

PRELIMINARY FEASIBILITY REPORT

FOR

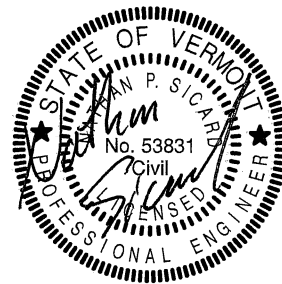
SALT/SAND SHED

FOR

BARTON VILLAGE, INC.

Municipal Lane
Barton, VT

December 2020



Prepared by

12/18/2020



RUGGLES ENGINEERING SERVICES INC.

Ruggles Engineering Services, Inc., 5480 Memorial Drive, St. Johnsbury, VT 05819

www.rugglesengineeringservices.com

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1. General

A. Need for the Facility

The village of Barton, VT has experienced substantial operational changes during the past 20 years including relocation of facilities and loss of a critical mass of staffing including contract operations for water and sewer department staff and contracting out electric department field work and lineman crews. Village staff has also been reduced to one employee for winter highway maintenance with one additional part time staffer for backup or sidewalk maintenance. The sand and salt materials need to be stored at the current municipal garage where the trucks, tools, fuel and security exist. The covering of the small quantities of sand will also protect the sand from freeze thaw which makes up to 25 percent of the annual pile unusable and add's maintenance.

The Village of Barton is also working through restricting changes to improve the highway tax rate and make Barton Village more attractive to future residents and working families that can support a vibrant rural community. Currently Barton Village has the highest highway tax rate of all of the surrounding communities. For example Barton Village highway tax rate is 0.7831 for 2020 and Barton Town is 0.4853 which is similar to the nearby Towns which do not have large downtowns and use Barton Village as their downtown (e.g. Banks, Groceries, Insurance and Hardware).

B. Existing Facility

The existing facility has been used for salt and sand storage for an unknown amount of time. (> 70 years). It may have also been a joint Village and Town facility at one time however operation needs outgrew the site and it now remains as a storage site but it is 1.2 miles from the active municipal garage site.

The existing facility is also located in a residential neighborhood and is generally out of character with the area.

C. Proposed Facility

The proposed facility is a pre-manufactured shed that will be approximately 35' x 60' with a concrete slab to protect the existing ground from direct infiltration of salt. This facility would not be occupied and would not store critical equipment. The facility will hold the 125cy of annual salt consumption for the Village highways and the approximate 400 cy of sand. Both for winter maintenance.

D. Building Site

The building site will be within the existing fenced in maintenance garage site that has been disturbed since 1979 when the sewer treatment facility was constructed.

E. Cost Estimate

Salt and Sand Cover
and Relocation Project

Construction Cost

Item	Unit	Unit Price	Quantity	Total Price
Hoop Barn Kit 35'x60' (with PE Stamp)	Lump Sum	\$36,250	1	\$36,250
Subgrade Preparation (Village staff)	man-hrs	\$100	80	\$8,000
Reinforced Concrete Pad Construction 41'x70'	CY	\$400	75	\$30,000
Concrete Waste Block Walls (3'x3'x6')	EA	\$80	40	\$3,200
Subgrade crushed stone base	CY	\$13	125	\$1,625
Disposal of Old Salt Shed (roll off dumpsters)	EA	\$800	2	\$1,600
Disposal of Old Salt Shed Pad	CY	\$60	14	\$840
Disposal of Shed (village staff)	man-hrs	\$100	40	\$4,000
Relocation of existing inventory	CY	\$20	75	\$1,500
Subtotal Construction				\$87,015

Non-Construction Cost

Construction Contingency (15%)	\$13,052.25
Hoop Barn PE Design & Stamp	\$3,750.00
Foundation PE Design & Stamp	\$2,000.00
Town Permit	\$125.00
Fire Marshals Permit	\$900.00
Act 250 Administrative Amendment	\$62.50
Staff Administrative and Coordination (20%)	\$17,403.0
Subtotal Non-Construction	\$37,292.75
Total Project Cost	\$124,307.75

F. Annual Operating Budget

a. Income

The project will not generate income.

b. Operation and Maintenance Cost

The project will not have O&M costs other than a capital replacement requirement.

G. Maps, Drawings, sketches and photo's.

1. Maps. Attached as appendix
2. Drawings. Attached as appendix.
3. Photo's. Attached as appendix.

H. Construction Problems.

No construction problems are anticipated except that time of year for construction will be important as the facility needs to be prepared at a minimum of 30 days before materials stockpiling which occurs each fall.

I. Conclusions and Recommendations

Construction of a salt and sand barn will improve the Village operations, efficiency, safety and equipment wear and tear. The shed should be constructed as a kit as these kits can be quickly and efficiently installed.

Improving the operations of the Village, cleaning up an old abandoned garage site will continue to move the Village toward revitalization.

Relocating and improving the winter maintenance operation is recommended however, the high highway tax rate is a barrier and external funding is necessary.

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Appendix A

Maps, Drawings and Photos

Site Plan

Municipal Garage Site

POOR COPY
RECEIVED FOR
FORMATTING

PARCEL 1
9.09 ACRES ±

N/E DUCHESNEAU

S 32° 30' W
810.69'

BAATON VILLAGE SEWAGE
TREATMENT PLANT

PLANT
CONTROL
BLD.

18" METAL CULV.
GATE

Salt and Sand Shed Site

PARCEL 2
1.01 ACRES ±

Existing Shop constructed
in 2005

238.17'
S 83° 46' E

50° 45' E
100.00'

120.57'
S 31° 46' W

226.03'
N 68° 30' W

Dept. of Environmental Conservation
Approved: _____
Permit #: EC-7-178
Date: 7/06/14

Parcel #4



200 ft

Site Plan

Abandoned Garage Site



Salt Barn to be removed.

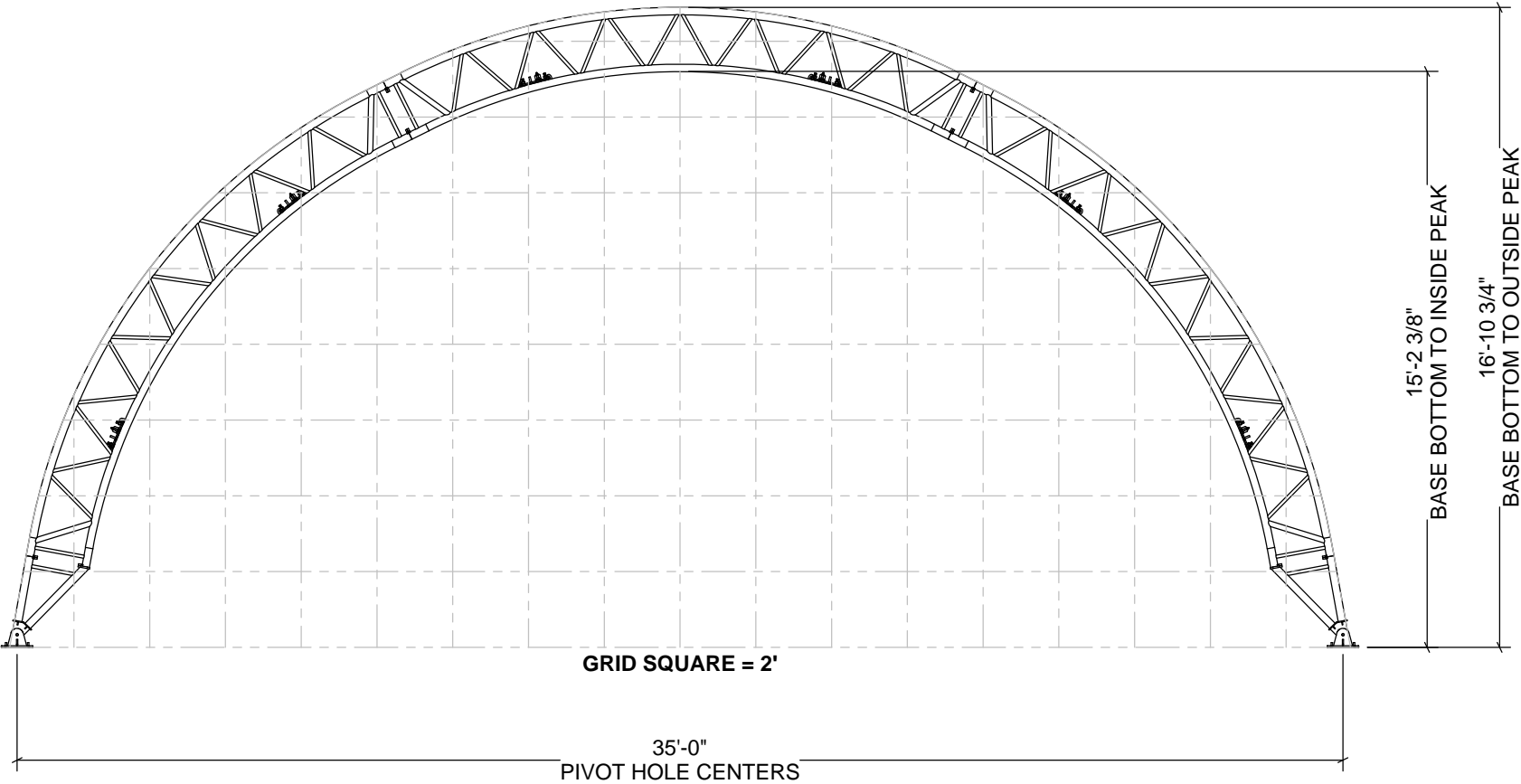


ADDITIONAL INFORMATION

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.



