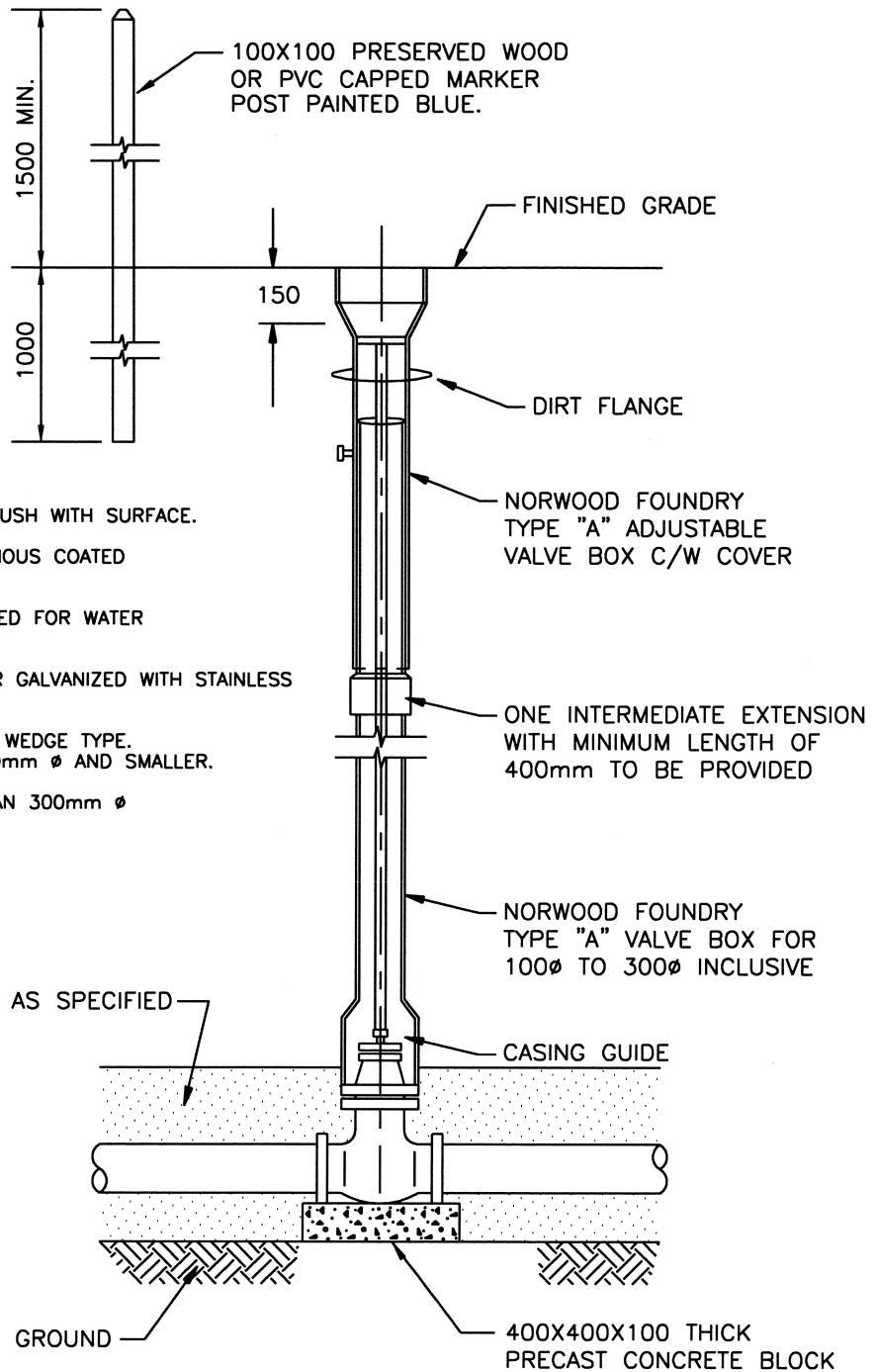


REVISIONS	
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Town of Whitecourt	
STANDARD HYDRANT CONNECTION DETAIL	
APPROVED:	STD. DWG. No.
SCALE: N.T.S.	2-01
DATE: JANUARY, 1996	


