

# CITY OF OWOSSO

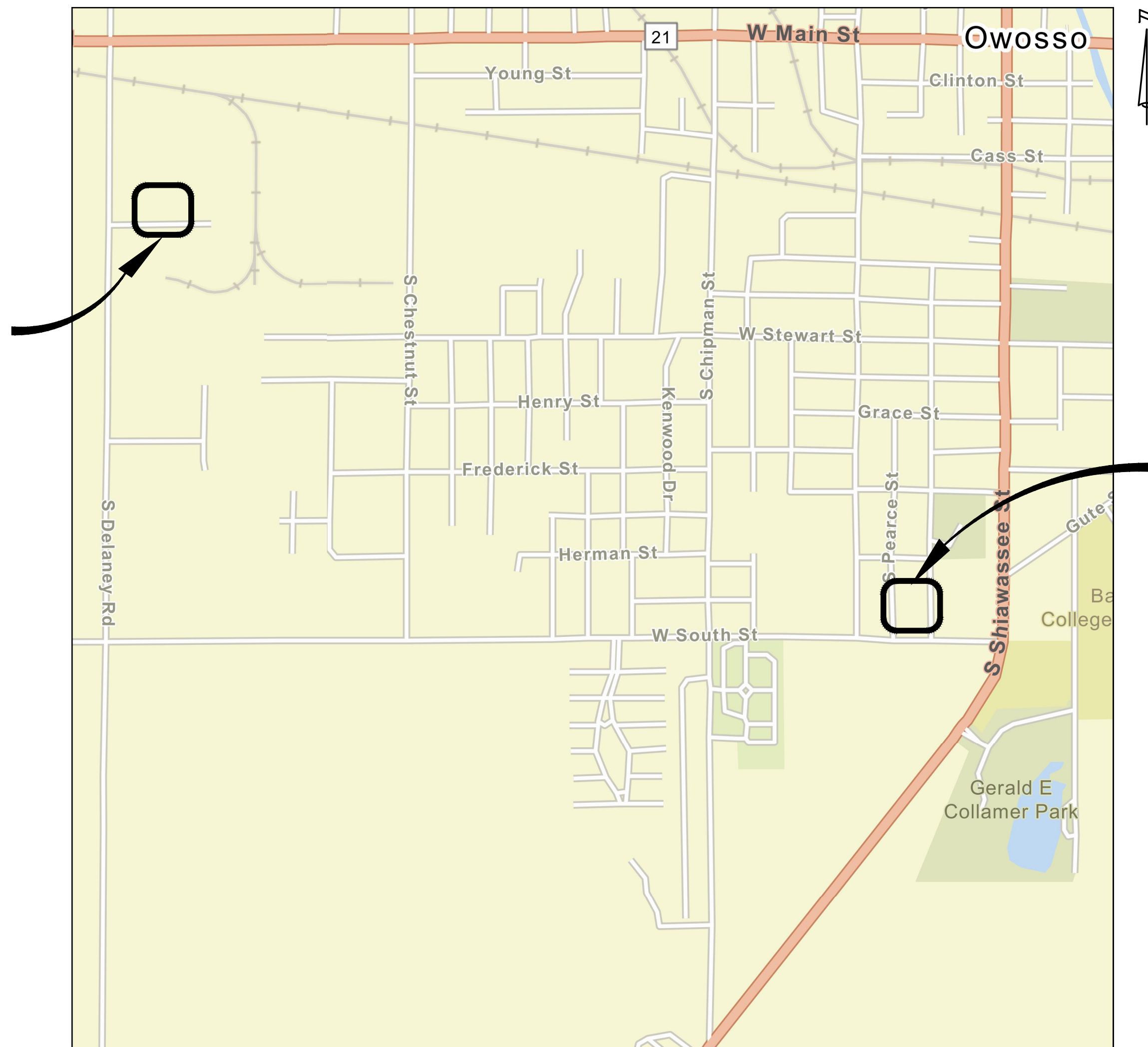
## WATER TOWER AND STANDPIPE REHABILITATION

### SHIAWASSEE COUNTY, MICHIGAN

## DWSRF PROJECT #7458-01

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
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P-505	DETAIL 3
E-501	MIXER ELECTRICAL DETAILS

WATER TOWER  
LOCATION  
1890 WEST DOWLING  
OWOSSO, MI 48867



STANDPIPE LOCATION  
1418 WALNUT ST  
OWOSSO, MI 48867

LOCATION MAP  
N.T.S.

APPLICATION DATE	PERMITS	APPROVAL DATE
12/23/2021	EGLE PART 399 NO. 221002	1/12/2022

Advancing Communities

34000 Plymouth Road | Livonia, MI 48150  
P (734) 522-6711 | F (734) 522-6427

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PREPARED UNDER THE SUPERVISION OF:

JENNIFER DRINAN  
ENGINEER  
No. 046850

*Jennifer Drinan*

**6201046859**  
Registration No.

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Date

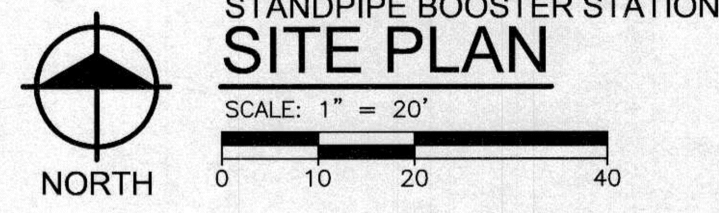
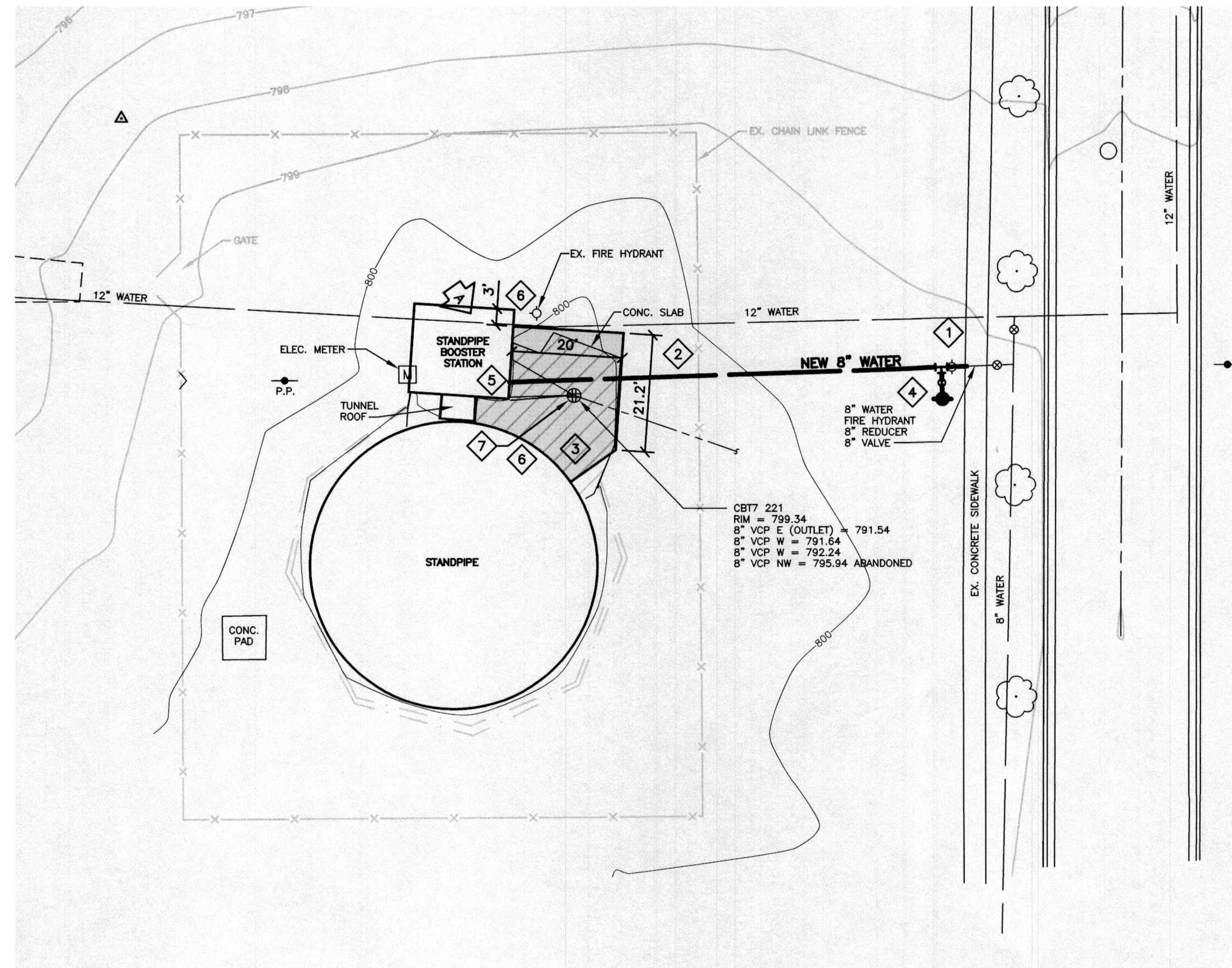
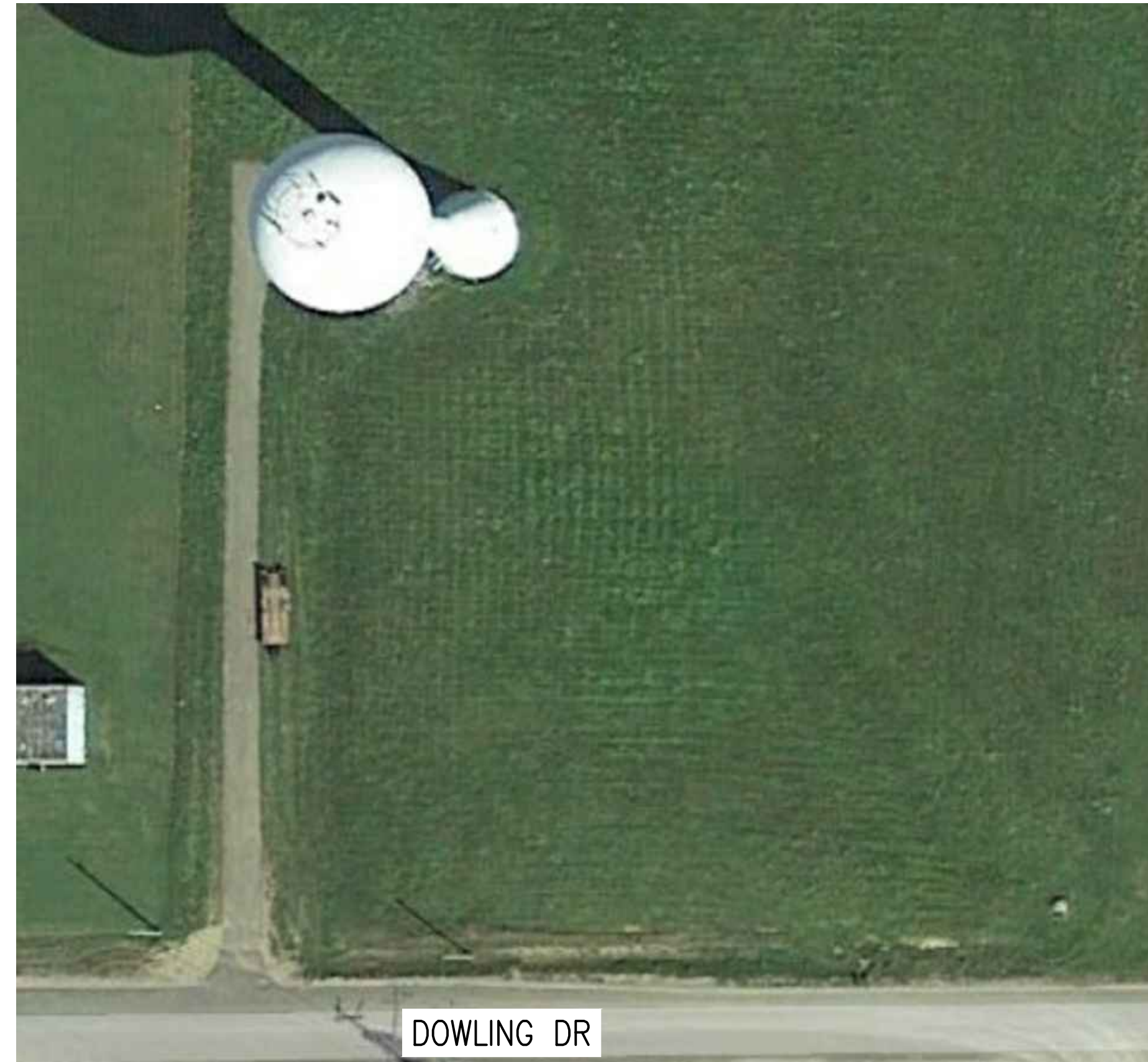
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REVISIONS

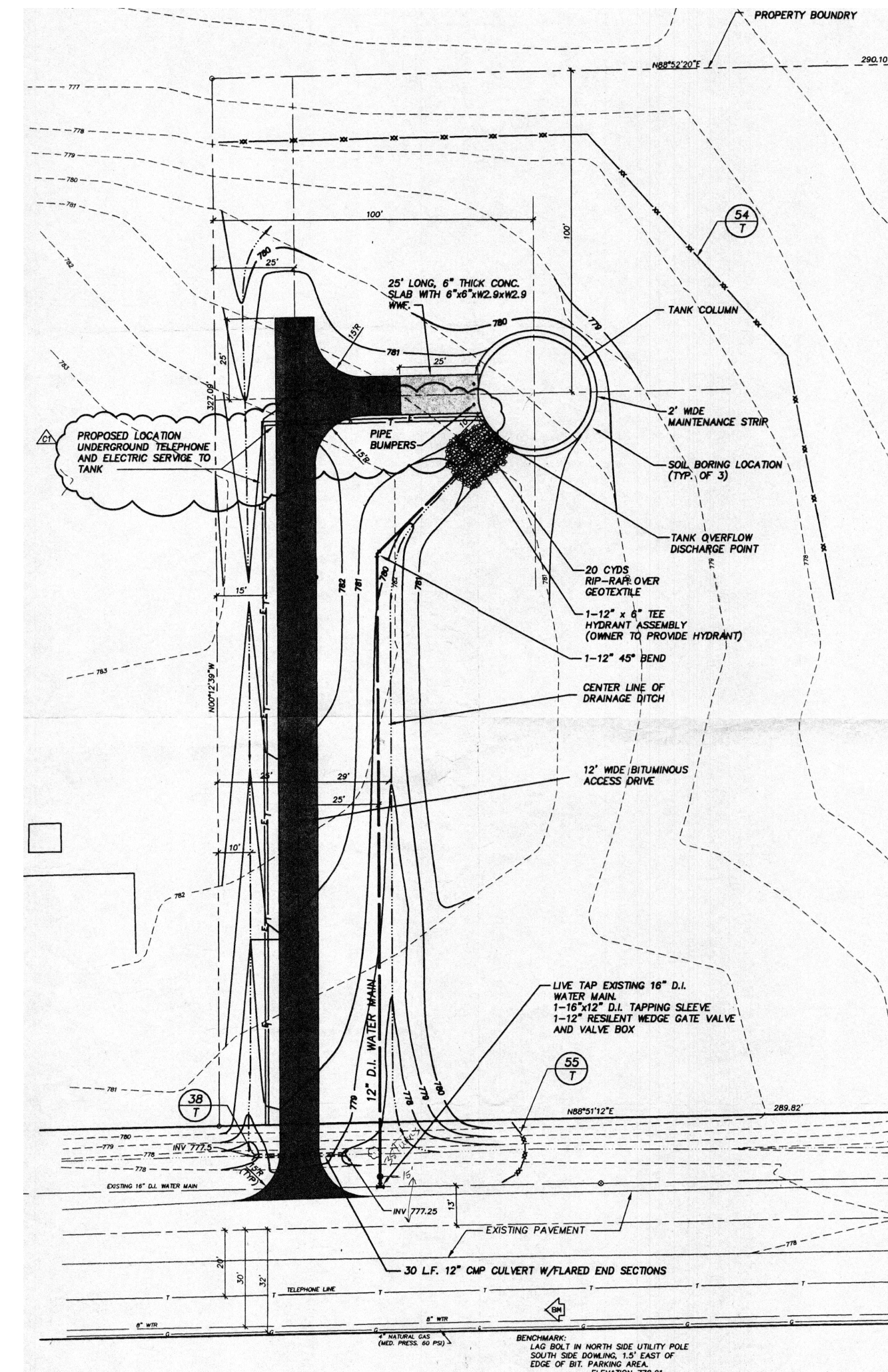
ISSUED FOR BID	1/25/2022

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PROJECT NO.	SHEET NO.
0020-21-0040	1



THIS DRAWING IS PREPARED USING THE DESIGN DRAWINGS FROM CITY OF OWOSSO WATER SYSTEM IMPROVEMENTS, PREPARED BY FISHBEEK, THOMPSON, CARR & HUBER, PROJECT NUMBER 07887CD, DATED JUNE 27, 2008. THEY ARE MADE AVAILABLE FOR BIDDER'S CONVENIENCE AND INFORMATION, BUT ARE NOT A WARRANTY OF EXISTING CONDITIONS. TECHNICAL INFORMATION THAT THE CONTRACTOR MAY RELY UPON IS LIMITED TO THE NOTATIONS ADDED TO THE DRAWING. QUANTITIES AND DIMENSIONS ARE NOT GUARANTEED AND THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE PROPOSED WORK FOR ALL CONSTRUCTION ACTIVITIES.



