

# TWAIN HARTE COMMUNITY SERVICES DISTRICT'S PLANS FOR CONSTRUCTION OF THE WATER TANK RECOATING AND UPGRADES PROJECT



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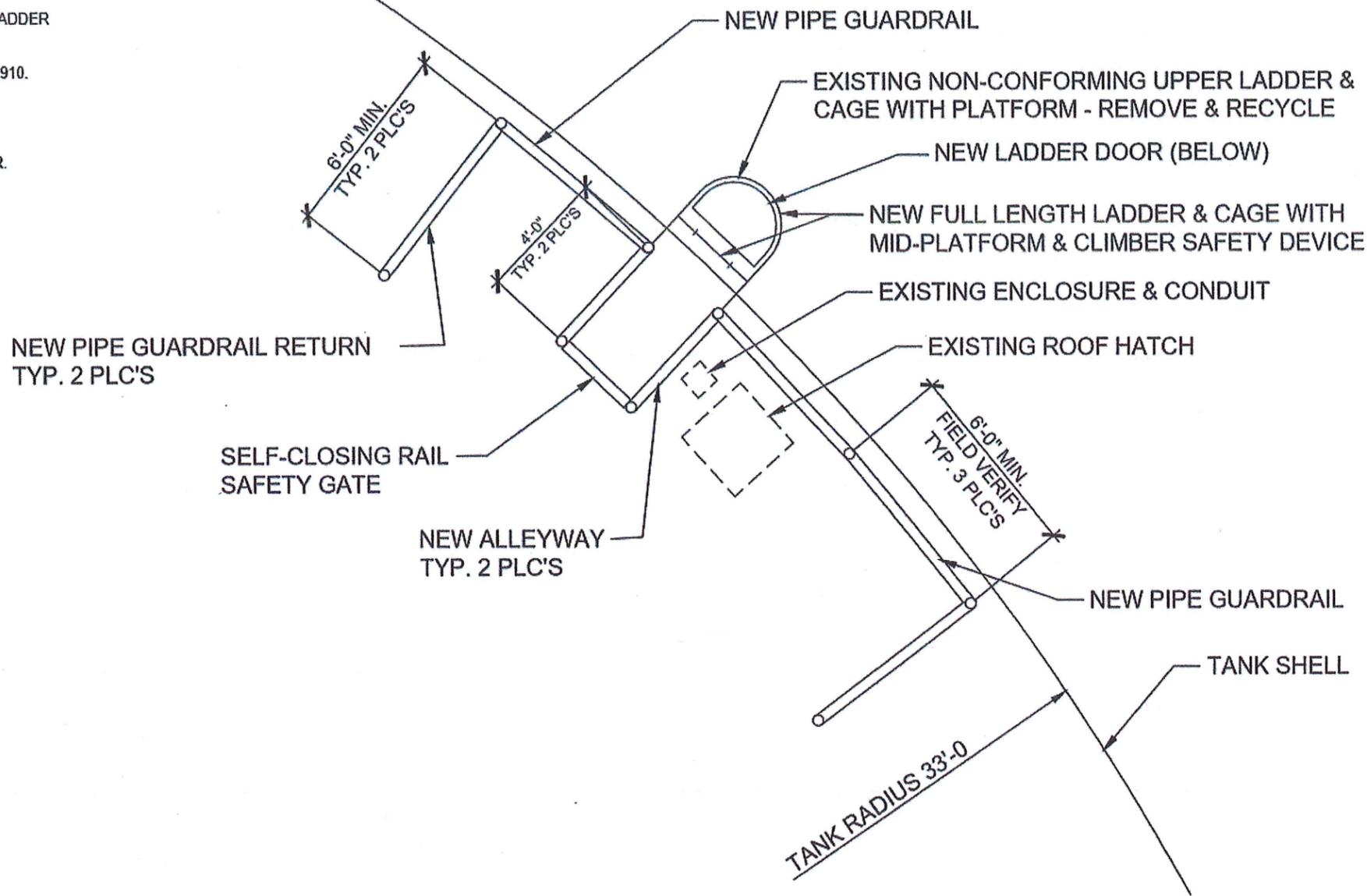
1. COVER
2. MG #1 PARTIAL PLAN
3. MG #2 PARTIAL PLAN
4. ROOF STRUCTURE
5. ROOF FALL PROTECTION
6. LADDER DOOR & ROOF HATCH



