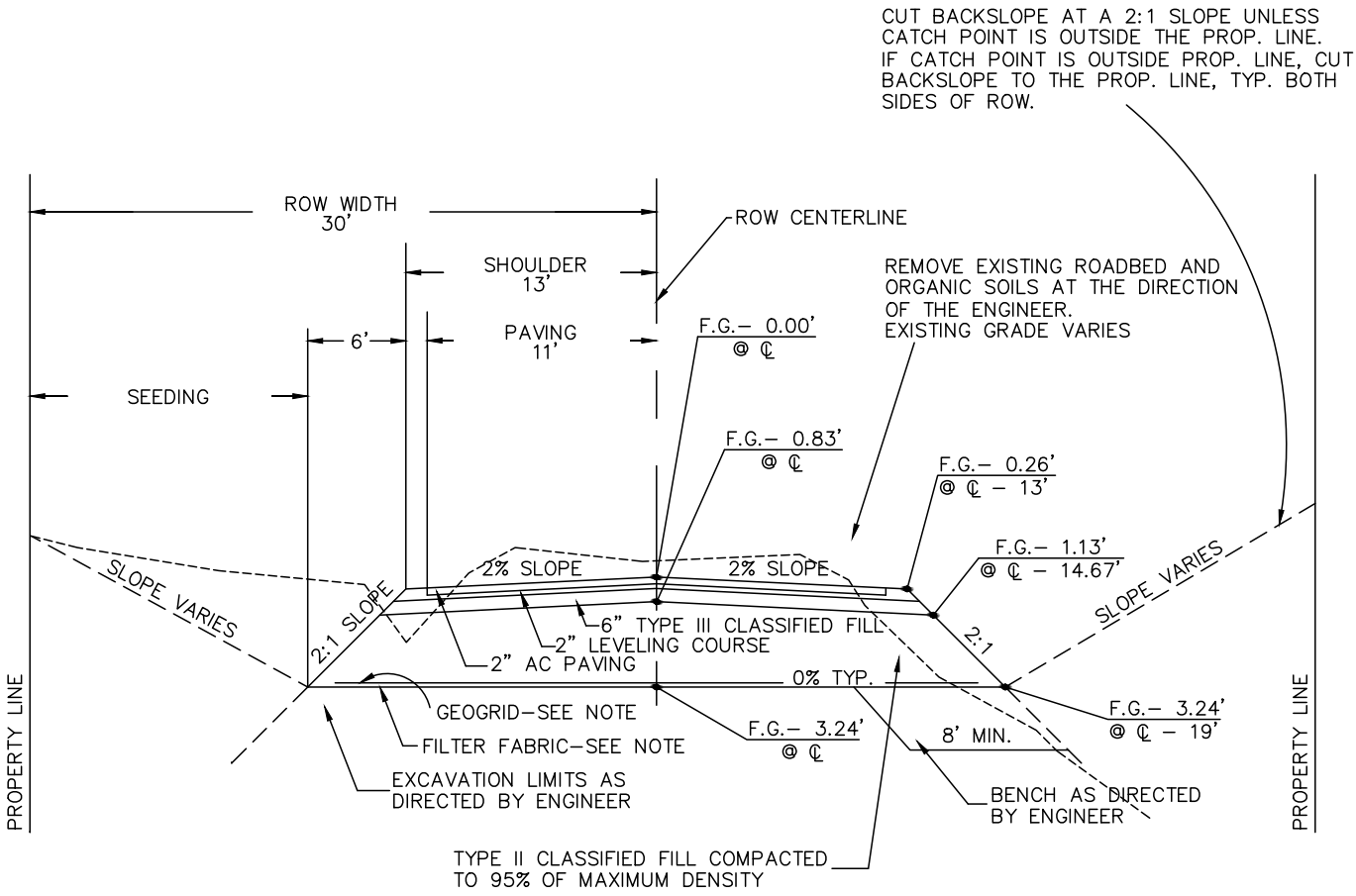
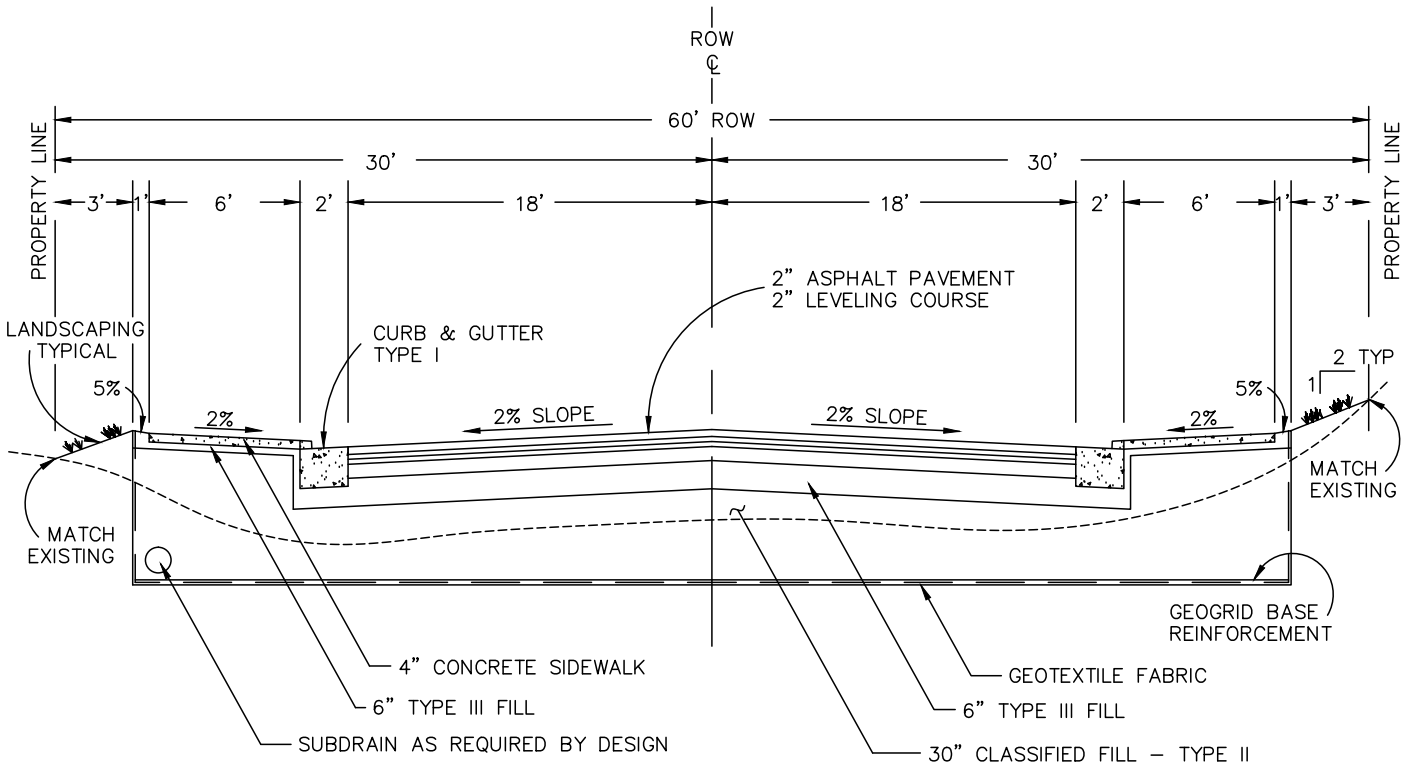


NOTES:

1. PLACE GEOGRID AND FILTER FABRIC A MINIMUM OF 1' AND A MAXIMUM OF 2' FROM EACH EDGE OF THE EXCAVATION.
2. TYPICAL CROSS SECTION MAY VARY BASED ON R.O.W. WIDTH, GEOTECHNICAL AND DESIGN INFORMATION.

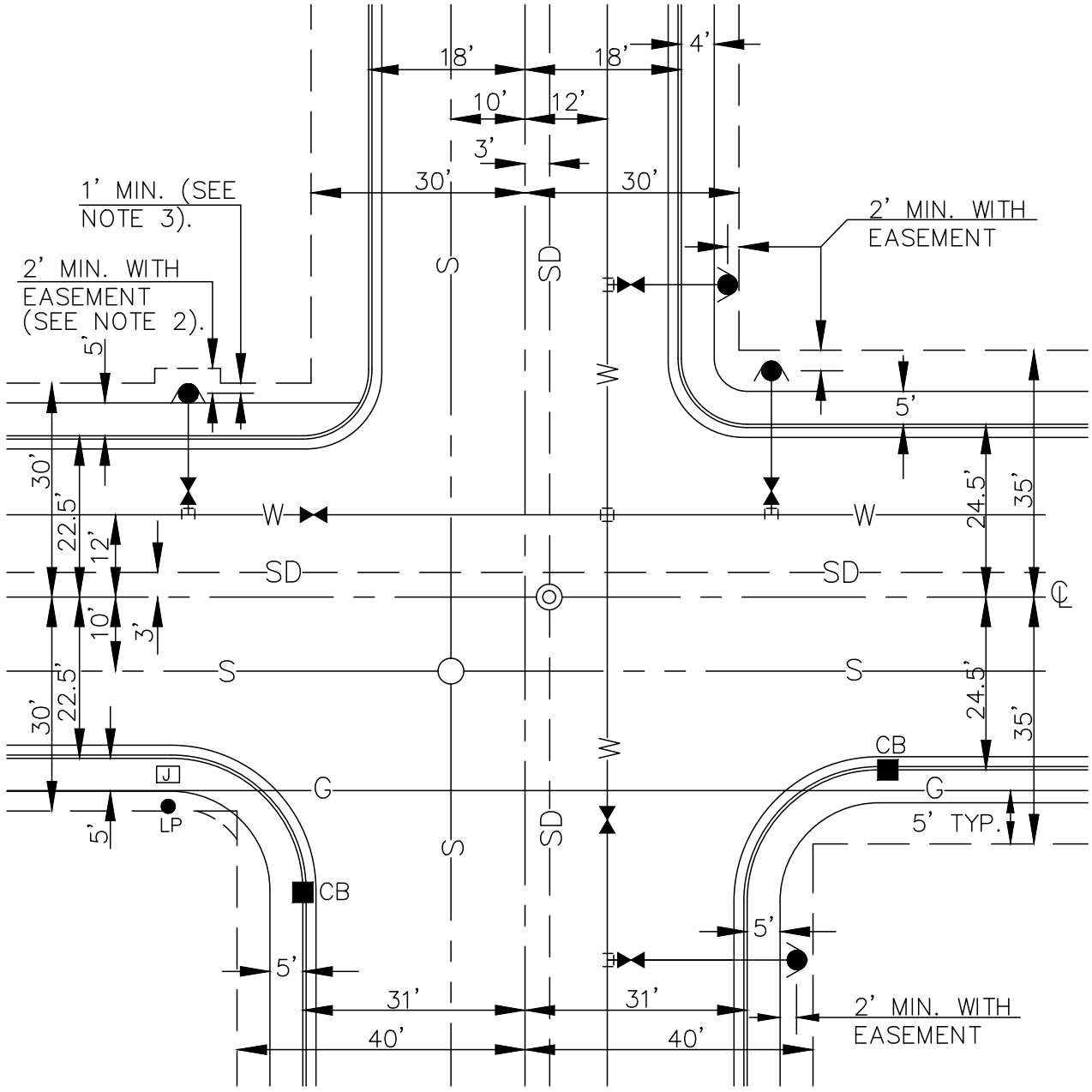
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 2/2007	TYPICAL ROADWAY SECTION RURAL	DETAIL # **200.01**



NOTES:

1. TYP. CROSS SECTION MAY VARY BASED ON ROW WIDTH, GEOTECH & DESIGN INFORMATION.

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	# TYPICAL ROADWAY SECTION URBAN (CURB, GUTTER + SIDEWALK)	DETAIL # **200.02**



G — GAS LINE
S — SANITARY SEWER LINE
SD — STORM DRAIN LINE
W — WATER LINE
℄ — ROADWAY CENTERLINE

NOTES:

1. OFFSETS ARE TO CENTER OF UTILITY.
2. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED TO MEET MINIMUM SET-BACKS FOR HYDRANTS.
3. HYDRANT MUST BE SET-BACK A MINIMUM OF 5' FROM BACK OF CURB OR 1' FROM EDGE OF SIDEWALK.
4. CURB TO CURB DIMENSIONS SHOWN ARE TYPICAL EXAMPLES ONLY.

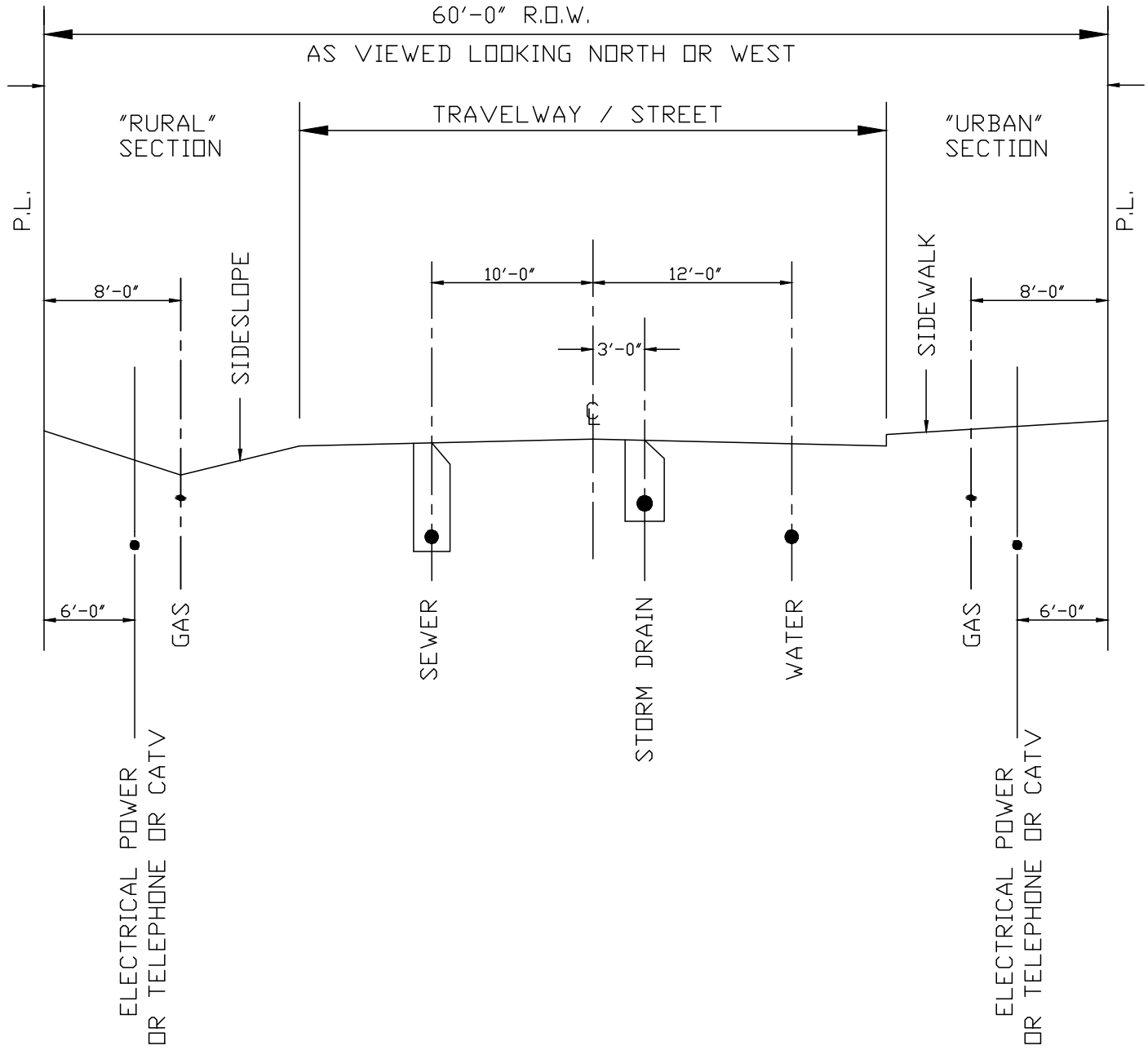
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

REVISED: 6/99

STANDARD LOCATION FOR NEW UTILITIES

DETAIL # 200.03



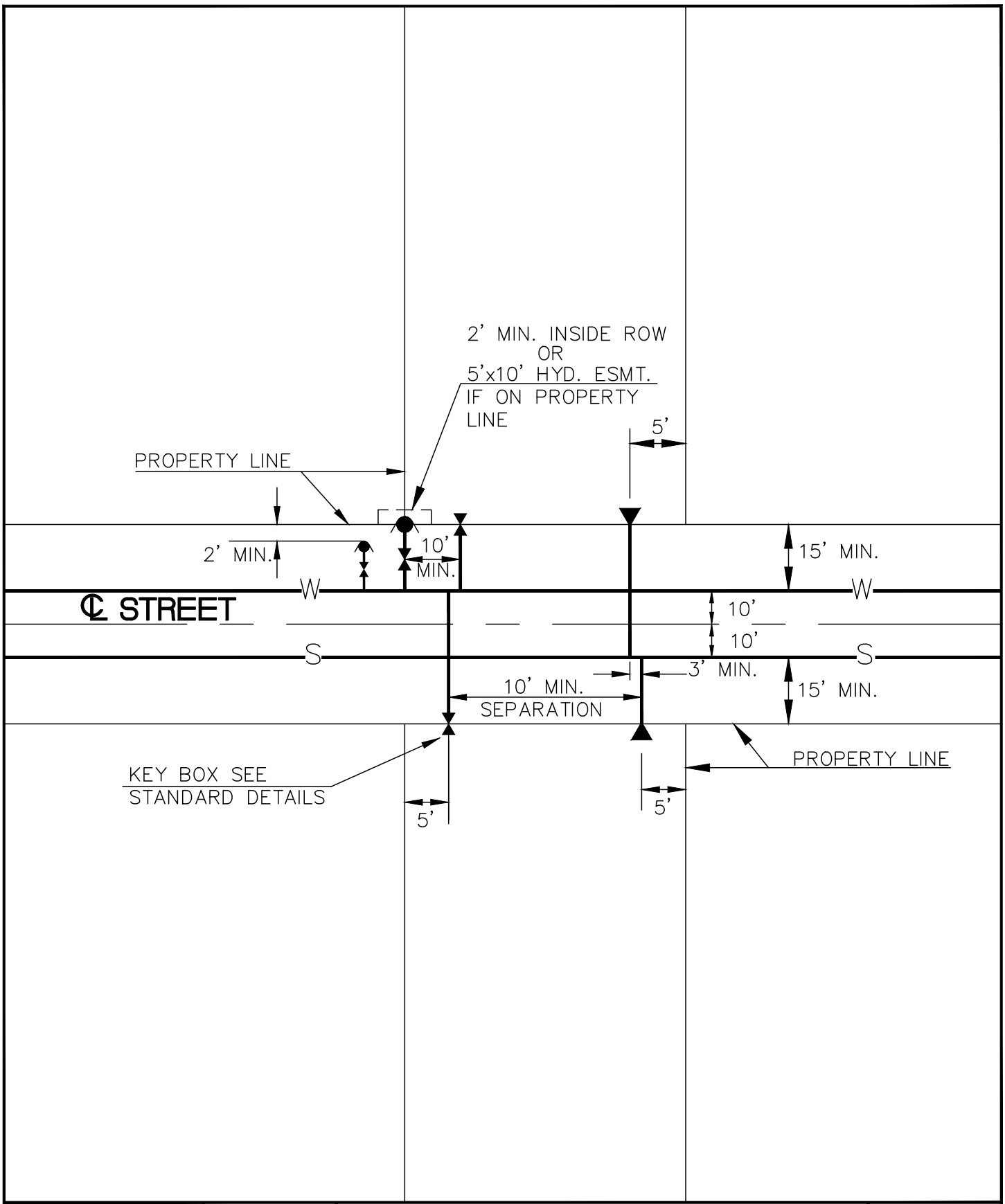
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

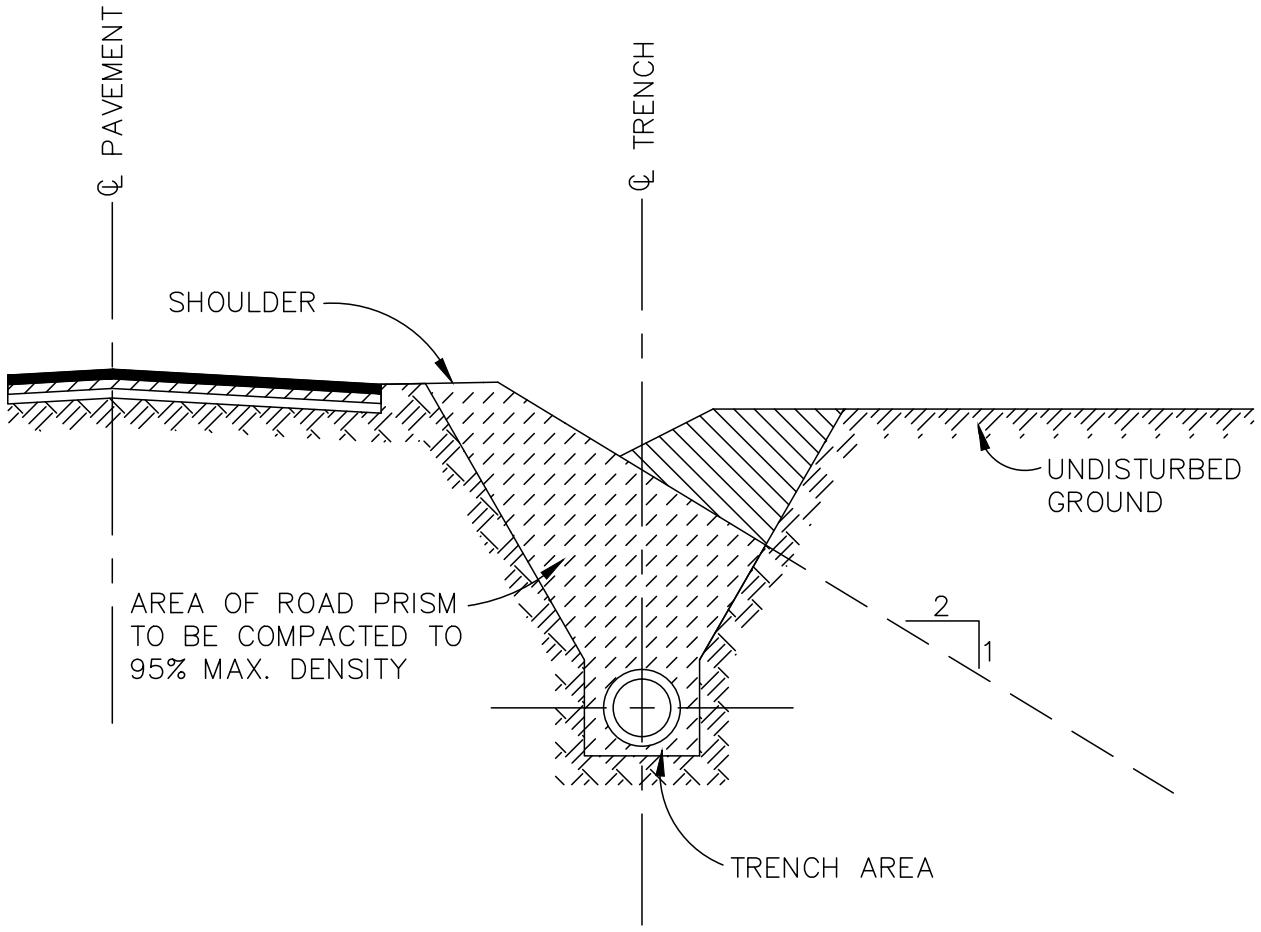
REVISED: 6/99

TYPICAL UTILITY LOCATIONS

DETAIL # **200.04**

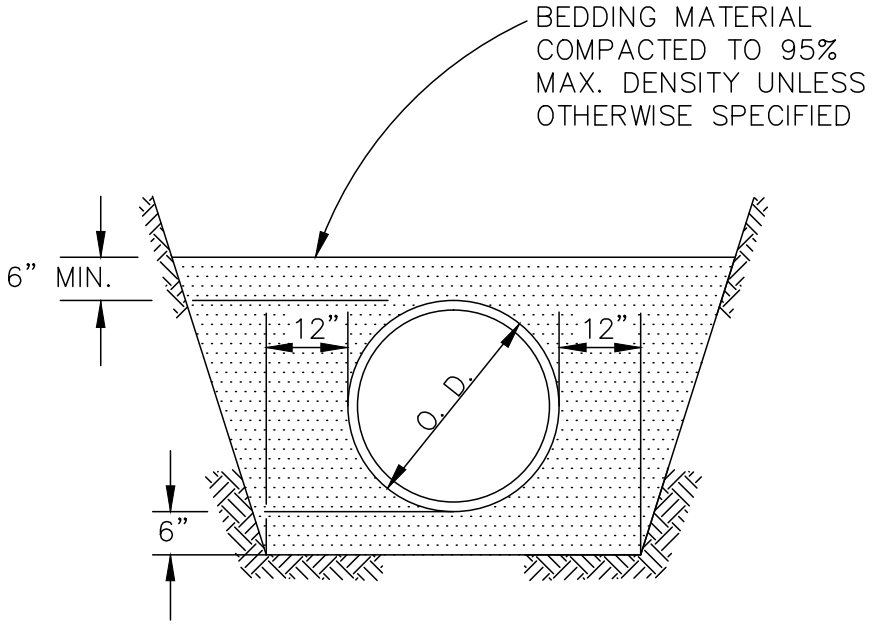


CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	TYPICAL WATER AND SEWER LOCATIONS	DETAIL # 200.05



1. ALL MATERIAL THAT IS TO BE BACKFILLED WITHIN THE ABOVE–DESCRIBED AREA WILL BE REPLACED IN ONE FOOT LIFTS & COMPACTED TO A MINIMUM OF 95%.
2. THIS BACKFILL WILL BE FREE OF ANY EXTENSIVE CLAYS & ORGANIC MATERIALS.
3. THE COMPACTION OF THIS BACKFILL WILL BE ACCOMPLISHED BY MECHANICAL MEANS WITHOUT THE AID OF WATER.
4. THE DITCH LINE WILL BE RESHAPED IN SUCH A MANNER AS TO ALLOW PROPER DRAINAGE & THE SHOULDER OF THE ROAD WILL BE REPLACED AT A UNIFORM SLOPE NOT TO EXCEED 2 TO 1.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	COMPACTION OF BACKFILL WITHIN RIGHT-OF-WAY	DETAIL # 200.06



NOTES:
1. TRENCH WALL SLOPE WILL VARY WITH SOIL STRENGTH AND CHARACTER
2. O.D. = OUTSIDE DIAMETER OF PIPE.
3. BEDDING MATERIAL IS CLASS B OR C.
4. BEDDING TO SPRING LINE ONLY FOR DUCTILE IRON PIPE.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	CLASS B AND C BEDDING	DETAIL # **200.07**

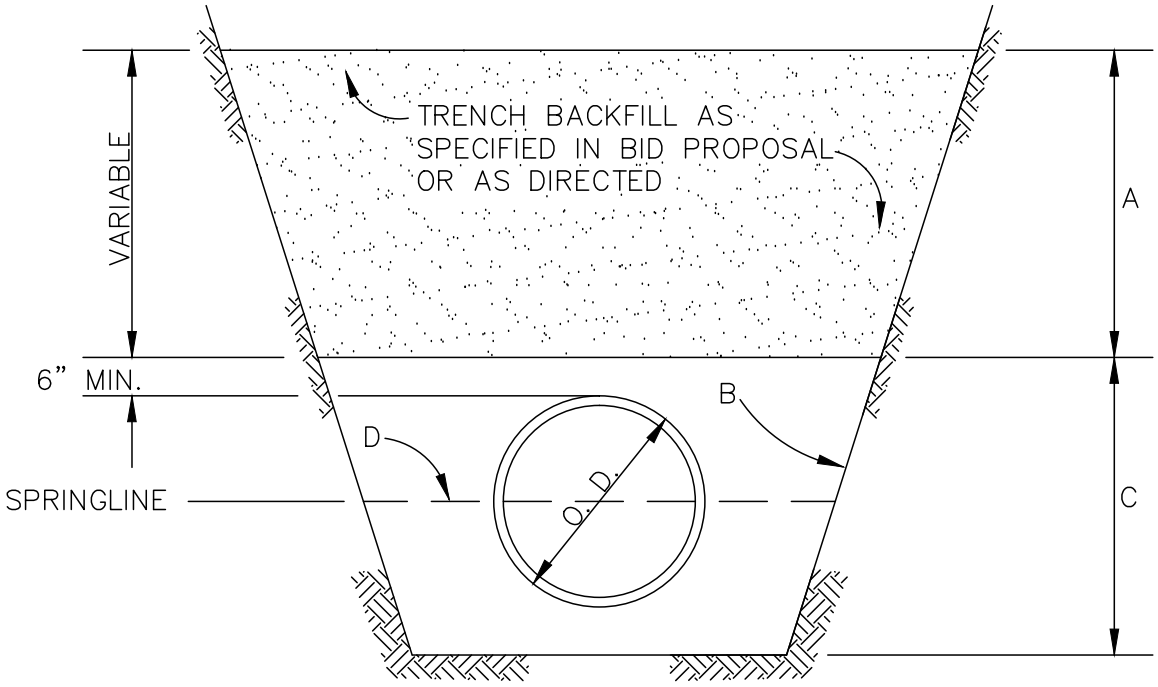
NOTES:

(A) TRENCH BACKFILL MATERIAL PLACED AND COMPACTED TO DEPTHS AS DETERMINED BY THE ENGINEER.

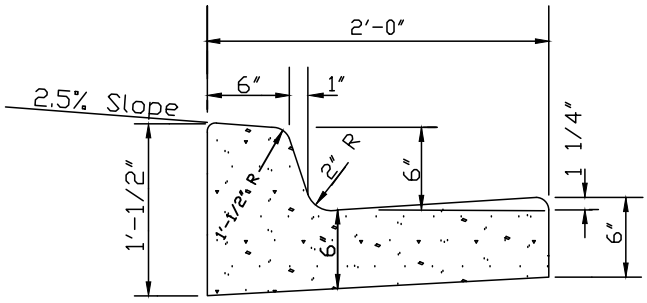
(B) TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES TO CONFORM TO SAFETY STANDARDS.

(C) CLASS "B" OR "C" BEDDING.

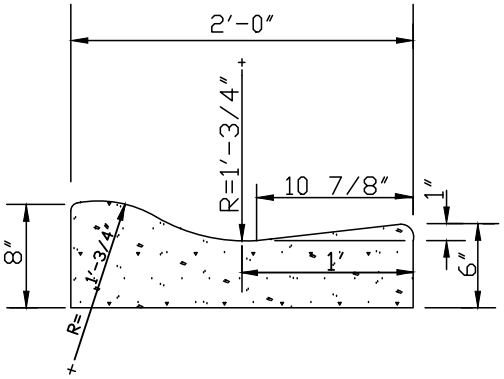
(D) BEDDING TO SPRING LINE ONLY WHEN DUCTILE IRON PIPE IS INSTALLED.



