

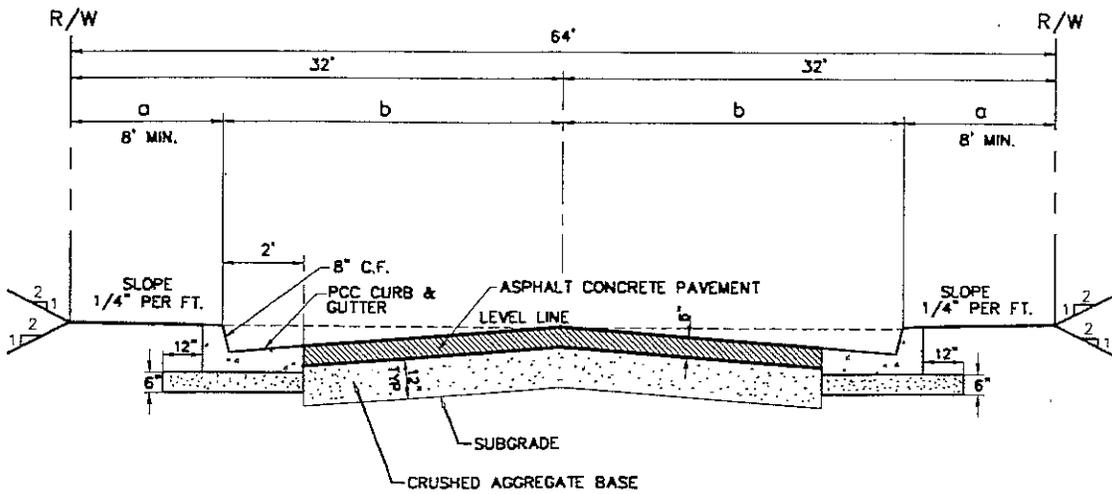
**CITY OF INDUSTRY
STANDARD PLANS**

REVISED AS OF 5/1/99

STANDARD PLANS

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* USE CALTRANS STD. A73A, A73B AND A73C, DATED JULY 1997



TYPICAL CROSS SECTION

NOTES:

1. DIMENSION a & b ARE SHOWN ON THE PLANS. " a " SHALL NOT BE LESS THAN 8' UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
2. ASPHALT CONCRETE PAVEMENT SHALL CONSIST OF A 2" THICK TYPE C2-AR-4000 SURFACE COURSE PLACED ON 4" THICK B-AR-4000 BASE COURSE.
3. CRUSHED AGGREGATE BASE THICKNESS SHOWN IS MINIMUM AND SHALL BE USED UNLESS ACTUAL SUBGRADE "R" VALUES DICTATE GREATER THICKNESS.
4. "R" VALUES SHALL BE DETERMINED AFTER COMPLETION OF THE ROUGH GRADING.
5. A DESIGN TRAFFIC INDEX OF 9.0 FOR LOCAL COLLECTOR AND 11.0 FOR MAJOR HIGHWAY AS MINIMUM AND A 20 YEAR DESIGN PERIOD SHALL BE USED TO DETERMINED AGGREGATE BASE THICKNESS.
6. CRUSHED MISCELLANEOUS BASE (CMB) NOT ALLOWED.

CITY OF INDUSTRY

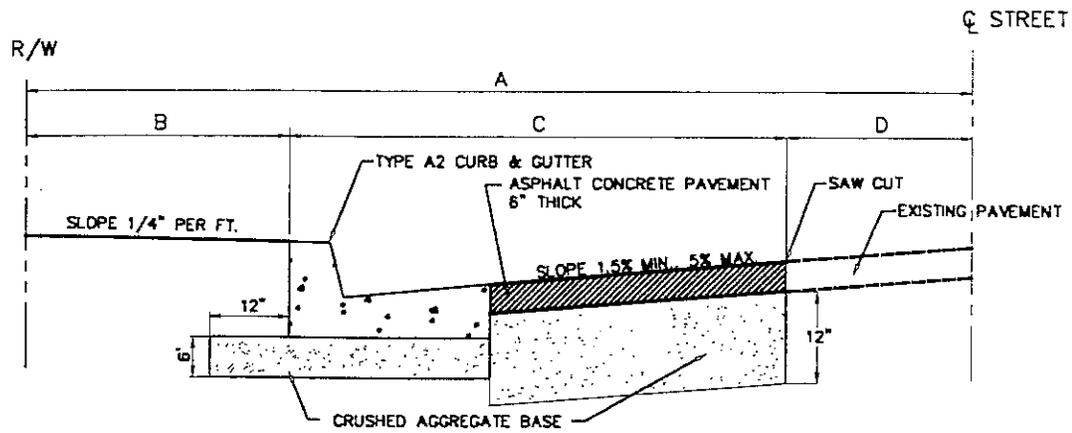
APPROVED BY: _____
 CITY ENGINEER

05-01-99
 01-27-94
 11-22-91
 09-18-81
 02-03-81
 06-05-79
 DATE

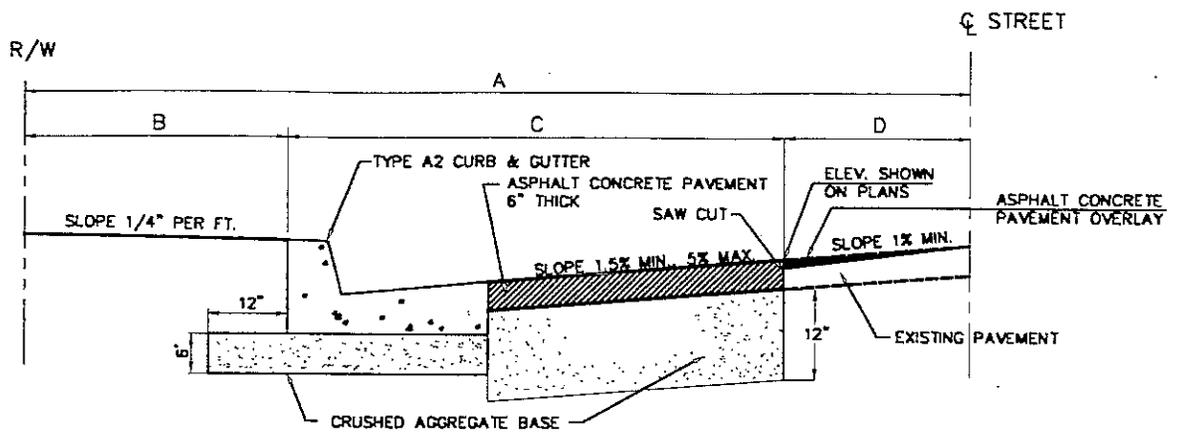
COLLECTOR STREET

STANDARD PLAN

110



CASE I



CASE II

NOTES:

1. ASPHALT CONCRETE PAVEMENT SHALL CONSIST OF A 2" THICK TYPE C2-AR-4000 SURFACE COURSE PLACED ON 4" THICK B-AR-4000 BASE COURSE.
2. ASPHALT CONCRETE PAVEMENT OVERLAY SHALL CONSIST OF A VARIABLE THICKNESS OF TYPE C2-AR-4000 SURFACE COURSE.
3. SAW CUT SHALL BE 1-1/2 INCHES DEEP. ONCE EXISTING PAVEMENT IS REMOVED, VEHICULAR TRAFFIC WILL NOT BE PERMITTED TO CROSS OVER UNPROTECTED SAW CUT EDGES. DAMAGED EDGES SHALL BE REMOVED BY ADDITIONAL SAW CUTTING.
4. A TACK COAT SHALL BE APPLIED TO ALL CONTACT SURFACES OF EXISTING PAVEMENT, MANHOLE FRAMES AND CONCRETE SURFACE. THE TACK COAT SHALL EXTEND 2 FEET ONTO EXISTING PAVEMENT.
5. CRUSHED AGGREGATE BASE THICKNESS SHOWN IS MINIMUM AND SUBJECT TO ADJUSTMENT BASED ON ACTUAL SUBGRADE SOIL CONDITIONS.
6. DIMENSIONS A, B, C, & D ARE SHOWN ON THE PLANS. C SHALL NOT BE LESS THAN 5.5 FEET.
7. CRUSHED MISCELLANEOUS BASE (CMB) NOT ALLOWED.

CITY OF INDUSTRY

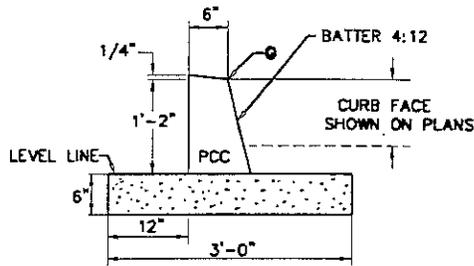
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 CITY ENGINEER

05-01-99
 11-22-91
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 DATE

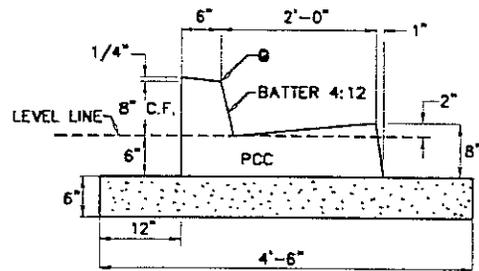
STREET PAVE-OUT

STANDARD PLAN

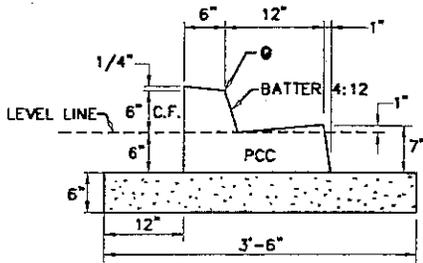
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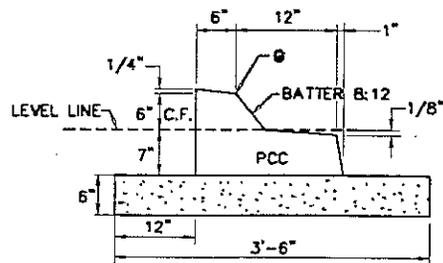
A1



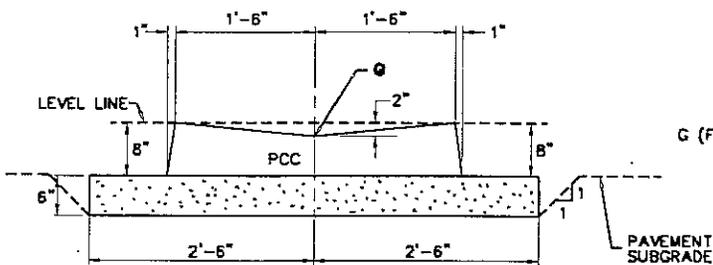
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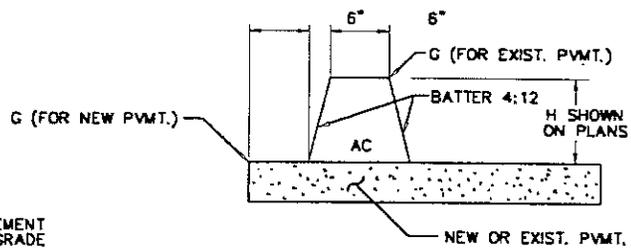
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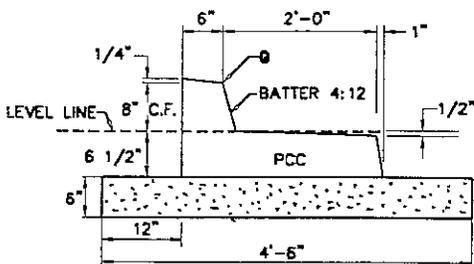
B2



V

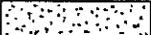


AC



A3

NOTES:

1. "G" DESIGNATES LOCATION OF GRADE LINE AND/OR OFFSET POINT.
2. PCC SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF NO LESS THAN 2500 PSI.
3.  CRUSHED AGGREGATE BASE
4. ALL EXPOSED CORNERS ON PCC CURB AND GUTTER AND AC CURB SHALL BE ROUNDED WITH A RADIUS OF 3/4 INCH.
5. BATTER CURB FACE AS INDICATED UNLESS OTHERWISE SHOWN ON THE PLANS.
6. CRUSHED MISCELLANEOUS BASE (CMB) NOT ALLOWED.

