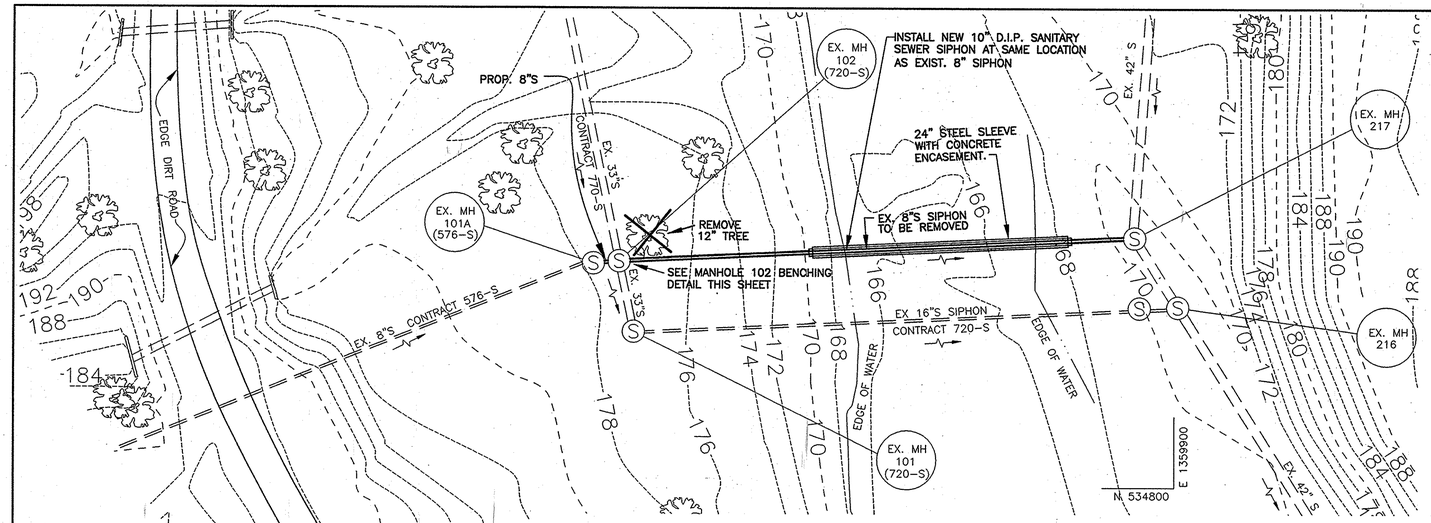
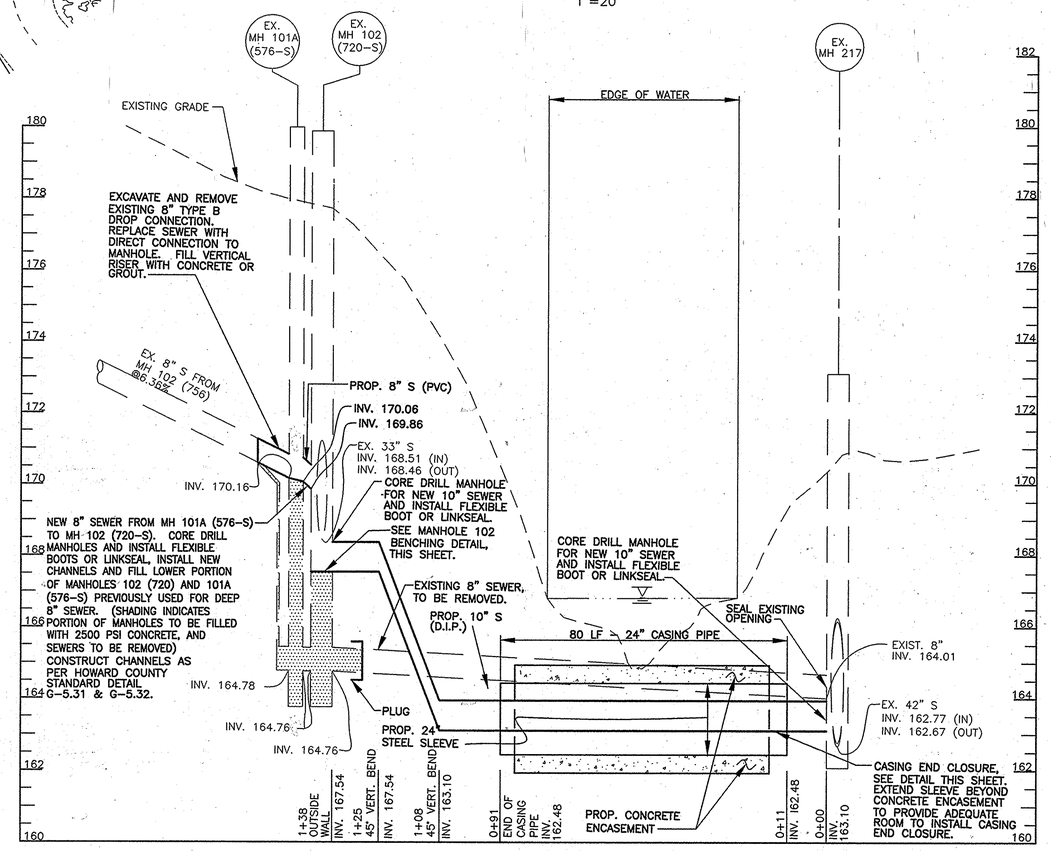


