



CITY OF WEST LINN, OREGON

ROSEMONT RESERVOIR

SAFETY AND MAINTENANCE IMPROVEMENTS

PROJECT NO. PW-14-04

JULY 2014

INDEX OF DRAWINGS

GENERAL

- 1 G-1 COVER SHEET, INDEX OF DRAWINGS AND LOCATION MAP
- 2 G-2 GENERAL NOTES AND ABBREVIATIONS

CIVIL

- 3 C-1 SITE PLAN
- 4 C-2 ELEVATION AND ROOF PLAN

STRUCTURAL

- 5 S-1 GENERAL STRUCTURAL NOTES
- 6 S-2 ELEVATION AND ROOF PLAN
- 7 S-3 STRUCTURAL DETAILS
- 8 S-4 STRUCTURAL DETAILS

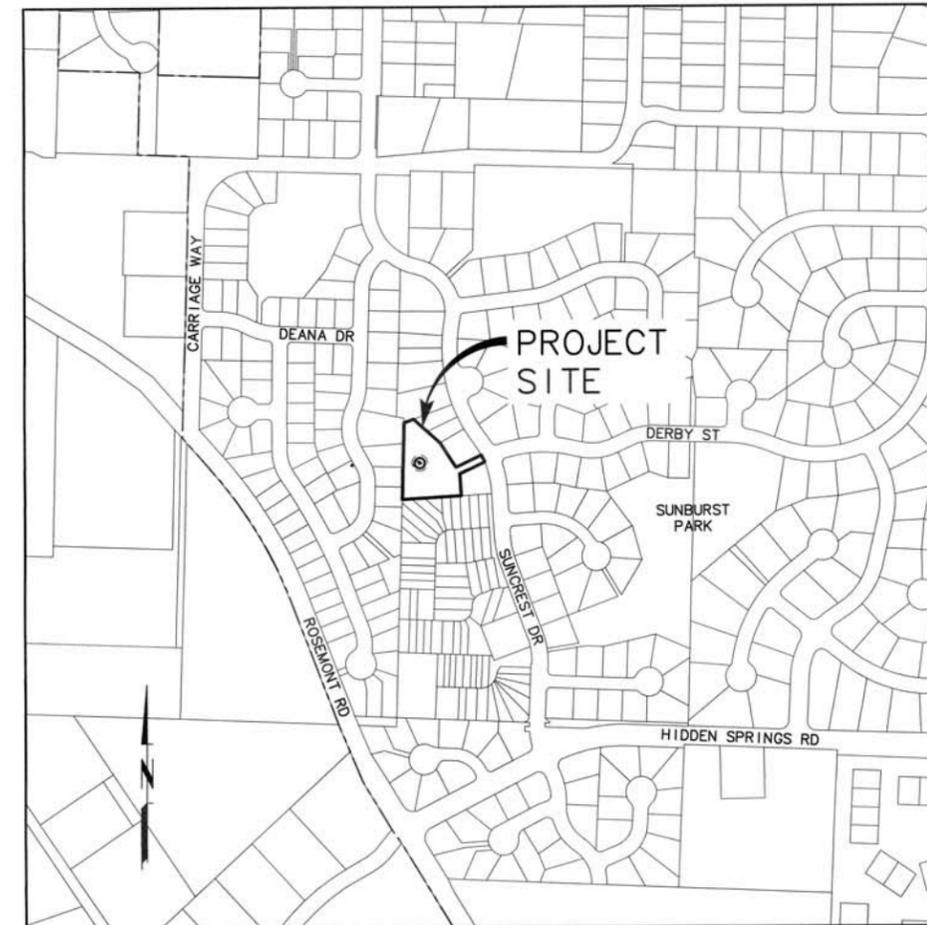
ELECTRICAL

- 9 E-1 ELECTRICAL PLAN
- 10 E-2 ELECTRICAL DETAILS

INSTRUMENTATION AND CONTROL

- 11 IC-1 SCADA SYSTEM MODIFICATIONS

ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)



LOCATION MAP
SCALE: 1"=300'

NO.	DATE	REVISION			
			DESIGNED: JHF	DRAWN: DKH	CHECKED: TPB
			APPROVED: TLB		
			SHEET	G-1	
			1 of 11		
SCALE	VERT. AS SHOWN	HORZ. AS SHOWN	NOTICE		
			IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		
CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS COVER SHEET INDEX OF DRAWINGS AND LOCATION MAP					
MSA Murray, Smith & Associates, Inc. Engineers/Planners			PHONE: 503-255-9010 121 S.W. Salmon, Suite 900 Portland, Oregon 97204 FAX: 503-255-9022		
MSA PROJECT: 14-1537-201			DATE: JULY 2014		



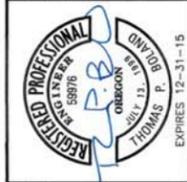
PLAN
SCALE: 1"=20'



MSA
Murray Smith & Associates, Inc.
Engineers/Planners
121 S.W. Salmon, Suite 900
Portland, Oregon 97204
PHONE: 503-255-0010
FAX: 503-255-0022

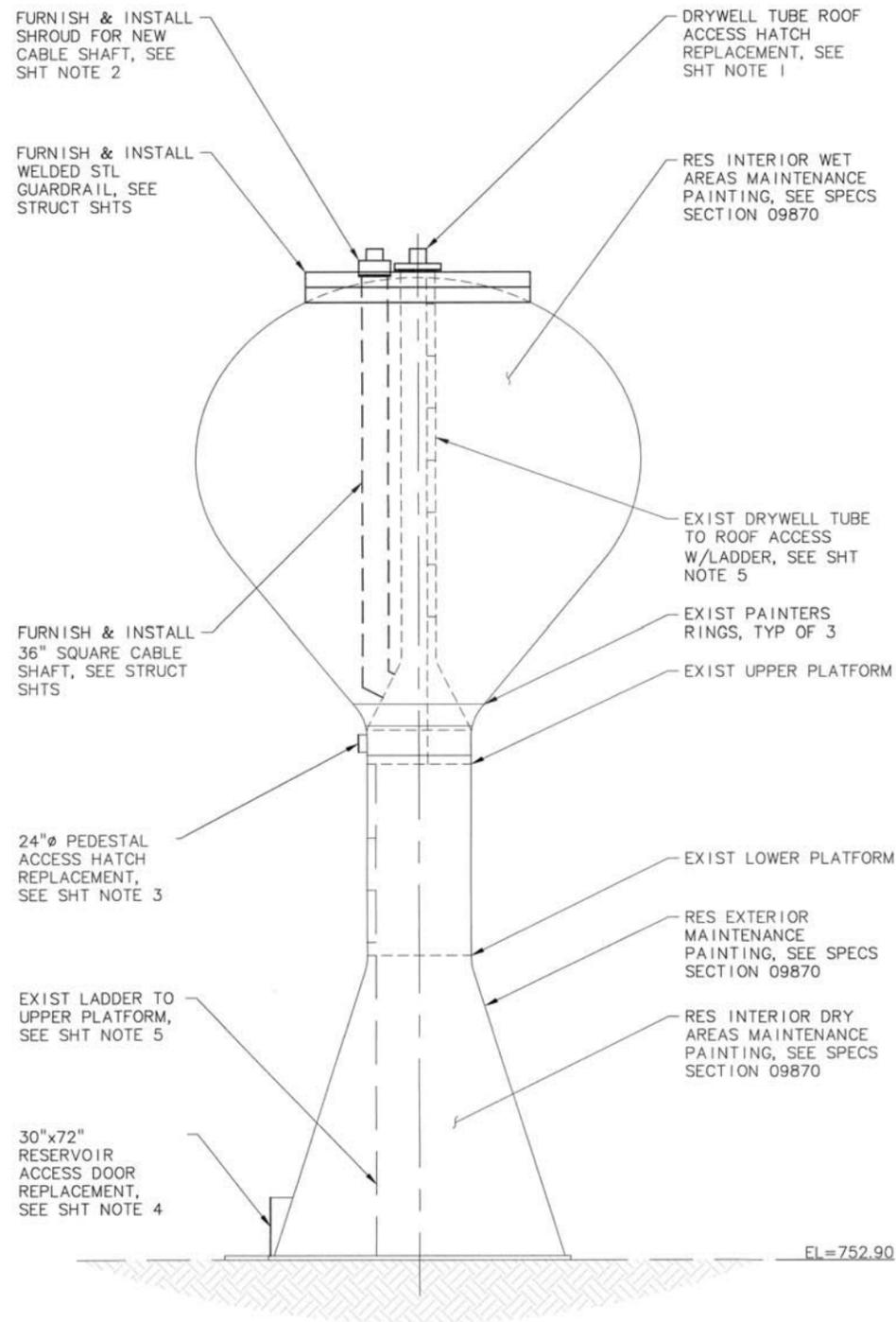
PROJECT NAME: CITY OF WEST LINN, OREGON
ROSEMONT RESERVOIR
SAFETY AND MAINTENANCE IMPROVEMENTS
SHEET TITLE: SITE PLAN

SCALE: VERT: AS SHOWN
HORIZ: AS SHOWN
NOTICE: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

