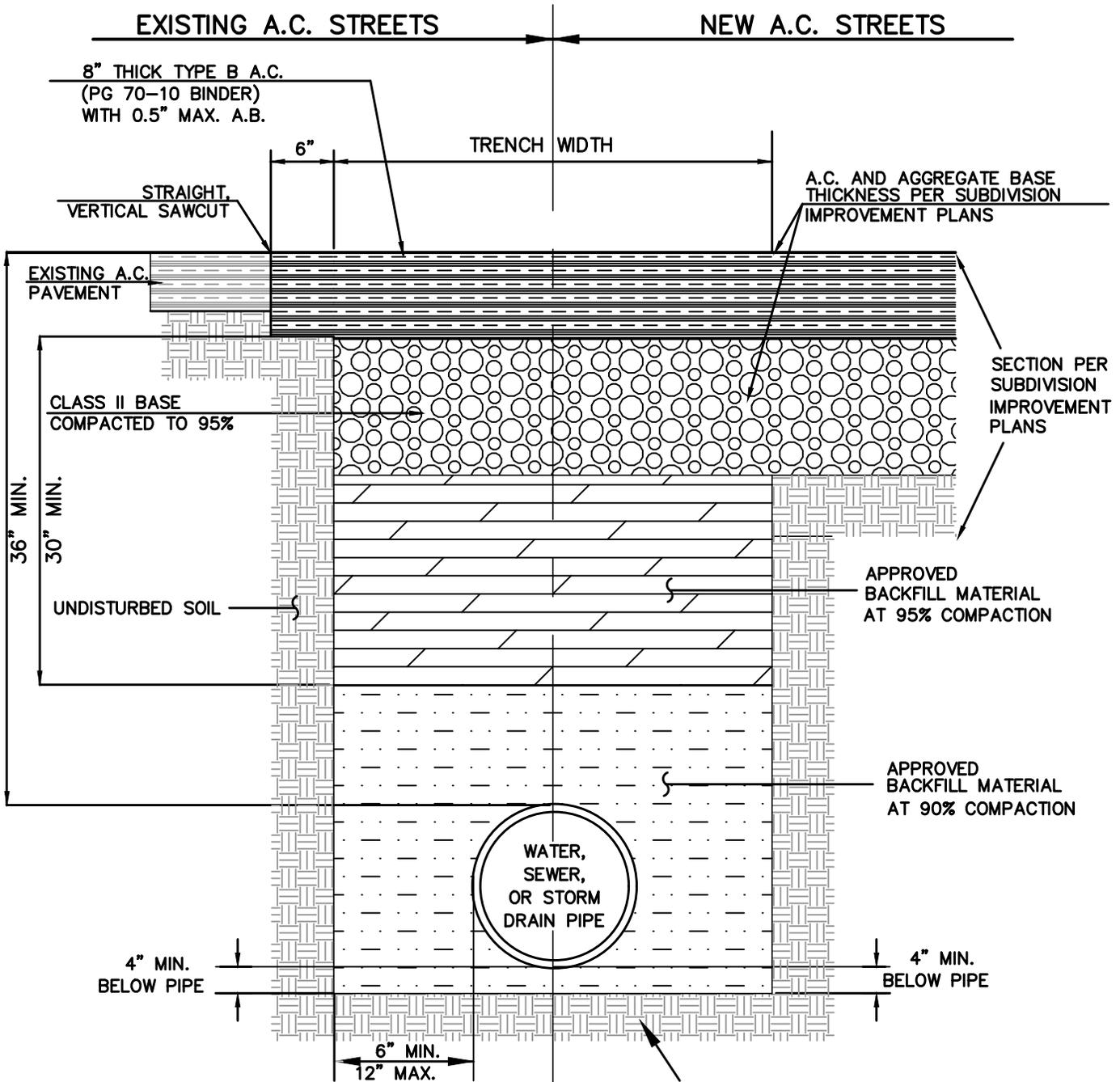


# INSTALLATION OF NEW PIPE



THE BOTTOM OF THE TRENCH SHALL BE GRADED AND PREPARED TO PROVIDE A FIRM AND UNIFORM BEARING THROUGHOUT THE ENTIRE LENGTH OF THE PIPE. SEE SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

SEE GENERAL NOTES PLATE B1-B

**CITY OF ARVIN**

**STANDARD TRENCH  
BACKFILL**

PLATE

**B1-A**

REVISED: OCT. 2014 SHT. 1 OF 1

## GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT USA AT 1-800-227-2600, 48 HOURS PRIOR TO START OF WORK FOR CLEARING UNDERGROUND UTILITIES.
2. CONTRACTOR TO SECURE ENCROACHMENT PERMIT FOR WORK WITHIN CITY RIGHT-OF-WAY.
3. CONTRACTOR TO NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT LEAST 24 HOURS PRIOR TO TRENCHING.
4. ALL WORK TO CONFORM TO THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION, AND/OR ASTM SPECIFICATIONS FOR TESTING. ANY DEVIATIONS FROM THESE STANDARDS SHALL BE APPROVED BY THE CITY ENGINEER.
5. UNLESS OTHERWISE SPECIFIED BY PRELIMINARY SOILS REPORT, BACKFILL MATERIAL TO BE PROPERLY MOISTENED AND PLACED IN 8" MAX. LOOSE LIFTS. ALL BACKFILL MATERIAL SHALL PASS A 1" SIEVE AND BE FREE FROM ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES, AND SHALL BE OF SUCH NATURE THAT IT CAN BE COMPACTED READILY UNDER WATERING AND ROLLING OR TAMPING TO FORM A FIRM, STABLE BASE.
6. CLASS II BASE, 3/4" MAX., TO CONFORM TO SECTION 26 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION, AND COMPACTED TO A MINIMUM OF 95% THICKNESS SHALL BE PER APPROVED PLANS.
7. IN AREAS THAT REQUIRE ASPHALT CONCRETE, PLACE ASPHALT CONCRETE USING TYPE B, 1/2" MAX, MEDIUM GRADE AGGREGATE CONFORMING TO SECTION 39, AND PG GRADE 70-10 ASPHALT BINDER CONFORMING TO SECTION 92 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION.
8. IN AREAS THAT REQUIRE ROAD MIX, PLACE A MINIMUM OF 4" OF ROAD MIXED ASPHALT SURFACING CONFORMING TO SECTION 39 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION.
9. SAWCUT AND TRIM EXISTING STREET PAVING. APPLY PAINT BINDER TO VERTICAL SURFACES PRIOR TO PAVING. PAINT BINDER TO CONFORM TO SECTION 39-4.02 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION. SEAL FINISH SAW-CUT JOINT WITH APPROVED SEALANT WHEN FINISHED SURFACE IS CONSTRUCTED.
10. MINIMUM TRENCH WIDTH MEASURED AT OUTSIDE OF PIPE SHALL BE PIPE OUTSIDE DIAMETER PLUS 12". MAXIMUM TRENCH WIDTH MEASURED AT OUTSIDE OF PIPE SHALL BE THE OUTSIDE DIAMETER OF THE PIPE BELL OR COUPLING PLUS 24". PIPE SHALL BE CENTERED IN THE TRENCH. CONTRACTOR SHALL INSTALL SMOOTH STEEL PLATES TO COVER UN-BACKFILLED TRENCHES AT THE END OF EACH DAY. THE TOP OF THE STEEL PLATE SHALL BE FLUSH WITH THE ADJACENT SURFACE AS DIRECTED BY THE CITY ENGINEER.
11. THE CITY PUBLIC WORKS DEPARTMENT DESIGNATED INSPECTOR MAY REQUIRE COMPACTION TESTS. ALL TESTS ARE TO BE ARRANGED AND PAID FOR BY THE CONTRACTOR AT TIMES AND LOCATIONS DESIGNATED BY THE CITY'S INSPECTOR. METHOD OF TESTING TO BE ASTM 1557-5 LAYER.
12. THE TRENCH SHALL BE BACKFILLED IN ACCORDANCE WITH THESE DETAILS WITHIN 5 WORKING DAYS AFTER COMPLETION OF TRENCHING OPERATIONS. EITHER A TEMPORARY COLD ASPHALT MIX OR FINAL PAVING IS TO COMPLETED WITHIN 10 WORKING DAYS AFTER COMPLETION OF BACKFILL OPERATIONS. IF A TEMPORARY COLD MIX IS PROVIDED, FINAL PAVING IS TO BE COMPLETED WITHIN 30 WORKING DAYS AFTER PLACEMENT OF THE COLD MIX. CONTRACTOR SHALL MAINTAIN TEMPORARY COLD MIX UNTIL SUCH TIME AS FINAL PAVING IS COMPLETED.
13. ALL APPURTENANCES SUCH AS VALVE BOXES, GRATES, MANHOLES, ETC. SHALL BE BROUGHT TO GRADE AS REQUIRED WITHIN 20 WORKING DAYS OF COMPLETION OF PAVING.
14. TRAFFIC SHALL BE ALLOWED TO PASS THROUGH THE CONSTRUCTION SITE. THE CONTRACTOR SHALL INSTALL SIGNS, LIGHTS, BARRICADES AND OTHER FACILITIES FOR THE CONVENIENCE, SAFETY AND DIRECTION OF PUBLIC TRAFFIC. IF NECESSARY, THE CONTRACTOR SHALL PROVIDE COMPETENT FLAGMEN WHOSE ONLY DUTY SHALL BE TO DIRECT THE MOVEMENT OF TRAFFIC THROUGH OR AROUND THE WORK AREA. ALL TRAFFIC CONTROL SHALL CONFORM TO SECTION 12 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION.
15. IN AREAS OF NO PAVEMENT OR PHASED SUBDIVISIONS OR WHERE NO A.C. PAVEMENT AND/OR AGGREGATE BASE IS REQUIRED, THE COMPACTED BACKFILLED MATERIAL SHALL BE APPLIED TO A DEPTH OF 30" BELOW THE EXISTING GRADE AND SHALL BE COMPACTED TO 95% COMPACTION.
16. UTILITY POTHOLE (AND/OR) SMALL BELL HOLE. STREET EXCAVATION TO BE BACKFILLED PER CITY PUBLIC WORKS INSPECTOR.

**CITY OF ARVIN**

**STANDARD TRENCH  
BACKFILL**

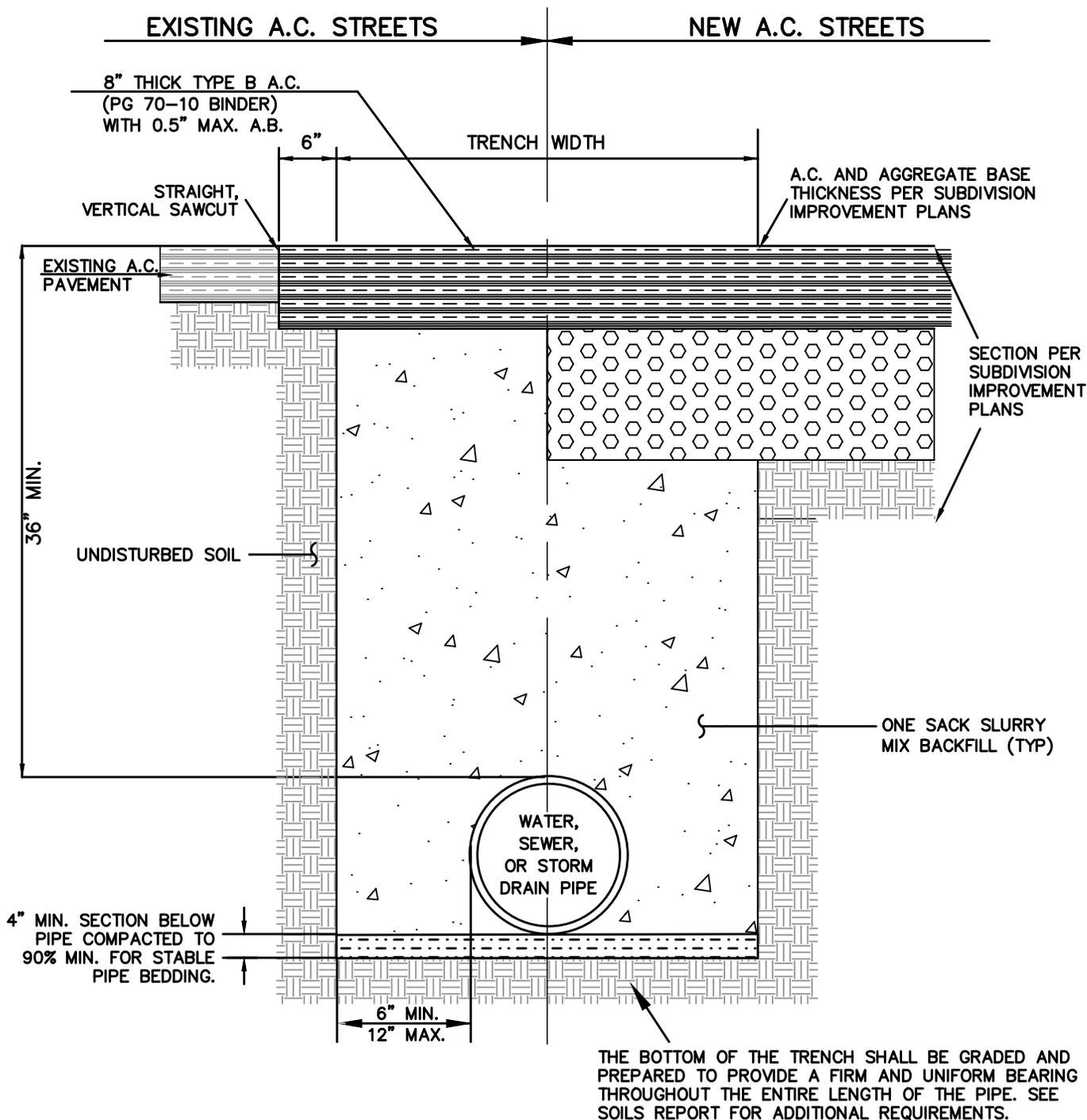
PLATE  
**B1-B**

REVISED: OCT. 2014

BY: AV

SHT. 1 OF 1

# INSTALLATION OF NEW PIPE



SEE GENERAL NOTES PLATE B2-B

**CITY OF ARVIN**

**ONE SACK SLURRY  
TRENCH BACKFILL**

PLATE

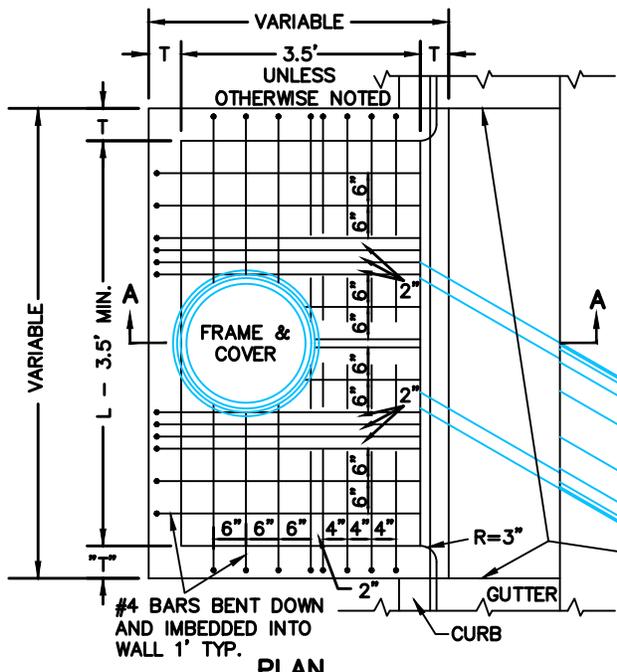
**B2-A**

REVISED: OCT. 2014 SHT. 1 OF 1

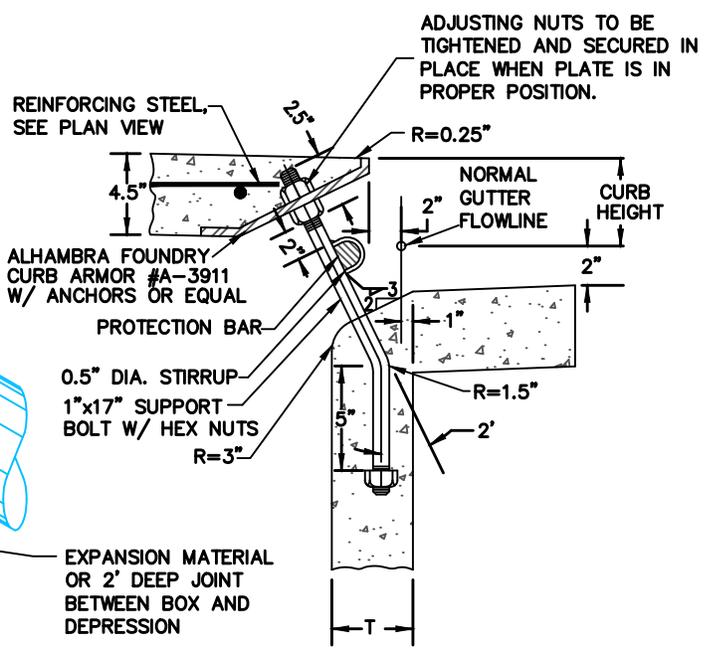
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	<b>CITY OF ARVIN</b>	
	<b>ONE SACK SLURRY TRENCH BACKFILL</b>	PLATE <b>B2-B</b>
	REVISED: OCT. 2014	BY: AV
		SHT. 1 OF 1

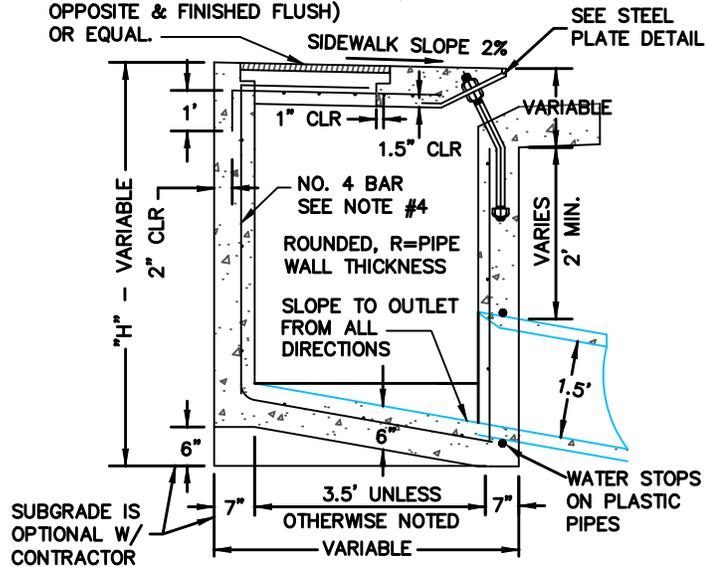


PLAN

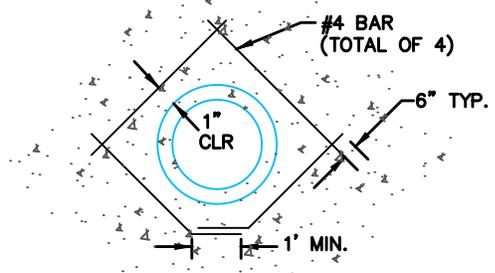


STEEL PLATE DETAIL

ALHAMBRA FOUNDRY GALV. FRAME AND COVER #A1530 WITH 2.75" STAINLESS STEEL SOCKET HEAD SET SCREWS (SET OPPOSITE & FINISHED FLUSH) OR EQUAL.



SECTION A-A



REINFORCING AROUND PIPE

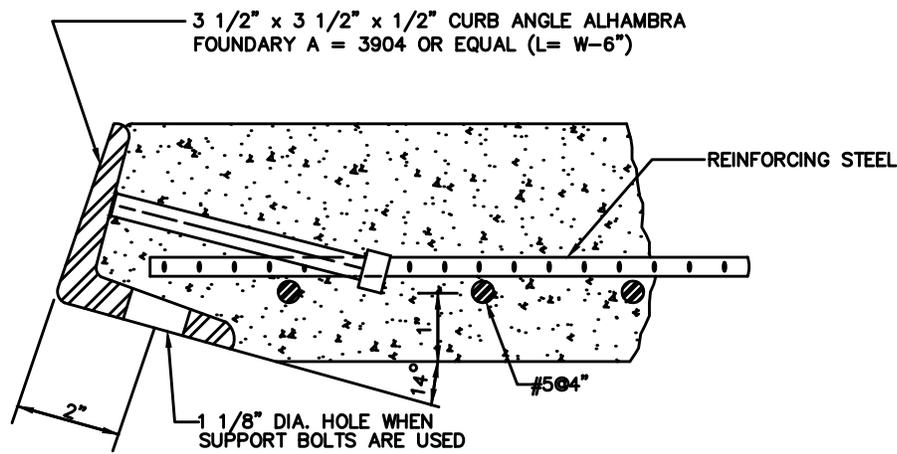
NOTES:

1. ALL CONCRETE SHALL BE CLASS "A" AND SHALL BE WITHIN 2.5" TO 5.0" SLUMP.
2. SLAB TO BE POURED MONOLITHIC WITH SIDEWALK WHERE SIDEWALK IS REQUIRED OR NEEDS REPLACING. SURFACES OF ALL EXPOSED CONCRETE SHALL MATCH SLOPE, FINISH, COLOR AND SCORING OF ADJACENT CONCRETE.
3. WALL THICKNESS: T=6" EXCEPT WHEN H>8', T=8" OR L>8', T= 8". CATCH BASIN WALLS SHALL BE INCREASED BY 2" MINIMUM IN THICKNESS IF POURED AGAINST NATURAL GROUND IN LIEU OF OUTSIDE FACE FORMS.
4. WALL REINFORCING NOT REQUIRED WHEN H=8.0' OR LESS AND L=7' OR LESS. WALLS EXCEEDING THESE LIMITS SHALL BE REINFORCED WITH NO. 4 BARS AT 1.5" O.C. BOTH WAYS. ALL REINFORCING SHALL BE NO. 4 BARS 1.5" CLEAR OF INSIDE FACE UNLESS OTHERWISE SHOWN.
5. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AFTER FABRICATION.
6. SUPPORT BOLTS SHALL BE INSTALLED WHEN LENGTH OF OPENING EXCEEDS 5' O.C. AND SHALL BE SPACED BETWEEN 3' TO 5' O.C.
7. WHEN CURB OPENING EXCEEDS 5.5", A PLAIN ROUND STEEL PROTECTION BAR 1" IN DIAMETER SHALL BE INSTALLED. BAR SHALL BE IMBEDDED 5" AT EACH END.
8. PIPE SHALL BE AS SPECIFIED OR AS DIRECTED BY THE CITY ENGINEER. THE ANGULAR CUT ON THE PIPE SHALL BE MADE AS DIRECTED BY THE CITY ENGINEER.
9. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.

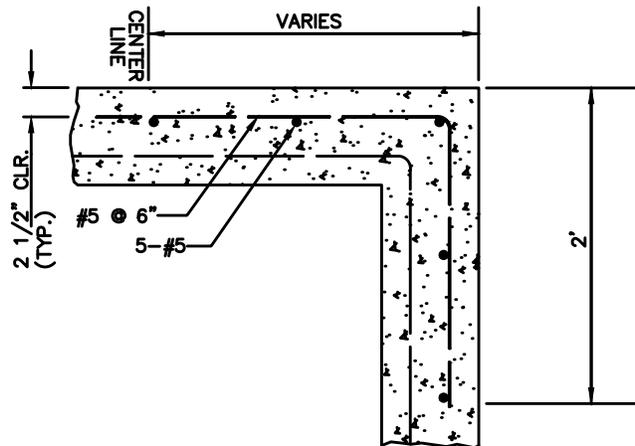
RESOLUTION # \_\_\_\_\_

\_\_\_\_\_  
CITY ENGINEER

<b>CITY OF ARVIN</b>	
<b>CATCH BASIN</b>	PLATE <b>D1</b>
REVISED: NOV. 2014 SHT. 1 OF 1	



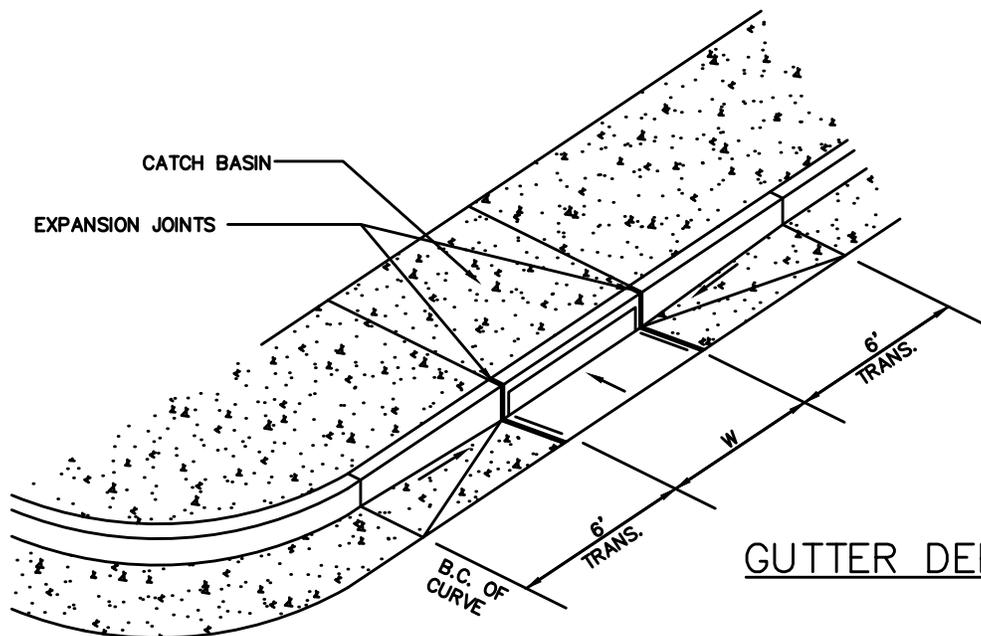
CURB ANGLE DETAIL



CORNER REINFORCING DETAIL

WALL THICKNESS "T" SHALL BE AS FOLLOWS:

- $W \geq 8'$ ,  $T = 8''$
- $H \geq 8'$ ,  $T = 8''$
- OTHERWISE  $T = 6''$



GUTTER DEPRESSION DETAIL

RESOLUTION # \_\_\_\_\_

\_\_\_\_\_  
CITY ENGINEER

**CITY OF ARVIN**

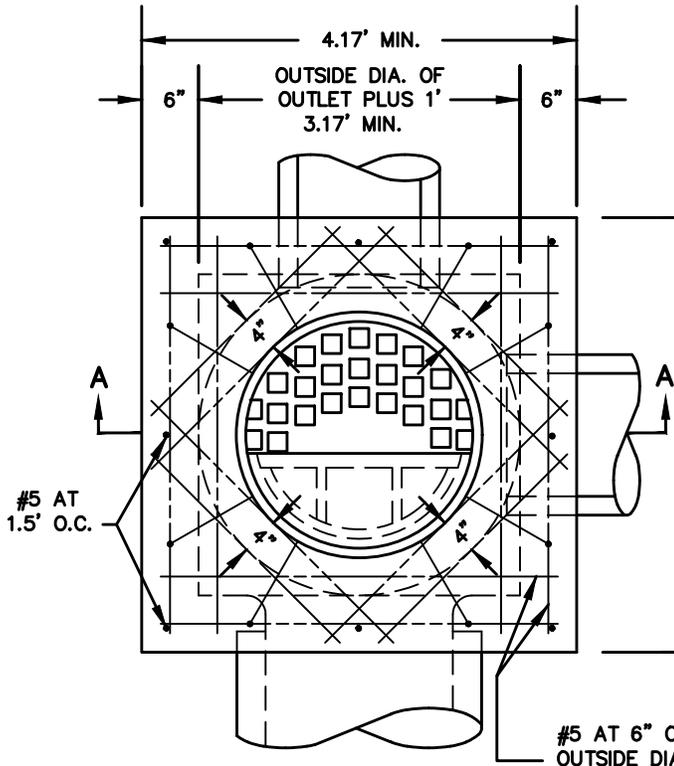
**CATCH BASIN DETAILS**

REVISED: NOV. 2014

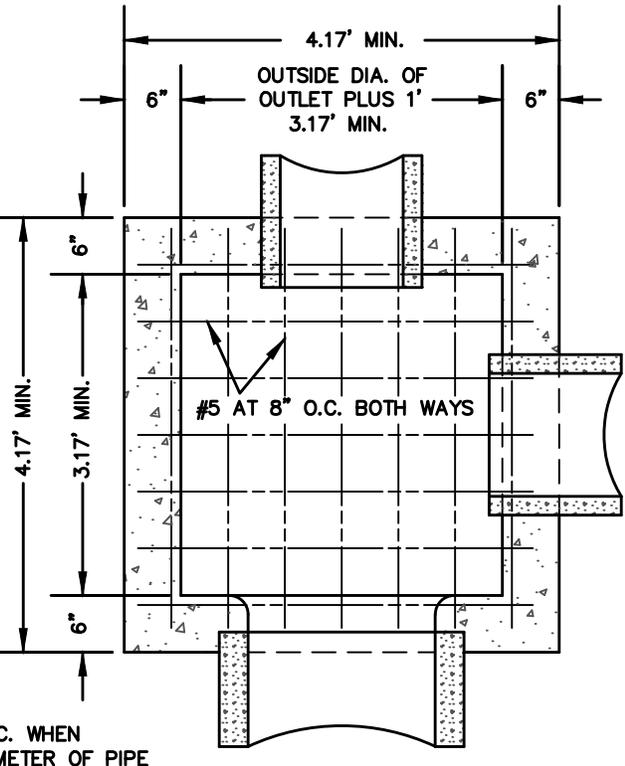
SHT. 1 OF 1

PLATE

**D1-A**

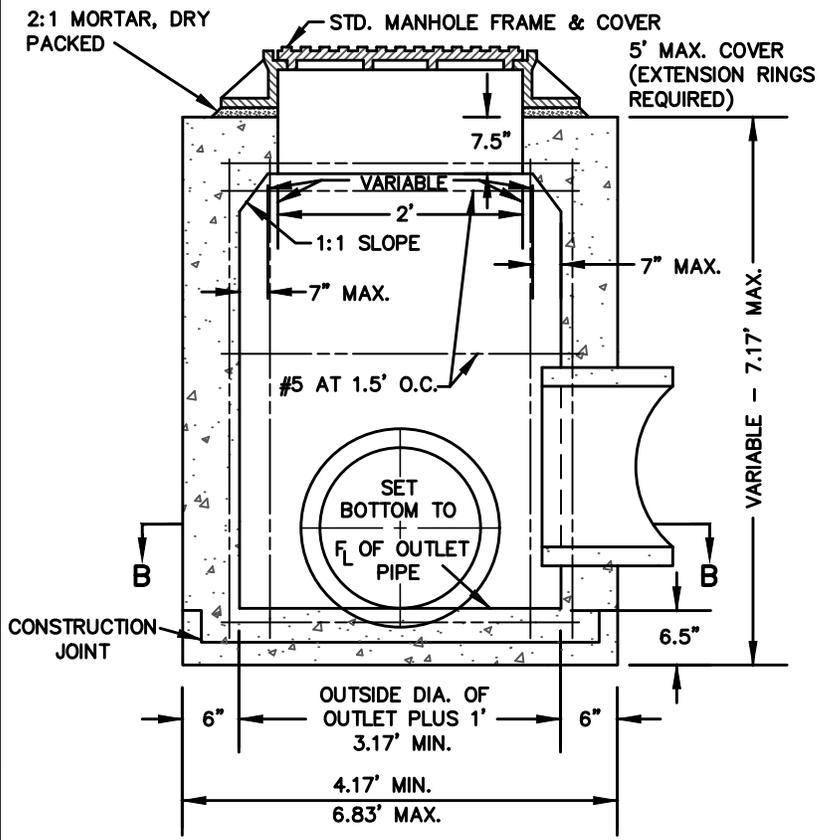


PLAN



SECTION B-B

#5 AT 6" O.C. WHEN OUTSIDE DIAMETER OF PIPE IS 2.5' OR GREATER.



