OPERATIONS & MAINTENANCE FACILITY





31016 28TH AVE S FEDERAL WAY, WA 98003

GENERAL & SITE DEVELOPMENT SET

ZONING INFORMATION

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PHONE: 425 398 2300

EMAIL: JSOUZA@MIGIZIGROUP.COM

CIVIL ENGINEER 2215 NORTH 30TH STREET SUITE 300 TACOMA. WA 98403 CONTACT: WILLIAM J. FIERST PHONE: 253 383 2422

EMAIL:WFIERST@AHBL.COM

LANDSCAPE ARCHITECT 2215 NORTH 30TH STREET SUITE 300 TACOMA, WA 98403 CONTACT: CRAIG SKIPTON

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STRUCTURAL ENGINEER INTERIOR DESIGN 2215 NORTH 30TH STREET SUITE 300

HELIX DESIGN GROUP, INC. 6021 12th STREET EAST SUITE 201 TACOMA, WASHINGTON 98424 CONTACT: DIANE BARRINGER PHONE: (253) 922-9037 EMAIL: DIANEB@HELIXDESIGNGROUP.NET

1201 THIRD AVENUE, STE 600 SEATTLE, WASHINGTON 98101 CONTACT: RON ELIASON PHONE: 206 448 3376 EMAIL: RON.ELIASON@HARGIS.BIZ

MECHANICAL ENGINEER

GOVERNING CODE

PARCEL NUMBER

ZONING

CHAPTER 19

LAND USE

CHAPTER 19.15

PERMIT USES

OFF STREET PARKING STALLS

REFER TO SITE PLAN FOR PARKING COUNT PROVIDED.

ELECTRICAL ENGINEER 1201 THIRD AVENUE, STE 600 SEATTLE, WASHINGTON 98101 CONTACT: ROBERT SMITH PHONE: 206 448 3376

EMAIL: ROBERT.SMITH@HARGIS.BIZ

1201 THIRD AVENUE, STE 600 SEATTLE, WASHINGTON 98101 CONTACT: BEN HELMS PHONE: 206 448 3376

EMAIL: BEN.HELMS@HARGIS.BIZ

TELECOM/SECURITY ENGINEER

INDUSTRIAL ENGINEER PINNACLE CONSULTING GROUP II4 AVE. C, SUITE IO2 SNOHOMISH, WA 98290 CONTACT: MATT FICKEL PHONE: 360 563 7401 EMAIL: MFICKEL@PINNACLEGRP.COM

HELIX DESIGN GROUP, INC

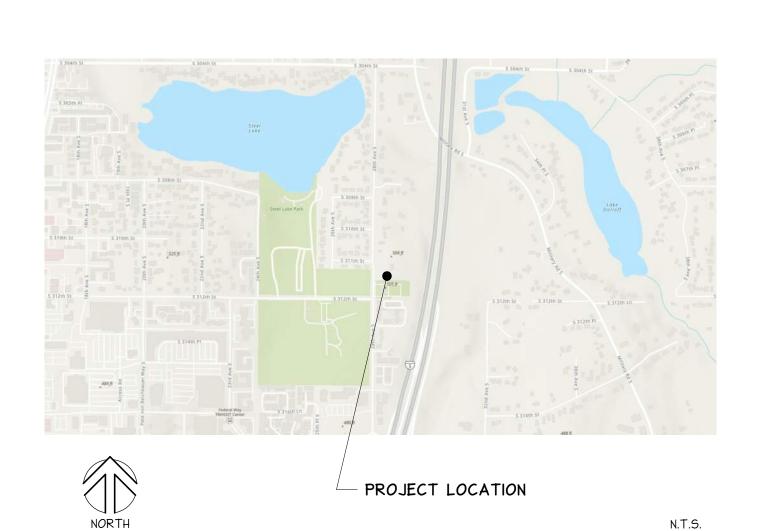
ARCHITECT

PRINCIPAL

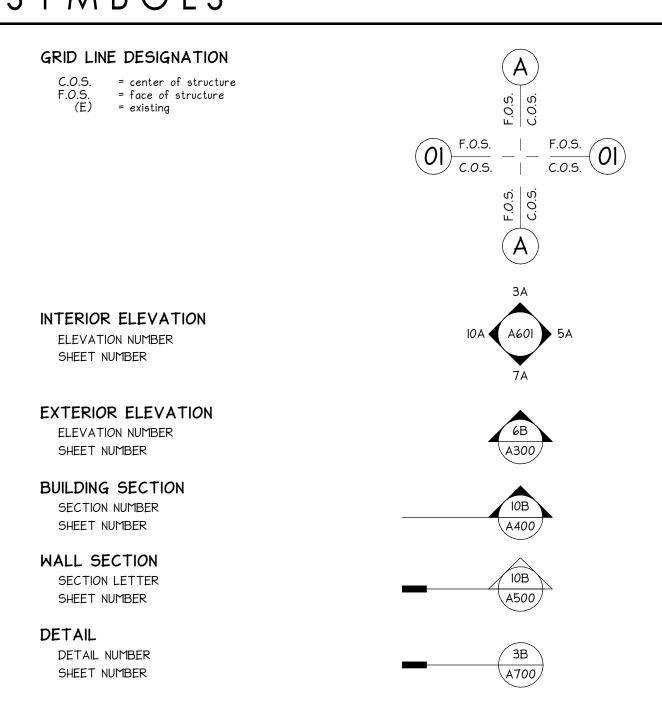
LOWELL CATE

PROJECT MANAGER

AREA MAP



SYMBOLS



MATCHLINE

NORTH

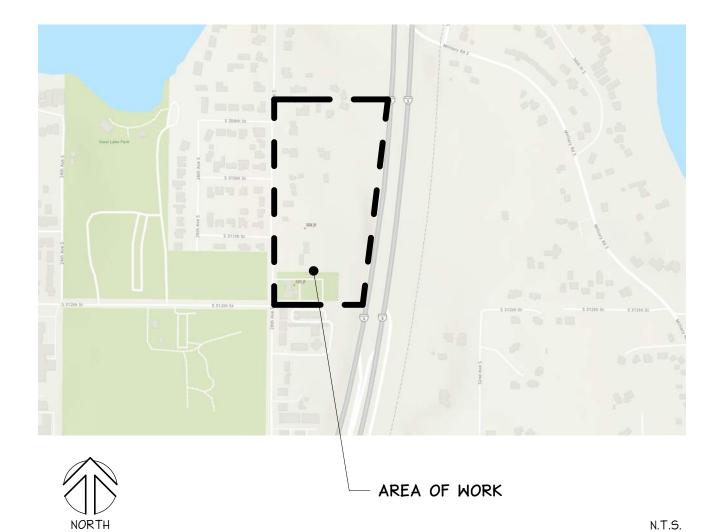
VICINITY MAP

TACOMA, WA 98403

PHONE: 253 383 2422

CONTACT: DREW MCEACHERN

EMAIL: DMCEACHERN@AHBL.COM



GENERAL NOTES

IMMEDIATELY OF ANY UNCERTAINTIES OR DISCREPANCIES WITH DRAWINGS.

- I. ALL WORK SHALL CONFORM TO APPLICABLE BUILDING CODES AND ORDINANCES. WHERE MORE THAN ONE CODE OR ORDINANCE CONFLICT WITH EACH OTHER, THE MORE RESTRICTIVE CODE SHALL GOVERN.
- 3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES AT THE SITE, PROTECT THEM FROM DAMAGE AND REPORT ANY DISCREPANCIES WITH DRAWINGS.

2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT THE SITE AND SHALL NOTIFY THE ARCHITECT

- 4. THE CONTRACTOR SHALL INSURE THE HEALTH AND SAFETY OF THE PUBLIC AND ALL WHO ENTER THE BUILDING DURING CONSTRUCTION.
- 5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE WORK OF SUBCONTRACTORS AND ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. 6. DRAWINGS SHALL NOT BE SCALED. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CONFLICTS.
- 7. ALL CONSTRUCTION SHALL MEET OR EXCEED LOCAL INDUSTRY STANDARDS. DETAILS ARE PROVIDED TO INDICATE MINIMUM QUALITY AND TO GIVE STANDARDS OF CONSTRUCTION. IF A CONDITION IS NOT SPECIFICALLY DETAILED, SUBMIT A SUGGESTED DETAIL FOR GUIDANCE AND APPROVAL. 9. DIMENSIONS ON PLANS ARE TO FACE OF STUD. CENTER OF COLUMN, CENTER OF MULLION, FACE OF CONCRETE,
- FACE OF MASONRY, FACE OF FRAME OR FACE OF ROUGH OPENING, UNLESS OTHERWISE NOTED. 10. LABORATORY TESTING AND SPECIAL INSPECTION REQUIRED IN ACCORDANCE WITH IBC CHAPTER 17 FOR ALL EARTHWORK COMPACTION, FIELD WELDING, HIGH STRENGTH BOLTING AND ALL STRUCTURAL CONCRETE. OWNER TO HIRE AN INDEPENDENT SPECIAL INSPECTOR AND TESTING LAB FOR ALL CODE REQUIRED TESTING
- II. SUSPENDED CEILINGS TO BE DESIGNED FOR SEISMIC DESIGN CATEGORY D.
- 12. REFER TO SHEET A600 FOR STANDARD CASEWORK DETAILS AND PLUMBING FIXTURE AND TOILET ACCESSORIES MOUNTING HEIGHTS.

DEFERRED SUBMITTALS

ALL DEFERRED SUBMITTALS SHALL BE SUBMITTED TO ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR O SUBMITTING TO BUILDING OFFICIAL. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. A RECORD DRAWING SET OF THE APPROVED SUBMITTAL SHALL BE SUBMITTED TO ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF

PRE-ENGINEERED METAL BUILDING PRE-ENGINEERED METAL BUILDING DRAWINGS ARE DEFERRED TO CONTRACTOR'S DESIGN-BUILD SUBMITTAL. WHICH INCLUDES SITE STRUCTURES (C, D, E, AND F). SEE

SITE PLAN SHEET GOO2 IN (VOLUME - O) FOR

ADDITIONAL INFORMATION.

AUTOMATIC SPRINKLER SYSTEM DRAWINGS AUTOMATIC SPRINKLER SYSTEM DRAWINGS DEFERRED TO CONTRACTOR'S DESIGN-BUILD SUBMITTAL.

FIRE ALARM AND DETECTION SYSTEM DRAWINGS

FIRE ALARM AND DETECTION SYSTEM DRAWINGS DEFERRED TO CONTRACTOR'S DESIGN-BUILD SUBMITTAL.

SECURITY GATES

SECURITY GATES ACROSS FIRE DEPARTMENT ACCESS ROADS DEFERRED TO CONTRACTOR'S DESIGN-BUILD

VOL. 0 - GENERAL & SITE DEVELOPMENT SET

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G004 G005	ENLARGED SITE PLAN SITE DETAILS	ElOI	ELECTRICAL SITE PLAN - SOUTH
G006 G007	SITE DETAILS STAIR PLANS AND DETAILS	E102 E301	ELECTRICAL SITE PLAN - NORTH ELECTRICAL DETAILS
G008	ART - SECURITY WALL DETAILS	E401	ELECTRICAL ONE LINE DIAGRAM
G020 G035	ABBREVIATIONS AND NOTES LEGENDS AND NOTES	E402 E403	ELECTRICAL SERVICE DETAILS PANEL SCHEDULES
G040	COLORS AND MATERIAL SCHEDULE	L103	TABLE GOTTLEBGELG
CIVIL DE	RAWINGS	SITE TE	LECOMMUNICATIONS DRAWINGS
C100 C101	COVER SHEET TESC AND DEMOLITION PLAN	T00I	TELECOM LEGEND, GENERAL NOTES,
C102	TESC AND DEMOLITION PLAN	T002	ABBREVIATIONS, ÁND DRAWING INDEX TELECOM AND SECURITY ROUGH-IN
C103 C104	TESC AND DEMOLITION PLAN TESC AND DEMOLITION PLAN		SCHEDULES
C105	TESC AND DEMOLITION NOTES AND DETAILS	T101 T102	TELECOM SITE PLAN - NORTH TELECOM SITE PLAN - SOUTH
C106 C200	TESC AND DEMOLITION NOTES AND DETAILS OVERALL GRADING AND STORM DRAINAGE	T8 <i>0</i> 1	TELECOM DETAILS
	PLAN GRADING AND STORM DRAINAGE PLAN	T802 T901	TELECOM DETAILS TELECOM ONE-LINE DIAGRAM
C20I C202	GRADING AND STORM DRAINAGE PLAN	T902	SECURITY ONE-LINE DIAGRAM
C203 C204	GRADING AND STORM DRAINAGE PLAN GRADING AND STORM DRAINAGE PLAN		
C205	GRADING SECTIONS	INDUSTR	RIAL ENGINEERING
C206 C300	GRADING SECTIONS OVERALL PAVING AND HORIZONTAL CONTROL	11100111	
	PLAN	IP-01	PARTIAL SITE PLAN - VEHICLE
C301 C302 C303	PAVING AND HORIZONTAL CONTROL PLAN PAVING AND HORIZONTAL CONTROL PLAN PAVING AND HORIZONTAL CONTROL PLAN	IP-02	MAINTENANCE BUILDING AND FUEL STATION VEHICLE MAINTENANCE BUILDING -
C304	PAVING AND HORIZONTAL CONTROL PLAN	IP-03	EQUIPMENT PLAN VEHICLE MAINTENANCE BAYS - DETAILS
C401 C501	COMPOSITE UTILITIES PLAN NOTES AND DETAILS	IP-04	FABRICATION SHOP, TIRE REPAIR, AND WASH BAY DETAILS
C502	NOTES AND DETAILS NOTES AND DETAILS	IP-05	CARPENTRY SHOP & LUBE ROOM - DETAILS
C503 C504	NOTES AND DETAILS	IP-06	FUEL STATION TANKER AND DISPENSING
C505 WI00	NOTES AND DETAILS WATER COVER SHEET		EQUIPMENT PLAN
WI0I	WATER SITE PLAN	IP-07	EQUIPMENT SCHEDULE
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W203	28th AVE. S WATER PLAN AND PROFILE		
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W304 W305	WATER PLAN AND PROFILE WATER PLAN AND PROFILE		
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55201 55202	SEWER PLAN AND PROFILE SEWER PLAN AND PROFILE		
55300	SEWER NOTES AND DETAILS		
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L00I	LANDSCAPE COVER SHEET		
LIOO LIOI	TREE RETENTION PLAN TREE RETENTION PLAN		
1 102	TOFF DETENTION DI ANI		

TREE RETENTION PLAN

TREE RETENTION PLAN

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IRRIGATION SCHEDULE & NOTES

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PLANTING PLAN

PLANTING PLAN

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FOUNDATION DETAILS

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ROOF FRAMING DETAILS

ROOF FRAMING DETAILS

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BRACED FRAME DETAILS

BRACED FRAME DETAILS

BRACED FRAME DETAILS

CANOPY PLANS

STEEL STUD DETAILS

STRUCTURAL NOTES

QUALITY ASSURANCE PLAN

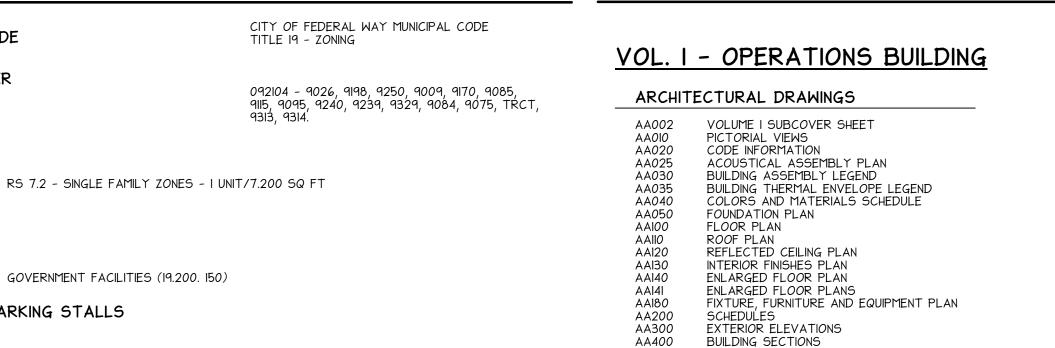
QUALITY ASSURANCE PLAN

FRAMING NOTES AND SCHEDULES

ROOF DIAPHRAGM ATTACHMENT PLAN

STRUCTURAL DRAWINGS

STANDARD CASEWORK AND FIXTURES



AA600

AA601

AA605

AA700

SA030

SA302

SA401 SA402



SITE ADRESS 31016 28TH AVE. SOUTH. FEDERAL WAY, WA 98003 SITE ADRESS 31016 28TH AVE. SOUTH. FEDERAL WAY, WA 98003

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MECHA	NICAL DRAWINGS
MA001 MA002	MECHANICAL LEGEND AND DRAWING INDEX MECHANICAL ABBREVIATIONS AND GENERAL
MA003 MA004 MA005 MA006	NOTES MECHANICAL ADDREVIATIONS AND GENERAL NOTES MECHANICAL SCHEDULES MECHANICAL SCHEDULES MECHANICAL SCHEDULES HVAC VENTILATION, LOAD CALCULATIONS,
MA007 MA20I MA30I MA40I MA50I MA60I MA80I MA802 MA90I	AND WSEC SCHEDULES WSEC FAN POWER ALLOWANCE CALCULATIONS MAIN FLOOR HVAC ZONE PLAN MAIN FLOOR HVAC PLAN MAIN FLOOR HVAC PIPING PLAN MECHANICAL ROOF PLAN MECHANICAL SECTIONS MECHANICAL DETAILS MECHANICAL DETAILS MECHANICAL CONTROL DIAGRAMS AND SEQUENCY OF OPERATIONS
MA902	MECHANICAL CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS
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TELECOM DETAILS

TELECOM DETAILS

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SECURITY ONE-LINE DIAGRAM

FIRE PROTECTION LEGEND, GENERAL NOTES, AND

TELECOM LEGEND, GENERAL NOTES, ABBREVIATIONS, AND

MAIN FLOOR FIRE PROTECTION PLAN

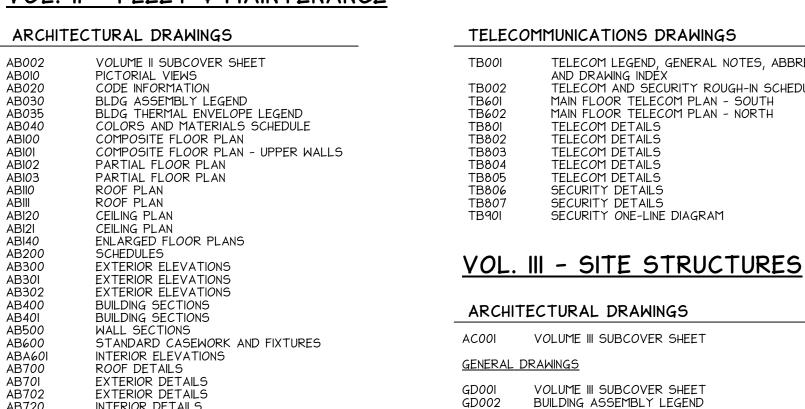
MAIN FLOOR HAZARD LEVEL ZONING PLAN

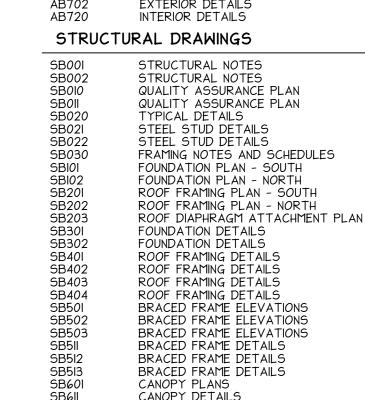
FIRE PROTECTION DETAILS AND DIAGRAMS

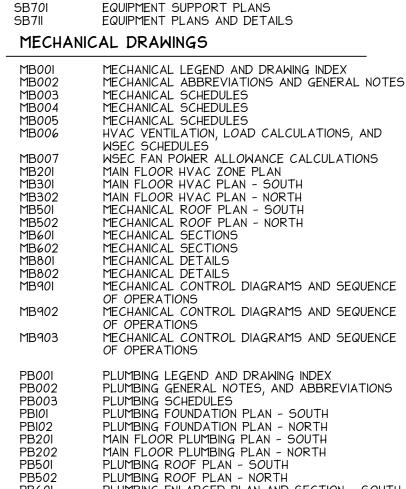
TELECOM AND SECURITY ROUGH-IN SCHEDULES

FIRE PROTECTION DRAWINGS

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EB302

EB402 EB501 EB502

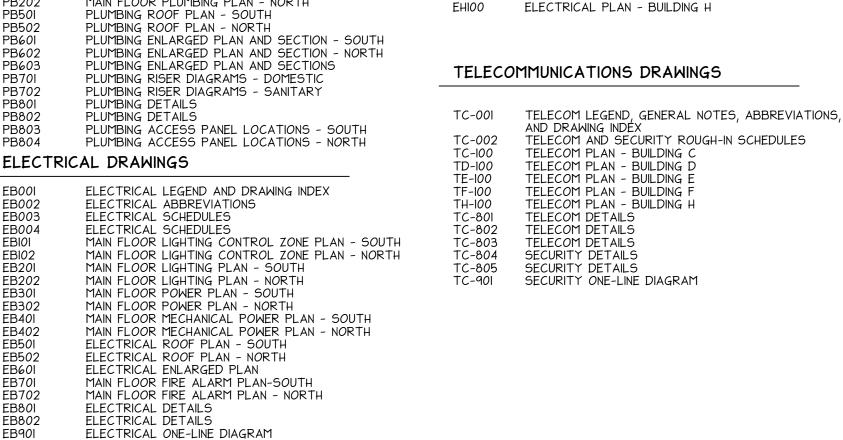
EB901

EB903

MAIN FLOOR HAZARD LEVEL ZONING PLAN - NORTH

FIRE PROTECTION DETAILS AND DIAGRAMS

FIRE PROTECTION DRAWINGS



NIN FLOOR FIRE ALARM PLAN - NORTH ECTRICAL DETAILS ECTRICAL DETAILS ECTRICAL ONE-LINE DIAGRAM NEL SCHEDULES NEL SCHEDULES	
CTION DRAWINGS	
RE PROTECTION LEGEND, GENERAL NOTES, SCH D DRAWING INDEX	IEDULES
NN FLOOR FIRE PROTECTION PLAN - SOUTH NN FLOOR FIRE PROTECTION PLAN - NORTH	
NN FLOOR HAZARD LEVEL ZONING PLAN - SOUT	ГН

HELIX DESIGN GROUP, INC. 6021 12th STREET EAST SUITE 201 TELECOMMUNICATIONS DRAWINGS TACOMA, WASHINGTON 98424 TELECOM LEGEND, GENERAL NOTES, ABBREVIATIONS AND DRAWING INDEX TELECOM AND SECURITY ROUGH-IN SCHEDULE MAIN FLOOR TELECOM PLAN - SOUTH MAIN FLOOR TELECOM PLAN - NORTH

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FLOOR PLAN, SECTION & CODE INFORMATION

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EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

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PANEL SCHEDULES

ON-LINE DIAGRAM

PANEL SCHEDULES

BUILDING SECTIONS

AG300

AH300

SCOOL

SC040

SC060

SC061

SFI00

BUILDING SECTIONS

BUILDING SECTIONS

JEFF RYAN PHONE: (253) 922-9037 EMAIL: JEFFR@HELIXDESIGNGOUP.NET

OWNER

CITY OF FEDERAL WAY DEPUTY PUBLIC WORKS DIRECTOR DESIREE S. WINKLER PHONE: (253) 835-2711 DESIREE.WINKLER@CITYOFEDERALWAY.COM

APPROVED FOR CONSTRUCTION Yenr S. Mon 5/13/24

Desireé S. Winkler, P.E.

Deputy Public Works Director

Date

EXTERIOR ELEVATIONS STRUCTURAL DRAWINGS STRUCTURAL NOTES STRUCTURAL NOTES QUALITY ASSURANCE PLAN QUALITY ASSURANCE PLAN TYPICAL DETAILS FRAMING NOTES AND SCHEDULES FOUNDATION DETAILS

COVER SHEET

CITY OF FEDERAL WAY **OPERATIONS & MAINTENANCE FACILITY**

FEDERAL WAY, WASHINGTON REVISION

DATE JOB NO. 05.06.24 a23-087 **BID SET**

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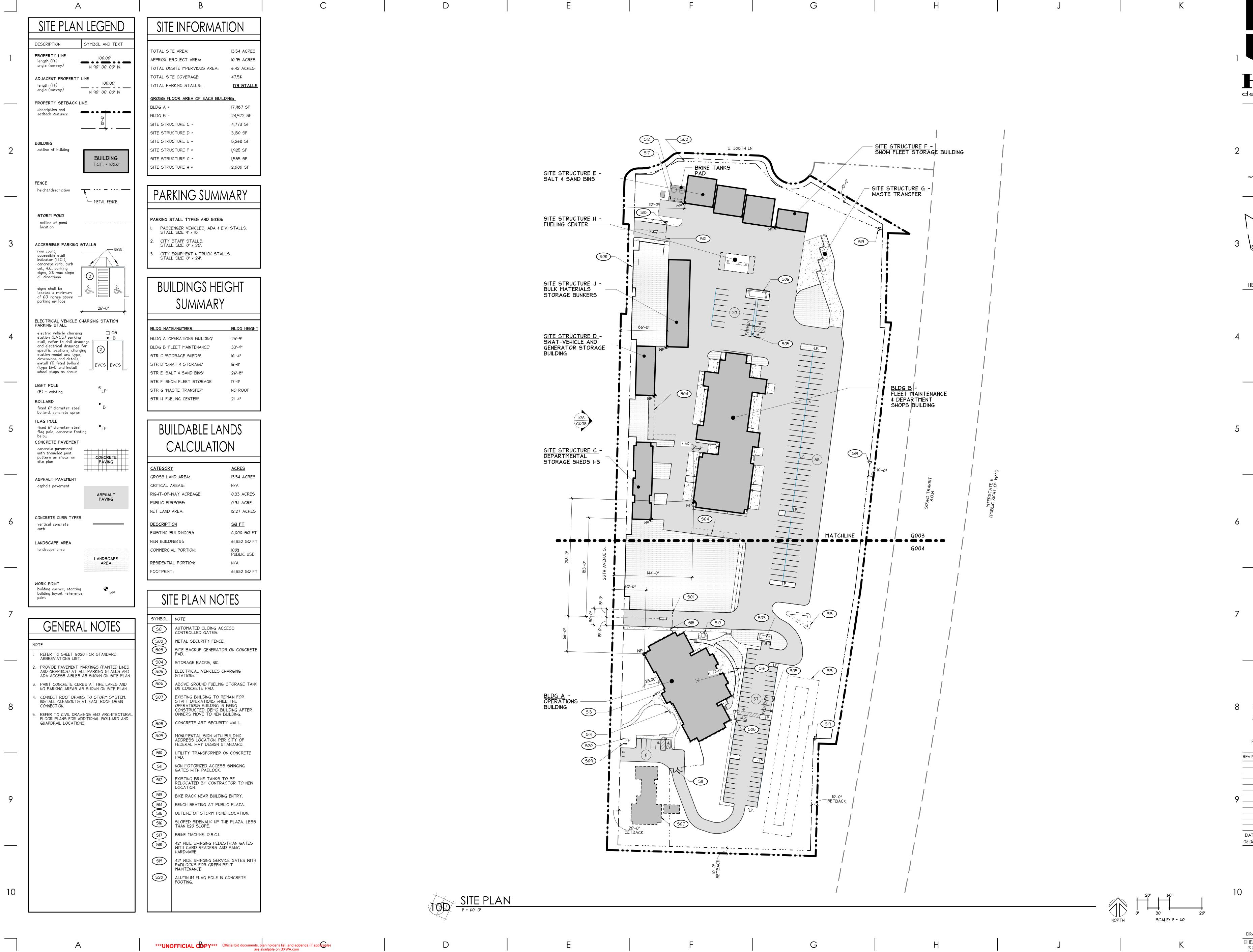
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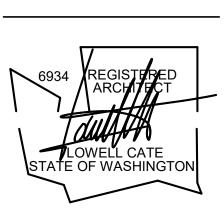
REVISION

MATCHLINE

NORTH ARROW







HELIX DESIGN GROUP, INC

SITE PLAN

CITY OF
FEDERAL WAY
JOINT
OPERATIONS &
MAINTENANCE
FACILITY

FUSION DA

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DATE JOB NO. 05.06.24 a23-087

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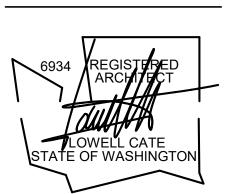
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ENLARGED SITE PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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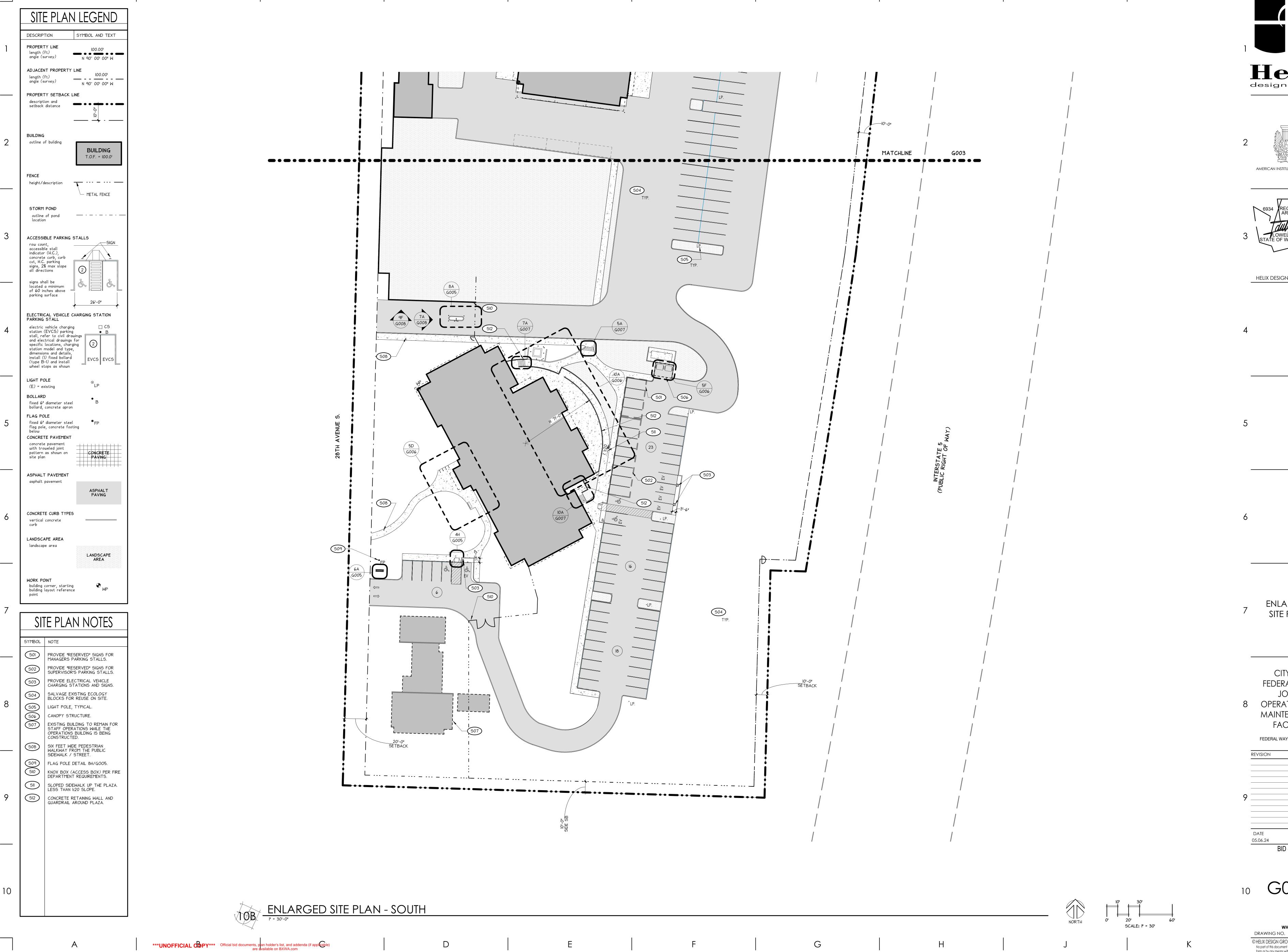
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ENLARGED SITE PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

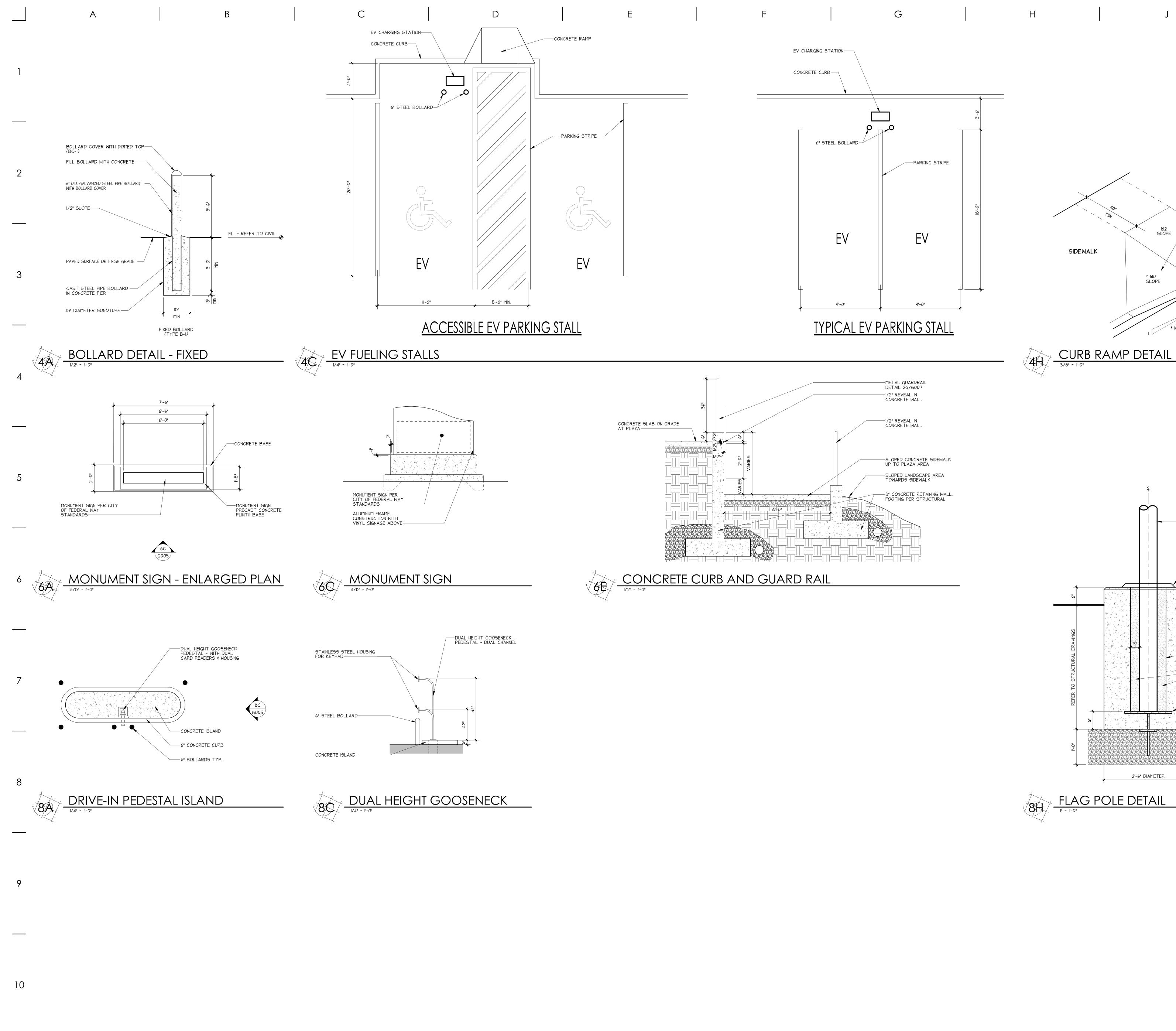
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FLAG POLE

— FLASH COLLAR

- 3/4" CHAMFERED EDGE

EXPOSED ARCHITECTURAL CONCRETE PLINTH (CONC-I)

CONCRETE FOOTING WITH REINFORCING STEEL (REFER TO STRUCTURAL DRAWINGS)

GALVANIZED STEEL PIPE SLEEVE

- GALVANIZED STEEL BASE PLATE WITH WELDED GROUNDING SPIKE

- GRAVEL BASE COURSE

TAMPED SAND

2'-6" DIAMETER

— ADA DETECTABLE WARNING (CAST TRUNCATED DOMES IN CONTRASTING COLOR)

—SLOPED CURB @ RAMP

SITE DETAILS

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE **FACILITY**

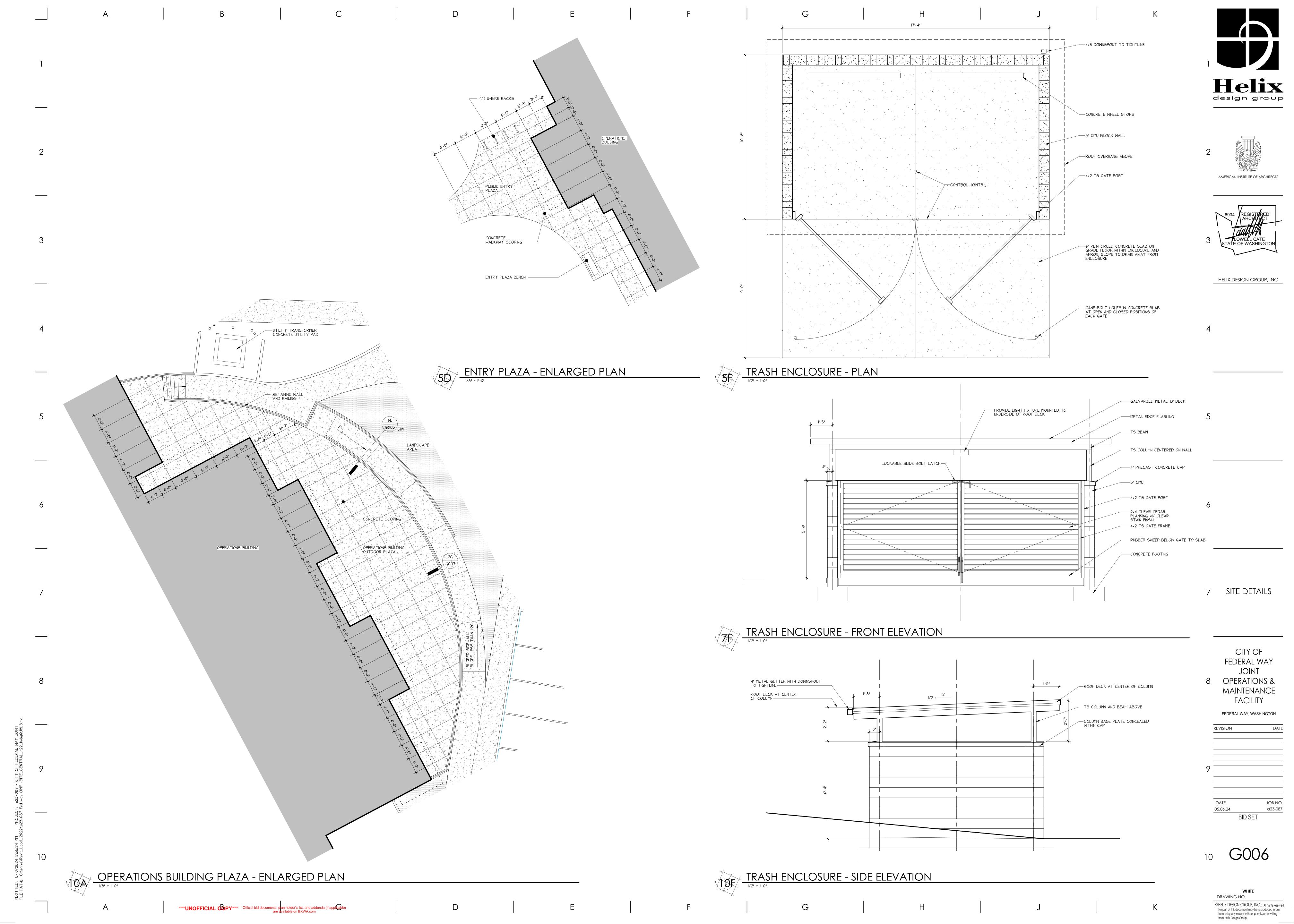
FEDERAL WAY, WASHINGTON

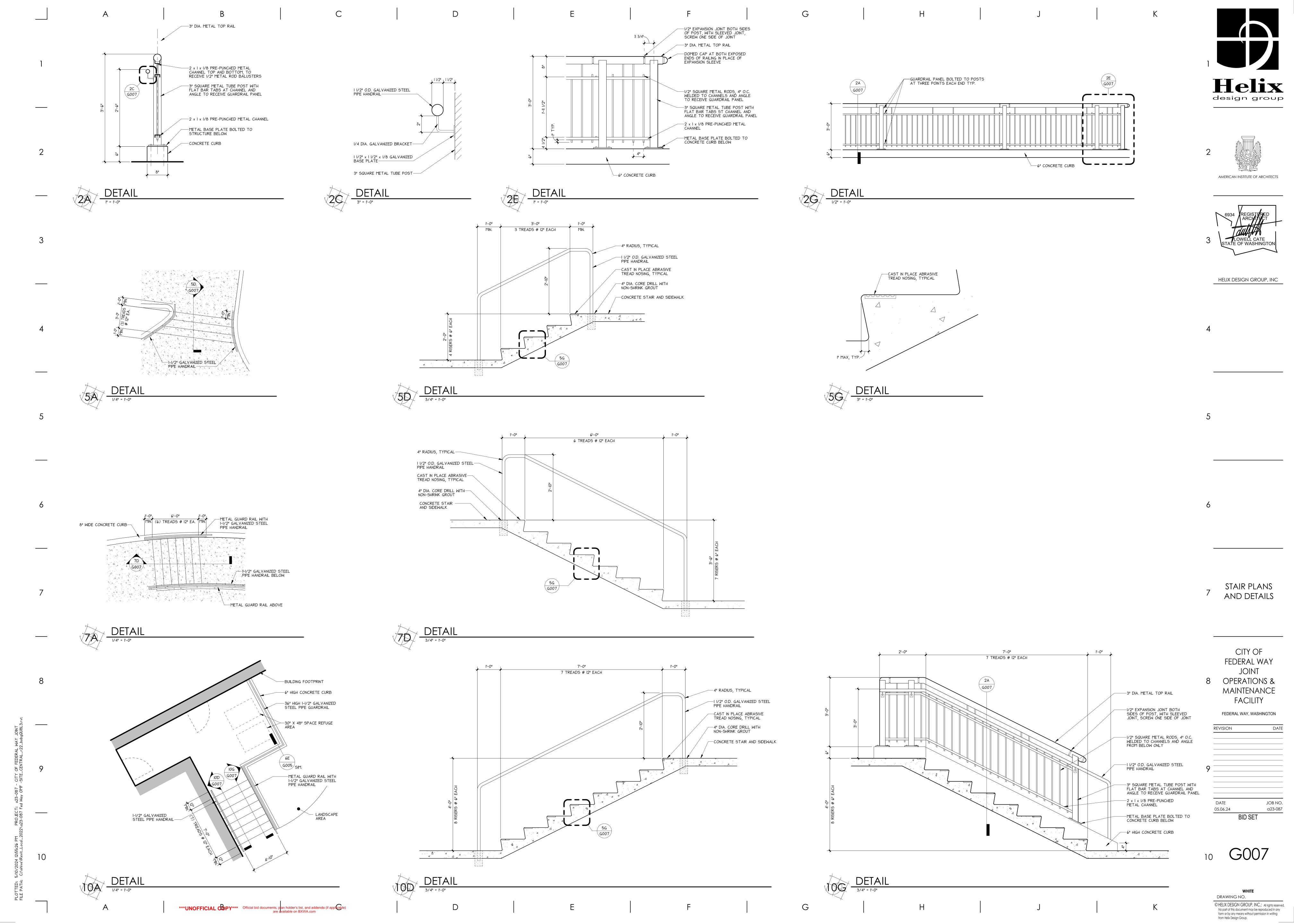
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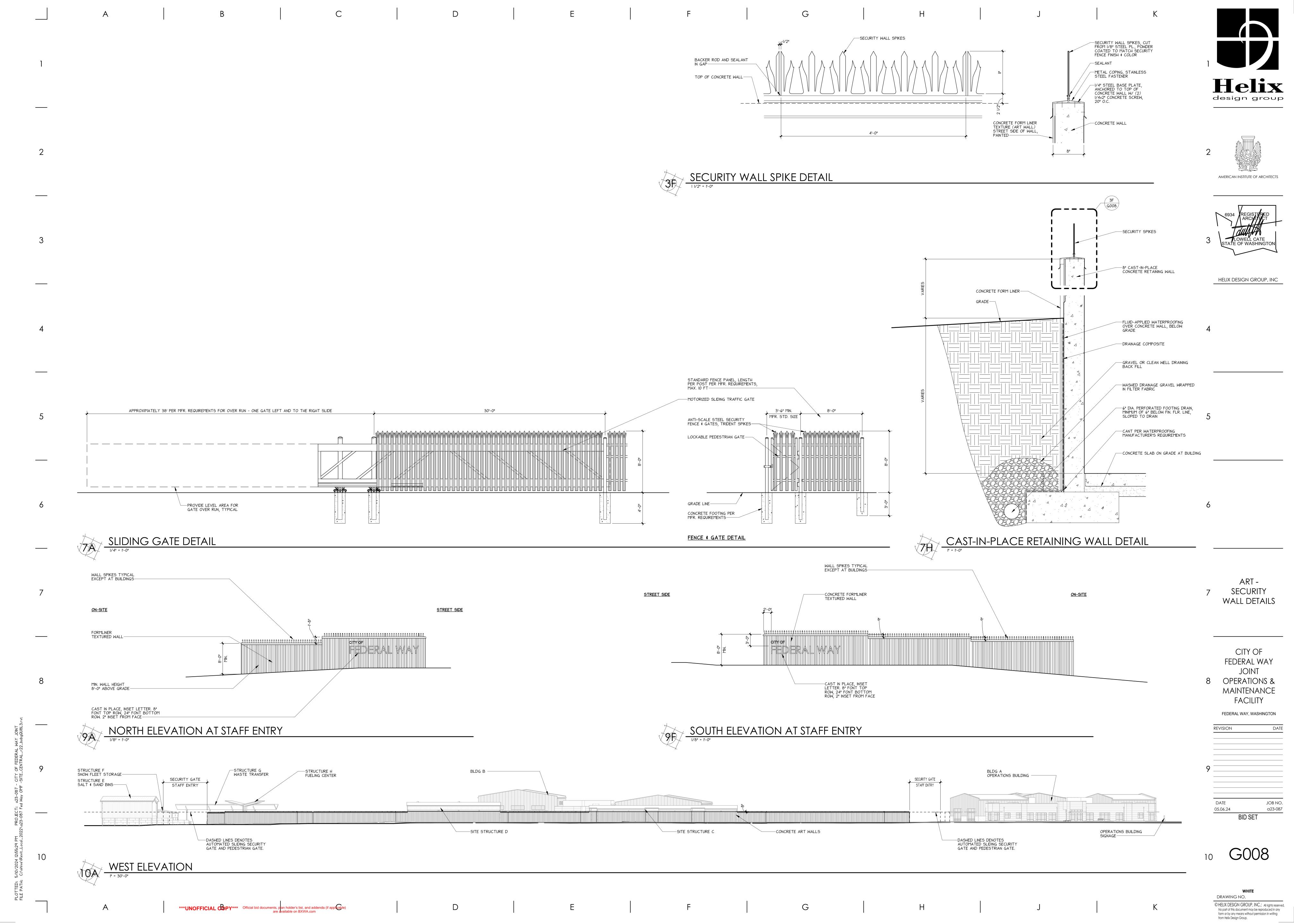
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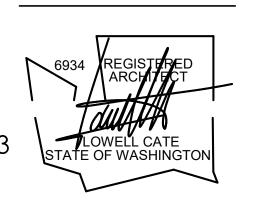


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ABBREVIATIONS

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

REVISION

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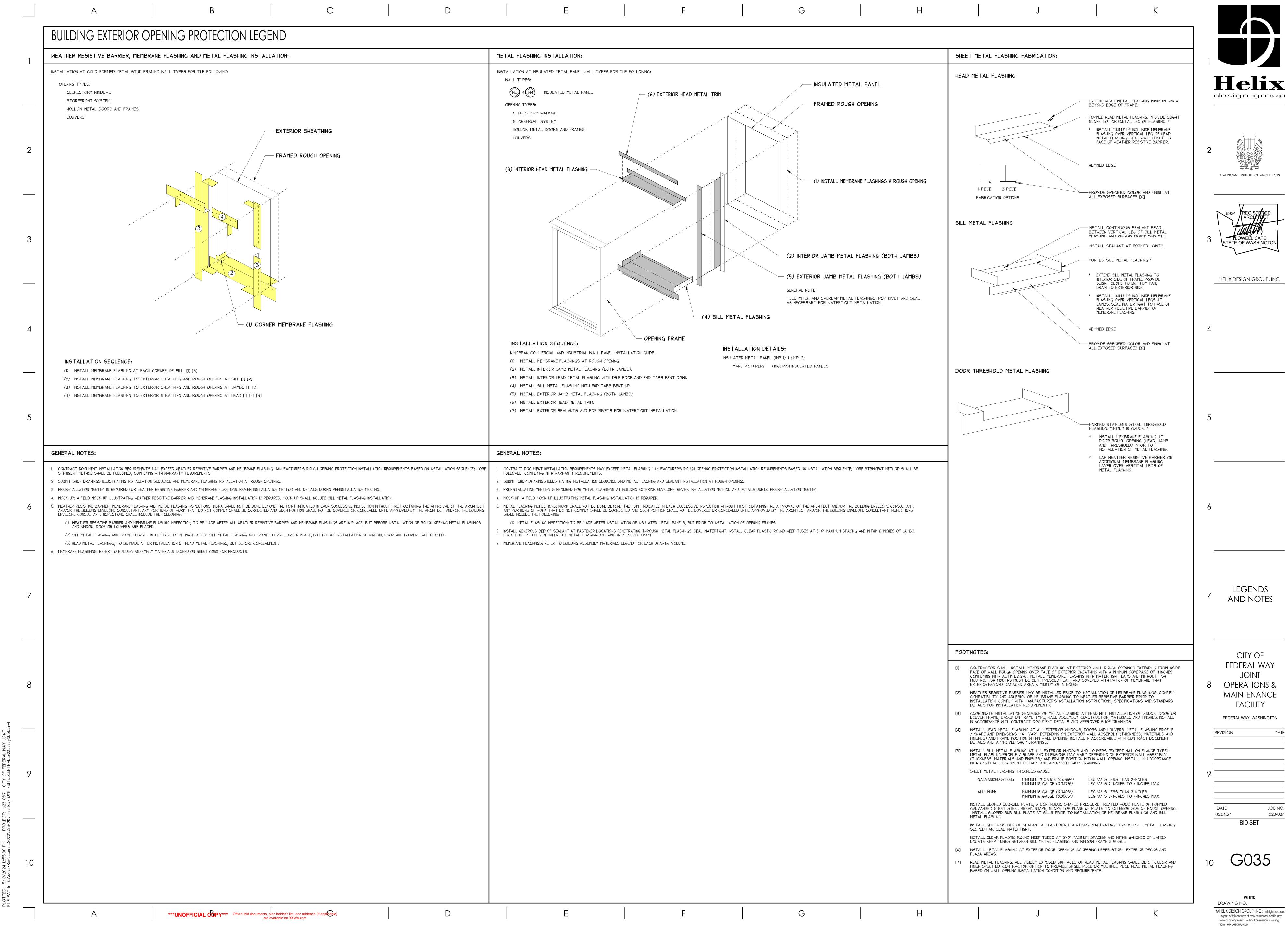
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		COLORS AND MATERIAL	S SCHEDULE		
		SYMBOL MATERIAL DIVISION 3 - CONCRETE	MANUFACTURER	COLOR / PATTERN / TYPE	LOCATION
		DIVISION 3 - CONCRETE CONC-I CAST IN PLACE CONCRETE CONC-2 CAST IN PLACECONCRETE CONC-3 CAST IN PLACE CONCRETE CONC-4 CAST IN PLACE CONCRETE	- - REDKLI -	NATURAL GRAY / SMOOTH FINISH / SEALER NATURAL GRAY / LIGHT BROOM FINISH / SEALER NATURAL GRAY / FORMLINER I (PELLWORM, OFFSET PLANKS FINISH) / PT-5 NATURAL GRAY / FORMLINER 2 (LIGHT SANDBLAST FINISH) / PT-5	EXPOSED VERTICAL SURFACES - EXTERIOR EXPOSED HORIZONTAL SURFACES - EXTERIOR ART-SECURITY WALL - OFF SITE SIDE ART-SECURITY WALL - ONSITE SIDE AND BUILDING A RETAINING WALLS
		DIVISION 4 - MASONRY CMU-I CONCRETE MASONRY UNIT M-I CMU MORTAR	MUTUAL MATERIALS - THREE COLOR BLEND DESIGNMIX	CASCADE BLEND, DRIFTWOOD & ONYX / EQUAL BLEND / GROUND FACE BLOCK COLOR: GRAY	BUILDING A - TRASH & GENERATOR ENCLOSURE CMU BLOCKS
		DIVISION 5 - METALS MF-I METAL FABRICATIONS MF-2 METAL FABRICATIONS STL-I STRUCTURAL STEEL FRAMING	SHERWIN WILLIAMS SHERWIN WILLIAMS SHERWIN WILLIAMS	GALVANIZED / PT-2 GALVANIZED / PT-3 GALVANIZED / PT-3	
		DIVISION 9 - FINISHES PT-2 PAINT PT-3 PAINT	SHERWIN WILLIAMS SHERWIN WILLIAMS	GALVANIZED - CHEERFUL (SW6903) SAFETY YELLOW GALVANIZED - WEB GRAY(SW7905)	REFER TO SITE PLAN REFER TO SITE PLAN ART-SECURITY WAL
		DIVISION 10 - SPECIALTIES	SHERWIN WILLIAMS SHERWIN WILLIAMS	WSDOT COLOR - ST. HELNS, FLAT FINISH COLOR TO MATCH METAL SECURITY FENCING COLOR	ART-SECURITY WALL SPIKES AND MISC FENCING ITEMS
		BB-I BENCHES AND BIKE RACKS FP-I FLAG POLE DIVISION 33	LANDSCAPE FORMS -	SELECTED FROM STANDARD COLORS SUBMITTED SATIN ALUMINUM FINISH	AT BUILDING A - ENTRY PLAZA AT BUILDING A - ENTRY PLAZA
		PG-I PEDESTRIAN ENTRANCE GATE SF-I SECURITY FENCE & SERVICE GATES TG-I TRAFFIC GATE	AMERISTAR FENCE PRODUCTS AMERISTAR FENCE PRODUCTS AMERISTAR FENCE PRODUCTS	BLACK / EXODUS EGRESS GATE BLACK / IMPASSE II ANTI-SCALE TRIDENT, 3 RAIL BLACK / TRANSPORT IS ANTI-SCALE TRIDENT CANTILIVER GATE	ADJACENT TO VEHICLE GATES SITE PERIMETER TWO PRIMARY VEHICULAR GATES
			NOTEC		
		COLOR AND MATERIALS	NOIE2		
		NOTES [I] NOT USED.			
		SPECIFICATION NOTES			
		GENERAL NOTES:			
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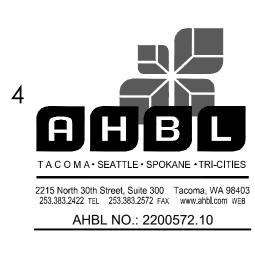


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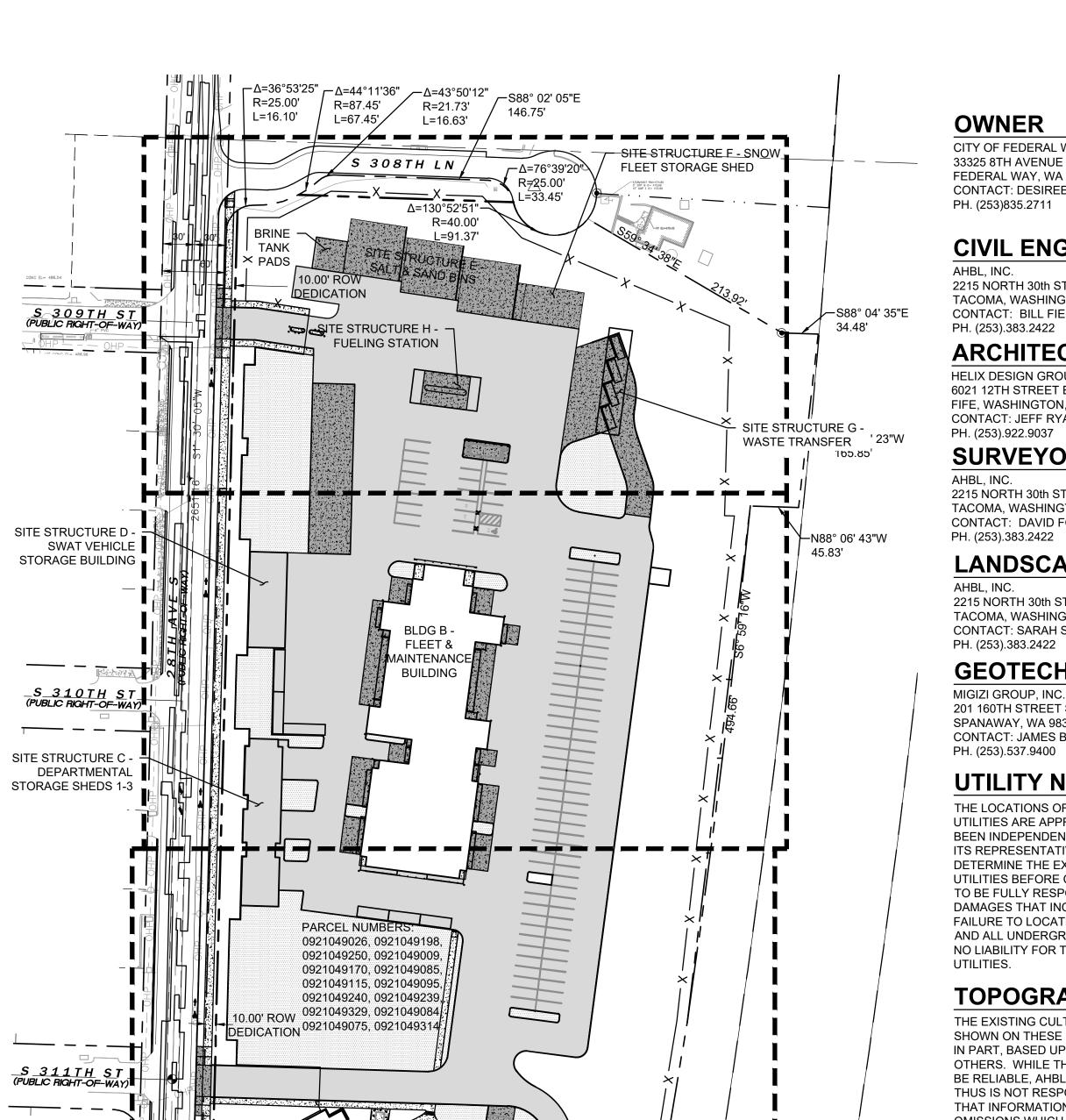




COVER SHEET

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON



D

CITY OF FEDERAL WAY 33325 8TH AVENUE SOUTH FEDERAL WAY, WA 98003 CONTACT: DESIREE WINKLER PH. (253)835.2711

CIVIL ENGINEER

2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: BILL FIERST P.E. PRINCIPAL PH. (253).383.2422

ARCHITECT

HELIX DESIGN GROUP 6021 12TH STREET EAST, SUITE 201 FIFE, WASHINGTON, 98424-1376 CONTACT: JEFF RYAN

SURVEYOR

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: DAVID FOLLANSBEE PLS. PRINCIPAL

LANDSCAPE ARCHITECT

2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: SARAH SINGLETON SCHROEDEL

GEOTECHNICAL ENGINEER

201 160TH STREET SOUTH #401 SPANAWAY, WA 98387 CONTACT: JAMES BRIGHAM, P.E. PH. (253).537.9400

UTILITY NOTE

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT INCUR DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. AHBL ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND

TOPOGRAPHIC NOTE

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, AHBL CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

AUTOCAD FILE:

AN AUTOCAD DRAWING FILE IS AVAILABLE TO ASSIST WITH SITE LAYOUT. PLEASE NOTE THAT ELECTRONIC SEE TOPOGRAPHIC SURVEY. FILES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE AND SHALL NOT REPLACE NOR BE USED TO SUBSTITUTE THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT LAYOUT ACCORDING TO CONTRACT DOCUMENTS AND COST FOR ELECTRONIC AUTOCAD FILES. PHONE: (253) 383-2422

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND AHBL ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW. CHAPTER 49.17 RCW.

SITE DATA

APPROX. PROJECT AREA: 11.08 ACRES (482,450 SF) TOTAL LOT AREA: 13.53 ACRES (589,563 SF) EX. SITE IMPERVIOUS AREA: 4.13 ACRES (179,743 SF) REPLACED IMPERVIOUS AREA 0 ACRES (0 SF) NEW IMPERVIOUS AREA: 6.63 ACRES (288,629 SF) TOTAL ONSITE IMPERVIOUS AREA (POST-DEVELOPMENT): 6.63 ACRES (288,629 SF) MAXIMUM LOT COVERAGE:

EARTHWORK QUANTITIES

CUT=	21,191 CY
FILL=	37,853 CY
NET IMPORT/EXPORT=	16,662 CY FILL
TOTAL EARTHWORK=	59,044 CY

NOTE: THE ABOVE QUANTITIES ARE ESTIMATES ONLY INTENDED TO THE PERMITTING PROCESS AND ARE NOT INTENDED TO BE USED BY THE CONTRACTOR FOR BIDDING PURPOSES. THE CONTRACTOR SHALL MAKE THEIR OWN EARTHWORK DETERMINATION.

UTILITIES/SERVICES

LAKEHAVEN UTILITY DISTRICT LAKEHAVEN UTILITY DISTRICT SEWER: PUGET SOUND ENERGY POWER: TELEPHONE: CENTURYLINK

VERTICAL DATUM

LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06'

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY - STEEL

BASIS OF BEARING

NAD 1983/11 WASHINGTON STATE PLANE NORTH PROJECTION, BASED ON GPS OBSERVATIONS USING WSRN AND GEOID 2012A. UNITS OF MEASUREMENT ARE US SURVEY FEET.

LEGAL DESCRIPTION

SITE ADDRESS 31016 28TH AVENUE SOUTH

FEDERAL WAY, WA. 98003 PARCEL NUMBERS: 0921049026, 0921049198, 0921049250, 0921049009, 0921049170, 0921049085, 0921049115, 0921049095, 0921049240, 0921049239, 0921049329, 0921049084, 0921049075, 0921049314

CONSTRUCTION SPECIFICATION

CONSTRUCTION SHALL BE PERFORMED CONFORMING TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 2021 STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.

EXISTING LEGEND:

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TING	LEGEND:	Thurch of Christ
		s acon s at Federal Way Wildwood Park
7	SET NAIL AND WASHER	♥ Elementary School
)	FOUND REBAR AND CAP	Construction Group C
	BOLLARD	Deka Family Daycare O
3	MAIL BOX	New Horizons Moving Company
L	SIGN AS NOTED	\$ 304th \$1
	SANITARY SEWER MANHOLE	Park Plumbing 0
	SANITARY SEWER CLEANOUT	And Fulling V
]	STORM CATCH BASIN	Steel Lake
	STORM MANHOLE	Steel Lake boat launch Lakeside Window
	ROOF DRAIN	S 2084/ St Cleaning S 309h St O
	CABLE RISER	PRO.
	GAS METER	SITE Montess
1	GAS VALVE	S.31MhSt.
	GATE POST	Alicen Lum Photography Call Us for Information Candidate Steel Kan Propul Fig.
7	POWER TRANSFORMER	Lake Park at Steel Lake
_	GUY ANCHOR	hI CSL Plasma
-	UTILITY POWER POLE	S 314th St S On Carper Anadomy of S
Ď	POWER METER	Career Academy at P
)	FIRE HYDRANT	VICINITY MAP
×	IRRIGATION CONTROL VALVE	

SHEET	LIST TABLE
Sheet Number	Sheet Title
C100	COVER SHEET
C101	TESC AND DEMOLITION PLAN
C102	TESC AND DEMOLITION PLAN
C103	TESC AND DEMOLITION PLAN
C104	TESC AND DEMOLITION PLAN
C105	TESC AND DEMOLITION NOTES AND DETAILS
C106	TESC AND DEMOLITION NOTES AND DETAILS
C200	OVERALL GRADING AND STORM DRAINAGE PLAN
C201	GRADING AND STORM DRAINAGE PLAN
C202	GRADING AND STORM DRAINAGE PLAN
C203	GRADING AND STORM DRAINAGE PLAN
C204	GRADING AND STORM DRAINAGE PLAN
C205	GRADING SECTIONS
C206	GRADING SECTIONS
C300	OVERALL PAVING AND HORIZONTAL CONTROL PLAN
C301	PAVING AND HORIZONTAL CONTROL PLAN
C302	PAVING AND HORIZONTAL CONTROL PLAN
C303	PAVING AND HORIZONTAL CONTROL PLAN
C304	PAVING AND HORIZONTAL CONTROL PLAN
C401	COMPOSITE UTILITIES PLAN
C501	NOTES AND DETAILS
C502	NOTES AND DETAILS
C503	NOTES AND DETAILS
C504	NOTES AND DETAILS
C505	NOTES AND DETAILS
W100	WATER COVER SHEET
W101	WATER SITE PLAN
W201	28TH AVE S WATER PLAN AND PROFILE
W202	28TH AVE S WATER PLAN AND PROFILE
W203	28TH AVE S WATER PLAN AND PROFILE
W301	WATER PLAN AND PROFILE
W302	WATER PLAN AND PROFILE
W303	WATER PLAN AND PROFILE
W304	WATER PLAN AND PROFILE
W305	WATER PLAN AND PROFILE
SS100	SEWER COVER SHEET
SS101	SEWER DEMOLITION PLAN
SS200	SEWER PLAN AND PROFILE
SS201	SEWER PLAN AND PROFILE
SS202	SEWER PLAN AND PROFILE
SS203	SEWER PLAN AND PROFILE
SS300	SEWER NOTES AND DETAILS

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PERMIT	NO.	24-101093-EN
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S 312 TH ST

BLDG A -

OPERATIONS BUILDING

> **GRAPHIC SCALE** 1" = 80 FEET

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EXISTING FEATURES SOUTH OF THIS LINE SHALL REMAIN IN PLACE UNTIL **NEW FACILITIES ARE CONSTRUCTED**

A=APPLE, B=BIRCH, F=FIR, P=PINE, HA=HAWTHORNE HO=HOLLY, M=MAPLE, O=OAK, U= UNKNOWN --- \bigcirc -- STORM LINE - - - S - - SANITARY SEWER LINE - — G — -GAS LINE

ELECTRICAL LINE COMMUNICATIONS LINE WATER LINE IRRIGATION PER RECORD DRAWING - - OHP - OVERHEAD UTILITIES

HOSE BIB

WATER METER

WATER VALVE

HVAC UNIT

CONCRETE ASPHALT — —XXX— — CONTOUR MAJOR INTERVAL - - -XXX- - CONTOUR MINOR INTERVAL — — — PROPERTY / RIGHT-OF-WAY LINE

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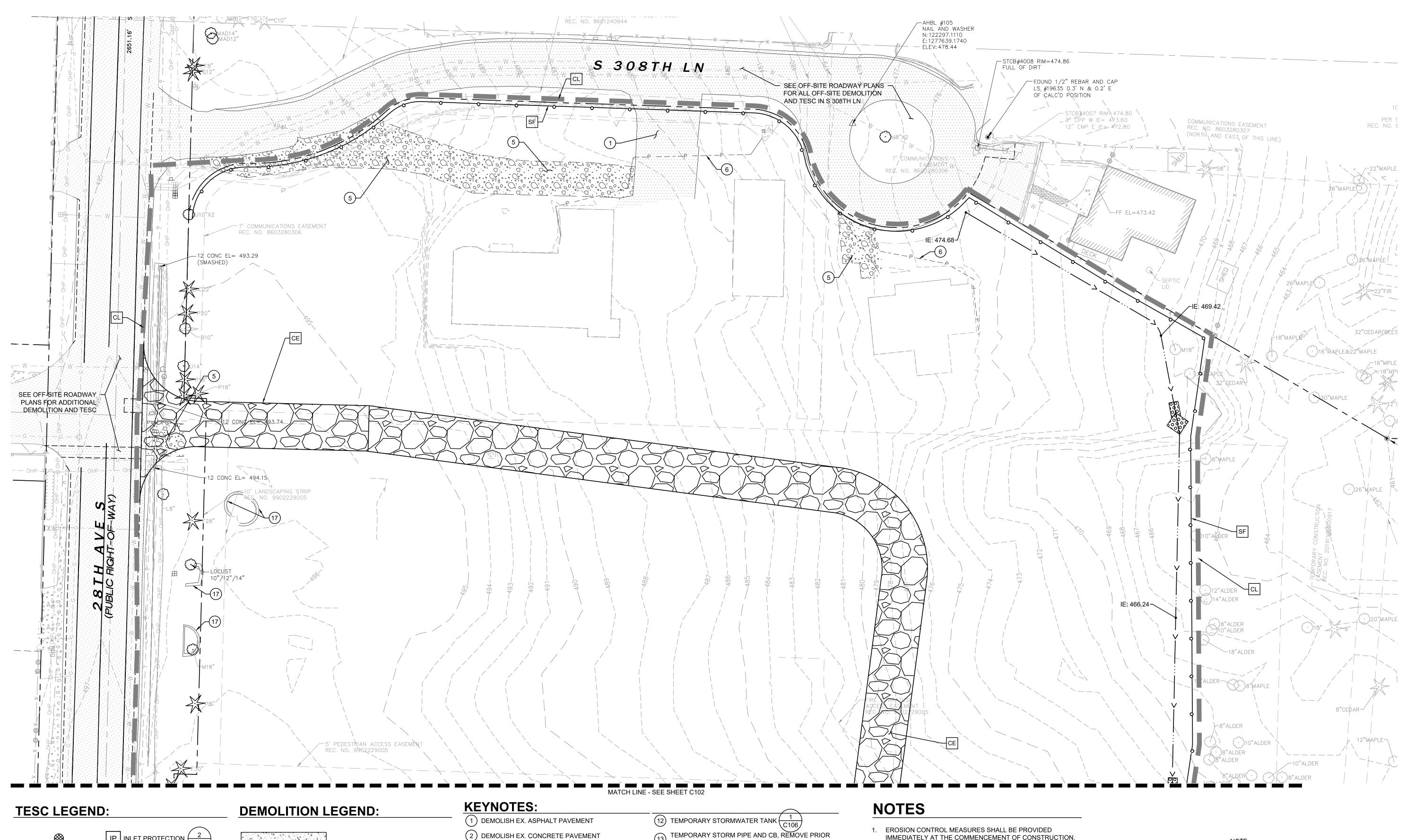


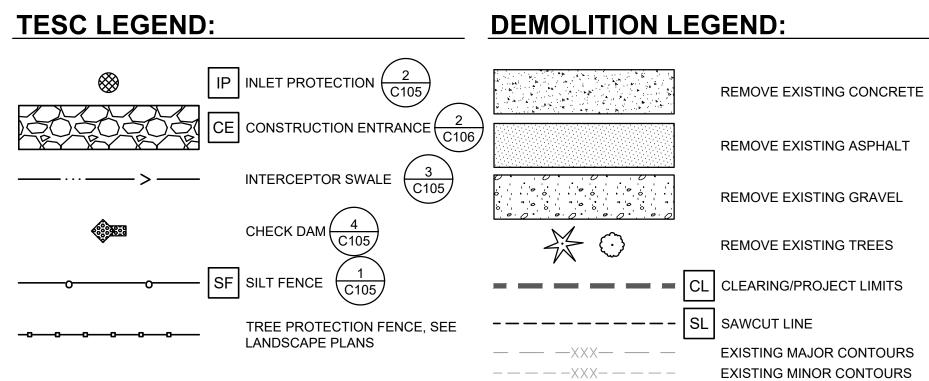
TESC AND DEMOLITION PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

	FEDERAL WAY, V	WASHINGTON
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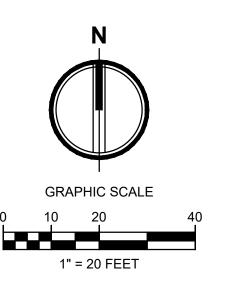
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- 3 DEMOLISH EX. FENCE
- (4) DEMOLISH EX. BUILDING AND ALL APPURTENANCES
- 5) DEMOLISH EX. GRAVEL SURFACING
- 6 DEMOLISH EX. ELECTRICAL CONDUIT OR ELECTRICAL STRUCTURE
- DEMOLISH EX. SANITARY SEWER STRUCTURE AND ASSOCIATED SANITARY SEWER PIPE
- 8 DEMOLISH EX. CATCH BASIN
- 9 DEMOLISH EX. STORM LINE
- 10) DEMOLISH EX. GAS LINE

11) DEMOLISH EX. SITE FEATURE

- TEMPORARY STORM PIPE AND CB, REMOVE PRIOR TO PROJECT COMPLETION (14) TEMPORARY DISPERSION TRENCH (C505)
- 15) DEMOLISH EX. GAS METER
- (16) DEMOLISH EX. GATE
- (17) DEMOLISH EX. WALL
- (18) PUMP AND PIPE STORMWATER TO BAKER TANKS. THE CONTRACTOR SHALL PROVIDE THE PUMPS AND PIPES NECESSARY TO PUMP STORMWATER TO BAKER TANKS.
- EXISTING TREE CRITICAL ROOT ZONE: NO EQUIPMENT, EXCAVATION, OR STORAGE OF MATERIALS WITHIN TREE PROTECTION FENCE. SEE LANDSCAPE PLANS.
- IMMEDIATELY AT THE COMMENCEMENT OF CONSTRUCTION. SEE EROSION CONTROL NOTES ON SHEET C105 FOR ADDITIONAL INFORMATION.
- 2. HYDROSEED SHALL BE APPLIED TO ALL DISTURBED AREAS PER HYDROSEED NOTES ON SHEET C105.
- 3. EROSION CONTROL MEASURES ARE NOT LIMITED TO THE
- ITEMS SHOWN. 4. DEMOLISH TEMPORARY STRUCTURES AND PIPES AT THE
- COMPLETION OF THE PROJECT. 5. SEE LANDSCAPE ARCHITECTURE PLANS FOR TREE PROTECTION FENCE.
- 6. THE CONTRACTOR SHALL ENSURE SEDIMENT LADEN AND TURBID STORMWATERS ARE NOT RELEASED FROM THE SITE. THE CONTRACTOR SHALL ADJUST STORMWATER MEASURES TO ENSURE NO SUCH RELEASES OCCUR.

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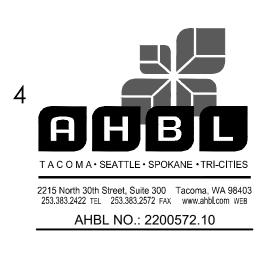


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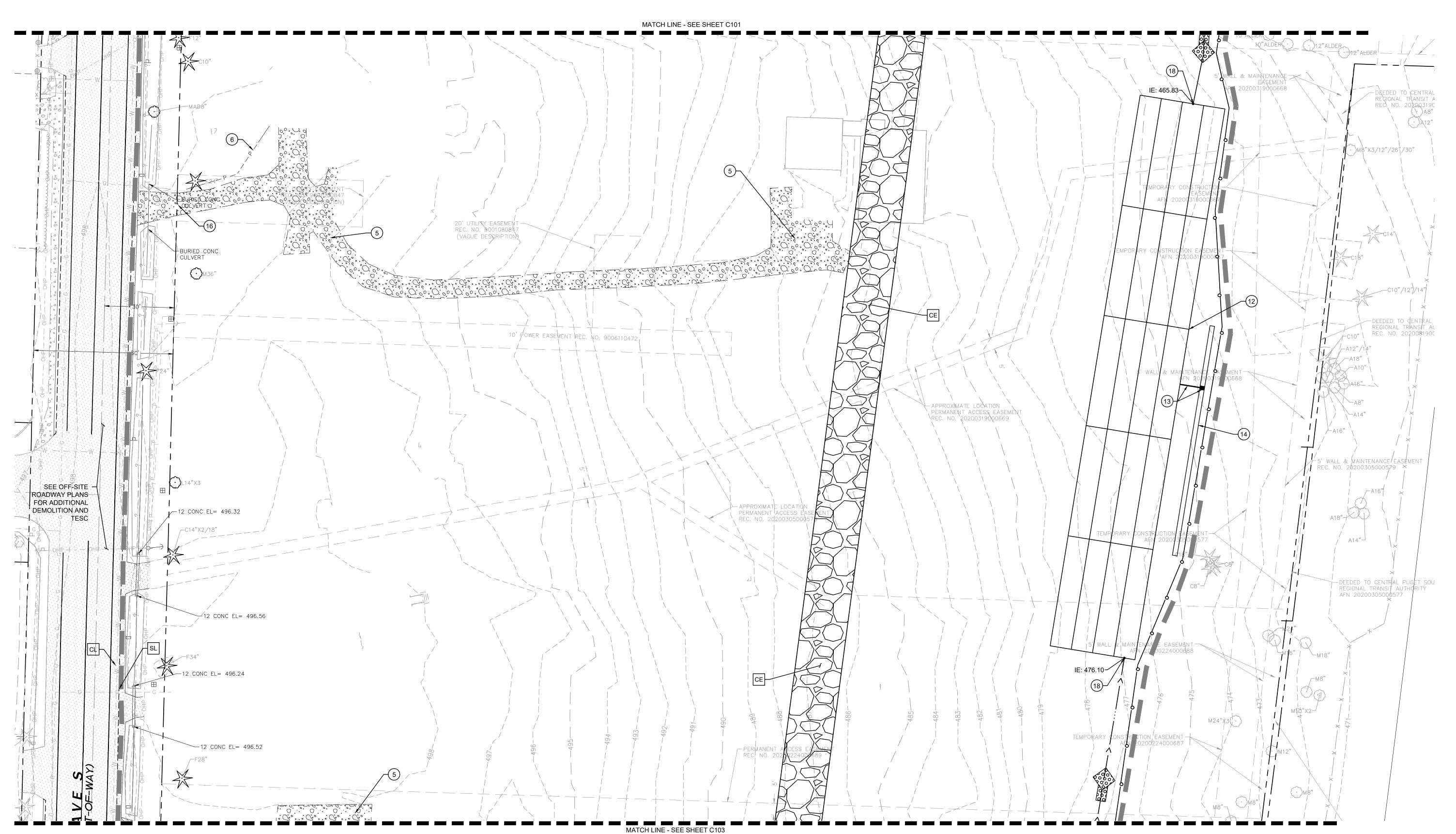
TESC AND DEMOLITION PLAN

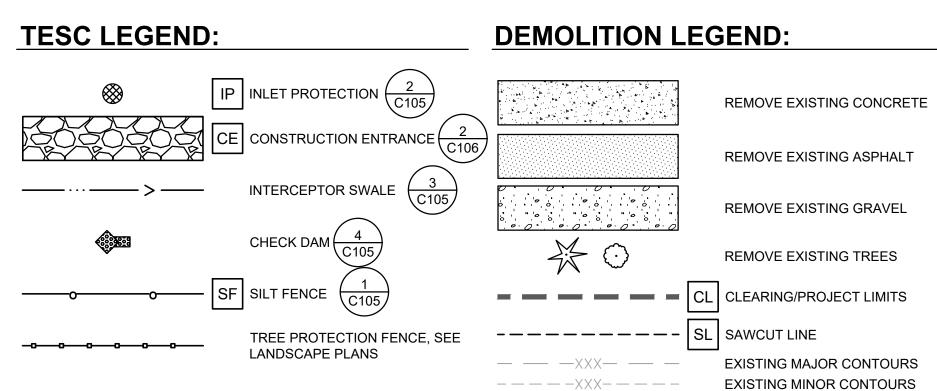
CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

a23-087

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KEYNOTES:

- (1) DEMOLISH EX. ASPHALT PAVEMENT
- (2) DEMOLISH EX. CONCRETE PAVEMENT
- 3 DEMOLISH EX. FENCE
- (4) DEMOLISH EX. BUILDING AND ALL APPURTENANCES 5) DEMOLISH EX. GRAVEL SURFACING
- 6 DEMOLISH EX. ELECTRICAL CONDUIT OR ELECTRICAL STRUCTURE
- DEMOLISH EX. SANITARY SEWER STRUCTURE AND ASSOCIATED SANITARY SEWER PIPE
- 8 DEMOLISH EX. CATCH BASIN
- 9 DEMOLISH EX. STORM LINE
- 10) DEMOLISH EX. GAS LINE

11) DEMOLISH EX. SITE FEATURE

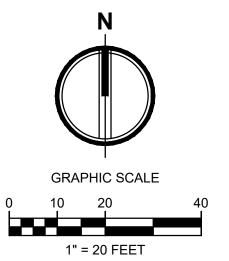
- 12) TEMPORARY STORMWATER TANK $\left(\frac{1}{C106}\right)$
- TEMPORARY STORM PIPE AND CB, REMOVE PRIOR TO PROJECT COMPLETION (14) TEMPORARY DISPERSION TRENCH (C505)
- 15) DEMOLISH EX. GAS METER
- (16) DEMOLISH EX. GATE
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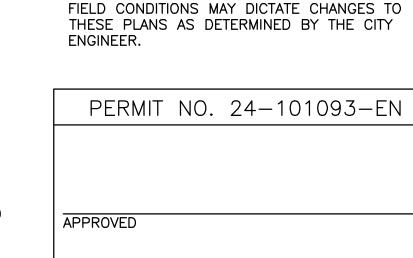
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ON THESE PLANS.