CITY OF INDUSTRY

APPROVED BY:

05-01-99
06-05-79

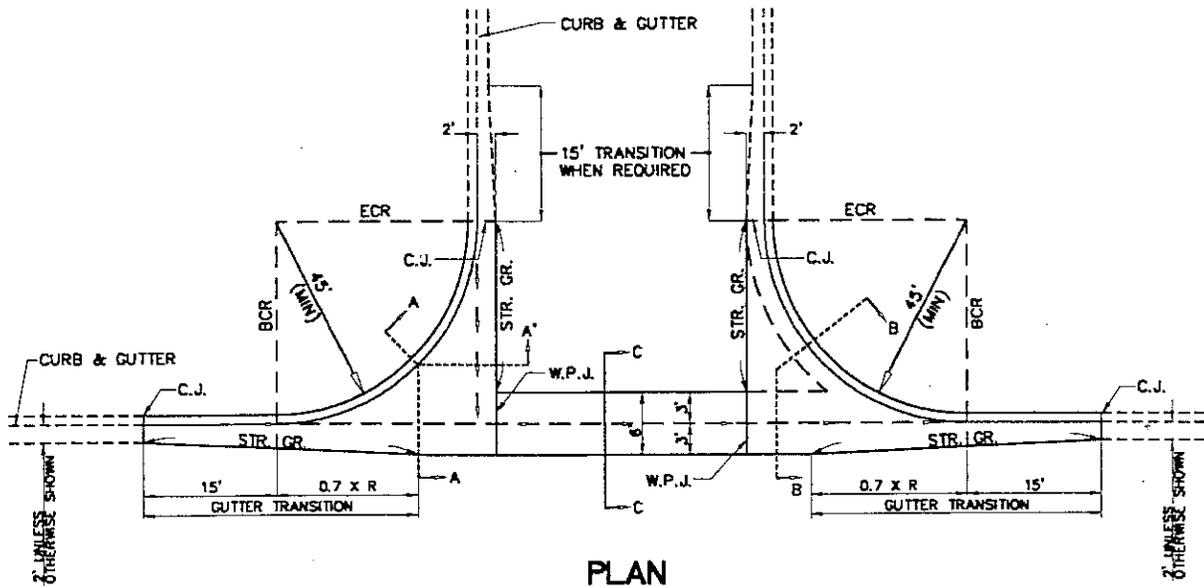
CITY ENGINEER

DATE

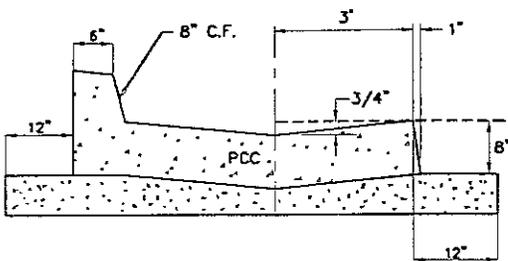
CURB & GUTTER

STANDARD PLAN

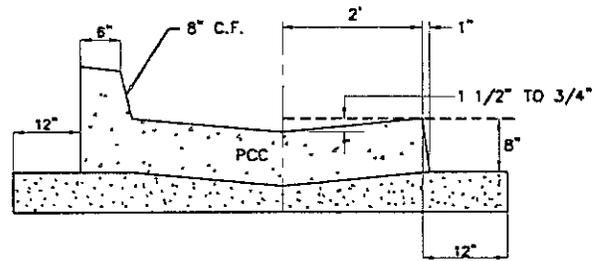
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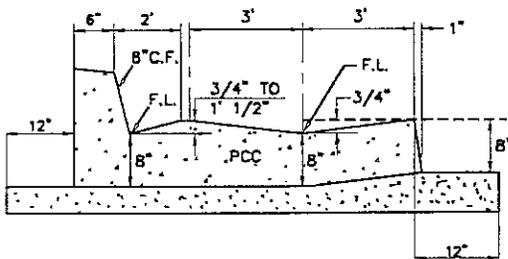
PLAN



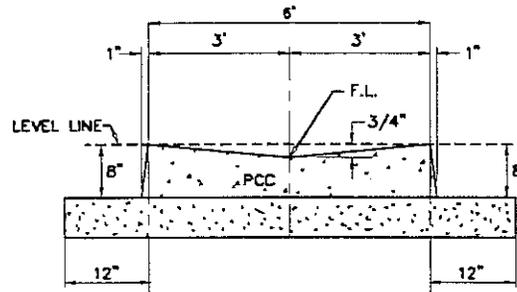
SECTION A-A



SECTION A-A'



SECTION B-B



SECTION C-C

SYMBOLS:

- FLOW LINE & DIRECTION OF FLOW
- W.P.J. WEAKENED PLANE JOINT
- C.J. CONSTRUCTION JOINT
- CRUSHED AGGREGATE BASE
6 INCHES THICK MINIMUM
- F.L. FLOW LINE
- STR. GR. STRAIGHT GRADE

NOTES:

1. ALL CURB FACES SHALL HAVE A 4:12 BATTER.
2. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,500 PSI.
3. GUTTERS AND SPANDRELS SHALL BE GIVEN A ROUGH BROOM FINISH, EXCEPT THAT THE SURFACE WITHIN 4 INCHES ON BOTH SIDES OF FLOW LINES SHALL BE GIVEN A SMOOTH STEEL TROWEL FINISH.
4. CURB FACE HEIGHT SHALL BE DEPRESSED WHERE PEDESTRIAN RAMPS ARE TO BE CONSTRUCTED.
5. ALL EXPOSED CORNERS OF CURB AND GUTTERS SHALL BE ROUNDED WITH A RADIUS OF 3/4 INCH.
6. CRUSHED MISCELLANEOUS BASE (CMB) NOT ALLOWED.

CITY OF INDUSTRY

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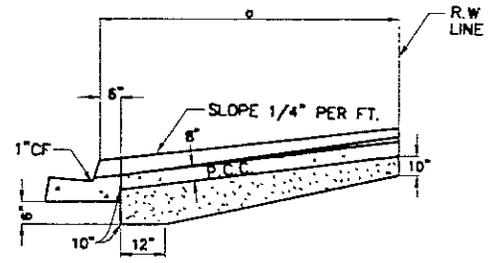
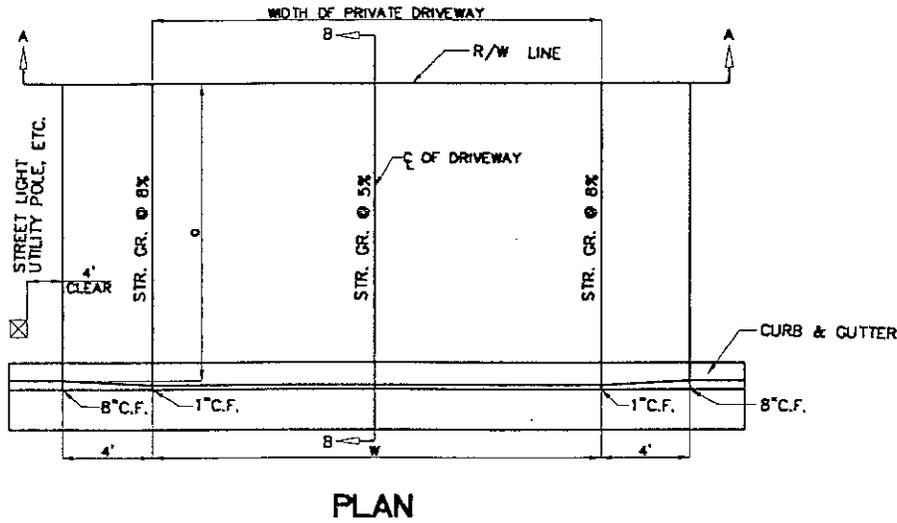
05-01-99
06-05-79
DATE

CROSS GUTTER
(STREET INTERSECTION)

STANDARD PLAN

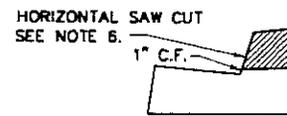
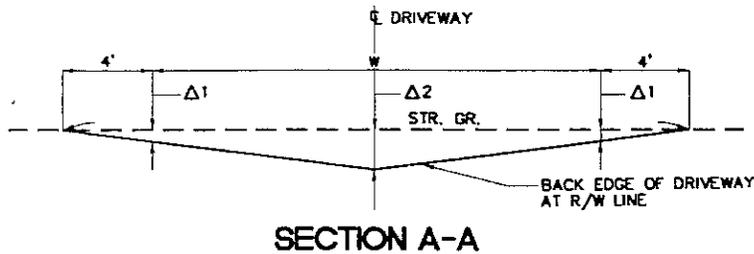
113

CITY ENGINEER



o	Δ1	Δ2
8'	0.11'	0.35'
10'	0.00'	0.29'

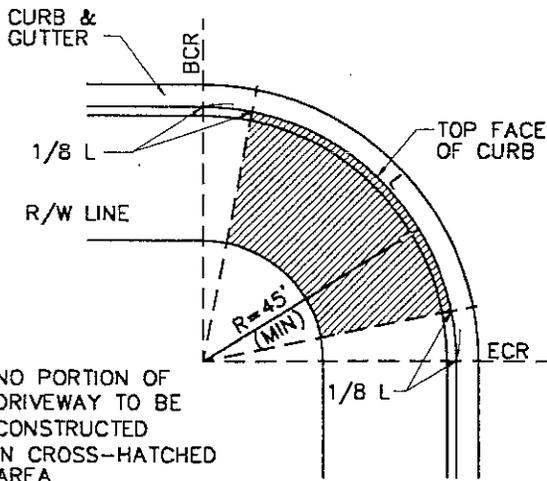
REMOVE CROSS-HATCHED PORTION OF EXISTING CURB TO CONSTRUCT DRIVEWAY



EXISTING CURB REMOVAL

NOTES:

1. LOCATION AND WIDTH ("W") OF DRIVEWAY IS
2. DRIVEWAY SURFACE SHALL BE GIVEN A ROUGH BROOM FINISH.
3. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,500 P.S.I.
4. PLACE SCORE LINES AT OUTER LIMITS OF "W" AND EQUALLY SPACED INTERVALS, NOT TO EXCEED 10 FEET, THEREIN.
5. BASE MATERIAL SHALL BE CRUSHED AGGREGATE BASE (CAB) OR CRUSHED MISCELLANEOUS BASE (CMB). SUBGRADE SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90% AND THE BASE MATERIAL TO 95% COMPACTION TEST MAY BE REQUIRED, AT THE EXPENSE OF THE CONTRACTOR PRIOR TO PLACING PCC.
6. HORIZONTALLY SAW CUT THE EXISTING CURB FACE AND/OR REMOVE THE EXISTING CURB AND GUTTER PER STD. PLAN III, CASE I.
7. ANY PARTIAL DRIVEWAY REMOVALS SHALL BE DONE TO THE NEAREST SCORE LINE WHEN APPROVED BY THE CITY ENGINEER.
8. NO MONOLITHIC POURS WITH THE CURB AND GUTTER.



