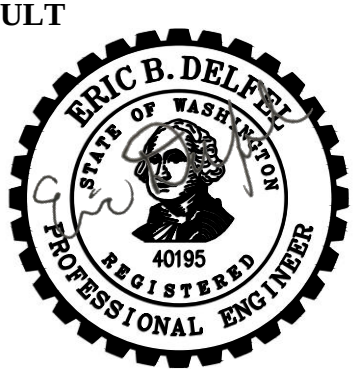
ADDENDUM 2
TO THE CONTRACT PROVISIONS AND CONTRACT PLANS

FOR

NORTHSHORE UTILITY DISTRICT
CONTRACT NO. C0928 451
CONTROL VALVE FACILITY AND CONTROL VALVE VAULT

G&O #18591.00



ISSUED THIS DATE: **WEDNESDAY, SEPTEMBER 18, 2024**

***REVISED* BID SUBMITTAL:** **10:00 A.M. (LOCAL TIME) ON TUESDAY, OCTOBER 1, 2024 NORTHSHORE UTILITY DISTRICT 6830 NE 185TH STREET KENMORE, WASHINGTON 98028**

Bidder shall acknowledge receipt of this Addendum on Page Prop 5R of the Proposal.

TO PROSPECTIVE BIDDERS:

Notice: Bidders are reminded that on-site visits will not be allowed unless by appointment and attended by District Staff. Bidders shall not contact the property owner at 15823 112th Avenue NE for access to the site. Please contact George Matote at Northshore Utility District at (425) 521-3727 to schedule an on-site visit.

The attention of all prospective bidders on the above project is directed to the following additions and modifications to the Contract Provisions and Contract Plans.

I. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE CALL FOR BIDS

ITEM 1:

Page CFB-1, Call for Bids

REVISE the first paragraph as shown below (added text is italicized, deleted text is shown as strike out):

> "Notice is hereby given that Northshore Utility District ("District") will receive sealed bids for the following construction project. Bids will be received at the District office, located at 6830 NE 185th Street, Kenmore, Washington, by mail or other courier up to the hour of 10:00 a.m. on Tuesday, ~~September 10, 2024~~ *October 1, 2024*, after which all bids will be publicly opened and read aloud."

II. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE INSTRUCTIONS TO BIDDERS

ITEM 1:

Page ITB-3, 1.3 Proposals

DELETE "Tuesday, September 24, 2024" and **REPLACE** with the following:

"Tuesday, October 1, 2024"

ITEM 2:

Page ITB-12, 1.14 SUBCONTRACTOR RESPONSIBILITY CRITERIA

REVISE subsection (c) as shown below (added text is italicized, deleted text is shown as strike out):

"Bidder will be required to complete and submit the "Subcontractor Responsibility Criteria" form, included in the "Proposal" section of this document~~, either with the bid or within two hours of the required bid submittal time~~ *prior to commencement of the subcontractor's work.*"

III. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE SPECIAL PROVISIONS

ITEM 1:

Page SP-3, Section 2.3, PERMITS, FRANCHISES AND EASEMENTS

REVISE the third paragraph as shown below (added text is italicized, deleted text is shown as strike out):

"The District is working to obtain Seattle Public Utilities Tolt Pipeline Right-of-Way permission to facilitate~~ site access and tree removal, but the Contractor should not make any assumptions regarding availability of access from the Tolt Pipeline Right-of-Way for construction equipment~~ *access only for tree felling spoils removal. Construction equipment access to the project site will not be allowed through the Tolt Pipeline Right-of-Way and will only be off of 112th Avenue NE. If access for tree felling spoils removal is approved by SPU:*

- *No portion of the felled trees shall be dropped directly onto the Tolt Pipeline Right-of-Way.*
- *The contractor shall submit a pedestrian access and control plan for the tree felling operations along the trail.*
- *The contractor shall provide and install protection measures (i.e., steel sheets) over Tolt Pipeline during tree felling operations, if required by SPU. Contractor shall receive SPU approval of pipeline protection measures prior to commencement of the work.*

- *All tree sections shall be mechanically lowered slowly to the ground onto NUD property in order to prevent vibrations or damage to adjacent property or utilities.*

- *Equipment access to remove the tree felling spoils shall be limited to the gravel pathway in the Tolt ROW.*

- *Contractor shall provide vehicle information (gross vehicle weight, axle loading, distribution, load weight) for vehicles proposed to be used to retrieve tree felling spoils.*"

ITEM 2:

Page SP-3, Section 2.3, PERMITS, FRANCHISES AND EASEMENTS

ADD the following paragraph to the end of this Section:

"Contractor shall notify Puget Sound Energy (PSE) a minimum of 2 business days prior to work near existing 4-inch gas main in 112th Avenue NE. PSE contact: Al Tejeda, (425) 754-4165."

ITEM 3:

Page SP-4, Section 2.5, CERTIFICATE OF INSURANCE

REVISE the second sentence as shown below (added text is italicized, deleted text is shown as strike out):

"Additional insureds shall include Northshore Utility District, its agents and representatives, *Seattle Public Utilities, City of Kirkland,* and the City of Bothell ~~:Building, Grading, and Right-of-Way~~."

ITEM 4:

Page SP-4, SPECIAL PROVISIONS

ADD the following new Section:

"**2.8 CONTRACTOR WORK PERFORMANCE REQUIREMENT**

Work done by the Contractor's own organization shall account for at least 30 percent of the awarded Contract price."

IV. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE TECHNICAL SPECIFICATIONS

ITEM 1:

Section 3, Engineering Specifications Table of Contents

Under Division 1, **ADD** the following:

"01200 Measurement and Payment ..... 01200-1"

Under Division 3, **ADD** the following:

"03370 Shotcrete ..... 003370-1"

ITEM 2:

ADD the attached New Specification Section 01200, Measurement and Payment.

ITEM 3:

Page 01950-6, Specification Section 01950-1.6, SUBMITTALS

ADD the following to the end of this Section:

"B. PEDESTRIAN ACCESS CONTROL PLAN

If the Contractor intends to utilize the Seattle Public Utilities (SPU) Tolt Pipeline Right-of-Way for spoils removal of tree-felling activities, the Contractor shall be required to prepare, submit, and receive approval for a Pedestrian Access Control Plan from SPU prior to commencement of the work. Pedestrian access control includes, but is not limited to, signage, flaggers, preparation and submittal of control plan documents, and coordination with SPU."

ITEM 4:

Page 02050-1, Specification Section 02050-3.1, GENERAL

REVISE the second paragraph as shown below (added text is italicized, deleted text is shown as strike out):

"The Contractor shall locate existing utilities ~~sufficiently~~ *a minimum of 6 working days* ahead of construction so that the Engineer can modify the alignment, or grade prior to construction. Where the alignment of the proposed utility cannot be adjusted to miss the existing utility without installation of additional pipe or fittings, the Contractor may be entitled to additional compensation to reroute the proposed utility. *Failure to notify the Engineer of conflicts 6-working days ahead of the impact area will waive all claims, costs, impacts and delays due to any actual or possible conflict.*"

ITEM 5:

Page 02230-1, Specification Section 02230-PART 1, GENERAL

ADD the following to the end of this Section:

"**1.4 SPU TOLT PIPELINE PROTECTION PLAN**

Construction equipment access to the project site will not be allowed through the Tolt Pipeline Right-of-Way and will only be off of 112th Avenue NE. If access for tree felling spoils removal is approved by Seattle Public Utilities (SPU):

- No portion of the felled trees shall be dropped directly onto the Tolt Pipeline Right-of-Way.
- The contractor shall provide and install protection measures (i.e., steel sheets) over Tolt Pipeline during tree felling operations, if required by SPU. Contractor shall receive SPU approval of pipeline protection measures prior to commencement of the work.
- All tree sections shall be mechanically lowered slowly to the ground onto NUD property in order to prevent vibrations or damage to adjacent property or utilities.
- Equipment access to remove the tree felling spoils shall be limited to the gravel pathway in the Tolt ROW.
- Contractor shall provide vehicle information (gross vehicle weight, axle loading, distribution, load weight) for vehicles proposed to be used to retrieve tree felling spoils."

ITEM 6:

Page 02700-2, Specification Section 02700-PART 2, PRODUCTS

ADD the following to the end of this Section:

"**2.9 PEA GRAVEL**

Pea gravel shall be relatively round, processed, washed rock conforming to ASTM C33 with the following sieve analysis.

Sieve Analysis (% Passing by Weight)	
Sieve Size	**Percent Passing**
1/2"	100
3/8"	85-100
No. 4	10-30
No. 8	0-10
No. 16	0-5"

ITEM 7:

ADD the attached New Specification Section 03370, Shotcrete.

ITEM 8:

Page 09900-6, Specification Section 09900-2.2 A. 3., Coatings

REVISE the second heading as shown below (added text is italicized, deleted text is shown as strike out):

"~~Field~~ Finish System"

ITEM 9:

Page 09900-11, Specification Section 09900-2.2, PAINT SYSTEMS

ADD the following new Section:

"J. CONCRETE BLOCK MASONRY (EXTERIOR)

1. Scope

This Section shall apply to all exterior concrete block masonry (CMU) surfaces unless otherwise specified in these Specifications.

2. Surface Preparation

Prepare surface in accordance with manufacturer's instructions. Surface must be free of cracks, dirt, oils, paints or other contaminates.

3. Coatings

Coat One	
Product:	Tex-Cote Rainstopper, 1750W, Clear
MDFT:	Apply at 75 – 100 SF per diluted gallon
Coat Two	
Product:	Tex-Cote Graffiti Gard IV Low Luster, Clear
MDFT:	150 – 250 SF per gallon"

ITEM 10:

Page 15050-3, Specification Section 15050-2.2 A., GENERAL

REVISE the second sentence of the first paragraph as shown below (added text is italicized, deleted text is shown as strike out):

"All flanged spools shall be ~~Class 52~~ *Class 53*."

V. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE MEASUREMENT AND PAYMENT

ITEM 1:

DELETE the Measurement and Payment Section (pages MP 1 through MP 20) in its entirety and **REPLACE** with the attached (pages MP 1R through MP 20R).

VI. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE PROPOSAL

ITEM 1:

DELETE the Proposal (pages Prop 1 through Prop 12) in its entirety and **REPLACE** with the attached Proposal (pages Prop 1R through Prop 12R).

Changes include adding or revising the following bid items (numbers shown are based on attached proposal):

a. Schedule A, New Bid Item 4, Potholes
b. Schedule A, New Bid Item 24, 4-In. PVC Sanitary Sewer Pipe and Fittings (Incl. Bedding)
c. Schedule A, New Bid Item 36, Fencing and Gates
d. Schedule B, New Bid Item 4, Potholes

VII. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE CONTRACT

ITEM 1:

Page C3, Contract

DELETE "Alan G. Nelson" and **REPLACE** with the following

"Amanda Campbell"

ITEM 2:

Page C4, Contract

DELETE Page C4 in its entirety.

VIII. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE DEFINITIONS AND ABBREVIATIONS

ITEM 1:

Page DAB-5,

ADD the following paragraph:

"**Working Day** – The Contractor shall complete all physical Contract Work within the number of "working days" stated in the Section 1.6 or as extended by the Engineer in accordance with Section 8.26. Every day will be counted as a "working day" unless it is a nonworking day, or an Engineer determined unworkable day. A nonworking day is defined as a Saturday, a Sunday, a whole or half day on which the Contract specifically prohibits Work on the critical path of the Contractor's approved progress schedule, or one of the holidays listed in Section 2.1. When any of these holidays fall on a Sunday, the following Monday shall be counted a nonworking day. When the holiday falls on a Saturday, the preceding

Friday shall be counted a nonworking day. The days between December 25 and January 1 will be classified as nonworking days.

An unworkable day is defined as a half or whole day the Engineer declares to be unworkable because of weather or conditions caused by the weather that prevents satisfactory and timely performance of the Work shown on the critical path of the Contractor's approved progress schedule. Other conditions beyond the control of the Contractor may qualify for an extension of time in accordance with Section 8.23.

Each working day shall be charged to the Contract as it occurs, until the Contract Work is physically complete.

The Engineer will furnish the Contractor with a weekly report showing:

1. The number of Working Days charged against the Contract Time for the preceding week
2. The Contract Time in Working Days
3. The number of Working Days remaining in the Contract Time
4. The revised Physical Completion Date as applicable
5. The number of Non-Working Days
6. Any whole Days during the immediately preceding week that the Engineer declared to be an Unworkable Day.

IX. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE CONTRACT PLANS

ITEM 1:

SHEET C1-1, SCHEDULE A - EXISTING SITE, DEMOLITION & TESC PLAN

DELETE Sheet C1-1 in its entirety and **REPLACE** with the attached revised Sheet C1-1.

ITEM 2:

SHEET C1-4, SCHEDULE A - PROPOSED SITE AND PIPING PLAN

DELETE Sheet C1-4 in its entirety and **REPLACE** with the attached revised Sheet C1-4.

ITEM 3:

SHEET C1-5, SCHEDULE A – SITE RESTORATION AND GRADING PLAN

DELETE Sheet C1-5 in its entirety and **REPLACE** with the attached revised Sheet C1-5.

ITEM 4:

SHEET C1-7, SCHEDULE A - PROPOSED PIPE PROFILES

DELETE Sheet C1-7 in its entirety and **REPLACE** with the attached revised Sheet C1-7.

ITEM 5:

SHEET C1-8, SCHEDULE A - PROPOSED SEWER AND STORM DRAIN PROFILE

DELETE Sheet C1-8 in its entirety and **REPLACE** with the attached revised Sheet C1-8.

ITEM 6:

SHEET C2-2, SCHEDULE B PROPOSED PIPING PLAN

DELETE the callout "Connect to existing Sewer Manhole."

ITEM 7:

SHEET CD-5, SCHEDULE A – CIVIL DETAILS 5

DELETE Sheet CD-5 in its entirety and **REPLACE** with the attached revised Sheet CD-5.

ITEM 8:

SHEET CD-6, SCHEDULE A – CIVIL DETAILS 6

DELETE Sheet CD-6 in its entirety and **REPLACE** with the attached revised Sheet CD-6.

ITEM 9:

SHEET A1-1, SCHEDULE A BUILDING NOTES AND SCHEDULES

ADD the following note to the "Typ Door Detail:"

"Fill gap at door frame and CMU with backer rod and sealant."

ITEM 10:

SHEET A1-4, SCHEDULE A BUILDING SECTIONS AND DETAILS

REPLACE Section "C" with the attached detail.

ITEM 11:

SHEET S-1, STRUCTURAL NOTES

Under the header Wood, **ADD** the following sentence:

"STAGGER JOINTS AT PLYWOOD SHEATHING."

ITEM 12:

SHEET S1-1, FOUNDATION AND FLOOR PLANS

DELETE Sheet S1-1 in its entirety and **REPLACE** with the attached revised Sheet S1-1.

X. PRE-BID MEETING

ITEM 1:

Attached, for informational purposes only, is the sign in sheet for the Pre-Bid Meeting.

SECTION 01200

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SCOPE

Refer to Section 4 – Measurement and Payment.

***** END OF SECTION *****

SECTION 03370

SHOTCRETE

PART 1 GENERAL

1.1 SCOPE

The work specified in this Section includes shotcrete work shown on the Plans, including schedules, notes and details for the construction of shotcrete walls.

1.2 RELATED WORK SPECIFIED ELSEWHERE

Section	Item
02834	Soldier Pile Wall
03200	Concrete Reinforcement

1.3 REFERENCES

This Section references the latest revisions of the following documents:

Reference	Title
ACI 301	Standard Specifications for Structural Concrete for Buildings
ACI 506R	Guide to Shotcrete
ACI 506.2R	Specifications for Shotcrete
ACI 506.3R	Guide for Certification of Shotcrete Nozzlemen
ASTM C33	Concrete Aggregates
ASTM C42	Obtaining and Testing Drilled Cores and Sawed Beam of Concrete
ASTM C136	Sieve Analysis of Fine and Coarse Aggregates
ASTM C150	Portland Cement
ASTM C171	Sheet Materials for Curing Concrete
ASTM C231	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C309	Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C566	Total Moisture Content of Aggregate by Drying
ASTM C618	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
ASTM C685	Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C881	Epoxy-Resin-Base Bonding Systems for Concrete

ASTM C1077	Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
ASTM C1140	Preparing and Testing Specimens from Shotcrete Test Panels
ASTM C1141	Admixtures for Shotcrete

1.4 SUBMITTALS

Submit under provision of section 01300.

A. PROPOSED EQUIPMENT

Submit list of proposed equipment.

B. MIX DESIGN

Contractor shall submit shotcrete mix design and method of placement proposed for use at the job site at least 14 days prior to beginning shotcrete placement. The Contractor shall also include evidence within this submittal that the proposed shotcrete mix design and method of placement will produce the required compressive strength at 7 days. No shotcrete shall be placed without written authorization from the Owner accepting the proposed mix design and method of placement.

C. NOZZLEMEN'S CERTIFICATION

Submit under provisions of Section 01400 Manufacturer's Certificates, certified nozzlemen employed on the Work, in accordance with ACI 506.3R.

D. WORK PLAN

Submit work plan detailing temporary supports, temporary backing for shotcrete panels, production of test panels prior to wall placement, production of test panels during wall placement, coring of test panels for verification, methods of controlling and disposing of waste materials, finishing procedures, curing and protection procedures.

1.5 QUALITY ASSURANCE

The Contractor shall provide facilities and labor as may be necessary for obtaining and testing representative test samples. Shotcrete shall be sampled and tested by the method given in section FIELD QUALITY CONTROL.

PART 2 PRODUCTS

2.1 CONCRETE MATERIALS

A. CEMENT

Portland cement shall meet the requirements of ASTM C150 Type II.

B. AGGREGATES

Aggregates shall conform to current gradation requirements for fine-grained aggregates as specified under ASTM C33.

C. WATER

Fresh, clean, potable mixing water that is not detrimental to the concrete shall be used.