T03506020F
T03508020F
T03510020F
T03512020F
T03514020F
T03516020F
T03518020F
T03520020F

BUILDING CONTENT GUIDE:

- [A1]COVER SHEET
- [B1]GENERAL NOTES
- [C1]BUILDING PLAN VIEW
- [D1]MATERIAL SPECIFICATIONS
- [E1]RAFTER PROFILES
- [F1]OMITTED
- [G1]DETAIL LOCATIONS & BASE DETAILS
- [G2]GENERAL CONNECTION DETAILS
- [G3]CABLE LAYOUT & DETAILS
- [H1]BASE PLATE LAYOUT & DETAILS
- [I]OMITTED
- [J1]BUILDING REACTION DATA

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CUSTOMER #:
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CUSTOMER INFORMATION: 	STRUCTURE SKU #: 	STRUCTURE SIZE: 	STRUCTURE DESCRIPTION:
	CONTACT PHONE: 	SHEET TITLE: COVER SHEET	

DRAWING DETAILS		
DRAWN BY: SEK		CREATION DATE: 5/19/2015
REVISIONS:		
NO.	BY:	REVISION DATE:
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SHEET:		

GENERAL NOTES:

FOUNDATION:

1. FOUNDATION AND ANCHORING ARE NOT ADDRESSED BY THESE DRAWINGS.

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 DESIGNER HAVE VISITED THIS JOBSITE. INFORMATION CONTAINED HEREIN IS BASED ON CLIENT SUPPLIED DATA AND MEASUREMENTS.

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 SAE J429 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 MANUFACTURER'S 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.

SHACKLE WORKING LOADS	
1/4" GALV.	1.1 KIPS
1/2" GALV.	3.9 KIPS

BOX BOLT HOLE SIZES & INSTALLATION TORQUE		
BOX BOLT DIA.	HOLE DIA.	INSTALLATION TORQUE
1/4"	7/16"	14 FT-LB
5/16"	9/16"	18 FT-LB
3/8"	3/4"	33 FT-LB
1/2"	13/16"	59 FT-LB
5/8"	1-1/16"	140 FT-LB
3/4"	1-5/16"	221 FT-LB
1. REFER TO BOX BOLT TECHNICAL DATA FOR MORE INFORMATION IF USING BOX BOLTS		

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DRAWN BY:
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CREATION DATE:
5/19/2015

REVISIONS:

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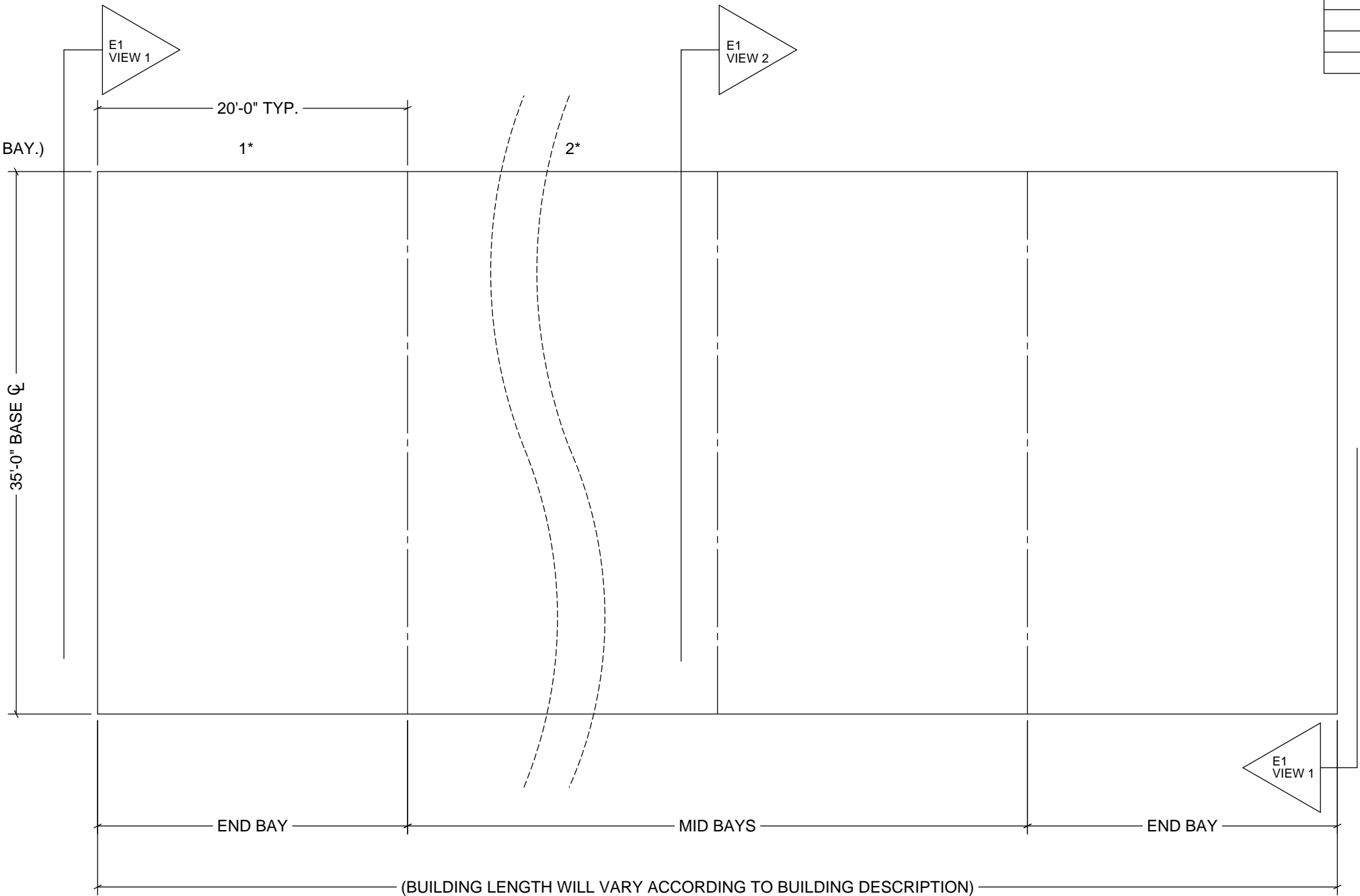
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SHEET:

B1

LEFT SIDE

*BAY NUMBERS:
(INCREMENTS ONE PER BAY.)