SECTION A-A

NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. ALL CONCRETE SHALL BE CLASS "A" UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
3. ALL REINFORCING STEEL SHALL BE OF #5 REINFORCING BARS AND BENT AS SHOWN.
4. MANHOLE COVER SHALL HAVE CAST THEREON IN RAISED LETTERS "DRAIN". LETTERING IS TO BE 3" IN HEIGHT AND RAISED 0.125".

RESOLUTION # 02-43

CITY OF ARVIN

*Harold J. [Signature]*  
CITY ENGINEER

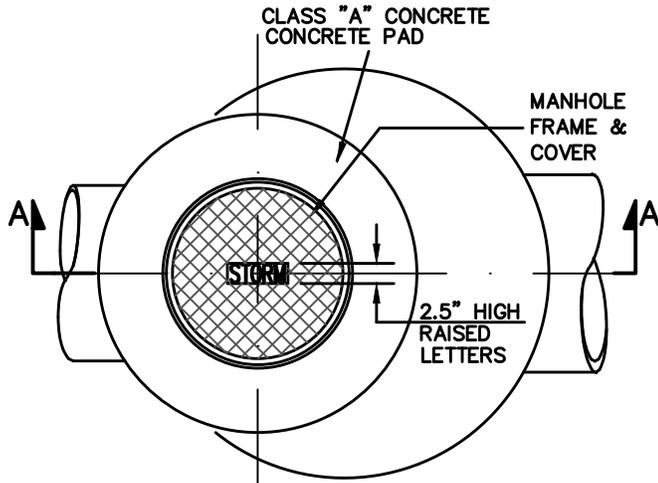
JUNCTION BOX

PLATE  
D2

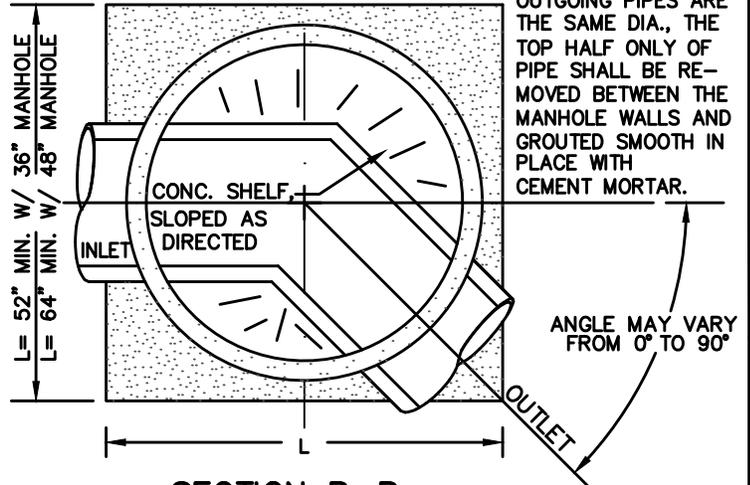
REVISED: NOV. 2002 SHT. 1 OF 1

WHERE INCOMING AND OUTGOING PIPE ARE DIFFERENT SIZES, THE LOWER HALVES OF BOTH PIPES SHALL BE EXTENDED 8" BEYOND THE INSIDE WALLS OF THE MANHOLE AND SHAPE A TRANSITION CHANNEL BETWEEN THEM.

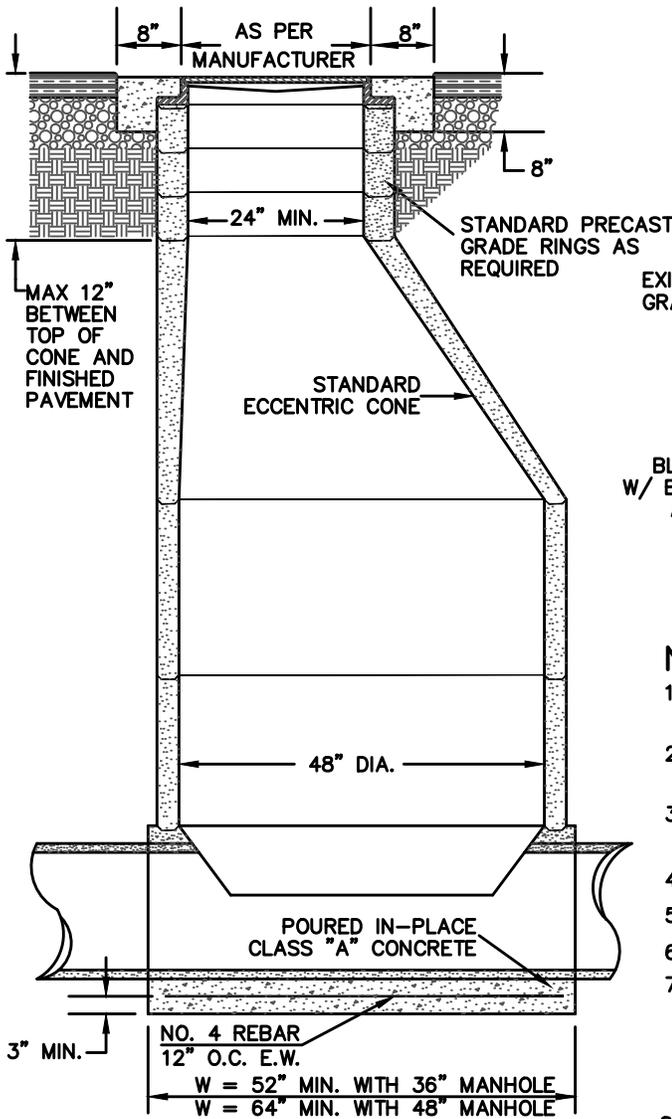
WHERE INCOMING AND OUTGOING PIPES ARE THE SAME DIA., THE TOP HALF ONLY OF PIPE SHALL BE REMOVED BETWEEN THE MANHOLE WALLS AND GROUTED SMOOTH IN PLACE WITH CEMENT MORTAR.



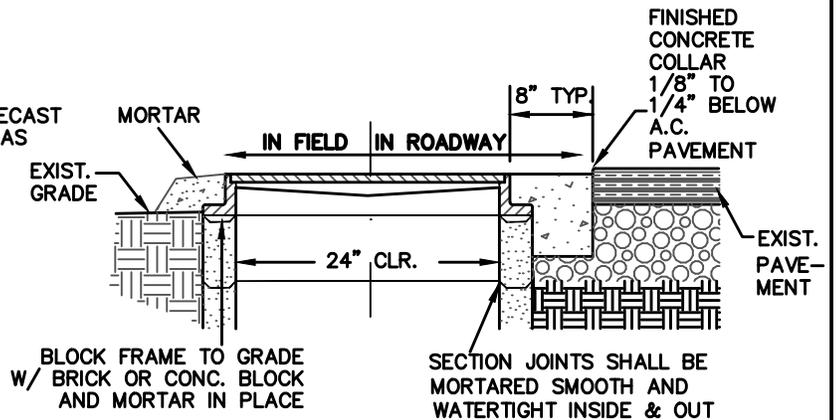
PLAN VIEW



SECTION B-B



SECTION A-A



**STANDARD MANHOLE FRAME & COVER**

**NOTES:**

1. MANHOLE FRAME SHALL WEIGH NOT LESS THAN 165 LBS. AND THE COVER NOT LESS THAN 150 LBS.
2. ALL MATERIALS USED IN MANUFACTURING OF MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM 48-30.
3. FRAME AND COVER BEARING SURFACES MACHINED TO ASSURE CLOSE, QUITE FIT.
4. CASTINGS SHALL BE DIPPED IN BLACK BITUMINOUS PAINT.
5. FRAME AND COVER SHALL EXCEED H-20 WHEEL LOADING.
6. STANDARD COVER MARKINGS: "STORM"
7. MANHOLES CONSTRUCTED ON STORM DRAIN PIPE OF 36" DIA. OR LARGER SHALL USE 48" DIA. SHAFT, FOR STORM DRAIN PIPE LESS THAN 36" DIA. SHALL USE 36" DIA. SHAFT, AND SHALL BE SPACED AT INTERVALS NOT TO EXCEED 600' ALONG THE CONDUIT. SEE SECTION 46-5.04 OF THE SPECIFICATIONS.
8. MANHOLE FRAME AND COVERS SHALL BE: ALHAMBRA FOUNDRY A-1254 OR APPROVED EQUAL.

RESOLUTION # \_\_\_\_\_

\_\_\_\_\_  
CITY ENGINEER

**CITY OF ARVIN**

**STORM DRAIN MANHOLE**

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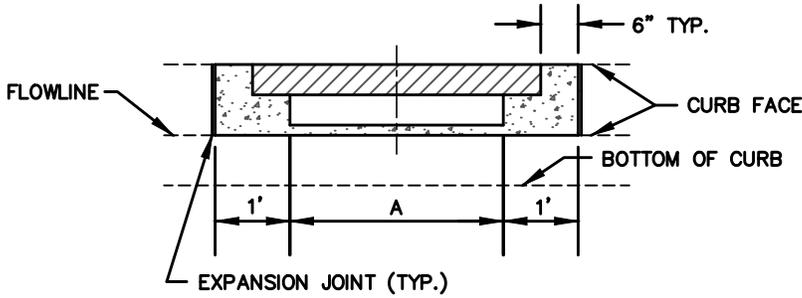
PLATE

**D3**

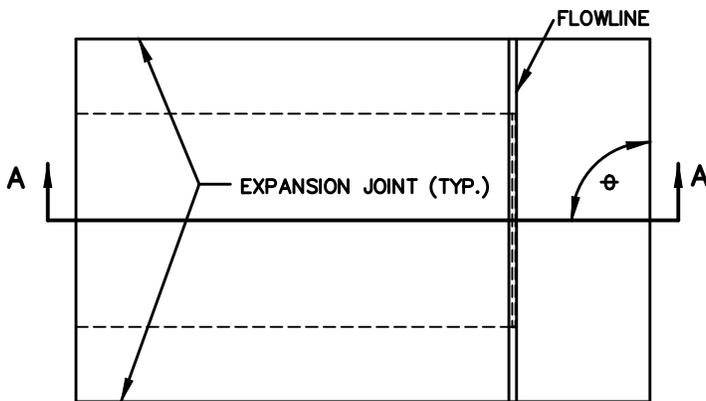
ALHAMBRA FOUNDRY COMPANY  
 NO. A-3900, FACE ANGLE  
 2.375" x 2.375" x 0.375" GALVANIZED

**NOTES:**

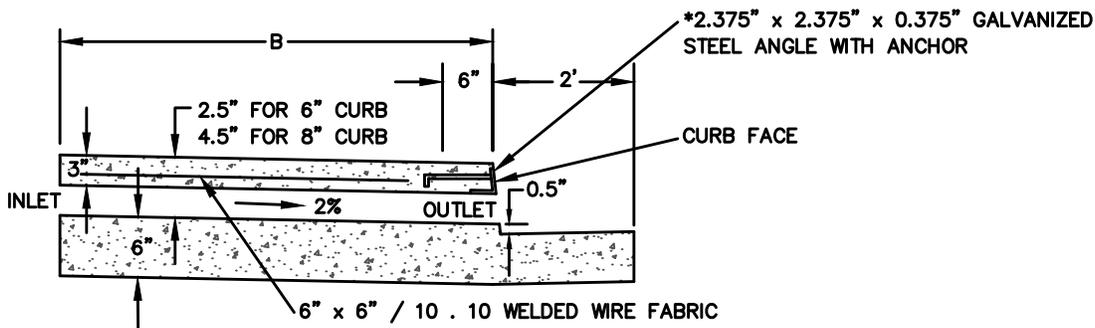
1. SIDEWALK UNDERDRAIN ONLY TO BE USED WITH THE APPROVAL OF THE CITY ENGINEER.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED, "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
3. ALL CONCRETE SHALL BE CLASS "A" AND SHALL HAVE A SLUMP WITHIN 2.5" TO 4.0".
4. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION, WITH COMPACTION OF 90% TO A DEPTH OF 6".
5. EXISTING SIDEWALK SHALL BE SAWCUT AND REMOVED AT THE FIRST SCORING LINE AT OR BEYOND THE PLANNED JOINT. ALL EXPOSED SURFACES OF THE SIDEWALK UNDERDRAIN SHALL MATCH THE EXISTING CURB, GUTTER AND SIDEWALK SURFACES.
6. EXPANSION JOINT FILLER MATERIAL SHALL BE PREFORMED OF A DURABLE, RESILIENT COMPOUND.
7. DIMENSIONS  
 A = GUTTER WIDTH, 1' < A < 3'  
 B = SIDEWALK WIDTH  
 $\phi = 90^\circ$   
 ALL DIMENSIONS TO BE APPROVED BY CITY ENGINEER.
8. ALL INLET MODIFICATIONS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.



**ELEVATION**



**PLAN**



**SECTION A-A**

\* ANCHOR IS 0.375" DIA. x 4"

RESOLUTION # 02-43

**CITY OF ARVIN**

PLATE

**D4**

*Harold J. Key*  
 CITY ENGINEER

**SIDEWALK UNDERDRAIN**

REVISED: NOV. 2002 SHT. 1 OF 1

## DRAINAGE DESIGN STANDARDS

1. USE THE CURRENT EDITION OF THE KERN COUNTY SUBDIVISION STANDARDS, SECTION 301, "STANDARDS FOR DRAINAGE" AND THE KERN COUNTY HYDROLOGY MANUAL SHALL BE THE BASIS FOR DESIGN.

RESOLUTION # 02-43

**CITY OF ARVIN**



CITY ENGINEER

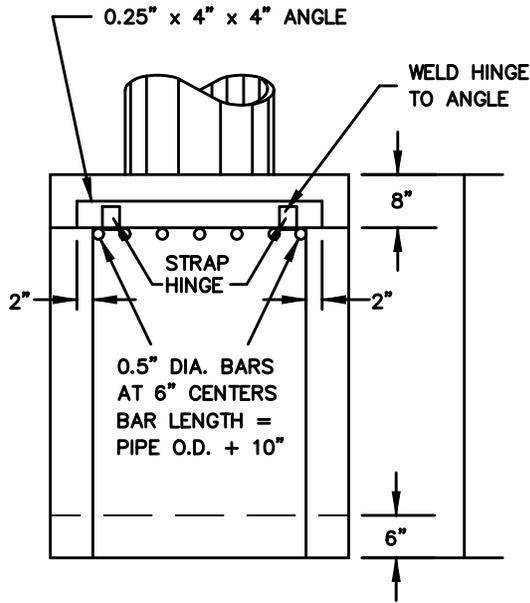
**DRAINAGE DESIGN  
STANDARDS**

REVISED: NOV. 2002

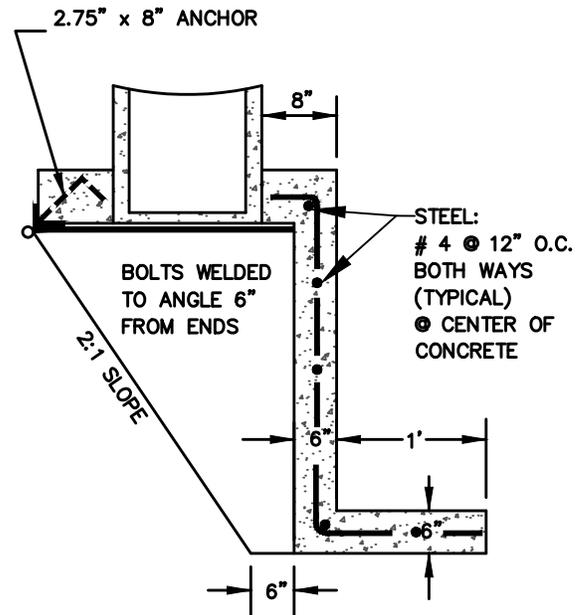
SHT. 1 OF 1

PLATE  
**D5,  
D6**

\* UNLESS OTHERWISE ALLOWED



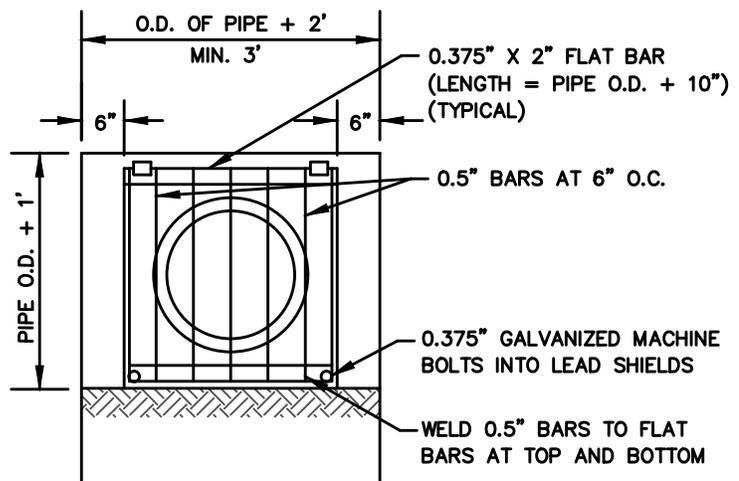
PLAN



SECTION

**NOTES:**

1. ALL WORK SHOWN SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. SIDE SLOPES SHALL NOT EXCEED 2:1.
3. ALL EXPOSED METAL IN THE OUTLET STRUCTURE SHALL NOT BE LESS THAN 20 AND SHALL CONFORM TO THE FOLLOWING GRADING: DIPPED GALVANIZED AFTER FABRICATION.
4. CONCRETE SHALL CONTAIN NO ADDITIVES UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER.
5. CONCRETE SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND COMPLYING TO SEC. 90-7.01B OF THE STANDARD SPECIFICATIONS.
6. NO PIPE BELLS SHALL BE PLACED IN THE STRUCTURE.



ELEVATION  
OUTLET STRUCTURE

RESOLUTION # 02-43

*Harold J. [Signature]*  
CITY ENGINEER

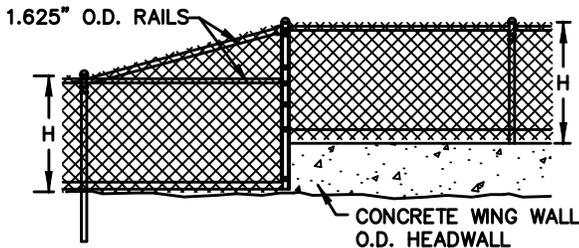
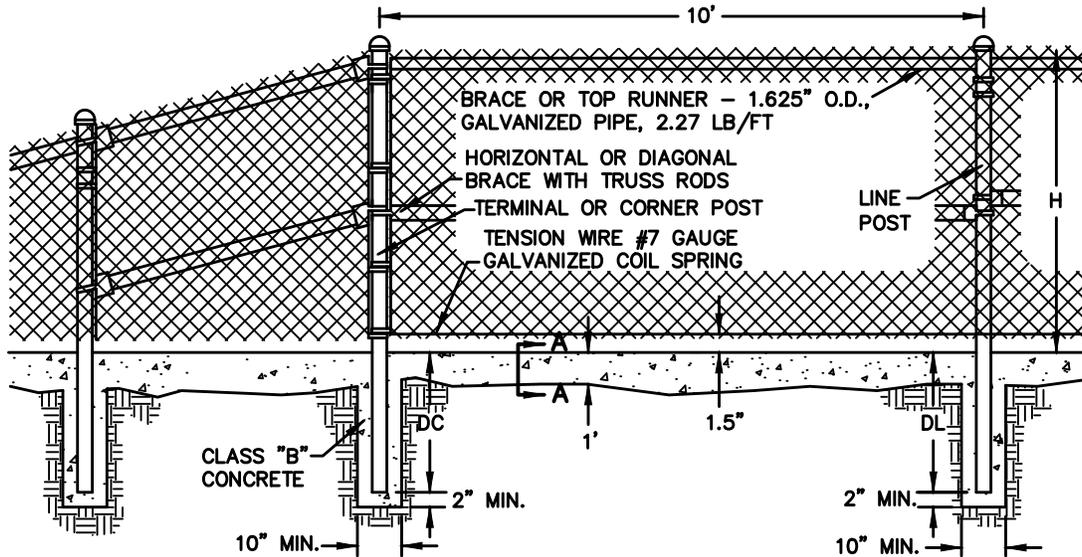
CITY OF ARVIN

TYPICAL  
OUTLET STRUCTURE

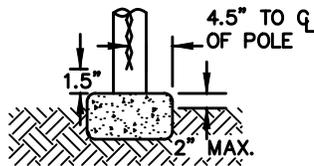
PLATE

D7

REVISED: NOV. 2002 SHT. 1 OF 1



TYPICAL DETAIL AT CULVERT ENDWALLS



SECTION A-A

NOTES:

1. INSTALLATION OF FENCING AND GATES SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. A 6" x 9" CLASS "B" CONCRETE CURB SHALL BE CONSTRUCTED UNDER ALL FENCES. WITHIN CITY PARKS A 6" THICK x 12" WIDE CURB SHALL BE USED. IN EITHER CASE, A 1.5" CLEARANCE BETWEEN THE CURBING AND FABRIC SHALL BE USED.
3. FABRIC SHALL BE FASTENED TO GATE POST, TERMINAL POST, OR CORNER POST WITH 0.25" x 0.75" STRETCHER BAR BANDS AT 8" ON CORNER.
4. CORNER POSTS SHALL BE INSTALLED AT ALL ANGLES IN FENCE LINE EXCESS OF 10 DEGREES.
5. FABRIC SHALL BE FASTENED TO LINE POST WITH FABRIC BANDS SPACED APPROXIMATELY 14" APART, AND TO TOP RUNNER AND BOTTOM TENSION WIRES WITH FABRIC BANDS SPACED APPROXIMATELY 24" APART.
6. FABRIC SHALL CONFORM TO ASTM 1-392, CLASS 1.
7. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION WITH COMPACTION OF 85% TO A DEPTH OF 6".
8. CONCRETE SHALL BE CLASS "B" AND SHALL BE WITHIN 2.5" AND 5.5" SLUMP.
9. SURFACE OF CONCRETE SHALL BE TROWELED SMOOTH AND BRUSH FINISHED.
10. CONCRETE SHALL CONTAIN NO ADDITIVES UNLESS PRIOR APPROVAL IS OBTAINED IN WRITING FROM THE CITY ENGINEER.
11. END, CORNER AND GATE POSTS SHALL BE BRACED TO THE NEAREST LINE POST WITH GALVANIZED DIAGONAL OR HORIZONTAL BRACES USED AS COMPRESSION MEMBERS AND GALVANIZED 0.375" STEEL TRUSS RODS WITH TURNBUCKLES OR TRUSS TIGHTENER USED AS TENSION MEMBERS.

FENCING TABLE	
HEIGHT (H)	6'-0"
DEPTH AT CORNER POST (DC)	3'-0"
DEPTH AT LINE POST (DL)	2'-6"
TERMINAL POST OR CENTER POST	2-7/8" O.D. GALV. PIPE 5.79 LBS./FT.
LINE POST	H COLUMN 2-1/4" x 1-7/8" 4.10 LBS./FT. 2-3/8" O.D. GALV. PIPE 3.65 LBS./FT.
FENCE FABRIC	9 GAUGE, 2" MESH, GALV. AFTER WEAVING, KNUCKLED TOP AND BOTTOM 9 GAUGE, 1.75" TENNIS FENCE MESH, GALV. AFTER WEAVING, KNUCKLED TOP AND BOTTOM
REDWOOD SLATS	2-3/16" x 1/4"

RESOLUTION # 02-43

CITY OF ARVIN

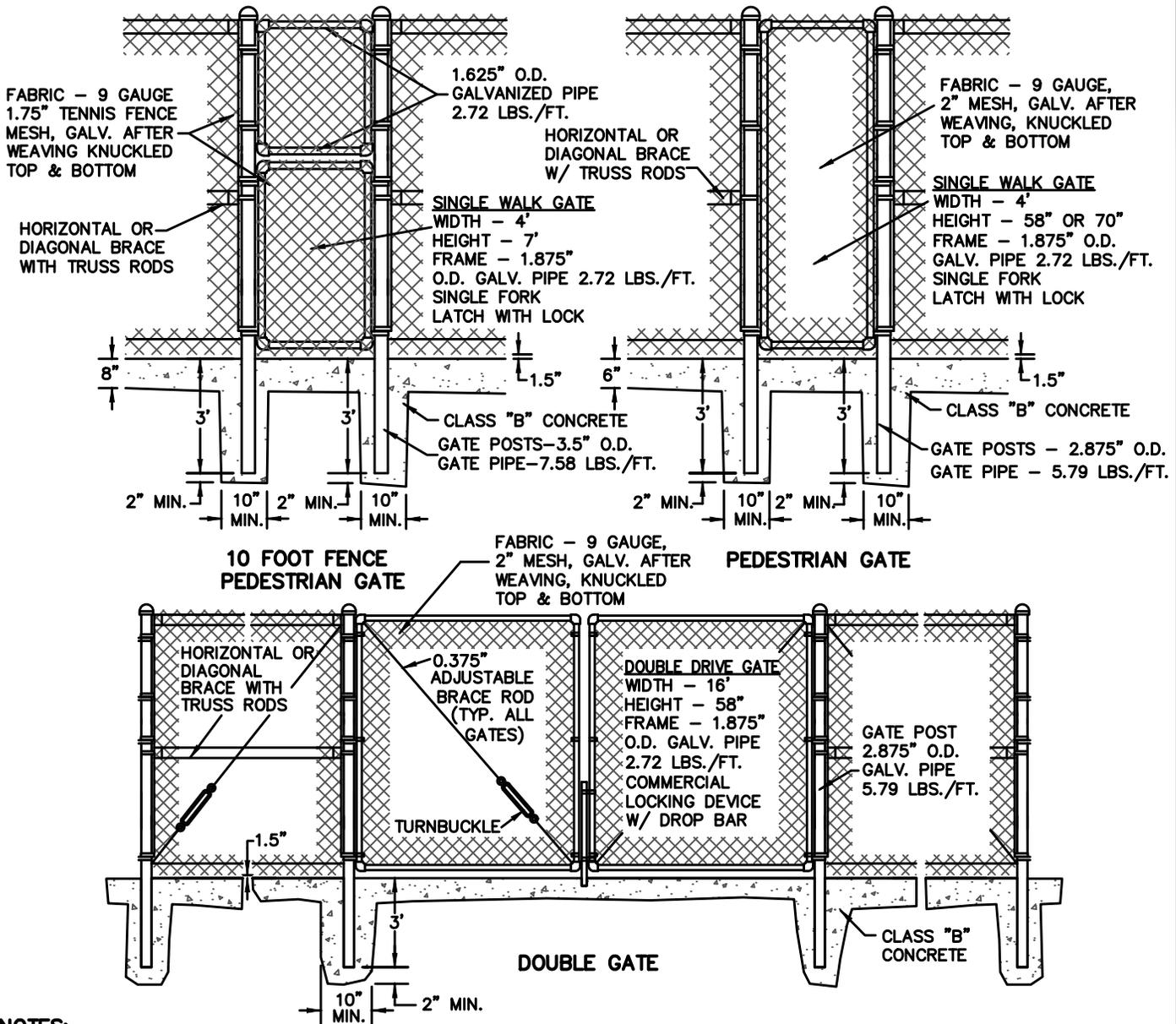
PLATE

CHAINLINK FENCE

D8

*Harold J. [Signature]*  
CITY ENGINEER

REVISED: NOV. 2002 SHT. 1 OF 1



**NOTES:**

1. SUBRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION WITH COMPACTION OF 85% TO A DEPTH OF 6".
2. CONCRETE SHALL BE CLASS "B" AND SHALL BE WITHIN 3.0" AND 5.5" SLUMP. CONCRETE SHALL BE TROWELED SMOOTH AND BRUSH FINISHED.
3. CONCRETE SHALL CONTAIN NO ADDITIVES UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER. CONCRETE SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND COMPLYING TO SECTION 90-7.01B OF THE STANDARD SPECIFICATIONS.
4. END, CORNER AND GATE POSTS SHALL BE BRACED TO THE NEAREST LINE POST WITH GALV. DIAGONAL OR HORIZONTAL BRACES USED AS COMPRESSION MEMBERS AND GALV. 0.375" STEEL TRUSS RODS WITH TURNBUCKLES OR TRUSS LIGHTENERS USED AS TENSION MEMBERS.
5. WHEN REDWOOD SUBURBAN SCREEN IS REQUIRED, IT SHALL BE USED WITH 3 x 5 - 9 GAUGE FABRIC SO CONSTRUCTED THAT THE SLOTS ARE LOCKED INTO POSITION AND CAN ONLY BE REMOVED WITH TOOLS.
6. FRAMES SHALL BE MADE WITH FITTINGS OR WELDED, WITH WELDS GROUND SMOOTH AND REGALVANIZED.
7. CHAINLINK FENCE FABRIC SHALL CONFORM TO THE SPECIFICATIONS OF ASTM DESIGNATION: A-392, CLASS 1.
8. INSTALLATION OF FENCING AND GATES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SEC. 80-4 OF THE STANDARD SPECIFICATIONS, CURRENT EDITION.

RESOLUTION # 02-43

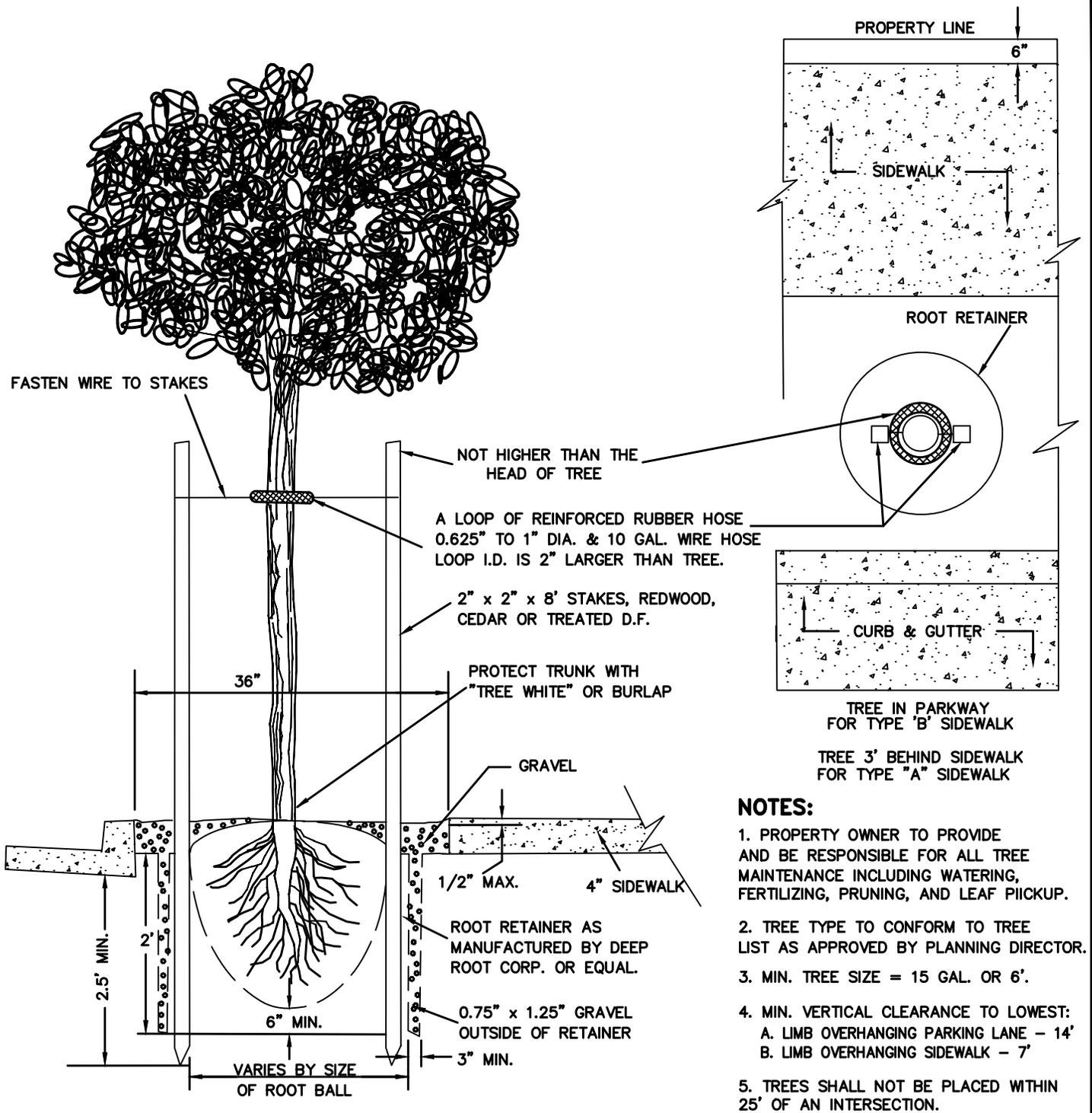
**CITY OF ARVIN**

*Harold J. [Signature]*  
 CITY ENGINEER

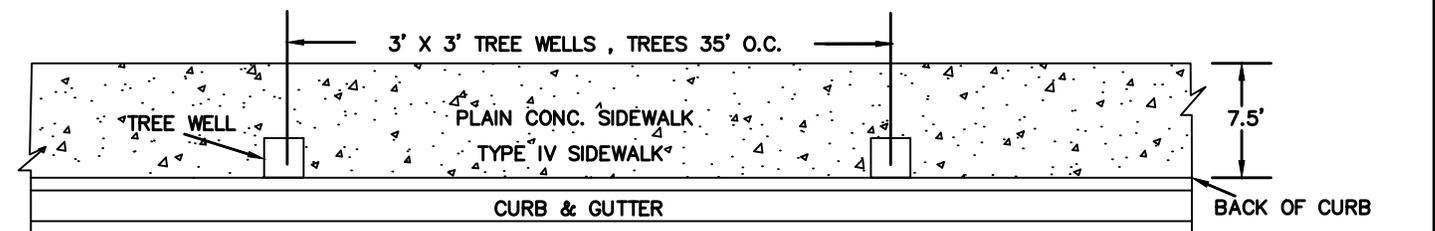
**CHAINLINK GATES**

PLATE  
**D9**

REVISED: NOV. 2002 SHT. 1 OF 1



- NOTES:**
1. PROPERTY OWNER TO PROVIDE AND BE RESPONSIBLE FOR ALL TREE MAINTENANCE INCLUDING WATERING, FERTILIZING, PRUNING, AND LEAF PICKUP.
  2. TREE TYPE TO CONFORM TO TREE LIST AS APPROVED BY PLANNING DIRECTOR.
  3. MIN. TREE SIZE = 15 GAL. OR 6'.
  4. MIN. VERTICAL CLEARANCE TO LOWEST:
    - A. LIMB OVERHANGING PARKING LANE - 14'
    - B. LIMB OVERHANGING SIDEWALK - 7'
  5. TREES SHALL NOT BE PLACED WITHIN 25' OF AN INTERSECTION.



