



# Building Permit Application

Howard County Maryland  
Department of Inspections, Licenses and Permits  
3430 Court House Drive  
Permits: 410-313-2455  
www.howardcountymd.gov

Date Received: \_\_\_\_\_

Permit No.: \_\_\_\_\_

Building Address: 11348 Willow Ridge Lane  
City: Ellicott City State: MD Zip Code: 21042  
Suite/Apt. #: \_\_\_\_\_ SDP/WP/BA #: \_\_\_\_\_  
Census Tract: \_\_\_\_\_ Subdivision: Willow Ridge  
Section: \_\_\_\_\_ Area: \_\_\_\_\_ Lot: 5  
Tax Map: 116 Parcel: 89,917201 Grid: 15  
Zoning: \_\_\_\_\_ Map Coordinates: \_\_\_\_\_ Lot Size: 39,943

Existing Use: Residential  
Proposed Use: Deck & Stairs  
Estimated Construction Cost: \$ 10,000  
Description of Work: Install Deck & Stairs  
10 x 7'

Occupant or Tenant: Occupant  
Was tenant space previously occupied? ☐ Yes ☐ No  
Contact Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

Commercial Building Characteristics	Residential Building Characteristics
Height: _____	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse
No. of stories: _____	<u>7</u> Depth <u>10</u> Width
Gross area, sq. ft./floor: _____	1 <sup>st</sup> floor: _____
	2 <sup>nd</sup> floor: _____
Area of construction (sq. ft.): _____	Basement: _____
	<input type="checkbox"/> Finished Basement
Use group: _____	<input type="checkbox"/> Unfinished Basement
	<input type="checkbox"/> Crawl Space
<b>Construction type:</b>	<input type="checkbox"/> Slab on Grade
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: _____
<input type="checkbox"/> Structural Steel	<u>Multi-family Dwelling</u>
<input type="checkbox"/> Masonry	No. of efficiency units: _____
<input type="checkbox"/> Wood Frame	No. of 1 BR units: _____
<input type="checkbox"/> State Certified Modular	No. of 2 BR units: _____
	No. of 3 BR units: _____
	Other Structure: _____
	Dimensions: _____
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings: _____
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof: _____
Roadside Tree Project Permit # _____	<input type="checkbox"/> State Certified Modular
	<input type="checkbox"/> Manufactured Home

Property Owner's Name: Morgan Alden  
Address: 11348 Willow Ridge Lane  
City: Columbia State: MD Zip Code: 21042  
Phone: 703-533-9156 Fax: \_\_\_\_\_  
Email: ma2133@columbia.edu

Applicant's Name & Mailing Address (if other than stated herein)  
Applicant's Name: Brian Hahn  
Address: 5011 B Olney-Laytonville Road  
City: Olney State: MD Zip Code: 20832  
Phone: 301-674-4790 Fax: 301-948-3323  
Email: brianh@botanicaldecorators.com

Contractor Company: Botanical Decorators  
Contact Person: Brian Hahn  
Address: 5011 B Olney-Laytonville Road  
City: Olney State: MD Zip Code: 20832  
License No.: 129799  
Phone: 301-948-8825 Fax: 301-948-3323  
Email: brianh@botanicaldecorators.com

Engineer/Architect Company: \_\_\_\_\_  
Responsible Design Prof.: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

Utilities
<b>Water Supply</b>
<input checked="" type="checkbox"/> Public
<input type="checkbox"/> Private
<b>Sewage Disposal</b>
<input checked="" type="checkbox"/> Public
<input type="checkbox"/> Private
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Heating System</b>
<input type="checkbox"/> Electric <input type="checkbox"/> Oil
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas
<input type="checkbox"/> Other: _____
<b>Sprinkler System:</b>
<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Grading Permit Number:</b>
<b>Building Shell Permit Number:</b>

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: Brian Hahn Print Name: Brian Hahn  
Email Address: brianh@botanicaldecorators.com Date: 8/11/16  
Title/Company: Landscape Designer/Botanical Decorators

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

\*\*PLEASE WRITE NEATLY & LEGIBLY\*\*

-FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health		

Is Sediment Control approval required for issuance? ☐ Yes ☐ No  
☐ CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION
Front: _____
Rear: _____
Side: _____
Side St.: _____
All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone: _____
SDP/Red-line approval date: _____

Filing Fee	\$
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$
Sub- Total Paid	\$
Balance Due	\$
Check	#

Distribution of Copies: White: Building Officials

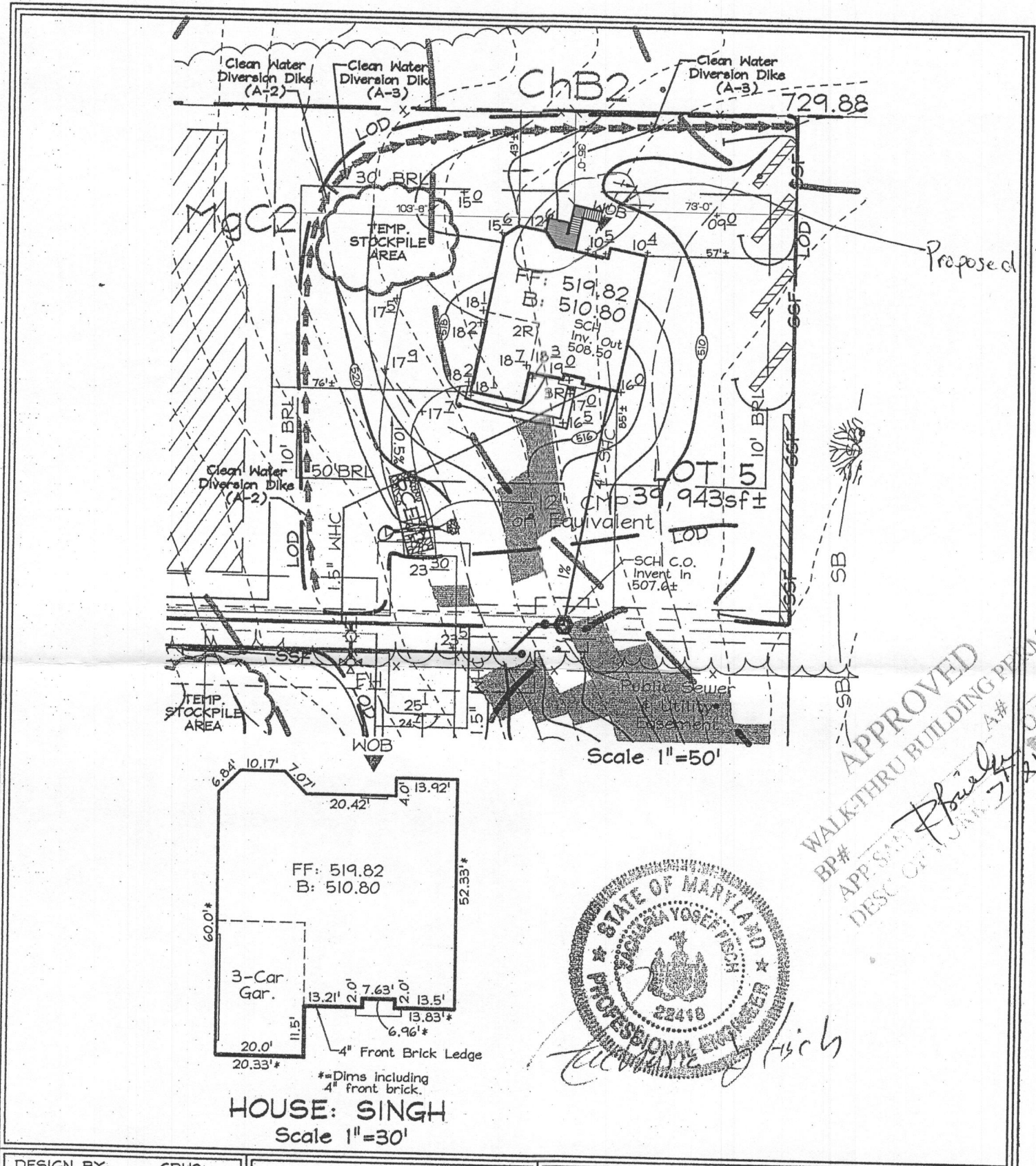
Green: PSZA,Zoning

Yellow: PSZA,Engineering

Pink: Health

Gold: SHA

T:\Operations\Updated Forms\Building applmp 8.2012.docx



APPROVED  
WALK-THRU BUILDING PERMIT  
BP# \_\_\_\_\_  
APP. DATE: 8/11/2016  
DESC. OF WORK: 210 Deck w/ stairs

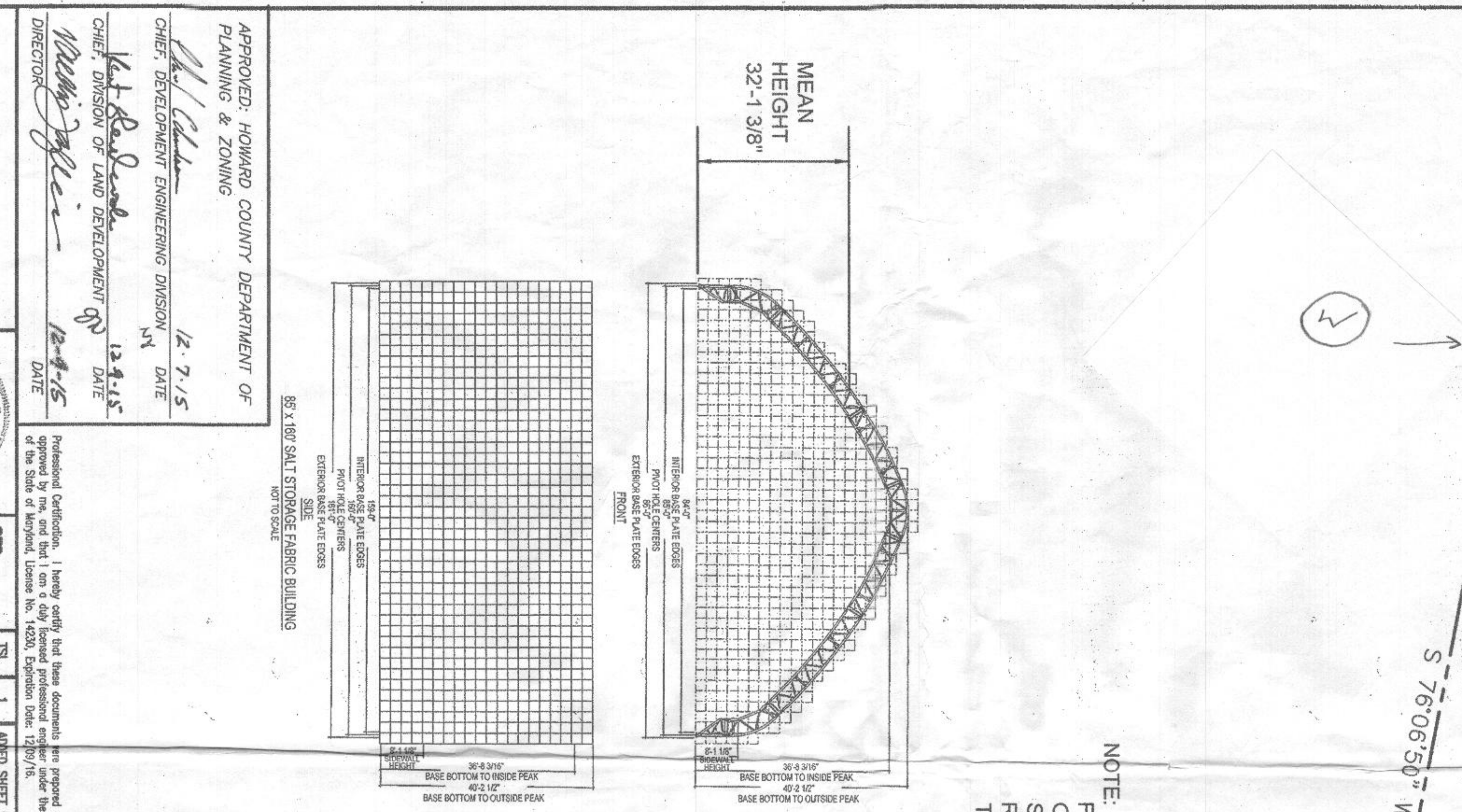
DESIGN BY: CRH2  
DRAWN BY: CRH2  
CHECKED BY: ZYF  
SCALE: As Shown  
DATE: October 25, 2013  
W.O. No.: 3033  
SHEET No. 1 OF 1

**FSH Associates**  
Engineers Planners Surveyors  
6339 Howard Lane Elkridge, MD 21075  
Tel: 410-567-5200 Fax: 410-798-1562  
E-mail: info@fshet.com

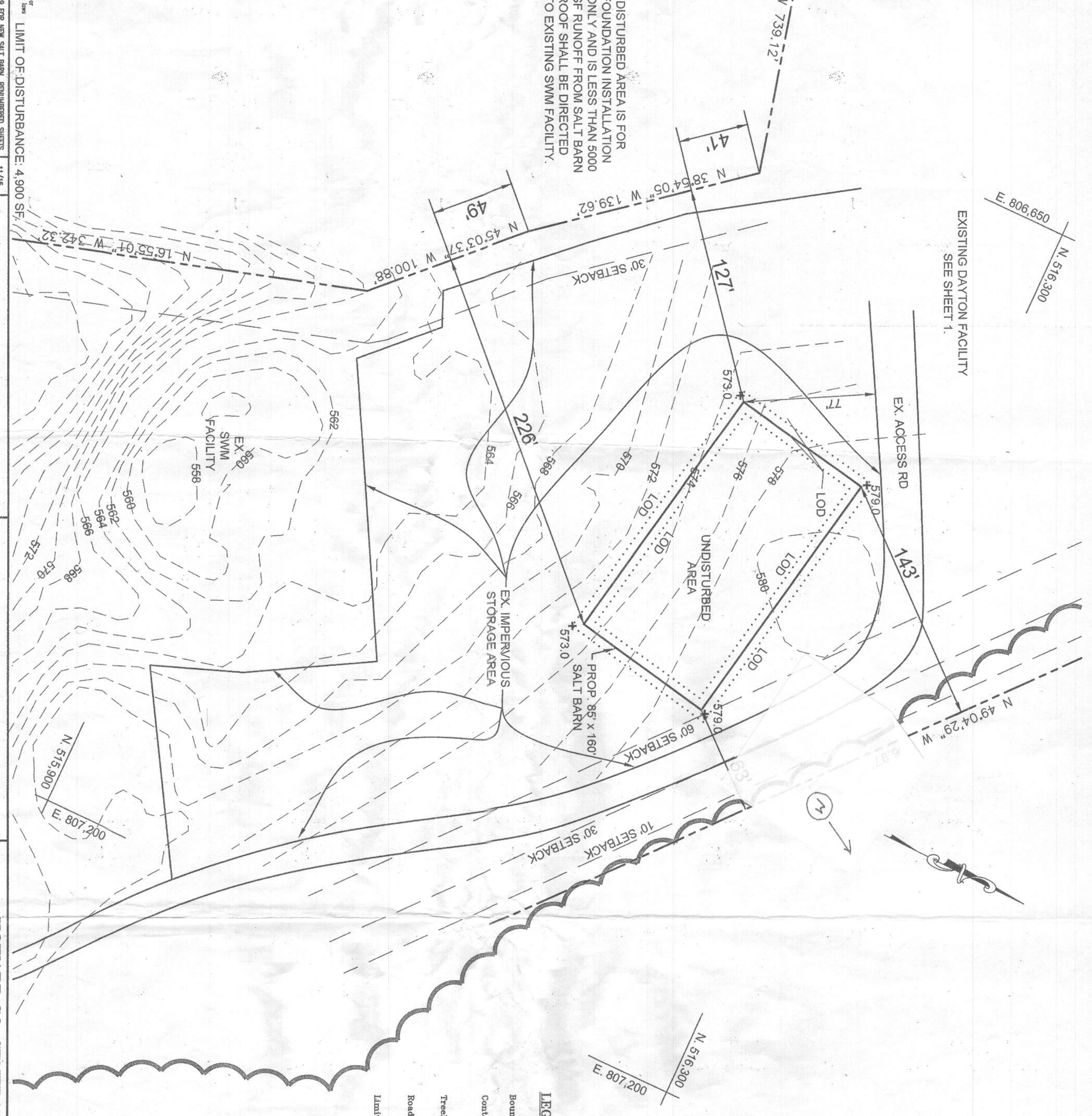
**RESITE #2**  
**WILLOW RIDGE**  
**LOT 5**  
**GP-13-065 & Plat #22030-22033**  
TAX MAP 16, GRID 15 PARCELS 89, 91 & 201  
3RD ELECTION DISTRICT HOWARD CO., MD



- GENERAL NOTES**
1. All construction shall be performed in accordance with the latest standards and specifications of Howard County, the MSHA standards and specifications, applicable to the project.
  2. The contractor shall notify the Department of Public Works / Bureau of Engineering Construction Inspection Division at (410) 330-3800 at least five (5) working days prior to the start of work.
  3. The contractor shall notify the Department of Public Works / Bureau of Engineering Construction Inspection Division at (410) 330-3800 at least five (5) working days prior to the start of work.
  4. The contractor shall have all existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
  5. Approximate locations of existing utilities are based solely on existing records and field surveys. Contractor shall verify the locations of any utilities which may be located within the project area and shall be responsible for any and all damages to existing utilities and maintain adequate service. Any damage to existing utilities shall be repaired immediately at the contractor's expense.
  6. The contractor shall be responsible for the installation of any and all utilities within the project area and shall be responsible for any and all damages to existing utilities and maintain adequate service. Any damage to existing utilities shall be repaired immediately at the contractor's expense.
  7. All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with ASTM D-1557.
  8. The project site is located outside the Metropolitan District.
  9. Zoning: RS-C-20.
  10. Area of Site: 4.467 A.
  11. Area of the Plan: 44,000 SF. (Limit of Disturbance)
  12. The project is exempt from APFO because it does not generate any new traffic / trips.
  13. Snow storage is less than 50,000 SF, the standard sediment control plan shall apply.
  14. Topography shown is from Howard County.
  15. Deed Reference: L. 078 P. 210 dated 02/28/06 L. 052 P. 648 dated 02/28/06



NOTE: DISTURBED AREA IS FOR FOUNDATION INSTALLATION ONLY AND IS LESS THAN 5000 SF RUNOFF FROM SALT BARN ROOF SHALL BE DIRECTED TO EXISTING SWM FACILITY.



**LEGEND**

- Boundary
- Contour
- Treeline
- Road
- Limit of Disturbance

**APPROVED**

WALSHRU BUILDING PERMIT

BR# B16003214 A#

APR SAN L. OSWALD DATE 8/1/16

DISC. OF WORK: Construct

New salt barn

**Vicinity Map - Scale: 1" = 2000'**

ADC Map 24-01

ADC The Map People - Permitted Use # 20612205

**HOWARD CO. CENTRAL MAINT. FACILITY**

REVISED SITE DEVELOPMENT PLAN

PROPOSED SALT BARN

**SHEET 9 OF 9**

SDP-82-087



POINT	NORTH	EAST
26	515050.71	805093.00
K	516241.97	805021.15
N	516632.51	806633.58
G	516078.77	806502.23

NOTE: "THE SHOP BUILDING ADDED TO THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. FOR CONSTRUCTION DRAWINGS, SEE HOWARD COUNTY CAPITAL PROJECT C-0216"

SCHEDULE OF CO-ORDINATES

DATE	REVISIONS
9-28-84	ADDED NEW EQUIPMENT/STORAGE BLDG. LIO 3 SCALE
7-6-84	ADDED NEW OFFICE BLDG. BY BUREAU OF HIGHWAYS
10-17-80	ADDED NEW SHOP BLDG. BY HIGHWAY
5-24-82	Added Spoof/Inches 1000. See Basin 2

GRADING PLAN

AREA

PROJECT: HOWARD CO. CENTRAL MAINT. FACILITY

OWNER/DEVELOPER:  
HOWARD COUNTY  
DEPT. OF PUBLIC WORKS  
GENERAL PROJECTS DIVISION  
PHONE: 933-2600

C-0114-001

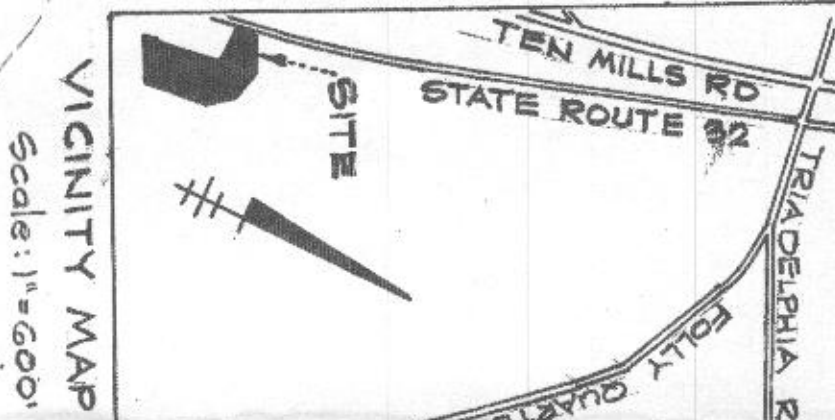
SDP 02-87



- CROSS REFERENCE NOTES**
- For top of curb elevations and layout dimensions see sheet 12 of G
  - For security fence layout see sheet 12 of G
  - For 4" of drainage swale stake-out see sheet 12 of G
  - For profile of road and drainage swales see sheet 12 of G
  - For storm drain plan & profile see sheet 12 of G
  - For 4" top of dam profile see sheet 12 of G

**PARKING SPACE DIMENSIONS**  
TRUCK PARKING 15' x 30'  
AUTO PARKING 9' x 20'

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE



GENERAL NOTES

- Area of parcel to be developed with this plan 5.445 Acres Tax map 28 Parcel # P-10
- Present zoning R district (Rural)
- Property is recorded in the Howard County land records, Liber 1050 Folio 402
- Parking requirements:
  - A-Use: Office  
Floor area office space - 2800 S.F.  
Parking spaces req'd @ 15 spaces per 200 S.F. = 21
  - B-Use: Garage  
Floor area garage space - 2714 S.F.  
Parking spaces req'd @ 1 space per 500 S.F. = 12
  - C-Number of parking spaces provided - 45
- Building coverage:
  - A-Maintenance building area = 9600 S.F.
  - B-Salt storage area = 5281 S.F.
  - C-Storage shed area = 1920 S.F.
  - D-Total building coverage = 16,801 S.F. or 0.386 Acres or 4.83% of site.
- All paving and storm drains shall be constructed in accordance with the latest editions of the M.S.H.A. Specifications and the Howard County "Storm Drain Design Manual" and "Details for Construction"
- Types of structures are those given in the standard storm drain details of Howard County. The contractor shall notify Miss Utility at 559-0100 three days prior to the beginning of construction.
- The contractor shall notify the Howard County Construction Inspection/Survey Division at 592-2418 twenty four hours prior to the beginning of construction.
- Bench marks: 1/2" pipe \* 26 to elev - 568.09  
1/2" pipe \* 11 to elev - 606.01
- METAL SHED AND SALT DOME STRUCTURES ARE NOT IN CONTACT. GRADING AND PAVING ARE TO BE DONE AS IF STRUCTURES ARE SEPARATE.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPT.  
CHIEF HEALTH OFFICER  
DATE 8-1-87

