RIVERSIDE CALIFORNIA

CITY OF RIVERSIDE — INCORPORATED 1883 — CALIFORNIA

PUBLIC WORKS DEPARTMENT

HORACE-LINCOLN STORM DRAIN

CONSTRUCTION LEGEND

(0 & 00)

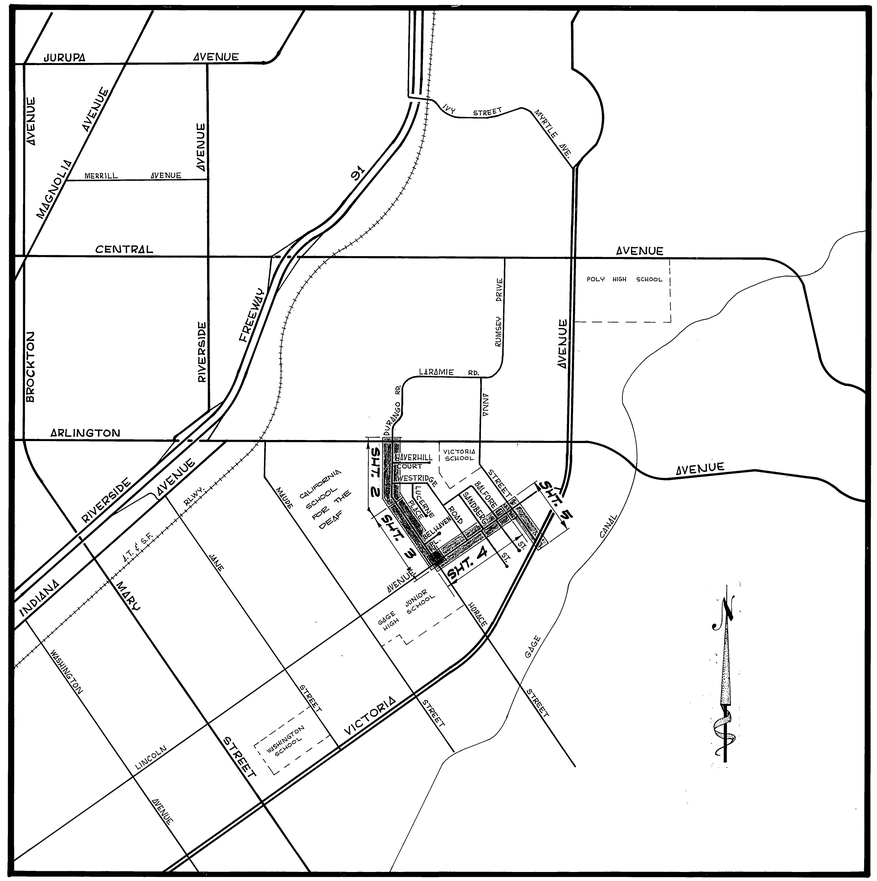
CENTER LINE	——℄——·———	TOP OF SLOPE	
RIGHT-OF-WAY LINE	——R/W———	TOE OF SLOPE	
SUBDIVISION LOT LINE	——⅊———	DIRECTION OF FLOW	←——·——

CONSTRUCT PER CITY OF RIVERSIDE STANDARD DRAWINGS:

- 200 — CURB AND GUTTER TYPE I PER STANDARD DRAWING 200.
- 405 — CATCH BASIN PER STANDARD DRAWING 405.
- 407 — CATCH BASIN PER STANDARD DRAWING 407.
- 421 — JUNCTION STRUCTURE PER STANDARD DRAWING 421.
- 425 — CLEANOUT BOX PER STANDARD DRAWING 425.
- 425 MOD — MODIFIED CLEANOUT BOX PER DETAILS SHEET 5, FROM STANDARD DRAWING 425.
- 430 — MANHOLE PER STANDARD DRAWING 430.
- 431 — MANHOLE PER STANDARD DRAWING 431.
- 432 — JUNCTION STRUCTURE MANHOLE PER STANDARD DRAWING 432.
- ~~412 — C.M.P. INLET PER DRAWING 412~~

