightened and the sides of the root ball must be roughened from top to bottom to a depth of approximately 1/2 inch in two to four places. Plants with any other type of root damage will be rejected. All rejected plants will be immediately removed from the site.

8-02.3(9) Seeding and Fertilizing

This Section is supplemented with the following:

(September 3, 2019)
Seed of the following mix, rate, and analysis shall be applied at the rates shown below on all areas requiring seeding within the project:

Kind and Variety of Seed in Mixture by Common Name and (Botanical Name)	Pounds Pure Live Seed (PLS) Per Acre
Dwarf Perennial Ryegrass	100
Creeping Red Fescue	50
Hard Fescue	50
Total Pounds PLS Per Acre	**200**

Seed shall meet or exceed Washington State Department of Agriculture Certified Seed Standards and be from within the 1f or 2i Ecoregion(s) as defined by the US Environmental Protection Agency (EPA).

The seed certification class shall be Certified (blue tag) in accordance with WAC 16-302 and meet the following requirements:

Prohibited Weed	0% max.
Noxious Weed	0% max.
Other Weed	0.20% max.
Other Crop	0.40% max.

8-02.3(13) Plant Establishment
(January 7, 2013 G&O)

This Section is supplemented with the following:

All references to “first-year plant establishment” in this Section shall read “plant establishment.”

The second paragraph of this Section is replaced with the following:

If directed by the Engineer, the Contractor shall submit a plant establishment plan for approval by the Engineer. The plant establishment period shall extend from notification of acceptance of initial planting through physical completion of the Project.

8-02.5 Payment
(January 7, 2013 G&O)

Delete all paragraphs under this Section and replace with the following:

Payment will be made in accordance with Section 1-04.1 for each of the following listed bid items that are included in the Proposal:

The lump sum price bid for “Storm Pond Planting and Restoration” shall be full pay for all materials, labor, tools and equipment necessary to plant and restore the storm pond

area to the limits shown on the plans. The lump sum price bid shall also include the excavation, installation, removal of excess or unsuitable material, plants (as noted on the plans), bark mulch and topsoil.

Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical

8-20.5 Payment

(******)

This Section is supplemented with the following:

"Junction Box," per each.

The unit contract price per each for "Junction Box" shall be full compensation for furnishing and installing all materials, labor and equipment necessary to install the junction box to include, but not be limited to, excavation, bedding, backfilling, wastehaul of excess excavated material and compaction.

8-21 PERMANENT SIGNING

8-21.5 Payment

(November 24, 2010 G&O)

This Section is supplemented with the following:

"Permanent Signing," per lump sum.

The lump sum contract price for "Permanent Signing" shall be full pay for all material, labor, tools, and equipment necessary to remove, protect, and reinstall existing signs including posts, concrete anchors, and fasteners, as specified herein and shown on the Plans, as well as furnishing and installing all new permanent signs as may be specified on the Plans.

Division 9
Materials

9-03 AGGREGATES

9-03.6 Aggregates for Asphalt Treated Base (ATB)

(May 5, 2015 APWA GSP)

9-03.6(1) General Requirements

Aggregates for asphalt treated base shall be manufactured from ledge rock, talus, or gravel, in accordance with the provisions of Section 3-01 that meet the following test requirements:

Los Angeles Wear, 500 Rev.	30% max.
Degradation Factor	15 min.

9-03.6(2) Grading

Aggregates for asphalt treated base shall meet the following requirements for grading:

Sieve Size	Percent Passing
2"	100
1/2"	56-100
No. 4	32-72
No. 10	22-57
No. 40	8-32
No. 200	2.0-9.0

All percentages are by weight.

9-03.6(3) Test Requirements

When the aggregates are combined within the limits set forth in Section 9-03.6(2) and mixed in the laboratory with the designated grade of asphalt, the mixture shall be capable of meeting the following test values:

% of Theoretical Maximum Specific Gravity (GMM) (approximate)	93@ 100 gyrations
AASHTO T324, WSDOT TM T718 or ASTM D3625 (Acceptable anti-strip evaluation tests)	Pass

The sand equivalent value of the mineral aggregate for asphalt treated base (ATB) shall not be less than 35.

9-03.8(7) HMA Tolerances and Adjustments
(March 14, 2014 G&O)

Delete Item 1 and replace it with the following:

1. **Job Mix Formula Tolerances**. After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

Aggregate, percent passing	Nonstatistical Evaluation	Commercial Evaluation
1", 3/4", 1/2", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±6%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points section, except the tolerance limits for sieves designated as 100 percent passing will be 99-100. The tolerance limits on sieves shall only apply to sieves with control points.

POWER EQUIPMENT

(******)
The successful bidder will be required to furnish the County a list of all equipment that they anticipate utilizing on this project.

The bidder's attention is directed to the attached Power Equipment Form, which the successful bidder will be required to complete and return with the contract documents. This information will enable hourly rental rates to be computed by the County, utilizing the "Rental Rate Blue Book for Construction Equipment". No payment for any force account work will be allowed until this form has been returned and accepted by the County.

E-VERIFY

(******)
"Effective June 21st, 2010, all contracts with a value of ≥ $100,000 shall require that the awarded contractor register with the Department of Homeland Security E-Verify program. Contractors shall have sixty days after the execution of the contract to register and enter into a Memorandum of Understanding (MOU) with the Department of Homeland Security (DHS) E-Verify program. After completing the MOU the contractor shall have an additional sixty days to provide a written record on the authorized employment status of their employees and those of any sub-contractor(s) currently assigned to the contract. Employees hired during the execution of the contract and after submission of the initial verification will be verified to the county within 30 days of hire, as reported from the E-Verify program. The contractor will continue to update the County on all corrective actions required and changes made during the performance of the contract."

BOND

(******)
The Bidder's special attention is directed to the attached bond form, which the successful bidder will be required to execute and furnish the County. <u>NO OTHER BOND FORMS WILL BE ACCEPTED</u>. The bond shall be for the full amount of the contract.

LEWIS COUNTY ESTIMATES AND PAYMENT POLICY

(******)
On or before the 5th day of each calendar month during the term of this contract, the Contracting Agency shall prepare its estimate of work performed, and material furnished. If the Contractor agrees, the Contractor will approve the estimate and return the estimate to the Contracting Agency by the 15th day of that same calendar month. The Contracting Agency shall prepare a voucher based upon the approved estimate and a payment based thereon shall be due the Contractor on the 10th day of the next calendar month.

When the Contractors report the work is completed he/she shall then notify the Contracting Agency. The Contracting Agency shall inspect the work and report any deficiencies to the Contractor. When the Contracting Agency is satisfied the work has been completed in accordance with all plans and specifications the Contracting Agency shall then accept the work.

The Contracting Agency shall prepare a pre-final estimate for approval by the Contractor and processing for payment on the monthly schedule. Release of Contract Bond will be 60 days following Contracting Agency Final Acceptance of Contract, provided the conditions of Section 1-03.4 and Section1-07.2 of these Special Provisions have been satisfied.

Appendices
(January 2, 2012)

The following appendices are attached and made a part of this contract:

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APPENDIX A:
Map and Log of Test Pits

APPENDIX B:
Washington State Prevailing Wage Rates

APPENDIX C:
Bid Proposal Documents

APPENDIX D:
Contract Documents

APPENDIX E:
Contract Plans

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(February 5, 2020)
Standard Plans

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 16-048, effective September 3, 2019 is made a part of this contract.

The Standard Plans are revised as follows:

A-50.10
Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20
Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

A-50.30
Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.1

B-10.60
DELETED

B-82.20

DELETED

B-90.40
Valve Detail – DELETED

C-1
Delete Note 1.

Revise Note 2 to read “Remove all rail washers, also called “Snow Load Rail Washers”, when encountered during raising beam guardrail work and the guardrail raising work requires removal of the rail.

Re-number all notes.

C-4b
DELETED

C-4e
DELETED

C-8a
Delete “Section A-A, Type 4 Detail

C-20.11
Delete Notes 1 & 2. Re-Number all notes.
Delete “ Snow Load Post Washer” and “Snow Load Rail Washer” details.

C-20.19
DELETED

C-22.14
DELETED

C-22.16
Note 3, formula, was: “Elevation G = (Elevation S – D x (0.1) + 31” is revised to read: “Elevation G = (Elevation S – D x (0.1) + 31/12”

C-22.45
For the SOFTSTOP (TL-2) elevation view detail, the callout “SOFTSTOP (TL-2) SYSTEM LENGTH = 38’ – 4 1/2"” is revised to read “SOFTSTOP (TL-2) SYSTEM LENGTH = 38’ – 3 1/2"”.

C-40.14
DELETED

C-60.10
Sheet 1, Side Elevation: The bottom set of □ - #4 horizontal rebar (2x) located at the base of the barrier is repositioned to be aligned with the bottom of □ - #4 stirrup bars to match the bar positioning shown on Sheet 1, Section A.

Sheet 1, Reinforcing Steel Bending Diagram, - Pin Slot Bar detail: Add the following callout to the detail, “HOT DIP GALVANIZE AFTER FABRICATION (ASTM A123 OR AASHTO M 111)”.

Sheet 2, ANCHORING PIN ASSEMBLY DETAIL: The first line of the description under the title was “1 1/2” DIAMETER (ASTM A36), COLD ROLL” is now changed to “1 1/2” DIAMETER (ASTM A36), HOT ROLL”.

C-70.10

Sheet 1, Note 1 was - “1. PERMANENT INSTALLATION requirements: Embed barrier 3” (in) minimum; …” is revised to read: “1. Installation requirements: Embed barrier 3” (in) minimum in asphalt or concrete; embed barrier 10” (in) minimum in soil; …”

Sheet 1, existing Notes 2 and 4 are deleted. Existing Note 3 is renumbered to Note 2.

Sheet 1, add new Note 3, “3. See Sheet 2 for barrier with a 2’-10” reveal installed in asphalt or concrete. See Sheet 3 for barrier with a 3’-6” reveal installed in asphalt or concrete.”

Sheet 1, Elevation: The dimension from the barrier end to the barrier lifting slot was “3’ – 4” (TYP)” is now changed to “4’ – 8” (TYP)”, and the barrier lifting slot dimension was “5’ – 0” (TYP)” is now changed to “3’ – 0” (TYP)”.

Sheet 2, the detail titled “3’ – 6” BARRIER FOR USE WITH A 0” (IN) TO 5” (IN) MAX. GRADE SEPARATION” has the following changes:
1. The detail title is changed to “3’ – 6” BARRIER FOR USE WITH A 0” (IN) TO 4” (IN) MAX. GRADE SEPARATION”.
2. The callout “GRADE SEPARATION--5” MAX.” is changed to “GRADE SEPARATION--4” MAX.”

C-75.10

Note 2 is deleted. Renumber subsequent notes.

C-75.20

Note 2 is deleted. Renumber subsequent notes.

C-75.30

Note 2 is deleted. Renumber subsequent notes.

C-85.11

Add new Note 3 “3. The intended use of this plan is for placing concrete barrier in front of bridge piers on bridge retrofit projects only. Contact the HQ Bridge traffic barrier specialist before using this barrier placement plan for projects involving new or reconstructed bridges.”

C-85.14

DELETED

C-90.10

DELETED

D-10.10

Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15

Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.30

Wall Type 5 may be used in all cases.

D-10.35

Wall Type 6 may be used in all cases.

D-10.40

Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45

Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

D-15.10

STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls” are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.20

STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls” are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.30

STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls” are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

F-10.12

Section Title, was – “Depressed Curb Section” is revised to read: “Depressed Curb and Gutter Section”

F-10.40

“EXTRUDED CURB AT CUT SLOPE”, Section detail - Deleted

F-10.42

DELETE – “Extruded Curb at Cut Slope” View

G-25.10

Key Note 3, second sentence, was – “For single-post installations, divide the (#2w/diamond shape symbol) post MAX. XYZ in half.” Is revised to read: “For single-post installations, divide the two-post MAX. XYZ in half.”

G-60.10

DELETED

G-60.20

DELETED

G-60.30

DELETED

G-70.10

DELETED

G-70.20

DELETED

H-70.20

Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

J-10.21

Note 18, was – “When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details.” Is revised to read; “When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details.”

J-10.22

Key Note 1, was – “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305.” Is revised to read; “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel.”

Key Note 4, “Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt “T” rated). Is revised to read: “Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt “T” rated).”

Key Note 14, was – “Hinged dead front with ¼ turn fasteners or slide latch.” Is revised to read; “Hinged dead front with ¼ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s).”

Key Note 15, was – “Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b.“ is revised to read; “Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details.”

Note 1, was – “…socket box mounting detail, see Standard Plan J-3b.” is revised to read to read: “…socket box mounting detail, see Standard Plan J-10.20.”

Note 6, was – "…See door hinge detail, Standard Plan J-3b." is revised to read: "…See door hinge detail, Standard Plan J-10.20."

J-20.26

Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

J-20.16

View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10

Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"

Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR.. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 1)"

Detail F, callout, "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

J-21.15

Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-21.16

Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15

Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0"

(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½" DIAM. is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-28.24

Case E and Case F Section View dimension callout, "3' – 0" MIN. FOR BEAM GUARDRAIL, 4' – 0" MIN. FOR CONC. BARRIER TYPE 2" is revised to read, "5' – 0"

MIN. FOR BEAM GUARDRAIL, 8' – 0" MIN. FOR UNANCHORED TYPE F CONC. BARRIER, 4' – 0" MIN. FOR ANCHORED TYPE F CONC. BARRIER".

J-40.10

Sheet 2 of 2, Detail F, callout, "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 12" S. S. FLAT WASHER" is revised to read; "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 1/2" (IN) S. S. FLAT WASHER"

J-75.20

Key Notes, note 16, second bullet point, was: "1/2" (IN) x 0.45" (IN) Stainless Steel Bands", add the following to the end of the note: "Alternate: Stainless steel cable with stainless steel ends, nuts, bolts, and washers may be used in place of stainless steel bands and associated hardware."

J-81.10

Power Distribution Block Diagram, lower left corner, Sheet 1 of 3; Switch Pack 2; circuit 623 (T4-5) [middle ckt] is revised to read; circuit **622 (T4-5)**.

K-80.10

SIGN INSTALLATION (BEHIND TRAFFIC BARRIER) detail dimension callout, "3' MIN." is revised to read, "5' MIN.".

K-80.30

DELETED

K-80.35

Add New Note 1 – "1. The intended use of this plan is for the temporary installation of Type 2 concrete barrier (See Standard Plan C-8) on cement concrete pavement, bridge decks, or hot mix asphalt pavement, and Type F concrete barrier on cement concrete pavement or bridge decks.

Re-number all notes.

The TYPE 1 ANCHOR detail description "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) AND TEMPORARY CONC. BARRIER (F-SHAPE) (STD. PLAN K-80.30) ON CEMENT CONC. PAVEMENT OR BRIDGE DECK" is revised to read, "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE F (STD. PLAN C-60.10) OR PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) ON CEMENT CONC. PAVEMENT OR BRIDGE DECK."

The TYPE 3 ANCHOR detail description "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) AND TEMPORARY CONC. BARRIER (F-SHAPE) (STD. PLAN K-80.30) ON HOT MIX ASPHALT PAVEMENT" is revised to read, "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) ON HOT MIX ASPHALT PAVEMENT."

K-80.37

Revise Note 1 to read:"1. The intended use of this plan is for the temporary installation of Type F NARROW BASE concrete barrier (See Standard Plan C-60.10) or Type 4 (Type 2 Narrow Base – See Std. Plan C-8a) Concrete Barrier on cement concrete pavement, bridge decks."

Replace all callouts stating “NARROW BASE, ALTERNATIVE TEMPORARY CONCRETE BARRIER SEGMENT” with “Type F NARROW BASE or Type 4 (Type 2 Narrow Base) concrete barrier segment.”

M-3.50

Double-Left Turn Channelization (with Right Turn Pocket) view, dimension, upper left corner, “taper” dimension; callout – was “40’ if Posted Speed is 40 MPH or less 100’ if Posted Speed is more than 40 MPH” is revised to read; “See Contract”

M-5.10

Right-Turn Channelization view, dimension, upper right corner, “taper” dimension; callout – was “50’ MIN.” is revised to read; “See Contract”

M-12.10

Add Note 5. “Check with Region Traffic Office for RPM and Guidepost placements.”

M-24.50

DELETED

The following are the Standard Plan numbers applicable at the time this project was advertised. The date shown with each plan number is the publication approval date shown in the lower right-hand corner of that plan. Standard Plans showing different dates shall not be used in this contract.

A-10.10-00.....8/7/07
A-10.20-00.....10/5/07
A-10.30-00.....10/5/07
A-20.10-00.....8/31/07
A-30.10-00.....11/8/07
A-30.30-01.....6/16/11
A-30.35-00.....10/12/07
A-40.00-00.....8/11/09
A-40.10-04.....7/31/19
A-40.15-00.....8/11/09
A-40.20-04.....1/18/17
A-40.50-02.....12/23/14
A-50.10-00…....11/17/08
A-50.20-01…....9/22/09
A-50.30-00…....11/17/08
A-50.40-00…....11/17/08
A-60.10-03.....12/23/14
A-60.20-03.....12/23/14
A-60.30-01.....6/28/18
A-60.40-00.....8/31/07

B-5.20-02.....1/26/17
B-5.40-02.....1/26/17
B-5.60-02.....1/26/17
B-10.20-02.....3/2/18
B-10.40-01.....1/26/17
B-10.70-00……1/26/17
B-15.20-01.....2/7/12
B-15.40-01.....2/7/12
B-15.60-02.....1/26/17
B-20.20-02.....3/16/12
B-20.40-04.....2/27/18
B-20.60-03.....3/15/12
B-25.20-02.....2/27/18
B-25.60-02.....2/27/18
B-30.10-03.....2/27/18
B-30.15-00……2/27/18
B-30.20-04.....2/27/18
B-30.30-03.....2/27/18
B-30.40-03.....2/27/18
B-30.50-03.....2/27/18
B-30.70-04.....2/27/18
B-30.80-01.....2/27/18
B-30.90-02.....1/26/17
B-35.20-00.....6/8/06
B-35.40-00.....6/8/06
B-40.20-00.....6/1/06
B-40.40-02.....1/26/17
B-45.20-01.....7/11/17
B-45.40-01.....7/21/17
B-50.20-00.....6/1/06
B-55.20-02.....2/27/18
B-60.20-01.....6/28/18
B-60.40-01.....2/27/18
B-65.20-01.....4/26/12
B-65.40-00.....6/1/06
B-70.20-00.....6/1/06
B-70.60-01.....1/26/17
B-75.20-02.....2/27/18
B-75.50-01.....6/10/08
B-75.60-00.....6/8/06
B-80.20-00.....6/8/06
B-80.40-00.....6/1/06
B-85.10-01.....6/10/08
B-85.20-00.....6/1/06
B-85.30-00.....6/1/06
B-85.40-00.....6/8/06
B-85.50-01.....6/10/08
B-90.10-00…....6/8/06
B-90.20-00.....6/8/06
B-90.30-00.....6/8/06
B-90.40-01.....1/26/17
B-90.50-00.....6/8/06
B-95.20-01.....2/3/09
B-95.40-01.....6/28/18

C-1.....6/28/18
C-1a.....7/14/15
C-1b.....8/12/19
C-1d.....10/31/03
C-2c.....8/12/19
C-4f.....8/12/19
C-6a.....10/14/09
C-7.....6/16/11
C-7a.....6/16/11
C-8.....2/10/09
C-8a.....7/25/97
C-8b.....2/29/16
C-8e.....2/21/07
C-8f.....6/30/04
C-16a.....7/21/17
C-20.10-05.....8/12/19
C-20.11-00……..7/21/17
C-20.14-04.....8/12/19
C-20.15-02.....6/11/14
C-20.18-03.....8/12/19
C-20.19-03.....8/12/19
C-20.40-07.....8/12/19
C-20.41-02.....8/12/19
C-20.42-05.....7/14/15
C-20.45.02.....8/12/19
C-22.16-06.....7/21/17
C-22.40-07.....8/12/19
C-22.45-04.....8/12/19
C-23.60-04.....7/21/17
C.24.10-02.....8/12/19
C-25.20-06.....7/14/15
C-25.22-05.....7/14/15
C-25.26-04.....8/12/19
C-25.30-00…….6/28/18
C-25.80-05.....8/12/19
C-40.16-02.....7/2/12
C-40.18-03.....7/21/17
C-60.10-00…….8/22/19
C-70.10-01.....6/17/14
C-75.10-01.....6/11/14
C-75.20-01.....6/11/14
C-75.30-01.....6/11/14
C-80.10-01.....6/11/14
C-80.20-01.....6/11/14
C-80.30-01.....6/11/14
C-80.40-01.....6/11/14
C-80.50-00.....4/8/12
C-85.10-00.....4/8/12
C-85.11-00.....4/8/12
C-85.14-01.....6/11/14
C-85.15-01.....6/30/14
C-85.16-01.....6/17/14
C-85-18-01.....6/11/14
C-85.20-01.....6/11/14

1

D-2.04-00.....11/10/05
D-2.06-01.....1/6/09
D-2.08-00.....11/10/05
D-2.14-00.....11/10/05
D-2.16-00.....11/10/05
D-2.18-00.....11/10/05
D-2.20-00.....11/10/05
D-2.32-00.....11/10/05
D-2.34-01.....1/6/09
D-2.36-03.....6/11/14
D-2.42-00.....11/10/05
D-2.44-00.....11/10/05
D-2.60-00.....11/10/05
D-2.62-00.....11/10/05
D-2.46-01.....6/11/14
D-2.48-00.....11/10/05
D-2.64-01.....1/6/09
D-2.66-00.....11/10/05
D-2.68-00.....11/10/05
D-2.80-00.....11/10/05
D-2.82-00.....11/10/05
D-2.84-00.....11/10/05
D-2.86-00.....11/10/05
D-2.88-00.....11/10/05
D-2.92-00.....11/10/05
D-3.09-00.....5/17/12
D-3.10-01……5/29/13
D-3.11-03……6/11/14
D-3.15-02……6/10/13
D-3.16-02……5/29/13
D-3.17-02……5/9/16
D-4.....12/11/98
D-6.....6/19/98
D-10.10-01.....12/2/08
D-10.15-01.....12/2/08
D-10.20-01.....8/7/19
D-10.25-01.....8/7/19
D-10.30-00.....7/8/08
D-10.35-00.....7/8/08
D-10.40-01.....12/2/08
D-10.45-01.....12/2/08

2

E-1.....2/21/07
E-2.....5/29/98
E-4.....8/27/03
E-4a.....8/27/03

3

F-10.12-03.....6/11/14
F-10.16-00.....12/20/06
F-10.18-01.....7/11/17
F-10.40-03.....6/29/16
F-10.42-00.....1/23/07
F-10.62-02.....4/22/14
F-10.64-03.....4/22/14
F-30.10-03.....6/11/14
F-40.12-03.....6/29/16
F-40.14-03.....6/29/16
F-40.15-03.....6/29/16
F-40.16-03.....6/29/16
F-45.10-02.....7/15/16
F-80.10-04.....7/15/16

4

G-10.10-00.....9/20/07
G-20.10-02.....6/23/15
G-22.10-04.....6/28/18
G-24.10-00.....11/8/07
G-24.20-01.....2/7/12
G-24.30-02.....6/28/18
G-24.40-07.....6/28/18
G-24.50-05.....8/7/19
G-25.10-04.....6/10/13
G-26.10-00……7/31/19
G-30.10-04.....6/23/15
G-50.10-03.....6/28/18
G-90.10-03……7/11/17
G-90.11-00……4/28/16
G-90.20-05……7/11/17
G-90.30-04……7/11/17
G-95.10-02.....6/28/18
G-95.20-03.....6/28/18
G-95.30-03.....6/28/18

G-24.60-05.....6/28/18 G-90.40-02……4/28/16

1

H-10.10-00.....7/3/08 H-32.10-00.....9/20/07 H-70.10-01.....2/7/12
H-10.15-00.....7/3/08 H-60.10-01.....7/3/08 H-70.20-01.....2/16/12
H-30.10-00.....10/12/07 H-60.20-01.....7/3/08 H-70.30-02.....2/7/12

2

I-10.10-01.....8/11/09 I-30.20-00.....9/20/07 I-40.20-00.....9/20/07
I-30.10-02.....3/22/13 I-30.30-02.....6/12/19 I-50.20-01.....6/10/13
I-30.15-02.....3/22/13 I-30.40-02.....6/12/19 I-60.10-01.....6/10/13
I-30.16-01.....7/11/19 I-30.60-02.....6/12/19 I-60.20-01.....6/10/13
I-30.17-01.....6/12/19 I-40.10-00.....9/20/07 I-80.10-02.....7/15/16

3

J-10.....7/18/97
J-10.10-03……6/3/15
J-10.15-01.....6/11/14
J-10.16-00……6/3/15
J-10.17-00……6/3/15
J-10.18-00……6/3/15
J-10.20-02……7/31/19
J-10.21-00……6/3/15
J-10.22-00.....5/29/13
J-10.25-00……7/11/17
J-12.15-00……6/28/18
J-12.16-00……6/28/18
J-15.10-01.....6/11/14
J-15.15-02……7/10/15
J-20.10-04.....7/31/19
J-20.11-03.....7/31/19
J-20.15-03.....6/30/14
J-20.16-02.....6/30/14
J-20.20-02.....5/20/13
J-20.26-01.....7/12/12
J-21.10-04.....6/30/14
J-21.15-01.....6/10/13
J-21.16-01.....6/10/13
J-21.17-01.....6/10/13
J-21.20-01.....6/10/13
J-22.15-02.....7/10/15
J-22.16-03.....7/10/15
J-26.10-03…..7/21/16
J-26.15-01…..5/17/12
J-26.20-01…..6/28/18
J-27.10-01…..7/21/16
J-27.15-00…..3/15/12
J-28.10-02.....8/7/19
J-28.22-00.....8/07/07
J-28.24-01.....6/3/15
J-28.26-01.....12/02/08
J-28.30-03.....6/11/14
J-28.40-02.....6/11/14
J-28.42-01.....6/11/14
J-28.43-01.....6/28/18
J-28.45-03.....7/21/16
J-28.50-03.....7/21/16
J-28.60-02.....7/21/16
J-28.70-03.....7/21/17
J-29.10-01.....7/21/16
J-29.15-01.....7/21/16
J-29.16-02.....7/21/16
J-30.10-00……6/18/15
J-40.05-00……7/21/16
J-40.10-04……4/28/16
J-40.20-03……4/28/16
J-40.30-04……4/28/16
J-40.35-01……5/29/13
J-40.36-02……7/21/17
J-40.37-02……7/21/17
J-40.38-01.....5/20/13
J-40.39-00……5/20/13
J-40.40-02……7/31/19
J-45.36-00……7/21/17
J-50.05-00……7/21/17
J-50.10-01…….7/31/19
J-50.11-02…….7/31/19
J-50.12-02…….8/7/19
J-50.13-00…….8/22/19
J-50.15-01…….7/21/17
J-50.16-01…….3/22/13
J-50.18-00…….8/7/19
J-50.19-00…….8/7/19
J-50.20-00…….6/3/11
J-50.25-00…….6/3/11
J-50.30-00…….6/3/11
J-60.05-01…….7/21/16
J-60.11-00…….5/20/13
J-60.12-00…….5/20/13
J-60.13-00…….6/16/10
J-60.14-01……7/31/19
J-75.10-02……7/10/15
J-75.20-01……7/10/15
J-75.30-02…….7/10/15
J-75.40-02……6/1/16
J-75.41-01……6/29/16
J-75.45-02……6/1/16
J-80.10-00……6/28/18
J-80.15-00……6/28/18
J-81.10-00……6/28/18
J-86.10-00……6/28/18
J-90.10-03…….6/28/18
J-90.20-03…….6/28/18
J-90.21-02……6/28/18
J-90.50-00……6/28/18

4

K-70.20-01.....6/1/16

K-80.10-01.....6/1/16
K-80.20-00.....12/20/06
K-80.35-00.....2/21/07
K-80.37-00.....2/21/07

1

L-10.10-02.....6/21/12
L-20.10-03.....7/14/15
L-30.10-02.....6/11/14
L-40.10-02.....6/21/12
L-40.15-01.....6/16/11
L-40.20-02.....6/21/12
L-70.10-01.....5/21/08
L-70.20-01.....5/21/08

2

M-1.20-03.....6/24/14
M-1.40-02.....6/3/11
M-1.60-02.....6/3/11
M-1.80-03.....6/3/11
M-2.20-03.....7/10/15
M-2.21-00……7/10/15
M-3.10-03.....6/3/11
M-3.20-02.....6/3/11
M-3.30-03.....6/3/11
M-3.40-03.....6/3/11
M-3.50-02.....6/3/11
M-5.10-02.....6/3/11
M-7.50-01.....1/30/07
M-9.50-02.....6/24/14
M-9.60-00……..2/10/09
M-11.10-03.....8/7/19
M-12.10-01……6/28/18
M-15.10-01.....2/6/07
M-17.10-02.....7/3/08
M-20.10-02.....6/3/11
M-20.20-02.....4/20/15
M-20.30-04.....2/29/16
M-20.40-03.....6/24/14
M-20.50-02.....6/3/11
M-24.20-02.....4/20/15
M-24.40-02.....4/20/15
M-24.60-04.....6/24/14
M-24.65-00……7/11/17
M-24.66-00……7/11/17
M-40.10-03.....6/24/14
M-40.20-00...10/12/07
M-40.30-01.....7/11/17
M-40.40-00.....9/20/07
M-40.50-00.....9/20/07
M-40.60-00.....9/20/07
M-60.10-01.....6/3/11
M-60.20-02.....6/27/11
M-65.10-02.....5/11/11
M-80.10-01.....6/3/11
M-80.20-00.....6/10/08
M-80.30-00.....6/10/08

3

4

APPENDIX A

MAP AND LOG OF TEST PITS

Z:\Projects\2019 Projects\19-170 Mickelsen Parkway

DATE: 5/31/2019

CHECKED BY: SLT

DRAWN BY: NTW

LEGEND

Approximate Test Pit Locations, PanGEO Inc., June 2019

NOTES

1. Base map provided by Gray & Osborne on May 30, 2019
2. Location of test pits are approximate and based on the relative locations of known site features.
3. Vertical Datum: NAVD 88

125 0 125 250
scale in feet
Scale: 1" = 250'

PanGEO INCORPORATED

Mickelsen Parkway Project
City of Winlock
Winlock, Washington

SITE AND EXPLORATION PLAN

PROJECT NO. 19-170

FIGURE NO. 2

RELATIVE DENSITY / CONSISTENCY

SAND / GRAVEL			SILT / CLAY		
Density	SPT N-values	Approx. Relative Density (%)	Consistency	SPT N-values	Approx. Undrained Shear Strength (psf)
Very Loose	<4	<15	Very Soft	<2	<250
Loose	4 to 10	15 - 35	Soft	2 to 4	250 - 500
Med. Dense	10 to 30	35 - 65	Med. Stiff	4 to 8	500 - 1000
Dense	30 to 50	65 - 85	Stiff	8 to 15	1000 - 2000
Very Dense	>50	85 - 100	Very Stiff	15 to 30	2000 - 4000
			Hard	>30	>4000

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		GROUP DESCRIPTIONS	
Gravel 50% or more of the coarse fraction retained on the #4 sieve. Use dual symbols (eg. GP-GM) for 5% to 12% fines.	GRAVEL (<5% fines)	GW	Well-graded GRAVEL
		GP	Poorly-graded GRAVEL
	GRAVEL (>12% fines)	GM	Silty GRAVEL
		GC	Clayey GRAVEL
Sand 50% or more of the coarse fraction passing the #4 sieve. Use dual symbols (eg. SP-SM) for 5% to 12% fines.	SAND (<5% fines)	SW	Well-graded SAND
		SP	Poorly-graded SAND
	SAND (>12% fines)	SM	Silty SAND
		SC	Clayey SAND
Silt and Clay 50%or more passing #200 sieve	Liquid Limit < 50	ML	SILT
		CL	Lean CLAY
		OL	Organic SILT or CLAY
	Liquid Limit > 50	MH	Elastic SILT
		CH	Fat CLAY
		OH	Organic SILT or CLAY
Highly Organic Soils		PT	PEAT

Notes: 1. Soil exploration logs contain material descriptions based on visual observation and field tests using a system modified from the Uniform Soil Classification System (USCS). Where necessary laboratory tests have been conducted (as noted in the "Other Tests" column), unit descriptions may include a classification. Please refer to the discussions in the report text for a more complete description of the subsurface conditions.

2. The graphic symbols given above are not inclusive of all symbols that may appear on the borehole logs. Other symbols may be used where field observations indicated mixed soil constituents or dual constituent materials.

DESCRIPTIONS OF SOIL STRUCTURES

Layered: Units of material distinguished by color and/or composition from material units above and below

Laminated: Layers of soil typically 0.05 to 1mm thick, max. 1 cm

Lens: Layer of soil that pinches out laterally

Interlayered: Alternating layers of differing soil material

Pocket: Erratic, discontinuous deposit of limited extent

Homogeneous: Soil with uniform color and composition throughout

Fissured: Breaks along defined planes

Slickensided: Fracture planes that are polished or glossy

Blocky: Angular soil lumps that resist breakdown

Disrupted: Soil that is broken and mixed

Scattered: Less than one per foot

Numerous: More than one per foot

BCN: Angle between bedding plane and a plane normal to core axis

COMPONENT DEFINITIONS

COMPONENT	SIZE / SIEVE RANGE	COMPONENT	SIZE / SIEVE RANGE
Boulder:	> 12 inches	Sand	
Cobbles:	3 to 12 inches	Coarse Sand:	#4 to #10 sieve (4.5 to 2.0 mm)
Gravel		Medium Sand:	#10 to #40 sieve (2.0 to 0.42 mm)
Coarse Gravel:	3 to 3/4 inches	Fine Sand:	#40 to #200 sieve (0.42 to 0.074 mm)
Fine Gravel:	3/4 inches to #4 sieve	Silt	0.074 to 0.002 mm
		Clay	<0.002 mm

TEST SYMBOLS

for In Situ and Laboratory Tests listed in "Other Tests" column.

ATT	Atterberg Limit Test
Comp	Compaction Tests
Con	Consolidation
DD	Dry Density
DS	Direct Shear
%F	Fines Content
GS	Grain Size
Perm	Permeability
PP	Pocket Penetrometer
R	R-value
SG	Specific Gravity
TV	Torvane
TXC	Triaxial Compression
UCC	Unconfined Compression

SYMBOLS

Sample/In Situ test types and intervals

- 2-inch OD Split Spoon, SPT (140-lb. hammer, 30" drop)
- 3.25-inch OD Spilt Spoon (300-lb hammer, 30" drop)
- Non-standard penetration test (see boring log for details)
- Thin wall (Shelby) tube
- Grab
- Rock core
- Vane Shear

MONITORING WELL

- Groundwater Level at time of drilling (ATD)
- Static Groundwater Level
- Cement / Concrete Seal
- Bentonite grout / seal
- Silica sand backfill
- Slotted tip
- Slough
- Bottom of Boring

MOISTURE CONTENT

Dry	Dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water

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Phone: 206.262.0370

Terms and Symbols for Boring and Test Pit Logs

Figure A-1

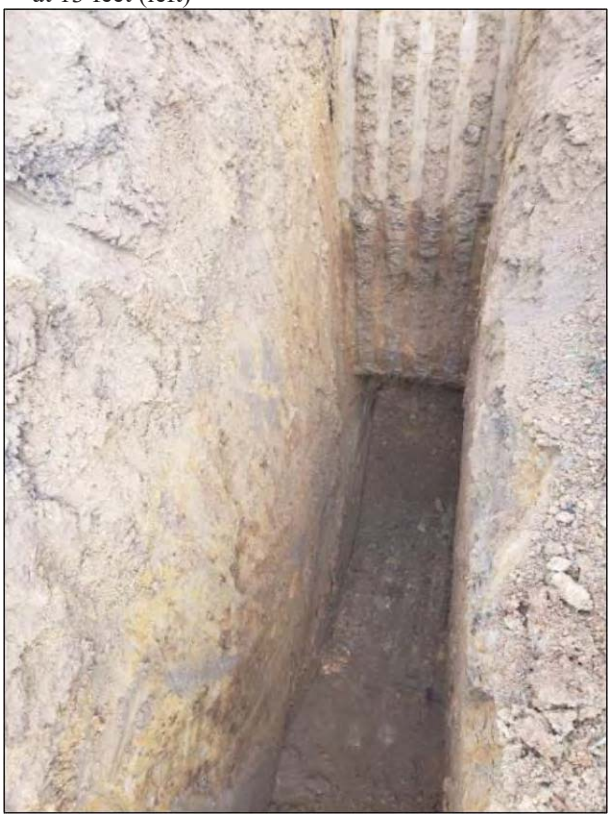
Test Pit No. TP-1

Approximate ground surface elevation: 470 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.478235, -122.892008

Depth (ft)	USCS	Material Description
0 – 1	SM	Tall grass over loose, moist, dark grey-brown, silty SAND; rootlets, slightly organic **[Topsoil]**
1 – 4	MH	Stiff, moist, red-brown, slightly sandy elastic SILT; trace organic remnants, possibly reworked **[Fill/Reworked Soil]**
4 – 7	MH	Very stiff to hard, moist, grey-brown to red-brown, slightly sandy elastic SILT; trace coal fragments; iron oxide staining
7 – 13	MH	Hard, moist, light grey to red, slightly sandy elastic SILT with gravel; trace coal fragment, manganese and iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]** *Sample at 9 feet: (MC= 38.9%, LL = 62, PL = 35, PI = 27)*

Photos TP-1: Test Pit TP-1 to approximately 13 feet in depth (below); Sample from bottom of exploration at 13 feet (left)



TP-1 was terminated approximately 13 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-2

Approximate ground surface elevation: 459 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.478961, -122.891552

Depth (ft)	USCS	Material Description
0 – 1	SM	Low vegetation over loose, moist, dark grey-brown, silty fine SAND; trace gravel, trace rootlets, slightly organic **[Topsoil]**
1 – 5	MH	Stiff, moist, red-brown to dark brown, slightly sandy elastic SILT; trace organic remnants, possibly reworked **[Fill/Reworked Soil]**
5 – 8	MH	Medium stiff, moist, grey-brown to red-brown, slightly sandy elastic SILT with gravel; trace coal fragments, manganese and iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]**

Photos TP-2: Test Pit TP-2 at approximately 8 feet in depth (below); Sample from bottom of exploration at 8 feet (left)

TP-2 was terminated approximately 8 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-3

Approximate ground surface elevation: 458 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.479756, -122.891247

Depth (ft)	USCS	Material Description
0 – 1	SM	Tall grass over loose, moist, dark grey-brown, silty fine SAND; trace gravel and cobble, rootlets, slightly organic **[Topsoil]**
1 – 3	MH	Stiff, moist, red-brown, slightly sandy elastic SILT; trace organic remnants, possibly reworked **[Fill/Reworked Soil]**
3 – 7	MH	Medium stiff, moist, red-brown to brown, slightly sandy elastic SILT with gravel; trace coal fragments, manganese and iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]** *Sample at 4 feet: (MC= 51.2%, LL = 57, PL = 47, PI = 10)*

Photos TP-3: Test Pit TP-3 to approximately 7 feet in depth (below); *in situ* sample at approximately 5 feet below ground surface (left)

TP-3 was terminated approximately 7 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-4

Approximate ground surface elevation: 466 feet (estimated from Mickelsen Parkway Plan and Profile)

Coordinates (WGS84): 46.480410, -122.890201

Depth (ft)	USCS	Material Description
0 – 1	SM	Low vegetation over loose, moist, dark grey-brown, silty SAND; trace gravel, rootlets, slightly organic **[Topsoil]**
1 – 3½	MH	Medium stiff, moist, red-brown, slightly sandy elastic SILT; trace organic remnants, possibly reworked **[Fill/Reworked Soil]**
3½ – 8	MH	Stiff, moist, red-brown to brown, slightly sandy elastic SILT with gravel; trace coal fragments, manganese and iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]**

Photos TP-4: Test Pit TP-4 to approximately 8 feet in depth (below); Sample from bottom of exploration at 8 feet (left)

TP-4 was terminated approximately 8 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-5

Approximate ground surface elevation: 470 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.481008, -122.889577

Depth (ft)	USCS	Material Description
0 – 1	SM	Low vegetation over loose, moist, dark grey-brown, silty SAND; trace gravel, rootlets, slightly organic; PVC pipe encountered near surface **[Topsoil]**
1 – 3	MH	Medium stiff, moist, red-brown, slightly sandy elastic SILT; trace organic remnants, possibly reworked **[Fill/Reworked Soil]**
3 – 6	MH/CH	Hard, moist, grey to orange-brown, elastic SILT to fat CLAY; trace sand and gravel **[Qap(lh) – Logan Hill Formation]** *Sample at 6 feet: (MC= 29.8%, Gravel = 3.9%, Sand = 9.7%, Fines = 86.4%)*

Photos TP-5: Test Pit TP-5 to approximately 6 feet in depth (below); Sample from exploration at approximately 6 feet (left)

TP-5 was terminated approximately 6 feet below ground surface. No groundwater was observed at the time of excavation.

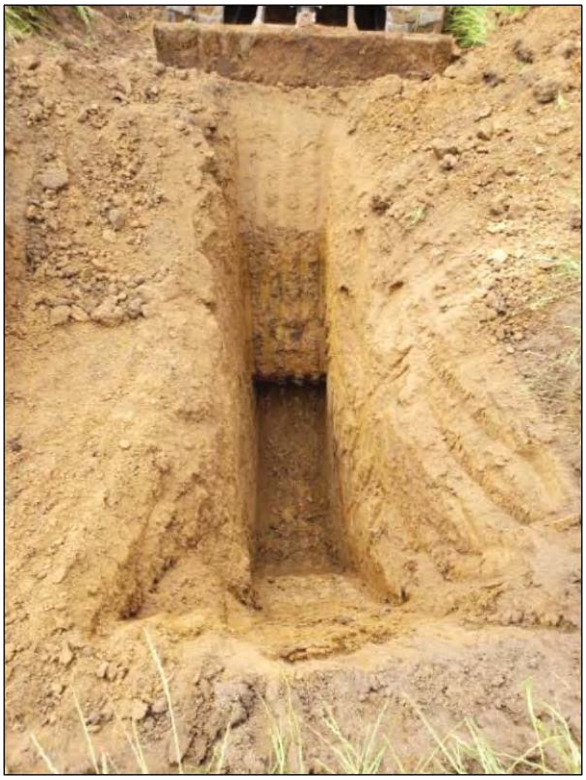
Test Pit No. TP-6

Approximate ground surface elevation: 468 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.481596, -122.888692

Depth (ft)	USCS	Material Description
0 – ½	SM	Tall grass over loose, moist, grey-brown, silty SAND; rootlets, slightly organic **[Topsoil]**
½ – 3	MH	Medium stiff to stiff, moist, red-brown, slightly sandy elastic SILT; possibly reworked **[Fill/Reworked Soil]**
3 – 7	MH	Stiff, moist, grey-brown to red-brown, slightly sandy elastic SILT with gravel; trace coal fragments, iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]**
7 – 12	MH	Stiff to hard, moist, grey to red-brown, slightly sandy elastic SILT with gravel; trace cobble, manganese and iron-oxide staining, gravels highly weathered and soft

Photos TP-6: Test Pit TP-6 to approximately 12 feet in depth (below); Sample from bottom of exploration at 12 feet (left)



TP-6 was terminated approximately 12 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-7

Approximate ground surface elevation: 469 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.482214, -122.887895

Depth (ft)	USCS	Material Description
0 – ½	SM	Tall grass over loose, moist, red-brown to grey-brown, silty fine SAND; rootlets, slightly organic **[Topsoil]**
½ – 5	MH	Stiff, moist, red-brown, slightly sandy elastic SILT; trace coal remnants, possibly reworked **[Fill/Reworked Soil]**
5 – 8	MH	Very stiff, moist, grey to red-brown, slightly sandy elastic SILT; iron-oxide staining **[Qap(lh) – Logan Hill Formation]**
8 – 9	CH	Hard, moist, grey to red-brown, silty fat CLAY; trace gravel, iron-oxide staining, gravels highly weathered and soft

Photos TP-7: Test Pit TP-7 to approximately 9 feet in depth (below); Sample from bottom of exploration at 9 feet (left)

TP-7 was terminated approximately 9 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-8

Approximate ground surface elevation: 478 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.482804, -122.887010

Depth (ft)	USCS	Material Description
0 – ½	SM	Low vegetation over loose, moist, grey-brown, silty fine SAND; rootlets, slightly organic **[Topsoil]**
½ – 4	MH	Medium stiff, moist, grey-brown to red-brown, slightly sandy elastic SILT; possibly reworked **[Fill/Reworked Soil]**
4 – 7½	MH	Stiff, moist, red-brown, slightly sandy elastic SILT; iron-oxide staining **[Qap(lh) – Logan Hill Formation]** *Sample at 7 feet: (MC= 30.5%, LL = 59, PL = 31, PI = 28)*
7½ - 9	MH/CH	Very stiff, moist, grey to red-brown, elastic SILT to fat CLAY, iron-oxide staining

Photos TP-8: Test Pit TP-8 to approximately 9 feet in depth (below); Sample from bottom of exploration at 9 feet (left)

TP-8 was terminated approximately 9 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-9

Approximate ground surface elevation: 483 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.483481, -122.886300

Depth (ft)	USCS	Material Description
0 – 1½	SM	Tall grass over loose, moist, grey-brown, silty fine SAND; rootlets, slightly organic **[Topsoil]**
1½ – 3	MH	Medium stiff, moist, red-brown, slightly sandy elastic SILT; trace coal remnants, possibly reworked **[Fill/Reworked Soil]**
3 – 7	MH/CH	Very stiff, moist, grey to red-brown, elastic SILT to fat CLAY; trace sand, iron-oxide staining **[Qap(lh) – Logan Hill Formation]** *Sample at 7 feet: (MC= 29.7%, Gravel = 0.0%, Sand = 7.1%, Fines = 92.9%)*

Photos TP-9: Test Pit TP-9 to approximately 7 feet in depth (below); Sample from bottom of exploration at 7 feet (left)

TP-9 was terminated approximately 7 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-10

Approximate ground surface elevation: 487 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.484155, -122.885562

Depth (ft)	USCS	Material Description
0 – 1	SM	Tall grass over loose, moist, grey-brown, silty fine SAND; rootlets, slightly organic **[Topsoil]**
1 – 3	MH	Medium stiff, moist, red-brown, slightly sandy elastic SILT; possibly reworked **[Fill/Reworked Soil]**
3 – 7	MH/CH	Very stiff, moist, red-brown, elastic SILT to fat CLAY with gravels; iron-oxide staining; soft gravels begin at approximately 6 feet **[Qap(lh) – Logan Hill Formation]**

Photos TP-10: Test Pit TP-10 to approximately 7 feet in depth (below); Sample from bottom of exploration at 7 feet (left)

TP-10 was terminated approximately 7 feet below ground surface. No groundwater was observed at the time of excavation.

Test Pit No. TP-11

Approximate ground surface elevation: 485 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.484920, -122.885019

Depth (ft)	USCS	Material Description
0 – 1	SM	Tall grass over loose, moist, grey-brown to red-brown, silty fine SAND; rootlets, slightly organic **[Topsoil]**
1 – 4	SM	Medium dense, moist, grey-brown to red-brown, silty fine SAND; possibly reworked **[Fill/Reworked Soil]**
4 – 6½	CH	Very stiff, moist, red-brown, silty fat CLAY with gravels; iron-oxide staining, gravels highly weathered and soft **[Qap(lh) – Logan Hill Formation]**

Photos TP-11: Test Pit TP-11 to approximately 6½ feet in depth (below); Sample from bottom of exploration at 6½ feet (left)

TP-11 was terminated approximately 6½ feet below ground surface. No groundwater was observed at the time of excavation.

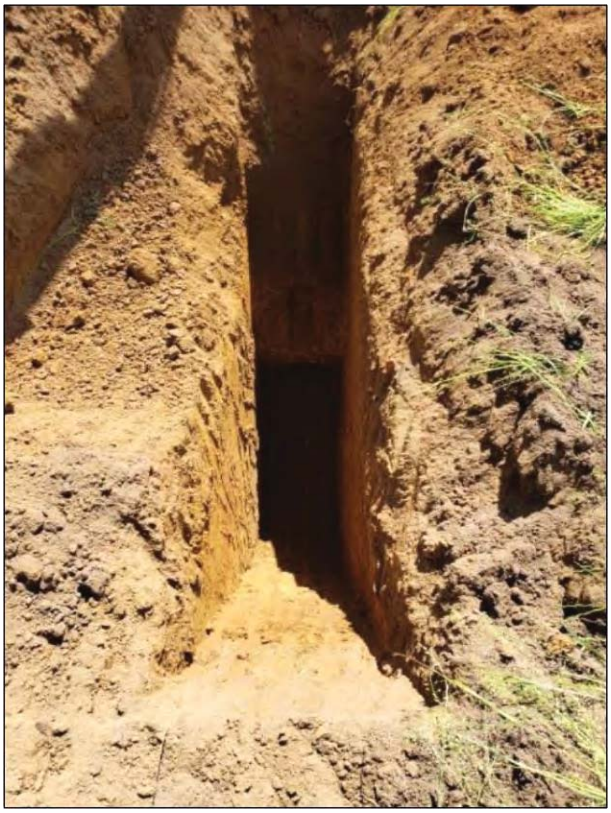
Test Pit No. TP-12

Approximate ground surface elevation: 484 feet (estimated from Mickelsen Parkway Plan and Profile)

Approximate coordinates (WGS84): 46.485703, -122.884690

Depth (ft)	USCS	Material Description
0 – 1½	SM	Tall grass over loose, moist, grey-brown to red-brown, silty SAND; rootlets, slightly organic **[Topsoil]**
1½ – 4	MH	Medium stiff, moist, red-brown, slightly sandy elastic SILT; possibly reworked **[Fill/Reworked Soil]**
4 – 10	MH/CH	Very stiff to hard, moist, grey to red-brown, silty fat CLAY; trace sand, trace gravel, iron-oxide staining **[Qap(lh) – Logan Hill Formation]** *Sample at 4 feet: (MC= 29.9%, Gravel = 0.4%, Sand = 7.8%, Fines = 91.8%)*
10 – 12	MH	Medium stiff, moist, grey to red-brown, slightly sandy elastic SILT; manganese and iron-oxide staining; gravels highly weathered

Photos TP-12: Test Pit TP-12 to approximately 12 feet in depth (below); Sample from bottom of exploration at 12 feet (left)



TP-12 was terminated approximately 12 feet below ground surface. No groundwater was observed at the time of excavation.

