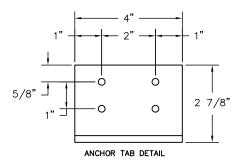


HEAVY DUTY EXTRUSION USED ON THIS BUILDING

DURALUMINUM MODEL 120120SW BUILDING NOTES:

- (1)— 100 AMP, SINGLE PHASE 12 SPACE LOAD CENTER w/ MAIN BREAKER
- (2)— 115V DUPLEX OUTLET
- 115V GFI DUPLEX OUTLET
- (3)— 230V 30AMP SINGLE OUTLET
- (4)— 4' SURFACE MOUNTED LED WRAPAROUND LIGHT w/ SWITCH
- (5)— EXTERIOR SINGLE HEAD LED SPOT/FLOOD LIGHT W/ SWITCH
- (6)— 230V, 20,000 C / 13,000 H BTU THRU WALL HVAC UNIT
- (7)— 240V 4,800 WATT WALL MOUNTED HEATER (WIRED DIRECT)
- (8)— DATA/PHONE JACK w/ CONDUIT & PULL WIRE TO ACCESS CUTOUT
- 9-4"x4" J-BOX w/ CONDUIT & PULL WIRE TO ACCESS CUTOUT
- 10- 22" DEEP PAINTED STEEL SHELF
- * EXTERIOR STANDING SEAM ROOF w/ 24" OVERHANG, GUTTERS & DOWNSPOUTS
- * CRANE LIFTING POCKETS IN BASEFRAME
- * 90" INTERIOR HEIGHT
- * 3070 HEAVY DUTY ALUMINUM SWING DOOR W/ HALF GLASS, ADA CLOSER, CHECK CHAIN & LEVER LOCKSET
- * GLAZING: 5/8" CLEAR INSULATED TEMPERED GLASS
 * INSULATION: WALLS R-10, FLOOR R-19, CEILING R-30
 * STANDING SEAM ROOF COLOR: ADVISE ROOF COLOR
- * INTERIOR PANEL FINISH: DIAMOND EMBOSSED ALUMINUM
- * ALUMINUM TREAD PLATE FLOOR
- * STANDARD CONDUIT ACCESS CUTOUT



RECOMMENDED THAT EACH ANCHOR TAB BE SECURED TO MEZZANINE w/ 1/2" Ø GR. 5 BOLT.

SERVICE (ASD) LOADS TO MEZZANINE AT EACH ANCHOR BOLT
T = 0.65 KIP
V = 0.30 KIP

CODIOMER:	PROJECT:
FULLER ENTERPRISES	FULLER ENTERPRISES CONST
SYSTEM: DURALUMINUM	208 DELMAR
морец: 120120SW	MILLS, WY 82644

ESTIMATE:

ORDER: PK34198

JOB:

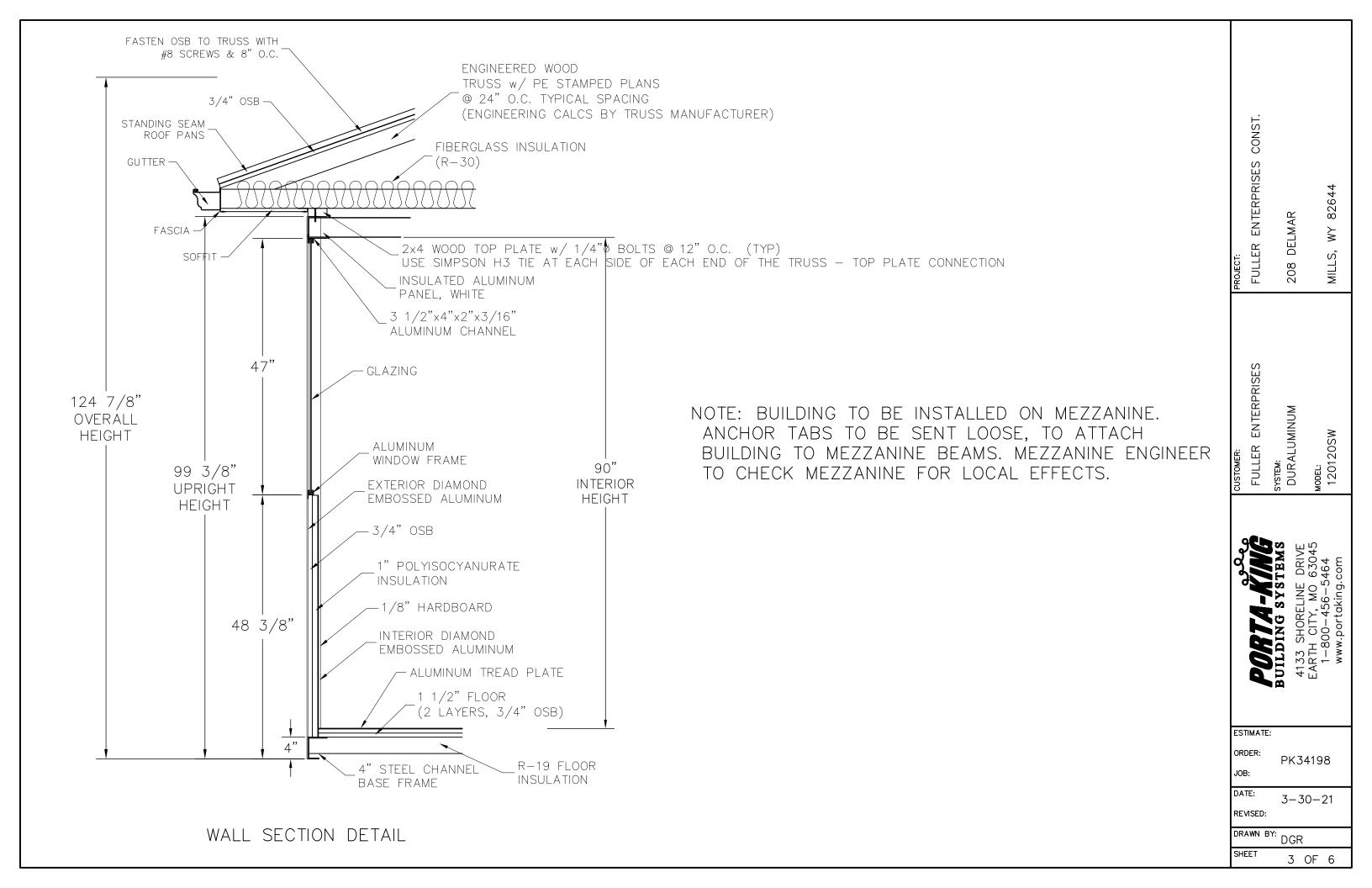
DATE: 3 - 30 - 21

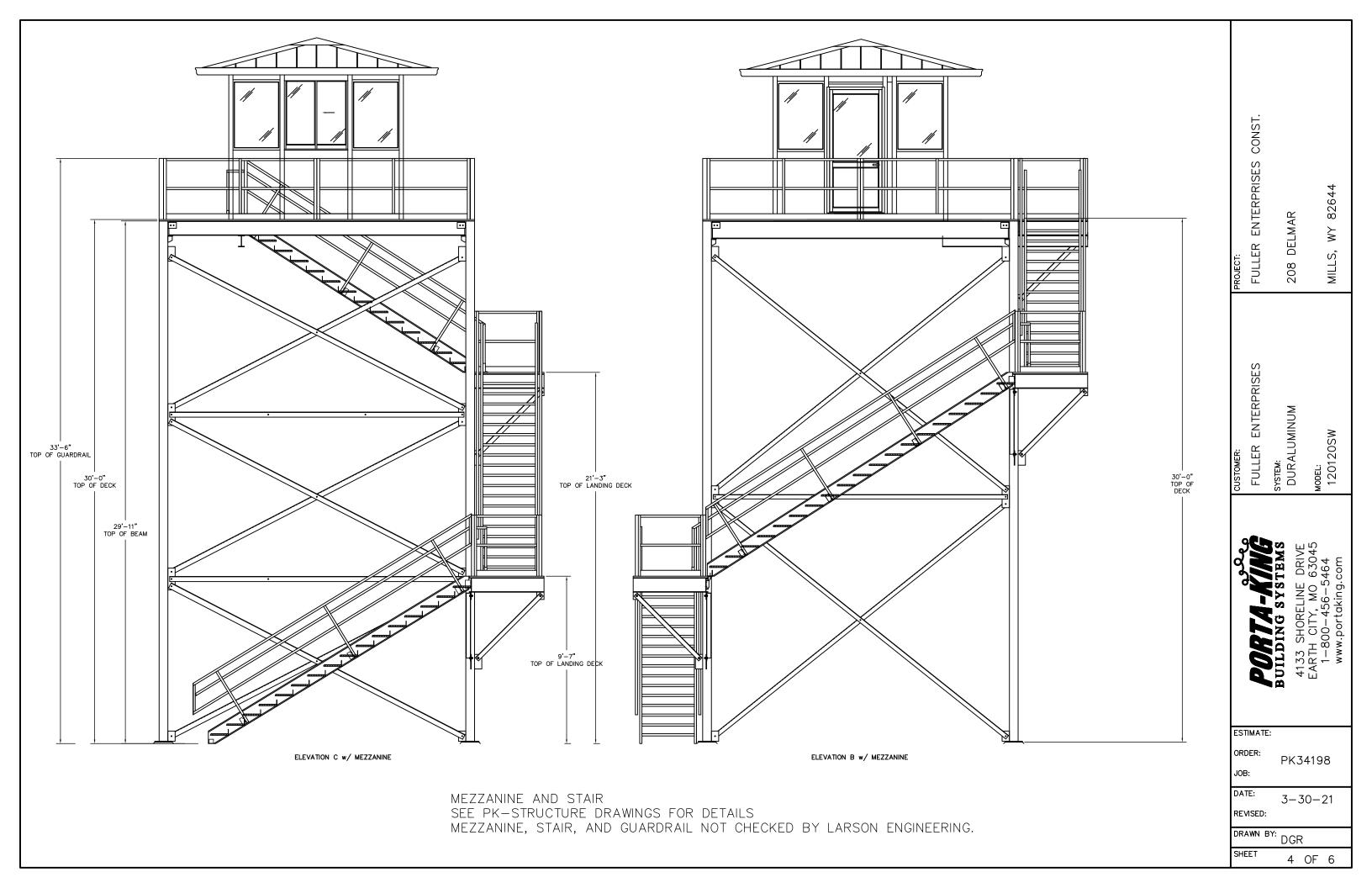