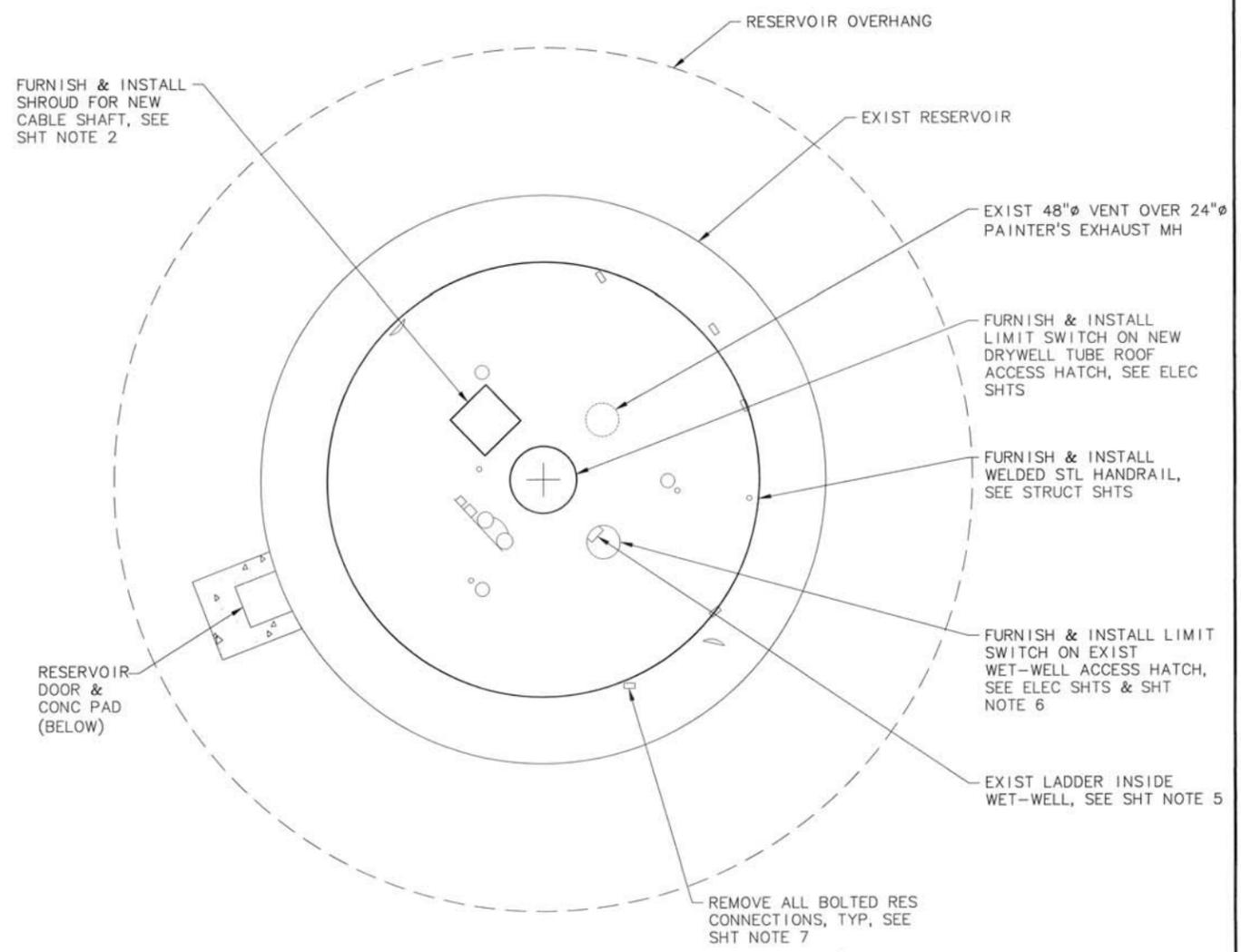


NO.	DATE	REVISION	BY
DESIGNED:	JHF		
DRAWN:	DKH		
CHECKED:	TPB		
APPROVED:	TLB		
			SHEET C-1
			3 of 11

G:\PDX_Projects\14\1537\CAD\Sheets\14-1537-201-OR-C.dwg C-2 7/28/2014 9:46 AM RLF 18.2s (LMS Tech)



RESERVOIR ELEVATION
SCALE: 1"=10'



RESERVOIR ROOF PLAN
SCALE: 1"=5'-0"

SHEET NOTES:

1. EXISTING DRYWELL TUBE ROOF ACCESS HATCH SHALL BE REPLACED AS DESCRIBED IN SPECIFICATIONS SECTION 05500. FURNISH AND INSTALL NEW HINGED HATCH WITH SCREENED ADJUSTABLE LOUVERS AND LIMIT SWITCH.
2. NEW CABLE SHAFT THROUGH WET-WELL SHALL INCLUDE A WEATHERPROOF SHROUD ON THE RESERVOIR ROOF AS DESCRIBED IN SPECIFICATIONS SECTION 05500.
3. FURNISH AND INSTALL A REPLACEMENT 24-INCH DIAMETER PEDESTAL ACCESS HATCH COMPLETE WITH INTEGRAL LOUVER AS DESCRIBED IN SPECIFICATIONS SECTION 05500.
4. FURNISH AND INSTALL A REPLACEMENT RESERVOIR ACCESS DOOR COMPLETE WITH INTEGRAL LOUVER AS DESCRIBED IN SPECIFICATIONS SECTION 05500.
5. ALL EXISTING NOTCHED RAIL FALL PREVENTION SYSTEMS ARE TO BE REMOVED FROM THE RESERVOIR LADDERS. FURNISH AND INSTALL FALL PREVENTION SYSTEMS AS SPECIFIED IN SECTION 11900 FOR THE FOLLOWING LADDERS: 1) FROM GROUND TO UPPER PLATFORM (APPROXIMATELY 65 FEET); 2) FROM UPPER PLATFORM TO RESERVOIR ROOF (APPROXIMATELY 60 FEET); AND 3) FROM RESERVOIR ROOF TO BOTTOM OF WET-WELL (APPROXIMATELY 50 FEET).
6. INSTALL CONDUIT PENETRATIONS THROUGH EXISTING WET-WELL HATCH COLLAR FOR EXISTING FLOAT SWITCH AND NEW HATCH LIMIT SWITCH PER ELECTRICAL SHEETS.
7. ALL EXISTING BOLTED CONNECTIONS THROUGH RESERVOIR SHELL SHALL BE REMOVED, PLATE PATCHED AND SEAL WELDED.
8. AFTER WELDING OF NEW ITEMS TO TANK, TELECOMMUNICATIONS PROVIDERS AND OTHER ROOFTOP EQUIPMENT OWNERS SHALL BE CONTACTED TO TRANSFER EQUIPMENT TO THE NEW INFRASTRUCTURE.
9. SEE SPECIFICATIONS SECTION 05500 FOR NEW INSTALLATIONS OR MODIFICATIONS TO EXISTING RESERVOIR APPURTENANCES.

NO.	DATE	REVISION	BY	SHEET	4 of 11
				C-2	
DESIGNED: JHF			DRAWN: DKH		
CHECKED: TPB			APPROVED: TLB		
<p>SCALE: VERT: AS SHOWN HORIZ: AS SHOWN</p> <p>NOTICE: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE</p>					
<p>CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS</p> <p>PROJECT NAME: ELEVATION AND ROOF PLAN</p>					
<p>MSA Murray, Smith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 800 Portland, Oregon 97204 PHONE: 503-255-9010 FAX: 503-255-9022</p>					
MSA PROJECT: 14-1537-201					DATE: JULY 2014

X:\2014\14-076 to 14-100\14-090\Acad\14-090-01.3 Rosemont Structural Drawings.dwg S-1 7/23/2014 2:07 PM PSE-006 18.2s (LMS Tech)

STRUCTURAL SHEETS:

- S1 GENERAL STRUCTURAL NOTES
- S2 ELEVATION AND ROOF PLAN
- S3 STRUCTURAL DETAILS
- S4 STRUCTURAL DETAILS

GENERAL STRUCTURAL NOTES:

1. THESE NOTES ARE GENERAL IN NATURE AND ARE INTENDED TO SET MINIMUM STANDARDS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH THE CONTRACT DOCUMENTS AND HAVE A COPY OF THEM ON SITE AT ALL TIMES.
2. FOR ANY PORTION OF THE CONSTRUCTION WHICH THE CONTRACTOR IS UNABLE TO ASCERTAIN THE REQUIRED CONSTRUCTION OR WHERE CONFLICTS EXIST, IT IS THE CONTRACTORS RESPONSIBILITY TO REQUEST ADDITIONAL INFORMATION (RFIs) AND/OR CLARIFICATIONS BEFORE CONSTRUCTION.
3. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE 2009 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE 2010 OREGON STATE STRUCTURAL SPECIALTY (OSSC) BUILDING CODE. ALL BUILDING ELEMENTS AND COMPONENTS NOT SPECIFICALLY DETAILED IN THESE STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CONTAINED IN THE IBC AS AMENDED BY THE STATE OF OREGON.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
5. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. METHODS, PROCEDURES, AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
6. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE. PROVIDE SHORING AND/OR BRACING WHERE LOADS EXCEED DESIGN CAPACITY AND WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.

DESIGN LOADS: PER 2009 IBC & 2010 OSSC

- 1603.1.2 - ROOF LOADS:
- LIVE LOAD 20 PSF
 - SNOW LOAD 25 PSF

- ANTENNA LOADS:
- DESIGN LOADING FOR ANTENNAS PROVIDED BY CLIENT, AS SUMMARIZED BELOW BY CARRIER
 - T-MOBILE (GUARDRAIL MOUNTED ARRAYS):
 - DESIGN WIND PRESSURE - 28.3 PSF
 - DEAD LOAD - PER COMPONENT WEIGHTS
 - AT&T (ROOF MOUNTED ARRAYS):
 - DESIGN ANTENNA ARRAY REACTIONS
 - VERTICAL LEG
 - WIND - 1550 LB (VERTICAL)
 - DEAD - 950 LB (VERTICAL)
 - ANGLED LEG
 - WIND - 1550 LB (VERTICAL)
 - 1200 LB (HORIZONTAL)
 - VERIZON (PEDESTAL MOUNTED ARRAYS):
 - DESIGN ANTENNA ARRAY REACTIONS
 - UPPER AND LOWER FRAME MOUNTS
 - VERTICAL REACTION - 350 LB (PER MOUNT)
 - HORIZONTAL REACTION - 260 LB (PER MOUNT)

STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING GRADES, UNLESS NOTED OTHERWISE ON THE PLANS:
 - PLATES & BARS - ASTM A36
 - TUBES - ASTM A500, GRADE B (Fy = 46 ksi)
 - PIPES - ASTM A53, GRADE B
 - HSS (RECTANGULAR) - ASTM A500, GRADE B (Fy = 46 ksi)
 - HSS (ROUND) - ASTM A500, GRADE B (Fy = 42 ksi)
 - CHANNELS & ANGLES - ASTM A36
2. WELD ACCORDING TO CURRENT AWS STANDARDS WITH E70XX ELECTRODES.
3. ALL STEEL EXPOSED TO WEATHER SHALL BE PAINTED OR HOT-DIP GALVANIZED, UNLESS NOTED OTHERWISE.
4. ALL STRUCTURAL CONNECTION BOLTS SHALL BE ASTM A325, UNLESS NOTED OTHERWISE. HOOKED, HEADED, THREADED, AND NUTTED ANCHOR RODS SHALL BE ASTM F1554 (Fy = 36 ksi), UNLESS NOTED OTHERWISE.

