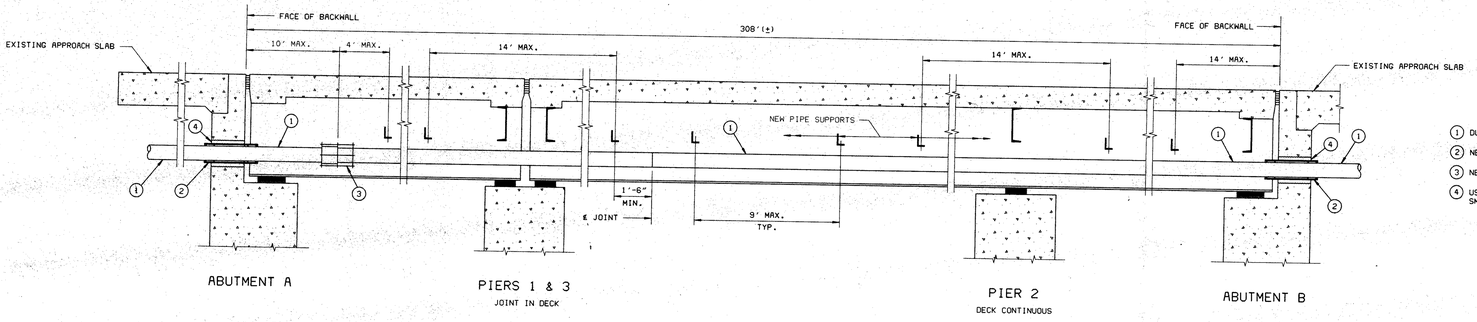


ELEVATION LOOKING NORTH

NOT TO SCALE

LEGEND

1. DUCTILE IRON PIPE
2. NEW ABUTMENT SLEEVE (SEE DETAIL BELOW)
3. NEW EXPANSION JOINT
4. USE DIAMOND CORE DRILL BITS FOR SMOOTH HOLES IN ABUTMENT WALLS

BRIDGE FORCE MAIN NOTES:

BRIDGE PLANS: - DETAILS OF EXISTING BRIDGE ARE SHOWN ON VDOT PLAN NO. 264-50

MATERIAL - DUCTILE IRON PIPE WITH MECHANICAL JOINTS
MINIMUM THICKNESS - CLASS 52 (RATED PRESSURE 300 PSI)
HYDROSTATIC TEST PRESSURE SHALL BE 200 PSI MINIMUM.
SPECIFICATION: ANSI A 21.51/AWWA C151
FINISH - CEMENT LINED, BITUMINOUS OUTER COAT

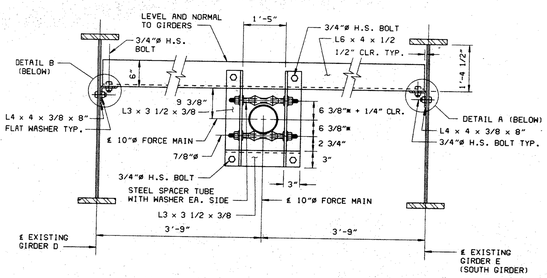
ABUTMENT - STEEL SLEEVE - API 5L-B 3/8" WALL
SEAL - ONE LINK-SEAL AT EACH FACE. LINK SEAL SHALL BE MODEL LS-325-C WITH 12 LINKS PER SEAL AS MANUFACTURED BY THUNDERLINE CORPORATION, BELLEVILLE, MICHIGAN, OR EQUAL.

EXPANSION JOINT - DRESSER STYLE 63, TYPE 3

GALVANIZATION - MISCELLANEOUS HARDWARE (ANGLE, RODS, ETC.), UNLESS OTHERWISE SPECIFIED, SHALL BE GALVANIZED.

INSULATION WILL ___ WILL NOT _X_ BE REQUIRED.

CASING UNDER APPROACH SLAB WILL ___ WILL NOT _X_ BE REQUIRED.

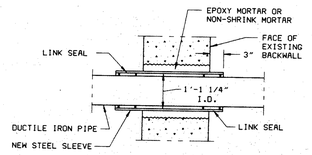


TYPICAL SUPPORT DETAIL AT EXPANSION JOINT

NOT TO SCALE

* COORDINATE DIMENSIONS WITH ROLLER USED.