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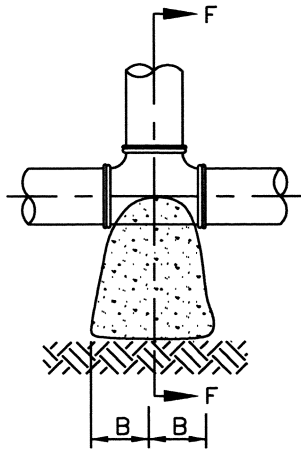
NOTES:

1. VALVE BOX TOPS TO BE SET FLUSH WITH SURFACE.
2. VALVE BOXES SHALL BE BITUMINOUS COATED TO PREVENT CORROSION.
3. TYPE "B" VALVE BOX TO BE USED FOR WATER LINES GREATER THAN 300mm ϕ
4. VALVE TO BE EPOXY COATED OR GALVANIZED WITH STAINLESS STEEL NUTS AND BOLTS.
5. VALVE TO BE RESILIENT SEATED WEDGE TYPE. CAST IRON CLASS 150 FOR 300mm ϕ AND SMALLER.
6. VALVES FOR LINES GREATER THAN 300mm ϕ TO BE BUTTERFLY VALVES.
7. MINIMUM COVER 3.0 METRES.

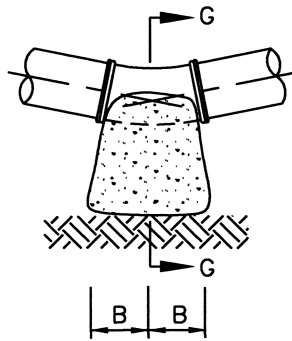
FOR CAST-IN-PLACE CONCRETE BASE
 INCREASE THICKNESS TO 150mm AND ADD
 TWO 10M BARS AT 300mm O/C EACH WAY.

REVISIONS			Town of Whitecourt	
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			DATE: JANUARY, 1996	

