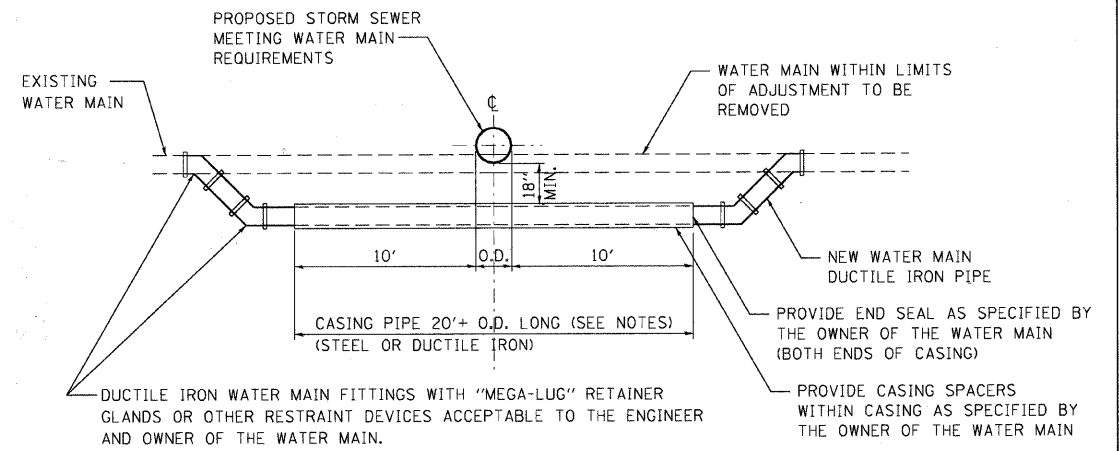


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0085	00-00246-02-FP	MCHENRY	292	047
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT NO: 63522				

