

NORTHSHORE UTILITY DISTRICT

King County, Washington

C0928

451 ZONE CONTROL VALVE IMPROVEMENTS

AUGUST 2024

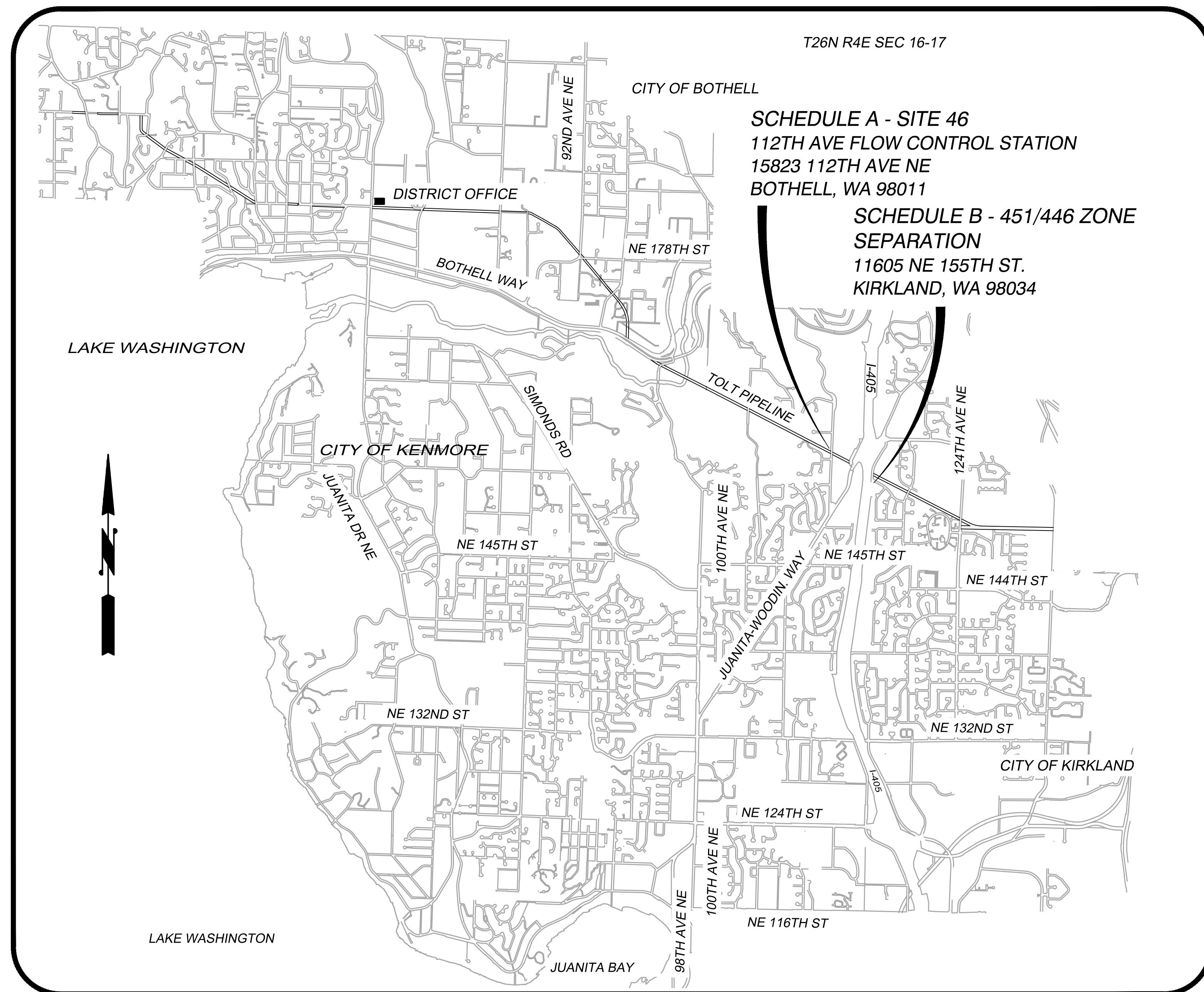


SUSAN GREATHOUSE President of the Board
TRUDY C. ROLLA Secretary of the Board
D. BRUCE GARDINER Commissioner
THOMAS D. MORTIMER Commissioner
MATT BREYSSE Commissioner
AMANDA CAMPBELL General Manager

BID SET

SCHEDULE A - AREA 1, CITY OF BOTHELL
SCHEDULE B - AREA 2, CITY OF KIRKLAND

SHEET NO.	TITLE		
--	COVER, VICINITY MAP AND SHEET INDEX	S-1	GENERAL STRUCTURAL NOTES
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VICINITY MAP

NOT TO SCALE

ABBREVIATIONS

AVE	AVENUE	TB	THRUST BLOCK
AC	ASBESTOS CEMENT PIPE	TC	TOP OF CURB
ADJ	ADJUST	TEL	TELEPHONE
ALT	ALTERNATE	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
ALUM	ALUMINUM	THRD	THREADED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	THRU	THROUGH
AP	ANGLE POINT	TYP	TYPICAL
ASPH	ASPHALT	UNO	UNLESS NOTED OTHERWISE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	VERT	VERTICAL
ASSY	ASSEMBLY	W	WEST
BF	BLIND FLANGE	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
BLDG	BUILDING	W/	WITH
BLK	BLOCK	W/O	WITHOUT
BO	BLOW OFF		
BOP	BEGINNING OF PROJECT		
BVCE	BEGIN VERTICAL CURVE ELEVATION		
BVCS	BEGIN VERTICAL CURVE STATION		
CTR	CENTER		
CAP	CORRUGATED ALUMINUM PIPE		
CB	CATCH BASIN		
CI	CAST IRON		
CL	CLEARANCE		
CLR	CLEARANCE		
CMP	CORRUGATED METAL PIPE		
CO	CLEANOUT		
CONC	CONCRETE		
C	CONDUIT		
CONN	CONNECTION		
CONT	CONTINUOUS		
CPEP	CORRUGATED POLYETHYLENE PIPE		
CPG	COUPLING		
CY	CUBIC YARD		
CONT	CONTINUED		
CL	CLASS		
CF	CUBIC FEET		
CFS	CUBIC FEET PER SECOND		
DC	DEGREE OF CURVATURE		
DI	DUCTILE IRON		
DIA	DIAMETER		
DOT	DEPARTMENT OF TRANSPORTATION		
DIM	DIMENSION		
DWGS	DRAWING(S)		
D	DRAIN		
E	EAST		
EA	EACH		
EL	ELEVATION		
ELEC	ELECTRICAL		
EOA	EDGE OF ASPHALT		
EOP	END OF PROJECT		
EVCE	END VERTICAL CURVE ELEVATION		
EVCS	END VERTICAL CURVE STATION		
EXIST	EXISTING		
FIG	FIGURE		
FIN	FINISHED		
FL	FLANGE		
FT	FEET		
GA	GAUGE		
GALV	GALVANIZED		
GI	GALVANIZED IRON		
GV	GATE VALVE		
HDPE	HIGH DENSITY POLYETHYLENE PIPE		
ID	INSIDE DIAMETER		
IE	INVERT ELEVATION		
INV	INVERT		
IN	INCH		
L	LENGTH		
LB	POUND		
LF	LINEAR FEET		
MAX	MAXIMUM		
MFR	MANUFACTURER		
MH	MANHOLE		
MIN	MINIMUM		
MJ	MECHANICAL JOINT		
MISC	MISCELLANEOUS		
N	NORTH		
NO	NUMBER		
NTS	NOT TO SCALE		
OC	ON CENTER		
OD	OUTSIDE DIAMETER		
PI	POINT OF INTERSECTION		
PP	POWER POLE		
PVI	POINT OF VERTICAL INTERSECTION		
PE	PLAIN END		
PERF	PERFORATED		
PVC	POLYVINYL CHLORIDE		
PVMT	PAVEMENT		
PVT	POINT OF VERTICAL TANGENT		
PC	POINT OF CURVATURE		
PT	POINT OF TANGENCY		
QTY	QUANTITY		
RET	RETAINING		
RR	RAILROAD		
R	RADIUS		
RED	REDUCER		
REINF	REINFORCE		
REQD	REQUIRED		
R/W	RIGHT-OF-WAY		
SL	SLOPE		
S	SOUTH		
SCH	SCHEDULE		
SF	SQUARE FEET		
SHT	SHEET		
SPECS	SPECIFICATIONS		
SQ	SQUARE		
STA	STATION		
STD	STANDARD		

LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINE
---	---	RIGHT OF WAY LINE
---	---	RIGHT OF WAY LINE CENTERLINE
---	---	ROADWAY CENTERLINE
---	---	DITCH CENTERLINE
W	W	WATER LINE
S	S	SANITARY SEWER LINE
D	D	STORM DRAIN LINE
---	---	SWALE OR DITCH
G	G	GAS LINE
E	E	UNDERGROUND POWER LINE
FO	FO	OVERHEAD POWER LINE
---	---	FIBER OPTIC LINE
---	PD PD PD	PERFORATED DRAIN PIPE
X	X	FENCE
---	---	GUARD RAIL
---	---	FILTER FABRIC FENCE
---	---	EDGE OF LANDSCAPING
---	---	CITY OF BOTHELL WETLAND
---	---	CITY OF BOTHELL WETLAND BUFFER
W	W	WATER VAULT CENTER
W	W	WATER METER
o	o	WATER VALVE POST
o	o	MANHOLE
o	o	SEWER MANHOLE
o	o	STORM DRAIN MANHOLE
o	o	COMMUNICATIONS MANHOLE
T	T	COMMUNICATIONS CABINET
o	o	STORM DRAIN CATCH BASIN
o	o	POWER POLE
o	o	ELECTRICAL HANDHOLE
o	o	ELECTRICAL METER
o	o	TELEPHONE HANDHOLE
o	o	SIGN
o	o	MONUMENT
o	o	ROCK
o	o	MODULAR BLOCK WALL
o	o	CONIFER TREE
o	o	SHRUB
o	o	DECIDUOUS TREE
o	o	TREE STUMP
o	o	CLEAN OUT
o	o	BUTTERFLY VALVE NORMALLY OPEN
o	o	BUTTERFLY VALVE NORMALLY CLOSED
o	o	GATE VALVE NORMALLY OPEN
o	o	GATE VALVE NORMALLY CLOSED
o	o	THRUST BLOCK
o	o	REDUCER
o	o	SOLID SLEEVE
o	o	BEND (ANGLE AS CALLED OUT)
o	o	CEMENT CONCRETE PAVEMENT
o	o	ASPHALT OVERLAY
o	o	ASPHALT CONCRETE PAVEMENT
o	o	GRAVEL
o	o	GRASS, HYDROSEED
o	o	PROPERTY ADDRESS
o	o	REMOVE AND WASEHAUL

ORDER OF WORK:

SCHEDULE B:

SCHEDULE B EXCAVATION SHALL BE COMPLETED BEFORE NOVEMBER 15TH, 2024 IN ANTICIPATION OF WSDOT WORK NEAR SITE.

- TESC
- INSTALL NEW PIPING
- INSTALL NEW VAULT AND PIPING
- DISINFECT AND PRESSURE TEST
- INSTALL ELECTRICAL EQUIPMENT
- STARTUP AND COMMISSIONING
- RESTORATION
- COMPLETE EXCAVATIONS PRIOR TO 11/15

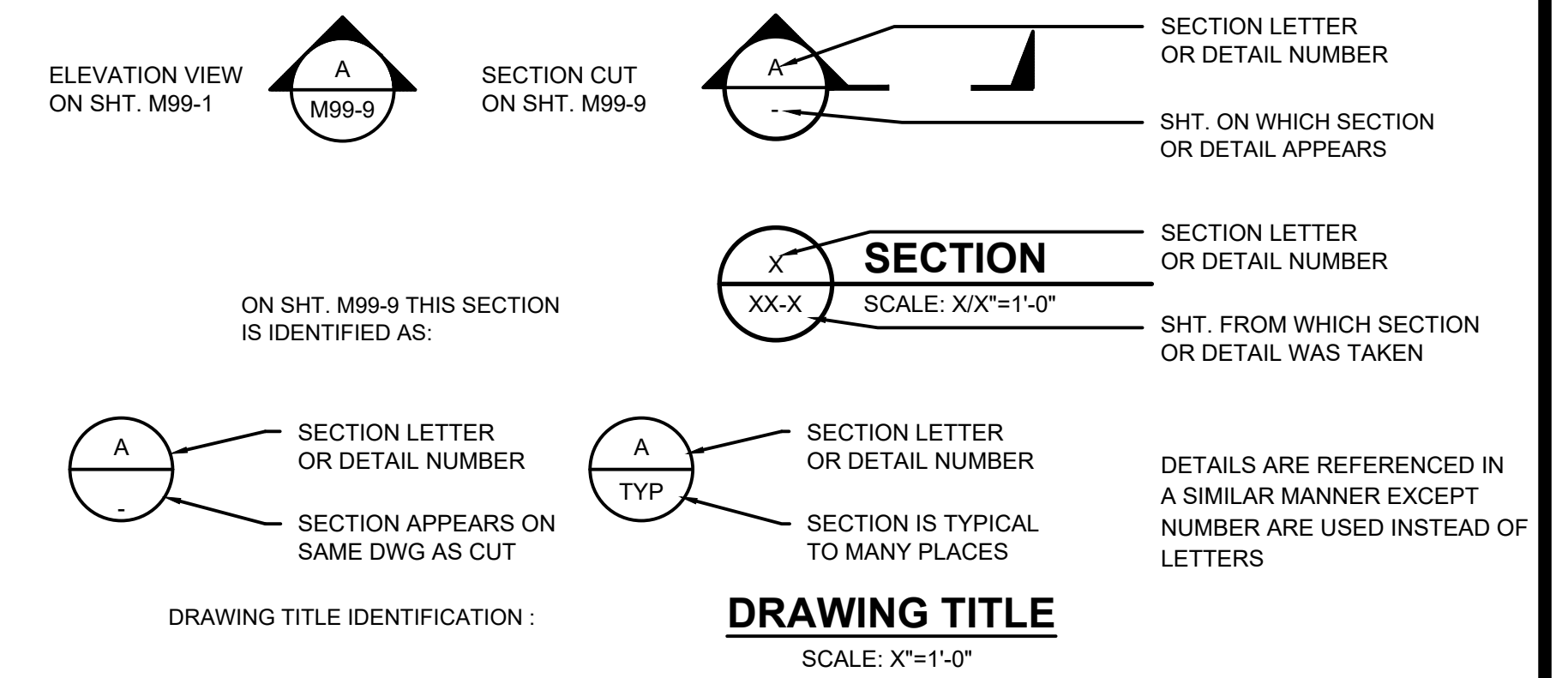
SCHEDULE A:

- INSTALL TESC
- BEGIN PSE SERVICE PROCESS
- CLEAR AND GRUB THE SITE
- INSTALL SOLDIER PILE WALL
- INSTALL UNDERGROUND SITE PIPING TO SITE BOUNDARY
- CONSTRUCT CONCRETE AND GRAVITY BLOCK WALLS
- INSTALL CONCRETE BLOCK BUILDING INCLUDING HVAC, ELECTRICAL, PIPING AND PLUMBING
- INSTALL PIPING IN ROW AND CONNECT TO EXISTING SYSTEM
- STARTUP AND COMMISSIONING
- INSTALL FRONTAGE IMPROVEMENTS
- COMPLETE RESTORATION

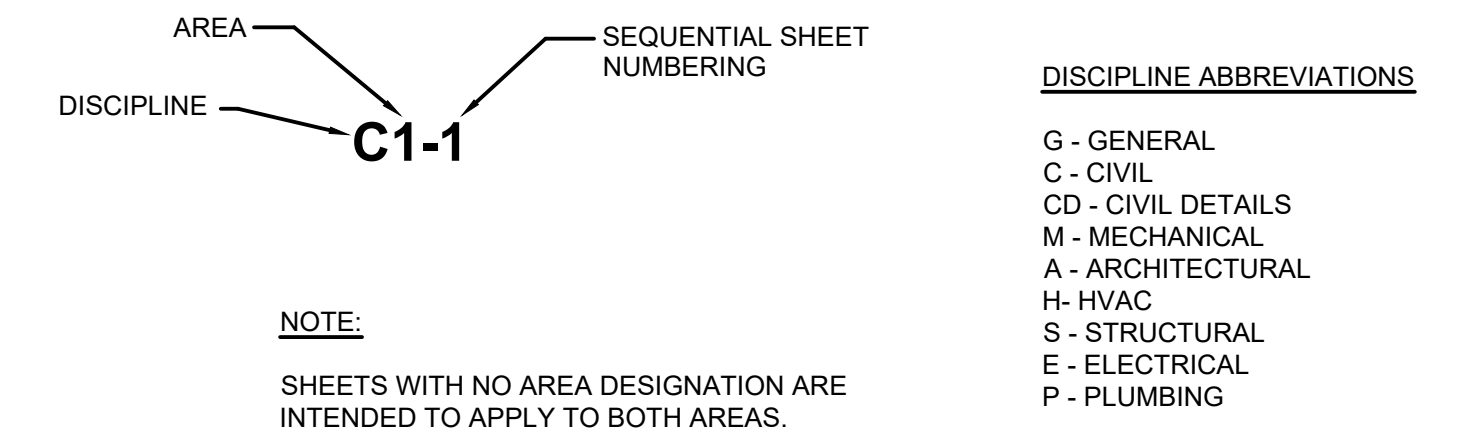
GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE CURRENT NORTHSHORE UTILITY DISTRICT STANDARD SPECIFICATIONS AND STANDARD DETAILS.
2. THE APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN ON THE PLANS FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF UTILITY LOCATIONS SHOWN, FOR THE PROTECTION AND REPAIR OF DAMAGED UTILITIES AND FOR THE DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE LOCATED, BY THE APPROPRIATE UTILITY DISTRICTS OR COMPANIES, ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. FOR UTILITY LOCATES IN KING COUNTY, CALL 1-800-424-5555 PRIOR TO DIGGING.
3. A PRE-CONSTRUCTION CONFERENCE WILL BE HELD AT THE DISTRICT OFFICE PRIOR TO START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL NOTIFY NORTHSHORE UTILITY DISTRICT A MINIMUM OF FIVE (5) DAYS IN ADVANCE OF BEGINNING CONSTRUCTION. CONSTRUCTION SHALL NOT BEGIN WITHOUT PRIOR WRITTEN NOTICE TO PROCEED BY THE DISTRICT.
5. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES OR MAKE ANY CONNECTIONS TO THE EXISTING WATER SYSTEM WITHOUT PRIOR APPROVAL FROM THE DISTRICT.