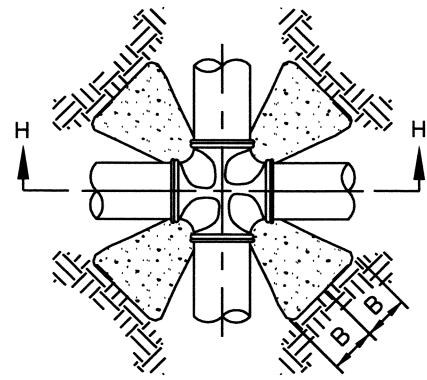
ACH 98-06-18 2-02.DWG



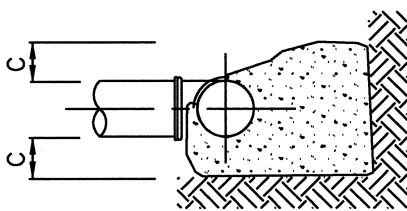
TEE & DEAD END CONNECTION



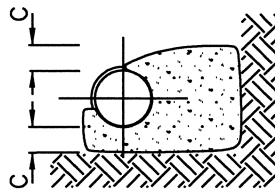
22 1/2' & 11 1/4' BENDS



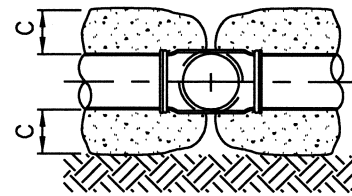
CROSS CONNECTION



SECTION F - F



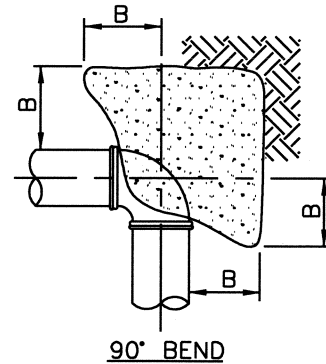
SECTION G - G



SECTION H - H

MINIMUM CONCRETE THRUST BLOCK DIMENSIONS

1035 Kpa WATER PRESSURE & 100 Kpa ALLOWABLE SOIL PRESURE									
FITTINGS	11 1/4' BEND	22 1/2' BEND	45' BEND	60' BEND	67 1/2' BEND	75' BEND	90' BEND	CROSS-TEE & PLUG	
RAR	0.198 A	0.390 A	0.765 A	A	1.112 A	1.218 A	1.414 A	A	
RAR = 2B x (2C + DIA.) & 2B ≥ (2C + DIA.) RAR = REACTION AREA REQUIRED A = AREA CONSTANT									
DIA. = 150 A=0.197	RAR	0.039	0.77	0.151	0.197	0.219	0.240	0.279	0.197
	B	100	150	220	250	250	275	310	250
	C	50 (MIN.)	50 (MIN.)	100	125	150	150	150	125
DIA. = 200 A=.350	RAR	0.069	0.137	0.268	0.350	0.389	0.426	0.495	0.350
	B	125	175	275	300	325	360	360	300
	C	75	100	150	200	200	200	250	200
DIA. = 250 A=0.547	RAR	0.108	0.213	0.418	0.547	0.608	0.666	0.773	0.547
	B	150	250	380	420	420	450	460	420
	C	75	100	150	200	250	250	300	200
DIA. = 300 A=0.788	RAR	0.156	0.307	0.603	0.788	0.876	0.960	1.114	0.788
	B	200	310	430	440	440	440	500	440
	C	75	100	200	300	350	400	400	300



90° BEND

NOTES:

- CONCRETE TO BE 25 Mpa @ 28 DAYS
- CONCRETE TO BE TYPE 50 SULFATE RESISTANT
- CONCRETE TO BE CLEAR OF BELLS & PIPE
- MINIMUM 75mm CONCRETE UNDER ALL FITTINGS.

THRUST BLOCK DESIGNED ON
- 100 Kpa ALLOWABLE SOIL BEARING PRESSURE.

- 1.5 FACTOR OF SAFETY
- 1035 Kpa PIPE WATER PRESSURE.
- LARGER REACTION AREAS ARE REQUIRED IN POOR SOIL CONDITIONS.