BAYS PER BUILDING LENGTH	
BUILDING LENGTH	BAY NUMBER
60'	1 - 3
80'	1 - 4
100'	1 - 5
120'	1 - 6
140'	1 - 7
160'	1 - 8
180'	1 - 9
200'	1 - 10

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	CUSTOMER CONTACT: 	CONTACT PHONE: 	SHEET TITLE: BUILDING PLAN VIEW

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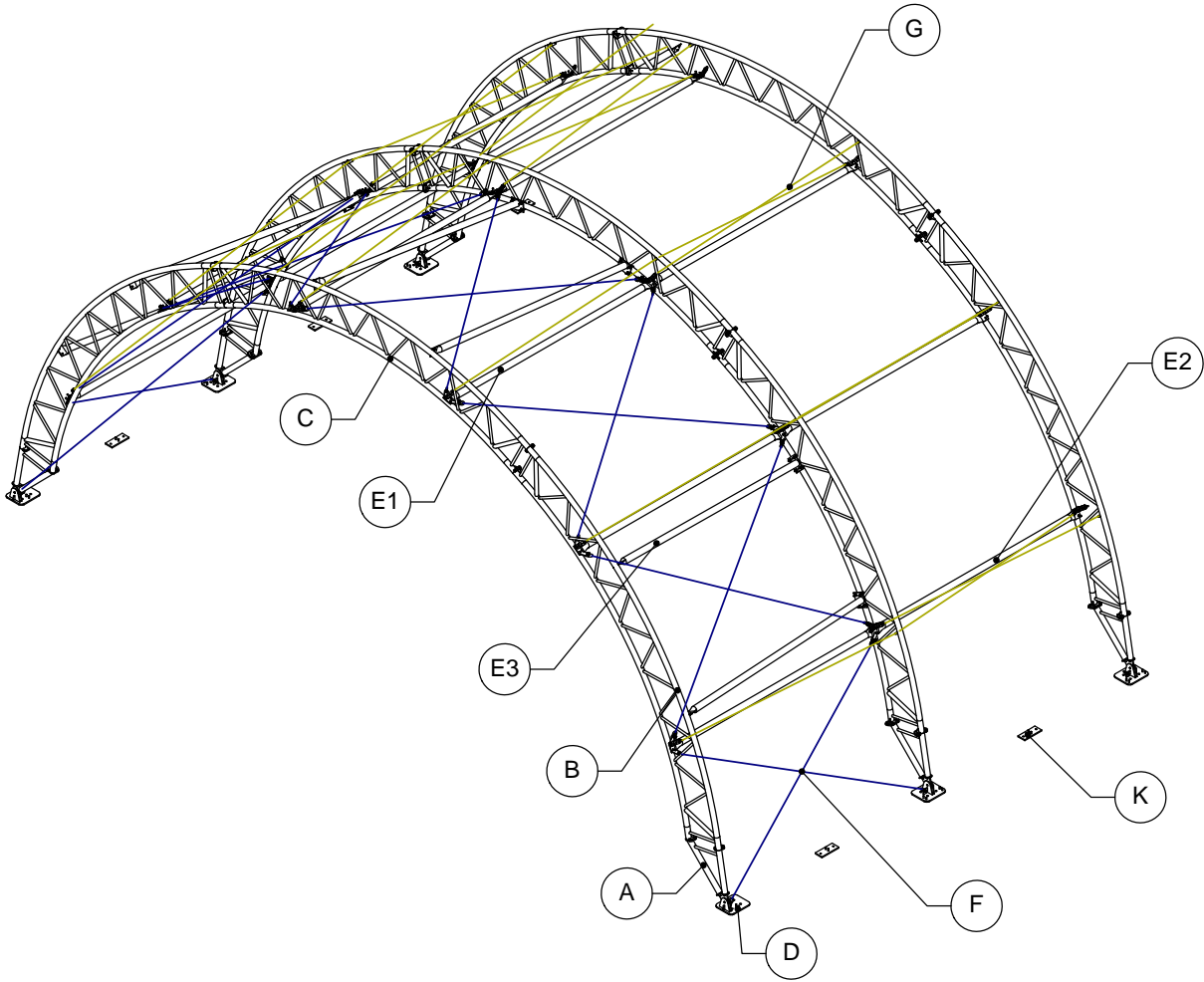
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SHEET:
C1

ITEM	DESCRIPTION	MATERIAL
A	SUPPORT BASE	
	OUTER CHORD	GALV. RND. STEEL TUBE - ϕ 2.375" - 14 GA
	INNER CHORD	GALV. RND. STEEL TUBE - ϕ 2.375" - 14 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - ϕ 1.00" - 14 GA
	CONNECTION PLATES	STEEL PLATE, 1/2" THICK
	GUSSETS	STEEL PLATE, 1/4" & 3/8" THICK
	PIVOT PLATE (CHORD)	STEEL PLATE, 1/4" THICK
	PIVOT PLATE (ROUND)	STEEL PLATE, 1/2" THICK
B&C	SEGMENT	
	OUTER CHORD	GALV. RND. STEEL TUBE - ϕ 2.375" - 14 GA
	INNER CHORD	GALV. RND. STEEL TUBE - ϕ 2.375" - 14 GA
	WEB (STRAIGHT)	GALV. RND. STEEL TUBE - ϕ 1.00" - 14 GA
	WEB (END ANGLED)	GALV. RND. STEEL TUBE - ϕ 1.66" - 14 GA
	WEB (ANGLED)	GALV. RND. STEEL TUBE - ϕ 1.00" - 14 GA
	CONNECTION PLATES	STEEL PLATE, 1/2" THICK
	GUSSETS	STEEL PLATE, 3/8" THICK
D	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
E	BRACING	
E1	LATERAL BRACING (END)	GALV. RND. STEEL TUBE - ϕ 3.5" - 14 GA
E2	LATERAL BRACING (MID)	GALV. RND. STEEL TUBE - ϕ 3.5" - 14 GA
E3	ANGLED BRACE	GALV. RND. STEEL TUBE - ϕ 3.5" - 14 GA
	THREADED STUD PLATE	1/4" PLATE W/ 1/2" X 2" STUDS
F	CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 5/16" THICK
G	SWAY CABLE ASSEMBLY	SEE SHEET G3
	CABLE CONNECTION PLATE	STEEL PLATE, 1/8" THICK
H	BRACE PLATES	
	SUPPORT BASE TO SEGMENT	STEEL PLATE, 1/8" THICK
	SEGMENT TO SEGMENT	STEEL PLATE, 1/8" THICK
J	WINCH ASSEMBLY	
	WINCH	2" LASHING WINCH (10,000 LBS. STRENGTH)
	STRAP	2" STRAP (10,000 LBS. STRENGTH)
K	WINCH PLATE (OPTIONAL)	
	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.

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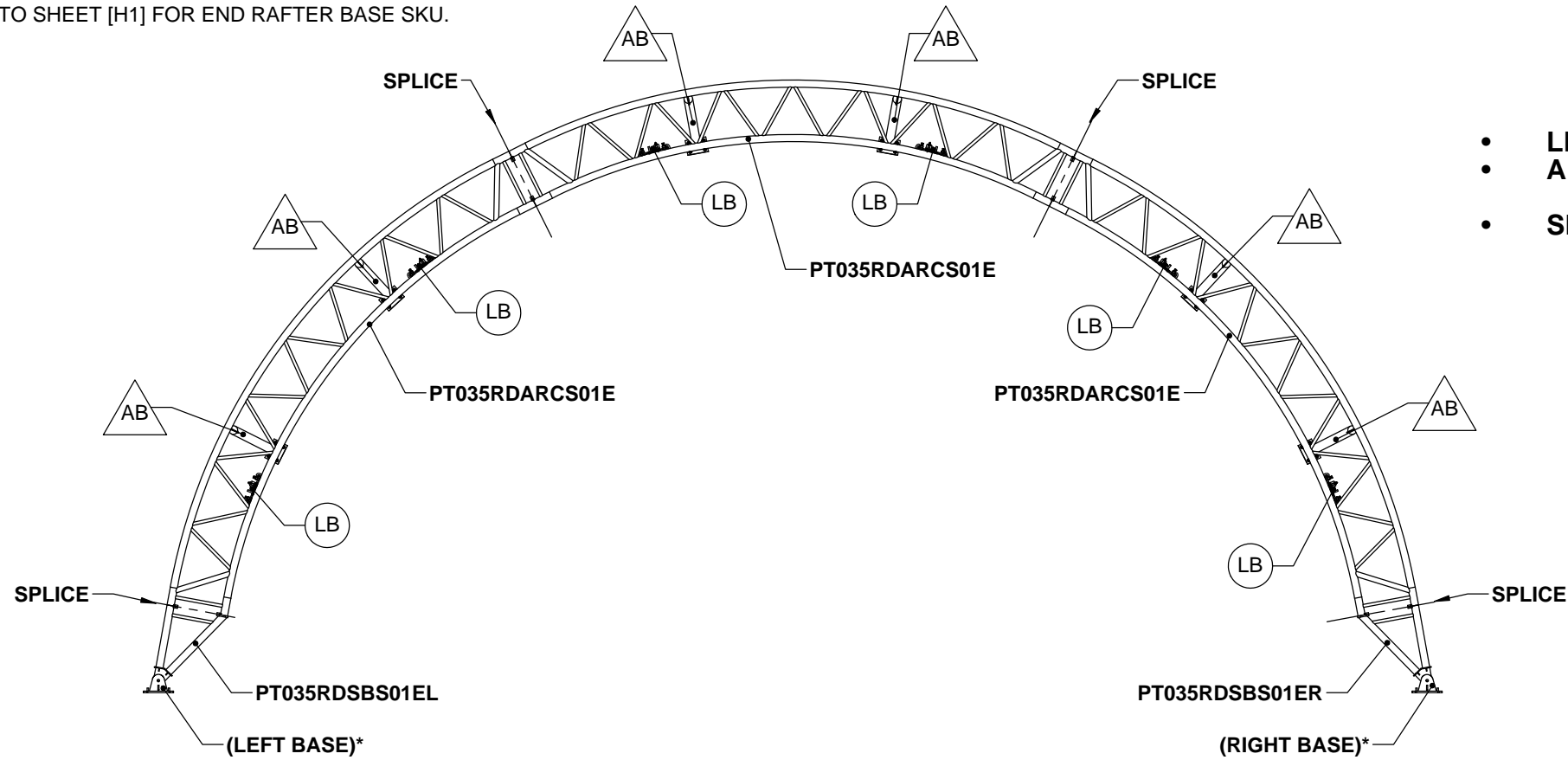
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STRUCTURE SKU #:	STRUCTURE SIZE:	STRUCTURE DESCRIPTION:
CUSTOMER INFORMATION:	CONTACT PHONE:	SHEET TITLE: MATERIAL SPECIFICATIONS
CUSTOMER CONTACT:		