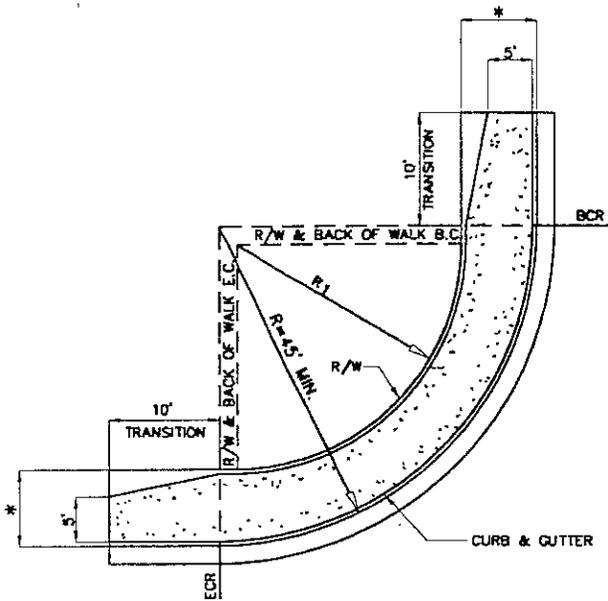
CITY OF INDUSTRY

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 05-01-99
 01-27-94
 12-21-89
 06-05-79
 CITY ENGINEER DATE

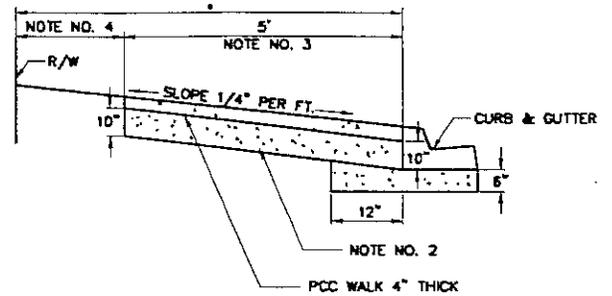
DRIVEWAY

STANDARD PLAN

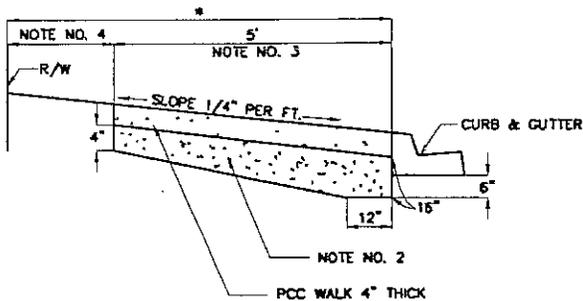
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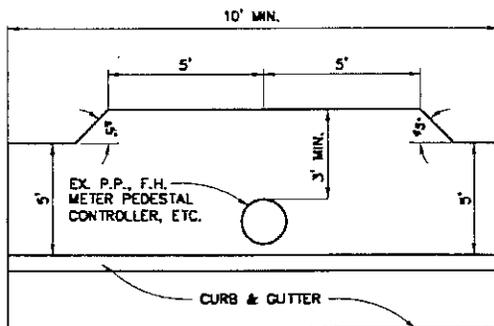
SIDEWALK IN RETURN
(WHERE EXISTING SIDEWALK = 5')



ALTERNATE SIDEWALK SECTION



TYPICAL SIDEWALK SECTION



SPECIAL DETAIL SIDEWALK AT OBSTRUCTION

NOTES:

1. * , R₁ SHOWN ON PLAN, R=45' MIN.
2. BASE MATERIAL SHALL BE CRUSHED AGGREGATE BASE (CAB) OR CRUSHED MISCELLANEOUS BASE (CMB). SUBGRADE SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90% AND THE BASE MATERIAL TO 95%. COMPACTION TEST MAY BE REQUIRED, AT THE EXPENSE OF THE CONTRACTOR PRIOR TO PLACING PCC.
3. VARIES IN TRANSITION AND RETURN AREAS.
4. GRADE AND LANDSCAPE AS APPROVED BY THE CITY ENGINEER, DIMENSION USUALLY 6".
5. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,500 P.S.I.
6. SCORE LINES, AT RIGHT ANGLES OR RADIAL TO THE CURB; SHALL BE PLACED OPPOSITE SCORE LINES IN CURBS AND AT INTERMEDIATE LOCATIONS ON APPROXIMATE 5 FOOT CENTERS.
7. NO MONOLITHIC POURS WITH THE CURB AND GUTTER.

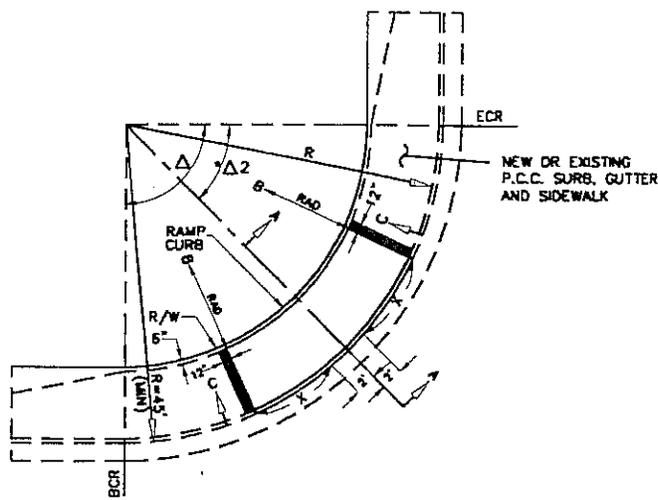
CITY OF INDUSTRY

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 05-01-99
 01-27-94
 07-21-92
 09-11-91
 06-05-79
 CITY ENGINEER DATE

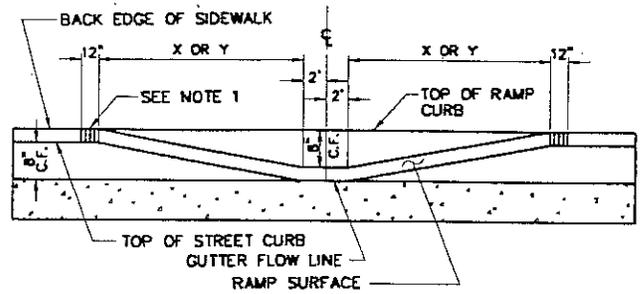
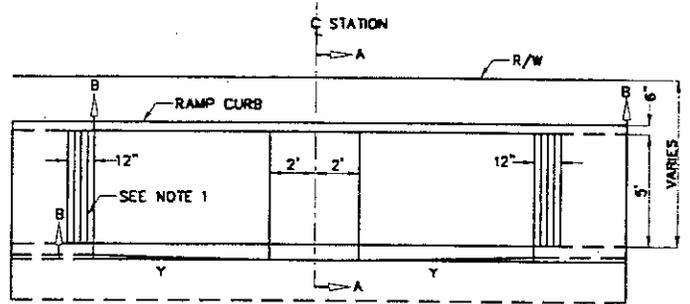
SIDEWALK

STANDARD PLAN

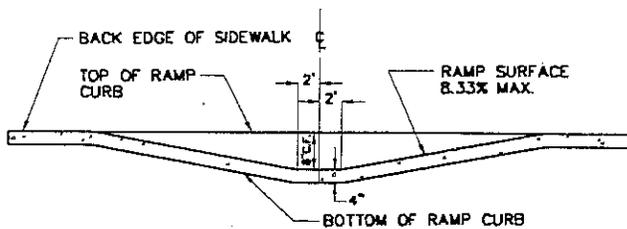
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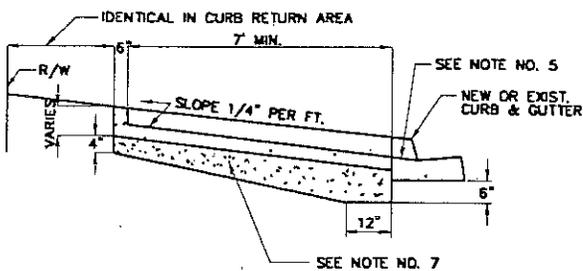
SIDEWALK IN RETURN
(WHERE EXISTING SIDEWALK = 5')



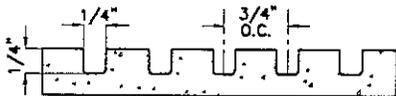
SECTION C-C



SECTION B-B



SECTION A-A



GROOVING DETAIL

NOTES:

1. GROOVE SIDEWALK ADJOINING RAMP DEPRESSION PER GROOVE DETAIL.
2. BASE MATERIAL SHALL BE CRUSHED AGGREGATE BASE (CAB) OR CRUSHED MISCELLANEOUS BASE (CMB). SUBGRADE SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90% AND THE BASE MATERIAL TO 95%. COMPACTION TEST MAY BE REQUIRED, AT THE EXPENSE OF THE CONTRACTOR PRIOR TO PLACING PCC.
3. THE SURFACE OF THE RAMP, EXCEPT FOR THAT PORTION GROOVED, SHALL BE GIVEN A ROUGH BROOM FINISH NORMAL TO THE RAMP CENTER LINE.
4. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,500 P.S.I.
5. IN AREAS OF EXISTING CURB AND GUTTER, REMOVE EXISTING CURB BY HORIZONTALLY SAW CUTTING THE EXISTING CURB FACE AND/ OR REMOVE THE EXISTING CURB AND GUTTER AND REPLACE PER STD. PLAN III, CASE I.
6. IN AREAS OF EXISTING SIDEWALK, REMOVE AND REPLACE SIDEWALK TO THE NEAREST SCORE LINE OR JOINT UNLESS OTHERWISE APPROVED BY THE ENGINEER.
7. Y=8', X=10.5' UNLESS OTHERWISE SHOWN ON PLANS. RAMP SURFACE SHALL NOT EXCEED 8.33%
8. NO MONOLITHIC POUR WITH THE CURB AND GUTTER.