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Livonia, MI 48150  
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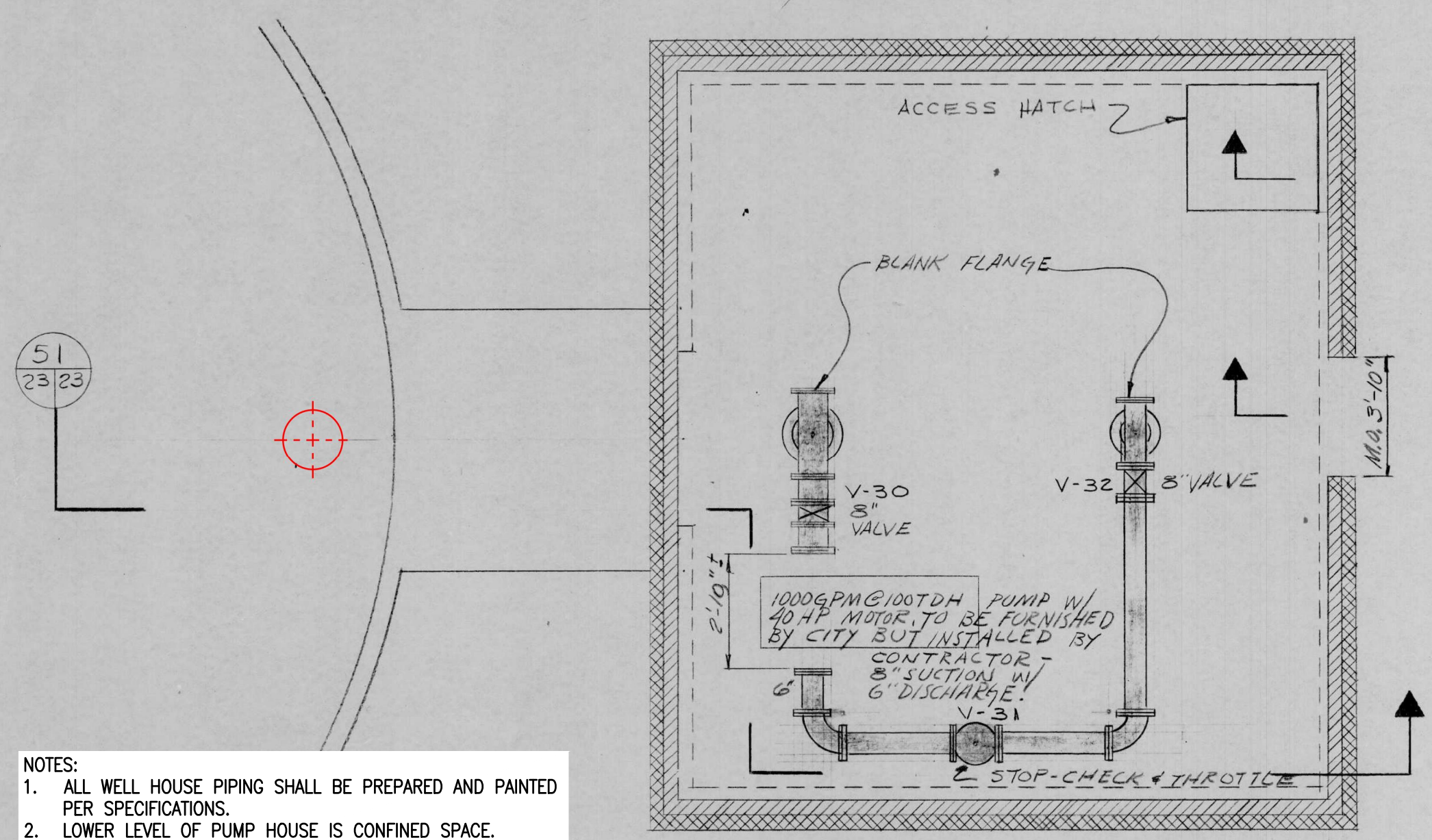
REVISIONS:	1/25/2022
ISSUED FOR BID	

DATE	02/21/2020	PROJ. NO.	002-21-000	CITY/VILLAGE/TOWNSHIP	OWOSSO	COUNTY	SHAWANSEE	SCALE	H: 1"=40'	V: 1"=4'	HORIZ. DATUM	VERT. DATUM
<p>CITY OF OWOSSO WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01 SITE PLANS</p>												

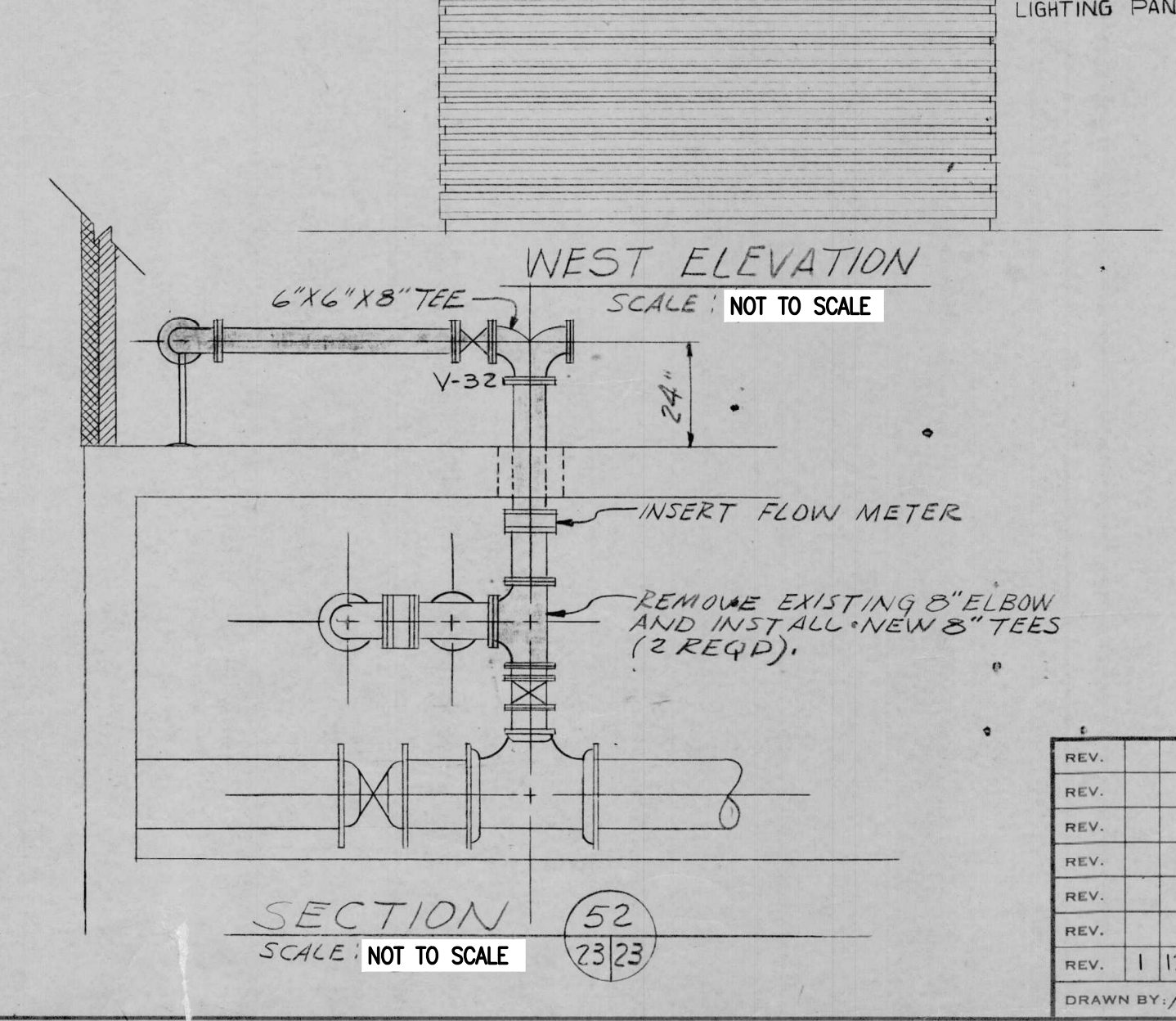
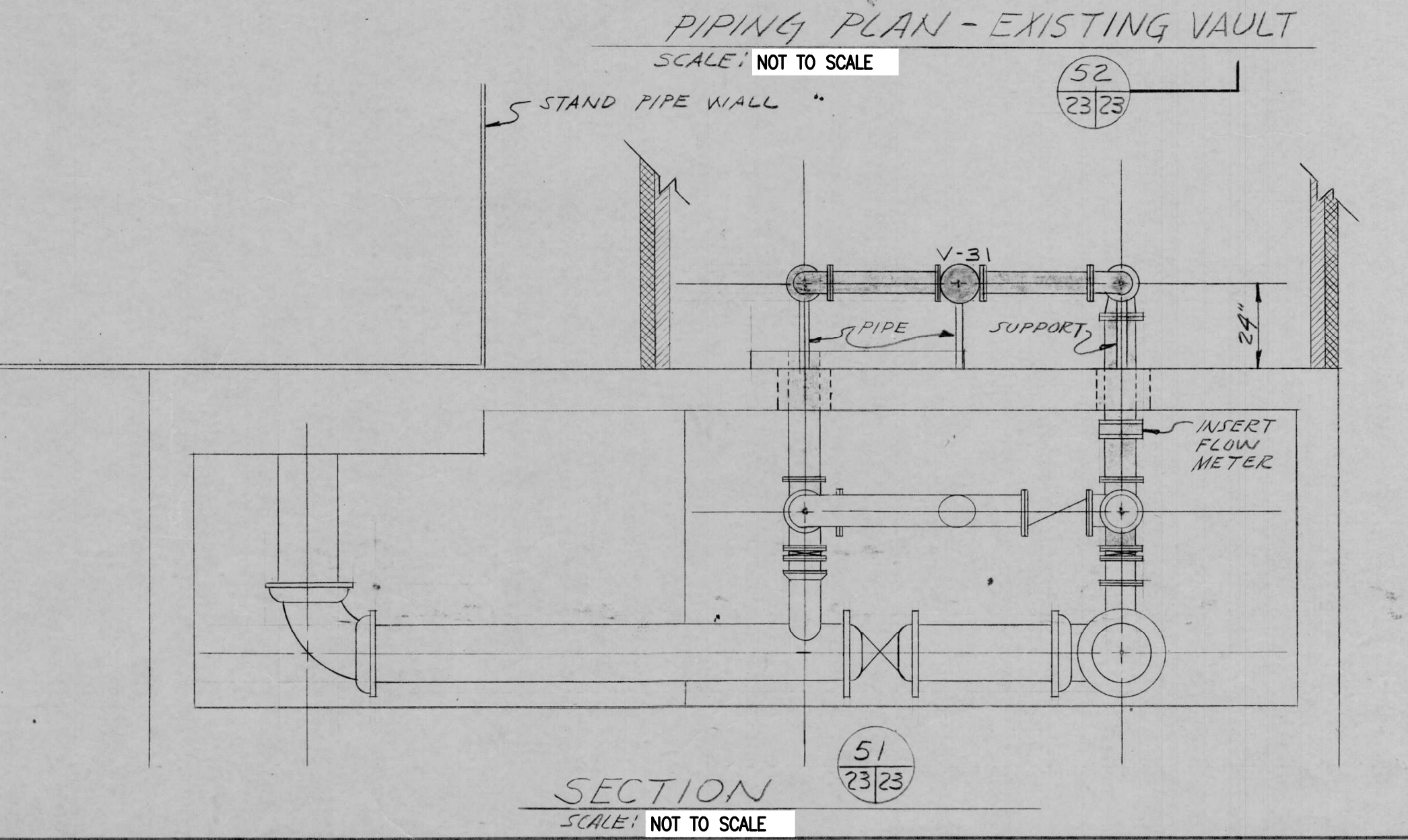
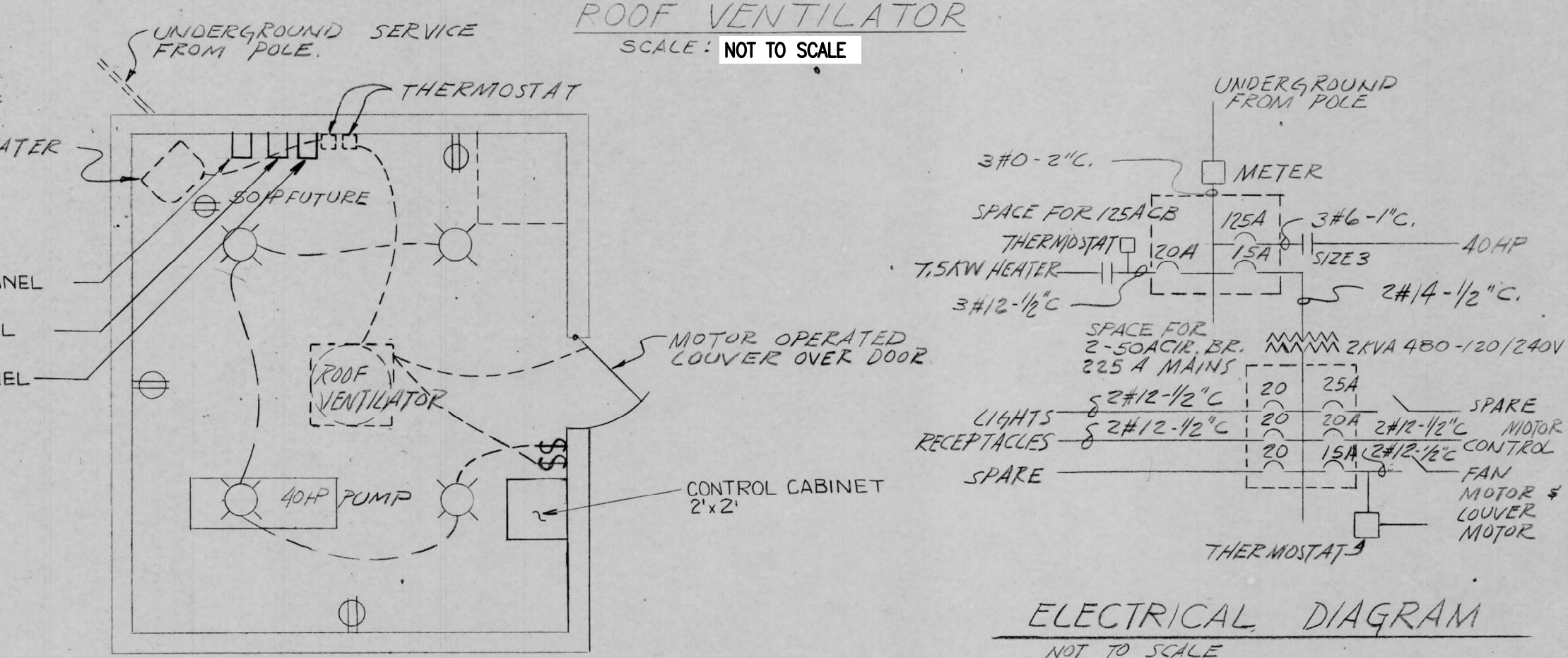
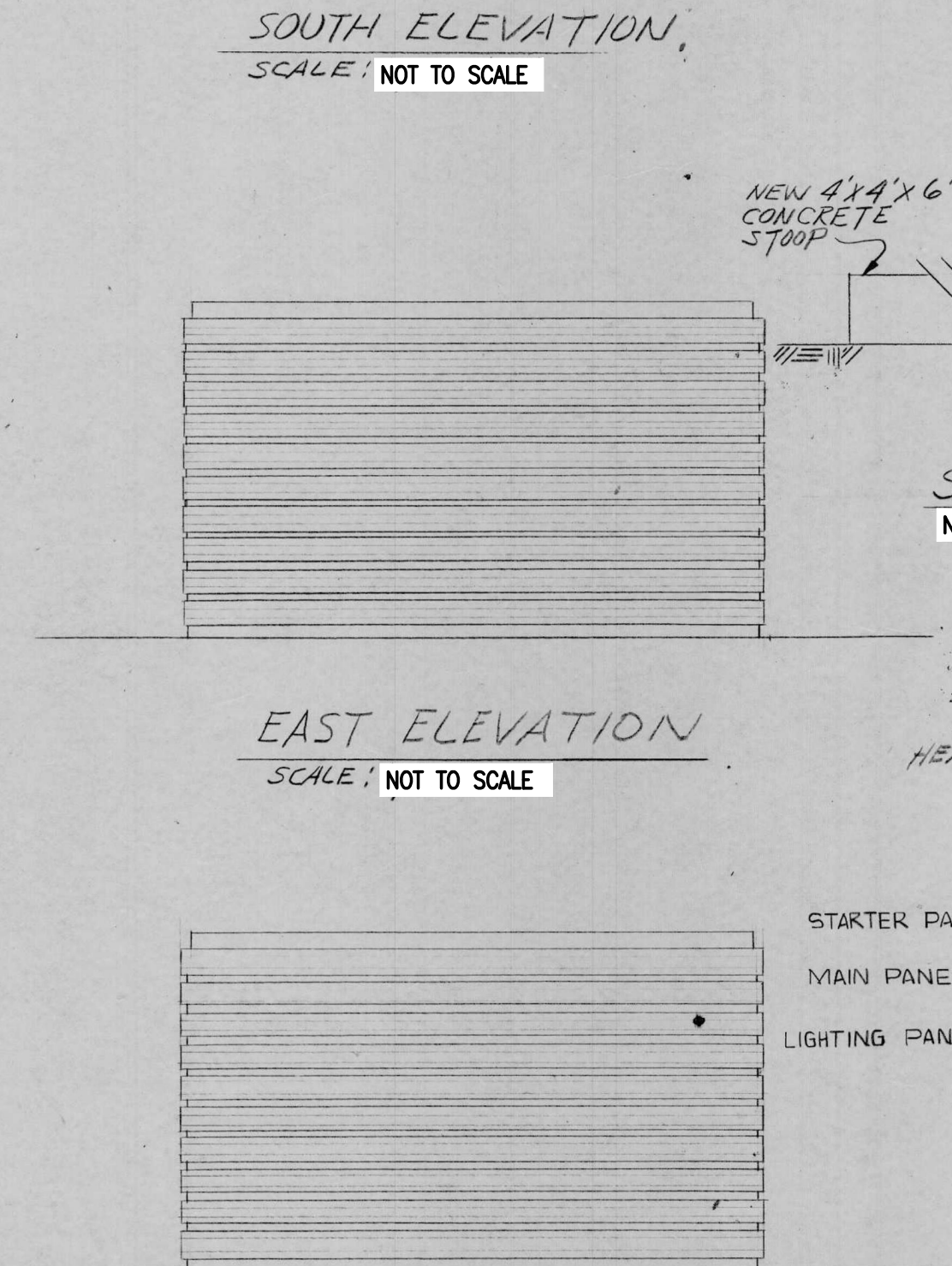
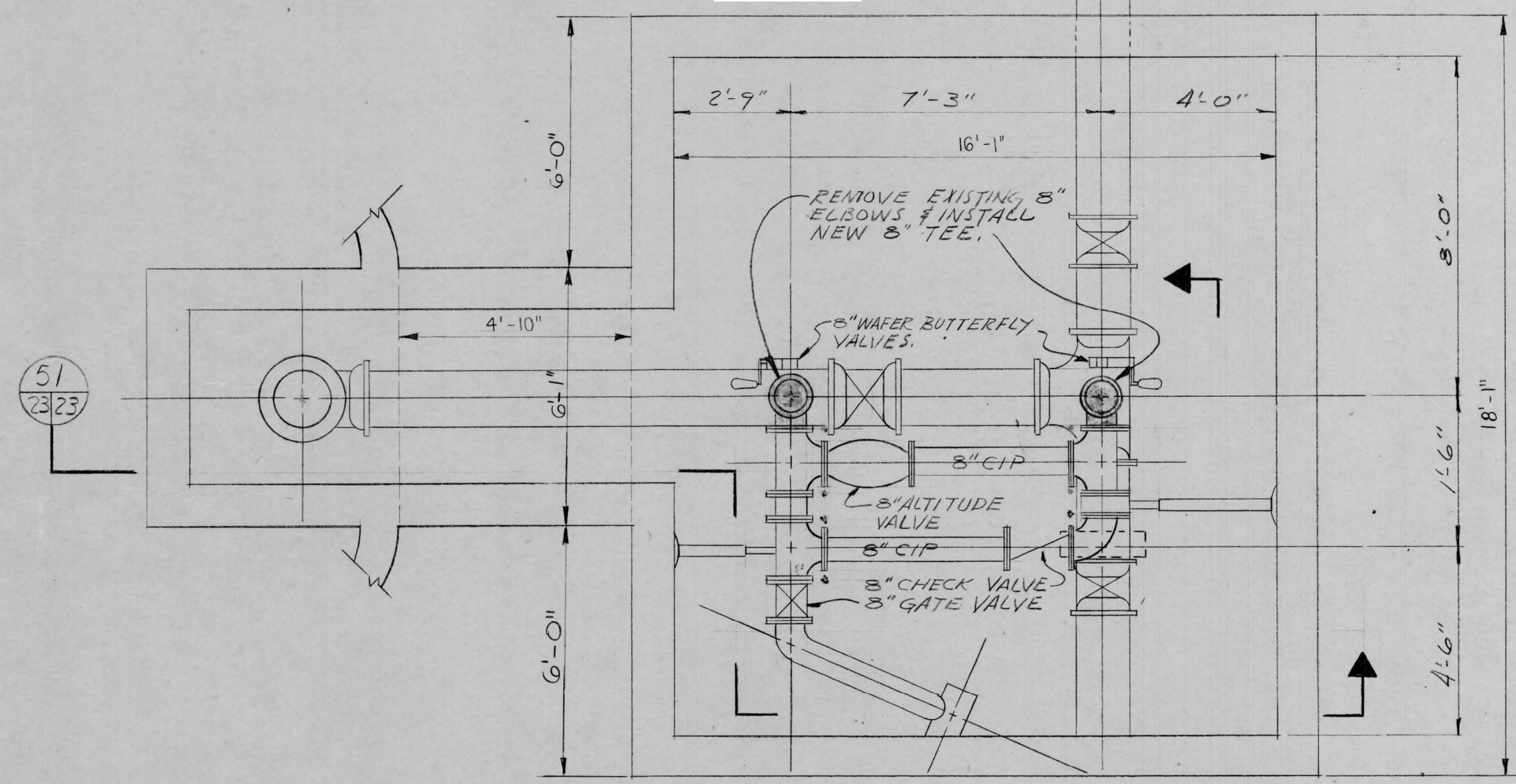
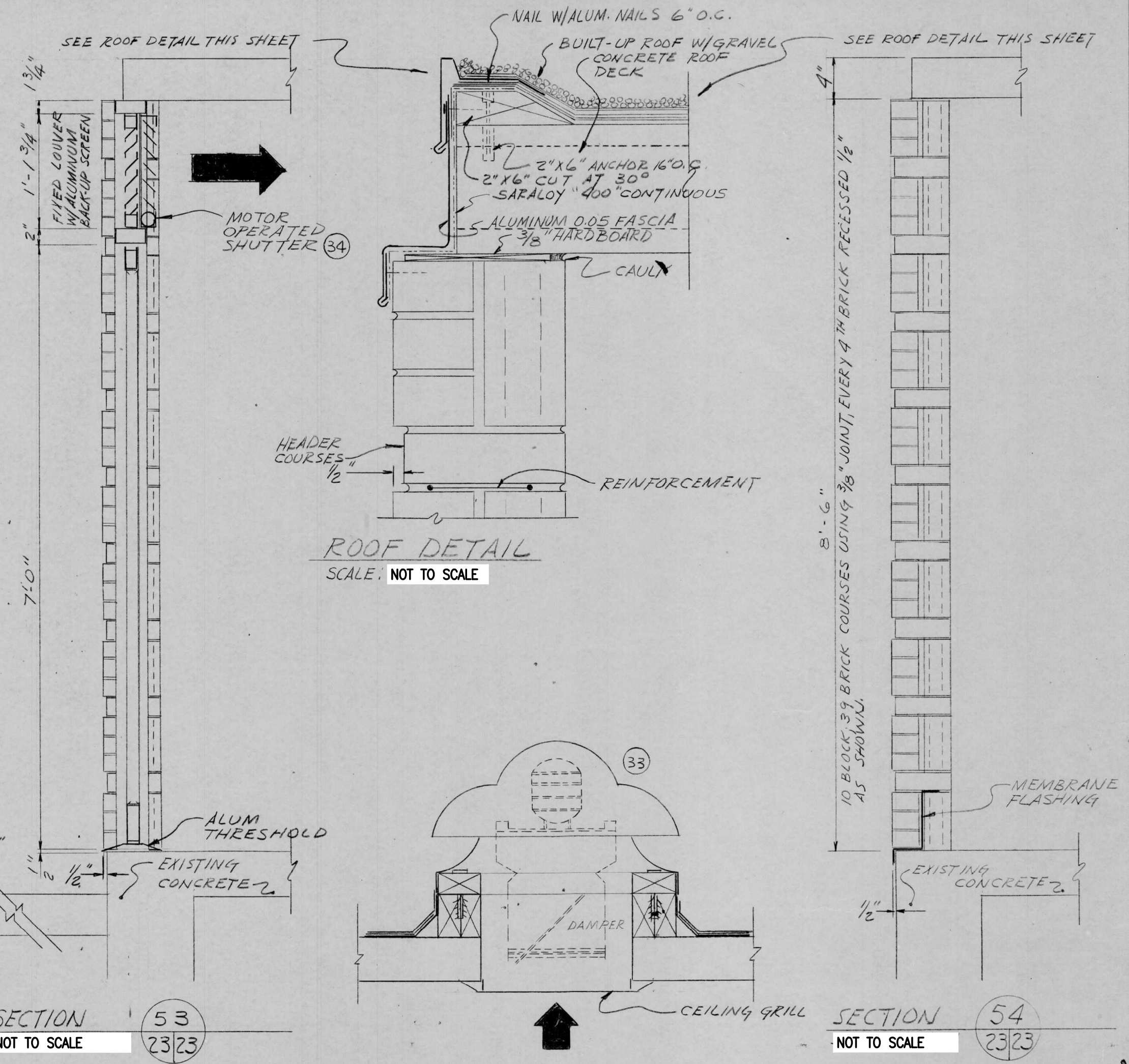
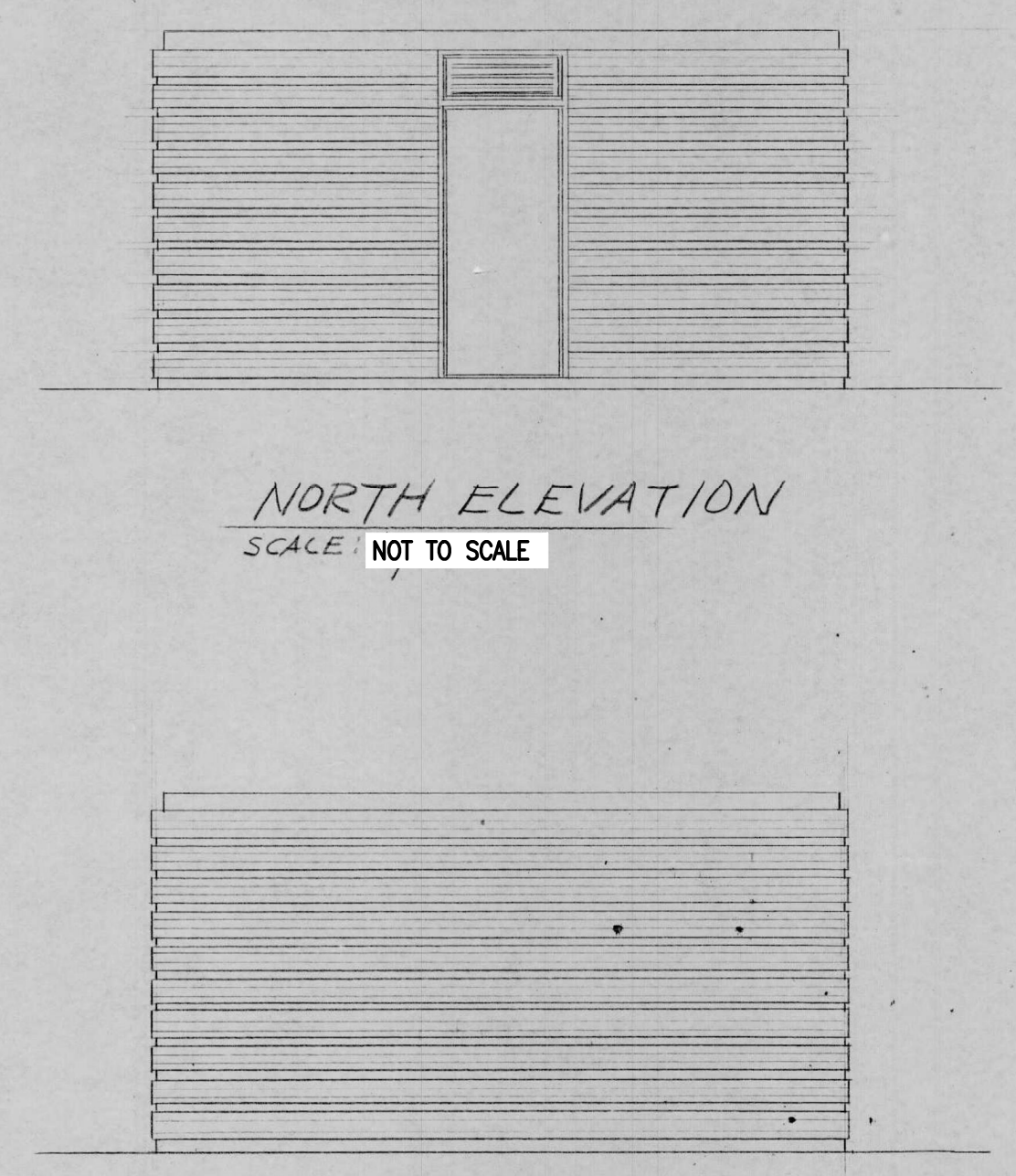
SHEET: C-101