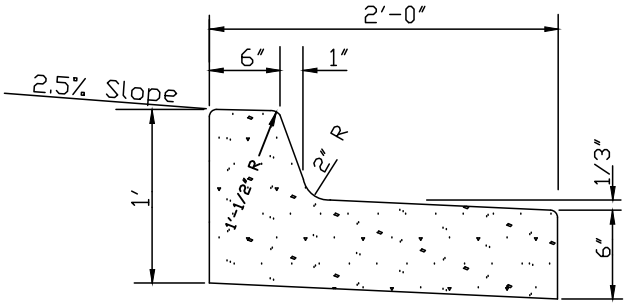
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NONE REVISED: 6/99	TRENCH BACKFILL	DETAIL # 200.08



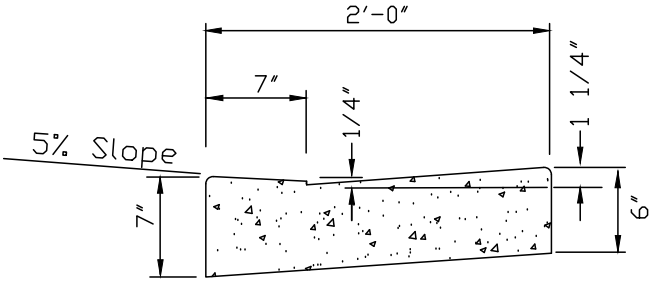
CURB & GUTTER
TYPE 1



ROLLED CURB & GUTTER
TYPE 2



CURB & GUTTER
TYPE 3

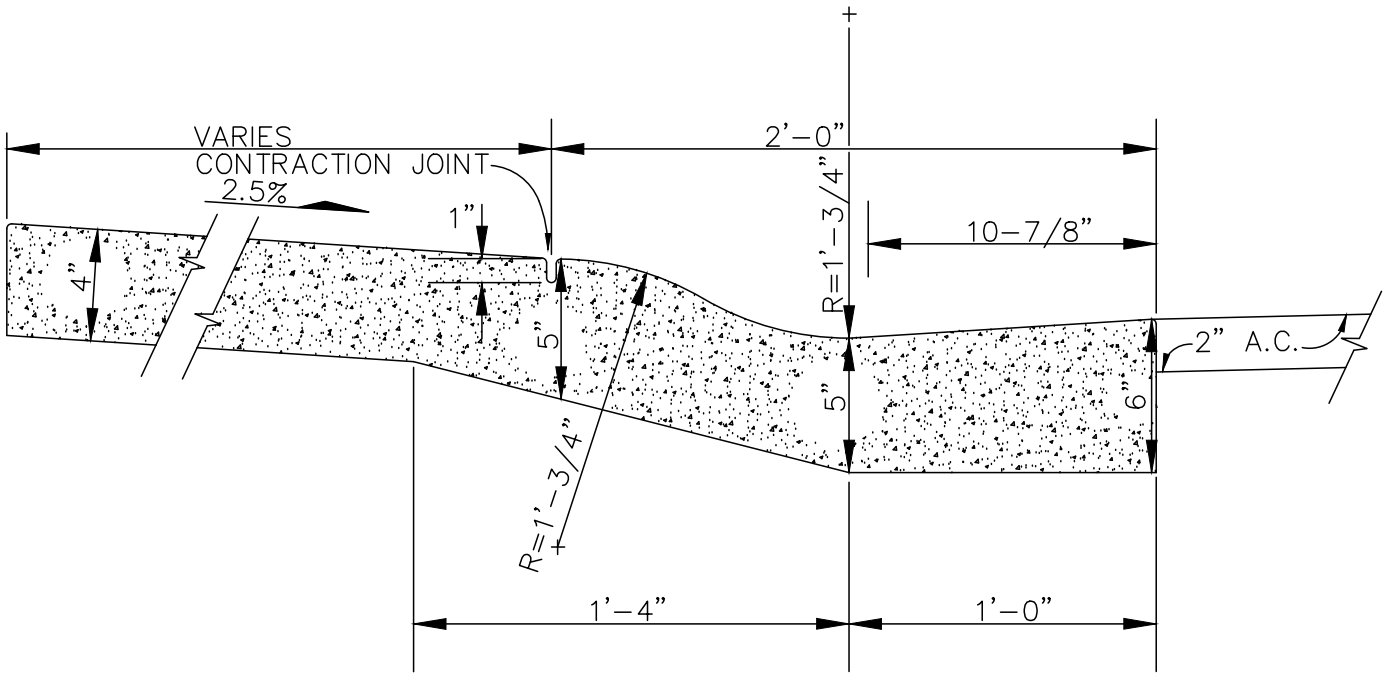


DEPRESSED CURB & GUTTER
(USED AT CURB CUTS)
TYPE 4

NOTE:

BOTH FRONT AND BACK EDGES OF THE CURB & GUTTER SHALL BE TROWELED TO A RADIUS OF ONE-HALF (1/2) INCH.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	CURB AND GUTTER CROSS SECTIONS	DETAIL # 300.01

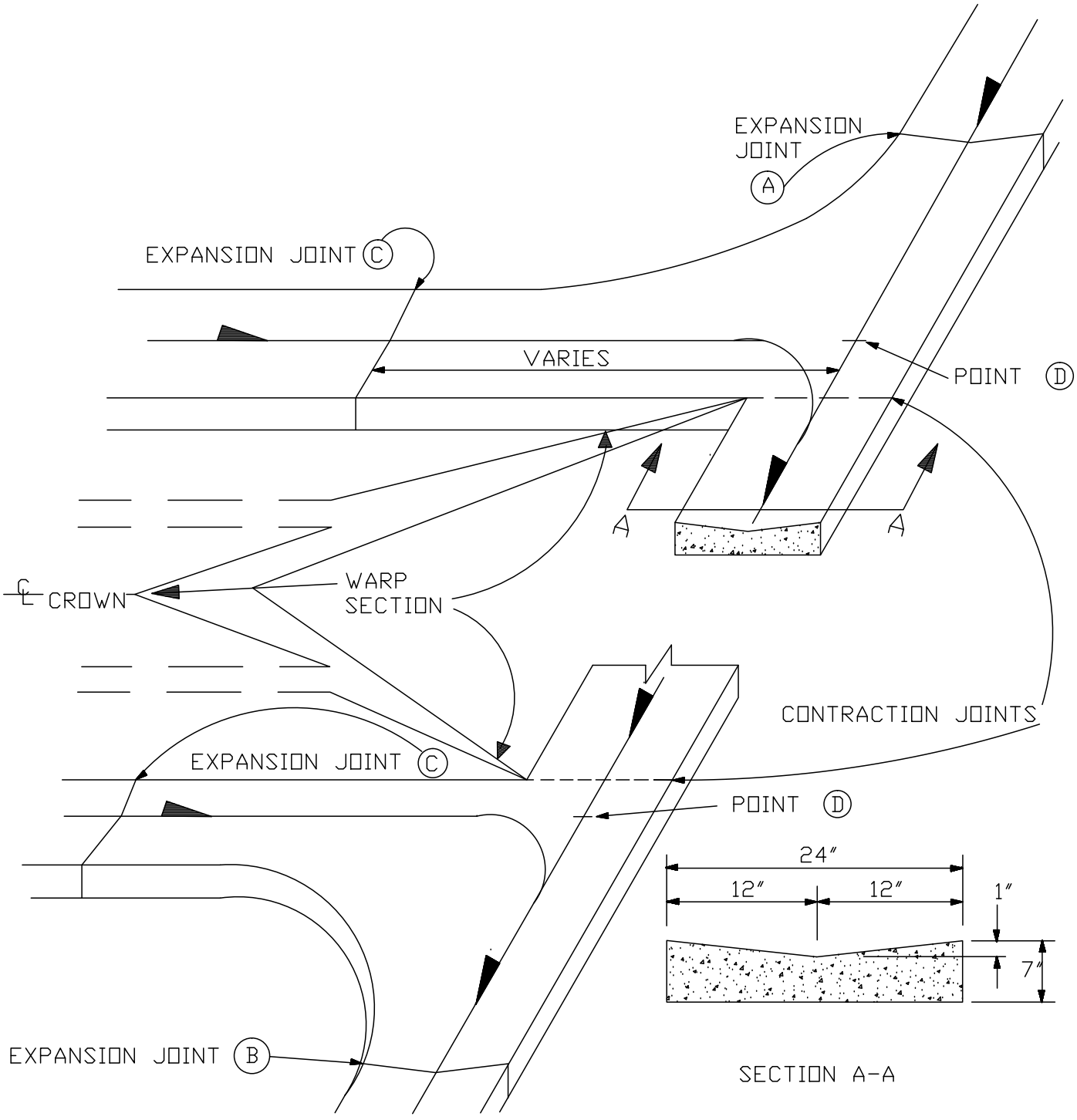


NOTES:

1. MONOLITHIC SIDEWALK AND CURB & GUTTER MAY BE SUBSTITUTED AS AN ALTERNATE TO THE ROLLED CURB & GUTTER AND SIDEWALK.

2. BOTH FRONT AND BACK EDGES OF THE CURB & GUTTER AND SIDEWALK SHALL BE TROWELED TO A RADIUS OF ONE-HALF (1/2) INCH.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	MONOLITHIC SIDEWALK CURB AND GUTTER SECTION	DETAIL # 300.02

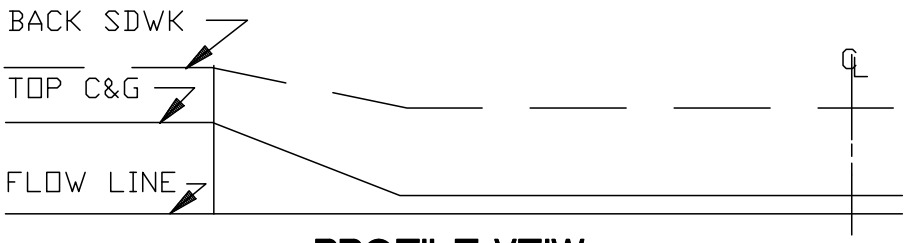


SECTION A-A

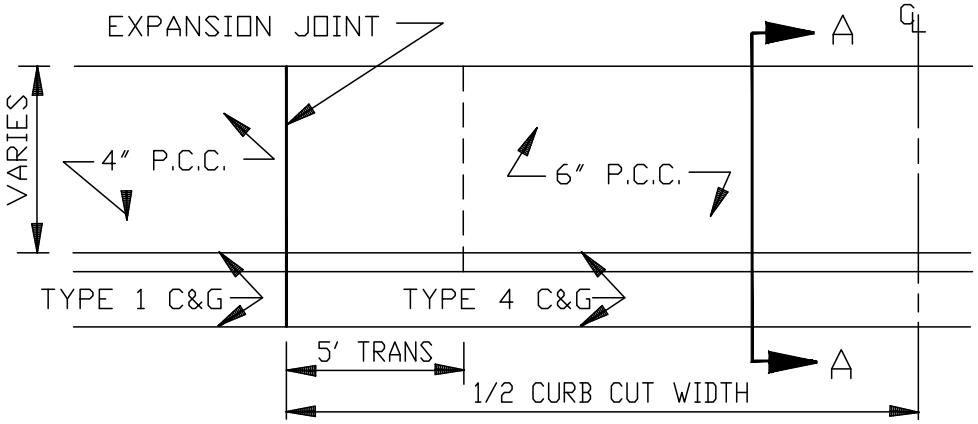
NOTE:

P.C.C. VALLEY GUTTER WILL BE PAID FOR PER LINEAR FOOT UNDER BID ITEM "P.C.C. VALLEY GUTTER". LENGTHS SHALL BE MEASURED ALONG THE STRAIGHT FLOW LINE BETWEEN EXPANSION JOINTS "A&B" AND FROM EXPANSION JOINT "C" TO THE INTERSECTION OF THIS STRAIGHT FLOW LINE (POINT "D") BOTH SIDES.

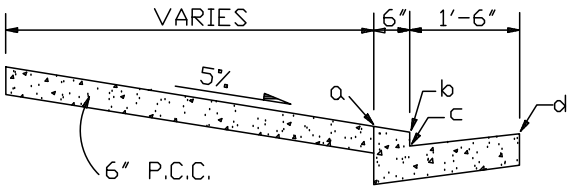
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	P.C.C. VALLEY GUTTER	DETAIL # 300.03



PROFILE VEIW



PLAN VIEW



SECTION A-A

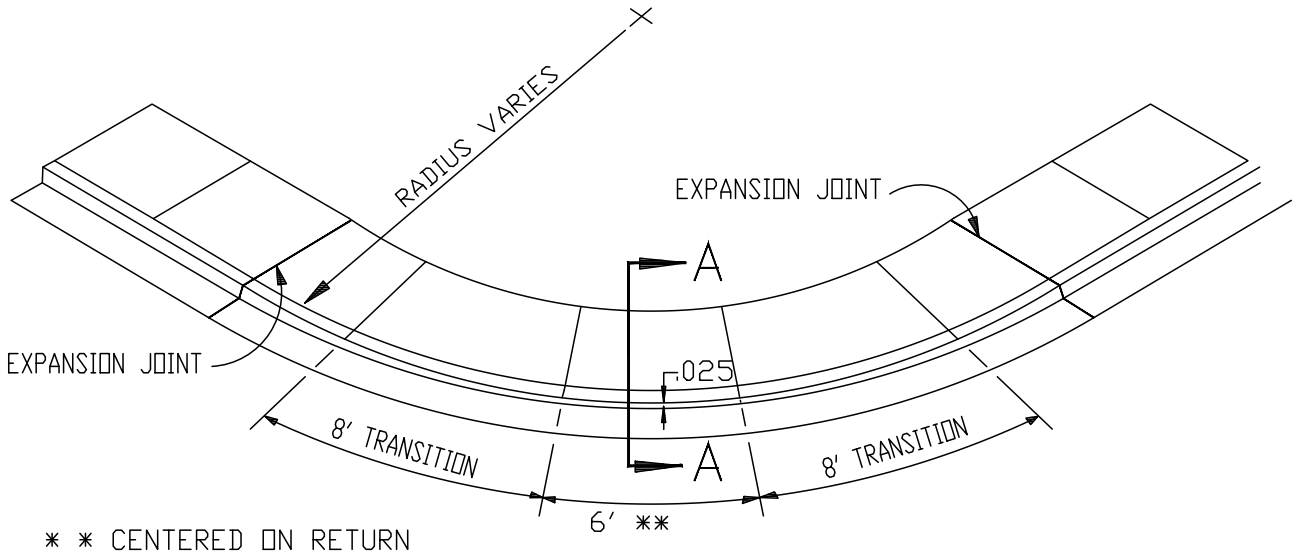
a	b	c	d
0.00	-0.025	-0.050	-0.025

SCALE: NTS

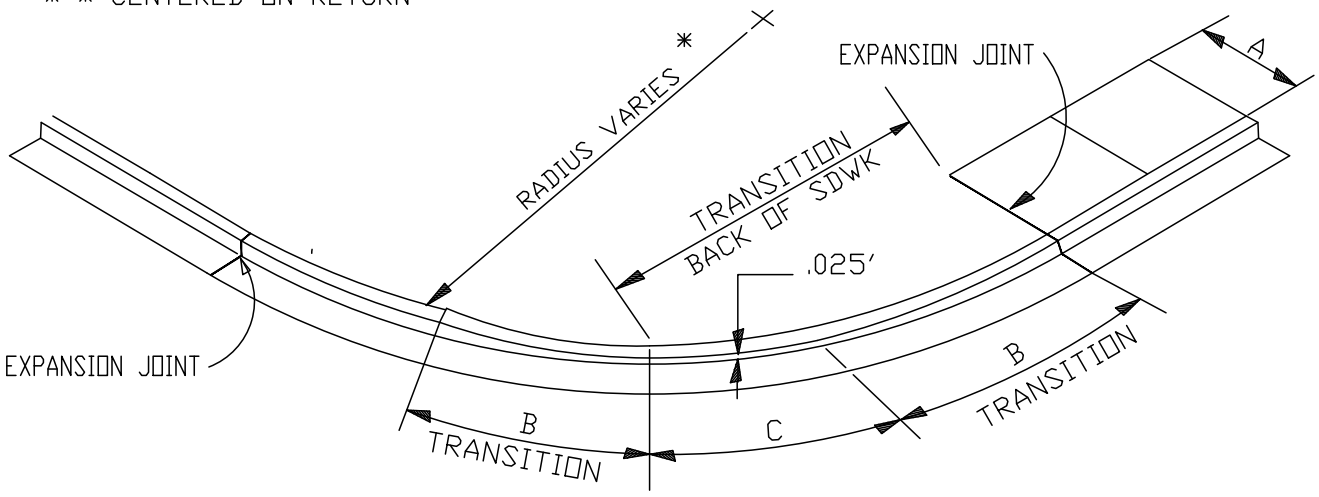
REVISED: 6/99

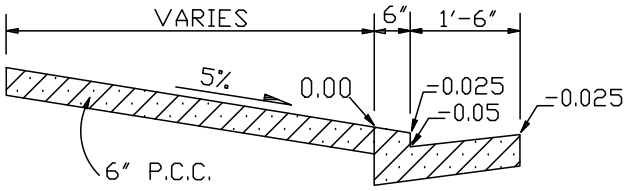
STANDARD CURB-CUT AND ALLEY RETURN

DETAIL # 300.04



* * CENTERED ON RETURN





SECTION A-A

RADIUS*	A	B	C
15'	4'	5.5'	5.7'
20'	4'	6.4'	6.5'
20'	5'	9.0'	5.5'
25'	4'	7.1'	7.2'
25'	5'	10.1'	6.0'
30'	4'	7.8'	7.9'
30'	5'	11.0'	6.6'

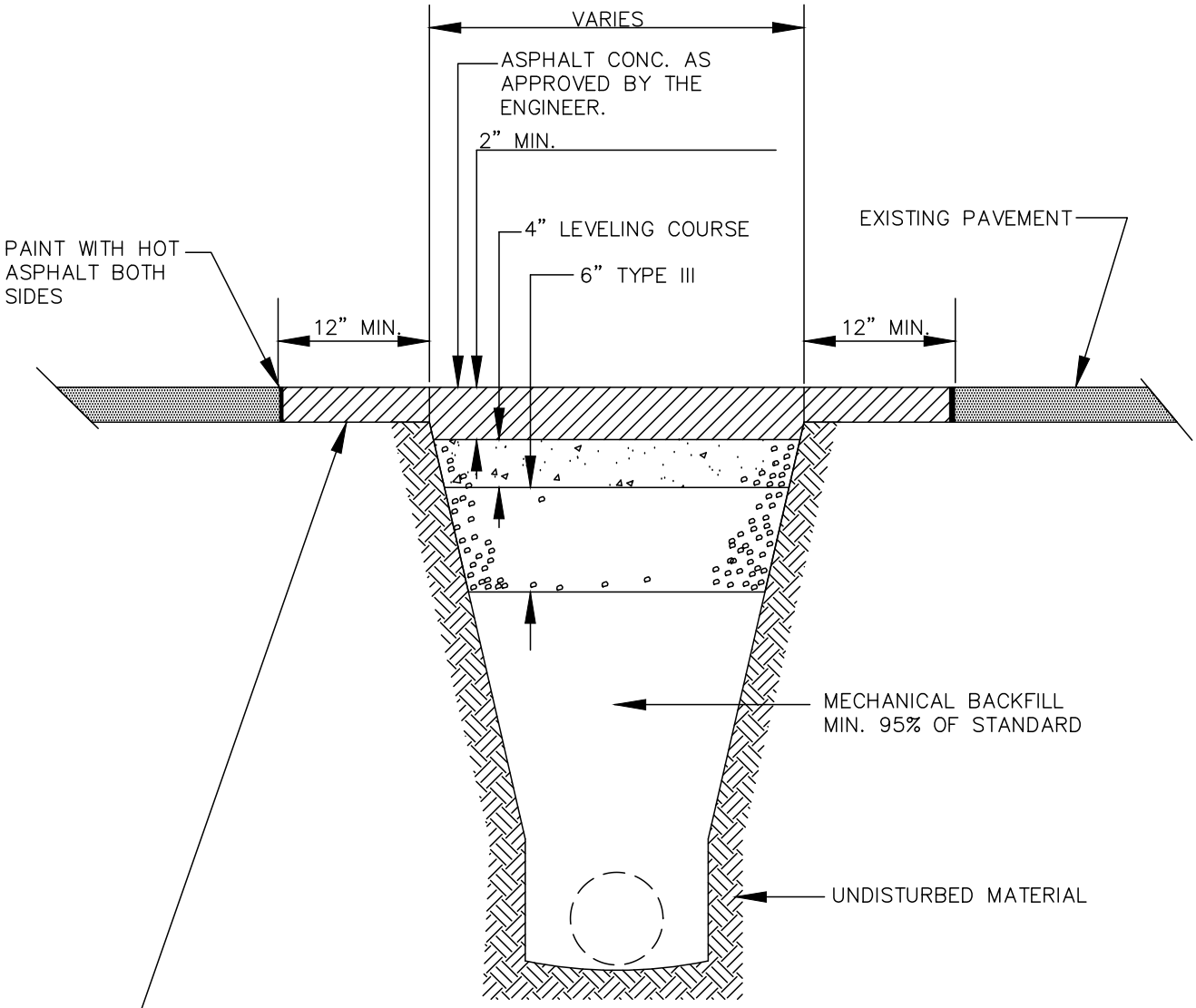
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

REVISED: 6/99

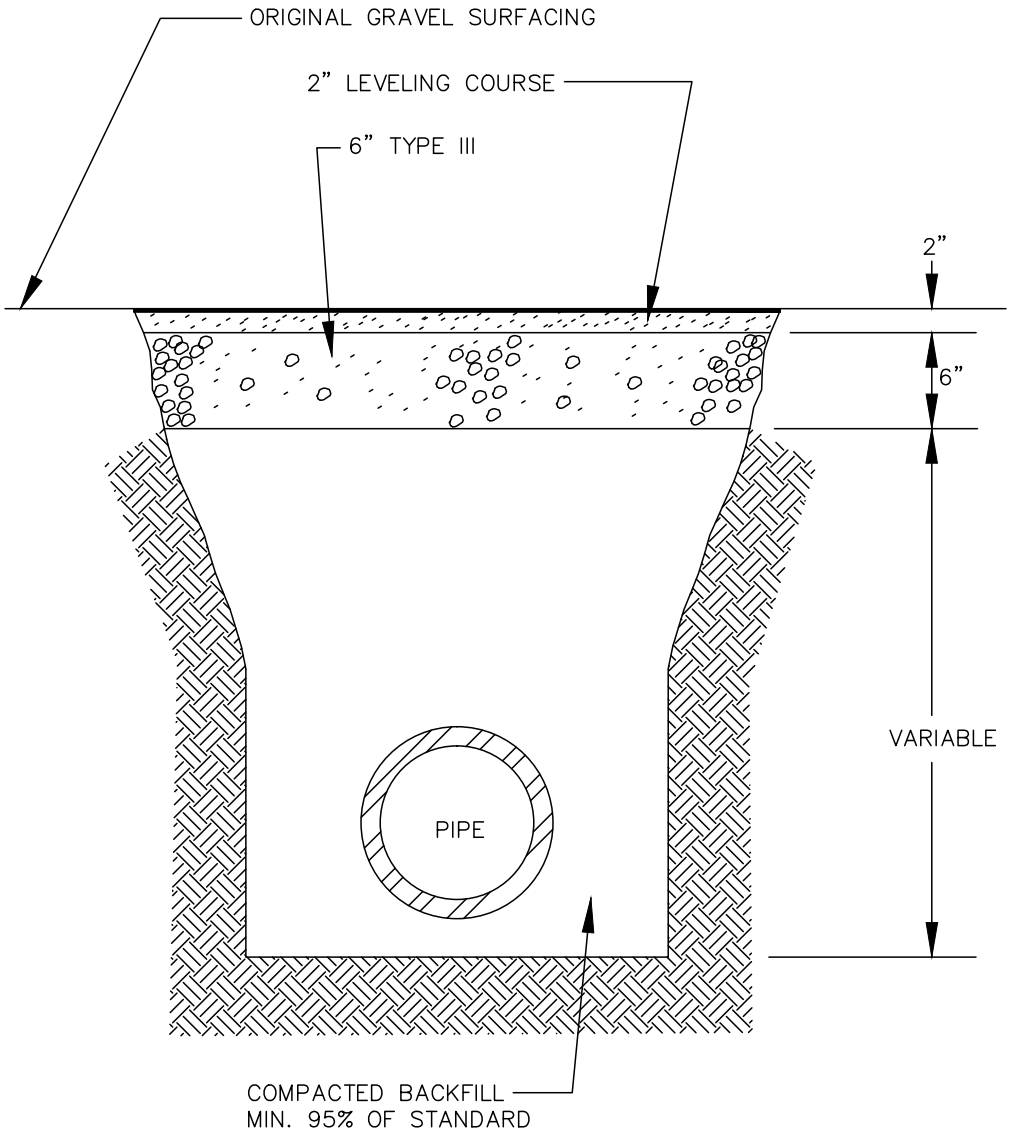
STANDARD CURB RETURN

DETAIL # **300.05**



AFTER DITCH BACKFILL HAS BEEN COMPACTED AN ADDITIONAL 12" WILL BE REMOVED FROM EACH EDGE OF THE ORIGINAL CUT. THE ENGINEER MAY REQUIRE MORE THAN THE 12" ADDITIONAL CUT IF THE EXISTING PAVEMENT HAS BEEN LIFTED IN THE REMOVAL PROCESS OR IF THE JOINT DOES NOT OCCUR ON UNDISTURBED MATERIAL. CUTS MAY BE MADE WITH A SAW OR AIR CHISEL.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	# PAVEMENT CUT REPLACEMENT	DETAIL # **400.01**



CITY OF HOMER · ALASKA · MARCH 31, 1964

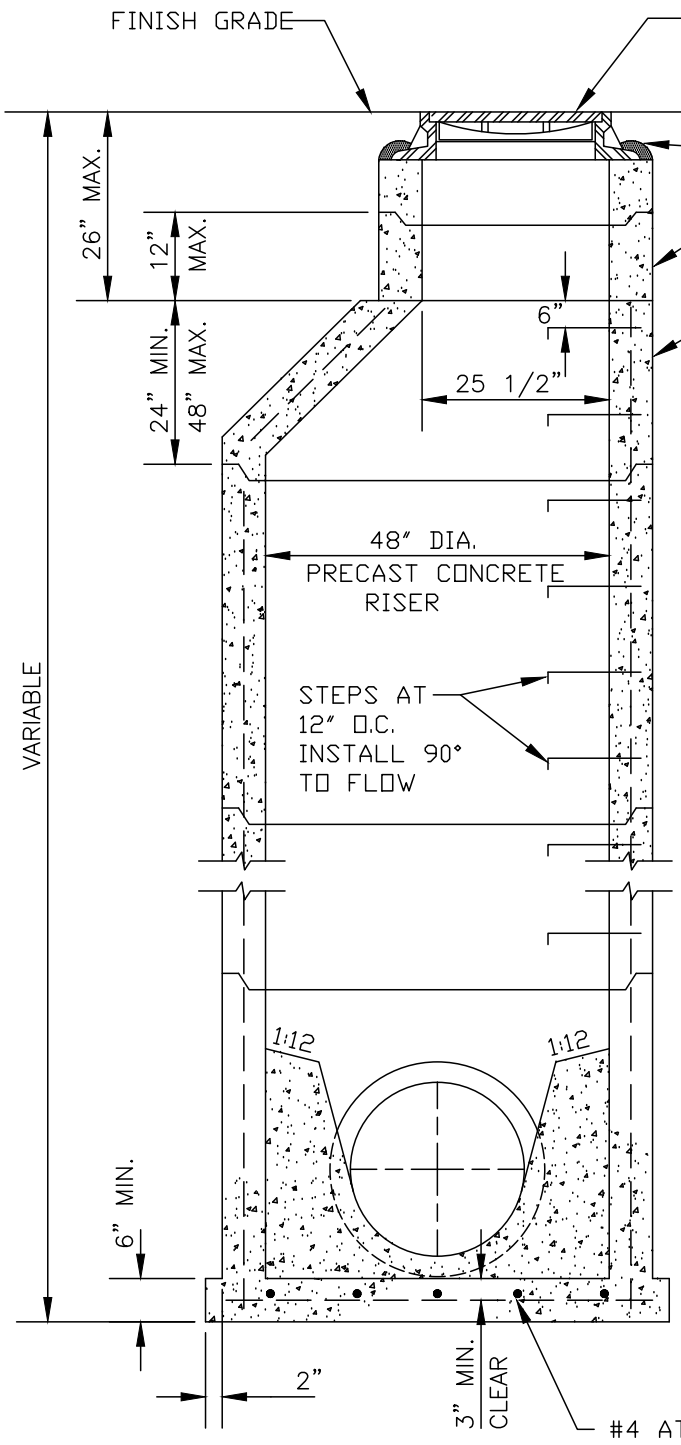
SCALE: NTS

REVISED: 6/99

RESURFACING DETAIL
TYPICAL GRAVEL SECTION

DETAIL #

400.02



NOTES:

1. MIN. STEEL REQ'D FOR BARREL AS PER A.S.T.M. C-478-69 SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNETED WITH BASE.
2. RAM-NEK GASKETS ALL BARREL JOINTS.
3. ALL MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. C-478-69.
4. "JET SET", "ALL CRETE" OR EQUAL, AT PIPE CONNECTION WITH PRECAST BASE.
5. NO REBAR TO EXTEND INTO PIPE OPENING.
6. MAXIMUM ALLOWABLE HEIGHT IN GRADE RINGS IS 12" FOR NEW CONSTRUCTION.
7. ALL EXTERIOR JOINTS, INCLUDING GRADE RINGS AND SURFACE CASTINGS, SHALL BE WRAPPED WITH WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM.

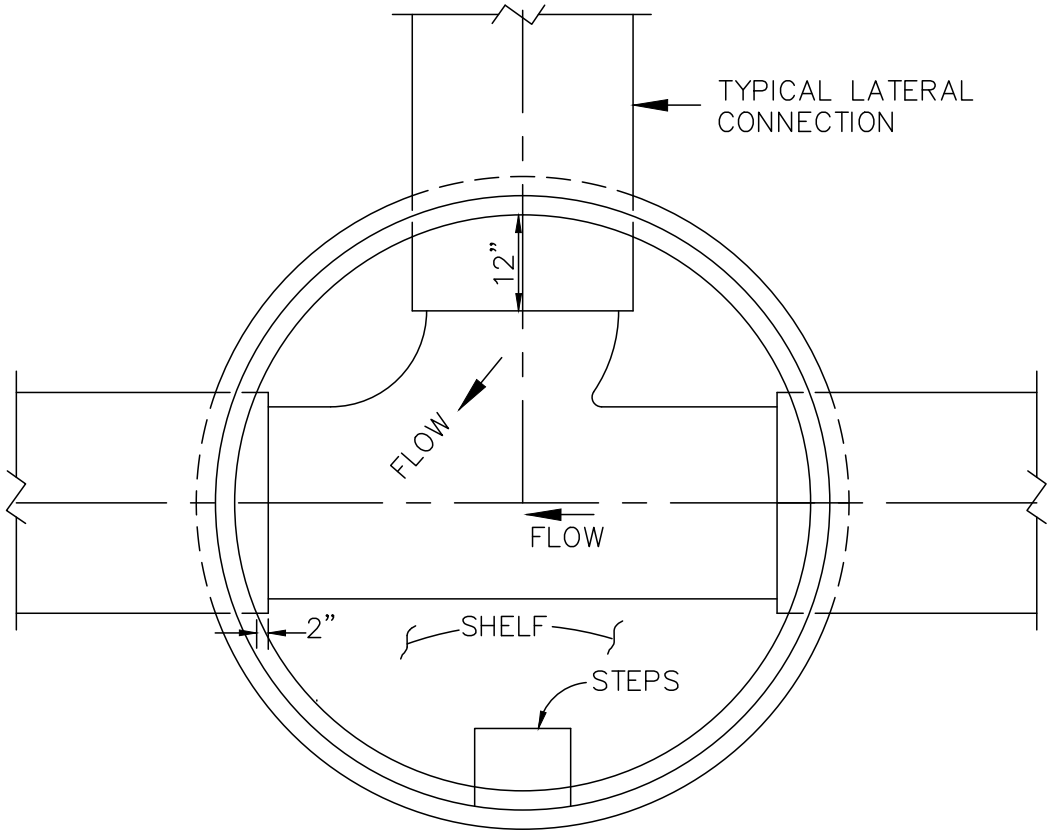
CITY OF HOMER - ALASKA - MARCH 31, 1964

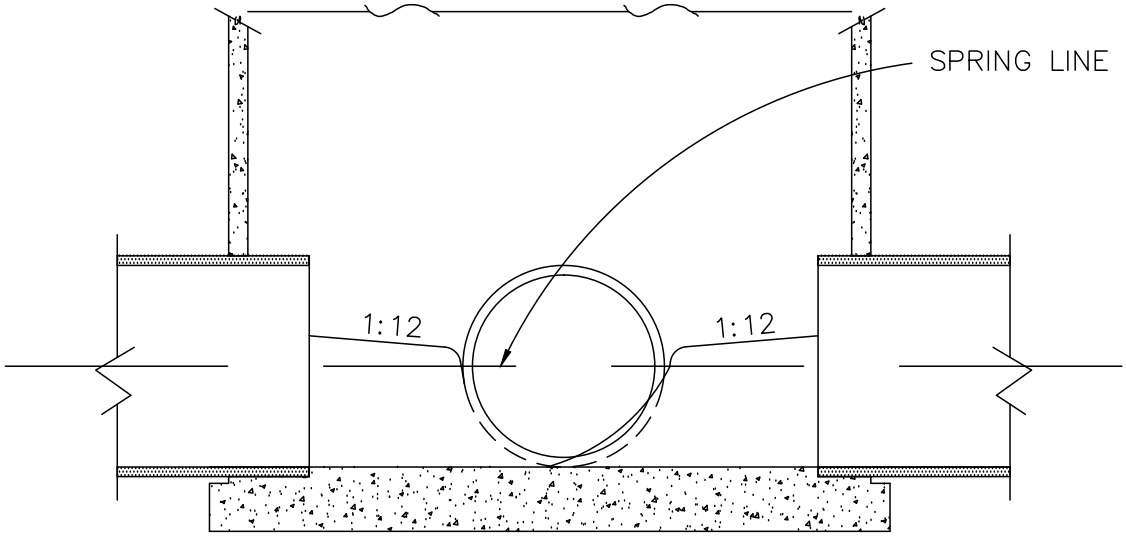
SCALE: N.T.S.