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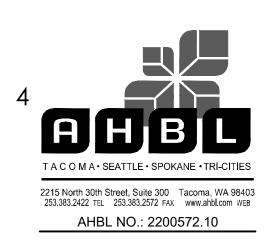
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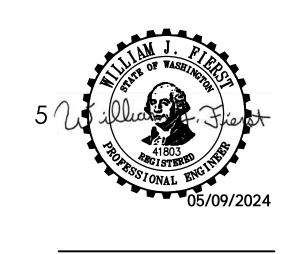
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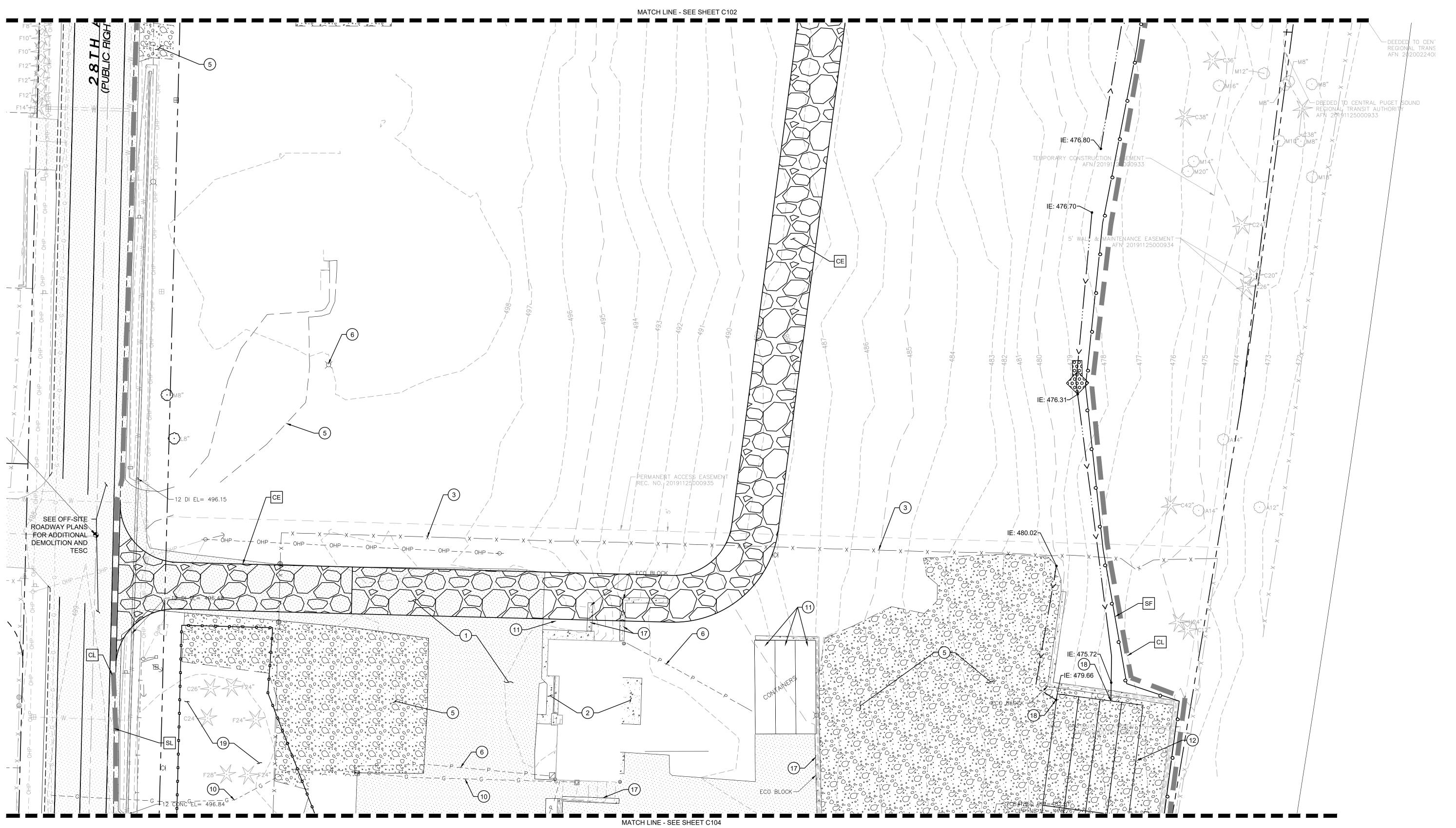
TESC AND DEMOLITION PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

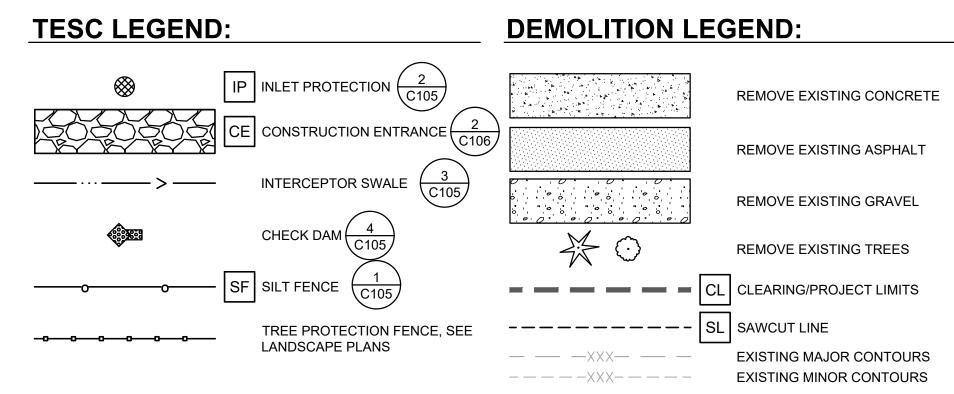
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KEYNOTES:

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(18) PUMP AND PIPE STORMWATER TO BAKER TANKS.

THE CONTRACTOR SHALL PROVIDE THE PUMPS AND

(12) TEMPORARY STORMWATER TANK $\left(\frac{1}{C106}\right)$

(14) TEMPORARY DISPERSION TRENCH (C505)

15) DEMOLISH EX. GAS METER

(16) DEMOLISH EX. GATE

17) DEMOLISH EX. WALL

TEMPORARY STORM PIPE AND CB, REMOVE PRIOR TO PROJECT COMPLETION

NOTES

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- 3. EROSION CONTROL MEASURES ARE NOT LIMITED TO THE ITEMS SHOWN.
- COMPLETION OF THE PROJECT. 5. SEE LANDSCAPE ARCHITECTURE PLANS FOR TREE

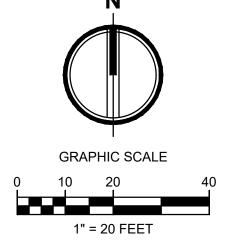
TO ENSURE NO SUCH RELEASES OCCUR.

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THE CONTRACTOR SHALL ADJUST STORMWATER MEASURES



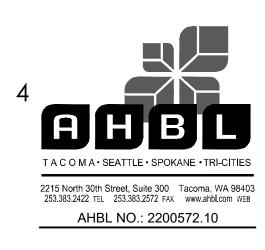
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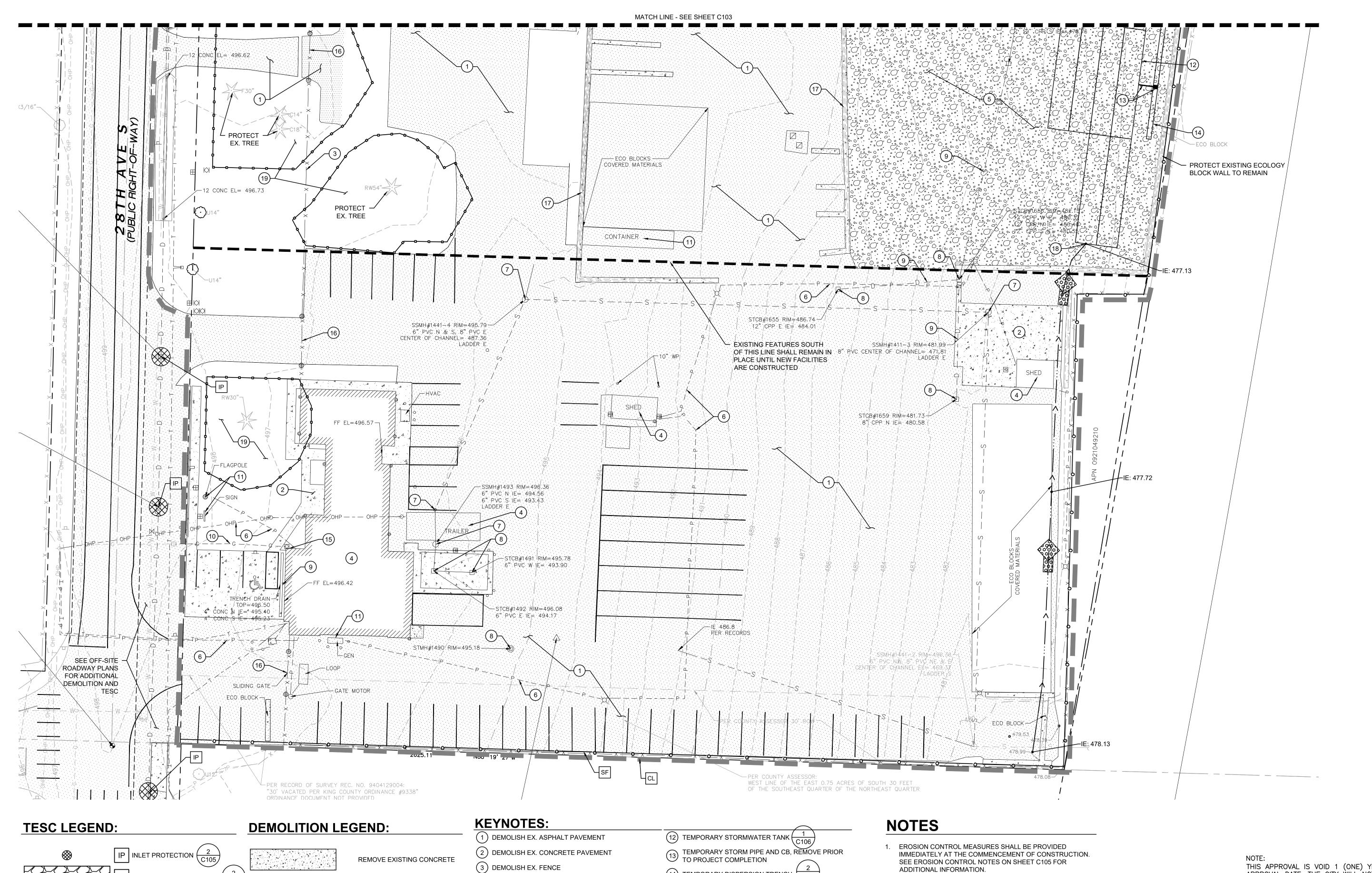


TESC AND DEMOLITION PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

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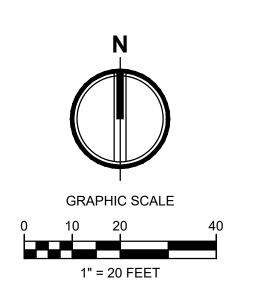
CONSTRUCTION ENTRANCE $\frac{2}{C106}$ REMOVE EXISTING ASPHALT INTERCEPTOR SWALE $\frac{3}{(C105)}$ REMOVE EXISTING GRAVEL REMOVE EXISTING TREES - CL CLEARING/PROJECT LIMITS LANDSCAPE PLANS — — —XXX— — EXISTING MAJOR CONTOURS ----

- (4) DEMOLISH EX. BUILDING AND ALL APPURTENANCES
- (5) DEMOLISH EX. GRAVEL SURFACING
- 6 DEMOLISH EX. ELECTRICAL CONDUIT OR ELECTRICAL STRUCTURE
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11) DEMOLISH EX. SITE FEATURE

- 10) DEMOLISH EX. GAS LINE

- (14) TEMPORARY DISPERSION TRENCH (C505)
- 15) DEMOLISH EX. GAS METER
- (16) DEMOLISH EX. GATE
- 17) DEMOLISH EX. WALL
- (18) PUMP AND PIPE STORMWATER TO BAKER TANKS. THE CONTRACTOR SHALL PROVIDE THE PUMPS AND PIPES NECESSARY TO PUMP STORMWATER TO BAKER TANKS.
- EXISTING TREE CRITICAL ROOT ZONE: NO EQUIPMENT, EXCAVATION, OR STORAGE OF MATERIALS WITHIN TREE PROTECTION FENCE. SEE LANDSCAPE PLANS.
- 2. HYDROSEED SHALL BE APPLIED TO ALL DISTURBED AREAS
- PER HYDROSEED NOTES ON SHEET C105.
- 3. EROSION CONTROL MEASURES ARE NOT LIMITED TO THE ITEMS SHOWN.
- 4. DEMOLISH TEMPORARY STRUCTURES AND PIPES AT THE COMPLETION OF THE PROJECT.
- 5. SEE LANDSCAPE ARCHITECTURE PLANS FOR TREE PROTECTION FENCE.
- 6. THE CONTRACTOR SHALL ENSURE SEDIMENT LADEN AND TURBID STORMWATERS ARE NOT RELEASED FROM THE SITE. THE CONTRACTOR SHALL ADJUST STORMWATER MEASURES TO ENSURE NO SUCH RELEASES OCCUR.



THIS APPROVAL IS VOID 1 (ONE) YEAR AFTER APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE CITY ENGINEER.

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NOTES

- 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 SIX-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
- 2. THE SILT FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS (WHERE FEASIBLE). THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12")

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- 3. A TRENCH SHALL BE EXCAVATED, ROUGHLY FOUR INCHES WIDE AND FOUR INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
- 4. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND EIGHT INCHES OF THE FILTER FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN THIRTY SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
- THE TRENCH SHALL BE BACKFILLED WITH NATIVE MATERIAL OR 3/4" TO 1-12"
- 6. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY
- 7. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- 8. GEOTEXTILE FOR HIGH VISIBILITY SILT FENCE SHALL BE COLOR ORANGE, SEE WSDOT STANDARD SPECIFICATION SECTION 9-33.2 (1), TABLE 6.

CONTOURS WHENEVER POSSIBLE

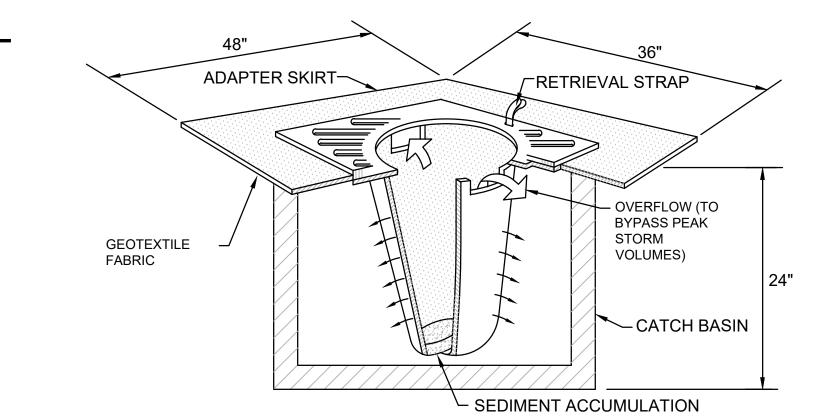
CITY OF FEDERAL WAY TESC NOTES

- 1. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (I.E. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- 2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- 3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR 12. WET SEASON REQUIREMENTS AS DESCRIBED IN APPENDIX D, SECTION D.2.4.2 OF THE FOR THE DURATION OF CONSTRUCTION.
- WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
- 5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (I.E. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS.
- 6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 7. ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED OR A PERIOD OF 2 DAYS (WET SEASON) OR 7 DAYS (DRY SEASON), SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (I.E. SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC.)
- 8. ANY AREA NEEDING ESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN 15 DAYS.

- 9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
- 10. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- 11. STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- KCSWDM ARE IN EFFECT BEGINNING OCTOBER 1 THROUGH APRIL 30.
- 4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION 13. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL STANDARD PLAN NOTES REV. 07-2017 PAGE 5 OF 7 NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANKS OR VAULTS SHALL BE USED AS A TEMPORARY SETTLING BASIN.
 - 14. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (I.E. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
 - 15. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF TWO INCHES.
 - 16.MANAGEMENT PRACTICES PROVIDING SIGNIFICANT TREE PROTECTION SHALL BE

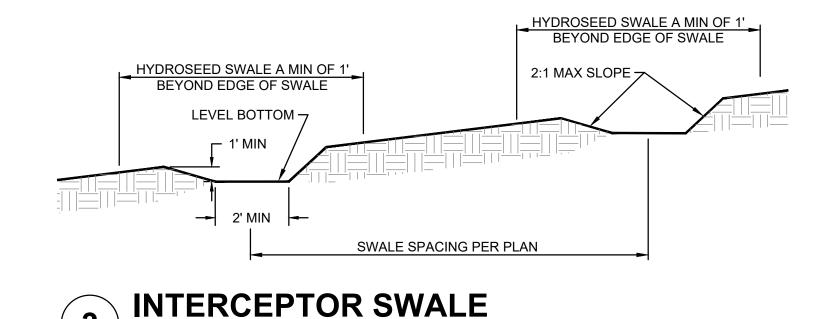
PROVIDED PER SECTION 19.120 OF FWRC.

1. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN 1/3 FULL. 2. INSTALL INLET PROTECTION IN ALL NEW STORM STRUCTURES THAT WILL



COLLECT STORMWATER AS THEY ARE INSTALLED.

CATCH BASIN INLET PROTECTION



HYDROSEEDING NOTES

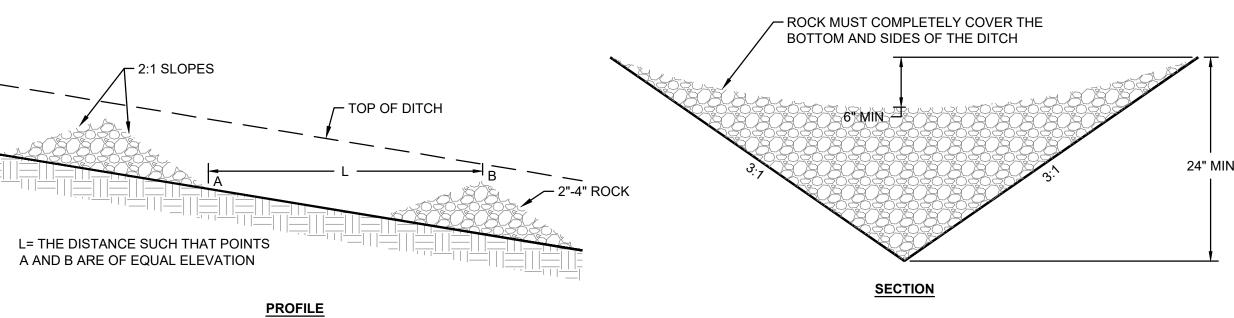
- 1. HYDROSEEDING SHALL BE APPLIED TO ALL DISTURBED NON-PAVED SURFACES, UNLESS
- 2. HYDROSEEDING SHALL CONSIST OF BENTGRASS AND SHALL BE APPLIED AT A RATE OF
- 3. HYDROSEED SHALL INCLUDE A MINIMUM OF 1500 LBS/ACRE OF MULCH WITH 3%

TACKIFIER. IT SHALL ALSO INCLUDE A 10-4-6 FERTILIZER AT A RATE OF 90 LBS/ACRE.

- 4. SEED BEDS PLANTED BETWEEN MAY 1 AND OCTOBER 31 WILL REQUIRE IRRIGATION AND OTHER MAINTENANCE AS NECESSARY TO FOSTER AND PROTECT THE ROOT
- 5. FOR SEED BEDS PLANTED BETWEEN OCTOBER 31 AND APRIL 30, ARMORING OF THE SEED BED WILL BE NECESSARY TO FOSTER AND PROTECT THE ROOT STRUCTURE (E.G. GEOTEXTILES, JUTE MAT, CLEAR PLASTIC COVERING).
- 6. BEFORE SEEDING, INSTALL ALL REQUIRED SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, INTERCEPTOR DIKES, SWALES, AND SEDIMENTATION
- 7. THE SEED BED SHALL BE FIRM WITH A FAIRLY FINE SURFACE, FOLLOWING SURFACE ROUGHENING. PERFORM ALL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE
- 8. FERTILIZERS ARE TO BE USED ACCORDING TO SUPPLIERS RECOMMENDATIONS AMOUNTS USED SHOULD BE MINIMIZED, ESPECIALLY ADJACENT TO WATER BODIES AND
- 9. HYDROSEED SHALL NOT BE APPLIED TO AREAS SUBJECT TO WEAR BY CONSTRUCTION

PLASTIC COVERING NOTES

- 1. PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MILS AND SHALL MEET THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 9-14.5(3).
- 2. COVERING SHALL BE INSTALLED AND MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10-FOOT GRID SPACING IN ALL DIRECTIONS. ALL SEAMS SHALL BE TAPED OR WEIGHTED DOWN FULL LENGTH. SEAMS SHALL HAVE AT LEAST A 12 INCH OVERLAP.
- CLEAR PLASTIC COVERING SHALL BE INSTALLED IMMEDIATELY ON AREAS SEEDED BETWEEN NOVEMBER 1 AND MARCH 31 AND REMAIN UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- 4. WHEN COVERING IS USED ON UN-SEEDED SLOPES, IT SHALL BE KEPT IN PLACE UNTIL THE NEXT SEEDING PERIOD.
- 5. PLASTIC COVERING SHALL BE BURIED TWO FEET AT THE TOP OF SLOPES IN ORDER TO PREVENT SURFACE WATER FLOW BENEATH SHEETS.
- PROPER MAINTENANCE OF COVERING INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, REGULAR CHECKS FOR AND REPAIRS OF RIPS AND DISLODGED ENDS.



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ROCK CHECK DAM

CONSTRUCTION SEQUENCE

- 1. ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH CITY OF FEDERAL WAY, OWNER, CONTRACTOR, ESC LEAD, AND ENGINEER. STAKE CLEARING LIMITS PRIOR TO THIS MEETING.
- 2. POST NOTICE OF CONSTRUCTION ACTIVITY SIGN WITH NAME AND PHONE NUMBER OF ESC LEAD.
- 3. FENCE CLEARING LIMITS AND TREE PROTECTION AREAS. FLAG WETLAND BUFFER LIMITS.
- 4. INSTALL CATCH BASIN SEDIMENT PROTECTION.
- 5. INSTALL PERIMETER PROTECTION (SILT FENCE, OR OTHER MEASURES) WHERE SPECIFIED ON THE ESC PLAN AND/OR REQUIRED BY THE CITY INSPECTOR.
- 6. GRADE AND STABILIZE CONSTRUCTION ENTRANCE(S).
- 7. GRADE AND STABILIZE CONSTRUCTION ROAD(S).

8. CLEAR AND GRUB WITHIN CONSTRUCTION LIMITS.

- 9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR SWALES, CHECK DAMS, TEMPORARY SEDIMENT POND, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- 10. PROVIDE PLASTIC COVERING ON ALL EXPOSED SLOPES 5H:1V OR GREATER. ALL FILLS MUST BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- 11. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF AUBURN STANDARDS, NPDES PERMIT AND EROSION AND SEDIMENT
- 12. RELOCATE SURFACE WATER CONTROLS AND EROSION CONTROL MEASURES OR INSTALL NEW MEASURES, SO THAT, AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY OF AUBURN EROSION AND SEDIMENT CONTROL REQUIREMENTS.

- 13. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS. THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON (OCT 1 TO APR 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) SHALL BE IMMEDIATELY STABILIZED WITH THE ÀPPROVED ESC MÉASURES.
- 14. ROUGH GRADE SITE.
- 15. CONSTRUCT PERMANENT STORMWATER FACILITIES. 16. CONSTRUCT ALL OTHER SITE IMPROVEMENTS.
- 17. SEED OR SOD ANY AREA TO REMAIN UNWORKED FOR MORE THAN 30
- 18. UPON SUBSTANTIAL COMPLETION, ALL DISTURBED AREAS MUST BE STABILIZED. EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL APPROVAL IS OBTAINED FROM THE CITY OF

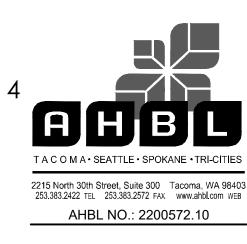
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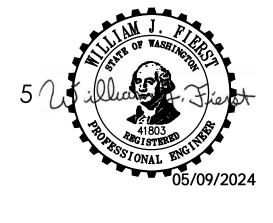
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DEMOLITION NOTES AND

DETAILS

CITY OF FEDERAL WAY **MAINTENANCE FACILITY** FEDERAL WAY, WASHINGTON

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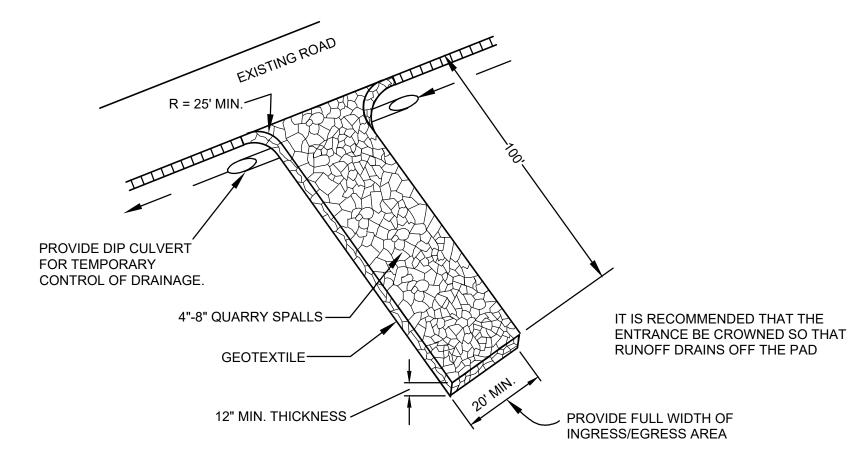
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TEMPORARY STORMWATER TANKS

MOST TANKS OF THIS TYPE HAVE AN INTERNAL LINING (COATING).

LOCATIONS, SIZES AND QUANTITIES. CONSULT YOUR LOCAL BAKER REPRESENTATIVE IF SPECIFIC NEEDS EXIST.

THIS TANK IS TO BE TRANSPORTED WHILE EMPTY ONLY. IT IS NOT DESIGNED TO TRANSPORT LOADS.



MAINTENANCE STANDARDS

- . QUARRY SPALLS SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
- 3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
- 4. ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- 5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING SHALL BE INSTALLED TO CONTROL TRAFFIC.

CONSTRUCTION ENTRANCE

DEMOLITION NOTES

1. DEMOLITION: IT IS THE INTENT OF THE WORK UNDER THIS CONTRACT TO INCLUDE THE DEMOLITION OF ALL EXISTING BUILDINGS, PAVING, UTILITIES AND OTHER EXISTING SITE IMPROVEMENTS INCLUDING THEIR UNDERGROUND COMPONENTS AS INDICATED BY THIS DRAWING AND AS REQUIRED FOR NEW CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FULLY REVIEW THE SITE CONDITIONS AND TO CORRELATE THESE OBSERVATIONS WITH THE PROJECT WORK AND INCLUDE ALL NECESSARY DEMOLITION, WHETHER SHOWN OR NOT, AND INCLUDE ALL SUCH COSTS IN THE BASE BID.

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- . CLEARING: IT IS THE INTENT OF THE WORK UNDER THIS CONTRACT TO CONDUCT ALL CLEARING NECESSARY TO BE ABLE TO COMPLETE ALL THE WORK OF THIS
- . CONTRACTOR SHALL LEGALLY DISPOSE OF THE OWNER'S PROPERTY, ALL DEMOLISHED AND REMOVED MATERIALS, UNLESS INDICATED OTHERWISE.
- 4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR FOR ENSURING THAT ALL UTILITIES HAVE BEEN DISCONNECTED PRIOR TO COMMENCING DEMOLITION. CONTRACTOR SHALL COORDINATE UTILITY DEMOLITION WITH NEW CONSTRUCTION.
- 5. COORDINATE POWER DEMOLITION WITH UTILITY PURVEYOR AND ELECTRICAL PLANS. CONTRACTOR TO ENSURE THAT DEMOLITION OF LINES WILL NOT COMPROMISE POWER TO OTHER AREAS.
- 6. GAS DISCONNECTION BY UTILITY PURVEYOR CONTRACTOR TO COORDINATE WORK WITH P.S.E. CONTRACTOR TO DEMOLISH ABANDONED SERVICE. CONTRACTOR TO ENSURE THAT DEMOLITION OF GAS LINES WILL NOT IMPACT GAS SERVICE TO OTHER AREAS. NO DISRUPTION IN SERVICE ALLOWED.
- 7. ANY ABANDONED SIDE SEWER(S) SHALL BE PLUGGED OR CAPPED AS SHOWN.
- 8. UTILITIES TO BE ABANDONED SHALL BE CAPPED. CONTRACTOR SHALL AS-BUILT LOCATION.
- 9. REFER TO LANDSCAPE ARCHITECTURE DRAWINGS FOR TREE PROTECTION REQUIREMENTS.
- 10. ALL MONUMENTS DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED PER WAC 332-120 AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL APPLY FOR PERMIT FROM THE DEPARTMENT OF NATURAL RESOURCES AS NECESSARY.
- 11. CONTRACTOR SHALL ENSURE THAT ADEQUATE FIRE PROTECTION ACCESS IS PROVIDED TO SITE AND EXISTING STRUCTURES TO REMAIN. CONTRACTOR SHALL ALSO PROVIDE ADEQUATE FIRE PROTECTION FOR THE NEW BUILDINGS AND EXISTING BUILDING TO REMAIN.
- 12. REPAIR PAVING OUTSIDE CLEARING LIMITS IF DAMAGED DURING CONSTRUCTION.
- 13. CONTRACTOR SHALL MINIMIZE DUST GENERATION ONSITE BY SPRINKLING THE SITE WITH WATER UNTIL SURFACE IS WET. SEE BMP C140.

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FIELD CONDITIONS MAY DICTATE CHANGES TO

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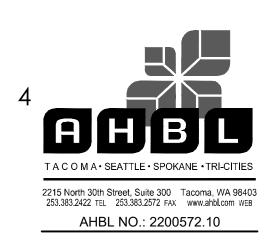
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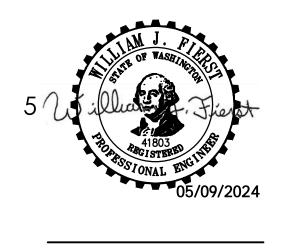
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TESC AND DEMOLITION **NOTES AND** DETAILS

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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P.J.B.

7/12/05 Z.E.R DRAWING NO.

FIXED TEXT AND CUT-OUTS

DESCRIPTION

WADE SINGLE WALL FIXED AXLE TANK

1 OF 1
WITH GEL LINE & MANIFOLD

S-2-M0010-1-A

110-1250

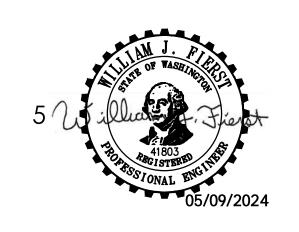
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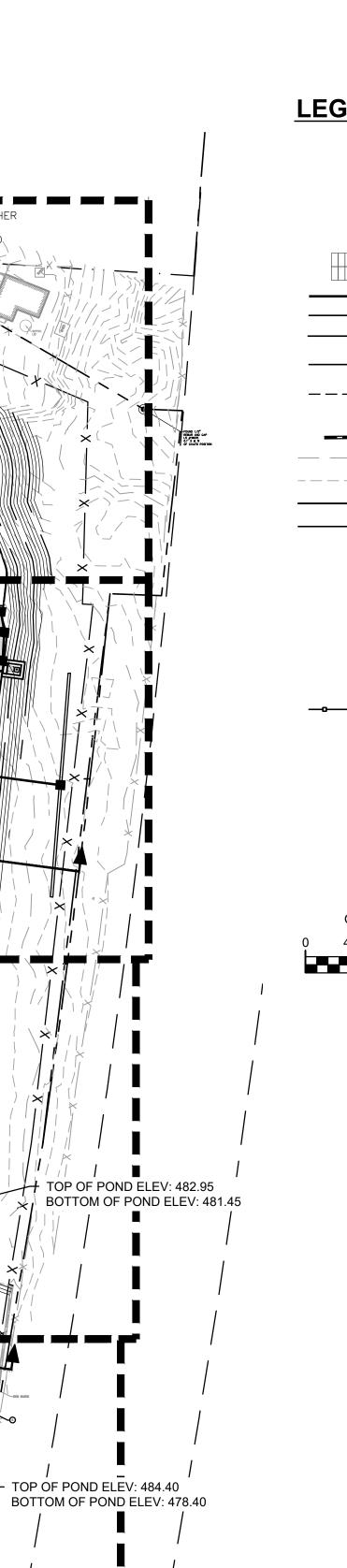
OVERALL GRADING AND STORM DRAINAGE PLAN

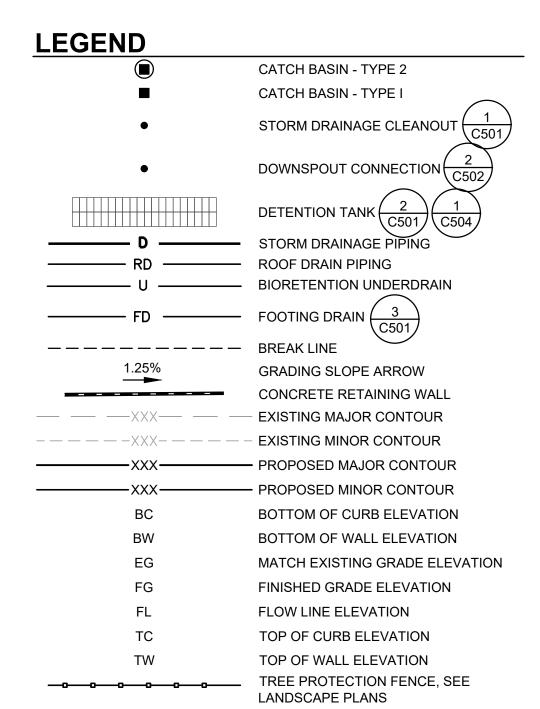
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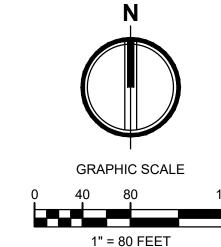
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GENERAL NOTES:

1. SEE ARCHITECTURAL SITE PLANS FOR ADDITIONAL SITE FEATURES INCLUDING BOLLARDS, FLAG POLE FOUNDATION, MONUMENT SIGN FOUNDATION, AND SITE FENCING AND GATES.

- 2. FOR BEDDING AND BACKFILL PIPE TRENCHES DETAIL SEE DETAIL 3 ON SHEET C502.
- 3. SPOT ELEVATIONS AND CONTOURING SHOWN REPRESENT FINISH GRADE ELEVATIONS. FINISH GRADE ELEVATIONS ARE FOR BOTTOM OF CURB UNLESS OTHERWISE NOTED. SUBGRADE ELEVATIONS WILL VARY DEPENDING UPON TYPE OF SURFACING REQUIRED. REFER TO SPECIFICATIONS FOR TOPSOIL AND MULCH DEPTHS.
- 4. MATCH EXISTING GRADES AT INTERFACE WITH EXISTING SURFACING. VERIFY EXISTING GRADES AT INTERFACE PRIOR TO ORDERING MATERIALS AND
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO CONSTRUCTION ACTIVITIES. CONTACT ENGINEER IF PROPOSED GRADES ARE BELIEVED TO BE IN ERROR.
- 6. SEE SHEET C501 FOR CITY OF FEDERAL WAY DRAINAGE NOTES AND GENERAL NOTES. SEE SHEET C105 FOR CONSTRUCTION SEQUENCE.
- 7. FINISHED GRADES ARE INDICATED. CONTRACTOR SHALL EXCAVATE AND FILL TO ACHIEVE PROPER SUBGRADES.

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- 8. ALL FILL MATERIALS SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 9. ALL FOOTING DRAINS SHALL BE 4-INCH IN DIAMETER PERFORATED PVC AND PLACED AROUND ALL PROPOSED BUILDINGS. FOOTING DRAINS SHALL CONNECT INTO STORM DRAIN CATCH BASIN. FOOTING DRAINS PER DETAIL 3 ON SHEET C501.
- 10. ROOF DRAIN MAIN LINES SHALL BE 8-INCH PVC PIPE AT A MINIMUM 1 PERCENT SLOPE UNLESS OTHERWISE INDICATED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE NEAREST TO STORM DRAINS OR DIRECTLY TO DETENTION SYSTEM. ALL ROOF DRAINS SHALL BE CONNECTED TO A STORM DRAINAGE CATCH BASIN OR DIRECTLY TO A DETENTION SYSTEM. PROVIDE AS-BUILTS TO OWNER. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS AND ROOF LEADERS. STORM DRAIN CLEANOUTS PER DETAIL 1 ON SHEET C501. DOWNSPOUT CONNECTION PER DETAIL 2 ON SHEET C502.
- 11. STORM PIPES AND STRUCTURE MATERIAL AND INSTALLATION SHALL CONFORM TO CITY OF FEDERAL WAY DEVELOPMENT STANDARDS MANUAL SECTION 4.4.
- 12. ADJUST EXISTING UTILITY LIDS FOR FINISHED GRADE.
- 13. FINISHED GRADE ELEVATION SHALL BE 6" BELOW FINISHED FLOOR ELEVATION UNLESS OTHERWISE INDICATED.
- 14. CATCH BASIN TYPE 1 PER CITY OF FEDERAL WAY STANDARD DETAIL 4-01.
- 15. CATCH BASIN TYPE 2 PER CITY OF FEDERAL WAY STANDARD DETAIL 4-03.
- 16. RECTANGULAR FRAME PER WSDOT STANDARD PLAN B-30.10-03.
- 17. RECTANGULAR SOLID COVER PER CITY OF FEDERAL WAY STANDARD DETAIL 4-07.
- 18. ALL ONSITE TYPE 1 CATCHBASINS SHALL HAVE HERRINGBONE GRATES UNLESS OTHERWISE INDICATED. RECTANGULAR HERRINGBONE GRATE PER PER CITY OF FEDERAL WAY STANDARD DETAIL 4-05.
- 19. STORM ROUND FRAME AND COVER PER CITY OF FEDERAL WAY STANDARD DETAIL 4-12 AND 4-13.
- 20. PROVIDE SUMP PUMP WITH BACKWATER CHECK VALVES OR GRAVITY DRAIN ON ALL STORM DRAINAGE OUTFALL PIPES FOR ALL WATER AND ELECTRICAL VAULTS. COORDINATE WITH ELECTRICAL FOR SUMP PUMP ELECTRICAL SERVICE.

PROPOSED SURFACE SUMMARY TARLE

PROPOSED SURFACE SUMMART TABLE				
	NORTH BASIN	SOUTH BASIN		
IMPERVIOUS AREA	5.314 AC	1.312 AC		
PERVIOUS AREA / LAWN	1.721 AC	1.826 AC		
TOTAL	7.025 A.C	2 120 AC		

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N: 121063.0350

E: 1277478.9180 ELEV: 494.42

TOP OF POND ELEV: 487.15

BOTTOM OF POND ELEV: 486.15

\$ 308TH LN

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7.035 AC | 3.138 AC

ENGINEER.

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S 310TH ST

S 311TH ST (PUBLIC RIGHT-OF-WAY)

TOP OF POND ELEV: 493.00

BOTTOM OF POND ELEV: 492.50







GRADING AND STORM DRAINAGE PLAN

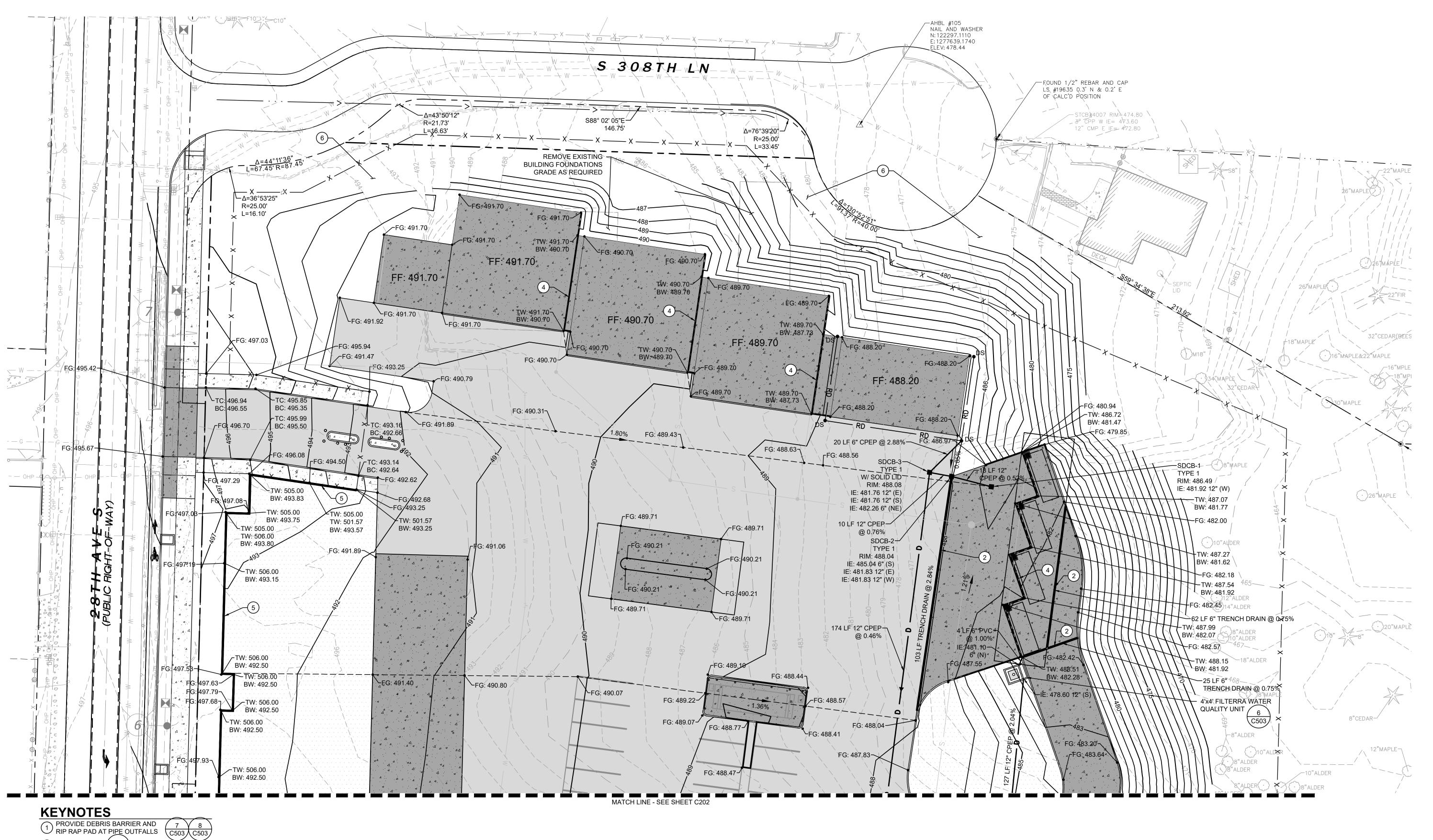
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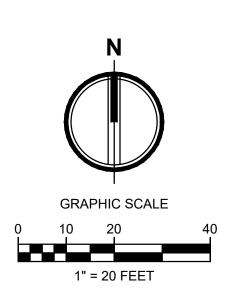
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- 2 TRENCH DRAIN $\frac{3}{(C504)}$
- 3) 2'x6'x2' ECOLOGY BLOCK, TWO LAYERS
- 4 SEE STRUCTURAL PLANS FOR RETAINING WALL DESIGN
- 5 SEE OFFSITE PLANS FOR RETAINING WALL STRUCTURAL DESIGN. WALL ELEVATIONS ARE FOR REFERENCE.
- 6 AREA OUTSIDE GRADING LIMITS: GRUB EXISTING VEGETATION, ESTABLISH SUBGRADE ELEVATION TO ACCOMMODATE TOPSOIL, AND SMOOTH SURFACE IRREGULARITIES. SEE LANDSCAPE PLANS FOR ADDITIONAL
- INFORMATION. EXISTING TREE CRITICAL ROOT ZONE: NO COUIPMENT, EXCAVATION, OR STORAGE OF MATERIALS WITHIN TREE PROTECTION FENCE. SEE LANDSCAPE PLANS.



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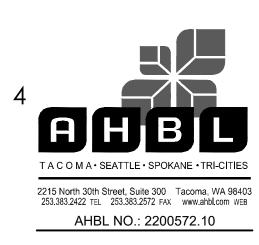
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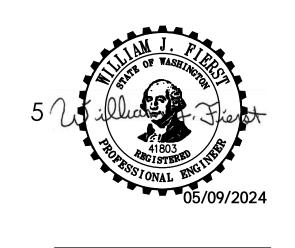
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GRADING AND STORM DRAINAGE PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

	REVISION	DATE
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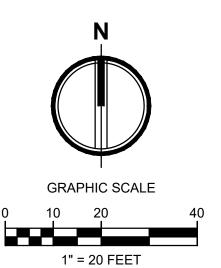
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KEYNOTES

- 1 PROVIDE DEBRIS BARRIER AND RIP RAP PAD AT PIPE OUTFALLS C503 C503
- 2 TRENCH DRAIN $\left(\frac{3}{C504}\right)$
- 3) 2'x6'x2' ECOLOGY BLOCK, TWO LAYERS
- SEE STRUCTURAL PLANS FOR RETAINING WALL DESIGN
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- INFORMATION. EXISTING TREE CRITICAL ROOT ZONE: NO U EQUIPMENT, EXCAVATION, OR STORAGE OF MATERIALS WITHIN TREE PROTECTION FENCE. SEE LANDSCAPE PLANS.



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MATCH LINE - SEE SHEET C203

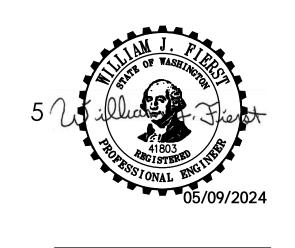
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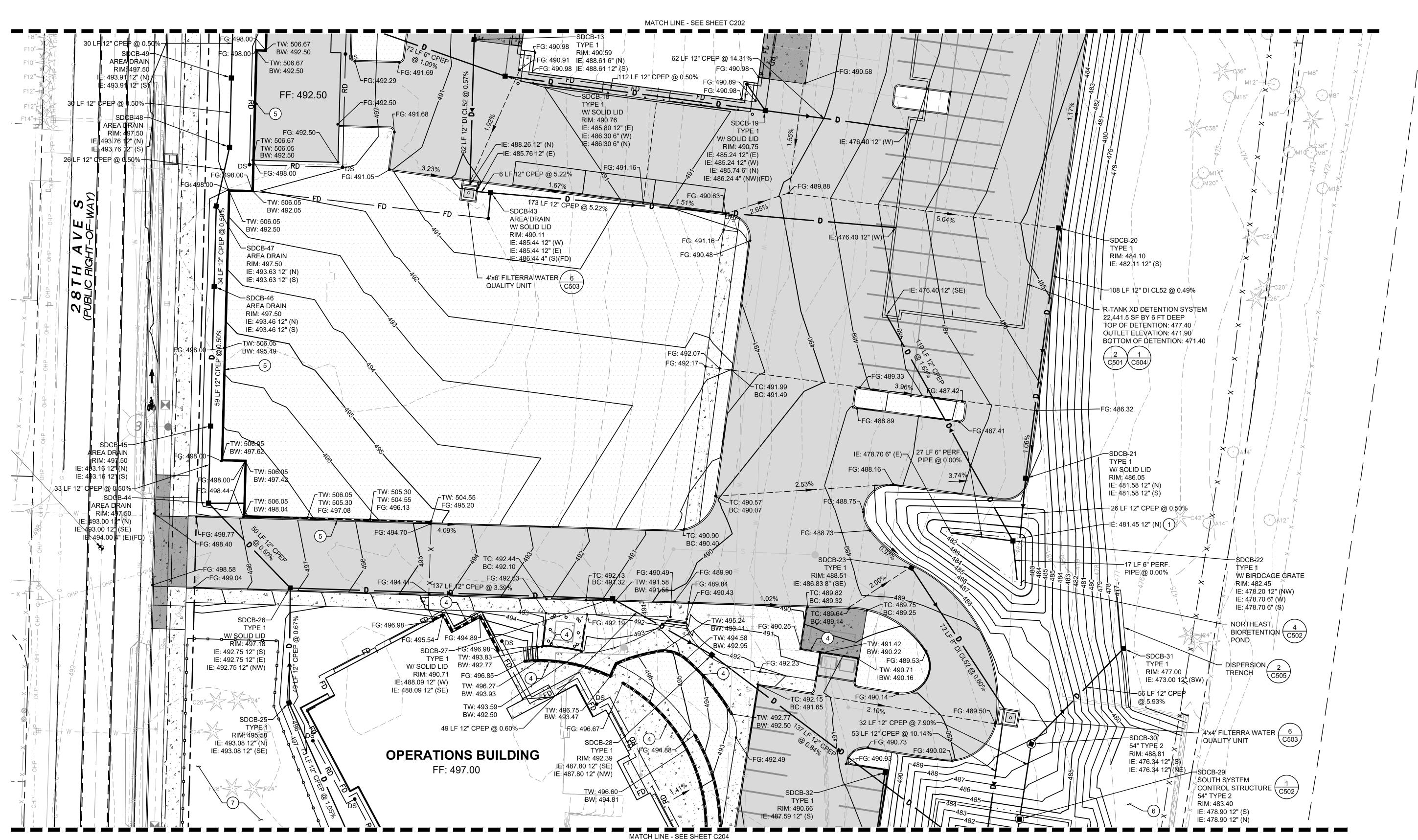


GRADING AND STORM DRAINAGE PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

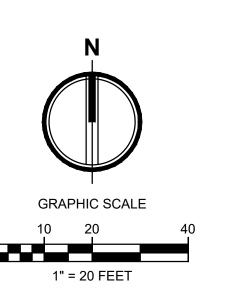
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KEYNOTES

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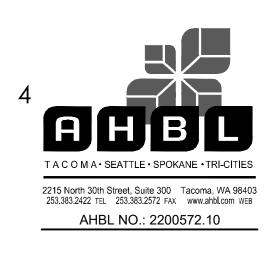
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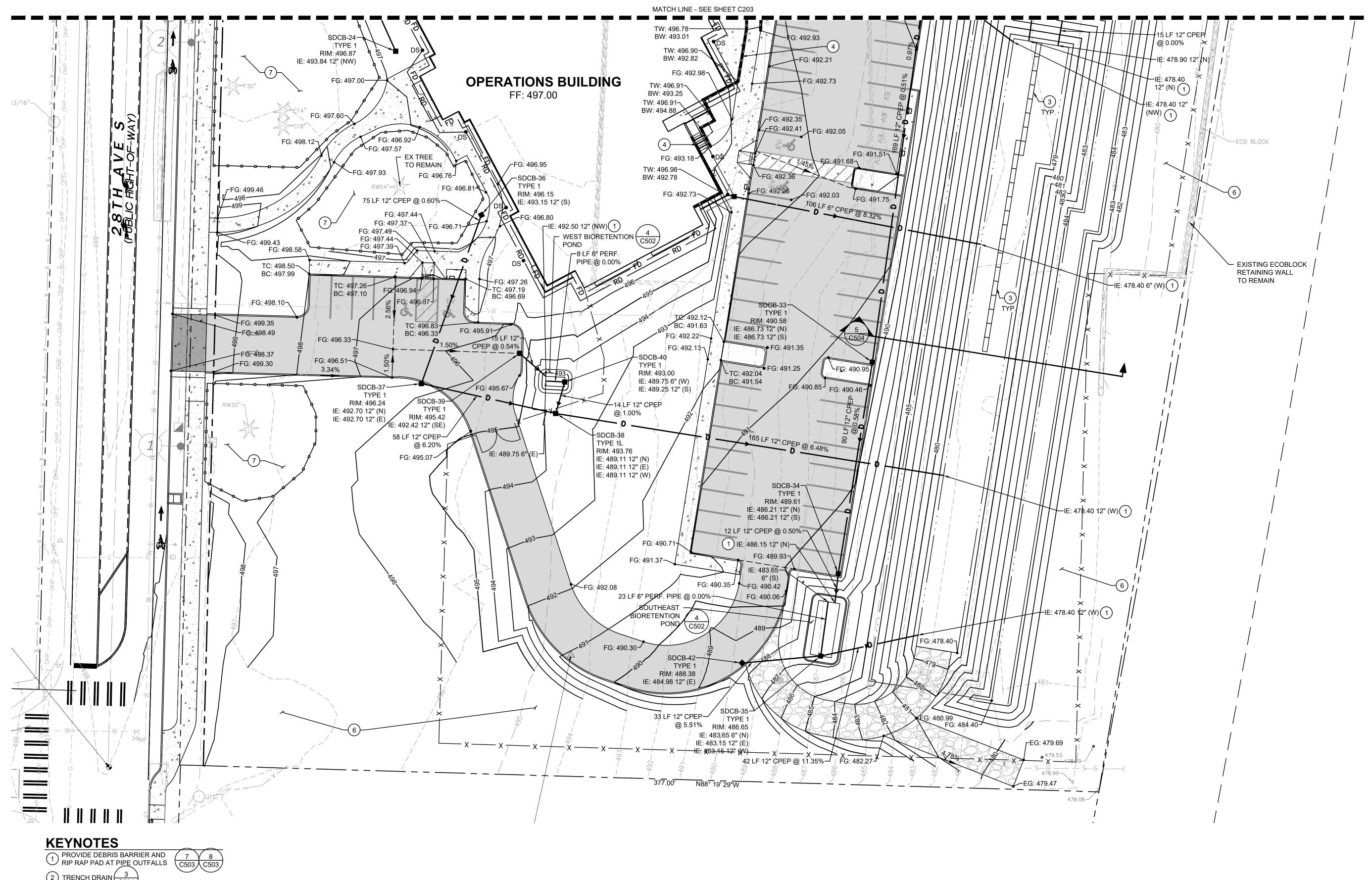
GRADING AND STORM DRAINAGE PLAN

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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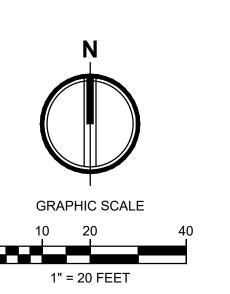
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- LANDSCAPE PLANS FOR ADDITIONAL INFORMATION. EXISTING TREE CRITICAL ROOT ZONE: NO COUIPMENT, EXCAVATION, OR STORAGE OF MATERIALS WITHIN TREE PROTECTION FENCE.

SEE LANDSCAPE PLANS.



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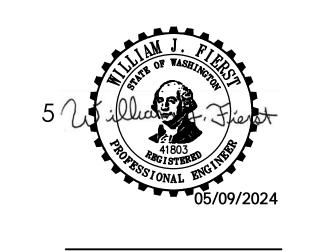
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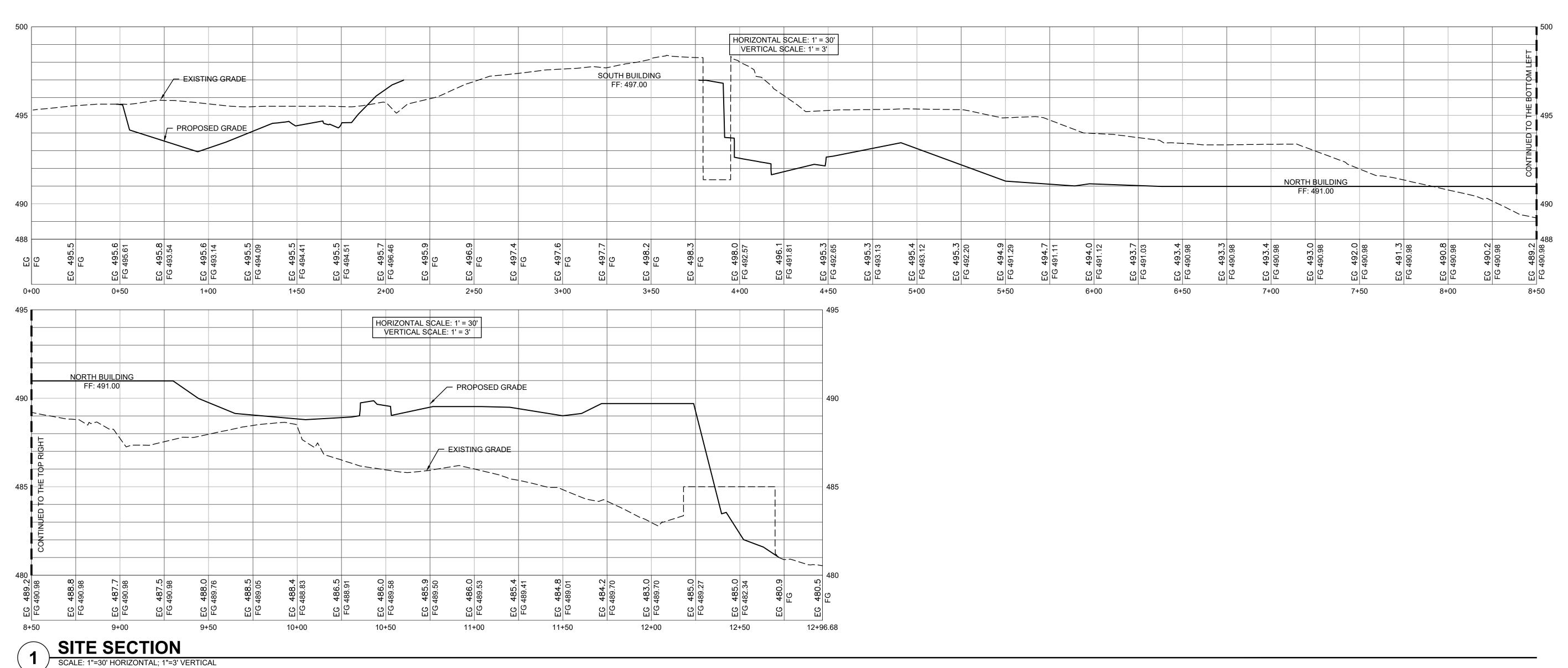




GRADING SECTIONS

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

DRAWING NO.



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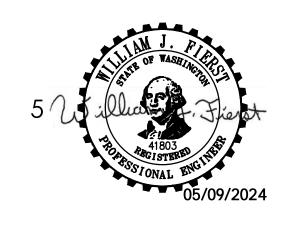
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GRADING SECTIONS

CITY OF
FEDERAL WAY
JOINT
OPERATIONS &
MAINTENANCE
FACILITY

FEDERAL WAY, WASHINGTON

REVISION DATE

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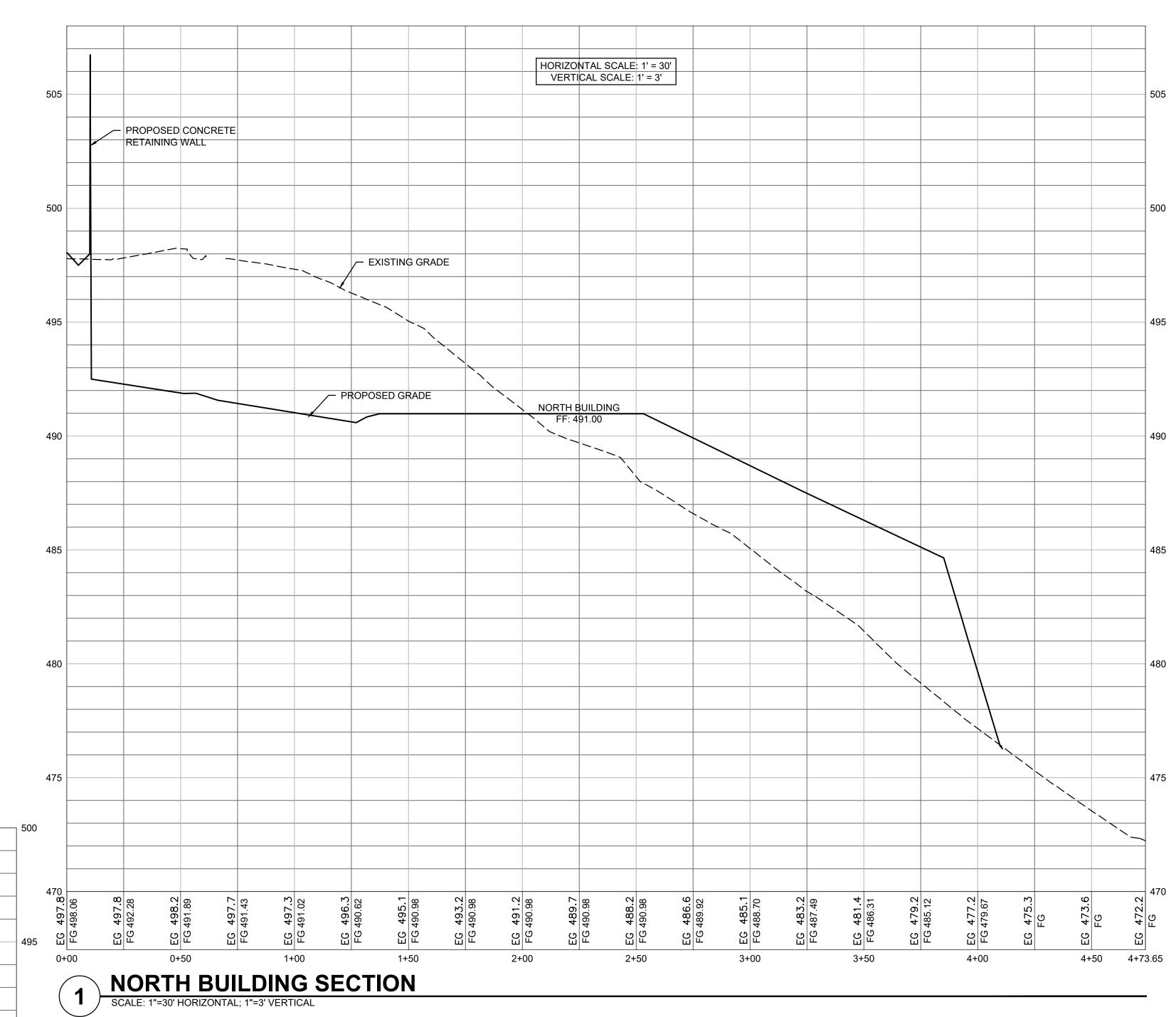
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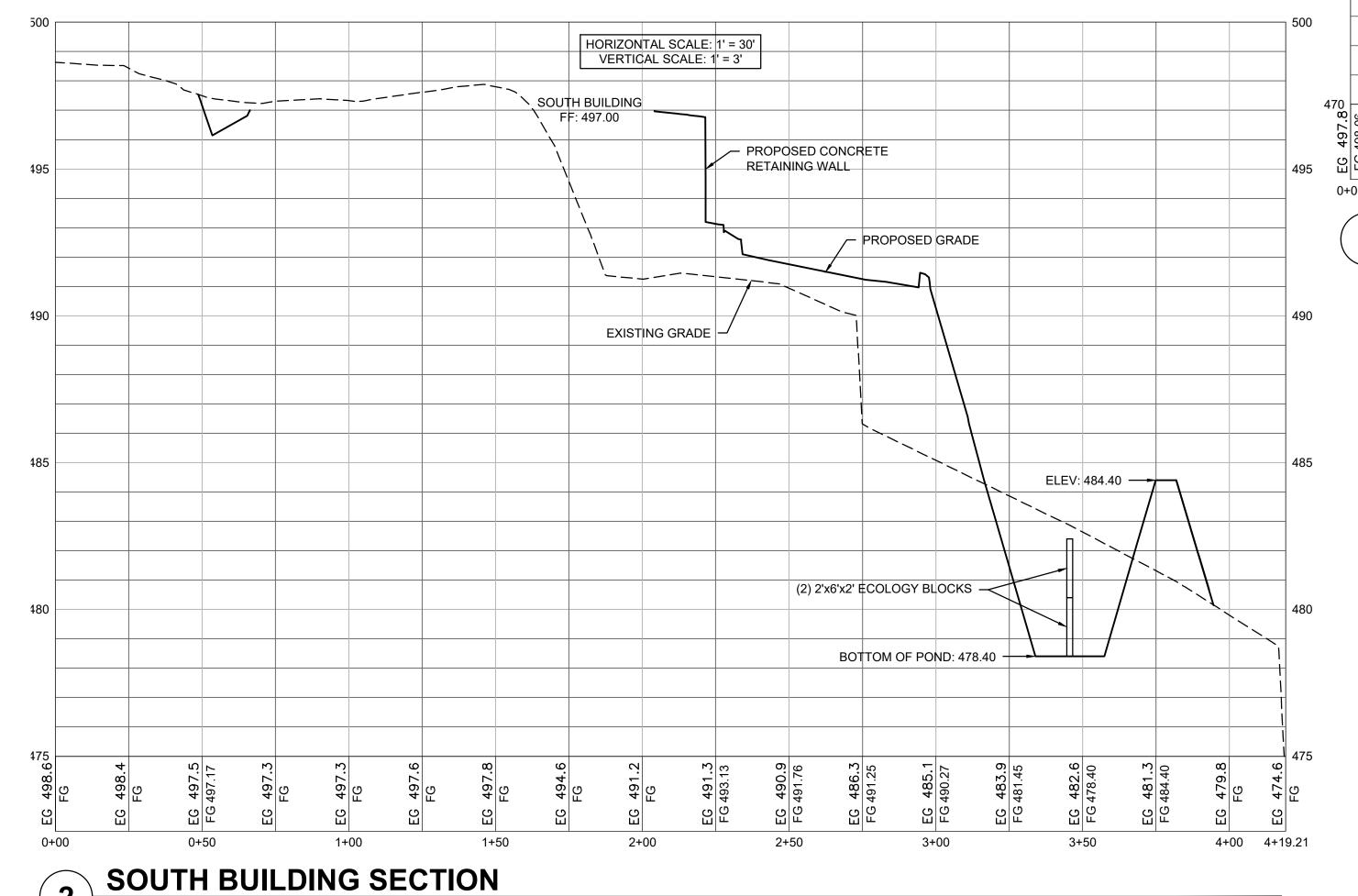
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SCALE: 1"=30' HORIZONTAL; 1"=3' VERTICAL

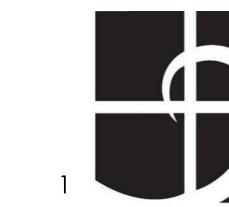
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NOTE:
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ON THESE PLANS.
FIELD CONDITIONS MAY DICTATE CHANGES TO
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ENGINEER.

PERMIT NO. 24-101093-EN

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DATE





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OVERALL PAVING AND HORIZONTAL CONTROL

PLAN

CITY OF
FEDERAL WAY
JOINT
OPERATIONS &
MAINTENANCE
FACILITY

FEDERAL WAY, WASHINGTON

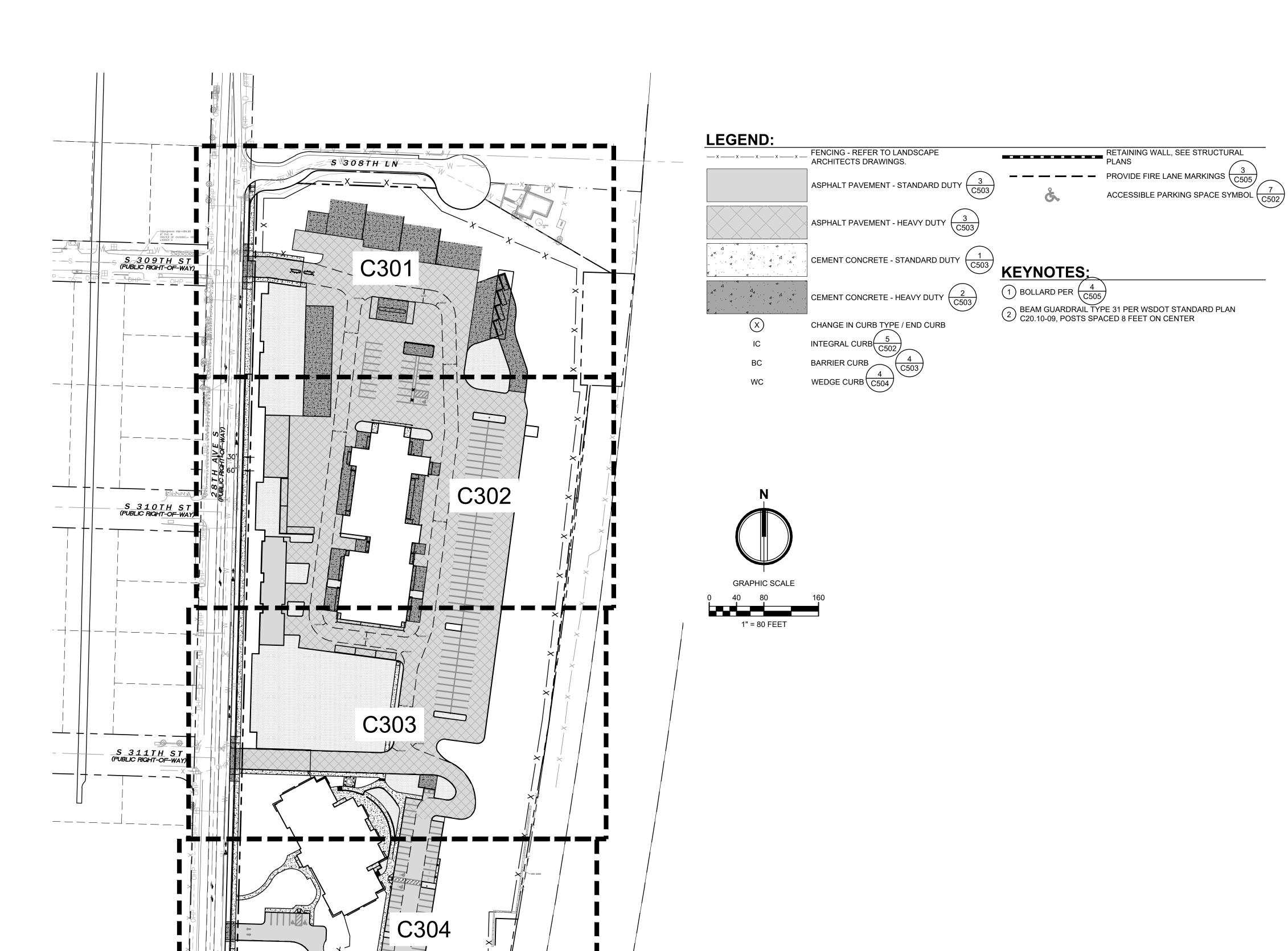
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HORIZONTAL CONTROL GENERAL NOTES:

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- SEE ARCHITECTURAL PLANS FOR BUILDING HORIZONTAL CONTROL AND DIMENSIONS.
- 2. SEE ARCHITECTURAL PLANS FOR HORIZONTAL CONTROL NOT SHOWN ON THIS PLAN

PAVING NOTES

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- THE EXISTING SITE SOILS REQUIRE PROPER COMPACTION PRIOR TO PLACEMENT OF PAVING AND UTILITY IMPROVEMENTS.
- 2. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL PAVED AND NON-PAVED AREAS, AND SHALL GRADE ALL AREAS TO PRECLUDE PONDING OF SURFACE WATER.



