

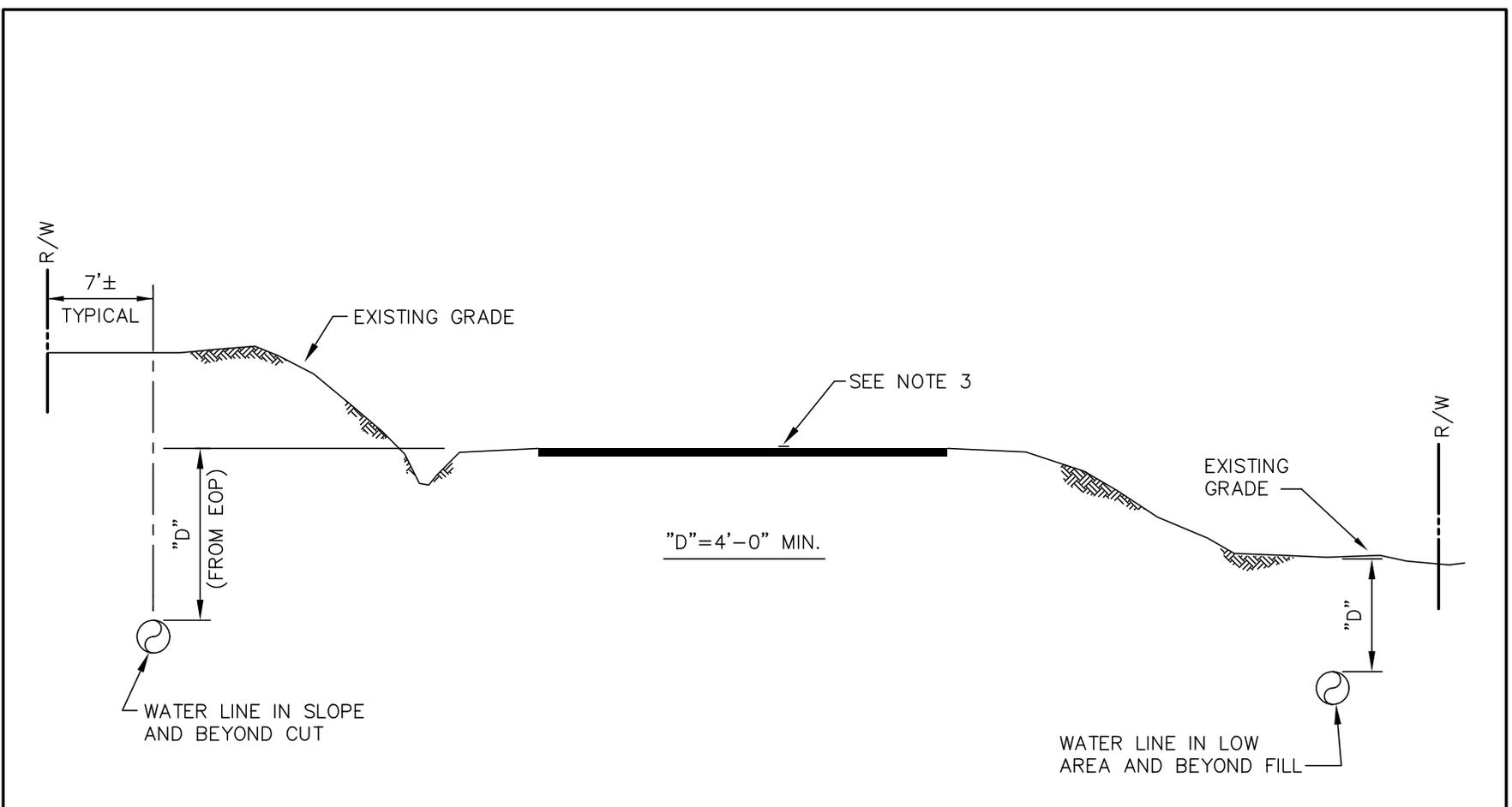
Approved By: _____	Date: _____
Revision No. _____	Date: _____

WATER
UTILITY



ENGINEERING
DEPARTMENT

STANDARD
DETAIL NUMBER
11.5-1



- NOTES:
1. WATER LINES SHALL BE LOCATED ON THE NORTH AND EAST SIDE OF THE ROADWAY UNLESS OTHERWISE APPROVED.
 2. SANITARY SEWER LINES SHALL BE INSTALLED AS REQUIRED TO SERVE THE AREA.
 3. REFLECTIVE MARKERS SHALL BE INSTALLED AT ALL HYDRANT LOCATIONS. MARKERS SHALL BE INSTALLED 1'-0" RIGHT OF CENTER LINE OF ROADWAY.