DRAWING PATH: P:\0000\_01000020210040\_water\_tank\_rehab\Drawings\Facilities\210040\SITE\_TANK.dwg Jan 24, 2022, 12:14pm

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**NOTES:**  
 1. ALL WELL HOUSE PIPING SHALL BE PREPARED AND PAINTED PER SPECIFICATIONS.  
 2. LOWER LEVEL OF PUMP HOUSE IS CONFINED SPACE. CONTRACTOR TO PROVIDE ALL EQUIPMENT AND LABOR NECESSARY TO PERFORM CONTRACT WORK PER LOCAL, STATE, AND FEDERAL GUIDELINES.



**NOTE: NEW PIPING SHOWN SHADED.**

THIS DRAWING IS PREPARED USING THE DESIGN DRAWINGS FROM CITY OF OWOSSO WATER WORKS IMPROVEMENTS, PREPARED BY AYRES, LEWIS, NORRIS & MAY (STANTEC), DATED DECEMBER 1970. THEY ARE MADE AVAILABLE FOR BIDDER'S CONVENIENCE AND INFORMATION, BUT ARE NOT A WARRANTY OF EXISTING CONDITIONS. TECHNICAL INFORMATION THAT THE CONTRACTOR MAY RELY UPON IS LIMITED TO THE NOTATIONS ADDED TO THE DRAWING. QUANTITIES AND DIMENSIONS ARE NOT GUARANTEED AND THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE PROPOSED WORK FOR ALL CONSTRUCTION ACTIVITIES.

REV.					
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REV.	1	12/17/20	RECORD SET		
DRAWN BY	14RF	CHECKED BY:			

<b>CITY OF OWOSSO, MICHIGAN</b>		<b>AYRES, LEWIS, NORRIS &amp; MAY</b>	
<b>WATERWORKS IMPROVEMENTS</b>		<b>CONSULTING ENGINEERS</b>	
<b>WATER SOFTENING PLANT</b>		ANN ARBOR, MICHIGAN	
<b>HIGH SERVICE BOOSTER PUMP STRUCTURE</b>		SCALE: AS SHOWN	
51303	23	RS	

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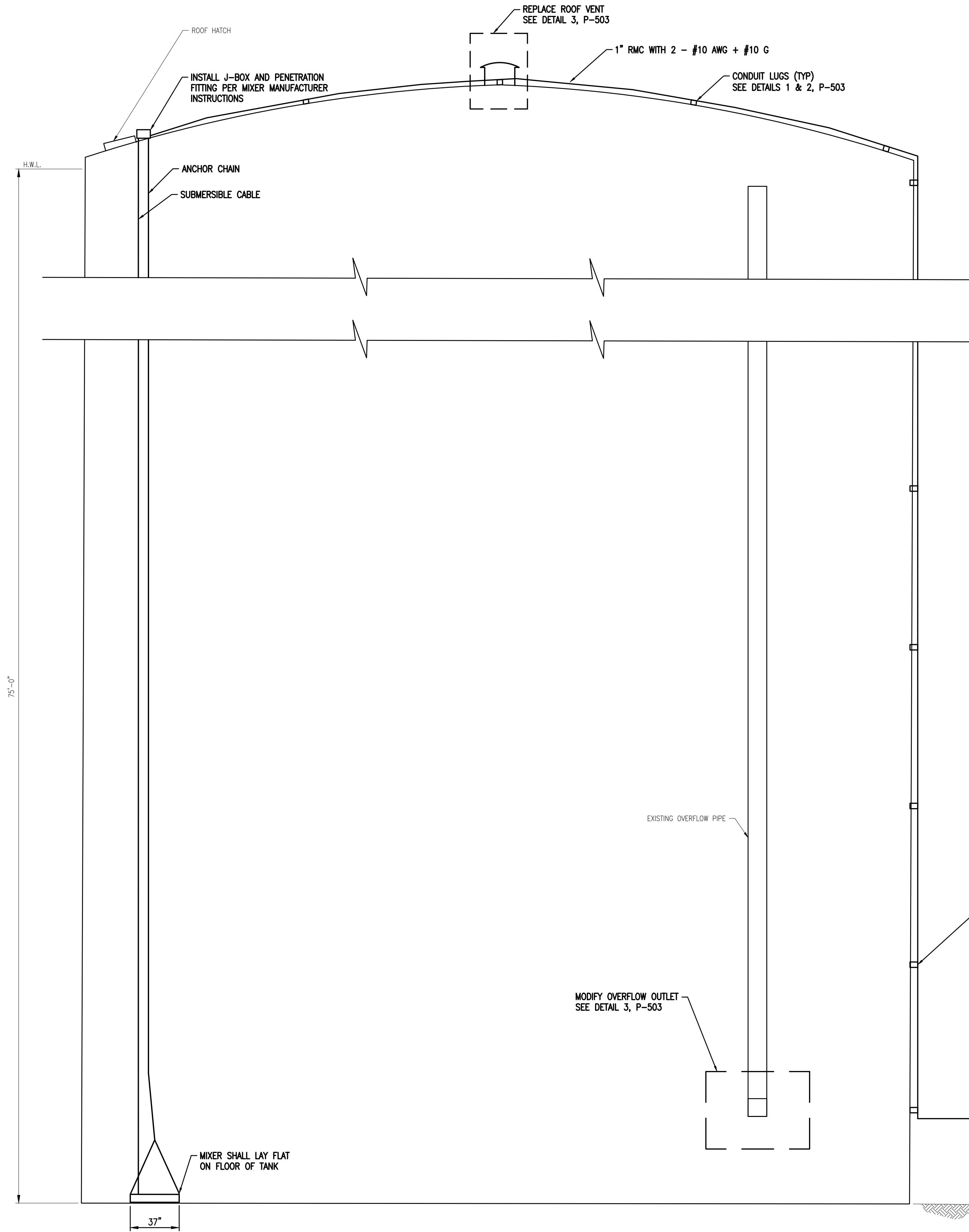
REVISIONS:  
 12/29/2022  
 ISSUED FOR BID