Date of Test Pit Observations: June 8, 2019
Test Pits Logged by: S. Scott

APPENDIX B

WASHINGTON STATE PREVAILING WAGE RATES

INCLUDING:

- **Washington State Prevailing Wage Rates**
- **Wage Rate Supplements**
- **Wage Rate Benefit Codes Key**

State of Washington
Department of Labor & Industries
Prevailing Wage Section - Telephone 360-902-5335
PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 6/9/2020

County	Trade	Job Classification	Wage	Holiday	Overtime	Note	*Risk Class
Lewis	Asbestos Abatement Workers	Journey Level	$50.86	5D	1H		View
Lewis	Boilermakers	Journey Level	$69.29	5N	1C		View
Lewis	Brick Mason	Journey Level	$58.82	5A	1M		View
Lewis	Brick Mason	Pointer-Caulker-Cleaner	$58.82	5A	1M		View
Lewis	Building Service Employees	Janitor	$13.50		1		View
Lewis	Building Service Employees	Shampooer	$13.50		1		View
Lewis	Building Service Employees	Waxer	$13.50		1		View
Lewis	Building Service Employees	Window Cleaner	$13.50		1		View
Lewis	Cabinet Makers (In Shop)	Journey Level	$23.17		1		View
Lewis	Carpenters	Acoustical Worker	$62.44	7A	4C		View
Lewis	Carpenters	Carpenter	$62.44	7A	4C		View
Lewis	Carpenters	Carpenters on Stationary Tools	$62.57	7A	4C		View
Lewis	Carpenters	Creosoted Material	$62.54	7A	4C		View
Lewis	Carpenters	Floor Finisher	$62.44	7A	4C		View
Lewis	Carpenters	Floor Layer	$62.44	7A	4C		View
Lewis	Carpenters	Scaffold Erector	$62.44	7A	4C		View
Lewis	Cement Masons	Application of all Composition Mastic	$62.97	7A	4U		View
Lewis	Cement Masons	Application of all Epoxy Material	$62.47	7A	4U		View
Lewis	Cement Masons	Application of all Plastic Material	$62.97	7A	4U		View
Lewis	Cement Masons	Application of Sealing Compound	$62.47	7A	4U		View
Lewis	Cement Masons	Application of Underlayment	$62.97	7A	4U		View
Lewis	Cement Masons	Building General	$62.47	7A	4U		View
Lewis	Cement Masons	Composition or Kalman Floors	$62.97	7A	4U		View
Lewis	Cement Masons	Concrete Paving	$62.47	7A	4U		View
Lewis	Cement Masons	Curb & Gutter Machine	$62.97	7A	4U		View
Lewis	Cement Masons	Curb & Gutter, Sidewalks	$62.47	7A	4U		View
Lewis	Cement Masons	Curing Concrete	$62.47	7A	4U		View

Lewis	Cement Masons	Finish Colored Concrete	$62.97	7A	4U		View
Lewis	Cement Masons	Floor Grinding	$62.97	7A	4U		View
Lewis	Cement Masons	Floor Grinding/Polisher	$62.47	7A	4U		View
Lewis	Cement Masons	Green Concrete Saw, self-powered	$62.97	7A	4U		View
Lewis	Cement Masons	Grouting of all Plates	$62.47	7A	4U		View
Lewis	Cement Masons	Grouting of all Tilt-up Panels	$62.47	7A	4U		View
Lewis	Cement Masons	Gunite Nozzleman	$62.97	7A	4U		View
Lewis	Cement Masons	Hand Powered Grinder	$62.97	7A	4U		View
Lewis	Cement Masons	Journey Level	$62.47	7A	4U		View
Lewis	Cement Masons	Patching Concrete	$62.47	7A	4U		View
Lewis	Cement Masons	Pneumatic Power Tools	$62.97	7A	4U		View
Lewis	Cement Masons	Power Chipping & Brushing	$62.97	7A	4U		View
Lewis	Cement Masons	Sand Blasting Architectural Finish	$62.97	7A	4U		View
Lewis	Cement Masons	Screed & Rodding Machine	$62.97	7A	4U		View
Lewis	Cement Masons	Spackling or Skim Coat Concrete	$62.47	7A	4U		View
Lewis	Cement Masons	Troweling Machine Operator	$62.97	7A	4U		View
Lewis	Cement Masons	Troweling Machine Operator on Colored Slabs	$62.97	7A	4U		View
Lewis	Cement Masons	Tunnel Workers	$62.97	7A	4U		View
Lewis	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	$116.20	7A	4C		View
Lewis	Divers & Tenders	Dive Supervisor/Master	$79.23	7A	4C		View
Lewis	Divers & Tenders	Diver	$116.20	7A	4C	8V	View
Lewis	Divers & Tenders	Diver On Standby	$74.23	7A	4C		View
Lewis	Divers & Tenders	Diver Tender	$67.31	7A	4C		View
Lewis	Divers & Tenders	Manifold Operator	$67.31	7A	4C		View
Lewis	Divers & Tenders	Manifold Operator Mixed Gas	$72.31	7A	4C		View
Lewis	Divers & Tenders	Remote Operated Vehicle Operator/Technician	$67.31	7A	4C		View
Lewis	Divers & Tenders	Remote Operated Vehicle Tender	$62.69	7A	4C		View
Lewis	Dredge Workers	Assistant Engineer	$56.44	5D	3F		View
Lewis	Dredge Workers	Assistant Mate (Deckhand)	$56.00	5D	3F		View
Lewis	Dredge Workers	Boatmen	$56.44	5D	3F		View
Lewis	Dredge Workers	Engineer Welder	$57.51	5D	3F		View
Lewis	Dredge Workers	Leverman, Hydraulic	$58.67	5D	3F		View
Lewis	Dredge Workers	Mates	$56.44	5D	3F		View
Lewis	Dredge Workers	Oiler	$56.00	5D	3F		View
Lewis	Drywall Applicator	Journey Level	$62.44	5D	1H		View
Lewis	Drywall Tapers	Journey Level	$62.81	5P	1E		View
Lewis	Electrical Fixture Maintenance Workers	Journey Level	$13.50		1		View
Lewis	Electricians - Inside	Cable Splicer	$74.69	5C	1G		View
Lewis	Electricians - Inside	Journey Level	$69.96	5C	1G		View
Lewis	Electricians - Inside	Lead Covered Cable Splicer	$79.41	5C	1G		View

Lewis	Electricians - Inside	Welder	$74.69	5C	1G		View
Lewis	Electricians - Motor Shop	Craftsman	$15.37		1		View
Lewis	Electricians - Motor Shop	Journey Level	$14.69		1		View
Lewis	Electricians - Powerline Construction	Cable Splicer	$82.39	5A	4D		View
Lewis	Electricians - Powerline Construction	Certified Line Welder	$75.64	5A	4D		View
Lewis	Electricians - Powerline Construction	Groundperson	$49.17	5A	4D		View
Lewis	Electricians - Powerline Construction	Heavy Line Equipment Operator	$75.64	5A	4D		View
Lewis	Electricians - Powerline Construction	Journey Level Lineperson	$75.64	5A	4D		View
Lewis	Electricians - Powerline Construction	Line Equipment Operator	$64.54	5A	4D		View
Lewis	Electricians - Powerline Construction	Meter Installer	$49.17	5A	4D	8W	View
Lewis	Electricians - Powerline Construction	Pole Sprayer	$75.64	5A	4D		View
Lewis	Electricians - Powerline Construction	Powderperson	$56.49	5A	4D		View
Lewis	Electronic Technicians	Journey Level	$44.70	6Z	1B		View
Lewis	Elevator Constructors	Mechanic	$97.31	7D	4A		View
Lewis	Elevator Constructors	Mechanic In Charge	$105.06	7D	4A		View
Lewis	Fabricated Precast Concrete Products	Journey Level	$13.50		1		View
Lewis	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$13.50		1		View
Lewis	Fence Erectors	Fence Erector	$43.11	7A	4V	8Y	View
Lewis	Fence Erectors	Fence Laborer	$43.11	7A	4V	8Y	View
Lewis	Flaggers	Journey Level	$43.11	7A	4V	8Y	View
Lewis	Glaziers	Journey Level	$66.51	7L	1Y		View
Lewis	Heat & Frost Insulators And Asbestos Workers	Journeyman	$76.61	5J	4H		View
Lewis	Heating Equipment Mechanics	Journey Level	$85.88	7F	1E		View
Lewis	Hod Carriers & Mason Tenders	Journey Level	$52.44	7A	4V	8Y	View
Lewis	Industrial Power Vacuum Cleaner	Journey Level	$13.50		1		View
Lewis	Inland Boatmen	Boat Operator	$61.41	5B	1K		View
Lewis	Inland Boatmen	Cook	$56.48	5B	1K		View
Lewis	Inland Boatmen	Deckhand	$57.48	5B	1K		View
Lewis	Inland Boatmen	Deckhand Engineer	$58.81	5B	1K		View
Lewis	Inland Boatmen	Launch Operator	$58.89	5B	1K		View
Lewis	Inland Boatmen	Mate	$57.31	5B	1K		View
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$13.50		1		View
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$13.50		1		View

Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$13.50		1		View
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$13.50		1		View
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$13.50		1		View
Lewis	Insulation Applicators	Journey Level	$62.44	7A	4C		View
Lewis	Ironworkers	Journeyman	$73.73	7N	1O		View
Lewis	Laborers	Air, Gas Or Electric Vibrating Screed	$50.86	7A	4V	8Y	View
Lewis	Laborers	Airtrac Drill Operator	$52.44	7A	4V	8Y	View
Lewis	Laborers	Ballast Regular Machine	$50.86	7A	4V	8Y	View
Lewis	Laborers	Batch Weighman	$43.11	7A	4V	8Y	View
Lewis	Laborers	Brick Pavers	$50.86	7A	4V	8Y	View
Lewis	Laborers	Brush Cutter	$50.86	7A	4V	8Y	View
Lewis	Laborers	Brush Hog Feeder	$50.86	7A	4V	8Y	View
Lewis	Laborers	Burner	$50.86	7A	4V	8Y	View
Lewis	Laborers	Caisson Worker	$52.44	7A	4V	8Y	View
Lewis	Laborers	Carpenter Tender	$50.86	7A	4V	8Y	View
Lewis	Laborers	Cement Dumper-paving	$51.80	7A	4V	8Y	View
Lewis	Laborers	Cement Finisher Tender	$50.86	7A	4V	8Y	View
Lewis	Laborers	Change House Or Dry Shack	$50.86	7A	4V	8Y	View
Lewis	Laborers	Chipping Gun (30 Lbs. And Over)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Chipping Gun (Under 30 Lbs.)	$50.86	7A	4V	8Y	View
Lewis	Laborers	Choker Setter	$50.86	7A	4V	8Y	View
Lewis	Laborers	Chuck Tender	$50.86	7A	4V	8Y	View
Lewis	Laborers	Clary Power Spreader	$51.80	7A	4V	8Y	View
Lewis	Laborers	Clean-up Laborer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Concrete Dumper/Chute Operator	$51.80	7A	4V	8Y	View
Lewis	Laborers	Concrete Form Stripper	$50.86	7A	4V	8Y	View
Lewis	Laborers	Concrete Placement Crew	$51.80	7A	4V	8Y	View
Lewis	Laborers	Concrete Saw Operator/Core Driller	$51.80	7A	4V	8Y	View
Lewis	Laborers	Crusher Feeder	$43.11	7A	4V	8Y	View
Lewis	Laborers	Curing Laborer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	$50.86	7A	4V	8Y	View
Lewis	Laborers	Ditch Digger	$50.86	7A	4V	8Y	View
Lewis	Laborers	Diver	$52.44	7A	4V	8Y	View
Lewis	Laborers	Drill Operator (Hydraulic, Diamond)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Dry Stack Walls	$50.86	7A	4V	8Y	View
Lewis	Laborers	Dump Person	$50.86	7A	4V	8Y	View
Lewis	Laborers	Epoxy Technician	$50.86	7A	4V	8Y	View

Lewis	Laborers	Erosion Control Worker	$50.86	7A	4V	8Y	View
Lewis	Laborers	Faller & Bucker Chain Saw	$51.80	7A	4V	8Y	View
Lewis	Laborers	Fine Graders	$50.86	7A	4V	8Y	View
Lewis	Laborers	Firewatch	$43.11	7A	4V	8Y	View
Lewis	Laborers	Form Setter	$50.86	7A	4V	8Y	View
Lewis	Laborers	Gabian Basket Builders	$50.86	7A	4V	8Y	View
Lewis	Laborers	General Laborer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Grade Checker & Transit Person	$52.44	7A	4V	8Y	View
Lewis	Laborers	Grinders	$50.86	7A	4V	8Y	View
Lewis	Laborers	Grout Machine Tender	$50.86	7A	4V	8Y	View
Lewis	Laborers	Groutmen (Pressure) Including Post Tension Beams	$51.80	7A	4V	8Y	View
Lewis	Laborers	Guardrail Erector	$50.86	7A	4V	8Y	View
Lewis	Laborers	Hazardous Waste Worker (Level A)	$52.44	7A	4V	8Y	View
Lewis	Laborers	Hazardous Waste Worker (Level B)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Hazardous Waste Worker (Level C)	$50.86	7A	4V	8Y	View
Lewis	Laborers	High Scaler	$52.44	7A	4V	8Y	View
Lewis	Laborers	Jackhammer	$51.80	7A	4V	8Y	View
Lewis	Laborers	Laserbeam Operator	$51.80	7A	4V	8Y	View
Lewis	Laborers	Maintenance Person	$50.86	7A	4V	8Y	View
Lewis	Laborers	Manhole Builder-Mudman	$51.80	7A	4V	8Y	View
Lewis	Laborers	Material Yard Person	$50.86	7A	4V	8Y	View
Lewis	Laborers	Motorman-Dinky Locomotive	$51.80	7A	4V	8Y	View
Lewis	Laborers	Nozzleman (Concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Blaster, Vacuum Blaster)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pavement Breaker	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pilot Car	$43.11	7A	4V	8Y	View
Lewis	Laborers	Pipe Layer Lead	$52.44	7A	4V	8Y	View
Lewis	Laborers	Pipe Layer/Tailor	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pipe Pot Tender	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pipe Reliner	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pipe Wrapper	$51.80	7A	4V	8Y	View
Lewis	Laborers	Pot Tender	$50.86	7A	4V	8Y	View
Lewis	Laborers	Powderman	$52.44	7A	4V	8Y	View
Lewis	Laborers	Powderman's Helper	$50.86	7A	4V	8Y	View
Lewis	Laborers	Power Jacks	$51.80	7A	4V	8Y	View
Lewis	Laborers	Railroad Spike Puller - Power	$51.80	7A	4V	8Y	View
Lewis	Laborers	Raker - Asphalt	$52.44	7A	4V	8Y	View
Lewis	Laborers	Re-timberman	$52.44	7A	4V	8Y	View
Lewis	Laborers	Remote Equipment Operator	$51.80	7A	4V	8Y	View
Lewis	Laborers	Rigger/Signal Person	$51.80	7A	4V	8Y	View

Lewis	Laborers	Rip Rap Person	$50.86	7A	4V	8Y	View
Lewis	Laborers	Rivet Buster	$51.80	7A	4V	8Y	View
Lewis	Laborers	Rodder	$51.80	7A	4V	8Y	View
Lewis	Laborers	Scaffold Erector	$50.86	7A	4V	8Y	View
Lewis	Laborers	Scale Person	$50.86	7A	4V	8Y	View
Lewis	Laborers	Sloper (Over 20")	$51.80	7A	4V	8Y	View
Lewis	Laborers	Sloper Sprayer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Spreader (Concrete)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Stake Hopper	$50.86	7A	4V	8Y	View
Lewis	Laborers	Stock Piler	$50.86	7A	4V	8Y	View
Lewis	Laborers	Swinging Stage/Boatswain Chair	$43.11	7A	4V	8Y	View
Lewis	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$51.80	7A	4V	8Y	View
Lewis	Laborers	Tamper (Multiple & Self-propelled)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Toolroom Person (at Jobsite)	$50.86	7A	4V	8Y	View
Lewis	Laborers	Topper	$50.86	7A	4V	8Y	View
Lewis	Laborers	Track Laborer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Track Liner (Power)	$51.80	7A	4V	8Y	View
Lewis	Laborers	Traffic Control Laborer	$46.10	7A	4V	9C	View
Lewis	Laborers	Traffic Control Supervisor	$46.10	7A	4V	9C	View
Lewis	Laborers	Truck Spotter	$50.86	7A	4V	8Y	View
Lewis	Laborers	Tugger Operator	$51.80	7A	4V	8Y	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$120.61	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$125.64	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$129.32	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$135.02	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$137.14	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	$142.24	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$144.14	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$146.14	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$148.14	7A	4V	9B	View
Lewis	Laborers	Tunnel Work-Guage and Lock Tender	$52.54	7A	4V	8Y	View
Lewis	Laborers	Tunnel Work-Miner	$52.54	7A	4V	8Y	View
Lewis	Laborers	Vibrator	$51.80	7A	4V	8Y	View
Lewis	Laborers	Vinyl Seamer	$50.86	7A	4V	8Y	View
Lewis	Laborers	Watchman	$39.18	7A	4V	8Y	View

Lewis	Laborers	Welder	$51.80	7A	4V	8Y	View
Lewis	Laborers	Well Point Laborer	$51.80	7A	4V	8Y	View
Lewis	Laborers	Window Washer/Cleaner	$39.18	7A	4V	8Y	View
Lewis	Laborers - Underground Sewer & Water	General Laborer & Topman	$50.86	7A	4V	8Y	View
Lewis	Laborers - Underground Sewer & Water	Pipe Layer	$51.80	7A	4V	8Y	View
Lewis	Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	$39.18	7A	4V	8Y	View
Lewis	Landscape Construction	Landscape Operator	$65.71	7A	3K	8X	View
Lewis	Landscape Maintenance	Groundskeeper	$13.50		1		View
Lewis	Lathers	Journey Level	$62.44	5D	1H		View
Lewis	Marble Setters	Journey Level	$58.82	5A	1M		View
Lewis	Metal Fabrication (In Shop)	Fitter	$15.16		1		View
Lewis	Metal Fabrication (In Shop)	Laborer	$13.50		1		View
Lewis	Metal Fabrication (In Shop)	Machine Operator	$13.50		1		View
Lewis	Metal Fabrication (In Shop)	Painter	$13.50		1		View
Lewis	Metal Fabrication (In Shop)	Welder	$15.16		1		View
Lewis	Millwright	Journey Level	$63.94	7A	4C		View
Lewis	Modular Buildings	Cabinet Assembly	$13.50		1		View
Lewis	Modular Buildings	Electrician	$13.50		1		View
Lewis	Modular Buildings	Equipment Maintenance	$13.50		1		View
Lewis	Modular Buildings	Plumber	$13.50		1		View
Lewis	Modular Buildings	Production Worker	$13.50		1		View
Lewis	Modular Buildings	Tool Maintenance	$13.50		1		View
Lewis	Modular Buildings	Utility Person	$13.50		1		View
Lewis	Modular Buildings	Welder	$13.50		1		View
Lewis	Painters	Journey Level	$43.40	6Z	2B		View
Lewis	Pile Driver	Crew Tender	$67.31	7A	4C		View
Lewis	Pile Driver	Crew Tender/Technician	$67.31	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$77.93	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	$82.93	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$86.93	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$91.93	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$94.43	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$99.43	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker -	$101.43	7A	4C		View

		Compressed Air Worker 68.01 - 70.00 PSI					
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$103.43	7A	4C		View
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$105.43	7A	4C		View
Lewis	Pile Driver	Journey Level	$62.69	7A	4C		View
Lewis	Plasterers	Journey Level	$59.42	7Q	1R		View
Lewis	Playground & Park Equipment Installers	Journey Level	$13.50		1		View
Lewis	Plumbers & Pipefitters	Journey Level	$76.22	5A	1G		View
Lewis	Power Equipment Operators	Asphalt Plant Operator	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Assistant Engineers	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Barrier Machine (zipper)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Batch Plant Operator: Concrete	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Bobcat	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Brokk - Remote Demolition Equipment	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Brooms	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Bump Cutter	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Cableways	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Chipper	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Compressor	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Concrete Finish Machine -laser Screed	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Conveyors	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes, 100 Tons - 199 Tons, Or 150 Ft Of Boom (including Jib With Attachments)	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: 200 tons to 299 tons, or 250' of boom (including jib with attachments)	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: 300 tons and over, or 300' of boom (including jib with attachments)	$68.84	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom	$66.81	7A	3K	8X	View

		(including Jib With Attachments)					
Lewis	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: Friction 200 tons and over. Tower Cranes: over 250' in height from base to boom.	$68.84	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: Friction cranes through 199 tons	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Crusher	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Deck Engineer/deck Winches (power)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Derricks, On Building Work	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Dozers D-9 & Under	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Drilling Machine	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Gradechecker/stakeman	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Guardrail punch/Auger	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Horizontal/directional Drill Locator	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Horizontal/directional Drill Operator	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Loaders, Overhead Under 6 Yards	$66.22	7A	3K	8X	View

Lewis	Power Equipment Operators	Loaders, Plant Feed	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Loaders: Elevating Type Belt	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Locomotives, All	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Material Transfer Device	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Mechanics, All (Leadmen - $0.50 Per Hour Over Mechanic)	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Motor patrol graders	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Pavement Breaker	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Pile Driver (other Than Crane Mount)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Posthole Digger, Mechanical	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Power Plant	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Pumps - Water	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Quad 9, HD 41, D10 And Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Rigger And Bellman	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Rollagon	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Roller, Other Than Plant Mix	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Roto-mill, Roto-grinder	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Saws - Concrete	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Scrapers - Concrete & Carry All	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Service Engineers - Equipment	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Shotcrete/gunite Equipment	$62.85	7A	3K	8X	View

Lewis	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators	Slipform Pavers	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Spreader, Topsider & Screedman	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Subgrader Trimmer	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Tower Bucket Elevators	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Tower crane over 175' through 250' in height, base to boom	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators	Tower Crane Up: To 175' In Height, Base To Boom	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators	Transporters, All Track Or Truck Type	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Trenching Machines	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators	Truck Mount Portable Conveyor	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators	Welder	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators	Wheel Tractors, Farmall Type	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators	Yo Yo Pay Dozer	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Assistant Engineers	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: Concrete	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Bobcat	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Brooms	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cableways	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Chipper	$66.22	7A	3K	8X	View

Lewis	Power Equipment Operators-Underground Sewer & Water	Compressor	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42m	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Conveyors	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, 100 Tons - 199 Tons, Or 150 Ft Of Boom (including Jib With Attachments)	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, 200 tons to 299 tons, or 250' of boom (including jib with attachments)	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, Over 300 Tons, Or 300' Of Boom Including Jib With Attachments	$68.84	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	cranes: 300 tons and over, or 300' of boom (including jib with attachments)	$68.84	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction 200 tons and over. Tower Cranes: over 250' in height from base to boom.	$68.84	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Crusher	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-	Drilling Machine	$67.49	7A	3K	8X	View

	Underground Sewer & Water						
Lewis	Power Equipment Operators-Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blueprints, Cut Sheets,etc.	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Guardrail punch/Auger	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Hydralifts/Boom Trucks Over 10 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (Leadmen - $0.50 Per Hour Over Mechanic)	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Motor patrol graders	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$62.85	7A	3K	8X	View

Lewis	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Power Plant	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Quad 9, HD 41, D10 And Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Rollagon	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-	Shovel, Excavator, Backhoe,	$65.71	7A	3K	8X	View

	Underground Sewer & Water	Tractors Under 15 Metric Tons					
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower crane over 175' through 250' in height, base to boom	$68.17	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Tower Crane: Up To 175' In Height, Base To Boom	$67.49	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	$65.71	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	$66.22	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Welder	$66.81	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	$62.85	7A	3K	8X	View
Lewis	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	$66.22	7A	3K	8X	View
Lewis	Power Line Clearance Tree Trimmers	Journey Level In Charge	$53.10	5A	4A		View
Lewis	Power Line Clearance Tree Trimmers	Spray Person	$50.40	5A	4A		View
Lewis	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$53.10	5A	4A		View
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer	$47.48	5A	4A		View
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$36.10	5A	4A		View
Lewis	Refrigeration & Air Conditioning Mechanics	Journey Level	$76.21	5A	1G		View
Lewis	Residential Brick Mason	Journey Level	$21.96		1		View
Lewis	Residential Carpenters	Journey Level	$24.89		1		View

Lewis	Residential Cement Masons	Journey Level	$16.79		1		View
Lewis	Residential Drywall Applicators	Journey Level	$36.07		1		View
Lewis	Residential Drywall Tapers	Journey Level	$24.48		1		View
Lewis	Residential Electricians	Journey Level	$36.53	5A	1B		View
Lewis	Residential Glaziers	Journey Level	$25.40		1		View
Lewis	Residential Insulation Applicators	Journey Level	$17.05		1		View
Lewis	Residential Laborers	Journey Level	$23.10		1		View
Lewis	Residential Marble Setters	Journey Level	$21.96		1		View
Lewis	Residential Painters	Journey Level	$18.76		1		View
Lewis	Residential Plumbers & Pipefitters	Journey Level	$26.35		1		View
Lewis	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$32.14		1		View
Lewis	Residential Sheet Metal Workers	Journey Level	$33.28		1		View
Lewis	Residential Soft Floor Layers	Journey Level	$14.86		1		View
Lewis	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$20.28		1		View
Lewis	Residential Stone Masons	Journey Level	$21.96		1		View
Lewis	Residential Terrazzo Workers	Journey Level	$14.86		1		View
Lewis	Residential Terrazzo/Tile Finishers	Journey Level	$14.86		1		View
Lewis	Residential Tile Setters	Journey Level	$14.86		1		View
Lewis	Roofers	Journey Level	$54.62	5A	2O		View
Lewis	Roofers	Using Irritable Bituminous Materials	$57.62	5A	2O		View
Lewis	Sheet Metal Workers	Journey Level (Field or Shop)	$85.88	7F	1E		View
Lewis	Sign Makers & Installers (Electrical)	Journey Level	$18.04		1		View
Lewis	Sign Makers & Installers (Non-Electrical)	Journey Level	$50.86	7A	4V	8Y	View
Lewis	Soft Floor Layers	Journey Level	$51.07	5A	3J		View
Lewis	Solar Controls For Windows	Journey Level	$13.50		1		View
Lewis	Sprinkler Fitters (Fire Protection)	Journey Level	$56.76	7J	1R		View
Lewis	Stage Rigging Mechanics (Non Structural)	Journey Level	$13.50		1		View
Lewis	Stone Masons	Journey Level	$58.82	5A	1M		View
Lewis	Street And Parking Lot Sweeper Workers	Journey Level	$16.00		1		View
Lewis	Surveyors	Chain Person	$65.11	7A	3K		View
Lewis	Surveyors	Instrument Person	$65.71	7A	3K		View
Lewis	Surveyors	Party Chief	$66.81	7A	3K		View
Lewis	Telecommunication Technicians	Journey Level	$44.70	6Z	1B		View
Lewis	Telephone Line Construction - Outside	Cable Splicer	$41.81	5A	2B		View
Lewis	Telephone Line Construction - Outside	Hole Digger/Ground Person	$23.53	5A	2B		View
Lewis	Telephone Line Construction -	Installer (Repairer)	$40.09	5A	2B		View

	Outside						
Lewis	Telephone Line Construction - Outside	Special Aparatus Installer I	$41.81	5A	2B		View
Lewis	Telephone Line Construction - Outside	Special Apparatus Installer II	$40.99	5A	2B		View
Lewis	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	$41.81	5A	2B		View
Lewis	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$38.92	5A	2B		View
Lewis	Telephone Line Construction - Outside	Telephone Lineperson	$38.92	5A	2B		View
Lewis	Telephone Line Construction - Outside	Television Groundperson	$22.32	5A	2B		View
Lewis	Telephone Line Construction - Outside	Television Lineperson/Installer	$29.60	5A	2B		View
Lewis	Telephone Line Construction - Outside	Television System Technician	$35.20	5A	2B		View
Lewis	Telephone Line Construction - Outside	Television Technician	$31.67	5A	2B		View
Lewis	Telephone Line Construction - Outside	Tree Trimmer	$38.92	5A	2B		View
Lewis	Terrazzo Workers	Journey Level	$54.06	5A	1M		View
Lewis	Tile Setters	Journey Level	$54.06	5A	1M		View
Lewis	Tile, Marble & Terrazzo Finishers	Finisher	$44.89	5A	1B		View
Lewis	Traffic Control Stripers	Journey Level	$47.68	7A	1K		View
Lewis	Truck Drivers	Asphalt Mix Over 16 Yards	$60.84	5D	4Y	8L	View
Lewis	Truck Drivers	Asphalt Mix To 16 Yards	$60.00	5D	4Y	8L	View
Lewis	Truck Drivers	Dump Truck	$60.00	5D	4Y	8L	View
Lewis	Truck Drivers	Dump Truck & Trailer	$60.84	5D	4Y	8L	View
Lewis	Truck Drivers	Other Trucks	$60.84	5D	4Y	8L	View
Lewis	Truck Drivers - Ready Mix	Transit Mix	$60.84	5D	4Y	8L	View
Lewis	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$18.18		1		View
Lewis	Well Drillers & Irrigation Pump Installers	Oiler	$13.50		1		View
Lewis	Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		1		View

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

S. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays and all other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   G. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

   W. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   A. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   C. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays shall be paid at double the hourly rate of wage. After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

3. E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.

F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

B. All hours worked over twelve (12) hours per day and all hours worked on holidays shall be paid at double the hourly rate of wage.

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

Overtime Codes Continued

4. D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

M. All hours worked on Sunday and Holidays shall be paid at double the hourly rate. Any employee reporting to work less than nine (9) hours from their previous quitting time shall be paid for such time at time and one-half times the hourly rate.

N. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays, and all work performed between the hours of midnight (12:00 AM) and eight AM (8:00 AM) every day shall be paid at double the hourly rate of wage.

O. All hours worked between midnight Friday to midnight Sunday shall be paid at one and one-half the hourly rate of wage. After an employee has worked in excess of eight (8) continuous hours in any one or more calendar days, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of six (6) hours or more. All hours worked on Holidays shall be paid at double the hourly rate of wage.

P. All hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage.

Q. The first four (4) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday shall be paid at double the hourly rate. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

R. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

S. All hours worked on Saturdays and Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

T. The first two (2) hours of overtime for hours worked Monday-Friday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. For work on Saturday which is scheduled prior to the end of shift on Friday, the first six (6) hours work shall be paid at one and one-half times the hourly rate of wage, and all hours over (6) shall be paid double the hourly rate of wage. For work on Saturday which was assigned following the close of shift on Friday, all work shall be paid at double the hourly rate of wage.

U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. V. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established or outside the normal shift (5 am to 6pm), and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

W. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

4. Y. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. All work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay.

   Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

   B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

   C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

   D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

   H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

   I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

   J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).

   K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

   L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

   N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

   P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

   Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

Holiday Codes Continued

5. R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

   S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

   T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).

   Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

   E. Paid Holidays: New Year's Day, Day Before Or After New Year's Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and a Half-Day On Christmas Eve Day. (9 1/2).

   G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

   H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

   I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).

   T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

   Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

   B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

   C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

7. Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

T. Paid Holidays: New Year's Day, the Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and The Day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Z. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

15. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8) Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

B. Holidays: New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. (9)

C. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8)

Holiday Codes Continued

15. D. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and the day after Christmas.

E. Holidays: the day before New Years's Day, New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day. (12)

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

P. Workers on hazmat projects receive additional hourly premiums as follows -Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, And Class D Suit $0.50.

Q. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

Note Codes Continued

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

   Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

   Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

   W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

   X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

   When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

   Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

   Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

   Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

   Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

	ITEM DESCRIPTION	YES	NO
8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		X
22.	Vault Risers - For use with Valve Vaults and Utilities X Vaults.		X
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

	ITEM DESCRIPTION	YES	NO
27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A .	X	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33.	Monument Case and Cover See Std. Plan.		X

	ITEM DESCRIPTION	YES	NO
34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36.	Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	X	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41.	Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
42.	Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum sheeting. **NOTE:** *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		X
44.	Guardrail components	X	X
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46.	Asphalt	Covered by WAC 296-127-018	
47.	Fiber fabrics		X
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		X
50.	Girder pads (elastomeric bearing)	X	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

ITEM DESCRIPTION	YES	NO
53. Fencing materials		X
54. Guide Posts		X
55. Traffic Buttons		X
56. Epoxy		X
57. Cribbing		X
58. Water distribution materials		X
59. Steel "H" piles		X
60. Steel pipe for concrete pile casings		X
61. Steel pile tips, standard		X
62. Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW 39.12.010
(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.
The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.
When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

APPENDIX C

BID PROPOSAL DOCUMENTS

INCLUDING:

- **Notice to Contractor**
- **Proposal Form**
- **Non-Collusion Declaration**
- **Proposal Signature Page**
- **Certification of Compliance with Wage Payment Statutes**

Lewis County Department of Public Works

Josh S. Metcalf, PE, Director
Tim Fife, PE, County Engineer

NOTICE TO CONTRACTORS

NOTICE IS HERBY GIVEN that The Board of County Commissioners of Lewis County or designee, will open sealed proposals and publicly read them aloud on or after *** 12:30 p.m. *** on *** June 23, 2020 ***, at the Lewis County Courthouse, Chehalis, Washington, for the *** Mickelsen Parkway Project, County Road Project No. 2121 ***.

SEALED BIDS MUST BE DELIVERED BY OR BEFORE
***** 12:30 p.m. *** on *** June 23, 2020 *****

(Lewis County official time is displayed on Axxess Intertel phones in the office of the Board of County Commissioners. Bids submitted after 12:30:00 P.M. will not be considered for this project.)

Sealed proposals must be delivered to the Clerk of the Board of Lewis County Commissioners (351 N.W. North Street, Room 210, CMS-01, Chehalis, Washington 98532) by or before **12:30 p.m.** on the date specified for opening, and in an envelope clearly marked: ****** SEALED BID FOR THE MICKELSEN PARKWAY PROJECT, COUNTY ROAD PROJECT NO. 2121, TO BE OPENED ON OR AFTER 12:30 P.M. ON JUNE 23, 2020 ***.***

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory performance bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to the Lewis County Public Works Department.

Informational copies of maps, plans and specifications are on file for inspection in the office of the County Engineer of Lewis County in Chehalis, Washington. The contract documents may be viewed and downloaded from Lewis County's Web Site @ www.lewiscountywa.gov or you may call the Lewis County Engineers office @ (360)740-2612 and request a copy be mailed to you.

The Lewis County Public Works Department in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin, or sex in consideration for an award.

PROPOSAL

TO: BOARD OF COUNTY COMMISSIONERS
LEWIS COUNTY
CHEHALIS, WASHINGTON 98532

This certifies that the undersigned has examined the location of the Mickelsen Parkway Project, CRP 2121, in Lewis County, Washington, and that the plans, specifications and contract governing the work embraced in these improvements, and the method by which payment will be made for said work is understood. The undersigned hereby proposes to undertake and complete the work embraced in this improvement, or as much thereof as can be completed with the money available in accordance with the said plans, specifications and contract, and the following schedules of rates and prices:

NOTE: Unit prices for all items, all extensions, and total amount of bid shall be shown: All entries must be typed or entered in ink.

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION	UNIT PRICE DOLLARS CENTS	AMOUNT DOLLARS CENTS
1	L.S.	Mobilization	LUMP SUM	$
2	L.S.	Clearing and Grubbing	LUMP SUM	$
3	L.S.	Removal of Structures and Obstructions	LUMP SUM	$
4	11,500 CY	Roadway Excavation Incl. Haul	$	$
5	28,000 TN	Gravel Borrow, Incl. Haul	$	$
6	590 TN	Cement for Cement Treated Base	$	$
7	12,200 SY	Cement Treated Base	$	$
8	60 TN	Quarry Spalls	$	$
9	3 EA	Catch Basin Type 2 48 In. Diam	$	$
10	2 EA	Catch Basin Type 2 54 In. Diam	$	$
11	1 EA	Catch Basin Type 2 54 In. Diam With Flow Control	$	$
12	710 LF	Testing Storm Sewer Pipe	$	$
13	340 LF	Schedule A Storm Sewer Pipe 12 In. Diam.	$	$
14	370 LF	Schedule A Storm Sewer Pipe 24 In. Diam.	$	$
15	2 EA	Storm Trash Rack	$	$
16	5,650 TN	Crushed Surfacing Top course	$	$
17	4,050 TN	Asphalt Treated Base	$	$
18	2,000 TN	HMA Cl 1/2" PG 58V-22	$	$
19	10 DAY	ESC Lead	$	$
20	5 EA	Inlet Protection	$	$
21	250 SY	Stabilized Construction Entrance	$	$
22	40 HR	Street Cleaning	$	$
23	3,450 LF	Silt Fence	$	$
24	EST.	Erosion/Water Pollution Control	ESTIMATED	$10,000.00
25	21,600 SY	Seeding, Fertilizing and Mulching	$	$

26	2,400 CY	Topsoil Type C	$	$
27	50 SY	Erosion Control Blanket	$	$
28	L.S.	Storm Pond Planting and Restoration	LUMP SUM	$
29	10,800 LF	Paint Line	$	$
30	35 LF	Paint Stop Line	$	$
31	L.S.	Permanent Signing	LUMP SUM	$
32	L.S.	Project Temporary Traffic Control	LUMP SUM	$
33	3,820 LF	Conduit Pipe 2 In. Diam.	$	$
34	8 EA	Junction Box	$	$
35	80 CY	Structure Excavation Class B	$	$
36	2,600 SF	Shoring or Extra Excavation Class B Incl. Haul	$	$
37	L.S.	Roadway Surveying	LUMP SUM	$
38	680 LF	Chain Link Fence, Type 3	$	$
39	17 EA	End, Gate, Corner, and Pull Post for Chain Link Fence	$	$
40	1 EA	Double 14 FT. Chain Link Gate	$	$
41	CALC	Minor Change	CALCULATED	$20,000.00
42	L.S.	SPCC Plan	LUMP SUM	$
101	50 CY	Removal and Replacement of Unsuitable Material	$	$
102	1 EA	Connection to Existing Water Main	$	$
103	10 EA	Gate Valve 12 In.	$	$
104	1 EA	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	$	$
105	1 EA	In-Line Blow-Off Assembly	$	$
106	3 EA	End Blow-Off Assembly	$	$
107	6 EA	Hydrant Assembly	$	$
108	3,760 LF	PVC Pipe for Water Main 12 In. Diam.	$	$
109	2,500 LB	Additional Ductile Iron Fittings	$	$
110	CALC	Minor Change	CALCULATED	$5,000.00
111	9,300 SF	Shoring or Extra Excavation Class B Incl. Haul	$	$
112	200 TN	Gravel Borrow, Incl. Haul	$	$
201	50 CY	Removal and Replacement of Unsuitable Material	$	$
202	3,530 LF	Sewer Force Main 4 In. Diam.	$	$
203	3,695 LF	Sewer Force Main 8 In. Diam.	$	$
204	CALC	Minor Change	CALCULATED	$5,000.00
205	11,500 SF	Shoring or Extra Excavation Class B Incl. Haul	$	$
206	300 TN	Gravel Borrow, Incl. Haul	$	$
			TOTAL BID	$

Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. **That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.**

NOTICE TO ALL BIDDERS

To report rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

PROPOSAL - SIGNATURE PAGE

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

A proposal guaranty in an amount of five percent (5%) of the total bid, based upon the approximate estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

CASH ☐ **IN THE AMOUNT OF**_____

CASHIER'S CHECK ☐ _____ **DOLLARS**

CERTIFIED CHECK ☐ **($_____) PAYABLE TO THE LEWIS COUNTY TREASURER**

PROPOSAL BOND ☐ **IN THE AMOUNT OF 5% OF THE BID**

** Receipt is hereby acknowledged of addendum(s) No.(s) _____, _____, _____, & _____

SIGNATURE OF AUTHORIZED OFFICIAL(S)

Proposal Must be Signed _____

Firm Name _____

Address _____

_____

_____

State of Washington Contractor's License No. _____

Unified Business Identifier (U.B.I.) No. _____

Federal ID No. _____

Note:
This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from the Lewis County Engineer will be cause for considering the proposal irregular and subsequent rejection of the bid.

*Attach Power of Attorney

Washington State
Department of Transportation

Contractor Certification
Wage Law Compliance - Responsibility Criteria
Washington State Public Works Contracts

FAILURE TO RETURN THIS CERTIFICATION AS PART OF THE BID PROPOSAL PACKAGE WILL MAKE THIS BID NONRESPONSIVE AND INELIGIBLE FOR AWARD

I hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to the date of the Call for Bids.

Bidder Name: _____
Name of Contractor/Bidder - Print full legal entity name of firm

By: _____ _____
Signature of authorized person — Print Name of person making certifications for firm

Title: _____ **Place:** _____
Title of person signing certificate — Print city and state where signed

Date: _____

APPENDIX D

CONTRACT DOCUMENTS

INCLUDING:

- **Contract Form**
- **Performance Bond**
- **Power Equipment List**

CONTRACT

THIS AGREEMENT, made and entered into this __ day of _____, 2020, between the BOARD OF COUNTY COMMISSIONERS of LEWIS COUNTY, State of Washington, acting under and by virtue of RCW 36.77.040, hereinafter called

the Board, and _____ of _____

for___sel___, heirs, executors, administrators, successors and assigns, hereinafter called the Contractor.

WITNESSETH:

That in consideration of the payments, covenants and agreements hereinafter mentioned to be made and performed by the parties hereto, the parties hereto covenant and agree as follows:

DESCRIPTION OF WORK:

1. The Contractor shall do all work and furnish all material necessary to improve *** Mickelsen Parkway in Lewis County by constructing new roadway, clearing, grading, subgrade preparation, surfacing, hot mix asphalt, drainage, utilities, signing, pavement marking, traffic control, *** and other work all in Lewis County Washington, in accordance with and as described in the attached plans and specifications, and in full compliance with the terms, conditions and stipulations herein set forth and attached, now referred to and by such reference incorporated herein and made a part hereof as fully for all purposes as if here set forth at length, and shall perform any alterations in or additions to the work covered by this contract and every part thereof and any extra work which may be ordered as provided in this contract and every part thereof.

The Contractor shall provide and be at the expense of all materials, labor, carriage, tools, implements and conveniences and things of every description that may be requisite for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof.

2. The County hereby promises and agrees with the Contractor to hire and does hire the Contractor to provide the materials and to do and cause to be done the above described work and to complete and furnish the same according to the attached plans and specifications and the terms and conditions herein contained, and hereby contracts to pay for the same according to the schedule of unit or itemized prices at the time and in the manner and upon the conditions provided for in this contract and every part thereof. The County further agrees to hire the contractor to perform any alterations in or conditions to the work covered by this contract and every part thereof and any force account work that may be ordered and to pay for the same under the terms of this contract and the attached plans and specifications.

3. The Contractor for himself, and for his heirs, executors, administrators, successors and assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

4. It is further provided that no liability shall attach to the County by reason of entering into this contract, except as expressly provided herein.

5. CANCELLATION OF CONTRACT FOR VIOLATION OF STATE POLICY

This contract, pursuant to RCW 49.28.040 to RCW 49.28.060, may be canceled by the officers or agents of the Owner authorized to contract for or supervise the execution of such work, in case such work is not performed in accordance with the policy of the State of Washington.

6. DOCUMENTS COMPRISING CONTRACT

All documents hereto attached, including but not being limited to the advertisement for bids, information for bidders, bid proposal form, general conditions (if any), special conditions (if any), complete specifications and the complete plans, are hereby made a part of this contract.

IN WITNESS WHEREOF, the said Contractor has executed this instrument, and the said Board of County Commissioners of aforesaid County, pursuant to resolution duly adopted, has caused this instrument to be executed by and in the name of said Board by its Chairman, duly attested by its Clerk, the day and year first above written, and the seal of said Board to be hereunto affixed on the date in this instrument first above written.

_____

By:_____

_____
Contractor

Performance of foregoing contract assured in accordance with the terms of the accompanying bond.

Dated: _____, 2020

By:_____
Surety

By:_____
Attorney-in-fact

APPROVED AS TO FORM:

JONATHAN L. MEYER, Prosecuting Attorney

By:_____
Civil Deputy

APPROVED:

_____
County Engineer

PERFORMANCE BOND FOR Bond No. _____
LEWIS COUNTY, WASHINGTON

WE, _____ d/b/a _____
(Insert legal name of Contractor) (Insert trade name of Contractor, if any)

(hereinafter "Principal"), and _____ (hereinafter "Surety"), are held and firmly bound unto **LEWIS COUNTY, WASHINGTON** (hereinafter "County"), as Obligee, in an amount (in lawful money of the United States of America) equal to the total compensation and expense reimbursement payable to Principal for satisfactory completion of Principal's work under Contract No. **CRP 2121 ,**between Principal and County, which total is ***initially*** _____Dollars ($_____), for the payment of which sum Principal and Surety bind themselves, their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents. Said contract (hereinafter referred to as "the Contract") is for the **Tucker Road Improvements Project,** and is made a part hereof by this reference. The Contract includes the original agreement as well as all documents attached thereto or made a part thereof and amendments, change orders, and any other document modifying, adding to or deleting from said Contract any portion thereof.

This Bond is executed in accordance with the laws of the State of Washington, and is subject to all provisions thereof and the ordinances of County insofar as they are not in conflict therewith, and is entered into for the use and benefit of County, and all laborers, mechanics, subcontractors, and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions or supplies for the carrying on of the work covered by Contract No. **CRP 2121,** between the below-named Contractor and County for the **Mickelsen Parkway Project,** a copy of which Contract, by this reference is made a part hereof and is hereinafter referred to as "the Contract." (The Contract as defined herein includes the aforesaid agreement together with all of the Contract documents including addenda, exhibits, attachments, modifications, alterations, and additions thereto, deletions therefrom, amendments and any other document or provision attached to or incorporated into the Contract)

THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly and faithfully perform the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

THE PARTIES FURTHER ACKNOWLEDGE & AGREE AS FOLLOWS:

(1) Surety hereby consents to, and waives notice of, any alteration, change order, or other modification of the Contract and any extension of time made by County, except that any single or cumulative change order amounting to more than twenty-five percent (25%) of the penal sum of this bond shall require Surety's written consent.

(2) Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the work or Contract Time and the amounts payable to Contractor. Subject to the limitations contained in paragraph (1) above, no such change or any combination thereof, shall void or impair Surety's obligation hereunder.

(3) Surety is subject to the provisions contained in Section 1-03.4, "Contract Bond," of the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction, and such provisions are incorporated by reference. A copy may be viewed at WSDOT's website www.wsdot.wa.gov/Publications/Manuals/.

(4) Whenever County has declared Contractor to be in default and County has given Surety written notice of such declaration, Surety shall promptly (in no event more than thirty [30] days following receipt of such notice), specify, in written notice to County, which of the following actions Surety intends to take to remedy such default, and thereafter shall:

(a) Remedy the default within fifteen (15) days after its notice to County, as stated in such notice; or

(b) Assume within fifteen (15) days following its notice to County, full responsibility for the completion of the Contract in accordance with all of its provisions, as stated in such notice, and become entitled to payment of the balance of the Contract sum as provided in the Contract; or

(c) Pay County upon completion of the Contract, in cash, the cost of completion together with all other reasonable costs and expenses incurred by County as a result of Contractor's default, including but not limited to those incurred by County to mitigate its losses, which may include but are not limited to attorneys' fees and the cost of efforts to complete the work prior to Surety's exercising any option available to it under this Bond; or

(d) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon a determination by County and Surety jointly of the lowest responsible bidder, arrange for one or more agreements between such bidder and County, and make available as work progresses (even though there is a default or a succession of defaults under such agreement(s) for completion arranged for under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price, but not exceeding, including other costs and damages for which Surety may be liable hereunder, the penal sum of this Bond. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by County to Contractor under the Contract, less the amount properly paid by County to Contractor.

(5) If County commences suit and obtains judgment against Surety for recovery hereunder, then Surety, in addition to such judgment, shall pay all costs and attorneys' fees incurred by County in enforcement of County's rights hereunder. The venue for any action arising out of or in connection with this bond shall be in Lewis County, Washington.

(6) No right or action shall accrue on this Bond to or for the use of any person or corporation other than Lewis County, except as herein provided.

(7) No rider, amendment or other document modifies this Bond except as follows, which by this reference is incorporated herein:

SURETY'S QUALIFICATIONS: Every Surety named on this bond must appear on the United States Treasury Department's most current list (Circular 570 as amended or superseded) and be authorized by the Washington State Insurance Commissioner to transact business as a surety in the State of Washington. In addition, the Surety must have a current rating of at least A-:VII in A. M. Best's Key Rating Guide.

INSTRUCTIONS FOR SIGNATURES: This bond must be signed by the president or a vice-president of a corporation; the managing general partner of a partnership; managing joint venturer of a joint venture; manager of a limited liability company or, if no manager has been designated, a member of such LLC; a general partner of a limited liability partnership; or the owner(s) of a sole proprietorship. If the bond is signed by any other representative, the Principal must attach currently-dated, written proof of that signer's authority to bind the Principal, identifying and quoting the provision in the corporate articles of incorporation, bylaws, Board resolution, partnership agreement, certificate of formation, or other document authorizing delegation of signature authority to such signer, and confirmation acceptable to the County that such delegation was in effect on the date the bond was signed. **A NOTARY PUBLIC MUST ACKNOWLEDGE EACH SIGNATURE BELOW.**

FOR THE SURETY:

By _____
(Signature of Attorney-in-Fact)

_____
(Type or print name of Attorney-in-Fact)

_____
(Type or print telephone number for Attorney-in-Fact)

FOR THE PRINCIPAL:

By:_____
(Signature of authorized signer for Contractor)

_____
(Type or print name of signer for Contractor)

_____
(Type or print title of signer for Contractor)

STATE OF _____)
) ss: **ACKNOWLEDGMENT FOR CONTRACTOR**
COUNTY OF _____)

On this _____ day of _____, ____, before me a notary public in and for the State of _____, duly commissioned and sworn, personally appeared _____, the person described in and who executed the foregoing bond, and acknowledged to me that _____ signed and sealed said bond as the free and voluntary act and deed of the Contractor so identified in the foregoing bond for the uses and purposes therein mentioned, and on oath stated that _____is authorized to execute said bond for the Contractor named therein. WITNESS my hand and official seal hereto affixed the day and year in this certificate first above written.

_____ _____
(Signature of Notary Public) (Print or type name of Notary Public)

Notary Public in and for the State of _____ residing at _____
My commission expires _____. ***SEAL*** ➔

STATE OF _____)
) ss: **ACKNOWLEDGMENT FOR SURETY**
COUNTY OF _____)

On this _____ day of _____, ____, before me a notary public in and for the State of _____, duly commissioned and sworn, personally appeared _____, Attorney-in-Fact for the Surety that executed the foregoing bond, and acknowledged said bond to be the free and voluntary act and deed of the Surety for the uses and purposes therein mentioned, and on oath stated that _____ is authorized to execute said bond on behalf of the Surety, and that the seal affixed on said bond or the annexed Power of Attorney is the corporate seal of said Surety. WITNESS my hand and official seal hereto affixed the day and year in this certificate first above written.

_____ _____
(Signature of Notary Public) (Print or type name of Notary Public)

Notary Public in and for the State of _____ residing at _____
My commission expires _____. ***SEAL*** ➔

POWER EQUIPMENT LIST

The undersigned furthermore certifies that he/she is thoroughly aware that time is of the essence for the completion of this contract within the time specified in the special provisions, and hereby agrees to provide the Engineer a list of his power equipment to be used on this project.

This equipment list will be used in computing any Force Account that may be performed within this contract.

The Contractor must complete this form in its entirety.

POWER EQUIPMENT

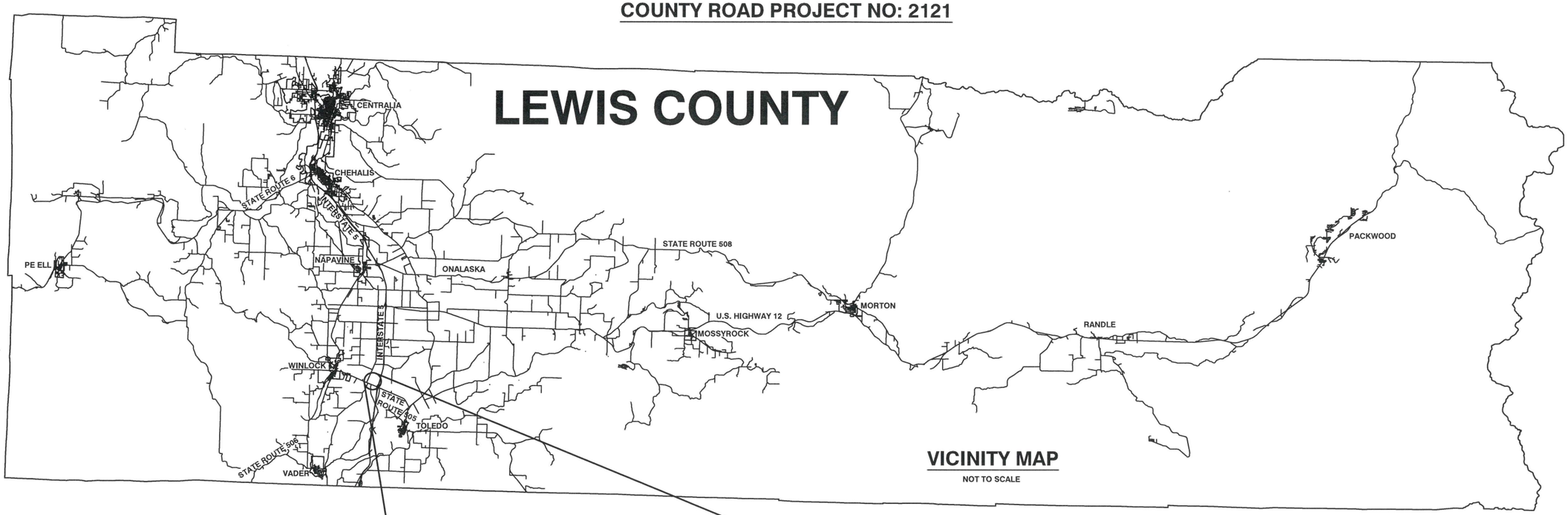
Type of Equipment	Make	Model Number	Serial Number	*Capacity	Year Built

APPENDIX E

CONTRACT PLANS

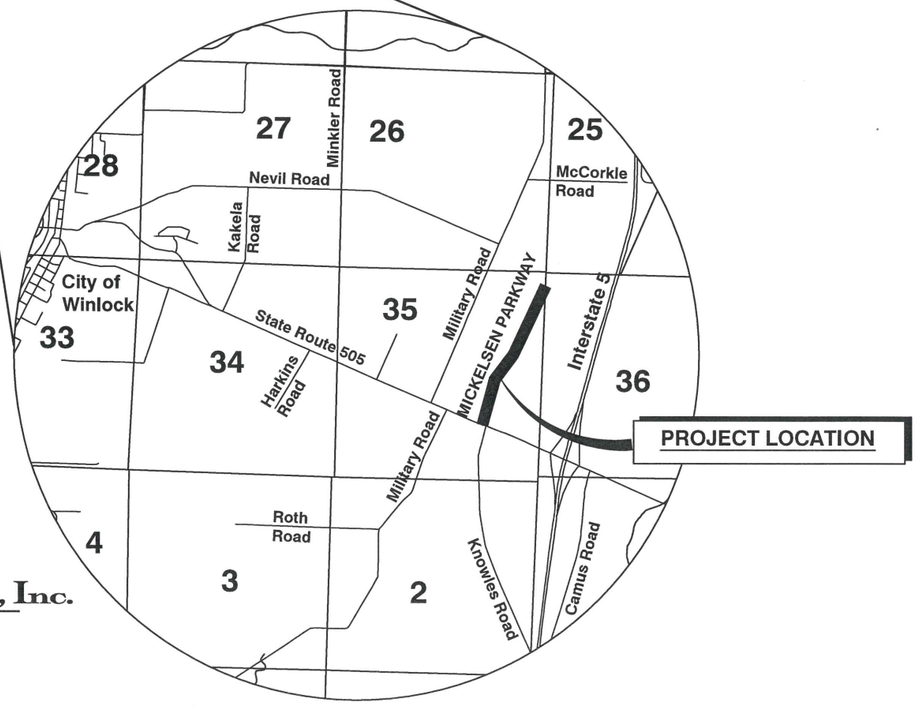
MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121



VICINITY MAP

NOT TO SCALE



APPROVED FOR CONSTRUCTION

BY: _____ DATE: 6-9-20

County Engineer

COMMISSIONERS:

EDNA J. FUND, DISTRICT 1
ROBERT C. JACKSON, DISTRICT 2
GARY STAMPER, DISTRICT 3

Lewis County
Department of Public Works

ENGINEERING-DESIGN SECTION

Gray & Osborne, Inc.
CONSULTING ENGINEERS
2102 CARRIAGE DRIVE SW, BLDG. I
OLYMPIA, WA 98502 • (360) 292-7418

SHEET INDEX

SHEET NO.	DESCRIPTION
--	VICINITY MAP AND SHEET INDEX
1	LEGEND AND ABBREVIATIONS
2	SUMMARY OF QUANTITIES
3	SURVEY CONTROL AND ROADWAY ALIGNMENT TABLES
4 - 5	TRAFFIC CONTROL PLANS
6-7	TRAFFIC CONTROL DETAILS
8 - 13	TESC PLANS
14 - 15	TESC DETAILS
16 - 24	WATER AND FORCE MAIN PLAN AND PROFILES
25	FORCE MAIN DETAILS
26 - 27	WATER MAIN DETAILS
28	TYPICAL ROADWAY SECTIONS
29 - 37	PLAN AND PROFILES
38	STORM POND
39	STORM POND SECTIONS
40 - 43	STORM DETAILS
44	FENCE DETAILS
45	GATE DETAILS
46	SIGN DETAILS
47	PAVEMENT MARKING DETAILS
48	STORM POND PLANTING PLAN
49 - 52	ROADWAY CROSS SECTIONS

ABBREVIATIONS

AVE	AVENUE
AC	ASBESTOS CEMENT PIPE
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ANGLE POINT
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
BF	BLIND FLANGE
BLDG	BUILDING
BLK	BLOCK
BO	BLOW OFF
BOP	BEGINNING OF PROJECT
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CTR	CENTER
CB	CATCH BASIN
CI	CAST IRON
℄	CENTER LINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
C	CONDUIT
CONT	CONTINUOUS
CPEP	CORRUGATED POLYETHYLENE PIPE
CY	CUBIC YARD
CONT	CONTINUED
CL	CLASS
DEPT	DEPARTMENT
DC	DEGREE OF CURVATURE
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DWGS	DRAWING(S)
E	EAST
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOP	END OF PROJECT
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EX	EXISTING
FIN	FINISHED
FL	FLANGE
FT	FEET
GA	GAUGE
GALV	GALVANIZED
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INV	INVERT
IN	INCH
LB	POUND
LF	LINEAR FEET
MAX	MAXIMUM
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MISC	MISCELLANEOUS
N	NORTH
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PI	POINT OF INTERSECTION
PP	POWER POLE
PVI	POINT OF VERTICAL INTERSECTION
PE	PLAIN END
PERF	PERFORATED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENT
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
QTY	QUANTITY
R	RADIUS
RED	REDUCER
REINF	REINFORCE
REQD	REQUIRED
R/W	RIGHT-OF-WAY
SL	SLOPE
S	SOUTH
SCH	SCHEDULE
SF	SQUARE FEET
SHT	SHEET
SPECS	SPECIFICATIONS
SQ	SQUARE
STA	STATION
STD	STANDARD
TB	THRUST BLOCK
TEL	TELEPHONE
TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
TYP	TYPICAL
VERT	VERTICAL
W	WEST
WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
W/	WITH
W/O	WITHOUT

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		ASPHALT PAVEMENT
		PAVEMENT SECTION–CEMENT TREATED BASE
		PAVEMENT SECTION–CRUSHED SURFACING TOP COURSE
		GRAVEL SURFACING (CSTC)
x x	x x	FENCE
		RIGHT–OF–WAY LINE
		CENTERLINE OF RIGHT–OF–WAY
	10+00	CENTERLINE OF CONSTRUCTION
	I	PROPERTY LINE
10	10	CONTOUR LINE (STORM POND AREA ONLY)
	C C	APPROXIMATE TOP OF CUT
	F F	APPROXIMATE TOE OF FILL
		SAWCUT LINE (APPROXIMATE LOCATION)
FO		FIBER OPTICS
OH		OVERHEAD UTILITIES
	COM COM	BURIED COMMUNICATIONS (SIZE & TYPE AS NOTED)
	FM	FORCE MAIN (SIZE & TYPE AS NOTED)
W	W	WATER MAIN (SIZE & TYPE AS NOTED)
D	D	STORM DRAIN (SIZE & TYPE AS NOTED)
D	D	CULVERT (SIZE & TYPE AS NOTED)
		DITCH (PLAN VIEW)
		DITCH FLOW LINE–RIGHT SIDE (PROFILE VIEW)
		DITCH FLOW LINE–LEFT SIDE (PROFILE VIEW)
		WATER METER
		FIRE HYDRANT
		BLOW–OFF VALVE
		COMBINATION AIR VALVE
		GATE VALVE
		THRUST BLOCK
		CAP/PLUG
		COUPLING/ADAPTER
		UTILITY POLE
		UTILITY POLE ANCHOR
		JUNCTION BOX
		MONUMENT (SURFACE)
		INLET/OUTLET PROTECTION (QUARY SPALLS)
		CATCH BASIN, TYPE 1 (ACTUAL DIMENSION SHOWN FOR PROPOSED)
		CATCH BASIN, TYPE 2 (ACTUAL DIMENSION SHOWN FOR PROPOSED)
		SIGN
		SHRUB
		TREE (CONIFER)
		TREE (DECIDUOUS)

RIGHT-OF-WAY DISCLAIMER

THE RIGHT–OF–WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"

TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
36494
REGISTERED
PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

LEGEND AND ABBREVIATIONS

SHEET 1 OF 52

CALL 48 HOURS BEFORE YOU DIG
1–800–424–5555
"It's the Law"
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\General\LEGEND.dwg, 6/8/2020 10:59 AM, SHARI GAER