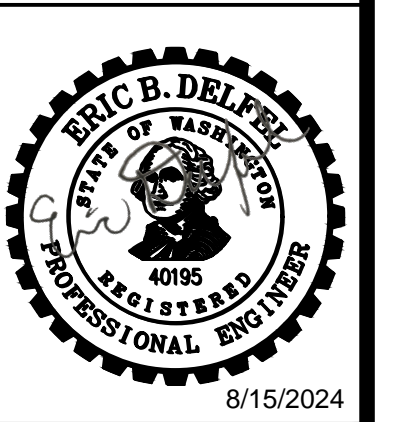
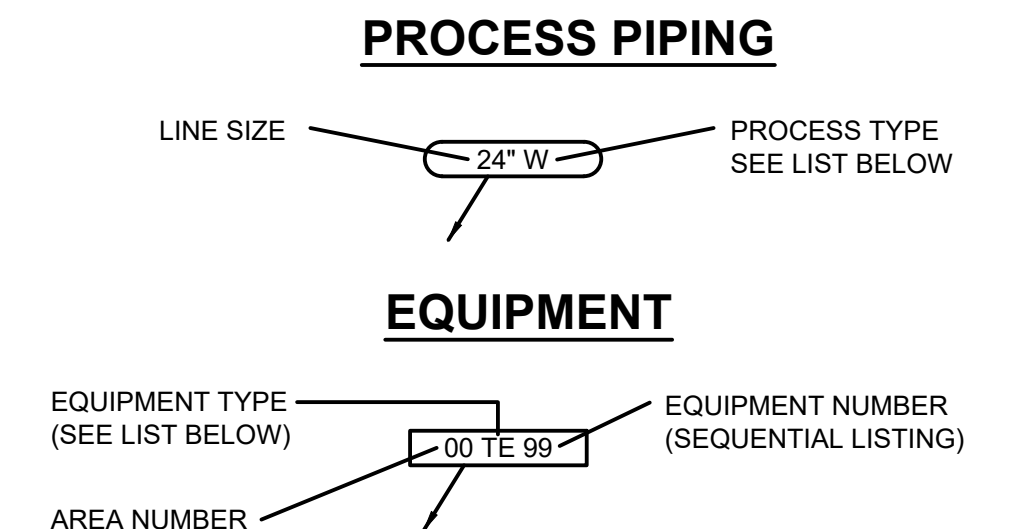
EXAMPLE OF SECTION NUMBERING SYSTEM AND PLAN/DRAWING TITLES



EXAMPLE OF SHEET NUMBERING SYSTEM



PROCESS PIPING / EQUIPMENT IDENTIFICATIONS



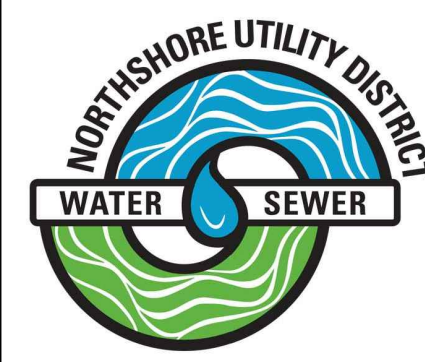
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8/15/2024

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



DESIGNED BY	
DRAWN BY	
CHECKED BY	
APPROVAL	
DATE	AUG 2024



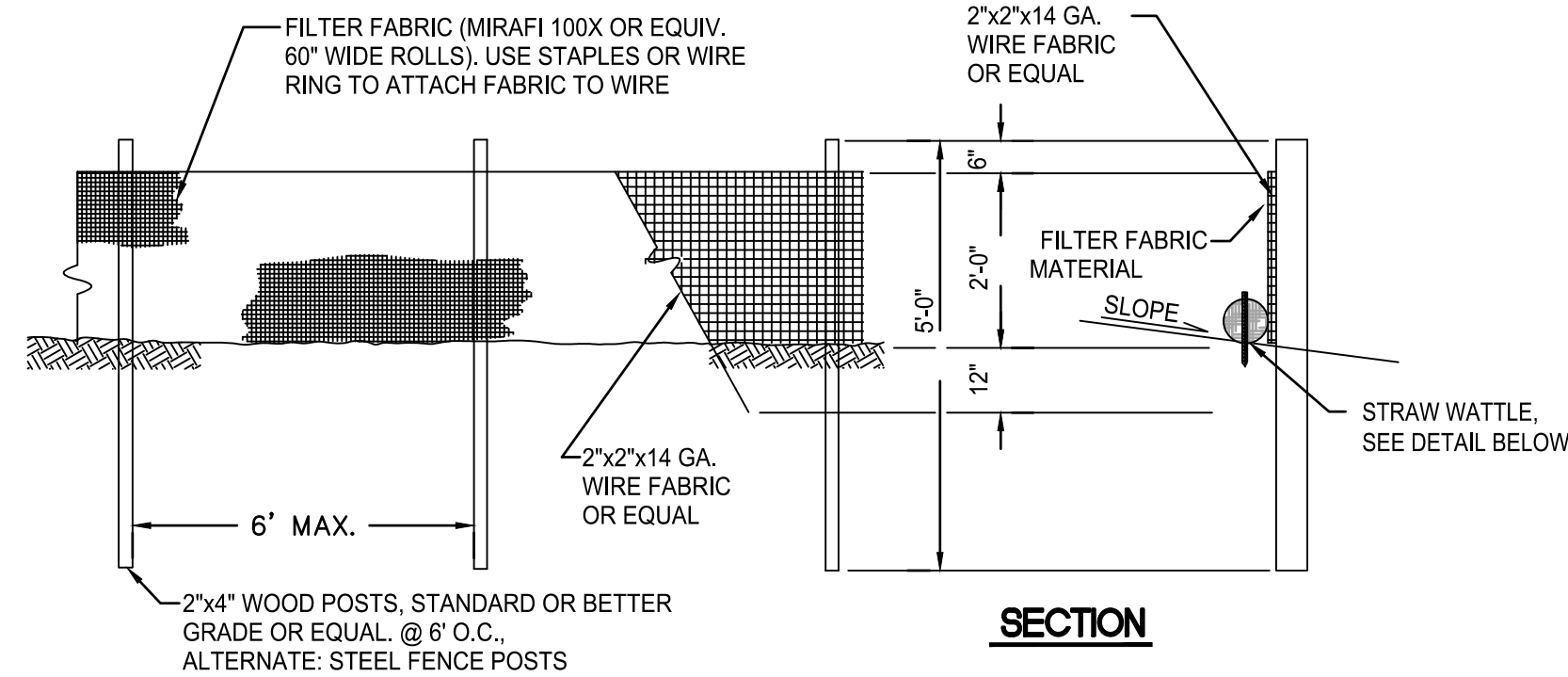
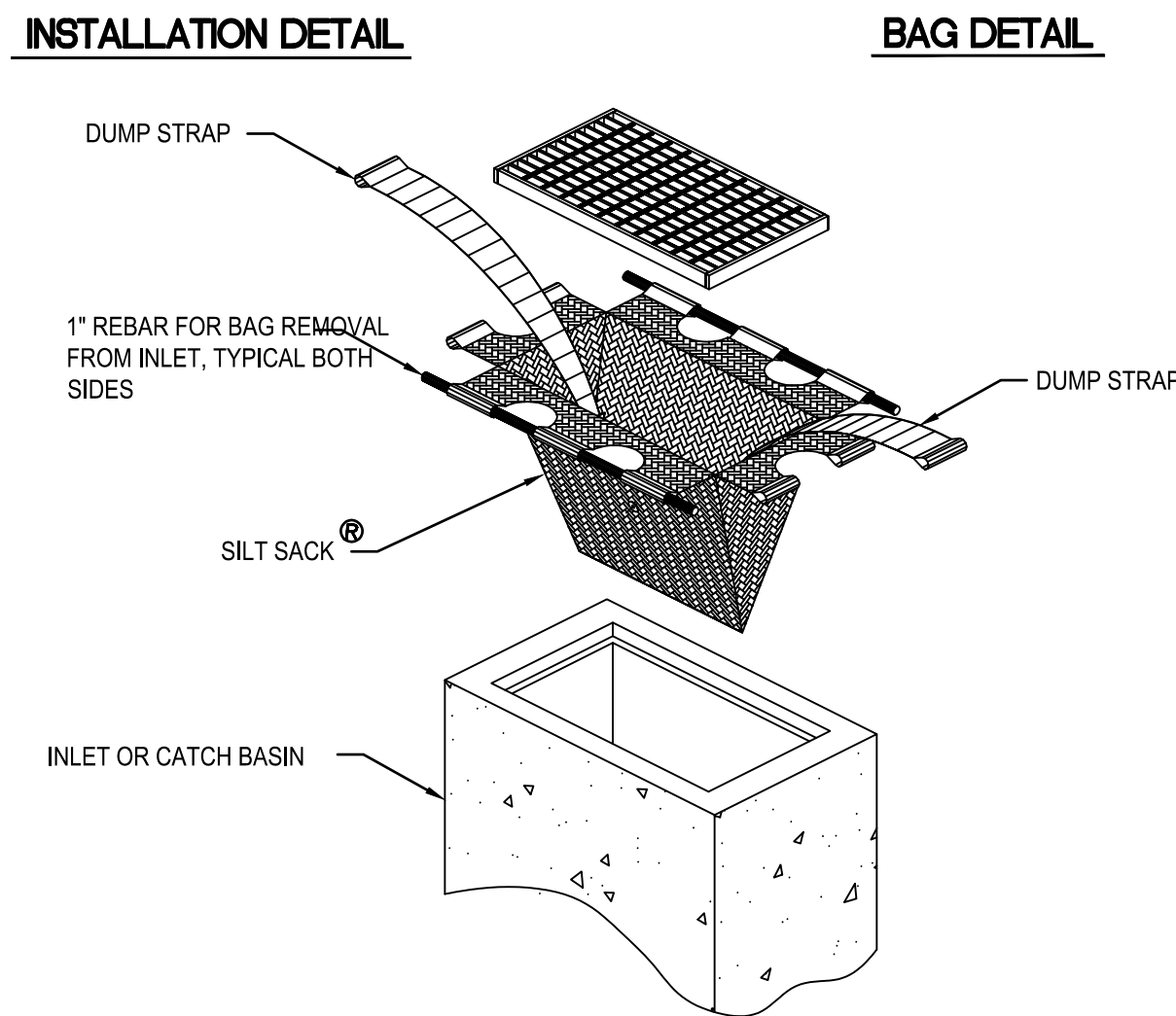
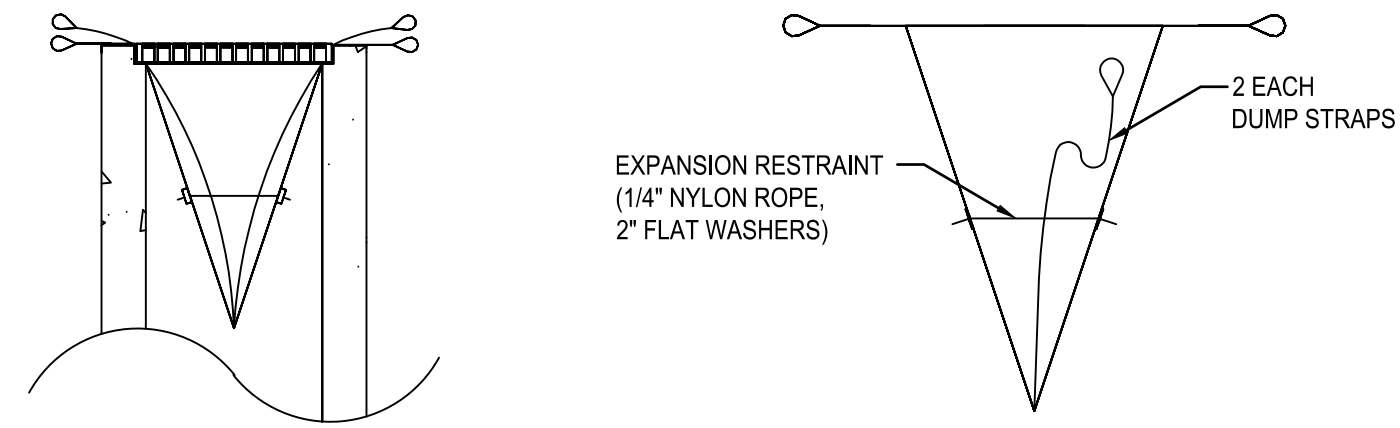
NORTHSHORE UTILITY DISTRICT

6830 NE 185th St. P.O. Box 82489
Kenmore, WA 98028-2684 Kenmore, WA 98028-2684

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451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULES A AND B
LEGEND, ABBREVIATIONS, AND
GENERAL NOTES

GENERAL
SHEET: G-1
1 OF 56



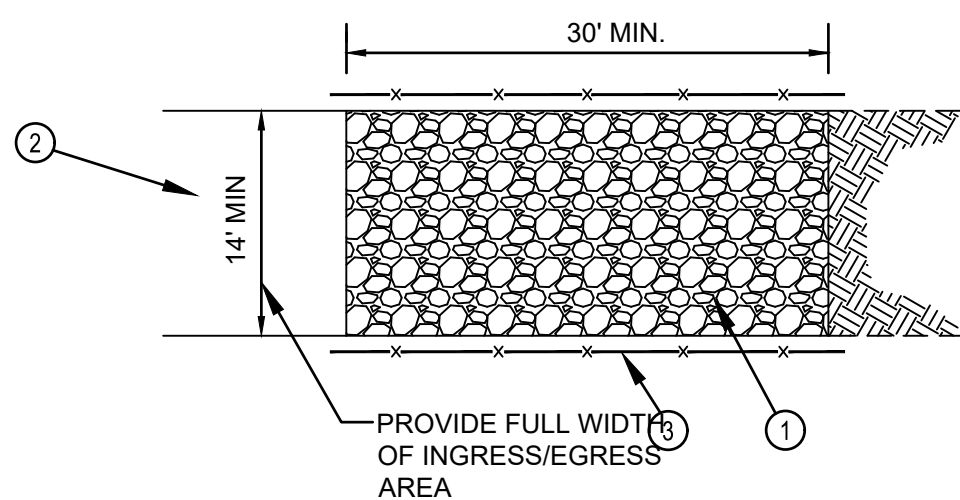
1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS (WHERE FEASIBLE). THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 30 INCHES).
3. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRE OR HOG RINGS.
4. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL BE EXTENDED ACROSS THE GROUND, UPSLOPE AND ADJACENT TO THE WOOD POST. THE FABRIC SHALL NOT EXTEND MORE THAN 30 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
5. WHEN EXTRA FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF STANDARD NOTE 3 APPLYING.
6. FABRIC SHALL BE SECURED AT THE BASE BY PEA-ROCK FILLED SANDBAGS OR STRAW WATTLES PLACED END TO END.
7. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
8. FILTER FABRIC FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

FILTER FABRIC FENCE

NOT TO SCALE

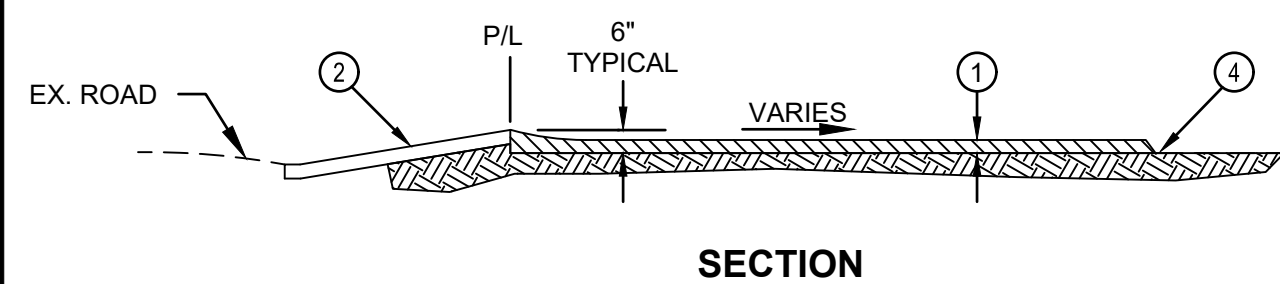
TEMPORARY EROSION AND SEDIMENTATION CONTROL NOTES

1. THE TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC) FACILITIES SHALL BE IMPLEMENTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS. MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE TESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE STORM DRAIN INLET PROTECTION DEVICE SHALL BE SILT SACK OR EQUAL. ALL CATCH BASINS WITHIN THE VICINITY OF THE CONSTRUCTION SHALL HAVE INLET PROTECTION MEASURES.
3. CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE CHANNELS, CULVERTS, SWALES AND STRUCTURES. WHENEVER EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE SUITABLE MEANS FOR DIVERTING AND MAINTAINING ALL FLOWS DURING CONSTRUCTION IN THAT AREA AT ITS EXPENSE. AFTER CONSTRUCTION HAS BEEN COMPLETED, ALL DRAINAGE CHANNELS, CULVERTS, SWALES AND STRUCTURES DISTURBED SHALL BE RETURNED TO THEIR ORIGINAL CONDITIONS.
4. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, TESC FACILITIES SHALL BE MAINTAINED AND UPGRADED AS NECESSARY BY THE CONTRACTOR.
5. CONTRACTOR SHALL INSPECT THE TESC FACILITIES AT THE END OF EACH WORKING DAY TO ASSURE ITSELF THAT THEY ARE IN GOOD CONDITIONS. IF TESC FACILITIES REQUIRE REPAIR/MAINTENANCE, IT SHALL BE PERFORMED PRIOR TO THE END OF THE WORKING DAY. ALL DISTURBED AREAS SHALL BE PROMPTLY AND THOROUGHLY STABILIZED AGAINST EROSION DURING PERIODS OF WET WEATHER WHEN WORK IS NOT BEING PERFORMED AT THE SITE.
6. ALL UNSUITABLE OR SURPLUS EXCAVATED OR CLEARED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED, LEGAL FILL SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ACCEPTABLE DISPOSAL SITES AND ASSURE THAT ALL SURPLUS MATERIAL IS DISPOSED OF IN SAME.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL APPROPRIATE MEASURES NEEDED (STREET SWEEPERS, WATER TRUCKS, ETC.) TO KEEP STREETS AND ROADS USED AS HAUL ROUTES FOR EXPORT OR IMPORT OF MATERIAL CLEAN AND FREE FROM DEBRIS, MUD, ETC. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.



- ① 4" TO 8" QUARRY SPALLS AS SPECIFIED IN SECTION 9-13.6 OF THE WSDOT STANDARD SPECIFICATIONS.
- ② ATB DRIVEWAY RAMP, OR EXISTING SITE ACCESS ROAD.
- ③ INSTALL ORANGE BARRIER FENCE TO DIRECT TRAFFIC ONTO CONSTRUCTION ENTRANCE.
- ④ FILTER FABRIC (GEOTEXTILE FABRIC) SHALL BE INSTALLED BENEATH THE ENTIRE CONSTRUCTION ENTRANCE AND SHALL CONFORM TO THE FOLLOWING PROPERTIES:

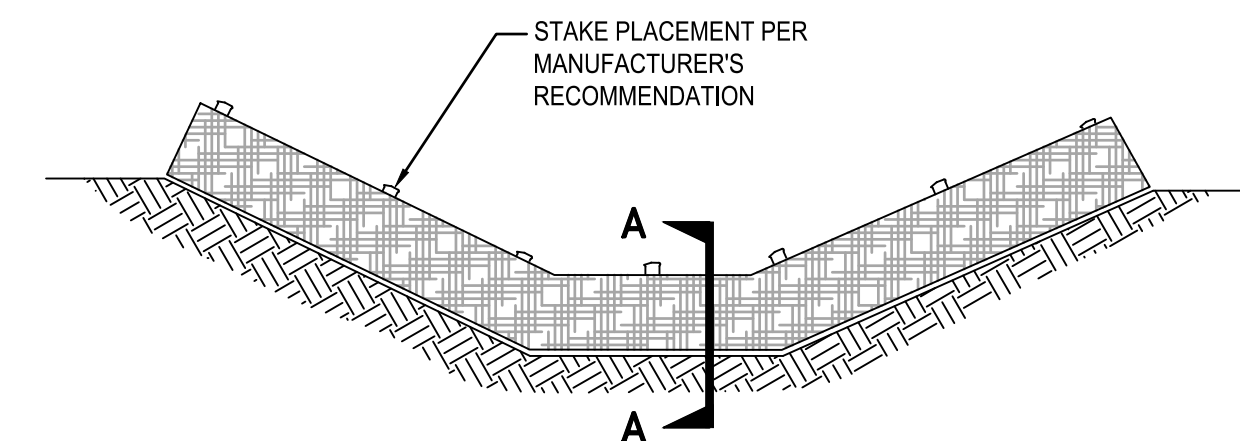
PROPERTY	UNIT	TEST METHOD	RESULT
WEIGHT	OZ/SY	ASTM D3776	2.5 MIN.
THICKNESS	MILS	ASTM D1776	15 MIN.
GRAB STRENGTH	LB	ASTM D1682	100 MIN.
UV RESISTANCE	%	ASTM D1682	90 MIN.
RETENTION EFFICIENCY	%	VIRGINIA DOT VTM-51	75 MIN.
EQUIVALENT SIZE OPENING	U.S. STD. SIEVE	COE CW 02215	20



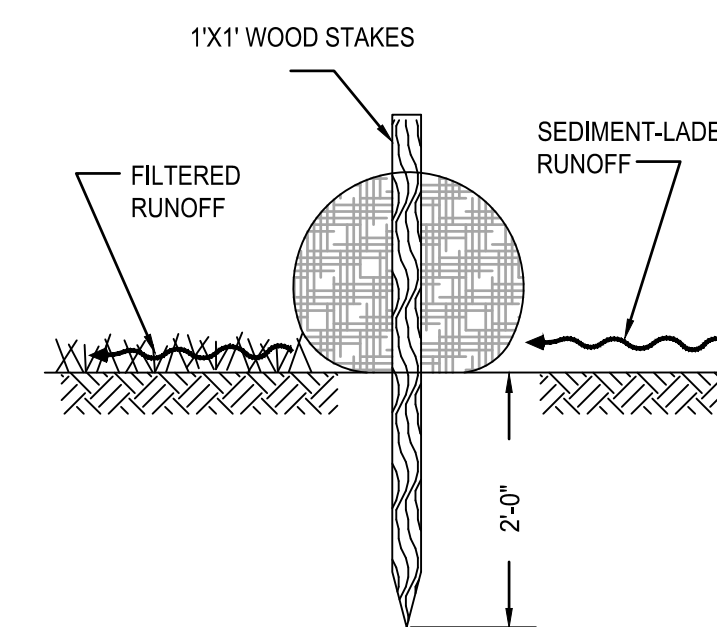
1. INSTALLATION - THE AREA OF THE ENTRANCE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. THE GRAVEL SHALL BE PLACED TO THE SPECIFIED DIMENSIONS. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO SPECIFICATIONS IN THE PLAN. IF WASH RACKS ARE USED, THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A DRIVABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
4. WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS USED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

CONSTRUCTION ENTRANCE

NOT TO SCALE

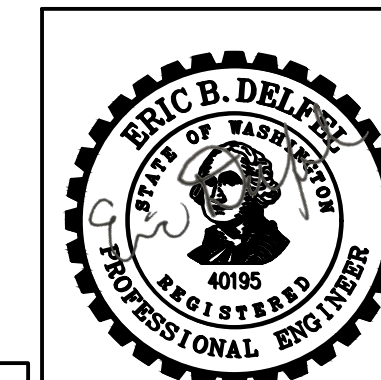


PLACEMENT OF STRAW WATTLE



STRAW WATTLE DAM

NOT TO SCALE

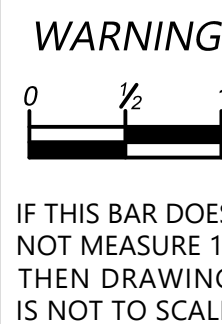


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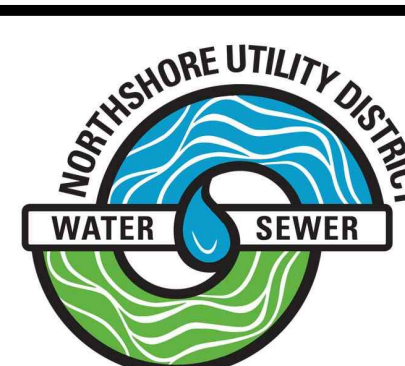
8/15/2024

