

STRUCTURAL GENERAL NOTES

CRITERIA:

CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE (IBC), 2006 EDITION, AS AMENDED BY THE CITY AND BOROUGH OF JUNEAU.

CODE:

GROUND SNOW LOAD:	70 PSF
ROOF SNOW LOAD:	65 PSF + DRIFT
WIND:	110 MPH, EXPOSURE D, I <sub>w</sub> =1.15
SEISMIC:	S <sub>1</sub> =0.30g, S <sub>s</sub> =0.65g, S <sub>0</sub> =0.36g, S <sub>0s</sub> =0.55g
	OCCUPANCY IV, I <sub>e</sub> =1.5, SITE CLASS D,
	SEISMIC DESIGN CATEGORY D
	R=1.25, C <sub>s</sub> =0.67 (STAND ALONE CANOPY: CANTILEVERED COLUMNS)
	R=3.25, C <sub>s</sub> =0.25 (BUILDING CANOPY: ORDINARY BRACED FRAME)

FOUNDATION:

FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 3,000 PSF

EXCAVATE IN ACCORDANCE WITH OSHA AND STATE OF ALASKA SAFETY REGULATIONS. PLACE BASE COURSE IN LIFTS OF LOOSE THICKNESS NO GREATER THAN 8 INCHES. BASE COURSE SHALL MEET THE REQUIREMENTS OF THE D1 OR C1 GRADING OF SECTION 703 IN THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2004 EDITION. COMPACT EACH LIFT OF BASE COURSE WITH A MINIMUM LEVEL OF EFFORT OF 8 PASSES WITH A VIBRATORY PLATE COMPACTOR WITH A MINIMUM RATING OF 14,000 POUNDS.

STRUCTURAL FILL SHALL BE NON-FROST SUSCEPTIBLE, WELL-GRADED GRAVELS AND SANDS WITH NO PARTICLE LARGER THAN 6" AND LESS THAN 6% PASSING THE NO 200 SIEVE. PLACE FILL IN LIFTS NO GRATER THAN 8" IN LOOSE THICKNESS AND COMPACT W/ A MINIMAL LEVEL OF EFFORT OF 8 PASSES WITH A WALK-BEHIND VIBRATORY PLATE COMPACTOR WITH A MINIMUM RATING OF 14,000 LBS.

CONCRETE:

CONCRETE SHALL BE A DENSE, WORKABLE MIX THAT WHEN PLACED IS FREE OF EXCESS SURFACE WATER. CONCRETE SHALL HAVE A 28-DAY STRENGTH (f<sub>c</sub>') OF 4000 PSI.

CONCRETE REINFORCING SHALL CONFORM TO ASTM A615 GRADE 60. FABRICATE AND PLACE STEEL REINFORCEMENT IN ACCORDANCE WITH CRSI'S "MANUAL OF STANDARD PRACTICE". REINFORCING SHALL BE SUPPORTED ON WELL-CURED BLOCKS OR APPROVED METAL ACCESSORIES. WELDING OF REINFORCING IS PROHIBITED. SUBMIT FABRICATION SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO COMMENCING FABRICATION.

PROVIDE MINIMUM COVER AT REINFORCING BARS AS FOLLOWS: CAST AGAINST EARTH – 3", EXPOSED TO EARTH OR WEATHER – 2", SLABS ON GRADE – 1.5".

SEE TABLE BELOW FOR SPLICE LENGTHS. PROVIDE CLASS B SPLICE UNLESS NOTED OTHERWISE.

REBAR LAP SPLICES						
BAR SIZE	#3	#4	#5	#6	#7	#8
CLASS A SPLICE	12"	20"	25"	30"	35"	40"
CLASS B SPLICE	16"	26"	32"	39"	45"	52"

STRUCTURAL STEEL:

ALL STEEL SHALL CONFORM TO THE FOLLOWING:

PILES	SEE PILE SECTION
HOLLOW RECTANGULAR SECTIONS:	ASTM A500, GRADE B
PLATES, ANGLES, CHANNELS:	ASTM A36 (UNLESS NOTED OTHERWISE)
ANCHOR BOLTS:	ASTM F1554, GRADE 36,
	HEADED BOLTS, GALVANIZED
BOLTS:	ASTM F1852 ("TWIST OFF" BOLTS)
STUDS:	ASTM A36

ALL STEEL SHALL BE FABRICATED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE, LATEST EDITION. SUBMIT FABRICATION SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO COMMENCING FABRICATION.

ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE", AND BE PERFORMED BY WELDERS QUALIFIED IN ACCORDANCE WITH D1.1. SMAW SHALL UTILIZE E70XX ELECTRODES. SUBMIT WELDER QUALIFICATIONS AND WELDING PROCEDURES FOR REVIEW AND APPROVAL. GRIND OFF GALVANIZING AT FIELD WELDS.

ALL STRUCTURAL STEEL DENOTED AS GALVANIZED (GALV) SHALL BE HOT-DIP GALVANIZED, AFTER FABRICATION, PER ASTM A123 OR A153 AS APPROPRIATE.

GALVANIZED DAMAGED OR REMOVED DUE TO FABRICATION, SHIPPING, HANDLING OR WELDING SHALL BE REPAIRED BY FLAME SPRAY METALIZING METHODS IN ACCORDANCE WITH SSPC CS 23 PROVIDING A 10 MIL MINIMUM DFT OR BY USING THE FOLLOWING HOT-APPLIED REPAIR STICK METHOD:

1. REPAIR STICKS SHALL BE ZINC-CADMIUM ALLOYS (MELTING POINT 518°-527°F) ZINC-TIN-LEAD ALLOYS (MELTING POINT 446°-500°F). THE ZINC-TIN-LEAD ALLOYS SHALL COMPLY WITH U.S. FEDERAL SPECIFICATION O-G-93 AND CONTAIN FLUXING AGENTS.

2. REMOVE WELDING SLAG BY CHIPPING HAMMER AND CLEAN WELD OR DAMAGED AREA BY VIGOROUS WIRE BRUSHING.

3. PREHEAT THE REGION TO BE REPAIRED BY MEANS OF AN OXYACETYLENE TORCH OR OTHER CONVENIENT METHOD TO BETWEEN 600°F AND 750°F. THE ALLOYS DO NOT SPREAD WELL AT TEMPERATURES BELOW 600°F AND AS TEMPERATURES RISE ABOVE 600°F, INCREASING AMOUNTS OF DROSS FORMS.

4. WIRE BRUSH SURFACE AGAIN.

5. APPLY COATING BY RUBBING BAR OF THE ALLOY OVER THE HEATED SURFACE WHILE IT IS HOT ENOUGH TO MELT THE ALLOY.

6. SPREAD THE MOLTEN ALLOY BY BRISKLY WIRE BRUSHING OR RUBBING WITH A FLAT EDGE STRIP OF STEEL OR PALETTE KNIFE.

7. REMOVE FLUX RESIDUES BY WIPING WITH A DAMP CLOTH OR RINSING WITH WATER.

8. BRUSH APPLY TWO COATS OF ZINC RICH PAINT, ZRC OR EQUAL (COLD GALVANIZE REPAIR), MINIMUM 3 MILS PER COAT, WHILE STEEL IS WARM FROM ZINC ALLOY APPLICATION.

PILES:

ALL PIPE PILES SHALL BE ASTM A252, GRADE 3, WITH CARBON EQUIVALENCY NOT TO EXCEED 0.45. ALL PILES SHALL BE SEAMLESS.

ALL PILES SHALL BE DRIVEN WITH AN IMPACT HAMMER. THE CONTRACTOR SHALL SUBMIT A PLAN FOR PILE DRIVING. THE PLAN SHALL CONTAIN HAMMER TYPE AND DRIVING METHODS FOR ALL PILE TYPES. THE CONTRACTOR SHALL NOT MOBILIZE HAMMERS AND RELATED EQUIPMENT PRIOR TO RECEIVING WRITTEN APPROVAL OF THE PLAN.

ANY HAMMER THAT CAUSES DAMAGE TO THE PILES DURING DRIVING OPERATIONS SHALL BE SUBSTITUTED WITH AN ACCEPTABLE ALTERNATE HAMMER AT NO ADDITIONAL COST TO THE OWNER. IMPACT HAMMER SHALL BE SUPPLIED WITH NEW CAPBLOCK CUSHIONS, WHICH SHALL BE CHANGED AT THE MANUFACTURER'S RECOMMENDED INTERVALS. THE CONTRACTOR'S DRIVING PLAN SHALL INCLUDE MANUFACTURER'S RECOMMENDATIONS AND INFORMATION HAMMER CUSHION.

PILES SHALL BE PLACED WITHIN 1% OF SPECIFIED VERTICAL ALIGNMENT AND WITHIN 2 INCHES OF SPECIFIED LOCATION AT CUTOFF. PILES HITTING OBSTACLES, MISALIGNED PILES AND PILES THAT HAVE NOT ACHIEVED MINIMUM PENETRATION PRIOR TO REFUSAL SHALL BE EXTRACTED BY THE CONTRACTOR WITH AN ADEQUATELY SIZED VIBRATORY HAMMER AND REDRIVEN AT NO ADDITIONAL COST TO THE OWNER.