ADVANTAGE TECHNICAL SERVICES, INC.  
805-595-2282  
ATS-SLO.COM

**DRAWING NOTES:**

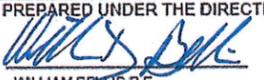
1. LEAD IS PRESENT IN THE COATINGS ON THE EXTERIOR OF THIS TANK. SEE APPENDIX A OF THE SPECIAL PROVISIONS FOR LABORATORY ANALYSIS.
2. REMOVE AND RECYCLE THE EXISTING NON-CONFORMING LADDER, SAFETY CAGE, PLATFORM AND GUARDRAIL.
3. INSTALL NEW FULL LENGTH LADDER WITH MID-PLATFORM, CLIMBER SAFETY DEVICE, LADDER DOOR AND ROOF GUARDRAIL PURSUANT TO THESE PROJECT DOCUMENTS.
4. ALL COMPONENTS INCLUDING GUARDRAIL SHALL CONFORM TO THE OSHA CFR PART 1910. LENGTHS OF NEW GUARDRAIL ARE MINIMUM.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
6. WELD 2 FALL PROTECTION ANCHOR LUGS AT LOCATIONS SPECIFIED BY THE ENGINEER. INSTALL CABLE LANYARDS PURSUANT TO THE SPECIAL PROVISIONS.