APPROVED: OFFICE OF PLANNING AND ZONING  
DATE 3-28-82

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
DATE 3-28-82

APPROVED: FOR STORM DRAINAGE SYSTEMS AND PRIVATE ROADS  
DATE 2-11-82

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
CHIEF, BUREAU OF ENGINEERING  
DATE 2-11-82

WITZ & ASSOCIATES, INC.  
ENGINEERS & SURVEYORS  
7222 KENNEDY RD  
BALTIMORE, MARYLAND 21007

DATE 2-2-82  
DESIGNED BY: E.M.R.  
DRAWN BY: A.B.T.  
PROJECT NO.: C-0114  
DATE: Jan 19-1982  
SCALE: 1"=50'

PROFESSIONAL ENGINEER NO. 2255  
DRAWING NO. 02-87



# FOUNDATION SYSTEM FOR CLEARSPAN STRUCTURE

## CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE

CLEARSPAN ORDER NO. 7032939

LOCATION:

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

### DRAWING INDEX

T1	TITLE SHEET
N1	GENERAL NOTES
S1	FOUNDATION PLAN
S2	ELEVATION VIEWS
S3	DETAILS
S4	DETAILS
S5	STRUCTURE REACTIONS



9138 S. State St., Suite 101 (301) 992-1775  
Sandy, UT 84070 (801) 990-1778 FAX  
www.vectora.com

DATE: 3/14/2016 DESIGNED: KOS DRAWER: KOS

#### REVISIONS

DATE	DESCRIPTION
7/1/2015	REVISED AS SHOWN
7/19/2015	ADDED ELEVATION VIEWS



A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com

### TITLE SHEET

FOUNDATION SYSTEM FOR  
CLEARSPAN STRUCTURE

CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

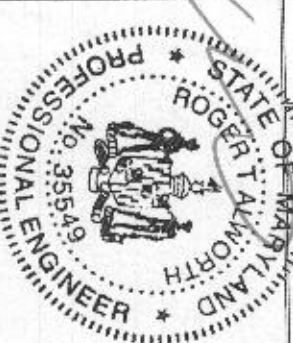
CLEARSPAN ORDER NUMBER: 7032939

# COPY

## RECEIVED

JUL 26 2016

LICENSEES & PERMITS  
DIVISION



JUL 20, 2016

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 35543. Expiration Date: 3/19/2018

U1382-351-151

REV  
T1 2



GENERAL DESIGN NOTES

GENERAL DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE INTERNATIONAL BUILDING CODE, 2015 EDITION AND THE ASCE 7-10 STANDARD

DESIGN LOADS:

WIND:

ULTIMATE WIND SPEED: 115 MPH (3-SEC GUST BASIC WIND SPEED)  
RISK CATEGORY: II  
EXPOSURE: C

GROUND SNOW LOAD = 25 PSF  
SNOW EXPOSURE FACTOR = 0.9  
THERMAL FACTOR = 1.2  
SNOW IMPORTANCE FACTOR = 1.0

ROOF LIVE LOAD = 30 PSF (NON-REDUCIBLE)

SEISMIC:

SEISMIC DESIGN CATEGORY: B  
RISK CATEGORY: II  
SEISMIC IMPORTANCE FACTOR: 1.0  
 $S_s = 0.123$   $S_1 = 0.051$   
SITE CLASS: "D"  
 $S_{as} = 0.131$   $S_{m1} = 0.081$

STEEL MATERIAL NOTES:

1. ALL STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, U.N.O.
2. ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM A325N, U.N.O.
3. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE w/ THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1.
4. ALL BOLTED CONNECTIONS SHALL BE TIGHTENED TO "SNUG-TIGHT" CONDITION AS DEFINED BY THE AWS MANUAL.
5. ALL STEEL SHAPES, PLATES, AND HARDWARE EXPOSED TO WEATHER SHALL BE GALVANIZED, STAINLESS STEEL, OR OTHERWISE PROTECTED FROM WEATHER.

REINFORCING STEEL NOTES:

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 60.
2. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF, WHICHEVER IS GREATER.
4. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
5. REBAR SPLICES ARE TO BE CLASS "B".
6. REINFORCING SPLICES SHALL BE MADE ONLY WHERE INDICATED ON THE DRAWINGS.
7. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY.

CONCRETE:

1. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318 LATEST APPROVED EDITION) WITH MODIFICATIONS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.
2. REINFORCED CONCRETE DESIGN IS BY THE "ULTIMATE STRENGTH DESIGN METHOD", ACI 318-(LATEST EDITION).
3. ALL STRUCTURAL CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 4000 PSI.
4. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL WITH THE FOLLOWING REQUIREMENTS:
  - 4.1. COMPRESSIVE STRENGTH AT AGE 28 DAYS AS SPECIFIED ABOVE.
  - 4.2. LARGE AGGREGATE-HARDROCK,  $\frac{3}{4}$ " MAXIMUM SIZE CONFORMING TO ASTM C-33.
  - 4.3. CEMENT-ASTM C-150, TYPE II PORTLAND CEMENT.
  - 4.4. MAXIMUM SLUMP 5-INCHES MAX WATER CEMENT RATIO 0.50
  - 4.5. NO ADMIXTURES, EXCEPT FOR ENTRAINED AIR, AND AS APPROVED BY THE ENGINEER.
5. CONCRETE MIXING OPERATIONS, ETC, SHALL CONFORM TO ASTM C-94.
6. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI STANDARD 614 AND PROJECT SPECIFICATIONS.
7. CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE AS FOLLOWS: CONCRETE POURED DIRECTLY AGAINST EARTH - 3 INCHES CLEAR STRUCTURAL SLABS -  $\frac{3}{4}$  INCHES CLEAR (TOP AND BOTTOM) FORMED CONCRETE WITH EARTH BACK FILL - 2 INCHES CLEAR
8. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS (AS APPLICABLE) SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
9. MODULUS OF ELASTICITY OF CONCRETE, WHEN TESTED IN ACCORDANCE WITH ASTM C-460, SHALL BE AT LEAST THE VALUE GIVEN BY THE EQUATIONS IN SECTION 8.5.1. OF ACI 318 FOR THE SPECIFIED 28-DAY STRENGTH.
10. SHRINKAGE OF CONCRETE, WHEN TESTED IN ACCORDANCE WITH ASTM C-157, SHALL NOT EXCEED 0.00040 INCHES/INCH.

FOUNDATION NOTES:

1. FOOTINGS ARE DESIGNED BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 4000 PSF PER THE PROJECT SOILS REPORT:

GEOTECHNICAL ENGINEER: GEOTECH ENGINEERS, INC.  
REPORT DATE: DECEMBER 10, 2015  
JOB NO: 352197  
ADDENDUM NO. 1: MARCH 8, 2016

2. CONTRACTOR SHALL PROVIDE FOR PROPER DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, SEEPAGE, ETC.
3. FOOTINGS SHALL BE PLACED ACCORDING TO DEPTHS SHOWN ON THE DRAWINGS.
4. THE TOP OF FOUNDATION SHALL BE LEVEL AND NON-SLOPING, U.N.O.
5. ALL DIMENSIONS SHALL BE VERIFIED BY THE FOUNDATION CONTRACTOR PRIOR TO CONSTRUCTION.
6. SOILS TO BE PREPARED PER THE GEOTECHNICAL REPORT PRIOR TO CONSTRUCTION. CLEAR, OVEREXCAVATE, SCARIFY, INSPECT, & RECOMPACT PER GEOTECHNICAL REPORT.
7. STRUCTURAL FILL SHALL BE PREPARED AND INSTALLED PER THE REFERENCED GEOTECHNICAL REPORT.

SPECIAL INSPECTIONS / QUALITY ASSURANCE:

1. SPECIAL INSPECTIONS SHALL BE REQUIRED FOR:
  - CONCRETE MIX DESIGN & STRENGTH
  - FORMWORK SHAPE, LOCATION, & DIMENSIONS
  - REINFORCEMENT TYPE & PLACEMENT
  - FOUNDATION EXCAVATION
  - ANCHORAGE TYPE & PLACEMENT
  - PERIODIC INSPECTION OF ALL POST-INSTALLED ANCHORAGE TO CONCRETE
2. THE OWNERS SHALL EMPLOY SPECIAL INSPECTORS WHO SHALL PROVIDE ADDITIONAL INSPECTIONS DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 17 OF THE CODE.
3. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT CERTIFIED INSPECTOR FROM AN ESTABLISHED TESTING AGENCY, LICENSED AND APPROVED BY THE BUILDING DEPARTMENT
4. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO VECTOR STRUCTURAL ENGINEERING AND ALL INTERESTED PARTIES.
5. ALL REPORTS SHALL BE DISTRIBUTED ON A MONTHLY BASIS TO THE ENGINEER OF RECORD, OWNER, CONTRACTOR, AND TO THE BUILDING OFFICIAL.
6. NO STRUCTURAL OBSERVATION IS REQUIRED. HOWEVER, THE ENGINEER OF RECORD RESERVES THE RIGHT TO MAKE FIELD OBSERVATIONS DURING CONSTRUCTION APPROXIMATELY ONCE PER WEEK.



5128 S. State St., Suite 101 (801) 964-1775  
Salt Lake City, UT 84107 (801) 964-1778 FAX  
www.vectorusa.com

DATE: 3/14/2016 DESIGNED: KOS DRAFTER: KOS

REVISIONS

DATE	DESCRIPTION
7/12/2016	REVISED AS SHOWN
7/19/2016	ADDED ELEVATION VIEWS



A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com

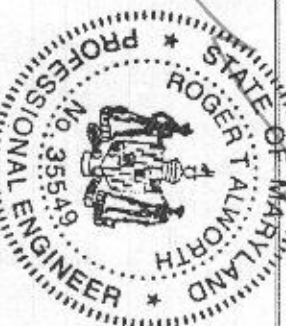
GENERAL NOTES

FOUNDATION SYSTEM FOR  
CLEARSPAN STRUCTURE

CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

CLEARSPAN ORDER NUMBER: 7032939



Jul 20, 2016

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35569, Expiration Date: 8/1/2019

U1382-351-151

N1

REV 2

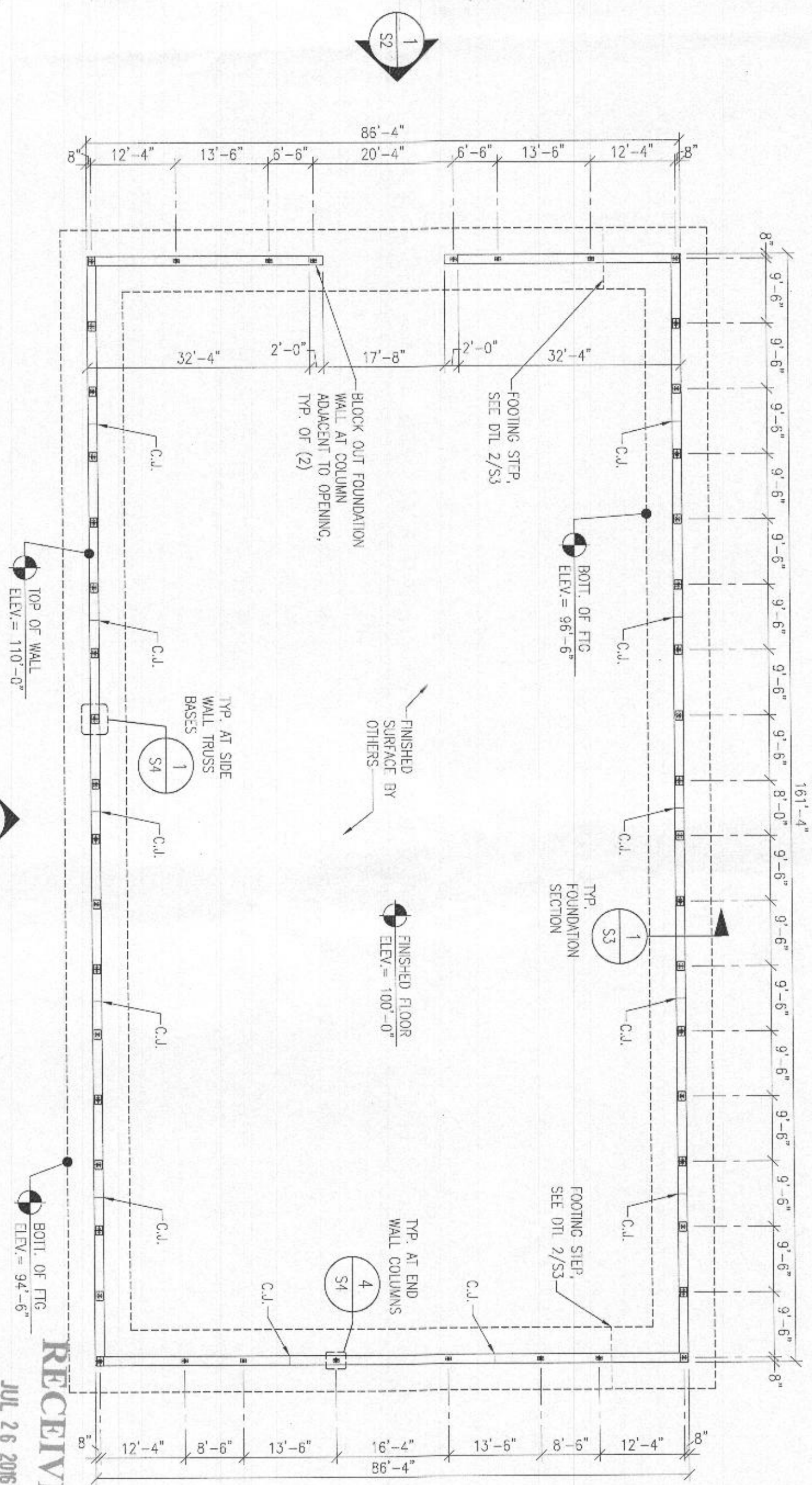
RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



- FOUNDATION NOTES:
1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH STEEL BUILDING DRAWINGS PRIOR TO CONSTRUCTION.
  2. SEE STEEL BUILDING DRAWINGS FOR ALL INFORMATION PERTAINING TO THE STEEL BUILDING.
  3. ALL FOUNDATION PEDESTALS AND FOOTINGS SHALL BE CENTERED BELOW THE TRUSS BASE PLATES, U.N.O.
  4. WALL CONTROL JOINTS (C.J.) TO BE LOCATED AT APPROXIMATELY 30' O.C. CONTROL JOINTS TO BE INSTALLED PER DTL 5/S4.
  5. ELEVATION MARKERS REFERENCE NOMINAL ELEVATIONS. REFER TO CIVIL PLAN FOR ACTUAL ELEVATIONS.



RECEIVED  
JUL 26 2016  
LICENSES & PERMITS DIVISION  
FOUNDATION PLAN  
3/3/21-07

**FOUNDATION PLAN**

**FOUNDATION SYSTEM FOR CLEARSPAN STRUCTURE**

SONC.FND. FOR 85'X160' CLEARSPAN STRUCTURE

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

CLEARSPAN ORDER NUMBER: 7032939

**PROFESSIONAL ENGINEER**

ROGER T. ALMOND

No. 3556

Jul 20 2016

Professional Engineer, hereby certify that these documents were prepared or supervised by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 3556, Expiration Date: 6/30/2018

U1382-351-151

**S1**

REV 2

**VECTOR ENGINEERS**

8135 S. State St., Suite 101 (301) 980-1775  
Sandp, UT 84070 (801) 980-1778 FAX  
www.vectoraz.com

DATE	REVISIONS	DESIGNER	DATE
7/12/16	REVISED AS SHOWN	KGS	7/12/16
7/19/2016	ADDED ELEVATION VIEWS	KGS	7/19/2016

**ClearSpan**

A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com



DATE	DESIGNED: KCS	DRAWN: KSS
REVISIONS		
DATE	DESCRIPTION	
7/1/2016	REVISED AS SHOWN	
7/19/2016	ADDED ELEVATION VIEWS	

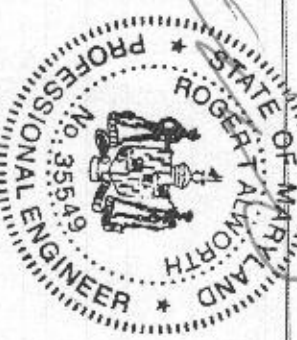


A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com

## ELEVATION VIEWS

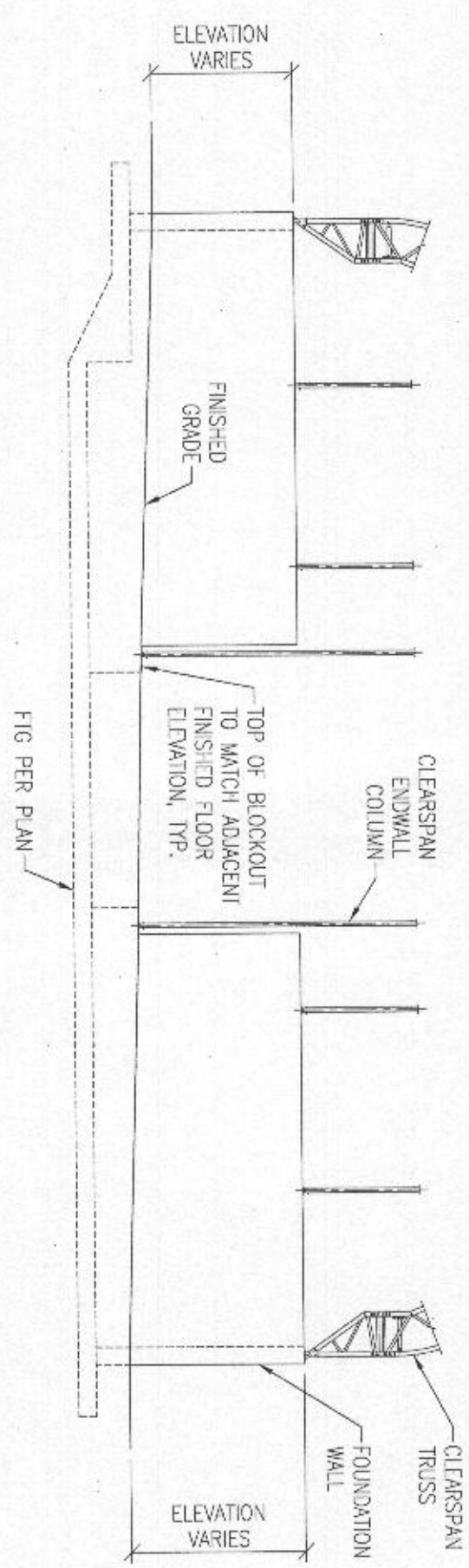
### FOUNDATION SYSTEM FOR CLEARSPAN STRUCTURE

CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE  
4301 ST. RT. 32  
DAYTON, MD 21035  
HOWARD COUNTY  
CLEARSPAN ORDER NUMBER: 7032939



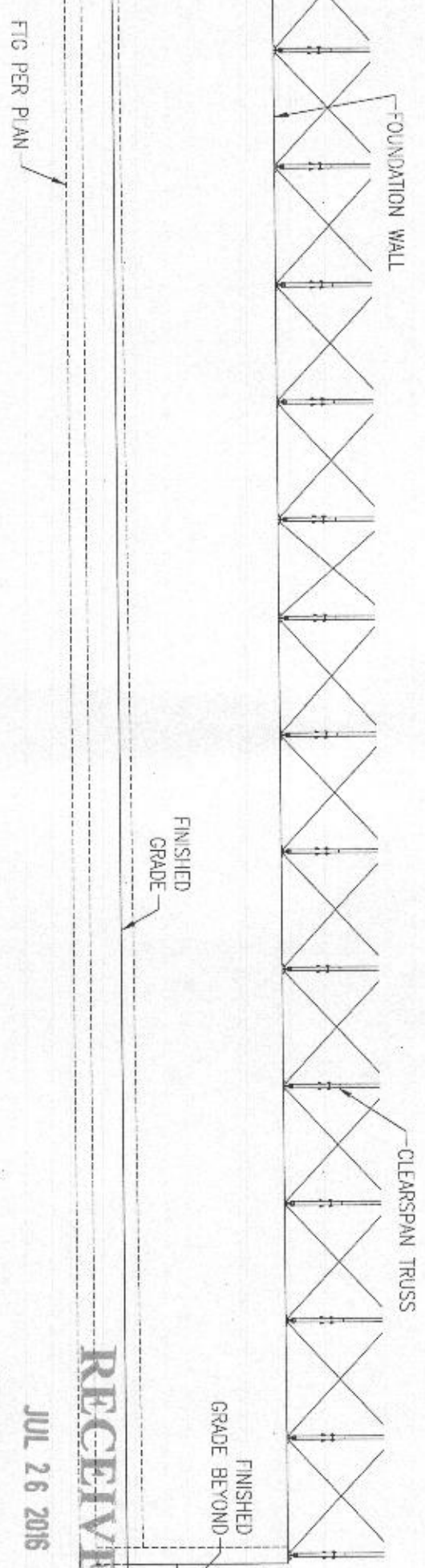
Jul 20, 2016  
U1382-351-151

REV  
S2 2



FRONT ENDWALL ELEVATION

NTS. 1



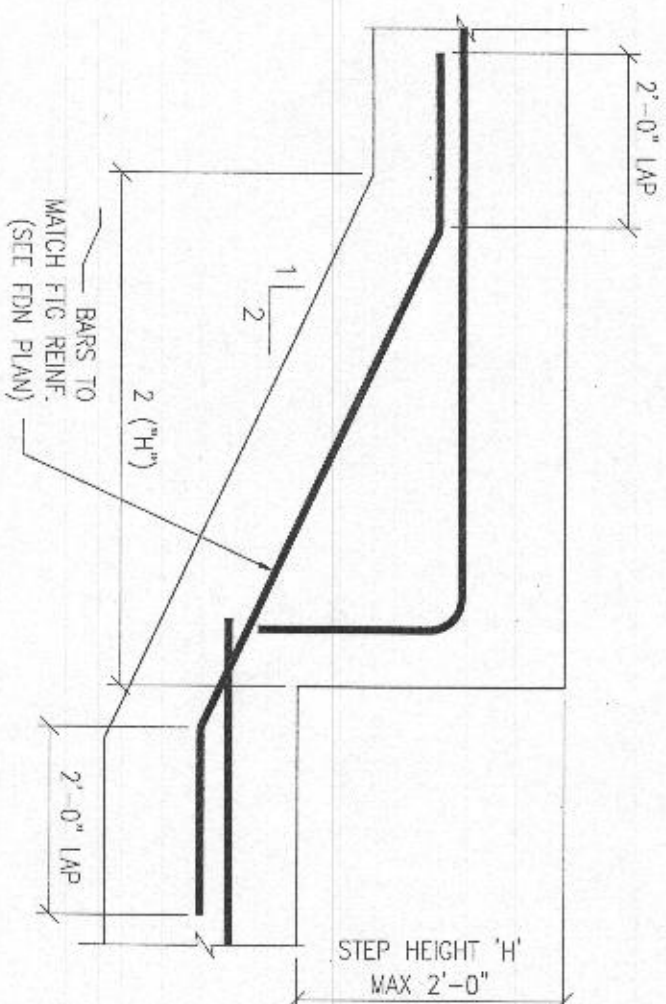
SIDEWALL ELEVATION

NTS. 2

RECEIVED  
JUL 26 2016  
LICENSES & PERMITS  
DIVISION



FOUNDATION WALL SCHEDULE							
HEIGHT -H'	TOE WIDTH	HEEL WIDTH	FTG. WIDTH	KEY DEPTH	INSIDE FACE VERTICAL REINF.	TOP FTG. TRANS. REINF.	BOTT. FTG. TRANS. REINF.
12'-2"	3'-10"	5'-2"	9'-0"	3'-0"	#5 @ 6" O.C.	#5 @ 6" O.C.	#5 @ 9" O.C.
14'-2"	4'-1"	5'-5"	9'-6"	3'-8"	#5 @ 4" O.C.	#5 @ 6" O.C.	#5 @ 7" O.C.