CITY OF OWOSSO  
 WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
 STANDPIPE PUMP HOUSE PIPING

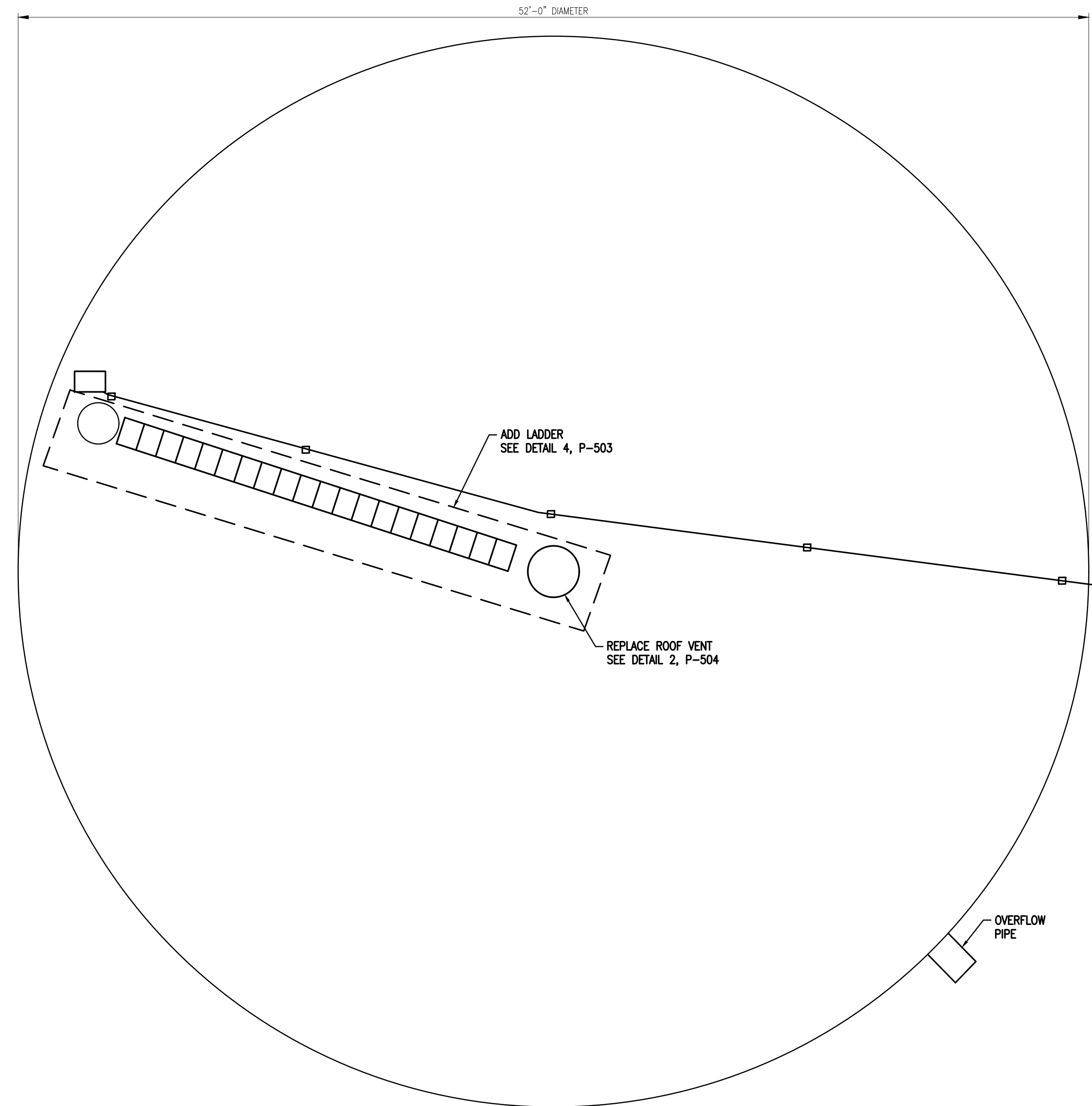
CITY/VILLAGETOWNSHIP: OWOSSO  
 COUNTY: SHAWANSEE  
 CAD: PR  
 PROJ INGR: VALP  
 PROJ NUMBER: 00242-CAD0  
 DATE: 02/24/2022

SHEET: P-101

DRAWING PATH: P:\0000\_01\00000202\0040\_water\_tank\_rehab\Drawings\Facilities\210040SP\_PLAN.dwg Jan 24, 2022 - 12:14pm



**WEST ELEVATION OF STANDPIPE**



**TOP VIEW OF STANDPIPE**

NOTES:  
 1. CONTRACTOR TO FURNISH AND INSTALL ALL COMPONENTS NECESSARY FOR COMPLETE MIXER INSTALLATION INCLUDING, BUT NOT LIMITED TO:

- a. MIXER
- b. MIXER ANCHOR WIRE
- c. MIXER CABLE WITH KELLUM GRIP
- d. MIXER PENETRATION FITTING WITH JUNCTION BOX
- e. MIXER CONTROL BOX

THIS DRAWING IS PREPARED USING THE DESIGN DRAWINGS FROM CITY OF OWOSSO CATHODIC PROTECTION SYSTEM FOR 1,250,000 GALLON STANDPIPE, PREPARED BY CPS WATER WORKS, DATED OCTOBER 16, 1996. THEY ARE MADE AVAILABLE FOR BIDDER'S CONVENIENCE AND INFORMATION, BUT ARE NOT A WARRANTY OF EXISTING CONDITIONS. TECHNICAL INFORMATION THAT THE CONTRACTOR MAY RELY UPON IS LIMITED TO THE NOTATIONS ADDED TO THE DRAWING. QUANTITIES AND DIMENSIONS ARE NOT GUARANTEED AND THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE PROPOSED WORK FOR ALL CONSTRUCTION ACTIVITIES.



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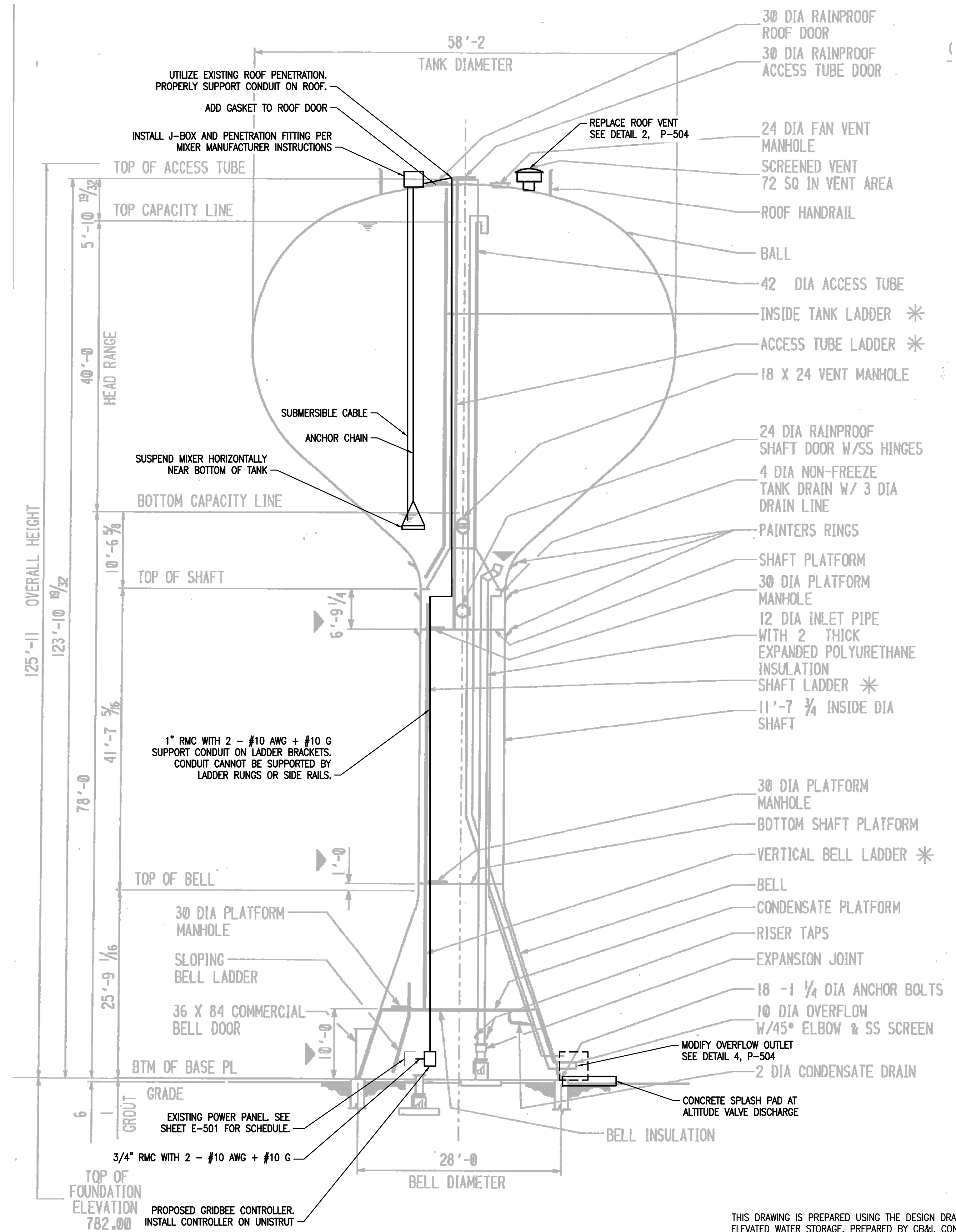
REVISIONS:	1/25/2022
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DATE	PROJ NUMBER	ENG	PROJ MGR	CADD	COUNTY	CITY/VILLAGE/TOWNSHIP	SCALE	H.	V.	VERT DATUM
###	00202-0400	Value	Value	PR	SHAWASSEE	OWOSSO	NTS	NTS	NTS	

CITY OF OWOSSO  
 WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
 STANDPIPE PLAN AND SECTION

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DRAWING PATH: P:\0000\_01\00002021\0040\_water\_tank\_ehsh\Drawings\Facilities\210040TOWER\_ELEV.dwg Jan 24, 2022 - 12:14pm



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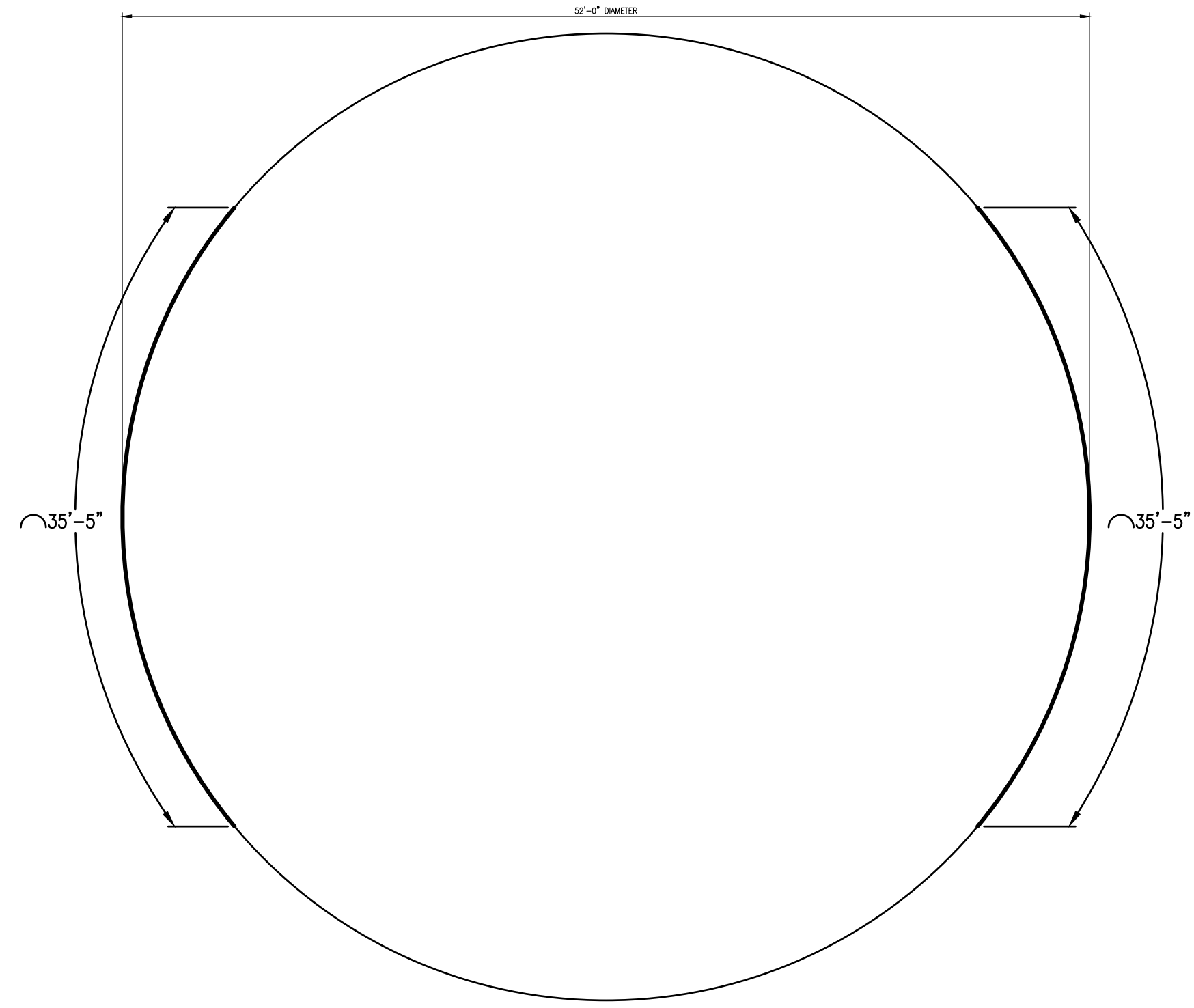
12/29/2022	ISSUED FOR BID
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DATE	PROJ NUMBER	ENG	PROJ MGR	CADD	COUNTY	CITY/VILLAGE/TOWNSHIP	SCALE	H.	V.	NTS	VERT DATUM
##	002021-0040	Value	Value	PR	SHAWANSEE	OWOSSO					

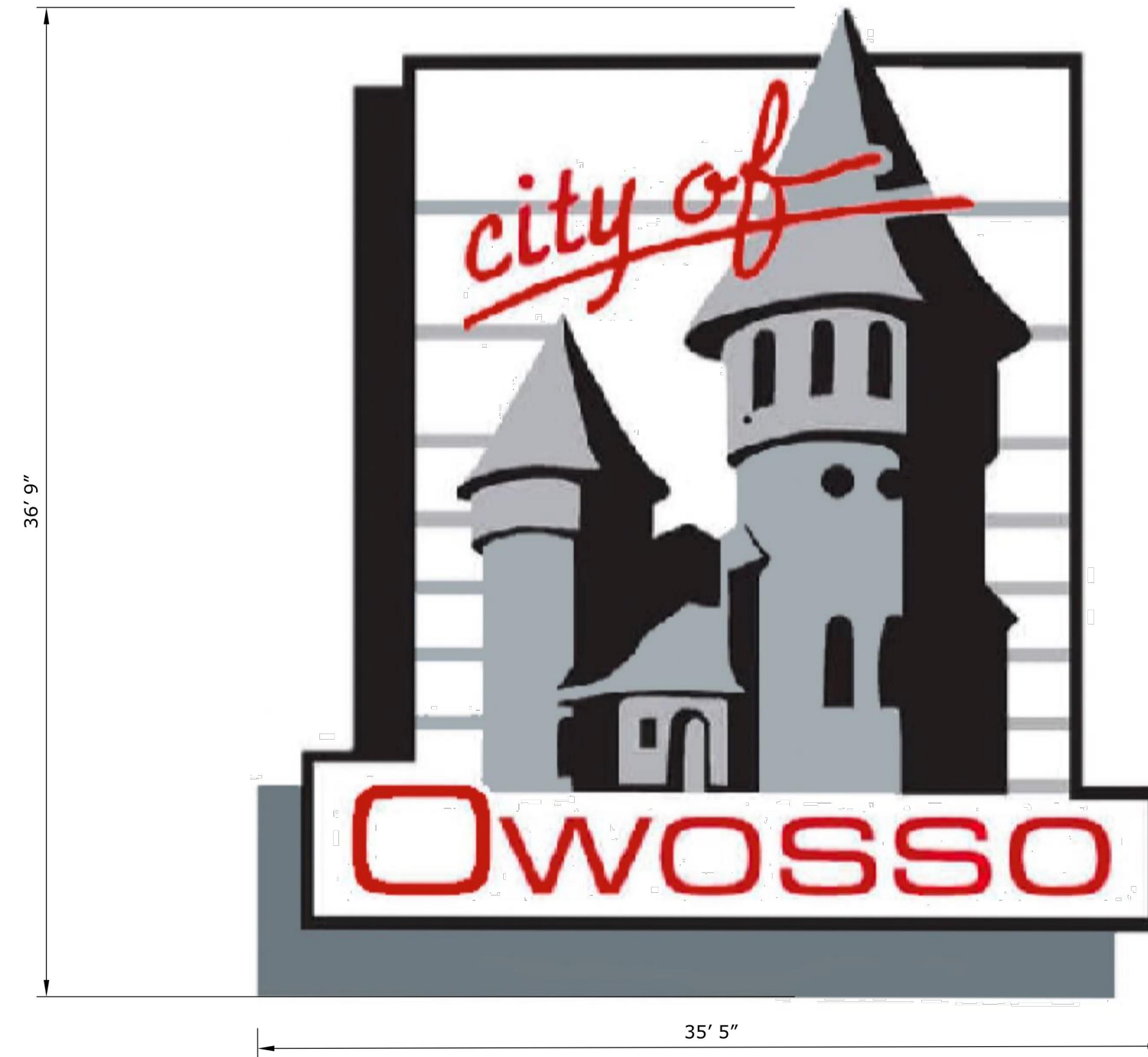
CITY OF OWOSSO  
 WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
 WATER TOWER ELEVATIONS



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TOP VIEW OF STANDPIPE



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 Nelson Tank Engineering  
 & Consulting, Inc.  
 16240 National Parkway  
 Lansing, MI 48906

