LAKE TECHNICAL COLLEGE BLDG 2 EVERGREEN CM

FO# 20468 Building 2 of 4

Tyler B. Theuret, P.E. Digitally signed by Tyler B. Theuret, P.E. Date: 2017.04.20 15:38:35 -04'00'



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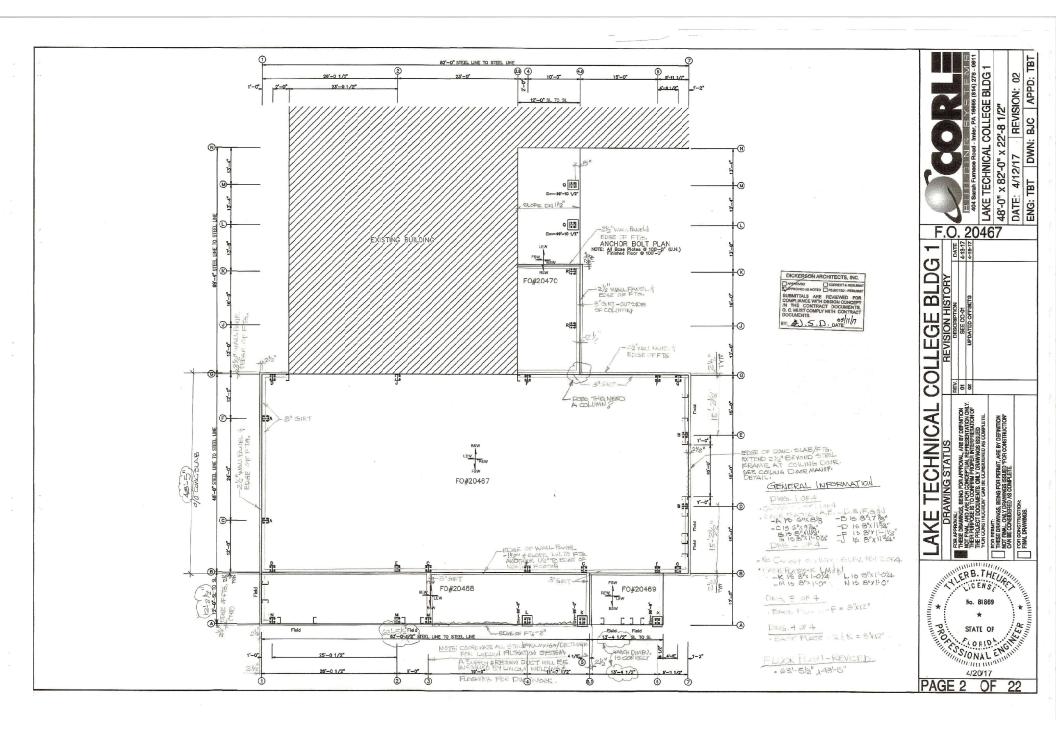
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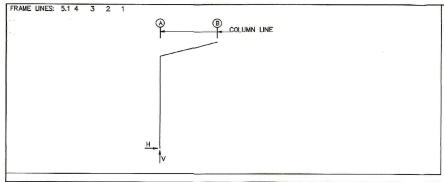
- 2. All exterior structural steel frames must have the exterior metal faces in align
- 3. All interior faces of structural frames.
- On North and South walls must align with each other on interior of building.
 All interior faces of structural frames going East and West must align with each other.
- Please furnish matching base plate revisions to allow General Contractor to form and pour concrete foundations to accommodate the above revisions, i.e.
 North and South walls, 8' x 1'-1-1/2"
 - East and West walls, 8" x 8-1/8"
- 5. Please clarify dimension between column lines 5.1 and 6 on Anchor Bolt Plan.
- 6. Does wall juncture at column line 4.9 and G. require a structural column?



Page	Drawing Title	REV NO.
55	Detail Page #4	01
23		0
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28		0
29		0
30		0
31		0
32		0

