



**LAKE HAVASU CITY**

**ENGINEERING  
DIVISION**

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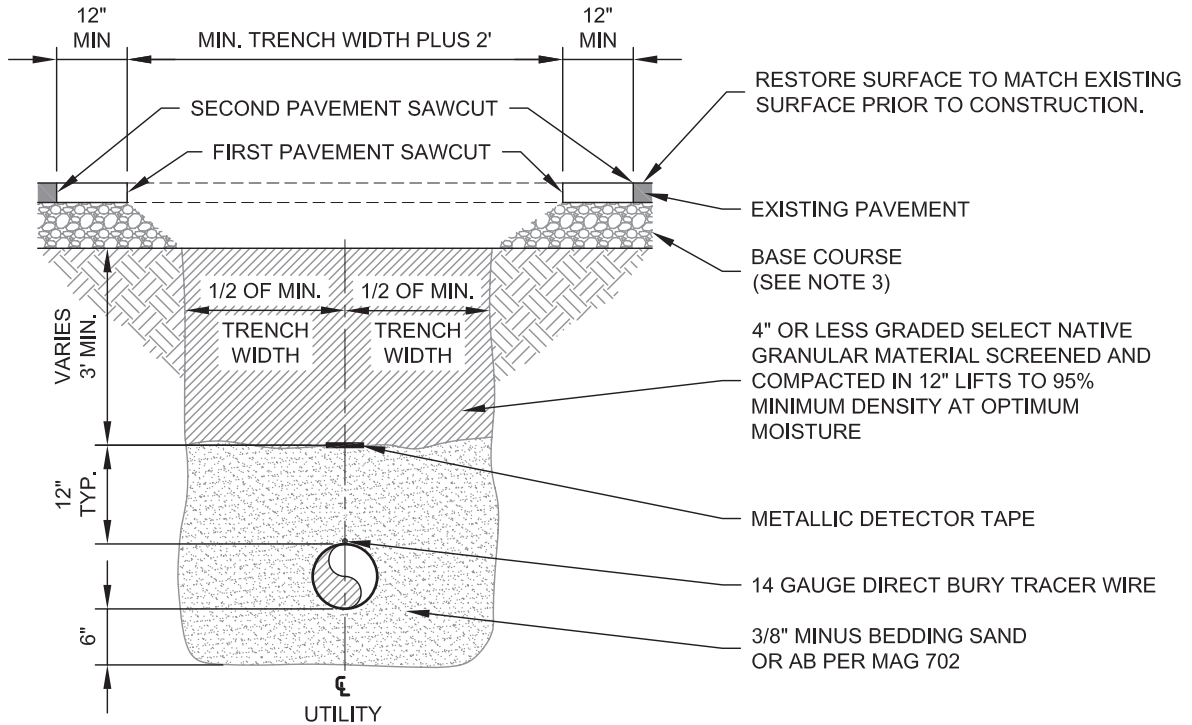
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**STANDARD  
DETAILS**

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**2026 UPDATE**

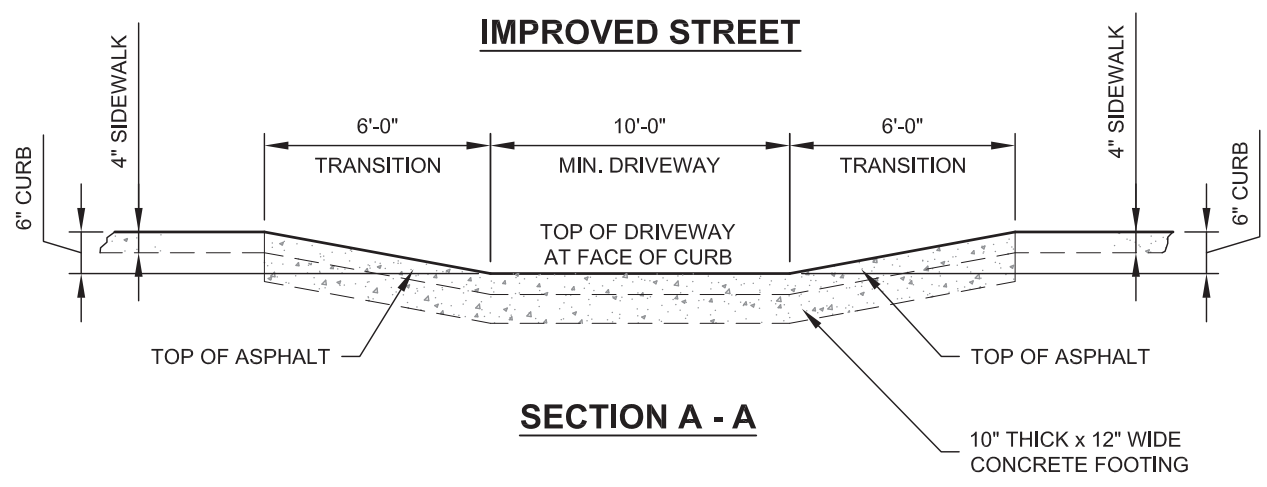
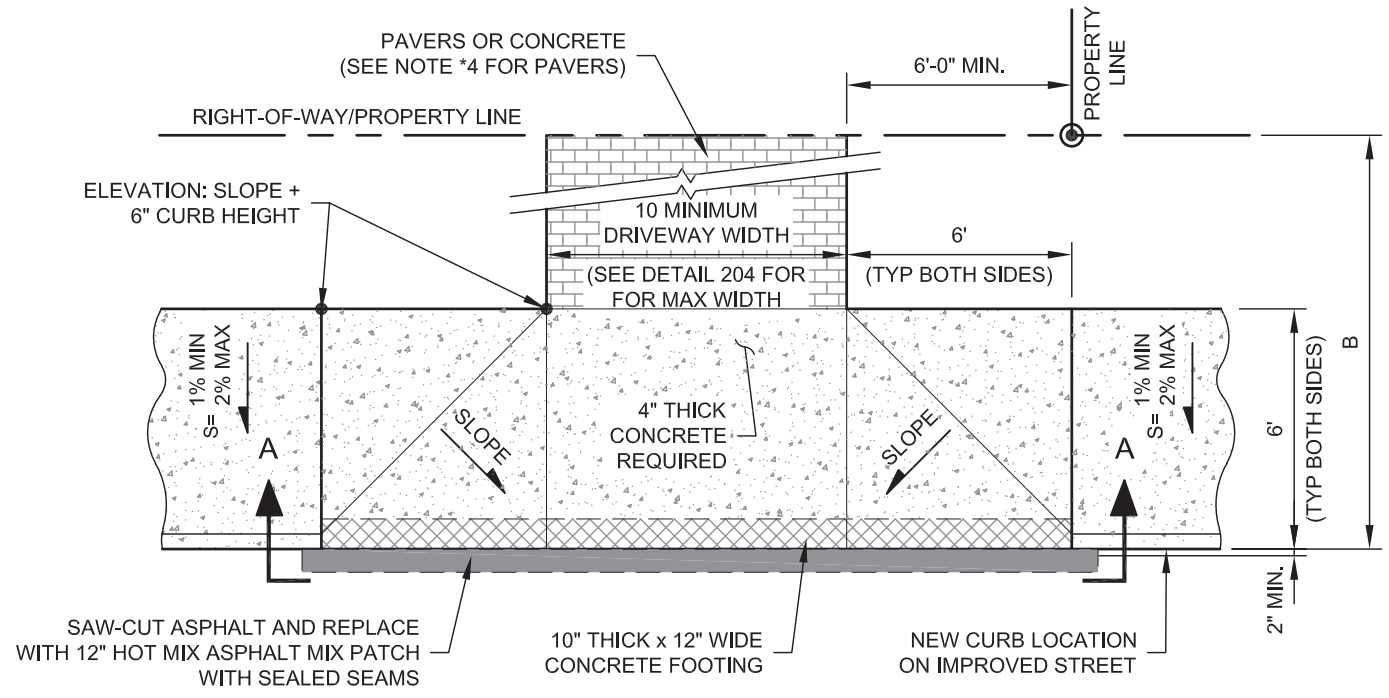


MINIMUM TRENCH WIDTH TABLE				
PIPE DIAMETER	MINIMUM WIDTH	MINIMUM BETWEEN FIRST SAWCUTS	MINIMUM BETWEEN SECOND SAWCUTS	CONCRETE PAVEMENT
<6 IN.	24"	2'	4'	SECOND SAWCUT SHALL BE AT EXISTING JOINTS, SEE NOTE #5
6 IN.	24"	4'-0"	6'-0"	
8IN.-12IN.	30"	4'-6"	6'-6"	
14IN.-18IN.	36"	5'	5'-0"	
20IN.-24IN.	42"	5'-6"	7'-6"	
24IN.-36IN.	1.25 (PIPE OD) PLUS 12IN.	MIN. WIDTH PLUS 2'	MIN. WIDTH PLUS 4'	SECOND SAWCUT SHALL BE AT EXISTING JOINTS, SEE NOTE #5
>36IN.	PER PLANS	MIN. WIDTH PLUS 2'	MIN. WIDTH PLUS 4'	

**NOTES:**

1. ALL SAWCUTS TO BE FULL DEPTH OF PAVEMENT.
2. PATCH MATERIAL SHALL MATCH THE EXISTING PAVEMENT MATERIAL (eg CONCRETE PAVEMENT SHALL BE PATCHED WITH CONCRETE AND EXISTING ASPHALT PAVEMENT WITH ASPHALT).
3. FOR ASPHALT PATCHES, BASE COURSE & ASPHALT CONCRETE THICKNESS IS TO MATCH EXISTING BUT IN NO CASE LESS THAN 0" BASE 3" ASPHALT CONCRETE.
4. ALL EXISTING VERTICAL ASPHALT JOINTS SHALL BE TACK COATED.
5. FINAL CONCRETE PAVEMENT REMOVALS SHALL BE TO THE NEAREST EXISTING JOINT (eg FULL PANEL REMOVAL AND REPLACEMENT).
6. TRENCHES ARE SHOWN TO DIAGRAM PATCHING REQUIREMENTS. TRENCHES SHALL BE CONSTRUCTED TO MEET OSHA REQUIREMENTS.
7. PAVEMENT REMOVAL BETWEEN FIRST AND SECOND SAW CUT SHALL BE REMOVED AT TIME OF HOT MIX PATCHING . DENSITY TESTING SHALL BE AT THE EXPENSE OF THE CONTRACTOR AND A COPY OF RESULTS SHALL BE PROVIDED TO THE CITY.
9. MONITOR & MAINTAIN SURFACE CONDITION AND PERFORM ASPHALT REPAIRS UNDER 1-YEAR WARRANTY PROVIDED THROUGH PERMIT.
10. ALL PATCH JOINTS SHOULD BE HENRY ASPHALT RESURFACER SEALED OR APPROVED EQUAL.