2.2 ADMIXTURES

A. GENERAL

Except for air entrainment, use of all other admixtures shall be subject to approval of the Engineer and at no additional cost to the Owner. Only admixtures expressly stated by the manufacturer as being chloride-free shall be used. Except as otherwise accepted, soluble admixtures shall be dissolved in water before introduction into the shotcrete mixture. Subject to compliance with requirements, products that may be incorporated into the work include, but are not limited to, the following:

1. Accelerators

When accelerating admixtures complying with ASTM C1141, Type II, Grade 1, are to be used. The powdered accelerator shall be blended with 50 grams of cement until uniform and 15 milliliters of water shall then be added. The liquid accelerator shall first be mixed with 15 milliliters of water and then added to 50 grams of cement. Three percent of the proposed accelerator by mass of cement shall be used as a starting point. Mixing shall be accomplished within 15 seconds. The specimen shall be molded within 1 minute of adding the mixing water. If initial set is 2 minutes or less and a final set is 10 minutes or less, the accelerator is considered compatible. If these values are not achieved in the first test, additional tests shall be run using 2 percent and 4 percent of accelerator.

2. Pozzolan Other Than Silica Fume

Pozzolans shall conform to ASTM C618, Class F, with a CaO maximum content of 10 percent.

2.3 ACCESSORIES

A. CURING COMPOUND

ASTM C309, Type 1, Class A and B.

B. REINFORCEMENT

See Section 03200 of these Specifications.

2.4 CONCRETE MIX

A. GENERAL

Prepare design mix by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method is used, use an independent testing facility acceptable to the Owner for preparing and reporting proposed mix designs. The testing facility shall not be the same as that used for field quality-control testing.

The maximum water-soluble chloride ion content, expressed as a percent of the cement, contributed from all ingredients of the concrete mix including water, aggregates, cementitious materials, and admixtures shall not exceed 0.10 percent. Pozzolans may be counted as part of the total cementitious material in the concrete mix design. The cementitious material is the "minimum cement content" specified in the mix design for each type of concrete. When pozzolans are used as part of this "cement content," the minimum content shall be 15 percent by weight of the total cementitious materials (Portland cement and pozzolans) and not more than 20 percent.

B. COMPRESSIVE STRENGTH

The required compressive strength of cores shall not be less than 4,000 psi at 7 days' age when tested in accordance with ASTM C42. The shotcrete mix design and method of placement proposed for use at the job shall be submitted to the Owner by the Contractor at least 14 calendar days prior to beginning shotcrete placement. The Contractor shall also include evidence within the submittal that the proposed shotcrete mix design and

method of placement will produce the required compressive strength at 7 days. No shotcrete shall be placed without written authorization from the Owner accepting the proposed mix design and method of placement.

C. MIX DESIGN

The minimum cement content shall be 658 pounds (seven sacks) per cubic yard. The sand-cement ratio shall not be more that 4.5 to 1 by weight.

D. ADMIXTURES

No admixture shall be used without Owner's approval. Admixtures used to entrain air, reduce water-cement ratio, retard or accelerate setting time, and to accelerate the development of strength shall be thoroughly mixed at a rate specified by the manufacturer and approved by the Owner.

E. AIR CONTENT

Air-entraining admixture shall be used in such proportion that the air content of the shotcrete prior to gunning shall be 7.5 plus or minus 1.0 percent as determined by ASTM C231.

PART 3 EXECUTION

3.1 PRODUCTION OF SHOTCRETE

A. DELIVERY EQUIPMENT

The equipment shall be capable of delivering the premixed materials accurately, uniformly, and continuously through the delivery hose. Recommendations of the equipment manufacturer shall be followed on the type and size of nozzle to be used and on cleaning, inspection, and maintenance of the equipment.

B. AIR SUPPLY

The Contractor shall provide a supply of clean, dry air adequate for maintaining sufficient nozzle velocity for all parts of the work and, if required, for simultaneous operation of a suitable blowpipe for clearing away rebound.

C. CONSTRUCTION JOINTS

Unless otherwise specified, construction joints shall be tapered to a shallow edge form, about 1-inch thick. If non-tapered joints are specified, special care shall be taken to avoid or remove trapped rebound at the joint. The entire joint shall be thoroughly cleaned and wetted prior to the application of additional shotcrete.

3.2 PREPARATION OF SURFACES

All unsound and loose materials shall be removed by sandblasting, grinding, or high-pressure water jets before applying shotcrete. Any area to be repaired shall be chipped off or scarified to remove offsets which would cause an abrupt change in thickness without suitable reinforcement. Edges shall be tapered to leave no square shoulders at the perimeter of a cavity. The surface shall be dampened but without visible free water.

3.3 PLACEMENT OF SHOTCRETE

A. GENERAL

Shotcrete shall be placed using suitable delivery equipment and procedures. The area to which shotcrete is to be applied shall be clean and free of rebound or overspray. The shotcrete shall be applied from the lower part of the area upwards to prevent accumulation of rebound on uncovered surfaces. Rebound shall not be worked back into the construction nor shall the rebound be salvaged. Rebound which does not fall clear of the working area shall be removed. No shotcrete shall be placed on frozen surfaces. The nozzle shall be held at a distance and at an angle approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Shotcrete shall emerge from the nozzle in a steady, uninterrupted flow. Intermittent flows exiting the nozzle shall be diverted from the work until steady flow resumes.

B. PLACEMENT TECHNIQUES

1. Placement Control

Thickness, method of support, air pressure, and water content of shotcrete shall be controlled to preclude sagging or sloughing off. Shotcreting shall not be placed in cold weather when the ambient temperature is below 40 degrees F and falling. Proper curing methods shall be applied when the shotcrete is likely to be subject to freezing temperatures before gaining sufficient strength.

Material shall be heated so that the temperature of the shotcrete, when deposited, shall neither be less than 50 degrees F nor more than 70 degrees F. The temperature of the shotcrete shall be maintained in accordance with ACI 506R. Shotcrete shall be protected in accordance with the recommendations of ACI 506R.

Shotcreting shall be discontinued if wind or air currents cause separation of the nozzle stream during placement or when, in the opinion of the Owner, the quality of the application is not acceptable.

2. Corners

Horizontal and vertical corners and any area where rebound cannot escape or be blown free shall be filled first.

C. PLACEMENT AROUND REINFORCEMENT

The nozzle shall be held at such distance and angle to place material behind reinforcement before any material is allowed to accumulate on the face of the reinforcement. In the dry-mix process, additional water may be added to the mixture when encasing reinforcement to facilitate a smooth flow of material behind the bars. Shotcrete shall not be placed through more than one layer of reinforcing steel rods or mesh in one application unless demonstrated by preconstruction tests that steel is properly encased.

D. COVER OF REINFORCEMENT

The following minimum cover shall be provided.

a. For shotcrete used as linings, coatings, slab, or wall: 1-1/2 inches.

E. PLACEMENT PRECAUTIONS

The following precautions shall be taken during placement.

a. Placement shall be stopped if drying or stiffening of the mixture takes place at any time prior to delivery to the nozzle.

b. Rebound or previously expended material shall not be used in the shotcrete mixture.

3.4 REPAIR OF DEFECTS

A. DEFECTS

Defective areas larger than 48 square inches or 2-inches deep shall be removed and replaced with fresh shotcrete. These defects include honeycombing, lamination, dry patches, voids, or sand pockets. Defective areas shall be removed in accordance with the procedures described in paragraph EXISTING CONCRETE and replaced with fresh shotcrete.

1. Repairs

All repairs shall be made within 1 week of the time the deficiency is discovered. All unacceptable materials shall be removed and repaired by the procedures described in the following two paragraphs. Voids and holes left by the removal of tie rods in all permanently exposed surfaces not to be backfilled and in surfaces to be exposed to water shall be reamed and completely filled with dry-patching mortar as specified below.

2. Minor Patching

Minor patching may be accomplished with a dry-pack mixture, or with materials as approved by the Contracting Officer. Patches that exceed 0.1 cubic foot in volume shall receive a brush coat of approved epoxy resin meeting ASTM C881, Type II, as a prime coat. Care shall be taken not to spill epoxy or overcoat the repair surface so that the epoxy runs or is squeezed out onto the surface which will remain exposed to view. Epoxy resin shall be used in strict conformance with manufacturer's recommendations with special attention paid to pot life, safety, and thin-film tack time.

3.5 FINISHING

A. NATURAL GUN FINISH

Unless otherwise specified, undisturbed final layer of shotcrete as applied from nozzle without hand finishing shall be provided.

B. CUTTING SCREED

After the surface has taken its initial set (crumbling slightly when cut), excess material outside the forms and ground wires shall be sliced off with a downward cutting motion using a sharp-edged cutting screed.

C. FLASH COAT

A thin coat of shotcrete containing finer sand applied from a distance greater than normal shall be applied to the surface as soon as possible after the screeding.

D. FLOAT AND TROWEL FINISH

Final surface finish shall be provided using wood float. Troweling of thin sections of shotcrete shall be avoided unless both troweling and commencement of moisture curing take place within a relatively short period after placement of shotcrete.

3.6 CURING AND PROTECTION

A. INITIAL CURING

Immediately after finishing, shotcrete shall be kept continuously moist for at least 3 days. One of the following materials or methods shall be used:

a. Ponding or continuous sprinkling.

b. Absorptive mat or fabric, sand, or other covering kept continuously wet.

c. Curing compounds on natural gun or flash finishes, use the coverage application requirement of 100 square feet per gallon or twice the manufacturer's requirement, whichever is less. Curing compounds shall not be used on any surfaces against which additional shotcrete or other cementitious finishing materials are to be bonded unless positive measures, such as sandblasting, are taken to completely remove curing compounds prior to the application of such additional materials.

B. FINAL CURING

Additional curing shall be provided immediately following the initial curing and before the shotcrete has dried. One of the following materials or methods shall be used:

a. Continue the method used in initial curing.

b. Application of impervious sheet material conforming to ASTM C171.

C. FORMED SURFACE

If forms are to be removed during curing period, one of the curing materials or methods listed in paragraph INITIAL CURING shall be used immediately. Such curing shall be continued for the remainder of the curing period.

D. DURATION OF CURING

Curing shall be continued for the first 7 days after shotcreting or until the specified compressive strength of the in-place shotcrete is achieved as determined by specimens obtained and tested in accordance with ASTM C42.

E. TEMPERATURE CONSIDERATIONS

The air temperature in contact with the shotcrete shall be continuously maintained at a temperature above 40 degrees F for at least 3 days after placement. No shotcrete shall be applied when the concrete surface or air in contact with the concrete surface is below 40 degrees F.

3.7 FIELD QUALITY CONTROL

A. GENERAL

Field control tests shall be performed by qualified personnel in the presence of the Owner. The Contractor shall provide equipment, supplies, and the service of one or more employees as necessary to assist in the field control testing.

B. STRENGTH TESTING

Within 48 hours of scheduled testing time, test specimens shall be initially cured on site, then shall be transported in an approved manner to an approved testing laboratory meeting the requirements of ASTM C1077.

C. TEST PANELS PRIOR TO APPLICATION

The Contractor shall notify the Owner not less than 2 days prior to the shooting of test panels.

Before starting shotcrete work, two test panels by each shotcrete crew, using the 30-inch square panel method and shooting against a solid backboard in a vertical position. The nozzlemen certification test panels shall be constructed as follows:

1. Test panel reinforced to simulate the maximum amount of reinforcement congestion to be encountered, and finish of fascia panel.

2. Test panel without reinforcement redundant 7-day strength.

   Specimens shall be cured under conditions that simulate site curing of applied shotcrete. A minimum of three cores, not less than 3 inches in diameter and having an L/D ratio of at least two, shall be made from each test panel in accordance with ASTM C42 and tested for compressive strength at 7 days.

D. TEST PANELS DURING APPLICATION

During the remainder of the work, production test panels shall be made and delivered to an independent testing laboratory, in accordance with ASTM C1140. One test panel will be required for every 50 cubic yards of shotcrete placed. Test panels shall have minimum dimensions of 12 inches by 12 inches by 6 inches and shall be gunned in the same positions as the work represented during the course of the work by the Contractor's regular nozzleman. Panels shall not be disturbed within 24 hours of shooting. Panels shall be field cured in the same manner as in the job.

The frequency specified for the production test panels is approximate. A greater or lesser number of tests may be required by the Engineer. Additional test due to test failing to meet the Specification shall be made by and at the expense of the Contractor.

E. VISUAL OBSERVATION

A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements, after they are covered, will be an indication of insufficient cover or poor application and probable void. In this case, the application of shotcrete shall be immediately suspended and the work carefully inspected by the Engineer or Owner's Representative. Corrective measures, if any, shall be implemented and completed prior to resuming the shotcrete operations.

The shotcreting procedure may be corrected by adjusting the nozzle distance and orientation perpendicular to the surface, or water content of the shotcrete mix. All overspray shall be removed from the surface. The shotcrete surface shall be broomed and roughened if needed to ensure proper bond.

F. GRADING

The grading of the coarse and fine aggregate shall be determined in accordance with ASTM C136. The fine and coarse aggregate grading shall be determined prior to batching the shotcrete and at least once during a shift in which shotcrete is being batched.

G. THICKNESS

The minimum shotcrete thickness shall be as shown in the Plans. The unhardened shotcrete shall be checked for thickness using a probe by the nozzleman or laborer at the time of placement. These thickness checks shall be at 15-minute intervals and all low or thin areas shall be corrected by applying additional shotcrete.

H. MIXTURE PROPORTIONS

Record and check mixture proportions at least once per shift for weigh batching. Record and check mixture proportions as recommended by ASTM C685 at least once per shift for volumetric batching and continuous mixing plants.

I. PREPARATIONS

Prior to each placement of shotcrete, the Contractor's inspector shall certify in writing or by an approved checkout form that cleanup and preparations are in accordance with the Plans and Specifications.

J. AIR CONTENT

Air content tests shall be conducted on wet-mix shotcrete according to ASTM C231 with a frequency of not less than once each shift or less than once for each 50 cubic yards of shotcrete placed through the nozzle. Tests shall be conducted on samples taken as the wet shotcrete mixture is placed in the delivery equipment.

***** END OF SECTION *****

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SECTION 4

MEASUREMENT AND PAYMENT

Section 4 - Measurement and Payment

Bid Item Introduction

It is the intent of these Specifications that the performance of all work under the bid items shall result in the complete construction, in proper operating condition, of the facilities described. It is understood that any additional material or work required to place the facilities in operating condition shall be provided by the Contractor as work covered by the listed bid items and shall be considered incidental thereto.

Submittals, shop drawings, calculations, startup, testing, training, warranties, and operation and maintenance manuals as required shall be considered incidental to the various items of work and no additional compensation will be allowed.

SCHEDULE A

Mobilization

The lump sum price bid for MOBILIZATION shall be full compensation for all labor, equipment, tools and materials required for preparatory work and operations, including, but not limited to the following items:

1. The movement of personnel, equipment, supplies and incidentals to the project site as related to project mobilization, demobilization and cleanup.

2. The establishment of field offices and material storage areas.

3. Purchase, delivery and storage of pipe, fittings, appurtenances, and all other materials required for the project.

4. Insurance, bonding, submittals and other work and operations that must be performed or costs incurred before beginning contract work.

5. Mobilization costs for subcontracted work.

Payment for MOBILIZATION shall be as follows:

25% Payment: When Contractor has mobilized on-site and temporary facilities are in place.

25% Payment: When 5 percent of the total pay items are completed (not including payment for materials on hand).

25% Payment: When 50 percent of the total pay items are completed (not including payment for materials on hand).

25% Payment: When Project is completed and recommended for acceptance.

In no event shall the amount bid or allowed for Mobilization exceed 5% of the total Contract Price for all other items listed in the Bid.

Minor Change

Measurement will be negotiated prior to commencing any such work under this pay item and shall be for work to remedy unforeseen conditions, utility conflicts, minor landscaping, minor drainage improvements, or special surface restoration.

Payment or credits for changes amounting to $50,000 or less may be made under the Bid Item MINOR CHANGE. At the discretion of the Owner, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in General Conditions Section 8.23. The Contractor will be provided a copy of the completed order for Minor Changes. The agreement for the Minor Changes will be documented by signature of the Contractor or notation of the verbal agreement. If the Contractor is in disagreement with anything required by the order for Minor Changes, the Contractor may protest the order as provided in General Conditions Section 8.23

Payments or credits will be determined in accordance with General Conditions Section 8.23. All Minor Change work will be within the scope of the Contract Work and will not change Contract Time. For the purpose of providing a common Proposal for all Bidders, the Owner has entered an amount for MINOR CHANGE in the Proposal to become part of the total Bid by the Contractor.

Locate Existing Utilities

The lump sum price bid for LOCATE EXISTING UTILITIES shall constitute full compensation for all labor, equipment, tools, and materials required to locate all existing utilities on the project.

Potholes

The unit price bid per each for POTHOLES shall constitute full compensation for all labor, equipment, and materials required to pothole existing utilities and provide restoration for the pothole.

Temporary Traffic Control

Measurement shall be measured by lump sum. The lump sum contract price for TEMPORARY TRAFFIC CONTROL shall include costs for all labor, material, and equipment to provide temporary traffic control for the project including pedestrian access and control plans for the Tolt Pipeline Right-of-Way as shown on the Plans and as specified in Section 01950.

Temporary Erosion and Sedimentation Control

The lump sum price bid for TEMPORARY EROSION AND SEDIMENT CONTROL shall be full compensation for all labor, materials, tools and equipment necessary and incidental to install, maintain and remove the TESC facilities. This item shall include, but not be limited to, the following: filter fabric fence, filter bags, storm drain inlet protection, straw bales, plastic sheeting, construction entrance mat, and street sweeping.

Clearing and Grubbing

Measurement shall be by lump sum. The unit price bid per cubic yard for CLEARING AND GRUBBING shall include all costs for the labor, material, and equipment associated with clearing and grubbing, including removal of brush and trees, and SPU Tolt Pipeline Right-of-Way protection measures, as shown on the Plans and as specified herein.

Trench Safety System

The lump sum price bid for TRENCH SAFETY SYSTEM shall constitute full compensation for all labor, materials, tools and equipment necessary and incidental to providing a safe trench excavation. This item shall include, but not be limited to, the following:

1. Design, installation, proper use and removal of all sheeting, shoring, cribbing, boxes or other trench protection methods.

