



Somerville, Massachusetts

Dates of Use: July 16, 2013 - September 8, 2013

OWNER:

CAVALIA

Cavalía USA, Inc.
145 Pine Haven Shores, Suite 1121
Shelburne, Vermont 05482

ARCHITECTS AND ENGINEERS:

WJE

Wiss, Janney, Elstner Associates, Inc.
330 Pfingsten Road
Northbrook, Illinois 60062

Job Number: 2013.0179



SITE LOCATION

NOT TO SCALE

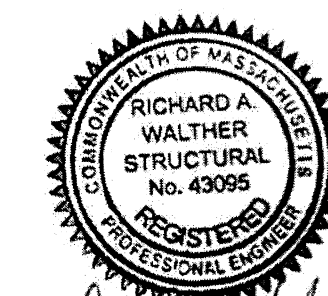
— PERFORMANCE SITE

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WJE | ENGINEERS
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MATERIALS SCIENTISTS

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Headquarters & Laboratories: Northbrook, Illinois
Atlanta | Austin | Boston | Chicago | Cleveland | Dallas | Denver | Detroit
Honolulu | Houston | Los Angeles | Minneapolis | New Haven | New York
Princeton | San Francisco | Seattle | Washington, D.C.



 *Richard A. White*

Project



Odysseo - Cavalia
201 Assembly Square Drive
Somerville, Massachusetts
02145

C	Client
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Cavalía USA Inc.
145 Pine Haven Shores Rd.
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Shelburne, Vermont 05482

B			
	Mark	Date	Description
	Project No.	2013.0179	
	Date	05/16/2013	
	Drawn	SLL	
	Checked	JCM/RAW	
	Scale	As Noted	

Title Sheet

Sheet Title

Sheet No.

G-101

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PROJECT INFORMATION

LOCATION: SOMERVILLE, MASSACHUSETTS

APPLICABLE CODES, LATEST EDITION UNO WITH SOMERVILLE AMENDMENTS:

- 2009 INTERNATIONAL BUILDING CODE
- ASCE/SEI 7-2005 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REGULATIONS

OWNER/ERECTOR: CAVALIA USA, INC.

CONTACT: JOCELYN LANGEJER, CHIEF OF LOGISTICS, 773.459.1323, JOCELYN@CAVALIA.NET

ENGINEER: WISS, JANNEY, ELSTNER ASSOCIATES, INC.

CONTACT: JONATHAN MCGORMLEY, 847-753-7234, JMCORMLEY@WJE.COM

LOCAL BUILDING DEPARTMENT:

THE CITY OF SOMERVILLE INSPECTIONAL SERVICES BUILDING DIVISION

DESIGN LOADS

TENT AND CANOPY STRUCTURE DESIGN LOADS:

- OCCUPANCY RESTRICTIONS: TENT AND CANOPY STRUCTURES ARE TO BE OCCUPIED UNDER THE FOLLOWING CONDITIONS:
 - INSTALL AND MAINTAIN STRUCTURAL COMPONENTS IN ACCORDANCE WITH SEALED DRAWINGS AND CALCULATIONS.
 - MONITOR WIND SPEED FORECAST FROM NEAREST WEATHER STATION.
 - INSTALL ANEMOMETER WITH AUDIBLE ALARM AT TOP OF BIG TOP MAST TO MEASURE WIND SPEED AT SITE.
 - CANCEL PERFORMANCE IF **SUSTAINED WIND SPEEDS** OVER 45 MPH ARE FORECAST AT ANY TIME DURING TIME PERIOD FROM 2 HOURS BEFORE PERFORMANCE TO END OF PERFORMANCE.
 - EVACUATE TENTS:
 - WHEN SITE-MEASURED **WIND GUSTS** EXCEED 65 MPH.
 - WHEN MORE THAN A TRACE AMOUNT OF SNOW COLLECTS ON TENT.
 - DESIGNATE A RESPONSIBLE PERSON IN CHARGE OF CANCELING ANY PERFORMANCE AND/OR ORDERING EVACUATION OF TENTS.
- DEAD, BIG TOP EVALUATED ASSUMING LIGHTING TRUSS DEAD LOADS OF 22 TONNES (48.5 KIP) ON LOBBY-SIDE ARCH AND 30 TONNES (66.1 KIP) ON EACH OF THE MIDDLE AND BACKSTAGE-SIDE ARCHES.
- WIND: TENT STRUCTURES WERE EVALUATED FOR MOST RESTRICTIVE OF FOLLOWING CONDITIONS:
 - 10 PSF WIND PRESSURE APPLIED TO VERTICAL PROJECTION OF TENT SURFACE.
 - DESIGN WIND PRESSURE CALCULATED ACCORDING TO ASCE 7-05 BASED ON A BASIC WIND SPEED OF 80 MPH AND EXPOSURE B.
- BEARING SUBSTRATE: CONCRETE SLAB-ON-GRADE, ASPHALT PAVEMENT AT LEAST 4-INCHES THICK, OR SOIL WITH MINIMUM ALLOWABLE BEARING CAPACITY OF 3,000 PSF; VERIFY SOIL BEARING CAPACITY AS NECESSARY.

GENERAL NOTES

- UNLESS OTHERWISE INDICATED, WORK WILL BE PERFORMED BY OWNER/ERECTOR.
- DRAWINGS:
 - TYPICAL (TYP.) DETAILS AND GENERAL NOTES ARE APPLICABLE UNLESS OTHERWISE DETAILED OR NOTED ON DRAWINGS.
 - CONDITIONS THAT ARE NOT DETAILED ON DRAWINGS OR SPECIFIED IN NOTES SHALL BE CONSTRUCTED TO SAME SIZE AND CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN, DETAILED, OR SPECIFIED.
 - DO NOT SCALE DRAWINGS.
- OBTAIN AND PAY FOR NECESSARY PERMITS, LICENSES, FEES, AND DEPOSITS PRIOR TO ERECTING OR USING TENTS AND CANOPY STRUCTURES.
- PERFORM WORK IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND CITY CODES AND ORDINANCES.
- MAINTAIN CURRENT COPIES OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR EACH CHEMICAL THAT WILL BE BROUGHT ONTO JOB SITE AND SHALL COMPLY WITH REQUIREMENTS OF OSHA HAZARD COMMUNICATION STANDARD.
- SUBMIT TO ENGINEER FOR REVIEW NECESSARY OR REQUESTED CHANGES TO SPECIFIED WORK. ALLOW ADEQUATE TIME FOR REVIEW BEFORE CHANGES MUST BE IMPLEMENTED.
- PROVIDE ADEQUATE BRACING AND SUPPORT OF TEMPORARY CONSTRUCTION AND TEMPORARILY UNSUPPORTED OR PARTIALLY UNSUPPORTED PORTIONS OF WORK. BRACING AND SUPPORT SHALL ENSURE SAFETY OF ALL PERSONS WHO COME IN CONTACT WITH WORK.
- REMOVE SNOW TO PREVENT ANY ACCUMULATION ON TENTS AND CANOPIES. REMOVE BY MELTING, BLOWING, SWEEPING, OR OTHER MEANS.
- COORDINATE AND OBTAIN INSPECTIONS/SPECIAL INSPECTIONS REQUIRED FOR WORK. ENGINEER WILL PERFORM FINAL INSPECTION AFTER SUBSTANTIAL COMPLETION OF ERECTION AND AS REQUIRED BY BUILDING OR FIRE OFFICIAL.
- FIRE SAFETY REQUIREMENTS:
- ENGINEER:
 - DOES NOT HAVE CONTROL OVER OR CHARGE OF AND ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR PROJECT SAFETY PRECAUTIONS AND SAFETY PROGRAMS.
 - ASSUMES NO RESPONSIBILITY FOR FAILURE OF ERECTOR TO PERFORM WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS OR FAILURE OF ERECTOR TO MAINTAIN APPROVED SCHEDULES.
 - ASSUMES NO RESPONSIBILITY FOR ACTS OR OMISSIONS OF OWNER/ERECTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER ENTITIES NOT AFFILIATED WITH ENGINEER

