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TRUST.  
EXPERIENCE.

6549 FAIN BLVD. N. CHARLESTON, SC 29406  
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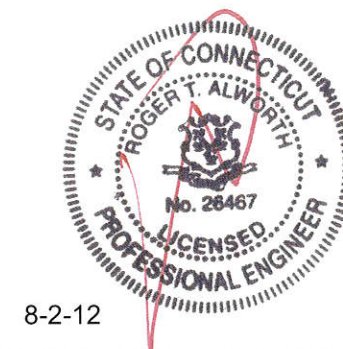
## FINAL ENGINEERING

**CT 1887**  
**455 VALLEY ROAD**  
**COS COB, CT 06807**

STEALTH® JOB#: CT11-01022W-33R0

### DRAWING INDEX

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GENERAL

1. THE TYPICAL NOTES SHALL APPLY FOR ALL CASES UNLESS OTHERWISE SPECIFICALLY DETAILED WITHIN THE DRAWINGS. SOME NOTES MAY NOT BE APPLICABLE IN PART OR IN WHOLE FOR EVERY PROJECT.
2. ANY ITEMS REFERENCED AS BEING ON "HOLD" ARE TO BE INCLUDED IN THE WORK AS SHOWN. HOWEVER, CONSTRUCTION OR FABRICATION IS NOT TO BEGIN UNTIL THE "HOLD" REFERENCE IS REMOVED.
3. DIMENSIONS CONTAINED WITHIN MUST BE FIELD VERIFIED AND CUSTOMER APPROVED PRIOR TO FABRICATION OF MATERIALS.
4. THE MODIFICATIONS DEPICTED IN THESE DRAWINGS ARE INTENDED TO PROVIDE STRUCTURAL SUPPORT FOR THE ADDITION OF THE ANTENNA SCREENING SYSTEMS OUTLINED WITHIN. THE EXISTING STRUCTURE OR BUILDING SHALL BE ANALYZED AND RETROFITTED AS REQUIRED, BY OTHERS, TO WITHSTAND THE LOADS IMPOSED BY THE NEW STEALTH® ENCLOSURE SHOWN ON THE DRAWINGS.
5. ANTENNA CONCEALMENT PRODUCTS SHALL BE INSTALLED BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK. CARE SHALL BE TAKEN IN THE INSTALLATION OF ANY AND ALL MEMBERS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS AND PROCEDURES. ALL APPLICABLE OSHA SAFETY GUIDELINES ARE TO BE FOLLOWED. STEALTH® IS NOT PROVIDING FIELD INSTALLATION SUPERVISION.
6. THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EVERY FIELD CONDITION THAT MAY BE ENCOUNTERED. THEREFORE, PRIOR TO BEGINNING OF WORK THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FIELD PROBLEMS.
7. PROTECTION OF EXISTING STRUCTURES DURING THE COURSE OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE STRUCTURAL INTEGRITY OF THIS STRUCTURE IS DESIGNED TO BE ATTAINED IN ITS COMPLETED STATE. WHILE UNDER CONSTRUCTION ANY TEMPORARY BRACING OR SHORING WHICH MAY BE REQUIRED TO MAINTAIN STABILITY PRIOR TO COMPLETION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
9. THE PLANS AND DETAILS WITHIN DO NOT INCLUDE DETAILS OR DESIGN FOR DRAINAGE FROM OR WATERPROOFING OF EXTERIOR OR INTERIOR SURFACES OF THE EXISTING BUILDING OR STRUCTURE. THESE DETAILS MUST BE COMPLETED BY OTHERS.

GENERAL DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE INTERNATIONAL BUILDING CODE, 2003 EDITION AND THE ASCE 7 STANDARD

DESIGN LOADS:

WIND:  
BASIC WIND SPEED: 110 MPH (3-SEC GUST)  
IMPORTANCE FACTOR: 1.00  
STRUCTURE CLASS: II  
EXPOSURE: C  
TOPOGRAPHIC CATEGORY: 1