SCHEDULE A: ROAD AND STORM DRAINAGE

ITEM NO.	STD. ITEM NO.	ITEM DESCRIPTION	QTY.	UNIT
		PREPERATION		
1	0002	Mobilization	1	LS
2	0035	Clearing and Grubbing	1	LS
3	0050	Removal of Structures and Obstructions	1	LS
		GRADING		
4	0310	Roadway Excavation Incl. Haul	11,500	CY
5	0431	Gravel Borrow, Incl. Haul	28,000	TN
6	Special	Cement for Cement Treated Base	590	TN
7	Special	Cement Treated Base	12,200	SY
		DRAINAGE		
8	1086	Quarry Spalls	60	TN
		STORM SEWER		
9	3105	Catch Basin Type 2 48 In. Diam.	3	EA
10	3106	Catch Basin Type 2 54 In. Diam.	2	EA
11	Special	Catch Basin Type 2 54 In. Diam. With Flow Control	1	EA
12	3151	Testing Storm Sewer Pipe	710	LF
13	3541	Schedule A Storm Sewer Pipe 12 In. Diam.	340	LF
14	3543	Schedule A Storm Sewer Pipe 24 In. Diam.	370	LF
15	Special	Storm Trash Rack	2	EA
		SURFACING		
16	5120	Crushed Surfacing Top Course	5,650	TN
17	Special	Asphalt Treated Base	4,050	TN
		HOT MIX ASPHALT		
18	5767	HMA Cl 1/2" PG 58V-22	2,000	TN
		EROSION CONTROL AND ROADSIDE PLANTING		
19	6403	ESC Lead	10	DAY
20	6471	Inlet Protection	5	EA
21	6468	Stabilized Construction Entrance	250	SY
22	6470	Street Cleaning	40	HR
23	6373	Silt Fence	3,450	LF
24	6488	Erosion/Water Pollution Control	1	FA
25	6431	Seeding, Fertilizing and Mulching	21,600	SY
26	6409	Topsoil Type C	2,400	CY
27	6455	Erosion Control Blanket	50	SY
28	Special	Storm Pond Planting and Restoration	1	LS
		TRAFFIC		
29	6806	Paint Line	10,800	LF
30	6859	Paint Stop Line	35	LF
31	Special	Permanent Signing	1	LS
32	6971	Project Temporary Traffic Control	1	LS
33	6945	Conduit Pipe 2 In. Diam.	3,820	LF
34	Special	Junction Box	8	EA
		OTHER ITEMS		
35	7006	Structure Excavation Class B	80	CY
36	7008	Shoring or Extra Excavation Class B Incl. Haul	2,600	SF
37	7038	Roadway Surveying	1	LS
38	7083	Chain Link Fence, Type 3	680	LF
39	7097	End, Gate, Corner, and Pull Post for Chain Link Fence	17	EA
40	7102	Double 14 FT. Chain Link Gate	1	EA
41	7728	Minor Change	1	CALC
42	7736	SPCC Plan	1	LS

SCHEDULE B: WATER MAIN

ITEM NO.	STD. ITEM NO.	ITEM DESCRIPTION	QTY.	UNIT
		WATER LINES		
101	3810	Removal and Replacement of Unsuitable Material	50	CY
102	Special	Connection to Existing Water Main	1	EA
103	6165	Gate Valve 12 In.	10	EA
104	3837	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	1	EA
105	Special	In-Line Blow-Off Assembly	1	EA
106	Special	End Blow-Off Assembly	3	EA
107	3846	Hydrant Assembly	6	EA
108	3937	PVC Pipe for Water Main 12 In. Diam.	3,760	LF
109	Special	Additional Ductile Iron Fittings	2,500	LB
		OTHER ITEMS		
110	7728	Minor Change	1	CALC
111	7008	Shoring or Extra Excavation Class B Incl. Haul	9,300	SF
112	0431	Gravel Borrow, Incl. Haul	200	TN

SCHEDULE C: SEWER MAIN

ITEM NO.	STD. ITEM NO.	ITEM DESCRIPTION	QTY.	UNIT
		SANITARY SEWER		
201	3810	Removal and Replacement of Unsuitable Material	50	CY
202	Special	Sewer Force Main 4 In. Diam	3,530	LF
203	Special	Sewer Force Main 8 In. Diam	3,695	LF
		OTHER ITEMS		
204	7728	Minor Change	1	CALC
205	7008	Shoring or Extra Excavation Class B Incl. Haul	11,500	SF
206	0431	Gravel Borrow, Incl. Haul	300	TN

0 1" 2"
TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

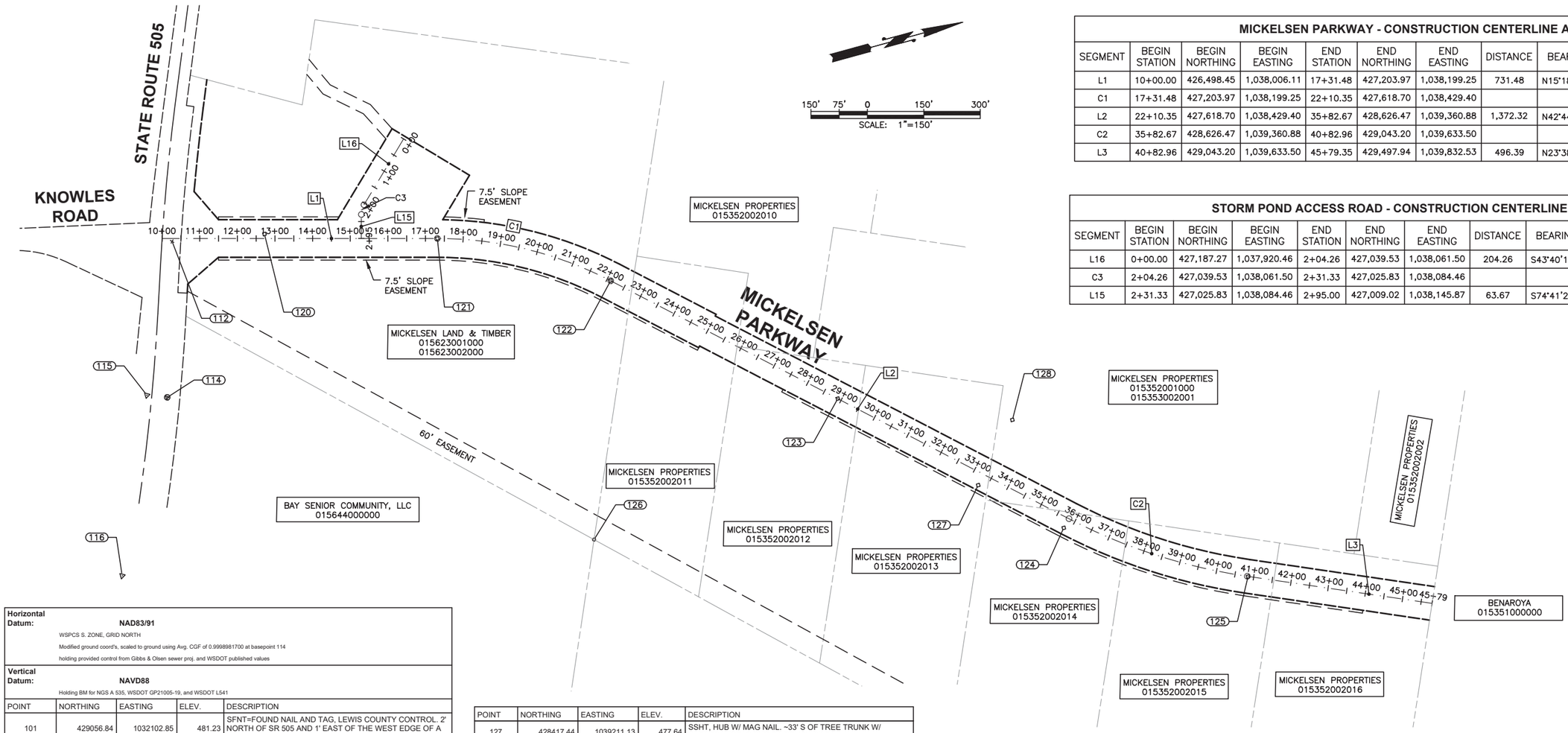
COUNTY ROAD PROJECT NO: 2121

SUMMARY OF QUANTITIES

SHEET 2 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON
STATE OF WASHINGTON
36484
REGISTERED
PROFESSIONAL ENGINEER



MICKELSEN PARKWAY - CONSTRUCTION CENTERLINE ALIGNMENT

SEGMENT	BEGIN STATION	BEGIN NORTHING	BEGIN EASTING	END STATION	END NORTHING	END EASTING	DISTANCE	BEARING	RADIUS	TANGENT	CURVE LENGTH	DELTA
L1	10+00.00	426,498.45	1,038,006.11	17+31.48	427,203.97	1,038,199.25	731.48	N15°18'36"E				
C1	17+31.48	427,203.97	1,038,199.25	22+10.35	427,618.70	1,038,429.40			1,000.00	244.12	478.87	27°26'14"
L2	22+10.35	427,618.70	1,038,429.40	35+82.67	428,626.47	1,039,360.88	1,372.32	N42°44'50"E				
C2	35+82.67	428,626.47	1,039,360.88	40+82.96	429,043.20	1,039,633.50			1,500.00	252.49	500.29	19°06'35"
L3	40+82.96	429,043.20	1,039,633.50	45+79.35	429,497.94	1,039,832.53	496.39	N23°38'15"E				

STORM POND ACCESS ROAD - CONSTRUCTION CENTERLINE ALIGNMENT

SEGMENT	BEGIN STATION	BEGIN NORTHING	BEGIN EASTING	END STATION	END NORTHING	END EASTING	DISTANCE	BEARING	RADIUS	TANGENT	CURVE LENGTH	DELTA
L16	0+00.00	427,187.27	1,037,920.46	2+04.26	427,039.53	1,038,061.50	204.26	S43°40'11"E				
C3	2+04.26	427,039.53	1,038,061.50	2+31.33	427,025.83	1,038,084.46			50.00	13.88	27.07	31°01'14"
L15	2+31.33	427,025.83	1,038,084.46	2+95.00	427,009.02	1,038,145.87	63.67	S74°41'24"E				

Horizontal Datum: **NAD83/91**

WSPCS S. ZONE, GRID NORTH

Modified ground coord's, scaled to ground using Avg. CGF of 0.9998981700 at basepoint 114

holding provided control from Gibbs & Olsen sewer proj. and WSDOT published values

Vertical Datum: **NAVD88**

Holding BM for NGS A 535, WSDOT GP21005-19, and WSDOT L541

POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
101	429056.84	1032102.85	481.23	SFNT=FOUND NAIL AND TAG, LEWIS COUNTY CONTROL. 2' NORTH OF SR 505 AND 1' EAST OF THE WEST EDGE OF A DRIVEWAY OF A HOUSE WITH NO NUMBER OR MAILBOX
108	426911.61	1036950.65	453.67	SSNT, NEAR THE CENTERLINE OF SOUTH MILITARY RD. ABOUT 16' SOUTH OF THE CENTERLINE OF SR 505.
111	426887.49	1036908.66	450.29	SFMC=FOUND MONUMENT IN CASE, STAINLESS STEEL ROD WITHOUT SLEEVE. "NGS A535 1987" GIBBS & OLSEN CONTROL POINT #4
112	426521.91	1038020.74	469.28	SFNT, AT THE EAST EDGE OF KNOWLES ROAD EXTENDED TO 2' SOUTH OF THE NORTH EDGE OF SR 505
114	426399.84	1038417.00	458.43	SFM, 3 1/2" ALUM DISC W/ PUNCH. "LEWIS COUNTY NW COR JB REILLE NO. 42 7-2012 LS 35981" SET IN CONC ON CUT BANK.
115	426349.48	1038397.15	455.11	SSNT, 2' N OF S EDGE OF ASPHALT. S OF MON "DLC"
116	426159.29	1038842.53	431.47	SSNT, 2' N OF S EDGE OF ASPHALT.
117	426009.14	1039189.46	412.56	SSNT, 3' N OF S EDGE OF ASPHALT. S OF LARGE FIR TREE @ E SIDE OF DRWY ENTRANCE. W OF GAS STATION ENTRANCE.
118	425787.62	1039738.89	383.06	SFMC, WSDOT I5 SB OFFRAMP & SR 505. EMPTY! SET OVER CENTER OF LID.
119	425733.80	1039818.30	377.84	SSNT, SE CORNER INTX SR 505 & SB I5 ON RAMP. ~4.5' N OF GUARDRAIL @ W END OF GUARDRAIL.
120	426763.97	1038066.43	464.40	SSHT
121	427204.02	1038199.19	458.51	SSHT, HUB W/ MAG NAIL & G&O TAG.
122	427618.74	1038429.13	467.38	SSHT, HUB W/ MAG NAIL
123	428118.15	1038890.70	470.14	SSHT, HUB W/ MAG NAIL
124	428606.78	1039380.60	481.97	SSHT, HUB W/ MAG NAIL. ~50' E OF E TOP SIDE OF POND/EDGE OF VEGETATION
125	429044.95	1039634.49	481.77	SSHT, HUB W/ MAG NAIL.
126	427394.31	1039081.01	477.87	SFRC, 1/2" REBAR W/ YPC. "K. BLUHM LS 29289" "DLC" CORNER

POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
127	428417.44	1039211.13	477.64	SSHT, HUB W/ MAG NAIL. ~33' S OF TREE TRUNK W/ BARBED WIRE. S END OF BRUSH PILES.
128	428550.85	1039067.72	477.02	SSHT, HUB W/ MAG NAIL. IN "CAUSEWAY" B/T TWO PONDS. ~15' S OF N GROUND TOP. ~15' N OF S ? W OF CENTERLINE TO CLEAR VIEW GAP OF N POND.
129	425607.19	1040188.50	359.21	SFM, "WSDOT 1991 P21005-19" BRASS DISC W/ PUNCH. 13.5' W OF E END OF BRIDGE IN NARROW CONC WALK N SIDE. GROUND COORDINATE SHOWN.
130	425283.93	1040707.98	322.53	SFM, "WSDOT L541" 3.5" BRASS DISC W/ PUNCH. GROUND COORDINATE SHOWN.

RIGHT-OF-WAY DISCLAIMER

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0 1" 2"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON STATE OF WASHINGTON 36494 REGISTERED PROFESSIONAL ENGINEER

Lewis County Department of Public Works

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CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

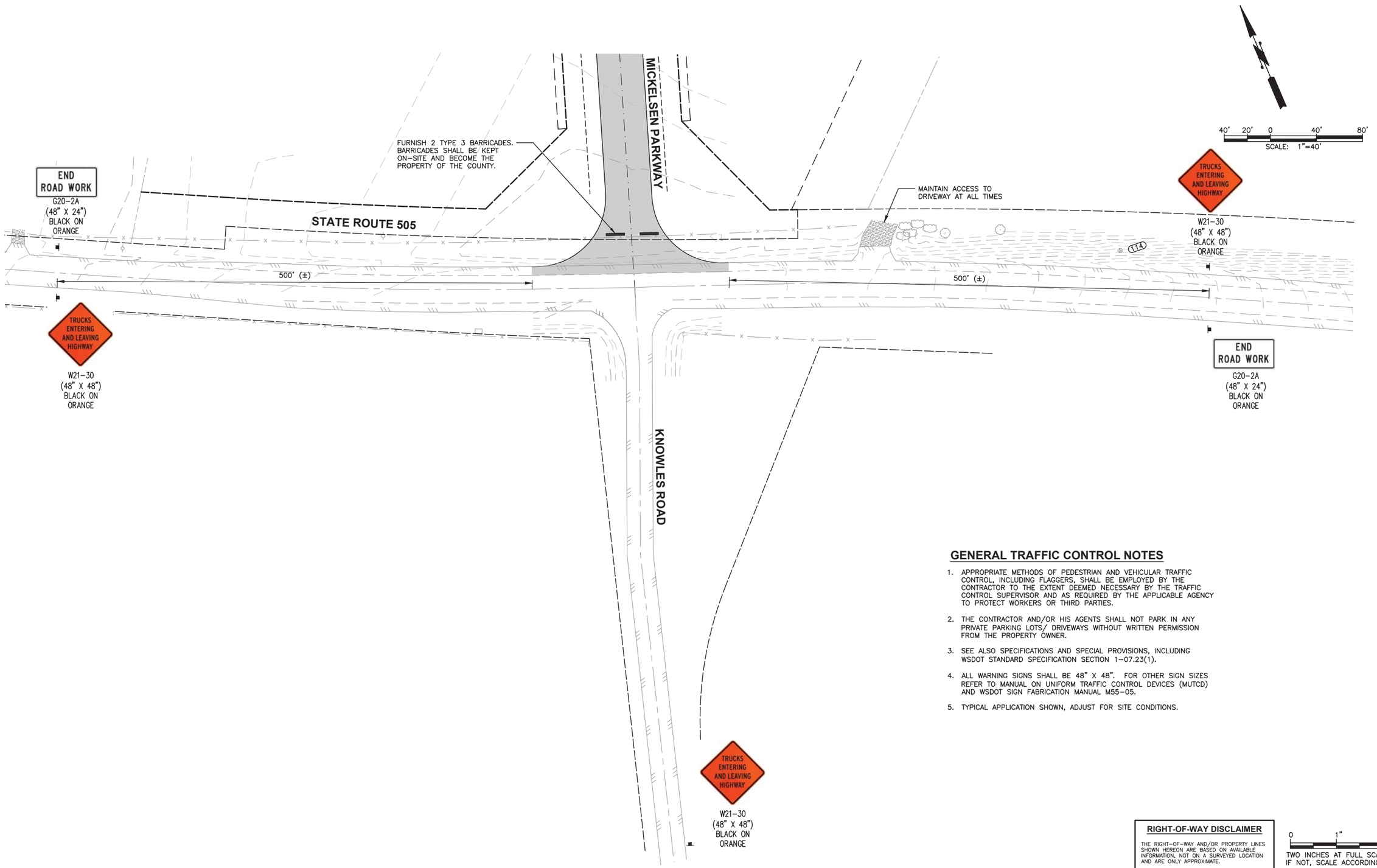
COUNTY ROAD PROJECT NO: 2121

SURVEY CONTROL AND ROADWAY ALIGNMENT TABLES

SHEET 3 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\General\PROJ_MAP.dwg, 6/8/2020 12:12 PM, CHRIS GASKIN



GENERAL TRAFFIC CONTROL NOTES

1. APPROPRIATE METHODS OF PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL, INCLUDING FLAGGERS, SHALL BE EMPLOYED BY THE CONTRACTOR TO THE EXTENT DEEMED NECESSARY BY THE TRAFFIC CONTROL SUPERVISOR AND AS REQUIRED BY THE APPLICABLE AGENCY TO PROTECT WORKERS OR THIRD PARTIES.
2. THE CONTRACTOR AND/OR HIS AGENTS SHALL NOT PARK IN ANY PRIVATE PARKING LOTS/ DRIVEWAYS WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
3. SEE ALSO SPECIFICATIONS AND SPECIAL PROVISIONS, INCLUDING WSDOT STANDARD SPECIFICATION SECTION 1-07.23(1).
4. ALL WARNING SIGNS SHALL BE 48" X 48". FOR OTHER SIGN SIZES REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WSDOT SIGN FABRICATION MANUAL M55-05.
5. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TRAFFIC CONTROL PLAN - CLASS A

SHEET 4 OF 52

CALL 48 HOURS BEFORE YOU DIG
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"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON
STATE OF WASHINGTON
36494
REGISTERED
PROFESSIONAL ENGINEER

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ◻
RURAL ROADS	45 / 55 MPH	500' ◻
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ◻
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ◻ (2)
URBAN STREETS	25 MPH OR LESS	100' ◻ (2)

1. ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
2. THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L IN FEET										
LANE WIDTH (FEET)	POSTED SPEED (MPH)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	–	–	–
11	115	165	225	295	495	550	605	660	–	–
12	125	180	245	320	540	600	660	720	780	840

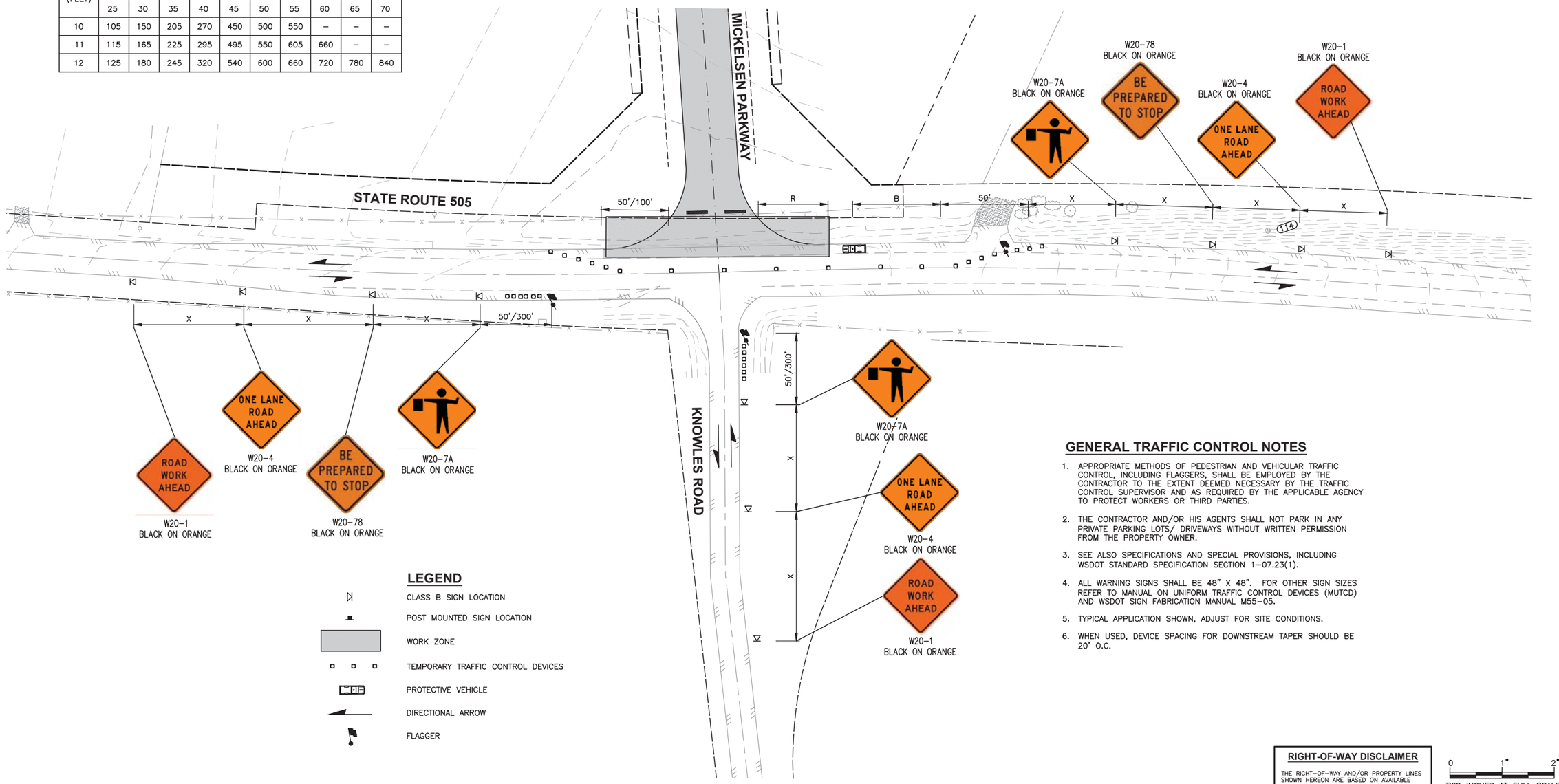
BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45–55 MPH	> 55 MPH	< 45 MPH	45–55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R
NO SPECIFIED DISTANCE REQUIRED

CHANNELIZING DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
50/65	10 TO 20	80

40' 20' 0 40' 80'
SCALE: 1"=40'



LEGEND

- CLASS B SIGN LOCATION
- POST MOUNTED SIGN LOCATION
- WORK ZONE
- TEMPORARY TRAFFIC CONTROL DEVICES
- PROTECTIVE VEHICLE
- DIRECTIONAL ARROW
- FLAGGER

GENERAL TRAFFIC CONTROL NOTES

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2. THE CONTRACTOR AND/OR HIS AGENTS SHALL NOT PARK IN ANY PRIVATE PARKING LOTS/ DRIVEWAYS WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
3. SEE ALSO SPECIFICATIONS AND SPECIAL PROVISIONS, INCLUDING WSDOT STANDARD SPECIFICATION SECTION 1–07.23(1).
4. ALL WARNING SIGNS SHALL BE 48" X 48". FOR OTHER SIGN SIZES REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WSDOT SIGN FABRICATION MANUAL M55–05.
5. TYPICAL APPLICATION SHOWN, ADJUST FOR SITE CONDITIONS.
6. WHEN USED, DEVICE SPACING FOR DOWNSTREAM TAPER SHOULD BE 20' O.C.

RIGHT-OF-WAY DISCLAIMER

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06-08-20

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TRAFFIC CONTROL PLAN - CLASS B WORK WITHIN SR 505 R/W

SHEET 5 OF 52

CALL 48 HOURS BEFORE YOU DIG 1–800–424–5555 "It's the Law" Utilities Underground Location Center

JON MARSHALL HINTON STATE OF WASHINGTON 36494 REGISTERED PROFESSIONAL ENGINEER

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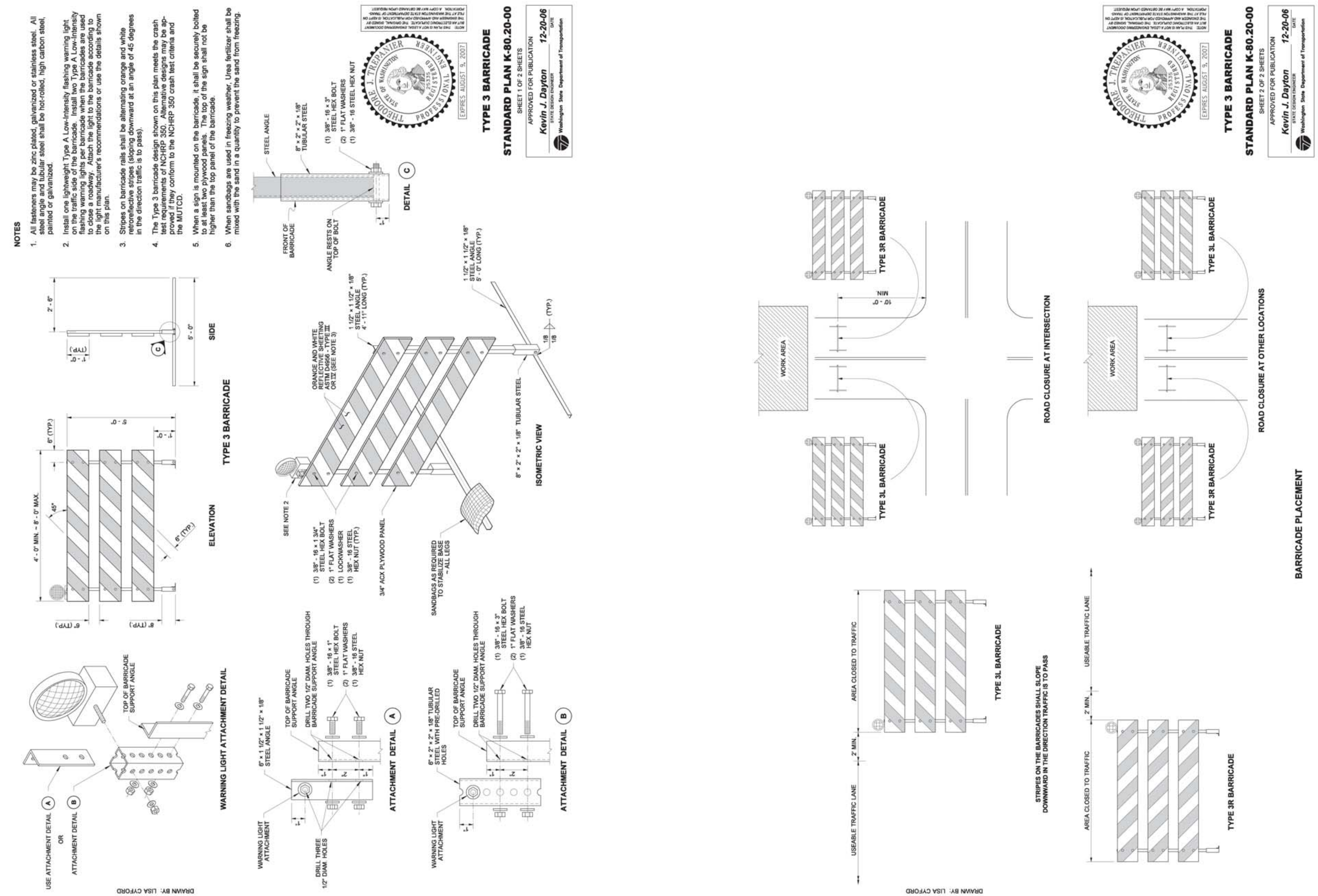

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TRAFFIC CONTROL DETAILS

SHEET 6 OF 52

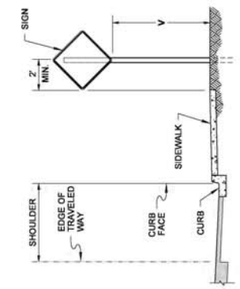
CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 36494

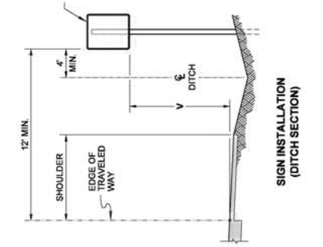
NOTES

1. For sign installation details, see **Standard Plan G - series.**
2. Where it is impractical to locate a sign with the lateral offset, a minimum of 2'(ft) offset may be used. A 1'(ft) lateral offset may be used in business, commercial or residential areas.
3. The **"V"** height for signs, with an area of more than 50 square feet and two or more sign supports, is 7' feet in both rural and urban areas.

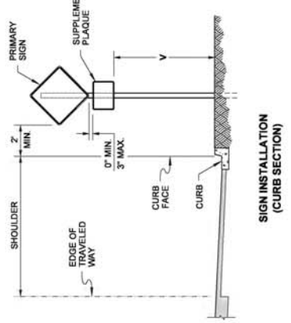
HEIGHT 'V'		
	TO BOTTOM OF SIGN (NO SUPPLEMENTAL PLAQUE)	TO BOTTOM OF SUPPLEMENTAL PLAQUE (WHEN REQUIRED)
RURAL	5' MINIMUM	4' MINIMUM
URBAN	7' MINIMUM	6' MINIMUM



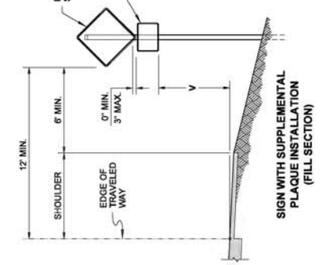
SIGN INSTALLATION (SIDEWALK AND CURB SECTION)



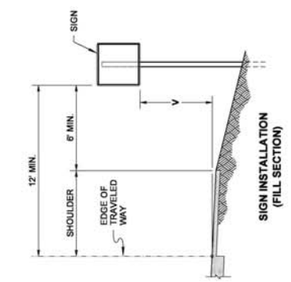
SIGN INSTALLATION (DITCH SECTION)



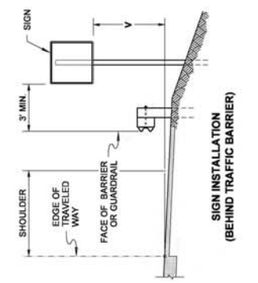
SIGN INSTALLATION (CURB SECTION)



SIGN WITH SUPPLEMENTAL PLAQUE INSTALLATION (FILL SECTION)



SIGN INSTALLATION (FILL SECTION)



SIGN INSTALLATION (BEHIND TRAFFIC BARRIER)

DRAWN BY: FERN LUDELL

Modified: May 16 2016 9:57 AM

CLASS A CONSTRUCTION SIGNING INSTALLATION STANDARD PLAN K-80.10-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Jan 7 2016 4:20 PM

STATE DESIGN ENGINEER
Washington State Department of Transportation

RIGHT-OF-WAY DISCLAIMER

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TRAFFIC CONTROL DETAILS

SHEET 7 OF 52

CALL 48 HOURS BEFORE YOU DIG
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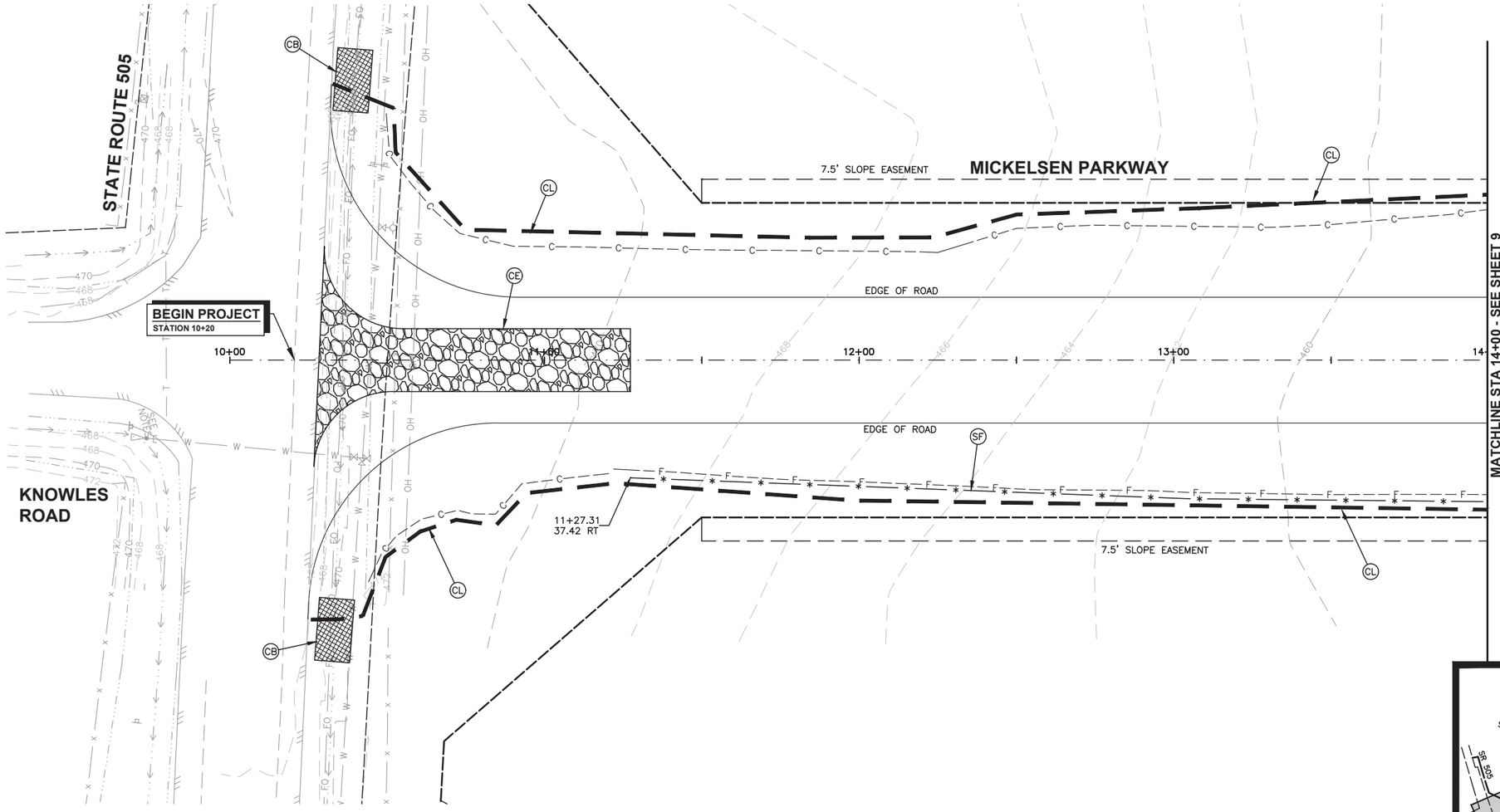


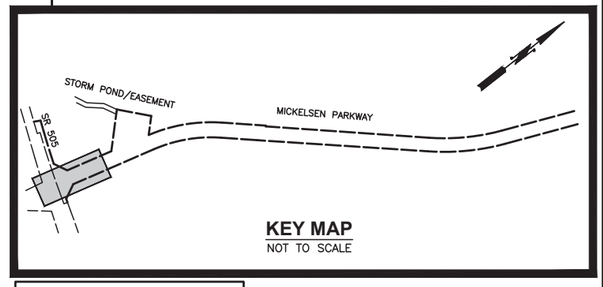
20' 10' 0 20' 40'

SCALE: 1"=20'

TESC LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
	SF	SILT FENCE
	CE	CONSTRUCTION ENTRANCE
	CL	CLEARING LIMITS
	IP	STORM INLET PROTECTION
	CB	EROSION CONTROL BLANKET

EROSION/SEDIMENTATION CONTROL NOTE

1. THE EROSION AND SEDIMENTATION CONTROL SYSTEMS DEPICTED ON THE DRAWINGS ARE IDENTIFIED IN SENSITIVE AREAS. NOT ALL EROSION CONTROL MEASURE ARE DEPICTED ON THE DRAWINGS. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE BMPS THROUGHOUT THE ENTIRE PROJECT. AS CONSTRUCTION PROGRESSES AND AS UNEXPECTED OR SEASONAL CONDITIONS DICTATE, THE CONTRACTOR SHOULD ANTICIPATE THAT MORE EROSION AND SEDIMENTATION CONTROL FACILITIES WILL BE NECESSARY TO INSURE COMPLETE SILTATION CONTROL ON THE PROPOSED SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES AND THE WATER QUALITY OF THE RECEIVING DRAINAGE SYSTEM.



KEY MAP
NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STATION 10+00 TO 14+00

SHEET **8** OF **52**

CALL 48 HOURS BEFORE YOU DIG
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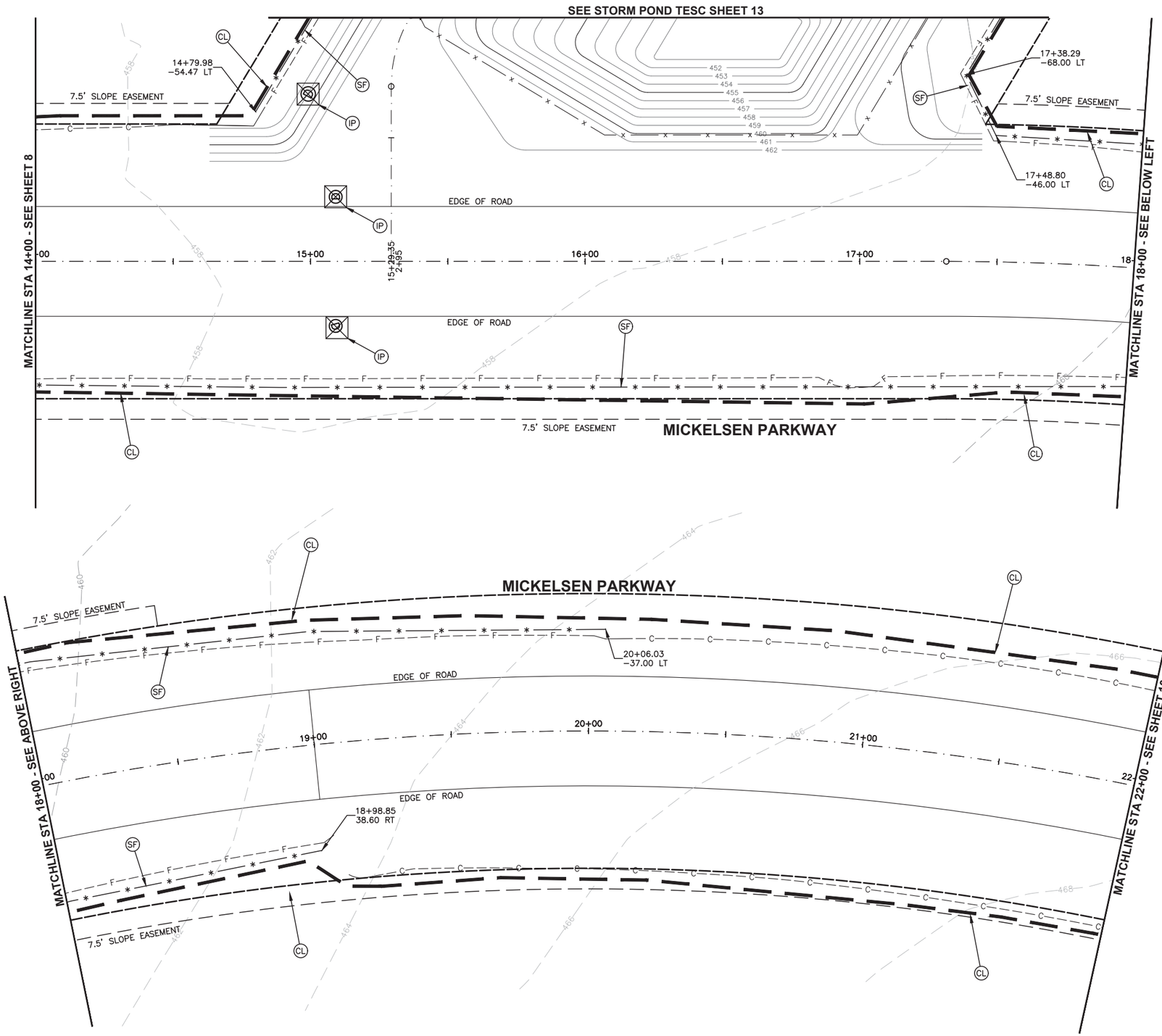

20' 10' 0 20' 40'

SCALE: 1"=20'

TESC LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
— * —	(SF)	SILT FENCE
	(CE)	CONSTRUCTION ENTRANCE
	(CL)	CLEARING LIMITS
	(IP)	STORM INLET PROTECTION
	(CB)	EROSION CONTROL BLANKET

EROSION/SEDIMENTATION CONTROL NOTE

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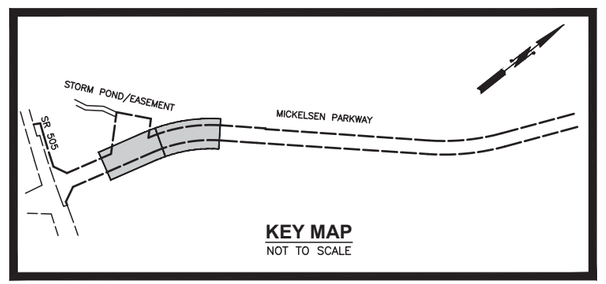

KEY MAP
NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON — STATE OF WASHINGTON — 36484 — REGISTERED PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STATION 14+00 TO 22+00

SHEET 9 OF 52

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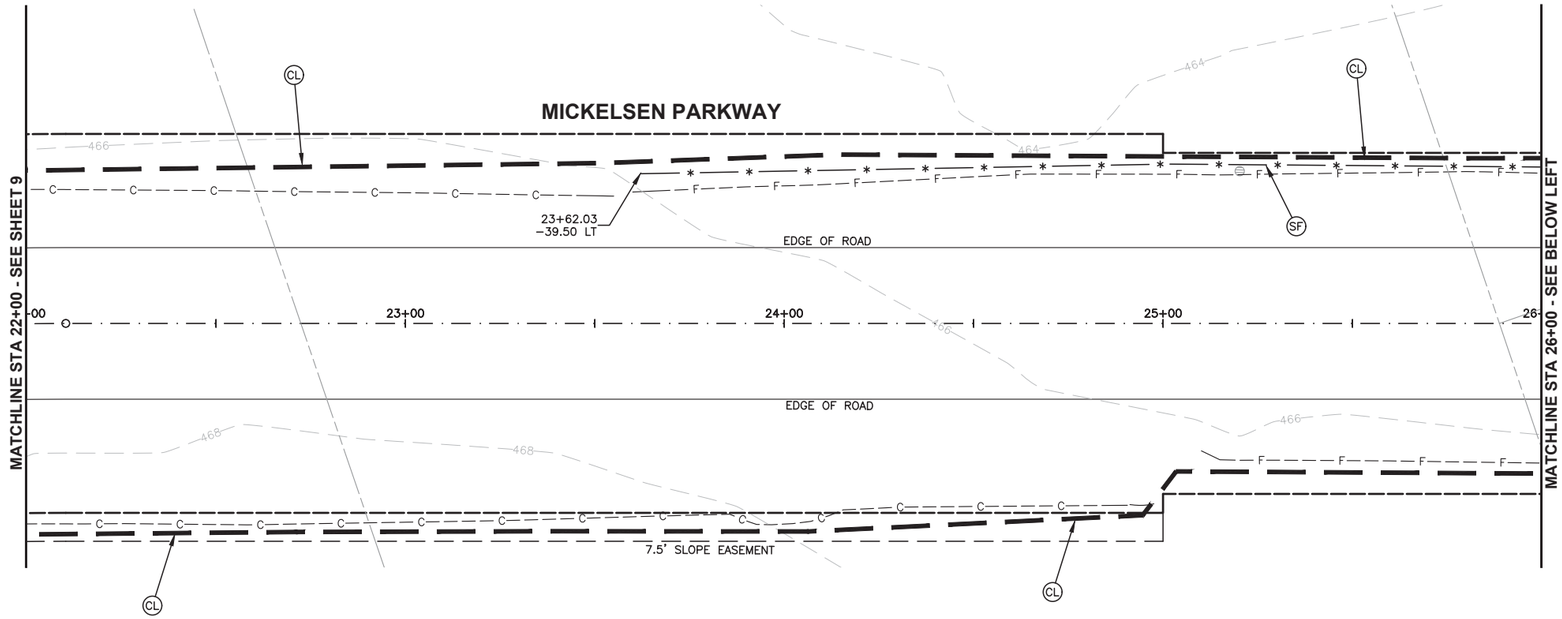
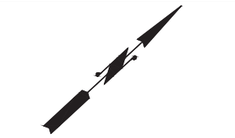
"It's the Law"
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\TESC_PLN.dwg, 6/8/2020 11:06 AM, SHARI GAER





20' 10' 0 20' 40'

SCALE: 1"=20'

TESC LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
— * —	(SF)	SILT FENCE
	(CE)	CONSTRUCTION ENTRANCE
	(CL)	CLEARING LIMITS
	(IP)	STORM INLET PROTECTION
	(CB)	EROSION CONTROL BLANKET

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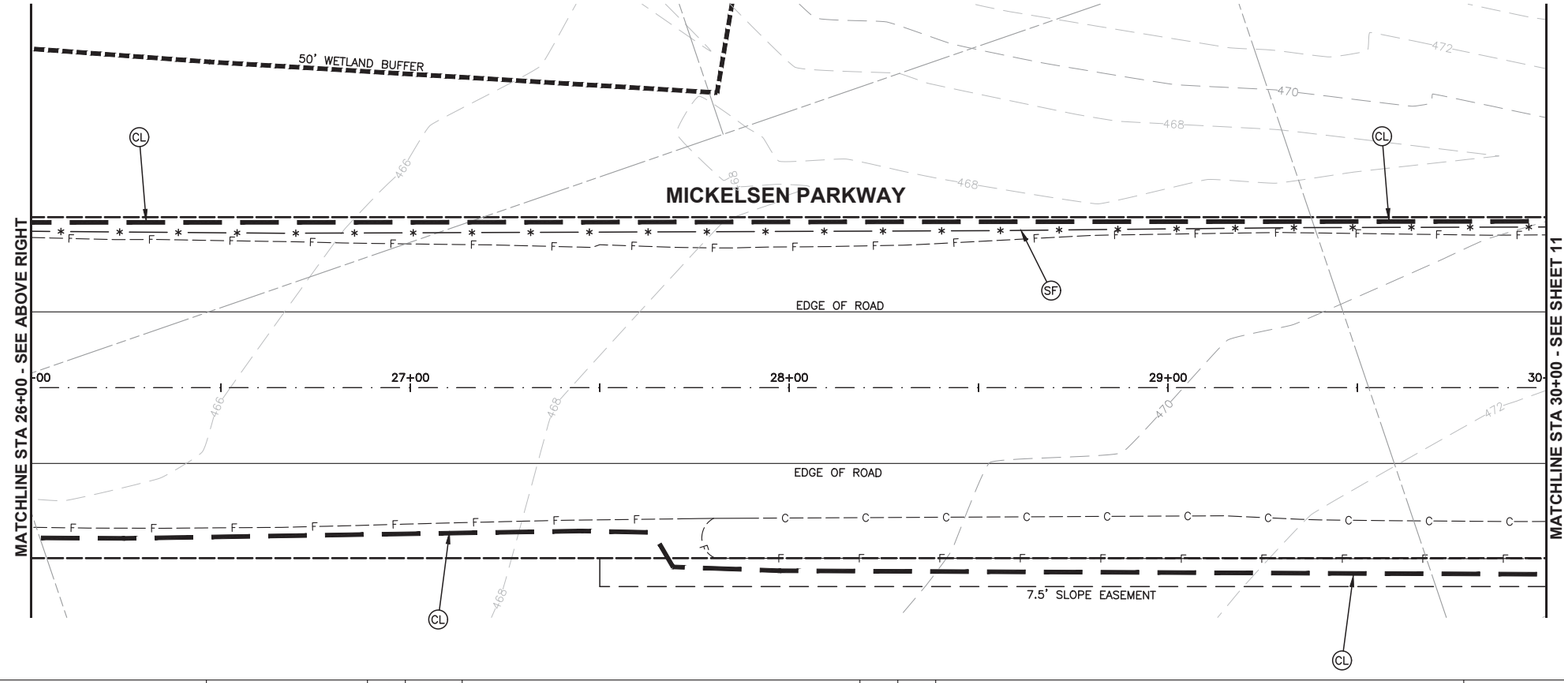

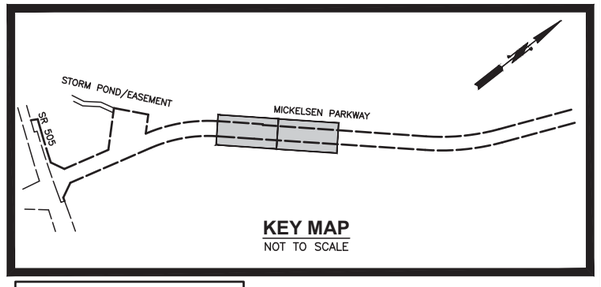

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06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
36484
REGISTERED
PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STATION 22+00 TO 30+00

SHEET 10 OF 52

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Utilities Underground Location Center

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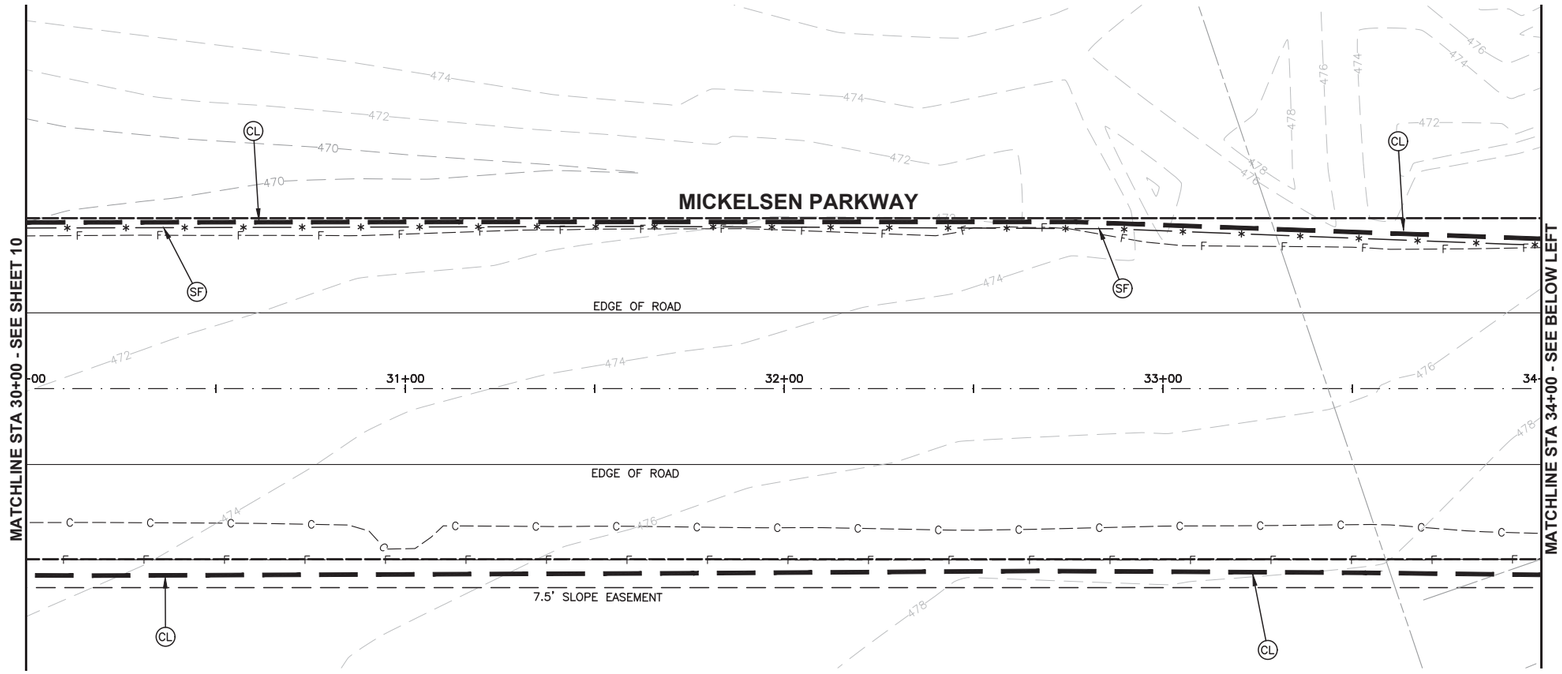

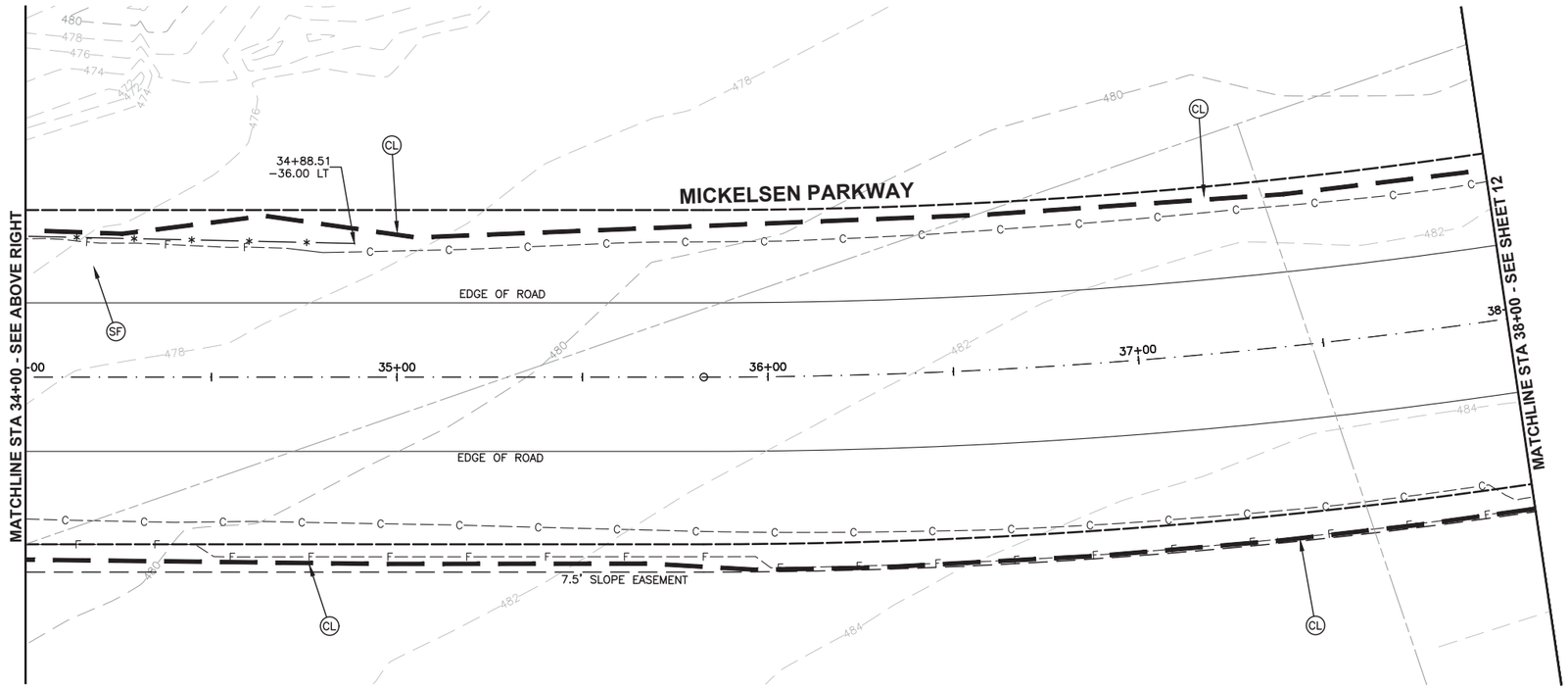

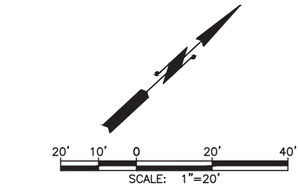

TESC LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
— * —	SF	SILT FENCE
	CE	CONSTRUCTION ENTRANCE
	CL	CLEARING LIMITS
	IP	STORM INLET PROTECTION
	CB	EROSION CONTROL BLANKET