CENEDAL	MATERIALS	ACTM DECIGNATION	MINITALINA COMP.	_ w.TE2*** 2	1	Т	
GENERAL. All materials included in the Metal Building System are in accordance with the manufacturer's standard materials and details unless otherwise specified on the order documents. (MBMA 2012 Metal Building Systems Manual, Part IV, Section 2.1)	Hot-Rolled Mill Sections	A 36, A 572, A 992	Fy = 36 ksi and/or 50 ksi	MATERIALS Roof and Wall Sheeting	ASTM DESIGNATION A 792, Gr. 50 Class 1 A 792, Gr. 80		
DESIGN RESPONSIBILITY The manufacturer is responsible only for the structural design of the Metal Building System it sells to the purchaser /	Structural Steel Plates	A 572, A 1011	Fy = 55 ksi	Mild Steel Bolts	A 307	Fy = 36 ksi	x 22'-8 ON: 01
customer. Neither the manufacturer nor the manufacturer's engineer is the design professional or engineer of record for the construction project. The manufacturer is not responsible for the design of any component or materials not sold by it, or their interface and commercion with Metal Building System unless such design responsibility is specifically required by the	Structural Steel Bars	A 572 or A 529	Fy = 55 ksi	High Strength Bolts	A 325-N A 490-N	Fy = 92 or 81 ksi N/A	GE B
order documents. (MBMA 2012 Metal Building Systems Manual, Part IV, Section 3.1)	Cold Formed Light Gauge Shapes	A 653 Gr. 55	Fy = 55 ksi	Anchor Rods (If supplied)	A 36	Fy = 36 ksi	Pa 1/8 B 1/8 EVIS
FOUNDATION DESIGN AND ANCHOR BOLTS The manufacturer is not responsible for the design, materials, and workmanship of the foundation. The anchor belt	Cable Bracing	A 475, EHS	N/A	Pipe and Hollow Structural Sections	A 500 Gr. B	Fy = 42 ksi, 46 ksi	N E S Y S T E I S Y S T T E I S Y S T T E I S Y S T T E I S Y S T T E I S Y S T T E I S T T T T T T T T T T T T T T T T T T
plans prepared by the manufacturer are intended to show only the anchor bolt location, diameter (based on ASIM A36 bolts), and quantity required to connect the Metal Ruilding System to the Gundation (MRMA 2012 Metal Ruilding System)	Rod Bracing	A 36	Fy = 36 ksi				ICAL
Manual, Fart IV. Section 3.2.2) It is the responsibility of the end customer to ensure that adequate provisions are made for specifying bolt embeddent, bearing angles, the rods, and / or associated items embedded in the concrete foundation, as well as foundation design based on the loads imposed by the Metal Building Systems, or other imposed loads, and the bearing capacity of the soil and other conditions of the building site (MBMA 2012 Metal Building Systems Manual, Part IV, Section 3.2.2) U.SAnchor bolts shall be accurately set to a tolerance of +/- 1/8 in both elevation and location (AISC Code of Standard Prectice for Stee, Buildings and Bridges). Canada -Anchor bolts shall be accurately set in accordance with CISC Code of Standard Practice, June 2008, Clause 7.7.1	CURRECTION OF ERRORS AND REPAIRS The correction of minor misfits by the use of drift pins to draw the components into line, shimming, moderate amounts of reaming, chipping, and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to claim. (AISC Code of Standard Practice for Steel Buildings and Bridges, April 14, 2010, Section 7.14; CISC Code of Standard Practice, June 2008, Clause 7.15; MBMA 2012 Metal Building Systems Manual, Par. IV, Section 6.10).						LAKE TECHNICAL COLLEGE BLDG 2 12-0" x 63-0-1/2" x 19-8 1/2" x 22-8 1/2 DATE: 3/ 7/17 REVISION: 01
ADJACENT EXISTING BUILDINGS The manufacturer does not investigate the influence of the Metal Building System on adjacent existing buildings or structures. The end customer assures that such buildings and structures are adequate to resist snow loads or other conditions as a result of the presence of the Metal Building System. (MBMA 2012 Metal Building Systems Manual, Part IV, Section 3.2.5)	In case of discrepa: manufacturers steel 14, 2010, Section 3: Systems Manual, Pa	3; CISC Code of Sta	manufacturers	SCREPANCIES steel plans and pl dard Practice for June 2008, Clause	ans for other trade Steel Buildings and e 3.4; MBMA 2012 l	es, the d Bridges, April Metal Building	F.O.20468
SHIP-PRIMED STEEL All structural members of the Metal Building System not fabricated of corrosion resistant material or protected by corrosion resistant roating are painted with one coat of shop primer. All surfaces to receive shop primer are cleaned of loose rust, loose mill seals and other foreign matter by using, as a minimum the hand too cleaning method SSPC-SP2 (Steel Manual Structures Painting Council) prior to painting. The coat of shop primer is intended to protect the steel framing for only a short period of exposure to ordinary atmospheric conditions. Shop-primed steel should be placed on blocking to prevent contact with the ground, and so positioned as to minimize water holding pockets, dust, mud an other contamination of the primer film Repeirs of damage to primed surfaces and or removal of foreign material due to improper field storage or site conditions are not the responsibility of the menufacturer. (CSC Code of Standard Practice, June 2008, Clause 6.8; (MEMA 2012 Metal Building Systems Manual, Part IV, Section 4.2.4).	Delivery of any ma own leased, charter material shall be a responsible for con builder. The manuf The manufacturer considered as being However, the manu-	LEGE BLDG REVISION HISTORY SEE COOL					
