



City of Woodburn

Standard Details

Rev. November 5, 2025

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6510-1 *BLANK*
6510-2 Outside Drop Manhole Connection
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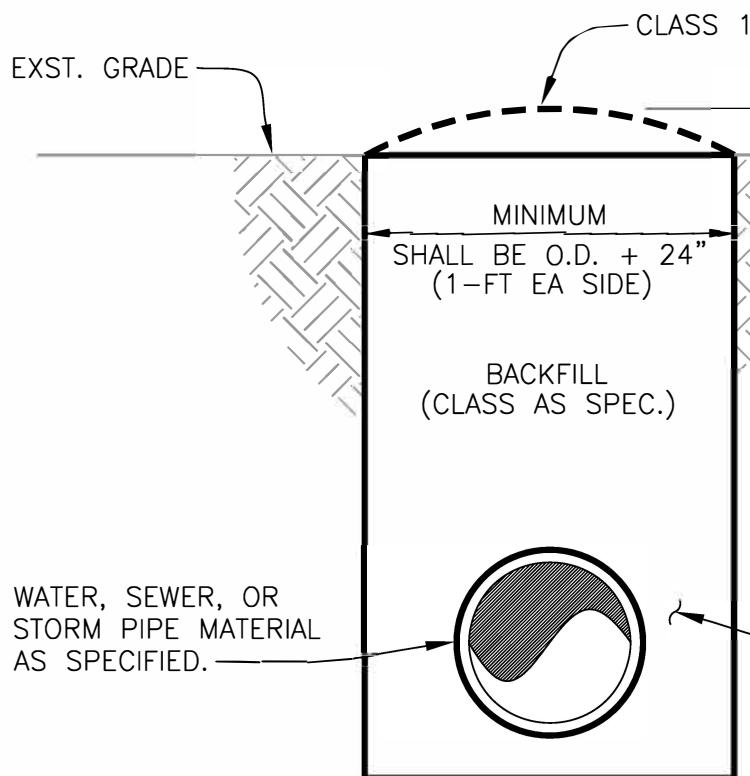
SECTION 7100 – CATCH BASINS

7100-1	<i>BLANK</i>
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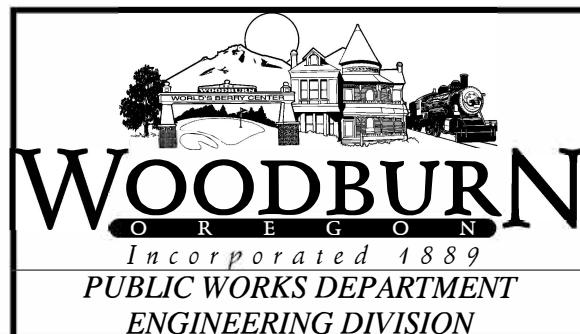
7500-1	Storm Sewer Manhole
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SECTION 3800
TRENCHING & BACKFILL



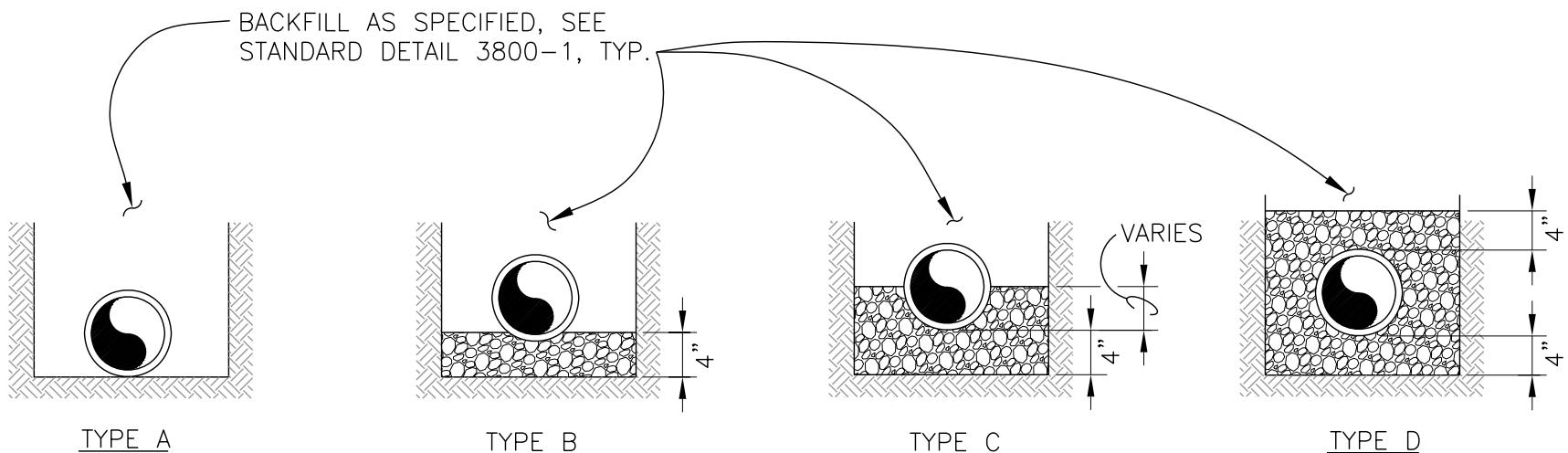
NOTES:

1. ENGINEER WILL CONSIDER ADJUSTING USUAL TRENCH WIDTH TO ACCOMMODATE CONDITION ENCOUNTERED.
2. REFERENCE TECHNICAL SPEC. SECTION 3800.
3. FOR HMA TRENCH CAP SURFACE REPLACEMENT SEE DETAIL 3800-5.



**PIPE TRENCH
BACKFILL**

REV: MARCH 2023
SCALE: NTS
DET No.
3800-1



TYPE A - PLACE PIPE BARREL ON UNDISTURBED EARTH.

TYPE B - SUPPORT PIPE ON 4" OF COMPACTED 1"-MINUS CRUSHED AGGREGATE.

TYPE C - PIPE BEDDED WITH 1"-MINUS CRUSHED AGGREGATE FROM 4" BELOW INVERT TO SPRING LINE.

TYPE D - PIPE BEDDED WITH 1"-MINUS CRUSHED AGGREGATE FROM 4" BELOW INVERT TO 4" ABOVE ZENITH.

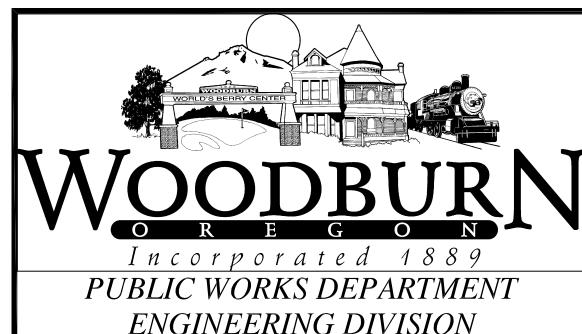
LEGEND

UNDISTURBED NATIVE SOIL

1"-MINUS CRUSHED AGGREGATE, COMPACTED 95 PCT. OF AASHTO T-99

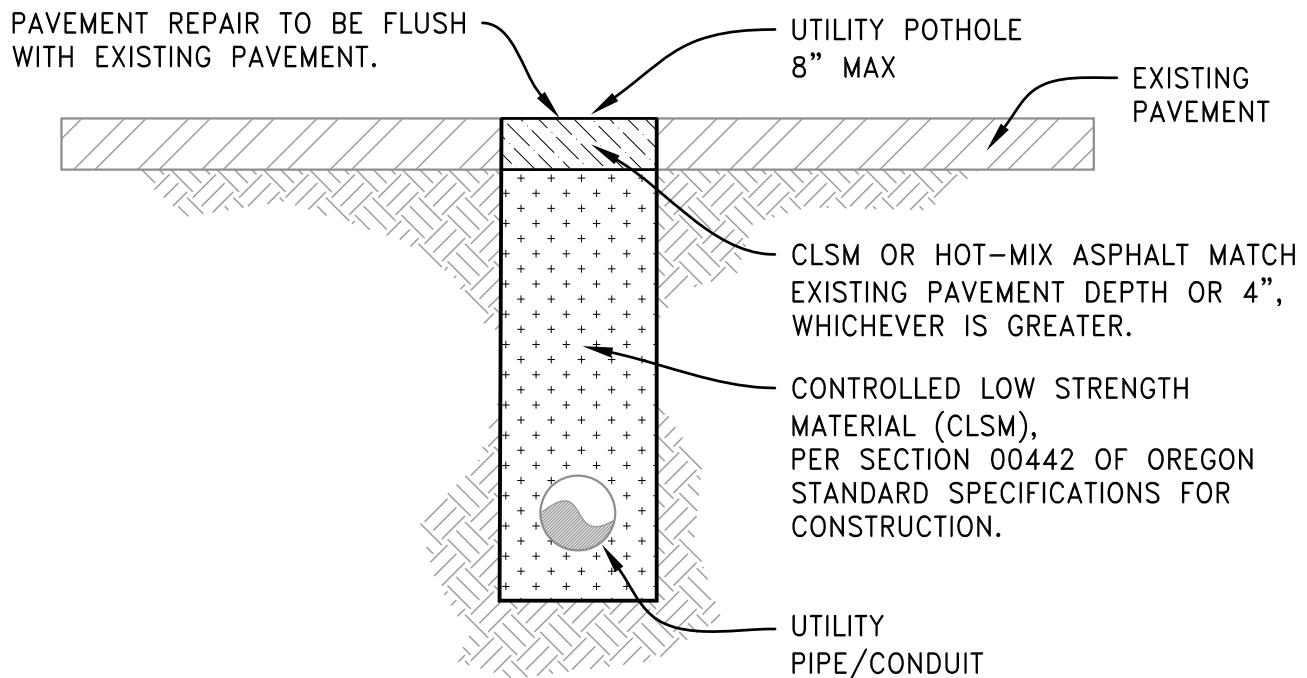
NOTES:

1. REFERENCE TECHNICAL SPEC. SECTION 3800.



PIPE TRENCH BEDDING AND ZONE

REV: DEC. 2007
SCALE: NTS
DET No.
3800-2



NOTES:

1. A RIGHT-OF-WAY CONSTRUCTION PERMIT IS REQUIRED FOR ALL PAVEMENT UTILITY POTHOLE EXCAVATIONS.
2. DRILLED CORE HOLES THROUGH THE ROADWAY PAVEMENT SHALL USE DIAMOND CORE DRILLING EQUIPMENT. CUTS OVER 8" SHALL BE REPAIRED PER CITY'S TRENCH CAP DETAIL 3800-5 OR AS DETERMINED BY CITY ENGINEER.
3. ADJACENT UTILITY POTHOLES SHALL NOT BE CLOSER THAN 3 FEET FROM EACH OTHER.



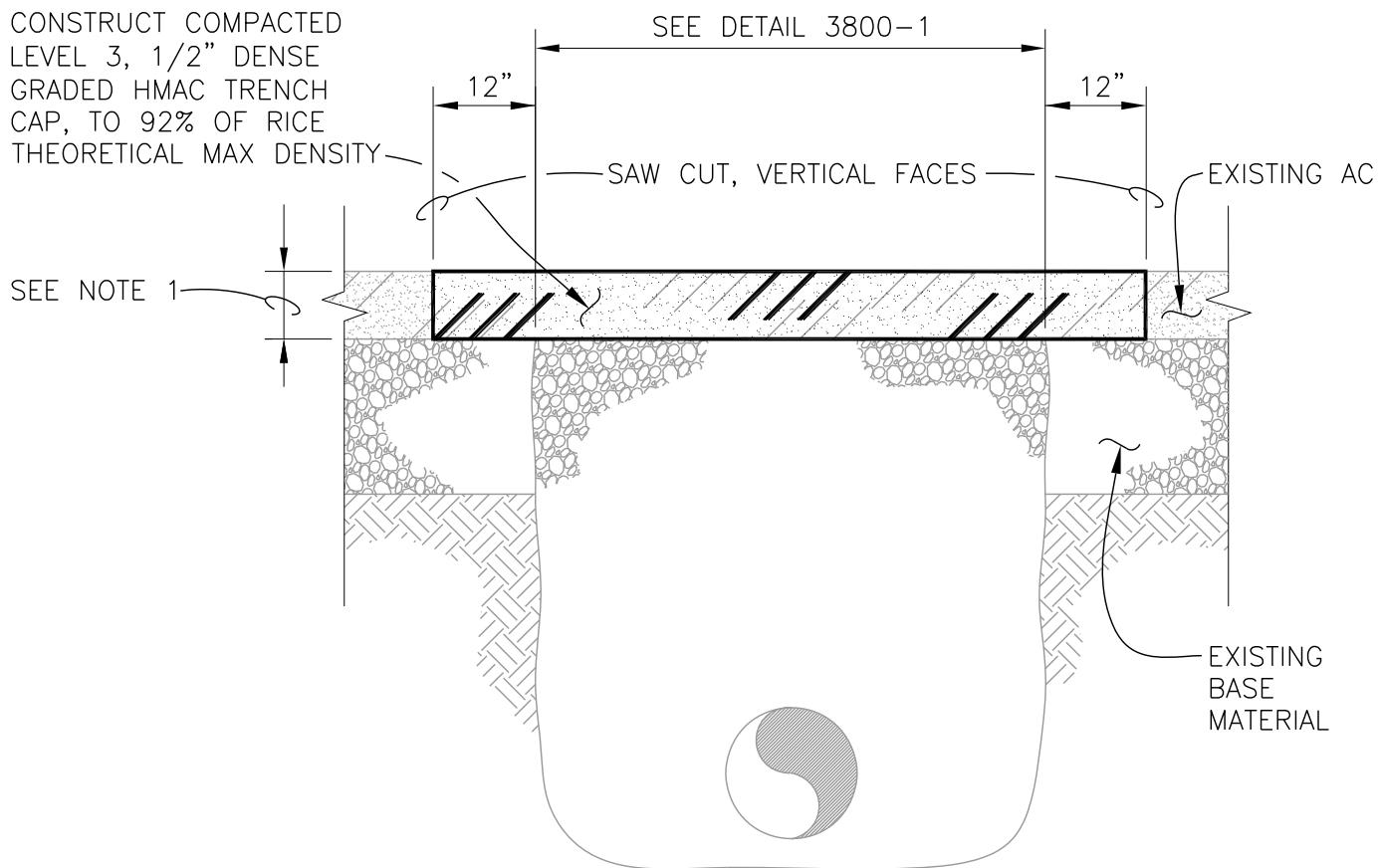
PAVEMENT CORE AND UTILITY POTHOLING REPAIR

REV: DEC. 2023

SCALE: NTS

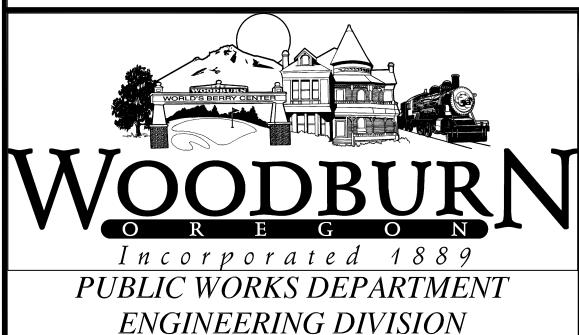
DET No.

3800-3



NOTES:

1. REPLACEMENT OF HMA SHALL MATCH EXST. DEPTH (4-INCH MINIMUM), OR OTHERWISE SPECIFIED ON PLANS. IN NO CASE SHALL THICKNESS BE LESS THAN THAT SHOWN ON STANDARD DETAIL 4200-1.
2. REFERENCE TECHNICAL SPEC. SECTION 2400, 4200 AND 4220.



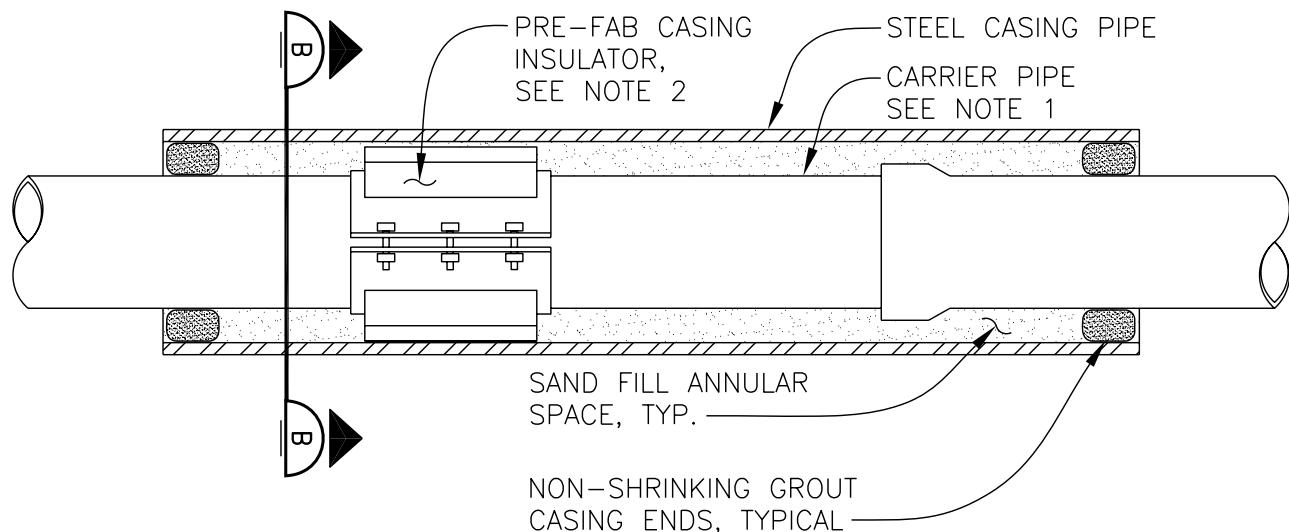
TRENCH CAP

REV: DEC. 2016

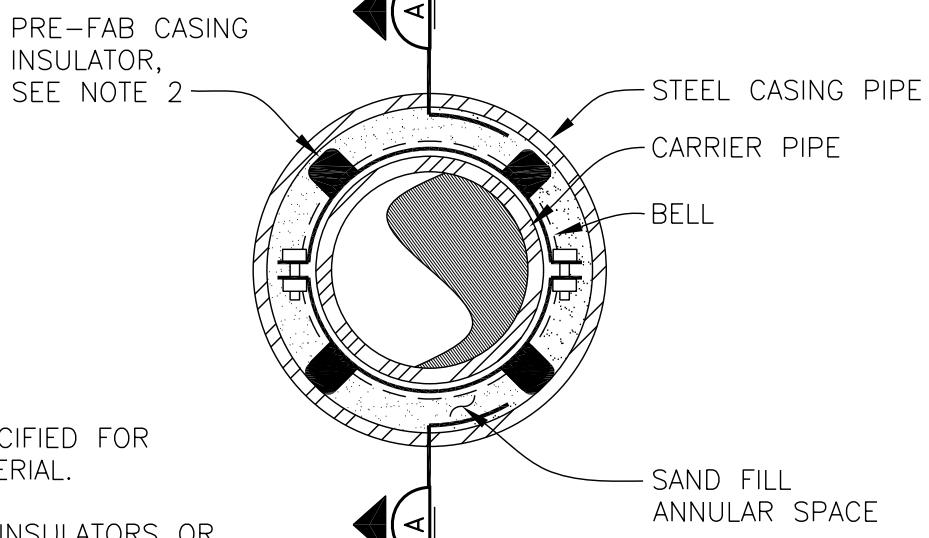
SCALE: NTS

DET No.
3800-5

SECTION 3820
BORING, TUNNELING, & PIPE
JACKING



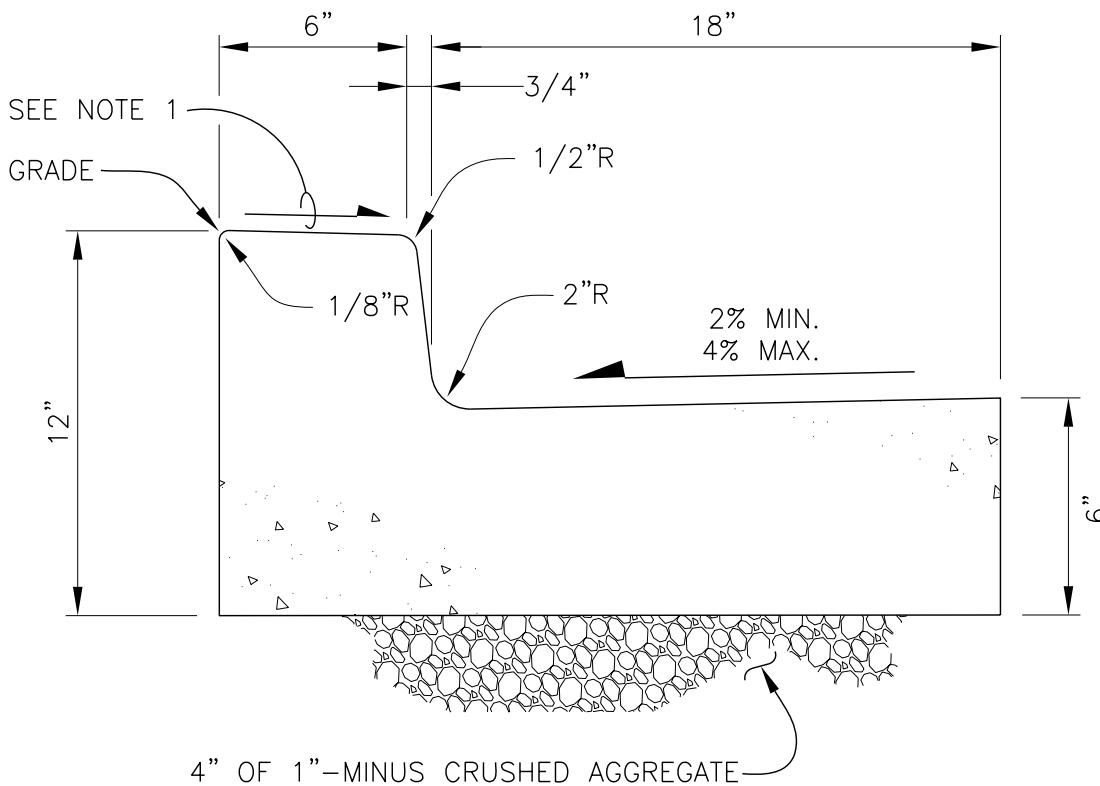
SECTION A

NOTES:

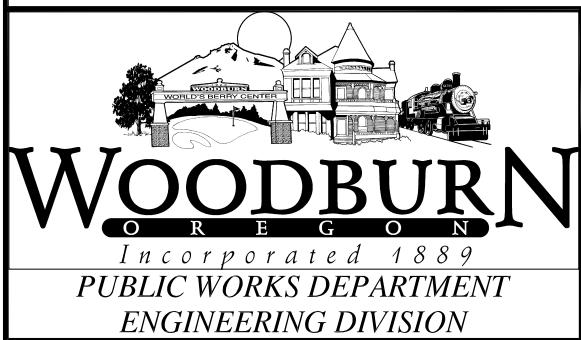
1. CARRIER PIPE AS SPECIFIED FOR SIZE, CLASS AND MATERIAL.
2. USE CALPICO CASING INSULATORS OR APPROVED EQUAL AND INSTALL PER MANUFACTURER'S SPECIFICATION.
3. REFERENCE TECHNICAL SPEC. SECTION 3820.

SECTION B

SECTION 4100
CURBS & GUTTERS

NOTES:

1. SLOPE CURB 0.02 FT/FT TO CURB FACE.
2. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.
3. REFERENCE TECHNICAL SPEC. SECTIONS 2000, 2300 AND 4100.
4. PLACE CONTRACTION JOINTS AT 15' MAX. INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH CURB.



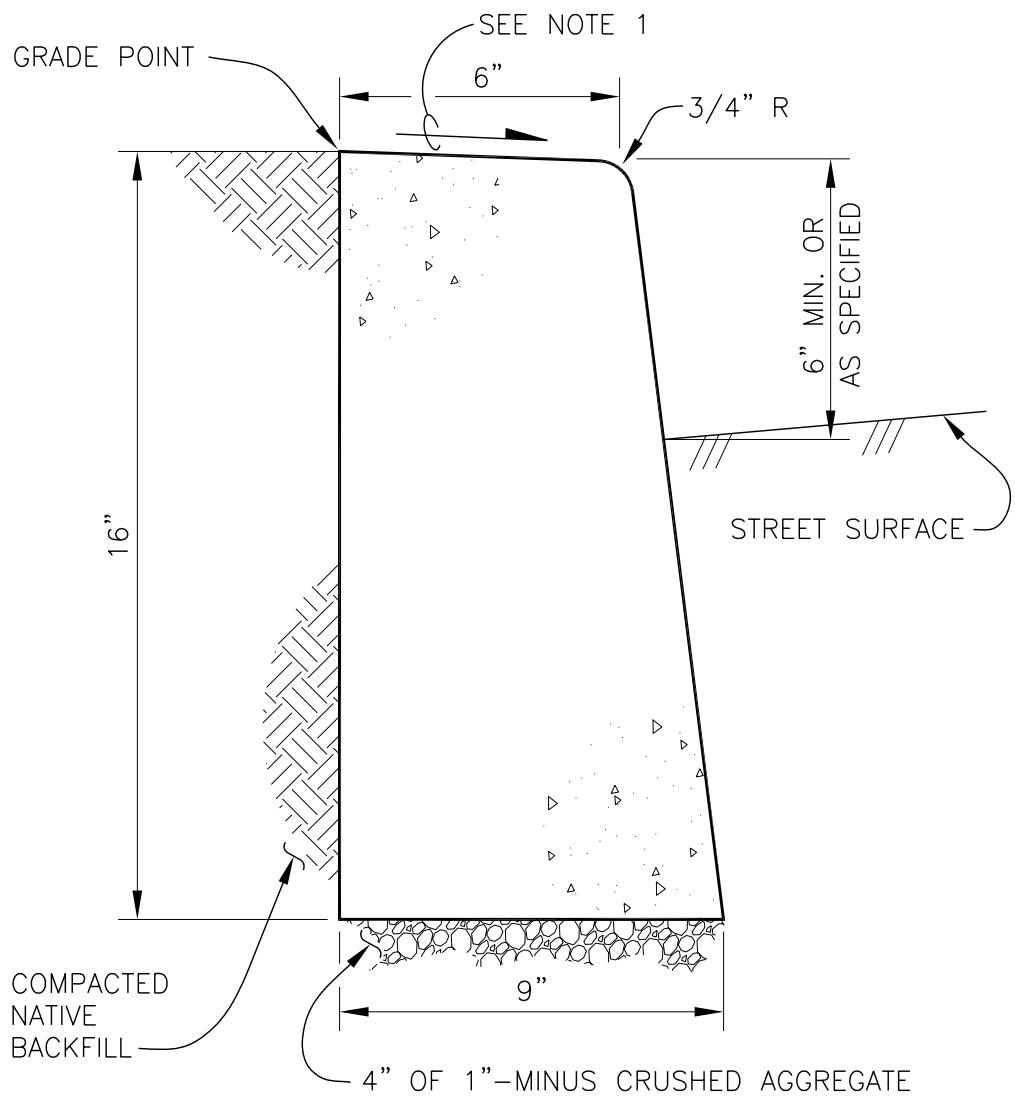
TYPE 'A' CURB AND GUTTER

REV: DEC. 2007

SCALE: NTS

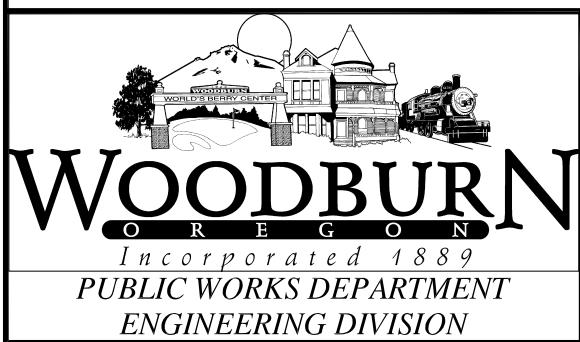
DET No.