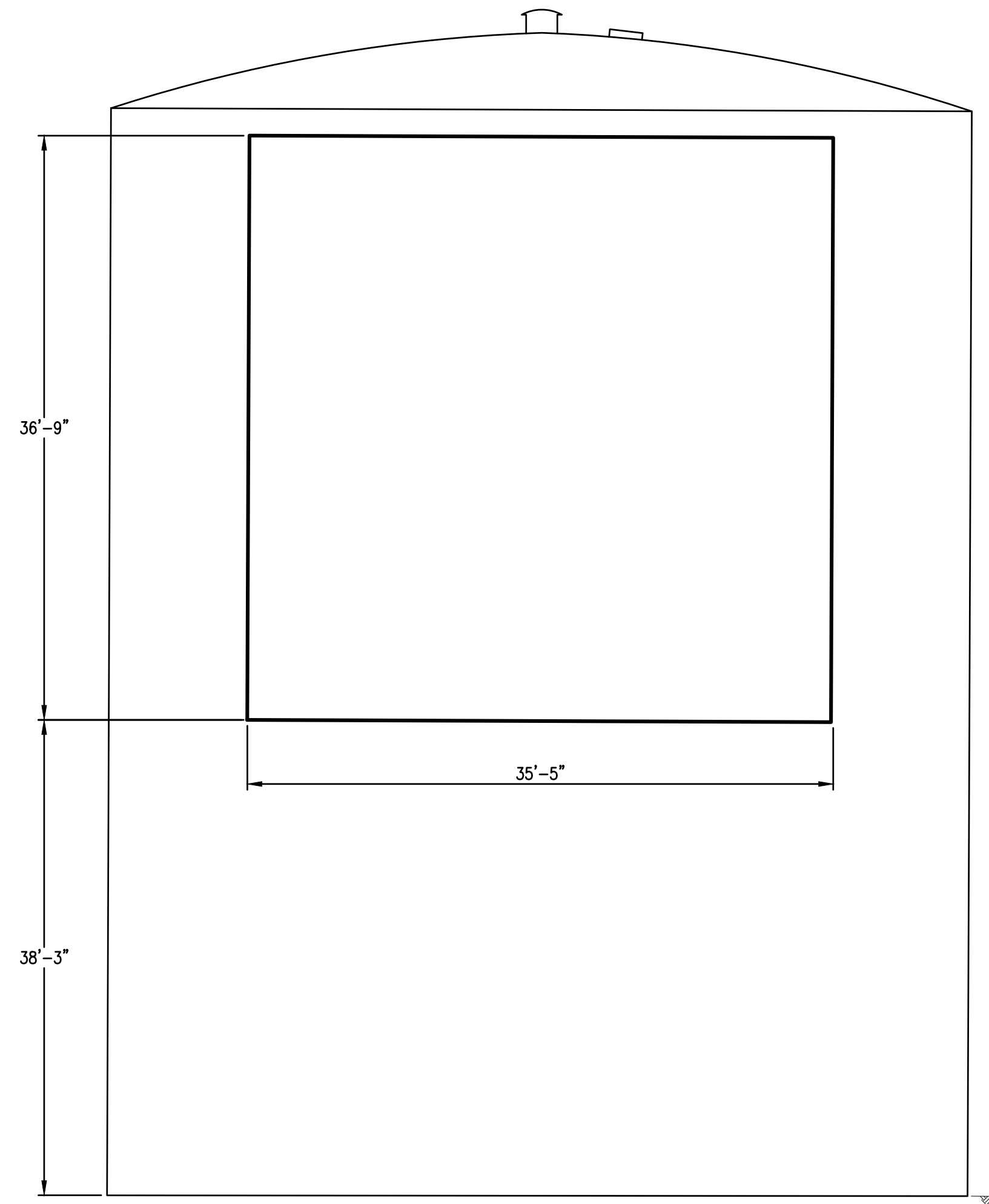
**Project**

**City of Owosso  
 1,250,000 Gallon  
 Standpipe**

**OHM**  
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 Livonia, MI 48150  
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WEST ELEVATION VIEW  
 OF STANDPIPE



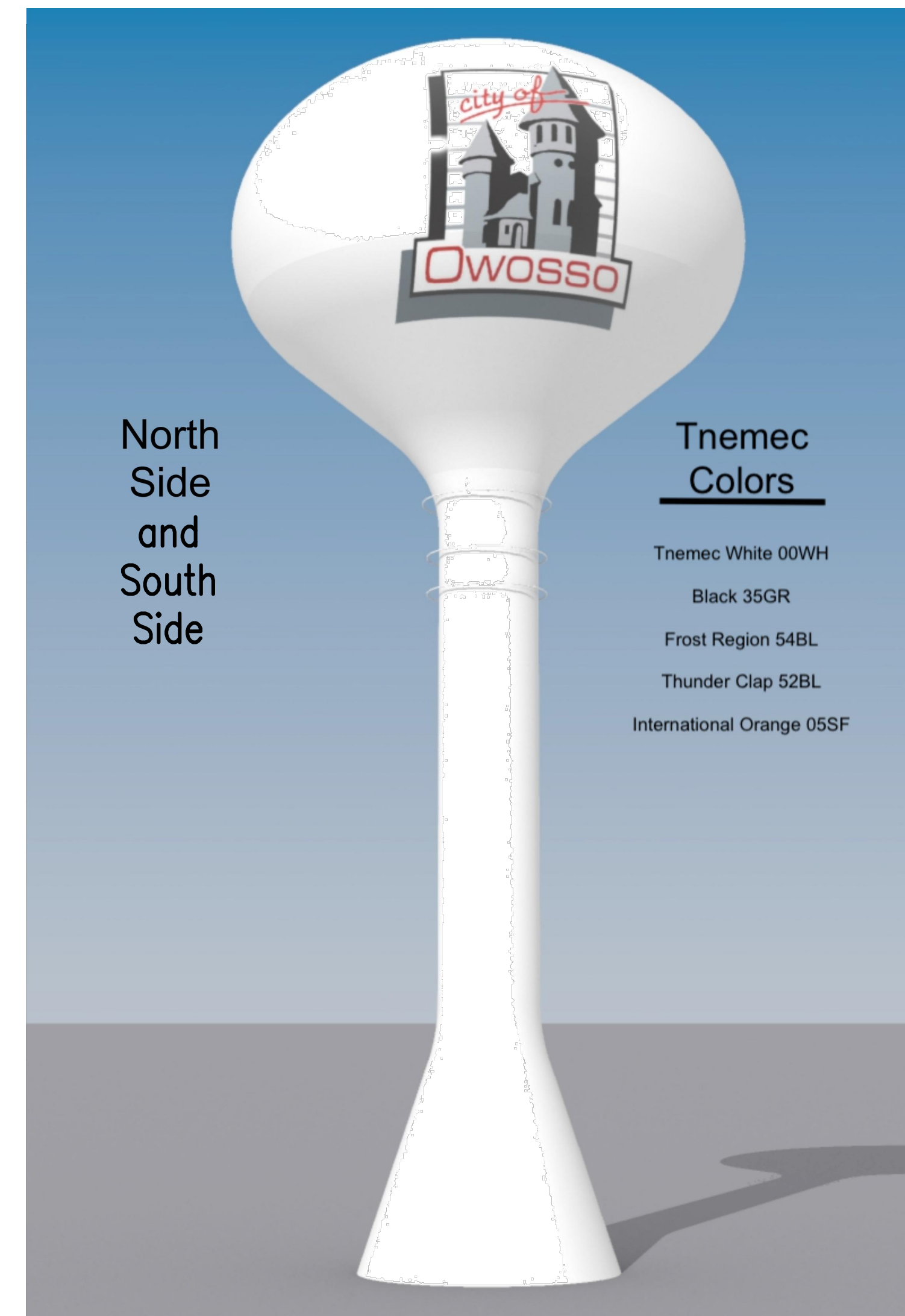
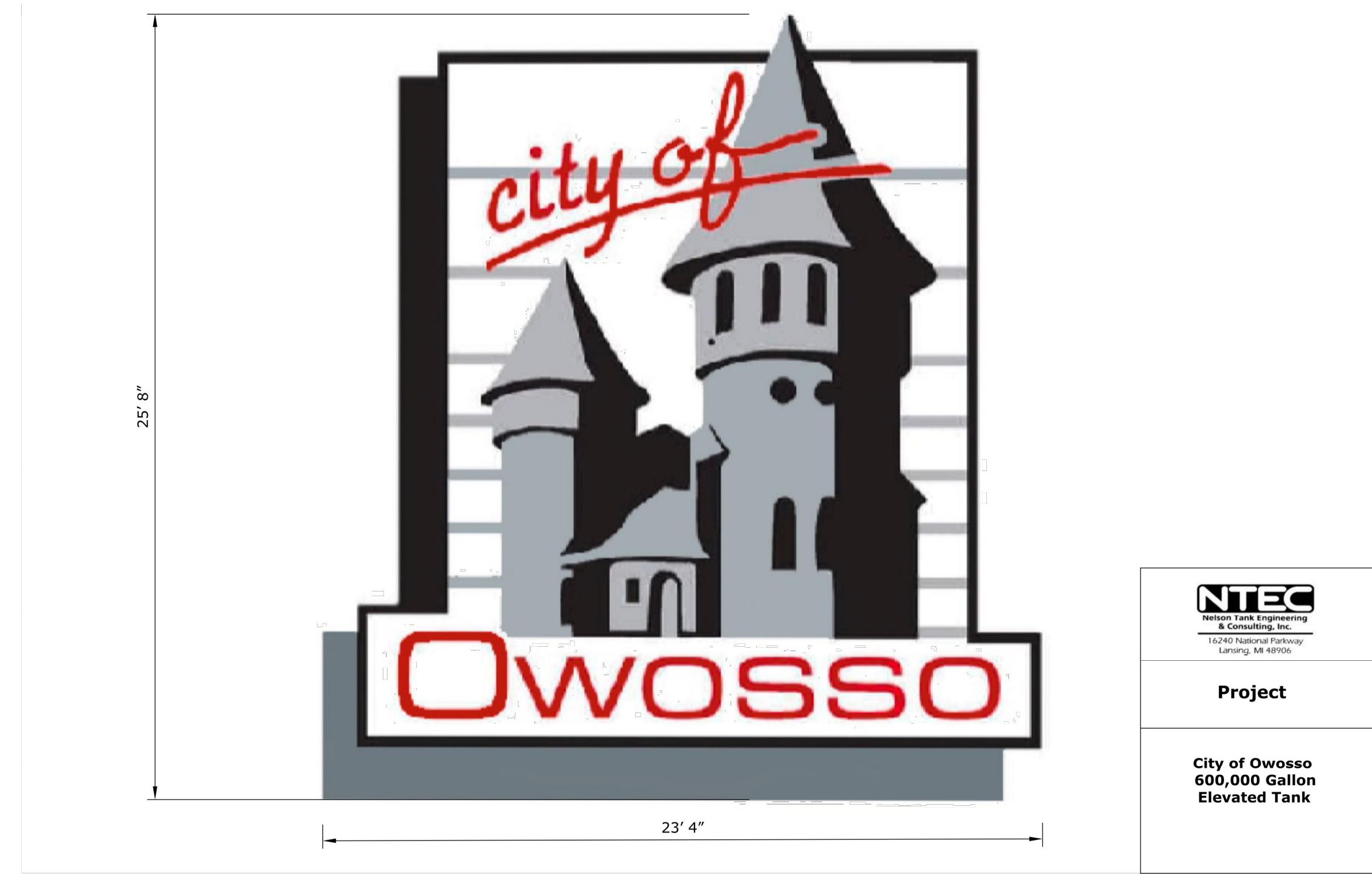
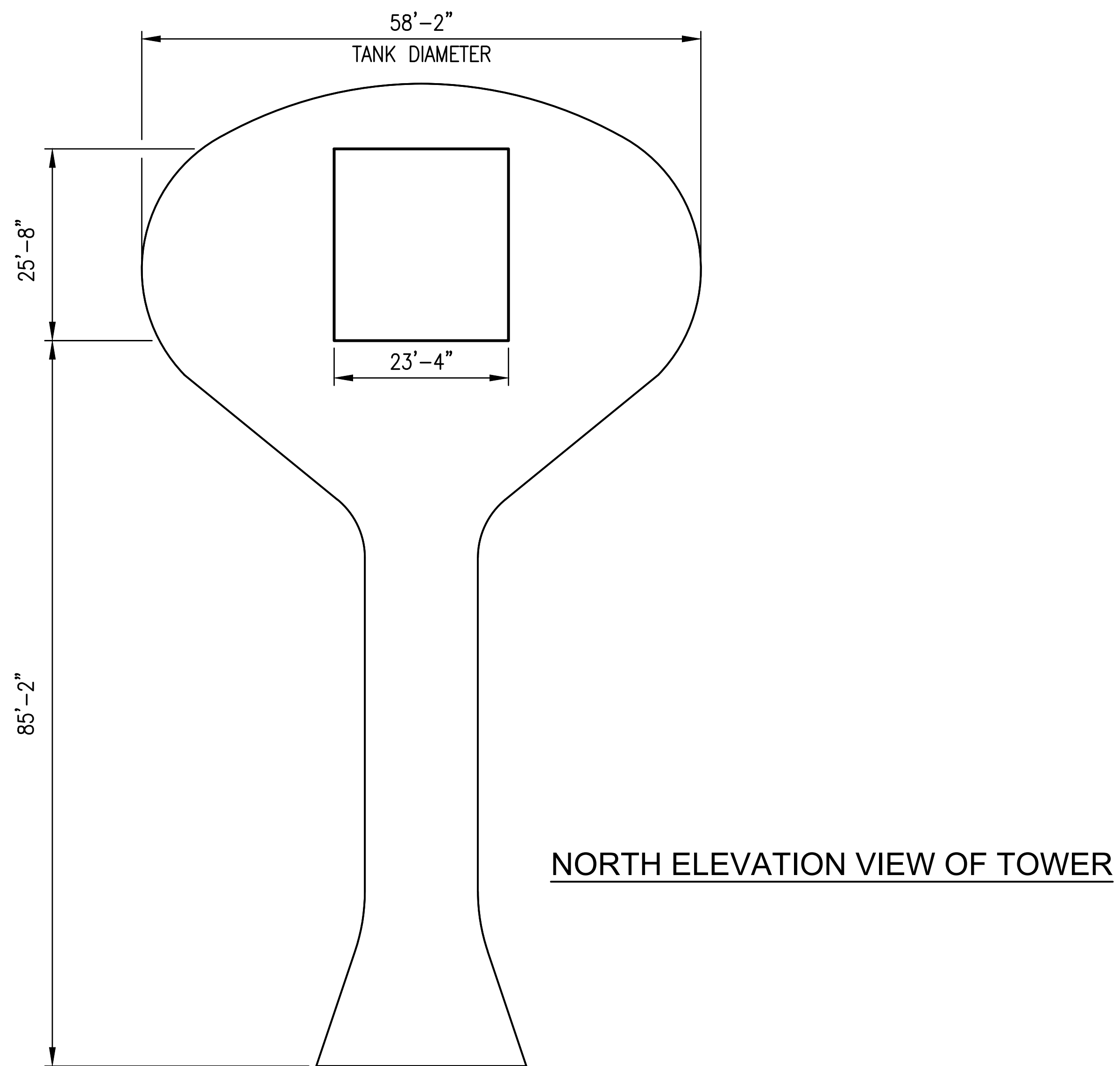
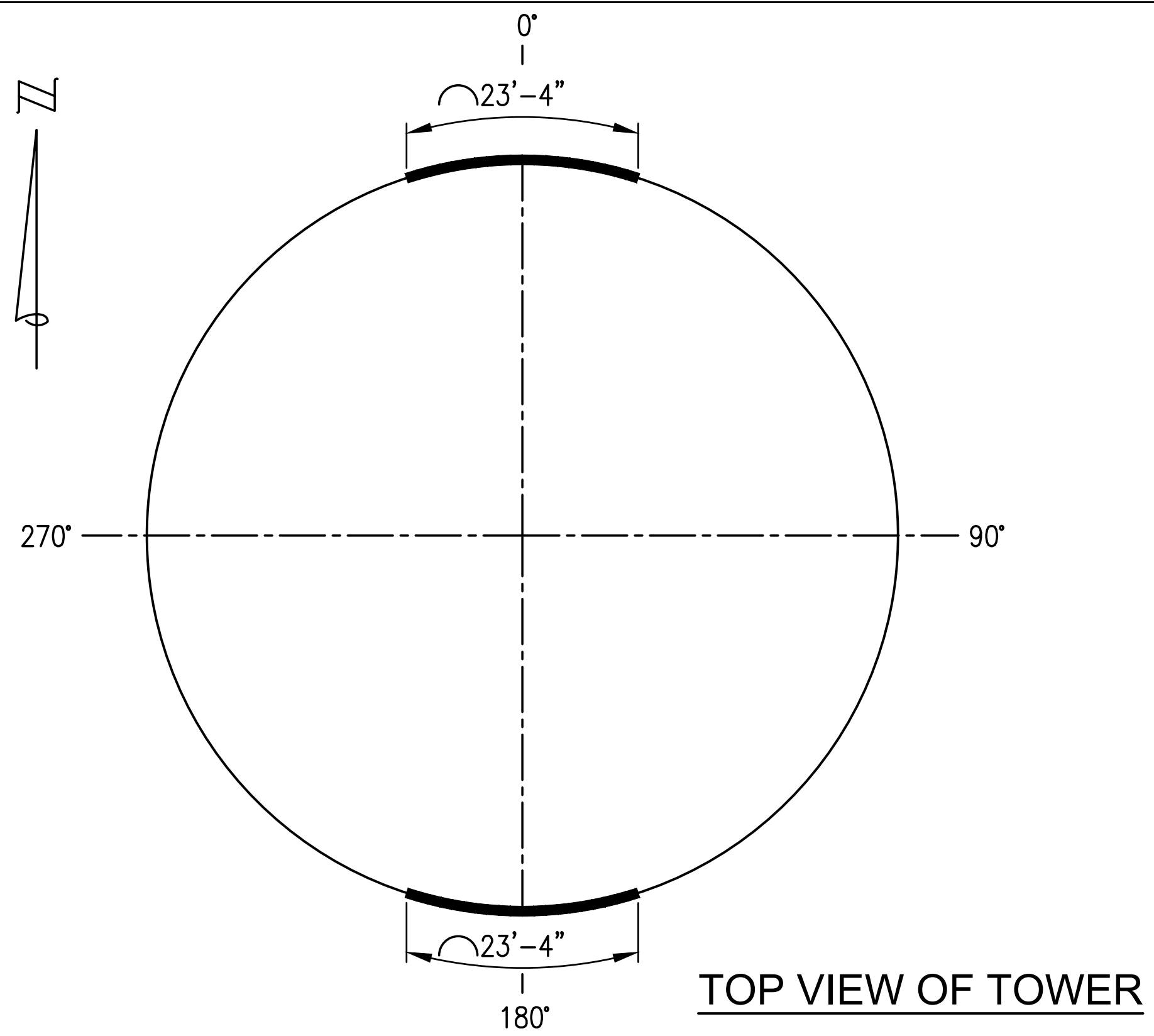
PAINTING DETAILS OF STANDPIPE FACE