ERECTION—GENERAL The erector, by entering into contract to erect the building, holds itself out as skilled in the erection of Metal Building Systems and its responsible for complying with all applicable local, federal, and state construction and safety regulations including OSKA regulations as well as any applicable requirements of local national, or international union rules or practices. (CISC Code of Standard Practice, June 2008, Clause 7.2; (MBMA 2012 Metal Building System Manual, Part IV, Section 6.9).	service department the customer to fil						
The erector shall erect the Metal Building System in accordance with the erection drawings, the Erection and Detail Manual (February 2012), and / or the Seam-Lok Technical — Erection manual (May 2012) as furnished by the manufacturer. The aforementioned erection information is intended to illustrate the layout of the framing members, provide the associated connection details, and suggests sequence of erection. It is not intended to specify any perticular method of erection to be followed by the erector. The erector remains solely responsible for the safety and appropriateness of all techniques and methods utilized by its crews in the erection of the Metal Building System. The erector is responsible for supplying any safety devices such as scaffolds, runways, nets, et, which may be required to safely erect the Metal Building System. (MBMA 2012 Metal Building Systems Manual, Part IV, Section 6.9) The manufacturer expressly disclaims any reanonsibility for injury to persons in the course	customer service d shortages. If any it Concealed shortages following time fram of truck loads used	HNICAL COTATUS TATUS TAT					
Systems Manual, Part IT, Section 6.9) The manufacturer expressly disclaims any responsibility for injury to persons in the course of erection or for damages to the product itself. Field erection of a Pre-Engineered Metal Building, as in all construction projects, involves hearants to persons within the area of the construction and risk of damage to the property itself. Only experienced persons who are skilled and qualified in the erection of Metal Building Systems should be permitted to field-erect a building due to the hazards of this construction activity. The manufacturer is not responsible for the erection of the Metal Building System, the supply of any tools or equipment, or any other field work. The manufacturer provides no field supervision for the erection of the structure nor does the manufacturer perform any intermediate or final inspections of the Metal Building System during or after erection. The erector shall furnish temporary guys and bracing where needed for squaring, plumbing, and securing the structural	The purchaser/customer is responsible for contacting the customer service department to advise the manufacturer of fabrication problems and corresponding cost estimates. The manufacturer will be						
The erector shall furnish temporary guys and bracing where needed for squaring, plumbing, and securing the structural framing against loads, such as wind loads acting on the exposed framing as well as loads due to erection equipment and erection operation, but not including loads resulting from the performance of worby others. Bracing furnished by the manufacturer for the Metal Building System cannot be assumed to be adequate during erection. Temporary supports such as temporary guys, braces, false work, cribbing, or other elements required for the erection operation will be determined, erected, and installed by the erector. (AISC Code of Standard Practice for Steel Buildings and Bridges, April 14, 2010, Section 7.10.3; CISC Code of Standard Practices, June, 2008, Clause 1.5; MBMA 2012 Metal Buildings System Manual, Part IV, Section 6.2.1.5).	costs for repair, and By acceptance of the invoice amount DEDUCT A BACK CHA	A APPICIONE DE LA PONTE DEL PONTE DE LA PO					
ERECTION TOLERANCES U.S.: Erection tolerances are those set forth in AISC code of standard practice except individual members are considered, plumb, level and aligned if the deviation does not exceed 1:500. (AISC Code of Standard Practice for Steel Buildings and Bridges April 14, 2010 Section 7:13.1: MBMA 2012 Metal Building Systems Manual, Part IV, Section 6:8) Canada: Erection tolerances are those set forth in CISC Code of Standard Practice except individual members are considered plumb, level and aligned if the deviation does not exceed 1:500. (CISC Handbook of Seel Construction, Tenth Edition, Second Revised Printing, Part 1, Clause 29.3; MBMA 2012 Metal Building Systems Manual, Part IV, Section 6:3)	The manufacturer is good job site practi manufacturer, the rithe job site. The er times. Accident preprocedures. The ma	RB. THE OF STATE OF S					
BOLI TIGHTENING The proper tightening and inspection of all fasteners is the responsibility of the erector (Reference RCSC for structural joints using high strength bolts; August 1, 2014). All high strength (ASTM A325, ASTM A490) bolts and nuts must be tightened by the "turn-of-the-nut" method unless otherwise specified by the end customer in the contract documents. Inspection of high strength bolt and nut installation by other than the erector must also be specified in the contract documents and the erector is responsible for ensuring that the installation procedures are	and health administ	No. 81869 STATE OF S					
compatible prior to the start of erection (CISC Handbook of Steel Construction, Tenth Edition, Second Revised Printing, Part 1, Clause 23.8.2), (MBMA 2012 Metal Building Systems Manual, Part IV, Section 6.9).	The manufacturer sl follow all applicable	hall not be respons safety regulations	ible for persons and material h	l injury or proper andling and install	rty damage as a re lation recommenda	esult of failure to tions.	4/20/17 PAGE 1 OF 22