REVISIONS

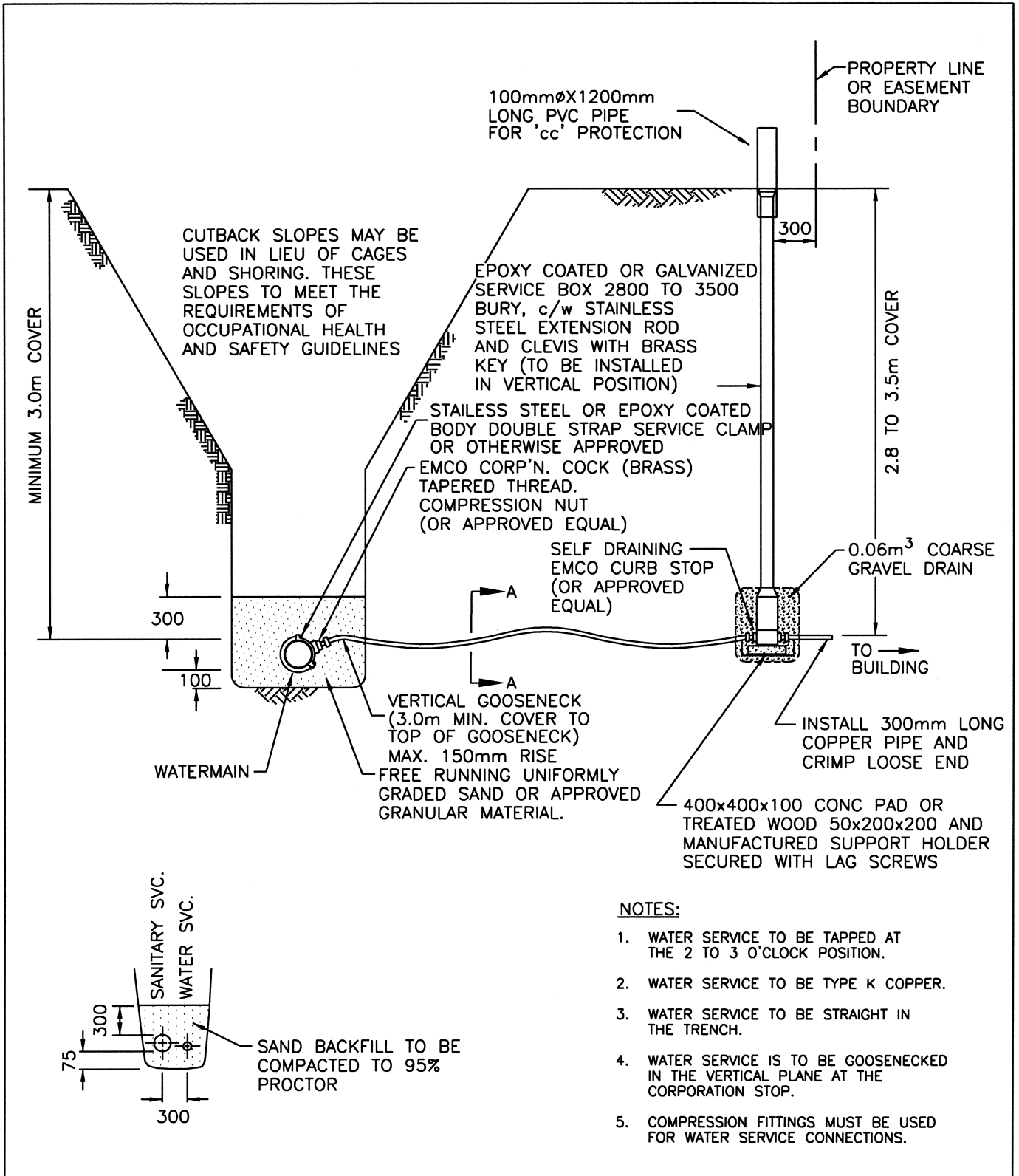
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Town of Whitecourt

THRUST BLOCK DETAIL

APPROVED:	STD. DWG. No.
SCALE: N.T.S.	2-03
DATE: JANUARY, 1996	



NOTES:

1. WATER SERVICE TO BE TAPPED AT THE 2 TO 3 O'CLOCK POSITION.
2. WATER SERVICE TO BE TYPE K COPPER.
3. WATER SERVICE TO BE STRAIGHT IN THE TRENCH.
4. WATER SERVICE IS TO BE GOOSENECKED IN THE VERTICAL PLANE AT THE CORPORATION STOP.
5. COMPRESSION FITTINGS MUST BE USED FOR WATER SERVICE CONNECTIONS.