HELIX DESIGN GROUP, INC





PAVING AND HORIZONTAL CONTROL PLAN

CITY OF
FEDERAL WAY
JOINT
8 OPERATIONS &
MAINTENANCE
FACILITY
FEDERAL WAY, WASHINGTON

	FEDERAL WAY, WASHINGTON	
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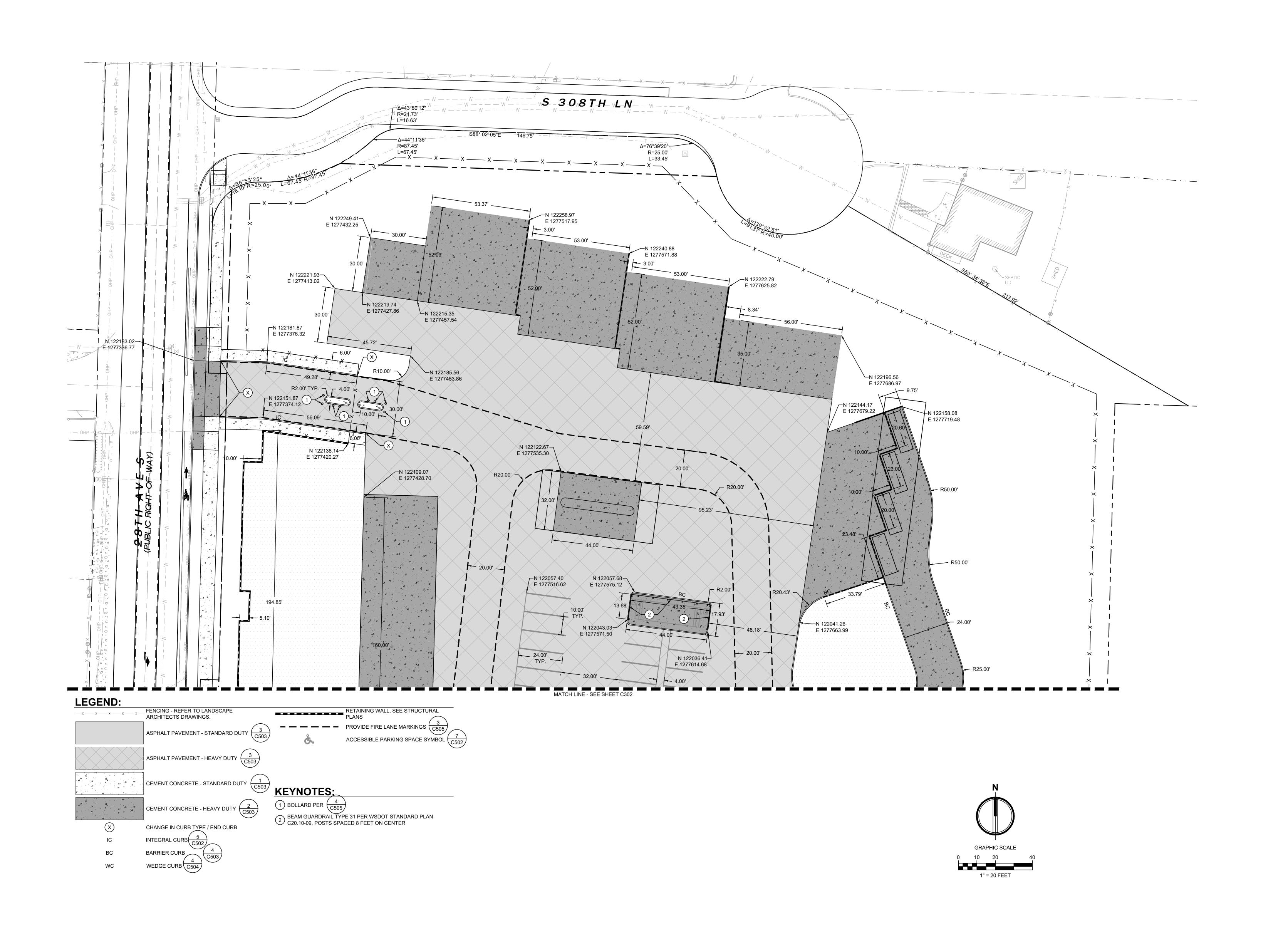
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PAVING AND HORIZONTAL CONTROL PLAN

CITY OF
FEDERAL WAY
JOINT
8 OPERATIONS &
MAINTENANCE
FACILITY

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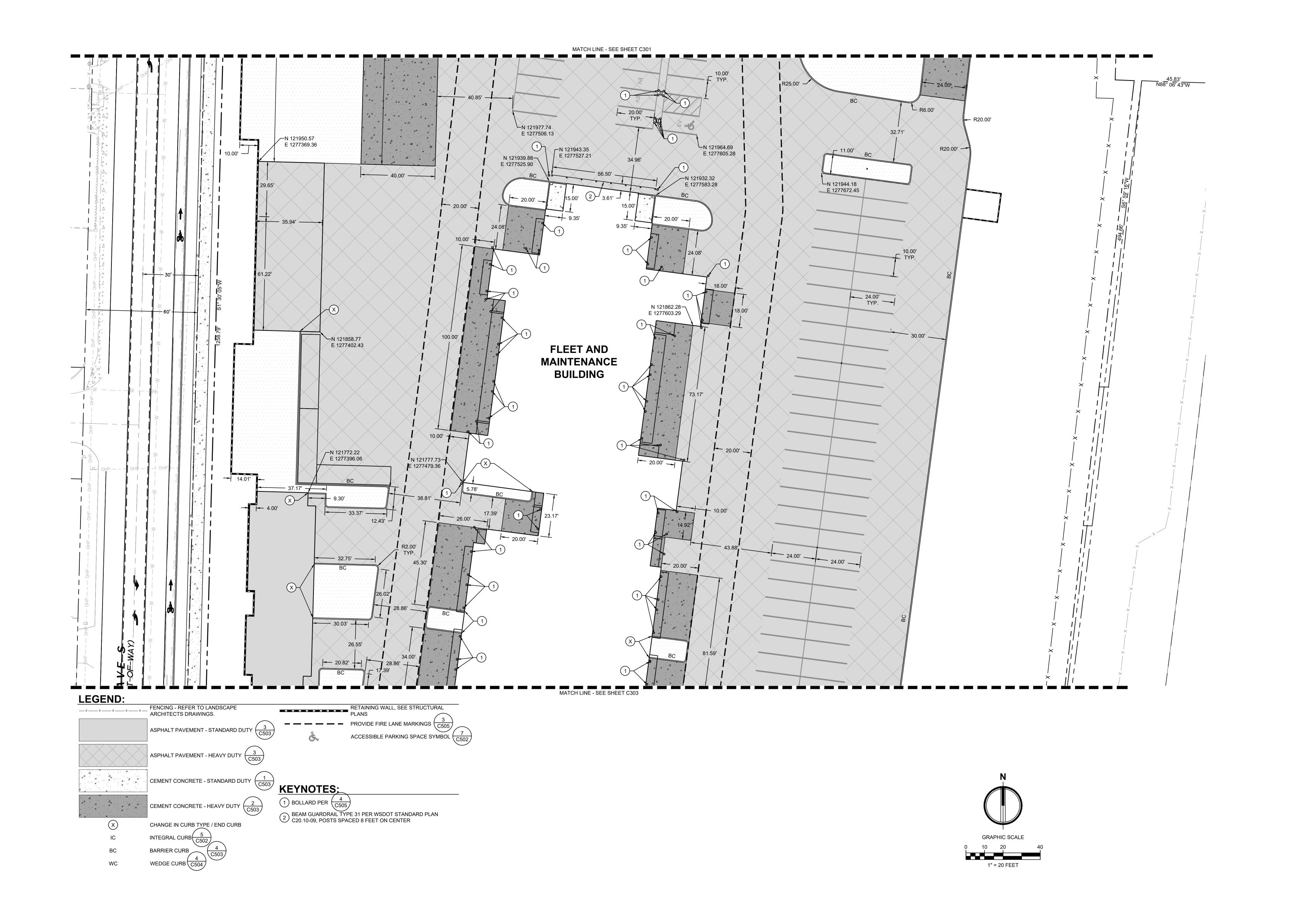
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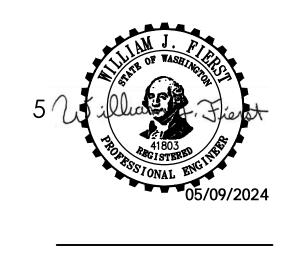
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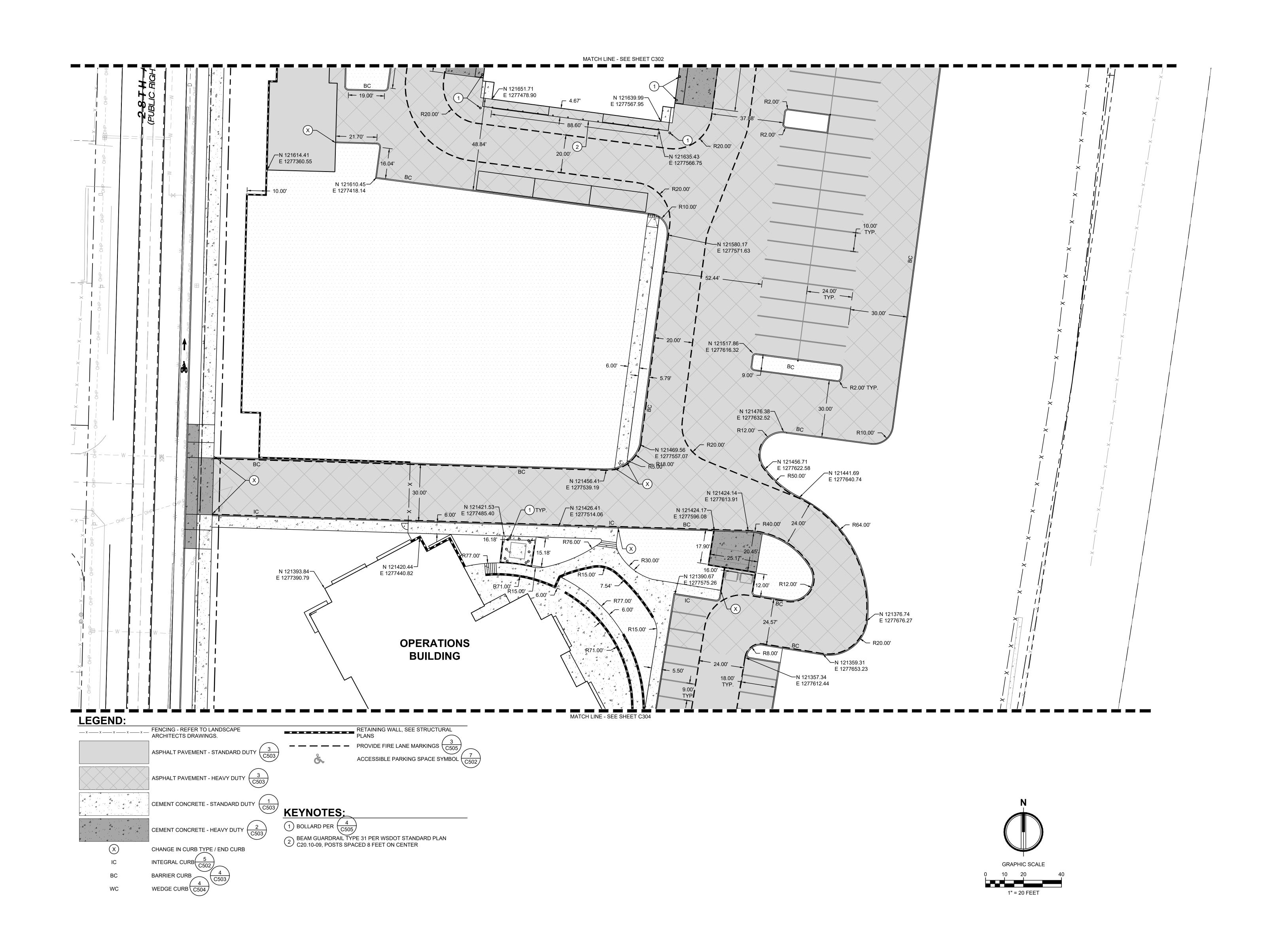


PAVING AND HORIZONTAL CONTROL PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

	FEDERAL WAY, WASHINGTON	
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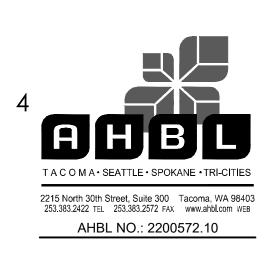


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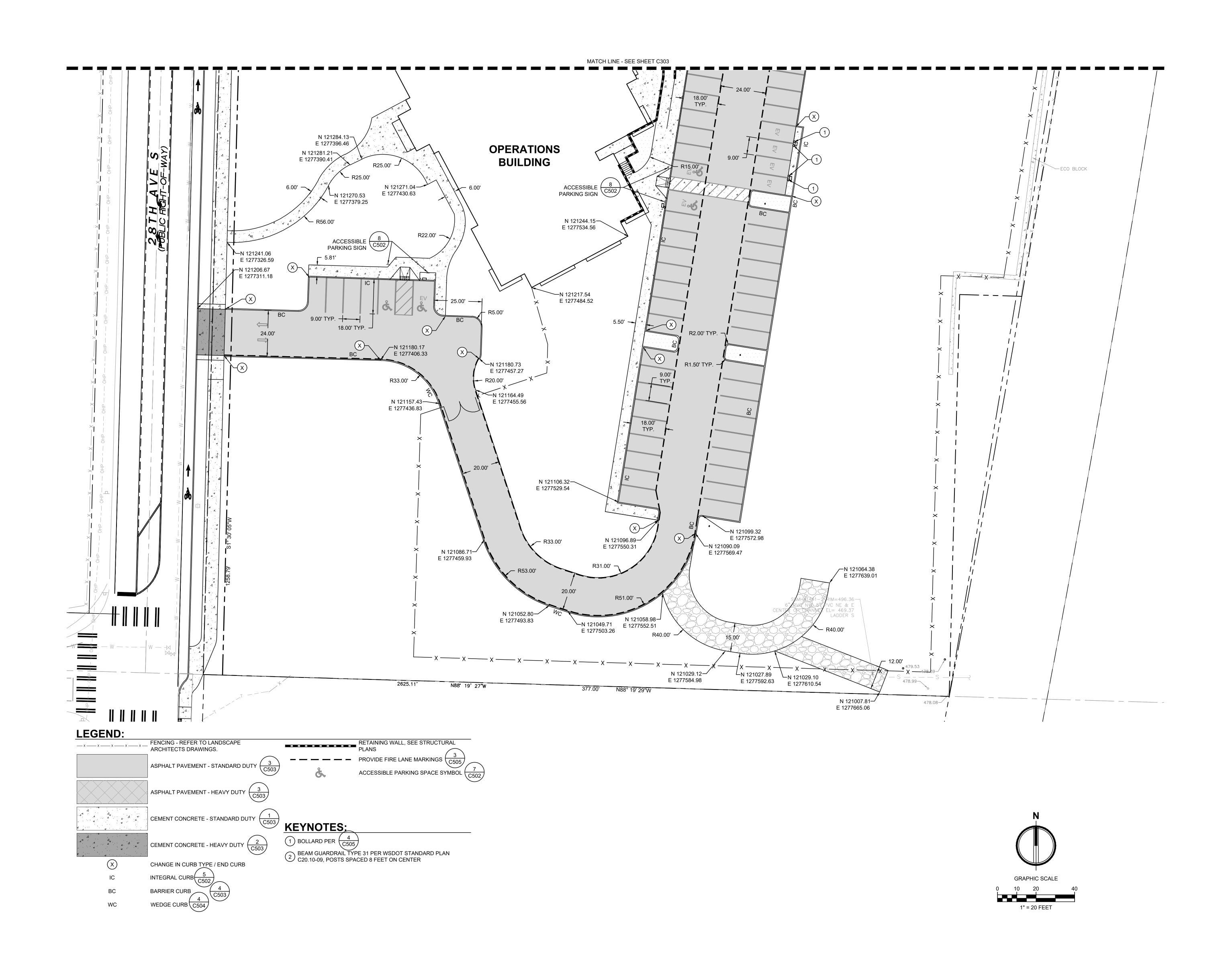


PAVING AND HORIZONTAL CONTROL PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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LEGEND UTILITY NOTES 1. SEE LAKEHAVEN WATER AND SEWER PLANS FOR SANITARY SEWER MANHOLE WATER AND SEWER IMPROVEMENTS. TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING — UNDERGROUND POWER ----- W ----- WATER PIPING FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION (FDC) METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD

> THRUST BLOCKING FITTINGS AS NOTED

YARD HYDRANT

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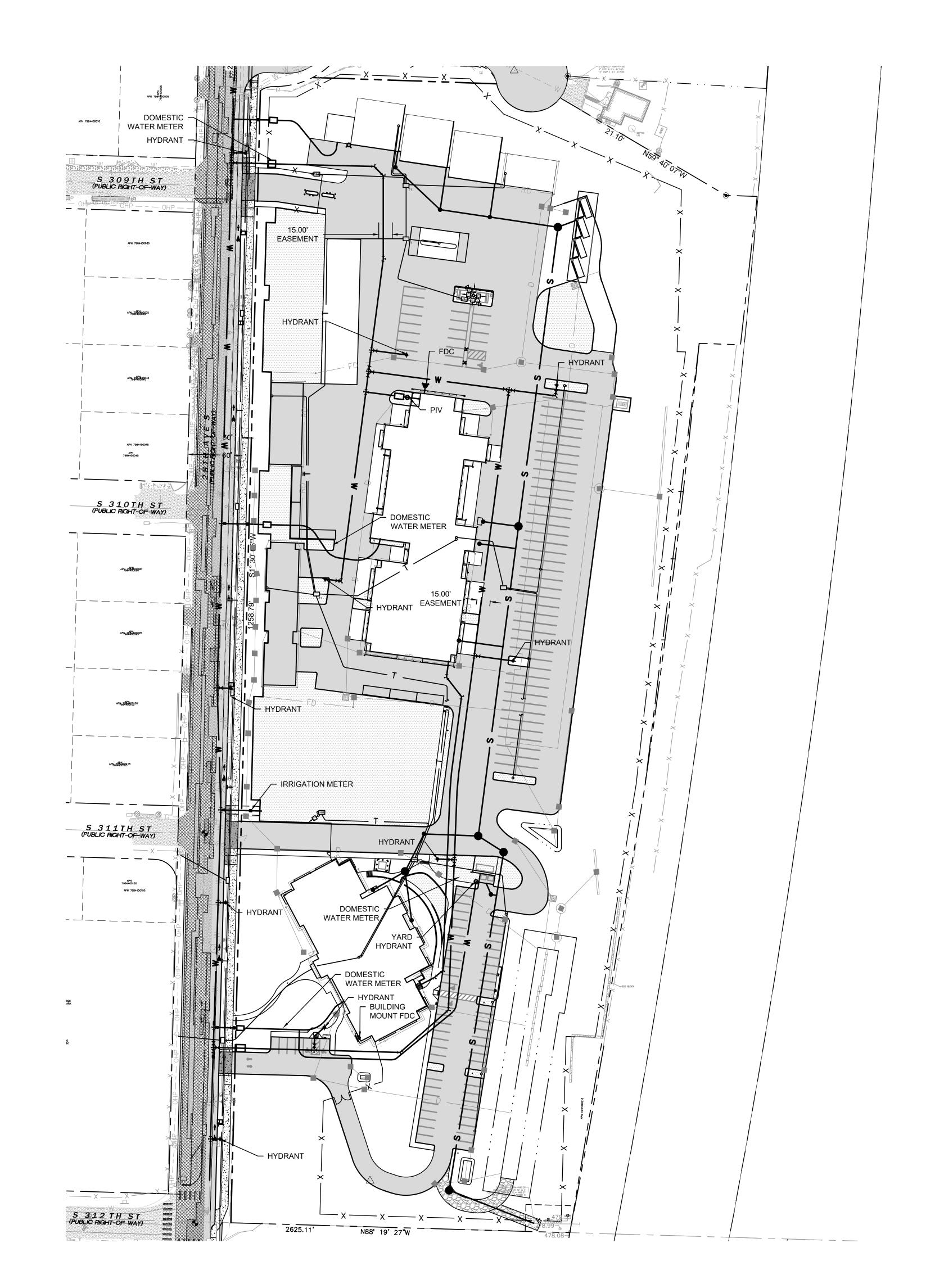




COMPOSITE UTILITIES PLAN

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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GRAPHIC SCALE 1" = 60 FEET

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CITY OF FEDERAL WAY

OPERATIONS & MAINTENANCE FACILITY

FEDERAL WAY, WASHINGTON

GENERAL NOTES:

SEE LANDSCAPE PLANS FOR ADDITIONAL SITE FEATURES.

2. FOR BEDDING AND BACKFILL PIPE TRENCHES DETAIL SEE DETAIL 3 ON SHEET C502.

- 3. ALL STORM PIPE SHALL BE LINED CORRUGATED POLYETHYLENE PIPE OR AS ALLOWED BY THE KING COUNTY 2021 DRAINAGE MANUAL UNLESS OTHERWISE NOTED.
- 4. SPOT ELEVATIONS AND CONTOURING SHOWN REPRESENT FINISH GRADE ELEVATIONS. SUBGRADE ELEVATIONS WILL VARY DEPENDING UPON TYPE OF SURFACING REQUIRED. REFER TO LANDSCAPE PLANS FOR TOPSOIL AND

5. MATCH EXISTING GRADES AT INTERFACE WITH EXISTING SURFACING. VERIFY EXISTING GRADES AT INTERFACE

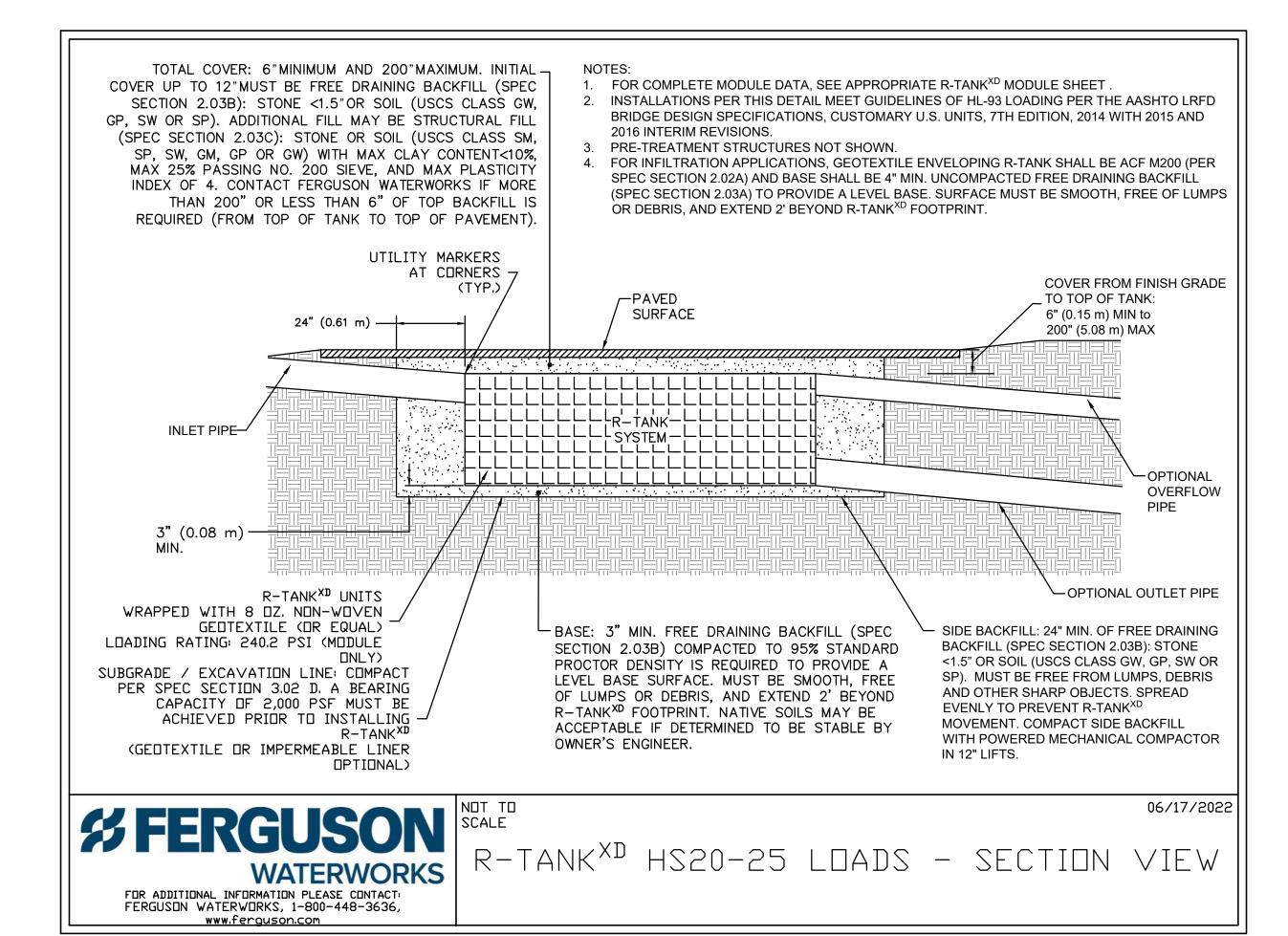
- PRIOR TO ORDERING MATERIALS AND CONSTRUCTING.
- 6. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO CONSTRUCTION ACTIVITIES. CONTACT ENGINEER IF PROPOSED GRADES ARE BELIEVED TO BE IN ERROR.
- 7. SEE SHEET C105 FOR CONSTRUCTION SEQUENCE NOTES.
- 8. FINISHED GRADES ARE INDICATED. CONTRACTOR SHALL EXCAVATE AND FILL TO ACHIEVE PROPER SUBGRADES.
- 9. ALL FILL MATERIALS SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 10. ALL FOOTING DRAINS SHALL BE 6 INCH IN DIAMETER AND PLACED AROUND BUILDING. FOOTING DRAINS SHALL CONNECT INTO STORM DRAIN CATCH BASIN. FOOTING DRAINS PER DETAIL 3 ON SHEET C501.
- 11. ROOF DRAIN LINES SHALL BE 8-INCH PIPE MINIMUM AT A MINIMUM 1 PERCENT SLOPE UNLESS OTHERWISE INDICATED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE NEAREST TO STORM DRAINS. ALL ROOF DRAINS SHALL BE CONNECTED TO A STORM DRAINAGE CATCH BASIN. PROVIDE AS-BUILTS TO OWNER. SEE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS. SEE MECHANICAL PLANS FOR EXACT LOCATION AND NUMBER OF ROOF LEADERS. STORM DRAIN CLEANOUTS PER DETAIL 1 ON SHEET C501. DOWNSPOUT CONNECTION PER DETAIL 2 ON SHEET C502.
- 12. ADJUST EXISTING UTILITY LIDS FOR FINISHED GRADE.

CITY OF FEDERAL WAY GENERAL NOTES:

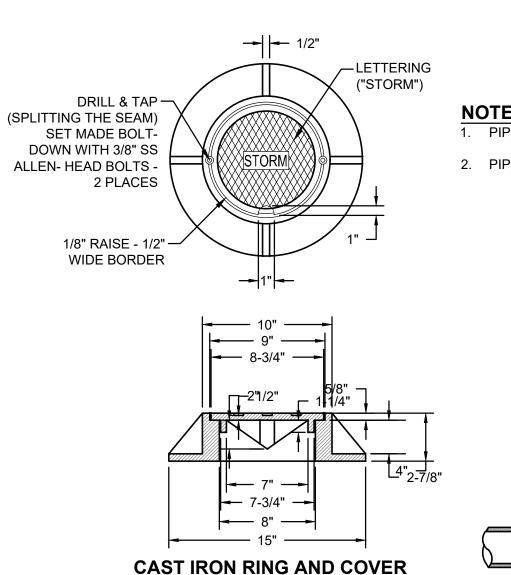
- 1. PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO PRE-CONSTRUCTION MEETING.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FEDERAL WAY REVISED CODE (FWRC), APPLICABLE ORDINANCES, AND THE CITY COUNCIL CONDITIONS OF PROJECT APPROVAL. THESE DOCUMENTS ARE SUPPLEMENTED BY THE MOST RECENT VERSION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (WSDOT/APWA), THE KING COUNTY ROAD STANDARDS (KCRS), AND THE KING COUNTY SURFACE WATER DESIGN MANUAL (KCSWDM). IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE CITY OF FEDERAL WAY.
- THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE FEDERAL WAY ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE CITY ENGINEERING PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF FEDERAL WAY, PRIOR TO CONSTRUCTION.
- 4. APPROVAL OF THIS ROAD, GRADING, AND DRAINAGE PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION (I.E. DOMESTIC WATER CONVEYANCE, SEWER CONVEYANCE, GAS, ELECTRICITY, ETC.)
- 5. BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRECONSTRUCTION MEETING MUST BE HELD BETWEEN THE CITY OF FEDERAL WAY, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
- 6. A SIGNED COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 7. ON-SITE CONSTRUCTION NOISE SHALL BE LIMITED AS PER FWRC (SECTION 19.105.040); NORMALLY THIS IS 7:00 A.M. TO 8:00 P.M., MONDAY THROUGH FRIDAY, AND 9:00 A.M. TO 8:00 P.M. ON SATURDAYS.
- 8. RIGHT-OF-WAY CONSTRUCTION IS ALLOWED 8:30 A.M. TO 3:00 P.M. MONDAY THROUGH FRIDAY. WRITTEN AUTHORIZATION TO WORK OUTSIDE OF THESE HOURS MUST BE GRANTED BY THE PUBLIC WORKS DIRECTOR.
- 9. IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS NECESSARY BEFORE INITIATING OFF-SITE WORK WITHIN THE ROAD RIGHT-OF-WAY.
- 10. FRANCHISED UTILITIES OF OTHER INSTALLATIONS THAT ARE NOT SHOWN ON THESE APPROVED PLANS SHALL NOT BE CONSTRUCTED UNLESS AN APPROVED SET OF PLANS THAT MEET ALL CITY REQUIREMENTS AND THE REQUIREMENTS OF KCRS CHAPTER 8 ARE SUBMITTED TO THE CITY OF FEDERAL WAY AT LEAST THREE DAYS PRIOR TO CONSTRUCTION.
- 11. VERTICAL DATUM SHALL BE KCAS OR NGVD-29.
- 12. GROUNDWATER SYSTEM CONSTRUCTION SHALL BE WITHIN A RIGHT-OF-WAY OR APPROPRIATE DRAINAGE EASEMENTS, BUT NOT UNDERNEATH THE ROADWAY SECTION. ALL GROUNDWATER SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE WSDOT/APWA STANDARD SPECIFICATIONS.
- 13. ALL UTILITY TRENCHES IN THE RIGHT-OF-WAY SHALL BE BACKFILLED 5/8" CRUSHED ROCK AND COMPACTED TO 95% DENSITY, WHEN TRENCH WIDTH IS 18 INCHES OR LESS, AND IS WITHIN THE TRAVELED WAY, TRENCH WILL BE BACKFILLED WITH CONTROL DENSITY FILL (SELF-COMPACTED FLOWABLE FILL) AS DEFINED BY WSDOT 2-09.3(1)E. THE AGGREGATE WILL BE 3/8-INCH MINUS.
- 14. ALL ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH WSDOT 2-06.3.
- 15. OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE PUBLIC WORKS DIRECTOR AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS 8.03(B) 3.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23 - TRAFFIC CONTROL, SHALL APPLY.
- 17. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REGULATORY AND WARNING SIGNS PER THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 18. ALL UTILITIES SHALL BE ADJUSTED TO FINAL GRADE AFTER PAVING ASPHALT WEARING COURSE.
- 19. ROCKERIES ARE CONSIDERED TO BE A METHOD OF BANK STABILIZATION AND EROSION ONLY. ROCKERIES SHALL NOT BE CONSTRUCTED TO SERVE AS RETAINING WALLS. ALL ROCKERIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CFW DRAWING NUMBERS 3-22, 3-23. ROCKERIES MAY NOT EXCEED SIX FEET IN HEIGHT FOR CUT SECTIONS OR FOUR FEET IN HEIGHT FOR FILL SECTIONS UNLESS DESIGNED BY A GEOTECHNICAL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF WASHINGTON.

CITY OF FEDERAL WAY DRAINAGE NOTES:

- 1. PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRECONSTRUCTION MEETING.
- 2. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT 7-08.3(1). THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF FOUNDATION MATERIAL, AND REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
- 3. STEEL PIPE SHALL BE GALVANIZED AND HAVE ASPHALT TREATMENT #1 OR BETTER INSIDE AND
- 4. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.
- 5. ALL CATCH BASIN GRATES SHALL CONFORM TO CFW DRAWING NUMBERS 4-1, 4-2, 4-3, 4-4, 4-5, 4-8 OR
- 6. ALL DRIVEWAY CULVERTS LOCATED WITHIN THE RIGHT-OF-WAY SHALL BE OF SUFFICIENT LENGTH TO PROVIDE A MINIMUM 3:1 SLOPE FROM THE EDGE OF THE DRIVEWAY TO THE BOTTOM OF THE DITCH. CULVERTS SHALL HAVE BEVELED END SECTIONS TO MATCH THE SIDE SLOPES.
- ROCK FOR EROSION PROTECTION OF DITCHES, CHANNELS AND SWALES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND -2" ROCK/10%-20% PASSING. INSTALLATION SHALL BE IN ACCORDANCE WITH KCRS DRAWING NUMBER 7-024 OR AS AMENDED BY THE APPROVED PLANS. RECYCLED ASPHALT OR CONCRETE RUBBLE SHALL NOT BE
- 8. LOTS NOT APPROVED FOR INFILTRATION SHALL BE PROVIDED WITH DRAINAGE OUTLETS (STUB-OUTS). STUB-OUTS SHALL CONFORM TO THE FOLLOWING:
- EACH OUTLET SHALL BE SUITABLY LOCATED AT THE LOWEST ELEVATION ON THE LOT, SO AS TO SERVICE ALL FUTURE ROOF DOWNSPOUTS AND FOOTING DRAINS, DRIVEWAYS, YARD DRAINS, AND ANY OTHER SURFACE OR SUB-SURFACE DRAINS NECESSARY TO RENDER THE LOTS SUITABLE FOR THEIR INTENDED USE. EACH OUTLET SHALL HAVE FREE-FLOWING, POSITIVE DRAINAGE TO AN APPROVED STORMWATER CONVEYANCE SYSTEM OR TO AN APPROVED OUTFALL LOCATION.
- B. OUTLETS ON EACH LOT SHALL BE LOCATED WITH A FIVE-FOOT HIGH, 2 X 4 STAKE MARKED "STORM". THE STUB-OUT SHALL EXTEND ABOVE SURFACE LEVEL, BE VISIBLE AND BE SECURED TO THE STAKE.
- C. PIPE MATERIAL SHALL CONFORM TO UNDERDRAIN SPECIFICATIONS DESCRIBED IN KCRS 7.03 AND, IF NON-METALLIC, THE PIPE SHALL CONTAIN WIRE OR OTHER ACCEPTABLE DETECTION.
- D. DRAINAGE EASEMENTS ARE REQUIRED FOR DRAINAGE SYSTEMS DESIGNED TO CONVEY FLOWS THROUGH INDIVIDUAL LOTS.
- THE APPLICANT/CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL STUB-OUT CONVEYANCE LINES WITH RESPECT TO THE UTILITIES (I.E. POWER, GAS, TELEPHONE,
- F. ALL INDIVIDUAL STUB-OUTS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE LOT
- G. THE CITY DOES NOT ALLOW TAP-IN OR CUT-IN TEES ON MAINS FOR INDIVIDUAL LOT DRAINAGE.

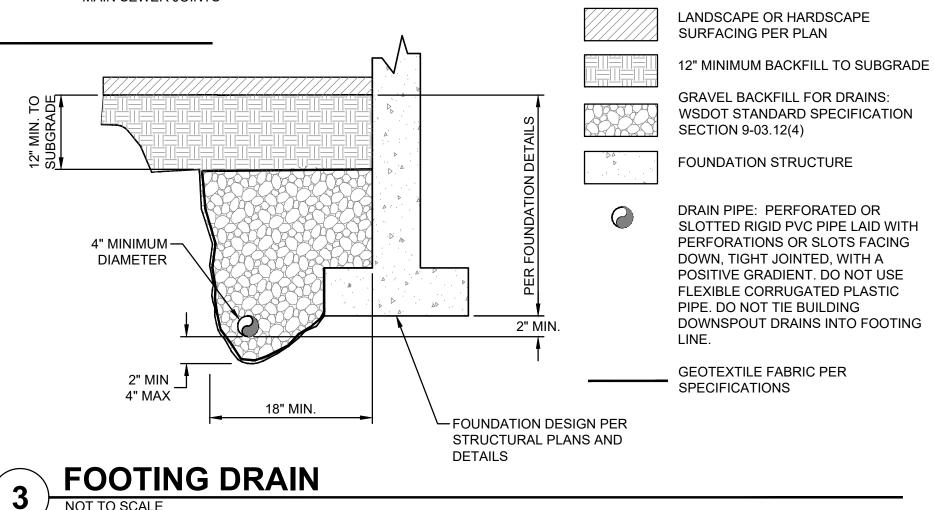


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CLEANOUT

1. PIPE MATERIAL AS SPECIFIED BY THE ENGINEER. 2. PIPE DIAMETER AS SHOWN PER PLAN. 3000 psi CLASS C — 1'-6" CONCRETE (TYP.) -PROVIDE CHERNEY PLUG FIBRE JOINT -**PACKING** BEND PLUG TO BE SEALED IN SAME MANNER AS MAIN SEWER JOINTS



R-TANK XD MODULE CROSS-SECTION

THIS APPROVAL IS VOID 1 (ONE) YEAR AFTER SLOTTED RIGID PVC PIPE LAID WITH APPROVAL DATE. THE CITY WILL NOT BE PERFORATIONS OR SLOTS FACING RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE CITY ENGINEER. DOWNSPOUT DRAINS INTO FOOTING

1093-EN

PERMIT	NO.	24-101
APPROVED		

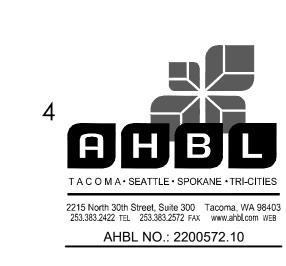
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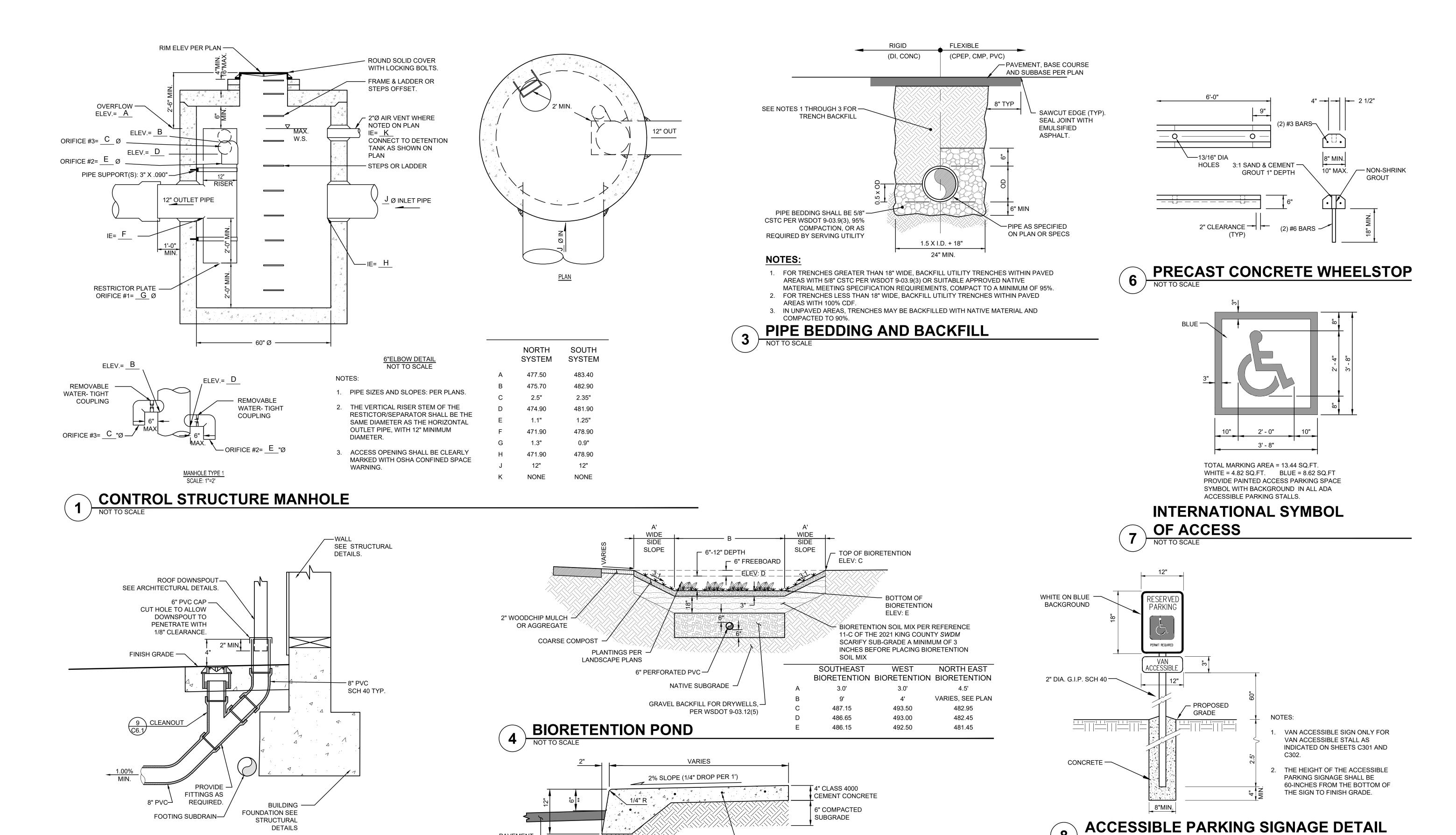




NOTES AND DETAILS

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON





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DOWNSPOUT CONNECTION

DETAILS

PAVEMENT —

D

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RESPONSIBLE FOR ERRORS AND/OR OMISSIONS

PERMIT NO. 24-101093-EN

FIELD CONDITIONS MAY DICTATE CHANGES TO

THESE PLANS AS DETERMINED BY THE CITY

ENGINEER.

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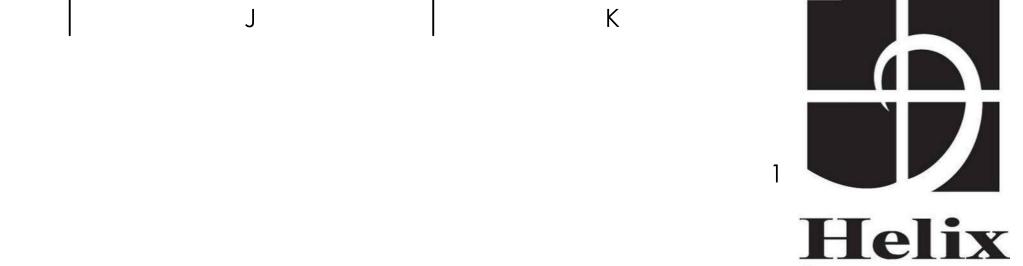
└─ #5 REBAR, 24" ON CENTER

1. COMPACTION FOR CONCRETE CURB AND WALKS TO BE 95% OF MAXIMUM DENSITY. SEE SPECIFICATIONS.

2. EXPANSION JOINTS SHALL BE AT 10'-0" INTERVALS OR AS SHOWN ON ARCHITECUTRAL PLANS.

INTEGRAL CURB AND SIDEWALK

** 0" AT FLUSH CURB LOCATION FOR CURB RAMPS.





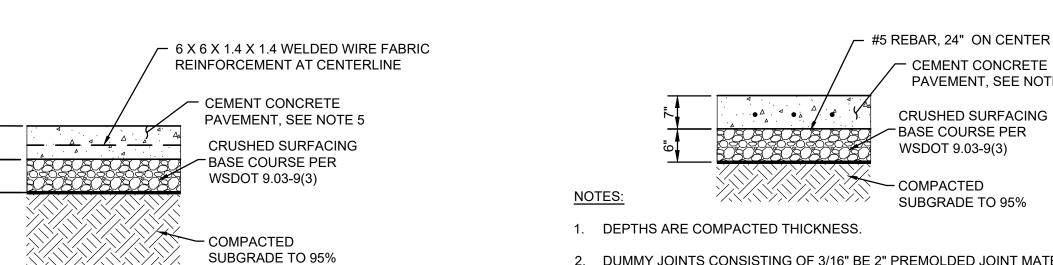




CITY OF FEDERAL WAY **OPERATIONS & MAINTENANCE FACILITY** FEDERAL WAY, WASHINGTON

	REVISION	D
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9		

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1. DEPTHS ARE COMPACTED THICKNESS. 2. DUMMY JOINTS CONSISTING OF 3/16" BE 2" PREMOLDED JOINT MATERIAL SHALL BE

- PLACED AT MAXIMUM 18 FOOT INTERVALS.
- 3. PROVIDE A TOOLED CONSTRUCTION JOINT AT MAXIMUM 6 FOOT INTERVAL. 4. THE CONTRACTOR SHALL EXPOSE EXISTING FILL, PROOF ROLL AND COMPACT TO 95%. IF YIELDING CONDITIONS ARE ENCOUNTERED, YIELDING MATERIALS SHALL BE REPLACED WITH IMPORTED STRUCTURAL FILL MATERIAL. THE DEPTH OF MATERIAL

REPLACEMENT SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.

STANDARD DUTY CONCRETE

FTBSVIB0806

FTBSVIB1006

FTBSVIB1206

FTBSVIB1208

N/A

FILTERRA WATER QUALITY UNIT

FTBSVIB1408

10 x 6 60

12 x 6 72

13 x 7 91

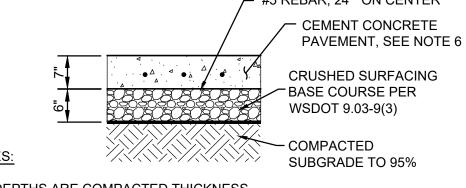
8 x 8 64 FTBSVIB0808

16 x 8 | 128 | FTBSVIB1608[†]

15 x 9 135 FTBSVIB1509[†]
18 x 8 144 FTBSVIB1808[†]

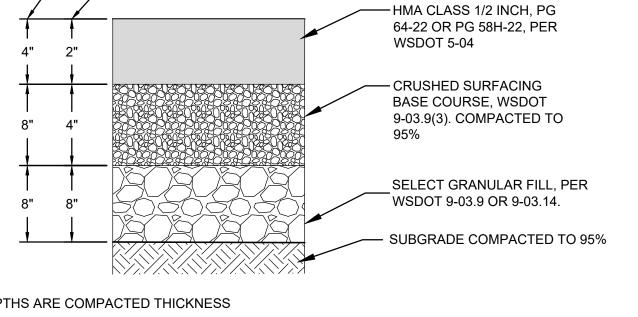
20 x 8 160 FTBSVIB2008[†] 22 x 8 176 FTBSVIB2208[†]

5. CONCRETE MIXES SHALL CONSIST OF ONE OF THE FOLLOWING: 4,000 PSI TYPE IL; 4,000 PSI TYPE 1L WITH ADMIXTURE (AEA, DELVO, POZZOLITH, GLENIUM, MBAE (MASTERAIR), XYPEX, MASTERLIFE SF 100, PENETON); 4,000 PSI TYPE 1P; 4,00 PSI TYPE 1S; OR 5,000



- 2. DUMMY JOINTS CONSISTING OF 3/16" BE 2" PREMOLDED JOINT MATERIAL SHALL BE PLACED AT MAXIMUM 18 FOOT INTERVALS.
- 3. PROVIDE A TOOLED CONSTRUCTION JOINT AT MAXIMUM 6 FOOT INTERVAL.
- 4. THE CONTRACTOR SHALL EXPOSE EXISTING FILL, PROOF ROLL AND COMPACT TO 95%. IF YIELDING CONDITIONS ARE ENCOUNTERED, YIELDING MATERIALS SHALL BE REPLACED WITH IMPORTED STRUCTURAL FILL MATERIAL. THE DEPTH OF MATERIAL REPLACEMENT SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.
- 5. FOR HEAVY DUTY CONCRETE PAVEMENT CONTRACTION AND CONSTRUCTION JOINTS PROVIDE SMOOTH DOWELS SPACED 18-INCHES O.C. THE DOWELS SHALL BE NO. 10 BAR 30-INCHES LONG.
- CONCRETE MIZES SHALL CONSIST OF ONE OF THE FOLLOWING: 4,000 PSI TYPE IL; 4,000 PSI TYPE 1L WITH ADMIXTURE (AEA, DELVO, POZZOLITH, GLENIUM, MBAE (MASTERAIR), XYPEX, MASTERLIFE SF 100, PENETON); 4,000 PSI TYPE 1P; 4,00 PSI TYPE 1S; OR 5,000

HEAVY DUTY CONCRETE



1. DEPTHS ARE COMPACTED THICKNESS

- HEAVY DUTY PAVING

STANDARD DUTY PAVING

- 2. CONTRACTOR SHALL PROOF-ROLL SUBGRADES. YIELDING SUBGRADE SHALL BE OVEREXCAVATED AND REPLACED WITH 6-INCHES OF GRAVEL BORROW MEETING WSDOT 9-03.14(1).
- 3. THE CONTRACTOR SHALL EXPOSE EXISTING FILL, PROOF ROLL AND COMPACT TO 95%. IF YIELDING CONDITIONS ARE ENCOUNTERED, YIELDING MATERIALS SHALL BE REPLACED WITH QUARRY SPALLS. THE DEPTH OF MATERIAL REPLACEMENT SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.

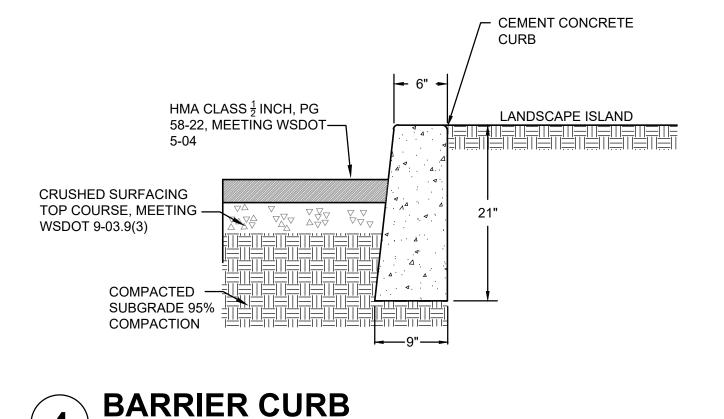
O.5" GALV. OR —

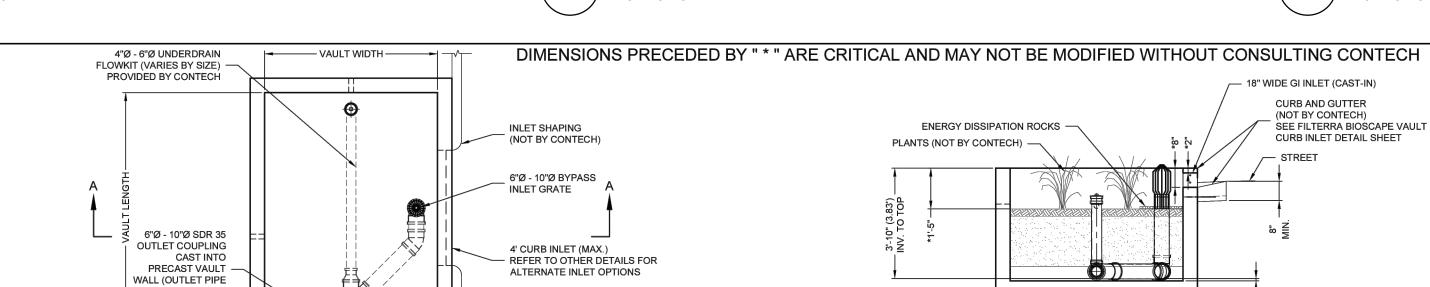
3" MAX. SPACING

0.75" DIA. FRAME —

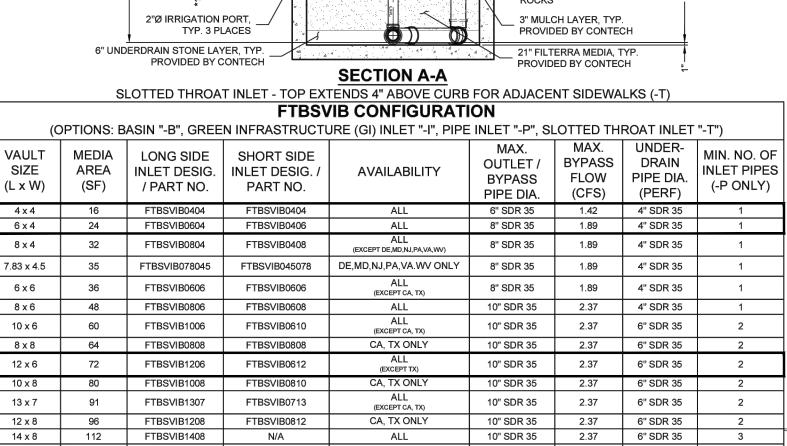
NON-CORROSIVE **NUTS & BOLTS**







LOCATION MAY (NOT BY CONTECH) **PLAN VIEW** - GALVANIZED ANGLE NOSING PLANTS (NOT BY CONTECH) -CURB AND GUTTER (NOT BY CONTECH) - SEE FILTERRA BIOSCAPE VAULT CURB SIDEWALK/CURB ELEVATION ENERGY DISSIPATION ROCKS 2"Ø IRRIGATION PORT, 3" MULCH LAYER, TYP. TYP. 3 PLACES PROVIDED BY CONTECH 6" UNDERDRAIN STONE LAYER. TY 21" FILTERRA MEDIA, TYP PROVIDED BY CONTECH PROVIDED BY CONTECH SLOTTED THROAT INLET - TOP EXTENDS 4" ABOVE CURB FOR ADJACENT SIDEWALKS (-T) FTBSVIB CONFIGURATION (OPTIONS: BASIN "-B", GREEN INFRASTRUCTURE (GI) INLET "-I", PIPE INLET "-P", SLOTTED THROAT INLET "-T") VAULT | MEDIA | LONG SIDE | SHORT SIDE OUTLET / BYPASS DRAIN INLET PIPES SIZE AREA INLET DESIG. | INLET DESIG. / AVAILABILITY BYPASS | FLOW | PIPE DIA. (CFS) (PERF) (-P ONLY) (LxW) SF) / PART NO. PART NO. PIPE DIA. 4 x 4 16 FTBSVIB0404 FTBSVIB0404 6" SDR 35 1.42 4" SDR 35 1 6 x 4 24 FTBSVIB0604 FTBSVIB0406 8" SDR 35 1.89 4" SDR 35 8 x 4 32 FTBSVIB0804 7.83 x 4.5 35 FTBSVIB078045 FTBSVIB045078 DE,MD,NJ,PA,VA.WV ONLY 8" SDR 35 1.89 4" SDR 35 6 x 6 36 FTBSVIB0606 FTBSVIB0606



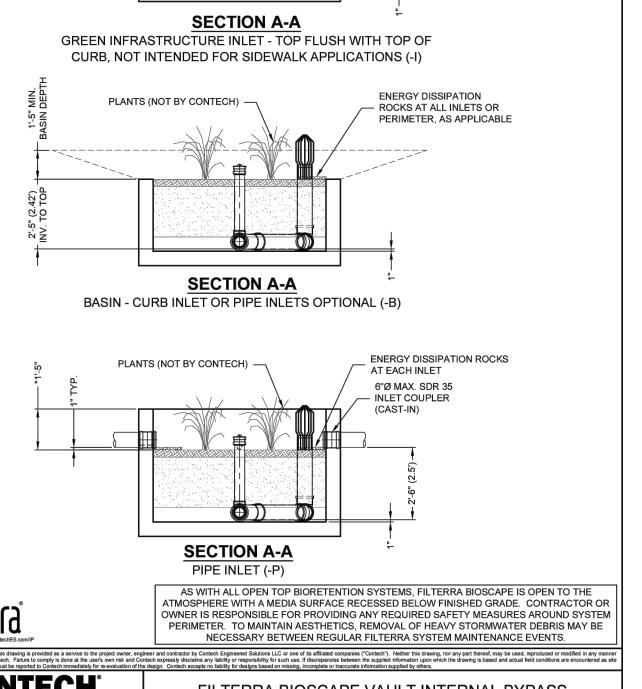
10" SDR 35 2.37 6" SDR 35 3

 10" SDR 35
 2.37
 6" SDR 35
 3

 10" SDR 35
 2.37
 6" SDR 35
 3

10" SDR 35 2.37 6" SDR 35 4 10" SDR 35 2.37 6" SDR 35 4

INTERNAL PIPE CONFIGURATION MAY VARY DEPENDING ON VAULT SIZE



CINTECH® FILTERRA BIOSCAPE VAULT INTERNAL BYPASS (FTBSVIB) CONFIGURATION DETAIL 9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069

RIP RAP PAD

EXISTING AND/OR PROPOSED GROUND 12" MIN. DEPTH (12"Ø PIPE) 4" MIN. FACE 🚽 18" MIN. DEPTH (15"-18"Ø PIPE) QUARRY ROCK 24" MIN. (24"-36"Ø PIPE) SECTION VIEW

4 EA. 0.25" x 2" x 5" STRIPS — WELD TO FRAME -

___ 0.25" x 2" x 5"

ENDS TO BE

0.75" DIA.

ASPHALT COATED (TREATMENT 1 OR BETTER). TRASH RACKS SHALL BE INSTALLED AT ALL OPEN ENDS OF STORM DRAINAGE PIPE 12" DIA. AND GREATER.

1.ALL STEEL PARTS MUST BE GALVANIZED AND

DEBRIS BARRIER

WELDED TO

SPACE UNIFORMALY

SIDE VIEW

G

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DATE		

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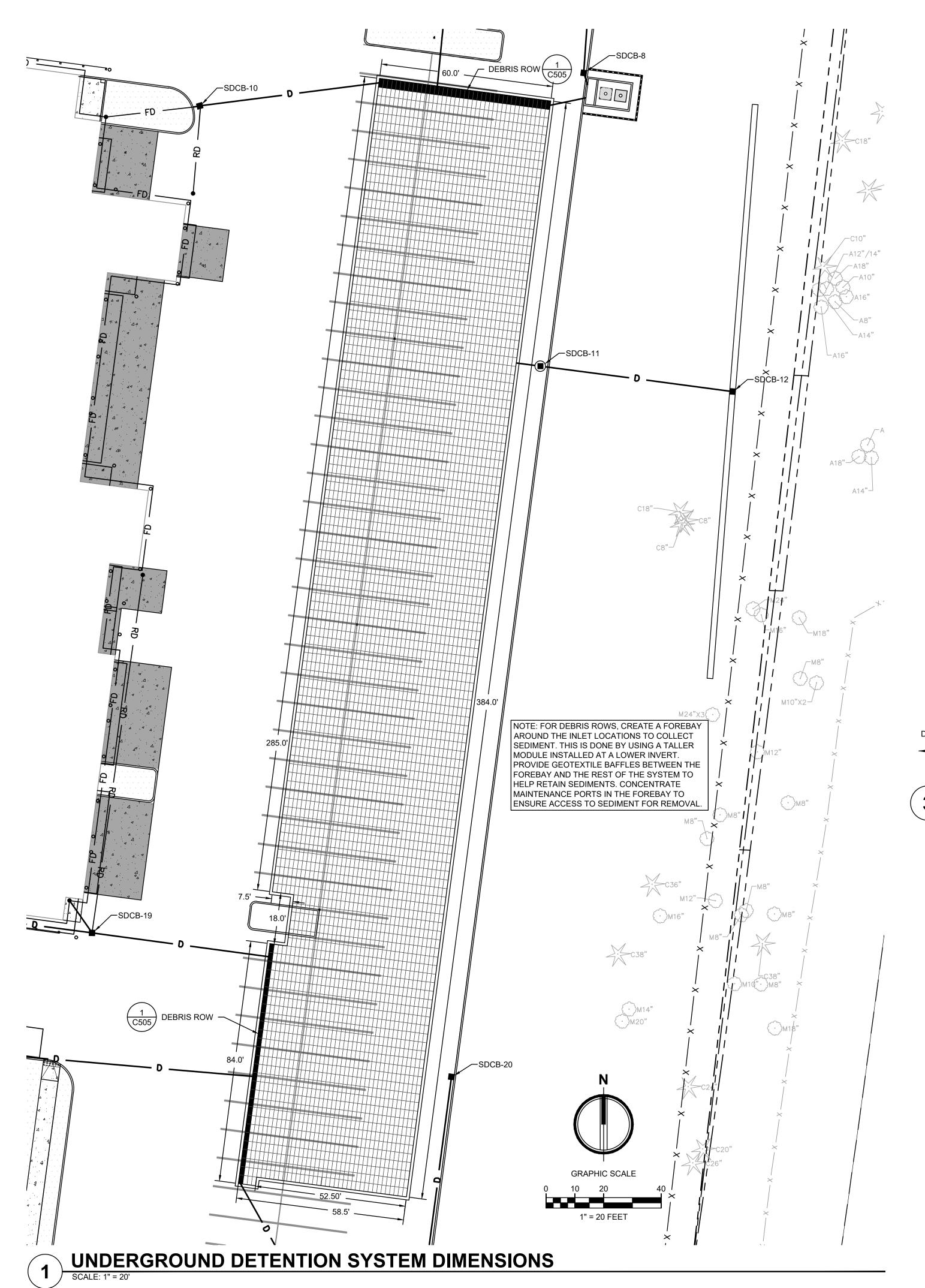


NOTES AND DETAILS

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

C504

DRAWING NO.

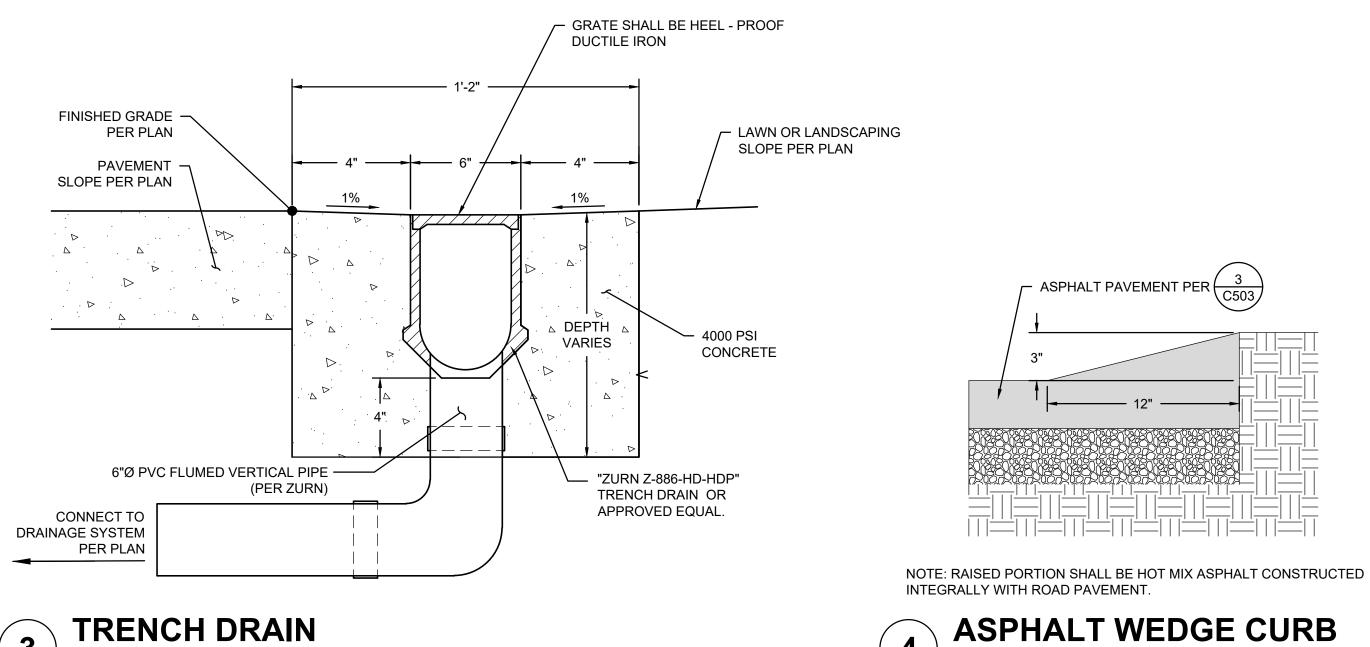


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C D

- TENCATE MIRAFI FW-402 WOVEN (OR EQUAL) SURROUNDING STONE / SOIL INTERFACE ─ 16.7' MAX. ─ 6" MIN. TOP OF SYSTEM ELEV = 477.40 INLET PIPE + IE VARIES, SEE PLAN 12" PVC OUTLET PIPE | IE = 471.90 SIDE AND TOP BACKFILL: GRAVEL BACKFILL FOR DRYWELLS PER WSDOT └ BOTTOM OF SYSTEM ELEV = 471.40 ► NONWOVEN GEOTEXTILE, ACF ─ BASE: 4" MIN. UNCOMPACTED N080 (OR EQUAL) SURROUNDING GRAVEL BACKFILL FOR DRYWELLS MODULES PER WSDOT 9-03.12(5) NOTE: SEE DETAIL FOR MORE INFORMATION. UNDERGROUND DETENTION SYSTEM SECTION VIEW

G H



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ENGINEER.

APPROVED

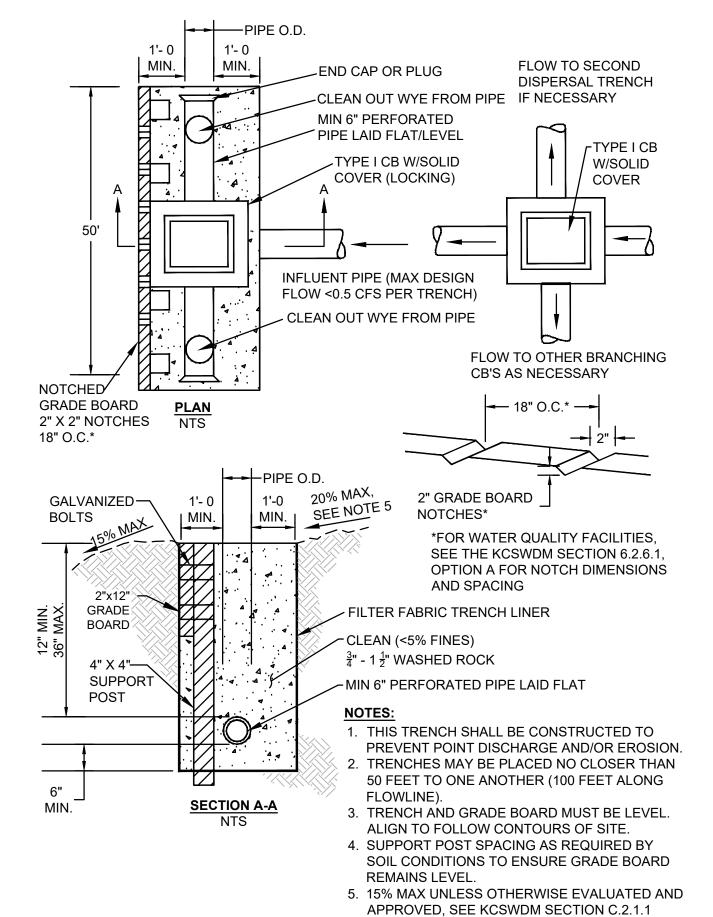
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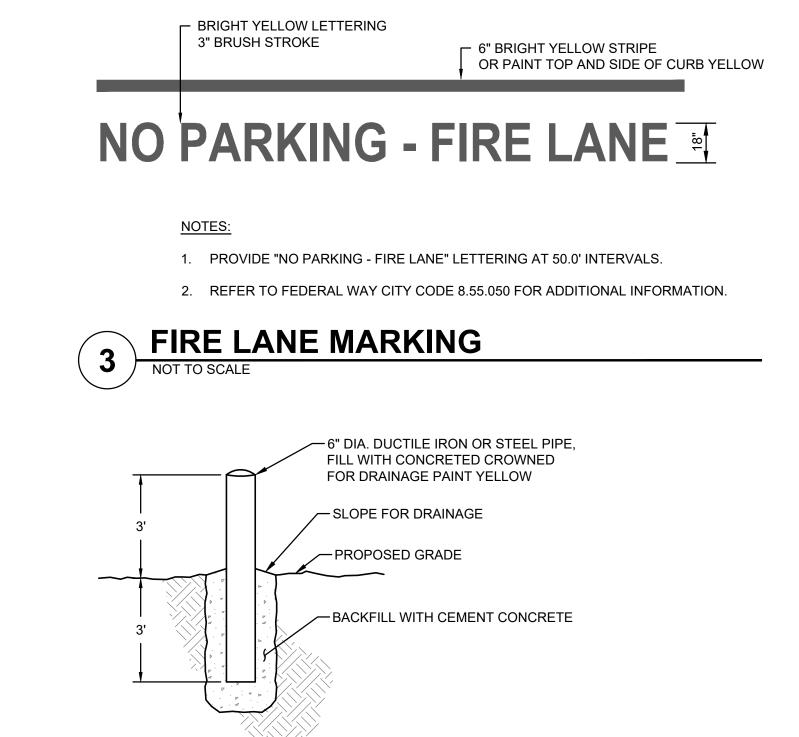
HORIZONTAL SCALE: 1"=20 VERTICAL SCALE: 1"=5' PROPOSED GRADE EXISTING GRADE FREEBOARD ELEV: 484.40 -1 | 7' WIDE BERM MAX.STORAGE ELEV: 483.40 (2) 2'x6'x2' ECOLOGY -BLOCKS POND BOTTOM: 478.40 EXISTING - PROPOSED
GRADE GRADE 481 48 FG 1+00 1+13.26 5 POND SECTION VIE SCALE: 1"=20' HORIZONTAL; 1"=5' VERTICAL **POND SECTION VIEW**

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1. THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT. 2. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED. 3. R-TANK^{HD}, R-TANK^{SD}, AND R-TANK^{XD} MAY BE USED IN TRAFFIC APPLICATIONS. 4. SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS. 5. IF MAINTENANCE PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR. 12" DIA. PVC REINFORCED CONCRETE COLLAR (WHERE REQUIRED), MAINTENANCE PORT MIN. 1" CLEARANCE FROM PVC NON-CORROSIVE 16.25" FRAME HOSE CLAMP AND COVER GEOTEXTILE SURFACE (AS SPECIFIED) BACKFILL COMPACTED TO 95% STANDARD PROCTOR DENSITY 1" +/- VENTING PERFORATIONS R-TANK MODULE (SEE MODULE DETAIL FOR ACTUAL HEIGHT) R-TANK SYSTEM 8" NOTCHES CUT IN SHADED AREAS (8 OPENINGS TOTAL) PIPE NOTCHING PATTERN NOTCH BOTTOM OF PIPE NON-CORROSIVE SOLID PLATE (SEE PATTERN) PLASTIC, SLATE OR EQUIVALENT 06/17/2022 R-TANK^{HD/SD/XD/LD} 12" MAINTENANCE PORT FOR ADDITIONAL INFORMATION PLEASE CONTACT: FERGUSON WATERWORKS, 1-800-448-3636, www.ferguson.com R-TANK MAINTENANCE PORT





BOLLARD

NOT TO SCALE



NOTES AND DETAILS

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

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DISPERSION TRENCH

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F G H

PERMIT NO. 24-101093-EN

ON THESE PLANS.

ENGINEER.

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FIELD CONDITIONS MAY DICTATE CHANGES TO

THESE PLANS AS DETERMINED BY THE CITY

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Helix design group

AMERICAN INSTITUTE OF ARCHITECTS

HELIX DESIGN GROUP, INC

2215 North 30th Street, Suite 300 Tacoma, WA 98403 253.383.2422 TEL 253.383.2572 FAX www.ahbl.com WEB

AHBL NO.: 2200572.10

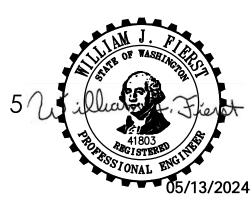
FEDERAL WAY, WASHINGTON

—Δ=53°07'08"

_{2.1}R,, 25.00'

L=23.18'





CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE

DRAWING NO.

0921049311

UTILITY NOTE

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT INCUR DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. AHBL ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

TOPOGRAPHIC NOTE

D

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INCLUDES UTILITY RECORDS FROM THE CITY OF FEDERAL WAY AND THE LAKEHAVEN WATER AND SEWER DISTRICT. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, AHBL CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

CONSTRUCTION SPECIFICATION

CONSTRUCTION SHALL BE PERFORMED CONFORMING TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 2024

AUTOCAD FILE:

AN AUTOCAD DRAWING FILE IS AVAILABLE TO ASSIST WITH SITE LAYOUT. PLEASE NOTE THAT ELECTRONIC FILES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE AND SHALL NOT REPLACE NOR BE USED TO SUBSTITUTE THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT LAYOUT ACCORDING TO CONTRACT DOCUMENTS AND COST FOR ELECTRONIC AUTOCAD FILES. PHONE: (253) 383-2422

STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.

OWNER

CITY OF FEDERAL WAY 33325 8TH AVENUE SOUTH FEDERAL WAY, WA 98003 CONTACTS: DESIREE WINKLER PH. (253)835.2711

CIVIL ENGINEER

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: BILL FIERST P.E. PRINCIPAL PH. (253).383.2422

ARCHITECT

HELIX DESIGN GROUP 6021 12TH STREET EAST, SUITE 201 FIFE, WASHINGTON, 98424-1376 CONTACT: JEFF RYAN PH. (253).922.9037

SURVEYOR

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: DAVID FOLLANSBEE PLS PRINCIPAL PH. (253).383.2422

LANDSCAPE ARCHITECT

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: SARAH SINGLETON SCHROEDEL PH. (253).383.2422

GEOTECHNICAL ENGINEER

FIRE HYDRANT

HOSE BIB

IRRIGATION CONTROL VALVE

MIGIZI GROUP, INC. 201 160TH STREET SOUTH #401 SPANAWAY, WA 98387 CONTACT: JAMES BRIGHAM, P.E. PH. (253).537.9400

EXISTING LEGEND

HING	LEGEND:	\bowtie	WATER VALVE
		Н	HVAC UNIT
7	SET NAIL AND WASHER		A-ADDIE D-DIDOU E-EID
	FOUND REBAR AND CAP		A=APPLE, B=BIRCH, F=FIR, P=PINE, HA=HAWTHORNE
	BOLLARD		HO=HOLLY, M=MAPLE,
	MAIL BOX	€.)	O=OAK, U= UNKNOWN
l	SIGN AS NOTED	D	STORM LINE
	SANITARY SEWER MANHOLE	s	SANITARY SEWER LINE
	SANITARY SEWER CLEANOUT		GAS LINE
	STORM CATCH BASIN	P	ELECTRICAL LINE
	STORM MANHOLE	T	COMMUNICATIONS LINE
	ROOF DRAIN		WATER LINE
3	CABLE RISER	— — — IR —	IRRIGATION PER RECORD DRAW
	GAS METER	OHP	OVERHEAD UTILITIES
	GAS VALVE	x x x	FENCE
)	GATE POST		CONCRETE
	POWER TRANSFORMER		ASPHALT
	GUY ANCHOR	XXX	CONTOUR MAJOR INTERVAL
)-	UTILITY POWER POLE	XXX	CONTOUR MINOR INTERVAL
ð	POWER METER		PROPERTY / RIGHT-OF-WAY LIN

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND AHBL ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW. CHAPTER 49.17 RCW.

SITE DATA

MAXIMUM LOT COVERAGE:

APPROX. PROJECT AREA: TOTAL LOT AREA:	10.95 ACRES (476,850 SF) 13.53 ACRES (589,563 SF)
EX. SITE IMPERVIOUS AREA: REPLACED IMPERVIOUS AREA NEW IMPERVIOUS AREA:	4.13 ACRES (179,743 SF) 0 ACRES (0 SF) 6.42 ACRES (279,534 SF)
TOTAL ONSITE IMPERVIOUS AREA (POST-DEVELOPMENT):	6.42 ACRES (279,534 SF)

47.45%

EARTHWORK QUANTITIES

CUT=	25,040 CY
FILL=	36,270 CY
NET IMPORT/EXPORT=	11,230 CY FILL
TOTAL EARTHWORK=	61,310 CY

NOTE: THE ABOVE QUANTITIES ARE ESTIMATES ONLY INTENDED TO THE PERMITTING PROCESS AND ARE NOT INTENDED TO BE USED BY THE CONTRACTOR FOR BIDDING PURPOSES. THE CONTRACTOR SHALL MAKE THEIR OWN EARTHWORK DETERMINATION.

UTILITIES/SERVICES

KEHAVEN WATER & SEWER DISTRICT
KEHAVEN WATER & SEWER DISTRICT
GET SOUND ENERGY
NTURYLINK

LEGAL DESCRIPTION

WATER METER

SEE TOPOGRAPHIC SURVEY.

SITE ADDRESS

31130 28th AVE S AVENUE SOUTH FEDERAL WAY, WA. 98003

FIRE PROTECTION AUTHORITY

SOUTH KING FIRE & RESCUE FEDERAL WAY, WA

VICINITY MAP

1201

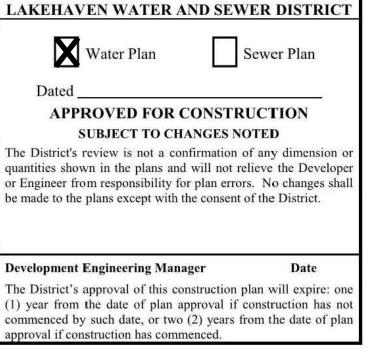
STANDARD PLAN TABLE

LHWSD STD. PLAN DETAIL DESCRIPTION

NOTE:

1. SEPARATE WATER SERVICE CONNECTION APPLICATION REQUIRED TO BE

Sheet Number	Sheet Title
W100	WATER COVER SHEET
W101	WATER SITE PLAN
W201	28th AVE S WATER PLAN AND PROFILE
W202	28th AVE S WATER PLAN AND PROFILE
W203	28th AVE S WATER PLAN AND PROFILE
W301	WATER PLAN AND PROFILE
W302	WATER PLAN AND PROFILE
W303	WATER PLAN AND PROFILE
W304	WATER PLAN AND PROFILE
W305	WATER PLAN AND PROFILE



LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND

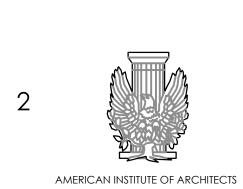
RESTORATION REQUIREMENTS FOR WORK PERFORMED IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION. CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

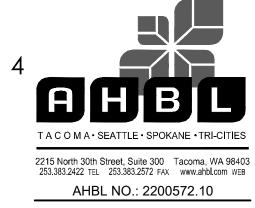
APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

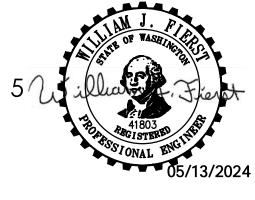
VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

NAD 1983/11 WASHINGTON STATE PLANE NORTH PROJECTION, BASED ON GPS OBSERVATIONS USING WSRN AND GEOID 2012A. UNITS C MEASUREMENT ARE US SURVEY FEET.







COVER SHEET

FACILITY

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S 311th S

S 312th 🕏

N88° 19' 27"W

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DOMESTIC WATER SERVICE CONNECTION 1202 AND METER 3" AND LARGER (3 PAGES) DOUBLE CHECK VALVE ASSEMBLY 2 1/2" 1402 AND SMALLER DOUBLE CHECK DETECTOR ASSEMBLY 3" 1403 TO 10" (2 PAGES) REDUCED PRESSURE BACKFLOW 1404 ASSEMBLY OUTSIDE INSTALLATION UTILITY VAULT LADDER

STANDARD TRENCH (2 PAGES)

PROTECTIVE PAD

2" (2 PAGES)

VALVE BOX APPURTENANCES AND

CONCRETE THRUST BLOCKING (2 PAGES)

WATER SERVICE CONNECTION 1 1/2" AND

FIRE HYDRANT ASSEMBLY (2 PAGES)

LOCATION

G

SUBMITTED TO LAKEHAVEN FOR METER INSTALLATION AND FULL SERVICE ACTIVATION.

LAKEHAVEN PROJECT NO: 6324006 THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH

SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY ADDENDA THERETO. ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W.

