

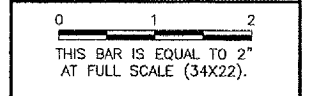
DRAINAGE STRUCTURE SCHEDULE

POINT NO.	STATION / OFFSET	DESCRIPTION	RIM	INVERT
A1	STA. 321+38.0 CENTERLINE OF TXY G2	TYPE 1 INLET	615.54	15" RCP SOUTH = 612.88 6" U.D. SOUTH = 613.21
A2	STA. 320+26.7 CENTERLINE OF TXY G2	TYPE 1 INLET	615.64	15" RCP NORTH = 612.33 18" RCP SOUTH = 612.33 6" U.D. NORTH = 612.89 6" U.D. SOUTH = 612.89
A3	STA. 319+00.0 CENTERLINE OF TXY G2	TYPE A-4 MANHOLE WITH TYPE 1 OPEN FRAME AND LID	615.30	18" RCP NORTH = 611.84 18" RCP SOUTHWEST = 611.84 6" U.D. NORTH = 612.46
A4	STA. 317+92.5, 72.6' RT. CENTERLINE OF TXY G2	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	611.20
B1	STA. 500+45.64, 52.58' RT BASELINE ENTRANCE RD.	TYPE A-4 MANHOLE WITH TYPE 1 FRAME AND OPEN LID	614.80	12" RCP NORTH = 611.62 15" RCP EAST = 611.62
B2	STA. 502+00.64, 52.58' RT BASELINE ENTRANCE RD.	TYPE A-5 MANHOLE WITH TYPE 1 FRAME AND OPEN LID	614.70	12" RCP NORTH = 611.32 18" RCP EAST = 611.32 15" RCP WEST = 611.32
B3	STA. 504+50, 238.57' RT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	611.00
B1A	STA. 500+45.64, 32.58' RT BASELINE ENTRANCE RD.	TYPE A INLET WITH TYPE 12 FRAME AND LID	615.50	12" RCP SOUTH = 611.81 6" U.D. SOUTHWEST=612.88
B2A	STA. 502+00.64, 32.58' RT BASELINE ENTRANCE RD.	TYPE A INLET WITH TYPE 12 FRAME AND LID	615.50	12" RCP SOUTH = 611.51 6" U.D. SOUTHWEST=612.88
C1	STA. 499+91.38, 93' LT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 15"	N.A.	611.54
C2	STA. 500+41.57, 93' LT BASELINE ENTRANCE RD.	TYPE A-4 MANHOLE WITH TYPE B LID	614.83	15" RCP EAST = 611.44 15" RCP WEST = 611.44
C3	STA. 503+21.16, 22.42' LT BASELINE ENTRANCE RD.	TYPE A-4 MANHOLE WITH TYPE B LID	614.83	18" RCP EAST = 611.13 15" RCP WEST = 611.13
C4	STA. 503+21.16, 40' RT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	611.00
D1	STA. 504+75, 238.58' RT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	609.97
D2	STA. 504+89, 238.58' RT BASELINE ENTRANCE RD.	TYPE 1 INLET WITH RESTRICTOR PLATE ON EAST WALL	613.50	18" RCP EAST = 609.93 18" RCP WEST = 609.94
D3	STA. 505+01.96, 238.58' RT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	609.90
E1	STA. 10+94.75, 125' RT BASELINE BORROW SITE	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	610.00
E2	STA. 10+50, 125' RT BASELINE BORROW SITE	TYPE 1 INLET WITH AUTOMATIC DRAINAGE GATE ON EAST WALL	614.00	18" RCP EAST = 609.90 18" RCP WEST = 609.90
E3	STA. 10+15, 125' RT BASELINE BORROW SITE	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	609.80
F1	STA. 10+94.75, 99.9' LT BASELINE BORROW SITE	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	610.00
F2	STA. 505+13, 20.5' RT BASELINE ENTRANCE RD.	INTERSECTION WITH BOX CULVERT	N.A.	18" RCP EAST = 609.51
G1	STA. 315+90.9, 65' LT. CENTERLINE OF TXY G2	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	610.07 ± MATCH FLUME INVERT
G2	STA. 315+90.9, 65' RT. CENTERLINE OF TXY G2	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	609.97 ± MATCH FLUME INVERT
H1	STA. 312+39.4, 91.9' LT. CENTERLINE OF TXY G2	TYPE 1 INLET WITH RESTRICTOR PLATE ON SOUTH WALL	614.38±	12" RCP NORTH = 611.36± 12" RCP SOUTH = 611.36±
H2	STA. 312+58, 71.5' RT. CENTERLINE OF TXY G2	CONCRETE FLARED END SECTION WITH GRATE - 12"	N.A.	610.92
H3	STA. 312+33.2, 71.5' RT. CENTERLINE OF TXY G2	TYPE 1 INLET WITH RESTRICTOR PLATE ON SOUTH WALL	614.51	12" RCP NORTH = 610.77± 12" RCP SOUTH = 610.75±
H4	STA. 315+90.9, 254.7' RT. CENTERLINE OF TXY G2	TYPE 2 INLET WITH RESTRICTOR PLATE ON EAST WALL	614.20	30" RCP EAST = 609.51± 30" RCP WEST = 609.51±
I1	STA. 504+67, 43' RT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	18" RCP SOUTH = 610.45
I2	STA. 506+02.13, 147.61' LT BASELINE ENTRANCE RD.	CONCRETE FLARED END SECTION WITH GRATE - 18"	N.A.	18" RCP NORTH = 610.65