- Tnemec Colors**
- Tnemec White 00WH
  - Black 35GR
  - Frost Region 54BL
  - Thunder Clap 52BL
  - International Orange 05SF

CITY OF OWOSSO  
 WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
 STANDPIPE LOGO

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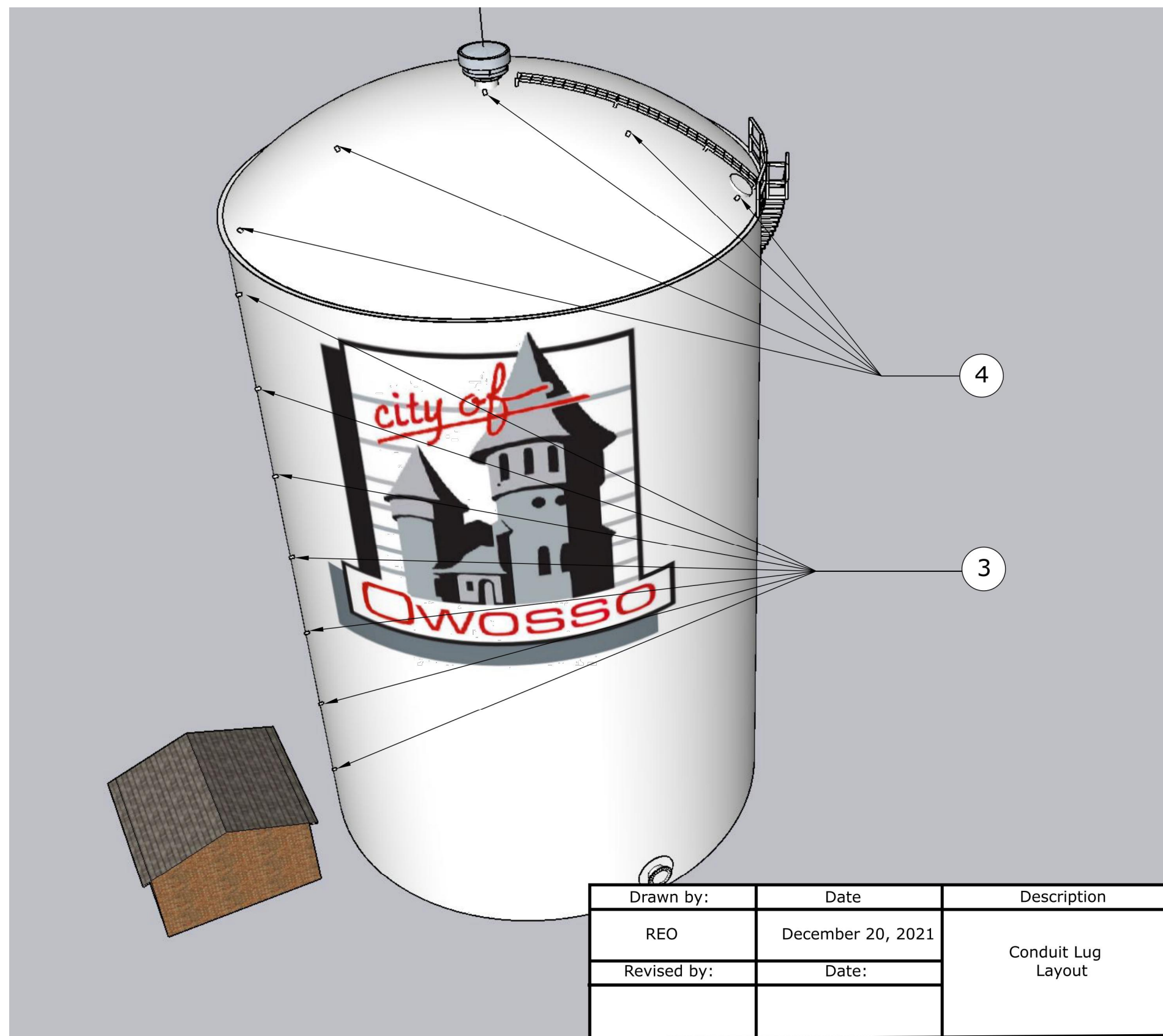


**PAINTING DETAILS OF TOWER FACE**

REVISIONS:	1/25/2022
ISSUED FOR BID	.....

DATE	PROJ NUMBER	ENG	PROJ MGR	CADD	COUNTY	CITY/VILLAGE/TOWNSHIP	SCALE	V:	NTS	VERT DATUM
###	002-2-0400	Value	Value	PR	SHAWASSEE	OWOSSO		H:	NTS	

**CITY OF OWOSSO**  
**WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01**  
**TOWER LOGO**



**DESIGN NOTE**

- Steel Plate: ASTM A36 or A283, Grades A, B and C.
- Paint in accordance with Div. 9.
- Conduit Lugs: Sidewall 4 X 6 X 3/8 inch. (7) spaced at 10 feet on center.
- Conduit Lugs: Roof 4 X 6 X 3/8 inch. (5) evenly spaced, first and fifth located 24 inches from roof edge and third lug located near center of roof. Field locate by Engineer.

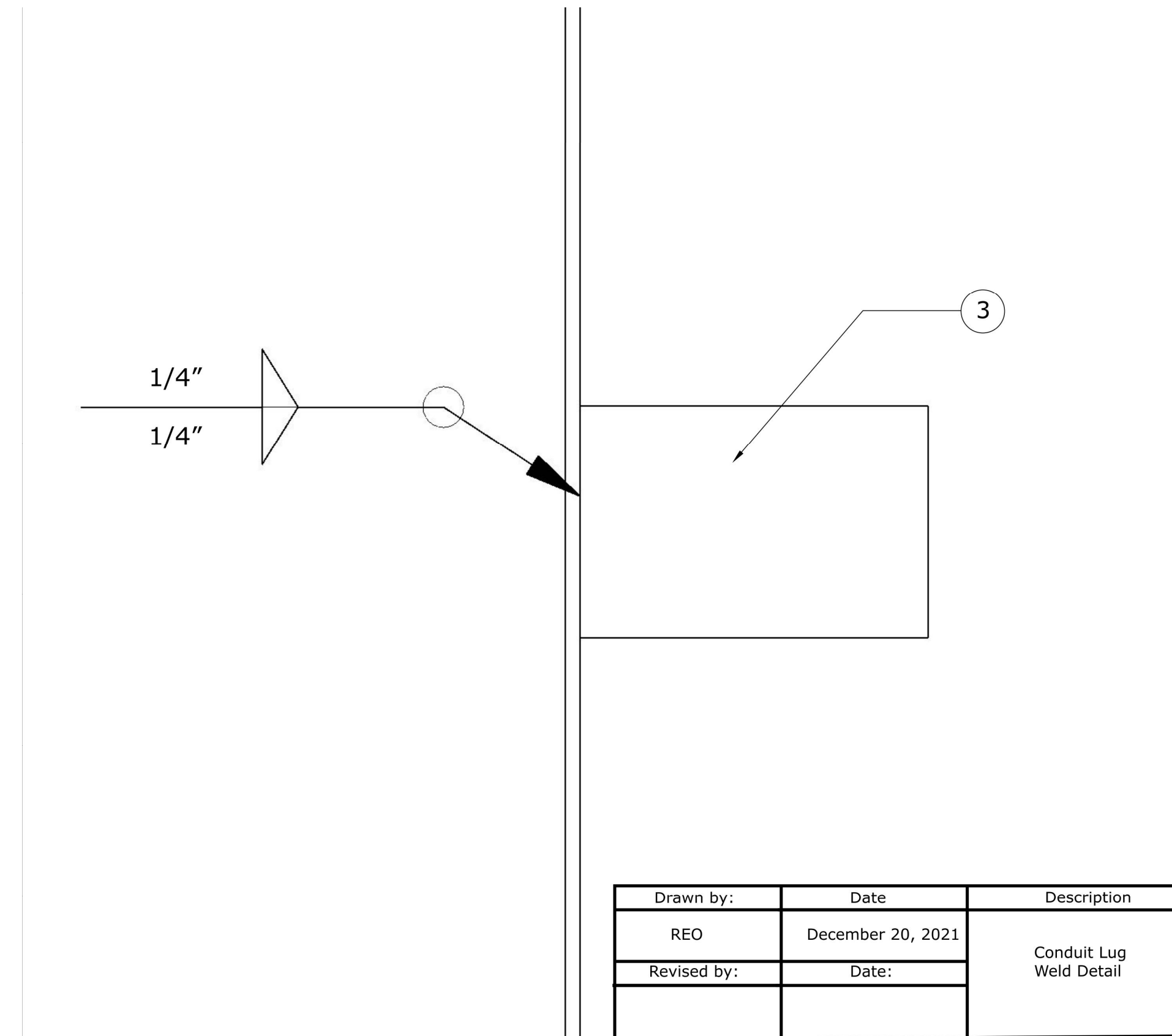
**NTEC**  
Nelson Tank Engineering & Consulting, Inc.  
16240 National Parkway  
Lansing, MI 48906

**Project**

Drawn by:	Date	Description
REO	December 20, 2021	Conduit Lug Layout
Revised by:	Date:	
REO	December 9, 2021	

**City of Owosso  
1,250,000 Gallon  
Standpipe**

1 STANDPIPE CONDUIT LUG LAYOUT



**DESIGN NOTE**

- Steel Plate: ASTM A36 or A283, Grades A, B and C.
- Paint in accordance with Div. 9.
- Conduit Lugs: 4 X 6 X 3/8 inch.

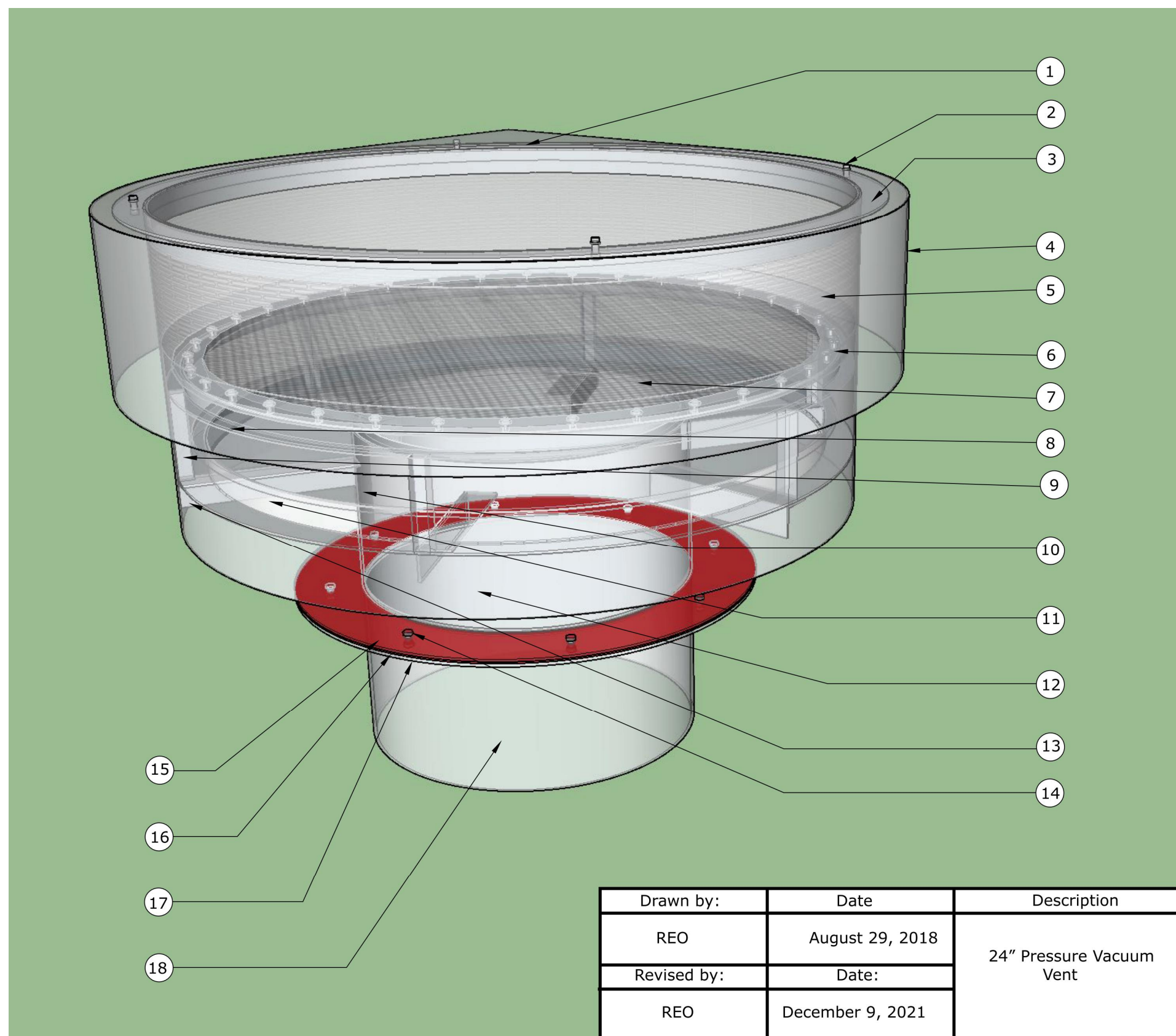
**NTEC**  
Nelson Tank Engineering & Consulting, Inc.  
16240 National Parkway  
Lansing, MI 48906

**Project**

Drawn by:	Date	Description
REO	December 20, 2021	Conduit Lug Weld Detail
Revised by:	Date:	
REO	December 9, 2021	

**City of Owosso  
1,250,000 Gallon  
Standpipe**

2 STANDPIPE CONDUIT LUG WELD DETAIL



**DESIGN NOTE**

- 1/8" x 54 3/4" plate coned to 1" in 12" min
- (4) 3/8" x 1/14" s.s. bolt
- (4) 3/8" s.s. wedge
- (4) 3/8" aluminum rivnut
- 2x2x3/16" angle rolled leg out to 54 5/8" I.D.
- 1/8x12" plate rolled to 54 5/8" I.D.
- 1/8x22" plate with integrated bird screen (8 1/2") rolled to 48" I.D.
- (26) 1/4" s.s. nut
- (26) 1/4" s.s. fender screw
- (26) 1/4x1" ss FHS
- Linear High Density Poly-Ethylene pressure pallet 47 1/2" O.D. 43" I.D. w/ 24x24"x.104" 316 s.s. screen 47 1/2" O.D.
- 1x1x3/16" angle rolled out to 48" O.D.
- (6) 1x1x3/16" angle 6" long
- Linear High Density Poly-Ethylene pressure pallet 45 1/2" O.D. 23" I.D.
- 2x2x3/16" angle rolled out to 48" O.D.
- 12x3/16" plate rolled to 24" I.D.
- (6) 2x2x3/16" angle 11 7/8" long
- 3/8x1" s.s. bolt and nut
- 24" I.D. x 34" O.D. x 3/16" plate bolt circle (8) 7/16" dia. holes @ 15" radius
- 1/8" red rubber gasket 24" I.D. 34" O.D.
- 1/4" steel plate 24 1/2" I.D x 34" O.D.
- 1/4x12" steel plate rolled to 24" I.D.

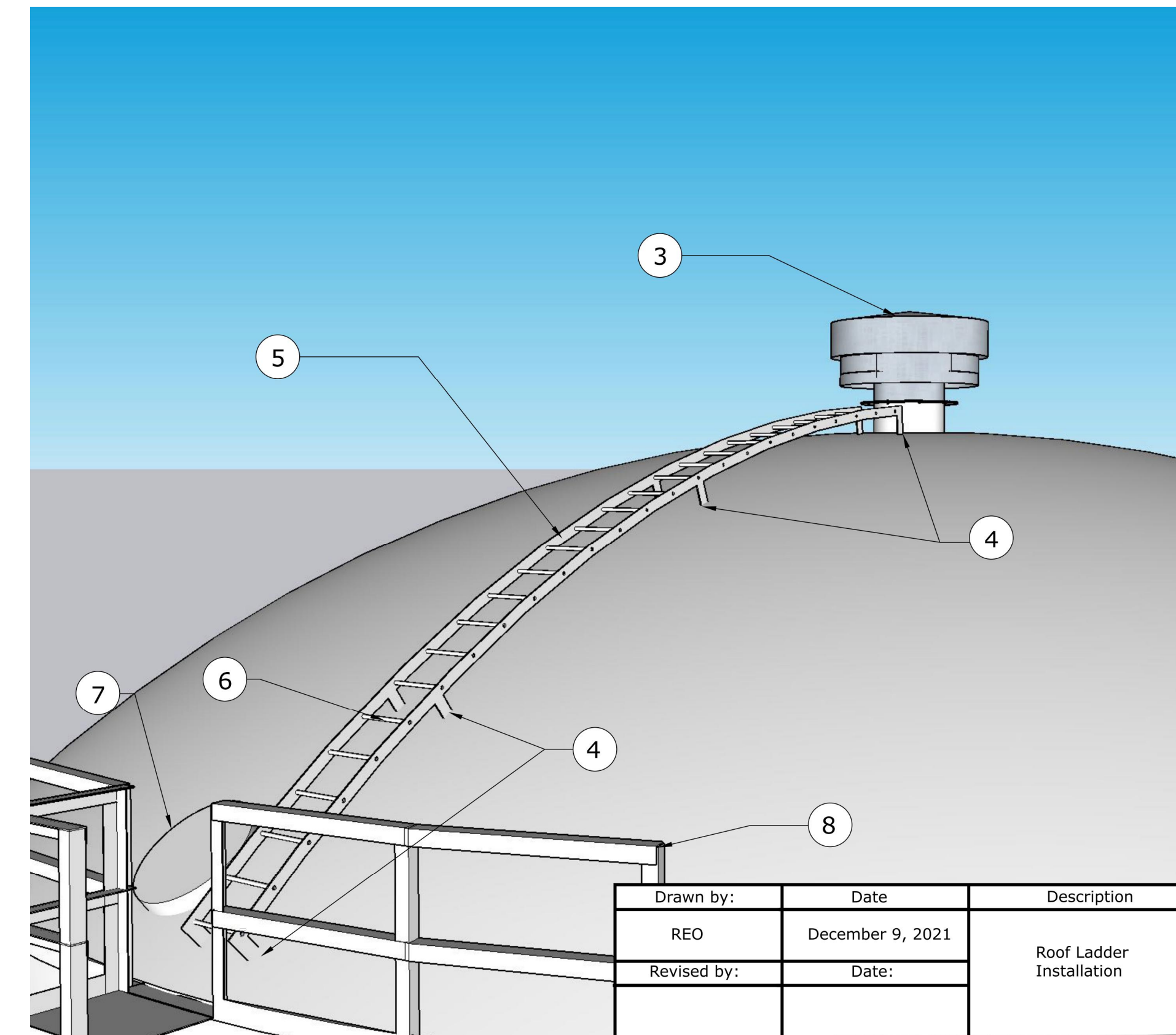
**NTEC**  
Nelson Tank Engineering & Consulting, Inc.  
16240 National Parkway  
Lansing, MI 48906

**Project**

Drawn by:	Date	Description
REO	August 29, 2018	24" Pressure Vacuum Vent
Revised by:	Date:	
REO	December 9, 2021	

**City of Owosso  
1,250,000 Gallon  
Standpipe**

3 STANDPIPE 24" PRESSURE VACUUM VENT



**DESIGN NOTE**

- Steel Plate: ASTM A36 or A283, Grades A, B and C.
- Paint in accordance with Div. 9.
- Match curvature of roof.
- New, 24" frost free roof vent
- Braces: 4 X 6 X 3/8 inch. (2) at top and bottom & at 9' intervals.
- Rails: 3/8 X 2 inch. Min space 16 inches
- Rungs: 3/4 rebar (2) at top and bottom and spaced at 12 inches.
- Roof hatch.
- Existing roof handrail.