STEALTHSKIN PANELS

1. FASTENER HOLES IN STEALTHSKIN FOAM COMPOSITE PANELS ARE NOT FACTORY DRILLED AND MUST BE DRILLED IN THE FIELD.
2. PANEL FASTENERS TO BE SPACED 18" O.C. MAX. AND LOCATED 6" MAX. HORIZONTALLY FROM EACH EDGE AT TOP AND BOTTOM OF PANEL. MAINTAIN 1 ½" MIN. EDGE DISTANCE FROM ALL EDGES. 4' WIDE PANELS REQUIRE (3) FASTENERS TOP AND BOTTOM. 5' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. CORNER PANELS REQUIRE (2) FASTENERS TOP AND BOTTOM PER SIDE.
3. WHEN FASTENER BOLT HEAD OR NUT BEARS DIRECTLY ON SURFACE OF STEALTHSKIN PANEL, TIGHTEN PANEL BOLTS ONLY ½ TURN PAST SNUG. APPLY THREAD LOCK COMPOUND TO THE THREADS OF METAL BOLTS. USE THIN BEAD OF EPOXY TO LOCK THE NUTS OF FRP BOLTS AND STEALTH® STAINLESS STEEL PANEL BOLTS. USE WASHER OR FLANGED HEAD BOLT, OR FASTENER WITH LARGE BEARING SURFACE.
4. PANELS WILL EXPAND AND CONTRACT DUE TO TEMPERATURE. WHEN INSTALLING PANELS IN COLD TEMPERATURES, EVENLY SPACE PANELS ALONG LENGTH OF SCREEN WALL WITH EQUAL GAPS BETWEEN PANELS TO ALLOW FOR EXPANSION DURING WARM TEMPERATURES.
5. ADJACENT FLAT PANELS ARE JOINED BY A VERTICAL FOAM SPLINE THAT IS INSERTED INTO GROOVES CUT INTO THE SIDE OF EACH PANEL. DO NOT LIFT PANELS BY GROOVES. PANELS MUST BE LIFTED WITH FORCE DIRECTED ONTO PANEL SURFACE.
6. ADJACENT RADIUS PANELS ARE JOINED BY A VERTICAL H-CHANNEL. INSERT PANELS INTO EACH SIDE OF H-CHANNEL.
7. RADIUS PANELS MUST BE EVENLY SPACED ALONG RADIUS SUPPORT. CONTRACTOR TO MEASURE LENGTH OF RADIUS SUPPORT AND DIVIDE BY THE NUMBER OF RADIUS PANELS TO DETERMINE PROPER SPACING. H-CHANNEL CONNECTORS ARE USED TO COVER THE GAP BETWEEN PANELS AND TO ALLOW FOR PANEL EXPANSION AND CONTRACTION.
8. SURFACES OF PANELS SHALL BE COATED WITH SUITABLE PAINT FOR UV PROTECTION. TOP EDGE OF PANEL MUST BE COVERED TO PREVENT WATER TRAVEL BETWEEN PANELS. USE SHERWIN WILLIAMS "COROTHANE II" OR PRE APPROVED EQUIVALENT.
9. EXPOSED TOP AND SIDE FOAM EDGES OF PANELS MUST BE COVERED OR COATED FOR UV PROTECTION. STEALTH® WILL PROVIDE PANEL EDGE CAPS TO BE FIELD APPLIED FOR THIS PURPOSE FOR MOST APPLICATIONS. PANEL EDGE CAPS TO BE SECURED WITH TEK SCREW INSTALLED @ 12" MINIMUM SPACING.

DESIGN REACTIONS (UNFACTORED):

TYPICAL AT EACH OF (4) PIPE COLUMN BASE PLATES AT UPPER ASSEMBLY  
R1 = 5.4 K (DOWN), 4.3 K (UP) - (DEAD + WIND)  
V1 = 1.4 K (ANY HORIZ. DIRECTION) - (WIND)

TYPICAL AT EACH OF (4) BOTTOM ROLLED CHANNEL PLATES AT UPPER ASSEMBLY  
R2 = 0.1 K (DOWN) - (DEAD)  
V2 = 0.3 K (ANY HORIZ. DIRECTION) - (WIND)

TYPICAL AT LOWER PANEL ASSEMBLY  
PANEL WEIGHT = 2 PSF  
WIND PRESSURE = 15 PSF (ANY HORIZ. DIRECTION)

APPROXIMATE WEIGHT OF UPPER ASSEMBLY = 5,600 LBS (EXCLUDING ANTENNAS & MOUNTS)  
APPROXIMATE WEIGHT OF LOWER PANELS = 2,100 LBS

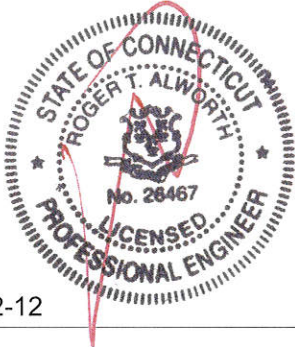
DESIGN OF THE STEEL SUPPORT PLATFORM AT UPPER ASSEMBLY, STEEL SUPPORT FRAMING AT LOWER ASSEMBLY, CONNECTION OF STEEL SUPPORT FRAMING TO EXISTING TANK AND VERIFICATION OF THE ADEQUACY OF THE EXISTING TANK TO BE BY OTHERS.