NOTE: 1. ± DENOTES CONTRACTOR SHALL VERIFY RIMS/INVERTS PRIOR TO ORDERING MATERIALS.  
 2. TYPE B GRATES SHALL BE PLACED ON 4" ADJUSTING RINGS.  
 3. TYPE 12 FRAME AND LID RIMS ARE ELEVATIONS AT EDGE OF PAVEMENT.  
 4. TYPE 12 FRAME AND LID STATIONS/OFFSETS ARE REFERENCED TO BACK OF CURB.

REVISIONS

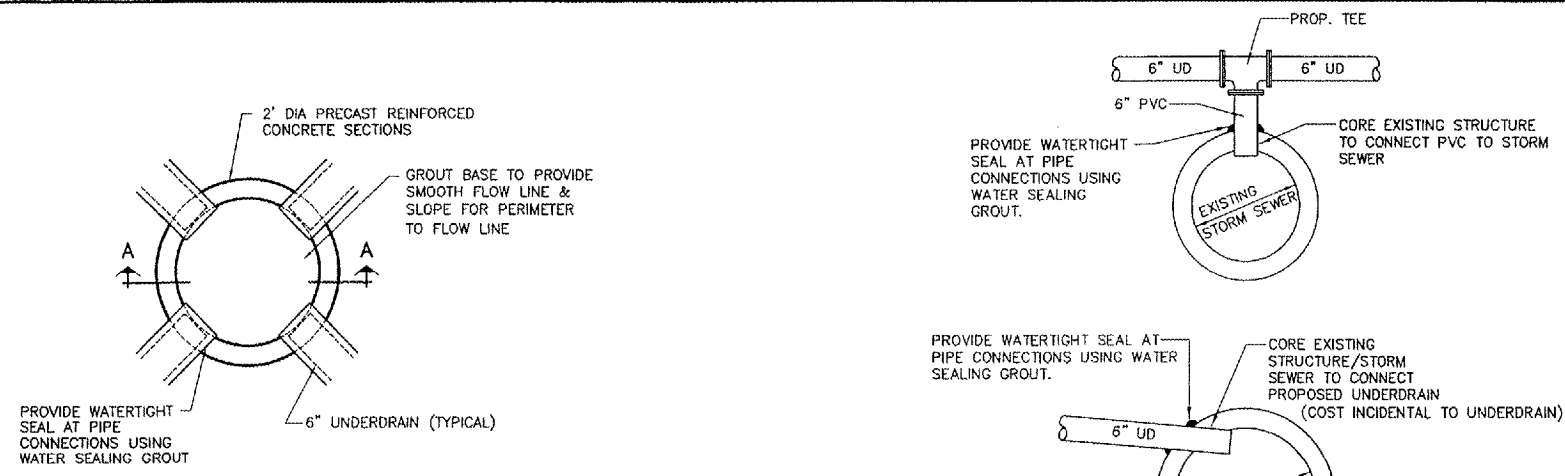
NUMBER	BY	DATE



LANSING MUNICIPAL AIRPORT  
 LANSING, ILLINOIS  
 NORTH QUADRANT SITEWORK - PHASE 1  
 AND TAXIWAY G2 EXTENSION  