 <p><b>LAKE HAVASU CITY</b></p>	<b>Standard Details</b>	<b>Utility Trench Patch</b>	Scale: <u>N.T.S.</u>
	<b>Roadway Improvements</b>		Detail No. <b>200R</b>



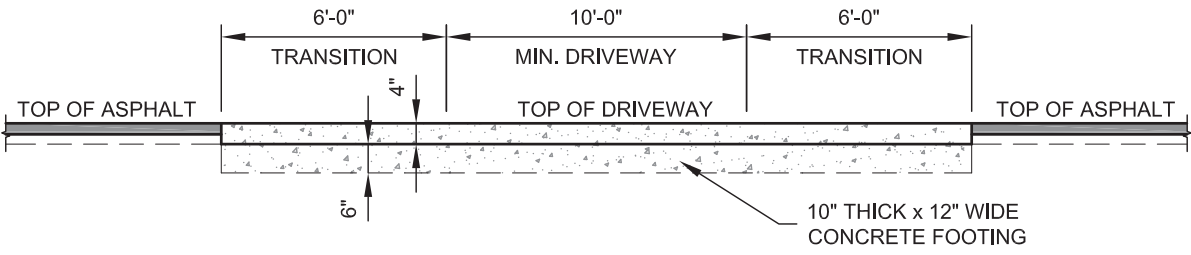
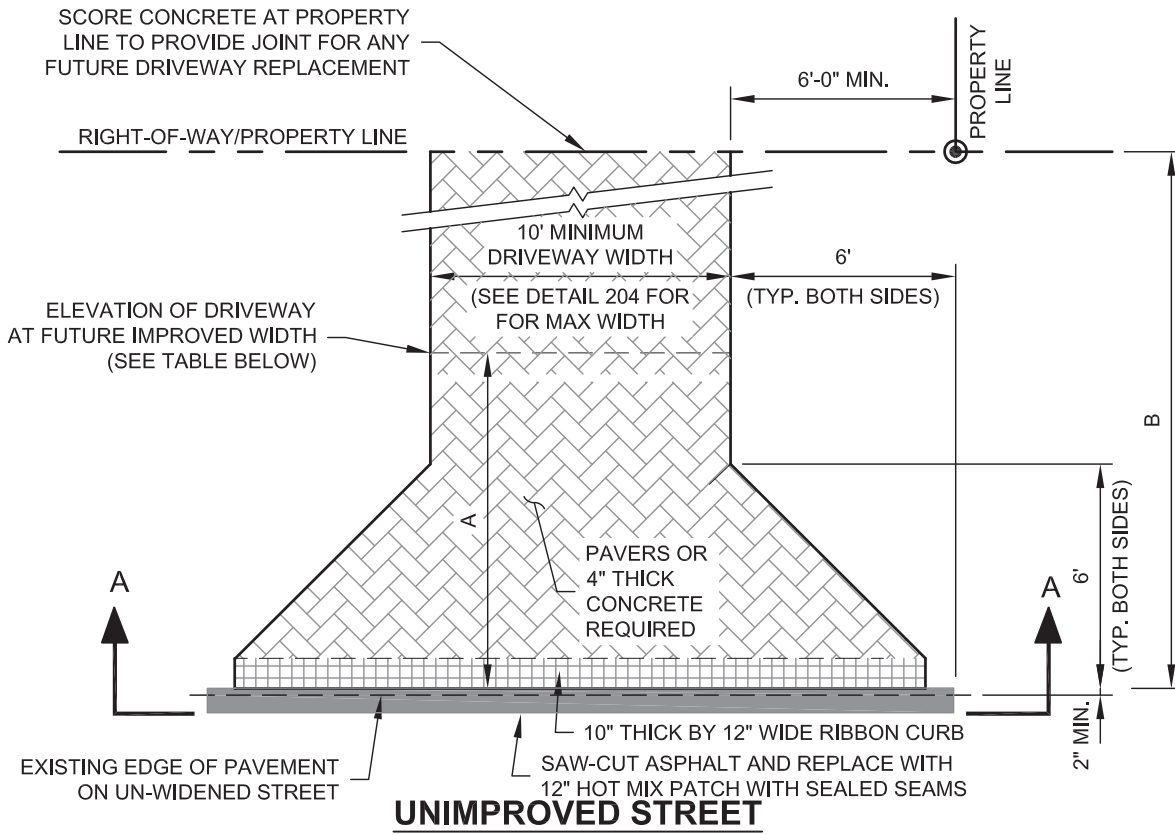
**DISTANCE & ELEVATION TABLE ('W' SECTION)  
ABOVE EXISTING EDGE OF PAVEMENT AT 2% SLOPE  
(BASED ON 12" EXISTING ASPHALT LANE)**

STREET	RISE	DISTANCE B
BOULEVARD	4"	15 FEET
AVENUE	3"	13 FEET
DRIVE	3"	9 FEET

**NOTES:**

1. ELEVATION AT PROPERTY LINE TO REMAIN 11" ABOVE EDGE OF STREET ON 'W' SECTIONS.
2. CONCRETE FOR STRUCTURES IN RIGHT-OF-WAY SHALL BE A 6 SACK PER CUBIC YARD MIX WITH A 4" MAXIMUM SLUMP AND BE ABLE TO PASS A 3,000 PSI COMPRESSIVE STRENGTH TEST AT 28 DAYS.
3. SIDEWALK CROSS-SLOPE (BACK OF SIDEWALK TO CURB) TO BE 1.5% MIN / 2% MAX.
- \*4. PAVERS ALLOWED WITH 4" CRUSHED BASE AND 1" SAND WITH ENROACHMENT AGREEMENT.

	<b>Standard Details</b>	<b>Modified Paver Driveway Detail Improved Street</b>	Scale: <u>N.T.S.</u>
	<b>Roadway Improvements</b>		Detail No.  <b>201A</b>




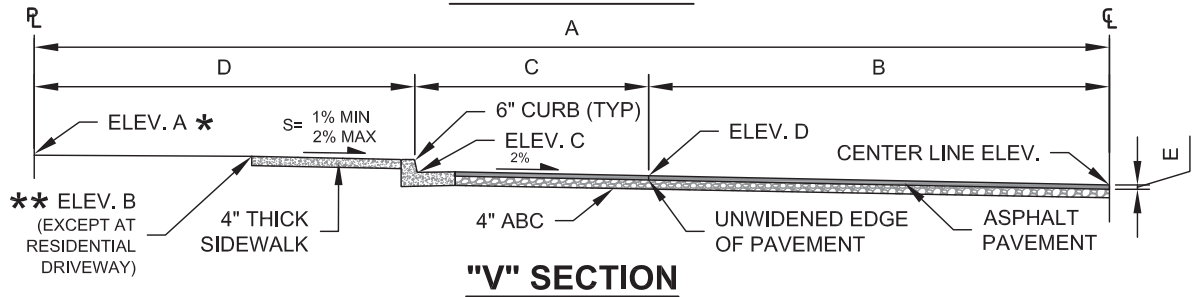
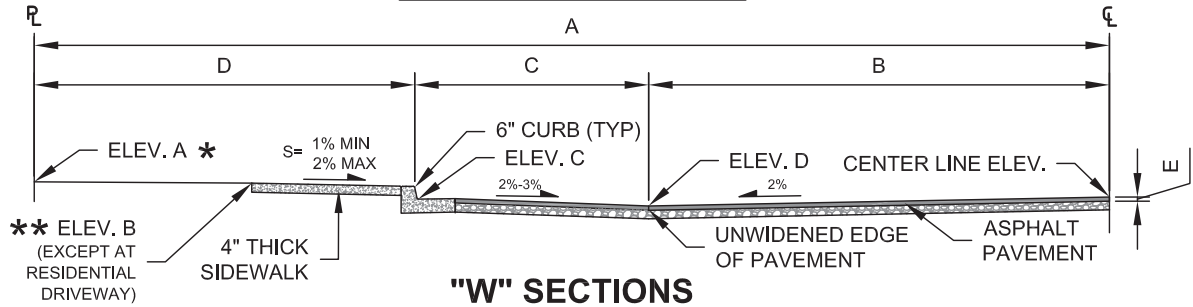
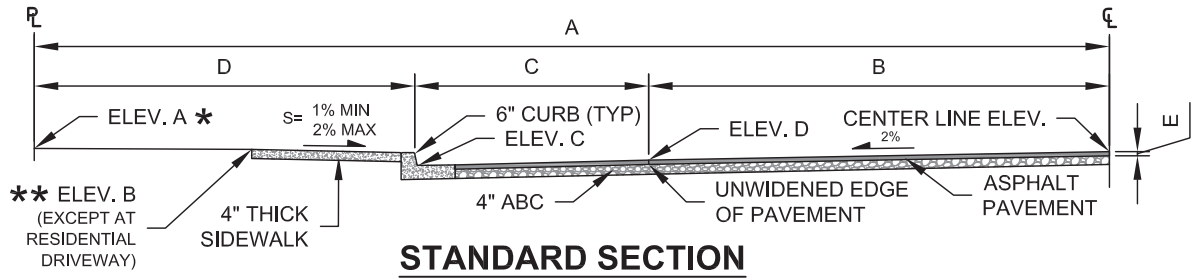
**DISTANCE & ELEVATION TABLE ('W' SECTION)**  
ABOVE EXISTING EDGE OF PAVEMENT AT 2% SLOPE (BASED ON 12' EXISTING ASPHALT LANE)

STREET	DISTANCE 'A'	RISE	DISTANCE 'B'
BOULEVARD	15 FEET	4"	30 FEET
AVENUE	10 FEET	3"	23 FEET
DRIVE	9 FEET	3"	18 FEET

**NOTES:**

1. ELEVATION AT PROPERTY LINE TO REMAIN 11" ABOVE EDGE OF STREET ON 'W' SECTIONS.
2. CONCRETE FOR STRUCTURES IN RIGHT-OF-WAY SHALL BE A 6 SACK PER CUBIC YARD MIX WITH A 4" MAXIMUM SLUMP AND BE ABLE TO PASS A 3,000 PSI COMPRESSIVE STRENGTH TEST AT 28 DAYS.
3. SIDEWALK CROSS-SLOPE (BACK OF SIDEWALK TO CURB) TO BE 1.5% MIN / 2% MAX.
- \* 4. PAVERS ALLOWED WITH 4" CRUSHED BASE & 1" SAND WITH ENCROACHMENT AGREEMENT.