STRUCTURAL STEEL

1. STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL AND SPECIFICATIONS.
2. STEEL I-SHAPE, ANGLE, CHANNEL, AND MISCELLANEOUS MEMBERS SHALL CONFORM TO ASTM A992 (50 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
3. STEEL PLATE MEMBERS SHALL CONFORM TO ASTM A572 GR50 (50 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
4. STEEL TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (46 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
5. STEEL PIPE MEMBERS SHALL CONFORM TO ASTM A53, A513, OR A519 AS NOTED ON THESE DRAWINGS, U.N.O.
6. BOLTS SHALL BE DOMESTIC, NEW HIGH STRENGTH GALVANIZED BOLTS, BEARING TYPE "X" (THREADS EXCLUDED), UNLESS NOTED OTHERWISE, AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS, U.N.O.
7. STRUCTURAL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
8. BOLT HOLE EDGE DISTANCES SHALL BE A MINIMUM 1", U.N.O.
9. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1 FOR STEEL AND AWS D1.2 FOR ALUMINUM.
10. STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION OR PAINTED WITH RUST INHIBITIVE PRIMER.
11. STEEL HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A153, U.N.O.
12. AFTER ANY FIELD HOLE PUNCHING / DRILLING OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBER, TOUCH UP ALL BARE MATERIAL AND WELDED AREAS WITH TWO COATS OF GAL-CON OR SIMILAR MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.
13. ALL WELDED STEEL ASSEMBLIES AND INDIVIDUAL STEEL PARTS SHOULD HAVE THE PART NUMBER WELDED ONTO THE PART OR ASSEMBLY. THE PART NUMBERS SHOULD BE LOCATED CONSISTENTLY AND AWAY FROM ANY CONNECTION POINT TO AVOID ANY INTERFERENCE ISSUES WITH THE WELD.

FRP STRUCTURAL MEMBERS

1. FRP STRUCTURAL SHAPES SHALL BE STEALTH FRP SERIES 1525, MANUFACTURED USING THE PULTRUSION PROCESS.
2. IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT STEALTH® CONCEALMENT SOLUTIONS, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
3. FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
5. FRP BOLTS SHOULD BE TIGHTENED ½ TURN PAST SNUG AND LOCKED WITH EPOXY.



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DIMENSIONS ARE IN INCHES

TOLERANCES

DECIMALS	ANGULAR
X $\pm 1/16$ "	X $\pm 0.5^\circ$
.xxx $\pm .010$ "	

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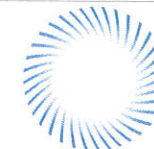
NOTES & SPECIFICATIONS

CT 1887  
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JOB #: CT11-01022W-33R0	
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DRAWN:	
DESIGNED: BK	
REVISED: BK	
N1	
8/2/12	REVISION 2