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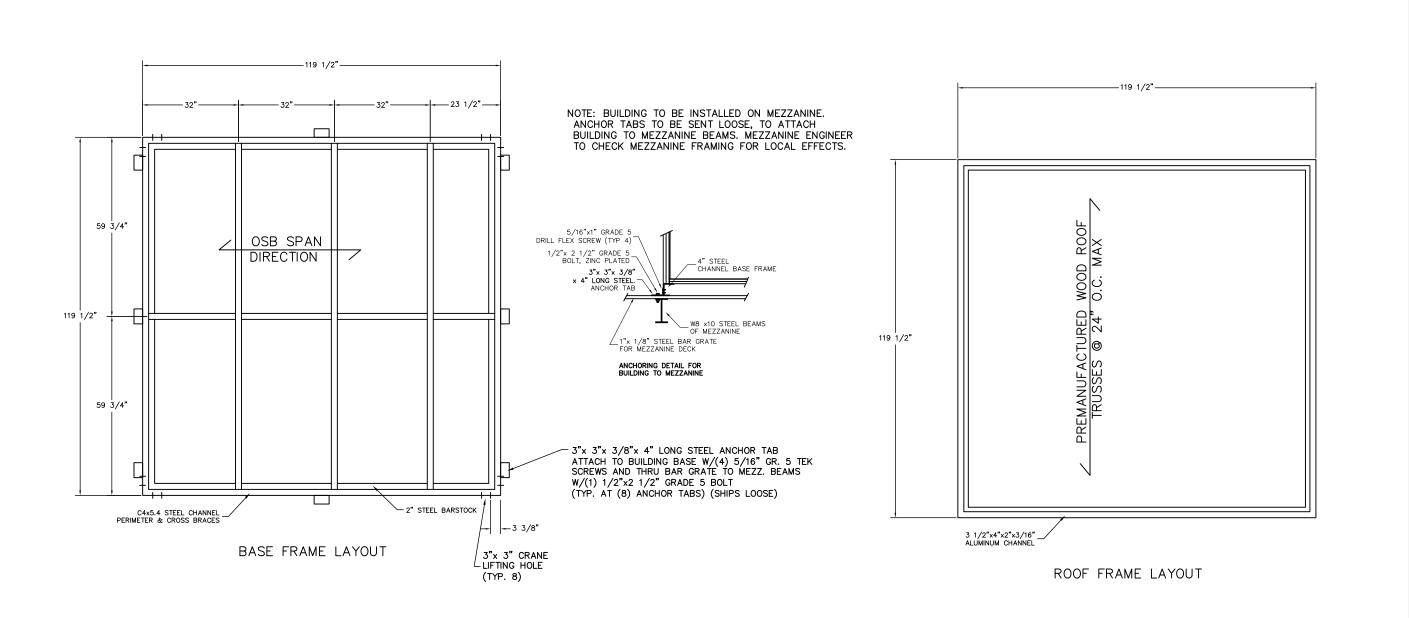
DRAWN BY: DGR

