

PROJECT REFERENCE NO.	SHEET NO.
R-5014	UC-4
DESIGNED BY: DMD	
DRAWN BY: DMD/MNG	
CHECKED BY: JDB	
APPROVED BY: CMT	
REVISED:	UTILITY CONSTRUCTION PLANS ONLY
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

THIS SHEET CORRESPONDS TO RDY-6
SEE SHEET 17 FOR -WL- PROFILE

RESTRAIN JOINTS OF EXIST. WATER LINE
SEE DETAIL A ON SHEET UC-3G
-L- STA. 50+75 TO 51+75

PROP. 12" -11 1/4° BEND
-WL1- STA. 9+93.54

RECONNECT WATER METER
SEE DETAIL A ON SHEET UC-3B (TYP)

PROP. 12" -11 1/4° BEND
-WL1- STA. 9+21.80

PROP. 12" -22 1/2° BEND
-WL1- STA. 8+39.58

PROP. 12" -22 1/2° BEND
-WL1- STA. 7+99.57

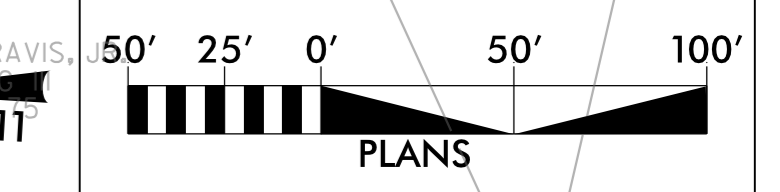
PROP. 12" -22 1/2° BEND
-WL1- STA. 7+51.08

ABANDON 900' OF 6" UTILITY PIPE
EXIST. 6" AC WATER LINE
SEE NOTES 1 & 2
-L- STA. 42+01 TO 50+76

ABANDON 790' OF 12" UTILITY PIPE
EXIST. 12" PVC WATER LINE
SEE NOTES 1 & 2
-L- STA. 42+54 TO 50+74

PROP. WATER METER
PROP. ROW

CONNECT TO EXIST. 2" SERVICE LINE
WITH A 12"x4" TEE, 4"x2" REDUCER,
PROP. 2" GATE VALVE, AND 14' OF 2" WATERLINE
-WL1- STA. 5+70.75



MATCH LINE -L- STA. 53+00.00
SEE SHEET UC-5

PROP. 12"x6" TEE WITH BLIND FLANGE
UNK SIZE/TYP

EXIST. 6" WATER LINE

EXIST. 4" WATER LINE

PROP. THRUST BLOCK FOR 12" WATER LINE

PROP. WATER METER
SEE DETAIL A ON SHEET UC-3B (TYP)