**PLAN OF SIDEWALK LAYOUT**

SEE ALSO PLATE L1-B

RESOLUTION # 02-43

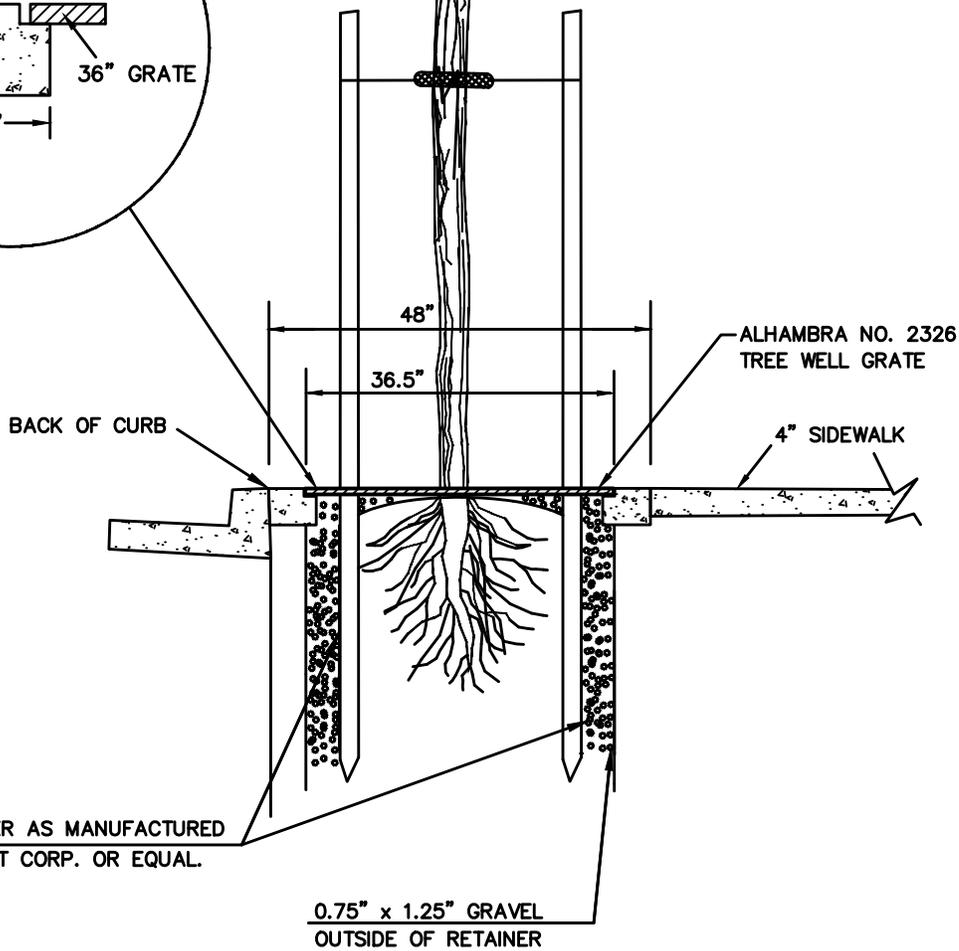
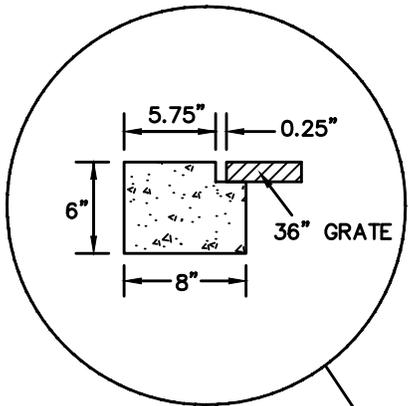
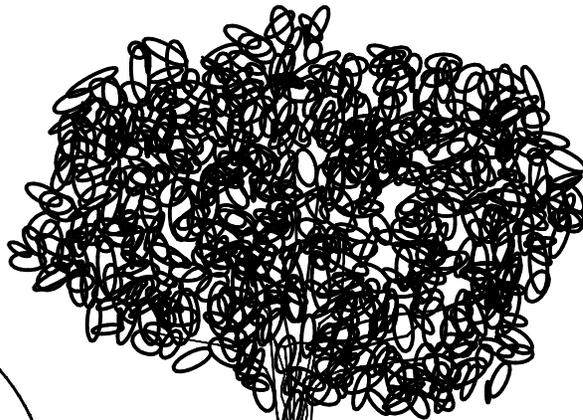
**CITY OF ARVIN**

*Harold J. [Signature]*  
CITY ENGINEER

**TREE PLACEMENT  
RESIDENTIAL**

PLATE  
**L1-A**

REVISED: NOV. 2002 SHT. 1 OF 1



ROOT RETAINER AS MANUFACTURED BY DEEP ROOT CORP. OR EQUAL.

0.75" x 1.25" GRAVEL OUTSIDE OF RETAINER

**TREE PLACEMENT WITH TREE WELL GRATE**

SEE ALSO PLATE L1-A

RESOLUTION # 02-43

**CITY OF ARVIN**

PLATE

**L1-B**

CITY ENGINEER

**TREE PLACEMENT**

REVISED: NOV. 2002 SHT. 1 OF 1

1. USE THE CURRENT EDITION OF THE KERN COUNTY SUBDIVISION STANDARDS, STANDARD R61 AND R62.

RESOLUTION # 02-43

**CITY OF ARVIN**



CITY ENGINEER

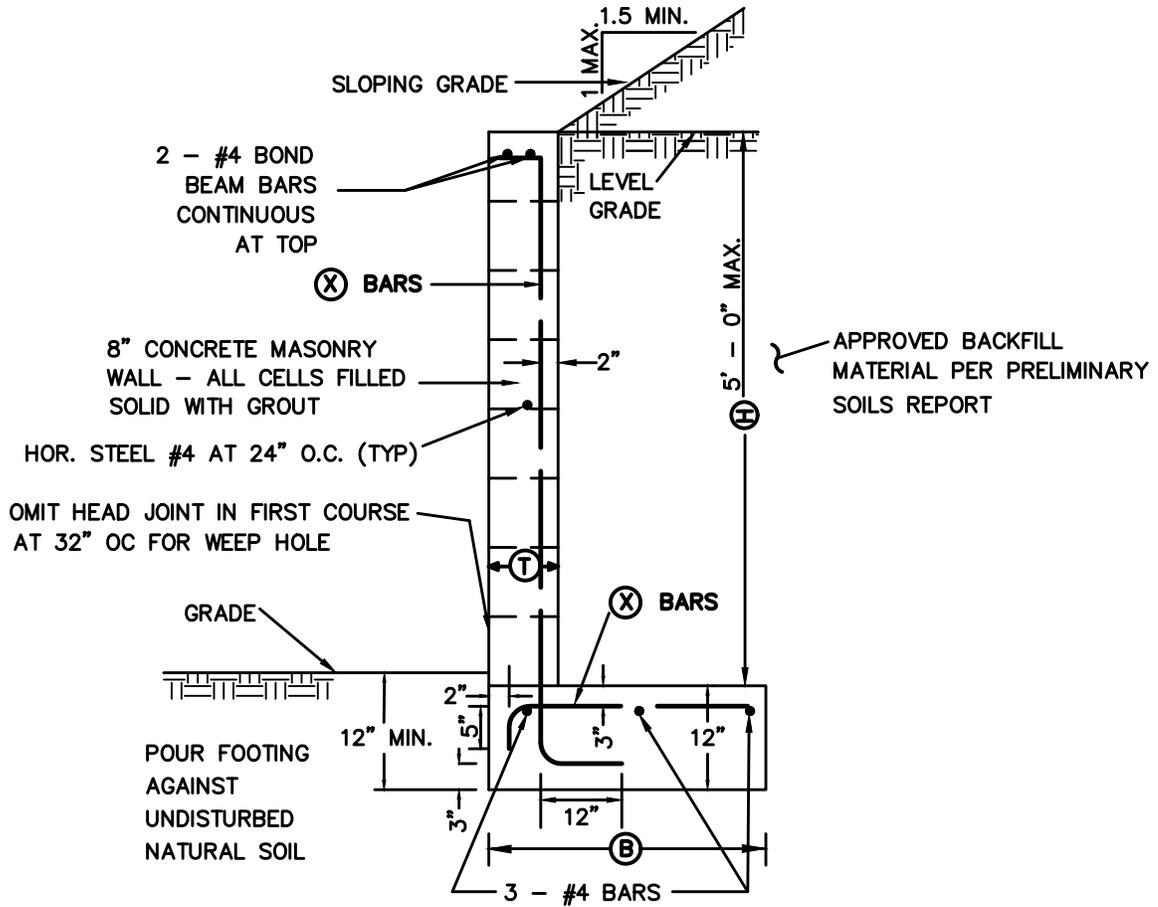
**BLOCK WALL**

PLATE

**L2**

REVISED: NOV. 2002

SHT. 1 OF 1



SECTION 5'-0" MAX.

(H)	(T)	(B)	(X) BARS
3'	8"	1'-10"	#3 @ 32" OC
4'	8"	2'-6"	#4 @ 32" OC
5'	8"	3'-0"	#5 @ 24" OC

DESIGN FOR LEVEL GRADE ABOVE WALL

(H)	(T)	(B)	(X) BARS
3'	8"	2'-9"	#4 @ 32" OC
4'	8"	3'-6"	#5 @ 24" OC
5'	8"	4'-0"	#5 @ 16" OC

DESIGN FOR SLOPING GRADE ABOVE WALL

NOTES:

1. CONCRETE IN FOOTING TO TEST 2000 LBS PER SQ. IN. @ 28 DAYS
2. CONCRETE BLOCK - GRADE "A" UNITS A.S.T.M. C-90
3. GROUT - 1 PART CEMENT, 3 PARTS SAND, 2 PARTS PEA GRAVEL
4. MORTAR - 1 PART CEMENT, 1/2 PART LIME PUTTY, 4-1/2 PARTS SAND
5. RETAINING WALL NOT TO BE USED AS FOUNDATION FOR BUILDING.

MAXIMUM STRESSES

$F_s = 20,000$  PSI     $F_m = 400$  PSI  
 SHEAR  $V = 15$  PSI    BOND  $U = 100$  PSI  
 SOIL PRESSURE = 1000 LBS PER SQ. FT.  
 CONCRETE TO SOIL FRICTION COEFFICIENT = 0.4  
 SOIL LATERAL =  $30\# / F^3$   
 SOIL VERTICAL =  $100\# / F^3$

RESOLUTION # 02-43

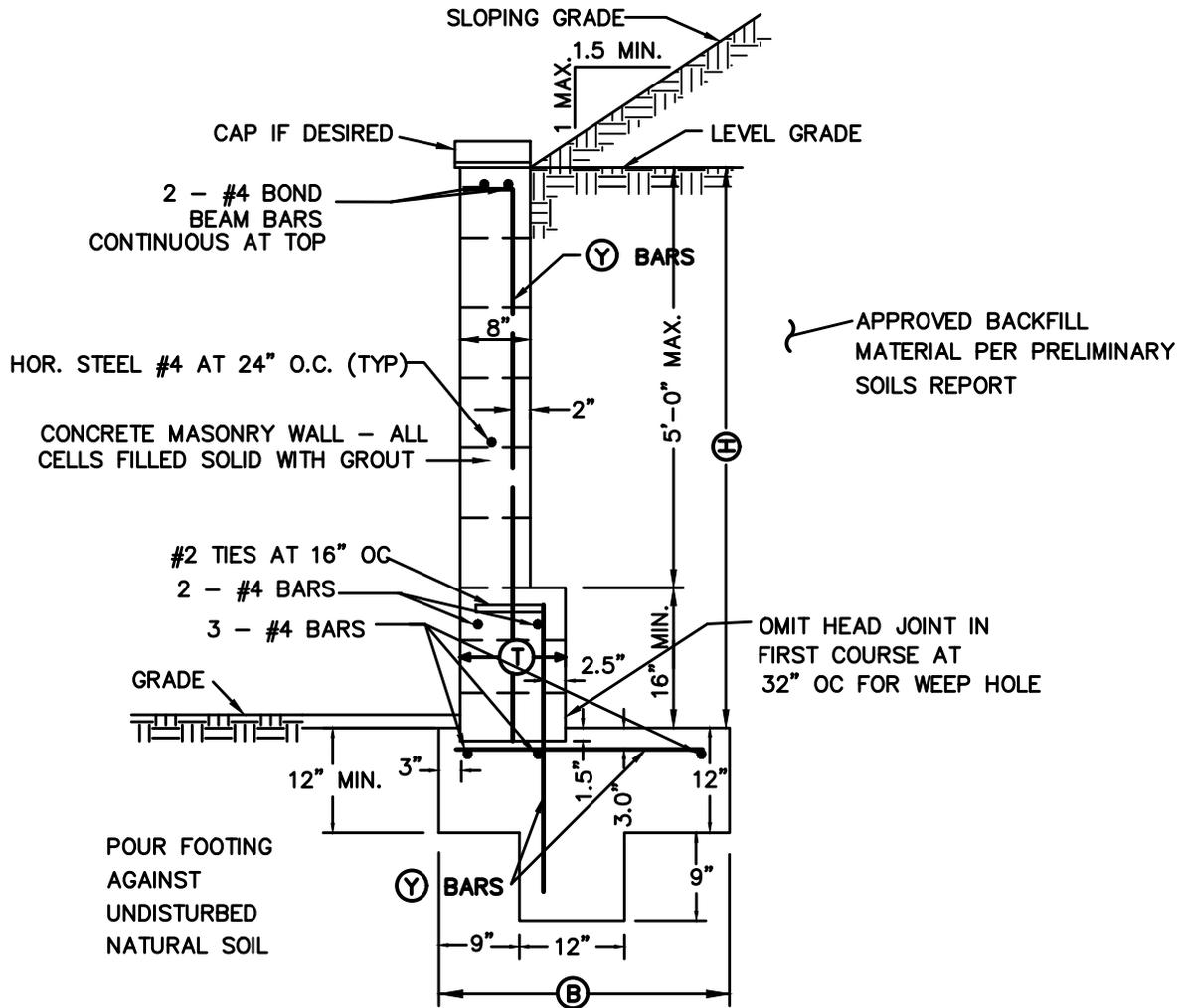
CITY OF ARVIN

*Harold J. Kelly*  
CITY ENGINEER

RETAINING WALL  
5' HIGH MAXIMUM

PLATE  
M1

REVISED: NOV. 2002 SHT. 1 OF 1



SECTION OVER 5'-0" TO 8'-0" HIGH

(H)	(T)	(B)	(Y) BARS
6'	12"	3'-8"	#5 @ 24" OC
7'	12"	4'-6"	#5 @ 16" OC
8'	12"	5'-3"	#6 @ 16" OC

(H)	(T)	(B)	(Y) BARS
6'	12"	4'-9"	#6 @ 24" OC
7'	12"	5'-6"	#6 @ 16" OC
8'	12"	6'-9"	#7 @ 16" OC

DESIGN FOR LEVEL GRADE ABOVE WALL

DESIGN FOR SLOPING GRADE ABOVE WALL

NOTES:

1. CONCRETE IN FOOTING TO TEST 2000 LBS PER SQ. IN. AT 28 DAYS
2. CONCRETE BLOCK - GRADE "A" UNITS A.S.T.M. C-90
3. GROUT - 1 PART CEMENT, 3 PARTS SAND, 2 PARTS PEA GRAVEL
4. MORTAR - 1 PART CEMENT, 1/2 PART LIME PUTTY, 4-1/2 PARTS SAND
5. RETAINING WALL NOT TO BE USED AS FOUNDATION FOR BUILDING.

MAXIMUM STRESSES

$F_s = 20,000$  PSI     $F_m = 450$  PSI  
 SHEAR  $V = 15$  PSI    BOND  $U = 100$  PSI  
 SOIL PRESSURE = 1000 LBS PER SQ. FT.  
 CONCRETE TO SOIL FRICTION COEFFICIENT = 0.4  
 SOIL LATERAL =  $30\# / F^3$   
 SOIL VERTICAL =  $100\# / F^3$

RESOLUTION # 02-43

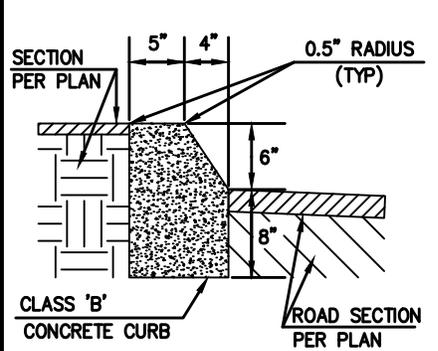
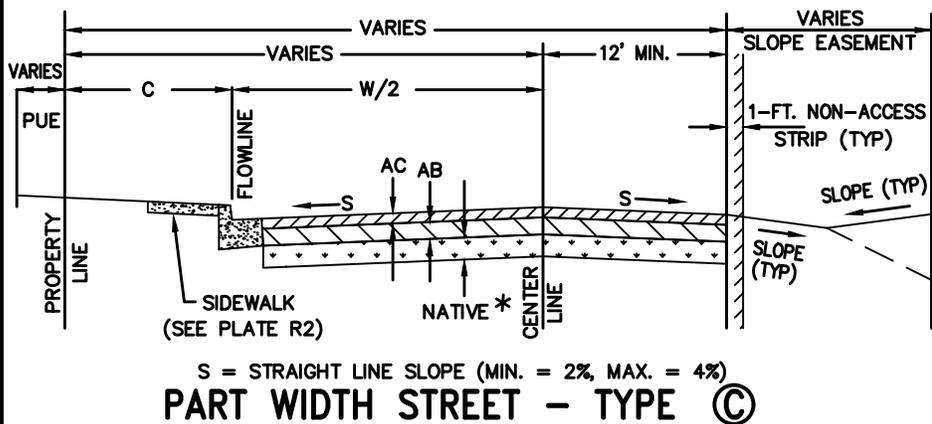
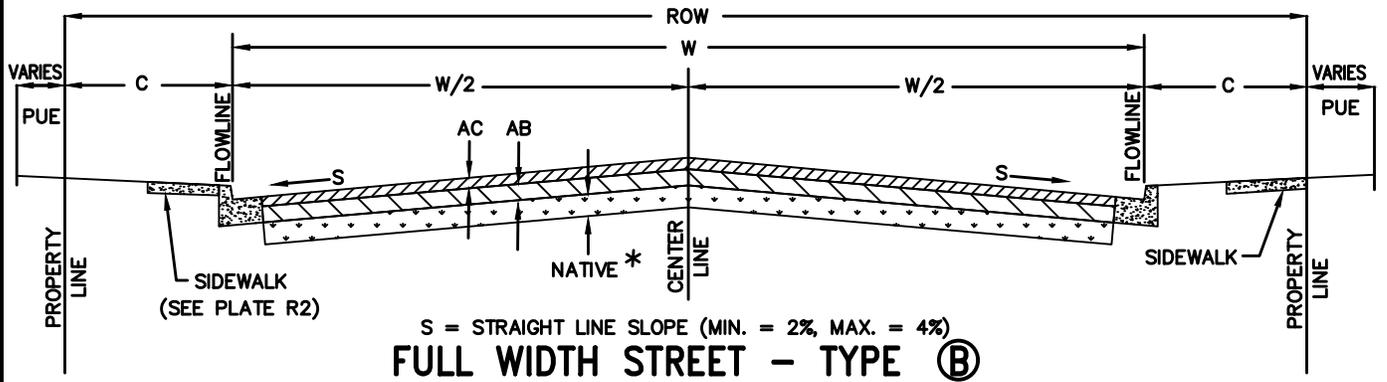
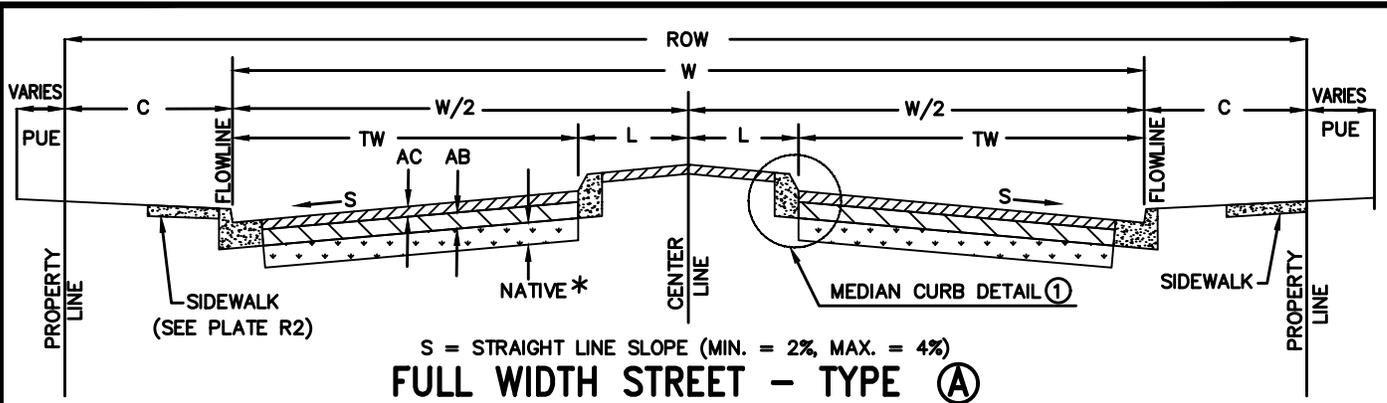
CITY OF ARVIN

*Harold J. Key*  
 CITY ENGINEER

RETAINING WALL  
 OVER 5' HIGH TO 8' HIGH

PLATE  
**M2**

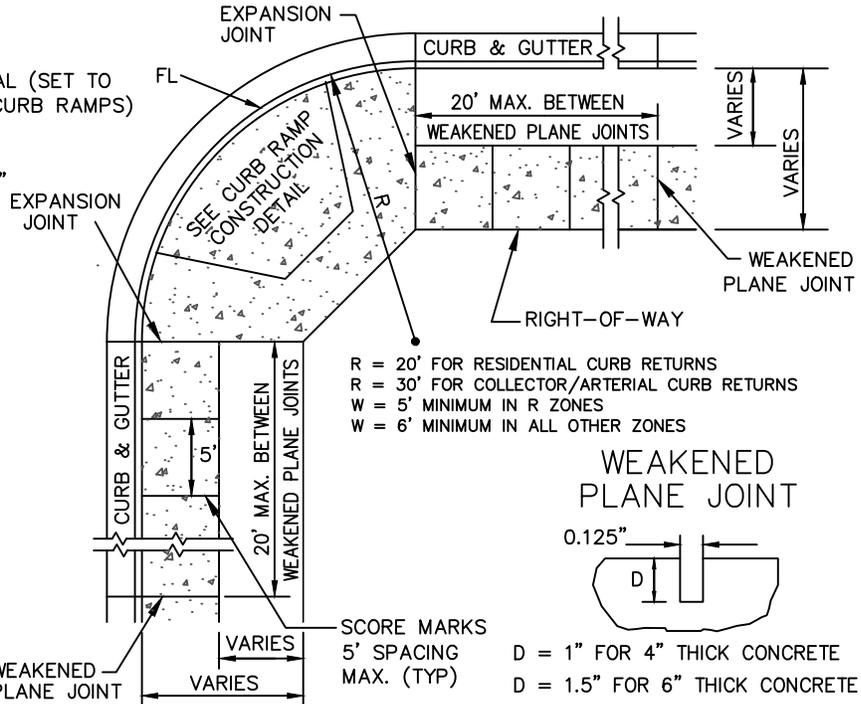
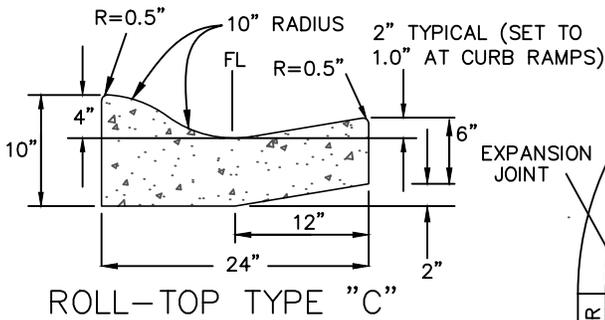
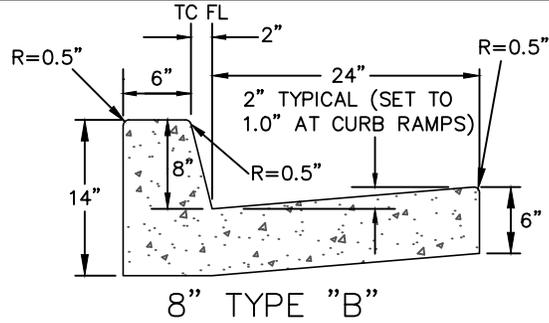
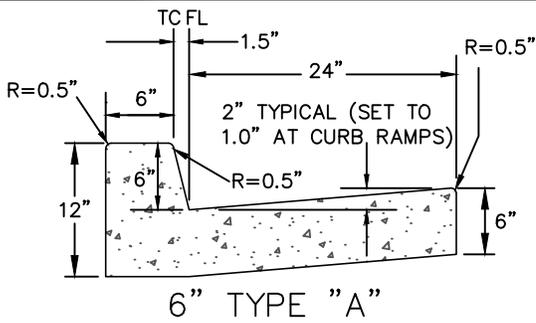
REVISED: NOV. 2002    SHT. 1 OF 1



#	STREET CLASSIFICATION	STREET TYPE	ROW (FT.)	C (FT.)	TW (FT.)	L (FT.)	W/2 (FT.)	W (FT.)	T.I.	AC (IN.)	AB (IN.)	SEE STANDARD R2		PUE (FT.)
												CURB & GUTTER	SIDEWALKS	
1	MAJOR	A, B	110	10	36	9	45	90	9.0	4	8	TYPE "A"	TYPE 1, 2, 3	0
2	MAJOR	A, B	146	10	54	9	63	126	9.0	4	8	TYPE "A"	TYPE 1, 2, 3	0
3	COLLECTOR	B	90	10	--	--	35	70	7.0	3	6	TYPE "A"	TYPE 1, 2, 3	0
4	LOCAL	B	60	10	--	--	20	40	4.75	2	4	TYPE "A"	TYPE 1	6
5	LOCAL	B	50	7	--	--	18	36	4.75	2	4	TYPE "A"	TYPE 1	6

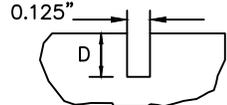
\* 12" SECTION NATIVE MATERIAL COMPACTED TO 95% RELATIVE COMPACTION.  
 NOTE: TYPICAL STREET SECTIONS AS SHOWN MAY BE REVISED PER REQUIREMENTS OF THE PRELIMINARY SOILS REPORT.  
 PUE-PUBLIC UTILITY EASEMENT AC-ASPHALT CONCRETE AB-AGGREGATE BASE T.I.-TRAFFIC INDEX ROW-RIGHT OF WAY

RESOLUTION # 02-43	<b>CITY OF ARVIN</b>	
 CITY ENGINEER	<b>STREET SECTIONS</b>	PLATE <b>R1</b>
	REVISED: JAN. 2008	BY: JPB

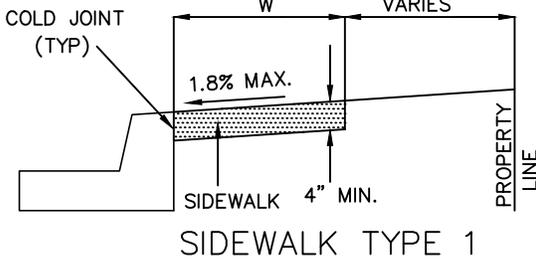


R = 20' FOR RESIDENTIAL CURB RETURNS  
 R = 30' FOR COLLECTOR/ARTERIAL CURB RETURNS  
 W = 5' MINIMUM IN R ZONES  
 W = 6' MINIMUM IN ALL OTHER ZONES

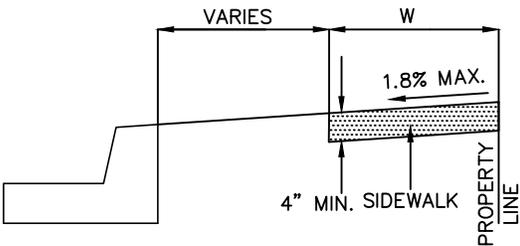
**WEAKENED PLANE JOINT**



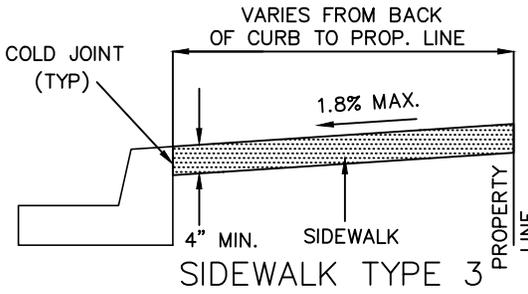
D = 1" FOR 4" THICK CONCRETE  
 D = 1.5" FOR 6" THICK CONCRETE



**SIDEWALK TYPE 1**



**SIDEWALK TYPE 2**



**SIDEWALK TYPE 3**

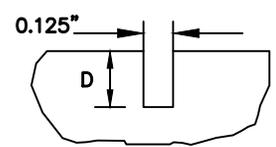
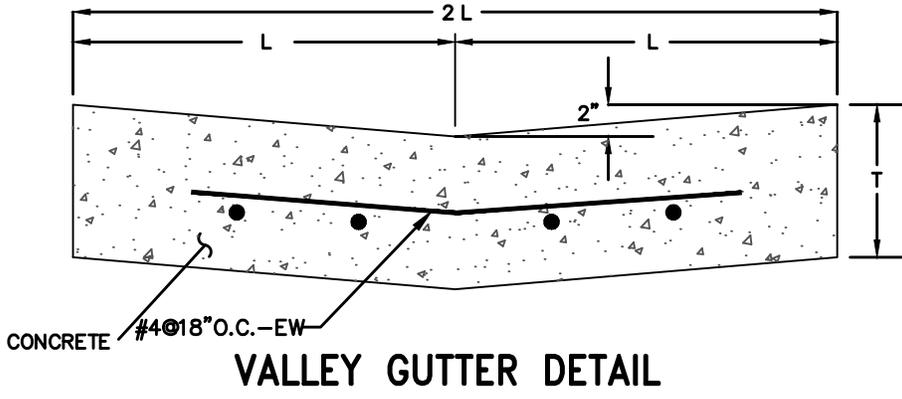
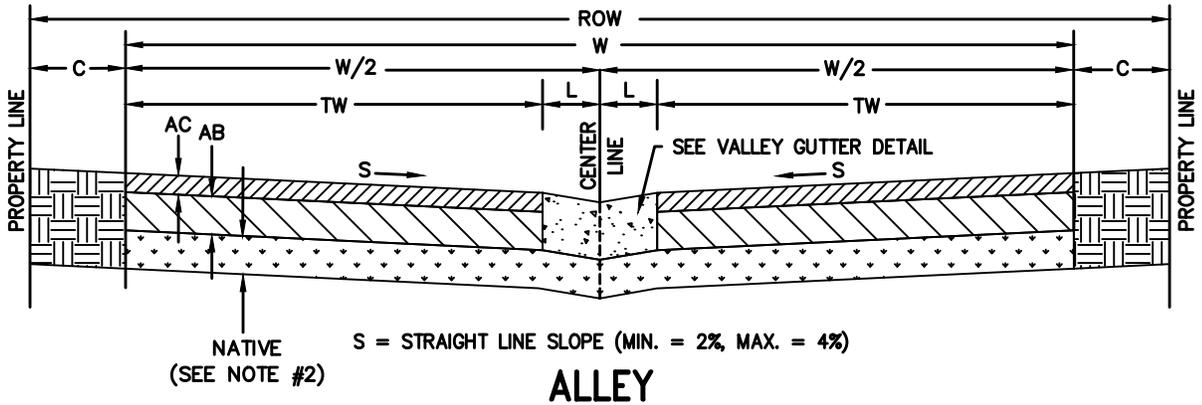
**GENERAL NOTES:**

1. ALL CONCRETE SHALL BE 6-SACK MIX, TYPE II-V. THE SURFACE SHALL BE FINISHED TO GRADE AND CROSS SECTION WITH A FLOAT, TROWELED SMOOTH, AND FINISHED WITH A BROOM. APPLY CURING AGENT PER SEC. 90-7.01B OF THE STANDARD SPECIFICATIONS.
2. SUBGRADE PREPARATION FOR CURB AND GUTTER SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION, WITH COMPACTION OF 95% TO A DEPTH OF 12".
3. SUBGRADE PREPARATION FOR SIDEWALK SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION, WITH COMPACTION OF 90% TO A DEPTH OF 12".
4. EXPANSION JOINTS SHALL BE EITHER (A) 1/4" TO 1/2" PREMOLDED EXPANSION JOINT FILLER PER CALTRANS STANDARD SPECIFICATIONS 73-1.03E, OR (B) 2" DEEP SCORE JOINT (WEAKENED PLANE, EXTRUSION MACHINE ONLY). EXPANSION JOINTS SHALL BE PLACED AT SIDES OF STRUCTURES, END OF CURB RETURNS, AND OPPOSITE EXPANSION JOINTS IN EXISTING CURB. NOTE: MAXIMUM SPACING = 50 FT.
5. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 20 FOOT INTERVALS OR AS DIRECTED BY THE ENGINEER.
6. SCORE SIDEWALK IN RECTANGLES OF NOT LESS THAN 12 SQUARE FEET NOR MORE THAN 20 SQUARE FEET. SIDEWALK SCORE MARKS MINIMUM DEPTH OF 0.125".
7. ROLL-TOP CURB & GUTTER ONLY ALLOWED IN INDUSTRIAL ZONES WITH APPROVAL OF THE CITY ENGINEER AND PLANNING DEPARTMENT.
8. SIDEWALK TO CURB AND GUTTER NOT TO BE POURED AS MONOLITHIC.
9. PROPERTY AT INTERSECTIONS SHALL BE A 20 FOOT BY 20 FOOT CUT OFF FOR WHEELCHAIR RAMPS.
10. MINIMUM GRADE FOR CURB AND GUTTER FLOWLINE SHALL BE 0.25% . EXCEPTIONS TO THE MINIMUM GRADE SHALL BE APPROVED BY THE CITY ENGINEER, AND WILL REQUIRE FLOW TESTING DURING CONSTRUCTION, BUT PRIOR TO START OF AC PAVING OPERATIONS..