1 OF 6









FULLER ENTERPRISES CONST. 82644 DELMAR ≽ MILLS, 208 FULLER ENTERPRISES SYSTEM: DURALUMINUM MODEL: 120120SW

BUILDING SYSTEMS
4133 SHORELINE DRIVE
EARTH CITY, MO 63045
1-800-456-5464
www.portdking.com

ESTIMATE:

ORDER:

PK34198

JOB:

DATE:

REVISED:

DRAWN BY: DGR

5 OF 6

3-30-21

DURALUMINUM BUILDING FRAMING NOTES :

BASE FRAMES ARE CONSTRUCTED USING C4x5.4 STEEL CHANNEL

ROOF FRAMES ARE CONSTRUCTED USING 6063 T-6 3/16" ALUMINUM, PERIMETER CHANNEL 3 1/2"x4"x2" BASE FRAMES AND ROOF FRAMES ARE ALL CONTINUOUS WELDED AT ALL CORNERS AND CROSS BRACE CONNECTIONS. VERTICAL STRUCTURAL MEMBERS, 6005 T-6, 1/4" ALUMINUM CORNERS 2 7/8"x 2 7/8" AND TEES 3"x 4".

ASSEMBLY NOTES :

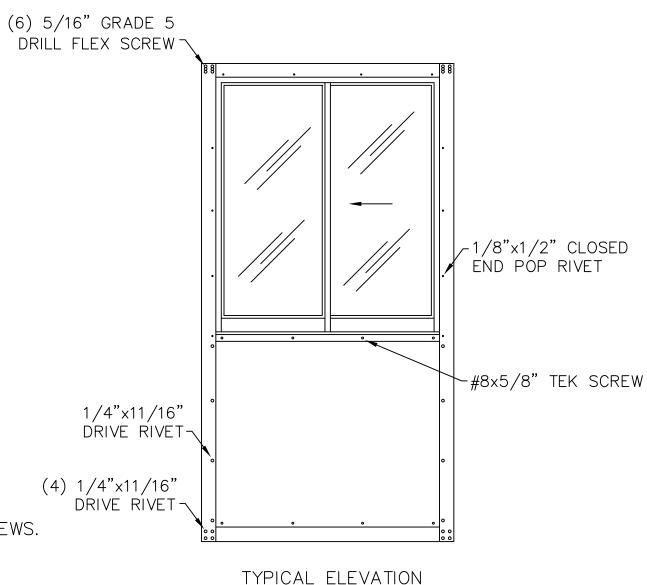
WALL PANELS, WINDOWS, AND DOORS ARE INSTALLED BETWEEN FRAMING MEMBERS.

WINDOWS, FIXED AND SLIDING, ARE ATTACHED TO FRAMING MEMBERS BY 1/8"DIA.x 1/2" CLOSED END POP RIVETS, 12"o.c.

WALL PANELS ARE ATTACHED TO FRAMING MEMBERS BY 1/4"DIA.x 11/16" DRIVE RIVETS, 12"o.c., AND ATTACHED TO WINDOWS BY #8 x 5/8" TEK SCREWS, 12"o.c.

DOOR FRAMES ARE ATTACHED TO FRAMING MEMBERS BY 3/16"DIA.x 5/8" POP RIVETS, 12"o.c.

VERTICAL FRAMING MEMBERS ARE ATTACHED TO THE BASE FRAME AND ROOF FRAME BY (6) 5/16" GRADE 5 DRILL FLEX SCREWS.



FULLER ENTERPRISES CONST. FULLER ENTERPRISES

UILDING SYSTEMS
4133 SHORELINE DRIVE
EARTH CITY, MO 63045
1-800-456-5464

ESTIMATE:

ORDER:

PK34198

JOB:

3-30-21

REVISED:

DRAWN BY: DGR
SHEET 6 OF 6

APPROVAL DRAWINGS ARE FOR A 18'-0 3/4" W X 30'-0" H X 18'-0 3/4" L **TOWER STRUCTURES**

FULLER ENTERPRISES CONSTRUCTION DEALER:

PACIFICORP - CEDAR SPRINGS WIND PLANT JOB NAME:

LOCATIONS: 460 SIXTEEN MILE ROAD DOUGLAS, WY 82633

NOTE: THESE DRAWINGS ARE FOR LAYOUT APPROVAL ONLY, **NOT FOR PERMIT** SUBMITTAL. ALL FIELD DIMENSIONS AND SITE CONDITIONS ARE THE RESPONSIBILITY OF THE CUSTOMER. IF P.E. SEALED DRAWINGS AND CALCULATIONS HAVE BEEN

APPROVAL SIGNATURE REQUIRED

(APPROVAL IS FOR ALL PAGES IN DRAWING SET)

APPROVED AS SHOWN

PURCHASED, THEY WILL NOT BE PRODUCED UNTIL AFTER LAYOUT IS APPROVED.

