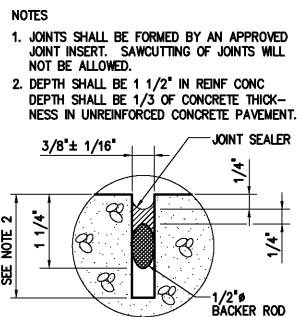
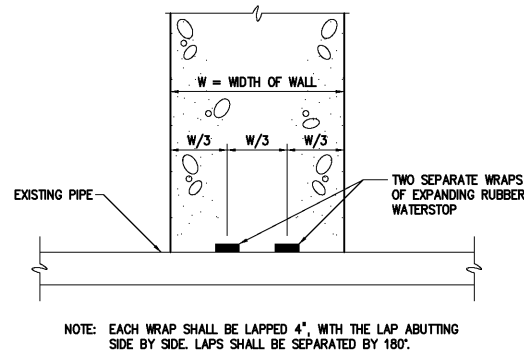


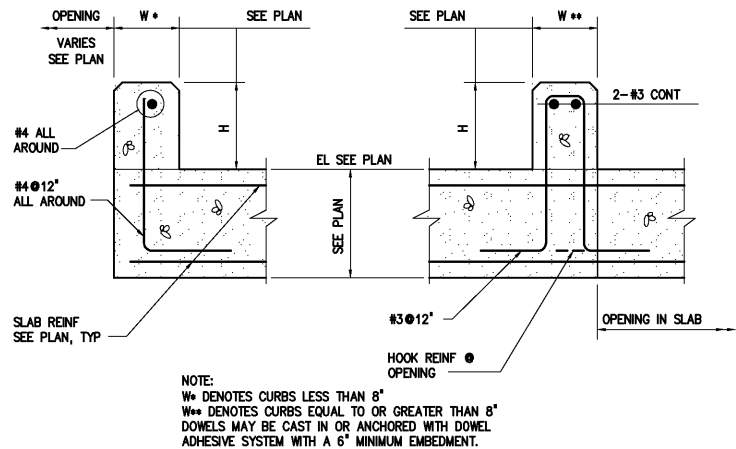
TYPICAL EXPANSION JOINT  
0325100



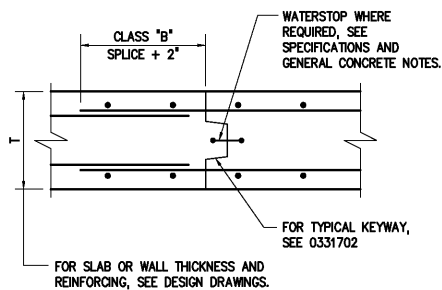
TYPICAL CONTRACTION JOINT  
0325101



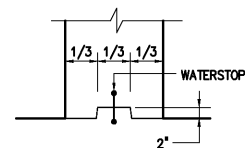
WATERSTOP CONNECTION AROUND EXISTING PIPE  
0325303



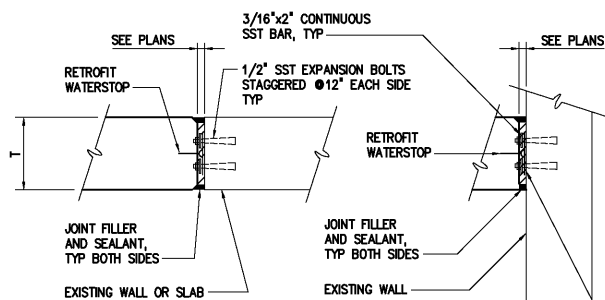
TYPICAL CONCRETE CURB  
0331004



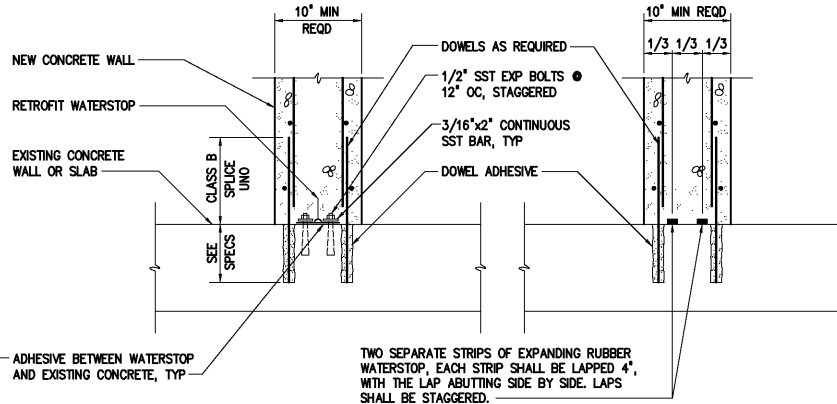
TYPICAL CONSTRUCTION JOINT  
0331701



TYPICAL KEYWAY  
0331702



EXPANSION JOINT

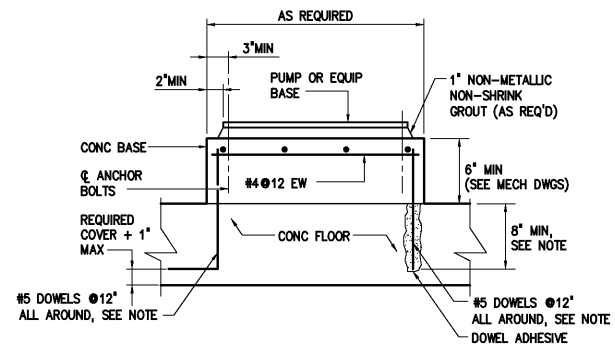


CONSTRUCTION JOINT WITH RETROFIT WATERSTOP

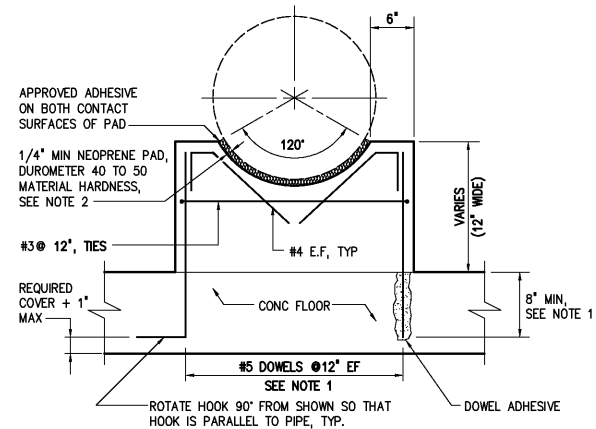
CONSTRUCTION JOINT WITH EXPANDING RUBBER WATERSTOP

WATERSTOP CONNECTIONS TO EXISTING STRUCTURES (PLAN AT WALLS OR SECTION AT SLAB)

0325302

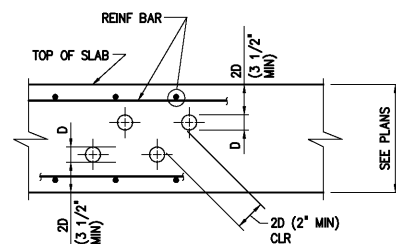


TYP PUMP OR EQUIP BASE  
0331600

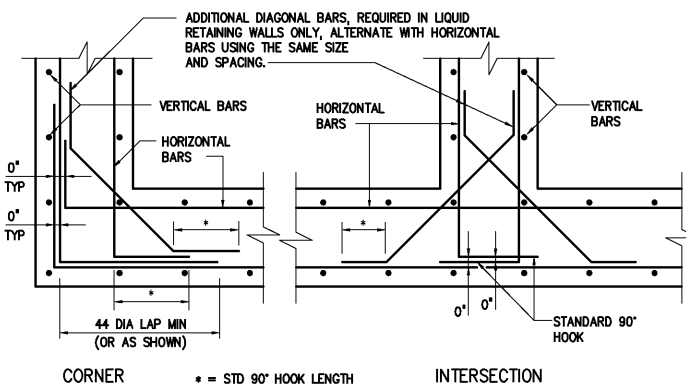


- NOTES: 1 DOWELS MAY BE CAST IN WITH 90° HOOK OR ANCHORED WITH DOWEL ADHESIVE AT CONTRACTORS OPTION. WHERE FLOOR IS 8" THICK OR LESS, USE #4 DOWELS EMBEDDED TO WITHIN 2" OF BOTTOM OF FLOOR SLAB.
- 2 ENGINEER SHALL VERIFY THICKNESS OF PAD WILL ACCOMMODATE DESIGN MOVEMENT, PARTICULARLY FOR OUTSIDE AERIAL PIPE.

CRADLE PIPE SUPPORT  
0331601

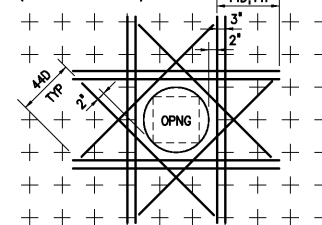


NOTE: D DENOTES PIPE OR CONDUIT OD  
PIPE OR CONDUIT EMBEDDED IN SLAB  
0331604



TYPICAL WALL REINFORCING  
0331700