GENERAL CONSTRUCTION NOTES

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1973 EDITION.
2. PIPE BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH STANDARD DRAWINGS 452 CASE I AND 453 RESPECTIVELY, EXCEPT WHEN TRENCH BACKFILL EXCEEDS A HEIGHT OF 9 FEET OVER TOP OF PIPE, BEDDING SHALL CONFORM TO STANDARD DRAWING 452 CASE II AT NO EXTRA COST TO THE CITY.
3. CATCH BASIN CONNECTOR PIPES SHALL BE CONNECTED TO MAIN LINE IN ACCORDANCE WITH RIVERSIDE COUNTY FLOOD CONTROL DISTRICT, JUNCTION STRUCTURE Nº 4.
4. ALL REINFORCED CONCRETE PIPE CONSTRUCTION SHALL BE ACCORDING TO THE STANDARD SPECIFICATIONS AND METHODS PROVIDED UNDER THE "PIPE ALTERNATE I" IN THE SPECIAL PROVISIONS. ~~ALL NON-REINFORCED CAST-IN-PLACE CONCRETE PIPE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE METHODS PROVIDED UNDER "PIPE ALTERNATE II" IN THE SPECIAL PROVISIONS.~~



PROJECT LOCATION PLAN

0' 500' 1000' 2000' 3000' 4000' 5000' 6000'

SCALE 1" = 1000'

SHEET INDEX

SHEET	1	TITLE SHEET
"	2	HORACE STREET - PLAN AND PROFILE
"	3	HORACE STREET - PLAN AND PROFILE
"	4	LINCOLN AVENUE - PLAN AND PROFILE
"	5	ANNA STREET - PLAN AND PROFILE

EXISTING CULTURE AND UNDERGROUND LEGEND

EXISTING UNDERGROUND UTILITIES

(000)

SANITARY SEWER	——8"VCP-S——	TELEPHONE CONDUIT	——T——T——
WATER LINE	——6"CI-W——	ELECTRICAL CONDUIT	——E——E——
STORM DRAIN	——24"RCP-SD——	STREET LIGHTING	——SL——SL——
CULVERT	——15"CONC-C——	TRAFFIC SIGNAL	——SIG——SIG——
IRRIGATION LINE	——20"-IRR——	FIRE ALARM	——F——F——
GAS LINE	——3"M-G——		

EXISTING TOPOGRAPHY

(000)

