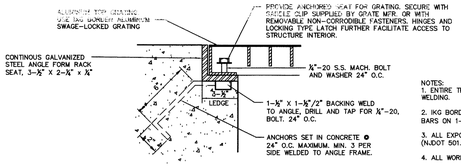
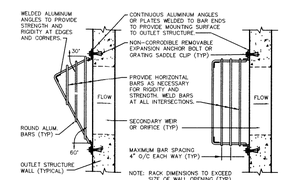


NOTES:
1. ENTIRE TRASH RACK FRAME TO BE HOT-DIPPED GALVANIZED AFTER WELDING.
2. IKG BORDEN ALUMINUM SWAGE-LOCKED "I-BAR" 2" DEEP BEARING BARS ON 1-$\frac{3}{16}$" CENTER WITH CROSS BARS ON 8" CENTERS OR EQUAL.
3. ALL EXPOSED CONCRETE SHALL HAVE CLASS 2 RUBBED FINISH (NJDOT 501.14b)
4. ALL WORK TO CONFORM TO NJDOT SPECIFICATIONS

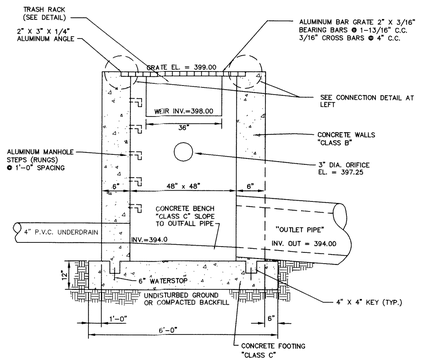
CONTROL STRUCTURE – TOP GRATE CONNECTION
NOT TO SCALE



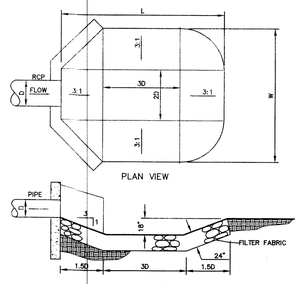
TRIANGULAR RACK RECTANGULAR RACK

NOTES:
1. ALL TRASH RACKS MUST HAVE SUFFICIENT NET OPEN AREA PERPEDDICULAR TO FLOW TO CONVEY PEAK DESIGN FLOW THROUGH THEM WITH MAXIMUM VELOCITY OF 2 F.P.S. IN MOST CASES, PEAK DESIGN FLOW SHOULD BE BASED ON PASSAGE OF EMERGENCY SPILLWAY HYDROGRAPH (ESH).
2. ALL ALUMINUM SURFACES MOUNTED DIRECTLY TO CONCRETE MUST BE PAINTED WITH A HEAVY COAT OF ALUMINUM PIGMENTED ALKALINE RESISTANT BITUMINOUS PAINT EQUAL TO MILITARY SPECIFICATION MIL-P-6883.
3. ALL TRASH RACKS AND FASTENERS SHALL HAVE SUFFICIENT STRENGTH TO WITHSTAND ANTICIPATED LOADINGS.
4. SECONDARY WEIR OR ORIFICE TRASH RACKS SHOULD BE PROVIDED WHERE POTENTIAL EXISTS FOR DEBRIS TO BLOCK THE WEIR OR ORIFICE, OR TO ENTER THE OUTLET STRUCTURE AND BLOCK THE OUTLET PIPE. RACKS SHOULD ALSO BE PROVIDED WHERE NECESSARY TO PREVENT ACCIDENTAL OR UNAUTHORIZED ENTRY, PARTICULARLY BY CHILDREN. ACTUAL SITE AND STRUCTURE CONDITIONS MUST BE CONSIDERED IN EVALUATION OF TRASH RACK NEEDS AND DESIGNS.