TYPICAL WATER & SEWER UTILITY LOCATION DETAIL-1
NEW & EXISTING COLLECTOR / ARTERIAL ROADS

NO SCALE

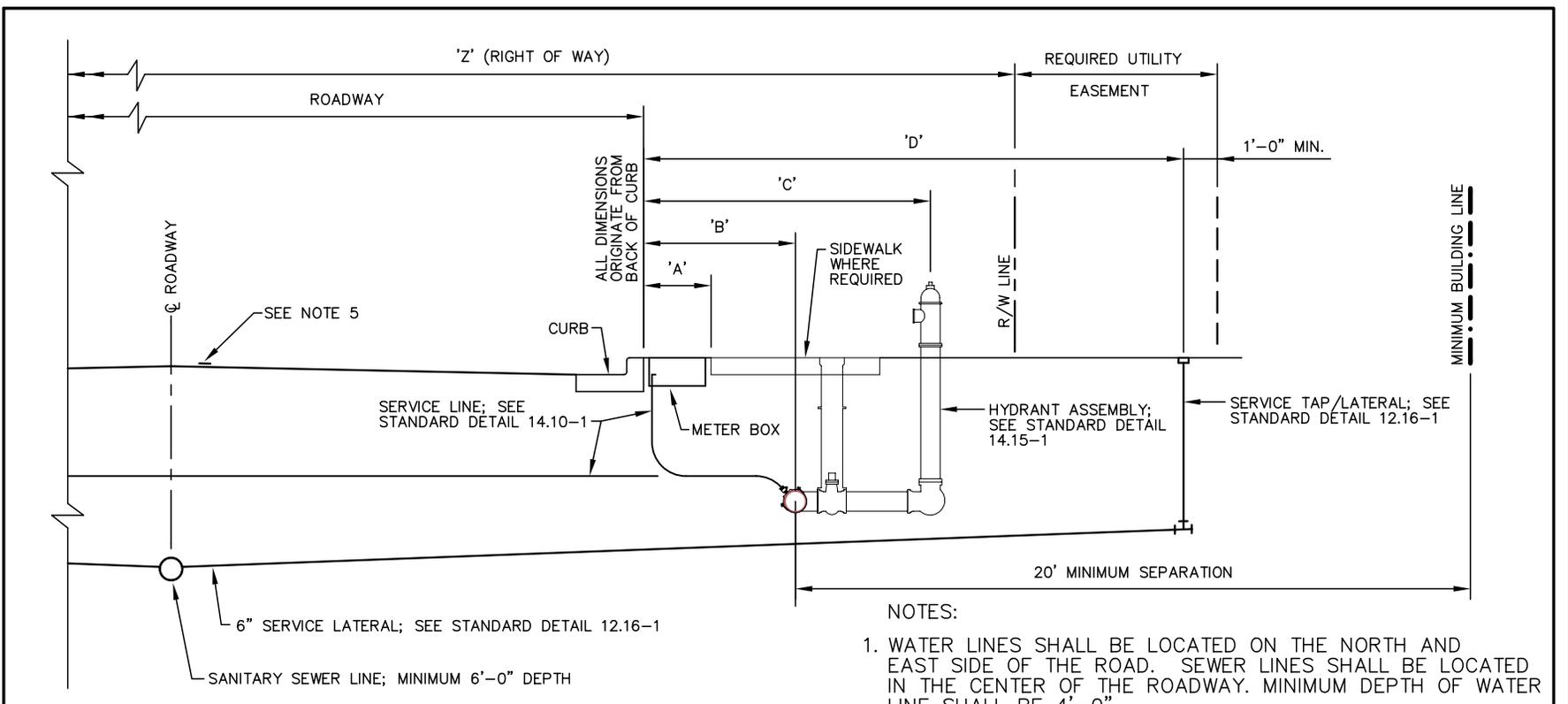
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WATER
UTILITY