DRAWING DETAILS		
DRAWN BY: SEK	CREATION DATE: 5/19/2015	
REVISIONS:		
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D1		

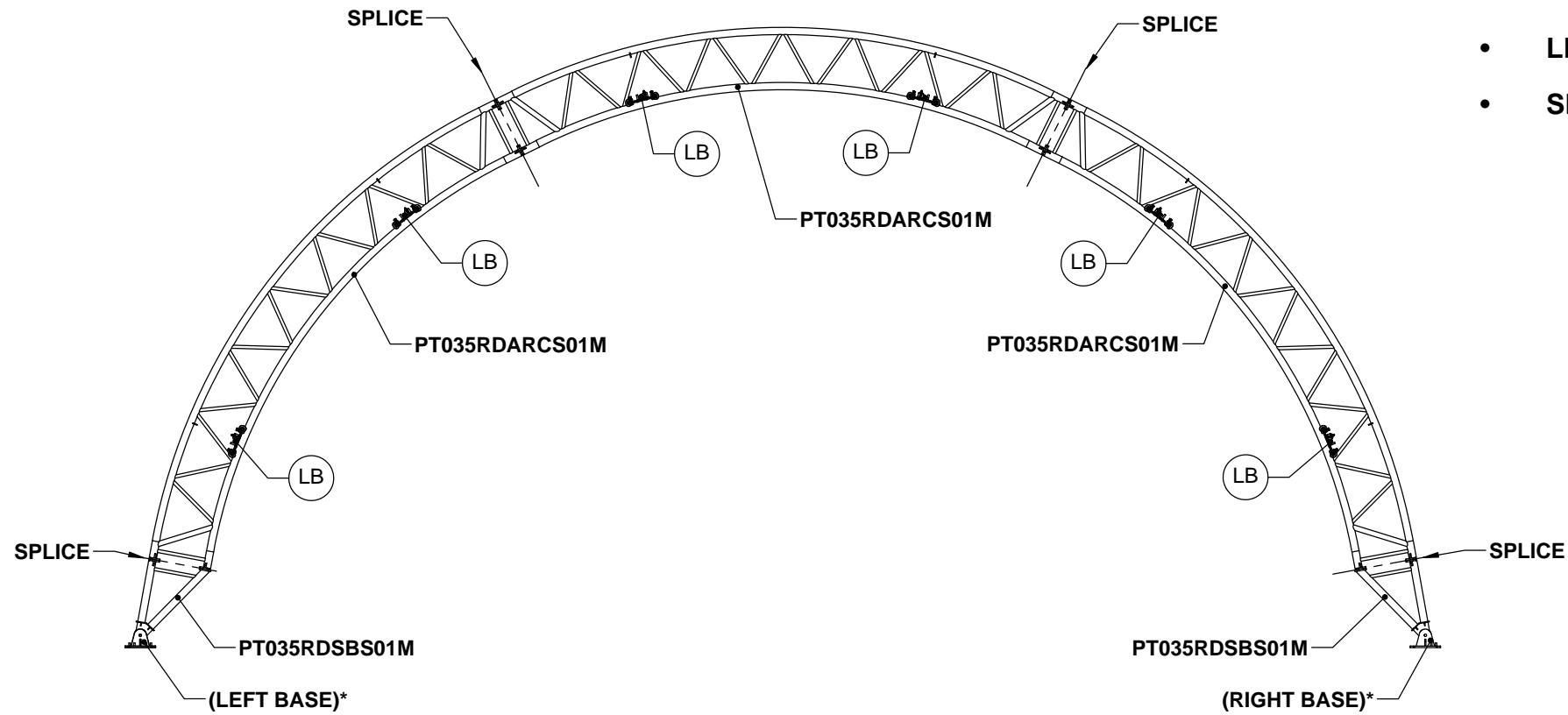
*NOTE: REFER TO SHEET [H1] FOR END RAFTER BASE SKU.



[E1] VIEW 1 - PROFILE (END RAFTER)

- **LB** = LATERAL BRACE (SKU: **LB35G14STL240**)
- **AB** = ANGLED BRACE (SKU: **AB35G14APL240**)
- **SPLICE**: SEE DETAIL SHEET [G2]

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



[E1] VIEW 2 - PROFILE (MID RAFTER)

- **LB** = LATERAL BRACE (SKU: **LB35G14STL240**)
- **SPLICE**: SEE DETAIL SHEET [G2]