**WATER MAIN CONSTRUCTION SEQUENCE:**

1. PRIOR TO THE INSTALLATION OF THE WATER MAIN ACROSS FIRST STREET, SCHEDULE THE WATER MAIN SHUTDOWN OF FIRST STREET WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN. CLPW WILL SHUT TWO (2) EXISTING VALVES BOTH NORTH AND SOUTH OF THE NEW 12" WATER MAIN CROSSING. IMMEDIATELY FOLLOWING THE SHUTDOWN, INSTALL THE NEW 12" WATER MAIN THROUGH THE EXISTING 4" WATER MAIN INSTALLING A 12X4 TEE AND A 4" VALVE IN BOX DIRECTLY (FLANGE FITTING) ONTO THE 12X4 TEE. INSTALL THE 4" WATER MAIN FROM THE NEW 4" VALVE TO THE EXISTING 4" WATER MAIN; INSTALL A 1" CORPORATION STOP W/ SADDLE AND A 1" COPPER WHIP W/ ROUNDWAY ON THE EXISTING WATER MAIN SIDE OF THE 4" VALVE FOR FLUSHING AND SAMPLING PURPOSES. SWAB PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. COMPLETE INSTALLATION OF NEW WATER MAIN CROSSING OF FIRST STREET. CLOSE NEW 4" VALVE. CLPW WILL TURN ON EXISTING WATER MAIN, FLUSH AND SAMPLE THE EXISTING WATER MAIN. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE THE COPPER WHIP AND ABANDON THE CORPORATION STOP WITH A COPPER DISK SECURED PROPERLY UNDER THE NUT. ROAD PLATES MAY BE REQUIRED DUE TO MINIMUM 24 HOUR WATER SAMPLING REQUIREMENTS. THE EXISTING 4" VALVE CLOSEST TO IL RTE 176 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. THE DURATION OF THE SHUTDOWN ON THE EXISTING WATER MAIN MUST NOT EXCEED 4 HOURS.
2. PRIOR TO THE INSTALLATION OF THE WATER MAIN ACROSS SECOND STREET, SCHEDULE THE WATER MAIN SHUTDOWN OF SECOND STREET WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN. CLPW WILL SHUT TWO (2) EXISTING VALVES BOTH SOUTH OF THE NEW 12" WATER MAIN CROSSING. PRIOR TO SHUTDOWN, INSTALL THE NEW 12" WATER MAIN UNDER THE EXISTING LIVE 4" WATER MAIN, INSTALLING A 12X4 TEE AND A 4" VALVE IN BOX DIRECTLY (FLANGE FITTING) ONTO THE 12X4 TEE. IMMEDIATELY FOLLOWING THE SHUTDOWN, CONNECT THE 4" VALVE TO THE EXISTING 4" WATER MAIN ISOLATING THE OLD WATER MAIN TO THE NORTH; INSTALL A 1" CORPORATION STOP W/ SADDLE AND A 1" COPPER WHIP W/ ROUNDWAY ON THE EXISTING WATER MAIN SIDE OF THE 4" VALVE FOR FLUSHING AND SAMPLING PURPOSES. SWAB ALL PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. COMPLETE INSTALLATION OF NEW WATER MAIN CROSSING OF SECOND STREET. CLOSE NEW 4" VALVE. CLPW WILL TURN ON EXISTING WATER MAIN, FLUSH AND SAMPLE THE EXISTING WATER MAIN. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE THE COPPER WHIP AND ABANDON THE CORPORATION STOP WITH A COPPER DISK SECURED PROPERLY UNDER THE NUT. ROAD PLATES MAY BE REQUIRED DUE TO MINIMUM 24 HOUR WATER SAMPLING REQUIREMENTS. THE EXISTING 4" VALVE CLOSEST TO IL RTE 176 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. THE DURATION OF THE SHUTDOWN ON THE EXISTING WATER MAIN MUST NOT EXCEED 4 HOURS.
3. PRIOR TO THE INSTALLATION OF THE WATER MAIN ACROSS THIRD STREET, SCHEDULE THE WATER MAIN SHUTDOWN OF THIRD STREET WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN. CLPW WILL SHUT TWO (2) EXISTING VALVES BOTH SOUTH OF THE NEW 12" WATER MAIN CROSSING. PRIOR TO SHUTDOWN, INSTALL THE NEW 12" WATER MAIN UNDER THE EXISTING LIVE 4" WATER MAIN, INSTALLING A 12X4 TEE AND A 4" VALVE IN BOX DIRECTLY (FLANGE FITTING) ONTO THE 12X4 TEE. IMMEDIATELY FOLLOWING THE SHUTDOWN, CONNECT THE 4" VALVE TO THE EXISTING 4" WATER MAIN ISOLATING THE OLD WATER MAIN TO THE NORTH, INSTALL A 1" CORPORATION STOP W/ SADDLE AND A 1" COPPER WHIP W/ ROUNDWAY ON THE EXISTING WATER MAIN SIDE OF THE 4" VALVE FOR FLUSHING AND SAMPLING PURPOSES. SWAB ALL PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. COMPLETE INSTALLATION OF NEW WATER MAIN CROSSING OF THIRD STREET. CLOSE NEW 4" VALVE. CLPW WILL TURN ON EXISTING WATER MAIN, FLUSH AND SAMPLE THE EXISTING WATER MAIN. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE THE COPPER WHIP AND ABANDON THE CORPORATION STOP WITH A COPPER DISK SECURED PROPERLY UNDER THE NUT. ROAD PLATES MAY BE REQUIRED DUE TO MINIMUM 24 HOUR WATER SAMPLING REQUIREMENTS. THE EXISTING 4" VALVE CLOSEST TO IL RTE 176 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. THE DURATION OF THE SHUTDOWN ON THE EXISTING WATER MAIN MUST NOT EXCEED 4 HOURS.

