



FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
I	N.Y.	0146001	43	92
BENNINGTON CONNECTOR S.H. 98-2				
P.I.N. 1306.60				
WHITEHOUSE BRIDGE - VERMONT STATE LINE S.H. 1426				
RENSSELAER COUNTY				

PROPOSED STORM SEWER																			
DR. No.	LOCATION INLET TO OUTLET	PROP. TF ELEV. (EXIST.)	PROP. FRAME TYPE	PROP. STR. TYPE	PROP. STR. HEIGHT		INVERT (EXIST.)		PROPOSED WORK	203.07 M	206.02 M	207.10 M	552.16 M	603.17814 M	603.9815 M	603.9830 M	604.301873 M	604.302016 M	620.03 M
					m		IN	OUT		m³	m³	m²	m²	EA	m	m	EA	EA	m³
1	42+958.5, 10.5 m LT TO 5.0 m LT	193.000	I6	T	2.2		191.15	191.10	INSTALL TYPE T STR. AND 5.0 m OF 750 mm SICPP. OUTLET TO DR-2. CUT AND TIE EXIST. 300 mm CPP INTO PROPOSED STRUCTURE.	15.7	26.5		14.2		5.0		I		I
2	42+958.5, 5.0 m LT TO 6.0 m RT	193.125	F3	R	2.1		191.10	190.70	INSTALL TYPE R STR. AND 11.0 m OF 750 mm SICPP. OUTLET TO DR-4.	23.3	20.1				11.0	I			I
3	42+905 TO 42+958.5, RT	191.250	I6	T	1.8		189.80	189.30	INSTALL TYPE T STR. AND 54.0 m OF 375 mm SICPP. OUTLET TO DR-4.	43.3	71.4			54.0			I		I
4	42+958.5, 6.0 m RT TO 42+958.5, 13.0 m RT	192.535	I6	T	3.5		189.30	189.25	INSTALL TYPE T STR., 7.0 m OF 750 mm SICPP. AND 900 mm END SECTION. OUTLET IN SLOPE. INSTALL STONE- LINED SLOPE AT OUTLET, SEE DETAIL DWG. DD-2.	13.5	53.2	51.2	41.3	I	7.0		I	21.0	I
5	CA0+032.5, 19.0 m LT TO 16.0 m RT	-	-	-	-		191.10	188.00	SEE DRIVEWAY ⑤ PLAN, DWG. DW-2 FOR PIPE LAYOUT. INSTALL 35.0 m OF 750 mm SICPP AND 900 mm END SECTION AT EACH END. OUTLET AT TOE OF SLOPE. INSTALL STONE APRON AT INLET AND STONE-LINED SLOPE AT OUTLET. SEE DETAILS, DWG. DD-2.	67.7	13.5	28.4		2	35.0			3.1	5.4
6	43+120.0, 14.0 m LT TO 43+104.0, 18.0 m RT	-	-	-	-		192.60	192.30	INSTALL 36.0 m OF 750 mm SICPP AND 900 mm END SECTION AT EACH END. OUTLET IN DITCH. INSTALL STONE APRON AT INLET AND OUTLET, SEE DETAIL, DWG. DD-2.	69.7	40.7	26.5		2	36.0			7.8	
TOTAL										233.2	225.4	106.1	55.5	5	54.0	94.0	I	3	10.9

ITEM NO.	DESCRIPTION	UNIT
203.07 M	SELECT GRANULAR FILL	m³
206.02 M	TRENCH AND CULVERT EXCAVATION	m³
207.10 M	GEOTEXTILE BEDDING	m²
552.16 M	EXCAVATION PROTECTION SYSTEM	m²
603.17814 M	GALVANIZED STEEL END SECTION PIPE (68 x 13) 900 mm DIAMETER	EA
603.9815 M	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT & STORM DRAIN PIPE, 375 mm DIAMETER	m
603.9830 M	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT & STORM DRAIN PIPE, 750 mm DIAMETER	m
604.301873 M	RECTANGULAR DRAINAGE STRUCTURE TYPE R FOR CAST IRON F3 FRAME	EA
604.302016 M	RECTANGULAR DRAINAGE STRUCTURE TYPE T FOR #16 WELDED FRAME	EA
620.03 M	STONE FILLING (LIGHT)	m³
620.04 M	STONE FILLING (MEDIUM)	m³
655.0201M	FRAMES AND GRATES (FABRICATED)	EA
655.0501M	STEEL FABRICATED GRATES IN CAST IRON FRAMES	EA