	BLOCK WALL		TOP OF SLOPE
	BOARD FENCE		TOE OF SLOPE
	WIRE FENCE		DIRECTION OF FLOW
	CHAIN LINK FENCE		

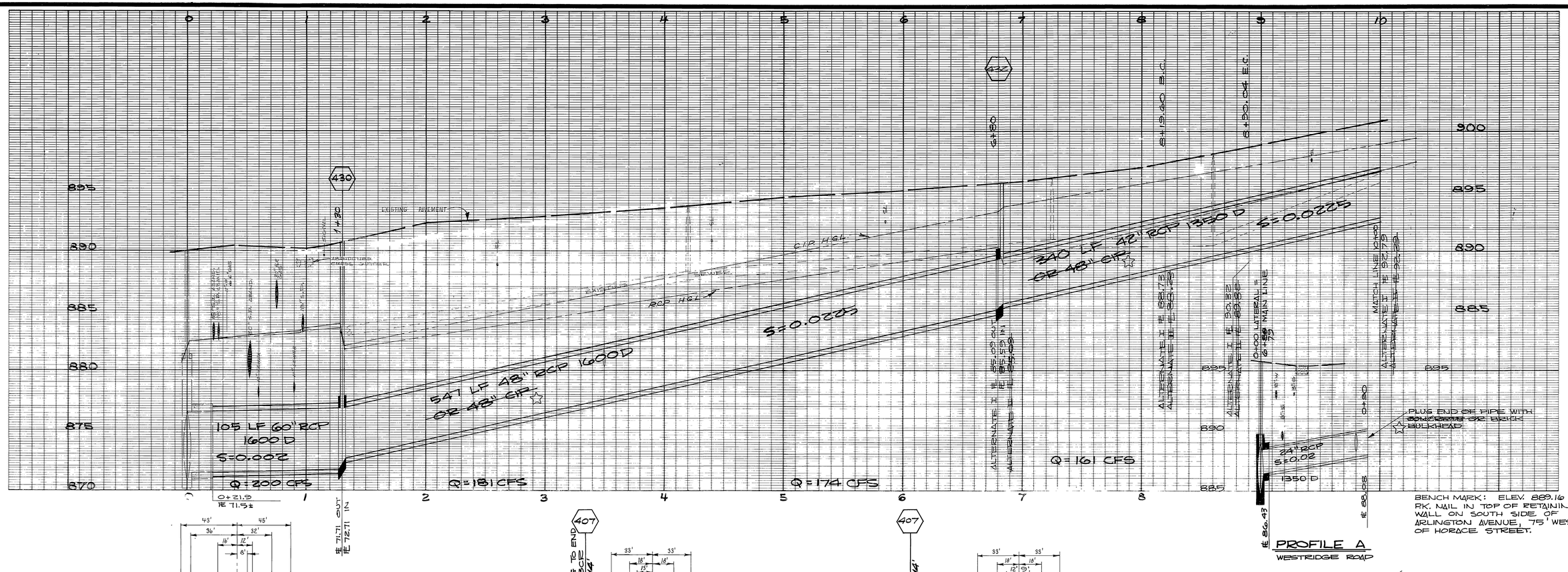
(S)	SANITARY SEWER MH		POWER POLE		RAILROAD TRACKS
S.C.O.	SANITARY SEWER CLEANOUT		GUY POLE		RAILROAD SIGN
(D)	STORM DRAIN MH		POLE & GUY ANCHOR		RAILROAD SIGNAL
(I)	IRRIGATION WEIR		PULL BOX		
(W)	WATER MH		TRAFFIC SIGN		
(G)	GAS MH		PARKING METER		STREET LIGHT (UPRIGHT)
(E)	ELECTRIC MH		FIRE ALARM BOX		STREET LIGHT
(T) [T]	TELEPHONE MH OR VAULT		STREET NAME SIGN		TRAFFIC SIGNAL
	WATER METER		GAS METER		TRAFFIC SIGNAL ON MAST ARM
	FIRE HYDRANT		MAIL BOX		TRAFFIC CONTROL BOX
	SPRINKLER HEAD		HYDRANT OR FAUCET		TRAFFIC SIGNAL DETECTOR
	VALVE			P.E.	PEDESTRIAN CONTROL FOR TRAFFIC SIGNAL

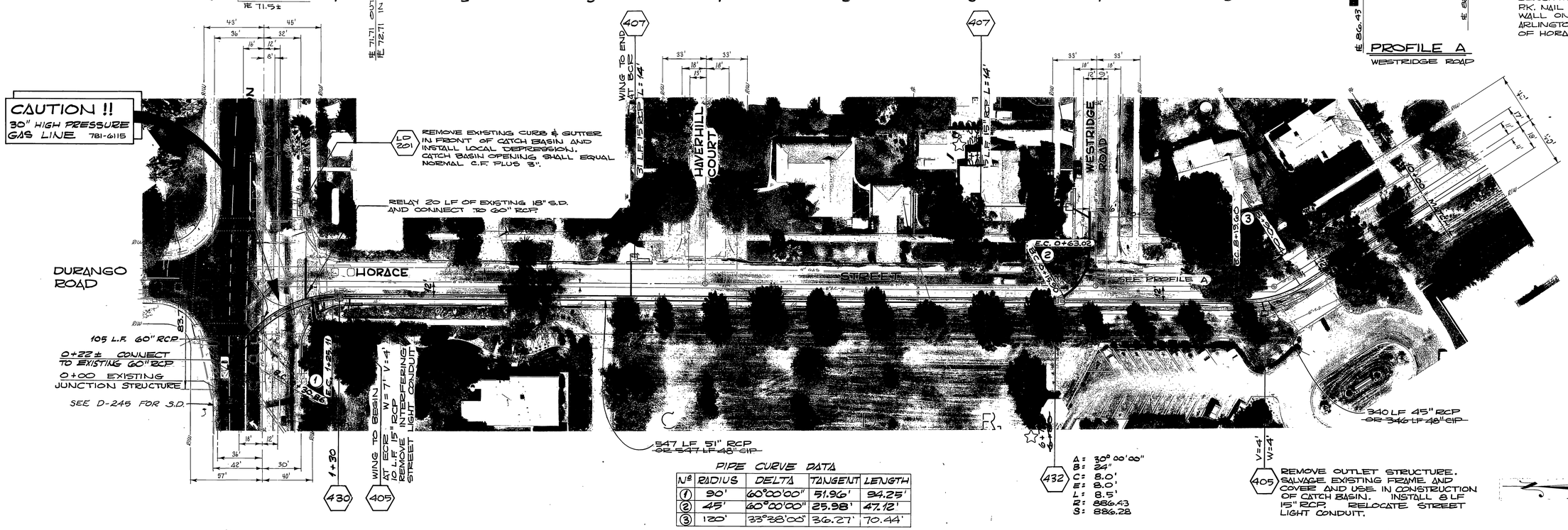
	CONCRETE		TREE SHOWING DIAMETER IN INCHES
	ASPHALT		PALM SHOWING DIAMETER IN INCHES
EP (asphalt) (curb) EP	EDGE OF PAVEMENT		SHRUBBERY
	BUILDING		TREE STUMP DIAMETER IN INCHES
OR	UNDERGROUND OR OVERHANGING STRUCTURE		