REVISED: 4/2011

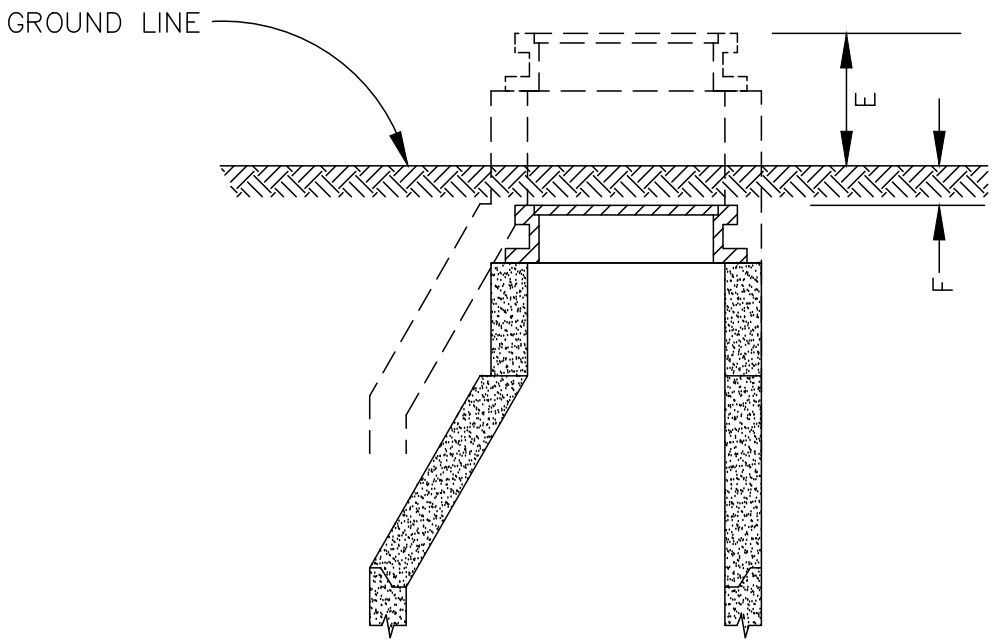
SANITARY SEWER MANHOLE TYPE A PIPE DIA. 8" TO 24"

DETAIL # 500.01





CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER TYPE A AND B MANHOLE BASE PLAN	DETAIL # **500.02**



LOCATION	E	F
BACKYARDS, GRAVEL STREETS, AND ALLEY AREAS WHERE TRAVELED.		6"
UNDEVELOPED AND SWAMPY AREAS.	24" MIN	
R.O.W.S OUTSIDE TRAFFIC AREAS.	6"	
PAVED STREETS.		1/2"

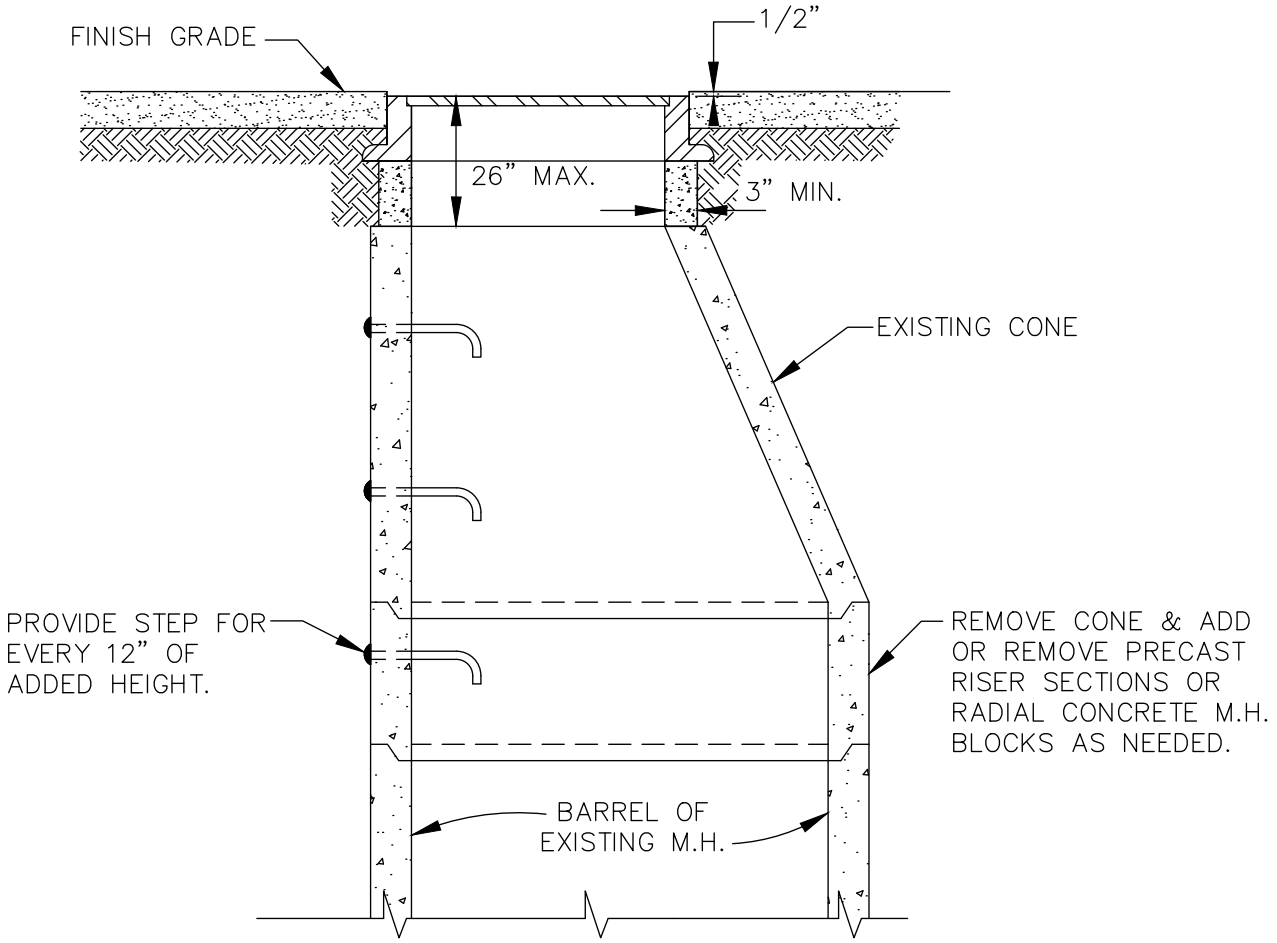
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

REVISED: 6/99

SANITARY SEWER MANHOLE HEIGHTS

DETAIL # 500.03

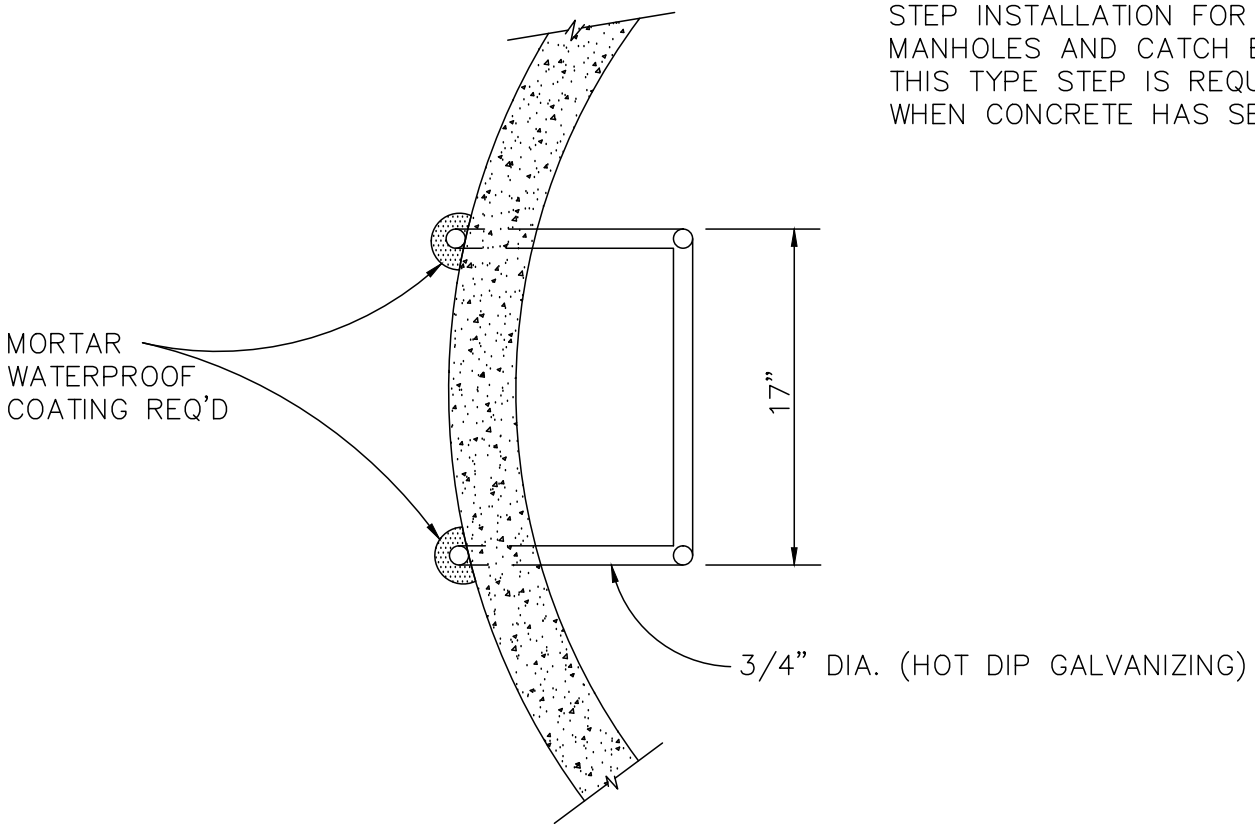


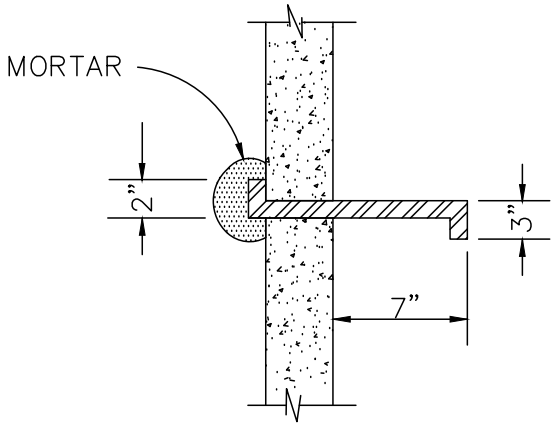
NOTES

1. ALL PERTINENT SECTIONS OF THE STANDARD SPECIFICATIONS WILL APPLY.
2. RESET RING IN FULL BED OF MORTAR.
3. REFER TO ASTM DESIGNATION C-478-69 FOR DESIGN AND STRENGTH REQUIREMENTS.
4. RESET CONE IN RAM-NEK OR EQUAL.
5. ALL EXTERIOR JOINTS, INCLUDING GRADE RINGS AND SURFACE CASTINGS, SHALL BE WRAPPED WITH WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM.

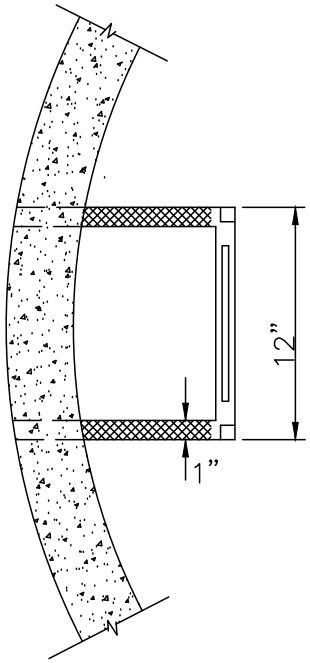
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 4/2011	SANITARY SEWER MANHOLE CONE ADJUSTMENT	DETAIL # 500.04

NOTE:
STEP INSTALLATION FOR MANHOLES AND CATCH BASINS. THIS TYPE STEP IS REQUIRED WHEN CONCRETE HAS SET.

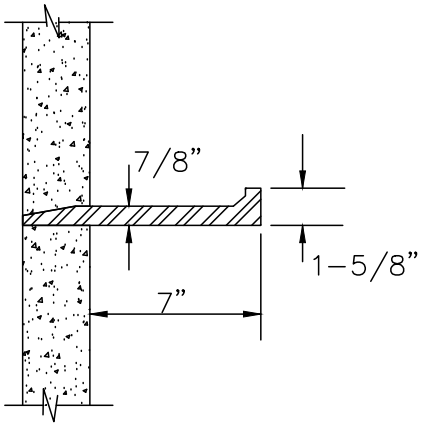




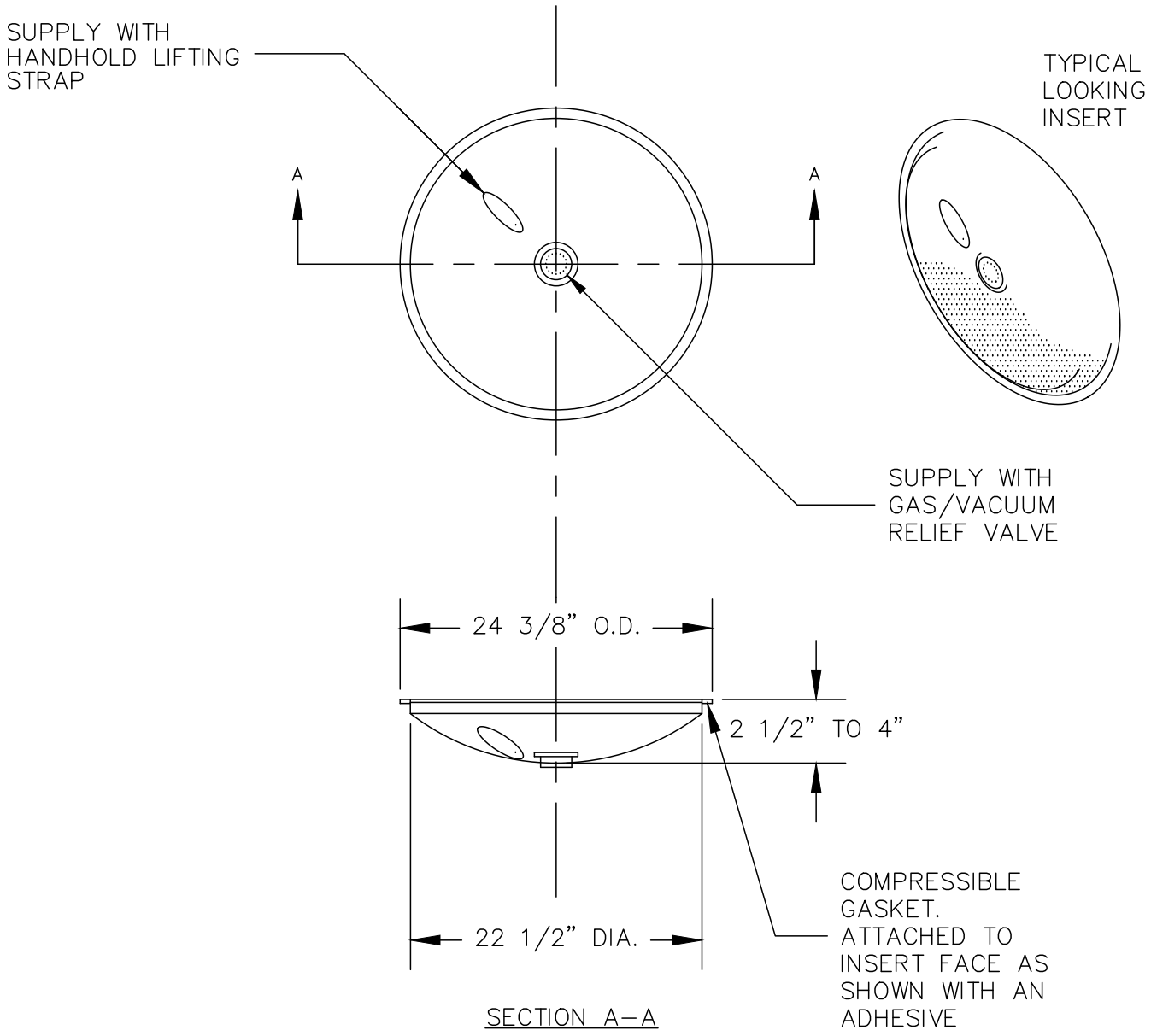
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER MANHOLE STEP	DETAIL # 500.05



NOTE:
CAST IRON STEPS MUST BE INSTALLED DURING MANHOLE SECTION POUR OR BEFORE CONCRETE SETS.
NEENAH CASTING No. R–1981–N OR EQUAL.



CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER MANHOLE STEP (ALTERNATE)	DETAIL # 500.06

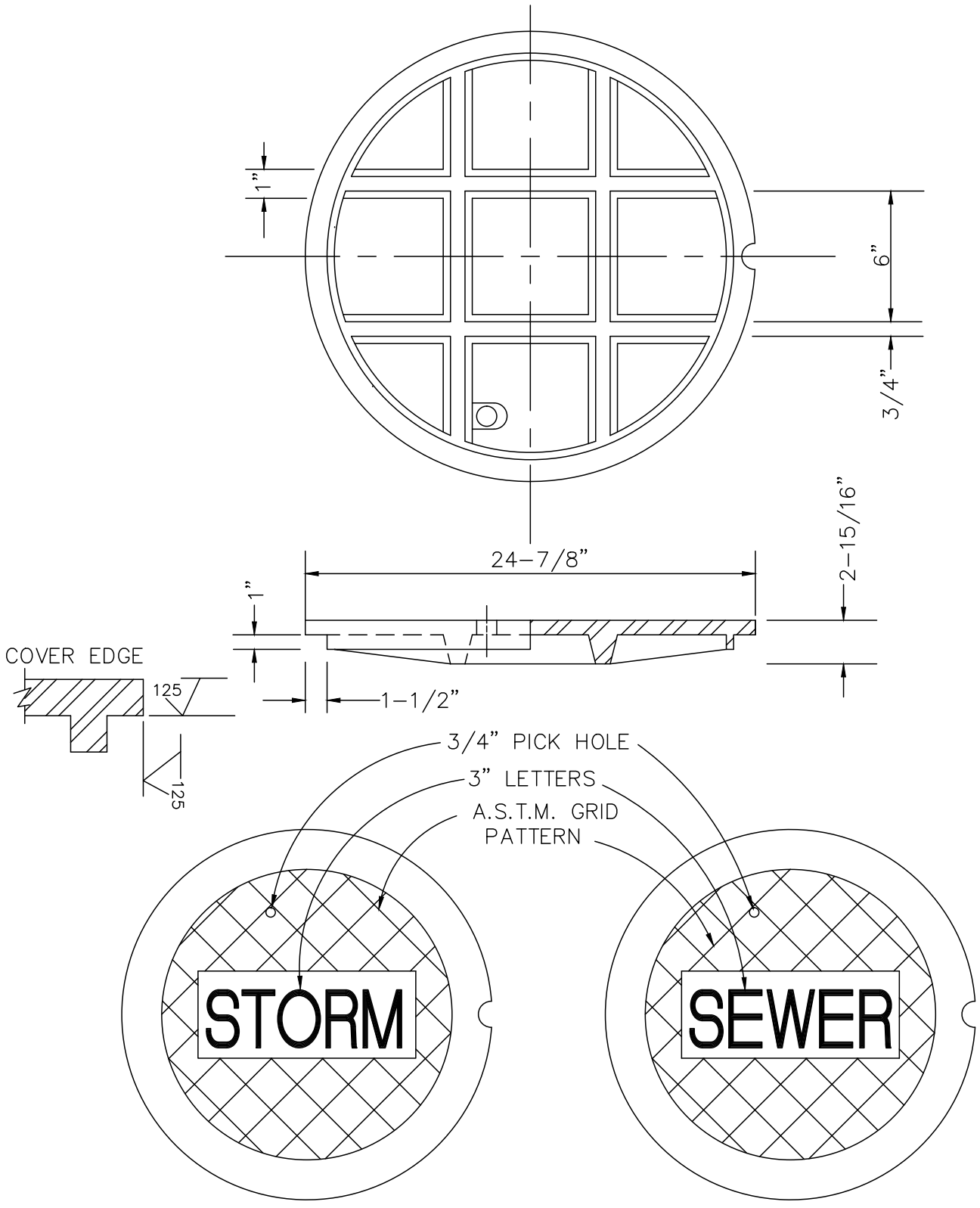


SECTION A–A

NOTES:

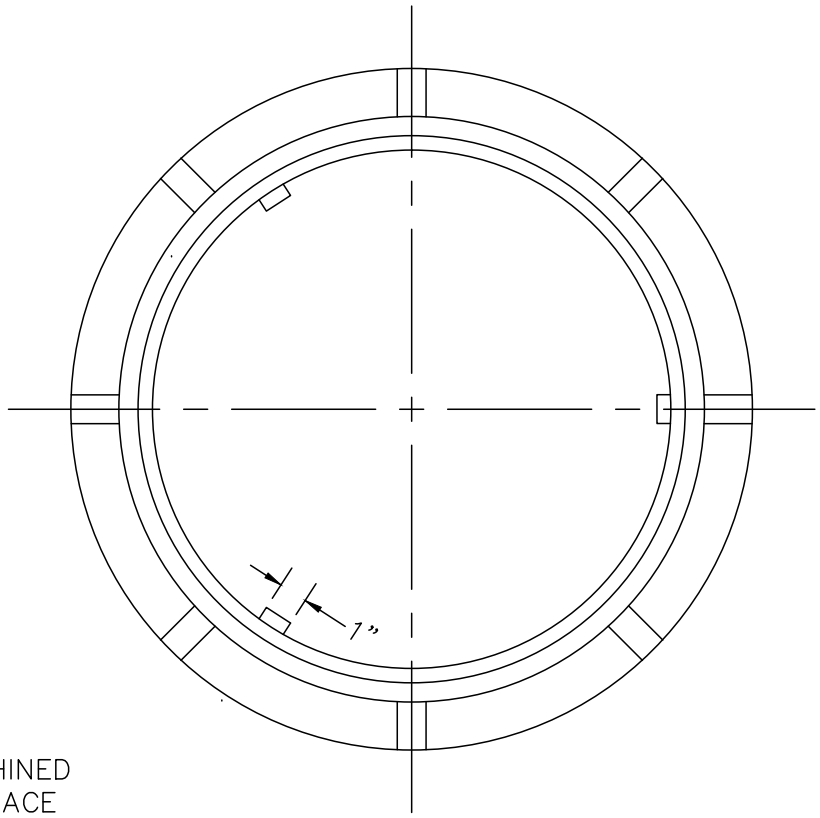
1. INSERT MATERIAL: ABS OR PE
AVAILABLE FROM : FRW INDUSTRIES, INC.
14882 ROSEBUD, CONROE, TX 77303

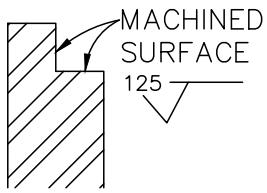
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER MANHOLE COVER INSERT (INFLOW PREVENTER)	DETAIL # 500.07



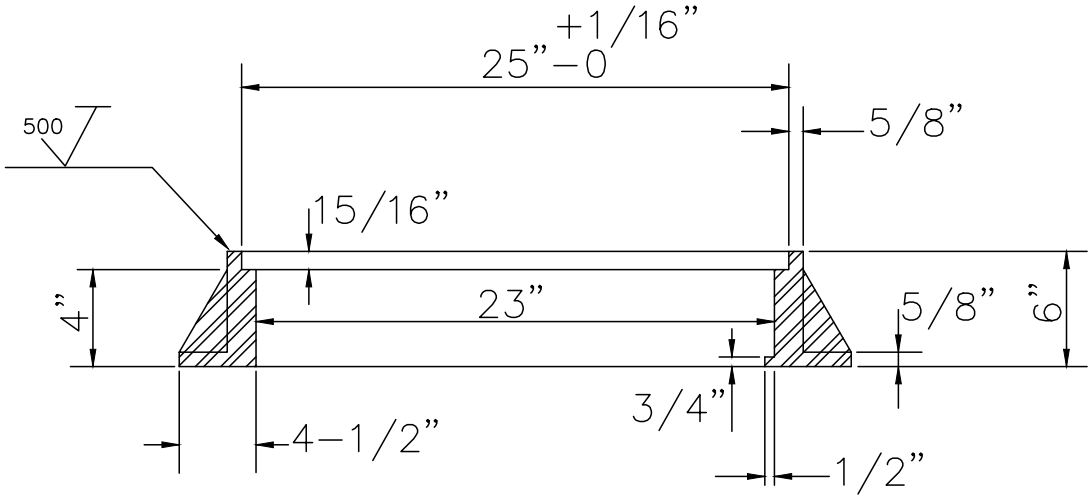
NOTE: ALL MANHOLE LIDS PLACED WITHIN A ROADWAY SECTION SHALL BE RATED FOR HEAVY VEHICLE TRAFFIC.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER MANHOLE COVER	DETAIL # 500.08

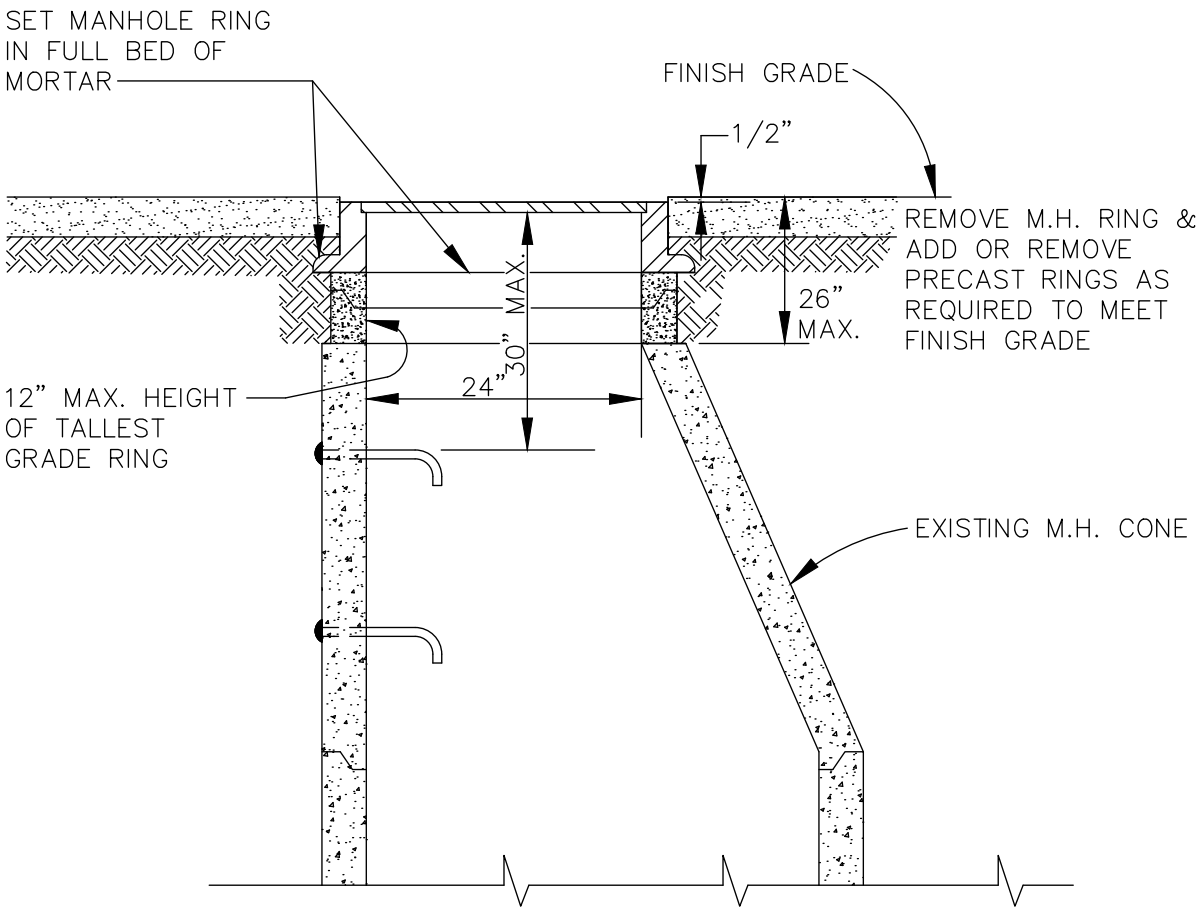




FRAME



CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER MANHOLE FRAME	DETAIL # **500.09**

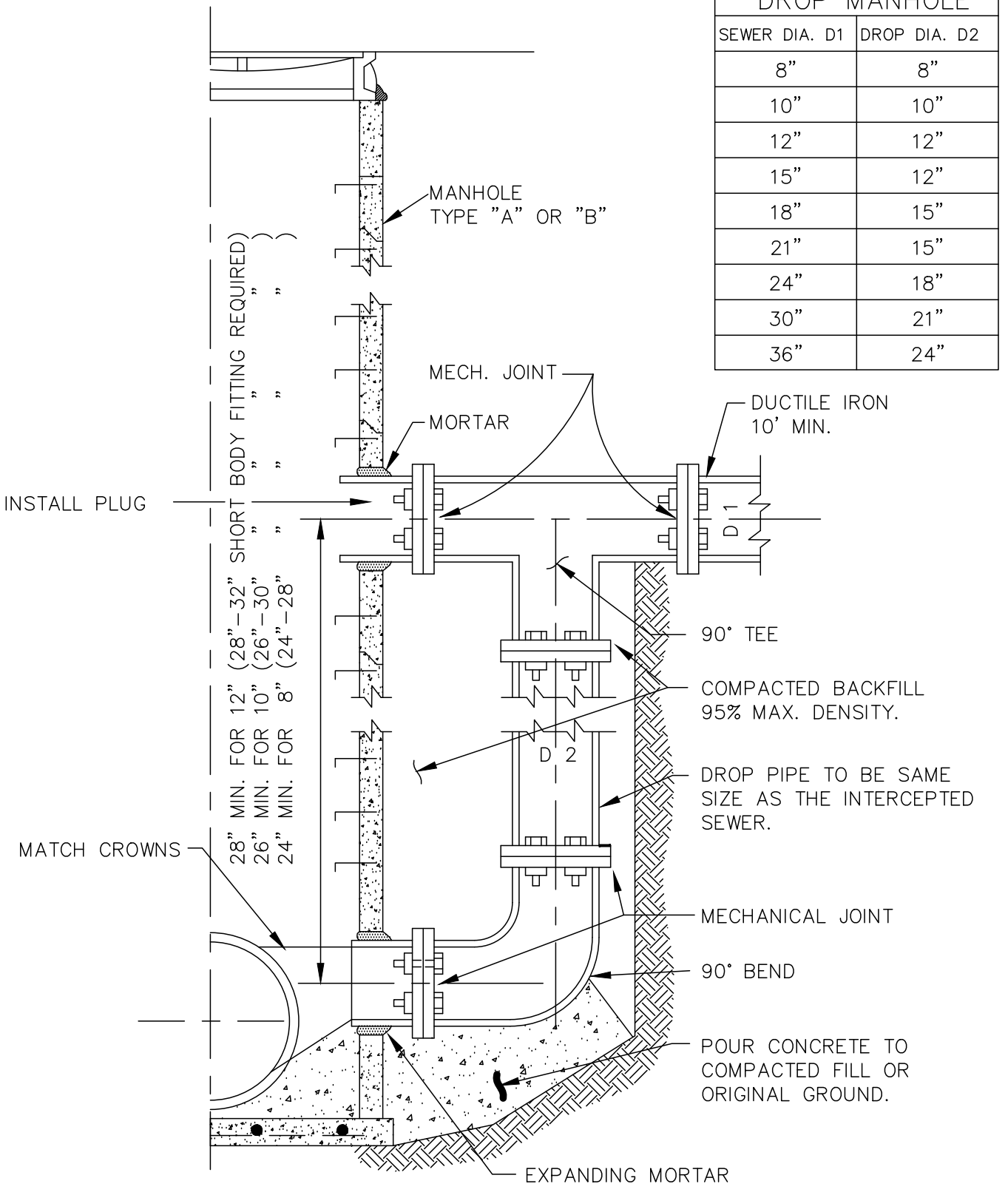


NOTES:

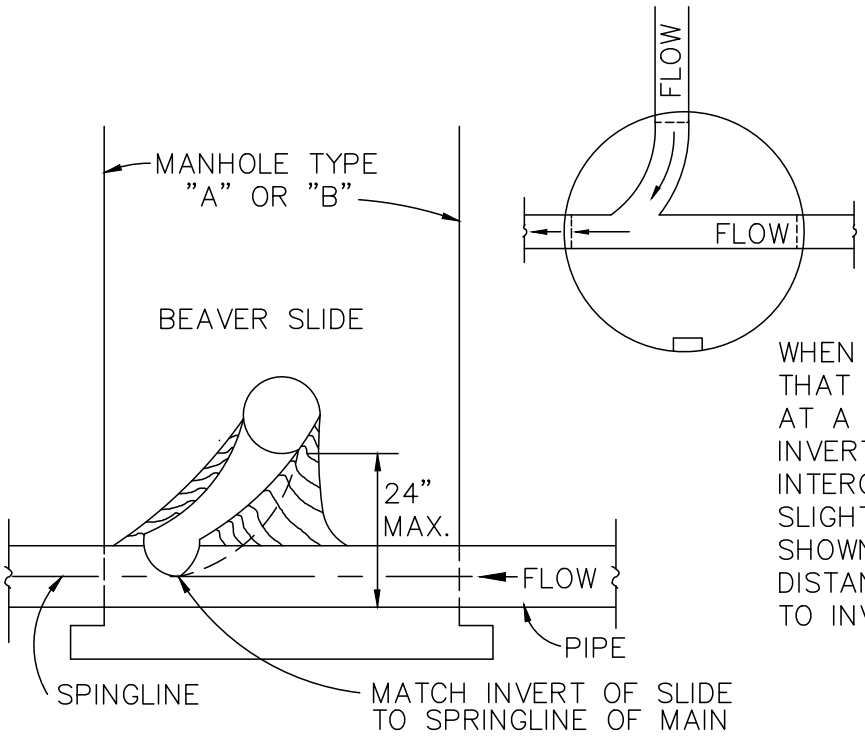
1. ALL PERTINENT SECTIONS OF THE STANDARD SPEC. WILL APPLY.
2. REFER TO ASTM DESIGNATION C-478-69 FOR DESIGN AND STRENGTH REQUIREMENTS.
3. WHEN AN ADJUSTMENT OF GREATER THAN 18" IN GRADE RINGS IS REQUIRED, A CONE ADJUSTMENT SHALL BE MADE.
7. ALL EXTERIOR JOINTS, INCLUDING GRADE RINGS AND SURFACE CASTINGS, SHALL BE WRAPPED WITH WRAPIDSEAL MANHOLE ENCAPSULATION SYSTEM.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 4/2011	SANITARY SEWER MANHOLE RING ADJUSTMENT	DETAIL # 500.10

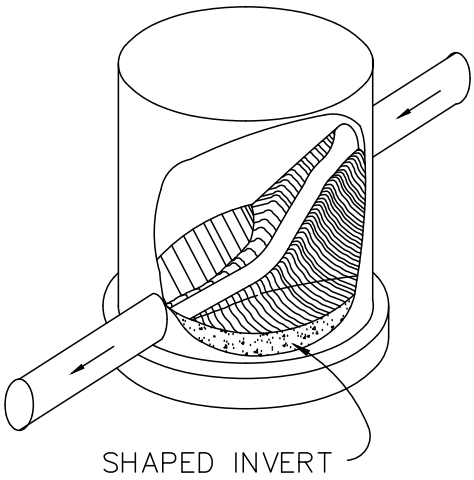
DROP MANHOLE	
SEWER DIA. D1	DROP DIA. D2
8"	8"
10"	10"
12"	12"
15"	12"
18"	15"
21"	15"
24"	18"
30"	21"
36"	24"

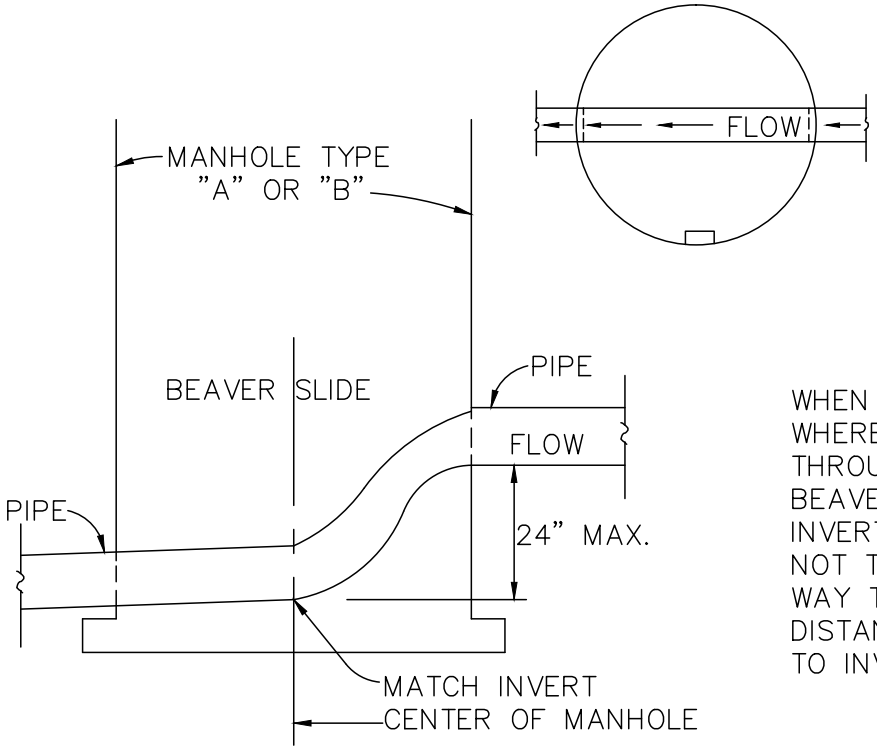


CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: N.T.S. REVISED: 6/99	SANITARY SEWER DROP CONNECTION TYPE A + B MANHOLE	DETAIL # 500.11



WHEN INSTALLING A BEAVER SLIDE THAT INTERCEPTS AN EXISTING SEWER AT A RIGHT ANGLE, THE CONNECTING INVERT OF THE BEAVER SLIDE IS TO INTERCEPT THE EXISTING SEWER SLIGHTLY ABOVE THE SPRINGLINE AS SHOWN.
DISTANCE MEASURED FROM INVERT TO INVERT.

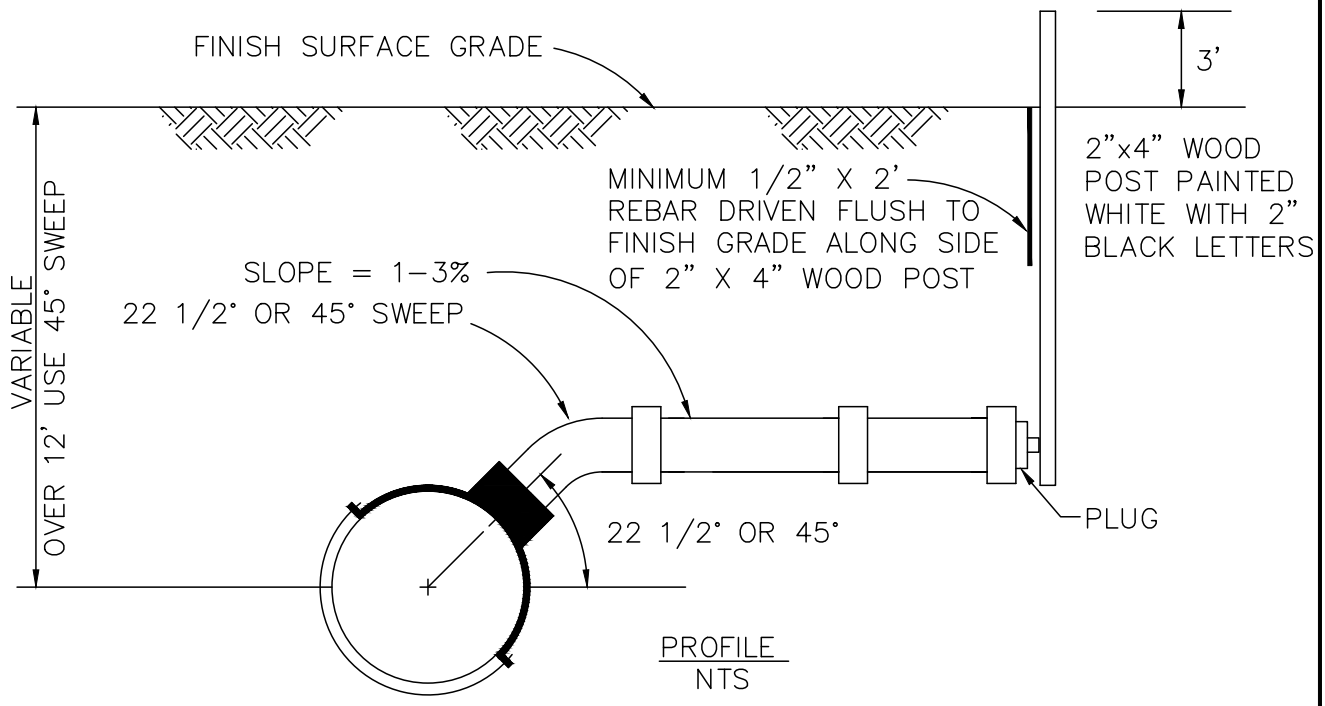




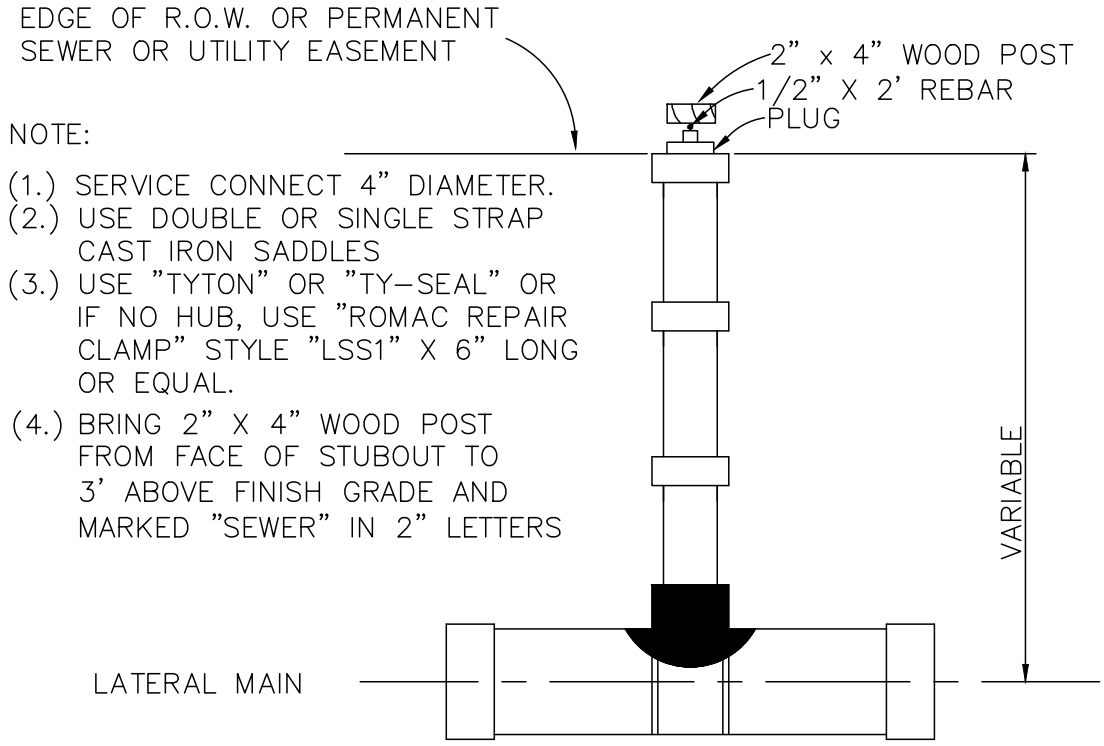
WHEN INSTALLING A BEAVER SLIDE WHERE THE FLOW IS STRAIGHT THROUGH THE MANHOLE, THE BEAVER SLIDE IS TO MATCH THE INVERT OF THE EXISTING LINE AND NOT TO EXTEND MORE THAN HALF-WAY THROUGH THE MANHOLE.
DISTANCE MEASURED FROM INVERT TO INVERT.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER TYPICAL BEAVER SLIDE TYPE A + B MANHOLE	DETAIL # 500.12

NOTE: BRING 2"x4" WOOD POST 3' ABOVE FINISH SURFACE GRADE.



PROFILE
NTS

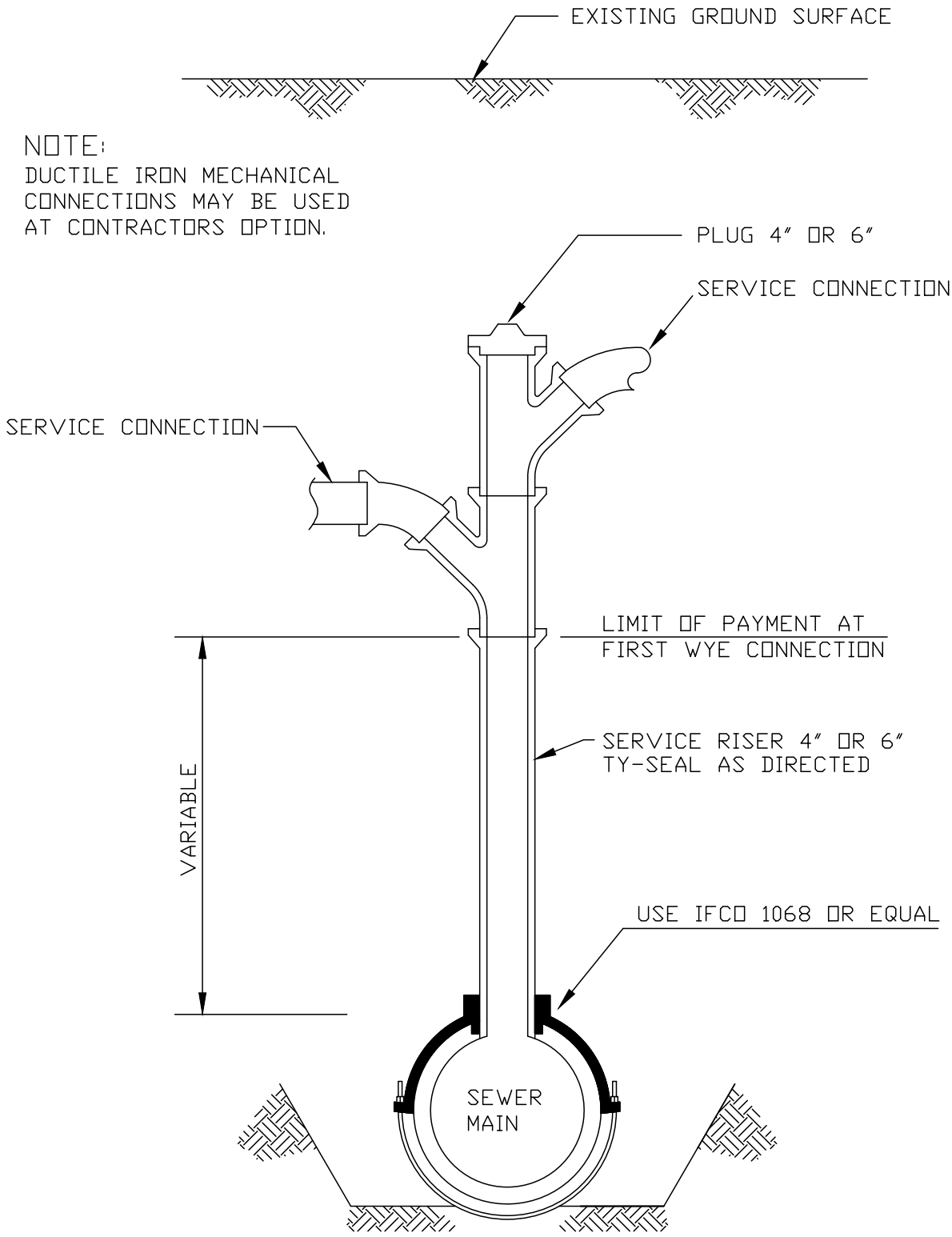


NOTE:

(1.) SERVICE CONNECT 4" DIAMETER.
(2.) USE DOUBLE OR SINGLE STRAP CAST IRON SADDLES
(3.) USE "TYTON" OR "TY-SEAL" OR IF NO HUB, USE "ROMAC REPAIR CLAMP" STYLE "LSS1" X 6" LONG OR EQUAL.
(4.) BRING 2" X 4" WOOD POST FROM FACE OF STUBOUT TO 3' ABOVE FINISH GRADE AND MARKED "SEWER" IN 2" LETTERS

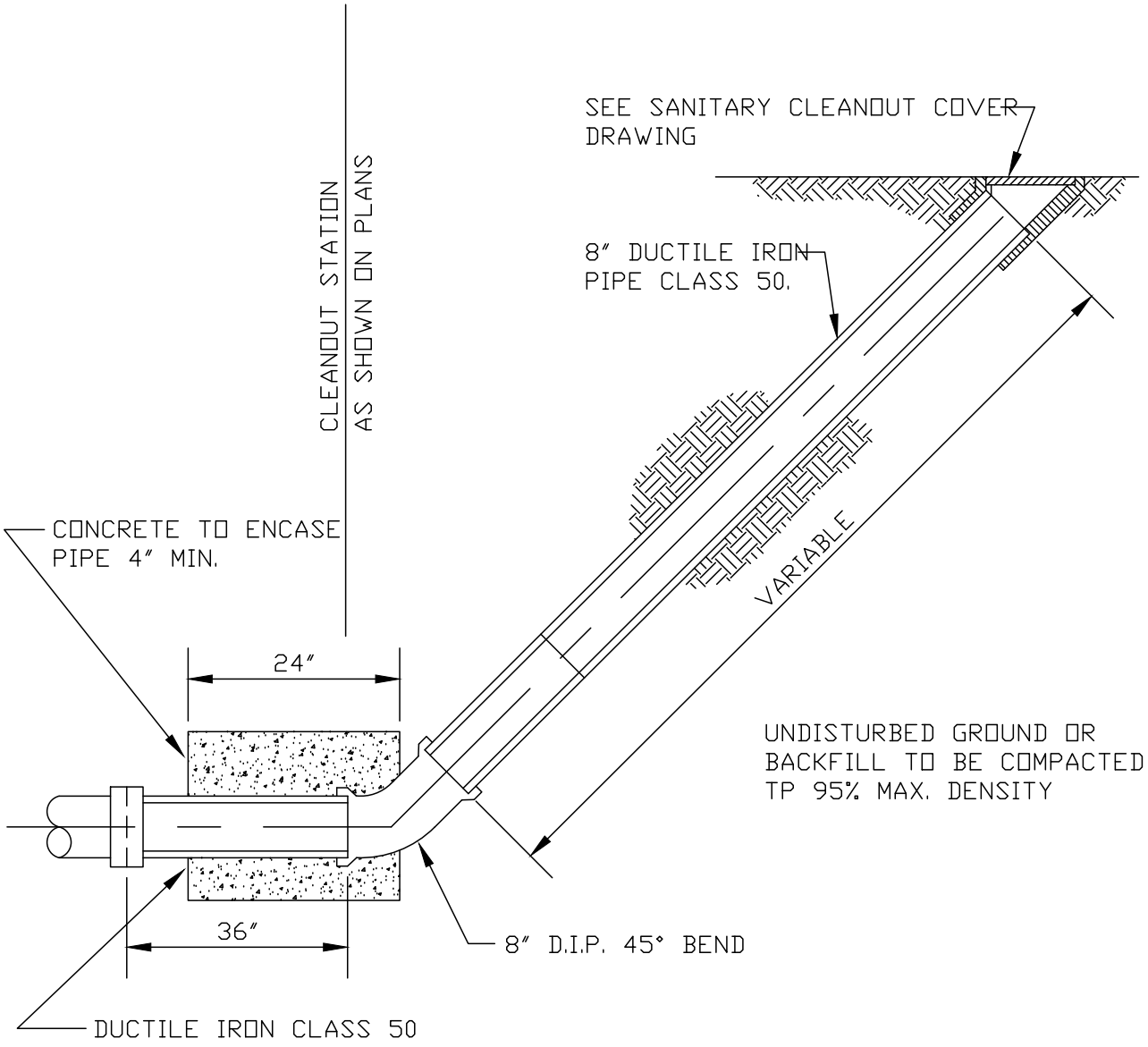
PLAN
NTS

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 2/2007	SANITARY SEWER SERVICE CONNECTION	DETAIL # 500.13



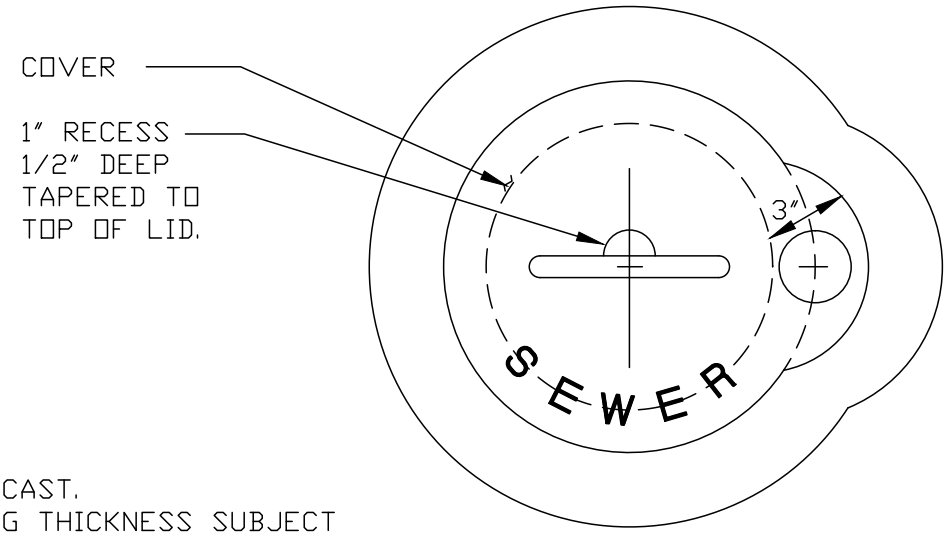
NOTE: USE TOP ENTRY TAP IF SEWER MAIN IS 10' DEEP OR GREATER.

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	**SANITARY SEWER** **SERVICE RISER/TOP ENTRY** **FOR DEEP SEWER - DUCTILE IRON**	DETAIL # **500.14**



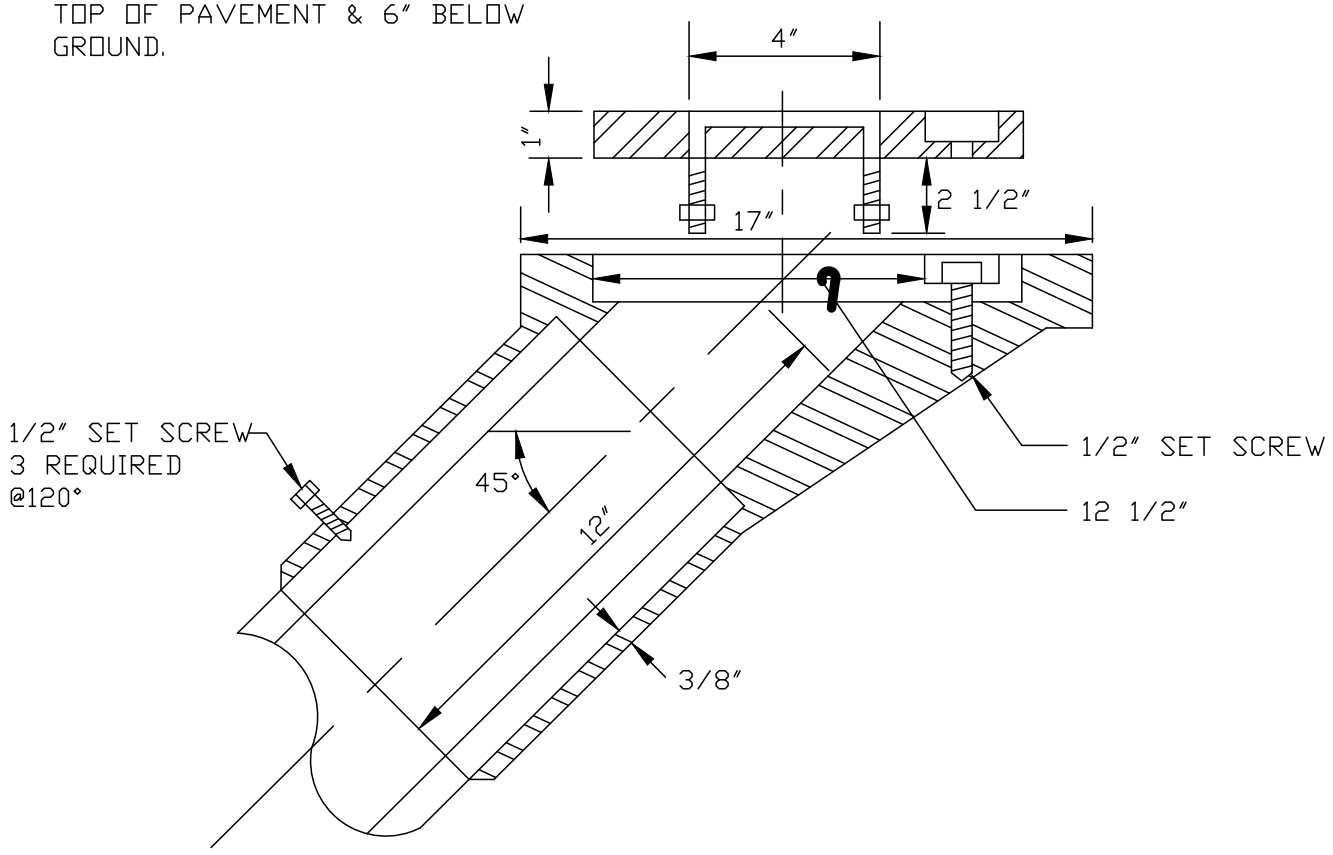
NOTE: WHEN D.I. PIPE WITH MECHANICAL JOINT IS USED CONCRETE ENCASEMENT IS NOT NECESSARY

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	# SANITARY SEWER CLEANOUT	DETAIL # 500.15

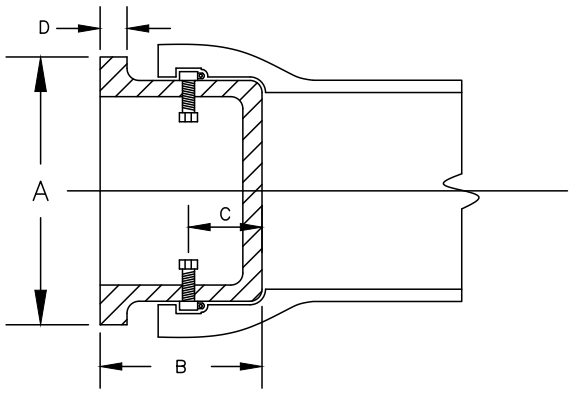


NOTE:

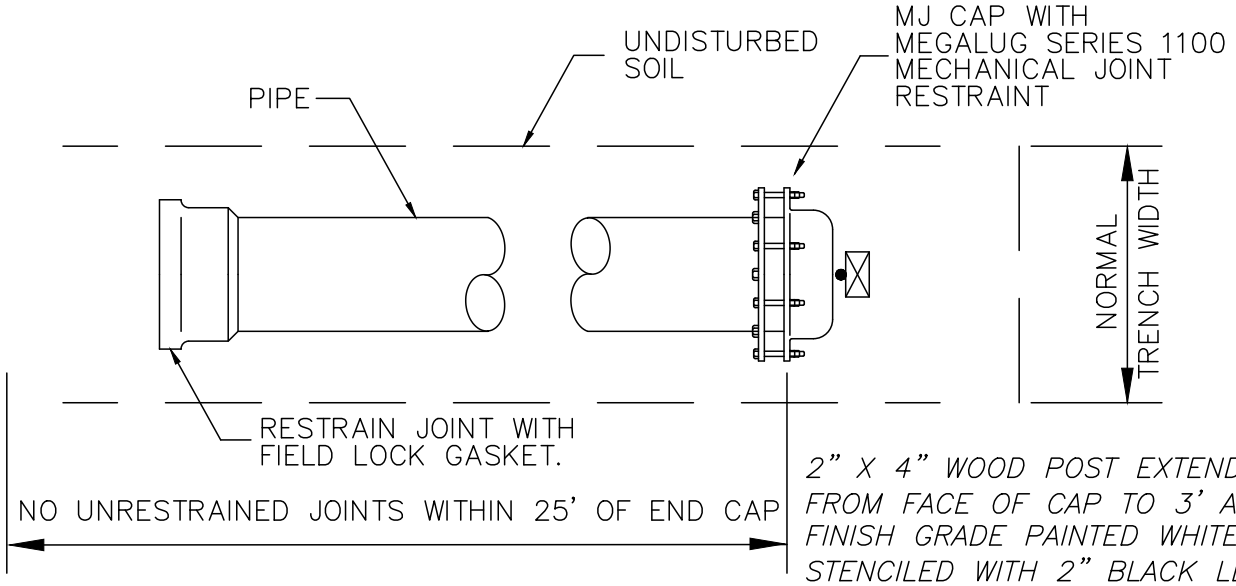
1. TO BE CAST.
2. CASTING THICKNESS SUBJECT TO FOUNDRY REQUIREMENTS.
3. CASTING MUST BE SIZED TO 8" AND OVER, CLASS 22 C.I. OR CLASS 50 D.I. PIPE.
4. COVER SHALL BE 1/4" BELOW TOP OF PAVEMENT & 6" BELOW GROUND.



CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SANITARY SEWER CLEANOUT COVER	DETAIL # 500.16



SIZE	PRESSURE RATING PSI (SET-SCREWS PROVIDE RESTRAINT)	A	B	C	D	SET-SCREWS LENGTH	SET-SCREWS SIZE	SET-SCREWS NUMBER
4	250	4.80	5 1/8	2 5/16	1	7/8	5/8	4
6	250	6.90	5 1/4	2 3/8	1	1 1/4	5/8	4
8	250	9.05	5 5/8	2 5/8	1 1/16	1 1/4	5/8	6
10	250	11.10	5 3/4	2 9/16	1 1/8	1 1/4	3/4	6
12	250	13.20	5 3/16	2 9/16	1 3/16	1 1/4	3/4	6
14	250	15.30	7	3 5/8	1 1/4	2	7/8	10
16	250	17.40	7 1/16	3 5/8	1 5/16	2	7/8	10
18	250	19.50	7 1/8	3 5/8	1 3/8	2	7/8	12



2" X 4" WOOD POST EXTENDING FROM FACE OF CAP TO 3' ABOVE FINISH GRADE PAINTED WHITE AND STENCILED WITH 2" BLACK LETTERS "WATER". DRIVE A MINIMUM 1/2" X 2' STICK OF REBAR ALONGSIDE OF POST FLUSH TO THE GROUND

NOTES:

1. ALL MECHANICAL JOINT (MJ) FITTINGS, INCLUDING VALVES AND END CAPS, SHALL BE RESTRAINED WITH MEGALUG SERIES 1100, MECHANICAL JOINT RESTRAINTS OR APPROVED EQUAL.
2. ALL MECHANICAL JOINT RESTRAINTS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.