	<b>Standard Details</b>	<b>Modified Paver Driveway Unimproved Street</b>	Scale: <u>N.T.S.</u>
	<b>Roadway Improvements</b>		Detail No. <b>202A</b>



**FINISHED ELEVATION**  
(SHOWN IN INCHES ABOVE (+) OR BELOW (-) CENTER LINE)

STREET	STANDARD SECTION				"W" SECTION				"V" SECTION			
	A (MIN)	B	C	D	A (MIN)	B	C	D	A (MIN)	B	C	D
BOULEVARD	+1.5"	+1"	-6.5"	-4.25"	+7"	+6.5"	-1"	-4.25"	+14.5"	+14"	+6.5"	+4.25"
AVENUE	+2.5"	+2"	-5.5"	-3"	+8.75"	+8.25"	+0.75"	-3"	+13.5"	+13"	+5.5"	+3"
DRIVE	+2.75"	+2.75"	-5.25"	-3"	+8.25"	+8"	+0.5"	-3"	+13.25"	+12.75"	+5.25"	+3"
CUL-DE-SAC	+3.5"	+3"	-4.5"	-3"	N/A	N/A	N/A	N/A	+12.5"	+12"	+4.5"	+3"

DIMENSIONS						
STREET	R/W	A	B	C	D	E
BOULEVARD	84'	42'★	18'★	9'	15'	3"
AVENUE	70'	35'	12'	10'	13'	3"
DRIVE	60'	30'	12'	9'	9'	3"
CUL-DE-SAC	50'	25'	12'	6'	7'	3"

★ UNLESS OTHERWISE APPROVED BY ENGINEERING DIVISION.  
 \*\* ELEVATION 'B' AT RESIDENTIAL DRIVEWAY TO BE.  
 ELEVATION 'C' + 6" OR EQUAL TO TOP OF CURB ELEVATION.  
 ★ FIELD-VERIFY UNWIDENED PAVEMENT WIDTH. ADJUST  
 DIMENSION 'B' AND 'C' ACCORDINGLY TO EQUAL 27' TOTAL.

**NOTES:**

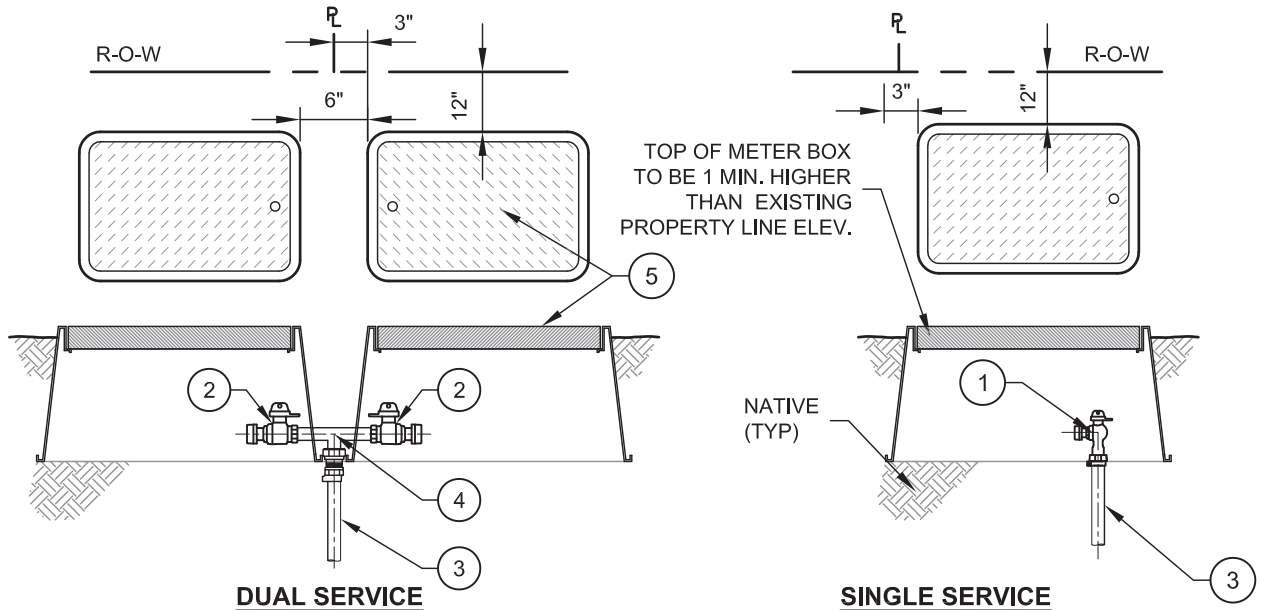
1. ALL PAVEMENT WIDENING MUST INCLUDE CURBS.
2. SEE DETAIL 213-216 FOR APPLICABLE CURB DETAIL.
3. "V" SECTION ONLY ALLOWED WITH PRIOR APPROVAL BY THE ENGINEERING DIVISION.
4. INDICATED CURBS, SIDEWALKS AND WIDENING MAY BE EITHER EXISTING OR FUTURE.
5. SIDEWALK CROSS-SLOPE (BACK OF SIDEWALK TO CURB) TO BE 1% MIN / 2% MAX.

**SPECIAL NOTES:**

1. ENGINEERING DIVISION TO DETERMINE STREET CROSS-SECTION.
2. MINIMUM ELEVATION AT PROPERTY LINE ALONG ENTIRE FRONTAGE OF LOT TO BE IN ACCORDANCE WITH ELEVATION 'A'.

 <b>LAKE HAVASU CITY</b>	<b>Standard Details</b>	<b>Standard Sections of Streets &amp; Sidewalks</b>	Scale: <u>N.T.S.</u>
	<b>Roadway Improvements</b>		Detail No.  <b>203B R</b>



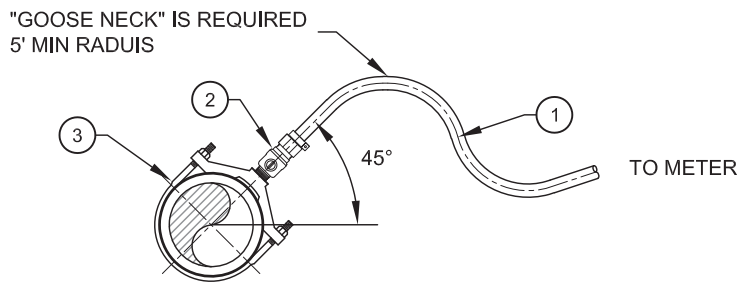


SERVICE TERMINATION DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1" ANGLE METER STOP	FORD BA43-342W-NL	OR EQUAL
②	1" BALL METER VALVE	FORD B13-332W-NL	OR EQUAL
③	1" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
④	1" SERVICE TEE	FORD T884-334-9-NL	OR EQUAL
⑤	METER BOX	CARSON METER BOX 1220 (25 3/8"x19"x12") TRAFFIC RATED BOX USE CHRISTY MAG 2 (25 1/2"x 17 3/4"x12")	OR EQUAL

**NOTE:**

1. STAINLESS STEEL INSERTS MUST BE USED.
2. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 2" SCH 40 SLEEVE.

**SERVICE TERMINATION DETAILS**



SERVICE CONNECTION DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
②	1" CORP STOP	FORD 1" FB1100-4-NL	OR EQUAL
③	1" x MAIN SIZE BRASS STRAP SADDLE	FORD 202B-xxx-IP4 (AC) OR S91-xx4 (C900) SADDLE W/ 1" IP THREAD	OR EQUAL