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND

BASIS OF BEARING

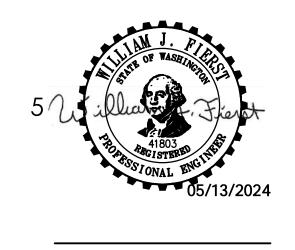
FEDERAL WAY, WASHINGTON

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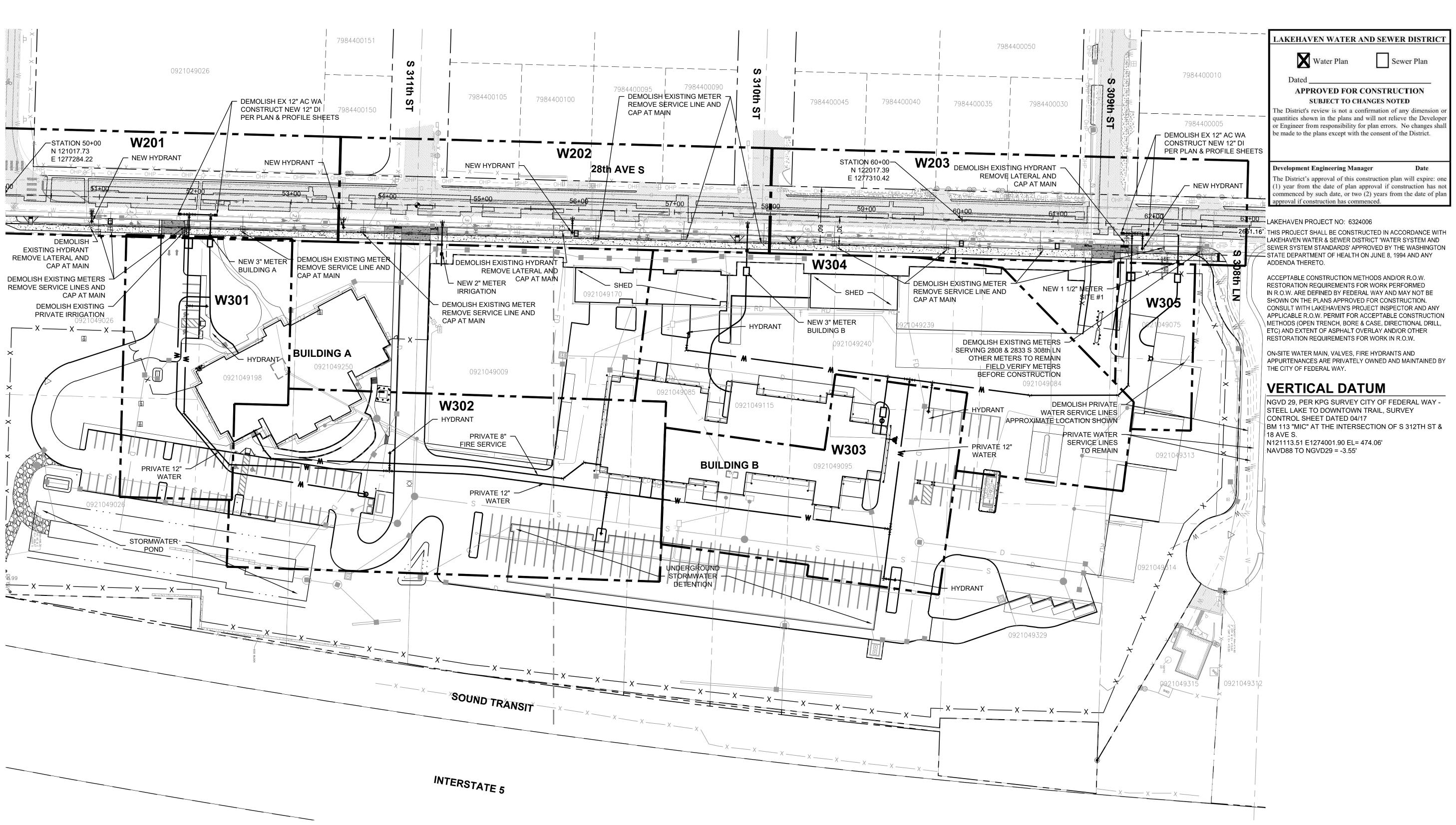
WATER SITE PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

	REVISION	DATE
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9		

DATE JOB NO. a23-087 05.06.24

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	В	UILDIN	G A ME	TER T	ABLE	
1ETER	SIZE	ESTIMATED ELEVATION	PRESSURE ZONE	HIGH/LOW PRESSURE	ESTIMATED MINIMUM USAGE	ESTIMATED MAXIMUM USAGE
MESTIC	3"	497	578	32-40	0	69 GPM

	BUILDING B METER TABLE							
/IETER	SIZE	ESTIMATED ELEVATION	PRESSURE ZONE	HIGH/LOW PRESSURE	ESTIMATED MINIMUM USAGE	ESTIMATED MAXIMUM USAGE		
MESTIC	2"	492	578	34-43	0	56 GPM		

	SITE METER TABLE					
METER	SIZE	ESTIMATED ELEVATION	PRESSURE ZONE	HIGH/LOW PRESSURE	ESTIMATED MINIMUM USAGE	ESTIMATED MAXIMUM USAGE
DOMESTIC (SITE #1)	1.5"	493	578	34-43		
IRRIGATION	2"	497	578	32-40	0	1180 GPM

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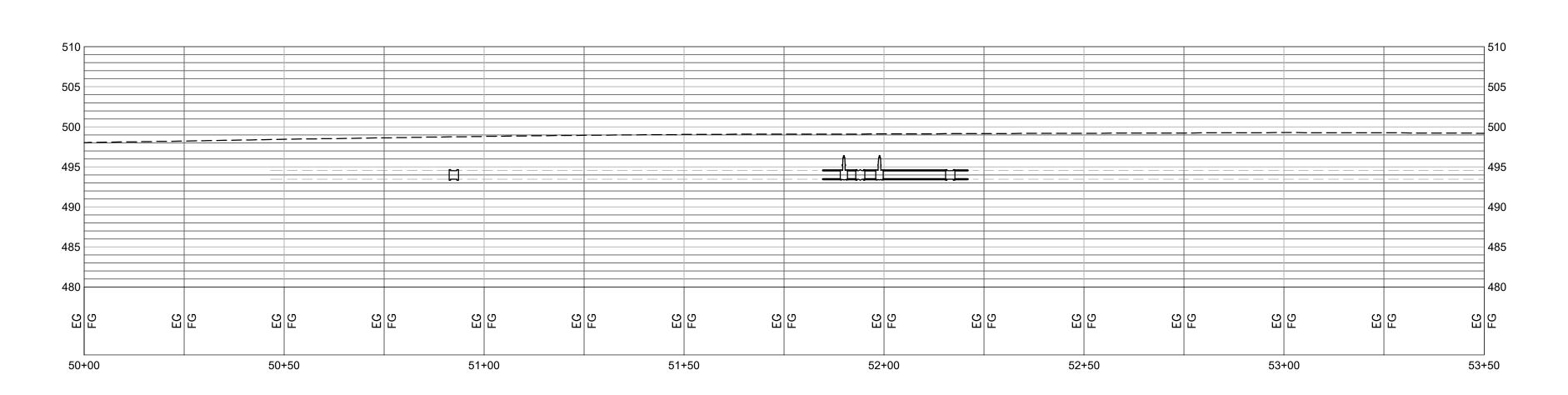
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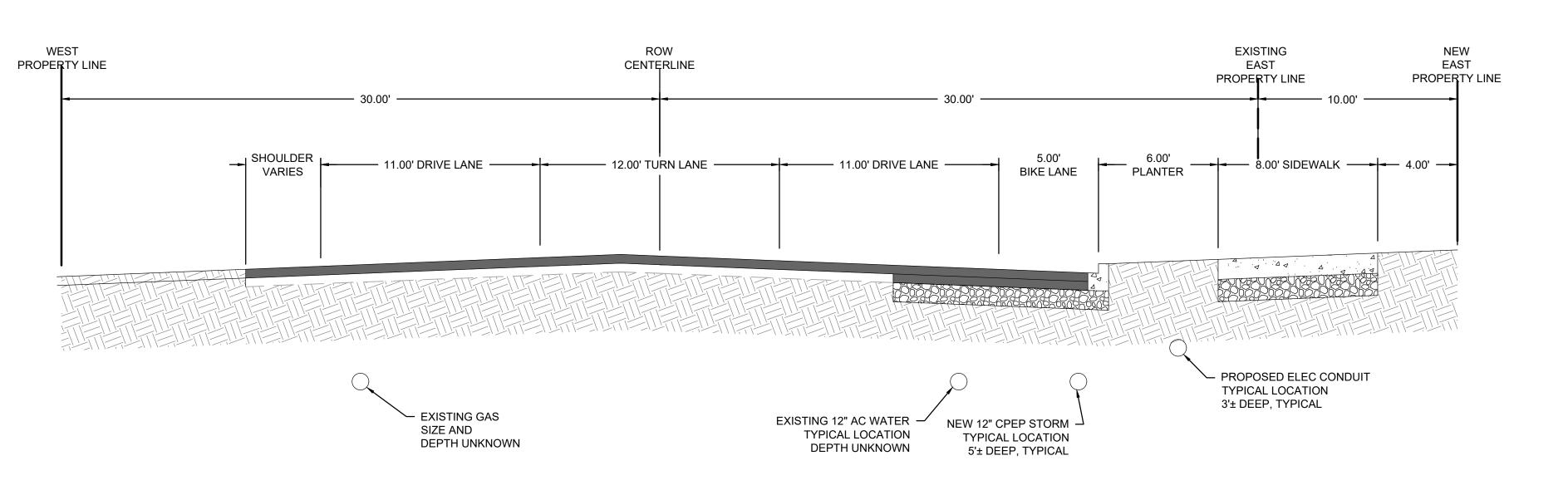
1" = 50 FEET

GRAPHIC SCALE

_MAD12"X3/16" -_OHP - - OHP STA:51+94.07, 15.55' RT 12x12 CUT IN TEE (FLxFLxFL) ___ 22 LF 12" DI CL 52 WA__ W/ (3) 12" GATE VALVE (FLxMJ) _ G _ _ _ _ G _ _ _ _ G _ _ _ G _ _ _ G _ _ _ W(THRUST BLOCK 28th AVE S STA:50+92.43, 15.06' RT-√ 12x6 CUT IN TEE (MJxFLxFL) 12x6 TAPPING TEE (FL) NEAREST W/ 6" GATE VALVE (FLxFL) W/ 6" GATE VALVE (FLxRJ) - HYDRANT W/ 6x3 REDUCER (FLxMJ) 99'± W/ THRUST BLOCK __NEAREST_ -<u>− EX 1</u>2" AC WA VALVE CRD UNKNOWN 11 LF 6" DI CL 52 WA -____ EX 12" AC WA RESTRAINED CRD UNKNOWN 12" TRANSITION COUPLING -─ 12" TRANSITION COUPLING W/ 10 LF 12" DI WA 52 SPOOL W/ 10 LF 12" DI WA 52 SPOOL STA:52+16.46, 38.25' RT STA:50+92.53, 25.69' RT~ 25 LF 12" DI CL 52 WA ----3" METER BLDG A FIRE HYDRANT ASSEMBLY PER STD DET 1202 **SEE SHEET W301 FOR CONTINUATION**

D







AKEHAVEN WATER AND SEWER DISTRICT Water Plan APPROVED FOR CONSTRUCTION SUBJECT TO CHANGES NOTED The District's review is not a confirmation of any dimension of quantities shown in the plans and will not relieve the Developer or Engineer from responsibility for plan errors. No changes shal be made to the plans except with the consent of the District. Development Engineering Manager The District's approval of this construction plan will expire: one (1) year from the date of plan approval if construction has not ommenced by such date, or two (2) years from the date of plan pproval if construction has commenced.

LAKEHAVEN PROJECT NO: 6324006 THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON

STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY

ADDENDA THERETO.

ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W. RESTORATION REQUIREMENTS FOR WORK PERFORMED IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION. CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

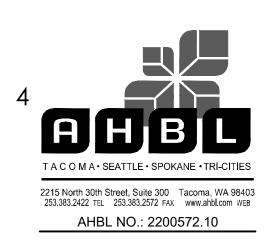
LEGEND SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING WATER PIPING F FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD THRUST BLOCKING FITTINGS AS NOTED YARD HYDRANT, SERVICE FROM

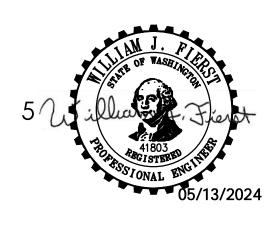
BUILDING PLUMBING SYSTEM,

EXCEPT WHERE INDICATED



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28TH AVE S

WATER PLAN

AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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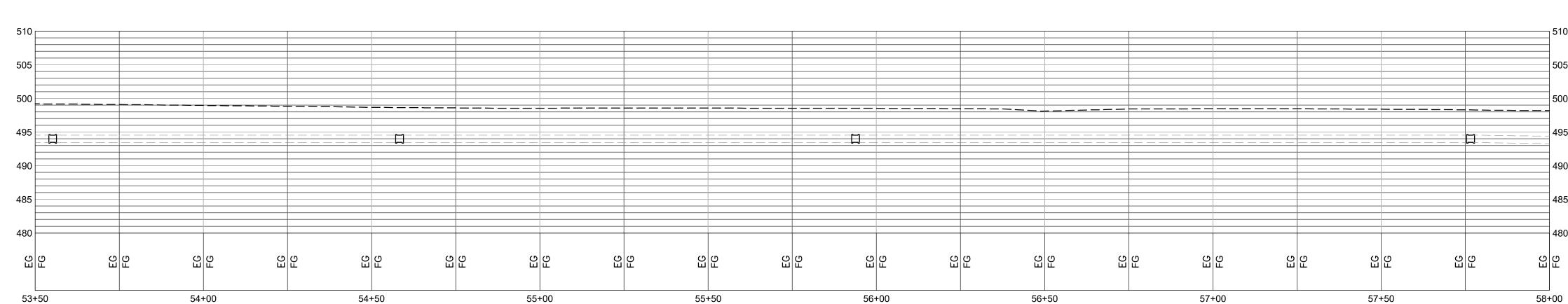
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GRAPHIC SCALE

1" = 20 FEET

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MAD8"DEADMAP12 STA:57+76.59, 9.46' RT 12x6 TAPPING TEE (FL) √STA:55+93.80, 9.30' RT _STA:54+58:28, 16:93' RT W/ 6" GATE VALVE (FLXFL) /-STA:53+55.22, 16.57 RT 12x6 TAPPING TEE (FL) MATCHLINE SHEET W201 28th AVE S 12x6 TAPPING TEE (FL) W/ 6x3 REDUCER (FLxMJ) 12x6 TAPPING TEE (FL) W/ 6" GATE VALVE (FLxFL) W/ THRUST BLOCK W/ 6" GATE VALVE (FLxRJ) W/ 6" GATE VALVE (FLxRJ) W/ 6x3 REDUOER (FLxMJ) W/ THRUST BLOCK 55+00 ____EX 12" AC WA <u>RESTRAINED</u> _____CRD_UNKNOWN RESTRAINED STA:57+76.59, 38.25' RT-2" IRRIGATION METER FIRE HYDRANT ASSEMBLY FIRE HYDRANT ASSEMBLY 3" METER BLDG B PER STD DET 1202 ______PER,STD DET 1100 ______ PER STD DET 1201_ PER STD DET 1100 **SEE SHEET W304 FOR CONTINUATION** SEE IRRIGATION PLANS FOR CONTINUATION

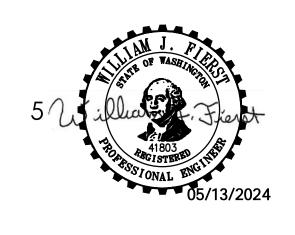




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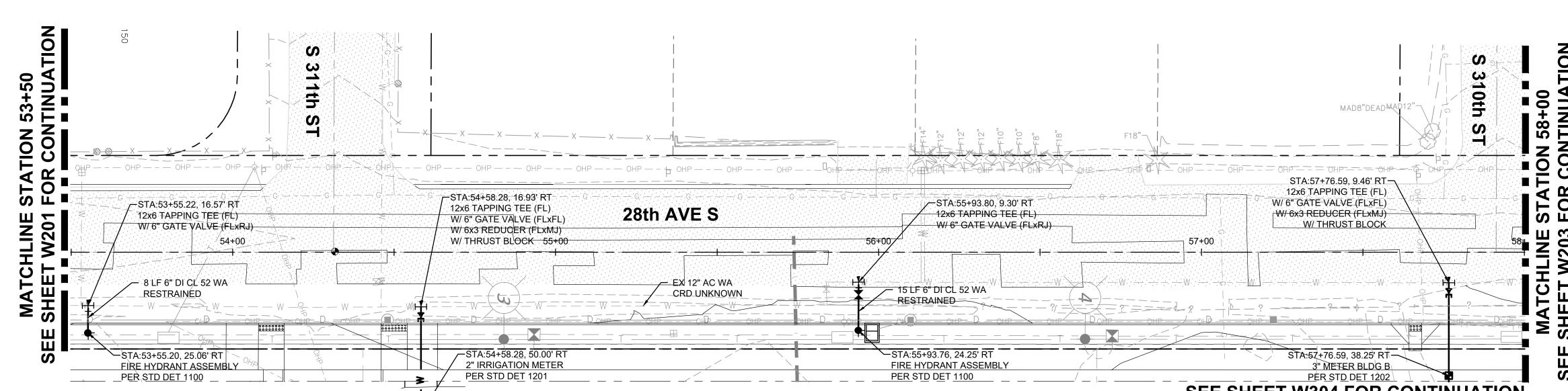




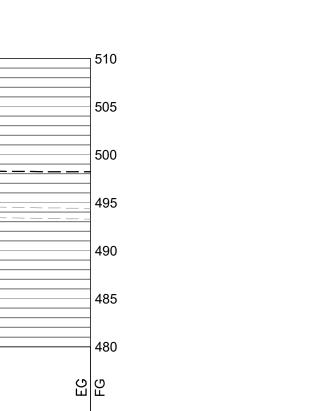
28TH AVE S WATER PLAN AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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D



AKEHAVEN WATER AND SEWER DISTRICT

APPROVED FOR CONSTRUCTION SUBJECT TO CHANGES NOTED

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CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY

APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION

APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST &

CLEANOUT

FIRE HYDRANT

METER AS NOTED

THRUST BLOCKING FITTINGS AS NOTED

GATE VALVE BOLLARD

CATCH BASIN TYPE-1

SANITARY SEWER PIPING

FIRE DEPARTMENT CONNECTION

YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED

GRAPHIC SCALE

1" = 20 FEET

POST INDICATOR VALVE (PIV)

SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER

METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL,

ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER

RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND

STEEL LAKE TO DOWNTOWN TRAIL, SURVEY

Development Engineering Manager

pproval if construction has commenced.

LAKEHAVEN PROJECT NO: 6324006

ADDENDA THERETO.

THE CITY OF FEDERAL WAY.

18 AVE S.

LEGEND

VERTICAL DATUM

N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

— W — WATER PIPING

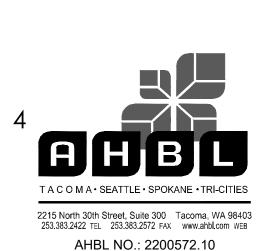
— F — FIRE SERVICE PIPING

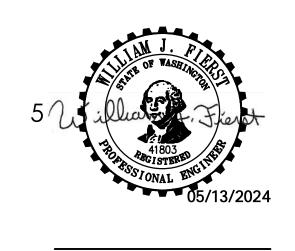
CONTROL SHEET DATED 04/17

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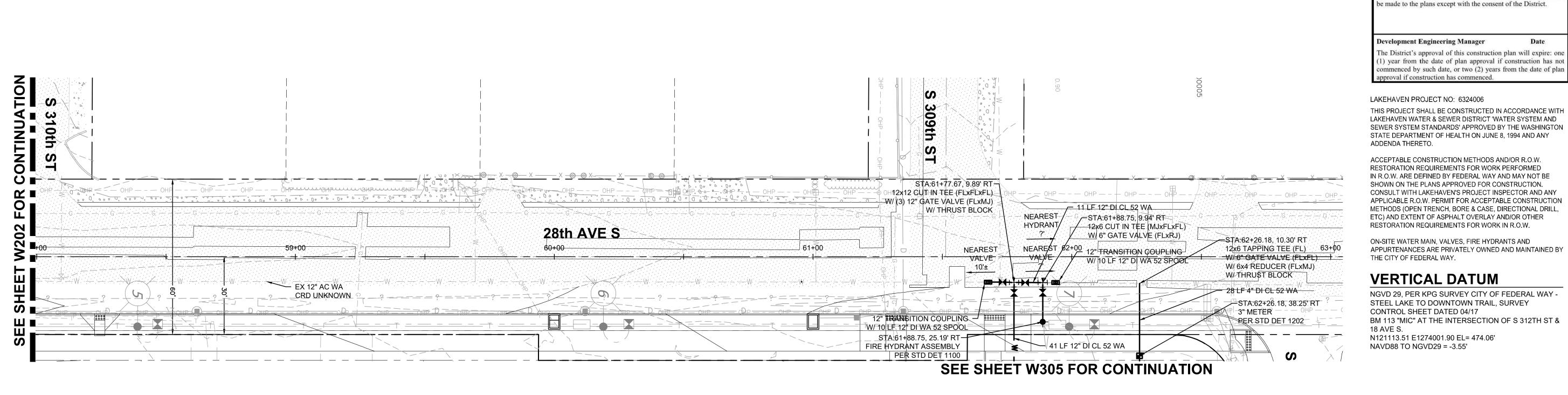


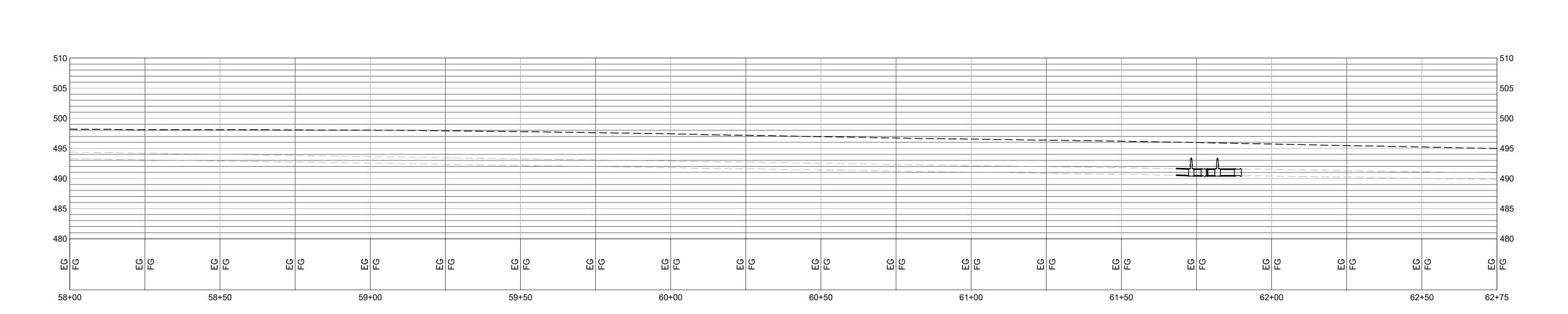
28TH AVE S WATER PLAN AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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LEGEND SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING WATER PIPING F F FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD THRUST BLOCKING FITTINGS AS NOTED YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED

AKEHAVEN WATER AND SEWER DISTRICT

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Development Engineering Manager

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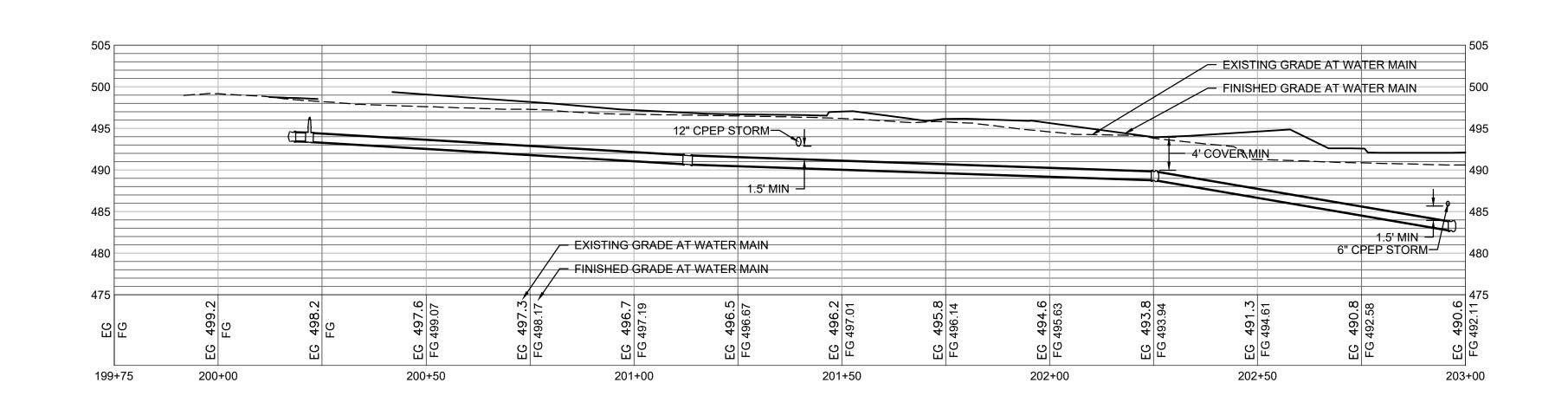
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MATCHLINE STATION 203+00 3" PE PRIVATE DOMESTIC WATER SERVICE **SEE SHEET W302 FOR CONTINUATION** N 121233.05-\ E 1277391.46 **−**N 121229.42 PRIVATE 3x1 TEE/ RW54°E-1277400.95 FIRE HYDRANT ASSEMBLY PER STD DET 1100 **BUILDING A** ✓N 121253.19 / ∕−N 121232.92 - PRIVATE FDC / E 1277566.09 E 1277334.83 MOUNTED TO BUILDING 12" 45° BEND (MJxMJ) PRIVATE 3" DCDA SEE MECHANICAL PLANS W/ THRUST BLOCK —N 121205.88 E 1277512.52 12" 45° BEND (MJxMJ) | W/ THRUST BLOCK 113 LF 12" DI CL 52 PRIVATE စ္ဆE 1277335.29 PRIVATE 12" RPDA É 1" PE PRIVAT⊭ DOMESTIC -PER STD PLAN 1403 WATER SERVICE N 121208.82 E 1277400.25 12x3 TEE (MJxFLxMJ) W/3" GATE VALVE (FLxMJ) W/ THRUST BLOCK

D |





AKEHAVEN WATER AND SEWER DISTRICT Water Plan APPROVED FOR CONSTRUCTION SUBJECT TO CHANGES NOTED The District's review is not a confirmation of any dimension of quantities shown in the plans and will not relieve the Developer or Engineer from responsibility for plan errors. No changes shal be made to the plans except with the consent of the District. Development Engineering Manager The District's approval of this construction plan will expire: one (1) year from the date of plan approval if construction has not commenced by such date, or two (2) years from the date of plan pproval if construction has commenced.

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LAKEHAVEN PROJECT NO: 6324006 THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY ADDENDA THERETO.

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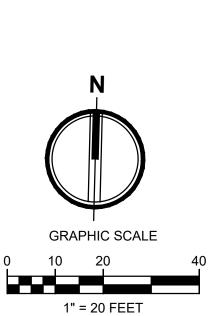
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FITTINGS AS NOTED

YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED

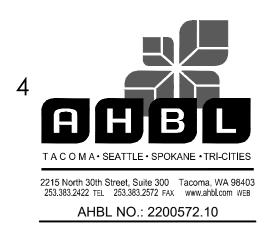
LEGEND SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING ----- W ----- WATER PIPING F FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD THRUST BLOCKING





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WATER PLAN

AND PROFILE

3	CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE FACILITY
	FEDERAL WAY, WASHINGTON

REVISION	DATE
9	

05.06.24

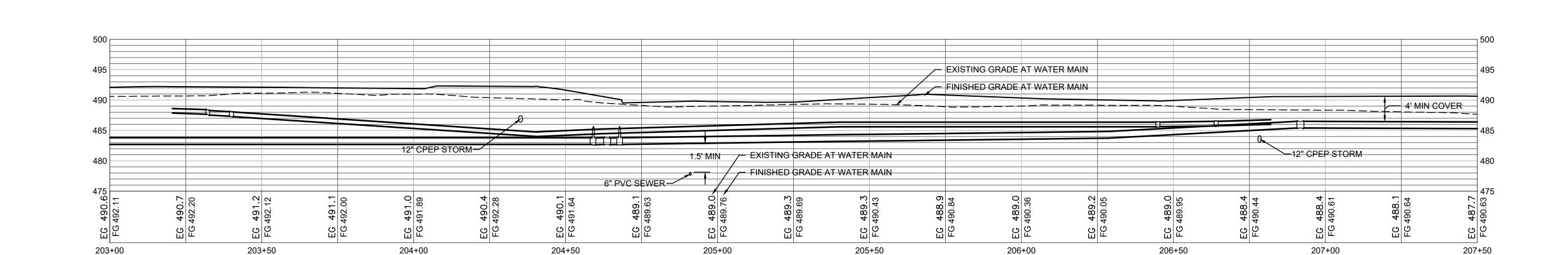
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← 23 LF 8" PRIVATE 🖡 DI CL52 FIRE **DING** ∕−N 121289.41 E 1277550.88 8" 11.25° BEND (MJxMJ) _N 121420.72 W/ THRUST BLOCK **BUILDING B** E 1277563.93 E 1277554.05 8" 45° BEND (MJxMJ) - 12 LF 8" PRIVATE FIRE HYDRANT ASSEMBLY W/ THRUST BLOCK 20 LF 8" PRIVATE DI CL52 FIRE PER STD PLAN 1100 18 LF 8" PRIVATE -DI CL 52 FIRE 27 LF 8" PRIVATE -DI CL52 FIRE - 18 LF 6" DLCL 52 DI CL52 FIRE N 121516.61 N 121496.71-PRIVATE E 1277569.45 N 121601.59~ CONNECT 8" PRIVATE FIRE E 1277567.75 BEND PIPE E 1277580.39 TO BUILDING BEND PIPE AT JOINT 8" 45° BEND (MJxMJ) SEE MECHANICAL PLANS TRION TA W/ THRUST BLOCK 8" FIRE CROSSES OVER 6" HYDRANT LATERAL 200 LF/8"/PRIVATE DI/CL \$2 FIRE 85 LF PRIVATE 8" DI CL52 FIRE ─N 121420 04 76 LF 12" DIP CL 52 PRIVATE E 1277572.71 131 LF 12" DI CL52 PRIVATE 12x6 TEE (FLxFLxFL) W/ (2) 12" GATE VALVE (MJXFL) N 121495.98 **─**N 121515.88 E 1277577.43 W/ 6" GATE VALVE (FLxMJ) E 1277575.72— -BEND PIPE W/ (3) VALVE PADS AT JOINT BEND PIPE PRIVATE W/ THRUST BLOCK 1" PE PRIVATE AT JOINT **∽**N 121646.86 43 LF 6" DI CL52 -DOMESTIC WATER SERVICE E 1277594.64 PRIVATE YARD HYDRANT PRIVATE - 20 LF 12" DIP CL 52 12x6 TEE (MJxFLxMJ) SEE MECHANICAL PLANS PRIVATE W/6" GATE VALVE (FLxMJ) W/ THRUST BLOCK **−**N 121640.95 E 1277637.95 FIRE HYDRANT ASSEMBLY PER STD PLAN 1100





AKEHAVEN WATER AND SEWER DISTRICT APPROVED FOR CONSTRUCTION AMERICAN INSTITUTE OF ARCHITECTS The District's review is not a confirmation of any dimension of quantities shown in the plans and will not relieve the Developer or Engineer from responsibility for plan errors. No changes shal

SUBJECT TO CHANGES NOTED

be made to the plans except with the consent of the District.

The District's approval of this construction plan will expire: one

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH

SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON

LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND

STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY

ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W.

RESTORATION REQUIREMENTS FOR WORK PERFORMED

IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE

CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY

APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION

METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST &

CLEANOUT

FIRE HYDRANT

GATE VALVE BOLLARD

METER AS NOTED

THRUST BLOCKING FITTINGS AS NOTED

CATCH BASIN TYPE-1

SANITARY SEWER PIPING

FIRE DEPARTMENT CONNECTION

YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM,

GRAPHIC SCALE

1" = 20 FEET

EXCEPT WHERE INDICATED

POST INDICATOR VALVE (PIV)

SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER

SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION.

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND

STEEL LAKE TO DOWNTOWN TRAIL, SURVEY

1) year from the date of plan approval if construction has not

ommenced by such date, or two (2) years from the date of plan

Development Engineering Manager

pproval if construction has commenced.

LAKEHAVEN PROJECT NO: 6324006

ADDENDA THERETO.

THE CITY OF FEDERAL WAY.

18 AVE S.

LEGEND

VERTICAL DATUM

N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

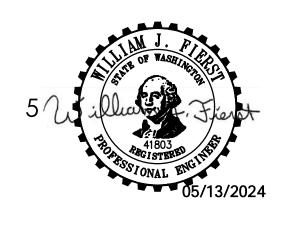
— W — WATER PIPING

— F — FIRE SERVICE PIPING

CONTROL SHEET DATED 04/17

HELIX DESIGN GROUP, INC

2215 North 30th Street, Suite 300 Tacoma, WA 98403 253.383.2422 TEL 253.383.2572 FAX www.ahbl.com WEB AHBL NO.: 2200572.10



WATER PLAN AND PROFILE

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

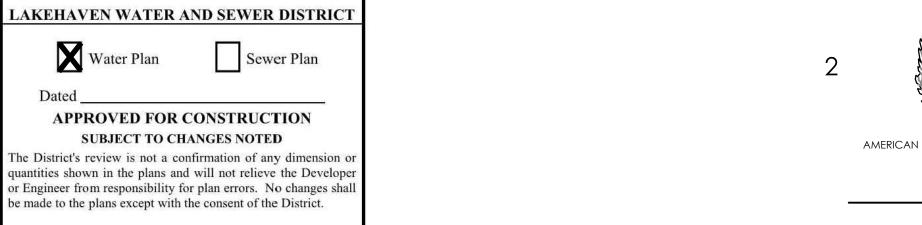
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LAKEHAVEN PROJECT NO: 6324006 THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH

ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W. RESTORATION REQUIREMENTS FOR WORK PERFORMED IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION. CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

The District's approval of this construction plan will expire: one (1) year from the date of plan approval if construction has not ommenced by such date, or two (2) years from the date of plan

LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

VERTICAL DATUM

Development Engineering Manager

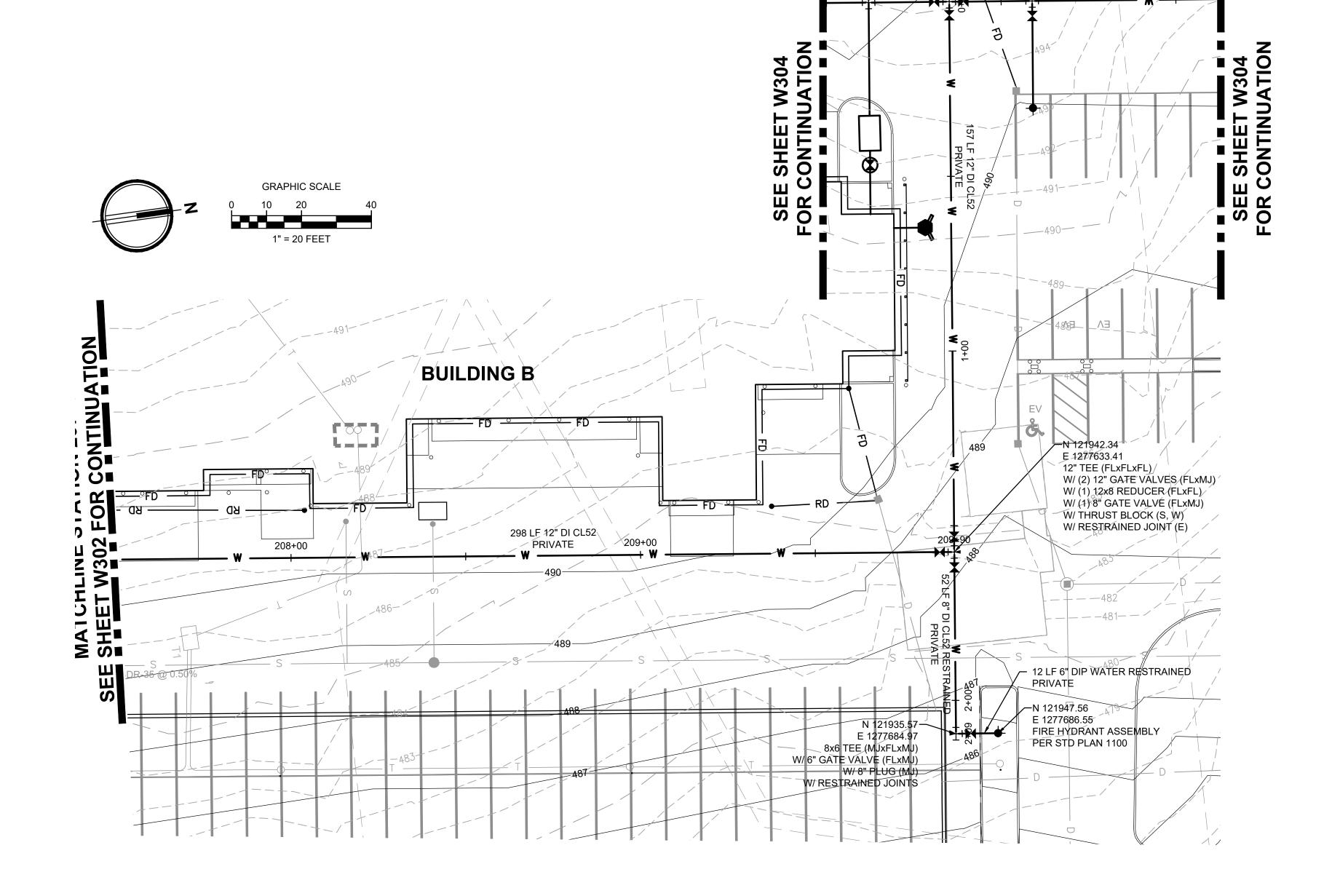
oproval if construction has commenced.

ADDENDA THERETO.

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

LEGEND SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING ----- W ----- WATER PIPING F FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD THRUST BLOCKING FITTINGS AS NOTED

> YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED



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HELIX DESIGN GROUP, INC





WATER PLAN AND PROFILE

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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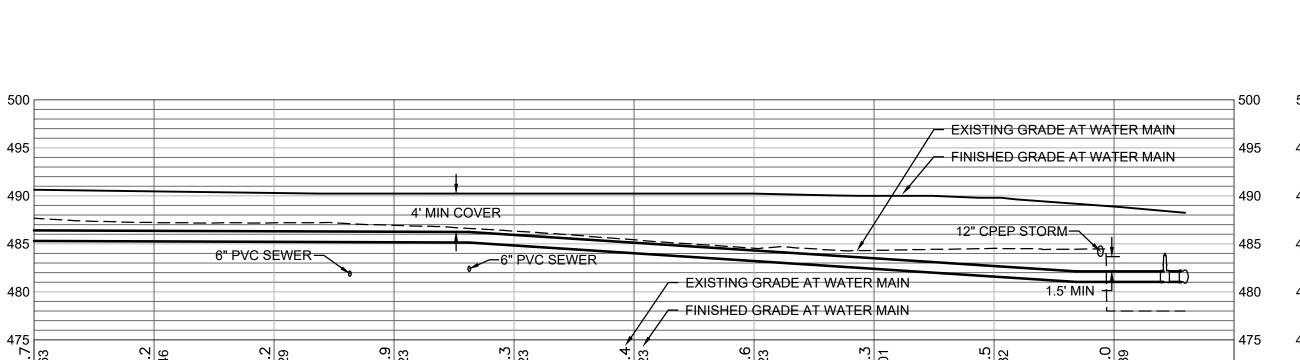
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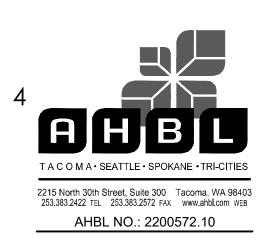
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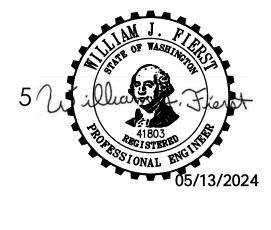
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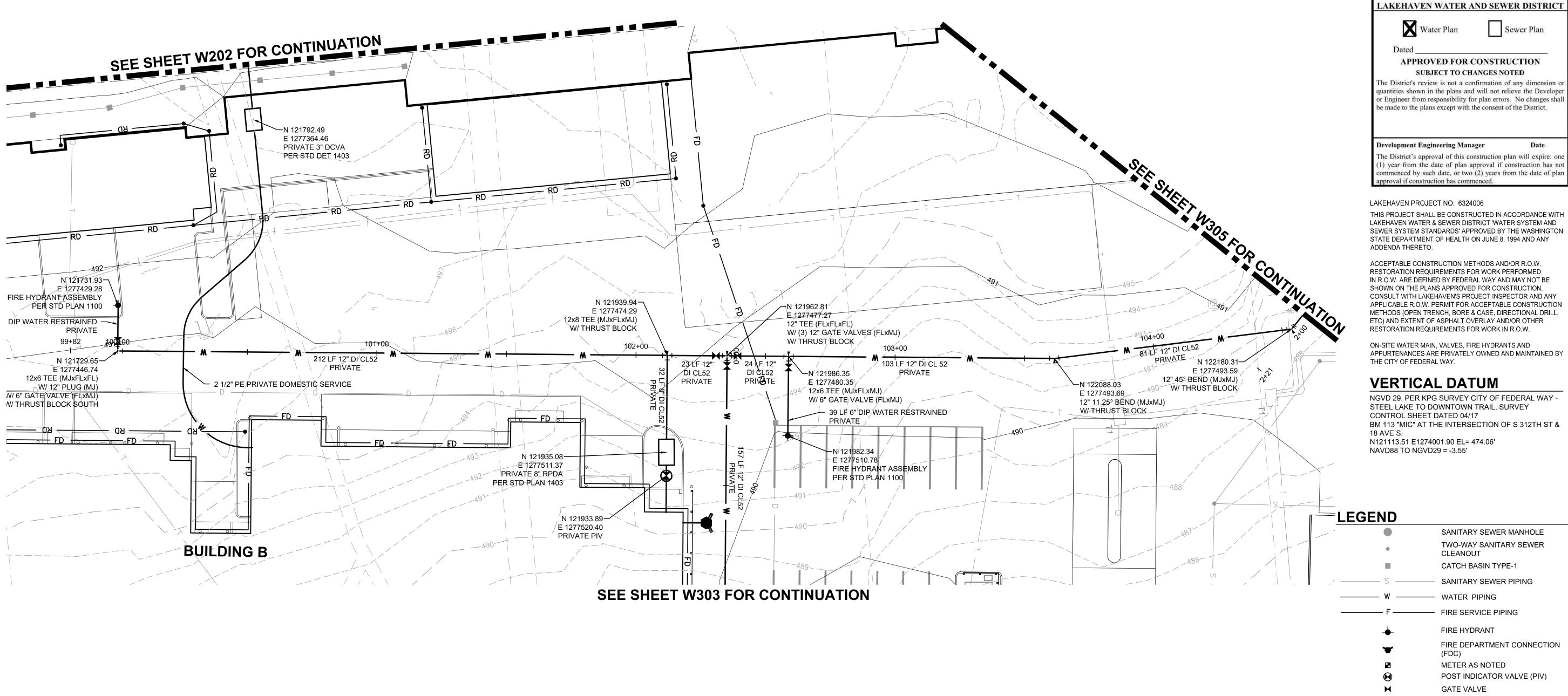


WATER PLAN

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

	TEDERAL WAT, WA	
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GRAPHIC SCALE 1" = 20 FEET

BOLLARD

THRUST BLOCKING FITTINGS AS NOTED

YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED

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AND PROFILE

FEDERAL WAY, WASHINGTON

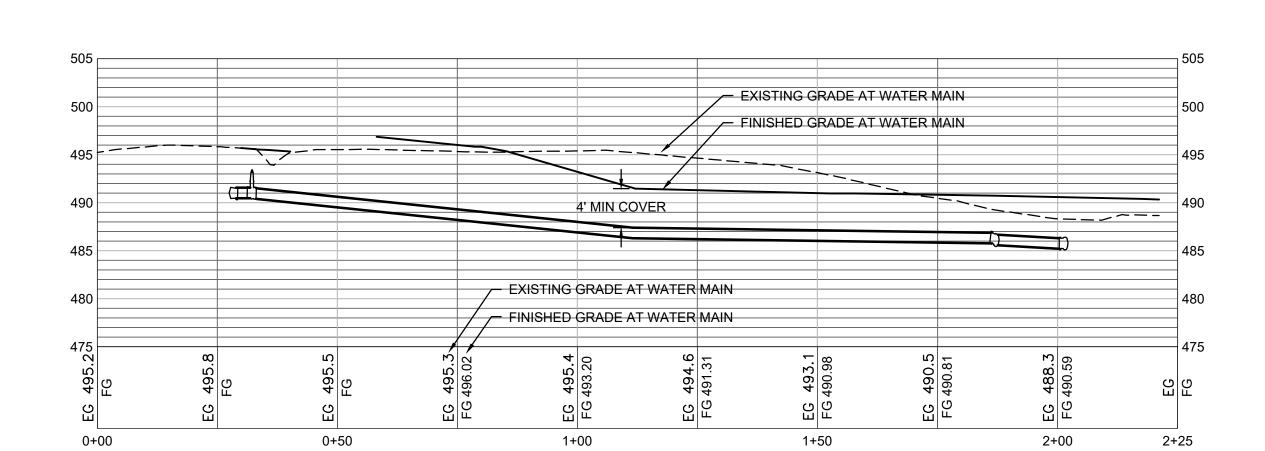
JOB NO.

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E 12773/1.58 PRIVATE 3" DCDA PER \$TD DET 1403 PRIVATE 4" PE SERVICE SEE MECHANICAL PLANS ∕–N 1⁄22√193.55\ E 1277370.06 PRIVATE 12" RPDA N 122190.57-PER \$TD PLAN 1/4/03 E 1277483.58 / 12" 45° B≣ND (MJxMJ) 110 LF 12" DI CL 52 W/ THRUST BLOCK ¬ 14∖LF 12"∖DI CL 52 − BRIVATE **MATCHLINE SEE SHEET**

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W304 FOR CONTINUATION



FIRE PROTECTION NOTES

- 1. THE FIRE PROTECTION SYSTEM SHOWN ON THESE DRAWINGS. INCLUDING MATERIALS, SIZING, AND CONFIGURATION, IS SUBJECT TO APPROVAL BY A FIRE PROTECTION ENGINEER. THE DRAWINGS CONTAINING FIRE PROTECTION WORK, INCLUDING DETAIL DRAWINGS, SHALL BE STAMPED FOR APPROVAL BY A FIRE PROTECTION ENGINEER AND SUBMITTED TO THE FIRE MARSHAL FOR APPROVAL.
- 2. CONTRACTOR SHALL COMPLY WITH ALL NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS AS SET FORTH BY "NFPA 13", ITS AMENDMENTS, AND LOCAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO ACQUISITION OF ALL PERMITS.
- 3. THE FIRE PROTECTION SYSTEM SHALL BE INSTALLED BY A WASHINGTON STATE CERTIFIED LEVEL "U" CONTRACTOR IN ACCORDANCE WITH WAC 212-80-83.
- 4. CONTRACTOR'S BID SHALL REFLECT THESE CONDITIONS AND REQUIREMENTS. 5. FIRE SPRINKLER UNDERGROUND SUPPLY AND FDC REQUIRES

A SEPARATE PERMIT FROM SOUTH KING COUNTY FIRE AND

RESCUE. CONTRACTOR SHALL APPLY FOR AND OBTAIN PERMIT.

6. FIRE DEPARTMENT CONNECTION (FDC) IS BUILDING MOUNTED. SEE MECHANICAL PLAN FOR FURTHER INFORMATION.

WATER NOTES:

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL THE REQUIREMENTS
- 2. THE ROAD AND STRUCTURE LOCATIONS SHOWN ARE OF THE PROPOSED WATER SYSTEM ONLY.
- SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXACT LOCATION TO AVOID DAMAGE OR DISTURBANCE.
- 4. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE CEMENT LINED.
- MINIMUM COVER FOR 12" DIAMETER WATER MAIN SHALL BE 4' AND SHALL BE MAINTAINED AT ALL POINTS
- 6. ALL FIRE HYDRANT SHALL INCLUDE AN APPROVED 5" STORZ ADAPTER ON THE PUMPER PORT.
- 7. GATE VALVES SHALL BE RESILIENT-SEATED GATE VALVES
- 8. ALL CUTTING, TAPPING, REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN CONFORMANCE WITH THE CURRENT POLICIES AND PROCEDURES OF THE WASHINGTON STATE DEPARTMENT OF HEALTH, THE PUGET SOUND AIR POLLUTION CONTROL AGENCY AND OTHER PUBLIC OFFICES WITH JURISDICTION IN THIS MATTER.
- NECESSARY POWER/FIRE SYSTEM MONITORING WIRING.

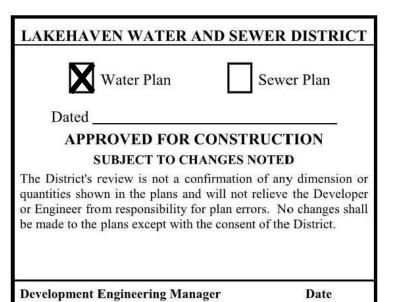
10.NOT USED.

11. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF LAKEHAVEN WATER & SEWER DISTRICT'S WATER SYSTEM DESIGN STANDARDS AND MATERIAL/CONSTRUCTION SPECIFICATIONS.

12.NOT USED

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- OF STATE AND LOCAL HEALTH AUTHORITIES.
- APPROXIMATE AND INTENDED TO SHOW THE RELATIVE LOCATION
- 3. ALL LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND IT
- 5. THE MINIMUM COVER FOR 8" DIAMETER WATER AND UNDER, SHALL BE 3' AND SHALL BE MAINTAINED AT ALL POINTS. THE
- CONFORMING TO AWWA C-509.
- 9. CONTRACTOR SHALL COORDINATE AND PROVIDE ALL THE



LAKEHAVEN PROJECT NO: 6324006

pproval if construction has commenced.

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH LAKEHAVEN WATER & SEWER DISTRICT 'WATER SYSTEM AND SEWER SYSTEM STANDARDS' APPROVED BY THE WASHINGTON STATE DEPARTMENT OF HEALTH ON JUNE 8, 1994 AND ANY ADDENDA THERETO.

The District's approval of this construction plan will expire: one

(1) year from the date of plan approval if construction has not

commenced by such date, or two (2) years from the date of plan

ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W. RESTORATION REQUIREMENTS FOR WORK PERFORMED IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION. CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.

ON-SITE WATER MAIN, VALVES, FIRE HYDRANTS AND APPURTENANCES ARE PRIVATELY OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

LEGEND

SANITARY SEWER MANHOLE TWO-WAY SANITARY SEWER CLEANOUT CATCH BASIN TYPE-1 SANITARY SEWER PIPING — W — WATER PIPING FIRE SERVICE PIPING FIRE HYDRANT FIRE DEPARTMENT CONNECTION METER AS NOTED POST INDICATOR VALVE (PIV) GATE VALVE BOLLARD

> THRUST BLOCKING FITTINGS AS NOTED

YARD HYDRANT, SERVICE FROM BUILDING PLUMBING SYSTEM, EXCEPT WHERE INDICATED

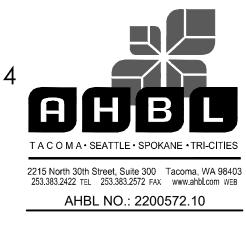
GRAPHIC SCALE

1" = 20 FEET



Helix design group

AMERICAN INSTITUTE OF ARCHITECTS





WATER PLAN AND PROFILE

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

	REVISION	DATE
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DRAWING NO.

UNOFFICIAL PPY Official bid documents, plan holder's list, and addenda (if applicable) are available on BXWA.com

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COVER SHEET

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE

FACILITY FEDERAL WAY, WASHINGTON

/-N1° 30' 13"E 0921049311 ____ ----_ _ _ _ BLDG B 0921049009 · — — — S 311th S

N88° 19' 27"W

0921049210

S 312th 5

UTILITY NOTE

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT INCUR DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. AHBL ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

TOPOGRAPHIC NOTE

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, AHBL CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

CONSTRUCTION SPECIFICATION

CONSTRUCTION SHALL BE PERFORMED CONFORMING TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 2024 STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.

AUTOCAD FILE:

AN AUTOCAD DRAWING FILE IS AVAILABLE TO ASSIST WITH SITE LAYOUT. PLEASE NOTE THAT ELECTRONIC FILES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE AND SHALL NOT REPLACE NOR BE USED TO SUBSTITUTE THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT LAYOUT ACCORDING TO CONTRACT DOCUMENTS AND COST FOR ELECTRONIC AUTOCAD FILES. PHONE: (253) 383-2422

OWNER

CITY OF FEDERAL WAY 33325 8TH AVENUE SOUTH FEDERAL WAY, WA 98003 CONTACTS: DESIREE WINKLER PH. (253)835.2711

CIVIL ENGINEER

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: BILL FIERST P.E. PRINCIPAL

PH. (253).383.2422 **ARCHITECT**

PH. (253).922.9037

HELIX DESIGN GROUP 6021 12TH STREET EAST, SUITE 201 FIFE, WASHINGTON, 98424-1376 CONTACT: JEFF RYAN

SURVEYOR

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: DAVID FOLLANSBEE PLS. PRINCIPAL PH. (253).383.2422

LANDSCAPE ARCHITECT

AHBL, INC. 2215 NORTH 30th STREET, SUITE 300 TACOMA, WASHINGTON 98403 CONTACT: SARAH SINGLETON SCHROEDEL

PH. (253).383.2422 **GEOTECHNICAL ENGINEER**

MIGIZI GROUP, INC. 201 160TH STREET SOUTH #401 SPANAWAY, WA 98387 CONTACT: JAMES BRIGHAM, P.E.

PH. (253).537.9400

EXISTING LEGEND:

	SET NAIL AND WASHER	Н	HVAC UNIT
	FOUND REBAR AND CAP		A=APPLE, B=BIRCH, F=FIR P=PINE, HA=HAWTHORNE
	BOLLARD MAIL BOX		HO=HOLLY, M=MAPLE, O=OAK, U= UNKNOWN
-	SIGN AS NOTED	D	STORM LINE
)	SANITARY SEWER MANHOLE	S	SANITARY SEWER LINE
	SANITARY SEWER CLEANOUT	G	GAS LINE
	STORM CATCH BASIN	P	ELECTRICAL LINE
)	STORM MANHOLE	\top	COMMUNICATIONS LINE
	ROOF DRAIN	W	WATER LINE
	CABLE RISER	— — — IR —	IRRIGATION PER RECORD
	GAS METER	OHP	OVERHEAD UTILITIES
	O. IO III L. L. I	v v v	EENCE

GAS VALVE **GATE POST** POWER TRANSFORMER

GUY ANCHOR

UTILITY POWER POLE POWER METER

FIRE HYDRANT IRRIGATION CONTROL VALVE

HOSE BIB

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND AHBL ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW. CHAPTER 49.17 RCW.

SITE DATA

APPROX. PROJECT AREA:	10.95 ACRES (476,850 SF)
TOTAL LOT AREA:	13.53 ACRES (589,563 SF)
EX. SITE IMPERVIOUS AREA:	4.13 ACRES (179,743 SF)
REPLACED IMPERVIOUS AREA	0 ACRES (0 SF)
NEW IMPERVIOUS AREA:	6.42 ACRES (279,534 SF)
TOTAL ONSITE IMPERVIOUS AREA (POST-DEVELOPMENT): MAXIMUM LOT COVERAGE:	6.42 ACRES (279,534 SF) 47.45%

EARTHWORK QUANTITIES

CUT=	25,040 CY
FILL=	36,270 CY
NET IMPORT/EXPORT=	11,230 CY FILL
TOTAL EARTHWORK=	61,310 CY

NOTE: THE ABOVE QUANTITIES ARE ESTIMATES ONLY INTENDED TO THE PERMITTING PROCESS AND ARE NOT INTENDED TO BE USED BY THE CONTRACTOR FOR BIDDING PURPOSES. THE CONTRACTOR SHALL MAKE THEIR OWN EARTHWORK DETERMINATION.

UTILITIES/SERVICES

WATER:	LAKEHAVEN WATER & SEWER DISTRICT
SEWER:	LAKEHAVEN WATER & SEWER DISTRICT
POWER:	PUGET SOUND ENERGY
TELEPHONE:	CENTURYLINK

VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY - STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90

BASIS OF BEARING

EL= 474.06'

NAD 1983/11 WASHINGTON STATE PLANE NORTH PROJECTION, BASED ON GPS OBSERVATIONS USING WSRN AND GEOID 2012A. UNITS OF MEASUREMENT ARE US SURVEY FEET.

LEGAL DESCRIPTION

CONCRETE

ASPHALT

— — — PROPERTY / RIGHT-OF-WAY LINE

CONTOUR MAJOR INTERVAL

CONTOUR MINOR INTERVAL

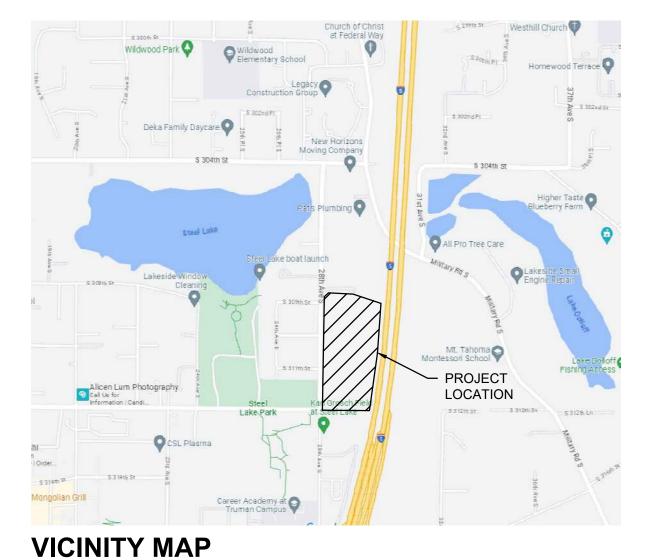
SITE ADDRESS

SEE TOPOGRAPHIC SURVEY.

FEDERAL WAY, WA. 98003

31130 28th AVE S AVENUE SOUTH

WATER METER
WATER VALVE
HVAC UNIT
A=APPLE, B=BIRCH, F=FIR, P=PINE, HA=HAWTHORNE
HO=HOLLY, M=MAPLE, O=OAK, U= UNKNOWN
STORM LINE
SANITARY SEWER LINE
GAS LINE
ELECTRICAL LINE
COMMUNICATIONS LINE
WATER LINE
IRRIGATION PER RECORD DRAWING
OVERHEAD UTILITIES
FENCE



NOTE FOR SEWER CONSTRUCTION

SEPARATE SEWER SERVICE CONNECTION PERMIT REQUIRED FOR EACH SEPARATE BUILDING, TO CONSTRUCT/COMPLETE BUILDING SEWER AND TO CONNECT TO THE SEWER MAIN.

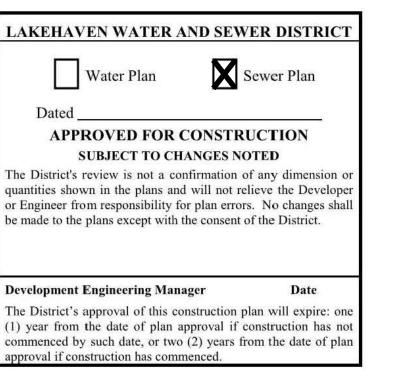
SEE SHEET SS300 FOR LAKEHAVEN WATER & SEWER DISTRICT STANDARD NOTES FOR GRAVITY SEWER CONSTRUCTION.

AS-BUILT NOTES

- 1. CONTRACTOR SHALL MAINTAIN AND PROVIDE A MARKED UP SET OF DRAWINGS AND SPECIFICATIONS INDICATING AS-CONSTRUCTED CONDITIONS FOR ALL CIVIL WORK INCLUSIVE OF ELEVATIONS AND EXISTING SITE UTILITIES ENCOUNTERED.
- 2. SUBMIT RECORD DRAWINGS TO ENGINEER FOR SUBMITTAL TO LAKEHAVEN WATER AND SEWER DISTRICT WHEN THE PROJECT IS
- 3. CHANGES OR REVISIONS TO THE ORIGINALLY APPROVED PERMIT DRAWINGS SHALL BE SUBMITTED TO LAKEHAVEN WATER AND SEWER DISTRICT PRIOR TO CONSTRUCTION FOR REVIEW AND APPROVAL.

STANDARI	PLAN TABLE
LHWSD STD. PLAN NO.	DETAIL DESCRIPTION
SS-01	SANITARY SEWER MANHOLE DETAILS
SS-02	SANITARY SEWER MANHOLE STEP AND COVER
SS-07	SANITARY SEWER SIDE SEWER STUB

SHEET	INDEX
Sheet Number	Sheet Title
SS100	SEWER COVER SHEET
SS101	SEWER DEMOLITION PLAN
SS200	SEWER PLAN AND PROFILE
SS201	SEWER PLAN AND PROFILE
SS202	SEWER PLAN AND PROFILE
SS203	SEWER PLAN AND PROFILE
SS300	SEWER NOTES AND DETAILS



LAKEHAVEN PROJECT NO: 6324006 SANITARY SEWER MANHOLES, MAIN, AND APPURTENANCES ARE PRIVATE OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

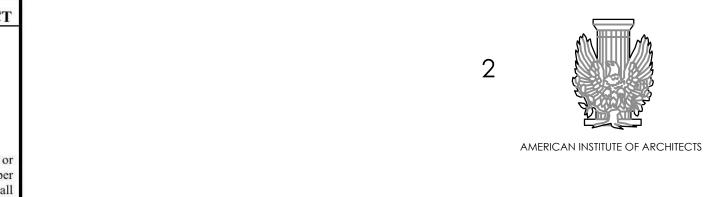
ACCEPTABLE CONSTRUCTION METHODS AND/OR R.O.W. RESTORATION REQUIREMENTS FOR WORK PERFORMED IN R.O.W. ARE DEFINED BY FEDERAL WAY AND MAY NOT BE SHOWN ON THE PLANS APPROVED FOR CONSTRUCTION. CONSULT WITH LAKEHAVEN'S PROJECT INSPECTOR AND ANY APPLICABLE R.O.W. PERMIT FOR ACCEPTABLE CONSTRUCTION METHODS (OPEN TRENCH, BORE & CASE, DIRECTIONAL DRILL, ETC) AND EXTENT OF ASPHALT OVERLAY AND/OR OTHER RESTORATION REQUIREMENTS FOR WORK IN R.O.W.



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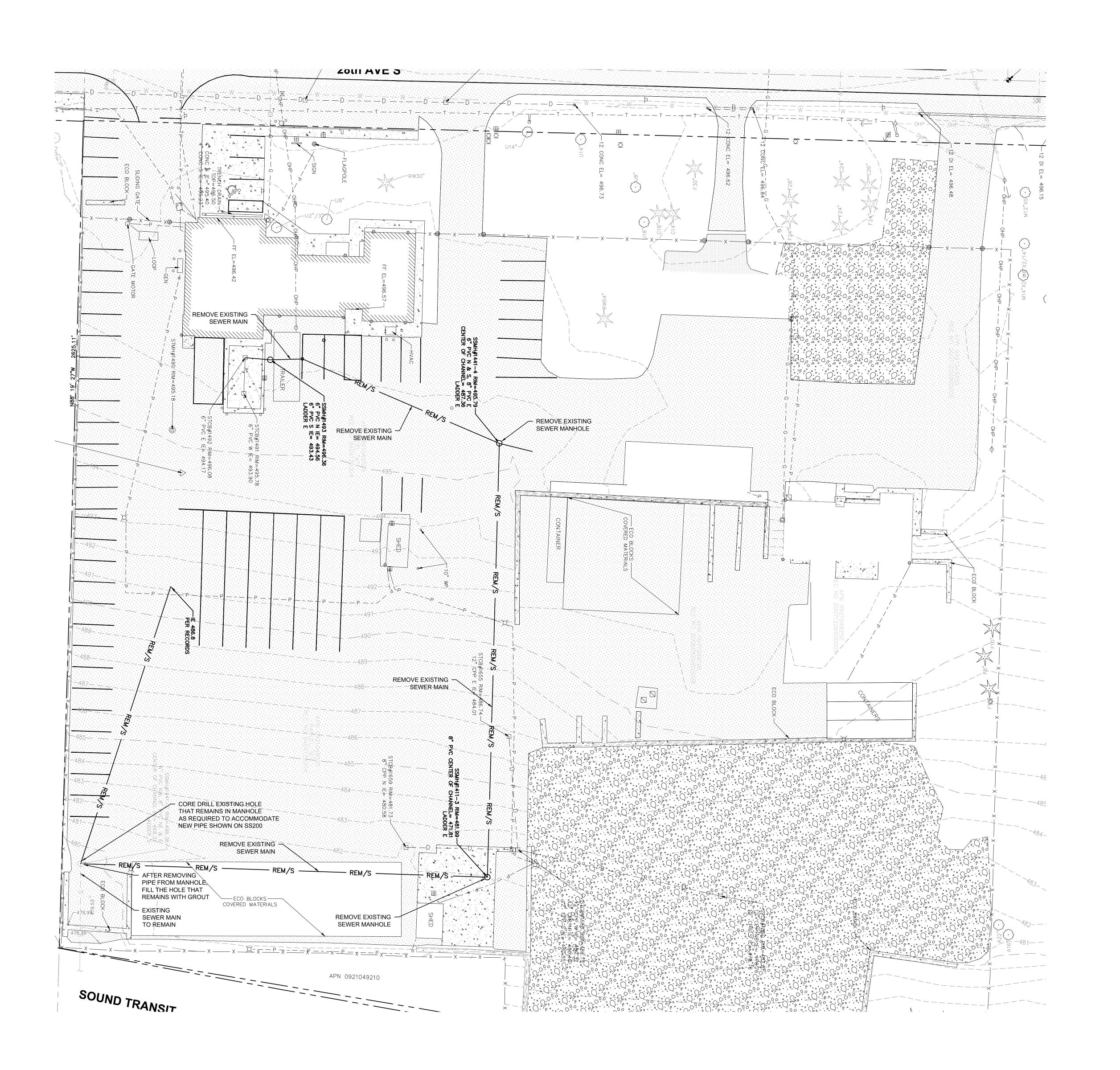
DEMOLITION PLAN

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

	,,	
	REVISION	DATE
9		
•		·

10 SS101

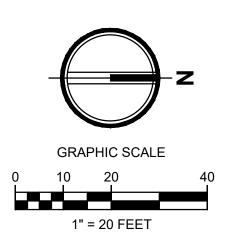
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AKEHAVEN WATER AND SEWER DISTRICT APPROVED FOR CONSTRUCTION SUBJECT TO CHANGES NOTED The District's review is not a confirmation of any dimension of quantities shown in the plans and will not relieve the Developer or Engineer from responsibility for plan errors. No changes shall be made to the plans except with the consent of the District. Development Engineering Manager The District's approval of this construction plan will expire: one (1) year from the date of plan approval if construction has not ommenced by such date, or two (2) years from the date of plan pproval if construction has commenced. LAKEHAVEN PROJECT NO: 6324006 SANITARY SEWER MANHOLES, MAIN, AND APPURTENANCES ARE PRIVATE OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY. **VERTICAL DATUM**

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'



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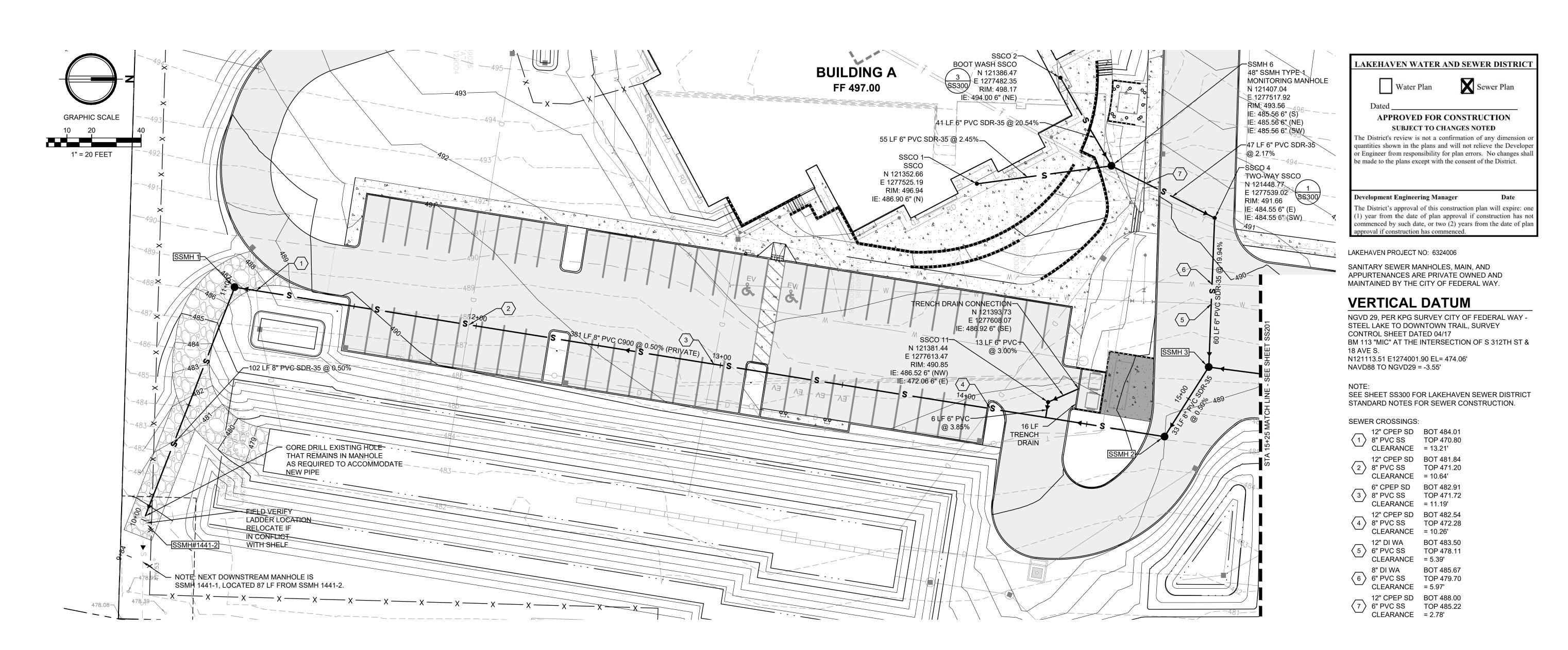


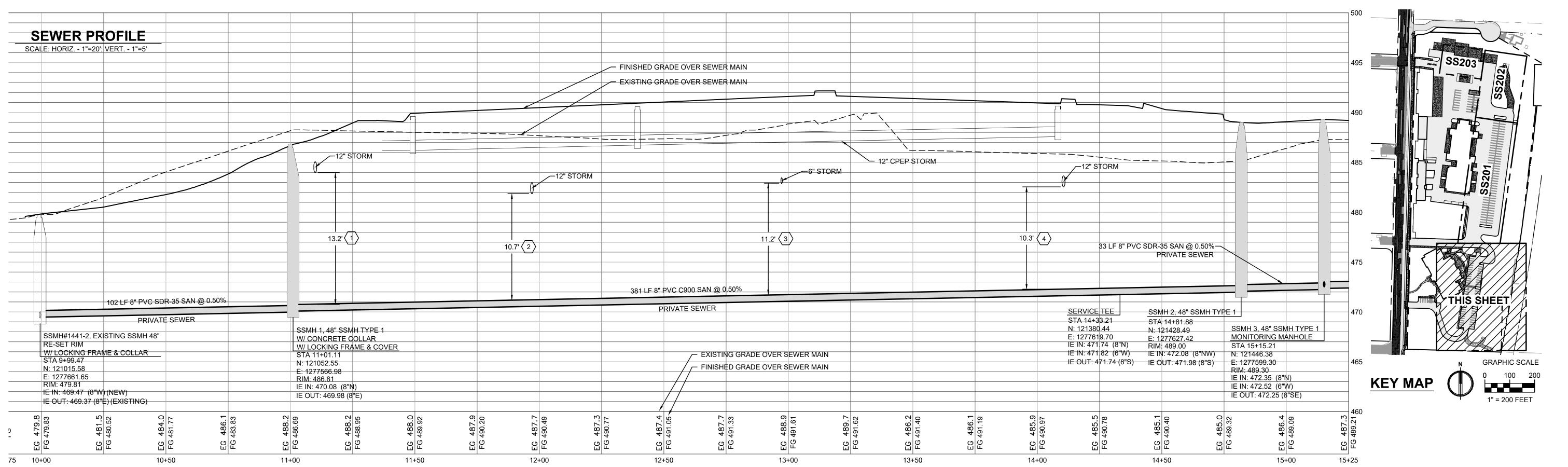


SEWER PLAN AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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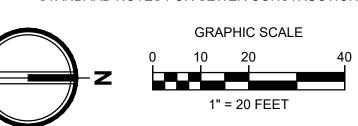


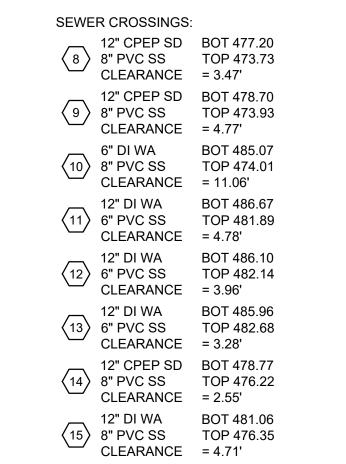
LAKEHAVEN PROJECT NO: 6324006 SANITARY SEWER MANHOLES, MAIN, AND APPURTENANCES ARE PRIVATE OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

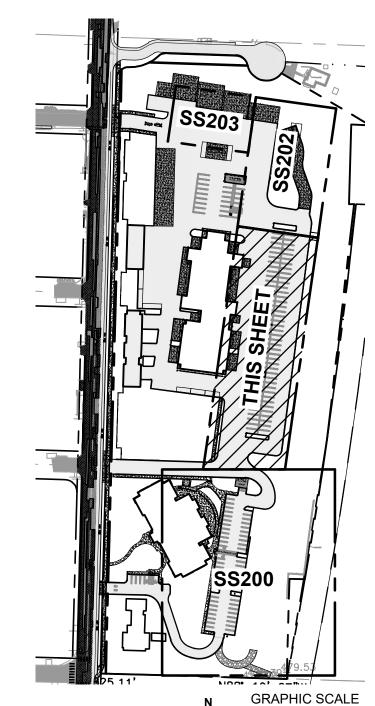
VERTICAL DATUM

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -STEEL LAKE TO DOWNTOWN TRAIL, SURVEY CONTROL SHEET DATED 04/17 BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST & 18 AVE S. N121113.51 E1274001.90 EL= 474.06' NAVD88 TO NGVD29 = -3.55'

SEE SHEET SS300 FOR LAKEHAVEN SEWER DISTRICT STANDARD NOTES FOR SEWER CONSTRUCTION.