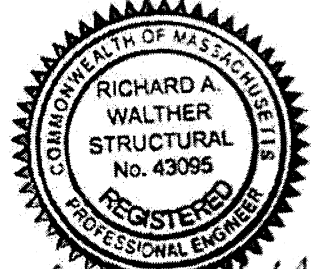
NOTES FOR TENT STRUCTURES

- TENT STRUCTURES ARE DEFINED AS TEMPORARY STRUCTURES COVERED WITH CANVAS OR SIMILAR LIGHTWEIGHT, PLIABLE MATERIAL NOT SUPPORTED BY AIR, ENCLOSED ON 25% OR MORE OF PERIMETER.
 - STRUCTURES ARE SUPPORTED BY NON-COMBUSTIBLE POLES, BEAMS, CABLES AND STRAPS, AND ANCHORS, AS SHOWN ON DRAWINGS.
 - VERIFY COMPONENTS AS DETAILED ON DRAWINGS.
 - TENT FABRIC DESIGNS BY OTHERS; ENGINEER NOT RESPONSIBLE FOR TENT FABRIC DESIGNS.
 - PERFORMANCE STRUCTURES (STRUCTURAL ELEMENTS NOT USED FOR TENT STRUCTURES; E.G. LIGHTING TRUSSES) DESIGN BY OTHERS; ENGINEER NOT RESPONSIBLE FOR PERFORMANCE STRUCTURES
- MATERIALS:
 - STRUCTURAL STEEL: ASTM A36, Fy = 36 KSI, Fu = 52 KSI
CSA G40.21 300W, Fy = 44 KSI
 - STRUCTURAL TUBING: ASTM A501, Fy = 36 KSI, Fu = 58 KSI
S-235 JR, Fy = 35 KSI
S-275 JR, Fy = 41 KSI
S-355 J2 H, Fy = 52 KSI
Fy = 51 KSI, Fu = 74 KSI
 - PINS:
 - FASTENERS:
 - BOLTS ASTM A325 GALVANIZED
 - WASHERS ASTM F436 GALVANIZED
 - NUTS ASTM A663 GALVANIZED
 - GUY, TIE-DOWN, BELL RING, AND FABRIC CABLES:
 - 26 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 117 KIP BREAKING STRENGTH.
 - 24 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 97 KIP BREAKING STRENGTH.
 - 20 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 67 KIP BREAKING STRENGTH.
 - 18 MM DIAMETER: TYPE A6265, 6X36 IWRC, 80 KIP BREAKING STRENGTH.
 - 18 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 55 KIP BREAKING STRENGTH.
 - 16.3 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 42 KIP BREAKING STRENGTH.
 - 16 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 43 KIP BREAKING STRENGTH.
 - 14 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 33 KIP BREAKING STRENGTH.
 - 12 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 24 KIP BREAKING STRENGTH.
 - 11.2 MM DIAMETER: TYPE S10 ZN, 6X36 IWRC, 18 KIP BREAKING STRENGTH.
 - MANUAL WIRE ROPE HOISTS:
 - HABEGGER HIT-32: WORKING LOAD = 7,055 LBS (3200 kg)
16.2 MM WIRE ROPE: BREAK LOAD = 35,274 LBS (16000 kg)
 - HABEGGER HIT-16: WORKING LOAD = 3,527 LBS (1600 kg)
11.2 MM WIRE ROPE: BREAK LOAD = 17,637 LBS (8000 kg)
 - AYERBE AY-TRAC 1.6 WORKING LOAD = 3,527 LBS (1600 kg)
11 MM WIRE ROPE BREAKING LOAD = 16,540 LBS (7502 kg)
 - GRIP HOIST T-516D WORKING LOAD = 3,527 LBS (1600 kg)
11 MM WIRE ROPE BREAKING LOAD = 16,540 LBS (7502 kg)
 - SHACKLES:
 - T-3-2: MINIMUM BREAKING LOAD = 36.0 KIP (160.0 kN)
 - T-4-75: MINIMUM BREAKING LOAD = 53.4 KIP (237.5 kN)
 - T-6-5: MINIMUM BREAKING LOAD = 73.1 KIP (325.0 kN)
 - T-8-5: MINIMUM BREAKING LOAD = 95.5 KIP (425.0 kN)
 - T-17-0: MINIMUM BREAKING LOAD = 191.1 KIP (850.0 kN)
 - TIE-DOWN STRAPS: NYLON, RACHET-TYPE; 5,820 LBS WORKING STRENGTH.
 - ANCHORS:
 - BIG TOP TENT: 2" DIAMETER BY 4'-6" LONG; 5,000 LBS PULL-OUT CAPACITY.
 - OTHER TENTS: 2" DIAMETER BY 4'-6" LONG; 5,000 LBS PULL-OUT CAPACITY.
 - POST BASES: 1 1/4" DIAMETER BY 2'-6" LONG
1" DIAMETER BY 2'-6" LONG
1 3/16" DIAMETER BY 3'-3" LONG
 - MANTA RAY ANCHORS TYPE MR-SR: 18 KIP PULL-OUT CAPACITY.
- SUPPLEMENTAL BEARING PLATES ARE NOT REQUIRED FOR MASTS AND A-FRAMES BEARING ON CONCRETE SLAB-ON-GRADE OR ASPHALT PAVEMENT AT LEAST 4-INCHES THICK.
- DINING TENT SIDE POLES REQUIRE 8"-LONG 4X4 BLOCKING IF BEARING ON SOIL.
- VIP, ARTIST, AND STABLES TENT SIDE POLES REQUIRE 2'-0" LONG 4X4 BLOCKING IF BEARING ON SOIL.
- WELDING SHALL CONFORM TO LATEST EDITION OF AWS D1.1/D1.1M STRUCTURAL WELDING CODE-STEEL.
- SPECIAL INSPECTIONS/TESTS:
 - STRUCTURAL TESTS, INSPECTIONS, AND SPECIAL INSPECTIONS SHALL BE MADE BY ENGINEER OR QUALIFIED SPECIAL INSPECTOR.
 - INSPECT TENTS FOR CONFORMANCE WITH DRAWINGS.
 - INSPECT ANCHORS FOR SIGNS OF MOVEMENT AND GROUND IN VICINITY OF ANCHORS FOR IRREGULARITIES THAT MIGHT INDICATE WEAKENED SOIL.
 - ANCHOR PULL-OUT TESTS:
 - TEST AT LEAST (5) - 4'-6"-LONG ANCHORS, OR MORE IF REQUIRED BY ENGINEER OR LOCAL BUILDING DEPARTMENT.
 - TEST PER ANCHOR PULL-OUT TEST PROCEDURE FOR MINIMUM PULL-OUT CAPACITY OF 5,000 LBS; PULL AT SAME ANGLE AS CABLES OR STRAPS.
 - PROOF TEST AT LEAST 10 PERCENT OF ALL MANTA RAY ANCHORS IN USE IN THEIR SERVICE LOCATIONS TO 10,000 LBS.
 - TESTS SHALL BE WITNESSED BY BUILDING OR FIRE OFFICIAL IF REQUESTED.
 - MANTA RAY ANCHORS MAY BE SUBSTITUTED FOR STAKE ANCHORS WITH ONE MANTA RAY ANCHOR REPLACING A MAXIMUM OF 5 STAKE ANCHORS DEPENDING ON SOIL CONDITIONS.
 - ENGINEER TO PROVIDE SUPPLEMENTAL ANCHOR PLAN IF ANCHORS DO NOT PASS PULL-OUT TESTING.
 - FILE INSPECTION REPORTS WITH LOCAL BUILDING DEPARTMENT.
- IN EVENT OF EVACUATION:
 - ENGINEER WILL INSPECT TENTS AND CANOPIES TO VERIFY EXTENT OF DAMAGE AND THAT TENTS AND CANOPIES ARE STRUCTURALLY SOUND AND ADEQUATE FOR OCCUPANCY.
 - ENGINEER WILL SUBMIT INSPECTION VERIFICATION REPORT TO LOCAL BUILDING DEPARTMENT FOR APPROVAL FOR RE-OCCUPANCY.

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Richard A. Walther

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Mark	Date	Description
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Project No.	2013.0179
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Drawn	SLL
Checked	JCM/RAW
Scale	As Noted

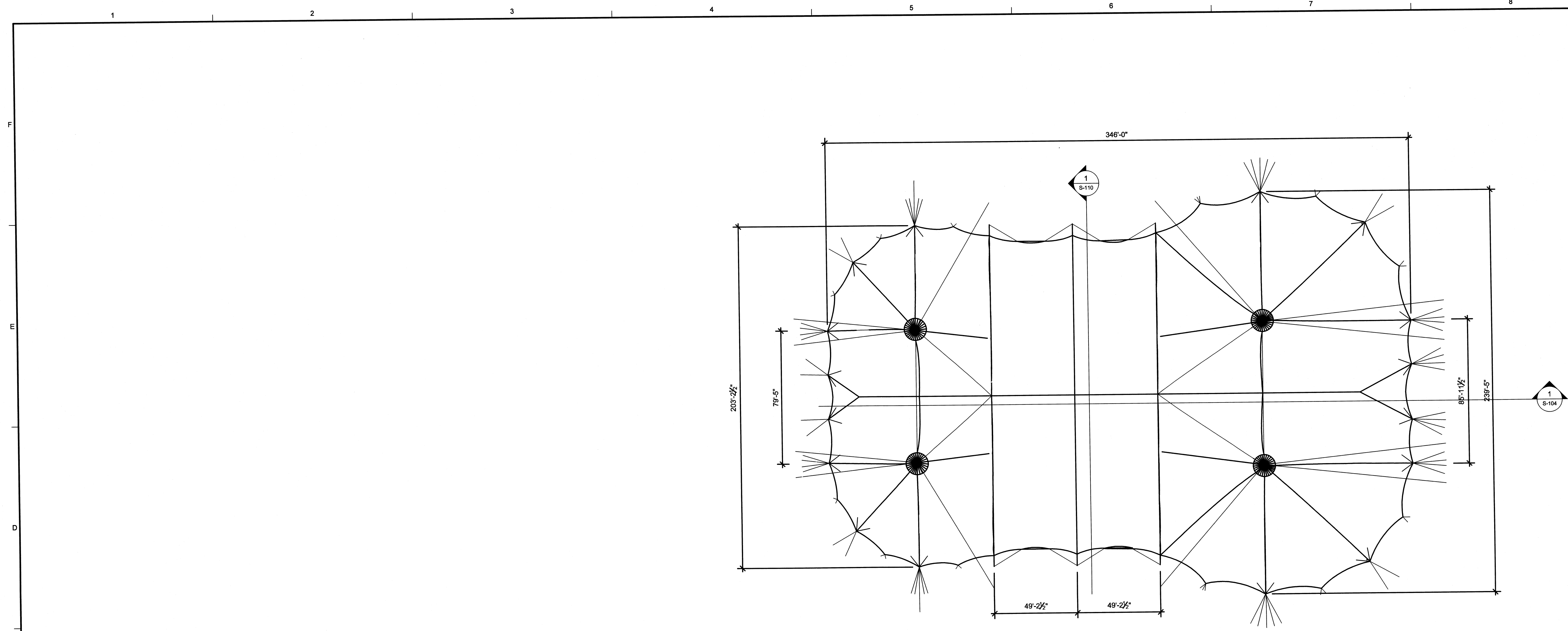
General Notes

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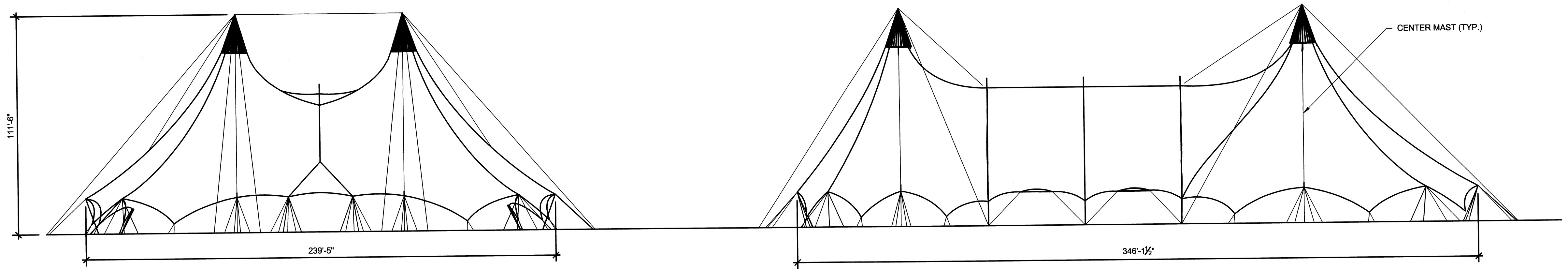
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1 TOP VIEW
SCALE: 1/32" = 1'-0"



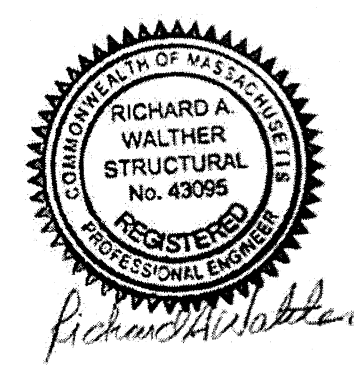
2 FRONT VIEW
SCALE: 1/32" = 1'-0"

