
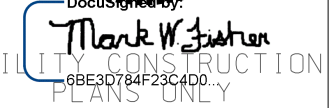


PROJECT REFERENCE NO.		SHEET NO.
U-4405		UC-3E
DESIGNED BY:	AMH	
DRAWN BY:	AMH/AB	
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UTILITY CONSTRUCTION

UTILITY CONSTRUCTION

UC-21 UTILITY NOTES:

11.CONTRACTOR SHALL PROTECT LIGHT POLES FROM TRENCHING OF WATER MAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND ALL COSTS ASSOCIATED WITH DISMANTLING AND REINSTALLING LIGHT POLES DURING INSTALLATION OF WATER MAIN. ACCORDING TO DRAWINGS PROVIDED BY DEALERSHIP, POLE BASES ARE 2'-6" SQUARE AND INSTALLED 7' DEEP.

12.COORDINATE METER PLACEMENTS WITH 6" CONDUIT THAT POWERS AND CONTROLS DRIVEWAY SENSORS.
BACKFLOW FOR 8" FIRE LINE IS PRESUMABLY IN BUILDING.

UC-22 UTILITY NOTES

1.SEE SEQUENCE NOTES FOR WL-21 AND WL-20R2 ON UC-21 UTILITY NOTES.

2.INSTALLATION OF 12"X12"X12"TAPPING SLEEVE FOR WL-21 AND OPEN CUT CROSSING OF ROXIE AVENUE SHALL BE PERFORMED BETWEEN 9:00 P.M. AND 6:00 A.M. TO MINIMIZE TRAFFIC IMPACTS. ALL OPEN EXCAVATIONS SHALL BE PLATED AND READY FOR TRAFFIC BY 6:00 A.M. UNLESS EXCAVATIONS ARE BACKFILLED/COMPACTED AND PATCHED BY 6:00 A.M.

3.SEE SEQUENCE NOTES FOR WL-20R2 ON UC-23 UTILITY NOTES. SEGMENT OF WL-20R2 BETWEEN 30"IN LINE VALVE AT STA. 53+55 AND 30"IN LINE VALVE NEAR STA. 73+05 SHALL BE INSTALLED AFTER WL-20R2 IS BUILT OUT AND OPERATIONAL ON EACH SIDE OF THIS SEGMENT.

4.RECONNECTION OF EXIST. 8"WATER MAIN IN FERNCREEK DRIVE SHALL BE UNDER SERVICE INTERRUPTION ADHERING TO CUT IN CONSTRUCTION REQUIREMENTS. RECONNECTION SHALL OCCUR AFTER 30"IS OPERATIONAL UP TO PROP. IN-LINE 30" VALVE NEAR STA. 58+10. EXISTING 8"CROSS-LINE SHALL BE INTERRUPTED USING EXISTING BRANCH VALVE (EV-67), THE EXIST. 8"IN-LINE NORTH ON FERNCREEK DRIVE AND EV-67A (SEE SHEET UC-21). RECONNECTION OF EXIST. 12"CROSS-LINE FOR FERNCREEK DRIVE SHALL BE PERFORMED BETWEEN 9:00 P.M. AND 6:00 A.M. TO MINIMIZE TRAFFIC IMPACTS.

5.KILL OUT OF SOUTHSIDE WATER MAIN BETWEEN ROXIE AVENUE AND PARCEL 223 AND LINE SIDE OF TAPPING SLEEVE FOR WL-21 SHALL BE KILLED OUT. SEQUENCE ENTAILS PERMANENTLY CLOSING EV-63, EV-69 AND EV-62 AND TEMPORARILY CLOSING EV-67 AND EV-67A TO TAKE PRESSURE OFF OF EV-63. KILLOUT LINE SIDE OF TAPPING SLEEVE FOR WL-21 AND SOUTHSIDE OF EV-63. RE-OPEN EV-67 AND EV-67A TO CONTINUE TO FEED NORTHSIDE 12"MAIN ALONG RAEFORD ROAD UNTIL WL-20R2 IS OPERATIONAL UPTO 30" IN-LINE VALVE NEAR STA. 58+10 AND CROSS-LINE ON FERNCREEK DRIVE IS PLANNED FOR RECONNECTION. KILL-OUT OF 12"MAIN ON NORTHSIDE OF RAEFORD ROAD SHALL THEN BE BY CLOSING EV-67B AND CUTTING AND PLUGGING EV-67A. THOSE KILLOUTS OUTSIDE OF ONE LANE CLOSURE SHALL BE PERFORMED BETWEEN 9:00 P.M. AND 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS.

