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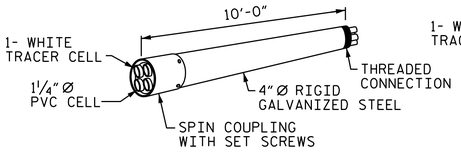
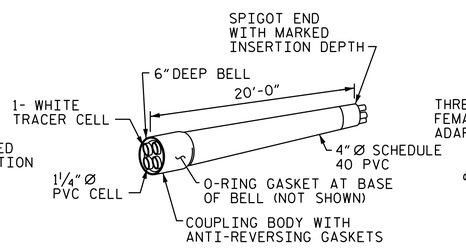
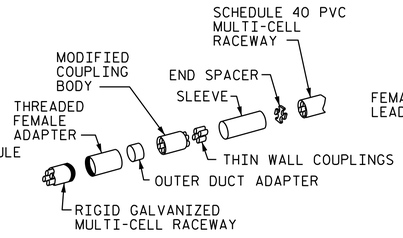


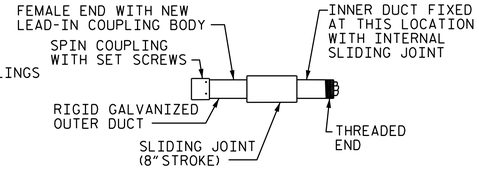
RIGID GALVANIZED (RGC)
MULTI-CELL RACEWAY



SCHEDULE 40 PVC
MULTI-CELL RACEWAY



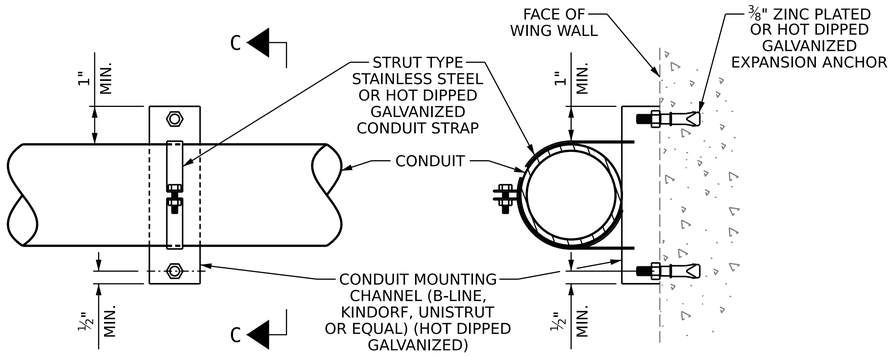
TRANSITION ADAPTER



EXPANSION JOINT FITTING

DETAIL "D"

4" MULTI-CELL COMPONENTS

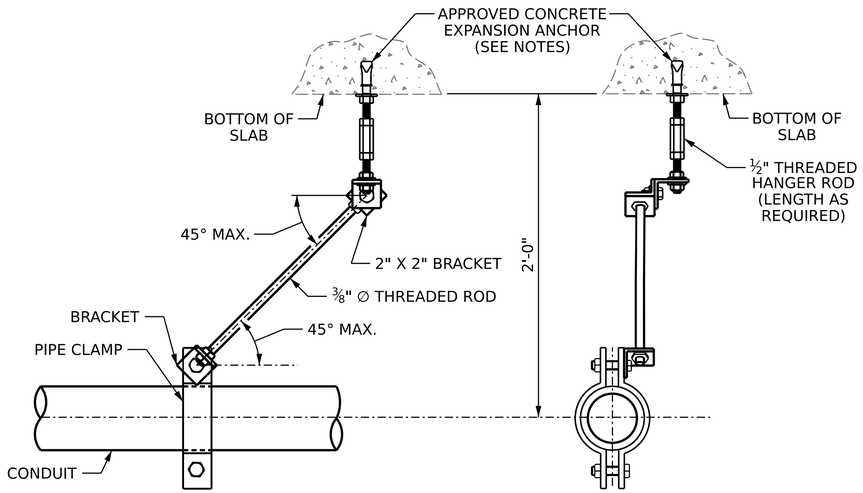


ELEVATION

SECTION C-C

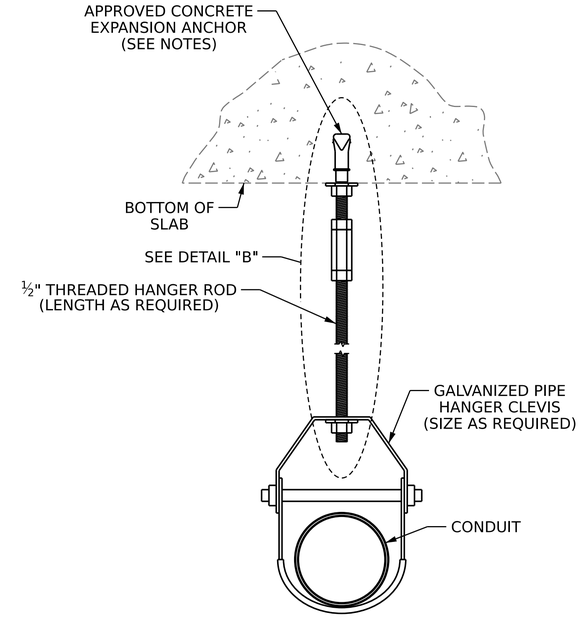
CONDUIT SURFACE MOUNTING

ATACHMENT TO VERTICAL OR HORIZONTAL CONCRETE SURFACES
(EXCLUDES DECK OVERHANG)