**EXISTING TANK PARTIAL PLAN VIEW**

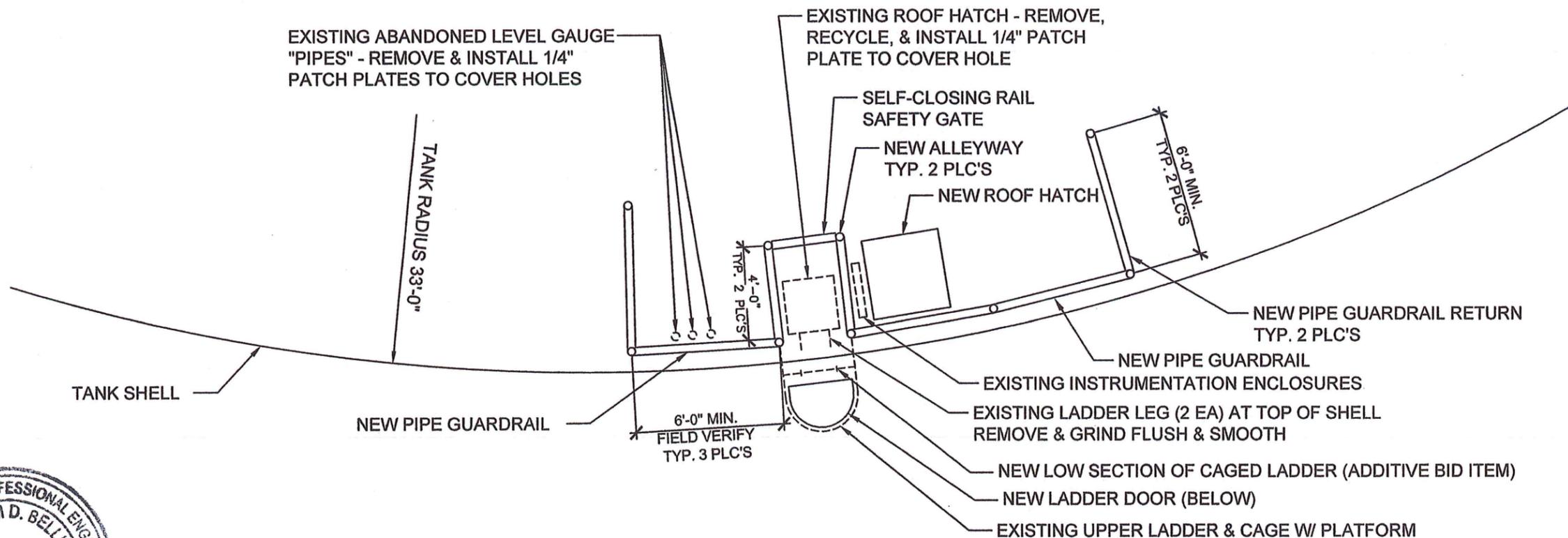


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REVISIONS DATE 00/00/00	 ADVANTAGE TECHNICAL SERVICES, INC. 805-595-2282 ATS-SLO.COM	DESIGNED BY: WB	DRAWN BY: SM	CHECKED BY: AD	RECOMMENDED:  ROBB PERRY, OPERATIONS MGR.	 TWAIN HARTE COMMUNITY SERVICES DISTRICT WATER TANK RECOATING & UPGRADES	SHEET: 2 OF 6
		PREPARED UNDER THE DIRECTION OF:  WILLIAM BELLIS P.E.			DATE: 11/2/18		APPROVED:  TOM TROTT, GENERAL MGR.

DRAWING NOTES:

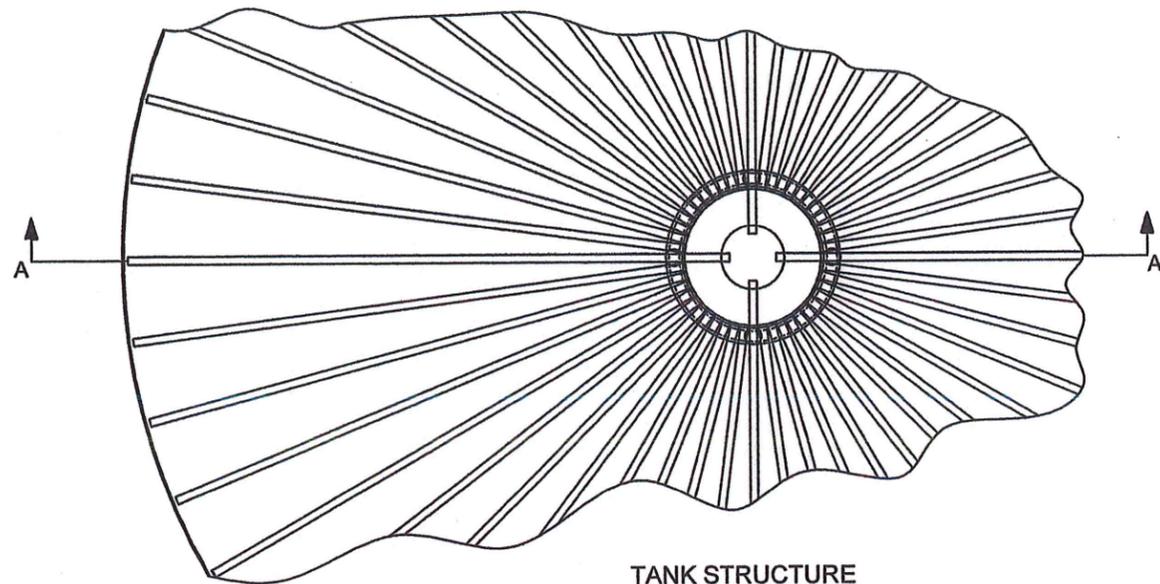
1. LEAD IS PRESENT IN THE COATINGS ON THE EXTERIOR OF THIS TANK. SEE APPENDIX A OF THE SPECIAL PROVISIONS FOR LABORATORY ANALYSIS.
2. REMOVE AND RECYCLE THE EXISTING ROOF HATCH, LEVEL GAUGE PIPES AND GUARDRAIL.
3. INSTALL NEW ROOF HATCH AND ROOF GUARDRAIL PURSUANT TO THESE PROJECT DOCUMENTS.
4. ALL COMPONENTS INCLUDING GUARDRAIL SHALL CONFORM TO THE OSHA CFR PART 1910. LENGTHS OF NEW GUARDRAIL ARE MINIMUM.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
6. WELD 2 FALL PROTECTION ANCHOR LUGS AT LOCATIONS SPECIFIED BY THE OWNER'S REPRESENTATIVE. INSTALL CABLE LANYARDS PURSUANT TO THE SPECIAL PROVISIONS.
7. IF THE ADDITIVE BID ITEM IS CONTRACTED, INSTALL A NEW CLIMBER'S SAFETY DEVICE ON THE EXISTING UPPER LADDER.
8. IF THE ADDITIVE BID ITEM IS CONTRACTED, INSTALL A NEW LOW SECTION OF CAGED EXTERIOR LADDER, DOOR, AND CLIMBER'S SAFETY DEVICE.



