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5/14/99

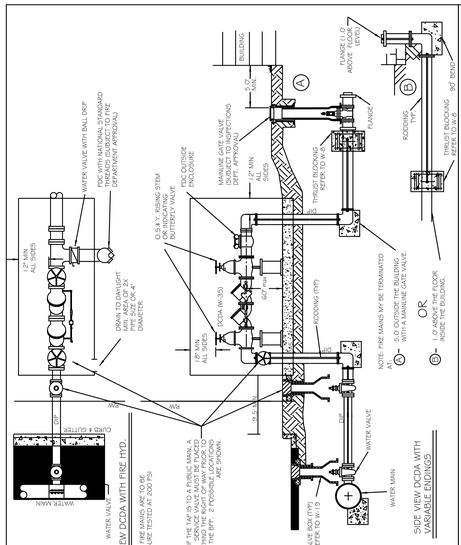
REVISIONS

Kimley»Horn ©2024
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.	SHEET NO.
P-5720	UC-3D
DESIGNED BY: DGB	
DRAWN BY: DGB	
CHECKED BY: ZGP	
APPROVED BY: NDR	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE:(919)707-6690 FAX:(919)250-4151	UTILITY CONSTRUCTION PLANS ONLY

NORTH CAROLINA PROFESSIONAL SEAL 037953 ENGINEER NOLAND RAMSEY
BY: CHIP GAMMON
1/23/2024

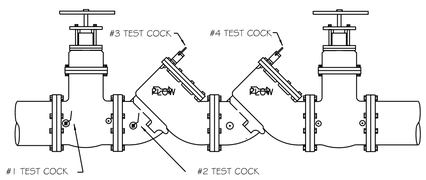
UTILITY CONSTRUCTION



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

TYPICAL FIRE MAIN DOUBLE DETECTOR CHECK VALVE ASSEMBLY

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-37	Y.C.A.	6-92	ABB	10-4-04
	D.W.C.	11-3-99	D.H.L.	6/18/08

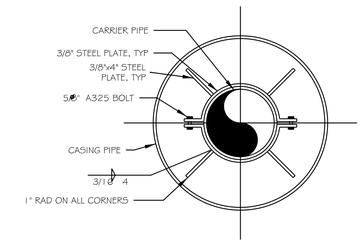


1. SHUT-OFF VALVES, CHECK VALVES, AND TEST COCKS SHALL BE STANDARD TO THE APPROVED BACKFLOW ASSEMBLY.
2. ALL LARGE(2-1/2" - 10") ASSEMBLIES TO BE SUPPORTED BY A CRADLE.
3. ENCLOSURE FOUNDATIONS SHALL BE CONSTRUCTED OF 4" OF CONCRETE OR 6" OF STONE.
4. ASSEMBLIES MUST BE ON CURRENT APPROVAL LIST.
5. 2 1/2" AND LARGER ASSEMBLIES SHALL BE FUSION BONDED EPOXY COATED INCLUDING SHUTOFF VALVES.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

STANDARD DOUBLE CHECK VALVE ASSEMBLY

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-38	D.W.C.	12-29-99	A.B.B.	4-13-04
	RRH	3-31-00	D.H.L.	6/18/08



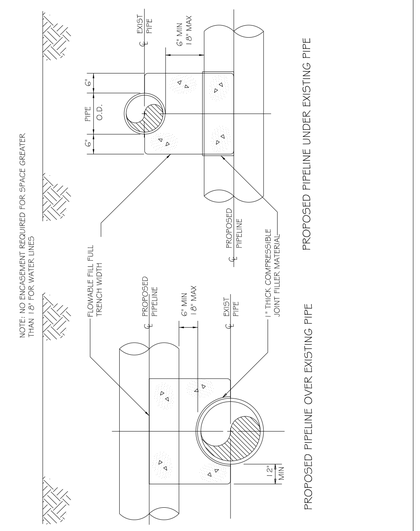
NOTE:

1) USE A MINIMUM OF TWO SPIDERS PER PIPE JOINT ONE FOURTH OF THE PIPE JOINT LENGTH IN FROM BOTH THE BELL AND SPIGOT ENDS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