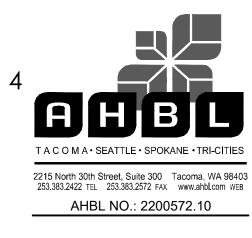








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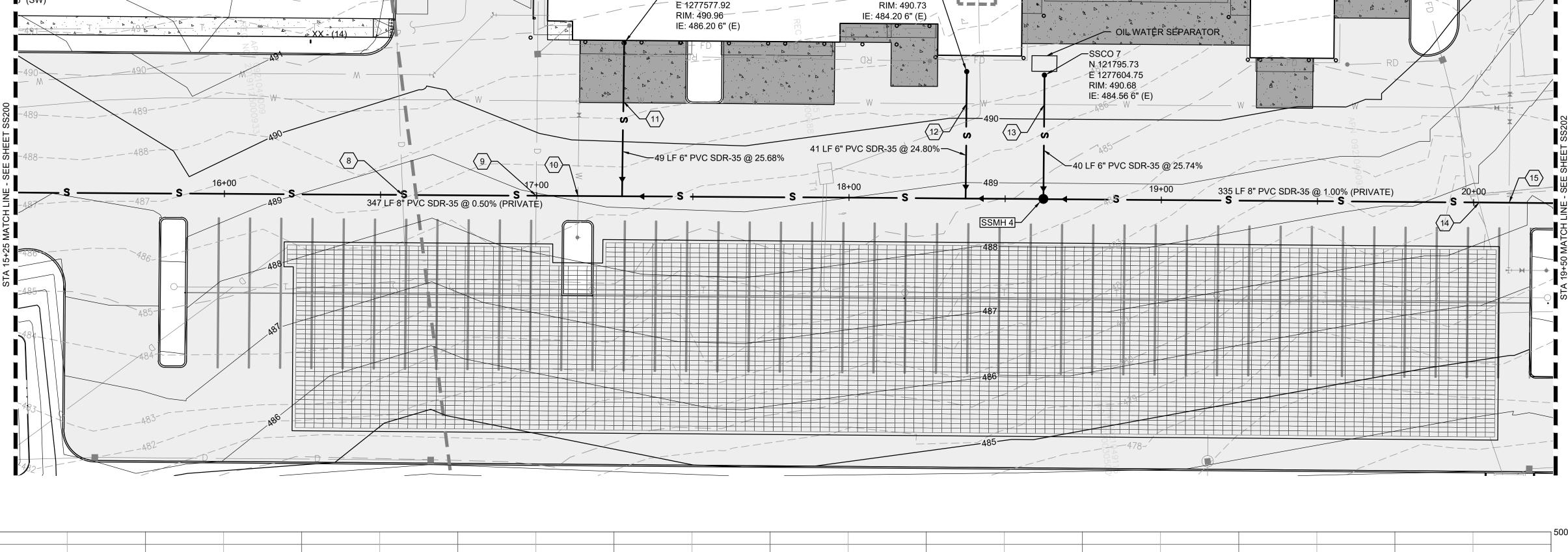




SEWER PLAN AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

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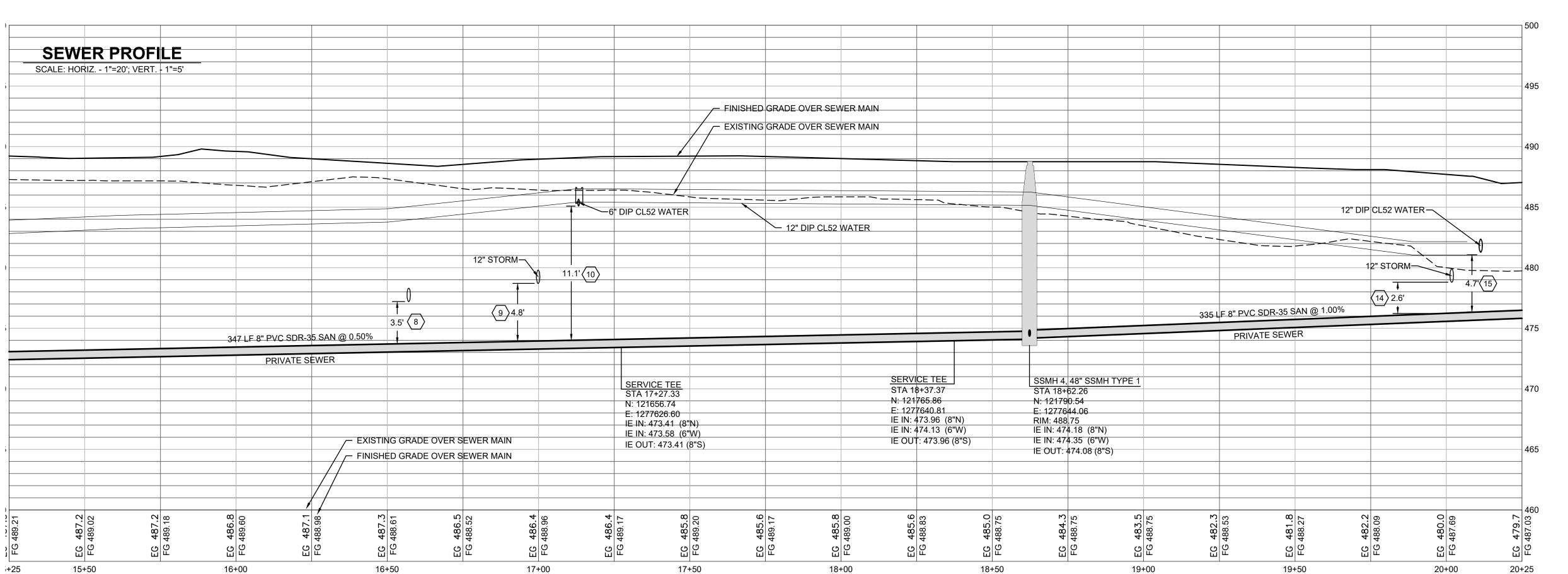
BUILDING B

FF 490.98

N 121663.47

N 121771.18

E 1277600.55



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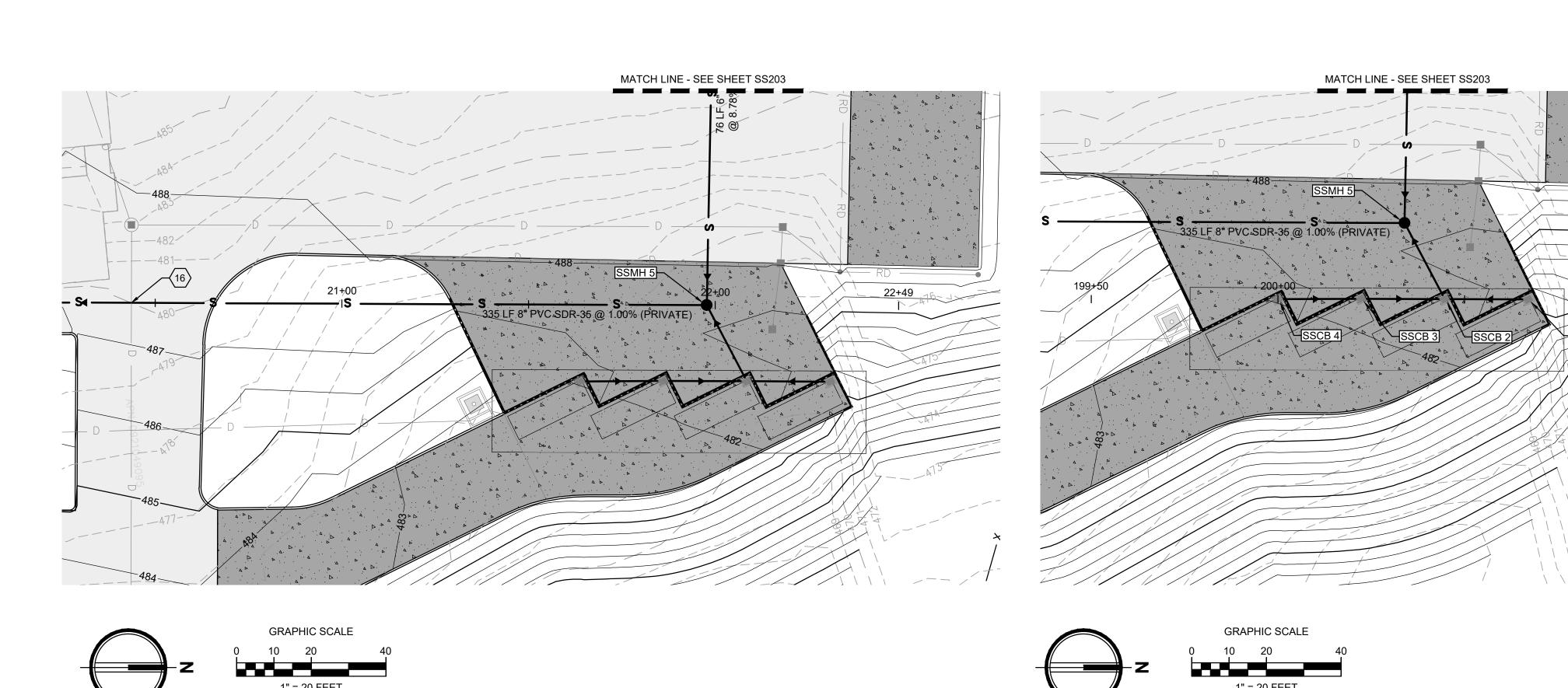


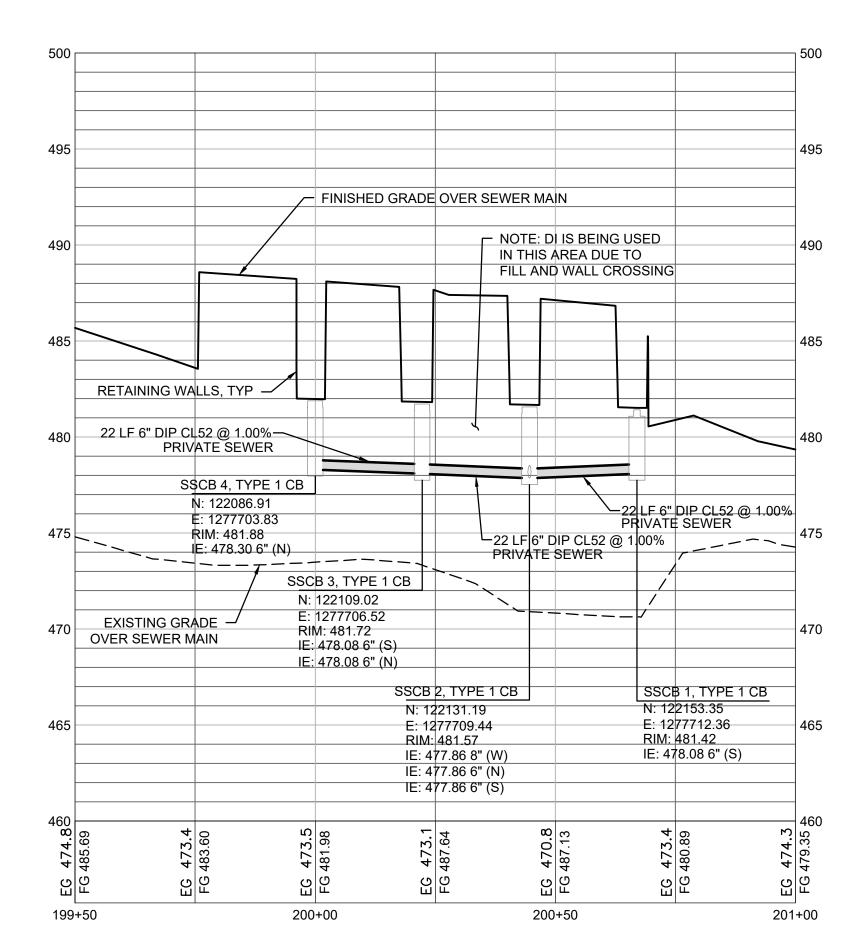


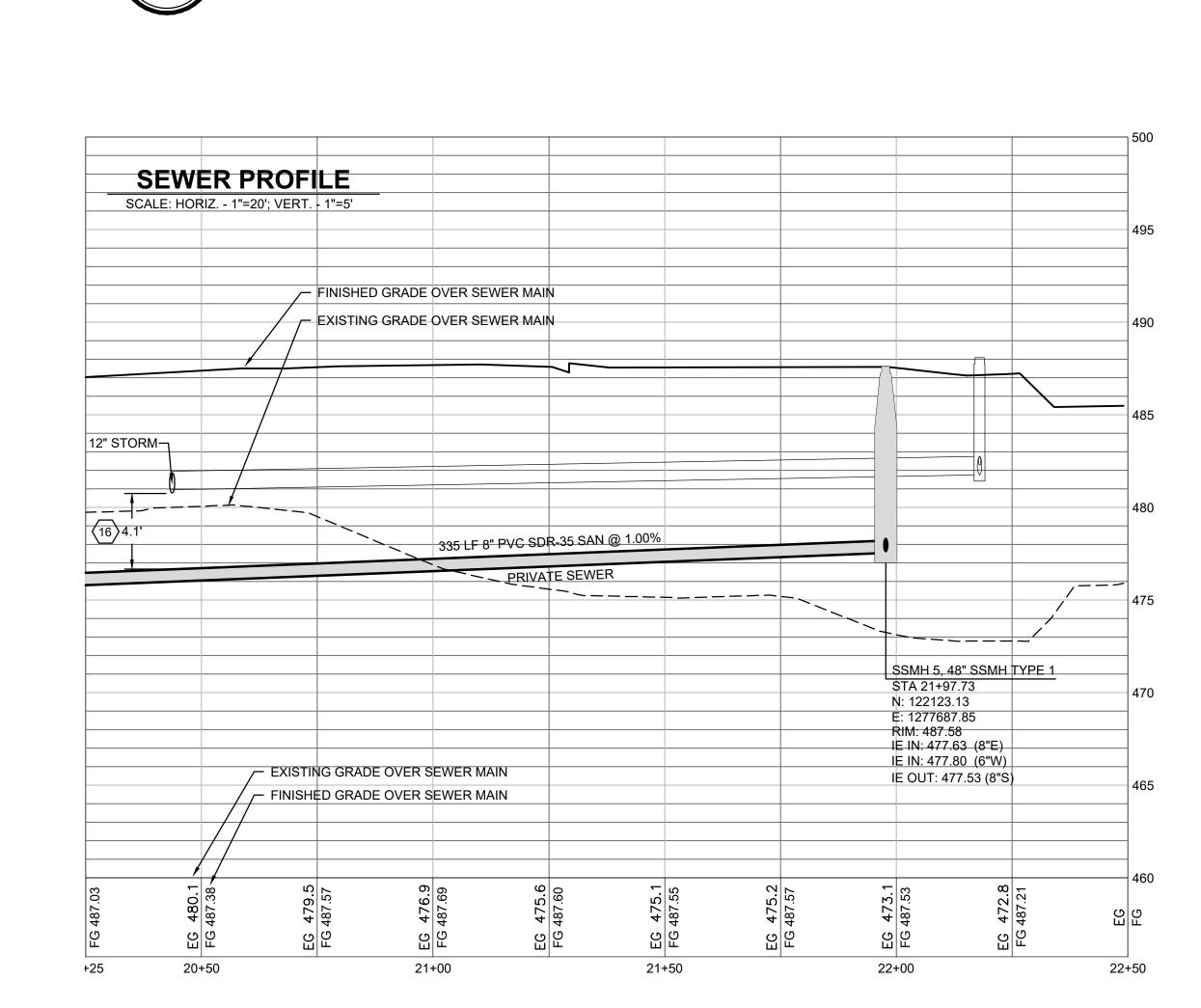
SEWER PLAN AND PROFILE

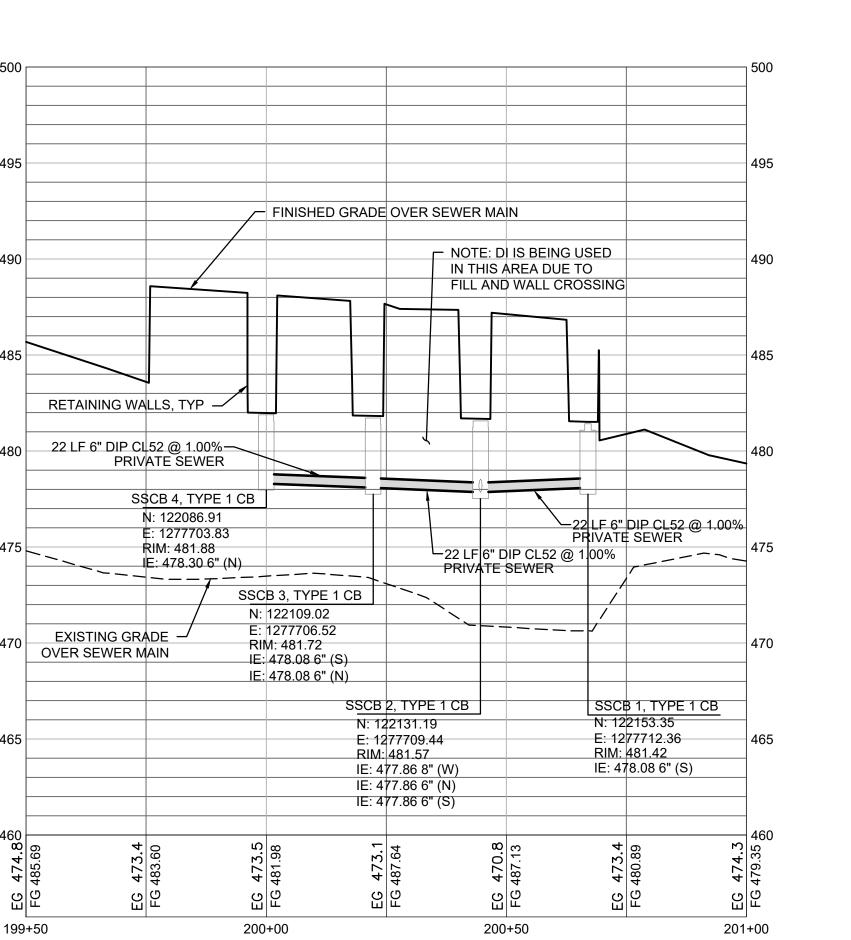
CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

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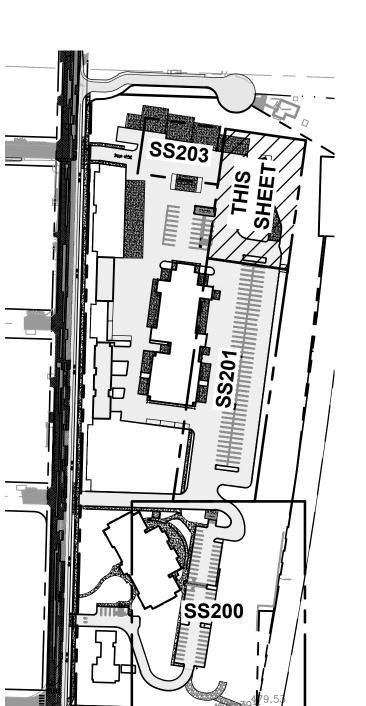






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AKEHAVEN WATER AND SEWER DISTRICT

APPROVED FOR CONSTRUCTION SUBJECT TO CHANGES NOTED

The District's review is not a confirmation of any dimension of quantities shown in the plans and will not relieve the Developer or Engineer from responsibility for plan errors. No changes shal

be made to the plans except with the consent of the District.

The District's approval of this construction plan will expire: one

(1) year from the date of plan approval if construction has not commenced by such date, or two (2) years from the date of plan

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST &

STEEL LAKE TO DOWNTOWN TRAIL, SURVEY

Development Engineering Manager

pproval if construction has commenced.

SANITARY SEWER MANHOLES, MAIN, AND APPURTENANCES ARE PRIVATE OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

LAKEHAVEN PROJECT NO: 6324006

VERTICAL DATUM

CONTROL SHEET DATED 04/17

NAVD88 TO NGVD29 = -3.55'

SEWER CROSSINGS:

N121113.51 E1274001.90 EL= 474.06'

18 AVE S.

SEE SHEET SS300 FOR LAKEHAVEN SEWER DISTRICT STANDARD NOTES FOR SEWER CONSTRUCTION. 12" CPEP SD BOT 480.77 12 CPEP SD BOT 460.77

(16) 8" PVC SS TOP 476.66

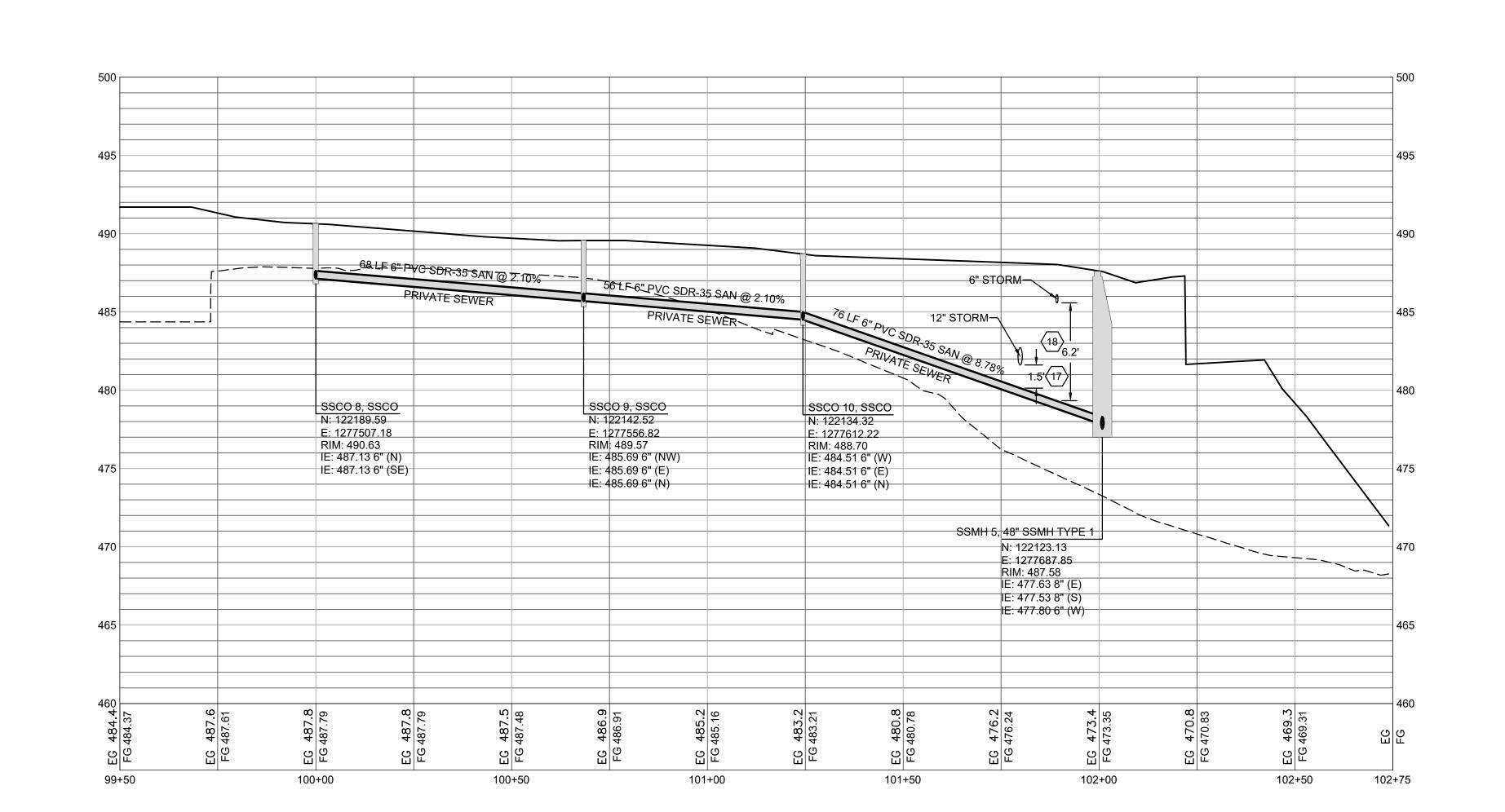
CLEARANCE = 4.11' CLEARANCE = 4.11'

FEDERAL WAY, WASHINGTON

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SEWER CROSSINGS: 17 6" PVC SS TOP 480.14 CLEARANCE = 1.48' TRENCH DRAIN CONNECTION ... / △PLUG TRENCH△DRAIN ØUTLEJ△ / N 122207.36 6" CPEP SD BOT 485.57 (18) 6" PVC SS TOP 479.32 TRENCH DRAIN CONNECTION * IE: 487.67 6" (S) △ PLUG TRENCH DRAIN OUTLET 4 ATRENCH DRAIN CONNECTION 44 *PLUG TRENCH DRAIN OUTLET ___18 LF 6" PVC SDR-35 @_3.01% IE 486.68 6" (S) 4 4 4 4 IE: 485.68 6" (S) └ 53 LF TRENCH DRAIN 53 LF TRENCH DRAIN 76 LF 6" PVC SDR-35 @ 8.78% (PRIVATE) 56 LF 6" PVC SDR-35-@|2.10% (PRIVATE) MATCH LINE - SEE SHEET SS202 **GRAPHIC SCALE**

D

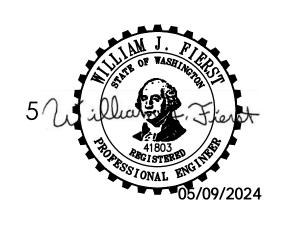






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SEWER PLAN AND PROFILE

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY** FEDERAL WAY, WASHINGTON

DRAWING NO.

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G

12" CPEP SD BOT 481.62

CLEARANCE = 6.25'

AKEHAVEN WATER AND SEWER DISTRICT

APPROVED FOR CONSTRUCTION

SUBJECT TO CHANGES NOTED

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quantities shown in the plans and will not relieve the Developer

or Engineer from responsibility for plan errors. No changes shall

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NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST &

SEE SHEET SS300 FOR LAKEHAVEN SEWER DISTRICT

STANDARD NOTES FOR SEWER CONSTRUCTION.

STEEL LAKE TO DOWNTOWN TRAIL, SURVEY

be made to the plans except with the consent of the District.

Development Engineering Manager

pproval if construction has commenced.

SANITARY SEWER MANHOLES, MAIN, AND APPURTENANCES ARE PRIVATE OWNED AND MAINTAINED BY THE CITY OF FEDERAL WAY.

LAKEHAVEN PROJECT NO: 6324006

VERTICAL DATUM

N121113.51 E1274001.90 EL= 474.06'

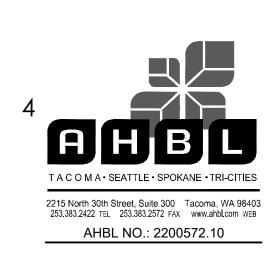
CONTROL SHEET DATED 04/17

NAVD88 TO NGVD29 = -3.55'

18 AVE S.

AMERICAN INSTITUTE OF ARCHITECTS

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SEWER NOTES

AND DETAILS

CITY OF FEDERAL WAY JOINT **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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LAKEHAVEN WATER & SEWER DISTRICT STANDARD NOTES FOR GRAVITY SEWER CONSTRUCTION (DECEMBER 30, 2016)

- 1. ALL WORK AND MATERIALS SHALL CONFORM TO THE STANDARDS OF LAKEHAVEN WATER & SEWER DISTRICT 9. MANHOLE FRAMES AND COVERS SHALL BE CAST IRON, WITH THE WORD "LAKEHAVEN" CAST IN THE TOP, SHALL AND WASHINGTON STATE DEPARTMENT OF TRANSPORTATION/WASHINGTON STATE CHAPTER AMERICAN PUBLIC WEIGH 140 TO 150 POUNDS, AND SHALL HAVE A SINGLE 1-INCH LIFT HOLE FITTED WITH ONE 3/1 X 3" GALVANIZED WORKS ASSOCIATION (WSDOT/APWA) "STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION,"
- 2. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES THAT MAY BE AFFECTED BY THIS WORK AND 10. CONCRETE COLLARS REINFORCED WITH WIRE MESH SHALL BE INSTALLED PER DISTRICT STANDARD PLAN SHALL NOTIFY APPROPRIATE UTILITY COMPANIES TO FIELD-LOCATE THEIR FACILITIES BEFORE STARTING ANY EXCAVATION, IN ACCORDANCE WITH RCW 19.122.

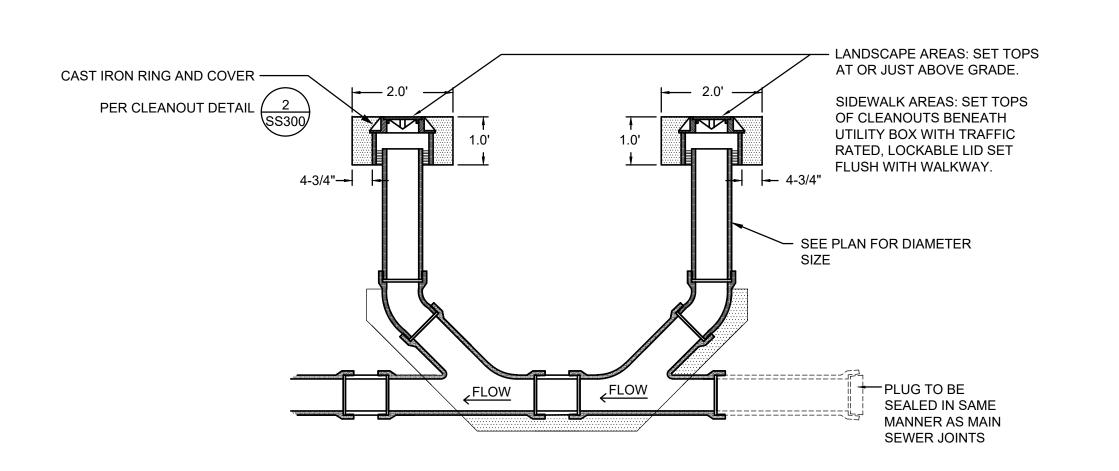
SHALL BE REMOVED PRIOR TO OPENING THE SEAL, WITHOUT FLUSHING THE DEBRIS DOWNSTREAM.

3. CONNECTIONS OF NEW MAINS TO EXISTING FACILITIES SHALL BE TEMPORARILY SEALED OFF UNTIL AFTER UPSTREAM CONSTRUCTION IS TESTED, CLEANED AND ACCEPTED. ALL CONSTRUCTION DEBRIS AND WATER

HIGH DENSITY POLYETHYLENE (HDPE) ASTM F-894, WITH GASKETED JOINTS

- 4. GRAVITY SEWER PIPE MATERIAL SHALL BE AS SHOWN ON THE PLANS, WHICH WILL BE ONE OF THE FOLLOWING AND NOT NECESSARILY INTERCHANGEABLE: POLYVINYL CHLORIDE (PVC) ASTM D-3034, SDR 35 (4" THROUGH 15") OR ASTM F-679, SDR 35 (18" AND LARGER) POLYVINYL CHLORIDE (PVC) AWWA C-900, DR-18 (4" THROUGH 12") OR AWWA C-905, DR-18 (14" THROUGH 36")
- 5. CRUSHED SURFACING TOP COURSE (A.K.A. 5/8" CRUSHED ROCK) SHALL BE USED FOR PIPE BEDDING FOR RIGID 13. PIPE ENDS OF ALL INLET AND OUTLET PIPELINES SHALL NOT EXTEND MORE THAN 2 INCHES INSIDE THE AND FLEXIBLE GRAVITY SEWER PIPE. THE MATERIAL SHALL BE PLACED UNDER THE PIPE TO A COMPACTED DEPTH OF 4" (FOR 27" AND SMALLER PIPE), AND TO A COMPACTED DEPTH OF 6" (FOR PIPE GREATER THAN 27"). THE MATERIAL SHALL BE PLACED 6" OVER THE TOP OF FLEXIBLE PIPE AND TO THE SPRINGLINE OF RIGID PIPE
- WITH A TOOL CAPABLE OF PREVENTING THE FORMATION OF VOID SPACES AROUND THE PIPE. 6. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF RELATIVE DENSITY, OR GREATER IF SO SHOWN ON THE PLANS OR OTHERWISE REQUIRED BY THE ROAD AGENCY HAVING JURISDICTION, FROM THE BOTTOM OF 15 THE EXCAVATION TO THE SURFACE. DEVELOPER SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED FOR COMPACTION TESTING.
- TRENCH BACKFILL SHALL BE COMPACTED PRIOR TO TESTING SEWER MAIN PIPE, AND SIDE SEWER STUB(S) SHALL BE AIR TESTED AT THE SAME TIME AS THE SEWER MAIN.
- 8. MANHOLES SHALL CONFORM TO WSDOT/APWA STANDARD PLAN B-23A, TYPE 1 OR TYPE 2 WITH ECCENTRIC CONES, AND INCLUDE 1-INCH GALVANIZED DROP SAFETY STEPS OR POLYPROPYLENE SAFETY STEPS (LANE INTERNATIONAL CORP. PART NO. P-14938) AND AT LEAST ONE (1), AND NO MORE THAN FIVE (5), FOUR-INCH (4") HIGH ADJUSTMENT RINGS BELOW THE FRAME AND COVER. ALL MANHOLE EXTERIOR SURFACES SHALL RECEIVE A PROTECTIVE COATING OF BITUMINOUS COAL TAR TO A MINIMUM THICKNESS OF 50 MILS, APPLIED AT THE FACTORY. WHERE NOTED ON THE PLANS, MANHOLE INTERIOR SURFACES SHALL RECEIVE A CORROSION PROTECTIVE EPOXY COATING OF:
- POLYSHIELD SS-100® (BY SPECIALTY PRODUCTS, INC. (LAKEWOOD, WA); 50 MILS MINIMUM THICKNESS); OR RAVEN® 405 (BY RLS SOLUTIONS INC. (OKLAHOMA); 100 MILS MINIMUM THICKNESS).

- CARRIAGE BOLT WITH BURRED END TO RETAIN THE NUT AND A FLAT WASHER TO ALLOW FOR 1" BOLT TRAVEL. COVERS SHALL BE 25" IN DIAMETER.
- WHERE SHOWN ON THE PLANS.
- 11. MANHOLE CHANNELS SHALL BE PRODUCED TO THE FULL DEPTH OF THE ASSOCIATED PIPE DIAMETER AND TO A WIDTH NO LESS THAN THE OUTSIDE DIAMETER OF THE ASSOCIATED PIPE AND NO MORE THAN 1/2-INCH IN EXCESS OF THE OUTSIDE DIAMETER OF THE ASSOCIATED PIPE. MANHOLE CHANNELS SHALL HAVE A SMOOTH FINISH. TO MINIMIZE TURBULENCE, SIDE CHANNELS FROM INLET PIPELINES SHALL BE CURVED TOWARD THE OUTLET PIPELINE TO PROVIDE A SMOOTH LAMINAR FLOW TRANSITION FROM ALL INLET PIPELINES TO THE OUTLET PIPELINE. CHANNEL MATERIAL SHALL BE A SHRINK-RESISTANT GROUT MIX, USING 6SACKS PER CUBIC YARD PORTLAND CEMENT AND 7/8" GRADED AGGREGATE. FOR GRAVITY SEWER SYSTEMS 15" AND LARGER, PREDL® MANHOLE LINER SYSTEMS BY PREDL SYSTEMS NORTH AMERICA, INC. (BURNABY, B.C.) SHALL BE UTILIZED FOR CHANNELS, FLOORS AND PIPELINE CONNECTION SYSTEMS FOR MANHOLES.
- DUCTILE IRON ANSI A21.51/AWWA C-151, MINIMUM CLASS 52, EPOXY-LINED WITH PROTECTO 401™ CERAMIC 12. MANHOLE SHELVES SHALL HAVE A BROOM FINISH, AND BE SLOPED ½-INCH TO 1-INCH PER FOOT TOWARD THE
- MANHOLE, AND ALL PENETRATIONS SHALL BE SMOOTHLY GROUTED AROUND THE PIPE WITH SHRINK-RESISTANT TO ASSURE UNIFORM SUPPORT, THE MATERIAL SHALL BE CAREFULLY WORKED UNDER THE PIPE HAUNCHES 14. NO JOINTS FOR FLEXIBLE PIPE INLETS AND OUTLETS SHALL BE WITHIN 10 FEET OF THE MANHOLE, AND PIPELINES SHALL BE CONNECTED TO THE MANHOLE WITH PVC MANHOLE COLLARS. FLEXIBLE BOOT COLLARS
 - . SIDE SEWER STUBS SHALL BE INSTALLED AT A GRADE OF AT LEAST 2%, AND THEIR TERMINI SHALL BE AT A DEPTH ADEQUATE TO SERVE THE INTENDED PROPERTY, CAPPED AND MARKED BY A WHITE 2X4 POST LABELED "SANITARY SIDE SEWER."



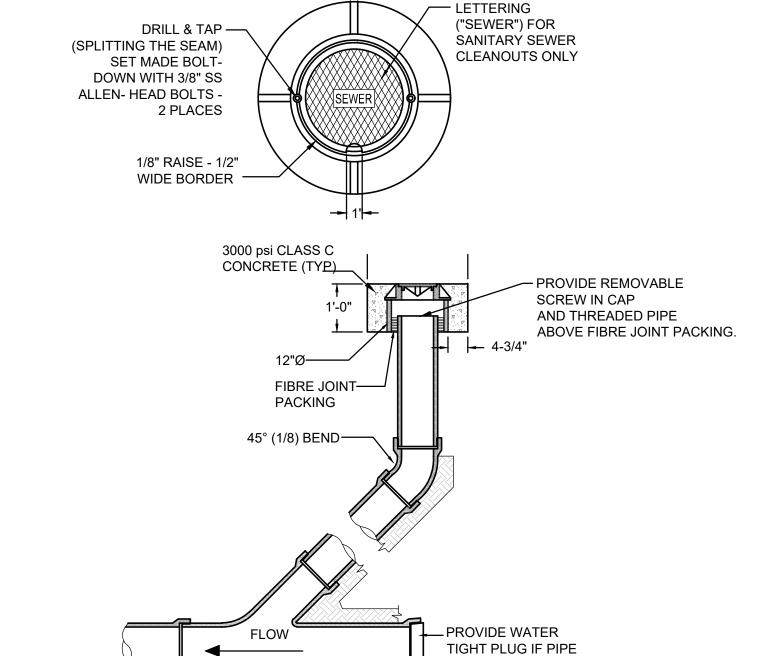
TWO-WAY SEWER CLEANOUT

ALL COATINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. NOTES: 1. PIPE MATERIAL PER PLAN. 2. PIPE DIAMETER PER PLAN. 3. ABS TO PVC USE PVC ADAPTOR OR FERNCO W/STAINLESS STEEL CLAMPS OR APPROVED EQUAL 4. PVC TO CAST IRON OR CONCRETE USE FERNCO W/STAINLESS STEEL CLAMPS OR APPROVED EQUAL

CAST IRON RING AND LOCKING COVER

7-3/4" ---

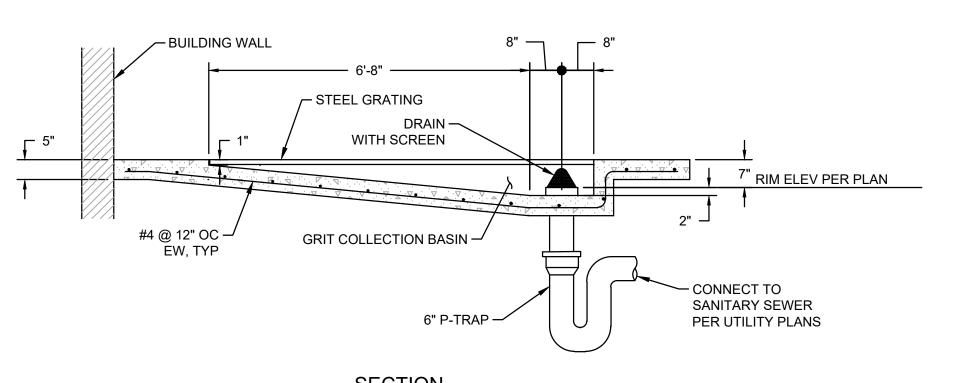
8-3/4"

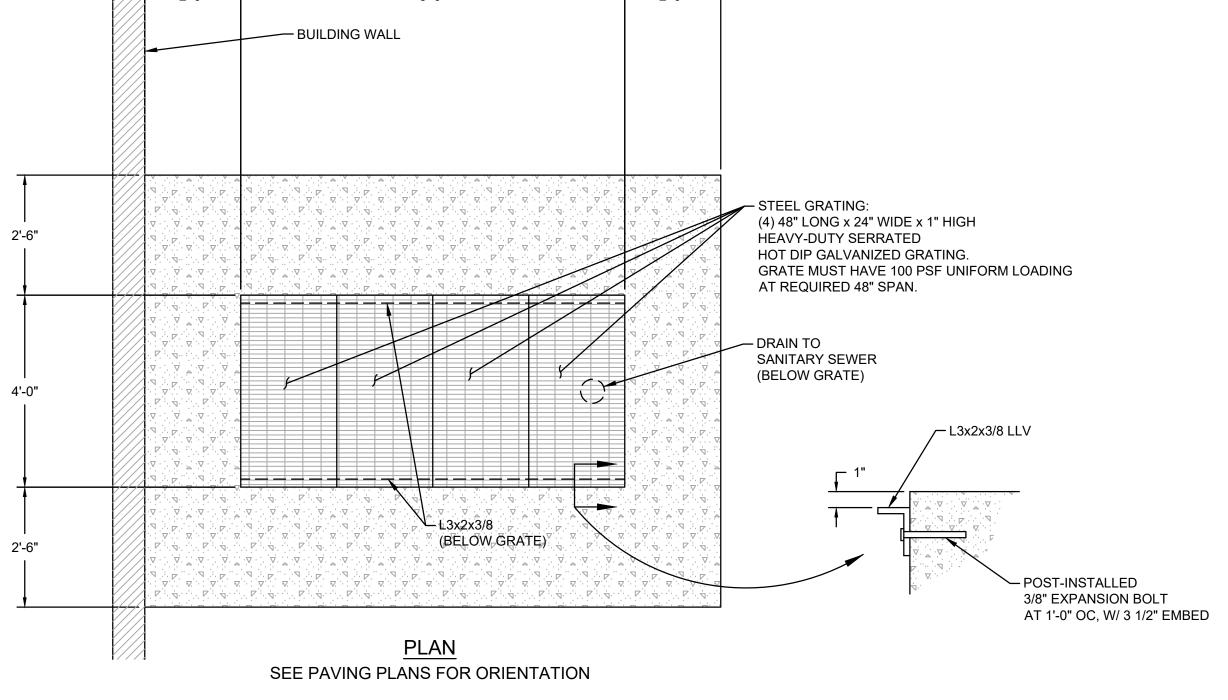


SECTION ENDS.

CLEANOUT

---- BUILDING WALL STEEL GRATING: (4) 48" LONG x 24" WIDE x 1" HIGH HÉAVY-DUTY SERRATED HOT DIP GALVANIZED GRATING. GRATE MUST HAVE 100 PSF UNIFORM LOADING AT REQUIRED 48" SPAN. SANITARY SEWER (BELOW GRATE) 4'-0" ← L3x2x3/8 LLV **L**3x2x3/8 ∶ POST-INSTALLED 3/8" EXPANSION BOLT AT 1'-0" OC, W/ 3 1/2" EMBED





SECTION

BOOT WASH
NOT TO SCALE

GRATE SHALL BE HEEL - PROOF **DUCTILE IRON** FINISHED GRADE -- LAWN OR LANDSCAPING SLOPE PER PLAN **PAVEMENT** SLOPE PER PLAN DEPTH ─ 4000 PSI VARIĖS CONCRETE 6"Ø PVC FLUMED VERTICAL PIPE ——— - "ZURN Z-886-HD-HDP" (PER ZURN)

LAKEHAVEN PROJECT NO: 6324006

VERTICAL DATUM

CONTROL SHEET DATED 04/17

NAVD88 TO NGVD29 = -3.55'

N121113.51 E1274001.90 EL= 474.06'

18 AVE S.

SANITARY SEWER MANHOLES, MAIN, AND

APPURTENANCES ARE PRIVATE OWNED AND

NGVD 29, PER KPG SURVEY CITY OF FEDERAL WAY -

BM 113 "MIC" AT THE INTERSECTION OF S 312TH ST &

MAINTAINED BY THE CITY OF FEDERAL WAY.

STEEL LAKE TO DOWNTOWN TRAIL, SURVEY

TRENCH DRAIN

CONNECT TO

PER PLAN

DRAINAGE SYSTEM

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TRENCH DRAIN OR

APPROVED EQUAL.

TREE ORDINANCE CODE SUMMARY TABLE

FEDERAL WAY CODE	CALCULATIONS	REQUIRED	RETAINED	PROVIDED ON SITE	PROVIDED OFF SITE	TOTAL
19.120.130 TREE RETENTION	13.2 ACRES (LOT SIZE) X 25 TREE UNIT CREDITS (PER ACRE) = 330 TREE UNIT CREDITS	330				
19.120.130.2 TREE UNIT CREDITS	0 X 1.0 TREE UNIT CREDITS = 0 22 X 1.5 TREE UNIT CREDITS = 33 6 X 2.0 TREE UNIT CREDITS = 12 11 X 2.5 TREE UNIT CREDITS = 27.5 19 X 3.0 TREE UNIT CREDITS = 57 TOTAL TREE UNIT CREDITS = 129.5		129.5			
19.120.130.2 TREE UNIT CREDITS	29 X 0.5 TREE UNIT CREDITS = 14.5 52 X 1.0 TREE UNIT CREDITS = 52 TOTAL TREE UNIT CREDITS = 70.5			66.5		
19.120.130.2 TREE UNIT CREDITS	1.0 TREE UNIT CREDITS = 130				134	
19.120.130 TREE RETENTION	129.5 + 70.5 + 130 = 330					330

CALCULATIONS | REQUIRED | PROVIDED

32

3,450 SF

MIN 25%

8,800 SF

OVER 25%

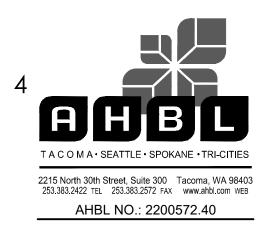
1,115 LF / 35 = 31.85

 $345' \times 10' = 3,450 \text{ SF}$

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LANDSCAPE COVERSHEET

CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

FACE OF WALL DIAMETER FINISHED SURFACE PLUS OR MINUS **ELEVATION** FTG FOOTING NUMBER **FURN** FURNITURE/ FURNISHED SECTION GAUGE GALVANIZED **GALV** GC GENERAL CONTRACTOR GND GROUND ALIGN (FACES OR EDGES) GATE VALVE HORIZONTAL BREAK LINE HR HOUR HT/H HEIGHT / HIGH HEATING, VENTILATING & AIR CONDITIONING **REVISION NUMBER INSIDE DIAMETER** INCL INCLUDING INFO INFORMATION REVISION CLOUD INTERIOR MAS MASONRY MAT MATERIAL MAX MAXIMUM MECH **MECHANICAL** MED MEDIUM MET/MTL METAL MANUFACTURER MANHOLE MIN MINUMUM MISCELLANEOUS

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MIXTURE

NORTH

NUMBER

NOMINAL

NOT APPLICABLE

NOT TO SCALE

OUTSIDE DIAMETER

ON CENTER

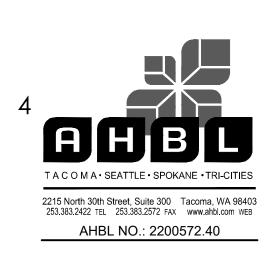
OVERHEAD

NOT IN CONTRACT

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RETENTION PLAN

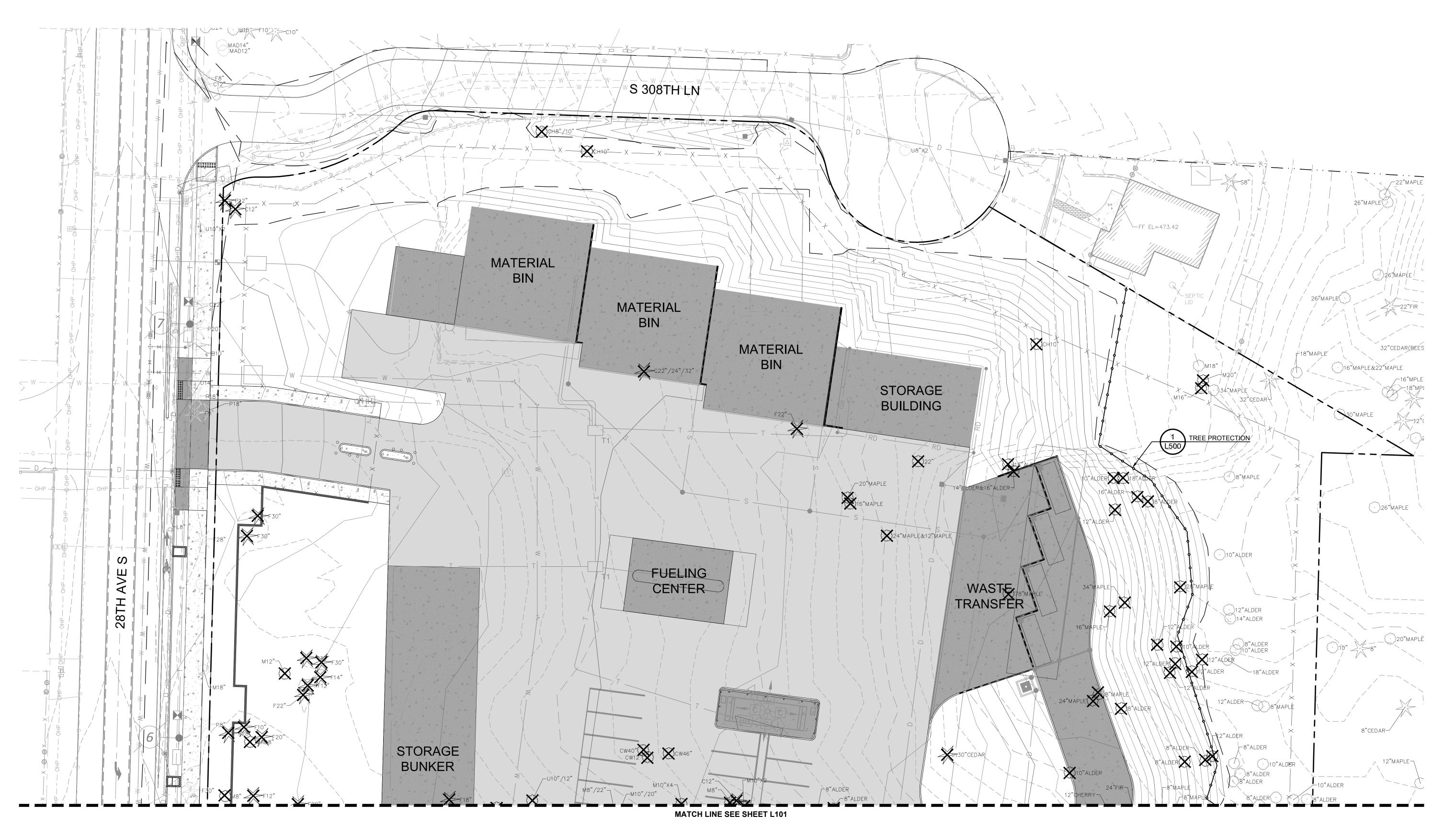
CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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MATCHLINE PROPERTY LINE / RIGHT-OF-WAY —— GRADING LIMIT, SEE CIVIL ———————— FENCE, SEE ARCH PROPOSED STRUCTURE, SEE ARCH EXISTING PAVING WITHIN TREE PROTECTION

EXISTING TREES TO REMAIN

EXISTING TREES TO DEMOLISH

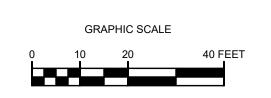
- NOTES 1. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE.
- 2. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE. 3. SEE SHEETS L400-L403 FOR SOIL PLACEMENT PLANS.

OFF SITE PLANS FOR TREE RETENTION WITH THE RIGHT OF WAY.

4. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY

WORK WITHIN TREE PROTECTION LIMITS

- 1. TURF PLANTING & ORGANIC MULCH AREAS, SEE PLANTING PLAN. 1.1. PERFORM THE FOLLOWING WORK BY HAND: IF ROOTS GREATER THAN 2 INCH ARE
- ENCOUNTERED, CUT CLEANLY AND KEEP MOIST. 1.2. REMOVAL OF EXISTING VEGETATION.
- 1.3. ESTABLISHMENT OF SUBGRADE ELEVATION TO ACCOMMODATE IMPORT TOPSOIL & ORGANIC MULCH.
- 1.4. EXCAVATION FOR ROOT BARRIER AND STEEL EDGING INSTALLATION. 2. DEMOLITION OF EXISTING PAVEMENT.
- 2.1. ESTABLISH TREE PROTECTION FENCING AT PERIMETER OF EXISTING PAVEMENT UNTIL THE FOLLOWING WORK IS COMPLETE.
- 2.2. DEMOLITION EQUIPMENT SHALL OPERATE WITHIN THE LIMITS OF EXISTING PAVEMENT TO
- AVOID COMPACTION OF EXISTING TREE'S CRITICAL ROOT ZONES. 2.3. REMOVAL OF BASE AGGREGATE SHALL BE DONE BY HAND TO AVOID DAMAGING ROOTS.





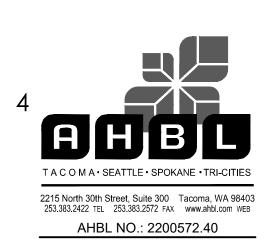
LEGEND

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RETENTION PLAN

CITY OF FEDERAL

WAY JOINT OPERATIONS & MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON



MATCH LINE SEE SHEET L100

LEGEND MATCHLINE PROPERTY LINE / RIGHT-OF-WAY —— GRADING LIMIT, SEE CIVIL PROPOSED STRUCTURE, SEE ARCH EXISTING PAVING WITHIN TREE PROTECTION

EXISTING TREES TO REMAIN

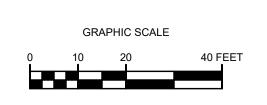
EXISTING TREES TO DEMOLISH

NOTES

- 1. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE.
- 2. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE. 3. SEE SHEETS L400-L403 FOR SOIL PLACEMENT PLANS.
- 4. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR TREE RETENTION WITH THE RIGHT OF WAY.

WORK WITHIN TREE PROTECTION LIMITS

- 1. TURF PLANTING & ORGANIC MULCH AREAS, SEE PLANTING PLAN. 1.1. PERFORM THE FOLLOWING WORK BY HAND: IF ROOTS GREATER THAN 2 INCH ARE
- ENCOUNTERED, CUT CLEANLY AND KEEP MOIST. 1.2. REMOVAL OF EXISTING VEGETATION.
- 1.3. ESTABLISHMENT OF SUBGRADE ELEVATION TO ACCOMMODATE IMPORT TOPSOIL & ORGANIC MULCH.
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MATCH LINE SEE SHEET L101 STORAGE SHED -M10"/12"/14" XWX H6 **M**10" SOUND TRANSIT (RIGHT-OF-WAY) M14"/18"X4/22"/28" XXA18" A10" C38" · ဟ -M8" 2/ M14"X2 28TH OPERATIONS BUILDING MATCH LINE SEE SHEET L103 NOTES WORK WITHIN TREE PROTECTION LIMITS LEGEND 1. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE. 1. TURF PLANTING & ORGANIC MULCH AREAS, SEE PLANTING PLAN. MATCHLINE 1.1. PERFORM THE FOLLOWING WORK BY HAND: IF ROOTS GREATER THAN 2 INCH ARE 2. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE. 3. SEE SHEETS L400-L403 FOR SOIL PLACEMENT PLANS. ENCOUNTERED, CUT CLEANLY AND KEEP MOIST. 4. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY 1.2. REMOVAL OF EXISTING VEGETATION. PROPERTY LINE / RIGHT-OF-WAY OFF SITE PLANS FOR TREE RETENTION WITH THE RIGHT OF WAY. 1.3. ESTABLISHMENT OF SUBGRADE ELEVATION TO ACCOMMODATE IMPORT TOPSOIL & ORGANIC MULCH. 1.4. EXCAVATION FOR ROOT BARRIER AND STEEL EDGING INSTALLATION. —— GRADING LIMIT, SEE CIVIL 2. DEMOLITION OF EXISTING PAVEMENT. 2.1. ESTABLISH TREE PROTECTION FENCING AT PERIMETER OF EXISTING PAVEMENT UNTIL THE FOLLOWING WORK IS COMPLETE. 2.2. DEMOLITION EQUIPMENT SHALL OPERATE WITHIN THE LIMITS OF EXISTING PAVEMENT TO AVOID COMPACTION OF EXISTING TREE'S CRITICAL ROOT ZONES. 2.3. REMOVAL OF BASE AGGREGATE SHALL BE DONE BY HAND TO AVOID DAMAGING ROOTS. PROPOSED STRUCTURE, SEE ARCH GRAPHIC SCALE EXISTING PAVING WITHIN TREE PROTECTION EXISTING TREES TO REMAIN EXISTING TREES TO DEMOLISH

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TREE RETENTION PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE

FEDERAL WAY, WASHINGTON

FACILITY

PEVISION DATE

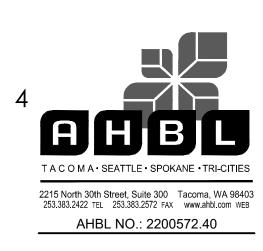
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RETENTION PLAN

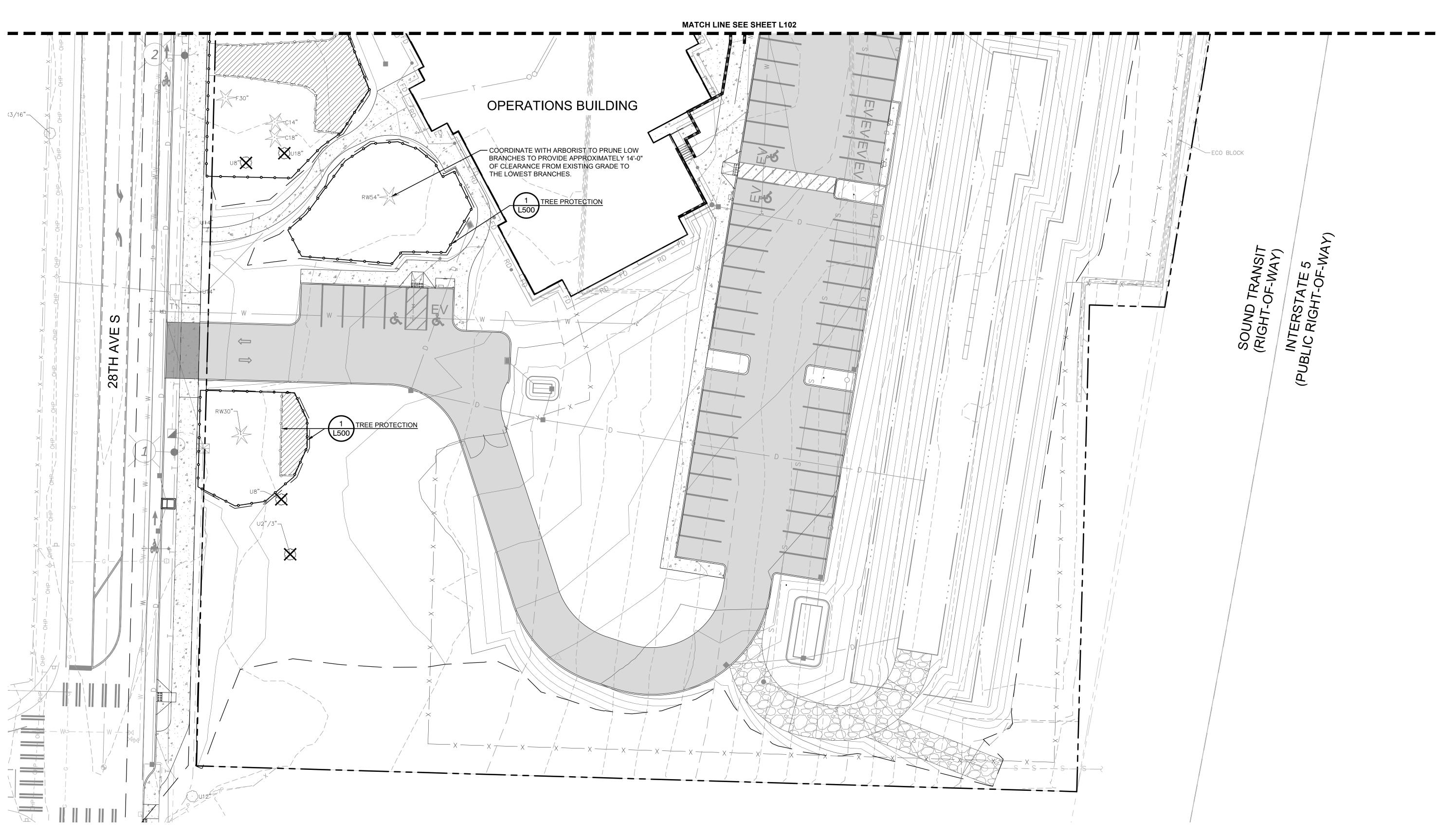
CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE

FEDERAL WAY, WASHINGTON

FACILITY

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LEGEND MATCHLINE

— – PROPERTY LINE / RIGHT-OF-WAY

—— —— GRADING LIMIT, SEE CIVIL

———————— FENCE, SEE ARCH PROPOSED STRUCTURE, SEE ARCH

EXISTING PAVING WITHIN TREE PROTECTION EXISTING TREES TO REMAIN

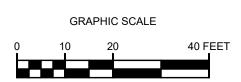
EXISTING TREES TO DEMOLISH

NOTES

- 1. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE. 2. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE.
- 3. SEE SHEETS L400-L403 FOR SOIL PLACEMENT PLANS. 4. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR TREE RETENTION WITH THE RIGHT OF WAY.

WORK WITHIN TREE PROTECTION LIMITS

- 1. TURF PLANTING & ORGANIC MULCH AREAS, SEE PLANTING PLAN. 1.1. PERFORM THE FOLLOWING WORK BY HAND: IF ROOTS GREATER THAN 2 INCH ARE ENCOUNTERED, CUT CLEANLY AND KEEP MOIST.
- REMOVAL OF EXISTING VEGETATION. 1.3. ESTABLISHMENT OF SUBGRADE ELEVATION TO ACCOMMODATE IMPORT TOPSOIL &
- ORGANIC MULCH. 1.4. EXCAVATION FOR ROOT BARRIER AND STEEL EDGING INSTALLATION.
- 2. DEMOLITION OF EXISTING PAVEMENT. 2.1. ESTABLISH TREE PROTECTION FENCING AT PERIMETER OF EXISTING PAVEMENT UNTIL
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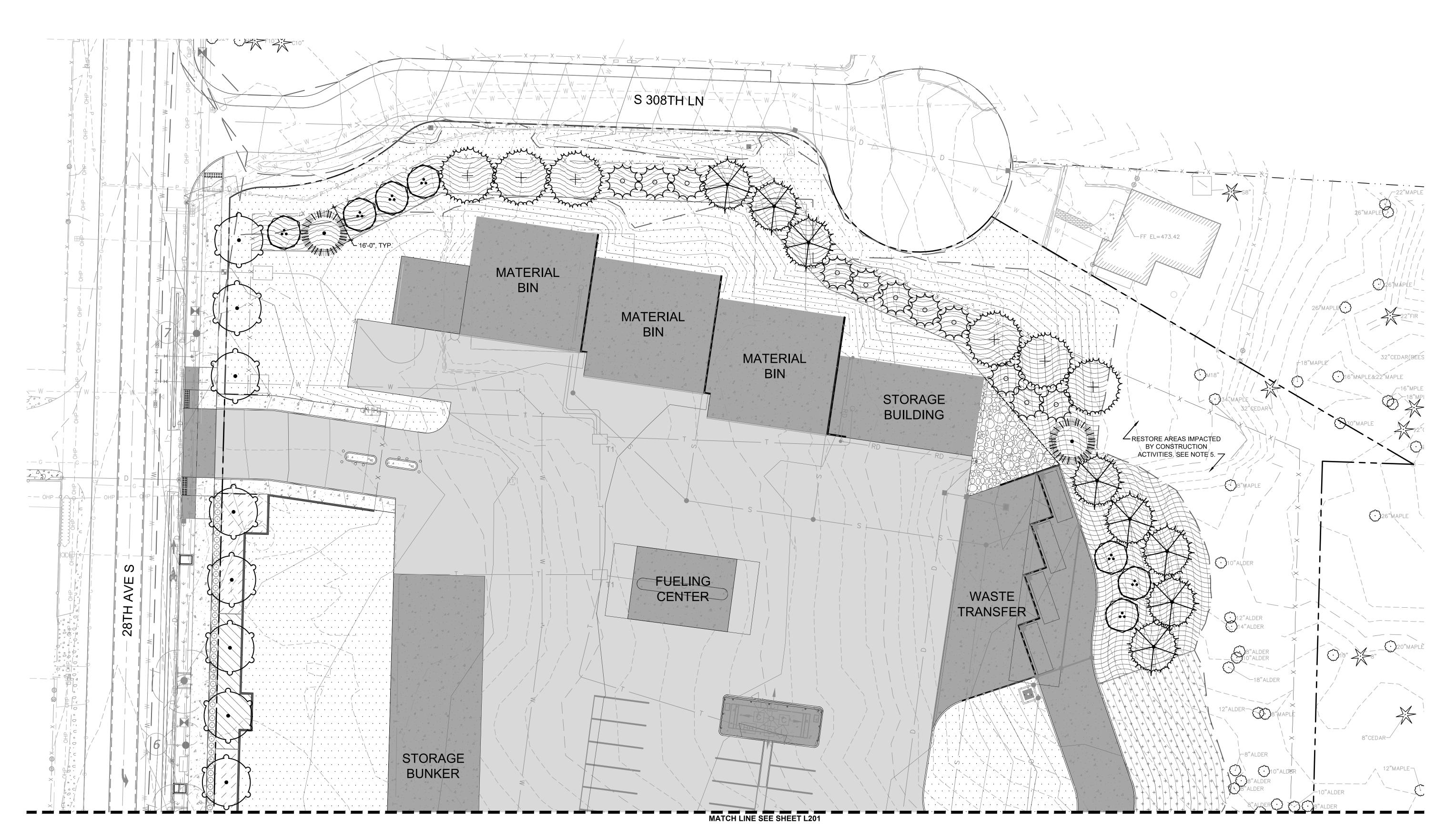


PLANTING PLAN

CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

	REVISION	DATE
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LEGEND PROPERTY LINE / RIGHT-OF-WAY —— — GRADING LIMIT, SEE CIVIL —— ROOT BARRIER, SEE DETAIL 8/L500

— — — STEEL EDGING, SEE DETAIL 9/L500

EXISTING TREES TO REMAIN

NOTES

1. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS. 2. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE.

SEE SHEETS L400-L403 FOR SOIL PLACEMENT PLANS. SEE SHEET L204 FOR PLANT SIZES & QUANTITIES. SEE SHEET L500 FOR PLANTING DETAILS.

4. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR PLANTING WITHIN THE RIGHT OF WAY. 5. ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITIES BETWEEN THE GRADING LIMIT AND PERIMETER FENCE SHALL RECEIVE 3" DEPTH ARBORIST MULCH.

PLANT SCHEDULE REFERENCE SYMBOL BOTANICAL NAME **COMMON NAME** ACER CIRCINATUM CALOCEDRUS DECURRENS INCENSE CEDAR CHAMAECYPARIS NOOTKATENSIS 'PENDULA' WEEPING NOOTKA CYPRESS CORNUS X 'KN30-8' VENUS® DOGWOOD PARROTIA PERSICA 'VANESSA'

VANESSA PERSIAN PARROTIA

BOTANICAL NAME PSEUDOTSUGA MENZIESII TILIA CORDATA 'GREENSPIRE' SARCOCOCCA HOOKERIANA HUMILIS CEANOTHUS GLORIOSUS

FRAGARIA X 'LIPSTICK'

JUNCUS EFFUSUS

COMMON NAME BOTANICAL NAME FLEUR DE LAWN DOUGLAS FIR GRASS & WILDFLOWER SEED MIX LAWN SEED MIX GREENSPIRE LITTLELEAF LINDEN TRAILING SWEETBOX POINT REYES CEANOTHUS

LIPSTICK STRAWBERRY

SOFT RUSH

WET AREA SEED MIX INORGANIC MULCH ORGANIC MULCH

GRAPHIC SCALE

COMMON NAME

MEADOW LAWN

NO MOW LAWN

WET AREA LAWN

RIVER COBBLE

ARBORIST MULCH

FINE LAWN

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PROPOSED STRUCTURE, SEE ARCH

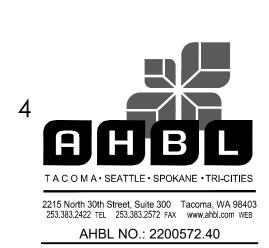
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CITY OF FEDERAL **WAY JOINT**

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FACILITY	

OPERATIONS &

FEDERAL WAY, WASHINGTON			
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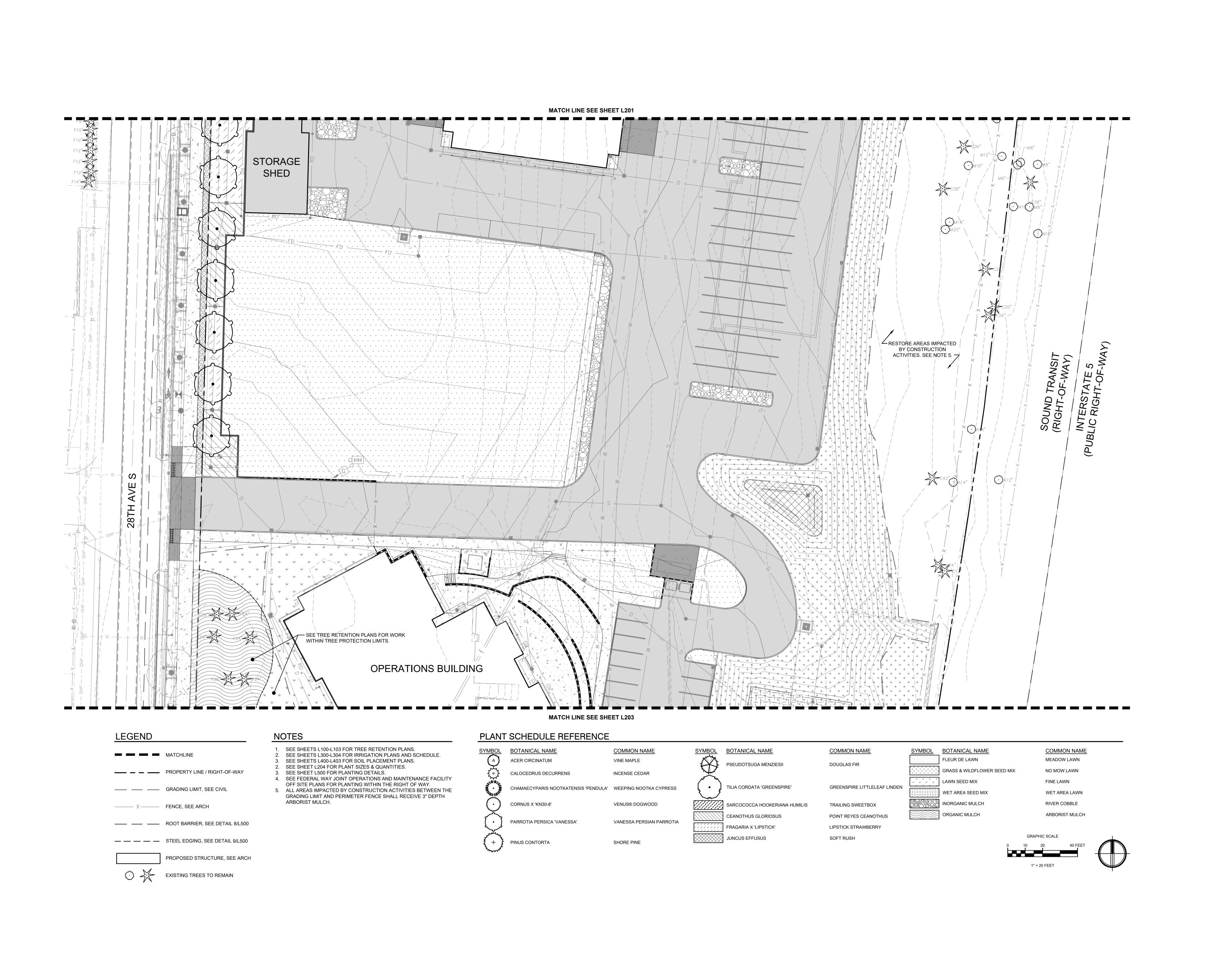
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PLANTING PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE FACILITY

FEDERAL WAY, WASHINGTON

PREVISION DATE

DATE JOB 05.06.24 d23-BID SET

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PLANTING PLAN

CITY OF FEDERAL **WAY JOINT OPERATIONS &**

MAINTENANCE

FACILITY FEDERAL WAY, WASHINGTON

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PLANTING **SCHEDULE** & NOTES

CITY OF FEDERAL **WAY JOINT** OPERATIONS & MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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GENERAL LANDSCAPE NOTES

D

1. PLANTING SHALL CONFORM TO ALL FEDERAL WAY CODE REQUIREMENTS, INCLUDING PRESERVATION OF ADEQUATE INTERSECTION SIGHT DISTANCE LINES/ TRIANGULAR AREAS.

CONTRACTOR SHALL VERIFY ON-SITE CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION. 3. THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR READING THE PLANS, SPECIFICATIONS AND NOTES. 4. THE CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL QUANTITIES PRIOR TO INSTALLATION. ANY PLANT MATERIAL QUANTITIES LISTED ARE FOR THE CONVENIENCE OF THE CONTRACTOR. ACTUAL NUMBER OF SYMBOLS SHALL HAVE PRIORITY OVER QUANTITY DESIGNATED. THE CONTRACTOR HALL BE RESPONSIBLE FOR

COUNTING THE TOTAL NUMBER F PLANTS INDICATED ON THE PLANS AND ESTIMATING GOUNDCOVER QUANTITIES. 5. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL CONTAINER OR FIELD GROWN TREES, SHRUBS AND GROUNDCOVERS, INCLUDING SEEDED AND SODDED TURF, HYDROMULCHES AND FLATTED GROUNDCOVERS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE AND PAY FOR: PLANTING OF ALL PLANT MATERIALS; THE SPECIFIED GUARANTEE OF ALL PLANT MATERIALS; THE STAKING AND GYING OF TREES AND THE CONTINUOUS PROTECTION OF ALL PLANT MATERIALS UPON THEIR ARRIVAL AT THE SITE.

SYMBOL CODE BOTANICAL NAME AC ACER CIRCINATUM

PLANT SCHEDULE

VINE MAPLE CD CALOCEDRUS DECURRENS INCENSE CEDAR CN CHAMAECYPARIS NOOTKATENSIS 'PENDULA' WEEPING NOOTKA CYPRESS CV CORNUS X 'KN30-8' **VENUS® DOGWOOD** PARROTIA PERSICA 'VANESSA'

G

VANESSA PERSIAN PARROTIA 1.5" CAL MIN. PINUS CONTORTA SHORE PINE PM PSEUDOTSUGA MENZIESII DOUGLAS FIR GREENSPIRE LITTLELEAF LINDEN 1.5" CAL MIN. TILIA CORDATA 'GREENSPIRE'

SPACING QTY SYMBOL CODE BOTANICAL NAME COMMON NAME SARCOCOCCA HOOKERIANA HUMILIS TRAILING SWEETBOX 36" o.c. 16 CG CEANOTHUS GLORIOSUS POINT REYES CEANOTHUS 36" o.c. 742 24" o.c. 1,667 FRAGARIA X 'LIPSTICK' LIPSTICK STRAWBERRY JUNCUS EFFUSUS SOFT RUSH 24" o.c. 362

COMMON NAME

FLEUR DE LAWN MEADOW LAWN HYDROSEED GW GRASS & WILDFLOWER SEED MIX NO MOW LAWN HYDROSEED FINE LAWN LAWN SEED MIX HYDROSEED WA WET AREA SEED MIX WET AREA LAWN HYDROSEED

INORGANIC MULCH ORGANIC MULCH

RIVER COBBLE 8" DEPTH 4" DEPTH ARBORIST MULCH

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<u>QTY</u>

102,269 SF

44,044 SF

15,677 SF

6,341 SF

25,428 SF

8,750 SF

CALIPER/HEIGHT

6` HT MIN. MULTI-TRUNK

6` HT MIN.

6` HT MIN.

1.5" CAL MIN.

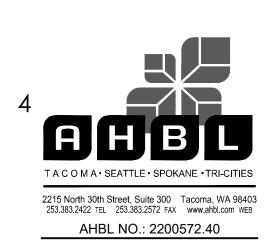
6` HT MIN.

6` HT MIN.

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IRRIGATION PLAN

CITY OF FEDERAL
WAY JOINT
OPERATIONS &
MAINTENANCE
FACILITY

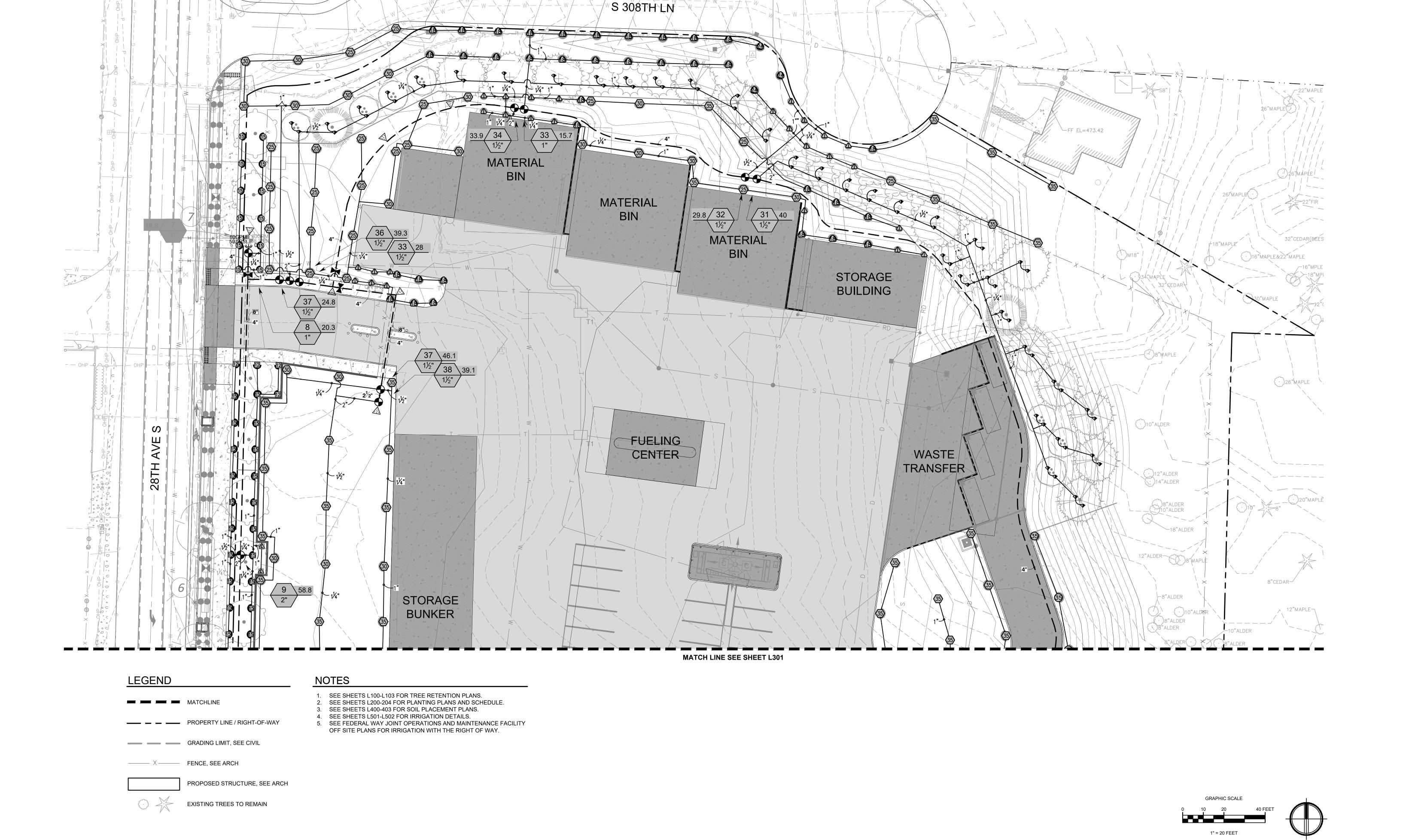
FEDERAL WAY, WASHINGTON

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DATE JOB NO.
05.06.24 a23-087

BID SET

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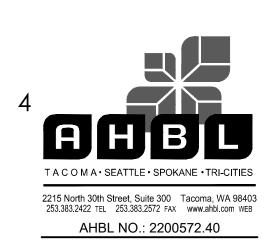
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IRRIGATION PLAN

CITY OF FEDERAL

OPERATIONS & MAINTENANCE FACILITY

WAY JOINT

FEDERAL WAY, WASHINGTON

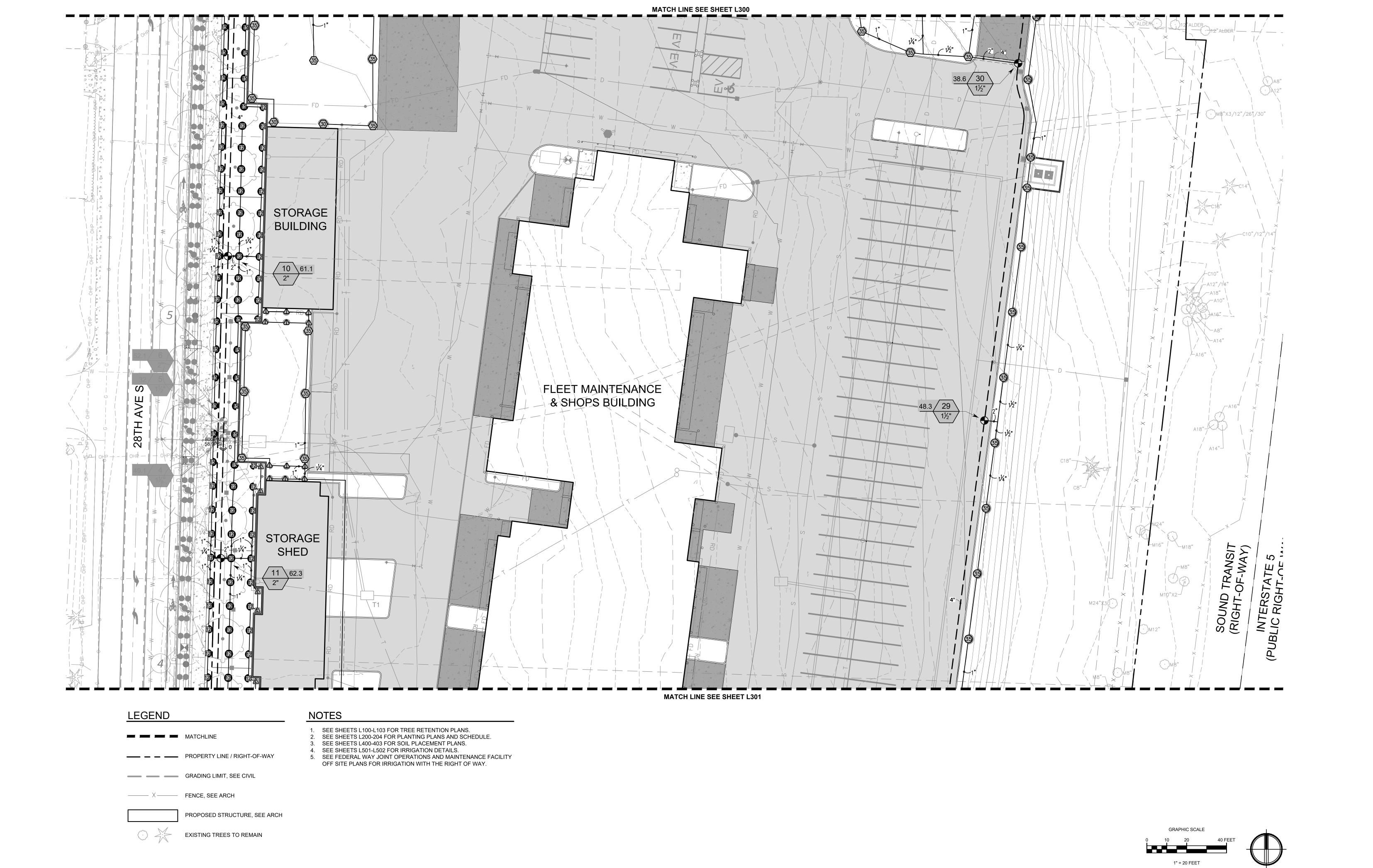
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MATCH LINE SEE SHEET L301 STORAGE SHED PIPE SHOWN IN HARD SURFACE FOR CLARITY. INSTALL IN ADJACENT PLANTING BED. DO NOT BEND PIPE AROUND CURVES OR CORNERS, USE FITTINGS TO AVOID TENSION ON THE PIPE, TYP. 2 BOOSTER PUMP ENCLOSURE **S** 28TH

MATCH LINE SEE SHEET L303

G

NOTES

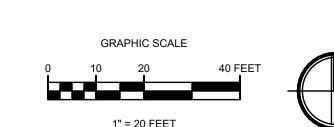
I. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS.
2. SEE SHEETS L200-204 FOR PLANTING PLANS AND SCHEDULE.
3. SEE SHEETS L400-403 FOR SOIL PLACEMENT PLANS.
4. SEE SHEETS L501-L502 FOR IRRIGATION DETAILS.
5. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR IRRIGATION WITH THE RIGHT OF WAY.

PROPOSED STRUCTURE, SEE ARCH

NOTES

1. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS.
2. SEE SHEETS L200-204 FOR PLANTING PLANS AND SCHEDULE.
3. SEE SHEETS L501-L502 FOR IRRIGATION DETAILS.
5. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR IRRIGATION WITH THE RIGHT OF WAY.