PILES SHALL BE FURNISHED WITH VERSA STEEL OUTSIDE FIT CUTTING SHOE, WELDED WITH 5/16" FILLET ALL AROUND, OR APPROVED EQUAL. PILES SHALL BE DRIVEN FULL LENGTH TO CUTOFF ELEVATION UNLESS PILE REQUIRED BEARING CAPACITY OR BEDROCK REFUSAL IS OBTAINED. PILE CAPACITY WILL BE DETERMINED SOLELY BY THE ENGINEER. PROPOSED IMPACT HAMMER SHALL HAVE A MINIMUM RATED ENERGY OF APPROXIMATELY 40,000 FT-LBS.

ALL PILE INSTALLATION SHALL BE CONDUCTED WITH THE ENGINEER PRESENT. THE CONTRACTOR SHALL ASSIST THE ENGINEER IN MONITORING THE PILE DRIVING. THE CONTRACTOR SHALL MARK EACH PILE WITH ONE-FOOT INCREMENTS, WITH EVERY FIVE-FOOT INCREMENTS NUMBERED. THE MARKS SHALL BE VISIBLE FROM ALL SIDES OF THE PILE.

SPECIAL INSPECTION:

THE OWNER SHALL RETAIN A SPECIAL INSPECTOR TO PERFORM THE FOLLOWING SPECIAL INSPECTIONS:

- 1) SAMPLING AND TESTING OF CONCRETE. VERIFYING MIX DESIGN, PLACEMENT, CONSOLIDATION, AND CURING MEETS SPECIFIED REQUIREMENTS
- 2) FIELD WELDING
- 3) HIGH STRENGTH BOLTING
- 4) PILE DRIVING


ABBREVIATIONS

AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FTG	FOOTING
APP	APPROXIMATELY	GALV	GALVANIZED
ARCH	ARCHITECT	MAX.	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MIN.	MINIMUM
AWS	AMERICAN WELDING SOCIETY	NO.	NUMBER
BTWN	BETWEEN	O.C.	ON CENTER
℄	CENTERLINE	℄	PLATE
CLR	CLEAR	PSI	POUNDS PER SQUARE INCH
COL	COLUMN	REINF	REINFORCING
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	REQ'D	REQUIRED
CY	CUBIC YARD	SC	SLIP CRITICAL
DBL	DOUBLE	SIM	SIMILAR
EA	EACH	STD	STANDARD
EL	ELEVATION	T&B	TOP AND BOTTOM
EMBED	EMBEDMENT	T.O.C.	TOP OF CONCRETE
EW	EACH WAY	T.O.S.	TOP OF STEEL
FND	FOUNDATION	TYP.	TYPICAL
		W/C	WATER/CEMENT
		W.P.	WORK POINT
		U.N.O.	UNLESS NOTED OTHERWISE



**Jensen  
Yorba  
Lott  
Inc.**

522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



JNU AIRPORT  
CITY/BOROUGH OF JUNEAU  
ALASKA'S CAPITAL CITY



**P | N | D**

ENGINEERS, INC.

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska

CD

REVISIONS

△ .

△ .

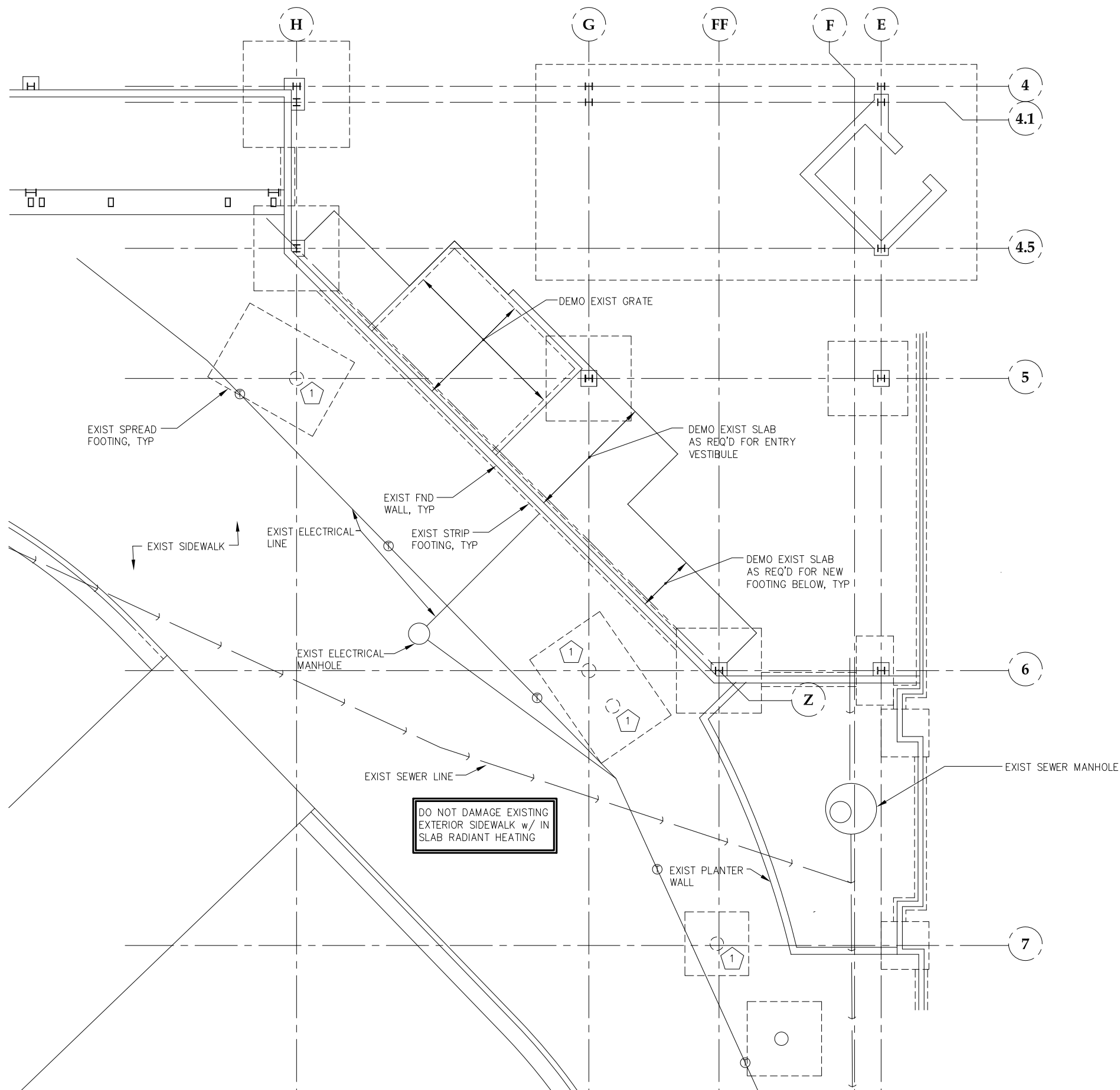
△ .

SHEET TITLE

**STRUCTURAL  
GENERAL NOTES**

DATE: August 8, 2011

FILE: 062088.13

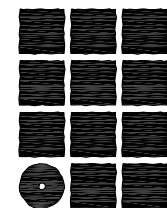


DEMO NOTES:

1 DEMO EXIST 16"Ø STEEL COLUMN, CUT FLUSH w/ SIDEWALK, GRIND SMOOTH, AND FILL w/ CONCRETE, TYP 4 LOCATIONS

1 FOUNDATION/SLAB DEMO PLAN

SCALE: 0 2' 4' 8' 16'



**Jensen  
Yorba  
Lott  
Inc.**

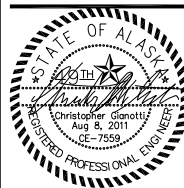
522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



**ENGINEERS, INC.**

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



**City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska**

CD

REVISIONS

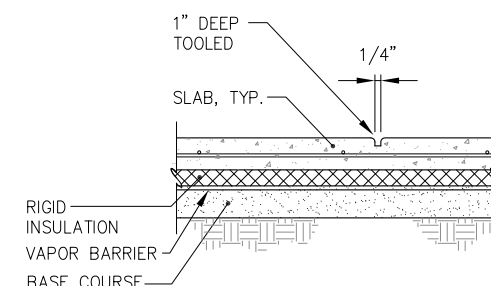
△ .  
△ .  
△ .

