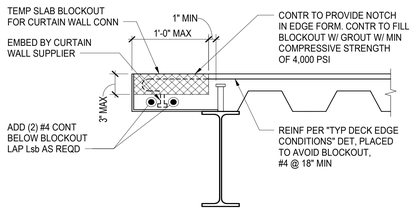
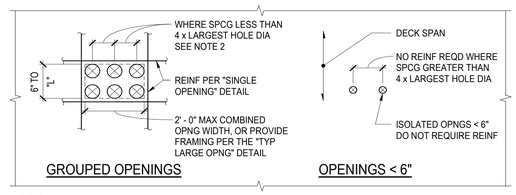


NOTES:

1. SEE "TYPICAL DECK EDGE CONDITIONS" DETAIL FOR INFORMATION NOT SHOWN.

1 TYPICAL CURTAIN WALL CONNECTION

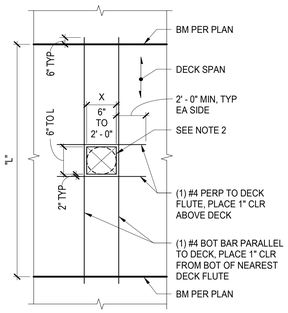


GROUPED OPENINGS — OPENINGS < 6"

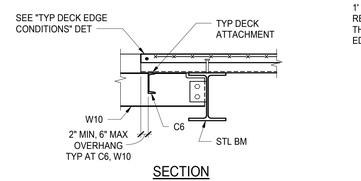
NOTES:

1. BLOCK OUT OPENING BEFORE PLACING CONCRETE.
2. REMOVE BLOCKOUT AND CUT DECK AFTER CONCRETE HAS REACHED ITS DESIGN STRENGTH.
3. SMALL OPENINGS WHERE NOTED REQUIRE A MINIMUM CENTER-TO-CENTER SPACING FROM ADJACENT SMALL OPENINGS OF FOUR TIMES THE MAXIMUM OPENING DIMENSION. IF THIS SPACING REQUIREMENT CANNOT BE ACHIEVED, THE GROUP SHALL BE REINFORCED AS IF ONE COMBINED OPENING OR PENETRATION.
4. THE CONTRACTOR SHALL COORDINATE ALL OPENING SIZES AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND MECH, ELEC, PLUMBING, AND OTHER TRADES.
5. WHERE OPENING WIDTH "X" IS GREATER THAN 2'-0", REFER TO THE "TYPICAL COMPOSITE FLOOR DECK - FRAMED OPENINGS" DETAIL.

2 TYPICAL COMPOSITE DECK - SMALL OPENINGS (X ≤ 2'-0")



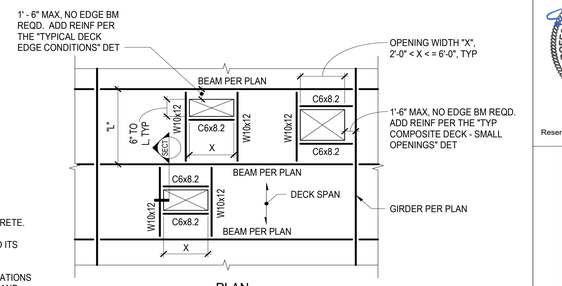
SINGLE OPENING



SECTION

NOTES:

1. BLOCK OUT OPENING AND INSTALL FRAMING BEFORE PLACING CONCRETE.
2. REMOVE BLOCKOUT AND CUT DECK AFTER CONCRETE HAS REACHED ITS DESIGN STRENGTH.
3. THE CONTRACTOR SHALL COORDINATE ALL OPENING SIZES AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND MECH, ELEC, PLUMBING, AND OTHER TRADES.
4. WHERE OPENING WIDTH "X" IS 2'-0" OR LESS, REFER TO THE "TYPICAL COMPOSITE FLOOR DECK - SMALL OPENING" DETAIL.