 DRAINAGE DETAILS AND SCHEDULE - SHEET 2

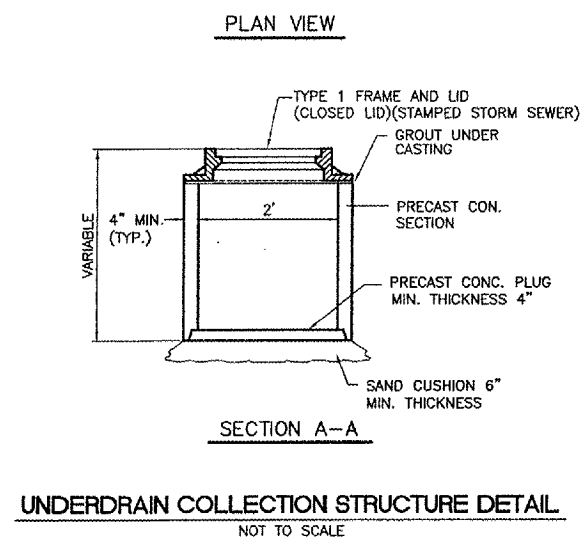
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JOB No:	03297-02

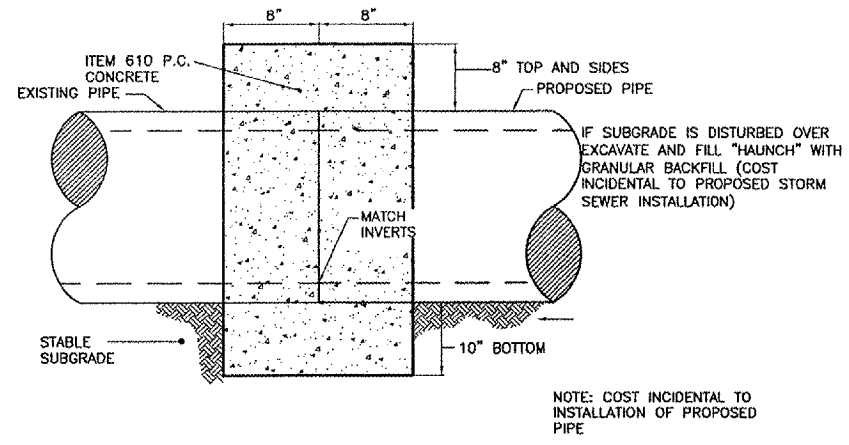


UNDERDRAIN CONNECTION DETAILS

NOT TO SCALE  
 UNDERDRAIN CONNECTIONS AND FITTINGS, TEES AND ELBOWS USED FOR CONNECTIONS TO PROPOSED STRUCTURES AND STORM SEWERS / EXISTING STRUCTURES AND STORM SEWERS, SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED UNDERDRAIN.