UC-23 UTILITY NOTES

1.BUILD-OUT PROP. 12"WATER MAIN FROM TAPPING SLEEVE AND VALVE ON EXIST. 12"IN OWEN DRIVE TO WL-23 APPROX. STA. 11+40 AND CONTINUE BUILD-OUT OF WL-23 TO PROP. 12"IN-LINE VALVE NEAR STA. 0+05.

2.BUILD-OUT PROP. 8"WATER MAIN FROM TAPPING SLEEVE AND VALVE ON EXIST. 8" IN MCPHERSON CHURCH ROAD TO WL-20R2 APPROX. STA. 77+90 AND CONTINUE BUILD-OUT OF WL-20R2 TO PROP. 30"IN-LINE VALVE NEAR STA. 73+15.

3.INSTALL TAPPING SLEEVE AND VALVE, STUB-OUT RESTRAINED VALVE FOR FUTURE EXTENSION SOUTH DOWN OWEN DRIVE, STUB-OUT RESTRAINED VALVE FOR WL-23 FOR CONTINUATION OF 8" TO SERVE SHOPPING CENTER AND STUB-OUT RESTRAINED VALVE FOR CONTINUATION OF WL-23 TOWARDS OLD MCPHERSON CHURCH ROAD. THESE MAINS SHALL BE OPERATIONAL, AND ALL SERVICES AND IMPACTED CROSS-LINES SHALL BE TRANSFERRED OVER TO WL-23.

4.INSTALLATION OF THE FOLLOWING COMPONENTS OF WL-23 SHALL CONFORM TO TRAFFIC CONTROL REQUIREMENTS AND BE PERFORMED BETWEEN 9:00 P.M. AND 6:00 A.M UNLESS WORK CAN BE PERFORMED UNDER ONE LANE CLOSURE.:

A. TAPPING SLEEVE AND VALVE AND WATER MAIN ALONG OWEN DRIVE UPTO WL-23 STA. 11+50

B. WL-23 BETWEEN STA. 11+50 AND END OF LINE

C. WL-23 BETWEEN STA. 10+00 AND STA. 11+50

D. WL-23 BETWEEN STA. 4+00 AND STA. 5+50

E. RECEIVING PIT FOR WL-23 AND CONNECTION TO CARRIER PIPE

5.KILLOUT LINE SIDE OF TAPPING SLEEVE VALVE WITHIN OWEN DRIVE AND EXIST. 12"EXISTING WATER MAIN BETWEEN EV-71 AND EV-69 SHALL BE ONCE WL-20R2 IS INSTALLED COMPLETELY BETWEEN FERNCREEK DRIVE AND MCPHERSON CHURCH ROAD.

6.INSTALLATION OF WL-20R2 SHALL BE COMPLETED AND IN OPERATION UP TO PROP. 30"IN LINE VALVE 73+05. TEMPORARY 2" MAIN SHALL BE INSTALLED AND EXTENDED TO SERVE PARCEL 249, 388 AND 378 PRIOR TO TAKING THE EXISTING 6"WATER MAIN ON THE NORTH SIDE OF RAEFORD BETWEEN MCPHERSON CHURCH ROAD AND OLD MCPHERSON CHURCH ROAD OUT OF SERVICE.

UC-23 UTILITY NOTES

7.ONCE TEMPORARY 2"MAIN IS IN SERVICE PRIOR TO INTERRUPTION OF SERVICE OF THE EXISTING 12"MAIN, RELOCATE METERS FOR PARCEL 249, 388 AND 378 AND CONNECT TO TEMPORARY MAIN.

8. INTERRUPT SERVICE TO EXIST. 6"USING EV-71A AND EV-69B (SEE SHEET UC-22) AND COMPLETE GAP ON WL-20R2 BETWEEN PROP. 30"IN LINE VALVE NEAR WL-20R2 STA. 58+10 (SEE SHEET UC-22) AND PROP. 30"IN-LINE VALVE NEAR WL-20R2 STA. 73+05. CONNECT WL-20R2 TO WL-23. PROVIDE NEW SERVICES FROM WL-20R2 TO RELOCATED METERS FOR PARCELS 249, 288 AND 378 AND REMOVE TEMPORARY 2"MAINS.