PLACE EXTRA BARS OF THE SAME SIZE AS THE INTERRUPTED BARS AT EACH SIDE OF OPENINGS. QUANTITY OF EXTRA BARS AT EACH SIDE SHALL EQUAL HALF THE QUANTITY OF INTERRUPTED BARS, EXCEPT WHERE NOTED OTHERWISE. PROVIDE ONE DIAGONAL BAR EACH SIDE OF OPENING, SIZE TO BE EQUAL TO MAIN REINFORCING. (TYPICAL EACH FACE)



NOTE: THIS DETAIL IS FOR OPENINGS 8" Ø OR LARGER, FOR SMALLER OPENINGS, BEND BARS.

TYPICAL REINF AT OPENINGS  
0331703

|             |            |
|-------------|------------|
| DESIGNED    | H & S      |
| DRAWN       | H & S      |
| CHECKED     |            |
| PROJ. ENGR. | H & S      |
| NO.         | ISSUED FOR |
| DATE        | BY         |
| APPROVED    |            |

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#### RECORD DRAWING

THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY CHRISTOPHER T. PHILLIPS, 033796. THIS MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

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Environmental Engineers & Scientists  
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CITY OF ROANOKE  
VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT  
PROCESS TRAIN IMPROVEMENTS

MISCELLANEOUS STANDARD DETAILS

|   |                 |                |
|---|-----------------|----------------|
| THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING. | DATE            | JANUARY 2004   |
| H & S JOB NUMBER  | CONTRACT NUMBER | DRAWING NUMBER |
| 30788C  | C               | D7             |