

ORIGINAL SEDIMENT STORAGE VOLUME REQUIRED FOR VILLAS POND (67 CY/ACRE) FOR 79.0 ACRES = 5293 CY

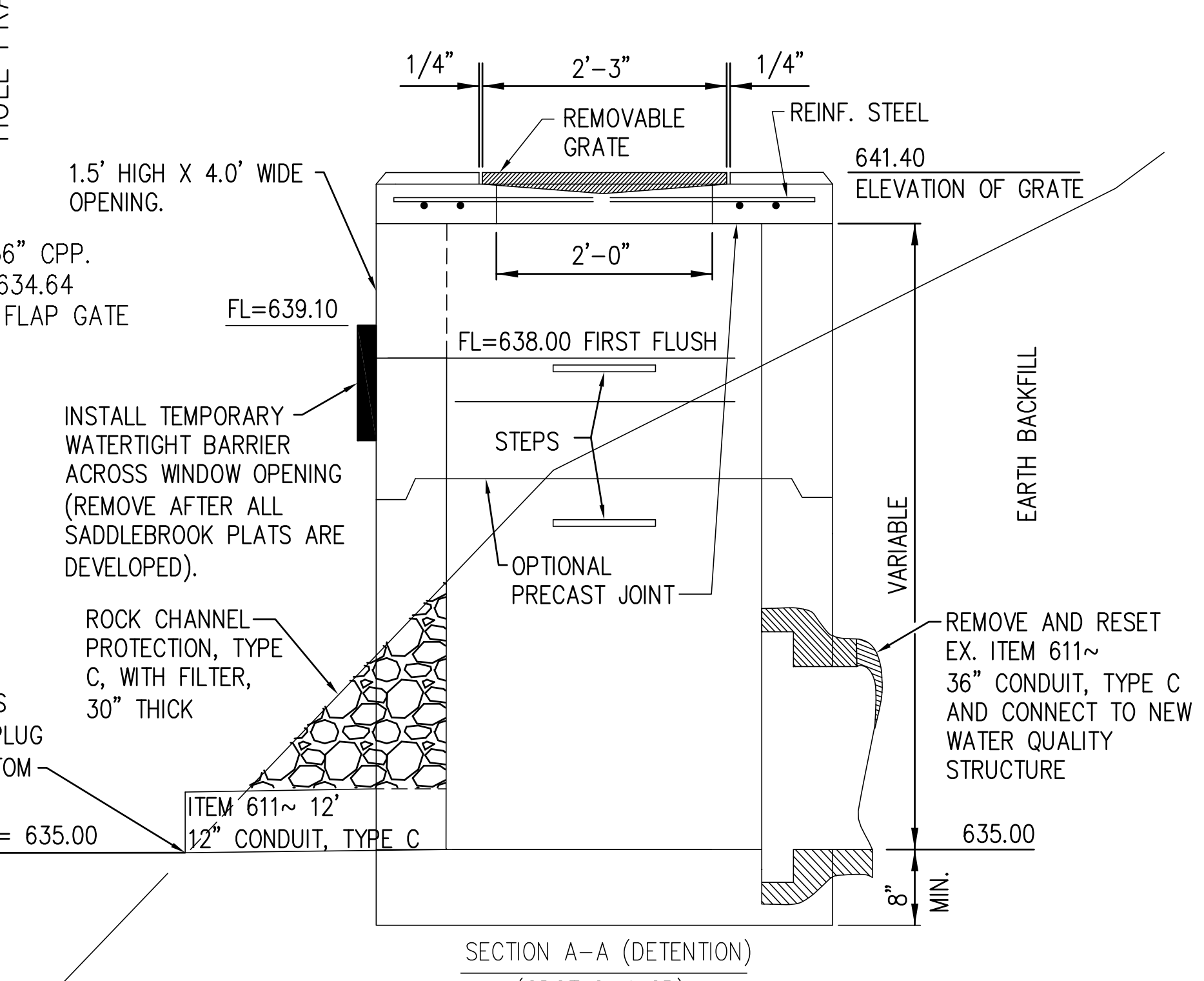
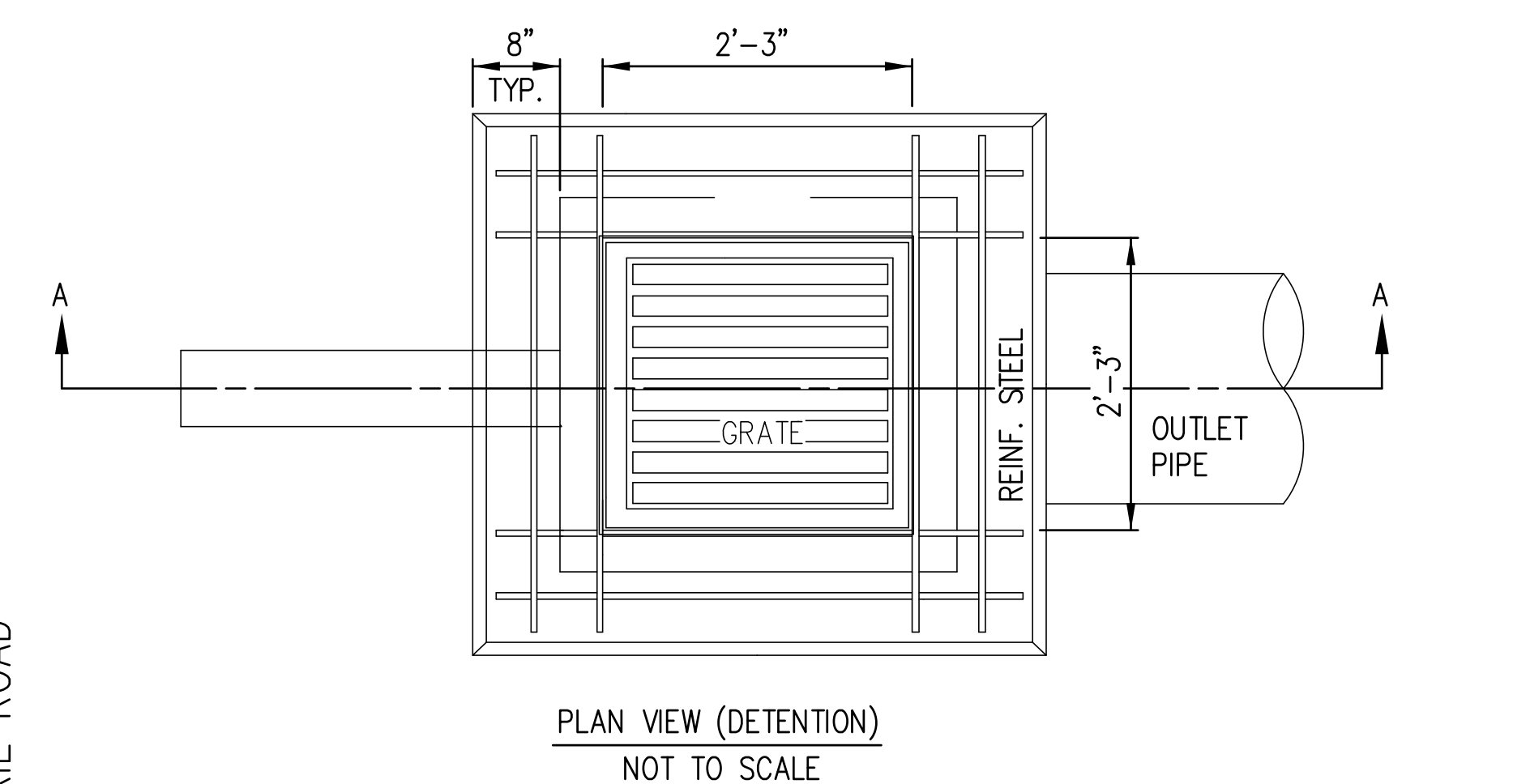
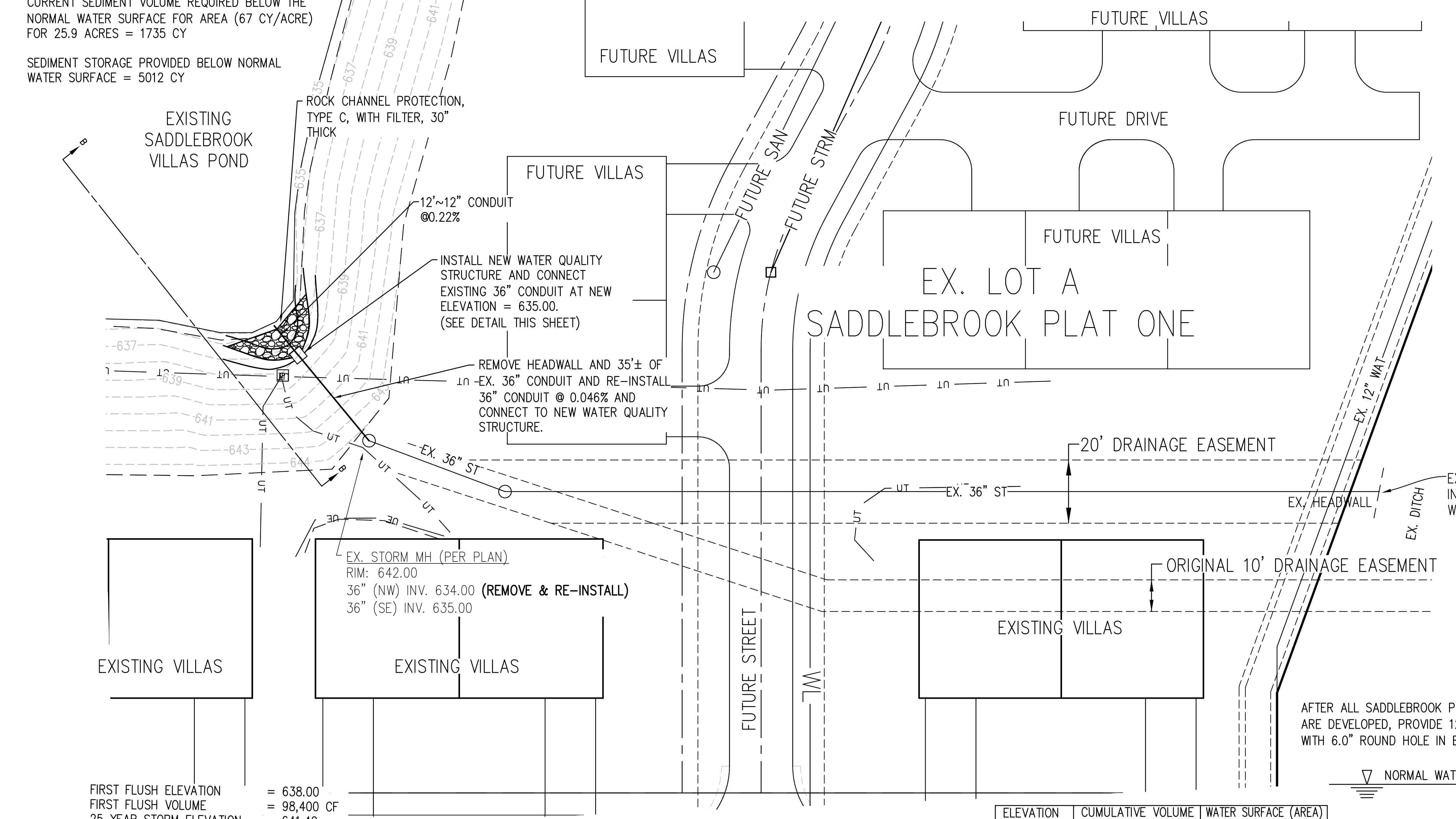
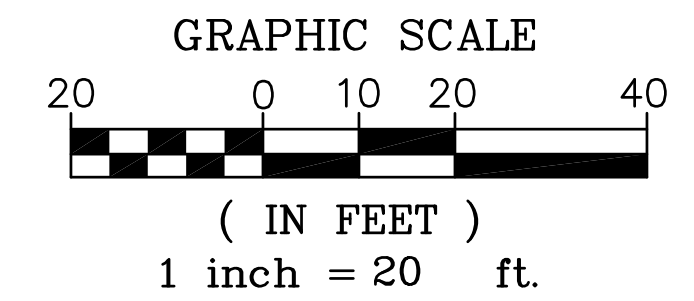
SADDLEBROOK DEVELOPMENT - UNDEVELOPED AREA = 25.9 ACRES