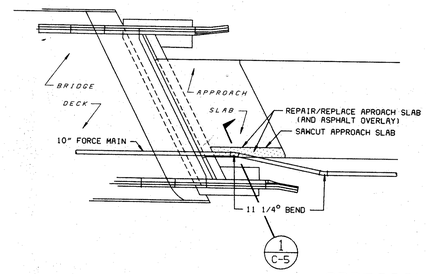
NOTE: ALL ITEMS ARE NEW UNLESS OTHERWISE NOTED.



ABUTMENT SLEEVE DETAIL

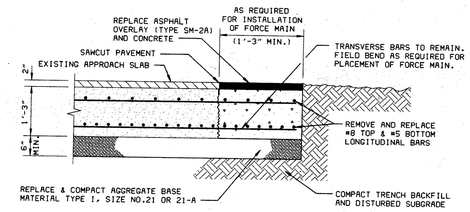
NOT TO SCALE

NOTE: HOLES THRU BACKWALLS SHALL BE MADE USING DIAMOND CORE DRILL BITS



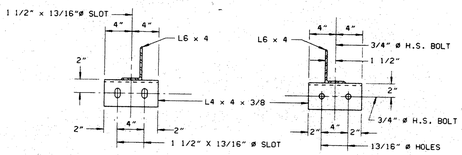
APPROACH SLAB REPAIR DETAIL

NOT TO SCALE



SECTION 1/C-5

NOT TO SCALE



DETAIL A

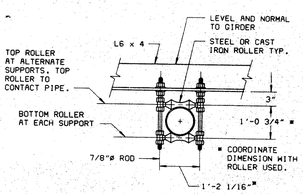
DETAIL B

SIZE	TEE			90°			45°			22 1/2° OR 11 1/4°		
D	A	B	C	A	B	C	A	B	C	A	B	C
6"	1.5'	3.0'	1.5'	2.0'	3.0'	2.0'	1.5'	2.5'	1.5'	1.5'	2.5'	1.5'
8"	2.5'	3.0'	2.0'	2.5'	4.5'	2.0'	2.0'	3.0'	1.5'	2.0'	3.0'	1.5'
10"	3.0'	4.5'	2.0'	4.0'	5.0'	2.5'	2.5'	4.0'	2.0'	2.5'	4.0'	2.5'

DIMENSIONS ARE IN FEET

SIZE	11 1/4° BEND			22 1/2° BEND			45° BEND		
D	L	M	N	L	M	N	L	M	N
6"	6"	1'-2"	8"	10"	1'-2"	8"	1'-2"	1'-2"	8"
8"	8"	1'-4"	8"	11"	1'-4"	8"	1'-9"	1'-4"	8"
10"	8"	1'-6"	8"	1'-3"	1'-6"	9"	2'-5"	1'-6"	1'-0"

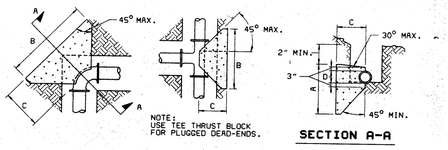
PIPE SIZE	11 1/4° BEND				22 1/2° BEND				45° BEND			
	L	W	D	REINF. BARS NO. & SIZE	L	W	D	REINF. BARS NO. & SIZE	L	W	D	REINF. BARS NO. & SIZE
6"	2'-0"	2'-0"	1'-6"	3 ▪ 7	2'-6"	2'-6"	2'-0"	3 ▪ 7	3'-0"	3'-0"	2'-0"	3 ▪ 7
8"	2'-0"	2'-0"	2'-0"	3 ▪ 8	2'-9"	2'-9"	2'-3"	3 ▪ 8	3'-6"	3'-6"	2'-6"	3 ▪ 8
10"	2'-3"	2'-3"	2'-0"	3 ▪ 8	3'-6"	3'-6"	2'-3"	3 ▪ 8	4'-0"	4'-0"	2'-9"	4 ▪ 8



TYPICAL SUPPORT DETAIL

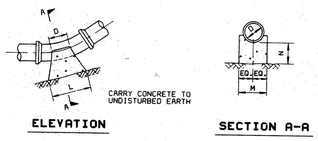
NOT TO SCALE

FOR DETAILS NOT SHOWN, SEE TYPICAL SUPPORT DETAIL AT EXPANSION JOINT.