2. Excavation, backfill, compaction and other work required if extra excavation is used in lieu of trench box, shoring, cribbing or other trench protection. If imported backfill gravel is required for backfilling within the limits of the sewer or water line excavation, it shall also be required as backfill material for the extra excavation and shall be provided at the Contractor's expense.

3. All barricades, warning lights, signs, flaggers or other devices needed to warn and protect the public.

The Contractor shall be solely responsible for the safety of his crew and public, and the District assumes no responsibility. The District will not be responsible for

determining the adequacy of any system used by the Contractor and payment for protection systems will not imply District's approval of adequacy.

Dewatering

Measurement shall be by lump sum. The lump sum contract price for DEWATERING shall include costs for all labor, materials, equipment, installing, removing, maintaining, and testing necessary to provide dewatering.

Sitework

Measurement shall be by lump sum. The lump sum contract price for SITEWORK shall include all costs for labor, materials, and equipment to excavate, wastehaul excess native material to an approved disposal site, decommission the existing monitoring well, install import materials, compact and grade the site as shown on the Plans and as specified herein. Import materials shall be measured and paid under separate unit price bid items unless otherwise noted.

Demolition

Measurement shall be by lump sum. The unit price for DEMOLITION shall include all costs for labor, materials, and equipment to demolish existing equipment as shown on the Plans and described in Section 01900 of these Specifications.

Asphalt Planing

The unit price bid per square yard of ASPHALT PLANING, shall constitute full compensation for all labor, materials, tools and equipment necessary and incidental for planing of asphalt surface in preparation of overlay shown on the Plans and details. This shall include, but not be limited to the following:

1. Lowering of existing utility covers to below the proposed planing depth prior to planing.

2. Surface preparation, including removal and lawful disposal of ground asphalt as necessary.

3. Planing to a depth of 2-inches along a neat and straight line to the limits shown on the Plans where full width planning is required.

Payment will be made based on the actual number of square yard of asphalt removed within the limits shown on the plans. Any other asphalt damaged by the Contractor's operations will be the Contractor's responsibility and will be considered incidental to construction and must be restored by the Contractor to the satisfaction of the District and the governing jurisdiction.

Building

Measurement shall be measured by lump sum. The lump sum contract price for BUILDING shall include all costs for labor, materials, and equipment to construct the operations building including, but not limited to, concrete within the building footprint, foundation, CMU, wood trusses, roofing, trim siding, doors, insulation, hardware, cabinets, finishes, plumbing, bridge crane/hoist, portable generator concrete pad and enclosure, and HVAC as shown on the Plans and as specified herein.

Building Piping

Measurement shall be by lump sum. The lump sum contract price for BUILDING PIPING shall include all costs for labor, materials, and equipment required to install within the building footprint including, but not limited to, pipe, fittings, joint restraint, control valves, pipe supports, flow meter, disinfection, testing, and all other appurtenances within the building footprint as shown in the Plans and as specified in Section 15050 of these Specifications.

8-In. DI Water Main and Fittings, Restrained Joint (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 8-IN. DI WATER MAIN AND FITTINGS, RESTRAINED JOINT (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 8-inch restrained joint ductile iron water main, including, but not limited to, fittings, blocking, joint restraint, detectable marking tape, exothermic welds and cathodic bond cables, temporary blowoffs and blocking, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, disinfection, and testing of the complete and in place 8-inch ductile iron water main as shown on the Plans and as specified in Section 02500 of these Specifications.

8-Inch Gate Valve

Measurement will be per each. The unit price bid per each for 8-INCH GATE VALVE shall include all costs for labor, materials, and equipment to furnish and install the gate valve including, but not limited to, the valve box and cover, ethafoam pad, valve stem extension as required, excavation, wastehaul and disposal of excess material, dewatering, compaction, disinfection, and appurtenances as shown on the Plans and as specified herein.

12-In. DI Water Main and Fittings, Restrained Joint (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 12-IN. DI WATER MAIN AND FITTINGS, RESTRAINED JOINT (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 12-inch restrained

joint ductile iron water main, including, but not limited to, fittings, blocking, joint restraint, detectable marking tape, exothermic welds and cathodic bond cables, temporary blowoffs, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, disinfection, and testing of the complete and in place 12-inch ductile iron water main as shown on the Plans and as specified in Section 02500 of these Specifications.

16-In. DI Water Main and Fittings, Restrained Joint (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 16-IN. DI WATER MAIN AND FITTINGS, RESTRAINED JOINT (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 16-inch restrained joint ductile iron water main, including, but not limited to, fittings, blocking, joint restraint, detectable marking tape, exothermic welds and cathodic bond cables, temporary blowoffs, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, disinfection, and testing of the complete and in place 16-inch ductile iron water main as shown on the Plans and as specified in Section 02500 of these Specifications.

CPEP Storm Sewer Pipe, 12-In. Diam. (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for CPEP STORM SEWER PIPE, 12-IN. DIAM. (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 12-inch CPEP storm sewer pipe, including, but not limited to, fittings, detectable marking tape, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, connection to the existing storm system, and testing of the complete and in place 12-inch CPEP storm sewer as shown on the Plans and as specified in Section 02534 of these Specifications.

Catch Basin, Type 1

The unit contract price per each for CATCH BASIN, TYPE 1 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, lids, frames and grates, slip resistant lids where indicated on the Plans, structure excavation, foundation gravel, backfill with suitable native material, compaction, removal and wastehaul of excess or unsuitable excavated material, pipe connection, dewatering, bypass pumping and maintaining stormwater flows, adjusting to finished grade, and material and compaction testing of suitable native backfill.

6-In. PVC Drain Pipe and Fittings (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 6-IN. PVC DRAIN PIPE AND FITTINGS (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 6-inch drain pipe, including, but not limited to, fittings, cleanouts, detectable marking tape, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, and testing of the complete and in place 6-inch drain pipe as shown on the Plans and as specified in Section 02534 of these Specifications.

8-In. PVC Drain Pipe and Fittings (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 8-IN. PVC DRAIN PIPE AND FITTINGS (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 8-inch drain pipe, including, but not limited to, fittings, cleanouts, detectable marking tape, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, and testing of the complete and in place 8-inch drain pipe as shown on the Plans and as specified in Section 02534 of these Specifications.

4-In. PVC Footing Drain and Fittings-Perforated (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 4-IN. PVC FOOTING DRAIN AND FITTINGS-PERFORATED (INCL. BEDDING) shall include all costs of labor, material, and equipment required to furnish, install, and test complete all 4-inch drain pipe, including, but not limited to, fittings, cleanouts, detectable marking tape, removal and wastehaul or existing facilities, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, and testing of the complete and in place 4-inch drain pipe as shown on the Plans and as specified in Section 02534 of these Specifications.

4-In. PVC Sanitary Sewer Pipe and Fittings (Incl. Bedding)

Measurement will be per linear foot as measured along the ground surface. The unit price bid per linear foot for 4-IN. PVC SANITARY SEWER PIPE AND FITTINGS (INC. BEDDING), shall include all costs for the labor, materials, and equipment required to furnish, install and test complete all 4-inch sewer pipe, including, but not limited to, fittings, cleanouts, detectable marking tape, excavation, dewatering, bedding, compaction, wastehaul and disposal of excess material, connection to the existing sewer system, and testing complete and in place the 4-inch sewer pipe as shown on the plans and as specified in Section 02535.

Additional Fittings

Measurement will be per pound based on the actual weight of the additional fittings alone, excluding follower glands, bolts, gaskets, and blocking. The unit price bid per pound for ADDITIONAL FITTINGS shall include all costs for the labor, material, and equipment to furnish and install any fittings required in addition to those specifically reference on the Plans and shall include, where appropriate, all costs for follower glands, bolts, gaskets, thrust blocks, anchor blocks, excavation, wastehaul and disposal of excess material, dewatering, compaction, and any and all other costs of material, equipment, tools, and labor incurred in the installation of the additional fittings.

Connection to Existing Water System

The unit price bid per each for CONNECTION TO EXISTING WATER SYSTEM shall constitute full compensation for all labor, materials, tools and equipment necessary and incidental to connecting to the District's existing water system as shown on the Plans. This shall include sawcutting, pre-digging the connection location a minimum of one day prior to the scheduled connection in order to verify the connection configuration, steel plates, excavation, cutting and removing existing tees, valves, valve boxes and other fittings, coupling adapters, plugs/caps, gaskets, bolts and other hardware, flanges, temporary blow-off assemblies, concrete blocking, disinfection and testing, removal of existing plugs, ductile iron reducers and ductile sleeves and plugging and abandonment of existing pipes.

The cut-in and connection to the existing water main at each location shown on the Plans shall be considered one (1) Connect to Existing Water System. All work associated with each tee or cross connection shall be considered one (1) Connect to Existing Water System, including all branch or mainline connections. Connections to sections of new water main installed previously in other phases of the Contract will not be paid for under the Connect to Existing Water System bid item, but shall be considered incidental to the bid item for water main installation.

Soldier Piles

Measurement shall be per linear foot. The unit price bid per linear foot for SOLDIER PILES shall include all costs for the labor, material and equipment necessary to construct soldier piles including, but not limited to excavating, boring, preparing the subgrade, and backfill for a complete installation as shown on the Plans and specified herein.

Lagging

Measurement shall be per square foot of exposed wall. The unit price per square foot price for LAGGING shall include all costs for labor, material and equipment necessary to install timber lagging including, but not limited to the timber lagging, drain board, drain grate, and wall drain as shown on the Plans and as specified herein.

Cast-In-Place Retaining Wall

Measurement shall be by lump sum. The lump sum contract price for CAST-IN-PLACE RETAINING WALL shall include all costs for the labor, material and equipment necessary to construct cast-in-place wall including, but not limited to excavating, preparing the subgrade, furnish and installing leveling pad, backfill for a complete installation as shown on the Plans and as described in Section 03300.

Gravity Block Retaining Wall

Measurement shall be by lump sum. The lump sum contract price for GRAVITY BLOCK RETAINING WALL shall include all costs for the labor, material and equipment necessary to construct block retaining wall including, but not limited to, excavating, preparing the subgrade, furnish and installing leveling pad, modular block unit and cap, backfill for a complete installation as shown on the Plans and as described in Section 02832.

Unsuitable Materials

Measurement shall be by cubic yard, in-place and shall be to the limits as designated by the Engineer. There shall be no payment if the Engineer believes removal of materials is needed because of damage caused by the Contractor's operations.

All quantities will be measured and recorded by the Engineer in their Daily Report and the Contractor shall be responsible for reconciling their quantities with the Engineer on a daily basis.

The unit price per cubic yard for UNSUITABLE MATERIALS shall include all cost for labor, material, and equipment to excavate and wastehaul unsuitable native subgrade materials, including backfilling the resulting excavations with compacted foundation gravel materials.

The Contractor is advised that the excavation of any and all unsuitable material must be authorized by the Engineer in writing prior to the commencement of said excavation by the Contractor.

Foundation Gravel
Imported Backfill Gravel
Crushed Rock

The unit price bid per ton for FOUNDATION GRAVEL, IMPORTED BACKFILL GRAVEL, and CRUSHED ROCK shall constitute full compensation for all labor, material, tools and equipment necessary and incidental to furnishing the materials in the trench, under asphalt trench patch, under structures, in the shoulder, asphalt road and under the sidewalk, curb and gutter or elsewhere as required or as directed by the District, and proper disposal of excavated materials. These items shall include, but not be limited to, the following:

1. Over-excavation or extra depth excavation as may be required by the District, or field conditions, which dictate such excavation, as approved by the District.

2. Grading, preparation and compaction of existing subgrade.

3. Proper disposal of excavated materials.

Payment for gravel and rock materials will be made based on the actual number of tons of material furnished and placed. Quantities shall be based on certified weight tickets signed by the driver and collected by the inspector at the time and place of delivery. Loads of material for which a certified weight ticket has not been given to the inspector shall not be paid for.

Gravel and rock materials will be paid for by the ton as substantiated by certified scale tickets, up to the maximum quantity calculated for the volume within the neat lines of the trench as specified in the specifications and standard details. A conversion factor of 1.85 Tons/CY will be used to convert cubic yards of material to tons.

It will be the Contractor's responsibility to see that a ticket is given to the Inspector for each truckload of material delivered. Duplicate tally tickets shall be prepared to accompany each truckload of material delivered on the project. The tickets shall bear at least the following information:

1. Truck number.

2. Quantity delivered in cubic yards and tons.

3. Driver's name and date.

4. Location of delivery - by job name and stationing on each job.

5. Place for receipting by the inspector.

HMA Cl. 1/2" PG 64-22

Measurement shall be per ton, in-place, based on truck tickets and shall be to the limits designated and approved by the Engineer. The unit price bid per ton for HMA CL. 1/2" PG 64-22 shall include all costs for the labor, material, and equipment to furnish, install, and test hot mix asphalt, including, but not limited to, tack coat, cleaning and sealing joints, compaction, pavement markings, and adjusting castings to grade, as shown on the Plans and as described in Section 02740.

Fencing and Gates

Measurement shall be by linear foot in place to the limits shown on the plans and approved by the Engineer. The linear foot contract price for FENCING AND GATES shall include all labor, materials and equipment necessary to furnish and install fencing and gates as shown on the Plans and as specified in Section 02820.

Sidewalk

Measurement shall be by square yard, in place, to the limits shown on the plans and approved by the Engineer. The square yard contract price for SIDEWALK shall include all labor, materials and equipment necessary and incidental to furnish, install, and test concrete.

Concrete Curb and Gutter

Measurement shall be by linear foot, in place, to the limits shown on the plans and approved by the Engineer. The linear foot contract price for CONCRETE CURB AND GUTTER shall include all labor, materials and equipment necessary and incidental to furnish, install, and test concrete.

Electrical, Cameras, and Door Access System

Measurement shall be by lump sum. The lump sum contract price for ELECTRICAL, CAMERAS, AND DOOR ACCESS SYSTEM shall include all labor, materials, and equipment to furnish and install camera system, door access system, conduit, wiring, panel boards, receptacles, lighting, fixtures, antennae and masts, and demolition or abandonment of electrical components as shown on the Plans and specified herein. Costs also include the installation of items described in Appendix C, which will be purchased and supplied by the Owner.

Electrical Service

Measurement shall be by lump sum. The lump sum contract price for ELECTRICAL SERVICE shall include all costs associated with the modifications to the electrical service. For bidding purposes, an amount of $30,000 will be included in the proposal for ELECTRICAL SERVICE line item. The Owner will pay the actual invoice cost of service modifications completed by Puget Sound Energy.

All other costs of coordination with the Puget Sound Energy shall be included in the lump sum cost of ELECTRICAL.

General Restoration

The lump sum price bid for GENERAL RESTORATION shall constitute full compensation for all labor, material, tools and equipment necessary and incidental to restore disturbed ground surfaces and existing improvements to their pre-construction condition or better, not including work covered by other bid items. This item shall include, but not be limited to, the following:

1. Furnishing and placing of new topsoil, sod, bark, decorative rock or other surface treatment consistent with the adjacent undisturbed ground surface.

2. Excavation, grading and preparation of the areas to be restored.

3. Removal, storage and replacement of any existing decorative shrubs, hedges or trees.

4. Restoration of fences, rockeries, utilities or other structures.

5. Protection or replacement of existing culverts and asphalt lined ditches.

6. Protection of existing trees and improvements not to be removed.

7. Hydroseeding, seeding, mulching, plantings or other erosion control measures as required in rights-of-way, easement, or landscaped areas.

8. Asphalt or concrete pavement required beyond the limits allowed for payment described herein.

9. Removal and replacement of existing landscaping or irrigation system as required.

10. Installation of new landscaping and hydroseeding for frontage improvement planter strip.

Payment shall be based on completion of the restoration satisfactory to the individual property owners or agency having jurisdiction over the affected property.

Apprenticeship Incentive

Measurement shall be by calculation. For the purpose of providing a common Proposal for all bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total bid by the Contractor. An incentive of $3,000 will be assessed with the Final Payment for Contractors who meet the Apprentice Utilization Requirement without a reduction by Good Faith Effort, as described in the General Conditions.

Apprenticeship Penalty

Measurement shall be by calculation. Apprenticeship Hours will be measured for each hour of work performed by an apprentice as shown on the Monthly Apprentice Utilization Report, based on certified payrolls or the affidavits of wages paid, whichever is least. The percentage is not rounded up.

For the purpose of providing a common Proposal for all bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total bid by the Contractor, as described in the General Conditions. When the Contractor fails to meet the Apprenticeship goal of 15 percent, a penalty will be assessed for each hour that is not achieved, unless a Good Faith Effort is approved by the Contracting Agency.

Apprenticeship Utilization Penalty will be calculated as described below:

Percent of Goal Met	Penalty
>90% to <100%	$1,000
>75% to 90%	$2,000
>50% to 75%	$3,000
>1% to 50%	$4,000
0%	$5,000

The Contractor shall include all related costs in the unit Bid prices of the Contract, included but not limited to implementing, developing, documenting, and administering an apprenticeship utilization program, recording and reporting hours and all other costs to comply with this provision.

SCHEDULE B

Mobilization

The lump sum price bid for MOBILIZATION shall be full compensation for all labor, equipment, tools and materials required for preparatory work and operations, including, but not limited to the following items:

1. The movement of personnel, equipment, supplies and incidentals to the project site as related to project mobilization, demobilization and cleanup.

2. The establishment of field offices and material storage areas.

3. Purchase, delivery and storage of pipe, fittings, appurtenances, and all other materials required for the project.

4. Insurance, bonding, submittals and other work and operations that must be performed or costs incurred before beginning contract work.

5. Mobilization costs for subcontracted work.

Payment for MOBILIZATION shall be as follows:

25% Payment: When Contractor has mobilized on-site and temporary facilities are in place.

25% Payment: When 5 percent of the total pay items are completed (not including payment for materials on hand).

25% Payment: When 50 percent of the total pay items are completed (not including payment for materials on hand).

25% Payment: When Project is completed and recommended for acceptance.

In no event shall the amount bid or allowed for Mobilization exceed 5% of the total Contract Price for all other items listed in the Bid.

