

- ALL SANITARY SEWERS WILL BE SUBJECT TO AN AIR EXFILTRATION TEST. TELEVISIONING TEST AND DEFLECTION TEST TO BE PERFORMED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE ENGINEER. ALL TESTING WILL BE DONE IN CONFORMANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION, AND VILLAGE OF CARPENTERSVILLE REQUIREMENTS.
- VACUUM TESTING OF EACH MANHOLE SHALL BE CARRIED OUT IMMEDIATELY AFTER ASSEMBLY AND PRIOR TO BACKFILLING. ALL LIFT HOLES SHALL BE PLUGGED WITH AN APPROVED NON-SHRINK GROUT.
- NO GROUT WILL BE PLACED IN THE HORIZONTAL JOINTS BEFORE TESTING. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED, TAKING CARE TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE.
- THE TESTING HEAD SHALL BE PLACED AT THE INSIDE OF THE TOP OF THE FRAME SECTION AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
- A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF WITH THE VALVES CLOSED. THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 INCHES. THE MANHOLE SHALL PASS IF THE TIME IS GREATER THAN 60 SECONDS FOR A 48 INCH DIAMETER MANHOLE, 75 SECONDS FOR A 60 INCH MANHOLE AND 90 SECONDS FOR A 72 INCH MANHOLE. IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE WITH A NON-SHRINK GROUT WHILE THE VACUUM IS STILL BEING DRAWN. RETESTING SHALL PROCEED UNTIL A SATISFACTORY TEST IS OBTAINED.
- ALL COVERS USED FOR SANITARY SEWERS SHALL HAVE A MACHINED SURFACE AND A WATERTIGHT RUBBER GASKET SEAL. FULL FRAME SEAL SHALL BE ADCO WT-64 BUTYL SEALANT OR APPROVED EQUAL. TROWEL MASTIC OVER FULL SURFACE BETWEEN FRAMES, ADJUSTING RINGS AND CONES. FRAME AND LID SHALL BE NEENAH R-1713 WITH TYPE B LID OR APPROVED EQUAL.

WATER MAIN CONSTRUCTION

- ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION, AND REVISIONS THERETO. THESE IMPROVEMENT PLANS AND DETAILS, SPECIAL PROVISIONS AND IN ACCORDANCE WITH CODES AND ORDINANCES OF THE VILLAGE OF CARPENTERSVILLE.
- ALL WATER MAINS SHALL BE DUCTILE IRON PIPE CLASS 52 WITH EITHER MECHANICAL OR PUSH-ON JOINTS AND SHALL CONFORM TO ANSI A21.51-96, AWWA C151 AND ANSI A21.11-00, AWWA C111. ALL PIPE AND FITTINGS SHALL BE MADE IN THE UNITED STATES.
- ALL FITTINGS SHALL BE COMPACT DUCTILE IRON AND SHALL CONFORM TO AWWA/ANSI C153/A21.53-00. FITTINGS SHALL BE U.L. LISTED CLASS 350, TYLER GRIFFIN, CLOW OR APPROVED EQUAL. ALL FITTINGS SHALL BE MADE IN THE UNITED STATES.
- ALL PIPE AND FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH AWWA/ANSI C104/A21.4-95.
- ALL FITTINGS SHALL BE MECHANICAL JOINT AND SHALL BE RESTRAINED WITH MEGA LUGS BY EBAA IRON OR APPROVED EQUAL UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL MAY BE LAID WITH STANDARD PIPE AT DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL BE IN ACCORDANCE WITH AWWA C800-99. WHEN RUBBER GASKETED PIPE IS LAID ON A CURVE, THE PIPE SHALL BE JOINTED IN A STRAIGHT ALIGNMENT AND THEN DEFLECTED TO THE CURVED ALIGNMENT. TRENCHES SHALL BE MADE WIDER ON CURVES FOR THIS PURPOSE.
- COUPLINGS FOR CONNECTIONS TO EXISTING ASBESTOS CEMENT WATER MAINS SHALL BE FORD OR CASCADE OR APPROVED EQUAL, BOTH WITH ALLOY BOLTS AND FUSION BONDED EPOXY COATING.
- ALL GATE VALVES SHALL HAVE A NON-RISING STEM, SHALL HAVE A STANDARD 2" SQUARE OPERATING NUT AND SHALL OPEN IN A COUNTER-CLOCKWISE DIRECTION. RESILIENT WEDGE GATE VALVES SHALL BE CLOW F-6100 IN ACCORDANCE TO AWWA C-509 OR CLOW OR WATEROUS IN ACCORDANCE TO AWWA C-515 MAIN LINE VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT CONNECTION AND RESTRAINED WITH MEGA LUGS.
- ALL VALVE BOXES SHALL BE CAST IRON. TWO PIECES 5 1/4-INCH SHAFT, SCREW-TYPE TYLER MODEL, EAST JORDAN OR APPROVED EQUAL 664-S LIDS TO BE MARKED "WATER" (VALVE BOX EXTENSIONS IF REQUIRED ARE CONSIDERED INCLUDED IN THE COST). VALVE BOX STABILIZER SHALL BE AS MANUFACTURED BY VALVE BOX STABILIZER, INC. OR APPROVED EQUAL.
- ALL HYDRANTS SHALL BE IN ACCORDANCE WITH AWWA C502-94 AND SHALL BE CLOW MEDALLION F-2545 HYDRANT FLANGED SHOE FOR BURY DEPTHS OF 6 FEET AND LESS AND MJ SHOE FOR DEPTH GREATER THAN 6 FEET. (BREAK AWAY STYLE TRAFFIC DESIGN) WITH ONE 4 1-2" STEAMER NOZZLE AND TWO (2) HOSE OUTLETS, OF WHICH THE THREADS CONFORM TO THE STANDARDS OF THE VILLAGE OF CARPENTERSVILLE, ILLINOIS. HYDRANT AUXILIARY VALVES SHALL BE CLOW FL X MJ OR MJ X MJ DEPENDING ON DEPTH.
- ALL PRESSURE TAPPING SLEEVES TO AN EXISTING VILLAGE MAIN SHALL BE MADE WITH CLOW F-2507, CASCADE CXTX, OR ROMAC SST-III FULL STAINLESS STEEL OR EQUAL FOR DUCTILE IRON. THE FULL STAINLESS STEEL CLAMPS SHALL BE USED ON ASBESTOS CEMENT. ALL SHOULD BE CONSTRUCTED IN A VALVE VAULT OR AS DEPICTED IN THE PLANS.
- ALL TEES, BENDS, VALVES, AND FIRE HYDRANTS SHALL BE ADEQUATELY SUPPORTED WITH A CONCRETE BASE, AND SUPPORTED LATERALLY WITH PRECAST THRUST BLOCKING AGAINST UNDISTURBED EARTH.
- ALL WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 5.5 FEET OR AS NOTED ON THE PLANS.
- ALL WATER SERVICES SHALL BE TYPE "K" COPPER PIPE WITH A. Y. MCDONALD "T" OR "Q" SERIOUS COMPRESSION 4701BT OR 4701BQ (BALL TYPE) CONNECTIONS, OR APPROVED EQUAL.
- ALL CORPORATION STOPS SHALL BE A. Y. MCDONALD 4701BT OR 4701BQ (BALL TYPE). SWIVEL NUT 4750 ST IS REQUIRED FOR 1 1/2" AND 2" SERVICES, OR APPROVED EQUAL.