**NTEC**  
Nelson Tank Engineering & Consulting, Inc.  
16240 National Parkway  
Lansing, MI 48906

**Project**

Drawn by:	Date	Description
REO	December 9, 2021	Roof Ladder Installation
Revised by:	Date:	
REO	December 9, 2021	

**City of Owosso  
1,250,000 Gallon  
Standpipe**

4 STANDPIPE ROOF LADDER INSTALLATION

**OHM**  
ARCHITECTS ENGINEERS PLANNERS  
34000 Plymouth Road  
Livonia, MI 48150  
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OHM-ADVISORS.COM

1/25/2022

ISSUED FOR BID

DATE: 02/02/2022  
PROJ NUMBER: 00242-CAD0  
COUNTY: SHAWANSEE  
CITY/VILLAGE/TOWNSHIP: OWOSSO  
SCALE: V: NTS  
VERT DATUM: H: NTS

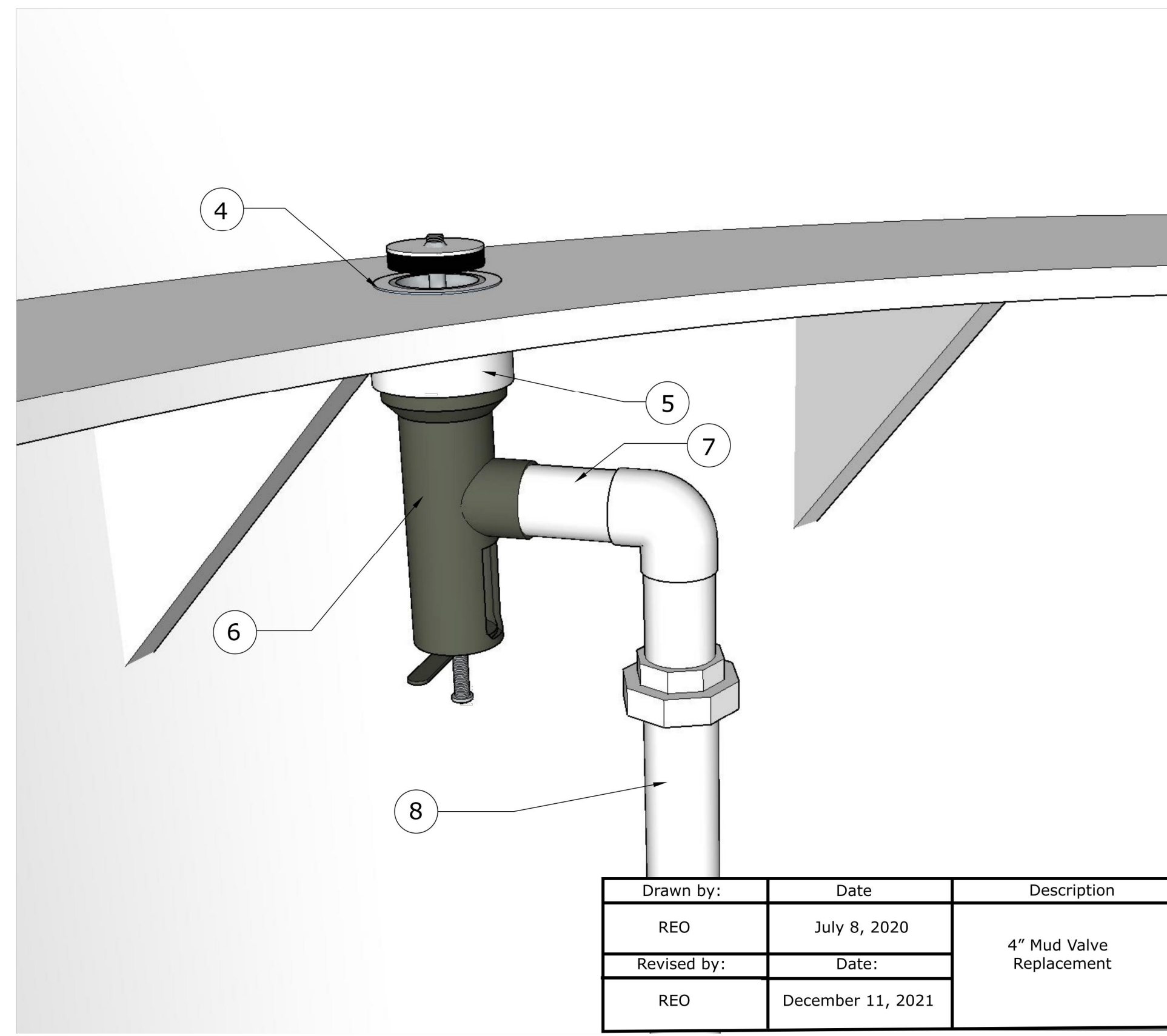
**CITY OF OWOSSO  
WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
DETAIL 1**

SHEET: P-503

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Design Notes		
1. Drawing not to scale		
2. Welding per AWWA D-100 AWS 1.1		
3. Paint in accordance with Division 9		
4. Coupling flush with tank floor		
5. Existing coupling		
6. Babco 4" frost free mud valve		
7. Attach mud valve to existing threaded fitting		
8. Existing mud valve drain pipe		

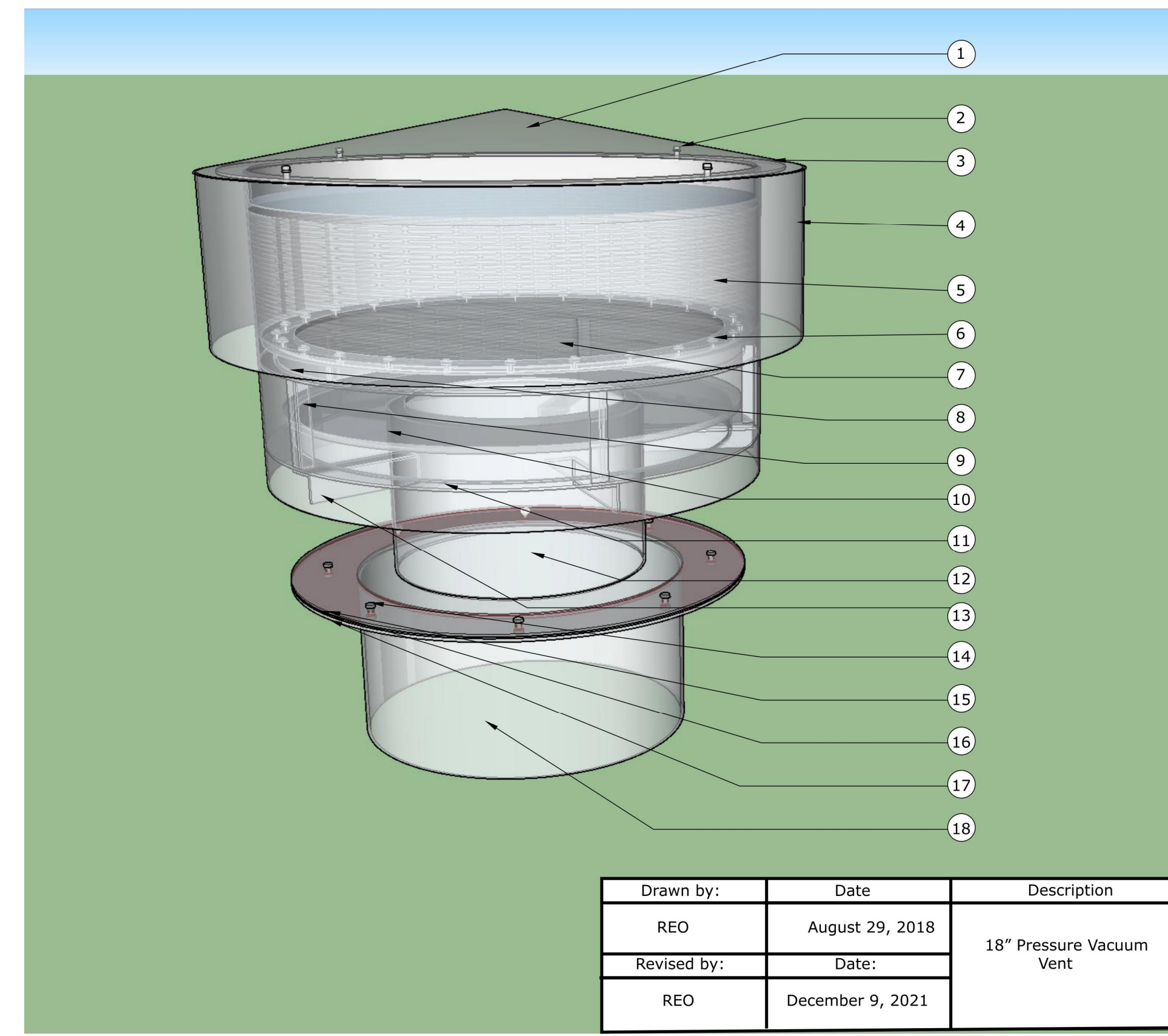
  

		
Project		
City of Owosso	600,000 Gallon	Spheroid


Drawn by:	Date	Description
REO	July 8, 2020	4" Mud Valve Replacement
Revised by:	Date:	
REO	December 11, 2021	

1 SPHEROID 4" MUD VALVE REPLACEMENT



DESIGN NOTE		
1. 1/8"x42 3/4" plate coned to 1" in 12" min		
2. (4) 3/8"x 1/14" s.s. bolt		
3. (4) 3/8" s.s. wedge		
4. (4) 3/8" aluminum rivnut		
5. 2x2x3/16" angle rolled leg out to 35 3/8" I.D.		
6. 1/8"x12" plate rolled to 42 1/2" I.D.		
7. 1/8"x22" plate with integrated bird screen (8 1/2") rolled to 36" I.D.		
8. (26) 1/4" s.s. nut		
9. (26) 1/4" s.s. fender screw		
10. Linear High Density Poly-Ethylene pressure pallet 35 1/2" O.D.		
11. 31" I.D. w/ 24x24" x.014 316 s.s. screen 35 1/2" O.D.		
12. 1x1x3/16" angle rolled out to 36" O.D.		
13. (5) 1x1x3/16" angle 6" long		
14. Linear High Density Poly-Ethylene pressure pallet 33 1/2" O.D.		
15. 17" I.D.		
16. 2x2x3/16" angle rolled out to 36" O.D.		
17. 12x3/16" plate rolled to 18 1/2" I.D.		
18. (5) 2x2x3/16" angle 8 9/16" long		
19. 3/8x1" s.s. bolt and nut		
20. 18 1/2" I.D. x 34" O.D. plate bolt circle (8) 7/16" dia. holes @ 15" radius		
21. 1/8" red rubber gasket 24" I.D., 34" O.D.		
22. 1/4" steel plate 24 1/2" I.D x 34" O.D.		
23. 1/4x12" steel plate rolled to 24" I.D.		

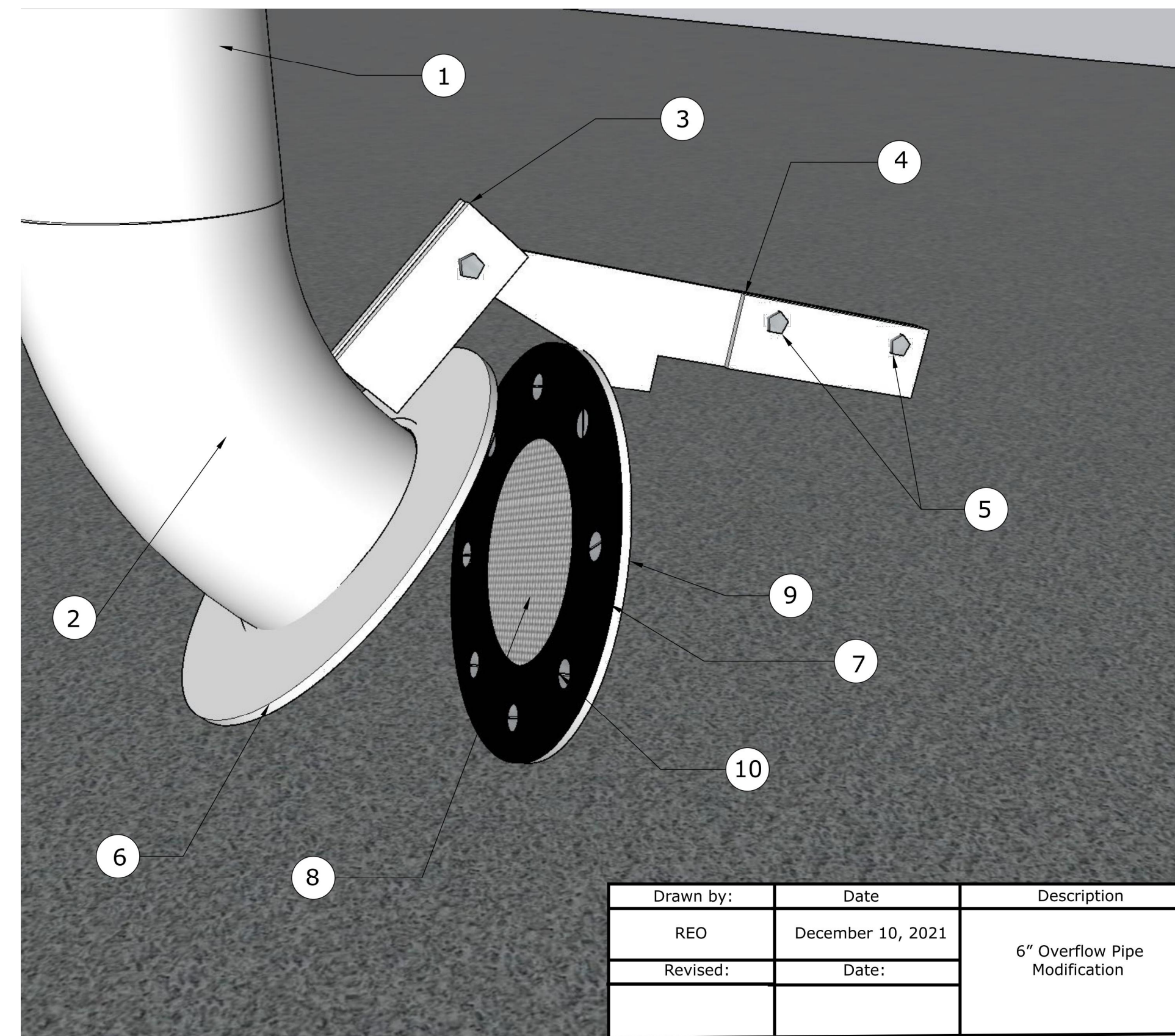
  

		
Project		
City of Owosso	600,000 Gallon	Spheroid


Drawn by:	Date	Description
REO	August 29, 2018	18" Pressure Vacuum Vent
Revised by:	Date:	
REO	December 9, 2021	

2 SPHEROID 18" PRESSURE VACUUM VENT



Design Notes		
1. Existing 6" overflow pipe.		
2. Install 6" 45 degree elbow		
3. (2) 6x3x1/4" flap gate support.		
4. 10"x2"x1/2" plates w/ (2) moveable weights.		
5. (2) 1/2" hex key bolts		
6. New pipe flange		
7. 3/8" PVC gasket.		
8. McNichols stainless steel wire mesh 24x24 with .028" opening.		
9. Flap gate flange.		
10. (8) flat head bolts.		