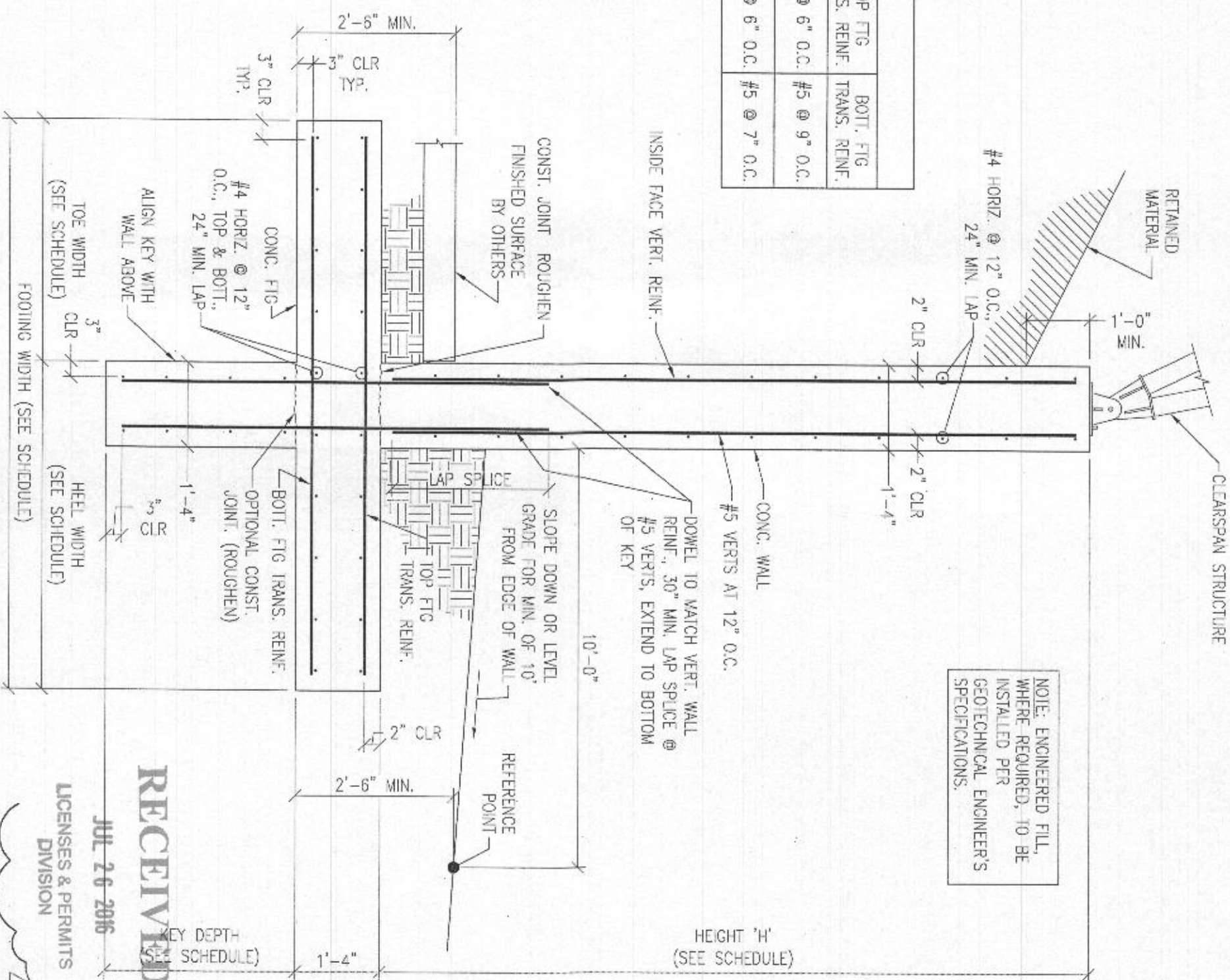


NOTE: SEE FDN PLAN  
FOR FTG STEP LOCATION

## FOOTING STEP

NTS

2



NOTE: ENGINEERED FILL, WHERE REQUIRED, TO BE INSTALLED PER GEOTECHNICAL ENGINEER'S SPECIFICATIONS.

HEIGHT 'H'  
(SEE SCHEDULE)

RECEIVED  
(SEE)

JUL 26 2016

LICENSES & PERMITS  
DIVISION

TYPICAL FOUNDATION SECTION @ SIDE WALLS

NLS

1

## DETAILS

## FOUNDATION SYSTEM FOR CLEARSPAN STRUCTURE

SONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE

4301 ST. RT. 32  
DAYTON, ND 21038  
HOWARD COUNTY

CLEARSPAN ORDER NUMBER: 7032939



A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
[www.esapco.com](http://www.esapco.com)



9138 S. State St., Suite 101 (201) 890-1775  
Sandy, UT 84070 (801) 593-1776 FAX

DATE: 3/14/2016		DESIGNED: KSS	DRAWN: KSS
REVISIONS			
DATE	DESCRIPTION		
7/1/2016	REVISED AS SHOWN		
7/19/2016	ADDED ELEVATION VIEWS		

DATE: 3/14/2016	DESIGNED: KGS	DRAFTER: KGS
-----------------	---------------	--------------

A circular professional engineer seal for the State of Maryland. The outer ring contains the text "STATE OF MARYLAND" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the name "ROBERT ALWORTH" is written in an arc. Below the name is the number "No. 35549". In the center of the seal is a detailed illustration of a classical building with columns and a pediment, topped with a dome.

Jul 20, 2016

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549, Expiration Date: 3 Apr 2018.

U1382-351-151



RE

2

NLS



DATE	DESCRIPTION	DESIGNED: KOS	DRAWN: KOS
7/12/2016	REVISED AS SHOWN		
7/19/2016	ADDED ELEVATION VIEWS		



A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com

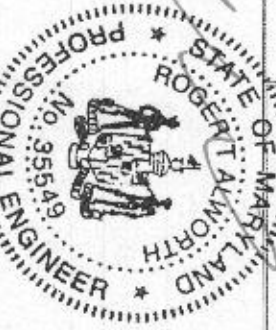
DETAILS

FOUNDATION SYSTEM FOR  
CLEARSPAN STRUCTURE

CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

CLEARSPAN ORDER NUMBER: 7032939



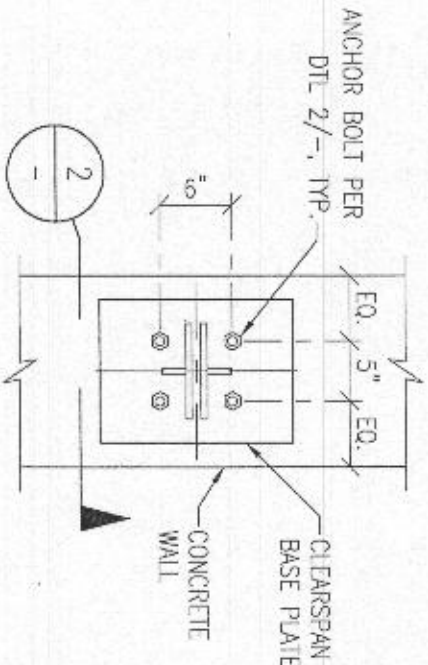
Jul 20, 2016

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 35546, Expiration Date: 7/19/2018

U1382-351-151

S4

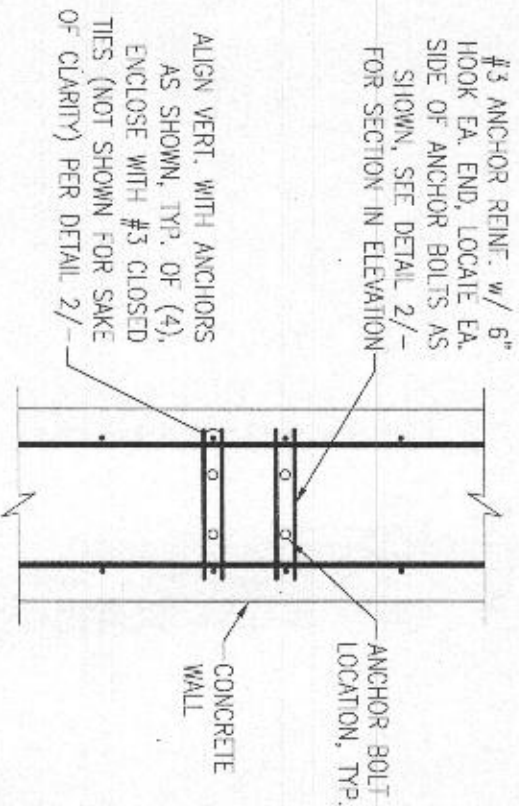
REV 2



TRUSS BASE ANCHORAGE

NTS

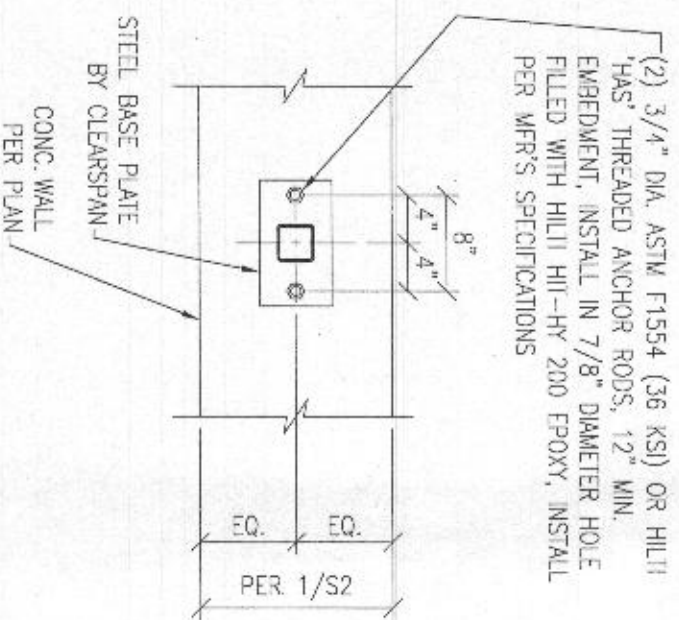
1



ANCHORAGE REINFORCEMENT (PLAN VIEW)

NTS

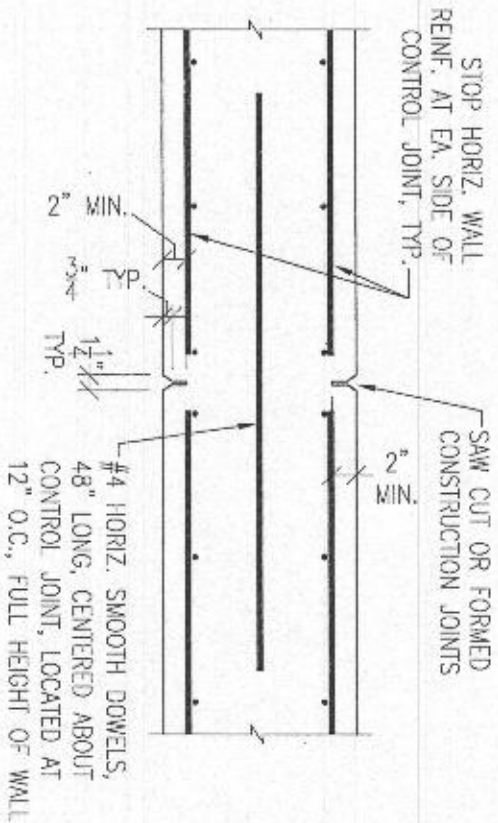
3



COLUMN BASE ANCHORAGE @ END WALL

NTS

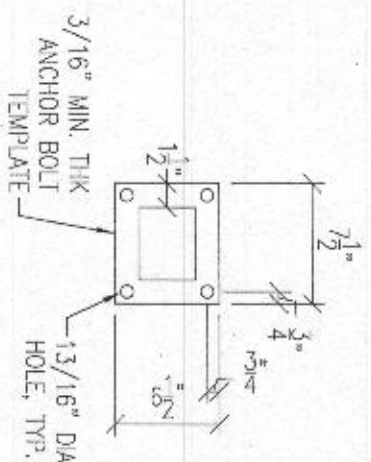
4



WALL CONTROL JOINT

NTS

5



ANCHOR BOLT TEMPLATE

NTS

6



DATE	DESIGNED: KCS	DRAWN: KCS
REVISIONS		
DATE	DESCRIPTION	
7/12/2016	REVISED AS SHOWN	
7/13/2016	ADDED ELEVATION WINDS	



A Division of Engineering Services & Products Co.  
1440 18th Ave. SW  
Dyersville, IA 52040  
www.esapco.com

STRUCTURE REACTIONS  
FOUNDATION SYSTEM FOR  
CLEARSPAN STRUCTURE  
CONC. FND. FOR 85'X160' CLEARSPAN STRUCTURE  
4301 ST. RT. 32  
DAYTON, MO 24035  
HOWARD COUNTY  
CLEARSPAN ORDER NUMBER: 7032209

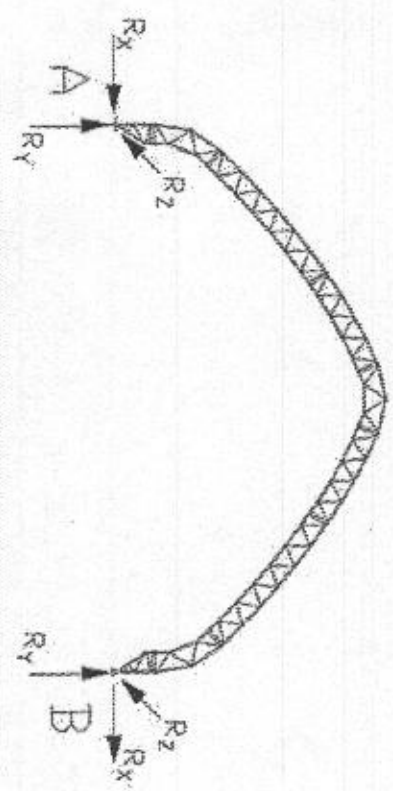


RECEIVED

JUL 26 2016  
DIVISION  
LICENSES & PERMITS

CLEARSPAN STRUCTURE REACTIONS

FOR REFERENCE



CONTROLLING ASD COMBINATIONS TO CONSIDER AT TYPICAL BASES		
Max Gravity (kip)	13.96	DL + EL + Lr
Max Uplift (kip)	-8.98	0.6DL + 0.6Wz
Max Inward Lateral (kip)	-4.05	0.6DL + 0.6Wx
Max Outward Lateral (kip)	-8.32	DL + EL + 0.75Lr + 0.45Wx2

ADDITIONAL CONTROLLING ASD COMBINATIONS TO CONSIDER AT BASES WITH CABLE ATTACHED		
Max Gravity (kip)	14.12	DL + EL + 0.75Lr + 0.45Wz2
Max Uplift (kip)	-9.74	0.6DL + 0.6Wz
Max Inward Lateral (kip)	-4.04	0.6DL + 0.6Wx
Max Outward Lateral (kip)	-8.34	DL + EL + 0.75Lr + 0.45Wx2

* See notes below		UNFACTORED BASE REACTIONS TO CONSIDER AT TYPICAL BASES			
		Side A		Side B	
Load Case		Rx (kip)	Ry (kip)	Rx (kip)	Ry (kip)
Dead Load, Self Weight	DL	0.55	1.34	-0.55	1.34
Dead Load, Collateral	EL	0.29	0.50	-0.29	0.50
Snow Load, Balanced	S	3.03	5.08	-3.03	5.08
Snow Load, Unbalanced	Su	2.55	3.09	-2.55	4.94
Wind Load	Wx	-7.31	-7.97	-2.97	-8.56
Wind Load	Wx2	-4.77	5.50	-5.51	4.91
Wind Load	Wz2	-2.55	-16.31	4.26	-15.67
Wind Load	Wz	-0.02	-2.83	1.72	-2.20
Roof Live Load	Lr	6.66	12.11	-6.66	12.11
0	0	0.00	0.00	0.00	0.00

* See notes below		ADDITIONAL UNFACTORED BASE REACTIONS TO CONSIDER AT BASES WITH CABLE ATTACHED					
		Side A			Side B		
Load Case		Rx (kip)	Ry (kip)	Rz (kip)	Rx (kip)	Ry (kip)	Rz (kip)
Wind Load	Wz	3.72	-17.67	1.21	5.18	-16.76	1.12
Dead Load, Cable (Wz)	DL	0.02	0.09		-0.02	0.09	
Wind Load	Wz2	3.43	6.78	0.02	-4.32	3.94	0.01
Dead Load, Cable (Wz2)	DL	0.05	0.14		-0.05	0.14	

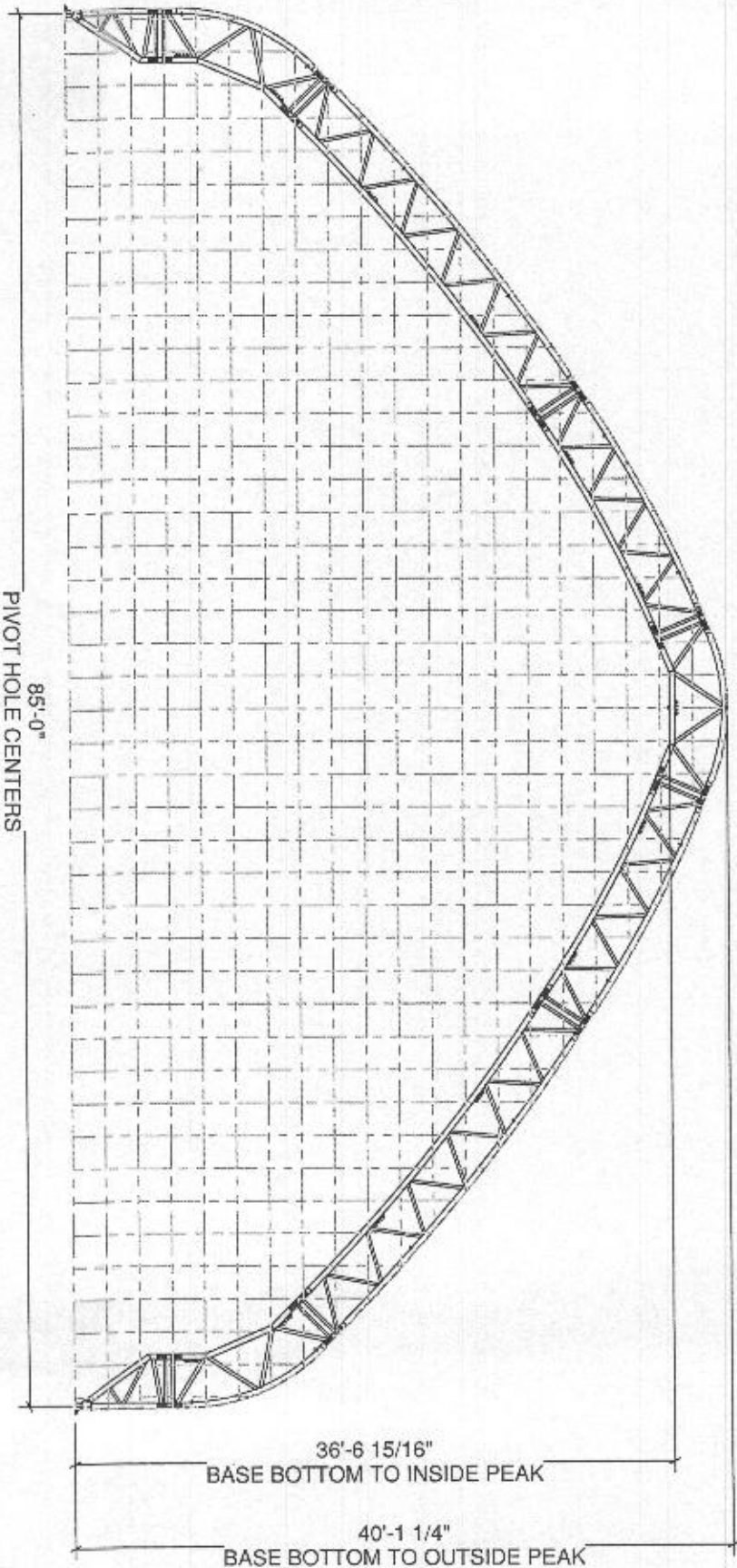


ADDITIONAL INFORMATION

THESE PRINTS IDENTIFY AND SHOW THE MAIN COMPONENTS AND CONNECTIONS FOR THIS BUILDING. LENGTH, WIDTH, AND OTHER IMPORTANT DIMENSIONS ARE ALSO PRESENT.

TO BEST UNDERSTAND HOW TO CONSTRUCT THIS BUILDING, THE INFORMATION CONTAINED WITHIN THESE SHEETS SHALL BE USED WITH THE INSTRUCTION MANUAL SHIPPED WITH THE BUILDING.

THE INSTRUCTIONS INCLUDE DETAILS NEEDED DURING CONSTRUCTION.



T085GBMF021160  
85x160 GBM TRUSS FRAME

BUILDING CONTENT GUIDE:

[A1]	COVER SHEET
[B1]	GENERAL NOTES
[C1]	BUILDING PLAN VIEW
[D1]	MATERIAL SPECIFICATIONS
[E1]	RAFTER PROFILES
[F1]	SIDE PROFILES
[G1]	DETAIL LOCATIONS & BASE DETAILS
[G2]	GENERAL CONNECTION DETAILS
[G3]	CABLE LAYOUT & DETAILS
[H1]	BASE PLATE LAYOUT & DETAILS
[I]	OMITTED
[J1]	BUILDING REACTION DATA
[K]	OMITTED
[L1 - L3]	FRONT ENDWALL: EW085GBF0531D
[M1 - M2]	BACK ENDWALL: EW085GBF0480D

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



JUL 20, 2016

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 35543  
Expiration Date: 3-31-2019

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9255 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: COVER SHEET		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME

9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U1382-351-162

DRAWING DETAILS	NO. 1	DATE
BY: BHB	2/16/2016	
REVISIONS:		
NO. 1	DATE	
1	6/24/2016	
2		
3		
4		

SHEET: A1

ORDER #	7032939
CUSTOMER #	6764428

ENGINEERING SERVICES & PRODUCTS, CO.  
COLUMBIA, MD 21045  
P: 410-382-7098  
WWW.CEMSPAN.COM



SITE LOCATION AND BUILDING DESCRIPTION:

SITE LOCATION:

4301 ST. RT. 32  
DAYTON, MD 21036  
HOWARD COUNTY

BUILDING SIZE:

85' X 160' 13,600 SQUARE FEET  
PRE-ENGINEERED FABRIC STRUCTURE

CONSTRUCTION TYPE: IIIB  
FABRIC: FIRE-RATED (PER NFPA 701)

GENERAL NOTES:

1. DESIGNED IN CONFORMANCE WITH THE STRUCTURAL PROVISIONS OF THE INTERNATIONAL BUILDING CODE, 2015 EDITION.
2. DESIGN LOADS:

- A. FLOOR LIVE LOAD: N/A  
B. ROOF LIVE LOAD: 30 PSF (NON-REDUCIBLE)  
C. ROOF SNOW LOADS:

- Pg (GROUND SNOW LOAD) = 25 PSF  
Ce (SNOW EXPOSURE FACTOR)  
= 0.9 (FULLY EXPOSED TERRAIN CATEGORY C)  
Ct (THERMAL FACTOR) = 1.2 (COLD ROOF)  
Is (SNOW IMPORTANCE FACTOR) = 1.0 (RISK CATEGORY II)  
Pt (FLAT ROOF SNOW LOAD) = 18.9 PSF  
Ps (SLOPED ROOF SNOW LOAD) = Cs Pt  
Cs (SLOPE FACTOR) = AS DETERMINED FOR GABLE OR ARCHED ROOF PER ASCE 7 (BALANCED AND UNBALANCED LOADING CONDITIONS CONSIDERED)

SNOW DRIFTING FROM ADJACENT BUILDINGS, STRUCTURES, OR ANY OTHER HORIZONTAL SURFACES HAS NOT BEEN CONSIDERED.