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NO	BY	APPD	REVISION	DATE



DESIGNED BY	
DRAWN BY	
CHECKED BY	
APPROVAL	
DATE	AUG 2024



NORTHSHORE UTILITY DISTRICT

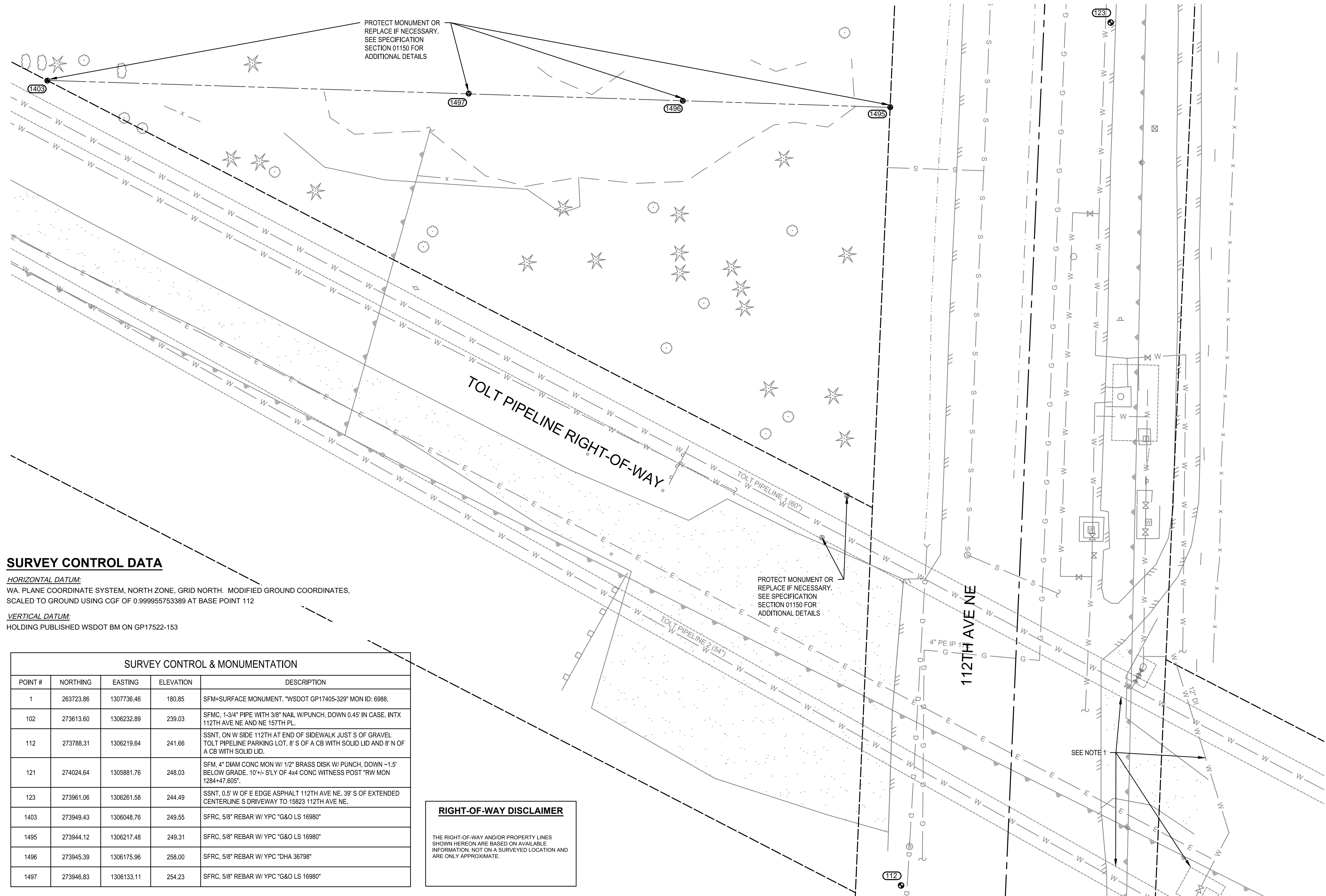
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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULES A AND B
TESC NOTES AND DETAILS

GENERAL
SHEET: G-2
2 OF 56

I:\GIS\PROJECTS\451 Zone Control Valve Station\plans\mar-2022\General\SURVEY SCH A.dwg, 8/14/2024 2:00 PM, PHILIP MARSHALL



NOTES:
 1. LOCATIONS WERE NOT SURVEYED AND ARE APPROXIMATE. LOCATIONS ARE FROM AS BUILT DRAWINGS.

SURVEY CONTROL DATA

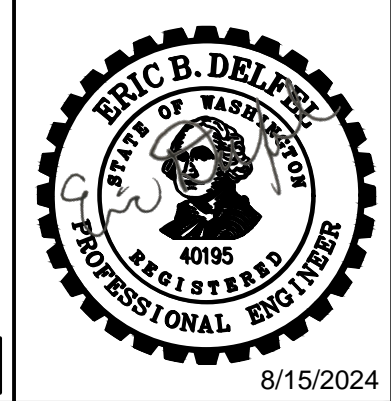
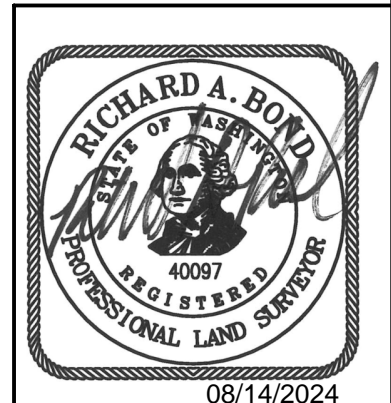
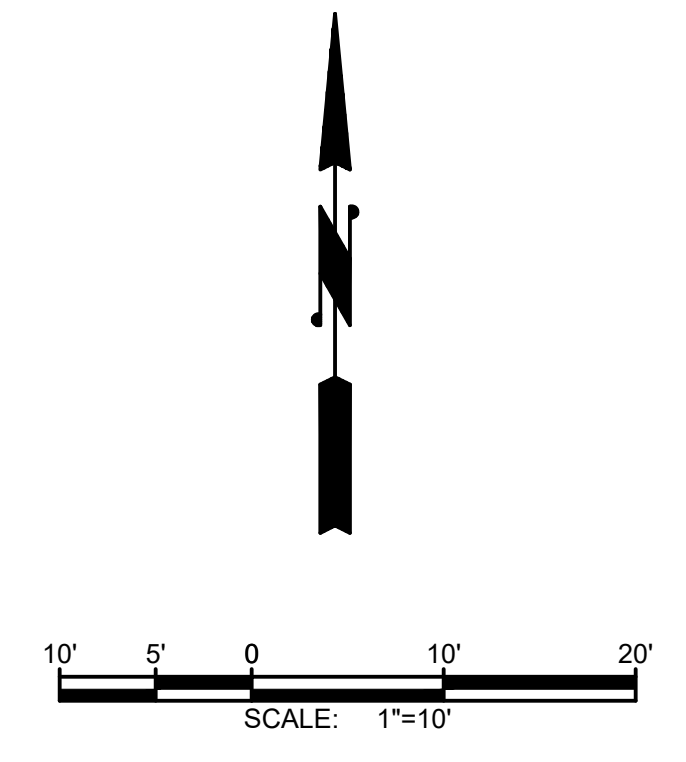
HORIZONTAL DATUM:
 WA PLANE COORDINATE SYSTEM, NORTH ZONE, GRID NORTH. MODIFIED GROUND COORDINATES. SCALED TO GROUND USING CGF OF 0.999955753389 AT BASE POINT 112

VERTICAL DATUM:
 HOLDING PUBLISHED WSDOT BM ON GP17522-153

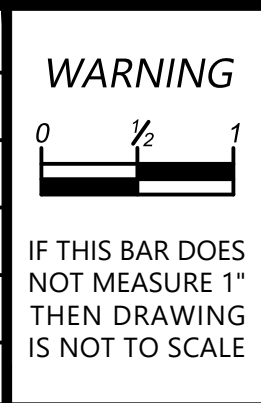
SURVEY CONTROL & MONUMENTATION				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	263723.86	1307736.46	180.85	SFM-SURFACE MONUMENT, "WSDOT GP17405-329" MON ID: 6988.
102	273613.60	1306232.89	239.03	SFMC, 1-3/4" PIPE WITH 3/8" NAIL W/PUNCH, DOWN 0.45' IN CASE, INTX 112TH AVE NE AND NE 157TH PL.
112	273788.31	1306219.64	241.66	SSNT, ON W SIDE 112TH AT END OF SIDEWALK JUST S OF GRAVEL TOLT PIPELINE PARKING LOT, 8' S OF A CB WITH SOLID LID AND 8' N OF A CB WITH SOLID LID.
121	274024.64	1305881.76	248.03	SFM, 4" DIAM CONC MON W/ 1/2" BRASS DISK W/ PUNCH, DOWN -1.5' BELOW GRADE, 10'+/- S'LY OF 4x4 CONC WITNESS POST "RW MON 1284+47.605".
123	273961.06	1306261.58	244.49	SSNT, 0.5' W OF E EDGE ASPHALT 112TH AVE NE, 39' S OF EXTENDED CENTERLINE S DRIVEWAY TO 15823 112TH AVE NE.
1403	273949.43	1306048.76	249.55	SFRC, 5/8" REBAR W/ YPC "G&O LS 16980"
1495	273944.12	1306217.48	249.31	SFRC, 5/8" REBAR W/ YPC "G&O LS 16980"
1496	273945.39	1306175.96	258.00	SFRC, 5/8" REBAR W/ YPC "DHA 36798"
1497	273946.83	1306133.11	254.23	SFRC, 5/8" REBAR W/ YPC "G&O LS 16980"

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.



NO	BY	APPD	REVISION	DATE



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

NORTHSHORE UTILITY DISTRICT
 WATER SEWER

6830 NE 185th St. P.O. Box 82489
 Kenmore, WA 98028-2684 Kenmore, WA 98028-2684

Ph: (425) 398-4400 | Fax: (425) 398-4430 | www.nud.net

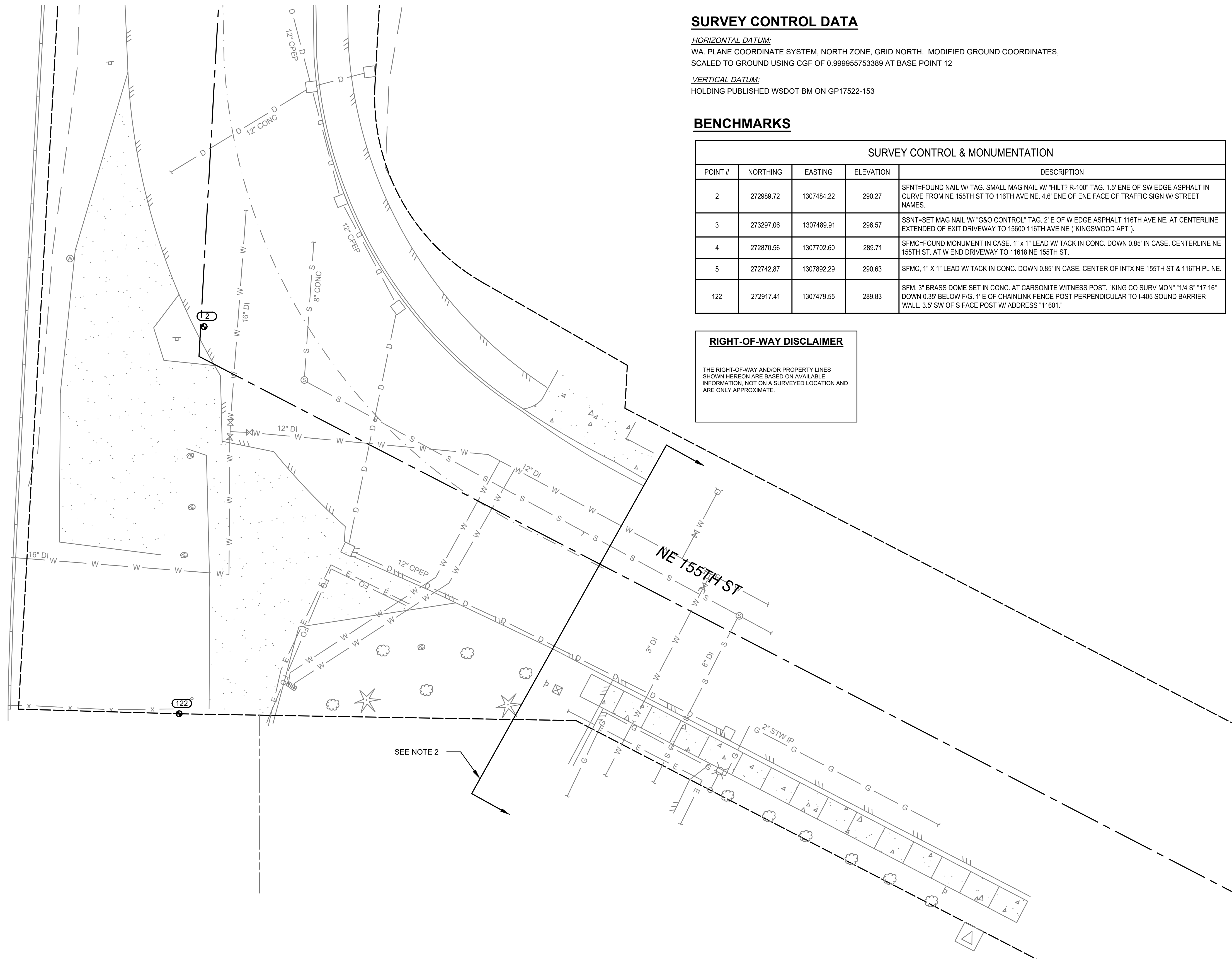
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
SURVEY CONTROL PLAN

#C928

GENERAL
SHEET: G1-1
3 OF 56

I:\GIS\SERVER3\data\2\Nsh\ne118591_451_zone_control_valve_station\plans\set-mar-2022\General\SURVEY SCH.B.dwg, 8/14/2024 2:00 PM, PHILIP MARSHALL

INTERSTATE 405



SURVEY CONTROL DATA

HORIZONTAL DATUM:
WA. PLANE COORDINATE SYSTEM, NORTH ZONE, GRID NORTH. MODIFIED GROUND COORDINATES, SCALED TO GROUND USING CGF OF 0.999955753389 AT BASE POINT 12

VERTICAL DATUM:
HOLDING PUBLISHED WSDOT BM ON GP17522-153

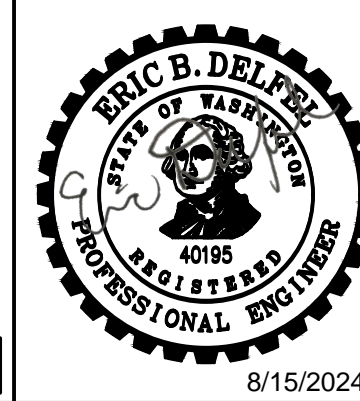
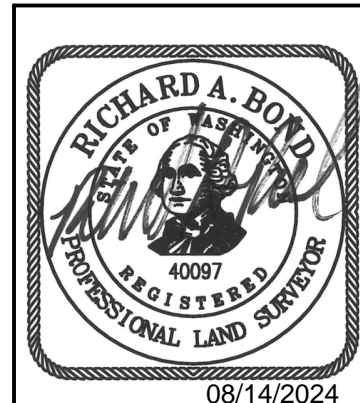
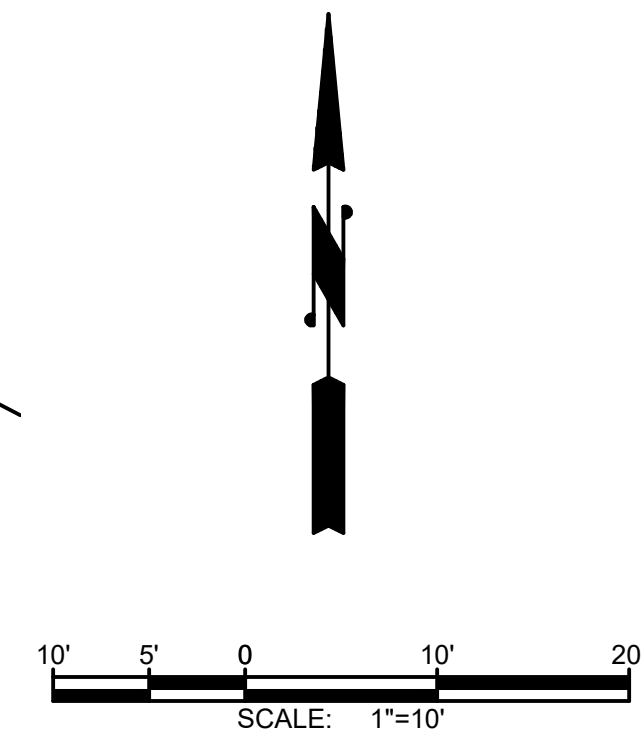
BENCHMARKS

SURVEY CONTROL & MONUMENTATION				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	272989.72	1307484.22	290.27	SFNT-FOUND NAIL W/ TAG. SMALL MAG NAIL W/ "HILT? R-100" TAG. 1.5' ENE OF SW EDGE ASPHALT IN CURVE FROM NE 155TH ST TO 116TH AVE NE. 4.6' ENE OF ENE FACE OF TRAFFIC SIGN W/ STREET NAMES.
3	273297.06	1307489.91	296.57	SSNT-SET MAG NAIL W/ "G&O CONTROL" TAG. 2' E OF W EDGE ASPHALT 116TH AVE NE. AT CENTERLINE EXTENDED OF EXIT DRIVEWAY TO 15600 116TH AVE NE ("KINGSWOOD APT").
4	272870.56	1307702.60	289.71	SFMC-FOUND MONUMENT IN CASE. 1" x 1" LEAD W/ TACK IN CONC. DOWN 0.85' IN CASE. CENTERLINE NE 155TH ST. AT W END DRIVEWAY TO 11618 NE 155TH ST.
5	272742.87	1307892.29	290.63	SFMC, 1" X 1" LEAD W/ TACK IN CONC. DOWN 0.85' IN CASE. CENTER OF INTX NE 155TH ST & 116TH PL NE.
122	272917.41	1307479.55	289.83	SFM, 3" BRASS DOME SET IN CONC. AT CARSONITE WITNESS POST. "KING CO SURV MON" "1/4 S" "1716" DOWN 0.35' BELOW FIG. 1' E OF CHAINLINK FENCE POST PERPENDICULAR TO I-405 SOUND BARRIER WALL. 3.5' SW OF S FACE POST W/ ADDRESS "11601."

RIGHT-OF-WAY DISCLAIMER

THE RIGHT-OF-WAY AND/OR PROPERTY LINES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION, NOT ON A SURVEYED LOCATION AND ARE ONLY APPROXIMATE.

- NOTES:**
1. PROTECT MONUMENTS OR REPLACE IF NECESSARY. SEE SPECIFICATION SECTION 01150 FOR ADDITIONAL DETAILS.
 2. LOCATIONS OF ITEMS SHOWN EAST OF THIS LINE WERE NOT SURVEYED AND ARE DERIVED FROM SATELLITE IMAGERY.