CURRENT UNDEVELOPED AREA FLOWING INTO THE VILLA'S POND AS OF 11/6/2015 = 25.9 ACRES.

CURRENT SEDIMENT VOLUME REQUIRED BELOW THE NORMAL WATER SURFACE FOR AREA (67 CY/ACRE) FOR 25.9 ACRES = 1735 CY

SEDIMENT STORAGE PROVIDED BELOW NORMAL WATER SURFACE = 5012 CY

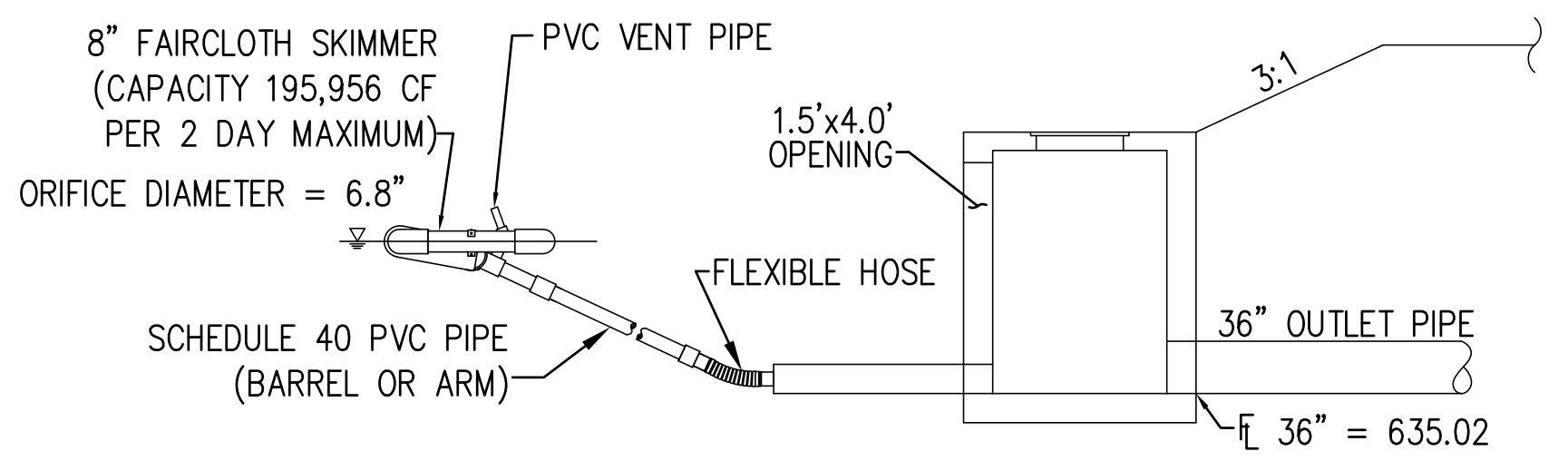
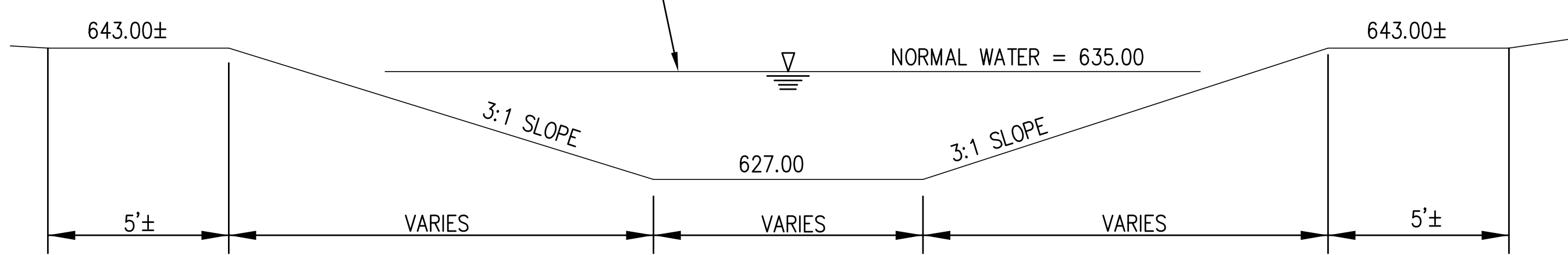
CONTRIBUTING DRAINAGE AREA	SEDIMENT BASIN				PERMANENT STORMWATER FACILITY			
	DEWATERING VOLUME	SEDIMENT STORAGE VOLUME	DETENTION TIME MIN 48 HR	SEDIMENT CONTROL ORIFICE SIZE	WATER QUALITY VOLUME-WQv	PERMANENT POOL VOLUME	DETENTION TIME	WQv ORIFICE SIZE (EXTENDED DETENTION) (Inch)
(Acre)	(Cubic Yard)	(Cubic Yard)	(Hours)	(Inch)	(Cubic Yard)	(Cubic Yard)	(Hours)	(Inch)
79.00	3644	5012	48	6.0	3644	5012	24	6.0