3 SIDE VIEW
SCALE: 1/32" = 1'-0"

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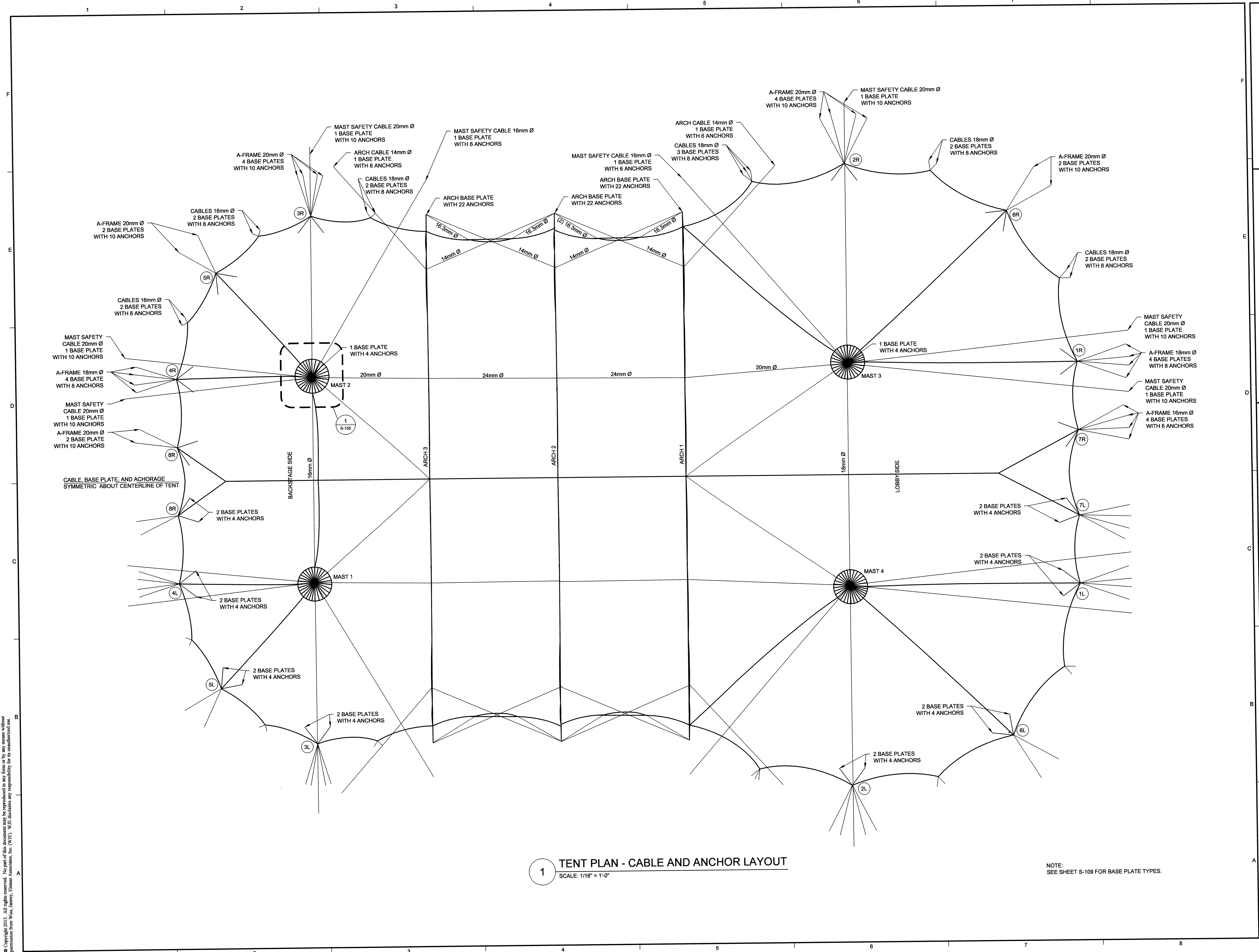
Client
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**Big Top - General
Arrangement**

Sheet Title
Sheet No. **S-101**

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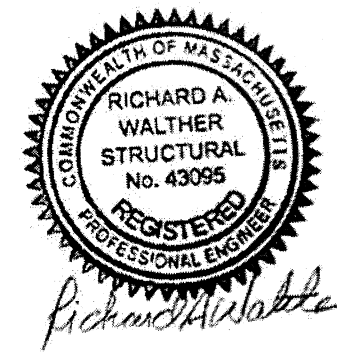
1 TENT PLAN - CABLE AND ANCHOR LAYOUT
SCALE: 1/16" = 1'-0"

NOTE:
SEE SHEET S-109 FOR BASE PLATE TYPES.

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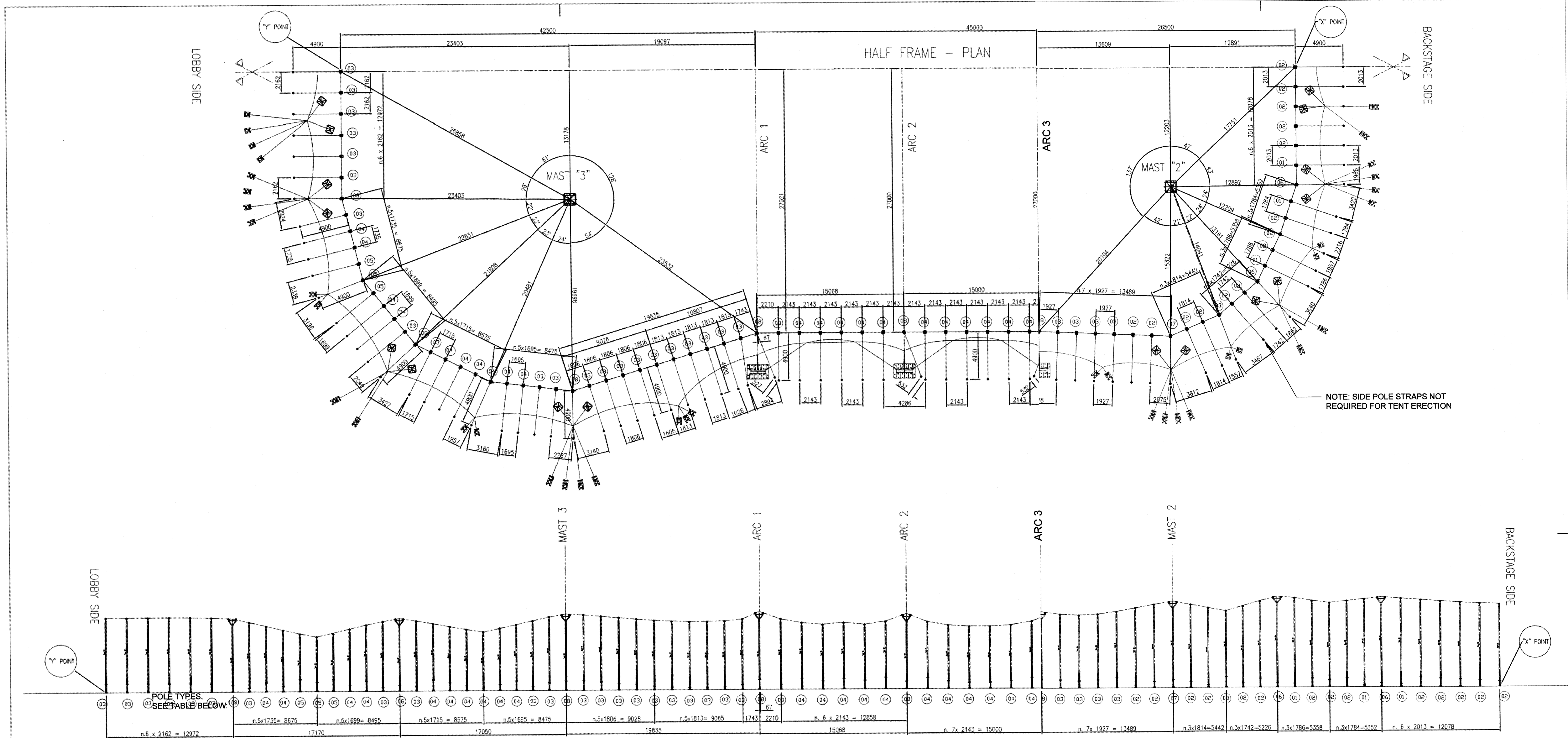
Project No.	2013.0179
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Big Top - Cables Plan

Sheet Title

Sheet No.

S-102



SIDE POLES - FRONT VIEW
SEE SHEETS S-106 AND S-107
FOR SIDE POLE SIZES

MEASURES: millimeters

Rev.	Data	Nome	Descrizione aggiornamento	Data	Contr.
C					
B					
A					

CANOBBIO

Progetto: TENT
m 73 x 120

Cliente: CAVALIA
Canada

Oggetto: SIDE POLES
SETTING OUT
AND ASSEMBLY

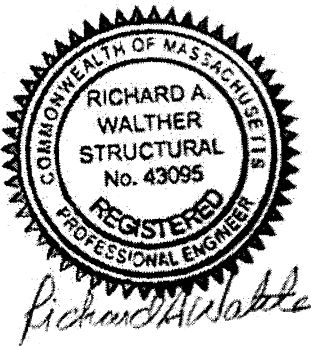
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Project No. 2013.0179

Date 05/16/2013

Drawn SLL

Checked JCM/RAW

Scale As Noted

**Big Top - Side Poles
Plan**

Sheet Title

Sheet No. **S-103**



Odysseio

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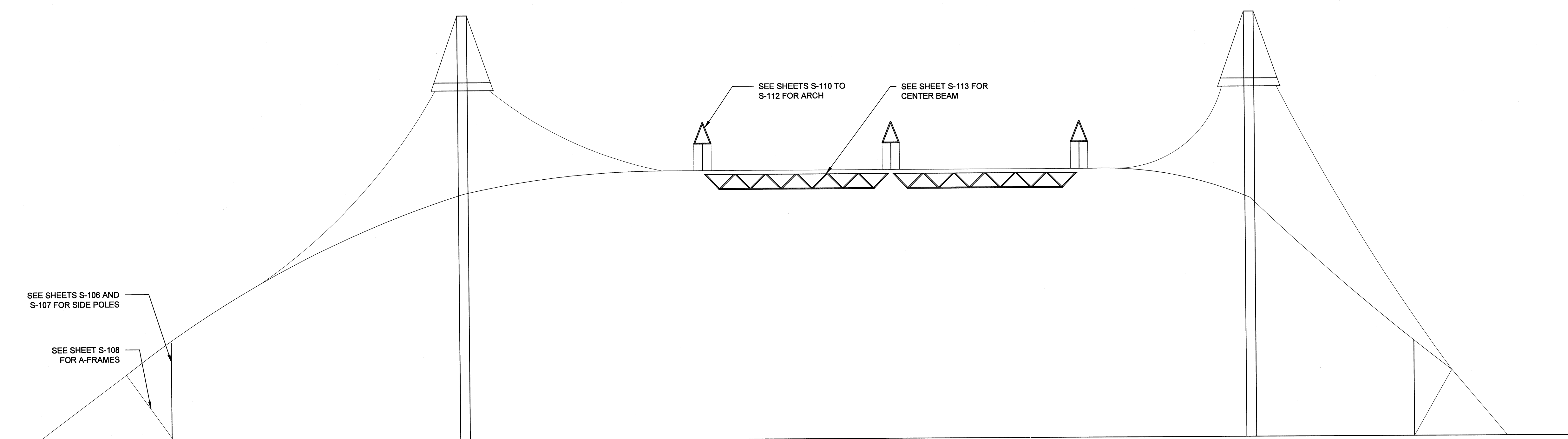
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Big Top - Longitudinal Section

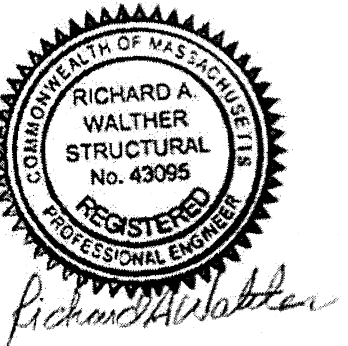
Sheet Title

Sheet No.