9.INSTALLATION OF WL-20R2 BETWEEN APPROX. STA. 62+25 AND APPROX. STA. 65+50 SHALL CONFORM TO TRAFFIC CONTROL REQUIREMENTS AND BE PERFORMED BETWEEN 9:00 P.M. AND 6:00 A.M. PLATE ALL OPEN EXCAVATIONS OR HAVE IT READY FOR TRAFFIC BY 6:00 A.M.

10.RECONNECT EXIST. MAIN IN OLD MCPHERSON CHURCH ROAD UNDER SERVICE INTERRUPTION. LOCATION OF EXIST. WATER MAIN IN MCPHERSON CHURCH ROAD SHALL BE CONFIRMED PRIOR TO RECONNECTION. VERIFY VALVE NEST IN RAEFORD ROAD FOR APPROPRIATE VALVE TO SHUT FLOW OFF FROM EXISTING MAINS IN RAEFORD ROAD. SHUTDOWN SHOULD BE FACILITATED BY EV-69B AS IT APPEARS TO BE THE CORRECT VALVE IN RAEFORD AND THE EXISTING IN LINE FURTHER NORTH ON MCPHERSON CHURCH ROAD.

11. ONCE WL-20R2 IS IN SERVICE AND THE GAP AS NOTED IN NOTE 8 AND RECONNECTION ON OLD MCPHERSON CHURCH ROAD IS COMPLETED, KILL OUT EXISTING MAINS BETWEEN RAILROAD CROSSING AND ALL-AMERICAN ROAD. 12" MAIN FROM EV-71 TOWARDS ROBESON STREET SHALL REMAIN ACTIVE. CLOSE EV-71 TO FACILITATE KILLOUT TOWARDS ALL AMERICAN.

UC23A/UC24A UTILITY NOTES

1.EXIST. 4"SEWER SERVICE FOR PARCEL 254 SHALL BE RE-ROUTED TO EXIST. SEWER MAIN ON NORTH SIDE. COORDINATE SEWER SERVICE RE-ROUTE WITH WL-23 AND STORM DRAINAGE INSTALLATION. EXIST. 4" SEWER SERVICE CONFLICTS WITH PROP. DRAINAGE SO IT SHALL BE RE-ROUTED PRIOR TO DRAINAGE WORK. PROP.

2.PROP. SL-7 SHALL BE INSTALLED PRIOR TO INSTALLATION OF WL-23 AND DRAINAGE. BUILD OUT FROM CONNECTION TO EXIST. SSMH NO. 1 AND HAVE PROP. SEWER AND SSMH NO. 2 IN SERVICE AND READY FOR SEWER BEFORE LAYING BACK TO EXIST. SSMH NO. 3. CONNECT TO EXIST. SSMH NO. 3 AND PLUG EXIST. INVERT OUT.

UC-24 UTILITY NOTES:

1.PURSUANT TO TRAFFIC CONTROL REQUIRMENTS, CONTRACTOR MUST BE COMPLETE WITH WORK ON THE SOUTH SIDE OF RAEFORD ROAD BEFORE BEGINNING WORK ON THE NORTH SIDE. CONTRACTOR SHALL NOT BE PERFORMING WATER MAIN INSTALLATION LONGITUDINALLY TO THE ROAD ON BOTH SIDES.

2.WL-26 BETWEEN THE PLUG AT STA. 0+00 TO THE FIRST IN-LINE VALVE AT MARLBOROUGH ROAD (APPROX STA. 12+50) (SEE UTILITY NOTES FOR SHEET UC-25), INCLUDING CROSS LINE CONNECTION FOR ANCESTRY DRIVE, SHALL BE INSTALLED AND OPERATIONAL BEFORE INSTALLING ANY OTHER PORTION OF WL-26. WL-26 FROM RESTRAINED PLUG (STA 0+00) TO HORIZONTAL 45 DEGREE BEND (APPROX. STA 3+29) SHALL BE INSTALLED BETWEEN 9:00 P.M. TO 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS.