Minor Change

Measurement will be negotiated prior to commencing any such work under this pay item and shall be for work to remedy unforeseen conditions, utility conflicts, minor landscaping, minor drainage improvements, or special surface restoration.

Payment or credits for changes amounting to $20,000 or less may be made under the Bid Item MINOR CHANGE. At the discretion of the Owner, this procedure for

Minor Changes may be used in lieu of the more formal procedure as outlined in General Conditions Section 8.23. The Contractor will be provided a copy of the completed order for Minor Changes. The agreement for the Minor Changes will be documented by signature of the Contractor or notation of the verbal agreement. If the Contractor is in disagreement with anything required by the order for Minor Changes, the Contractor may protest the order as provided in General Conditions Section 8.23.

Payments or credits will be determined in accordance with General Conditions Section 8.23. All Minor Change work will be within the scope of the Contract Work and will not change Contract Time. For the purpose of providing a common Proposal for all Bidders, the Owner has entered an amount for MINOR CHANGE in the Proposal to become part of the total Bid by the Contractor.

Locate Existing Utilities

The lump sum price bid for LOCATE EXISTING UTILITIES shall constitute full compensation for all labor, equipment, tools, and materials required to locate all existing utilities on the project.

Potholes

The unit price bid per each for POTHOLES shall constitute full compensation for all labor, equipment, and materials required to pothole existing utilities and provide restoration for the pothole.

Temporary Traffic Control

Measurement shall be by lump sum. The lump sum contract price for TEMPORARY TRAFFIC CONTROL shall include costs for all labor, material, and equipment to provide temporary traffic control for the project as shown on the Plans and as specified in Section 01950.

Temporary Erosion and Sedimentation Control

The lump sum price bid for TEMPORARY EROSION AND SEDIMENT CONTROL shall be full compensation for all labor, materials, tools and equipment necessary and incidental to install, maintain and remove the TESC facilities. This item shall include, but not be limited to, the following: filter fabric fence, filter bags, storm drain inlet protection, straw bales, plastic sheeting, construction entrance mat, and street sweeping.

Trench Safety System

The lump sum price bid for TRENCH SAFETY SYSTEM shall constitute full compensation for all labor, materials, tools and equipment necessary and incidental to providing a safe trench excavation. This item shall include, but not be limited to, the following:

1. Design, installation, proper use and removal of all sheeting, shoring, cribbing, boxes or other trench protection methods.

2. Excavation, backfill, compaction and other work required if extra excavation is used in lieu of trench box, shoring, cribbing or other trench protection. If imported backfill gravel is required for backfilling within the limits of the sewer or water line excavation, it shall also be required as backfill material for the extra excavation and shall be provided at the Contractor's expense.

The Contractor shall be solely responsible for the safety of his crew and public, and the District assumes no responsibility. The District will not be responsible for determining the adequacy of any system used by the Contractor and payment for protection systems will not imply District's approval of adequacy.

Precast Vault

Measurement shall be by lump sum. The lump sum contract price for PRECAST VAULT shall include all costs for the labor, materials, and equipment to install precast vaults and appurtenances as shown on the Plans and as specified herein.

Precast Vault Piping

Measurement shall be by lump sum. The lump sum contract price for PRECAST VAULT PIPING shall include all costs for the labor, materials, and equipment to install vault piping, valves, sump pump, and appurtenances as shown on the Plans and as specified herein.

Site Piping

Measurement shall be by lump sum. The lump sum contract price for SITE PIPING shall include all costs for labor, materials, and equipment required to install site piping including, but not limited to, fittings, blocking, joint restraint, excavation, dewatering, bedding, backfill, compaction, disinfection, stormwater discharge piping, connection to existing storm system, testing, and all other appurtenances as shown in the Plans and as specified in Section 02500 of these Specifications.

Fire Hydrant Assembly

Measurement shall be per each. The unit price per each for FIRE HYDRANT ASSEMBLY shall include all costs for labor, materials, and equipment to furnish and install the fire hydrant, valve, and appurtenances as shown on the Plans and described in Section 02500 of these Specifications.

Connection to Existing Water System

The unit price bid per each for CONNECTION TO EXISTING WATER SYSTEM shall constitute full compensation for all labor, materials, tools and equipment necessary and incidental to connecting to the District's existing water system as shown on the Plans. This shall include sawcutting, pre-digging the connection location a minimum of one day prior to the scheduled connection in order to verify the connection configuration, steel plates, excavation, cutting and removing existing tees, valves, valve boxes and other fittings, cutting carrier pipe and furnishing and installing casing end seals, coupling adapters, plugs/caps, gaskets, bolts and other hardware, flanges, temporary blow-off assemblies, concrete blocking, disinfection and testing, removal of existing plugs, ductile iron reducers and ductile sleeves and plugging and abandonment of existing pipes.

The cut-in and connection to the existing water main at each location shown on the Plans shall be considered one (1) Connect to Existing Water System. All work associated with each tee or cross connection shall be considered one (1) Connect to Existing Water System, including all branch or mainline connections. Connections to sections of new water main installed previously in other phases of the Contract will not be paid for under the Connect to Existing Water System bid item, but shall be considered incidental to the bid item for water main installation.

Unsuitable Materials

Measurement shall be by the cubic yard, in-place and shall be to the limits as designated by the Engineer. There shall be no payment if the Engineer believes removal of materials is needed because of damage caused by the Contractor’s operations.

All quantities will be measured and recorded by the Engineer in their Daily Report and the Contractor shall be responsible for reconciling their quantities with the Engineer on a daily basis.

The unit price per cubic yard for UNSUITABLE MATERIALS shall include all cost for labor, material, and equipment to excavate and wastehaul unsuitable native subgrade materials, including backfilling the resulting excavations with compacted foundation gravel materials.

The Contractor is advised that the excavation of any and all unsuitable material must be authorized by the Engineer in writing prior to the commencement of said excavation by the Contractor.

Foundation Gravel
Imported Backfill Gravel
Crushed Rock

The unit price bid per ton for FOUNDATION GRAVEL, IMPORTED BACKFILL GRAVEL, and CRUSHED ROCK shall constitute full compensation for all labor, material, tools and equipment necessary and incidental to furnishing the materials in the trench, under asphalt trench, in the shoulder, asphalt road and under the sidewalk, under the vault, curb and gutter or elsewhere as required or as directed by the District, and proper disposal of excavated materials. These items shall include, but not be limited to, the following:

1. Over-excavation or extra depth excavation as may be required by the District, or field conditions, which dictate such excavation, as approved by the District.

2. Grading, preparation and compaction of existing subgrade.

3. Proper disposal of excavated materials.

Payment for gravel and rock materials will be made based on the actual number of tons of material furnished and placed. Quantities shall be based on certified weight tickets signed by the driver and collected by the inspector at the time and place of delivery. Loads of material for which a certified weight ticket has not been given to the inspector shall not be paid for.

Gravel and rock materials will be paid for by the ton as substantiated by certified scale tickets, up to the maximum quantity calculated for the volume within the neat lines of the trench as specified in the specifications and standard details. A conversion factor of 1.85 Tons/CY will be used to convert cubic yards of material to tons.

It will be the Contractor's responsibility to see that a ticket is given to the Inspector for each truckload of material delivered. Duplicate tally tickets shall be prepared to accompany each truckload of material delivered on the project. The tickets shall bear at least the following information:

1. Truck number.

2. Quantity delivered in cubic yards and tons.

3. Driver's name and date.

4. Location of delivery - by job name and stationing on each job.

5. Place for receipting by the inspector.

Electrical

Measurement shall be by lump sum. The lump sum contract price for ELECTRICAL shall include all labor, materials, and equipment to furnish and install conduit, wiring, receptacles, fixtures as shown on the Plans and specified herein. Costs also include the installation of items described in Appendix C, which will be purchased and supplied by the Owner.

Electrical Service

Measurement shall be by lump sum. The lump sum contract price for ELECTRICAL SERVICE shall include all costs associated with the modifications to the electrical service. For bidding purposes, an amount of $10,000 will be included in the proposal for ELECTRICAL SERVICE line item. The Owner will pay the actual invoice cost of service modifications completed by Puget Sound Energy. All other costs of coordination with the Puget Sound Energy shall be included in the lump sum cost of ELECTRICAL.

General Restoration

The lump sum price bid for GENERAL RESTORATION shall constitute full compensation for all labor, material, tools and equipment necessary and incidental to restore disturbed ground surfaces and existing improvements to their pre-construction condition or better, not including work covered by other bid items. This item shall include, but not be limited to, the following:

1. Furnishing and placing of new topsoil, sod, bark, decorative rock or other surface treatment consistent with the adjacent undisturbed ground surface.

2. Excavation, grading and preparation of the areas to be restored.

3. Removal, storage and replacement of any existing decorative shrubs, hedges or trees.

4. Restoration of fences, rockeries, utilities or other structures.

5. Protection or replacement of existing culverts and asphalt lined ditches.

6. Protection of existing trees and improvements not to be removed.

7. Hydroseeding, seeding, mulching, plantings or other erosion control measures as required in rights-of-way, easement, or landscaped areas.

8. Asphalt or concrete pavement required beyond the limits allowed for payment described herein.

9. Removal and replacement of existing landscaping or irrigation system as required.

Payment shall be based on completion of the restoration satisfactory to the individual property owners or agency having jurisdiction over the affected property.

Apprenticeship Incentive

Measurement shall be by calculation. For the purpose of providing a common Proposal for all bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total bid by the Contractor. An incentive of $1,000 will be assessed with the Final Payment for Contractors who meet the Apprentice Utilization Requirement without a reduction by Good Faith Effort, as described in the General Conditions.

Apprenticeship Penalty

Measurement shall be by calculation. Apprenticeship Hours will be measured for each hour of work performed by an apprentice as shown on the Monthly Apprentice Utilization Report, based on certified payrolls or the affidavits of wages paid, whichever is least. The percentage is not rounded up.

For the purpose of providing a common Proposal for all bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total bid by the Contractor, as described in the General Conditions. When the Contractor fails to meet the Apprenticeship goal of 15 percent, a penalty will be assessed for each hour that is not achieved, unless a Good Faith Effort is approved by the Contracting Agency.

Apprenticeship Utilization Penalty will be calculated as described below:

Percent of Goal Met	Penalty
>90% to <100%	$500
>75% to 90%	$1,000
>50% to 75%	$1,500
>1% to 50%	$2,000
0%	$2,500

The Contractor shall include all related costs in the unit Bid prices of the Contract, included but not limited to implementing, developing, documenting, and administering an apprenticeship utilization program, recording and reporting hours and all other costs to comply with this provision.

SECTION 5

Proposal

Honorable Commissioners
Northshore Utility District
King County, Washington

Dear Members of the Board:

The undersigned has examined the site, specifications, plans, laws and ordinances covering the improvements contemplated. In accordance with the terms, provisions and requirements of the foregoing, the following lump sums and unit prices are tendered as an offer to perform the work and furnish the equipment, materials, appurtenances and guarantees, where required, complete in place, in good working order.

As evidence of good faith, cash, bid bond, cashier's check, certified check, or postal money order made payable to the King County Treasurer is attached hereto. The undersigned understands and here agrees that, should this offer be accepted and the undersigned fail or refuse to enter into a contract and furnish the required construction performance bond and necessary liability insurance, the undersigned will forfeit to the District an amount from the "good faith token", equal to five percent (5%) of the amount bid as liquidated damages, all as provided for in the specifications.

The undersigned hereby proposes to undertake and complete the work embraced in this improvement, in accordance with the terms of the specifications and contract documents, at the following lump sum and unit prices.

Please find attached the itemized listing for said lump sum and unit prices, receipt of addenda, non-collusion declaration, the bidder responsibility checklist, the subcontractor responsibility checklist, the statement of bidder’s qualifications, and the proposed subcontractors list for Contract C0928; 451 Zone Control Valve Facility and Control Valve Vault.

ATTACHMENTS

C0928; 451 ZONE CONTROL VALVE FACILITY AND CONTROL VALVE VAULT

SCHEDULE A – SITE 46 – 112TH AVENUE NE FCV

Item	Item Description	Units	Quantity	Unit Price	Amount
1.	Mobilization	LS	1		
2.	Minor Change	CALC	1	$50,000.00	$50,000.00
3.	Locate Existing Utilities	LS	1		
4.	Potholes	EA	8		
5.	Temporary Traffic Control	LS	1		
6.	Temporary Erosion and Sedimentation Control	LS	1		
7.	Clearing and Grubbing	LS	1		
8.	Trench Safety System	LS	1		
9.	Dewatering	LS	1		
10.	Sitework	LS	1		
11.	Demolition	LS	1		
12.	Asphalt Planing	SY	400		
13.	Building	LS	1		
14.	Building Piping	LS	1		
15.	8-In. Diam. Water Main and Fittings, Restrained Joint (Incl. Bedding)	LF	200		
16.	8-Inch Gate Valve	EA	3		
17.	12-In. Diam. Water Main and Fittings, Restrained Joint (Incl. Bedding)	LF	5		
18.	16-In. Diam. Water Main and Fittings, Restrained Joint (Incl. Bedding)	LF	300		
19.	CPEP Storm Sewer Pipe, 12 In. Diam. (Incl. Bedding)	LF	270		
20.	Catch Basin, Type 1	EA	5		
21.	6-In. PVC Drain Pipe and Fittings (Incl. Bedding)	LF	45		
22.	8-In. PVC Drain Pipe and Fittings (Incl. Bedding)	LF	75		
23.	4-In. PVC Footing Drain and Fittings-Perforated (Incl. Bedding)	LF	140		
24.	4-In. PVC Sanitary Sewer Pipe and Fittings (Incl. Bedding)	LS	80		
25.	Additional Fittings	LB	1,000		
26.	Connection to Existing Water System	EA	3		

Item	Item Description	Units	Quantity	Unit Price	Amount
27.	Soldier Piles	LF	450		
28.	Lagging	SF	1,200		
29.	Cast-In-Place Retaining Wall	LS	1		
30.	Gravity Block Retaining Wall	LS	1		
31.	Unsuitable Materials	CY	20		
32.	Foundation Gravel	TN	70		
33.	Imported Backfill Gravel	TN	1,300		
34.	Crushed Rock	TN	80		
35.	HMA Cl. 1/2" PG 64-22	TN	120		
36.	Fencing and Gates	LF	310		
37.	Sidewalk	SY	50		
38.	Concrete Curb and Gutter	LF	100		
39.	Electrical, Cameras, and Door Access System	LS	1		
40.	Electrical Service	CALC	1	$30,000.00	$30,000.00
41.	General Restoration	LS	1		
42.	Apprenticeship Incentive	CALC	1	$3,000.00	$3,000.00
43.	Apprenticeship Penalty	CALC	1	$0.00	$0.00
				Subtotal, Schedule A	$
				10.2% Sales Tax	
				Total, Schedule A	

SCHEDULE B – SITE 69 – 451/446 ZONE SEPARATION VALVE

Item	Item Description	Units	Quantity	Unit Price	Amount
1.	Mobilization	LS	1		
2.	Minor Change	CALC	1	$20,000.00	$20,000.00
3.	Locate Existing Utilities	LS	1		
4.	Potholes	EA	10		
5.	Temporary Traffic Control	LS	1		
6.	Temporary Erosion and Sedimentation Control	LS	1		
7.	Trench Safety System	LS	1		
8.	Precast Vault	LS	1		
9.	Precast Vault Piping	LS	1		
10.	Site Piping	LS	1		
11.	Fire Hydrant Assembly	EA	1		
12.	Connection to Existing Water System	EA	2		
13.	Unsuitable Materials	CY	10		
14.	Foundation Gravel	TN	10		
15.	Imported Backfill Gravel	TN	70		
16.	Crushed Rock	TN	30		
17.	Electrical	LS	1		
18.	Electrical Service	CALC	1	$10,000.00	$10,000.00
19.	General Restoration	LS	1		
20.	Apprenticeship Incentive	CALC	1	$1,000.00	$1,000.00
21.	Apprenticeship Penalty	CALC	1	$0.00	$0.00
				Subtotal, Schedule B	$
				10.3% Sales Tax	
				Total, Schedule B	

C0928; 451 ZONE CONTROL VALVE FACILITY AND CONTROL VALVE VAULT

Total, Schedule A	$
Total, Schedule B	$
Total Bid, Schedules A and B	$

Extra Depth Asphalt or Concrete Removal and Disposal

In the event the Contractor encounters asphalt or concrete pavement exceeding 6" thickness, the Contractor will be compensated for the saw cutting, removal and disposal of the excess asphalt or concrete according to the following schedule:

ASPHALT DEPTH	PRICE PER LF
6"	$0
7”	$2.00
8"	$4.00
9"	$6.00
10"	$8.00
11"	$10.00
12"	$12.00

Add $2.00 per inch at depth per lineal foot for all depths that exceed 12 inches.

Prices shown are per foot of trench length.
Payment will not be cumulative.

Receipt of Addenda

Receipt of Addenda No(s). _____ to the Contract Documents is hereby acknowledged:

Note: Failure to acknowledge receipt of the addenda will be considered an irregularity in the proposal.

BIDDER RESPONSIBILITY CHECKLIST

The following checklist is used in documenting that a bidder meets the mandatory Bidder Responsibility Criteria. Please print a copy of documentation from the appropriate website to be included with the submittal.

General Information	
Project Name: Contract C0928; 451 Zone Control Valve Facility and Control Valve Vault.	Project Number: 0
Bidder's Business Name:	Bid Submittal Deadline:
Contractor Registration	
License Number:	Status: Active: Yes ☐ No ☐
Effective Date (must be effective on or before Bid Submittal Deadline):	Expiration Date:
Contractor and Plumber Infraction List	
Is Bidder on Infraction List?	Yes ☐ No ☐
Current UBI Number	
UBI Number:	Account Closed: Open ☐ Closed ☐
Industrial Insurance Coverage	
Account Number:	Account Current: Yes ☐ No ☐
Employment Security Department Number	
Employment Security Department Number:	
Please provide a copy of your latest correspondence, containing your account number, with Employment Security Department. Please do not provide document containing personal information such as social security numbers.	
State Excise Tax Registration Number	
Tax Registration Number:	Account Closed: Open ☐ Closed ☐
Not Disqualified from Bidding	
Is the Bidder listed on the "Contractors Not Allowed to Bid" list of the Department of Labor and Industries?	Yes ☐ No ☐
Contractor Public Works Training (RCW 39.04.350 & RCW 39.06.020)	
Has the Bidder satisfied the PW training requirements?	Yes ☐ No ☐
Information Supplied by:	
Print Name of Bidder Representative:	Date:
Verified by:	
Signature of District Employee:	Date:

SUBCONTRACTOR RESPONSIBILITY CHECKLIST

The following checklist is used in documenting that a subcontractor of any tier meets the subcontractor responsibility Criteria. Bidder must complete one of these forms for each of the first-tier subcontractor. Please print a copy of the documentation from the appropriate website to be included with the submittal.

