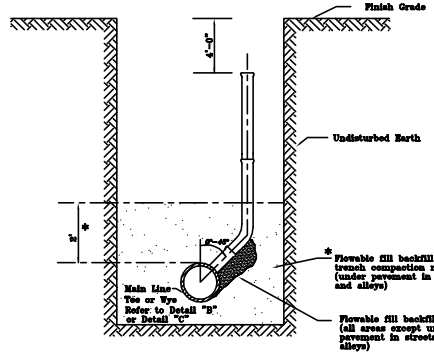


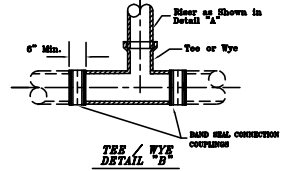
CLASS C STANDARD BEDDING DETAILS
NOT TO SCALE

I.D. PIPE	STANDARD TRENCH WIDTH
2" - 12"	30"
14" - 18"	38"
20" - 24"	42"
28" - 30"	54"
32" - 36"	60"
38" - 42"	66"
44" - 48"	72"
50" - 54"	78"
58" - 60"	84"

STANDARD TRENCH WIDTH



DETAIL "A"



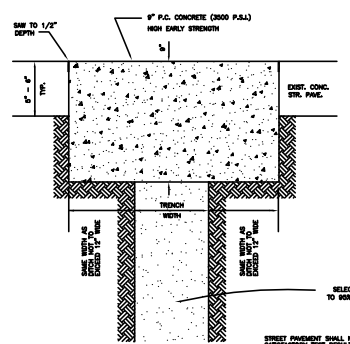
TEE / WYE DETAIL "B"

- Notes:**
1. CITY CITY COMPLETE SECTION OF THE MAINLINE AND REPLACE WITH THE OR VTR CITY EXISTING PIPE BY THE USE OF CONCENTRIC CLAY PIPE CUTTING TOOL.
 2. NEW SECTION OF MAIN LINE TWO SAND SEAL CONCENTRIC COUPPLERS TO BE INSTALLED TO THE MAINLINE AND PERFORMANCE STANDARD OF 1/8" CLEARANCE FOR CONCENTRIC JOINTS PER VTR/CITY CLAY PIPE AND FITTINGS.
 3. THE OR VTR SHALL BE CAST, UNLESS OTHERWISE NOTED ON DRAWING. FLANGE FITTING WITH EQUAL CLEARANCE TO MAIN LINE, BUT WITH 1/8" GAP.
 4. CITY CITY COMPLETE SECTION OF THE MAINLINE AND REPLACE WITH THE OR VTR CITY EXISTING PIPE BY THE USE OF CONCENTRIC CLAY PIPE CUTTING TOOL.
 5. THE OR VTR SHALL BE CAST, UNLESS OTHERWISE NOTED ON DRAWING. FLANGE FITTING WITH EQUAL CLEARANCE TO MAIN LINE, BUT WITH 1/8" GAP.
 6. THERE A NEW SECTION THE VTR IS INSTALLED, FLOWABLE FILL SHALL BE PLACED TO EQUAL LINE OF VTR OR THE ALL MAIN.

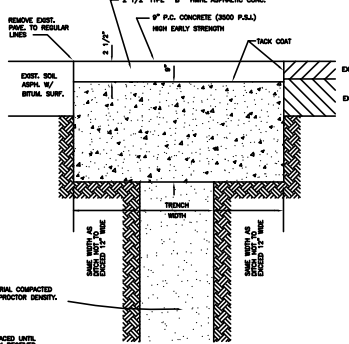
SERVICE TEE / WYE INSTALLATION
Not To Scale

- Notes:**
1. SERVICE SERVICE LINE AND OR SERVICE LINE CONNECTIONS AND TRENCH PAVED SURFACES OR ALLEYS THE EXISTING SHALL BE CONSTRUCTED OF CAST IRON AND MANHOLE SHALL BE CONSTRUCTED TO THE STANDARD PRACTICE.
 2. ALL ABOVE SERVICE LINE CONNECTIONS SHALL BE CONSTRUCTED TO BEHIND OF SIDEWALKS AND FLOWABLE FILL SHALL BE PLACED TO EQUAL LINE OF THE MAIN LINE.
 3. TRENCH BACKFILL SHALL BE COMPACTED PER A STANDARD SHALL BE PROTECTED BY PLACEMENT OF FLOWABLE FILL TO A MINIMUM OF 18" FROM THE SERVICE LINE TO THE MAIN LINE.
 4. THERE SERVICE LINE OF THE OR VTR SHALL NOT BE SMALLER THAN THE MAINLINE OF SERVICE LINE AS TO BE PROTECT OF SERVICE LINE SHALL BE LARGER THAN MAIN LINE TO MAIN.