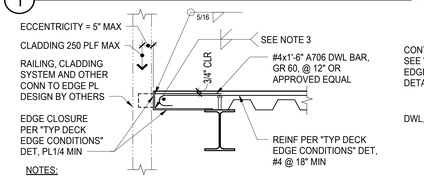


PLAN

4 TYPICAL COMPOSITE DECK - FRAMED OPENINGS (2'-0" < X ≤ 6'-0")

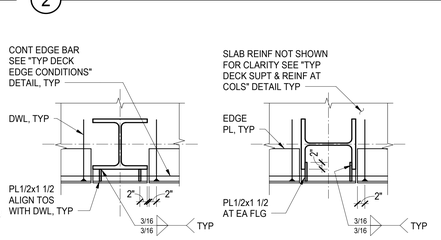
NOTES:

1. SEE "TYPICAL DECK EDGE CONDITIONS" DETAIL FOR INFORMATION NOT SHOWN.



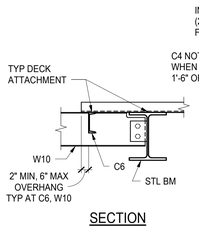
NOTES:

1. SEE "TYPICAL DECK EDGE CONDITIONS" DETAIL FOR INFORMATION NOT SHOWN.
2. PROVIDE BENT PLATE AT EXTERIOR WHEREVER REQUIRED TO SUPPORT EXTERIOR CLADDING.
3. AT CONTRACTOR'S OPTION, FABRICATE EDGE PLATE FROM TWO PIECES OF PLATE AND WELD. GRIND SMOOTH TO MATCH BENT PLATE AT EXPOSED PLATE CONDITIONS.
4. EXTERIOR SLAB EDGE SHALL NOT VERTICALLY SUPPORT PRECAST.
5. CLADDING LOAD MAGNITUDES AND LOCATIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW PRIOR TO FABRICATION. BASED ON REVIEW, ADJUSTMENT TO THIS DETAIL MAY BE REQUIRED.
6. AT RAILING ATTACHMENT, PROVIDE 1/2" BENT PLATE. REDUCE DOWEL AND SLAB EDGE REINFORCING SPACING TO 6".

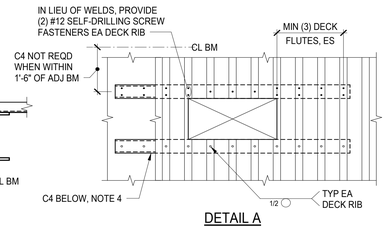


COLUMN W/ WEB PERPENDICULAR — COLUMN W/ WEB PARALLEL

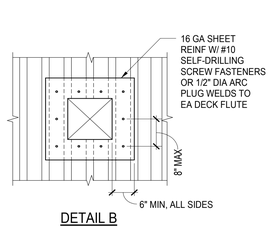
TYPICAL EDGE CONDITION AT COLUMN



SECTION



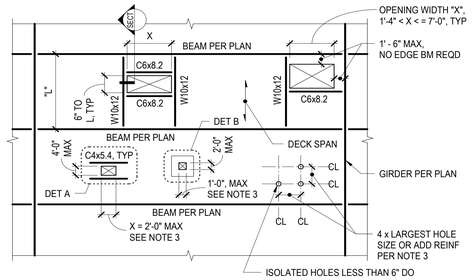
DETAIL A



DETAIL B

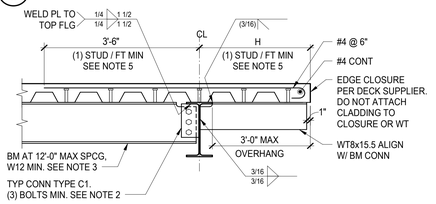
NOTES:

1. INSTALL INFILL FRAMING OR DECK REINFORCEMENT BEFORE CUTTING HOLES OR OPENINGS.
2. THE CONTRACTOR SHALL COORDINATE ALL OPENING SIZES AND LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND MECH, ELEC, PLUMBING, AND OTHER TRADES.
3. SMALL OPENINGS WHERE NOTED REQUIRE A MINIMUM ON-CENTER SPACING FROM ADJACENT OPENINGS OF FOUR TIMES THE MAXIMUM OPENING DIMENSION. WHERE THE REQUIRED OPENING LAYOUT CANNOT CONFORM TO THESE REQUIREMENTS, PROVIDE DECK REINFORCEMENT OR INFILL FRAMING AS IF THE GROUP WAS ONE COMBINED LARGE OPENING.
4. WITH ARCHITECT APPROVAL, THE CONTRACTOR MAY OPT TO INSTALL CHANNELS ON TOP OF DECK WITH EQUIVALENT ARC PLUG WELDS OR SCREW FASTENERS.