NO	BY	APPD	REVISION	DATE

WARNING

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

NORTHSHORE UTILITY DISTRICT

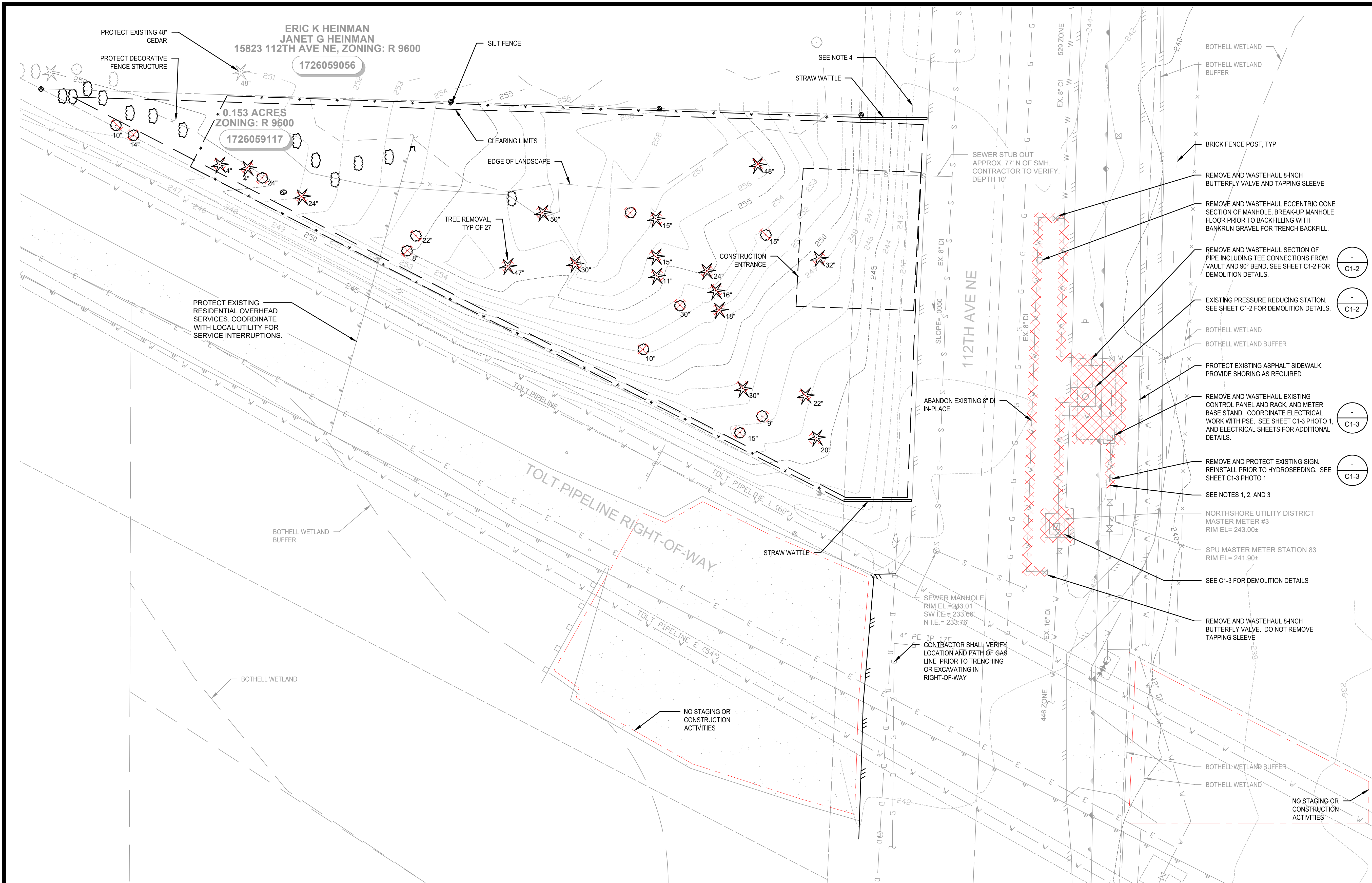
6830 NE 185th St. P.O. Box 82489
Kenmore, WA 98028-2684 Kenmore, WA 98028-2684

Ph: (425) 398-4400 | Fax: (425) 398-4430 | www.nud.net

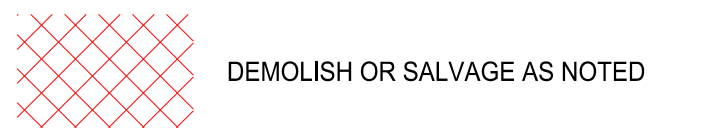
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
SURVEY CONTROL PLAN

GENERAL
SHEET: G2-1
4 OF 56

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LEGEND

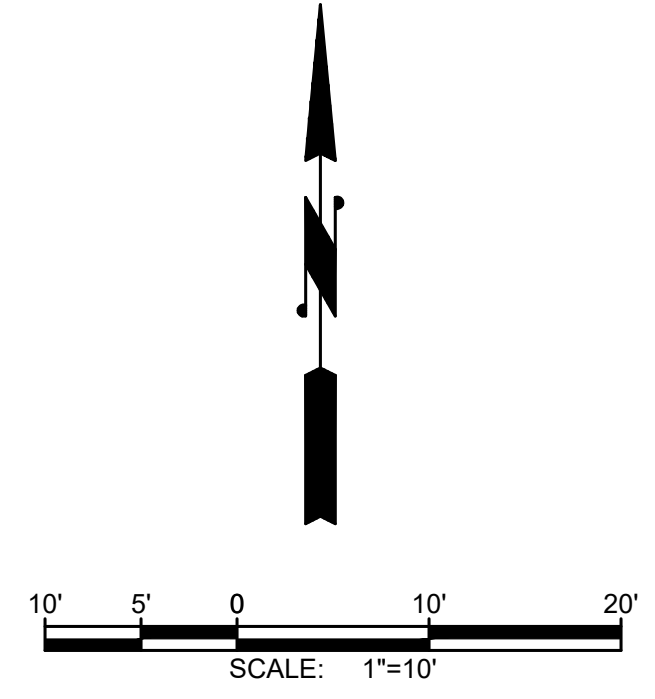


NOTES:

- CONTRACTOR SHALL FIELD VERIFY (POTHOLE) EXACT LOCATION AND DEPTH OF EXISTING PIPE AND CONNECTIONS BETWEEN NUD AND SEATTLE PUBLIC UTILITY (SPU) MASTER METER VAULT.
- REMOVE AND WASTEHAUL 12-INCH PIPE AND FITTINGS CONNECTING TO PLAIN END OF PIPE PENETRATING SPU MASTER METER VAULT. SEE C1-2 FOR ADDITIONAL DETAILS.
- COORDINATE WORK NEAR SPU MASTER METER VAULT WITH SPU. WORK REQUIRING SPU NOTIFICATION INCLUDE VACTORING, PIPE REMOVAL, PIPE INSTALLATION, AND ANY WORK REQUIRING WATER SHUT-OFF.
- 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.

SCHEDULE A PROPOSED ORDER OF WORK:

- CLEAR AND GRUB SITE.
- EXCAVATE DRIVEWAY TO ALLOW SITE ACCESS AND STAGING.
- INSTALL SOLDIER PILE WALL.
- COMPLETE SITE EXCAVATION.
- INSTALL SITE PIPING UNDER 451 FACILITY TO EDGE OF 112TH AVE NE.
- CONSTRUCT 451 FACILITY.
- 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.



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WARNING

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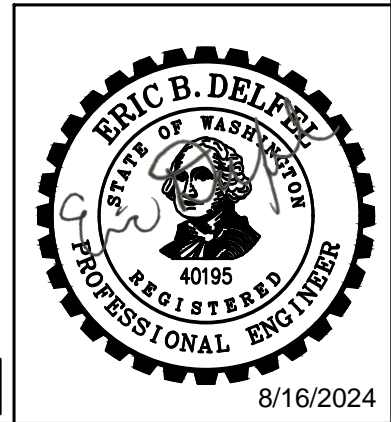
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DRAWN BY	MAN
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024



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 Kenmore, WA 98028-2684 Kenmore, WA 98028-2684
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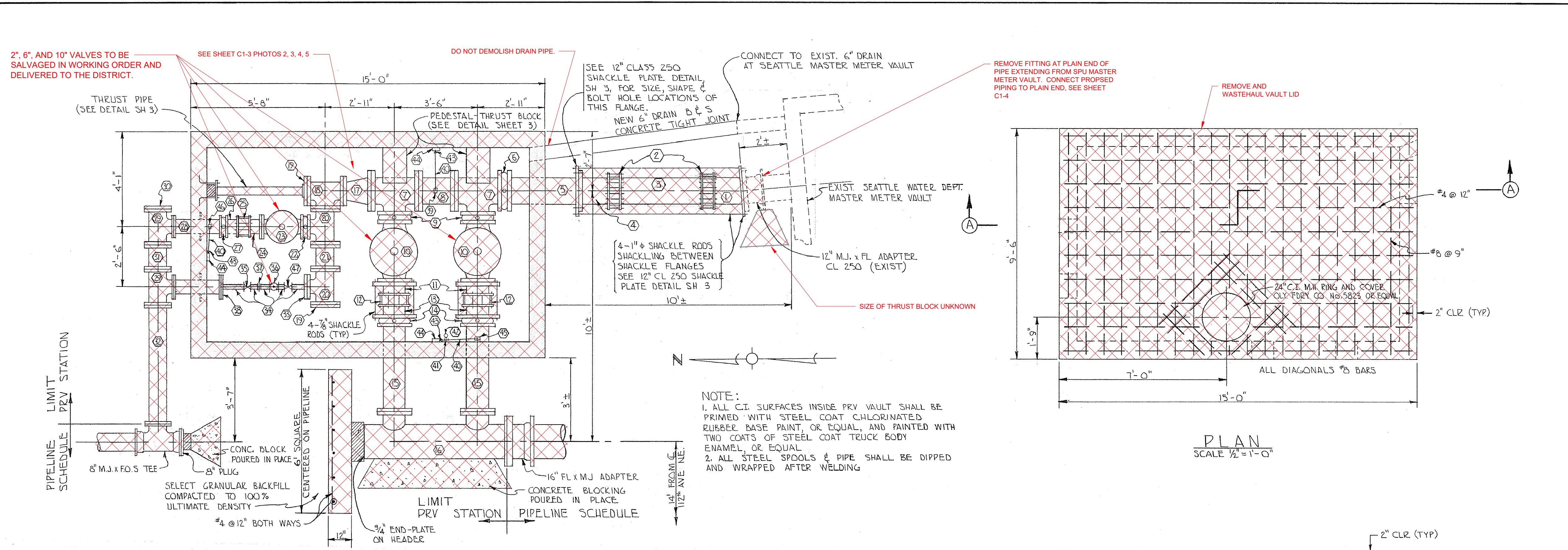
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
EXISTING SITE, DEMOLITION & TESC
PLAN

#C928



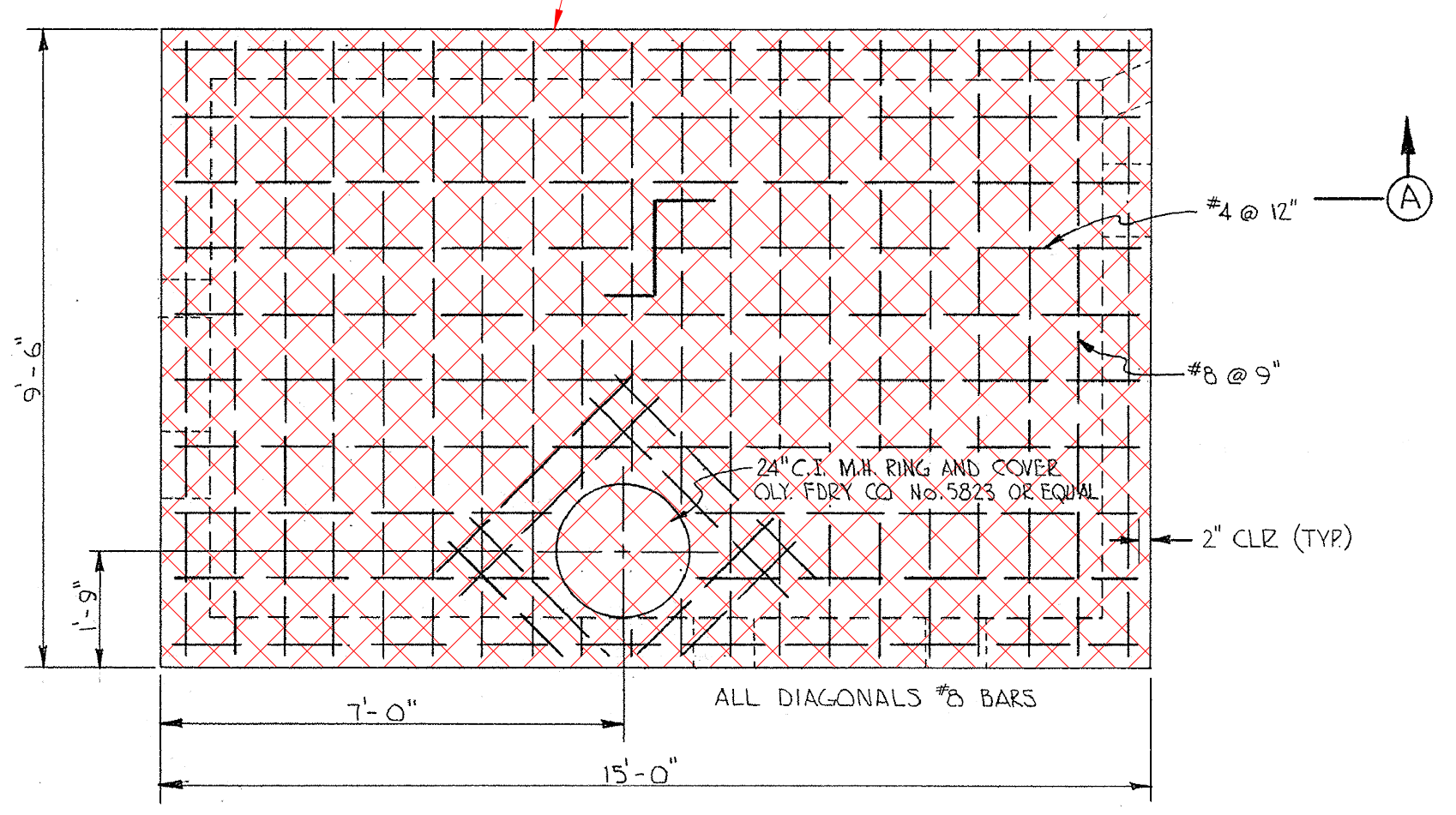
CIVIL
 SHEET: C1-1
 5 OF 56

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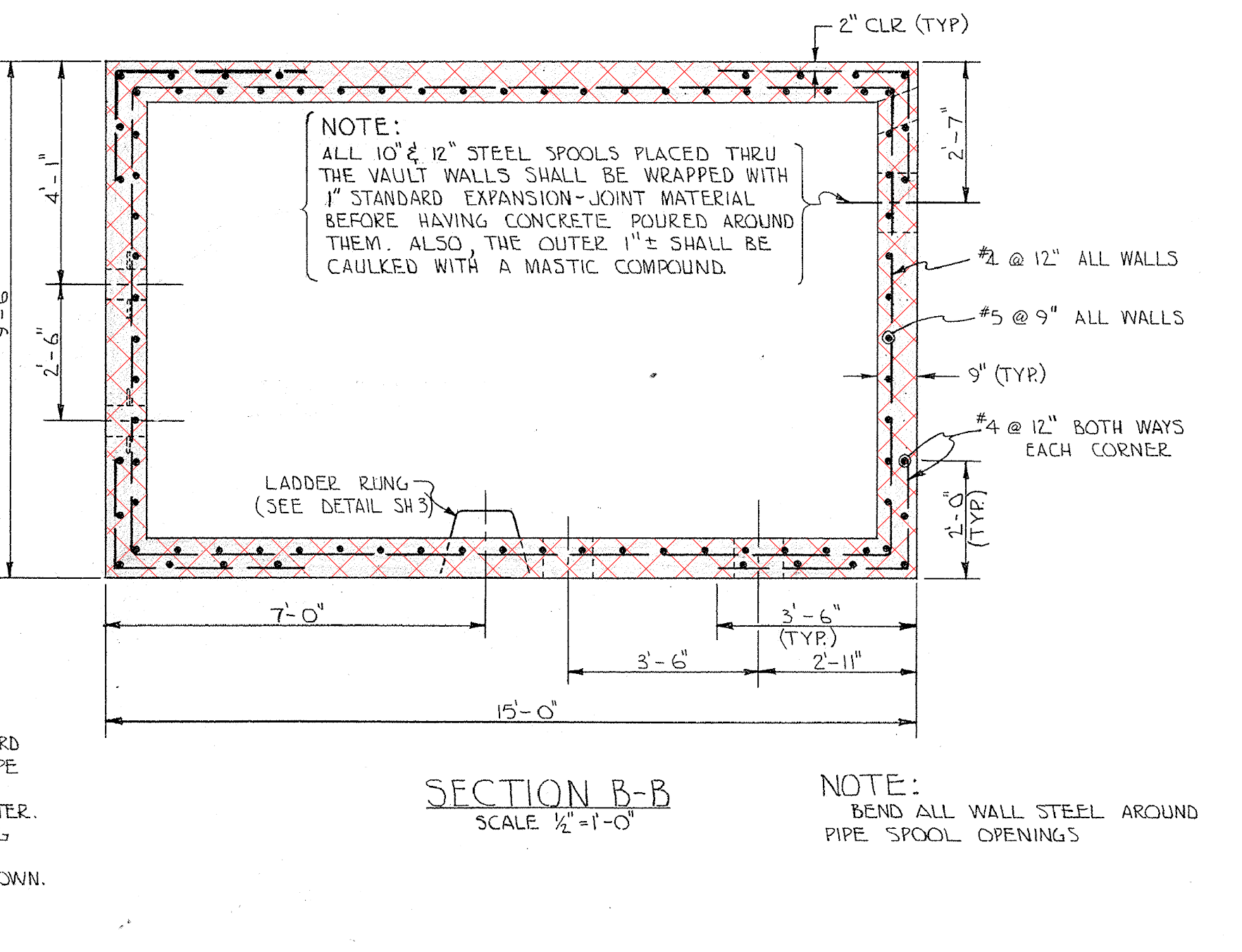
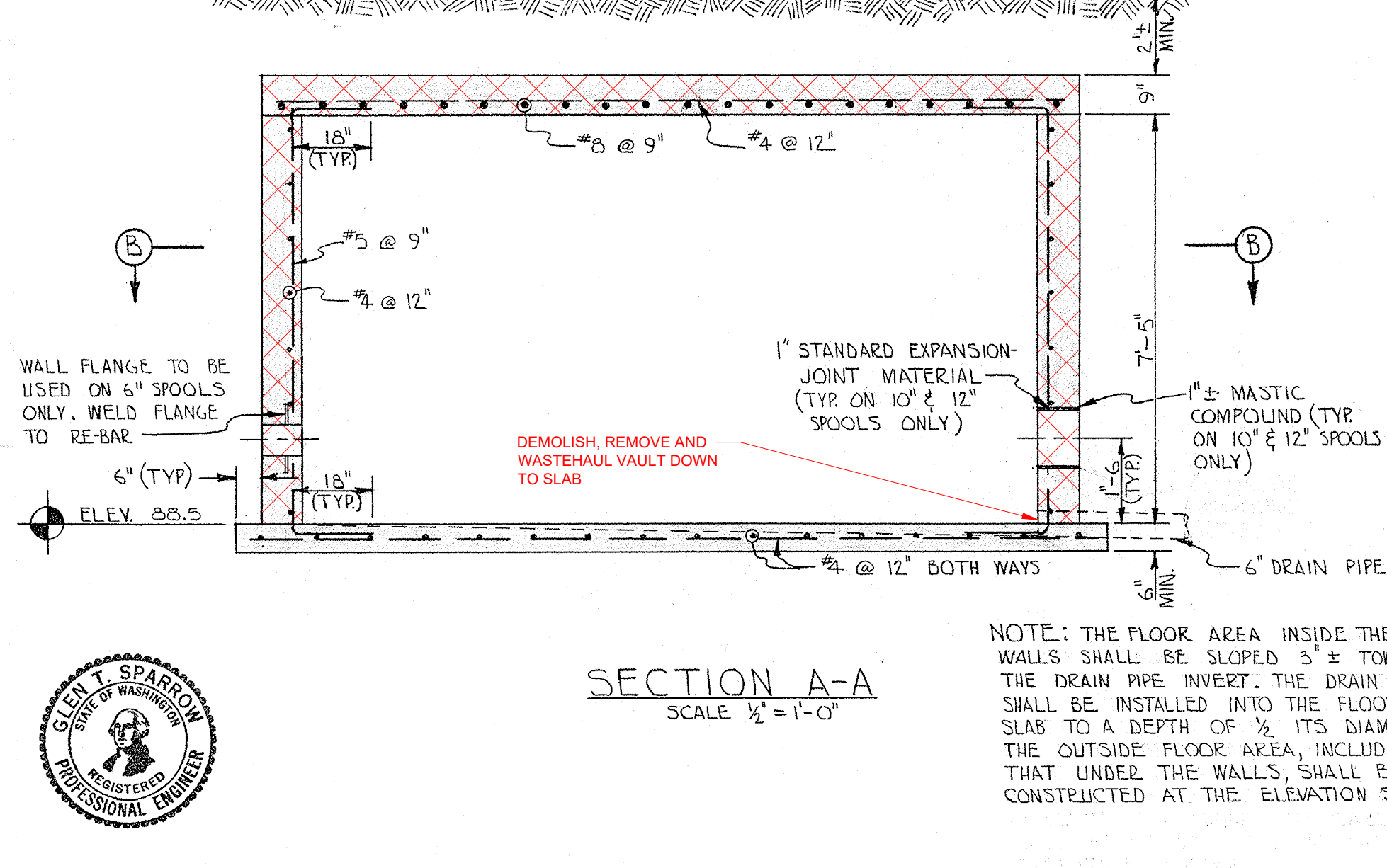
LEGEND

DEMOLISH OR SALVAGE AS NOTED



BILL OF MATERIALS

1. 12" Stl spool, .375 wall FlxPE, 1' - 6" long (see 12" Cl 250 Shackle Pl det Sh 3)	23. 6" PRV, Clayton 90, Cl 250, furnished by WD, Contractor to furnish nuts, bolts & gaskets
2. 12" Flex cply - Cl 250 service	24. 6" C.I. spool, FlxPE, Cl 250, 9" long
3. 12" Stl pipe .375 wall, 3'-9" long	25. 6" Flex cply, Cl 150 service
4. 12" Stl spool, .375 wall, FlxPE, 1'6" long	26. 6" C.I. spool, FlxPE, Cl 150, 9" long
5. 12" Stl flange - 1" Pl Fl	27. 6" butterfly valve, Ser "A", gear operated Ser 19000, Centerline or equal
6. 12" Stl spool, .375 wall, 1" Pl Fl Cl 250 drilling x special Fl (see 12" Cl 250 shackle Pl det Sh 3)	28. 6" Stl spool, Sch 40, 1/2" Pl Fl w/1/2" Pl wall fl welded at center, 2'0" long
7. 12" butterfly valve, Ser "AA", gear operated series 19000, Centerline or equal	29. 8"x6" Pl tee, Cl 150, C.I.
8. 12"x10" Fl tee Cl 250 C.I.	30. 8" Bl Fl, Cl 150, C.I.
9. 12" Stl spool, FlxPl, .375 wall, 1" Pl Fl Cl 250 drilling 1"6" long	31. 8" C.I. spool, Flx Pl, Cl 150, 12" long
10. butterfly valve, Ser "AA", gear operated series 19000, centerline or equal	32. 8" C.I. spool, FlxPl, Cl 150, 5'0" long
11. 10" PRV Clayton #90, Cl 250 furnished by WD, Contractor to furnish nuts, bolts & gaskets	33. 6" C.I. Pl, Cl 250 tapped 2" I.P.T.
12. 10" Stl spool, Sch 40, FlxPE, 9" long (see 10" Cl 150 shackle Pl det, Sh 3)	34. 2" G.I.P. - length as required
13. 10" butterfly valve, Ser "A", gear operated series 19000, Centerline or equal	35. 2" GV, IBBM, NRS, w/hand-wheel, screwed ends
14. 10" Stl spool, FlxPl, Sch 40, 3/4" Pl Fl, Cl 150, drilling 3'-8" long	36. 2" PRV, Clayton 90, Cl 250, furnished by WD.
15. 16" Stl header, 3/8" wall, 1" Pl Fl, w/2-10" outlets, Sch 40, 3/4" Pl Fl, all Pl Cl 150 drilling	37. 2" union, galv.
16. 12"x8" Fl reducer, Cl 250 C.I.	38. 6" C.I., Fl, Cl 150 tapped 2" I.P.T.
17. 8" Fl tee, Cl 250 C.I.	39. Welded boss, 3/4" I.P.T. w/mounted high Press angle valve
18. 8" Bl Fl Cl 250 C.I.	40. 3/4" G.I.P. - length as req'd
19. 8"x6" Fl tee, Cl 250 C.I.	41. 3/4" galv. tee
20. 8" Stl spool, Sch 40, 3/4" Pl Fl, Cl 250 drilling	42. 3/4" hose bibb
21. 6" butterfly valve, Ser "AA", gear operated series 19000, Centerline or equal	43. 3/4"x 1/4" bushing, galv
	44. Pressure gage, brass, 0-300 psi surface mounting. Install w/brass stop cock under gage.
	45. Welded boss, 3/4" I.P.T.
	46. Welded boss, 3/4" I.P.T.
	47. 2" GV, Cl 250, screwed end



G. T. SPARROW & ASSOCIATES
CONSULTING ENGINEERS & ARCHITECTS
THE 400 BUILDING
BELLEVUE, WASHINGTON

400 - 108TH AVE. N.E.
GL 5-1151

DRAWN BY HAN	DATE 2-29-63	REVISIONS	DATE	BY	SCALE
CHECKED BY [Signature]	DATE 3-4-63				HORIZONTAL 1/2" = 1'-0"
APPROVED BY [Signature]	DATE 3-4-63				VERTICAL

WATER DISTRICT NO. 79
KING COUNTY WASHINGTON

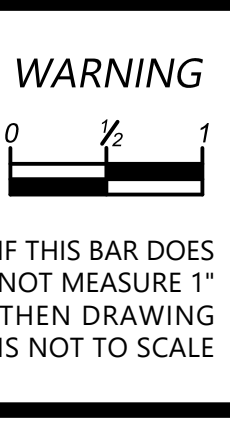
PRESSURE REDUCING STATION
112TH AVE. N.E. & TOLT PIPELINE R.O.W.