UNDERDRAIN COLLECTION STRUCTURE DETAIL

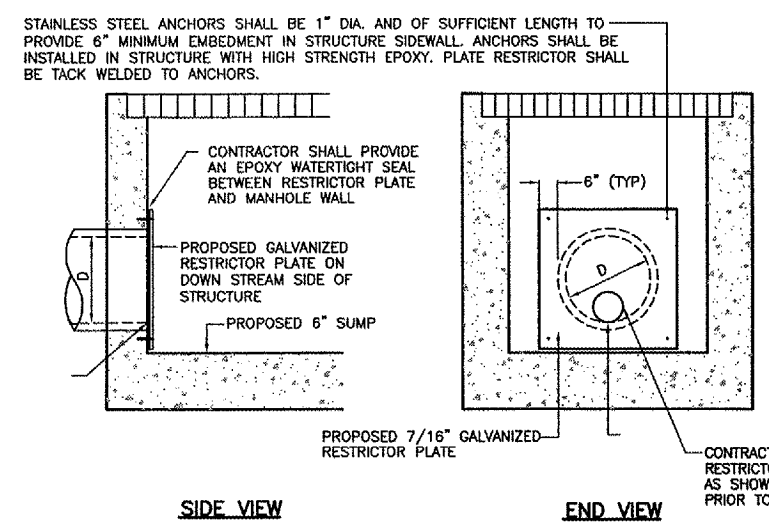


CONCRETE COLLAR - STORM SEWER

NOT TO SCALE

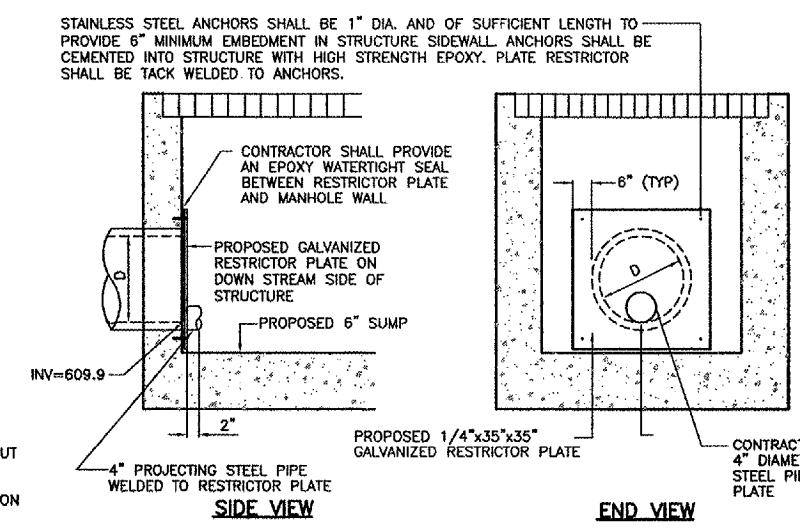
MWRDGC GENERAL NOTES (APPLIES TO ALL SANITARY SEWER)

- THE MWRDGC SEWER PERMIT SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) DAYS PRIOR TO THE COMMENCEMENT OF WORK (CALL 708-588-4055).
- ELEVATION DATUM IS USGS.
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER.
- ALL SANITARY PIPE (AND STORM IN COMBINED AREAS) SHALL CONFORM TO THE FOLLOWING:  
 DUCTILE IRON PIPE ASTM A-21.5  
 PVC ASTM D 3034 SDR26  
 JOINT SPECIFICATIONS SHALL CONFORM TO THE FOLLOWING.  
 DUCTILE IRON PIPE ASTM A-21.11  
 PVC ASTM D 3212
- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS) REQUIRES STONE BEDDING 1/4" TO 1" IN SIZE, WITH A MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES OR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- "BAND SEAL" OF SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED.  
 1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.  
 2. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL AND REPLACE WITH A WYE OR TEE BRANCH SECTION).  
 3. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHEREVER A SEWER CROSSES UNDER A WATER MAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATER MAIN SHALL BE 18 INCHES, FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY SEWERS AND WATER MAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATER MAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS.
- ALL EXISTING SEPTIC SYSTEMS ARE TO BE ABANDONED. ABANDONED ARE TANKS TO BE FILLED OR REMOVED.
- ALL SANITARY MANHOLES, AND STORM MANHOLES IN COMBINED SEWER AREAS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.



RESTRICTOR PLATE DETAIL-TYPE A

N.T.S.



RESTRICTOR PLATE DETAIL-TYPE B

N.T.S.