4. PRIOR TO MAKING THE WATER MAIN CONNECTION ON WALKUP ROAD, NORTH OF IL RTE 176, AND ON IL RTE 176, WEST OF WALKUP ROAD, SCHEDULE THE WATER MAIN SHUTDOWN OF WALKUP ROAD WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN. CLPW WILL SHUT A TOTAL OF SIX (6) EXISTING VALVES, FOUR (4) AT THE INTERSECTION OF WALKUP ROAD/IL RTE 176 AND TWO (2) AT THE WALKUP ROAD DRIVEWAY NORTH OF IL RTE 176 (LOOP TO THE STRIP MALL AT THE NORTHWEST CORNER OF THE INTERSECTION). PRIOR TO THE SHUTDOWN, INSTALL AN 8" LINE STOP ON THE EXISTING 8" WATER MAIN ALONG IL RTE 176 WEST OF WALKUP ROAD. IMMEDIATELY FOLLOWING THE SHUTDOWN, INSTALL THE 8" VALVE IN VAULT EAST OF THE LINE STOP AND CONNECT THE NEW 12" WATER MAIN TO THE EXISTING 8" WATER MAIN ON WALKUP ROAD, JUST NORTH OF IL RTE 176. INSTALL A 1" CORPORATION STOP, IN BOTH VAULTS, WITH A 1" COPPER WHIP W/ ROUNDWAY ON THE EXISTING WATER MAIN SIDE OF THE 8" AND 12" VALVES FOR FLUSHING AND SAMPLING PURPOSES. SWAB ALL PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. CLOSE THE NEW 8" AND 12" VALVES. THE CONTRACTOR SHALL RELEASE THE LINE STOP ON IL RTE 176 AND CLPW WILL TURN ON EXISTING WATER MAIN NORTH OF IL RTE 176 AT THE WALKUP ROAD DRIVEWAY (LOOP TO THE STRIP MALL AT THE NORTHWEST CORNER OF THE INTERSECTION). CLPW WILL FLUSH AND SAMPLE BOTH EXISTING WATER MAINS. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE THE COPPER WHIPS FROM THE CORPORATION STOPS. THE EXISTING FOUR (4) VALVES AT THE INTERSECTION OF WALKUP ROAD/IL RTE 176 SHALL REMAIN CLOSED FOR THE DURATION OF THE PROJECT. THE DURATION OF THE SHUTDOWN ON THE EXISTING WATER MAIN NORTH OF IL RTE 176 AT THE WALKUP ROAD DRIVEWAY MUST NOT EXCEED 4 HOURS.
5. PRIOR TO INSTALLING THE 8" VALVE IN VAULT ON GATES STREET AT WALKUP AVENUE, SCHEDULE A WATER MAIN SHUTDOWN, FLUSH AND SAMPLE WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED FLUSH AND SAMPLE. IMMEDIATELY FOLLOWING THE INSTALLATION OF THE 8" VALVE IN VAULT, INSTALL A 1" CORPORATION STOP IN THE VAULT WITH A 1" COPPER WHIP W/ ROUNDWAY ON THE EXISTING WATER MAIN SIDE OF THE 8" VALVES FOR FLUSHING AND SAMPLING PURPOSES. SWAB ALL PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. CLOSE THE NEW 8" VALVE. CLPW WILL FLUSH AND SAMPLE THE EXISTING WATER MAIN ON GATES STREET. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE THE COPPER WHIPS FROM THE CORPORATION STOPS. THE DURATION OF THE SHUTDOWN ON THE EXISTING 8" WATER MAIN MUST NOT EXCEED 4 HOURS.
6. PRIOR TO SHUTTING DOWN THE EXISTING 4" WATER MAIN ON WALKUP AVE. AND GATES ST., INSTALL THE 12" WATER MAIN ON WALKUP AVE., NORTH OF GATES ST., UP TO AND INCLUDING THE 4" VALVE IN BOX. THE CONNECTION OF THE EXISTING 4" WATER MAIN ON GATES STREET EAST OF WALKUP AVE., THE CONNECTION OF THE EXISTING 4" WATER MAIN ON BURDENT STREET AT WALKUP AVENUE AND THE CUTTING AND CAPPING OF THE 4" WATER MAIN WEST OF THE 12" WATER MAIN MUST BE COMPLETED WITHIN A 4 HOUR PERIOD. INSTALL A 1" CORPORATION STOP W/ SADDLE AND A 1" COPPER WHIP W/ ROUNDWAY IN THE EXISTING VALVE VAULT ON GATES STREET NEAR THIRD STREET AND AT THE CUT AND CAP LOCATION FOR THE EXISTING 4" WATER MAIN WEST OF THE 12" WATER MAIN FOR FLUSHING AND SAMPLING PURPOSES. PRIOR TO BEGINNING THIS WORK, SCHEDULE A WATER MAIN SHUTDOWN WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614), FLUSH AND SAMPLE THE EXISTING 4" WATER MAIN THAT MUST TEMPORARILY REMAIN IN SERVICE. PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN, FLUSH AND SAMPLE.
7. UPON COMPLETION OF THE 6 ITEMS ABOVE, INCLUDING TESTING, CHLORINATION, OBTAINING AN IEPA OPERATING PERMIT AND TRANSFERING ALL WATER SERVICES TO THE NEW WATER MAIN, AND PRIOR TO THE CONNECTION OF THE NEW WATER MAIN TO THE EXISTING 4" WATER MAIN ON IL RTE 176, SCHEDULE THE SHUTDOWN OF THE REMAINING OLD WATER MAIN WITHIN THE PROJECT WITH CRYSTAL LAKE PUBLIC WORKS (CLPW) (815-356-3614). PROVIDE A MINIMUM 2 WORKING DAY NOTICE TO CLPW PRIOR TO THE REQUIRED SHUTDOWN, FLUSHING AND SAMPLING. CLPW WILL SHUT A TOTAL OF THREE (3) EXISTING VALVES, INSTALL A 1" CORPORATION STOP W/ SADDLE AND A 1" COPPER WHIP W/ ROUNDWAY IN THE EXISTING VALVE VAULT ON IL RTE 176 EAST OF FIRST STREET, FOR FLUSHING AND SAMPLING PURPOSES. SWAB ALL PIPES AND FITTINGS THAT WILL NOT BE PRESSURE TESTED OR CHLORINATED WITH CHLORINE SOLUTION OF AT LEAST 50 MG/L. DURING INSTALLATION, USE EXTRA PRECAUTION TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE. CLPW WILL FLUSH AND SAMPLE THE EXISTING WATER MAIN ON IL RTE 176. WHEN CONNECTING NEW PIPE TO THE EXISTING WATER SYSTEM, USE SYSTEM OPERATING PRESSURE TO VISUALLY INSPECT FOR LEAKS PRIOR TO BACKFILLING WHEN FEASIBLE. UPON CLPW COMPLETION OF ALL REQUIRED FLUSHING AND SAMPLING, THE CONTRACTOR SHALL REMOVE ALL THE COPPER WHIPS FROM THE CORPORATION STOPS.