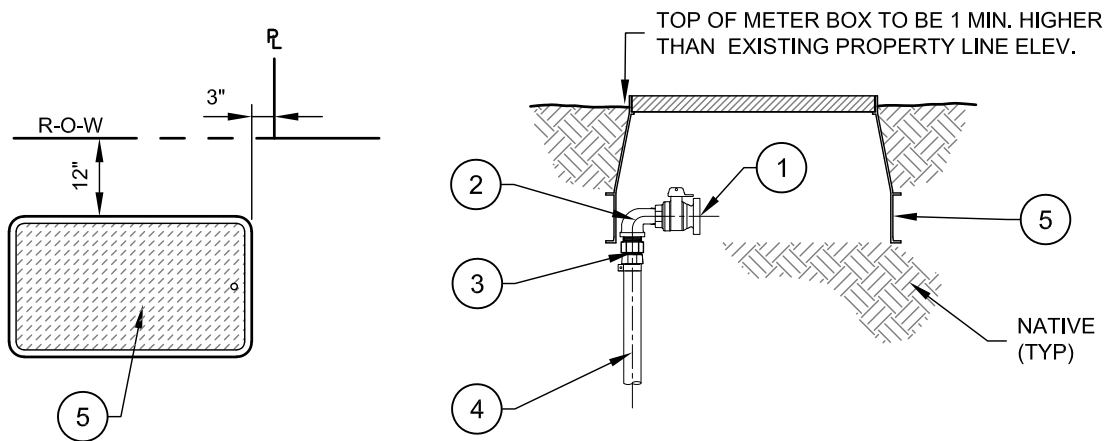
**SERVICE CONNECTION DETAILS**



**Standard Details**  
**Water Improvements**

**1" Service Connection**

Scale: N.T.S.  
Detail No.  
**301 R**

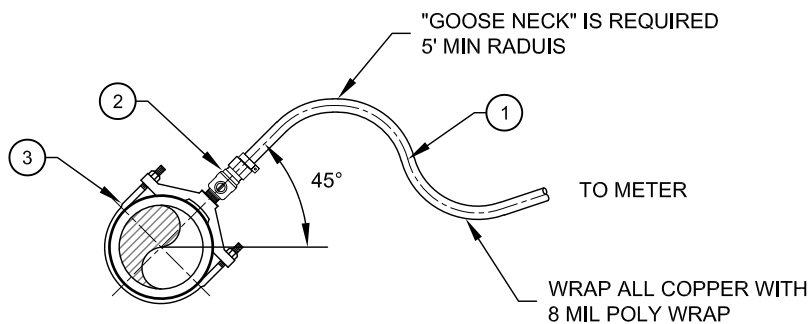


SERVICE TERMINATION DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	2" BALL METER VALVE	FORD BF13-777W-NL	OR EQUAL
②	2" 90 STREET ELL	BRASS STREET ELL	
③	2" PACK JOINT COUPLING	2" FORD C84-77-NL	OR EQUAL
④	2" POLY TUBE	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑤	METER BOX	CHRISTY FL36 METER BOX (37"x24"x18 7/16") TRAFFIC RATED BOX USE CHRISTY MAG 2 (25 1/2"x 17 3/4"x12")	OR EQUAL

**NOTE:**

1. STAINLESS STEEL INSERTS MUST BE USED.
2. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 4" SCH 40 SLEEVE.

**SERVICE TERMINATION DETAILS**



SERVICE TERMINATION DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
②	2" CORP STOP	FORD FB1100-7-NL	OR EQUAL
③	2" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP7 (AC) OR S91-xx7 (C900) SADDLE W/ 2" IP THREAD	OR EQUAL

**NOTE:**

1. STAINLESS STEEL INSERTS MUST BE USED.
2. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 4" SCH 40 SLEEVE.

**SERVICE CONNECTION DETAILS**



Standard Details

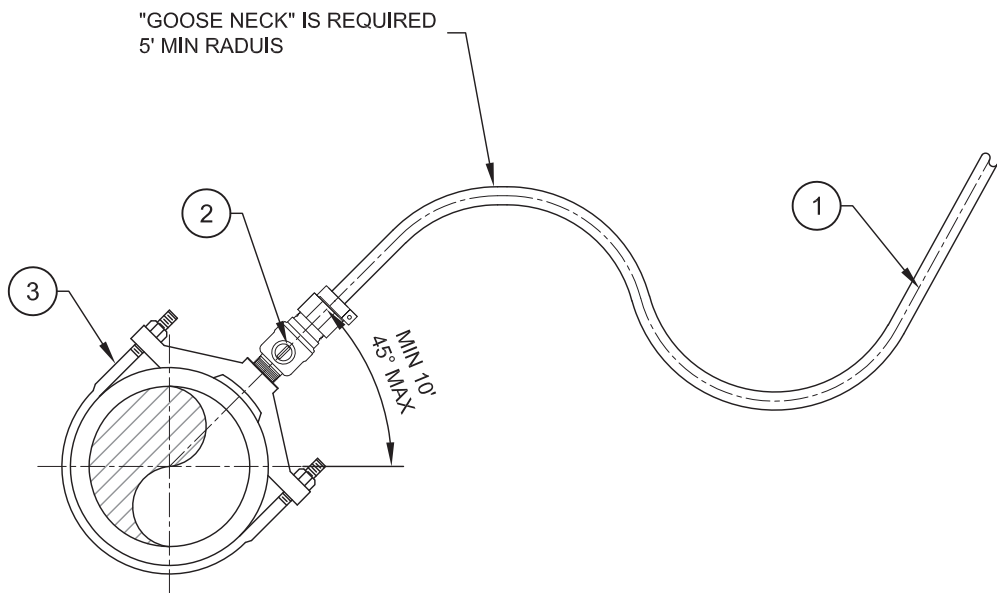
Water Improvements

2" Service Connection

Scale: N.T.S.

Detail No.

302



**SERVICE TAP**

SERVICE TAP DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
②	1" CORP STOP	FORD FB1100-4-NL	OR EQUAL
③	1" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP4 (AC) OR S91-xx4 (C900) SADDLE W/ 1" IP THREAD	OR EQUAL

**NOTE:**

1. ALL PARTS ARE FROM FORD METER BOX COMPANY.
2. ALL ASSEMBLIES TO BE LOCATED WITHIN CITY RIGHT-OF-WAY.
3. STAINLESS STEEL INSERTS MUST BE USED.
4. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 2" SCH 40 SLEEVE.
5. SEE DETAILS 301 FOR SERVICE TERMINATION DETAIL.



**Standard Details**

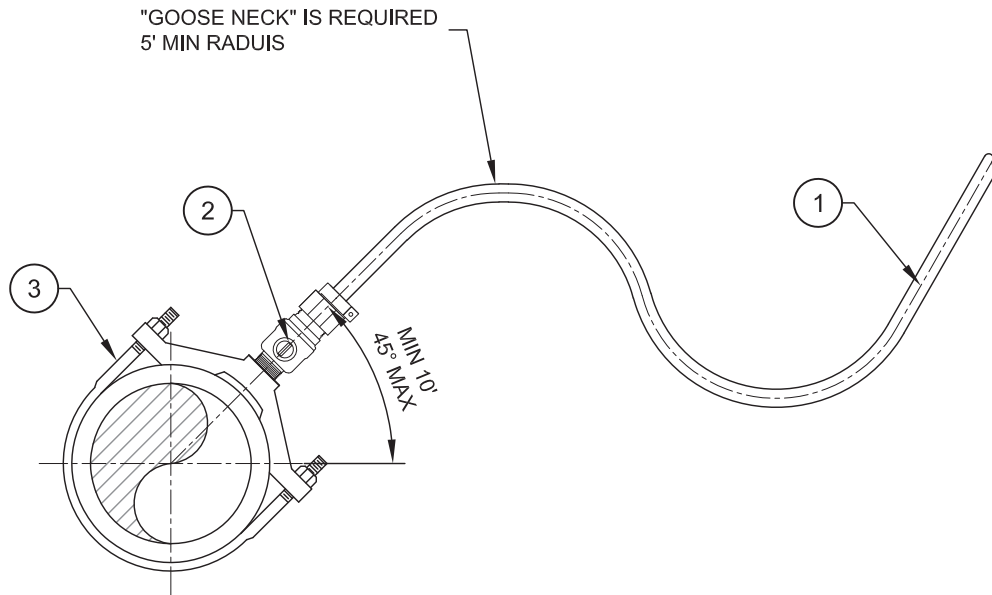
**Water Improvements**

**1" Service Tap**

Scale: N.T.S.

**Detail No.**

**303 R**

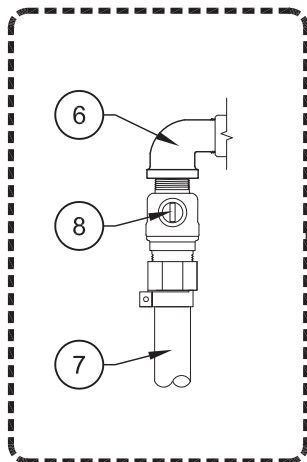


SERVICE TERMINATION DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1.5" or 2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
②	1.5" or 2" CORP STOP	FORD 1.5" FB1100-6-NL - 2" FB1100-7-NL	OR EQUAL
③	1.5" or 2" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP6 (AC) OR S91-xx6 (C900) SADDLE WITH IP THREAD FORD 202B-xxx-IP7 (AC) OR S91-xx7 (C900) SADDLE WITH IP THREAD	OR EQUAL

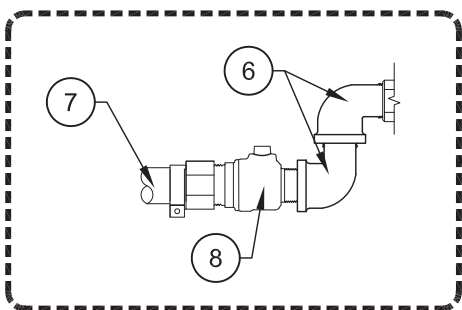
**NOTE:**

1. ALL PARTS ARE FROM FORD METER BOX COMPANY.
2. ALL ASSEMBLIES TO BE LOCATED WITHIN CITY RIGHT-OF-WAY.
3. STAINLESS STEEL INSERTS MUST BE USED.
4. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 4" SCH 40 SLEEVE.