**EXISTING TANK PARTIAL PLAN VIEW**

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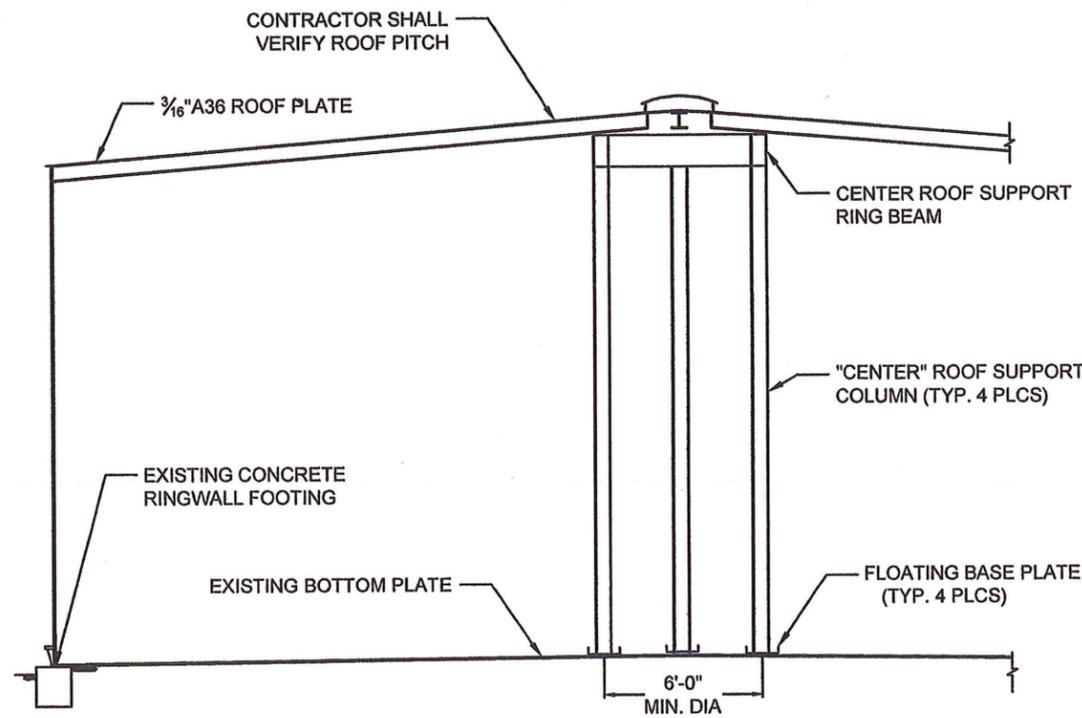
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	00/00/00		WB	SM	AD	<i>Robb Perry</i> ROBB PERRY, OPERATIONS MGR.		3 OF 6	
			PREPARED UNDER THE DIRECTION OF:		APPROVED:		MG #2 PARTIAL PLAN	SCALE:	
			<i>William D. Bellis</i> WILLIAM BELLIS P.E.	DATE	<i>Tom Trott</i> TOM TROTT, GENERAL MGR.			NTS	



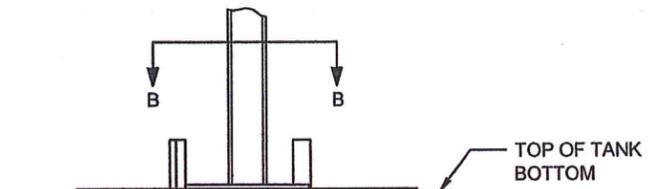
**TANK STRUCTURE  
PARTIAL PLAN**  
(ROOF PLATE NOT SHOWN FOR CLARITY)