- ALL CURB STOPS SHALL BE A. Y. MCDONALD 6104T MINNEAPOLIS PATTERN, OR APPROVED EQUAL.
- ALL CURB BOXES SHALL BE A. Y. MCDONALD 5614, MINNEAPOLIS PATTERN WITH A 1 1/4" UPPER SECTION FOR 3/4" AND 1" SERVICES (NO ROD), OR APPROVED EQUAL.
- HYDROSTATIC TESTS - THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTS IN ACCORDANCE WITH DIVISION IV, SECTION 41 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION, AND APPLICABLE PROVISIONS OF AWWA C-600 AND C-603. THE WATER MAINS SHALL BE PRESSURED TESTED AT 150 PSI. THE TEST PRESSURE SHALL NOT DROP MORE THAN 2 PSI FOR THE DURATION OF THE TEST. THE GAUGE SHALL BE OF GOOD QUALITY AND CONDITION, AND BE FLUID FILLED. THE GAUGE SHALL HAVE A LARGE ENOUGH RANGE FOR THE PRESSURE BEING TESTED AND SHALL BE CAPABLE OF READING A MINIMUM PRESSURE INCREMENT OF 1 PSI. ALLOWABLE LEAKAGE SHALL BE AS SET FORTH IN AWWA C-600 LATEST EDITION. THE TESTING LENGTH SHALL BE LIMITED TO 1000 FOOT. IF MORE THAN 1000 FOOT OF WATER MAIN IS TESTED, THE ALLOWABLE LEAKAGE WILL BE BASED UPON 1000 FOOT. THE DURATION OF THE TEST SHALL BE FOR TWO HOURS MINIMUM.
- DISINFECTION OF THE WATER MAINS - UPON COMPLETION OF THE NEWLY LAID WATER MAINS (AND WATER SERVICE LINES 4" AND LARGER), THE WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE AWWA C-651, LATEST EDITION. THE CONTRACTOR IS RESPONSIBLE FOR COLLECTING SAMPLES AND HAVING BACTERIOLOGICAL TESTING PERFORMED AS REQUIRED BY THE IEPA. THE CONTRACTOR SHALL FURNISH TO THE VILLAGE THE REQUIRED DOCUMENTATION, TEST RESULTS, ETC., REQUIRED BY THE IEPA BEFORE PLACING THE WATER MAINS IN SERVICE OR BEFORE OPENING A WATER SERVICE LINE TO THE VILLAGE SYSTEM.
- ALL WATER MAINS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS, STORM SEWERS, COMBINED SEWERS, HOUSE SEWER SERVICE CONNECTIONS AND DRAINS IN ACCORDANCE WITH TITLE 35: ENVIRONMENTAL PROTECTION AGENCY SUBTITLE F: PUBLIC WATER SUPPLIES, CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY, PARTS 651-654 TECHNICAL POLICY STATEMENT, SECTION 653.119.
- ONLY VILLAGE STAFF SHALL OPEN AND CLOSE EXISTING WATER MAIN VALVES. VILLAGE UNDERGROUND STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO, AND OBSERVE ALL CUTTING INTO OR REPAIRING OF EXISTING MAINS. THE VILLAGE OF CARPENTERSVILLE SHALL BE CONTACTED AT (847) 551-3476 FOR ALL WORK AND THE VILLAGE OF EAST DUNDEE SHALL BE CONTACTED AT (847) 426-2822 FOR WORK ALONG DUNDEE ROAD.