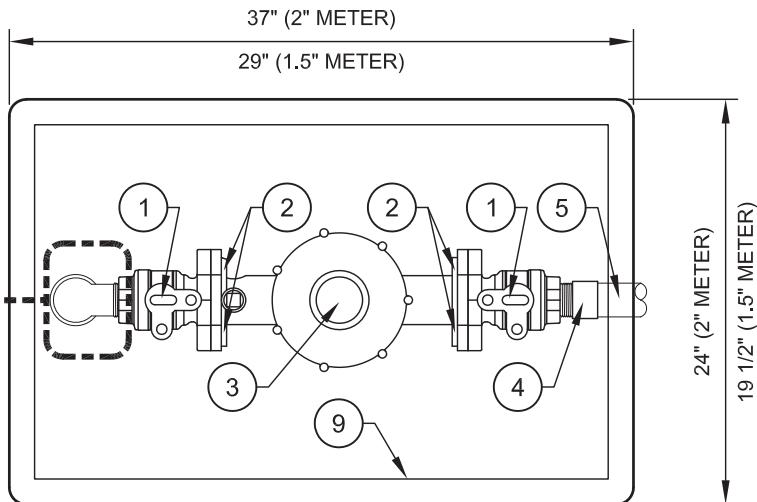
	<b>Standard Details</b>	<b>1.5" - 2" Single Service Tap</b>	Scale: <u>N.T.S.</u>
	<b>Water Improvements</b>		Detail No.  <b>304 R</b>



**SIDE VIEW**



**(OPTIONAL) TOP VIEW**



(OPTIONAL) - IF USED MUST USE BRASS 90° STREET ELBOWS

**SERVICE METER DETAIL TABLE**

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1.5" or 2" BALL METER VALVE	FORD 1.5" BF13-666W-NL - 2" BF13-777W-NL	OR EQUAL
②	BOLTS & NUTS	STAINLESS STEEL	
③	1.5" or 2" WATER METER	BADGER 1.5" M120-150LNSX-HL-GAXX - 2" M170-200LNSX-HL-GAXX	OR EQUAL
④	1.5" or 2" ADAPTOR	FORD C84 PACK JOINT OR PVC MALE ADAPTOR	OR EQUAL
⑤	1.5" or 2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑥	1.5" or 2" 90° STREET ELBOW	BRASS 90° STREET ELBOW	
⑦	1.5" or 2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑧	1.5" or 2" BALL CORP STOP VALVE	FORD 1.5" FB1100-6-NL - 2" FB1100-7-NL	OR EQUAL
⑨	METER BOX	CHRISTY FL36 MODEL 17x30 (37"x24"x18 7/16")	OR EQUAL

**NOTE:**

1. ALL PARTS ARE FROM FORD METER BOX COMPANY.
2. ALL ASSEMBLIES TO BE LOCATED WITHIN CITY RIGHT-OF-WAY.
3. STAINLESS STEEL INSERTS MUST BE USED.
4. ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 4" SCH 40 SLEEVE.
5. COMMERCIAL AND IRRIGATION WATER METERS REQUIRE APPROVED BACKFLOW PREVENTED ASSEMBLIES PER LAKE HAVASU CITY SPECIFICATIONS.



**Standard Details**

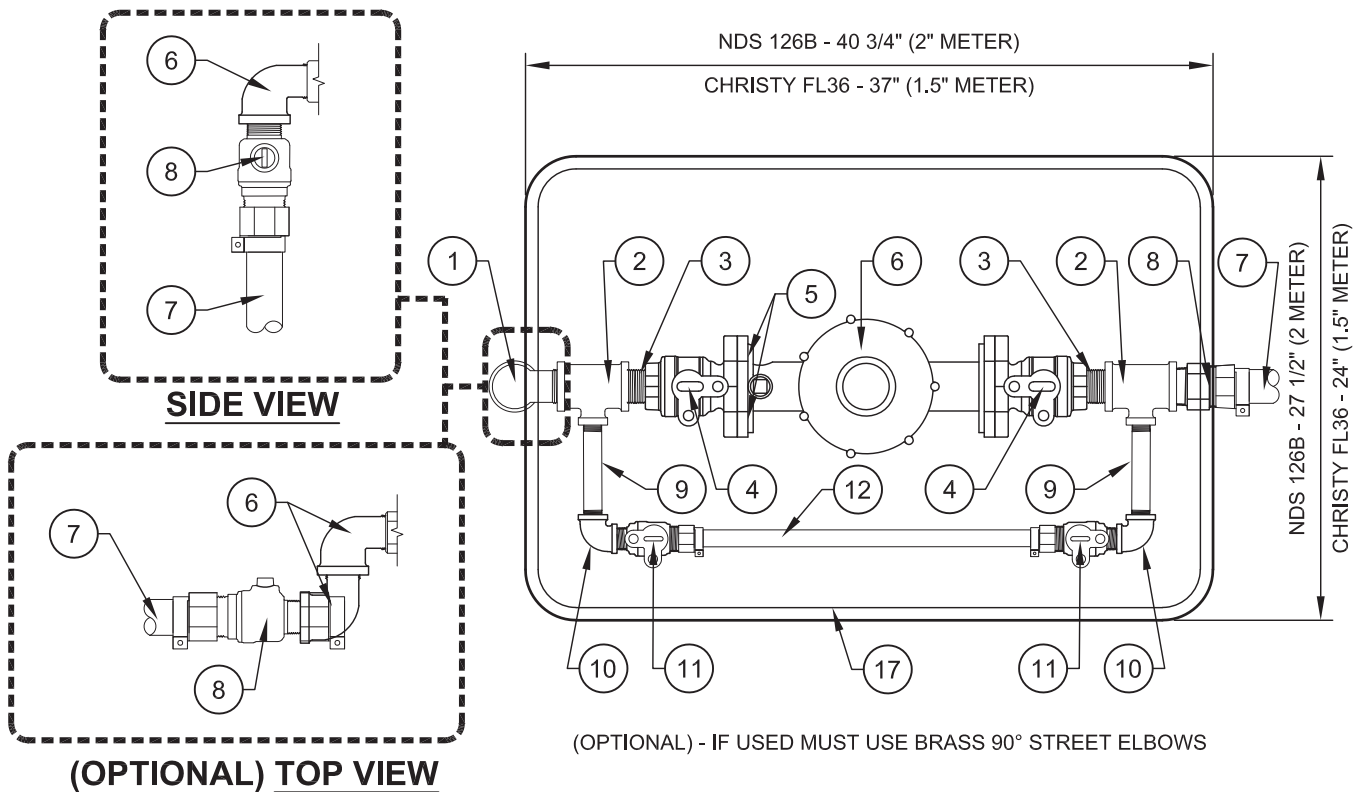
**Water Improvements**

**1.5" & 2" Water Meter Assembly**

Scale: N.T.S.

Detail No.

**305 R**



(OPTIONAL) - IF USED MUST USE BRASS 90° STREET ELBOWS

SERVICE METER DETAIL TABLE

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	1.5" or 2" 90°	BRASS 90° STREET ELBOW	
②	1.5"x1" or 2"x1" TEE	BRASS REDUCING TEE	
③	1.5" or 2" NIPPLE	BRASS NIPPLE (CLOSE)	
④	1.5" or 2" BALL METER VALVE	FORD 1.5" BF13-666W-NL - 2" BF13-777W-NL	OR EQUAL
⑤	BOLTS & NUTS	STAINLESS STEEL	
⑥	1.5" or 2" WATER METER	BADGER 1.5" M120-150LNSX-HL-GAXX - 2" M170-200LNSX-HL-GAXX	
⑦	1.5" or 2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑧	1.5" or 2" ADAPTOR	FORD C84 PACK JOINT OR PVC MALE ADAPTOR	
⑨	1" NIPPLE	BRASS 6" NIPPLE	
⑩	1" 90° ELBOW	BRASS 90° ELBOW	
⑪	1" CURB STOP	FORD 1" B84-444W-NL	OR EQUAL
⑫	1" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑭	1.5" or 2" BALL CURB VALVE	FORD 1.5" FB1100-6-NL - 2" FB100-7-NL	OR EQUAL
⑮	1.5" or 2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE	OR EQUAL
⑯	METER BOX	FOR 1.5" ASSEMBLY CHRISTY FL36 MODEL 17"x30" (37"x24"x18 7/16") FOR 2" ASSEMBLY NDS 126B W/ COVER (40 3/4"x27 1/2"x18")	OR EQUAL

**NOTES:**

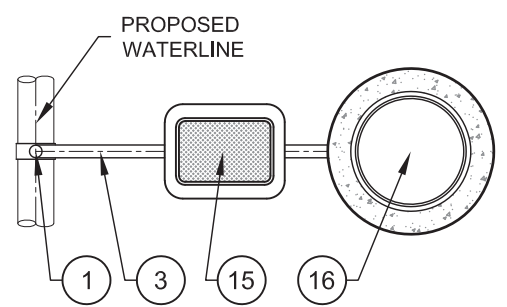
- RESIDENTIAL DOMESTIC WATER METERS REQUIRE CHECK VALVES ON OUTLET SIDE OF METER. COMMERCIAL AND IRRIGATION WATER METERS REQUIRE APPROVED BACKFLOW PREVENTED ASSEMBLIES PER L.H.C. SPECIFICATIONS.
- ALL PARTS ARE FROM FORD METER BOX COMPANY.
- ALL ASSEMBLIES TO BE LOCATED WITHIN CITY RIGHT-OF-WAY.
- STAINLESS STEEL INSERTS MUST BE USED.
- ALL SERVICES OVER 20 FEET IN LENGTH SHALL HAVE 2" SCH 40 SLEEVE FOR 1" AND 4" SCH 40 SLEEVE FOR 1.5" AND 2" ASSEMBLY.



**Standard Details**  
**Water Improvements**

**1.5" & 2"**  
**Water Meter Bypass Assembly**

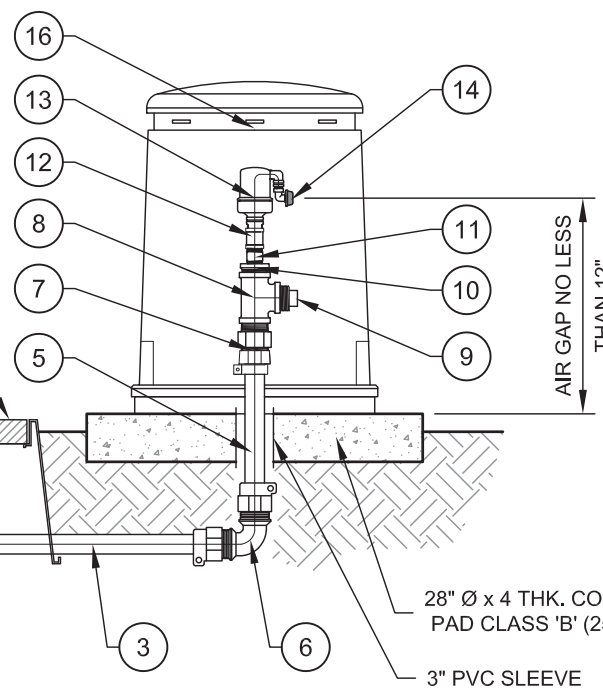
Scale: N.T.S.  
Detail No.  
**306 R**



**PLAN VIEW**

TOP OF VALVE BOX TO BE 1" MIN. HIGHER THAN EXISTING PROPERTY LINE ELEV.  
FINISH GRADE

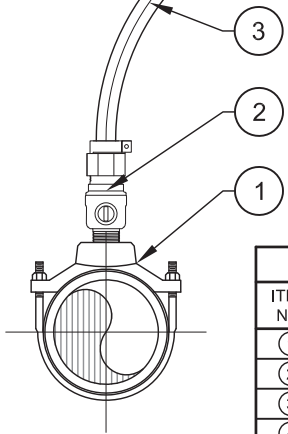
R-O-W



28" Ø x 4 THK. CONCRETE PAD CLASS 'B' (2500 PSI)  
3" PVC SLEEVE

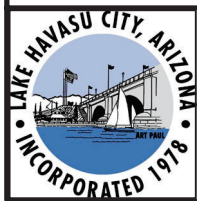
**NOTE:**

1. WRAP ALL COPPER & BRASS WITH 8 MIL POLY WRAP.
2. COMPACT SUB-GRADE UNDER VALVE & ARV ENCLOSURE PAD.
3. IF BLOWOFF IS NOT USED ELIMINATE ITEMS 8 & 9.