RECONNECT WATER METER

PROP. 12" -11 1/4° BEND
-WL1- STA. 5+40.66

EXIST. UG POWER CROSSING
-WL1- STA. 5+17.37

RECONNECT WATER METER

PROP. 12" -11 1/4° BEND
-WL1- STA. 3+95.68

RECONNECT WATER METER

RECONNECT WATER METER

- NOTE:**
1. THE EXISTING 8" AC WATERLINE, ON THE SOUTH SIDE OF COLINGTON ROAD, IS TO REMAIN IN SERVICE DURING THE CONSTRUCTION OF THE PROPOSED 12" PVC WATERLINE. THE CONTRACTOR IS RESPONSIBLE TO PROTECT THE EXISTING WATERLINE DURING CONSTRUCTION.
 2. AFTER COMPLETION OF THE PROPOSED 12" PVC WATERLINE, THE EXISTING 8" AC WATERLINE IS TO BE ABANDONED IN PLACE AND FILLED WITH GROUT FROM -L- STA. 41+83 TO -L- STA. 211+55, PER THE SPECIAL PROVISIONS SECTION OF THE SPECIFICATIONS, PG 75
 3. ALL PROPOSED WATERLINE SHALL BE 12" C900 PVC.
 4. ALL PIPE FITTINGS SHALL BE DUCTILE IRON.
 5. REFER TO THE RESTRAINED JOINT DETAIL ON SHEET UC-3G FOR RESTRAINED JOINT LENGTHS.
 6. ELEVATION OF EXISTING WATERLINES ARE ASSUMED TO BE 3- FEET BELOW EXISTING GRADE. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE EXISTING WATERLINE PRIOR TO MAKING THE CONNECTION.
 7. CONNECTIONS TO EXISTING WATERLINE ARE TO BE RESTRAINED BY THRUST COLLARS. SEE DETAIL A ON SHEET UC-3E.
 8. WITH APPROVAL FROM THE NCDOT ENGINEER, IN AREAS WHERE THE RIGHT-OF-WAY IS BOUNDED BY WETLANDS OR CONSERVATION AREA, SUSPEND THE FUSIBLE PVC PIPE STRING WITH A BACKHOE OR CRANE OVER THE SENSITIVE AREA FOR PULL-IN. FOR AREAS OF PRIVATE PROPERTY, THE CONTRACTOR SHALL UTILIZE THE CARTRIDGE METHOD, MULTIPLE SHORT PIPES WITH FUSION IN THE PIT.

INSET B

PROP. 40' OF 6" WATER LINE
C900 PVC

PROP. 6"x4" REDUCER
PROP. 4" VALVE

EXIST. 12" WATER LINE

EXIST. 4" WATER LINE

CONNECT TO EXIST. 4" WATERLINE WITH TRANSITION COUPLING

RELOCATE FIRE HYDRANT
PROP. 15 LF OF FIRE HYDRANT LEG
PROP. 6" VALVE

15" RCP (SEE ROADWAY DESIGN)

PROP. 12" -11 1/4° BEND
-WL1- STA. 5+40.66

EXIST. UG POWER CROSSING
-WL1- STA. 5+17.37

RECONNECT WATER METER

PROP. 12" -11 1/4° BEND
-WL1- STA. 3+95.68

RECONNECT WATER METER

RECONNECT WATER METER

PROP. 80' OF 16" ENCASEMENT
INSTALLED BY OPEN CUT
SEE DETAIL F ON SHEET UC-3D
-WL1- STA. 0+49 TO 1+29
AND PROP. 90' OF 12" FUSIBLE PVC
-WL1- STA. 0+44 TO 1+34

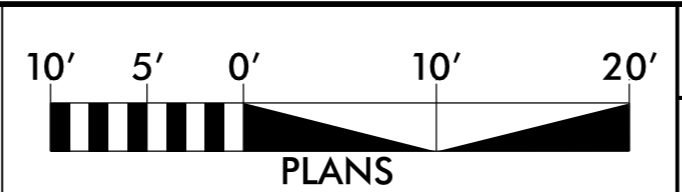
PROP. 1267' OF 12" WATERLINE
C900 PVC SEE DETAIL F ON SHEET UC-3C (TYP)

RECONNECT WATER METER

RECONNECT WATER METER

RECONNECT WATER METER

PROP. 2" VALVE, AND 10' OF 2" WATERLINE



PROP. 12" -45° BEND
-WL1- STA. 10+67.83

PROP. 20' OF 4" WATER LINE
C900 PVC

PROP. THRUST COLLAR FOR 6" WATER LINE

PROP. 12" -45° BEND
-WL1- STA. 10+62.32

PROP. 12" VALVE
-WL1- STA. 10+53.36

RELOCATE FIRE HYDRANT
PROP. 15 LF OF FIRE HYDRANT LEG
PROP. 6" VALVE

PROP. 12"x6" TEE WITH BLIND FLANGE

PROP. THRUST BLOCK FOR 12" WATER LINE
SEE DETAIL B ON SHEET UC-3E (TYP)