S-104



1 LONGITUDINAL SECTION
SCALE: 1/16" = 1'-0"



Project

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Cavalis

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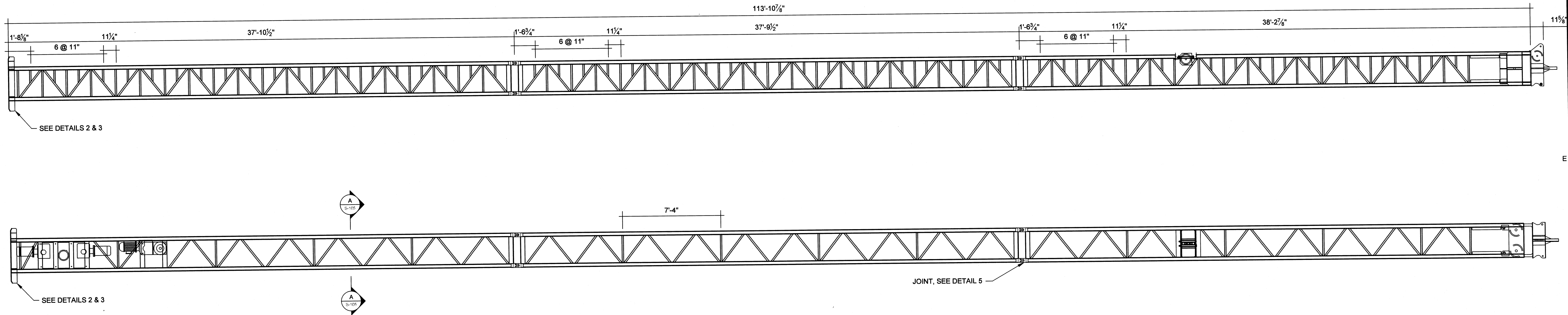
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Big Top - Mast

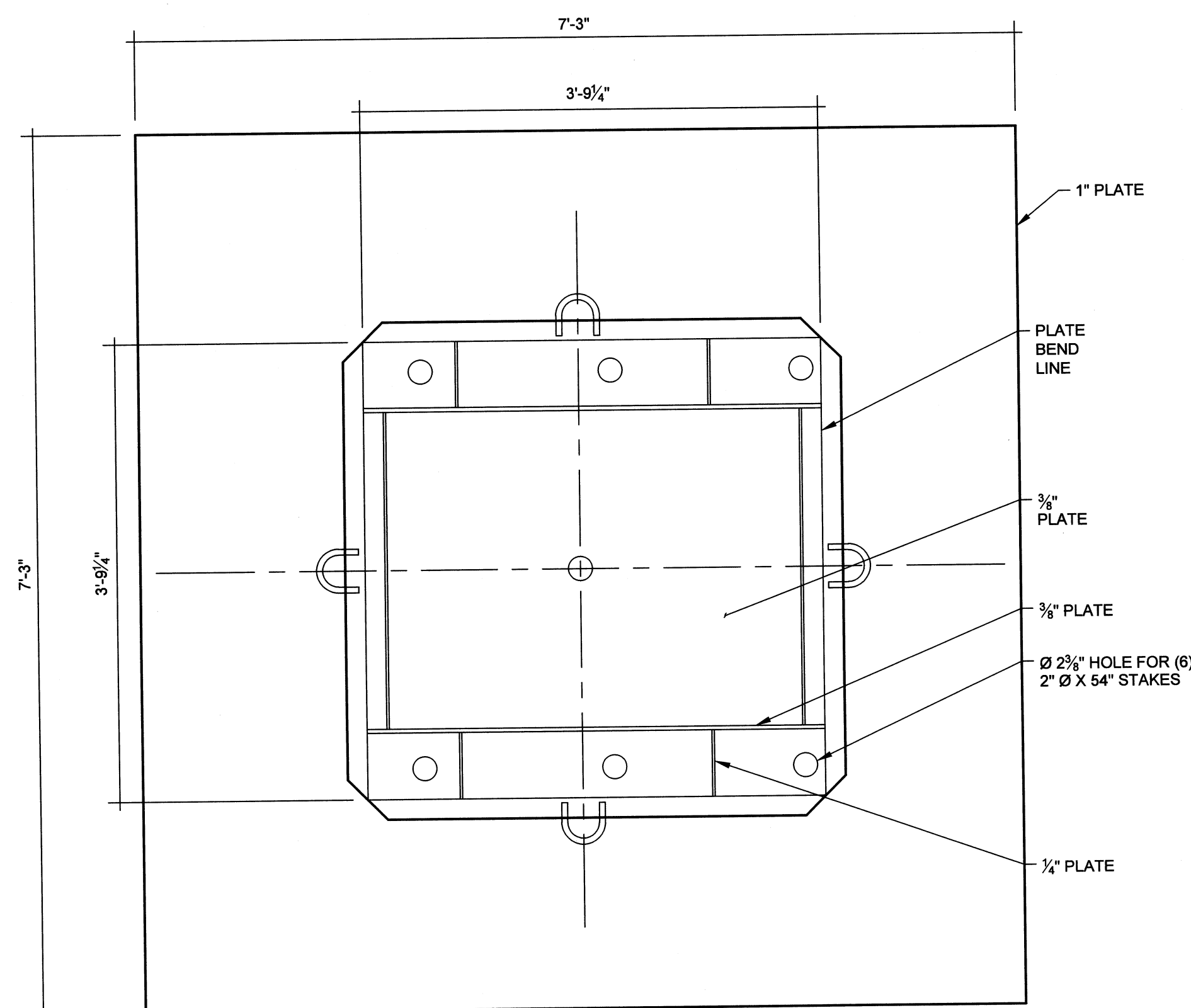
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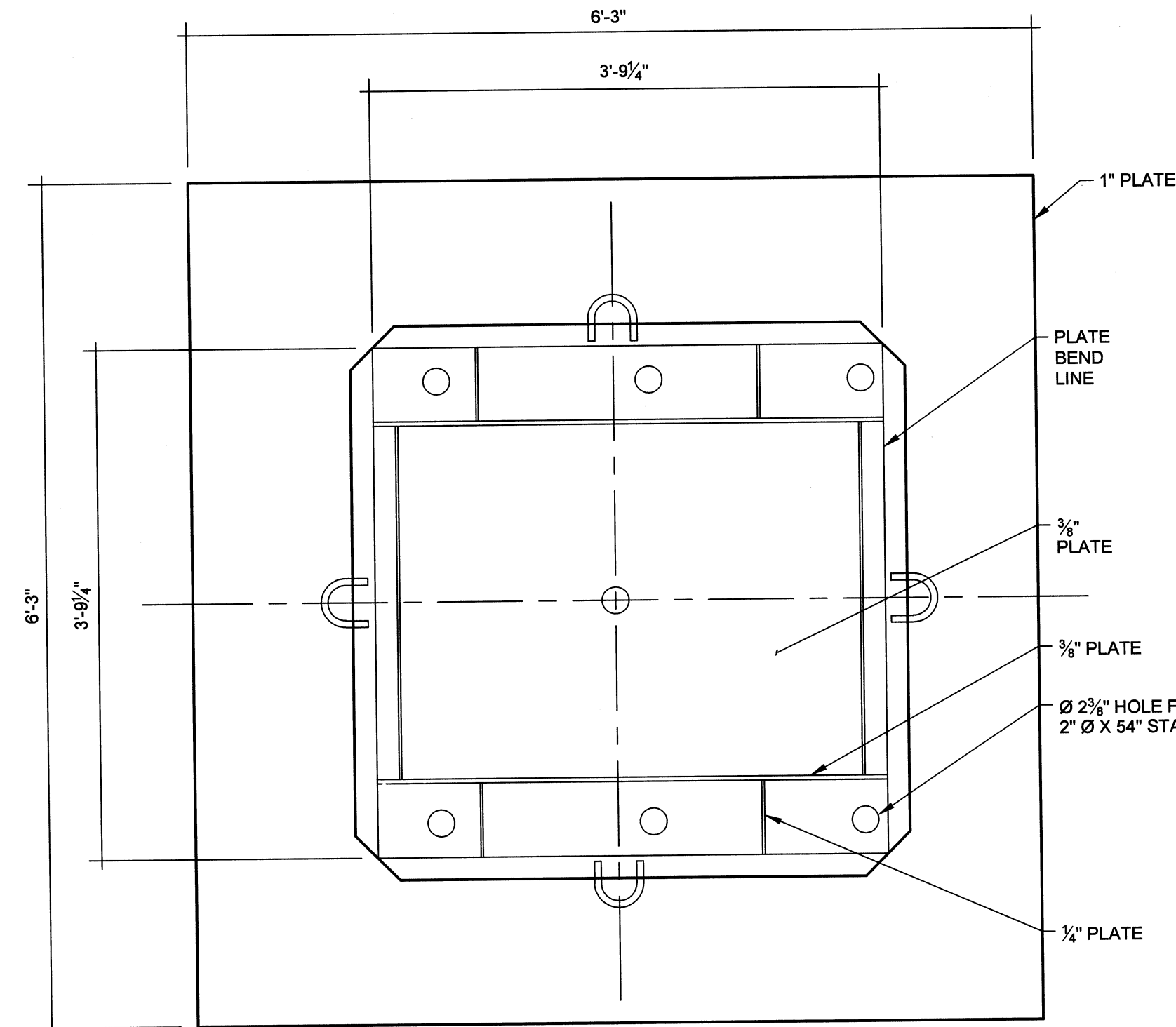
S-105



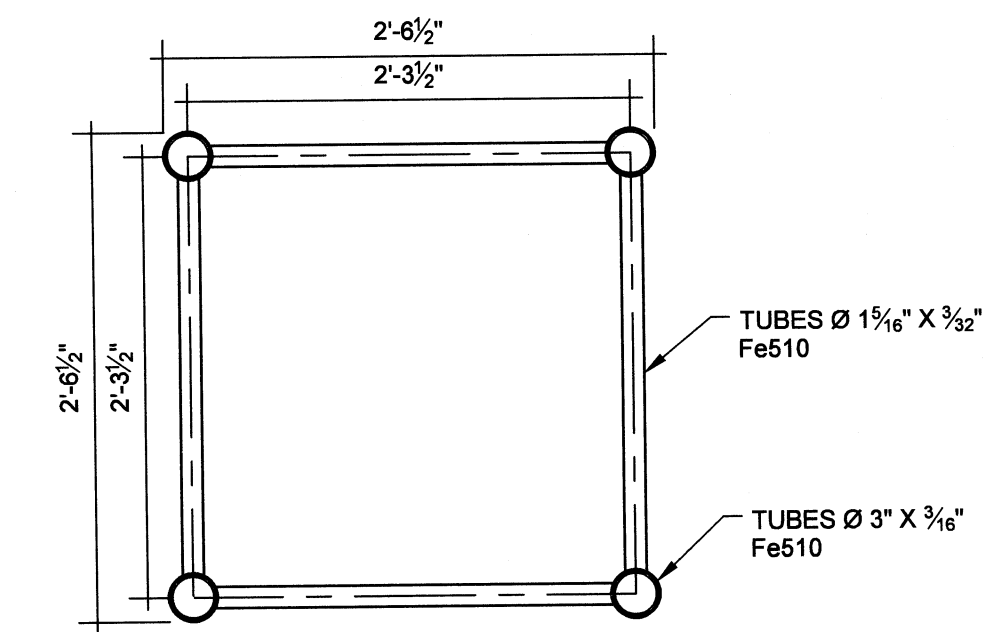
1 MAST
SCALE: 1/4" = 1'-0"