**1" COMBINATION AIR/VAC - 2" BLOW OFF DETAIL TABLE**

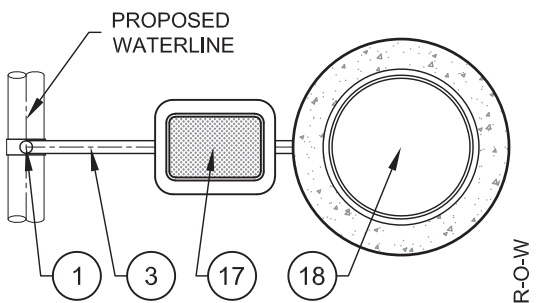
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
①	2" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP4 (AC) OR S91-xx4 (C900) SADDLE WITH IP THREAD
②	2" CORP STOP	FORD FB1100-7-NL
③	2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE OR APPROVED EQUAL
④	2" CURB STOP	FORD B44-777-NL
⑤	2" COPPER TUBE	COPPER TYPE "K" SLEEVED WITH 8 MIL. POLY WRAP
⑥	2" PACK JOINT ELL COUPLING	FORD L44-77-NL
⑦	2" PACK JOINT COUPLING	FORD C84-77-NL
⑧	2" TEE	BRASS TEE
⑨	2" PLUG	BRASS PLUG MIPT
⑩	2"x1" REDUCING BUSHING	BRASS REDUCING BUSHING 2" MIPT x 1" FIPT
⑪	1" NIPPLE	BRASS NIPPLE 1x2
⑫	1" COUPLING	BRASS COUPLING 1" FIPT x FIPT
⑬	1" ARV	ARI D-040 COMBINATION AIR/VACUUM RELEASE VALVE
⑭	3/8" SCREEN	BUG SCREEN 40 MESH
⑮	VALVE BOX	CARSON 1419 VALVE BOX (20 7/8"x15 3/4"x12") TRAFFIC RATED BOX USE CHRISTY MAG 2 (25 1/2"x 17 3/4"x12")
⑯	POLYETHYLENE ENCLOSURE	PIPELINE PRODUCTS ADVANTAGE SERIES ENCLOSURE (VCAS-1830)



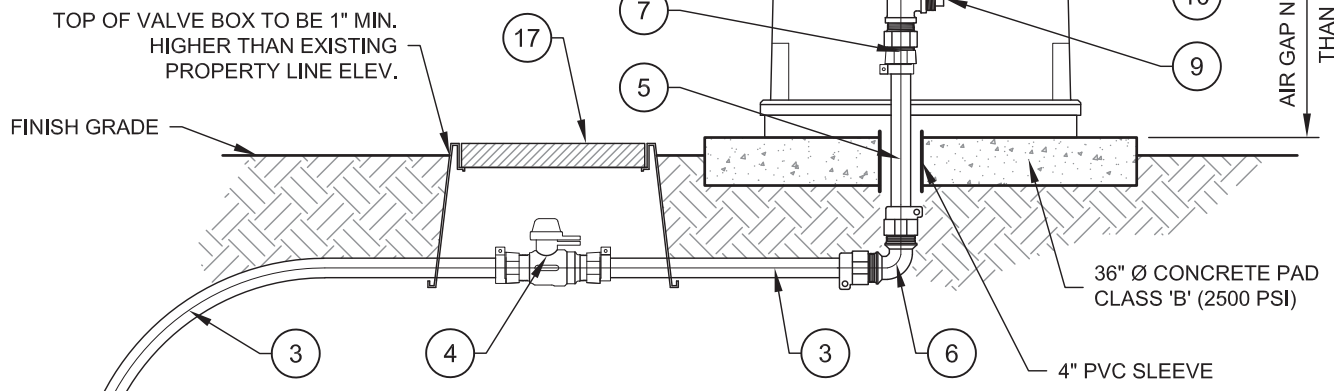
**Standard Details**  
**Water Improvements**

**1" Combination Air/Vacuum Valve & 2" Blow-Off**

Scale: N.T.S.  
Detail No.  
**310 R**

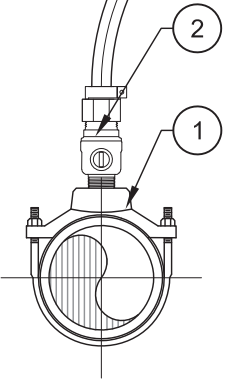


**PLAN VIEW**



**NOTE:**

1. WRAP ALL COPPER & BRASS WITH 8 MIL POLY WRAP.
2. COMPACT SUB-GRADE UNDER VALVE PAD & ARV ENCLOSURE PAD.
3. IF BLOWOFF IS NOT REQUIRED USE ENCLOSURE & CONCRETE PAD FROM DETAIL 310 & ELIMINATE ITEMS 8 & 9.



**2" COMBINATION AIR/VAC - 2" BLOW OFF DETAIL TABLE**

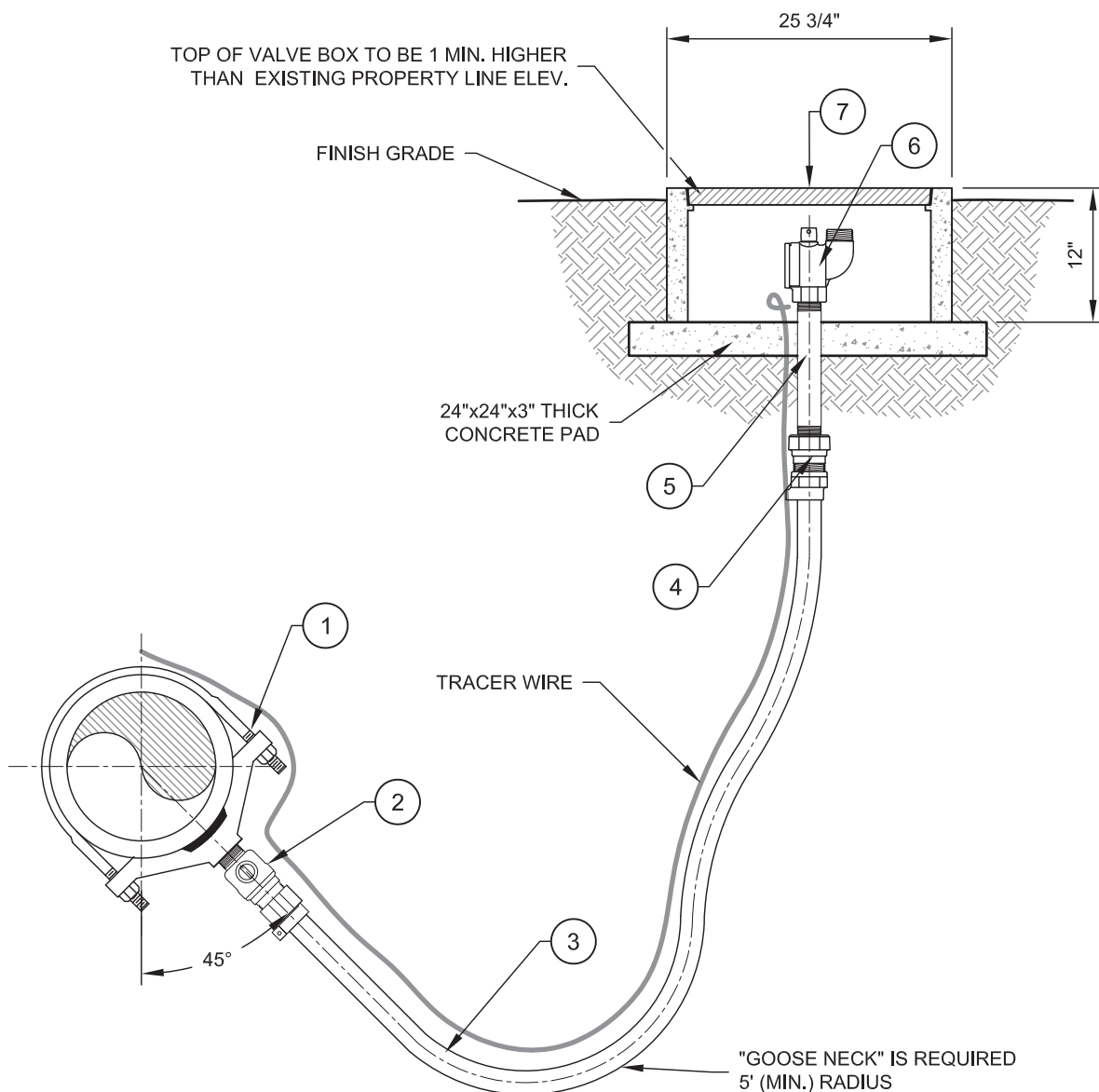
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
①	2" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP4 (AC) OR S91-xx4 (C900) SADDLE WITH IP THREAD
②	2" CORP STOP	FORD FB1100-7-NL
③	2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE OR APPROVED EQUAL
④	2" CURB STOP	FORD B44-777-NL
⑤	2" COPPER TUBE	COPPER TYPE "K" SLEEVED WITH 8 MIL. POLY WRAP
⑥	2" PACK JOINT ELL COUPLING	FORD L44-77-NL
⑦	2" PACK JOINT COUPLING	FORD C84-77-NL
⑧	2" TEE	BRASS TEE
⑨	2" PLUG	BRASS PLUG MIPT
⑩	2" NIPPLE	BRASS NIPPLE 2"x4"
⑪	2" COUPLING	BRASS COUPLING FIPT
⑫	2" ARV	ARI D-040 COMBINATION AIR/VACUUM RELEASE VALVE
⑬	1 1/2" NIPPLE	PVC SCH 80 NIPPLE
⑭	1 1/2" 90	PVC SCH 80 90 FIPT x FIPT
⑮	1 1/2"x1" REDUCING BUSHING	PVC SCH 80 REDUCING BUSHING 1 1/2" MIPT x 1" FIPT
⑯	1" SCREEN	BUG SCREEN 40 MESH
⑰	VALVE BOX	CARSON 1419 VALVE BOX (20 7/8"x15 3/4"x12") TRAFFIC RATED BOX USE CHRISTY MAG 2 (25 1/2"x 17 3/4"x12")
⑱	POLYETHYLENE ENCLOSURE	PIPELINE PRODUCTS ADVANTAGE SERIES ENCLOSURE (VCAS-2436)



