

## UTILITY GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" CURRENT ADDITION, THESE PLANS, THE SPECIAL PROVISIONS, THE CONDITIONS OF THE I.E.P.A. PERMIT, AND THE CITY OF COLLINSVILLE SUBDIVISION ORDINANCE.
2. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
  - \* AMEREN IP (GAS & ELECTRIC)
  - \* AT&T (COMMUNICATIONS)
  - \* AT&T CORPORATION (COMMUNICATIONS)
  - \* BUCO SERVICES, LTD (COMMUNICATIONS)
  - \* CHARTER COMMUNICATIONS, INC. (CABLE TV)
  - \* CITY OF COLLINSVILLE (WATER & SANITARY SEWER)
  - \* MCLEOD (COMMUNICATIONS)
- MEMBERS OF J.U.L.I.E. (800-892-0123) ARE INDICATED BY AN \*. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
3. ALL EXCAVATIONS UNDER AND WITHIN 2' OF ALL ROADWAY ELEMENTS SUCH AS PAVEMENT, SHOULDERS, DRIVEWAYS, AND SIDEWALKS SHALL BE BACKFILLED WITH CLASS I (COMPACTED CA-6) OR APPROVED EQUAL, AND SURFACE RESTORED WITH BITUMINOUS COLD PATCH MATERIAL. CLASS III (EARTHEN) BACKFILL CAN BE USED EVERYWHERE ELSE. PATCHING SHALL BE INCLUDED WITH THE INSTALLATION OF THE WATER MAIN.
4. WATER MAIN AND SERVICE LINE TRENCHES IN EARTHEN AREAS SHALL BE BACKFILLED WITH THE EXCAVATED MATERIAL AND MODERATELY COMPACTED WITH THE BACKHOE BUCKET OR WHEEL SO AS TO MINIMIZE / ELIMINATE SETTLEMENT AND THE POTENTIAL CREATION OF HAZARDOUS DEPRESSIONS. THIS WORK IS INCLUDED IN THE COST OF THE CONTRACT.
5. MINIMUM DEPTH OF COVER ON THE PROPOSED WATER MAINS AND SERVICES SHALL BE 42".
6. THWN SOFT DRAW NO. 12 COPPER TRACER WIRE SHALL BE INSTALLED WITH ALL PVC WATER MAINS. IT SHALL BE CONNECTED TO ALL VALVES AND HYDRANTS. ALL SPLICES SHALL BE SOLDERED AND WATER TIGHT. THE COSTS FOR COMPLYING WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
7. REMOVAL AND SUITABLE DISPOSAL OF SURPLUS EXCAVATED MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH THE COST OF SAID DISPOSAL INCLUDED IN THE COST OF THE CONTRACT.
8. ANY DAMAGE TO EXISTING CULVERTS/STORM SEWERS BY CONTRACTOR'S OPERATIONS SHALL BE CAUSE FOR THE CONTRACTOR TO REMOVE AND REPLACE SAME AT NO COST TO THE CONTRACT. COST TO REMOVE AND REPLACE CULVERTS AS NECESSARY TO INSTALL WATER MAIN SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRENCH SHORING, EQUIPMENT, ETC., TO PROVIDE FOR THE PROPER PROTECTION OF HIS WORKERS AS REQUIRED BY D.S.H.A., THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THE ILLINOIS DEPARTMENT OF LABOR. THIS REQUIREMENT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND THE CITY WILL NOT BE RESPONSIBLE FOR THE ENFORCEMENT OF SAFETY STANDARDS.
10. HYDRANTS ARE TO BE SET ON 6" LATERALS, ISOLATED BY A GATE VALVE WITH BOX, AND RESTRAINED WITH SET SCREW RETAINER GLANDS, AND CONCRETE THRUST BLOCKS. TYPICALLY, FIRE HYDRANT ASSEMBLY TO INCLUDE 6" GATE VALVE/VALVE BOX, 6" LEAD PIPE, AND 6" FIRE HYDRANT.
11. REMOVAL OF EXISTING HYDRANT ASSEMBLIES AND SALVAGED TO THE CITY SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
12. PROPOSED FIRE HYDRANT BURY DEPTHS ARE SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL CONFIRM THE ACTUAL DEPTHS AFTER THE UTILITIES THAT WILL BE CROSSED ARE VERIFIED AND THE PROPOSED WATER MAIN IS INSTALLED. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
13. NEW MAINS TO BE INSTALLED AND ISOLATED BY MEANS OF VALVES UNTIL PERMITTED FOR OPERATIONS BY I.E.P.A. COORDINATE WITH CITY WATER DIVISION FOR FLUSHING, TESTING AND PERMITTING.
14. ALL SERVICES CONNECTED BY TAPPING SADDLE. INSTALL MAIN AVOIDING DAMAGE TO EXISTING SERVICES. REPLACE ALL SERVICE LINES FROM NEW MAIN TO METER WITH FLEXIBLE COPPER TUBING, TYPE "K" ONLY AFTER MAIN HAS BEEN PERMITTED BY I.E.P.A. FOR OPERATION. NEW, SCANNABLE METERS WILL BE FURNISHED BY THE CITY ALONG WITH DRILLED METER PIT LIDS. SALVAGE OLD METERS TO THE CITY.
15. HYDRANT AND VALVE LOCATIONS SHOWN ARE APPROXIMATE. FIELD LOCATION TO SUIT SITE EVERY 300 FEET.
16. THE CONTRACTOR WILL REPLACE ALL EXISTING WATER METERS AND METER BOXES WITH CITY FURNISHED SCANNABLE METERS AND METER BOXES. ALL WATER SERVICE LINES SHALL BE INSTALLED NEW TO THE METER. MODIFICATIONS TO EXISTING WATER LINE SERVICES SHALL BE INCLUDED AT NO ADDITIONAL COMPENSATION.
17. THE CONTRACTOR SHALL FURNISH AND REPLACE METER SETTERS WITH A DOUBLE CHECK VALVE THAT IS ACCEPTABLE BY THE CITY AND STATE. VERTICAL CHECK VALVES MUST BE REMOVABLE FROM THE TAP FOR SERVICE WITHOUT DISTURBING THE SETTER. ALSO INCLUDED WITH THIS ITEM ARE THE TAPPING SLEEVE CONNECTION AND INSTALLATION OF THE CITY FURNISHED SCANNABLE METERS AND METER BOXES. METER LIDS SHALL BE DRILLED FOR SCANNABLE HEADS. THE INSTALLATION OF THE METER SETTER, METER, AND METER BOX SHALL BE MEASURED FOR PAYMENT AS AN INSTALLED UNIT.
18. ALL SERVICE CROSSINGS SHALL BE BORED UNLESS OPEN CUT METHOD IS APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE CITY OF COLLINSVILLE. PLEASE REFER TO THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS."