**CITY OF ARVIN**

**CURB, GUTTER AND SIDEWALK**

PLATE  
**R2**



D = 1" FOR 4" THICK CONCRETE  
 D = 1.5" FOR 6" OR 8" THICK CONCRETE

**WEAKENED PLANE JOINT**

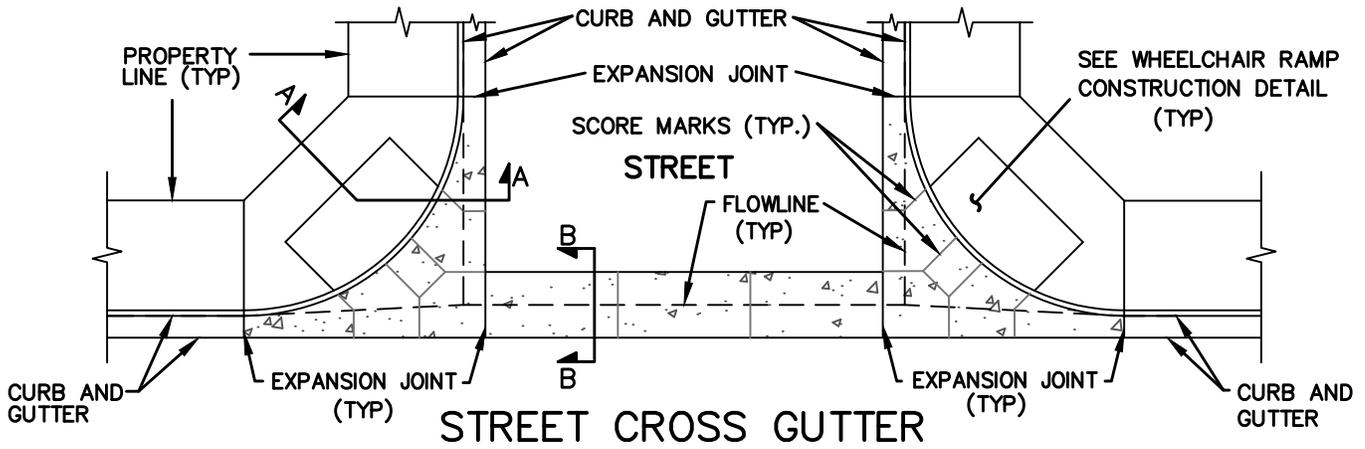
**NOTES:**

1. ALL CONCRETE SHALL BE 7 SACK MIX TYPE II-V.
2. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION WITH COMPACTION OF 95% TO A DEPTH OF 12".
3. VALLEY GUTTER FLOWLINE SHALL MATCH BACK EDGE OF ALLEY DRIVEWAY APPROACH TO ELIMINATE PONDING.
4. EXPANSION JOINT MATERIAL OR WEAKENED PLANE JOINTS SHALL BE PLACED AT 15' INTERVALS IN VALLEY GUTTER (TYP).
5. EXPANSION JOINTS SHALL BE EITHER (A) 1/2" TO 3/4" PREMOLDED EXPANSION JOINT FILLER PER SEC. 51-1.12 OF THE STANDARD SPECIFICATIONS, OR (B) 2" DEEP SCORE JOINT (WEAKENED PLANE, EXTRUSION MACHINE ONLY).
6. MINIMUM GRADE FOR VALLEY GUTTER SHALL BE 0.2%. EXCEPTIONS TO THE MINIMUM GRADE SHALL BE APPROVED BY CITY ENGINEER.

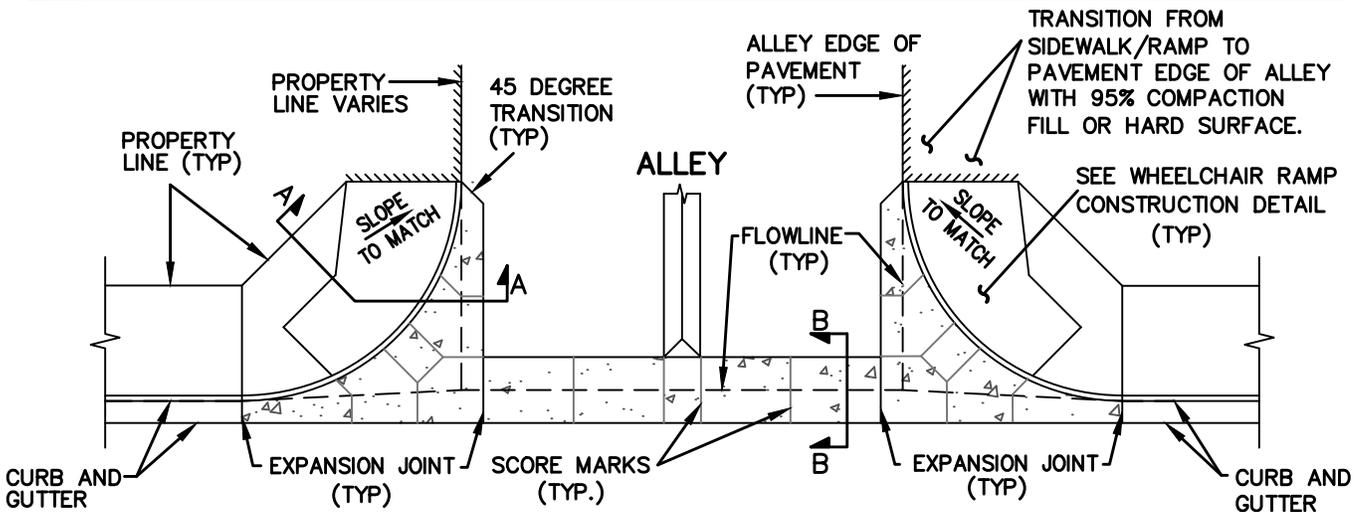
#	ALLEY CLASSIFICATION	ROW (FT.)	C (FT.)	TW (FT.)	L (FT.)	2L (FT.)	T (IN.)	W/2 (FT.)	W (FT.)	T.I.	AC (IN.)	AB (IN.)	COMMENTS
1	INDUSTRIAL	30	0	13	2	4	8	15	30	9.0	3	8	
2	COMMERCIAL	30	0	13	2	4	8	15	30	7.0	3	6	
3	RESIDENTIAL (MULTI-FAMILY)	25	0	10.5	2	4	6	12.5	25	4.75	2	4	
4	RESIDENTIAL (SINGLE-FAMILY)	20	0	8	2	4	6	10	20	4.75	2	4	

NOTE: TYPICAL ALLEY SECTIONS AS SHOWN MAY BE REVISED PER REQUIREMENTS OF THE PRELIMINARY SOILS REPORT.  
 AC-ASPHALT CONCRETE AB-AGGREGATE BASE T.I.-TRAFFIC INDEX ROW-RIGHT OF WAY

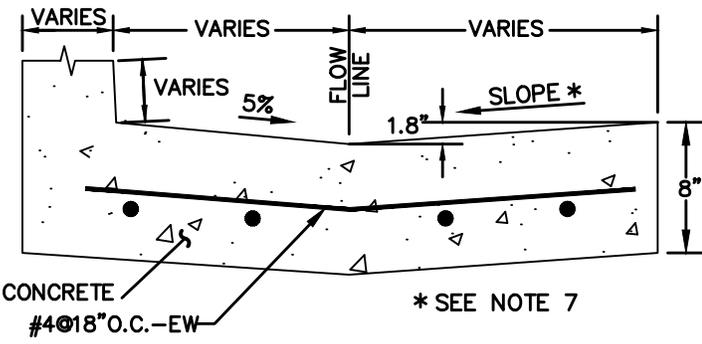
RESOLUTION # _____  _____ CITY ENGINEER	<b>CITY OF ARVIN</b>  <b>ALLEY SECTIONS</b>  REVISED: NOVEMBER 2014 BY: AV
	PLATE <b>R3</b>



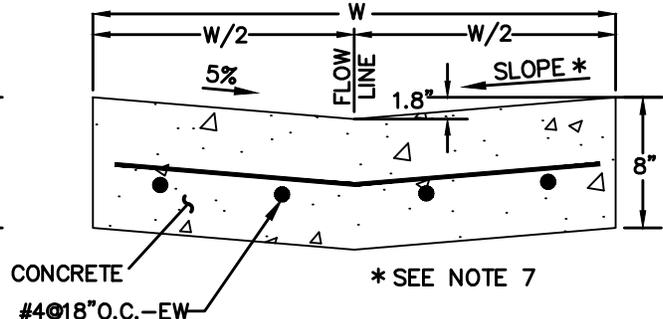
**STREET CROSS GUTTER**



**ALLEY CROSS GUTTER**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

1. ALL CONCRETE SHALL BE 7 SACK MIX, TYPE II-V.
2. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE AND CROSS SECTION WITH COMPACTION OF 95% TO A DEPTH OF 12".
3. ALL CONCRETE SURFACES SHALL BE GIVEN A BROOM FINISH WITH STROKES PARALLEL TO GUTTER FLOWLINE AND SHALL BE CURED WITH AN APPROVED CURING COMPOUND.
4. EXPANSION JOINTS SHALL BE PLACED AT 15' INTERVALS (TYP).
5. EXPANSION JOINTS SHALL BE EITHER (A) 3/4" TO 1" PREMOLDED EXPANSION JOINT FILLER PER SEC. 51-1.12 OF THE STANDARD SPECIFICATIONS, OR (B) 2" DEEP SCORE JOINT (WEAKENED PLANE, EXTRUSION MACHINE ONLY).
6. MINIMUM GRADE FOR CROSS GUTTER SHALL BE 0.2%. EXCEPTIONS TO THE MINIMUM GRADE SHALL BE APPROVED BY CITY ENGINEER.
7. MAXIMUM CROSS SLOPE SHALL BE 1.80% ALONG ADA PATH'S OF TRAVEL.
8. ALLEYS WITHOUT ADEQUATE SPACE FOR A CURB RETURN TO BE DESIGNED AS SPECIAL CONDITION.

**CITY OF ARVIN**

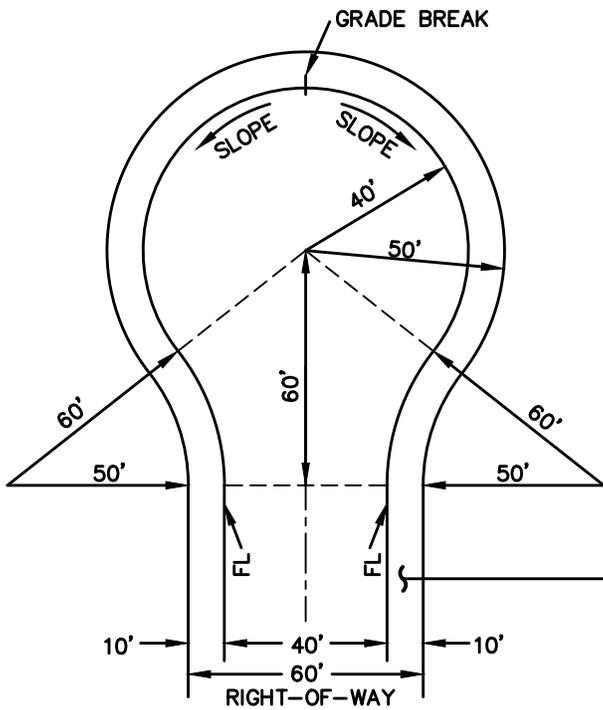
**CROSS GUTTER**

PLATE

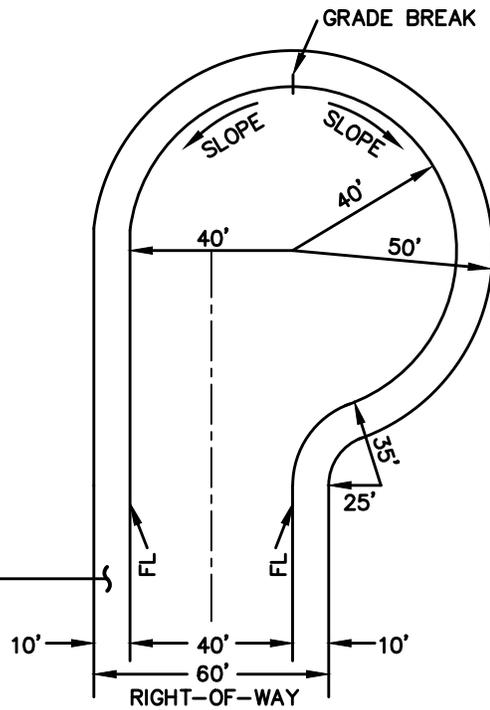
**R4**

REVISED: OCTOBER 2014

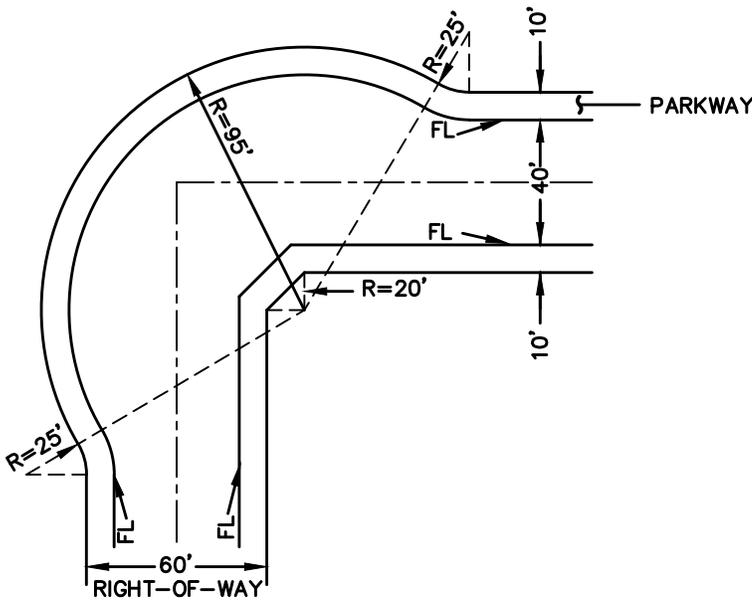
BY: AV



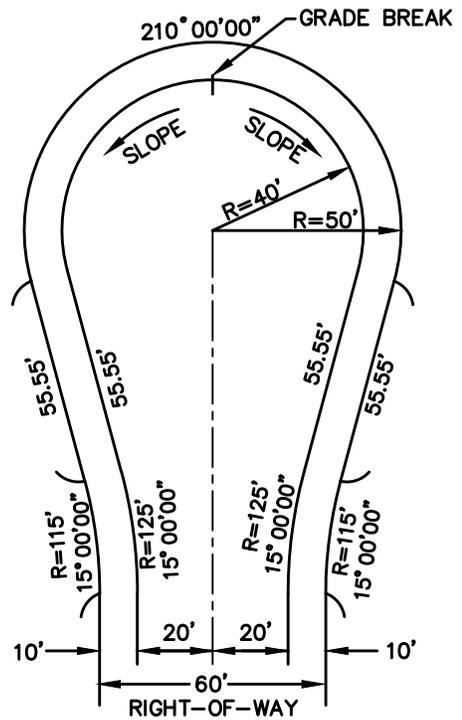
**CUL-DE-SAC**



**CUL-DE-SAC (OFFSET)**



**KNUCKLE**



**CUL-DE-SAC (ELONGATED)**

**NOTES:**

1. PARKWAY WIDTH TO BE MAINTAINED AT A UNIFORM WIDTH AROUND CUL-DE-SAC AND KNUCKLE.
2. GUTTER FLOWLINE SLOPE TO BE 0.2% MINIMUM.
3. FL = CURB AND GUTTER FLOWLINE

RESOLUTION # 02-43

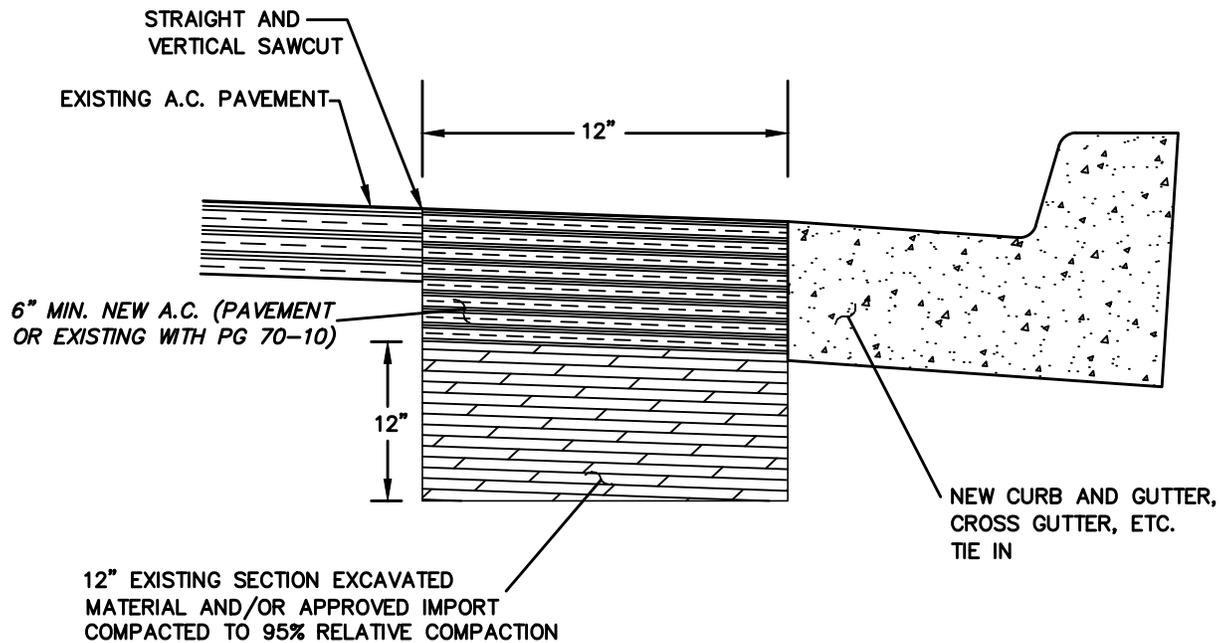
**CITY OF ARVIN**

*Harold J. [Signature]*  
CITY ENGINEER

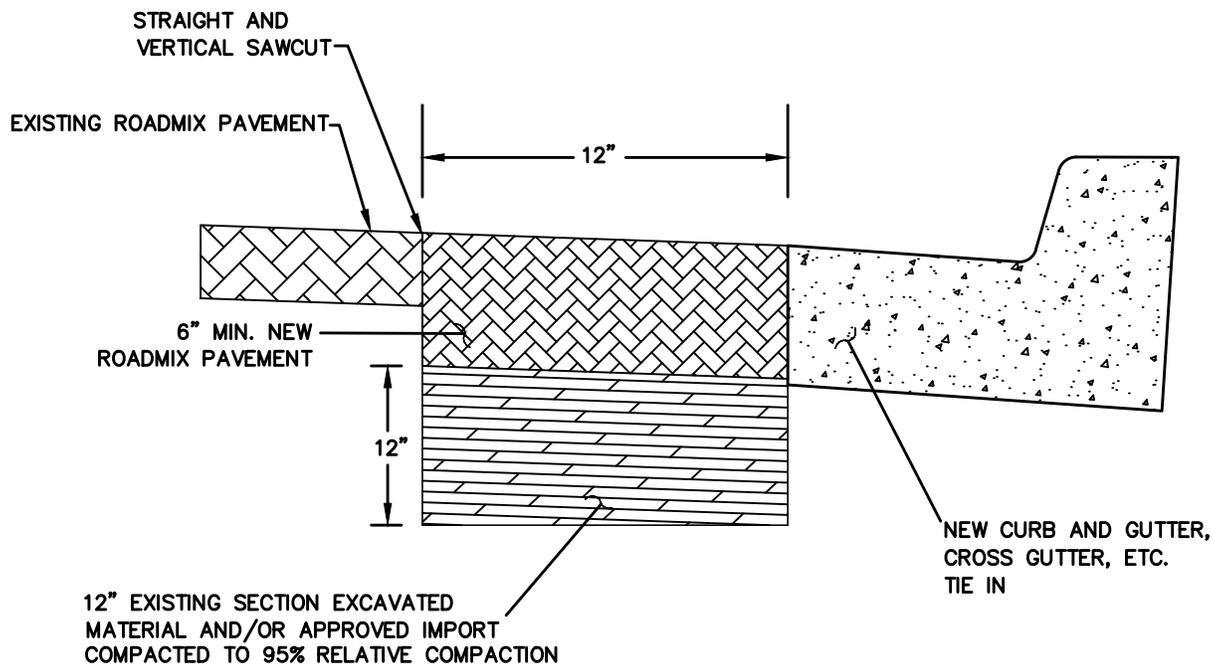
**CUL-DE-SAC AND  
KNUCKLE TREATMENTS**

PLATE  
**R5**

REVISED: NOV. 2002 SHT. 1 OF 1



### A.C. STREETS



### ROADMIX STREETS

**NOTES:**

1. ALL EXISTING VERTICAL SURFACES SHALL BE COATED WITH AN ASPHALTIC PAINT BINDER (TACK COAT) PRIOR TO PLACING NEW PAVEMENT.
2. ALL NEW PAVEMENT AND EARTHWORK SHALL BE COMPACTED BY MECHANICAL MEANS.
3. COMPACTION TESTING PER REQUIREMENTS OF CITY ENGINEER.

RESOLUTION # 02-43

**CITY OF ARVIN**

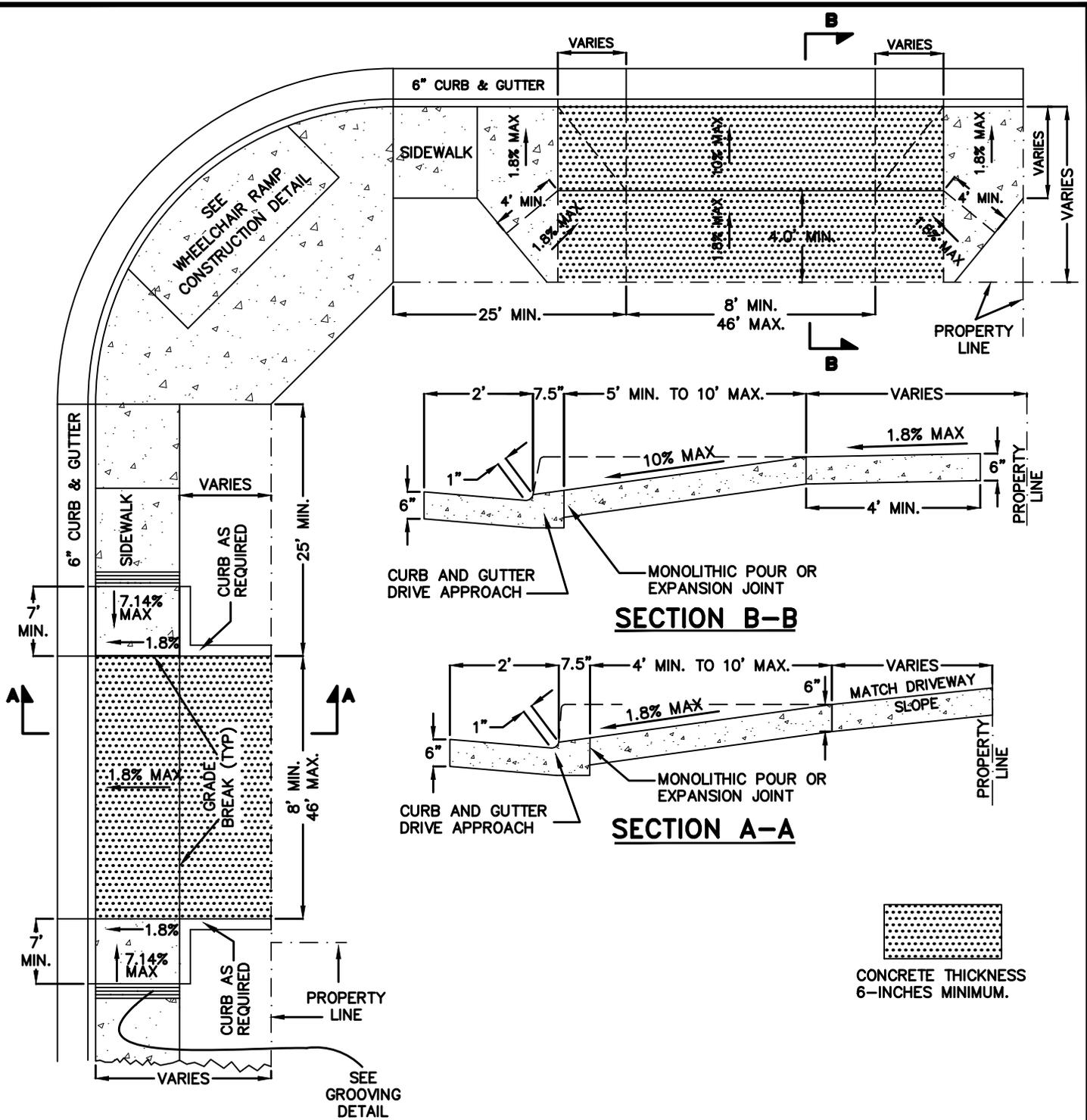
PLATE

**PAVEMENT TIE-IN**

**R6**

\_\_\_\_\_  
CITY ENGINEER

REVISED: NOV. 2014 SHT. 1 OF 1



**NOTES:**

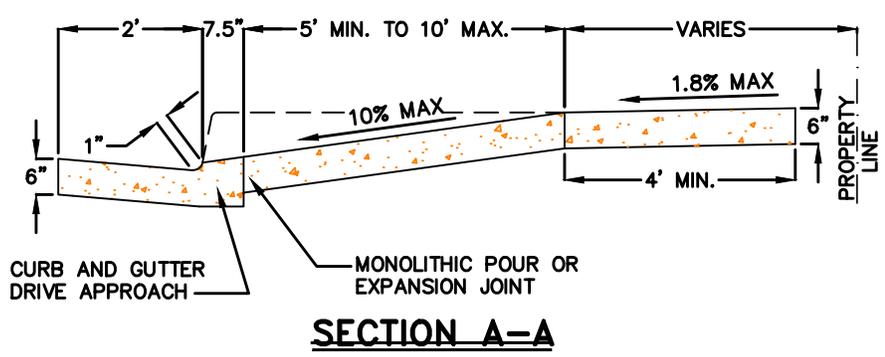
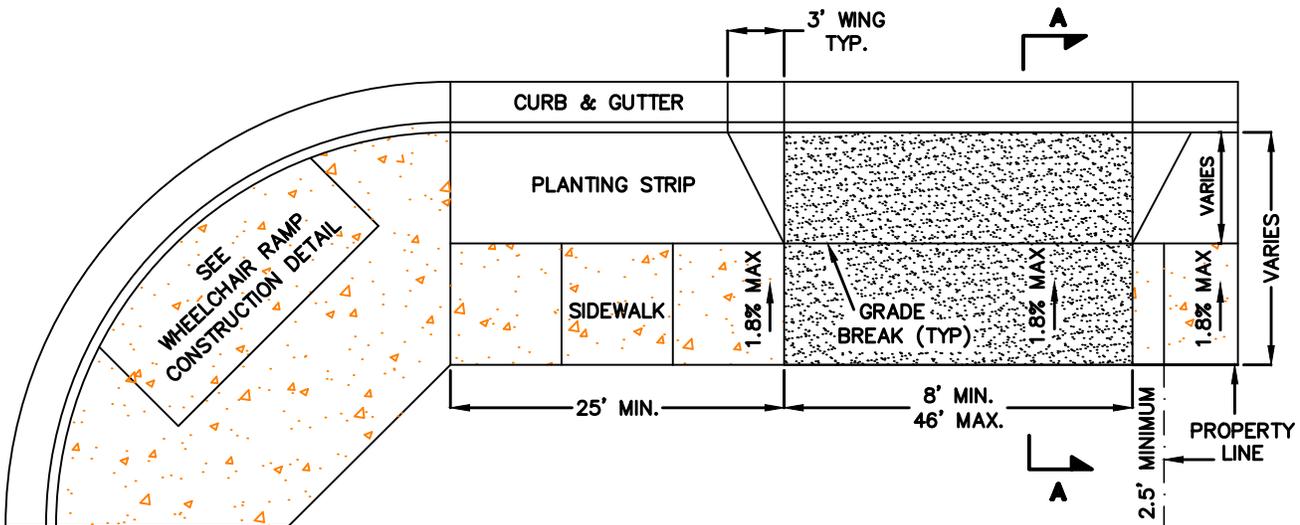
1. DRIVE APPROACH SHALL BE CONSTRUCTED TO MEET CURRENT A.D.A. STANDARDS.
2. ALL CONCRETE SHALL BE CLASS "A".
3. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE WITH COMPACTION OF 95% TO A DEPTH OF 12".
4. ALL CONCRETE SURFACES SHALL BE FINISHED TO GRADE WITH A FLOAT, TROWELED SMOOTH AND FINISHED WITH A BROOM.
5. EXPANSION JOINT(S) SHALL CONSIST OF 0.25" TO 0.5" PREMOLDED JOINT MATERIAL APPROVED FOR SUCH USE.
6. DRIVEWAY APPROACH TO CURB AND GUTTER TO BE POURED AS MONOLITHIC OR WITH AN EXPANSION JOINT.
7. APARTMENTS OF 4 UNITS OR LESS SHALL USE THIS DRIVEWAY APPROACH.
8. APARTMENTS OF MORE THAN 4 UNITS SHALL USE THE COMMERCIAL DRIVEWAY APPROACH PLATE.
9. THIS STANDARD APPLIES TO 6" CURB ONLY.