General Information	
Project Name: Contract C0928; 451 Zone Control Valve Facility and Control Valve Vault.	Project Number: 0
Subcontractor's Business Name:	Subcontract Execution Date:
Contractor Registration	
License Number:	Status: Active: Yes ☐ No ☐
Effective Date (must be effective on or before Subcontract Bid Submittal Deadline):	Expiration Date:
Contractor and Plumber Infraction List	
Is Subcontractor on Infraction List? Yes ☐	No ☐
Current UBI Number	
UBI Number:	Account Closed: Open ☐ Closed ☐
Industrial Insurance Coverage	
Account Number:	Account Current: Yes ☐ No ☐
Employment Security Department Number	
Employment Security Department Number:	
• Has Subcontractor provided account number on the Bid Form? Yes ☐ No ☐ • And/or have you asked the Subcontractor for documentation from Employment Security Department on account number? Yes ☐ No ☐	
State Excise Tax Registration Number	
Tax Registration Number:	Account Closed: Open ☐ Closed ☐
Not Disqualified from Bidding	
Is the Subcontractor listed on the "Contractors Not Allowed to Bid" list of the Department of Labor and Industries? Yes ☐ No ☐	
Contractor Licenses	
Electrical: If required by Chapter 19.28 RCW, does the Subcontractor have an Electrical Contractor's License? Yes ☐ No ☐	Elevator: If required by Chapter 70.87 RCW, does the Subcontractor have an Elevator Contractor's License? Yes ☐ No ☐
Contractor Public Works Training (RCW 39.04.350 & RCW 39.06.020)	
Has the Subcontractor satisfied the PW training requirements? Yes ☐ No ☐	
Information Supplied by:	
Print Name of ☐ Contractor ☐ Subcontractor Representative:	Date:
Verified by:	
Signature of District Employee:	Date:

STATEMENT OF BIDDER'S QUALIFICATIONS

Contracting Firm Name:
Number of years Contractor has been in the construction business under the present firm name:
Present gross dollar amount of work under contract: $
Present gross dollar amount of contracts not yet completed: $
General type of work performed by firm:

List the five major pieces of equipment to be used on this project:	Owned	Leased	Rented
1.			
2.			
3.			
4.			
5.			

List the general superintendents or other supervisory employees at your firm:	# of Years at Firm
Employee 1:	
Employee 2.:	
Employee 3:	

Bank Reference:
Have you changed bonding companies within the last three years?
If so, why? (optional)

PROPOSED SUBCONTRACTORS

Consistent with RCW 39.30.060, each Bidder on a project in excess of $1,000,000 is required to submit the completed Subcontractors list included in the proposal section with the bid. The completed list must identify each subcontractor who will perform heating, ventilation and air-conditioning (HVAC), or plumbing work as described in Chapter 18.106 RCW, electrical work as described in Chapter 19.28 RCW, or the contractor must name itself for the work. The requirement to name the Bidder's proposed HVAC, plumbing and electrical subcontractor applies only to those subcontractors who will contract directly with the Bidder (i.e. first-tier subcontractors only, even if that first-tier subcontractor intends to hire a sub-tier contractor to perform all or part of the HVAC, plumbing or electrical work

The Bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the Bidder must indicate which subcontractor will be used for which alternates.

Failure of the Bidder to submit as part of the bid the names of such subcontractors, or name itself to perform such work, or the naming of two or more subcontractors to perform the work, shall render the Bidder's bid it nonresponsive and therefore void.

In completing the form, Bidders are advised that: 1) Ventilation is typically required to meet safety requirements for enclosed spaces and tunnels or certain shafts, but it may be incidental to other parts of the work, and may be required for the temporary construction facilities; 2) No plumbing work within buildings (as described in Chapter 18.106 RCW) has been specified in the contract, however plumbing work may be required for the temporary construction facilities and elsewhere in the contract documents; 3) Electrical work may be incidental to the work such as encountered with traffic control systems, electrical service to buildings and street lights, distribution wiring, conduit and junction box installation, generators, temporary electrical service and wiring for construction equipment and dewatering systems. In each instance above, the Bidder should list the work in the table(s) above. Other areas may be identified by the Bidder in the contract documents as well.

The subcontractors list may be submitted with the Bid, or 1) HVAC, Plumbing, or Electrical may be submitted separately within one hour of the time and date for Bid submittal stated in the Call for Bids or by addendum; 2) Structural Steel Installation and Rebar Installation may be submitted within 48 hours of the time and date for Bid submittal stated in the Call for Bids or by addendum. The form may be submitted in person or by facsimile (FAX number (425) 398-4430) to:

Northshore Utility District
Attention: George Matote, P.E.
6830 NE 185th St
Kenmore, WA 98028

STRUCTURAL STEEL INSTALLATION	
Firm Name:	% of Project:
Contact Person:	
Address:	
City, State, Zip Code:	
Phone #:	Fax #:
E-mail Address:	

REBAR INSTALLATION	
Firm Name:	% of Project:
Contact Person:	
Address:	
City, State, Zip Code:	
Phone #:	Fax #:
E-mail Address:	

HVAC SUBCONTRACTOR	
Firm Name:	% of Project:
Contact Person:	
Address:	
City, State, Zip Code:	
Phone #:	Fax #:
E-mail Address:	

PLUMBING SUBCONTRACTOR	
Firm Name:	% of Project:
Contact Person:	
Address:	
City, State, Zip Code:	
Phone #:	Fax #:
E-mail Address:	

ELECTRICAL SUBCONTRACTOR	
Firm Name:	% of Project:
Contact Person:	
Address:	
City, State, Zip Code:	
Phone #:	Fax #:
E-mail Address:	

Subject to the time lost due to inclement weather and delay in delivery of materials, should such delay not be the result of the undersigned's actions, the undersigned agrees to complete all of the work embraced in this contract in 120 working days, all beginning with the date of written Notice to Proceed with the work.

The undersigned fully understands and agrees to the provisions of the Information for Bidders and herewith further agrees that the liquidated damages shall be $1,400.00 per day for each and every working day required beyond the construction time allowed above to complete this project.

Contractor Name:	
Contact Name:	
Mailing Address:	
Office Phone #:	
Cell Phone #:	
E-mail:	

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:

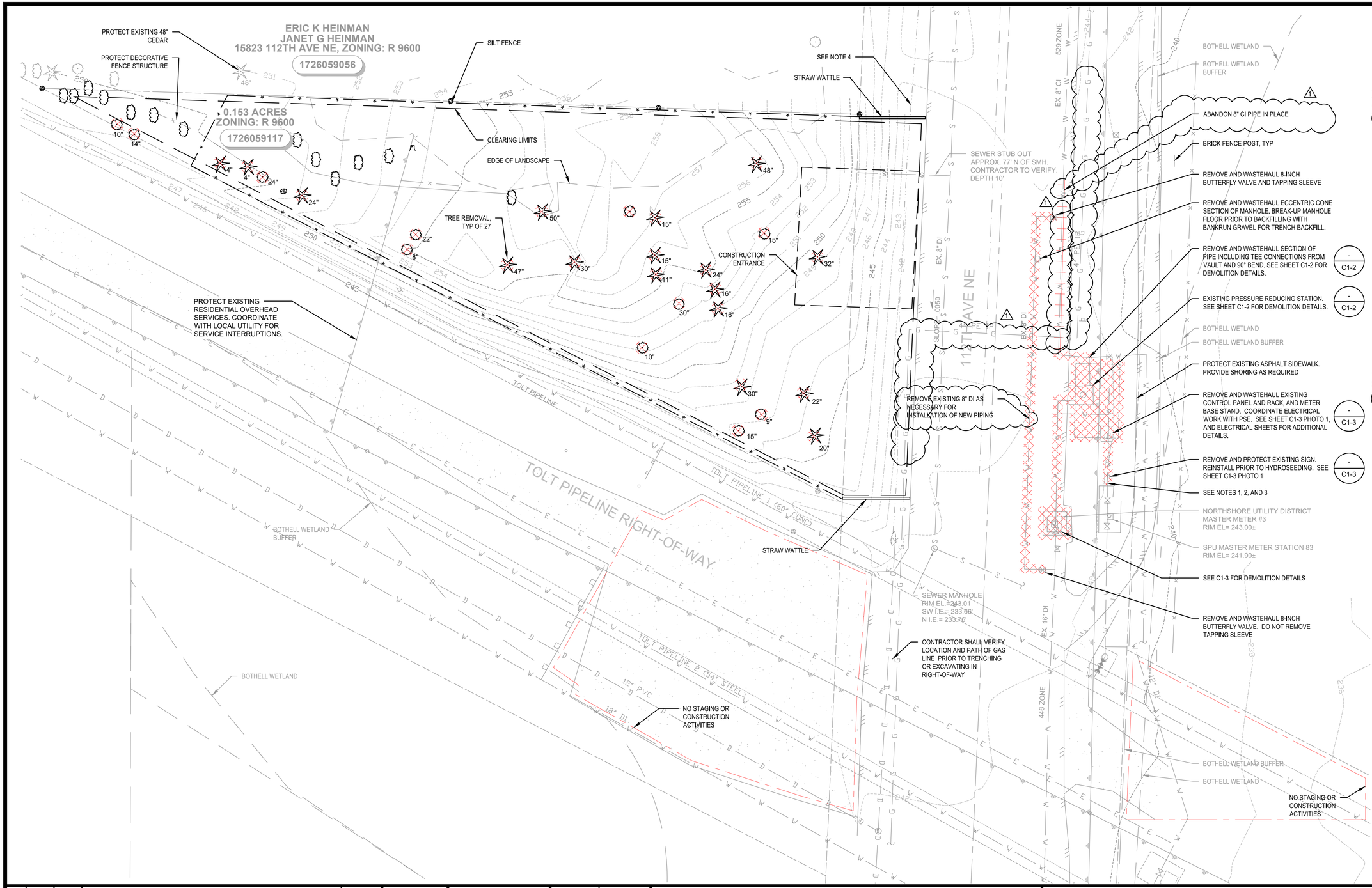
1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is 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.

Signature: _____

Print Name: _____

Title: _____

Date Signed: _____



LEGEND

DEMOLISH OR SALVAGE AS NOTED

ABANDON IN-PLACE

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY (POTHOLE) EXACT LOCATION AND DEPTH OF EXISTING PIPE AND CONNECTIONS BETWEEN NUD AND SEATTLE PUBLIC UTILITY (SPU) MASTER METER VAULT.
2. REOVE AND WASTEHAUL 12-INCH PIPE AND FITTINGS CONNECTING TO PLAIN END OF PIPE PENETRATING SPU MASTER METER VAULT. SEE C1-2 FOR ADDITIONAL DETAILS.
3. COORDINATE WORK NEAR SPU MASTER METER VAULT MWITH SPU. WORK REQUIRING SPU NOTIFICATION INCLUDE VACTORING, PIPE REMOVAL, PIPE INSTALLATION, AND ANY WORK REQUIRING WATER SHUT-OFF.
4. MAINTAIN EXISTING SURFACE WATER FLOWPATH ALONG WEST SIDE OF 112TH AVE NE AT ALL TIMES DURING CONSTRUCTION. ALL TEMPORARY SURFACE WATER DIVERSIONS AND DEWATERING ACTIVITIES SHALL BE DIRECTED ALONG THIS PATH.
5. TREES TO BE REMOVED ARE IDENTIFIED ON THE PLANS. TREES MARKED IN THE FIELD ARE NOT NECESSARILY INDICATIVE OF TREES WITHIN THE PROJECT LIMITS.

SCHEDULE A PROPOSED ORDER OF WORK:

1. CLEAR AND GRUB SITE.
2. EXCAVATE DRIVEWAY TO ALLOW SITE ACCESS AND STAGING.
3. INSTALL SOLDIER PILE WALL.
4. COMPLETE SITE EXCAVATION.
5. INSTALL SITE PIPING UNDER 451 FACILITY TO EDGE OF 112TH AVE NE.
6. CONSTRUCT 451 FACILITY.
7. DEMOLISH EXISTING PRV VAULT AND INSTALL PIPING WITHIN 112TH AVE NE RIGHT-OF-WAY. THIS WORK SHALL BE COORDINATED WITH NUD TO MINIMIZE WATER SERVICE INTERRUPTIONS.

10' 5' 0 10' 20'
SCALE: 1"=10'

#C928

ERIC B. DELFEL — STATE OF WASHINGTON — 40195 — REGISTERED PROFESSIONAL ENGINEER

NO	BY	APPD	REVISION	DATE
1	PLS	EBD	ADDENDUM 2	8/28/24

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

Gray & Osborne, Inc
CONSULTING ENGINEERS

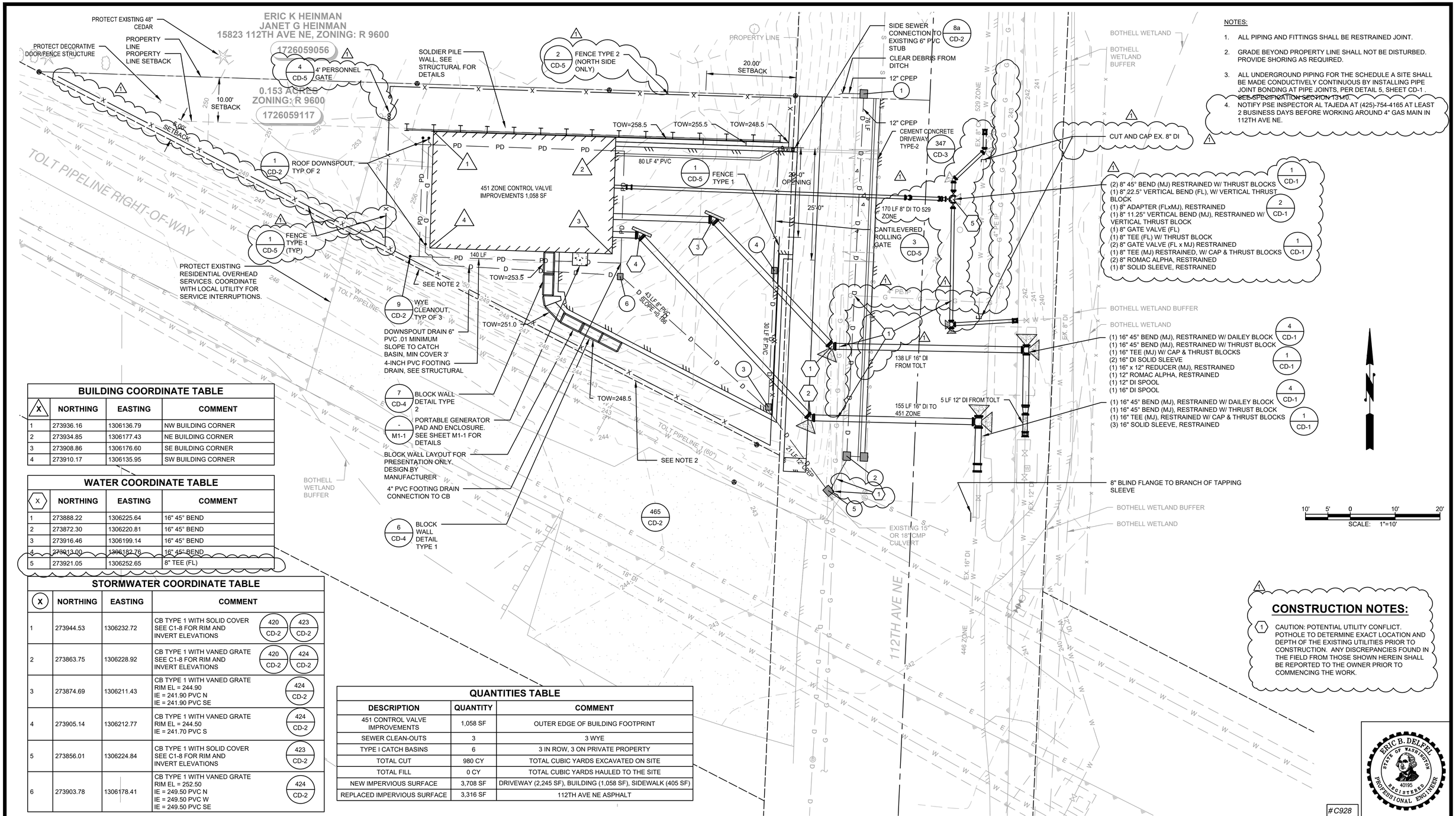
DESIGNED BY	AKG
DRAWN BY	MAN
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024

NORTHSHORE UTILITY DISTRICT
6830 NE 185th St.
Kenmore, WA 98028-2684
P.O. Box 82489
Kenmore, WA 98028-2684
Ph: (425) 398-4400 | Fax: (425) 398-4430 | www.nud.net

C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A EXISTING SITE, DEMOLITION & TESC PLAN

CIVIL
SHEET: C1-1
5 OF 56

\\goSERVER3\data2\Nshore\18591 451 zone control valve station\planset-mar-2022\General\EX-SITE SCH A.dwg, 9/16/2024 2:13 PM, PATRICK SMILEY



BUILDING COORDINATE TABLE

X	NORTHING	EASTING	COMMENT
1	273936.16	1306136.79	NW BUILDING CORNER
2	273934.85	1306177.43	NE BUILDING CORNER
3	273908.86	1306176.60	SE BUILDING CORNER
4	273910.17	1306135.95	SW BUILDING CORNER

WATER COORDINATE TABLE

X	NORTHING	EASTING	COMMENT
1	273888.22	1306225.64	16" 45° BEND
2	273872.30	1306220.81	16" 45° BEND
3	273916.46	1306199.14	16" 45° BEND
4	273913.00	1306182.76	16" 45° BEND
5	273921.05	1306252.65	8" TEE (FL)

STORMWATER COORDINATE TABLE

X	NORTHING	EASTING	COMMENT
1	273944.53	1306232.72	CB TYPE 1 WITH SOLID COVER SEE C1-8 FOR RIM AND INVERT ELEVATIONS (420 CD-2) (423 CD-2)
2	273863.75	1306228.92	CB TYPE 1 WITH VANED GRATE SEE C1-8 FOR RIM AND INVERT ELEVATIONS (420 CD-2) (424 CD-2)
3	273874.69	1306211.43	CB TYPE 1 WITH VANED GRATE RIM EL = 244.90 IE = 241.90 PVC N IE = 241.90 PVC SE (424 CD-2)
4	273905.14	1306212.77	CB TYPE 1 WITH VANED GRATE RIM EL = 244.50 IE = 241.70 PVC S (424 CD-2)
5	273856.01	1306224.84	CB TYPE 1 WITH SOLID COVER SEE C1-8 FOR RIM AND INVERT ELEVATIONS (423 CD-2)
6	273903.78	1306178.41	CB TYPE 1 WITH VANED GRATE RIM EL = 252.50 IE = 249.50 PVC N IE = 249.50 PVC W IE = 249.50 PVC SE (424 CD-2)

QUANTITIES TABLE

DESCRIPTION	QUANTITY	COMMENT
451 CONTROL VALVE IMPROVEMENTS	1,058 SF	OUTER EDGE OF BUILDING FOOTPRINT
SEWER CLEAN-OUTS	3	3 WYE
TYPE I CATCH BASINS	6	3 IN ROW, 3 ON PRIVATE PROPERTY
TOTAL CUT	980 CY	TOTAL CUBIC YARDS EXCAVATED ON SITE
TOTAL FILL	0 CY	TOTAL CUBIC YARDS HAULED TO THE SITE
NEW IMPERVIOUS SURFACE	3,708 SF	DRIVEWAY (2,245 SF), BUILDING (1,058 SF), SIDEWALK (405 SF)
REPLACED IMPERVIOUS SURFACE	3,316 SF	112TH AVE NE ASPHALT

CONSTRUCTION NOTES:

1. CAUTION: POTENTIAL UTILITY CONFLICT. POTHOLE TO DETERMINE EXACT LOCATION AND DEPTH OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND IN THE FIELD FROM THOSE SHOWN HEREIN SHALL BE REPORTED TO THE OWNER PRIOR TO COMMENCING THE WORK.