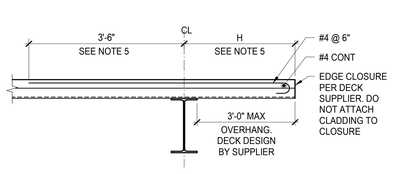


PLAN

6 TYPICAL DECK EDGE AT EXTERIOR CLADDING OR RAILING



DECK SPANNING PARALLEL TO BEAM

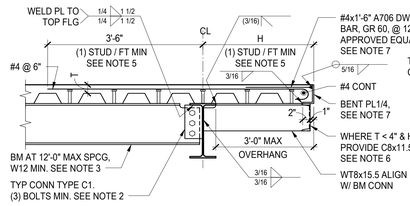


DECK SPANNING PERPENDICULAR TO BEAM

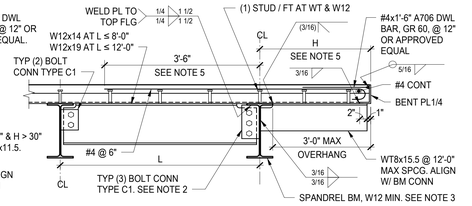
NOTES:

1. SEE "TYPICAL DECK EDGE CONDITIONS" DETAIL FOR INFORMATION NOT SHOWN.
2. SEE "TYPICAL TYPE C1 - SINGLE PLATE SHEAR CONNECTION" DETAIL FOR BOLTS, PLATE AND WELDS. HOLES SHALL BE STANDARD ROUND HOLES (STD).
3. IF BACKSPAN OR SPANDREL BEAM ARE LESS THAN W12, NOTIFY ENGINEER OF RECORD FOR REVIEW.
4. AT COLUMN WELD WT OUTRIGGER TO COLUMN WITH ALL-AROUND 3/16" FILLET WELD.
5. WHERE CLADDING IS SUPPORTED AT EDGE, NO SLAB OPENINGS LARGER THAN 1'-0" WIDE AT OVERHANG AND FIRST 3'-6" OF BACK-SPAN. IF NOT MET, NOTIFY ENGINEER OF RECORD FOR REVIEW AND APPROVAL.

8 TYPICAL ROOF DECK OPENINGS (X ≤ 7'-0")



DECK SPANNING PARALLEL TO BEAM

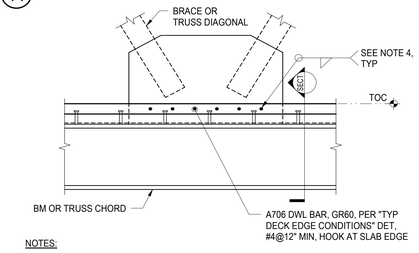


DECK SPANNING PERPENDICULAR TO BEAM

NOTES:

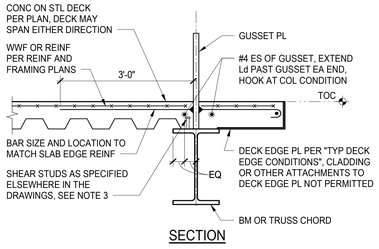
1. SEE "TYPICAL DECK EDGE AT EXTERIOR CLADDING OR RAILING" DETAIL FOR INFORMATION NOT SHOWN.
2. SEE "TYPICAL TYPE C1 - SINGLE PLATE SHEAR CONNECTION" DETAIL FOR BOLTS, PLATE AND WELDS. HOLES SHALL BE STANDARD ROUND HOLES (STD).
3. IF BACKSPAN OR SPANDREL BEAM ARE LESS THAN W12, NOTIFY ENGINEER OF RECORD FOR REVIEW.
4. AT COLUMN WELD WT OUTRIGGER TO COLUMN WITH ALL-AROUND 3/16" FILLET WELD.
5. WHERE CLADDING IS SUPPORTED AT EDGE, NO SLAB OPENINGS LARGER THAN 1'-0" WIDE AT OVERHANG AND FIRST 3'-6" OF BACK-SPAN. IF NOT MET, NOTIFY ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
6. WELD BENT PLATE TO CHANNEL WITH FILLET WELD 3/16" x 2" @ 12". PROVIDE "TYPICAL TYPE C11 - SHALLOW BEAM CONN" AT ENDS.
7. AT RAILING ATTACHMENT, PROVIDE 1/2" BENT PLATE AND REDUCE DOWEL SPACING TO 6".