☐ APPROVED AS NOTED (NOTED CHANGES MAY CAUSE REVISION PRIOR TO FABRICATION)

REVISE AND RESUBMIT PRIOR TO FABRICATION

AUTHORIZED SIGNATURE:

DATE: 4/5/2021

IMPORTANT MANUFACTURER'S DISCLAIMERS

THE MANUFACTURER HAS DESIGNED AND ENGINEERED THIS SYSTEM SPECIFICALLY, AS STATED IN THE TOWER NOTES SECTION. VARIATIONS AND/OR MODIFICATIONS TO THE SYSTEM OR COMPONENTS WILL VOID AND NULLIFY ANY AND ALL WARRANTIES, BOTH WRITTEN AND/OR IMPLIED, AND LIABILITY FOR DEFECTS IN THIS SYSTEM AND IT'S COMPONENTS. MANUFACTURER FURTHER ACCEPTS NO RESPONSIBILITY AND/OR LIABILITY FOR OBTAINING OR MAINTAINING AN LOCAL, REGIONAL OR NATIONAL BUILDING PERMITS. INSPECTIONS OR DOCUMENTS THAT MAY BE REQUIRED.

THIS TOWER HAS (OR WILL BE) ENGINEERED STRUCTURALLY ONLY. IT IS THE RESPONSIBILITY OF THE BUYER TO VERIFY THAT WHEN THIS TOWER IS INSTALLED. THE BUILDING THAT HOUSES IT COMPLIES WITH LOCAL SAFETY CODES WHICH ADDRESS INGRESS, EGRESS, FIRE RATINGS, SPRINKLERS, ETC.

ALL INSPECTIONS TO BE ARRANGED BY AND PAID FOR BY OTHERS AND NOT PK STRUCTURES. PROJECTS THAT ARE NOT APPROVED FOR PRODUCTION WITHIN 30 DAYS FROM DATE ORDER WAS PLACED MAY BE SUBJECT TO PRICE ESCALATION BASED ON FLUCTUATIONS IN THE CURRENT STEEL MARKET.

TOWER NOTES

1) STRUCTURE:

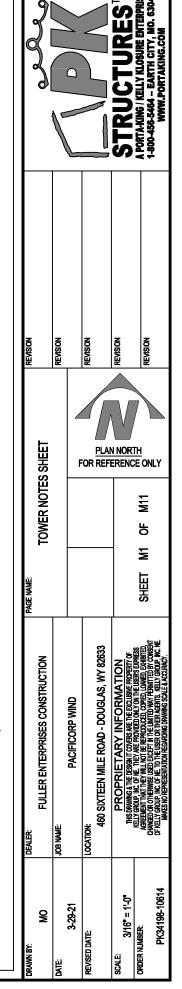
- A) TOWER LOCATIONS: 460 SIXTEEN MILE ROAD DOUGLAS, WY 82633
- B) THE STRUCTURE OF THIS TOWER HAS BEEN DESIGNED IN CONFORMANCE WITH THE APPLICABLE BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE (2018 IBC) USING THE FOLLOWING LOADS:
 - a) LIVE LOAD = 100 PSF W/ DEFLECTION LESS THAN L/360 (18'-0 3/4" X 18'-0 3/4" AREA)
- b) LIVE LOAD = 100 PSF W/ DEFLECTION LESS THAN L/360 (LANDINGS)
- c) DEAD LOAD = 15 PSF
- d) POINT LOADING: TOWER FRAMING HAS NOT BEEN DESIGNED TO SUPPORT HEAVY RACK POST/POINT LOADS. POINT LOADS UP TO 355 LBS. MAY BE SUPPORTED WITHOUT FURTHER INVESTIGATION, IF THE POSTS ARE ORIENTED SUCH THAT THE SPACING OF THE POSTS ARE PERPENDICULAR TO THE DECK SPAN. CONTACT PK STRUCTURES IF ANTICIPATED LOADS ARE GREATER THEN 355 LBS. OR IF QUESTIONS ARISE REGARDING POST LAYOUT.
- e) MAXIMUM WHEEL LOADS = 0 LBS.
- f) SEISMIC: Ss = TBD S1 = TBD Fa = TRD Fv = TRD SDS = TRD SD1 = TBD SDC = "B" SITE CAT = D
- a) WIND LOAD: TBD MPH EXPOSURE C
- h) GROUND SNOW LOAD: 20 PSF, ROOF LIVE LOAD = 20 PSF

