# **CONSTRUCTION PLANS** FOR

## **DESCHUTES COUNTY DEPT. OF SOLID WASTE** SW TRANSFER STATION TRAILER BAY and BIN STORAGE IMPROVEMENTS PROJECT 54580 HIGHWAY 97 **DESCHUTES COUNTY** T21S R11E S05 00101 ODOT MILE POST 159.51

### **APPROVALS:**

MID STATE ELECTRIC COMPANY

DESCHUTES COUNTY DEPT. OF SOLID WASTE	DATE
LA PINE FIRE DISTRICT	DATE

INDEX OF SHEETS R SHEET PLAN AND GENERAL GRADING . PLAN AND PROFILE CTURAL PLAN AND	
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CTURAL PLAN AND	
RAL STRUCTURAL NOTES	
CTURAL DETAILS	
PLAN & FENCE PLAN	
FENCE - AXON DRAWING	
CTURAL NOTES AND SITE PLAN	
L DETAILS	
	L DETAILS RK AND BASIS OF BEARINGS:

APRIL 12, 2013 AND ON NOVEMBER 26, 2014 FOR THE PURPOSE OF A TOPOGRAPHIC SURVEY FOR THIS PROJECT.

BOUNDARY AND EASEMENT LOCATIONS ARE BASED ON RECORD DATA ONLY. NO TITLE REPORT WAS PROVIDED OR RIGHTS-OF-WAY RESOLVED.

UTILITY LOCATES WERE REQUESTED FOR THIS SITE. VERIFY LOCATON OF **EXISTING UTILITIES PRIOR TO CONSTRUCTION.** 

CONTOUR INTERVAL = 1.0 FT COORDINATES ARE BASED ON CENTRAL OREGON COORDINATE SYSTEM VERTICAL DATUM WAS PROVIDED BY JOHN THOMPSON AND ASSOCIATES. INC BASED ON NGVD 1929, ODOT BM D532 ELEV 4209.26 FT

### **PROPERTY OWNER:**

**DESCHUTES COUNTY. OR** 

**NOTES:** 

DATE

2. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON THE PROJECT SITE AT ALL TIMES.

3. 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).

4. CONTRACTOR SHALL COMPLY WITH ORS 757.541 TO 757.571.

5. CONTRACTOR IS RESPONSIBLE TO PROVIDE NOTICE TO OWNER OF **INCONSISTENCIES BETWEEN THESE PLANS AND ACTUAL SITE CONDITIONS THAT** WOULD ADVERSELY AFFECT THE INTEGRITY OF THIS PROJECT.

6. ALL EXISTING SURVEY MONUMENTS AND CONTROL POINTS THAT ARE REMOVED OR DISTURBED IN ANY WAY DURING CONSTRUCTION SHALL BE REESTABLISHED AND DOCUMENTED BY AN OREGON REGISTERED LAND SURVEYOR AT CONTRACTOR'S EXPENSE.

7. CONTRACTOR UNDERSTANDS THAT THE INTENT OF THIS PROJECT IS TO CONSTRUCT SITE IMPROVEMENTS THAT SHALL BE COMPLETE. FUNCTIONAL. AND **READY FOR USE AT THE COMPLETION OF CONSTRUCTION. AND THAT ALL COSTS** FOR SUCH WORK HAVE BEEN INCLUDED IN THE BID PRICE PROVIDED TO THE OWNER.

8. COUNTY ENGINEER SIGNATURE DOES NOT GRANT APPROVAL TO COMMENCE CONSTRUCTION.

9. ALL WORK SHALL BE PREFORMED BY A STATE APPROVED CONTRACTOR. 10. COUNTY ENGINEER'S SIGNATURE DOES NOT CONSTITUTE APPROVAL OF FACILITIES PROPOSED ON PRIVATE PROPERTY. SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT ARE REQUIRED AND SHALL BE OBTAINED BY THE DEVELOPER FOR FACILITIES LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF- WAY.

11. ANY WORK WITHIN EXISTING PUBLIC RIGHT-OF-WAY OR DEDICATED COUNTY AND STATE EASEMENTS REQUIRES A SEPARATE RIGHT-OF-WAY/EXCAVATION PERMIT OBTAINED FROM THE COUNTY ENGINEERING DIVISION OR STATE **RIGHT-OF-WAY DEPARTMENT. WORK WITHIN THE RIGHT-OF-WAY OR EASEMENT** MAY OCCUR ONLY BETWEEN THE HOURS OF 7:00AM AND 4:00 PM UNLESS OTHERWISE PERMITTED ANY AND EVERY CALENDAR DAY EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS.