11 TYPICAL EXTENDED DECK EDGE (1'-6" < OVERHANG ≤ 3'-0")



NOTES:

1. SIMILAR AT GUSSET TO COLUMN CONNECTIONS.
2. SEE "TYPICAL DECK EDGE CONDITIONS" DETAIL FOR ADDITIONAL INFORMATION.
3. AT GUSSET, LOCATE STUDS ON OPPOSITE SIDE OF GUSSET PLATE FROM DECK EDGE. WHERE WELDING ACCESS IS PRECLUDED BY CONNECTION GEOMETRY, STUDS SHALL BE UNIFORMLY DISTRIBUTED ON EACH SIDE OF GUSSET PLATE.
4. WELD SIZE SHALL BE 5/16" FOR #4 BARS AND 7/16" FOR #5 BARS.

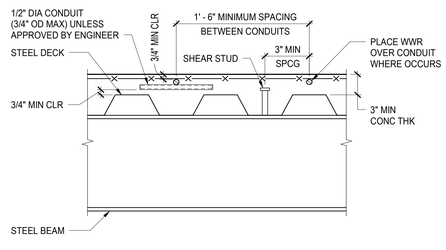


SECTION

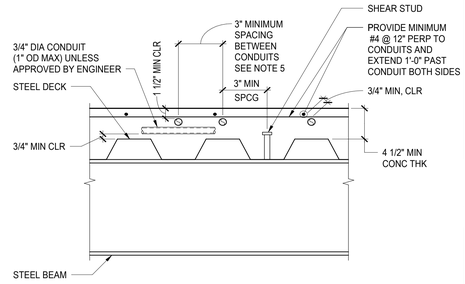
13 TYPICAL EXTENDED DECK EDGE AT EXTERIOR CLADDING OR RAILING (1'-6" < OVERHANG ≤ 3'-0")

NOTES:

1. REINFORCEMENT TAKES PRECEDENCE OVER CONDUIT. DO NOT RAISE, LOWER OR MOVE REINFORCEMENT TO ACCOMMODATE CONDUIT.
2. LOCATE CONDUITS IN CONCRETE THICKNESS ABOVE THE DECK FLUTES ONLY. CHAIR CONDUIT OFF DECK TO PROVIDE MINIMUM SPECIFIED CLEAR COVER.
3. ROUTE CONDUIT UNDER THE DECK OR IN OTHER LOCATIONS IF SLAB THICKNESS OR SPACING REQUIREMENTS CANNOT BE MET.
4. CONDUIT LAYOUT SHALL BE COORDINATED BY THE CONTRACTOR WITH MEP, ARCH AND OTHER TRADES. CONTRACTOR TO SUBMIT CONDUIT LAYOUT TO ENGINEER FOR REVIEW AND APPROVAL.
5. THE MAXIMUM NUMBER OF CONDUITS IN A GROUP IS (10). PROVIDE 3'-0" CLEAR MINIMUM BETWEEN GROUPS OF CONDUITS.
6. DENSE CLUSTERS OF CONDUITS, WHERE MINIMUM SPACING CANNOT BE MET, TO BE TREATED AND REINFORCED AS OPENINGS.
7. PLACE TRANSVERSE CONDUITS RUNNING OVER COMPOSITE BEAMS IN OUTER THIRD OF BEAM SPANS.
8. MINIMUM ANGLE BETWEEN CONDUITS AT CROSSOVERS SHALL BE 45 DEGREES.



LIGHT CONDUIT IN CONCRETE ON STEEL DECK



HEAVY CONDUIT IN CONCRETE ON STEEL DECK

16 TYPICAL SLAB EDGE AT GUSSET PLATE

18 TYPICAL CONDUIT IN SLAB ON STEEL DECK

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DEER VALLEY, UTAH

principal architect
project manager
drawn by
checked by
job no. 20052
date 04/08/2024

revisions:

no.	date	by
2	04/08/2024	IFC SET 1 OF 3
1	11/18/2022	95% CD

ISSUED FOR CONSTRUCTION
SET 1 OF 3
04/08/2024

TYPICAL STEEL DECK DETAILS

S4.15