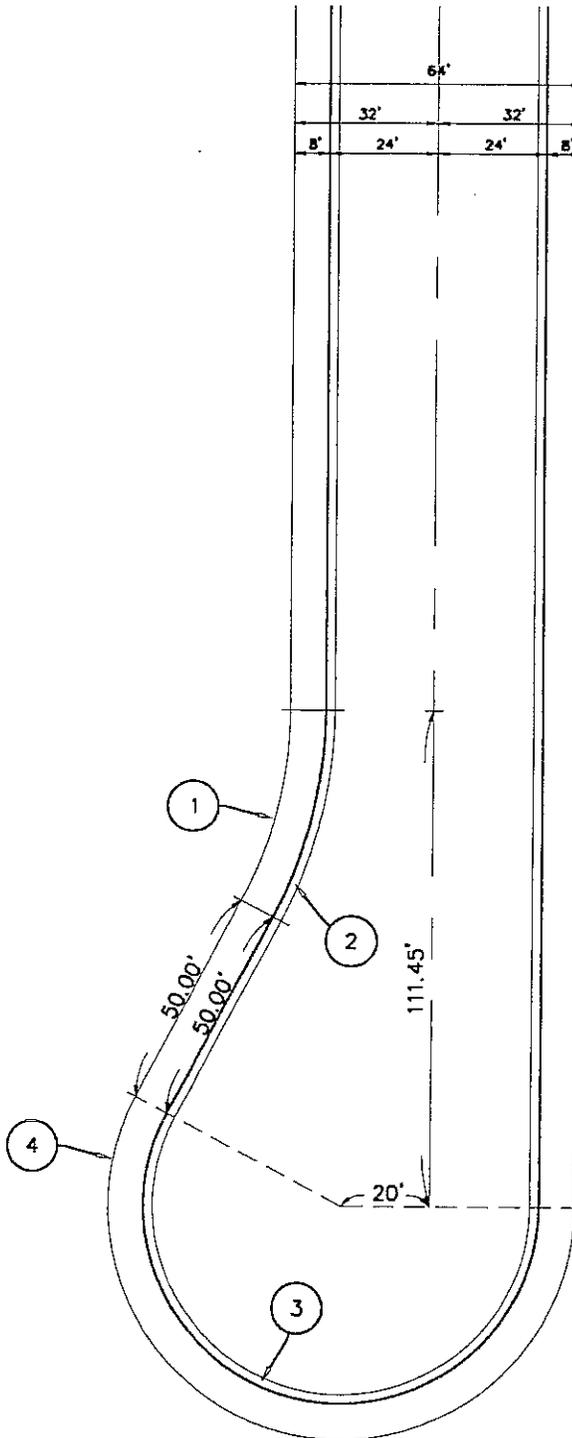
CITY OF INDUSTRY

APPROVED BY: _____
 05-01-99
 01-27-94
 07-21-92
 09-11-91
 06-05-79
 CITY ENGINEER _____ DATE

**PEDESTRIAN RAMP
CASE I**

STANDARD PLAN

116



- 1 P DATA
 $\Delta = 27^\circ 49' 52''$
 $R = 92.00'$
 $L = 44.69'$
- 2 CURB CURVE DATA
 $\Delta = 27^\circ 49' 52''$
 $R = 100.00'$
 $L = 48.57'$
- 3 CURB CURVE DATA
 $\Delta = 207^\circ 49' 52''$
 $R = 44.00'$
 $L = 159.60'$
- 4 P DATA
 $\Delta = 207^\circ 49' 52''$
 $R = 52.00'$
 $L = 188.62'$

CUL-DE-SAC
 PAVEMENT AREA
 9,742.83 SQ. FT.

CITY OF INDUSTRY

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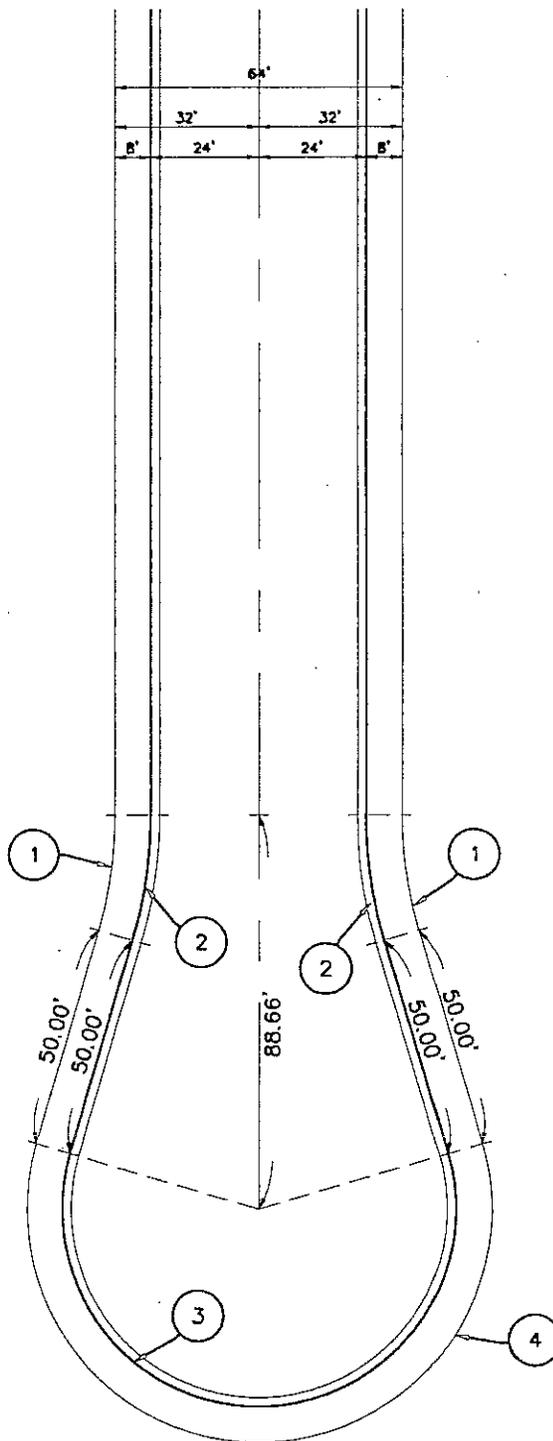
CITY ENGINEER

01-27-94
 06-05-79
 DATE

OFFSET CUL - DE - SAC

STANDARD PLAN

118



- 1 P DATA
 $\Delta = 16^\circ 24' 56''$
 $R = 92.00'$
 $L = 26.36'$
- 2 CURB CURVE DATA
 $\Delta = 16^\circ 24' 56''$
 $R = 100.00'$
 $L = 28.65'$
- 3 CURB CURVE DATA
 $\Delta = 212^\circ 49' 52''$
 $R = 44.00'$
 $L = 159.60'$
- 4 P DATA
 $\Delta = 212^\circ 49' 52''$
 $R = 52.00'$
 $L = 188.62'$

CUL-DE-SAC
 PAVEMENT AREA
 8,362.09 SQ. FT.

CITY OF INDUSTRY

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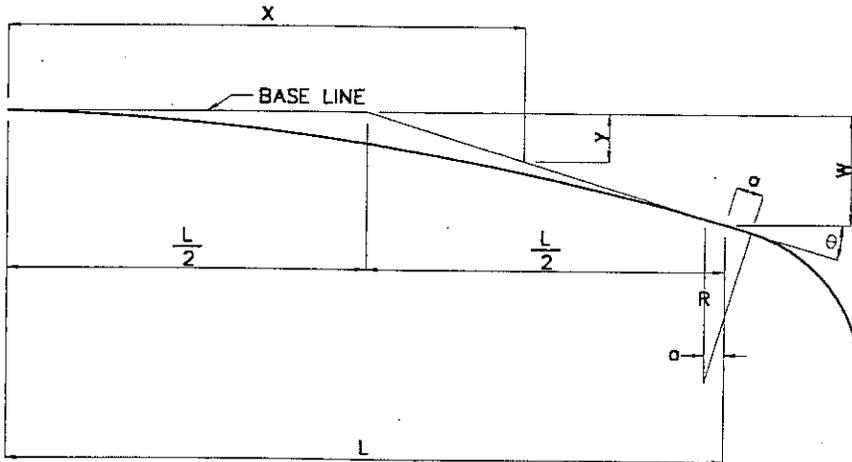
01-27-94
 06-05-79
 DATE

CUL - DE - SAC

STANDARD PLAN

120

CITY ENGINEER



$$y = w \left(\frac{x}{L} \right)^2$$

$$\tan \theta = \frac{2w}{L}$$

$$o = R \tan \frac{\theta}{2}$$

L = LENGTH OF FLARE IN FEET
W = MAXIMUM OFFSET DISTANCE IN FEET.
X = DISTANCE ALONG BASE LINE IN FEET.
y = OFFSET FROM BASE LINE IN FEET.

o = TANGENT
R = RADIUS OF NOSE IN FEET.

NOTE:

- IF STATION OF RADIUS POINT IS NOT GIVEN ON PLAN TANGENT 'o' MAY BE IGNORED

OFFSET 'y'
(IN FEET)

X L	10	15	20	25	30	40	45	50	60	70	75	80	90	100
--------	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

FOR W/L = 1:5

25	0.80	1.80	3.20	5.00										
50	0.40		1.60		3.60	6.40		10.00						

FOR W/L = 1:10

50	0.20		0.80		1.80	3.20		5.00						
100	0.10		0.40		0.90	1.60		2.50	3.60	4.90		6.40	8.10	10.00

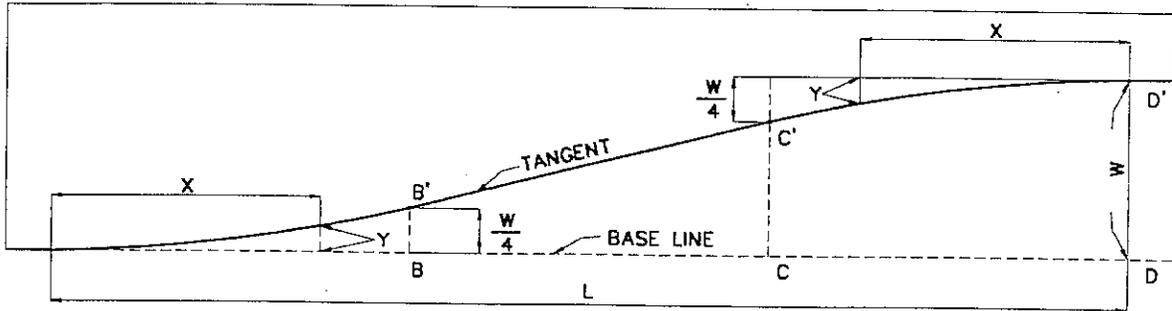
FOR W/L = 1:15

45	0.15		0.59		1.33	2.37	3.00							
75	0.09		0.36		0.80	1.42		2.22	3.20	4.36	5.00			
90	0.07		0.30		0.67	1.19		1.85	2.67	3.63		4.74	6.00	