19. TRENCH BACKFILL WILL BE PAID TO THE DEPTH AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PLEASE REFER TO THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS."
20. LINE ENDS ARE TO BE CAPPED WITH MECHANICAL JOINT CAP AND A SET SCREW RETAINER GLAND, LESS THAN ONE LENGTH OF PIPE PAST GATE VALVE.
21. ALL VALVES AND FITTINGS SUCH AS TEES, CROSSES, REDUCERS, ELBOWS, CAPS, PLUGS, ETC., SHALL BE DUCTILE IRON WITH MECHANICAL JOINTS AND INCLUDE TRANSITION GASKETS. AND THEY SHALL BE RESTRAINED WITH SET SCREW RETAINER GLANDS AND CONCRETE THRUST BLOCKS.
22. CONCRETE THRUST BLOCKS SHALL NOT BE POURED "WET" UNLESS SPECIFICALLY REQUESTED BY THE CITY. HOWEVER PREFABRICATED CONCRETE BLOCKS (PER THE CITY OF COLLINSVILLE'S SPECIFICATIONS) CAN BE USED TO PROVIDE THRUST RESISTANCE.
23. PIPE MATERIAL SHALL BE PVC SDR 21 WITH PUSH JOINTS MEETING ASTM 3139.
24. MAILBOX REMOVAL AND REPLACEMENT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT.
25. WATER MAINS SHALL BE SEPARATED FROM SEPTIC TANKS, DISPOSAL FIELDS, AND ABSORPTION BEDS BY A MINIMUM OF 25 FEET.
26. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE AREA LOCATED WITHIN THE CONSTRUCTION LIMITS, SHOWN ON THE PLANS. ANY AREAS DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
27. THE CONTRACTOR SHALL STAGE HIS WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS 24 HOURS PRIOR TO TEMPORARILY CLOSING ENTRANCES.
28. AFTER FINAL GRADING, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. THE COST SHALL BE INCLUDED IN THE PRICE FOR WATER MAIN INSTALLATION.
29. ALL SURVEY AND LAYOUT WORK IS THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN THE COST OF THE CONTRACT
30. ALL TAPPING SLEEVES SHALL BE STAINLESS STEEL WITH A DUCTILE IRON FLANGE.
31. ALL GATE VALVES SHALL BE RIGHT CLOSING WITH STAINLESS STEEL BONNET AND PACK BOLTS.
32. THE EXISTING WATER SERVICE LINES SHOWN ARE FOR INFORMATION PURPOSES ONLY. ALL SIZES, LOCATIONS, AND LENGTHS ARE APPROXIMATE. WATER SERVICE LINES IN ADDITION TO THOSE SHOWN MAY BE PRESENT. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, AND LENGTH OF ALL WATER SERVICES LINES PRIOR TO THE START OF CONSTRUCTION.