SHEET NO.
2/3

JOB NO.
6101-M-37

EXISTING PRESSURE REDUCING STATION - ORIGINAL DESIGN DRAWING

NO	BY	APPD	REVISION	DATE



DESIGNED BY
AKG

DRAWN BY
MAN

CHECKED BY
AKG

APPROVAL
EBD

DATE
AUG 2024

NORTHSHORE UTILITY DISTRICT

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Kenmore, WA 98028-2684 Kenmore, WA 98028-2684

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C0928

451 ZONE CONTROL VALVE IMPROVEMENTS

SCHEDULE A

EXISTING PRESSURE REDUCING STATION

DEMOLITION DETAILS

CIVIL

SHEET: C1-2

6 OF 56

ERIC B. DELFER
REGISTERED PROFESSIONAL ENGINEER
40195
8/15/2024

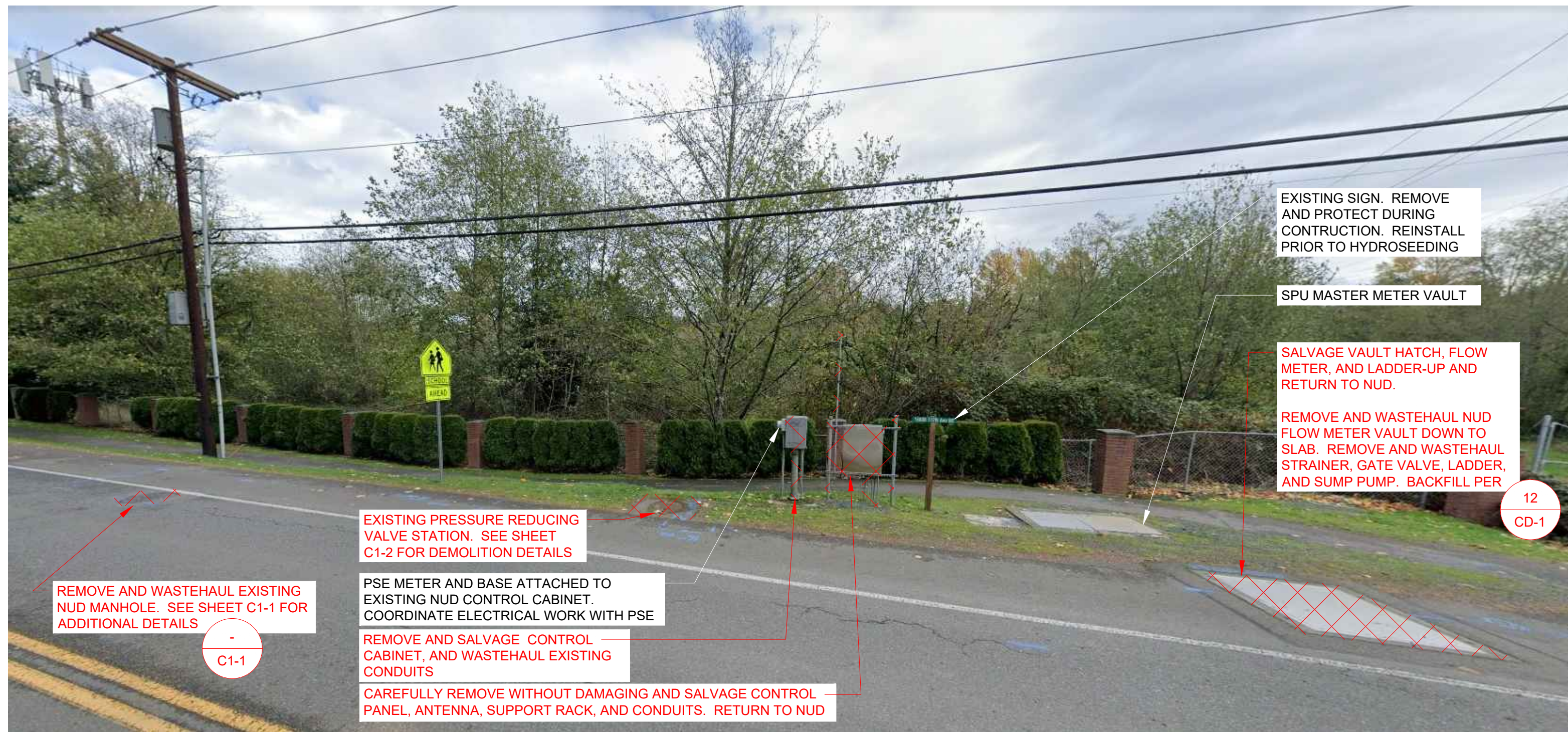


PHOTO 1
SCALE: NTS



PHOTO 2
SCALE: NTS

LEGEND

DEMOLISH OR SALVAGE AS NOTED



PHOTO 3
SCALE: NTS

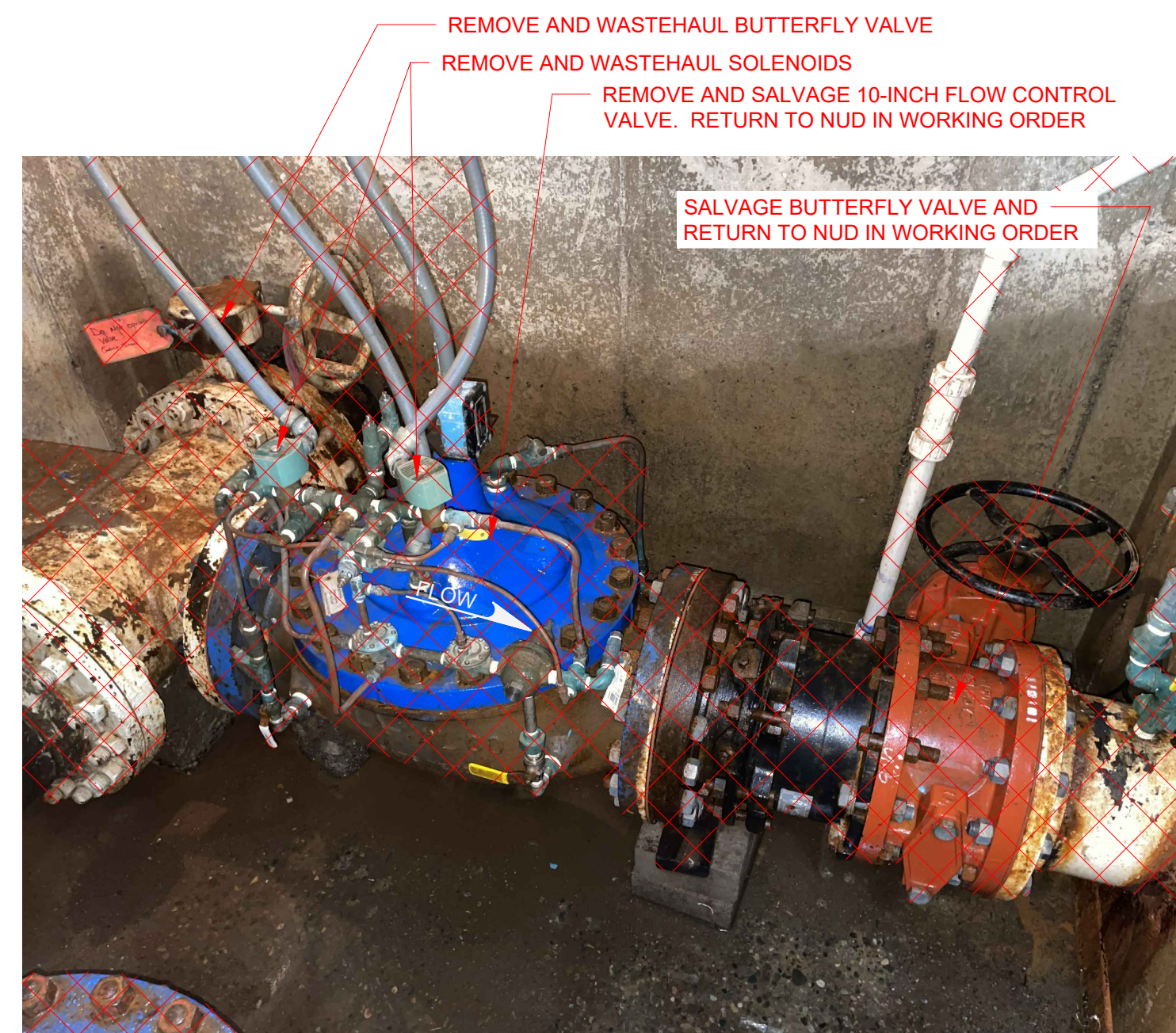


PHOTO 4
SCALE: NTS



PHOTO 5
SCALE: NTS

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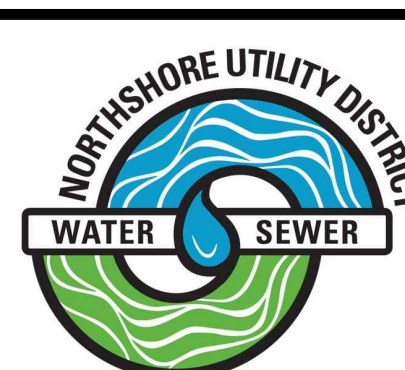
NO	BY	APPD	REVISION	DATE

WARNING

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APPROVAL	EBD
DATE	AUG 2024



NORTHSHORE UTILITY DISTRICT

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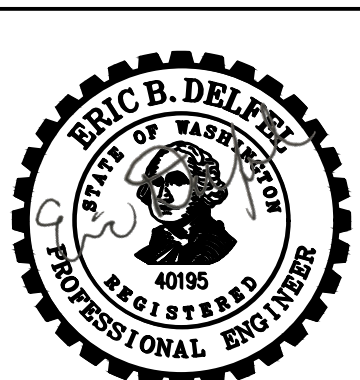
C0928

451 ZONE CONTROL VALVE IMPROVEMENTS

SCHEDULE A

EXISTING PRESSURE REDUCING STATION DEMOLITION PHOTOS

#C928



8/15/2024

CIVIL

SHEET: C1-3

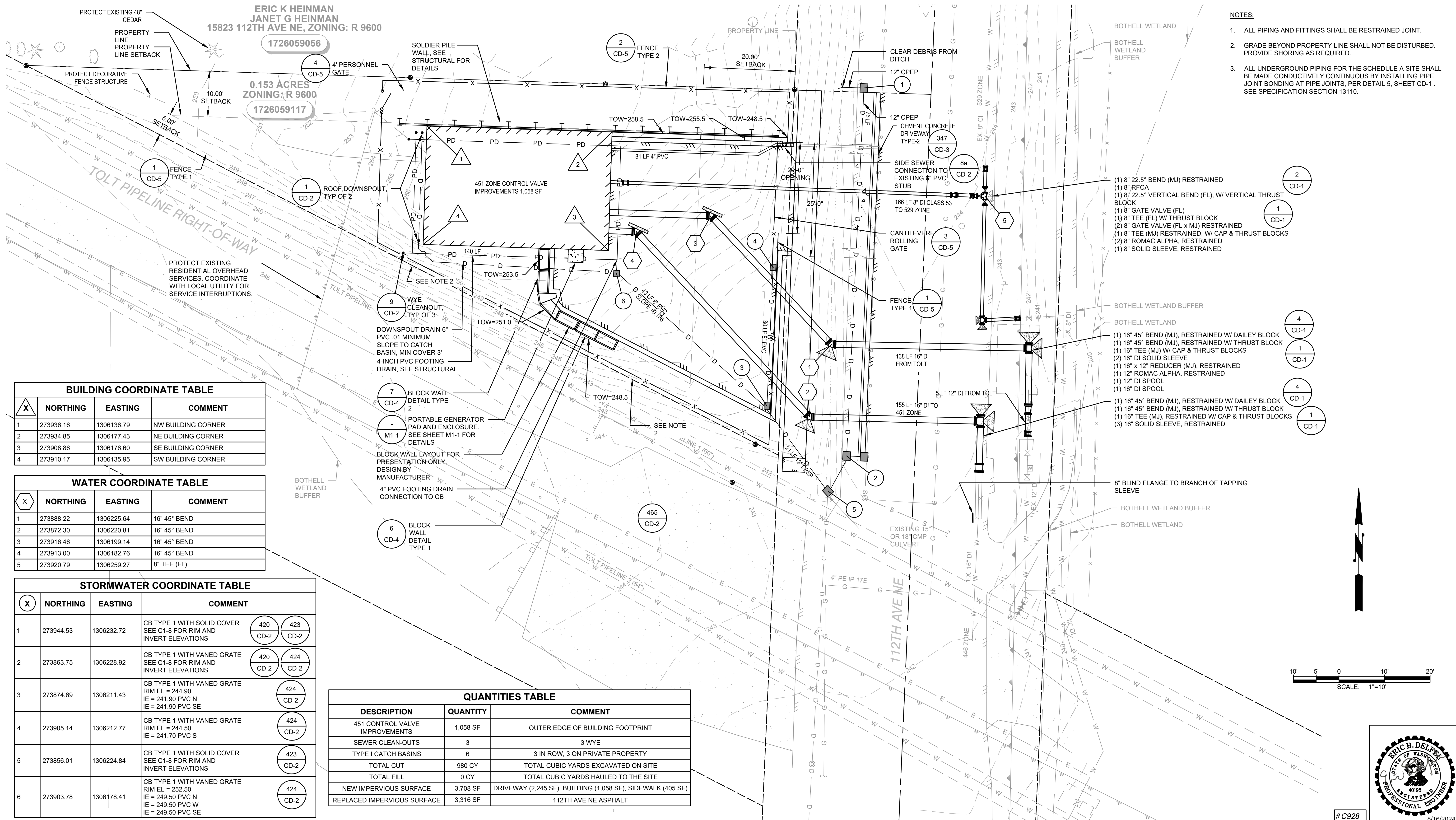
7 OF 56

ERIC K HEINMAN
JANET G HEINMAN
15823 112TH AVE NE, ZONING: R 9600

1726059056
0.153 ACRES
ZONING: R 9600
1726059117

NOTES:

- ALL PIPING AND FITTINGS SHALL BE RESTRAINED JOINT.
- GRADE BEYOND PROPERTY LINE SHALL NOT BE DISTURBED. PROVIDE SHORING AS REQUIRED.
- ALL UNDERGROUND PIPING FOR THE SCHEDULE A SITE SHALL BE MADE CONDUCTIVELY CONTINUOUS BY INSTALLING PIPE JOINT BONDING AT PIPE JOINTS, PER DETAIL 5, SHEET CD-1. SEE SPECIFICATION SECTION 13110.



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	273920.79	1306259.27	8" TEE (FL)

STORMWATER COORDINATE TABLE

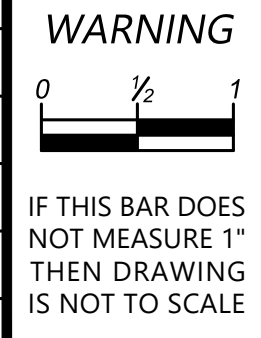
X	NORTHING	EASTING	COMMENT
1	273944.53	1306232.72	CB TYPE 1 WITH SOLID COVER SEE C1-8 FOR RIM AND INVERT ELEVATIONS (420 CD-2, 423 CD-2)
2	273863.75	1306228.92	CB TYPE 1 WITH VANED GRATE SEE C1-8 FOR RIM AND INVERT ELEVATIONS (420 CD-2, 424 CD-2)
3	273874.69	1306211.43	CB TYPE 1 WITH VANED GRATE RIM 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

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NO	BY	APPD	REVISION	DATE

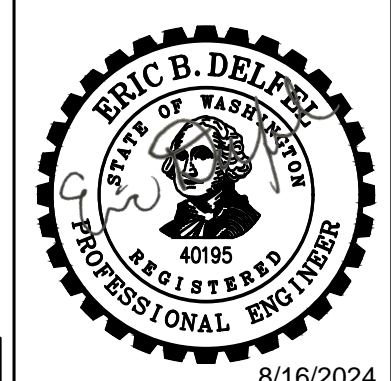


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DRAWN BY	MAN
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024



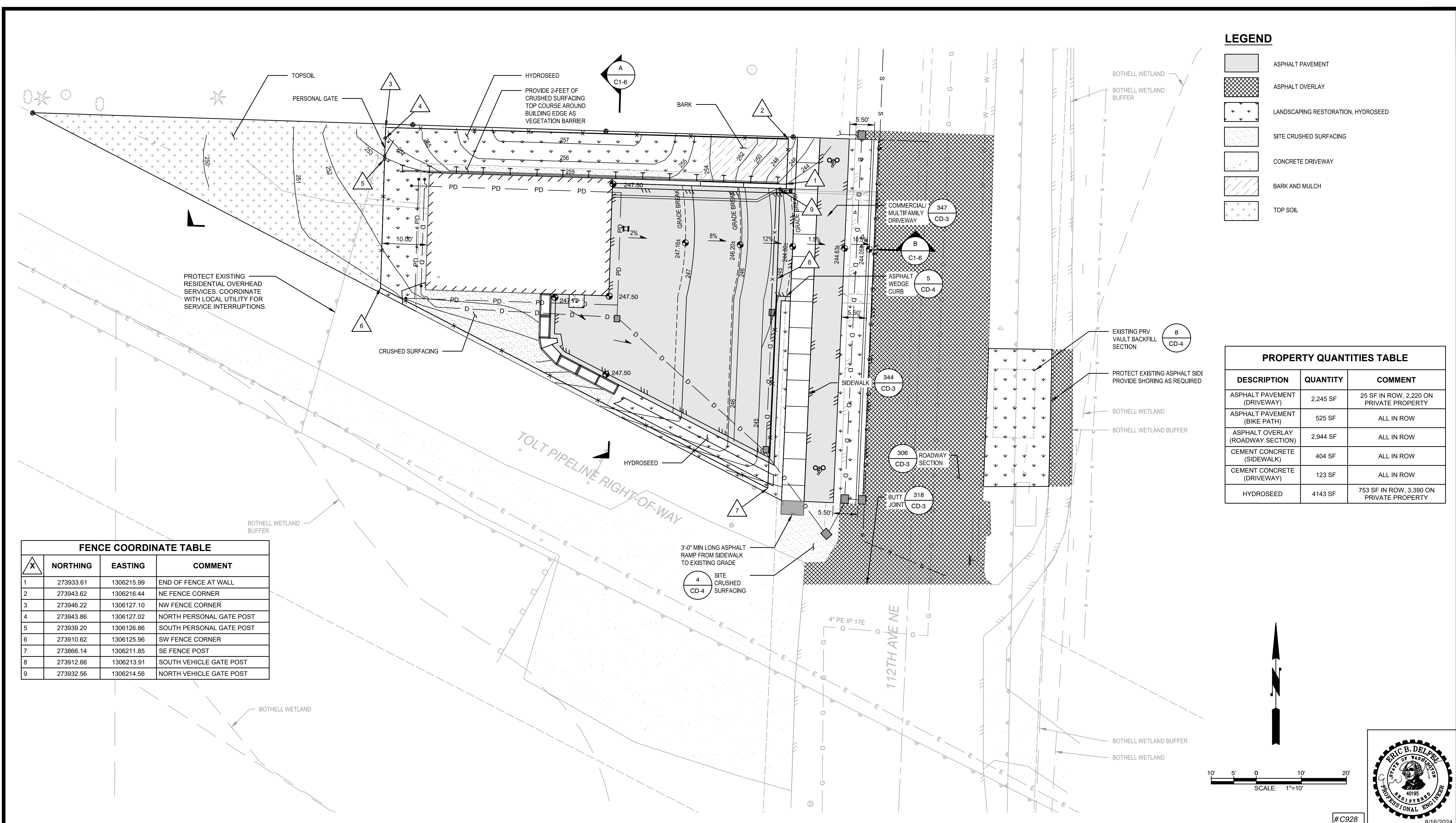
NORTHSHORE UTILITY DISTRICT
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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
PROPOSED SITE AND PIPING PLAN