4100-1



NOTES:

1. SLOPE CURB 0.02 FT/FT TO CURB FACE.
2. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.
3. REFERENCE TECHNICAL SPEC. SECTIONS 2000, 2300 AND 4100.
4. PLACE CONTRACTION JOINTS AT 15' MAX. INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH CURB.



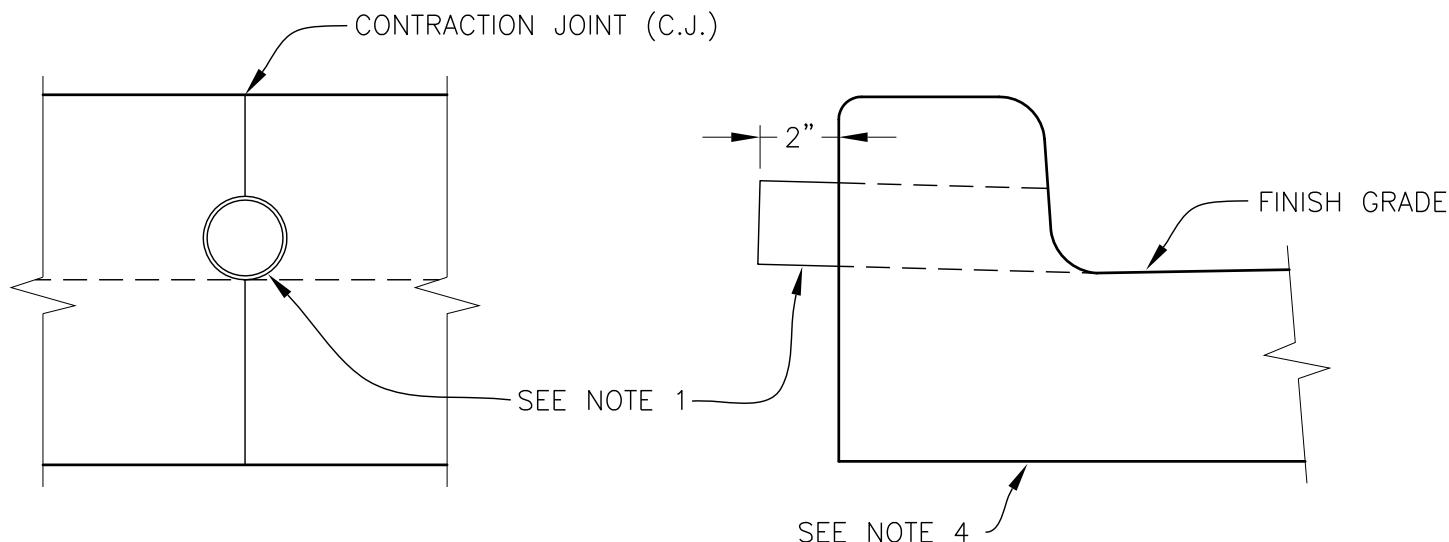
TYPE 'C' CURB

REV: DEC. 2007

SCALE: NTS

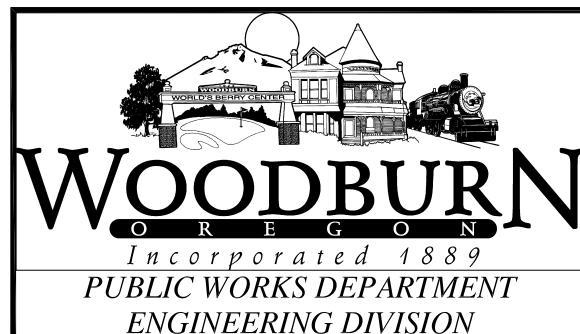
DET No.

4100-2



NOTES:

1. 3" PVC SHALL BE SCHEDULE 40 AND SHALL EXTEND AT LEAST 2" BEYOND BACK OF CURB.
2. WEEP HOLE CONSTRUCTION IN EXISTING CURB SHALL BE CORED 3-1/2" DIA. OR AS APPROVED BY ENGINEERING DIVISION.
3. REFERENCE TECHNICAL SPEC. SECTION 4100.
4. SEE DETAILS 4100-1 OR 4100-2 FOR CURB DETAIL INFORMATION.



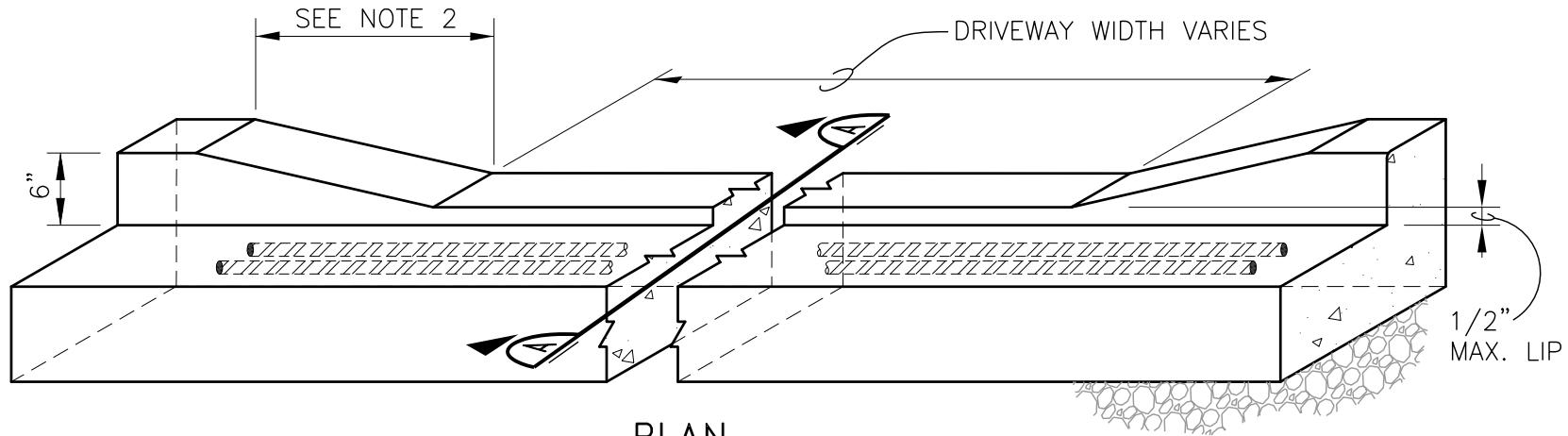
WEEP HOLE

REV: JAN. 2014

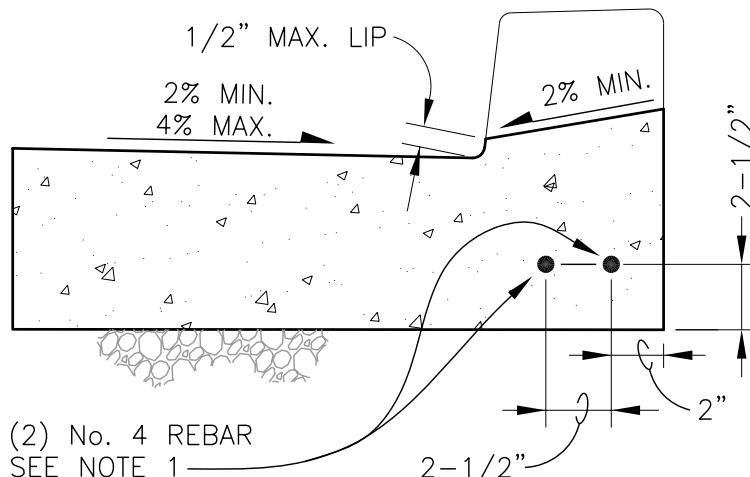
SCALE: NTS

DET No.

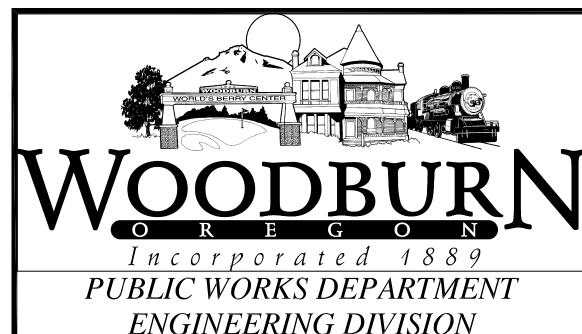
4100-3



PLAN



SECTION A



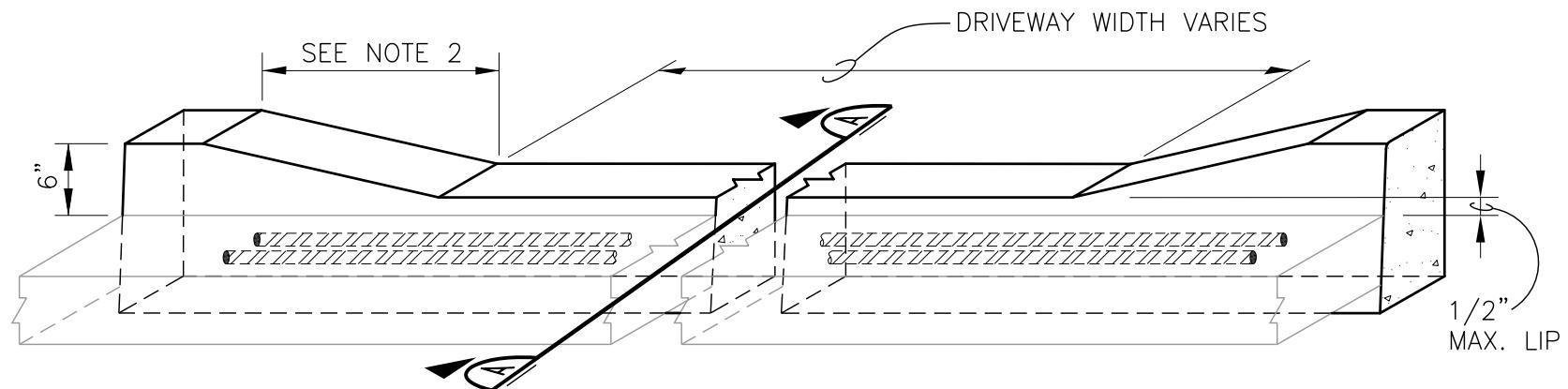
TYPE 'A' CURB
AT DRIVEWAY

REV: DEC. 2007

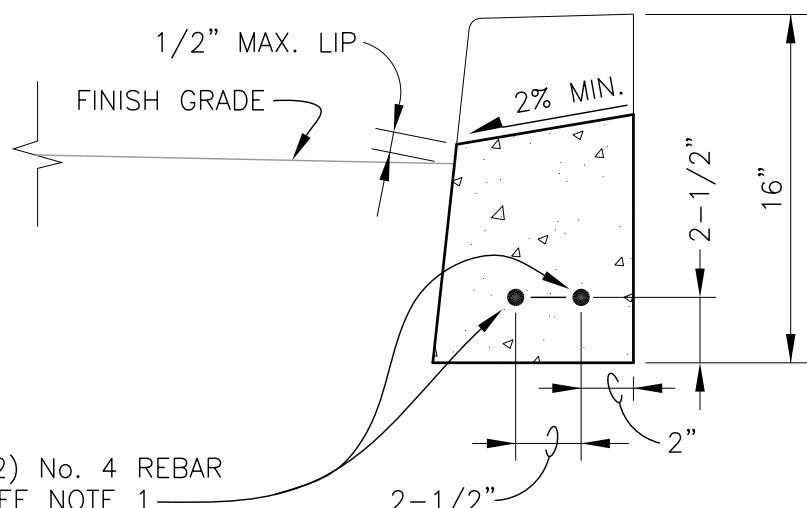
SCALE: NTS

DET No.

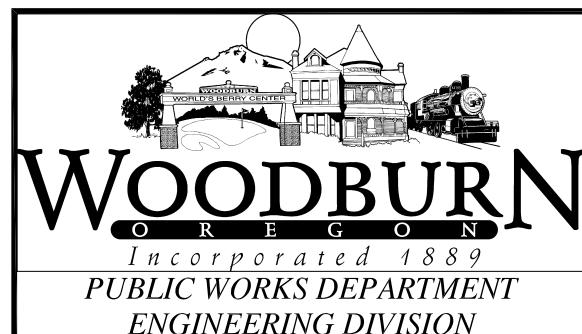
4100-4



PLAN



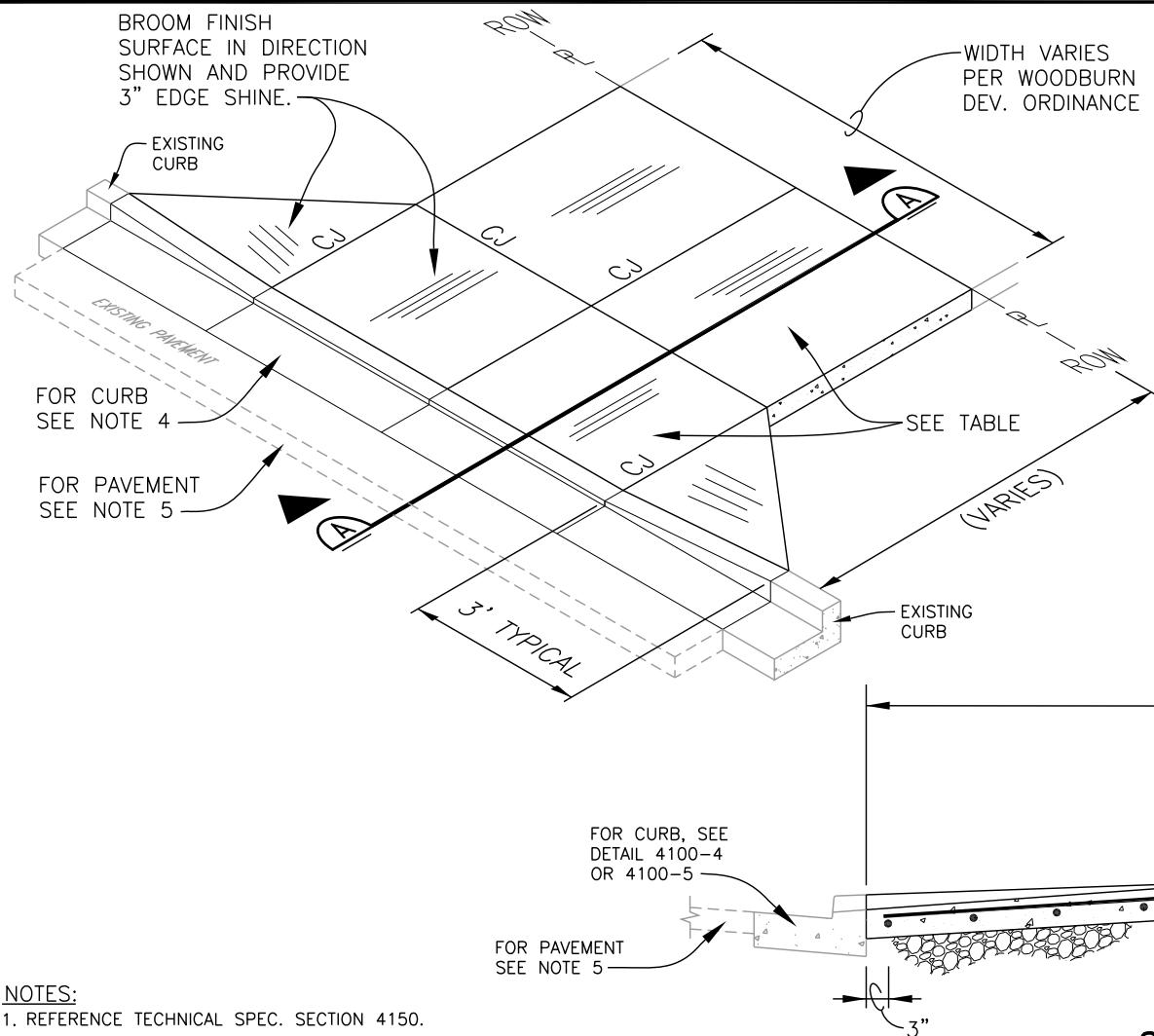
SECTION A



TYPE 'C' CURB
AT DRIVEWAY

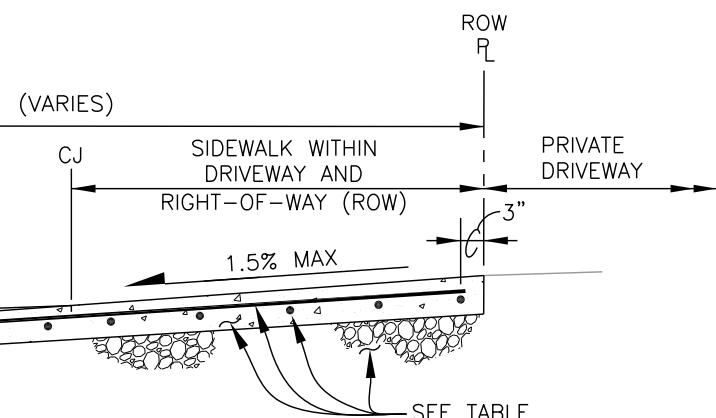
REV: DEC. 2007
SCALE: NTS
DET No.
4100-5

SECTION 4150
DRIVEWAYS, SIDEWALKS, & ADA
RAMPS

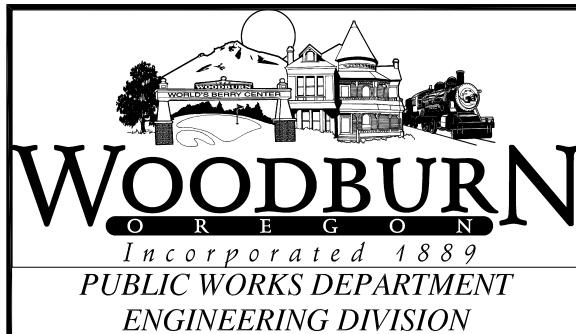
**TABLE**

CONCRETE/AGGREGATE BASE
THICKNESS AND REINFORCEMENT.

USE	CONC.	1"-MINUS CRUSHED AGGREGATE	REBAR
SINGLE FAMILY RESIDENTIAL	6"	4"	NONE
ALL OTHER	8"	6"	No. 4 @ 12" O.C. EACH WAY

**SECTION A****NOTES:**

1. REFERENCE TECHNICAL SPEC. SECTION 4150.
2. EXPANSION JOINTS (EJ) SHALL BE 1/2" AC IMPREGNATED JOINT FILLER AT ALL DISSIMILAR VERTICAL SURFACES.
3. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.
4. CURBS WITH CRACKING, SETTLEMENT, DRAINAGE PROBLEMS OR SIGNIFICANT DETERIORATION SHALL BE REPLACED UNLESS APPROVED BY ENGINEERING DEPARTMENT.
5. ASPHALT STREETS SHALL BE REPAIRED TO FIX ANY OVERCUTS OR DAMAGE CAUSED BY PLACING CURB FORMS. REPAIR SHALL BE A MINIMUM OF 1FT WIDE AND THE EXTEND THE ENTIRE LENGTH OF THE CURB REPLACEMENT AREA. ALL LIMITS SHALL BE CLEANLY SAW CUT.



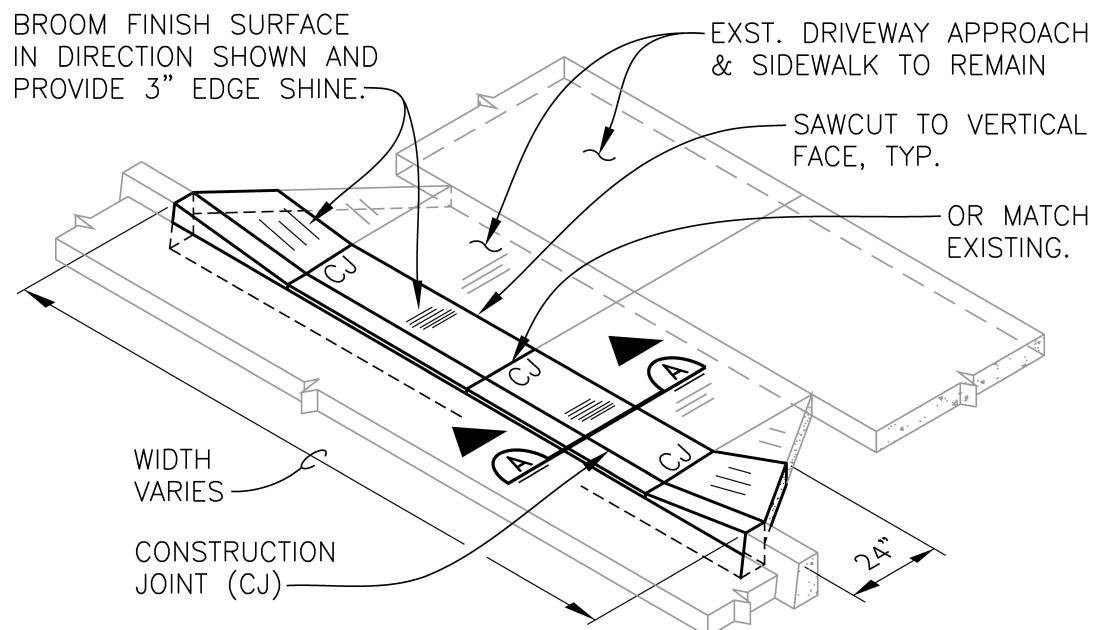
DRIVEWAY APPROACH

REV: AUG. 2020

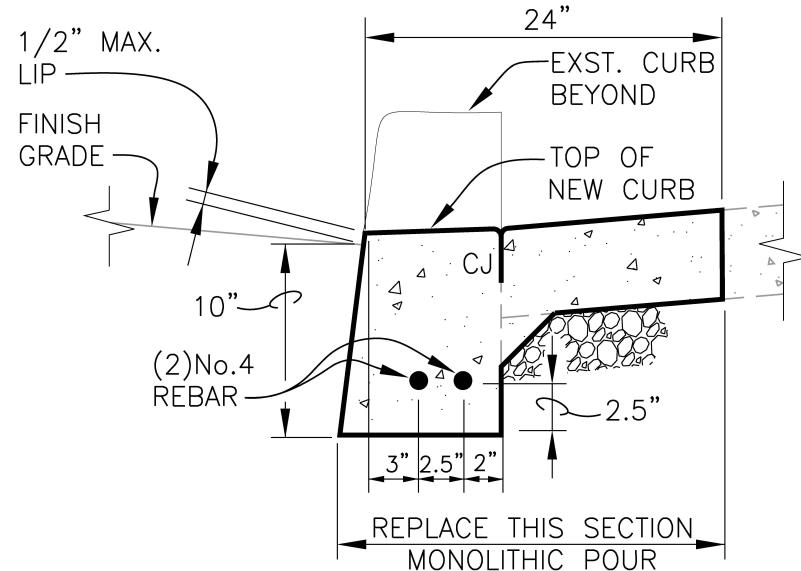
SCALE: NTS

DET No.

4150-1

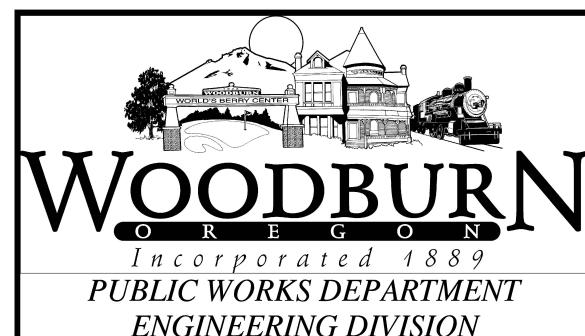
NOTES:

1. USE HIGH/EARLY REDI-MIX WITH MIN. 3-DAY STRENGTH OF 3500 PSI.
2. CONSTRUCTION JOINTS AS FIELD SPECIFIED, MINIMUM MATCH EXISTING.
3. CURB ADJOINING 24" REPLACEMENT SHALL BE INCLUDED IN REPLACEMENT BID ITEM.
4. CONCRETE/CRUSHED AGGREGATE ARE MINIMUM THICKNESS, SEE TABLE.
5. REFERENCE TECHNICAL SPEC. SECTION 4150.
6. REBAR WILL EXTEND A MIN. OF 2' INTO THE WING AREA.

SECTION A

CONCRETE/AGGREGATE BASE
THICKNESS AND REINFORCEMENT.

USE	CONC.	1" - MINUS CRUSHED AGGREGATE	REBAR
SINGLE FAMILY RESIDENTIAL	6"	4"	AS SHOWN
ALL OTHER	8"	6"	



24" DRIVEWAY REPLACEMENT

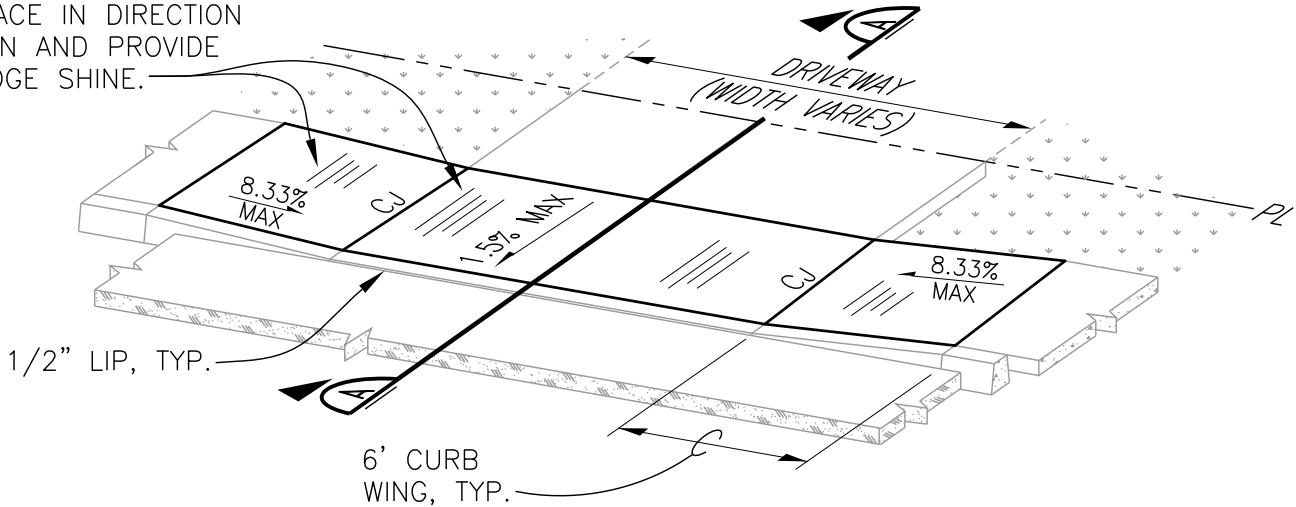
REV: DEC. 2007

SCALE: NTS

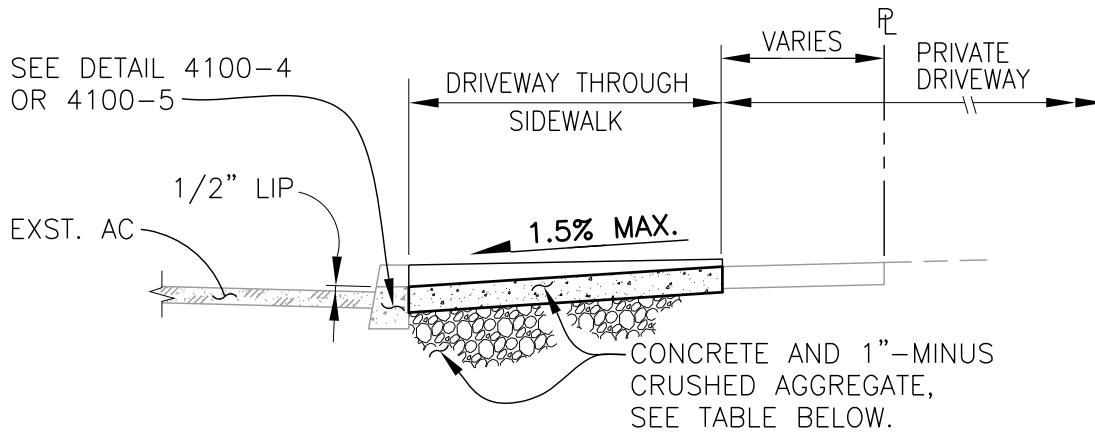
DET No.