3.CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER MAIN WITH ABANDONMENT/REMOVAL OF EXISTING STORM DRAINAGE AND INSTALLATION OF PROPOSED STORM DRAINAGE FROM STATION 0+00 TO STATION 3+29.

4.ANCESTRY DRIVE CROSS-LINE CONNECTION SHALL BE INSTALLED UNDER SERVICE INTERRUPTION AND SHALL BE COORDINATED WITH PWC'S PROJECT COORDINATOR. EXISTING VALVES EV-77 AND EV-78 SHALL BE USED TO FACILITATE RECONNECTION OF THE 8"WATER MAIN. CONTRACTOR SHALL CONNECT TO EXISTING 8"WATER MAIN USING FULLBODY SLEEVE AND RESTRAINING GLANDS. THIS PART OF THE CONNECTION SHALL BE SWABBED PRIOR TO RECONNECTION OF THE EXISTING 8"WATER MAIN. THE CROSS-LINE SHALL BE KILLED OUT BY PERMANENTLY CLOSING AND ABANDONING EXISTING VALVE EV-77. KILL OUT SHALL BE DONE BETWEEN 9:00 P.M. TO 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS.

5.ANCESTRY DRIVE WILL BE THE SOURCE WATER FOR WL-26 TO IN-LINE VALVE AT STA. 25+43. SEE UTILITY NOTES FOR UC-26.

6.WL-28 BETWEEN IN-LINE VALVE AT APPROX. STATION 13+71 (SHEET UC-25) TO IN-LINE VALVE AT APPROX. STATION 9+81, INCLUDING FAIRFIELD ROAD CROSS-LINE CONNECTION, SHALL BE INSTALLED AND FULLY OPERATIONAL AFTER INSTALLATION OF SECTION WL-28 (SEE NOTE 18 ON UTILITY NOTES UC-25).

7.NEXT IN-LINE VALVE TO FACILITATE RECONNECTION OF THE 12"WATER MAIN IN FAIRFIELD ROAD IS APPROXIMATELY 760 FEET (NEAR INTERSECTION OF MICHAEL ST) FROM PROPOSED RECONNECTION POINT. THIS PLANNED SERVICE INTERRUPTION SHALL BE COORDINATED WITH THE ENGINEER.

8.ALL EXISTING METERS THAT OVERLAP THIS RELOCATION SEGMENT SHALL BE SWITCHED OVER TO THIS NEW SEGMENT. CROSS-LINE FOR FAIRFIELD ROAD SHALL BE FULLY RESTRAINED THROUGH BRANCH VALVES.

UC-24 UTILITY NOTES

9.CONTRACTOR SHALL CONNECT TO EXISTING 12" WATER MAIN USING FULL BODY SLEEVE AND RESTRAINING GLANDS. THIS PART OF THE CONNECTION SHALL BE SWABBED PRIOR TO RECONNECTION OF THE EXISTING 12"WATER MAIN. THE EXISTING CROSS LINE AT FAIRFIELD ROAD SHALL BE KILLED OUT BY PERMANENTLY CLOSING AND ABANDONING EXISTING VALVE EV-82. KILL OUT SHALL BE DONE BETWEEN 9:00 P.M. TO 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS AND MINIMIZE SERVICE INTERRUPTION.

10.WL-28 BETWEEN IN-LINE VALVE AT APPROX. STATION 9+81 TO IN-LINE VALVE AT APPROX. STATION 3+00, INCLUDING CAMBRIDGE ST CROSS-LINE CONNECTION, SHALL BE INSTALLED AND FULLY OPERATIONAL AFTER INSTALLATION OF SECTION WL-28 (SEE NOTE 6).

11.NEXT IN-LINE VALVE TO FACILITATE RECONNECTION OF THE 6"WATER MAIN IN CAMBRIDGE ST IS APPROXIMATELY 372 FEET FROM PROPOSED RECONNECTION POINT. THIS PLANNED SERVICE INTERRUPTION SHALL BE COORDINATED WITH THE ENGINEER.

12.ALL EXISTING METERS THAT OVERLAP THIS RELOCATION SEGMENT SHALL BE SWITCHED OVER TO THIS NEW SEGMENT. CROSS-LINE FOR CAMBRIDGE ST SHALL BE FULLY RESTRAINED THROUGH BRANCH VALVES.