ENGINEERING
DEPARTMENT

STANDARD
DETAIL NUMBER
11.5-2



- NOTES:
1. WATER LINES SHALL BE LOCATED ON THE NORTH AND EAST SIDE OF THE ROAD. SEWER LINES SHALL BE LOCATED IN THE CENTER OF THE ROADWAY. MINIMUM DEPTH OF WATER LINE SHALL BE 4'-0".
 2. SEE INDIVIDUAL STANDARD DETAILS FOR SPECIFICS. THESE DIMENSIONS COVER THE MINIMUM DISTANCES REQUIRED TO INSTALL WATER & SEWER SERVICE WITHIN THE DEVELOPMENT. VARIANCES FROM THESE DIMENSIONS SHALL BE REVIEWED AND APPROVED BY THE CCWUED ON A CASE BY CASE BASIS.
 3. SEE STANDARD DETAIL 11.5-1 AND 11.5-3 FOR DIFFERENT ROADWAY CONFIGURATIONS AND UTILITY LOCATIONS.
 4. ALL STORM LINES SHALL BE LOCATED OPPOSITE WATER LINES. A PARALLELISM OF STORM AND WATER LINE IS NOT PERMITTED. ALL FORCE MAINS SHALL BE LOCATED OPPOSITE WATER LINES AND 5'-0" OFF CURB. ALL FORCE MAINS SHALL HAVE A MINIMUM DEPTH OF 4'-0".
 5. REFLECTIVE MARKERS SHALL BE INSTALLED AT ALL HYDRANT LOCATIONS. MARKERS SHALL BE INSTALLED 1'-0" RIGHT OF CENTER LINE OF ROADWAY.

WATER & SEWER LOCATIONS					
'A'	'B'	'C'	'D'	'Z' MAX.	REMARKS
N/A	5'-0"	8'-6"	16'-0"	50'	MINIMUM DISTANCE; NO SIDEWALK
2'	5'-0"	8'-6"	16'-0"	50'	2' PLANTER; 5' SIDEWALK
5'	7'-6"	11'-6"	19'-0"	50'	5' PLANTER; 5' SIDEWALK

TYPICAL WATER & SEWER UTILITY LOCATION
DETAIL-2 FOR LAND SERVICE STREET

SCALE: 1"=5'

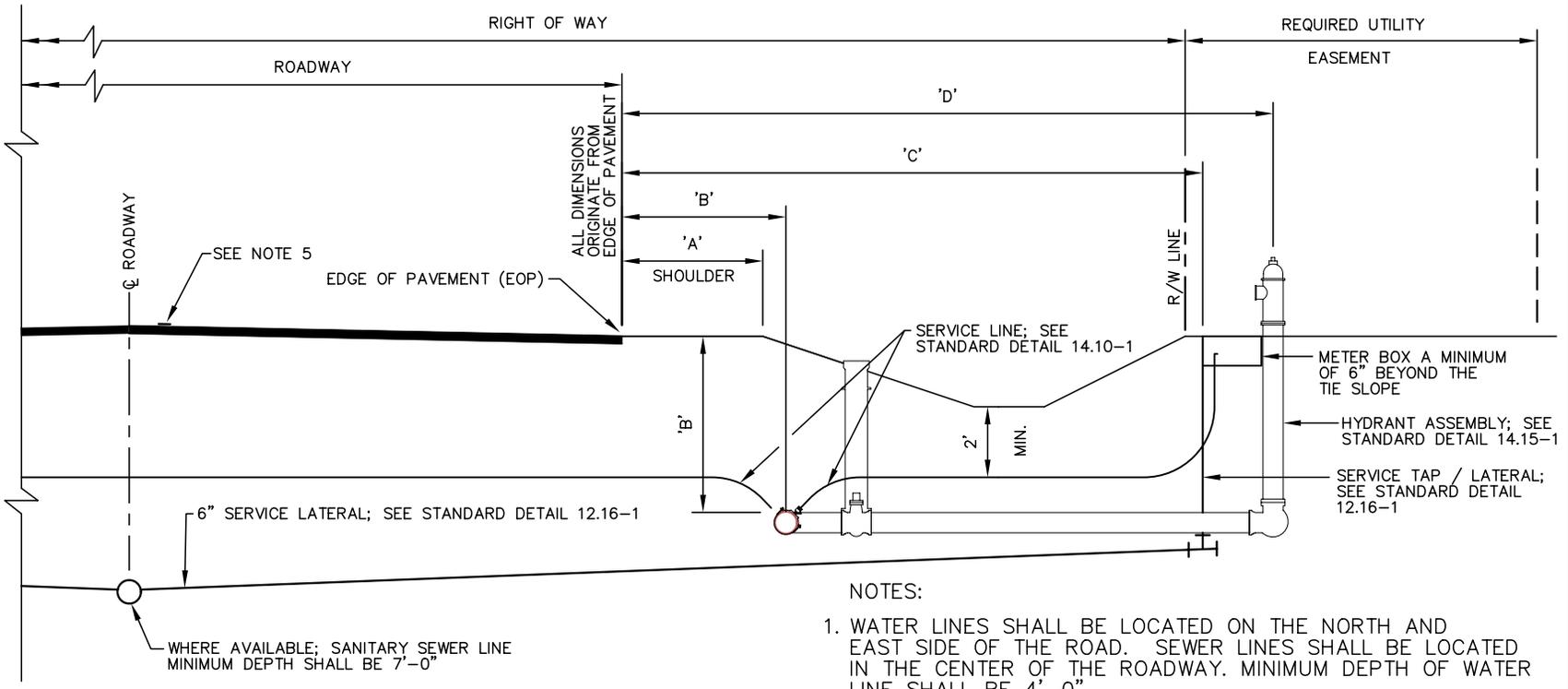
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WATER UTILITY