4150-2

BROOM FINISH
SURFACE IN DIRECTION
SHOWN AND PROVIDE
3" EDGE SHINE.



CURB SIDE SIDEWALK



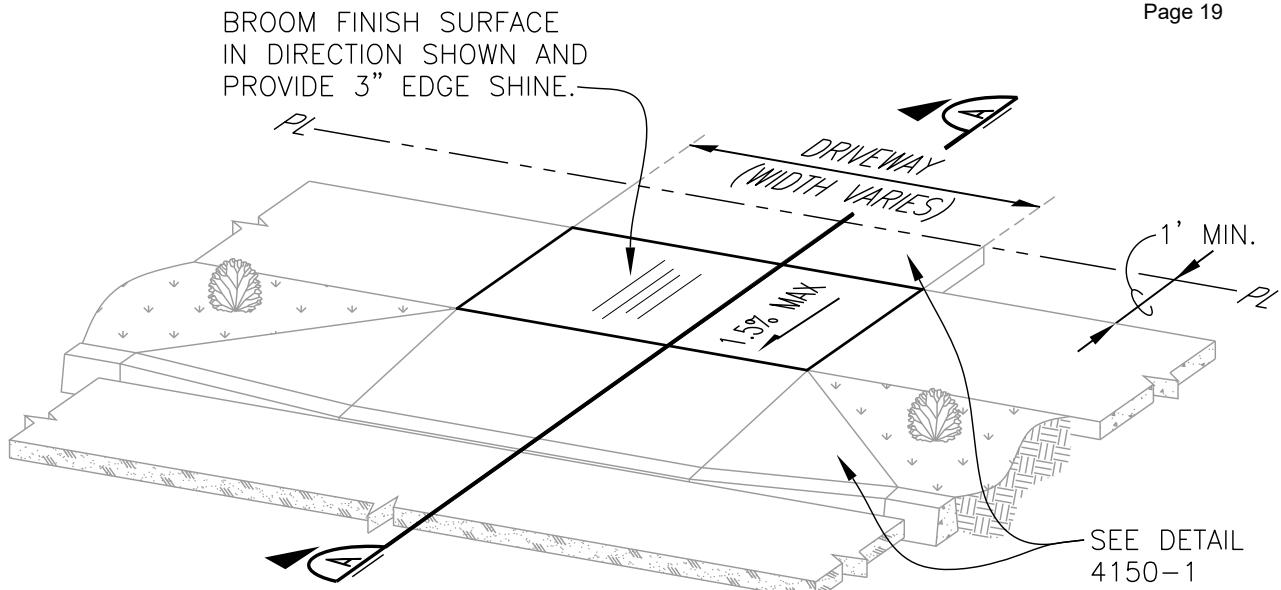
SECTION A

CONCRETE/AGGREGATE BASE
THICKNESS AND REINFORCEMENT.

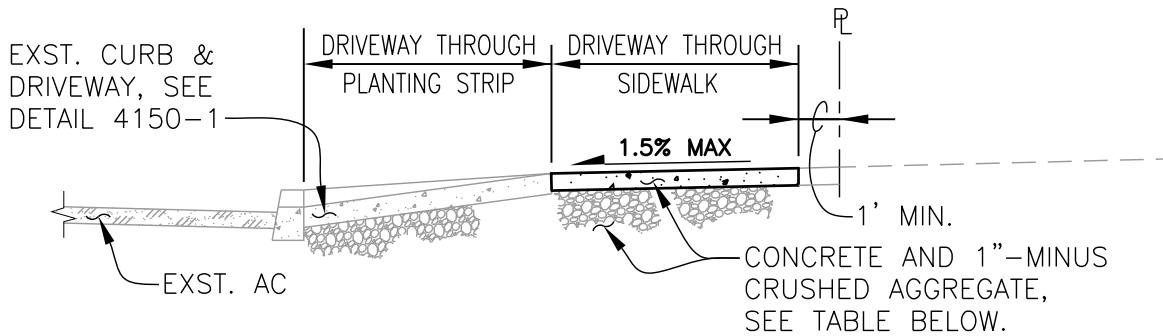
NOTES:

1. REFERENCE TECHNICAL SPEC.
SECTION 4150.
2. PLACE CONSTRUCTION JOINTS AT
5' INTERVALS 1/3 THICKNESS.
3. MATERIAL - 3500 PSI CONCRETE
AT 28 DAYS.

USE	CONC.	1"-MINUS CRUSHED AGGREGATE	REBAR
SINGLE FAMILY RESIDENTIAL	6"	4"	NONE
ALL OTHER	8"	6"	No.4 @ 12"O.C. EACH WAY



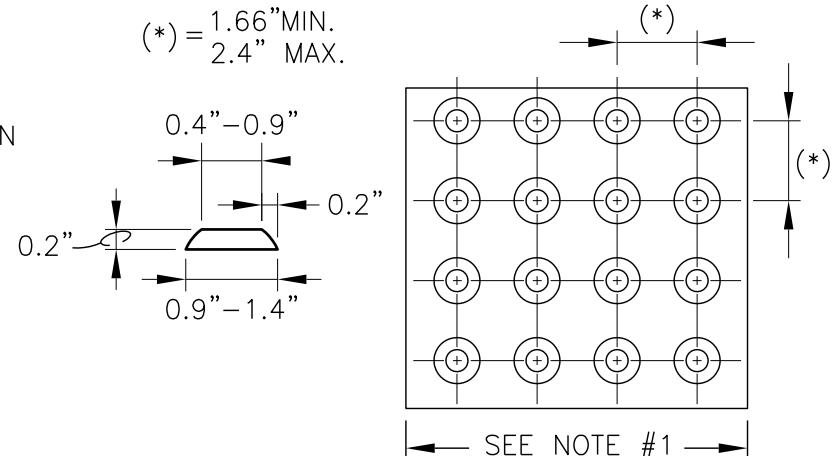
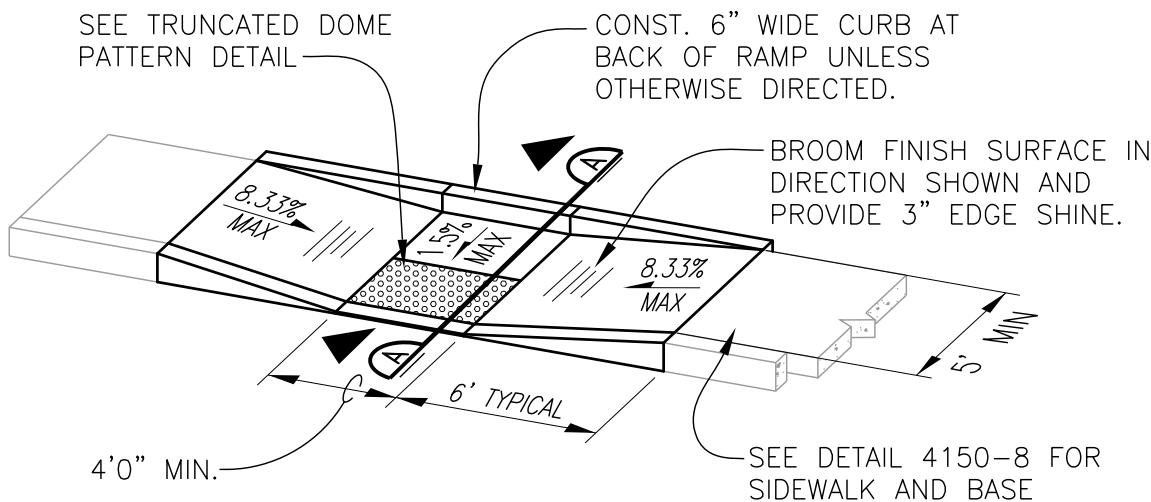
PROPERTY LINE SIDEWALK



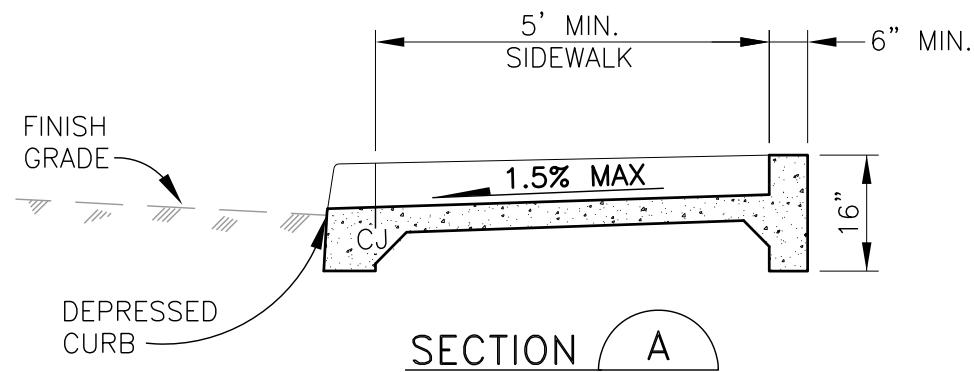
SECTION A

CONCRETE/AGGREGATE BASE
THICKNESS AND REINFORCEMENT.

USE	CONC.	1"-MINUS CRUSHED AGGREGATE	REBAR
SINGLE FAMILY RESIDENTIAL	6"	4"	NONE
ALL OTHER	8"	6"	No.4 @ 12"O.C. EACH WAY

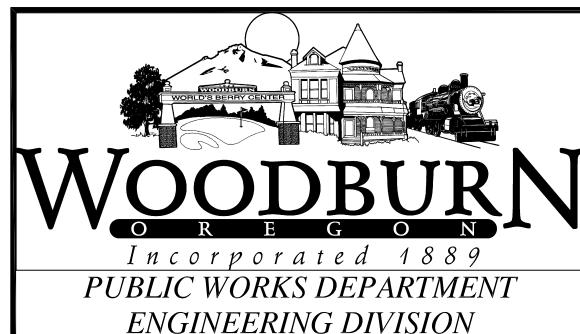


TRUNCATED DOME PATTERN



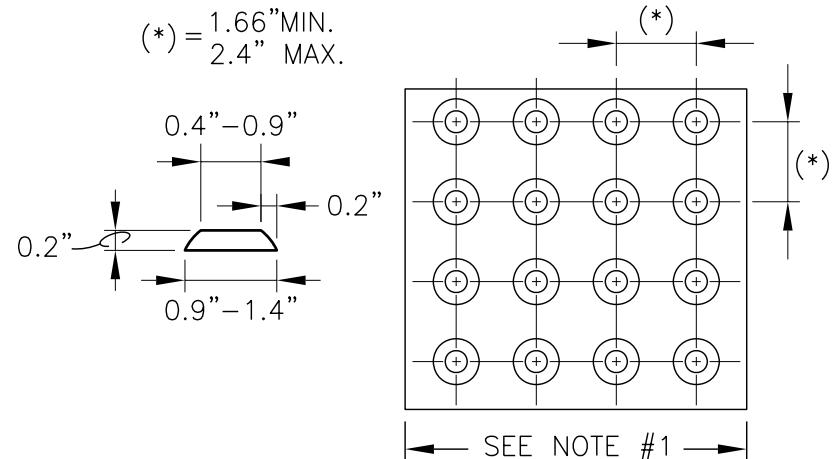
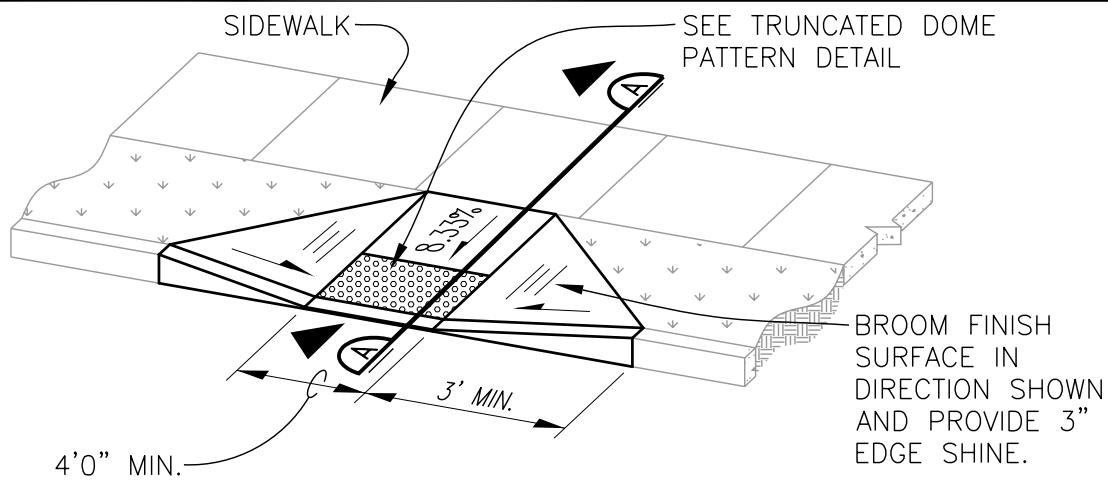
NOTES:

1. TRUNCATED DOME PATTERN SHALL BE 2' DEEP, WIDTH VARIES (4' MINIMUM).
2. REFERENCE TECHNICAL SPEC. SECTION 4150.
3. TRUNCATED DOME TO BE SAFETY YELLOW OR APPROVED OTHERWISE.
4. COMPLY WITH CURRENT ADA STANDARDS.
5. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.

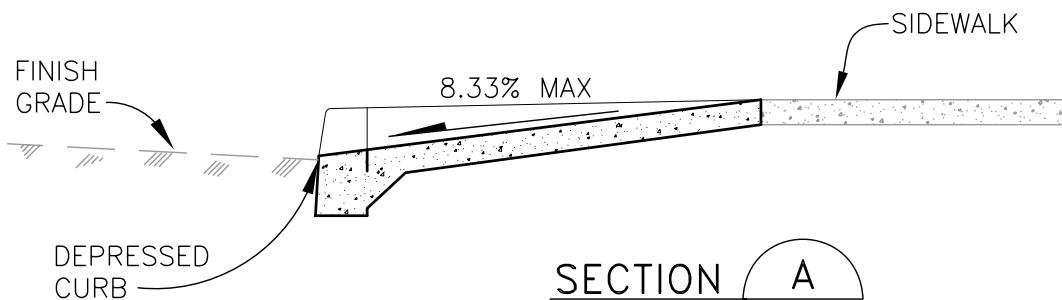


**ADA RAMP
AT CURBSIDE
SIDEWALK**

REV: MAY 2019
SCALE: NTS
DET No.
4150-5

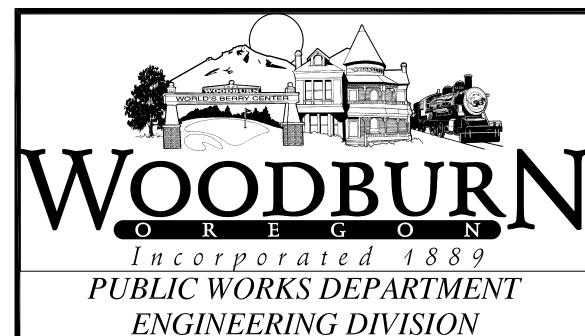


TRUNCATED DOME PATTERN



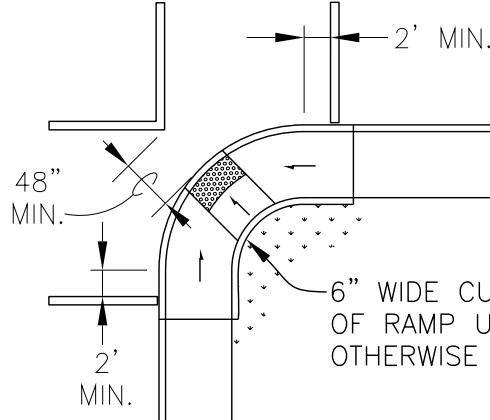
NOTES:

1. TRUNCATED DOME PATTERN SHALL BE 2' DEEP, WIDTH VARIES (4' MINIMUM).
2. REFERENCE TECHNICAL SPEC. SECTION 4150.
3. TRUNCATED DOME TO BE SAFETY YELLOW OR APPROVED OTHERWISE.
4. COMPLY WITH CURRENT ADA STANDARDS.
5. MATERIAL – 3500 PSI CONCRETE AT 28 DAYS.

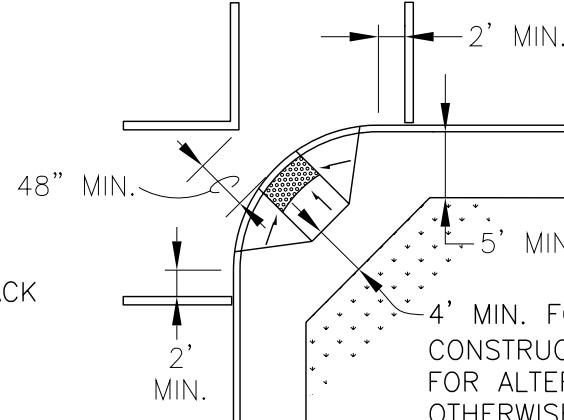


ADA RAMP AT PROPERTY LINE SIDEWALK

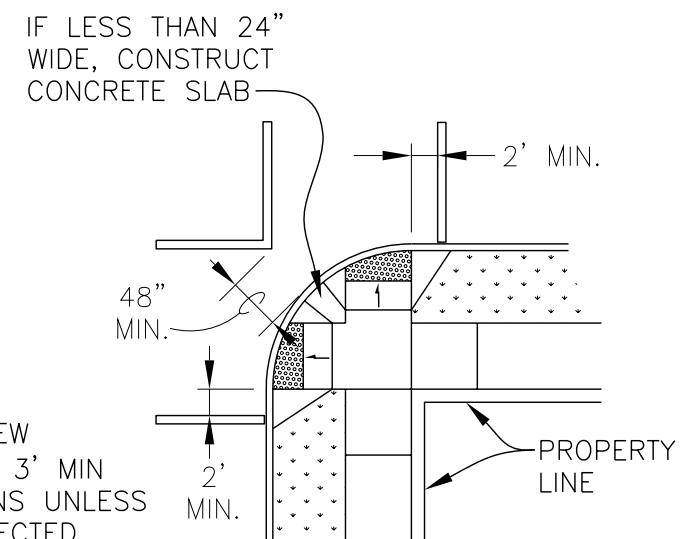
REV:	DEC. 2007
SCALE:	NTS
DET No.	
4150-6	



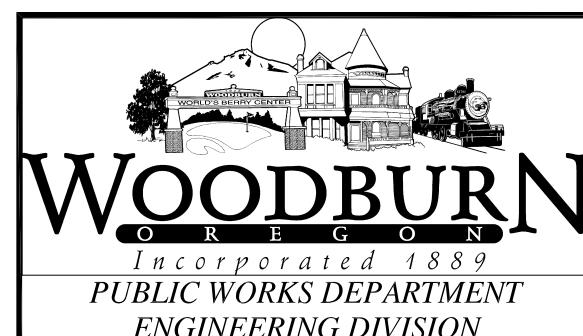
OPTION A



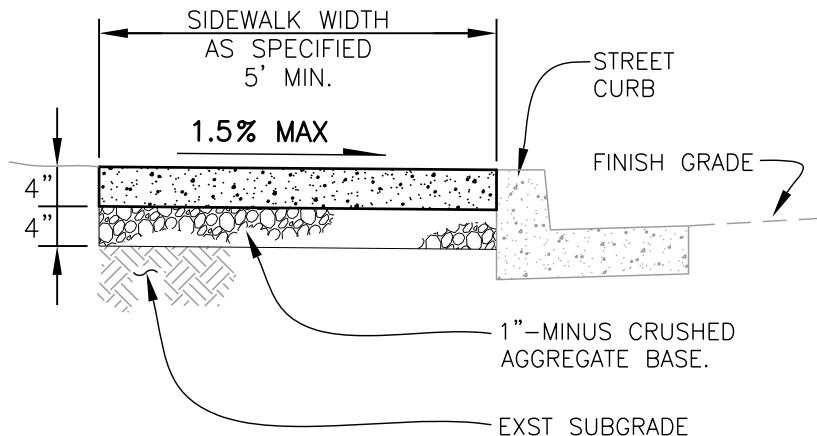
OPTION B

CURBLINE SIDEWALKSPROPERTYLINE SIDEWALKSNOTES:

1. REFERENCE TECHNICAL SPEC. SECTION 4150.
2. SEE DETAILS 4150-5 & 4150-6 FOR ADA RAMPS.

**ADA RAMP LOCATIONS**

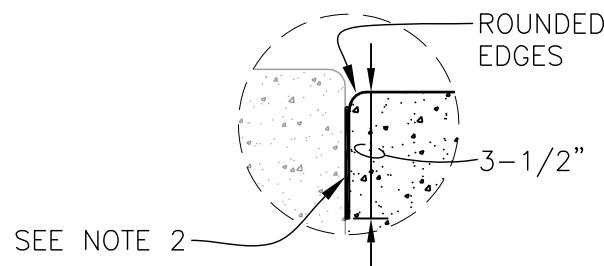
REV: DEC. 2007
SCALE: NTS
DET No.
4150-7



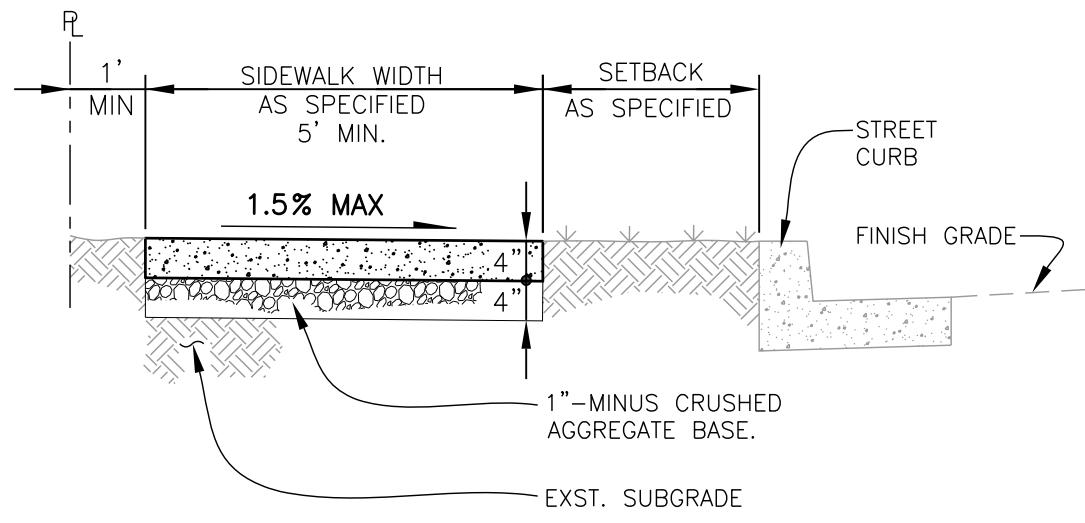
CURBLINE SIDEWALK

NOTES:

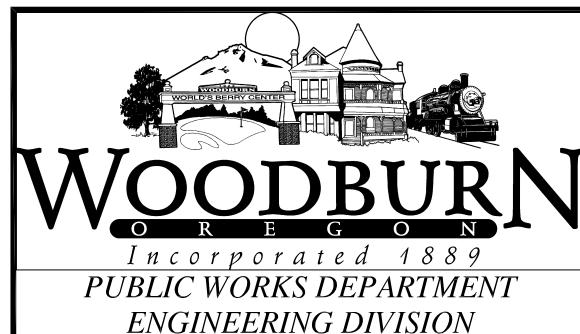
1. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS. BROOM FINISH SURFACE & PROVIDE 3" EDGE SHINE. REFERENCE TECHNICAL SPEC. SECTION 4150.
2. EXPANSION JOINTS (EJ) SHALL BE 1/2" AC IMPREGNATED JOINT FILLER AT ALL DISSIMILAR VERTICAL SURFACES.
3. TRANSVERSE CONSTRUCTION JOINTS (CJ) 1-1/2" DEEP OR 1/3 OF THE THICKNESS (T) @ 5' INTERVALS.
4. FOR SIDEWALK AT DRIVEWAYS SEE DETAILS 4150-3 AND 4150-4.



EXPANSION JOINT



PROPERTY LINE SIDEWALK



SIDEWALKS

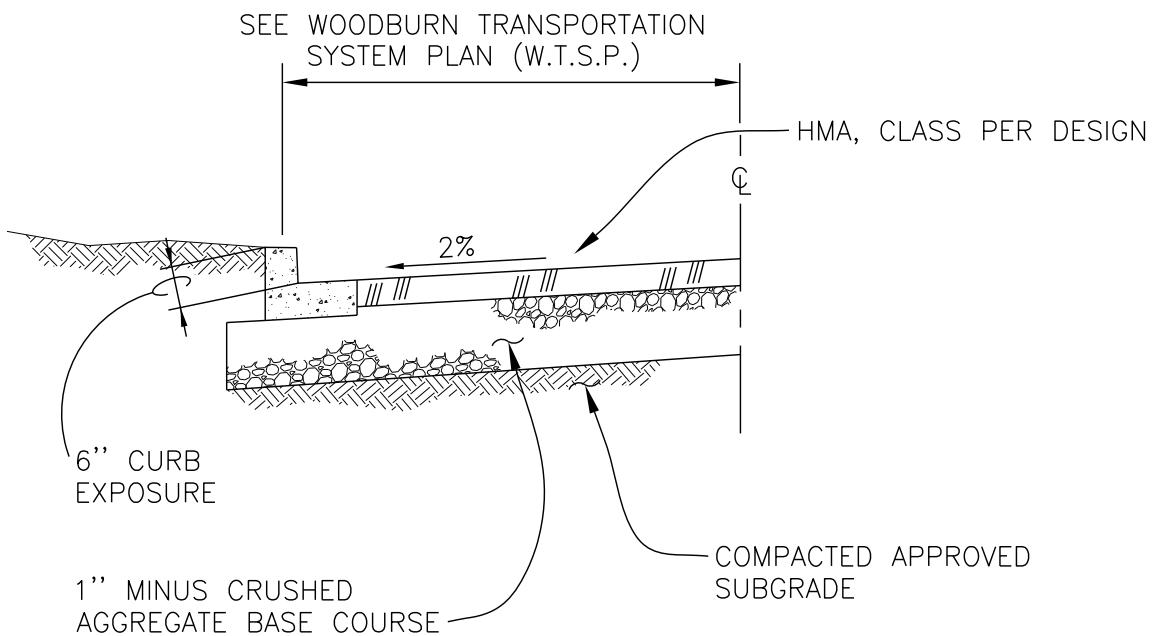
REV: JULY 2018

SCALE: NTS

DET No.