NTS

**CITY OF ARVIN**

**RESIDENTIAL  
DRIVE APPROACH**

PLATE  
**R7**



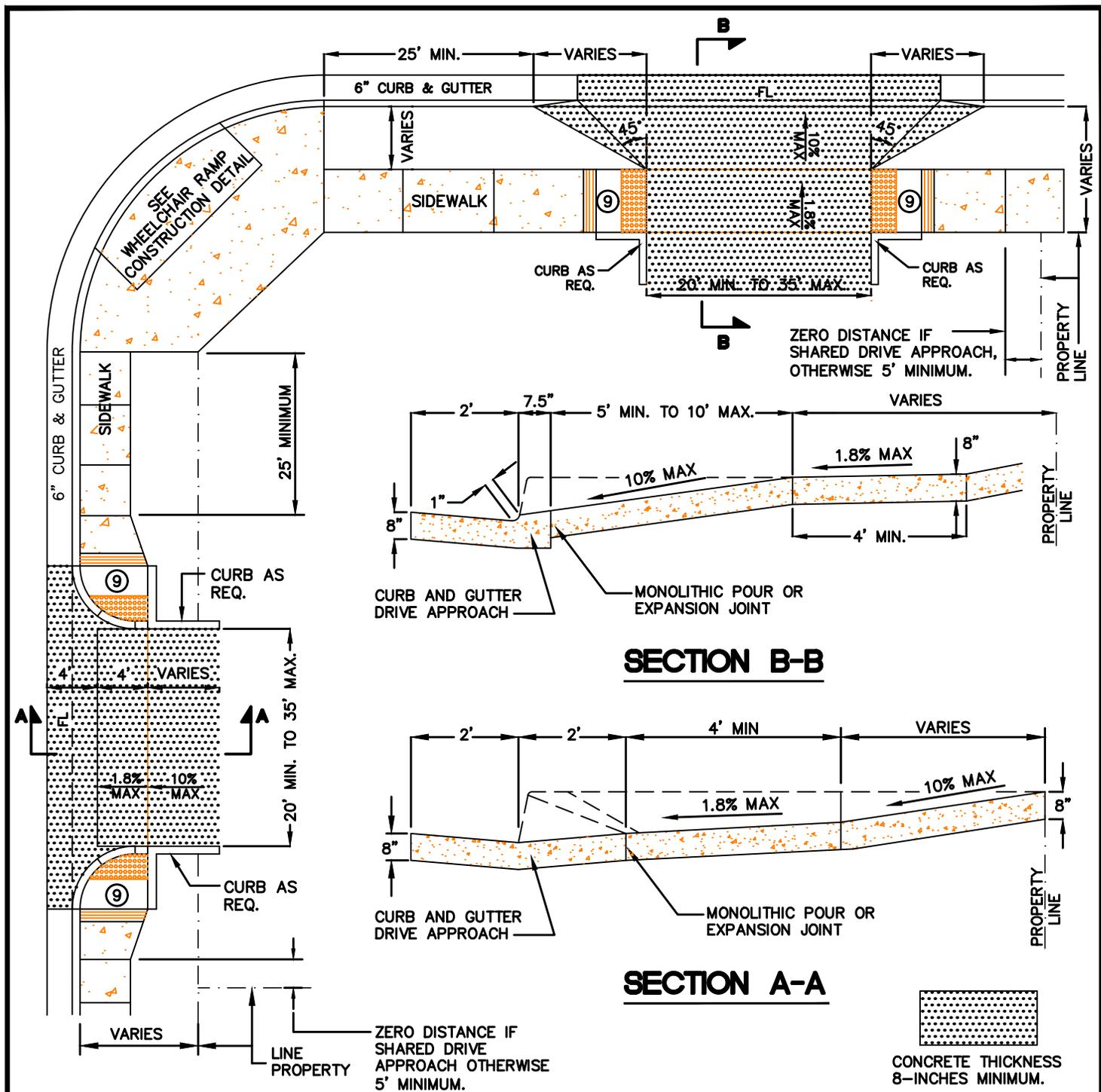
**SECTION A-A**

**NOTES:**

1. DRIVE APPROACH SHALL BE CONSTRUCTED TO MEET CURRENT A.D.A. STANDARDS.
2. ALL CONCRETE SHALL BE (6-SACK) CLASS "A", TYPE II - V CEMENT AND 0.45 W/C.
3. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE WITH COMPACTION OF 95% TO A DEPTH OF 12".
4. ALL CONCRETE SURFACES SHALL BE FINISHED TO GRADE WITH A FLOAT, TROWELED SMOOTH AND FINISHED WITH A BROOM.
5. EXPANSION JOINT(S) SHALL CONSIST OF 0.25" TO 0.5" PREMOLDED JOINT MATERIAL APPROVED FOR SUCH USE.
6. DRIVEWAY APPROACH TO CURB AND GUTTER TO BE POURED AS MONOLITHIC OR WITH AN EXPANSION JOINT.
7. APARTMENTS OF 4 UNITS OR LESS SHALL USE THIS DRIVEWAY APPROACH.
8. APARTMENTS OF MORE THAN 4 UNITS SHALL USE THE COMMERCIAL DRIVEWAY APPROACH PLATE.
9. THIS STANDARD APPLIES TO 6" CURB ONLY.

NTS

	<b>CITY OF ARVIN</b>	
	<b>RESIDENTIAL DRIVE APPROACH PLANTING STRIP</b>	PLATE <b>R7A</b>
	REVISED: OCTOBER 2014	BY: AV SHT. 1 OF 1



**NOTES:**

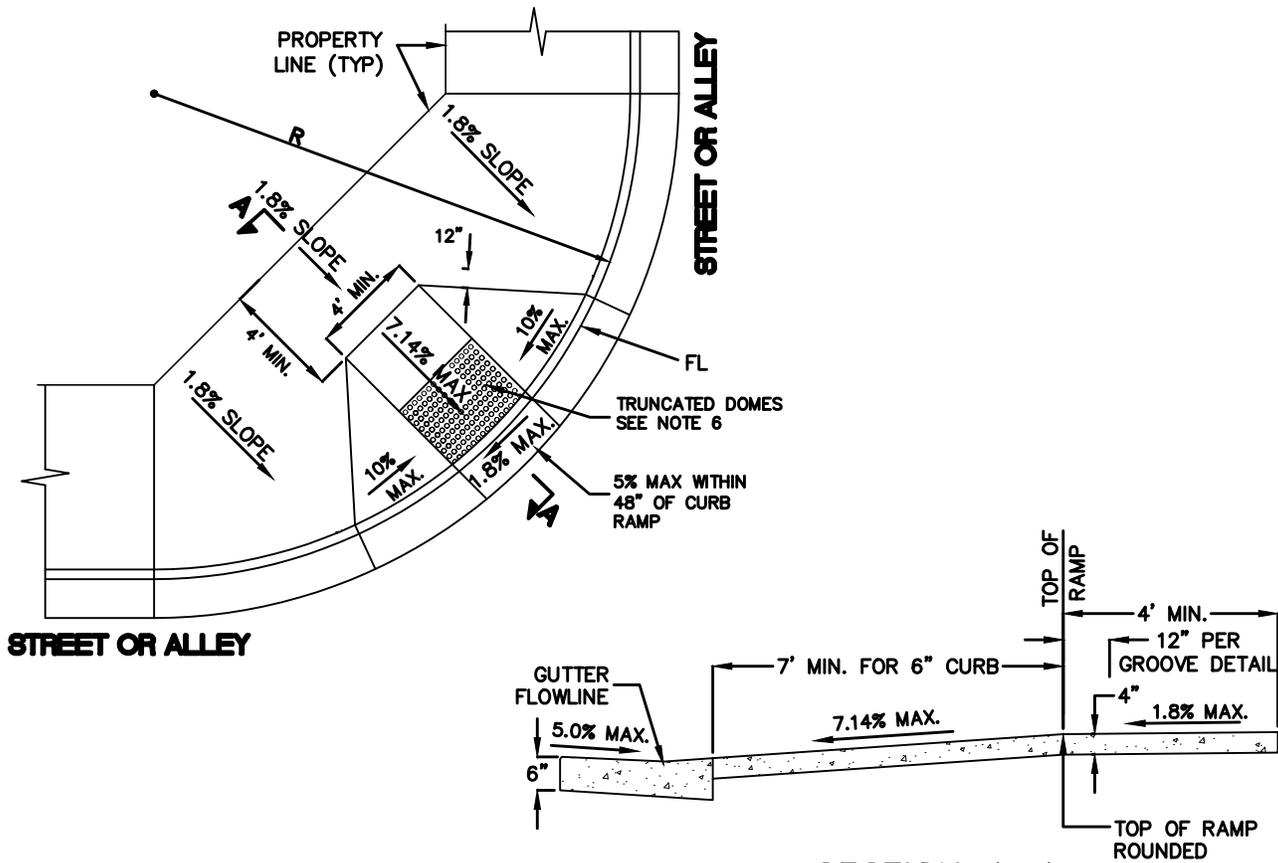
1. DRIVE APPROACH SHALL BE CONSTRUCTED TO MEET CURRENT A.D.A. STANDARDS..
2. ALL CONCRETE SHALL BE CLASS "A".
3. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE WITH COMPACTION OF 95% TO A DEPTH OF 12".
4. ALL CONCRETE SURFACES SHALL BE FINISHED TO GRADE WITH A FLOAT, TROWELED SMOOTH AND FINISHED WITH A BROOM.
5. EXPANSION JOINT(S) SHALL CONSIST OF 0.25" TO 0.5" PREMOLDED JOINT MATERIAL APPROVED FOR SUCH USE.
6. DRIVEWAY APPROACH TO CURB AND GUTTER TO BE POURED AS MONOLITHIC OR WITH AN EXPANSION JOINT.
7. APARTMENTS OF 4 UNITS OR LESS SHALL USE THE RESIDENTIAL DRIVEWAY APPROACH PLATE.
8. APARTMENTS OF MORE THAN 4 UNITS SHALL USE THE COMMERCIAL DRIVEWAY APPROACH PLATE.
9. SEE PLATE R9 FOR ADDITIONAL A.D.A. RAMP REQUIREMENTS AND INFORMATION REGARDING GROOVING & TRUNCATED DOMES.

**NTS**

RESOLUTION # \_\_\_\_\_

\_\_\_\_\_  
CITY ENGINEER

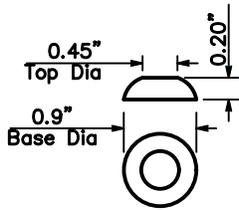
<b>CITY OF ARVIN</b>	
<b>COMMERCIAL DRIVE APPROACH</b>	PLATE <b>R8</b>
REVISED: 2015	BY: AV
SHT. 1 OF 1	



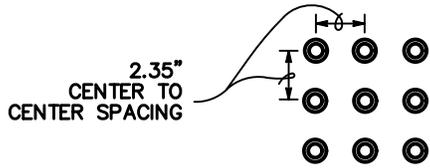
STREET OR ALLEY

STREET OR ALLEY

**SECTION A-A**



RAISED TRUNCATED DOME



RAISED TRUNCATED DOME PATTERN (IN-LINE)

**DETECTABLE WARNING SURFACE**

R = 20' FOR RESIDENTIAL CURB RETURNS  
 R = 30' FOR COMMERCIAL/INDUSTRIAL CURB RETURNS

**NOTES:**

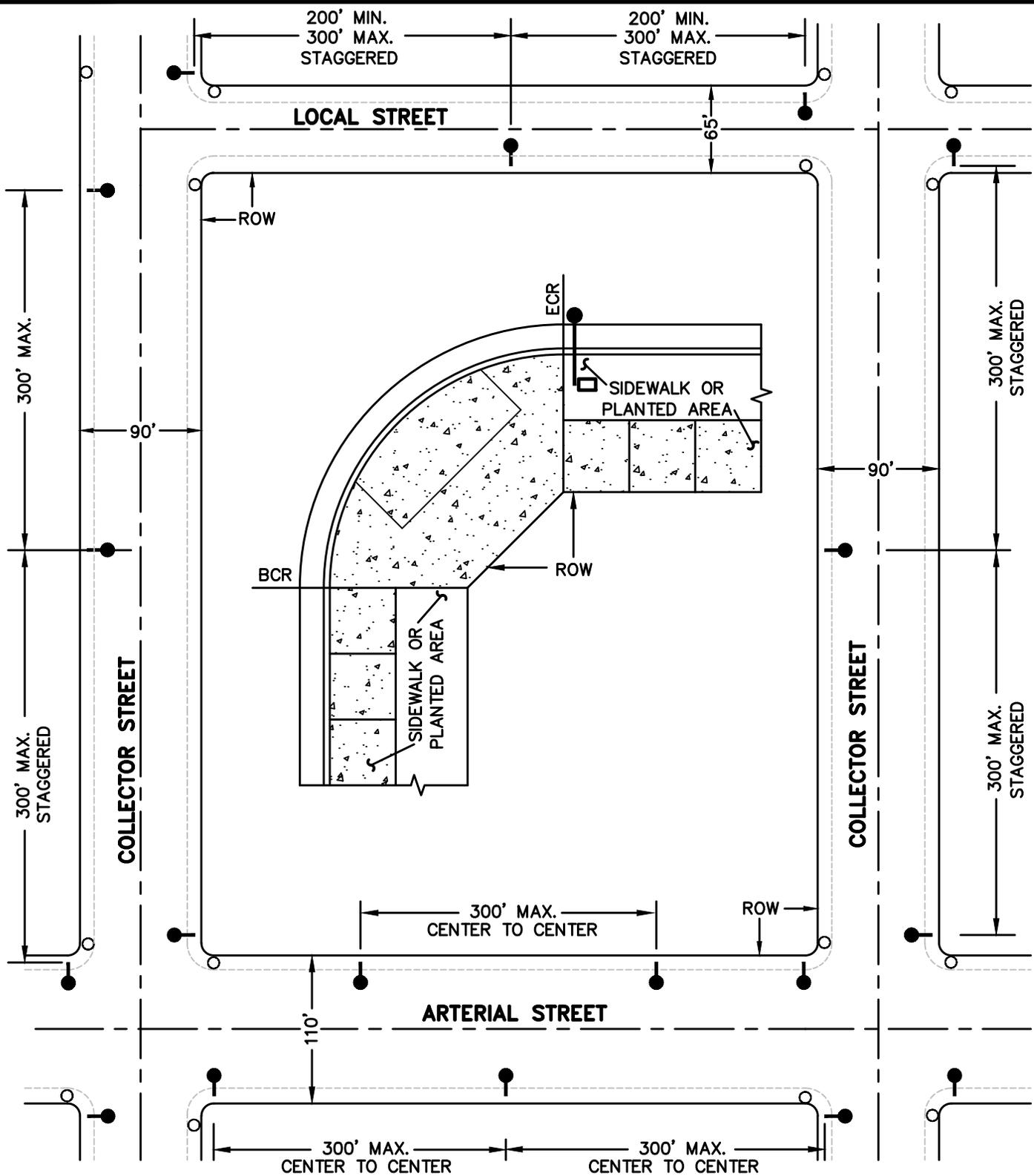
1. CURB RAMP SHALL BE CONSTRUCTED TO MEET CURRENT A.D.A. STANDARDS.
2. ALL CONCRETE SHALL BE 5-SACK CLASS "B" (TYPE II-V).
3. SUBGRADE PREPARATION SHALL BE CONSTRUCTED TRUE TO GRADE WITH COMPACTION OF 95% TO A DEPTH OF 12".
4. ALL CONCRETE SURFACES SHALL BE FINISHED TO GRADE WITH A FLOAT, TROWELED SMOOTH AND FINISHED WITH A BROOM.
5. EXPANSION JOINT(S) SHALL CONSIST OF 0.5" PREMOLDED JOINT MATERIAL APPROVED FOR SUCH USE.
6. CURB RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE EXTENDING THE FULL WIDTH & 3'-0" DEPTH OF THE RAMP, UNLESS RAMP SLOPE IS LESS THAN 6.7%, IN WHICH CASE THE DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL WIDTH & DEPTH OF THE CURB RAMP INSIDE THE GROOVED BORDER, EXCLUDING WINGS. COLOR YELLOW CONFORMING TO FEDERAL COLOR NO. 33538.
7. BECAUSE OF EXISTING CONDITIONS, OTHER CURB RAMP CONFIGURATIONS MAY BE NECESSARY. THESE SHALL MEET THE STATE OF CALIFORNIA ARCHITECTURAL BARRIERS LAWS AND BE APPROVED PRIOR TO INSTALLATION.

NTS

**CITY OF ARVIN**

**CURB RAMP**

PLATE  
**R9**



**LEGEND**

- STREET LIGHT
- STOP SIGN
- PULL BOX
- ECR END CURB RETURN
- BCR BEGIN CURB RETURN
- ROW RIGHT-OF-WAY

**NOTES**

1. STREET/STOP SIGNS LOCATED AT BCR.
2. STREET LIGHT LOCATIONS AT ECR.
3. SEE GENERAL NOTES PLATE R14.

RESOLUTION # 02-43

*Harold J. Key*  
CITY ENGINEER

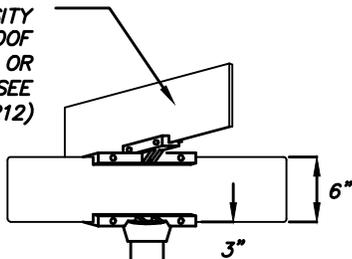
**CITY OF ARVIN**

**STREET SIGNAGE /  
LIGHT POLE LOCATIONS**

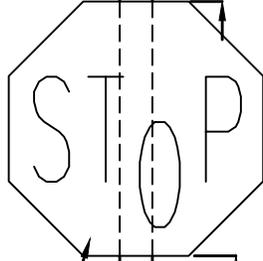
PLATE  
**R10**

REVISED: NOV. 2002 SHT. 1 OF 1

STANDARD STREET SIGN  
 (REFLECTIVE HIGH INTENSITY  
 GRADE WITH GRAFFITI-PROOF  
 FILM) SAME LOCATION WITH OR  
 WITHOUT STOP SIGN (SEE  
 PLATE R10, R12)



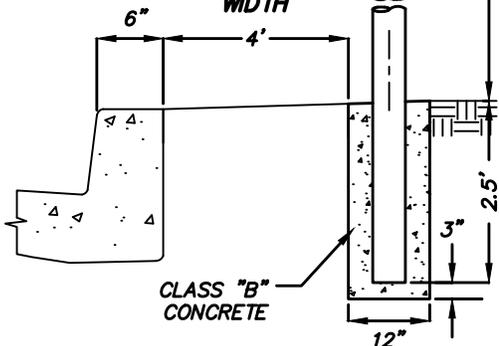
STANDARD R-1 STOP SIGN  
 30" X 30" REFLECTIVE HIGH  
 INTENSITY GRADE WITH  
 GRAFFITI-PROOF FILM



2" I.D. STD  
 GALVANIZED PIPE  
 POST

7'-0" WITH OR WITHOUT STOP SIGN

SIDEWALK OR  
 GREENBELT  
 WIDTH

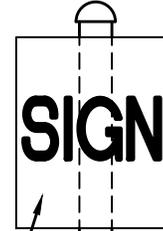


CLASS "B"  
 CONCRETE

**SIGN DETAIL (A)**

4' SIDEWALK  
 SIGN SHALL BE BEHIND THE SIDEWALK

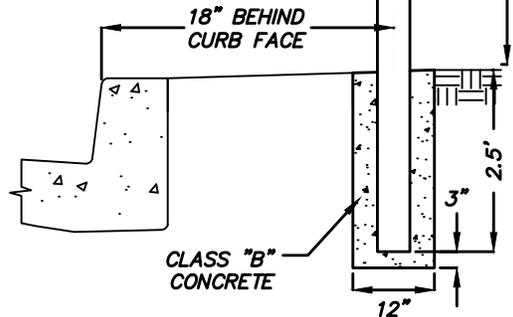
GENERAL INFORMATION SIGN  
 (REFLECTIVE HIGH INTENSITY  
 GRADE WITH GRAFFITI-PROOF  
 FILM - TYPE, SIZE AND  
 SPACING PER APPROVED PLANS)



2" I.D. STD  
 GALVANIZED PIPE  
 POST

7'-0"

18" BEHIND  
 CURB FACE



CLASS "B"  
 CONCRETE

**SIGN DETAIL (B)**

5' SIDEWALK  
 SIGN SHALL BE 18" BEHIND CURB FACE

RESOLUTION # 02-43

CITY OF ARVIN

*Harold J. Key*

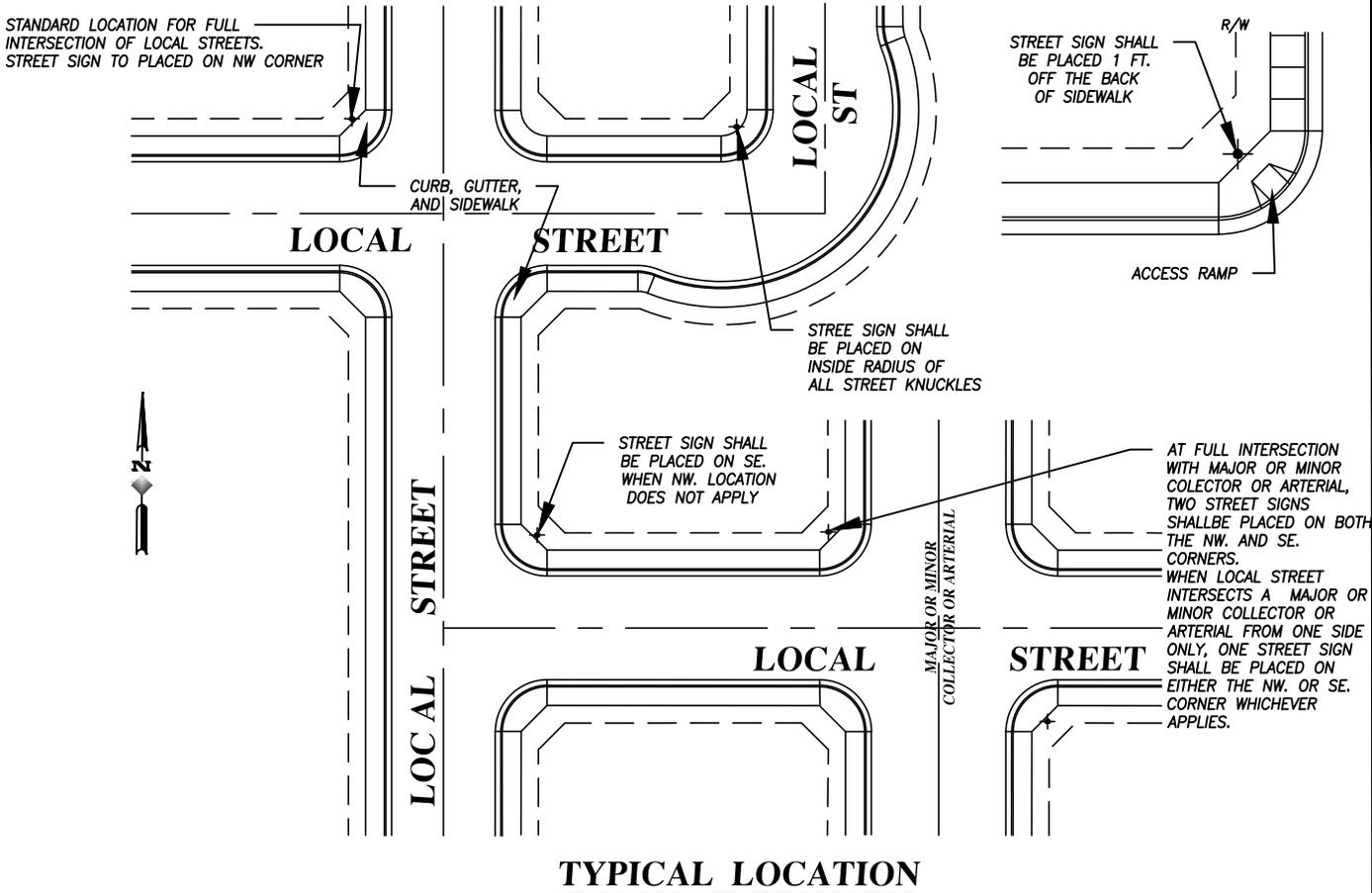
CITY ENGINEER

STREET SIGNAGE

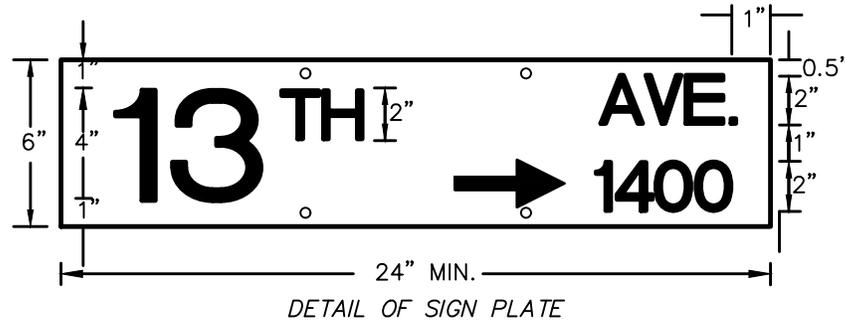
PLATE

R11

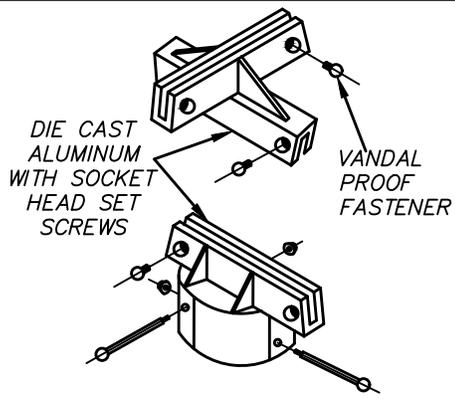
REVISED: DECEMBER 2006 SHT. 1 OF 1



**TYPICAL LOCATION**



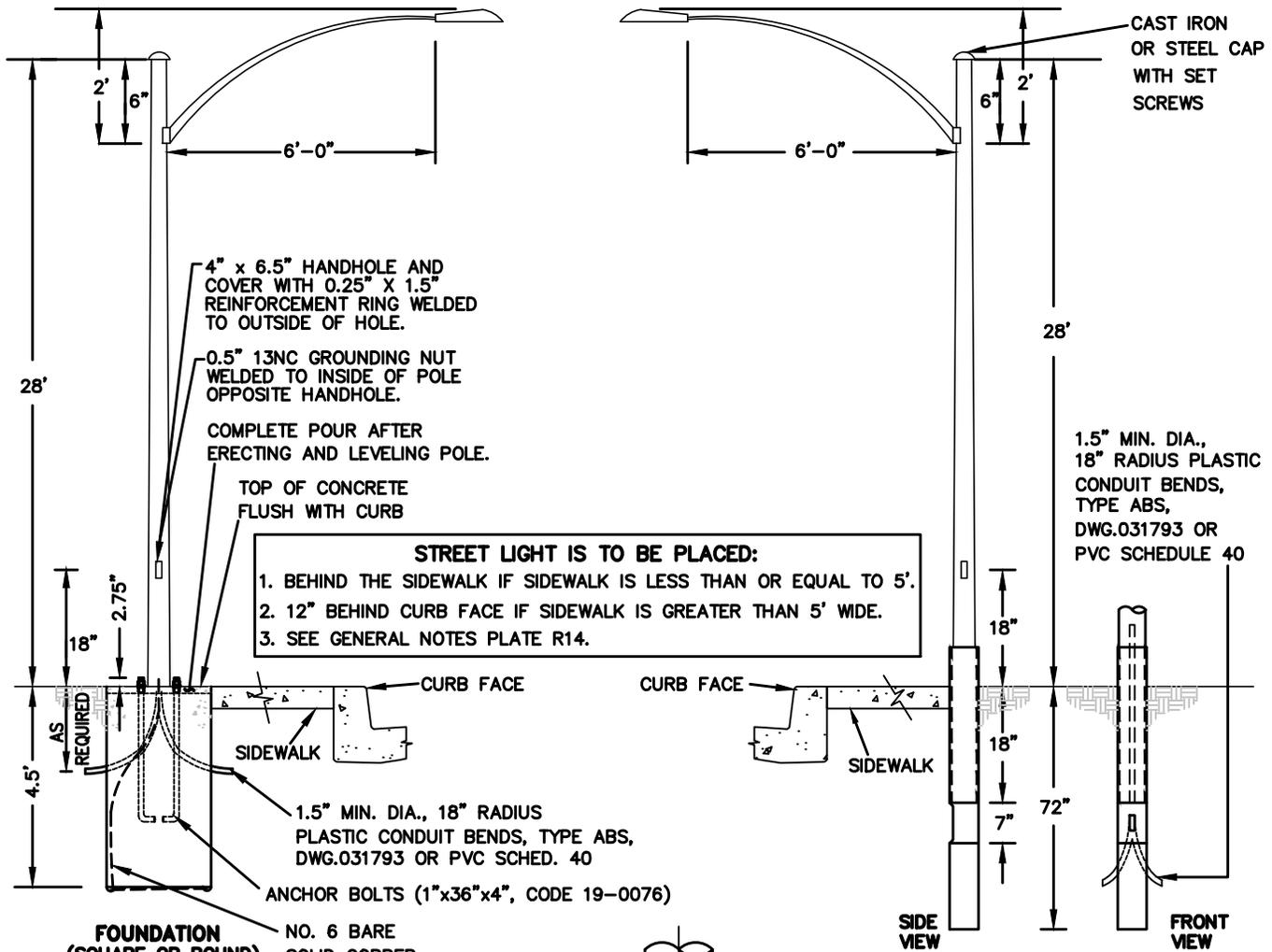
DETAIL OF SIGN PLATE



DETAIL OF FITTINGS FOR PIPE MOUNTINGS

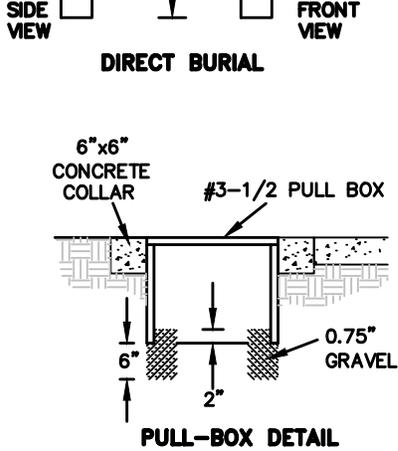
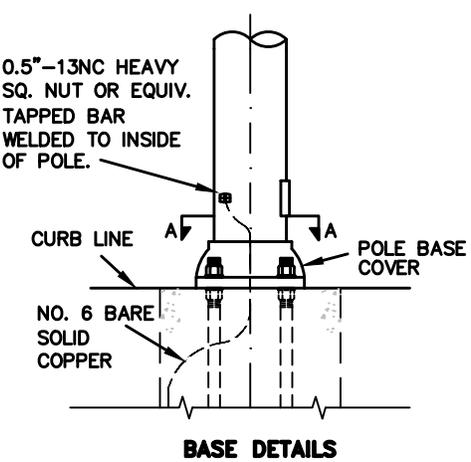
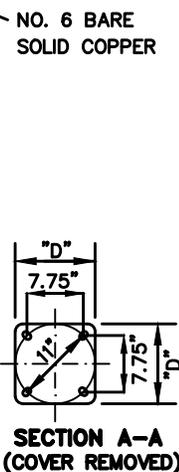
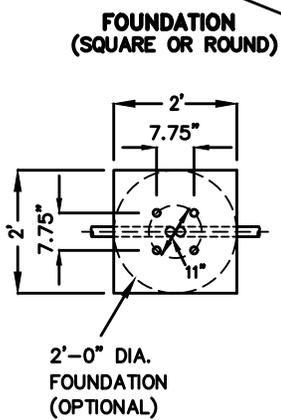
- NOTES:
1. SIGNS PROVIDED SHALL BE ACCOMPANIED BY A CERTIFICATE TO SHOW COMPLIANCE WITH CITY STANDARD.
  2. SIGN PLATES TO BE MADE OF 0.125" ALUMINUM PLATE, CUT TO DIMENSIONS SPECIFIED.
  3. PLATES SHALL HAVE REFLECTIVE HIGH INTENSITY GRADE WITH GRAFFITI-PROOF FILM - GREEN BACKGROUND W/SILVER COPY
  4. FORMAT SHALL BE HAWKINS-HAWKINS CO., INC. SM-C12 OR PRIOR APPROVED EQUAL IN WRITING.
  5. MOUNTS FOR PLATES SHALL BE HAWKINS-HAWKINS CO., INC. VANDAL-PROOF (HD) VP 90° CROSSPIECE V-14F-(HD) VP-105(90) AND PIPE CAP V14F-(HD) VP-107(2C) TO FIT A 2" I.D. PIPE OR APPROVED EQUAL.
  6. INSTALL TWO 5/16" X 3.5" BOLTS THROUGH PIPE CAP AND PIPE. USE HAWKINS-HAWKINS CO. VANDAL PROOF NUT M2G-VP 56N OR APPROVED EQUAL.
  7. SPECIAL DESIGN VANDAL-PROOF FASTENER V14F-(HD) VP-12 PT KNURLED HEAD, 0.5" LENGTH, NOMINAL OR PRIOR APPROVED EQUAL SHALL BE USED.
  8. SIGNS FACING TRAFFIC ON ARTERIAL AND MAJOR COLLECTORS SHALL BE METRO SIZE (8" X 30" MIN.) WITH 5" CAPS.