- A) OCCUPANCY GROUP U "UTILITY AND MISCELLANEOUS" OBSERVATION / VISION TOWER (NO PUBLIC ACCESS)
- B) FUNCTION OF SPACE: INDUSTRIAL, AREA IN SQ.FT. (INCLUDES TOP LANDING) PER OCCUPANT = 100 GROSS (346 SQ.FT. / 100 = 4) 1) OCCUPANCY LOAD = 4
- C) SQUARE FOOTAGE OF THE STRUCTURE: = 346 SQ.FT. (INCLUDES TOP LANDING).
- D) CONSTRUCTION TYPE = IIB
- E) HEIGHT OF STRUCTURE = 30'-0"
- F) SPRINKLERS / FIRE ALARMS NOT REQUIRED
- G) NO FIELD WELDING. DECKING MATERIAL ALSO MECHANICALLY ATTACHED

3) FOUNDATION RESPONSIBILITY:

- A) FOUNDATIONS MAY BE EXISTING CONCRETE FLOOR SLAB OR ISOLATED CONCRETE FOOTINGS. THE STRUCTURAL CAPACITY OF THE FOUNDATION IS TO BE DETERMINED BY OTHERS USING SOUND ENGINEERING PRACTICES. THE EXISTING STRENGTH PARAMETERS OF CONCRETE. REINFORCING STEEL. AND SOIL BEARING CAPACITY SHOULD BE ANALYZED IN THE REVIEW.
- B) MAXIMUM PERIMETER COLUMN LOAD = SEE BASE PLATE LAYOUT SHEET.
- C) NON-SHRINK GROUT IS RECOMMENDED WHEN THE TOWER FLOOR IS NOT LEVEL WITH THE EXISTING SLAB ON GRADE. GROUT & GROUTING ARE THE RESPONSIBILITY OF OTHERS.
- STRUCTURAL MATERIAL SPECIFICATIONS:
- A) FLOORING: 1" X 1/8" 19W4 SERRATED BAR GRATE BEARING BARS ARE ON 1 3/16" CENTERS, 1 1/16" CLEAR BETWEEN BEARING BARS.
- B) WIDE FLANGE STEEL BEAM SHAPES: Fy = 50 KSI: ASTM A572-50 OR A992-50 (FOR TOWER AND TOP LANDING)
- C) TOWER TUBE COLUMNS: Fy = 46 KSI: ASTM A500 GRADE B (SEE FLOOR PLAN LAYOUT FOR SIZES)
- D) INTERMEDIATE LANDING TÜBE COLUMNS: Fy = 46 KSI: ASTM A500 GRADE B (TS 2" X 2" X 3/16" WITH L 2 " X 2 " X 1/18" A36 CONNECTION CLIPS).
- E) INTERMEDIATE LANDING PLATFORMS: MC10X8.4, A36
- F) INTERMEDIATE AND TOP LANDINGS: 1" X 1/8" 19W4 SERRATED BAR GRATE BEARING BARS ARE ON 1 3/16" CENTERS,
- 1 1/16" CLEAR BETWEEN BEARING BARS. G) STAIRS: MC10X8.4. A36 STRINGERS WITH 1" X 3/16" 19W4 SERRATED BAR GRATE TREADS W/ CHECKER PLATE NOSING.
- H) GUARDRAIL COMPONENTS:

 - HORIZONTAL TUBES = TS 1 1/2" X 1 1/2" X 14 GA., ASTM A513-TYPE 1, Fymin = 32 KSI.
 VERTICAL POSTS = TS 1 1/2" X 1 1/2" X 11 GA., ASTM A500 GRADE B, Fymin = 46 KSI. MAXIMUM SPACING OF 90" ON CENTER.
 - CORNER ANGLES = L 2 1/2" X 2 1/2" X 3/16", ASTM A36, Fymin = 36 KSI.
 - END ANGLES = L 3" X 2" X 3/16", ASTM A36, Fymin = 36 KSI.
 - KICK PLATE = L 4" X 3" X 1/4". ASTM A36. Fymin = 36 KSI.
 - CONNECTION BOLT TO FLOOR FRAMING = 3/8" Ø.
 - CONNECTION BOLT AT CORNERS = 1/2" Ø.
- I) STAIR GUARDRAILS & HANDRAILS:
 - ALL TUBES EXCEPT VERTICAL POSTS = TS 1 1/2" X 1 1/2" X 14 GA., ASTM A513-TYPE 1, Fymin = 32 KSI.
 - VERTICAL POSTS = TS 1 1/2" X 1 1/2" X 11 GA., ASTM A500 GRADE B, Fymin = 46 KSI. MAXIMUM SPACING OF 90" ON CENTER.
 TUBES FOR EXTENDED HANDRAIL BASE = TS 1 3/4" X 1 3/4" X 14 GA., ASTM A513-TYPE 1, Fymin = 32 KSI.
- J) OTHER STRUCTURAL STEEL SHAPES & BASE PLATES: FY = 36 KSI: ASTM A36
- K) STRUCTURAL BOLTS: 1/2" DIAMETER = GRADE 5 AND 5/8" DIAMETER OR LARGER = A325 A490 (REFERENCE DETAILS FOR CALLOUTS).
- L) ANCHORS: TO BE SUPPLIED SEE BASE PLATE LAYOUT SHEET FOR BASE REACTIONS.
- 5) BOLT INSTALLATION:
 - A) BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE 1/2" DIAMETER GRADE 5 AND 5/8" DIAMETER OR LARGER A325 A490 IN BEARING-TYPE CONNECTIONS, TIGHTENED UNTIL SNUG, UNLESS NOTED OTHERWISE. SNUG TIGHT IS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT AND MAY BE ACHIEVED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A PERSON USING AN ORDINARY SPUD WRENCH. PLEASE NOTE THAT THE AISC DOES NOT RECOGNIZE TIGHTENING BOLTS TO A SPECIFIED TORQUE AS A SUFFICIENT MEANS OF TIGHTENING THEM. IT DOES HOWEVER RECOGNIZE THE TURN OF THE NUT METHOD AS A SUFFICIENT MEANS TO TIGHTEN BOLTS.
- 6) STAIR AND GUARDRAIL DESIGN:
 - A) THE STAIRS, GUARDRAILS, AND STAIR RAILS INCLUDED WITH THIS MODULAR TOWER HAVE BEEN CONFIGURED IN CONFORMANCE WITH OSHA. THEY HAVE ALSO BEEN DESIGNED TO COMPLY WITH THE 2018 IBC REQUIREMENTS.
 - B) IBC CODE COMPLIANCE OF THIS SINGLE MEANS OF EGRESS DESIGN ASSUMES ANY IBC OCCUPANCY TYPE EXCEPT H (HIGH HAZARD). I (INSTITUTIONAL) AND R (RESIDENTIAL) AND MAXIMUM OCCUPANT LOAD ON THE TOWER FLOOR OF 30 PEOPLE.
 - C) STAIRWAY TREAD WIDTH = 36" STAIR TREAD DEPTH = 11.0" (MIN) STAIR RISER HEIGHT = 7.0" (MAX) STAIR HANDRAIL HEIGHT = 34" (MIN) STAIR TREAD MATERIAL = 1" X 3/16" 19W4 SERRATED BAR GRATE TREADS WITH CHECKER PLATE NOSING. **GUARDRAIL HEIGHT = 42"**
- 7) FINISH ALL COMPONENTS HOT DIP GALVANIZED
- 8) SPECIAL INSPECTIONS PER IBC 2018. CHAPTER 17:
- A) HIGH STRENGTH BOLTING
 - 1) ALL CONNECTIONS CONSIDERED BEARING CONDITION AND REQUIRE PERIODIC INSPECTION, UNLESS NOTED OTHERWISE.
 - 2) FRAMED CONNECTIONS CONSIDERED SLIP CRITICAL AND REQUIRE CONTINUOUS INSPECTION.
- B) HILTI ADHESIVE ANCHOR INSTALLATION (HOLE CLEANING CRITICAL).
- C) CONCRETE PLACEMENT & MIX DESIGN, REBAR PLACEMENT.

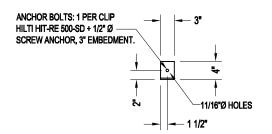


GROUT BASE PLATES AS NECESSARY TO ERECT TOWER WITHIN GUIDELINES ESTABLISHED BY AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES" - USE HILTI GROUT: (BY OTHERS) (1" NOMINAL THICKNESS)

ANCHOR BOLTS: 4 PER BASE PLATE -HILTI HIT-RE 500-SD + HAS-R 304/316, 7/8" Ø, TBD" EMBEDMENT.

