# UO HOUSING CENTRAL KITCHEN & WOODSHOP

# EUGENE, OR

# 11/7/2014 - GMP CONFORMED SET

# GENERAL NOTES

- 1. SURVEY PROVIDED BY FORD & ASSOCIATES, DATED 6/3/13. ELEVATIONS ARE BASED ON EUGENE NGVD29 VERTICAL DATUM ESTABLISHED PER BENCH MARK NO. 449B1903 LOCATED AT THE NORTHEAST CORNER OF VILLARD HALL, IN THE NORTH FACE OF THE BUILDING, 2 INCHES BELOW THE DATE 1885 WITH AN ELEVATION OF 449.320.
- 2. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR, 1/2 REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
- 3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING CONSTRUCTION LAYOUT. SEE SHEET C2.0 FOR PROJECT
- 4. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING
- 5. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF RECORD IMMEDIATELY UPON DISCOVERY.
- 6. BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
- 7. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTS DAMAGED OR REMOVED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A
- 8. SOME SITE DEMOLITION AND UTILITY RELOCATION HAS BEEN PERFORMED. SURVEY MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- 9. CONTRACTOR TO REFERENCE GEOTECHNICAL INVESTIGATION BY GRI DATED JUNE 11, 2013 FOR THE SITE SOILS CONDITIONS.
- 10. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2008 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2011 OREGON PLUMBING SPECIALTY CODE, AND REQUIREMENTS OF THE CITY OF EUGENE.
- 11. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING
- 12. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY LOCATED.
- 13. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF KPFF CONSULTING ENGINEERS, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
- 14. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
- 15. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO CITY OF CITY OF EUGENE AND 1200-CN PERMIT FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING DUST CONTROL AS REQUIRED.
- 17. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO CITY OF EUGENE AND UNIVERSITY OF OREGON FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION.
- 18. CONTRACTOR SHALL MAINTAIN ALL UTILITIES SERVING THE UNIVERSITY OF OREGON AT ALL TIMES DURING CONSTRUCTION.
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.
- 20. NOTIFY EUGENE INSPECTOR 72 HOURS BEFORE STARTING WORK. A PRECONSTRUCTION MEETING WITH THE OWNER, THE OWNER'S ENGINEER, CONTRACTOR AND THE CITY OF EUGENE REPRESENTATIVE SHALL BE REQUIRED.

# CONSTRUCTION NOTES

# <u>DEMOLITION</u>

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN
- 2. EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
- 3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND DELIVERED STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
- 4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL

5. CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REMOVED TO THE NEAREST

EXISTING CONSTRUCTION JOINT. 6. SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND

- ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
- 2. CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS, UNLESS CONFLICT IS WITH NATURAL GAS. CONTACT NWNATURAL TO ADJUST ANY GAS LINES.
- 3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE
- 4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.

# STORM AND SANITARY

- CONNECTIONS TO EXISTING STORM AND SANITARY SEWERS SHALL CONFORM TO THE 2008 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 00490, "WORK ON EXISTING SEWERS AND STRUCTURES".
- 2. BEGIN LAYING STORM DRAIN AND SANITARY SEWER PIPE AT THE LOW POINT OF THE SYSTEM, TRUE TO GRADE AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. THE CONTRACTOR SHALL ESTABLISH LINE AND GRADE FOR THE STORM AND SANITARY SEWER PIPE USING A LASER.
- 3. ALL ROOF DRAIN AND CATCH BASIN LEADERS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT UNLESS NOTED OTHERWISE IN THE PLANS.
- 1. ALL WATER AND FIRE PROTECTION PIPE SHALL HAVE A MINIMUM 36-INCH COVER TO THE FINISH GRADE.
- 2. ALL WATER AND FIRE PRESSURE FITTINGS SHALL BE PROPERLY RESTRAINED WITH THRUST BLOCKS PER DETAIL.
- 3. ALL WATER MAIN / SANITARY SEWER CROSSINGS SHALL CONFORM TO THE OREGON STATE HEALTH DEPARTMENT REGULATIONS, CHAPTER 333.
- 1. CONTRACTOR SHALL PREVENT SEDIMENTS AND SEDIMENT LADEN WATER FROM ENTERING THE STORM DRAINAGE SYSTEM.
- 2. TRENCH BEDDING AND BACKFILL SHALL BE AS SHOWN ON THE PIPE BEDDING AND BACKFILL DETAIL, THE PROJECT SPECIFICATIONS AND AS REQUIRED IN THE SOILS REPORT. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER WILL NOT BE

# ABBREVIATIONS

NORTHING

OUTSIDE DIAMETER

νC	ASPHALT CONCRETE	OVH/OH	OVERHEAD
۷D	ASPHALT CONCRETE AREA DRAIN	P/I	PROPERTY LINE
PPROX	APPROXIMATE	PC PC	POINT OF CURVATURE
}	BOLLARD	PCC	POINT OF COMPOUND CURVATURE
LDG	BUILDING	PCR	POINT OF CURB RETURN
OW	BACK OF WALK	PFD	PEDESTRIAN
S	BOTTOM OF SWALE	PIV	POST INDICATOR VALVE
	BOTTOM OF STAIR	PM	PARKING METER
:W	BOTTOM OF WALL	POC	PROPERTY LINE POINT OF CURVATURE POINT OF COMPOUND CURVATURE POINT OF CURB RETURN PEDESTRIAN POST INDICATOR VALVE PARKING METER POINT ON CURVE
B	CATCH BASIN	PP	POINT ON CORVE POWER POLE POINT OF REVERSE CURVATURE POINT OF TANGENT PUBLIC UTILITY EASEMENT
:L	CENTERLINE	PRC	POINT OF REVERSE CURVATURE
MP .	CORRUGATED METAL PIPE CONCRETE MASONRY UNIT CLEANOUT	PT	POINT OF TANGENT
:MU	CONCRETE MASONRY UNIT	P.U.E	PUBLIC UTILITY EASEMENT
O	CLEANOUT	PVC	POLYVINYL CHLORIDE
ONC.	CONCRETE	PVMT	PAVEMENT
OTG	CONCRETE MASONRY UNIT CLEANOUT CONCRETE CLEANOUT TO GRADE CONTROL POINT DELTA	PVT	PRIVATE
P	CONTROL POINT	R	RIM
	DELTA	RD	ROOF DRAIN
' / VV	DRIVEWAY	R.O.W	ROOF DRAIN RIGHT—OF—WAY SLOPE (FT/FT)
IA.,Ø	DIAMETER	S	SLOPE (FT/FT)
IP .	DUCTILE IRON PIPE	SD	STORM DRAIN
	EASTING	SDMH	STORM DRAIN MANHOLF
XIST./EX	EXISTING FIRE DEPARTMENT CONNECTION FINISH FLOOR ELEVATION	SHT	STORM DRAIN MANHOLE SHEET
DC .	FIRE DEPARTMENT CONNECTION	22	CANITARY CEWER
F	FINISH FLOOR ELEVATION	SSMH	SANITARY SEWER MANHOLE STREET
G	FINISH GRADE	ST	STREET
Ή	FIRE HYDRANT	STA	STATION
L	FLOWLINE	STD	STANDARD
ND	FOUNDATION	S/W	SIDEWALK
;	GUTTER	TĆ	TOP OF CURB
B	GRADE BREAK	TD	TRENCH DRAIN
iL .	GAS LINE	TG	TOP OF GROUND
SV	GATE VALVE	TP	TOP OF PAVEMENT
	HEIGHT	TRANS.	TRANSFORMER
ICP	HANDICAP PARKING SPACE	TS	TOP OF STAIR
IP	HIGH POINT	TW	TOP OF WALL
<u>)</u>	INSIDE DIAMETER		TOP OF WALK
		TYP	TYPICAL
17	INVERT	UG	UNDERGROUND
R.	IRRIGATION	UGE	UNDERGROUND ELECTRIC
Ρ	LIGHT POLE	W	WATER
1H	MANHOLE	W/	WITH
IIN	MINIMUM	WCR	WHEEL CHAIR RAMP
	NORTHING		WATER METER

WATER METER

WATER VALVE

# LOCAL LITHITY CONTACTS

LOCAL UTILITY CONTACTS							
	UTILITY	COMPANY/CONTACT	PHONE NUMBER				
•	WATER	EWEB/CHRIS BIGELOW	(541) 685-7353				
•	SEWER	CITY OF EUGENE	(541) 682-5291				
•	GAS	NW NATURAL GAS	(541) 342-3661				
•	ELECTRIC	EWEB/RICH DELUNA	(541) 685-7148				
•	TELEPHONE	CENTURY LINK/JODY KALDHAL	(541) 484-7796				

# **VEGETATED STORMWATER FACILITY NOTI**

SUCCESSFUL CONSTRUCTION OF THE VEGETATED STORMWATER FACILITY DEPEND ON PROPER CONSTRUCTION SEQUENCING, MATERIALS, INSTALLATION, PROTECTION OF SUBGRADE AND EROSION CONTROL.

CONTRACTOR SHALL SETUP A PRE-CONSTRUCTION MEETING WITH CIVIL ENGINEER TO SPECIFICALLY DISCUSS THESE ITEMS. CONTACT ANNA BACKUS WITH KPFF CONSULTING ENGINEERS 541-684-4902.

SUBMITTAL REQUIREMENT: SUBMIT (1) 2 GALLON SAMPLE OF GROWING MEDIUM THAT MEETS THE SOIL SPECIFICATION FOR INFILTRATION TESTING BY KPFF FOR APPROVAL. CONTRACTOR TO PERFORM INFILTRATION TESTS ON COMPLETED STORMWATER FACILITIES. KPFF TO BE INFORMED OF THE TESTING SO THAT THEY MAY OBSERVE IT. PROVIDE TEST RESULTS TO KPFF PRIOR TO PUNCH-LIST WALKTHROUGH. THE FACILITIES WILL NOT BE ACCEPTED IF THEY DO NOT MEET CITY OF EUGENE AND PROJECT SPECIFICATION REQUIREMENTS. SEE PROJECT SPECIFICATIONS FOR TESTING REQUIREMENTS.