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XXX  $\pm 0.0"$   
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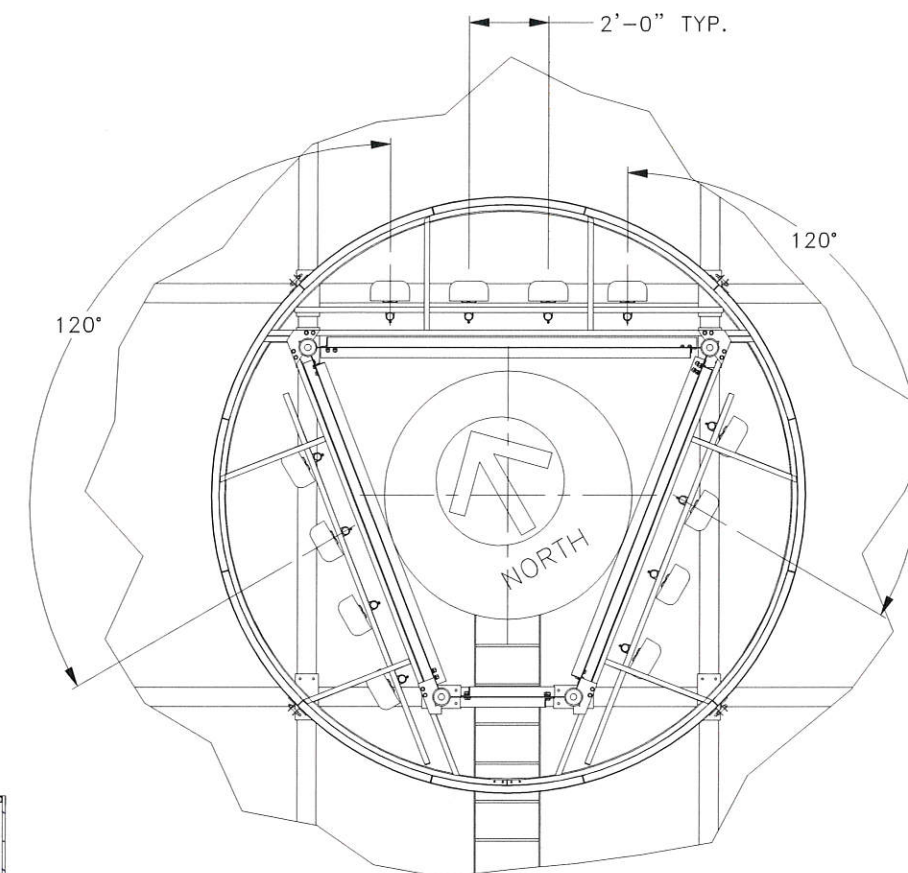
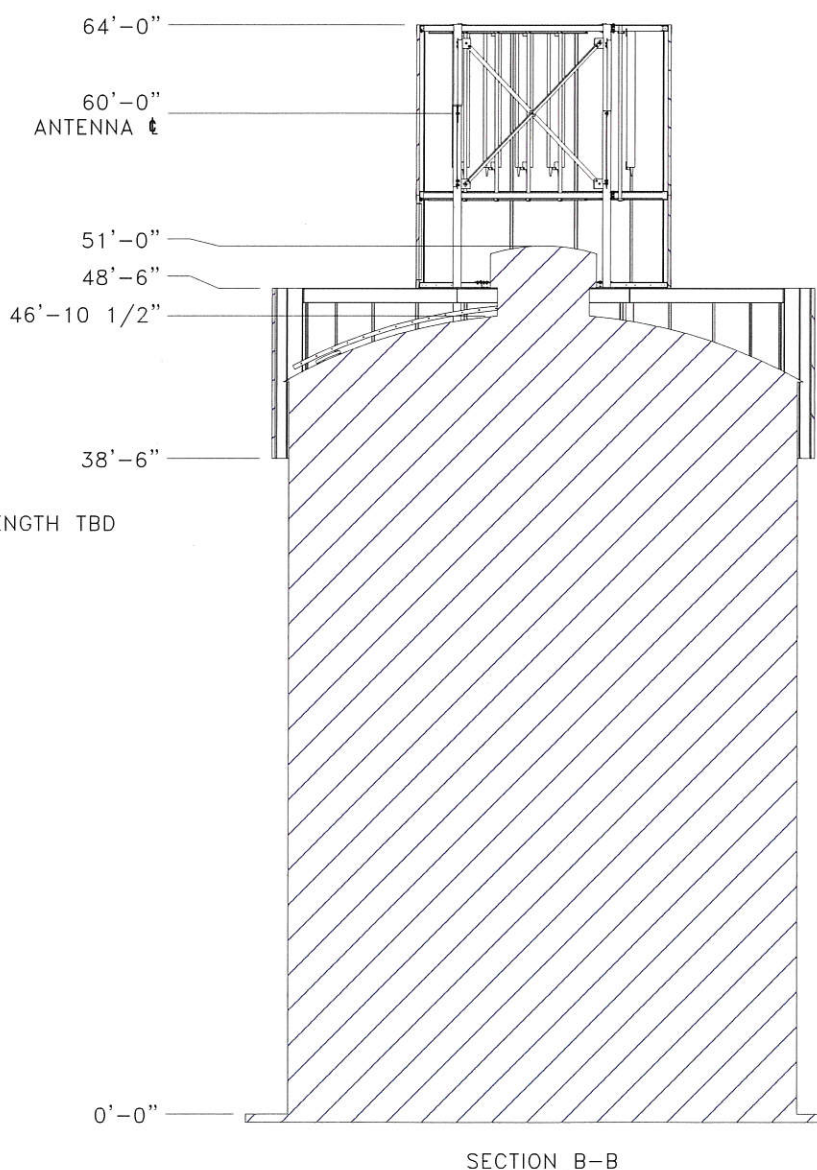