EXISTING STORM SEWER TO BE REMOVED						
R. No.	LOCATION INLET TO OUTLET	EXIST. INVERT		PROPOSED WORK	203.07 M	206.02 M
		IN	OUT		m³	m³
1	42+958.5, 7.0 m LT TO 10.0 m RT	192.50±	188.50±	REMOVE EXISTING 600 mm X 600 mm BOX CULVERT	-	-
2	43+107.0, HCL TO 12.5 m RT	193.50±	193.00±	REMOVE EXISTING CULVERT	21.6	58.0
TOTAL					21.6	58.0

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE LOCATIONS AND ELEVATIONS OF THE EXISTING DRAINAGE SYSTEM PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL CALL "DIG SAFE NY" AT 1-800-962-7962 AT LEAST 48 HOURS PRIOR TO EXCAVATION OPERATIONS. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING ANY UNDERGROUND UTILITY LINES WHICH MAY BE ENCOUNTERED DURING THE INSTALLATION OF THE NEW STORM SEWER SYSTEM. ANY DAMAGE TO THESE FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
2. DRAINAGE STRUCTURE'S OFFSETS AND LENGTHS OF PIPE SHOWN IN THE DRAINAGE TABLES ARE NOMINAL DIMENSIONS. EXACT DIMENSIONS MUST BE DETERMINED BY THE CONTRACTOR IN THE FIELD.

3. AN EXCAVATION PROTECTION SYSTEM (EPS) SHALL BE USED FOR ALL TRENCH EXCAVATIONS DEEPER THAN 1.52 m. PAYMENT FOR THE EPS SHALL BE MADE UNDER ITEM 552.16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SUPPORT SYSTEM THAT WILL NOT ONLY PROTECT WORKERS WITHIN THE EXCAVATION, BUT ALSO SUPPORT ANY AND ALL EXISTING AND NEW UTILITIES AND FACILITIES ENCOUNTERED DURING TRENCHING OPERATIONS.
4. ALL SICPP PIPE ENDS SHALL PROTRUDE 50 mm INTO THE DRAINAGE STRUCTURE TO PROVIDE A BATTERED GROUT SEAL TO BOTH THE INSIDE AND OUTSIDE OF THE STRUCTURE.
5. EXCAVATION OF THE EXISTING CULVERT PIPES TO BE REMOVED SHALL BE PAID UNDER ITEM 206.02 M, TRENCH AND CULVERT EXCAVATION (SEE DETAIL, DWG. DD-2). IF THE EXCAVATION LIMITS FOR THE INSTALLATION OF A NEW PIPE OVERLAPS THE EXCAVATION LIMITS FOR PIPE REMOVALS, PAYMENT FOR EXCAVATION SHALL BE PAID ONLY FOR THE NEW PIPE INSTALLATION.

6. SEE DWG. DD-1 FOR EDGEDRAIN DETAILS, OUTLET LOCATIONS AND TREATMENTS.
7. ALL DRAINAGE PIPES CARRYING INTERMITTENT DRAINAGE COURSES SHALL BE CONSTRUCTED DURING DRY CONDITIONS, AS DIRECTED BY THE RESIDENT ENGINEER.
8. ITEM 203.1770 M CLEANING CULVERTS WITH SPAN OF 1300 MILLIMETERS OR LESS SHALL BE USED FOR CLEANING ALL EXISTING AND PREVIOUSLY INSTALLED CULVERTS WITHIN THE CONTRACT LIMITS AS DIRECTED BY THE RESIDENT ENGINEER.

DRAINAGE
TABLES

SURVEYED BY	<u>C.H.A. & V.S.E.</u>	DATE	<u>12/93</u>
DESIGNED BY	<u>D.W.E.</u>	DATE	<u>2/04</u>
DRAWN BY	<u>C.A.K.</u>	DATE	<u>2/04</u>
CHECKED BY	<u>T.P.K.</u>	DATE	<u>2/04</u>
DESIGN FILE NO. NYDT-LDGN			
PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(I) C/1			
PROJ. NO. P.I.N. 1306.60			
SHEET 43 OF 92		DWG NO. DT-1	