SUBMITTALS:

THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD AND THE BUILDING OFFICIAL SUBMITTALS FOR APPROVAL, PRIOR TO CONSTRUCTION, FOR THE FOLLOWING ITEMS:

1. STEEL FABRICATION SHOP DRAWINGS, MATERIAL CERTIFICATIONS & WELDING PROCEDURES.

SPECIAL INSPECTIONS:

1. AN INDEPENDENT TESTING LABORATORY CHOSEN BY THE OWNER SHALL PROVIDE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AS OUTLINED IN TABLE 2 FOR THE STRUCTURAL SYSTEMS OUTLINED HEREIN. ALL OTHER ELEMENTS SHALL COMPLY WITH THE SPECIAL INSPECTION & TESTING REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
2. THE TESTING AGENCY SHALL PROVIDE THE ENGINEER OF RECORD, THE OWNER, AND THE BUILDING OFFICIAL COPIES OF ALL RELEVANT TEST REPORTS AND SPECIAL INSPECTIONS.

TABLE 2 REQUIRED STRUCTURAL SPECIAL INSPECTIONS					
SYSTEM or MATERIAL	INSPECTION			REMARKS	
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY Continuous Periodic		
FABRICATORS					
FABRICATORS	1704.2		X	SPECIAL INSPECTIONS APPLY TO VERIFICATION OF DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES INCLUDING REVIEW FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS	
STEEL					
FABRICATION OF STRUCTURAL ELEMENTS	1704.2		X	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS	
MATERIAL VERIFICATION OF STRUCTURAL STEEL	1704.3 2203.1	ASTM A6 AISC 360 A3.1	X (a)	CERTIFIED MILL TEST REPORTS	
MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS	1704.3	AISC 360 A3.3	X	MANUFACTURER'S CERTIFIED TEST REPORTS	
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS	1704.3	AISC 360 A3.4	X	MANUFACTURER'S CERTIFIED TEST REPORTS	
MATERIAL VERIFICATION OF WELD FILLER METALS	1704.3	AISC 360 A3.5	X	MANUFACTURER'S CERTIFIED TEST REPORTS	
VERIFYING USE OF PRCPER WPS'S			X	COPY OF WELDING PROCEDURE SPECIFICATIONS	
VERIFYING WELDER QUALIFICATIONS			X	COPY OF QUALIFICATION CARDS	
COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	1704.3.1	AWS D1.1 SECTION 6	X		
MULTIPASS FILLET WELDS			X	ALL WELDS VISUALLY INSPECTED PER AWS D1.1 6.9	
SINGLE PASS FILLET WELDS GREATER THAN 5/16"			X		
SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16"			X		
TIGHT-HIGH STRENGTH BOLT INSTALLATION	1704.3.2	RCSC SPECIFICATION FOR	X	ALL CONNECTIONS VISUALLY INSPECTED	
MATERIAL VERIFICATION OF REINFORCING STEEL FOR WELDING	1704.3.1	ACI 318 3.5.2 AWS D1.4 SECTION 7	X	CERTIFIED MILL TEST REPORTS	
MATERIAL VERIFICATION OF WELD FILLER METALS			X	MANUFACTURER'S CERTIFIED TEST REPORTS	
VERIFYING USE OF PRCPER WPS'S			X	COPY OF WELDING PROCEDURE SPECIFICATIONS	
VERIFYING WELDER QUALIFICATIONS			X	COPY OF QUALIFICATION CARDS	
WELDING REINFORCING EXCEPT AS NOTED OTHERWISE			X	ALL WELDS VISUALLY INSPECTED PER AWS D1.4 7.5	
WELDING REINFORCING STEEL IN MOMENT RESISTING FRAMES	1704.3.1	ACI 318 3.5.2 AWS D1.4 SECTION 7	X	ALL WELDS VISUALLY INSPECTED PER AWS D1.4 7.5	

STRUCTURAL OBSERVATION REQUIREMENTS:

1. THE OWNER SHALL EMPLOY THE ENGINEER OF RECORD OR AN ALTERNATE OREGON LICENSED PROFESSIONAL ENGINEER, APPROVED BY THE ENGINEER OF RECORD, TO PERFORM STRUCTURAL OBSERVATIONS IN ACCORDANCE WITH SECTION 1702 OF THE INTERNATIONAL BUILDING CODE.
2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY OTHER INSPECTION CRITERIA, INCLUDING SPECIAL INSPECTION, AS REQUIRED BY THE BUILDING OFFICIAL OR AS INDICATED WITHIN THE INTERNATIONAL BUILDING CODE.
3. DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER AND THE BUILDING OFFICIAL (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION). AT THE CONCLUSION OF THE STRUCTURAL SYSTEMS, INCLUDED WITHIN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL AND THE OWNER (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION) A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
4. THE CONTRACTOR SHALL MAKE AVAILABLE ALL MEANS AND METHODS NECESSARY FOR THE STRUCTURAL OBSERVER TO PERFORM THE REQUIRED STRUCTURAL OBSERVATIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND STRUCTURAL OBSERVER A MINIMUM OF 48 HOURS BEFORE THE TIME AT WHICH THE SPECIFIED STRUCTURAL OBSERVATIONS MAY BE PERFORMED. IN ADDITION THE CONTRACTOR SHALL UPDATE THE STRUCTURAL OBSERVER OF THE CONSTRUCTION PROGRESS.
5. STRUCTURAL OBSERVATIONS SHALL BE PERFORMED FOR THE FOLLOWING AREAS OF WORK:
 - 5.1. FOLLOWING THE COMPLETION OF ALL STRUCTURAL ELEMENTS CONTAINED HEREIN.

PROJECT NAME: CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS	SHEET TITLE: GENERAL STRUCTURAL NOTES	PROJECT NO.: SHEET S-1	DATE: JULY 2014	MSA PROJECT: 14-1537.201
CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS GENERAL STRUCTURAL NOTES		REGISTERED PROFESSIONAL ENGINEER JAMES W. ELLIOTT OREGON REG. NO. 12357 EXPIRES 12/31/14		
SCALE: VERT: AS SHOWN HORIZ: AS SHOWN		NOTICE: IF THIS BAR DOES NOT MEASURE UP THEN DRAWING IS NOT TO SCALE		
PROJECT NO.: SHEET TITLE: SHEET S-1		DESIGNED: JWC/EFL DRAWN: JWC/EFL CHECKED: TGM APPROVED: TLB		

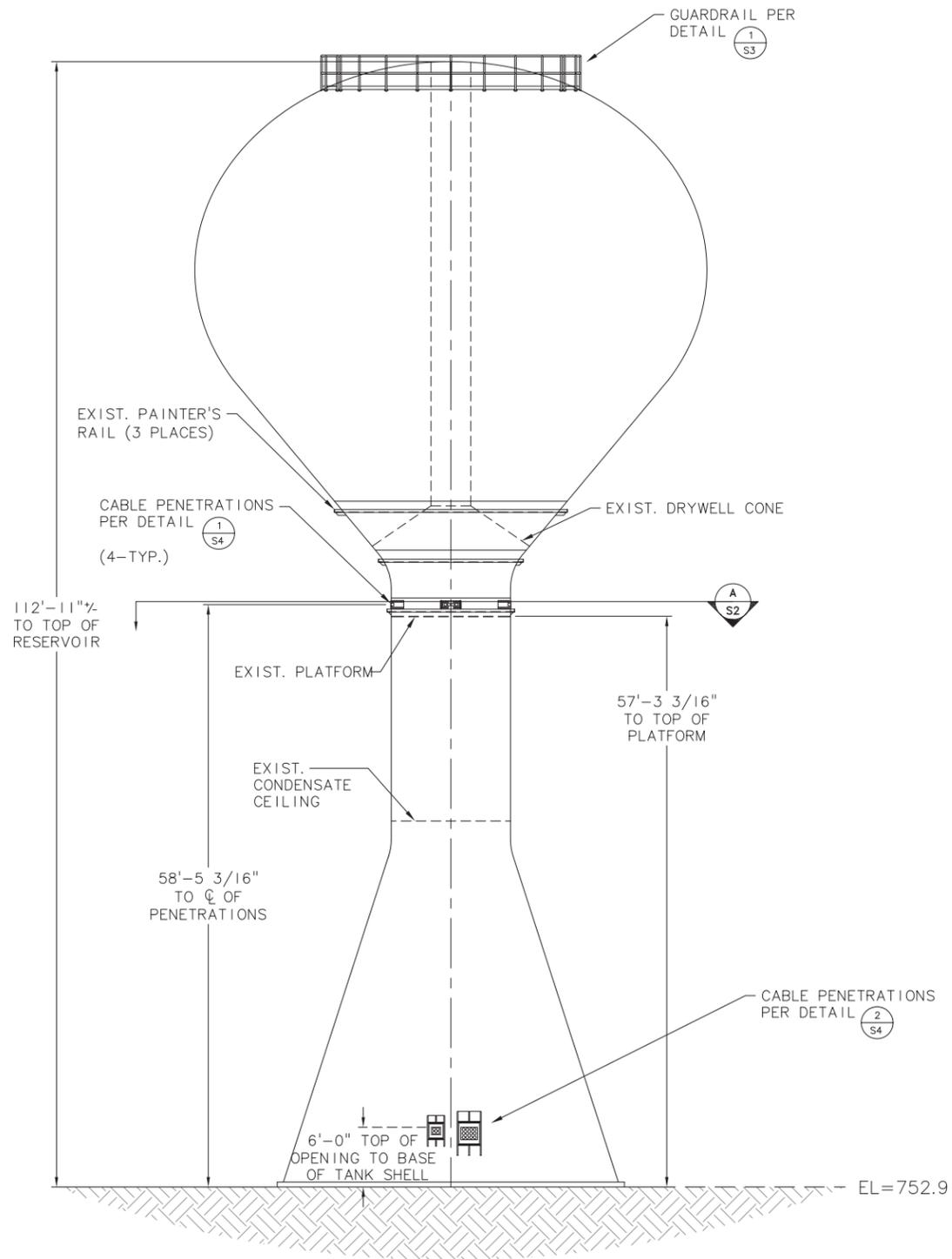


MSA
 Murray Smith & Associates, Inc.
 Engineers/Planners
 121 S.W. Salmon, Suite 900
 Portland, Oregon 97204
 PHONE 503-255-9010
 FAX 503-255-9022