# OWNER / CONTRACTOR RESPONSIBILITIES

- 1. OWNER OR CONTRACTOR TO OBTAIN, COMPLETE, AND SUBMIT SERVICE APPLICATIONS FOR EWEB (WATER AND POWER), NORTHWEST NATURAL GAS, AND TELECOM.
- 2. CONTRACTOR TO COORDINATE INSTALLATION OF EWEB SERVICES.
- 3. CONTRACTOR OR OWNER RESPONSIBLE FOR FEES ASSOCIATED WITH SERVICE CONNECTIONS FROM FRANCHISE UTILITIES, INCLUDING EWEB AND NORTHWEST NATURAL
- 4. CONTRACTOR TO COORDINATE DESIGN AND INSTALLATION OF NORTHWEST NATURAL GAS SERVICE. LOCATIONS OF SERVICE AND METERS SHOWN ON THE PLANS ARE FOR INFORMATION ONLY. NORTHWEST NATURAL WILL DESIGN FINAL LOCATION AND ROUTING
- 5. CONTRACTOR RESPONSIBLE FOR UNDERGROUND FIRE LINE SUBMITTAL TO THE EUGENE FIRE MARSHAL'S OFFICE. SUBMITTAL SHALL INCLUDE THREE SETS OF SHOP DRAWINGS WITH PIPE MATERIAL, TRENCH DETAIL, VALVES, CONNECTION AND RESTRAINT DETAILS, FIRE DEPARTMENT CONNECTION LOCATION, AND HYDRANT TYPE AND LOCATION (IF APPLICABLE). SUBMITTAL MUST BE APPROVED BY FIRE MARSHAL'S OFFICE PRIOR TO

## NOTICE TO EXCAVATORS: ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR

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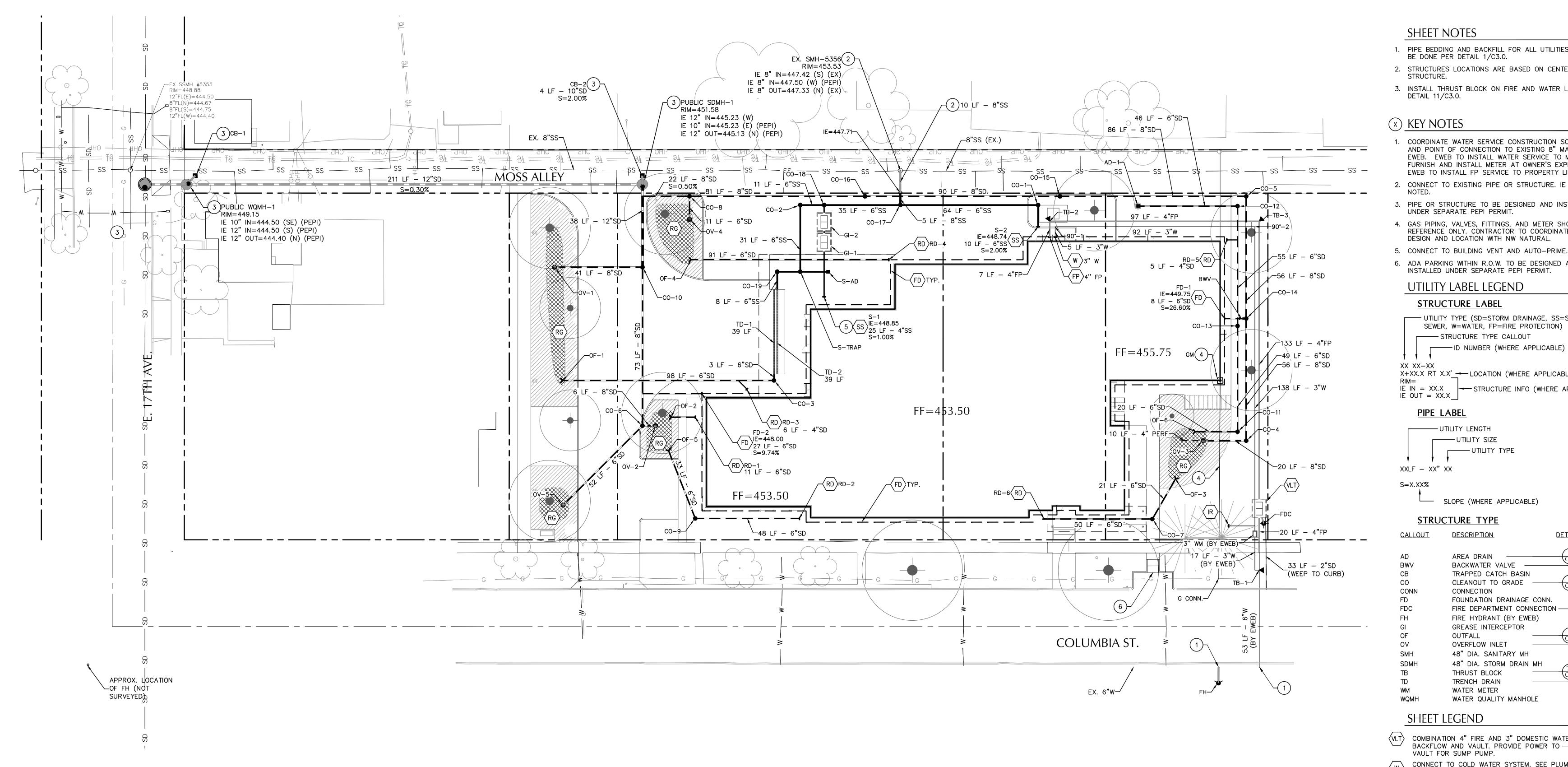
POTENTIAL UNDERGROUND FACILITY OWNERS

Call the Oregon One-Call Center 1-800-332-2344

# CIVIL SHEET INDEX

SHEET	SHEET	SHEET DESCRIPTION
NO.	TITLE	SHEET DESCRIPTION
1	C1.0	CIVIL NOTES & ABBREVIATIONS
2	C2.0	UTILITY PLAN
3	C3.0	CIVIL DETAILS
4	C3.1	CIVIL DETAILS

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# SHEET NOTES

- 1. PIPE BEDDING AND BACKFILL FOR ALL UTILITIES SHALL BE DONE PER DETAIL 1/C3.0.
- STRUCTURES LOCATIONS ARE BASED ON CENTER OF STRUCTURE.
- 3. INSTALL THRUST BLOCK ON FIRE AND WATER LINES PER DETAIL 11/C3.0.

# (X) KEY NOTES

- 1. COORDINATE WATER SERVICE CONSTRUCTION SCHEDULE AND POINT OF CONNECTION TO EXISTING 8" MAIN WITH EWEB. EWEB TO INSTALL WATER SERVICE TO METER AND FURNISH AND INSTALL METER AT OWNER'S EXPENSE. EWEB TO INSTALL FP SERVICE TO PROPERTY LINE.
- CONNECT TO EXISTING PIPE OR STRUCTURE. IE AS
- 3. PIPE OR STRUCTURE TO BE DESIGNED AND INSTALLED UNDER SEPARATE PEPI PERMIT.
- 4. GAS PIPING, VALVES, FITTINGS, AND METER SHOWN FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE FINAL DESIGN AND LOCATION WITH NW NATURAL.
- 6. ADA PARKING WITHIN R.O.W. TO BE DESIGNED AND INSTALLED UNDER SEPARATE PEPI PERMIT.

# UTILITY LABEL LEGEND

# STRUCTURE LABEL

—— UTILITY TYPE (SD=STORM DRAINAGE, SS=SANITARY SEWER, W=WATER, FP=FIRE PROTECTION) STRUCTURE TYPE CALLOUT

ID NUMBER (WHERE APPLICABLE)

X+XX.X RT X.X' ← LOCATION (WHERE APPLICABLE) IE OUT = XX.X

# PIPE LABEL

——— UTILITY LENGTH -----UTILITY SIZE UTILITY TYPE XXLF - XX" XX

S=X.XX%

SLOPE (WHERE APPLICABLE)

STRUCTURE TYPE <u>CALLOUT</u> **DESCRIPTION** DETAIL REF. AREA DRAIN BWV BACKWATER VALVE -CB TRAPPED CATCH BASIN CLEANOUT TO GRADE -CO CONN CONNECTION FD FOUNDATION DRAINAGE CONN. FIRE DEPARTMENT CONNECTION -FDC FIRE HYDRANT (BY EWEB) GREASE INTERCEPTOR OUTFALL OVERFLOW INLET 48" DIA. SANITARY MH 48" DIA. STORM DRAIN MH THRUST BLOCK TRENCH DRAIN WATER METER

# SHEET LEGEND

- COMBINATION 4" FIRE AND 3" DOMESTIC WATER BACKFLOW AND VAULT. PROVIDE POWER TO (3.0) VAULT FOR SUMP PUMP.
- W CONNECT TO COLD WATER STATEM. SEL . L. PLANS FOR CONTINUATION. SIZE AS NOTED. CONNECT TO COLD WATER SYSTEM. SEE PLUMBING

WATER QUALITY MANHOLE

- G CONNECT TO GAS MEIER. CONTRACTOR TO COCKETT..... WITH GAS COMPANY. SEE PLUMBING FOR CONTINUATION.
- IRRIGATION POINT OF CONNECTION. SEE IRRIGATION PLANS FOR CONTINUATION.
- FP CONNECT TO FIRE PROTECTION SYSTEM. SIZE AS NOTED. SEE PLUMBING PLANS FOR CONTINUATION.
- PERIMETER FOUNDATION DRAIN. PROTECT WITH
  BACKWATER VALVE & CONNECT TO STORM

  SYSTEM, IF AS NOTED

  PERIMETER FOUNDATION DRAIN. PROTECT WITH

  (3.1) SYSTEM. IE AS NOTED. SS CONNECT TO WASTE LINE. SEE P CONTINUATION. SIZE AS NOTED. CONNECT TO WASTE LINE. SEE PLUMBING PLANS FOR
- CONNECT TO STORM DRAIN/ROOF DRAIN. SEE CONNECT TO STORM DRAIN/ROOF DRAIN. SEE

  PLUMBING PLANS FOR CONTINUATION. SIZE AND IE AS
  NOTED.
- RG VEGETATED RAIN GARDEN ---
- POTHOLE EXISTING UTILITY FOR CROSSING OR CONNECITON PRIOR TO CONSTRUCTION. REPORT ELEVATION, SIZE, AND HORIZONTAL LOCATION TO KPFF. PROVIDE 12" MIN. CLEARANCE FOR CROSSINGS, U.N.O.