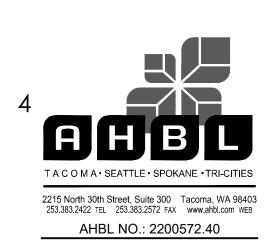
EXISTING TREES TO REMAIN

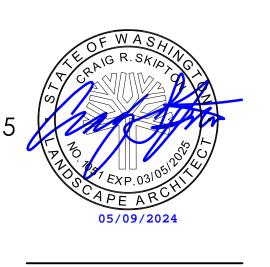






HELIX DESIGN GROUP, INC







IRRIGATION PLAN

CITY OF FEDERAL WAY JOINT

FACILITY
FEDERAL WAY, WASHINGTON

OPERATIONS &

MAINTENANCE

REVISION DATE

DATE JOB NO.
05.06.24 a23-087

BID SET

L302

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OPERATIONS BUILDING

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IRRIGATION PLAN

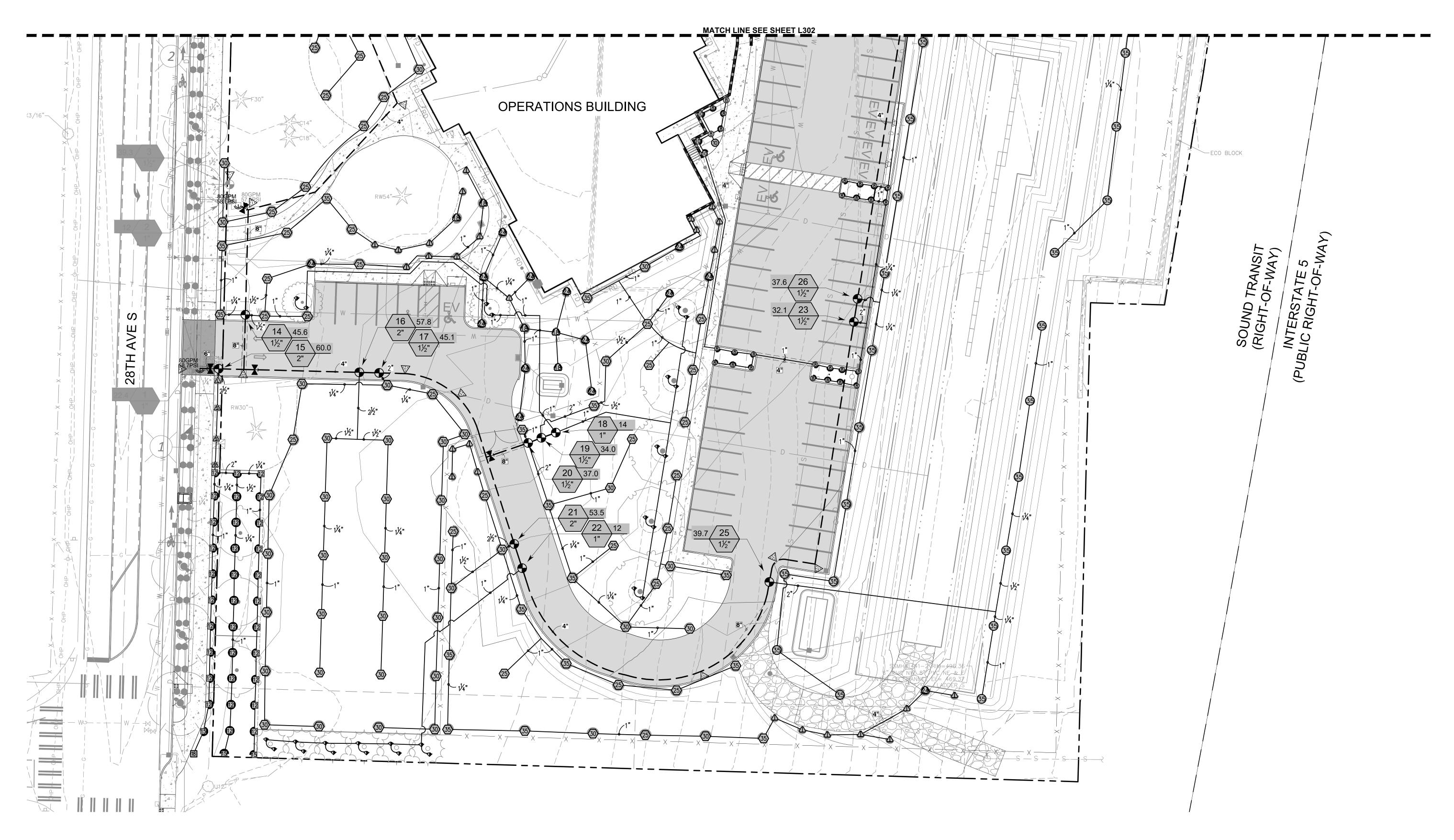
CITY OF FEDERAL **WAY JOINT** OPERATIONS & MAINTENANCE

FEDERAL WAY, WASHINGTON

FACILITY

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LEGEND MATCHLINE PROPERTY LINE / RIGHT-OF-WAY GRADING LIMIT, SEE CIVIL

NOTES

1. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS.

2. SEE SHEETS L200-204 FOR PLANTING PLANS AND SCHEDULE. 3. SEE SHEETS L400-403 FOR SOIL PLACEMENT PLANS.

4. SEE SHEETS L501-L502 FOR IRRIGATION DETAILS.

5. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY OFF SITE PLANS FOR IRRIGATION WITH THE RIGHT OF WAY.

PROPOSED STRUCTURE, SEE ARCH

EXISTING TREES TO REMAIN

GRAPHIC SCALE

- 1. NO SUBSTITUTIONS OF EQUIPMENT OR DESIGN CHANGES SHALL BE PERMITTED UNLESS APPROVED BY THE OWNER.
- 2. IRRIGATION LINES AND VALVES MAY BE SHOWN IN HARD SURFACE AREAS OR OUTSIDE LANDSCAPE AREAS FOR GRAPHIC CLARITY. LOCATE ALL IRRIGATION LINES IN LANDSCAPE AREAS OR IN SLEEVES UNDER PAVEMENT.
- 3. IRRIGATION CONTRACTOR SHALL COORDINATE INSTALLATION OF IRRIGATION CONDUIT AND SLEEVES UNDER HARD SURFACES WITH RESPECTIVE CONTRACTORS.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, TESTS, AND INSPECTIONS REQUIRED FOR THE IRRIGATION SYSTEM.
- 5. CALL FOR LOCATES PRIOR TO DIGGING AT 811. CONTRACTOR IS RESPONSIBLE TO VERIFY UTILITY LOCATIONS. IF UTILITIES ARE DAMAGED IN THE COURSE OF WORK, CONTRACTOR SHALL INFORM THE OWNER AND MAKE ANY REPAIRS REQUIRED, AT NO COST TO THE OWNER.
- 6. ALL SLEEVING SHALL BE MARKED, SEALED AND STAKED. ALL SLEEVES SHALL BE TWICE THE SIZE OF OF THE LINE OR COMBINED LINES. MINIMUM SLEEVE SIZE SHALL BE 4-INCHES IF LOCATED UNDER ROADWAY OR DRIVE AISLE.
- 7. COORDINATE SLEEVING LOCATIONS WITH ELECTRICAL CONDUIT.
- 8. INSTALL CONCRETE THRUST BLOCKS ON MAINLINE 2-1/2" AND LARGER, FOR ALL CHANGES IN PIPE DIRECTION OVER
- 9. SPLICE CONTROL WIRES WITHIN VALVE BOXES ONLY, USING 3M-DBY, OR APPROVED SPLICE KITS, AND PROVIDE A 24" EXPANSION LOOP FOR ALL CONTROL WIRES WITHIN EACH VALVE BOX. KEEP WIRE SPLICES TO A MINIMUM. PROVIDE CLEAN WIRE CUTS WITH NEW SPLICE KITS AT ALL SPLICES INCLUDING ANY SPLICE THAT IS DISCONNECTED AND RECONNECTED FOR ANY REASON OR PERIOD OF TIME.
- 10. VALVE BOXES SHALL BE COMMERCIAL-GRADE POLYETHYLENE OR HDPE AND SUITABLE FOR LIGHT DUTY
- 11. INSTALLER TO ADJUST ALL ZONE CONTROL VALVES TO THE CORRECT OPERATING PRESSURE. SEE VALVE SCHEDULE FOR OPERATING PSI.
- 12. CONTRACTOR SHALL HAND TRENCH IRRIGATION DITCHES WHEN WITHIN 20 FEET, OR WITHIN A DELINEATED ROOT PROTECTION ZONE, OF EXISTING TREES TO REMAIN. AVOID CUTTING ANY ROOTS OVER 3" - 4" IN DIAMETER WITHIN THE ROOT PROTECTION ZONE.
- 13. INSTALLER SHALL BE RESPONSIBLE FOR KEEPING EXACT ACCURATE NOTES AND "AS-BUILTS" FOR THE CREATION OF THE "RECORD DRAWINGS" OF THE INSTALLED SYSTEM.
- 14. CONTRACTOR SHALL PROVIDE IRRIGATION MAINTENANCE THROUGH THE PLANT ESTABLISHMENT PERIOD INCLUDING WINTERIZATION(S) AND SPRING START-UP(S).

POINT OF CONNECTION NOTES

- 1. CONTRACTOR SHALL VERIFY EXISTING STATIC PRESSURE AT THE METER AND SUBMIT WRITTEN VERIFICATION TO THE LANDSCAPE ARCHITECT. NOTIFY THE LANDSCAPE ARCHITECT OF DISCREPANCIES GREATER THAN 5 POUNDS OF DESIGN PRIOR TO INSTALLATION OF ANY IRRIGATION EQUIPMENT.
- 2. POC: 2" IRRIGATION METER.
- 2.1. THE SYSTEM DESIGN IS BASED ON OPERATING 1 ZONE AT A TIME USING A NEW IRRIGATION METER ON A 3" SCH. 40 PVC SUPPLY LINE. CONTRACTOR SHALL FIELD
- VERIFY SIZE AND LOCATION. 2.2. BOOSTER PUMP DESIGNED TO ADD 65 PSI FOR A TOTAL OF 88 PSI AND 120 GPM.
- 3. COORDINATE METER SCOPE OF WORK WITH ALL APPLICABLE TRADES. INSTALL METER PER FEDERAL WAY PLUMBING CODE.
- 4. IRRIGATION CONTRACTOR SHALL TIE INTO METER AND RUN PIPE TO BACKFLOW PREVENTER.
- 5. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF THE POINT OF CONNECTION ASSUMPTIONS MADE HERE DO NOT MATCH FIELD CONDITIONS.

CONTROLLER NOTES

- 1. CONTROLLER: INSTALL NEW WALL MOUNTED TWO-WIRE CONTROLLER. CONFIRM LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- 1.1. PROVIDE 120V FROM ELECTRICAL SERVICE PER LOCAL UTILITY REQUIREMENTS AND APPLICABLE CODES. SEE ELECTRICAL PLAN FOR MORE INFORMATION.
- 1.2. PROVIDE COMMUNICATION CONNECTION FROM CONTROLLER TO FLOW METER AND MASTER VALVE.
- 1.3. PROVIDE DATA CABLE CONNECTION FROM CONTROLLER TO OPERATIONS BUILDING. COORDINATE WITH IT DEPARTMENT TO CONNECT TO NETWORK.
- 1.4. INSTALL CONTROLLER PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE GROUNDING PER MANUFACTURER'S REQUIREMENTS.
- 1.5. PROGRAM CONTROLLER WITH TEMPORARY ESTABLISHMENT AND PERMANENT WATERING SCHEDULE. COORDINATE WITH OWNER FOR CONNECTION TO CENTRAL CONTROL SERVER AND PROGRAMMING.
- 2. CONTROL WIRE SHALL BE INSTALLED IN 2" SCH. 40 ELECTRICAL CONDUIT AT HARDSCAPE CROSSINGS.
- 3. INSTALL SPARE CONTROL WIRE (ORANGE COLOR) FROM CONTROLLER TO FARTHEST VALVE.

IRRIGATION SYSTEM DESIGN NOTES

- 1. WATER PURVEYOR: LAKEHAVEN WATER & SEWER DISTRICT.
- 2. THIS DESIGN ADDS A NEW IRRIGATION SYSTEM FOR THE AREAS AFFECTED BY CONSTRUCTION OF FEDERAL WAY'S JOINT OPERATIONS & MAINTENANCE FACILITY.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>PSI</u>	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>PSI</u>	<u>GPM</u>	RADIUS
6) 6 6 Q H F	RAIN BIRD 1804-SAM-PRS 5 SERIES MPR TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.	30	2 5	RAIN BIRD 5004-PC-SAM-MPR 25 TURF ROTOR, 4IN. POP-UP, PLASTIC RISER, MATCHED PRECIPITATION ROTOR (MPR NOZZLE). ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.	45		25'
8) 8) 8 8 Q T H F	RAIN BIRD 1804-SAM-PRS 8 SERIES MPR TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.	30	30	RAIN BIRD 5004-PC-SAM-MPR 30 TURF ROTOR, 4IN. POP-UP, PLASTIC RISER, MATCHED PRECIPITATION ROTOR (MPR NOZZLE). ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE.	45		30'
Q T H F	RAIN BIRD 1804-SAM-PRS 10 SERIES MPR TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.	30	3 5	WITH SEAL-A-MATIC CHECK VALVE. RAIN BIRD 5004-PC-SAM-MPR 35 TURF ROTOR, 4IN. POP-UP, PLASTIC RISER, MATCHED	45		35'
(2) (2) (2) (2) Q T H TQ F	RAIN BIRD 1804-SAM-PRS 12 SERIES MPR TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.	30		PRECIPITATION ROTOR (MPR NOZZLE). ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE. RAIN BIRD 5006-PL-PC-SAM-MPR 35	43		33
(5) (5) (5) (5) Q T H TQ F	RAIN BIRD 1804-SAM-PRS 15 SERIES MPR TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING.	30	35	SHRUB ROTOR, 6IN. POP-UP, PLASTIC RISER, WITH FLOW SHUT-OFF DEVICE. MATCHED PRECIPITATION ROTOR (MPF NOZZLE), ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.			34'
4 6 8 00 4 6 8 10 12 15 18	RAIN BIRD 1804-SAM-PRS ADJ TURF SPRAY 4.0IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH	30	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION RAIN BIRD PEB			
12 15 18 12 15 18 13 15 18 15 16 16 16 16 16 16 16 16 16 16 16 16 16	SEAL-A-MATIC CHECK VALVE. PRESSURE REGULATING. RAIN BIRD 1812-SAM-PRS 15 STRIP SERIES SHRUB SPRAY 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	30	→	1IN., 1-1/2IN., 2IN., 3IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. SHUT OFF VALVE			
12 12 12 12 12 Q T H TQ F	RAIN BIRD 1812-SAM-PRS 12 SERIES MPR SHRUB SPRAY 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	30		RAIN BIRD EFB-CP 1-1/2" 1IN., 1-1/4", 1-1/2IN., 2IN. BRASS MASTER VALVE, THAT IS CONTAMINATION PROOF W/SELF-FLUSHING FILTER SCREEN. GLOBE CONFIGURATION, RECLAIMED WATER COMPATIBLE, AND PURPLE HANDLE COVER DESIGNATES NON-POTABLE WATER USE.			
15) 15) 15 15 Q T H TQ F	RAIN BIRD 1812-SAM-PRS 15 SERIES MPR SHRUB SPRAY 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	30	(BF)	FEBCO 825Y 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER BASELINE BL-3200XS TWO-WIRE CONTROLLER IN LARGE 16-GAUGE			
4 6 8 10 4 6 8 10 12 15 18 12 15 18	RAIN BIRD 1812-SAM-PRS ADJ SHRUB SPRAY 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	30	FS	STAINLESS-STEEL WALL MOUNT CABINET, EXPANDABLE TO 200 STATIONS. BASELINE BL-BFM100 1" BASELINE BRASS 1IN. FLOW METER WITH INTEGRATED FLOW DECODER, MALE THREADED, TWO-WIRE READY.			
14 ADJ 14 F	RAIN BIRD R-VAN14 1804-SAM-P45-NP TURF ROTARY, 8FT14FT. 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET. WITH NON-POTABLE PURPLE CAP.	45	Œ₽	MUNRO SIMP46053PHBP COMPLETE 5HP, 460V, 3PH PUMP STATION FOR PRESSURE BOOST APPLICATION INCLUDES: • 5HP STRAIGHT CENTRIFUGAL PUMP • VALVES • DISCHARGE MANIFOLD • VARIABLE FREQUENCY DRIVE (VFD) CONTROLLER			
18 ADJ 18 F	RAIN BIRD R-VAN18 1804-SAM-P45-NP TURF ROTARY, 13FT18FT. 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET. WITH NON-POTABLE PURPLE CAP.	45		• ALUMINUM SKID WITH A POWDER-COATED ALUMINUM ENCLOSURE PLEASE CONTACT MUNRO FOR PRODUCT SELECTION ASSISTANCE OR ADDITIONAL INFORMATION: 877-372-9005 OR MSY@MUNROPUMP.COM THRUST BLOCK			
24 ADJ 24 F	RAIN BIRD R-VAN24 1804-SAM-P45-NP TURF ROTARY, 17FT24FT. 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET. WITH NON-POTABLE	45	M 	WATER METER 2" CONFIRMED BY HARGIS OCT. 2023 IRRIGATION LATERAL LINE: PVC SCHEDULE 40 IRRIGATION MAINLINE: PVC SCHEDULE 40			
0 0 0 0	PURPLE CAP. RAIN BIRD RWS-B-C 1400 SERIES ROOT WATERING SYSTEM WITH 4.0IN. DIAMETER X 36.0IN.	30		PIPE SLEEVE: PVC SCHEDULE 40			

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CRITICAL	ANAL	LYSIS

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Generated:	2024-05-02 12:19
P.O.C. NUMBER: 01 Water Source Information:	Confirmed by Hargis Oct. 2023
FLOW AVAILABLE	-
Water Meter Size: Flow Available	2" 120 GPM
PRESSURE AVAILABLE Static Pressure at POC:	28 PSI
Elevation Change:	8.00 ft
Service Line Size:	3"
Length of Service Line:	150 ft
Booster Pump pressure provided:	65 PSI
Pressure Available:	88 PSI
DESIGN ANALYSIS	
Maximum Multi-valve Flow:	80 GPM
Flow Available at POC:	120 GPM
Residual Flow Available:	40 GPM
Critical Station:	21
Design Pressure:	45 PSI
Friction Loss:	5.29 PSI
Fittings Loss:	0.53 PSI
Elevation Loss:	0 PSI
Loss through Valve:	4.76 PSI
Pressure Req. at Critical Station:	56.4 PSI
Loss for Fittings: Loss for Main Line:	0.06 PSI 0.62 PSI
Loss for POC to Valve Elevation:	-1.3 PSI
Loss for Backflow:	12.6 PSI
Loss for Master Valve:	7.5 PSI
Loss for Water Meter:	4.9 PSI
Critical Station Pressure at POC:	80.8 PSI
Pressure Available:	88 PSI
Residual Pressure Available:	7.24 PSI

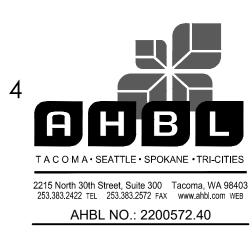
VALVE SCHEDULE
V/ LEVE OOI IEDOLE

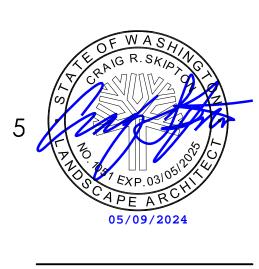
Valve Callout

NUMBER	MODEL	SIZE	<u>TYPE</u>	<u>GPM</u>	<u>PSI</u>	PRECIP
8	RAIN BIRD PEB	1"	TURF SPRAY	20.34	34.6	1.82 in/h
9	RAIN BIRD PEB	2"	SHRUB SPRAY	58.78	36.6	1.84 in/h
10	RAIN BIRD PEB	2"	SHRUB SPRAY	61.11	36.1	1.72 in/h
11	RAIN BIRD PEB	2"	SHRUB SPRAY	62.34	36.1	1.64 in/h
12	RAIN BIRD PEB	2"	SHRUB SPRAY	62.64	36.6	1.75 in/h
13	RAIN BIRD PEB	2"	TURF ROTOR	50.13	53.3	0.93 in/h
14	RAIN BIRD PEB	1-1/2"	TURF ROTOR	45.59	52.5	0.91 in/h
15	RAIN BIRD PEB	2"	SHRUB SPRAY	60.04	37.6	1.83 in/h
16	RAIN BIRD PEB	2"	TURF ROTOR	57.8	52.5	0.85 in/h
17	RAIN BIRD PEB	1-1/2"	TURF ROTOR	45.08	52.5	0.79 in/h
18	RAIN BIRD PEB	1"	BUBBLER	14	34.1	3.45 in/h
19	RAIN BIRD PEB	1-1/2"	TURF ROTOR	34.03	51.1	0.7 in/h
20	RAIN BIRD PEB	1-1/2"	TURF ROTOR	37.03	51.2	0.66 in/h
21	RAIN BIRD PEB	2"	TURF ROTOR	53.46	55.6	0.68 in/h
22	RAIN BIRD PEB	1"	BUBBLER	12	36.8	3.45 in/h
23	RAIN BIRD PEB	1-1/2"	TURF SPRAY	32.06	37.8	1.81 in/h
24	RAIN BIRD PEB	2"	TURF SPRAY	66.92	38.1	1.91 in/h
25	RAIN BIRD PEB	1-1/2"	SHRUB ROTOR	39.72	42.1	0.68 in/h
26	RAIN BIRD PEB	1-1/2"	SHRUB ROTOR	37.61	42.6	0.61 in/h
27	RAIN BIRD PEB	1-1/2"	SHRUB ROTOR	39.72	41.3	0.69 in/h
28	RAIN BIRD PEB	1-1/2"	SHRUB ROTOR	48.17	41.9	0.64 in/h
29	RAIN BIRD PEB	1-1/2"	SHRUB ROTOR	48.3	44.0	0.69 in/h
30	RAIN BIRD PEB	1-1/2"	TURF ROTOR	38.62	50.6	0.85 in/h
31	RAIN BIRD PEB	1-1/2"	BUBBLER	40	37.6	3.47 in/h
32	RAIN BIRD PEB	1-1/2"	TURF ROTARY	29.8	52.2	0.72 in/h
33	RAIN BIRD PEB	1-1/2"	BUBBLER	28	37.8	3.45 in/h
33	RAIN BIRD PEB	1"	TURF ROTARY	15.7	50.5	0.59 in/h
34	RAIN BIRD PEB	1-1/2"	TURF ROTARY	33.94	52.1	0.71 in/h
36	RAIN BIRD PEB	1-1/2"	TURF ROTOR	39.26	52.5	0.73 in/h
37	RAIN BIRD PEB	1-1/2"	TURF ROTOR	24.8	54.6	0.82 in/h
37	RAIN BIRD PEB	1-1/2"	TURF ROTOR	46.06	53.7	0.78 in/h
38	RAIN BIRD PEB	1-1/2"	TURF ROTOR	39.06	51.7	0.68 in/h
39	RAIN BIRD PEB	1"	TURF ROTARY	20.38	54.3	0.62 in/h
40	RAIN BIRD PEB	2"	TURF ROTOR	75.8	53.2	0.64 in/h
41	RAIN BIRD PEB	2"	TURF ROTOR	59.06	54.0	0.71 in/h
42	RAIN BIRD PEB	2"	TURF ROTOR	68.67	58.2	0.7 in/h



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IRRIGATION **SCHEDULE** & NOTES

CITY OF FEDERAL **WAY JOINT** OPERATIONS & MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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CHECK VALVE. RAIN BIRD BUBBLER OPTION AS INDICATED:

1401 0.25 GPM, 1402 0.5 GPM, 1404 1.0 GPM, 1408 2.0 GPM.

1401 1402 1404 1408

LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE, AND

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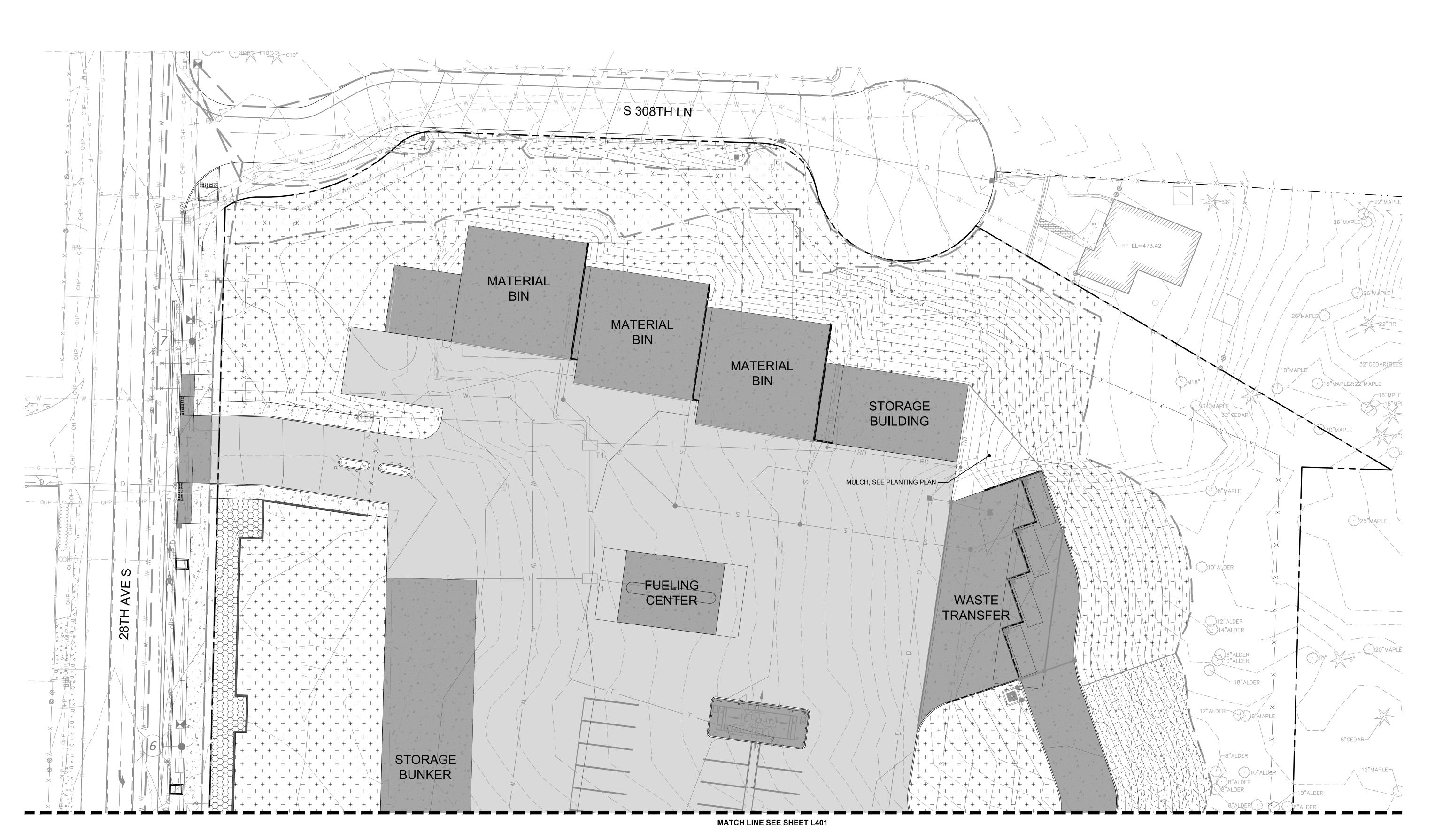


SOIL PLACEMENT PLAN

CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE

FACILITY FEDERAL WAY, WASHINGTON

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LEGEND PROPERTY LINE / RIGHT-OF-WAY OFF SITE PLANS FOR SOIL PLACEMENT WITH THE RIGHT OF WAY. GRADING LIMIT, SEE CIVIL

PROPOSED STRUCTURE, SEE ARCH

EXISTING TREES TO REMAIN

———————— FENCE, SEE ARCH

NOTES

1. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS. 2. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE.

3. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE.

4. SEE SHEET L500 FOR SOIL PREPARATION DETAIL 5. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY SOIL NOTES

FOR CALCULATING QUANTITIES.

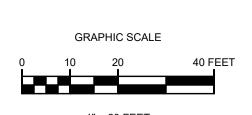
1. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. 2. LEAVE UNDISTURBED AREAS INTACT AND AVOID COMPACTION OF TOPSOIL OUTSIDE CLEARING AREA

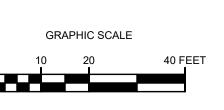
UNLESS OTHERWISE NOTED ON THE PLANS. 3. MEET WASHINGTON STATE DEPARTMENT OF ECOLOGY'S STORMWATER MANAGEMENT MANUAL FOR

WESTERN WASHINGTON, BMP T5.13 STANDARDS FOR POST CONSTRUCTION SOIL QUALITY AND DEPTH. 4. LANDSCAPE AREAS, EXCEPT TURF OR AREAS OF ESTABLISHED GROUND COVER, SHALL BE COVERED

WITH AT LEAST THREE INCHES OF MULCH TO MINIMIZE EVAPORATION. 5. THE CONTRACTOR SHALL VERIFY ALL SOIL QUANTITIES PRIOR TO INSTALLATION. ANY SOIL QUANTITY LISTED IS FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE SOIL PLACEMENT SCHEDULE 18" DEPTH: BIORETENTION SOIL MIX 9" DEPTH: 3-WAY TOPSOIL 4" DEPTH: 2-WAY TOPSOIL

2" DEPTH: COMPOST AMENDMENTS





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1. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

UNLESS OTHERWISE NOTED ON THE PLANS.

FOR CALCULATING QUANTITIES.

2. LEAVE UNDISTURBED AREAS INTACT AND AVOID COMPACTION OF TOPSOIL OUTSIDE CLEARING AREA

3. MEET WASHINGTON STATE DEPARTMENT OF ECOLOGY'S STORMWATER MANAGEMENT MANUAL FOR

4. LANDSCAPE AREAS, EXCEPT TURF OR AREAS OF ESTABLISHED GROUND COVER, SHALL BE COVERED

5. THE CONTRACTOR SHALL VERIFY ALL SOIL QUANTITIES PRIOR TO INSTALLATION. ANY SOIL QUANTITY LISTED IS FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE

WITH AT LEAST THREE INCHES OF MULCH TO MINIMIZE EVAPORATION.

WESTERN WASHINGTON, BMP T5.13 STANDARDS FOR POST CONSTRUCTION SOIL QUALITY AND DEPTH.

1. SEE SHEETS L100-L103 FOR TREE RETENTION PLANS.

4. SEE SHEET L500 FOR SOIL PREPARATION DETAIL

2. SEE SHEETS L200-L204 FOR PLANTING PLANS AND SCHEDULE.

3. SEE SHEETS L300-L304 FOR IRRIGATION PLANS AND SCHEDULE.

5. SEE FEDERAL WAY JOINT OPERATIONS AND MAINTENANCE FACILITY

OFF SITE PLANS FOR SOIL PLACEMENT WITH THE RIGHT OF WAY.

MATCHLINE

PROPERTY LINE / RIGHT-OF-WAY

PROPOSED STRUCTURE, SEE ARCH

EXISTING TREES TO REMAIN

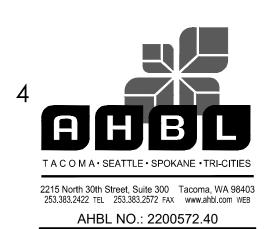
GRADING LIMIT, SEE CIVIL

———————— FENCE, SEE ARCH

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SOIL PLACEMENT PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS &

FACILITY
FEDERAL WAY, WASHINGTO

MAINTENANCE

FEDERAL WAY, WASHINGTON

PEVISION DATE

DATE JOB NO 05.06.24 a23-087

10 **L401**

18" DEPTH: BIORETENTION SOIL MIX

GRAPHIC SCALE

9" DEPTH: 3-WAY TOPSOIL

2" DEPTH: COMPOST AMENDMENTS

4" DEPTH: 2-WAY TOPSOIL

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SOIL PLACEMENT PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE

FACILITY

FEDERAL WAY, WASHINGTON

REVISION DATE

DATE JOB 05.06.24 a23-

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SOIL PLACEMENT PLAN

CITY OF FEDERAL WAY JOINT OPERATIONS & MAINTENANCE FACILITY

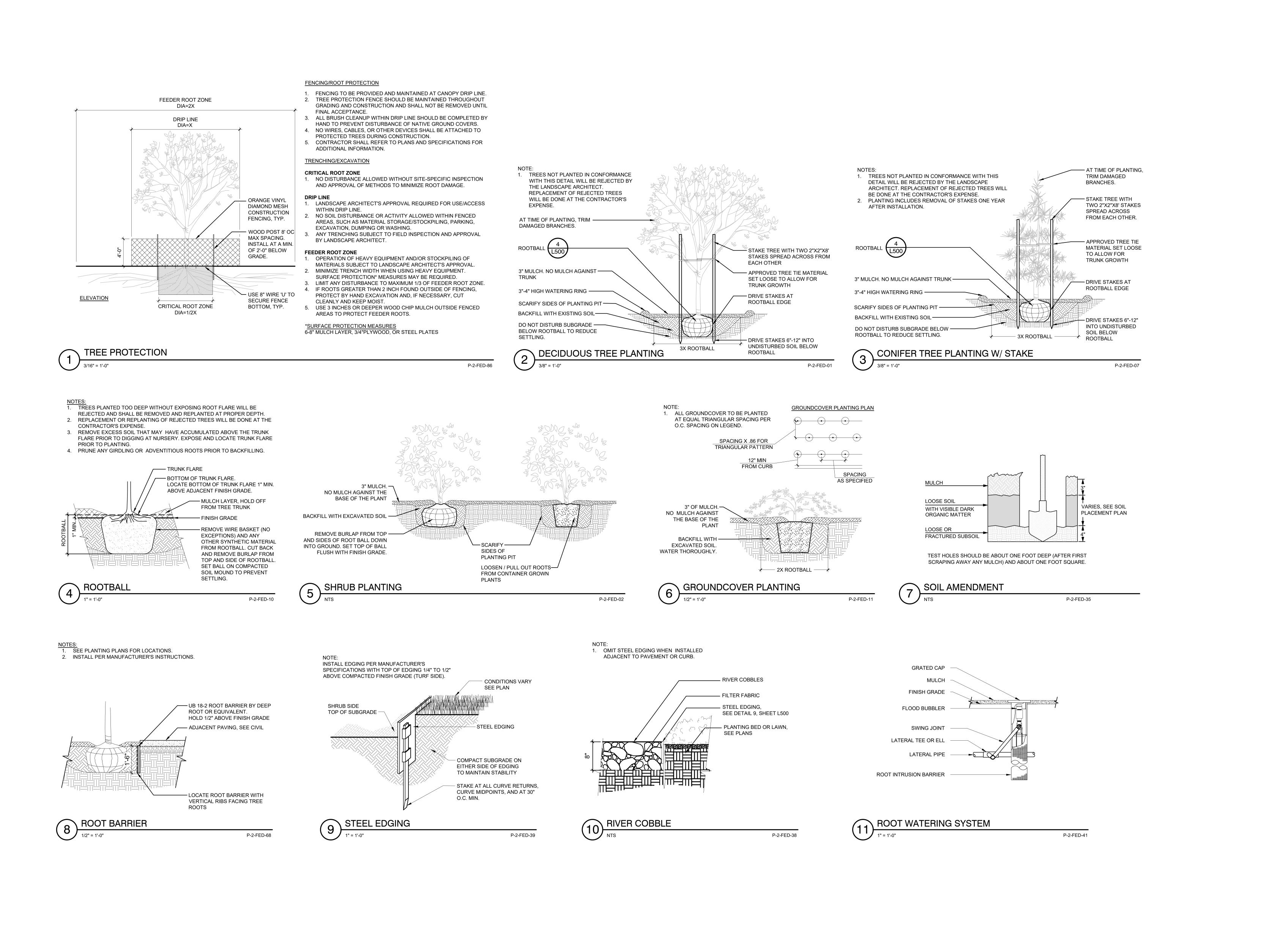
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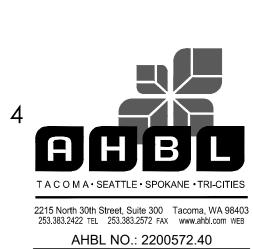
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AMERICAN INSTITUTE OF ARCHITECTS

HELIX DESIGN GROUP, INC







DETAILS

CITY OF FEDERAL **WAY JOINT OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

DRAWING NO.

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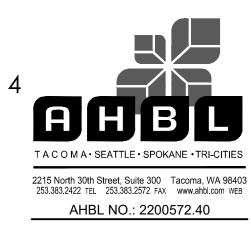
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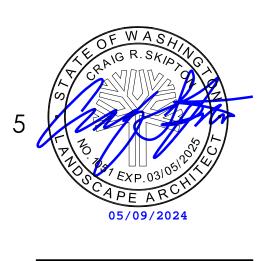
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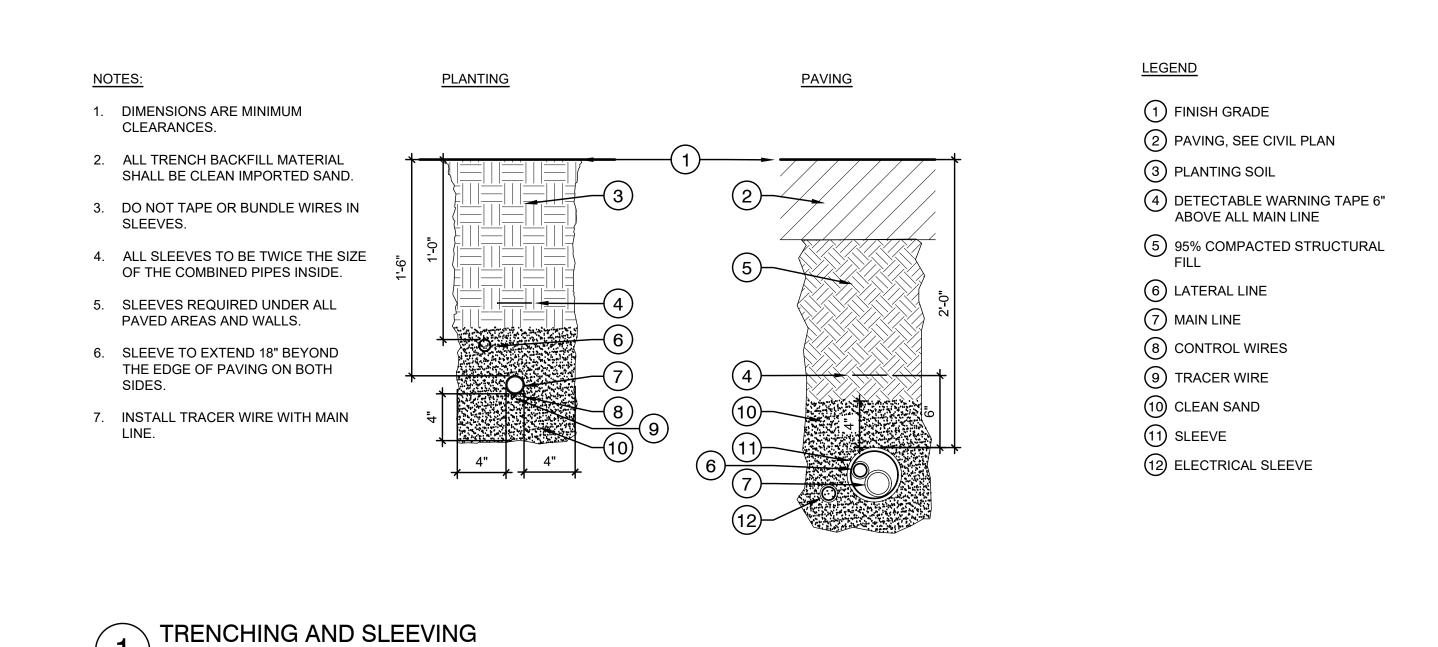




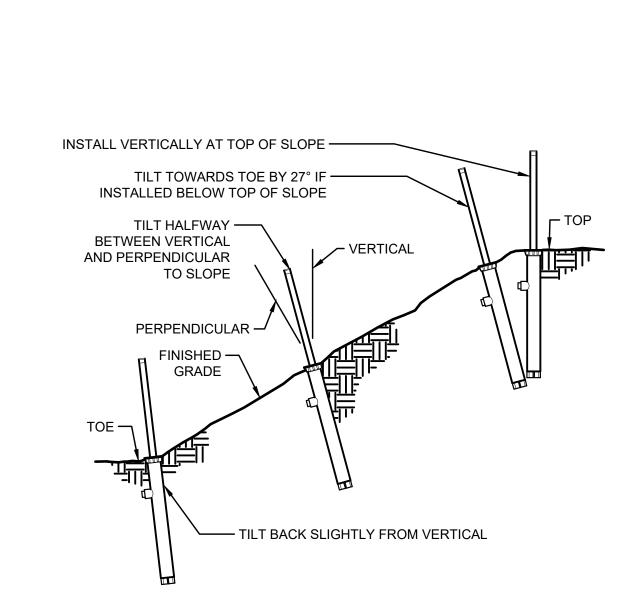
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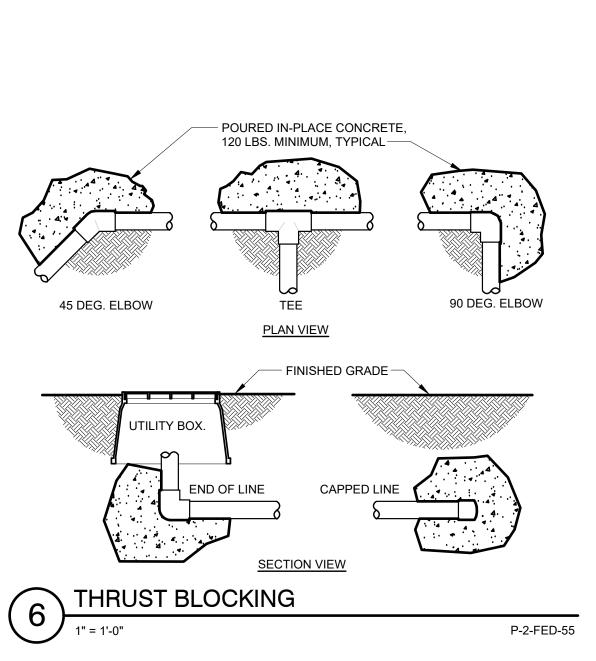
FEDERAL WAY, WASHINGTON

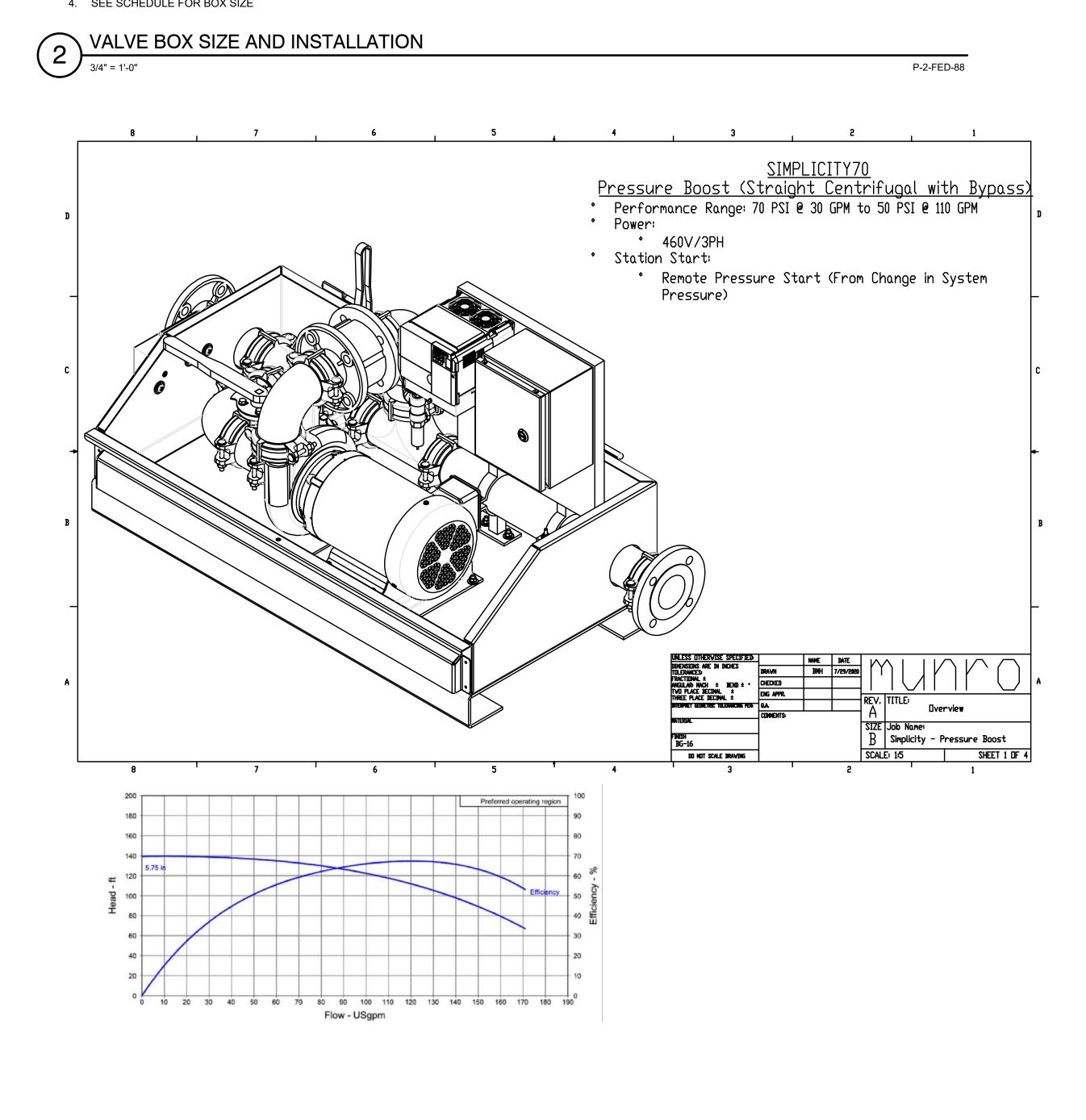


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P-2-FED-29





MINIMUM BOX SIZE BASIS OF DESIGN

CARSON 910

CARSON 2424

CARSON 1419

CARSON 1324

CARSON 1730

CARSON 1324 CARSON 2436

DESCRIPTION

SOLATION BALL VALVE

REMOTE CONTROL

REMOTE CONTROL

REMOTE CONTROL

REMOTE CONTROL

DCVA3/4" & 1"BACKFLOW PREVENTER13" X 24"DCVA1.5"BACKFLOW PREVENTER24" X 36"

SOLATION BALL VALVE 14" X 19"

ISOLATION BALL VALVE 24" X 24"

BACKFLOW PREVENTER 22" X 57"

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12"---

12"—

___EDGE OF LAWN OR BED

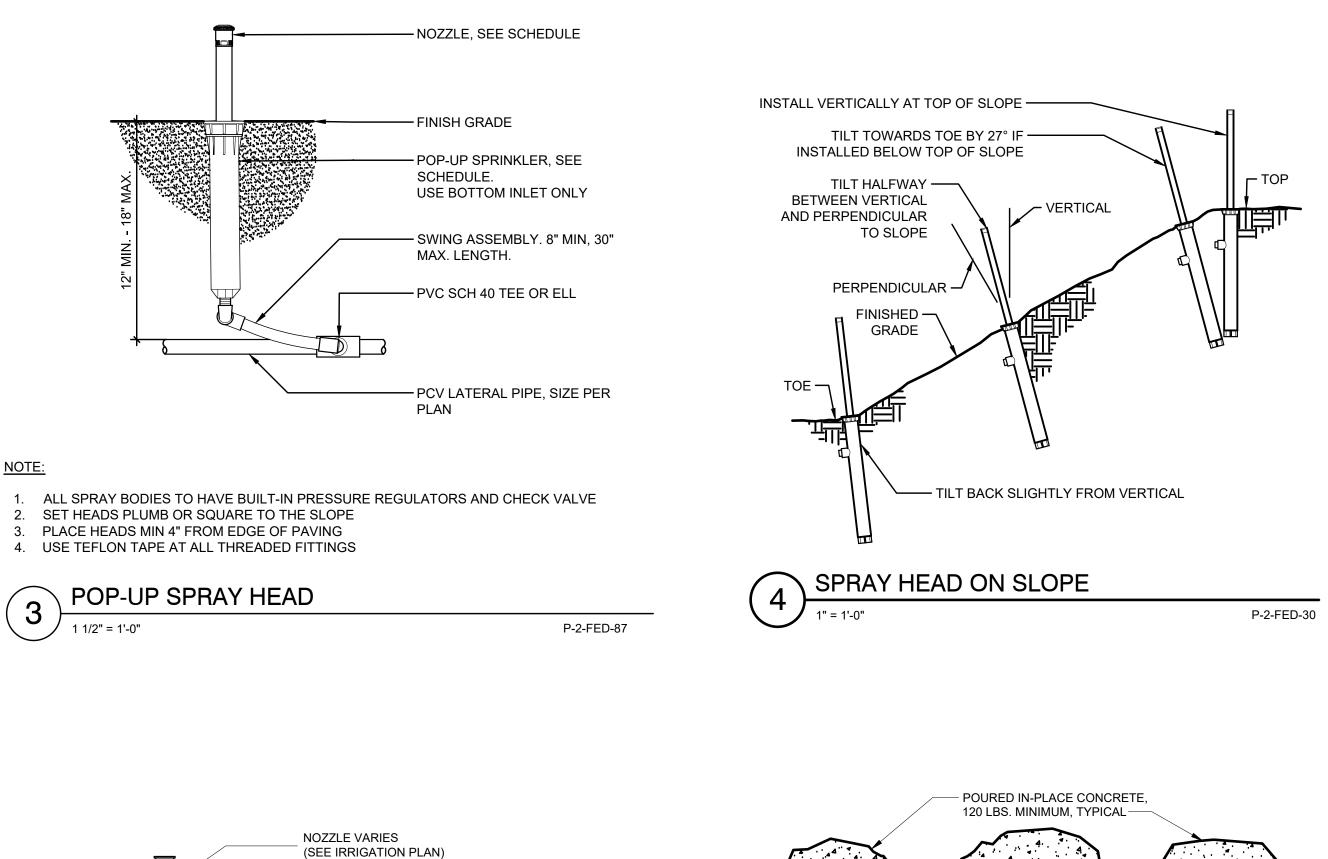
EDGE OF PAVING

RCV

1. CENTER BOX OVER VALVE TO FACILITATE REMOVAL & SERVICING

2. SET BOXES PARALLEL TO EACH OTHER & PERPENDICULAR TO BED EDGE

AVOID OVER COMPACTION TO PREVENT DEFORMATION & COLLAPSE OF BOX.
 SEE SCHEDULE FOR BOX SIZE



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NOTE: USE TEFLON TAPE ON ALL

POP-UP ROTOR HEAD

1/8" = 1'-0"

- FINISH GRADE

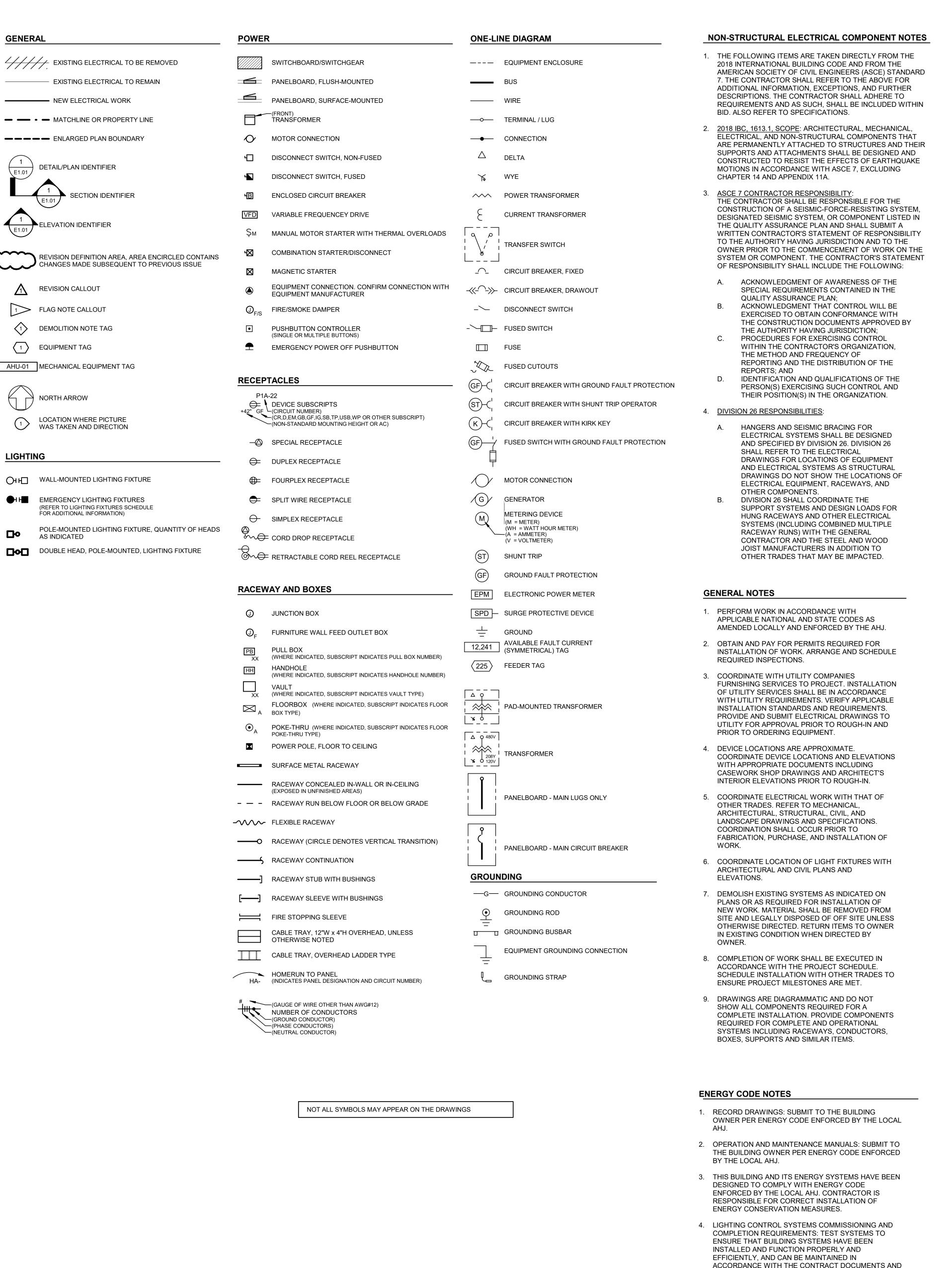
SCH 40 PVC LATERAL

PVC SCH 40 TEE OR ELL SLIP x FIPT x SLIP

ROTOR POP-UP SPRINKLER

TRIPLE SWING JOINT ASSEMBLY,

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ABOVE COUNTER MINIMUM AMP FUSE; AMP FRAME MLO MAIN LUGS ONLY AVAILABLE FAULT CURRENT MM MULTIMODE ABOVE FINISHED FLOOR MPOE MAIN POINT OF ENTRY ABOVE GRADE MPOP MAIN POINT OF PRESENCE **AUTHORITIES HAVING JURISDICTION** MTD MOUNTED AIR HANDLING UNIT MTS MANUAL TRANSFER SWITCH AMPERE INTERRUPTING CAPACITY MV MEDIUM VOLTAGE ALUMINUM AMERICAN NATIONAL STANDARDS INSTITUTE AMP SWITCH **NEUTRAL** AMP TRIP NOTIFICATION APPLIANCE CIRCUIT ASYNCHRONOUS TRANSFER MODE NATIONAL ELECTRICAL CODE AUTOMATIC TRANSFER SWITCH NATIONAL ELECTRICAL MANUFACTURERS **AUDIO VISUAL** ASSOCIATION AMERICAN WIRE GAUGE NON-FUSED NIC NOT IN CONTRACT BUILDING AUTOMATION SYSTEM NIGHT LIGHT BATT **BATTERIES** BASIC IMPULSE INSULATION LEVEL OFC OPTICAL FIBER CABLE OHL OVERHEAD LINE BKBD BACKBOARD BREAKER OVERLOAD OCCUPANCY SENSOR BUILDING OUTSIDE PLANT CONDUIT: DEGREES CELCIUS POLE CAB CABINET CATEGORY PULL-BOX COMMUNITY ANTENNA TELEVISION **POWER FACTOR** CB CIRCUIT BREAKER PHASE **CLOSED CIRCUIT TELEVISION** PASSIVE INFRARED CLG CEILING PIVPOST INDICATING VALVE CEILING-MOUNTED PNL PANEL CO CONDUIT ONLY CR CONTROLLED RECEPTACLE POTENTIAL TRANSFORMER CT CURRENT TRANSFORMER PVC POLYVINYL CHLORIDE RCP REFLECTED CEILING PLAN REC DEDICATED **RECEPTACLE** DIRECT DIGITAL CONTROL REF **REFER TO** DEMARC DEMARCATION POINT REV REVISION RM DISC DISCONNECT DISTRIBUTION RTRC REINFORCED THERMOSETTING RESIN CONDUIT DSL DIGITAL SUBSCRIBER LINE RACK UNIT DWG DRAWING SHEET SIGNALING LINE CIRCUIT **EXISTING** EACH SINGLEMODE EXHAUST FAN SURFACE-MOUNTED OPTICAL FIBER CABINET ELECTRONIC INDUSTRIES ASSOCIATION SURFACE METAL RACEWAY ELEV ELEVATION SYNCHRONOUS OPTICAL NETWORK SERVICE PROVIDER **EMERGENCY ELECTRICAL METALLIC TUBING** SPD SURGE PROTECTIVE DEVICE **ENCL ENCLOSURE** SPEC SPECIFICATIONS **ELECTRONIC POWER METER** SPST SINGLE POLE SINGLE THROW EPM **EMERGENCY POWER OFF** SHUNT TRIP STP SHIELDED TWISTED PAIR **EQUIP EQUIPMENT EXISTING TO REMAIN** SVGA SUPER VIDEO GRAPHICS ARRAY **EVCS** SW SWITCH ELECTRIC VEHICLE CHARGING STATION ELECTRIC WATER COOLER SWBD SWITCHBOARD TELECOMMUNICATIONS BONDING BACKBONE FUSES; DEGREES FAHRENHEIT TEL FIRE ALARM TELEPHONE FIRE ALARM ANNUNCIATOR PANEL TELCO TELEPHONE COMPANY TELECOMMUNICATIONS GROUNDING BUSBAR FACP FIRE ALARM CONTROL PANEL TGB TELECOMMUNICATIONS INDUSTRY ASSOCIATION FURNISHED BY OWNER FURNISHED BY OWNER INSTALLED BY TELECOMMUNICATIONS MAIN GROUNDING CONTRACTOR BUSBAR FURNISHED BY OWNER INSTALLED BY OWNER TAMPERPROOF FIRE SMOKE DAMPER TELECOMMUNICATIONS ROOM **TELEVISION** TRANSIENT VOLTAGE SURGE SUPPRESSION GROUND FAULT CIRCUIT INTERRUPTER BREAKER TYP **TYPICAL** GROUND FAULT CIRCUIT INTERRUPTER UNDERGROUND GROUND FAULT PROTECTION UG GND GROUND UNDERWRITERS LABORATORIES GALVANIZED RIGID STEEL UON UNLESS OTHERWISE NOTED UPS UNINTERRUPTIBLE POWER SUPPLY HORIZONTAL CROSS CONNECT USB UNIVERSAL SERIAL BUS HIGH INTENSITY DISCHARGE UTP UNSHIELDED TWISTED PAIR HORSEPOWER UV UNIT VENTILATOR HEATER HERTZ VOLTS **VOLT AMPERES** VA VFD JUNCTION VARIABLE FREQUENCY DRIVE WASTE, WATT, WIDE, WATER KIRK KEY THOUSAND CIRCULAR MILS WITH kVA KILOVOLT AMPERE W/O WITHOUT KVAR KILOVOLT AMPERE REACTIVE WAN WIDE AREA NETWORK KILOWATT WG WIRE GUARD WATT HOUR METER LOCAL AREA NETWORK **WEATHERPROOF** LCP LIGHTING CONTROL PANEL LOCAL EXCHANGE CARRIER TRANSFORMER LT LIGHT LTG LIGHTING WYE **METER IMPEDANCE** METROPOLITAN AREA NETWORK MAX MAXIMUM MAIN CROSS CONNECT; METAL CLAD (CABLE) MAIN CIRCUIT BREAKER

G

AIR CONDITIONING; ALTERNATING CURRENT,

ABBREVIATIONS

Η

MANUFACTURER

MANHOLE

MFR

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ELECTRICAL LEGEND, **ABBREVIATIONS** AND NOTES

WAY

JOB NO. a23-087 05 06 24

from Helix Design Group.

OPERATIONAL REQUIREMENTS PER ENERGY CODE ENFORCED BY THE AHJ. REFER TO SPECIFICATIONS FOR ADDITIONAL COMMISSIONING REQUIREMENTS.

MOTOR CONTROL CENTER MAIN DISTRIBUTION FRAME MAIN DISTRIBUTION PANEL

DRAWING INDEX E001 ELECTRICAL LEGEND, ABBREVIATIONS AND NOTES

- E002 ELECTRICAL SCHEDULES AND NOTES E101 ELECTRICAL SITE PLAN - SOUTH
- E102 ELECTRICAL SITE PLAN NORTH
- E301 ELECTRICAL DETAILS E401 ELECTRICAL ONE-LINE DIAGRAM
- E402 ELECTRICAL SERVICE DETAILS E403 PANEL SCHEDULES

HARGIS



CITY OF FEDERAL

FEDERAL WAY, WASHINGTON

FEEDER	FROM	ТО			E PLAN FEEDER/E	BRANCH CIRCUIT	CUIT S	FEEDER/ BRANCH CIRCUIT SIZE	FEEDER/CIRCUIT	VOLTAGE	STARTING VOLTAGE	ENDING VOLTAGE	VOLTAGE DROP	NOTE
P1	UTILITY TRANSFORMER	PANEL MSB	Kw	A 3000	DESCRIPTION INCOMING SERVICE	_	NOTE #1	NOTE #1	32 FT	480V/3PH	480V	479.4V	0.13%	
P2	PANEL MSB	ATS#1/PANEL MDPA		600	BUILDING A STANDBY	MSB #1	NOTE #1	NOTE #1	120 FT	480V/3PH	480V	477.3V	0.57%	
P3	PANEL MSB	PANEL MDPB		1600	BUILDING B	MSB #2	NOTE #1	NOTE #1	440 FT	480V/3PH	480V	471.2V	1.84%	
P4 P5	PANEL MSB PANEL MSB	TRANSFORMER T-EV ATS#2/EMA		350 100	EV SERVICE PANEL EMERGENCY POWER	MSB #3 MSB #4	NOTE #1	NOTE #1	105 FT 120 FT	480V/3PH 480V/3PH	480V 480V	478.2V 477.9V	0.38%	
P6	PANEL MSB	FIREPUMP		400	FIRE PUMP	MSB #5	NOTE #1	NOTE #1	580 FT	480V/3PH	480V	469.3V	2.23%	
P7	PANEL MDPB	TRANSFORMER T-C		70	STRUCTURE C POWER	MDPB#7	NOTE #1	NOTE #1	110 FT	480V/3PH	480V	475.2V	0.99%	
P8 P9	PANEL MDPB PANEL MDPB	PANEL HE		25 225	STRUCTURE D POWER STRUCTURE E POWER	MDPB#8 MDPB#9	NOTE #1	NOTE #1	200 FT 450 FT	480V/3PH 480V/3PH	480V 480V	471.3V 472.3V	1.80%	#2
P10	PANEL E	SITE GATE		5.2	SITE EQUIPMENT	E-5,7	1"C	2#12 & 1#12 GND	75 FT	208V/1PH	208V	206.5V	0.71%	
P11	PANEL RA1	SITE GATE		5.2	SITE EQUIPMENT	RA1-46,48	1"C	2#12 & 1#12 GND	130 FT	208V/1PH	208V	205.4V	1.23%	"0
P12 P13	PANEL MDPA PANEL FS	TRANSFORMER T-FS FUEL DISPENSING TANK		70 24	STRUCTURE H POWER SITE EQUIPMENT	MDPA#4 FS-1,3,5	NOTE #1	NOTE #1 2#6 & 1#6 GND	630 FT 150 FT	480V/3PH 208V/3PH	480V 208V	469.2V 204.5V	1.70%	#2
P14	PANEL FS	FUEL DISPENSING TANK		24	SITE EQUIPMENT	FS-7,9,11	1"C	2#6 & 1#6 GND	160 FT	208V/3PH	208V	204.2V	1.82%	#2
P15	PANEL FS	FUEL STORAGE TANK		24	STRUCTURE H EQUIPMENT	FS-13,15	1-1/4"C	2#4 & 1#4 GND	280FT	208V/1PH	208V	203.8V	2.00%	#2
P16 P17	PANEL FS PANEL FS	DEF SYSTEM PUMP		16 16	STRUCTURE H EQUIPMENT STRUCTURE H EQUIPMENT	FS-2 FS-4	1-1/2"C 1-1/4"C	2#4 & 1#4 GND 2#4 & 1#4 GND	280FT 280FT	120V/1PH 120V/1PH	120V 120V	117.2V 117.2V	2.31%	#2,#5 #2,#5
L5	PANEL FS	STRUCTUE H LIGHTING		3	STRUCTURE H LIGHTING	FS-6	1-1/4 C	2#10 &1#10 GND	280FT	120V/1PH	120V	117.2V 117.9V	1.74%	#2,#5
L6	PANEL FS	STRUCTUE G LIGHTING		2	STRUCTURE G LIGHTING	FS-8	1"C	2#10 &1#10 GND	280FT	120V/1PH	120V	118.6V	1.16%	#2
P18	PANEL MHA	IRRIGATION BOOSTER PUMP		7.6	SITE EQUIPMENT	MHA-31,33,35	1"C	3#12 &1#12 GND	180FT	480V/3PH	480V	474.6V	1.13%	#0 #C
P19 P20	PANEL RA1	IRRIGATION RPBA ENCLOSURE IRRIGATION CONTROLLER		16 16	SITE EQUIPMENT SITE EQUIPMENT	RA-9 RA-7	1"C	2#6 &1#6 GND 2#6 &1#6 GND	180FT 180FT	120V/1PH 120V/1PH	120V 120V	117.2V 117.2V	2.36%	#2,#6 #2,#6
G1	GENERATOR	ATS#1/PANEL MDPA		600	STANDBY POWER	-	NOTE #1	NOTE #1	200 FT	480V/3PH	480V	475.4V	0.95%	,
G2	GENERATOR	ATS#2/PANEL EMA		100	EMERGENCY POWER	-	NOTE #1	NOTE #1	200 FT	480V/3PH	480V	473.8V	1.28%	
G3 G4	GENERATOR GENERATOR	PANEL MLA ATS#1 & ATS#2		100	GENERATOR LOADS CONTROLS	MLA-2,4,6	NOTE #1 (2) 1"C	NOTE #1	200 FT	208V/3PH	208V	201.8V	2.96%	
G5	GENERATOR	REMOTE ANNUNCIATOR	-	-	CONTROLS	-	1"C	-	-	-	-	-	-	
EL1	PANEL EMB	STRUCTURE C		0.8	EMERGENCY LIGHTING	EMB-1	1"C	2#12 & 1#12 GND	100 FT	277V/1PH	277V	276.8V	0.07%	
EL2	PANEL EMB	STRUCTURE D		0.2	EMERGENCY LIGHTING	EMB-1	1"C	2#12 & 1#12 GND	195 FT	277V/1PH	277V	276.6V	0.14%	ДД А
FA1 FA2	BUILDING A FACP BUILDING B FACP	BUILDING B FACP STRUCTURE C NAC	-	-	FA SYSTEM FA SYSTEM	-	1"C	-	-	-	-	-	-	#4
FA3	BUILDING B FACP	STRUCTURE D NAC	-	-	FA SYSTEM	-	1"C	_	-			_		#4
L1	PANEL LA	SITE LIGHTING		7	LIGHTING	LA-2	1"C	2#6 & 1#6 GND	155 FT	277V/1PH	277V	275.3V	0.61%	#2
L1.1		SITE LIGHTING		5.6	LIGHTING		1"C	2#8 &1#8 GND	120FT	277V/1PH	275.3V	274.2V	0.41%	#2 #2
L1.2 L1.3		SITE LIGHTING SITE LIGHTING		4.2 2.8	LIGHTING LIGHTING		1"C	2#8 &1#8 GND 2#8 &1#8 GND	135 FT 125 FT	277V/1PH 277V/1PH	274.2V 273.4V	273.4V 272.8V	0.30%	#2
L1.4		SITE LIGHTING		1.4	LIGHTING		1"C	2#8 &1#8 GND	235 FT	277V/1PH	272.8V	272.3V	0.15%	#2
	DANIELLA					CKT LA-2 TOTAL		0//0 0 4//0 00/0	770FT	277V/1PH	277V	272.3V	1.68%	"0
L2 L2.1	PANEL LA	SITE LIGHTING SITE LIGHTING		10.4 10.1	LIGHTING LIGHTING	LA-4	1"C	2#6 & 1#6 GND 2#6 & 1#6 GND	60 FT 55 FT	277V/1PH 277V/1PH	277V 276.4V	276.4V 275.6V	0.21%	#2 #2
L2.1		SITE LIGHTING		9.8	LIGHTING		1"C	2#6 & 1#6 GND	55 FT	277V/1PH	275.6V	275.0 V	0.20%	#2
L2.3	-	SITE LIGHTING		8.4	LIGHTING		1"C	2#6 & 1#6 GND	105 FT	277V/1PH	275V	274V	0.37%	#2
L2.4		SITE LIGHTING		7	LIGHTING		1"C	2#6 & 1#6 GND	90 FT	277V/1PH	274V	273.4V	0.22%	#2
L2.5 L2.6		SITE LIGHTING SITE LIGHTING		5.6 4.2	LIGHTING LIGHTING		1"C	2#6 & 1#6 GND 2#6 & 1#6 GND	95 FT 100 FT	277V/1PH 277V/1PH	273.4V 272.9V	272.9V 272.5V	0.20%	#2 #2
L2.7		SITE LIGHTING		2.8	LIGHTING		1"C	2#8 &1#8 GND	90 FT	277V/1PH	272.5V	272.1V	0.15%	#2
L2.8	-	SITE LIGHTING		1.4	LIGHTING		1"C	2#8 &1#8 GND	110 FT	277V/1PH	272.1V	271.8V	0.12%	#2
L3	PANEL LA	SITE LIGHTING		11.2	LIGHTING	CKT LA-4 TOTAL LA-6	1-1/4"C	2#4 & 1#4 GND	760 FT 300 FT	277V/1PH 277V/1PH	277V	271.8V 275V	1.81% 0.74%	#2,#3
L3.1		SITE LIGHTING		8.4	LIGHTING	LA-0	1-1/4 C	2#4 & 1#4 GND	145 FT	277V/1P11	275V	273.7V	0.74%	#2,#3
L3.2		SITE LIGHTING		5.6	LIGHTING		1-1/4"C	2#6 & 1#6 GND	110 FT	277V/1PH	273.7V	273V	0.23%	#2,#3
L3.3	-	SITE LIGHTING		2.8	LIGHTING	OKT LA C TOTAL	1-1/4"C	2#8 &1#8 GND	110 FT	277V/1PH	273V	272.5V	0.19%	#2,#3
L4	PANEL LA	SITE LIGHTING		9.8	LIGHTING	CKT LA-6 TOTAL LA-8	1-1/4"C	2#4 & 1#4 GND	665FT 665 FT	277V/1PH 277V/1PH	277V 277V	272.5V 272.9V	1.62%	#2,#3
L4.1		SITE LIGHTING		4.2	LIGHTING	L/ C	1-1/4"C	2#4 & 1#4 GND	170 FT	277V/11PH	272.9V	272.5V	0.15%	#2
L4.2		SITE LIGHTING		2.8	LIGHTING		1-1/4"C	2#4 & 1#4 GND	210 FT	277V/1PH	272.5V	272.1V	0.14%	#2
L4.3 L4.4		SITE LIGHTING SITE LIGHTING		1.4 2.8	LIGHTING LIGHTING		1"C	2#8 &1#8 GND 2#6 & 1#6 GND	145 FT 135 FT	277V/1PH 277V/1PH	272.1V 272.9V	271.7V 272.5V	0.16%	#2 #2
L4.4		SITE LIGITING		2.0	LIGITING	CKT LA-8 TOTAL	10	2#0 & 1#0 GND	1325FT	277V/1PH	277V	272.3V 271.7V	1.93%	π2
L7	PANEL LA	MONUMENT SIGN LIGHTING		0.5	LIGHTING	LA-7	3/4"C	2#12 & 1#12 GND	170 FT	277V/1PH	277V	276.3V	0.24%	
R1	PANEL E	SITE RECEPTACLES		4.5	RECEPTACLE	E-6	1"C	2#8 &1#8 GND	60 FT	120V/1PH	120V	119.5V	0.39%	#2
R1.1 R1.2		SITE RECEPTACLES SITE RECEPTACLES		3 1.5	RECEPTACLE RECEPTACLE		1"C	2#8 &1#8 GND 2#8 &1#8 GND	130 FT 210 FT	120V/1PH 120V/1PH	119.5V 118.9V	118.9V 118.2V	0.51%	#2 #2
									400 FT	120V/1PH	120V	118.2V	1.45%	
	PANEL RB1	SITE RECEPTACLES		4.5	RECEPTACLE	RB1-82	1"C	2#8 &1#8 GND	200 FT	120V/1PH	120V	118.4V	1.30%	#2
R2.1 R2.2		SITE RECEPTACLES SITE RECEPTACLES		3 1.5	RECEPTACLE RECEPTACLE		1"C	2#8 &1#8 GND 2#8 &1#8 GND	110 FT 125 FT	120V/1PH 120V/1PH	118.4V 117.9V	117.9V 117.5V	0.43%	#2 #2
114.4		STEREOLI FAOLLO		1.0	NEOLI IAOLE				435 FT	120V/1PH	120V	117.5V 117.5V	2.06%	
	PANEL RB1	SITE RECEPTACLES		4.5	RECEPTACLE	RB1-84	1"C	2#8 &1#8 GND	190 FT	120V/1PH	120V	118.5V	1.24%	#2
R3.1 R3.2		SITE RECEPTACLES SITE RECEPTACLES		3 1.5	RECEPTACLE RECEPTACLE		1"C	2#8 &1#8 GND 2#8 &1#8 GND	110 FT 135 FT	120V/1PH 120V/1PH	118.4V 117.9V	118V 117.6V	0.43%	#2
13.2		OTTE NEOLE IAOLES		1.0	NEOLF IAOLE			ZITO CLITO GIND	435 FT	120V/1PH	117.9V	117.6V	2.02%	112
R4	PANEL RB1	SITE RECEPTACLES		4.5	RECEPTACLE	RB1-80	1"C	2#8 &1#8 GND	120 FT	120V/1PH	120V	119V	0.78%	#2
R4.1		SITE RECEPTACLES		3	RECEPTACLE		1"C	2#8 &1#8 GND	220FT	120V/1PH	119V	118V	0.86%	#2 #2
R4.2	-	SITE RECEPTACLES		1.5	RECEPTACLE		1"C	2#8 &1#8 GND	115 FT 455 FT	120V/1PH 120V/1PH	118V 120V	117V 117.7V	0.30% 1.94%	#4
R5	PANEL RA1	SITE RECEPTACLES		4.5	RECEPTACLE	RA1-38	1"C	2#8 &1#8 GND	210 FT	120V/1PH	120V	118.4V	1.37%	#2
R5.1		SITE RECEPTACLES		3	RECEPTACLE		1"C	2#8 &1#8 GND	100 FT	120V/1PH	118.4V	117.9V	0.39%	#2
R5.2	-	SITE RECEPTACLES		1.5	RECEPTACLE		1"C	2#8 &1#8 GND	85 FT 395 FT	120V/1PH 120V/1PH	117.9V 120V	117.6V	0.22% 1.98%	#2
R6	PANEL RA1	SITE RECEPTACLES		6	RECEPTACLE	RA1-40	1"C	2#8 &1#8 GND	120 FT	120V/1PH	120V	117.6V 118.9V	0.94%	#2
R6.1		SITE RECEPTACLES		4.5	RECEPTACLE		1"C	2#8 &1#8 GND	105 FT	120V/1PH	118.9V	118.1V	0.68%	#2
R6.2		SITE RECEPTACLES		3	RECEPTACLE		1"C	2#10 &1#10 GND	80 FT	120V/1PH	118.1V	117.7V	0.31%	#2
R6.3	-	SITE RECEPTACLES		1.5	RECEPTACLE		1"C	2#10 &1#10 GND	90 FT 395 FT	120V/1PH 120V/1PH	117.7V 120V	117.3V	0.37% 2.30%	#2
R6	PANEL RA1	SITE RECEPTACLES		3	RECEPTACLE	RA1-42	1"C	2#10 &1#10 GND	135 FT	120V/1PH	120V	119V	0.84%	#2
R6.1	-	SITE RECEPTACLES		1.5	RECEPTACLE		1"C	2#10 &1#10 GND	115 FT	120V/1PH	119V	118.4V	0.48%	#2
	PANEL EV	EV CHARGER	6240	20	EV/ CHARCER	EV-1,3			250 FT 205 FT	120V/1PH	120V	118.4V 204.2V	1.32% 1.83%	#2
E1 E2	PANEL EV	EV CHARGER EV CHARGER	6240 6240	30 30	EV CHARGER EV CHARGER	EV-1,3 EV-5,7	1-1/4"C	4#4 & 1#4 GND	205 FT	208V/1PH 208V/1PH	208V 208V	204.2V 204.2V	1.83%	#2
E3	PANEL EV	EV CHARGER	6240	30	EV CHARGER	EV-9,11	1-1/4"C	4#4 & 1#4 GND	205 FT	208V/1PH	208V	204.2V	1.83%	#2
E4	PANEL EV	EV CHARGER	6240	30	EV CHARGER	EV-13,15			205 FT	208V/1PH	208V	204.2V	1.83%	#2
E5 E6	PANEL EV PANEL EV	EV CHARGER EV CHARGER	6240	30	EV CHARGER	EV-17,19 EV-21,23	1"C	2#6 & 1#6 GND 2#6 & 1#6 GND	115 FT 205 FT	208V/1PH	208V 208V	204.8V 204.2V	1.56%	#2 #2
E7	PANEL EV	EV CHARGER EV CHARGER	6240 6240	30	EV CHARGER EV CHARGER	EV-21,23 EV-2,4	1"C		820 FT	208V/1PH 208V/1PH	208V 208V	204.2V 203.2V	2.30%	#2
	PANEL EV	EV CHARGER	6240	30	EV CHARGER	EV-6,8	1-1/2"C	4#2 & 1#2 GND	820 FT	208V/1PH	208V	203.2V	2.30%	#2
E8				_ '							_			
	PANEL EV PANEL EV	EV CHARGER EV CHARGER	6240 6240	30 30	EV CHARGER EV CHARGER	EV-10,12 EV-14,16	1-1/2"C	4#2 & 1#2 GND	820 FT 820 FT	208V/1PH 208V/1PH	208V 208V	203.2V 203.2V	2.30%	#2 #2

#1. REFER TO ONE-LINE DIAGRAM ON SHEET E-401 AND ONE-LINE FEEDER SCHEDULE ON SHEET E-402

#2. FEEDER/BRANCH CIRCUIT IS UPSIZED TO ADJUST FOR VOLTAGE DROP

#3. CKTS LA-6 AND LA-8 SHARE CONDUIT

#5. CIRCUITS FS-2,4, AND 6 SHARE CONDUIT #6. CIRCUITS RA1-7 AND 9 SHARE CONDUIT

#4. CONFIRM CONDUIT SIZE WITH FA CONTRACTOR

V	1.74%	#2,#5
/	1.16%	#2
,	1.13%	
,	2.36%	#2,#6
/	2.36%	#2,#6
/	0.95%	
/	1.28%	
/	2.96%	
	-	
	-	
/	0.07%	
/	0.14%	
	-	#4
	-	#4
	-	#4
V	0.61%	#2
V	0.41%	#2
V	0.30%	#2
V	0.21%	#2
V	0.15%	#2
V	1.68%	
V	0.21%	#2
V	0.20%	#2
	0.20%	#2
	0.37%	#2
V	0.22%	#2
V	0.20%	#2
V	0.14%	#2
V	0.15%	#2
V	0.12%	#2
V	1.81%	
	0.74%	#2,#3
V	0.46%	#2,#3
	0.23%	#2,#3
V	0.19%	#2,#3
V	1.62%	
V	1.48%	#2,#3
V	0.15%	#2
V	0.14%	#2
V	0.16%	#2
V	0.15%	#2
V	1.93%	
V	0.24%	
V	0.39%	#2
V	0.51%	#2
V	0.55%	#2
V	1.45%	
V	1.30%	#2
V	0.43%	#2
V	0.33%	#2
v V	2.06%	
<u> </u>	1.24%	#2
-	0.43%	#2
V	0.45%	#2
v	2.02%	
	0.78%	#2
	⊥U / O 70	Iπ ∠

B C D E F G H

TYPE	DESCRIPTION	MANUFACTURER	MODEL		LAMP	INPUT	INPUT	FIXTURE
				QTY	TYPE	VOLTS	WATTS	EFFICACY
P1	12' POLE MOUNT LED TYPE 5 MEDIUM DISTRIBUTION INTEGRAL OCCUPANCY SENSOR (9'-40' HEIGHT), NX WIRELESS ENABLED	KIM LIGHTING	ALT1-54L-95-4K7-5QM-UNV	INC	LED 4000K 12,500 LM	UNV	95	133 LM/W
P4W	30' POLE MOUNTED LED TYPE 4 WIDE DISTRIBUTION INTEGRAL OCCUPANCY SENSOR (9'-40' HEIGHT), NX WIRELESS ENABLED	KIM LIGHTING	ALT3-168L-385-4K7-4W-UNV	INC	LED 4000K 50,000 LM	UNV	385	126 LM/W
P5W	30' POLE MOUNTED LED TYPE 5 WIDE DISTRIBUTION INTEGRAL OCCUPANCY SENSOR (9'-40' HEIGHT), NX WIRELESS ENABLED	KIM LIGHTING	ALT3-168L-385-4K7-5W-UNV	INC	LED 4000K 50,000 LM	UNV	385	128 LM/W
LG1	OUTDOOR MICRO-FLOOD LED UPLIGHT FOR MONUMENT SIGN	KIM LIGHTING	EL218-W-5-8L-4K-UV-FINISH-JBR3	INC	LED 4000K 1386 LM	UNV	16	87 LM/W
LG2	OUTDOOR FLUSH GRADE MOUNT LED UPLIGHT HALF SHIELD, SPOT DISTRIBUTION	KIM LIGHTING	LTV81-HS-SP-36I-4K-UV-PL	INC	LED 4000K 3507 LM	UNV	42	84 LM/W





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ELECTRICAL SCHEDULES AND NOTES

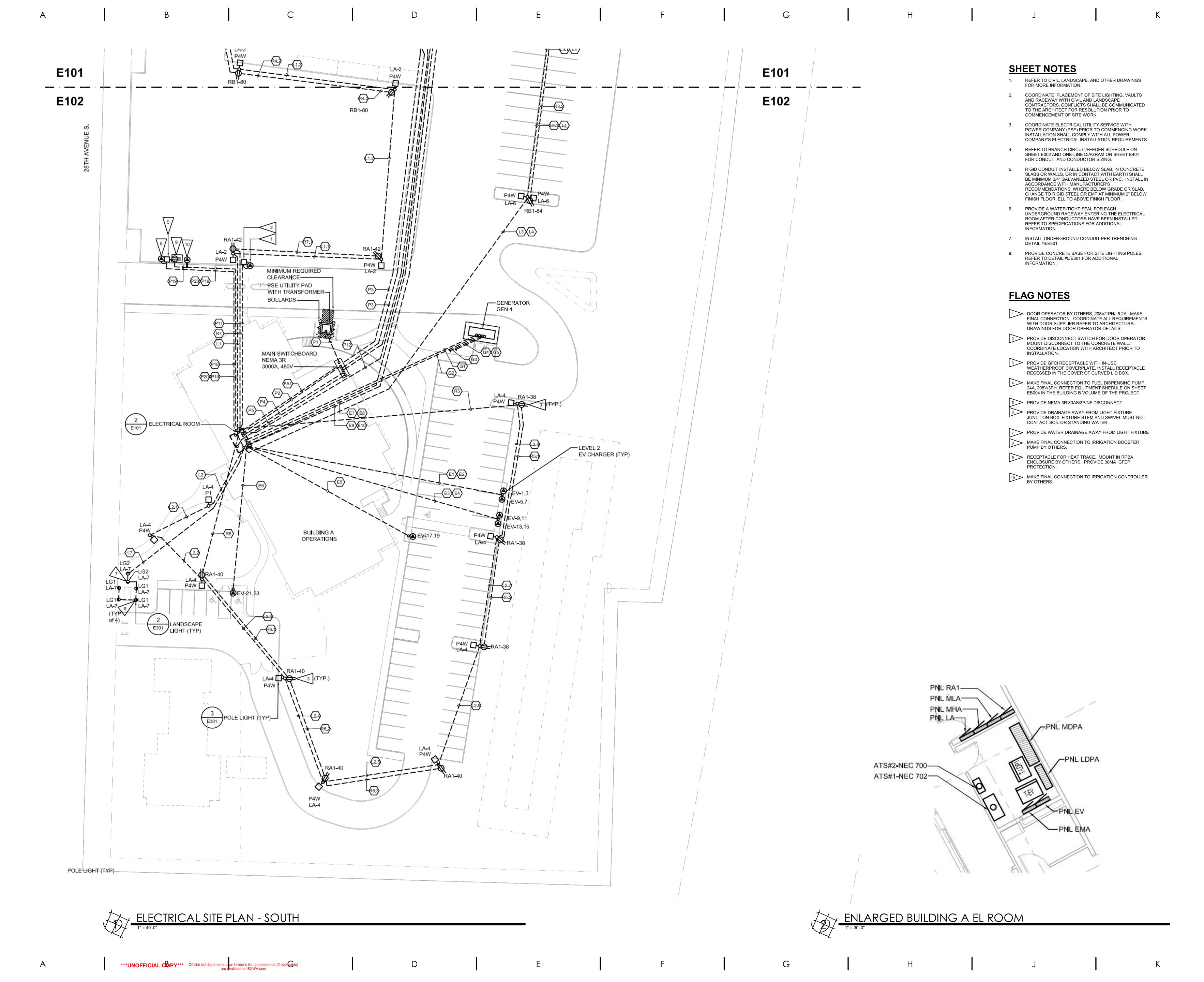
CITY OF FEDERAL WAY

a23-087

10 E002

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5/6/2024

ELECTRICAL SITE PLAN -SOUTH

CITY OF FEDERAL WAY SITE

FEDERAL WAY, WASHINGTON

9 DATE JOBN

DATE JOB NO. 05.06.24 a23-087

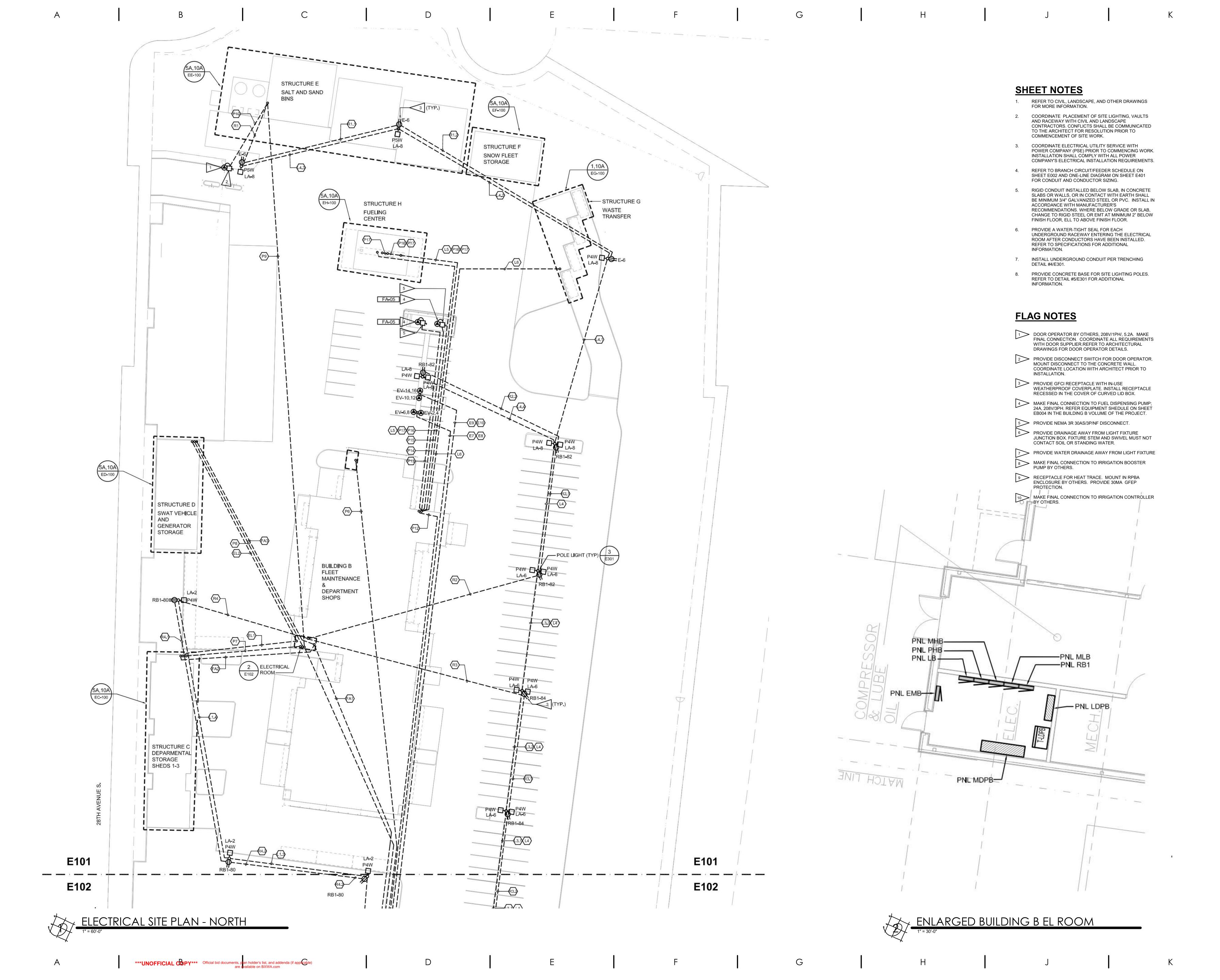
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ELECTRICAL SITE PLAN -NORTH

CITY OF FEDERAL WAY SITE

FEDERAL WAY, WASHINGTON

DATE JOB NO.