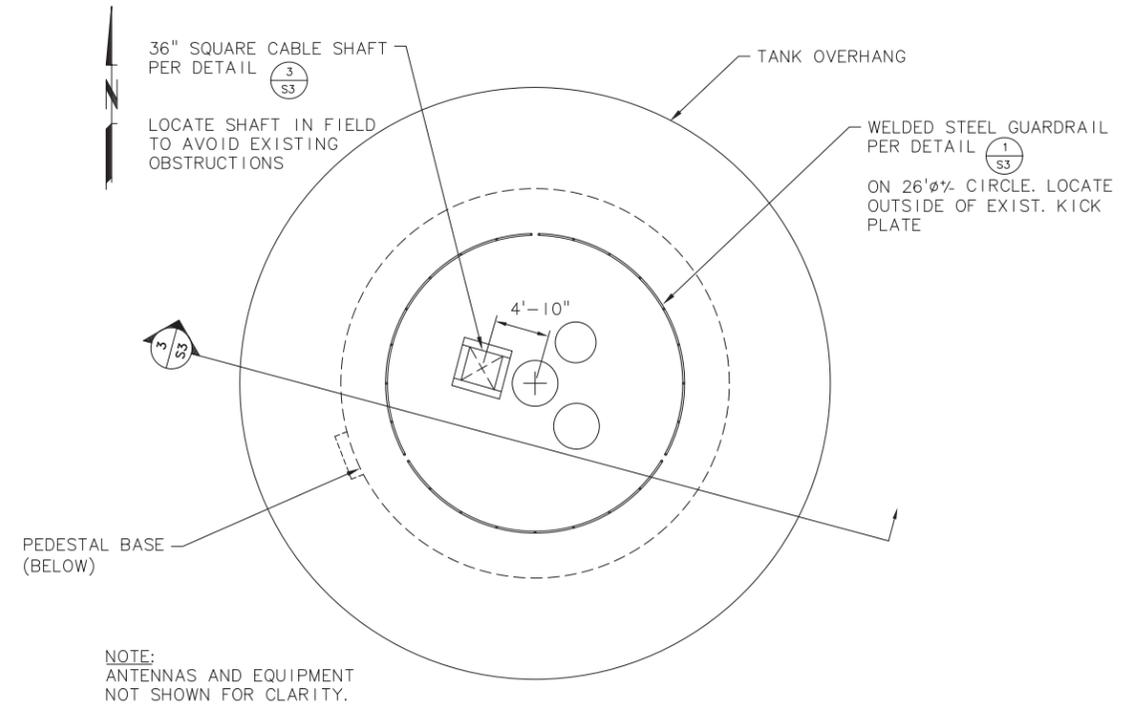
Peterson Structural Engineers, Inc.
 5319 S.W. Westgate Dr., Suite 215
 Portland, Oregon 97221
 (503) 292-1635
 PSE PROJECT NO. 14-090

X:\2014\14-076 to 14-100\14-090\Acad\14-090-01.3 Rosemont Structural Drawings.dwg S-2 7/23/2014 2:07 PM PSE-006 18.2s (LMS Tech)

- NOTE:
- PENETRATIONS HAVE BEEN ROTATED IN-LINE FOR CLARITY. SEE PLANS FOR ACTUAL POSITIONS.
 - ANTENNAS AND EQUIPMENT NOT SHOWN FOR CLARITY.

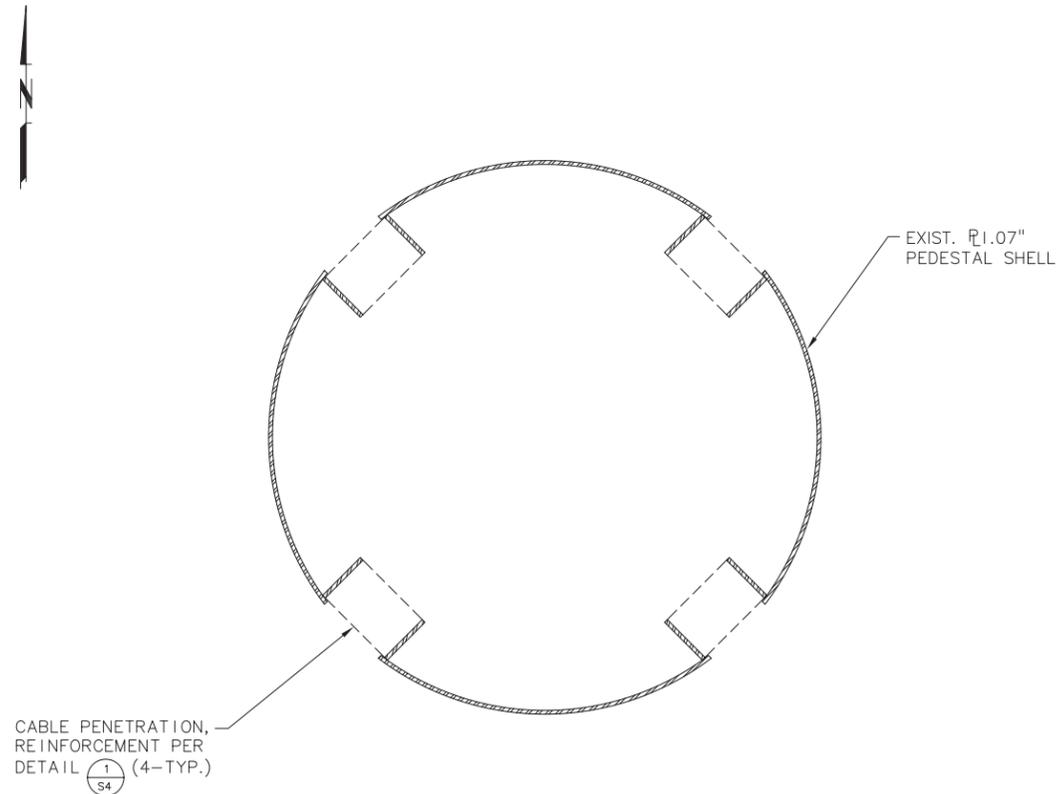


RESERVOIR ELEVATION
SCALE: 1/8"=1'-0"



NOTE:
ANTENNAS AND EQUIPMENT NOT SHOWN FOR CLARITY.

RESERVOIR ROOF PLAN
SCALE: 1/8"=1'-0"



NOTE:
ANTENNAS AND EQUIPMENT NOT SHOWN FOR CLARITY.

PEDESTAL SECTION (A) S2
SCALE: 1/2"=1'-0"