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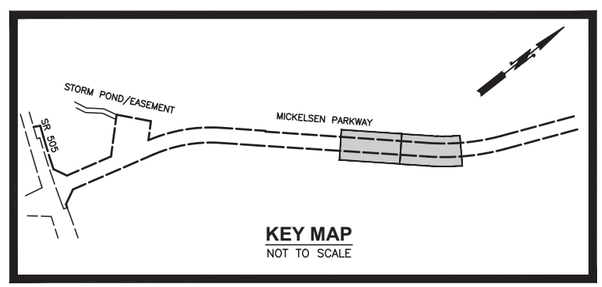

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Lewis County — Department of Public Works

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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STATION 30+00 TO 38+00

SHEET 11 OF 52

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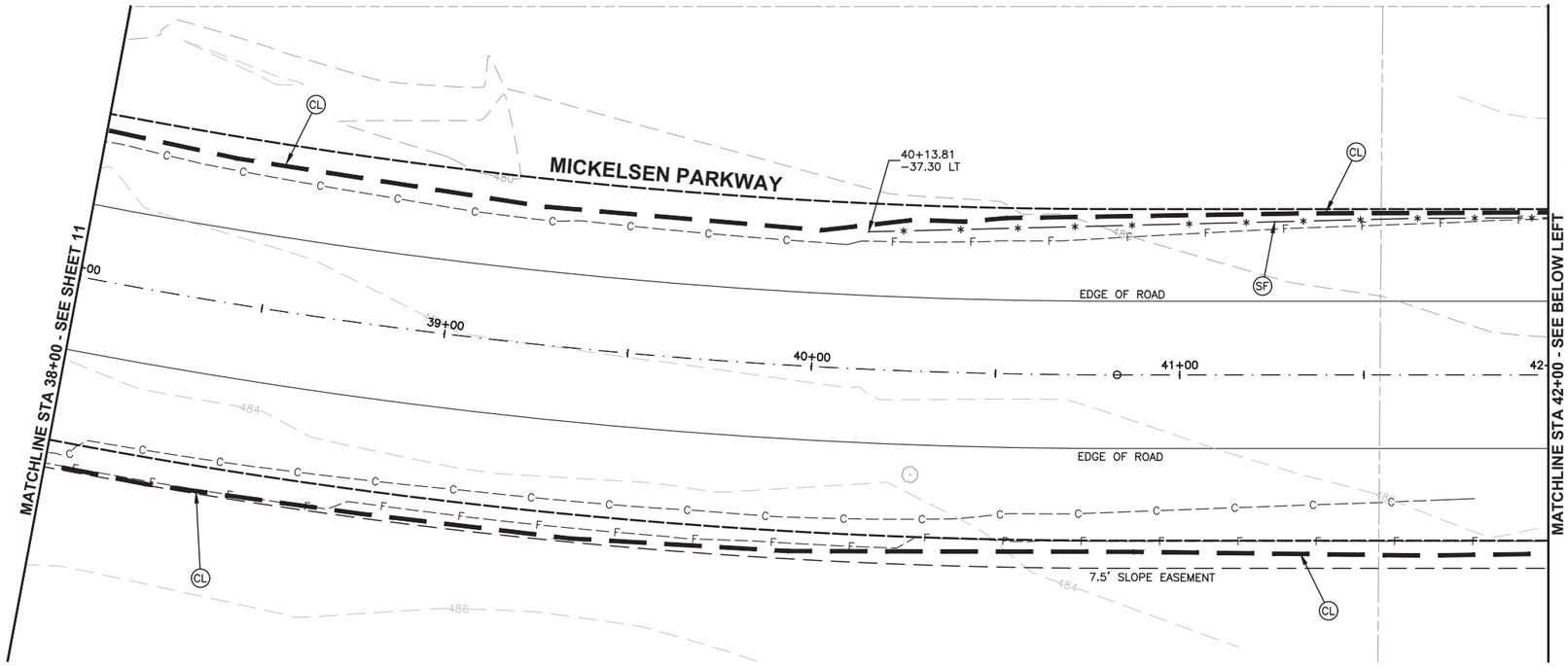

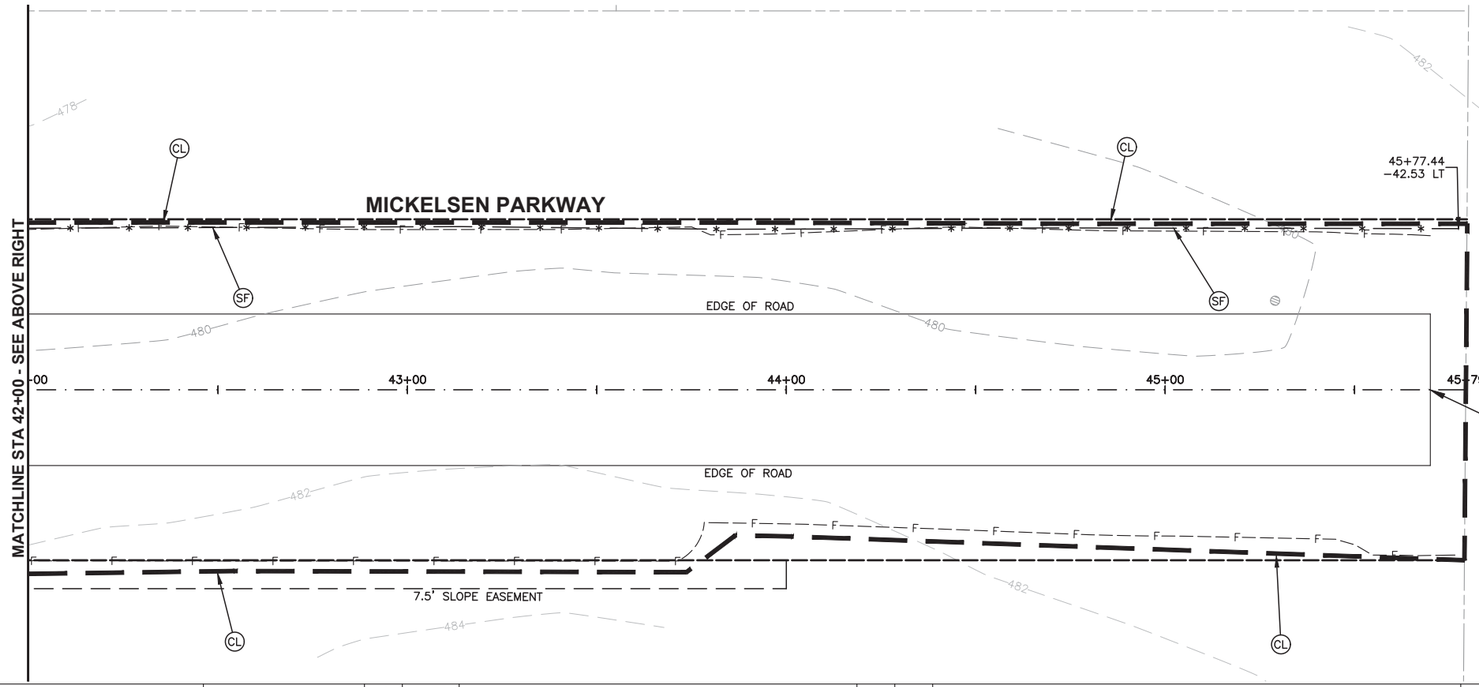

20' 10' 0 20' 40'

SCALE: 1"=20'

TESC LEGEND

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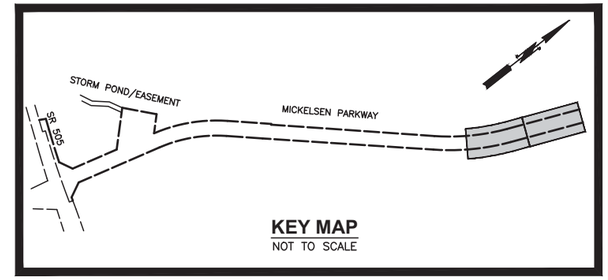

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DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STATION 38+00 TO 45+79

SHEET 12 OF 52

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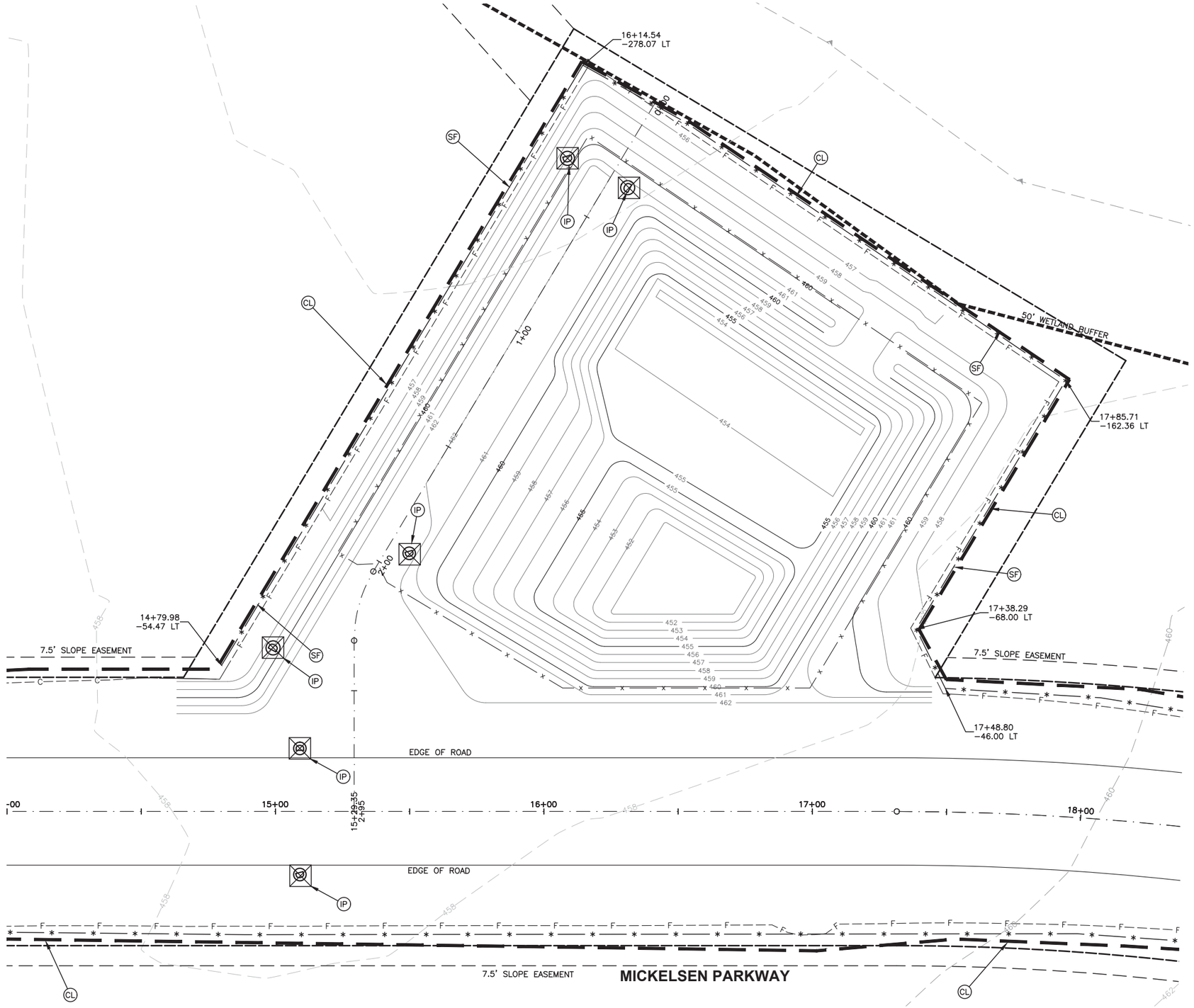

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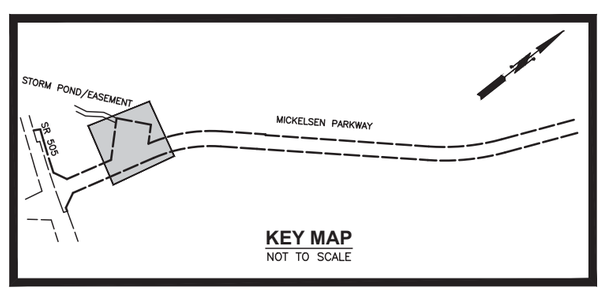

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Lewis County
Department of Public Works

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DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
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DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

TESC PLAN
STORM POND

SHEET
13
OF
52

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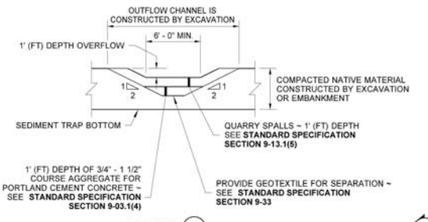
MICKELSEN PARKWAY

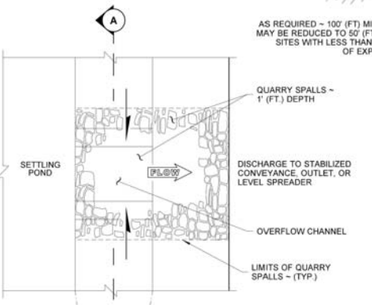
COUNTY ROAD PROJECT NO: 2121

TESC DETAILS

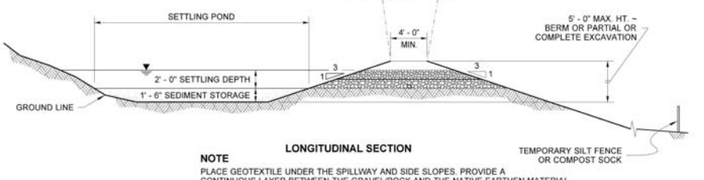
SHEET 14 OF 52



SECTION (A)



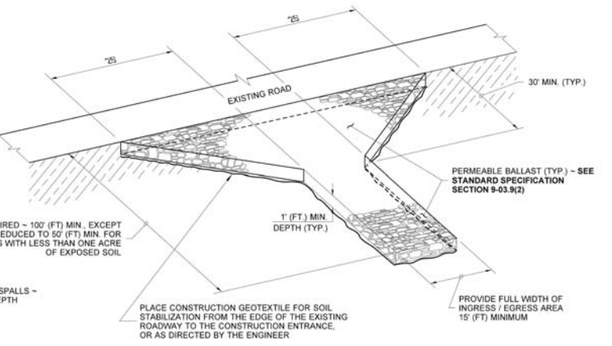
PARTIAL PLAN VIEW OF BERM
SHOWN LARGER FOR CLARITY



LONGITUDINAL SECTION

NOTE
PLACE GEOTEXTILE UNDER THE SPILLWAY AND SIDE SLOPES. PROVIDE A CONTINUOUS LAYER BETWEEN THE GRAVEL/ROCK AND THE NATIVE EARTHEN MATERIAL.

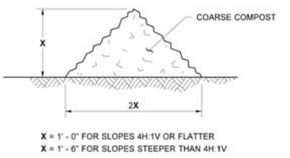
TEMPORARY SEDIMENT TRAP



ISOMETRIC VIEW

STABILIZED CONSTRUCTION ENTRANCE

STABILIZED CONSTRUCTION ENTRANCE SHALL MEET THE REQUIREMENTS OF **STANDARD SPECIFICATION SECTION 8-01.3(7).**



X = 1' - 0" FOR SLOPES 4H:1V OR FLATTER
X = 1' - 6" FOR SLOPES STEEPER THAN 4H:1V

TYPICAL SECTION

COMPOST BERM DETAIL

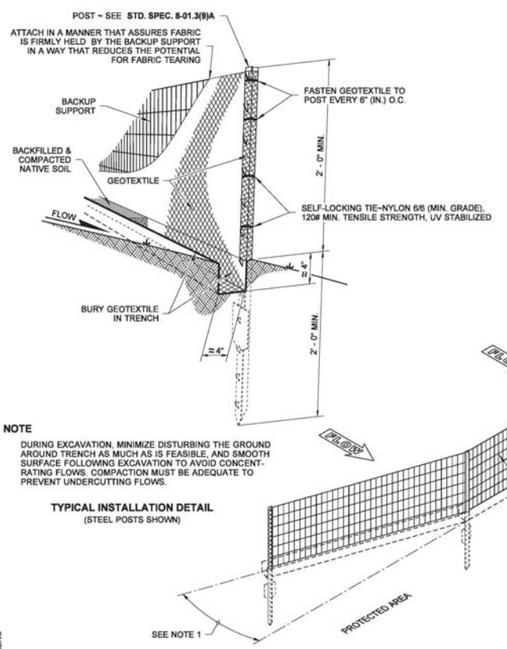
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
JULI DEE HARTWIG
LICENSE NO. 1422
DATE: 06-21-17

MISCELLANEOUS EROSION CONTROL DETAILS

STANDARD PLAN I-80.10-02

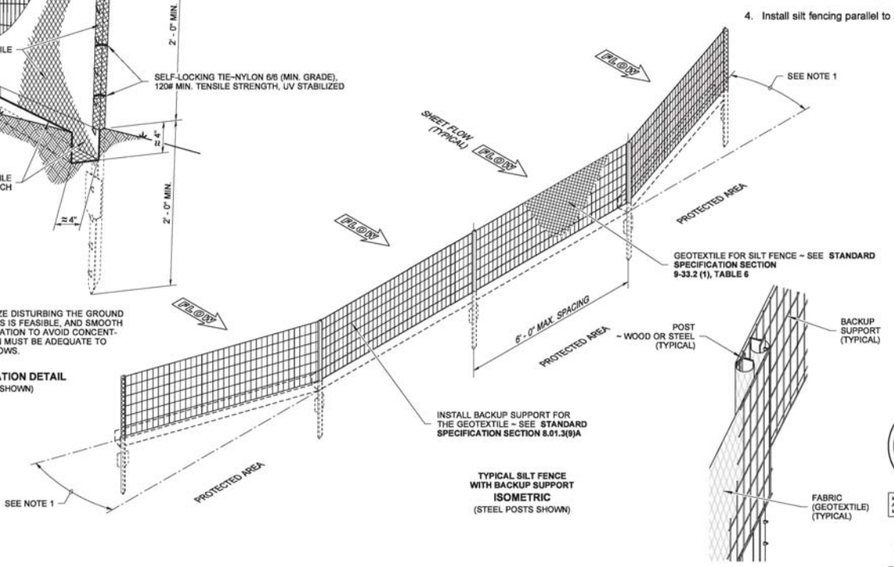
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 15 2016 2:28 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation



NOTE
DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)



TYPICAL SILT FENCE WITH BACKUP SUPPORT
ISOMETRIC
(STEEL POSTS SHOWN)

SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP.

SPLICE DETAIL
(STEEL POSTS SHOWN)

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15).**
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
SANDRA L. SALISBURY
CERTIFICATE NO. 000860

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

SILT FENCE WITH BACKUP SUPPORT

STANDARD PLAN I-30.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 3/22/13
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

DRAWN BY: BILL BERENS

RIGHT-OF-WAY DISCLAIMER
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0
1"
2"

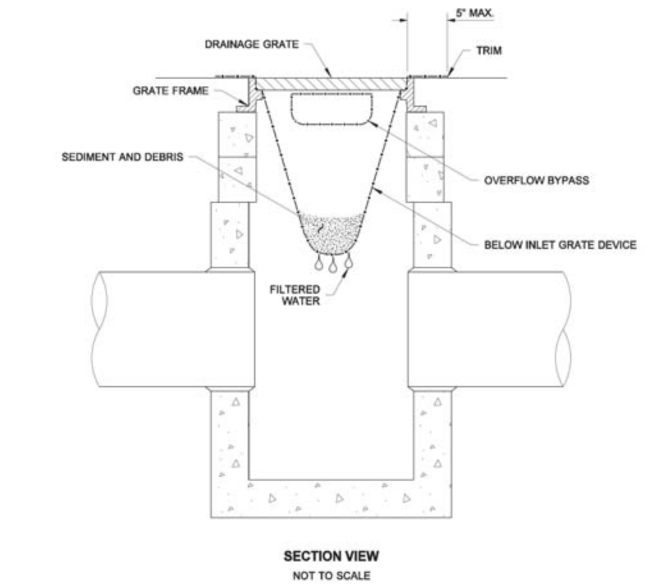
JON MARSHALL HILTON
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
(06-08-20)

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\TESC_DET.dwg, 6/8/2020 11:06 AM, SHARI GAER

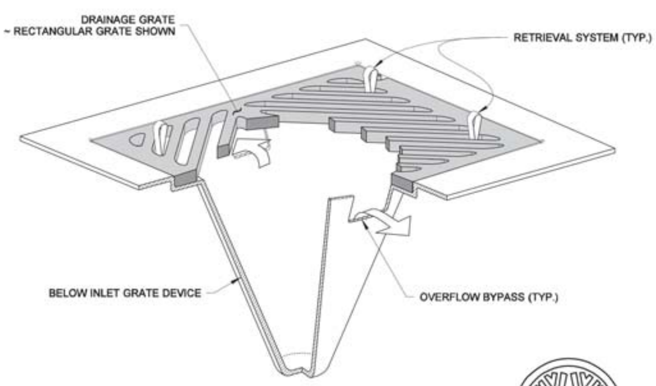
DRAWN BY: LISA CYFORD

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



SECTION VIEW
NOT TO SCALE

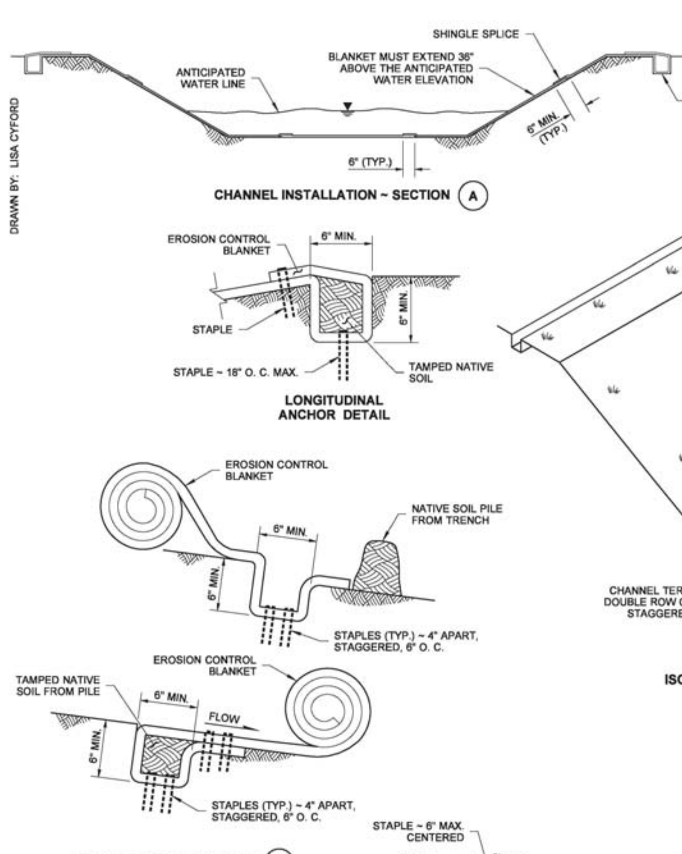


ISOMETRIC VIEW

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
MARK W. MAURER
CERTIFICATE NO. 000598

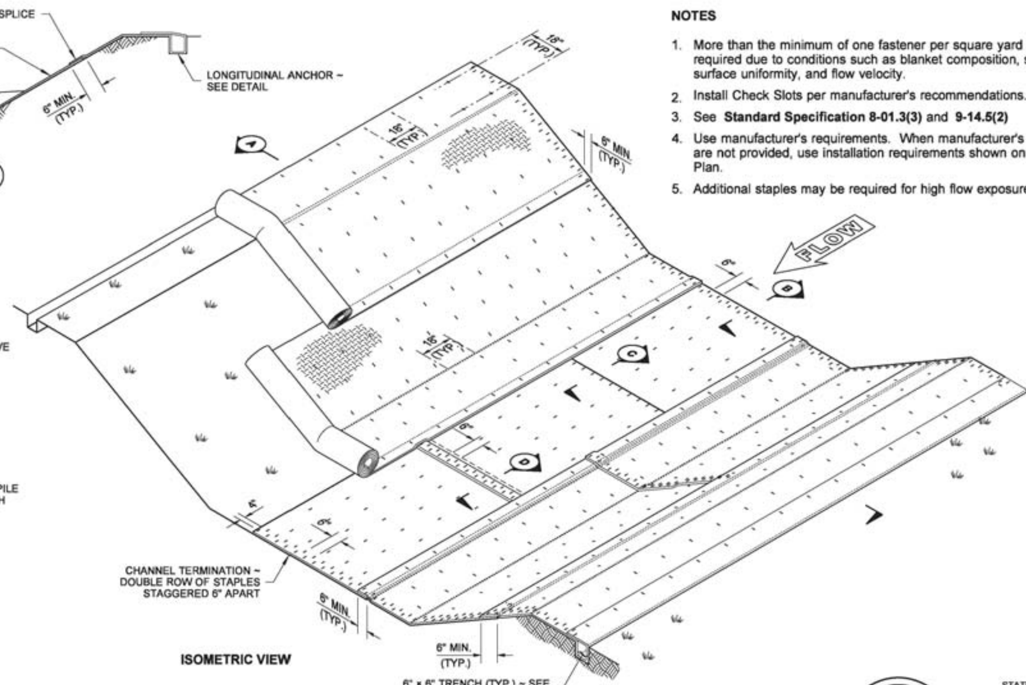
STORM DRAIN INLET PROTECTION
STANDARD PLAN I-40.20-00
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III — 09-20-07
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

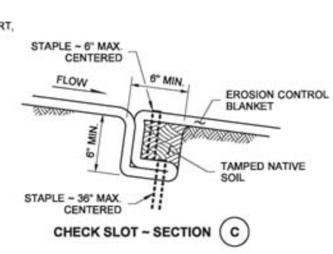


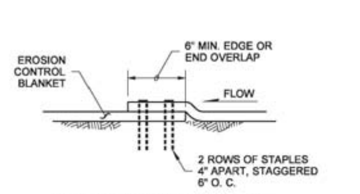
NOTES

1. More than the minimum of one fastener per square yard may be required due to conditions such as blanket composition, soil type, surface uniformity, and flow velocity.
2. Install Check Slots per manufacturer's recommendations.
3. See **Standard Specification 8-01.3(3)** and **9-14.5(2)**
4. Use manufacturer's requirements. When manufacturer's requirements are not provided, use installation requirements shown on Standard Plan.
5. Additional staples may be required for high flow exposure.



ISOMETRIC VIEW





INSTALLATION STEPS:

1. Prepare smooth slope.
2. Amend soil and seed, as specified.
3. Dig anchor trench. Set aside native soil removed from trench.
4. Secure blanket in anchor trench, staking or stapling blanket as shown.
5. Replace native soil previously removed from trench.
6. Roll blanket parallel to the slope in a controlled manner, taking care to remove excess slack, and taking care not to stretch blanket.
7. Stake or staple blanket as shown so there are no gaps between the blanket and the soil. Staple while unrolling blanket to minimize walking on blanket.

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
SANDRA L. SALISBURY
LICENSE NO. 860
DATE: 6/6/13

BIODEGRADABLE EROSION CONTROL BLANKET PLACEMENT FOR DITCHES
STANDARD PLAN I-60.20-01
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III — 6/10/13
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

RIGHT-OF-WAY DISCLAIMER
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0 — 1" — 2"
TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

Lewis County Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

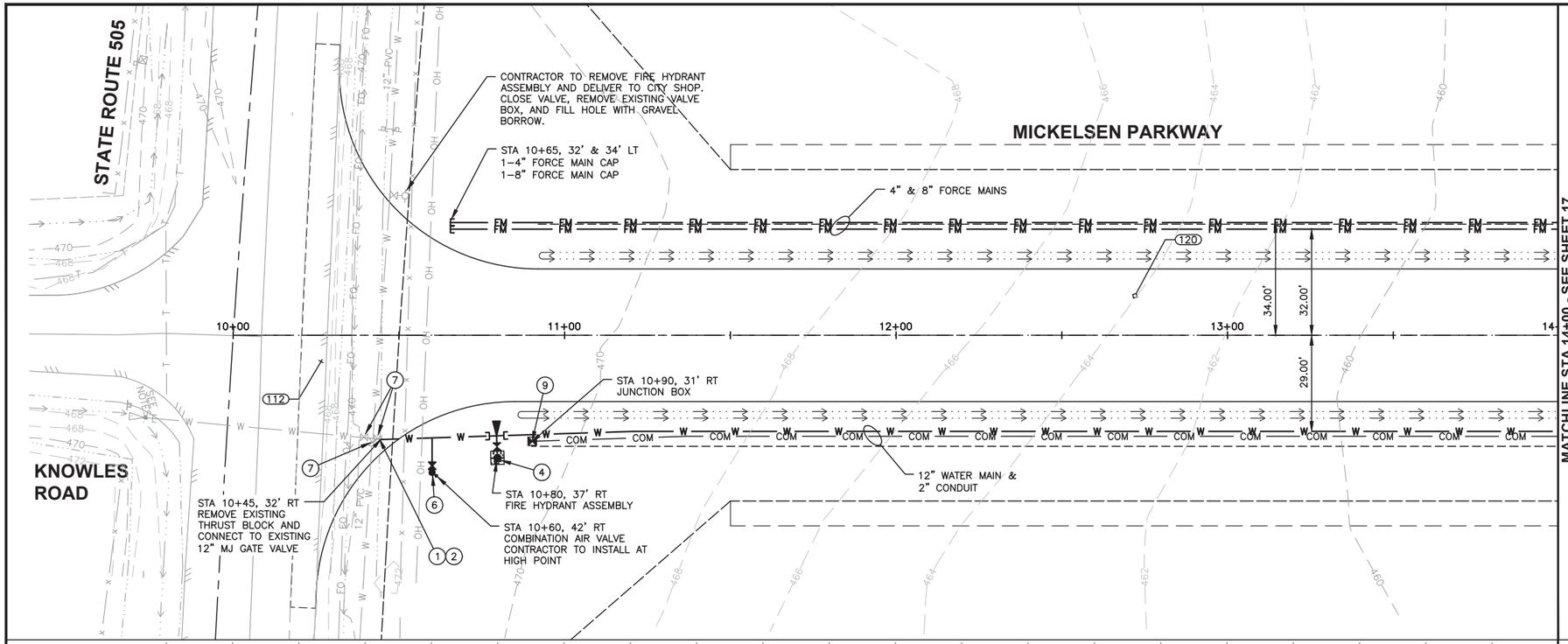
COUNTY ROAD PROJECT NO: 2121

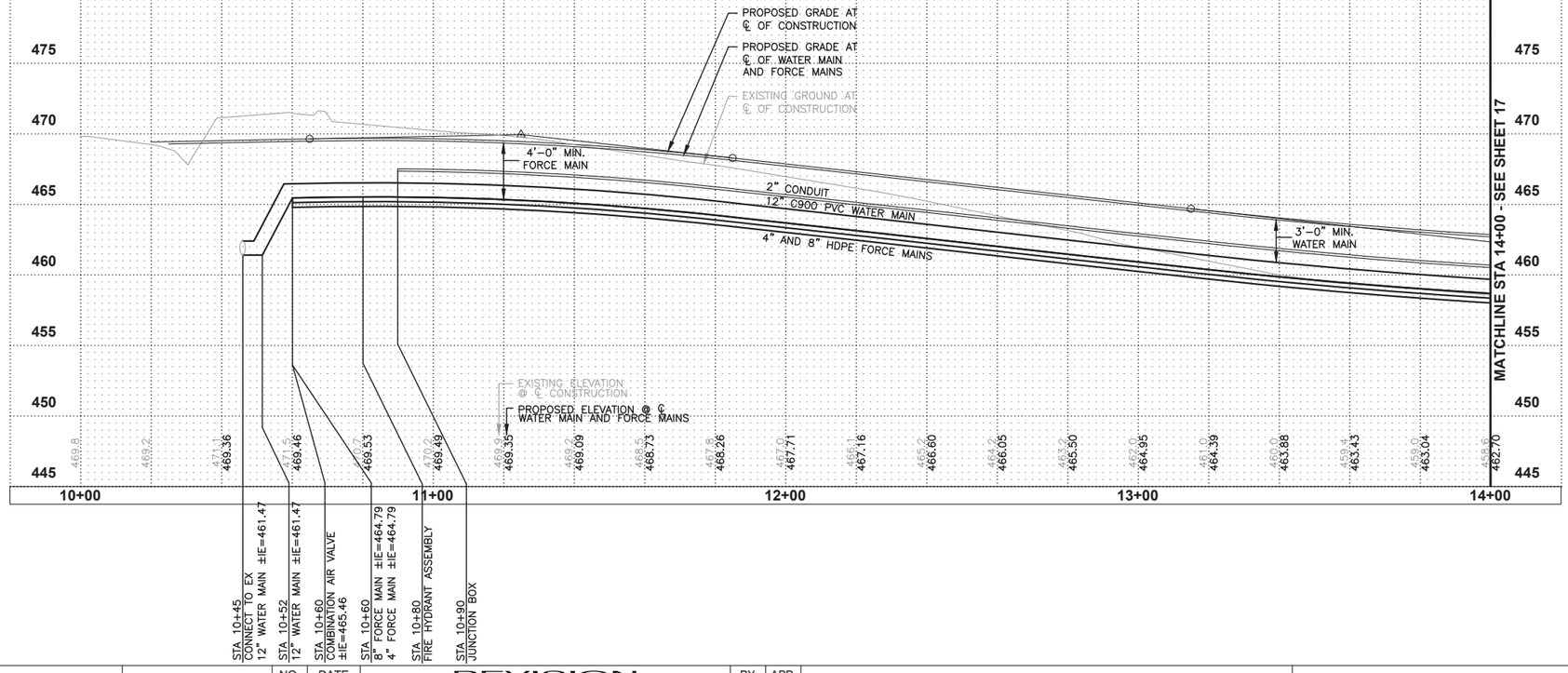
TESC DETAILS

SHEET 15 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON — STATE OF WASHINGTON — 36494 — REGISTERED PROFESSIONAL ENGINEER





20' 10' 0 20' 40'

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=5'

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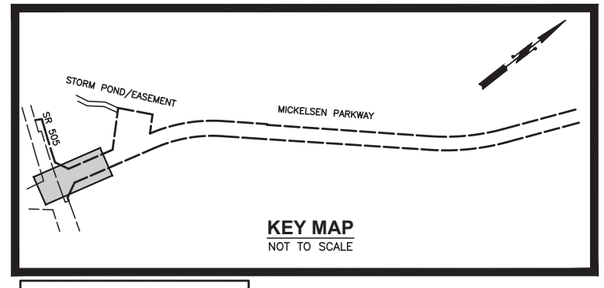

KEY MAP
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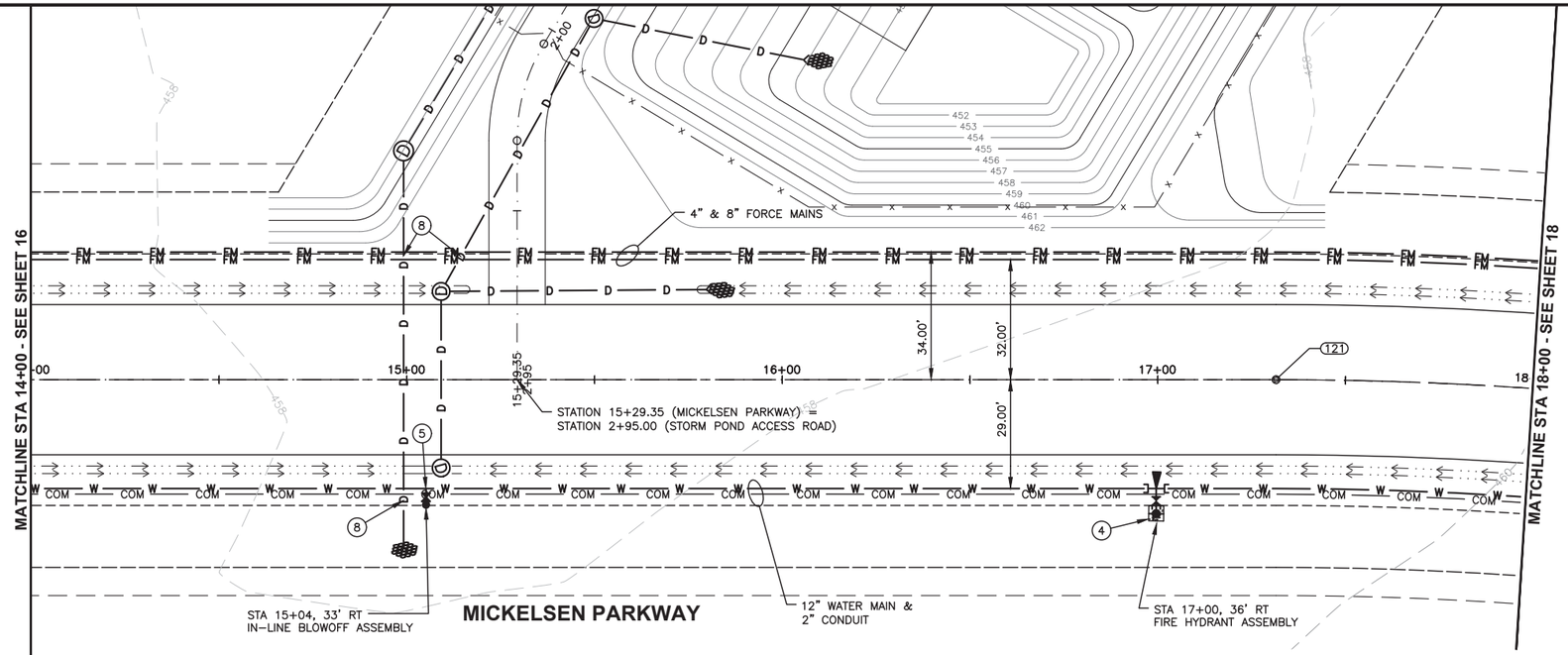
COUNTY ROAD PROJECT NO: 2121

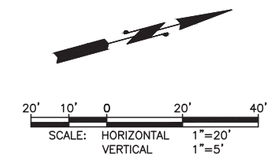
WATER AND FORCE MAIN PLAN AND PROFILE STATION 10+00 TO 14+00

SHEET 16 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\WAT_PLN-PRO.dwg, 6/8/2020 11:10 AM, SHARI GAER





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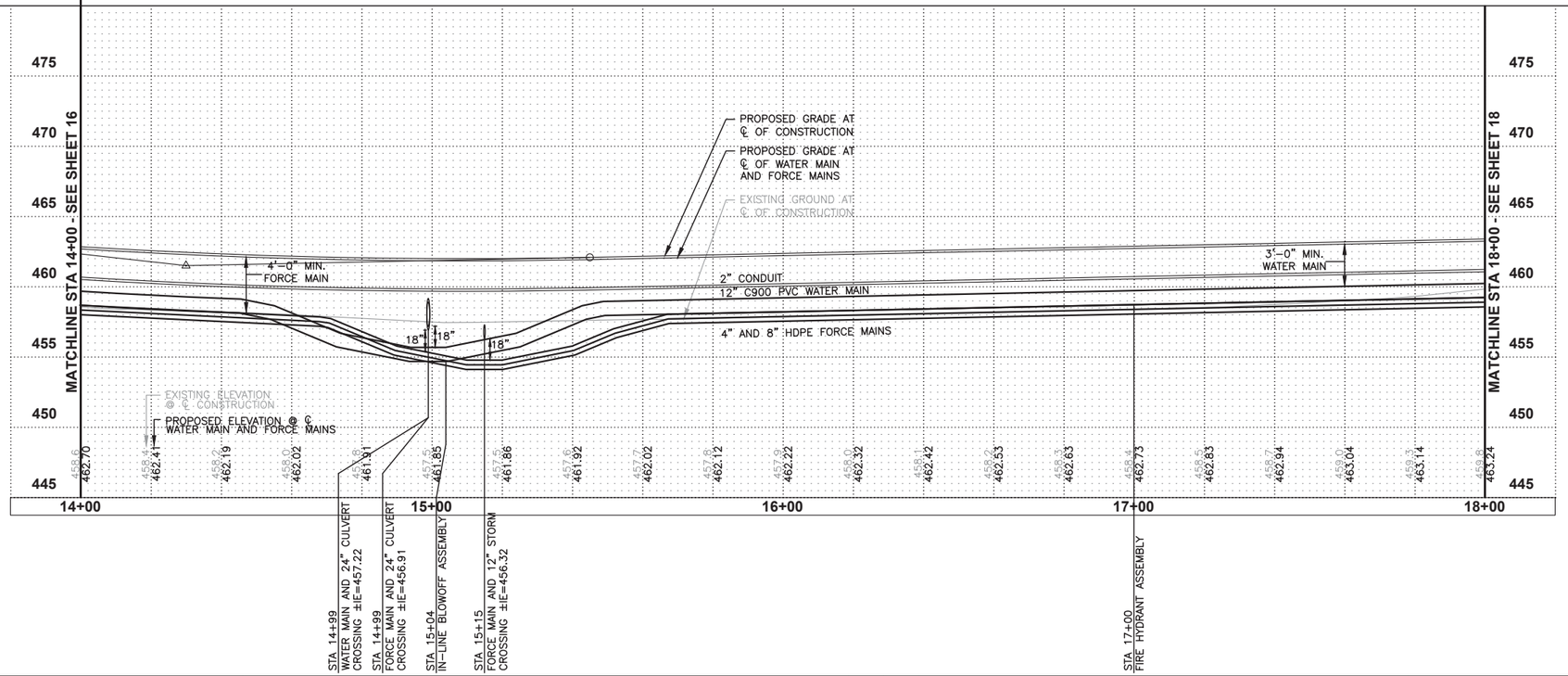

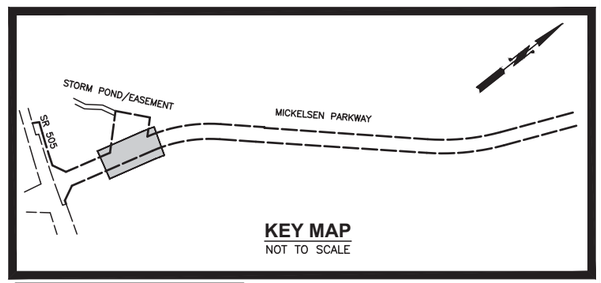

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DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 14+00 TO 18+00

SHEET 17 OF 52

CALL 48 HOURS BEFORE YOU DIG
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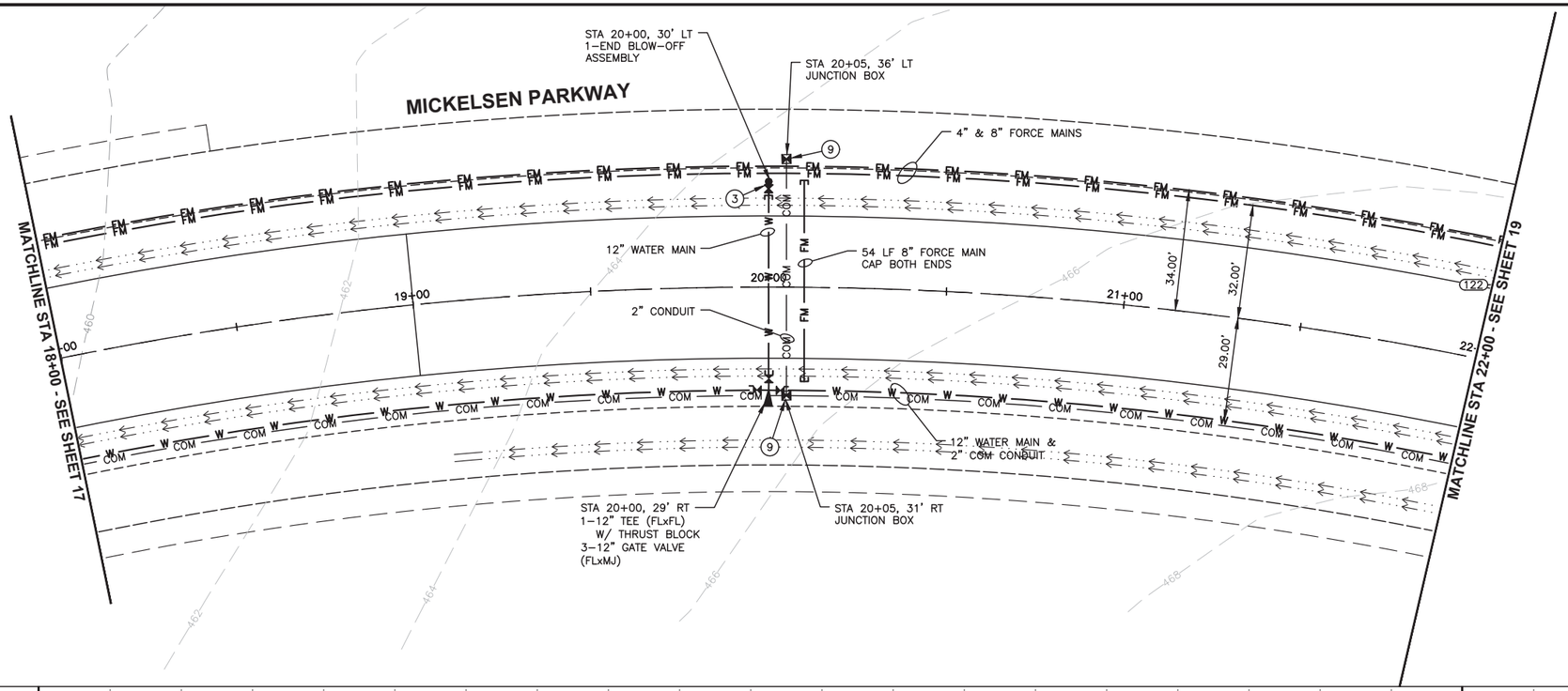

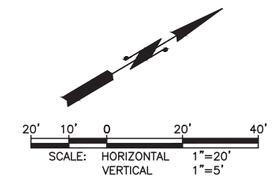

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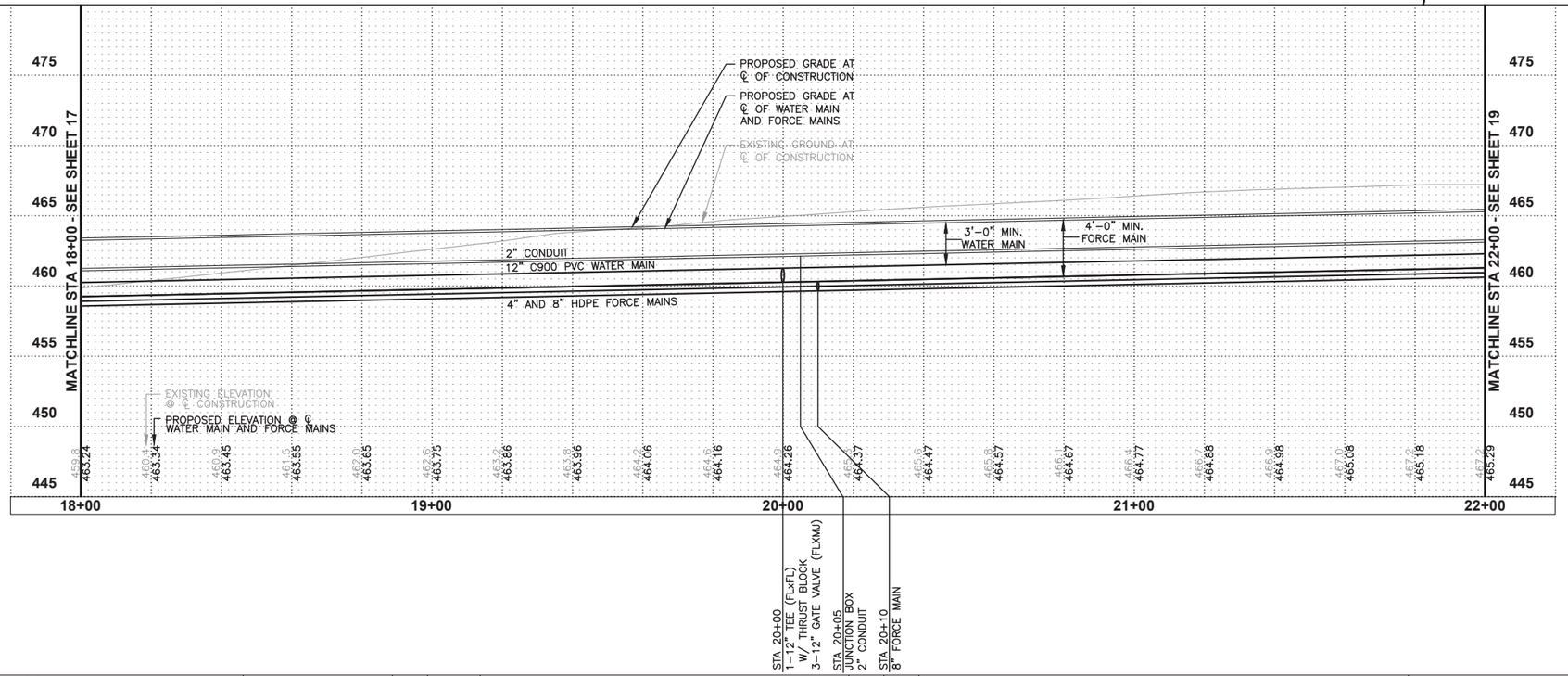

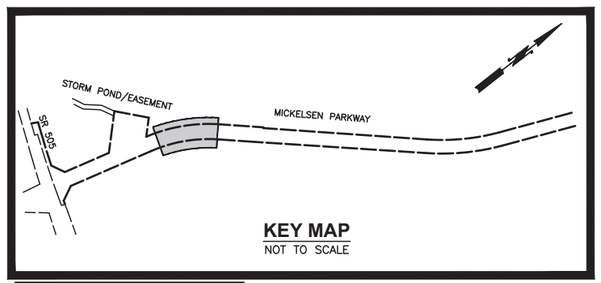

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Lewis County
Department of Public Works

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DRAWN BY : C. GASKIN
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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 18+00 TO 22+00

SHEET 18 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

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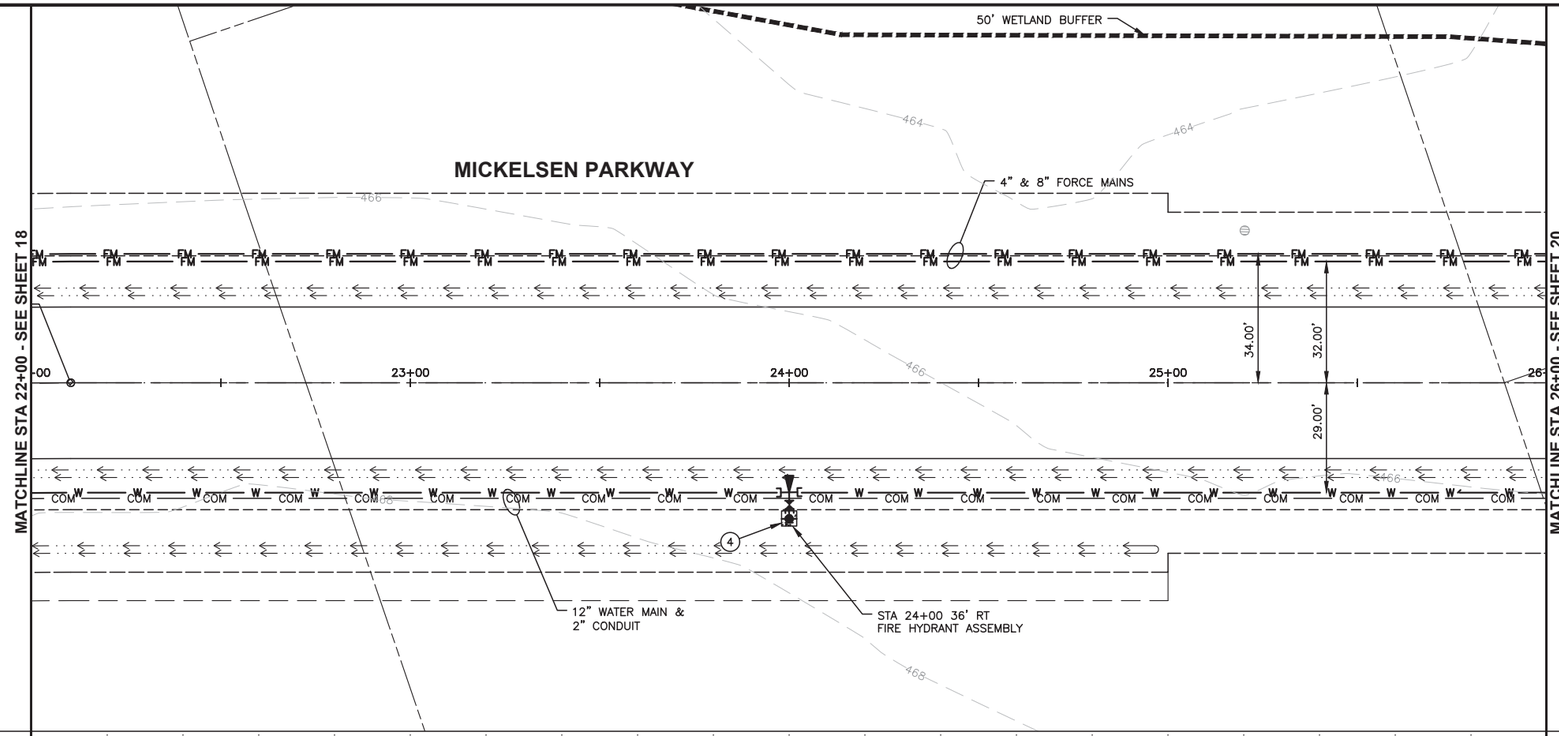

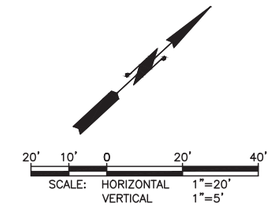

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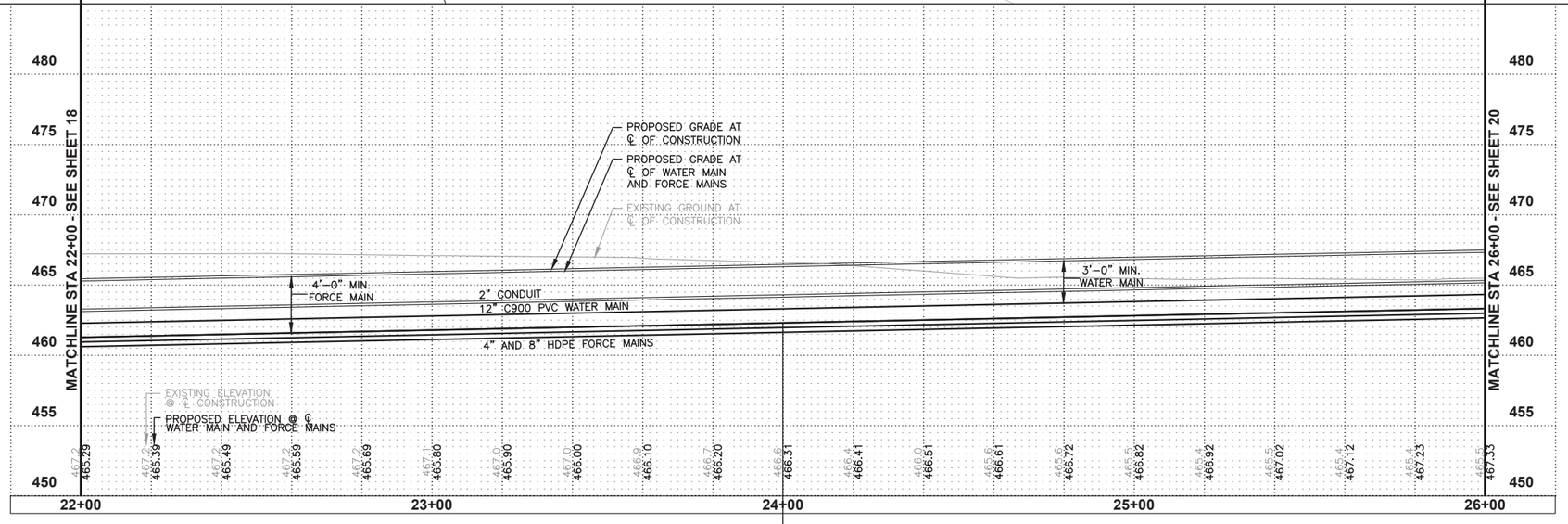