05.06.24 a23-087
BID SET

10 E102

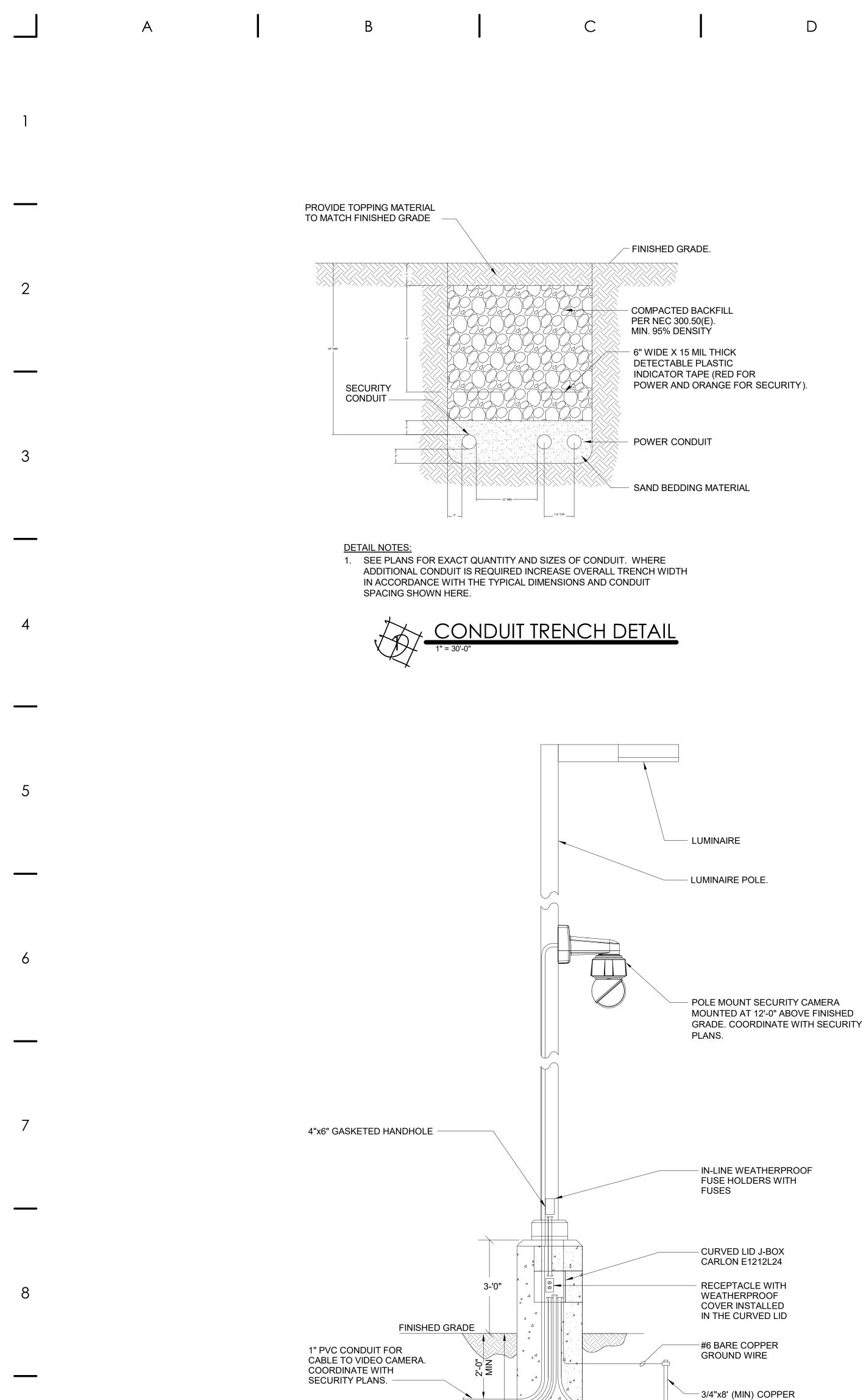
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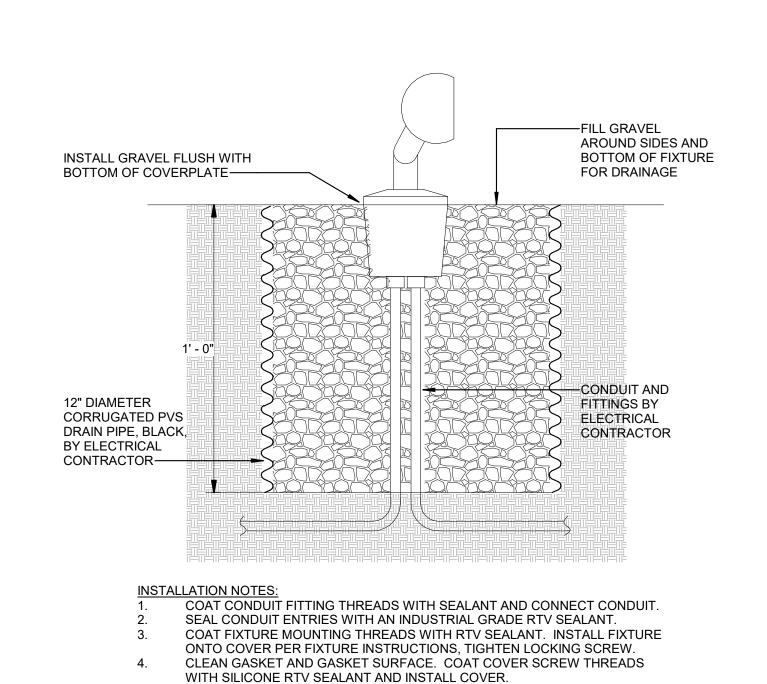
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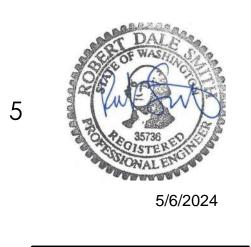




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ELECTRICAL

CITY OF FEDERAL WAY

FEDERAL WAY, WASHINGTON

a23-087

E301

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POLE LIGHT FIXTURE DETAIL

-2'-0" -

NEW 1" PVC CONDUIT FOR POWER CIRCUIT TO

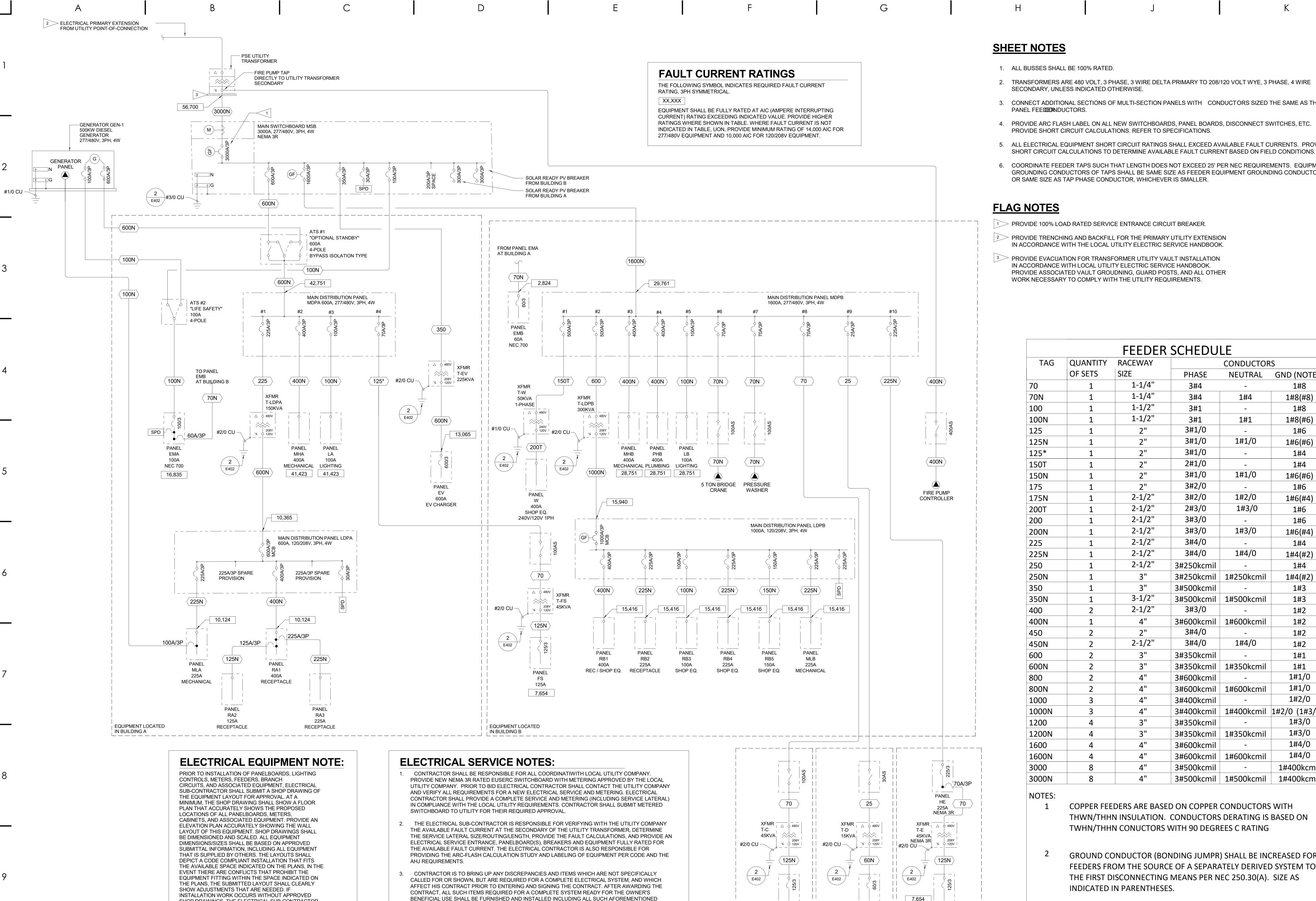
NEW 1" OR 1-1/4" PVC CONDUIT FOR POWER CIRCUIT TO LIGHT POLE

RECEPTACLE -

D

WELD GROUND ROD

F G H



SHEET NOTES

- 1. ALL BUSSES SHALL BE 100% RATED.
- 2. TRANSFORMERS ARE 480 VOLT, 3 PHASE, 3 WIRE DELTA PRIMARY TO 208/120 VOLT WYE, 3 PHASE, 4 WIRE SECONDARY, UNLESS INDICATED OTHERWISE.
- 3. CONNECT ADDITIONAL SECTIONS OF MULTI-SECTION PANELS WITH CONDUCTORS SIZED THE SAME AS THE PANEL FEEDERNDUCTORS.
- 4. PROVIDE ARC FLASH LABEL ON ALL NEW SWITCHBOARDS, PANEL BOARDS, DISCONNECT SWITCHES, ETC. PROVIDE SHORT CIRCUIT CALCULATIONS. REFER TO SPECIFICATIONS.
- 5. ALL ELECTRICAL EQUIPMENT SHORT CIRCUIT RATINGS SHALL EXCEED AVAILABLE FAULT CURRENTS. PROVIDE
- 6. COORDINATE FEEDER TAPS SUCH THAT LENGTH DOES NOT EXCEED 25' PER NEC REQUIREMENTS. EQUIPMENT GROUNDING CONDUCTORS OF TAPS SHALL BE SAME SIZE AS FEEDER EQUIPMENT GROUNDING CONDUCTOR OR SAME SIZE AS TAP PHASE CONDUCTOR, WHICHEVER IS SMALLER.

- 1> PROVIDE 100% LOAD RATED SERVICE ENTRANCE CIRCUIT BREAKER.
- 2 PROVIDE TRENCHING AND BACKFILL FOR THE PRIMARY UTILITY EXTENSION IN ACCORDANCE WITH THE LOCAL UTILITY ELECTRIC SERVICE HANDBOOK.
- PROVIDE EVACUATION FOR TRANSFORMER UTILITY VAULT INSTALLATION IN ACCORDANCE WITH LOCAL UTILITY ELECTRIC SERVICE HANDBOOK. PROVIDE ASSOCIATED VAULT GROUDNING, GUARD POSTS, AND ALL OTHER

		FEEDER	SCHEDU	LE	
TAG	QUANTITY	RACEWAY		CONDUCTOR	RS
	OF SETS	SIZE	PHASE	NEUTRAL	GND (NOTE2)
70	1	1-1/4"	3#4	-	1#8
70N	1	1-1/4"	3#4	1#4	1#8(#8)
100	1	1-1/2"	3#1	-	1#8
100N	1	1-1/2"	3#1	1#1	1#8(#6)
125	1	2"	3#1/0	-	1#6
125N	1	2"	3#1/0	1#1/0	1#6(#6)
125*	1	2"	3#1/0	-	1#4
150T	1	2"	2#1/0	-	1#4
150N	1	2"	3#1/0	1#1/0	1#6(#6)
175	1	2"	3#2/0	-	1#6
175N	1	2-1/2"	3#2/0	1#2/0	1#6(#4)
200T	1	2-1/2"	2#3/0	1#3/0	1#6
200	1	2-1/2"	3#3/0	-	1#6
200N	1	2-1/2"	3#3/0	1#3/0	1#6(#4)
225	1	2-1/2"	3#4/0	-	1#4
225N	1	2-1/2"	3#4/0	1#4/0	1#4(#2)
250	1	2-1/2"	3#250kcmil	-	1#4
250N	1	3"	3#250kcmil	1#250kcmil	1#4(#2)
350	1	3"	3#500kcmil	-	1#3
350N	1	3-1/2"	3#500kcmil	1#500kcmil	1#3
400	2	2-1/2"	3#3/0	-	1#2
400N	1	4"	3#600kcmil	1#600kcmil	1#2
450	2	2"	3#4/0	-	1#2
450N	2	2-1/2"	3#4/0	1#4/0	1#2
600	2	3"	3#350kcmil	-	1#1
600N	2	3"	3#350kcmil	1#350kcmil	1#1
800	2	4"	3#600kcmil	-	1#1/0
800N	2	4"	3#600kcmil	1#600kcmil	1#1/0
1000	3	4"	3#400kcmil	-	1#2/0
1000N	3	4"	3#400kcmil	1#400kcmil	1#2/0 (1#3/0)
1200	4	3"	3#350kcmil	-	1#3/0
1200N	4	3"	3#350kcmil	1#350kcmil	1#3/0
1600	4	4"	3#600kcmil	-	1#4/0
1600N	4	4"	3#600kcmil	1#600kcmil	1#4/0
3000	8	4"	3#500kcmil	-	1#400kcmil
	1	1	i i	i .	1

NOTES:

COPPER FEEDERS ARE BASED ON COPPER CONDUCTORS WITH THWN/THHN INSULATION. CONDUCTORS DERATING IS BASED ON TWHN/THHN CONUCTORS WITH 90 DEGREES C RATING

3#500kcmil 1#500kcmil

1#400kcmil

GROUND CONDUCTOR (BONDING JUMPR) SHALL BE INCREASED FOR FEEDERS FROM THE SOURCE OF A SEPARATELY DERIVED SYSTEM TO THE FIRST DISCONNECTING MEANS PER NEC 250.30(A). SIZE AS INDICATED IN PARENTHESES.





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ELECTRICAL

ONE-LINE

DIAGRAM

CITY OF FEDERAL

JOB NO.

a23-087

E401

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ELECTRICAL ONE-LINE DIAGRAM

SHOP DRAWINGS, THE ELECTRICAL SUB-CONTRACTOR

ACTION AND ALL COSTS NECESSARY FOR A COMPLETE

AND COORDINATED INSTALLATION, FREE OF CONFLICTS

SHALL BE FULLY RESPONSIBLE FOR CORRECTIVE

WITH OTHER SYSTEMS AND TRADES.

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DISCREPANCY ITEMS AT NO ADDITIONAL COST TO THE OWNER.

APPLICABLE TO THIS ELECTRICAL INSTALLATION.

ALL WORK SHALL CONFORM TO UL, NEC, NFPA, AND ALL OTHER CODES OF JURISDICTION WHICH ARE

PRIOR TO ORDERING ANY EQUIPMENT, CONTRACTOR SHALL OBTAIN APPROVAL FROM THE AHJ AND

LOCAL ELEC UTILITY FOR THE ELEC SERVICE/METERING EQUIPMENT, LAYOUT, RATING AND LOCATION.

EQUIPMENT LOCATED

IN BUILDING D

G

NEMA 3R

EQUIPMENT LOCATED

BUILDING E

AT EXTERIOR ADJACENT TO

PANEL

7,654

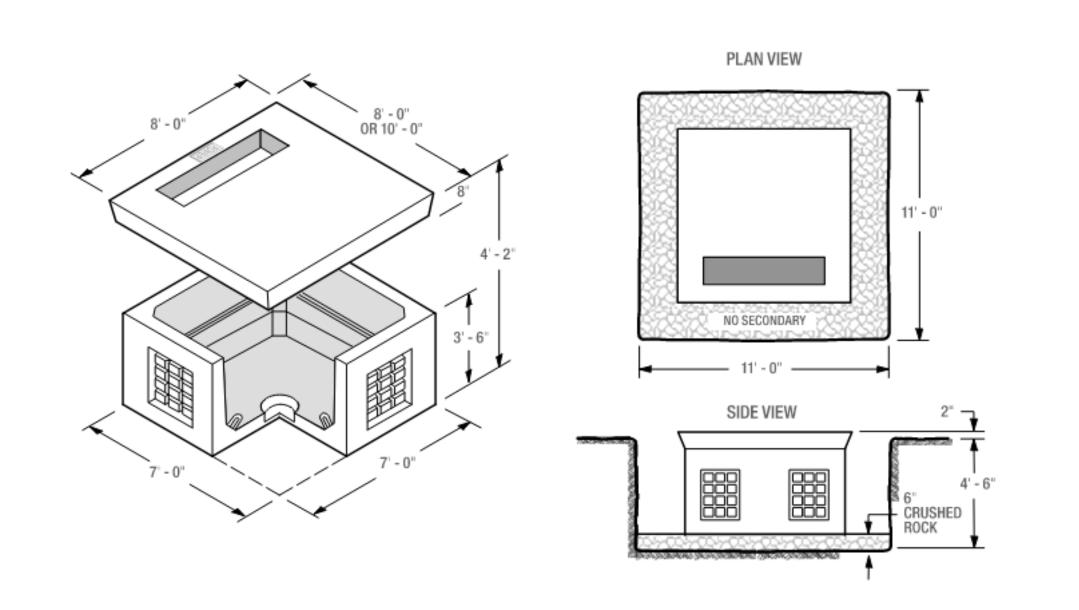
PANEL

125A

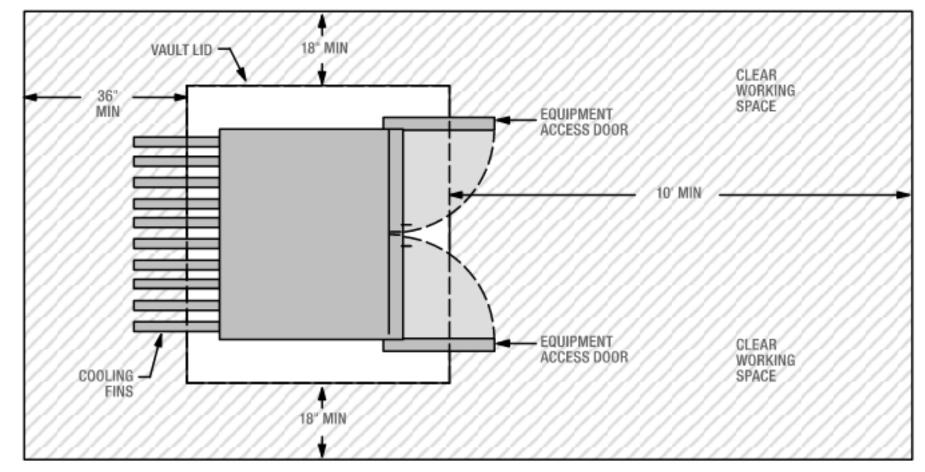
7,654

EQUIPMENT LOCATED

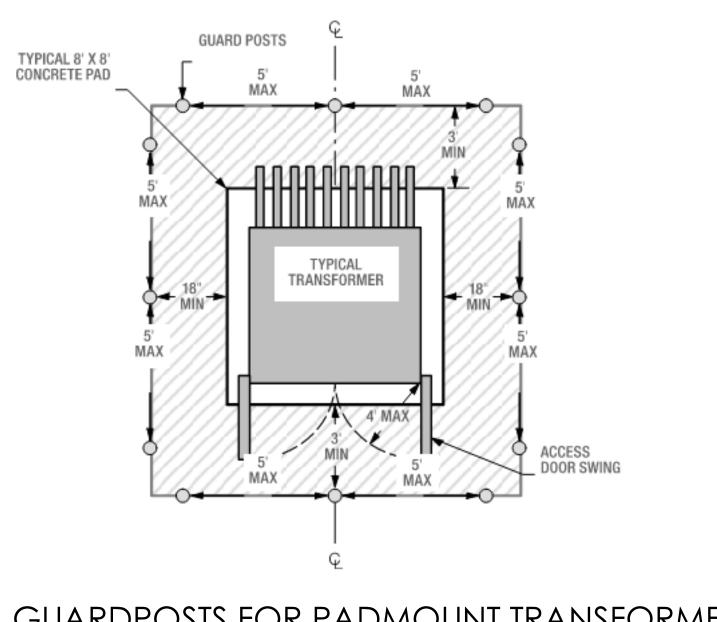
IN BUILDING C

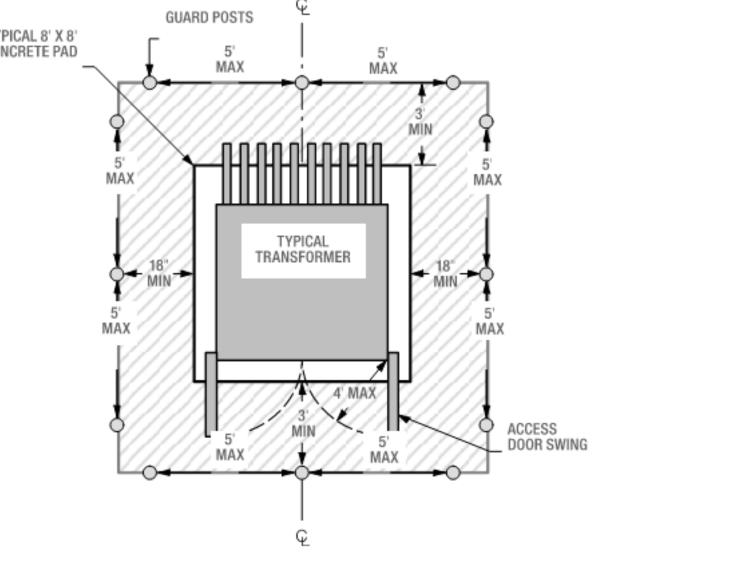


3-PHASE PAD MOUNT TRANSFORMER 500KVA AND LARGER



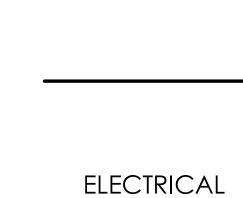
PAD MOUNT TRANSFORMER CLEARANCE REQUIREMENTS













SERVICE

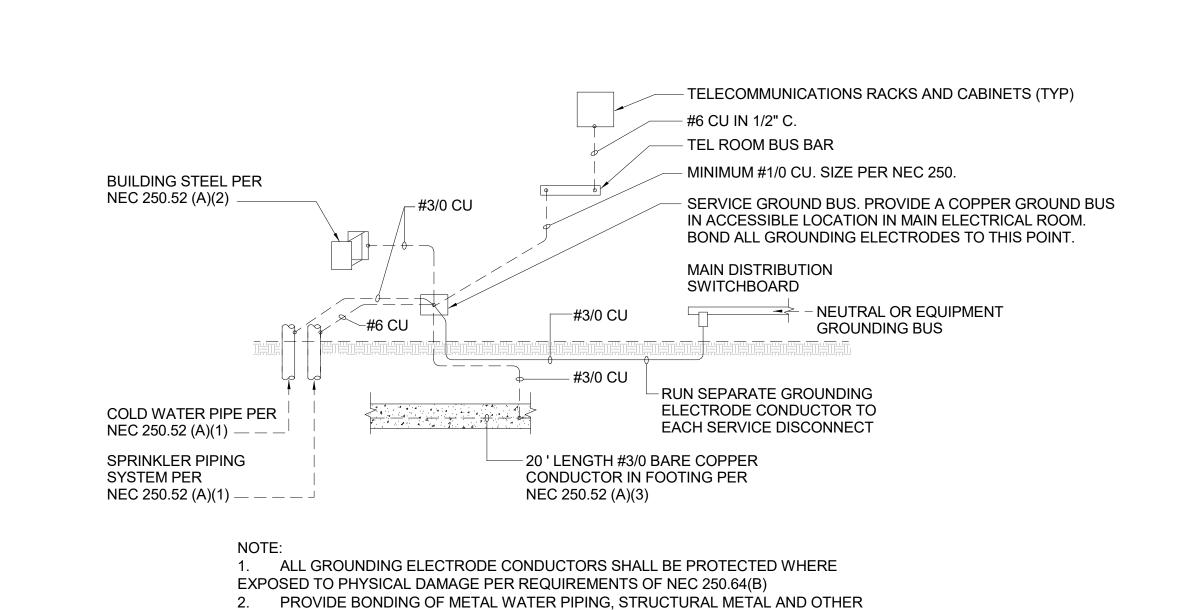


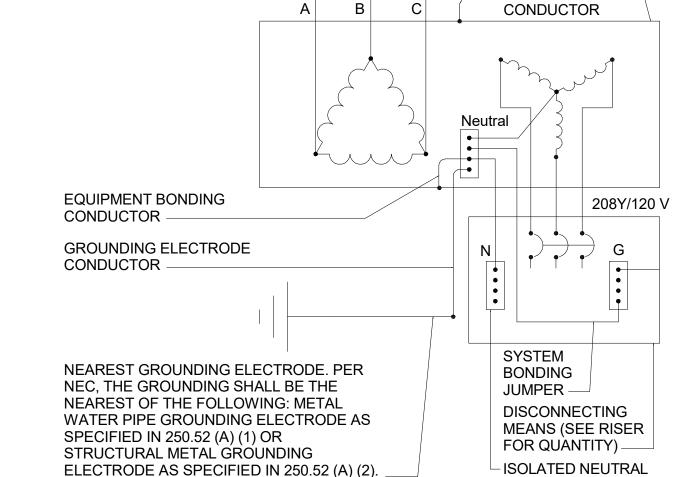
	FEDERAL WAY, WAS	SHINGTON
	REVISION	DATE
9		



10 **E402**

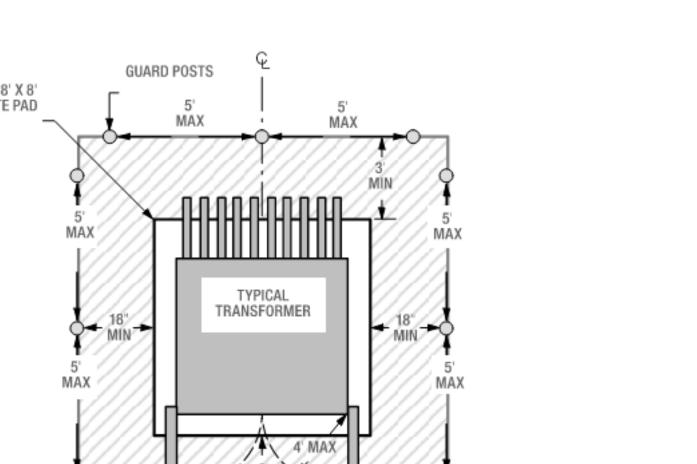
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* SEPARATELY DERIVED GROUND (PER NEC 250.30)

FLECTRICAL SERVICE GROUNDUING DETAIL





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AMERICAN INSTITUTE OF ARCHITECTS

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- EQUIPMENT GROUNDING

D

DRY-TYPE

TRANSFORMER-

METAL PIPING PER NEC 250.104

E F G H J

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ELECTRODE AS SPECIFIED IN 250.52 (A) (2).

MAIN SWITCHBOARD SUMMARY: 03/11/2024	MAIN SWITCHBOARD	'MS	SB'		PROJECT: Federal Way O&M Facili
CLASSIFICATION: NORMAL FED FROM: MOUNTING: SURFACE	VOLTAGE: 480Y/277V 3Ø, 4-WIRE MAINS: 3000A MAIN LUGS ONLY				
	LOAD CALCULATION				
LOAD DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR		CALCULATED LOAD
MISCELLANEOUS CONTINUOUS:	62400	X	125%	=	78000
EQUIPMENT & MISCELLANEOUS:	910831	X	100%	=	910831
LIGHTING:	35112	X	125%	=	43890
LARGEST MOTOR:	124293	X	125%	=	155366
MOTORS:	108450	X	100%	=	108450
RECEPTACLE:	10000	X	100%	=	10000
RECEPTACLES OVER 10kVA:	39780	X	50%	=	19890
COMPUTER:	11160	X	100%	=	11160
ELECTRIC HEATING:	8880	X	100%	=	8880
COOLING:	62399	X	100%	=	62399
KITCHEN (EQUIP = 6):	7580	X	65%	=	4927
LARGEST ARC WELDER:	14144	X	100%	=	14144
	LOAD SUMMARY				
TOTAL CONNECTED LOAD AMPS PHASE A: 486,665 VA 1,757 A	TOTAL CONNECTED LOAD (VA) 1,395,029 VA				TOTAL CALCULATED LOAD (VA) 1,427,937 VA
PHASE B: 471,673 VA 1,703 A PHASE C: 436,691 VA 1,577 A	TOTAL CONNECTED AMPS 1,679 A				TOTAL CALCULATED AMPS 1,718 A
IOTES:				HA	ARGIS ENGINEERS, INC.
1. 2. 3.				120	01 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101
5. 4. 5.					PH. (206) 448-3376 FAX. (206) 448-4450
			<u> </u>		. ,
PANEL SCHEDULE : 04/29/2024	PANEL 'EV'				PROJECT: Federal Way O&M Fa

VOLTAGE: 208Y/120V 3Ø, 4-WIRE

NEUTRAL: 100% RATED

MAINS: 600A MAIN CIRCUIT BREAKER

LOAD CALCULATIONS

100%

125%

125%

100%

100%

PANEL 'HE'

 CKT
 BREAKER
 LOAD
 LOAD
 BREAKER
 CKT

 NO.
 AMPS POLE
 (VA)
 Ø
 (VA)
 AMPS POLE
 NO.

 1
 30
 3
 A
 20
 1
 2
 SPARE

 3
 B
 20
 1
 4
 SPARE

 5
 C
 20
 1
 6
 SPARE

 7
 30
 3
 A
 20
 1
 8
 SPARE

7 30 3 A 20 1 8 SPARE
9 - - B 20 1 10 SPARE
11 - - C 20 1 12 SPARE
13 30 3 A 20 1 14 SPARE
15 - - B 20 1 16 SPARE
17 - - C 20 1 18 SPARE

LOAD CALCULATIONS

125%

125%

100%

100%

LOAD DESCRIPTION CONN. (VA) DEMAND FACTOR CALC. (VA)

3786

795

SECTION: 1 OF 1

VOLTAGE: 480Y/277V 3Ø, 4-WIRE

MAINS: 225A MAIN LUGS ONLY

NEUTRAL: 100% RATED

LOAD DESCRIPTION CONN. (VA) DEMAND FACTOR CALC. (VA)

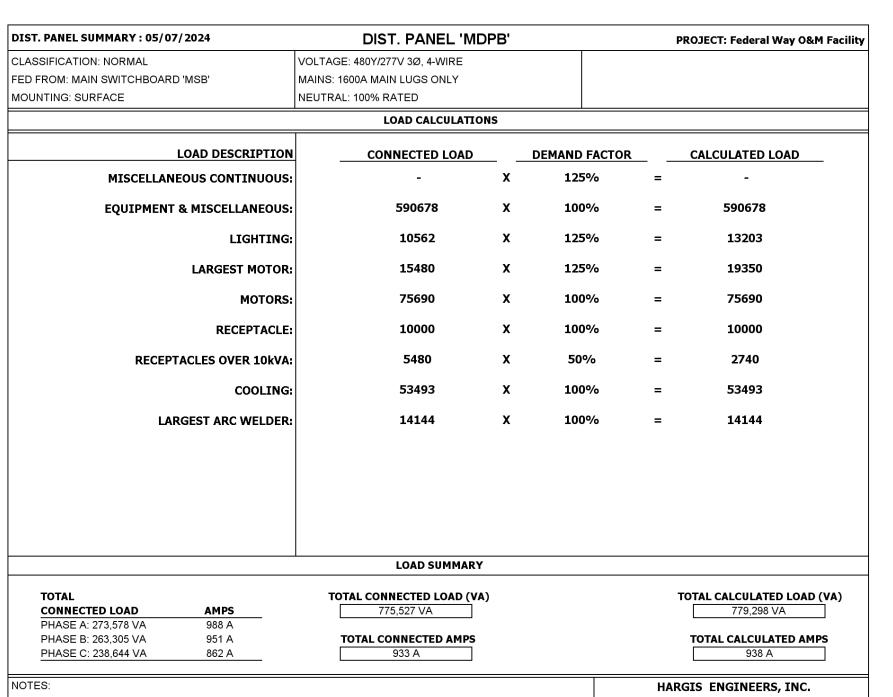
DIST. PANEL SUMMARY : 05/07/2024	DIST. PANEL 'MD	PA'			PROJECT: Federal Way O&M Faci
CLASSIFICATION: NORMAL	VOLTAGE: 480Y/277V 3Ø, 4-WIRE				
FED FROM: AUTO TRANSFER SWITCH 'ATS #1'	MAINS: 600A MAIN LUGS ONLY				
MOUNTING: SURFACE	NEUTRAL: 100% RATED				
	LOAD CALCULATION	S			
LOAD DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR		CALCULATED LOAD
MISCELLANEOUS CONTINUOUS:	-	X	125%	=	-
EQUIPMENT & MISCELLANEOUS:	320153	x	100%	=	320153
LIGHTING:	18920	X	125%	=	23650
LARGEST MOTOR:	8640	X	125%	=	10800
MOTORS:	8640	X	100%	=	8640
RECEPTACLE:	10000	X	100%	=	10000
RECEPTACLES OVER 10kVA:	24300	X	50%	=	12150
COMPUTER:	11160	X	100%	=	11160
ELECTRIC HEATING:	8880	X	100%	=	8880
COOLING:	8906	X	100%	=	8906
KITCHEN (EQUIP = 6):	7580	X	65%	=	4927
	LOAD SUMMARY				
TOTAL CONNECTED LOAD AMPS	TOTAL CONNECTED LOAD (VA) 427,179 VA				TOTAL CALCULATED LOAD (VA) 419,266 VA
PHASE A: 147,500 VA 532 A PHASE B: 143,367 VA 518 A	TOTAL CONNECTED AMPS				TOTAL CALCULATED AMPS
PHASE C: 136,312 VA 492 A	514 A				505 A
NOTES:				HA	ARGIS ENGINEERS, INC.
1. 2.				12	01 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101
3. 4. 5.					PH. (206) 448-3376 FAX. (206) 448-4450

DIST. PANEL SUMMARY: 05/07/2024	DIST. PANEL 'MDF	B'			PROJECT: Federal Way O&M
CLASSIFICATION: NORMAL	VOLTAGE: 480Y/277V 3Ø, 4-WIRE				
FED FROM: MAIN SWITCHBOARD 'MSB'	MAINS: 1600A MAIN LUGS ONLY				
MOUNTING: SURFACE	NEUTRAL: 100% RATED				
	LOAD CALCULATION	5	•		
LOAD DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR		CALCULATED LOAD
MISCELLANEOUS CONTINUOUS:	-	X	125%	=	-
EQUIPMENT & MISCELLANEOUS:	590678	X	100%	=	590678
LIGHTING:	10562	X	125%	=	13203
LARGEST MOTOR:	15480	X	125%	=	19350
MOTORS:	75690	X	100%	=	75690
RECEPTACLE:	10000	X	100%	=	10000
RECEPTACLES OVER 10kVA:	5480	X	50%	=	2740
COOLING:	53493	X	100%	=	53493
LARGEST ARC WELDER:	14144	X	100%	=	14144
	LOAD SUMMARY				
TOTAL	TOTAL CONNECTED LOAD (VA)				TOTAL CALCULATED LOAD (
CONNECTED LOAD AMPS	775,527 VA				779,298 VA
PHASE A: 273,578 VA 988 A					TOTAL CALCUMATE
PHASE B: 263,305 VA 951 A PHASE C: 238,644 VA 862 A	933 A				938 A
FINDE C. 200,044 VA 002 A	933 A				330 A
NOTES:				Н	ARGIS ENGINEERS, INC.
1. 2.					201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101
3. 4. 5.					PH. (206) 448-3376 FAX. (206) 448-4450

LOAD CALCULATIONS LOAD CALCULATIONS LOAD DESCRIPTION CONN. (VA) DEMAND FACTOR CALC. (VA) CALCULATIONS CALCULATIONS CALCULATIONS CALC. (VA) CALCULATIONS CALCULATIONS CALCULATIONS CALCULATIONS CALCULATIONS CALCULATIONS CALCULATIONS CALCULATIONS CALC. (VA) CALCULATIONS CALCULATION	SCHEDULE: 05/03/2024		PANEL 'C'		PROJECT: Federal Way O	&M Facility	PANEL SCHEDUL	E: 05/05/2024		PANEI	_ 'D'			PROJECT: Fe	ederal Way O&M Fa
Mary	ICATION: NORMAL	VOLTAGE: 208Y/120	√ 3Ø, 4-WIRE	SECTION: 1 OF 1			CLASSIFICATION	: NORMAL	VOLTAGE: 208Y/1	20V 3Ø, 4-WIRE		SECTION: 1	1 OF 1		
Magnification Magnificatio	DM: TRANSFORMER 'T-C'	MAINS: 60A MAIN CI	RCUIT BREAKER				FED FROM: TRAN	ISFORMER 'T-D'	MAINS: 60A MAIN	CIRCUIT BREA	AKER				
PART															
THE PRESCRIPTION 10 OUTPOUNDED 1 10 OUTPOUNDED 1 10 OUTPOUNDED 1 OUTPOUNDED 1 OUTPOUNDED 1 OUTPOUNDED O				L BREAKER LOKE	I .		1				1045	DDEALCED	LOUT		T
Supplementation	ITEM DESCRIPTION				ITEM DESCRIPTION	NOTE	NOTE	ITEM DESCRIPTION						ITEM DESCRIPT	ION NOI
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SAME 11 1 1 1 1 1 1 1 1	QUIP - OVERHEAD DOOR	7 20 3	901 A 901	20 3 8	EQUIP - OVERHEAD DOOR		SPARE		7 20 1	Α	360	20 1	8 REC - SV	WAT STORAGE	
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SACE STATE SACE SAC	OUR OVERVEAR ROOM									C					
SPACE 20 1	QUIP - OVERHEAD DOOR									I A		· ·			
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PARE	DARE						BPACE		23 - 1			-	24 SPACE		
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LOAD CALCULATIONS LOAD DESCRIPTION CONN. (VA) DEMAND FACTOR CALC. (VA)															
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EQUIPMENT & MISCELLANEOUS 500 100% 500 100% 500 125% 125% 1080 125% 125% 1080 125% 1355 100% 13515 100% 13515 100% 13515 100% 13515 100% 1250 125% 1350 100% 1250 125% 1350 125% 1		I													
LAGEST MOTOR: 2703 125% 3379 CONNECTED LOAD AMPS MOTORS: 13515 100% 125% 525 CONNECTED LOAD 18515 100% 13515 100% 125% 125% 3379 CONNECTED LOAD 18515 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 1260 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 1260 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 1260 100% 1250 125% 125% 3379 CONNECTED LOAD 18515 1260 100% 1250 125% 125% 125% 125% 125% 125% 125% 125%		CONN. (VA)	DEMAND FACTOR	R CALC. (VA)	. LOAD CUMMARY					DEMAND	FACTOR	CALC. (V	/A)	LOADOUM	ADV
LARGEST MOTOR: 2703 125% 3379 CONNECTED LOAD AMPS MOTORS: 1355 100% 13515 RECEPTACLE: 1260 100% 1260 RECEPTACLE: 1260 100% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50% - 50% - 50% - 50% 1620 RECEPTACLES OVER 10KVA: - 50%	MISCELLANEOUS CONTINUOUS	CONN. (VA)	DEMAND FACTOR 125%	R CALC. (VA)	LOAD SUMMARY			MISCELLANEOUS CONTINUOUS:	-	DEMAND 1259	FACTOR %	CALC. (V	/A)	LOAD SUMM.	ARY
MOTORS: 13515 100% 13515	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS	CONN. (VA) - 500	DEMAND FACTOR 125% 100%	CALC. (VA) - 500				MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS:	- 1696	DEMAND 1259 1009	FACTOR % %	CALC. (V - 1696			ARY
RECEPTACLE: 1260 100% 1260 RECEPTACLE: 0 100% 1260 RECEPTACLE: 0 100% 1620 PHASE B: 6,446 VA 54 A PHASE C: 5,766 VA 48 A TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 PHASE B: 6,446 VA 54 A RECEPTACLE: 1620 100% 1620 PHASE B: 2,121 VA 18 A PHASE B: 2,121 VA 18 A RECEPTACLE: 1620 100% 1620 PHASE B: 2,121 VA 18 A PHASE B: 2,121 VA 18	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING	CONN. (VA) - 500 864	DEMAND FACTOR 125% 100% 125%	CALC. (VA) - 500 1080	TOTAL			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING:	- 1696 500	DEMAND 1259 1009 1259	FACTOR % %	CALC. (V - 1696 625	т	OTAL	
RECEPTACLES OVER 10kVA: - 50% - PHASE B: 6,446 VA 54 A PHASE C: 5,766 VA 48 A PHASE C: 5,766 VA 48 A TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED AMPS: 55 A TOTALS: 18,842 19,734 HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 18 A RECEPTACLES OVER 10kVA: - 50% - PHASE B: 2,121 VA 18 A PHASE C: 1,941 VA 16 A TOTAL CALCULATED LOAD: 7,320 VA TOTAL CALCULATED AMPS: 20 A TOTALS: 6,519 7,320 NOTES: 1.	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR	CONN. (VA) - 500 864 2703	DEMAND FACTOR 125% 100% 125% 125%	CALC. (VA) - 500 1080 3379	TOTAL CONNECTED LOAD AMPS			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR:	- 1696 500 2703	DEMAND 1259 1009 1259 1259	FACTOR % % % %	CALC. (V - 1696 625 3379	TO	OTAL ONNECTED LOAD	AMPS
TOTAL CALCULATED LOAD: 19,734 VA TOTAL CALCULATED AMPS: 55 A TOTALS: 18,842 19,734 TOTALS: 6,519 7,320 TOTAL CALCULATED AMPS: 20 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 PH. (206) 448-3376 PH. (206) 448-3376 4. TOTALS: 6,519 TOTAL CALCULATED LOAD: 7,320 VA TOTAL CALCULATED L	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS	CONN. (VA) - 500 864 2703 13515	DEMAND FACTOR 125% 100% 125% 125% 100%	CALC. (VA) - 500 1080 3379 13515	TOTAL CONNECTED LOAD AMPS			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS:	- 1696 500 2703 -	DEMAND 1259 1009 1259 1269	FACTOR % % % % % %	CALC. (V - 1696 625 3379 -	TO	OTAL ONNECTED LOAD	AMPS
TOTAL CALCULATED AMPS: 55 A TOTAL CALCULATED AMPS: 55 A TOTAL SEQUIATED AMPS: 20 A TOTAL CALCULATED	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	CONN. (VA) - 500 864 2703 13515	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515	TOTAL CONNECTED LOAD AMPS PHASE A: 6,630 VA 55 A			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE:	- 1696 500 2703 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 -	TO CO Ph	OTAL ONNECTED LOAD HASE A: 2,457 VA	AMPS 20 A
TOTALS: 18,842 19,734 TOTALS: 6,519 7,320 HARGIS ENGINEERS, INC. NOTES: HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 1. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 2. 3. SEATTLE, WA 98101 3. 9H. (206) 448-3376 4. PH. (206) 448-3376 PH. (206) 448-337	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	CONN. (VA) - 500 864 2703 13515	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515	TOTAL CONNECTED LOAD AMPS PHASE A: 6,630 VA 55 A PHASE B: 6,446 VA 54 A			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE:	- 1696 500 2703 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 -	T(C(P)	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA	AMPS 20 A 18 A
HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 NOTES: HARGIS ENGINEERS, INC. 1. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 2. 3. PH. (206) 448-3376 4. PH. (206) 448-3376	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	CONN. (VA) - 500 864 2703 13515	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515	TOTAL			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE:	- 1696 500 2703 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 -	T (C) PH	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA	AMPS 20 A 18 A 16 A
1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	CONN. (VA) - 500 864 2703 13515	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515	TOTAL			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE:	- 1696 500 2703 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 -	T (C)	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO	AMPS 20 A 18 A 16 A AD: 7,320 VA
1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376 1. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 2. 3. PH. (206) 448-3376 4.	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL			MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO	AMPS 20 A 18 A 16 A AD: 7,320 VA
SEATTLE, WA 98101 2. SEATTLE, WA 98101 3. PH. (206) 448-3376 4. PH. (206) 448-3376	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL		NOTES:	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO	AMPS 20 A 18 A 16 A AD: 7,320 VA
PH. (206) 448-3376 3. 4. PH. (206) 448-3376	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL CONNECTED LOAD PHASE A: 6,630 VA PHASE B: 6,446 VA PHASE C: 5,766 VA TOTAL CALCULATED LOAD: 19,734 TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC.	I VA	NOTES:	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO OTAL CALCULATED AM	AMPS 20 A 18 A 16 A AD: 7,320 VA IPS: 20 A
	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL CONNECTED LOAD PHASE A: 6,630 VA PHASE B: 6,446 VA PHASE C: 5,766 VA TOTAL CALCULATED LOAD: 19,734 TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600	I VA	NOTES: 1. 2.	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO OTAL CALCULATED AM HARGIS ENGINE 1201 THIRD AVENU	AMPS 20 A 18 A 16 A AD: 7,320 VA IPS: 20 A EERS, INC. E, SUITE 600
FAX. (206) 448-4450 5.	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL CONNECTED LOAD PHASE A: 6,630 VA PHASE B: 6,446 VA PHASE C: 5,766 VA TOTAL CALCULATED LOAD: 19,734 TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600	I VA	NOTES: 1. 2. 3.	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED LO OTAL CALCULATED AM HARGIS ENGINE 1201 THIRD AVENU	AMPS 20 A 18 A 16 A AD: 7,320 VA IPS: 20 A EERS, INC. E, SUITE 600
	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL CONNECTED LOAD PHASE A: 6,630 VA PHASE B: 6,446 VA PHASE C: 5,766 VA TOTAL CALCULATED LOAD: 19,734 TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101	I VA	NOTES: 1. 2. 3. 4.	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED AM HARGIS ENGINE 1201 THIRD AVENU SEATTLE, WA	AMPS 20 A 18 A 16 A AD: 7,320 VA IPS: 20 A EERS, INC. E, SUITE 600 98101
	MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	CONN. (VA) - 500 864 2703 13515 1260 -	DEMAND FACTOR 125% 100% 125% 125% 100% 100%	CALC. (VA) - 500 1080 3379 13515 1260 -	TOTAL CONNECTED LOAD PHASE A: 6,630 VA 55 A PHASE B: 6,446 VA 54 A PHASE C: 5,766 VA 48 A TOTAL CALCULATED LOAD: 19,734 TOTAL CALCULATED AMPS: 55 A HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101 PH. (206) 448-3376	I VA	NOTES: 1. 2. 3. 4. 5.	MISCELLANEOUS CONTINUOUS: EQUIPMENT & MISCELLANEOUS: LIGHTING: LARGEST MOTOR: MOTORS: RECEPTACLE: RECEPTACLES OVER 10kVA:	- 1696 500 2703 - 1620	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % % % %	CALC. (V - 1696 625 3379 - 1620	TG CG PH PH PH TG TG	OTAL ONNECTED LOAD HASE A: 2,457 VA HASE B: 2,121 VA HASE C: 1,941 VA OTAL CALCULATED AM HARGIS ENGINE 1201 THIRD AVENU SEATTLE, WA PH. (206) 448-	AMPS 20 A 18 A 16 A AD: 7,320 VA IPS: 20 A EERS, INC. E, SUITE 600 98101

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5.														
PANEL SCHEDULE : 04/30/2024			PANEI	_ 'E'				PROJECT: Feder	ral Way O&M Facility	PANE	EL SCHEDULE : 05/07/2024			
CLASSIFICATION: NORMAL	VOLTAG	E: 208Y/12	:0V 3Ø, 4-WIRE		SECT	ION: 1	1 OF 1			CLAS	SIFICATION: NORMAL	VO	LTAGE: 20	D8Y/12
FED FROM: TRANSFORMER 'T-E'	MAINS: 6	OA MAIN	CIRCUIT BREA	AKER						FED F	FROM: TRANSFORMER 'T-FS'	МА	INS: 125A	MAIN
MOUNTING: SURFACE	NEUTRA	L: 100% R	ATED							MOUN	NTING: SURFACE	NE!	UTRAL: 10	ງ0% R
	CKT E	BREAKER	LOAD	LOAD	BREA	KER	CKT					- Ck	KT BRE	
NOTE ITEM DESCRIPTION		MPS POLE			AMPS			ITEM DESCRIPTION	NOTE	NOTE	ITEM DESCRIPTION	NC		
EQUIP - BRINE MAKER		20 2	1352 A	312	20	1	2	LTG - BUIDLING E - SAND SHED			EQUIP - FA-05 FUEL DISPENSING TANK	1		3
-		- -	1352 B	324	20	1	4	LTG - BUILDING F - SNOW FLEET			-	3		-
SITE GATE CONTROLLER	5 2	20 2	541 C	540	20	1	6	SITE RECETPACLES			-	5		<u> </u>
SPARE	<u>'</u>	 20 1	541 A		20	1	8 10	SPARE SPARE			EQUIP - FA-05 FUEL DISPENSING TANK	9	- 50	3
SPARE		20 1	C		20	1	12	SPARE			<u>-</u>	11		<u> </u>
SPACE	1	- 1	A		20	1	14	SPARE			EQUIP - FA-01 FUEL STORAGE TANK	13		2
SPACE		- 1	В		-	1	16				-	15		-
SPACE		- 1	С		-	1	18				SPACE	17	_	1
SPACE	<u> </u>	- 1	A		-	1	20				SPACE	19		1
SPACE SPACE		- 1 - 1	B		-	1	22 24				SPACE SPACE	21 23		1
	d sou		LOAD CALC											
LOAD DESCRIPTION		N. (VA)	DEMAND	FACTOR		LC. (V	A)	LOAD SUMMAR			LOAD DESCRIP		CONN. (\	<u>'</u> (A)
MISCELLANEOUS CONTINUOUS	:	N. (VA) -	DEMAND 1259	FACTOR %	CA	-	A)	LOAD SUMMARY	Υ		MISCELLANEOUS CONTINU	ous:	-	<u>(A)</u>
	: 37	N. (VA) - 786	DEMAND 1259 1009	FACTOR % %	CA	- 3786	A)	LOAD SUMMAR	Y			OUS: OUS:	CONN. (\\	<u>(A)</u>
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS	: : 37	N. (VA) -	DEMAND 1259	FACTOR % %	CA	-	A)		Y AMPS		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE	DUS: DUS: TING:	- 8412	<u>/A)</u>
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS	: 37 : 6	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259	FACTOR % % % % % %	CA	- 3786 795 - -	A)	TOTAL			MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT	DUS: DUS: TING: TOR: DRS:	- 8412 540	/A)
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	: 37 : 6 : 5	N. (VA) - 786 :36	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540	(A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA	AMPS 18 A		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT RECEPTA	DUS: DUS: TING: TOR: DRS: CLE:	- 8412 540 8640	
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS	: 37 : 6 : 5	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259	FACTOR % % % % % % % % %	CA	- 3786 795 - -	A)	TOTAL CONNECTED LOAD	AMPS		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT	DUS: DUS: TING: TOR: DRS: CLE:	540 8640 8640	<u>//A)</u>
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	: 37 : 6 : 5	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA	AMPS 18 A		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT RECEPTA	DUS: DUS: TING: TOR: DRS: CLE:	540 8640 8640	
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE	: 37 : 6 : 5	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA	AMPS 18 A 14 A 9 A		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT RECEPTA	DUS: DUS: TING: TOR: DRS: CLE:	540 8640 8640	
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE	: 37 : 6 : 5	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA	AMPS 18 A 14 A 9 A : 5,121 VA		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH LARGEST MO MOT RECEPTA	DUS: DUS: TING: TOR: DRS: CLE:	540 8640 8640	
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	33 6 3 5	N. (VA) - 786 -36 -	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD	AMPS 18 A 14 A 9 A : 5,121 VA		MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE:	540 8640 8640	/A)
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTORS MOTORS RECEPTACLE RECEPTACLES OVER 10kVA	33 6 3 5	N. (VA) - 786 - 336 - - - 440	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540 -	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD	AMPS 18 A 14 A 9 A : 5,121 VA	NOTE	MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE: PkVA:	- 8412 540 8640 8640 - -	
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE RECEPTACLES OVER 10kV/	33 6 3 5	N. (VA) - 786 - 336 - - - 440	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540 -	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD TOTAL CALCULATED AMPS HARGIS ENGINEER 1201 THIRD AVENUE, S	AMPS 18 A 14 A 9 A : 5,121 VA : 14 A SS, INC. SUITE 600	1.	MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE: PkVA:	- 8412 540 8640 8640 - -	/A)
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE RECEPTACLES OVER 10kV/	33 6 3 5	N. (VA) - 786 - 336 - - - 440	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540 -	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD TOTAL CALCULATED AMPS HARGIS ENGINEER	AMPS 18 A 14 A 9 A : 5,121 VA : 14 A SS, INC. SUITE 600	1. 2.	MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE: PkVA:	- 8412 540 8640 8640 - -	/A)
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE RECEPTACLES OVER 10kV/A TOTALS NOTES: 1. 2. 3.	33 6 3 5	N. (VA) - 786 - 336 - - - 440	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540 -	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD TOTAL CALCULATED AMPS HARGIS ENGINEER 1201 THIRD AVENUE, 3 SEATTLE, WA 98	AMPS 18 A 14 A 9 A : 5,121 VA : 14 A SS, INC. SUITE 600	1.	MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE: PkVA:	- 8412 540 8640 8640 - -	/A)
MISCELLANEOUS CONTINUOUS EQUIPMENT & MISCELLANEOUS LIGHTING LARGEST MOTOR MOTORS RECEPTACLE RECEPTACLES OVER 10kV/	33 6 3 5	N. (VA) - 786 - 336 - - - 440	DEMAND 1259 1009 1259 1259 1009	FACTOR % % % % % % % % %	CA	- 3786 795 - - 540 -	A)	TOTAL CONNECTED LOAD PHASE A: 2,205 VA PHASE B: 1,676 VA PHASE C: 1,081 VA TOTAL CALCULATED LOAD TOTAL CALCULATED AMPS HARGIS ENGINEER 1201 THIRD AVENUE, S	AMPS 18 A 14 A 9 A : 5,121 VA : 14 A SS, INC. SUITE 600 101	1. 2.	MISCELLANEOUS CONTINU EQUIPMENT & MISCELLANE LIGH' LARGEST MO MOT RECEPTA RECEPTACLES OVER 10	DUS: DUS: TING: TOR: DRS: CLE: PkVA:	- 8412 540 8640 8640 - -	



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5	5/6/2024

AMERICAN INSTITUTE OF ARCHITECTS

HELIX DESIGN GROUP, INC

HARGIS

1201 third avenue, ste 600

seattle, wa 98101

206.448.3376

-	PANEL
/	SCHEDULES

	CITY OF FEDERA
	WAY
8	SITE
8	

	FEDER	AL WAY, WASH	INGTON
	REVISION		DA
9			
	DATE		JOB N
	05.06.24		a23-0
	·	BID SET	·

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CLASSIFICATION: NORMAL

MOUNTING: SURFACE

FED FROM: TRANSFORMER 'T-EV'

LEVEL 2 EV CHARGER

LEVEL 2 EV CHARGER LEVEL 2 EV CHARGER

NOTES: EV CHARGER PANEL

PANEL SCHEDULE: 05/07/2024

FED FROM: DIST. PANEL 'MDPB'

CLASSIFICATION: NORMAL

MOUNTING: SURFACE

MISCELLANEOUS CONTINUOUS:

RECEPTACLES OVER 10kVA:

MISCELLANEOUS CONTINUOUS:

EQUIPMENT & MISCELLANEOUS: 3786

RECEPTACLES OVER 10kVA:

LARGEST MOTOR:

RECEPTACLE:

LIGHTING: 636

TOTALS: 4,962

LIGHTING:

LARGEST MOTOR: MOTORS:

RECEPTACLE:

EQUIPMENT & MISCELLANEOUS:

D

LOAD SUMMARY

PHASE B: 21,840 VA 182 A

TOTAL CALCULATED AMPS: 217 A

PHASE C: 18,720 VA 156 A

TOTAL CALCULATED LOAD: 78,000 VA

HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101

PH. (206) 448-3376

FAX. (206) 448-4450

LOAD SUMMARY

PHASE C: 1,081 VA 4 A

TOTAL CALCULATED LOAD: 5,121 VA

HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600 SEATTLE, WA 98101

> PH. (206) 448-3376 FAX. (206) 448-4450

TOTAL CALCULATED AMPS: 6 A

CONNECTED LOAD PHASE A: 2,205 VA

PHASE B: 1,676 VA

PROJECT: Federal Way O&M Facility

CONNECTED LOAD

PHASE A: 21,840 VA

F G

Н

VOLTAGE: 208Y/120V 3Ø, 4-WIRE SECTION: 1 OF 1

LOAD CALCULATIONS

100%

125%

125%

100%

100%

50%

DEMAND FACTOR CALC. (VA)

675 10800 8640

MAINS: 125A MAIN CIRCUIT BREAKER

NEUTRAL: 100% RATED

LOAD SUMMARY

PHASE C: 6,084 VA 51 A

TOTAL CALCULATED LOAD: 28,527 VA

HARGIS ENGINEERS, INC. 1201 THIRD AVENUE, SUITE 600

SEATTLE, WA 98101

PH. (206) 448-3376

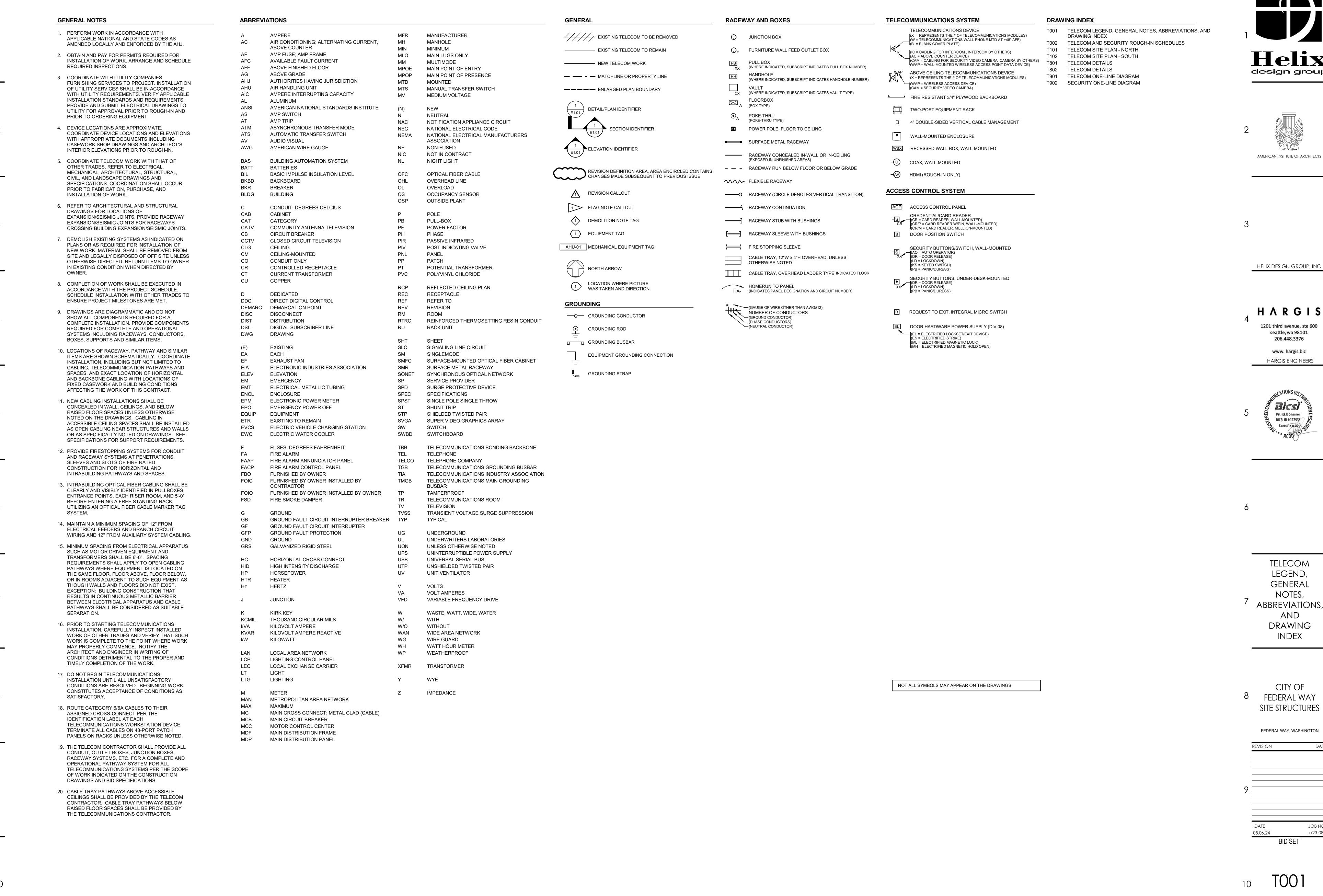
FAX. (206) 448-4450

TOTAL CALCULATED AMPS: 79 A

PHASE A: 9,972 VA

PHASE B: 10,176 VA

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HARGIS 1201 third avenue, ste 600 seattle, wa 98101

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206.448.3376



TELECOM LEGEND, GENERAL **ABBREVIATIONS** AND DRAWING

INDEX

CITY OF FEDERAL WAY SITE STRUCTURES

FEDERAL WAY, WASHINGTON

REVISION

a23-087

HARGIS 1201 third avenue, ste 600 seattle, wa 98101 206.448.3376

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TELECOM AND **SECURITY ROUGH-IN SCHEDULES**

CITY OF FEDERAL WAY SITE STRUCTURES

FEDERAL WAY, WASHINGTON

	DID OFT	
05.06.24		a23-
DATE		JOB

form or by any means without permission in writing from Helix Design Group.

SYMBOL	MOUNTING HEIGHT	DEVICE NAME	C	OUTLET BOX		CO	NDUIT	MUD RING	DETAIL	NOTEO
STIVIBUL	WOUNTING REIGHT	DEVICE NAME	QTY	SIZE	QTY	SIZE	TERM LOCATION	INIOD KING	DETAIL	NOTES
X	STANDARD, UON	CATEGORY 6 DEVICE	1	4-11/16"	1	1"	ACCESSIBLE CLG / PB	SINGLE GANG	1,3/T803	-
AC	ABOVE COUNTER	CATEGORY 6 DEVICE	1	4-11/16"	1	1"	ACCESSIBLE CLG / PB	SINGLE GANG	1,3/T803	3
X WAP	+144", UON	FLUSH CATEGORY 6 WAP DEVICE	1	4-11/16"	1	1"	ACCESSIBLE CLG / PB	SINGLE GANG	-	-
WAP	ABOVE CLG	CATEGORY 6 WAP DEVICE	1	4-11/16"	1	1"	ACCESSIBLE CLG / PB	SINGLE GANG	1/T805	1
	-	FLOOR BOX DEVICE	-	SEE ELEC	1	1-1/4"	SEE NOTE	SINGLE GANG	-	2,4
-AV	STANDARD	HDMI	1	4-11/16"	1	1"	ACCESSIBLE CLG	DOUBLE GANG	-	-
S	CEILING TILE	SPEAKER	1	SPECIALTY BACK BOX	-	-	-	-	-	-
- S	+108", UON	SPEAKER	1	4"S	1	3/4"	ACCESSIBLE CLG	SINGLE GANG	-	-
—(TP)	+48"	IP TOUCHLINK CONTROL PANEL	1	SPECIALTY BACK BOX	1	1"	ACCESSIBLE CLG	-	-	-
WB1	+80", UON	RECESSED WALL BOX, TYPE 1	2	SEE NOTE	2	1-1/4"	ACCESSIBLE CLG	SINGLE GANG	6/T802	5

INTER	COM ROU	GH-IN SCHEDULE	ı							
SYMBOL	MOUNTING HEIGHT	DEVICE NAME		OUTLET BOX		COI	NDUIT	MUD RING	DETAIL	NOT
STWIDOL	MOUNTING REIGHT	DEVICE NAIVIE	QTY	SIZE	QTY	SIZE	TERM LOCATION	WIOD KING	DETAIL	NOI
	±120"	INTERCOM SPEAKER, EXTERIOR	1	SPECIALTY BACK	4	2//"	ACCESSIBLE CLC			

2. FLOOR BOX DEVICES LOCATED ON THE FIRST FLOOR SHALL ROUTE TO THE NEAREST TELECOM ROOM OR AS INDICATED ON THE FLOOR PLANS.

	+120"	RATED	1	BOX	1	3/
GENERAL N	IOTE:					
1.	MOUNTING HEIGHTS I	NDICATED ON THE SCHEDULE REF	FER TO C	ENTER OF BACK B	OX.	

1. MOUNTING HEIGHTS INDICATED ON THE SCHEDULE REFER TO CENTER OF BACK BOX.

3. MOUNT DEVICE ABOVE COUNTER TO MATCH ELECTRICAL RECEPTACLES.

1. PROVIDE ROUGH-IN (FLUSH) FOR HARD-LID AND (SURFACE MOUNT) IN OPEN TO STRUCTURE CEILINGS.

4. FLOOR BOXES ARE PROVIDED UNDER SECTION 260535, SEE SECTION 271100 FOR CONNECTIVITY. 5. PROVIDE RECESSED WALL BOX WITH (2) LOW-VOLTAGE BACK BOXES & (2) ELECTRICAL BACK BOXES.

IP SE	CURITY VID	EO ROUGH-IN SC	HED	ULE						
SYMBOL	MOUNTING HEIGHT	DEVICE NAME	0	UTLET BOX		CO	NDUIT	MUD RING	DETAIL	NOTES
STWIDOL	MODITING TILIGITI	DEVICE NAME	QTY	SIZE	QTY	SIZE	TERM LOCATION	WOD KING	DEIAIL	NOILS
C - C - V	CEILING	CAMERA	1	4"S	1	3/4"	ACCESSIBLE CLG	DOUBLE GANG	2/T806	1,3
C	+108"	INTERIOR CAMERA	1	4"S	1	3/4"	ACCESSIBLE CLG	DOUBLE GANG	4/T806	1,3,4
C	+156"	EXTERIOR CAMERA	1	MASONRY	1	3/4"	ACCESSIBLE CLG	SINGLE GANG	1/T806	1
> C -	+156"	CORNER MOUNT CAMERA	1	MASONRY	1	3/4"	ACCESSIBLE CLG	SINGLE GANG	3/T806	1,5
o-C-	+18'-0"	POLE MOLINT CAMERA	1	NEMA 3R J-BOX	1	1"	SEE SITE PLAN	_	3/T801	2

GENERAL NOTE:	
1. MOUNTING HEIGHTS INDICATED ON THE SCHEDULE REFER TO CENTER OF BACK B	OX.
NOTES:	

- 1. DEVICE REQUIRES NETWORK CONNECTION, PROVIDE CATEGORY 6 CABLING (CABLING BY 271100). 2. DEVICE REQUIRES NETWORK CONNECTION, PROVIDE OPTICAL FIBER CABLING (CABLING BY 271100).
- 3. COORDINATE BACK BOX AND MUD RING WITH IP SECURITY VIDEO CONTRACTOR PRIOR TO INSTALLATION.
- 4. SINGLE GANG MASONRY BACK BOXES ARE ACCEPTABLE FOR EXTERIOR CAMERA LOCATIONS.
- 5. PROVIDE STAINLESS STEEL FACEPLATE AND GASKET WITH 3/4" WEATHERTIGHT CONDUIT TO CAMERA HOUSING.