"AS BUILT" 4-76 BY R.B.

INDEXED

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT				Horace · Lincoln Storm Drain	ACCOUNT No. 09-573-469 DRAWING NUMBER D-251
APPROVED BY	BY	DATE	APPROVED BY		
PRINCIPAL ENGINEER		7/25			
PARK DEPARTMENT			DIRECTOR OF PUBLIC WORKS		
TRAFFIC DIVISION		4/7			SHEET 1 OF 6
CHIEF PUB. WKS. ENGR.		7/25	DATE	DESIGNED BY RDT DRAWN BY Bill Burn CHECKED BY	





PIPE CURVE DATA

Nº	RADIUS	DELTA	TANGENT	LENGTH
1	90'	60°00'00"	51.96'	94.25'
2	45'	60°00'00"	25.98'	47.12'
3	120'	33°38'00"	36.27'	70.44'

MARK	REVISIONS	APPR.	DATE

DESIGNED BY RDT DRAWN BY Ken CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

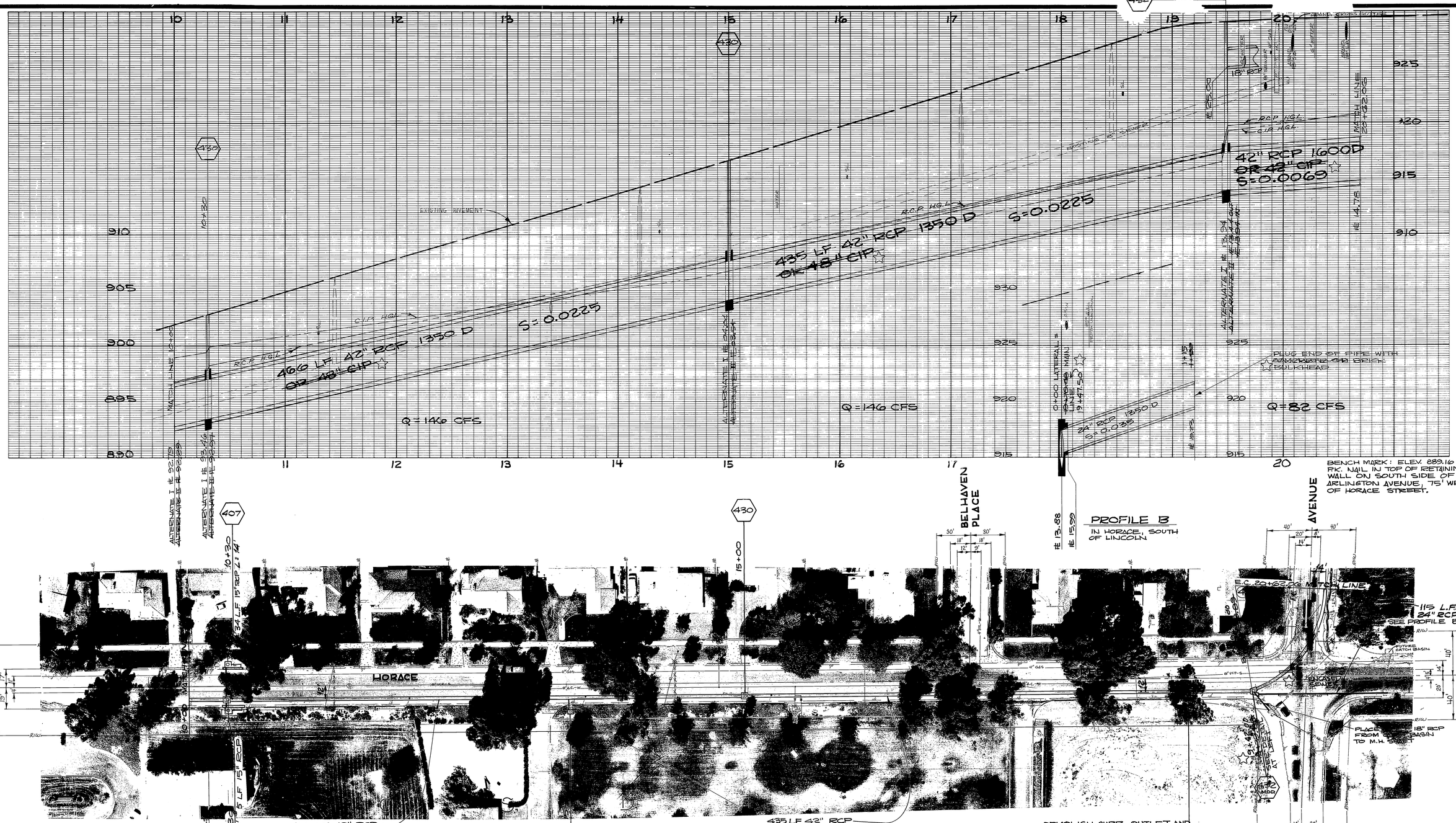
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		7-25
PARK DEPARTMENT		
TRAFFIC DIVISION		4-7
CHIEF PUB. WKS. ENGR.		7/25