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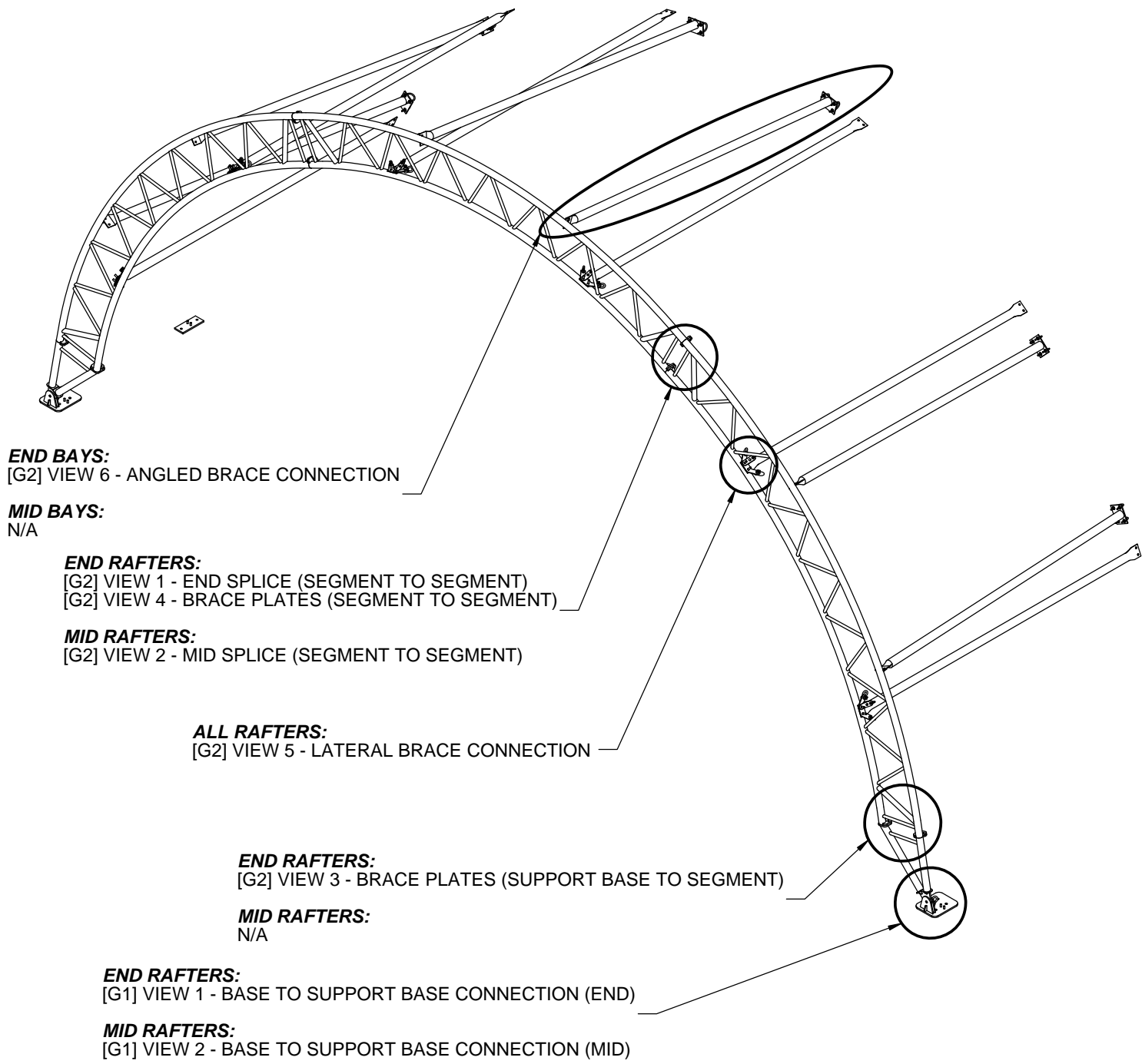
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CUSTOMER CONTACT: _____	CONTACT PHONE: _____	STRUCTURE SIZE: _____
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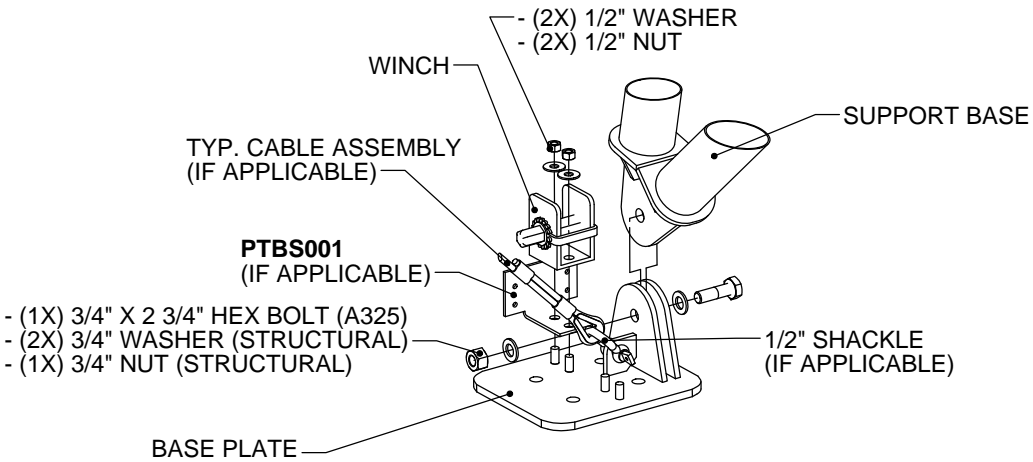
SHEET:

DETAIL LOCATION CALL-OUTS



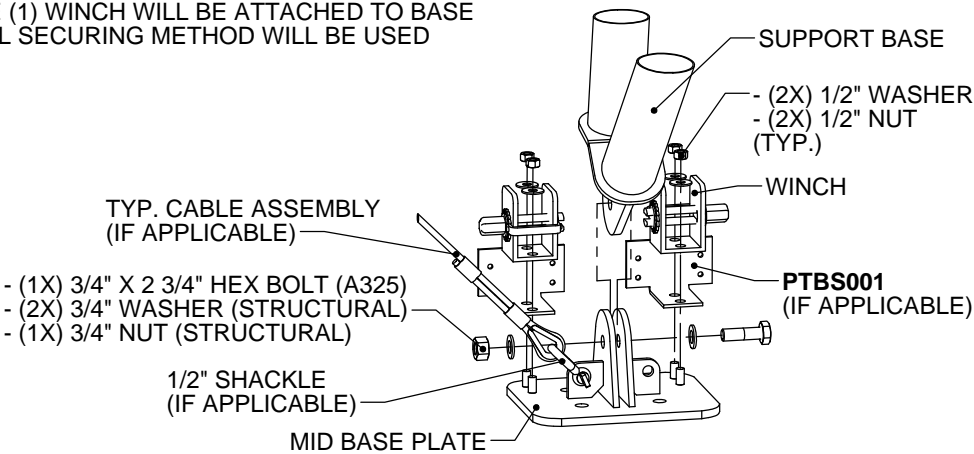
DETAILS WITH LOCATION CALL-OUTS NOT SHOWN ON THIS SHEET:

- [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 LOCATIONS
- [G3] VIEW 5 - SWAY CABLE DETAILS
- [G3] VIEW 6 - TYPICAL SWAY CABLE ASSEMBLY



[G1] VIEW 1 - BASE TO SUPPORT
BASE CONNECTION (END)

NOTE: IF COVER IS TO BE INSTALLED USING ONLY THE POCKET ABOVE THE BASE FOR TENSIONING, TWO (2) WINCHES WILL BE USED AS SHOWN. IF COVER IS TO BE INSTALLED USING BOTH THE POCKET ABOVE AND THE POCKET BELOW THE BASE FOR TENSIONING, ONLY ONE (1) WINCH WILL BE ATTACHED TO BASE AND ONE (1) ADDITIONAL SECURING METHOD WILL BE USED BELOW BASE.



[G1] VIEW 2 - BASE TO SUPPORT BASE
CONNECTION (MID)

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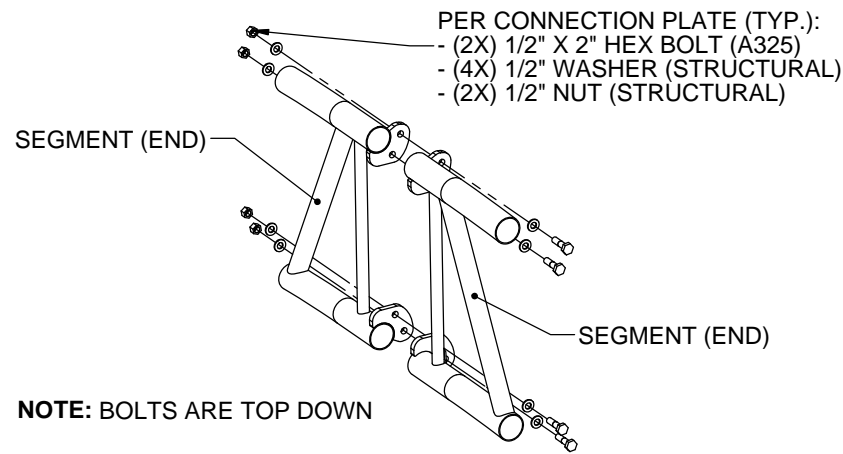
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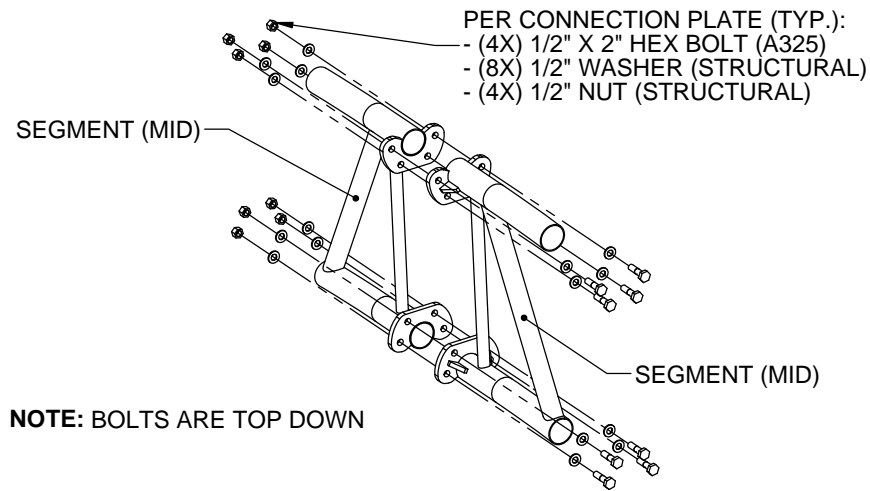
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STRUCTURE SKU #: 	STRUCTURE SIZE: 	STRUCTURE DESCRIPTION:
CUSTOMER INFORMATION: 	CONTACT PHONE: 	SHEET TITLE: DETAIL LOCATIONS & BASE DETAILS