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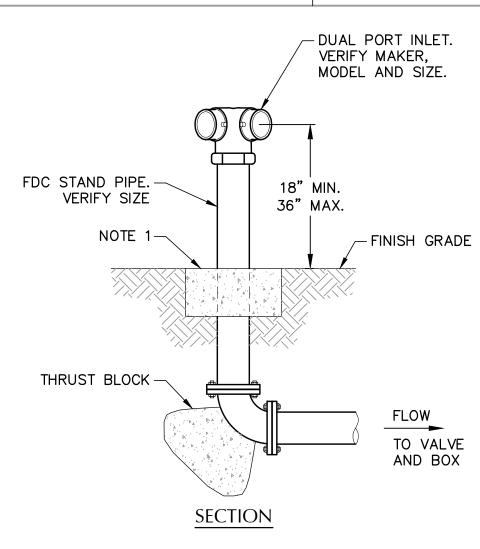
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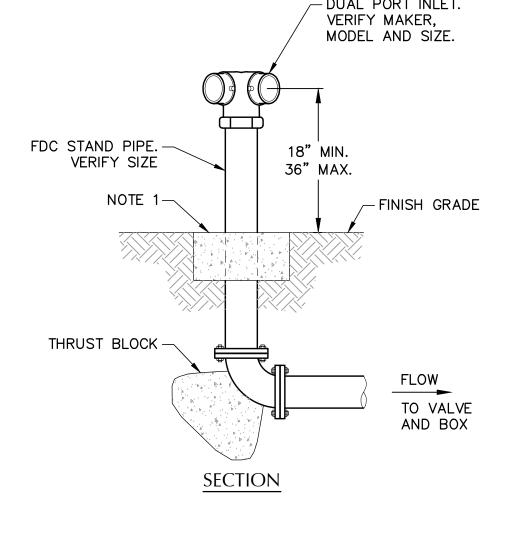
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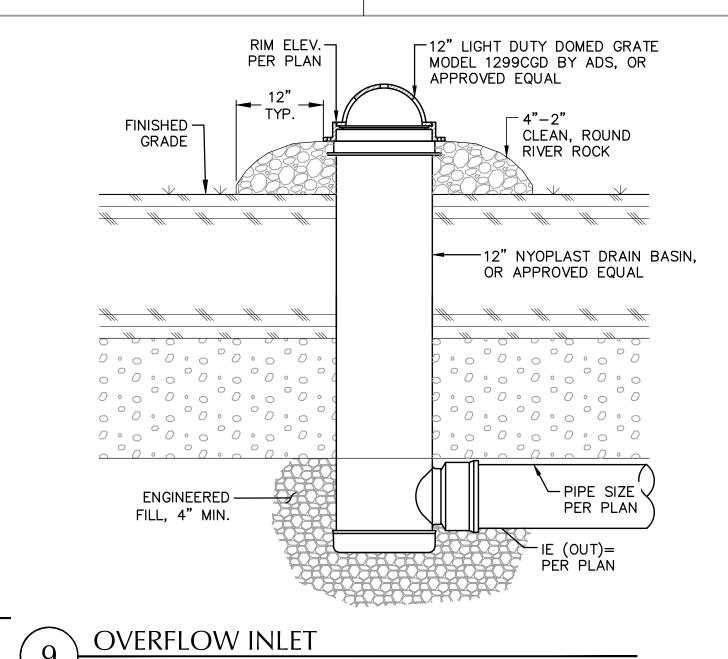
1. CONCRETE ANCHOR PAD TO BE 12"x12"x6" THICK, UNLESS NOTED OTHERWISE. ELIMINATE IF INSTALLED IN CONCRETE PAVED AREA.

- 2. USE FLANGE OR THREADED FITTINGS.
- 3. CONTRACTOR SHALL PROVIDE SINGLE CHECK VALVE AND BALL DRIP VALVE IN ACCESSIBLE LOCATION INSIDE DDCV VAULT. COORDINATE WITH PLUMBING.









-PLANTINGS, SEE

LANDSCAPE PLANS

**VARIES** 6"-9"

> **VARIES** BOTTOM

OF BASIN

SAME AS BOTTOM

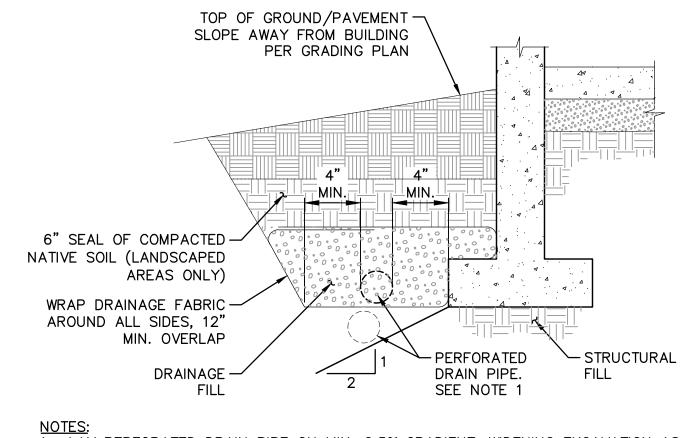
PRIOR TO PROJECT PUNCH-LIST WALKTHROUGH, CONTRACTOR WILL BE REQUIRED

CITY OF EUGENE AND PROJECT SPECIFICATIONS, THE STORMWATER FACILITY WILL

TO PERFORM INFILTRATION TESTS ON THE RAIN GARDENS. TEST RESULTS MUST BE

PROVIDED TO KPFF. IF THE INFILTRATION TESTS DO NOT MEET REQUIREMENTS OF

AREA, MIN. 3'



. LAY PERFORATED DRAIN PIPE ON MIN. 0.5% GRADIENT, WIDENING EXCAVATION AS REQUIRED. MAINTAIN PIPE ABOVE 2:1 SLOPE AS SHOWN.

SECTION

1. TRENCH DRAIN SHALL BE NEUTRAL-SLOPED 6" WIDE ZURN OR ACO TRENCH

3. TRENCH SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

TRENCH DRAINS GRATE SHALL BE LOCKABLE HEAVY DUTY TRENCH GRATE -

SEE NOTE 2

← PAVEMENT

**VARIES** 

CONNECT TO FOUNDATION DRAIN STUBOUT SHOWN ON PLANS. PERIMETER FOUNDATION DRAIN SCALE: NTS

-PAVEMENT

TRENCH DRAIN - 6 INCH WIDE

SEE NOTE 1

DRAIN OR APPROVED EQUAL.

CLASS C.

SCALE: NTS

GROWING MEDIUM,

SEE NOTE 2 &

NATIVE SUB-GRADE

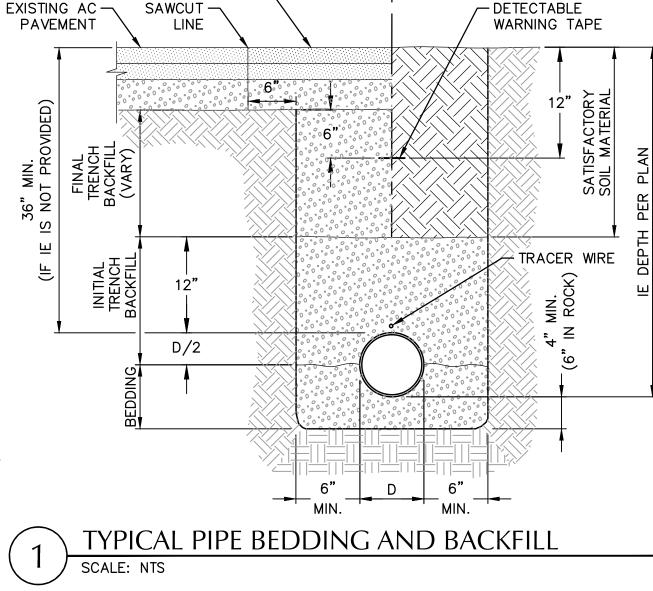
SPECS

─ 4" PVC PERF. SEE PLANS

FOR LOCATION & IE.

1/4" PLYWOOD -

6"± <del>|</del>-



PAVED | UNPAVED

AREAS

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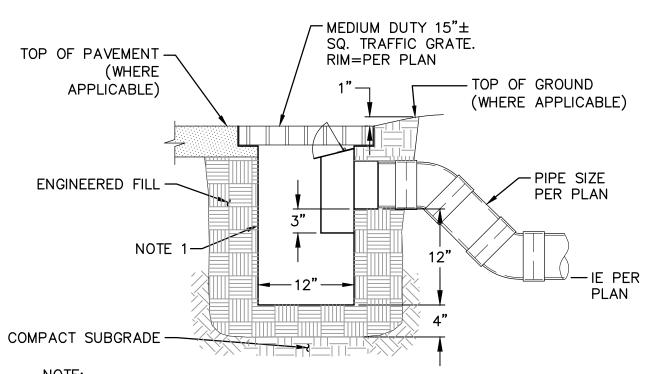
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AREAS

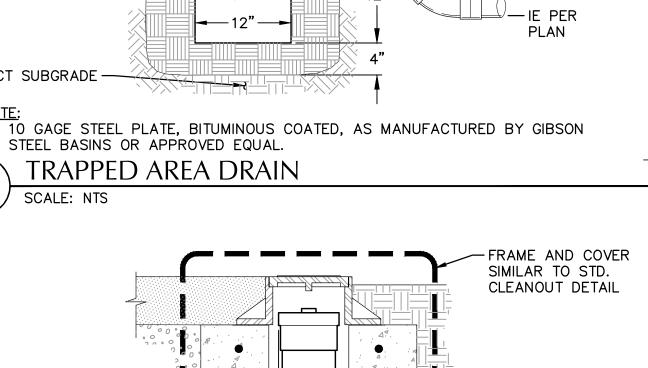
RESURFACING MATCH-

EXISTING PAVEMENT

SECTION



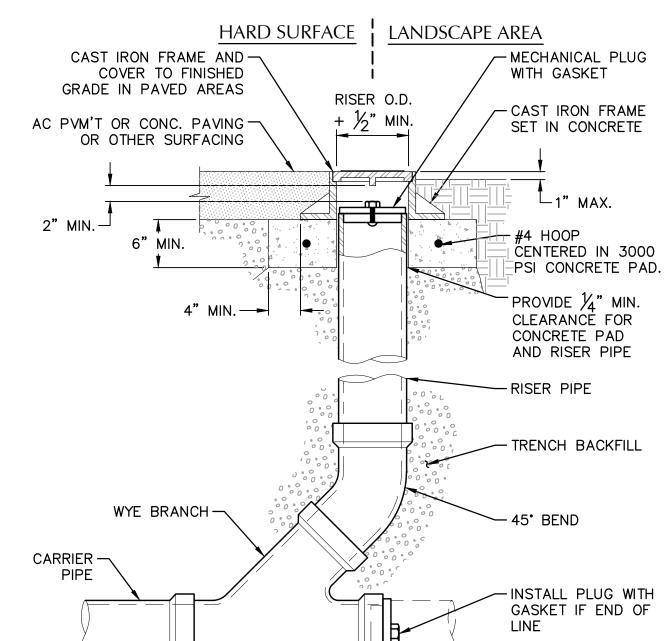
STEEL BASINS OR APPROVED EQUAL TRAPPED AREA DRAIN



 EXTENDABLE BACKWATER

EXTENDABLE BACKWATER VALVE TO BE MANUFACTURED BY CLEAN CHECK OR APPROVED EQUAL AND SHALL BE INSTALLED PER MANUFACTURER'S



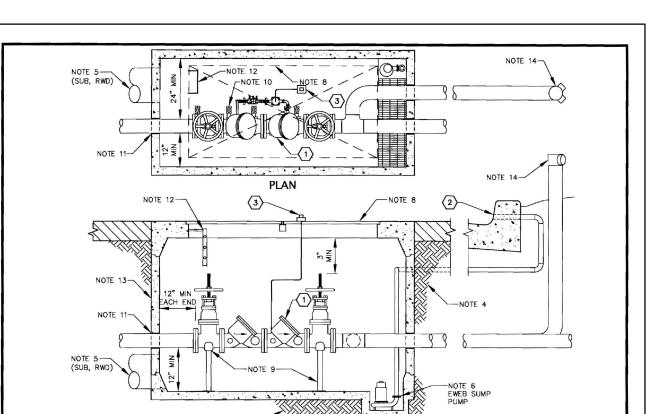


NOTES:

1. CAST IRON FRAME AND COVER SHALL MEET H-20 LOAD REQUIREMENT. 2. FOR CARRIER PIPE SIZE 6"Ø AND LESS, PROVIDE RISER PIPE SIZE TO MATCH

3. FOR CARRIER PIPE SIZE 8"\$\Phi\$ AND LARGER, RISER PIPE SHALL BE 6"\$\Phi\$.

4. RISER PIPE MATERIAL TO MATCH CARRIER PIPE MATERIAL STANDARD CLEANOUT (COTG) SCALE: NTS



(1) APPROVED DETECTOR DOUBLE CHECK VALVE ASSEMBLY INCLUDING FACTORY SUPPLIED SHUT-OFF VALVES: AS LISTED ON THE CURRENTLY APPROVED BACKFLOW PREVENTION ASSEMBLIES LIST SPECIFIED BY OREGON DEPARTMENT OF HUMAN SERVICES. (2) CURB CUT REQUIRES A PERMIT. CITY STANDARDS APPLY.

(3) REMOTE READER, METER REGISTER AND TOUCH PAD PROVIDED BY EWEB, SUB OR RWD PLUMBING FROM THE CONNECTION TO POTABLE WATER SUPPLY LINE TO THE ASSEMBLY REQUIRES A PLUMBING PERMIT AND MUST BE INSPECTED BEFORE COVERING. SERVICE TAPS CANNOT ALWAYS BE INSTALLED AT A LOCATION DESIRED BY THE CUSTOMER BECAUSE OF UNDERGROUND OBSTACLES THAT BECOME KNOWN ONLY AFTER EXCAVATION FOR THE INSTALLATION OF THE

SERVICE TAP. AS A RESULT, EWEB REQUIRES THAT THE SERVICE TAP BE INSTALLED BEFORE THE CUSTOMER AN INITIAL TEST PERFORMED BY A STATE CERTIFIED BACKFLOW ASSEMBLY TESTER IS REQUIRED AT THE TIME OF INSTALLATION, AT LEAST ANNUALLY THEREAFTER OR MORE FREQUENTLY AS REQUIRED BY WATER SUPPLIER. COPIES OF COMPLETED TEST REPORT SHALL BE FURNISHED TO:

THE WATER SUPPLIER (EWEB, SUB OR RAINBOW WATER DISTRICT) THE BUILDING OFFICIAL

					SUB DW FF11DE4			RE\	<u>/</u>		
CITY OF EUGENE BUILDING			_	RWD ENGINEERING REVIEW	SUB ENGINEERING REVIEW _ DK						
FUNC	BY	СНК	APP			SCALE:	NTS				
DEC		1	61144	WATER STANDARDS REGIONAL DESIGN STANDARDS DETECTOR DOUBLE CHECK VALVE ASSEMBLY		REV DATE	BY	СНК		APP	
DES	SLW		SLW			05/21/09	NLN		M	W	
DWN	RS		SLW			5 YEAR REVIE	w				
SPONSOR SLW		\A/	2 1/2" - 10" BELOW GROUND		DWG NO			REV			
31 O143 OK 3EVV		.,,,	•			WD6-6.5700					3
DATE: 01/01/95				EUGENE WATER & ELECTRIC BOARD - EUGENE, OREC	EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON		1 of 2				

. DOUBLE CHECK VALVE ASSEMBLY (DCV) SHALL BE INSTALLED IN A LOCATION APPROVED BY EWEB, SUB OR RWD FOR THEIR RESPECTIVE SERVICE AREA. 2. DCV MAY BE INSTALLED VERTICALLY, PROVIDED THAT THE DCV IS: APPROVED BY EWEB, SUB OR RWD FOR THEIR RESPECTIVE SERVICE AREA. a. RECOMMENDED BY THE MANUFACTURER FOR VERTICAL INSTALLATION 2. DDC MAY BE INSTALLED VERTICALLY, PROVIDED THAT THE DDC IS: a. RECOMMENDED BY THE MANUFACTURER FOR VERTICAL INSTALLATION b. APPROVED IN A VERTICAL ORIENTATION AS LISTED ON THE CURRENTLY APPROVED BACKFLOW PREVENTION ASSEMBLIES LIST SPECIFIED BY OREGON DEPARTMENT OF

SUB DWG NO FF11DE47

SUB ENGINEERING REVIEW \_DK

SCALE: NTS

5 YEAR REVIEW

REV DATE BY CHK

WD6-6.5400

05/21/09 NLN

HUMAN SERVICES. ALL CLEARANCES PICTURED APPLY TO OUTSIDE, IN-BUILDING, AND VERTICAL INSTALLATIONS. 4. DCV INSTALLED BELOW GROUND IS PROTECTED FROM FREEZING DUE TO LOCAL SOIL TEMPERATURE. a. DCV AT A DEPTH OF 24" OR GREATER ARE EXEMPT FROM INSULATION/HEAT SOURCE 5. SUB AND RWD REQUIRE A BORE-SIGHTED DRAIN TO DAYLIGHT IN ALL INSTALLATIONS IN

APPROVED DOUBLE CHECK VALVE ASSEMBLY INCLUDING FACTORY SUPPLIED SHUT-OFF VALVES: AS LISTED ON THE CURRENTLY APPROVED BACKFLOW PREVENTION ASSEMBLIES

PLUMBING FROM THE CONNECTION TO POTABLE WATER SUPPLY LINE TO THE ASSEMBLY REQUIRES A PLUMBING PERMIT AND MUST BE INSPECTED BEFORE COVERING.

SERVICE TAPS CANNOT ALWAYS BE INSTALLED AT A LOCATION DESIRED BY THE CUSTOMER BECAUSE OF UNDERGROUND OBSTACLES THAT BECOME KNOWN ONLY AFTER EXCAVATION FOR THE INSTALLATION OF THE SERVICE TAP. AS A RESULT, EWEB REQUIRES THAT THE SERVICE TAP

AN INITIAL TEST PERFORMED BY A STATE CERTIFIED BACKFLOW ASSEMBLY TESTER IS REQUIRED

AT THE TIME OF INSTALLATION, AT LEAST ANNUALLY THEREAFTER OR MORE FREQUENTLY AS

LIST SPECIFIED BY OREGON DEPARTMENT OF HUMAN SERVICES.

(2) CURB CUT REQUIRES A PERMIT. CITY STANDARDS APPLY.

BE INSTALLED BEFORE THE CUSTOMER INSTALLS ANY VAULTS.

COPIES OF COMPLETED TEST REPORT SHALL BE FURNISHED TO:

THE WATER SUPPLIER (EWEB, SUB OR RAINBOW WATER DISTRICT)

RWD ENGINEERING REVIEW \_\_\_\_

WATER STANDARDS

REGIONAL DESIGN STANDARDS

DOUBLE CHECK VALVE ASSEMBLY

2 1/2" - 10" BELOW GROUND

EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

REQUIRED BY WATER SUPPLIER.

AND PERMITS REVIEW \_\_\_\_

DES SLW

DWN RS

SPONSOR

DATE: 01/01/95

FUNC BY CHK APP

SLW

THEIR SERVICE AREAS. 6. EWEB REQUIRES VAULT INSTALLATION TO HAVE A SUMP PUMP AND HIGH WATER ALARM NEAR THE MAIN ALARM PANEL (EACH WIRED TO A SEPARATE CIRCUIT) IN THEIR SERVICE AREA. ALTERNATIVE METHODS MAY BE APPROVED BEFORE CONSTRUCTION ONLY. TEMPORARY DEWATERING OF VAULT IS REQUIRED UNTIL PERMANENT SUMP PUMP AND HIGH WATER ALARM ARE INSTALLED. ALTERNATIVES MAY INCLUDE: a. DRY WELL (2 CUBIC YARD MINIMUM) MUST BE APPROVED BEFORE CONSTRUCTION

7. COMPACTED GRAVEL OR UNDISTURBED BASE. 8. HATCH, MINIMUM 3' X 3', SPRING ASSISTED, GALVANIZED OR ALUMINUM DIAMOND PLATE. a. IF VAULT IS IN A PEDESTRIAN TRAFFIC AREA, METAL SURFACES SHALL HAVE FACTORY APPLIED NON-SKID COATING. 9. DCV 2 1/2" OR LARGER SHALL HAVE VALVE SUPPORTS. 10. DCV INSTALLED BELOW GROUND LEVEL SHALL HAVE WATERTIGHT PLUGS OR CAPS INSTALLED ON THE TEST PORTS.