SHEET TITLE

**FOUNDATION/  
SLAB DEMO PLAN**

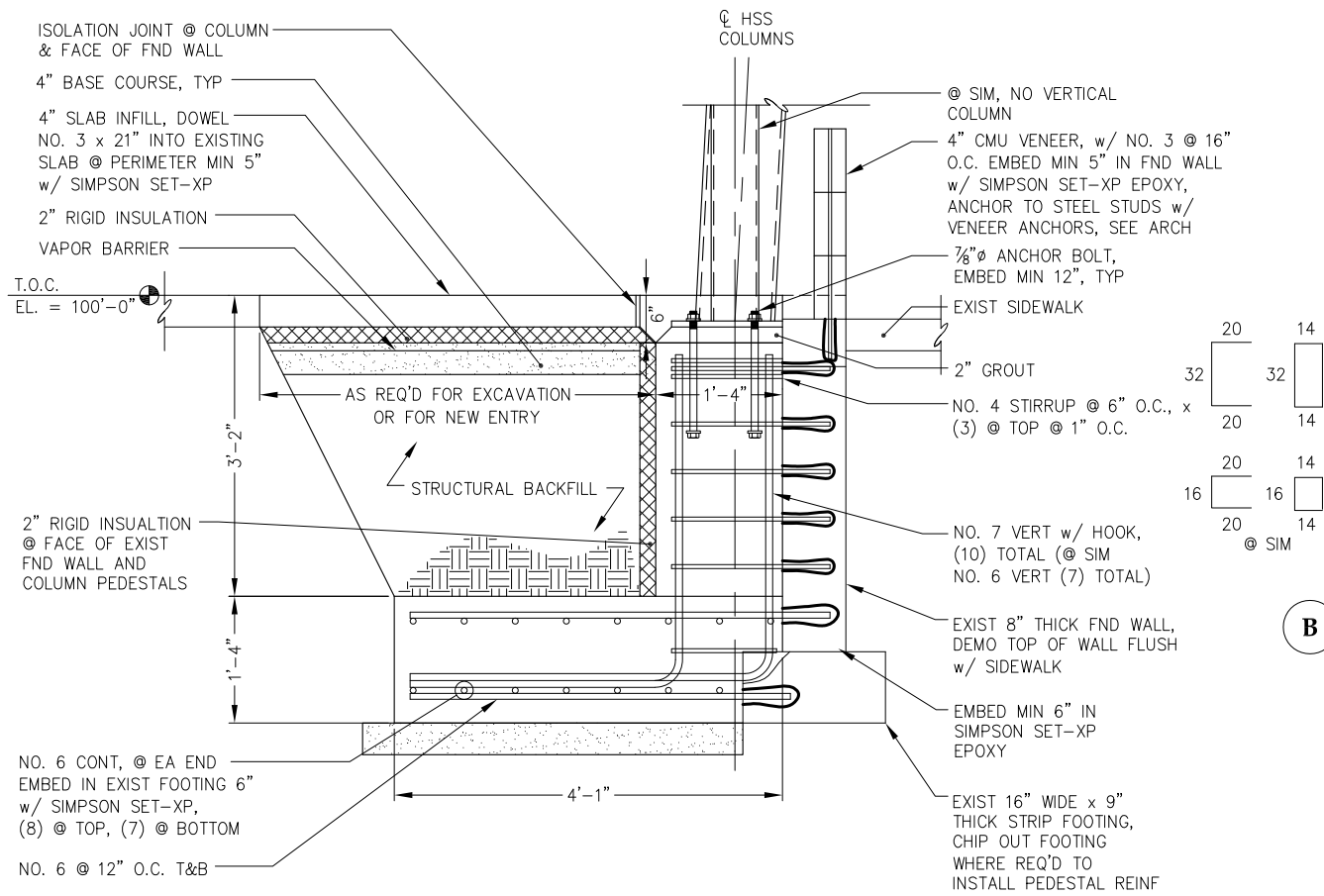
DATE: August 8, 2011  
FILE: 062088.13

**S100**



SCALE: 0 6" 1' 2'

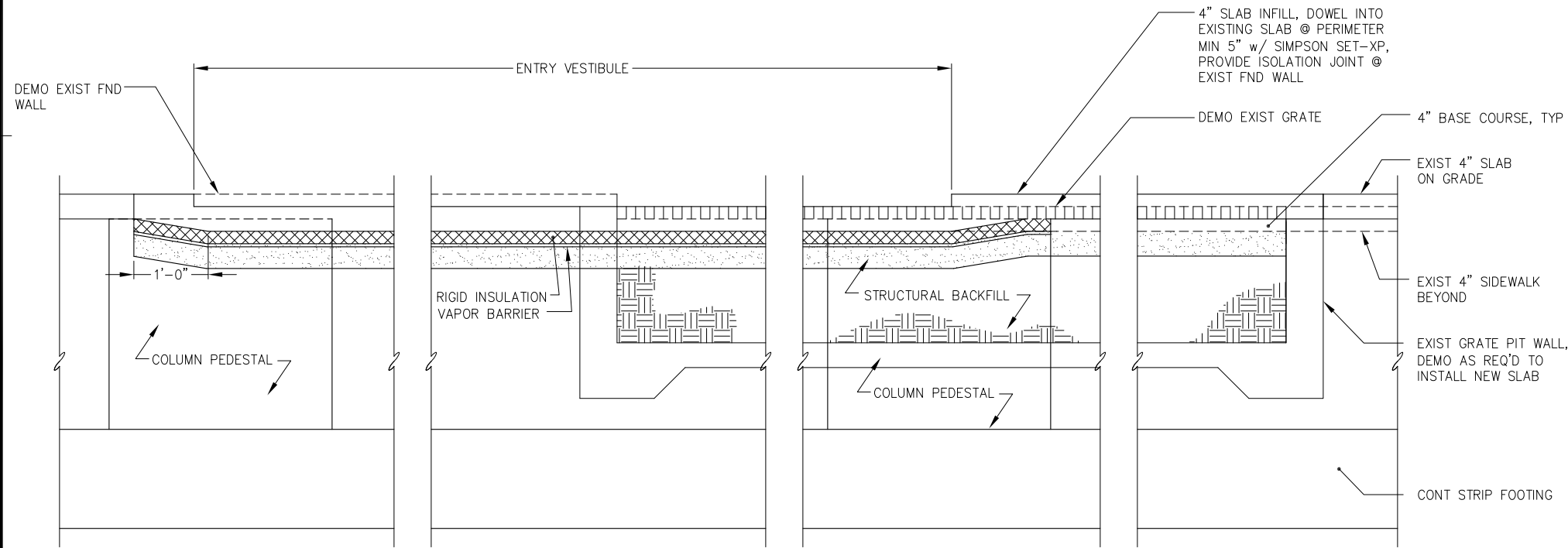
\*\* DENOTES GALVANIZED STEEL



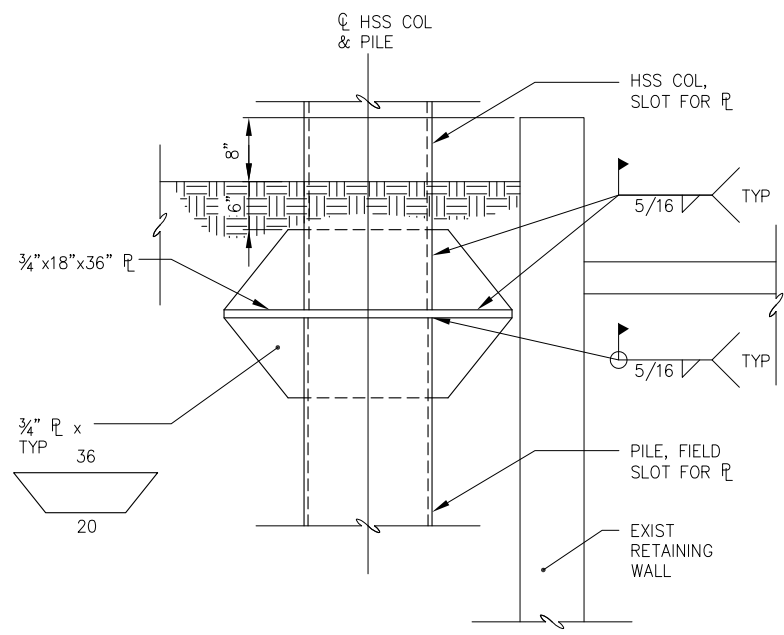
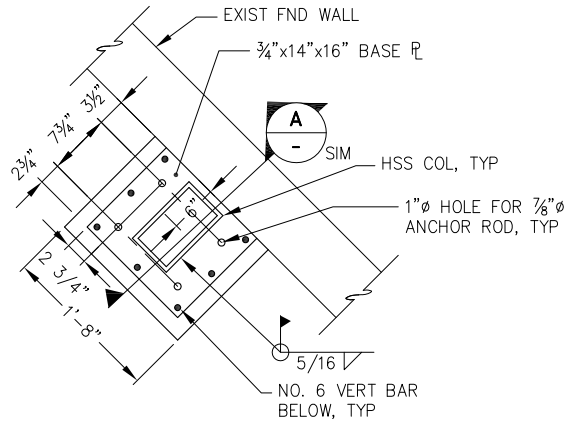
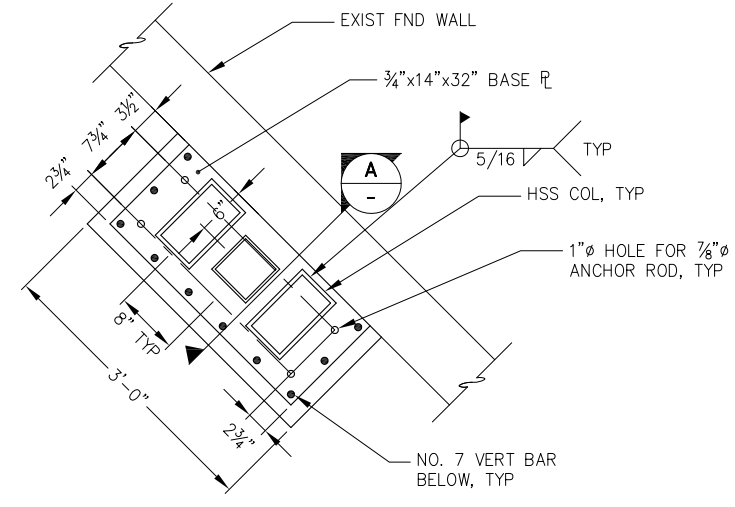
**A FOUNDATION SECTION** SCALE: 0 6" 1' 2'