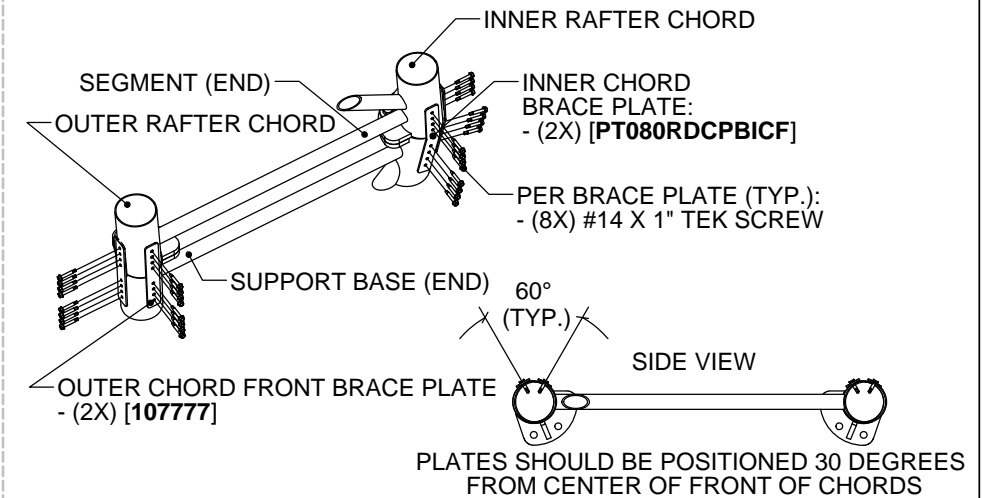
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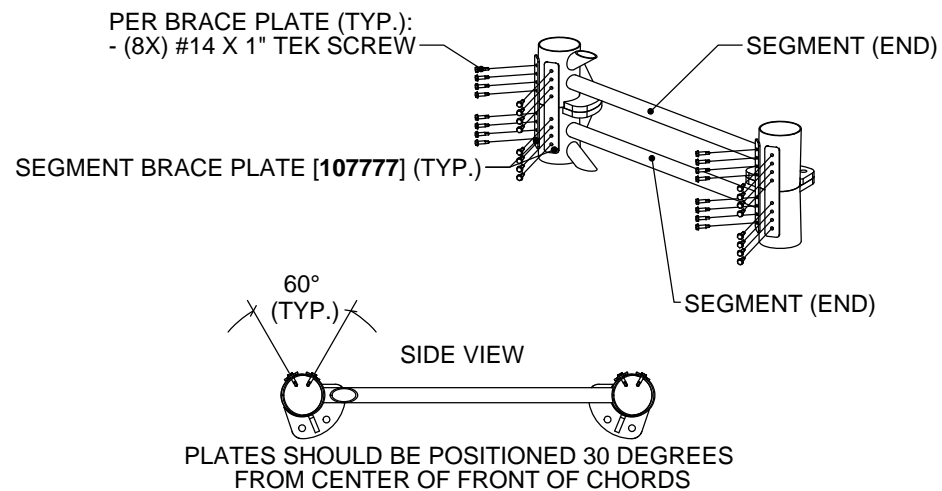
[G2] VIEW 1 - END SPLICE
(SEGMENT TO SEGMENT)



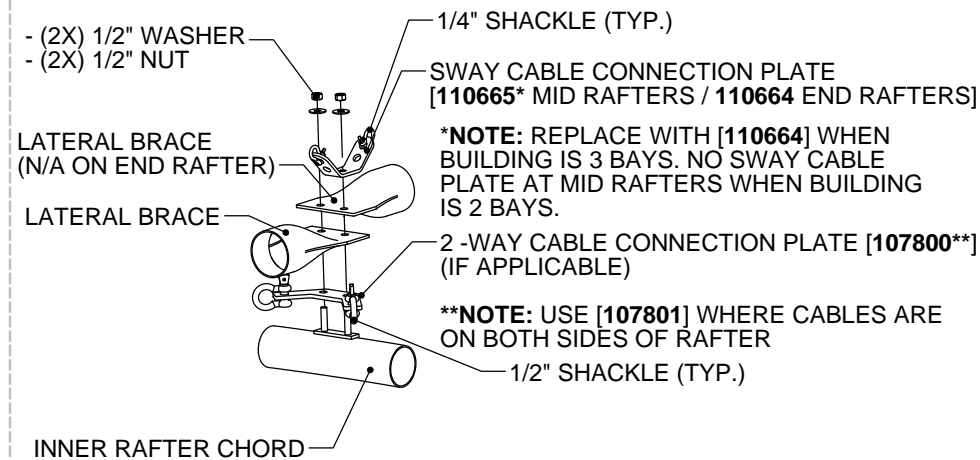
[G2] VIEW 2 - MID SPLICE
(SEGMENT TO SEGMENT)



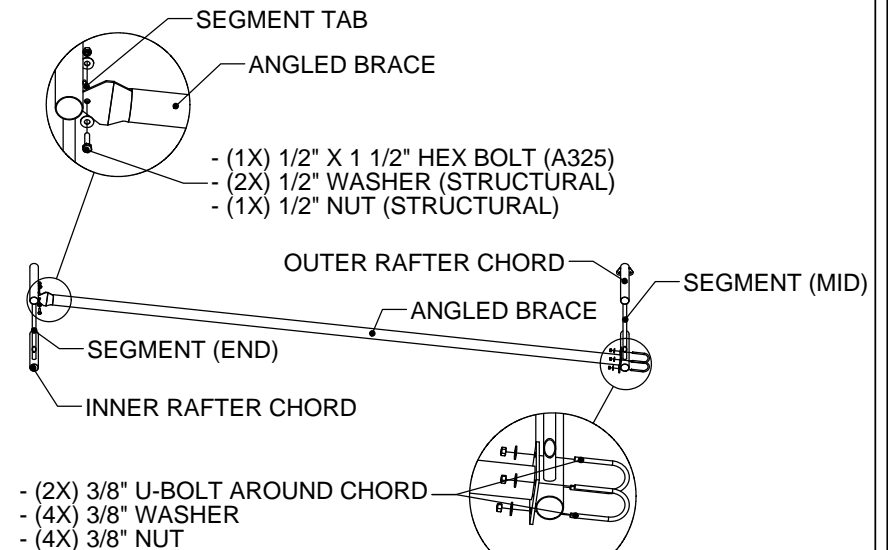
[G2] VIEW 3 - BRACE PLATES
(SUPPORT BASE TO SEGMENT)



[G2] VIEW 4 - BRACE PLATES
(SEGMENT TO SEGMENT)



[G2] VIEW 5 - LATERAL BRACE
CONNECTION



[G2] VIEW 6 - ANGLED BRACE
CONNECTION

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CUSTOMER #:
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STRUCTURE SKU #:	STRUCTURE SIZE:	STRUCTURE DESCRIPTION:
CUSTOMER INFORMATION:	CONTACT PHONE:	SHEET TITLE: GENERAL CONNECTION DETAILS
CUSTOMER CONTACT:		

DRAWING DETAILS		
DRAWN BY: SEK		CREATION DATE: 5/19/2015
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NO.	BY:	REVISION DATE:
NOT TO SCALE		SHEET SIZE: 11X17
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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 ϕ UNLESS NOTED OTHERWISE.
- CABLE IS NOT PRESENT IN BAY NUMBERS NOT LISTED IN TABLE.