**DRAWING NOTES:**

1. "CENTER" ROOF SUPPORT COLUMNS SHALL BE ROUND HSS 5/16" MINIMUM WALL THICKNESS AND THE MINIMUM QUANTITY SHALL BE 4.
2. CENTER ROOF SUPPORT RING BEAM SHALL BE 5/16" MINIMUM THICKNESS, RECTANGULAR CROSS SECTION AND 6' DIAMETER (MIN.) AT THE CENTER LINE.
3. RAFTER DESIGN SHALL CONSIDER SNOW LOAD & SHALL ADEQUATELY SUPPORT 3/16" ROOF PLATE.
4. THE ROOF DESIGN SHALL PROVIDE A SYSTEM FOR CONTROL OF SHELL ROUNDNESS DURING ERECTION SUCH AS ERECTION BOLTS OR OTHER METHOD USING POSITIVE STOPS.
5. COLUMN BASE PLATES SHALL BE THE "FLOATING TYPE" (DESIGNED TO PREVENT THE COLUMNS FROM BEING LOADED DOWNWARD BY THE TANK BOTTOM).
6. BASE PLATES SHALL BE SEAL WELDED TO THE TANK BOTTOM TO PREVENT AN INACCESSIBLE AREA OF BOTTOM PLATE.

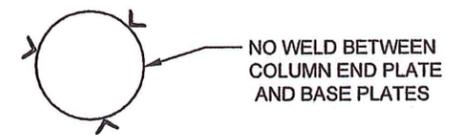


**PARTIAL SECTION VIEW A-A**



**FLOATING BASE PLATE**

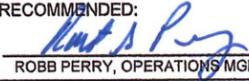
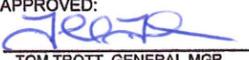
(BASE PLATE THICKNESS AND DIMENSIONS BY CONTRACTOR'S ENGINEER)

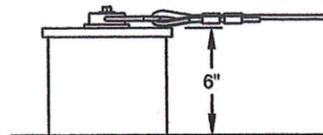
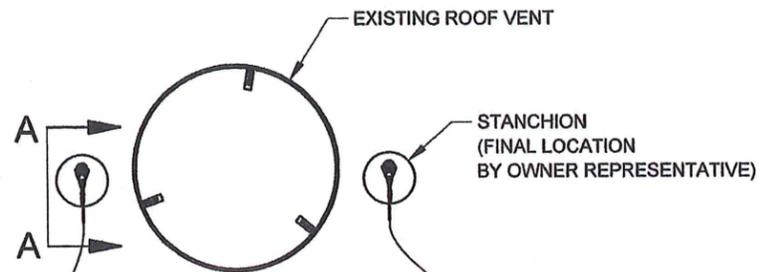


**SECTION VIEW B-B**



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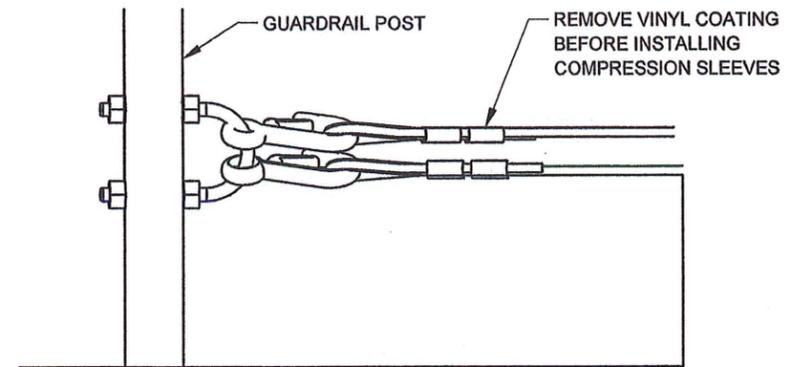
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	00/00/00		WB	SM	AD	 ROBB PERRY, OPERATIONS MGR.		4 OF 6
			PREPARED UNDER THE DIRECTION OF:  WILLIAM BELLIS P.E.			APPROVED:  TOM TROTT, GENERAL MGR.	<b>ROOF STRUCTURE</b>	SCALE:
					DATE			NTS