1. WATERTIGHT GROUT SHALL BE USED TO SEAL OPENINGS. 12. IF VAULT DEPTH EXCEEDS 4', OSHA APPROVED FIXED LADDER IS REQUIRED. 13. REINFORCED CONCRETE VAULT (ASTM C-875). ADDITIONAL CONSIDERATIONS FOR FIRE SERVICES:

FIRE SERVICE ASSEMBLIES SHALL BE INSTALLED WITHIN 10' OF EWEB, SUB OR RWD POINT OF CONNECTION (GENERALLY LOCATED AT THE PROPERTY LINE) AND SHALL BE DIRECTLY INLINE WITH SERVICE TAP LOCATION SUCH THAT THE POINT OF CONNECTION IS INLINE WITH 2. ALL PIPING PRECEDING THE DOUBLE CHECK VALVE SHALL BE CONSTRUCTED OF POTABLE APPROVED MATERIAL PER OPSC TABLE 6-4

3. NO OUTLETS OR CONNECTIONS (INCLUDING HYDRANTS) WILL BE PERMITTED ON FIRE SERVICE LINES PRIOR TO BACKFLOW PREVENTION ASSEMBLIES. 4. ABOVE GROUND ENCLOSURES FOR FIRELINES SHALL INCLUDE INSULATION AND/OR HEAT SOURCE DESIGNED TO KEEP ENCLOSURE AT A MINIMUM TEMPERATURE OF 40 F (NFPA

5. WHERE NON-FOOD GRADE ANTIFREEZE, CORROSION INHIBITORS, OR OTHER CHEMICALS ARE ADDED TO A FIRE PROTECTION SYSTEM A REDUCED PRESSURE BACKFLOW ASSEMBLY OR REDUCED PRESSURE DETECTOR ASSEMBLY SHALL BE USED. REFERENCE: OREGON PLUMBING SPECIALTY CODE, CHAPTER 6 WATER SUPPLY AND DISTRIBUTION, 603.4.6.3; 603.4.6.4; 603.3.3; 603.3.4; 603.3.8; 603.4.18.3; TABLE 6-4

REFERENCE: OREGON ADMINISTRATIVE RULES CHAPTER 437, DIVÍSION 2, 1910.27 CITY OF EUGENE BUILDING AND PERMITS REVIEW FUNC BY CHK APP

	SUB DW FF11DE4				
RWD ENGINEERING REVIEW	SUB ENGI	NEERING REVIE	w_D	K	
		SCALE:	NTS		
WATER STANDARDS		REV DATE	BY	CHK	APP
REGIONAL DESIGN STANDARDS		05/21/09	NLN		MDA
DOUBLE CHECK VALVE ASSEMBLY		5 YEAR REVIEW  DWG NO  WD6-6.5400			
2 1/2" - 10" BELOW GROUND					RE✓
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ENE WATER & ELECTRIC BOARD - EUGENE, OREGO	DN	2 of 2			

SUB DWG NO RWD ENGINEERING REVIEW . SCALE: NTS WATER STANDARDS DES SLW REGIONAL DESIGN STANDARDS DWN RS DETECTOR DOUBLE CHECK VALVE ASSEMBLY 2 1/2" - 10" BELOW GROUND SPONSOR EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

SUB ENGINEERING REVIEW \_\_DK REV DATE BY CHK APP 05/21/09 NLN M WD6-6.5700

1. PLACE BOTH BACKFLOW DEVICES IN A SINGLE, CONCRETE VAULT, CONTRACTOR TO SIZE VAULT BASED ON CLEARANCES AND REEQUIREMETNS SHOWN ABOVE AND SIZE OF BACKFLOW PREVENTERS SELECTED. VAULT SELECTED TO BE SMALLEST

SIZE POSSIBLE. SIZE SHOWN ON PLANS FOR REFERENCE ONLY. 2. CONTRACTOR TO DESIGN BALLAST, AS NECESSARY.

3. CONTRACTOR SHALL PROVIDE POWER TO SUMP PUMP AND HIGH WATER DETECTOR IN VAULT.

4. CONTRACTOR TO PROVIDE A HIGH WATER ALARM NEAR THE MAIN ALARM PANEL. 5. VAULT DRAINAGE FROM SUMP PUMP SHALL DAYLIGHT TO CURB.

EWEB FIRE SERVICE AND DOMESTIC WATER VAULT

DES SLW

SPONSOR SLW

DWN RS

DATE: 01/01/95

SCALE: NTS

b. APPROVED IN A VERTICAL ORIENTATION AS LISTED ON THE CURRENTLY APPROVED BACKFLOW PREVENTION ASSEMBLIES LIST SPECIFIED BY OREGON DEPARTMENT OF HUMAN 3. ALL CLEARANCES PICTURED APPLY TO OUTSIDE, IN-BUILDING, AND VERTICAL INSTALLATIONS. DDC INSTALLED BELOW GROUND IS PROTECTED FROM FREEZING DUE TO LOCAL SOIL TEMPERATURE. 5. SUB AND RWD REQUIRE A BORE-SIGHTED DRAIN TO DAYLIGHT IN ALL INSTALLATIONS IN THEIR 6. EWBB REQUIRES VAULT INSTALLATION TO HAVE A SUMP PUMP AND HIGH WATER ALARM NEAR THE MAIN ALARM PANEL (EACH WIRED TO A SEPARATE CIRCUIT) IN THEIR SERVICE AREA. TEMPORARY DEWATERING OF VAULT IS REQUIRED UNTIL PERMANENT SUMP PUMP AND HIGH WATER ALARM ARE INSTALLED. ALTERNATIVES MAY INCLUDE: a. DRY WELL (2 CUBIC YARD MINIMUM) MUST BE APPROVED BEFORE CONSTRUCTION COMPACTED GRAVEL OR UNDISTURBED BASE. 8. HATCH, MINIMUM 3' X 3', SPRING ASSISTED, GALVANIZED OR ALUMINUM DIAMOND PLATE.

o. IF VAULT IS IN A PEDESTRIAN TRAFFIC AREA, METAL SURFACES SHALL HAVE FACTORY APPLIED NON-SKID COATING. 9. DDC 2 ½" OR LARGER SHALL HAVE VALVE SUPPORTS.
10. DDC INSTALLED BELOW GROUND LEVEL SHALL HAVE WATERTIGHT PLUGS OR CAPS INSTALLED ON THE TEST PORTS.

11. WATERTIGHT GROUT SHALL BE USED TO SEAL OPENINGS. 12. IF VAULT DEPTH EXCEEDS 4', USE OSHA APPROVED FIXED LADDER. 3. REINFORCED CONCRETE VAULT (ASTM C-875). 14. FIRE DEPARTMENT PUMPER CONNECTION (IF NEEDED) SHALL COMPLY WITH LOCAL FIRE CODE. ADDITIONAL CONSIDERATIONS FOR FIRE SERVICES: FIRE SERVICE ASSEMBLIES SHALL BE INSTALLED WITHIN 10' OF EWEB, SUB OR RWD POINT OF CONNECTION (GENERALLY LOCATED AT THE PROPERTY LINE) AND SHALL BE DIRECTLY INLINE WITH SERVICE TAP LOCATION SUCH THAT THE POINT OF CONNECTION IS INLINE WITH ASSEMBLY. PIPING PRECEDING THE DOUBLE CHECK VALVE SHALL BE CONSTRUCTED OF POTABLE APPROVED MATERIAL PER OPSC TABLE 6-4 3. NO OUTLETS OR CONNECTIONS (INCLUDING HYDRANTS) WILL BE PERMITTED ON FIRE SERVICE LINES PRIOR TO BACKFLOW PREVENTION ASSEMBLIES. 4. ABOVE GROUND ENCLOSURES FOR FIRELINES SHALL INCLUDE INSULATION AND/OR HEAT SOURCE DESIGNED TO KEEP ENCLOSURE AT A MINIMUM TEMPERATURE OF 40 F (NFPA 8.16.4.1.3)
5. WHERE NON-FOOD GRADE ANTIFREEZE, CORROSION INHIBITORS, OR OTHER CHEMICALS ARE ADDED TO A FIRE PROTECTION SYSTEM A REDUCED PRESSURE BACKFLOW ASSEMBLY OR REDUCED PRESSURE DETECTOR ASSEMBLY SHALL BE USED. REFERENCE: OREGON PLUMBING SPECIALTY CODE, CHAPTER 6 WATER SUPPLY AND DISTRIBUTION, 603.4.6.3; 603.4.6.4; 603.3.3; 603.3.4; 603.3.8; 603.4.18.3; TABLE 6-4 REFERENCE: OREGON ADMINISTRATIVE RULES 333-061-0070 (5) (12) (15); 333-061-0071 (9) REFERENCE: OREGON ADMINISTRATIVE RULES CHAPTER 437, DIVISION 2, 1910.27 FUNC BY CHK APP

TABULATED TOTAL OVER FACE OF BOLTS PLUGGED CROSS PLUG OR CAP DETECTOR DOUBLE CHECK VALVE ASSEMBLY (DDC) VAULT OR ENCLOSURE SHALL BE INSTALLED NO MORE THAN 10 FEET FROM POINT OF CONNECTION, OR IN AN ALTERNATE LOCATION PLUGGED CROSS

WRAP DRAINAGE

NOT BE ACCEPTED.

SCALE: NTS

EACH AREA IS 1/2 OF

DRAINAGE -

1. INSTALL 2" THICK LAYER OF PEA GRAVEL.

2. PROVIDE 2 GALLON SAMPLE TO KPFF PRIOR TO INSTALLATION.

RAIN GARDEN (FILTRATION)

FABRIC AROUND ALL

SIDES, 12" OVERLAP

1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH. 2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.

3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLAN; e.g. (15) INDICATES 15 SQUARE FEET BEARING AREA

4. IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED BELOW, ADJUST IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS (ES) STATED IN THE SPECIAL SPECIFICATIONS.

5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.

BEARING AREA OF THRUST BLOCK IN SQUARE FOOT

PLUGGED ON RUN TEE, 90° WYE, BEND FITTING | PLUG, | PLUGGED BEND I SIZE OR CAPI CROSS | A1 A2 | BEND | 1.9 | 1.4 | 1.0 1.0 1.4 3.0 | 4.3 | 3.0 | 1.6

5.3 | 7.6 | 5.4 | 2.9 | 1.5 |

8.4 | 11.8 | 8.4 | 4.6 | 2.4 |

NOTE:
ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 p.s.i. AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 p.s.i.. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURE AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150)X(2000/ SOIL BEARING

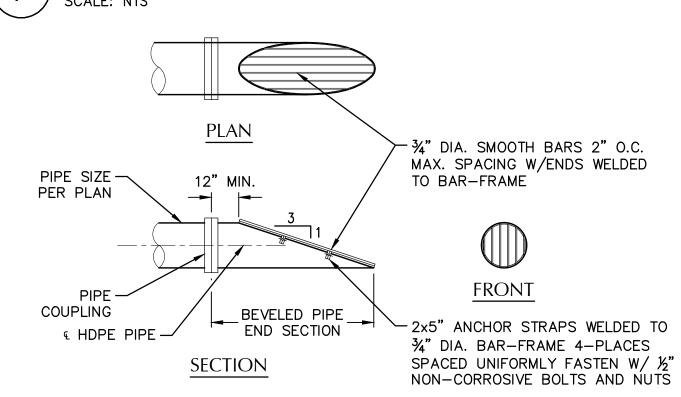
STRESS)X(TABLE VALUE). THRUST BLOCK SCALE: NTS

3.8

5.9

-MITERED OUTFALL  $\frac{8}{300}$ 2'-TOP OF SLOPE /- IE=SEE PLAN - TOE OF SLOPE **→**/-⁄-3' MIN.----'DEEP '3'WIDE∜ PIPE OUTFALL CENTERED IN ROCK GEOTEXTILE 4" TO 8" CLEAN ROCK -