4150-8

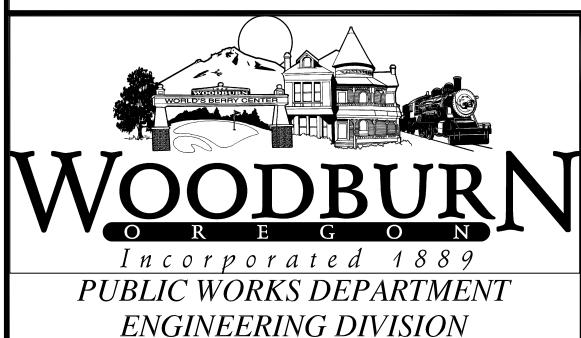
SECTION 4200
BITUMINOUS HOT MIX AC



	MINIMUM STREET CLASSIFICATION (PER W.T.S.P.)			
	LOCAL RESIDENTIAL STREET	SERVICE COLLECTOR, ACCESS & INDUSTRIAL STREET	ARTERIAL	
			MINOR	MAJOR
1"-MINUS CRUSHED AGGREGATE BASE COURSE	8"	10"	12"	18"
HOT-MIX ASPHALT PAVEMENT (HMA)	4"	5"	6"	8"

NOTES:

1. FLEXIBLE PAVEMENT STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER USING SUBGRADE REACTION APPROPRIATE FOR THE SITE, TRAFFIC INDEX, AND A 20-YEAR DESIGN LIFE FOR PAVEMENT SYSTEM.
2. STRUCTURE THICKNESSES SHALL NOT BE LESS THAN VALUES FROM TABLE ABOVE.
3. SEE THE WOODBURN TRANSPORTATION SYSTEM PLAN (W.T.S.P.) FOR STREET CLASSIFICATION.
4. DESIGN ENGINEER SHALL PROVIDE STRUCTURAL DESIGN CALCS. FOR APPROVAL.



**TYPICAL FLEXIBLE
PAVEMENT
STRUCTURE**

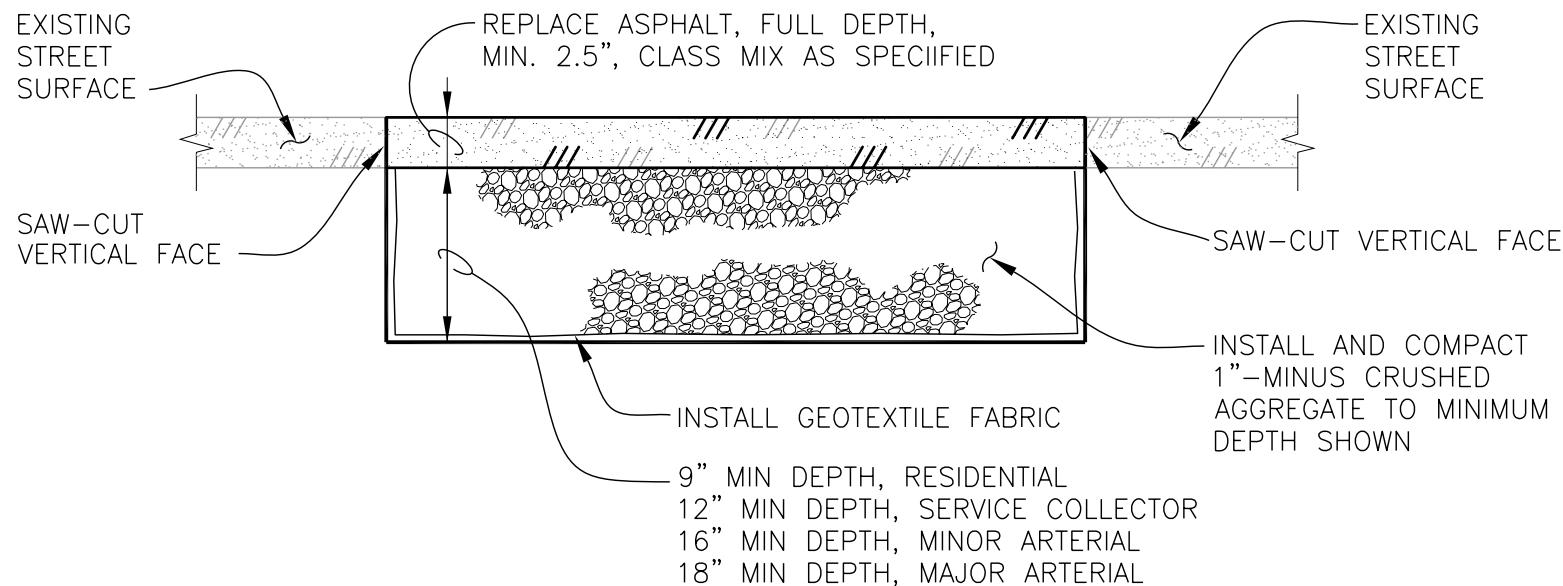
REV: JAN. 2009

SCALE: NTS

DET No.
4200-1

SECTION 4220

SURFACE PREPARATIONS



NOTES:

1. REFERENCE TECHNICAL SPEC. SECTION 4220.
2. AC CUTTING, AC REMOVAL, EXCAVATION, FABRIC, FILL, AND NEW AC ARE CONSIDERED COMPLETE AND SHALL BE PAID UNDER FULL DEPTH REPAIR.



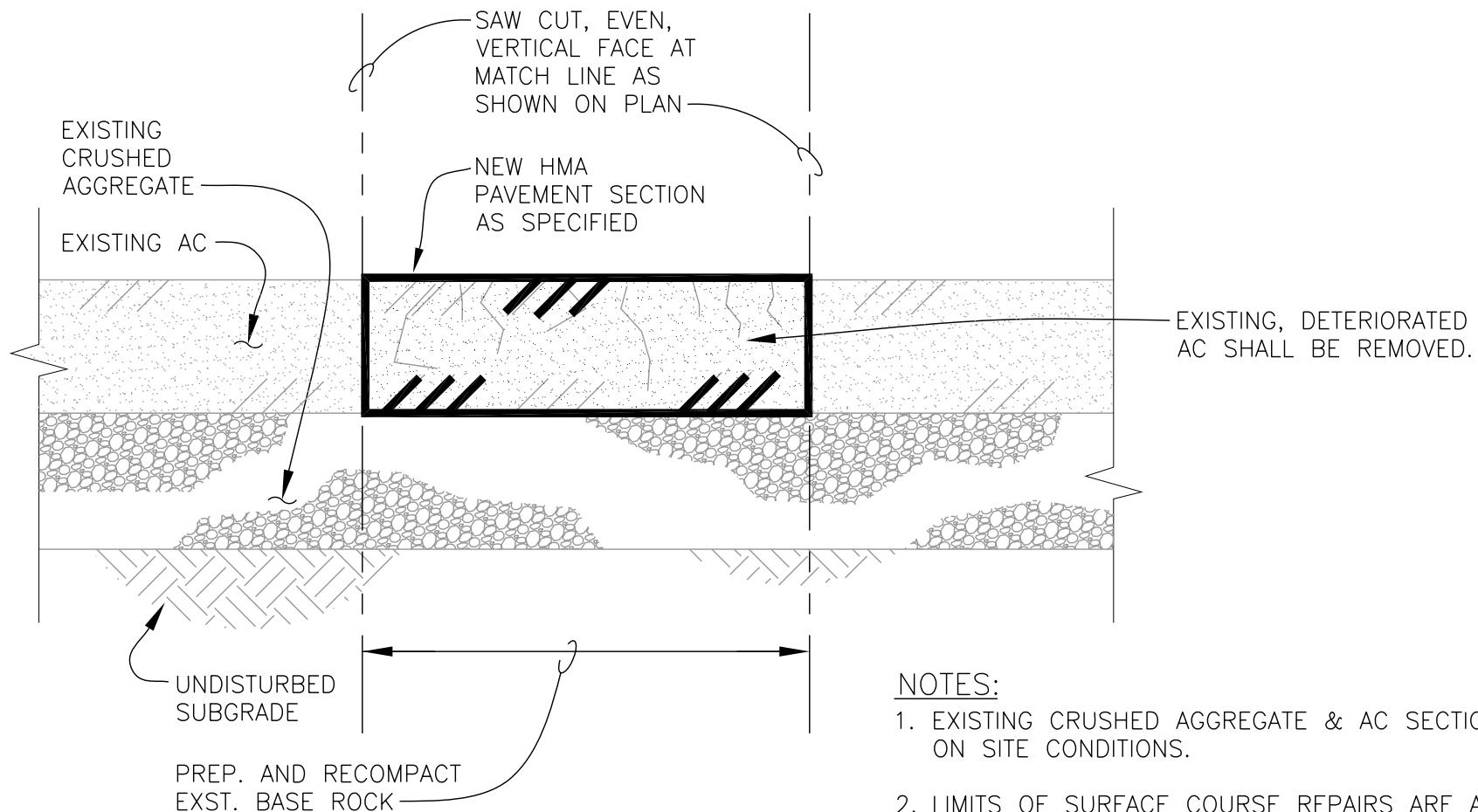
**FULL DEPTH
REPAIR**

REV: DEC. 2007

SCALE: NTS

DET No.

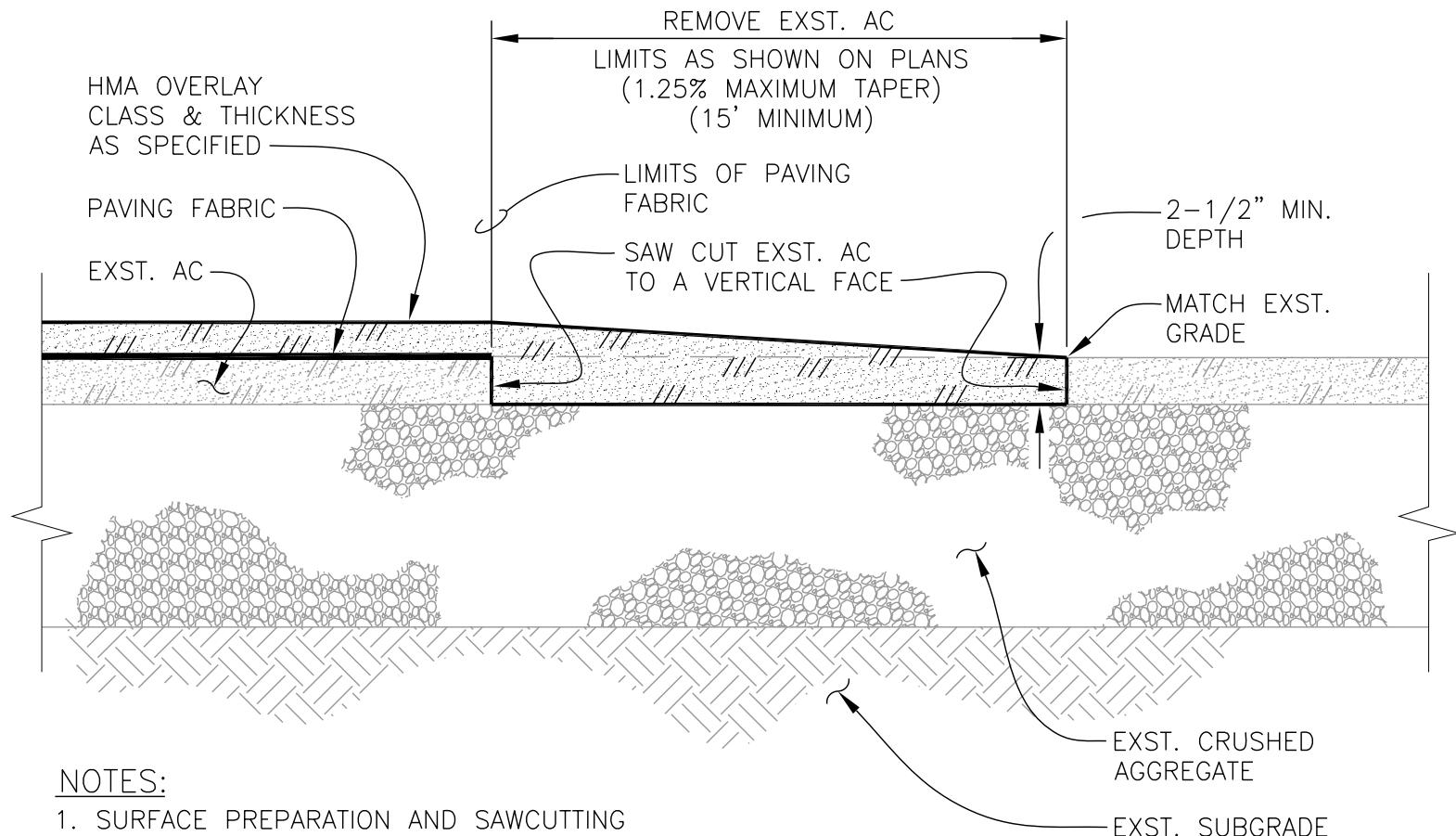
4220-1



SURFACE COURSE REPAIR

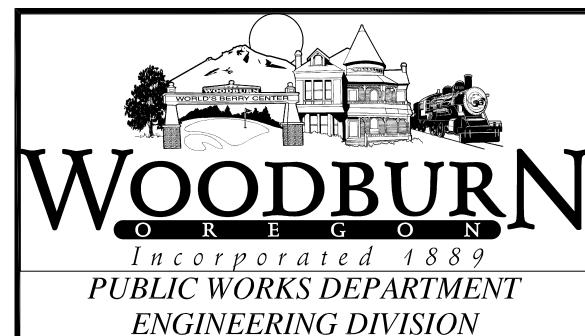
REV: DEC. 2007
SCALE: NTS
DET No.

4220-3



NOTES:

1. SURFACE PREPARATION AND SAWCUTTING WILL BE INCIDENTAL TO THE UNIT PRICE FOR IN-PLACE HMA BY CLASS.
2. REFERENCE TECHNICAL SPEC. SECTION 4220.



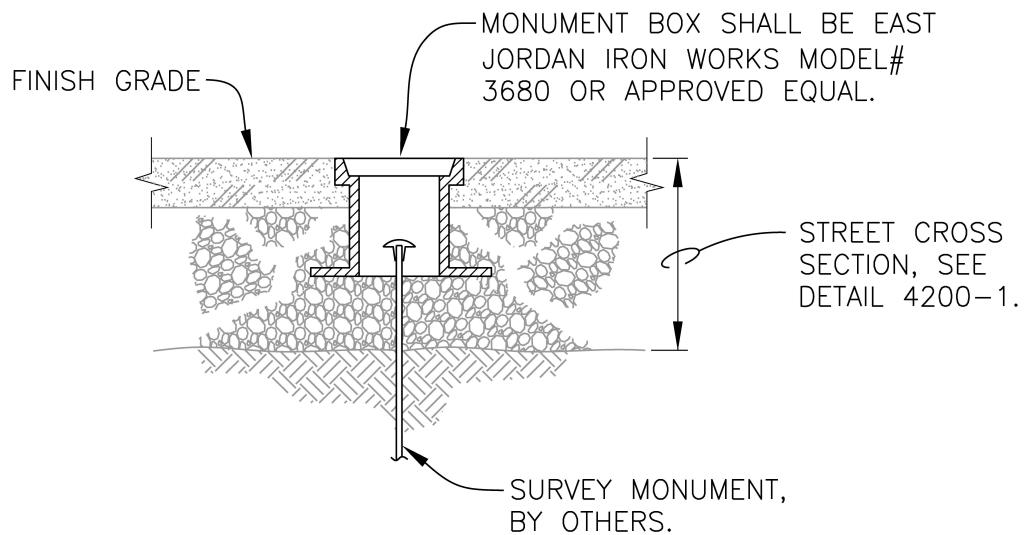
OVERLAY NOTCHING

REV: DEC. 2007

SCALE: NTS

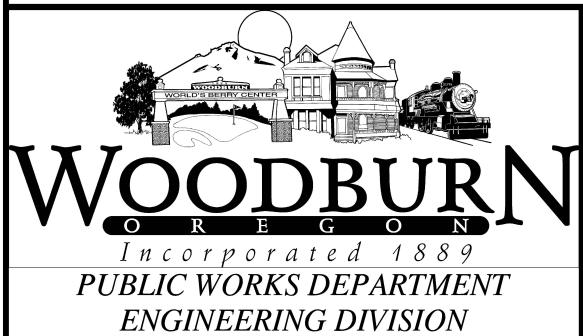
DET No.

4220-4



NOTES:

1. CONTRACTOR SHALL EXCAVATE AREA 24" DIA. AT LOCATION(S) SHOWN ON PLAN.
2. CONTRACTOR SHALL BACKFILL AROUND MONUMENT CASE WITH BASE MATERIAL AND HMA TO DEPTHS AS SPECIFIED.



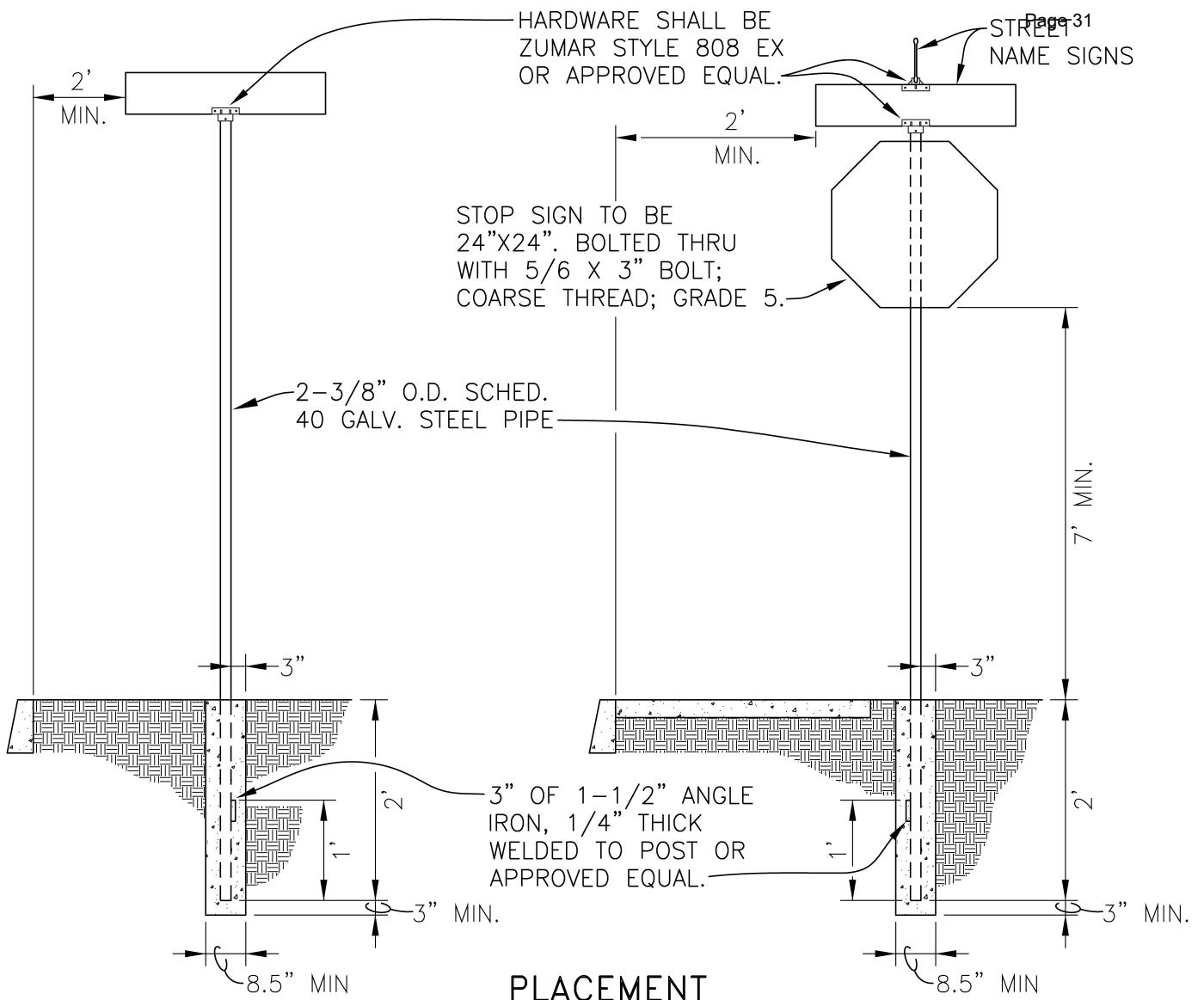
**MONUMENT
BOX**

REV: DEC. 2007

SCALE: NTS

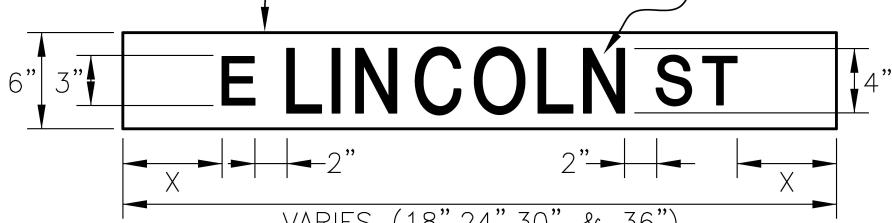
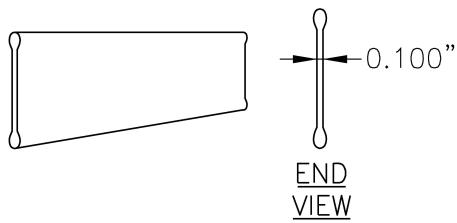
DET No.
4220-5

SECTION 4300
SIGNING & PAVEMENT MARKING



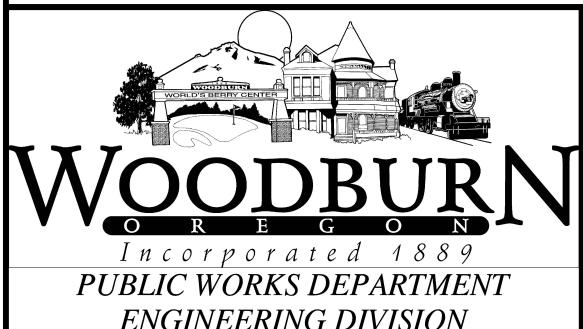
HIGH INTENSITY PRISMATIC GREEN BACKING ON BLADE.

SCOTCH LIGHT SILVER WHITE LETTERS, HIGHWAY GOTHIC-SERIES "C" FONT. "B" FONT MAY BE APPROVED FOR LONGER STREET NAMES.



EXTRUDED BLADE

STREET NAME SIGN



STREET NAME SIGN SUPPORT AND PLACEMENT DETAIL

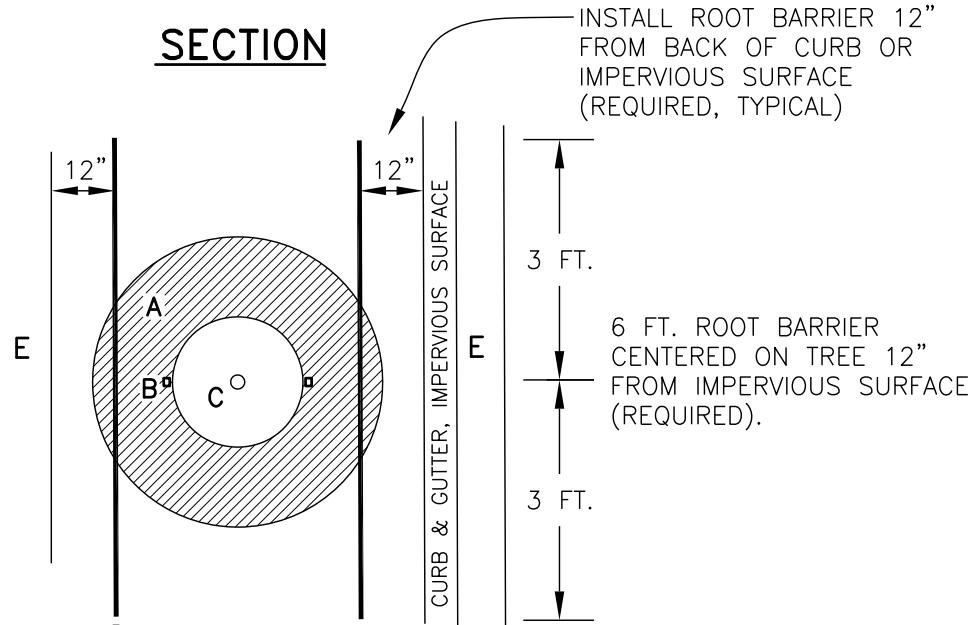
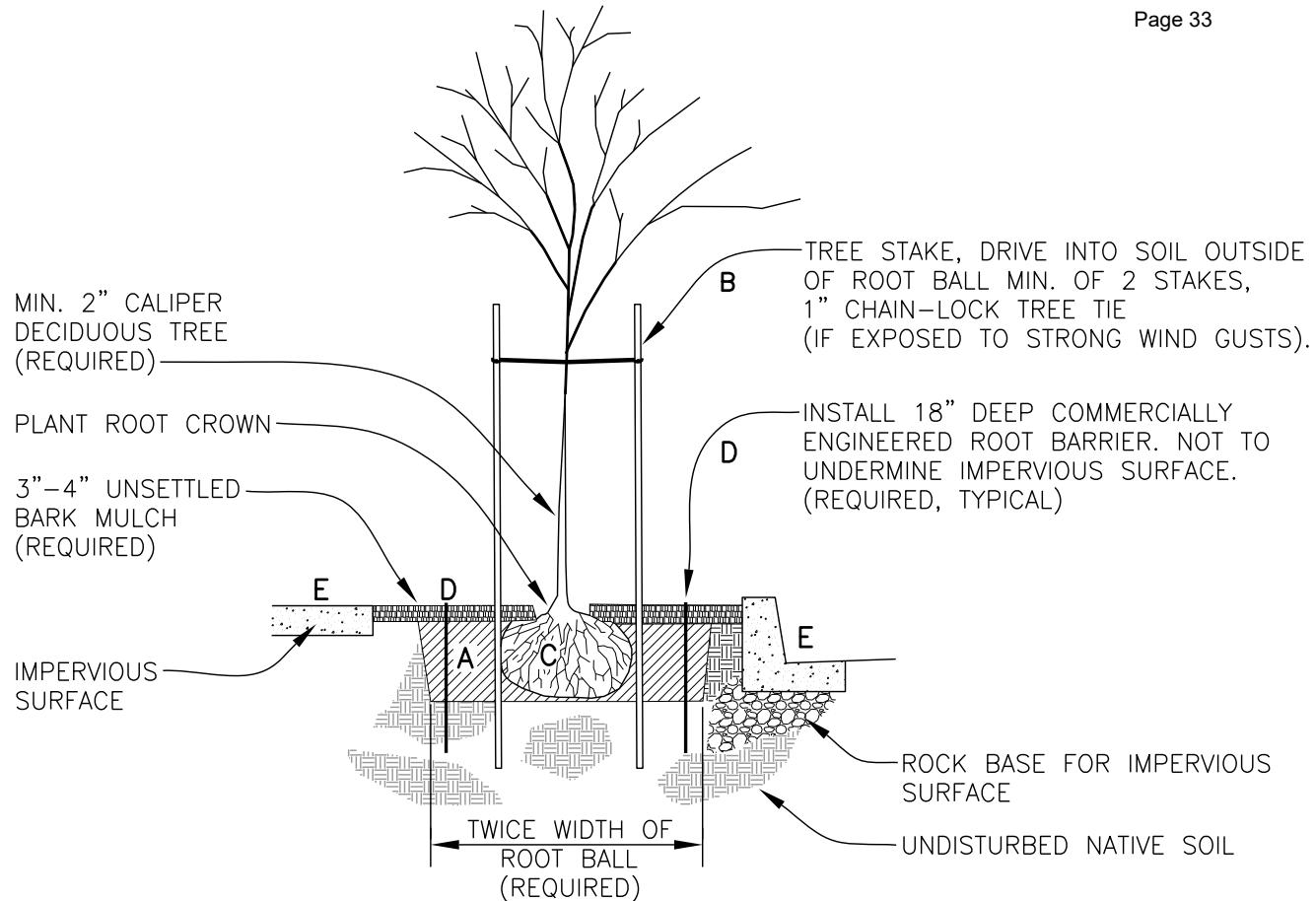
REV: DEC. 2007

SCALE: NTS

DWG No.