ERIC B. DELFEL — STATE OF WASHINGTON — 40195 — REGISTERED PROFESSIONAL ENGINEER

#C928

NO	BY	APPD	REVISION	DATE
1	PLS	EBD	ADDENDUM 2	8/28/24

WARNING 0 ½ 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

Gray & Osborne, Inc CONSULTING ENGINEERS

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DRAWN BY	MAN
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024

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6830 NE 185th St. Kenmore, WA 98028-2684
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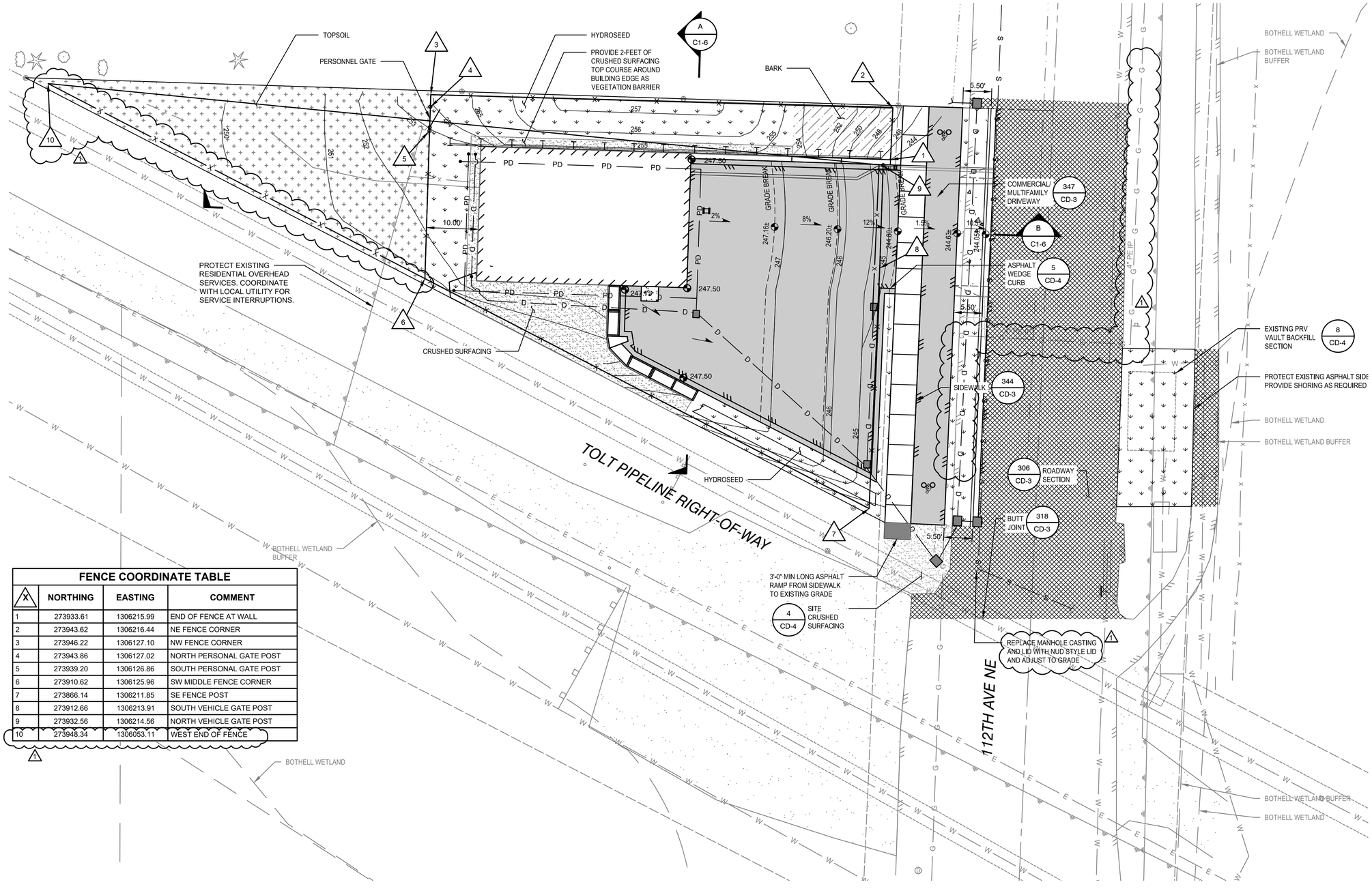
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
PROPOSED SITE AND PIPING PLAN

CIVIL
SHEET: C1-4
8 OF 56



LEGEND

- ASPHALT PAVEMENT
- ASPHALT OVERLAY
- LANDSCAPING RESTORATION, HYDROSEED
- SITE CRUSHED SURFACING
- CONCRETE DRIVEWAY
- BARK AND MULCH
- TOP SOIL

PROPERTY QUANTITIES TABLE

DESCRIPTION	QUANTITY	COMMENT
ASPHALT PAVEMENT (DRIVEWAY)	2,245 SF	25 SF IN ROW, 2,220 ON PRIVATE PROPERTY
ASPHALT PAVEMENT (BIKE PATH)	525 SF	ALL IN ROW
ASPHALT OVERLAY (ROADWAY SECTION)	2,944 SF	ALL IN ROW
CEMENT CONCRETE (SIDEWALK)	404 SF	ALL IN ROW
CEMENT CONCRETE (DRIVEWAY)	123 SF	ALL IN ROW
HYDROSEED	4143 SF	753 SF IN ROW, 3,390 ON PRIVATE PROPERTY

FENCE COORDINATE TABLE

X	NORTHING	EASTING	COMMENT
1	273933.61	1306215.99	END OF FENCE AT WALL
2	273943.62	1306216.44	NE FENCE CORNER
3	273946.22	1306127.10	NW FENCE CORNER
4	273943.86	1306127.02	NORTH PERSONAL GATE POST
5	273939.20	1306126.86	SOUTH PERSONAL GATE POST
6	273910.62	1306125.96	SW MIDDLE FENCE CORNER
7	273866.14	1306211.85	SE FENCE POST
8	273912.66	1306213.91	SOUTH VEHICLE GATE POST
9	273932.56	1306214.56	NORTH VEHICLE GATE POST
10	273948.34	1306053.11	WEST END OF FENCE

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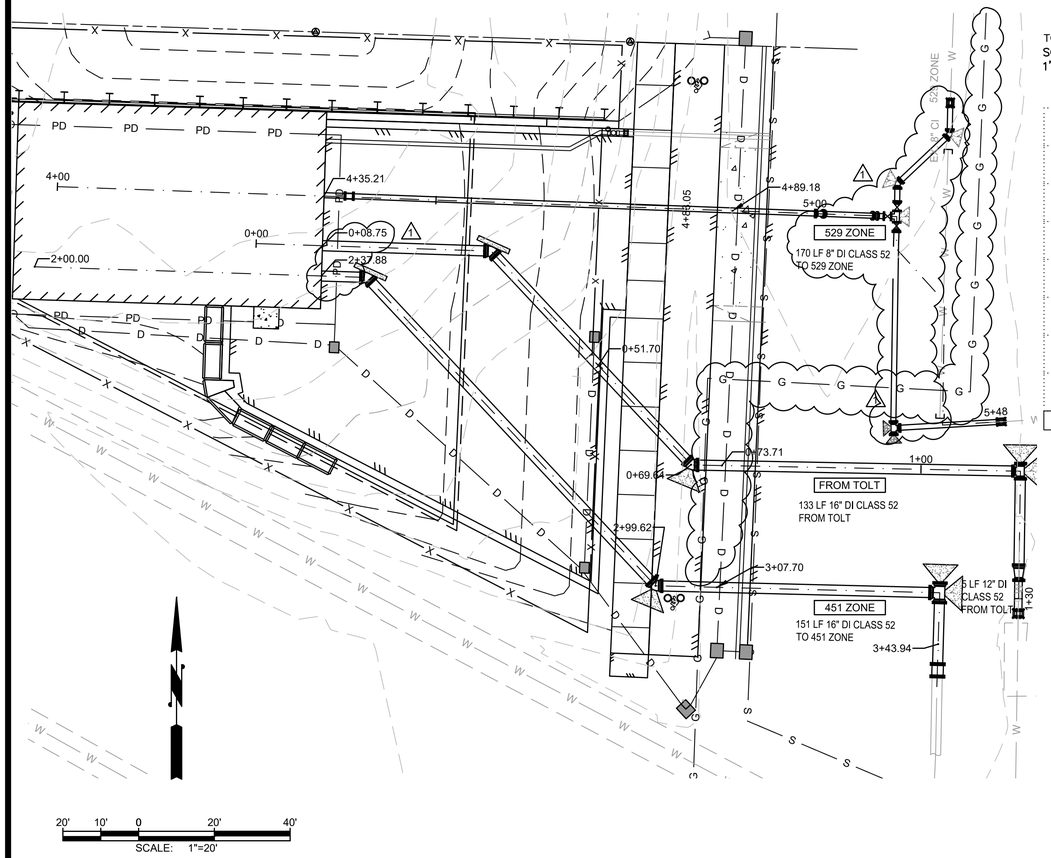
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A SITE RESTORATION AND GRADING PLAN

CIVIL
SHEET: C1-5
9 OF 56

ERIC B. DELFEL STATE OF WASHINGTON 40195 REGISTERED PROFESSIONAL ENGINEER

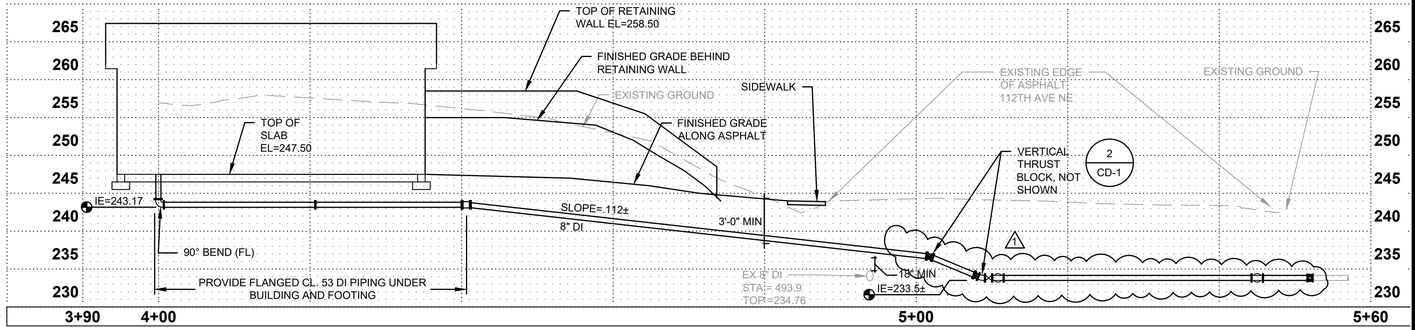
M:\Nshore\18591 451 Zone Control Valve Station\Planset-Mar-2022\General\RESTO SCH A.dwg, 9/17/2024 4:13 PM, CAITLIN CALLEGARI



20' 10' 0 20' 40'

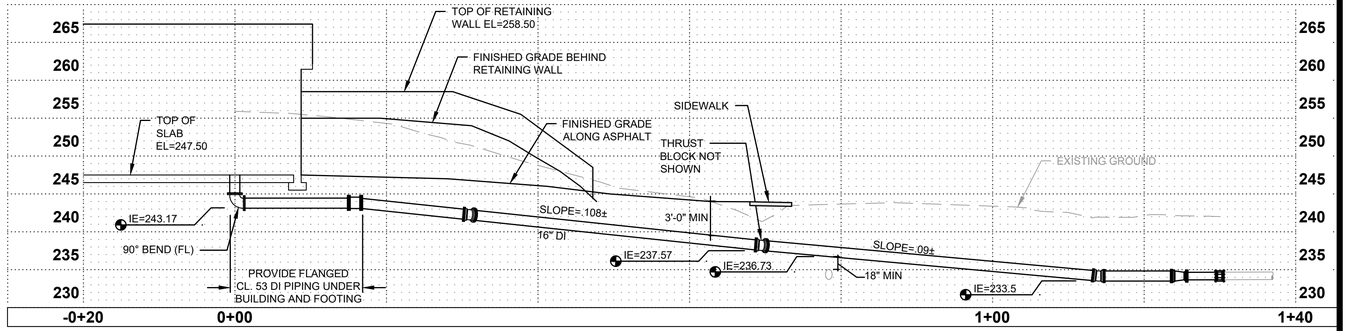
SCALE: 1"=20'

TO 529 CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



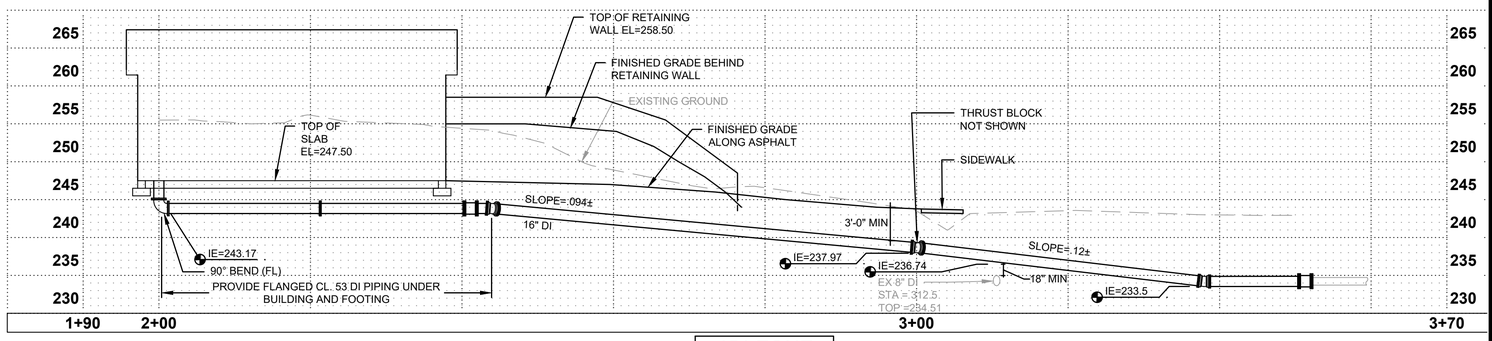
529 ZONE

FROM TOLT CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



TO 451 CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

FROM TOLT



451 ZONE

#C928

ERIC B. DELFEL
STATE OF WASHINGTON
40195
REGISTERED
PROFESSIONAL ENGINEER

NO	BY	APPD	REVISION	DATE
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Gray & Osborne, Inc
CONSULTING ENGINEERS

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CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024