13. TEMPORARY ACCESS FOR ALL USERS, INCLUDING THOSE WITH DISABILITIES, SHALL **BE MAINTAINED WITHIN THE EXISTING RIGHT-OF-WAY.** 

**1. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE** CONTRACT DOCUMENT SPECIFICATIONS AND PLANS .

**12. ALL CONSTRUCTION SHALL CONFORM TO STATE AND FEDERAL STANDARDS REGARDING ACCESSIBILITY TO PEOPLE WITH DISABILITIES** 



VICINITY MAP







General Structura	I Note	€S			
PROJECT DESCRIPTION: NEW RETAINING WALL FOR TRANSFER	STATION.				
DESIGN CODE: INTERNATIONAL BUILDING CODE, 2009	EDITION.				
GENERAL: 1. UNLESS OTHERWISE NOTED, ALL CONTROLMED THE MOOT RECENTLY A	MATERIAL A		SPECIFICATIONS CITED HER	EIN SHALL	
2. THESE STRUCTURAL NOTES ARE DISCREPANCY FOUND AMONG THE DR	A SUPPLEME A WINGS, SPE		DF CODE. PROJECT SPECIFICATIONS. S, THESE NOTES, AND ANY S	ANY ITE	
CONDITIONS SHALL BE REPORTED IN A WHO SHALL CORRECT ANY DISCREPAN	TIMELY MAN	INER TO THE	E ARCHITECT / ENGINEER OF ORK DONE BY THE CONTRAC	RECORD	
3. THE CONTRACTOR SHALL VERIFY TO PROCEEDING WITH ANY WORK OR	HALL BE DON 7 AND COORE FABRICATION	IE AT THE CO DINATE THE I.	DITRACTOR'S RISK. DIMENSIONS AMONG DRAWI	NGS PRIOR	
4. THE STRUCTURAL DRAWINGS RE INTENDED TO INDICATE THE MEANS AN DESPONSIBLE FOR ALL DEMOLITION AN	PRESENT TH	E COMPLET	ED STRUCTURE AND ARE NO JCTION. THE CONTRACTOR	DT S	
SEQUENCING, AND SAFETY REQUIRED 5. THE CONTRACTOR IS RESPONSI	FOR THIS PR	OJECT. DESIGN ANI	D CONSTRUCTION OF ALL EF	ECTION	
BRACING, FORM WORK, AND TEMPORA 6. ALL FEATURES OF CONSTRUCTIO CHARACTER AS SHOWN FOR SIMILAR (	RY SHORING	REQUIRED	FOR THIS PROJECT. HALL BE OF THE SAME TYPE DREVIEW BY THE ARCHITECT		
STRUCTURAL ENGINEER OF RECORD. 7. ALL PRODUCTS AND MATERIALS	USED BY THE	CONTRACT	OR SHALL BE APPLIED, PLAC	CED,	
8. THESE DOCUMENTS CONTAIN NO ELEMENTS, SPECIFICALLY TO ONE SHE	DTES THAT MATER OF THE THAT MATER OF THE	AY APPLY G	ENERALLY TO ALL STRUCTION ONE OR MORE STRUCTURA	RAL	
ELEMENTS. THE NOTES ARE NOT MERE ANY WORK THAT IS PERFORMED THAT WITH THE DESIGN AND IS SUBJECT TO	E GUIDELINES IS NOT IN CC REJECTION	S, THEY ARE MPLIANCE \ ANY AI TER	PART AND PARCEL OF OUR WITH THE NOTES IS NOT IN C ATION MODIFICATION DELE	DESIGN. COMPLIANCE	
ADDITION TO THE NOTES BY WRITING, THE PRIOR EXPRESS WRITTEN CONSE	ACT OR FAILI	URE TO ACT ROVAL OF FF	, SHALL BE CARRIED OUT ON ROELICH CONSULTING ENGIN	ILY WITH IEERS.	
FOUNDATIONS: 1. FOUNDATION SIZES ARE BASED	UPON A MAXI	MUM TOTAL	LOAD BEARING SOIL PRESS	URE = 2500	
PSF (ASSUMED) FOR BEARING ON NAT 2. FOOTING SHALL BE FOUNDED OF FILL AS RECOMMENDED BY THE GEO	IVE SOILS/CC N FIRM, UNDIS TECHNICAL E	MPACTED F STURBED SC NGINEER'S I	TLL. DIL OR ON APPROVED STRUC REPORT	TURAL	
3. ALL DISTURBED SOIL SHALL BE F TO NEAT LINES AND REPLACED WITH F	REMOVED BY	HAND OPER FILL IF NEC	REFORT. RATION FROM FOOTING EXC ESSARY.	AVATIONS	