RIGID	FRAN	ΛE:	BASIC COI	LUMN REA	ACTIONS (k)								
Frame Line 5.1 4 3 2	Column Line A A A A A	Horiz 0.0 0.0 0.0 0.0 0.0	Dead Vert 1.2 1.3 0.9 1.1 1.0	Horiz 0.0 0.0 0.0 0.0 0.0 0.0	Vert 0.4 0.5 0.4 0.5 0.4	Horiz -0.1 -0.1 -0.1 -0.1 -0.1	Vert 2.6 2.8 2.3 2.9 2.6	Wind Horiz -0.4 0.5 0.4 0.5 0.0	Left1- Vert -7.6 -7.0 -5.9 -7.4	-Wind_l Horiz 5.1 4.8 4.0 5.0 4.7	Right1- Vert -6.2 -5.7 -4.8 -5.9 -5.7	Wind Horiz -5.6 -5.2 -4.3 -5.3 -5.1	_Left2- Vert -2.5 -1.4 -1.1 -1.5 -2.0	
Frame Line 5.1 4 3 2	Column Line A A A A A	-Wind_ Horiz -0.1 -0.9 -0.7 -0.9 -0.4	Right2- Vert -1.0 0.0 0.0 -0.1 -0.6	Wind Horiz 4.7 5.2 4.3 5.3 4.6	Long1- Vert -5.5 -5.9 -4.9 -6.2 -5.5	Wind Horiz 4.7 5.2 4.3 5.3 4.6	Long2- Vert -5.5 -6.2 -5.2 -6.2 -5.5				,			