PROP. 12"x6" TEE

EXIST. 12" WATER LINE

EXIST. 6" WATER LINE

EXISTING ROW

RECONNECT WATER METER

RECONNECT WATER METER

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RECONNECT WATER METER

INSET A

PROP. THRUST COLLAR FOR 12" WATER LINE
PROP. 12" VALVE

PROP. 25' OF 12" WATER LINE
DUCTILE IRON

PROP. 12" -90° BEND
-WL1- STA. 11+27.33

CONNECT TO PROP. 12" WATERLINE WITH PROP. 12"x12" TEE AND 12" RESTRAINED MJ SLEEVE
-WL1- STA. 11+32.45

-L- STA. 51+74.17, 21.43' LT
16" ENCAS. BY OC

PROP. 42' OF 16" ENCASEMENT
INSTALLED BY OPEN CUT
SEE DETAIL F ON SHEET UC-3D
-WL1- STA. 10+72 TO 11+14

PROP. 50' OF 12" FUSIBLE PVC
-WL1- STA. 11+19.33

PROP. 12" -90° BEND
-WL1- STA. 11+19.33

PROP. 12" AIR RELEASE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

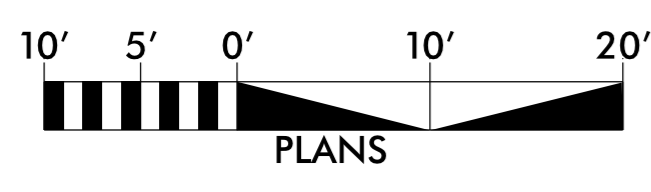
PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE

PROP. 12" WATER LINE



INSET C

PROP. THRUST COLLAR FOR 6" WATER LINE

PROP. 30' OF 6" WATER LINE

PROP. 12"x6" TEE
ROTATED 45° VERTICALLY

PROP. THRUST BLOCK FOR 6" WATER LINE

PROP. 6" -45° VERTICAL BEND

PROP. 6" VALVE

CONNECT TO EXIST. 6" WATER LINE WITH TRANSITION COUPLING

CONNECT TO EXIST. 6" WATER LINE WITH TRANSITION COUPLING

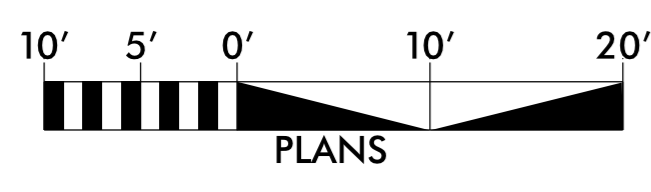
CONNECT TO EXIST. 6" WATER LINE WITH TRANSITION COUPLING

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CONNECT TO EXIST. 6" WATER LINE WITH TRANSITION COUPLING



INSET D

BEGIN PROJECT
CONNECT TO EXIST. 8" AC WATER LINE WITH A 8" TRANSITION COUPLING
-WL1- STA. 0+00.00
-L- STA. 41+66.10, 12.20' RT

PROP. THRUST COLLAR FOR 12" WATER LINE
SEE DETAIL A SHEET UC-3E (TYP)

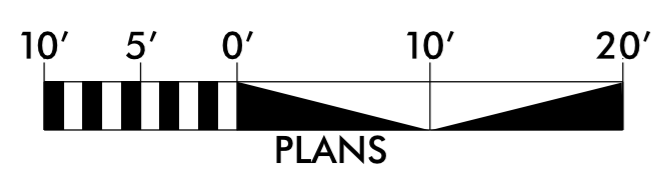
PROP. 12" VALVE
-WL1- STA. 0+27.71
SEE DETAILS C AND D ON SHEET UC-3C (TYP)

PROP. 12"x8" TEE
-WL1- STA. 0+41.33

PROP. 30' OF 8" WATERLINE
C900 PVC SEE DETAIL F ON SHEET UC-3C (TYP)

PROP. 8" -45° BEND

PROP. THRUST COLLAR FOR 8" WATER LINE



PROPOSED 8,325 POUNDS OF DUCTILE IRON WATER PIPE FITTINGS

8/17/99
SYSTEME - UC03R5014_UC4_psh.dgn
USER: GYANTM