CITY OF INDUSTRY

APPROVED BY:	PARABOLIC FLARE	STANDARD PLAN
CITY ENGINEER		121

06-05-79
DATE



L = TAPER LENGTH
 AB = BC = CD = $L/3$
 AB' = AND C'D' ARE PARABOLIC CURVES EXCEPT ON CURVED ALIGNMENTS
 FORMULA: $Y = 2.25 \frac{WX^2}{L^2}$

LENGTH OF TAPER	DISTANCE FROM POINT "A" ALONG BASE LINE											
	60'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'
72'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'	66'	72'
90	7.5'	15'	22.5'	30'	37.5'	45'	52.5'	60'	67.5'	75'	82.5'	90'
W	OFFSET FROM BASELINE											
10'	0.15'	0.62'	1.41'	2.50'	3.75'	5.00'	6.25'	7.50'	8.59'	9.38'	9.84'	10.00'
11'	0.17'	0.69'	1.55'	2.75'	4.13'	5.50'	6.88'	8.25'	9.45'	10.31'	10.83'	11.00'
12'	0.19'	0.75'	1.69'	3.00'	4.50'	6.00'	7.50'	9.00'	10.31'	11.25'	11.81'	12.00'

NOTE:

TO DETERMINE OFFSET DISTANCES FOR ANY LENGTH TAPER USE THE FORMULA $Y = 2.25 \frac{WX^2}{L^2}$ FOR THE PORTIONS AB' AND C'D' WHICH ARE PARABOLIC CURVES. THE PORTION B'C' IS A TANGENT. IN THE CASE WHEN THE BASE LINE IS CURVED, THE OFFSETS ARE CALCULATED BY ASSUMING THE BASE LINE TO TANGENT; THEY ARE THEN APPLIED TO THE CURVED BASE LINE AB' AND C'D' ARE NO LONGER PARABOLIC AND B'C' IS NO LONGER PARABOLIC AND B'C' IS NO LONGER TANGENT.

CITY OF INDUSTRY

APPROVED BY:

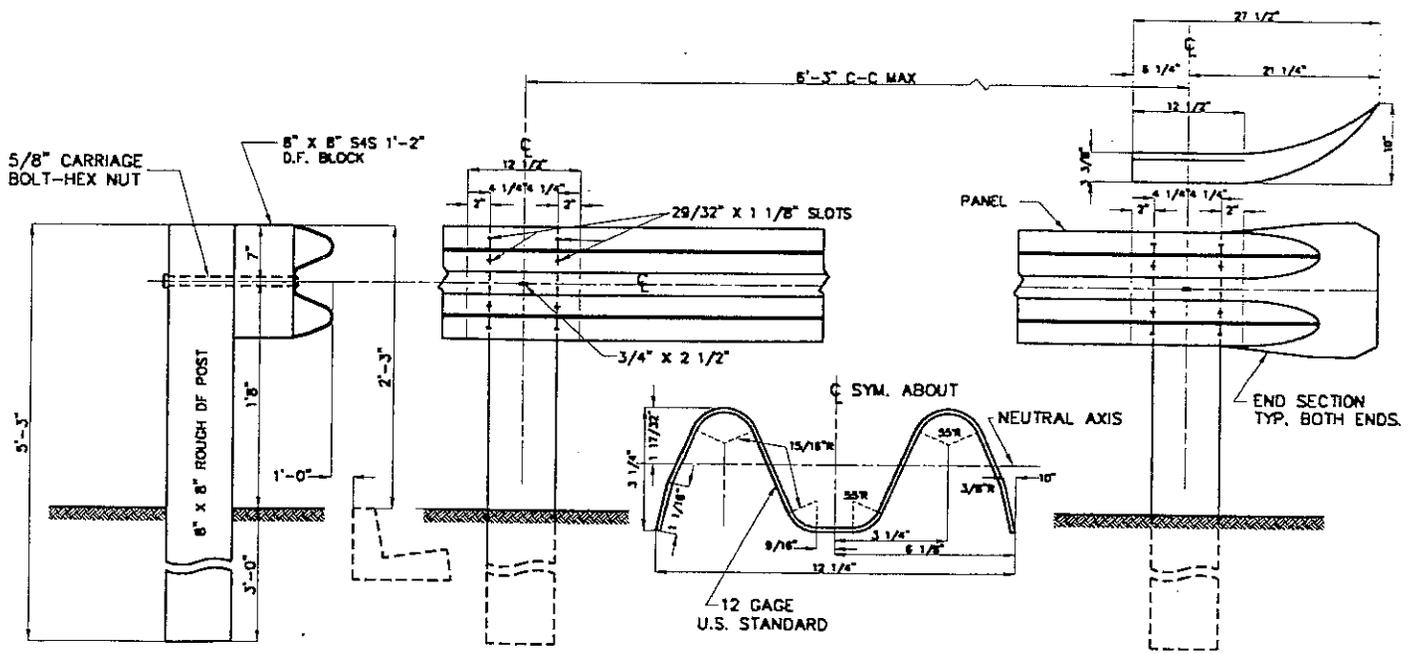
06-05-79
DATE

CITY ENGINEER

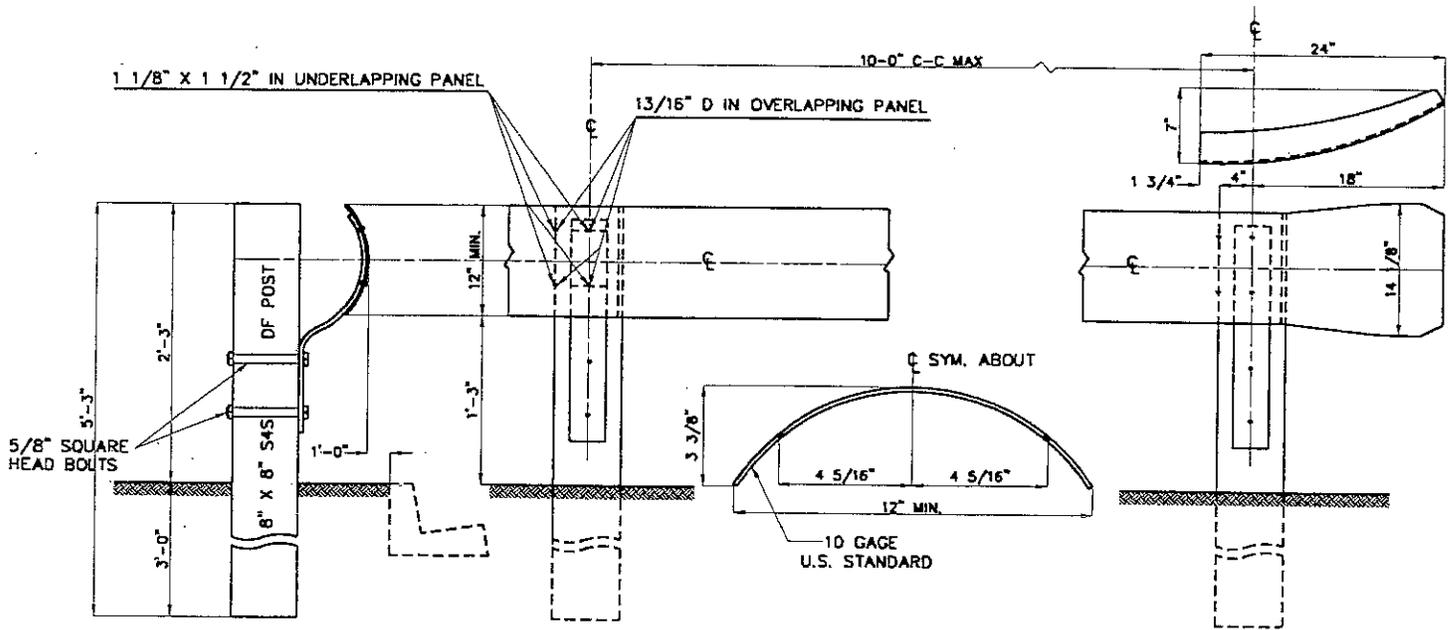
REVERSE TAPER

STANDARD PLAN

122



GUARD RAIL TYPE - 1



GUARD RAIL TYPE - 2

NOTES:

1. DISTANCE OUT (IF SHOWN ON PLAN) IS TO FACE OF POST.
2. RAIL TO BE ATTACHED TO POST PER MANUFACTURER'S INSTRUCTIONS.
3. ALL DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. MAKE ALL LAPS IN THE DIRECTION OF TRAFFIC.

CITY OF INDUSTRY

APPROVED BY:

GUARD RAIL

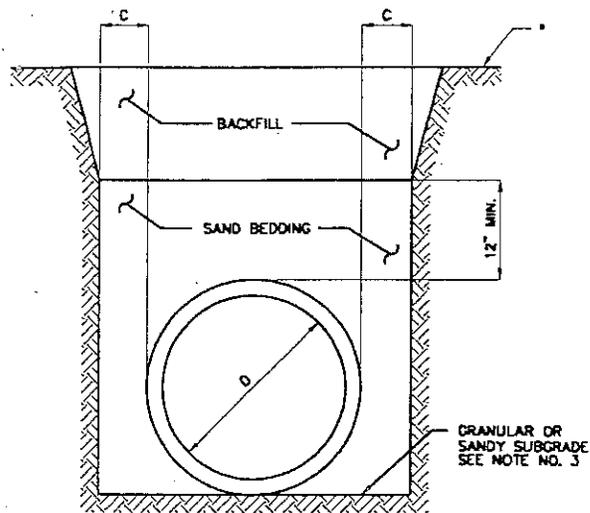
STANDARD PLAN

123

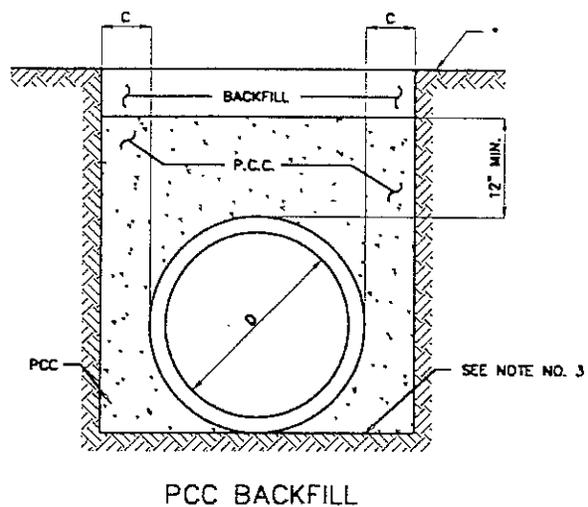
06-05-79

DATE

CITY ENGINEER



CASE Ad
LOAD FACTOR = 1.5

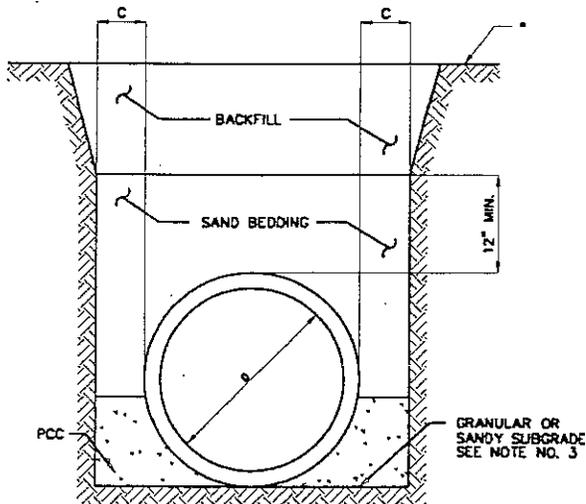


PCC BACKFILL

* SUBGRADE IN EXISTING OR PROPOSED
PAVED AREAS. FINISHED GRAD IN
GARAGE ONLY AREAS.