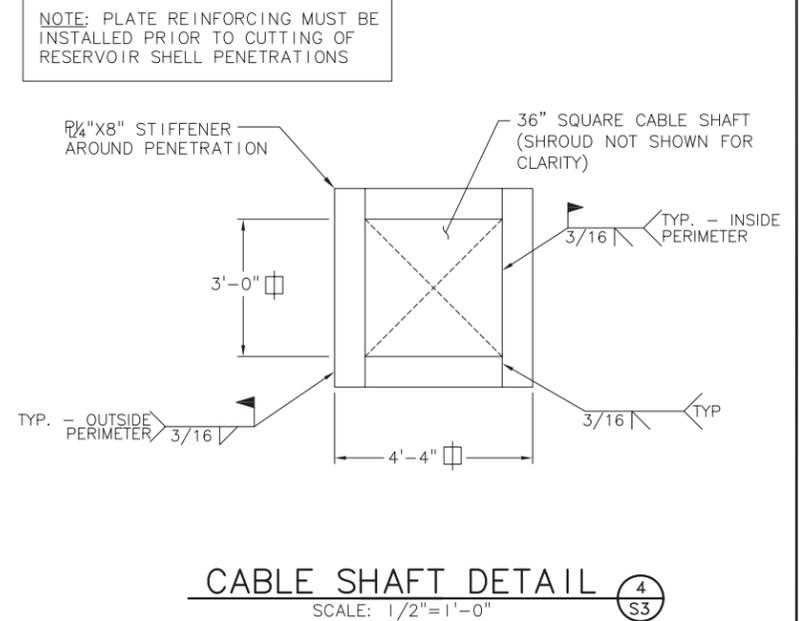
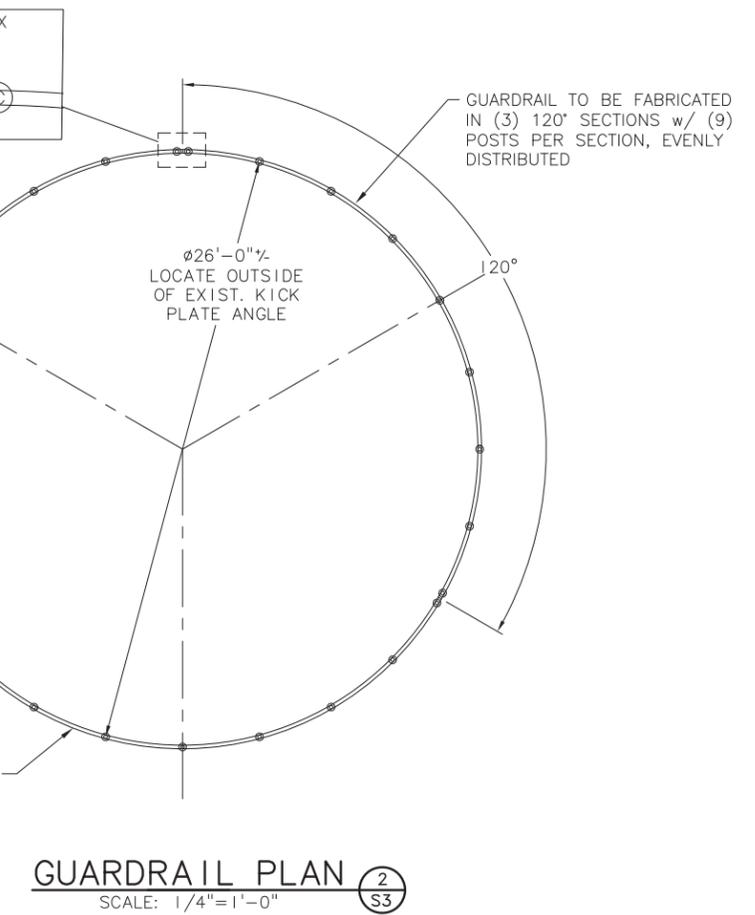
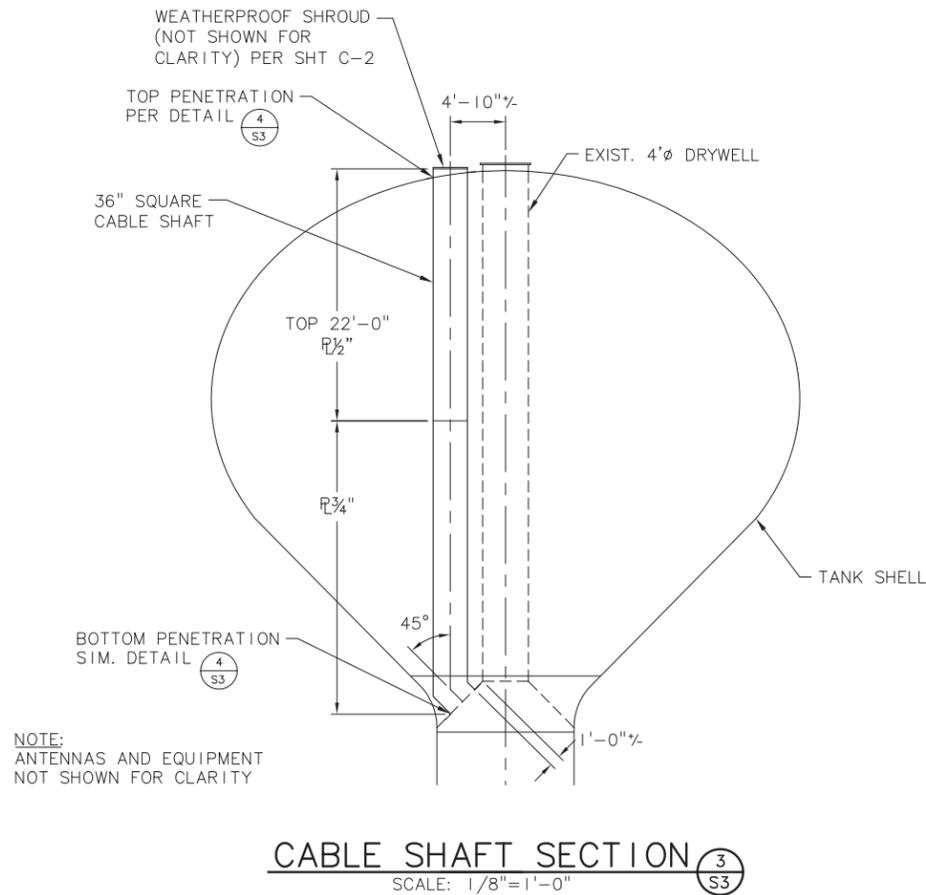
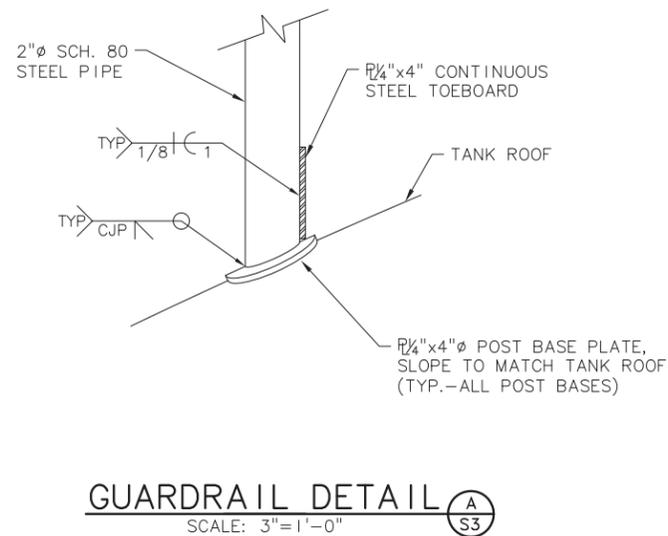
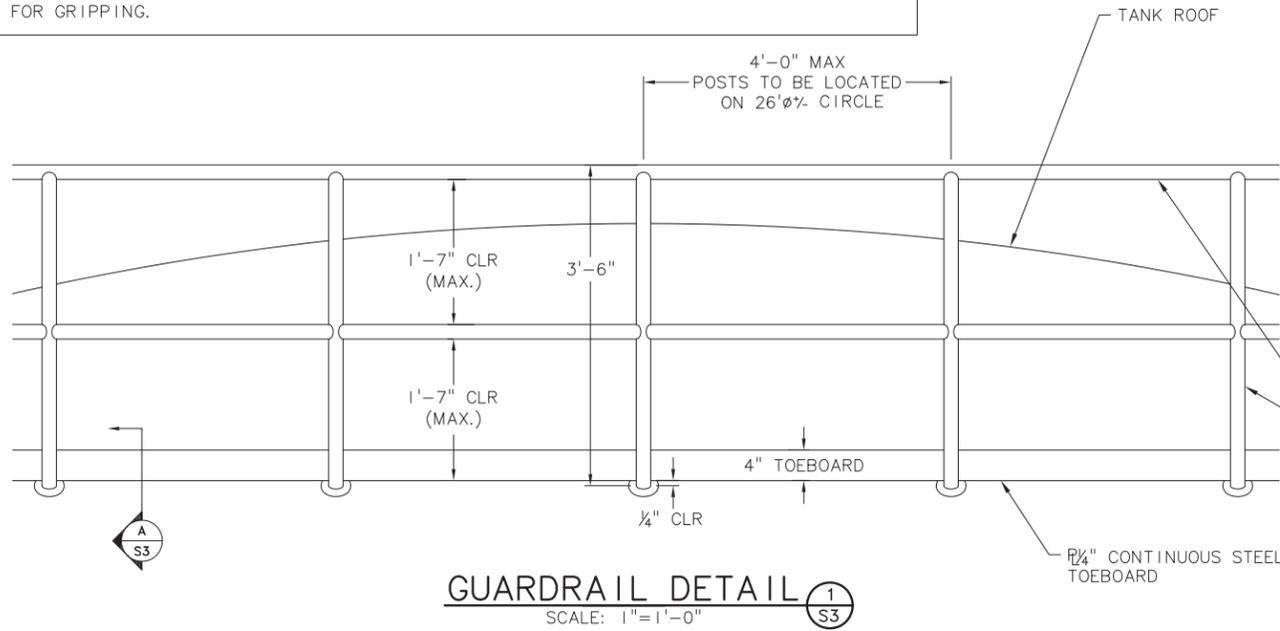
PSE
Peterson Structural Engineers, Inc.
5319 S.W. Westgate Dr., Suite 215
Portland, Oregon 97221
(503) 292-1635
PSE PROJECT NO. 14-090

PROJECT NAME: CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS	NO. DATE	REVISION	BY
	DESIGNED: JWC/EFL DRAWN: JWC/EFL CHECKED: TGM APPROVED: TLB		
SHEET TITLE: ELEVATION AND ROOF PLAN	REGISTERED PROFESSIONAL ENGINEER STATE OF OREGON TRAVIS GREGORY EXPIRES 12/31/14		
	SCALE: VERT: AS SHOWN HORIZ: AS SHOWN NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		
Murray Smith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 900 Portland, Oregon 97204 PHONE 503-255-9010 FAX 503-255-9022	DATE: JULY 2014	MSA PROJECT: 14-1537.201	
SHEET S-2		6 of 11	

X:\2014\14-076 to 14-100\14-090\Acad\14-090-01.3 Rosemont Structural Drawings.dwg S-3 7/23/2014 2:07 PM PSE-006 18.2s (LMS Tech)

GUARDRAIL CONSTRUCTION NOTES:

- ALL GUARDRAIL MEMBER CONNECTIONS TO BE FULLY WELDED ALL AROUND.
- HORIZONTAL RAIL MEMBERS SHALL BE CURVED TO MATCH DIAMETER OF GUARDRAIL CIRCLE.
- INTERMEDIATE RAILS SHALL HAVE ENDS COPE TO FIT POSTS. POSTS SHALL NOT BE CUT OR OTHERWISE COMPROMISED TO FIT INTERMEDIATE RAILS.
- GUARDRAIL TO BE FABRICATED IN (3) EVEN SECTIONS AND JOINED IN FIELD. HORIZONTAL RAILS SHALL BE FULLY WELDED IN FIELD BETWEEN GUARDRAIL SECTION END POSTS TO PROVIDE A CONTINUOUS GUARDRAIL.
- GUARDRAIL MEMBERS AND JOINTS SHALL BE FREE OF BURRS AND PROVIDE A SMOOTH SURFACE FOR GRIPPING.