**Standard Details**  
**Water Improvements**

**2" Combination Air/Vacuum Valve & 2" Blow-Off**

Scale: N.T.S.  
Detail No.  
**311 R**



BLOW-OFF ASSEMBLY DETAIL TABLE			
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS
①	2" x MAIN SIZE BRASS SADDLE	FORD 202B-xxx-IP7 (AC) OR S91-xx7 (C900) SADDLE WITH IP THREAD	OR EQUAL
②	2" CORP STOP	FORD 2" FB1100-7-NL	OR EQUAL
③	2" POLY TUBING	MUNICIPAL WATER SERVICE PIPE	OR EQUAL
④	2" PACK JOINT COUPLING	FORD 2" C14-77-NL OR EQUAL	
⑤	2"x12" NIPPLE	2"x12" BRASS NIPPLE	
⑥	2" BLOW-OFF VALVE	FORD 2" BLA18-777-TA-NL	OR EQUAL
⑦	METER BOX	MAG SPEC 320 CONCRETE METER BOX (25 3/4"x18"x12")	



Standard Details

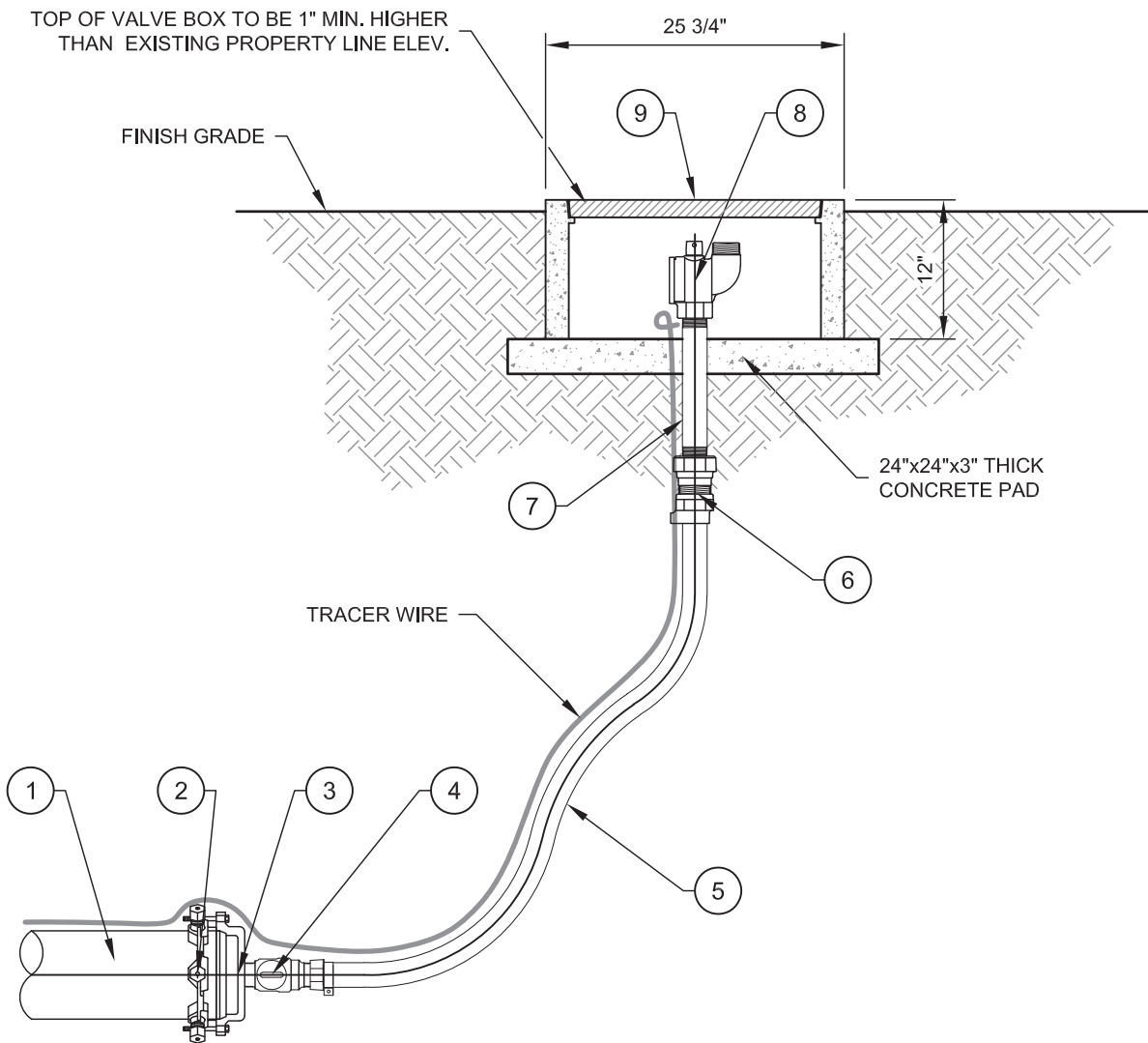
Water Improvements

2" Blow-Off Assembly In Line

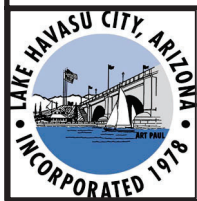
Scale: N.T.S.

Detail No.

313 R



BLOW-OFF ASSEMBLY DETAIL TABLE		
ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
①	S" PVC PIPE	C900 PVC PIPE (S= SIZE IN INCHES)
②	S" JOINT RESTRAINT	EBAA 2000PV JOIST RESTRAINT OR EQUAL (S= SIZE IN INCHES)
③	S" MECHANICAL JOINT CAP	US PIPE MECHANICAL JOINT CAP WITH CENTER THREADED OPENING (S= SIZE IN INCHES)
④	2" CORP STOP	FORD 2" FB1100-7-NL OR EQUAL
⑤	2" POLY TUBING	MUNICIPEX WATER SERVICE PIPE OR APPROVED EQUAL
⑥	2" PACK JOINT COUPLING	2" PACK JOINT COUPLING
⑦	2"x12" NIPPLE	2"x12" BRASS NIPPLE
⑧	2" BLOW-OFF VALVE	FORD 2" BLA18-777-TA-NL OR EQUAL
⑨	METER BOX	MAG SPEC 320 CONCRETE METER BOX (25 3/4" x 18" x 12")