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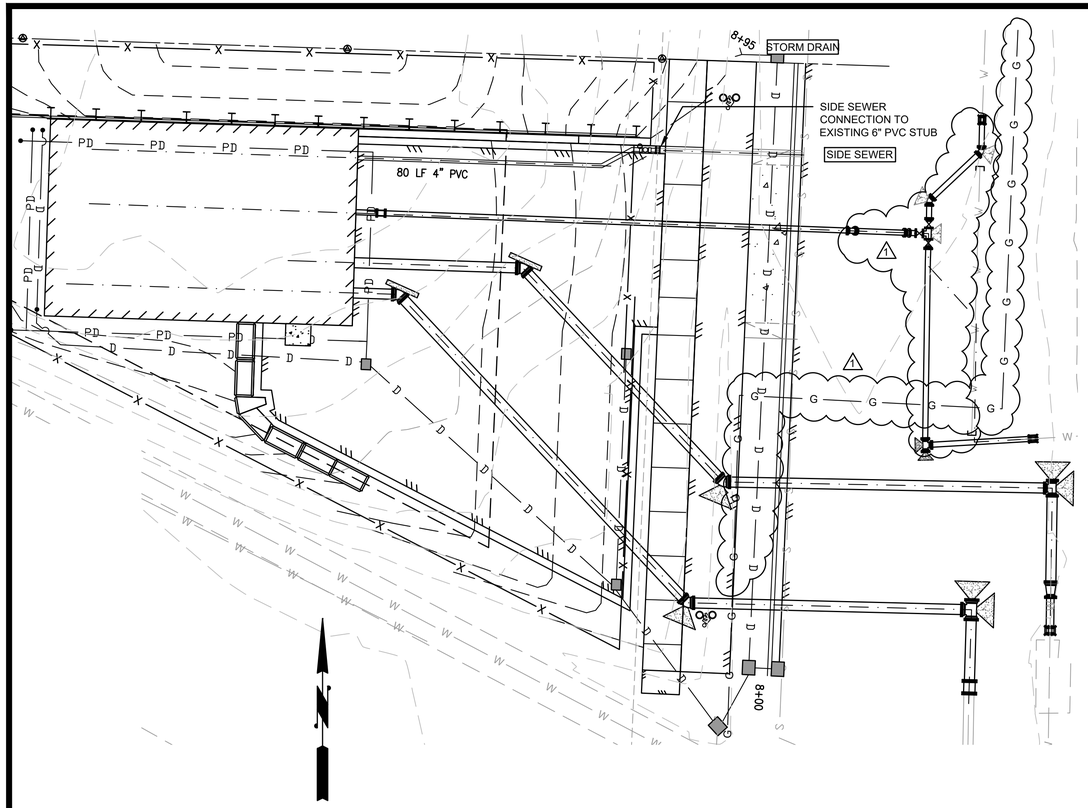
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS

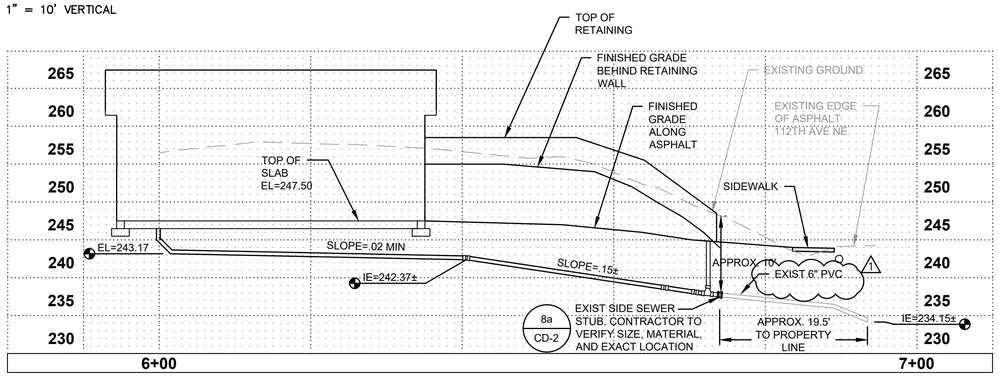
SCHEDULE A
PROPOSED PIPE PROFILES

CIVIL
SHEET: C1-7
11 OF 56

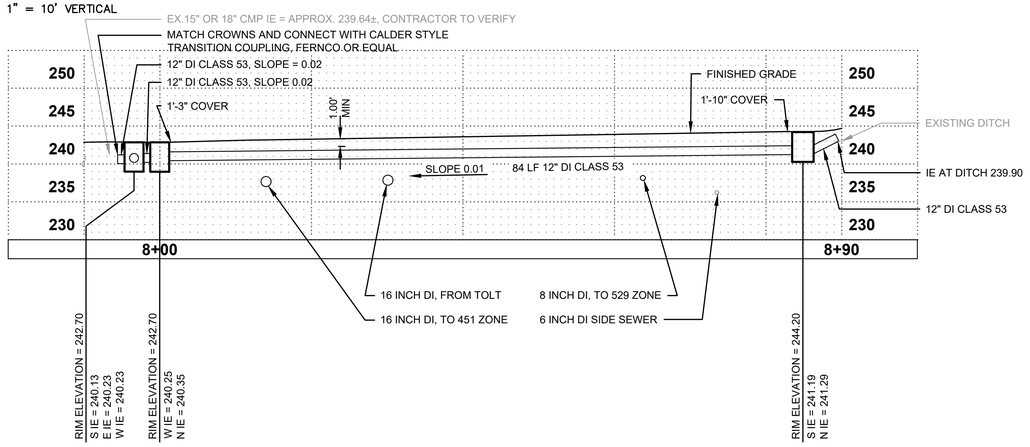
\\gpSERVER3\data2\Nshore\18591 451 zone control valve station\planset-mar-2022\General\C-PROFILES.dwg, 9/17/2024 1:17 PM, PATRICK SMILEY



SEWER_CONN CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



PROPOSED STORM CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



NO	BY	APPD	REVISION	DATE
1	PLS	EBD	ADDENDUM 2	8/28/24

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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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STATE OF WASHINGTON
40195
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PROFESSIONAL ENGINEER

#C928

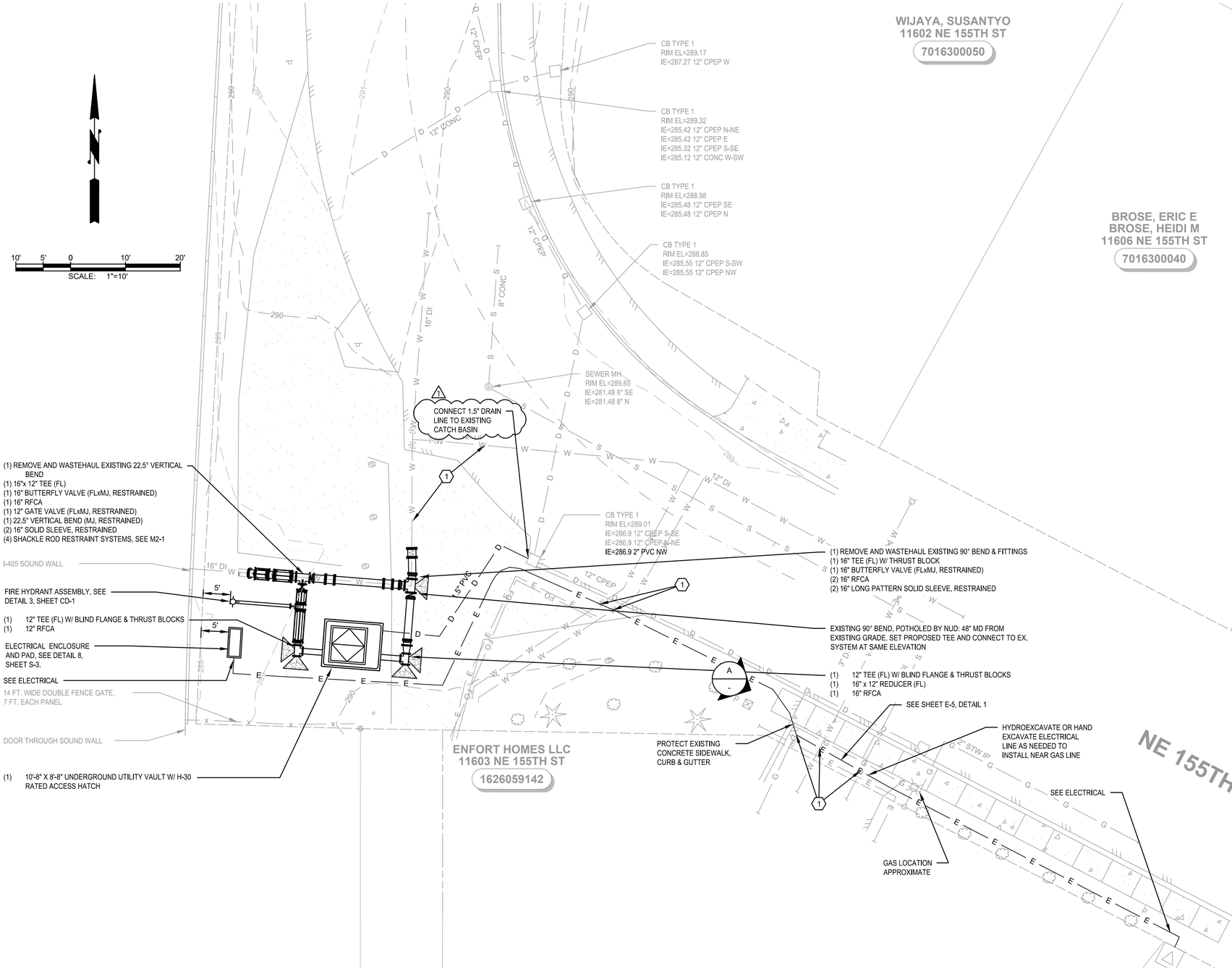
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS

SCHEDULE A
PROPOSED SEWER AND STORM DRAIN PROFILE

CIVIL

SHEET: C1-8

12 OF 56



GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY LOCATIONS, SIZE, AND TYPE OF ALL CONNECTIONS TO EXISTING SYSTEMS PRIOR TO MAKING THE CONNECTION.
2. ALL WATER PIPING SHALL BE INSTALLED WITH RESTRAINED JOINTS.

KEY NOTES:

(1) UTILITY CONFLICT MAY EXIST. CONTRACTOR SHALL FIELD VERIFY (POTHOLE) EXACT LOCATIONS AND DEPTHS OF EXISTING UTILITIES.

A / M1-1 **SOUTH EAST VIEW - ELECTRICAL ALIGNMENT**
NTS

ERIC B. DELFEL — STATE OF WASHINGTON — 40195 — REGISTERED PROFESSIONAL ENGINEER

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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
PROPOSED SITE AND PIPING PLAN

CIVIL

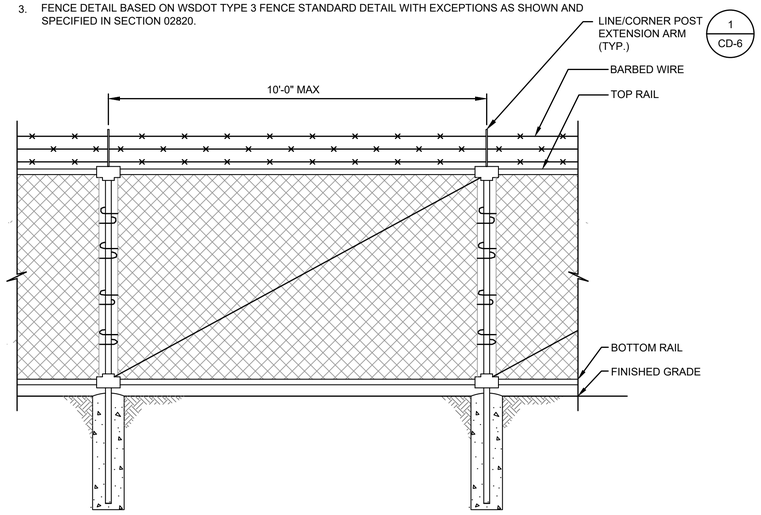
SHEET: C2-2

16 OF 56

\\goSERVER3\data2\Nshore\18591 451 zone control valve station\planset-mar-2022\General\P-SITE SCH B.dwg, 9/10/2024 11:18 AM, PATRICK.SMILEY

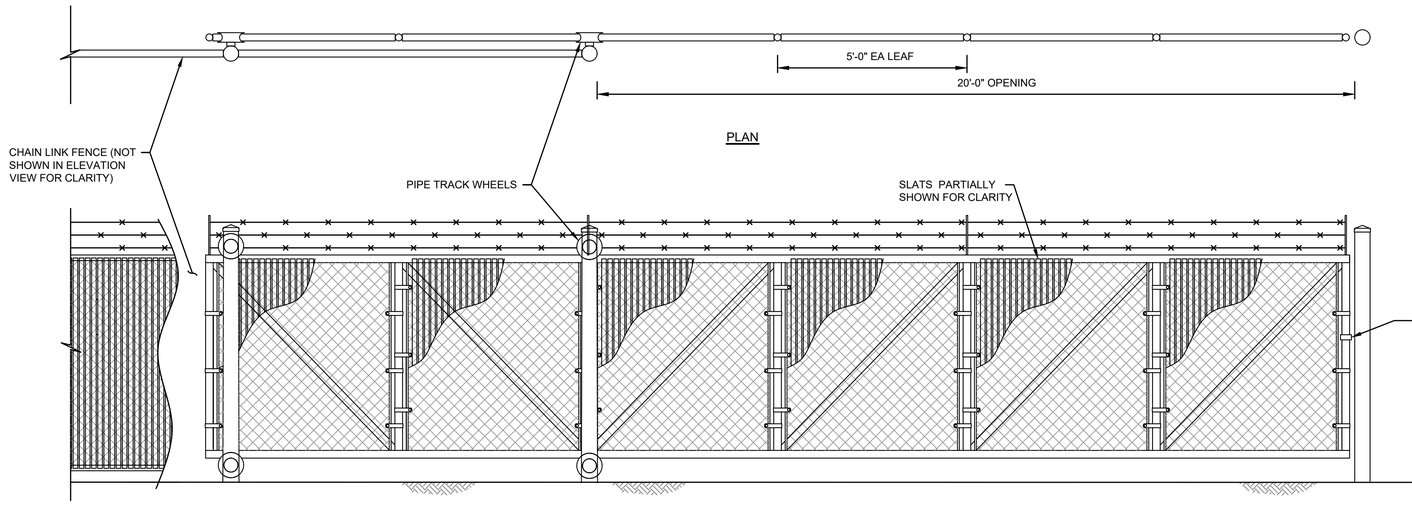
NOTES:

1. SEE SPECIFICATIONS FOR TYPICAL MATERIAL AND INSTALLATION REQUIREMENTS.
2. FENCE FABRIC SHALL BE DIAMOND MESH, GALVANIZED WIRE (BLACK VINYL COATED), WITH FACTORY INSTALLED BLACK FLAT TUBULAR POLYETHYLENE SLATS (FENCE DETAIL TYPE 2 ONLY), VIEWGAURD BY SECURITY CONTRACTOR SERVICES, INC. OR EQUAL.
3. FENCE DETAIL BASED ON WSDOT TYPE 3 FENCE STANDARD DETAIL WITH EXCEPTIONS AS SHOWN AND SPECIFIED IN SECTION 02820.



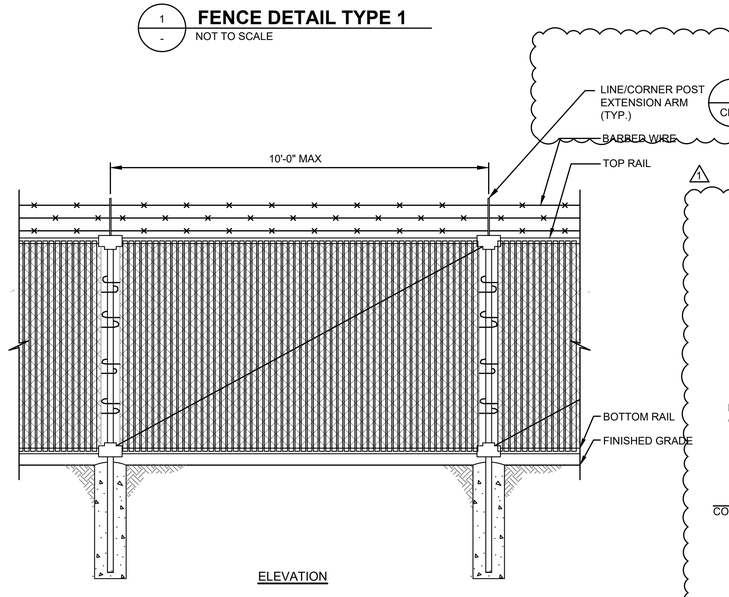
ELEVATION

1 FENCE DETAIL TYPE 1
NOT TO SCALE



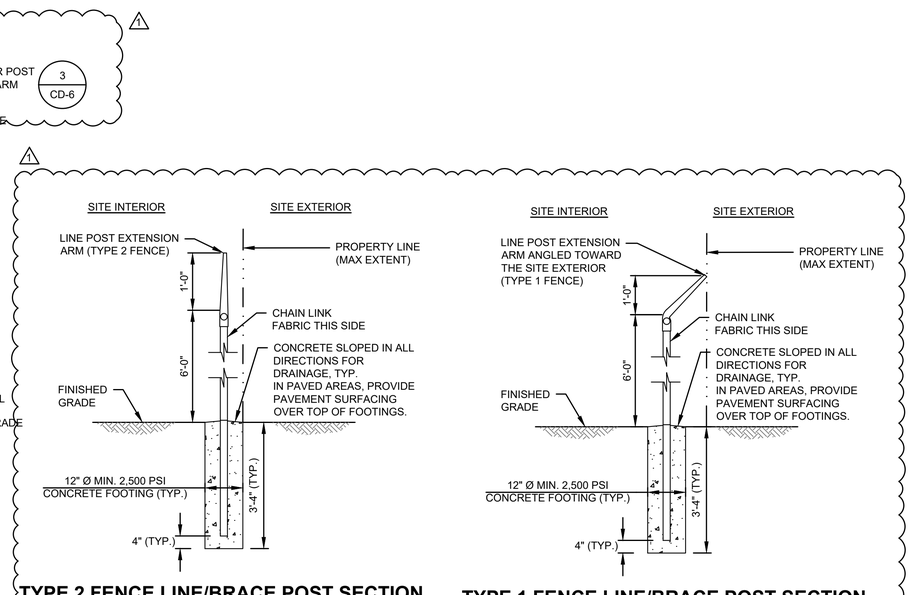
ELEVATION VIEW FROM 112TH AVE NE

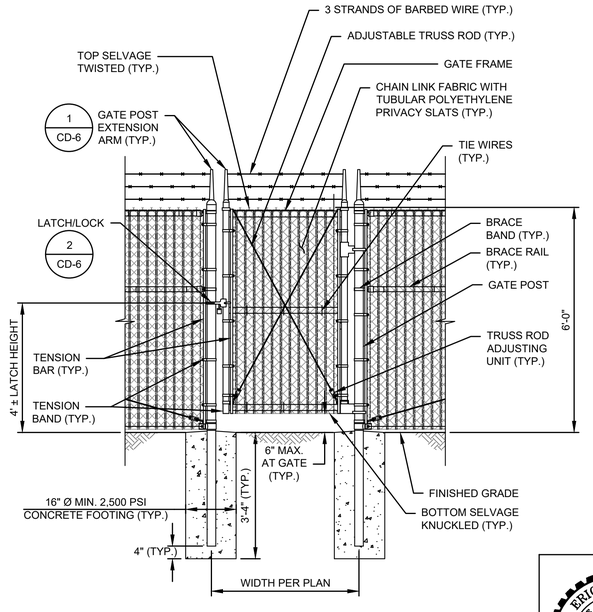
3 CANTILEVERED ROLLING GATE
NOT TO SCALE



ELEVATION

2 FENCE DETAIL TYPE 2
NOT TO SCALE





4 TYP PERSONNEL GATE - MANUAL SWING GATE
NOT TO SCALE

#C928

ERIC B. DELFEL — STATE OF WASHINGTON — 40195 — REGISTERED PROFESSIONAL ENGINEER

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1	PLS	EBD	ADDENDUM 2	8/28/24