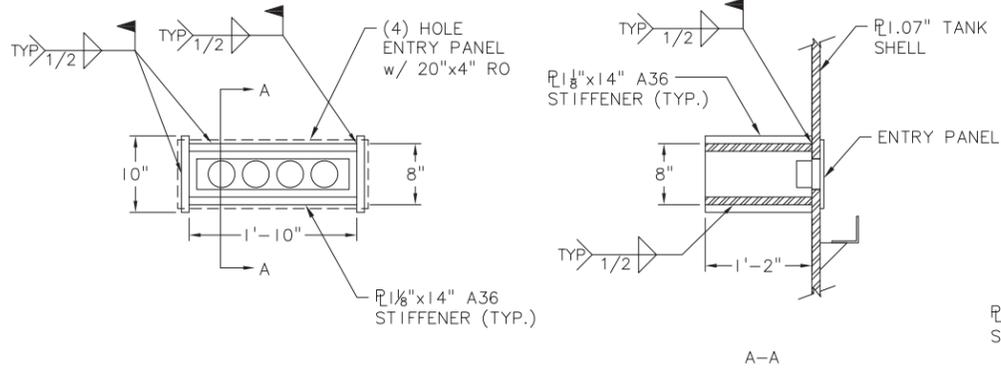
NOTE: PLATE REINFORCING MUST BE INSTALLED PRIOR TO CUTTING OF RESERVOIR SHELL PENETRATIONS

PSE
Peterson Structural Engineers, Inc.
5319 S.W. Westgate Dr., Suite 215
Portland, Oregon 97221
(503) 292-1635
PSE PROJECT NO. 14-090

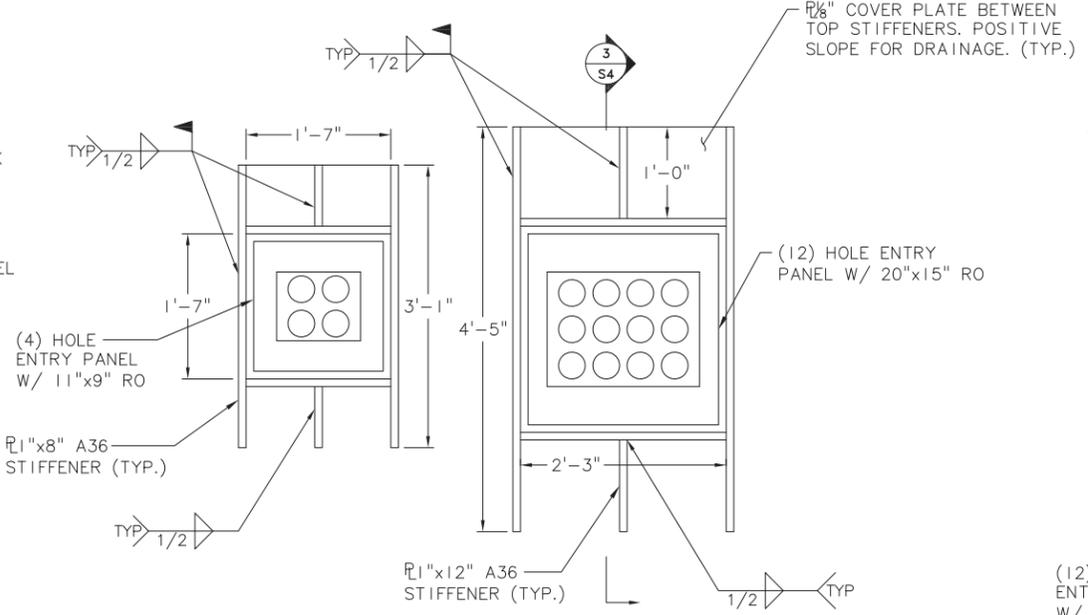
BY:	REVISION:	NO.:	DATE:	DESIGNED: JWC/EFL	DRAWN: JWC/EFL	CHECKED: TGM	APPROVED:
				SHEET S-3 7 of 11			
PROJECT NAME: CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS SHEET TITLE: STRUCTURAL DETAILS							
Murraysmith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 900 Portland, Oregon 97204				PHONE: 503-255-9010 FAX: 503-255-9022 DATE: JULY 2014 MSA PROJECT: 14-1537.201			

X:\2014\14-076 to 14-100\14-090\Acad\14-090-01.3 Rosemont Structural Drawings.dwg S-4 7/25/2014 8:25 AM PSE-006 18.2s (LMS Tech)

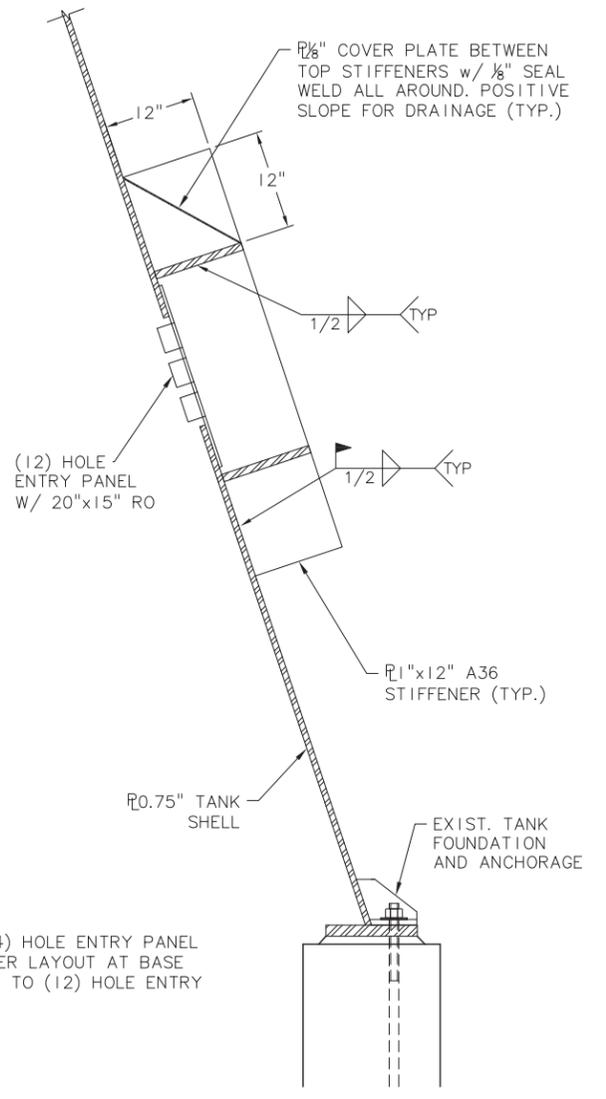
NOTE: PLATE REINFORCING MUST BE INSTALLED PRIOR TO CUTTING OF RESERVOIR SHELL PENETRATIONS



PEDESTAL PENETRATION DETAIL (1) S4
SCALE: 1"=1'-0"

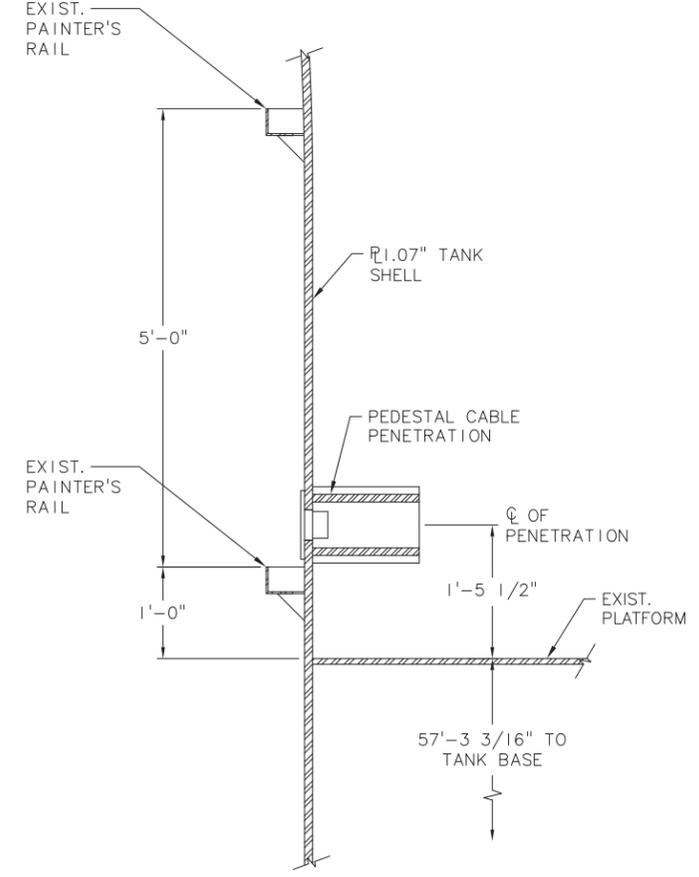


BASE PENETRATION DETAIL (2) S4
SCALE: 1"=1'-0"



NOTE: (4) HOLE ENTRY PANEL STIFFENER LAYOUT AT BASE SIMILAR TO (12) HOLE ENTRY PANEL.

BASE PENETRATION SECTION (3) S4
SCALE: 1"=1'-0"