TYPICAL OUTFALL RIP-RAP PROTECTION

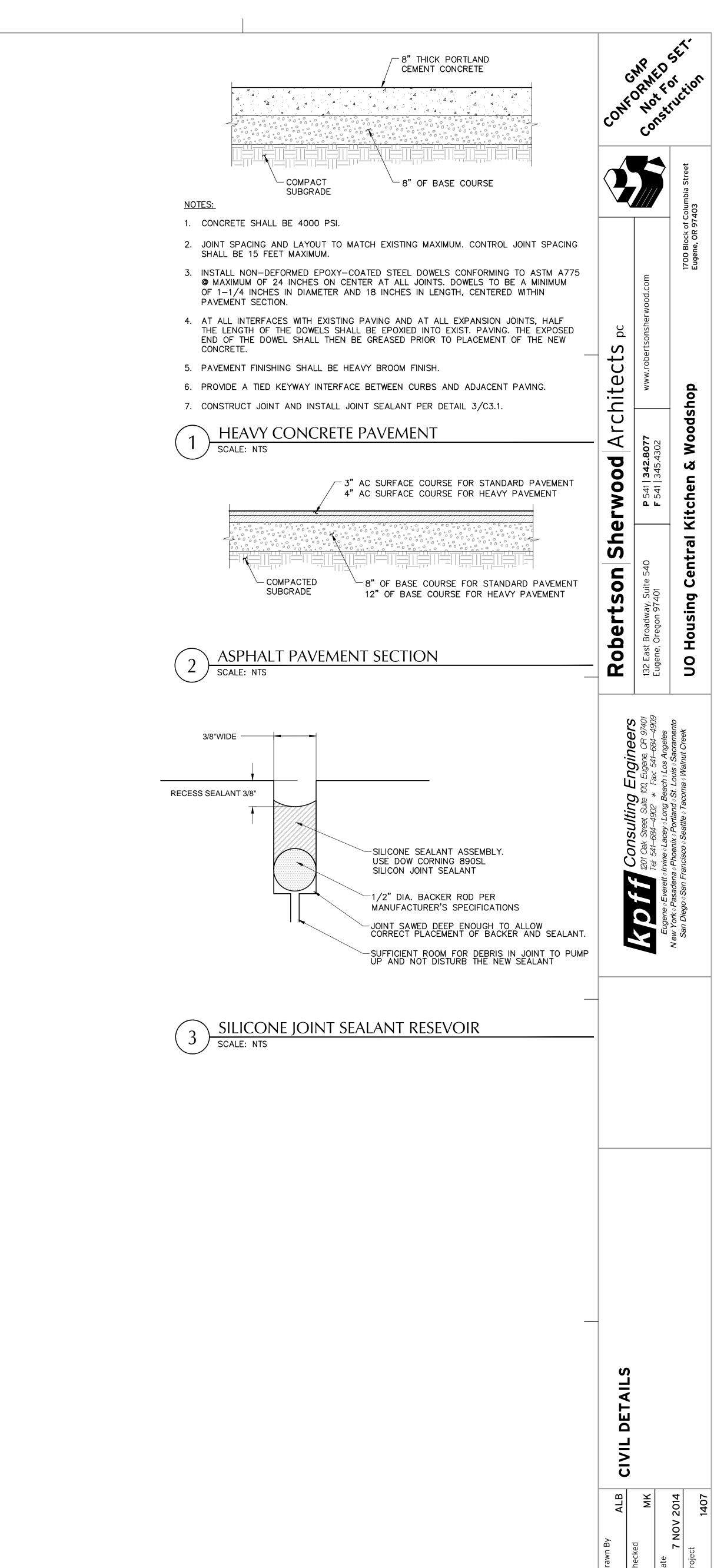


ALL TRASH RACK PARTS AND CONNECTORS MUST BE ALUMINUM, OR ASPHALT COATED GALVANIZED STEEL (TREATMENT 1 OR BETTER).

2. WELD AT ALL JOINTS. SHOP DRAWINGS REQUIRED. MITERED OUTFALL W/ TRASH RACK (3:1)

SCALE: NTS

- SERVICE CONNECTION IF REQUIRED - BEDDING MATERIAL



MOSS ALLEY PEPI

# EUGENE, OREGON

**GMP CONFORMED SET** 

# GENERAL NOTES

- 1. SURVEY PROVIDED BY FORD & ASSOCIATES, DATED 6/3/13. ELEVATIONS ARE BASED ON EUGENE NGVD29 VERTICAL DATUM ESTABLISHED PER BENCH MARK NO. 449B1903 LOCATED AT THE NORTHEAST CORNER OF VILLARD HALL, IN THE NORTH FACE OF THE BUILDING, 2 INCHES BELOW THE DATE 1885 WITH AN ELEVATION OF 449.320.
- 2. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR,½REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
- 3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING CONSTRUCTION LAYOUT. SEE SHEET C2.0 FOR PROJECT CONTROL INFORMATION.
- 4. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
- 5. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF RECORD IMMEDIATELY UPON DISCOVERY.
- 6. BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
- 7. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTS DAMAGED OR REMOVED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A LICENSED SURVEYOR.
- 8. SOME SITE DEMOLITION AND UTILITY RELOCATION HAS BEEN PERFORMED. SURVEY MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- 9. CONTRACTOR TO REFERENCE GEOTECHNICAL INVESTIGATION BY GRI DATED JUNE 11, 2013 FOR THE SITE SOILS CONDITIONS.
- 10. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2008 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2011 OREGON PLUMBING SPECIALTY CODE, AND REQUIREMENTS OF THE CITY OF EUGENE.
- 11. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
- 12. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY LOCATED.
- 13. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF KPFF CONSULTING ENGINEERS, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
- 14. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
- 15. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO CITY OF CITY OF EUGENE AND 1200—CN PERMIT FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING DUST CONTROL AS REQUIRED.
- 17. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO CITY OF EUGENE AND UNIVERSITY OF OREGON FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION.
- 18. CONTRACTOR SHALL MAINTAIN ALL UTILITIES SERVING THE UNIVERSITY OF OREGON AT ALL TIMES DURING CONSTRUCTION.
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.
- 20. NOTIFY EUGENE INSPECTOR 72 HOURS BEFORE STARTING WORK. A PRECONSTRUCTION MEETING WITH THE OWNER, THE OWNER'S ENGINEER, CONTRACTOR AND THE CITY OF EUGENE REPRESENTATIVE SHALL BE REQUIRED.

# CITY OF EUGENE GENERAL NOTES

- . CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL COMPLY WITH THE CITY'S STANDARD SPECIFICATIONS AND DRAWINGS.
- 2. A GRADING AND/OR FILL PERMIT FROM THE CITY BUILDING DIVISION MAY BE REQUIRED FOR ANY CONSTRUCTION ACTIVITY OUTSIDE OF THE RIGHTS—OF—WAY AND PUBLIC FASEMENTS
- . ITEMS OF WORK NOT SHOWN ON THE PLAN BUT NECESSARY FOR SUCCESSFUL COMPLETION OF THIS PROJECT WILL BE REQUIRED BY THE CITY.
- 4. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AND SECURE APPROVAL OF THE PLAN FROM THE CITY AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING WORK.
- 5. THE CONTRACTOR SHALL NOT PERFORM WORK WITHOUT CITY INSPECTIONS.
- 6. BEFORE BACK—FILLING THE END OF A MAINLINE PIPE NOT ENDING AT A MANHOLE OR CLEANOUT, THE CONTRACTOR SHALL PERFORM THE TV INSPECTION AS REQUIRED BY THE STANDARD SPECIFICATIONS AND ALLOW THE CONSULTING ENGINEER TO DETERMINE THE EXACT LOCATION AND ELEVATION OF THE END OF THE PIPE.
- 7. WHERE CONNECTING TO AN EXISTING PIPE, THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE AND ALLOW THE ENGINEER TO VERIFY EXACT LOCATION AND ELEVATION BEFORE LAYING ANY NEW PIPE ON THAT SYSTEM.
- 8. WHERE THE CONTRACTOR IS UNABLE TO ACHIEVE SUB-GRADE COMPACTION AND DEFLECTION STANDARDS REQUIRED BY THE SPECIFICATIONS, AS DETERMINED BY FIELD INSPECTION AND TESTING, THE SUB-GRADE SURFACE SHALL BE LOWERED AT LEAST 6 INCHES, FABRIC SHALL BE PLACED, AND THE MATERIAL REMOVED SHALL BE REPLACED WITH 1½"-0 CRUSHED ROCK AND COMPACTED ACCORDING TO THE SPECIFICATIONS. IF THE SUB-GRADE STILL DOES NOT MEET SPECIFICATIONS OVER-EXCAVATE TO A DEEPER SUBBASE DEPTH AS DIRECTED BY PROJECT ENGINEER AND REPEAT THE PROCESS UNTIL THE SUB-GRADE MEETS SPECIFICATIONS.
- ASPHALT SHALL BE FORMULATED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 745 OF THE CITY'S STANDARD SPECIFICATIONS.
- 10. THE CONTRACTOR SHALL NOTIFY LANE COUNTY DEPARTMENT OF PUBLIC WORKS
  PERMIT SECTION 24 HOURS BEFORE BEGINNING WORK IN THE COUNTY RIGHT—OF—WAY.
- . THE CONTRACTOR SHALL PROTECT THE WORK AREA IN THE COUNTY ROAD IN ACCORDANCE WITH "LANE COUNTY TRAFFIC CONTROL AND SAFETY PROCEDURES."
- 12. REQUESTS BY THE CONTRACTOR FOR CHANGES TO THE PLANS MUST BE APPROVED BY THE CONSULTING ENGINEER AND THE CITY BEFORE THE CHANGES ARE IMPLEMENTED.
- 13. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 1-800-3322344. IF YOU HAVE ANY QUESTIONS ABOUT THESE RULES, YOU MAY CONTACT THE CALL CENTER.
- 14. AT EACH INTERSECTION AT LEAST ONE POST SHALL BE PLACED DISPLAYING STREET NAME SIGNS FOR BOTH INTERSECTING STREETS. A "SIGN SCHEDULE" INDICATING NAMES AND LOCATIONS OF ALL SIGNS TO BE INSTALLED SHALL BE SUBMITTED TO THE PROJECT INSPECTOR WITHIN 15 DAYS OF THE PUBLIC IMPROVEMENT PERMIT DATE.
- 15. PLACEMENT OR STORAGE OF SPOILS FROM TRENCH CONSTRUCTION IS NOT PERMITTED ON HARD SURFACE STREETS WITHIN PUBLIC RIGHT—OF—WAY. SPOILS STORED IN OTHER RIGHT OF WAY AREAS SHALL BE COVERED TO PREVENT EROSION.
- 16. FORMS OF ADEQUATE SIZE AND CONFIGURATION TO MEET CONCRETE THICKNESS REQUIREMENTS SHALL BE USED AROUND OUTSIDES OF OUTSIDE—DROP MANHOLES.
- 17. CONSTRUCTION SITE SHALL BE MANAGED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION SITE MANAGEMENT PLAN (CSMP). CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING COMPONENTS OF THE CSMP UNTIL PROJECT FINAL ACCEPTANCE IS ISSUED.
- 18. THE CITY INSPECTOR SHALL NOT BE REQUIRED TO LAY OUT ADA RAMPS FOR PRIVATELY—ENGINEERED PROJECTS. THE DEVELOPER/OWNER OR THEIR AGENT SHALL BE RESPONSIBLE FOR RAMP LAYOUT AND SHALL ENSURE COMPLIANCE WITH ADA STANDARDS.
- 19. LOCATIONS OF STREET LIGHTING, SIGNS, AND MARKINGS, ETC. ARE APPROXIMATE. ACTUAL LOCATIONS SHALL BE AS DIRECTED BY THE CITY INSPECTOR IN THE FIELD.
- 20. WORK REQUIRES THE ELECTRICAL CONTRACTOR TO SECURE AN ELECTRIC PERMIT AS WELL AS INSPECTION SERVICES FROM THE BUILDING PERMIT SERVICES DIVISION TO ASSURE NATIONAL ELECTRIC CODE COMPLIANCE. IN ADDITION, CONTRACT INSPECTION SERVICES SHALL BE OBTAINED FROM THE PUBLIC WORKS ENGINEERING DIVISION 24 HOURS IN ADVANCE OF WORK COMMENCEMENT BY CALLING 541682-5560.