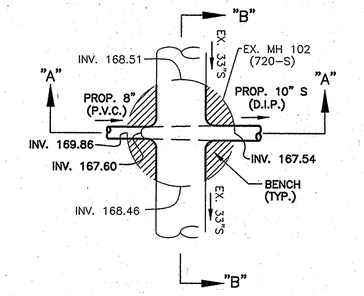
PLAN
1"=20'



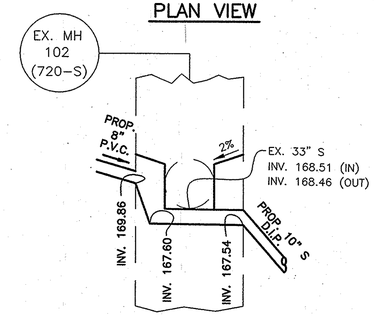
PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

QUANTITIES

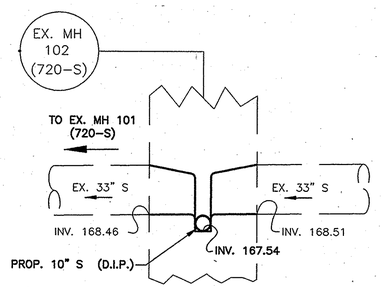
ITEMS	AS-BUILTS		
	QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
10 " TYTON, CL56 w/PROTECTO 401"	140 L.F.	DIP	U.S. PIPE
54-INCH STEEL CASING (CONCRETE LINED)	80 L.F.	STEEL	NORTHWEST PIPE CO.
16" 45° VERT. BENDS CL153	2 EA.	MJ DIP	FERGUSON ENTERPRISES
SPACER, SP S/5	12 EA.		FERGUSON ENTERPRISES



PLAN VIEW

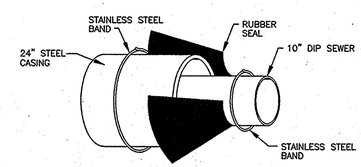


SECTION "A"



SECTION "B"

MANHOLE 102 BENCHING DETAIL
SCALE: 1/4"=1'0"