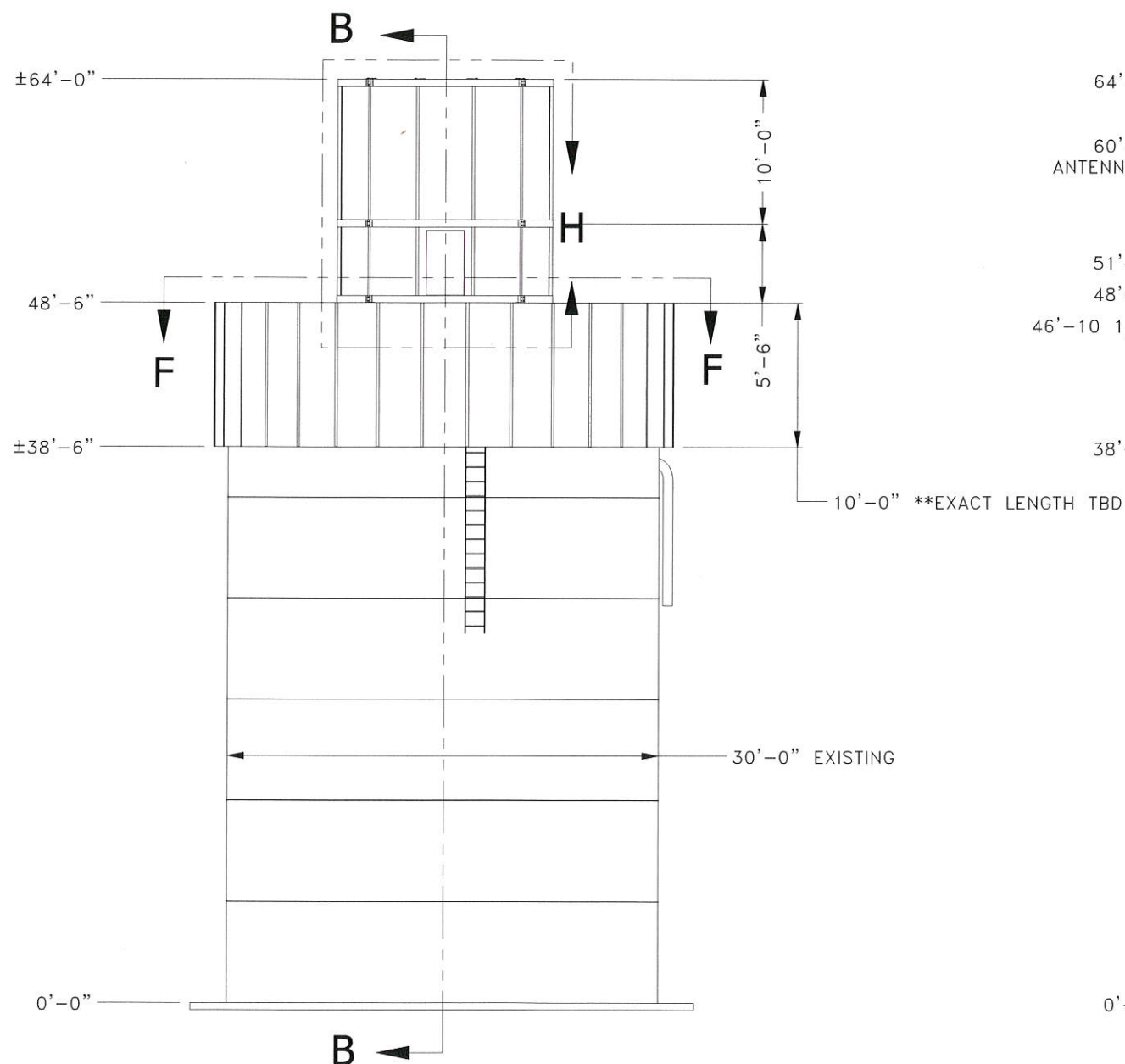
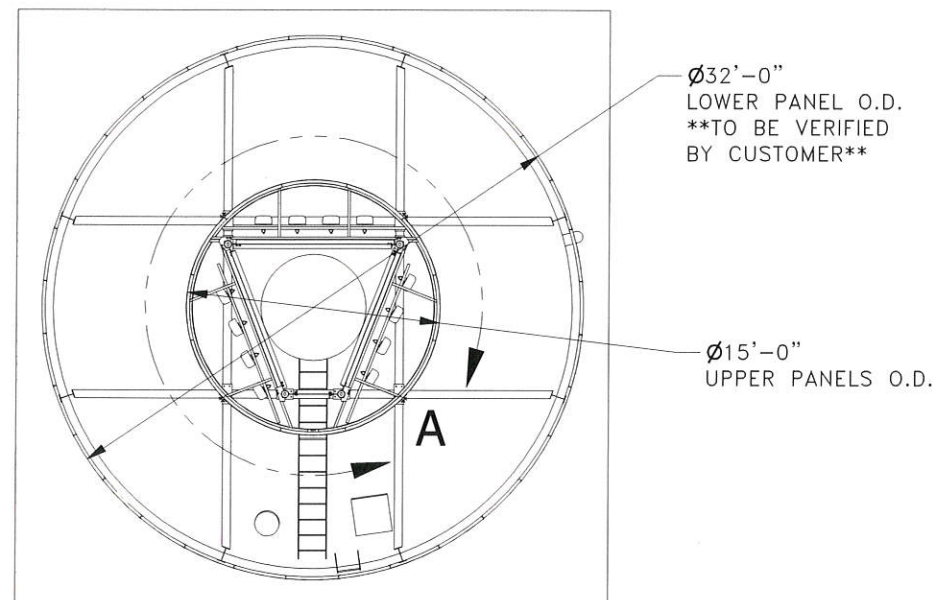
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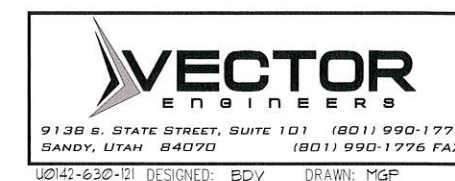