TRASH RACK DETAIL
NOT TO SCALE



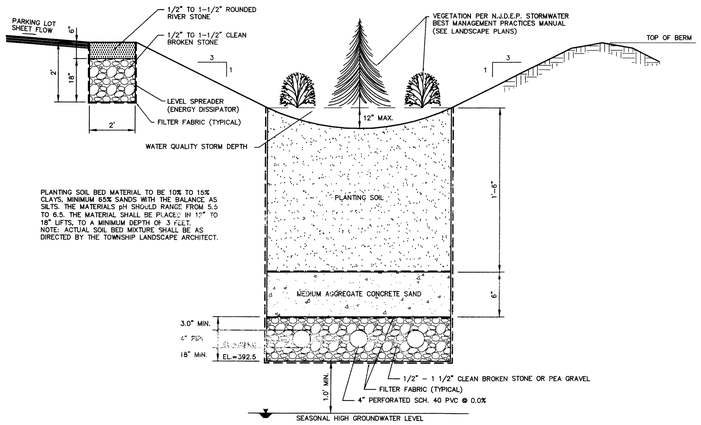
OUTLET STRUCTURE DETAIL
NOT TO SCALE



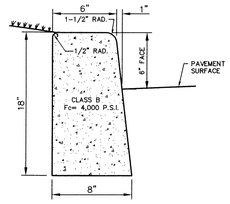
SCOUR HOLE SCHEDULE

HEAD WALL NO.	D	S %	Q(CFS)	L (FT.)	W (FT.)	D50 (IN)	T (IN)
1	18"	1.0	10.1	13.5	12.0	8	24
2	24"	1.0	25.0	18.0	16.0	8	24
3	15"	1.0	4.13	13.5	12.0	8	24

SCOUR HOLE PROTECTION DETAIL
NOT TO SCALE

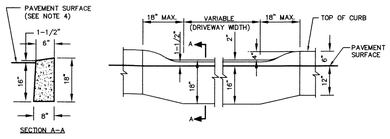


SECTION: BIORETENTION BASIN
NOT TO SCALE



NOTES
1. EXPANSION JOINTS SHALL BE PROVIDED AT APPROXIMATELY EQUAL DISTANCES OF NOT MORE THAN 20' BETWEEN JOINTS, AND SHALL BE FILLED WITH PREFORMED EXPANSION JOINT FILLER, 1/2" THICK, WHICH SHALL BE FLUSH WITH TOP AND FACE.
2. CLEAN 3/16" JOINTS AT 10' O.C.
3. CONCRETE SHALL BE 4,000 P.S.I. CLASS 'B' AIR ENTRAINED ACCORDING TO THE REQUIREMENTS OF THE NEW JERSEY D.O.E. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

CONCRETE CURB DETAIL
NOT TO SCALE



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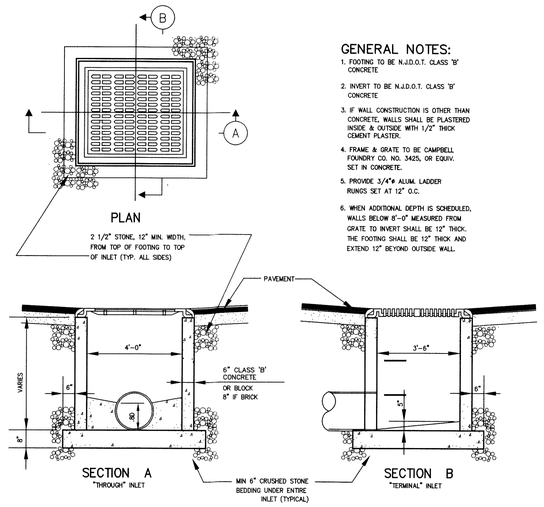
4. PAVEMENT SURFACE TO BE FLUSH WITH CURB AT HANDICAP ACCESS AND LEVEL SPREADER LOCATIONS. TOP OF CURB AT HANDICAP ACCESS SHALL SLOPE TOWARDS THE PARKING AREA. TOP OF CURB AT LEVEL SPREADER SHALL SLOPE TOWARDS THE DETENTION BASIN.