BACKFILL

- STORM SEWER, WATER MAIN, AND SANITARY SEWER SHALL BE BACK FILLED IN ACCORDANCE WITH ARTICLE 550.07, METHOD 1 ONLY.
- PROVIDE TRENCH BACKFILL FOR ALL UTILITY LINES WITHIN 2' OF PAVED AREAS. ALL TRENCH BACKFILL QUANTITIES FOR STORM SEWER HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE, BASED ON PIPE SIZE. DEPTH WILL BE CALCULATED AS INVERT DEPTH FROM SURFACE ELEVATION.
- TRENCH BACKFILL AND AGGREGATE SHOULDER MATERIAL SHALL CONSIST OF CA-6 MATERIAL.

SIGNING AND STRIPING

- SEE IDOT STANDARD DETAIL 780001, DISTRICT ONE DETAIL AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.
- SIGNS SHALL NOT BE MOVED OR COVERED UNTIL PROGRESS OF WORK NECESSITATES IT.
- THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH HIS CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
- ALL SIGNS SHALL BE INSTALLED OR RELOCATED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. THIS WORK SHALL BE PAID FOR USING THE APPROPRIATE PAY ITEMS.
- ALL REMOVED SIGNS SHALL BE RETURNED TO THE VILLAGE OF CARPENTERSVILLE.
- LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS. THIS WORK SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 729 OF THE STANDARD SPECIFICATIONS.

TRAFFIC CONTROL

- SEE TRAFFIC CONTROL PLANS FOR GENERAL NOTES CONCERNING TRAFFIC CONTROL AND PROTECTION.

EROSION CONTROL PLANS

- SEE EROSION CONTROL PLANS FOR GENERAL NOTES CONCERNING EROSION CONTROL.

EARTHWORK

- PRIOR TO ANY EMBANKMENT PLACEMENT ALL VEGETATION AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL.
- SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS BEFORE REMOVAL OF ANY UNSTABLE MATERIAL.

LANDSCAPING

- THE LOCATIONS OF PROPOSED TREES TO BE PLANTED MAY BE OUTSIDE THE PROJECT LIMITS, WITHIN VILLAGE PROPERTY, AS DETERMINED BY THE RESIDENT ENGINEER. THERE WILL BE NO MORE THAN 2 LOCATIONS AND ANY MOBILIZATION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. TREES MUST BE REPLACED AT A 1:1 RATIO WITHIN PROJECT LIMITS, PER DEPARTMENT POLICY.

CROSS SECTIONS

- EXISTING UTILITIES IN THE CROSS SECTIONS ARE SHOWN WITH AN ASSUMED DEPTH OF COVER.

STANDARD NO.	LIST OF DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
424001-05	CURB RAMPS FOR SIDEWALK
442201-03	CLASS C AND D PATCHING
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-04	SUB-SURFACE DRAINS
602001-02	CATCH BASIN TYPE A
602011-02	CATCH BASIN TYPE C
602301-03	INLET - TYPE A
602306-03	INLET - TYPE B
602401-03	MANHOLE, TYPE A
602406-04	MANHOLE TYPE A 6' (1.8m) DIAMETER
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
604006-04	FRAME AND GRATE, TYPE 3
604036-02	GRATE, TYPE 8
604046-02	FRAME AND GRATE TYPE 10
604056-03	FRAME AND GRATE TYPE 11V
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606201-02	TYPE B GUTTER (INLET, OUTLET, & ENTRANCE)
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-07	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE 1W OR 2W MULTILANECROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS, & DELINEATORS
720016-02	MAST ARM MOUNTED STREET NAME SIGNS
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESTINGED DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GOUNDING & BONDING
876001-01	PEDESTRIAN PUSH BUTTON POST
877001-04	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877011-04	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-08	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

COMPANY NAME: SEC GROUP, INC.
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VILLAGE OF CARPENTERSVILLE

GENERAL NOTES, LIST OF HIGHWAY STANDARDS, AND COMMITMENTS

SCALE: N.T.S. SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	06-00074-00-FP	KANE	211	3
*FAU 2414, FAU 1280, FAP 343			CONTRACT NO. 63504	
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				