DETAIL A



NOTES:

- 1.) THE INTEGRITY OF THE EXISTING STRUCTURE MUST BE VERIFIED BY OTHERS.
- 2.) DIMENSIONS OF THE EXISTING STRUCTURE ARE BASED UPON DRAWINGS BY (CHA) DATED 9-20-11 AND HAVE NOT BEEN PHYSICALLY VERIFIED BY STEALTH®. VERIFICATION OF THESE DIMENSIONS IS THE RESPONSIBILITY OF THE CUSTOMER.
- 3.) THE ATTACHMENT TO EXISTING (DESIGN AND FASTENERS) MUST BE PROVIDED BY OTHERS. STEALTH® WILL ONLY SUPPLY FASTENER SIZE AND QUANTITY REQUIRED, FOR ATTACHMENT TO EXISTING.
- 4.) THE PANELS ARE TO BE PAINTED / TEXTURED ACCORDING TO THE CUSTOMER APPROVED SAMPLE(S).
- 5.) THIS CONCEALMENT WAS DESIGNED TO ACCEPT THE FOLLOWING ANTENNA (POWERWAVE P65-17-XLH-RR). IT IS THE CUSTOMERS RESPONSIBILITY TO ENSURE THE FIT OF THE ANTENNA AND COAX WITH THEIR SPECIFIC MOUNTING EQUIPMENT.
- 6.) IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REVIEWS THE RF CONSIDERATIONS IN THIS DESIGN.