ENGINEERING DEPARTMENT

STANDARD
DETAIL NUMBER
11.5-3

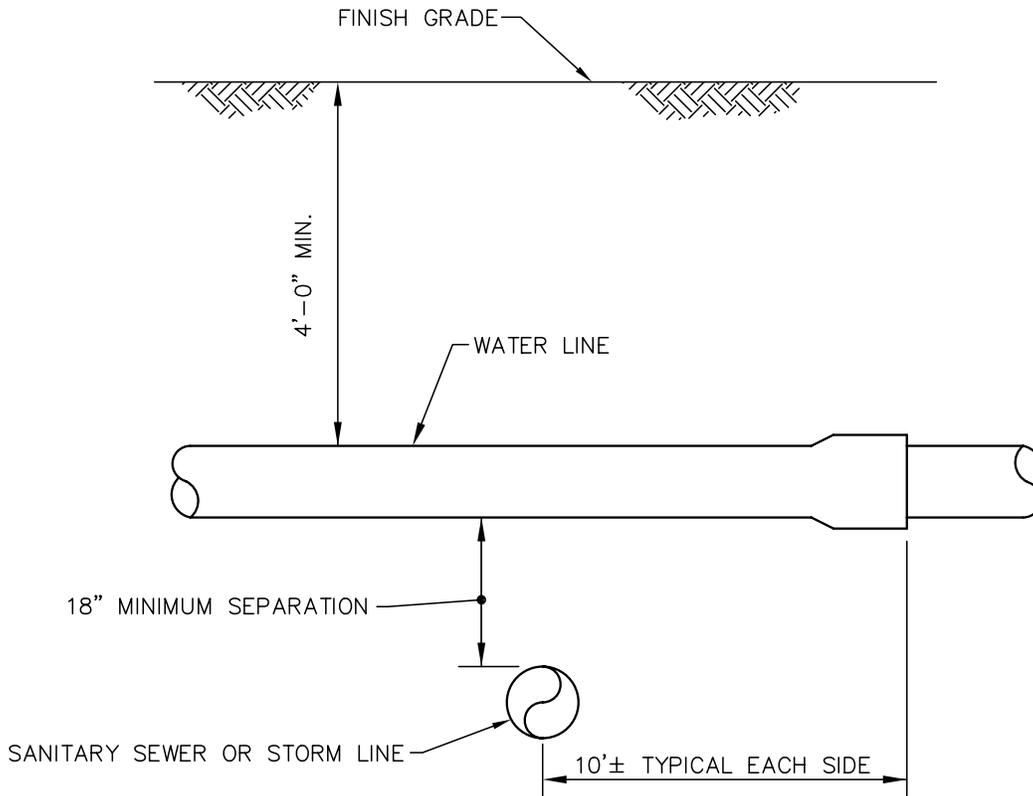


- NOTES:
1. WATER LINES SHALL BE LOCATED ON THE NORTH AND EAST SIDE OF THE ROAD. SEWER LINES SHALL BE LOCATED IN THE CENTER OF THE ROADWAY. MINIMUM DEPTH OF WATER LINE SHALL BE 4'-0".
 2. SEE INDIVIDUAL STANDARD DETAILS FOR SPECIFICS. THESE DIMENSIONS COVER THE MINIMUM DISTANCES REQUIRED TO INSTALL WATER & SEWER SERVICE WITHIN THE DEVELOPMENT. VARIANCES FROM THESE DIMENSIONS SHALL BE REVIEWED AND APPROVED BY THE CCWUD ON A CASE BY CASE BASIS.
 3. SEE STANDARD DETAIL 11.5-1 AND 11.5-2 FOR DIFFERENT ROADWAY CONFIGURATIONS AND UTILITY LOCATIONS.
 4. ALL STORM LINES SHALL BE LOCATED OPPOSITE WATER LINES. A PARALLELISM OF STORM AND WATER LINE IS NOT PERMITTED. ALL FORCE MAINS SHALL BE LOCATED OPPOSITE WATER LINES AND 5'-0" OFF CURB OR EOP. ALL FORCE MAINS SHALL HAVE A MINIMUM DEPTH OF 4'-0".
 5. REFLECTIVE MARKERS SHALL BE INSTALLED AT ALL HYDRANT LOCATIONS. MARKERS SHALL BE INSTALLED 1'-0" RIGHT OF CENTER LINE OF ROADWAY.