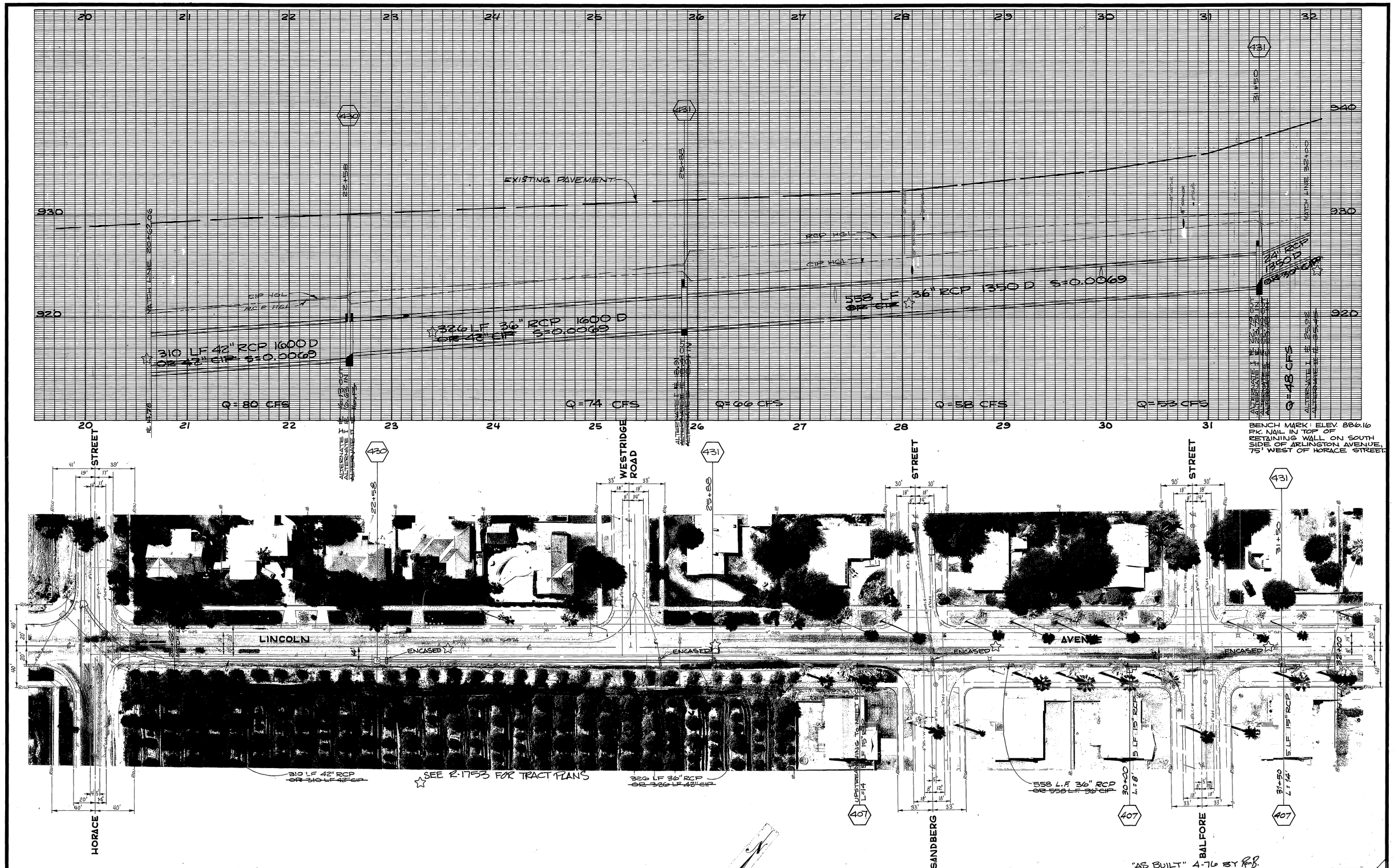
APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 7-28-75