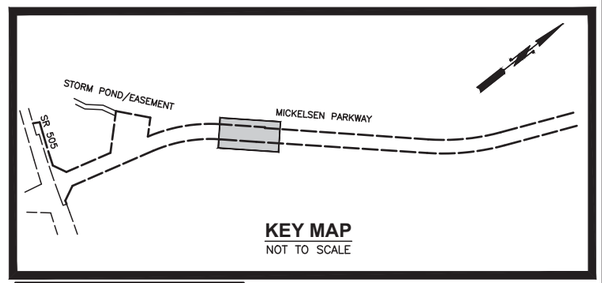

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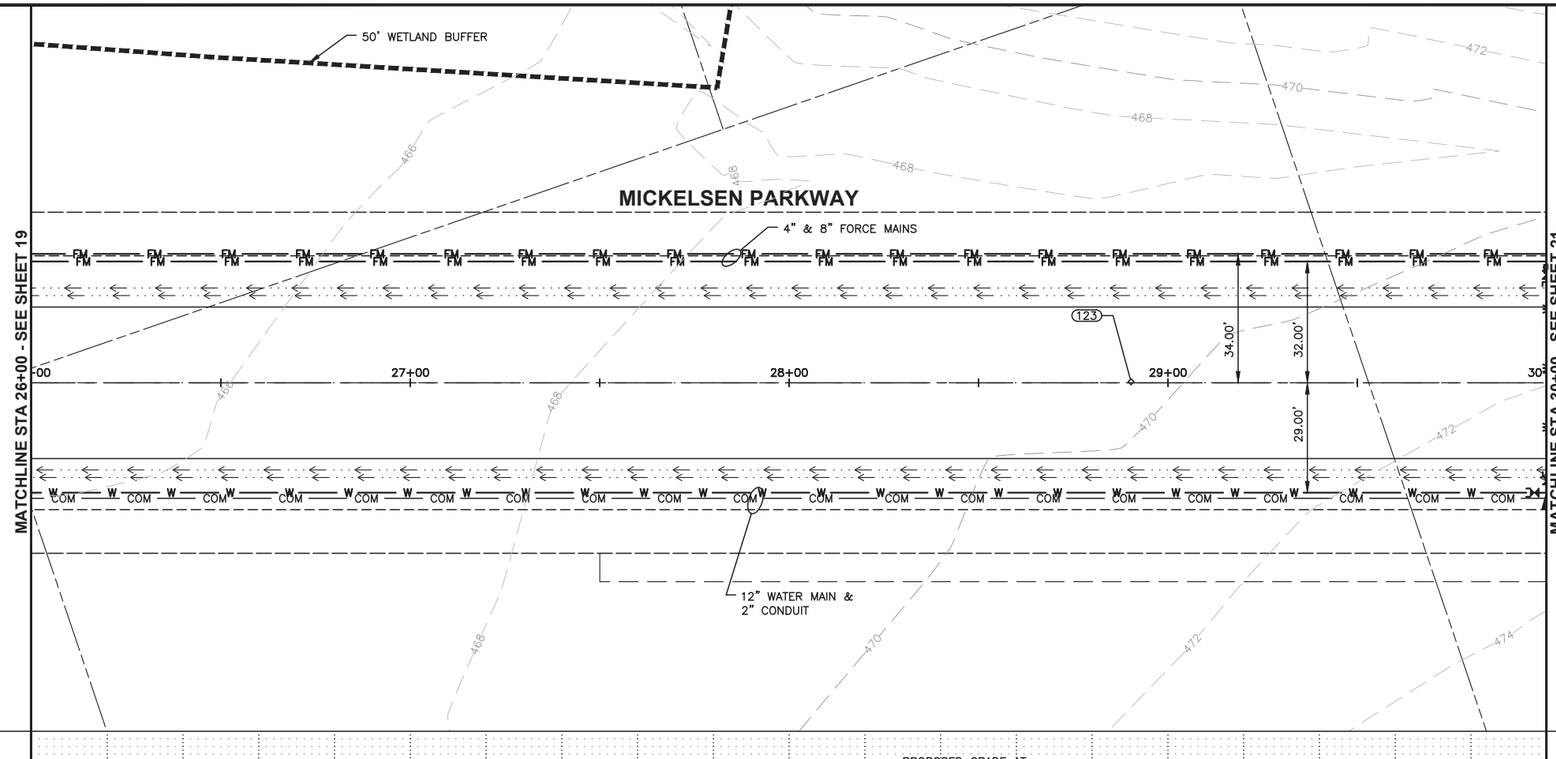
MICKELSEN PARKWAY

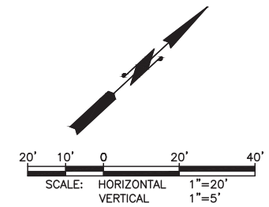
COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 22+00 TO 26+00

SHEET 19 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center





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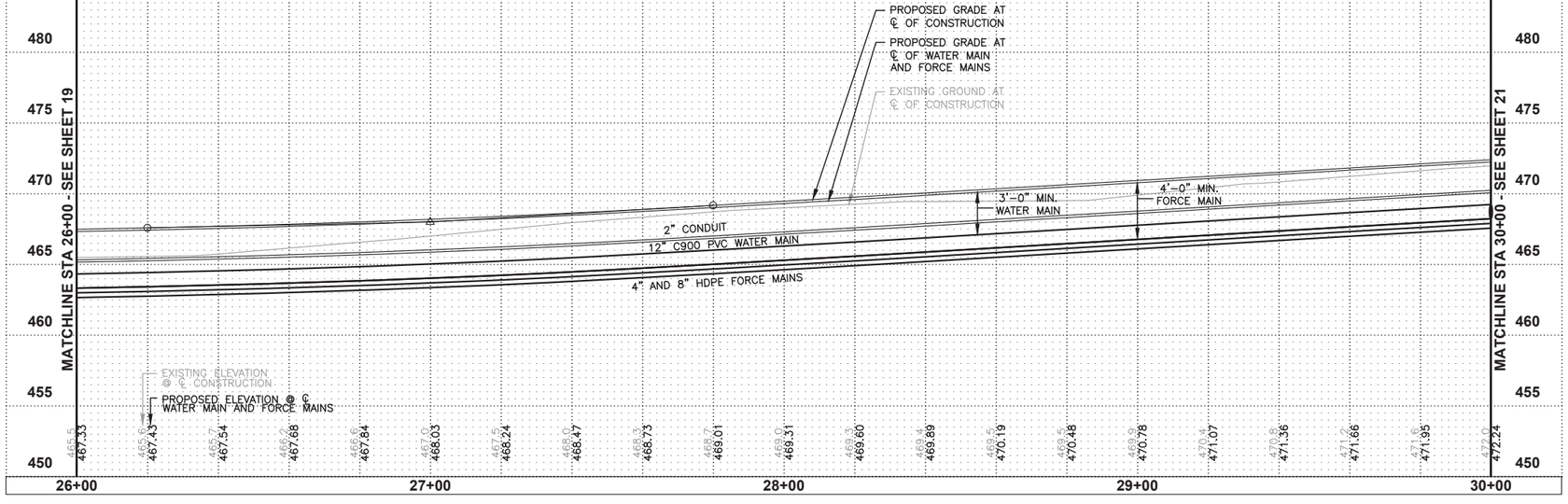

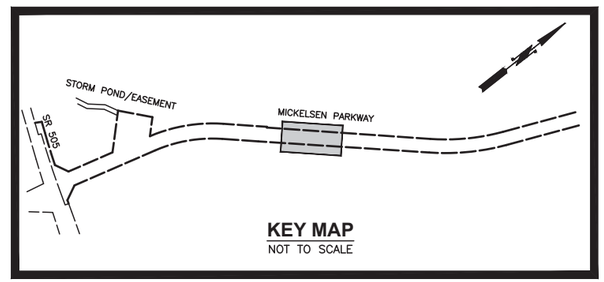

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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 26+00 TO 30+00

SHEET 20 OF 52

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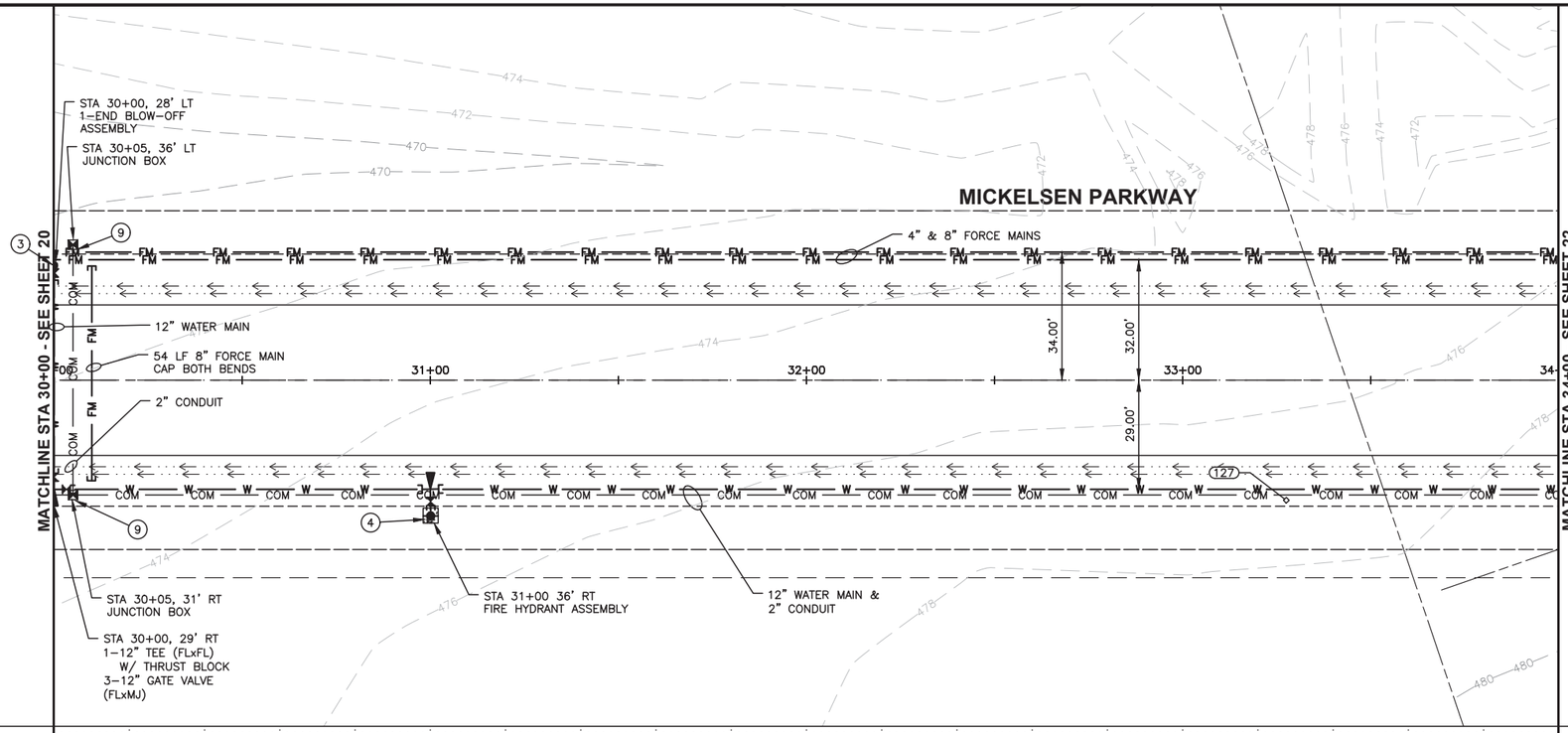

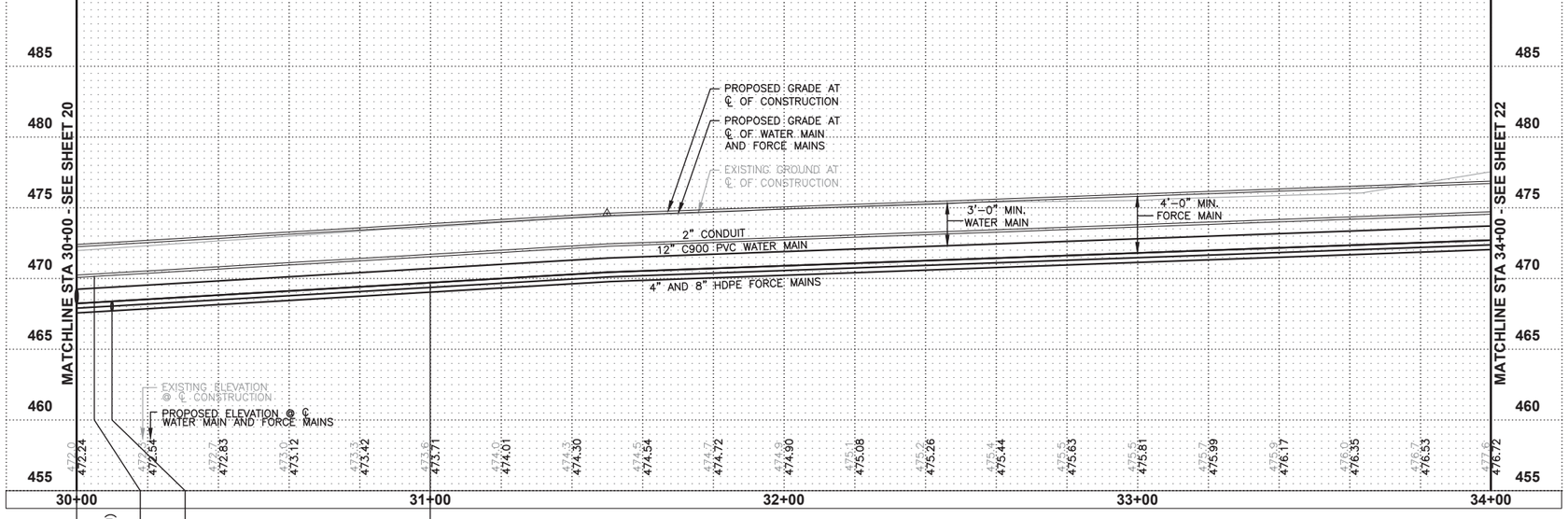

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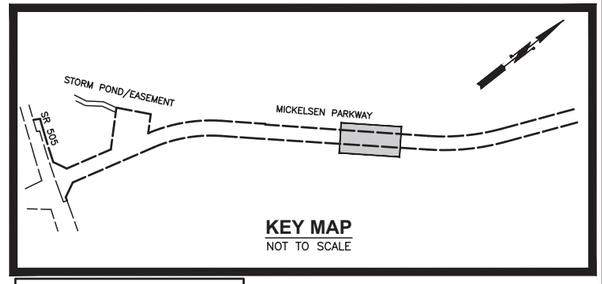
ALL FITTINGS IN FILL AREA SHALL BE RESTRAINED.



KEY MAP
NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"
TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 30+00 TO 34+00

SHEET 21 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON
STATE OF WASHINGTON
36484
REGISTERED
PROFESSIONAL ENGINEER

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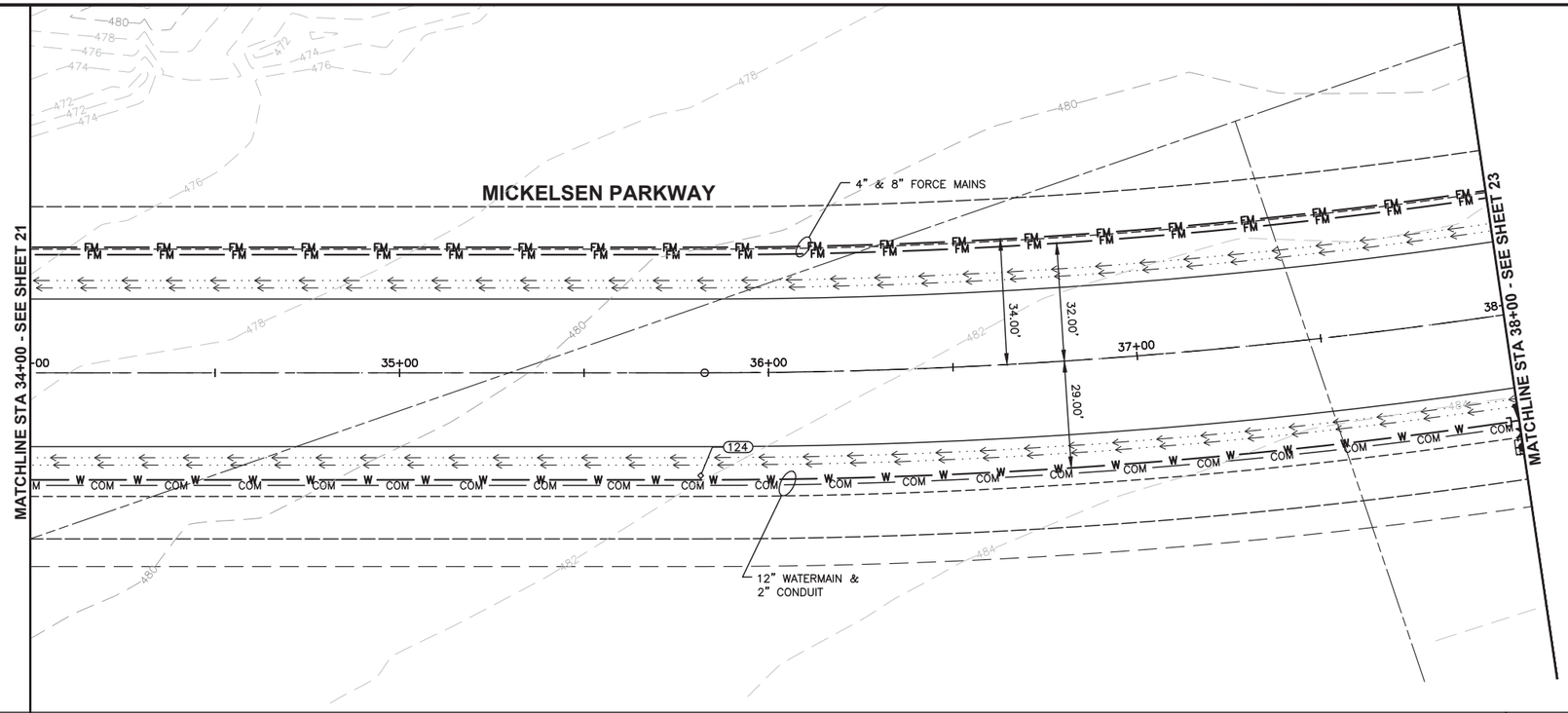

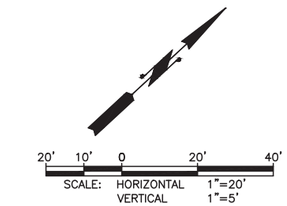

(X) WATER, FORCE MAIN AND CONDUIT NOTES:

1. CONTRACTOR SHALL LOCATE EXISTING UTILITIES SO HORIZONTAL AND/OR VERTICAL ALIGNMENT CAN BE ADJUSTED AS NECESSARY. CONTRACTOR SHALL POTHOLE PRIOR TO EXCAVATION TO DETERMINE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES AT ALL CROSSINGS AND CONNECTIONS.
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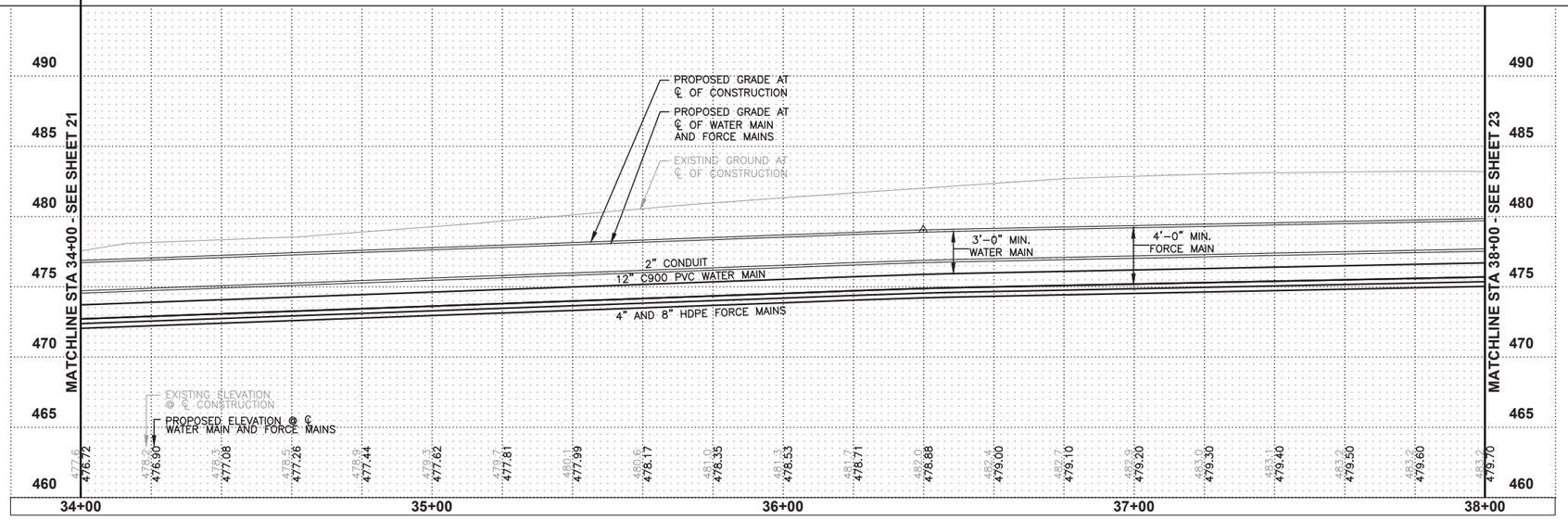

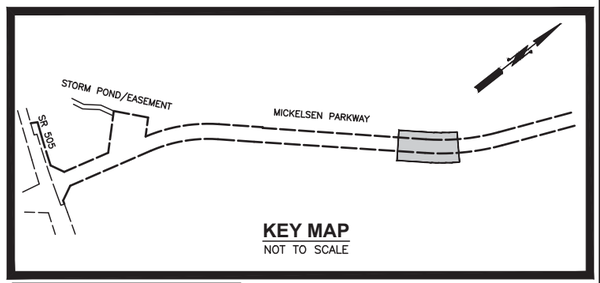

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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 43+00 TO 38+00

SHEET 22 OF 52

CALL 48 HOURS BEFORE YOU DIG
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Utilities Underground Location Center

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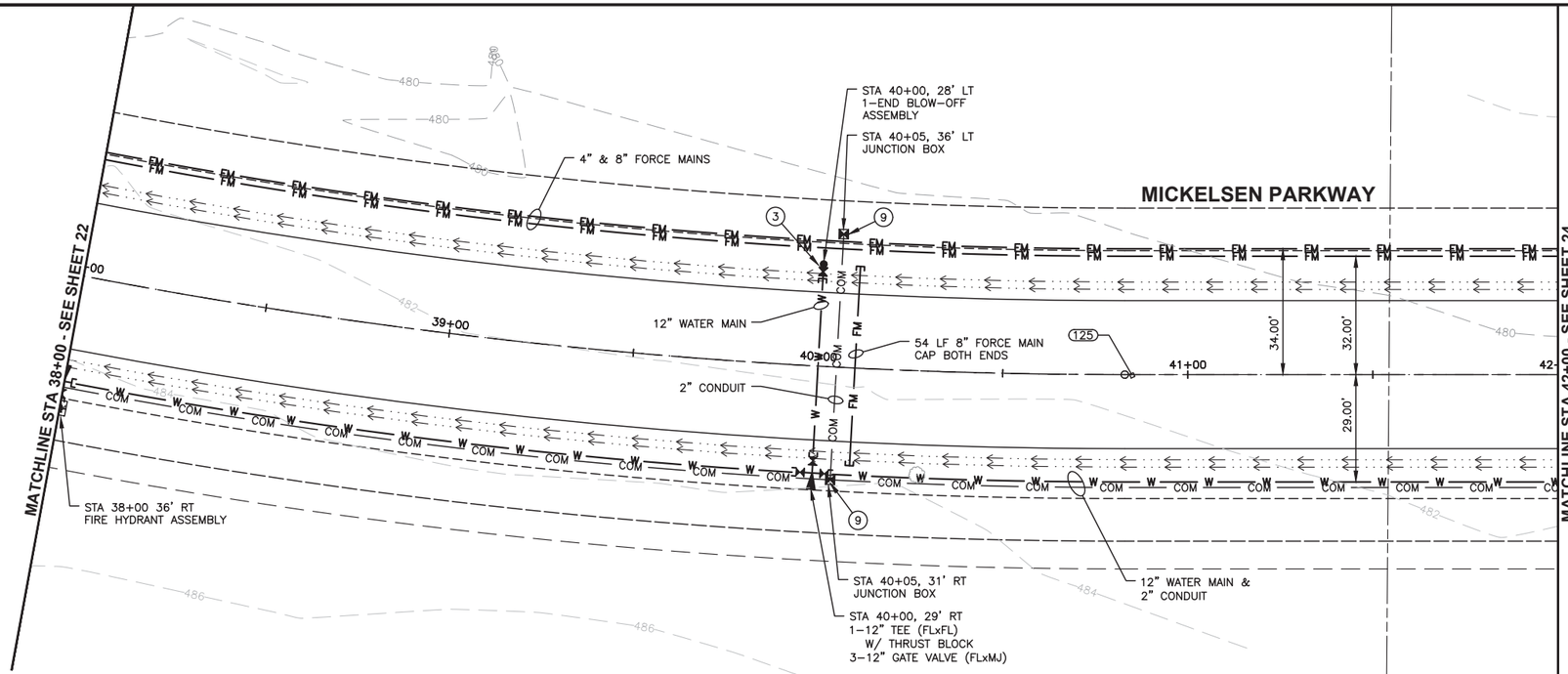

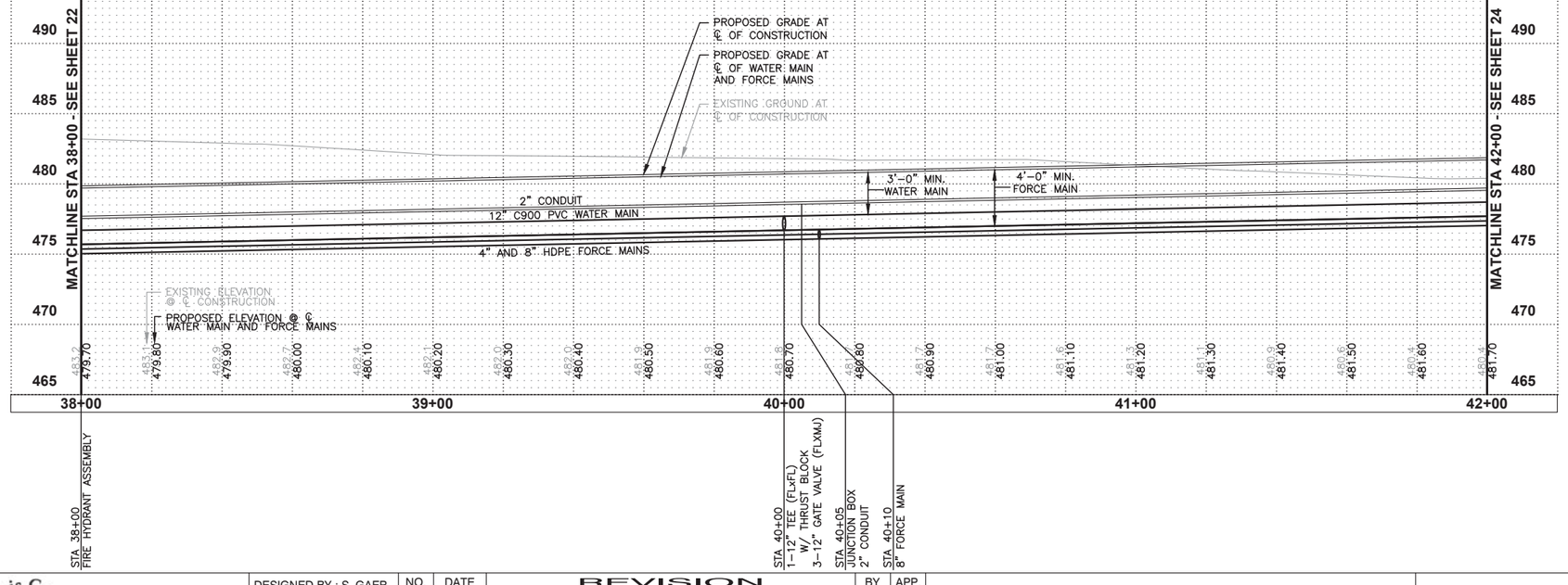

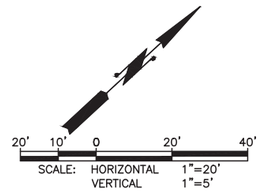

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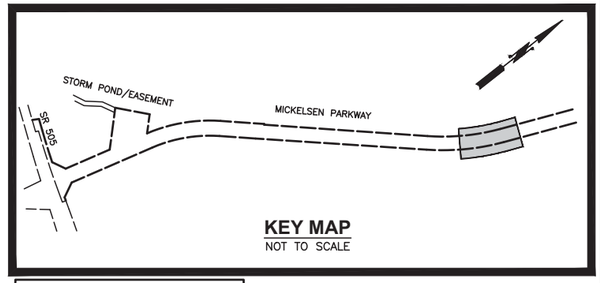

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 38+00 TO 42+00

SHEET 23 OF 52

CALL 48 HOURS BEFORE YOU DIG
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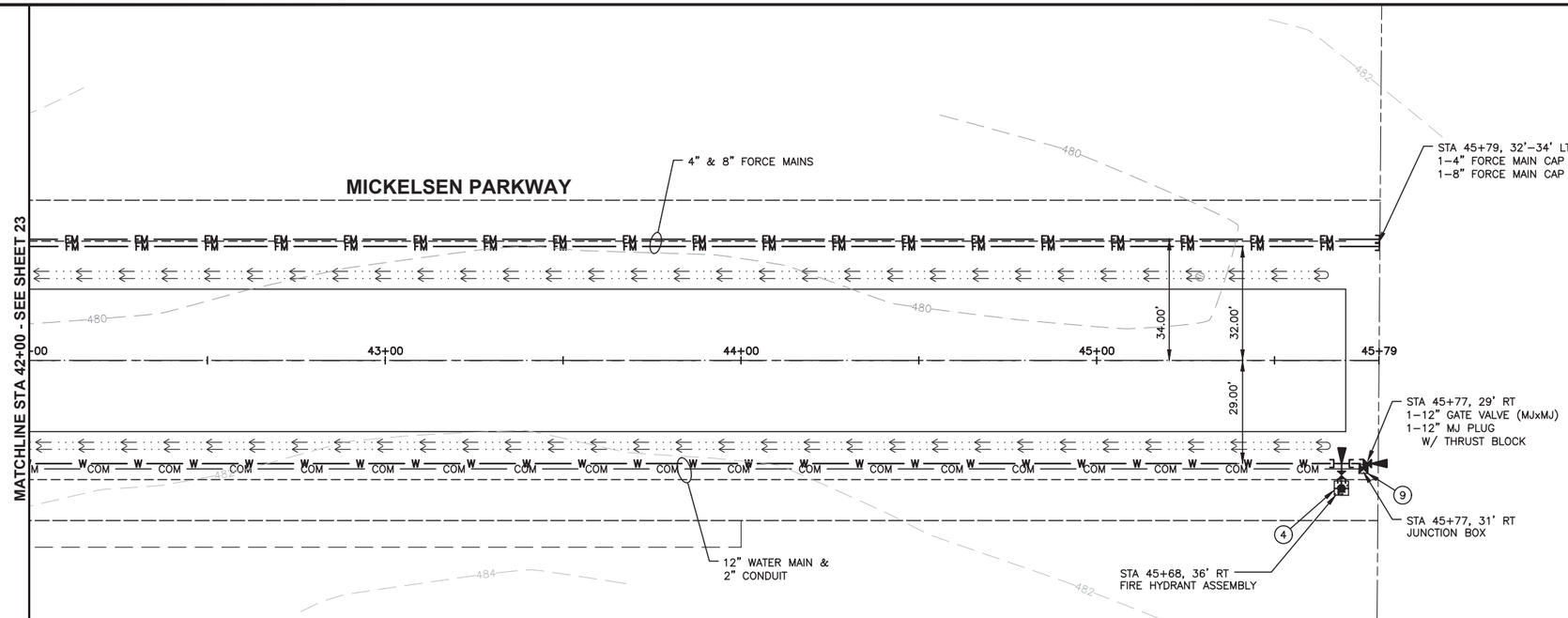
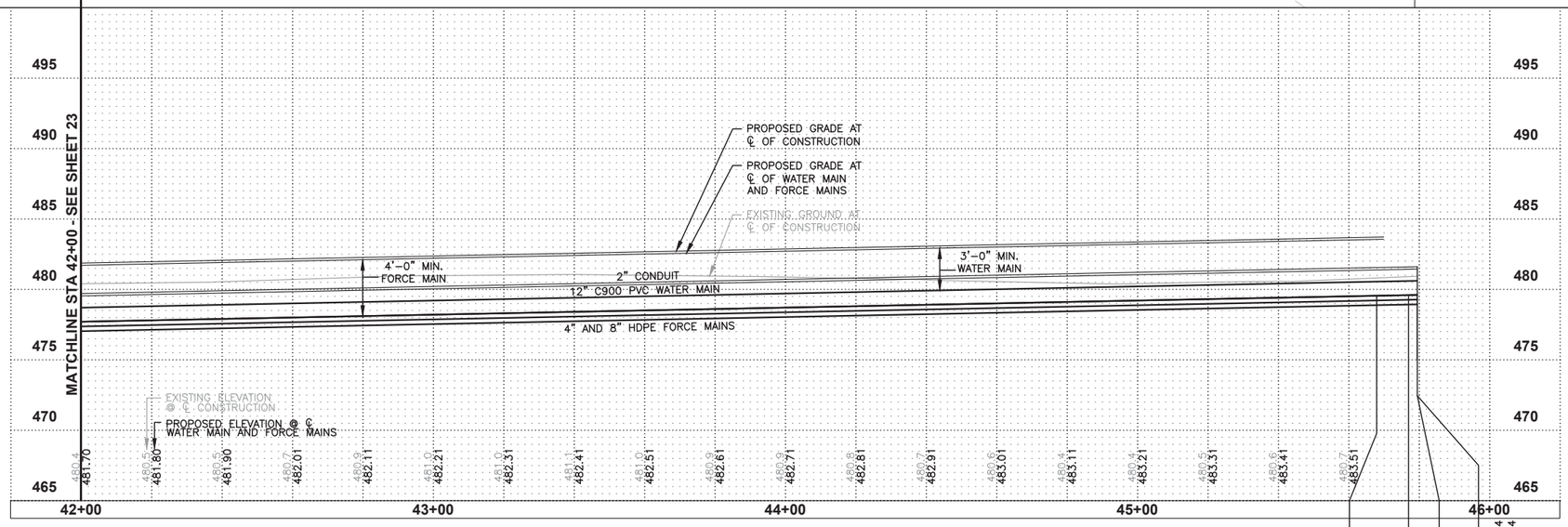
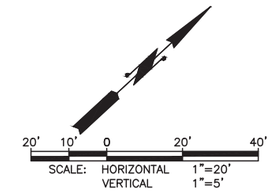
Utilities Underground Location Center







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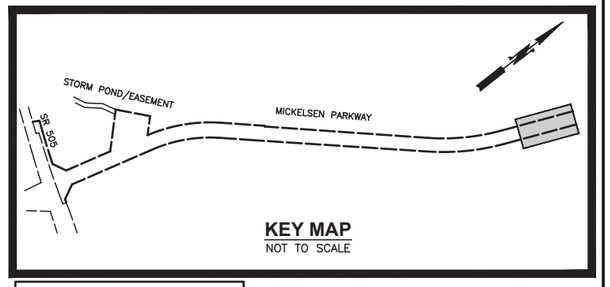

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER AND FORCE MAIN PLAN AND PROFILE STATION 42+00 TO 45+79

SHEET 24 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

JON MARSHALL HINTON STATE OF WASHINGTON 36484 REGISTERED PROFESSIONAL ENGINEER

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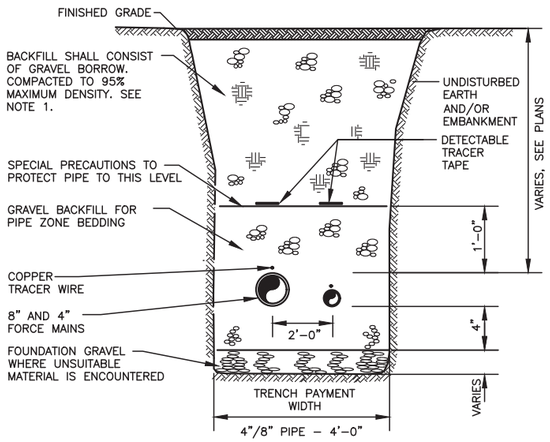
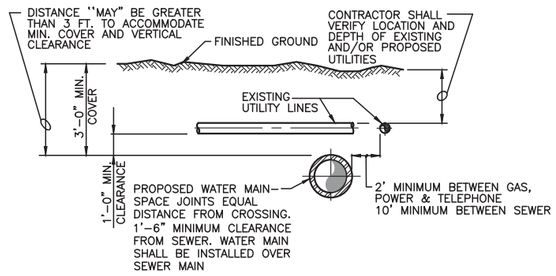


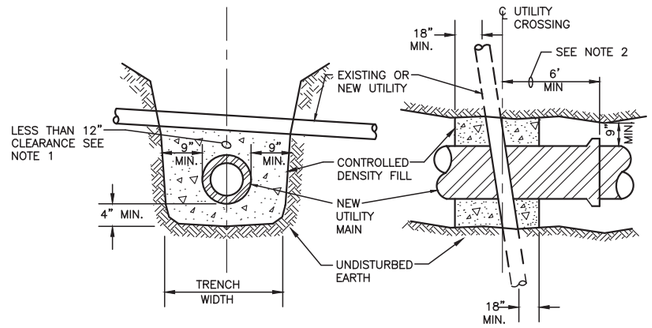
NOTES:

1. GRAVEL BORROW IMPORTED TO CONSTRUCT EMBANKMENT SHALL BE EXCAVATED, STOCKPILED, PROTECTED AND REUSED AS TRENCH BACKFILL, AS NEEDED.

1 / – **TYPICAL FORCE MAINS TRENCH SECTION**
NOT TO SCALE



2 / TYP **TYPICAL UTILITY CROSSING**
NOT TO SCALE



NOTES:

1. CONTRACTOR SHALL PROVIDE CDF PIPE ENCASEMENT AT ALL EXISTING UTILITY CROSSINGS IN THE EVENT THAT A 12" SEPARATION CANNOT BE PROVIDED. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SITE UTILITIES TO ANTICIPATE PROVIDING AND INSTALLING CDF ENCASEMENTS WHERE NECESSARY.
2. CONTRACTOR SHALL NOT CONSTRUCT ANY NEW PIPE JOINT WITHIN 6 FEET OF THE EXISTING CENTERLINE OF THE UTILITY CROSSING.

3 / TYP **CDF PIPE ENCASEMENT DETAIL**
NOT TO SCALE

Lewis County
Department of Public Works
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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

FORCE MAIN DETAILS

SHEET **25** OF **52**

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

06-08-20

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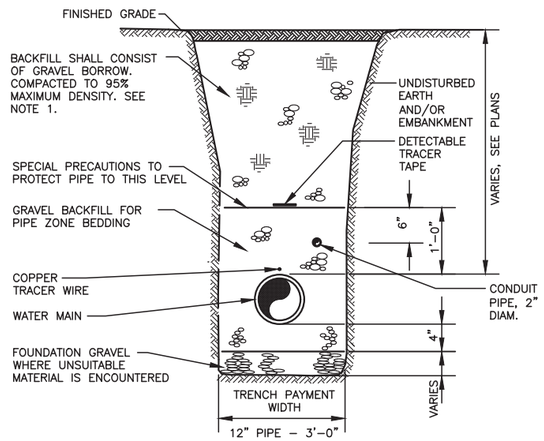

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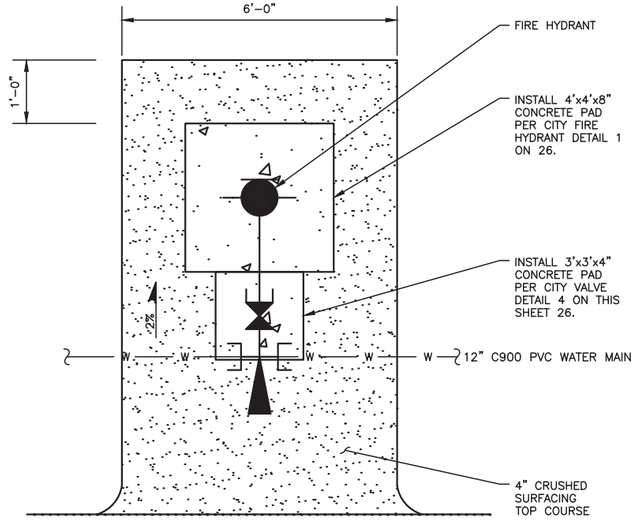
1 TYP — TYPICAL WATER MAIN TRENCH SECTION
NOT TO SCALE

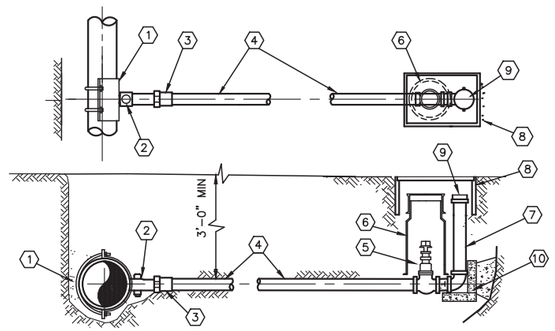


MICKELSEN PARKWAY

NOTE:

1. INSTALL GRAVEL BORROW TO SET FIRE HYDRANT ACCESS PAD TO EXISTING ROAD GRADE.

2 TYP — TYPICAL FIRE HYDRANT LAYOUT
NOT TO SCALE

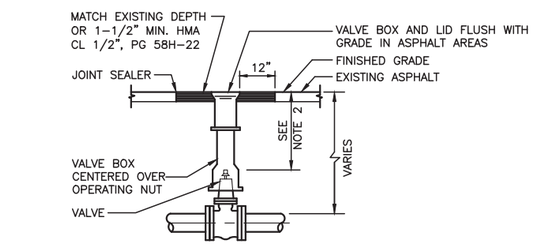


1. DOUBLE STRAP SERVICE SADDLE
2. 2" CORPORATION STOP
3. ADAPTOR
4. 2" 200 PSI IPS POLY PIPE
5. 2" GATE VALVE WITH SQUARE OPERATING NUT
6. CAST IRON VALVE BOX, RICH 910.
7. 2" GALVANIZED IRON PIPE & FITTINGS
8. METER BOX WITH SOLID LID, FOGTITE B–10, MID–STATES BCF1324–12, OR RAVEN SHALL BE H–20 LOAD RATED WHERE REQUIRED. (FIELD LOCATION TO BE CONFIRMED WITH CITY)
9. 2" BRASS COUPLING & 2" SQUARE BRASS PLUG (HAND TIGHTEN PLUG)
10. 2 – 2"x8"x16" CONC. SUPPORT BLOCKS & POURED CONC. SUPPORT

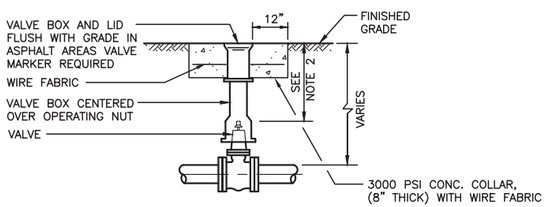
NOTE:

1) INSTALL DIELECTRIC COUPLINGS AT DISSIMILAR METALS.

3 TYP — 2" IN-LINE BLOWOFF ASSEMBLY
NOT TO SCALE



VALVE BOX IN ASPHALT AREA

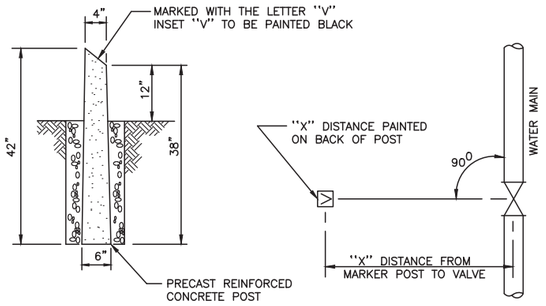


VALVE BOX IN UNIMPROVED AREA

NOTES:

1. EACH VALVE SHALL BE PROVIDED WITH AND ADJUSTABLE CAST IRON VALVE BOX OF 5 INCHES (5") INSIDE DIAMETER. VALVE BOXES SHALL HAVE A TOP SECTION WITH AN EIGHTEEN INCH (18") MINIMUM LENGTH.
2. 15" MINIMUM, 36" MAXIMUM FOR OPERATOR NUT. EXTENSION MAY BE REQUIRED.

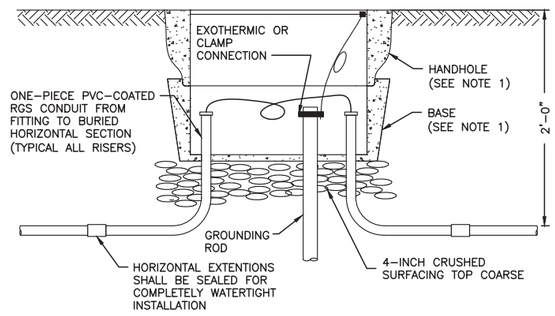
4 TYP — VALVE BOX ADJUSTMENT
NOT TO SCALE



NOTES:

1. PRECAST REINFORCED POST TO BE PAINTED FLAT TRAFFIC YELLOW #2612 OR SAFETY YELLOW #1063.
2. THE DISTANCE FROM THE MARKER POST TO THE WATER MAIN SHALL BE PAINTED ON THE BACKSIDE OF THE MARKER POST IN BLACK WITH A 2" HIGH NUMBER.
3. VALVE MARKER POST SHALL BE REQUIRED WHENEVER THE WATER VALVE IS LOCATED IN AN UNPAVED AREA.
4. THE POST WILL ALSO BE REQUIRED FOR BLOW–OFF IN THE SAME CONDITION AS WATER VALVES.

5 TYP — VALVE MARKER POST
NOT TO SCALE



NOTES:

1. FOGTITE INC. J–40.10 JUNCTION BOX COMPLETE WITH GALVANIZED STEEL LID, RATED H–20 LOADING, WITH POSITIVE LOCK, AND WITH J–40.10 BASE. FURNISH AND INSTALL PULL BOX ASSEMBLY ON TOP OF 4–INCH THICK CRUSHED SURFACING TOP COURSE. PROVIDE LID WITH "POWER" LEGEND.
2. PROVIDE GROUND ROD AND BRAID INSIDE JUNCTION BOX WITH METAL PARTS OR METAL LID.

6 TYP — JUNCTION BOX DETAIL
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06-08-20

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER MAIN DETAILS

SHEET 26 OF 52

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JON MARSHALL HINTON — STATE OF WASHINGTON — 36484 — REGISTERED PROFESSIONAL ENGINEER

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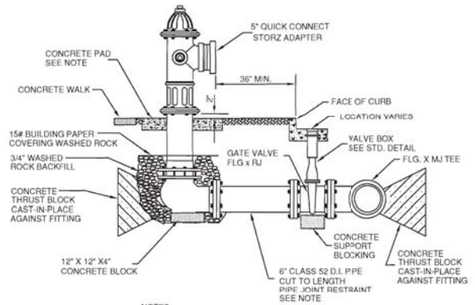
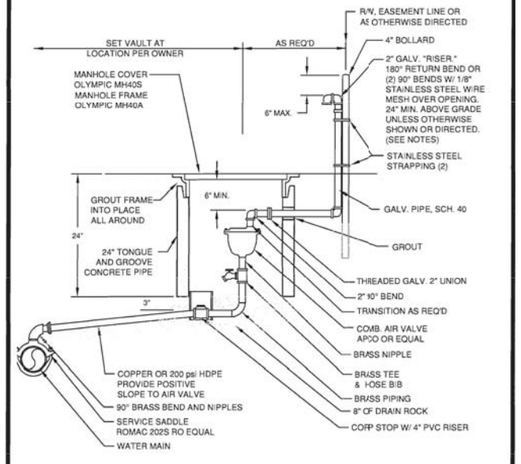


NOTES

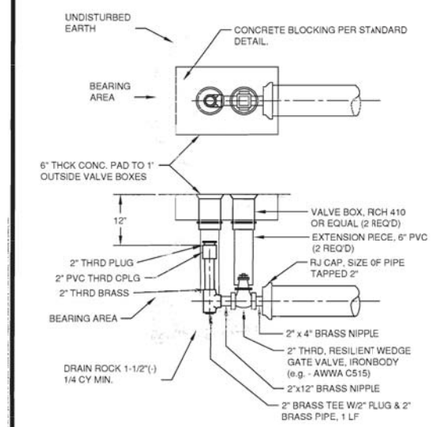
1. HYDRANTS SHALL BE LOCATED WITHIN THE STREET RIGHT-OF-WAY, WITH A MINIMUM THREE-FOOT RADIUS UNOBSTRUCTED WORKING AREA.
2. HYDRANT SHALL BE CLOW MEDALLION.
3. HYDRANT SHALL BE PAINTED SUNBURST YELLOW HIGH-GRADE ENAMEL AFTER INSTALLATION.
4. MECHANICAL PIPE JOINTS SHALL BE MEGALUG SERIES RESTRAINING GLANDS.
5. A 4'X 4'X 8" DEEP CONCRETE PAD WILL BE POURED AROUND THE HYDRANT. ENTEND PAD TO 2' BEYOND GATE VALVE WHEN VALVE IS OUTSIDE OF PAVEMENT.
6. MINIMUM HYDRANT BURY SHALL BE 30".
7. INSTALL 4 BOLLARDS AROUND HYDRANT (4' RADIUS) IN UN-PROTECTED LOCATIONS.

CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS FIRE HYDRANT	REVISED 08/20/2007	DRAWING NO. 4-6

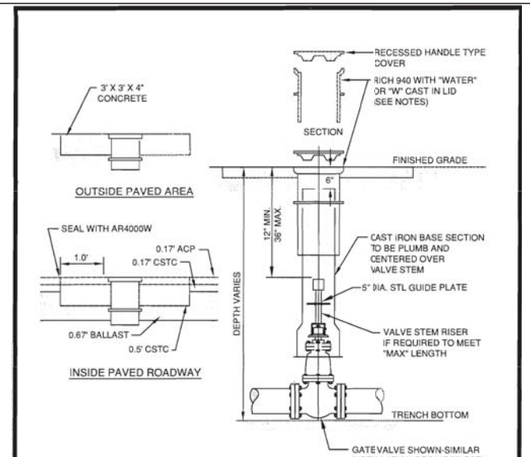


COMBINATION AIR VALVE NOTE:
1. DRAIN TO DAYLIGHT W/ 2" PVC IF APPLICABLE.
2. TERMINATE EXHAUST INSIDE VAULT W/ 90° BEND (DOWN) AND WIRE MESH IF VAULT IS DRAINED TO DAYLIGHT.

CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS COMBINATION AIR VALVE	REVISED 08/20/2007	DRAWING NO. 4-7

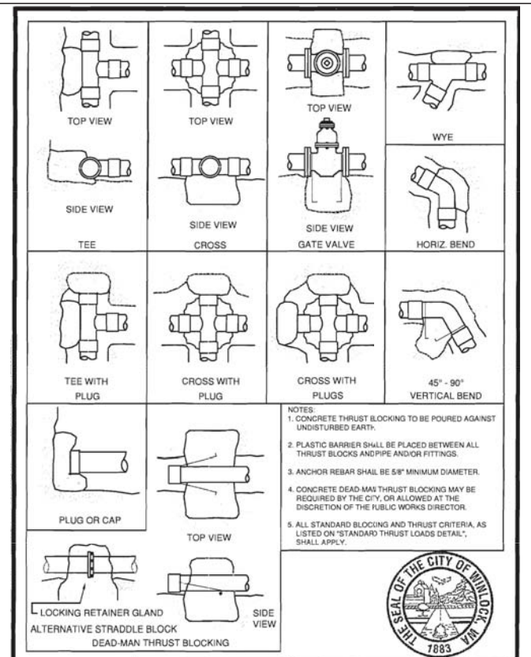


CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS BLOW OFF VALVE	REVISED 08/20/2007	DRAWING NO. 4-8



NOTES:
1. ALGN VALVE COVER EARS IN DIRECTION OF FLOW THROUGH VALVE.

CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS VALVE BOX DETAIL	REVISED 08/20/2007	DRAWING NO. 4-10



NOTES:
1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. PLASTIC BARRIER SHALL BE PLACED BETWEEN ALL THRUST BLOCKS AND PIPE AND/OR FITTINGS.
3. ANCHOR REBAR SHALL BE 5/8" MINIMUM DIAMETER.
4. CONCRETE DEAD MAS THRUST BLOCKING MAY BE REQUIRED BY THE CITY, OR ALLOWED AT THE DISCRETION OF THE PUBLIC WORKS DIRECTOR.
5. ALL STANDARD BLOCCING AND THRUST CRITERIA, AS LISTED ON "STANDARD THRUST LOADS DETAIL", SHALL APPLY.

CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS THRUST BLOCKING DETAIL	REVISED 08/20/2007	DRAWING NO. 4-11a

THRUST LOADS

THRUST AT FITTINGS IN POUNDS AT 200 POUNDS PER SQUARE INCH OF WATER PRESSURE

PIPE DIAMETER	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	DEAD END OR TEE
4"	3,600	2,000	1,000	500	2,600
6"	8,000	4,400	2,300	1,200	5,700
8"	14,300	7,700	4,000	2,000	10,100
10"	22,300	12,100	6,200	3,100	15,800
12"	32,000	17,400	8,900	4,500	22,700
14"	43,600	23,600	12,100	6,100	30,800
16"	57,000	30,800	15,700	7,900	40,300

NOTES:

1. BLOCKING SHALL BE COMMERCIAL CONCRETE POURED IN PLACE AGAINST UNDISTURBED EARTH. FITTING SHALL BE ISOLATED FROM CONCRETE THRUST BLOCK WITH PLASTIC OR SIMILAR MATERIAL.
2. TO DETERMINE THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET (S.F.):
   EXAMPLE : 12" - 90° BEND IN SAND AND GRAVEL
   32,000 LBS 3000 LB/S.F. = 10.7 S.F. OF AREA
3. AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZE, PRESSURES AND SOIL CONDITIONS.
4. BLOCKING SHALL BE ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF SERVICE.