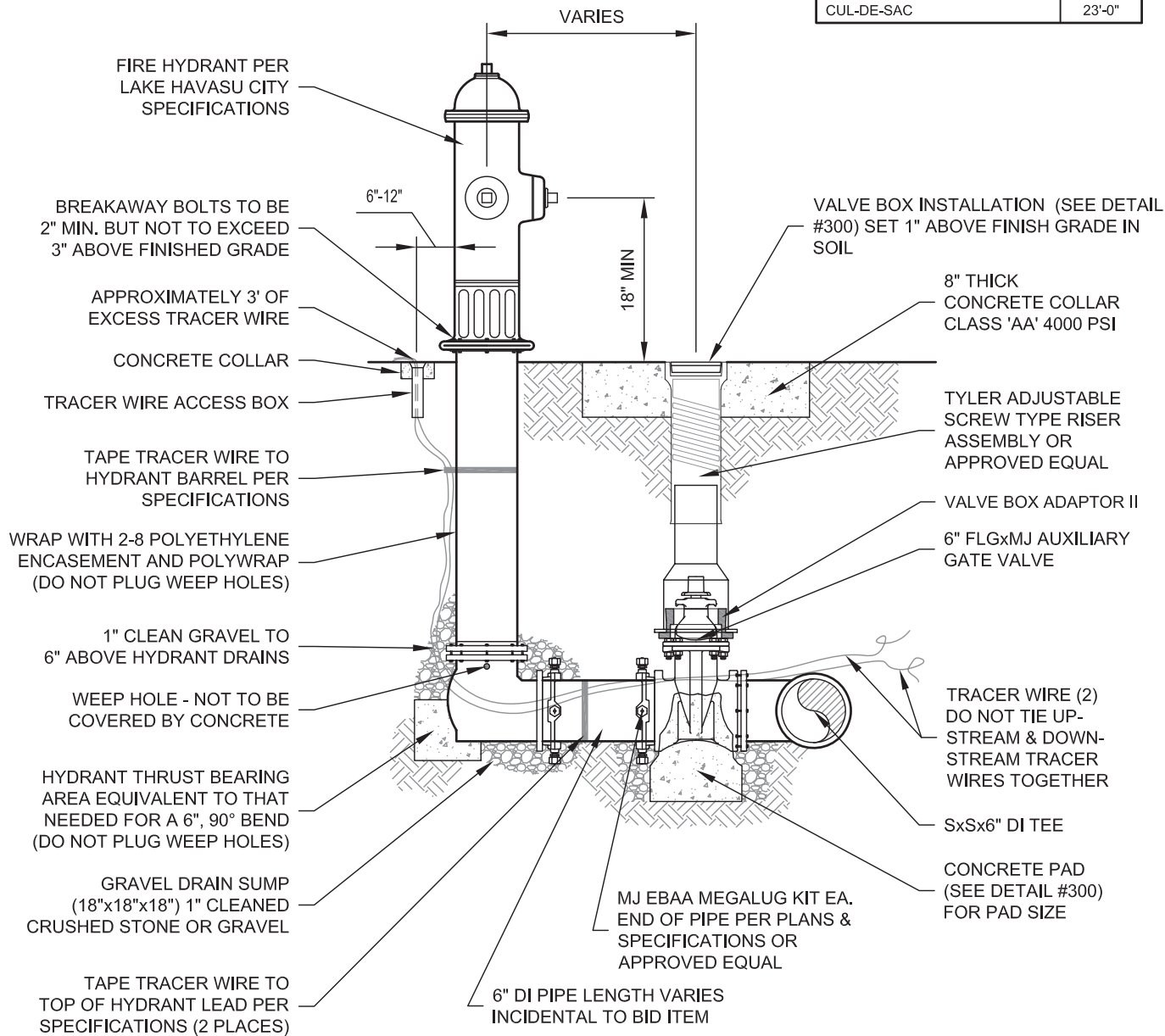


**Standard Details**  
**Water Improvements**

**2" Blow-Off Assembly End of Line**

Scale: N.T.S.  
Detail No.  
**314 R**

STREET TYPE	'D'
BOULEVARD	34'-0"
AVENUE	29'-0"
DRIVE	28'-0"
CUL-DE-SAC	23'-0"



**NOTE:**

1. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO SUBMITTAL. APPROVAL SHALL BE OBTAINED PRIOR TO ORDERING OF PARTS. CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE BARREL LENGTH TO ACCOMMODATE ANY CHANGE IN GRADE OR PIPE ELEVATION.
2. PUMPER CONNECTIONS TO FACE BUILDINGS OR STREET.
3. S = MAIN SIZE.
4. ALL JOINTS ARE TO BE FULLY RESTRAINED.



**Standard Details**

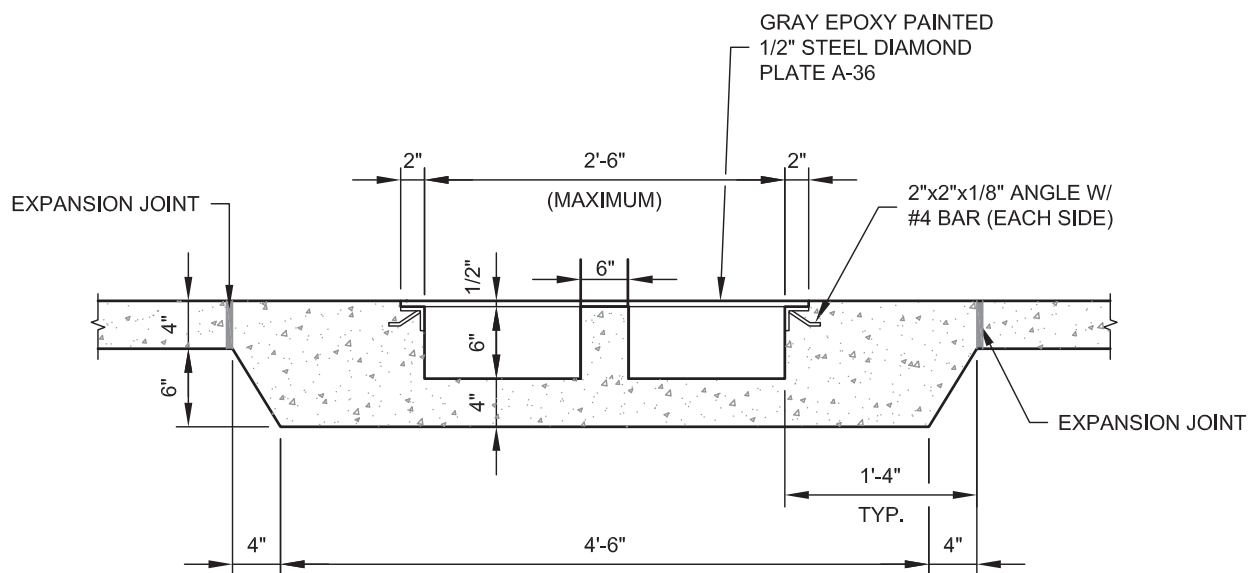
**Water Improvements**

**6" Fire Hydrant**

Scale: N.T.S.

Detail No.

**320 R**



**NOTE:**

1. CONCRETE TO BE CLASS 'AA' (4000 PSI).



**Standard Details**

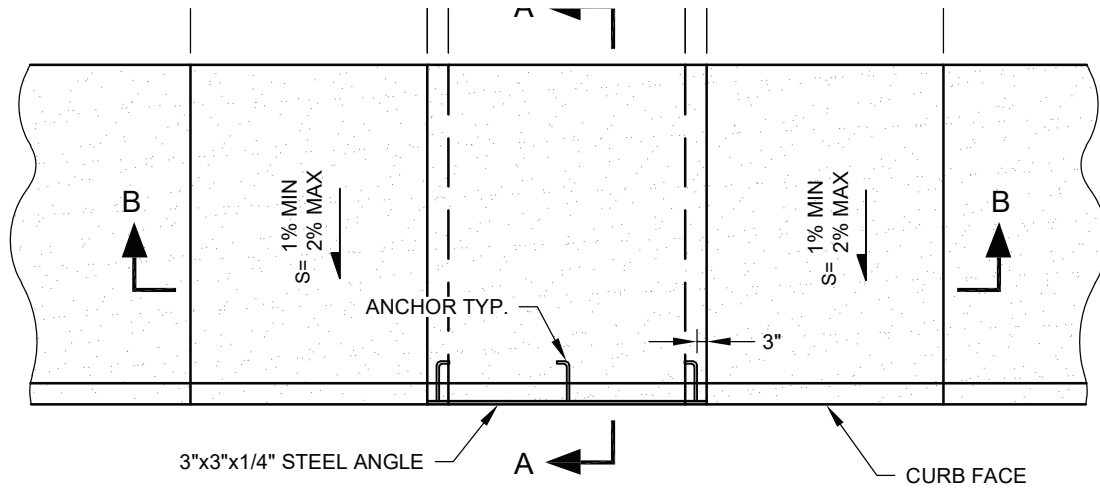
**Stormwater  
Improvements**

**Scuppers**

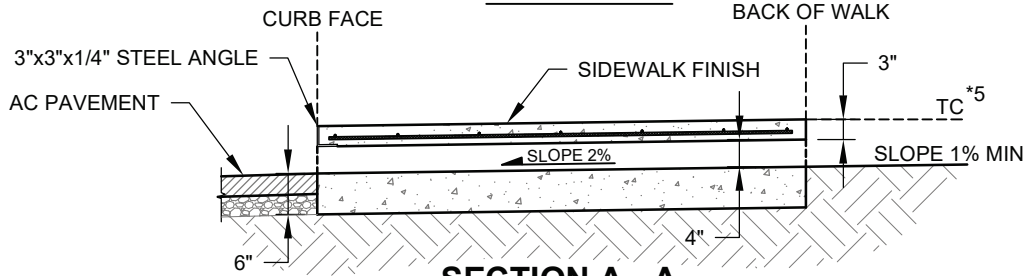
Scale: N.T.S.

Detail No.

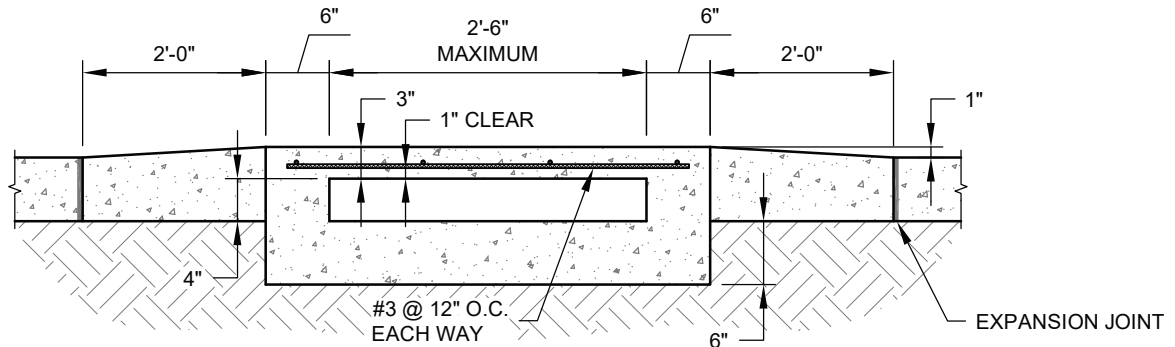
**501 R**



**PLAN VIEW**



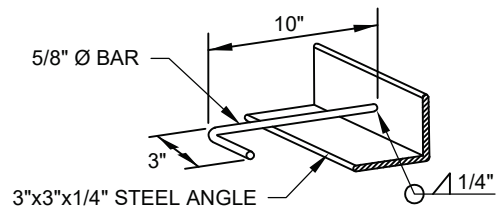
**SECTION A - A**



**SECTION B - B**

**NOTE:**

1. CONCRETE TO BE CLASS 'AA' (4000 PSI).
2. FLOOR OF BOX SHALL BE TROWLED SMOOTH
3. A HEADED STEEL STUD 5/8"x6-3/8" WITH A 1" HEAD ATTACHED BY A FULL PENETRATION BUTT WELD MAY BE USED AS AN ALTERNATE ANCHOR.
4. THE 3" LEG OF THE 5/8" Ø ANCHORS SHALL BE PARALLEL TO THE TOP OF THE SIDEWALK.
- \*5. CONCRETE CURBED CHANNEL FROM PROPERTY



**ANCHOR DETAIL**



**Standard Details**

**Stormwater Improvements**

**Concrete Curb Outlet**

Scale: **N.T.S.**

Detail No.

**501 A**