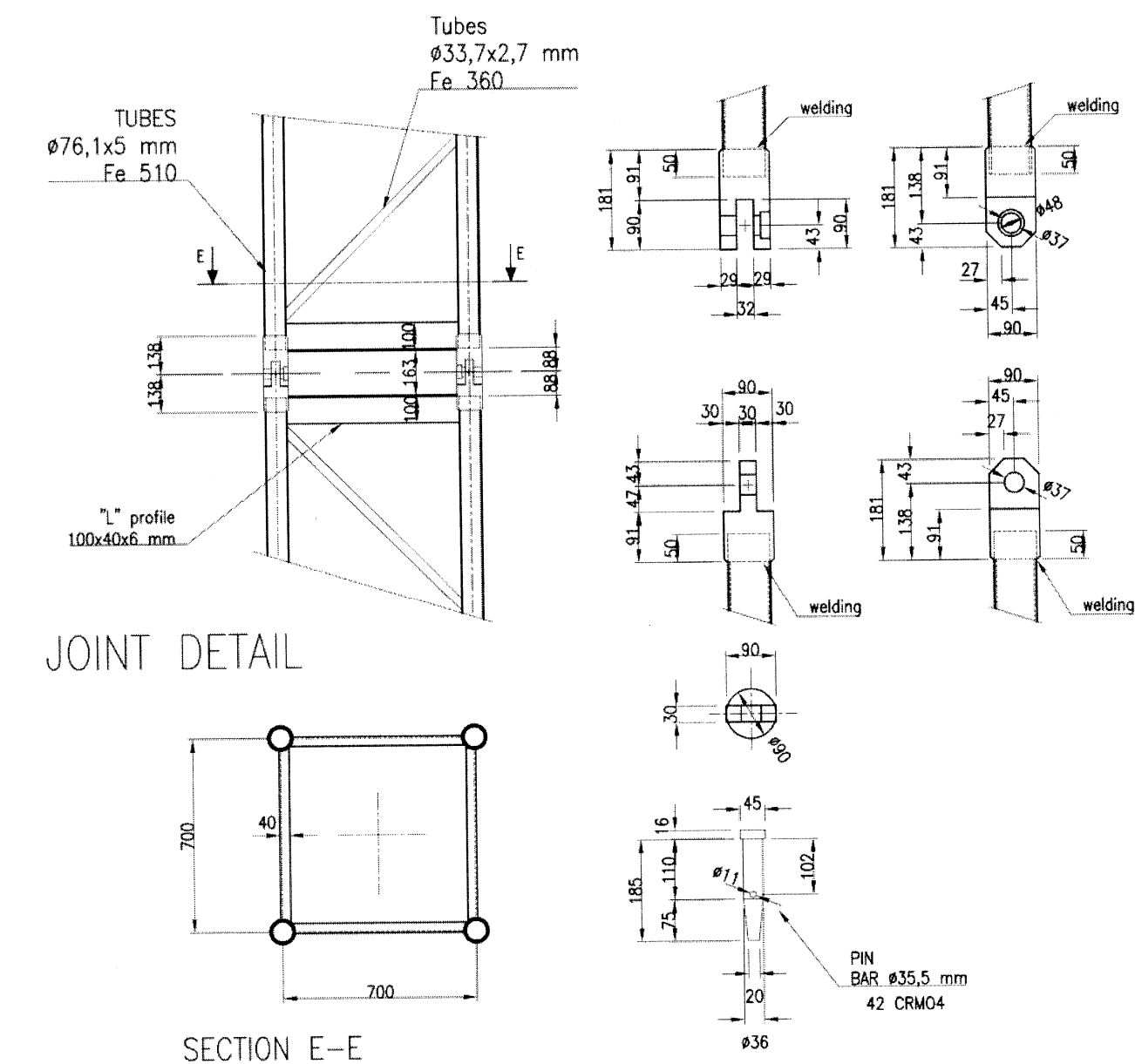
2 **BASE PLATE
MASTS 1 & 2**
SCALE: 1" = 1'-0"



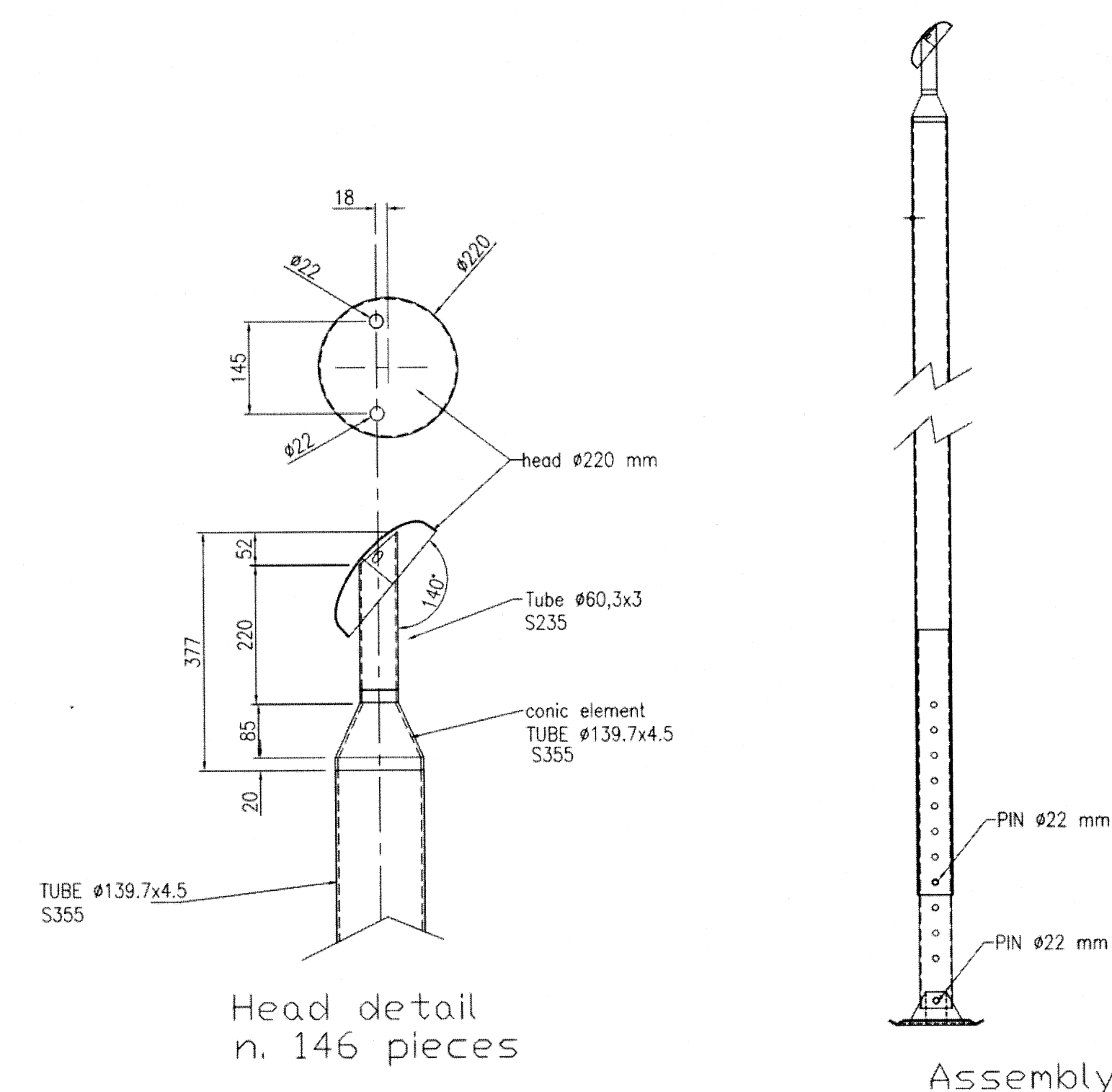
3 **BASE PLATE**
MASTS 3 & 4
SCALE: 1" = 1'-0"



4 **SECTION A-A**
SCALE: 1" = 1'-0"



5 JOINT DETAIL
SCALE: 1" = 1'-0"



MATERIALS:					
EN 10025-2 For Plates and other profiles					
EN 10210-1 and EN 10219-2/2006 Only for pipes					
S 235 JR	Yield tensile strength d06/cmq	2600	Ultimate tensile strength d06/cmq	Adm.	tensile strength —
Fe 360 B					1500
S 275 JR	Yield tensile strength d06/cmq	2800	Ultimate tensile strength d06/cmq	Adm.	tensile strength 1800
Fe 430 D			4500		1900
S 355 J2 H	Yield tensile strength d06/cmq	3600	Ultimate tensile strength d06/cmq	Adm.	tensile strength d06/cmq
Fe 510 D			5100		2400
WELDINGS:					
All the weldings are of the type lap and continuous					
For the union of the plates, if otherwise specified, not to be the least thickness of the elements to be united.					
For the union of the pipes, if otherwise specified: not					
					
The preparation of the edges to be welded, how to be up-to-standard: EN 10017/88					
All the weldings have to be up-to-standard: EN ISO 5817 /2/04					
Finish of the materials: Hot dipped galvanized, least thickness of the galvanization = 53 microns, and up-to-standard: NFA.5303, EN 1461, EN 17713.					
Provide drainage holes for galvanizing.					
TOLERANCE: for dimensions +/- 5 mm					
for holes +/- 1 mm					

C					
B					
A					
Rev	Data	Nome	Descrizione pagamento	Data	C



Amministrazione e Uffici Commerciali
Via Roma 3 - Castelnuovo S. (AL) I-15053
Tel. 0131-82.33.53 Fax 0131-82.35.21

Stabilimento e Ufficio Tecnico
Strada Sgarbazzolo 4
Castelnuovo Scrivia (AL) I-15053
Tel. 0131-82.33.53 Fax 0131-85.51.42
Modem 0131-82.33.17

Progetto	TENT m 73 x 120
----------	--------------------

Cliente	CAVALIA CANADA
---------	-------------------

Oggetto	STANDARD SIDE POLES Tube $\varnothing 139.7 \times 4.5$ mm
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Proprietà CANOBIO s.p.a. - Riproduzione e divulgazione vietata a termine di legge

Blocco : z466			File :		Prog. est.	
Scala 1 : 20		UNI A 1	Progetto n°	4163C	Disegno n°	466
	Data	Nome				
Dis.	25-05-11	ag				
Cont.						

Project

Odysseio

Odysseo - Cavalia
201 Assembly Square Drive
Somerville, Massachusetts
02145

Client	
--------	--

Cavalía USA Inc.
145 Pine Haven Shores Rd.
Suite 1121
Shelburne, Vermont 05482

Mark	Date	Description
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Project No. 2013.0179

Date	05/16/2013
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Drawn	SLL
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Checked	JCM/RAW
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Scale	As Noted
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Big Top - Standard Side
Poles

Sheet Title

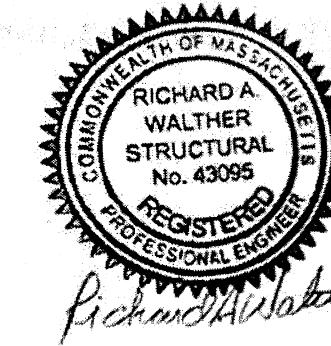
Sheet No. _____

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Headquarters & Laboratories: Northbrook, Illinois
Atlanta | Austin | Boston | Chicago | Cleveland | Dallas | Denver | Detroit
Honolulu | Houston | Los Angeles | Minneapolis | New Haven | New York
Princeton | San Francisco | Seattle | Washington, D.C.