D. WIND DESIGN DATA: (MAIN WIND FORCE RESISTING SYSTEM)

- V (ULTIMATE WIND SPEED) = 115 MPH  
Kd (WIND DIRECTIONALITY FACTOR) = 0.85  
Kzt (WIND TOPOGRAPHIC FACTOR) = 1.0 (ASSUMED)  
Exp (EXPOSURE CATEGORY) = C  
Gcpi (INT. PRES. COEFF.) = +/-0.55 (PARTIALLY ENCLOSED)  
Cp (EXT. PRES. COEFF.) = AS DETERMINED FOR GABLE OR ARCHED ROOF PER ASCE 7

COMPONENTS AND CLADDING WIND PRESSURE: PER ASCE 7

E. EARTHQUAKE DESIGN DATA: (EQUIV. LATERAL FORCE METHOD)

SEISMIC DESIGN CATEGORY = B  
RISK CATEGORY = II, SEISMIC IMPORTANCE FACTOR = 1.0  
Ss = 0.123 g, Si = 0.051 g, SITE CLASS: D  
Sds = 0.131 g, Sdi = 0.081 g  
Cs = 0.044, R = 3, SEISMIC BASE SHEAR = 2.72 KIPS  
BASIC SEISMIC-FORCE RESISTING SYSTEM = STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

3. THE TRUSSES ARE DESIGNED TO ACCOMMODATE LIMITED ADDITIONAL WEIGHT. ADDITIONAL LOADS, SUCH AS FOR LIGHTING, HEATING, AND VENTILATING EQUIPMENT, SHALL NOT EXCEED 1,000 LBS. PER ASSEMBLED TRUSS. WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER, LOADS SHALL BE APPLIED AT PANEL POINTS (POINTS OF CONTACT BETWEEN TRUSS WEB AND CHORD) AND SHALL BE DISTRIBUTED SO THAT NO MORE THAN 150 LBS. IS SUSPENDED FROM ANY SINGLE LOCATION.

FOUNDATION:

1. REFER TO FOUNDATION DRAWINGS BY VECTOR ENGINEERS.

GENERAL ABBREVIATIONS:

TOS TOP OF STEEL / TSL TOP OF SLAB / GALV. GALVANIZED / FND FOUNDATION / EL ELEVATION / RND. ROUND / GA GAUGE / DIA. DIAMETER / TYP. TYPICAL / LBS. POUNDS / CL CENTERLINE

SITE CONDITIONS:

1. NEITHER CLEARSPAN NOR THE BUILDING ENGINEER HAVE VISITED THIS JOBSITE. INFORMATION CONTAINED HEREIN IS BASED ON CLIENT SUPPLIED DATA AND MEASUREMENTS. THE DESIGN AND DEPICTED FABRICATION, ERECTION, AND FOUNDATION DRAWINGS ARE ONLY VALID FOR THE EXACT DESIGN PARAMETERS AND COMBINATIONS OF PARAMETERS DOCUMENTED. NEITHER CLEARSPAN NOR THE BUILDING ENGINEER SHALL BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. WORK SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CLEARSPAN AND/OR THE BUILDING ENGINEER SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO RE-EVALUATE THEIR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.

STEEL:

1. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL TUBING SHALL BE GALVANIZED, MIN. YIELD STRENGTH 50 KSI, AND SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A500.
2. UNLESS OTHERWISE NOTED, STEEL PLATES SHALL COMPLY WITH ASTM A572 GRADE 50 OR EQUAL FOR 3/16" OR GREATER THICKNESS AND ASTM A1011 GRADE 50 OR ASTM A653 GRADE 50 OR EQUAL FOR LESS THAN 3/16" THICKNESS.

3. ALL STRUCTURAL STEEL IS TO BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."

BOLTS:

1. UNLESS OTHERWISE NOTED, ALL BOLTED CONNECTIONS SHALL USE GRADE 2 OR A307 OR BETTER BOLTS WITH COMPATIBLE WASHERS AND NUTS OF DIAMETERS INDICATED ON PLANS. BOLTS NEED ONLY BE TIGHTENED TO THE SNUG-TIGHT CONDITION. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH, OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH.

CABLES AND HARDWARE:

1. ALL CABLE SHALL BE GALVANIZED STEEL, MULTIPURPOSE, 7X19 (UP TO 3/8" DIA.) OR 6X26 (1/2" DIA.) CLASS STRAND CORE COMMERCIAL GRADE, OF DIAMETER INDICATED.
2. CABLE SLEEVES SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
3. USE THIMBLES WITH CABLE SLEEVES IN ALL LOOP-END APPLICATIONS.
4. TENSION CABLES AT TURNBUCKLE TO TAUT CONDITION (STRAIGHT AND NOT SLACK OR LOOSE).
5. TIGHTEN CABLES SEQUENTIALLY TO AVOID TWISTING OR DEFORMING STRUCTURAL ELEMENTS DURING ERECTION. RECHECK PREVIOUSLY TIGHTENED CABLES UNTIL ALL CABLES ACHIEVE TAUT CONDITION.

WELDING:

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AWS D1.1 AND D1.3.
2. REFER TO AWS PUBLICATION D19.0-72: WELDING ZINC-COATED STEEL AND "WELDING GUIDELINES" PUBLISHED BY ALLIED TUBE AND CONDUIT-HARVEY ILLINOIS, FOR RECOMMENDED PROCESSES AND PRACTICES FOR WELDING GALVANIZED STEEL.

3. ALL SHOP WELDING IS TO BE PERFORMED BY CERTIFIED WELDERS.

PAINTING AND TOUCH-UP:

1. AFTER SHOP FABRICATION, PAINT ALL BARE STEEL, WELDS, AND ABRADED AREAS WITH COLD GALVANIZING COMPOUND CONSISTENT WITH GALVANIZED TUBE MANUFACTURER'S RECOMMENDATIONS FOR COLOR AND COMPOSITION. PRIOR TO TOUCH-UP, CLEAN WELDED AND ABRADED AREAS WITH A WIRE BRUSH. SURFACES MUST BE CLEAN AND OIL FREE.
2. AFTER FIELD INSTALLATION, TOUCH-UP ANY FIELD WELDS AND DAMAGED AREAS WITH COLD GALVANIZING COMPOUND.

ERECTION AND FIELD QUALITY CONTROL:

1. THE ERECTOR IS RESPONSIBLE FOR DESIGNING AND FURNISHING ALL TEMPORARY BRACING, SHORING, AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF ERECTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING ERECTION.
2. NO MODIFICATIONS OR ALTERATIONS (OTHER THAN THOSE SHOWN ON THE DRAWINGS) SHALL BE MADE IN ANY STRUCTURAL MEMBER OR CONNECTION WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER.

RECEIVED

JUL 26 2016

LICENSES & PERMITS

DIVISION



JUL 20 2016

BOX BOLT HOLE SIZES & INSTALLATION TORQUE <sup>1</sup>			
BOX BOLT DIA.	HOLE DIA.	INSTALLATION TORQUE	
1/4"	1/2"	14 FT-LB	
5/16"	5/8"	18 FT-LB	
3/8"	3/4"	33 FT-LB	
1/2"	13/16"	59 FT-LB	
5/8"	1-1/8"	140 FT-LB	
3/4"	1-3/8"	221 FT-LB	

1. REFER TO BOX BOLT TECHNICAL DATA FOR MORE INFORMATION IF USING BOX BOLTS

ORDER # 7032939  
CUSTOMER # 6764428

VECTOR ENGINEERS  
9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U1362-351-162

CUSTOMER INFORMATION:  
DEPARTMENT OF PUBLIC WORKS  
9260 BENDIX RD  
COLUMBIA, MD 21046-1832

STRUCTURE SKU #: T085GBMF021160  
STRUCTURE SIZE: 85' X 160'  
STRUCTURE DESCRIPTION: 85X160 GBM TRUSS FRAME

CUSTOMER CONTACT: JOHN CAPPELLETTI  
CONTACT PHONE: 410-382-7096

SHEET TITLE: GENERAL NOTES

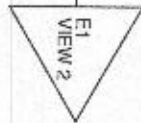
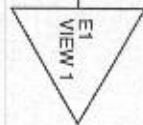
DRAWING DETAILS  
DRAWN BY: [blank] DATE: 2/18/2016  
REVISIONS:  
NO. BY: REVISION DATE:  
1 SHM 8/24/2016  
2  
3  
4 NOT TO SCALE SHEET SIZE: 11X17  
SHEET: B1



NOTE: MAN DOOR LOCATIONS ARE APPROXIMATE  
AND CAN BE FIELD ADJUSTED AS NEEDED.

DOOR CALL-OUT	DOOR SIZE
A	20'-0" X 20'-0" OPENING

LEFT SIDE - SEE SHEET [F1] FOR ELEVATION VIEW



BAY NUMBERS:

1	9'-6"	2	9'-6"	3	9'-6"	4	9'-6"	5	9'-6"	6	9'-6"	7	9'-6"	8	9'-6"	9	8'-0"	10	9'-6"	11	9'-6"	12	9'-6"	13	9'-6"	14	9'-6"	15	9'-6"	16	9'-6"	17	9'-6"
---	-------	---	-------	---	-------	---	-------	---	-------	---	-------	---	-------	---	-------	---	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------

85'-0" BASE  $\phi$

42'-6"



$\phi$

FRONT ENDWALL: EW085GBF0531D  
SEE SHEET [L1] FOR ELEVATION VIEW

BACK ENDWALL: EW085GBF0480D  
SEE SHEET [M1] FOR ELEVATION VIEW

RIGHT SIDE - SEE SHEET [F1] FOR ELEVATION VIEW

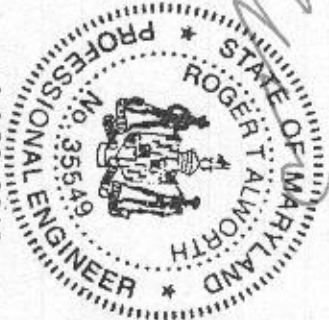
EXTERIOR RAFTER CHORD CENTERS

160'-0"



Professional Certification, I hereby certify that these documents were prepared or supervised by me, and I am a duly Licensed Professional Engineer in the State of Maryland, License No. 35546  
Expiration Date: 8-4-2018

Jul 20, 2016



CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21046-1892		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: BUILDING PLAN VIEW		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME



9138 S. STATE STREET, SUITE 101 (801) 990-1775  
BANDY, UTAH 84070 (801) 990-1776 FAX

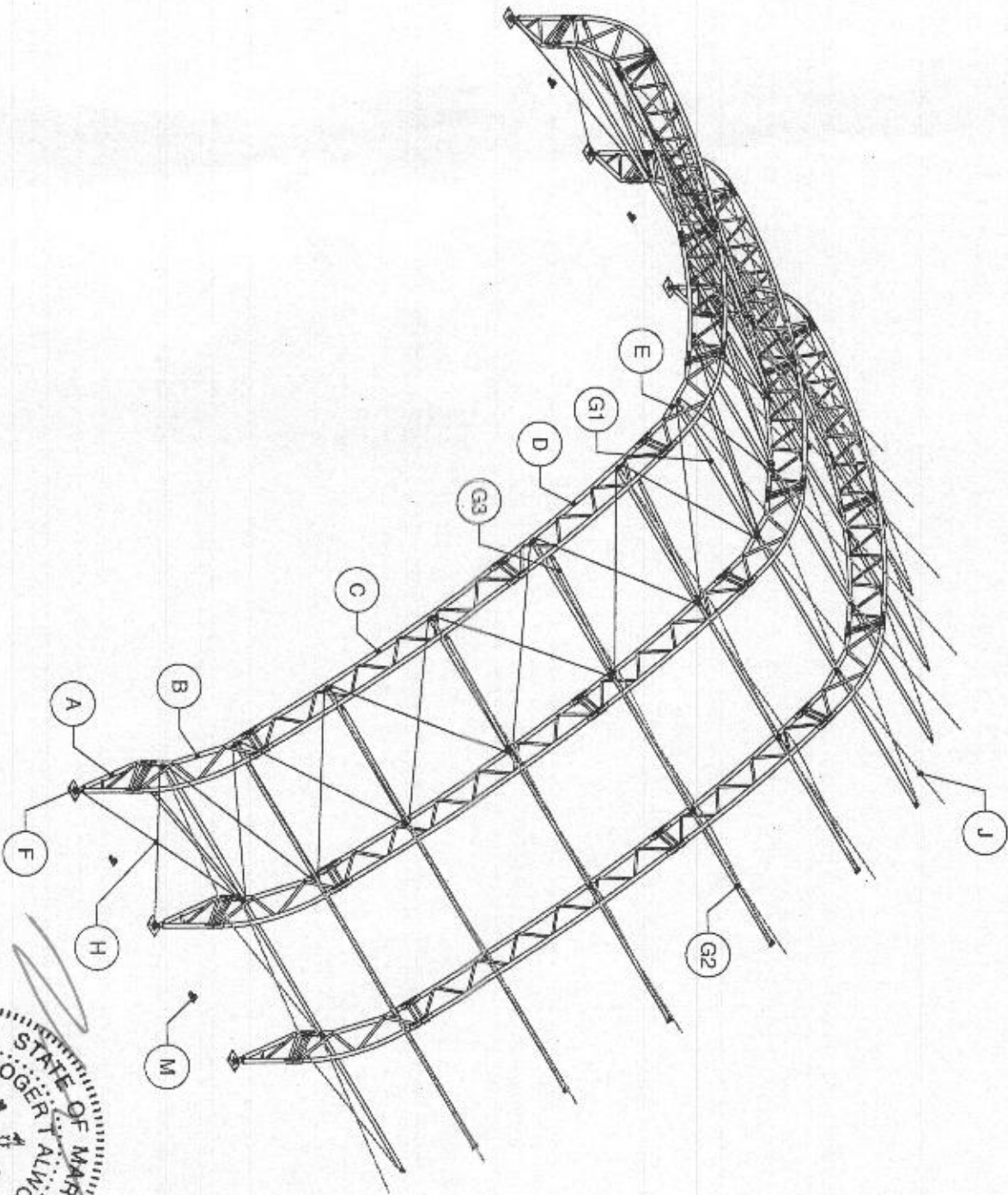
PROJECT NUMBER: U1382-351-162

ORDER # 7032939	
CUSTOMER # 6764428	

1450 18TH AVENUE SW  
DENVER, CO 80202  
P: 303.671.2017  
WWW.VECTOR.COM



ITEM	DESCRIPTION	MATERIAL
A	SUPPORT BASE	
	OUTER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 7 GA
	INNER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 7 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - Ø 1.90" - 14 GA
	WEB (ANGLED)	GALV. RND. STEEL TUBE - Ø 1.9" - 2.375" - 14 GA
	PIVOT PLATE (CHORD)	STEEL PLATE, 1/2" THICK
	PIVOT PLATE (ROUND)	STEEL PLATE, 1/2" THICK
B&E	SEGMENT	
	OUTER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 7 GA
	INNER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 7 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - Ø 1.90" - 14 GA
	WEB (ANGLED)	GALV. RND. STEEL TUBE - Ø 2.375" - 14 GA
C&D	SEGMENT	
	OUTER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 10 GA
	INNER CHORD	GALV. RND. STEEL TUBE - Ø 4.0" - 10 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - Ø 1.90" - 14 GA
	WEB (ANGLED)	GALV. RND. STEEL TUBE - Ø 1.90" - 14 GA
F	BASES	
	HORIZONTAL	STEEL PLATE, 1/2" THICK
	VERTICAL (ROUNDED)	STEEL PLATE, 3/8" THICK
	THREADED STUD	CFL FULLY THREADED STUD - 1/2"-13 x 1"
	GUSSETS	STEEL PLATE, 3/8" THICK
G	BRACING	
G1	LATERAL BRACING (END)	GALV. RND. STEEL TUBE - Ø 3.5" - 14 GA
G2	LATERAL BRACING (MID)	GALV. RND. STEEL TUBE - Ø 2.875" - 14 GA
G3	ANGLED BRACE	GALV. RND. STEEL TUBE - Ø 3.5" - 14 GA
	THREADED STUD PLATE	1/4" PLATE W/ 1/2" X 2" STUDS
	AB CONNECTION PLATE	STEEL PLATE, 1/4" THICK
H	CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 5/16" THICK
J	SWAY CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 1/8" THICK
K	SPLICE	
	SPLICE OUTSERTS	FORMED STEEL BAR, 5/16" THICK
L	WINCH ASSEMBLY	
	WINCH	2" LASHING WINCH (10,000 LBS. STRENGTH)
	STRAP	2" STRAP (10,000 LBS. STRENGTH)
M	WINCH PLATE	
	HORIZONTAL	STEEL PLATE, 1/2" THICK
	THREADED STUDS	CFL FULLY THREADED STUD - 1/2"-13 x 1"



NOTE: THIS VIEW IS GENERIC TO ILLUSTRATE LOCATIONS OF ITEMS IN THE TABLE ONLY. CABLE PATTERN AND/OR OTHER DETAILS MAY NOT FULLY MATCH THE SPECIFICS FOR THIS ORDER. SEE OTHER SHEETS FOR ORDER-SPECIFIC DETAILS.

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



Jul 20, 2016

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549. Expiration Date: 3-31-2018

DRAWING DETAILS		CUSTOMER INFORMATION:		STRUCTURE SKU #:	
DESIGNED BY: EMB		DEPARTMENT OF PUBLIC WORKS		T085GBMF021160	
DATE: 12/18/2016		9260 BENDIX RD			
		COLUMBIA, MD 21045-1832			
REVISIONS:		CUSTOMER CONTACT:		CONTACT PHONE:	
NO. BY: DATE:		JOHN CAPPELLETTI		410-382-7098	
1. SMW 6/24/2016					
2.					
3.					
4.					
NOT TO SCALE		SHEET SIZE: 11X17		STRUCTURE DESCRIPTION:	
SHEET: D1				85' X 160'	
				85x160 GBM TRUSS FRAME	

<b>VECTOR</b> ENGINEERS	
9138 S. STATE STREET, SUITE 101 (801) 990-1775	
SANDY, UTAH 84070 (801) 990-1776 FAX	
PROJECT NUMBER: U1382-351-162	

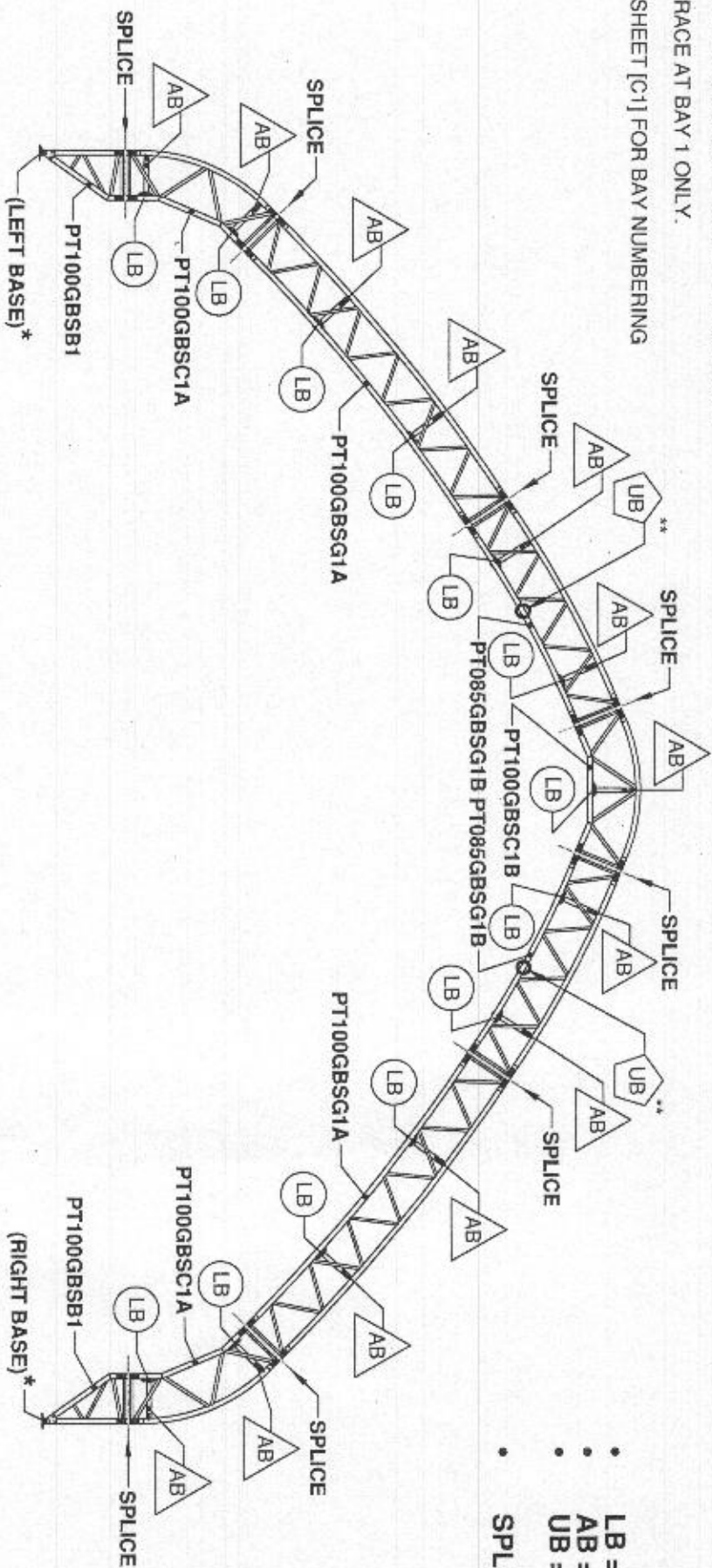
ORDER #:	
7032939	
CUSTOMER #:	
6764428	



\*NOTE: REFER TO SHEET [H1] FOR END RAFTER BASE SKU.

\*\*NOTE: U-BOLT BRACE AT BAY 1 ONLY.