CIVIL
SHEET: C1-4
8 OF 56

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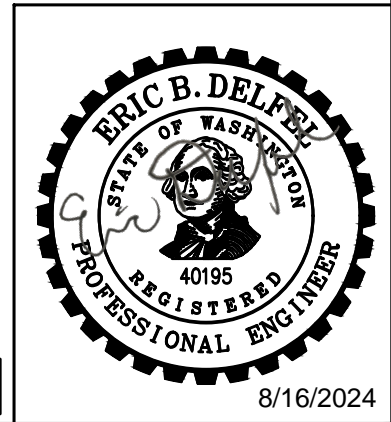
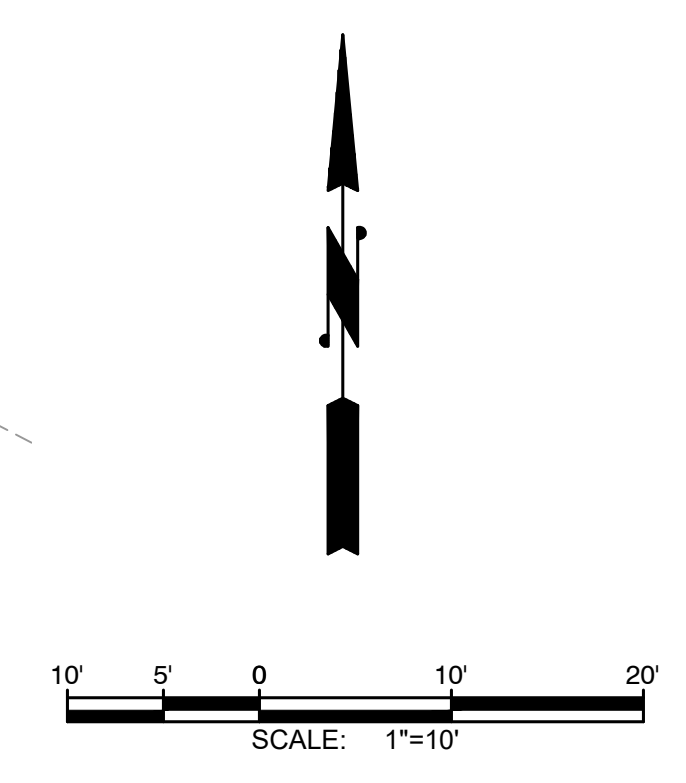
	ASPHALT PAVEMENT
	ASPHALT OVERLAY
	LANDSCAPING RESTORATION, HYDROSEED
	SITE CRUSHED SURFACING
	CONCRETE DRIVEWAY
	BARK AND MULCH
	TOP SOIL

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 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



NO	BY	APPD	REVISION	DATE

WARNING

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

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

Gray & Osborne, Inc.
 CONSULTING ENGINEERS

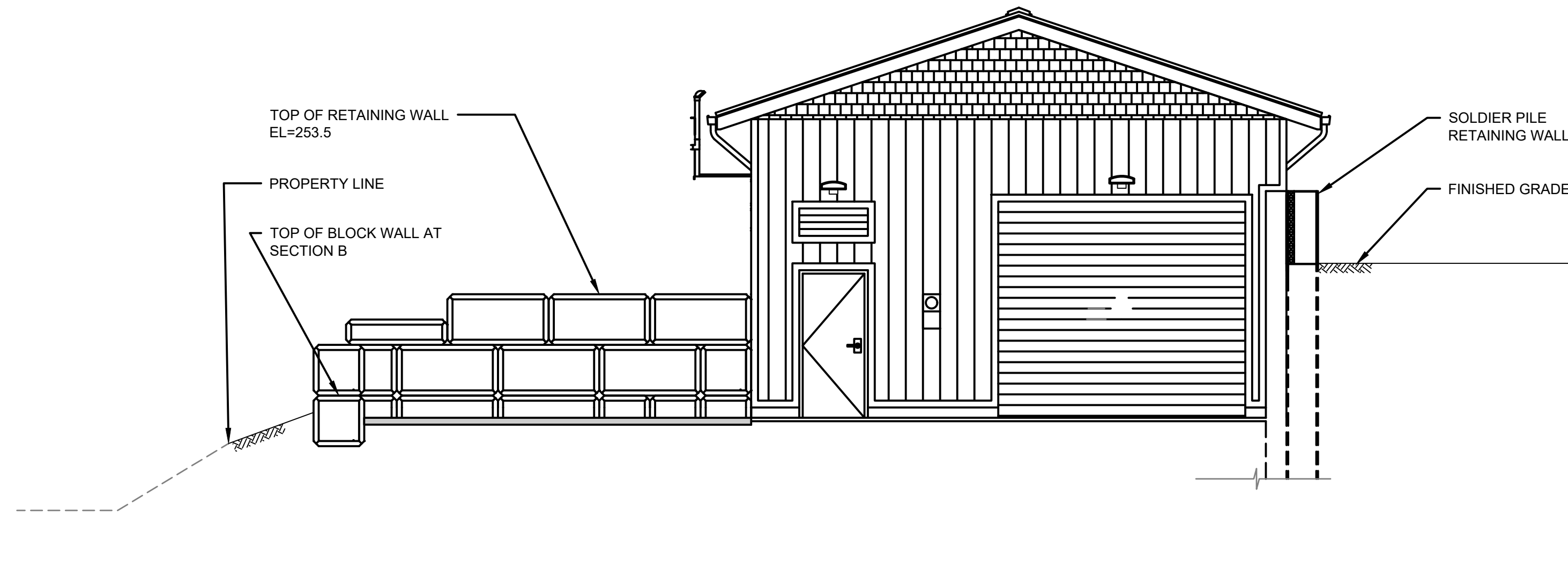
NORTHSHORE UTILITY DISTRICT

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


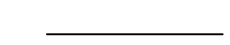
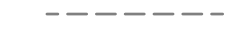
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
SITE RESTORATION AND GRADING
PLAN

CIVIL
 SHEET: C1-5
 9 OF 56

266
264
262
260
258
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240

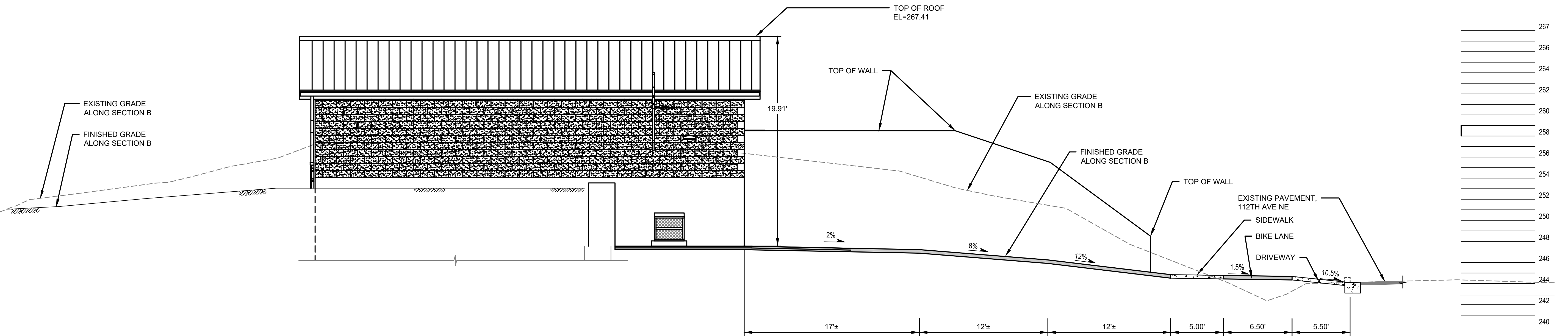


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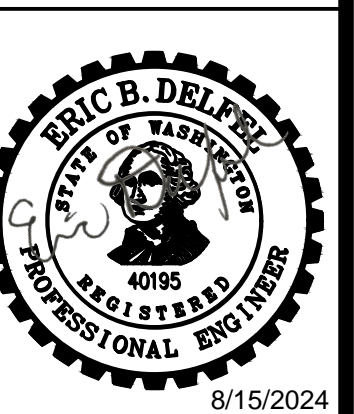
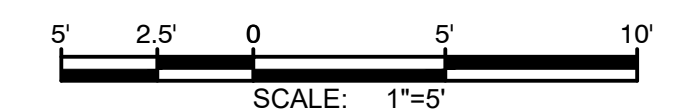
-  ASPHALT
-  FINISHED GRADE
-  EXISTING GRADE

A SECTION
C1-5 SCALE: 1"=5'-0"

266
264
262
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258
256
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252
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248
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240



B SECTION
C1-5 SCALE: 1"=5'-0"

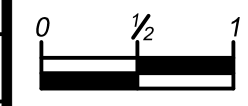


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8/15/2024

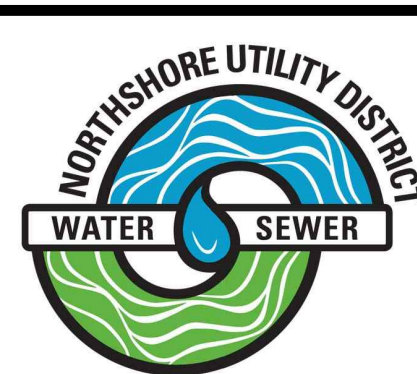
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APPROVAL	EBD
DATE	AUG 2024

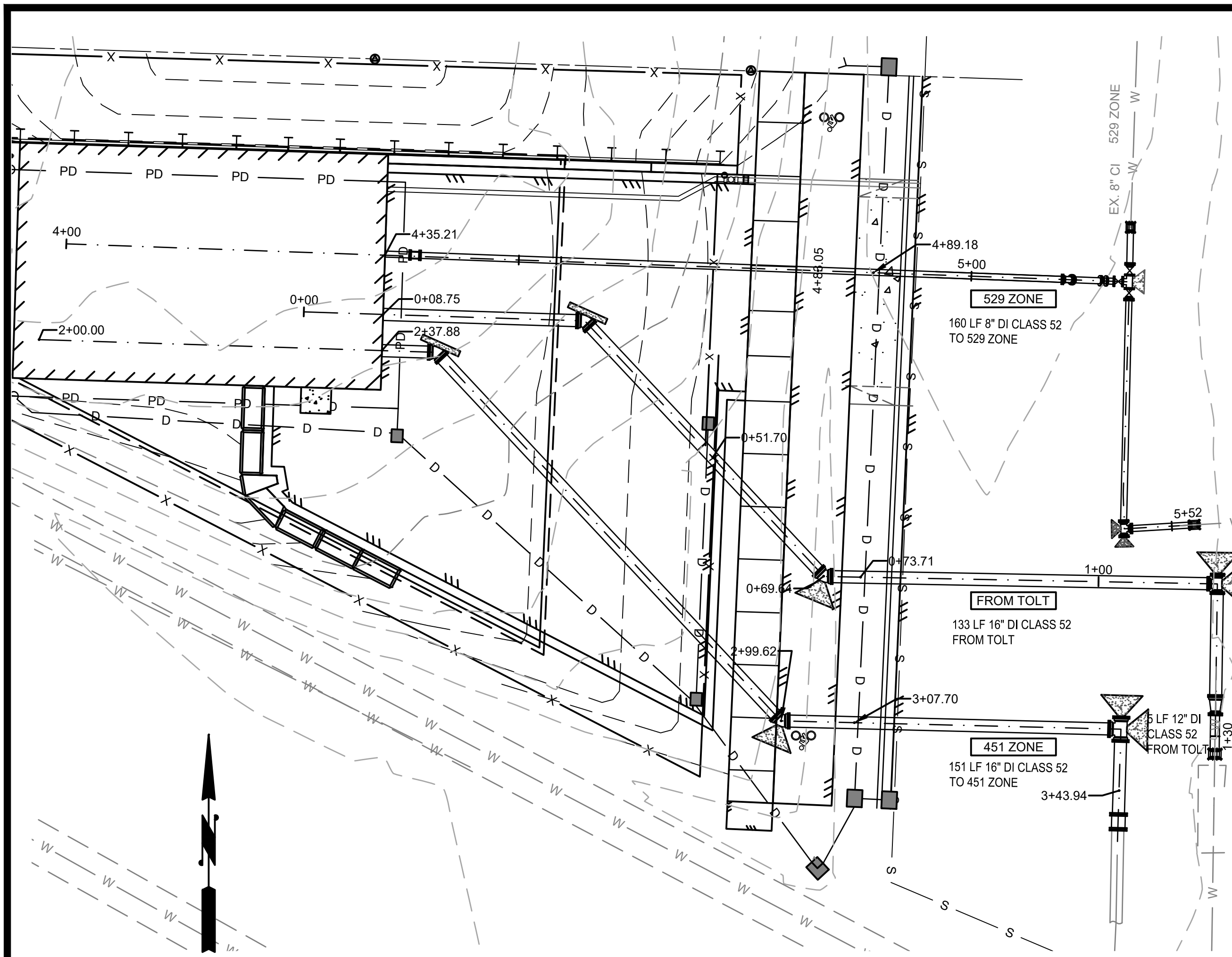


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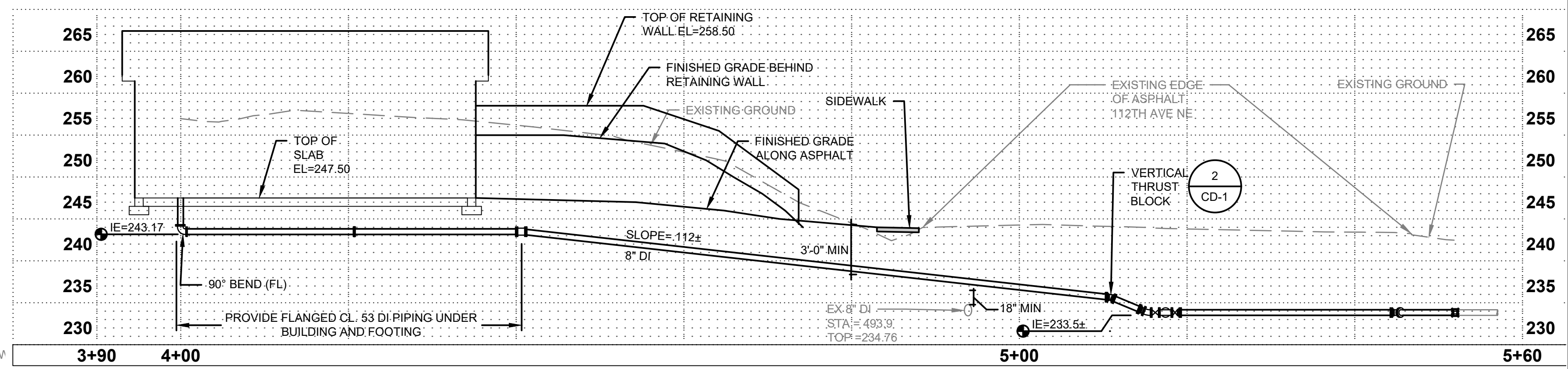
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
SITE GRADING SECTIONS

CIVIL
SHEET: C1-6
10 OF 56

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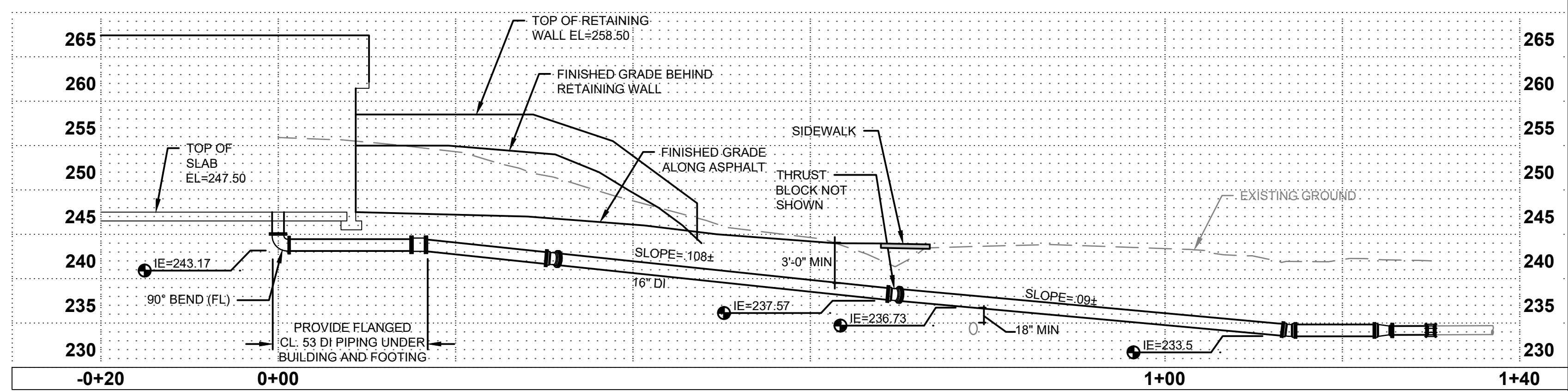


TO 529 CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



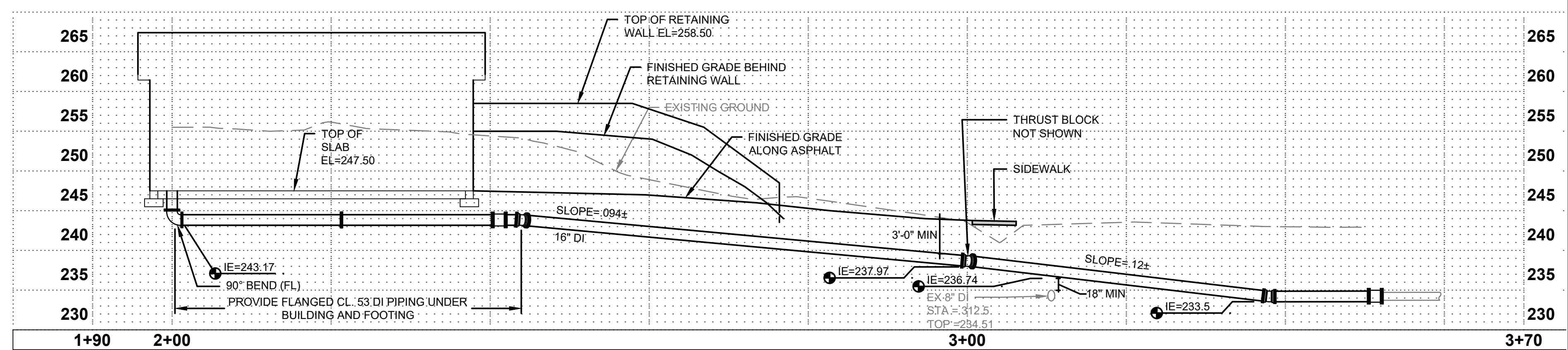
529 ZONE

FROM TOLT CENTERLINE PROFILE
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1" = 10' VERTICAL

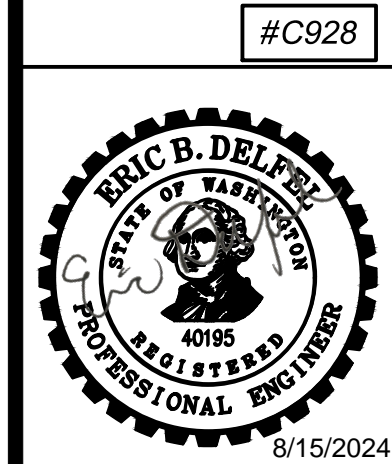
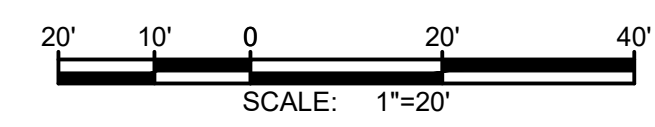


FROM TOLT

TO 451 CENTERLINE PROFILE
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1" = 10' VERTICAL