NOTES:

1. BACKFILL IN STREETS SHALL BE SAND OR WELL GRADED GRANULAR MATERIAL APPROVED BY THE ENGINEER. BACKFILL OUTSIDE OF STREET LIMITS MAY BE NONORGANIC MATERIAL FROM TRENCH EXCAVATION.
2. ALL REINFORCED CONCRETE PIPE SHALL BE PLACED IN ACCORDANCE WITH "CASE Ad" BEDDING UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. IF OTHER THAN GRANULAR OR SANDY MATERIAL IS ENCOUNTERED AT SUBGRADE THE TRENCH BOTTOM SHALL BE OVER EXCAVATED TO A DEPTH OF AT LEAST 3 INCHES AND BACKFILLED WITH SAND, NO. 3 OR NO. 4 CRUSHED ROCK EXCEPT THAT NO. 3 ROCK SHALL NOT BE USED UNDER PIPE 24 INCHES OR LESS IN DIAMETER. ALL COSTS FOR OVER EXCAVATING AND BACKFILLING WITH GRANULAR MATERIAL SHALL BE BORNE BY THE CONTRACTOR.
4. C₁ AND C₂ SHALL NOT BE LESS THAN 6 INCHES.
5. C₁ PLUS C₂ SHALL NOT BE GREATER THAN 24 INCHES, IF THE TRENCH WIDTH IS EXCAVATED TO A GREATER WIDTH THE CONTRACTOR SHALL FURNISH AND PLACE "CASE Bd" BEDDING AT HIS OWN EXPENSE.
6. PIPES 21 INCHES IN DIAMETER AND SMALLER WITH 2 FEET OF COVER OR LESS, AND PIPES 24 INCHES IN DIAMETER OR GREATER WITH 1 FOOT OF COVER OR LESS SHALL BE PLACED IN ACCORDANCE WITH "P.C.C. BACKFILL" BEDDING.
7. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,000 P.S.I.
8. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATING ANY TRENCH 5 FEET OR MORE IN DEPTH.
9. EXCESS MATERIAL FROM TRENCH EXCAVATION SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.



CASE Bd
LOAD FACTOR = 2.00

CITY OF INDUSTRY

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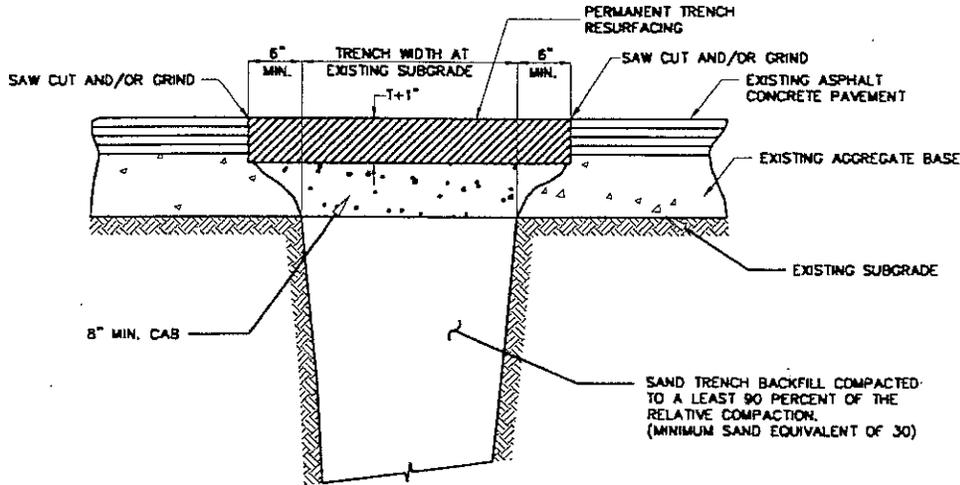
PIPE BEDDING FOR STORM DRAINS

STANDARD PLAN

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CITY ENGINEER

06-05-79
DATE



NOTES:

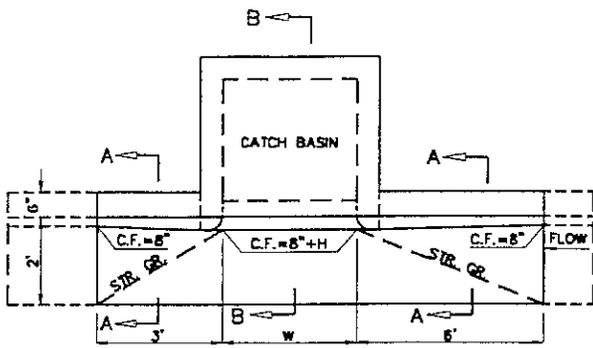
1. PERMANENT TRENCH RESURFACING SHALL CONSIST OF AN ASPHALT CONCRETE SURFACE COURSE OF TYPE C2-AR-4000 1 1/2" INCHES THICK PLACED ON AN ASPHALT CONCRETE BASE COURSE OF TYPE B-AR-4000.
2. SAW CUTS SHALL BE 1 1/2 INCHES DEEP, IF THE SAW CUT IS WITHIN 3 FEET OF A PREVIOUS PARALLEL SAW CUT OF 3 FEET OR GREATER IN LENGTH OR A CONCRETE EDGE THE EXISTING PAVEMENT SHALL BE REMOVED TO SAID SAW CUT OR CONCRETE EDGE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
3. THE CONTACT SURFACES OF EXISTING PAVEMENT, MANHOLE FRAMES AND SHAFTS AND CONCRETE SURFACES SHALL BE GIVEN A TACK COAT BEFORE PERMANENT TRENCH RESURFACING IS PLACED.
4. TEMPORARY TRENCH RESURFACING MAY BE PLACED AT THE CONTRACTOR'S EXPENSE. IT SHALL BE PLACED LEVEL WITH THE EXISTING PAVEMENT ON COMPACTED TRENCH BACKFILL AND SHALL BE MAINTAINED FREE OF DEPRESSIONS.
5. PERMANENT OR TEMPORARY TRENCH RESURFACING SHALL BE PLACED IMMEDIATELY AFTER TRENCH BACKFILL.
6. THE WIDTH OF P.C.C. PAVEMENT REPLACEMENT SHALL BE A MINIMUM OF 10 FEET WIDE AN/OR TO THE NEAREST CONSTRUCTION JOINT WITH #4 DOWELS EPOXIED @12" O.C.
7. ANY TUNNELLING UNDER EXISTING CURB AND GUTTER SHALL REQUIRE A SLURRY BACKFILL TO THE SATISFACTION OF THE INSPECTOR.

CITY OF INDUSTRY

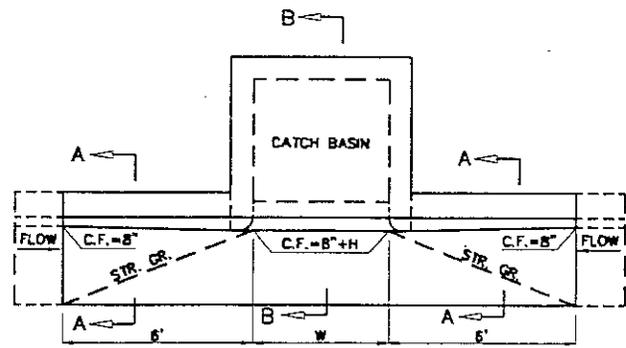
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 11-19-91
 08-01-88
 06-05-79
 CITY ENGINEER DATE

TRENCH RESURFACING

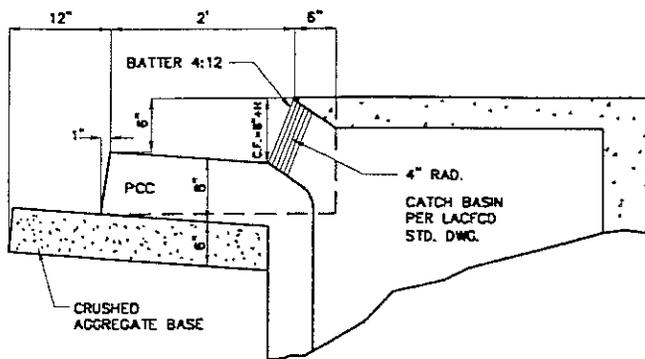
STANDARD PLAN
 211



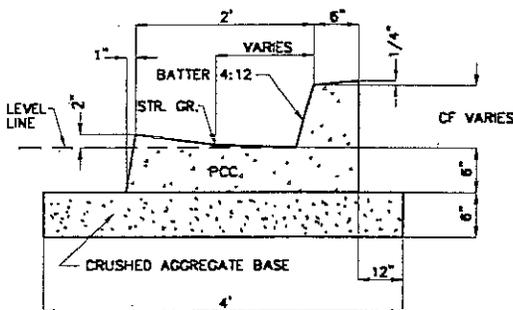
PLAN
CASE 1



PLAN
CASE 2
(SUMP CONDITION)



SECTION B-B



SECTION A-A

NOTES:

1. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 3,250 P.S.I.
2. ADJACENT CURB AND GUTTER SHALL BE IN PLACE OR FORMED PRIOR TO CONSTRUCTION OF LOCAL DEPRESSION AND TOP OF CATCH BASIN.
3. THIS STANDARD PLAN IS APPLICABLE ON TO LACFCD CATCH BASINS NO. 1,2 AND 3 OR SIMILAR SIDE INLET TYPES.
4. COST OF LOCAL DEPRESSION SHALL BE INCLUDED IN THE CONTRACT PRICE PAID FOR THE RESPECTIVE CATCH BASIN.
5. CURB FACE BATTER SHALL BE ADJUSTED TO THAT OF EXISTING CURB TO BE JOINED.
6. "W" IS SHOWN ON CATCH BASIN STANDARD DRAWING OR ON PLANS.
7. "H" SHALL BE 2 INCHES UNLESS SHOWN OTHERWISE.
8. STATION AND GUTTER FLOW LINE ELEVATION FOR ENDS OF LOCAL DEPRESSION ARE SHOWN ON THE PLANS.
9. ALL CATCH BASIN HARDWARE TO BE GREASED PRIOR TO FINAL ACCEPTANCE AND MANHOLE COVERS ARE TO BE FIELD PAINTED.