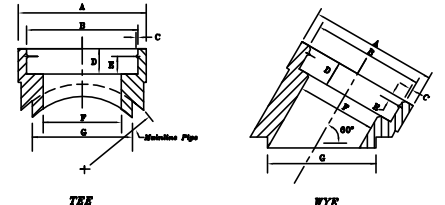
SANITARY SEWER SERVICE LINE CONNECTION
Not To Scale



TYPICAL SECTION FOR REPLACEMENT OF P.C. CONCRETE STREET & ALLEY PAVEMENT
NOT TO SCALE



TYPICAL SECTION FOR REPLACEMENT OF BITUMINOUS STREET & ALLEY PAVEMENT
NOT TO SCALE



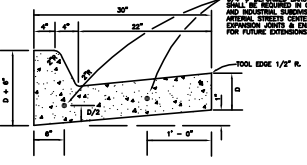
DETAIL "C"

SIZE	A	B	C	D	E	F	G	MAINLINE PIPE
MINIMUM 6" x 6"	6 3/4"	6 1/4"	1 1/2"	1 1/4"	1 1/2"	12/16"	1 1/4"	6" 12" Class 15" Spigot
MINIMUM 8" x 8"	8"	7 5/8"	2 1/2"	1 3/4"	1 3/4"	1 1/2"	6" 12" Class 15" Spigot	
MINIMUM 10" x 10"	10"	9 1/2"	3 1/2"	2 1/4"	2 1/4"	1 1/2"	6" 12" Class 15" Spigot	
MIN. PIPE 8" x 8"	12/16"	1 1/4"	1 1/2"	1 1/4"	1 1/2"	1 1/4"	6" 12" Class 15" Spigot	

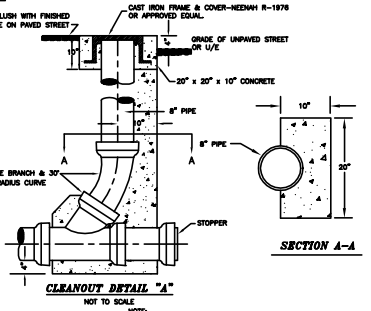
- Notes:**
1. MANHOLE TAPPING SADDLE KIT OR EQUAL MEETS ALL PERFORMANCE CRITERIA OF ASTM C-700 AND C-885.
 2. MATERIALS USED SHALL BE HIGH STRENGTH UNWEARABLE.
 3. FITTINGS TO BE INSTALLED INTO EXISTING MAIN LINE WITH EXACT ALIGNMENT.
 4. COVER SHALL BE TYPICAL WITH HIGH STRENGTH TAPPING SADDLE. SEE FORMER 1 1/2" S.P. 4" AND 6" TAPED, WATER COVER, MANHOLE COVERING WEARS, (OR EQUAL).
 5. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

TAPPING SADDLE KIT
Not To Scale

- GENERAL NOTES:**
1. THE PURPOSE OF THIS DETAIL IS TO PROVIDE A STANDARD METHOD OF REPLACING THE EXISTING SERVICE LINE CONNECTIONS TO THE PUBLIC SANITARY MAIN LINE. THE MAIN LINE SHALL BE INSTALLED TO THE MAINLINE AND REPLACE WITH THE OR VTR CITY EXISTING PIPE BY THE USE OF CONCENTRIC CLAY PIPE CUTTING TOOL. ANY OTHER METHOD SHALL BE APPROVED BY THE CITY ENGINEER.
 2. FLOWABLE FILL SHALL CONSIST OF A MIXTURE OF SAND, GRUNT AND WATER TO BE COMPACTED TO A DENSITY OF 95% OF THE THEORETICAL MAXIMUM DENSITY OF THE SAND, GRUNT AND WATER MIXTURE AS DETERMINED BY STANDARD TEST FOR FLOWABLE FILL.



COMBINED CURB & GUTTER DETAIL
NOT TO SCALE



CLEANOUT DETAIL "A"
NOT TO SCALE

400 West 10th Street
 Des Moines, IA 50319-0001
 Telephone: (515) 281-2222
 Fax: (515) 281-2222
 Website: www.ci-desmoines.org
CONTRACT:
 Project Name:
 Project Number:
 Sheet: 3 of 3

THE CITY OF DES MOINES

REV.	DATE	DESCRIPTION

SPECIFICATION DETAILS

Lot 1, Block 4,
Sequoiah Hills Addition

Date: 6/5/24
 Scale: NO SCALE
 Civil Engineer: ROBERT S. HILL
 Drawn By: J.P.B.
 Designed By: J.P.B.
 Approved By: J.P.B.
 Sheet: 3 of 3