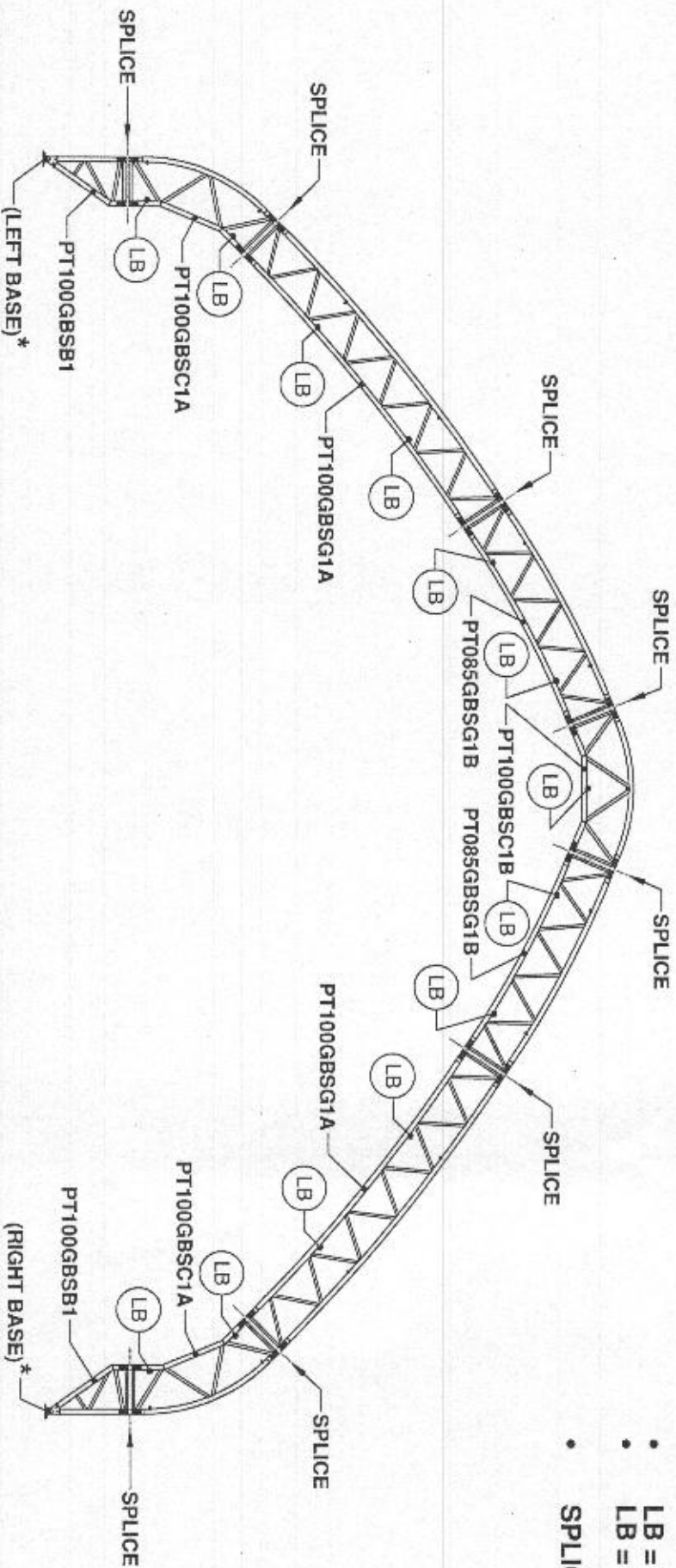
NOTE: REFER TO SHEET [C1] FOR BAY NUMBERING



- LB = LATERAL BRACE (SKU: LBC35G14UBL114)
- AB = ANGLED BRACE (SKU: LB35G14SL10918)
- UB = ANGLED BRACE (SKU: UB28G14L114C40)
- SPLICE: SEE DETAIL SHEET [G2]

\*NOTE: REFER TO SHEET [H1] FOR MID RAFTER BASE SKU.

[E1] VIEW 1 - FRONT PROFILE (END RAFTER)



- LB = LATERAL BRACE @ 9'-6" BAYS (SKU: LB28G14STL114)
- LB = LATERAL BRACE @ 8'-0" BAY (SKU: LB28G14STL096)
- SPLICE: SEE DETAIL SHEET [G2]

RECEIVED

JUL 26 2016

LICENSEES & PERMITS  
DIVISION

Jul 20, 2016  
Professional Engineer  
No. 35549  
ROGER AKMORTH  
STATE OF MARYLAND

ORDER # 7032939  
CUSTOMER # 6764428

**VECTOR ENGINEERS**  
9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U1382-351-182

CUSTOMER INFORMATION:  
DEPARTMENT OF PUBLIC WORKS  
9250 BENDIX RD  
COLUMBIA, MD 21045-1832

CUSTOMER CONTACT:  
JOHN CAPPELLETTI

CONTACT PHONE:  
410-382-7098

STRUCTURE SKU #:  
T085GBMF021160

STRUCTURE SIZE:  
85' X 160'

STRUCTURE DESCRIPTION:  
85x160 GBM TRUSS FRAME

SHEET TITLE:  
RAFTER PROFILES

DRAWING DETAILS  
DESIGNED BY: BHB  
CREATION DATE: 2/10/2016

REVISIONS:  
NO. BY: REVISION DATE:

1. SMN 5/24/2016

2.

3.

4.

NOT TO SCALE SHEET 2 OF 11X17

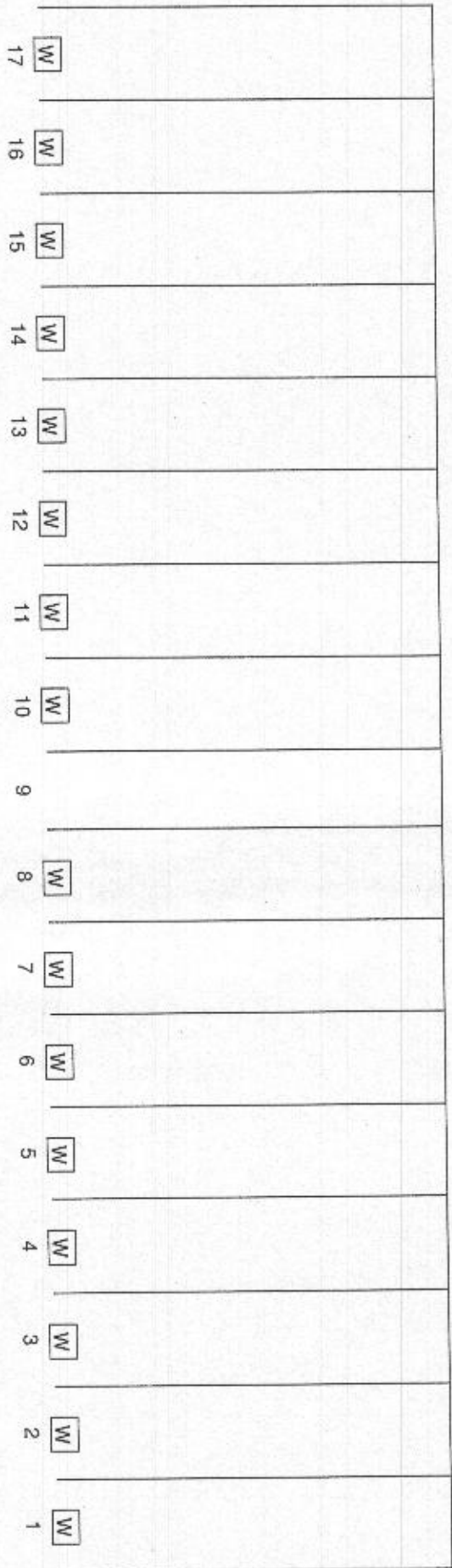
SHEET: E1



NOTE: REFER TO SHEET (E1) FOR FRONT PROFILE OF BRACE LOCATIONS & SHEET (C1) FOR PLAN VIEW OF DOOR LOCATIONS (IF APPLICABLE).

BACK OF STRUCTURE

BAY NUMBERS:

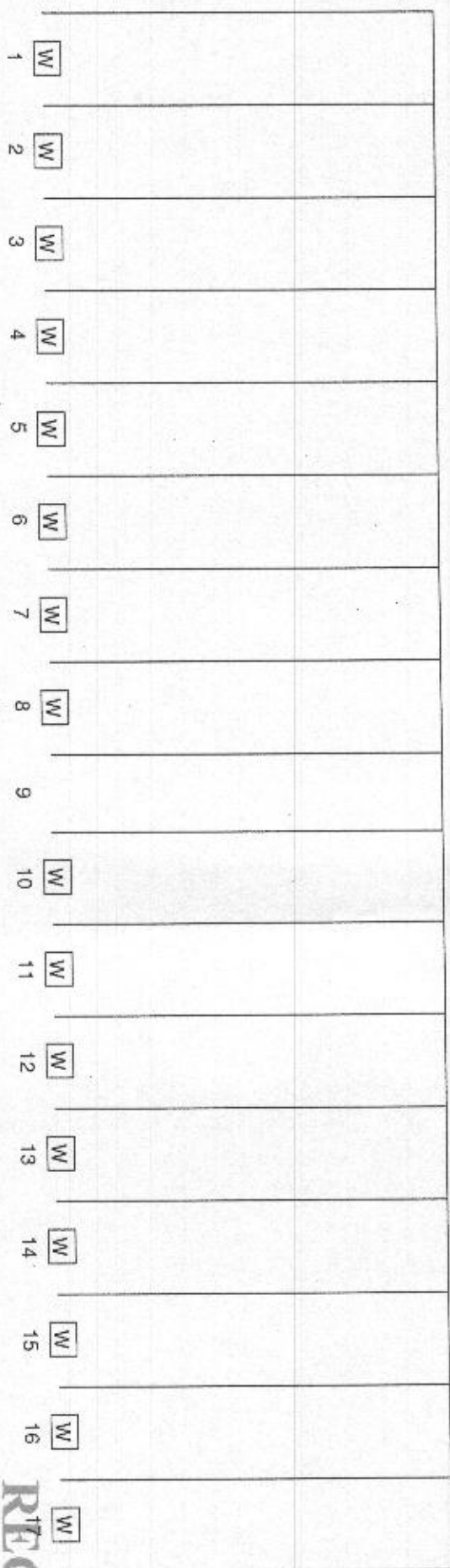


FRONT OF STRUCTURE

LEFT SIDE VIEW

FRONT OF STRUCTURE

BAY NUMBERS:



BACK OF STRUCTURE

W = WINCH PLATE LOCATION  
NOTE: WINCH PLATES (IF APPLICABLE) TO BE CENTERED BETWEEN RAFTERS, UNLESS NOTED OTHERWISE.

RIGHT SIDE VIEW

DESIGNED BY

**Vector**  
ENGINEERS

ENGINEERING SERVICES & PRODUCTS, CO.  
1440 E. 10TH AVE.  
DENVER, CO 80202  
303.733.1117  
WWW.VECOR.COM

CUSTOMER #

6764428

ORDER #

7032939

PROJECT NUMBER: U1382-351-162

5138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1932		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: SIDE PROFILES		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME

DRAWING DETAILS	
DRAWN BY: BIB	CREATION DATE: 2/19/2018
NO. BY: SMH	REVISION DATE: 6/24/2016
1	
2	
3	
4	
NOT TO SCALE	SHEET SIZE: 11x17
SHEET: F1	

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION

STATE OF MARYLAND

ROGER T. ALWORTH

PROFESSIONAL ENGINEER

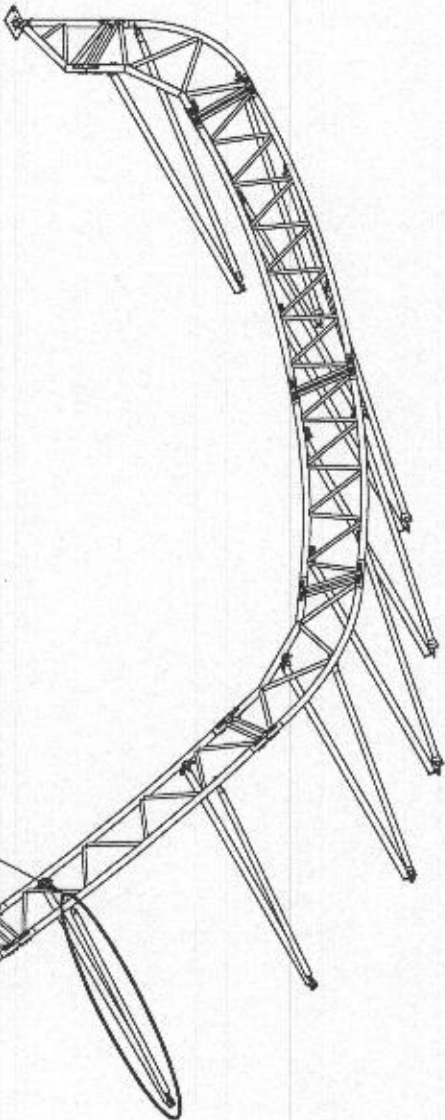
No. 35554

Jul 20, 2016

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35554, Expiration Date: 3-31-2018.



DETAIL LOCATION CALL-OUTS

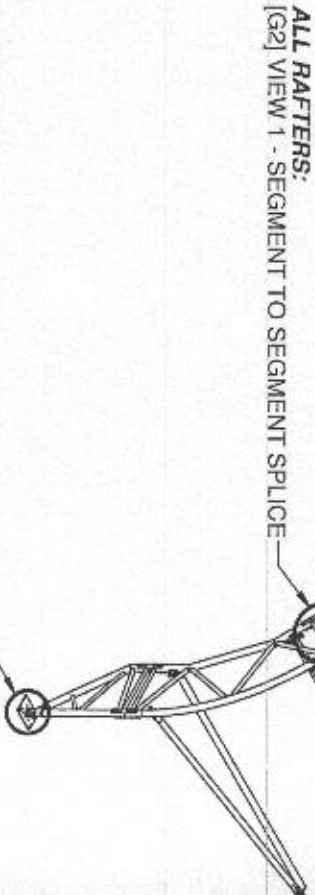


END BAYS:  
[G2] VIEW 6 - ANGLED BRACE CONNECTION (END BAYS ONLY)

MID BAYS:  
N/A

END RAFTERS:  
[G2] VIEW 2 - LATERAL BRACE CONNECTION (END BAY)

MID RAFTERS:  
[G2] VIEW 2 - LATERAL BRACE CONNECTION (END BAY)  
[G2] VIEW 3 - LATERAL BRACE CONNECTION (MID BAY TO MID BAY)

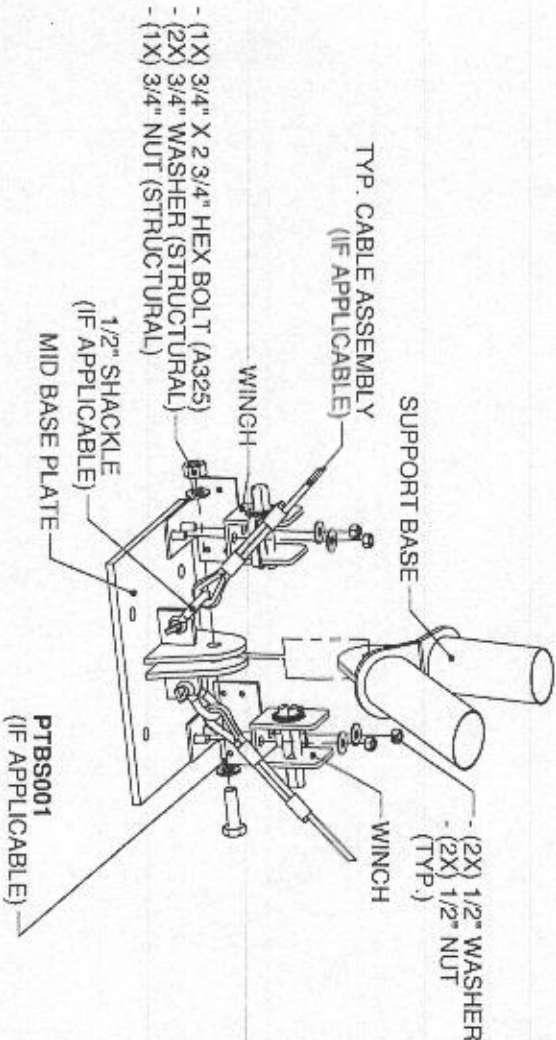


ALL RAFTERS:  
[G1] VIEW 2 - BASE TO SUPPORT BASE CONNECTION

DETAILS WITH LOCATION CALL-OUTS NOT SHOWN ON THIS SHEET:

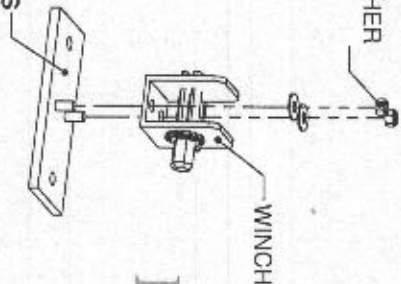
- [G1] VIEW 3 - WINCH PLATE CONNECTION (IF APPLICABLE)
- [G2] VIEW 4 - SIDE DOOR DETAIL (IF APPLICABLE)
- [G2] VIEW 5 - U-BOLT BRACE CONNECTION (IF APPLICABLE)
- [G3] VIEW 1 - CABLE SKU PER SPAN
- [G3] VIEW 2 - TYPICAL CABLE CONNECTION DETAIL
- [G3] VIEW 3 - TYPICAL CABLE ASSEMBLY
- [G3] VIEW 4 - SWAY CABLE CONNECTIONS
- [G3] VIEW 5 - SWAY CABLE CONNECTION (END BAY)
- [G3] VIEW 6 - SWAY CABLE CONNECTION (MID BAY TO MID BAY)
- [G3] VIEW 7 - TYPICAL SWAY CABLE ASSEMBLY

[G1] VIEW 1 - NOT USED



[G1] VIEW 2 - BASE TO SUPPORT BASE CONNECTION

- (2X) 1/2" WASHER  
- (2X) 1/2" NUT



[G1] VIEW 3 - WINCH PLATE  
CONNECTION (IF APPLICABLE)

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



Jul 20, 2016  
Professional Certification, I hereby certify that these documents were prepared or approved by me, and are true and correct to the best of my knowledge and belief.  
Expiration Date: 5/31/2018

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: DETAIL LOCATIONS & BASE DETAILS		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME

DRAWING DETAILS	NO. BY:	DATE:
1	SMN	6/24/2016
2		
3		
4		
NOT TO SCALE		SHEET DATE 11/17
SHEET:		G1

**VECTOR**  
ENGINEERS

9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

PROJECT NUMBER: U1382-351-162

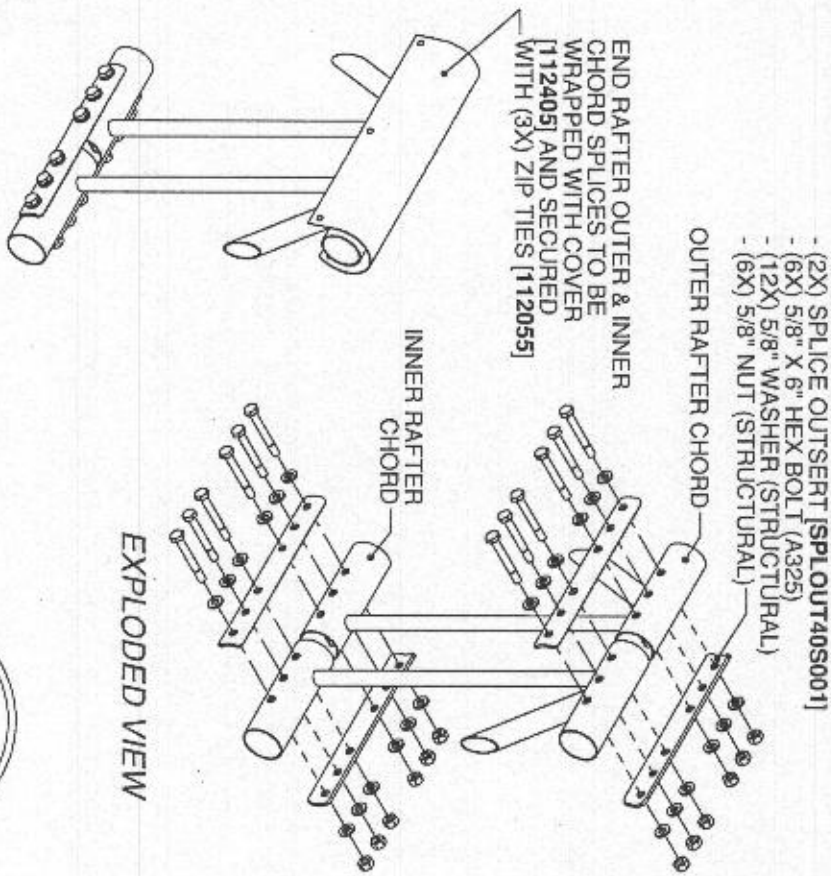
BRANDS  
CLEARSPAN  
1440' x 174' ASSEMBLY  
DIVISION, S. A. 10000  
P.O. BOX 10000  
WWW.CLEARSPAN.COM

CUSTOMER #:  
6764428

ORDER #:  
7032939

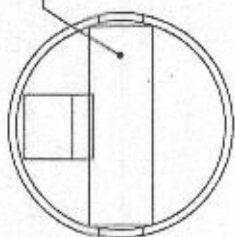


NOTES:  
• END RAFTER BOLT HEADS TO BE LOCATED AT EXTERIOR OF STRUCTURE  
REFER TO SHEET [E1] FOR SPLICE LOCATIONS.



EXPLODED VIEW

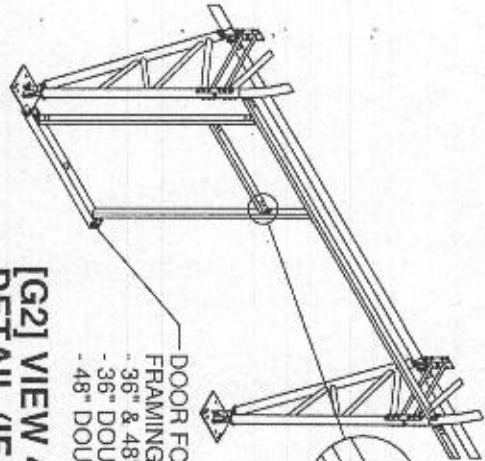
SEGMENT CHORDS TO BE MANUFACTURED  
WITH SLEEVES AT EACH SPLICE BOLT  
LOCATION.



INTERNAL CHORD VIEW

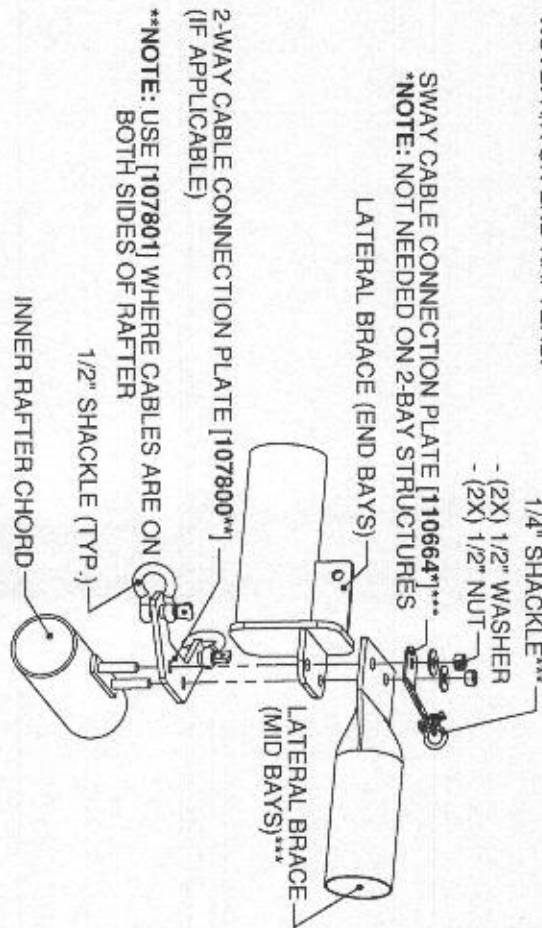
[G2] VIEW 1 - SEGMENT  
TO SEGMENT SPLICE

NOTE: VERIFY ROUGH OPENING PRIOR TO CUTTING TUBE.  
NOTE: THIS VIEW IS GENERIC TO ILLUSTRATE MAN DOOR FRAMING  
CONNECTIONS. RAFTER STYLE AND/OR OTHER DETAILS MAY NOT FULLY  
MATCH THE SPECIFICS FOR THIS PROJECT. SEE OTHER SHEETS FOR ORDER  
SPECIFIC DETAILS.