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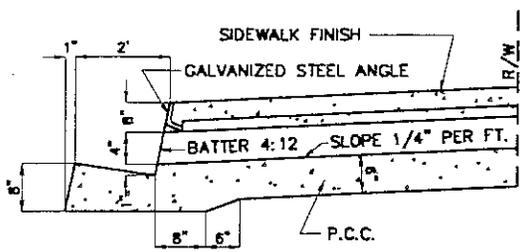
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LOCAL DEPRESSION

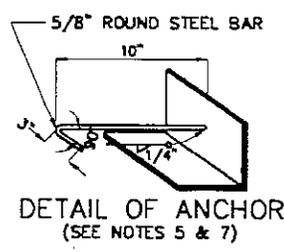
STANDARD PLAN

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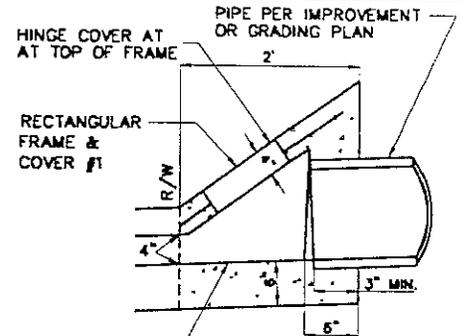
CITY ENGINEER



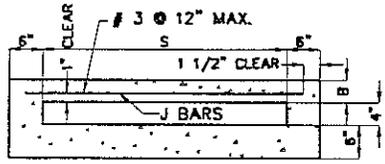
SECTION A-A



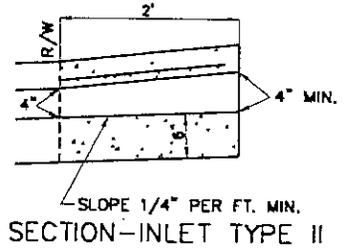
DETAIL OF ANCHOR
(SEE NOTES 5 & 7)



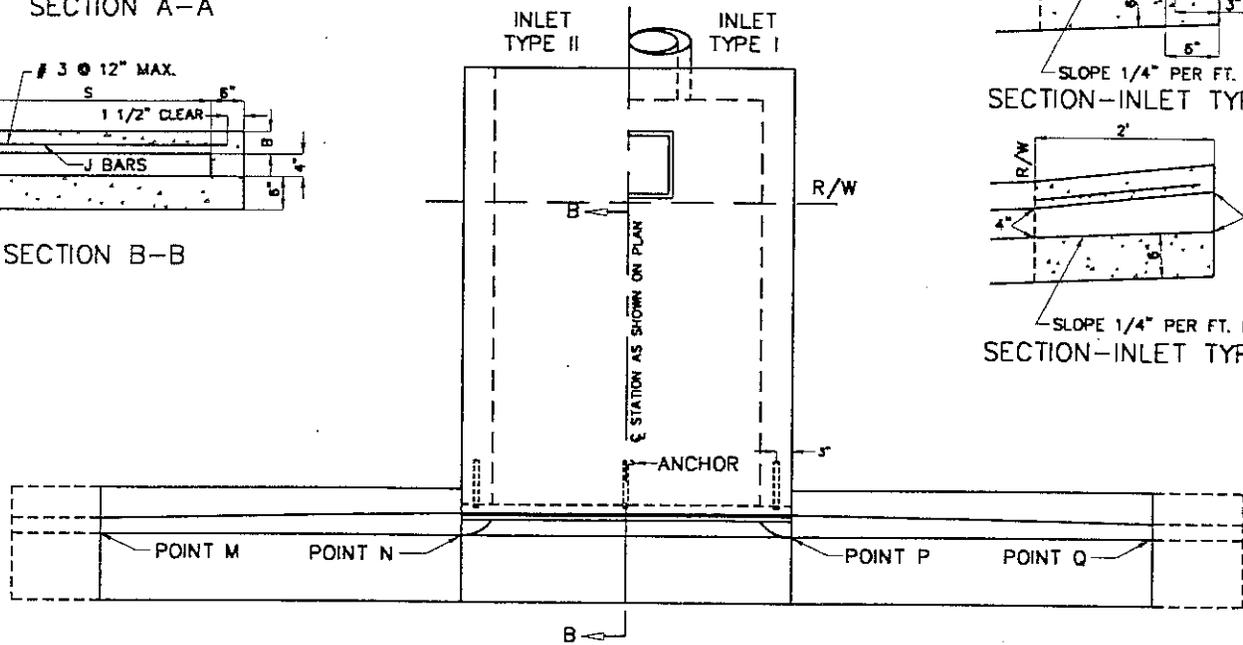
SECTION-INLET TYPE I



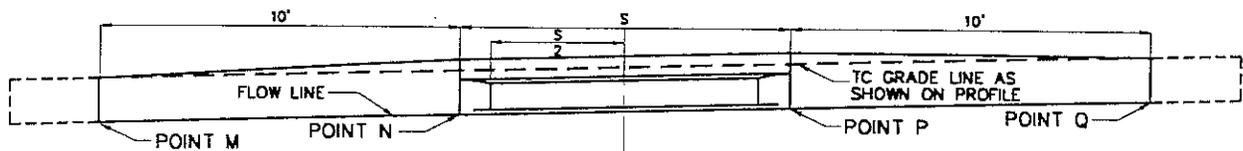
SECTION B-B



SECTION-INLET TYPE II



PLAN



PROFILE

NOTES:

1. FLOOR OF BOX TO BE TROWELED SMOOTH.
2. WHEN THE TOE OF SLOPE IS WITHIN THE R/W, INLET TYPE I BEGINS AT THE TOE RATHER THAN AT THE R/W LINE.
3. FOR OPEN DITCH APPROACH (TYPE II) THE 2' EXTENSION IS NOT REQUIRED WHEN THE BACK OF THE WALK IS 2' OR MORE FROM THE R/W LINE.
4. TOP OF INLET STRUCTURE (TYPE I & II) TO BE FLUSH WITH ADJACENT SURFACE WHERE PREDICTABLE.
5. A HEADED STEEL STUD 5/8" X 6 3/8" WITH HEAD D=1" ATTACHED BY A FULL PENETRATION BUTT WELD MAY BE USED AS AN ALTERNATE ANCHOR.
6. NORMAL CURB FACE POINT N & Q, B+5" AT POINT N & P.
7. THE 3" LEG OF THE INTERIOR ANCHORS SHALL BE PARALLEL TO THE TOP OF SIDEWALK.
8. REMOVAL OF EXISTING CURB AND GUTTER SHALL BE PER STD. PLAN III, CASE I.

STEEL LIST

S	B	GALVANIZED STEEL ANGLE	J BAR	J BAR	
				SIZE	SPACING/LENGTH
1'-0"	3"	2 1/2" X 2" X 3/8"	2	#3	7" 1'-9"
1'-6"	"	"	"	"	" 2'-3"
2'-0"	"	"	"	"	" 2'-9"
2'-6"	"	"	"	"	" 3'-3"
3'-0"	"	"	3	"	" 3'-9"
3'-6"	"	"	"	6"	4'-3"
4'-0"	"	"	"	5"	4'-9"
4'-6"	"	3 1/2" X 3" X 1/2"	"	6 1/2"	5'-3"
5'-0"	"	"	"	5"	5'-9"
5'-6"	"	"	"	4"	6'-3"
6'-0"	"	"	"	3 1/2"	6'-9"

CITY OF INDUSTRY

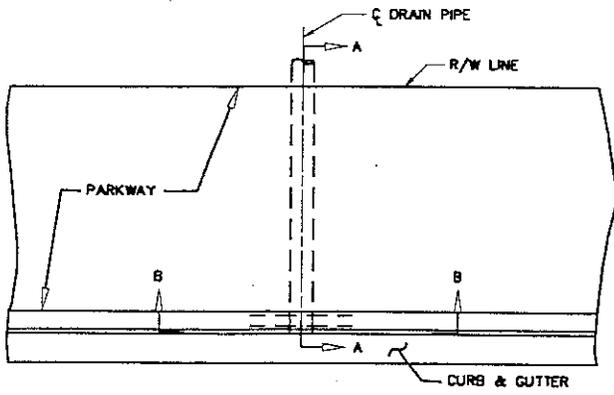
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 05-01-99
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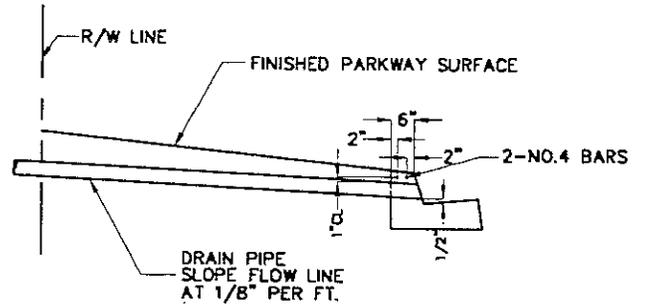
PARKWAY DRAIN NO. 1

STANDARD PLAN

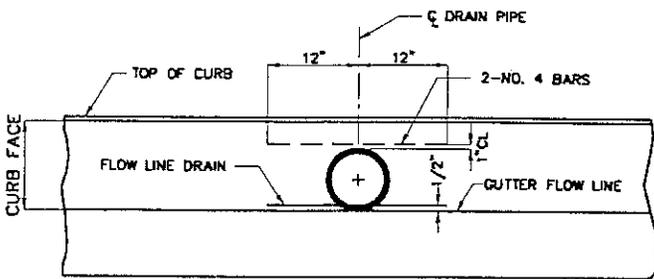
213



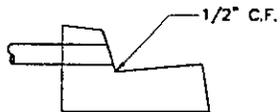
PLAN



SECTION A - A



SECTION B-B



EXISTING CURB & GUTTER

CORE DRILL THE EXISTING CURB FACE.
INSERT PIPE AND DRY PACK.

NOTES:

1. DRAIN PIPE DIAMETER SHAL NOT EXCEED 1/2 OF CURB FACE DIMENSION.
2. PIPE MAY BE STEEL, CAST IRON, ASBESTOS CEMENT, SOLID WALL ABS, OR P.V.C. SEWER PIPE.
3. P.C.C. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF AT LEAST 2,500 P.S.I.
4. ANY EXISTING SIDEWALK SHALL BE SAW CUT AND REMOVED TO THE NEAREST SCORE LINES AND REPLACED PER STD. PLAN 115.