WATER & SEWER LOCATIONS				
'A'	'B'	'C'	'D'	REMARKS
4'	5'-0"	16'-6"	18'-6"	MINIMUM DISTANCE; 4' SHOULDER
5'	5'-0"	17'-6"	19'-6"	5' SHOULDER
6'	5'-0"	18'-6"	20'-6"	6' SHOULDER

**TYPICAL WATER & SEWER UTILITY LOCATION
DETAIL-3 FOR RURAL LAND SERVICE STREET**

SCALE: 1"=5'



NOTE:

1. WHERE AN 18" SEPARATION IS NOT POSSIBLE, 1 JOINT OF DUCTILE IRON PIPE MUST BE INSTALLED OVER OR UNDER THE PIPE CROSSING.
2. WHERE THERE IS AN APPARENT CONFLICT CROSSING A SANITARY OR STORM SEWER LINE, SEE STANDARD DETAIL FOR VERTICAL OFFSETS.

TYPICAL WATER & SEWER LINE
SEPARATION DETAIL

NO SCALE

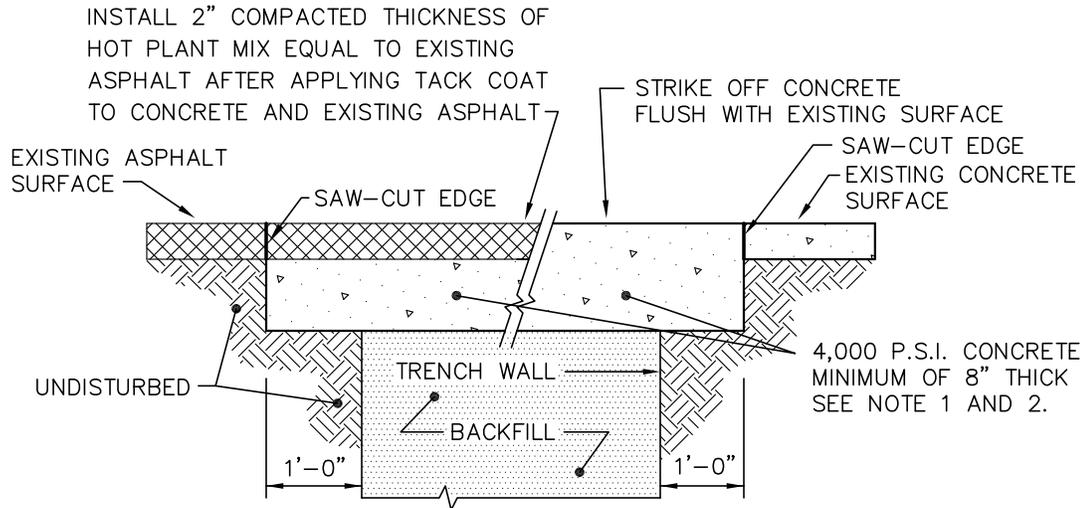
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WATER
UTILITY



ENGINEERING
DEPARTMENT

STANDARD
DETAIL NUMBER
11.5-4



NOTES:

1. ENTIRE DEPTH OF BACKFILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 8" AND COMPACTED TO 95% DENSITY PER ASTM D698.
2. METAL TRENCH PLATES ARE REQUIRED WHERE OPEN CUTS SHALL UTILIZE CONCRETE.
3. AN 8" THICK, 19MM ASPHALT BINDER LIFT MAY BE USED IN LIEU OF THE CONCRETE WHERE THE ROADWAY SHALL BE COMPLETELY OVERLAYED WITHIN THE PROJECT. ASPHALT SHALL BE INSTALLED IN 2 - 4" THICK COMPACTED LIFTS.
4. A 50' WIDE TAPERED OVERLAY MAY APPLY IN ACCORDNACE WITH COLUMBIA COUNTY ENGINEERING DEPARTMENT.

PAVEMENT REPLACEMENT OVER
TRENCH EXCAVATION DETAIL

N.T.S.

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WATER
UTILITY



ENGINEERING
DEPARTMENT

STANDARD
DETAIL NUMBER
11.5-5