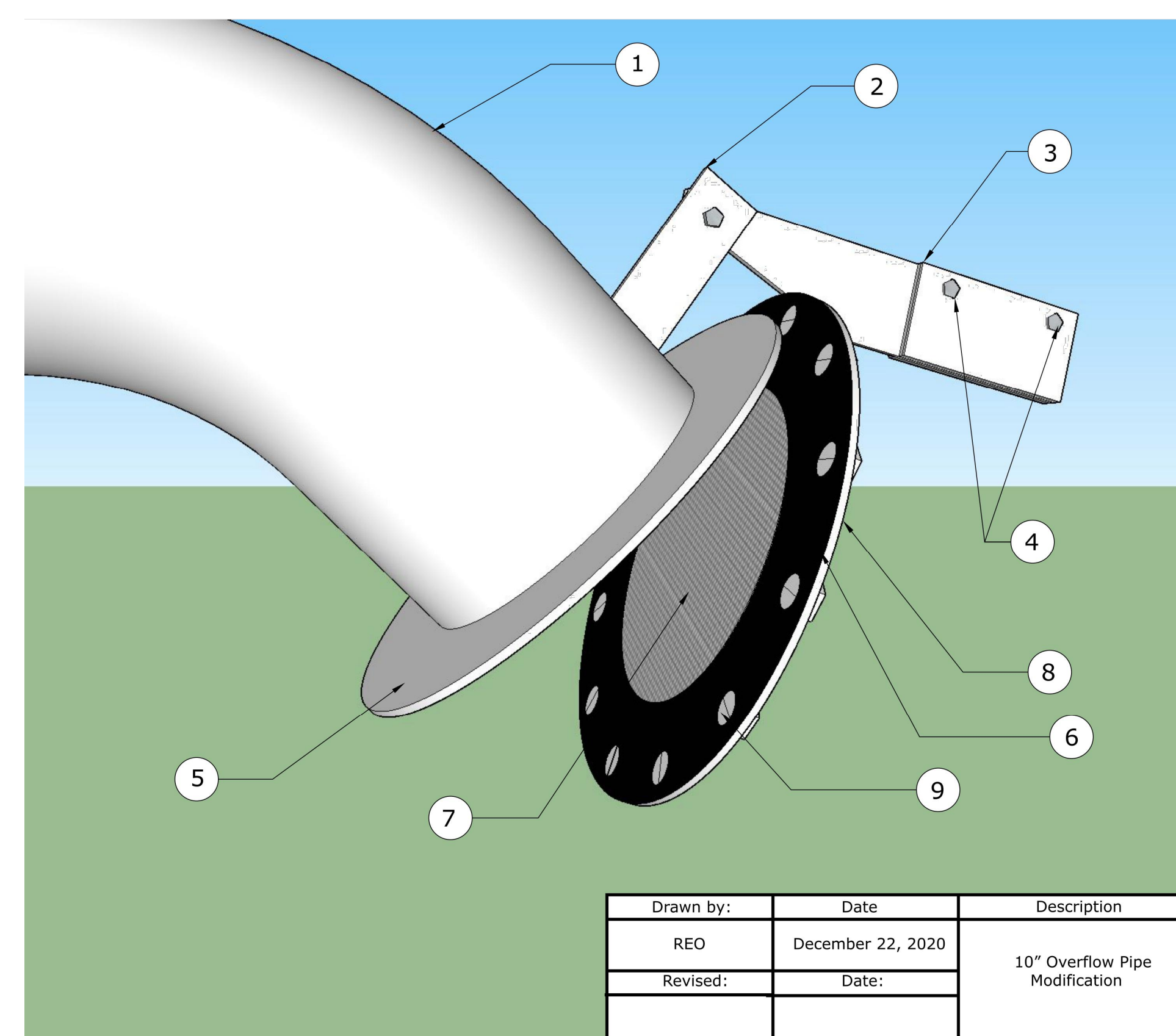
  

		
Project		
City of Owosso	1,250,000 Gallon	Standpipe


Drawn by:	Date	Description
REO	December 10, 2021	6" Overflow Pipe Modification
Revised:	Date:	

3 STANPIPE 6" OVERFLOW PIPE MODIFICATION



Design Notes		
1. Existing 10" overflow pipe.		
2. (2) 6x3x1/4" flap gate support.		
3. (2) 10"x3"x1/2" plates w/ moveable weights.		
4. (2) 1/2" hex key bolts		
5. Existing pipe flange		
6. 3/8" PVC gasket.		
7. McNichols stainless steel wire mesh 24x24 with .028" opening.		
8. Flap gate flange.		
9. (12) 7/8" flat head bolts.		


		
Project		
City of Owosso	600,000 Gallon	Elevated Tank

Drawn by:	Date	Description
REO	December 22, 2020	10" Overflow Pipe Modification
Revised:	Date:	

4 TOWER 10" OVERFLOW PIPE MODIFICATION

DRAWING PATH: P:\0000\_01\00002021\040\_water\_tank\_rehab\Drawings\Facilities\210040DEI.dwg Jan 24, 2022 - 12:15pm



ARCHITECTS ENGINEERS PLANNERS  
34000 Plymouth Road  
Livonia, MI 48150  
P (734) 522-6711 | F (734) 522-6427  
OHM-ADVISORS.COM

1/25/2022

ISSUED FOR BID

DATE: 02/21/2020  
 PROJ NUMBER: 002-2-CAD-  
 VAL:

PROJ MGR: VALR  
 VAL:

COUNTY: SHAWASSEE  
 CITY/VILLAGE/TOWNSHIP: OWOSSO  
 STATE: MI

SCALE: H: NTS V: NTS  
 HORIZ DATUM:

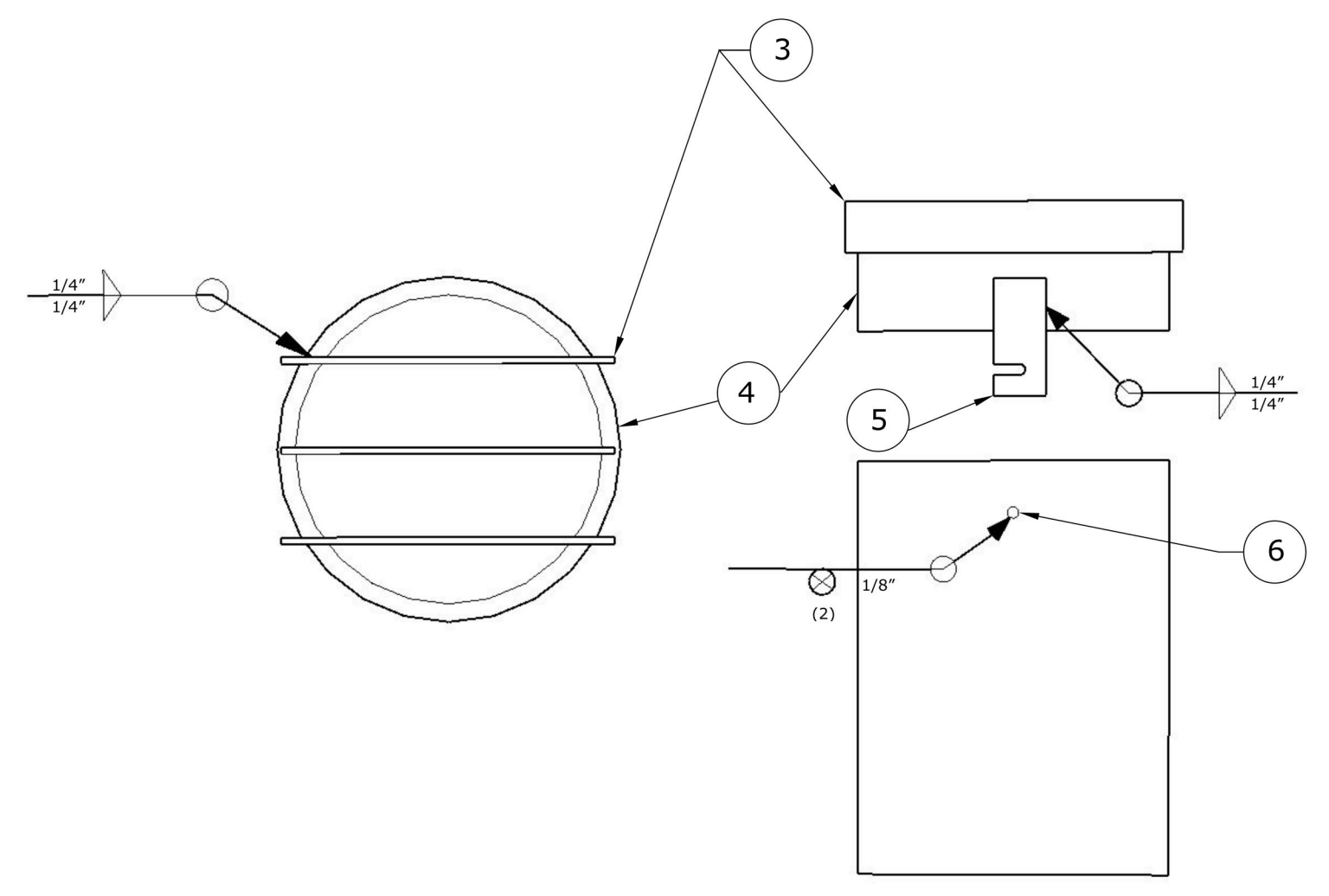
VERT DATUM:

CITY OF OWOSSO  
WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
DETAIL 2

P-504

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DRAWING PATH: \\nhdms\Corporate\Projects\0000\_01000\020210040\_Water\_Tank\_Rehab\Drawings\Facilities\2\040DET.dwg Feb 06, 2022 - 11:19pm

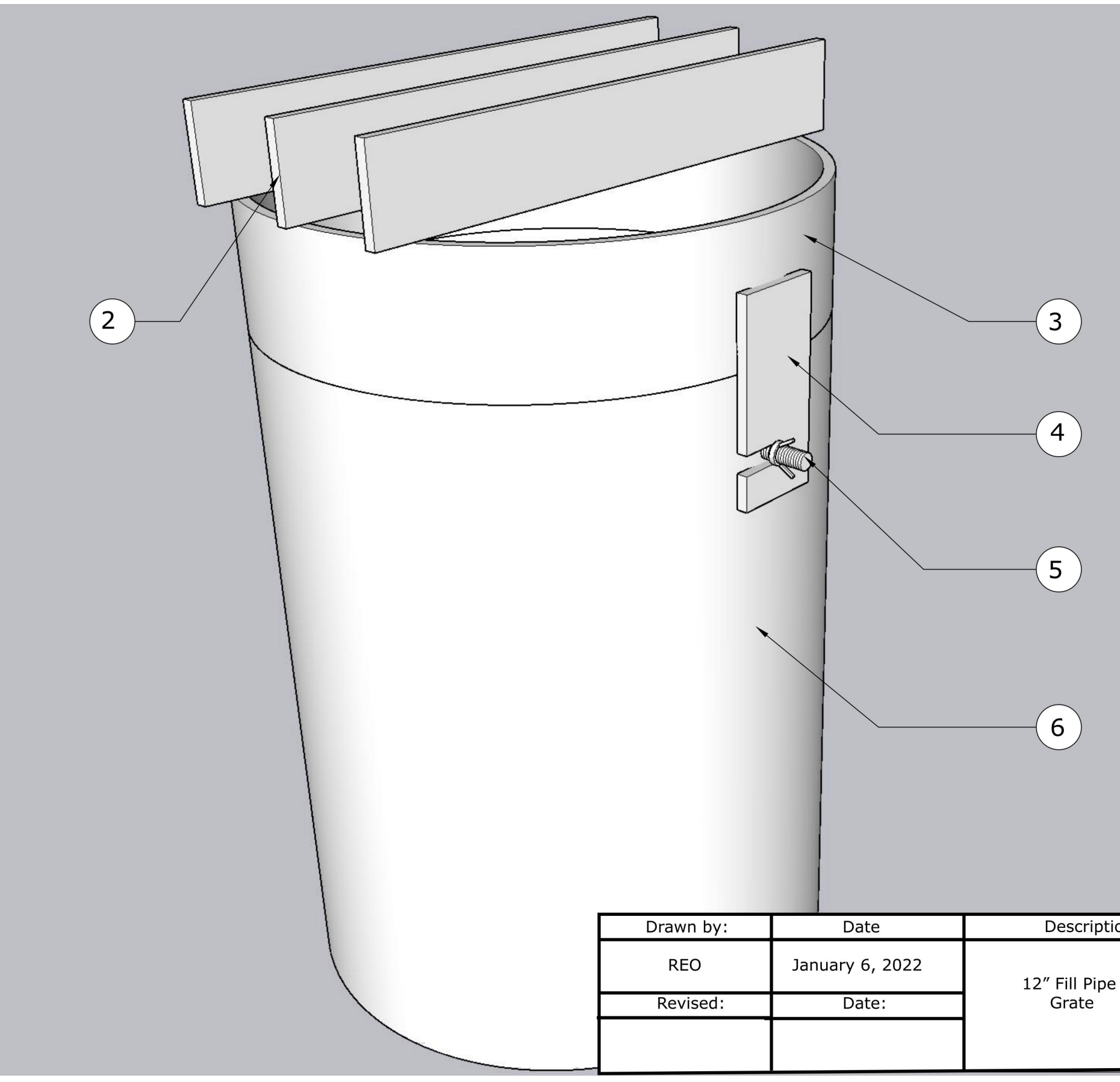


DESIGN NOTE		
1.	Steel Plate: ASTM A36 or A283, Grades A, B and C.	
2.	Paint in accordance with Div. 9.	
3.	(3) Bars 2"x1/4"x13" Spaced Eq. @ 3 1/2" O.C.	
4.	3" section of 12" SCH.40 pipe.	
5.	(2) 2"x1/4"x4 1/2" w/ 7/16"x 1" notch located 1" from bottom.	
6.	(2) 3/8" x 1 1/2" SS bolts.	

<b>NTEC</b> Nelson Tank Engineering & Consulting, Inc. 16240 National Parkway Lansing, MI 48906		
<b>Project</b>		
Drawn by:	Date	Description
REO	January 6, 2022	12" Fill Pipe Grate Weld Detail
Revised by:	Date:	
<b>City of Owosso 600,000 Gallon Elevated Tank</b>		

1 TOWER 12" FILL PIPE GRATE WELD



Design Notes		
1.	Paint in accordance with Division 9.	
2.	(3) Bars 2"x1/4"x13" Spaced Eq. @ 3 1/2" O.C.	
3.	3" section of 12" SCH.40 pipe.	
4.	(2) 2"x1/4"x4 1/2" w/ 7/16"x 1" notch located 1" from bottom.	
5.	(2) 3/8"x 1 1/2" SS Bolts and wing nuts.	
6.	Existing 12" fill pipe.	

<b>NTEC</b> Nelson Tank Engineering & Consulting, Inc. 16240 National Parkway Lansing, MI 48906		
<b>Project</b>		
Drawn by:	Date	Description
REO	January 6, 2022	12" Fill Pipe Grate
Revised:	Date:	
<b>City of Owosso 600,000 Gallon Elevated Tank</b>		

2 TOWER 12" FILL PIPE GRATE

ARCHITECTS ENGINEERS PLANNERS  
34000 Plymouth Road  
Livonia, MI 48150  
P (734) 522-6711 F (734) 522-6427  
OHM-ADVISORS.COM

1/25/2022  
ISSUED FOR BID

DATE	PROJ NUMBER	ENG	PROJ INCR	CADD	COUNTY	CITY/TOWNSHIP	SCALE	H:	V:	NTS	VERT DATUM
###	00021-0040	Val#	Val#	PR	SHAWANSEE	OWOSSO					

CITY OF OWOSSO  
WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
DETAIL 3

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DRAWING PATH: P:\0000\_01\00002021\040\_water\_tank\_electrical\Drawings\Facilities\210040MIXER.dwg Jan 24, 2022 - 12:15pm

SMALL SERVICE PNL							DESCRIPTION: EXISTING PANEL SURFACE MOUNT - EXTERIOR AT 1,250,000 GALLON TANK, 240/120V, 1φ, 3W, 100A, MLO, 12 CIRCUIT, 10k SCCR, SQUARE D						
IDENTIFICATION	KVA LOAD		WIRE	POLE	AMP	CIRCUIT	CIRCUIT	AMP	POLE	WIRE	KVA LOAD		IDENTIFICATION
	A	B									B	A	
HEATER CONTROL CIRCUIT	0.00		EX.	1	15	1							CATHODIC PROTECTION
HEATER CONTROL CIRCUIT		0.00	EX.	1	20	3	4	20	1	EX.	0.00		LIGHTS - CONTROL CAB
PUMP CONTROL CIRCUIT			EX.	1	20	5	6	30	1	EX.			LIGHTS & CEILING FAN-LOUVER
AIR DRYER			EX.	1	20	7	8	20	1	EX.			PANEL OUTLET PLUG
STANDPIPE SOLENOID			EX.	1	15	9	10	20	1	EX.			LIGHTS-BASEMENT
GRIDBEE MIXER CONTROLLER				1	20	11	12	20	1	EX.			XX
CONNECTED LOAD	0.00	0.00									0.00	0.00	CONNECTED LOAD

SERVICE PANEL							DESCRIPTION: EXISTING PANEL SURFACE MOUNT, 240/120V, 1φ, 3W, 100A, MCB, 20 CIRCUIT, 10k SCCR, LOCATED IN PUMP HOUSE NEAR 600,000 GALLON TANK, SQUARE D						
IDENTIFICATION	KVA LOAD		WIRE	POLE	AMP	CIRCUIT	CIRCUIT	AMP	POLE	WIRE	KVA LOAD		IDENTIFICATION
	A	B									B	A	
ROOM LIGHTS	0.00		EX.	1	20	1	2	20	1	EX.		0.00	COLUMN LIGHTS
OUTSIDE LIGHTS			EX.	1	20	3	4	20	1	EX.	0.00		ROOM RECEPTACLE
CATHODIC PROTECTION			EX.	1	20	5	6	20	1	EX.			HEAT TAPE
TELEMETRY			EX.	1	20	7	8	30	2	EX.			HEATER
INUSALNK?			EX.	1	20	9	10	20	1	EX.			DEHUMIDIFIER
COLUMN RECEPTACLE			EX.	1	20	11	12	20	1	EX.			XX
HTR (TELEMETRY PNG)			EX.	1	20	13	14	20	1	EX.			XX
GRIDBEE MIXER CONTROLLER				1	20	15	16	20	1	EX.			XX
XX			EX.	1	20	17	18	20	1	EX.			XX
XX			EX.	1	20	19	20	20	1	EX.			XX
CONNECTED LOAD	0.00	0.00									0.00	0.00	CONNECTED LOAD



REVISIONS:  
 ISSUED FOR BID  
 1/25/2022

DATE: 02/02/2022  
 PROJ NUMBER: 02021-040  
 COUNTY: SHAWASSEE  
 CITY/VILLAGE/TOWNSHIP: OWASSO  
 SCALE: NTS  
 V: NTS  
 H: NTS  
 CITY OF OWASSO  
 WATER TOWER AND STANDPIPE REHABILITATION, DWSRF PROJECT #7458-01  
 MIXER ELECTRICAL DETAILS

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