RESOLUTION #	<b>CITY OF ARVIN</b>	
CITY ENGINEER	<b>STREET SIGN RESIDENTIAL</b>	PLATE <b>R12</b>
REVISED: NOV. 2015 SHT. 1 OF 1		



**STREET LIGHT IS TO BE PLACED:**

1. BEHIND THE SIDEWALK IF SIDEWALK IS LESS THAN OR EQUAL TO 5'.
2. 12" BEHIND CURB FACE IF SIDEWALK IS GREATER THAN 5' WIDE.
3. SEE GENERAL NOTES PLATE R14.



STEEL POLE		DIMENSIONS (IN.)		
POLE CODE NO.	MOUNTING HEIGHT	"D"		
		UNION METAL	AMERON	VALMONT
35-7119 & 35-7199	27'-6"	11-1/2	11-1/2	11-1/2
35-7120 & 35-7189	32'-6"	11-1/2	11-1/2	11-1/2
35-7122 & 35-7191	35'-0"	11-1/2	11-1/2	11-1/2

**ANCHOR BASE DATA FOR STEEL POLES**

ALUMINUM POLE		DIMENSIONS (IN.)		
POLE CODE NO.	MOUNTING HEIGHT	"D"		
		HAPCO	UNION METAL	P & K
35-7123 & 35-7193	27'-6"	11-1/4	11-1/2	12
35-7124 & 35-7194	32'-6"	11-1/4	11-1/2	12
35-7125 & 35-7195	35'-0"	11-1/4	11-1/2	12

**ANCHOR BASE DATA FOR ALUMINUM POLES**

RESOLUTION # 02-43

**CITY OF ARVIN**

*Harold J. Hays*  
CITY ENGINEER

**STREET LIGHT**

PLATE  
**R13**

REVISED: NOV. 2002 SHT. 1 OF 1

## GENERAL NOTES

1. ALL WORK SHALL CONFORM TO SECTION 86 OF THE "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, BUSINESS AND TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION, AND THESE SPECIAL PROVISIONS.
2. LUMINAIRE SHALL BE COBRA HEAD TYPE, HIGH PRESSURE SODIUM-VAPOR WITH TYPE IV PHOTOELECTRIC CELL AND A BALLAST WHICH PROVIDES 55 VOLTS TO THE BULB. TYPE IV REFRACTOR SHALL BE USED AT INTERSECTIONS, AND A TYPE II TWO-WAY SHALL BE USED AT MID-BLOCK LOCATIONS. LENS SHALL BE GLASS OR POLYCARBONATE PLASTIC. BULB SHALL BE 6,000 LUMENS ON LOCAL STREETS AND 9,500 LUMENS ON COLLECTOR/ARTERIAL STREETS, SUBJECT TO INCREASE BY DIRECTION OF CITY STAFF.
3. PULL BOX SHALL BE A SIZE 3-1/2 AND SHALL BE LOCATED WITHIN 5' OF THE STREET LIGHT AND BE INSTALLED FLUSH WITH THE SIDEWALK. GRAVEL (0.75" MAX.) SHALL BE PLACED UNDER THE PULL BOX FOR DRAINAGE (SEE DETAIL ON R13). PULL BOX COVER SHALL BE MARKED TO IDENTIFY IT AS STREET LIGHTING. PULL BOX MAY BE PRECAST CONCRETE OR PLASTIC.
4. WIRING FROM THE UTILITY COMPANY SERVICE BOX AT THE BASE OF THE POLE SHALL BE #10 MIN. SOLID OR STRANDED COPPER. THE UTILITY COMPANY SHALL BE NOTIFIED PRIOR TO, AND A REPRESENTATIVE SHALL BE PRESENT DURING ANY WORK WITHIN THE UTILITY COMPANY'S SERVICE BOX. WIRING FROM THE PULL BOX TO THE LUMINAIRE SHALL BE #12 MIN. SOLID OR STRANDED COPPER. VOLTAGE DROP FROM THE UTILITY COMPANY SERVICE BOX TO THE LUMINAIRE SHALL NOT EXCEED 5%. VOLTAGE AT THE UTILITY COMPANY SERVICE BOX SHALL BE 120V (240V MAY BE USED IN CERTAIN CIRCUMSTANCES SUBJECT TO THE APPROVAL OF THE CITY ENGINEER). GROUNDING WIRE FROM THE LUMINAIRE TO THE GROUNDING ROD SHALL BE #8 BARE COPPER. AN IN-LINE FUSE IN THE UNGROUNDED CONDUCTOR OR CONDUCTORS ONLY AND A 0.5"  $\phi$  x 8' LONG COPPER OR COPPER CLAD GROUNDING ROD SHALL BE LOCATED IN THE PULL BOX.
5. SPLICES IN THE PULL BOX SHALL BE TAPED AND WATERPROOFED WITH AN APPROVED ELECTRICAL COATING.
6. CONDUIT SHALL BE A 1.5" MINIMUM DIAMETER SCHEDULE 40 RIGID NON-METALLIC CONDUIT CONFORMING TO UL STANDARD UL 651. CABLE IN CONDUIT (C.I.C) MAY BE USED. CONDUIT SHALL HAVE A MINIMUM COVER OF 18". SMALLER CONDUIT MAY BE USED WHERE THE TYPE OF POLE WILL NOT ACCEPT 1.5" CONDUIT, SUBJECT TO APPROVAL OF THE CITY ENGINEER.
7. ALL CONCRETE SHALL BE CLASS "A".
8. THESE ARE MINIMUM STANDARDS. OTHER ALTERNATIVES TO BE APPROVED BY THE PLANNING DIRECTOR.
9. STANDARD PLATE R15 IS TO BE USED ON LOCAL STREETS IN RESIDENTIAL ZONES ONLY. STANDARD PLATE R13 IS TO BE USED FOR ALL OTHER STREETS, EXCEPT IN THE HISTORICAL DISTRICT. ALL LIGHTING MUST BE APPROVED BY THE PLANNING DIRECTOR.
10. ALL UNDERGROUND ELECTRICAL WIRE SHALL BE PLACED IN CONDUIT.

RESOLUTION # 02-43

**CITY OF ARVIN**



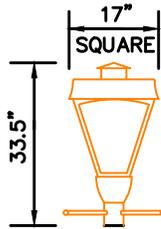
CITY ENGINEER

**STREET LIGHTS  
GENERAL NOTES**

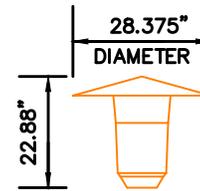
PLATE

**R14**

REVISED: NOV. 2002 SHT. 1 OF 1



MC-ED. CO. TRADITIONAIRE

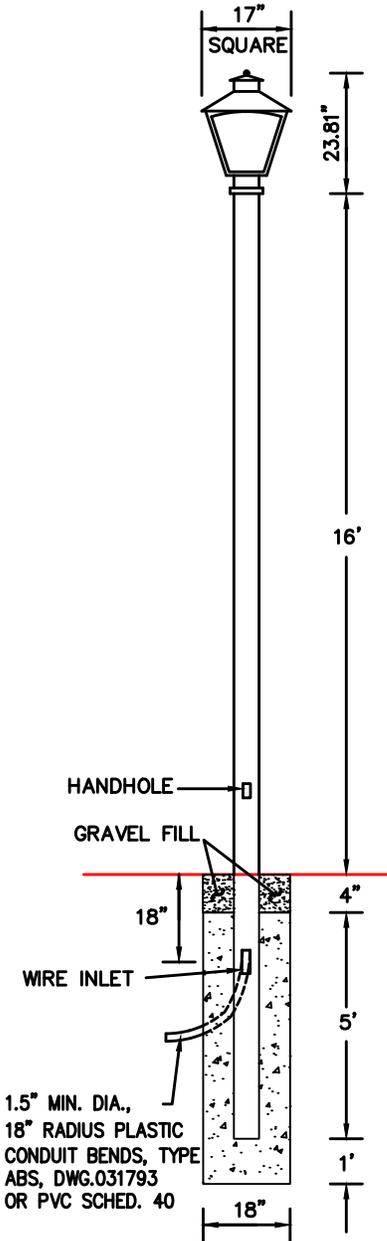


MC-ED. CO. STYLEKING

**SODIUM LUMINAIRES**

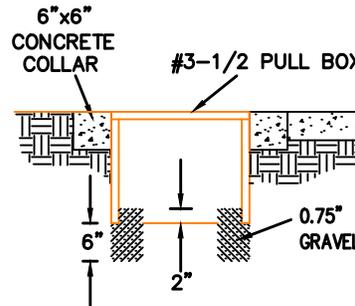
MFR.	CAT. NO.	TYPE
MCGRAW EDISON CO.	UTR3293-120RV-BK	TRADITIONAIRE
MCGRAW EDISON CO.	UTS4193-120RV-BK	STYLEKING
AMERICAN ELECTRIC	24T-57063-8	AMERICAN REVOLUTION

THESE ARE MINIMUM STANDARDS, OTHER ALTERNATIVES TO BE APPROVED BY THE PLANNING DIRECTOR.



**PRESTRESSED CONCRETE POST**

CENTRECON SER-5T-123  
(3.5" x 6.69" x 20.42")  
OR EQUAL APPROVED BY  
CITY ENGINEER AND  
PLANNING DIRECTOR.



**PULL-BOX DETAIL**

**NOTES:**

1. STREET LIGHT IS TO BE PLACED BEHIND THE SIDEWALK IF THE SIDEWALK IS LESS THAN OR EQUAL TO 5' WIDE. THE STREET LIGHT IS TO BE PLACED 12" BEHIND THE CURB FACE IF THE SIDEWALK IS GREATER THAN 5' WIDE.
2. LUMINAIRE SHALL BE POST TOP TYPE, HIGH PRESSURE SODIUM-VAPOR WITH TYPE IV PHOTOELECTRIC CELL AND BALLAST WHICH PROVIDES 55 VOLTS TO THE BULB. A TYPE III REFRACTOR SHALL BE USED. REFRACTORS/PANELS SHALL BE POLYCARBONATE PLASTIC. BULB SHALL BE 6,000 LUMEN FOR LOCAL STREETS.
3. PULL BOX SHALL BE SIZE 3-1/2 AND SHALL BE LOCATED WITHIN 5' OF THE STREET LIGHT AND BE INSTALLED FLUSH WITH THE SIDEWALK. GRAVEL (0.75" MAX.) SHALL BE PLACED UNDER THE PULL BOX FOR DRAINAGE. PULL BOX COVER SHALL BE MARKED TO IDENTIFY IT AS STREET LIGHTING. PULL BOX MAY BE PRECAST CONCRETE OR PLASTIC.
4. WIRING FROM THE UTILITY COMPANY SERVICE BOX AT THE BASE OF THE POLE SHALL BE #10 MIN. SOLID OR STRANDED COPPER. THE UTILITY COMPANY SHALL BE NOTIFIED PRIOR TO WORK SUCH THAT A REPRESENTATIVE SHALL BE PRESENT DURING ANY WORK WITHIN THE UTILITY COMPANY'S SERVICE BOX. WIRING FROM THE PULL BOX TO THE LUMINAIRE SHALL BE #12 MIN. SOLID OR STRANDED COPPER. VOLTAGE DROP FROM THE UTILITY COMPANY SERVICE BOX SHALL NOT EXCEED 5%. VOLTAGE AT THE UTILITY COMPANY SERVICE BOX SHALL BE 120V (240V MAY BE USED IN CERTAIN CIRCUMSTANCES SUBJECT TO APPROVAL OF THE CITY ENGINEER). GROUNDING WIRE FROM THE LUMINAIRE TO THE GROUNDING ROD SHALL BE #8 BARE COPPER. AN IN-LINE FUSE IN THE UN-GROUNDED CONDUCTOR(S) ONLY AND A 0.5"  $\phi$  x 8' LONG COPPER OR COPPER CLAD GROUNDING ROD SHALL BE LOCATED IN THE PULL BOX.
5. SPLICES IN THE PULL BOX SHALL BE TAPED AND WATERPROOFED WITH AN APPROVED ELECTRICAL COATING.
6. ALL POSTS TO BE SUITABLE FOR MOUNTING POST TOP LUMINAIRES WITH 3" I.D. ( $\pm$  0.125") SLIPFITTER.
7. ALL CONCRETE SHALL BE CLASS "A".

8. STANDARD PLATE R15 IS TO BE USED ONLY FOR LOCAL STREETS IN RESIDENTIAL ZONES. LIGHTING MUST BE APPROVED BY THE PLANNING DIRECTOR.

RESOLUTION # 02-43

*Harold J. Key*  
CITY ENGINEER

**CITY OF ARVIN**

**STREET LIGHT  
POST TYPE**

PLATE

**R15**

REVISED: NOV. 2002 SHT. 1 OF 1

STERNBERG  
9930/VG/150W/CA.  
150W HIGH PRESSURE  
SODIUM BULB.  
SEE NOTE 2

STERNBERG PLAINFIELD  
5716'T5/VG POLE WITH  
FLUTED BASE

16'-0"

T.O.C.

WIRE INLET

1.5" PVC SCH. 40  
CONDUIT WITH  
12" MIN. RADIUS  
BEND

2" GRAVEL FILL

EARTH

**SEE 'FOOTING DETAIL' FOR  
ADDITIONAL INFORMATION**

ORNAMENTAL POLE

1#8 BARE CU  
TO GND. LUG.

POLE BASE AND  
COVERPLATE

1" CHAMFER TYP

2" GROUT UNDER  
BASE AFTER LEVELING

T.O.C.

T.O.C.

PROVIDE (3)#3 TIES  
WITHIN 6" OF TOP  
FOOTING

(4) 3/4" X 18" MIN.  
OR PER MFR.  
ANCHOR BOLTS WITH  
HEX NUT, LEVELING  
NUT, AND TWO  
WASHERS FOR EACH  
BOLT

#3 TIES @ 16" O.C.

BOND TO  
FOOTING STEEL

#5 VERTICAL REBARS-  
(4) REQUIRED

3000 P.S.I.  
CONC. @ 28  
DAYS

4'-6"  
NTS

2'-6"  
DIA

### FOOTING DETAIL

NTS

### NOTES:

1. STREET LIGHT IS TO BE PLACED BEHIND THE SIDEWALK IF THE SIDEWALK IS LESS THAN OR EQUAL TO 5' WIDE. THE STREET LIGHT IS TO BE PLACED 12" BEHIND THE CURB FACE IF THE SIDEWALK IS GREATER THAN 5' WIDE.
2. FIXTURE SHALL BE POST TOP TYPE, CAST ALUMINUM WITH VANDAL RESISTANT CLEAR ACRYLIC PLASTIC. MOGUL BASE PORCELAIN SOCKETS WITH ELECTRONIC PHOTOCELL. BALLAST SHALL BE INSTANT START ELECTRONIC. REFRACTORS SHALL BE TYPE 3.
3. STANDARD PLATE R15 SHALL BE USED ONLY FOR LOCAL STREETS IN RESIDENTIAL ZONES. LIGHTING MUST BE APPROVED BY THE PLANNING DIRECTOR.
4. REFER TO PLATE 15A FOR PULL BOX DETAIL REQUIREMENTS.
5. ALL ELECTRICAL WORK EQUIPMENT AND MATERIALS, INCLUDING THEIR INSTALLATIONS SHALL CONFORM TO THE FOLLOWING APPLICABLE CODES:
  - NATIONAL ELECTRICAL CODE, LATEST EDITION
  - CALIFORNIA ELECTRICAL CODE, LATEST EDITION
  - OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS
  - COUNTY OF KERN AND CITY OF ARVIN CODES AND ORDINANCES

RESOLUTION #

CITY OF ARVIN

*Harold J. Key*

INTERIM CITY ENGINEER

STREET LIGHT  
POST TYPE

PLATE

R15

REVISED: MARCH 2012 SHT. 1 OF 1

DETAIL-HV1 .60MM



DETAIL-HV2 .40MM



DETAIL-MD1 .30MM



DETAIL-MD2 .20MM



DETAIL-LT1 .15MM

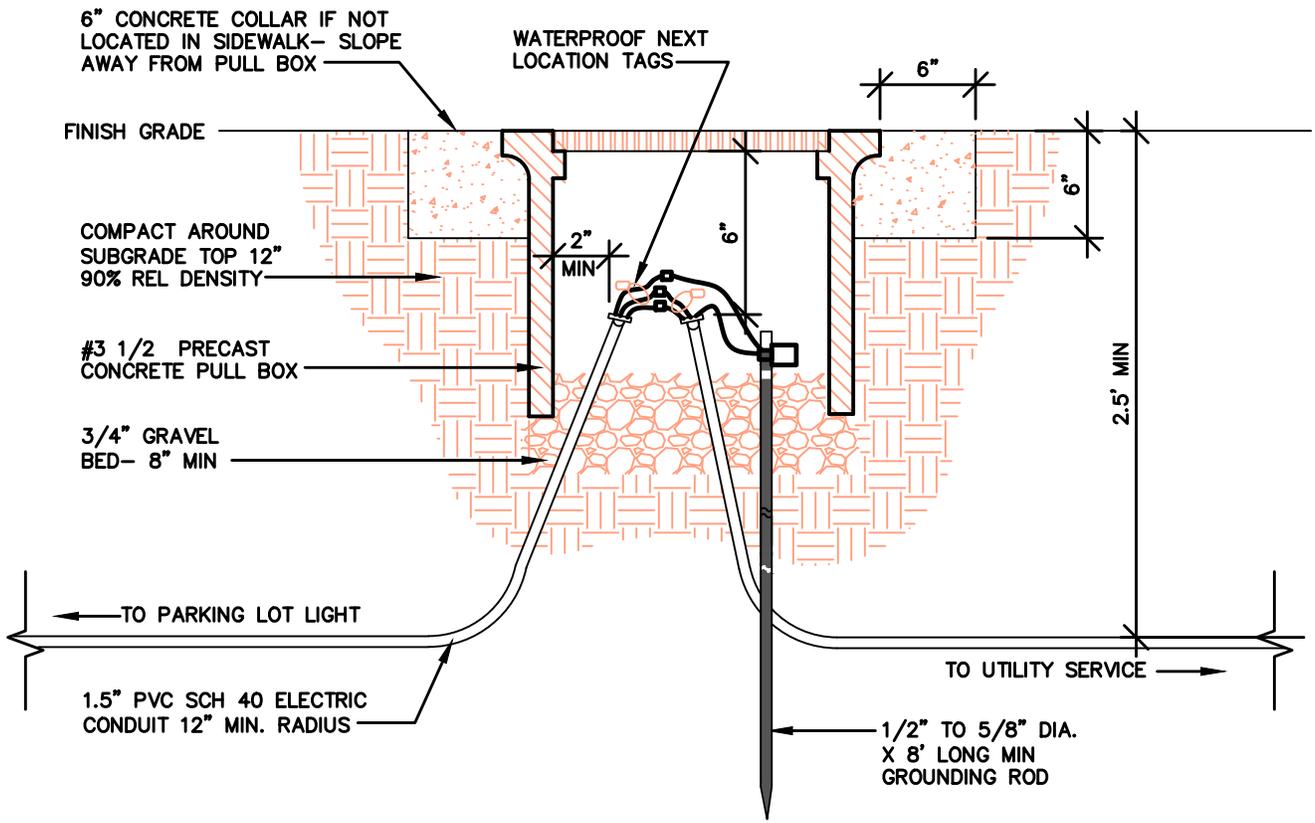


DETAIL-LT2 .00MM



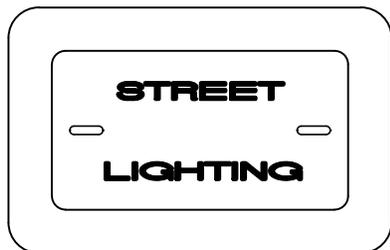
DETAIL-LT3 .00MM



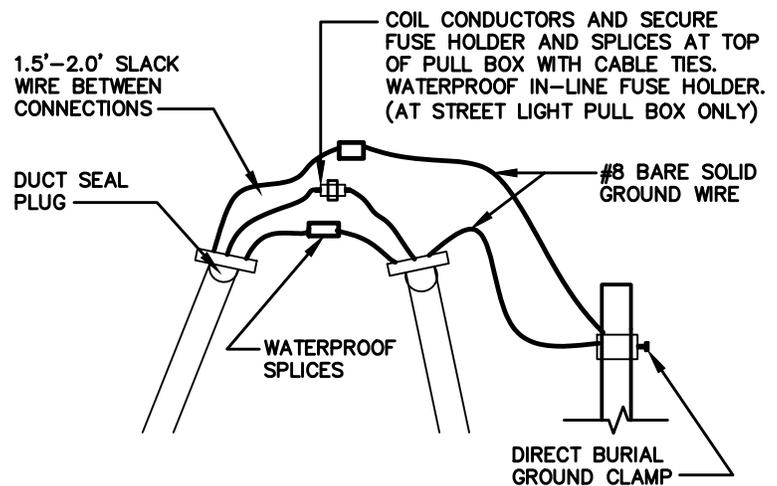


**PULL BOX DETAIL**

**NTS**



**COVER DETAIL**



**INNER BOX DETAIL**

**NOTES:**

- 1.- REMOVE COVER BEFORE PLACING CONCRETE. KEEP INSIDE OF BOX FREE OF OVERSPILL.
- 2.- PULL BOX SHALL BE SIZE 3-1/2 AND SHALL BE LOCATED WITHIN 5' OF THE STREET LIGHT AND BE INSTALLED FLUSH WITH THE SIDEWALK. GRAVEL (0.75" MAX.) SHALL BE PLACED UNDER THE PULL BOX FOR DRAINAGE. PULL BOX COVER SHALL BE MARKED TO IDENTIFY IT AS STREET LIGHTING. PULL BOX SHALL BE PRECAST CONCRETE

RESOLUTION #

*Harold J. Hays*  
 INTERIM CITY ENGINEER

**CITY OF ARVIN**

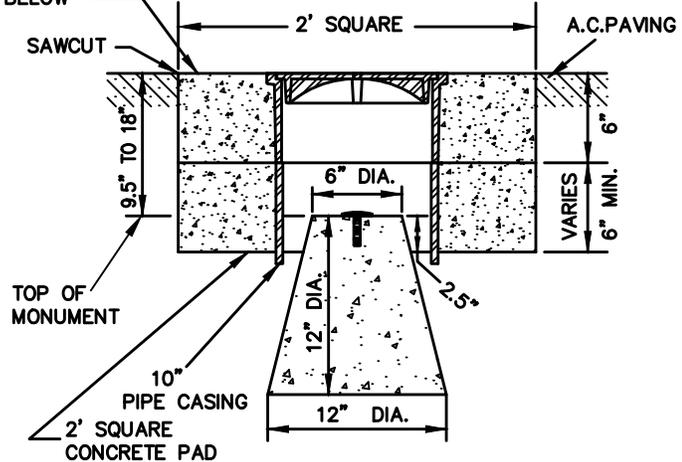
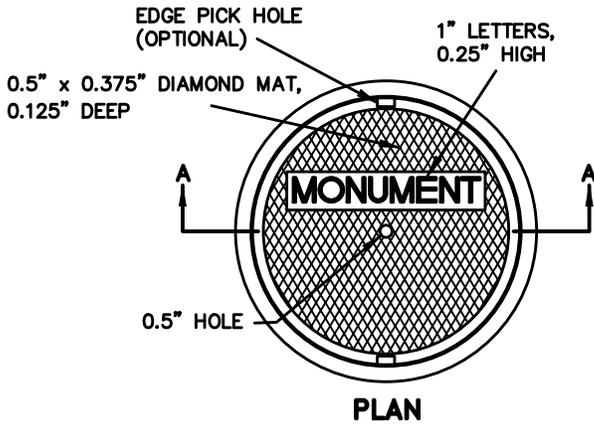
**STREET LIGHT  
 PULL BOX DETAIL**

PLATE

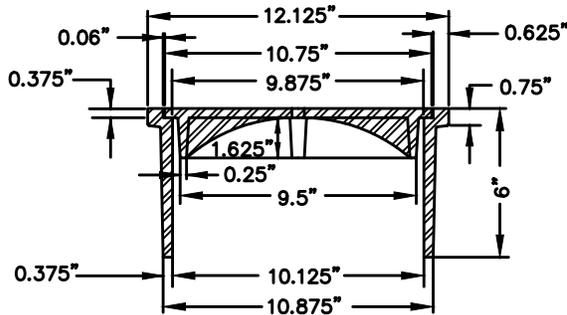
**R15a**

REVISED: MARCH 2012 SHT. 1 OF 1

CLASS "A" SLAB NOT TO BE POURED UNTIL PAVING IS IN PLACE. SLAB AND LID TO BE 0.125" TO 0.25" BELOW NEW PAVING

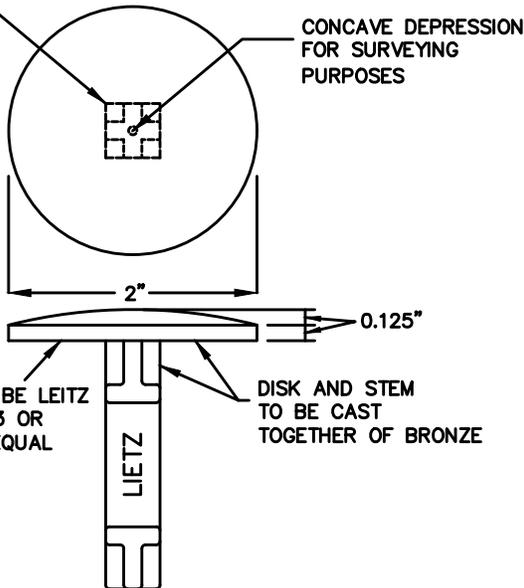


**SECTION THROUGH MONUMENT**



**SECTION A-A**

STAMP DISK WITH R.C.E. OR L.S. NUMBER



**DOME HEAD DISK DETAIL**

**NOTES:**

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. CASTINGS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR GREY-IRON CASTINGS, SERIAL DESIGNATION ASTM: (LATEST) A48, CLASS NO. 30B
3. ALL FRAMES AND COVERS SHALL BE TOUGH, GREY CAST IRON, FREE FROM WARPS, CRACKS, SWELLS, AND COLD SHEET, AND SHALL HAVE A WORKMANLIKE FINISH.
4. THE SEATS OF FRAMES AND BEARING FACES OF THE COVERS SHALL BE MACHINED FOR A SMOOTH, NON-ROCKING FIT BETWEEN THE TWO CASTINGS.
5. CASTING SHALL BE THOROUGHLY CLEANED AND DIPPED TWICE IN A PREPARATION OF ASPHALT OR COAL TAR AND OIL APPLIED AT 300° F TO FORM A FIRM AND TENACIOUS SEAL.
6. CONCRETE SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND COMPLYING WITH SECTION 90-7.01B OF STANDARD SPECIFICATIONS.
7. THE SURFACE SHALL BE FINISHED TO GRADE, TROWELED SMOOTH, AND GIVEN A LIGHT BROOM FINISH.
8. ALL CONCRETE USED SHALL BE CLASS "A".
9. THE NAME OF THE MANUFACTURING COMPANY SHALL BE ON THE UNDERSIDE OF THE COVER.
10. PIPE CASING SHALL BE 10" I.D. STEEL. OR AS DIRECTED BY THE CITY ENGINEER.