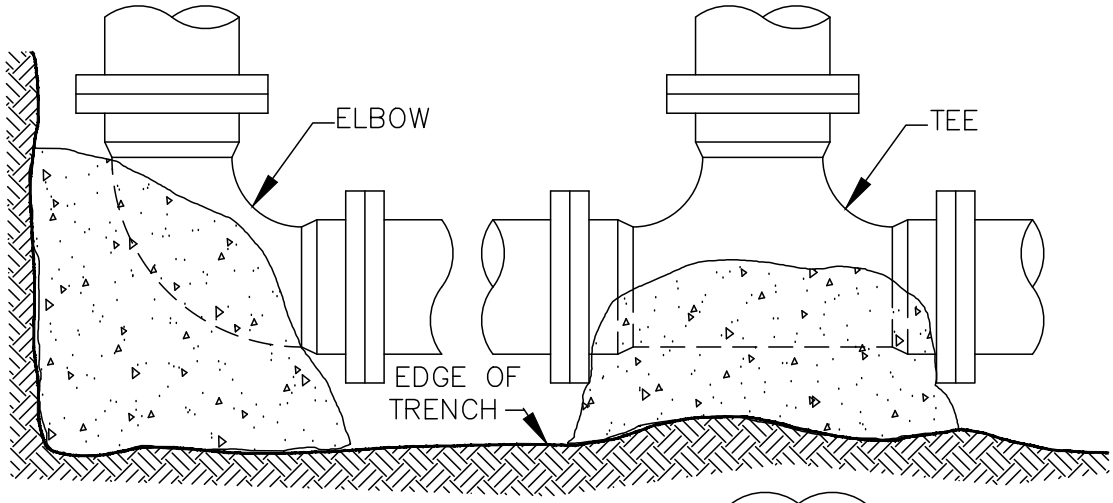
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

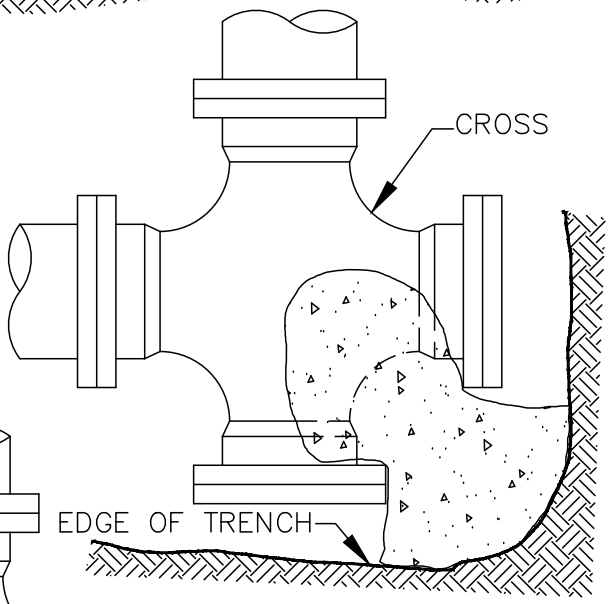
REVISED: 2/2007

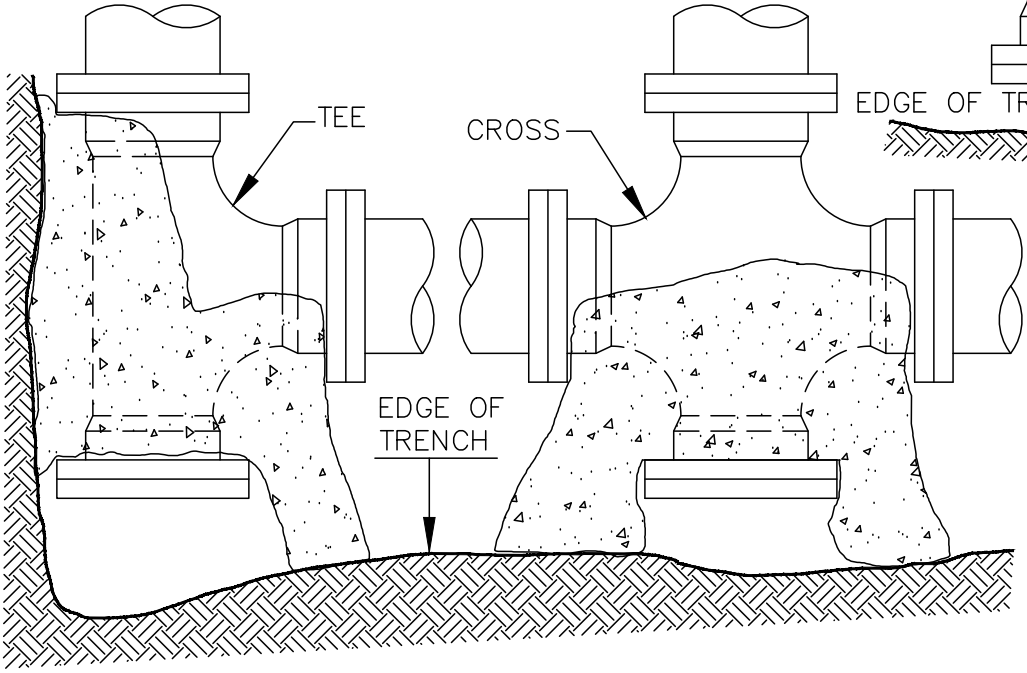
PLUG AND CAP FOR BELL AND SPIGOT PIPE

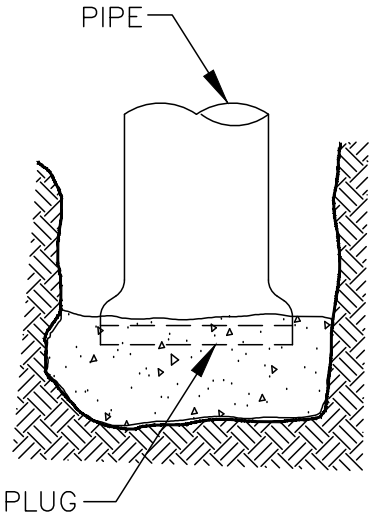
DETAIL # **600.01**



PIPE SIZE	MIN. BASE AREA SQ. FT.		
	90° BEND	45° BEND	PLUG
6"	2.0	1	2.0
8"	2.5	1.5	2.5
10"	4.5	2.5	4.5
12"	6	3.5	6
14"	8	4.5	8
16"	10.5	6	10.5
24"	24	13	24





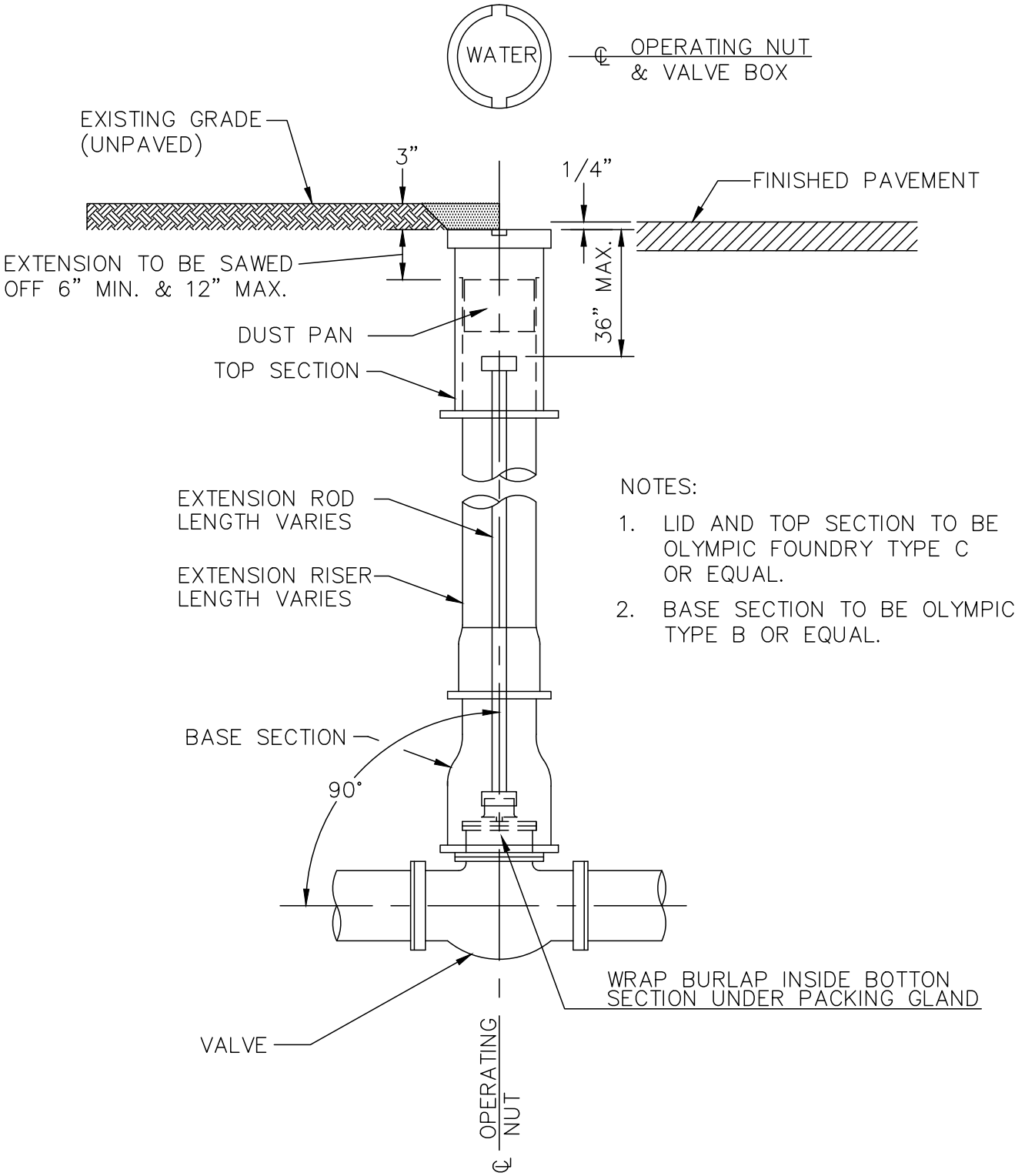


SCALE: NTS

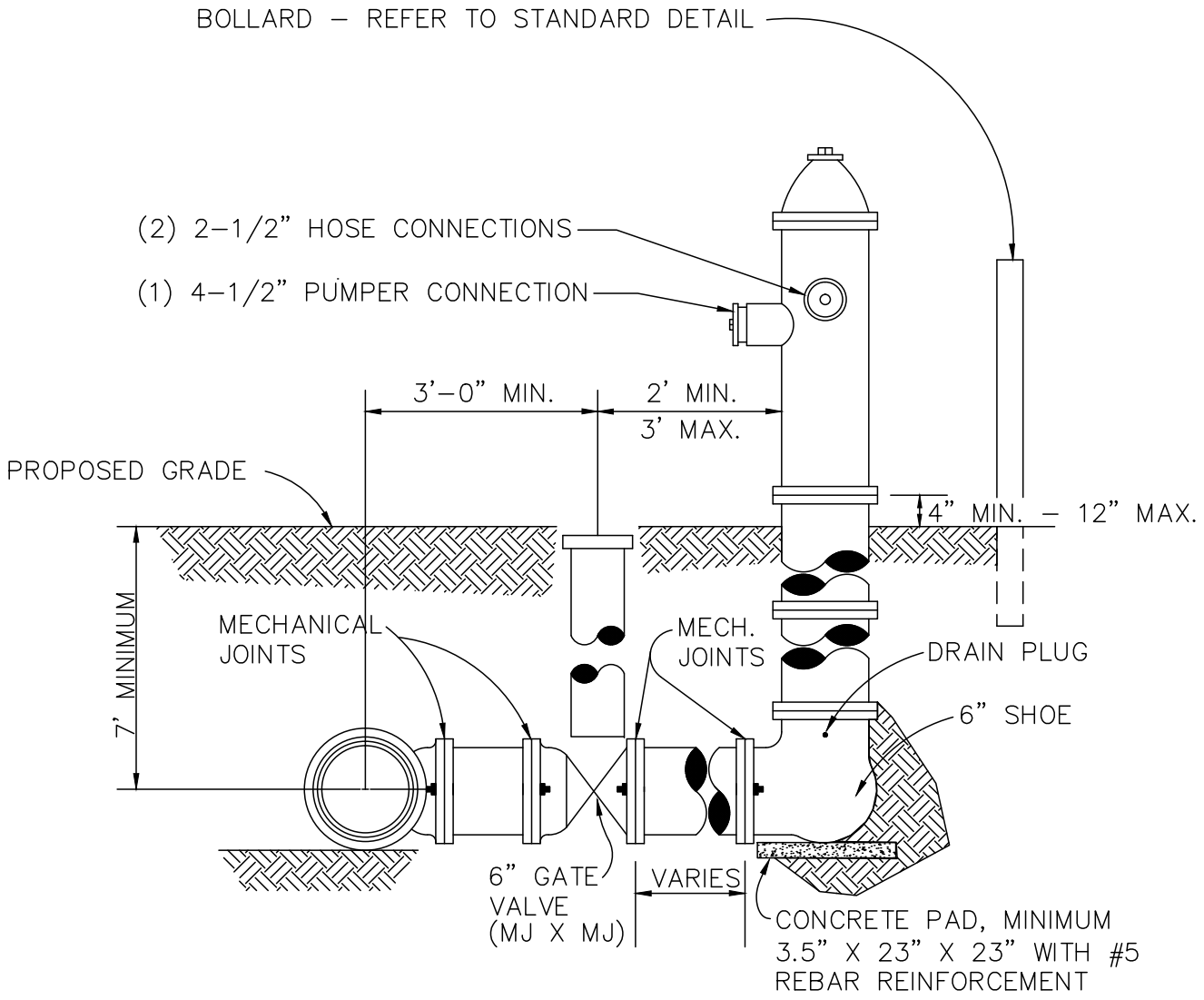
REVISED: 6/99

THRUST BLOCK

DETAIL # **600.02**



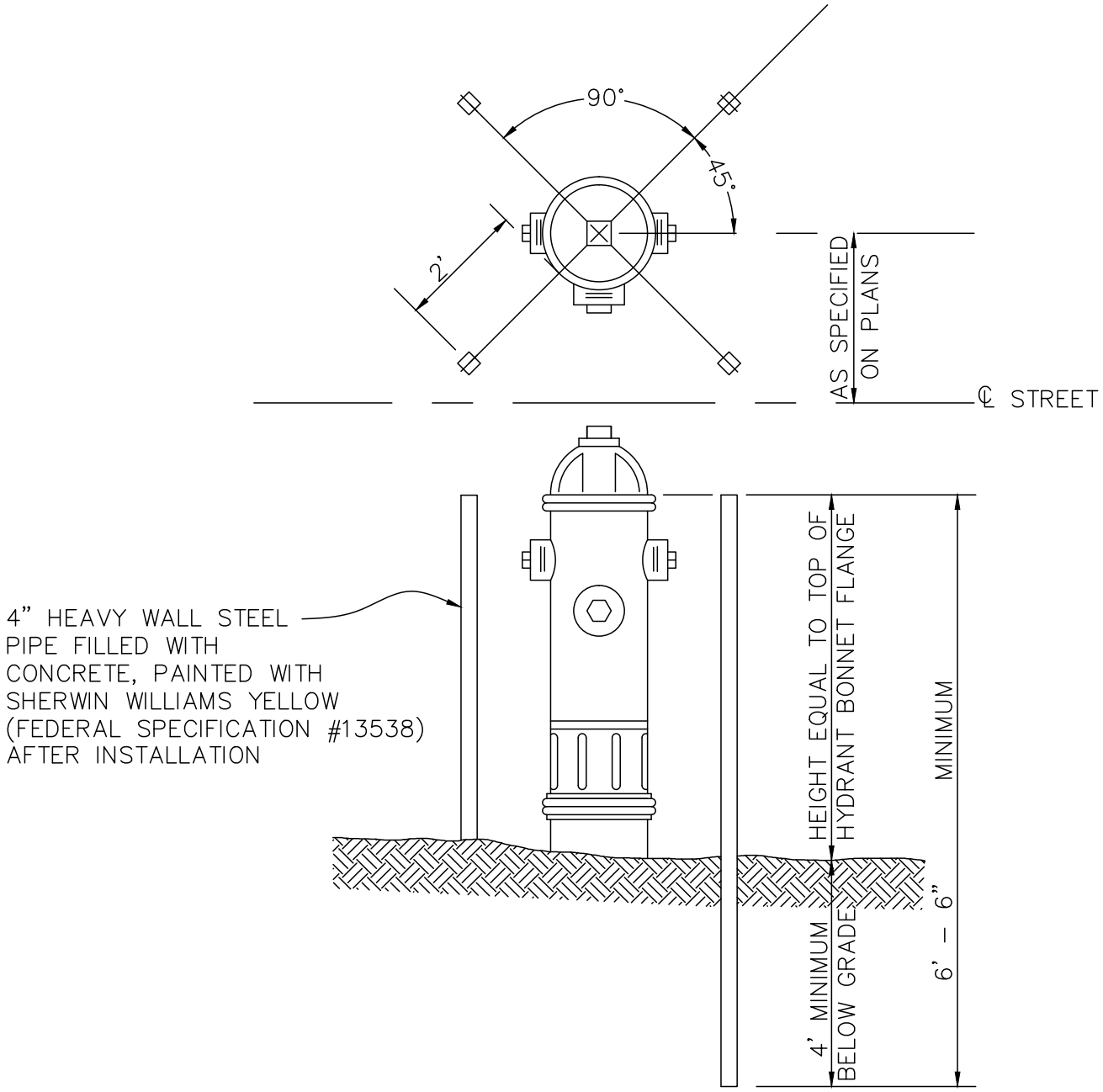
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	TYPICAL VALVE BOX	DETAIL # 600.03



HYDRANT INSTALLATION NOTES:

1. HYDRANT BARREL MUST BE INSTALLED PLUMB AND THE LEG MUST BE INSTALLED LEVEL.
2. DRAIN PLUG TO BE INSTALLED BY CONTRACTOR.
3. ALL HYDRANTS SHALL BE PAINTED WITH SHERWIN/WILLIAMS YELLOW (FEDERAL SPECIFICATION #13538).
4. AUXILLIARY GATE VALVE BOX TO BE INSTALLED ACCORDING TO DETAIL FOR TYPICAL VALVE BOX.
5. USE MEGALUG RESTRAINTS ON ALL MECHANICAL JOINTS

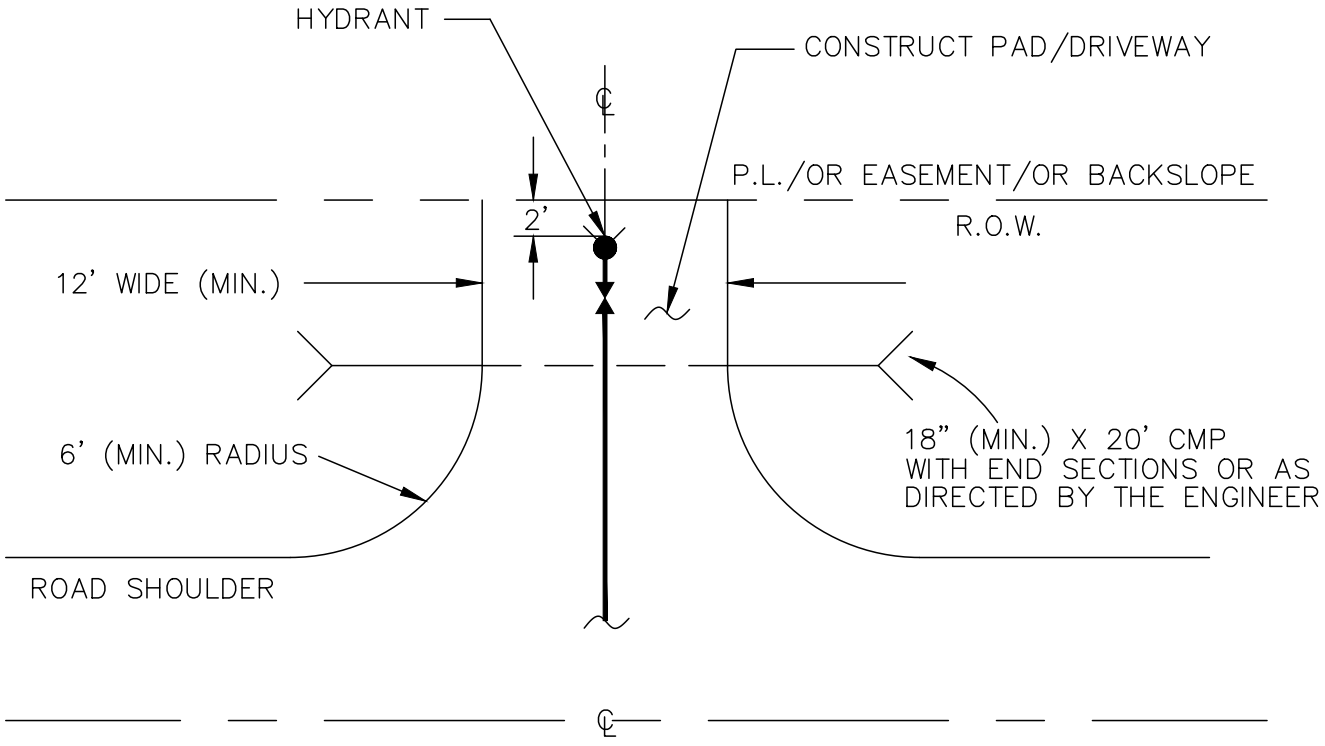
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 1/2008	SINGLE PUMPER "L" BASE HYDRANT ASSEMBLY	DETAIL # 600.04



NOTES:

1. GUARD POSTS WILL BE FURNISHED & INSTALLED BY THE CONTRACTOR.
2. POSTS SHALL BE LOCATED TO ALLOW UNRESTRICTED ACCESS TO PUMPER AND HOSE CONNECTIONS.

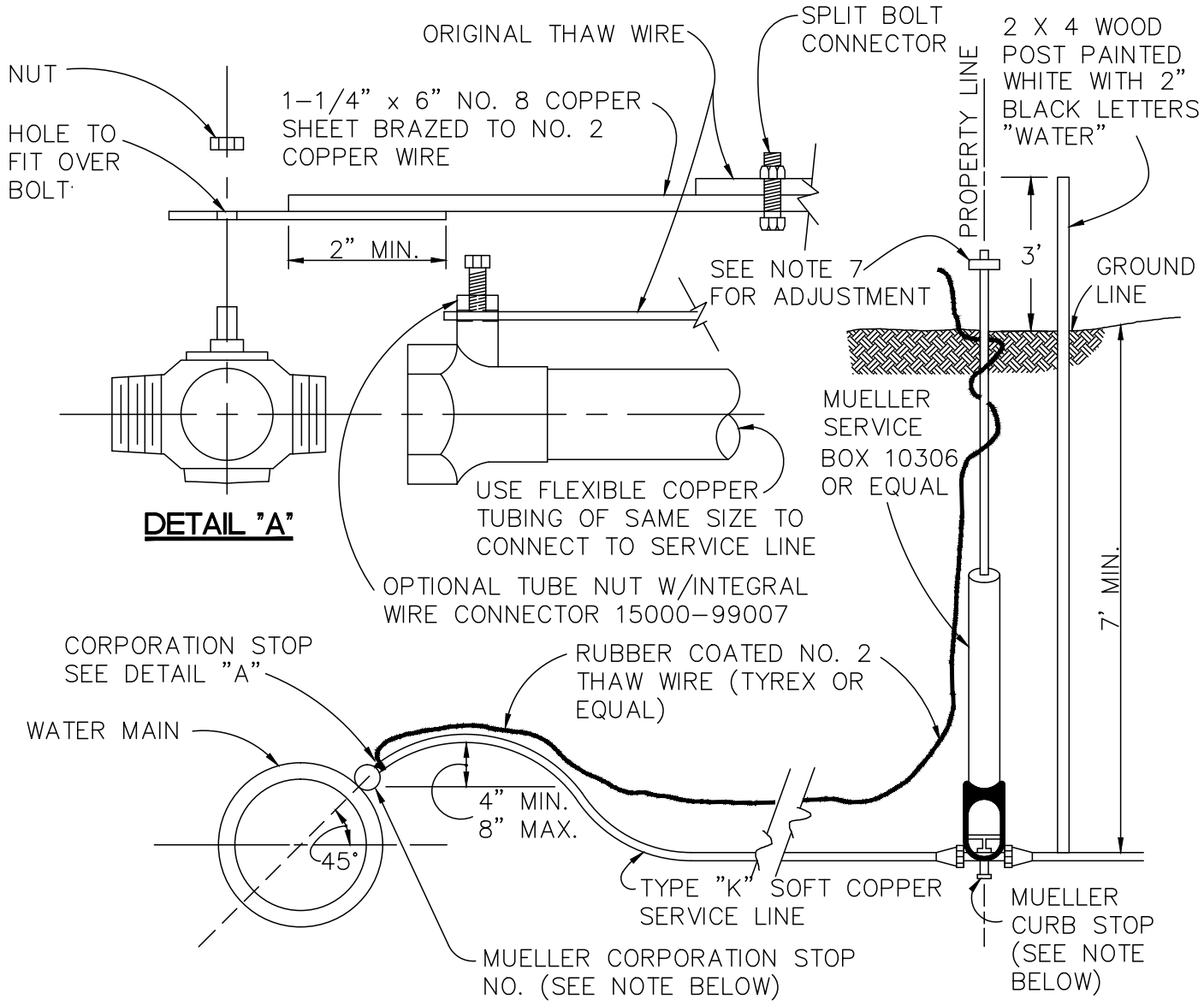
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 2/2007	HYDRANT GUARD POSTS	DETAIL # **600.05**



NOTES:

1. MATCH CULVERT INVERTS TO BOTTOM DITCHLINE GRADE OR DESIGN ELEVATIONS AS SHOWN ON PLANS.
2. CULVERT BEDDING MATERIAL SHALL BE TWO INCH MAXIMUM SIZE SAND OR SANDY GRAVEL FOR A MINIMUM DISTANCE OF SIX INCHES AROUND CULVERT.
3. THREE INCH MAXIMUM GRANULAR GRAVEL FILL MATERIAL IS REQUIRED FOR TOP TWO FEET OF THE DRIVEWAY.
4. TOP COURSE MATERIAL SHALL MATCH THE EXISTING GRAVEL ROAD SURFACE BUT IN NO CASE SHALL EXCEED TWO INCHES IN SIZE.
5. DRIVEWAY SHALL BE CONSTRUCTED ON A MINUS 3% GRADE FROM THE SHOULDER OF THE ROAD TO THE PROPERTY LINE OR AS DIRECTED BY THE ENGR.
6. DRIVEWAYS CONSTRUCTED ONTO PAVED ROADS MUST BE PAVED WITH TWO INCHES AC FROM PAVED ROAD SURFACE TO THE FIRE HYDRANT OR AS DIRECTED BY THE ENGR.
7. CULVERT MATERIAL SHALL BE TYPE (CMP) CORRUGATED METAL PIPE GALVANIZED STEEL ONLY, CONFORMING TO ASHTO M-36 OR M-218 AND ASTM-A-444. CORRUGATIONS MAY BE EITHER ANNULAR OR HELICAL. CULVERT END SECTIONS SHALL BE GALVANIZED STEEL.

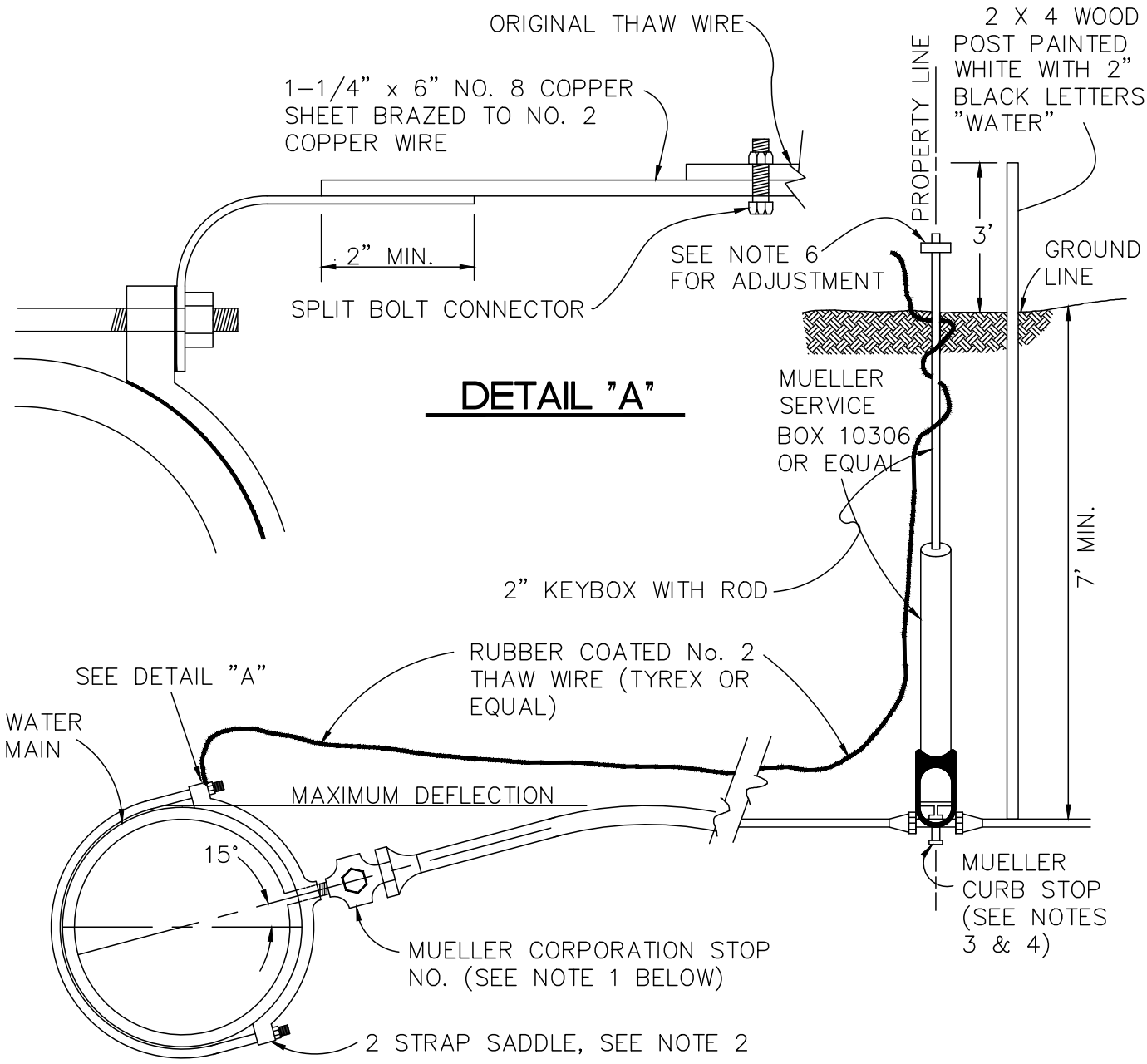
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	FIRE HYDRANT ACCESS PAD	DETAIL # 600.06



NOTES:

1. USE MUELLER CORPORATION STOP NO. 15025 FOR PIPE-THREAD SADDLES.
2. USE MUELLER CORPORATION STOP NO. 15000 FOR STEEL PIPE.
3. USE MUELLER CURB STOP NO H-15214 FOR COPPER TO COPPER CONNECTIONS.
4. ROD TO BE ATTACHED TO CURB STOP WITH NO. 6 GUAGE COPPER WIRE, NO SUBSTITUTIONS.
5. MUELLER SERVICE CLAMP TO BE USED ON ALL PLASTIC PIPE, DOUBLE STRAP OR EQUAL.
6. HDPE MAINLINES SHALL UTILIZE A SIDEWALL BRANCH SADDLE WITH INTEGRAL BRASS CC THREAD INSERT TO RECIEVE CORPORATION STOP.
7. CURB BOX FINISH ELEVATION SHALL BE AS FOLLOWS:
   - PAVED AREA .5" BELOW FININSH GRADE
   - GRAVEL AREA 1"-3" BELOW FINISH GRADE
   - YARD/UNDEVELOPED AREA 0" TO 3" ABOVE FINISH GRADE