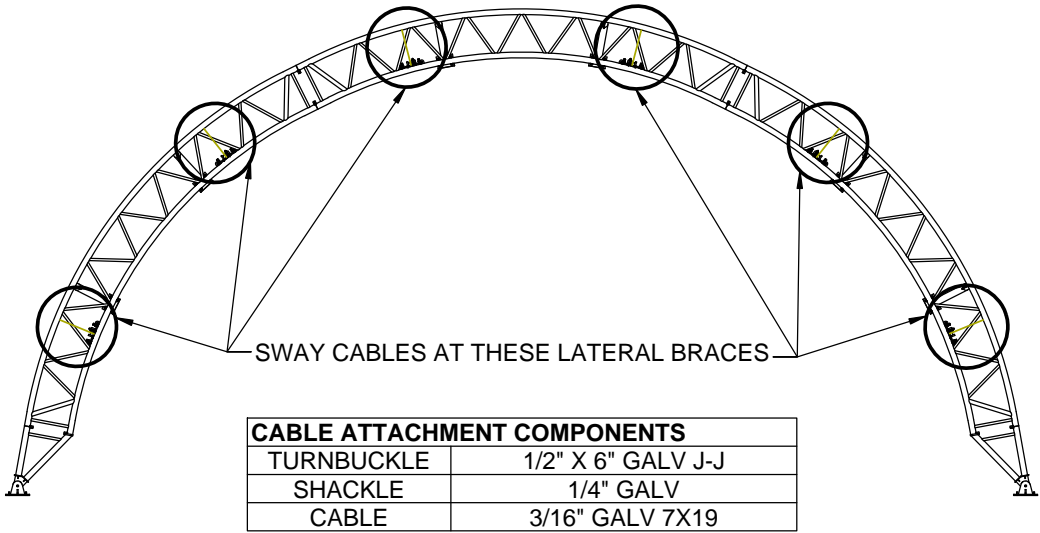
CABLE ATTACHMENT COMPONENTS	
TURNBUCKLE	1/2" X 12" GALV E-E
SHACKLE	1/2" GALV
CABLE	3/8" GALV 7X19

BAY 1 IS AT THE FRONT OF THE BUILDING AND INCREASES 1 FOR EVERY 20' OF LENGTH

CABLE ASSEMBLY SKU'S					
BUILDING LENGTH	BAY NUMBER*	SPAN 'A'	SPAN 'B'	SPAN 'C'	SPAN 'D'
60'	1 & 3	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
80'	1 & 4	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
100'	1 & 5	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
120'	1 & 6	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
140'	1 & 7	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
160'	1, 5 & 8	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
180'	1, 5 & 9	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800
200'	1, 5 & 10	CAB37G1707	CAB37G1800	CAB37G1800	CAB37G1800

[G3] VIEW 1 - CABLE SKU PER SPAN

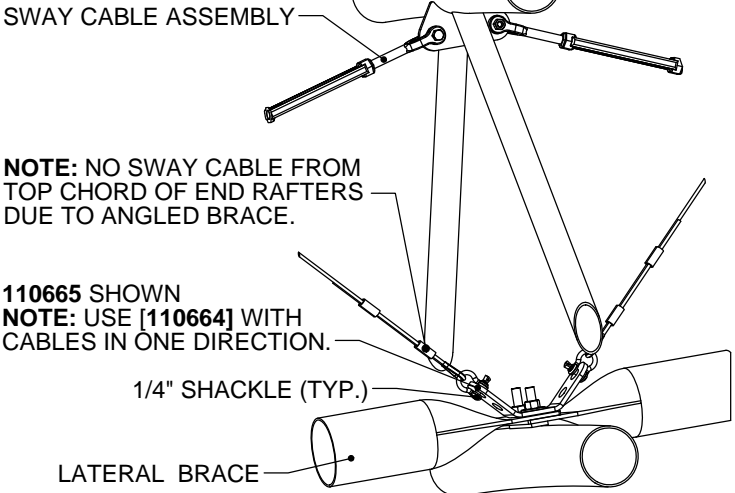
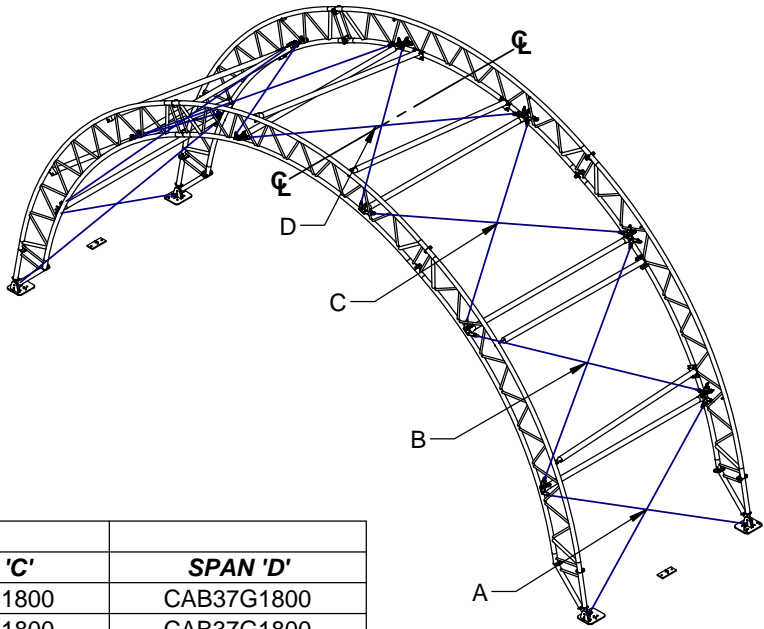
SWAY CABLE REPEATS DOWN LENGTH OF BUILDING AT LOCATIONS SHOWN BELOW



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

SWAY CABLE ASSEMBLY SKU'S		
BUILDING LENGTH	BAY NUMBER*	SWAY CABLE SKU
ALL LENGTHS	ALL BAYS	CAB18G1803

[G3] VIEW 4 - SWAY CABLE LOCATIONS



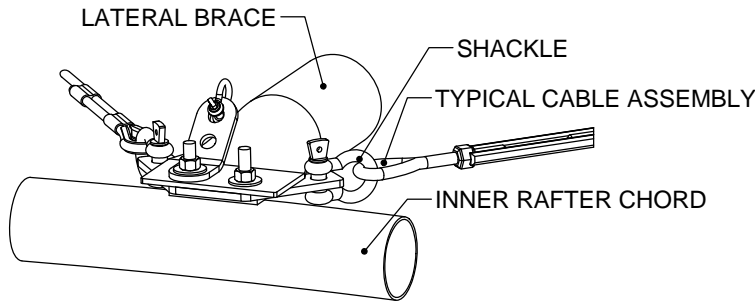
NOTE: NO SWAY CABLE FROM TOP CHORD OF END RAFTERS DUE TO ANGLED BRACE.

110665 SHOWN
NOTE: USE [110664] WITH CABLES IN ONE DIRECTION.

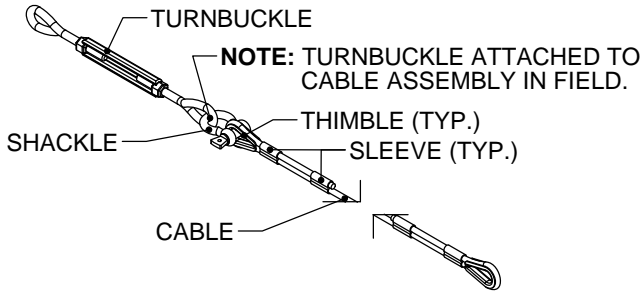
1/4" SHACKLE (TYP.)

LATERAL BRACE

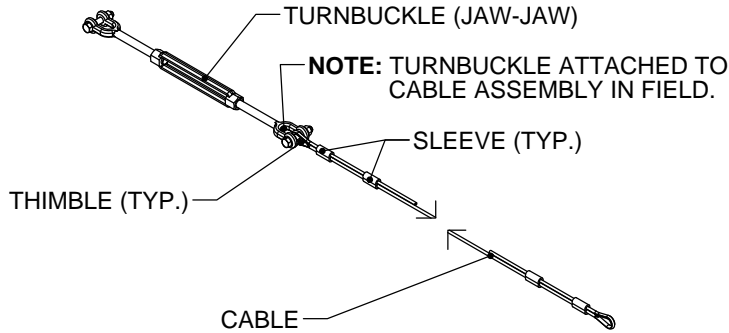
[G3] VIEW 5 - SWAY CABLE DETAILS



[G3] VIEW 2 - TYPICAL CABLE CONNECTION DETAIL



[G3] VIEW 3 - TYPICAL CABLE ASSEMBLY



[G3] VIEW 6 - TYPICAL SWAY CABLE ASSEMBLY

DEVELOPED BY


A DIVISION OF
ENGINEERING SERVICES & PRODUCTS CO.
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DYERSVILLE, IA 52040
P: 563.875.6113
F: 563.875.2317
WWW.ESAPCO.COM

ORDER #:

--

CUSTOMER #:

--

STRUCTURE SKU #:	STRUCTURE SIZE:	STRUCTURE DESCRIPTION:
CUSTOMER INFORMATION:	CONTACT PHONE:	SHEET TITLE: CABLE LAYOUT & DETAILS