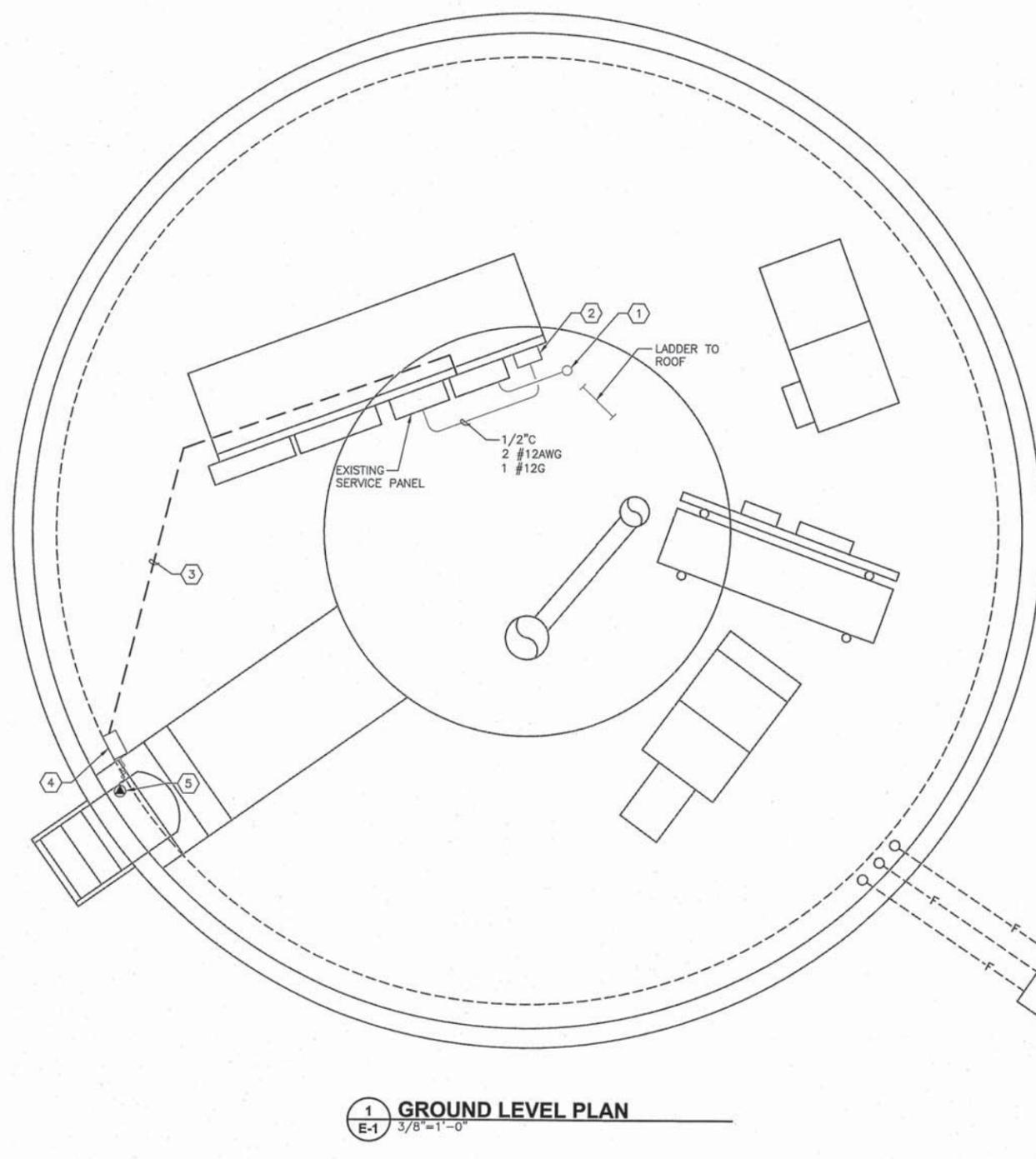


PEDESTAL PENETRATION SECTION (4) S4
SCALE: 1"=1'-0"

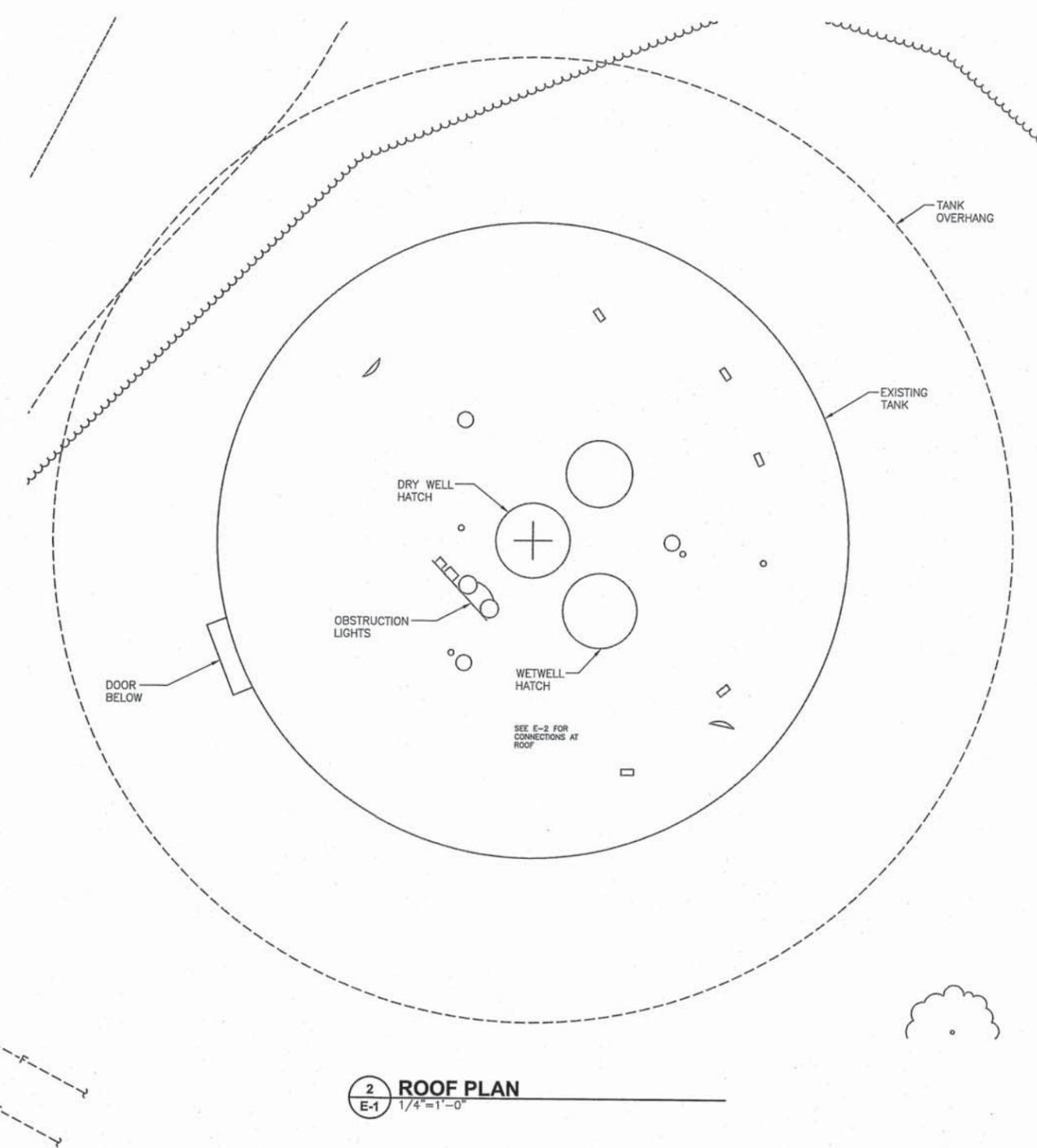
BY:	REVISION:	NO.:	DATE:	DESIGNED: JWC/EFL	DRAWN: JWC/EFL	CHECKED: TCM	APPROVED:	SHEET S-4	8 of 11
VERT. AS SHOWN		HORIZ. AS SHOWN		NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE					
PROJECT NAME: CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS SHEET TITLE: STRUCTURAL DETAILS									
Murray Smith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 900 Portland, Oregon 97204 PHONE 503-255-9010 FAX 503-255-9022				DATE: JULY 2014 PSE PROJECT NO. 14-090					

PSE
 Peterson Structural Engineers, Inc.
 5319 S.W. Westgate Dr., Suite 215
 Portland, Oregon 97221
 (503) 292-1635
 PSE PROJECT NO. 14-090

W:\WF\483_Murray Smith Assoc\080_Rosemont Reservoir\001_Design\DWG\E-1.0.dwg Layout | 7/28/2014 3:29 PM JAMES 19.1s (LMS Tech)



1 GROUND LEVEL PLAN
3/8"=1'-0"



2 ROOF PLAN
1/4"=1'-0"

NOTES THIS SHEET

- 1 NEW CONDUIT TO JUNCTION BOX ON ROOF FOR OVERFLOW FLOAT AND TWO HATCH SENSORS. ROUTE CONDUIT ON EXISTING RACKS WHERE POSSIBLE. 1" RGS CONDUIT WITH 6 #14 AWG, 1 #12 AWG, G.
- 2 NEW OBSTRUCTION LIGHT CONTROLLER. PROVIDE NEW CONDUCTORS IN EXISTING CONDUITS TO NEW OBSTRUCTION LIGHTS ON ROOF.
- 3 NEW (2) 1" RGS CONDUIT. ONE CONDUIT CONTAINS CAT 6E CABLE FOR ETHERNET COMMUNICATION. SECOND CONDUIT CONTAINS 10 #14 AWG, 1 #12 AWG, G FOR STATUS AND POWER.
- 4 DOOR ENTRY TOUCH PANEL PROVIDED BY CONTROL SYSTEM INTEGRATOR. MOUNT AND CONNECT COMPLETE AS REQUIRED.
- 5 INSTALL LIMIT SWITCH AT ENTRY DOOR.

R&W ENGINEERING, INC.
"Engineering Integrated Solutions"
9015 S.W. Allen Boulevard
Suite 107
Beaverton, Oregon 97005
Phone: (503) 726-3300
Fax: (503) 726-3326
E-mail: rwen@rweg.com
Project No.: 483.080.001 Contact: GREGG SCHOLZ

Murray, Smith & Associates, Inc.
Engineers/Planners
21 S.W. Salmon, Suite 900
Portland, Oregon 97204
PHONE 503-255-9010
FAX 503-255-9022

MISA
14-1537-201
DATE: JULY 2014

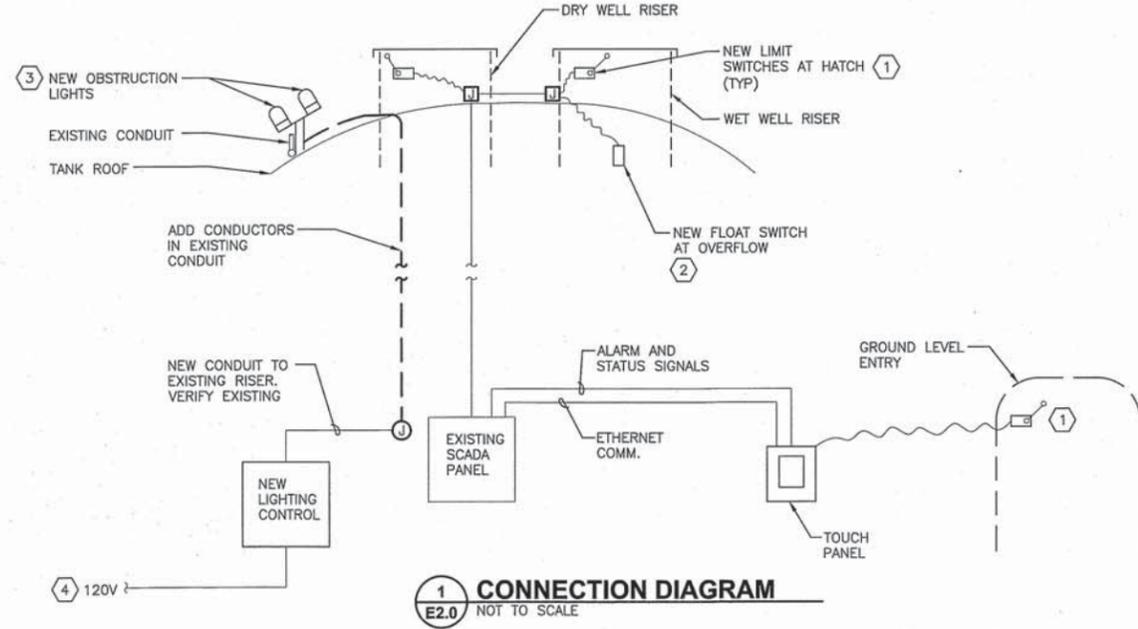
PROJECT NAME: CITY OF WEST LINN, OREGON
ROSEMONT RESERVOIR
SAFETY AND MAINTENANCE IMPROVEMENTS
SHEET TITLE: ELECTRICAL PLAN