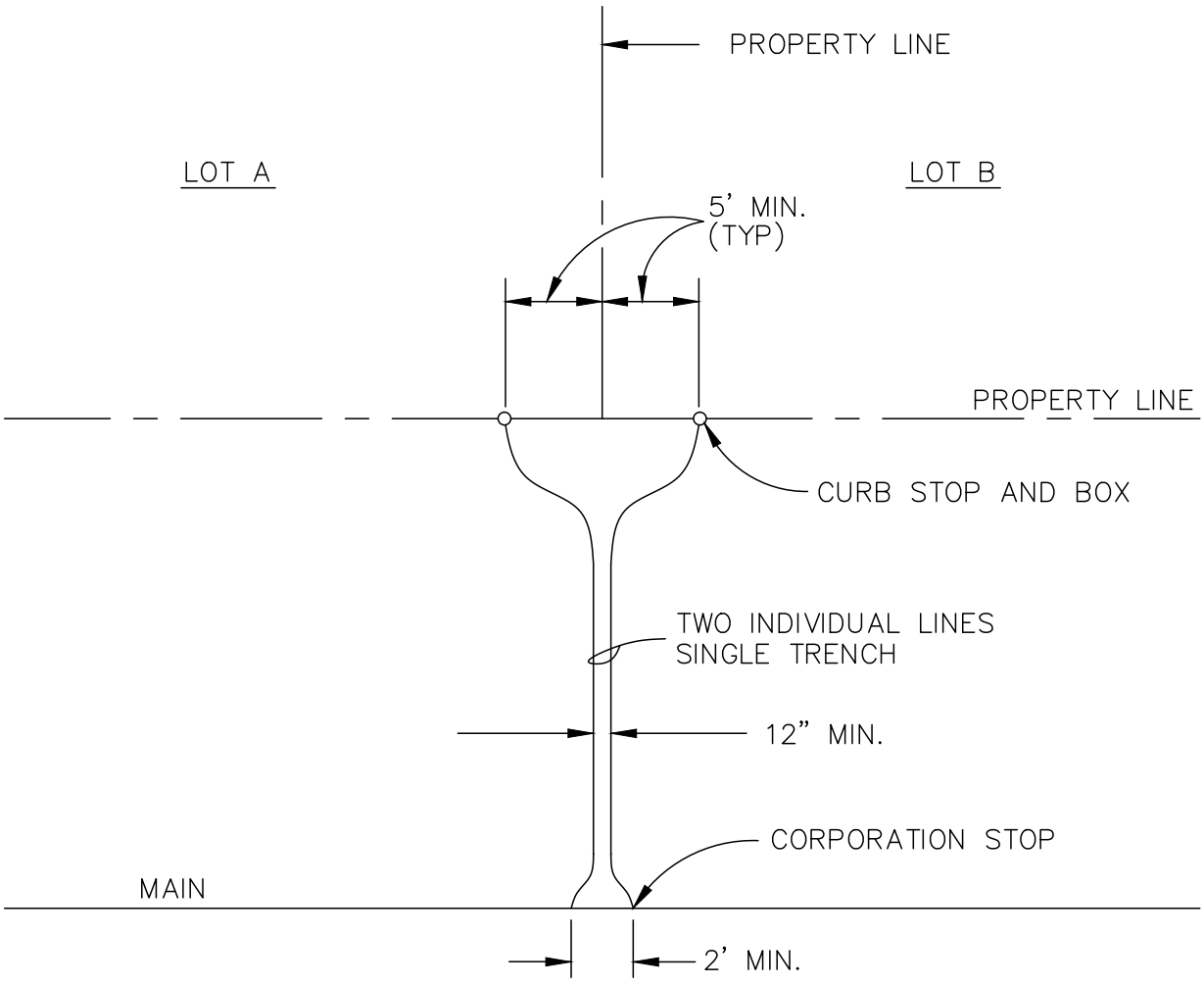
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 2007	WATER SERVICE CONNECT 1"	DETAIL # 600.07



NOTES

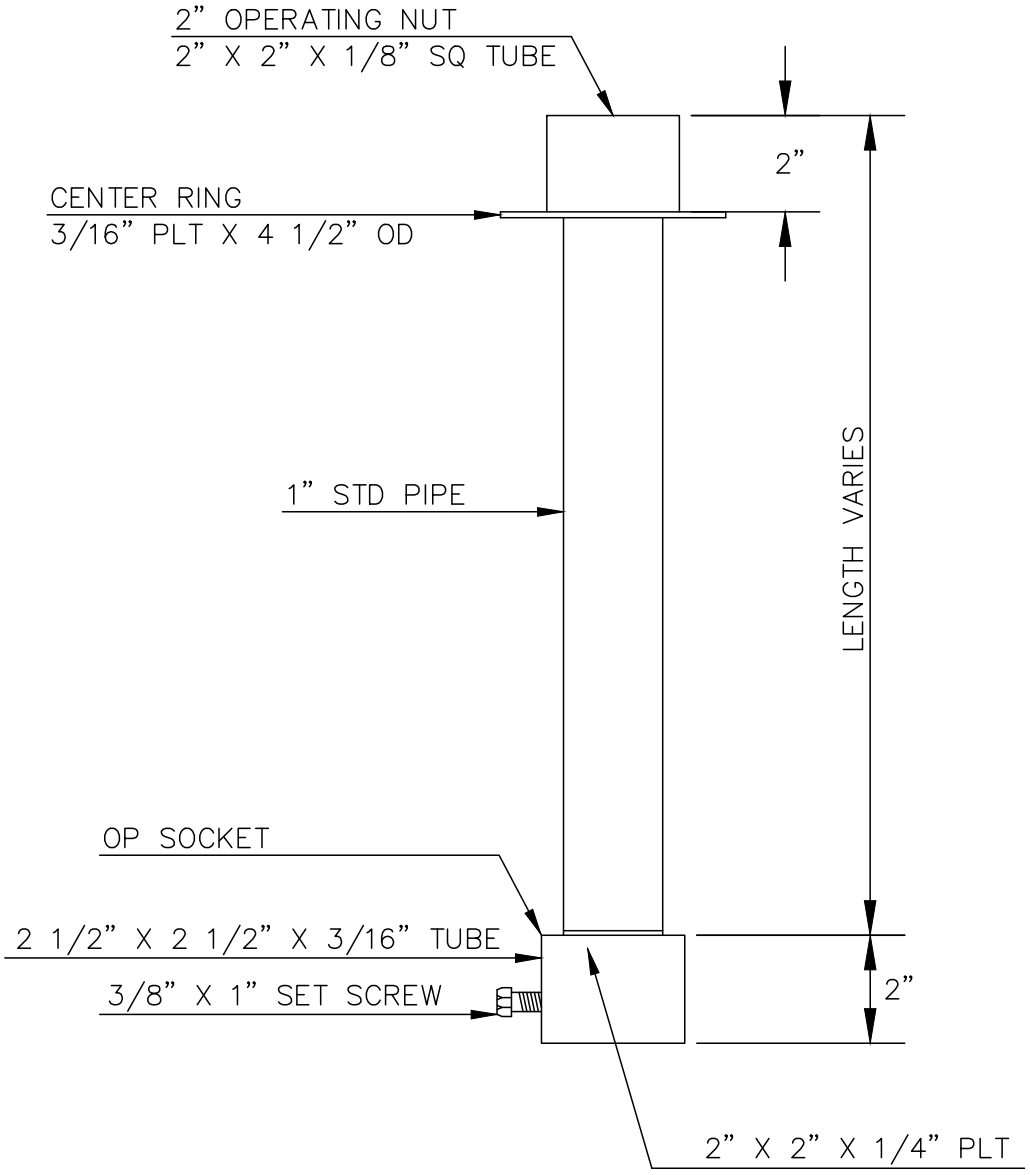
1. USE MUELLER CORPORATION STOP NO. 15025 OR EQUAL.
2. MUELLER SERVICE CLAMP WITH (2) TWO STRAPS OR EQUAL SHALL BE USED ON ALL PIPE.
3. ROD TO BE ATTACHED TO CURB STOP WITH NO. 6 GAUGE COPPER WIRE–NO SUBSTITUTIONS.
4. USE MUELLER CURB STOP NO. H15214 ORISEAL.
5. HDPE MAINLINES SHALL UTILIZE A SIDEWALL BRANCH SADDLE WITH INTEGRAL BRASS CC THREAD INSERT TO RECIEVE CORPORATION STOP.
6. CURB BOX FINISH ELEVATION SHALL BE AS FOLLOWS:
   - PAVED AREA .5" BELOW FININSH GRADE
   - GRAVEL AREA 1"–3" BELOW FINISH GRADE
   - YARD/UNDEVELOPED AREA 0"–3" BELOW FINISH GRADE

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 2/2007	WATER SERVICE CONNECT 1-1/2" AND 2"	DETAIL # 600.08



PLAN

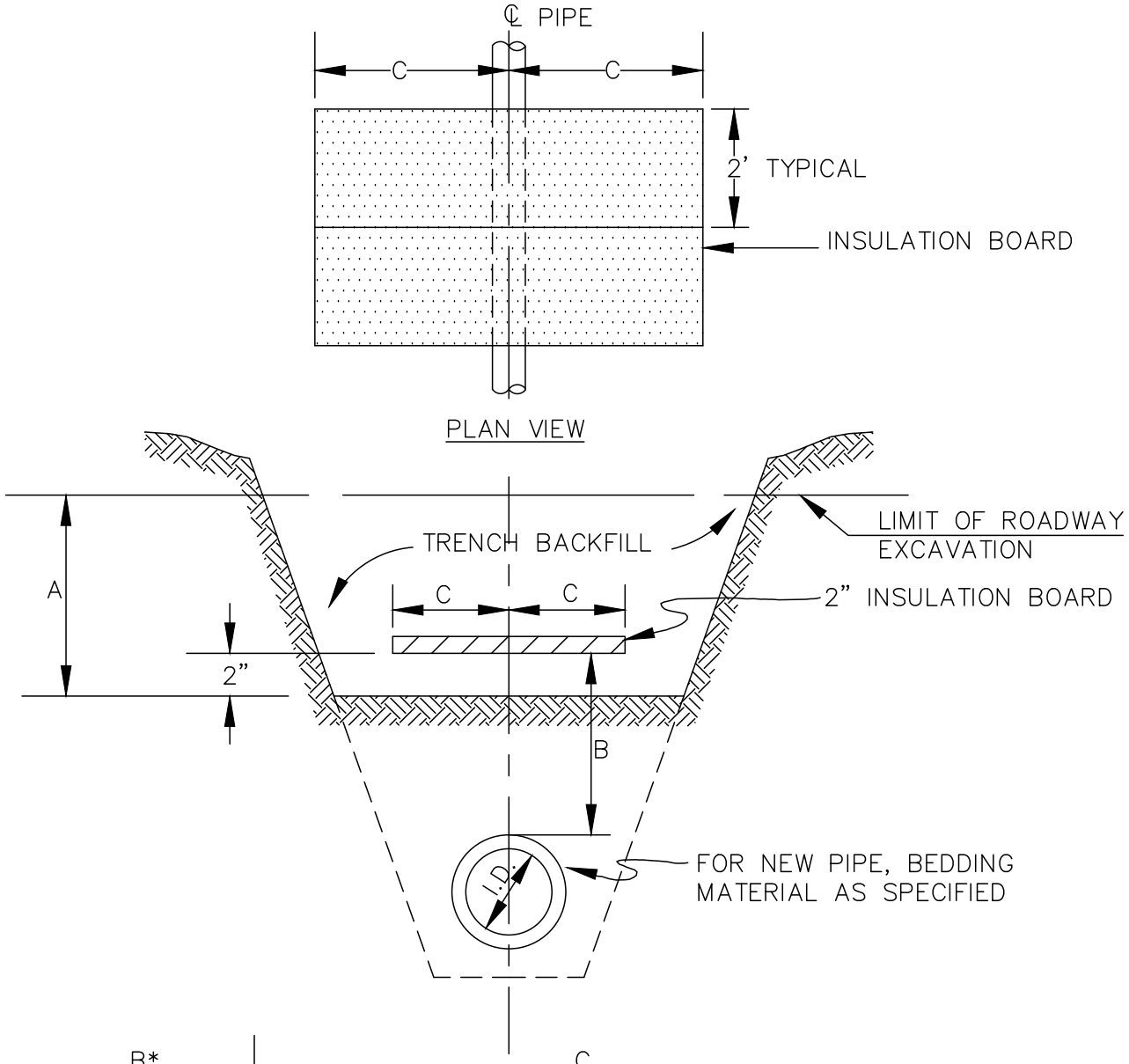
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NONE REVISED: 6/99	DOUBLE WATER SERVICE	DETAIL # **600.09**



NOTES:

1. ALL 3/16" PAINTED ASPHALT TAR BLACK.
2. RODS SHALL BE AS MANUFACTURED BY WESTEEL CO. STEEL FABRICATORS, 8001 7TH AVE. SOUTH, SEATTLE, WA 98108, (206) 767-4224

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	GATE VALVE EXTENSION ROD	DETAIL # 600.10



B*	C			
	NEW MAIN	EXISTING MAIN	NEW SERVICE CON.	EXISTING SERVICE CON.
1'	2'		1'	
1' to 3'		2'		2'
3' to 5'		3'		3'
5' to 7'		4'		4'

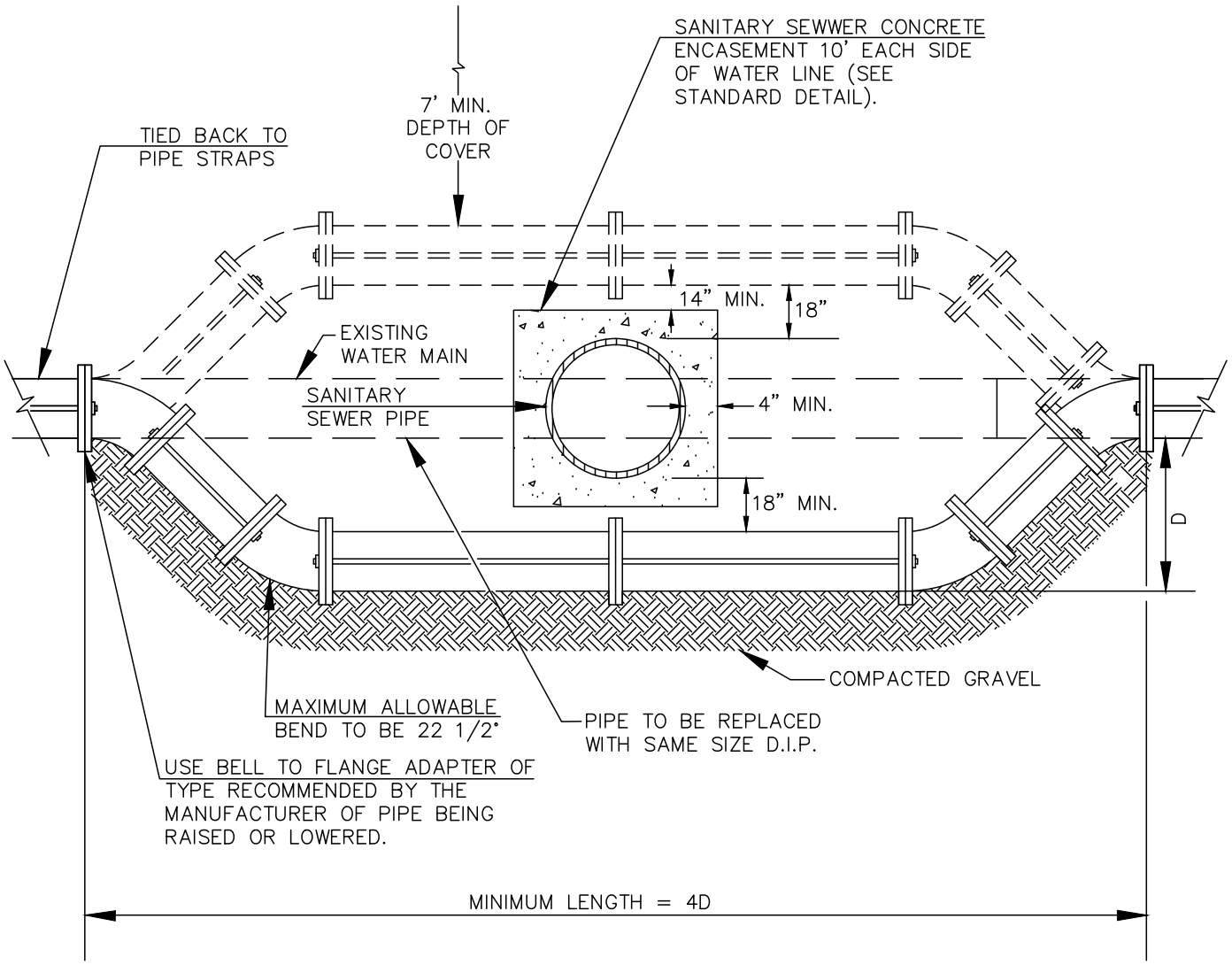
* AS NOTED ON PLANS

A= DEPTH FOR PAYMENT UNDER "TRENCH EXCAVATION AND BACKFILL" WHERE INSULATION IS PLACED OVER EXISTING PIPE

NOTES:

1. THIS DETAIL APPLIES ONLY WHERE INSULATION IS REQUIRED BY THE PLANS.
2. MAXIMUM I.D. = 12"

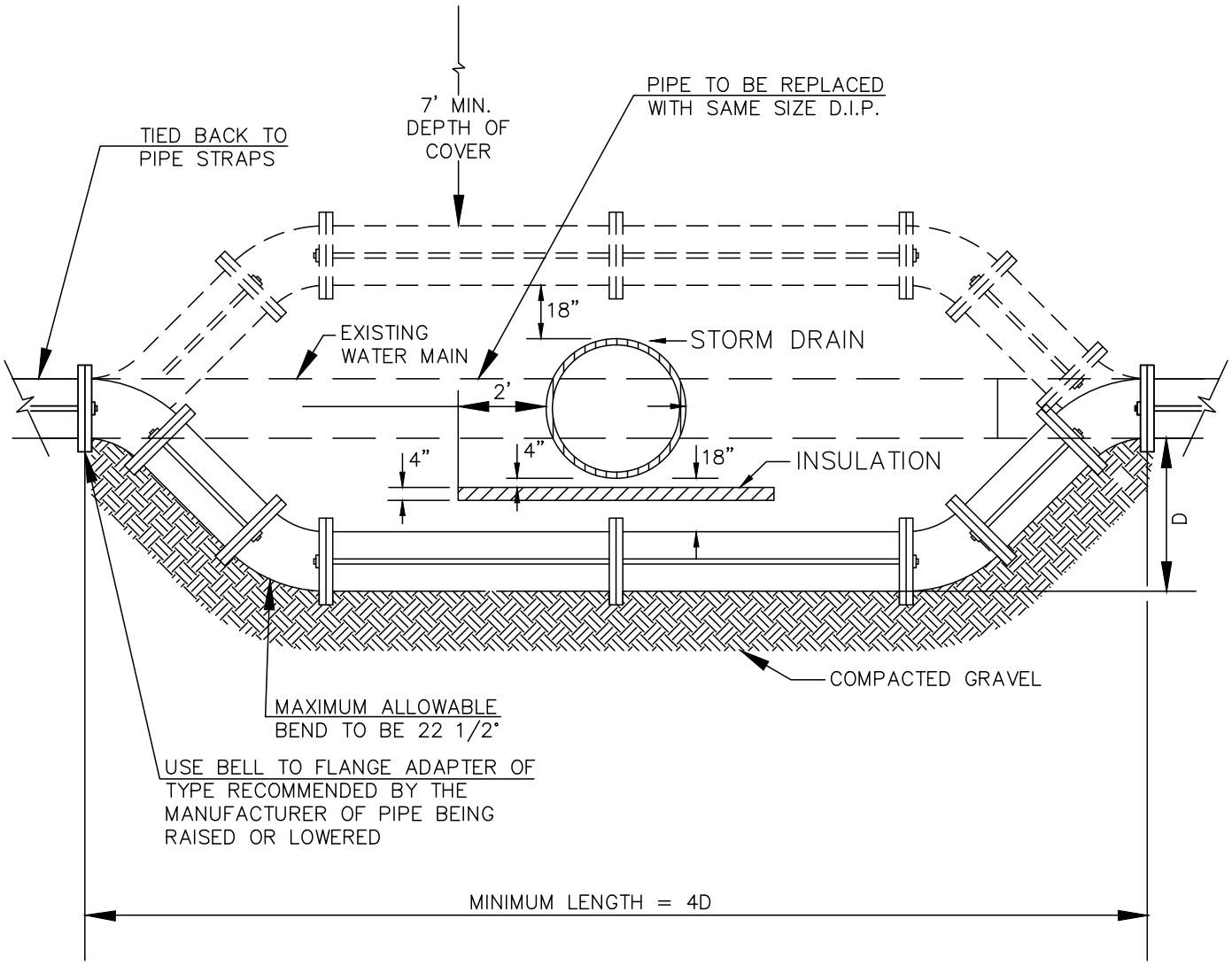
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	PIPE INSULATION	DETAIL # 700.01



NOTE: ALL JOINTS TO BE TIED TOGETHER WITH 3/4" THREADED ROD. TIE RODS TO BE SUPPORTED EACH 27' TO INSURE A SYMMETRICAL LOCATION.

EVERY EFFORT SHOULD BE MADE TO RELOCATE WATER MAIN LINE UNDER THE SEWER MAIN LINE.

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	**RELOCATE WATER MAIN** **(SANITARY SEWER)**	DETAIL # **700.02**



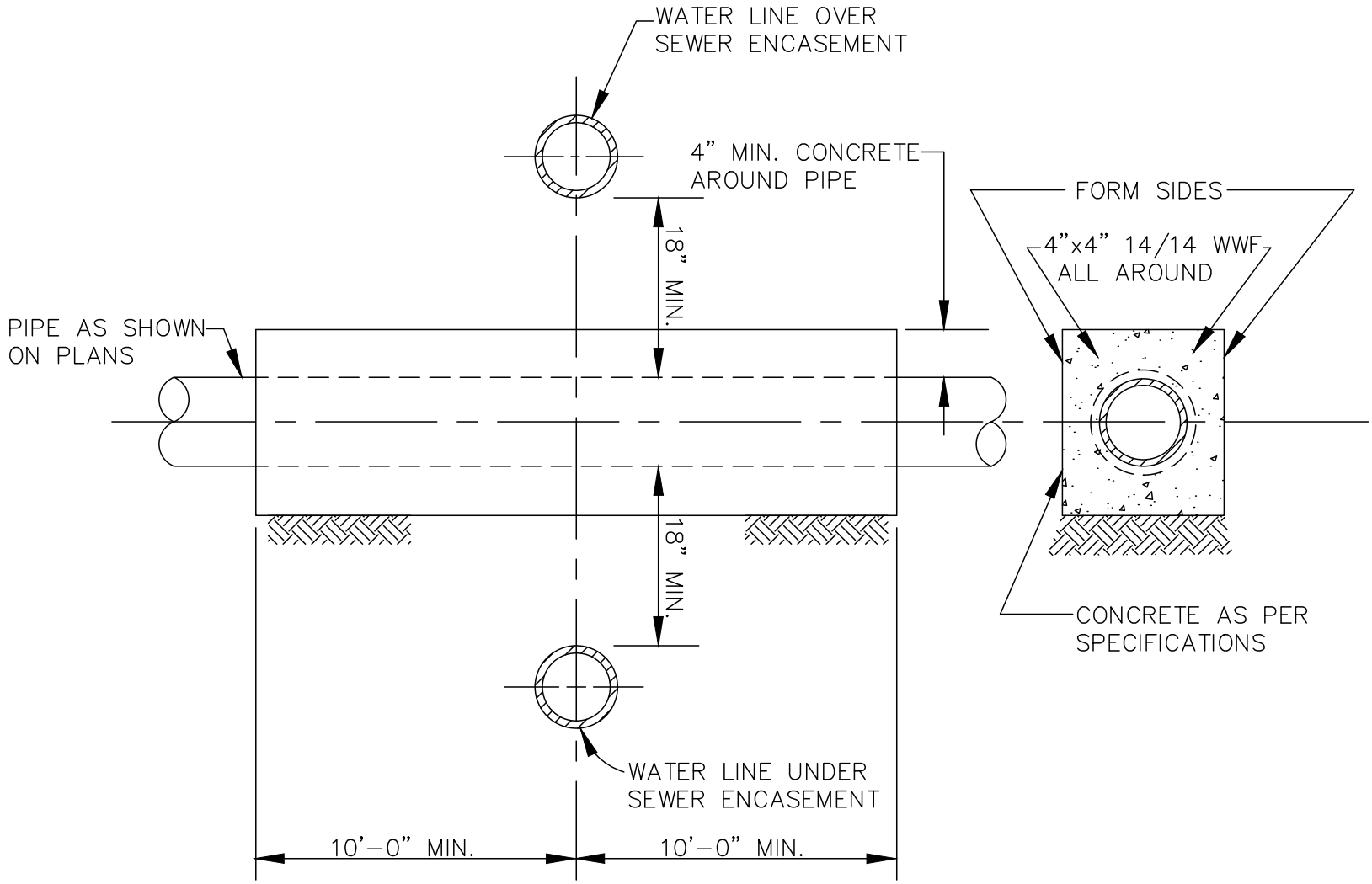
NOTES:

1. ALL JOINTS TO BE TIED TOGETHER WITH 3/4" THREADED ROD OR EQUAL.
2. RELOCATED WTAR LINE SHALL BE NO LESS THAN 18" DISTANCE FROM STORM SEWER LINE.
3. INSULATION SHALL BE POSITIONIED NO LESS THAN (4) FOUR INCHES FROM STORM SEWER.
4. MINIMUM VERTICAL SEPARATION IS (18") EIGHTEEN INCHES UNLESS INSULATED WITH (4) FOUR INCHES OF RIGID BOARD INSULATION IN CON-FORMANCE WITH SECTION 70.18 INSULATIONN. (2" STOCK WITH OVERLAPPING JOINTS)

CITY OF HOMER · ALASKA · MARCH 31,1964	SCALE: NTS REVISED: 6/99	# RELOCATE WATER MAIN (STORM DRAIN)	DETAIL # **700.03**

NOTES:

1. DUCTILE IRON PIPE OR OTHER APPROVED CONNECTIONS MAY BE USED IN LIEU OF CONCRETE ENCASEMENT.
2. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI.
3. ENCASEMENT NOT REQUIRED ON PIPE 24" OR LARGER.



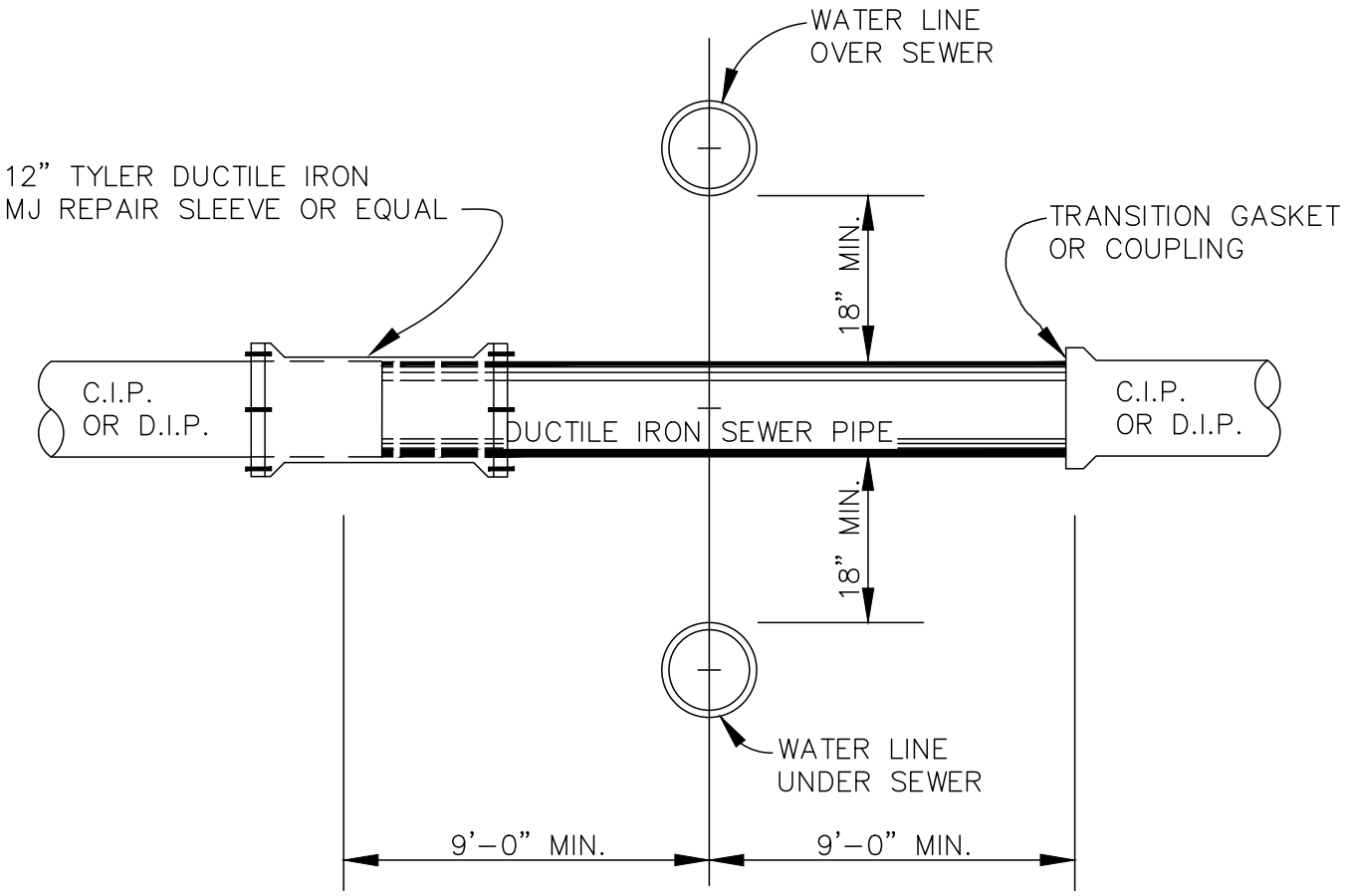
SCALE: NTS

REVISED: 6/99

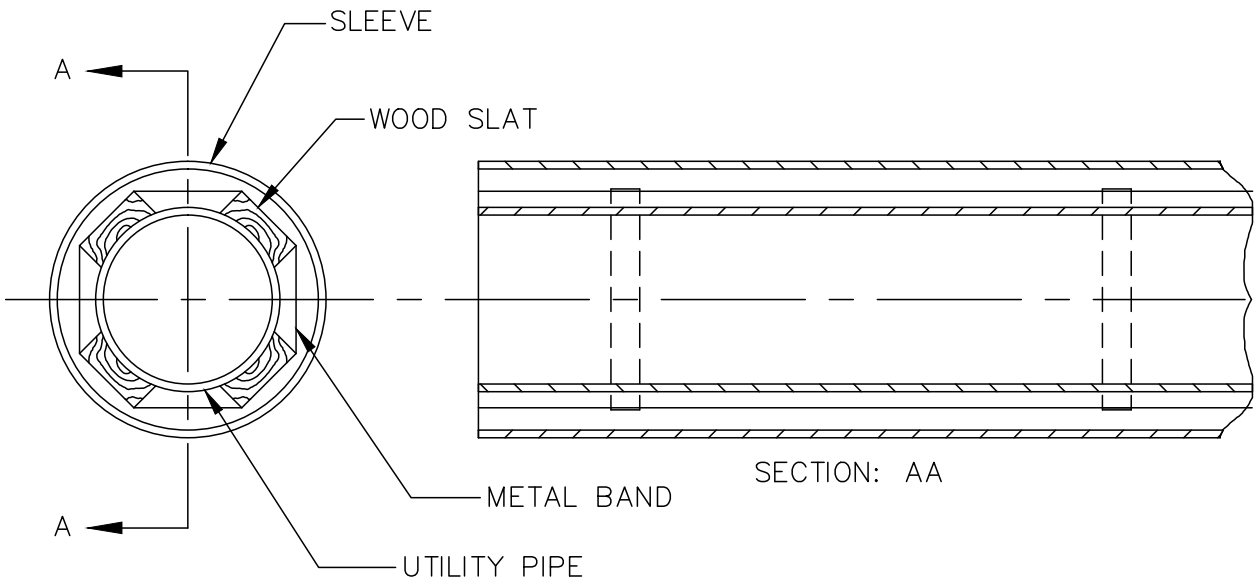
SEWER ENCASEMENT

DETAIL # **700.04**

DUCTILE IRON SEWER PIPE ALTERNATE IN
LIEU OF CONCRETE SEWER ENCASEMENT



CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 2/2007	SEWER ENCASEMENT ALTERNATE	DETAIL # 700.05



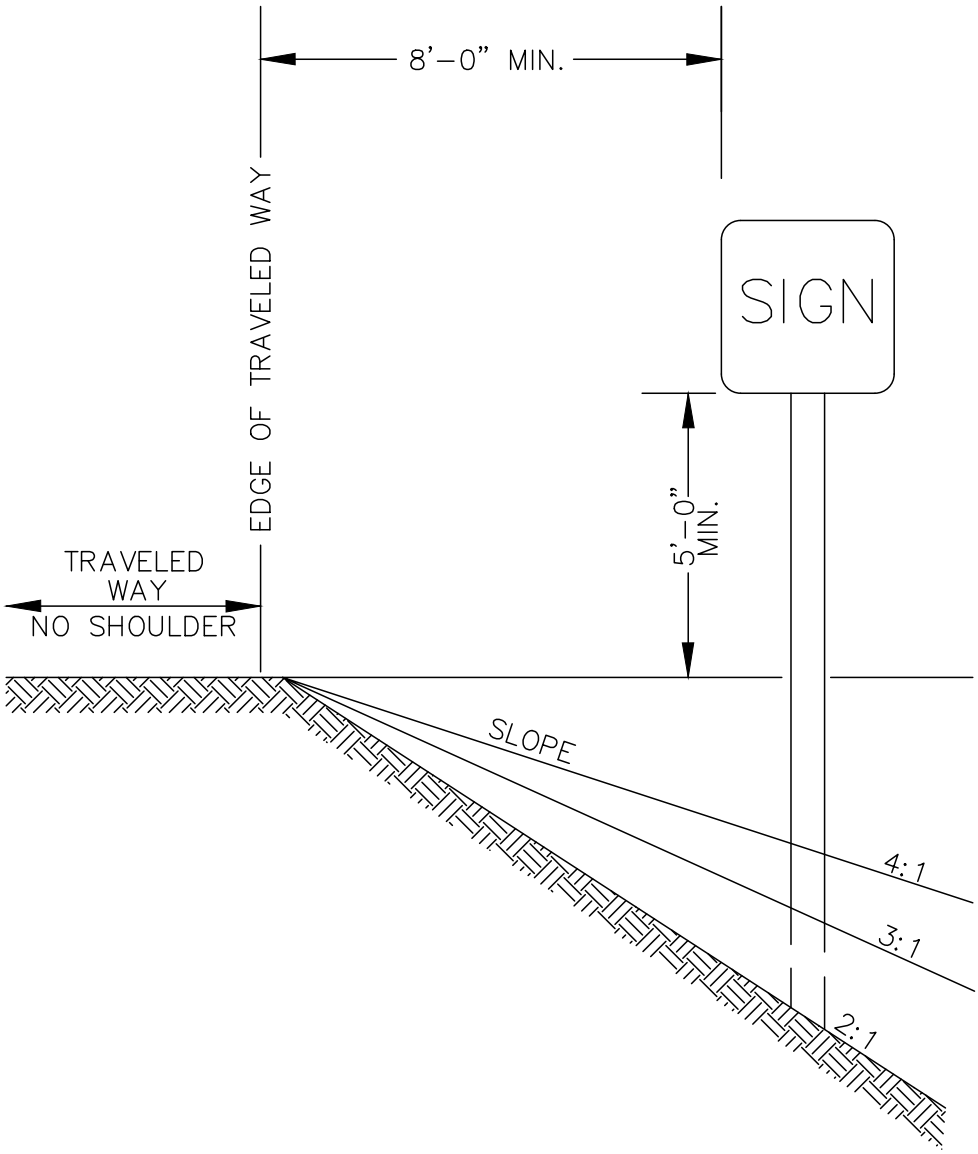
NOTES:

1. SLEEVE/CASING PIPE SHALL BE EITHER WELDED OR STAINLESS STEEL CASING PIPE SCHEDULE 40 WALL OR CORRUGATED METAL PIPE (CMP) GAUGE 0.064 INCHES MIMIMUM WALL (PIPE SIZE SHALL BE PER TABLE).
2. IN NO CASE SHALL THE NUMBER OF SLATS AROUND THE PIPE BE LESS THAN THREE AND THE THICKNESS OF THE SLATS SHALL BE AS APPROVED BY THE ENGINEER.
3. SLATS SHALL BE PLACED BETWEEN EACH PIPE JOINT, AND NEVER OVER THE JOINT, OR AS DIRECTED BY THE ENGINEER. THICKNESS OF THE SLATS SHALL BE GREAT ENOUGH SO THAT THE PIPE RESTS ON THE WOOD AND NOT ON THE JOINTS (i.e. BELL FLANGES, ETC.).
4. METAL BANDS SHALL BE AS APPROVED BY THE ENGINEER.
5. THE SLAT MATERIAL SHALL BE EITHER REDWOOD OR WESTERN CEDAR.