Project

Odysseo
Cavalía

Odysseo - Cavalia
201 Assembly Square Drive
Somerville, Massachusetts
02145

Client

Cavalía USA Inc.
145 Pine Haven Shores Rd.
Suite 1121
Shelburne, Vermont 05482

Mark Date Description

Project No. 2013.0179

Date 05/16/2013

Drawn SLL

Checked JCM/RAW

Scale As Noted

Big Top - Double Side Poles

Sheet Title

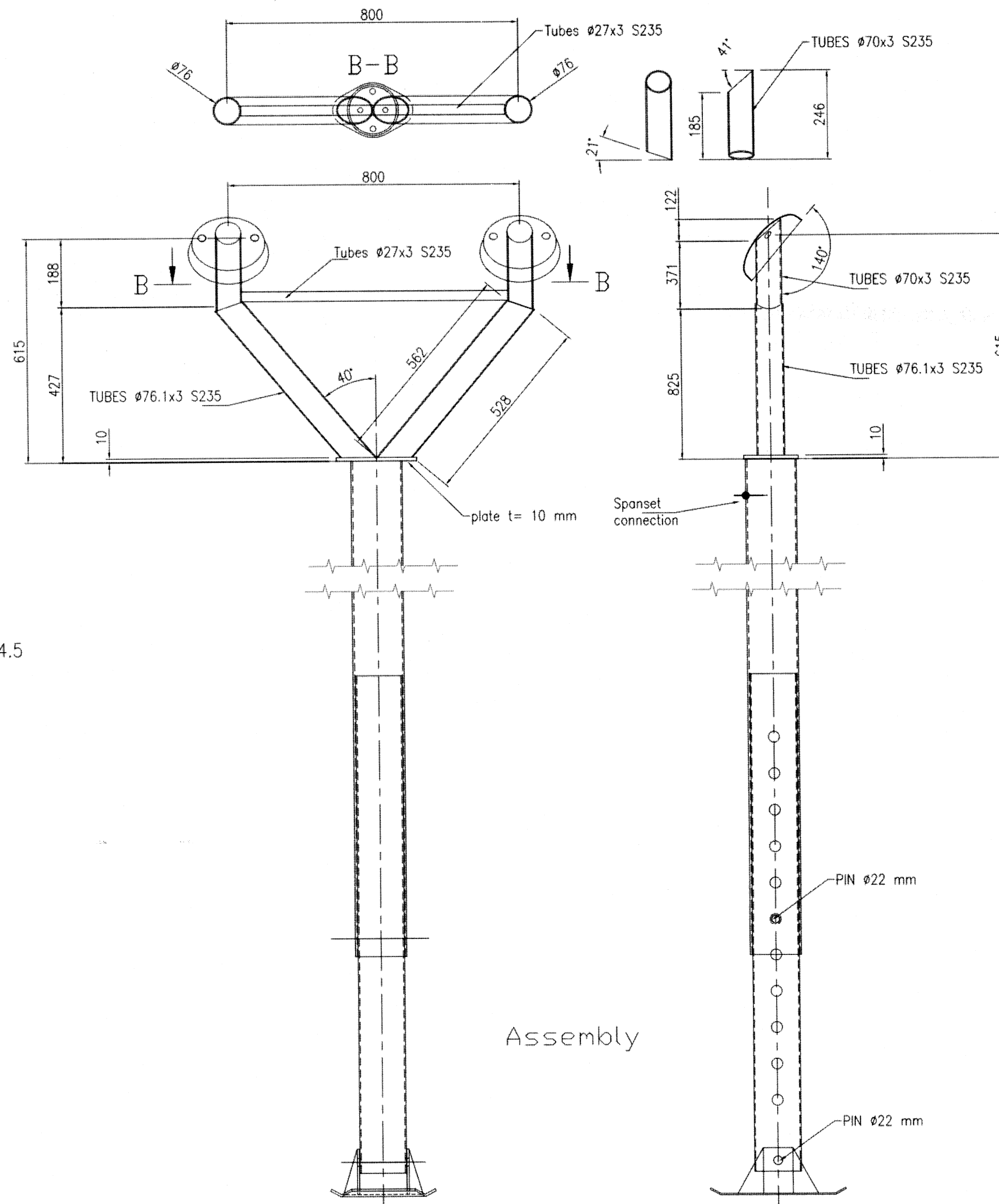
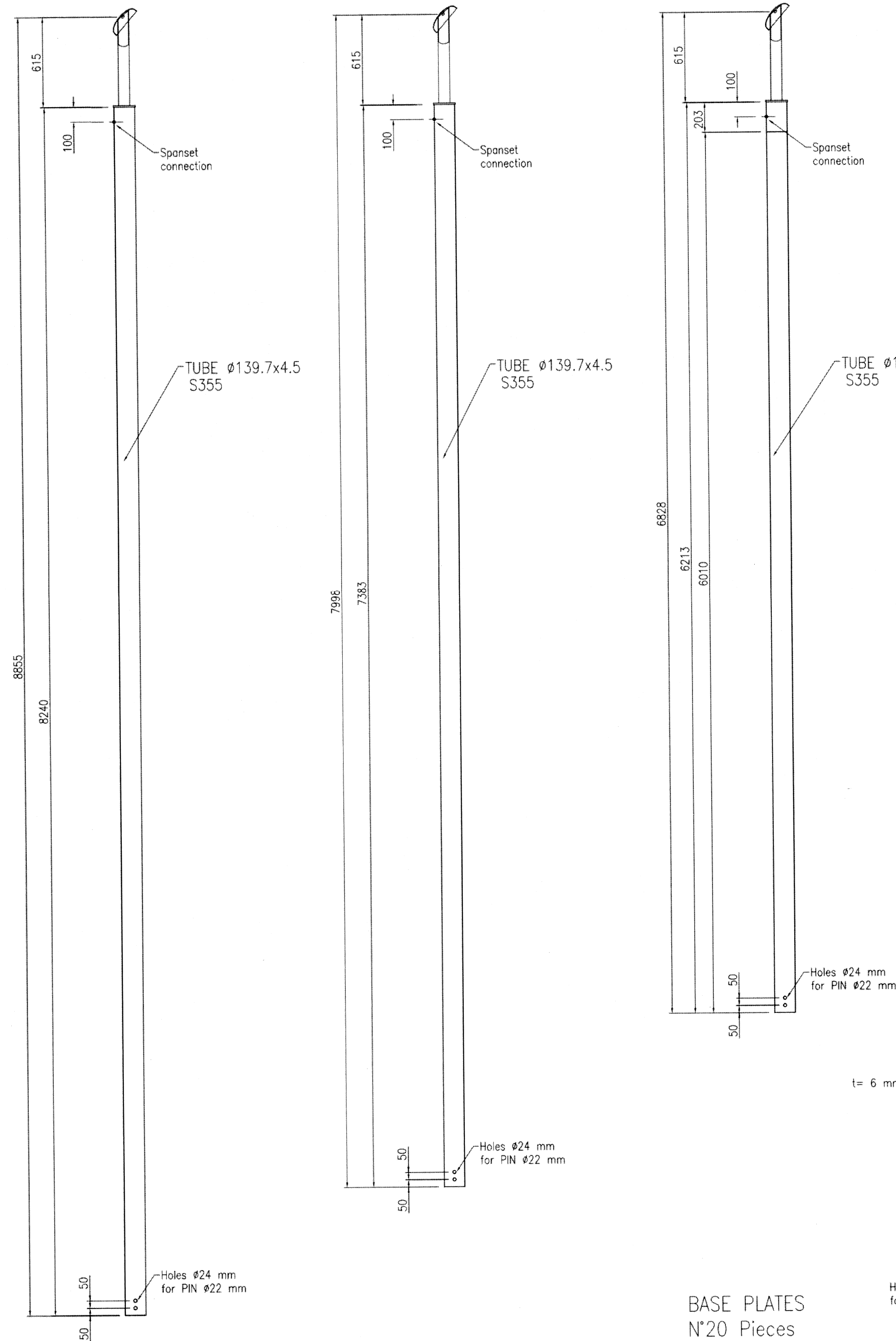
Sheet No.