**B TYPICAL COLUMN DETAIL** SCALE: 0 6" 1' 2'

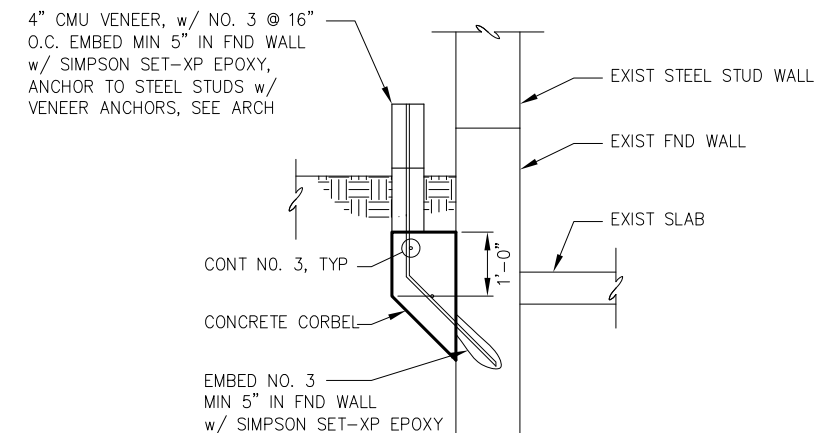
**C TYPICAL COLUMN DETAIL** SCALE: 0 6" 1' 2'



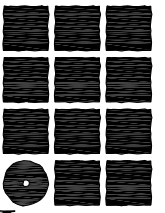
**D FOUNDATION SECTION** SCALE: 0 6" 1' 2'



**E PILE DETAIL** SCALE: 0 6" 1' 2'



**F CMU VENEER DETAIL** SCALE: 0 6" 1' 2'



**Jensen Yorba Lott Inc.**

522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



ENGINEERS, INC.

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



**City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska**

CD

REVISIONS  
△ .  
△ .  
△ .