HORIZONTAL BENDS

SECTION A-A



ELEVATION

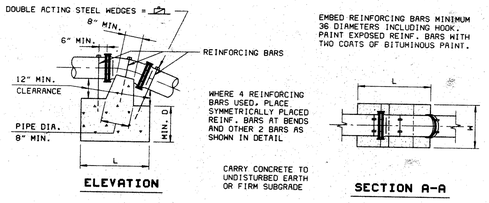
SECTION A-A

LOWER VERTICAL BENDS

THRUST BLOCK DETAILS

NOT TO SCALE

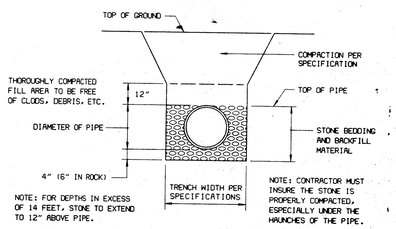
NOTE: BLOCKING BASED ON PRESSURE OF 150 PSI AND ALLOWABLE SOIL BEARING CAPICITY OF 2000 PSF. CONCRETE TO BE 3000 PSI.



ELEVATION

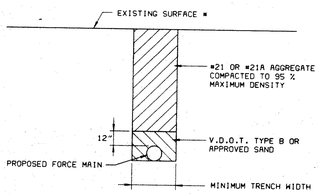
SECTION A-A

UPPER VERTICAL BENDS



BEDDING AND BACKFILL DETAIL FOR PLASTIC SEWER PIPES

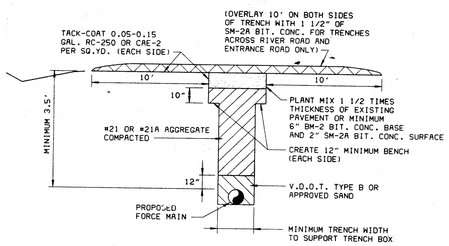
NOT TO SCALE



* NOTE: CAPPING DONE ON SHOULDERS

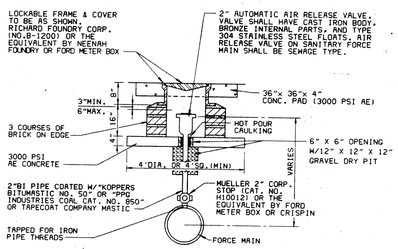
TYPICAL SECTION - FORCE MAIN IN SHOULDER OF RIVER ROAD

NOT TO SCALE



TYPICAL SECTION - FORCE MAIN IN PAVEMENTS

NOT TO SCALE



TYPICAL SECTION

NOTES:

1. 2" TAP FOR AIR VENT SHALL BE STD. THREADED TAP OR SADDLE TAP DEPENDING ON MANUFACTURER'S RECOMMENDATIONS FOR TYPE & THICKNESS OF PIPE USED.
2. CI FRAME & COVER TO BE EQUAL TO DEWEY BROTHERS CORP. B-1200 OR THE EQUIVALENT BY NEENAH FOUNDRY OR FORD METER CO.
3. BI = BLACK IRON PIPE.
4. MACHINE SEATING SURFACES ON BOTH FRAME & COVER.
5. ALL CASTINGS TO BE DIPPED IN ASPHALTIC PAINT AFTER MACHINING.
6. TOLERANCE TO BE +0.125" FOR ALL DIMENSIONS.
7. CASTING TO BE SHOT BLASTED.
8. CASTING TO BE ASTM A-48 CLASS 30.

AIR VENT DETAILS

NOT TO SCALE

Owner:

RIVERSIDE REGIONAL JAIL AUTHORITY

Project:

RIVERSIDE REGIONAL JAIL

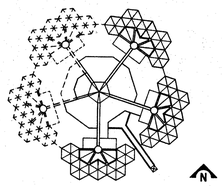
PRINCE GEORGE COUNTY, VIRGINIA

Notes:

Mark:	Date:	Description:

REVISIONS

Key Plan:



Architects / Engineers:

VOSBECK
DMJM
INCORPORATED

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COMMONWEALTH OF VIRGINIA
Stephen L. Castiglione
STEPHEN L. CASTIGLIONE
No. 12997
PROFESSIONAL ENGINEER

Consultants:

LV. Harris and Assoc. Inc.	Associated Architects
Correctional Services Group	Program Verif. Operations
MMM Design Group	Civil Engineering
Systech Group, Inc.	Security
Foodesign Assoc. Inc.	Food Service
Leonard Smith and Assoc. Inc.	Cost Estimating
Polysonics	Acoustical Consultant

Drawing Title:

SANITARY FORCE MAIN DETAILS

DMJM Project No. 3053

Scale: AS SHOWN	Date: JULY 19, 1994	Drawing No. C-5
Drawn By: CADD/TSC	Approved By: SLC	