4. THE CONTRACTOR SHALL REVIE TO THE COMMENCEMENT OF ANY SITE 5. STRUCTURAL FUL SHALL CONST	W ALL GEOTE WORK. ST OF CLEAN			IS PRIOR	
CRUSHED ROCK. FOR COMPACTION & REPORT.	STRUCTURAL	L FILL REQU	IREMENTS, SEE GEOTECHNI	CAL	
6. BOTTOM OF FOOTINGS SHALL BE HORIZONTAL TO 1'-0" VERTICAL STEPS HORIZONTAL WHEN APPROVED BY THI	STEPPED FI OR SHALL BI E ENGINEFR	KOM ELEVAT E SLOPED N	I ION TO ELEVATION AT 2'-0" OT TO EXCEED 1 VERTICAL	<sup>-</sup> O 4	
7. PLACEMENT OF ALL FILL SHALL E QUALIFIED TECHNICIAN UNDER THE G	BE OBSERVED	O AND TEST	ED FOR RELATIVE COMPACT CHNICAL ENGINEER. MINIMU	ION BY A IM TESTING	
FREQUENCY SHALL BE ESTABLISHED I 8. THE CONTRACTOR SHALL NOTIF OF FILLING OPERATIONS	אי וHE GEOT Y THE GEOTE	ECHNICAL E	INGINEER. NGINEER PRIOR TO COMMEN	ICEMENT	
9. ALL GENERAL EXCAVATIONS AND THE PLACEMENT OF ANY SOIL BACKFI	D FOOTINGS	SHALL BE IN ONCRETE.			
CONDITIONS, SHALL FOLLOW RECOMM	IENDATIONS	OF GEOTEC	HNICAL ENGINEER.		
CONCRETE (CAST IN PLACE): 1. ALL CONCRETE SHALL BE NORM	AL WEIGHT A	ND SHALL H	AVE THE FOLLOWING PROPE	RTIES:	
DESCRIPTION         28-DAY STREE           SLAB         3500 PSI	<u>NGTH</u>	MAX WATE	0.48	<u>RAINED AIR</u> 6% +/- 1.5%	
RETAINING WALLS 3000 PSI			0.48	6% +/- 1.5%	
<ol> <li>A MINIMUM OF 5 CONCRETE TES CONCRETE STRENGTH, EACH DAY. CY AT 28 DAYS AND 1 HELD IN RESERVE.</li> </ol>	LINDERS SHA	SHALL BE F ALL BE TEST ENTRAINMEI	PROVIDED FOR EACH 100 CU TED AS FOLLOWS: 1 AT 7 DA NT, WATER/CEMENT RATIO, I	. YARDS OF EACH YS, 1 AT 14 DAYS, LOCATION IN	1 , 2
3. CONCRETE CYLINDER AND TEST	ED AND RECO	ORDED FOR	EACH SET OF CYLINDERS, F ASTM SPECIFICATIONS.	PER ASTM.	
PRACTICE, LATEST EDITION, AND SPEC 5. CONCRETE SUPPLIER TO PROVID	CIFICATIONS. DE MIX DESIG	N CALCULA	TIONS & TESTING HISTORY T	O STRUCTURAL	
ENGINEER OF RECORD FOR REVIEW F 6. CONCRETE SHALL BE PLACED IN 7. THE CONTRACTOR SHALL PROVI	RIOR TO POU ONE CONTIN	JRING OF CO IUOUS OPEF AWINGS FOF	ONCRETE RATION. R THE LAYOUT OF THE CONS	TRUCTION/CONTE	301
JOINTS FOR CONCRETE SLAB-ON-GRA FORMING RECTANGLES WITH A LENGT	DE. THE JOIN	NTS SHALL B	E LOCATED AT MAXIMUM OF EXCEEDING 1 TO 1.5 IN ANY I	15'-0" OC EACH W DIRECTION. CONT	VAY IROL
EINFORCING STEEL:	BLOCKOUTS	AND AT EN	D OF BEARING WALLS & REE	NTRANT CORNER	5.
1. ALL REINFORCING BARS SHALL CC GRADE 60 FOR ALL REINFORCEME	NFORM TO A	STM A-615 C 5 GRADE 40	OF THE FOLLOWING GRADES FOR BEAM STIRRUPS, COLU	: ASTM A615 MN TIES AND	
<ol> <li>REINFORCEMENT SHALL BE DETAIL 318 AND ACI MANUAL 315, UNLESS</li> </ol>	_ED, FABRICA OTHERWISE	TED AND PL	ACED IN ACCORDANCE WITI	HACI CODE FREE OF	STRUCTURAL STEEL: 1. STRUCTURAL CRADES:
LOOSE MILL AND RUST SCALE, OIL ALL REINFORCEMENT IS CONTINUO	DIRT AND CO DUS WITH AD	DATINGS OF EQUATE LAP S WITH SUIT	ANY MANNER THAT WILL RE S. ARI E TIES AND ANCHORAGE	DUCE BOND.	GRADES: CHANI HOLLC
PREVENT DISPLACEMENT. BARS A CUBES.	DJACENT TO	EARTH SHA	LL BE SUPPORTED BY CEME	NT MORTAR	
4. REINFORCEMENT STEEL SHALL NO UNLESS APPROVED BY THE STRUC WET SETTING' OF REINFORCEMEN	T BE DISPLA TURAL ENGI	CED FOR TH NEER OF RE	E CONVENIENCE OF OTHER CORD.	TRADES	3. ALL WELDING WELDERS QU
<ol> <li>THE FOLLOWING MINIMUM CONCRUCE</li> <li>REINFORCEMENT:</li> </ol>	ETE COVER S	HALL BE PR	OVIDED FOR CAST-IN-PLACE		4. ALL SHOP WE 5. WELD TESTIN
A. CONCRETE CAST AGAINS B. CONCRETE EXPOSED TO #6 THROUGH #8	FAND PERMA EARTH OR WE	NENTLY EX	POSED EARTH	3" 2"	6. THE STEEL FA (WPS) PER A
#5 BAR AND SM C. CONCRETE NOT EXPOSED	ALLER TO WEATHE	R:		- 1½"	APPROVAL. 7. ALL BOLTED ( A307
SLABS AND WALLS: #6 BAR AND SM. 11 PLACE 2'-0" × 2'-0" BARS AT CORVE	ALLER	RSECTIONS		3/4" )NS FOLIAL	8. ALL STEEL EX PER ASTM A-1
IN SIZE, NUMBER AND SPACING TO 12. REINFORCEMENT SPLICES, SHALL	HORIZONTAL BE 48 BAR DI	REINFORC A (24" MIN),	ING. UNLESS NOTED OTHERWISE		9. THE DRAWING PER AISC STA DRAWINGS W
13. UNLESS OTHERWISE NOTED, DOW SPACING AS WALL REINFORCEMEN	EL CONCRET IT.	E WALLS TO	FOOTING WITH BARS OF SA	ME SIZE &	10. FIELD WELDIN EXACT EXTEN
SPECIAL INSPECTIONS: 1. A QUALIFIED SPECIAL INSPECTOR I	S TO BE CONT	RACTED BY	THE OWNER PER IBC CHAPTE	R 17	WELDING MA DETERMINED
REQUIREMENTS, AND ALL LOCAL O 2. IT IS THE CONTRACTORS RESPONS INSPECTOR IN A TIMELY MANNED D	RDINANCES. IBILITY TO CO RIOR TO ALL Y	ORDINATE A	LL INSPECTIONS WITH THE DE	SIGNATED SPECIA	SHOWN AS SI 11. IT IS THE RES
3. ALL SPECIAL INSPECTORS SHALL B MATERIALS AND OPERATIONS INDIC	E CERTIFIED T CATED PER IBO	C, ACI, AWS (	THE NECESSARY INSPECTION OR OTHER APPROVED GOVER	NS ON THE NING INSTITUTION	STRUCTURAL 12. PROVIDE NON 6000 PSI MINI
STANUARUS.	: Staa				
Verification and Inspection		Periodic	a Referenced Standard	BC reference	Verification A
1. MATERIAL VERIFICATION OF WELD FIL		_S:			
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS STANDARDS			AISC 360, SECTION A3.5 &		2. INSPECTION OF
SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	-	X	APPLICABLE AWS A5 DOCUMENTS	-	STEEL WELDIN WITH TABLE 17
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	-	x	-	-	3. INSPECTION OF INSTALLED IN H CONCRETE.
2. INSPECTION OF WELDING:					4. VERIFYING USE DESIGN MIX.
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS:	х	-			SAMPLED TO F/ SPECIMENS FO
2) MULTIPASS FILLET WELDS:	Х	-	AWS D1.1	1704.3.1	PERFORM SLUM CONTENT TEST THE TEMPERAT
3) SINGLE-PASS FILLE I WELDS > $\frac{3}{5}_{6}$ ": 4) SINGLE-PASS FILLET WELDS	Х	-			CONCRETE. 6. INSPECTION FC
= <sup 5/ <sub>6</sub> ":	-	X			
5) FLOOR AND ROOF DECK					