BASE PLATE: 5/8" x 12" x 12"

1" Ø HOLES



STAIR BOTTOM CLIP: L 4" x 3" x 1/4"

FOUNDATION REACTIONS (ALLOWABLE STRESS DESIGN) PER BASE PLATE:

- MAXIMUM UPLIFT = -TBD LBS.
 MAXIMUM DOWNWARD FORCE = TBD LBS.
- MAXIMUM SHEAR FORCE = TBD LBS.

ANCHOR BOLT REACTIONS (FACTORED LOADS) PER BASE PLATE:

- MAXIMUM UPLIFT = -TBD LBS.

 MAXIMUM DOWNWARD FORCE = TBD LBS.

 MAXIMUM SHEAR FORCE = TBD LBS.

	2								
	REVISION	REVISION		REVISION		REVISION		REVISION	
	UT SHEET	PLAN NORTH FOR REFERENCE ONLY							
	WE. BASE PLATE LAYOUT SHEET					SHEET M2 OF M11			
	PAGE NAME: FULLER ENTERPRISES CONSTRUCTION		PACIFICORP WIND	35	460 SIXTEEN MILE ROAD - DOUGLAS, WY 82633	PROPRIETARY INFORMATION	RE INE EXCLUSIVE PROPERTY OF SEPRESS	ei ja	JFKELLY GROUP, INC. OF NE. TO THE USER OR THEIR AGENTS. KELLY GROUP, INC. NE. MAKES NO REPRESENTATION REGARDING DRAWING SCALE & ACCURACY.
	DEALER:	JOB NAME:	3-29-21	ATE: LOCATION:		3/16" = 1.0"	T		PK34198-10614

FLOOR PLAN LAYOUT

15'-9 13/16" [189 13/16"]

17'-6 3/4" [210 3/4"]

C/C COLUMNS

18'-0 3/4" [216 3/4"]

OUT TO OUT OF COLUMNS / OVERALL DECK SURFACE 18'-6 3/4" [222 3/4"] OUT TO OUT OF BASE PLATES

4'-3 3/8" [51 3/8"]

LANDING WIDTH

-— 3"

CRITICAL

PLATES 5/8" X 12" X 12".

ALL COLUMNS WILL BE CAPPED.

NOTE: THE BUILDING NEEDS TO BE BOLTED TO THE MEZZANINE BEAMS. ANGLE TABS WILL BE SHIPPED WITH THE PORTA-KING BLDG. THE TABS WILL NEED TO BE FIELD ATTACHED TO THE BLDG., THEN USING THE TABS AS A TEMPLATE HOLES NEED TO BE FIELD DRILLED THROUGH THE MEZZANINE BEAMS BELOW. BOLTS 2 1/2" LONG WILL BE SUPPLIED WITH THE BUILDING.

THIS IS AN INTEGRATED PROJECT. PLEASE CHECK MEZZANINE AND PRE-ASSEMBLED BUILDING DRAWINGS FOR ALL DETAILS THAT MAY BE APPLICABLE TO BOTH TO MAKE SURE THAT NOTHING IS MISSED IN THE ASSEMBLY PROCESS.

- HOLES FOR ATTACHING THE GUARDRAIL TO THE BEAM FLANGE AROUND THE PERIMETER OF THE MEZZANINE NEED TO BE FIELD DRILLED.

BEAM SEAT CONDITIONS:

- #1 BEARING PLATE 1/2" x 4 1/2" W/ L3"x2"x3/16" #2 - BEARING PLATE 5/8" x 4 1/2" W/ L3"x2"x3/16"
- #3 BEARING PLATE 3/4" x 4 1/2" W/ L3"x2"x1/4"
- #4 BEARING PLATE 3/4" x 5 1/2" W/ L3"x2"x1/4"
- #5 BEARING PLATE 3/4" x 5 1/2" W/ L3"x2"x1/4" AND TRIANGULAR GUSSET.

#12 X 1" TEK 5 SCREW (TYP 4) 1/2" X 2 1/2" GRADE 5 BOLT ZINC PLATED, HOLE TO BE FIELD DRILLED THROUGH BEAM FLANGE. SUPPLIED WITH PORTA-KING BUILDING BUILDING BASE FRAME 27/8" X 27/8" X 1/4" X 5" LG. ANCHOR TAB W8X10 & W10X12 STEEL **BEAMS ON TOWER** 1" X 1/8" STEEL SERRATED BAR GRATE FOR TOWER DECK

> **ANCHORING DETAIL FOR BUILDING TO MEZZANINE**