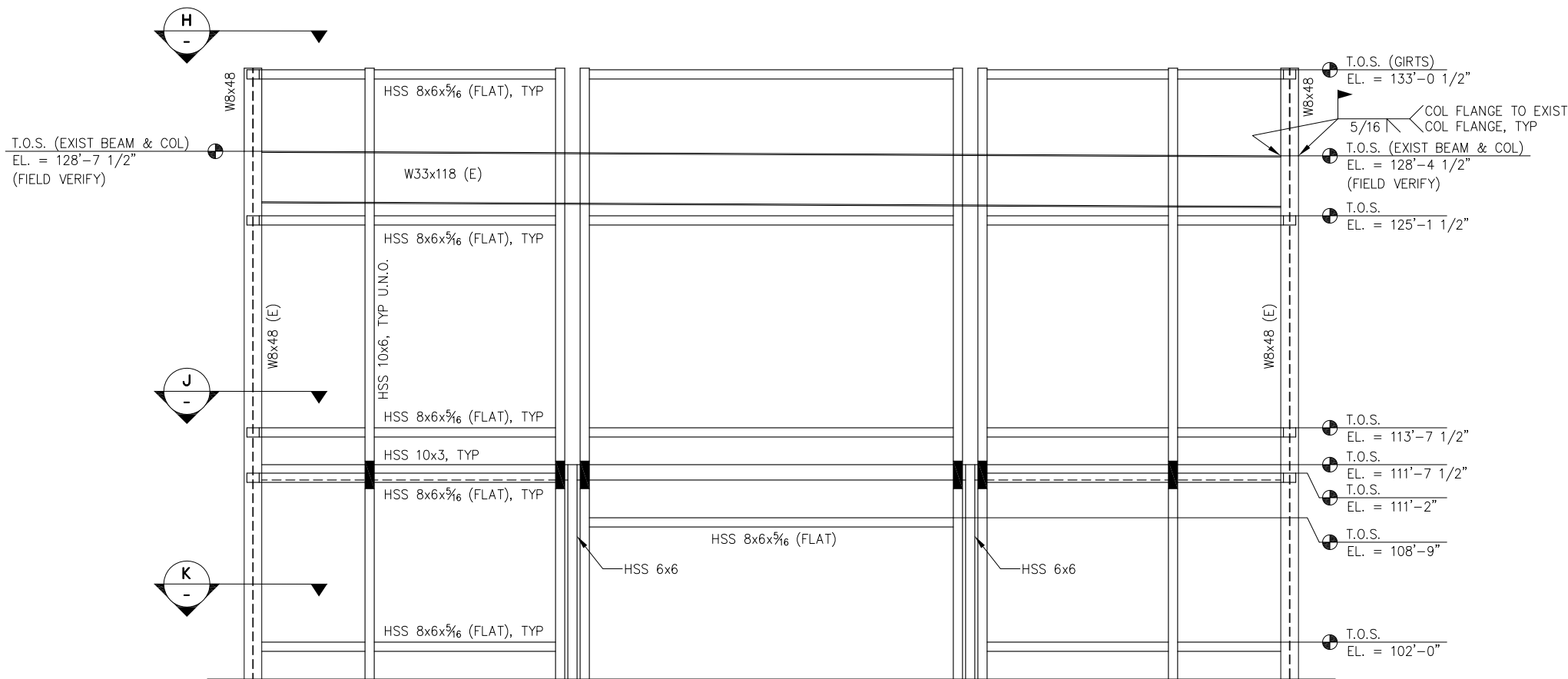
SHEET TITLE  
**FOUNDATION  
DETAILS**

DATE: August 8, 2011  
FILE: 062088.13

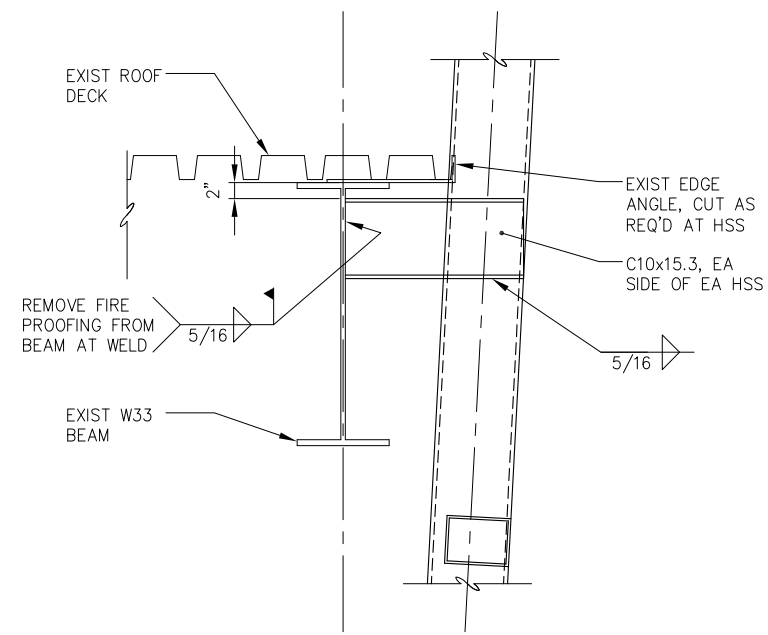
**S102**



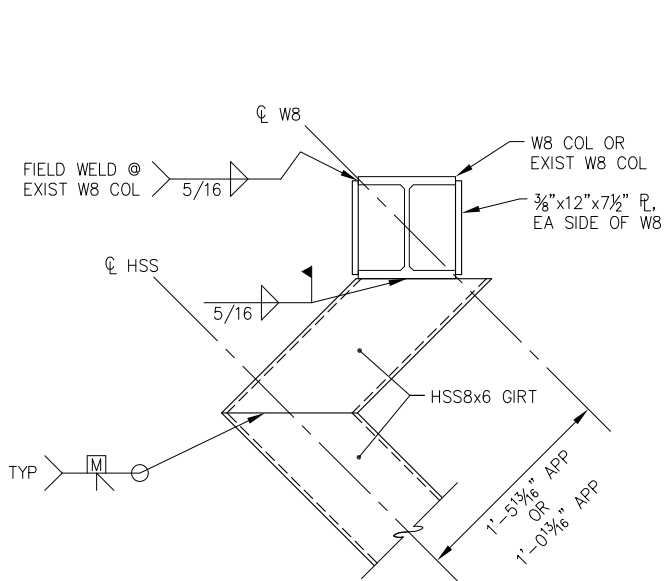




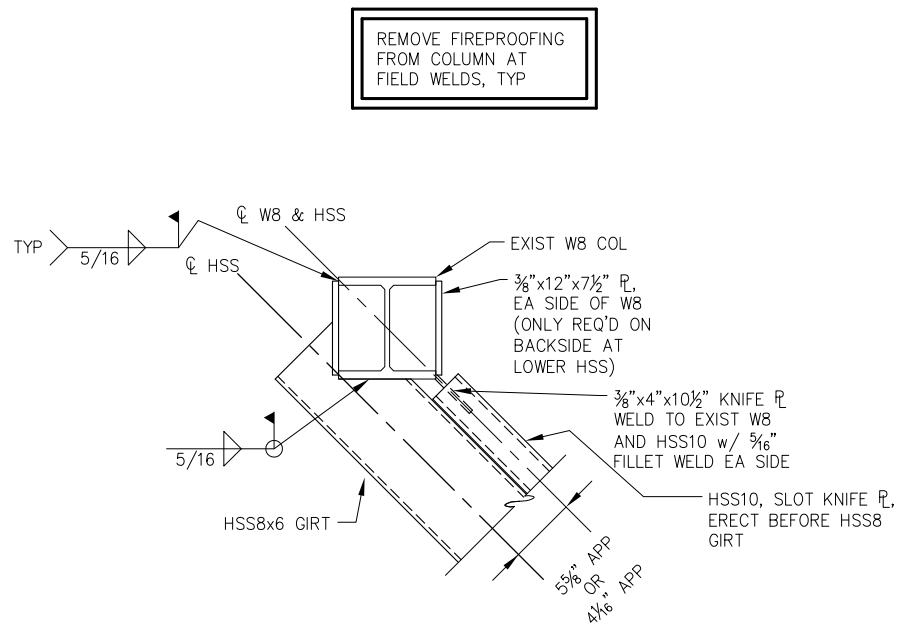
**F WALL ELEVATION**  
SCALE: 0 2' 4' 8'



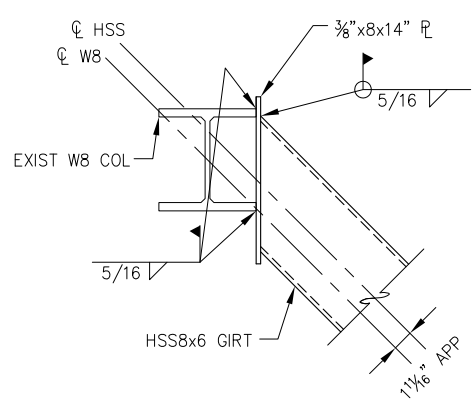
**G HSS COL TO EXIST ROOF BEAM CONNECTION DETAIL**  
SCALE: 0 6" 1' 2'



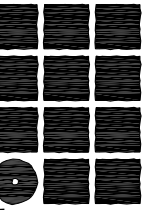
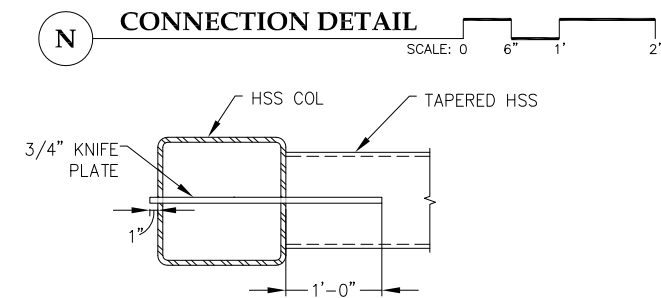
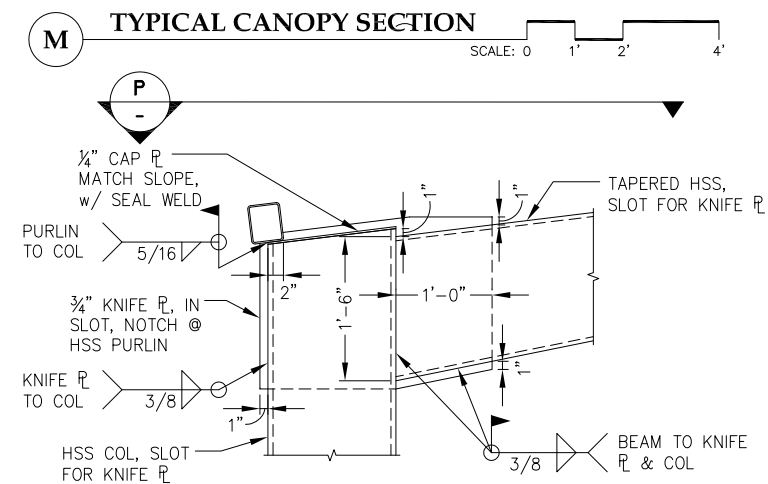
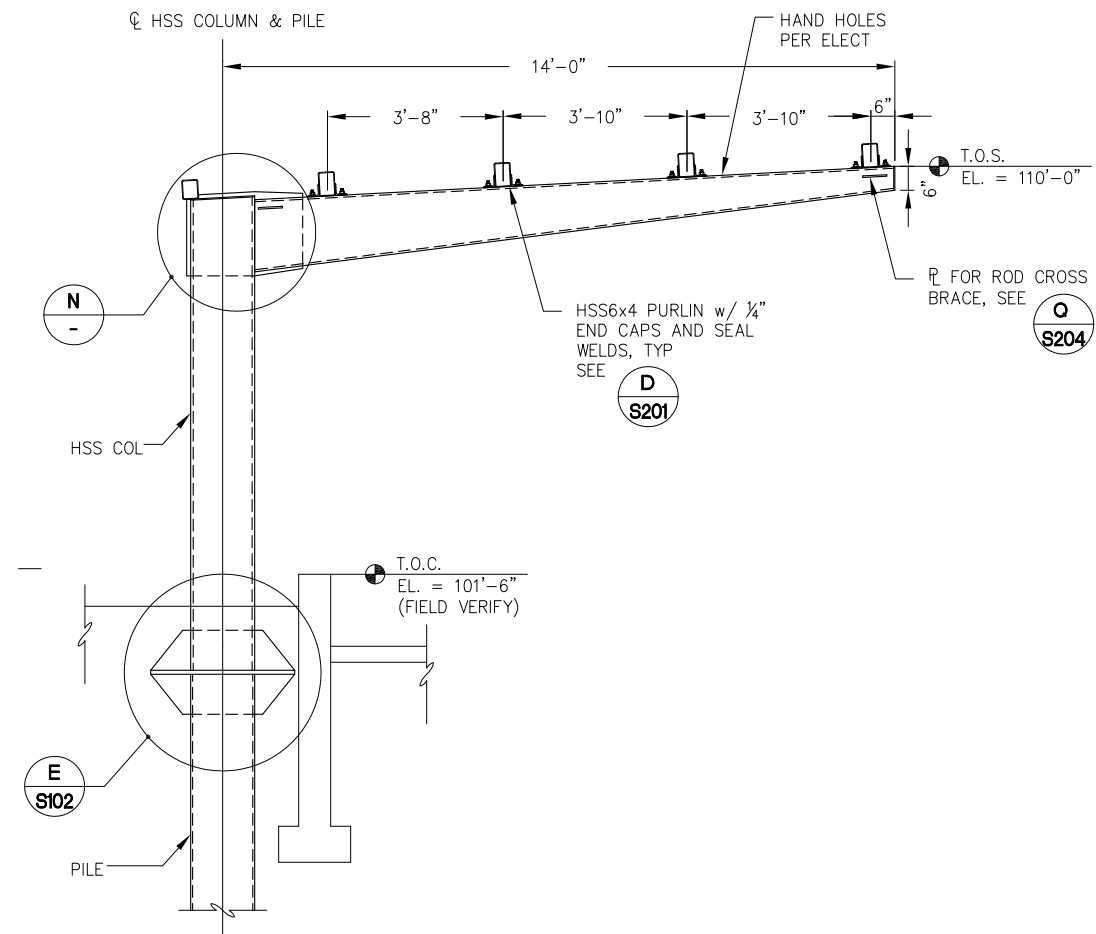
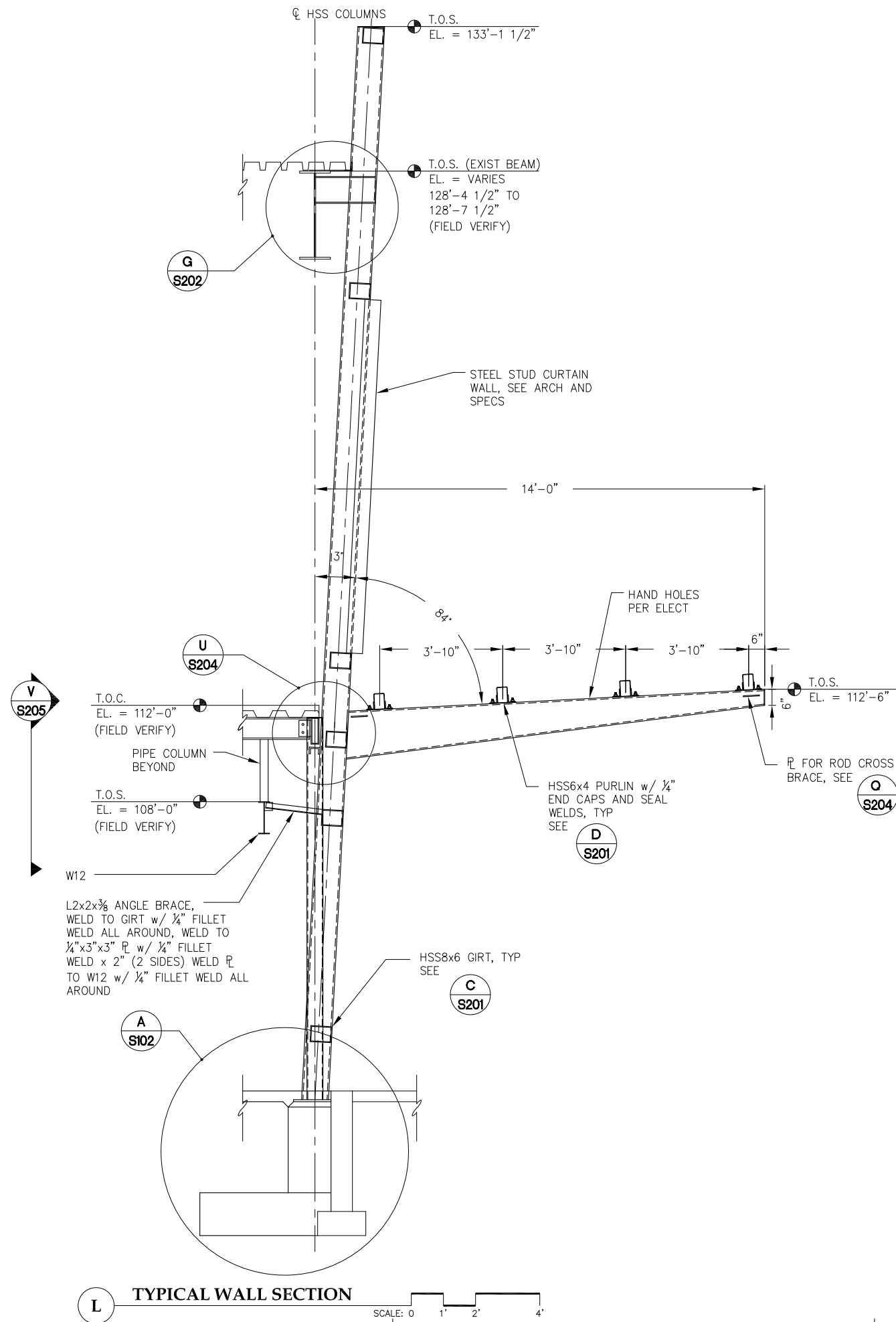
**H GIRT DETAIL**  
SCALE: 0 6" 1' 2'