**WATER MAIN ADJUSTMENT DETAIL**

- WATER MAIN CROSSING NOTES**  
WATER MAIN PIPE JOINTS LOCATED WITHIN THE CASING PIPE SHALL BE RESTRAINED AS SPECIFIED BY THE OWNER OF THE WATER MAIN
- WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN
- CASING PIPE SHALL BE REQUIRED WHERE PROPOSED STORM SEWER DOES NOT MEET WATER MAIN REQUIREMENTS.

**WATER MAIN CONSTRUCTION NOTES:**

1. NEW WATER MAIN CONSTRUCTION ALONG IL RTE 176 AND WALKUP AVENUE SHALL BE COMPLETED ACCORDING TO THE WATER MAIN CONSTRUCTION SEQUENCE SPECIFIED IN THE PLANS.
2. WATER SUPPLY SYSTEM WORK CONSISTING OF NEW WATER MAIN CONSTRUCTION, EXISTING WATER MAIN ADJUSTMENTS AND FIRE HYDRANTS TO BE MOVED OR RELOCATED SHALL COMPLETED BEFORE TEMPORARY PAVEMENT IS CONSTRUCTED AT THE WORK LOCATIONS.
3. EXISTING PAVEMENT REMOVAL AND REPLACEMENT REQUIRED FOR WATER SUPPLY SYSTEM CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 442 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PAVEMENT PATCHING, 9 INCH.

REVISIONS	
NAME	DATE

MCHENRY COUNTY DIVISION OF TRANSPORTATION  
WALKUP ROAD F.A.U. 0085

**WATER MAIN CONSTRUCTION NOTES**

SCALE: N.T.S. DRAWN BY:  
DATE: 06/10/11 CHECKED BY:

**TENG**  
TENG & ASSOCIATES, INC.  
ENGINEERS ARCHITECTS PLANNERS  
200 N. BUCKINGHAM AVE. CHICAGO, IL 60611  
TELEPHONE: 312.964.6000

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