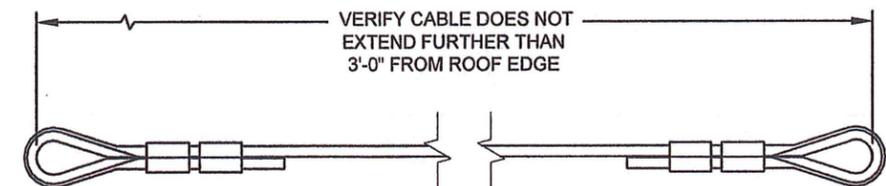
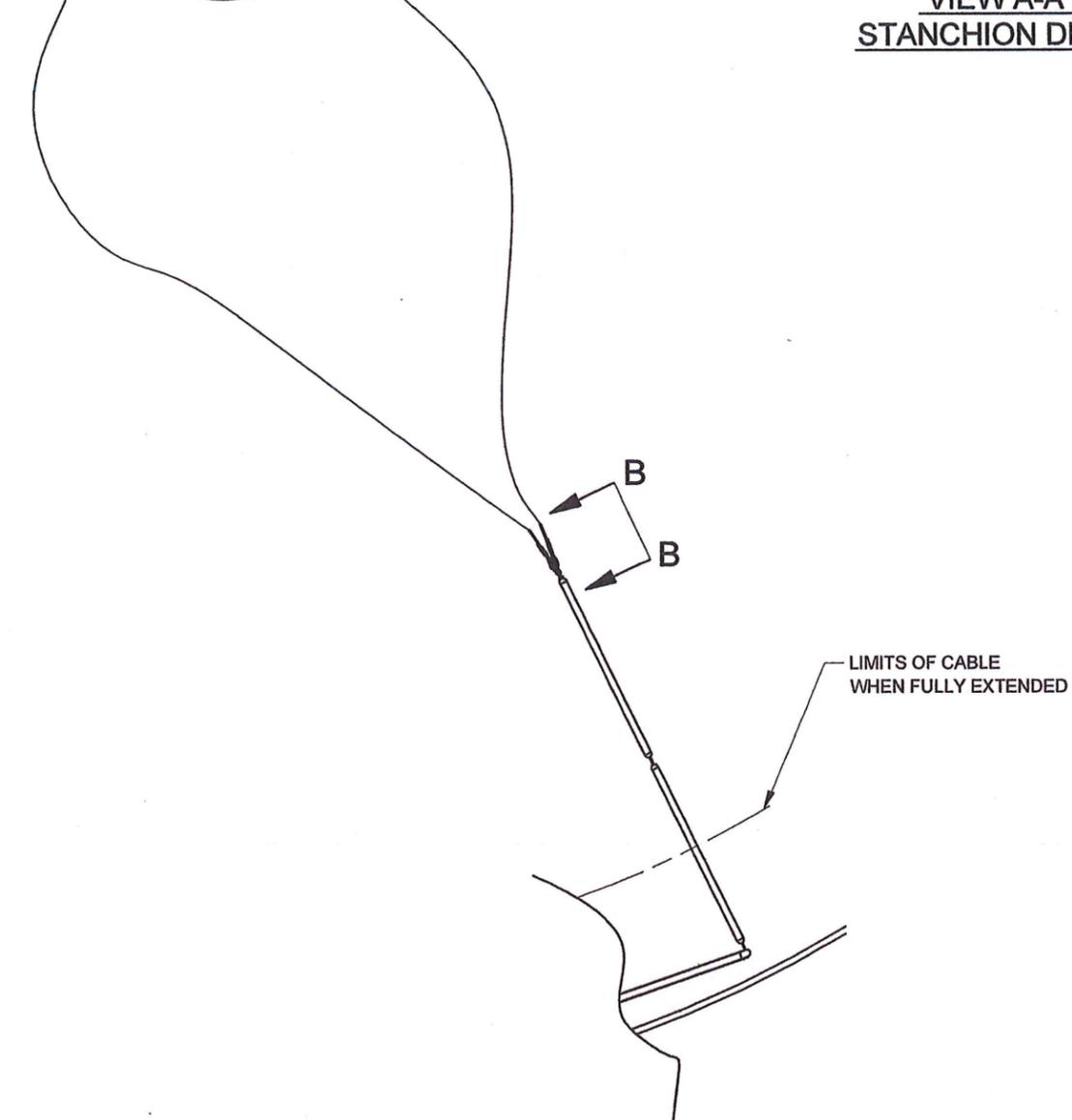
**VIEW A-A**  
**STANCHION DETAIL**

**DRAWING NOTES:**

1. FALL PROTECTION SYSTEM SHALL BE DESIGNED TO PROVIDE FALL PROTECTION FOR 360 DEGREES AROUND THE STANCHION.
2. FALL PROTECTION SHALL CONFORM TO OSHA STANDARDS FOR GENERAL INDUSTRY AND OTHER APPLICABLE REGULATORY REQUIREMENTS.