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TIPO 06
N°4 Pieces

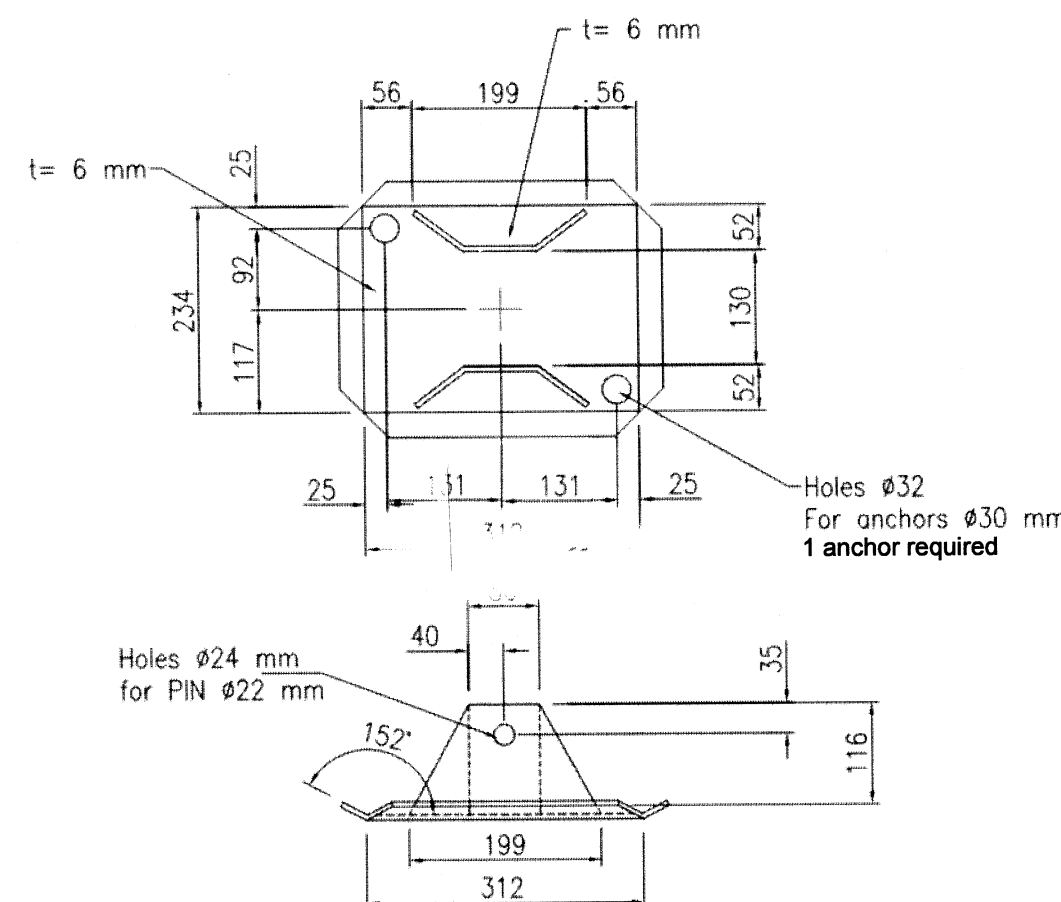
TIPO 07
N°4 Pieces

TIPO 08
N°12 Pieces



Assembly

BASE PLATES
N°20 Pieces



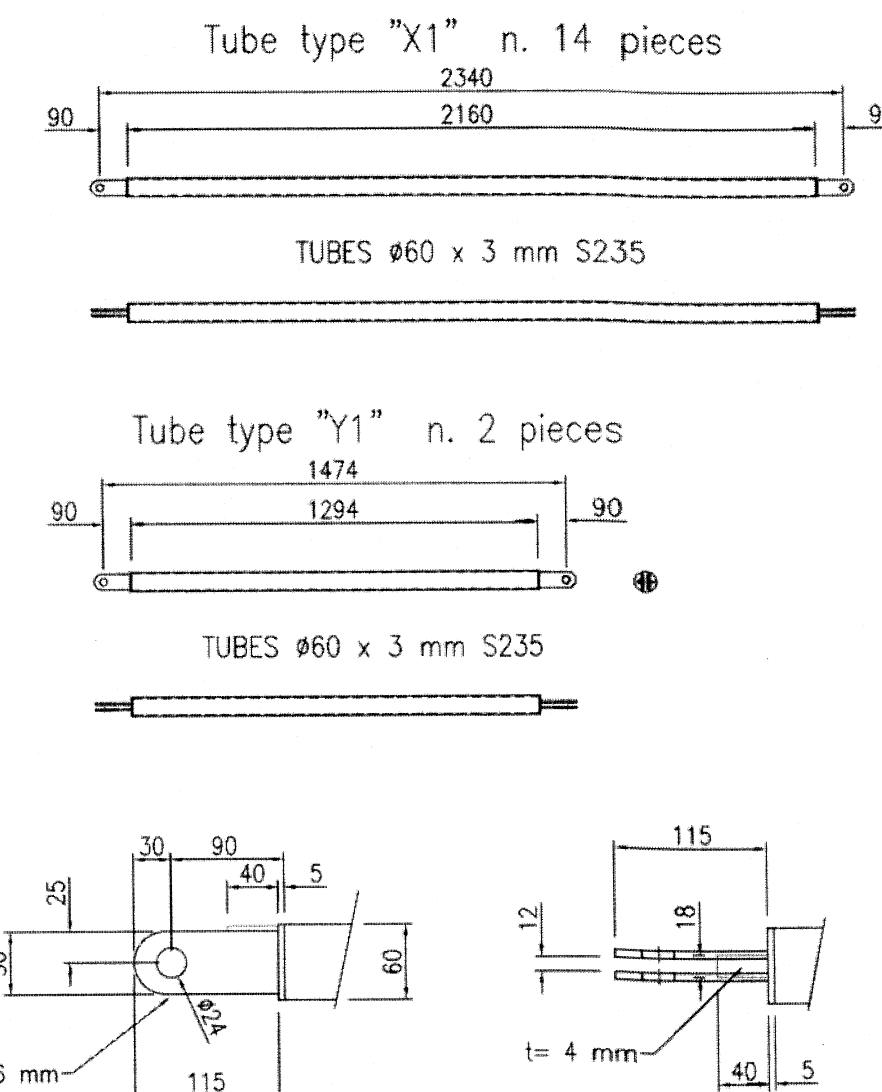
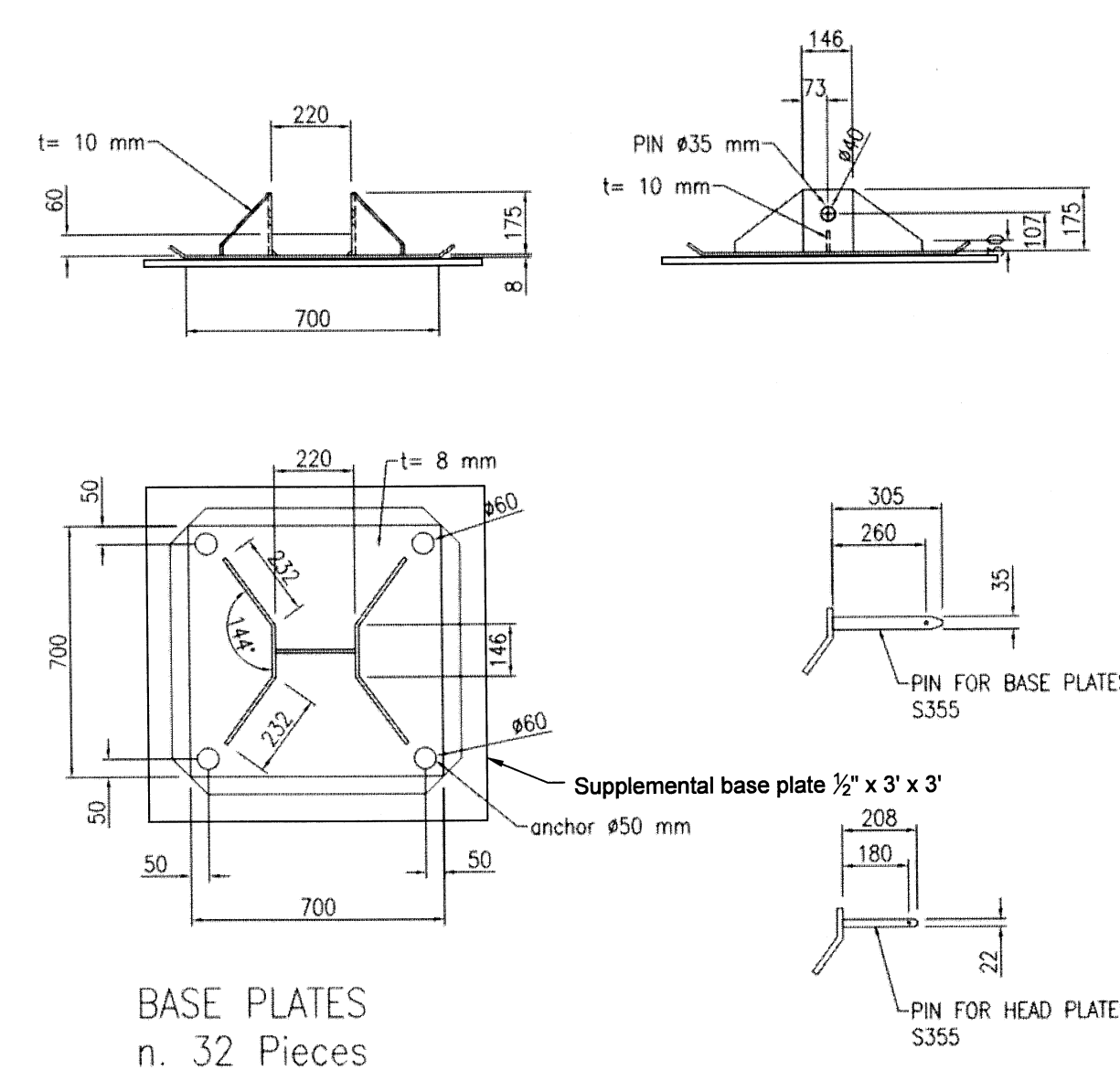
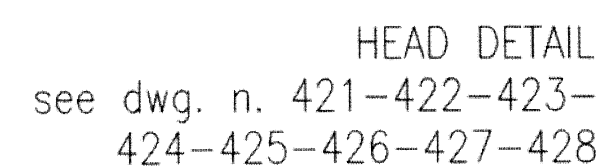
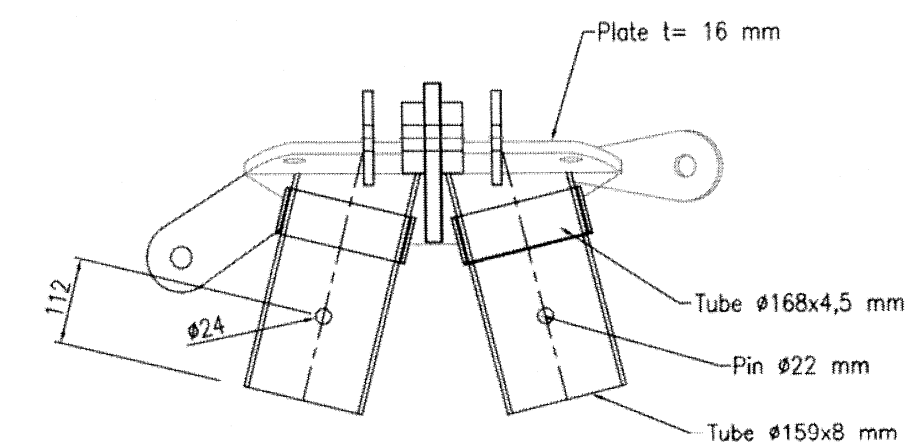
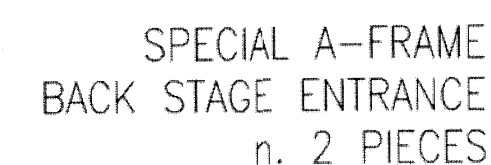
FABRICATE n. 20 DOUBLE SIDE POLES

MATERIALS:			
EN 10025-2 For Plates and other profiles			
EN 10210-1 and EN 10219-2/2006 Only for pipes			
S 235 JR	Yield tensile Strength daN/cm²	Ultimate tensile Strength daN/cm²	Adm. tensile Strength daN/cm²
Fe 360 B	2400	3600	1600
S 275 JR	Yield tensile Strength daN/cm²	Ultimate tensile Strength daN/cm²	Adm. tensile Strength daN/cm²
Fe 430 D	2800	4300	1900
S 355 J2 H	Yield tensile Strength daN/cm²	Ultimate tensile Strength daN/cm²	Adm. tensile Strength daN/cm²
Fe 510 D	3600	5100	2400

WELDINGS:
All the weldings are of the type plain and continuous.
For the union of the tubes, if otherwise specified not, a= to the least thickness of the two elements to be united.
For the union of the plates, if otherwise specified not:
The preparation of the edges to be welded, how to be up-to-standards: EN 10017/08
All the weldings have to be up-to-standards: EN ISO 5817 C/2004
Finish of the materials: Hot dipped galvanized, least thickness of the galvanization > 5,5 micron, and up-to-standards: NF A 5503, EN 1461, EN 17713.
Provide drainage holes for galvanizing.

TOLERANCE: for dimensions +/- 5 mm
for holes +/- 1,5 mm

Rev.	Data	Nome	Descrizione aggiornamento	Data	Contr.
CANOBBIO					
Progetto	TENT m 73 x 120				
Cliente	CAVALIA CANADA				
Oggetto	DOUBLE SIDE POLES Tube Ø139,7 x 4,5 mm				
Proprietà 'CANOBBIO' s.p.a. - Riproduzione e divulgazione vietata a termini di legge					
Blanco	2467	File	Prog. est.		
Scala	1:20	UNI	A1	Progetto n°	Disegno n°
Dis.	25-05-11	ag		4163C	467
Contr.					0



FABRICATE n. 16 "A" - FRAME

MATERIALS:				
EN 10025-2 For Plates and other profiles				
EN 10210-1 and EN 10219-2/2006 Only for pipes				
S 235 JR Fe 360 B	Yield tensile Strength daN/cm ² 2400	Ultimate tensile Strength daN/cm ² 3600	Adm. tensile Strength daN/cm ² 1600	
S 275 JR Fe 430 D	Yield tensile Strength daN/cm ² 2800	Ultimate tensile Strength daN/cm ² 4300	Adm. tensile Strength daN/cm ² 1900	
S 355 J2 H Fe 510 D	Yield tensile Strength daN/cm ² 3550	Ultimate tensile Strength daN/cm ² 5100	Adm. tensile Strength daN/cm ² 2550	

WELDING

All the weldings are of the type plain and continuous.

For the union of the tubes, if otherwise specified not,

am to the least thickness of the two elements to be united

For the union of the plates, if otherwise specified not:

The preparation of the wires to be welded.

the preparation of the edges to be welded, have to be up-to-standard: UNI 10011/88. All the welding have to be up-to-standard: EN ISO 5817 C/200.

All the weldings have to be up-to-standard: EN ISO 5817 C/2004

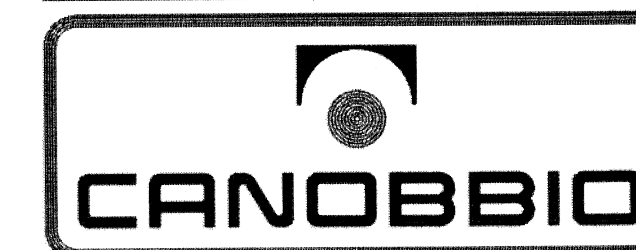
Finish of the materials: Hot dipped galvanized, least thickness of the galvanization: 100 g/m² and up-to-standards: NE A 3503 EN 1461 EN 17713

Provide drainage holes for galvanizing.