SAFE SOIL BEARING LOADS

FOR HORIZONTAL THRUSTS WHEN THE DEPTH OF COVER OVER THE PIPE EXCEEDS 2 FEET

SOIL	POUNDS PER SQUARE FOOT
MUCK, PEAT	0
SOFT CLAY	1,000
SAND	2,000
SAND & GRAVEL	3,000
SAND & GRAVEL CEMENTED WITH CLAY	4,000
HARD SHALE	10,000

CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	WATER DETAILS THRUST LOADS DETAIL	REVISED 08/20/2007	DRAWING NO. 4-11b

06-08-20

JON MARSHALL HINTON — STATE OF WASHINGTON — 36484 — REGISTERED PROFESSIONAL ENGINEER

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

WATER MAIN DETAILS

SHEET 27 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

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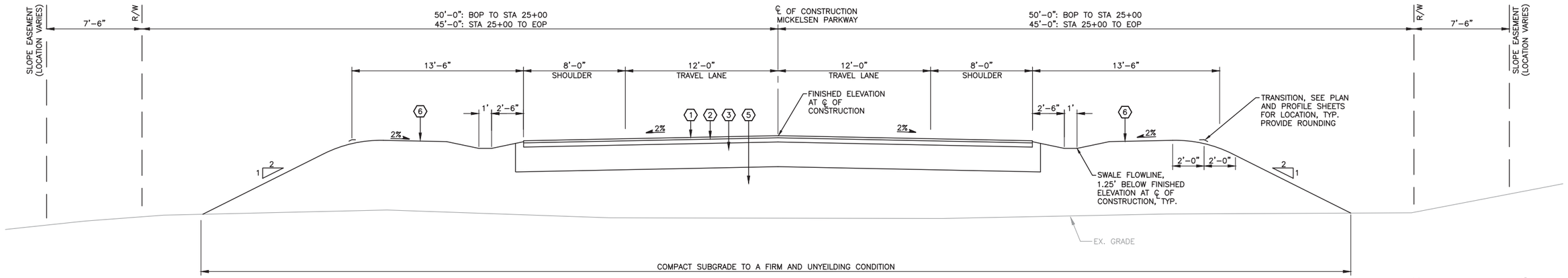
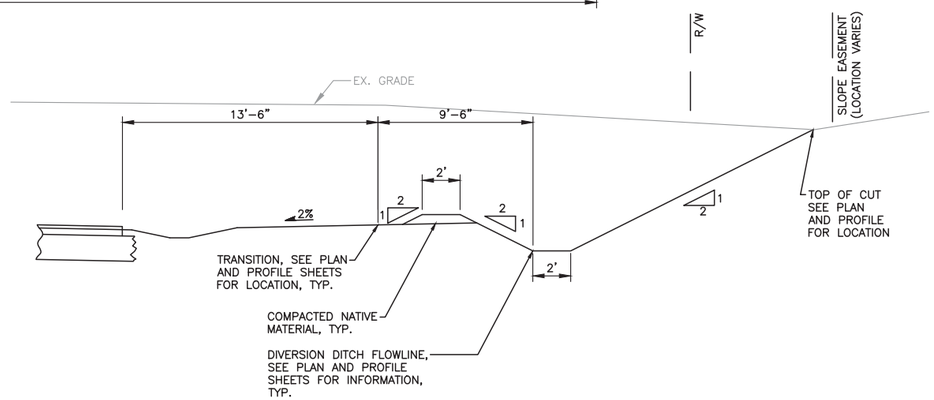


TYPICAL CROSS SECTION-FILL AREAS

NOT TO SCALE

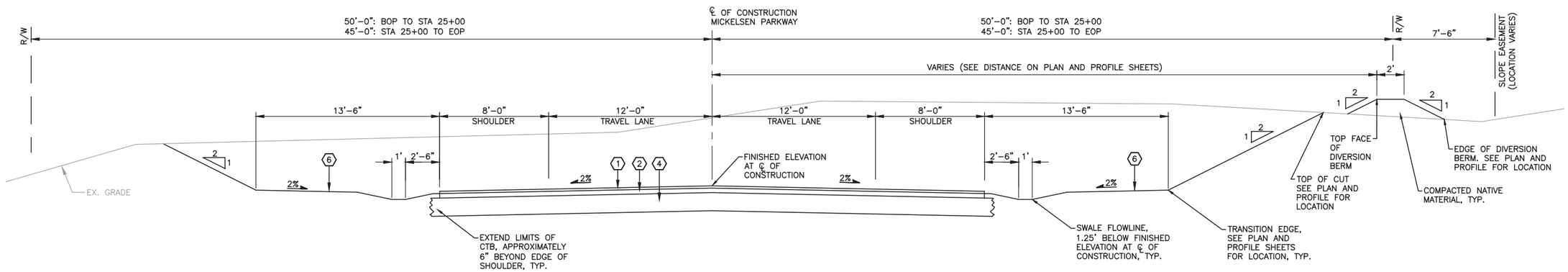
LEGEND:

1. 2" COMPACTED DEPTH, HMA
2. 4" COMPACTED DEPTH, ASPHALT TREATED BASE
3. 24" COMPACTED DEPTH, CRUSHED SURFACING TOP COURSE
4. 16" COMPACTED DEPTH, CEMENT TREATED BASE
5. COMPACTED GRAVEL BORROW, DEPTH VARIES. GRAVEL BORROW IMPORTED FOR EMBANKMENTS AND EXCAVATED FOR UTILITY CONSTRUCTION SHALL BE STOCKPILE ON–SITE AND REUSED AS TRENCH BACKFILL. COST TO REUSE GRAVEL BORROW SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS UTILITIES.
6. ALL DISTURBED AREAS SHALL RECEIVE 4" TOPSOIL, TYPE C. TILL TO A DEPTH OF 6" AND APPLY SEEDING, FERTILIZING AND MULCHING.



DIVERSION DITCH
STATION 19+50 TO STATION 24+50

NOT TO SCALE



TYPICAL CROSS SECTION-CUT AREAS

NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

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0 1" 2"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON — STATE OF WASHINGTON — 36494 — REGISTERED PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

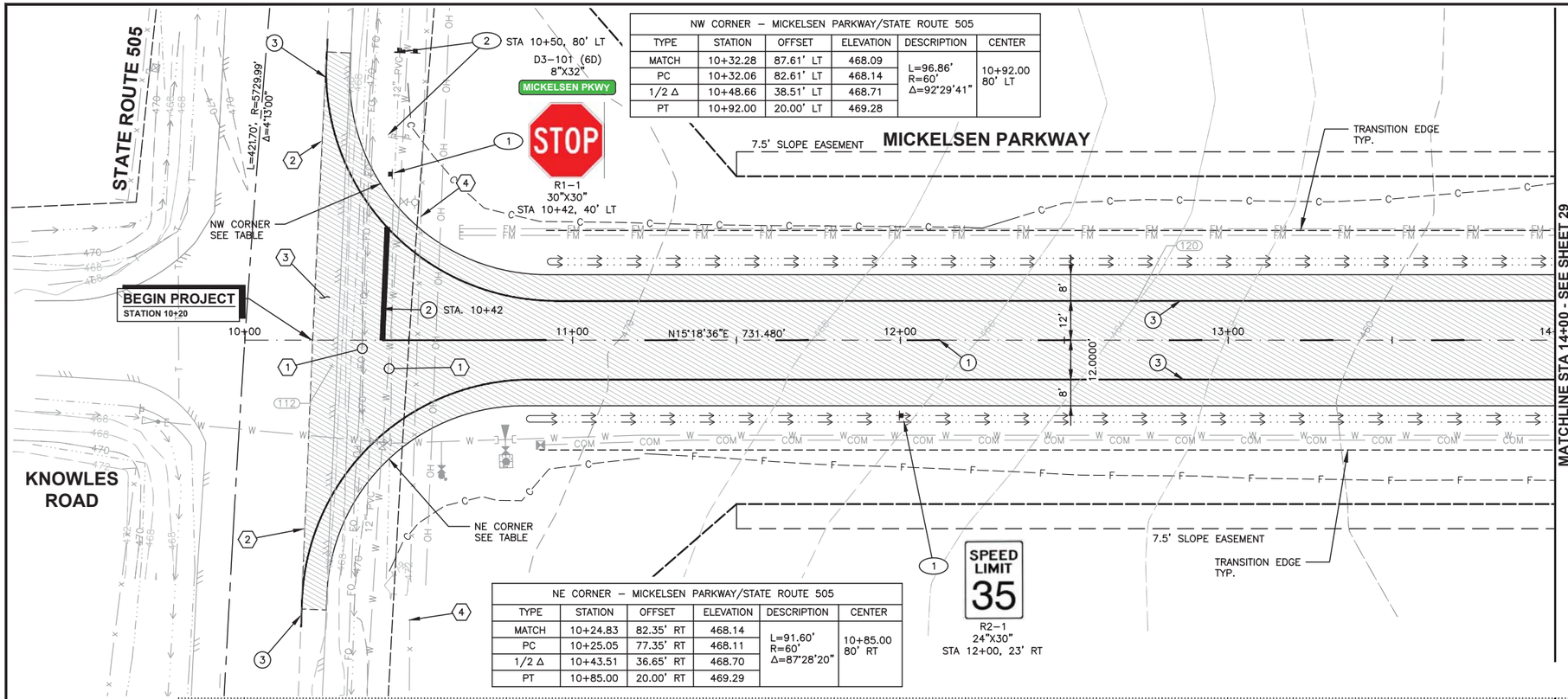
TYPICAL ROADWAY SECTIONS

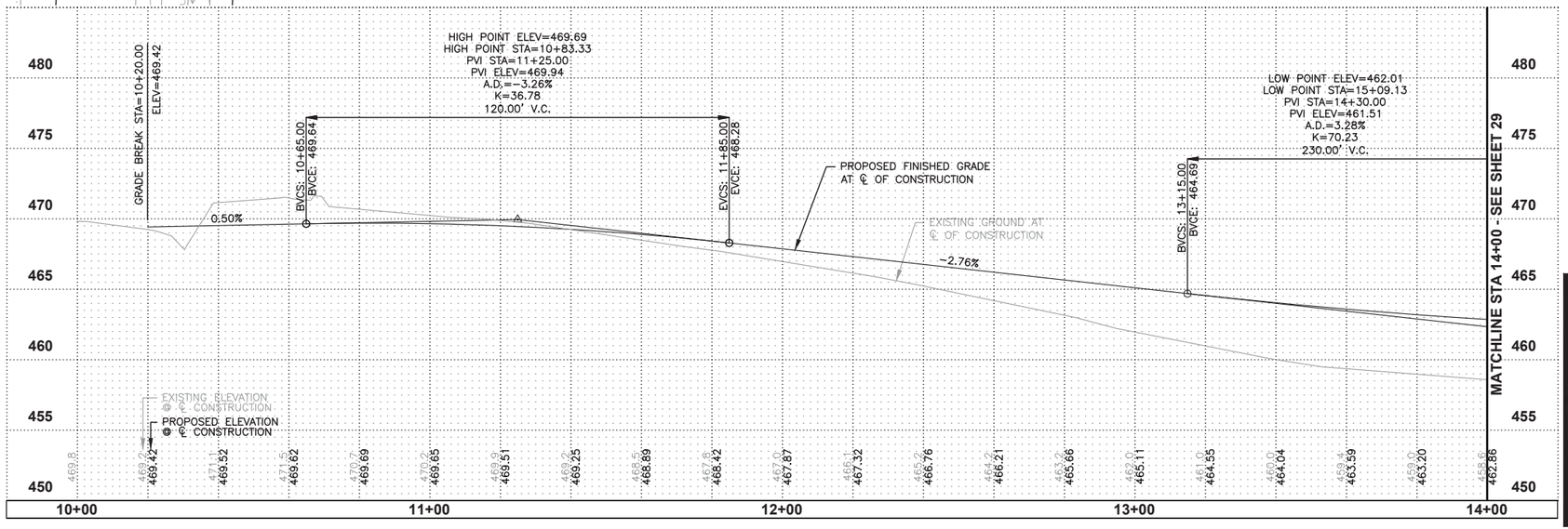
SHEET 28 OF 52

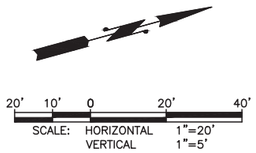
CALL 48 HOURS BEFORE YOU DIG 1–800–424–5555 "It's the Law" Utilities Underground Location Center

NW CORNER – MICKELSEN PARKWAY/STATE ROUTE 505					
TYPE	STATION	OFFSET	ELEVATION	DESCRIPTION	CENTER
MATCH	10+32.28	87.61' LT	468.09	L=96.86' R=60' Δ=92°29'41"	10+92.00 80' LT
PC	10+32.06	82.61' LT	468.14		
1/2 Δ	10+48.66	38.51' LT	468.71		
PT	10+92.00	20.00' LT	469.28		

NE CORNER – MICKELSEN PARKWAY/STATE ROUTE 505					
TYPE	STATION	OFFSET	ELEVATION	DESCRIPTION	CENTER
MATCH	10+24.83	82.35' RT	468.14	L=91.60' R=60' Δ=87°28'20"	10+85.00 80' RT
PC	10+25.05	77.35' RT	468.11		
1/2 Δ	10+43.51	36.65' RT	468.70		
PT	10+85.00	20.00' RT	469.29		







ROADWAY & STORM DRAINAGE NOTES

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2. SAWCUT EXISTING PAVEMENT AND SEAL JOINT (WHERE APPLICABLE) THEN APPLY SAND BLANKET TO THE SURFACE JOINT.
3. REMOVE AND WASTEHAUL EXISTING PAVEMENT.
4. REMOVE AND WASTEHAUL EXISTING FENCE.
5. INSTALL INLET AND/OR OUTLET PROTECTION PER DETAILS ON SHEET 41.

GENERAL

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2. SIGNS SHALL BE CONSTRUCTED ENTIRELY OF TYPE III OR TYPE IV REFLECTIVE SHEETING PER WSDOT STANDARD SPECIFICATIONS SECTION 9-28.12.
3. ALL PLASTIC PAVEMENT MARKINGS SHALL BE TYPE D-1 MMA UNLESS INDICATED OTHERWISE.

CHANNELIZATION NOTES:

1. INSTALL 4" WIDE PAINTED YELLOW CENTERLINE PER WSDOT STANDARD PLAN M-20.10-02.
2. INSTALL 18" WIDE PAINTED STOP LINE PER WSDOT STANDARD PLAN M-24.60-04.
3. INSTALL 4" WIDE PAINTED WHITE EDGE LINE PER WSDOT STANDARD PLAN M-20.10-02.

SIGNING NOTES:

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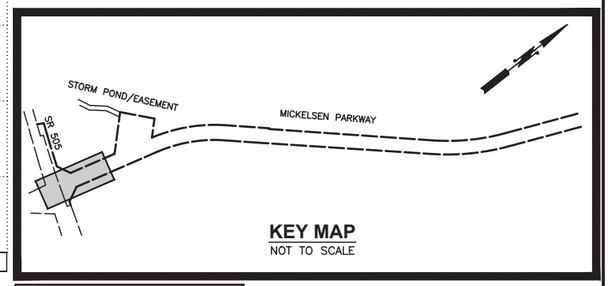

KEY MAP
NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

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0 1" 2"
TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
36494
REGISTERED
PROFESSIONAL ENGINEER

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

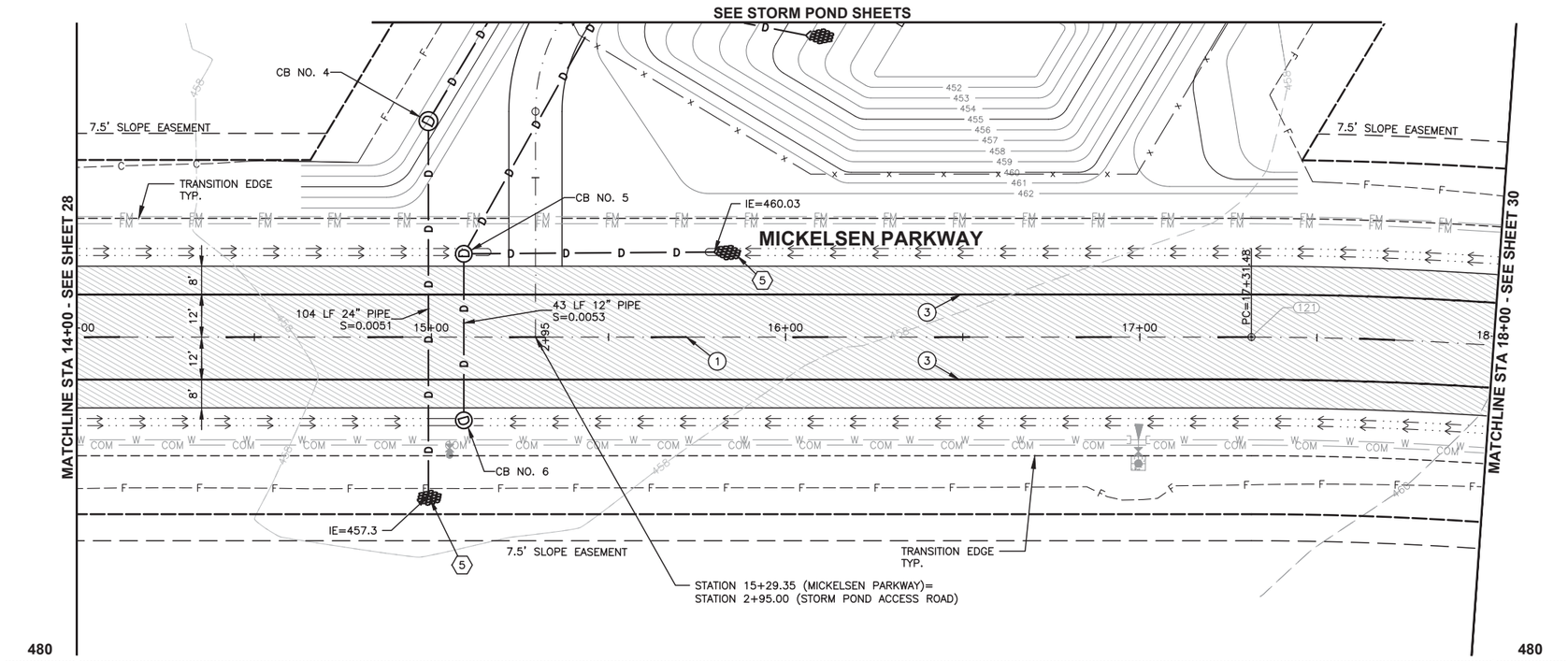
COUNTY ROAD PROJECT NO: 2121

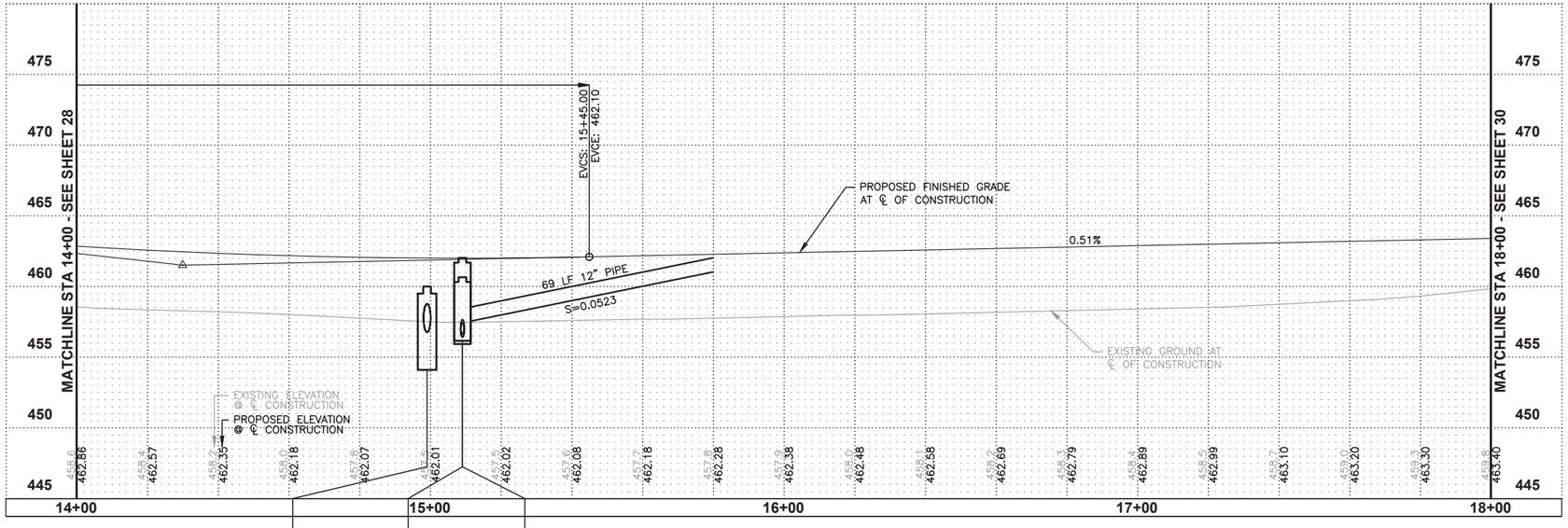
PLAN AND PROFILE
STATION 10+00 TO 14+00

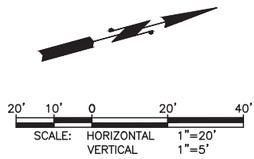
SHEET 29 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\RD_PLN-PRO.dwg, 6/8/2020 11:14 AM, SHARI GAER







ROADWAY & STORM DRAINAGE NOTES

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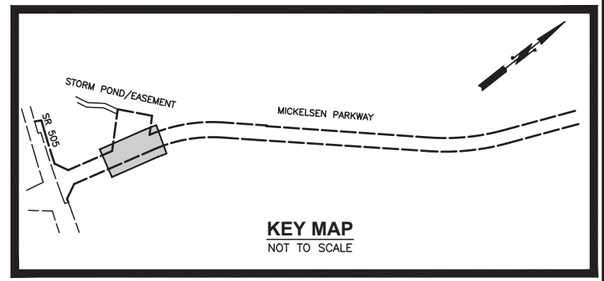

KEY MAP
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06-08-20
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STATE OF WASHINGTON
36494
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PROFESSIONAL ENGINEER

Lewis County
Department of Public Works
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PHONE # (360) 740-1123
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DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 14+00 TO 18+00

SHEET 30 OF 52

CALL 48 HOURS BEFORE YOU DIG
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"It's the Law"
Utilities Underground Location Center

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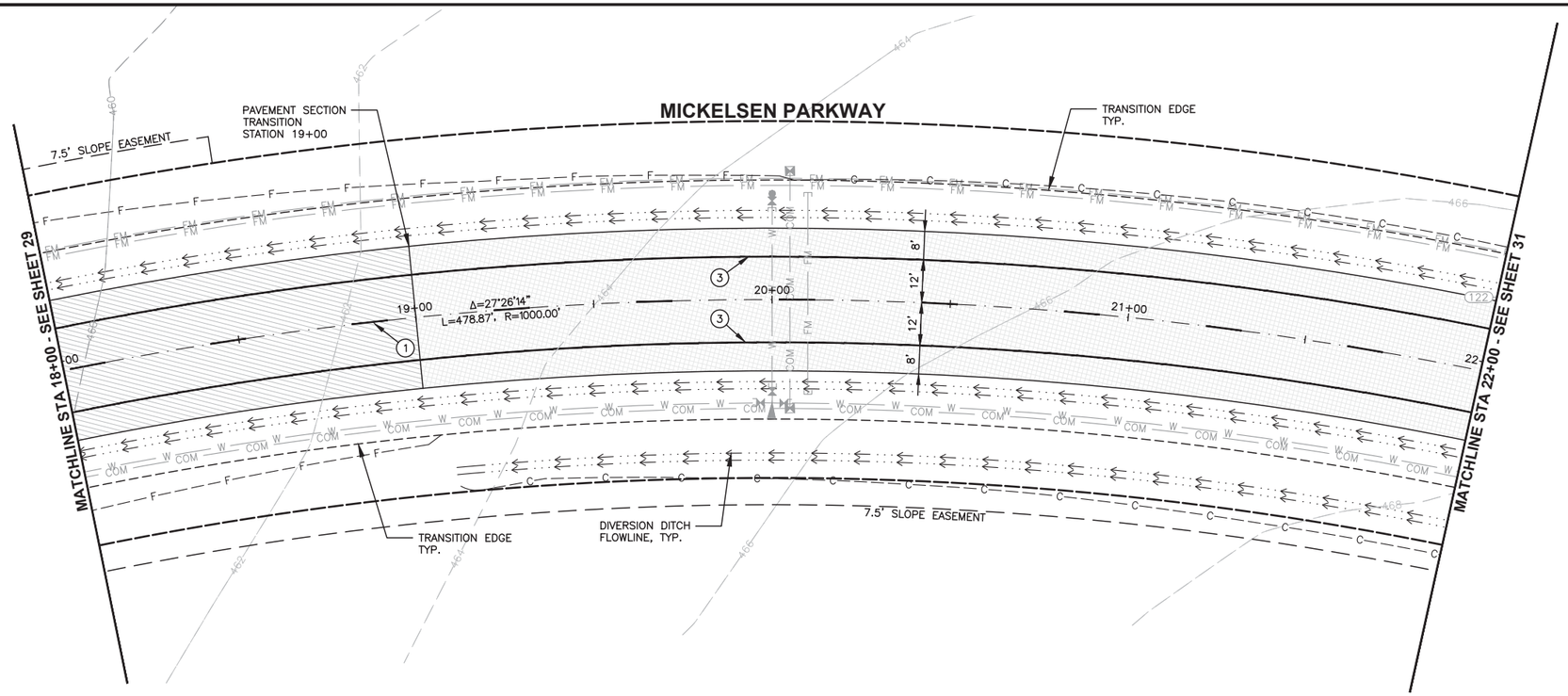

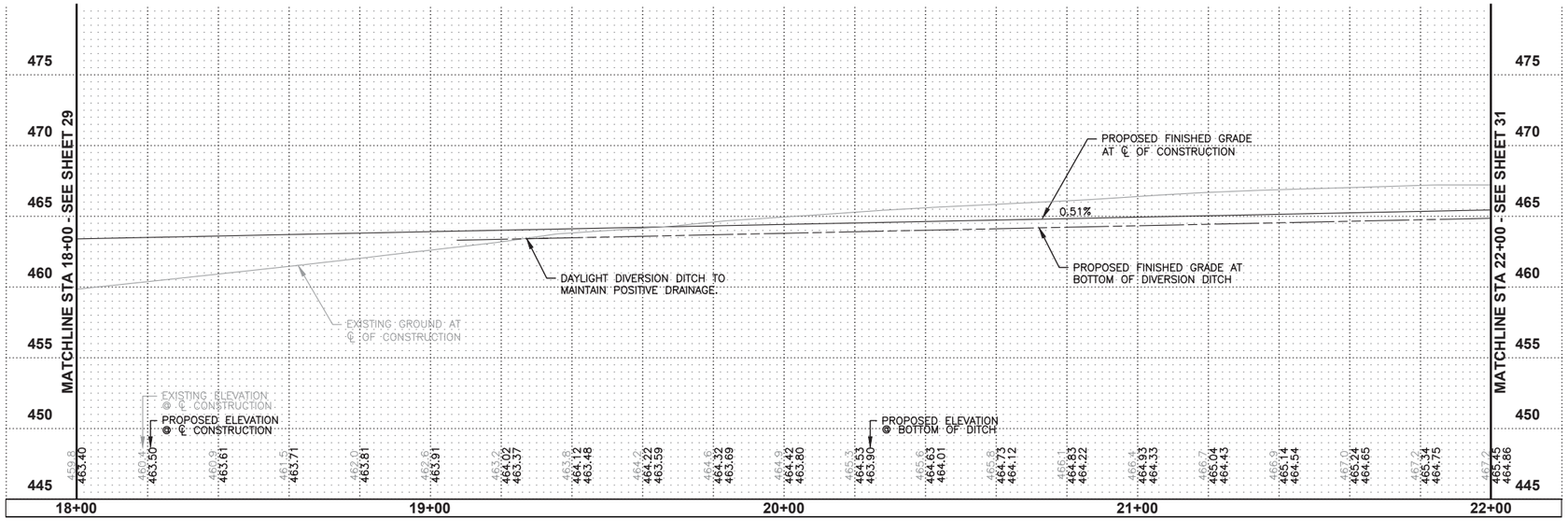

20' 10' 0 20' 40'

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=5'

ROADWAY & STORM DRAINAGE NOTES

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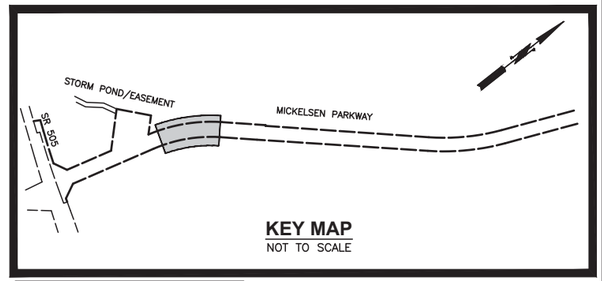

KEY MAP
NOT TO SCALE

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0 1" 2"

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06-08-20

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Lewis County
Department of Public Works

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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 18+00 TO 22+00

SHEET 31 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
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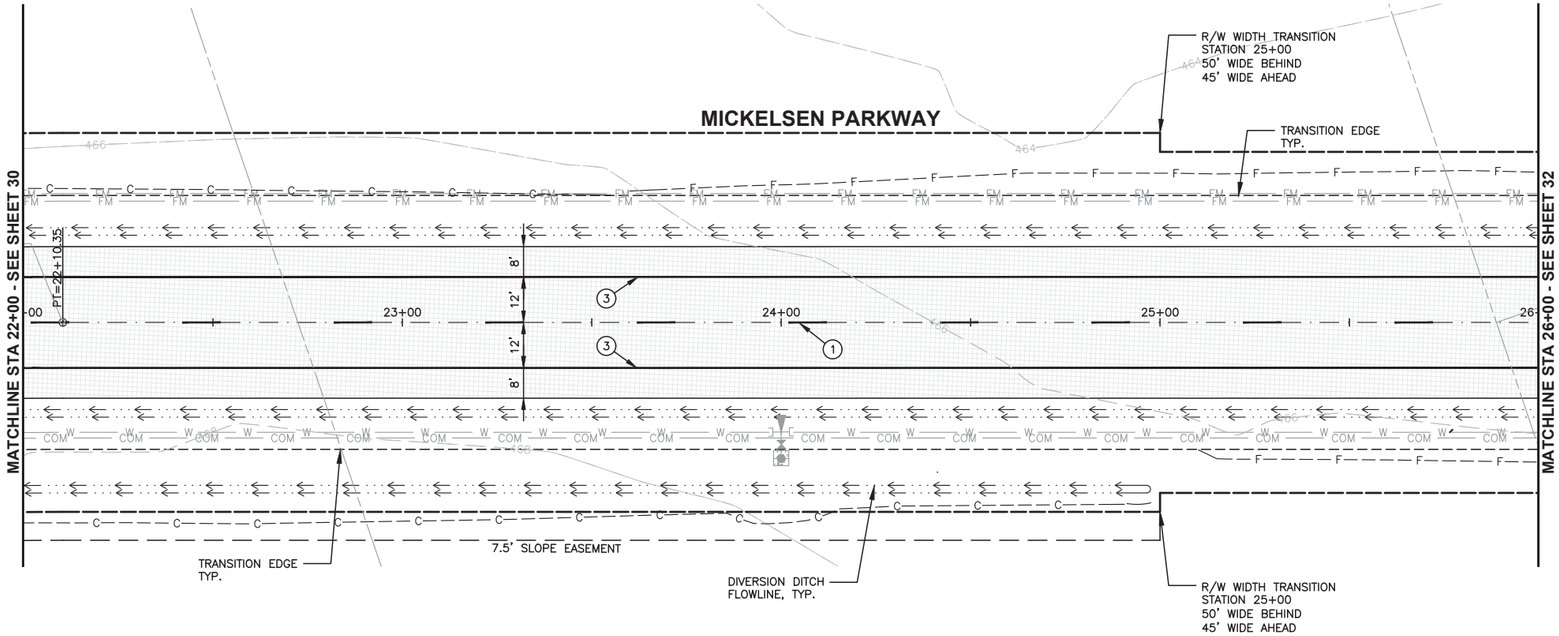
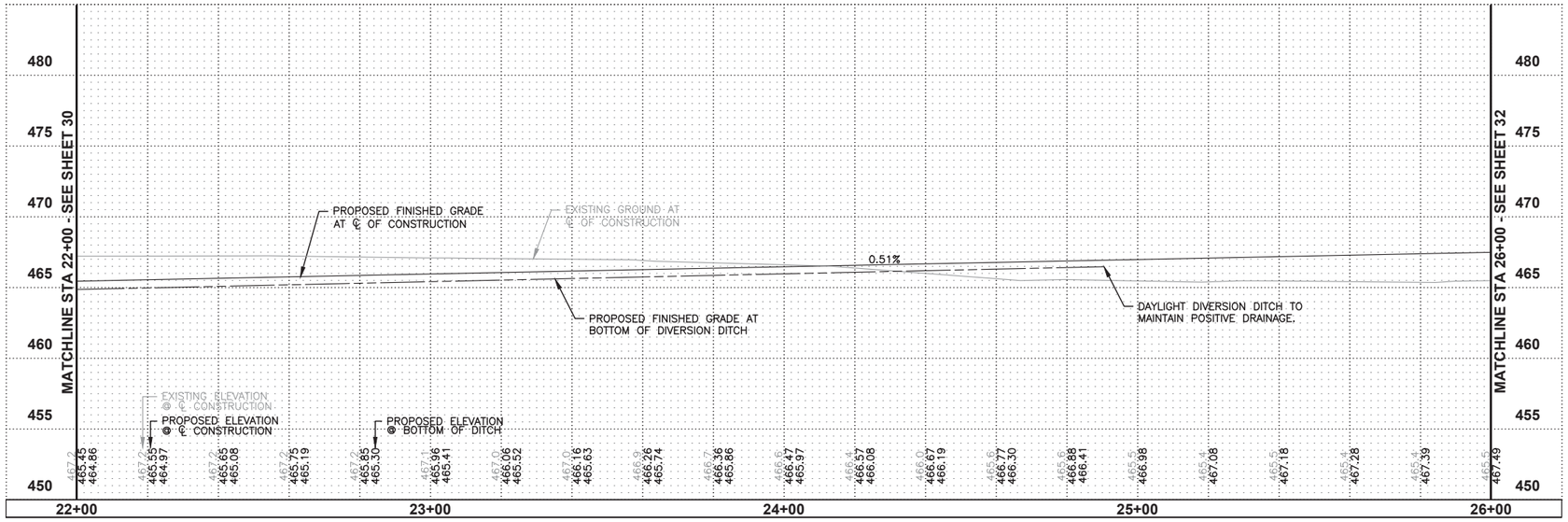
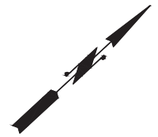
Utilities Underground Location Center







20' 10' 0 20' 40'

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=5'

ROADWAY & STORM DRAINAGE NOTES

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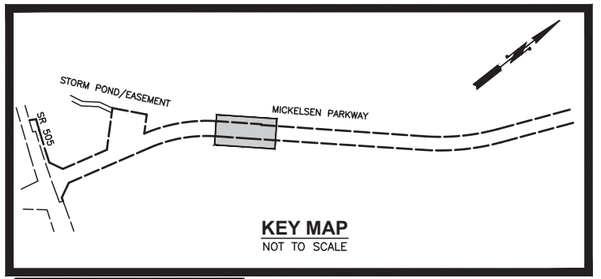

KEY MAP
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CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 22+00 TO 26+00

SHEET 32 OF 52

CALL 48 HOURS BEFORE YOU DIG
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"It's the Law"
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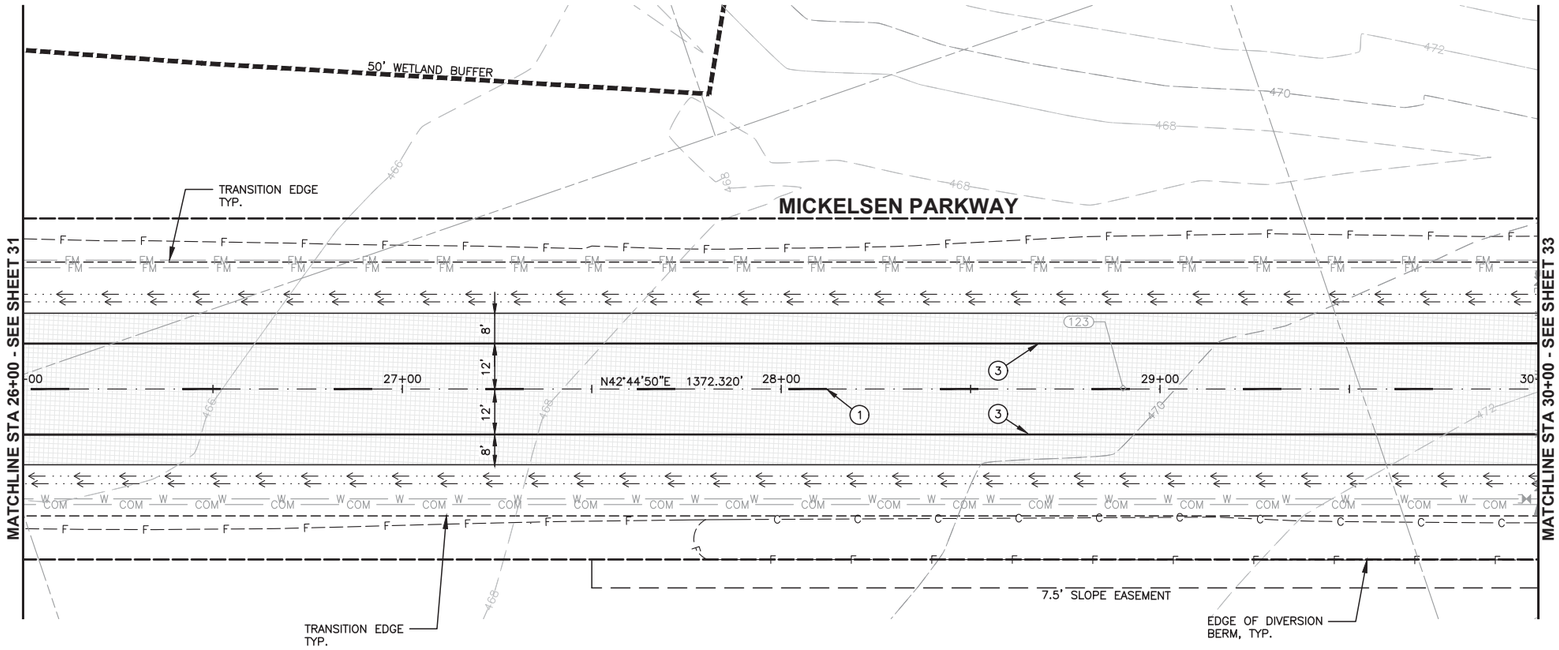

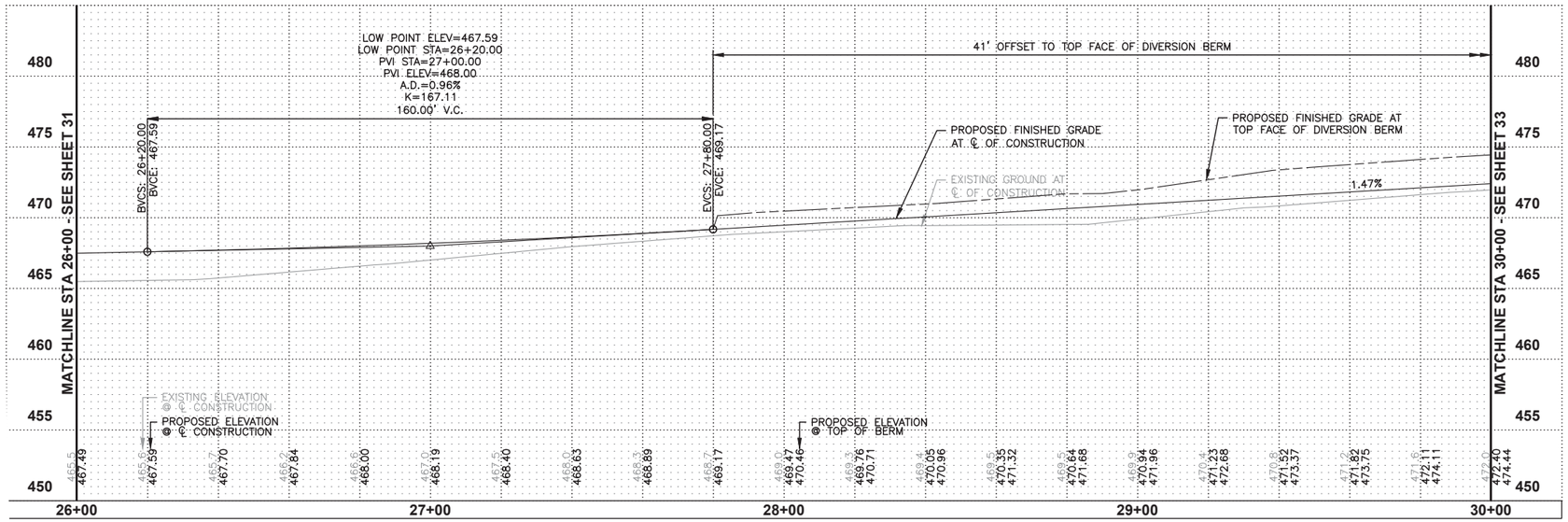

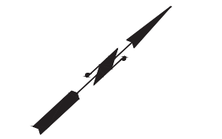

20' 10' 0 20' 40'

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=5'

ROADWAY & STORM DRAINAGE NOTES

1. CAUTION: EXITING BURIED UTILITY. VERIFY (POTHOLE) EXACT LOCATION AND DEPTH OF EXISTING UTILITY.
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3. REMOVE AND WASTEHAUL EXISTING PAVEMENT.
4. REMOVE AND WASTEHAUL EXISTING FENCE.
5. INSTALL INLET AND/OR OUTLET PROTECTION PER DETAILS ON SHEET 41.

GENERAL

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3. ALL PLASTIC PAVEMENT MARKINGS SHALL BE TYPE D-1 MMA UNLESS INDICATED OTHERWISE.

CHANNELIZATION NOTES:

1. INSTALL 4" WIDE PAINTED YELLOW CENTERLINE PER WSDOT STANDARD PLAN M-20.10-02.
2. INSTALL 18" WIDE PAINTED STOP LINE PER WSDOT STANDARD PLAN M-24.60-04.
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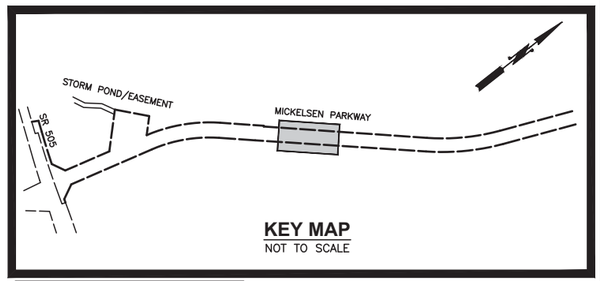

KEY MAP
NOT TO SCALE

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"

TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
36494
REGISTERED
PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
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DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 26+00 TO 30+00

SHEET 33 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
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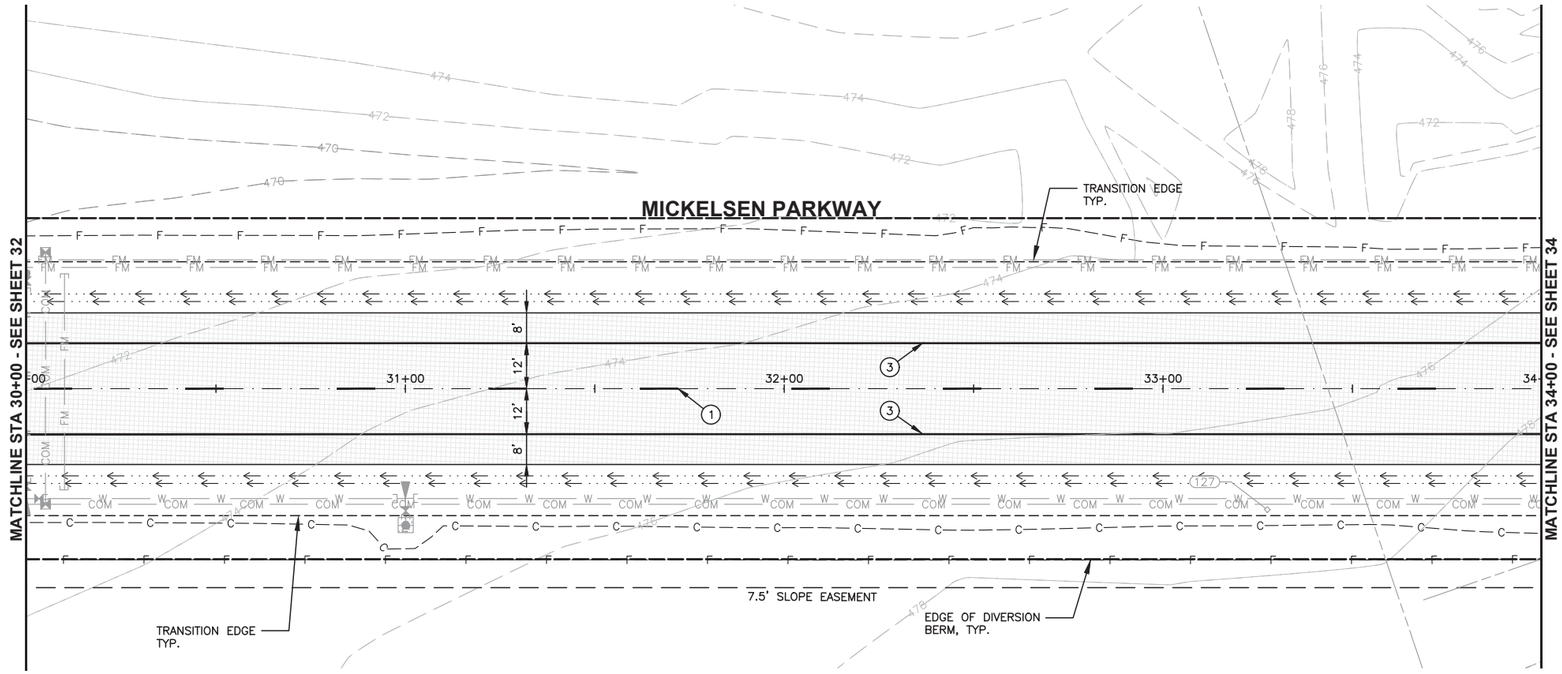
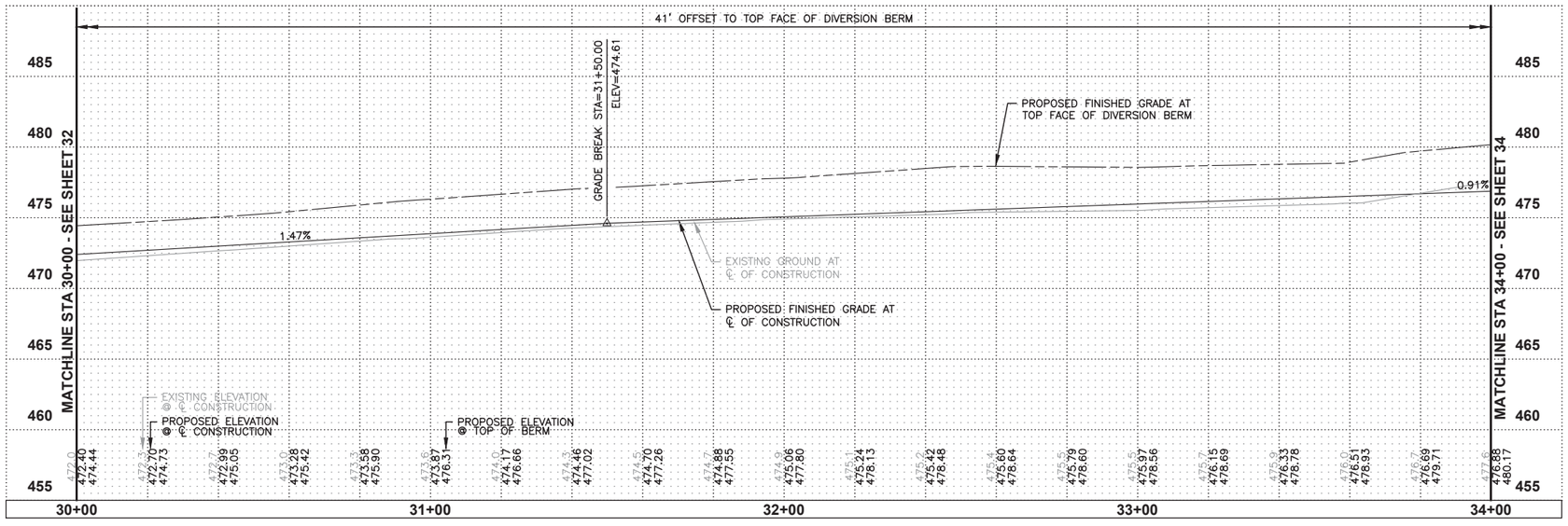
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\RD_PLN-PRO.dwg, 6/8/2020 11:15 AM, SHARI GAER





ROADWAY & STORM DRAINAGE NOTES

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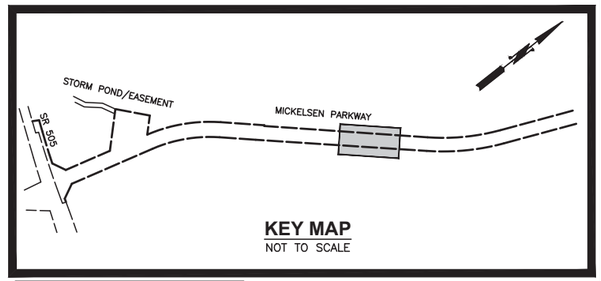

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 30+00 TO 34+00

SHEET 34 OF 52

CALL 48 HOURS BEFORE YOU DIG
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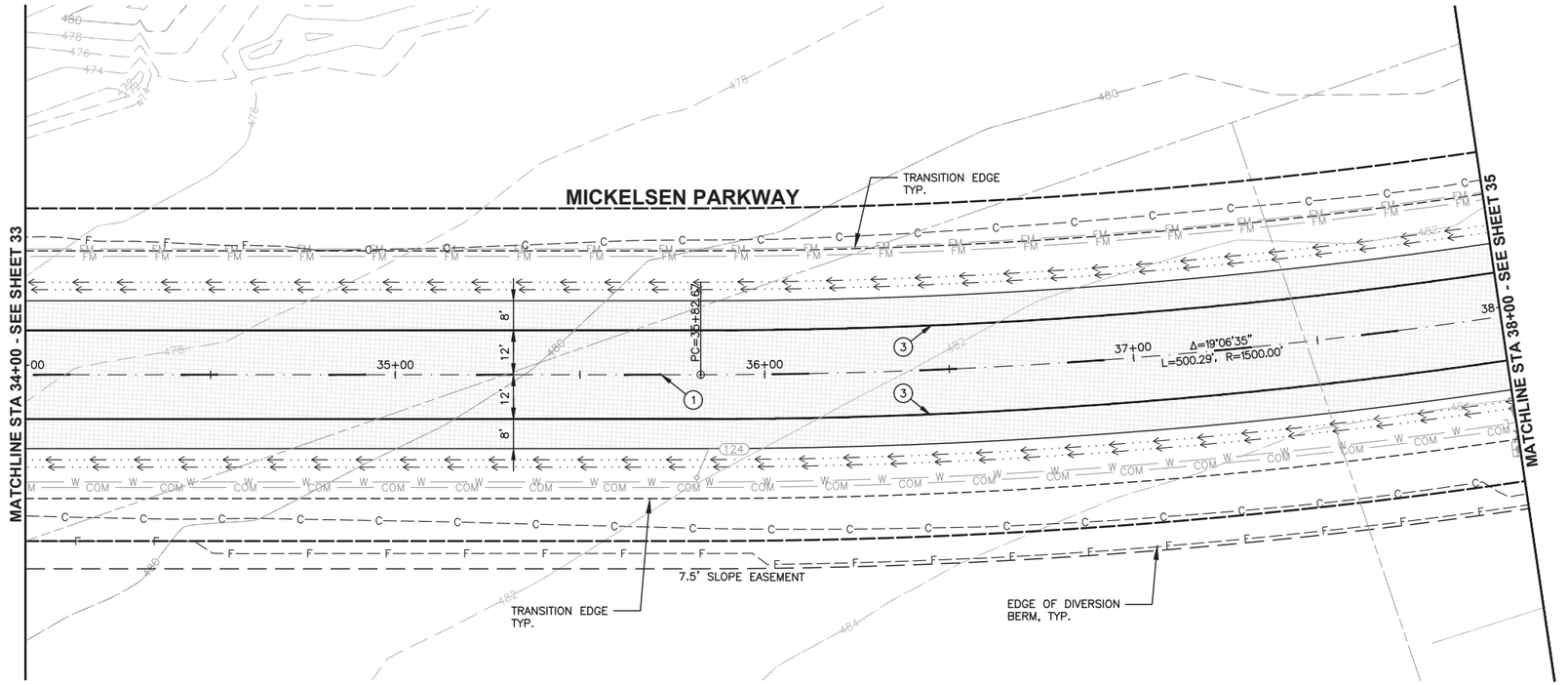

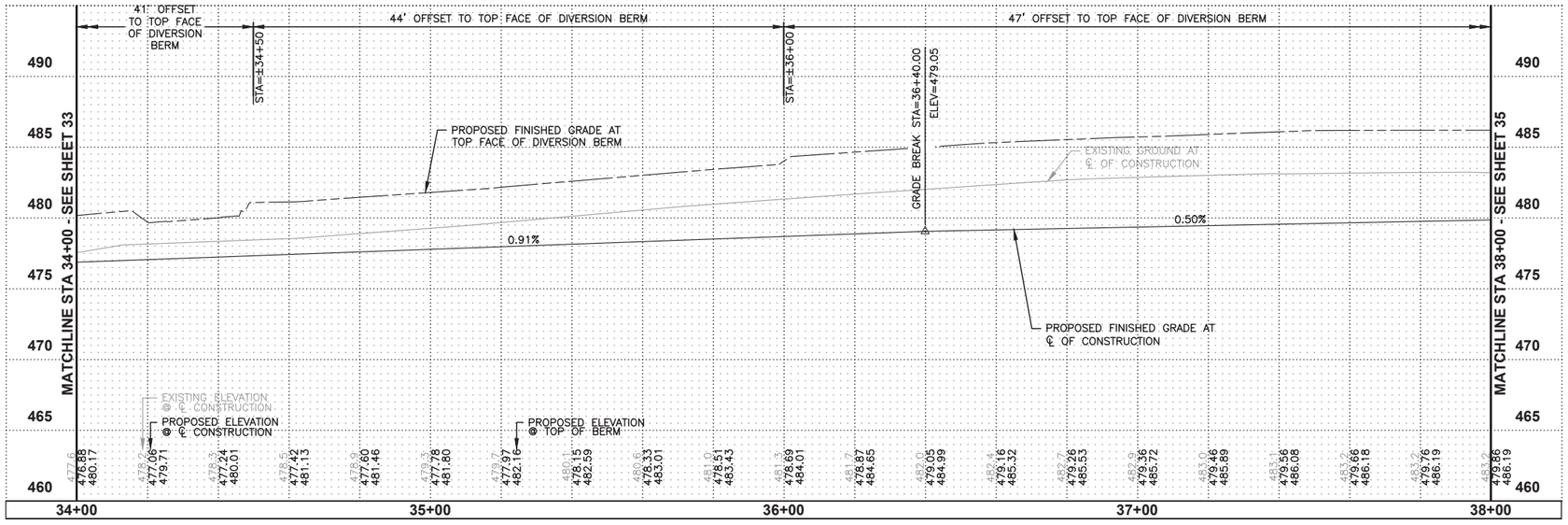

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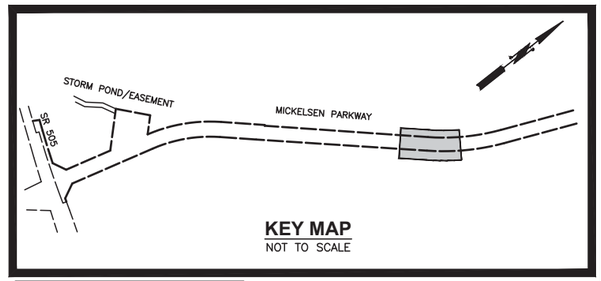

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 34+00 TO 38+00

SHEET 35 OF 52

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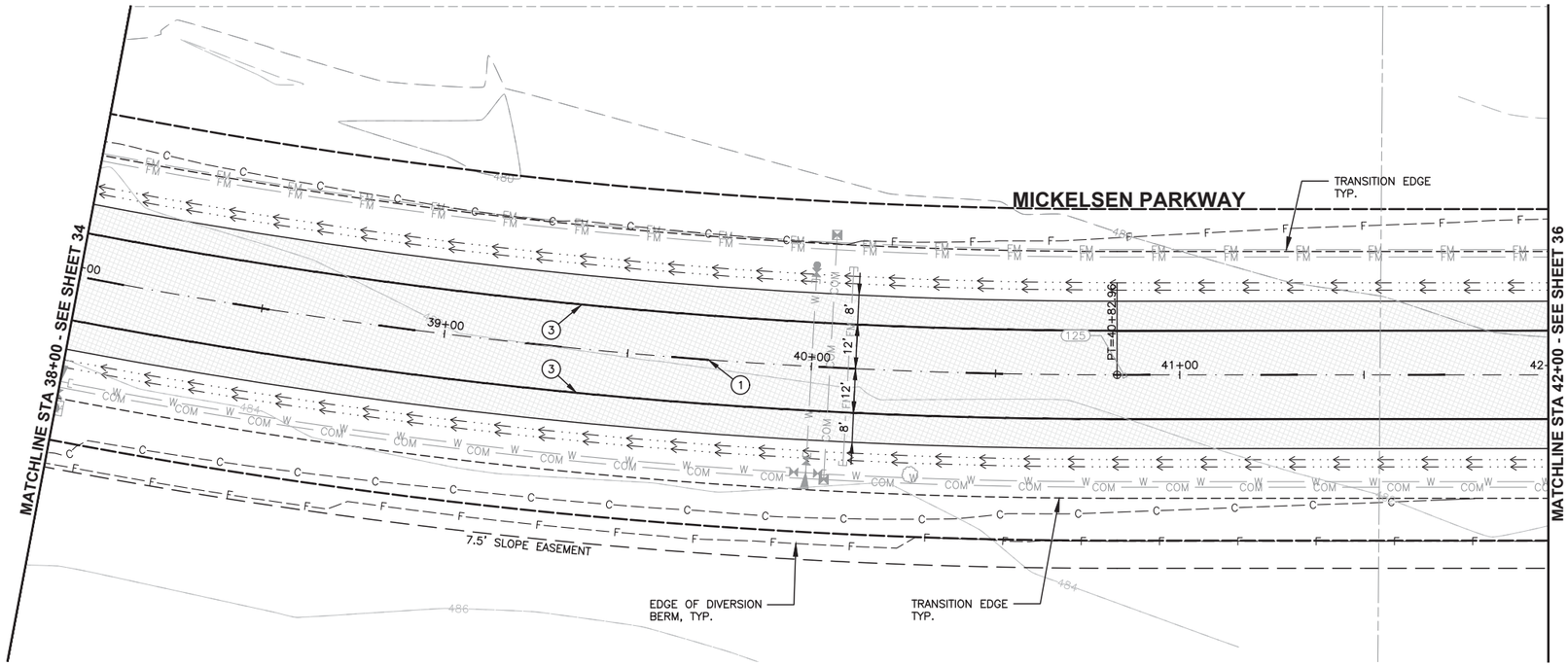