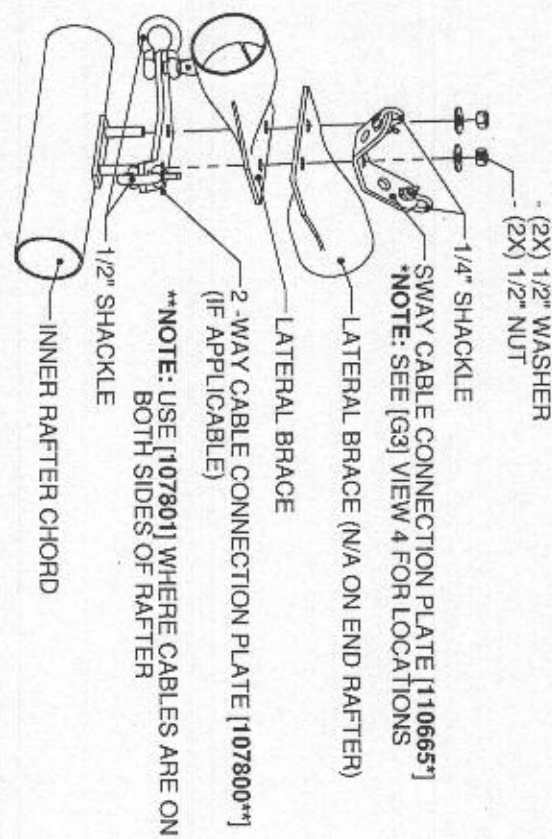


[G2] VIEW 4 - SIDE DOOR  
DETAIL (IF APPLICABLE)

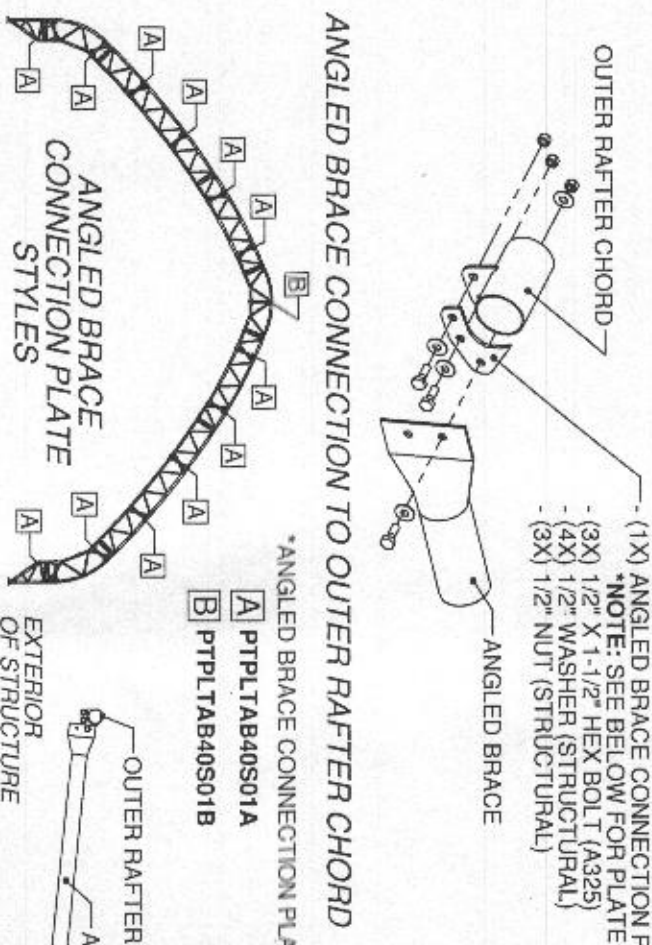
\*\*\*NOTE: N/A ON END RAFTERS.



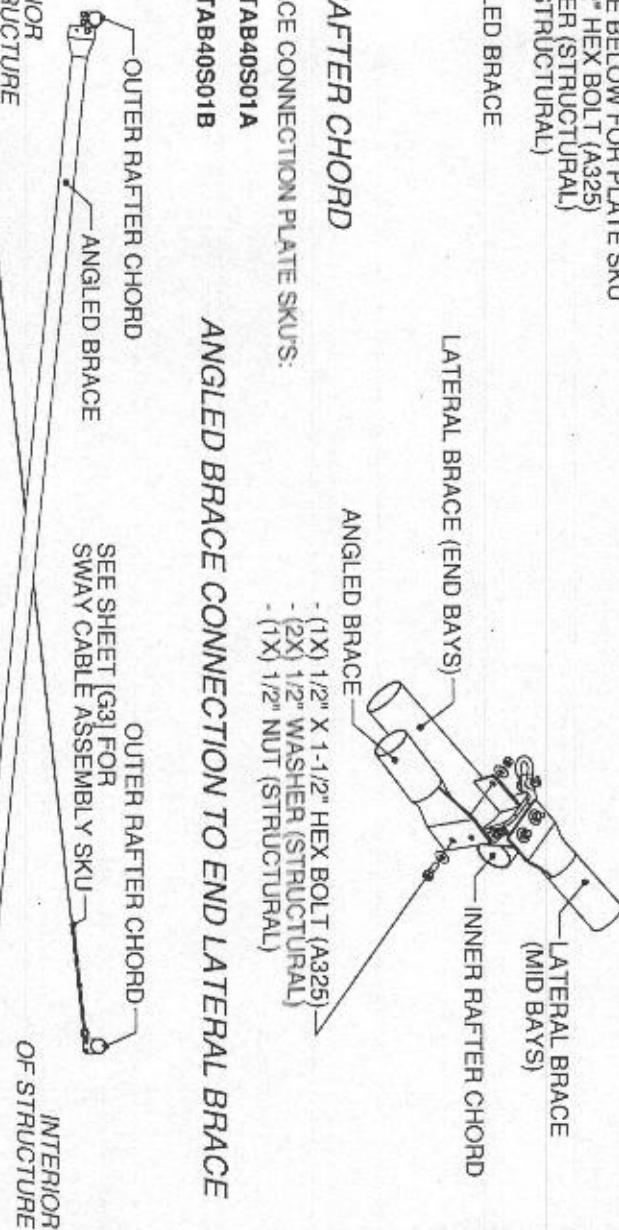
[G2] VIEW 2 - LATERAL BRACE  
CONNECTION (END BAY)



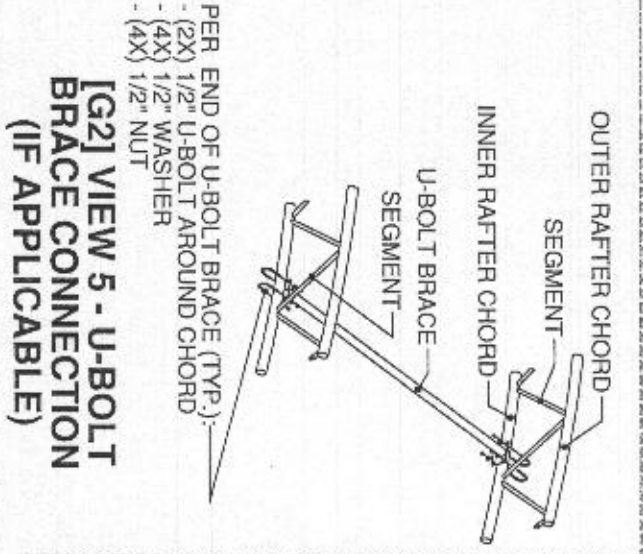
[G2] VIEW 3 - LATERAL BRACE CONNECTION  
(MID BAY TO MID BAY)



ANGLED BRACE CONNECTION TO OUTER RAFTER CHORD



ANGLED BRACE CONNECTION TO END LATERAL BRACE



[G2] VIEW 5 - U-BOLT  
BRACE CONNECTION  
(IF APPLICABLE)

[G2] VIEW 6 - ANGLED BRACE CONNECTION (END BAYS ONLY)

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: GENERAL CONNECTION DETAILS		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME

**VECTOR**  
ENGINEERS

9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

PROJECT NUMBER: U1362-351-162

**Vector**  
ENGINEERING SERVICES & PRODUCTS CO.

1400 S. 1400 W.  
SALT LAKE CITY, UT 84119  
PHONE: (801) 488-1212  
WWW.VECTORCO.COM

ORDER #: 7032939  
CUSTOMER #: 6764428

DRAWING DETAILS		
DRAWN BY:	CREATION DATE	
BHB	2/18/2016	
REVISIONS:		
NO.	BY:	REVISION DATE
1	SWH	8/24/2016
2		
3		
4		
NOT TO SCALE		
SHEET SIZE: 11X17		
SHEET: G2		



NOTES:

- RAFTER VIEW SHOWN REPRESENTS TYPICAL CABLE SPAN LABELS TO ILLUSTRATE LOCATIONS OF SPANS IN THE TABLE. THE CABLE PATTERN SHOWN MAY NOT FULLY MATCH THE SPECIFICS FOR THIS PROJECT.
- CABLE PATTERN REPEATS ON OPPOSITE SIDE OF  $\phi$  UNLESS NOTED OTHERWISE.
- CABLE IS NOT PRESENT IN BAY NUMBERS NOT LISTED IN TABLE.

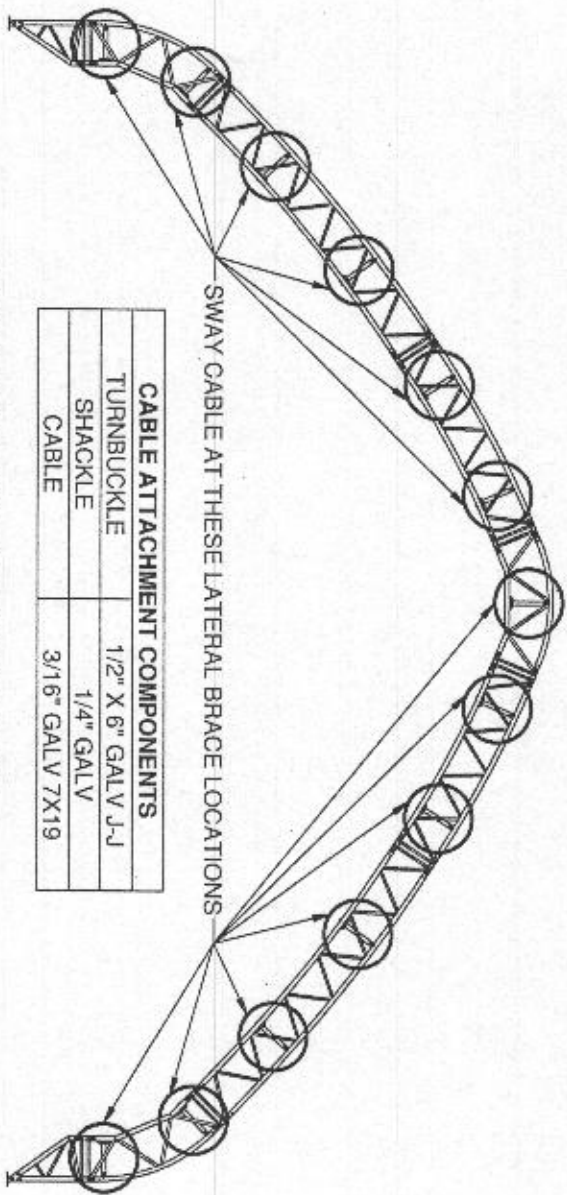
CABLE ATTACHMENT COMPONENTS	
TURNBUCKLE	3/4" X 9" GALV E-E
SHACKLE	1/2" GALV
CABLE	1/2" GALV 6X26

\*REFER TO SHEET [C1] FOR BAY NUMBERING

CABLE ASSEMBLY SKUS						
BAY NUMBER*	SPAN 'A'	SPAN 'B'	SPAN 'C'	SPAN 'D'	SPAN 'E'	SPAN 'F'
1 & 17	CAB50G0811	CAB50G0800	CAB50G0903	CAB50G1005	CAB50G1005	CAB50G0811
2 & 16	CAB50G0811	CAB50G0800	CAB50G0903	CAB50G1005	CAB50G1005	N/A
3, 8, 10 & 15	CAB50G0811	CAB50G0800	CAB50G0903	CAB50G1005	N/A	N/A
4, 7, 11 & 14	CAB50G0811	CAB50G0800	CAB50G0903	N/A	N/A	N/A
5, 6, 12 & 13	CAB50G0811	CAB50G0800	N/A	N/A	N/A	N/A
9	CAB50G0709	CAB50G0610	CAB50G0802	CAB50G0905	CAB50G0905	CAB50G0808

[G3] VIEW 1 - CABLE SKU PER SPAN

SWAY CABLE REPEATS DOWN LENGTH OF BUILDING AT LOCATIONS SHOWN BELOW

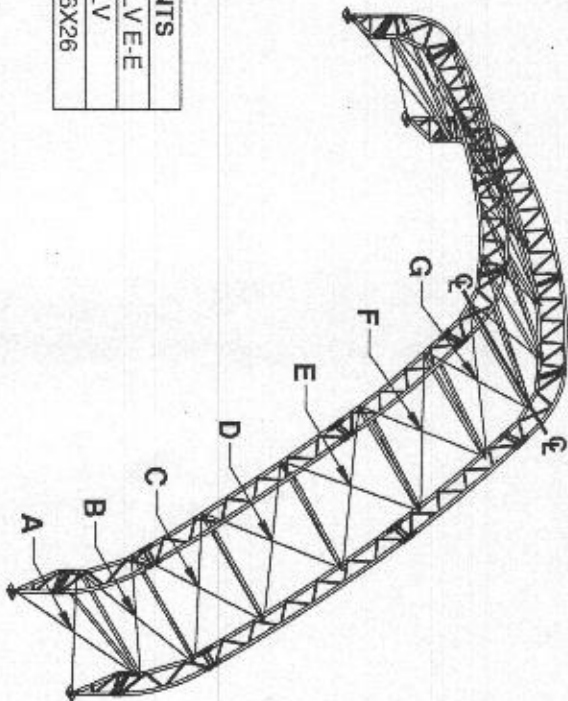


CABLE ATTACHMENT COMPONENTS	
TURNBUCKLE	1/2" X 6" GALV J-J
SHACKLE	1/4" GALV
CABLE	3/16" GALV 7X19

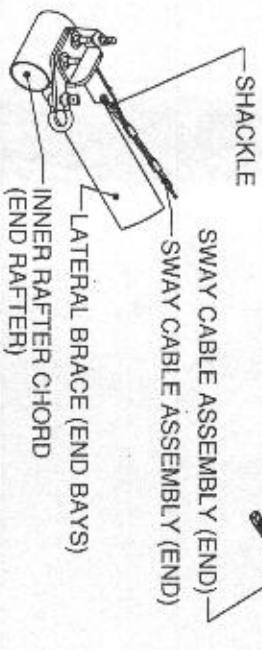
\*REFER TO SHEET [C1] FOR BAY NUMBERING

SWAY CABLE ASSEMBLY SKUS	
BAY NUMBER*	SWAY CABLE SKU
1 & 17	CAB18G0710
2 - 8 & 10 - 16	CAB18G0801
9	CAB18G0607

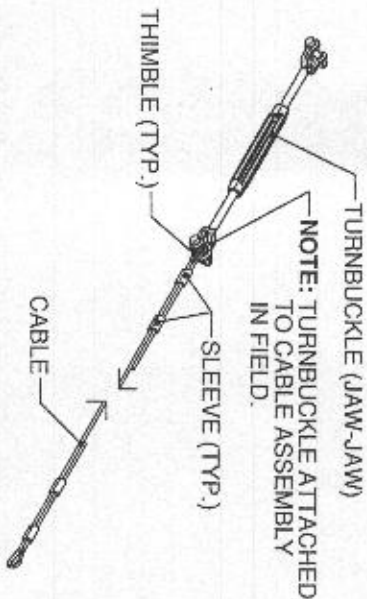
[G3] VIEW 4 - SWAY CABLE LOCATIONS



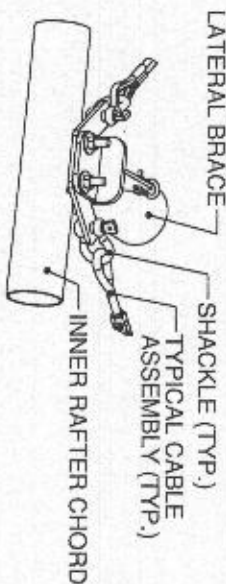
OUTER RAFTER CHORD (MID RAFTER)



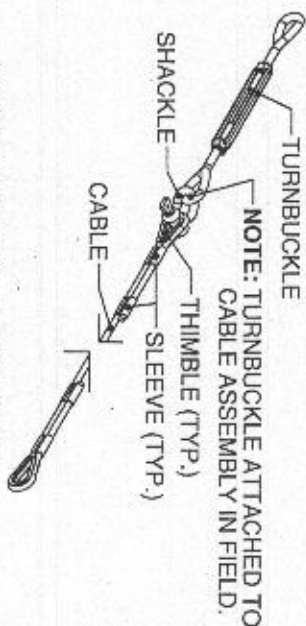
[G3] VIEW 5 - SWAY CABLE CONNECTION (END BAY)



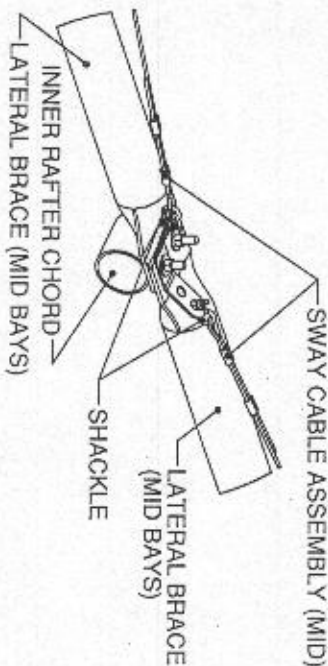
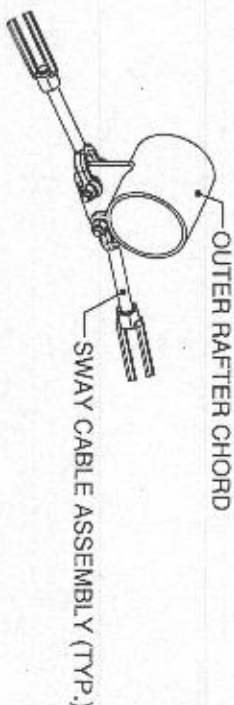
[G3] VIEW 7 - TYPICAL SWAY CABLE ASSEMBLY



[G3] VIEW 2 - TYPICAL CABLE CONNECTION DETAIL



[G3] VIEW 3 - TYPICAL CABLE ASSEMBLY



[G3] VIEW 6 - SWAY CABLE CONNECTION (MID BAY TO MID BAY)



RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION

JUL 20, 2016

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35546, Expiration Date: 3-31-2019.



CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: CABLE LAYOUT & DETAILS		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME



**VECTOR**  
ENGINEERS

5138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

PROJECT NUMBER: U1382-351-162



**OverSpan**  
ENGINEERING SERVICES, A PROCONICS CO.

1402 18TH AVENUE SW  
DURHAM, NC 27604  
P: 919.485.5013  
WWW.OVERSPAN.COM

ORDER #:  
7032939

CUSTOMER #:  
6764428

DRAWING DETAILS	
DRAWN BY: CHEN	DATE: 07/20/16
REVISIONS:	REVISION DATE:
1. BY: SWN	08/04/16
2.	
3.	
4.	
SHEET: G3	

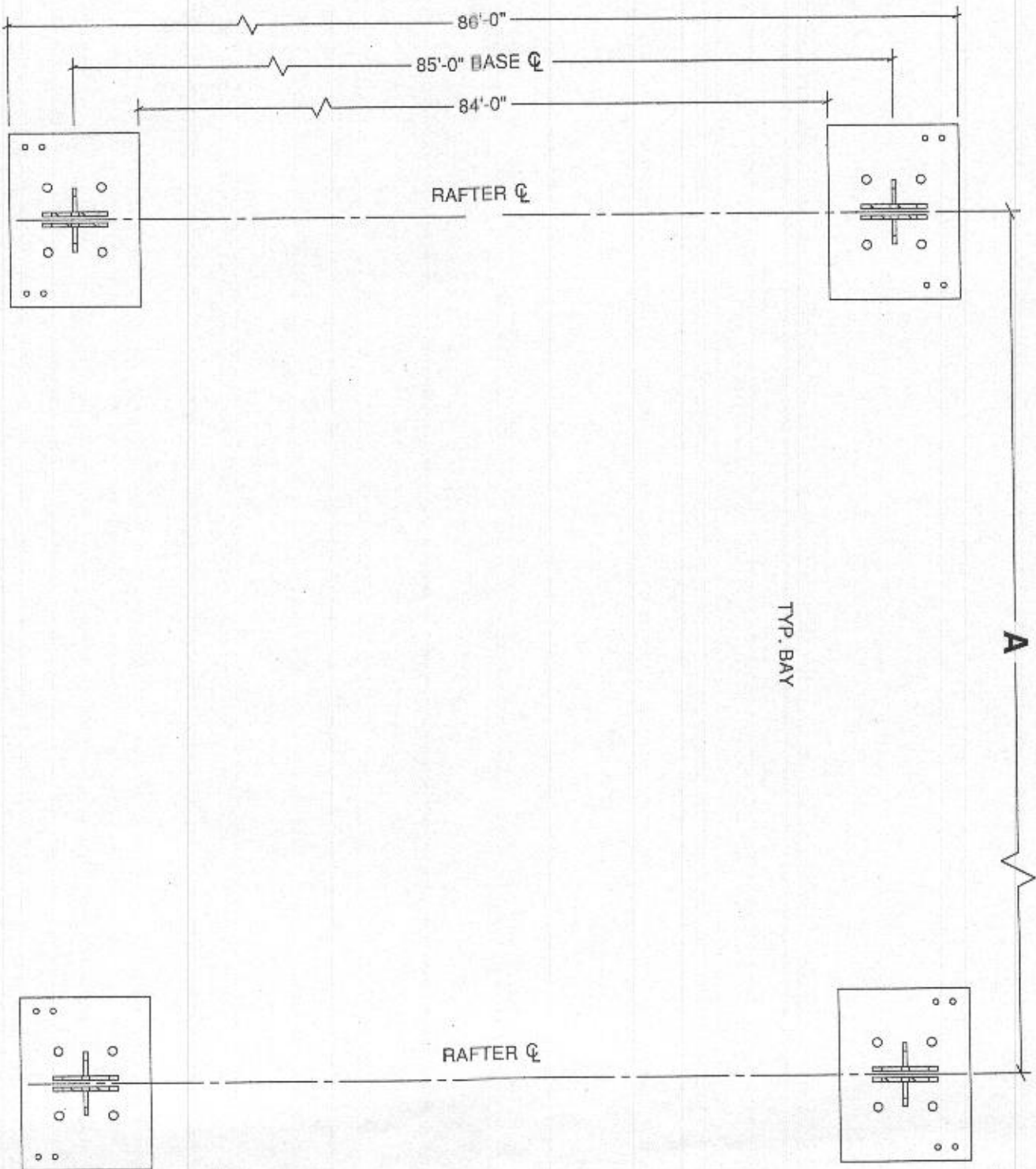


REFER TO SHEET [C1] FOR BAY NUMBERING

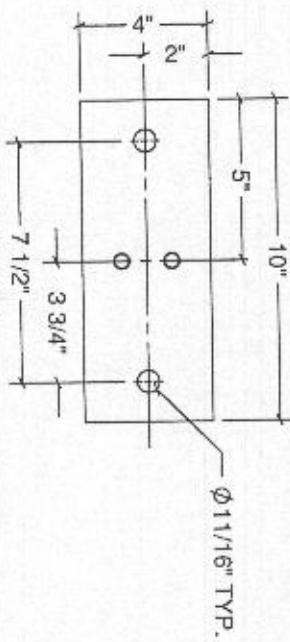
BAY NUMBER*	A (RAFTER SPACING)
1 - 8 & 10 - 17	9'-6"
9	8'-0"