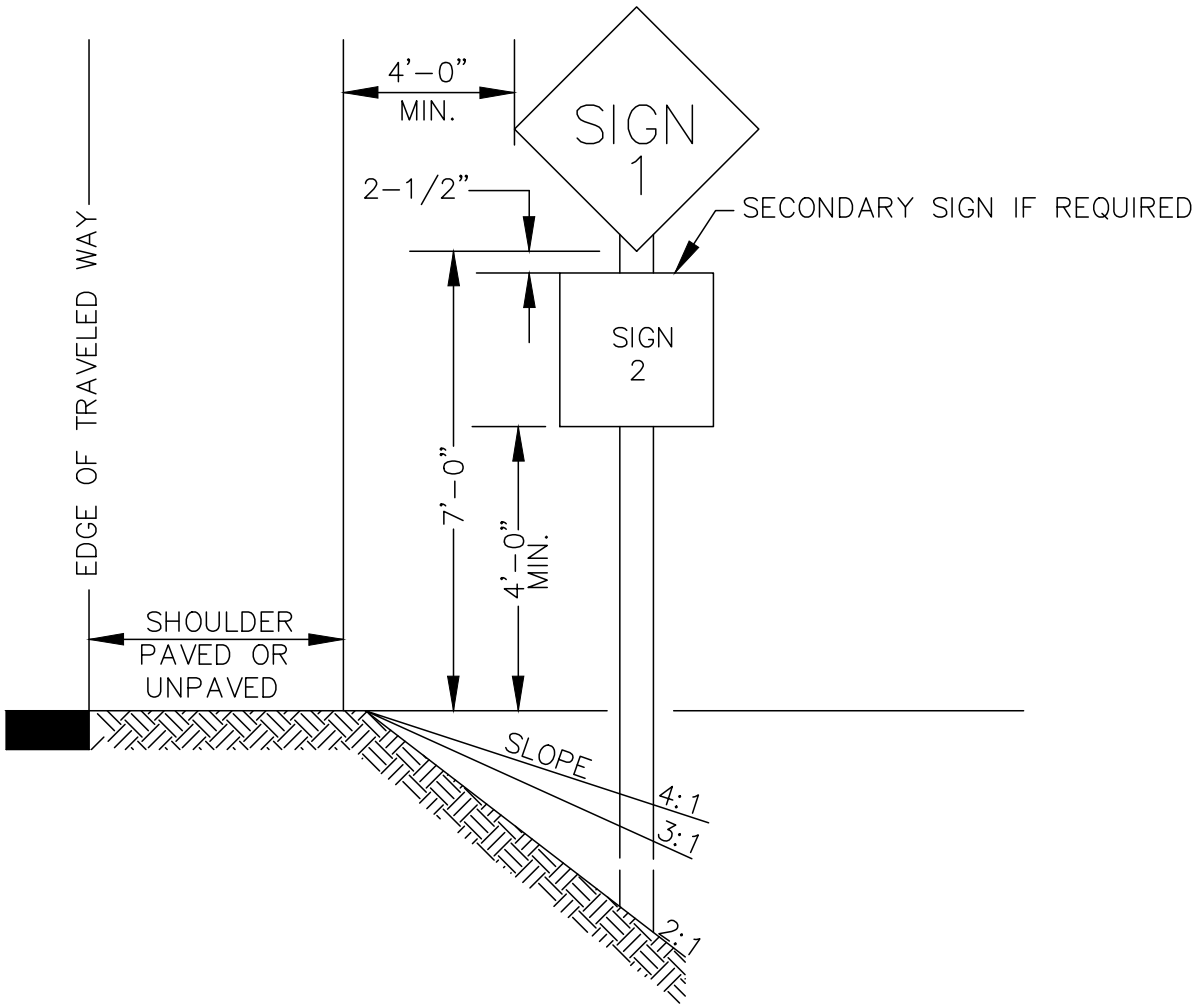
TABLE

UTILITY PIPE	SLEEVE/CASING PIPE SIZE (INCHES)
1"	2" WOOD SLATS OPTIONAL
2X1"	4" FOR K-COPPER WATER
4"	8" SERVICE LINES
6"	12"
8"	15"
10"	20"
12"	24"

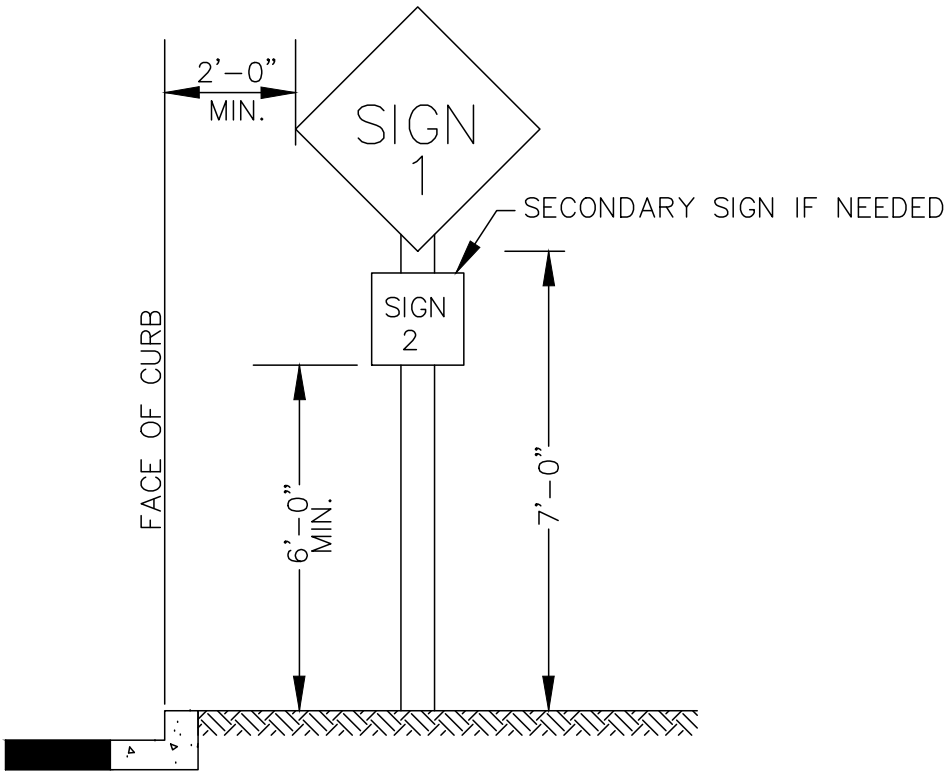
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	BORED ENCASEMENT	DETAIL # 700.06



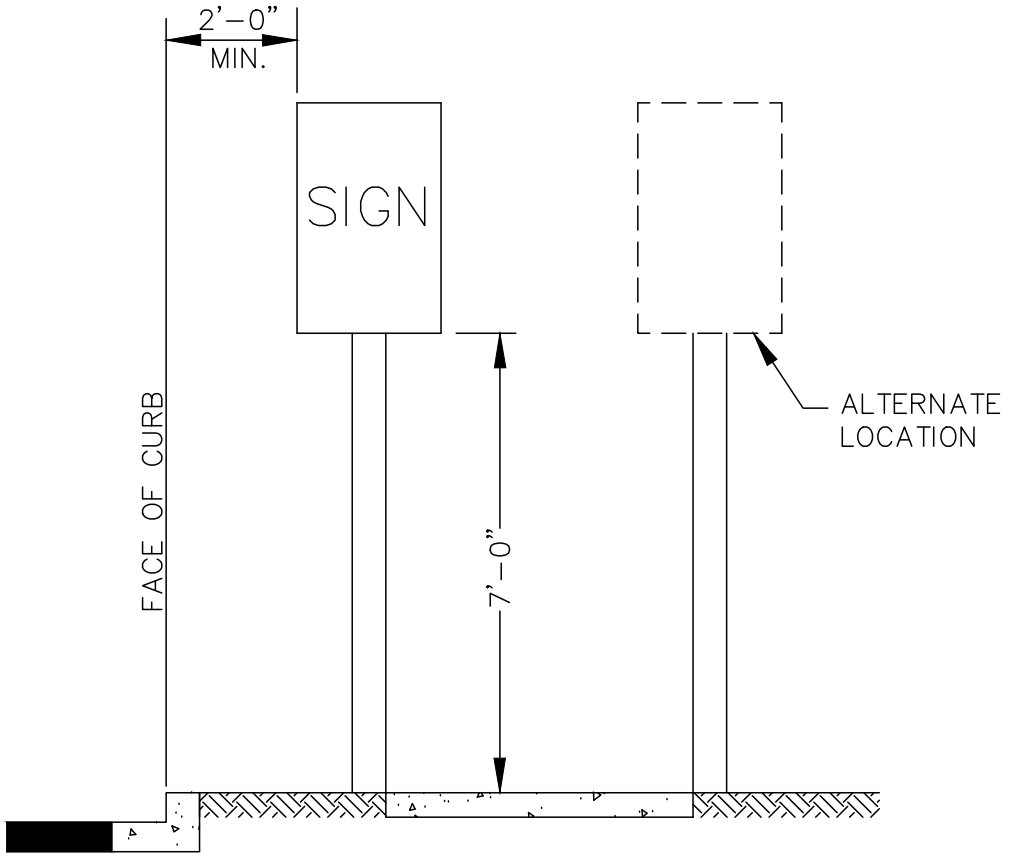
CITY OF HOMER - ALASKA - MARCH 31,1964	SCALE: NTS REVISED: 6/99	SIGN PLACEMENT NO CURB OR SHOULDER	DETAIL # 700.07



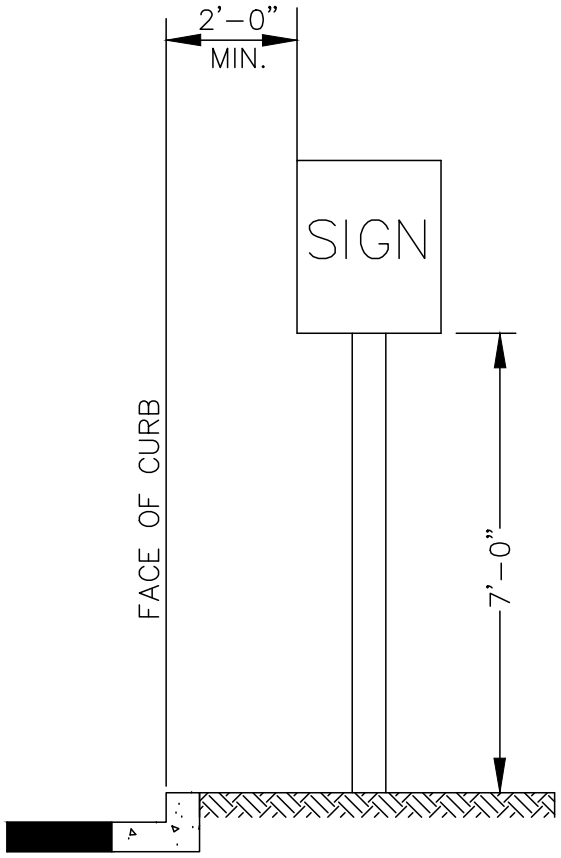
CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SIGN PLACEMENT SHOULDER WITHOUT CURB	DETAIL # 700.08



CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SIGN PLACEMENT CURB WITHOUT SIDEWALK	DETAIL # 700.09

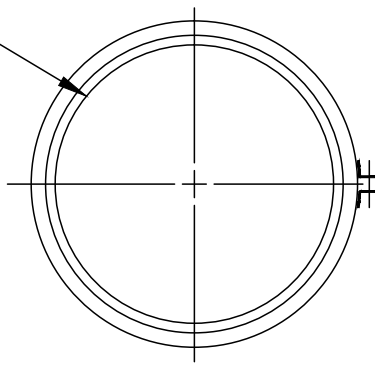


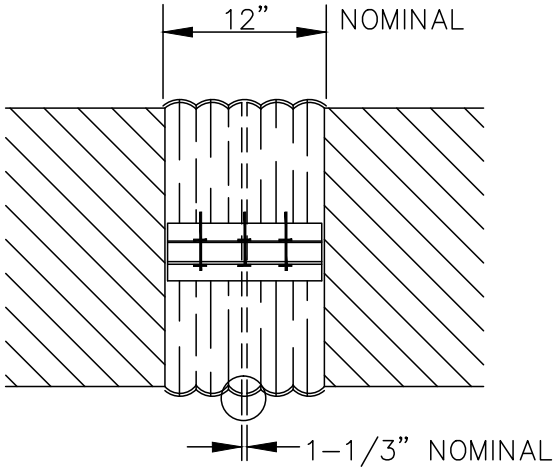
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	SIGN PLACEMENT CURB WITH SIDEWALK AND PARKWAY	DETAIL # **700.10**



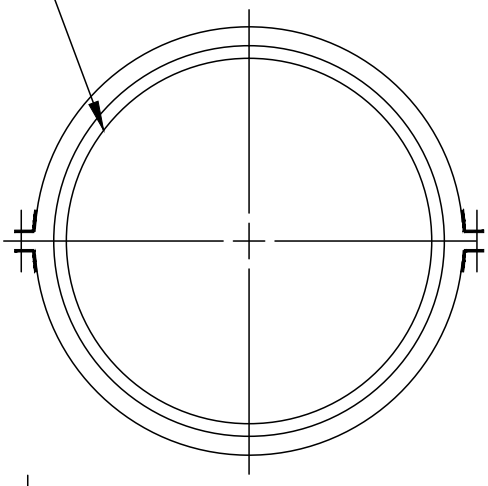
CITY OF HOMER · ALASKA · MARCH 31,1964	SCALE: NTS REVISED: 6/99	SIGN PLACEMENT CURB WITH SIDEWALK	DETAIL # **700.11**

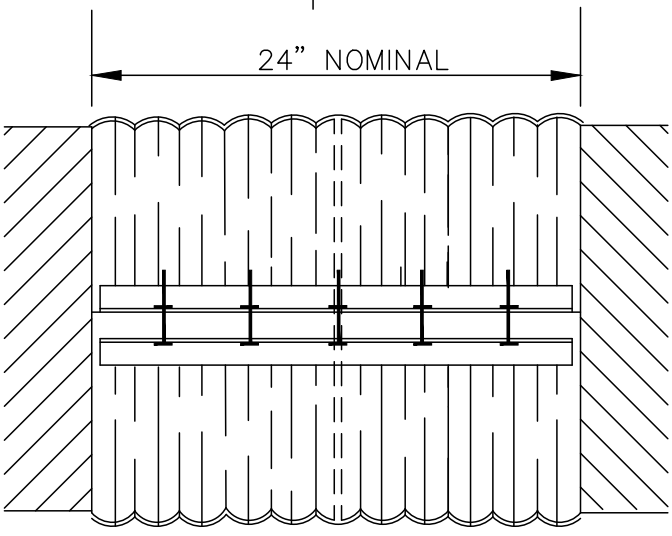
PIPE DIAMETER 12" THRU 36"
ONE PIECE BAND





PIPE DIAMETER 48" THRU 96" TWO PIECE
BAND, 108" THRU 120" THREE PIECE BAND

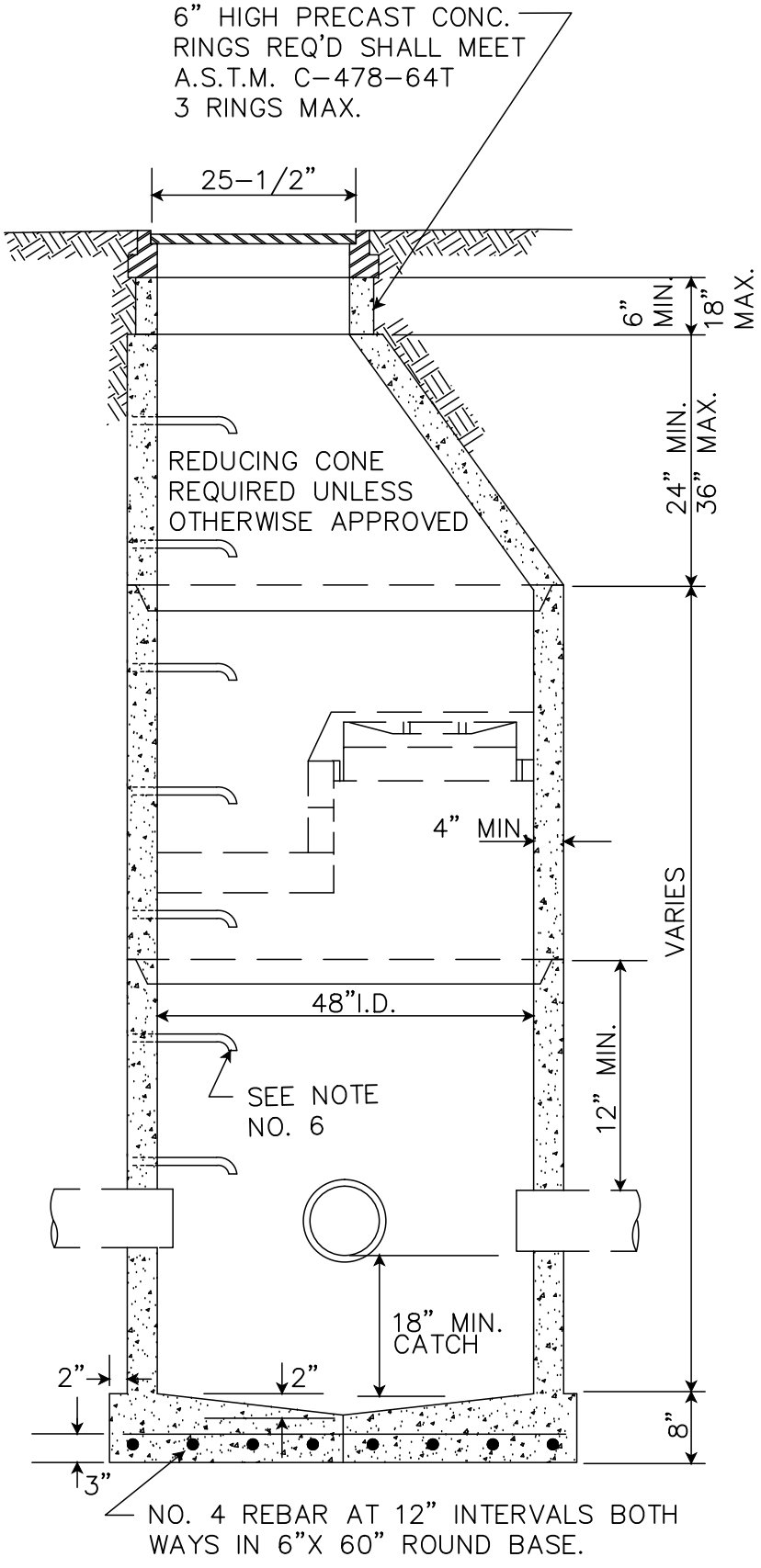




NOTES:

1. 12" THRU 36" PIPE ENDS RE-CORRUGATED TO ANNULAR 2 VALLEYS MIN. PER END.
2. 48" THRU 120" PIPE ENDS RE-CORRUGATED TO ANNULAR 4 VALLEYS MIN. PER END.
3. BAND ANGLES TO BE 2"x2"X12" GA. MIN.
4. BAND MATERIAL AMD FABRICATION PER AASHTO M36 AND AASHTO M218 12" THRU 120" BANDS TO BE 16 GAUGE.
5. DIMPLED TYPE CONNECTING BANDS ALLOWED ONLY WHERE FITTINGS ARE USED IN NEW OR EXISTING CONSTRUCTION, FOR REPAIRS TO DAMAGED CMP AND FOR EXTENSIONS TO CMP WITHOUT ANNULAR ENDS. BANDS TO BE SIZED PER ABOVE SCHEDULE. (MIN. 12")
6. BOLT SIZE SHOULD BE 1/2" DIAMETER BY 8" LONG. NUTS SHALL BE PROVIDED WITH A WASHER.

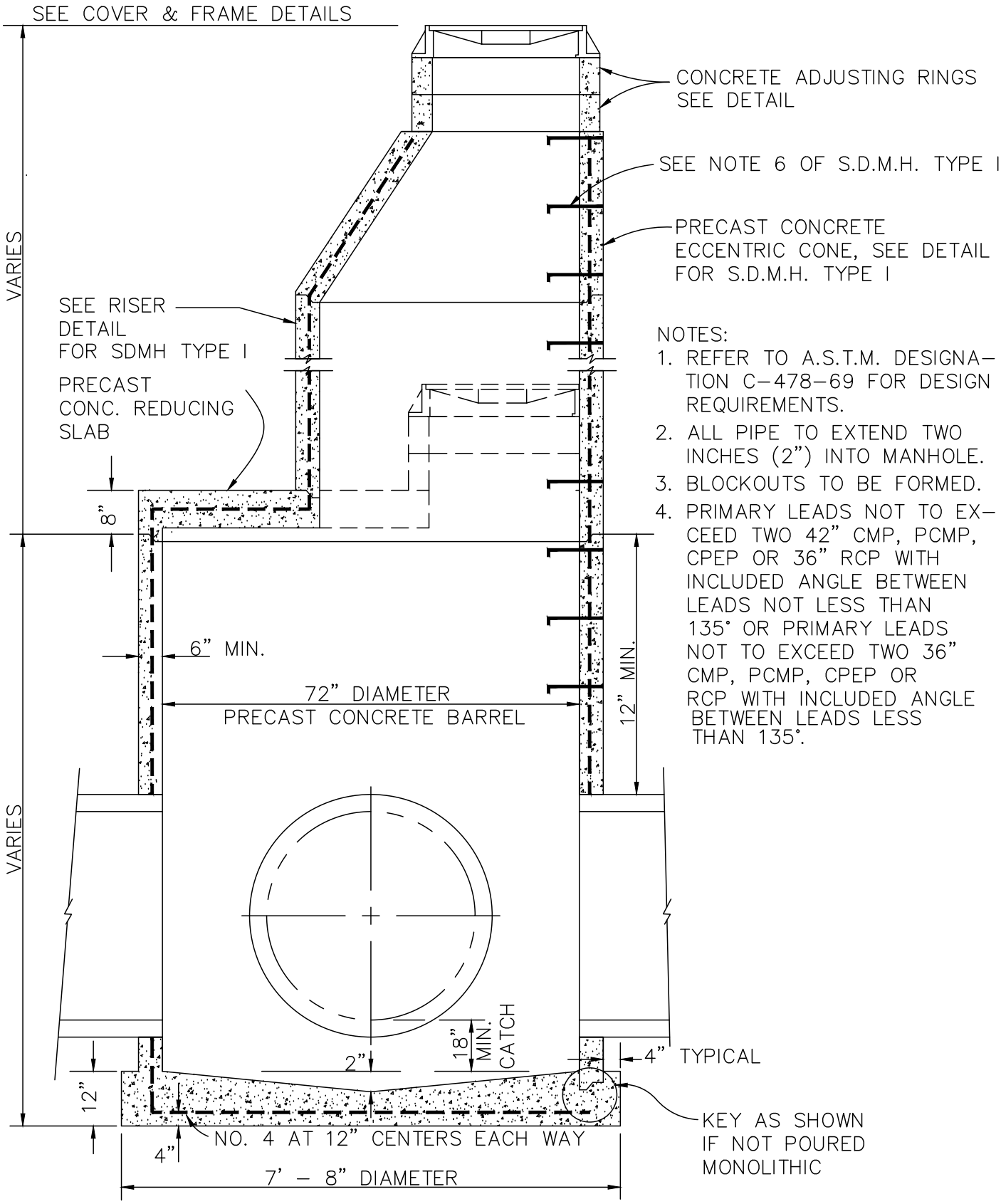
CITY OF HOMER · ALASKA · MARCH 31,1964	SCALE: NTS REVISED: 11/87	# STORM DRAIN CORRUGATED METAL PIPE BAND DETAIL	DETAIL # **800.01**



NOTES:

1. REFER TO A.S.T.M. DESIGNATION C-470-69 FOR DESIGN RE-QUIREMENTS.
2. SEE MANHOLE FRAME & COVER DETAIL
3. MIN. STEEL REQ'D FOR BARREL AS PER A.S.T.M. C-478-69 SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
4. PRIMARY LEADS NOT TO EXCEED 30" CMP, PCMP, CPEP OR 27" RCP WITH INCLUDED ANGLE BETWEEN LEADS NO LESS THAN 135° OR PRIMARY LEAD NOT TO EXCEED 24" CMP, PCMP, CPEP OR 21" RCP WITH INCLUDED ANGLE LESS THAN135°.
5. BLOCKOUTS TO BE FORMED.
6. RUNGS TO BE PLACED 12" ON CENTER ON UNOBSTRUCTED SIDE OF MANHOLE 18" MAX. FROM BOTTOM OF MANHOLE & 6" MAX. FROM TOP OF CONE. IF UNOB-STRUCTED SIDE NOT AVAILABLE, BOTTOM RUNG TO BE PLACED 6" OVER SMALLEST PIPE. SEE RUNG (MANHOLE STEP) DETAIL

CITY OF HOMER - ALASKA - MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE TYPE I	DETAIL # 800.02



NOTES:

1. REFER TO A.S.T.M. DESIGNATION C–478–69 FOR DESIGN REQUIREMENTS.
2. ALL PIPE TO EXTEND TWO INCHES (2") INTO MANHOLE.
3. BLOCKOUTS TO BE FORMED.
4. PRIMARY LEADS NOT TO EXCEED TWO 42" CMP, PCMP, CPEP OR 36" RCP WITH INCLUDED ANGLE BETWEEN LEADS NOT LESS THAN 135° OR PRIMARY LEADS NOT TO EXCEED TWO 36" CMP, PCMP, CPEP OR RCP WITH INCLUDED ANGLE BETWEEN LEADS LESS THAN 135°.