**J GIRT DETAIL**  
SCALE: 0 6" 1' 2'



**K GIRT DETAIL**  
SCALE: 0 6" 1' 2'



**Jensen  
Yorba  
Lott  
Inc.**

522 West 10th Street  
 Juneau, Alaska 99801  
 phone 907-586-1070  
 fax 907-586-3959  
 jensenyorbalott.com



**P N D**

ENGINEERS, INC.  
 9360 Glacier Highway, Ste. 100  
 JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
 FAX (907) 586-2099  
 www.pndengineers.com



City & Borough of Juneau  
 Juneau International Airport  
 Terminal Main Entry  
 Renovation  
 CBJ Contract No. E12-036  
 Juneau, Alaska

CD

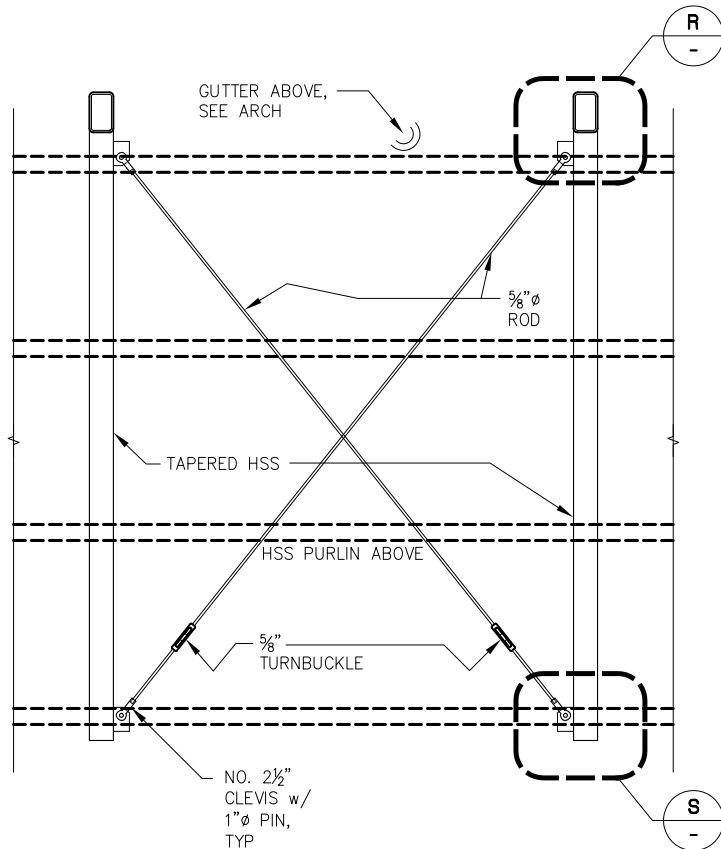
REVISIONS  
 1.  
 2.  
 3.

SHEET TITLE  
 WALL/CANOPY  
 SECTIONS

DATE: August 8, 2011  
 FILE: 062088.13

**S203**





**Q** TYPICAL ROD BRACING PLAN SCALE: 0 1' 2' 4'

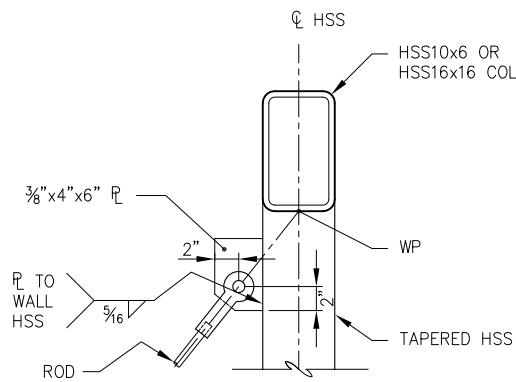
**NOTES:**

1. RODS SHALL CONFORM TO ASTM A36.
2. CLEVISES AND TURNBUCKLES SHALL BE MADE FROM COLD FINISHED CARBON STEEL BARS CONFORMING TO ASTM A108 GRADE 1035 AND SHALL HAVE A WORKING LOAD CAPACITY GREATER THAN THE YIELD STRENGTH OF THE ROD THEY ARE CONNECTING.
3. ALL CANOPY STEEL SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 OR A153 AS APPROPRIATE.

\*\* ATTACH W BEAM TO EXIST W BEAM PER THE FOLLOWING:

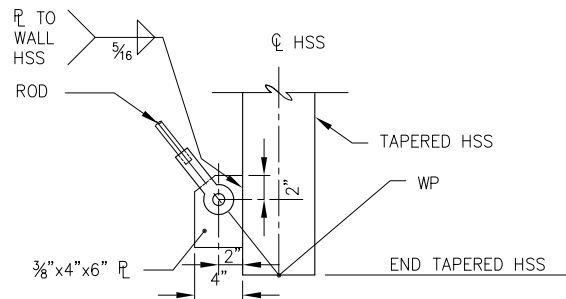
- 1) REMOVE EXIST FIREPROOFING AS REQ'D AT FIELD WELD SURFACES.
- 2) WELD 5/16"x3"x6" PL TO EXIST W BEAM w/ 1/4" FILLET EA SIDE.
- 3) WELD W12 TO 5/16" PL w/ 1/4" FILLET 3 SIDES, COPE W BEAM AS REQ'D FOR FILED WELD.