**VIEW B-B**  
**ROOF SAFETY CABLE STORAGE POINT**

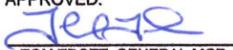


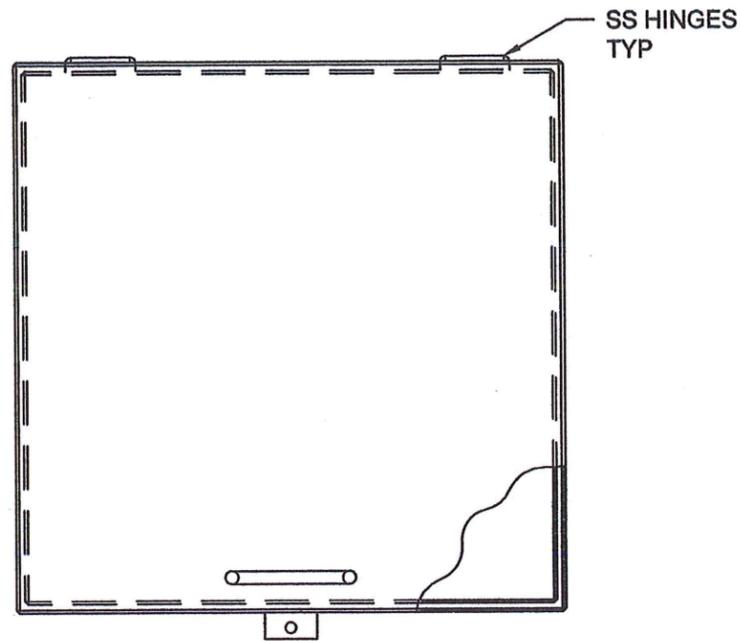
**ROOF SAFETY CABLE LENGTH**



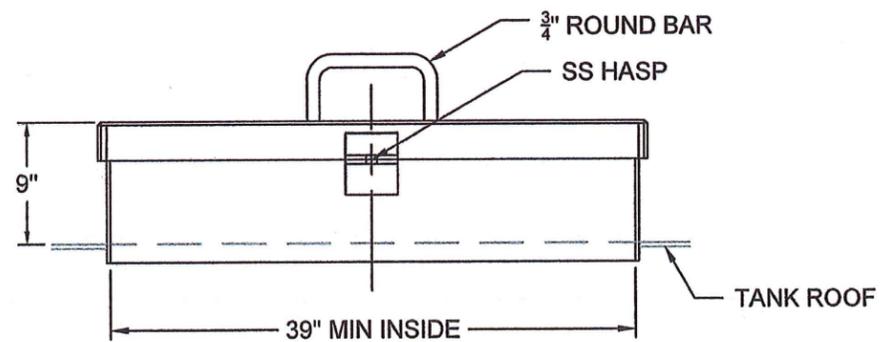
**ROOF GUARDRAIL-PLAN**

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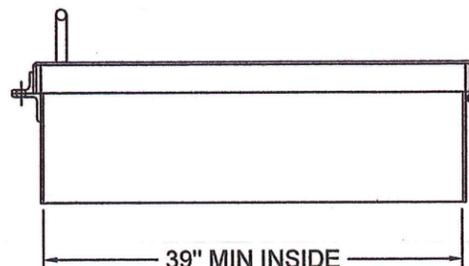
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	00/00/00		WB SM AD	PREPARED UNDER THE DIRECTION OF:  WILLIAM BELLIS P.E.	DATE 11/12/18	 ROBB PERRY, OPERATIONS MGR.		 TOM TROTT, GENERAL MGR.	5 OF 6
<b>ROOF FALL PROTECTION</b>								SCALE:	NTS



