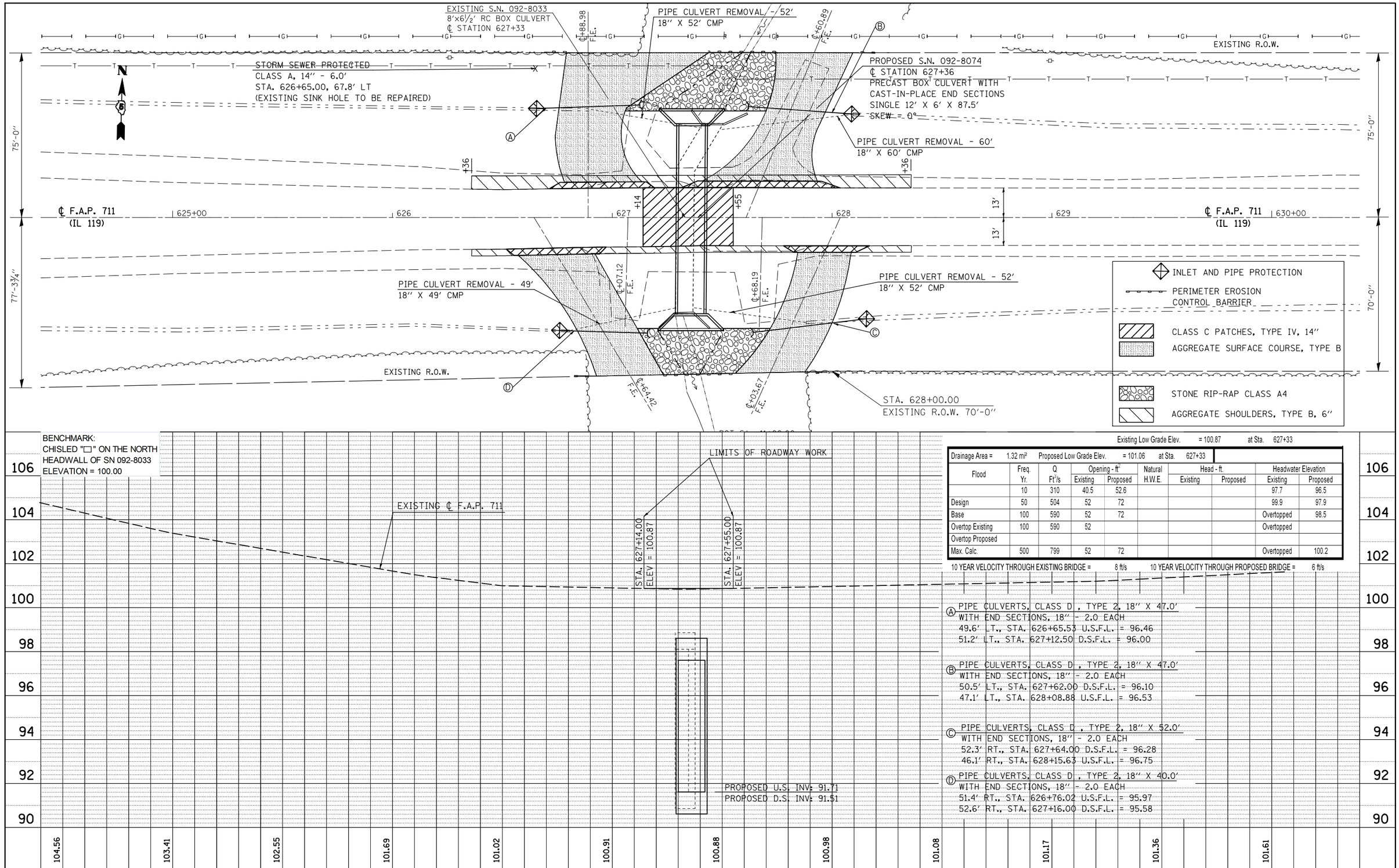

Existing Low Grade Elev. = 100.87 at Sta. 627+33

Drainage Area = 1.32 mi² Proposed Low Grade Elev. = 101.06 at Sta. 627+33

Flood	Freq. Yr.	Q Ft³/s	Opening - ft² Existing	Opening - ft² Proposed	Natural H.W.E.	Head - ft. Existing	Head - ft. Proposed	Headwater Elevation Existing	Headwater Elevation Proposed
	10	310	40.5	52.6				97.7	96.5
Design	50	504	52	72				99.9	97.9
Base	100	590	52	72				Overtopped	98.5
Overtop Existing	100	590	52					Overtopped	
Overtop Proposed									
Max. Calc.	500	799	52	72				Overtopped	100.2

10 YEAR VELOCITY THROUGH EXISTING BRIDGE = 8 ft/s 10 YEAR VELOCITY THROUGH PROPOSED BRIDGE = 6 ft/s

Ⓐ PIPE CULVERTS, CLASS D , TYPE 2, 18" X 47.0'
WITH END SECTIONS, 18" - 2.0 EACH
49.6' LT., STA. 626+65.53 U.S.F.L. = 96.46
51.2' LT., STA. 627+12.50 D.S.F.L. = 96.00

Ⓑ PIPE CULVERTS, CLASS D , TYPE 2, 18" X 47.0'
WITH END SECTIONS, 18" - 2.0 EACH
50.5' LT., STA. 627+62.00 D.S.F.L. = 96.10
47.1' LT., STA. 628+08.88 U.S.F.L. = 96.53

Ⓒ PIPE CULVERTS, CLASS D , TYPE 2, 18" X 52.0'
WITH END SECTIONS, 18" - 2.0 EACH
52.3' RT., STA. 627+64.00 D.S.F.L. = 96.28
46.1' RT., STA. 628+15.63 U.S.F.L. = 96.75

Ⓓ PIPE CULVERTS, CLASS D , TYPE 2, 18" X 40.0'
WITH END SECTIONS, 18" - 2.0 EACH
51.4' RT., STA. 626+76.02 U.S.F.L. = 95.97
52.6' RT., STA. 627+16.00 D.S.F.L. = 95.58

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME — NOTE BOOK NO. — BY — DATE

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTAT'NS CHK'D — NOTE BOOK NO. — BY — DATE

FILE NAME = c:\pw_work\pwidot\bowerml\d0186764\D570801-sht-plnprf.dgn	USER NAME = bowerml	DESIGNED - MLB	REVISED -
		DRAWN - MLB	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE SHEET
S.N. 092-8074, STA. 627+36.00

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. 624+40.00 TO STA. 630+40.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116CR	VERMILION	50	10

CONTRACT NO. 70801

ILLINOIS FED. AID PROJECT