REVISIONS	
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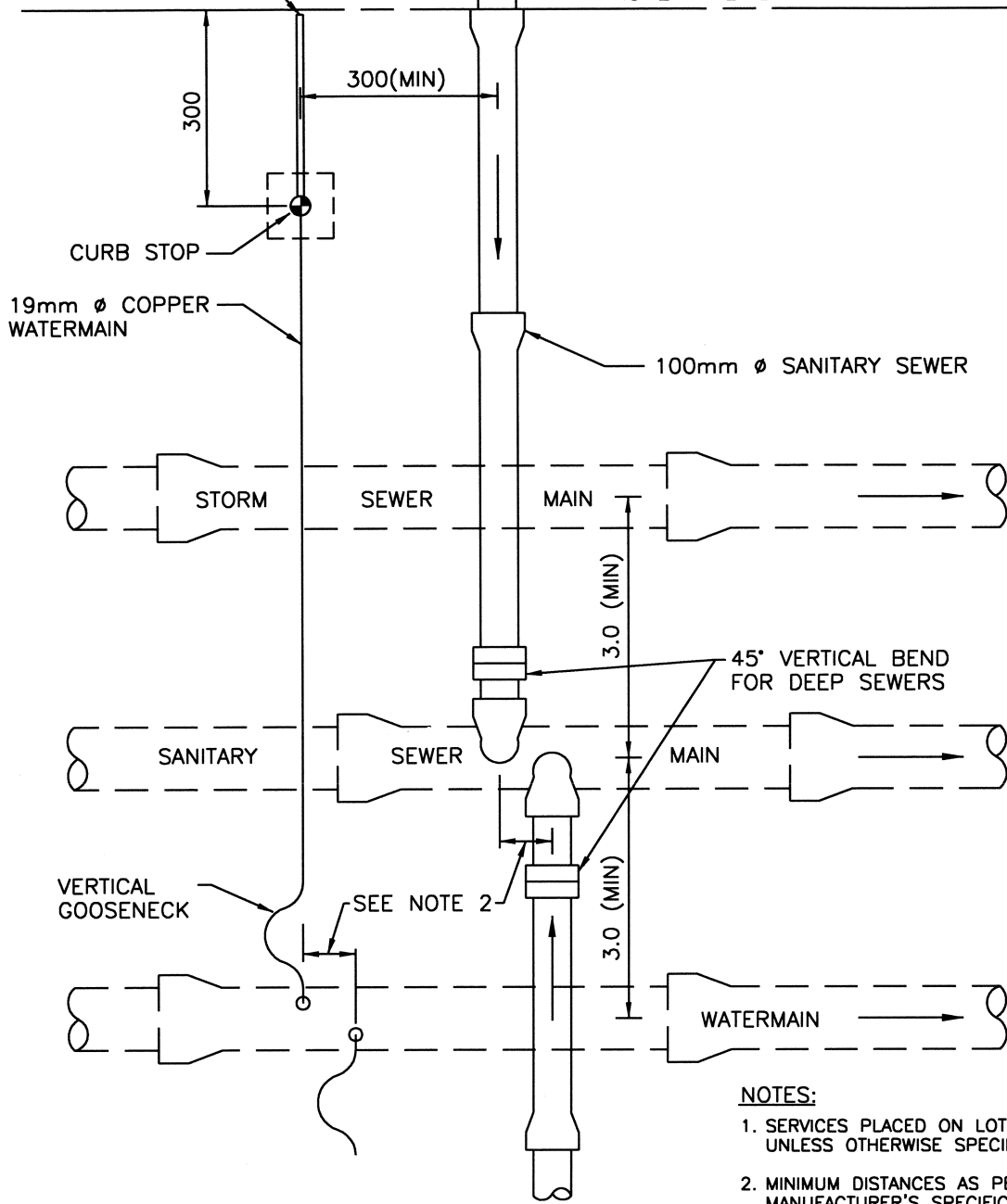
Town of Whitecourt
STANDARD WATER SERVICE CONNECTION

APPROVED:	STD. DWG. No.
SCALE: N.T.S.	2-04
DATE: JANUARY, 1996	

ACH 98-06-18 2-04.DWG

300mm LONG COPPER STUB
CRIMP LOOSE END

PROPERTY LINE



NOTES:

1. SERVICES PLACED ON LOT \odot UNLESS OTHERWISE SPECIFIED.
2. MINIMUM DISTANCES AS PER PIPE MANUFACTURER'S SPECIFICATIONS WHERE APPLICABLE.
3. WATER SERVICE PIPE TO BE LOCATED ON THE UPSTREAM SIDE OF THE SANITARY SERVICE SEWER.
4. TAP SEWER SERVICES BETWEEN 10:00 AND 2:00 O'CLOCK POSITION.

REVISIONS	
Date	Details
98-06-18	DESIGN STANDARD UPDATE



Town of Whitecourt WATER AND SEWER SERVICE CONNECTION

APPROVED:	STD. DWG. No.
SCALE: N.T.S.	2-05
DATE: MAY, 1998	

ACH 98-06-18 2-05.DWG