& WHERE APPLICABLE, SEE ALSO SECTION 1707.1, SPECIAL INSPECTION FOR SEISMIC RESISTANCE.

LS, ANGLES, PLATES

V STRUCTURAL SECTIONS A-500, GRADE B (Fy=46 KSI)

- C 335, OR AISC-HSS.
- DING SHALL BE PERFORMED IN AN AWS APPROVED SHOP.

- H DETAIL DIMENSIONS PER AISC CODE OF STANDARD PRACTICE. HAS BEEN INDICATED ON DETAILS. BY NO MEANS DO THE DETAILS INDICATE THE
- H ON STEEL SHOP DRAWINGS.
- RAWINGS TO PRODUCE THE SHOP DRAWINGS. IUM AT 28 DAYS AND SHALL COMPLY WITH ASTM C 1107.

### Inspection: Concrete

Verification and Inspection	Continuous	Periodic	Referenced Standard	IBC reference
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	-	x	ACI 318: 3.5, 7.1-7.7	1913.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1704.3, ITEM 5b.	-	-	AWS D1.4 ACI 318: 3.5.2	-
3. INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.	-	х	ACI 318: 3.8.6, 8.1.3, 21.2.8	1912.1
4. VERIFYING USE OF REQUIRED DESIGN MIX.	-	х	ACI 318: Ch. 4, 5.2-5.4	1904.2.2, 1913.2, 1913.3
<ol> <li>AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.</li> </ol>	X	-	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1913.10
<ol> <li>INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.</li> </ol>	-	x	ACI 318: 5.11-5.13	1913.6, 1913.7, 1913.8
<ol> <li>INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.</li> </ol>	-	x	ACI 318: 6.1.1	-
a. WHERE APPLICABLE, SEE ALSO SEC	TION 1707.1, SPE	CIAL INSPEC	TION FOR SEISMIC RESISTANCE.	



ASTM A-36 (Fy=36 KSI)

ON, ERECTION AND IDENTIFICATION OF STRUCTURAL STEEL SHALL CONFORM TO

HALL CONFORM TO AWS SPECIFICATIONS. ALL WELDING SHALL BE DONE BY LIFIED UNDER AWS SPECIFICATIONS, USING E70XX, LOW HYDROGEN, ELECTRODES. AND INSPECTION SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF AWS D1.1

RICATOR AND ERECTOR SHALL DEVELOP A WELDING PROCEDURE SPECIFICATION S D1.1 FOR ALL WELDS. SUBMIT WRITTEN COPIES TO THE INSPECTOR FOR

NNECTIONS SHALL BE MADE WITH MACHINE BOLTS (MB) CONFORMING TO ASTM

OSED TO WEATHER, MOISTURE, SOIL, OR AS NOTED SHALL BE HOT DIP GALVANIZED 3, OR HAVE AN APPROVED PROTECTIVE COATING. PER SPECIFICATIONS. ARE DIMENSIONED FOR GENERAL LAYOUT AND NOT NECESSARILY DIMENSIONED DARDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP

OF FIELD WELDING. ADDITIONAL FIELD WELDING MAY BE REQUIRED AND/OR SHOP BE SUBSTITUTED FOR FIELD WELDING. EXACT FIELD WELDING LOCATIONS SHALL BE ND COORDINATED BY THE CONTRACTOR AND/OR SHOP FABRICATOR WITH RESPECT ABILITY, TRANSPORTATION AND PLACEMENT PRIOR TO FABRICATION AND SHALL BE

DNSIBILITY OF THE CONTRACTOR TO COORDINATE BETWEEN THE CIVIL AND HRINK GROUT UNDER ALL BASE PLATES. GROUT SHALL BE FACTORY-PACKAGED,

NOTE: SEE CIVIL DRAWINGS FOR WALL

HEIGHTS & DIMENSIONS.

STRUCTURAL PLAN SCALE: 1/4"=1'-0" 13-B055







SCALE: 1"=1'-0" 13-B055







6

<u></u>\$2.0









PHOTO #001 SCALE: NTS 13-B055

1 \S4.0



PHOTO #003 SCALE: NTS 13-B055

3 \S4.0



PHOTO #007 SCALE: NTS 13-B055



### Keyed Notes

- ANCHOR FENCE TO NEW WALL PER 7/S2.0.
- WELD NEW FENCE TO EXISTING VERTICAL FENCE POST WITH 1/4" FILLET WELDS ON ALL SIDES.

- 5 LATCHING MECHANISM AT EAST END OF GATE.





SPECIAL INSPECTIO	N: SOILS	S AND FOL		N		
		INSPECT				
VERIFICATION AND INSPECTION	IBC CODE	CODE OR	FREQUENCY OF INSPECTION		REMARKS	
	REFERENCE	REFERENCE	CONTINUOUS	PERIODIC		
REQUIRED GEOTECHNICAL VERIFICATION	& INSPECTION O	F SOILS (a)	·			
VERIFY FOOTING BEARING CAPACITY AND SUBGRADE PREPARATION FOR FILLS	TABLE	GEOTECHNICAL	-	X (b)	BY THE GEOTECHNICAL	
FILL MATERIAL VERIFICATION	1705.6	1705.6 REPORT	Х	-	ENGINEER	
FILL PLACEMENT & COMPACTION			Х	-		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	TABLE 1705.6	-	-	X (b)	BY THE GEOTECHNICAL ENGINEER	
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	TABLE 1705.6	-	-	х		
PERFORM CLASSIFICATION OF COMPACTED FILL MATERIALS	TABLE 1705.6 1803.5.1	-	-	х		
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	TABLE 1705.6	-	х	-	BY THE GEOTECHNICAL ENGINEER	
PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	TABLE 1705.6	-		Х		

(b) Periodic Special Inspection frequency and timing to be defined by the registered design professional.

General Structural Note	es		
PROJECT DESCRIPTION:			
NEW SITE RETAINING WALL			
SEGMENTAL RETAINING WALL			
2. STATE OF OREGON 2014 STRUCTURAL	SPECIALTY CODE (OSS	C) AMENDMENTS.	
3. ALL REFERENCE TO OTHER CODES AN	ID STANDARDS (ACÌ, AST	M, ETC.) SHALL BE FOR THE EDITIONS NOTED IN	
CHAPTER 35 OF THE IBC.			
OCCUPANCY CATEGORY (PER IBC TABLE 10	604.5 II		
& ASCE 7 TABLE 1-1)			
SEISMIC IMPORTANCE FACTOR	) 1		
SITE CLASS	D		
MAPPED SPECTRAL RESPONSE (Sg	<sub>s</sub> ) 0.418		
MAPPED SPECTRAL RESPONSE (S	0.178		
SPECTRAL RESPONSE COEFF. (S <sub>I</sub>	<sub>DS</sub> ) 0.409		
SPECTRAL RESPONSE COEFF. (S <sub>t</sub>	<sub>D1</sub> ) 0.247		
SEISMIC DESIGN CATEGORY	D		
ANALYSIS PROCEDURE	EQUIVALENT L	ATERAL FORCE PROCEDURE	
ALLOWABLE SOIL BEARING PRESSURE	2500 PSF PER	GEOTECHNICAL REPORT	
	BY:	WALLACE GROUP	
	DATED:	MAY 29, 2013	
	PROJECT NO:	10287(1)	

