F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	2008-001VB	COOK	579	74
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60E10

DRAINAGE AND UTILITY GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED)

ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

STORM SEWER, WATER MAIN REQUIREMENTS IS TO BE USED AT LOCATIONS WHERE LATERAL SEPARATION BETWEEN THE SEWER AND WATER MAIN IS LESS THAN 3.0 m AND THE WATER MAIN INVERT IS LESS THAN 0.45 m ABOVE THE STORM SEWER CROWN.

STRUCTURE OFFSET LOCATIONS GIVEN ON THE PLANS ARE TO THE FOLLOWING POINTS:
A) FOR STRUCTURES FALLING IN THE CURB LINE - TO THE EDGE OF PAVEMENT
B) FOR ALL OTHER STRUCTURE LOCATIONS - TO THE CENTER OF THE STRUCTURE

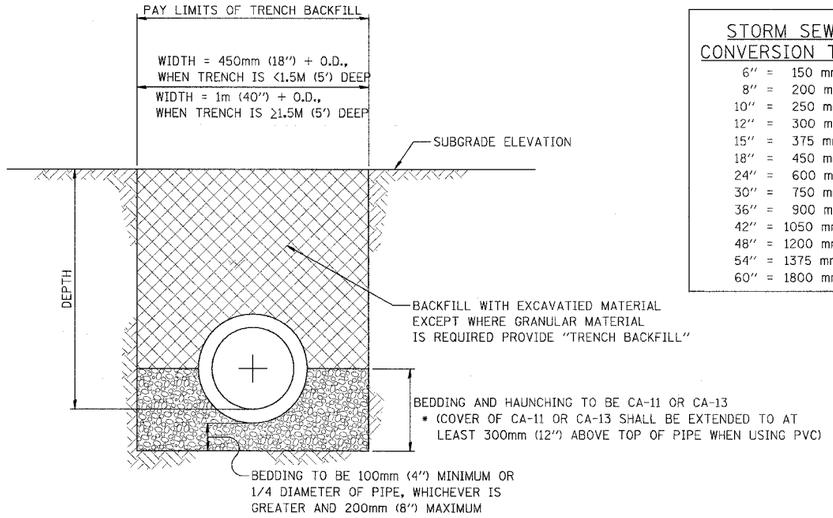
THE LOCATION AND ELEVATION OF EXISTING UTILITIES ARE APPROXIMATE AND ARE PROVIDED BY THE OWNERS. THE EXACT LOCATIONS AND ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR THROUGH THE OWNER OF THE UTILITY.

EMBANKMENTS SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER PRIOR TO EXCAVATION FOR STORM SEWER.

THE COST OF MAKING STORM SEWER CONNECTIONS TO EXISTING OR PROPOSED SEWER SHALL BE INCIDENTAL TO THE COST OF STORM SEWER BEING CONNECTED.

MANHOLES AND CATCH BASINS TYPE A WHERE THE DIFFERENCE BETWEEN THE RIM ELEVATION AND INVERT ELEVATION IS LESS THAN 1.8 METERS (6 FEET), SHALL BE CONSTRUCTED WITH FLAT TOPS.

ALL ADJUSTMENTS OR RECONSTRUCTIONS SHALL INCLUDE THE REMOVAL AND REPLACEMENT, AT THE CONTRACTOR'S EXPENSE, OF ALL UNSUITABLE 600 MILLIMETER 24 INCH) INSIDE DIAMETER ADJUSTING RINGS.



NOTES: TRENCH WIDTH SHALL BE AS NARROW AS POSSIBLE, WITH MINIMUM WIDTH OF PIPE O.D. PLUS 200mm (8") ON EACH SIDE.

PROVIDE TRENCH BACKFILL IF TRENCH IS WITHIN 600mm (2-FEET) OF ANY PAVED AREAS

TRENCH SECTION FOR RIGID SEWER PIPE
R.C.P., A.C.P., D.I.P., C.I.S.P., P.V.C.

STORM SEWER CONVERSION TABLE

6"	=	150 mm
8"	=	200 mm
10"	=	250 mm
12"	=	300 mm
15"	=	375 mm
18"	=	450 mm
24"	=	600 mm
30"	=	750 mm
36"	=	900 mm
42"	=	1050 mm
48"	=	1200 mm
54"	=	1375 mm
60"	=	1800 mm

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO GENERAL NOTES

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
2. ELEVATION DATUM IS U.S.G.S. MEAN SEA LEVEL DATUM.
3. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
4. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
5. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO:

PIPE MATERIAL SPEC.	JOINT SPEC.
CONCRETE PIPE C-14	C-443
RCP C-76	C-443
ACP C-428	D-1869
PVC GRAVITY SEWER PIPE	
6"-15" DIA. SDR 26	
D-3034	D-3212 OR D-2855
18"-27" DIA. F/DY=46	
F-679	D-3212 OR D-2855
CISP A-74	C-564
DIP A-21.51	A-21.11

6. ALL SANITARY SEWER CONSTRUCTION AND STORM SEWER CONSTRUCTION, REQUIRES AGGREGATE BEDDING WITH CA-11 OR CA-13 AGGREGATE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN 100MM (4-INCHES) NOR MORE THAN 200MM (8-INCHES). MATERIAL SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC. (SEE CONSTRUCTION DETAIL)
7. "BAND SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR MATERIALS.
8. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAT AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
   A. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
   B. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
   C. 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.
9. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS 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 WATERMAIN 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 CAN NOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS.
10. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
11. ALL CATCH BASINS, MANHOLES, INLETS, AND DRAINAGE STRUCTURES SHALL BE CONSTRUCTED OF EITHER CAST-IN-PLACE PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH ARTICLE 602.04 OF THE STANDARD SPECIFICATIONS OR OF PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH ARTICLE 602.07 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE CONSTRUCTION DETAILS. BRICK MASONRY AND CONCRETE MASONRY UNITS WILL NOT BE ALLOWED. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES.
12. ALL STRUCTURES THAT WILL BE TRIBUTARY TO A COMBINED STORM SEWER SYSTEM SHALL BE CONSTRUCTED WITH A WATERTIGHT BOOT, IN CONFORMING TO ASTM C-923, BETWEEN EACH PIPE AND THE STRUCTURE WALLS. THIS SHALL INCLUDE ALL DRAINAGE STRUCTURES, EXISTING AND PROPOSED, AT LOCATIONS AS SHOWN ON THE PLANS AND AS HEREIN INDICATED: STRUCTURES 139 THROUGH 221; STRUCTURE 275; AND STRUCTURES CW4 THROUGH CW14 AS SHOWN ON PLAN DRAWINGS DU-1 THROUGH DU-44.

URS
100 S. WACKER DR., SUITE 500
CHICAGO, ILLINOIS 60606
TEL. (312) 939-1000
FAX (312) 939-4198

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
US RTE 6 FROM LEXINGTON AVE TO FISK AVE
DRAINAGE AND UTILITIES
GENERAL NOTES

DRAWN BY PMV
DATE 02/21/08 CHECKED BY MAD