ACCESS CONTROL ROUGH-IN SCHEDULE

CVMDOL	MOUNTING LIFICUT	DEVICE NAME	OU	TLET BOX		CON	NDUIT	MUD DING	DETAIL	NOTES
SYMBOL	MOUNTING HEIGHT	DEVICE NAME	QTY	SIZE	QTY	SIZE	TERM LOCATION	MUD RING		
-S CR	+44"	CARD READER	1	4"S	1	3/4"	J-BOX ABOVE ACCESSIBLE CLG	SINGLE GANG	T808	3
-S CR/M	+44"	CARD READER, MULLION	-	-	1	3/4"	J-BOX ABOVE ACCESSIBLE CLG	-	T808	-
S	TOP OF FRAME	DOOR POSITION SWITCH	-	SEE NOTE	1	3/4"	J-BOX ABOVE ACCESSIBLE CLG	-	T808	2,5
DR	UNDER DESK	DOOR RELEASE BUTTON	1	4"S	1	3/4"	ACCESSIBLE CLG	SINGLE GANG	-	4
PB	UNDER DESK	PANIC BUTTON	1	4"S	1	3/4"	ACCESSIBLE CLG	SINGLE GANG	-	4
R	-	INTEGRAL MICRO REX	-	-	-	-	-	-	T808	2
EL	SEE NOTE	ELECTRIFIED LOCKSET/ EXIT DEVICE	VARIES	MASONRY	VARIES	3/4"	J-BOX ABOVE ACCESSIBLE CLG	SINGLE GANG	T808	2,6

GENERAL NOTE:
1. MOUNTING HEIGHTS INDICATED ON THE SCHEDULE REFER TO CENTER OF BACK B

- 1. DEVICE REQUIRES NETWORK CONNECTION, PROVIDE CATEGORY 6 CABLING (CABLING BY 271100). 2. COORDINATE REQUIREMENTS WITH SECURITY CONTRACTOR AND DOOR HARDWARE CONTRACTOR.
- 3. SINGLE GANG MASONRY BACK BOXES ARE ACCEPTABLE FOR EXTERIOR MOUNTED DEVICES.
- 4. PROVIDE FACEPLATE WITH COMPRESSION BOX CONNECTOR AND 1/4" ARMORD CABLING UNDER WORK SURFACE TO DEVICE.
- 5. WHERE DOOR FRAME IS FILLED, PROVIDE SINGLE GANG MASONRY BACK BOX AT TOP OF DOOR FRAME AT 4" ON CENTER FROM STRIKE SIDE OF DOOR. 6. PROVIDE SINGLE GANG MASONRY BACK BOX AT CENTER HINGE ON BOTH SIDES OR AT STRIKE.

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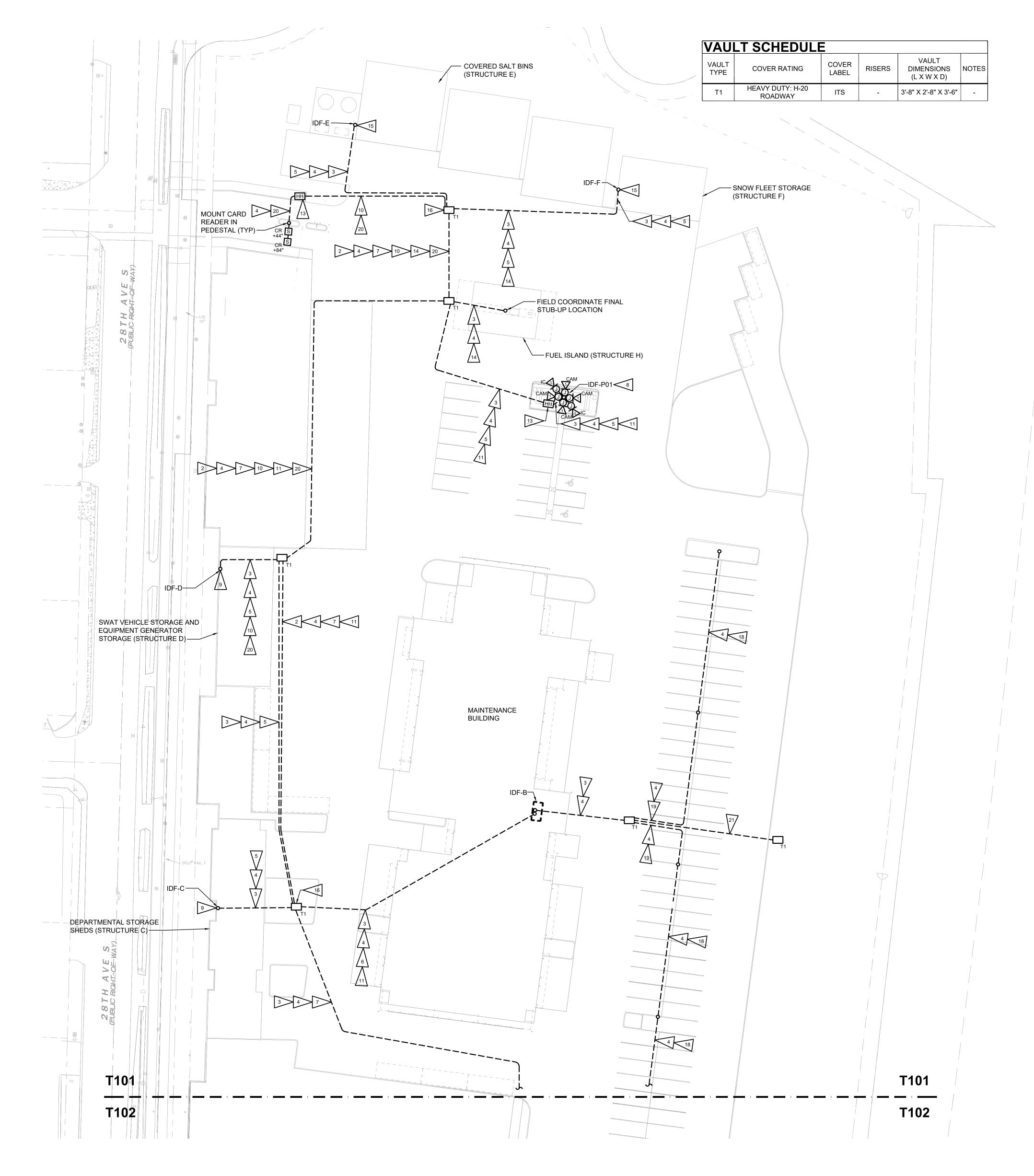
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TELECOM SITE PLAN - NORTH

SCALE: 1" = 30'-0"

SHEET NOTES

- 1. COORDINATE PLACEMENT OF VAULTS AND RACEWAY WITH DIVISION 31, CIVIL, DIVISION 32 AND LANDSCAPING CONTRACTORS. COORDINATE WITH TREE PROTECTION AND AVOID CRITICAL ROOT ZONES OR EXISTING TREES. CONFLICTS SHALL BE COMMUNICATED TO ARCHITECT FOR RESOLUTION PRIOR TO COMMENCEMENT OF
- 2. INSTALLATION OF CONDUITS AND VAULTS SHALL INCLUDE BUT NOT LIMITED TO TRENCHING, BACKFILL, TAMPING OF EARTH, DETECTABLE MARKER TAPE AND WHERE INDICATED CONCRETE ENCASEMENT.
- 3. CONDUITS SHALL BE ENCASED WITH CONCRETE WHERE PASSING UNDER BUILDING FOUNDATIONS AND AT STREET/ PARKING LOT CROSSINGS. EXTEND ENCASEMENT 60" ON EACH SIDE OF CROSSING.
- 4. WATERTIGHT SEAL SHALL BE PROVIDED FOR EACH CONDUIT INSIDE THE VAULT AND WITHIN THE BUILDING AFTER BACKBONE/ DEMARC CABLING HAS BEEN INSTALLED. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 5. PROVIDE CAUTION TAPE ABOVE ALL BURIED CONDUITS.
- 6. ALL FIBER CONDUITS SHALL HAVE A COPPER CONDUCTOR INSTALLED IN ALL CONDUITS FOR LOCATING PURPOSES.

FLAG NOTES

- PROVIDE THE FOLLOWING DEMARCATION CONDUITS: (1)4"C COMCAST
- 2 PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (2)4"C - TELECOM
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (1)4"C TELECOM
- PROVIDE 1"C FROM HAND-HOLE TO PEDESTAL-MOUNTED CARD
- 5 PROVIDE (1) 12-ST SM OFC.
- 6 PROVIDE (1) 24-ST SM OFC.
- 7 PROVIDE (1) 144-ST SM OFC.
- PROVIDE POLE-MOUNTED L-COM 18"X16"X8" NEMA R ENCLOSURE, PART NO. NB181608-10F, FOR IDF. FIELD COORDINATE FINAL INSTALLATION LOCATION. SEE 2/T801 FOR ADDITIONAL INFORMATION.
- 9 PROVIDE WALL-MOUNTED TELECOM RACK. FIELD COORDINATE FINAL LOCATION AND CONDUIT STUB-UPS PRIOR TO INSTALLATION. SEE 1/T801 FOR ADDITIONAL INFORMATION.
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (1)4"C - ACCESS CONTROL.
- PROVIDE CABLING FOR INTERCOMS.
- PROVIDE POLE-MOUNTED EXTERIOR INTERCOM SPEAKERS. MOUNT 12" BELOW CAMERAS. SEE SPECIFICATION 271100 FOR ADDITIONAL
- PROVIDE 12"x12"x24" PENCELL PEM-1212-PC GRADE LEVEL BURIED
- PROVIDE (4) CATEGORY CABLING FOR FUEL ISLAND.
- PROVIDE WALL-MOUNTED L-COM 18"X16"X8" NEMA R ENCLOSURE, PART NO. NB181608-10F, FOR IDF. FIELD COORDINATE FINAL LOCATION AND CONDUIT STUB-UPS PRIOR TO INSTALLATION. SEE 2/T801 FOR ADDITIONAL INFORMATION.
- PROVIDE FIBER SPLICE CASE IN VAULT. SEE ONE-LINE DIAGRAM ON T901 FOR ADDITIONAL INFORMATION. PROVIDE CATEGORY CABLING FOR POLE-MOUNTED CAMERA.
- PROVIDE CATEGORY CABLING FOR POLE-MOUNTED CAMERA.
- PROVIDE 1"C FROM JUNCTION BOX IN LIGHT-POLE BASE TO JUNCTION BOX IN LIGHT-POLE BASE. SEE ELECTRICAL DRAWINGS FOR EXACT LIGHT-POLE LOCATION.
- 19 PROVIDE 1"C FROM TELECOM VAULT/HAND-HOLE TO JUNCTION BOX IN LIGHT-POLE BASE. SEE ELECTRICAL DRAWINGS FOR EXACT LIGHT-POLE LOCATION.
- PROVIDE CABLING FOR PEDESTAL MOUNTED CARD READERS BY
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS:

(1)2"C - FUTURE





HELIX DESIGN GROUP, INC

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TELECOM SITE PLAN -NORTH

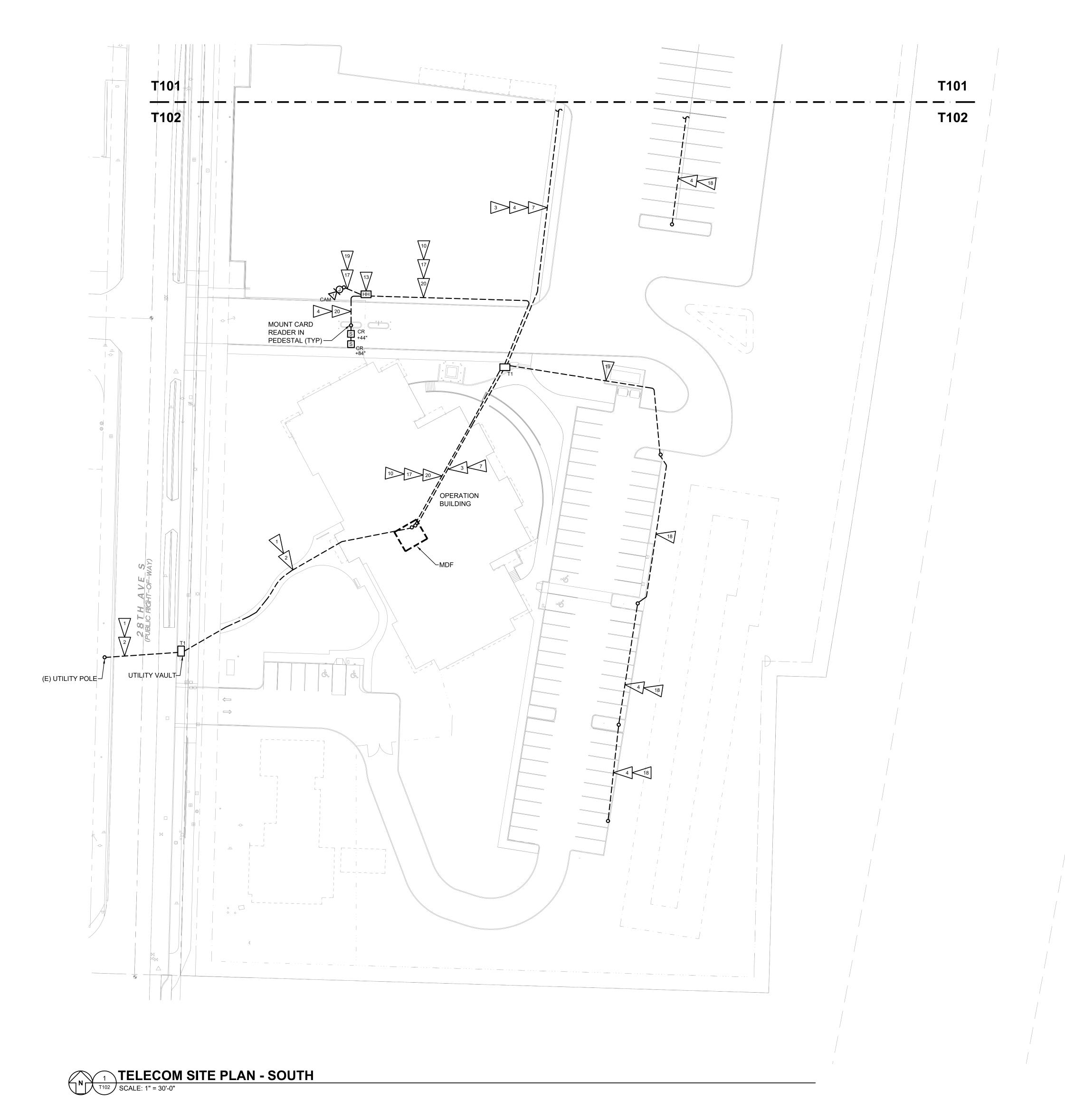
CITY OF FEDERAL

FEDERAL WAY, WASHINGTON

10 T101

VAU	<u>LT SCHEDULE</u>				
VAULT TYPE	COVER RATING	COVER LABEL	RISERS	VAULT DIMENSIONS (L X W X D)	NO.
T1	HEAVY DUTY: H-20 ROADWAY	ITS	-	3'-8" X 2'-8" X 3'-6"	,

D E F G



SHEET NOTES

- 1. COORDINATE PLACEMENT OF VAULTS AND RACEWAY WITH DIVISION 31, CIVIL, DIVISION 32 AND LANDSCAPING CONTRACTORS. COORDINATE WITH TREE PROTECTION AND AVOID CRITICAL ROOT ZONES OR EXISTING TREES. CONFLICTS SHALL BE COMMUNICATED TO ARCHITECT FOR RESOLUTION PRIOR TO COMMENCEMENT OF SITE WORK.
- 2. INSTALLATION OF CONDUITS AND VAULTS SHALL INCLUDE BUT NOT LIMITED TO TRENCHING, BACKFILL, TAMPING OF EARTH, DETECTABLE MARKER TAPE AND WHERE INDICATED CONCRETE ENCASEMENT.
- 3. CONDUITS SHALL BE ENCASED WITH CONCRETE WHERE PASSING UNDER BUILDING FOUNDATIONS AND AT STREET/ PARKING LOT CROSSINGS. EXTEND ENCASEMENT 60" ON EACH SIDE OF CROSSING.
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- 5. PROVIDE CAUTION TAPE ABOVE ALL BURIED CONDUITS.
- 6. ALL FIBER CONDUITS SHALL HAVE A COPPER CONDUCTOR INSTALLED IN ALL CONDUITS FOR LOCATING PURPOSES.

FLAG NOTES

- PROVIDE THE FOLLOWING DEMARCATION CONDUITS: (1)4"C COMCAST
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (2)4"C - TELECOM
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (1)4"C TELECOM
- PROVIDE 1"C FROM HAND-HOLE TO PEDESTAL-MOUNTED CARD
- 5 PROVIDE (1) 12-ST SM OFC.
- 6 PROVIDE (1) 24-ST SM OFC.
- 7 PROVIDE (1) 144-ST SM OFC.
- 8 PROVIDE POLE-MOUNTED L-COM 18"X16"X8" NEMA R ENCLOSURE, PART NO. NB181608-10F, FOR IDF. FIELD COORDINATE FINAL INSTALLATION LOCATION. SEE 2/T801 FOR ADDITIONAL INFORMATION.
- 9 PROVIDE WALL-MOUNTED TELECOM RACK. FIELD COORDINATE FINAL LOCATION AND CONDUIT STUB-UPS PRIOR TO INSTALLATION. SEE 1/T801 FOR ADDITIONAL INFORMATION.
- 10> PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS: (1)4"C - ACCESS CONTROL.
- PROVIDE CABLING FOR INTERCOMS.
- PROVIDE POLE-MOUNTED EXTERIOR INTERCOM SPEAKERS. MOUNT 12 BELOW CAMERAS. SEE SPECIFICATION 271100 FOR ADDITIONAL
- PROVIDE 12"x12"x24" PENCELL PEM-1212-PC GRADE LEVEL BURIED HANDHOLE.
- PROVIDE (4) CATEGORY CABLING FOR FUEL ISLAND.

ADDITIONAL INFORMATION.

(1)2"C - FUTURE

- PROVIDE WALL-MOUNTED L-COM 18"X16"X8" NEMA R ENCLOSURE, PART NO. NB181608-10F, FOR IDF. FIELD COORDINATE FINAL LOCATION AND CONDUIT STUB-UPS PRIOR TO INSTALLATION. SEE 2/T801 FOR
- PROVIDE FIBER SPLICE CASE IN VAULT. SEE ONE-LINE DIAGRAM ON T901 FOR ADDITIONAL INFORMATION. PROVIDE CATEGORY CABLING FOR POLE-MOUNTED CAMERA.
- 17 PROVIDE CATEGORY CABLING FOR POLE-MOUNTED CAMERA.
- 18 PROVIDE 1"C FROM JUNCTION BOX IN LIGHT-POLE BASE TO JUNCTION BOX IN LIGHT-POLE BASE. SEE ELECTRICAL DRAWINGS FOR EXACT LIGHT-POLE LOCATION.
- 19 PROVIDE 1"C FROM TELECOM VAULT/HAND-HOLE TO JUNCTION BOX IN LIGHT-POLE BASE. SEE ELECTRICAL DRAWINGS FOR EXACT LIGHT-POLE LOCATION.
- PROVIDE CABLING FOR PEDESTAL MOUNTED CARD READERS BY
- PROVIDE THE FOLLOWING CUSTOMER-OWNED OSP CONDUITS:







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TELECOM SITE PLAN -SOUTH

CITY OF FEDERAL

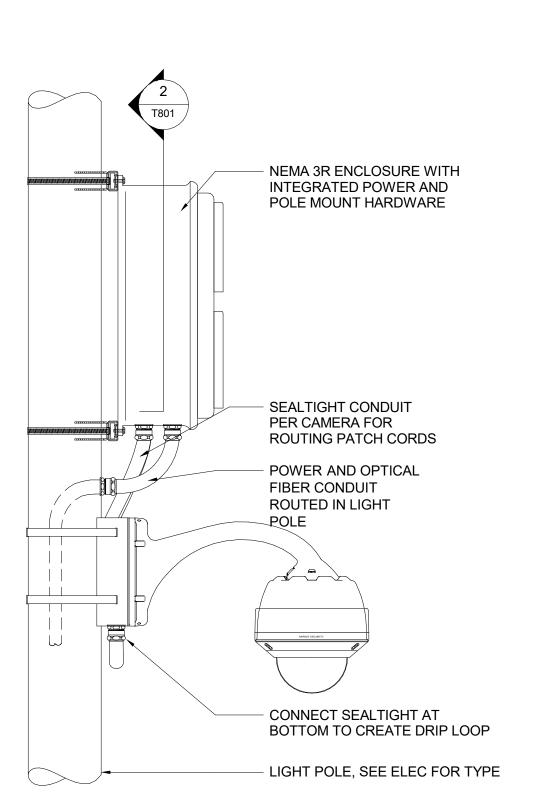
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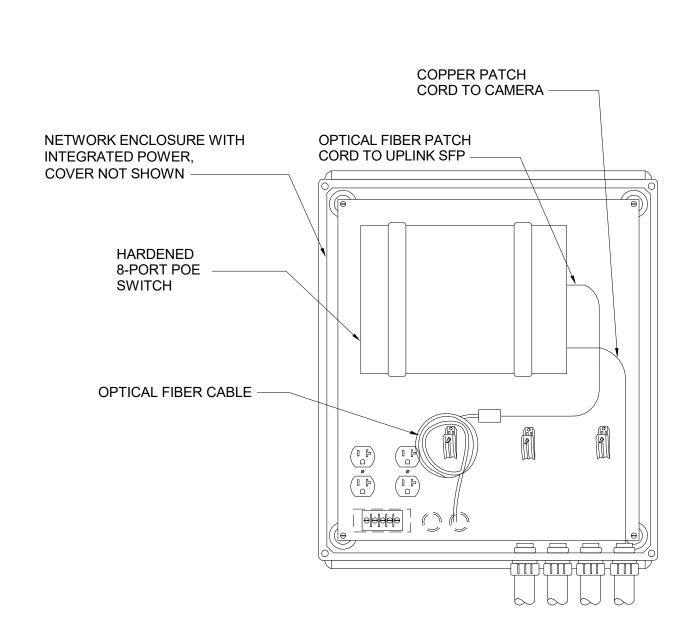
4'-0" FLOOR

TYPICAL INDOOR WALL-MOUNTED IDF RACK ELEVATION T801 SCALE: NONE



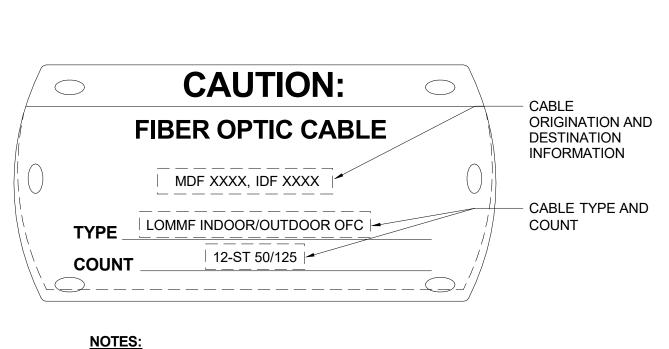
DETAIL - EXTERIOR POLE MOUNT CAMERA W/ BRACKET T801 SCALE: NONE

DRAWING SYMBOL — → Ū



G

TYPICAL OUTDOOR NEMA 3R IDF ENCLOSURE T801 SCALE: NONE



NOTES:

1. THE PART NUMBER AND TYPE ABOVE ARE EXAMPLES ONLY. PROVIDE THE CORRECT INFORMATION IN TAG PER SPECIFICATIONS OF INSTALLED TYPE. OTHER CABLE TYPES AND CONFIGURATIONS MAY VARY.

REFER TO TELECOMMUNICATIONS RISER DIAGRAM AND TERMINATION SCHEDULES FOR CABLE ORIGINATION AND DESTINATION LOCATIONS, CABLE TYPES, AND STRAND/PAIR COUNTS.

DETAIL - OPTICAL FIBER CABLE MARKER DETAIL T801 SCALE: NONE

RACK REQUIREMENTS

- 1. RACK ASSEMBLY SHALL INCLUDE BY NOT LIMITED TO ANCHOR BOLTS, CLAMPS, RACKS AND MISC. INSTALLATION HARDWARE. EQUIP EACH RACK AS SHOWN, AND AS DESCRIBED IN THE SPECIFICATIONS. PROVIDE CABLE MANAGEMENT PANELS, PATCH PANELS, ETC., UNLESS NOTED OTHERWISE.
- 2. GROUND EQUIPMENT TO NEAREST NEC RECOGNIZED GROUNDING ELECTRODE SUBSYSTEM WITH A DEDICATED #6
- 3. ASSEMBLE EQUIPMENT RACKS SO RACK UNIT 1 IS NEAREST TO THE FLOOR AND NUMBERS INCREASE VERTICALLY.

AWG COPPER, STRANDED, GREEN GROUNDING CONDUCTOR.

RACK COMPONENTS

- (1) WALL-MOUNTED LOCKABLE CABINET, GREAT LAKES MODEL GL36WM OR APPROVED EQUAL. FIELD COORDINATE FINAL LOCATION PRIOR TO INSTALLATION
- 2 2-RU OPTICAL FIBER CABLE MANAGEMENT PANEL
- 3 2-RU HORIZONTAL CABLE MANAGEMENT PANEL
- 4 2-RU RMFC (X/Y), (X) DENOTES QUANTITY OF 6-LC DUPLEX SM MODULES, (Y) DENOTES QUANTITY OF BLANK PANELS
- (5) CATEGORY 6 24-PORT WAP PATCH PANEL
- (6) CATEGORY 6 24-PORT STATION PATCH PANEL
- (7) CONDUIT PATHWAY, PROVIDE CONDUIT WATERFALLS FOR EACH 4"C SLEEVE. SEE FLOOR PLAN FOR QUANTITY AND SIZES
- (8) OSP PATHWAY, SEE SITE PLAN FOR QUANTITY AND SIZES. FIELD COORDINATE FINAL STUB-UP LOCATION
- (9) 3/4" FIRE RETARDANT PLYWOOD BACKBOARD, MOUNT AT +6"AFF
- (10) 10" TGB, SEE 2/T802
- (11) FIBER SERVICE LOOP
- (12) ETHERNET NETWORK SWITCH, (OFOI)
- (13) BONDING STRAP #6AWG WITH 2-HOLE GROUND LUG

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CITY OF FEDERAL WAY SITE STRUCTURES

FEDERAL WAY, WASHINGTON

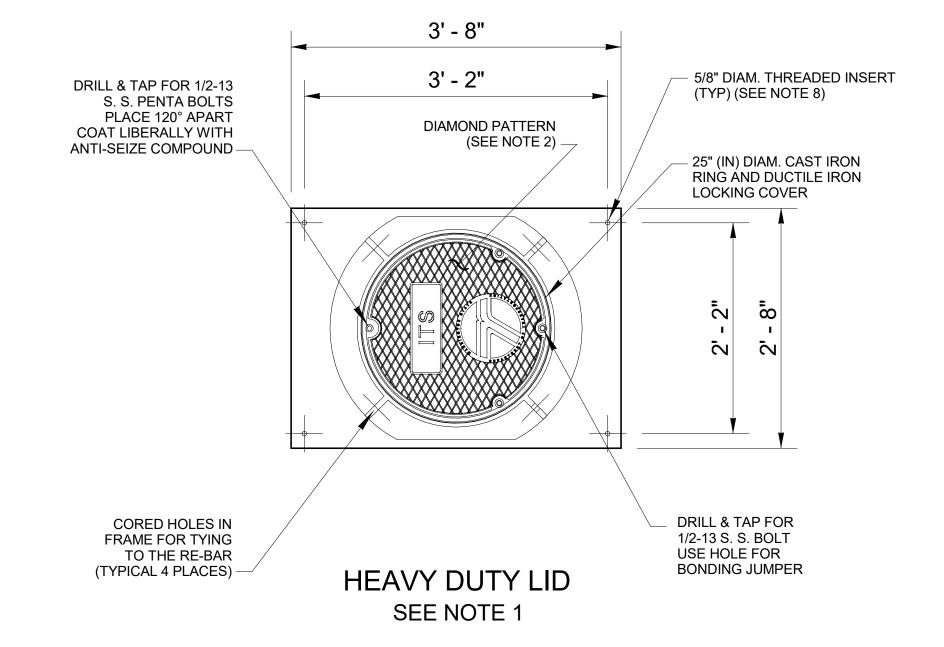
T801

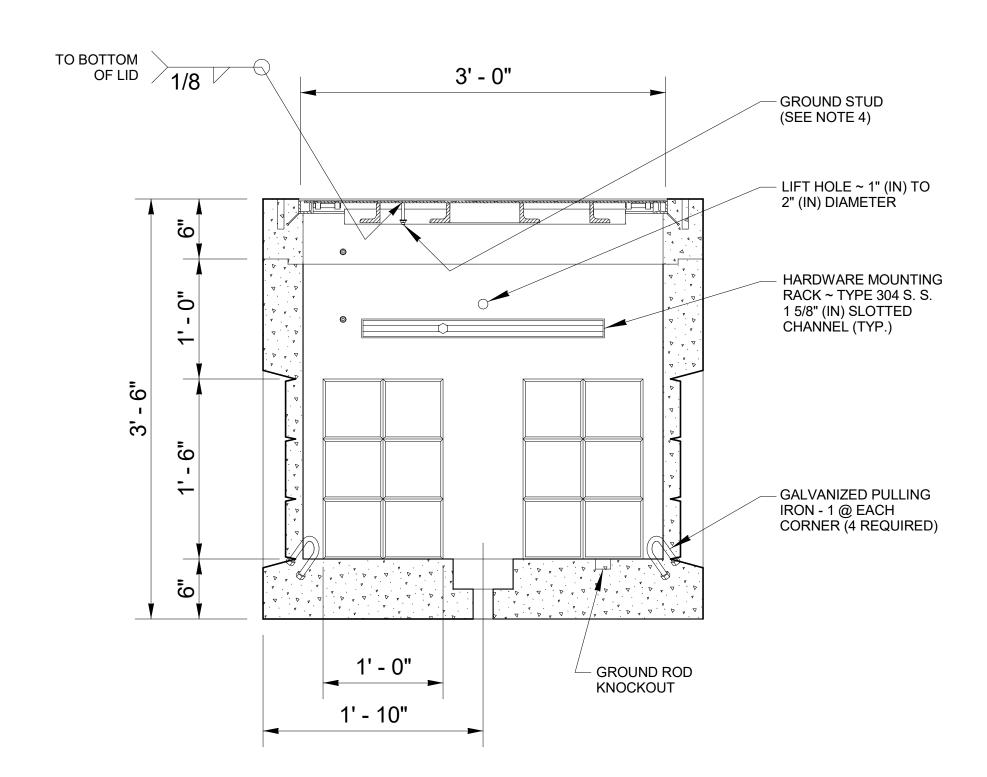
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DETAIL - TELECOM VAULT

T802 SCALE: NONE

NOTES

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- 1. THE HEAVY DUTY LID THICKNESS VARIES BY INSTALLATION TYPE: A.) 9" (IN) FOR ALL NEW INSTALLATIONS B.) 6" (IN) FOR EXISTING BOXES WITH NO ROADWAY OVERLAY C.) SUCH THAT IT IS FLUSH WITH THE SURFACE OF THE NEW OVERLAY, WHEN A NEW OVERLAY IS SPECIFIED
- 2. MINIMUM LID THICKNESS SHOWN. THE DIAMOND PATTERN SHALL BE A MINIMUM OF 3/32" (IN) THICK.
- 3. SLIP-RESISTANT LIDS SHALL BE IDENTIFIED WITH A PERMANENT MARKING ON THE UNDERSIDE OF THE LID, INDICATING THE TYPE OF SURFACE TREATMENT (SEE CONTRACT DOCUMENTS FOR DETAILS) AND THE YEAR OF MANUFACTURE. THE MARKING SHALL USE 1/8" (IN) THICK LINES FORMED WITH A WELD BEAD, AND SHALL BE PLACED PRIOR TO GALVANIZING.
- 4. FOR STANDARD DUTY LIDS, ATTACH A 1/4-20 UNC × 1" (IN) S. S. GROUND STUD, COATED WITH ANTI-SIEZE COMPOUND. FOR HEAVY DUTY LIDS, INSTALL A 1/2-13 UNC × 1 1/4" (IN) S. S. BOLT IN A 5/8" (IN) DIAMETER CORED HOLE IN THE DUCTILÉ IRON LID GUSSET AS A GROÙND STUD. ALL GROUND STUDS SHALL INCLUDE (3) S. S. NUTS AND (2) S. S. FLAT WASHERS. SEE STANDARD PLAN J-90.50 FOR GROUNDING AND BONDING DETAILS.
- 5. THE BONDING JUMPER BETWEEN THE LID AND FRAME SHALL BE #8 AWG (MIN.) X 4' (FT) TINNED BRAIDED
- SYSTEM IDENTIFICATION LETTERS SHALL USE 1/8" (IN) WIDE LINES. COVER MARKING FOR STEEL LIDS SHALL BE FORMED BY CASTING OR WITH A MILD STEEL WÈLD BEAD. COVER MARKING FOR DUCTILE IRON LIDS SHALL BE RECESSED. SEE COVER MARKING DETAIL AND STANDARD SPECIFICATION SECTION 9-29.2(4) FOR ADDITIONAL DETAILS. DUCTILE IRON LIDS SHALL ALSO PROVIDE A MINIMUM 1 1/2" (IN) WIDE X 3 1/2" HIGH X 3/16" (IN) THICK, FLAT AREA FOR LIFTING PURPOSES.
- 7. CEMENT CONCRETE SHALL BE CLASS 4000
- 8. PLASTIC PLUGS SHALL BE PUT INTO THE LID INSERTS AFTER FABRICATION AND THE LID INSTALLATION.
- 9. CONDUIT CAPACITY = 40 INCHES (SUM TOTAL OF ALL CONDUIT DIAMETERS).
- 10. THIS DRAWING DEPICTS A TYPICAL PULL BOX ASSEMBLY. REINFORCING NOT SHOWN. EACH MANUFACTURER'S PULL BOX ASSEMBLY WILL VARY. REFER TO THE APPROVED MANUFACTURER'S SHOP DRAWINGS FOR ALL DIMENSIONS AND THE ACTUAL ARRANGEMENT.
- 11. THE LID IS AN ASSEMBLY CONSISTING OF THE METAL LID AND FRAME, REINFORCING STEEL, BRASS GROUND INSERTS, AND CONCRETE.
- 12. #3 REINFORCING BAR SHALL BE CAPABLE OF BEING BENT OUT OF THE WAY AND RESTORED, TO ALLOW FOR CONDUIT INSTALLATION.





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Patrick D Shannon BICSI ID # 122533

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DETAILS

CITY OF FEDERAL WAY SITE STRUCTURES

FEDERAL WAY, WASHINGTON

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TELECOM ONE-LINE DIAGRAM

CITY OF FEDERAL WAY SITE STRUCTURES

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144-ST SM OFC

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SPLICE IN VAULT

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SPLICE IN VAULT

TELECOM BACKBONE FIBER ONE-LINE DIAGRAM

IDF-E

IDF-D

IDF-C

MDF

T901 SCALE: NONE

SNOW FLEET STORAGE

IDF-F

PARKING LOT LIGHT

POLE

IDF-P01

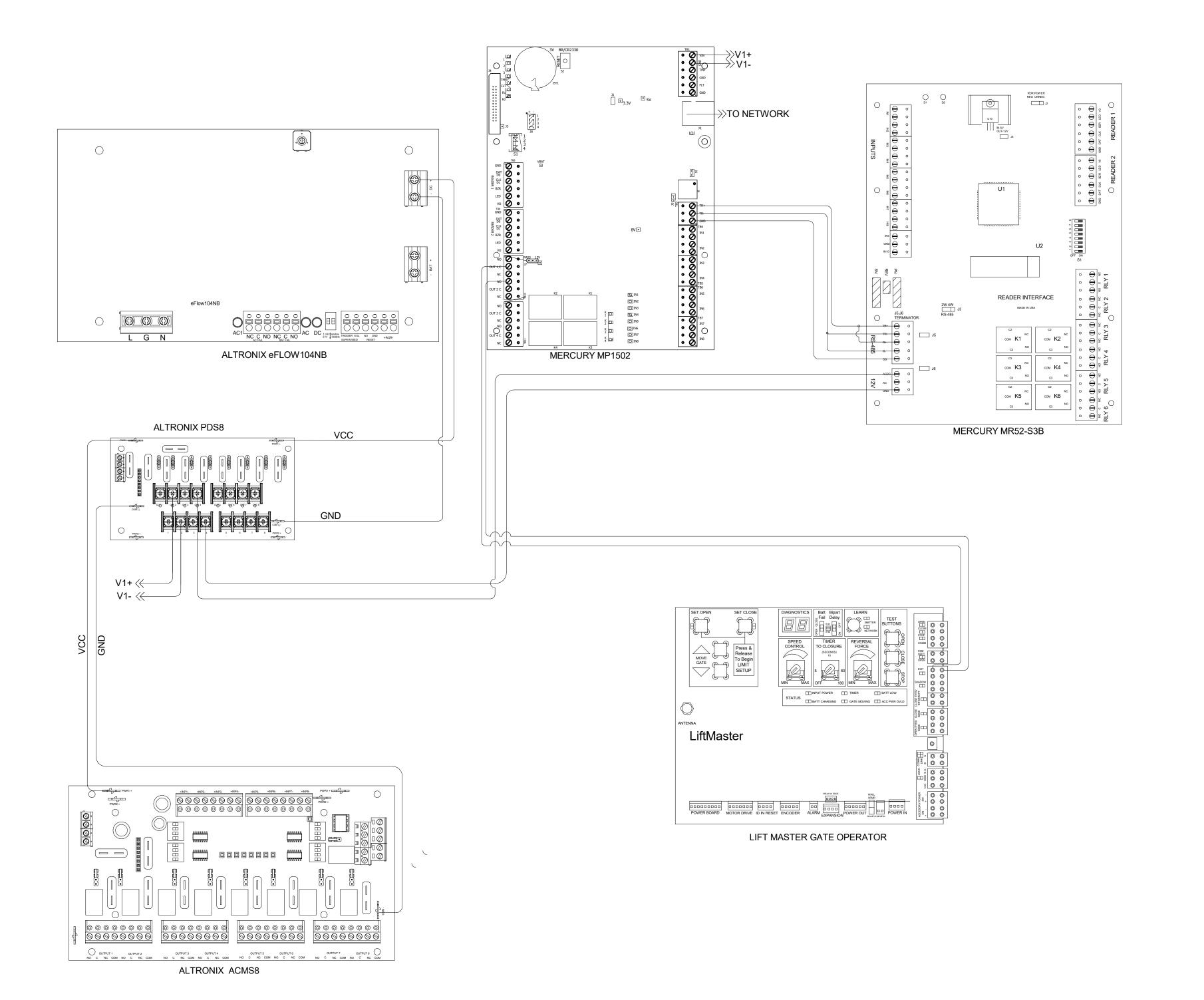
MAINTENANCE BLDG

IDF-B

COVERED SALT BINDS SWAT VEHICLE & GENERATOR STORAGE DEPARTMENT STORAGE OFFICE BLDG

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DETAIL - WIRING DIAGRAM FOR GATE OPERATOR

SHEET NOTES

- 1. CONFIRM AND DOCUMENT SEQUENCE OF OPERATION PRIOR TO START OF WORK AND CONFIRM IT'S MAINTAINED AT THE COMPLETION OF THE PROJECT.
- 2. CABLES DRAWN IN DASHED LINE ARE FOR EQUIPMENT ON THE UNSECURED SIDE OF THE DOOR UNLESS OTHERWISE NOTED.
- 3. DETAIL IS INTENDED TO COVER VARIOUS OPTIONS. WHERE NOT ALL OPTIONS ARE PRESENT, REMOVE THE SCOPE FOR THE OPTIONS NOT PRESENT. LOCATIONS ARE DIAGRAMMATIC.

EXACT LOCATIONS TO BE FIELD COORDINATED.

4. SPARE CABLE/ CONDUCTORS LOCATED IN THE ACCESS CONTROL/ POWER SUPPLY PANELS AND AT DOOR JUNCTION BOXES SHALL NOT BE CUT BACK OR SHORTENED. PROVIDE HEAT SHRINK TUBING AROUND THE END OF THE CABLE JACKET AND HEAT SHRINK TUBING AT THE ENDS OF THE SPARE CONDUCTORS ENCOMPASSING BOTH THE CABLE JACKET AND CONDUCTORS.

FLAG NOTES

1 PROVIDE HEAT SHRINK AT ENDS OF CABLES AND SPARE CONDUCTOR ENDS, SEE NOTE 4 ABOVE FOR ADDITIONAL INFORMATION.



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SECURITY ONE-LINE DIAGRAM

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T902 SCALE: NONE

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PARTIAL SITE
PLAN - VEHICLE
MAINTENANCE
BUILDING AND
FUEL STATION

CITY OF FEDERAL WAY 8 OPERATIONS &
MAINTENANCE
FACILITY

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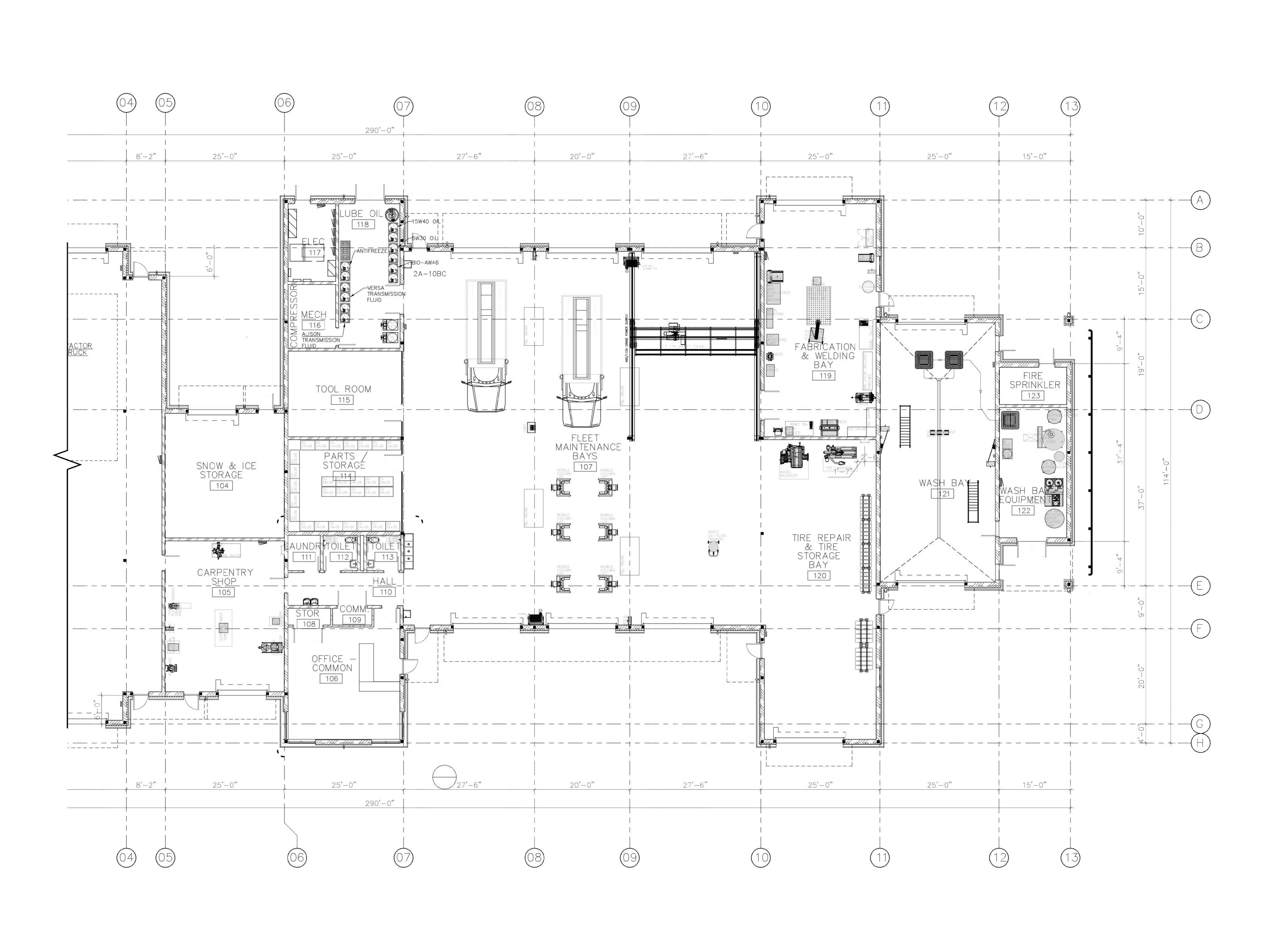
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PARTIAL SITE PLAN - VEHICLE MAINTENANCE BUILDING AND FUEL STATION

1/32" = 1'-0"

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B C D K

VEHICLE MAINTENANCE BUILDING - B2- EQUIPMENT PLAN

1/8" = 1'-0"

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VEHICLE MAINTENANCE BUILDING -EQUIPMENT PLAN

CITY OF
FEDERAL WAY
OPERATIONS &
MAINTENANCE
FACILITY

revision	DAT

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EQUIPMENT LEGEND

BUILDING 2 MAINTENANCE BAY

(MB-01) WALL MOUNTED EXHAUST REEL SET WITH FAN, QTY=2

 $\overline{MB-02}$ AIR HOSE REEL, QTY=2

(MB-03) MOBILE COLUMN LIFT, QTY=6

(MB-04) WASTE OIL-FLUID DRAINER, QTY=1

MB-05 2 TON HEAVY DUTY WORK BENCH, QTY= 4

MB-06 MECHANIC COMPUTER STATION, QTY=1

(MB-07) 5 TON OVERHEAD BRIDGE CRANE, QTY=1

SYMBOL LEGEND

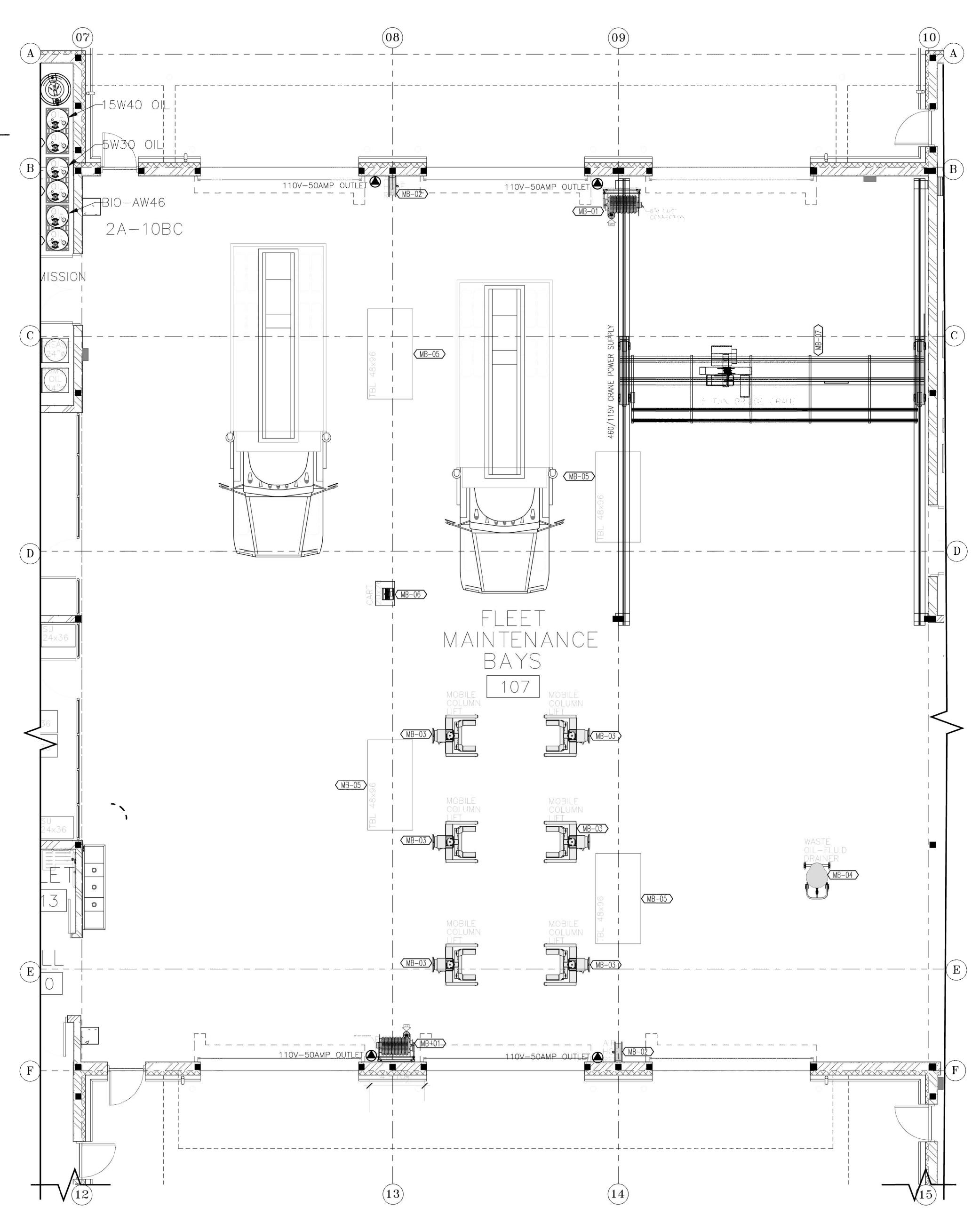
EQUIPMENT

□ STORAGE CART

□ WASTE/RECYCLE BIN

(XX-XX) EQUIPMENT I.D TAG

'X' POWER DROP
('X' = VOLTS/PHASE, AMPS)







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VEHICLE MAINTENANCE BAYS - DETAILS

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

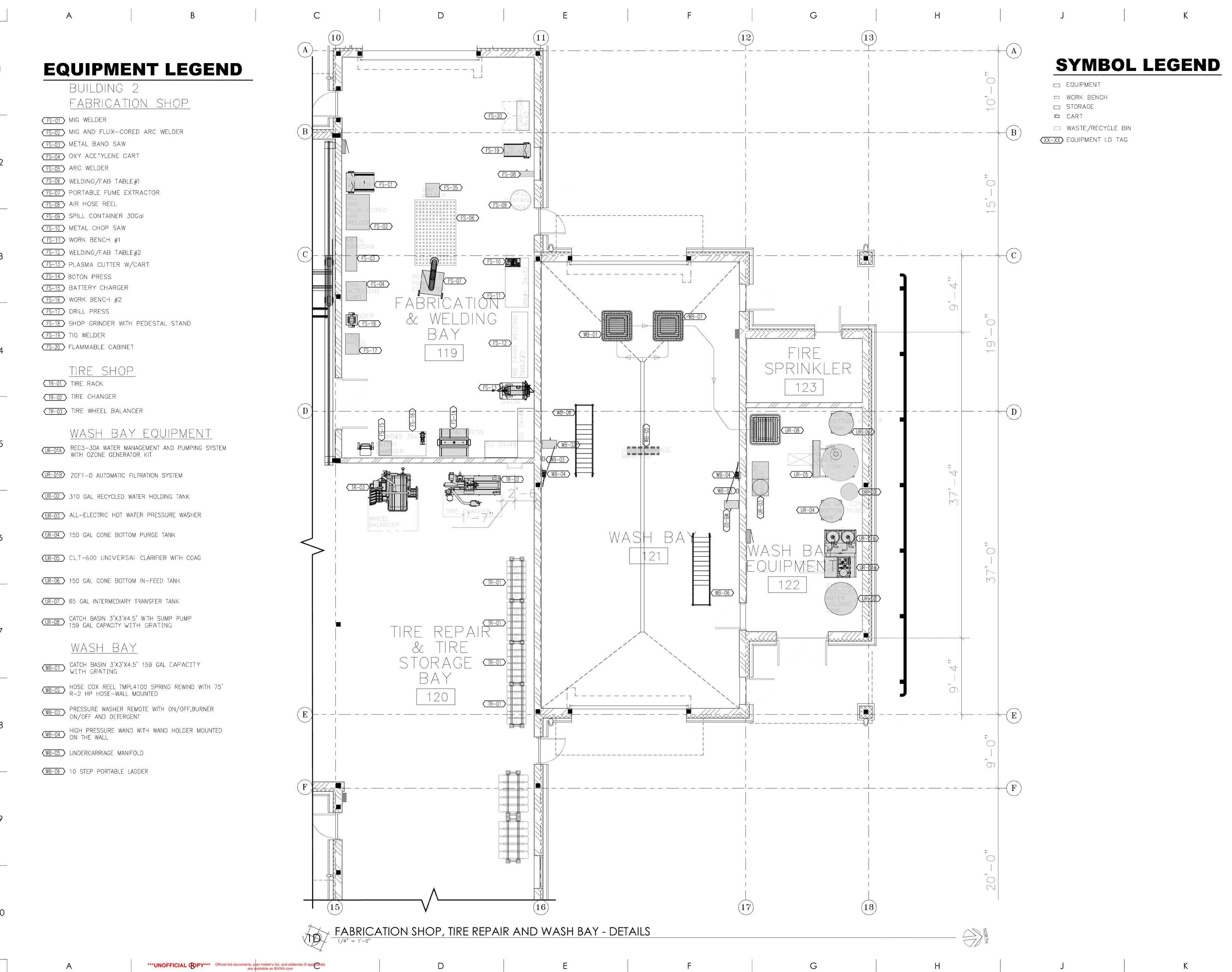
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VEHICLE MAINTENANCE BAYS - DETAILS

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FABRICATION
7 SHOP, TIRE REPAIR
AND WASH BAY DETAILS

CITY OF
FEDERAL WAY
OPERATIONS &
MAINTENANCE
FACILITY

FEDERAL WAY, WASHINGTON

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EQUIPMENT LEGEND

BUILDING 2

LUBE ROOM

(LR-01) 100GAL WASTE OIL TANK

(LR-02a) 55 GAL. DRUM WITH ELECTRIC PUMPS - 15W40

(LR-02b) 55 GAL. DRUM WITH ELECTRIC PUMPS - 5W30

(LR-02c) 55 GAL. DRUM WITH ELECTRIC PUMPS - Bio AW46 (LR-03) 55 GAL. DRUM WITH ELECTRIC PUMPS - ANTIFREEZE

(LR-040) 55 GAL. DRUM WITH ELECTRIC PUMPS- VERSA TRANSMISSION FLUID

(LR-04b) 55 GAL. DRUM WITH ELECTRIC PUMPS-ALISON TRANSMISSION FLUID

(LR-05a) LUBE TROLLEY SET-85M90 OIL

(LR-05b) LUBE TROLLEY SET-GREASE

(LR-06) SPILL CONTAINMENT PALLET

CARPENTRY SHOP

(CS-01) TABLE SAW

(CS-02) BAND SAW

(CS-03) MITER SAW

(CS-04) DISK SANDER

(CS-05) DRILL PRESS (CS-06) SHOP-VAC

(CS-07) CYCLONE DUST COLLECTOR

(CS-08) AIR HOSE REEL

(CS-09) WORK BENCH

SYMBOL LEGEND

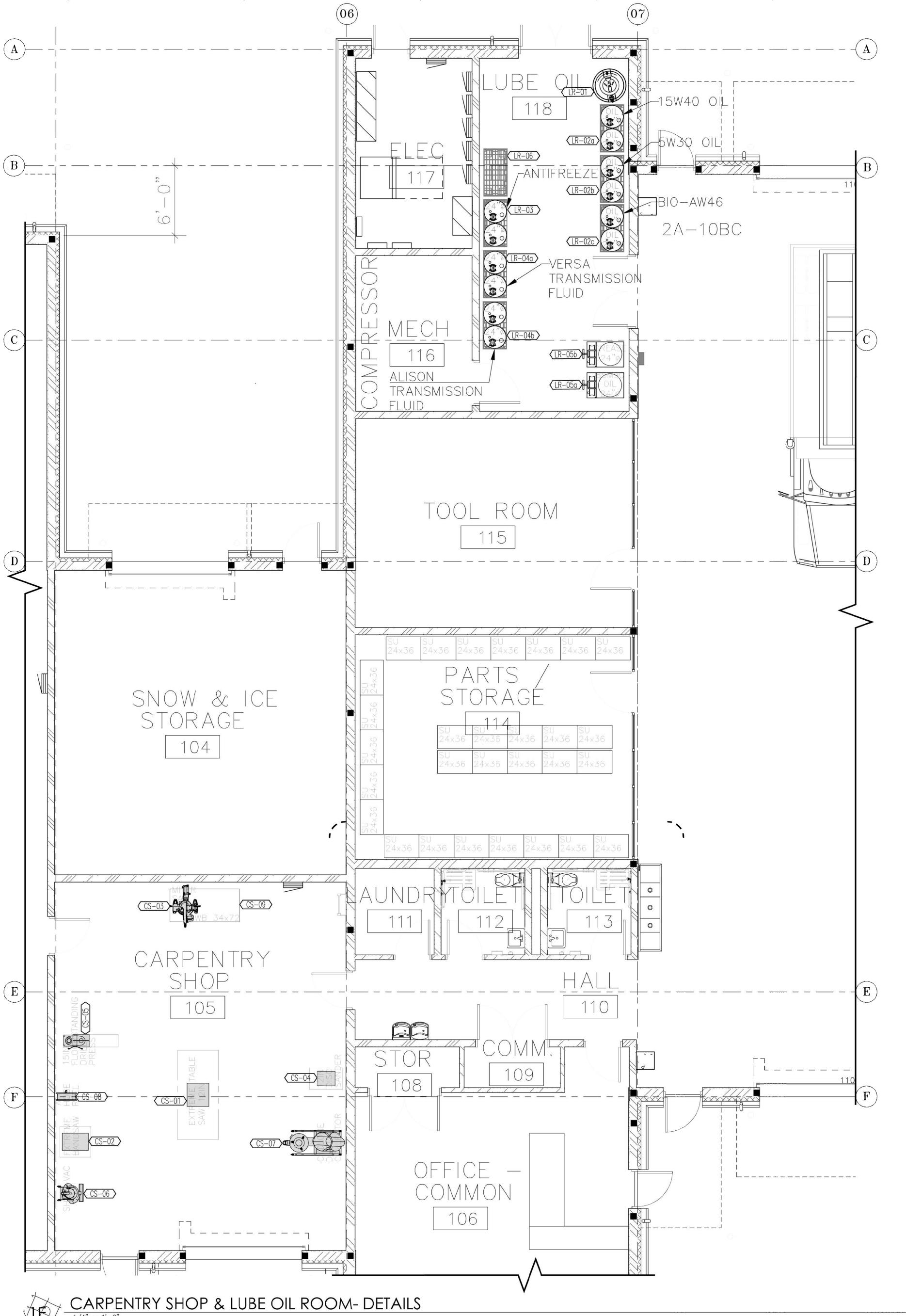
EQUIPMENT

□ WORK BENCH ☐ STORAGE

□ CART

□ WASTE/RECYCLE BIN

(XX-XX) EQUIPMENT I.D TAG







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CARPENTRY SHOP & LUBE ROOM-**DETAILS**

CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

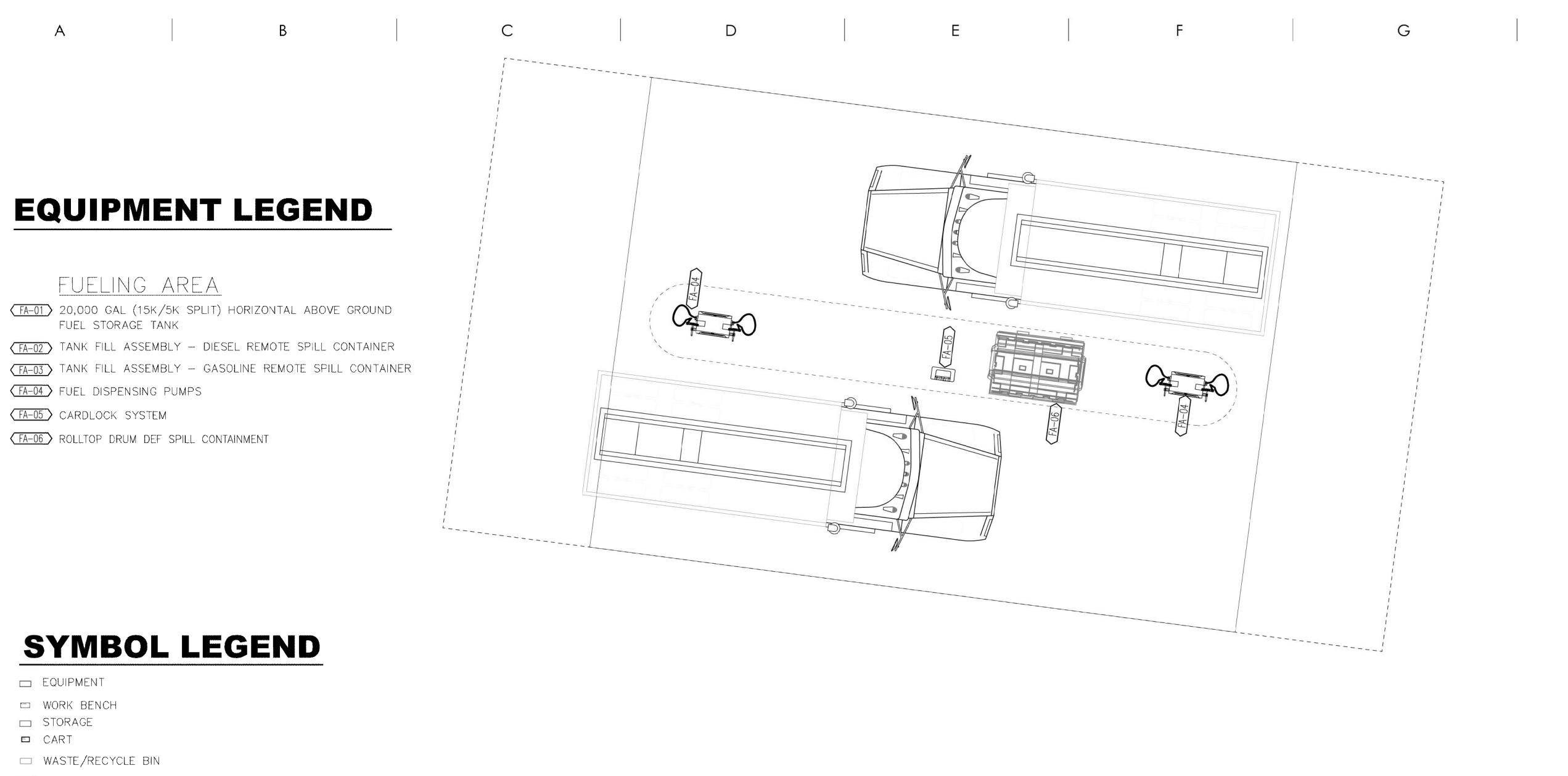
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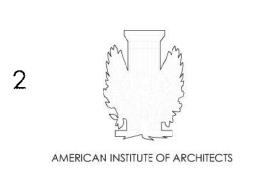
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FUEL STATION 7 TANKER AND DISPENSING EQUIPMENT PLAN

> CITY OF FEDERAL WAY **OPERATIONS &** MAINTENANCE **FACILITY**

FEDERAL WAY, WASHINGTON

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FUEL STATION TANKER AND DISPENSING EQUIPMENT PLAN

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FUELING AREA

FA-06 ROLLTOP DRUM DEF SPILL CONTAINMENT

(FA-04) FUEL DISPENSING PUMPS

(FA-05) CARDLOCK SYSTEM

EQUIPMENT

□ STORAGE

□ WORK BENCH

□ WASTE/RECYCLE BIN

(XX-XX) EQUIPMENT I.D TAG

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EDERAL WAY FLEET MAIN	TENANCE FACILIT	Y			Equ	ipme	nt Sc	hedule / Ut	ility Requ	irements	FEDERAL WAY FLEET MAIN	NTENANCE FACILIT	Y			Equ	ipme	nt Scl	nedule	∍ / Utilit	ty Requ	irements
le b. I.D. Tag Equipment Name	Manufacturer/Model#	Qty. New		Contr.	Volts	Electrical sdwA	Type	Comp. Air Vacuum Vent/ Exh. Dust Coll.	Nitrogen H ₂ O Drain Veight (lbs.)	Comments	Line No. I.D. Tag Equipment Name	Manufacturer/Model#	Qty. New	Surplus Own	er Contr.	Volts	Sdu V	Type	Comp. Air	Vent/ Exh. Dust Coll. Nitrogen	H ₂ O Drain Weight (lbs.)	Comments
MAINTENANCE BUILDING - WASH BA	AY EQUIPMENT (UTILITY) R	OOM					8				5 FABRICATION/WELDING BAY CONT	T						0				
Manual Wash Equipment			17.								FS-09 Spill Container	ENPAC / 30 Gallon Spill Kit Universal	1 🗸	✓								
REC3-30A Water Management and Pumping System	WaterMaze / REC3-30A	1 ./			230 1	20 H	lord Wirod		v v	1.5 HP self-priming pump transfer rate up to 30 GPM and up to 40 PSI.	FS-10 Metal Chop Saw	Max Tool/JET 707212 12 Inch Sliding Dual	1 1			115 1	15 15	iA Plugin		· · · · · · · · · · · · · · · · · · ·		
with Ozone Generator Kit	Waterwaze / RECS-30A			Y	230 1	20 F	iard wired		r	10GPM @ 10 Micron Filtration	FS-11 Work Bench #1	Bevel Compound Miter Saw									<u> </u>	
UR-01 ZCF1-D Automatic Filtration System-Filtration rate <10GPM	WaterMaze / ZCF1-D	1 🗸		✓	120 1	5 H	lard Wired			Flow up to 30 GPM	1920 St. 10 000-0000000000000000000000000000000	Durham Mfg. / DWB-3672-95 Global Industrial/Built Systems Welding Table,	1 🗸	V								
UR-02 310 GAL Recycled water Holding Tank	WaterMaze	1 🗸		✓							FS-12 Welding/ Fab Table #2	94"W x 46"D, 3500 lb Capacity, Black - WRB2180996	1 🗸	✓								*Power consumption :0.3W (Standby)
UR-03 All-Electric Hot Water Pressure Washer	Landa / EHW4-20024C	1 🗸		✓	460 3	59 H	lard Wired			3.5 gpm; 3000 PSI , 7.5 HP motor 40.5KW	FS-13 Plasma Cutter with Cart	Welding Supplies IOC/Miller Multimatic 220				240 1	Plug	Iti-Voltage (MVP) for				
UR-04 150 Gal Cone Bottom Purge Tank	WaterMaze	1 🗸		✓							F5-13 Plasma Cutter with Cart	AC/DC / Spectrum 375 X-Treme				240 1		/ and 240 V //A Type 6- 50P				
UR-05 CLT-600 Universal Clarifier With Coag	WaterMaze	1 🗸		✓		Н	lard Wired				FS-14 75 Ton Hydraulic Press	Baleigh industrial / WRB3055673	1 🗸	/					Y	The state of the s		Require 90 - 115 PSI compressed air
Belt-Mop skimmer w/ oil decanter	,				120 1	9				Separate 120V circuit required	FS-15 Manual Battery Charger/ Engine Starter	Northern Tool / Schumacher Wheeled Manua	1 1			120 1	12.5	/ Grounded				
AMC-1000D Auto-purge System UV Ozone system with circulation pump and times					120 1 120 1	9		Y		Compressed Air requirement : 4cfm@85psi		Battery Charger/Engine Starter/ SC1437				120	12.5	Outlet				
pH Controller system					120 1	3					FS-16 Work Bench #2	Durham Mfg. / DWB-3672-95	1 🗸	✓				an suche neur suchaan sues (neur s				
Integrated Chemical Coagulation /Flocculation system					120 1	10					FS-17 Drill Press	Global Industrial/Jet 354170 JDP-20MF 20" Floor Drill Press Jet	1 🗸	✓		115 1	15 Ha	ard Wired				
UR-06 150 Gal Cone Bottom In-Feed Tank	WaterMaze	1 🗸		✓		10					FS-18 Shop Grinder with Pedestal Stand	Northern Tool Equipment/JET Benchtop Shor Grinder with Stand — 8in. Dia. Wheel, Mode#		│		115 1	15					
UR-07 65 Gal Intermediary Transfer Tank	WaterMaze	1 🗸		✓							FS-19 Tig Welder	JBG-8A/JPS-2A Global Industrial - 180 ST Stick TIG Welder	1 1			240 1						Recommended 50A time-delay (slow-blow) breaker
UR-08 159 Gal Fiberglass Catch Basin 3'x3'x4.5' With Sump Pump and Grating	WaterMaze	1 🗸		✓							1 G-18 Fig vvelue!	Machine - Model# WRB3160013	V			240 1						necommended SUA unite-delay (Slow-blow) breaker
MAINTENANCE BUILDING - WASH BA	ΔΥ										FS-20 Flammable Cabinet	Global Industrial - Double Door Manual close 60 Gallon - 34"x34", Model WB237289	1 🗸	│								
Wash Bay Equipment											6 MAINTENANCE BUILDING - LUBE O	DIL			- t-							
150 Cal Fiberaless Catab. Basin (Bit) 21x21x4 51 With	WaterMaze	2 🗸		/	on demonstration facilities of the						LR-01 100Gal Chem-Tainer Waste Oil Tank	National Tank Outlet/ TC3541DC	1 🗸		✓							
WB-02 Grating WB-02 Hose Cox Reel TMPL4100 Spring Rewind with 75' R-2 HP Hose		-									LR-02a	Uline/Electric Drum Pump for Bio-AW46,								i		
		2 🗸		v							LR-02b Electric Drum Pumps for 55 Gal Oil Drum LR-02c	15w40 and 5w30 Engine oil./ H-6501	3 🗸		*	115 1	13.2	iA Plugin				1.5 HP motor for Oil, antifreeze and adhesive
WB-03 Pressure Washer Remote with ON/OFF, Burner ON/OFF and Detergent	WaterMaze	2 🗸		~							LD 00 Floatio Davis Davis for FF Col Artifornia Davis	Uline/Electric Drum Pump for Antifreeze/ H-				445	42.2	A Diversion		ĺ		
WB-04 High Pressure Wand with Wand Holder mounted on the Wall	WaterMaze	2		✓							LR-03 Electric Drum Pumps for 55 Gal Antifreeze Drum	4933				115 1	13.2 1	A Plugin				
SS 1/2" Tubing 0.065 Wall and others	WaterMaze	1 🗸		✓							LR-04a Electric Drum Pumps for 55Gal Versa Trans. Fluid Drum	Drum/ H-6501	1 🗸		✓	115 1	13.2	iA Plugin				
WB-05 Undercarriage Manifold wash system	AMB Tools and Equipment/ Belanger	1 🗸		✓	208 3	25 H	lard Wired		YY	3 Phase 15HP 300 PSI Wash Down Pump	LR-04b Electric Drum Pumps for 55Gal Alison Trans. Fluid Drum	Uline/Electric Drum Pump for Versa Fluid Drum/ H-6501	1 🗸		✓	115 1	13.2	iA Plugin				
WB-06 10 Step Portable Ladder	Uline/H-5230-20	2 🗸	/								LR-05a Oil Lube Trolley Set	Wiley Equipment Company/ Alemite/Oil Trolley Package/343509	1 🗸		✓							
Installation cost (Estimated)											LR-05b Grease Lube Trolley Set	Wiley Equipment Company/ Alemite/Grease Trolley Package/343510	1 🗸		✓							
MAINTENANCE BUILDING - TIRE REI	PAIR/TIRE STORAGE										LR-06 Spill Containment Pallet - 2 Drum	Global Industrial/ WR988952	7 🗸	V								
TR-01 Tire Rack	Global Industrial/Heavy Duty Tire Rack	4	/								7 MAINTENANCE BUILDING - CARPE	NTRY SHOP						I				
TR-02 Tire Changer	Hunter Engineering Company / TCX625PHD	1 ./			208 1	20 NE	MA 16 20D				CS-01 Table Saw	Grizzly Industrial Inc./ 12" 5 HP 220V Extreme Table Saw/ Model: Grizzly G0605X1	1 🗸	✓		220 1		MA L6-30 A Plugin				
				V		NE	MA L6-20P			Air Suppl y requirements: 100-175 psi (7-12 bar)		Grizzly Industrial Inc./17" 2 HP Extreme-Series					30	A Plugin				
TR-03 Tire Wheel Balancer	Hunter Engineering Company / HDE33	1 /		✓	208 1	10	plug	Y		Approximate Air Consumption : 4 CFM	CS-02 Bandsaw with Cast-Iron Trunnion & Foot Brake	Bandsaw with Cast-Iron Trunnion & Foot Brake/ Model: Grizzly G0513X2F	1 🗸	✓		110/220 1		@110V Plugin @ 220v				
MAINTENANCE BUILDING - FLEET M	1					44					CS-03 12" Sliding Dual Bevel Compound Miter Saw	Global Industrial/JET JMS-12X / Model #: WRB2836505	1 🗸	✓		115 1	15 19	iA Plugin		İ		
	John Dow Industries/Eurovent Vehicle Exhaust Extraction/Model: CAR-ALU-HD-6 for Fixed Hose Reel and AF-12 for Exhaust	2 🗸		✓	460 3	(FLA) H	lard Wired			0.5 HP, 525CFM Exhaust Fan	CS-04 12" Disc Sander with Open Stand	Global Industrial/ JET JSG-6DCK / Model #: WRB57972	1 🗸	 		115/230 1	11 15	A Plugin				
	Fan Global Industrial/Spring Retractable Steel					(LRA)	an motory				CS-05 15" Floor standing Drill Press	Max Tool/ Jet JDP-15F 15-Inch Belt Tensioning Depth Floor standing Drill Press -	1 🗸	✓		115 1	3/18 15	A Plugin		1		
MB-02 Air Hose Reel	Hose Reel w/ 3/8" x 25'L Hose, 300 PSI/	2 🗸		✓				Y		3/8" x 25'L Hose, 300 PSI Motor rating: 2.2 / 3.0 kW per column (Cabled /		Model: 716250 Vacmaster Professional/ 14-GALLON* 6.5 PEAK HP STAINLESS STEEL WET/DRY										
MB-03 Mobile Columns (wheel) Lift	Stertil Koni / ST 1085	6	✓		208 1	2	208 V wall socket	Y		Wireless. 230 V wall socket for wireless and 400 V supply for cabled.	CS-06 14 Gallon Shop Vacuum, Wet/Dry	VACUUM BEAST SERIES/ Model: VJE1412SW0201	1 🗸			120 1	11 15	A Plugin				
MB-04 Waste Oil-Fluid Drainer	Graco / 26C064	1 🗸								supply for cabled.	CS-07 Cyclone Dust Collector	Northern Tool Equipment/JET Cyclone Dust Collector,2HP,230Volt,938CFM	1 🗸			250/230 1	9/27 15	A Plugin				
MB-05 2 ton Heavy Duty Work Bench	Grainger/Durham Mfg. Workbench / HDWB-	4	/									Model# JCDC-2 Global Industrial/Spring Retractable Steel							V			
MB-06 Mechanic Computer Station/ Mobile Computer Cabinet	3672-95, (72Dx36Wx36H)	1 /			120 1	15 1	54 Plugin				CS-08 Air Hose Reel	Hose Reel w/ 3/8" x 25'L Hose, 300 PSI/	1 V		Y				Y			
				32						Nominal power of crane: 8.8 HP, Main voltage 460V and	CS-09 Work Bench	Durham Mfg. / DWB-3672-95		_								
MB-07 5 ton Bridge Crane	Washington Crane and Hoist/ 5T-SGTR-25	1 🗸		✓	460 3	52.9 H	lard Wired			Control voltage 115V - (Alternative - Not to be supplied at project initial phase)	8 FUEL STATION TANKER AND DISPE	ENSING - FUEL ISLAND			1							- 2-HP Relay for Submersible Turbine Pumps
MAINTENANCE BUILDING - FABRICA	TION/WELDING BAY										20,000 Gal (15K/5K Split) Horizontal Above Ground FA-01 Fuel Storage Tank, Tank Venting, Tank Gauging,	Shields Harper / Regal Tanks USA inc.	1 1			220 1	30 Ha	ard Mirod				- 120 Volts AC for Solenoid Valve - STP-CBS, single-phase control box with switch and
FS-01 Mig Welder	Welding Supplies IOC/Miller / Millermatic 252	1 🗸	/		208 1	68 N	EMA 6-50P				Decals, Tank Monitoring and Turbine Assembly		1 •			220 1	30 H	ira vvirea				lockout, 120 volt coil - Automatic Tank gauge system power requirement:
FS-02 Mig and flux-cored Arc Welder	Grainger/Miller Maxstar 161S / Electric Stick Welder/907709	1 🗸			240 1	22.5 NE	MA 14-50P				EA 02 Took Fill Assessed Disease Disea	Shields Harper /Morrison Bros. Co.	4 /									power supply 100-249 VAC, 50/60Hz, 2A max
FS-03 Metal Band Saw	Global Industrial/Jet 714400K / JW BS-14SFX - 14" steel frame Bandsaw	1 🗸	/	==100	208 1	20 H	lard Wired	Y		Dust Collection minimum 350 CFM required	FA-02 Tank Fill Assembly - Diesel Remote Spill container	Shielda Harner /Marrison Proc. Co.	1 🗸		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							
FS-04 Oxy/Acetylene Cart	Grainger/Firewall Welding Cylinder Hand	1 🗸									FA-03 Tank Fill Assembly - Gasoline Remote Spill container	Shields Harper /Wayne Fueling Systems LLC,	1 1									MA-1105
	Truck/ 871-16FW-LE						ulti-Voltage				FA-04 Fuel Dispensing Pumps	Model: 3G7203D/29G-JKUY1	2 🗸		✓	240	Ha	ard Wired				Motor: 1-HP continuous duty with thermal overload protection
FS-05 Arc Welder	Welding Supplies IOC/Miller / Syncrowave 210	1 🗸			240 1	20 120	ig (MVP) for V and 240 V				FA-05 Cardlock System	Shields Harper /Syn-Tech Systems, Inc Fuel Master	1 🗸		✓	120	15 Ha	ard Wired	Y			
						NE	MA Type 5- 20P				FA-06a Rolltop DRUM - DEF Spill Containment	Grainger/Rolltop Drum Spill Containment	1 🗸								Y	
FS-06 Welding/ Fab Table #1	Global Industrial/Built Systems Welding Table, 94"W x 46"D, 3500 lb Capacity, Black -	1 🗸								*Power consumption :0.3W (Standby)	FA-06b DEF Transfer Pump System 55 Gallon	system for 2 Drums / 9613 Basco	1 1			110	15 1	iA Plugin				
FO 07 M-17 /D-1111 / D-1111 /	WRB2180996				400		3 w/plug SJT			A D-41-A	Piping and Underground Equipment with optional	Shields Harper /NOV Fiber Glass Systems -					.0 13					
FS-07 Mobile (Portable) Weld Fume Extractor	Welding Supplies IOC/Miller Fitair MWX D	7 /			120 1		ISVAC 15A dicated outlet	Y		Accu-Rated Airflow: 875 CFM	Factory AIM Training - Lump Sum	Red Thread IIA	1 🗸									
FS-08 Air Hose Reel	Global Industrial/Spring Retractable Steel Hose Reel w/ 3/8" x 25'L Hose, 300 PSI/	1 🗸		✓				Y			AIM Training 1-2 days/3-5 vehicles		manganorateng, berhang V V (1999)		✓		Managanian managan Pilipinganian Ti		values of Landscattering of Patrick and Association	emontones materia, 4.33 (A.Sair. Solida and and an analysis of the solida analysis of the solida analysis of the solida and an	annues Proposition Laboratorius Prop	

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EQUIPMENT SCHEDULE

3/8" = 1'-0"

Helix design group



HELIX DESIGN GROUP, INC

EQUIPMENT SCHEDULE

CITY OF FEDERAL WAY OPERATIONS & MAINTENANCE **FACILITY**

revision	
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DATE JOB NO. a23-087 05.06.24

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