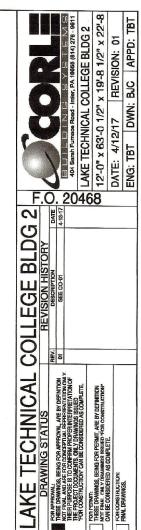
RIGI) FR	AME	: AN	NCHOR I	BOLTS &	BASE	PLATES
Frm Line	Col Line	Anc Qty	Bolt Dia	Base_ Width	_Plate (i Length	in) Thick	Grout (in)
5.1	Α	4	0.750	8.000	12.25	0.500	-3.0

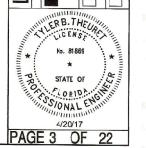
RIGIE) FR	AME	: AN	NCHOR I	BOLTS &	BASE	PLATES
Frm Line	Col Line	Anc Q:y	_Bolt Dia	Base_ Width	_Plate (Length	in) Thick	Grout (in)
4	A	4	0.750	8.000	12.25	0.500	-3.0

RIG	D FR	AME	: AN	NOHOR	BOLTS &	& BASE	PLATES
Frm Line	Col Line	And Qty	Bolt Dia	Base. Width	_Plate (Length	(in) Thick	Grout (in)
3	Α	4	0.750	8.000	12.00	0.500	0.0

RIGI) FRA	AME	: AN	ICHOR I	BOLTS &	BASE	PLATES
Frm Line	Col Line	Anc. Qty	_Bolt Dia	Base_ Width	_Plate (i Length	n) Thick	Grout (in)
2	Α	4	0.750	8.000	12.00	0.500	0.0

RIGID F	RAM	E: AN	ICHOR I	BOLTS &	BASE	PLATES
Frm Col Line Line	And Qly	Bolt Dia	Base. Width	_Plate (Length	in) Thick	Grout (in)
1 A		0.750	8.000	12.00	0.500	0.0





ANCHOR BOLT SUMMARY Dla (in) Туре Qty Locate O 20 Frame 3/4"

BUILDING BRACING REACTIONS
Reactions in plane of wall Shear Facultions Reactions Re
R_EW 1 (h) B_SW A Torsional Bracing Used
(f)Bracing loads are applied to adjacent building (h)Rigid trame at endwall