# **CONSTRUCTION NOTES**

# **DEMOLITION**

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING A.C., CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS
- 2. EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
- 3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED, DELIVERED, AND STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
- 4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
- 5. SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

# UTILITIES

1. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.

- 2. CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS, WITH THE EXCEPTION OF NATURAL GAS. CONTACT NW NATURAL IF A GAS LINE IS ENCOUNTERED.
- 3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OR REMOVAL OF GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
- 4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.

# University of Oregon School of Law Scholars Hall I East School of Law Many Nations Longhouse Erik Bishoff Photography Oregon Bach Festival Agate Apartments Agate Apartments

MAP FROM: maps.google.com @

# LOCAL UTILITY CONTACTS

	UTILITY	COMPANY/CONTACT	PHONE NUMBER
•	WATER	EWEB/CHRIS BIGELOW	(541) 685-7353
•	SEWER	CITY OF EUGENE	(541) 682-5291
•	GAS	NW NATURAL GAS	(541) 342-3661
•	ELECTRIC	EWEB/RICH DELUNA	(541) 685-7148
•	TELEPHONE	CENTURY LINK/JODY KALDHAL	(541) 484-7796

# PROIECT CONTACTS

DEVELOPER/OWNER:
UNIVERSITY OF OREGON
1595 E. 15TH AVE
EUGENE, OR 97403
TEL: 541-346-8801
CONTACT: DAVID OPP-BECKMAN

CIVIL ENGINEER:
KPFF CONSULTING ENGINEERS
1201 OAK STREET, SUITE 100
EUGENE, OREGON 97401
TEL: 541-684-4902
CONTACT: MATT KEENAN, PE

SURVEYING:
FORD & ASSOCIATES
399 E. 10TH AVE.
EUGENE, OREGON 97401
TEL: 541-344-1852
CONTACT: RYAN SISSON, LSIT

CONTRACTOR:
CHAMBERS CONSTRUCTION
3028 JUDKINS RD.
EUGENE, OR 97403
TEL: 541-687-9445
CONTACT: BRIAN ERICKSON

# SHEET INDEX

SHI		SHEET TITLE	SHEET DESCRIPTION
	1	C100	COVER SHEET
2	2	C101	KEY PLAN AND HORIZONTAL CONTROL
3	3	C200	N-S PLAN & PROFILE - STA 9+70 TO STA 12+50
4	4	C201	N-S PLAN & PROFILE - STA 12+50 TO STA 15+50
5	5	C300	CIVIL DETAILS

# **ABBREVIATIONS**

AC .	ASPHALTIC CONCRETE	POB	POINT OF BEGINNING
APPROX.	APPROXIMATE	POE	POINT OF ENDING
ARCH.	ARCHITECT	PROP	PROPOSED
CB	CATCH BASIN	PVM'T	PAVEMENT
	CENTERLINE	R	RADIUS
	CITY OF EUGENE	R.O.W.	RIGHT-OF-WAY
	CONCRETE	RT	RIGHT
CONST.	CONSTRUCT	S	SLOPE (FT./FT.)
)WG	DRAWING	SHT.	
)/W	DRIVEWAY	SPECS.	SPECIFICATIONS
	EAST		STORM DRAIN
LEC.	ELECTRICAL	SDMH	STORM DRAIN MANHOLE
	ELEVATION	SS	SANITARY SEWER
EWEB	EUGENE WATER & ELECTRIC BOARD	STD.	STANDARD
XIST./EX.	EXISTING	S/W	SIDEWALK
HGL	HYDRAULIC GRADE LINE	TĆ	TOP OF CURB
E	INVERT ELEVATION	TP	TOP OF PAVEMENT
E .F_	LINEAR FEET	TYP.	TYPICAL
.Τ	LEFT	W	WATER/WEST
ΛIN.	MINIMUM	W/	WITH
ИΗ	MANHOLE	WQMH	
NTS	NOT TO SCALE		
1	NORTH		

PRIVATELY ENGINEERED PUBLIC

**IMPROVEMENTS** 

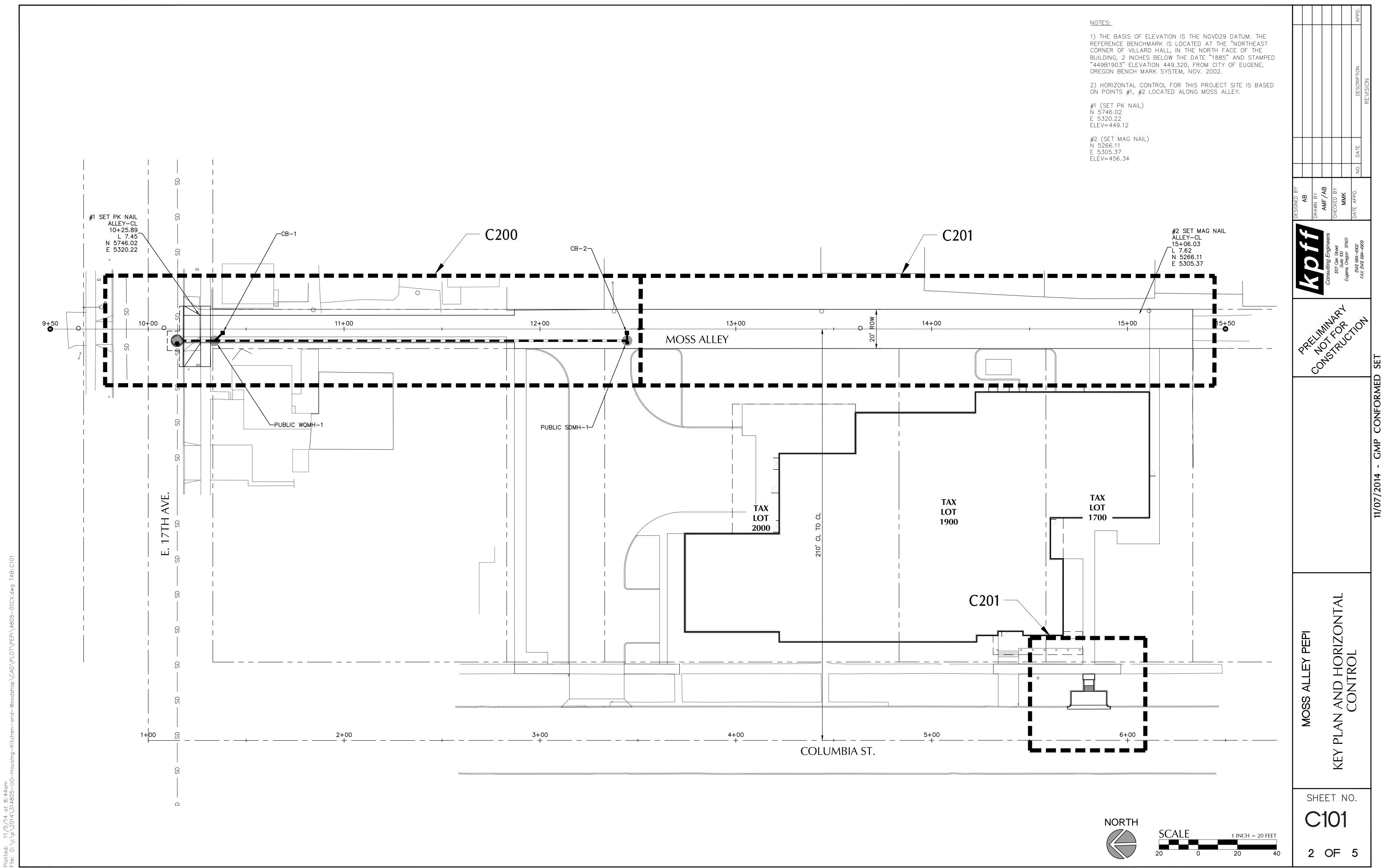
NOTICE TO EXCAVATORS:
ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