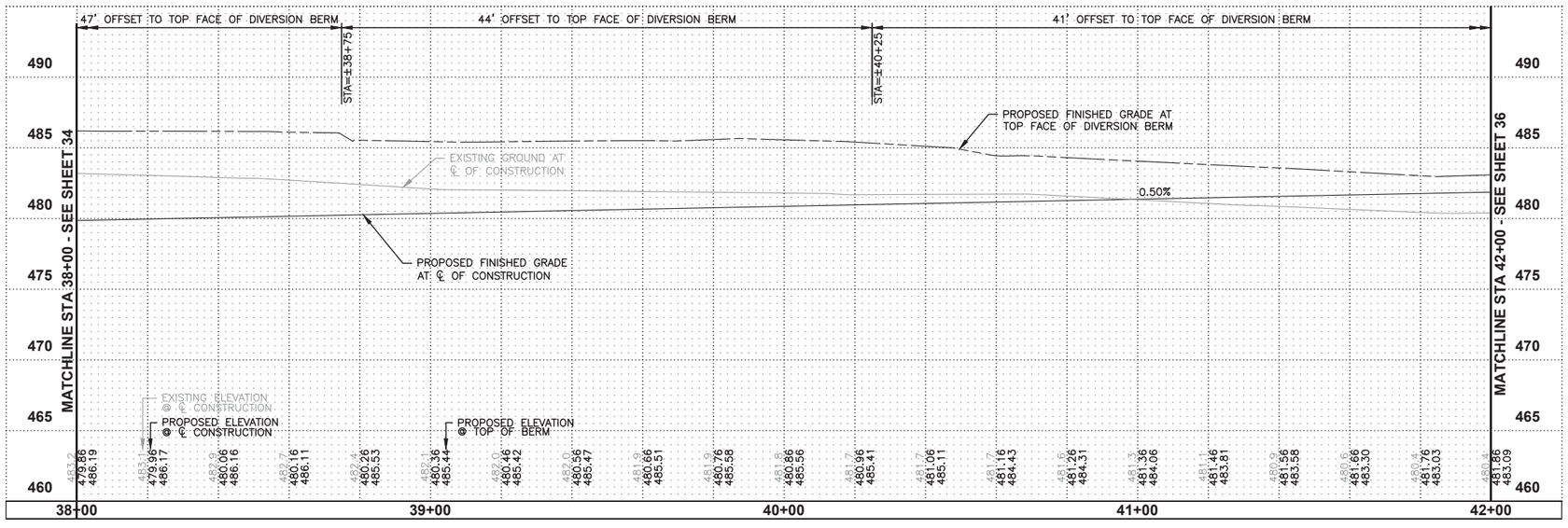

20' 10' 0 20' 40'

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ROADWAY & STORM DRAINAGE NOTES

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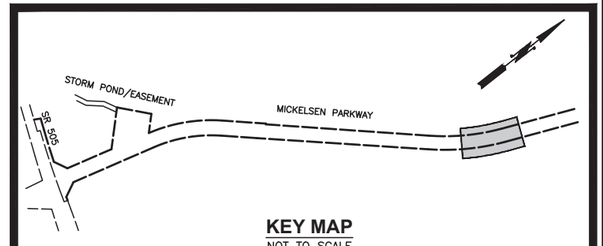

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 38+00 TO 42+00

SHEET 36 OF 52

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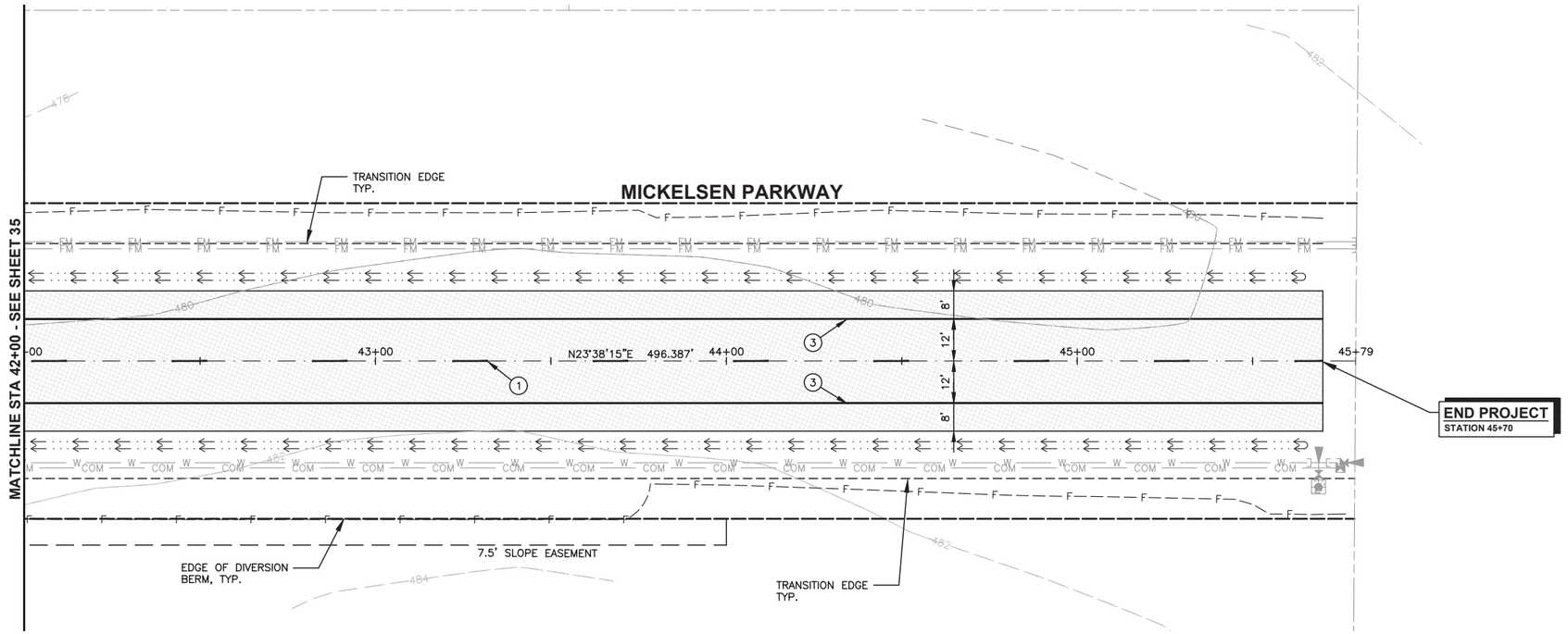

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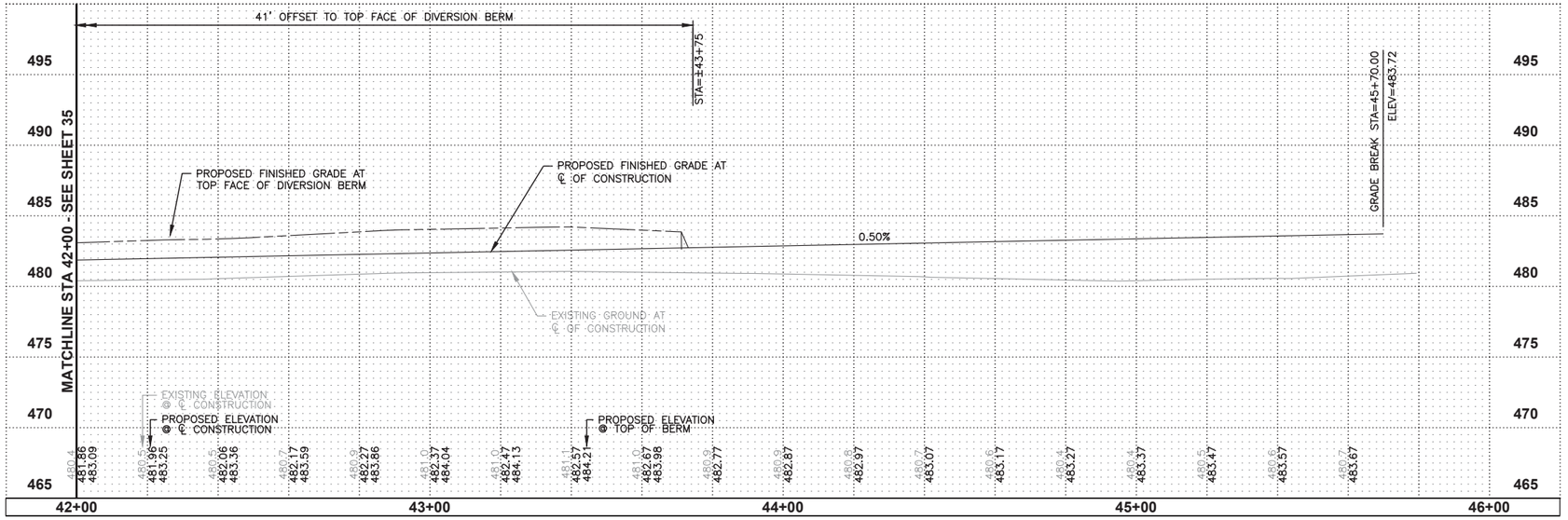

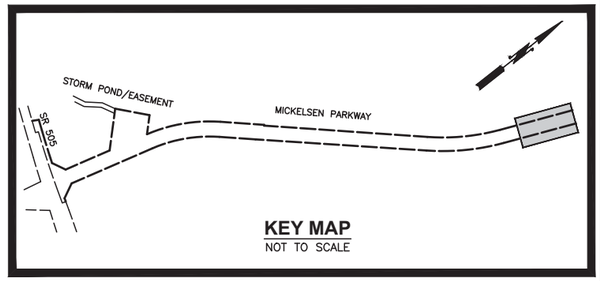

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PLAN AND PROFILE
STATION 42+00 TO 45+79

SHEET 37 OF 52

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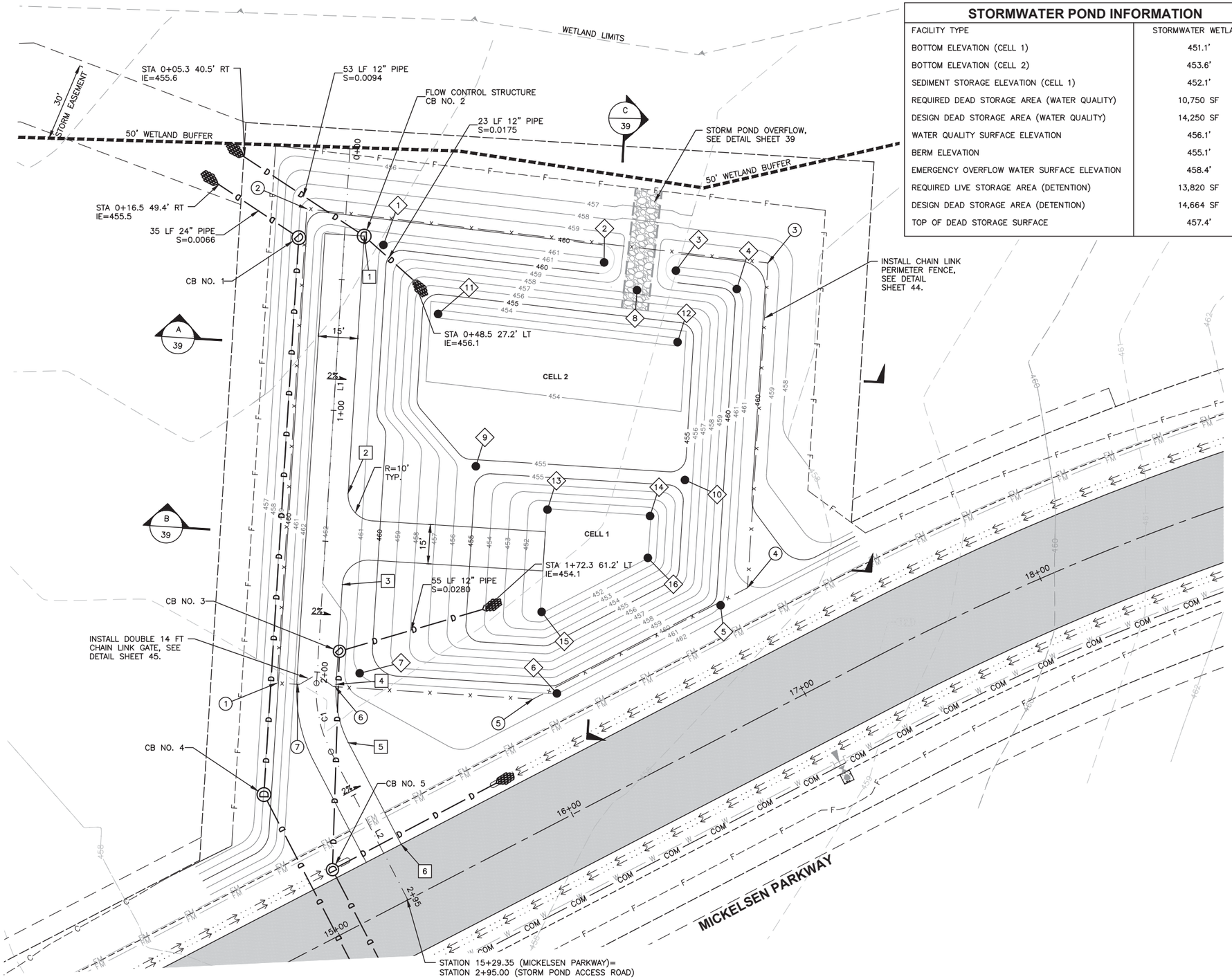

STORMWATER POND INFORMATION

FACILITY TYPE	STORMWATER WETLAND
BOTTOM ELEVATION (CELL 1)	451.1'
BOTTOM ELEVATION (CELL 2)	453.6'
SEDIMENT STORAGE ELEVATION (CELL 1)	452.1'
REQUIRED DEAD STORAGE AREA (WATER QUALITY)	10,750 SF
DESIGN DEAD STORAGE AREA (WATER QUALITY)	14,250 SF
WATER QUALITY SURFACE ELEVATION	456.1'
BERM ELEVATION	455.1'
EMERGENCY OVERFLOW WATER SURFACE ELEVATION	458.4'
REQUIRED LIVE STORAGE AREA (DETENTION)	13,820 SF
DESIGN DEAD STORAGE AREA (DETENTION)	14,664 SF
TOP OF DEAD STORAGE SURFACE	457.4'

20' 10' 0 20' 40'
SCALE: 1"=20'

FENCE INFORMATION

POINT #	ITEM	STATION & OFFSET
1	FENCE CORNER	2+04.94 15.0' RT
2	FENCE CORNER	0+23.87 15.0' RT
3	FENCE CORNER	0+33.51 161.8' LT
4	FENCE CORNER	1+57.66 161.8' LT
5	FENCE CORNER	2+49.00 77.7' LT
6	GATE POST	2+05.3 7.0' LT
7	GATE POST	2+05.0 7.0' RT

NOTE: STATION AND OFFSET INFORMATION IS FROM STORM POND ACCESS ROAD ALIGNMENT

STORMWATER POND GRADING INFORMATION

POINT #	ITEM	STATION & OFFSET
1	POND – TOP	0+35.9 15.4' LT
2	POND – TOP	0+37.2 99.9' LT
3	POND – TOP	0+38.6 127.0' LT
4	POND – TOP	0+44.2 150.6' LT
5	POND – TOP	1+65.0 152.0' LT
6	POND – TOP	2+51.3 86.7' LT
7	POND – TOP	1+99.7 16.4' LT
8	POND OVERFLOW	0+65.0 122.6' LT
9	BERM – TOP	1+17.9 55.5' LT
10	BERM – TOP	1+17.9 135.5' LT
11	BOTTOM – CELL 2	0+60.8 37.5' LT
12	BOTTOM – CELL 2	0+65.8 129.3' LT
13	BOTTOM – CELL 1	1+32.7 83.8' LT
14	BOTTOM – CELL 1	1+32.7 123.0' LT
15	BOTTOM – CELL 1	1+71.8 84.0' LT
16	BOTTOM – CELL 1	1+48.7 123.2' FT

NOTE: STATION AND OFFSET INFORMATION IS FROM STORM POND ACCESS ROAD ALIGNMENT

ACCESS ROAD INFORMATION

POINT #	ITEM	STATION & OFFSET	ELEVATION
1	CORNER	0+32.9 7.5' LT	461.85'
2	PC–TO CELL #1	1+31.1 7.5' LT	461.85'
3	PC–TO CELL #1	1+66.1 7.5' LT	461.85'
4	PC	2+04.3 7.5' LT	462.85'
5	PT	2+31.3 7.5' LT	462.35'
6	CORNER	2+75.0 7.5' LT	461.66'

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COUNTY ROAD PROJECT NO: 2121

STORM POND

SHEET 38 OF 52

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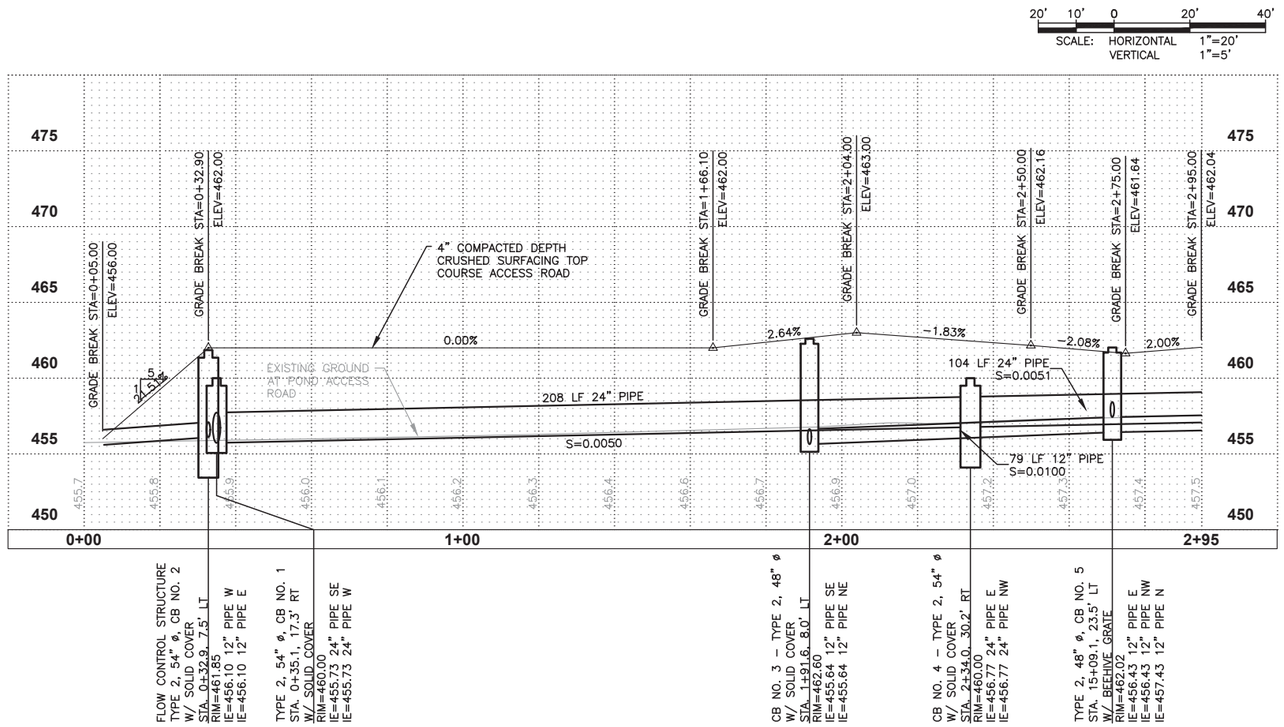
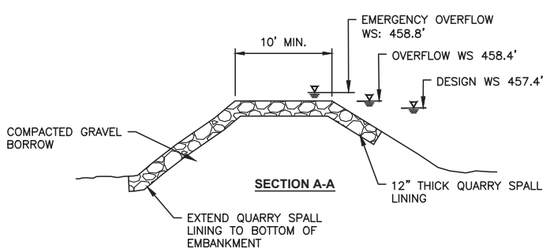
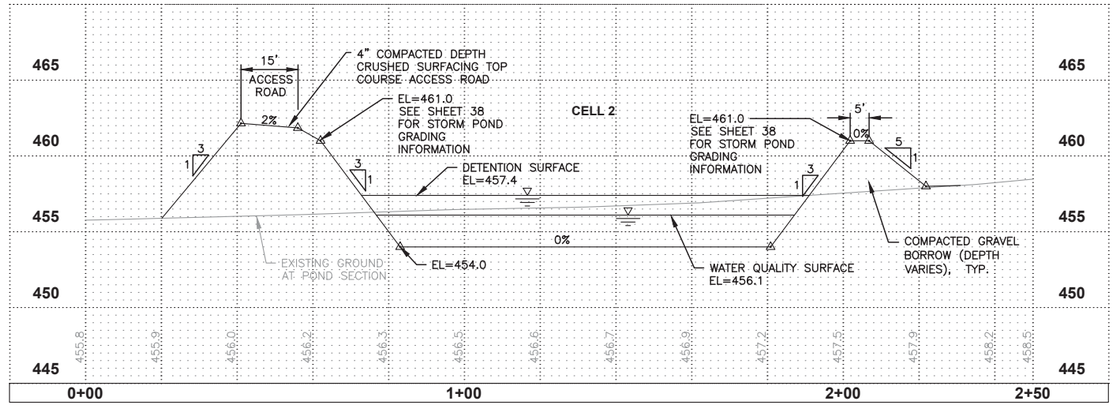


PROFILE
STORM POND ACCESS ROAD

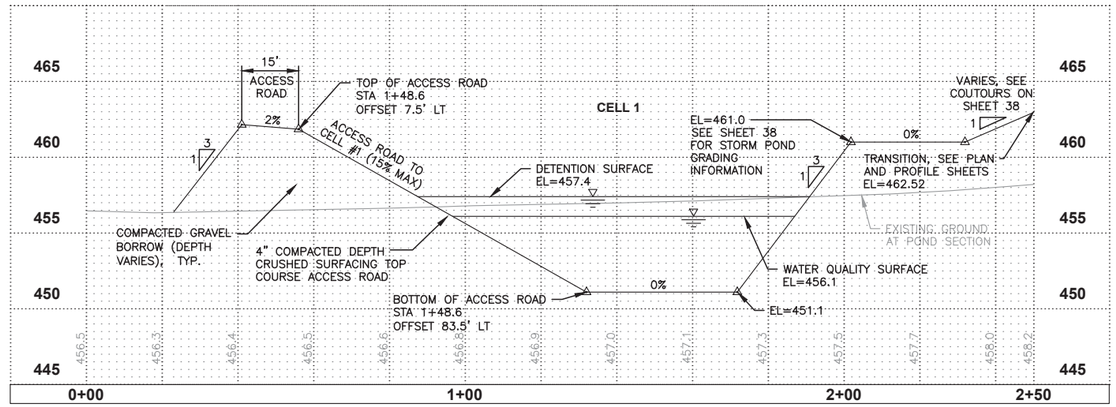
EMERGENCY OVERFLOW SPILLWAY



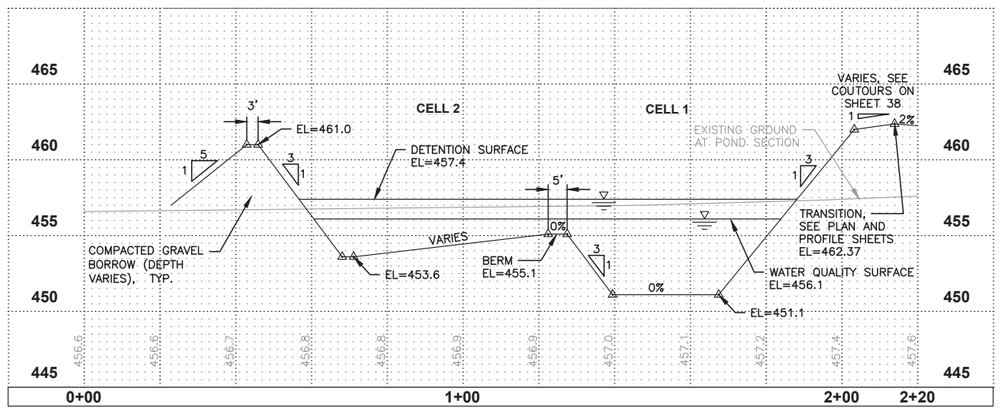
STORM POND OVERFLOW DETAIL
NOT TO SCALE



A/38 **SECTION**



B/38 **SECTION**



C/38 **SECTION**

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"
TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

STORM POND SECTIONS

SHEET 39 OF 52

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" Utilities Underground Location Center

JON MARSHALL HINTON STATE OF WASHINGTON 36494 REGISTERED PROFESSIONAL ENGINEER

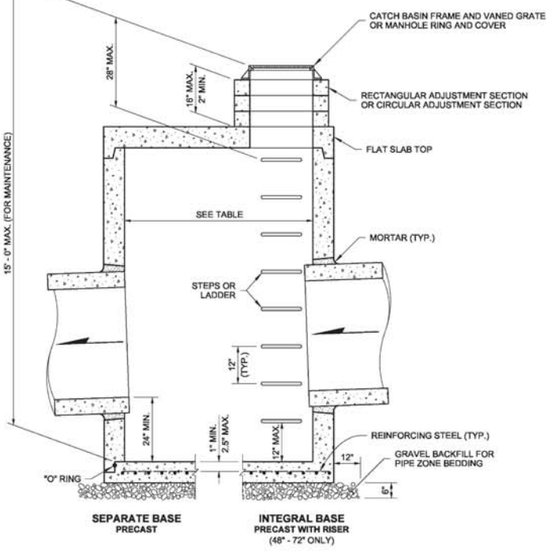
L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\STORM POND.dwg, 6/8/2020 11:18 AM, SHARI GAER

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

DRAWN BY: CHRISTOPHER LISH



NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
4. Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification 9-04.3.**

CATCH BASIN DIMENSIONS

CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES

CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP ①	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

① Corrugated Polyethylene Storm Sewer Pipe **(Standard Specification 9-05.20)**
② **(Standard Specification 9-05.12(1))**
③ **(Standard Specification 9-05.12(2))**

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT UNLESS IT BEARS THE ORIGINAL WET SEAL AND SIGNATURE OF THE REGISTERED ENGINEER WHOSE NAME APPEARS HEREON. A COPY MAY BE DERIVED FROM ELSEWHERE.

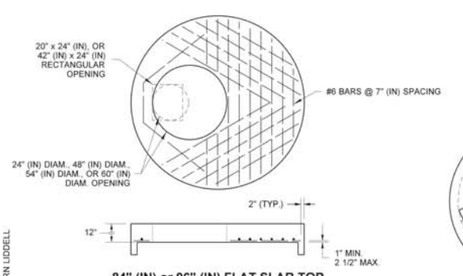
CATCH BASIN TYPE 2

STANDARD PLAN B-10.20-01

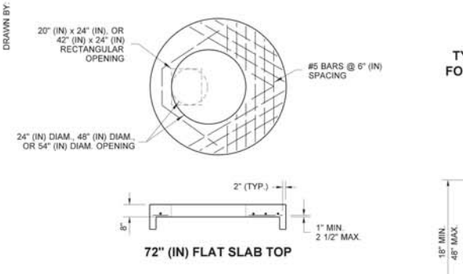
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III *02-07-12*
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation

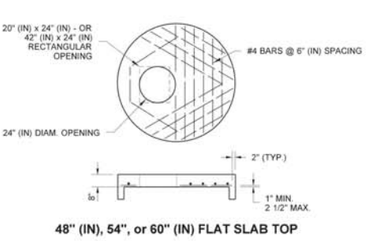
DRAWN BY: FERN LUDDELL



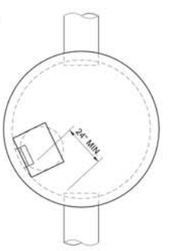
84" (IN) or 96" (IN) FLAT SLAB TOP



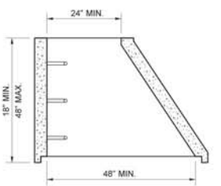
72" (IN) FLAT SLAB TOP



48" (IN), 54", or 60" (IN) FLAT SLAB TOP



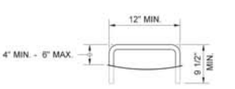
TYPICAL ORIENTATION FOR ACCESS AND STEPS



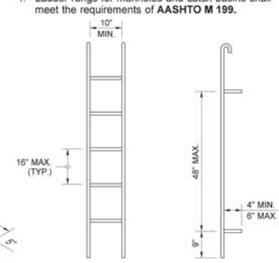
ECCENTRIC CONE SECTION

NOTE

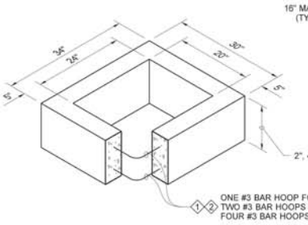
1. Ladder rungs for manholes and catch basins shall meet the requirements of **AASHTO M 199.**



STEP



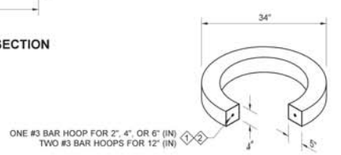
PREFABRICATED LADDER



RECTANGULAR ADJUSTMENT SECTION

① As an acceptable alternative to rebar, wire mesh having a minimum area of 0.12 square inches per foot may be used for adjustment sections.

② As an acceptable alternative to conventional steel reinforcement, manufacturers shall use Synthetic Structural Fibers meeting the requirements of **Standard Specification Section 9-05.50(10)**.



CIRCULAR ADJUSTMENT SECTION

For rectangular and circular adjustment sections, approved alternate material compositions are acceptable in lieu of precast concrete designs

Heilman, Julie
Jan 25 2017 3:01 PM

MISCELLANEOUS DETAILS FOR DRAINAGE STRUCTURES STANDARD PLAN B-30.90-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 8:32 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

STORM DETAILS

SHEET 40 OF 52

CALL 48 HOURS BEFORE YOU DIG
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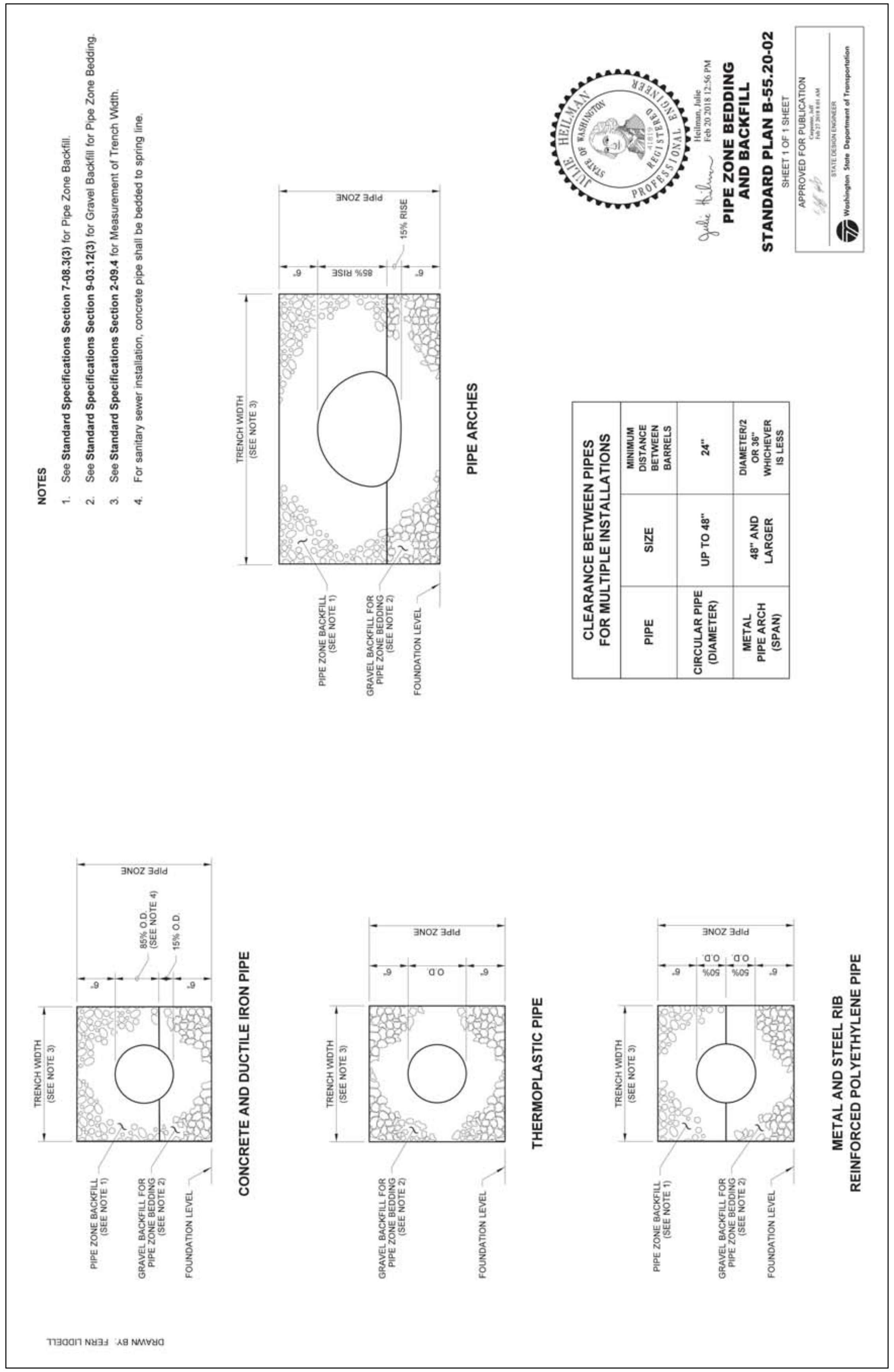
Washington Utilities Underground Location Center

0 1" 2"
IF NOT, SCALE ACCORDINGLY

(06-08-20)


NOTES
1. See Standard Specifications Section 7-08.3(3) for Pipe Zone Backfill.
2. See Standard Specifications Section 9-03.12(3) for Gravel Backfill for Pipe Zone Bedding.
3. See Standard Specifications Section 2-09.4 for Measurement of Trench Width.
4. For sanitary sewer installation, concrete pipe shall be bedded to spring line.
PIPE ARCHES
CLEARANCE BETWEEN PIPES FOR MULTIPLE INSTALLATIONS
PIPE | SIZE | MINIMUM DISTANCE BETWEEN BARRELS
CIRCULAR PIPE (DIAMETER) | UP TO 48" | 24"
METAL PIPE ARCH (SPAN) | 48" AND LARGER | DIAMETER/2 OR 36" WHICHEVER IS LESS
CONCRETE AND DUCTILE IRON PIPE
THERMOPLASTIC PIPE
METAL AND STEEL RIB REINFORCED POLYETHYLENE PIPE
PIPE ZONE
TRENCH WIDTH (SEE NOTE 3)
PIPE ZONE BACKFILL (SEE NOTE 1)
GRAVEL BACKFILL FOR PIPE ZONE BEDDING (SEE NOTE 2)
FOUNDATION LEVEL
PIPE ZONE BEDDING AND BACKFILL
STANDARD PLAN B-55.20-02
SHEET 1 OF 1 SHEET
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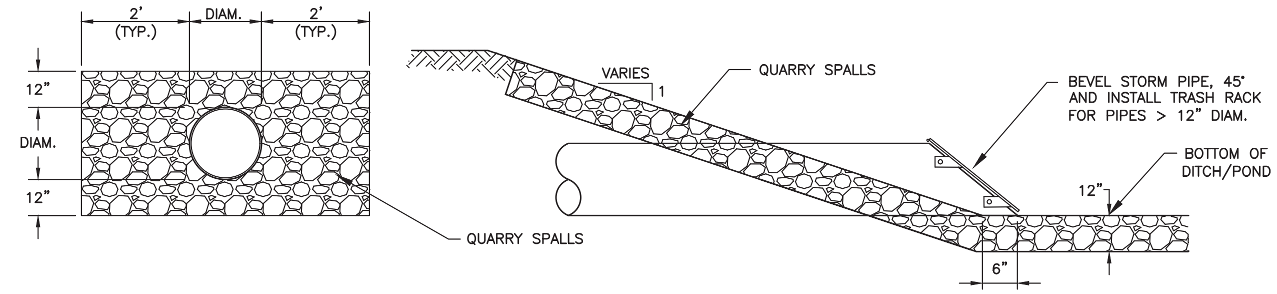
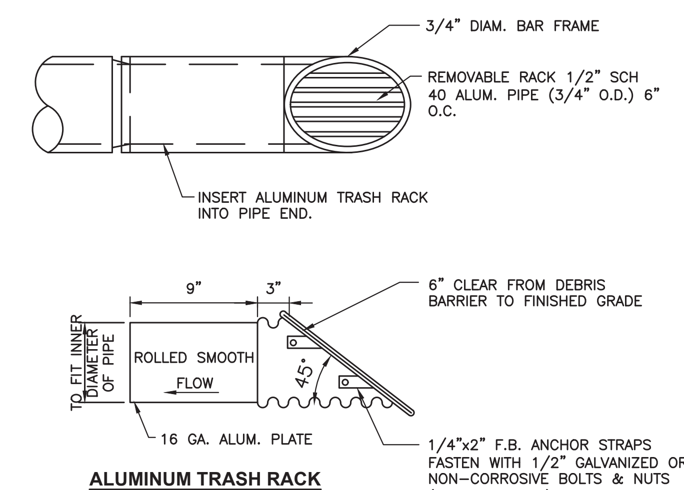
Washington State Department of Transportation
DRAWN BY: FERN LIDDELL



1 TYP STORM PIPE INLET/OUTLET PROTECTION DETAIL

NOT TO SCALE


3/4" DIAM. BAR FRAME
REMOVABLE RACK 1/2" SCH 40 ALUM. PIPE (3/4" O.D.) 6" O.C.
INSERT ALUMINUM TRASH RACK INTO PIPE END.
9"
3"
6" CLEAR FROM DEBRIS BARRIER TO FINISHED GRADE
TO FIT INNER DIAMETER OF PIPE
ROLLED SMOOTH
FLOW
45°
16 GA. ALUM. PLATE
1/4"x2" F.B. ANCHOR STRAPS FASTEN WITH 1/2" GALVANIZED OR NON-CORROSIVE BOLTS & NUTS (TYP, 4 PLACES).

ALUMINUM TRASH RACK

NOTES:

1. ALL STEEL PARTS MUST BE GALVANIZED & ASPHALT COATED (TREATMENT 1 OR BETTER).
2. CONTRACTOR TO VERIFY DIMENSIONS.

2 TYP TRASH RACK DEBRIS BARRIER

NOT TO SCALE

0 1" 2"
TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

Lewis County Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

STORM DETAILS

SHEET 41 OF 52

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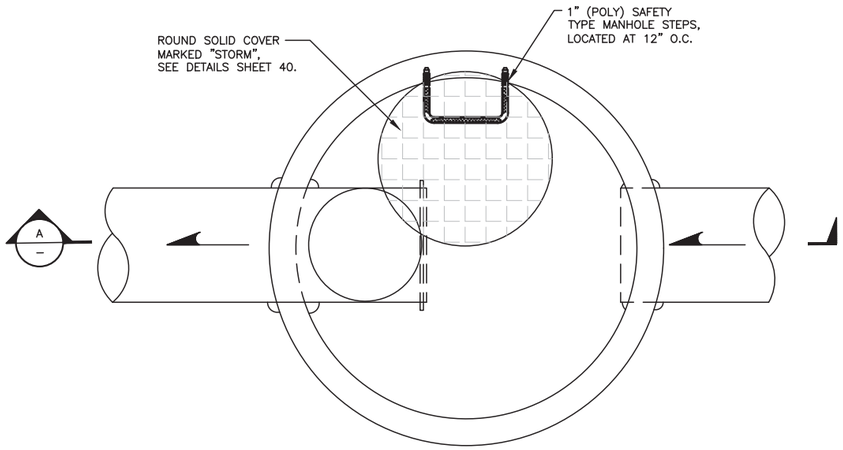
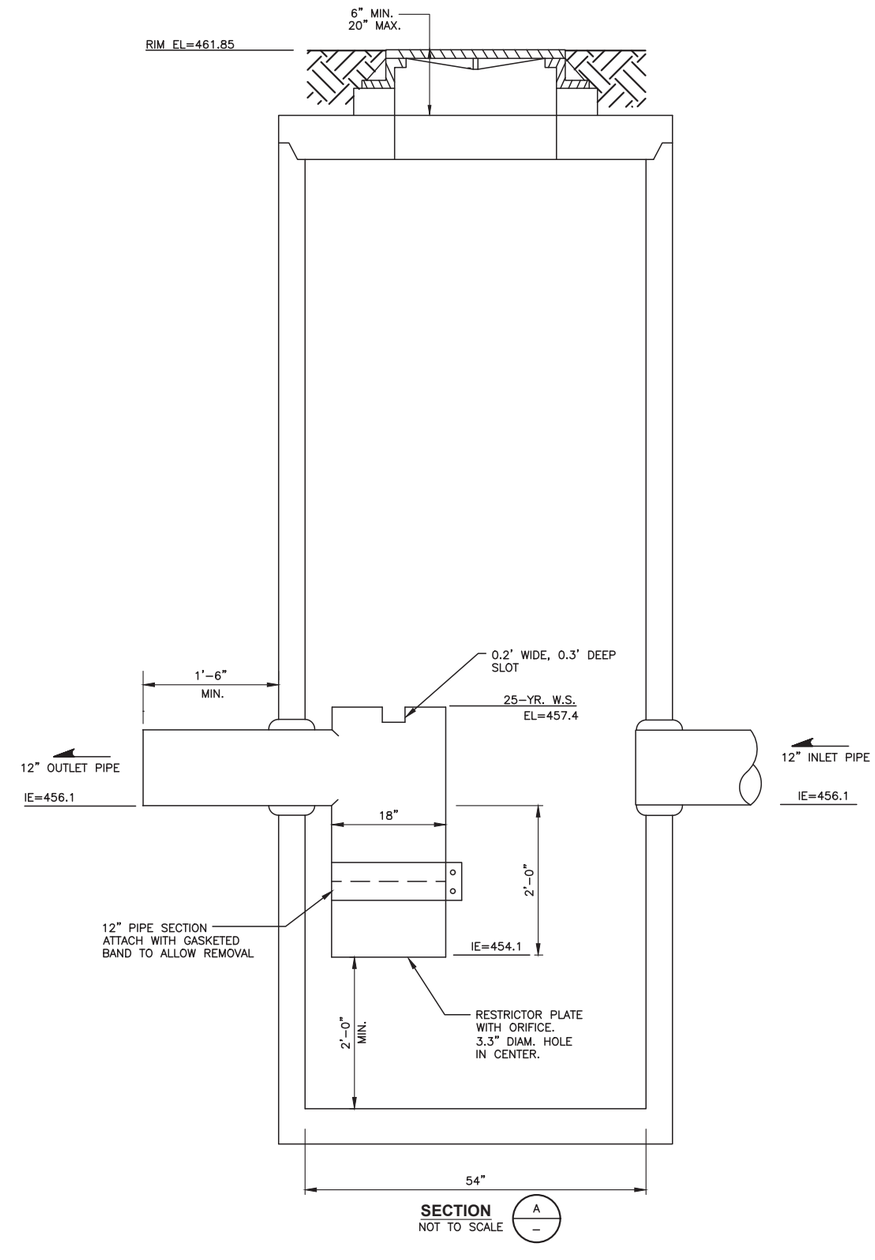
JON MARSHALL HINTON STATE OF WASHINGTON 36494 REGISTERED PROFESSIONAL ENGINEER



PLAN VIEW

NOTES:

1. THE RESTRICTOR/SEPARATOR SHALL BE FABRICATED FROM .60" ALUMINUM OR .064" ALUMINIZED STEEL OR .064" GALVANIZED STEEL PIPE IN ACCORDANCE WITH AASHTO M 36, M196 AND M274. GALVANIZED STEEL SHALL HAVE ASPHALT TREATMENT 1.
2. OUTLET SHALL BE CONNECTED TO STORM DRAIN PIPE WITH A COUPLING BAND.
3. FRAME AND LADDER OR STEPS SHALL BE OFFSET SO THAT (1) THE RISER PIPE IS VISIBLE FROM TOP AND (2) CLIMB-DOWN SPACE IS CLEAR OF THE RISER.
4. METAL PARTS: CORROSION RESISTANT ALUMINUM. IF STEEL SUBSTITUTED FOR ALUMINUM, GALVANIZED PARTS NEED TO HAVE ASPHALT TREATMENT 1.



SECTION A
NOT TO SCALE

0 1" 2"
TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

2 **FLOW CONTROL STRUCTURE - CB NO. 2**

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

STORM DETAILS

SHEET 42 OF 52

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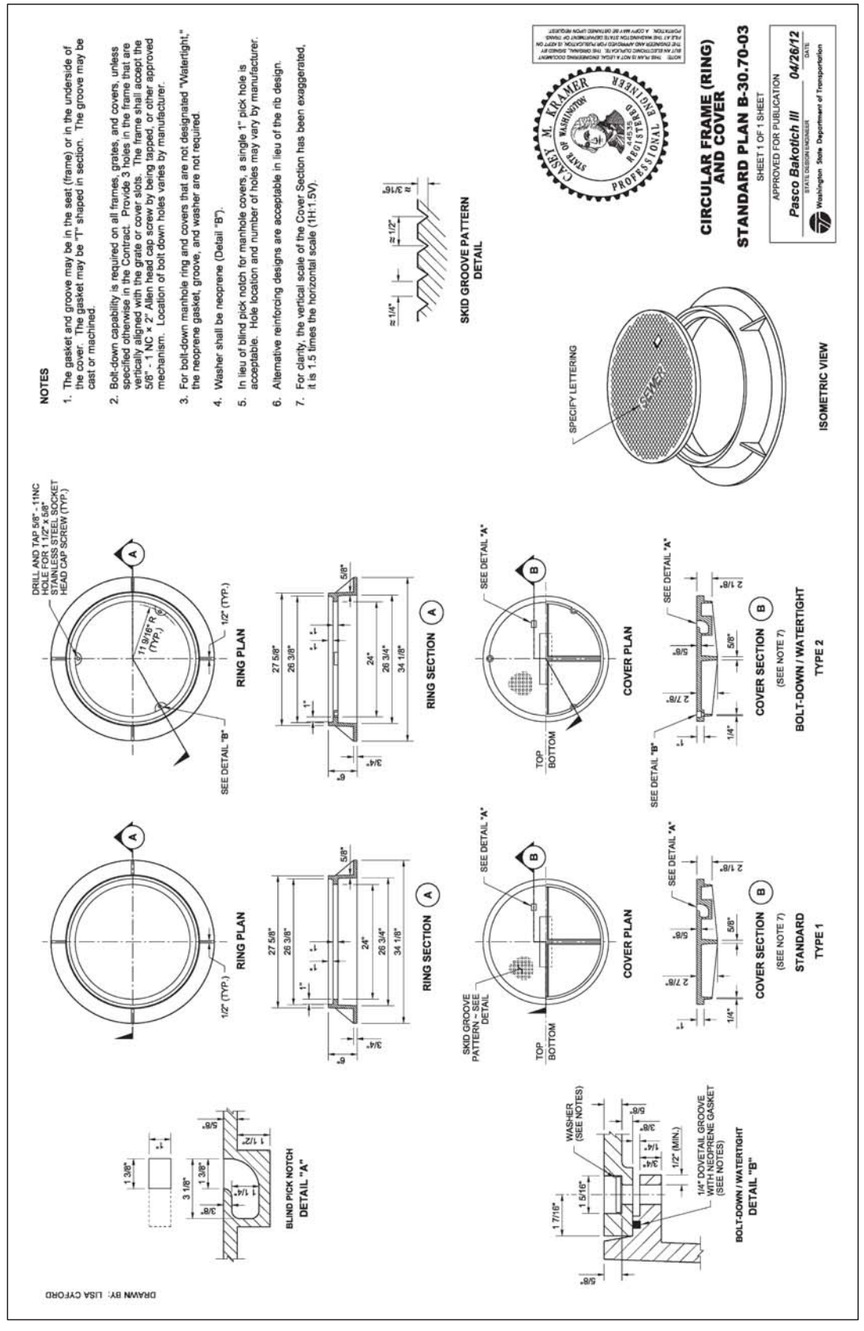
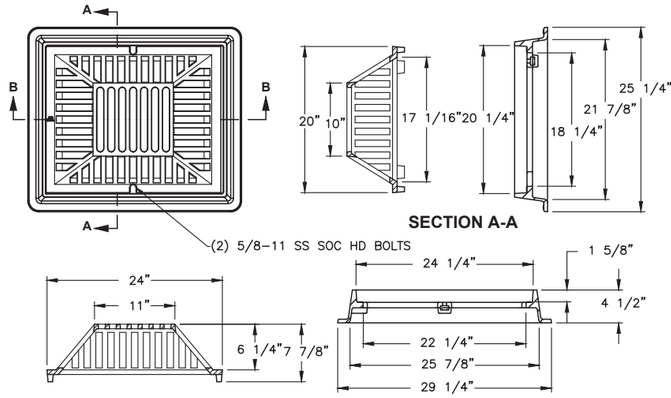
JON MARSHALL HINTON
STATE OF WASHINGTON
36484
REGISTERED
PROFESSIONAL ENGINEER





BEEHIVE FRAME AND GRATE DETAIL

NTS

0 1" 2"

TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
REGISTERED
36484
PROFESSIONAL ENGINEER

Lewis County
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DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
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NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

STORM DETAILS

SHEET 43 OF 52

CALL 48 HOURS BEFORE YOU DIG
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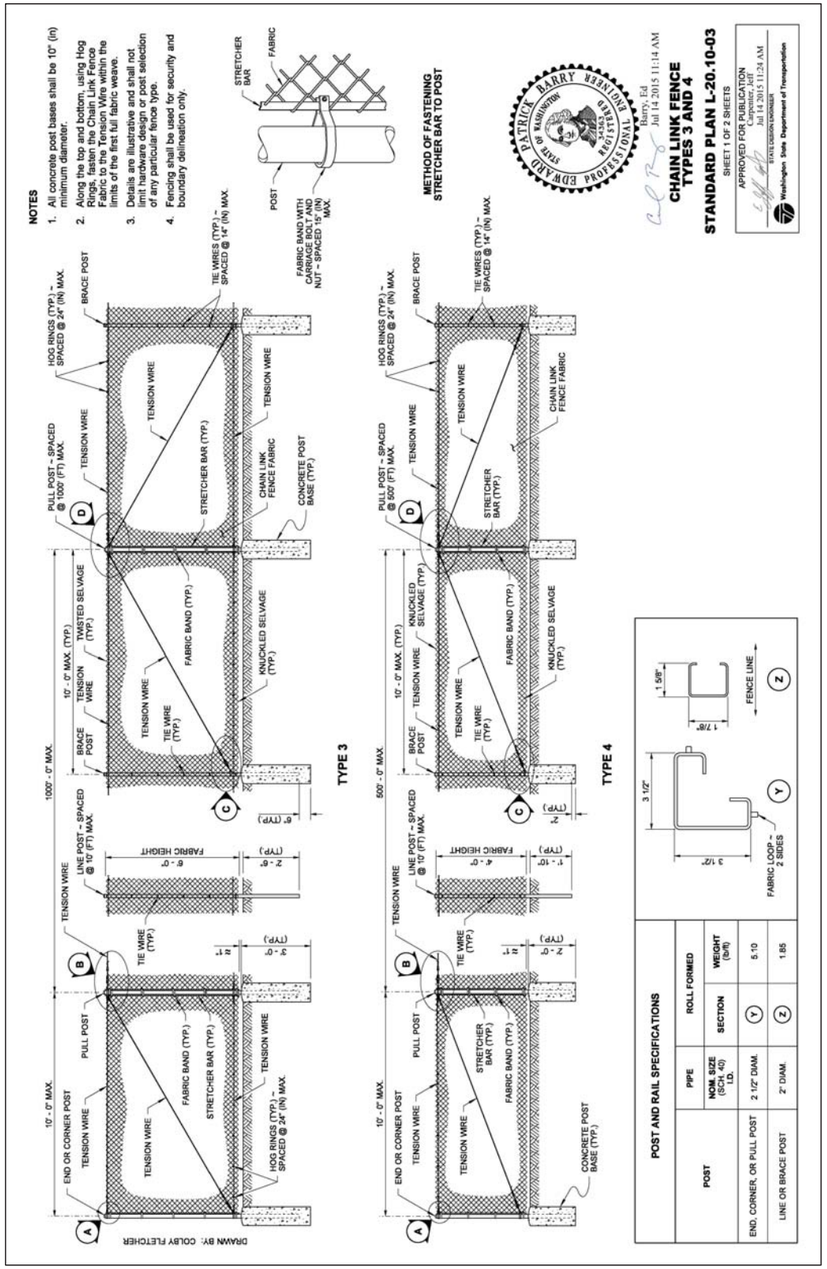
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\STRM_DET.dwg, 6/8/2020 11:18 AM, SHARI GAER

NOTES

1. All concrete post bases shall be 10" (in) minimum diameter.
2. Along the top and bottom, using Hog Rings, fasten the Chain Link Fence Fabric or the Tension Wire within the limits of the Fabric Bands where used.
3. Details are illustrative and shall not limit the manufacturer's choice selection of any particular fence type.
4. Fencing shall be used for security and boundary delineation only.