TOLERANCE: for dimensions ± 0.5 mm

TOLERANCE: for dimensions ± 0.5 mm
for holes ± 0.15 mm

C					
B					
A					
Rev.	Data	Nome	Descrizione aggiornamento	Data	C



Amministrazione e Uffici Commerciali
Via Roma 3 - Castelnovo S. (AL) I-15053
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Strada Sgarbazzolo 4
Castelnovo Saviia (AL) I-15053
Tel. 0131-82.33.53 Fax 0131-85.51.42
Modem 0131-82.33.17

Progetto	TENT m 73x120
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Cliente	CAVALIA CANADA
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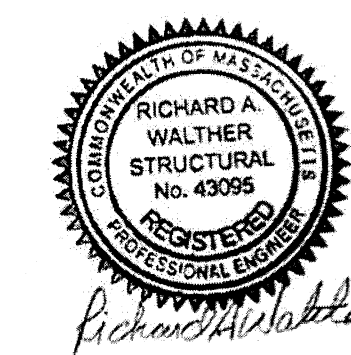
Oggetto	A - FRAME ø168 x 4,5 mm
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Proprietà CANOBRIO s.p.a. - Riproduzione e divulgazione vietata a termine di legge

Blocco :		File :		Prog. est.	
Scala	1 : 45	UNI	A1	Progetto n°	Disegno n°
	Data	Nome		4163C	468
Dis.	25-05-11	ag			
Conte					

Wiss, Janney, Elstner Associates, Inc.
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Northbrook, Illinois 60062
847.272.7400 tel | 847.291.4813 fax
www.wje.com

Headquarters & Laboratories: Northbrook, Illinois
Atlanta | Austin | Boston | Chicago | Cleveland | Dallas | Denver | Detroit
Honolulu | Houston | Los Angeles | Minneapolis | New Haven | New York
Princeton | San Francisco | Seattle | Washington, D.C.



Project	
---------	--

Odysseio

Odysseo - Cavalia
201 Assembly Square Drive
Somerville, Massachusetts
02145

C	Client
---	--------

Cavalía USA Inc.
145 Pine Haven Shores Rd.
Suite 1121
Shelburne, Vermont 05482

B			
	Mark	Date	Description

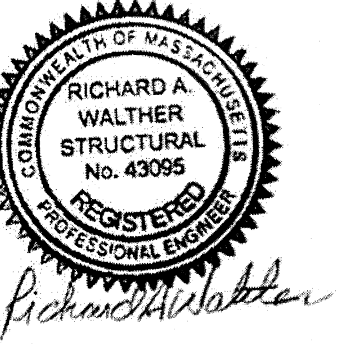
Project No.	2013.0179
Date	05/16/2013
Drawn	SLL
Checked	JCM/RAW
Scale	As Noted

Big Top - A-Frame

Sheet Title

Sheet No.

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Project

Odysseu
Cavalis

Odysseo - Cavalia
201 Assembly Square Drive
Somerville, Massachusetts
02145

Client

Cavalía USA Inc.
145 Pine Haven Shores Rd.
Suite 1121
Shelburne, Vermont 05482

TOTAL: n. 98 BASE PLATES

MATERIALS: Steel S235

ANCHORS: Ø 2" X 54"

B					
A					
Rev.	Data	Nome	Descrizione aggiornamento	Data	Contr.



Amministrazione e Uffici Commerciali Via Roma 3 - Castelnuovo Scivria (AL) I-15053 Stabilimento e Ufficio Tecnico Strada Sgarbazzolo 4 - Castelnuovo Scivria (AL) I-15053					
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Proprietà: CANOBIO s.p.a.

Riproduzione e divulgazione vietata a termine di legge

Data	Nome	Data	Contr.	Contr.
30-05-11	ag			

Progetto		Tent	
73 x 120		m	

Cliente		CAVALIA	
		Canada	

Oggetto		BASE PLATES FOR	
		ANCHORS Ø50 mm	

File :		Blocco :	
Scala	1 : 10	UNI	A
Prog. est.			

Progetto n°		4163C	
Dis.		469	
Rev.		0	

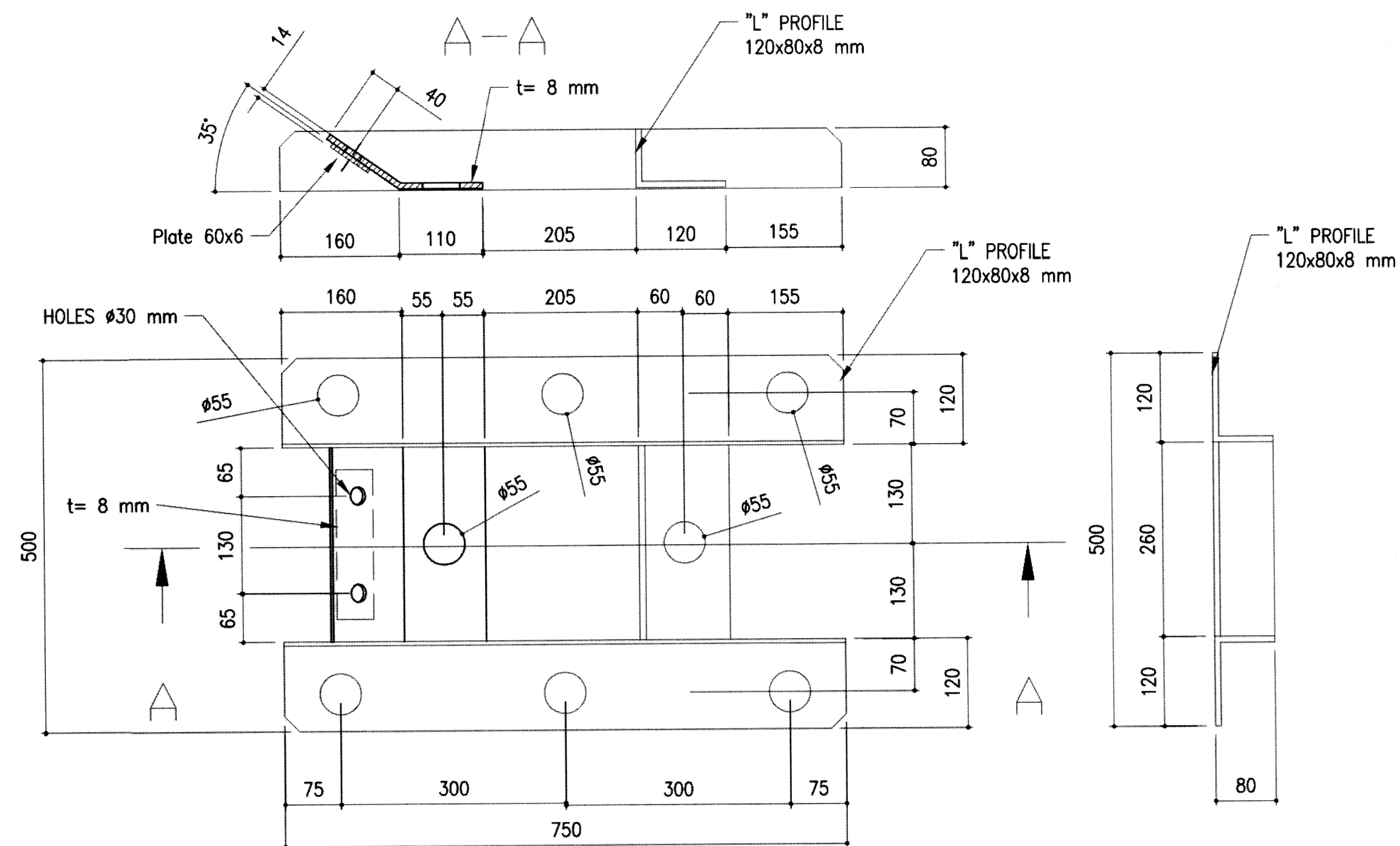
Big Top - Base Plates for Anchors

Sheet Title

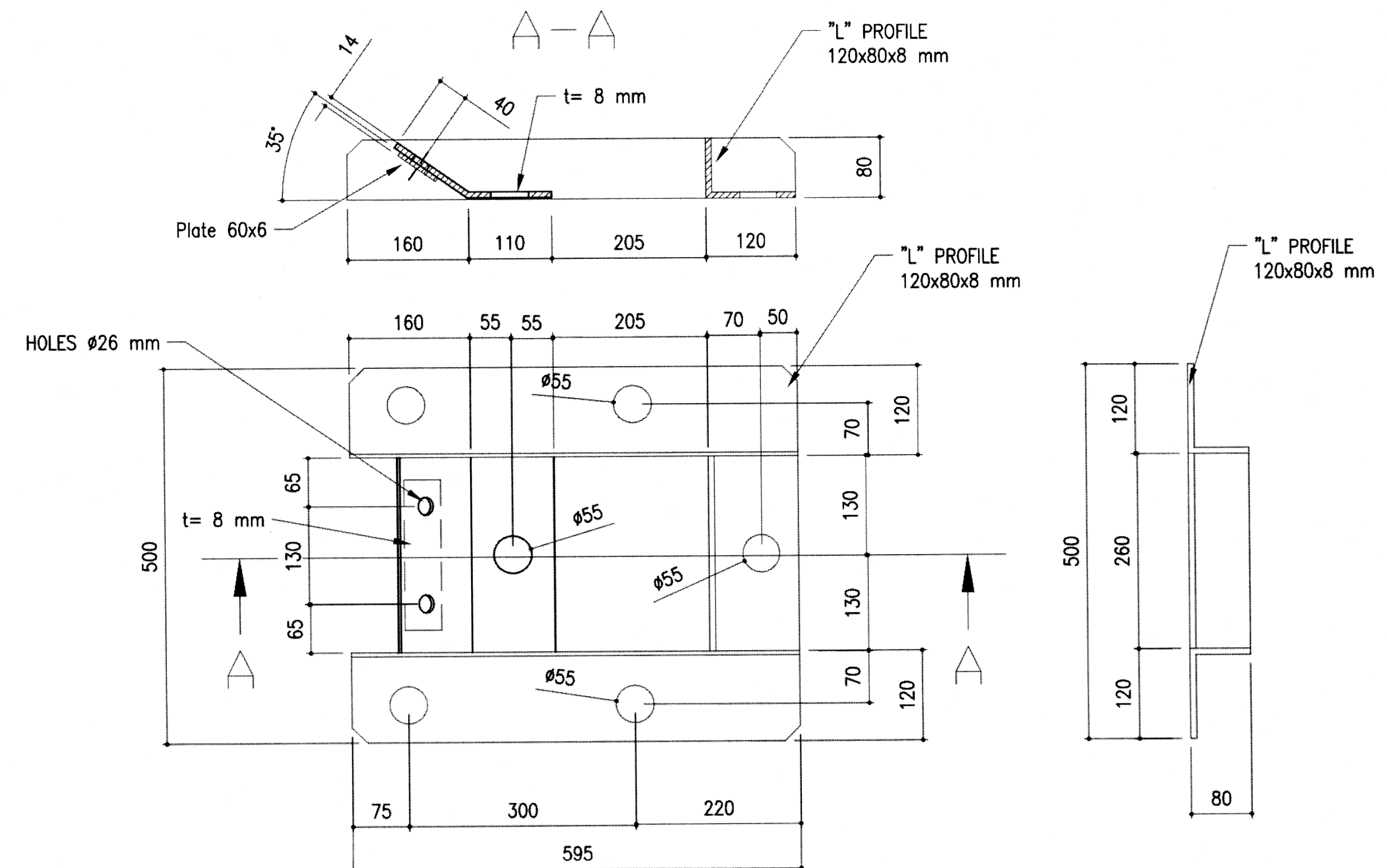
Sheet No.

S-109

BASE PLATES FOR n. 8 ANCHORS $\varnothing 50$ mm
n. 34 PIECES



BASE PLATES FOR n. 6 ANCHORS $\varnothing 50$ mm
n. 24 PIECES



BASE PLATES FOR n. 10 ANCHORS $\varnothing 50$ mm
n. 40 PIECES