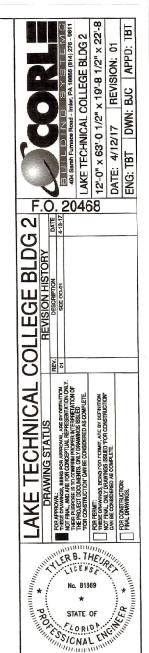
DESIGN INFORMATION All loading conditions are examined and only the maximum / minimum H cr V and the corresponding H or V are reported. 2. Positive reactions are shown in the sketch. Foundation loads are in opposite directions. Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward. 4. Building reactions are based on the following building data: SEISMIC CRITERIA DEFLECTION LIMITS DESIGN CRITERIA Width (ft) Length (ft) Length (ft) Eave Height (ft) Roof Slope (rise/12) Building Code Local Code (State/Prov) Dead Load (psf) Collateral Load (psf) Roof Live Load (psf) Frame Live Load (psf) = 12 = 63.04 = 19.71 = 3.0:12 = IBC 12 = FLBC 14 = 4.650 = 5.00 = 20.00 = 20.00 ENDWALL COLUMN ENDWALL RAFTER (Live) ENDWALL RAFTER (Wind) L/ 180 WALL GIRTS LU (90 PURLIN (WIND) PURLIN (WIND) WALL PANEL L/ 90 WALL PANEL L/ 90 WALL PANEL L/ 90 WALL FAMEL L/ 120 WALL FAMEL L/ 180 WALL FROM (Grane) L/ 100 WALL FROM (GRANE) WALL Seismic Importance Occupancy Category = 1.00 = 11 - Norma Accelerations = 0.1000 = 0.0400 Mapped Spectral Response Ss S1 -Spectral Response Coefficients---= 0.1067 = 0.0640 Snow: Ground Snow Load (psf) Snow Importance Thermal Coefficient Snow Exposure Factor Slippery Roof Roof Snow Load (psf) = 0.00 = 1.00 = 1.20 = 1.00 = N = 0 Site Class Seismic Design Category Wind: Basic Wind Speed (mph) Occupancy Category Importance — Wind Wind Exposure Enclosure Classification = 135 mph = II - Normal = 1.00 = C = P --Seismic Response Coefficients--rame = 0.01 SW = 0.01 SW = 0.00 --Response Modification Factors--rame = 0 = 0 = 0 --Internal Pressure Coefficients-= 0.55 = -0.55

PARTITION COLUMN
L/ 120
PARTITION GIRT
L/ 120
PARTITION PANEL
L/ 120

----Components & Cladding-Design Pressure:
Pressure (psf)
Suction (psf)

Equivalent Lateral Brace Force Procedure.

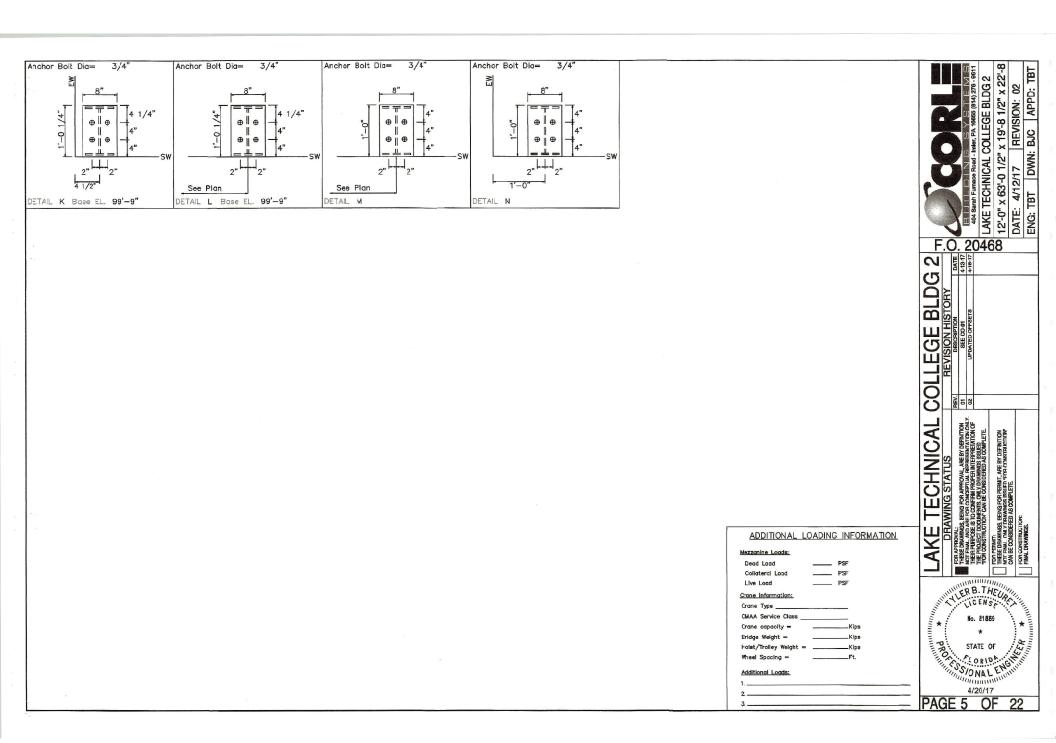
Steel systems not specifically detailed for seismic resistance.