451 ZONE

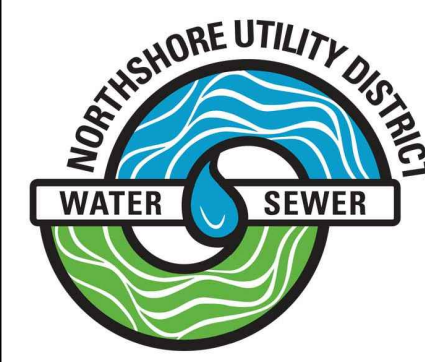


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APPROVAL	EBD
DATE	AUG 2024

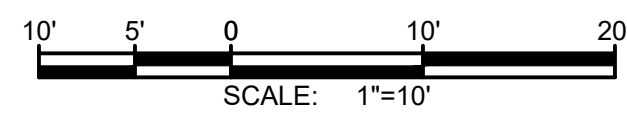
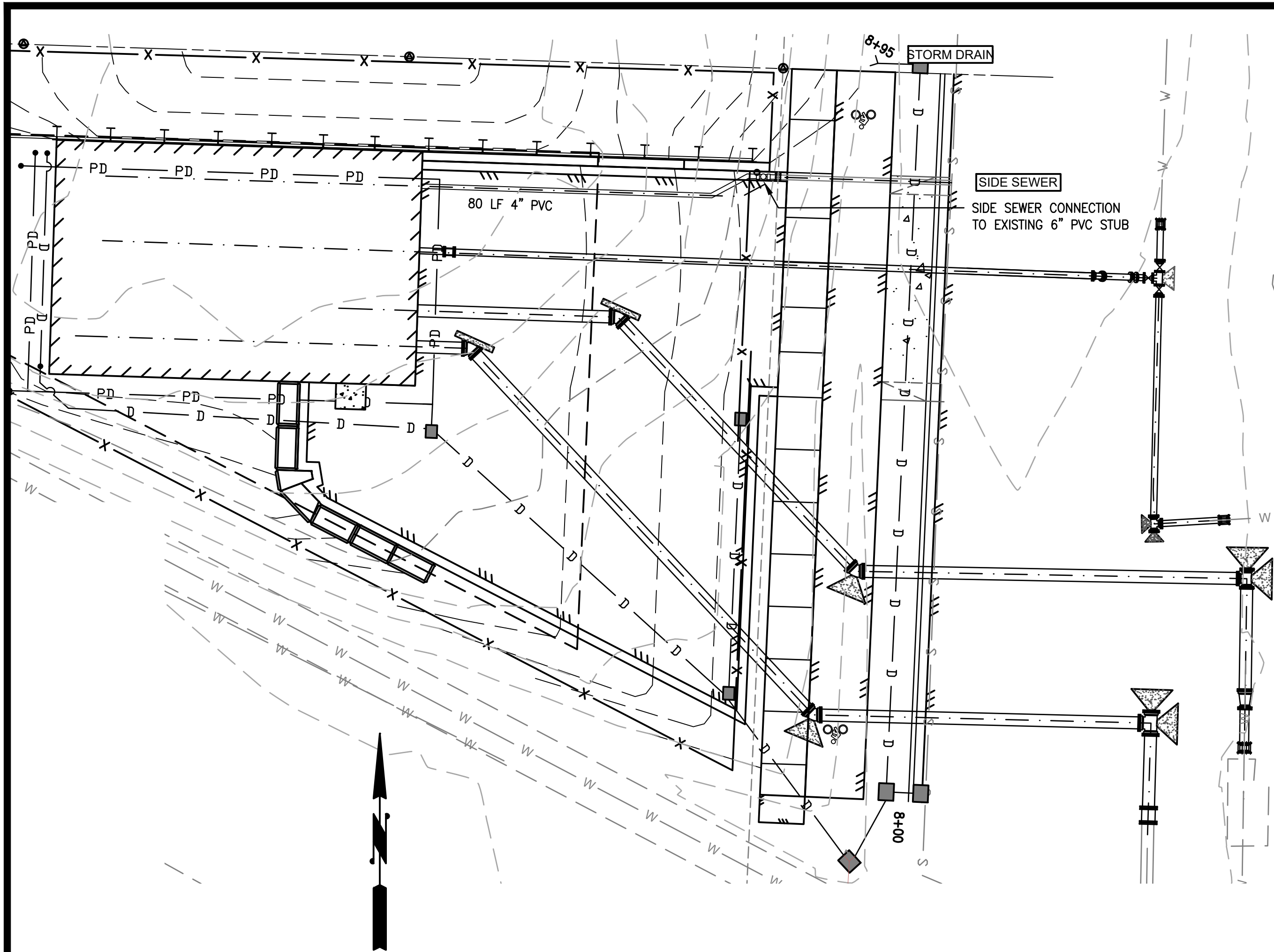


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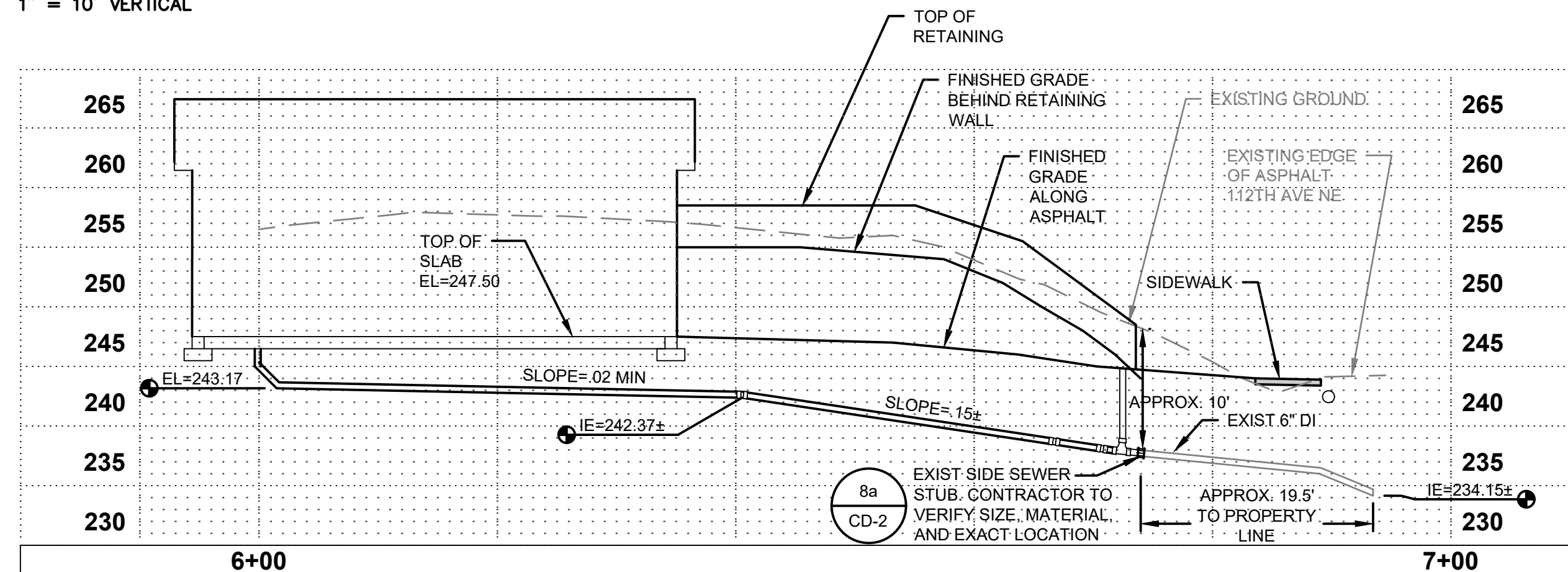
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
PROPOSED PIPE PROFILES

CIVIL
SHEET: C1-7
11 OF 56

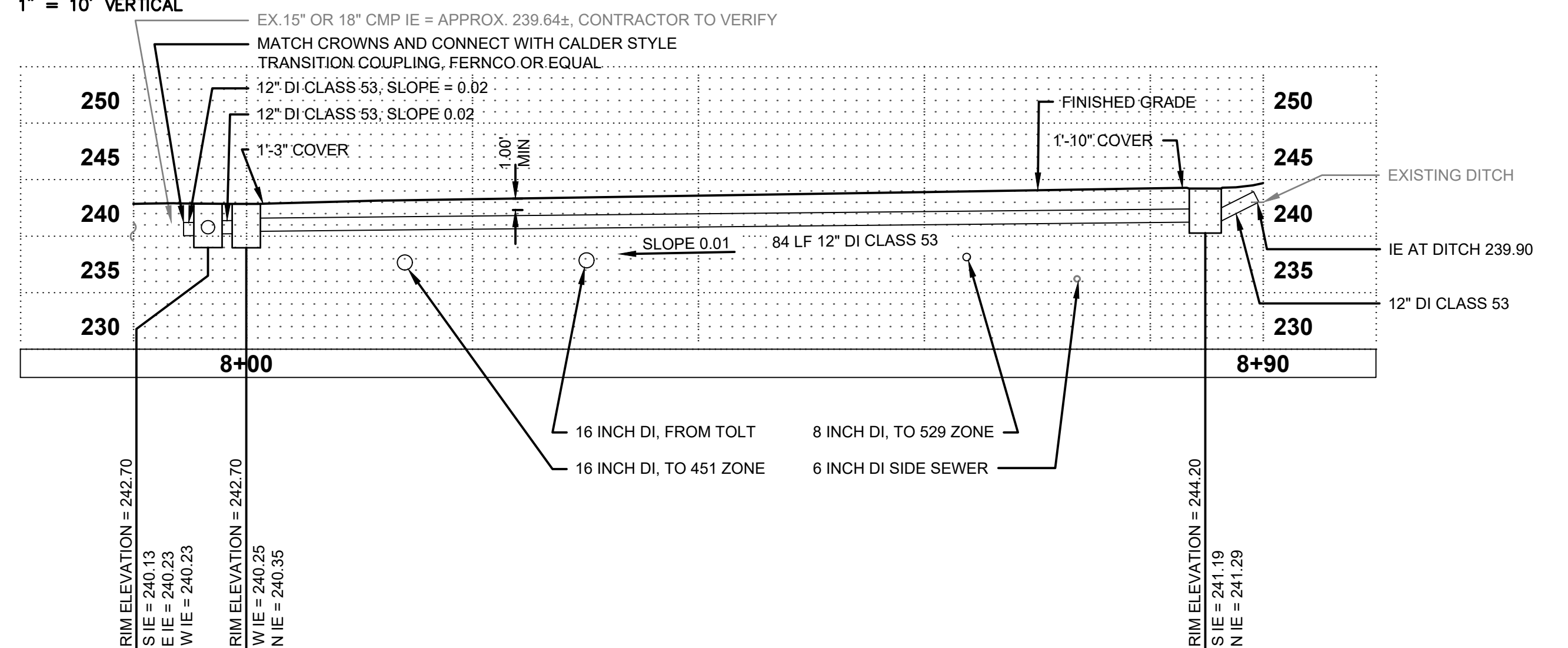
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SEWER_CONN CENTERLINE PROFILE
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



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

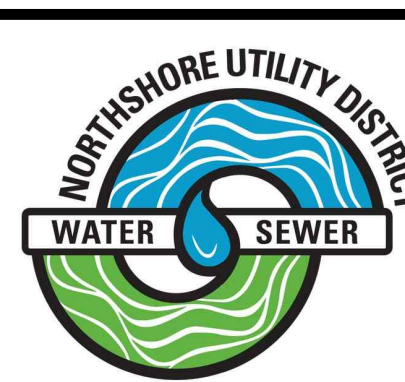


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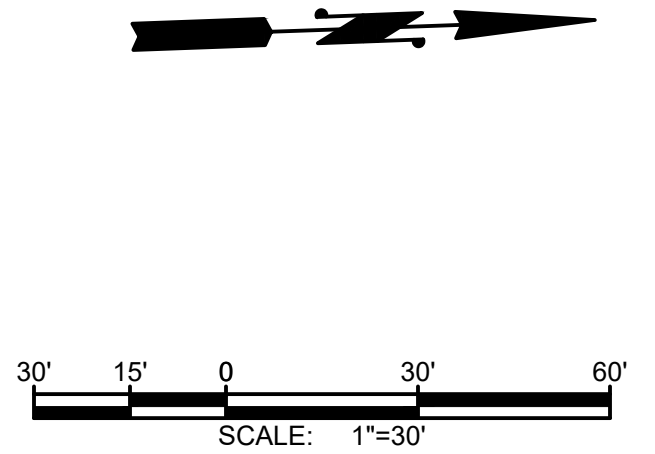
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
PROPOSED SEWER AND STORM DRAIN PROFILE

#C928


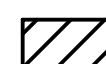





CIVIL
SHEET: C1-8
12 OF 56

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LEGEND

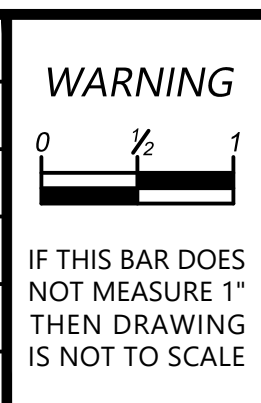
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-  WORK ZONE
-  CHANNELIZING DEVICES
-  FLAGGING STATION
-  TYPE III BARRICADE


NOTES


1. THIS TRAFFIC CONTROL PLAN IS PRELIMINARY AND HAS NOT BEEN APPROVED BY THE PERMITTING AGENCY. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO NORTHSHORE UTILITY DISTRICT FOR REVIEW AND APPROVAL BY THE GOVERNING JURISDICTION.
2. SIGNS SHALL BE BLACK (NON-REFL.) ON ORANGE BACKGROUND (REFL.) UNLESS OTHERWISE NOTED.
3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE WSDOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. CONTRACTOR TO COMPLY WITH WORK HOUR RESTRICTIONS OF THE PERMITTING AGENCY.
5. ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
6. EXTEND TAPER DEVICES ACROSS SHOULDER.
7. MOTORCYCLES USE EXTREME CAUTION SIGNS SHALL BE INSTALLED WHEN THE FOLLOWING ROADWAY CONDITIONS EXIST:
 - GROOVED PAVEMENT
 - ABRUPT LANE EDGE
 - STEEL PLATES
 - LOOSE GRAVEL OR EARTH
8. OPEN TRENCHES WITHIN THE TRAVELED WAY OR AUXILIARY LANE SHALL HAVE A STEEL-PLATE COVER PLACED AND ANCHORED OVER THEM. A WEDGE OF SUITABLE MATERIAL, IF REQUIRED, SHALL BE PLACED FOR A SMOOTH TRANSITION BETWEEN THE PAVEMENT AND THE STEEL PLATE. WARNING SIGNS SHALL BE USED TO ALERT MOTORISTS OF THE PRESENCE OF THE STEEL PLATES.

CHANNELIZATION DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
35/45	10 TO 20	60
25/30	10 TO 20	40

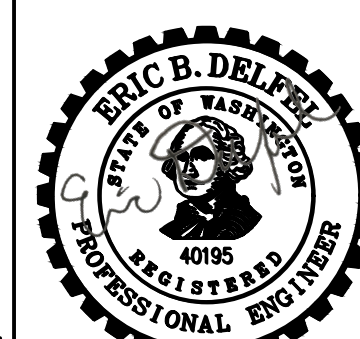
NO	BY	APPD	REVISION	DATE



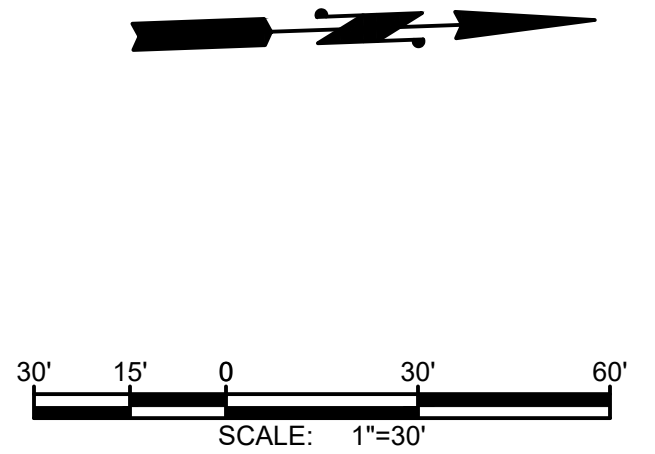
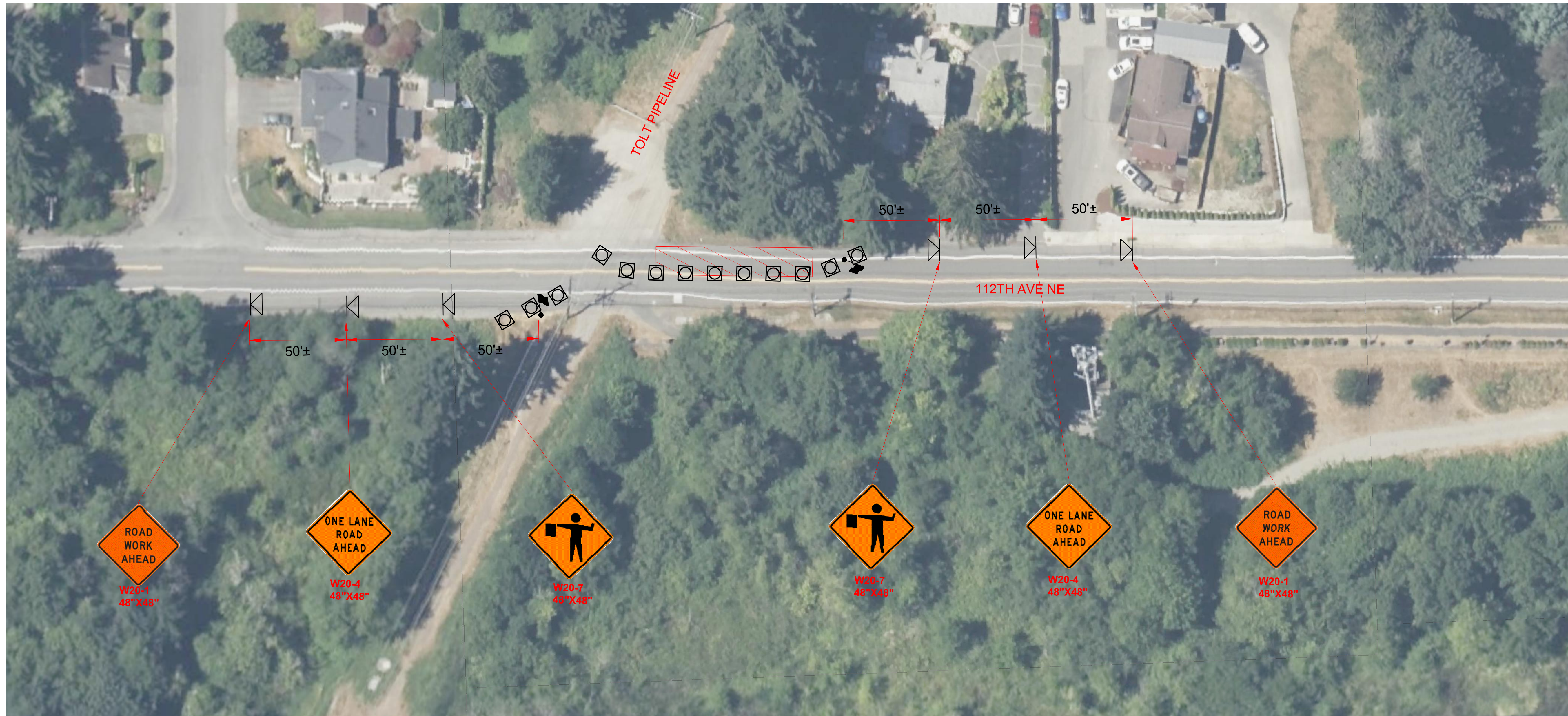
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	DRAWN BY	PLS
	CHECKED BY	AKG
	APPROVAL	EBD
	DATE	AUG 2024

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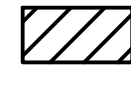



C0928 451 ZONE CONTROL VALVE IMPROVEMENTS SCHEDULE A TRAFFIC CONTROL

 #C928 8/15/2024
TRAFFIC SHEET:TC1-1 13 OF 56

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LEGEND

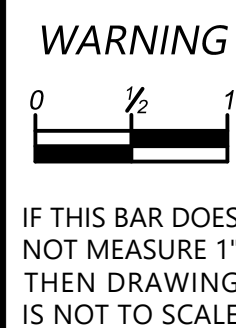
-  TEMPORARY SIGN LOCATION
-  WORK ZONE
-  CHANNELIZING DEVICES
-  FLAGGING STATION
-  TYPE III BARRICADE

NOTES

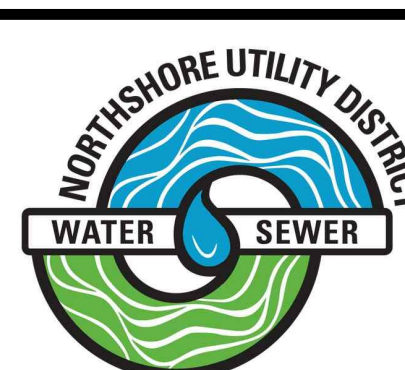
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4. CONTRACTOR TO COMPLY WITH WORK HOUR RESTRICTIONS OF THE PERMITTING AGENCY.
5. ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
6. EXTEND TAPER DEVICES ACROSS SHOULDER.
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CHANNELIZATION DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
35/45	10 TO 20	60
25/30	10 TO 20	40

NO	BY	APPD	REVISION	DATE



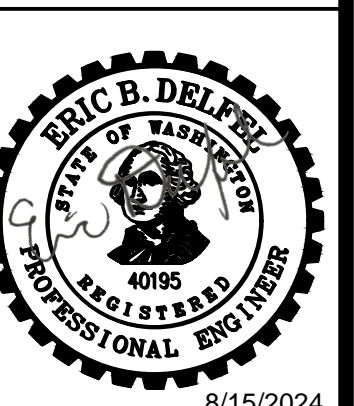
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DRAWN BY	PLS
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APPROVAL	EBD
DATE	AUG 2024



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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE A
TRAFFIC CONTROL