TOP VIEW

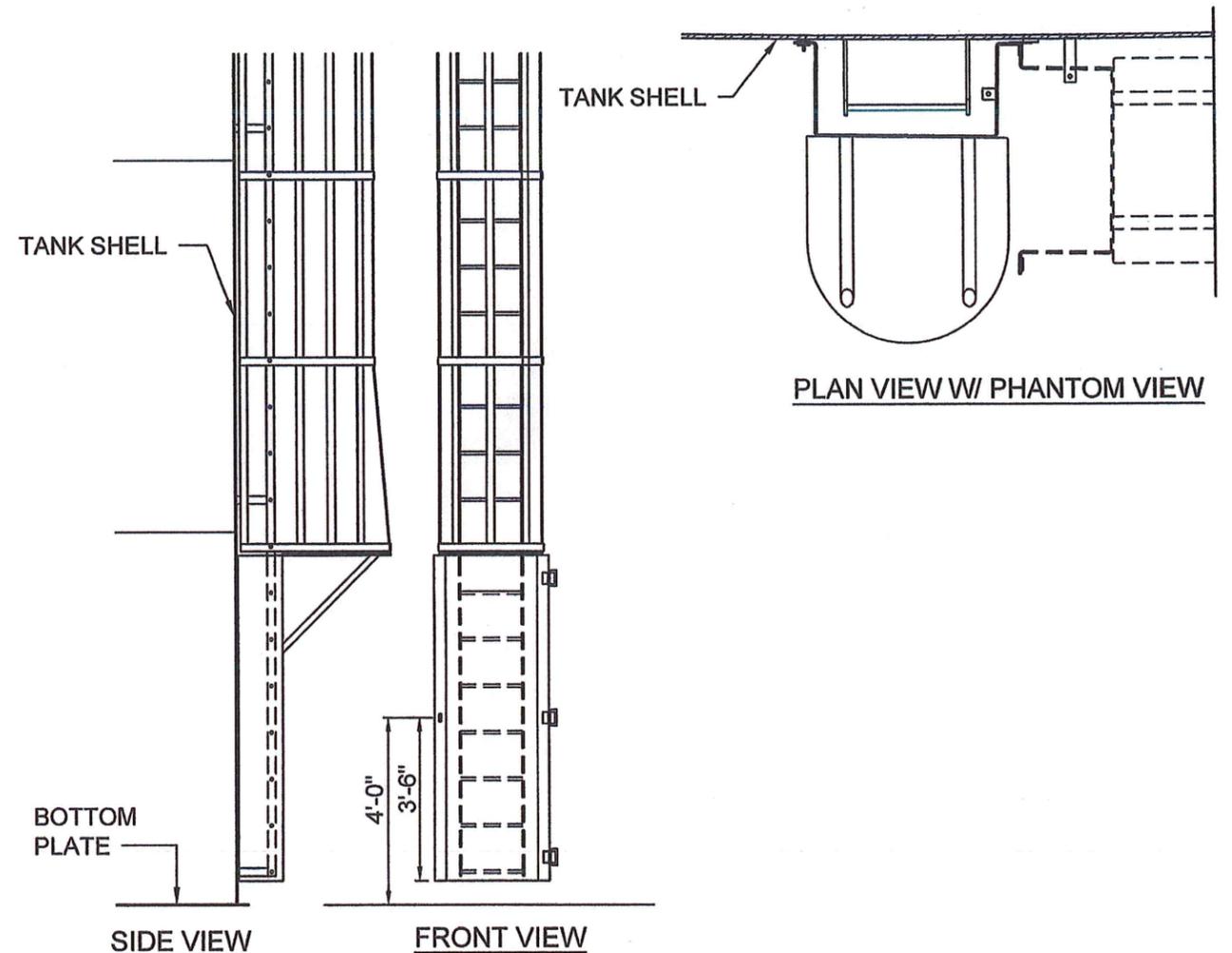


FRONT VIEW



SIDE VIEW

**ROOF HATCH**



SIDE VIEW

FRONT VIEW

**LADDER DOOR FOR CAGED LADDER**



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	00/00/00		PREPARED UNDER THE DIRECTION OF: <i>William Bellis</i> WILLIAM BELLIS P.E.	DATE 11/2/18	APPROVED: <i>Tom Trott</i> TOM TROTT, GENERAL MGR.	LADDER DOOR & ROOF HATCH		SCALE: NTS	