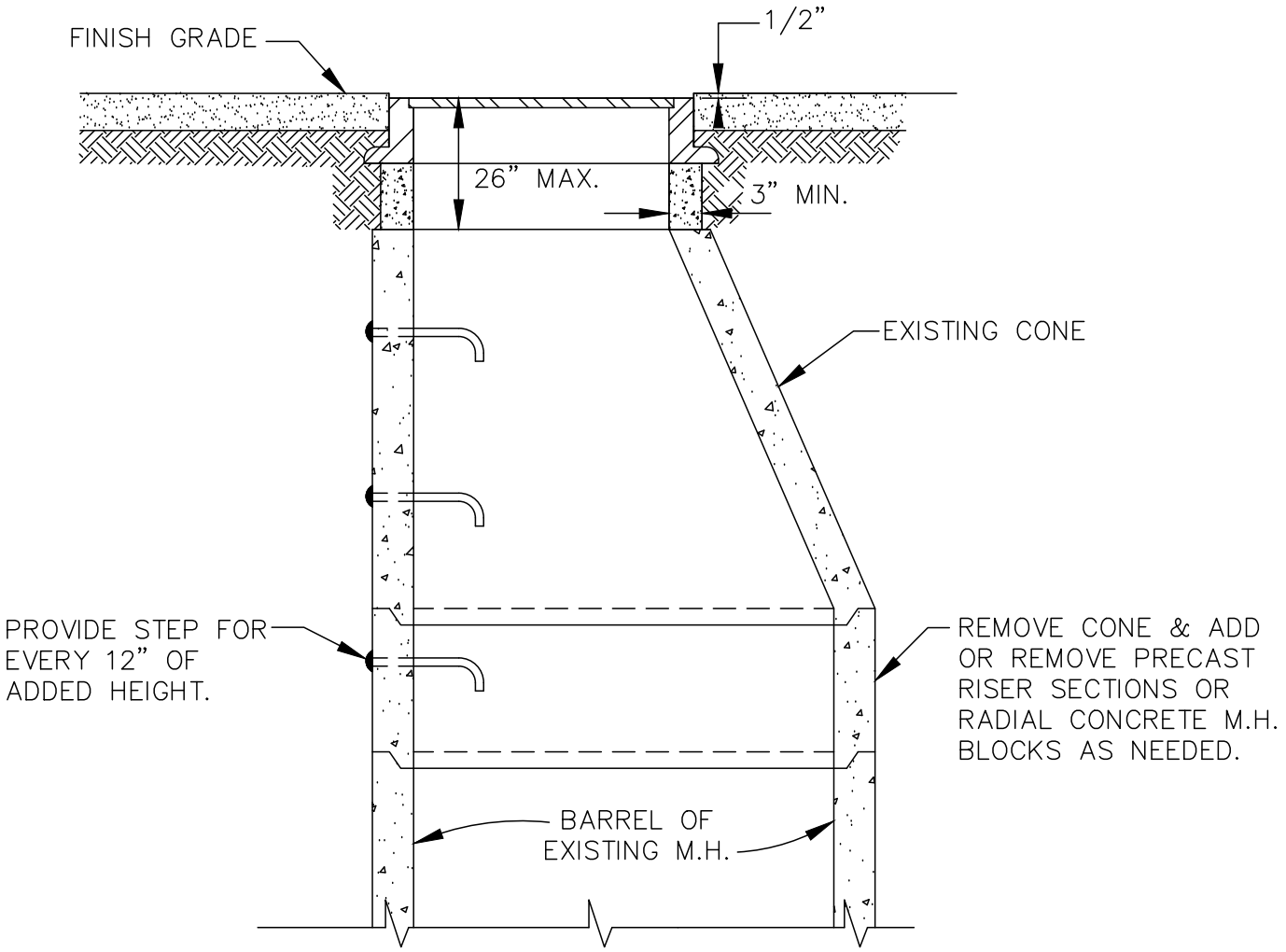
CITY OF HOMER · ALASKA · MARCH 31, 1964

SCALE: NTS

REVISED: 6/99

STORM DRAIN MANHOLE TYPE II

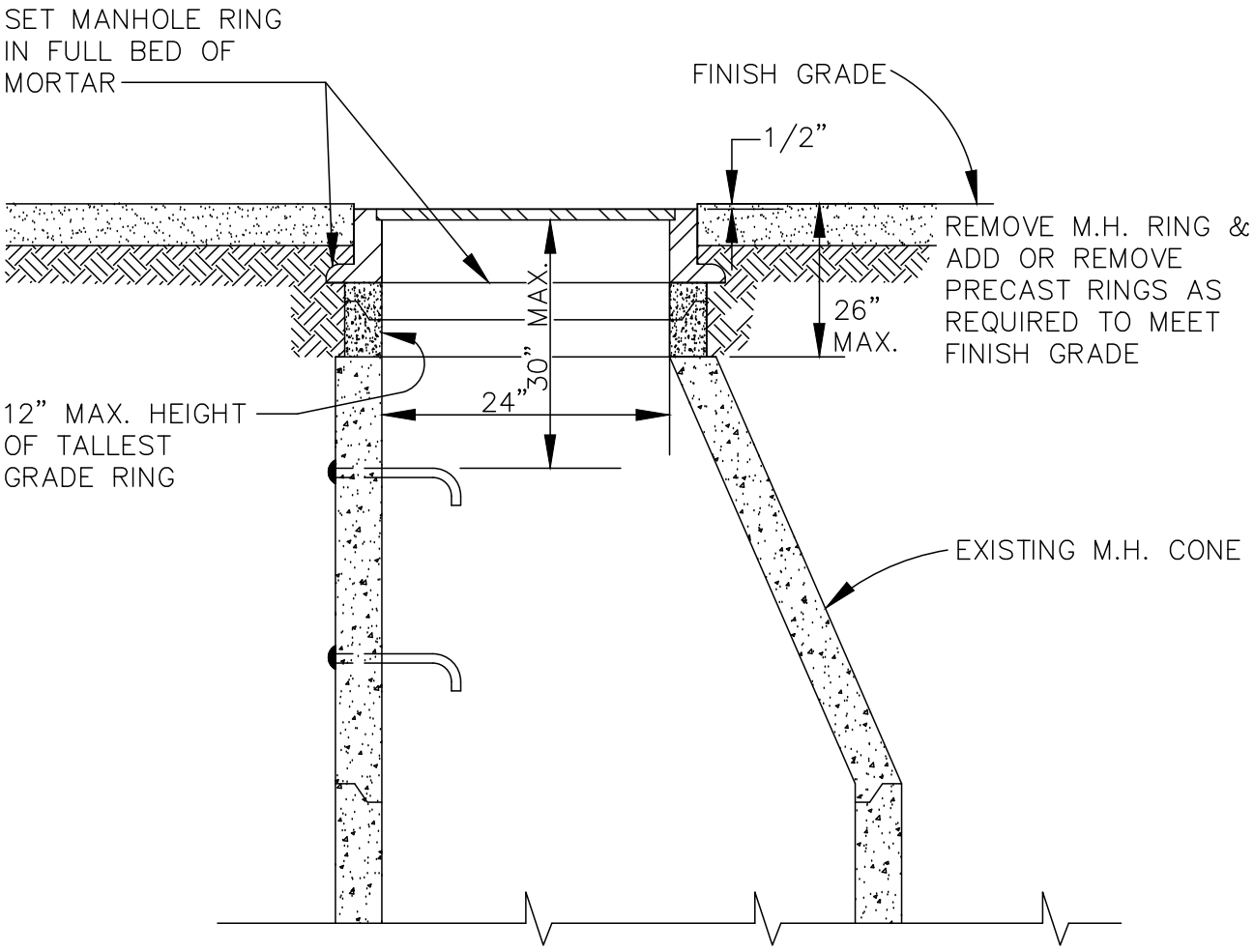
DETAIL # **800.03**



NOTES

1. ALL PERTINENT SECTIONS OF THE STANDARD SPECIFICATIONS WILL APPLY.
2. RESET RING IN FULL BED OF MORTAR.
3. REFER TO ASTM DESIGNATION C-478-69 FOR DESIGN AND STRENGTH REQUIREMENTS.
4. RESET CONE IN RAM-NEK OR EQUAL.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE CONE ADJUSTMENT	DETAIL # **800.04**

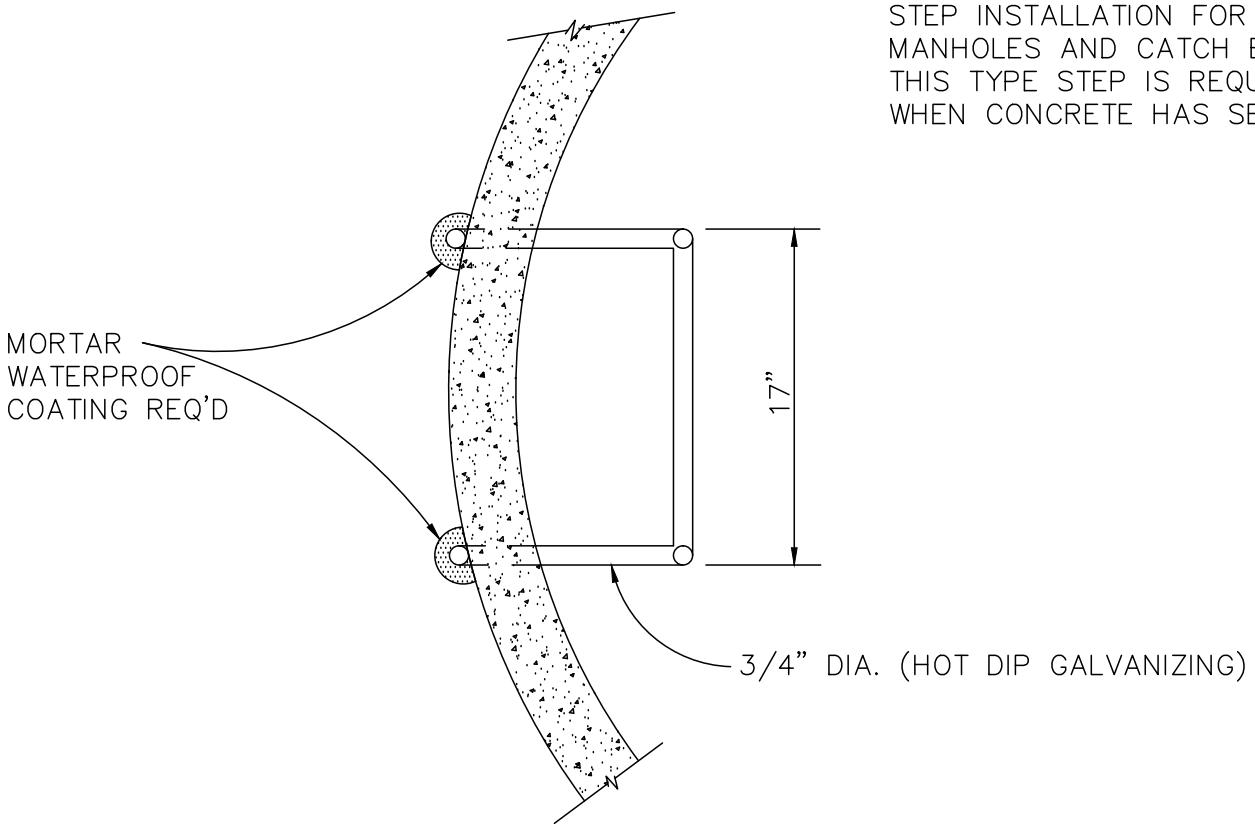


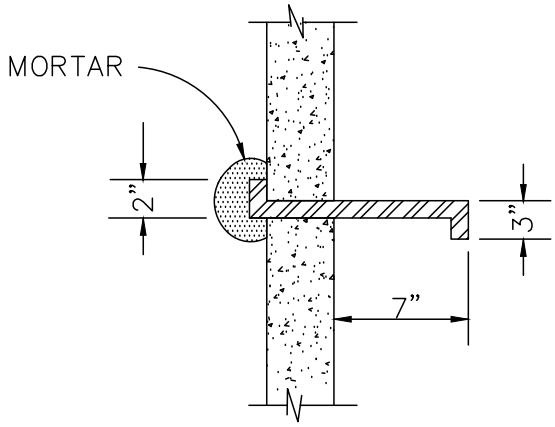
NOTES:

1. ALL PERTINENT SECTIONS OF THE STANDARD SPEC. WILL APPLY.
2. REFER TO ASTM DESIGNATION C-478-69 FOR DESIGN AND STRENGTH REQUIREMENTS.
3. WHEN AN ADJUSTMENT OF GREATER THAN 18" IN GRADE RINGS IS REQUIRED, A CONE ADJUSTMENT SHALL BE MADE.

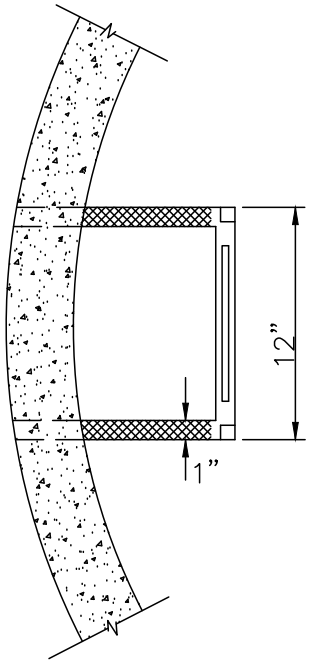
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE RING ADJUSTMENT	DETAIL # 800.05

NOTE:
STEP INSTALLATION FOR MANHOLES AND CATCH BASINS. THIS TYPE STEP IS REQUIRED WHEN CONCRETE HAS SET.



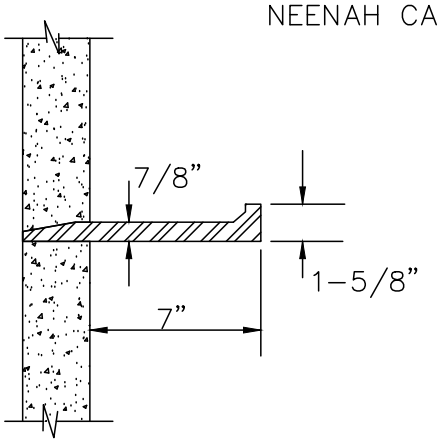


CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE STEP	DETAIL # 800.06

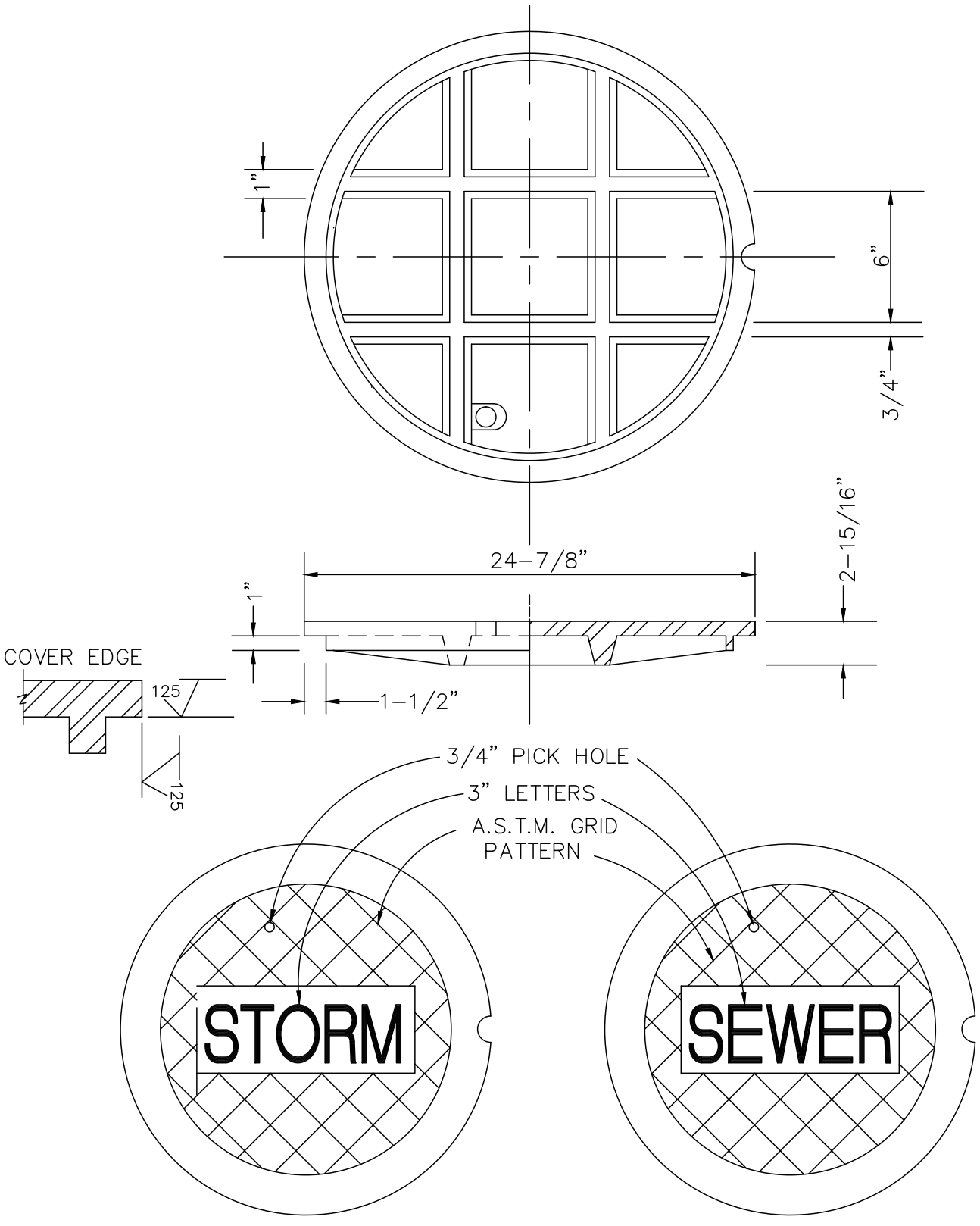


NOTES:
CAST IRON STEPS MUST BE INSTALLED DURING MANHOLE SECTION POUR OR BEFORE CONCRETE SETS.

NEENAH CASTING No. R–1981–N OR EQUAL.

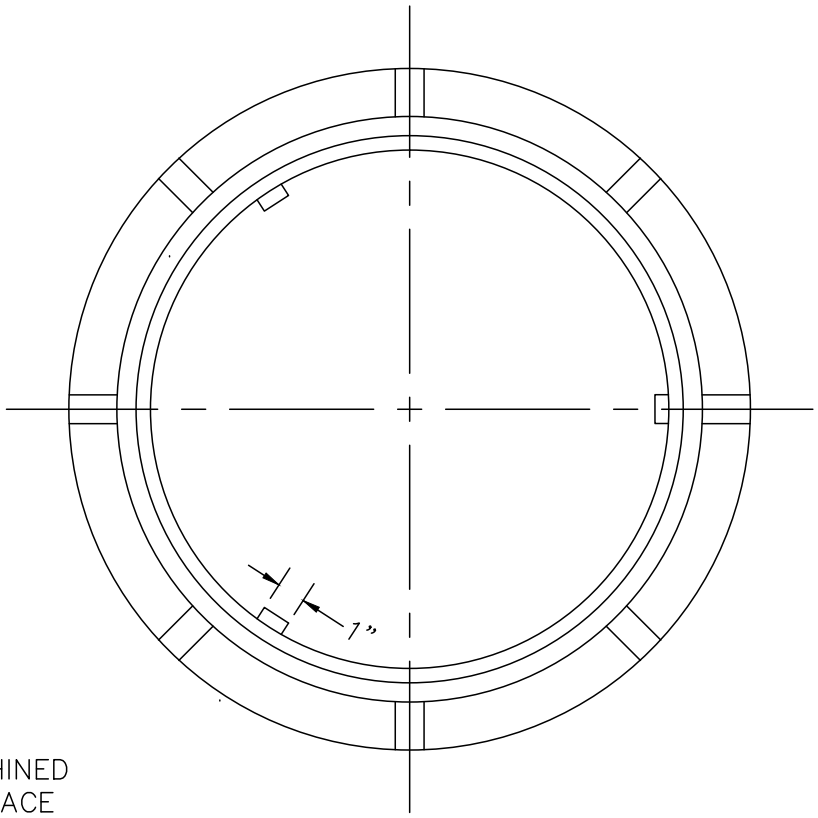


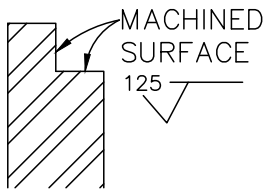
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE STEP (ALTERNATE)	DETAIL # 800.07



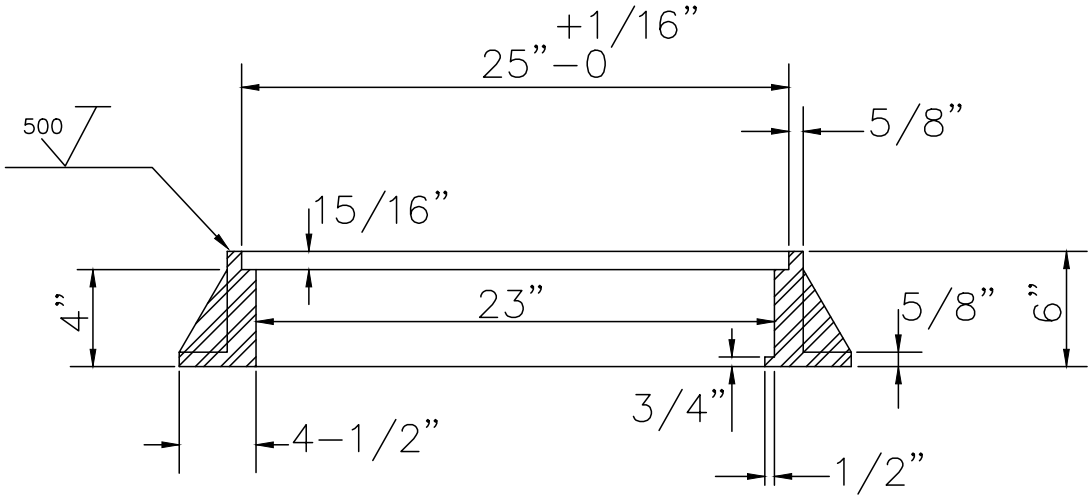
NOTE: ALL MANHOLE LIDS PLACED WITHIN A ROADWAY SECTION SHALL BE RATED FOR HEAVY VEHICLE TRAFFIC.

CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE COVER	DETAIL # 800.08

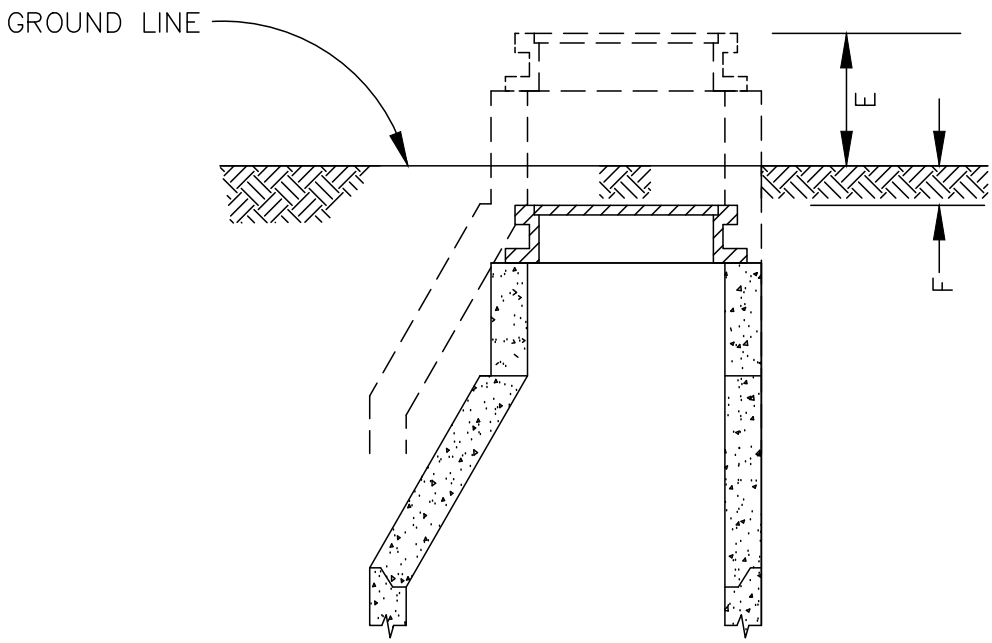




FRAME



CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	STORM DRAIN MANHOLE FRAME	DETAIL # 800.09



LOCATION	E	F
BACKYARDS, GRAVEL STREETS, AND ALLEY AREAS WHERE TRAVELED.		6"
UNDEVELOPED AND SWAMPY AREAS.	24" MIN	
R.O.W.'S OUTSIDE TRAFFIC AREAS.	6"	
PAVED STREETS.		1/2"

CITY OF HOMER · ALASKA · MARCH 31, 1964

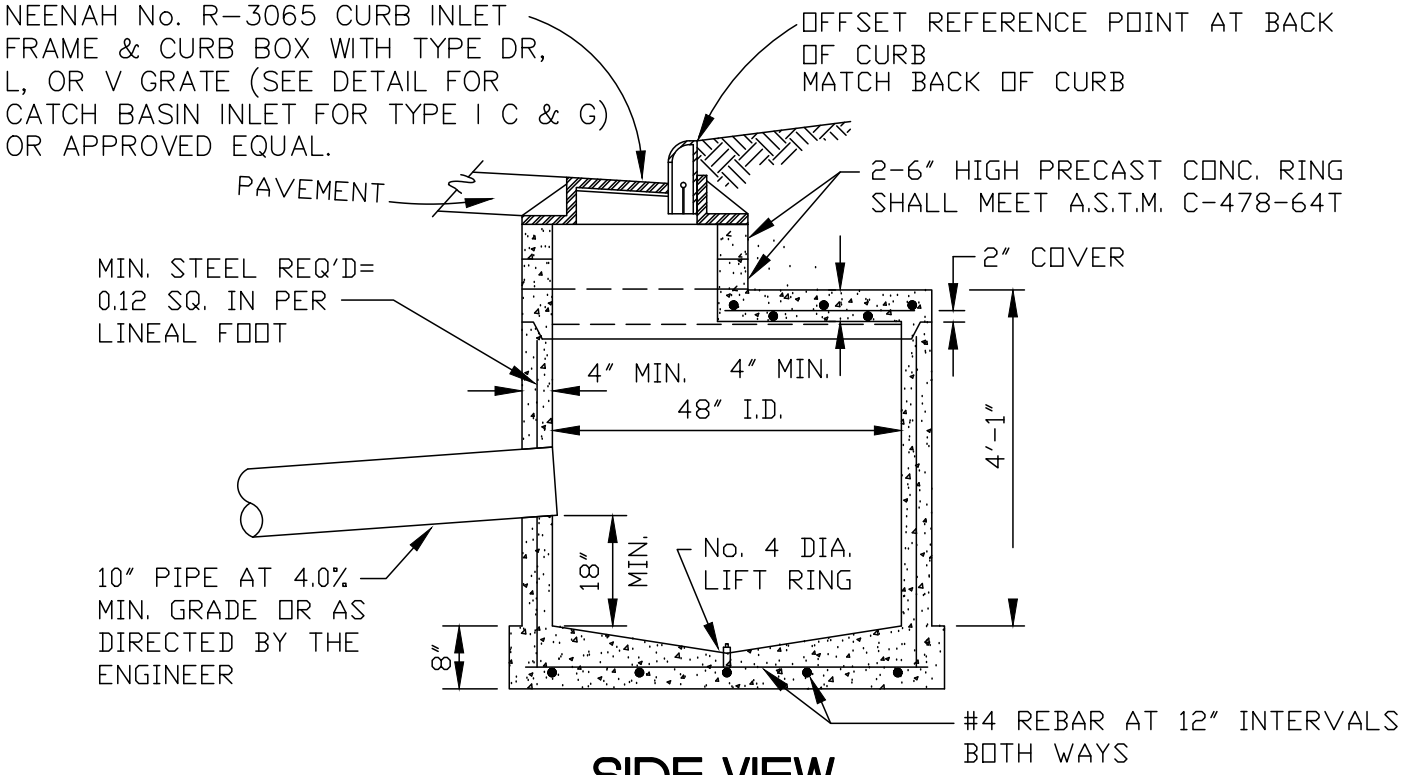
SCALE: NTS

REVISED: 6/99

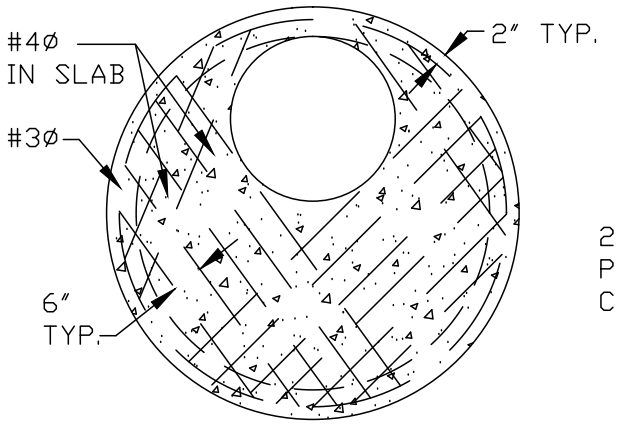
STORM DRAIN MANHOLE HEIGHTS

DETAIL #

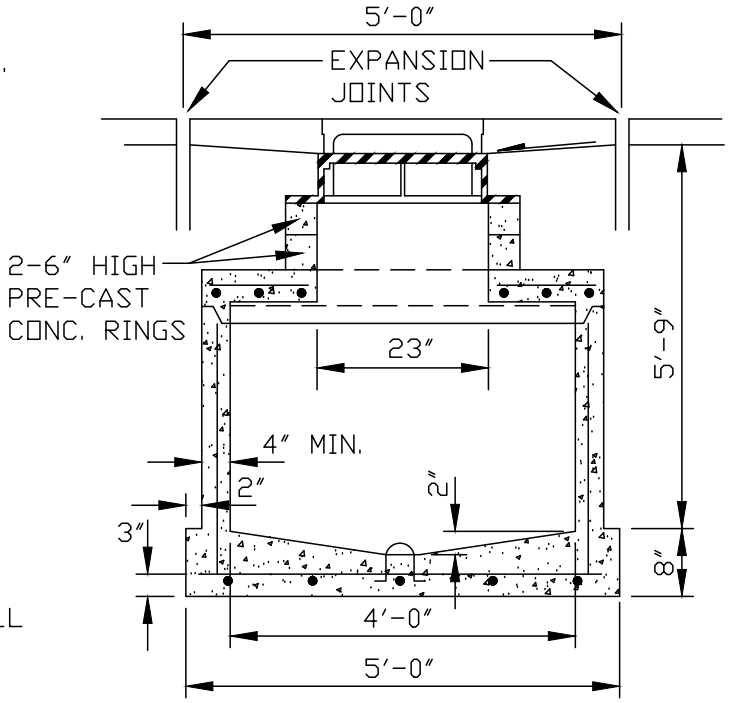
800.10



SIDE VIEW



REDUCING SLAB

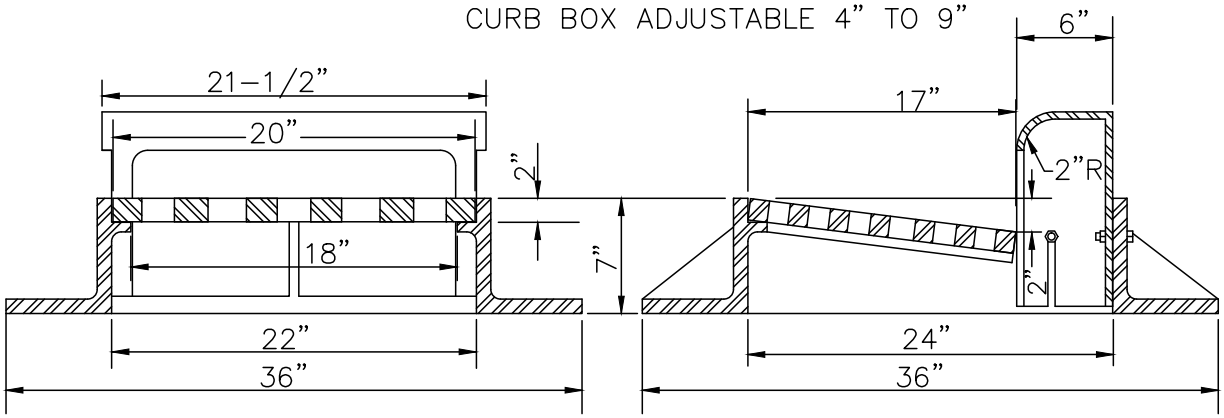


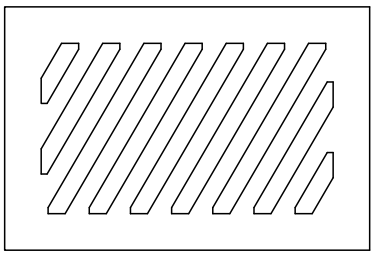
FRONT VIEW

NOTES:

1. COMPRESSIVE STRENGTH OF CONC. SHALL BE MINIMUM 4000 P.S.I. EXCEPT BASE SLAB WHICH MAY BE 3000 P.S.I. BASE & BARREL SHALL BE CONNECTED BY CONTINUOUS STEEL.
2. SEE ASTM C-478-64T FOR DESIGN REQUIREMENTS.
3. AT CATCH BASIN, DELETE CONC. CURB & GUTTER, PAVE TO FACE OF CATCH BASIN INLET.

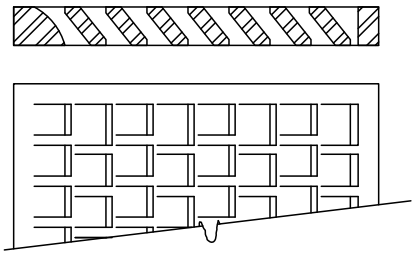
CITY OF HOMER · ALASKA · MARCH 31, 1964	SCALE: NTS REVISED: 6/99	**STORM DRAIN** **PRECAST CATCH BASIN** **FOR TYPE 1 CURB + GUTTER**	DETAIL # **800.11**



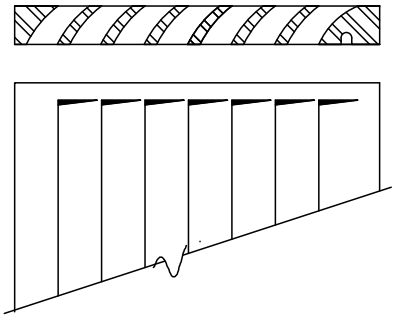


CURB INLET FRAME, GRATE AND CURB BOX

ILLUSTRATING NEENAH R-3065 WITH TYPE DR REVERSIBLE GRATE. FOR OPPOSITE HAND FLIP GRATE TOP TO BOTTOM.



ALTERNATE TYPE L GRATE



ALTERNATE TYPE V GRATE

CITY OF HOMER · ALASKA · MARCH 31,1964	SCALE: NTS REVISED: 6/99	**STORM DRAIN CATCH BASIN INLET FOR TYPE 1 CURB + GUTTER**	DETAIL # 800.12