NO. DATE REVISION
DESIGNED: GHS
DRAWN: MJP
CHECKED: GHS
APPROVED: GHS

BY: SHEET E-1 9 of 11

REGISTERED PROFESSIONAL ENGINEER
EXPIRES 6/30/2016

VERT. AS SHOWN
HORIZ. AS SHOWN
SCALE
NOTICE
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



1 CONNECTION DIAGRAM
E2.0 NOT TO SCALE

NOTES THIS SHEET

- 1 LIMIT SWITCHES PROVIDED BY CONTROL SYSTEM INTEGRATOR.
- 2 FLOAT SWITCH PROVIDED BY CONTROL SYSTEM INTEGRATOR. PROVIDE CORD GRIP SUPPORT AT ELEVATION DIRECTED BY ENGINEER.
- 3 PROVIDE AND INSTALL NEW OBSTRUCTION LIGHT WITH ALARMED CONTROLLER. LIGHTS SHALL BE SPECIALTY TOWER LIGHTING MODEL SL-2 LED OR EQUAL. CONTROLLER SHALL BE SPECIALTY TOWER LIGHTING MODEL RL-OMLED OR EQUAL.
- 4 PROVIDE 120V, 20A CIRCUIT FROM EXISTING PANEL.



MSA Murray, Smith & Associates, Inc.
Engineers/Planners
21 S.W. Salmon, Suite 800
Portland, Oregon 97204
PHONE: 503-255-4000
FAX: 503-255-4022

PROJECT NAME: CITY OF WEST LINN, OREGON
ROSEMONT RESERVOIR
SAFETY AND MAINTENANCE IMPROVEMENTS
SHEET TITLE: ELECTRICAL DETAILS

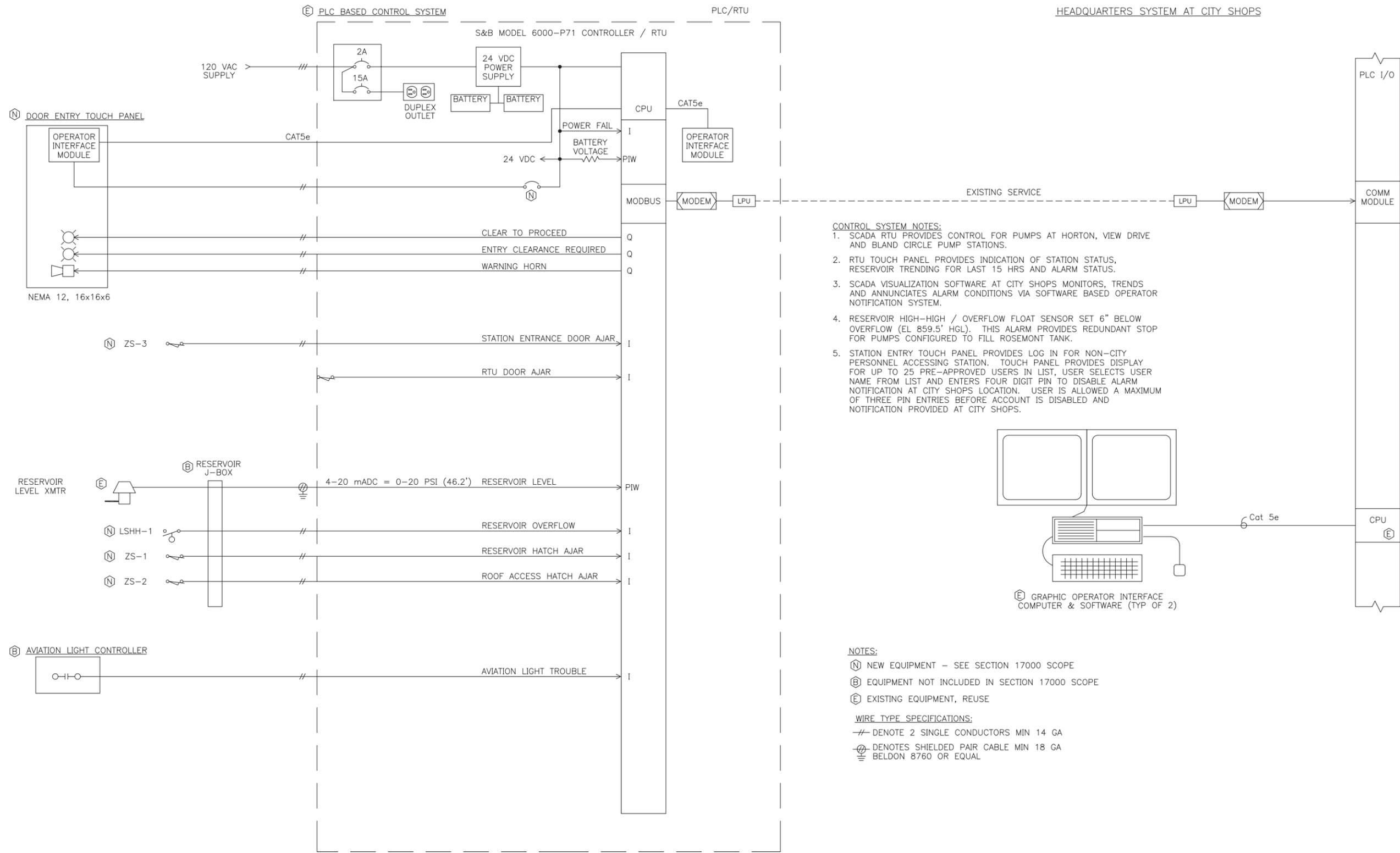
SCALE: VERT. AS SHOWN, HORIZ. AS SHOWN
NOTICE: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
STATE OF OREGON
JULY 16, 1981
GREGG H. SCHOLZ
EXPIRES 6/30/2016

NO.	DATE	REVISION	BY
DESIGNED:	GHS		
DRAWN:	MJP		
CHECKED:	GHS		
APPROVED:	GHS		

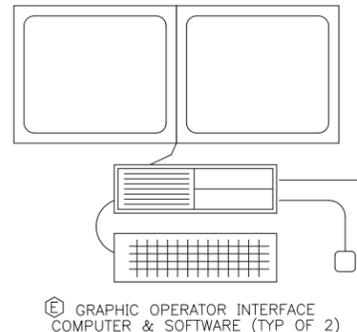
SHEET E-2
10 of 11

\\ALPHA\cad\west_linn\12023-008-01.dwg 12023-008-01 7/25/2014 6:21 PM RSTEAD 17.2s (LMS Tech)



- CONTROL SYSTEM NOTES:**
1. SCADA RTU PROVIDES CONTROL FOR PUMPS AT HORTON, VIEW DRIVE AND BLAND CIRCLE PUMP STATIONS.
 2. RTU TOUCH PANEL PROVIDES INDICATION OF STATION STATUS, RESERVOIR TRENDRING FOR LAST 15 HRS AND ALARM STATUS.
 3. SCADA VISUALIZATION SOFTWARE AT CITY SHOPS MONITORS, TRENDS AND ANNUNCIATES ALARM CONDITIONS VIA SOFTWARE BASED OPERATOR NOTIFICATION SYSTEM.
 4. RESERVOIR HIGH-HIGH / OVERFLOW FLOAT SENSOR SET 6" BELOW OVERFLOW (EL 859.5' HGL). THIS ALARM PROVIDES REDUNDANT STOP FOR PUMPS CONFIGURED TO FILL ROSEMONT TANK.
 5. STATION ENTRY TOUCH PANEL PROVIDES LOG IN FOR NON-CITY PERSONNEL ACCESSING STATION. TOUCH PANEL PROVIDES DISPLAY FOR UP TO 25 PRE-APPROVED USERS IN LIST, USER SELECTS USER NAME FROM LIST AND ENTERS FOUR DIGIT PIN TO DISABLE ALARM NOTIFICATION AT CITY SHOPS LOCATION. USER IS ALLOWED A MAXIMUM OF THREE PIN ENTRIES BEFORE ACCOUNT IS DISABLED AND NOTIFICATION PROVIDED AT CITY SHOPS.

- NOTES:**
- (N) NEW EQUIPMENT - SEE SECTION 17000 SCOPE
 - (B) EQUIPMENT NOT INCLUDED IN SECTION 17000 SCOPE
 - (E) EXISTING EQUIPMENT, REUSE
- WIRE TYPE SPECIFICATIONS:**
- DENOTE 2 SINGLE CONDUCTORS MIN 14 GA
 - ⊘ DENOTES SHIELDED PAIR CABLE MIN 18 GA
 - ≡ BELDON 8760 OR EQUAL



PROJECT NAME: CITY OF WEST LINN, OREGON ROSEMONT RESERVOIR SAFETY AND MAINTENANCE IMPROVEMENTS		SHEET TITLE: SCADA SYSTEM MODIFICATIONS	
PROJECT NO.: 12023-008-01		SHEET NO.: IC-1	
DATE: JULY 2014		DATE: JULY 2014	
Murray Smith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 900 Portland, Oregon 97204 PHONE: 503-255-9010 FAX: 503-255-9022		Murray Smith & Associates, Inc. Engineers/Planners 121 S.W. Salmon, Suite 900 Portland, Oregon 97204 PHONE: 503-255-9010 FAX: 503-255-9022	
BY: _____		BY: _____	
NO. DATE		NO. DATE	
DESIGNED: RTS		DESIGNED: RTS	
DRAWN: RTS		DRAWN: RTS	
CHECKED: RTS		CHECKED: RTS	
APPROVED: RTS		APPROVED: RTS	