METHOD OF FASTENING STRETCHER BAR TO POST

POST AND RAIL SPECIFICATIONS

POST	PIPE NOM. SIZE (SCH. 40) I.D.	ROLL FORMED SECTION	ROLL FORMED WEIGHT (lb/ft)
END, CORNER, OR PULL POST	2 1/2" DIAM.	Y	5.10
LINE OR BRACE POST	2" DIAM.	Z	1.85

PATRICK BARRY EDWARD — STATE OF WASHINGTON — 23363 — REGISTERED PROFESSIONAL ENGINEER

Barry, Ed
Jul 14 2015 11:14 AM

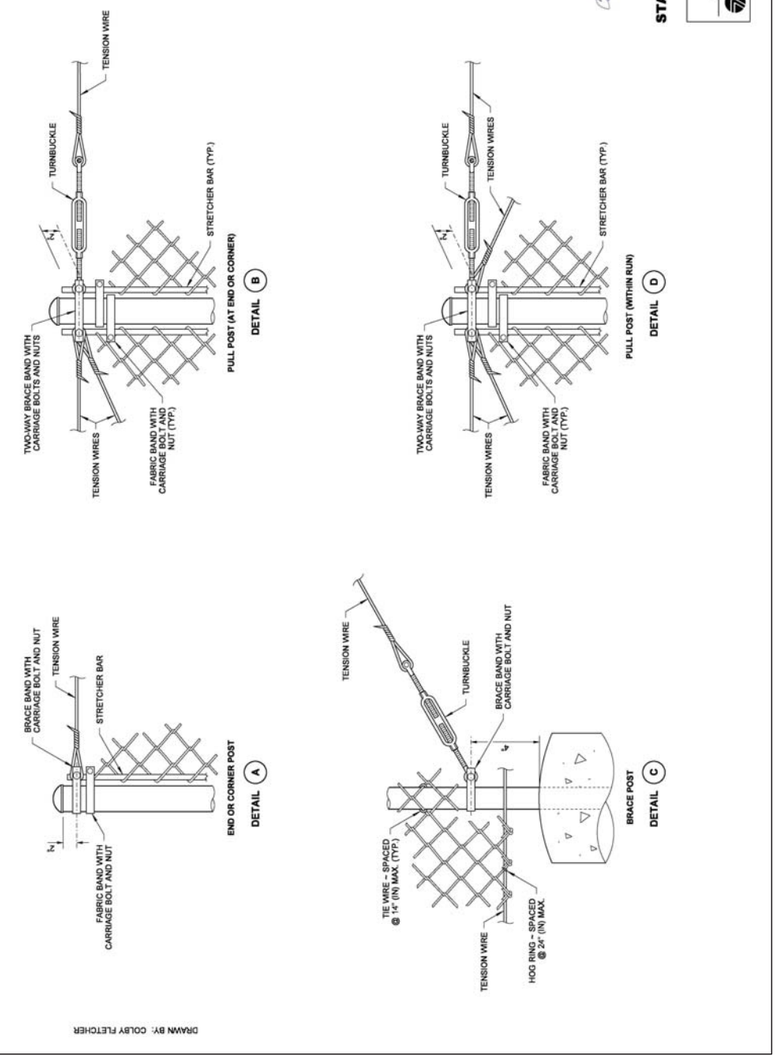
CHAIN LINK FENCE TYPES 3 AND 4

STANDARD PLAN L-20.10-03

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 14 2015 11:24 AM
STATE DESIGN ENGINEER

Washington State Department of Transportation



PATRICK BARRY EDWARD — STATE OF WASHINGTON — 23363 — REGISTERED PROFESSIONAL ENGINEER

Barry, Ed
Jul 14 2015 11:14 AM

CHAIN LINK FENCE TYPES 3 AND 4

STANDARD PLAN L-20.10-03

SHEET 2 OF 2 SHEETS

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Carpenter, Jeff
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0 1" 2"
TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON — STATE OF WASHINGTON — 36484 — REGISTERED PROFESSIONAL ENGINEER

Lewis County
Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

FENCE DETAILS

SHEET 44 OF 52

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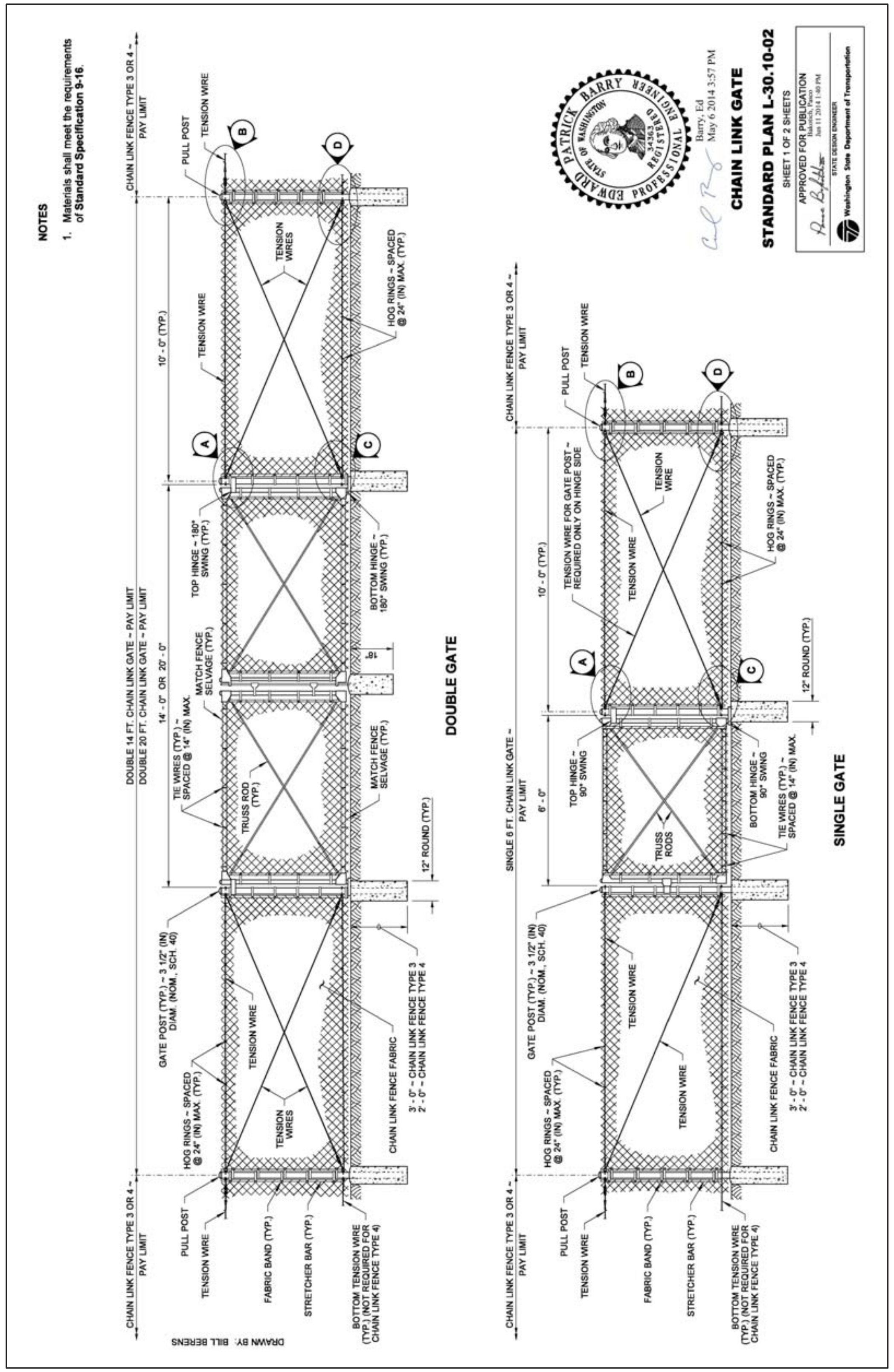

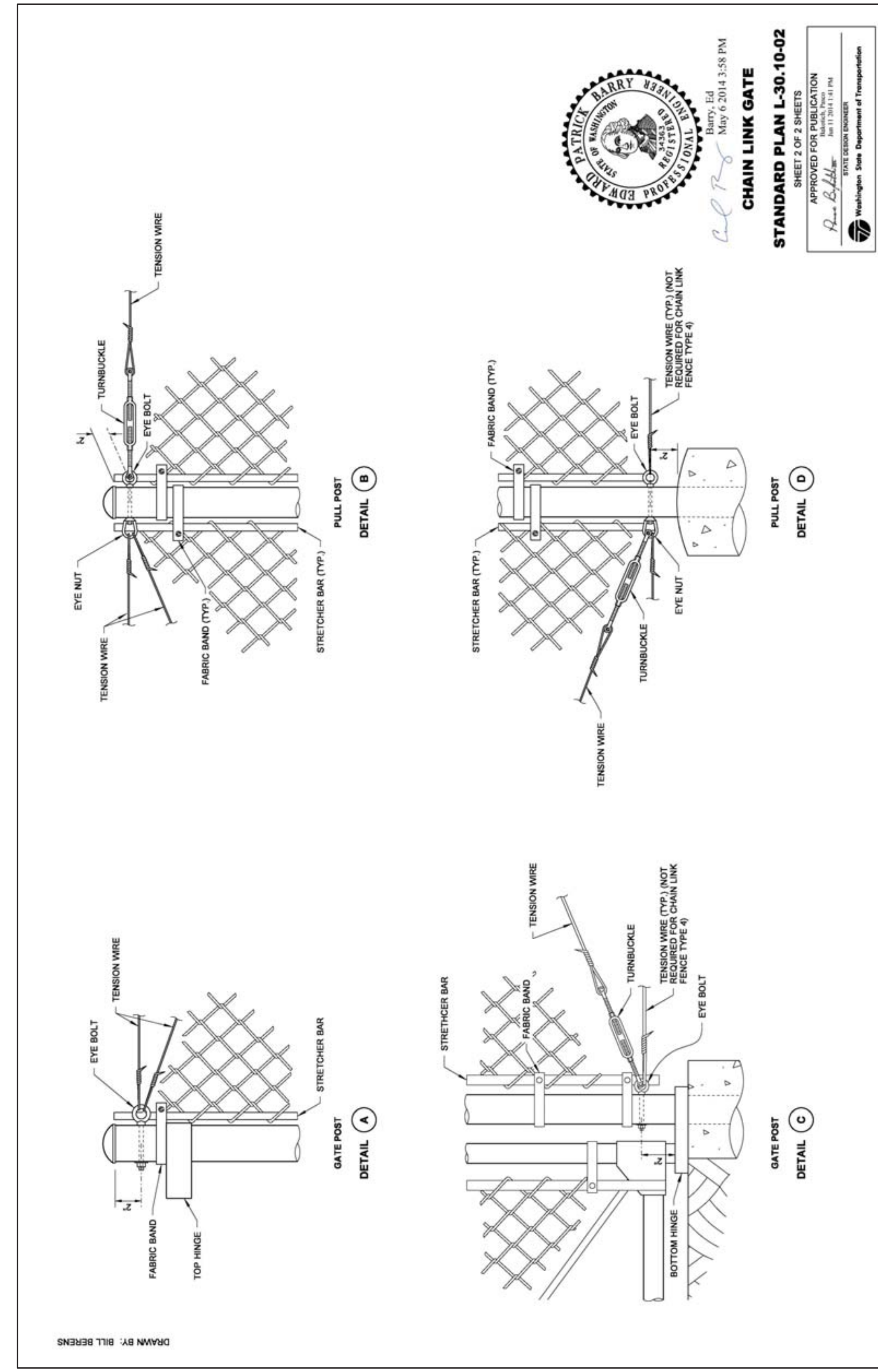

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06-08-20

Lewis County Department of Public Works
2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

GATE DETAILS

SHEET 45 OF 52

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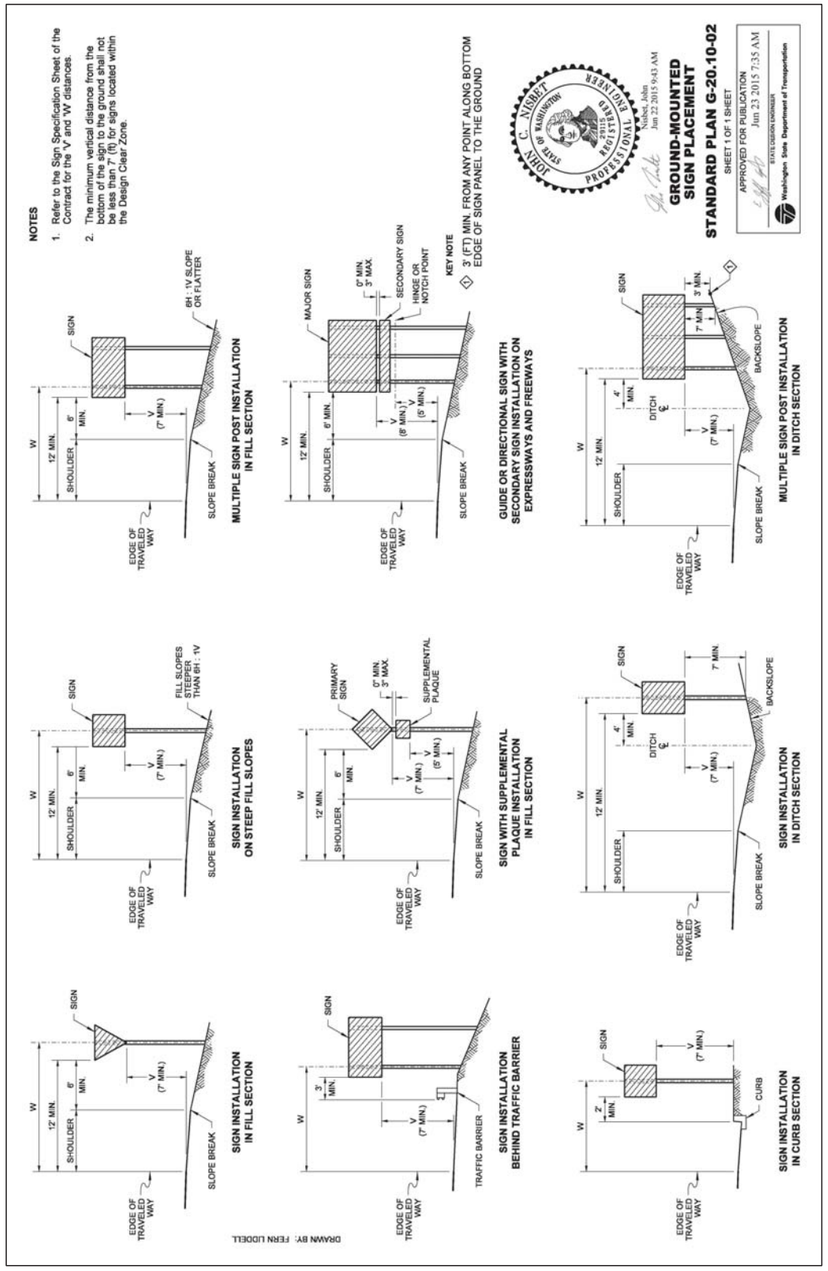
Utilities Underground Location Center

JON MARSHALL HINTON, STATE OF WASHINGTON, 36494, REGISTERED PROFESSIONAL ENGINEER



JOHN C. NISBET — STATE OF WASHINGTON — 36494 — REGISTERED PROFESSIONAL ENGINEER

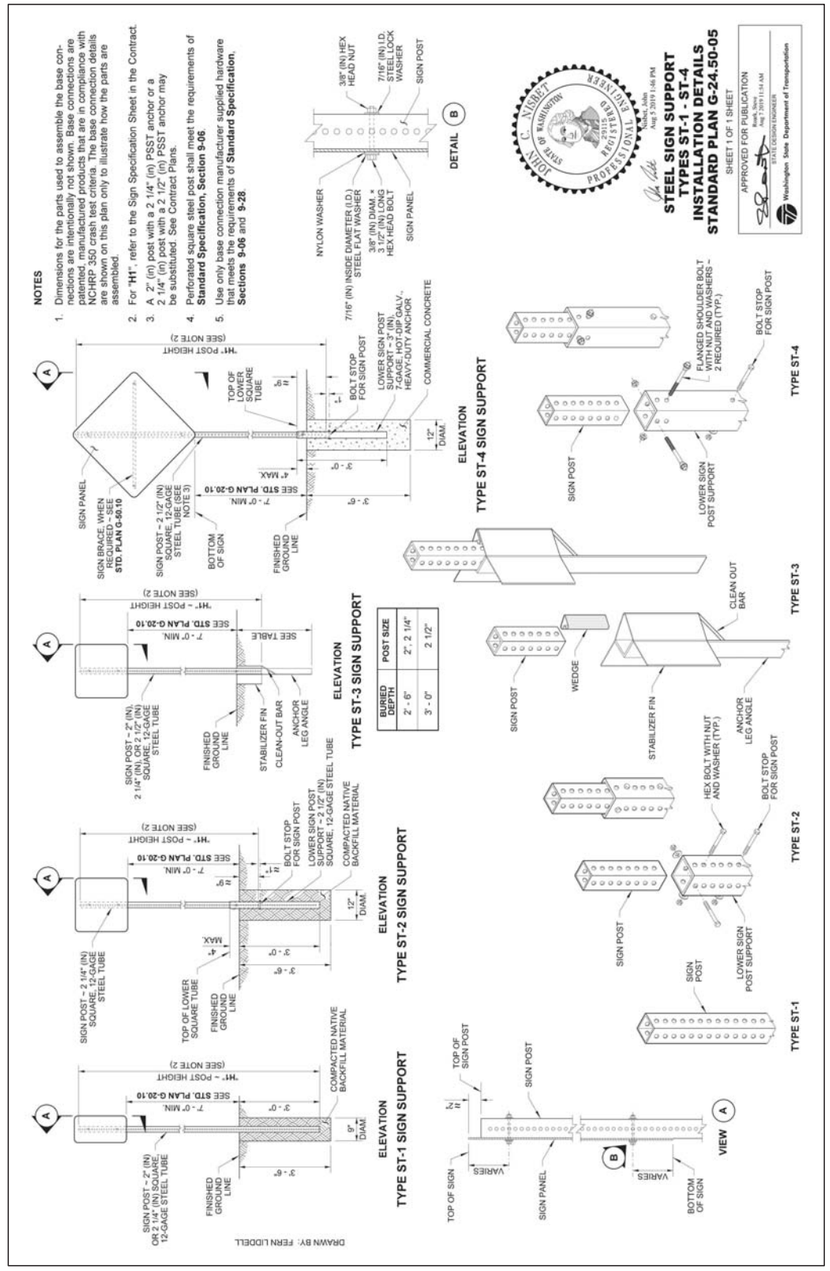
Jon Marshall Hinton
Jun 22 2015 9:43 AM

GROUND-MOUNTED SIGN PLACEMENT
STANDARD PLAN G-20.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Jun 23 2015 7:35 A.M.
STATE DESIGN ENGINEER

Washington State Department of Transportation



BURIED DEPTH	POST SIZE
2' - 6"	2", 2 1/4"
3' - 0"	2 1/2"

JOHN C. NISBET — STATE OF WASHINGTON — 36494 — REGISTERED PROFESSIONAL ENGINEER

Jon Marshall Hinton
Aug 7 2019 11:54 AM

STEEL SIGN SUPPORT TYPES ST-1 ST-4 INSTALLATION DETAILS
STANDARD PLAN G-24.50-05

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Aug 7 2019 11:54 AM
STATE DESIGN ENGINEER

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RIGHT-OF-WAY DISCLAIMER
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0 1" 2"
TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON — STATE OF WASHINGTON — 36494 — REGISTERED PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

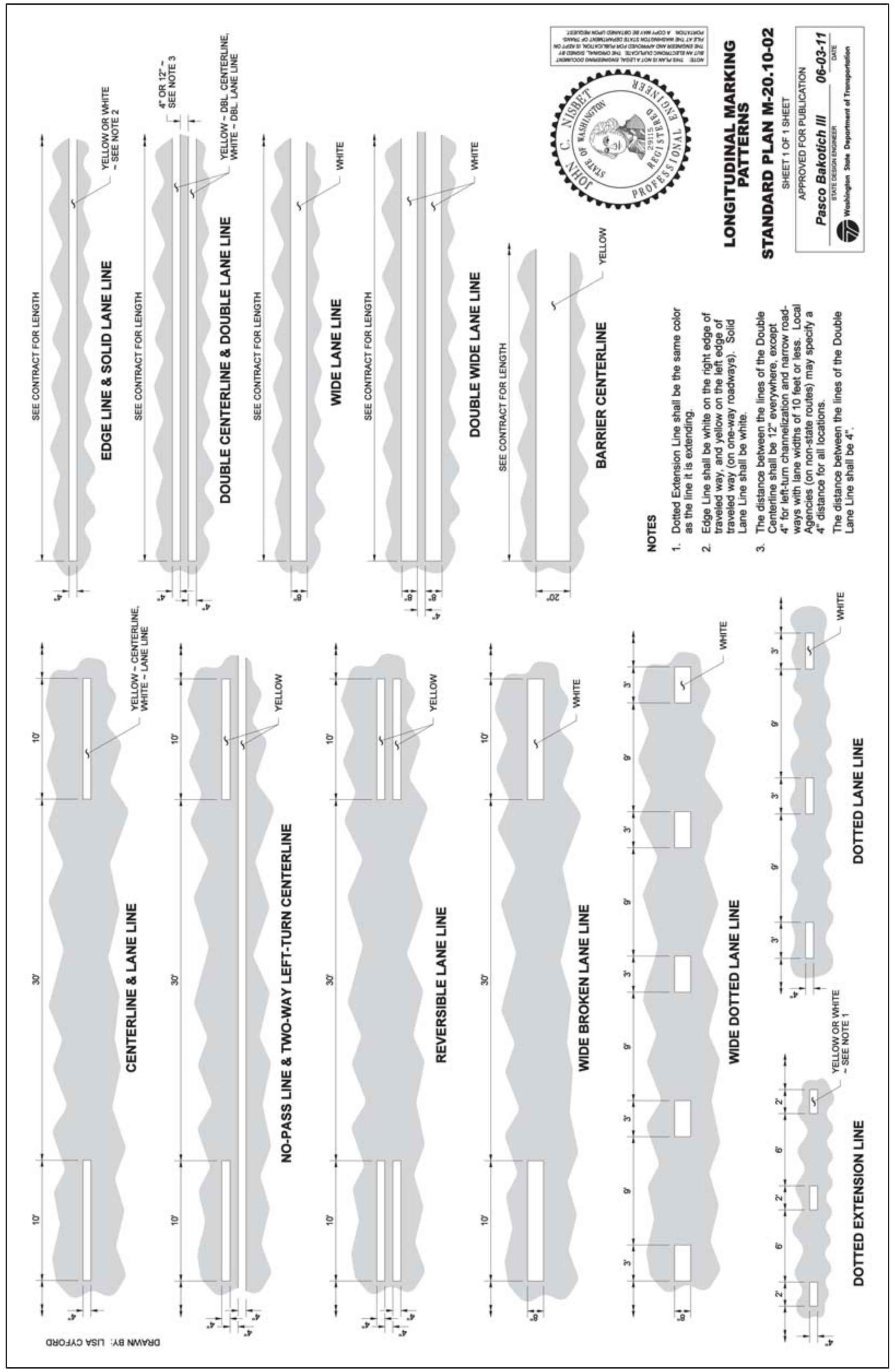
COUNTY ROAD PROJECT NO: 2121

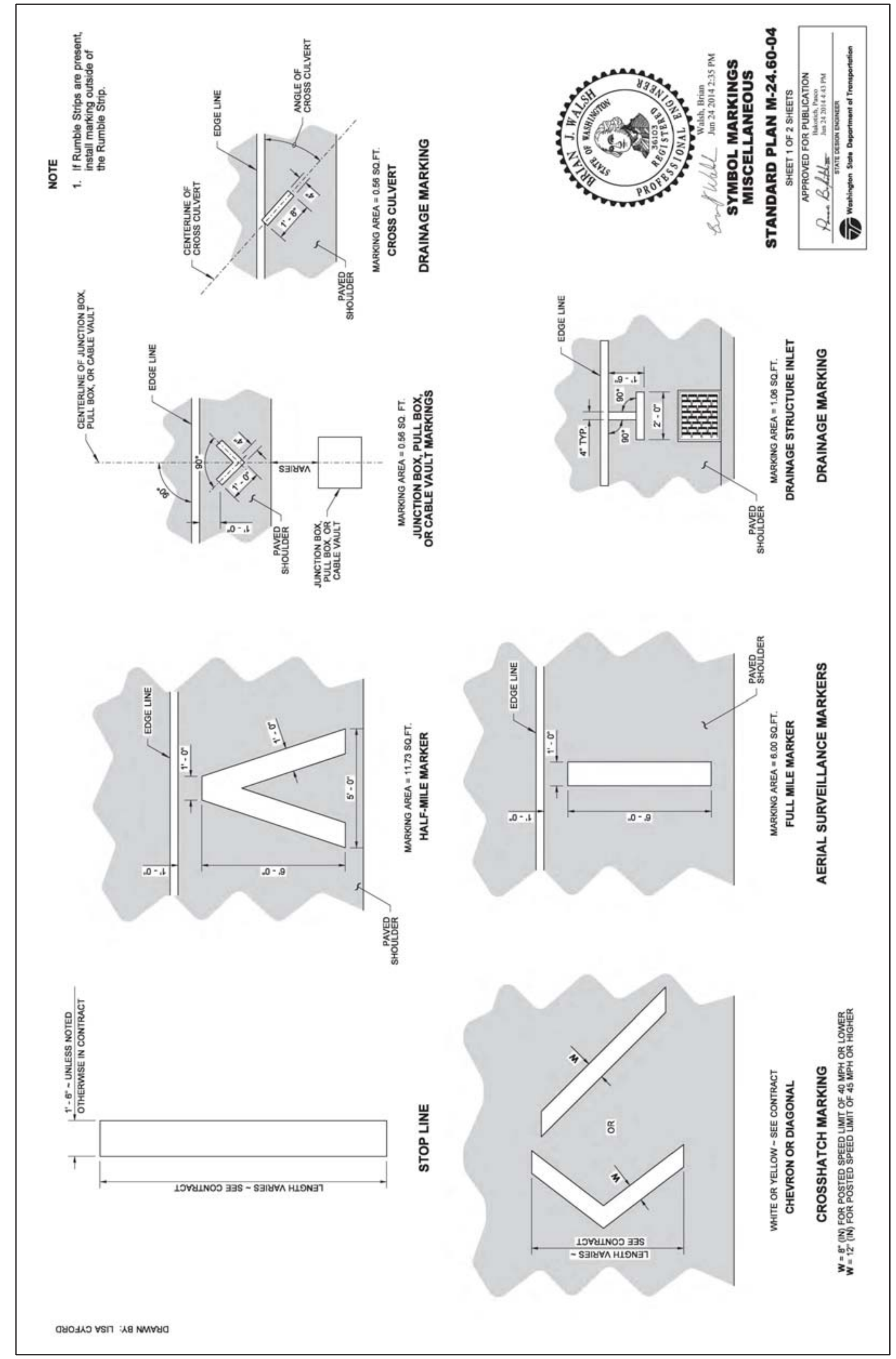
SIGN DETAILS

SHEET 46 OF 52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\Civil\X-SEC & DET.dwg, 6/8/2020 11:19 AM, SHARI GAER


LONGITUDINAL MARKING PATTERNS
STANDARD PLAN M-20.10-02
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III
06-03-11
Washington State Department of Transportation
EDGE LINE & SOLID LANE LINE
DOUBLE CENTERLINE & DOUBLE LANE LINE
WIDE LANE LINE
DOUBLE WIDE LANE LINE
BARRIER CENTERLINE
CENTERLINE & LANE LINE
NO-PASS LINE & TWO-WAY LEFT-TURN CENTERLINE
REVERSIBLE LANE LINE
WIDE BROKEN LANE LINE
WIDE DOTTED LANE LINE
DOTTED LANE LINE
DOTTED EXTENSION LINE
SEE CONTRACT FOR LENGTH
YELLOW OR WHITE - SEE NOTE 2
4" OR 12" - SEE NOTE 3
YELLOW - DBL. CENTERLINE, WHITE - DBL. LANE LINE
WHITE
YELLOW
YELLOW - CENTERLINE, WHITE - LANE LINE
YELLOW OR WHITE - SEE NOTE 1
NOTES
1. Dotted Extension Line shall be the same color as the line it is extending.
2. Edge Line shall be white on the right edge of traveled way, and yellow on the left edge of traveled way (on one-way roadways). Solid Lane Line shall be white.
3. The distance between the lines of the Double Centerline shall be 12" everywhere, except 4" for left-turn channelization and narrow roadways with lane widths of 10 feet or less. Local Agencies (on non-state routes) may specify a 4" distance for all locations.
The distance between the lines of the Double Lane Line shall be 4".
DRAWN BY: LISA CYFORD


SYMBOL MARKINGS MISCELLANEOUS
STANDARD PLAN M-24.60-04
SHEET 1 OF 2 SHEETS
APPROVED FOR PUBLICATION
Washington State Department of Transportation
NOTE
1. If Rumble Strips are present, install marking outside of the Rumble Strip.
CROSS CULVERT
DRAINAGE MARKING
MARKING AREA = 0.56 SQ. FT.
JUNCTION BOX, PULL BOX, OR CABLE VAULT MARKINGS
MARKING AREA = 1.06 SQ. FT.
DRAINAGE STRUCTURE INLET
DRAINAGE MARKING
MARKING AREA = 11.73 SQ. FT.
HALF-MILE MARKER
MARKING AREA = 6.00 SQ. FT.
FULL MILE MARKER
AERIAL SURVEILLANCE MARKERS
STOP LINE
1'- 6" - UNLESS NOTED OTHERWISE IN CONTRACT
LENGTH VARIES - SEE CONTRACT
WHITE OR YELLOW - SEE CONTRACT
CHEVRON OR DIAGONAL
CROSSHATCH MARKING
W = 8" (IN) FOR POSTED SPEED LIMIT OF 40 MPH OR LOWER
W = 12" (IN) FOR POSTED SPEED LIMIT OF 45 MPH OR HIGHER
EDGE LINE
PAVED SHOULDER
DRAWN BY: LISA CYFORD

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DESIGNED BY : S. GAER	NO.	DATE	REVISION	BY	APP.
DRAWN BY : C. GASKIN					
CHECKED BY : J. HINTON					
DATE : JUNE 2020					

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

PAVEMENT MARKING DETAILS

SHEET 47 OF 52

CALL 48 HOURS BEFORE YOU DIG
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"It's the Law"
Utilities Underground Location Center

JON MARSHALL HINTON, STATE OF WASHINGTON, 36494, REGISTERED PROFESSIONAL ENGINEER

STORM POND PLANTING AND RESTORATION PAYMENT LIMITS

1+00

10' 5' 0 10' 20'

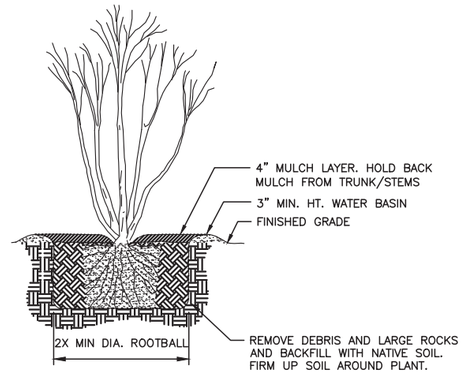
SCALE: 1"=10'

STORM POND PLANTING LEGEND

SYMBOL	DESCRIPTION	REMARKS
	Scirpus acutus (hardstem bulrush)	24" O.C.
	Sparganium emersum (burreed)	36" O.C.
	Veronica sp. (marsh speedwell)	5" POTS 36" O.C.

NOTES:

1. PLANTS SHALL BE STAGGERED WITH ADJACENT PLANT TYPE. STAGGER A MIN. OF ONE PLANT ROW, ABOVE AND BELOW.
2. ALL OTHER AREAS SHALL BE RESTORED WITH 4" TOPSOIL, TYPE C AND SEEDING.



NOTES:

1. PLANTING PIT SHALL NOT BE LESS THAN (2) TIMES THE WIDTH OF THE ROOT BALL DIA.
2. LOOSEN SIDES AND BOTTOM OF PLANT PIT
3. REMOVE FROM POT & ROUGH–UP ROOT BALL BEFORE INSTALLING. IF PLANT IS EXCEPTIONALLY ROOT–BOUND OR CONTAINS CIRCLING ROOTS, THE PLANT MAY BE REJECTED.
4. SOAK PLANTING PIT AFTER PLANTING

SHRUB PLANTING DETAIL

NOT TO SCALE

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STORM POND PLANTING PLAN

SHEET 48 OF 52

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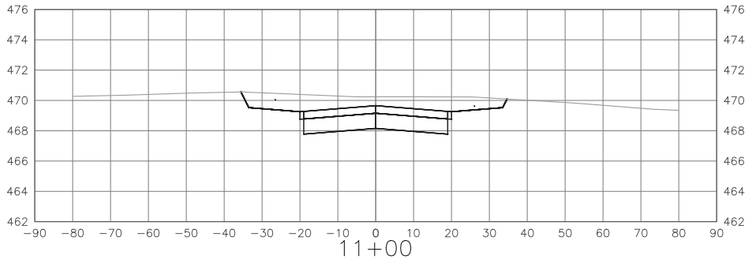

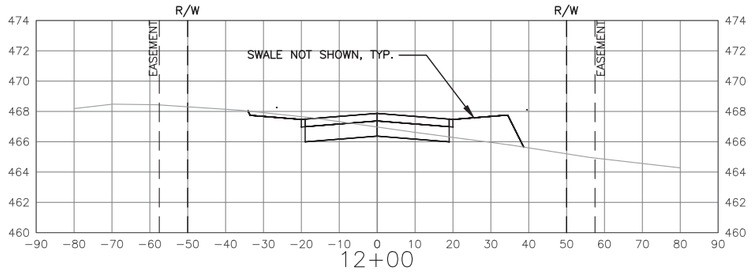

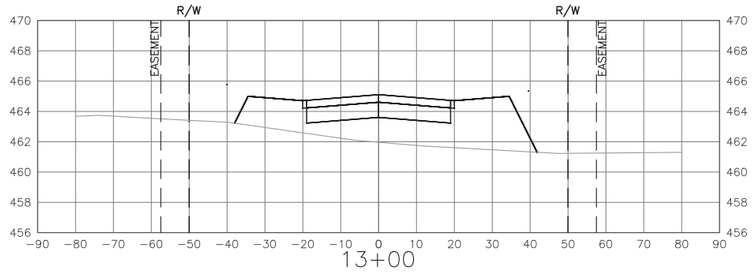

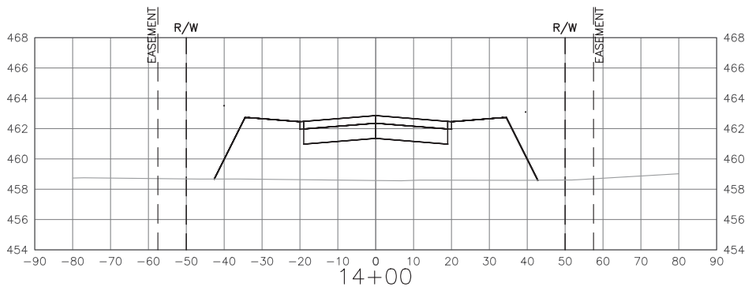

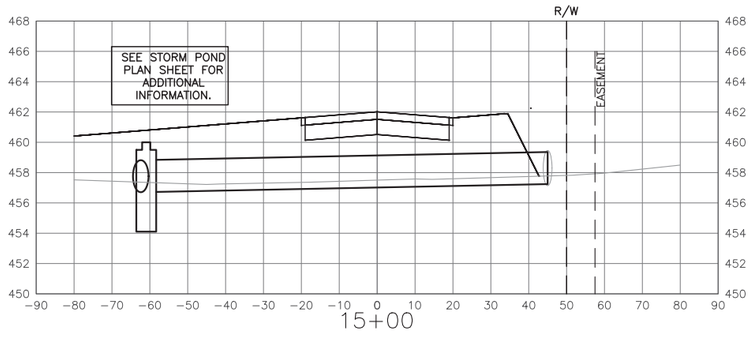

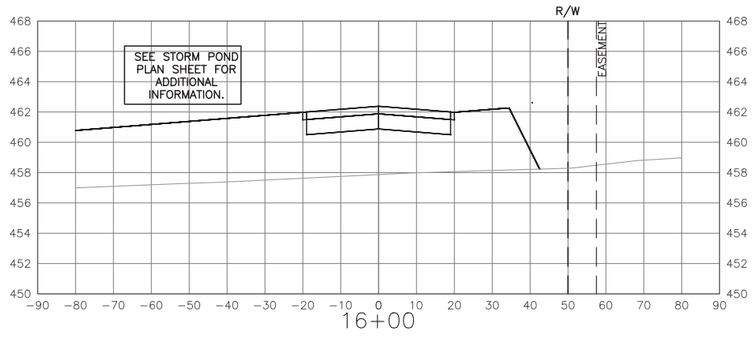

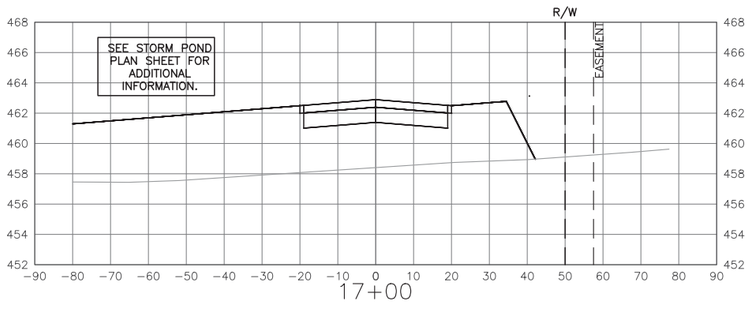

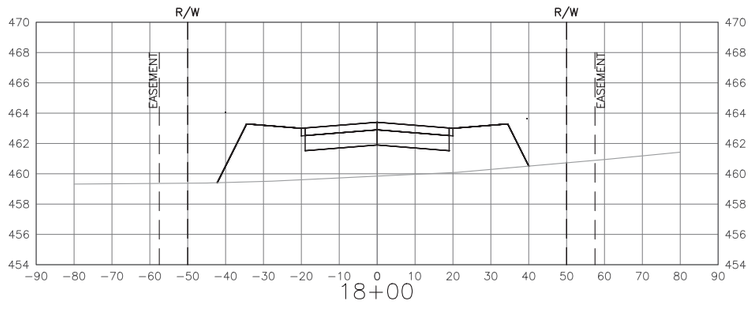

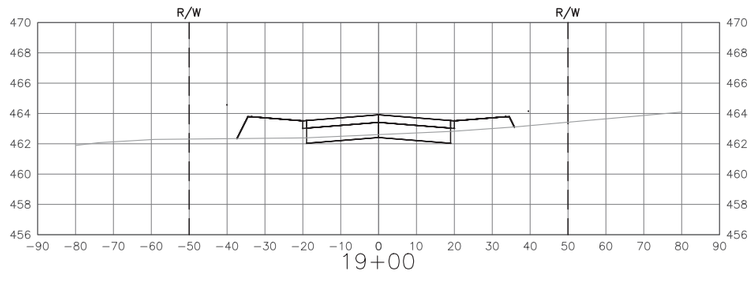

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

ROADWAY CROSS SECTIONS

SHEET 49 OF 52

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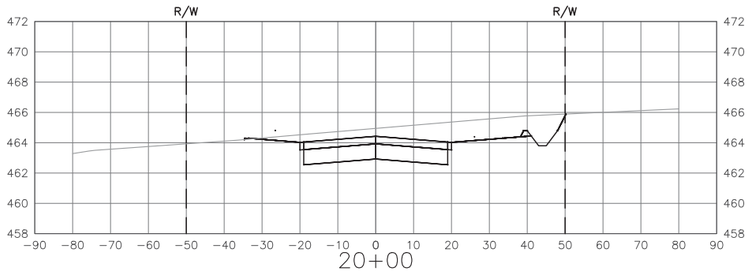

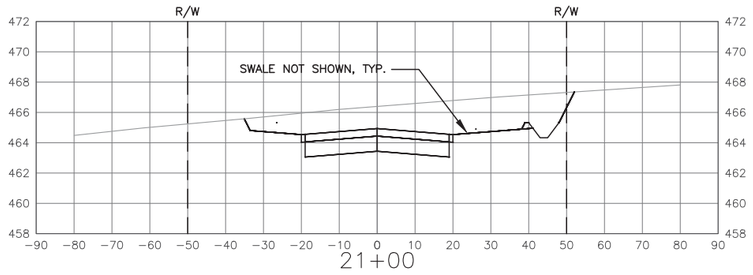

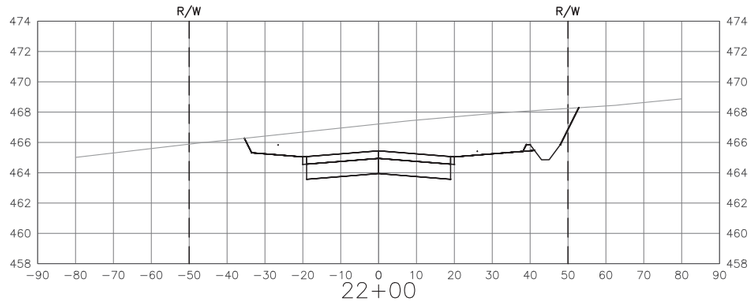

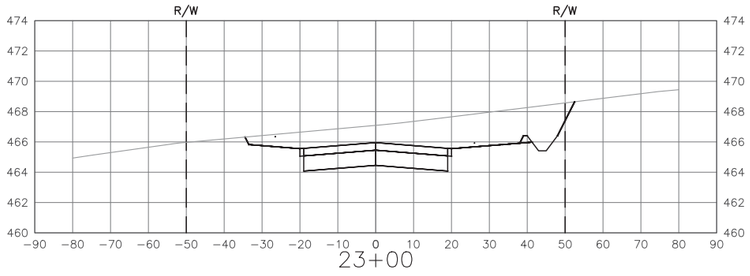

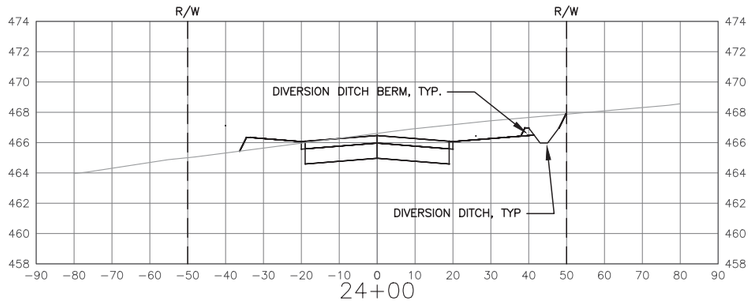

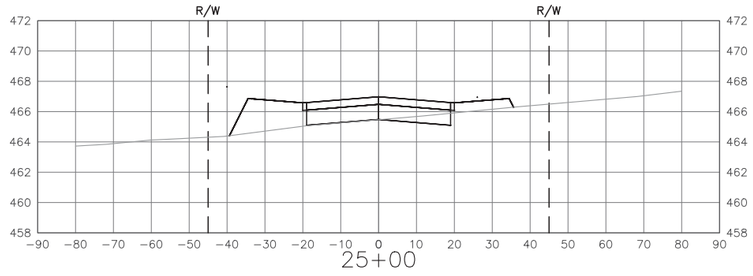

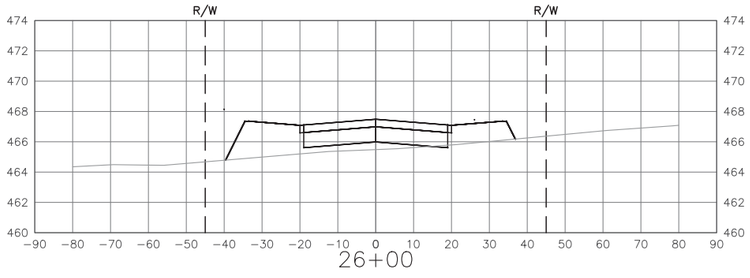

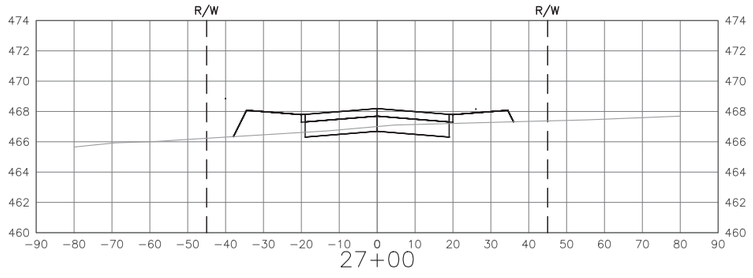

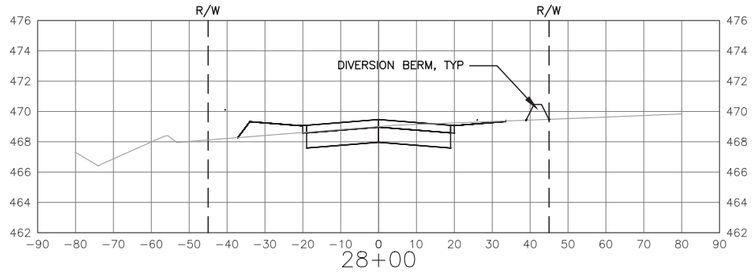

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MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

ROADWAY CROSS SECTIONS

SHEET
50
OF
52

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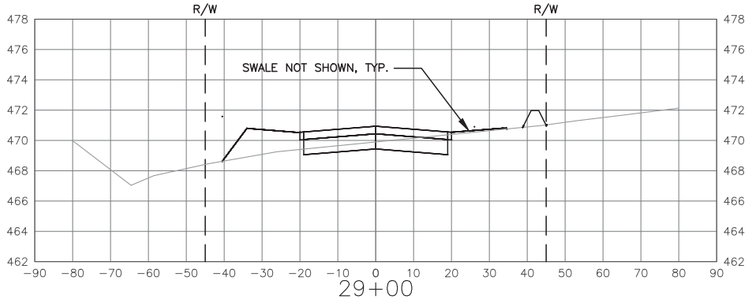

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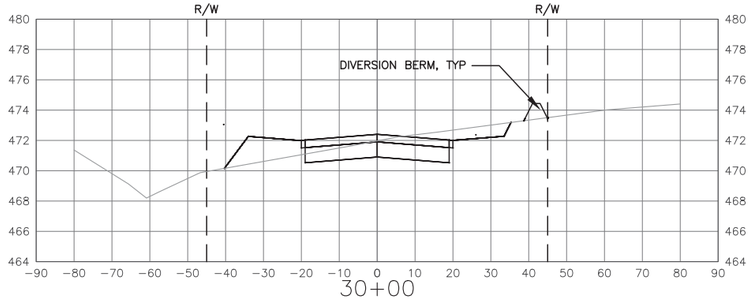

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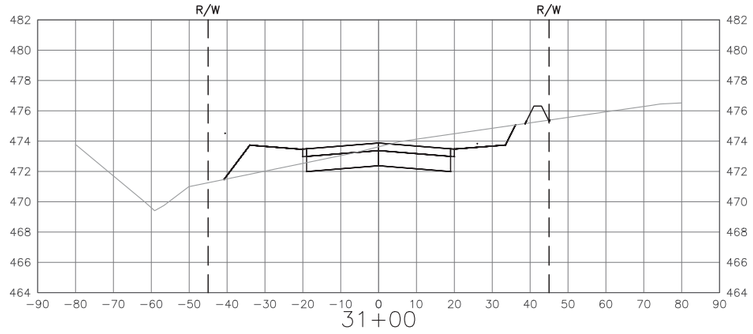

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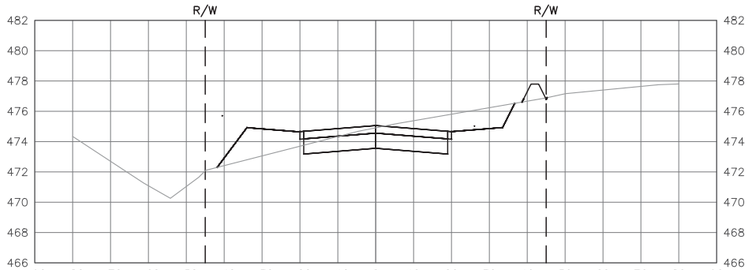

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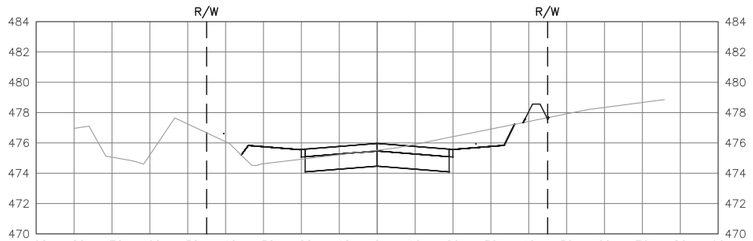

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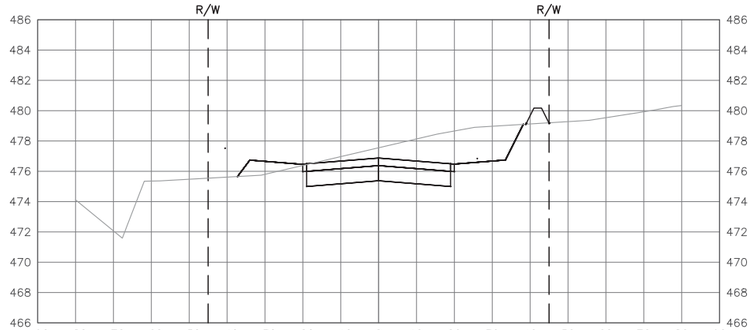

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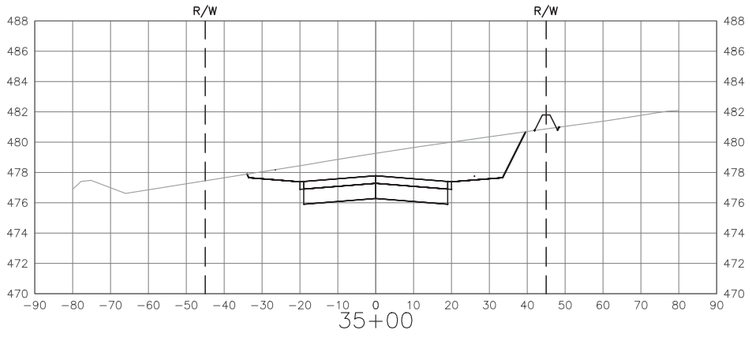

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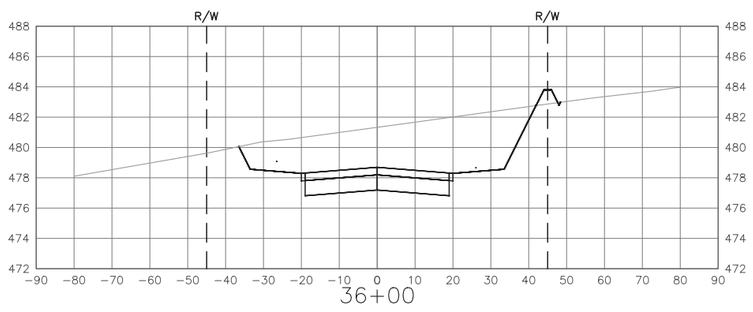

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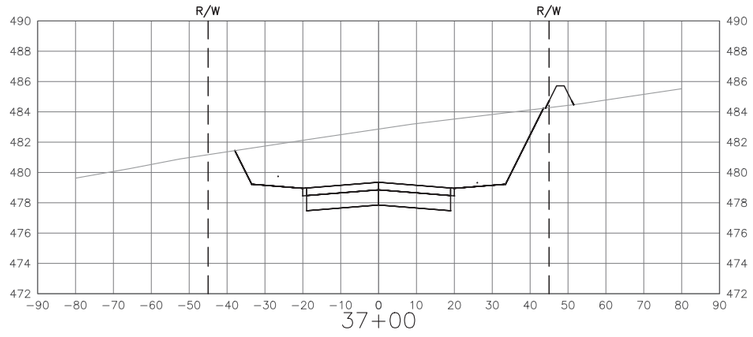

37+00

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ROADWAY CROSS SECTIONS

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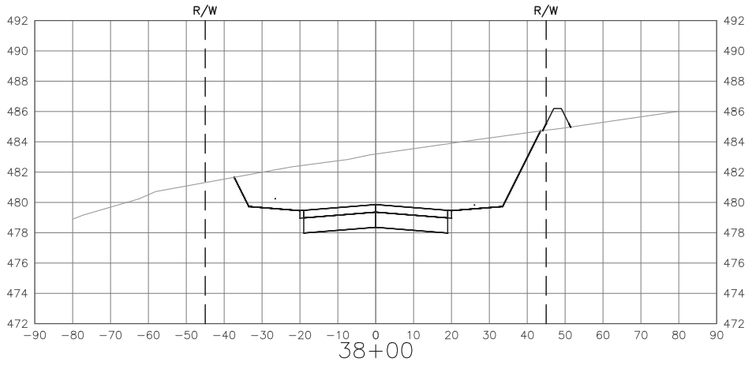

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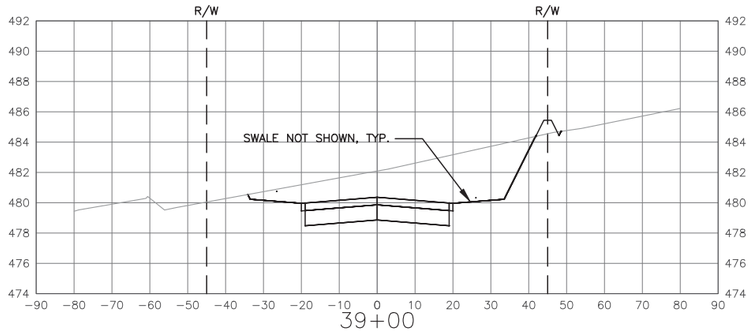

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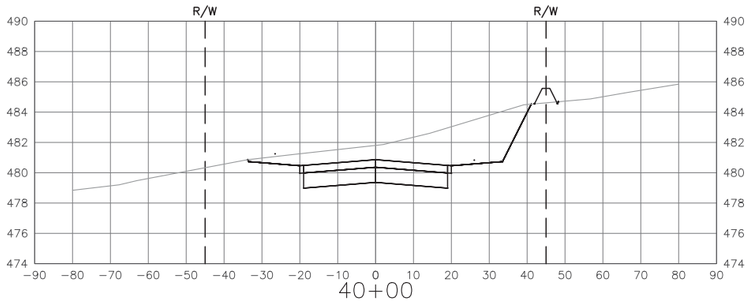

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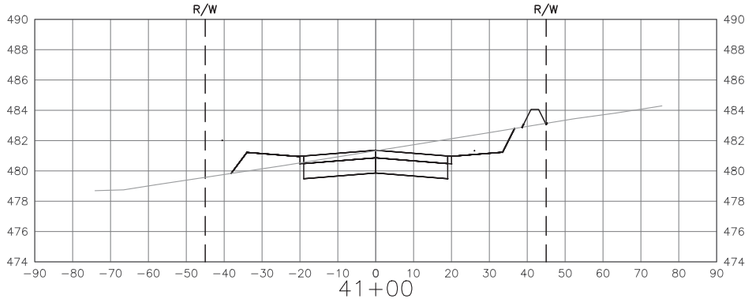

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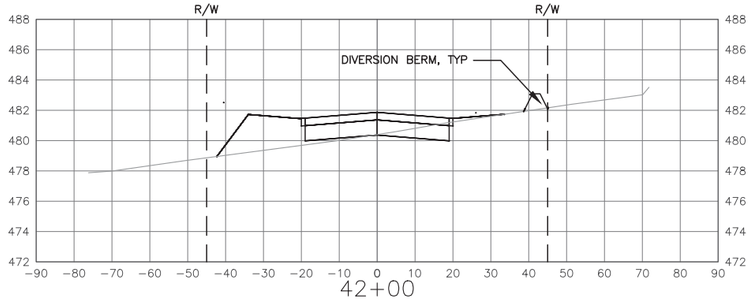

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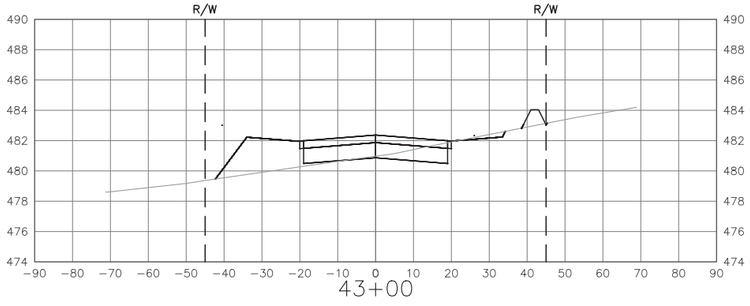

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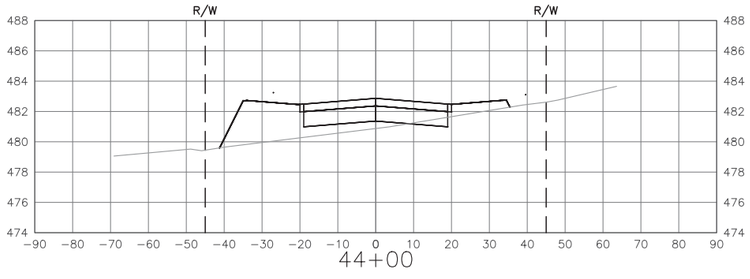

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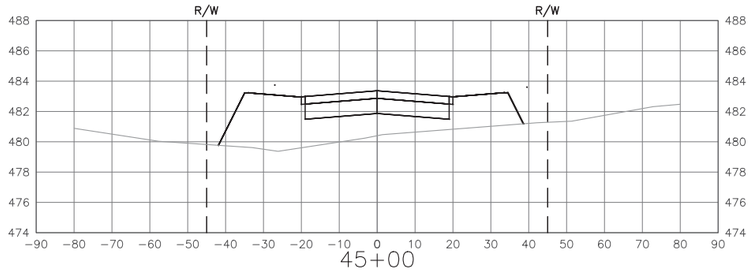

45+00

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

0 1" 2"

TWO INCHES AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

06-08-20

JON MARSHALL HINTON
STATE OF WASHINGTON
36494
REGISTERED
PROFESSIONAL ENGINEER

Lewis County
Department of Public Works

2025 N. E. KRESKY AVE.
CHEHALIS WA 98532
PHONE # (360) 740-1123
FAX # (360) 740-2719

DESIGNED BY : S. GAER
DRAWN BY : C. GASKIN
CHECKED BY : J. HINTON
DATE : JUNE 2020

NO.	DATE	REVISION	BY	APP.

MICKELSEN PARKWAY

COUNTY ROAD PROJECT NO: 2121

ROADWAY CROSS SECTIONS

SHEET
52
OF
52

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
"It's the Law"
Utilities Underground Location Center

L:\Lewis County\19310 Mickelsen Parkway\01 Design\PLANSET\General\Sections.dwg, 6/8/2020 11:23 AM, SHARI GAER