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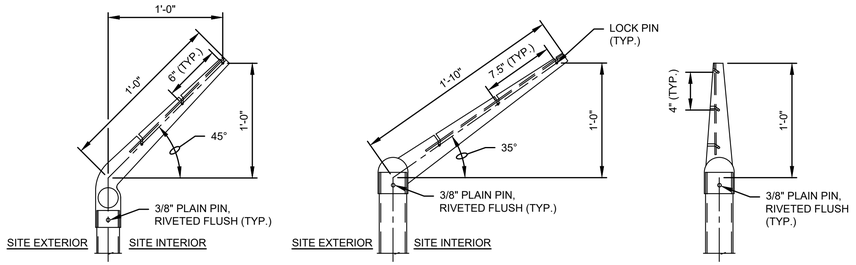
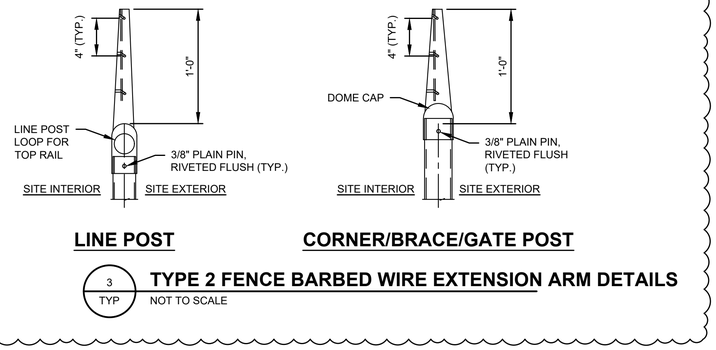
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
CIVIL DETAILS 5

CIVIL
SHEET:CD-5
23 OF 56



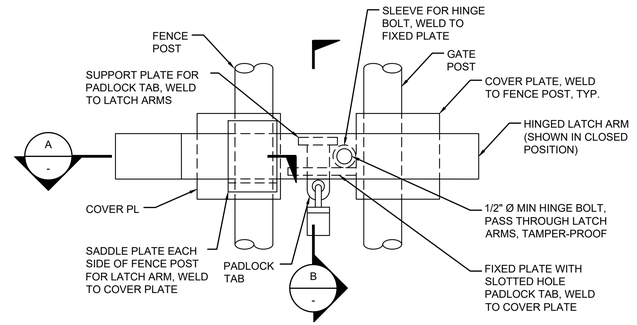
LINE POST **CORNER POST** **GATE POST**

1 TYP **TYPE 1 FENCING BARBED WIRE EXTENSION ARM DETAILS**
NOT TO SCALE

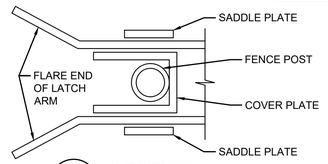


LINE POST **CORNER/BRACE/GATE POST**

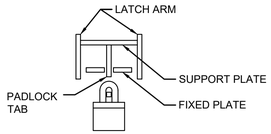
3 TYP **TYPE 2 FENCE BARBED WIRE EXTENSION ARM DETAILS**
NOT TO SCALE



PROFILE



A - **SECTION**



B - **SECTION**

NOTES:

1. USE 1/4" THICK PLATE, MIN, TYP.
2. DETAIL IS BASED ON EXISTING LATCH, MATCH DIMENSIONS OF EXISTING LATCH - FIELD VERIFY.

2 TYP **FENCE GATE LATCH/LOCK DETAIL**
NOT TO SCALE

#C928

ERIC B. DELFEL — STATE OF WASHINGTON — 40195 — REGISTERED PROFESSIONAL ENGINEER

NO	BY	APPD	REVISION	DATE
1	PLS	EBD	ADDENDUM 2	8/28/24

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Gray & Osborne, Inc
CONSULTING ENGINEERS

DESIGNED BY	AKG
DRAWN BY	MAN
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024

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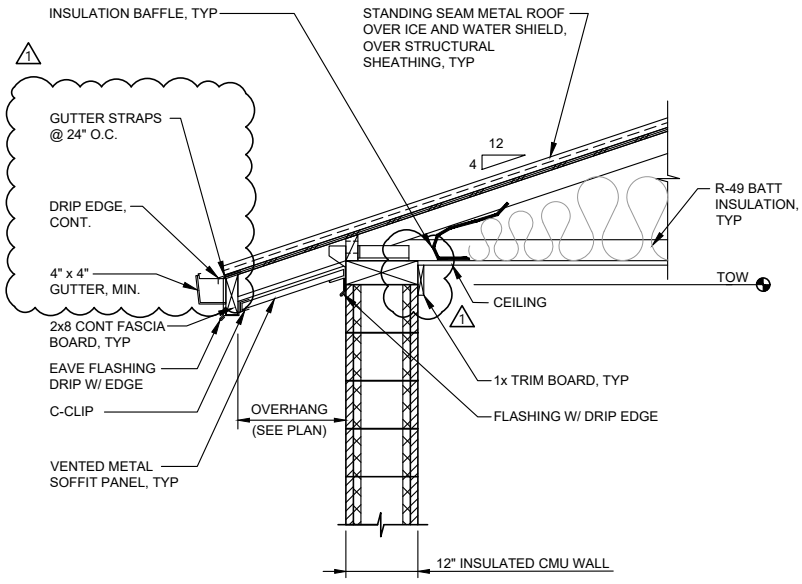
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
CIVIL DETAILS 6

CIVIL
SHEET:CD-6
24 OF 56



C
-

SECTION

SCALE: 3/4"=1'-0"

0 1" 2"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

NORTHSHORE UTILITY DISTRICT

451 ZONE CONTROL VALVE STATION

CLARIFICATION ROOF DETAIL
SECTION C

REFERENCE SHEET A1-4

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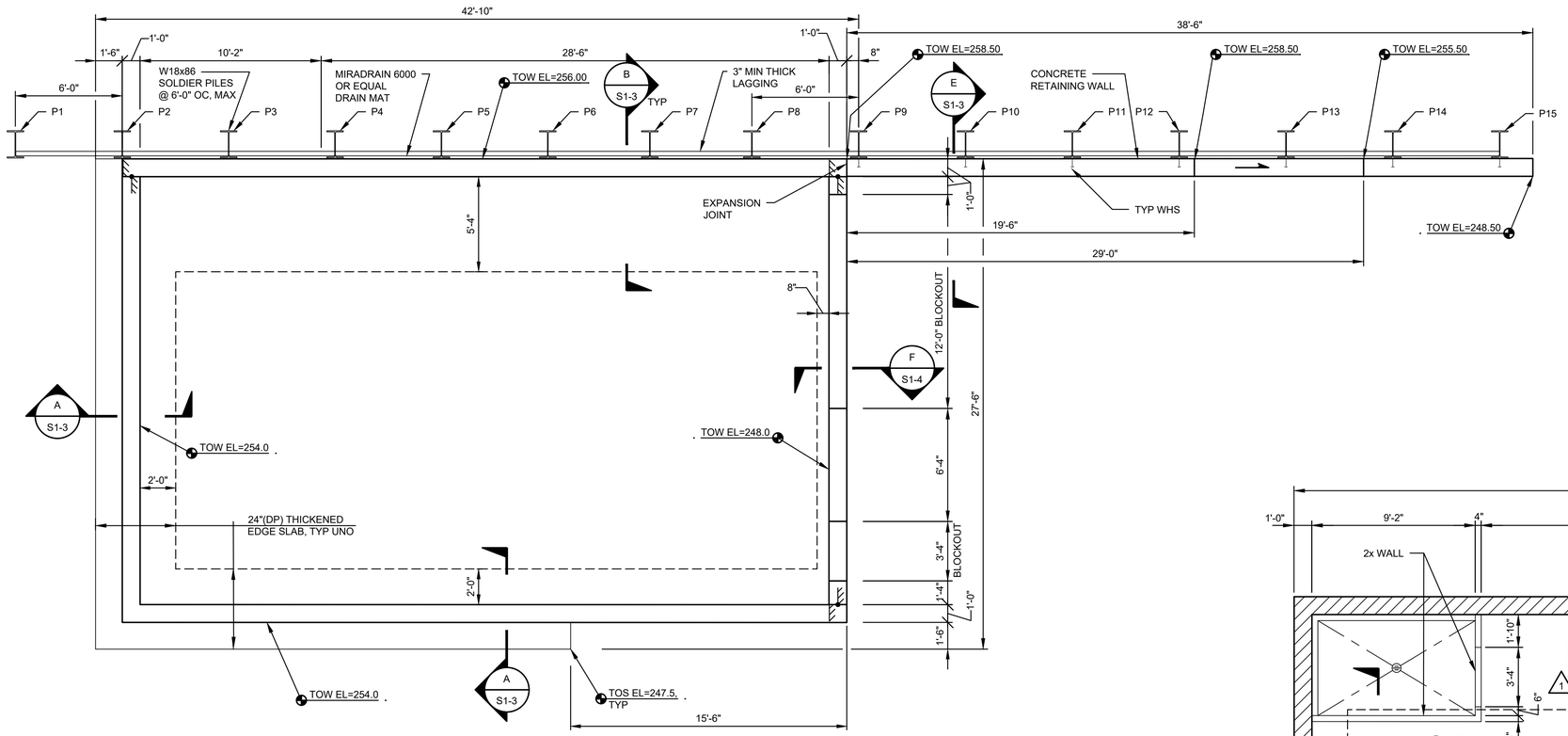
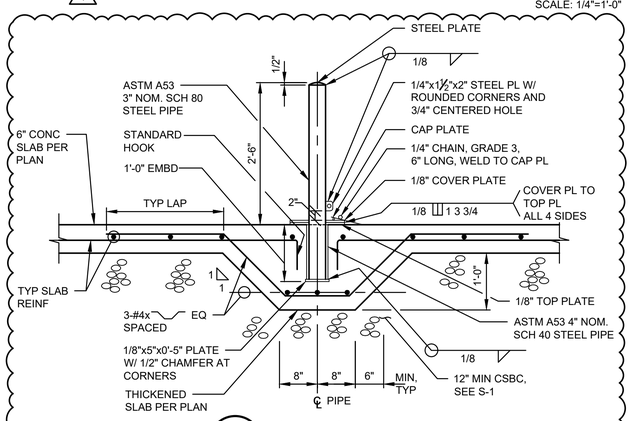


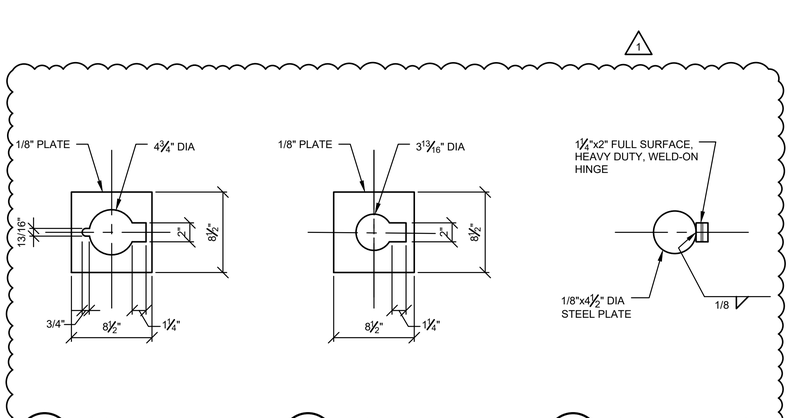
FOUNDATION PLAN

SCALE: 1/4"=1'-0"



A
*
SECTION
SCALE: 3/4"=1'-0"

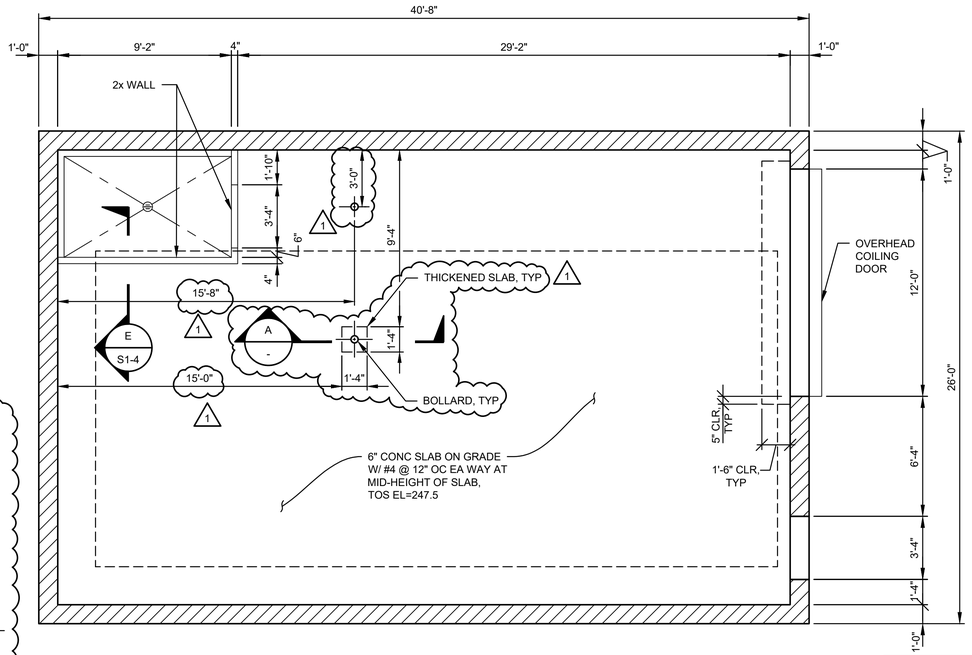
NOTE:
1. PAINT BOLLARD YELLOW.



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

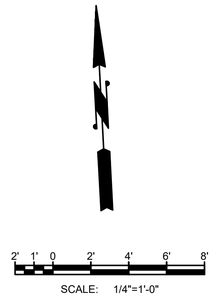
2
-
TOP PLATE
SCALE: 1 1/2"=1'-0"

3
-
CAP AND HINGE
SCALE: 1 1/2"=1'-0"



FLOOR PLAN

SCALE: 1/4"=1'-0"



SCALE: 1/4"=1'-0"

NOTES:

1. SEE SEE SHEETS S-1 THROUGH S-3 FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
2. DIMENSIONS SHOWN ON THE STRUCTURAL PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
3. NOT ALL PENETRATIONS MAY BE SHOWN. CONTRACTOR SHALL VERIFY NUMBER, SIZE, AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL, ELECTRICAL, AND HVAC DRAWINGS.
4. "TOW" REFERS TO TOP OF CONCRETE WALL ON THIS SHEET.

MYRON J. BASDEN
STATE OF WASHINGTON
46334
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

#C928

NO	BY	APPD	REVISION	DATE
			1 ADDENDUM #2	9/16/2024

WARNING
0 ½ 1
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CONSULTING ENGINEERS

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DRAWN BY	RAH
CHECKED BY	ZK
APPROVAL	MJB
DATE	

NORTHSHORE UTILITY DISTRICT
WATER SEWER

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P.O. Box 82489 Kenmore, WA 98028-2684
Ph: (425) 398-4400 | Fax: (425) 398-4430 | www.nud.net

C0928
451 ZONE CONTROL VALVE IMPROVEMENTS

SCHEDULE A
FOUNDATION AND FLOOR PLANS

STRUCTURAL

SHEET: S1-1

41 OF 56

NORTHSHORE UTILITY DISTRICT
451 ZONE CONTROL VALVE FACILITY AND CONTROL VALVE VAULT
G&O #18591.00
PREBID MEETING SIGN IN SHEET – 8/26/2024 – 10:00 A.M.

	Name	Company	Address/Email	Phone
1.	Joe Reed	KBA	Jreed@KBACM.com	
2.	Scott Wilcox	KBA	Swilcox@KBACM.com	425-866-3202
3.	Brain Menard	Road Construction Northwest	Bids@rcnw.com	425-531-1634
4.	David Bloen	McClure & Sons	Bids@Mcclureandsons.com	425-316-6999
5.	Brian Barry	JW Folwer	Brianb@Jwfowler.com	253-288-8135
6.	Levi Wallace	Interwest	Bids@Interwest.biz	360-391-0768
7.	Anthony Thomas	Anvil Builders	Athomas@Anvilbuilders.com	206-359-0132
8.	Chris Stok	HPC	Chriss@HarborPacific.com	206-491-9913
9.	George Matote	NVD	Gmatotb@NVD.com	425-471-9450
10.	Mike Pellittori	Pellco	Mikep@Pellcoconstruction.com Bids@pellecoconstruction.com	425-265-7211

	Name	Company	Address/Email	Phone
11.	Eric Delfel	G&O	edelfel@g-o.com	206-284-0860
12.	Patrick Smiley	G&O	psmiley@g-o.com	206-284-0860
13.	Catherine Forrest	NUD	Cforrest@NUD.net	425-398-4400
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