REFER TO SHEET [E1] FOR BASE LOCATIONS

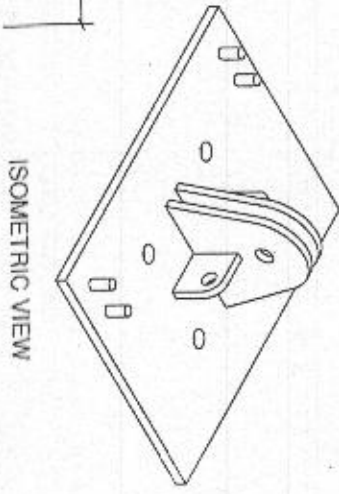
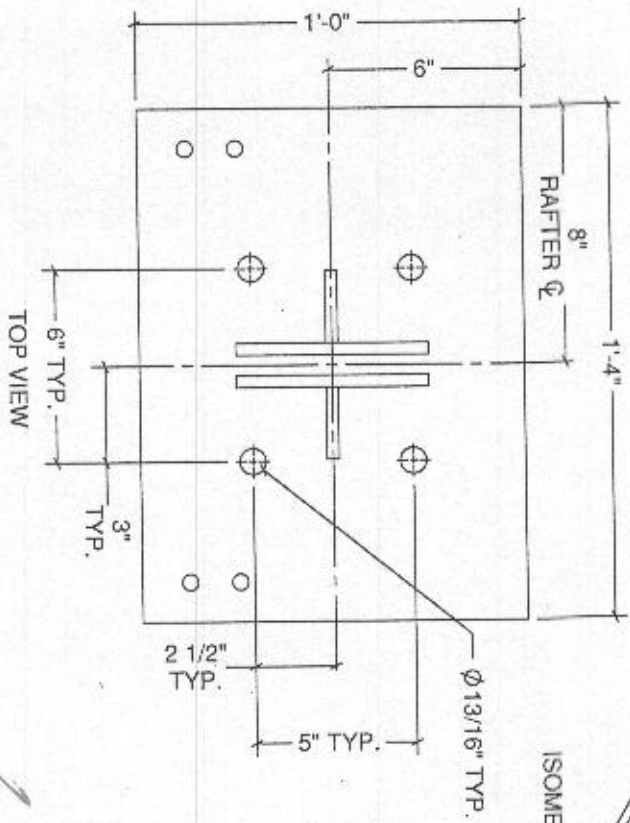
RAFTER TYPE	LEFT BASE SKU*	RIGHT BASE SKU*
END	BP061GBM	BP061GBM
MID	BP061GBM	BP061GBM



NOTE: REFER TO SHEET [F1] FOR WINCH PLATE LOCATIONS.



WP1004WS DETAILS (IF APPLICABLE)



BP061GBM DETAILS

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: <b>T085GBMF021160</b>	
CUSTOMER CONTACT: JOHN CAPPELLETTI		CONTACT PHONE: 410-382-7098	
SHEET TITLE: <b>BASE PLATE LAYOUT &amp; DETAILS</b>		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME	

DRAWING DETAILS DRAWN BY: BHB CHECKED BY: BHB DATE: 7/18/2016		REVISIONS: NO. 01: 5/24/2016 BY: BHB	
SHEET: <b>H1</b>		PROJECT NUMBER: U1382-351-162	

**VECTOR**  
 ENGINEERS  
 9138 S. STATE STREET, SUITE 101  
 SANDY, UTAH 84070  
 (801) 990-1775  
 (801) 990-1776 FAX

ORDER #:  
**7032939**

CUSTOMER #:  
**6764428**

ENGINEER:  
 LANCE K. ANDERSON, LICENSED PROFESSIONAL ENGINEER  
 1410 WEST AVENUE, SUITE 100  
 DENVER, CO 80202  
 (303) 733-1111  
 WWW.VECTOR-ENG.COM

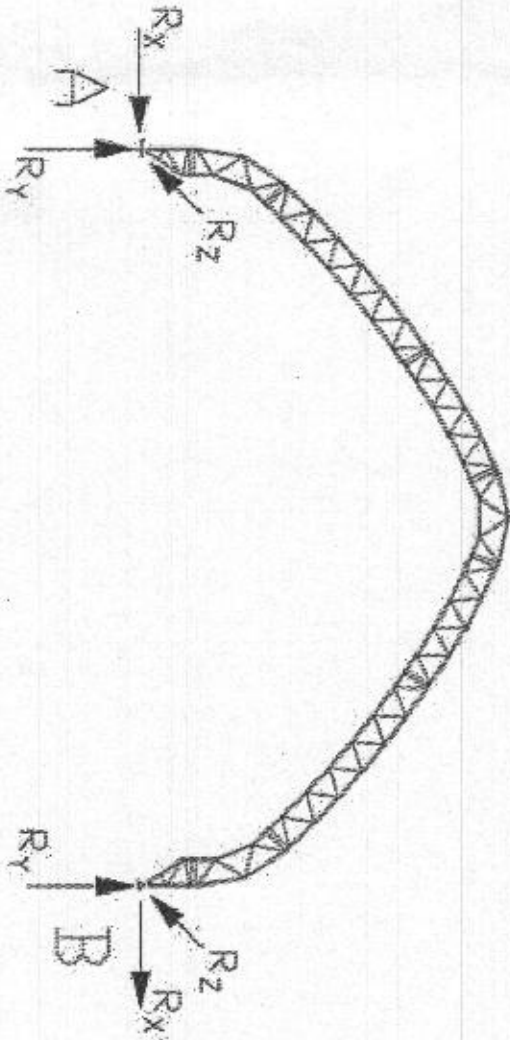


FOUNDATION NOTES:

- REFER TO FOUNDATION DRAWINGS BY VECTOR ENGINEERS.
- FOUNDATION MUST MEET THE BUILDING REACTION DATA SHOWN BELOW.
- SEE ENDWALL DRAWINGS FOR ENDWALL REACTIONS (IF APPLICABLE).

*See notes below	UNFACTORED BASE REACTIONS TO CONSIDER AT TYPICAL BASES					
	Side A			Side B		
	Rx (kip)	Ry (kip)	Rz (kip)	Rx (kip)	Ry (kip)	Rz (kip)
Dead Load, Self Weight	DL	0.55	1.34	-0.55	1.34	
Dead Load, Collateral	EL	0.29	0.50	-0.29	0.50	
Snow Load, Balanced	S	3.03	5.08	-3.03	5.08	
Snow Load, Unbalanced	Su	2.55	3.09	-2.55	4.94	
Wind Load	Wx	-7.31	-7.97	-2.97	-8.56	
Wind Load	Wx2	-4.77	5.50	-5.51	4.91	
Wind Load	Wz2	-2.55	-16.31	4.26	-15.67	
Wind Load	Wz2	-0.02	-2.83	1.72	-2.20	
Roof Live Load	Lr	6.66	12.11	-6.66	12.11	
0	0	0.00	0.00	0.00	0.00	

*See notes below		ADDITIONAL UNFACTORED BASE REACTIONS TO CONSIDER AT BASES WITH CABLE ATTACHED					
Load Case		Side A			Side B		
		Rx (kip)	Ry (kip)	Rz (kip)	Rx (kip)	Ry (kip)	Rz (kip)
Wind Load	Wz	-3.72	-17.67	1.21	5.18	-16.76	1.12
Dead Load, Cable (Wz)	DL	0.02	0.09		-0.02	0.09	
Wind Load	Wz2	-3.43	6.78	0.02	-4.32	3.94	0.01
Dead Load, Cable (Wz2)	DL	0.05	0.14		-0.05	0.14	



CONTROLLING ASD COMBINATIONS TO CONSIDER AT TYPICAL BASES		
Max Gravity (kip)	13.96	DL + EL + Lr
Max Uplift (kip)	-8.98	0.6DL + 0.6Wz
Max Inward Lateral (kip)	-4.05	0.6DL + 0.6Wx
Max Outward Lateral (kip)	-8.32	DL + EL + 0.75Lr + 0.45Wx2

ADDITIONAL CONTROLLING ASD COMBINATIONS TO CONSIDER AT BASES WITH CABLE ATTACHED		
Max Gravity (kip)	14.12	DL + EL + 0.75Lr + 0.45Wz2
Max Uplift (kip)	-9.74	0.6DL + 0.6Wz
Max Inward Lateral (kip)	-4.04	0.6DL + 0.6Wx
Max Outward Lateral (kip)	-8.34	DL + EL + 0.75Lr + 0.45Wx2

Notes:

- a. The above Reaction Data should be combined as required by the Load Combinations from IBC or other applicable code.

V2.4



9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U1382-351-162

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU # T085GBMF021160
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: BUILDING REACTION DATA		STRUCTURE DESCRIPTION: 85x160 GBM TRUSS FRAME



Jul 20, 2016  
Professional Engineer, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549.  
Expiration Date: 3/4/2018

DRAWING DETAILS	
DRAWN BY: BHB	CREATION DATE: 2/18/2016
REVISIONS:	
NO. BY: REVISION DATE:	
1 SMW 6/24/2016	
2	
3	
4	
NOT TO SCALE	SHEET SIZE: 11x17
SHEET: J1	

ORDER #: 7032939	
CUSTOMER #: 6764428	



NOTES:

- ALL DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE NOTED.
- FRAMING FOR WALK DOORS, VENTS, AND ADDITIONAL FRAMING, IF REQUIRED, WILL BE CUT IN FIELD USING 2" X 3" RECTANGULAR TUBING & 107923 OR 110356AL1/110356BAL1 INSERTS.
- DIMENSIONS FOR TELESCOPING PURLIN LOCATIONS ARE APPROXIMATE. LOCATIONS CAN BE FIELD ADJUSTED +/- 12" FROM WHAT IS SHOWN.
- FOUNDATION ELEMENTS ARE NOT SHOWN.

LINE STYLES:  
COLUMN: \_\_\_\_\_  
HEADER: \_\_\_\_\_  
TELESCOPING PURLIN: \_\_\_\_\_  
2" X 3" TUBING: \_\_\_\_\_

FRAME-OUT SCHEDULE

CALL-OUT	DESCRIPTION	ROUGH OPENING
A	20'-0" X 20'-0" OPENING	20'-0" X 20'-0"
B	3'-0" X 3'-0" LOUVER	VERIFY

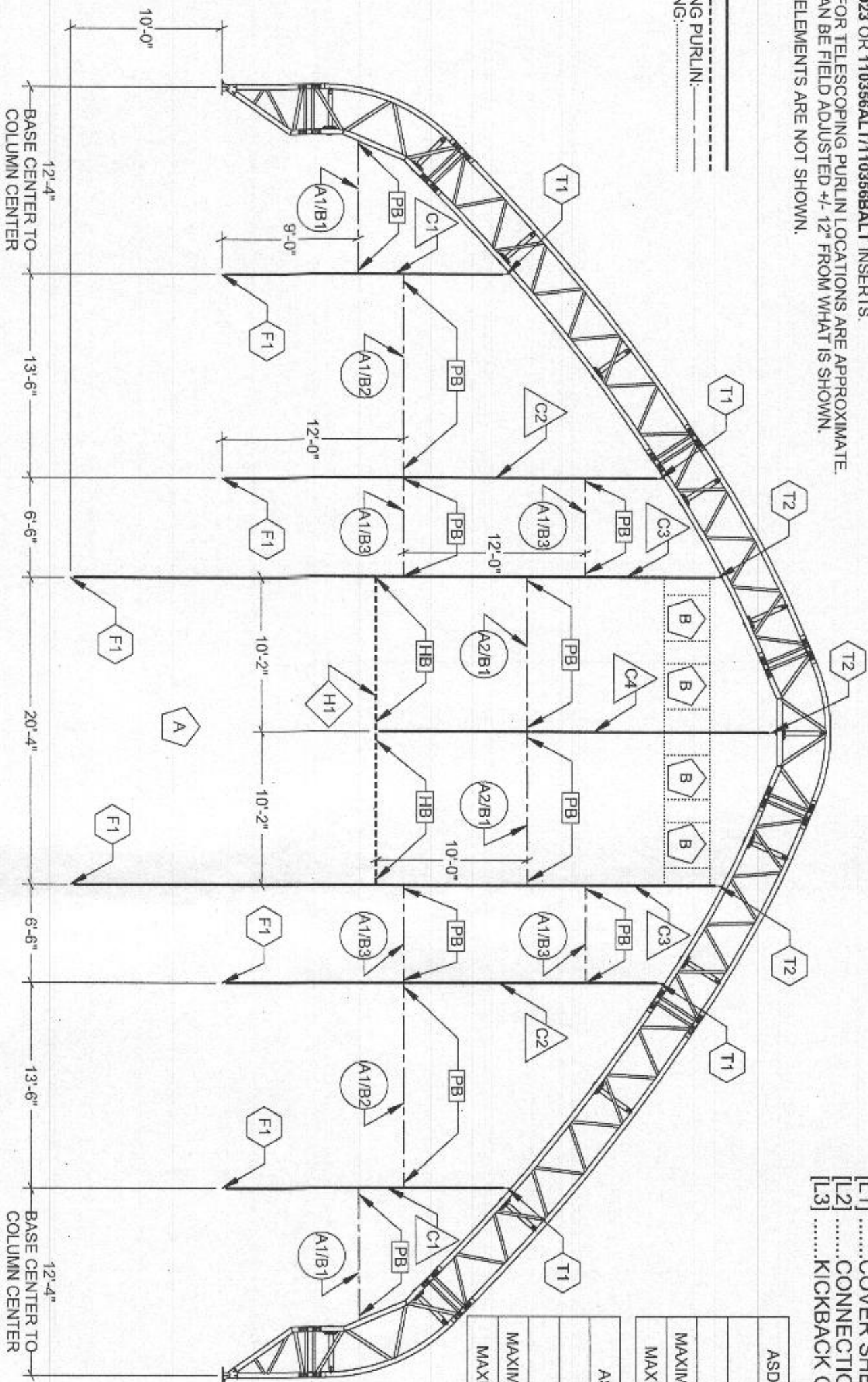
EW085GBF0531D

85GB END WL 20X-C(4)36"VNTS DRCOL+10'

ENDWALL CONTENT GUIDE:

- [L1] ..... COVER SHEET/PART LOCATIONS/LAYOUT
- [L2] ..... CONNECTION DETAILS
- [L3] ..... KICKBACK CONNECTION DETAILS

ASD ENDWALL COLUMN REACTIONS @ C1 & C2	
MAXIMUM GRAVITY	740 LBS
MAXIMUM NET UPLIFT	450 LBS
MAXIMUM HORIZONTAL {0.6 * MWFRS}	2640 LBS
MAXIMUM HORIZONTAL {0.6 * C&C}	3680 LBS
ASD ENDWALL COLUMN REACTIONS @ C3	
MAXIMUM GRAVITY	7950 LBS
MAXIMUM NET UPLIFT	6760 LBS
MAXIMUM HORIZONTAL {0.6 * MWFRS}	870 LBS
MAXIMUM HORIZONTAL {0.6 * C&C}	1140 LBS



COLUMNS

4" X 4", 8 GA, 2-PLY SQUARE TUBE

C1: EWC2P220G08

4" X 4", 8 GA, 3-PLY SQUARE TUBE

C2: EWC3P342G08  
C3: EWC3P508G08

4" X 4", 8 GA, 2-PLY SQUARE TUBE  
C4: EWM2P308G08

HEADERS

4" X 4", 8 GA, 2-PLY SQUARE TUBE

H1: EWH2P23875G08

TELESCOPING PURLINS

2.0" OD, 11 GA ROUND PIPE

A1: 200TP050  
A2: 200TP060

INSERTS

TOP COLUMN INSERTS  
(3.5" SQ. TUBE / 3/16" STEEL PLATE)

T1: 106757  
T2: 108151SA/108151SB

BRACKETS

PURLIN BRACKET (1/8" STEEL PLATE)

PB: 106755

HEADER BRACKET (3/16" STEEL PLATE)

HB: EWHB2P

RECEIVED

JUL 26 2016

LICENSES & PERMITS

DIVISION

JUL 20, 2016

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549, Expiration Date: 3-Apr-2018



CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: EW085GBF0531D
CUSTOMER CONTACT: JOHN CAPPELLETTI		CONTACT PHONE: 410-382-7098
SHEET TITLE: COVER SHEET/PART LOCATIONS/LAYOUT		STRUCTURE SIZE: 85' X 160'
		STRUCTURE DESCRIPTION: 85GB END WL 20X-C(4)36"VNTS DRCOL+10'



9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

PROJECT NUMBER: U1382-351-162

ORDER # 7032939	
CUSTOMER # 6764428	

DRAWING DETAILS	
DRAWN BY: SKM	CREATION DATE: 02/12/16
REV. NO.	REVISIONS:
1	REVISION DATE:
2	
3	
4	
SHEET: L1	

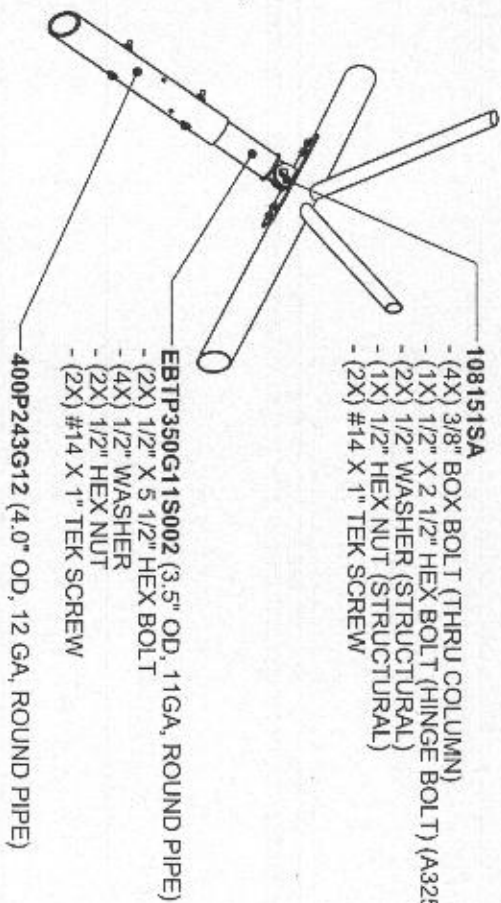




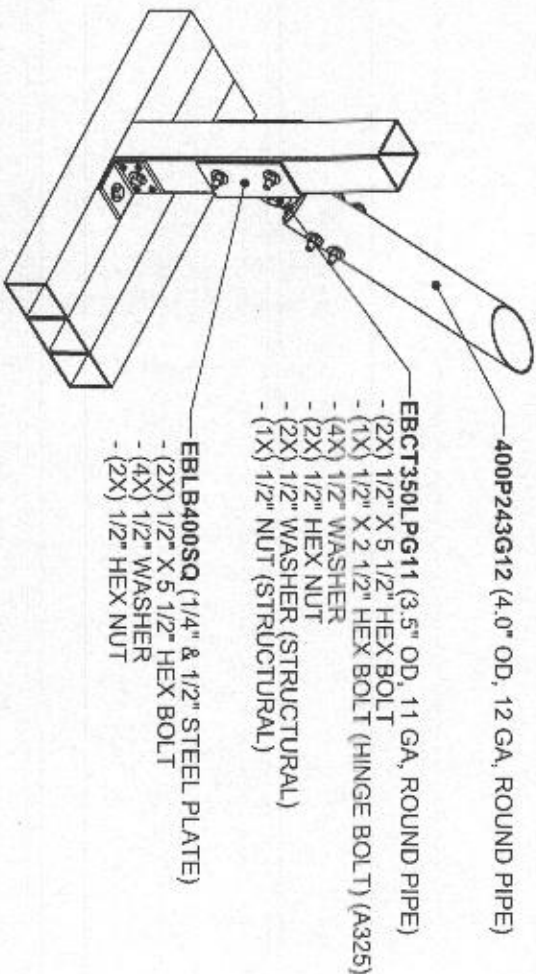


NOTE: USE (2X) #14 X 1" TEK  
SCREWS FOR TEMPORARILY  
HOLDING KICKBACK POSITION.