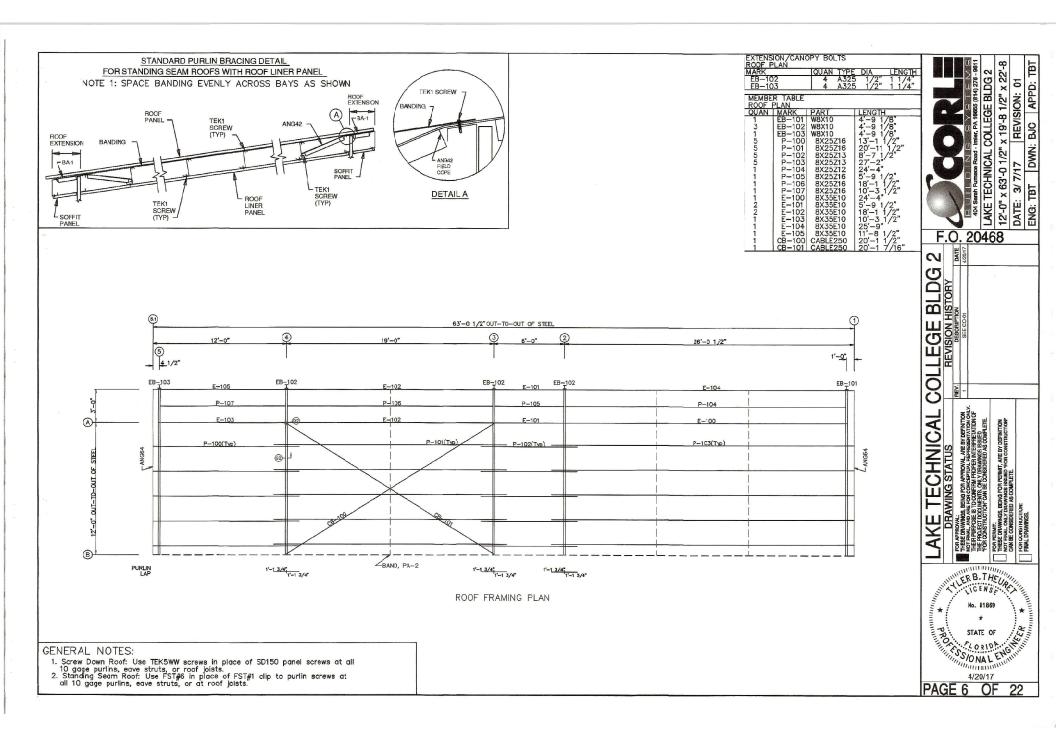


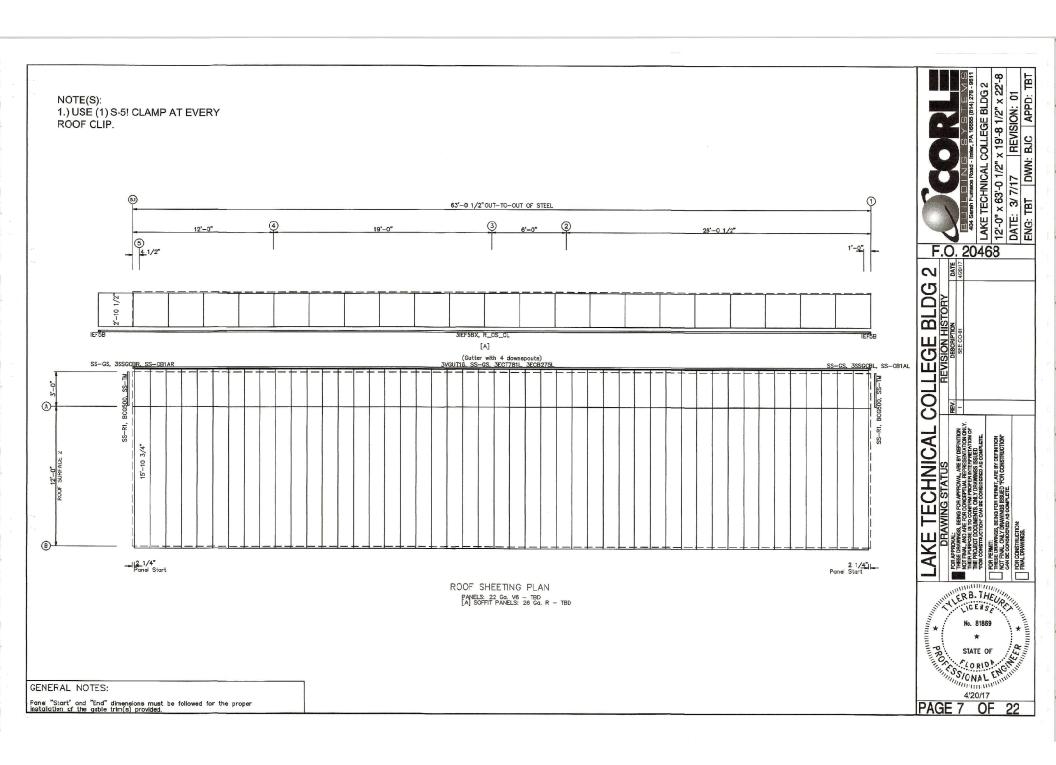
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OF

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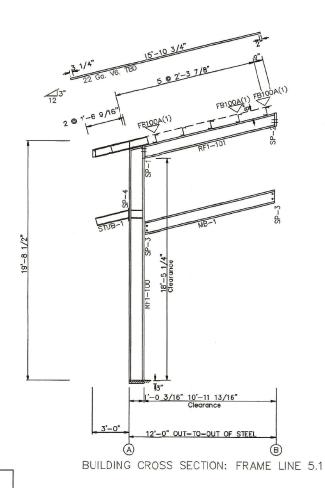




SPLICE BOLT TABLE											
.Mark	Qty Top	Bot	Int	Туре	Dia	Length					
SP-1	4	0	0	A325	0.500	1.75					
SP-2 SP-3	4	0	0		0.500						
SP-4	2	4	2		0.500						

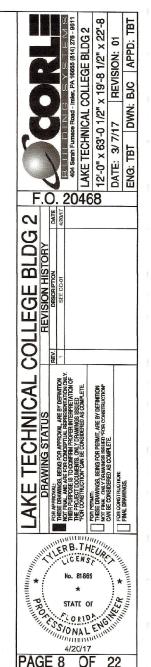
FLANGE BRACES: Both Sides(U.N.)
FBxxA(1)
A - L15X1/8

_	MEMBER S			
	MARK	MEMBER	LENGTH 19'-3 1/4" 11'-3 13/16" 4'-3" 12'-4"	
	RF1-100 RF1-101 STUB-1 MB-1	W12X26 W10X12 W8X10 W12X16		



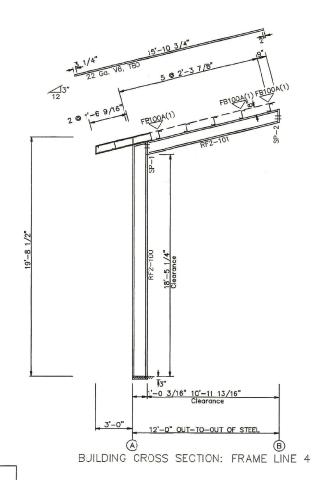
GENERAL NOTES:

See Detcil Sheets for Connection Information.
 See Shipping List for Flange Brace Lengths.



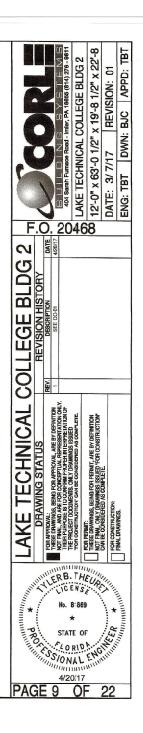
SPLICE BOLT TABLE							
Mark	Cty Top	Bot	Int	Туре	Dia	Length	
SP-1 SP-2	4	0	00		0.500 0.500		

FLANGE ERACES: Both Sides(U.N.)
FBxxA(1)
A - L15X1/8



GENERAL NOTES:

See Detail Sheets for Connection Information.
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SPLICE B	OLT	TABLE	_			
Mark	Gty Top	Bct	Int	Туре	Dia	Length
SP-1 SP-2	4	0	00	A325 A325	0.500 0.500	1.50

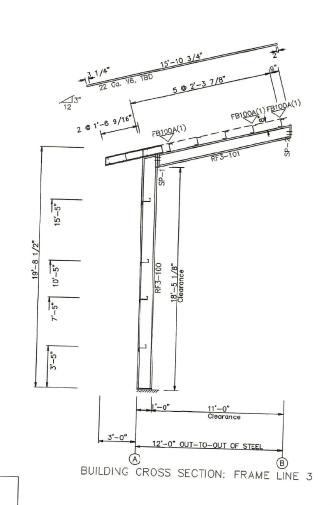
▼FLANGE BRACES: Both Sides(U.N.)
 FBxxA(1)
 A - L15X1/8

MEMBER SIZE TABLE

MARK MEMBER LENGTH

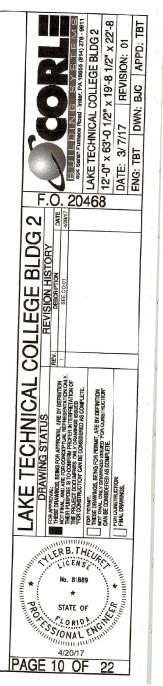
RF3-100 W12X16 19'-0 1/4"

RF3-101 W10X12 11'-4 1/16"





See Detail Sheets for Connection Information.
 See Shipping List for Flange Brace Lengths.



SPLICE	BOLT	TABLE	=			
	Qty					
Mark	Top	Bot	Int	Type	Dia	Length
SP-1	4	0	0	A325	0.500	1.50
SP-2	4	0	0	A325	0.500	1.25

FLANGE BRACES: Both Sides(U.N.)
FBxxA(1)
A - L15X1/8

 MEMBER SIZE TABLE

 MARK
 MEMBER
 LENGTH

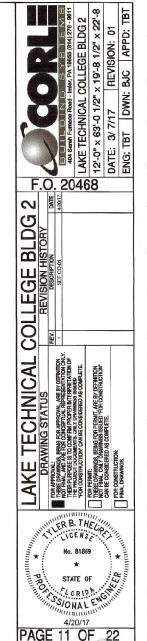
 RF4-100
 W12X16
 19'-0 1/4"

 RF4-101
 W10X12
 11'-4 1/16"

RF4-100 10'-5" 11'-0" Clearance 12'-0" OUT-TO-OUT OF STEEL BUILDING CROSS SECTION: FRAME LINE 2

GENERAL NOTES:

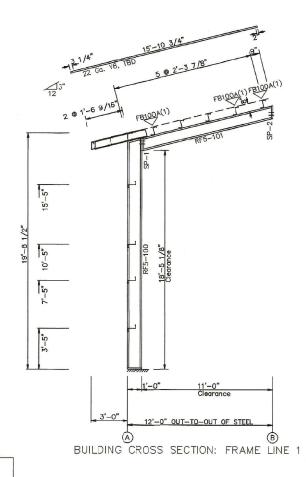
See Detail Sheets for Connection Information.
 See Shipping List for Flange Brace Lengths.



SPLICE B	OLT	TABLE	Ξ			
. Mark	Cty Top		Int	Туре	Dia	Length
SP-1 SP-2	4 4	00	0		0.500 0.500	

▼FLANGE BRACES: Both Sides(U.N.)
 FBxxA(1)
 A - L15X1/8

MEMBER SIZE TABLE								
MARK	MEMBER	LENGTH						
RF5-100 RF5-101	W12X16 W10X12	19'-0 1/4" 11'-4 1/16"						



LAKE TECHNICAL COLLEGE BLDG 2 12'-0" x 63'-0 1/2" x 19'-8 1/2" x 22'-8 DATE: 3/ 7/17 | REVISION: 01 ENG: TBT DWN: BJC APPD: TBT F.O. 20468 S COLLEGE BLDG
REV. DESCRIPTION
REV. DESCRIPTION E TECHNICAL WINGS, BEING FOR PERMIT, ARE BY DEFINITION DALY DRAWINGS ISSUED FOR CONSTRUCTION ISIDERED AS COMPLETE. LERB. THEUR LORIDA OF STANDARD PAGE 12 OF

GENERAL NOTES:

See Detcil Sheets for Connection Information.
 See Shipping List for Flange Brace Lengths.