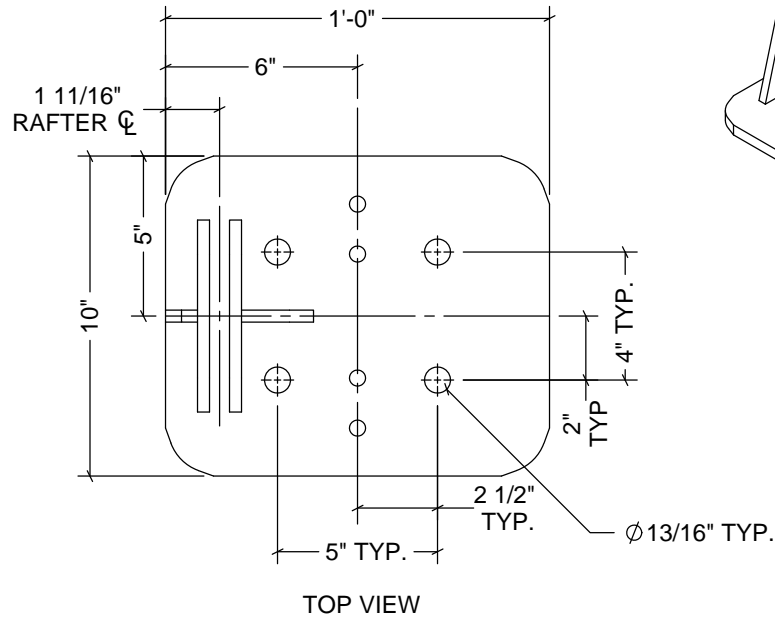
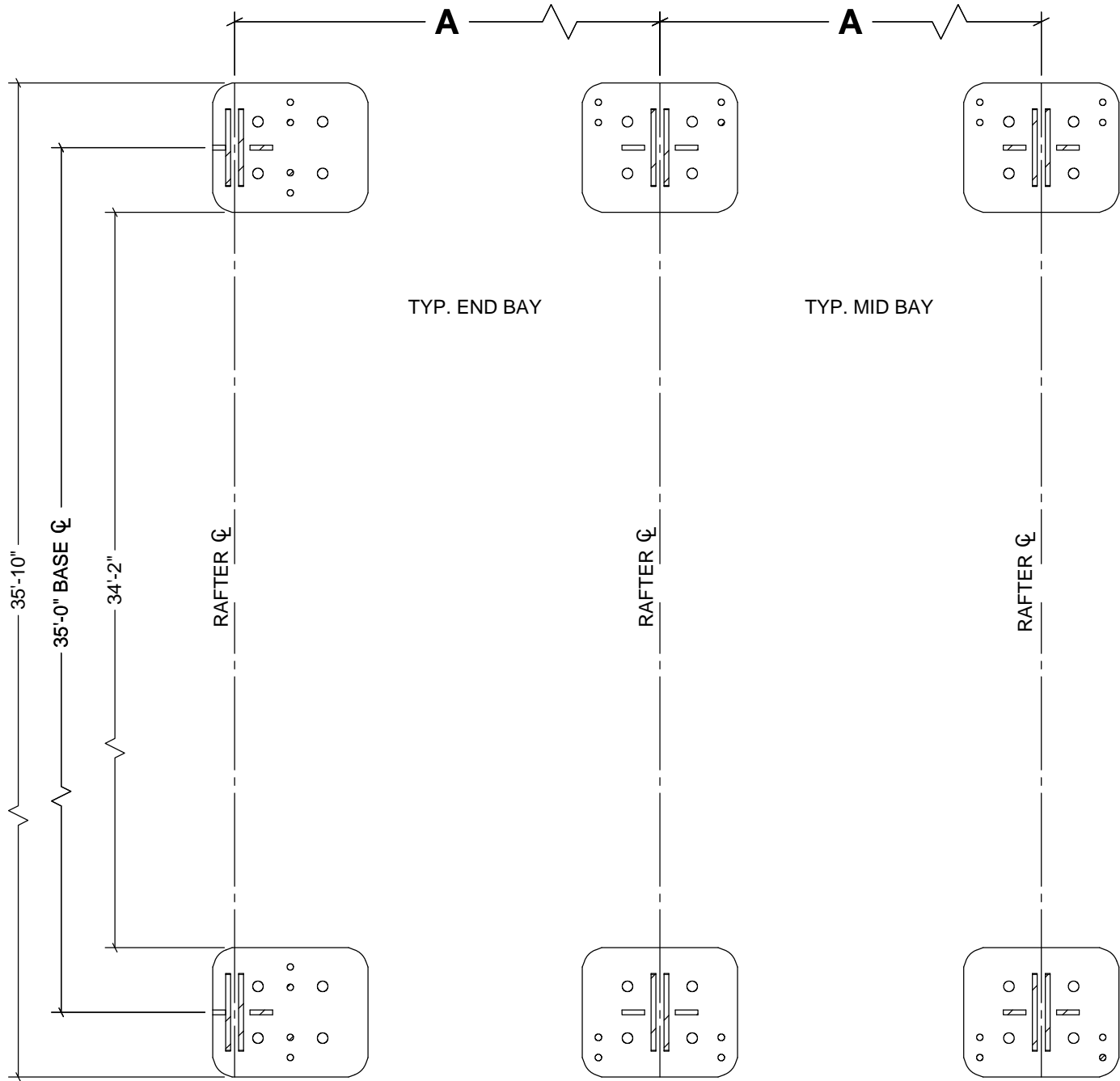
DRAWING DETAILS		
DRAWN BY: SEK	CREATION DATE: 5/19/2015	
REVISIONS:		
NO.	BY:	REVISION DATE:
1		
2		
3		
4		
NOT TO SCALE		SHEET SIZE: 11X17
SHEET:		G3

*REFER TO SHEET [C1] FOR BAY NUMBERING

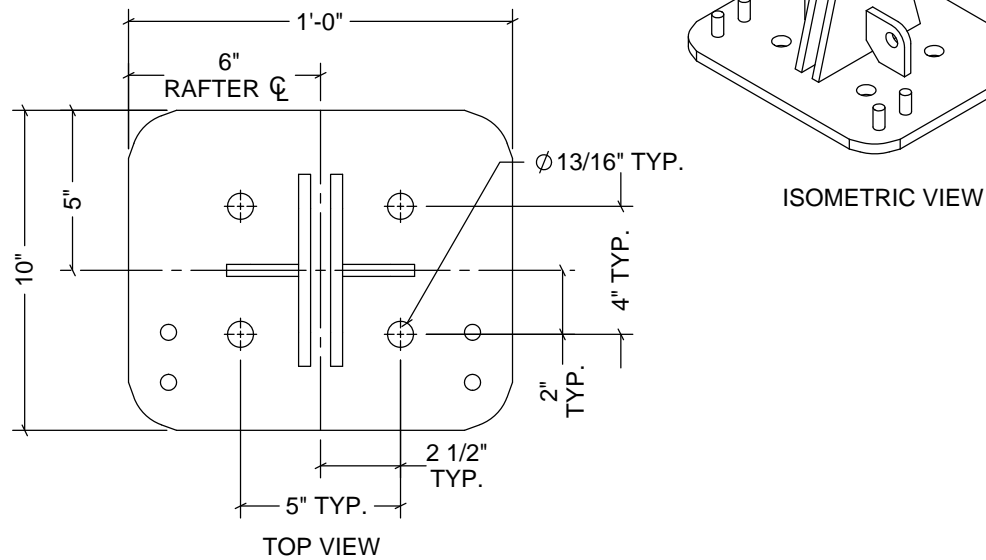
BAY NUMBER*	A (RAFTER SPACING)
ALL BAYS	20'-0"

**REFER TO SHEET [E1] FOR BASE LOCATIONS

RAFTER TYPE	LEFT BASE SKU**	RIGHT BASE SKU**
END	BP061E	BP061E
MID	BP061M	BP061M



TOP VIEW
BP061E DETAILS



TOP VIEW
BP061M DETAILS

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ORDER #:
--

CUSTOMER #:
--

STRUCTURE SKU #: --	STRUCTURE SIZE: --	STRUCTURE DESCRIPTION: --
CUSTOMER INFORMATION: --	CONTACT PHONE: --	SHEET TITLE: BASE PLATE LAYOUT & DETAILS

DRAWING DETAILS		
DRAWN BY: SEK	CREATION DATE: 5/19/2015	
REVISIONS:		
NO.	BY:	REVISION DATE:
1		
2		
3		
4		
NOT TO SCALE		SHEET SIZE: 11X17
SHEET:		
H1		



East View – Current Municipal Garage Facility



West View – Current Municipal Garage Facility