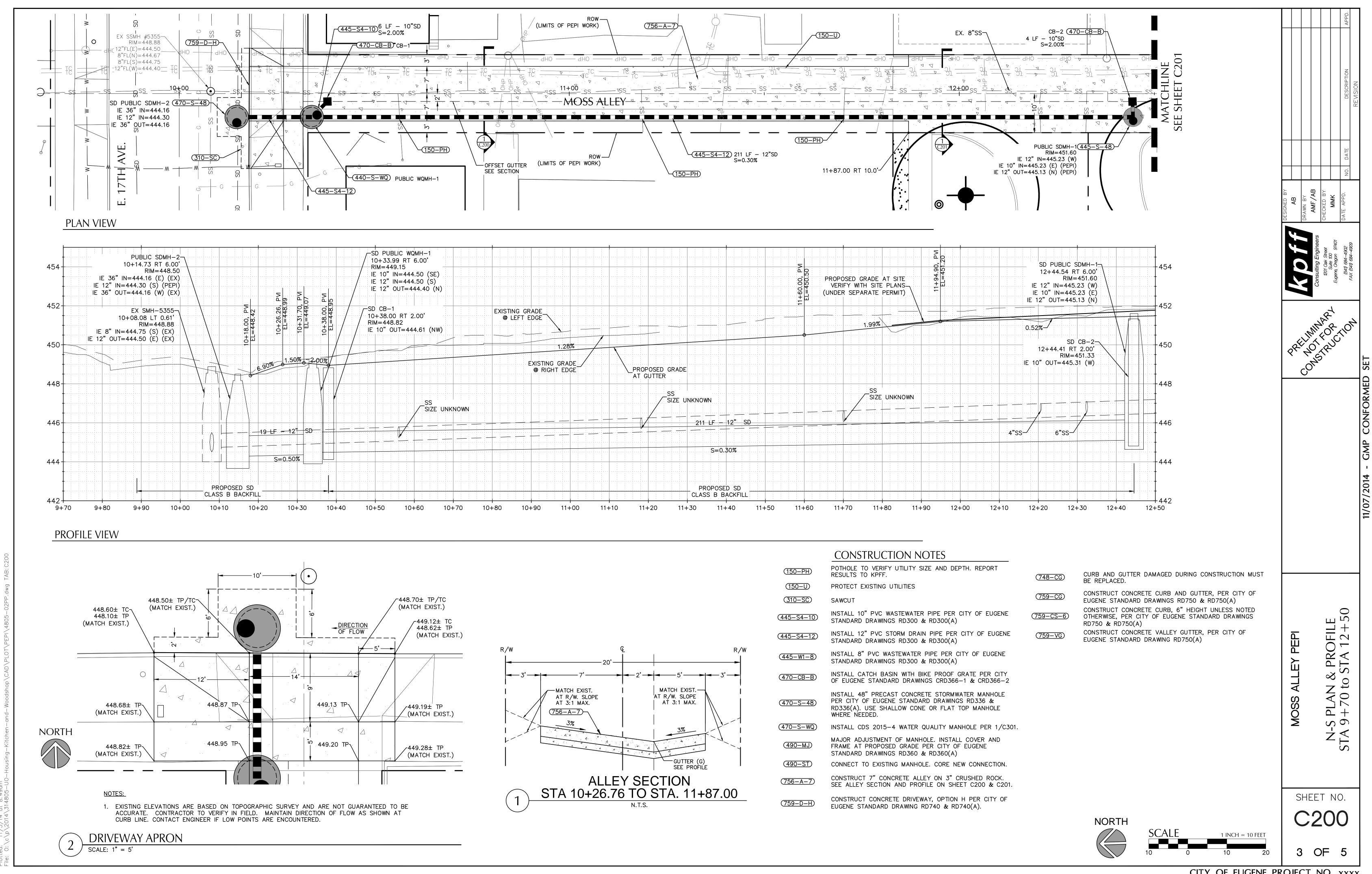
POTENTIAL UNDERGROUND FACILITY OWNERS

# Dig || Safely

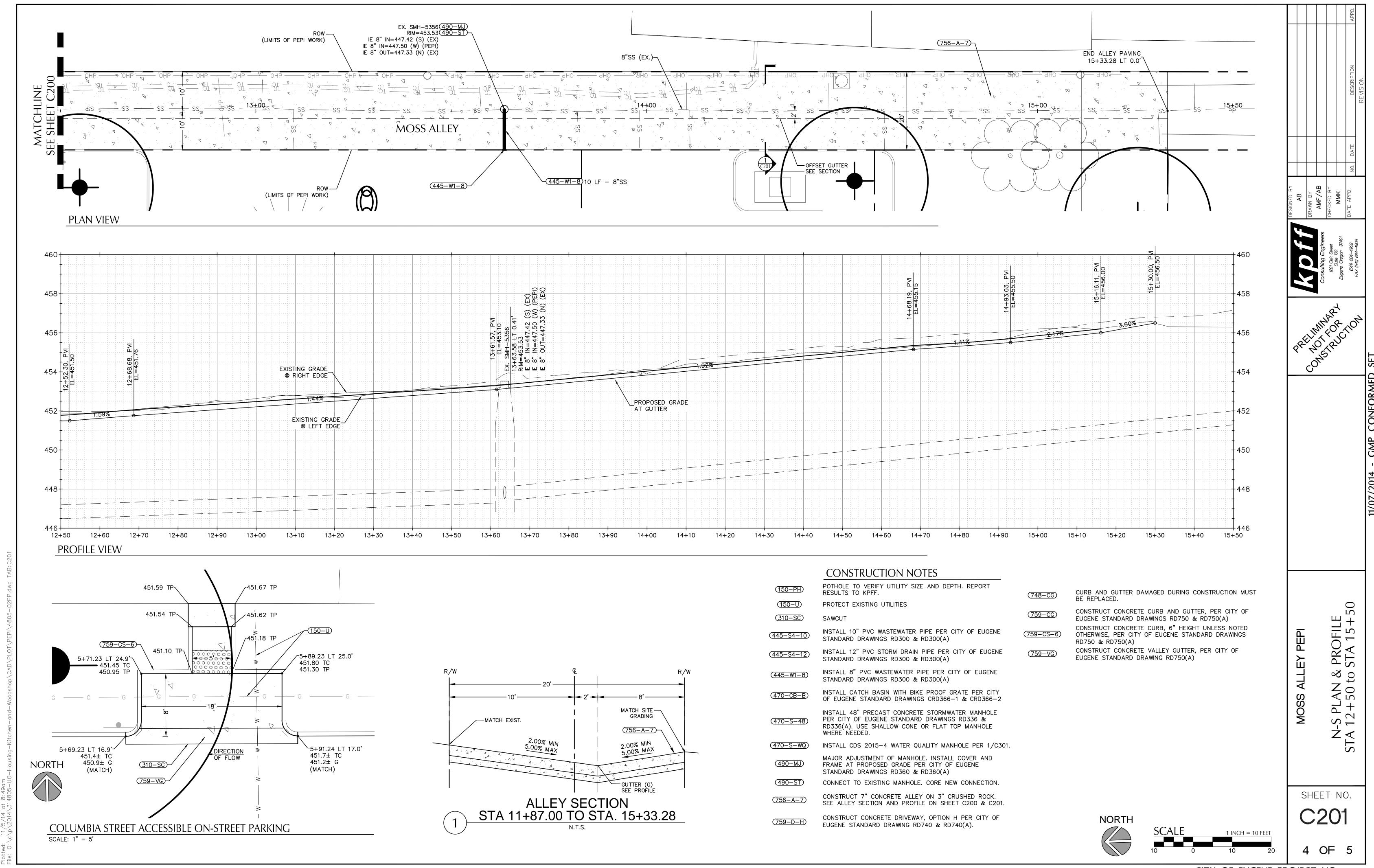
Call the Oregon One-Call Center 1-800-332-2344

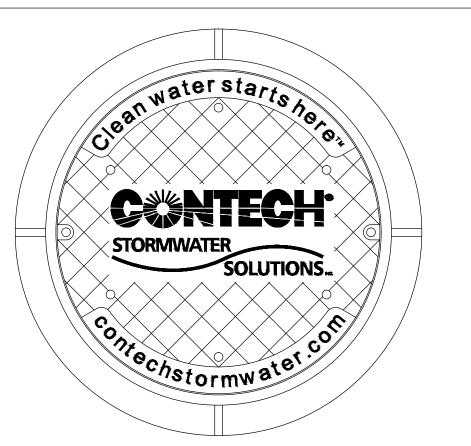
1 OF 5





CITY OF EUGENE PROJECT NO. xxxx



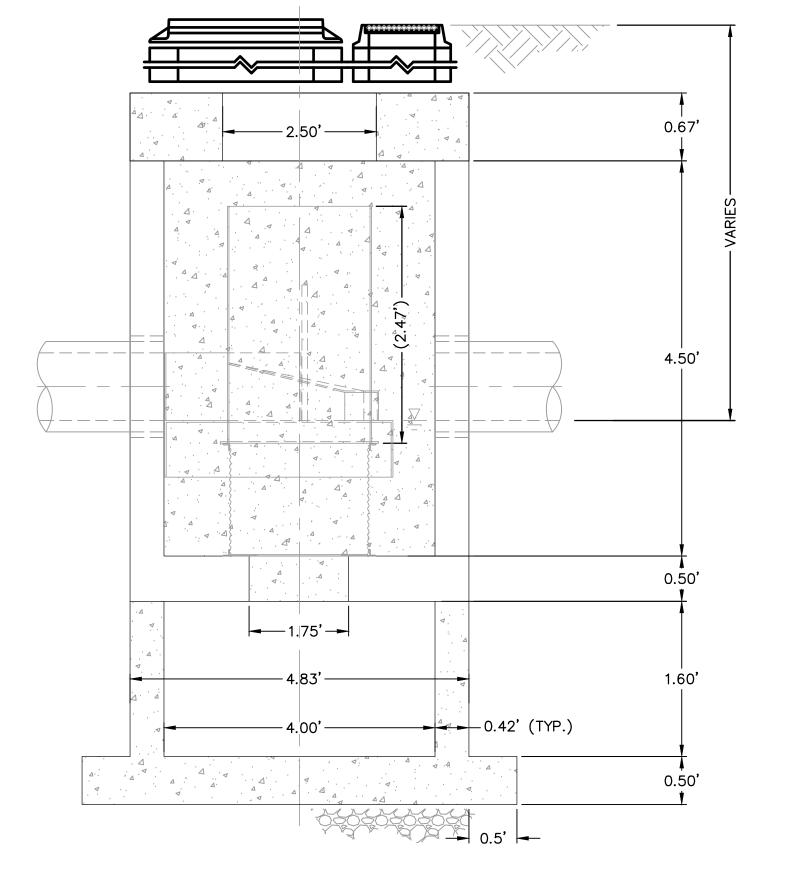


**PRELIMINARY** 

SHEET NO.

5 OF 5

PEPI WQMH

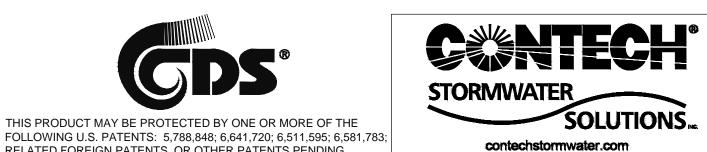


# GENERAL NOTES

- 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- 2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH STORMWATER SOLUTIONS REPRESENTATIVE. www.contechstormwater.com
- 4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION
- CONTAINED IN THIS DRAWING. 5. STRUCTURE AND CASTINGS SHALL MEET AASHTO HS20 LOAD RATING.
- 6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

# **INSTALLATION NOTES**

- 1. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND
- SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- 2. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- 3. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS
- 4. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



CDS2015-4 PRECAST CONCRETE WATER QUALITY SYSTEM STANDARD DETAIL

- 1. DETAIL IS FOR REFERENCE ONLY, WQMH TO BE CONSTRUCTED FROM SHOP DRAWINGS.
- 2. CONTRACTOR TO PROVIDE CONCRETE BALLAST PER MANUFACTURER'S RECOMMENDATION ASSUMING FULLY SATURATED SOIL CONDITION.
- 3. SEE CITY OF EUGENE STORMWATER MANAGEMENT MANUAL FOR A COMPLETE LIST OF THE CITY OF EUGENE PRODUCTS.
- 4. ANY PRODUCT SUBSTITUTION CHOSEN MUST BE SIZED BY KPFF.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE

RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