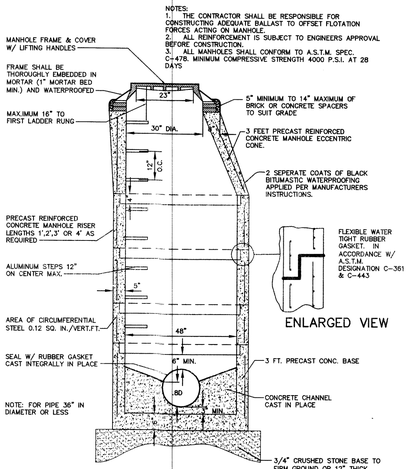
DEPRESSED CURB DETAIL
NOT TO SCALE



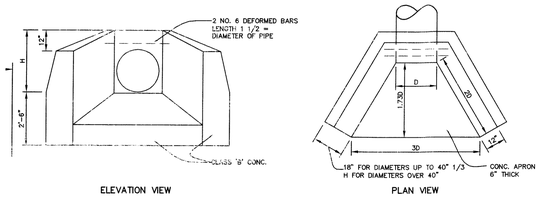
TYPE "E" INLET DETAIL
NOT TO SCALE

GENERAL NOTES:
1. FOOTING TO BE N.J.D.O.T. CLASS 'B' CONCRETE
2. INVERT TO BE N.J.D.O.T. CLASS 'B' CONCRETE
3. 8' WALL CONSTRUCTION IS OTHER THAN CONCRETE, WALLS SHALL BE PLASTERED INSIDE & OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
4. FRAME & GRATE TO BE CAMPBELL FOUNDRY CO. NO. 3425, OR EQUIV. SET IN CONCRETE.
5. PROVIDE 3/4"ø ALUM. LADDER RUNGS SET AT 12" O.C.
6. WHEN ADDITIONAL DEPTH IS SCHEDULED, WALLS BELOW 8'-0" MEASURED FROM GRATE TO INVERT SHALL BE 12" THICK. THE FOOTING SHALL BE 12" THICK AND EXTEND 12" BEYOND OUTSIDE WALL.

NOTES:
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET FLOTATION FORCES ACTING ON MANHOLE.
2. ALL REINFORCEMENT IS SUBJECT TO ENGINEERS APPROVAL BEFORE CONSTRUCTION.
3. ALL MANHOLES SHALL CONFORM TO A.S.T.M. SPEC. C-478. MINIMUM COMPRESSIVE STRENGTH 4000 P.S.I. AT 28 DAYS



4' DIAMETER MANHOLE
PRECAST CONCRETE MANHOLE
NOT TO SCALE



CONCRETE HEADWALL AND APRON DETAIL
NOT TO SCALE

NOTE: SHOP DRAWINGS FOR ALL PRECAST DRAINAGE STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE TOWNSHIP ENGINEER PRIOR TO FABRICATION.

DETAIL SHEET

NO.	DATE	REVISION
1	07/20/20	PER TOWNSHIP REVIEW

DANIEL E. PARKER
NEW JERSEY LAND SURVEYOR LIC. NO. 35866

PARKER
ENGINEERING & SURVEYING P.C.
370 EAST MAIN STREET, SOMERVILLE, N.J. 08876
(908) 725 – 4400 – FAX (908) 722 – 4401

SITE PLAN
488 ROUTE 31 SOUTH
TAX MAP LOT 7.06 BLOCK 79
TOWNSHIP OF WASHINGTON
WARREN COUNTY, NEW JERSEY

STEPHEN E. PARKER
NEW JERSEY PROFESSIONAL ENGINEER LIC. NO. 36187

DRAWN BY	CHECKED BY	SCALE	DATE	FILE	SHEET
PJD	SEP	AS NOTED	04-15-19	13211	8 OF 9