13.CONTRACTOR SHALL CONNECT TO EXISTING 6" WATER MAIN USING FULL BODY SLEEVE AND RESTRAINING GLANDS. THIS PART OF THE CONNECTION SHALL BE SWABBED PRIOR TO RECONNECTION OF THE EXISTING 6"WATER MAIN. THE EXISTING CROSS LINE AT CAMBRIDGE ST SHALL BE KILLED OUT BY PERMANENTLY CLOSING AND ABANDONING EXISTING VALVE EV-80. KILL OUT SHALL BE DONE BETWEEN 9:00 P.M. TO 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS AND MINIMIZE SERVICE INTERRUPTION.

14.WL-28 BETWEEN IN-LINE VALVE AT APPROX. STATION 3+00 TO IN-LINE VALVE AT APPROX. STATION 0+35 SHALL BE INSTALLED AND FULLY OPERATIONAL AFTER INSTALLATION OF SECTION WL-28 (SEE NOTE 10).

15.NEXT IN-LINE VALVE TO FACILITATE RECONNECTION OF THE 8" WATER MAIN IN TWIN ACRES DR IS APPROXIMATELY 275 FEET FROM PROPOSED RECONNECTION POINT. THIS PLANNED SERVICE INTERRUPTION SHALL BE COORDINATED WITH THE ENGINEER.

16.ALL EXISTING METERS THAT OVERLAP THIS RELOCATION SEGMENT SHALL BE SWITCHED OVER TO THIS NEW SEGMENT.

17.CONTRACTOR SHALL CONNECT TO EXIST. 8" GATE VALVE USING NIPPLE AND FULLBODY SLEEVE AND RESTRAINING GLANDS AND LAY BACK INTO EXISTING 8" WATER MAIN IN TWIN ACRES DR. WITH A MINIMUM OF 20 LF OF RESTRAINED JOINT UNDER PLANNED SERVICE INTERRUPTION AND SHALL BE COORDINATED WITH THE ENGINEER. THIS PART OF WL-28 SHALL BE SWABBED PRIOR TO RECONNECTION OF THE EXISTING 8"WATER MAIN.

18.THE EXISTING 8"WATER MAIN AT TWIN ACRES DRIVE SHALL BE KILLED OUT BY PERMANENTLY CLOSING AND ABANDONING EXISTING VALVE EV-75. KILL OUT SHALL BE DONE BETWEEN 9:00 P.M. TO 6:00 A.M. TO COMPLY WITH TRAFFIC CONTROL REQUIREMENTS AND MINIMIZE SERVICE INTERRUPTION.

UC-24A UTILITY NOTES:

1.TEMPORARY SHORING IF REQUIRED FOR BUILDING FOUNDATION PROTECTION OR MAINTENANCE OF TRAFFIC WILL BE PAID AS TEMPORARY SHORING IN SQUARE FEET BELOW GROUND SURFACE.

2.CONTRACTOR SHALL SUBMIT A DETAILED SEWAGE BYPASS PLAN FOR MAINTAINING ALL SEWAGE FLOWS THAT WILL BE IMPACTED BY THE SEWER RELOCATION AND ADHERE TO ALL REQUIREMENTS IN OWNER'S WASTE WATER CONTROL SPECIFICATIONS.

3.CONTRACTOR SHALL VERIFY SEWER SERVICE DEPTH AND LOCATION PRIOR TO ORDERING MATERIALS.

4.CONTRACTOR SHALL REPLACE EXISTING CLEAN OUT AND SEWER SERVICE LINE AT SAME DEPTH AND SLOPE.

5.CONTRACTOR SHALL REMOVE EXISTING CLEAN OUT AND EXISTING SEWER SERVICE TO PROPOSED CLEAN OUT LOCATION. CONTRACTOR SHALL GROUT FILL EXISTING SERVICE CORE IN MANHOLE WITH NON-SHRINK GROUT.

6.SEE SEWER FROM 23A NOTES FOR SEWER CONNECTION TO OUTFALL.

REVISIONS

UTILITY REV. - JULY 23, 2008 - REVISED ALL CONSTRUCTION NOTES

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