THE MOST RECENTLY ADOPTED SPECIFICATION OF CODE. 2. THESE STRUCTURAL NOTES ARE A SUPPLEMENT TO THE PROJECT SPECIFICATIONS. ANY DISCREPANCY FOUND AMONG THE DRAWINGS, SPECIFICATIONS, THESE NOTES, AND ANY SITE CONDITIONS SHALL BE REPORTED IN A TIMELY MANNER TO THE ARCHITECT / ENGINEER OF RECORD WHO SHALL CORRECT ANY DISCREPANCY IN

WRITING. ANY WORK DONE BY THE CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK. 3. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS AMONG DRAWINGS PRIOR TO

PROCEEDING WITH ANY WORK OR FABRICATION. 4. THE STRUCTURAL DRAWINGS REPRESENT THE COMPLETED STRUCTURE AND ARE NOT INTENDED TO INDICATE THE MEANS AND METHOD OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCING, AND SAFETY REQUIRED FOR THIS PROJECT. 5. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL ERECTION BRACING, FORM WORK, AND TEMPORARY SHORING REQUIRED FOR THIS PROJECT.

6. SEE "DEFERRED SUBMITTALS" FOR REQUIRED SHOP DRAWING SUBMITTALS. UNLESS STATED OTHERWISE IN THE PROJECT SPECIFICATIONS, PROVIDE A MINIMUM OF TWO SETS OF SUBMITTALS FOR APPROVAL OR CORRECTIONS.

7. ALL FEATURES OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME TYPE AND CHARACTER AS SHOWN FOR SIMILAR CONDITIONS SUBJECT TO REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

8. ALL PRODUCTS AND MATERIALS USED BY THE CONTRACTOR SHALL BE APPLIED, PLACED, ERECTED OR INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. 9. THESE DOCUMENTS CONTAIN NOTES THAT MAY APPLY GENERALLY TO ALL STRUCTURAL ELEMENTS, SPECIFICALLY TO ONE SHEET, OR SPECIFICALLY TO ONE OR MORE STRUCTURAL ELEMENTS. THE NOTES ARE NOT MERE GUIDELINES, THEY ARE PART AND PARCEL OF OUR DESIGN. ANY WORK THAT IS PERFORMED THAT IS NOT IN COMPLIANCE WITH THE NOTES IS NOT IN COMPLIANCE WITH THE DESIGN AND IS SUBJECT TO REJECTION. ANY ALTERATION, MODIFICATION, DELETION, OR ADDITION TO THE NOTES BY WRITING, ACT OR FAILURE TO ACT, SHALL BE CARRIED OUT ONLY WITH THE PRIOR EXPRESS WRITTEN CONSENT AND APPROVAL OF FROELICH ENGINEERS.

### SEGMENTAL CONCRETE RETAINING WALL:

1. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS. GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATION AND APPROVE PRIOR TO PLACEMENT OF LEVELING MATERIAL OR FILL SOILS. PROOF ROLL FOUNDATION AREA AS DIRECTED TO DETERMINE IF REMEDIAL WORK IS REQUIRED.

OVER EXCAVATE AND REPLACE UNSUITABLE FOUNDATION SOILS WITH APPROVED COMPACTED FILL. 3. LEVELING PAD MATERIAL SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS, TO A MINIMUM THICKNESS OF 6" (150 MM) AND EXTEND LATERALLY A MINIMUM OF 6" (150 MM) IN FRONT AND BEHIND THE SEGMENTAL WALL UNIT. 4. SOIL LEVELING PAD MATERIALS SHALL BE COMPACTED IN ACCORDANCE W/GEOTECHNICAL ENGINEER.

5. LEVELING PAD SHALL BE PREPARED TO INSURE FULL CONTACT TO THE BASE SURFACE OF THE CONCRETE UNITS.

6. INSTALL SHEAR/CONNECTING DEVICES PER MANUFACTURER'S RECOMMENDATIONS. 7. PLACE AND COMPACT DRAINAGE FILL WITHIN AND BEHIND WALL UNITS. PLACE AND COMPACT BACKFILL SOIL BEHIND DRAINAGE FILL. FOLLOW WALL ERECTION AND DRAINAGE FILL CLOSELY WITH STRUCTURE BACKFILL.