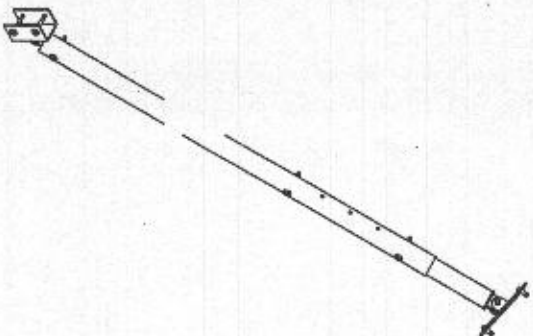
VIEW 1: KICKBACK CONNECTION DETAILS AT INTERIOR TRUSS



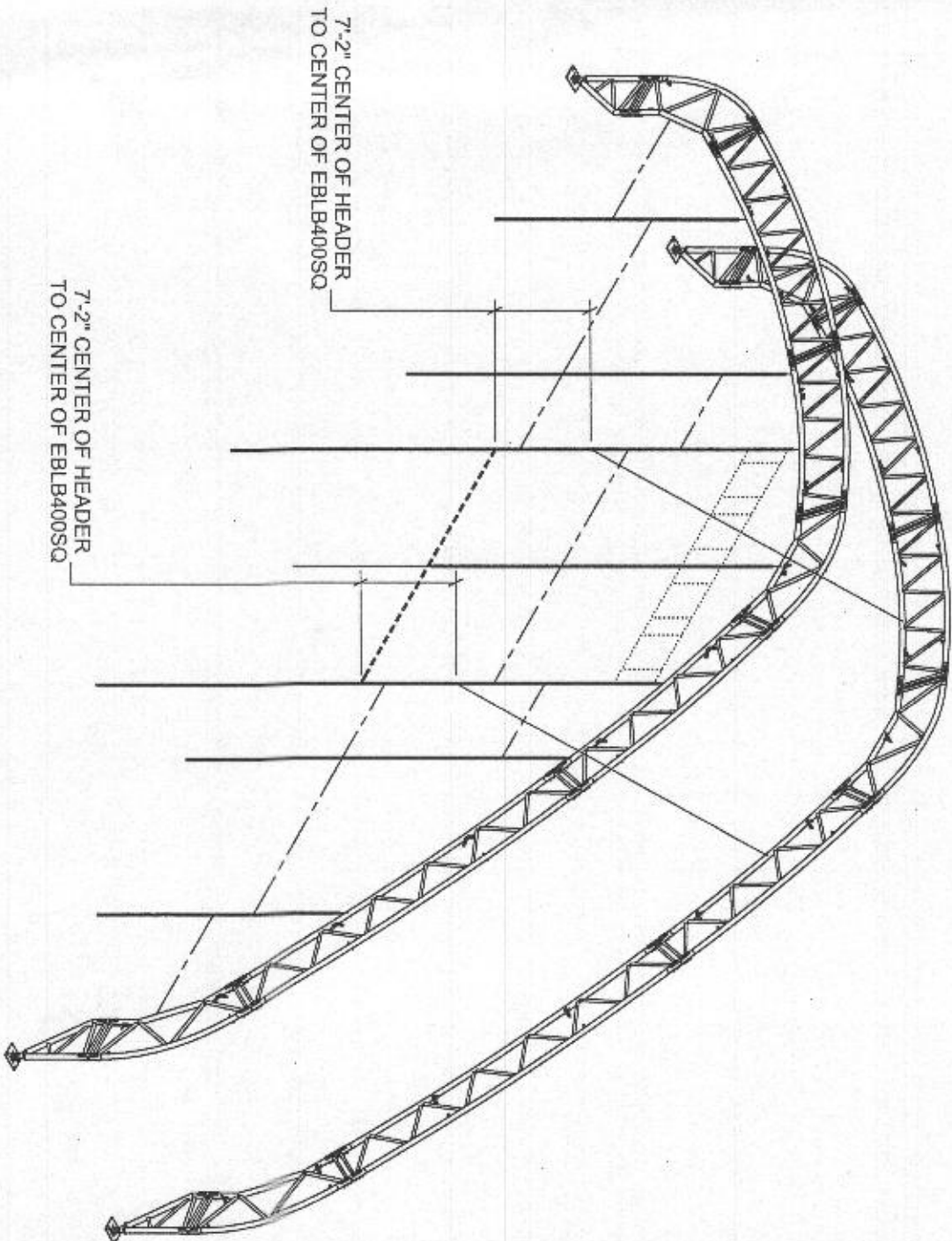
VIEW 2: KICKBACK CONNECTION DETAILS AT COLUMN



VIEW 3: TYPICAL KICKBACK ASSEMBLY



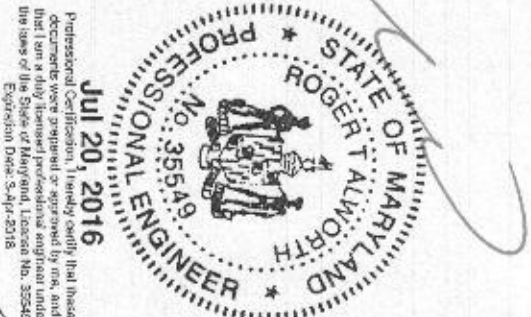
NOTE: LATERAL AND ANGLED BRACES NOT SHOWN FOR CLARITY.



RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



DRAWING DETAILS		
DESIGNED BY:	CREATION DATE:	
SIN#	BIZ120110	
REVISIONS:		
NO.	BY:	REVISION DATE
1		
2		
3		
4		
NOT TO SCALE		
SHEET SIZE: 11X17		
SHEET:		
L3		

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU #: EW085GBF0531D
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: KICKBACK CONNECTION DETAILS		STRUCTURE DESCRIPTION: 85GB END WL 20X-C/(4)36"VNTS DRCOL+10"



**VECTOR**  
ENGINEERS

9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX

PROJECT NUMBER: U1362-351-162



CHIEF SYSTEMS, INC.  
ENGINEERING SERVICES & PRODUCTS CO.  
1435 JEFFERSON AVE  
SANDY, UTAH 84070  
P: (801) 990-1775  
F: (801) 990-1776  
WWW.CHIEFSYSTEMS.COM

ORDER #:  
70329339

CUSTOMER #:  
6764428



NOTES:  
ALL DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE NOTED.

FRAMING FOR WALK DOORS, VENTS, AND ADDITIONAL FRAMING, IF REQUIRED, WILL BE CUT IN FIELD USING 2" X 3" RECTANGULAR TUBING & 107923 OR 110356AL T/110356BAL T INSERTS.  
DIMENSIONS FOR TELESCOPING PURLIN LOCATIONS ARE APPROXIMATE. LOCATIONS CAN BE FIELD ADJUSTED +/- 12" FROM WHAT IS SHOWN.  
FOUNDATION ELEMENTS ARE NOT SHOWN.

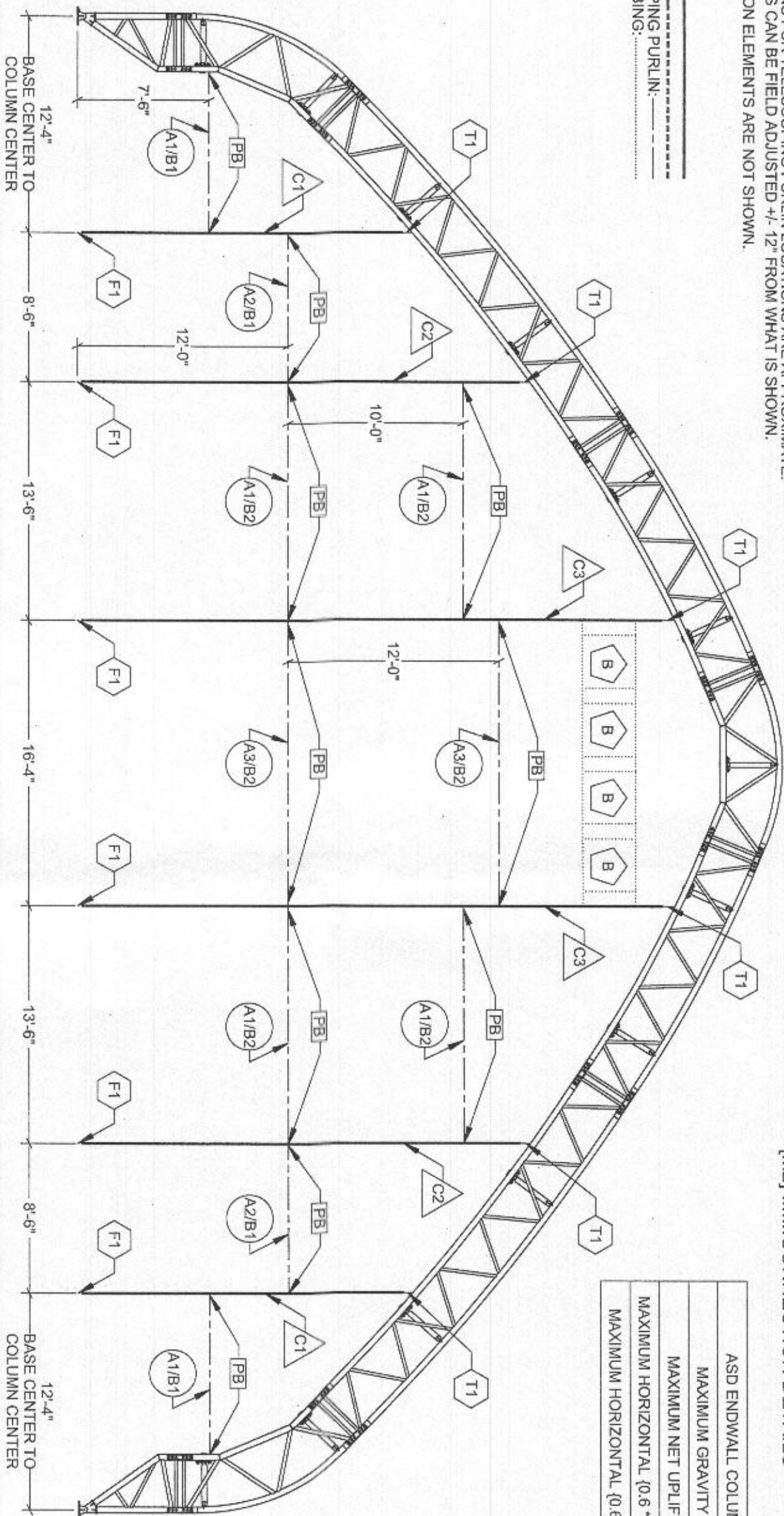
LINE STYLES:  
COLUMN: ———  
HEADER: - - - - -  
TELESCOPING PURLIN: - - - - -  
2" X 3" TUBING: . . . . .

FRAME-OUT SCHEDULE		
CALL-OUT	DESCRIPTION	ROUGH OPENING
B	3'-0" X 3'-0" LOUVER	VERIFY

ENDWALL CONTENT GUIDE:  
[M1] ..... COVER SHEET/PART LOCATIONS/LAYOUT  
[M2] ..... CONNECTION DETAILS

EW085GBF0480D  
85GB SOLID END WL

ASD ENDWALL COLUMN REACTIONS	
MAXIMUM GRAVITY	880 LBS
MAXIMUM NET UPLIFT	330 LBS
MAXIMUM HORIZONTAL {0.6 * MWFRS}	4710 LBS
MAXIMUM HORIZONTAL {0.6 * C&C}	6150 LBS



△ COLUMNS  
4" X 4", 8 GA, 2-PLY SQUARE TUBE

C1: EWC2P220G08  
C2: EWC2P300G08

4" X 4", 8 GA, 3-PLY SQUARE TUBE

C3: EWC3P397G08

○ TELESCOPING PURLINS  
2.0" OD, 11 GA ROUND PIPE

A1: 200TP050  
A2: 200TP036  
A3: 200TP078

2.375" OD, 14 GA ROUND PIPE

B1: 2375TP085  
B2: 2375TP138

◇ INSERTS  
TOP COLUMN INSERTS  
(3.5" SQ. TUBE / 3/16" STEEL PLATE)

T1: 106757

□ BRACKETS  
PURLIN BRACKET (1/8" STEEL PLATE)

PB: 106755

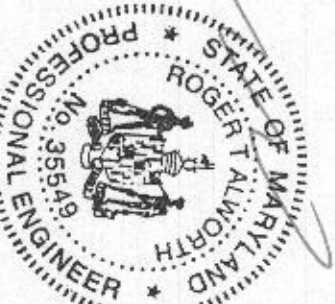
◇ INSERTS  
BOTTOM COLUMN INSERTS  
(3.5" SQ. TUBE / 3/8" STEEL PLATE)

F1: 111700

RECEIVED

JUL 26 2016

LICENSES & PERMITS  
DIVISION



Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549.  
Expiration Date: 3-Apr-2018

DRAWING DETAILS	
DRAWN BY: BMB	CREATION DATE: 2/17/2016
REVISIONS:	
NO. BY: 1 JAE	REVISION DATE: 6/24/2016
2	
3	
4	
NOT TO SCALE	
SHEET SIZE: 11x17	
SHEET: M1	

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9250 BENDIX RD COLUMBIA, MD 21045-1832	
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098
SHEET TITLE: COVER SHEET/PART LOCATIONS/LAYOUT	
STRUCTURE SKU #: EW085GBF0480D	STRUCTURE SIZE: 85' X 160'
STRUCTURE DESCRIPTION: 85GB SOLID END WL	

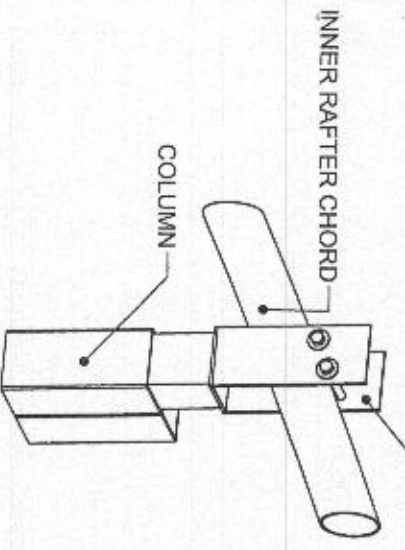
**VECTOR ENGINEERS**  
9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U1362-351-162

**CRENSHAW**  
ENGINEERING SERVICES & PRODUCTS CO.  
1000 WEST 1000 SOUTH  
SALT LAKE CITY, UT 84119  
TEL: 801.466.1113  
WWW.CRENSHAW.COM

ORDER #: 7032939  
CUSTOMER #: 6764428



**TOP COLUMN INSERT**  
- (2X) 1/2" X (SEE CHART) HEX BOLT  
- (4X) 1/2" WASHER  
- (2X) 1/2" HEX NUT

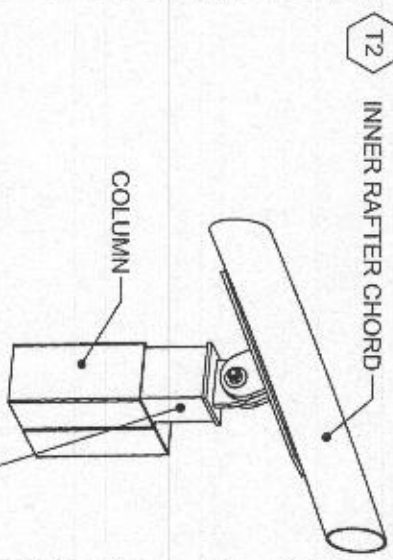


HEX BOLT LENGTH BASED ON CHORD DIA.	
CHORD DIA.	HEX BOLT LENGTH
2.375"	3 1/2"
2.875", 3.50"	4 1/2"
4.0"	5 1/2"
5.0"	6 1/2"

\* 5.0" CHORDS WILL REQUIRE 3/4" HARDWARE

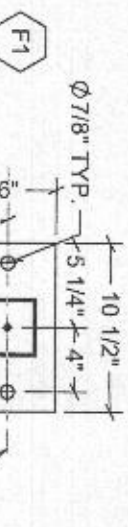
**VIEW 1: TOP COLUMN INSERT DETAIL**  
(IF APPLICABLE)

**T2 INNER RAFTER CHORD**

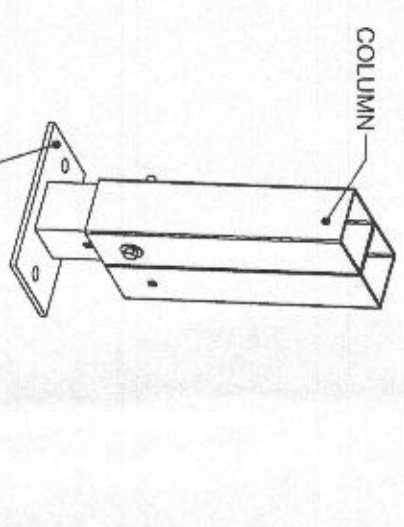


**ADJUSTABLE TOP COLUMN INSERT**  
- (1X) 1/2" X 2 1/2" HEX BOLT (HINGE BOLT)  
- (2X) 1/2" WASHER  
- (1X) 1/2" HEX NUT  
- (2X) 3/8" BOX BOLT (THRU CHORD)

**VIEW 2: ADJUSTABLE TOP COLUMN INSERT DETAIL**  
(IF APPLICABLE)

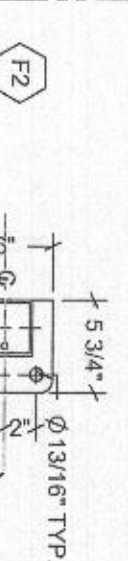


**F1 TRUSS**  
111700 DETAIL

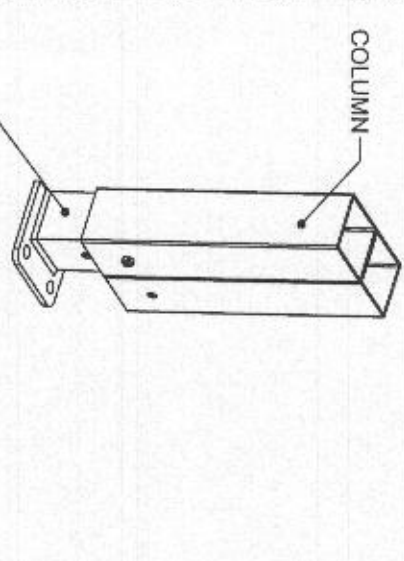


**BOTTOM COLUMN INSERT**  
- (1X) 1/2" X 5 1/2" HEX BOLT  
- (2X) 1/2" WASHER  
- (1X) 1/2" HEX NUT

**VIEW 3: BOTTOM COLUMN INSERT DETAIL**  
(IF APPLICABLE)

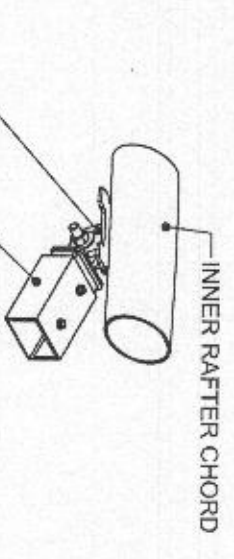


**F2 TRUSS**  
108420 DETAIL

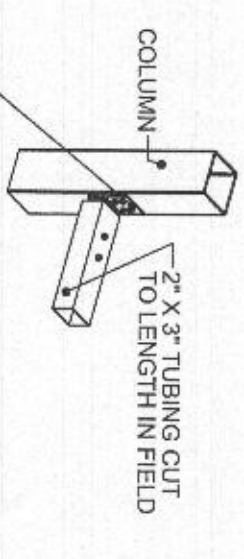


**FLUSH MOUNT BOTTOM COLUMN INSERT**  
- (1X) 1/4" BOX BOLT (THRU COLUMN)

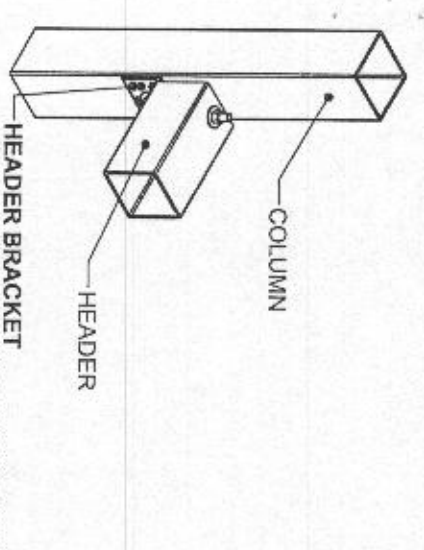
**VIEW 4: FLUSH MOUNT BOTTOM COLUMN INSERT DETAIL**  
(IF APPLICABLE)



**ADJUSTABLE 2" X 3" INSERT**  
[110356AL/T110356BAL/T]  
- (1X) 1/2" X 2 1/2" HEX BOLT (HINGE BOLT)  
- (2X) 1/2" WASHER  
- (1X) 1/2" HEX NUT  
- (2X) 1/4" BOX BOLT (THRU CHORD)  
- (2X) #14 X 1" TEK SCREW

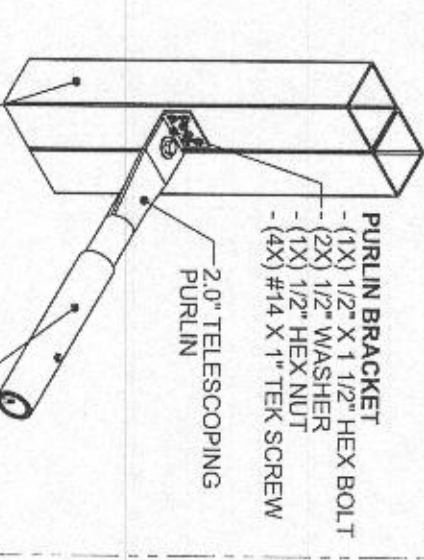


**VIEW 5: 2" X 3" INSERT DETAILS**  
(IF APPLICABLE)



**HEADER BRACKET**  
- (SEE CHART) 1/2" X 5 1/2" HEX BOLT  
- (SEE NOTE) 1/2" WASHER  
- (SEE NOTE) 1/2" HEX NUT  
- (SEE CHART) #14 X 1" TEK SCREW

**VIEW 6: HEADER BRACKET DETAIL**  
(IF APPLICABLE)



**PURLIN BRACKET**  
- (1X) 1/2" X 1 1/2" HEX BOLT  
- (2X) 1/2" WASHER  
- (1X) 1/2" HEX NUT  
- (4X) #14 X 1" TEK SCREW  
  
2.375" TELESCOPING PURLIN  
- (2X) #14 X 1" TEK SCREW  
\* 1X EACH ON OPPOSING FACE FROM THE OTHER

**VIEW 7: PURLIN BRACKET DETAIL**  
(IF APPLICABLE)

BRACKET SKU	# OF BOLTS	# OF TEK SCREWS
EWHB1P	2	4
EWHB2P	4	8
EWHB3P	6	8

**NOTE:** EVERY BOLT WILL GET (2) WASHERS AND (1) HEX NUT, SEE CHART FOR # OF BOLTS.

BOX BOLT HOLE SIZES & INSTALLATION TORQUE		
BOX BOLT DIA.	HOLE DIA.	INSTALLATION TORQUE
1/4"	1/2"	14 FT-LB
5/16"	5/8"	18 FT-LB
3/8"	3/4"	33 FT-LB
1/2"	13/16"	59 FT-LB
5/8"	1 1/8"	140 FT-LB
3/4"	1 3/8"	221 FT-LB

1. REFER TO BOX BOLT TECHNICAL DATA FOR MORE INFORMATION IF USING BOX BOLTS

**RECEIVED**

**JUL 26 2016**

**LICENSES & PERMITS DIVISION**



**JUL 20, 2016**

Professional Certification. I hereby certify that these documents were prepared or approved by me, and I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 35549. Expiration Date: 8 Apr 2018

CUSTOMER INFORMATION: DEPARTMENT OF PUBLIC WORKS 9280 BENDIX RD COLUMBIA, MD 21045-1832		STRUCTURE SKU # EW085GBF0480D
CUSTOMER CONTACT: JOHN CAPPELLETTI	CONTACT PHONE: 410-382-7098	STRUCTURE SIZE: 85' X 160'
SHEET TITLE: CONNECTION DETAILS		STRUCTURE DESCRIPTION: 85GB SOLID END WL

**VECTOR ENGINEERS**  
9138 S. STATE STREET, SUITE 101 (801) 990-1775  
SANDY, UTAH 84070 (801) 990-1776 FAX  
PROJECT NUMBER: U13B2-351-162

**Developed by**  
ENGINEERING SERVICES & PRODUCTS CO.  
1400 S. 1000 E. SUITE 200  
SALT LAKE CITY, UT 84143  
WWW.ESPCO.COM  
OFFICE # 7032939  
CUSTOMER # 6764428

DRAWING DETAILS		
DESIGNED BY: BHB	CREATION DATE: 2/17/2016	
REVISIONS:		
NO.	BY	REVISION DATE:
1	JAE	02/24/2016
2		
3		
4		
NOT TO SCALE		
SHEET SIZE: 11X17		
SHEET:		
M2		



4301 Route 32

B16003214

RECEIVED  
JUL 26 1990  
H&M

(SALT DOME)

COMM.

NEW

PROJECT:	HOCO HIGHWAYS
LOCATION:	4301 RT 32
SERIAL #:	B16003214
DATE:	7/26/10
CONTACT:	DAN BENNETT
PHONE #:	410. 313. 4235

HEALTH DEPT 2