SEE

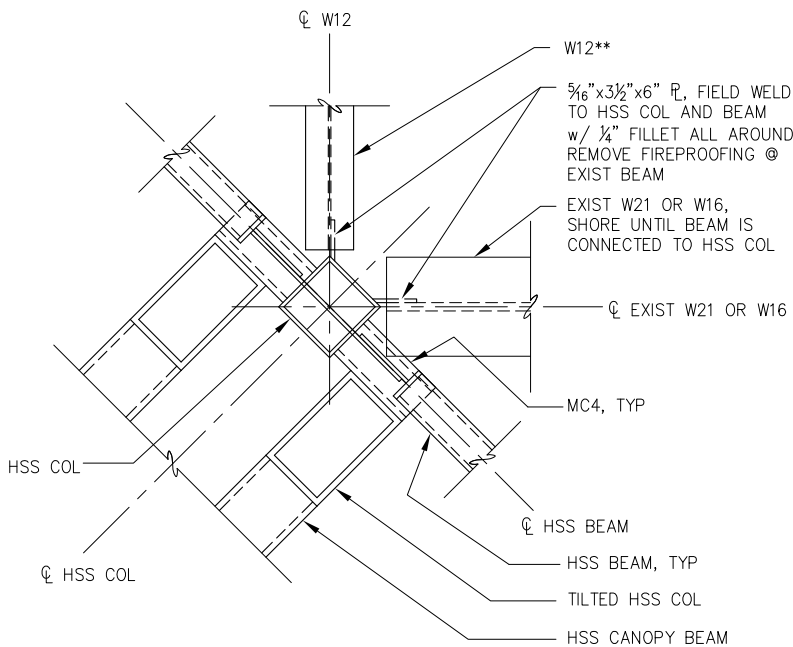


**NOTE:**  
TOP OF PL  
2" BELOW TOP  
OF HSS

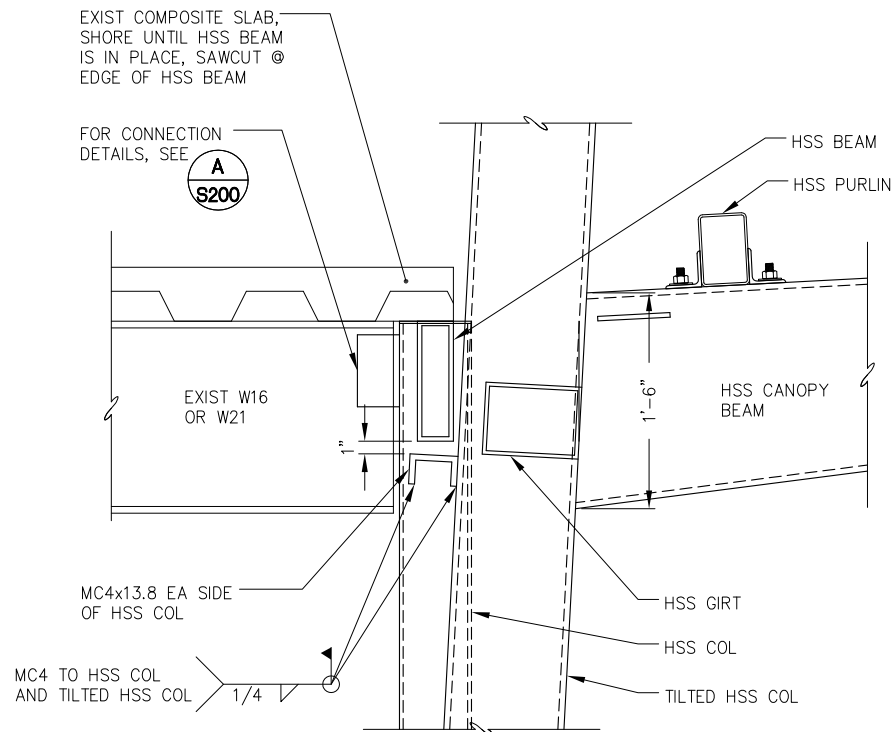
**R** TYPICAL ROD BRACING DETAIL SCALE: 0 6" 1' 2'



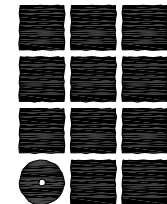
**S** TYPICAL ROD BRACING DETAIL SCALE: 0 6" 1' 2'



**T** HSS COL TO FLOOR FRAMING DETAIL SCALE: 0 6" 1' 2'



**U** HSS COL TO FLOOR FRAMING DETAIL SCALE: 0 6" 1' 2'



**Jensen  
Yorba  
Lott  
Inc.**

522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



**ENGINEERS, INC.**

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



**City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska**

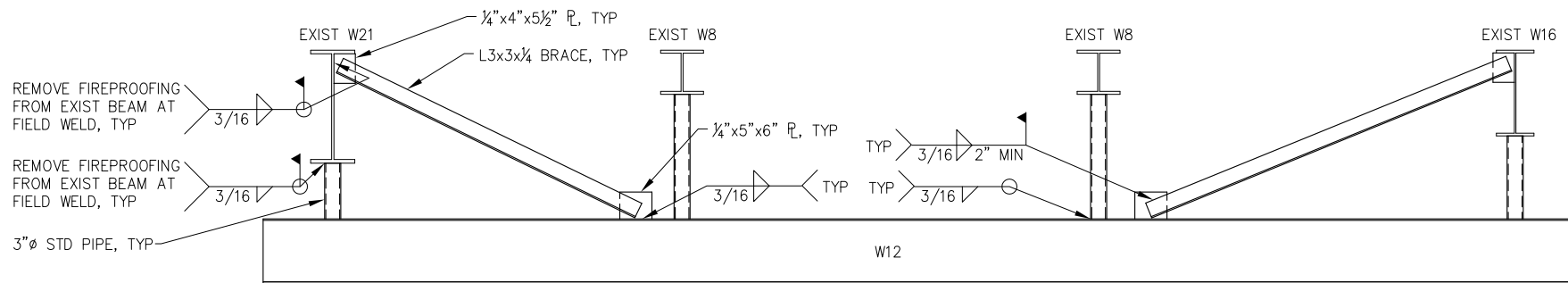
CD

REVISIONS	
△	.
△	.
△	.

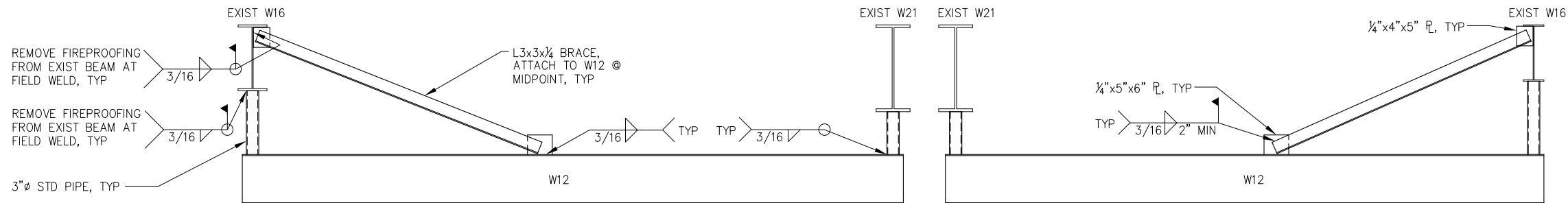
SHEET TITLE  
**CROSS BRACING  
AND FRAMING  
DETAILS**

DATE: August 8, 2011  
FILE: 062088.13

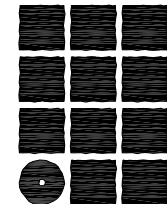
**S204**



**V SLIDING DOOR HEADER ELEVATION**  
SCALE: 0 6" 1' 2' 4'



**X SLIDING DOOR HEADER ELEVATION**  
SCALE: 0 6" 1' 2' 4'



**Jensen  
Yorba  
Lott  
Inc.**

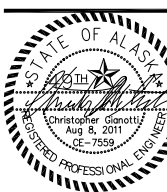
522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