8. MAXIMUM STACKED VERTICAL HEIGHT OF WALL UNITS, PRIOR TO UNIT DRAINAGE FILL AND BACKFILL PLACEMENT AND COMPACTION, SHALL NOT EXCEED TWO COURSES. 9. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS MANUFACTURED SPECIFICALLY FOR SOIL REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER YARN OR HIGH DENSITY POLYETHYLENE. POLYESTER GEOGRID SHALL BE KNITTED FROM HIGH TENACITY POLYESTER FILAMENT YARN WITH A MOLECULAR WEIGHT EXCEEDING 25,000 G/M AND A CARBOXYL END GROUP VALUES LESS THAN 30. POLYESTER GEOGRID SHALL BE COATED WITH AN IMPREGNATED PVC COATING THAT RESISTS PEELING, CRACKING, AND STRIPPING. 10. GEOGRID SHALL BE ORIENTED WITH THE HIGHEST STRENGTH AXIS PERPENDICULAR TO THE WALL

ALIGNMENT. 11. GEOGRID REINFORCEMENT SHALL BE PLACED AT THE STRENGTHS, LENGTHS, AND ELEVATIONS SHOWN

ON THE CONSTRUCTION DESIGN DRAWINGS OR AS DIRECTED BY THE ENGINEER. 12. THE GEOGRID SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL AND ATTACHED TO THE CONCRETE WALL UNITS. PLACE THE NEXT COURSE OF CONCRETE UNITS OVER THE GEOGRID. THE GEOGRID SHALL BE PULLED TAUT, AND ANCHORED PRIOR TO BACKFILL PLACEMENT ON THE GEOGRID. 13. GEOGRID REINFORCEMENTS SHALL BE CONTINUOUS THROUGHOUT THEIR EMBEDMENT LENGTHS AND

PLACED SIDE-BY-SIDE TO PROVIDE 100% COVERAGE AT EACH LEVEL. SPLICED CONNECTIONS BETWEEN SHORTER PIECES OF GEOGRID OR GAPS BETWEEN ADJACENT PIECES OF GEOGRID ARE NOT PERMITTED. 14. REINFORCED BACKFILL SHALL BE PLACED, SPREAD, AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK IN THE GEOGRID AND INSTALLATION DAMAGE 15. REINFORCED BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6" (150 MM) WHERE HAND COMPACTION IS USED, OR 8 - 10" (200 TO 250 MM) WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED DENSITY. 16. REINFORCED BACKFILL SHALL BE COMPACTED IN ACCORDANCE W/GEOTECHNICAL ENGINEER.

17. ONLY LIGHTWEIGHT HAND OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET (1 M) FROM THE TAIL OF THE SEGMENTAL CONCRETE UNIT. 18. GEOTECHNICAL ENGINEER SHALL INSPECT EXCAVATION PRIOR TO PLACING FIRST BLOCKS AND

PERIODICALLY DURING INSTALLATION.

tes LLC )R 97702 -408-576( , Associates | , Bend, OR 9 Cell: 541-40 er Engineering & / 5 Sunridge Drive, l ·: 541-617-0805, C Ш Kliewei 60465 Office: ng is an instrument of service only and is, and shall property of Kliewer Engineering & Associates LLC action or other use shall be made by any person or ut the expressed written permission of Kliewer ng & Associates LLC. Unauthorized use shall void th al seal and signature hereon and no professional ility will remain. Written dimensions on this drawing precedence over any scaled dimension. Do not drawing for accurate dimensions. Notify Engineer o KEA, All rights reserved FROELICH ENGINEERS Portland: (503) 624-7005 Bend: (541) 383-1828 Froelich-Engineers.com JOB# 14-B323 DM TRUCTURAL 51411PE OREGON EXPIRES 32 SOLID WASTE BIN AND ECT VTY  $\succ$ Q Q Q m μÖ <u>с</u> S Р ш TRAEMEN DEP COUNTY ТА<sup>-</sup> ИР! 97, io = ≻ AGE HW Ē ĒS OR/ 580 DESCHUTE ST 54 SW FILENAME: 14b323\_s10.dwg JOB NUMBER: 14-B323 **DRAWN BY: CHECKED BY:** SHEET TITLE STRUCTURAL NOTES AND SITE PLAN SHEET NUMBER