RESOLUTION # 02-43

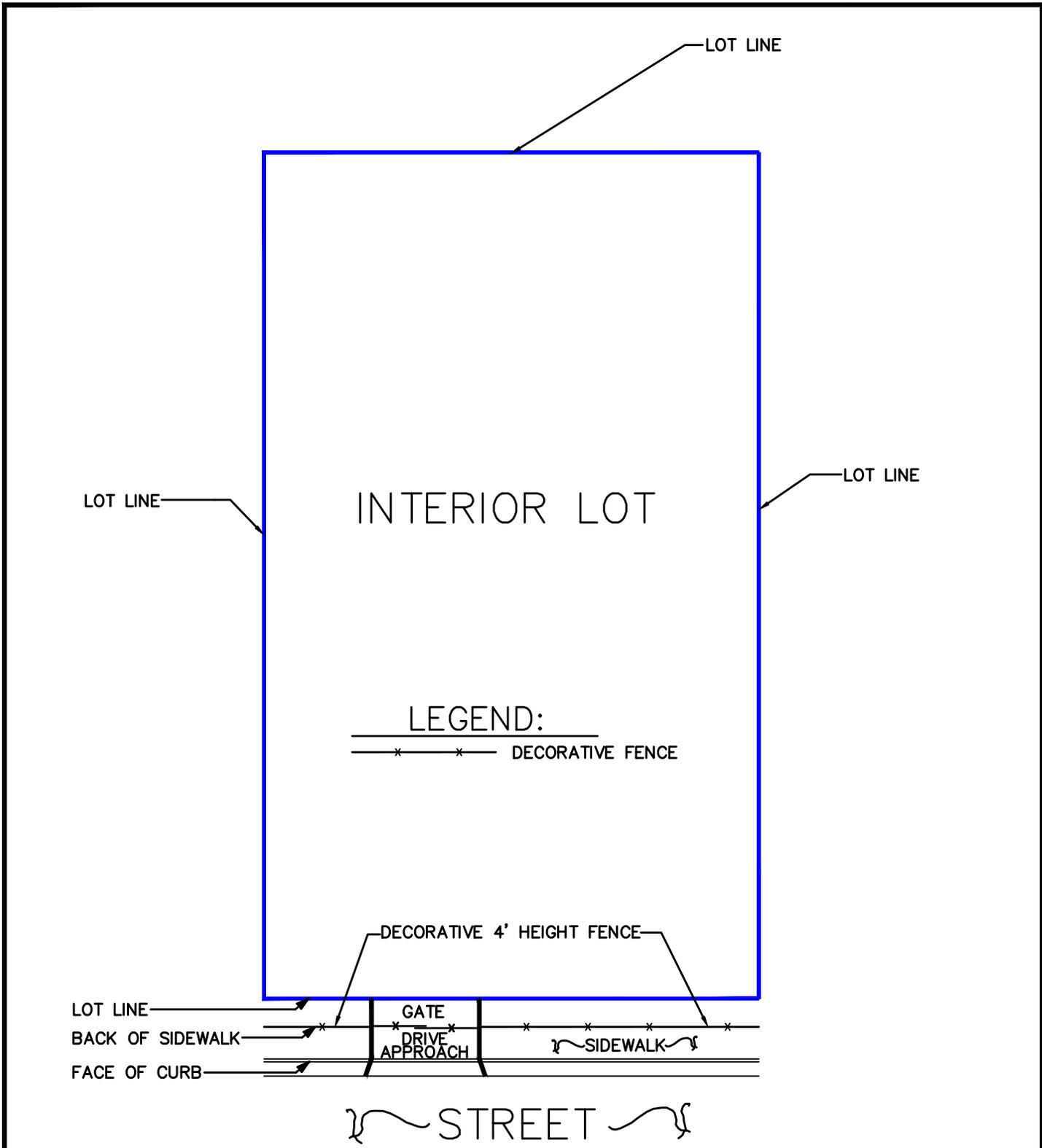
**CITY OF ARVIN**

*Harold J. Key*  
CITY ENGINEER

**SURVEY MONUMENT**

PLATE  
**R16**

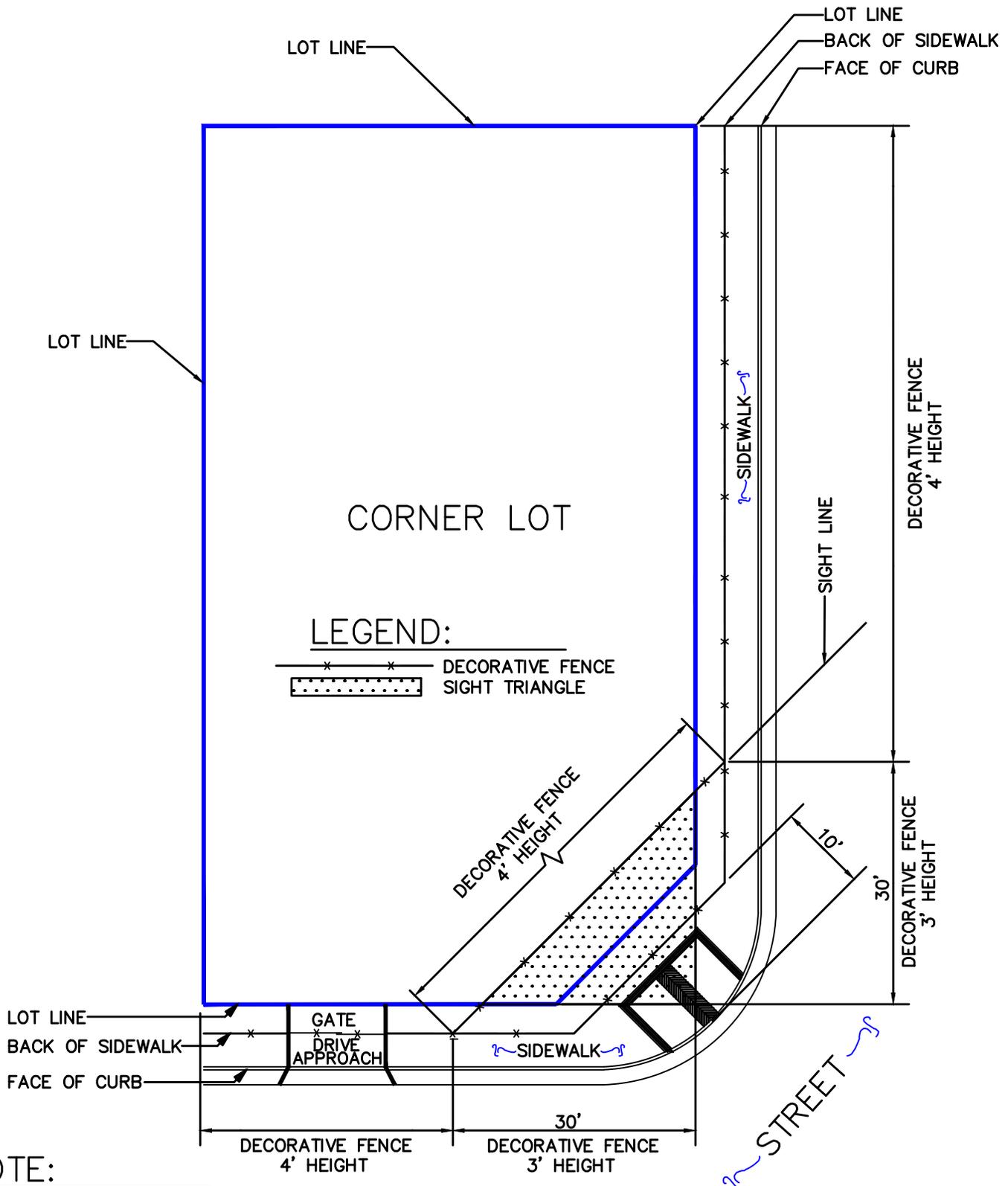
REVISED: NOV. 2002 SHT. 1 OF 1



**NOTE:**

1. ALL FENCES WITHIN THE RIGHT OF WAY AT INTERIOR LOT SHALL BE A MAXIMUM HEIGHT OF 4'-0". SEE PLATE R19 FOR CONSTRUCTION DETAILS.
2. OBTAIN APPROVAL FROM UTILITY COMPANIES PRIOR TO BUILDING PERMIT APPROVAL FOR POSSIBLE UTILITY CONFLICTS.

RESOLUTION # 02-43	<b>CITY OF ARVIN</b>	
 CITY ENGINEER	<b>INTERIOR LOT-DECORATIVE FENCE IN ROAD RIGHT OF WAY</b>	PLATE <b>R17</b>
REVISED: NOV. 2002 SHT. 1 OF 1		



**NOTE:**

1. ALL FENCES WITHIN THE RIGHT-OF-WAY SHALL BE A MAXIMUM HEIGHT OF 4'-0' EXCEPT IN THE SIGHT TRIANGLE, THE MAXIMUM HEIGHT IN THE SIGHT TRIANGLE SHALL BE 3'-0'. SEE PLATE R19 FOR CONSTRUCTION DETAILS.
2. OBTAIN APPROVAL FROM UTILITY COMPANIES PRIOR TO BUILDING PERMIT APPROVAL FOR POSSIBLE UTILITY CONFLICTS.

RESOLUTION # 02-43

**CITY OF ARVIN**

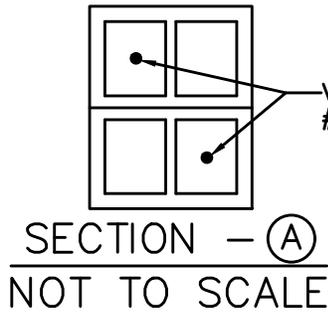
PLATE

**R18**

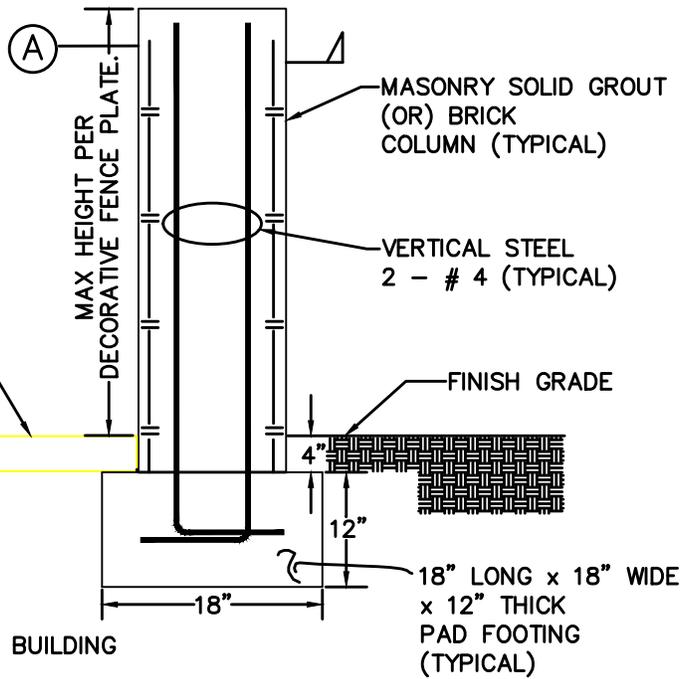
**CORNER LOT-DECORATIVE  
FENCE IN ROAD RIGHT OF WAY**

*Harold J. Key*  
CITY ENGINEER

REVISED: NOV. 2002 SHT. 1 OF 1



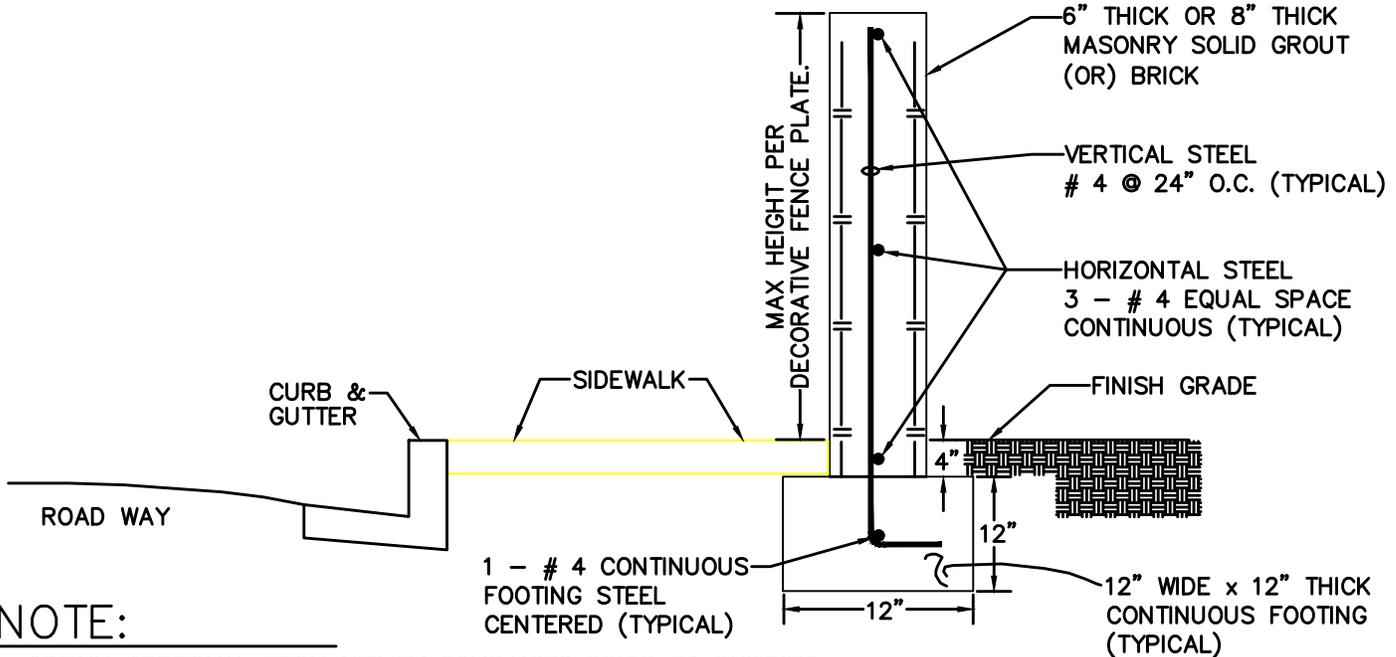
VERTICAL STEEL  
# 4 (TYPICAL)



**NOTE:**

1. OBTAIN APPROVAL FROM UTILITY COMPANIES PRIOR TO BUILDING PERMIT APPROVAL FOR POSSIBLE UTILITY CONFLICTS.

COLUMN ONLY  
NOT TO SCALE



**NOTE:**

1. OBTAIN APPROVAL FROM UTILITY COMPANIES PRIOR TO BUILDING PERMIT APPROVAL FOR POSSIBLE UTILITY CONFLICTS.

CONTINUOUS WALL ONLY  
NOT TO SCALE

RESOLUTION # 02-43

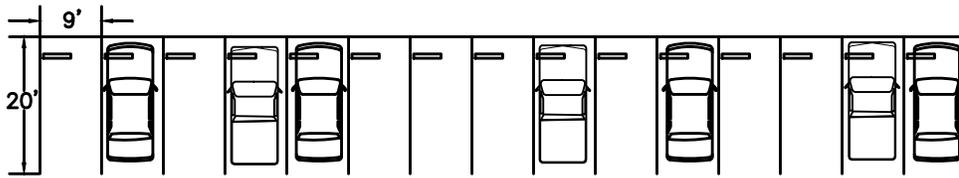
*Harold J. Key*  
CITY ENGINEER

**CITY OF ARVIN**

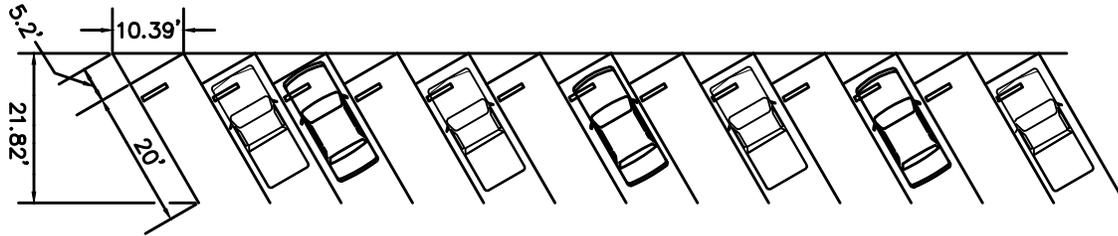
**DECORATIVE WALL  
CONSTRUCTION DETAILS**

PLATE  
**R19**

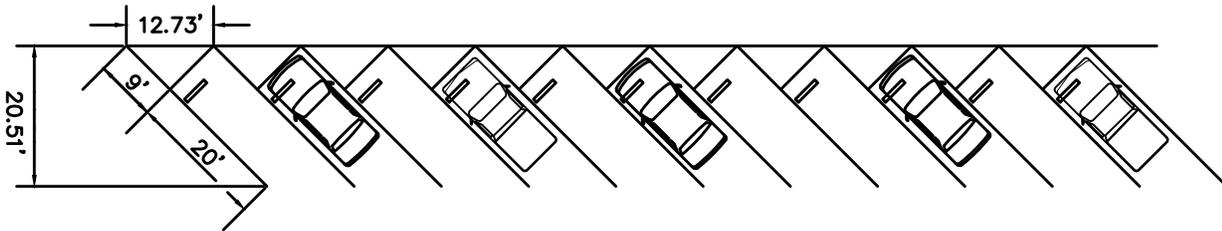
REVISED: NOV. 2002 SHT. 1 OF 1



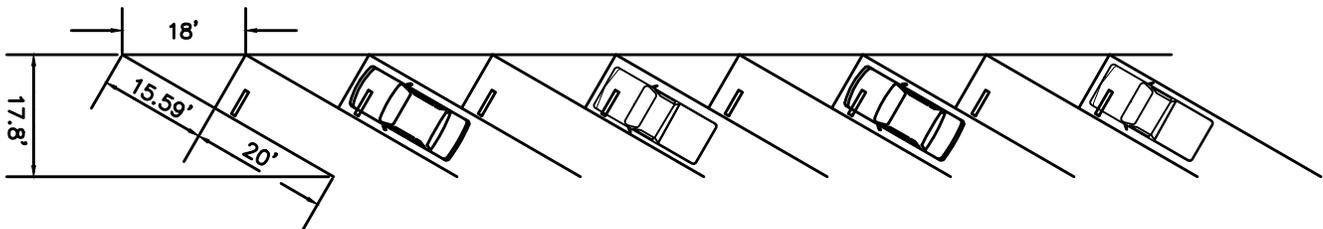
90 DEGREE PARKING



60 DEGREE PARKING



45 DEGREE PARKING

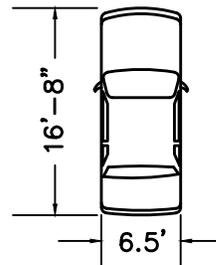


30 DEGREE PARKING

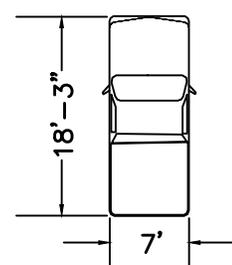
**NOTE:**

1. PARKING STALL DIMENSIONS ARE 9' WIDE BY 20' IN LENGTH (TYPICAL)
2. SEE R21 FOR PARKING BUMPER DETAIL

TYPICAL DIMENSIONS FOR MID SIZE CAR



TYPICAL DIMENSIONS FOR FULL SIZE TRUCK



NOT TO SCALE

RESOLUTION # 02-43

**CITY OF ARVIN**

PLATE

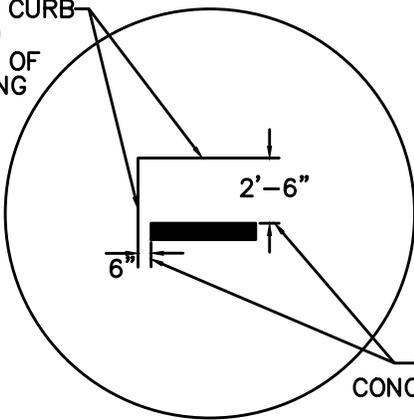
**R20**

*Harold J. Key*  
CITY ENGINEER

**PARKING LOT LAYOUT**

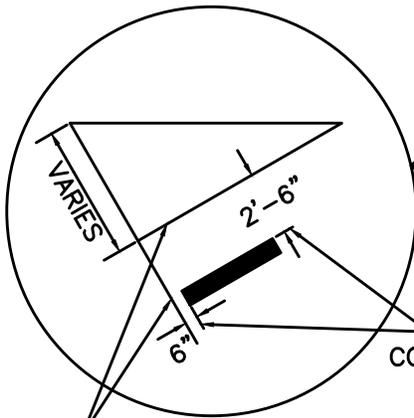
REVISED: NOV. 2002 SHT. 1 OF 1

FACE OF CURB  
(OR)  
CENTER OF  
STRIPING  
LINE



EDGE OF  
CONCRETE BUMPER

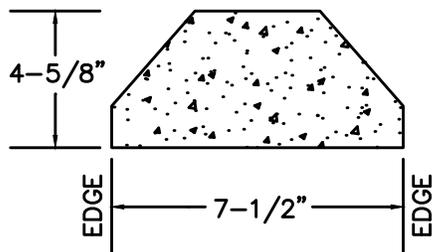
90 DEGREE PARKING



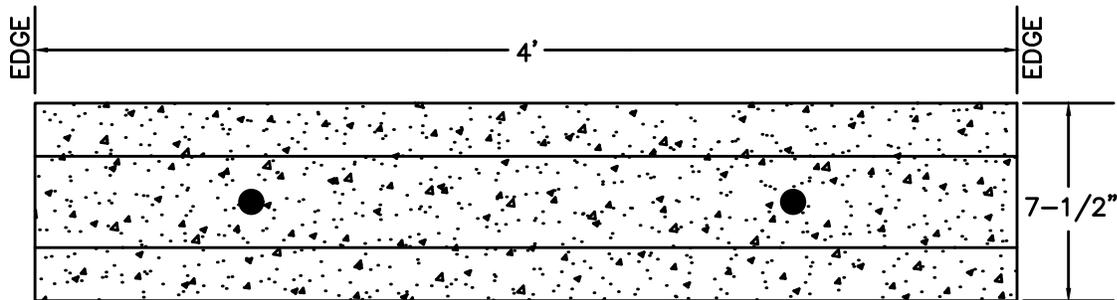
EDGE OF  
CONCRETE BUMPER

ANGLE PARKING

FACE OF CURB  
(OR)  
CENTER OF  
STRIPING  
LINE



END VIEW/ N.T.S.



PLAN VIEW/ N.T.S.

NOTE:

SECURED WITH # 5 REBAR, 12" INTO GRADE (TYPICAL)

RESOLUTION # 02-43

CITY OF ARVIN

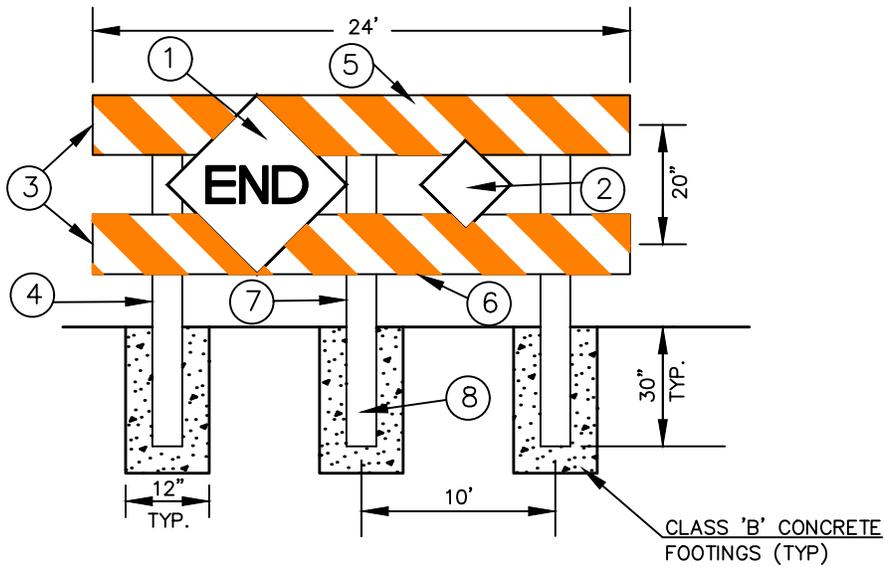
PLATE

R21

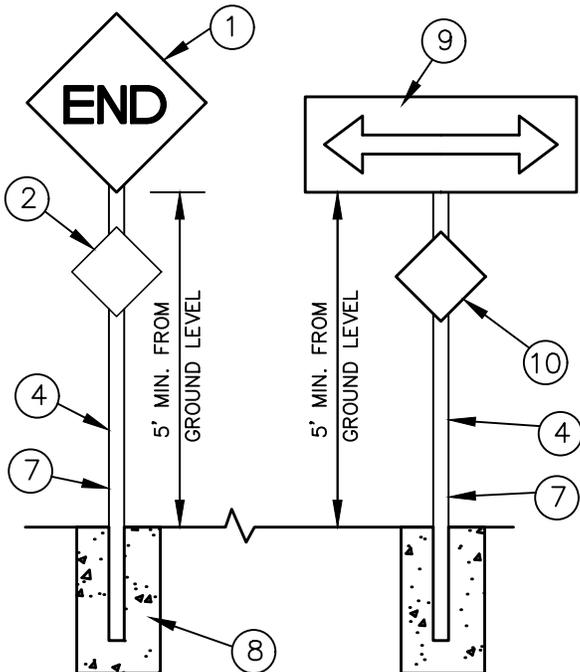
PARKING BUMPER DETAIL

REVISED: NOV. 2002 SHT. 1 OF 1

CITY ENGINEER



- ① STANDARD W-31-END 24" X 24" REFLECTORIZED.
- ② STANDARD N-2 (RED) 18" X 18".
- ③ 2 X 10, S4S, DOUGLAS FIR, NO. 2 OR BETTER.
- ④ 4 X 4, S4S, DOUGLAS FIR, NO. 2 OR BETTER, OR 2-1/2" GALV. PIPE.
- ⑤ FASTEN EACH RAIL TO EACH POST WITH 2-3/8" GALV. BOLTS, WASHERS AND NUTS.
- ⑥ ORANGE AND WHITE STRIPES, 6" WIDE, REFLECTORIZED
- ⑦ PAINT ALL OTHER SURFACES WITH TWO (2) COATS OF GOOD QUALITY WHITE EXTERIOR PAINT.
- ⑧ FILL POST HOLES WITH TYPE B CONCRETE (5 SACK MIX).
- ⑨ STANDARD W-56 OR W-57 18" X 36" REFLECTORIZED
- ⑩ STANDARD N-1 (YELLOW) 18" X 18" REFLECTORIZED



W-31 = STATE SIGN STANDARD  
 W-56 = STATE SIGN STANDARD  
 W-57 = STATE SIGN STANDARD  
 N-1 = STATE SIGN STANDARD  
 N-2 = STATE SIGN STANDARD  
 S4S = SURFACE FOUR (4) SIDES

NOTES:

1. PLACE BARRICADE CENTERED ON STREET AT END.
2. PLACE SIGNS ON POST CENTERED ON APPROACH LANE(S).
3. SIGNS SHALL BE AS MANUFACTURED BY HAWKINS-HAWKINS, BERKELEY, CALIFORNIA, OR APPROVED EQUAL.
4. THE DECISION AS TO WHICH TO USE (BARRICADE OR SIGN) SHALL BE BASED ON RECOMMENDATION OF THE CITY ENGINEER.

NTS

RESOLUTION #

CITY OF ARVIN

*Harold J. Key*

CITY ENGINEER

END OF STREET BARRICADE

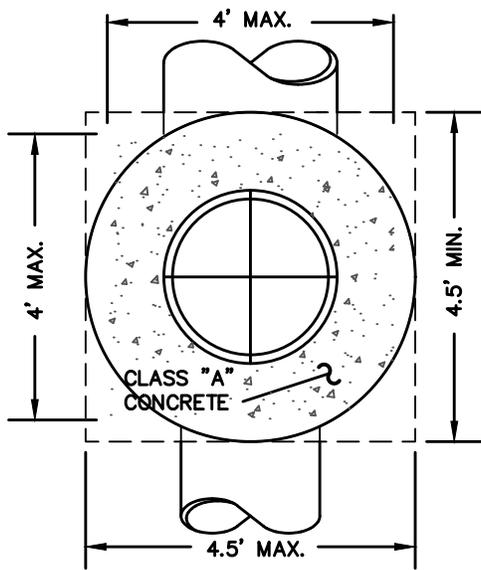
PLATE

R22

REVISED: DECEMBER 2007

BY: JMP

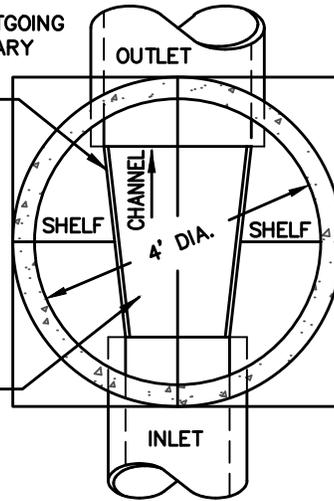
SHT. 1 OF 1



**PLAN AT SURFACE**

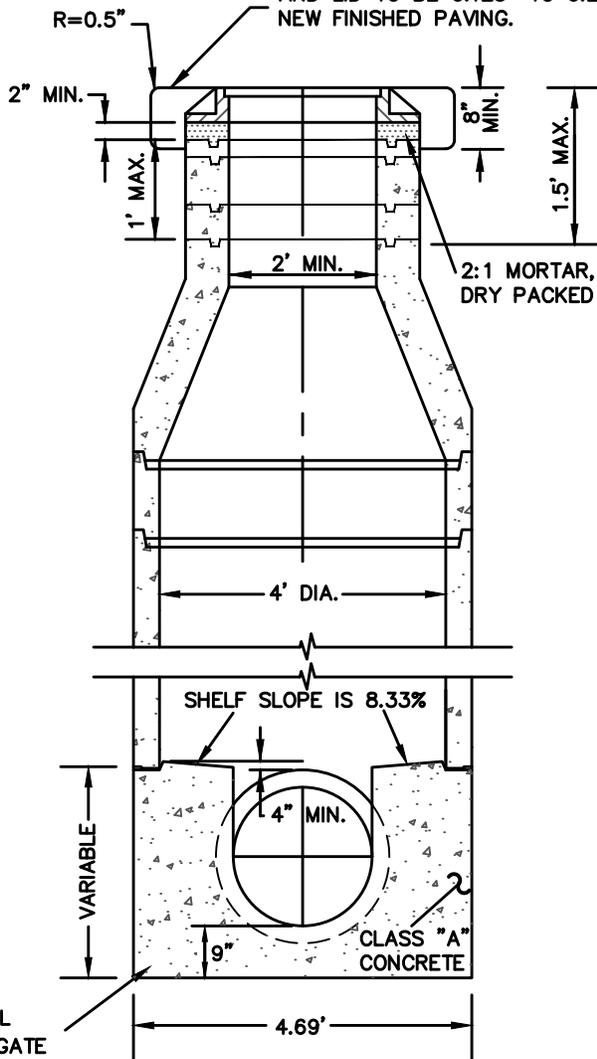
WHERE INCOMING AND OUTGOING SEWERS IN A MANHOLE VARY IN SIZE, EXTEND LOWER HALVES OF SEWERS 8" BEYOND INSIDE OF WALL SHAPE TRANSITION CHANNEL BETWEEN ENDS OF LOWER HALVES OF PIPES.

WHERE INCOMING AND OUTGOING SEWERS IN A MANHOLE AREA OF THE SAME DIAMETER, THE TOP HALF OF PIPE SHALL ONLY BE REMOVED BETWEEN WALLS AND THE BROKEN EDGES SHALL BE PLASTERED SMOOTH WITH CEMENT MORTAR.



**PLAN AT BOTTOM**

CLASS "A" CONCRETE SLAB NOT TO BE POURED UNTIL PAVING IS IN PLACE. SLAB AND LID TO BE 0.125" TO 0.25" BELOW NEW FINISHED PAVING.



**SECTION**

**NOTES:**

1. ALL CONCRETE USED SHALL BE CLASS "A". (6 SACK TYPE 2-5)
2. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
3. ALL UNLINED MANHOLE JOINTS SHALL BE FILLED WITH KENT SEAL OR APPROVED BLACK MASTIC EQUAL. INSIDE OF MANHOLES MUST BE MORTARED AND NEATLY RAKED OR WIPED ON INSIDE OF PIPE.
4. PRECAST REINFORCED MANHOLE SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF ASTM C-478, CURRENT EDITION.
5. ALL SEWER MANHOLES SHALL BE LINED WITH "T-LOCK" OR APPROVED EQUAL.
6. CONCRETE PAD SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND AS PER SECTION 90-7.01B OF THE STANDARD SPECIFICATIONS.
7. SEE STANDARD PLATE S2 FOR FRAME AND COVER DETAILS.
8. ALL CHANNELS SHALL BE SMOOTH FINISHED WITH STEEL TROWEL. SHELF SHALL BE BROOM FINISHED FOR SLIP RESISTANCE.