4300-1

SECTION 4500
STREET TREE INSTALLATION



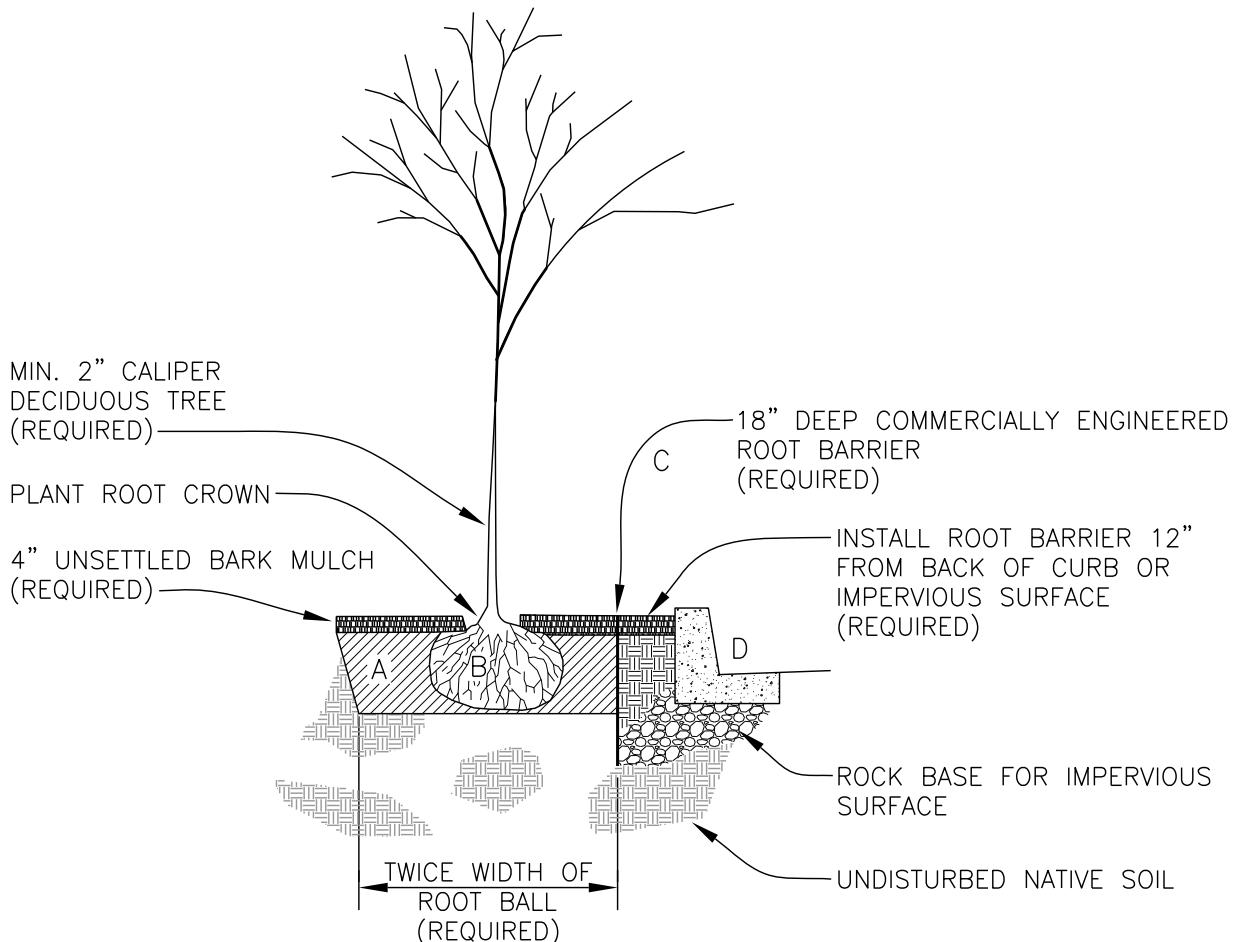
STREET TREE PLANTING NEW CONSTRUCTION

REV: AUG. 2020

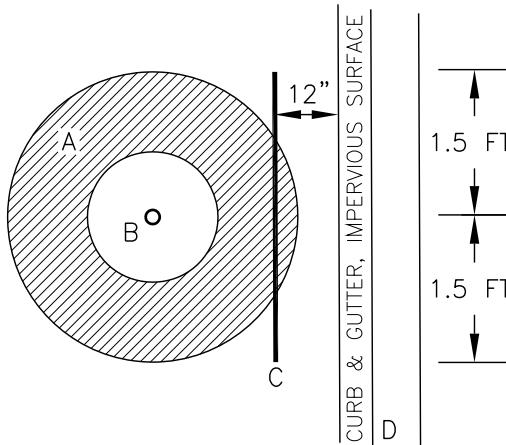
SCALE: NTS

DWG No.

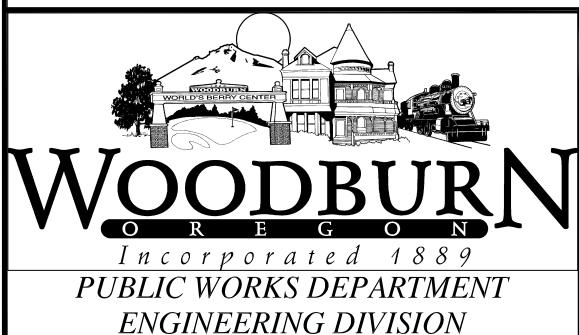
1



- A PLANTING PIT
- B ROOT BALL
- C 18" ROOT BARRIER
- D CURB OR IMPERVIOUS SURFACE



PLAN



**STREET TREE PLANTING
REPLACEMENT**

REV: OCT. 2007

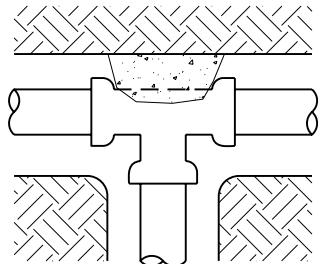
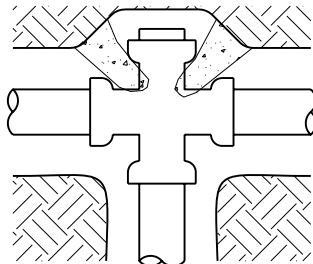
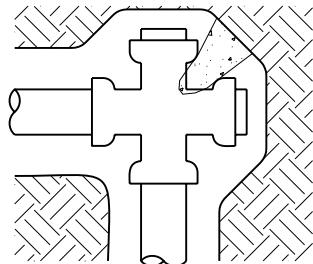
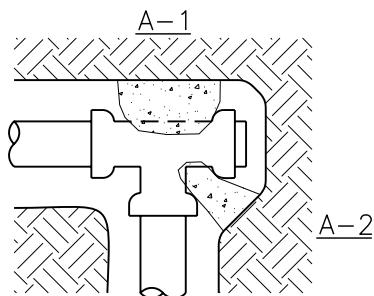
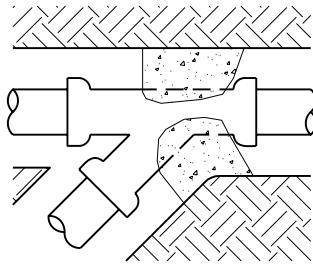
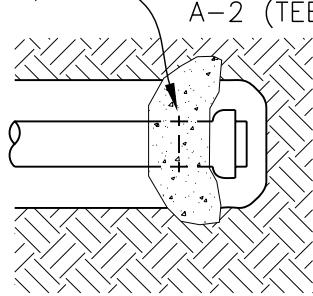
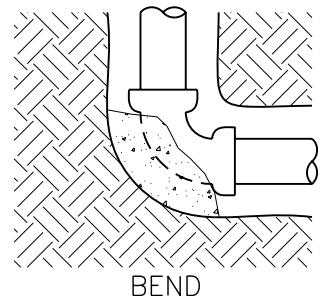
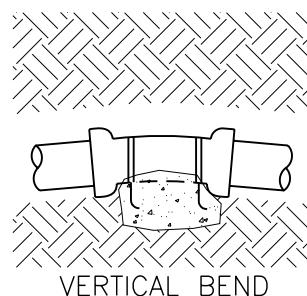
SCALE: NTS

DWG No.

1

SECTION 5000

WATERLINE INSTALLATION

TEECROSSCROSSTEEWYESTRADDLE BLOCKBENDVERTICAL BENDNOTES:

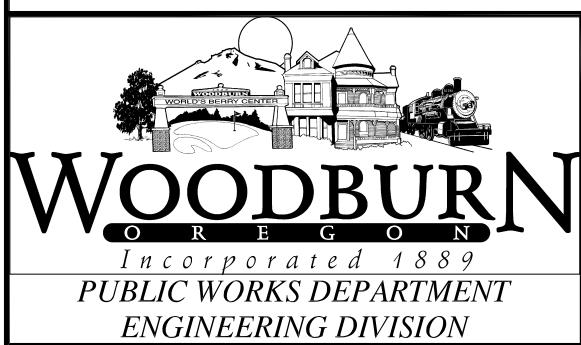
1. MATERIAL – 3500 PSI CONCRETE AT 28 DAYS.
2. SEE DETAIL 5000-2 FOR THRUST BLOCK BEARING AREAS.
3. FOR TYE BACK SEE DETAIL 5000-5.

1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES. INSTALL IN ACCORDANCE TO TECHNICAL SPEC. SECTION 5000.

FITTING SIZE	TEE, WYE PLUG OR CAP	90° BEND PLUGGED CROSS	BEARING AREA OF THRUST BLOCKS IN SQ. FT.			
			TEE PLUGGED ON RUN		45° BEND	22.5° BEND
			A-1	A-2*		
4	1.0	1.4	1.9	1.4	1.0	--
6	2.1	3.0	4.3	3.0	1.6	1.0
8	3.8	5.3	7.6	5.4	2.9	1.5
10	5.9	8.4	11.8	8.4	4.6	2.4
12	8.5	12.0	17.0	12.0	6.6	3.4
14	11.5	16.3	23.0	16.3	8.9	4.6
16	15.0	21.3	30.0	21.3	11.6	6.0
18	19.0	27.0	38.0	27.0	14.6	7.6
20	23.5	33.3	47.0	33.3	18.1	9.4
24	34.0	48.0	68.0	48.0	26.2	13.6
						6.8

3. BEARING AREAS SHOWN ARE BASED ON TEST PRESSURE OF 150 PSI. AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS) X (TABLE VALUE).
4. REFERENCE STANDARD DETAIL 5000-1.

*STRADDLE BLOCK SHALL MEET THIS TABLE.



HORIZONTAL THRUST BLOCK TABLES

REV: DEC. 2007

SCALE: NTS

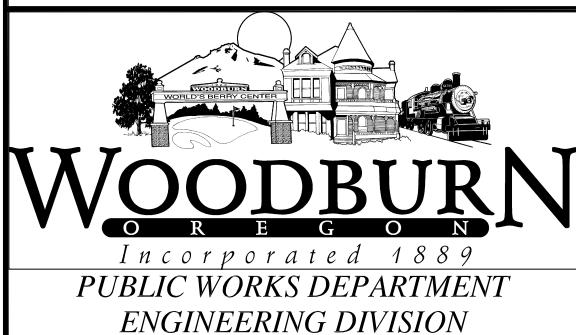
DET No.

5000-2

1. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES. INSTALL IN ACCORDANCE TO TECHNICAL SPEC. SECTION 5000.
2. THRUST BLOCKS FOR VERTICAL UP - BEND SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
3. ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI. AND THE WEIGHT OF CONCRETE = 4050 LBS/CU. YD. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESSURE/150) X (TABLE VALUE).
4. REFERENCE STANDARD DETAIL 5000-1.

VERTICAL THRUST BLOCK TABLE

FITTING SIZE	VOLUME OF THRUST BLOCK IN CU. YD.			
	90 BEND	45 BEND	22.5 BEND	11.25 BEND
4	NR	NR	NR	NR
6	1.3	NR	NR	NR
8	2.3	1.1	NR	NR
10	3.7	1.8	NR	NR
12	5.5	2.8	1.2	NR
14	7.6	3.9	1.7	NR
16	9.9	5.1	2.3	0.9



VERTICAL BEND THRUST BLOCK TABLES

REV: DEC. 2007

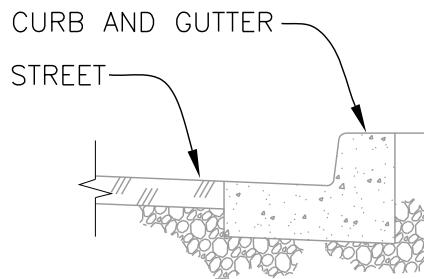
SCALE: NTS

DET No.

5000-3

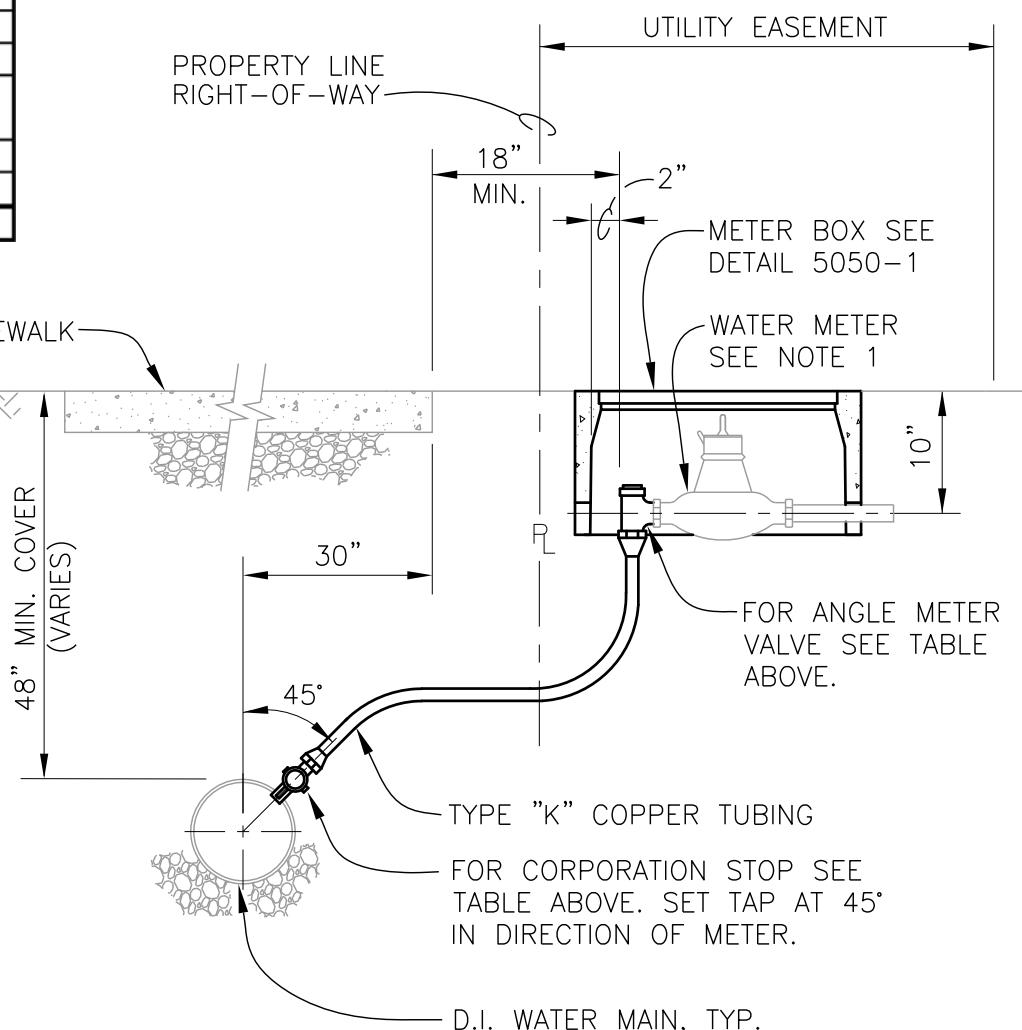
FORD CO. MODEL		
	CORP STOP	ANGLE METER VALVE
DIA.	Model No.	
1"	F1000-4* FB1000-4*	KV43-444W*
1.5"	FB500-6*	FV43-666W*
2"	FB500-7*	FV43-777W*

* OR APPROVED EQUAL



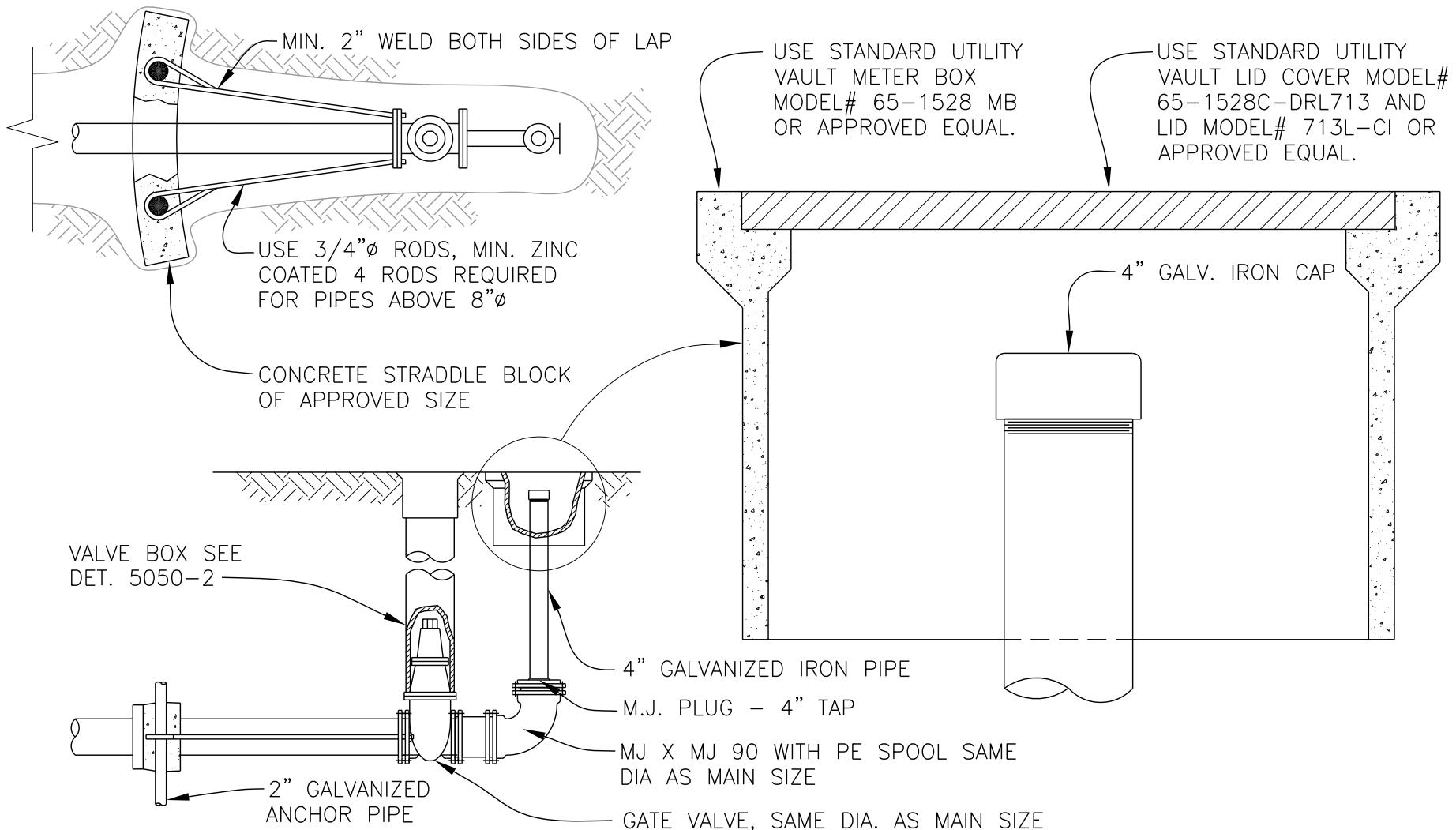
NOTES:

1. WATER METER AND TAILPIECE SHALL BE FURNISHED AND INSTALLED BY CITY WATER DIVISION. FEE PAID BY DEVELOPER.
2. WATER DIVISION SHALL HAVE SOLE RESPONSIBILITY FOR TAPPING LIVE MAINS.
3. REFERENCE TECHNICAL SPEC. SECTION 5000.
4. 1.5" & 2" SERVICE LINES SHALL BE SADDLE TAPPED WITH BRONZE DOUBLE STRAPS.

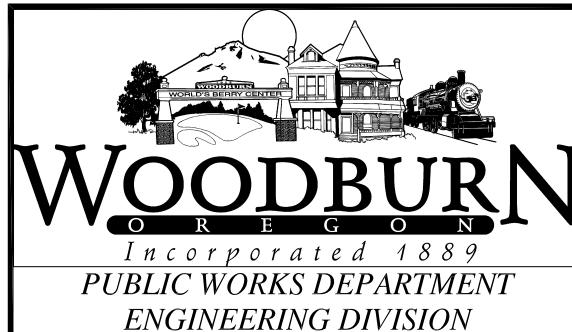


**WATER SERVICE
CONNECTION**

REV: FEB. 2022
SCALE: NTS
DET No.
5000-4

NOTES:

1. SEE DETAIL 5000-1 AND 5000-2 FOR THRUST BLOCKING.
2. FOR VALVES SEE TECHNICAL SPEC. SECTION 5050.



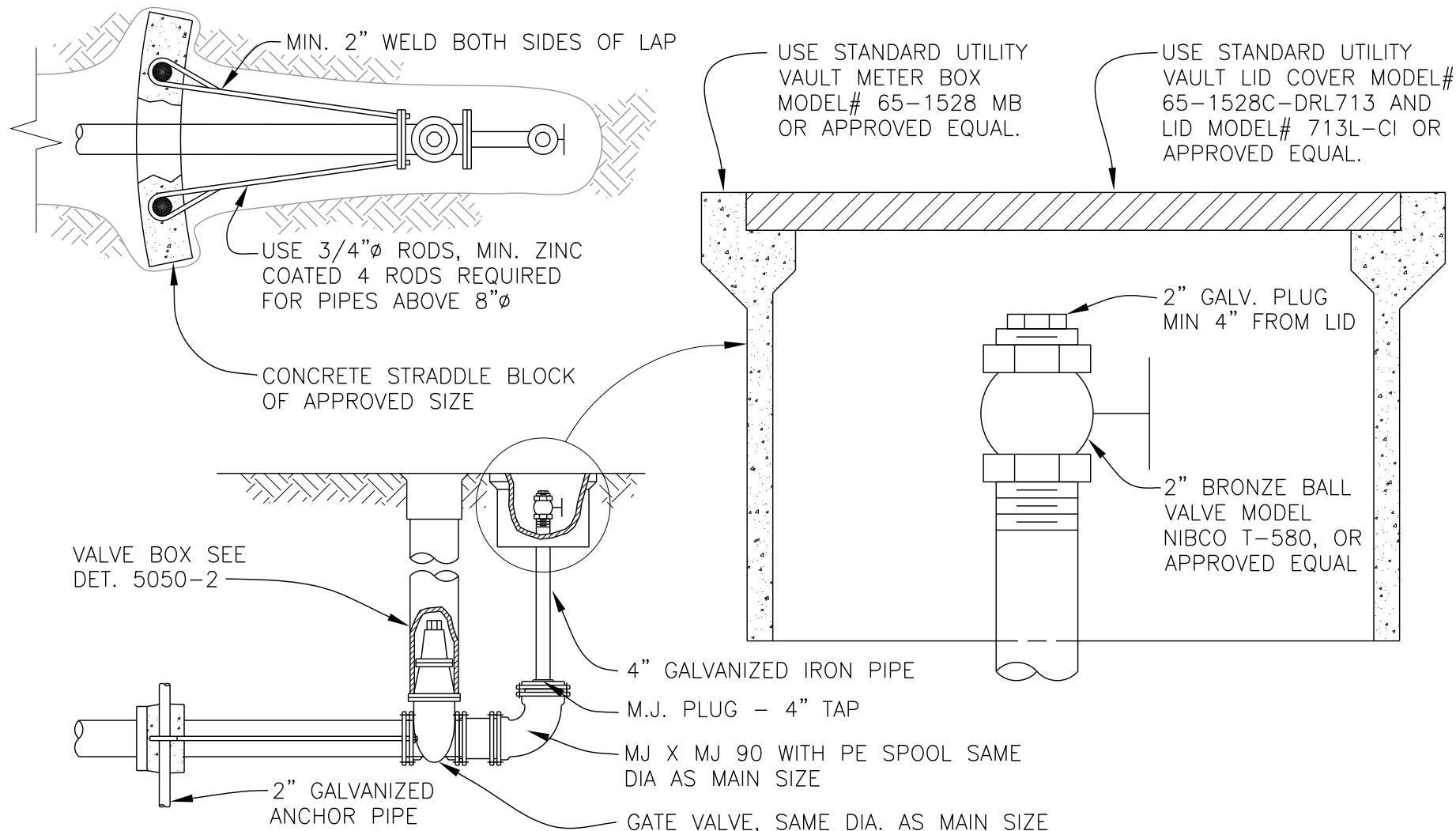
**TEMPORARY
BLOWOFF**

REV: SEPT. 2020

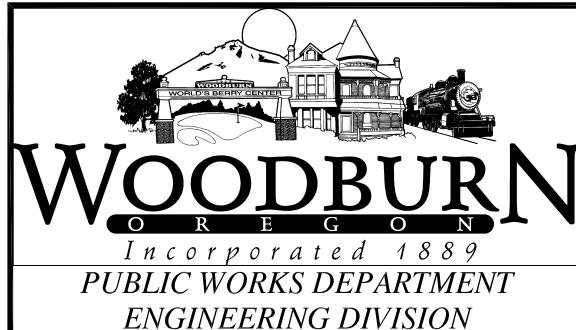
SCALE: NTS

DET No.