CASING END CLOSURE
SCALE: NO SCALE

SUGGESTED SEQUENCE OF CONSTRUCTION

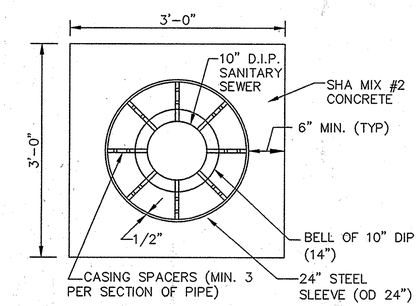
1. PLUG EXISTING 8" SEWERS IN MANHOLE 102 (720-S).
2. INSTALL FLOW THROUGH PLUG ON 33" SEWER IN MH 102 (720-S).
3. INSTALL TEMPORARY BYPASS PUMP AND PIPING FOR 8" SEWER UPSTREAM OF MANHOLE 101A (576-S).
4. PLUG EXISTING 8" SEWER IN MANHOLE 217.
5. INSTALL FLOW THROUGH PLUG ON 42" SEWER IN MANHOLE 217.
6. REMOVE SLUDGE/CLEAN MANHOLE 101A (576-S), MANHOLE 102 (720-S) AND MANHOLE 217.
7. CORE DRILL MANHOLE 101A (576-S) FOR NEW 8" SEWER, CORE DRILL MANHOLE 102 (720-S) FOR NEW 8" SEWER AND NEW 10" SEWER. CORE DRILL MANHOLE 217 FOR NEW 10" SEWER.
8. REMOVE EXISTING 8" DIP SIPHON, INSTALL NEW 10" SIPHON AND NEW 8" SEWER. SEE STREAM CROSSING PLAN AND DETAILS ON SHEET 2.
9. FILL LOWER PORTION OF MANHOLE 101A (576-S) AND MANHOLE 102 (720-S) WITH 2500 PSI CONCRETE. INSTALL BRICK CHANNELS FOR NEW 8" SEWER AND NEW 10" SIPHON.
10. REMOVE SEWER FLOW PLUGS FROM MANHOLE 102 (720-S) AND MANHOLE 217.
11. REMOVE TEMPORARY BYPASS PUMPING AND PLUG FROM 8" SEWER.
12. RESTORE SITE.

NOTES:

1. SEE SHEET 2 FOR STREAM CROSSING DETAILS.
2. ALL PIPE SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED ON THE PLAN, MEETING THE REQUIREMENTS OF AWWA C151. PIPE SHALL BE RESTRAINED JOINT TR FLEX PIPE WITH PROTECTO 401 LINING BY U.S. PIPE OR EQUAL.
3. JOINT DEFLECTION SHALL NOT EXCEED 3 DEGREES.
4. ALL PIPE, STONE AND CONCRETE ENCASEMENT SHALL BE INSTALLED ON FIRM, STABLE GROUND.

LEGEND

EX MH 102 (720-S) — (720-S) IS CONTRACT NUMBER (TYPICAL)



NOTES:

1. STEEL CASING PIPE TO BE 24"ø x ½" THICK WITH CEMENT MORTAR LINING ON INSIDE.
2. 10" DIP AND 24" STEEL PIPE SHALL BE INSTALLED USING THE OPEN CUT METHOD.
3. CONCRETE SHALL BE POURED AGAINST UNDISTURBED EARTH. REMOVE TRENCH SHEETING BEFORE POURING CONCRETE.
4. CASING SPACERS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
5. CONTRACTOR SHALL PREVENT FLOTATION OF CARRIER PIPE WHILE CONCRETE CURES.
6. CASING END SEAL SHALL BE PER HOWARD COUNTY SPECIFICATIONS.
7. SEE STD. SPECIFICATION SECTIONS 912 AND 963.

SLEEVE & ENCASEMENT DETAIL
SCALE: NO SCALE

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 20745 EXPIRATION DATE: 2-19-2013

AS-BUILT 3/21/11

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12/12/08
CHIEF, BUREAU OF ENGINEERING — DATE 12/12/08
CHIEF, BUREAU OF UTILITIES — DATE 12/12/08
CHIEF, UTILITY DESIGN DIVISION — DATE 12/11/08

Patton Harris Rust & Associates, Inc.
Engineers. Surveyors. Planners. Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

DES: B.G.W.
DRN: R.J.C.
CHK: G.C.L.
SEPTEMBER, 2010

BY	NO.	REVISION	DATE

10" REPLACEMENT INVERTED SIPHON
PLAN AND PROFILE

600' SCALE MAP 47 & 48 | BLOCK 1843 & 1942

LITTLE PATUXENT
PARALLEL INTERCEPTOR SEWER
CAPITAL PROJECT S-6175
CONTRACT NO. 20-4532
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 2

P:\project\16331\1-0\Env\Plans\AS-BUILTS\8-in siphone plan & profile AB.dwg, 7/27/2011 7:53:37 AM, TDS600.pc3