### SANITARY NOTES:

1. ALL MATERIALS, INSTALLATION, AND TESTING SHALL BE IN PERFORMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH, THE ILLINOIS PLUMBING CODE, AND THE REQUIREMENTS OF THE CITY OF COLLINSVILLE.
2. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE PLANS WITH THE ACTUAL DIMENSIONS AND CONDITIONS OF THE SITE. THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINES AND GRADES. IF A DISCREPANCY OCCURS FROM WHAT IS SHOWN ON THE PLANS, STANDARD SPECIFICATIONS, AND/OR DETAILS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE AFFECTED WORK. FAILING TO DO SO WILL BE CONSIDERED AS THE CONTRACTOR HAVING PROCEEDED AT HIS OWN RISK AND EXPENSE.
3. SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL CONFORM TO ASTM D 3034, TYPE PSM FOR SIZES 4"-15", STANDARD DIMENSION RATION (SDR) 35.
4. PVC SEWER PIPE JOINTS SHALL BE SOLVENT WELDED PER ASTM D 3212.
5. ALL MANHOLES SHALL BE PRECAST CONCRETE TYPE A, 48-INCH IN DIAMETER WITH GASKETED INVERTS, ECCENTRIC CONES, STEPS, AND TYPE 1 FRAME AND CLOSED LIDS. LIDS SHALL BE STAMPED "SANITARY". SEE DETAIL FOR MORE INFORMATION.
6. SANITARY SEWER MANHOLE RIM ELEVATIONS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL RIM ELEVATIONS SHALL BE SET TO MATCH THE SURROUNDING FINISH GRADES. ALL COSTS ASSOCIATED WITH THE FINAL RIM ADJUSTMENTS SHALL BE INCLUDED IN THE COST OF THE AFFECTED MANHOLE.

7. BEDDING OF THE PIPE AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AND AS SHOWN IN THE PLANS. GRANULAR TRENCH BACKFILL SHALL BE USED AS INDICATED ON THE PLANS AND WHEN THE EDGE OF ANY TRENCH IS WITHIN 2 FT. OF ANY PAVEMENT, CURB, SIDEWALK, OR OTHER STRUCTURE. TRENCH BACKFILL SHALL BE COMPACTED WITH A ROLLER, VIBRATORY PLATE, OR OTHER COMPACTING DEVICE IN 12-INCH LIFTS.
8. ALL SURFACE MATERIAL SHALL BE REPLACED IN KIND AND TO THE DEPTH THAT EXISTED PRIOR TO REMOVAL.
9. LEAK TESTING FOR MANHOLES SHALL BE DONE IN ACCORDANCE WITH ASTM C969-94- "STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996) (NO LATER EDITIONS OR AMENDMENTS) OR ASTM C1244-93 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996) (NO LATER EDITIONS OR AMENDMENTS)

FILE NAME =	USER NAME = default	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>UTILITIES GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P:\Projects\613501\CADD\DGN\0876D54-sht	d-a-r-n.dgn	DRAWN -	REVISED -			600	60-(30,31,128)-N-1	MADISON	152	50
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