5000-5

NOTES:

1. SEE DETAIL 5000-1 AND 5000-2 FOR THRUST BLOCKING.
2. FOR VALVES SEE TECHNICAL SPEC. SECTION 5050.

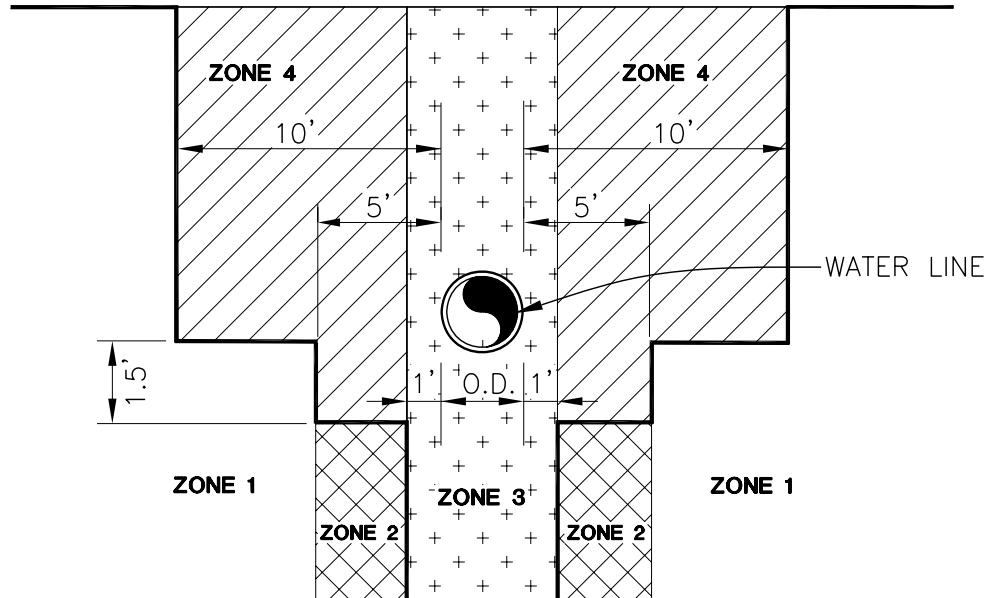
**STANDARD
BLOWOFF**

REV: NOV. 2020

SCALE: NTS

DET No.

5000-5A



ZONE 1

SEWER LINE BE LAID IN THIS AREA WITH NO SPECIAL REQUIREMENTS OF EITHER CONSTRUCTION OR MATERIALS OTHER THAN THOSE SPECIFIED.

ZONE 2

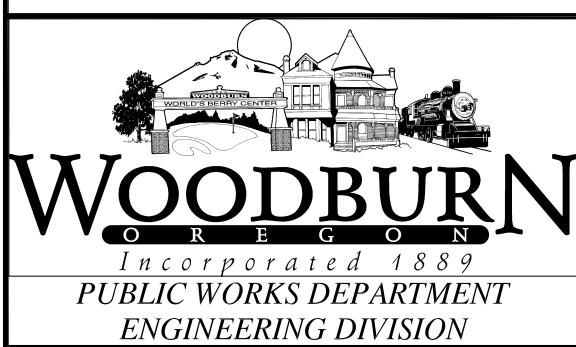
INSTALLING A SEWER LINE IN THIS ZONE IS NOT ADVISABLE AND MUST BE APPROVED IN EACH CASE. WATER LINE SHALL BE LOCATED ON A BENCH OF UNDISTURBED EARTH WHEN CONSTRUCTED CONCURRENTLY IN A COMMON TRENCH WITH A SEWER LINE.

ZONE 3

INSTALLING A SEWER MAIN DIRECTLY OVER A WATER MAIN OR DIRECTLY UNDER A WATER MAIN IN THIS ZONE IS PROHIBITED SINCE TAPPING AND MAINTENANCE OF EACH LINE WOULD BE IMPAIRED.

ZONE 4

SEWER LINE CONSTRUCTION IN THIS ZONE WOULD GENERALLY NOT BE PERMITTED. EACH INSTALLATION MUST BE APPROVED. IF CONSTRUCTION WAS APPROVED PRESSURE PIPE MATERIALS (D.I.) FOR THE SEWER LINE WOULD BE REQUIRED.



UTILITY ZONES AROUND WATER LINES

REV: DEC. 2007

SCALE: NTS

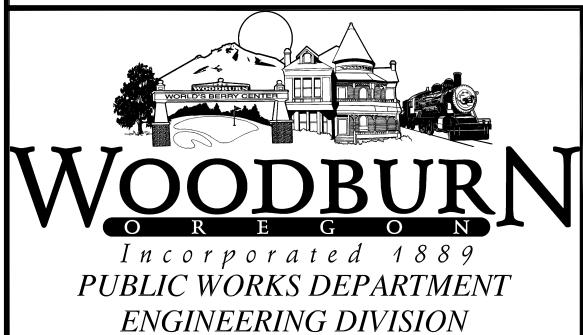
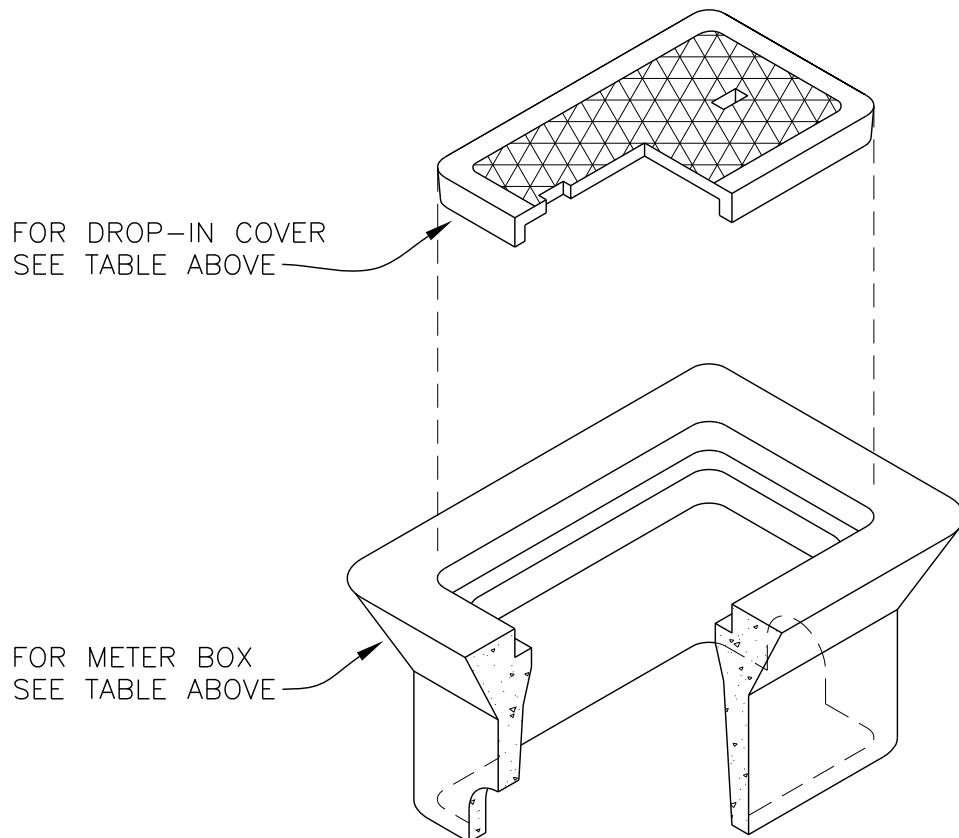
DET No.

5000-6

SECTION 5050
WATER VALVES & METERS

BROOKS PRODUCTS

	COVER	METER BOX
DIA.	MODEL NO.	
1"	No. 37-T CAST IRON COVER*	No. 37 MB-BODY*
2"	No. 65-TF STEEL COVER (FLUSH)*	No. 65 MB-BODY*
* OR APPROVED EQUAL		



METER BOX

REV: FEB 2020

SCALE: NTS

DET No.
5050-1

VALVE BOX COVER SHALL
BE EAST JORDAN IRON
WORKS MODEL# 2968A OR
APPROVED EQUAL.

ADJUST TO
FINISH GRADE

FINISH GRADE

18" VALVE BOX TOP
SECTION SHALL BE EAST
JORDAN IRON WORKS
MODEL# 3639Z1 18T
OR APPROVED EQUAL.

SLIDE VALVE BOX BOTTOM
SECTION SHALL BE 6-INCH
DIAMETER, SDR 35 PIPE OR
APPROVED EQUAL.

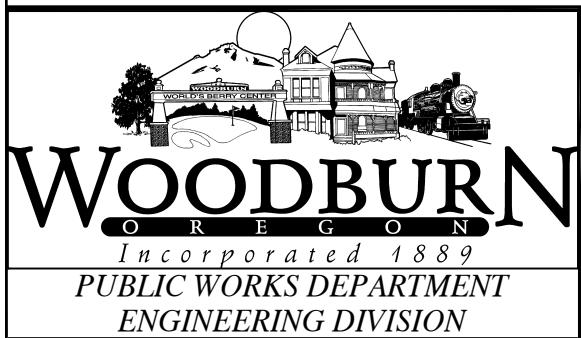
D.I. WATER MAIN

M.J. OR FLANGED
VALVE

CONCRETE PIER BLOCK POUR
ON UNDISTURBED EARTH, MIN.
AREA OF 2 SQ. FT. VALVE TO
HAVE TEMPORARY BLOCKING
DURING CURE.

NOTES:

1. REFERENCE TECHNICAL
SPEC. SECTION 5050.



VALVE
ASSEMBLY

REV: JAN 2026

SCALE: NTS

DET No.

5050-2

EAST JORDAN IRON WORKS MODEL#
1848-1849 BOLTED ASSEMBLY FRAME
AND COVER OR APPROVED EQUAL.

FINISH GRADE

48"Ø FLAT
TOP PRECAST
MANHOLE

SERIES 201C, (SINGLE
BODY) COMBINATION AIR
VALVE MANUFACTURED
BY VAL-MATIC, OR
APPROVED EQUAL

PIPE SUPPORT (TYP)
AS REQUIRED BY
ENGINEER

POTABLE D.I.
WATER MAIN

GROUT SURFACE
TO DRAIN

BRASS OR
STAINLESS INSECT
SCREEN COVER

12"
12"

PRESSURE TREATED
4 x 4 POST

(2) STAINLESS
STEEL STRAPS

GALVANIZED IRON
OUTLET PIPE.
EXTEND PAST CURBS
IN STREETS, TYP.

NON-SHRINK
GROUT

FERNCO WATER
STOP

CORPORATION STOP,
FORD FB-400 OR
APPROVED EQUAL

1" - MINUS CRUSHED
AGGREGATE

NOTES:

1. FOR WATER MAINS UP TO 12" DIA. USE 1-INCH COMBO AIR VALVE.
2. FOR WATER MAINS OVER 12" DIA. SIZE SHALL BE APPROVED BY ENGINEER.
3. VALVES: REFERENCE TECHNICAL SPEC. SECTION 5050.
4. GALVANIZED IRON PIPE OUTLET DIA. SAME SIZE AS VALVE INLET DIA.
5. LOCATION AND SIZE OF VALVES SHALL BE BY DESIGN OF THE ENGINEER.
6. CORPORATION STOPS OVER 1" DIA. SHALL BE SADDLE TAPPED.



PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

**WATER MAIN
COMBINATION AIR
RELEASE VALVE**

REV: DEC. 2007

SCALE: NTS

DET No.

5050-3

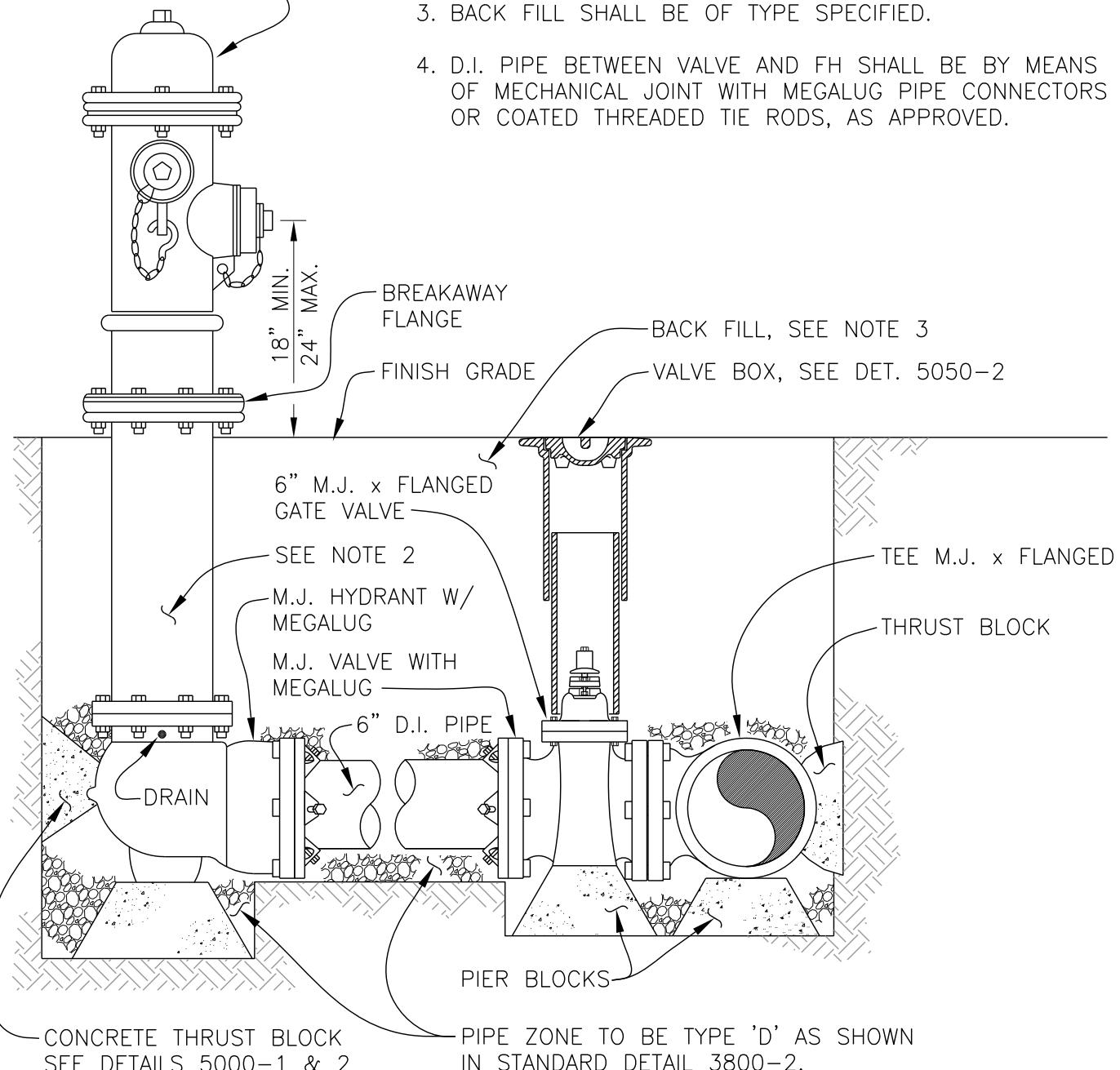
SECTION 5070

FIRE HYDRANTS

NOTES:

1. BED PIPE WITH 1"-MINUS SO AS TO CARRY LOAD OF PIPE EVENLY WITHOUT FIXING LOAD ON PIER BLOCKS DIG OUT BELOW BED FOR PIER BLOCKS, AS DIRECTED.
2. BURY HEIGHT: 3-1/2 TO 4 FEET. IF GREATER DEPTH IS REQUIRED EXTENSIONS SHALL BE USED TO ADJUST FH TO PROPER HEIGHT.
3. BACK FILL SHALL BE OF TYPE SPECIFIED.
4. D.I. PIPE BETWEEN VALVE AND FH SHALL BE BY MEANS OF MECHANICAL JOINT WITH MEGALUG PIPE CONNECTORS OR COATED THREADED TIE RODS, AS APPROVED.

HYDRANT: MUELLER CENTURION A423 OR M & H RELIANT 929T. REFERENCE TECHNICAL SPEC. SECTION 5070.



DCDA SIZE PER
SPRINKLER DESIGN.

12" DIA. 1-1/2"
DEEP SUMP
SEE NOTE 11. —

OSHA APPROVED GALVANIZED
WALL MOUNT CHAMBER LADDER
WITH BILCO LADDERUP SAFETY
POST OR APPROVED EQUAL

GALVANIZED STEEL, SPRING OR
GAS SHOCK ASSISTED, H-20
RATED ACCESS DOORS. NOMINAL
3' X 5' OLDCASTLE NO.35P
OR APPROVED EQUAL.

SET TOP AT FINISH
GRADE IN PAVED AREAS

1

STANDON MODEL S89 FLANGE
STAND OR APPROVED EQUAL
(TYP 2 PLCS). _____

OS&Y GATE VALVE
EACH END OF DCDA

RADIO READ
NEPTUNE METER #R900I, WITH
20FT R900 PIT ANTENNA,
MODEL #12527-300.
SEE NOTE #10.

TOP VIEW

SET TOP ABOVE
GRADE OUTSIDE
PAVED AREAS

FDC LOCATION AND
ORIENTATION TO BE
APPROVED BY THE
BUILDING DIVISION
AND FIRE MARSHALL.

— 2" MIN
6" MAX

6" MIN COMPACTED
GRANULAR FILL

SIDE VIEW

NOTES:

1. DCDA - DOUBLE CHECK DETECTOR ASSEMBLY
2. FDC - FIRE DEPARTMENT CONNECTION
3. DCDA SHALL BE USC APPROVED.
4. DCDA SHALL BE INSTALLED IN CONFORMANCE WITH OREGON HEALTH DEPARTMENT & HUMAN RESOURCES DIVISION.
5. FDC SHALL NOT EXIT THROUGH THE TOP. MAY EXIT AS SHOWN OR THROUGH ADJACENT WALL (ELIMINATE 90° BEND).
6. ALL PIPE PENETRATIONS SHALL BE SEALED WITH NON-SHRINK WATERTIGHT GROUT.
7. BENDS, CROSSES, AND TEES SHALL NOT BE INSTALLED WITHIN 5' OF THE OUTSIDE VAULT WALL.
8. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857.
ALL CONCRETE TO BE 4599 PSI @28 DAYS.
REBAR TO BE ASTM A-615 GRADE 60.
9. SIX INCH (6") MINIMUM CLEARANCE WHEN O.S.&Y. VALVE IS OPEN.
10. VERIFY METER MODEL WITH ENGINEERING DIVISION.
11. PROVIDE SUMP PUMP AND POWER CONNECTION.
12. PROVIDE TAMPER SWITCHES CONNECTED TO FIRE ALARM SYSTEM.
13. PROVIDE SEPARATE CONDUITS FOR POWER AND ALARM CONDUCTORS.



FIRE SERVICE VAULT

REV: SEPT 2019

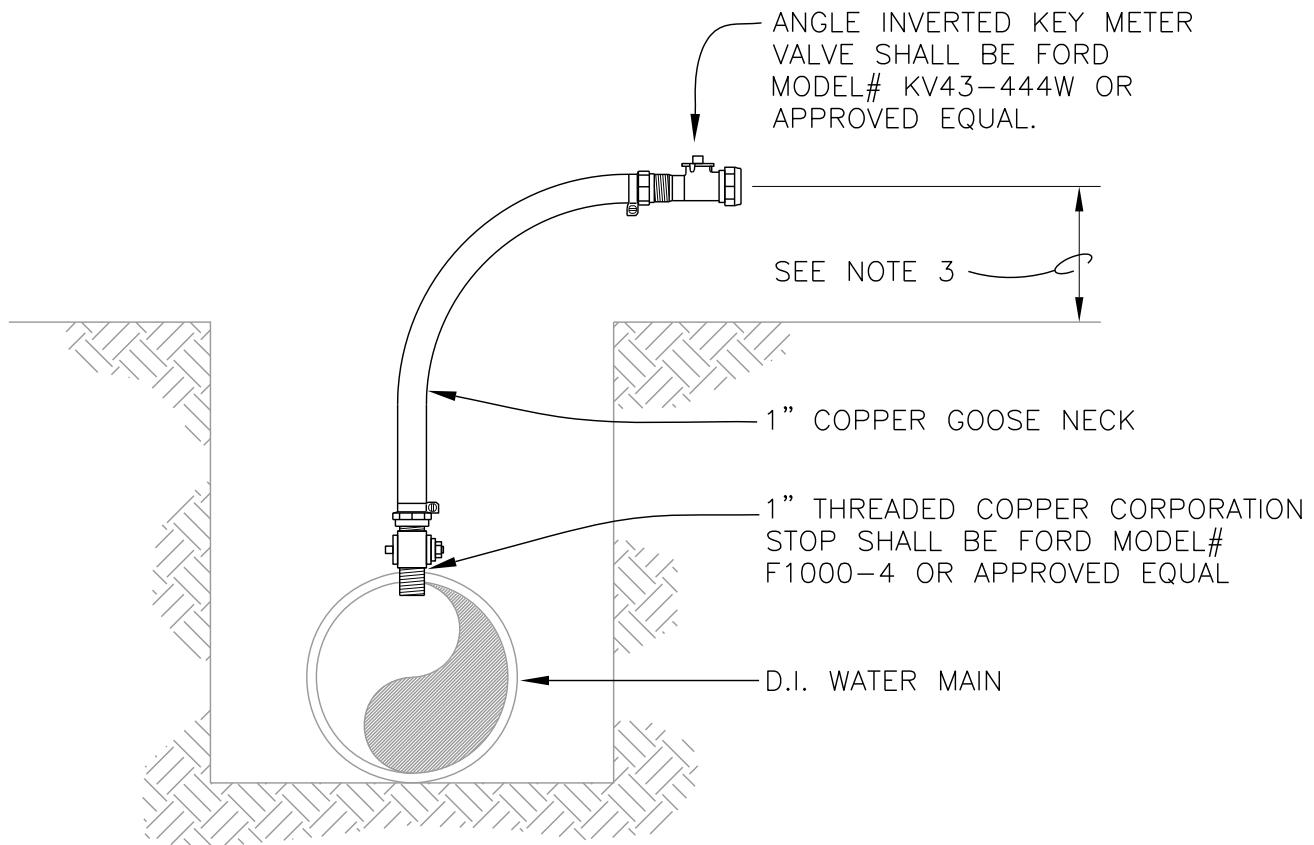
SCALE: NTS

DET No.

5070-2

SECTION 5100

WATERLINE DISINFECTION



NOTES:

1. SAMPLING TAPS SHALL USE STANDARD SERVICE TAPS IF AVAILABLE, OTHERWISE INSTALL THIS AT ENDS OF LINE OR AS DIRECTED BY THE ENGINEER.
2. SAMPLING TAP TO REMAIN AND BE REMOVED BY CITY.
3. BEYOND TRAVEL LANES EXTEND 18" MIN. ABOVE GRADE.
4. IF SADDLE IS REQUIRED BY ENGINEER, USE BRASS TYPE
5. SAMPLING AND SERVICE TAPS MUST HAVE SAMPLE PORT PER DETAIL 5100-2 OR SIMILAR WHEN USED FOR SAMPLING.



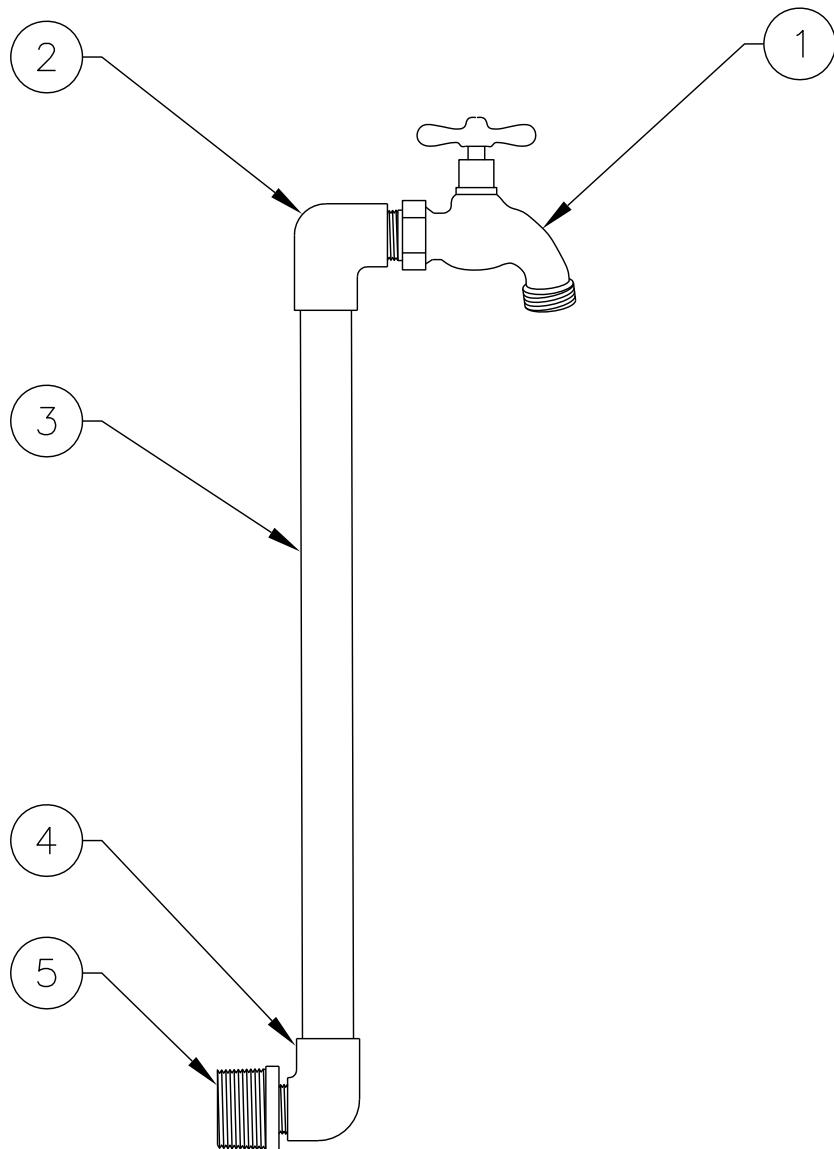
**SAMPLING TAP
ASSEMBLY**

REV: SEPT. 2020

SCALE: NTS

DET No.