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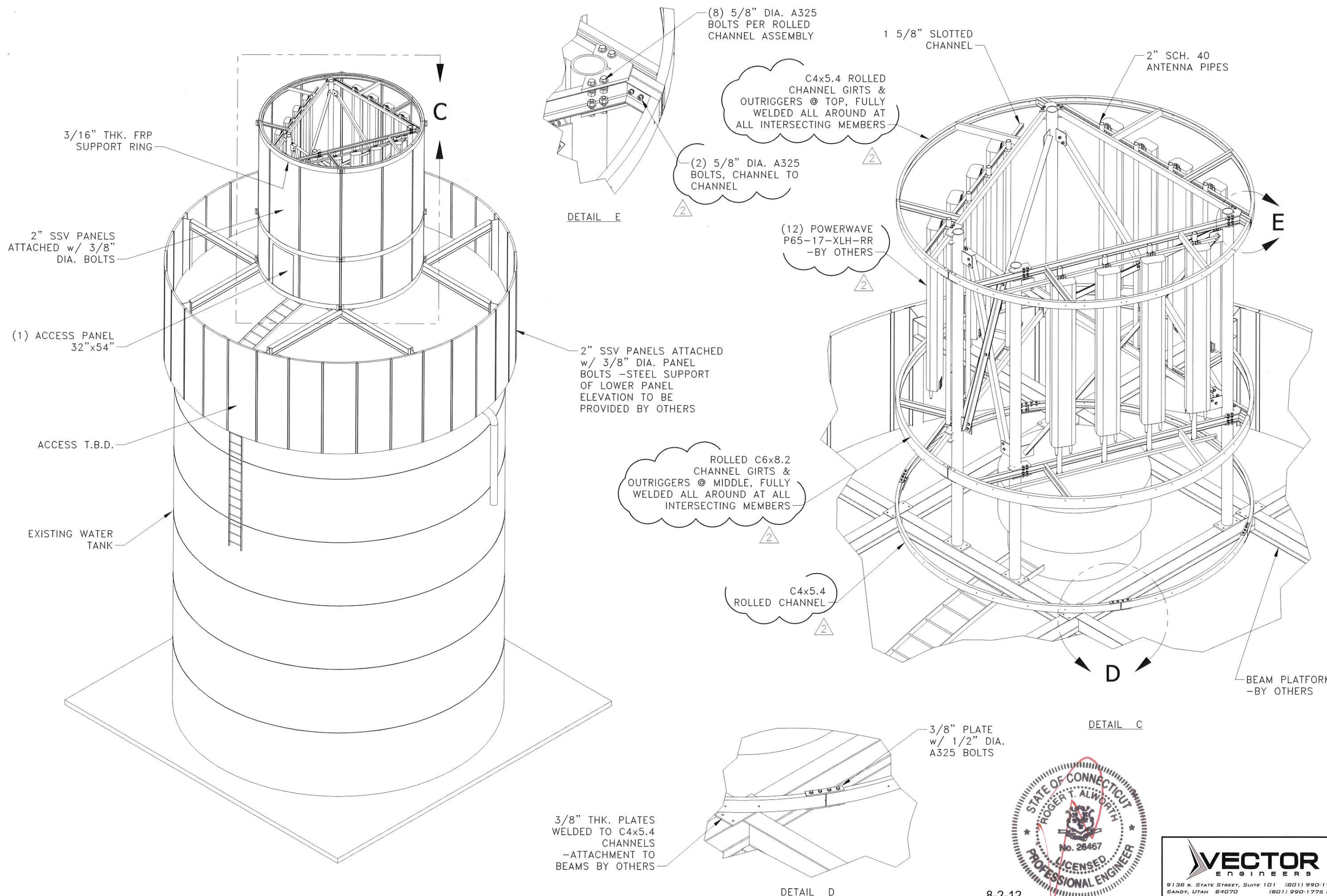
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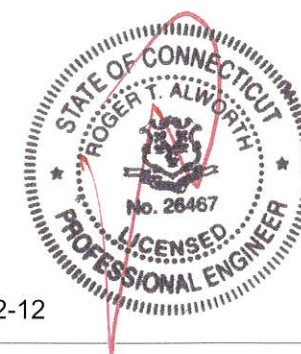
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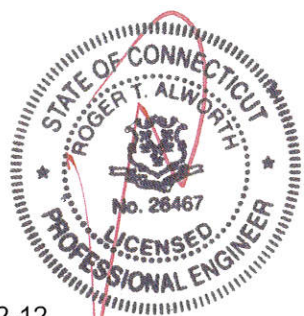
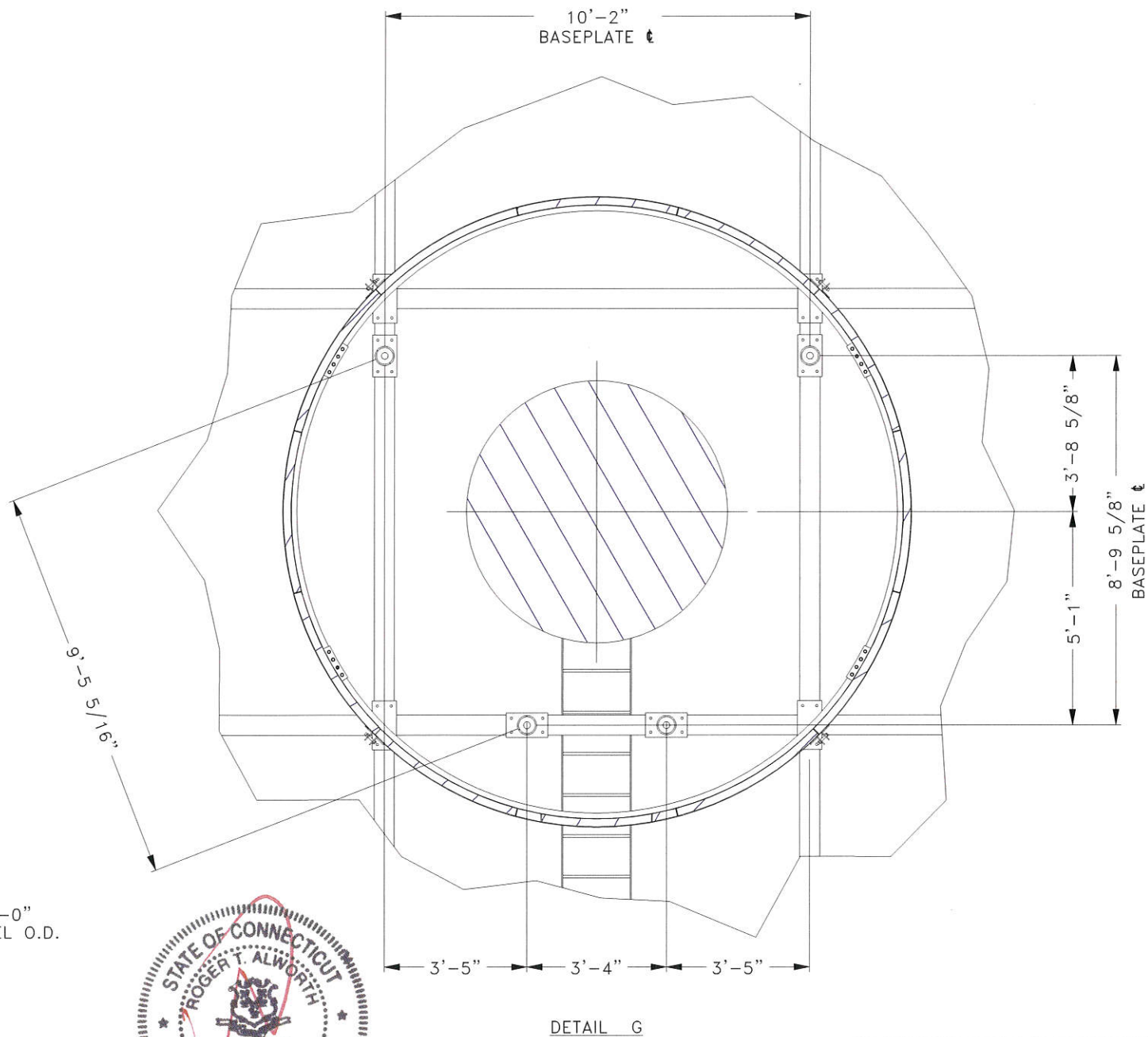
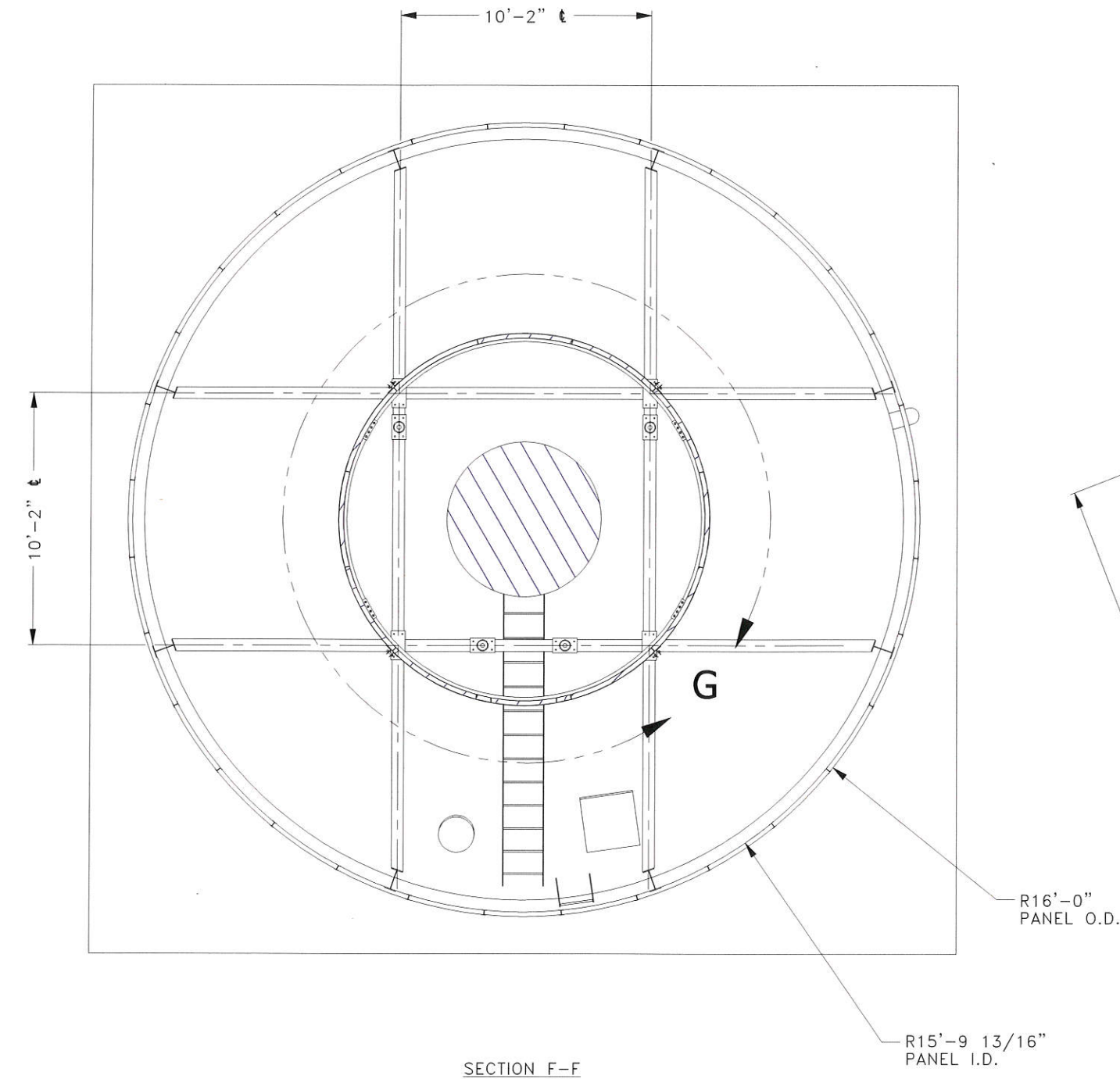


**VECTOR**  
ENGINEERS  
9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
U0142-630-121 DESIGNED: BDV DRAWN: MGP



**DIMENSION CRITICAL  
DESIGN**

THE DIMENSIONS OF EXISTING CONDITIONS  
REFERENCED IN THESE DRAWINGS ARE CRITICAL  
TO THE SUCCESS OF THE PROJECT.  
PLEASE VERIFY THAT THE DIMENSIONS  
LISTED ARE ACCURATE BEFORE APPROVING.



8-2-12

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ENGINEERS**

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