RESOLUTION #

**CITY OF ARVIN**

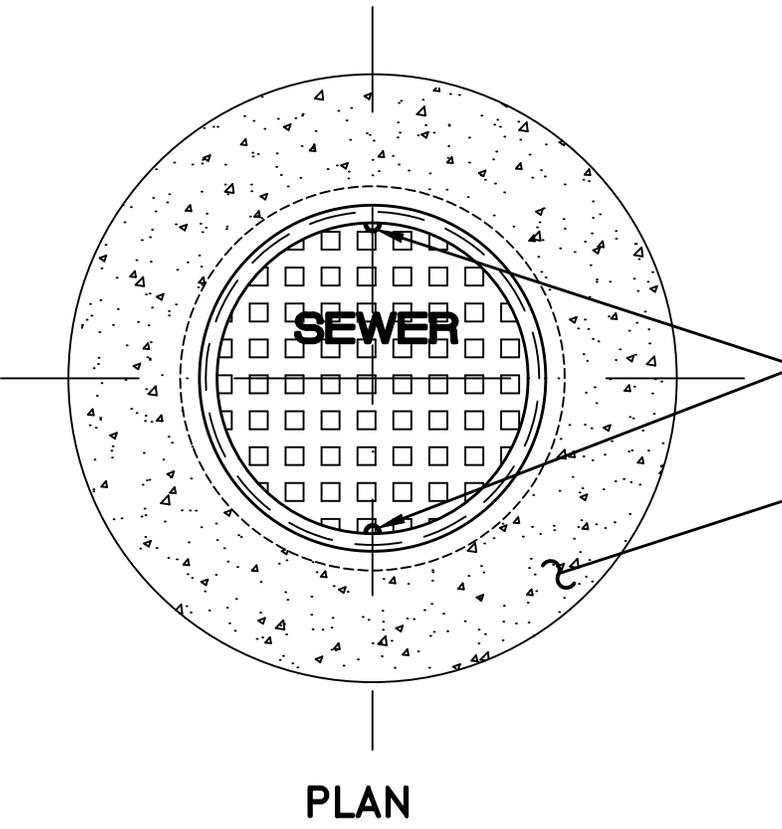
CITY ENGINEER

**MANHOLE TYPE 'A'**

PLATE

**S1**

REVISED: NOV. 2015 SHT. 1 OF 1



**MANHOLE FRAME AND COVER**

36" DIA. - ALHAMBRA FOUNDRY NO.A-1251-4  
OR APPROVED EQUAL

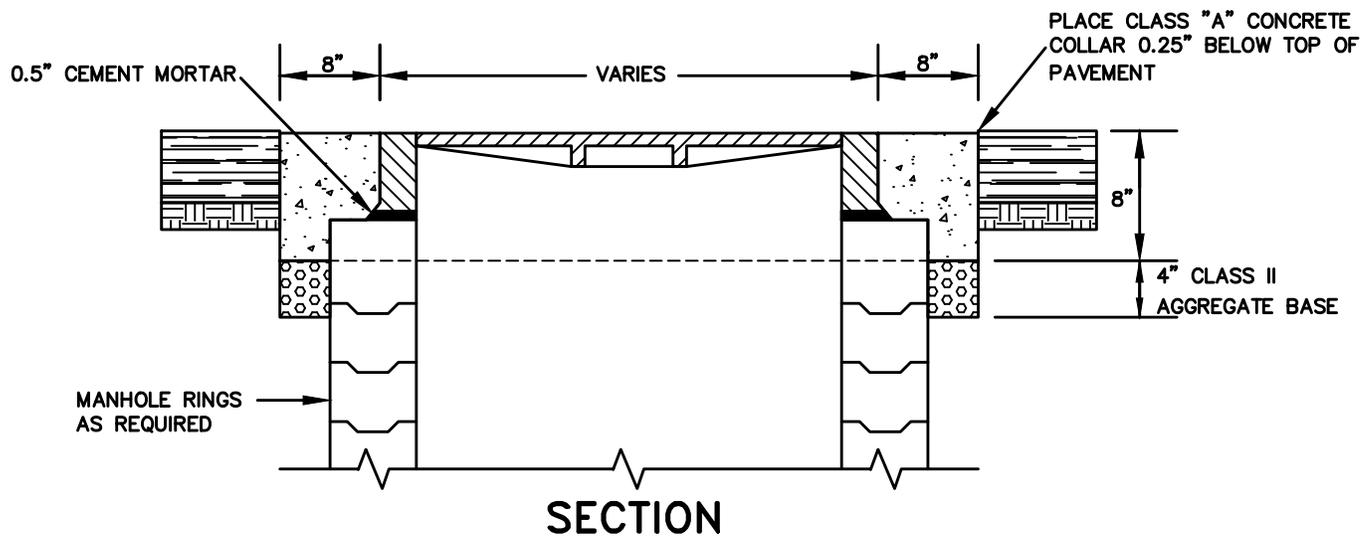
24" DIA. - ALHAMBRA FOUNDRY NO.A-1254  
OR APPROVED EQUAL

LETTERING SHALL BE 2.5" RAISED LETTERS

PROVIDE AT LEAST ONE PICKHOLE IN COVER

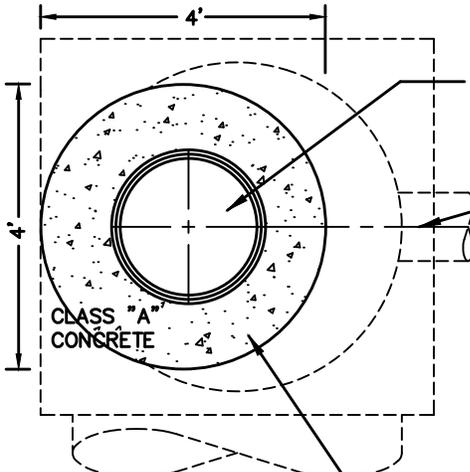
CLASS "A" CONCRETE COLLAR

**PLAN**



**SECTION**

RESOLUTION #	<b>CITY OF ARVIN</b>	
<hr/> CITY ENGINEER	<b>MANHOLE FRAME AND COVER</b>	PLATE <b>S2</b>
REVISED: NOV. 2015 SHT. 1 OF 1		

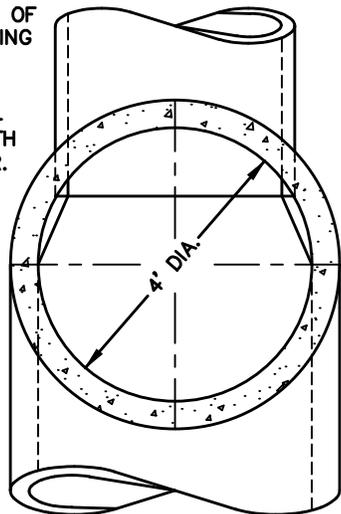


**TOP VIEW**

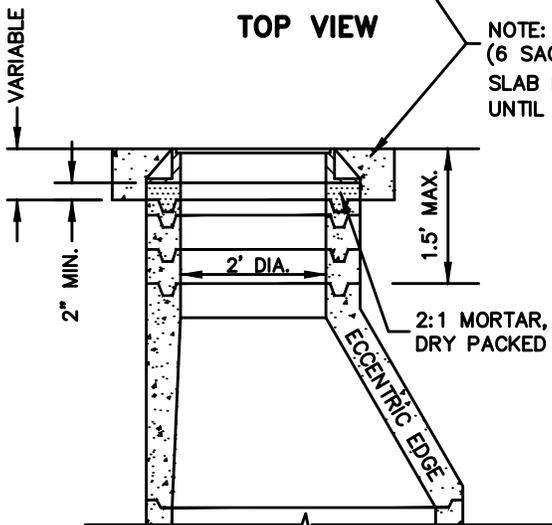
SEE STANDARD PLATE S2 FOR FRAME AND COVER DETAILS

THE UPPER PORTIONS OF INCOMING AND OUTGOING SEWERS SHALL BE REMOVED AND THE BROKEN EDGES SHALL BE PLASTERED SMOOTH WITH CEMENT MORTAR.

NOTE: CLASS "A" CONCRETE (6 SACK TYPE 2-4) SLAB NOT TO BE POURED UNTIL PAVING IS IN PLACE.

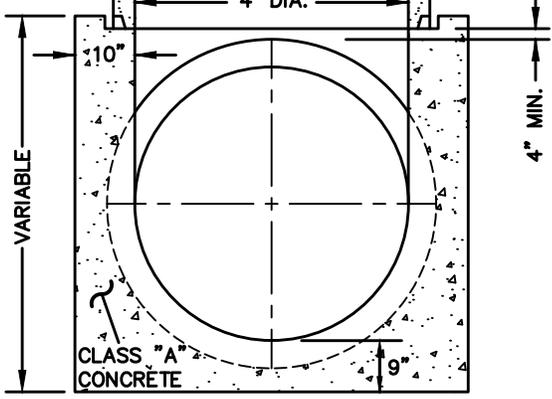


**SECTION**



**MANHOLE SECTION**

PIPE DIAMETER VARIES



**NOTES:**

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. ALL UNLINED MANHOLE JOINTS SHALL BE FILLED WITH KENT SEAL OR APPROVED BLACK MASTIC EQUAL. INSIDE OF MANHOLES MUST BE MORTARED AND NEATLY RAKED WIPED ON INSIDE OF PIPE.
3. PRECAST REINFORCED MANHOLE SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF ASTM C-478, CURRENT EDITION.
4. ALL SEWER MANHOLES SHALL BE LINED WITH "T-LOCK" OR APPROVED EQUAL.
5. CONCRETE PAD SHALL BE CURED WITH A WHITE PIGMENTED CURING COMPOUND AS PER SECTION 90-7.01 B OF THE STANDARD SPECIFICATIONS.
6. SEE STANDARD PLATE S2 FOR FRAME AND COVER DETAILS.
7. ALL CHANNELS SHALL BE SMOOTH FINISHED WITH STEEL TROWEL. SHELF SHALL BE BROOM FINISHED FOR SLIP RESISTANCE.

RESOLUTION #

**CITY OF ARVIN**

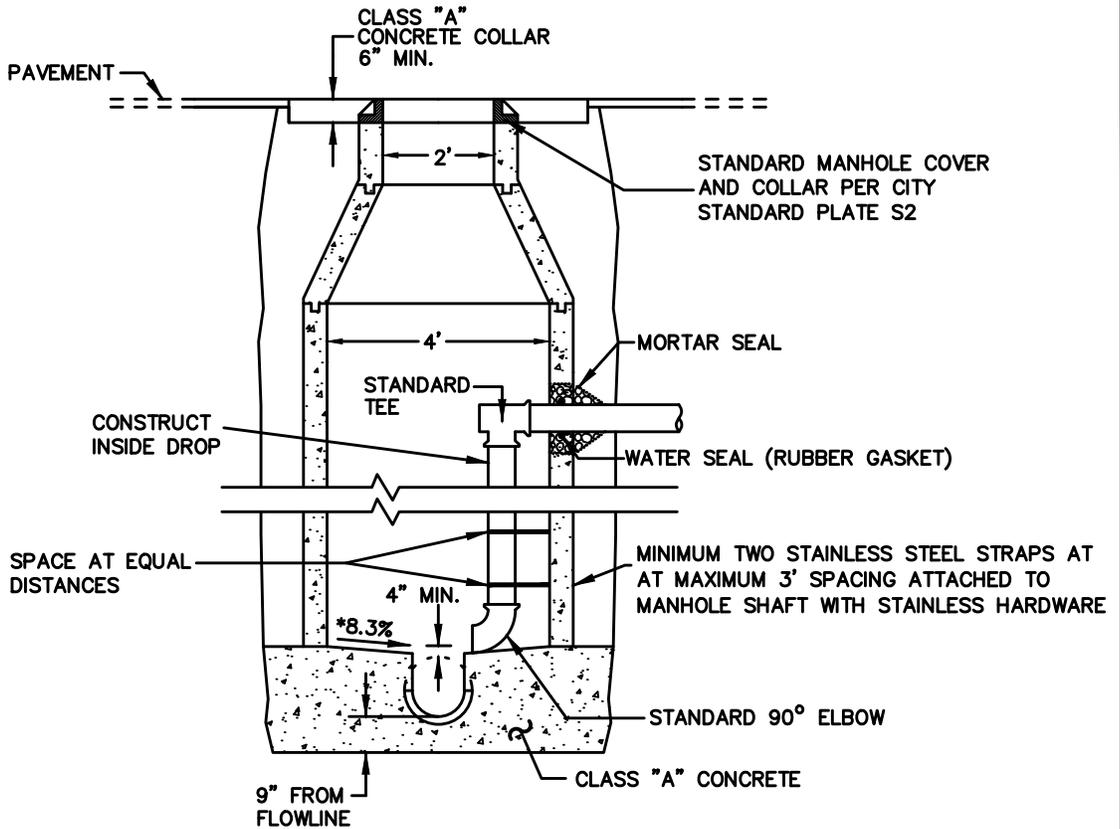
**MANHOLE TYPE 'B'**

PLATE

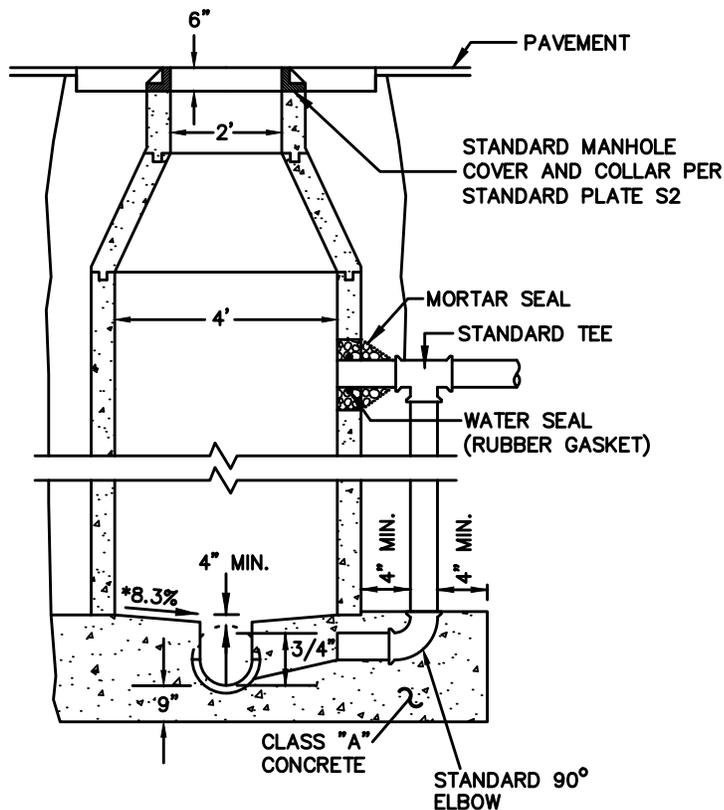
**S3**

CITY ENGINEER

REVISED: NOV. 2015 SHT. 1 OF 1



**INSIDE DROP**



**OUTSIDE DROP**

**NOTES:**

1. ALL WORK SHALL CONFORM TO THE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. DROP MANHOLES WILL ONLY BE ALLOWED WITH THE APPROVAL OF THE CITY ENGINEER.
3. PRECAST REINFORCED MANHOLE SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF ASTM C-478, CURRENT EDITION.
4. DROP MANHOLE IS ONLY ALLOWED IF DROP DISTANCE IS 30" OR GREATER.

\* MAXIMUM SLOPE ALLOWED INSIDE MANHOLE.

RESOLUTION # 02-43

**CITY OF ARVIN**

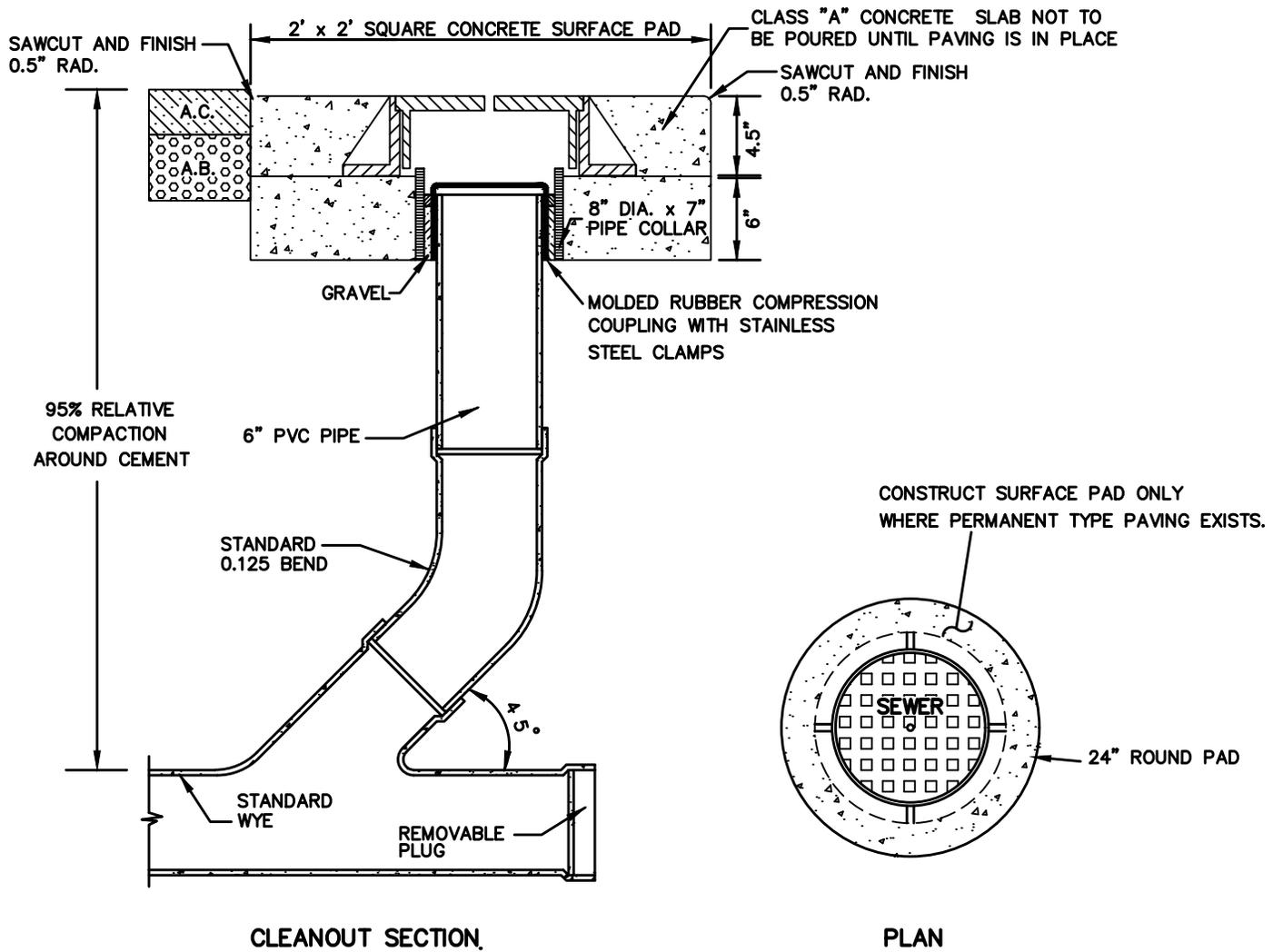
PLATE

**S4**

*Harold J. Key*  
 CITY ENGINEER

**DROP MANHOLE**

REVISED: NOV. 2002 SHT. 1 OF 1



**NOTES:**

1. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE SPECIFICATIONS ENTITLED "STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION", CURRENT EDITION.
2. PIPE MATERIAL SHALL MEET PVC SEWER GRADE SDR35.
3. ALL CONCRETE SHALL BE CLASS "A".(6 SACK TYPE 2-4)
4. CONCRETE SHALL HAVE NO ADDITIVES UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER.
5. TOP OF SLAB SHALL BE TROWELED SMOOTH AND GIVEN A LIGHT BROOM FINISH.
6. 95% RELATIVE COMPACTION IS REQUIRED AT CONSTRUCTION AREA.
7. FILL CAVITY BETWEEN PIPE AND COLLAR WITH GRAVEL TO WITHIN 0.5" OF TOP OF PIPE. CAULK REMAINING 0.5" WITH APPROVED MASTIC TO TOP OF PIPE FOR WATER TIGHT SEAL.
8. COLLAR SHALL BE VCP, ABS OR PVC PIPE.
9. FINISHED CLASS "A" CONCRETE SLAB TO BE 0.125" MIN. AND 0.25" MAX BELOW FINISHED PAVING SURFACE.

RESOLUTION #

**CITY OF ARVIN**

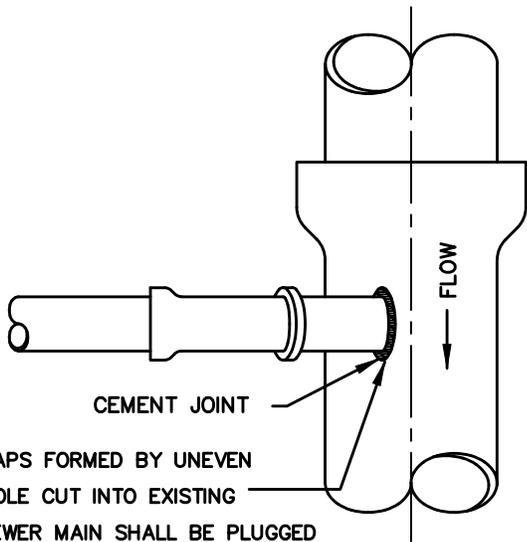
**EIGHT INCH (8")  
CLEANOUT**

PLATE

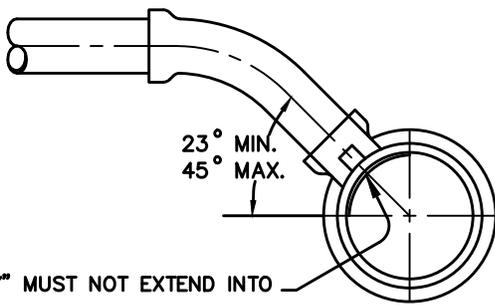
**S5**

\_\_\_\_\_  
CITY ENGINEER

REVISED: NOV. 2015 SHT. 1 OF 1



**PLAN VIEW**



**ELEVATION**

**NOTES:**

1. FOR PIPES 6" TO 12" IN DIAMETER, A LICENSED CONTRACTOR WHO HAS THE PROPER EQUIPMENT AND PERMITS IS CONSIDERED AN APPROVED AGENT AND MAY CORE INTO THE CITY'S LINES OR REMOVE A SECTION AND CONSTRUCT A WYE OR TEE. FOR PIPES 15" OR LARGER, A MANHOLE MUST BE CONSTRUCTED WHERE CORINGS ARE MADE. THE CITY INSPECTOR MUST OBSERVE THE INSTALLATION OF SADDLES TO CORES.

2. VITRIFIED CLAY PIPE SADDLES SHALL BE EXTRA STRENGTH CLAY PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF THE WEST COAST STANDARDS OF THE CLAY PIPE INSTITUTE.

3. VCP SADDLES MAY HAVE EITHER LUGS OR COLLARS.

4. THE BELL SHALL BE TRUE, CIRCULAR AND CONCENTRIC WITH THE BORE OF THE PIPE AND SHALL BE SCORED ON THE INSIDE OF ITS ENTIRE DEPTH.

5. OPENINGS IN EXISTING SEWER SHALL BE MADE ONLY LARGE ENOUGH TO ADMIT ALL OF SADDLE FITTING. LUGS OR COLLARS NOT RESTING ON PIPE SHALL BE BLOCKED UP AND SEALED WITH EPOXY GLUE.

6. ALL INSTALLATIONS SHALL BE INSPECTED BY PUBLIC WORKS DEPARTMENT OF THE CITY PRIOR TO BACKFILL.

7. FOR PVC AND ABS PIPE, FITTINGS SHALL BE INJECTION MOLDED AND SHALL BE INSTALLED IN LINE ON NEW PIPELINES; CUT-IN FITTINGS ARE NOT PERMITTED ON NEW SUBDIVISIONS OR NEW MAIN LINES.

8. PVC OR ABS SADDLES SHALL BE RUBBER GASKETED AND SHALL BE FASTENED BY STAINLESS STEEL BANDS.

RESOLUTION #

**CITY OF ARVIN**

\_\_\_\_\_  
CITY ENGINEER

**SEWER PIPE CONNECTION**

PLATE

**S6**

REVISED: NOV. 2015 SHT. 1 OF 1

## SEWER DESIGN STANDARDS

- A. SIZE – MINIMUM SEWER MAIN SIZE SHALL BE 8" INSIDE DIAMETER.  
AVERAGE DAILY FLOW – SINGLE FAMILY RESIDENCE = 350 GPD; MOBILE HOMES AND APARTMENTS = 250 GPD.  
OTHER USES BASED ON FIXTURE UNITS CONNECTED OR OTHER METHOD ACCEPTABLE TO THE CITY ENGINEER.
- B. PEAK FLOW – FOR SEWER CAPACITY DESIGN = 1.8 TIMES AVERAGE DAILY FLOW.
- C. DEPTH OF FLOW FOR SEWER CAPACITY DESIGN = 1/2 FULL.
- D. VELOCITY OF FLOW – SLOPE SO THAT MINIMUM VELOCITY = 2 FPS .
- E. MAXIMUM SLOPE – SLOPE SO THAT VELOCITY DOES NOT EXCEED 10 FPS .
- F. ALL FLOW CALCULATIONS SHALL BE BASED ON MANNING'S "N" OF 0.011 FOR PVC AND 0.013 FOR ALL OTHER PIPE.
- G. MANHOLES – PROVIDE AT ALL MAIN LINE SEWER INTERSECTIONS AND ALL CHANGES IN ALIGNMENT OR GRADE.  
MAXIMUM DISTANCE BETWEEN MANHOLES = 300 FEET. (GREATER DISTANCES MAY BE APPROVED AT THE  
DISCRETION OF THE CITY ENGINEER) PROVIDE 0.1 FEET DROP THROUGH MANHOLE WHEN ANGLE IN  
SEWER IS GREATER THAN 45°. MATCH PIPE TOPS WHERE SIZE CHANGES. WHEN INVERT ELEVATIONS  
ARE GREATER THAN 30", PROVIDE DROP MANHOLE CONNECTION.
- H. ALIGNMENT – SEWER LINES SHALL BE ON STRAIGHT ALIGNMENT AND GRADE BETWEEN MANHOLES, AND  
GRADE VERIFIED WITH A STRING LINE IN THE TRENCH. CURVED SEWERS SHALL BE ALLOWED ONLY WHEN  
THEIR NECESSITY IS DEMONSTRATED AND THE DESIGN IS APPROVED BY THE CITY ENGINEER.
- I. COVER – MINIMUM = 3 FEET IN STREETS WITH SURCHARGE LOADS AND 3 FEET IN EASEMENTS  
WITH NON SURCHARGE LOADS.
- J. LOCATION – SEWERS ARE USUALLY PLACED IN STREET AREA 5 FEET OFF CENTERLINE BUT NOT CLOSER  
THAN 2 FEET TO LIP OF GUTTER AND NOT UNDER SIDEWALK. ALL OTHER UTILITIES (EXCEPT WATER) ARE  
TO BE CLEARED BY 6" VERTICALLY (MIN.). IN ALLEY AREAS, SEWERS SHALL BE LOCATED 4 FEET FROM  
THE ALLEY INVERT TO PREVENT INFILTRATION.
- K. SEPARATION – SEWER AND WATER MAIN HORIZONTAL SEPARATION SHALL BE A MINIMUM OF 10 FEET.  
WATER AND SEWER MAINS SHALL BE LAID IN SEPARATE TRENCHES WITH THE WATER MAIN AT A HIGHER  
ELEVATION. WHEN WATER AND SEWER MAINS CROSS, THE BOTTOM OF THE WATER MAIN SHALL BE 12" MIN.  
ABOVE THE TOP OF THE SEWER MAIN.
- L. SEWER EASEMENTS – ALLOWED ONLY WHEN NO OTHER LOCATION IS FEASIBLE. EASEMENTS SHALL: BE  
GRANTED TO THE CITY ON THE FINAL MAP; BE A MINIMUM OF 15 FEET WIDE AND WIDER WHERE TERRAIN  
DEPTH, ACCESS, CLEARANCE, ETC., DICTATES; INCLUDE THE RIGHT OF ACCESS OVER ADJOINING  
PROPERTY FOR MAINTENANCE, REPLACEMENT AND OPERATION; NOT ALLOW PERMANENT STRUCTURES EXCEPT FENCES.
- M. BUILDING SEWER LATERALS – MIN. SIZE = 4" INSIDE DIA., OR AS GOVERNED BY THE UNIFORM  
PLUMBING CODE. LATERALS SHALL BE RUN TO PROPERTY LINE AND PLUGGED AND LOCATION MARKED UNLESS  
THEY ARE TO BE IMMEDIATELY CONNECTED TO A BUILDING SEWER. MIN. SLOPE = 1/4" PER FOOT. MIN.  
COVER IN STREET ROW = 3.0 FEET.
- N. MATERIALS – THE CONTRACTOR SHALL SUPPLY CERTIFICATES AND TESTS AS REQUIRED TO ASSURE THE  
DEPARTMENT OF PUBLIC WORKS THAT THE MATERIAL SUPPLIED MEETS THESE REQUIREMENTS. ALL PIPE AND  
FITTINGS SHALL BE STAMPED WITH THE MANUFACTURER'S TRADE NAME AND THE STRENGTH AND CLASS OF PIPE.
- O. PLASTIC SEWER PIPE – PLASTIC SEWER PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM  
SPECIFICATIONS D3034 FOR SDR 35, WITH INTEGRAL WALL BELL AND SPIGOT JOINTS AND ELASTOMERIC GASKET  
JOINTS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

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CITY ENGINEER

**SEWER DESIGN STANDARDS**

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## SEWER DESIGN STANDARDS (CONT.)

P. SPECIAL EQUIPMENT AND STRUCTURES – PUMP STATIONS, PRESSURE LINES, INVERTED SIPHONS (SAGS), ETC., SHALL BE APPROVED BY THE CITY ENGINEER.

Q. TESTING – ALL NEWLY INSTALLED SEWERS SHALL BE TESTED USING EITHER THE HYDROSTATIC, INFILTRATION OR AIR METHOD. THE DEVELOPER OR CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, LABOR AND MATERIAL AND SHALL PERFORM ALL TESTS TO THE REQUIREMENTS AND SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS. PRIOR TO TESTING THE MAIN SHALL BE "BALLED" FROM MANHOLE TO MANHOLE WITH A SEWER SCRUBBING BALL OF A TYPE AND SIZE APPROVED BY THE CITY ENGINEER.

1. HYDROSTATIC – EACH SECTION OF A SANITARY SEWER, BETWEEN TWO SUCCESSIVE STRUCTURES, SHALL BE TESTED BY CLOSING THE LOWER END OF THE SEWER TO BE TESTED AND THE INLET SEWER OF THE UPPER STRUCTURE WITH PLUGS OR STOPPERS, AND FILLING THE PIPE OR STRUCTURES WITH WATER TO A POINT ONE FOOT ABOVE THE SOFFIT OF THE SEWER IN THE UPPER STRUCTURE OR TO ONE FOOT ABOVE THE TOP OF THE LATERALS, WHICHEVER IS HIGHER. THIS HEAD SHALL BE MAINTAINED A MINIMUM OF ONE HOUR. IF DURING THAT PERIOD THE LEAKAGE DOES NOT EXCEED THE RATE OF THREE GALLONS PER HOUR PER INCH OF DIAMETER PER 1,000 FEET OF PIPE, THEN THE SEWER WOULD BE CONSIDERED SATISFACTORILY TESTED.

2. INFILTRATION TEST – IF EXCESSIVE GROUND WATER IS ENCOUNTERED, THE UPPER STRUCTURE SHALL BE CLOSED SUFFICIENTLY TO PREVENT THE ENTRANCE OF WATER, AND PUMPING OF GROUND WATER SHALL BE DISCONTINUED FOR AT LEAST 3 DAYS AFTER WHICH THE SECTION SHALL BE TESTED FOR INFILTRATION. THE INFILTRATION SHALL NOT EXCEED THREE GALLONS PER HOUR PER INCH OF DIAMETER PER 1,000 FEET OF MAIN LINE SEWER BEING TESTED AND DOES NOT INCLUDE THE LENGTH OF HOUSE LATERAL ENTERING THAT SECTION. ALL TESTS MUST BE COMPLETE BEFORE STREET OR TRENCH IS RESURFACED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

3. AIR TEST – AIR TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS PROJECTS, CURRENT EDITION.

SEWER DESIGN GRADES FT/FT		
PIPE SIZE	OTHER THAN PVC MINIMUM GRADES	PVC MINIMUM GRADES
6"	0.0050	0.004
8"	0.0035	0.003
10"	0.0025	0.002
12"	0.0020	0.0015
15"	0.0015	0.0011
18"	0.0011	0.0010

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CITY ENGINEER

**SEWER DESIGN STANDARDS**

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