5100-1

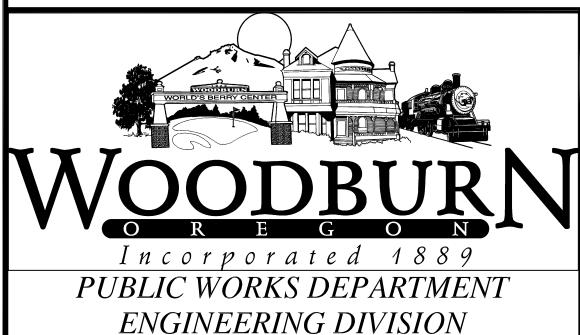


MATERIALS:

1. BRASS HOSE BIB
2. SOCKET X FNPT ELBOW
3. SCH 40 PVC PIPE
4. SOCKET X MNPT STREET T
5. $1\frac{1}{4}$ " X $\frac{3}{4}$ " (AS SHOWN) BUSHING

NOTES:

1. $\frac{3}{4}$ " SCH 40 PVC SHOWN. ALTERNATE MATERIALS ARE $\frac{1}{2}$ " PVC OR COPPER.
2. HOSE BIB OR SILLCOCK TO BE BRASS BODY, BALL VALVES ARE NOT ALLOWED.
3. $1\frac{1}{4}$ " NPT BUSHING DOES NOT MATCH THE $\frac{5}{8}$ " METERSTOP THREADS BUT IS AN INEXPENSIVE SOLUTION THAT IS CLOSE ENOUGH TO SEAL FOR THIS TEMPORARY APPLICATION.



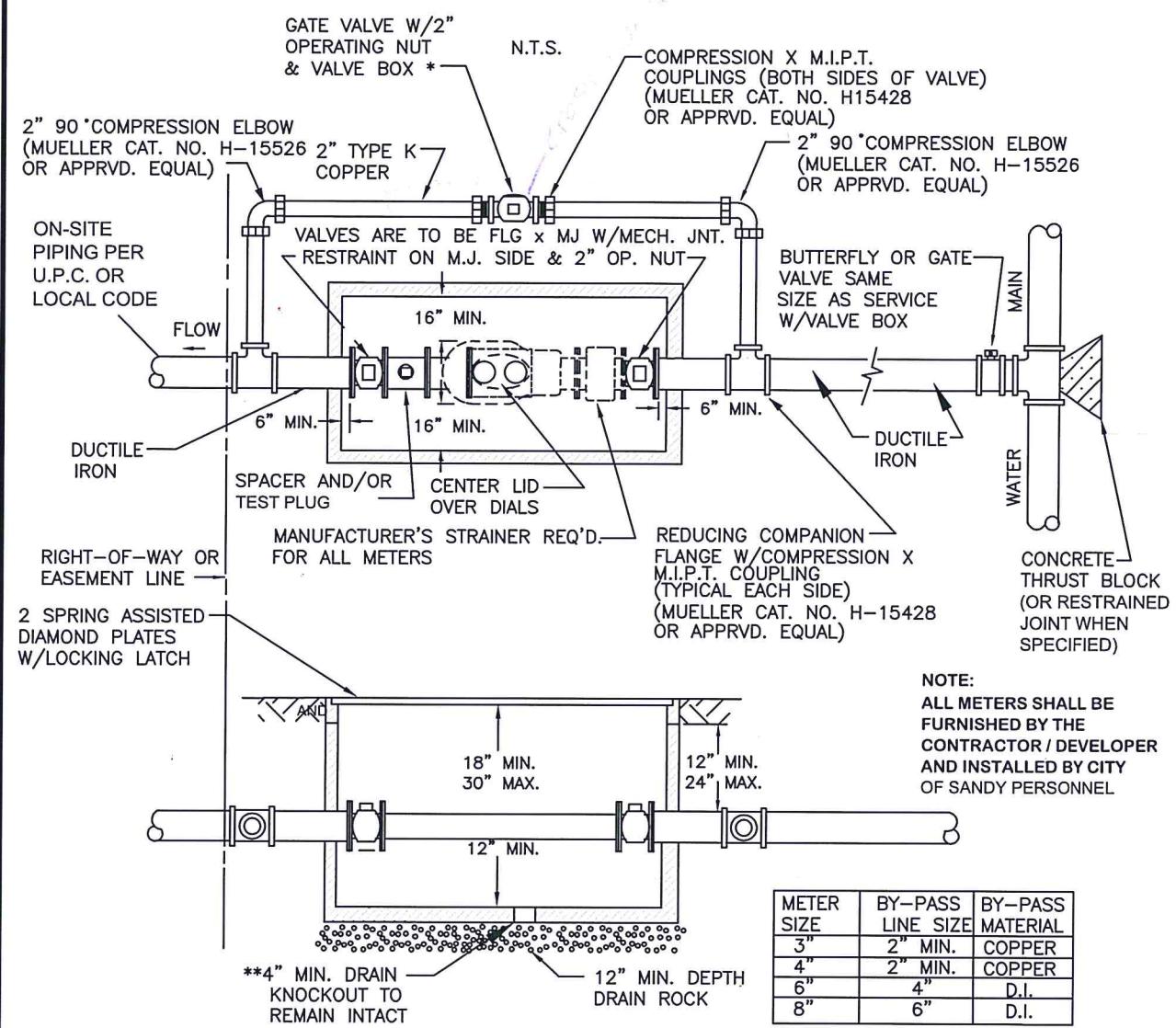
TEMPORARY SAMPLE PORT

REV: SEPT. 2020

SCALE: NTS

DET No.
5100-2

SECTION 5500
WATER METER INSTALLATION



METER SIZE	BY-PASS LINE SIZE	BY-PASS MATERIAL
3"	2" MIN.	COPPER
4"	2" MIN.	COPPER
6"	4"	D.I.
8"	6"	D.I.

NOTE:
TEN PIPE DIAMETERS OF STRAIGHT PIPE REQ'D.
UPSTREAM & DOWNSTREAM OF METER.
(EXAMPLE: IF USING 4" PIPE, NO BENDS
ALLOWED WITHIN 40" OF METER IN
EITHER DIRECTION - 4" x 10 = 40")

VAULTS SHALL BE SIZED TO ALLOW FOR MIN. CLEARANCES.

TRAFFIC RATED VAULT REQ'D. IN AREAS SUBJECT TO
VEHICLE TRAFFIC

** DRAIN KNOCKOUT TO REMAIN FOR FUTURE USE IF VAULT
IS PRONE TO FLOODING.

* METERED BYPASS REQUIRED WHEN SPECIFIED - SEE
SANDY042.DWG FOR CONSTRUCTION DETAILS.

METER SIZE	MODEL & VENDOR	MODEL & VENDOR
4"	SENSUS OMNI C2 OR T2 - DEPENDING ON FLOW RATE AND USE. COMPATIBLE WITH SENSUS AMR/AMI SYSTEMS	
6"	SENSUS OMNI C2 OR T2 - DEPENDING ON FLOW RATE AND USE. COMPATIBLE WITH SENSUS AMR/AMI SYSTEMS	

WOODBURN

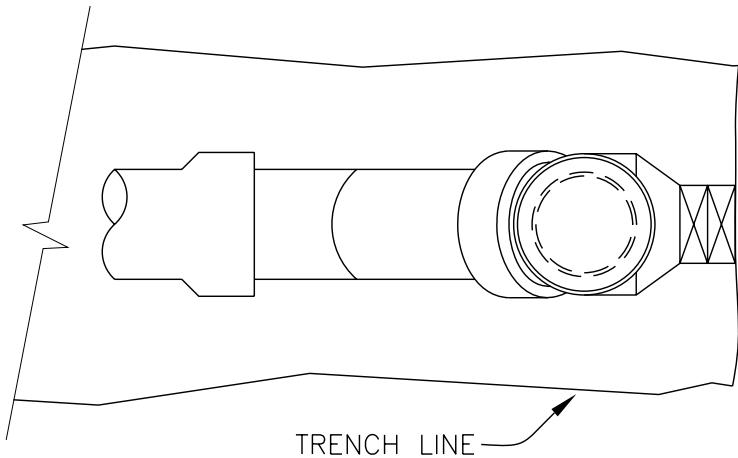
CITY OF ~~SANDY~~

STANDARD 3" AND 4"
NOMINAL SIZE METER
INSTALLATION

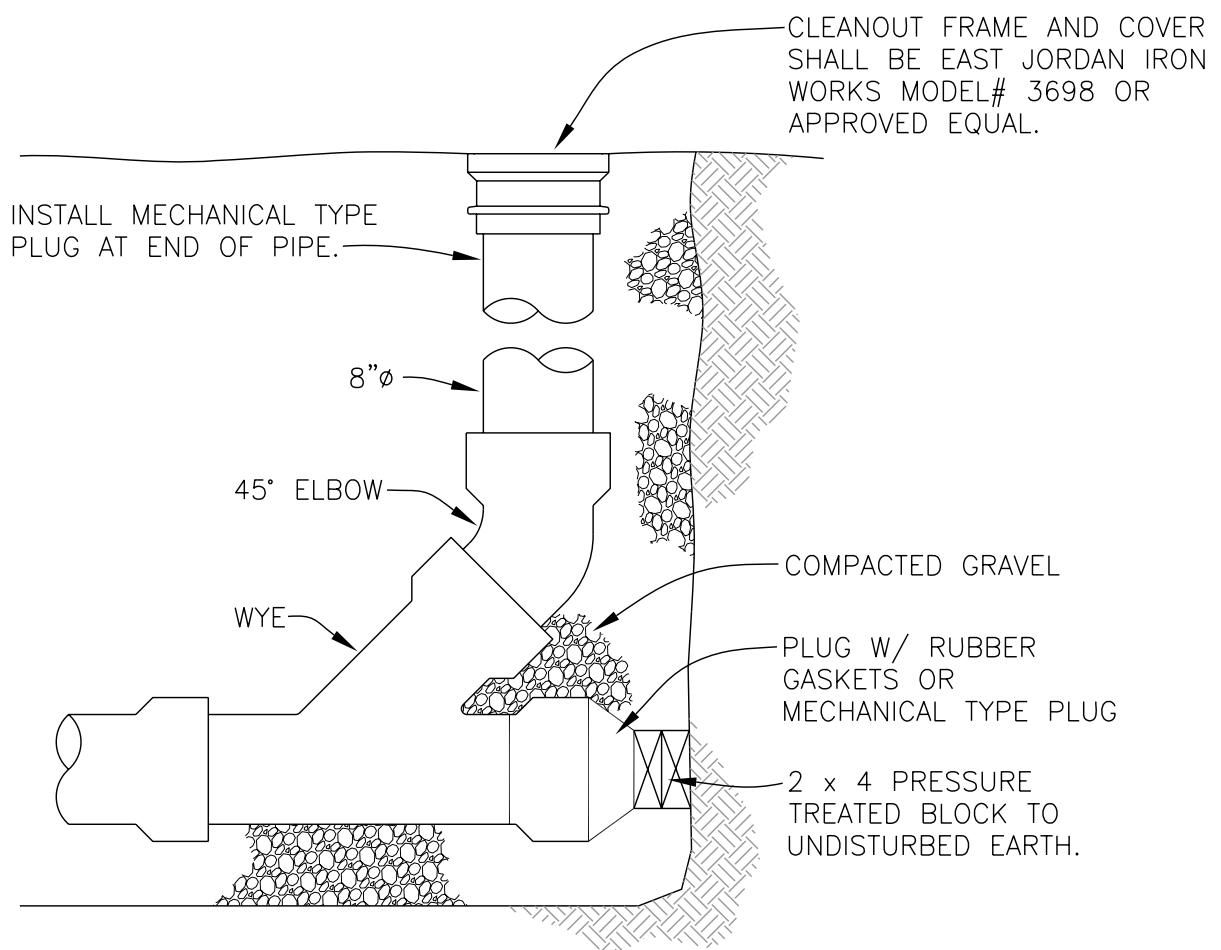
DATE: ~~SEPT 2002~~ DRAWING NO.

NOTE: ALL METERS SHALL REGISTER IN CUBIC FEET.
METERS SHALL HAVE FLANGED ENDS AND BE EQUIPPED WITH TEST
PLUGS. METERS SHALL BE EQUIPPED WITH INTEGRAL STRAINERS.

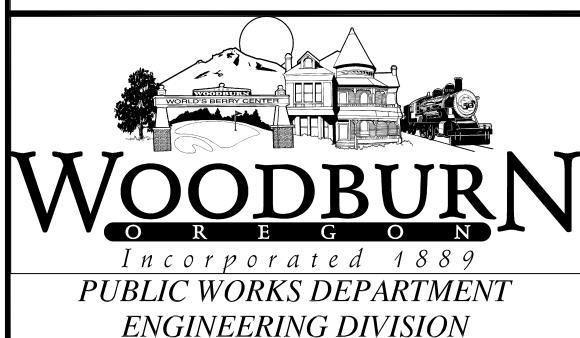
SECTION 6200
SANITARY SEWER LINE INSTALLATION



PLAN VIEW



ELEVATION VIEW



MAIN LINE CLEANOUT

REV: DEC. 2007

SCALE: NTS

DET No.

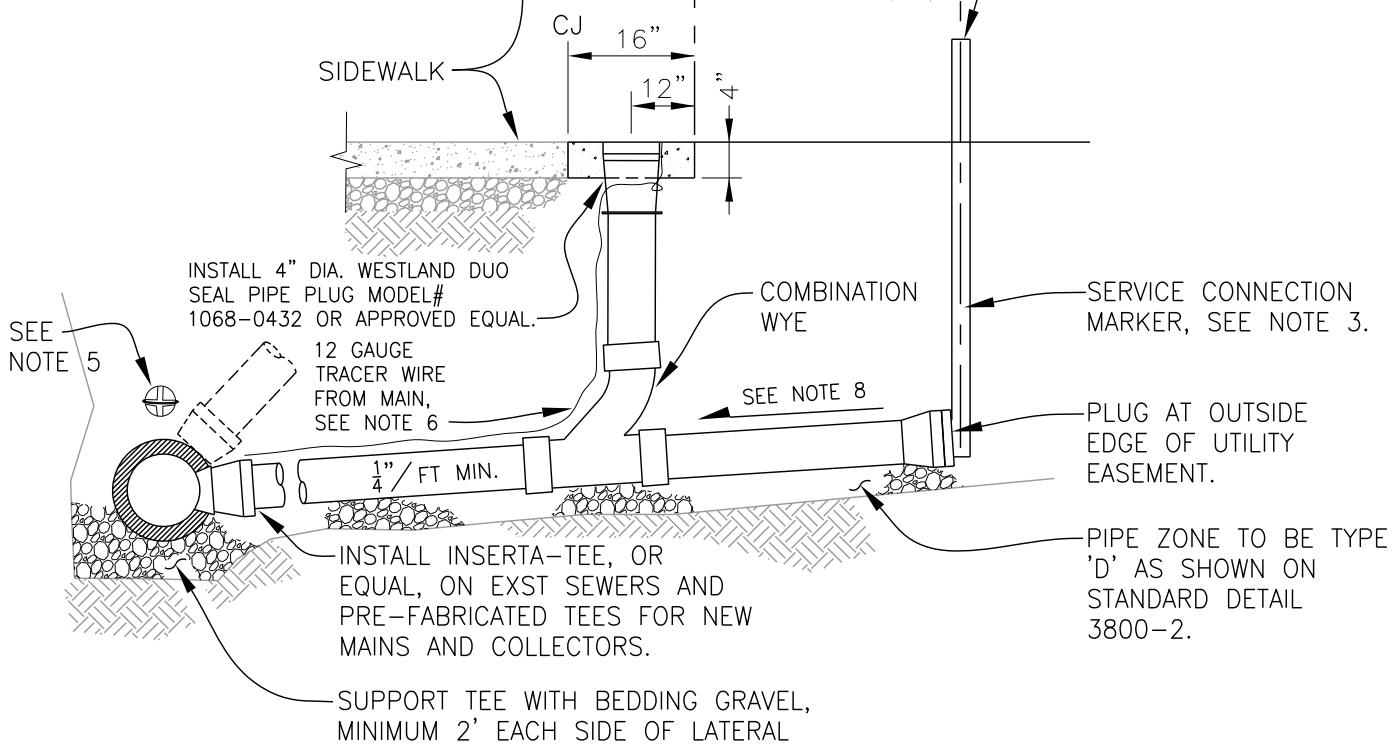
6200-1

16"X16"X4" CONCRETE
PAD TO GRADE.

Page 56

TRAFFIC RATED VALVE BOX SHALL BE
EAST JORDAN IRON WORKS
MODEL# 3639Z1 VALVE BOX TOP, MODEL
3639A1 VALVE BOX COVER EMBOSSED WITH
THE WORD "SEWER" OR APPROVED EQUAL.

PLAN



ELEVATION

NOTES:

1. PIPE AND FITTINGS SHALL BE COMPATIBLE. ONLY MANUFACTURED FITTINGS SHALL BE USED.
2. MINIMUM DEPTH AT RIGHT-OF-WAY OR EASEMENT LINE SHALL BE 4 FEET.
3. 2 x 4 FIR. POST TO EXTEND 36" MINIMUM ABOVE FINISH GRADE AND EXPOSED AREA SHALL BE PAINTED GREEN.
4. LAY SANITARY SEWER SERVICE TEE AT MAXIMUM 45°, MINIMUM 20° FROM HORIZONTAL.
5. INSTALL LOCATOR/MARKER BALL AT MAIN LINE CONNECTION 3FT MAX BELOW FINISH GRADE. CONTACT ENGINEERING FOR MORE INFORMATION.
6. INSTALL A CONTINUOUS 12-GAUGE TRACER WIRE FROM MAIN. PLACE TRACER WIRE DIRECTLY OVER PIPE CENTERLINE AND ON TOP OF THE PIPE ZONE MATERIAL.
7. REFERENCE TECHNICAL SPEC. SECTION 6200.
8. CONTACT MARION COUNTY PUBLIC WORKS FOR REQUIREMENTS.



WOODBURN
OREGON
Incorporated 1889
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

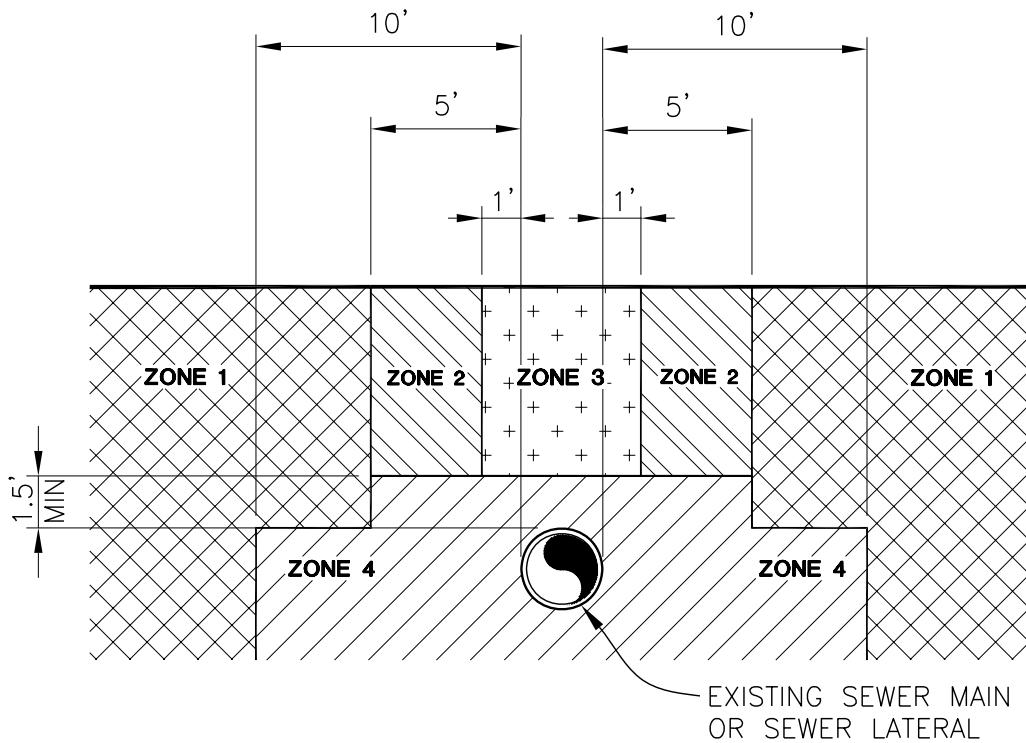
**SEWER SERVICE
CONNECTION**

REV: JUNE 2021

SCALE: NTS

DET No.

6200-3



ZONE 1

WATER LINE CAN BE LAID IN THIS AREA WITH NO SPECIAL REQUIREMENTS OF EITHER CONSTRUCTION OR MATERIALS OTHER THAN THOSE SPECIFIED. CROSSING RESTRICTIONS SHALL APPLY.

ZONE 2

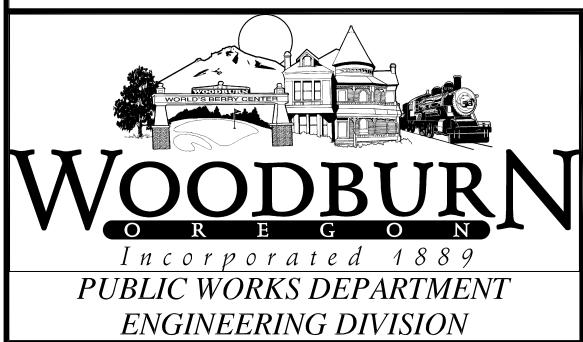
INSTALLING A WATER MAIN IN THIS ZONE IS NOT ADVISABLE AND MUST BE APPROVED IN EACH CASE. IF ALLOWED, WATER MAIN SHALL BE LOCATED MINIMUM 1.5' ABOVE ZENITH OF SEWER PIPE.

ZONE 3

WATER MAIN CONSTRUCTION IS NOT PERMITTED.

ZONE 4

WATER MAIN CONSTRUCTION IS NOT PERMITTED.



**UTILITY
ZONES AT
SEWER LINE**

REV: DEC. 2007

SCALE: NTS

DET No.

6200-4

EAST JORDAN IRON WORKS
MODEL# 2603 FRAME AND
COVER OR APPROVED EQUAL.

FINISH GRADE

2" GALV. STEEL PIPE.

2" OUTLET

COMBINATION AIR VALVE
SHALL BE VAL-MATIC
SERIES VM-801-ABW
OR APPROVED EQUAL.

BRONZE FULL FLOW
BALL VALVE

SANITARY SEWER
FORCE MAIN

GROUT SURFACE
TO DRAIN

48"Ø FLAT TOP
PRECAST MANHOLE

BRONZE FULL FLOW
BALL VALVE, W/
QUICK DISCONNECT
COUPLING.

2" CLEANOUT

PIPE SUPPORT (TYP)
AS REQUIRED BY
ENGINEER

BRONZE FULL FLOW
BALL VALVE

RISER PIPE

3"Ø DRAIN TO SEWER

1"-MINUS CRUSHED
AGGREGATE

DRAIN TO NEAREST
SANITARY SEWER
COLLECTOR

NOTES:

1. COMBO DEVICE FOR SEWER FORCE MAINS SHALL BE 2" DIA. MIN.
2. DEVICES OVER 2" DIA. SHALL BE SADDLE TAPPED.
3. REFERENCE TECHNICAL SPEC. SECTION 6210.
4. GALV. IRON OUTLET PIPE DIAMETER SAME AS VALVE INLET DIAMETER.



WOODBURN
O R E G O N
Incorporated 1889
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

**SANITARY SEWER
COMBINATION AIR
RELEASE VALVE**

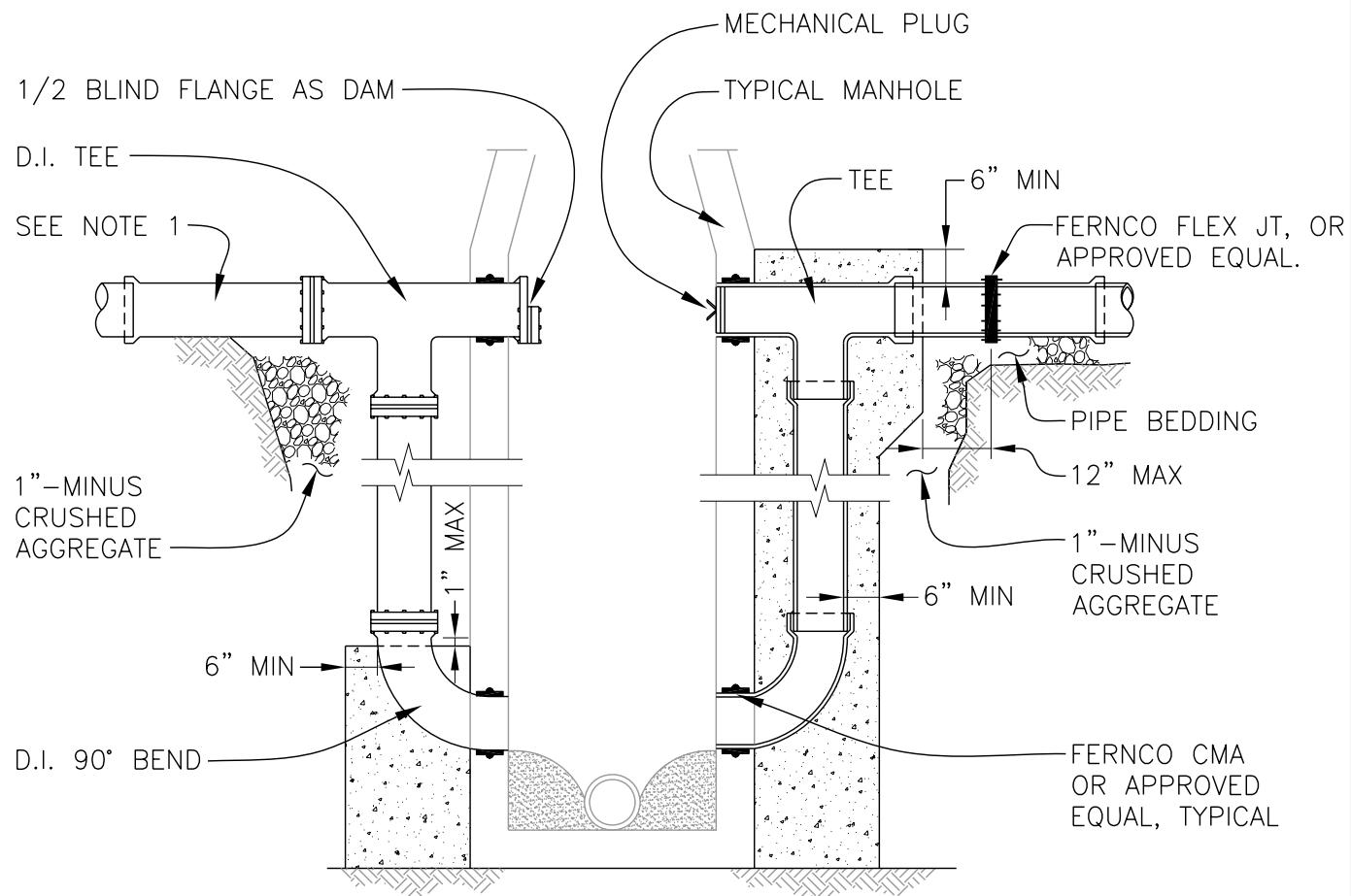
REV: DEC. 2007

SCALE: NTS

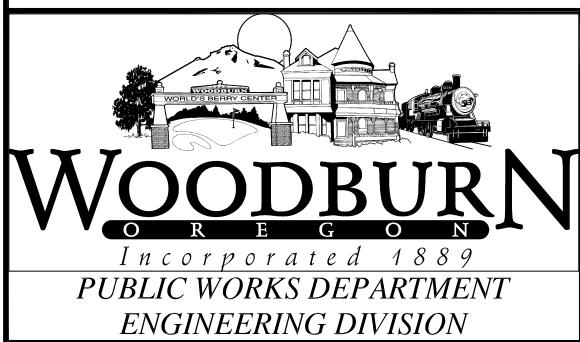
DET No.