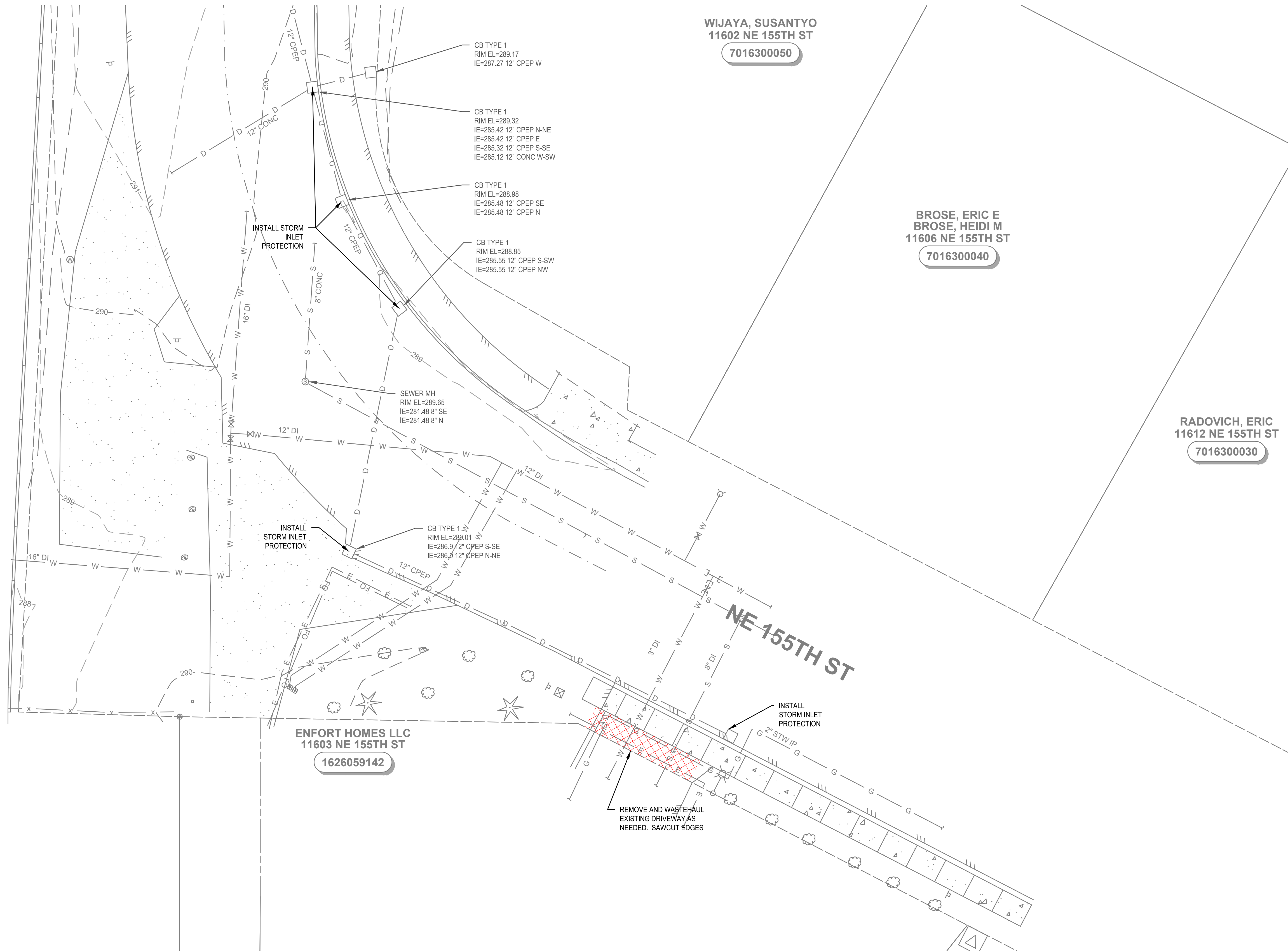
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TRAFFIC
 SHEET:TC1-2
 14 OF 56

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INTERSTATE 405



LEGEND



 REMOVE AND WASTEHAUL

WIJAYA, SUSANTYO
11602 NE 155TH ST
7016300050

BROSE, ERIC E
BROSE, HEIDI M
11606 NE 155TH ST
7016300040

RADOVICH, ERIC
11612 NE 155TH ST
7016300030

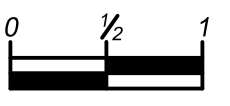
ENFORT HOMES LLC
11603 NE 155TH ST
1626059142

SCALE: 1"=10'

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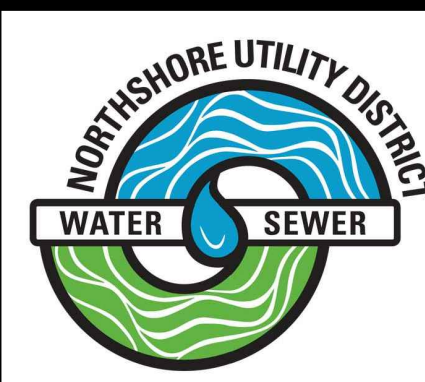
WARNING



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CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024



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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
EXISTING SITE, DEMOLITION AND TESC
PLAN

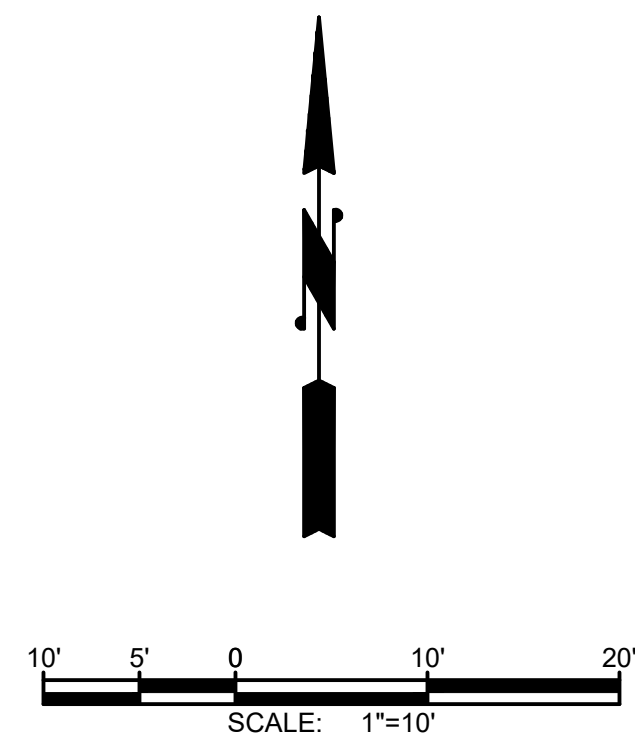
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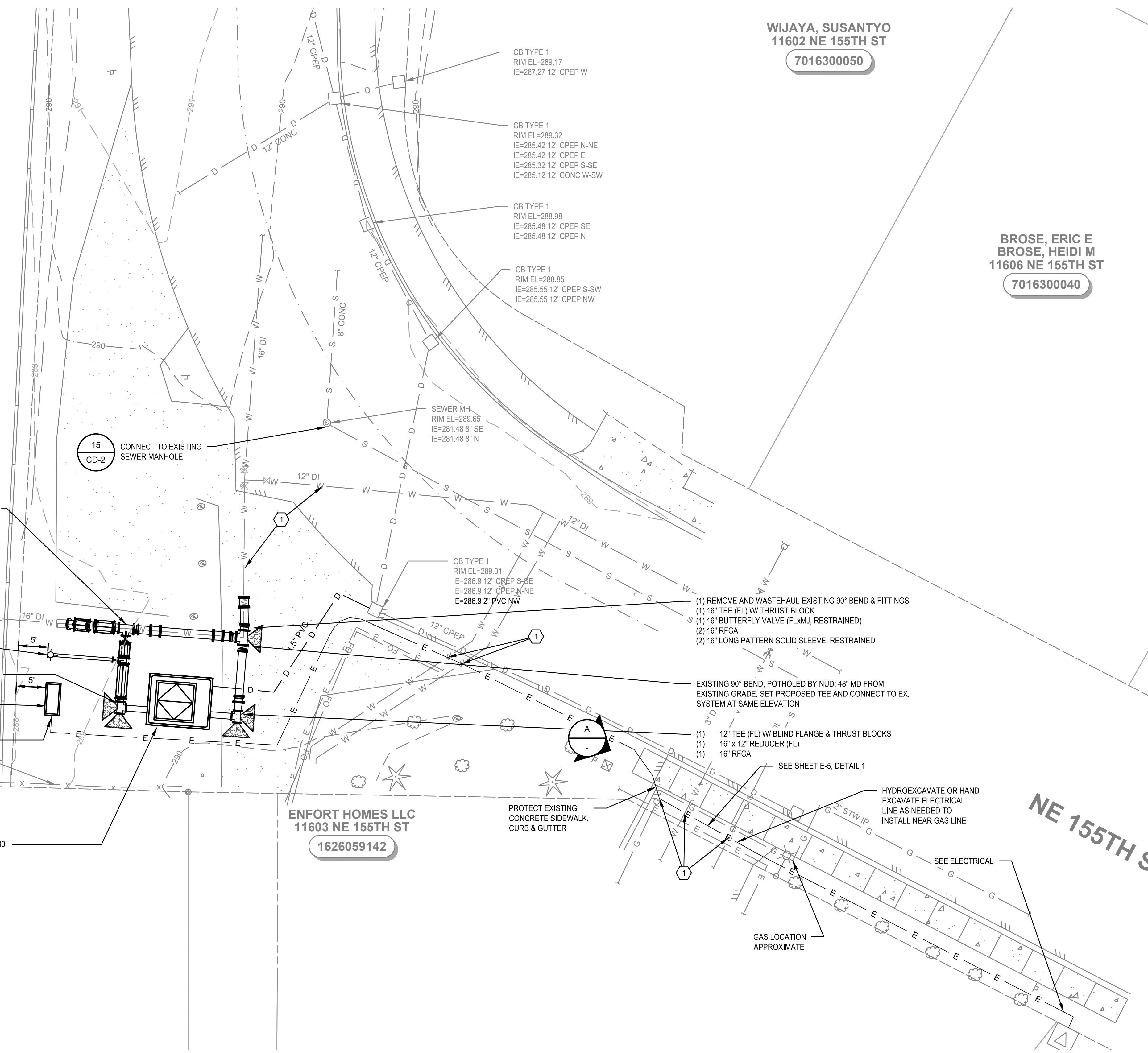
8/15/2024

CIVIL
SHEET: C2-1
15 OF 56

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- (1) REMOVE AND WASTEHAUL EXISTING 22.5" VERTICAL BEND
 - (1) 16" x 12" TEE (FL)
 - (1) 16" BUTTERFLY VALVE (FLxMJ, RESTRAINED)
 - (1) 16" RFCA
 - (1) 12" GATE VALVE (FLxMJ, RESTRAINED)
 - (1) 22.5" VERTICAL BEND (MJ, RESTRAINED)
 - (2) 16" SOLID SLEEVE, RESTRAINED
 - (4) SHACKLE ROD RESTRAINT SYSTEMS, SEE M2-1
- I-405 SOUND WALL
- FIRE HYDRANT ASSEMBLY, SEE DETAIL 3, SHEET CD-1
- (1) 12" TEE (FL) W/ BLIND FLANGE & THRUST BLOCKS
 - (1) 12" RFCA
- ELECTRICAL ENCLOSURE AND PAD, SEE DETAIL 8, SHEET S-3.
- SEE ELECTRICAL
- 14 FT. WIDE DOUBLE FENCE GATE, 7 FT. EACH PANEL
- DOOR THROUGH SOUND WALL
- (1) 10'-8" X 8'-8" UNDERGROUND UTILITY VAULT W/ H-30 RATED ACCESS HATCH



WIJAYA, SUSANTYO
11602 NE 155TH ST
7016300050

BROSE, ERIC E
BROSE, HEIDI M
11606 NE 155TH ST
7016300040

- 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 SOUTH EAST VIEW - ELECTRICAL ALIGNMENT
M1-1 NTS

NO	BY	APPD	REVISION	DATE

WARNING

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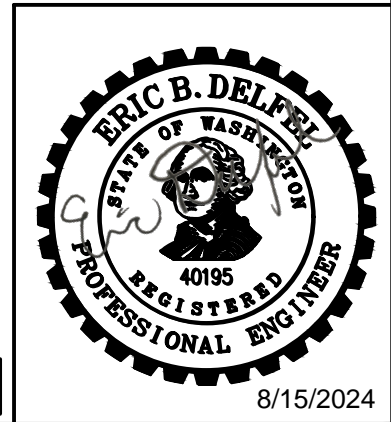
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DRAWN BY	PLS
CHECKED BY	AKG
APPROVAL	EBD
DATE	AUG 2024



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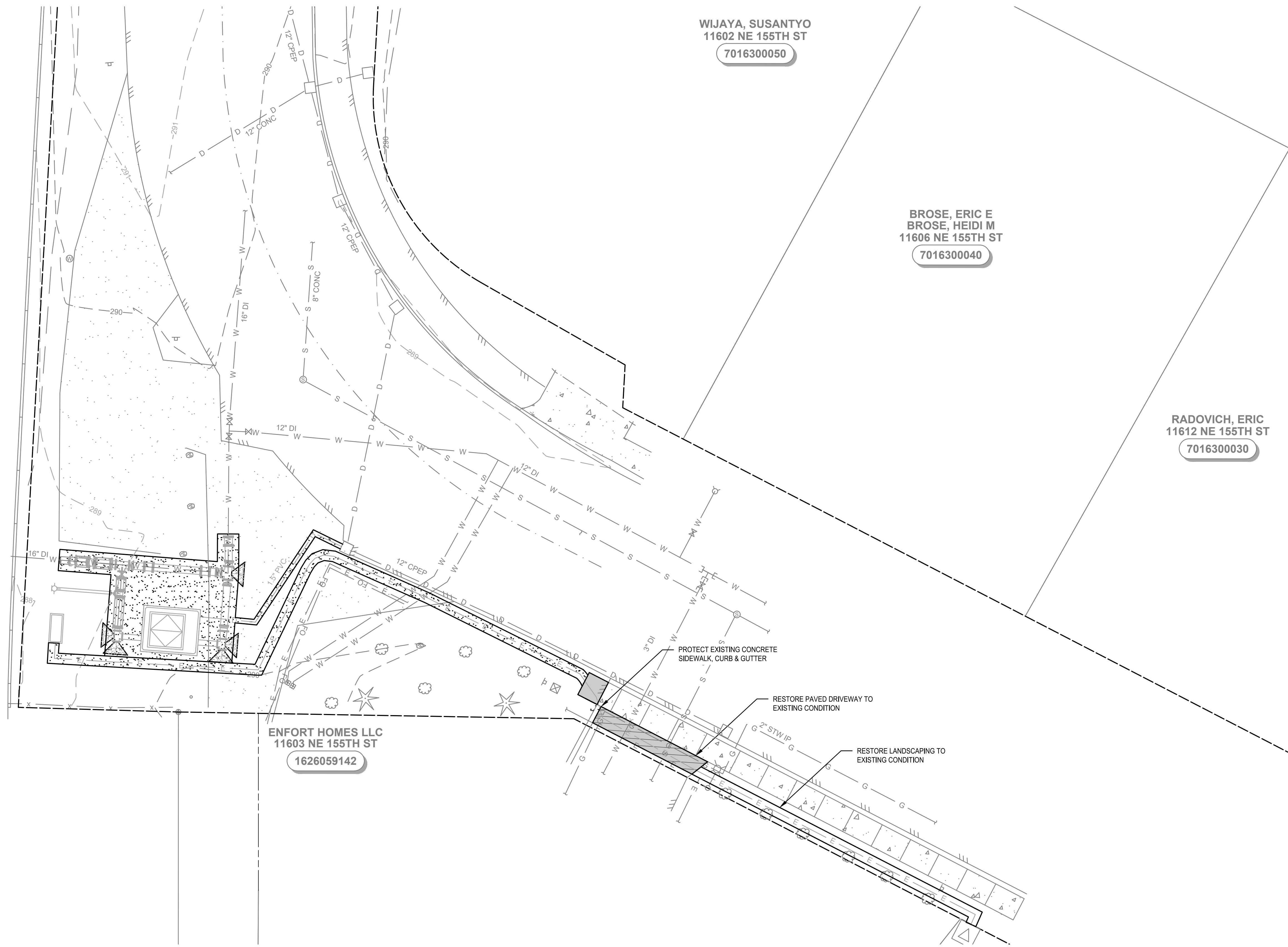
C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
PROPOSED SITE AND PIPING PLAN

#C928



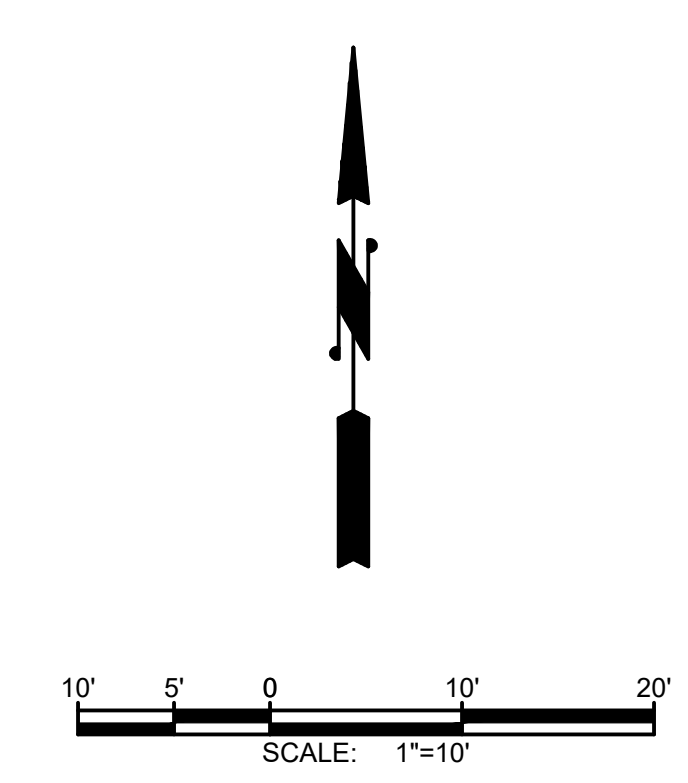
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SHEET: C2-2
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LEGEND

- ASPHALT PAVEMENT REPAIR CK-R-12
CD-3
- 4" CSTC 1
CD-4 4
CD-4
- PAVING DRIVEWAY REPAIR TO EXISTING CONDITION



ENFORT HOMES LLC
11603 NE 155TH ST
1626059142

NO	BY	APPD	REVISION	DATE

WARNING

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

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

NORTHSHORE UTILITY DISTRICT

6830 NE 185th St. P.O. Box 82489
 Kenmore, WA 98028-2684 Kenmore, WA 98028-2684

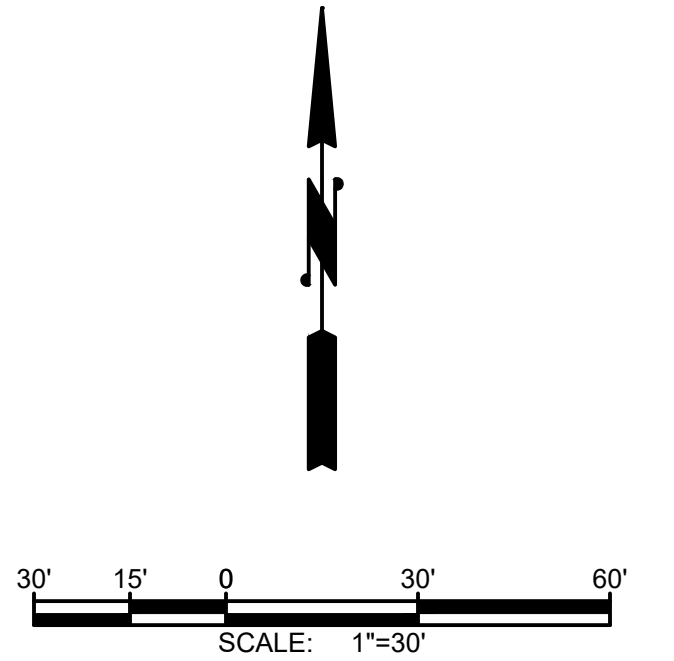
Ph: (425) 398-4400 | Fax: (425) 398-4430 | www.nud.net

C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
SITE RESTORATION AND GRADING
PLAN






#C928 8/15/2024

CIVIL
 SHEET: C2-3
 17 OF 56

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LEGEND

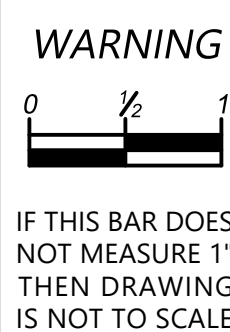
-  TEMPORARY SIGN LOCATION
-  WORK ZONE
-  CHANNELIZING DEVICES
-  FLAGGING STATION
-  TYPE III BARRICADE

NOTES

1. THIS TRAFFIC CONTROL PLAN IS PRELIMINARY AND HAS NOT BEEN APPROVED BY THE PERMITTING AGENCY. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO NORTSHORE UTILITY DISTRICT FOR REVIEW AND APPROVAL BY THE GOVERNING JURISDICTION.
2. SIGNS SHALL BE BLACK (NON-REFL.) ON ORANGE BACKGROUND (REFL.) UNLESS OTHERWISE NOTED.
3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE WSDOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. CONTRACTOR TO COMPLY WITH WORK HOUR RESTRICTIONS OF THE PERMITTING AGENCY.
5. ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
6. EXTEND TAPER DEVICES ACROSS SHOULDER.
7. MOTORCYCLES USE EXTREME CAUTION SIGNS SHALL BE INSTALLED WHEN THE FOLLOWING ROADWAY CONDITIONS EXIST:
 - GROOVED PAVEMENT
 - ABRUPT LANE EDGE
 - STEEL PLATES
 - LOOSE GRAVEL OR EARTH
8. OPEN TRENCHES WITHIN THE TRAVELED WAY OR AUXILIARY LANE SHALL HAVE A STEEL-PLATE COVER PLACED AND ANCHORED OVER THEM. A WEDGE OF SUITABLE MATERIAL, IF REQUIRED, SHALL BE PLACED FOR A SMOOTH TRANSITION BETWEEN THE PAVEMENT AND THE STEEL PLATE. WARNING SIGNS SHALL BE USED TO ALERT MOTORISTS OF THE PRESENCE OF THE STEEL PLATES.

CHANNELIZATION DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
35/45	10 TO 20	60
25/30	10 TO 20	40

NO	BY	APPD	REVISION	DATE



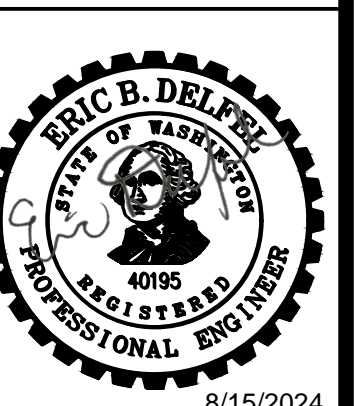
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C0928
451 ZONE CONTROL VALVE IMPROVEMENTS
SCHEDULE B
TRAFFIC CONTROL

#C928



TRAFFIC
 SHEET:TC2-1
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