WATER QUALITY BASIN (ODOT WQ-1.1) SCALE = NTS

FIRST FLUSH ELEVATION	= 638.00
FIRST FLUSH VOLUME	= 98,400 CF
25 YEAR STORM ELEVATION	= 641.40
25 YEAR STORM VOLUME	= 253,917 CF
POND BOTTOM ELEVATION	= 627.00
POND VOLUME (643.00)	= 345,296 CF

ELEVATION	CUMULATIVE VOLUME	WATER SURFACE (AREA)
635.00	WATER SURFACE	26,922 SF
636.00	28,821 CY	30,737 SF
637.00	61,508 CY	34,655 SF
638.00	98,167 CY	38,678 SF
639.00	138,906 CY	42,804 SF
640.00	183,820 CY	47,035 SF
641.00	233,015 CY	51,370 SF
642.00	286,596 CY	55,808 SF



TYPICAL MAINTENANCE ACTIVITIES FOR WATER QUALITY PONDS

SCHEDULE	ACTIVITY
MONTHLY	MOW EMBANKMENT AND CLEAN TRASH AND DEBRIS FROM OUTLET STRUCTURE. ADDRESS ANY ACCUMULATION OF HYDROCARBONS.
ANNUALLY	INSPECT EMBANKMENT AND OUTLET STRUCTURE FOR DAMAGE AND PROPER FLOW. REMOVE WOODY VEGETATION AND FIX ANY ERODING AREAS. MONITOR SEDIMENT ACCUMULATIONS IN FOREBAY AND MAIN POOL.
SEMI-ANNUALLY	INSPECT WETLAND AREAS FOR INVASIVE PLANTS.
3-7 YEARS	REMOVE SEDIMENT FROM FOREBAYS.
15-20 YEARS	MONITOR SEDIMENT ACCUMULATIONS IN THE MAIN POOL AND CLEAN AS POND BECOMES EUTROPHIC OR POND VOLUME IS REDUCED SIGNIFICANTLY.

SEE DETAIL SHEET 13/14 THE COST OF THE SKIMMER TO BE INCLUDED WITH THE COST OF THE WATER QUALITY STRUCTURE.

BENCH MARK DATA	
NORTH BONNET BOLT ON FIRE HYDRANT STA. 20+76.40, 19' RT, SADDLE HORN DRIVE ELEVATION.....	647.05
NORTH BONNET BOLT ON FIRE HYDRANT STA. 9+39.91, 59.13' LT, STONEBRIDGE LANE ELEVATION.....	644.87

Plot Date: 2/16/2016 9:17 AM File Name: 09-38-CP Water Quality P & D.dwg