6200-6

SECTION 6510
SANITARY SEWER MANHOLES

DUCTILE IRON PIPEPVC OR APPROVED EQUAL PIPE MATERIALNOTES:

1. USE ONE LENGTH OF D.I. TO SOLID BEARING IF SPAN IS LONGER THAN 4 FEET.
2. REFERENCE TECHNICAL SPEC. SECTION 6510.
3. CONCRETE ENCASING: MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.

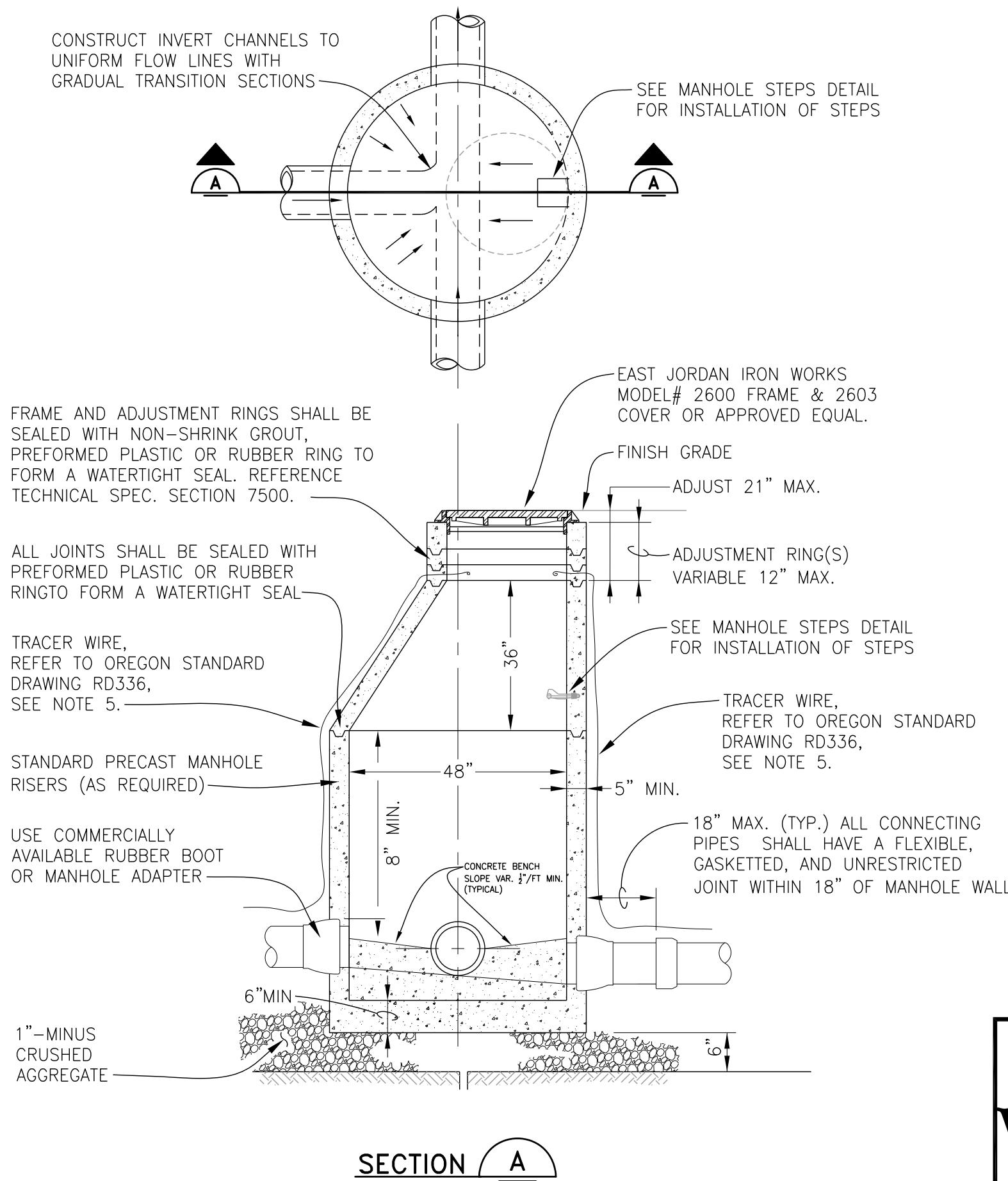
**OUTSIDE DROP MANHOLE CONNECTION**

REV: DEC. 2007

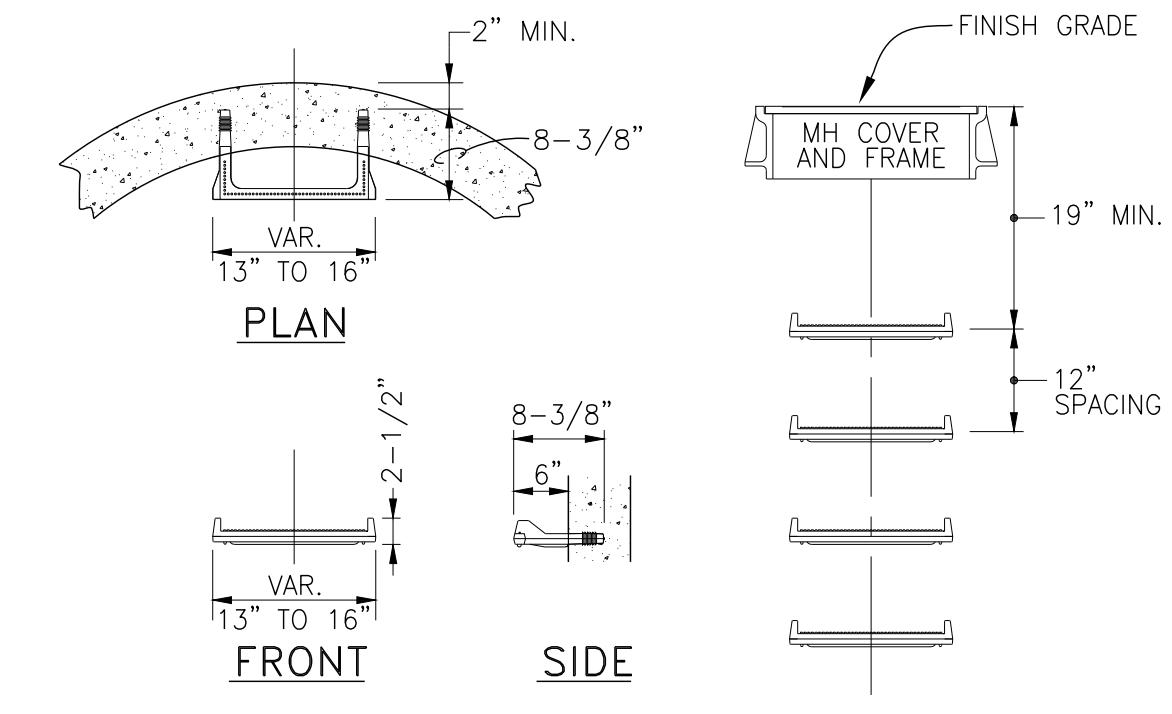
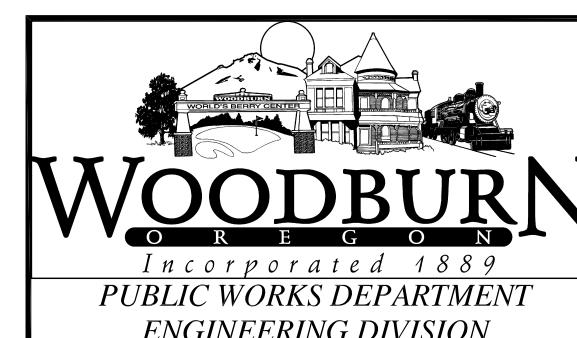
SCALE: NTS

DET No.

6510-2

NOTES:

1. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF ASTM C478.
2. STANDARD PRECAST MANHOLE SECTION DIAMETER SHALL BE 48". USE 42" IF SPECIFIED BY THE ENGINEER. MAXIMUM PIPE DIAMETER 24".
3. ALL CONNECTING PIPES SHALL HAVE A FLEXIBLE, GASKETTED, AND UNRESTRAINED JOINT WITHIN 18" OF MANHOLE WALL.
4. USE FLAT TOP FOR SHALLOW MANHOLE WHERE DIRECTED.
5. COIL AND SECURE TRACER WIRE IN MANHOLE TO NON CORROSIVE FASTENER, LEAVE ENOUGH FREE WIRE TO EXTEND 18" ABOVE TOP OF MANHOLE COVER.

MANHOLE STEPS DETAIL

**SANITARY SEWER
MANHOLE**

REV: SEPT. 2021

SCALE: NTS

DET No.

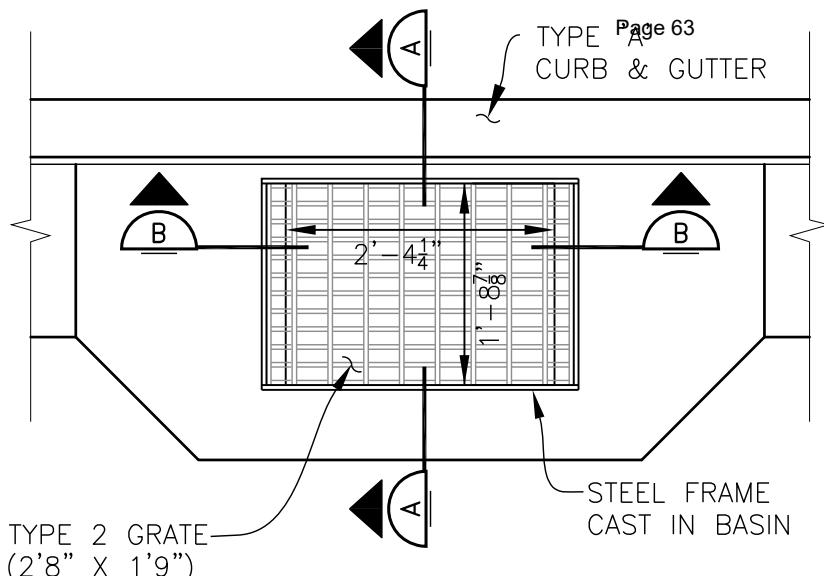
6510-3

SECTION 7100

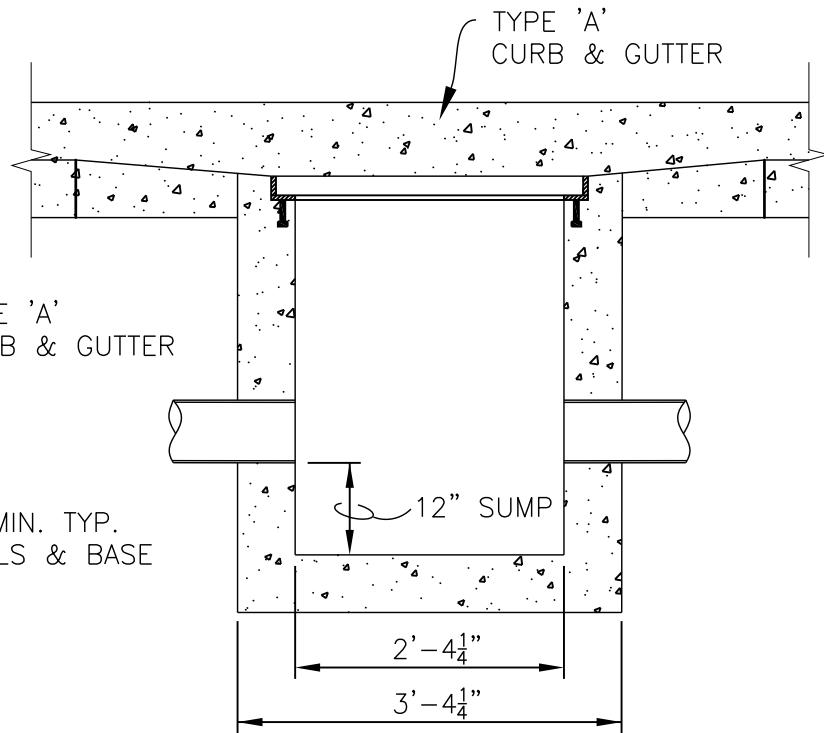
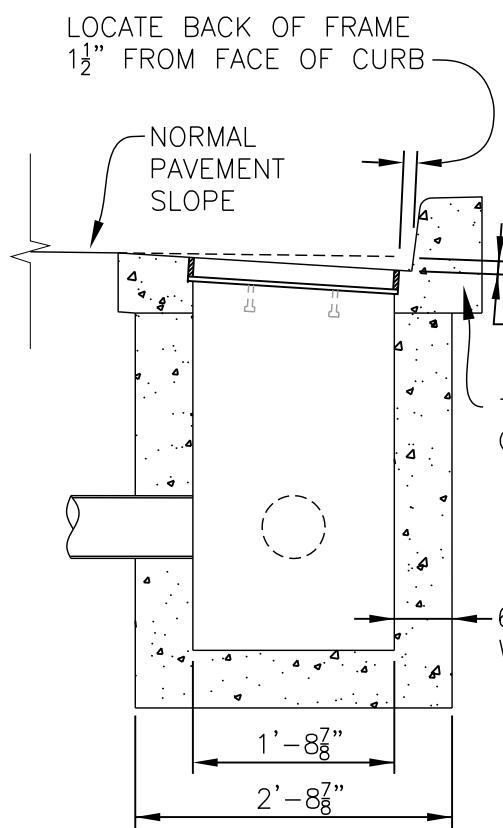
CATCH BASINS

NOTES:

1. MATERIAL - 3500 PSI CONCRETE AT 28 DAYS.
2. PRECAST INLETS MUST BE REVIEWED AND APPROVED BY PUBLIC WORKS PRIOR TO INSTALLATION.
3. CAST IN PLACE SHALL BE CONSTRUCTED AT THE MINIMUM DIMENSIONS SHOWN.
4. CONCRETE INLETS SHALL CONFORM TO ODOT STD DRAWING RD364.



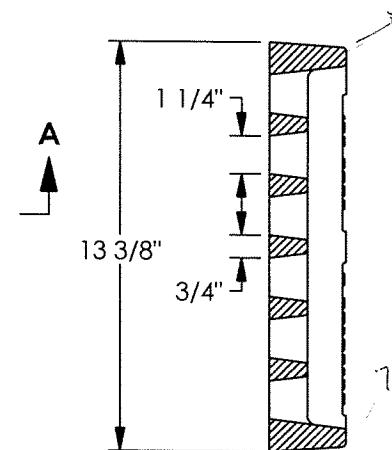
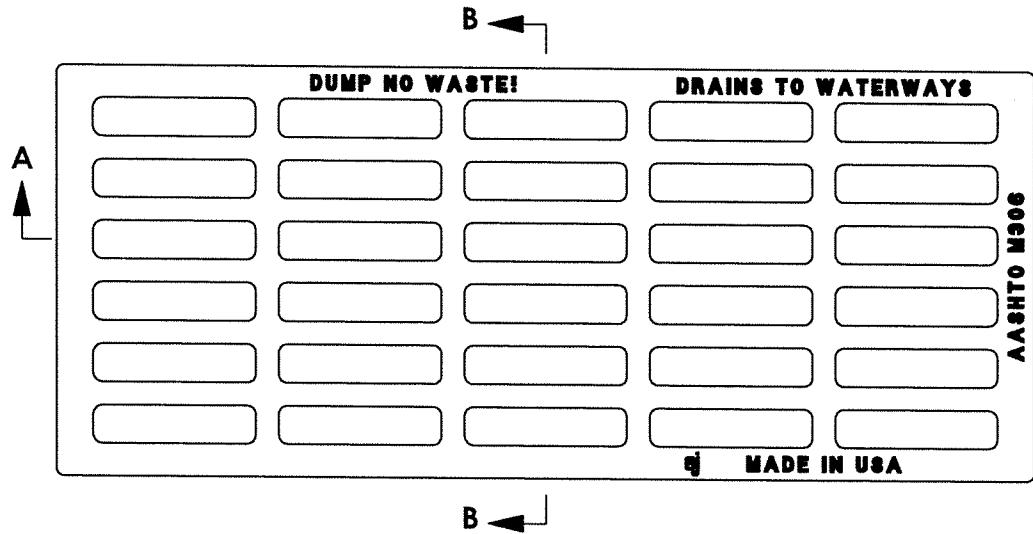
PLAN VIEW



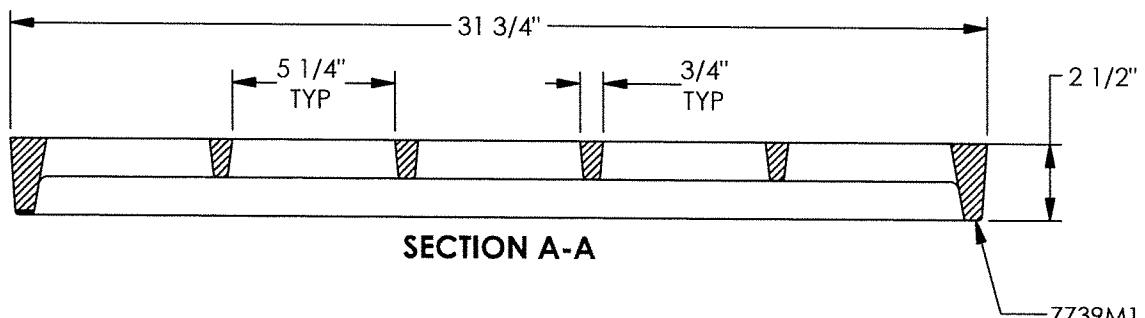
SECTION A

SECTION B

7739M1 Grate



SECTION B-B



SECTION A-A

7739M1
ASTM A536
MO/DY/YR X
PROD NO.

Drawing Revision

09/25/2007 Designer: SBB
08/21/2019 Revised By: DEF

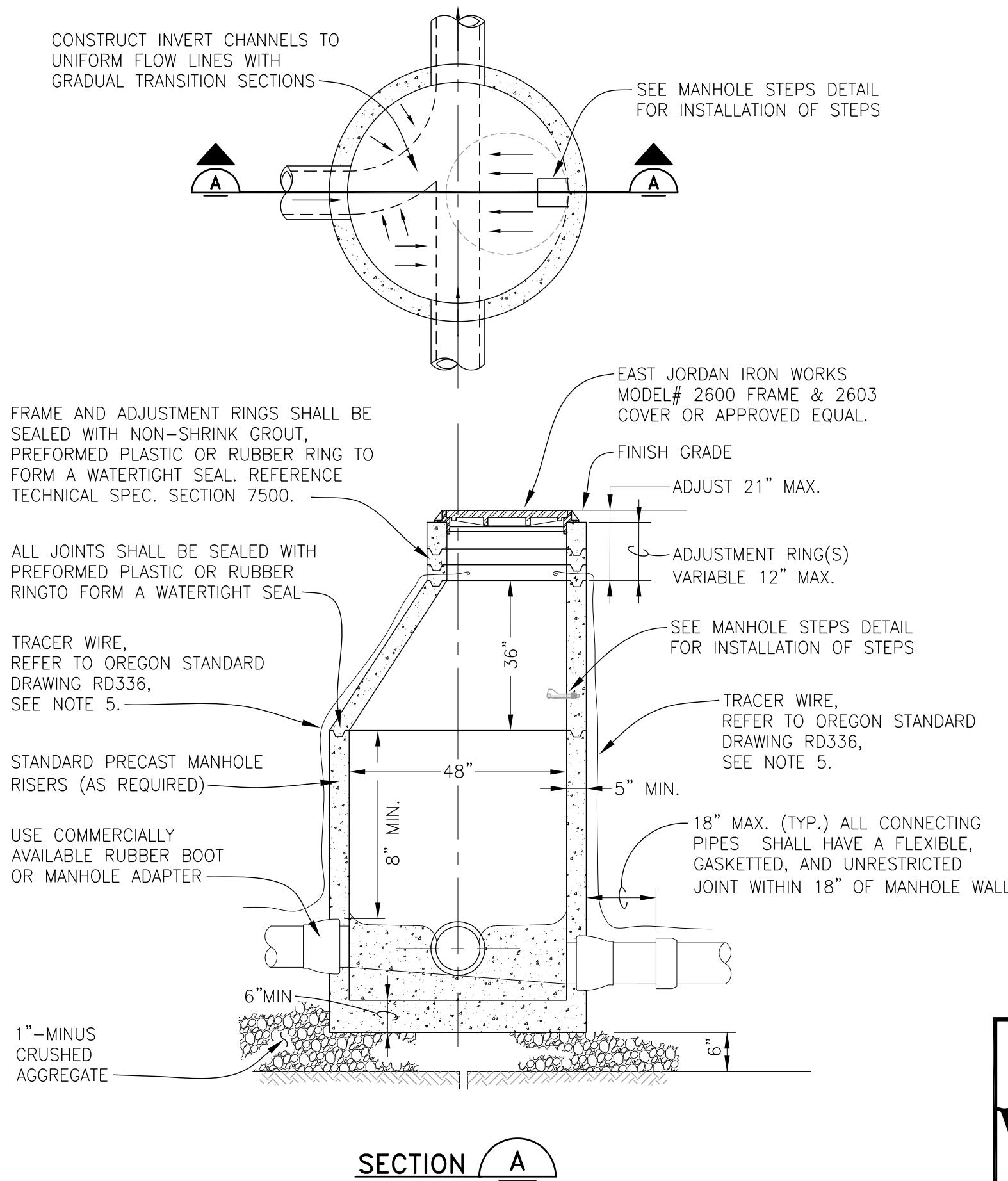
Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

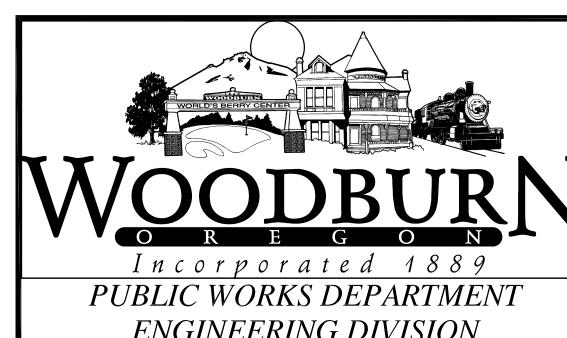
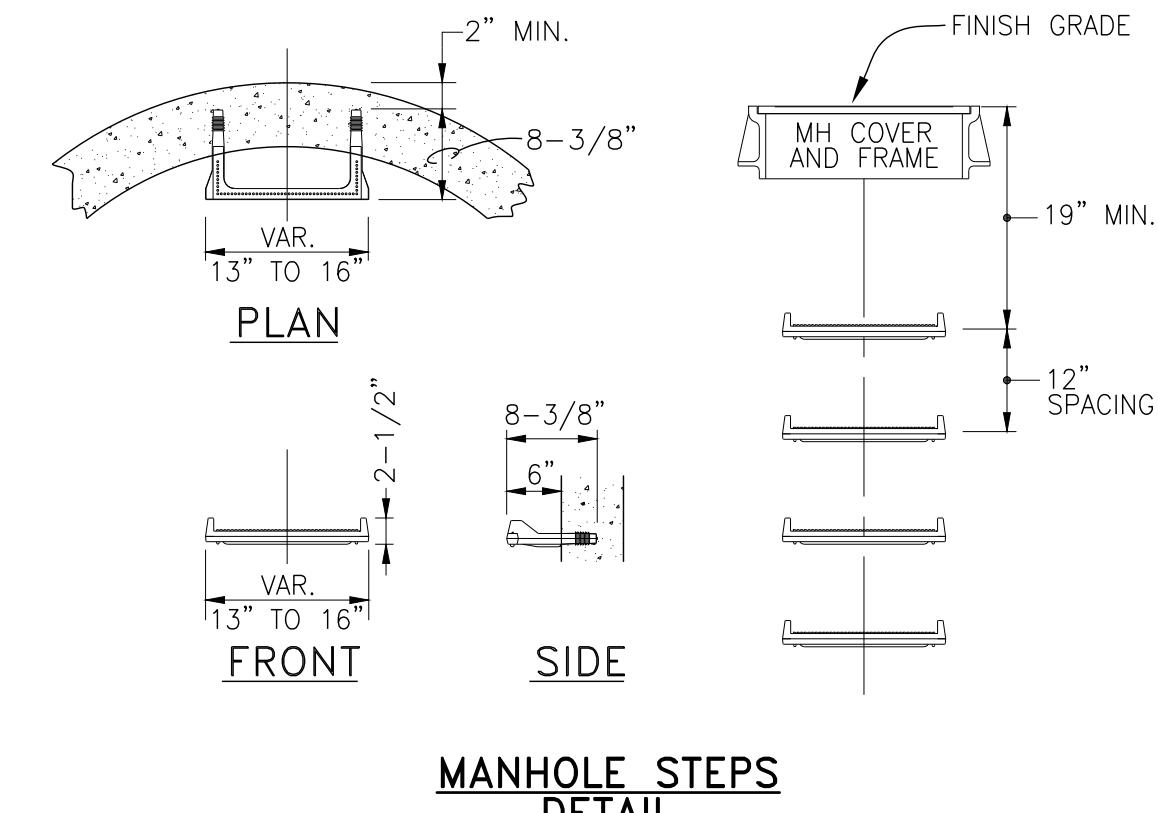
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Contact
800 626 4653
ejco.com

SECTION 7500
STORM SEWER MANHOLES

NOTES:

1. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF ASTM C478.
2. STANDARD PRECAST MANHOLE SECTION DIAMETER SHALL BE 48". USE 42" IF SPECIFIED BY THE ENGINEER. MAXIMUM PIPE DIAMETER 24".
3. ALL CONNECTING PIPES SHALL HAVE A FLEXIBLE, GASKETTED, AND UNRESTRAINED JOINT WITHIN 18" OF MANHOLE WALL.
4. USE FLAT TOP FOR SHALLOW MANHOLE WHERE DIRECTED.
5. COIL AND SECURE TRACER WIRE IN MANHOLE TO NON CORROSIVE FASTENER, LEAVE ENOUGH FREE WIRE TO EXTEND 18" ABOVE TOP OF MANHOLE COVER.



STORM SEWER
MANHOLE

REV: FEB. 2021
SCALE: NTS
DET No.
7500-1