**ENGINEERS, INC.**

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



**City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska**

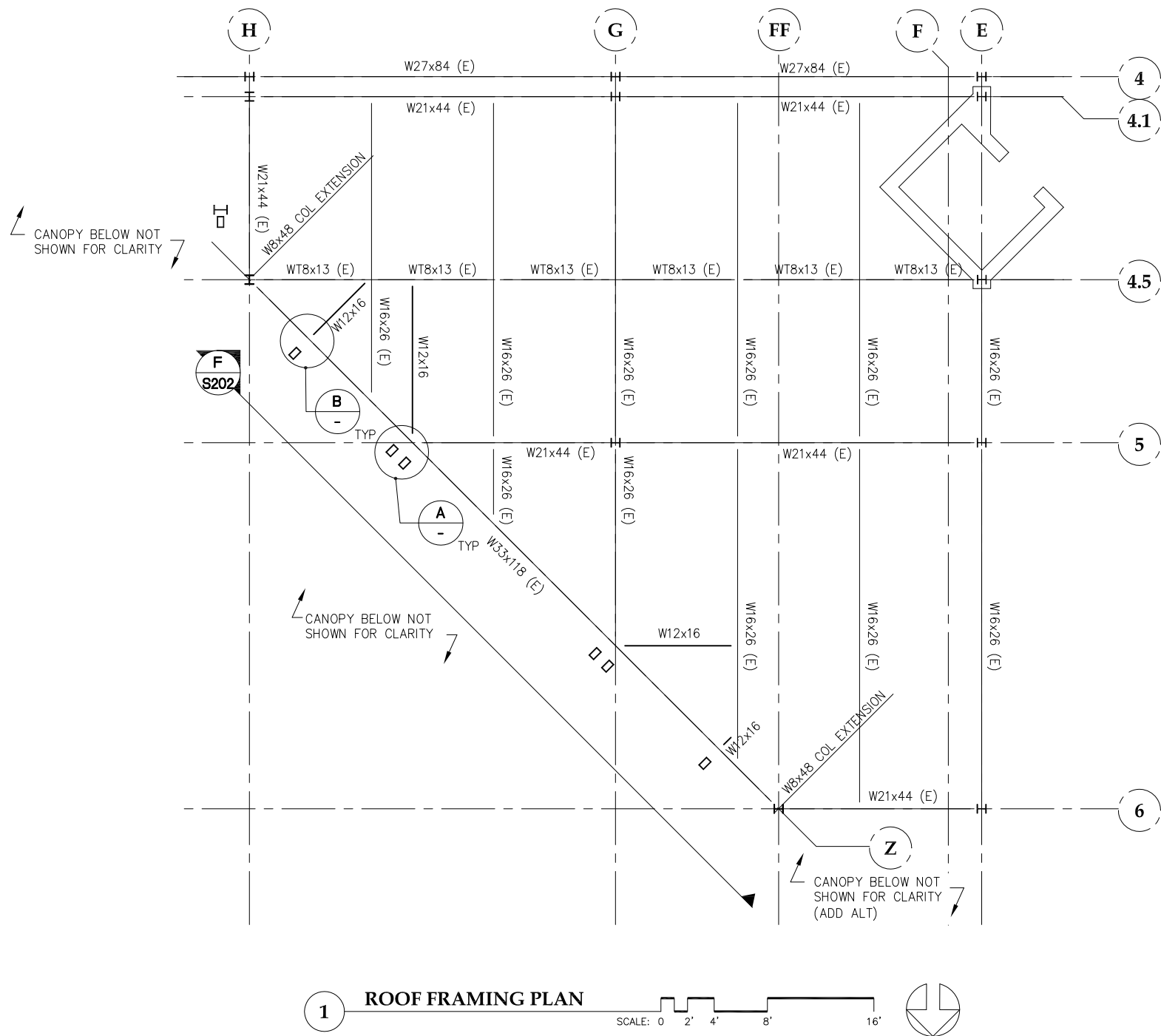
CD

REVISIONS  
△ .  
△ .  
△ .

SHEET TITLE  
**SLIDING DOOR  
HEADER DETAILS**

DATE: August 8, 2011  
FILE: 062088.13

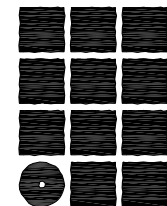
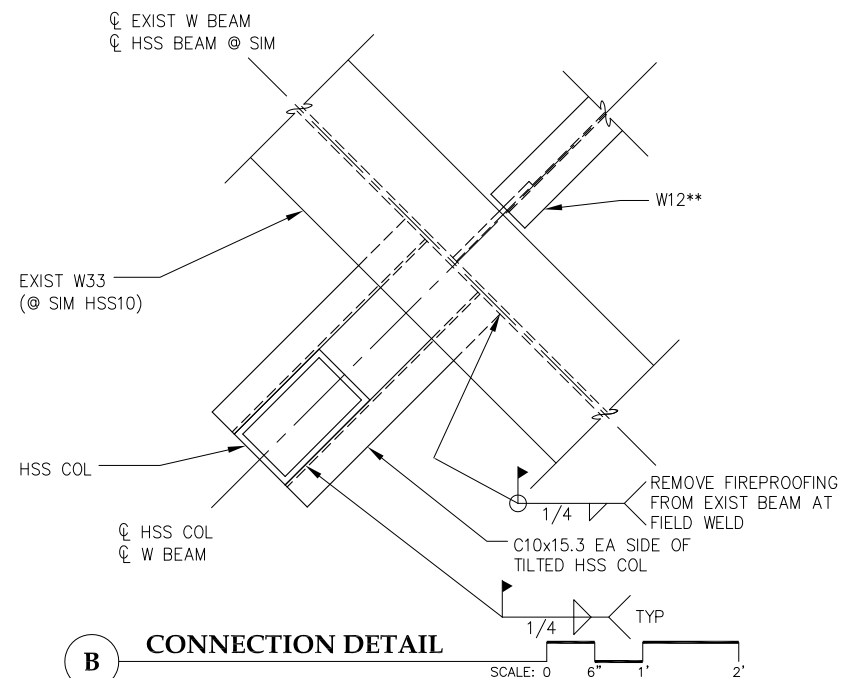
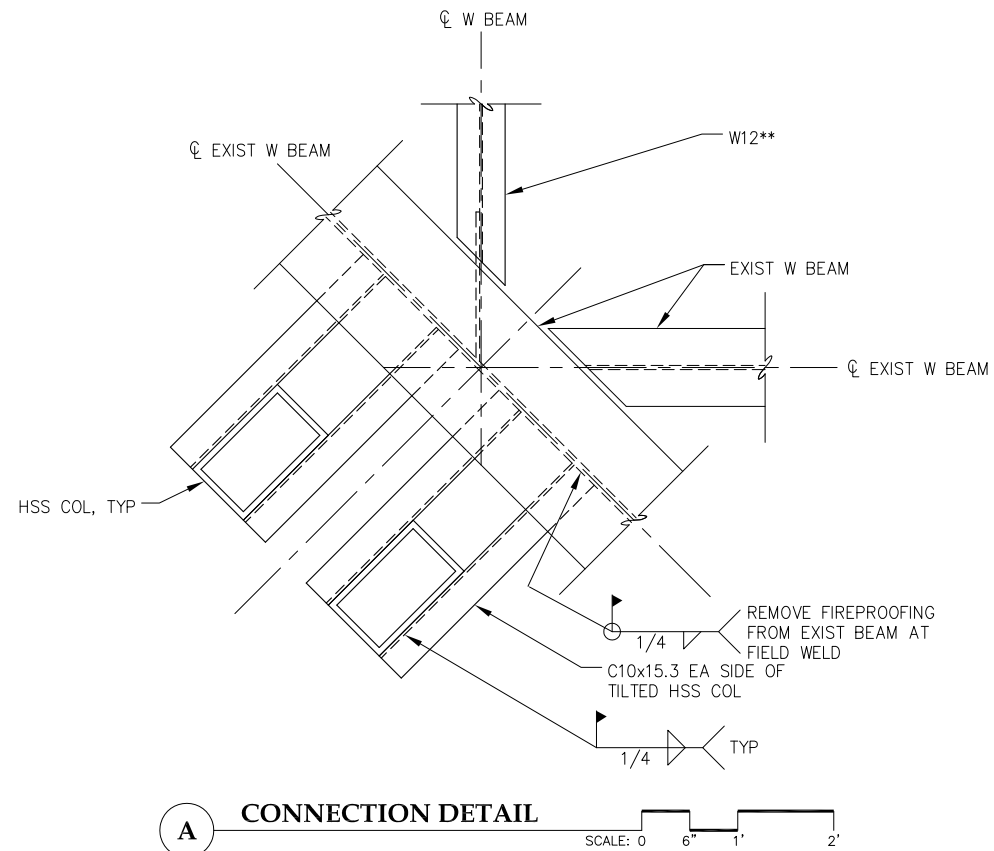
**S205**



\*\* ATTACH W BEAM TO EXIST W BEAM  
@ EA END PER THE FOLLOWING:

- 1) REMOVE EXIST FIREPROOFING AS REQ'D AT FIELD WELD SURFACES.
- 2) WELD  $\frac{5}{16}$ "x3"x6" PL TO EXIST W BEAM w/  $\frac{1}{4}$ " FILLET EA SIDE.
- 3) WELD W12 TO  $\frac{5}{16}$ " PL w/  $\frac{1}{4}$ " FILLET 3 SIDES, COPE W BEAM AS REQ'D FOR FIELD WELD.

SEE **A**  
**S200**



**Jensen  
Yorba  
Lott  
Inc.**

522 West 10th Street  
Juneau, Alaska 99801  
phone 907-586-1070  
fax 907-586-3959  
jensenyorbalott.com



**ENGINEERS, INC.**

9360 Glacier Highway, Ste. 100  
JUNEAU, ALASKA 99801

PHONE (907) 586-2093  
FAX (907) 586-2099  
www.pndengineers.com



**City & Borough of Juneau  
Juneau International Airport  
Terminal Main Entry  
Renovation  
CBJ Contract No. E12-036  
Juneau, Alaska**

**CD**

REVISIONS  
 1. .  
 2. .  
 3. .

SHEET TITLE  
**ROOF FRAMING  
 PLAN AND  
 DETAILS**

DATE: August 8, 2011  
 FILE: 062088.13

**S300**