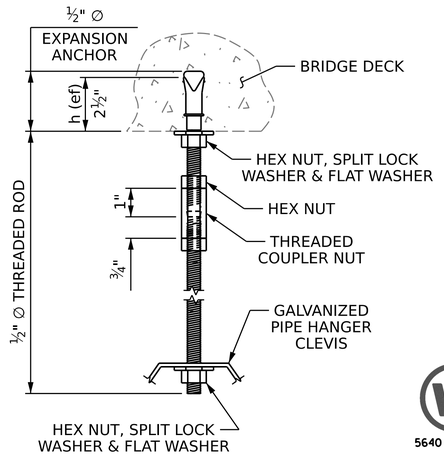
DETAIL "E"

STABILIZER



DETAIL "C"

HANGER ASSEMBLY



DETAIL "B"

NOTES:

INSTALL CONDUIT IN OVERHANG OF BRIDGE STRUCTURES. CONDUIT SHALL NOT BE CARRIED THROUGH EXISTING BACKWALL, WINGWALL ELEMENTS, OR INTERIOR GIRDER BAYS.

USE TORQUE CONTROLLED MECHANICAL EXPANSION ANCHORS THAT ARE APPROVED FOR USE IN CRACKED CONCRETE BY THE INTERNATIONAL CODE COUNCIL, EVALUATION SERVICE (ICC-ES). THE CHOSEN ANCHOR PRODUCT SHALL HAVE A DESIGNATED ICC-ES EVALUATION REPORT NUMBER, AND ITS APPROVAL STATUS SHALL BE MAINTAINED ON THE ICC-ESS WEBSITE UNDER DIVISION 031600 FOR CONCRETE ANCHORS.

HANGER RODS SHALL BE ASTM A193, GRADE B7 OR CARBON STEEL ALL-THREAD HANGER RODS.

NUTS SHALL BE ASTM A194, GRADE 2H, HEAVY HEX NUTS.

WASHERS SHALL BE ASTM F436.

ALL STRUCTURAL STEEL SHALL BE ASTM A36.

ALL METALLIC COMPONENTS SHALL BE HOT-DIPPED GALVANIZED PER NCDOT STANDARDS SPECIFICATIONS.

ADHESIVE ANCHORS SHALL NOT BE USED.

USE ANCHORS MANUFACTURED WITH STAINLESS STEEL EXPANSION WEDGES.

PRIOR TO HOLE DRILLING, USE REBAR LOCATOR TO ENSURE CLEARANCE FROM EXISTING DECK REINFORCEMENT.

USE ANCHORS OF MINIMUM 1600 LBS TENSILE CAPACITY (MINIMUM OF STEEL, CONCRETE BREAKOUT, AND CONCRETE PULLOUT STRENGTHS AS DETERMINED BY ACI 318 APPRENDIX D).

MAINTAIN 6" MINIMUM CLEARANCE FROM EXPANSION ANCHOR TO EDGE OF CONCRETE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE TOTAL QUANTITY OF CONDUIT NEEDED TO COMPLETE THE WORK AND THAT THE CONDUIT(S) ARE PLACED AT THE NOTED DIMENSION AND ABOVE THE BOTTOM OF THE GIRDER.

THE INSTALLATION OF THE CONDUIT SYSTEM SHALL BE PAID FOR AS LUMP SUM. THE PRICE SHALL INCLUDE ALL CONDUIT, HANGERS, STABILIZERS, EXPANSION JOINTS, EXPANSION ANCHORS AND ALL NECESSARY HARDWARE TO COMPLETE THE WORK.

THE CONTRACTOR SHALL FIELD VERIFY THAT THE CONDUIT SYSTEM IS NOT IN CONFLICT WITH THE GUARDRAIL POSTS.

SEE DETAIL "C" FOR HANGER ASSEMBLY INSTALLATION.

PROVIDE TRANSITION ADAPTER FOR CONDUIT AT END BENT 1 AND END BENT 2.

PROVIDE ONE EXPANSION JOINT FITTING PER SPAN.

INSTALL ONE STABILIZER PER SPAN, STABILIZER CAN NOT BE USED INSTEAD OF A HANGER ASSEMBLY.

FOR ELECTRICAL CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

PROJECT NO. I-2513AA/AB
BUNCOMBE COUNTY
STATION: 35+60.00 -L1_EB-

SHEET 3 OF 3

DRAWN BY : T. BANKOVICH DATE : 12-23
CHECKED BY : M.A. AVERETTE DATE : 12-23
DESIGN ENGINEER OF RECORD: M.A. AVERETTE DATE : 12-23

WGI
5640 Dillard Drive, Suite 200
Cary, NC 27518
LICENSURE NO. C-4434

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 023908 MARK A. AVERETTE
1/19/2024 | 10:44 AM EST

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE

ELECTRICAL CONDUIT SYSTEM RETROFIT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-3
1			3			TOTAL SHEETS
2			4			3

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