CITY OF INDUSTRY

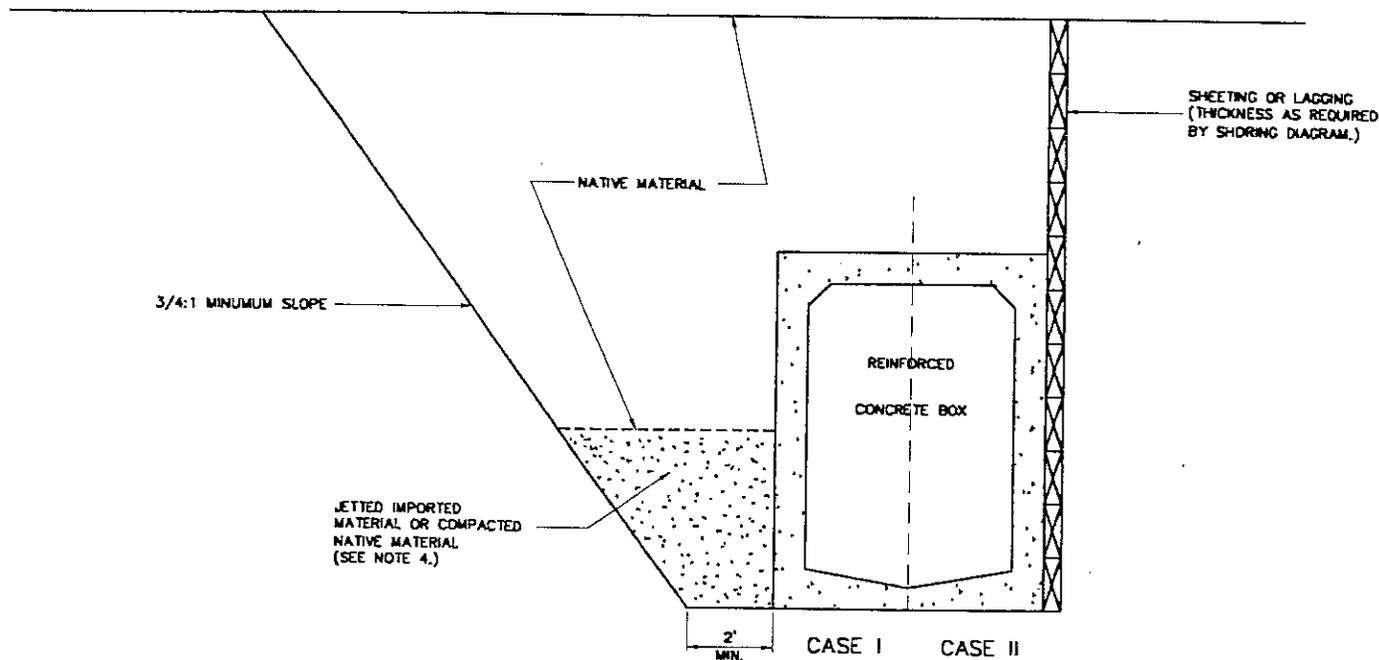
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DATE

PARKWAY DRAIN NO. 2

STANDARD PLAN

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CASE I

NOTES:

1. CASE I SHALL NOT BE USED IF ANY PARALLEL SEWER, WATER, GAS OR UNDERGROUND CONDUITS WILL BE EXPOSED IN THE EXCAVATION.
2. EXISTING PAVEMENT SHALL BE SAWCUT AND REMOVED A MINIMUM OF 6" BEYOND EDGE OF EXCAVATION OR LIMIT OF DISTURBED PAVEMENT WHICHEVER IS GREATER.
3. BACKFILL SHALL BE BROUGHT UP IN APPROXIMATELY EQUAL LIFTS ON ALTERNATE SIDES OF THE BOX.
4. AT CONTRACTOR'S OPTION, THE LOWER FOUR FEET OF BACKFILL SHALL BE a) NATIVE MATERIAL, HAND COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90% IN 8" MAXIMUM LIFTS OR b) IMPORTED SAND OR CRUSHED ROCK JETTED IN TWO FOOT LIFTS TO A MINIMUM RELATIVE DENSITY OF 90%
5. REMAINDER OF BACKFILL SHALL BE COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90% IN 8" MAXIMUM LIFTS TO FINISH GRADE OR TO STREET SUBGRADE IN PAVED AREAS.
6. THE 3/4:1 EXCAVATION LINE IS A MAXIMUM. GROUND CONDITIONS MAY DICTATE A FLATTER SLOPE. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SAFE CONDITION AT ALL TIMES.
7. TEMPORARY CHAIN LINK FENCING (5' MIN. HEIGHT) SHALL BE MAINTAINED ON BOTH SIDES OF EXCAVATION DURING NON-WORKING HOURS.

CASE II

NOTES:

1. EXISTING PAVEMENT SHALL BE SAWCUT AND REMOVED A MINIMUM OF 6" BEYOND EDGE OF EXCAVATION OR LIMIT OF DISTURBED PAVEMENT WHICHEVER IS GREATER.
2. LAGGING OR SHEETING MAY REMAIN IN GROUND BELOW TOP OF BOX AT CONTRACTOR'S OPTION.
3. IF LAGGING OR SHEETING IS REMOVED, VOID CREATED BELOW TOP OF BOX SHALL BE BACKFILLED WITH WASHED CONCRETE SAND, JETTED IN PLACE.
4. VOIDS OCCURRING DURING EXCAVATION BEHIND LIMITS OF LAGGING OR SHEETING SHALL BE BACKFILLED WITH SAND PRIOR TO CONSTRUCTION OF BOX.
5. BACKFILL ABOVE TOP OF BOX SHALL BE COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90% IN MAXIMUM 8" LIFTS TO FINISH GRADE OR STREET SUBGRADE IN PAVED AREAS.
6. TEMPORARY CHAIN LINK FENCING (5' MIN. HEIGHT) SHALL BE MAINTAINED ON BOTH SIDES OF EXCAVATION DURING NON-WORKING HOURS.
7. NOTHING HEREIN SHALL SUPERSEDE THE REQUIREMENTS OF SUBSECTION 303-1.3 (FORMS FOR CONCRETE STRUCTURES.)

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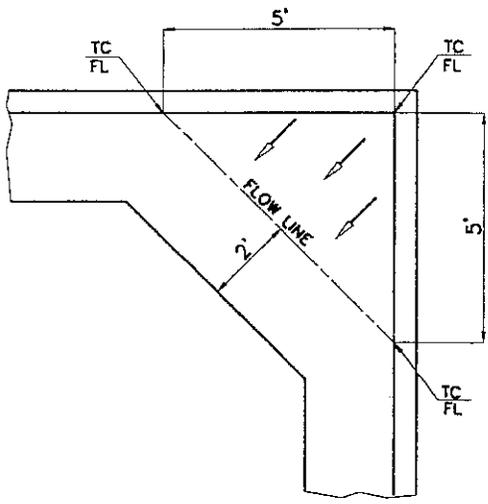
CITY ENGINEER

EXCAVATION & BACKFILL FOR
REINFORCED CONCRETE BOX

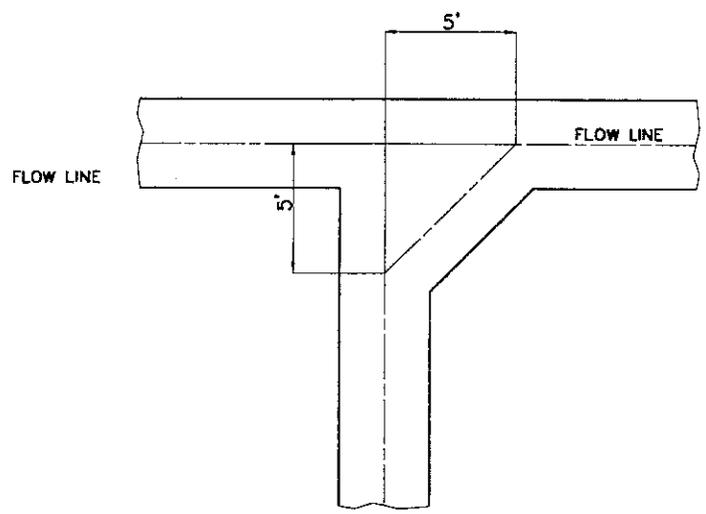
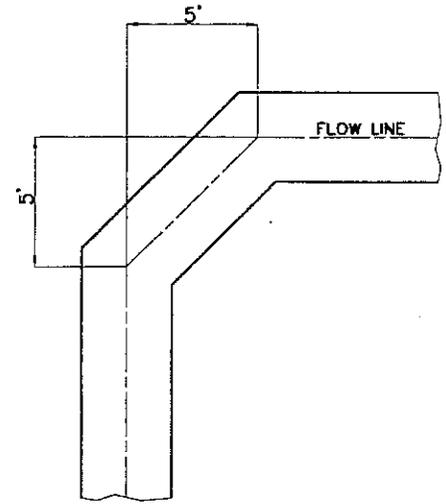
STANDARD PLAN

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DETAIL "A"



DETAIL "B"



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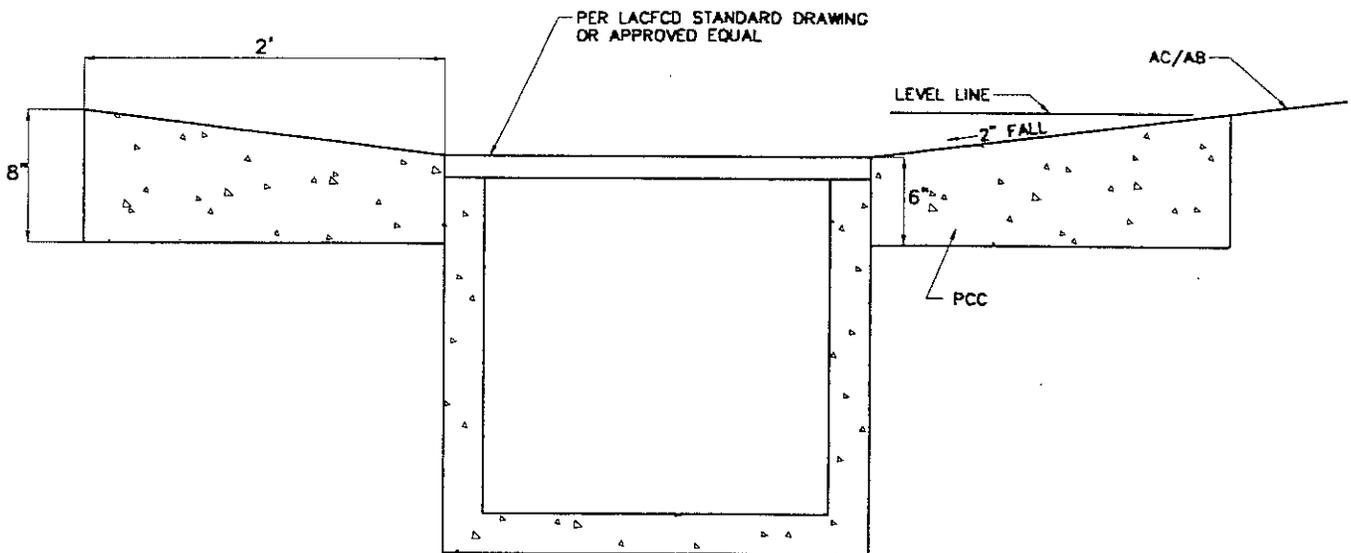
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DATE

"V" GUTTER DETAIL

STANDARD PLAN
216

GRATE CATCH BASIN



CITY OF INDUSTRY

APPROVED BY:

1-09-97
DATE

CITY ENGINEER

APRON DETAIL FOR
ON-SITE CATCH BASIN

STANDARD PLAN

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