PIPE ALIGNMENT GUIDE

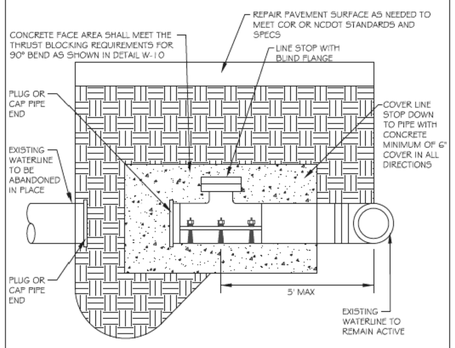
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-40	RRH	3-31-00		
	A.B.B.	4-16-04		



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

CONCRETE CRADLE PROTECTION FOR WATER LINE CROSSINGS

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-41	DHL	2-20-08		

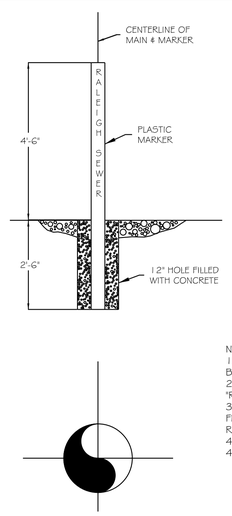


NOTES:
1. LINE STOP SHALL INCLUDE TAPPING SLEEVE, TEMPORARY VALVE, PILOT DRILL, STOPPER, COMPLETION PLUG, AND PROTECTIVE CAP. THE FINAL TAPPED PLUG SHALL BE RATED FOR A MINIMUM OF 150 PSI.
2. INSTALL LINE STOP PER MANUFACTURER'S INSTRUCTIONS.
3. ONCE LINE STOP IS INSTALLED AND THE WATER FLOW IS STOPPED. CUT & PLUG OR CAP BOTH ENDS OF PIPE
4. INSTALL CONCRETE AROUND LINE STOP AND CAPPED ENDS OF PIPE.
5. AT GRADE REPAIR TO MATCH EXISTING SURFACE. SEE DETAIL W-1 OR W-2.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

LINE STOP FOR LINE ABANDONMENT DETAIL

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-42	MAB	1-23-15		

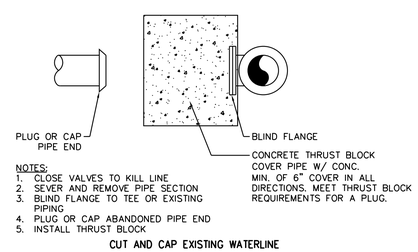


NOTES:
1. PLASTIC MARKER SHALL BE GREEN IN COLOR.
2. MARKERS SHALL BE LABELED "RALEIGH SEWER"
3. TO BE SPACED EVERY 300 FEET ON EACH SIDE OF ANY ROADWAY OR JUNCTION.
4. MARKERS SHALL BE ROUND 4" IN DIAMETER.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

STANDARD MAIN MARKER FOR SEWER FORCE MAINS IN EASEMENTS

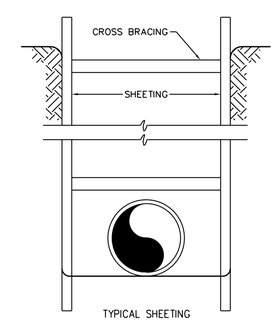
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-8	RRH	1-21-00		
	DHL	6-18-08		



NOTES:
1. CLOSE VALVES TO KILL LINE
2. SEVER AND REMOVE PIPE SECTION
3. BLIND FLANGE TO TEE OR EXISTING PIPING
4. PLUG OR CAP ABANDONED PIPE END
5. INSTALL THRUST BLOCK

CUT AND CAP EXISTING WATERLINE

0232203



TYPICAL SHEETING

0222121

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-4499

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-3582

The City of Raleigh consents to the connection and extension of the private sewer collection system as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # N/A

CITY OF RALEIGH – PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval _____

City of Raleigh Review Officer

1/23/2024