Horace · Lincoln Storm Drain

HORIZ. SCALE: 1"=40' VERT. SCALE: 1"=4'

ACCOUNT No. 09-573-469
DRAWING NUMBER D-251
SHEET 2 OF 60


19+39.89
EXISTING PAVEMENT
R.C.P. H.G.L.
C.I.P. H.G.L.
466 LF 42" RCP 1350 D
OR 48" CIP
S=0.0225
Q=146 CFS
435 LF 42" RCP 1350 D
OR 48" CIP
S=0.0225
Q=146 CFS
42" RCP 1600D
OR 48" CIP
S=0.0069
Q=82 CFS
18" RCP
24" RCP 1350 D
S=0.035
PLUG END OF PIPE WITH
BULKHEAD
MATCH LINE
ALTERNATE I
ALTERNATE II
BELHAVEN PLACE
LINCOLN AVENUE
PROFILE B
IN HORACE, SOUTH OF LINCOLN
E.C. 20+32.66 MATCH LINE
115 L.F. 24" RCP
SEE PROFILE B
HORACE
466 LF 42" RCP
OR 466 LF 48" CIP
435 LF 42" RCP
OR 435 48" CIP
DEMOLISH CURB OUTLET AND
REPLACE CURB & GUTTER
PLUG 18" BOTH ENDS
RELOCATE STREET
LIGHT CONDUIT
MODIFY OUTLET STRUCTURE TO FORM CLEANOUT.
REMOVE CURB OUTLET AND
REPLACE CURB AND GUTTER.
RELOCATE STREET LIGHT CONDUIT.
PIPE CURVE DATA
Nº RADIUS DELTA TANGENT LENGTH
4 100' 70°00" 70.02' 122.17'
J.S. MANHOLE DETAIL
AT STATION 19+39.89
SCALE: 1"=6'
MANHOLE CONSTRUCTION DATA
A = 50°00'30"
B = 24"
C = 8' (6' TO ANGLE POINT)
D1 = 42"
D2 = 48" FOR RCP, 42" FOR CIP
E = 5'
L = 6'
BENCH MARK: ELEV. 889.16
P.K. NAIL IN TOP OF RETAINING
WALL ON SOUTH SIDE OF
ARLINGTON AVENUE, 75' WEST
OF HORACE STREET.
"AS BUILT" 4-76 BY
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF PUB. WKS. ENGR.
DIRECTOR OF PUBLIC WORKS
DATE 7-28-75
MARK REVISIONS APPR. DATE
DESIGNED BY EDT DRAWN BY CHECKED BY
Horace · Lincoln
Storm Drain
ACCOUNT No. 09-573-468
DRAWING NUMBER
D-251
SHEET 3 OF 6
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=4'



MARK	REVISIONS	APPR.	DATE

DESIGNED BY RDT DRAWN BY Ron CHECKED BY GWK

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		7/25
PARK DEPARTMENT		
TRAFFIC DIVISION		4/11
CHIEF PUB. WKS. ENGR.		7.25

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 7-28-75

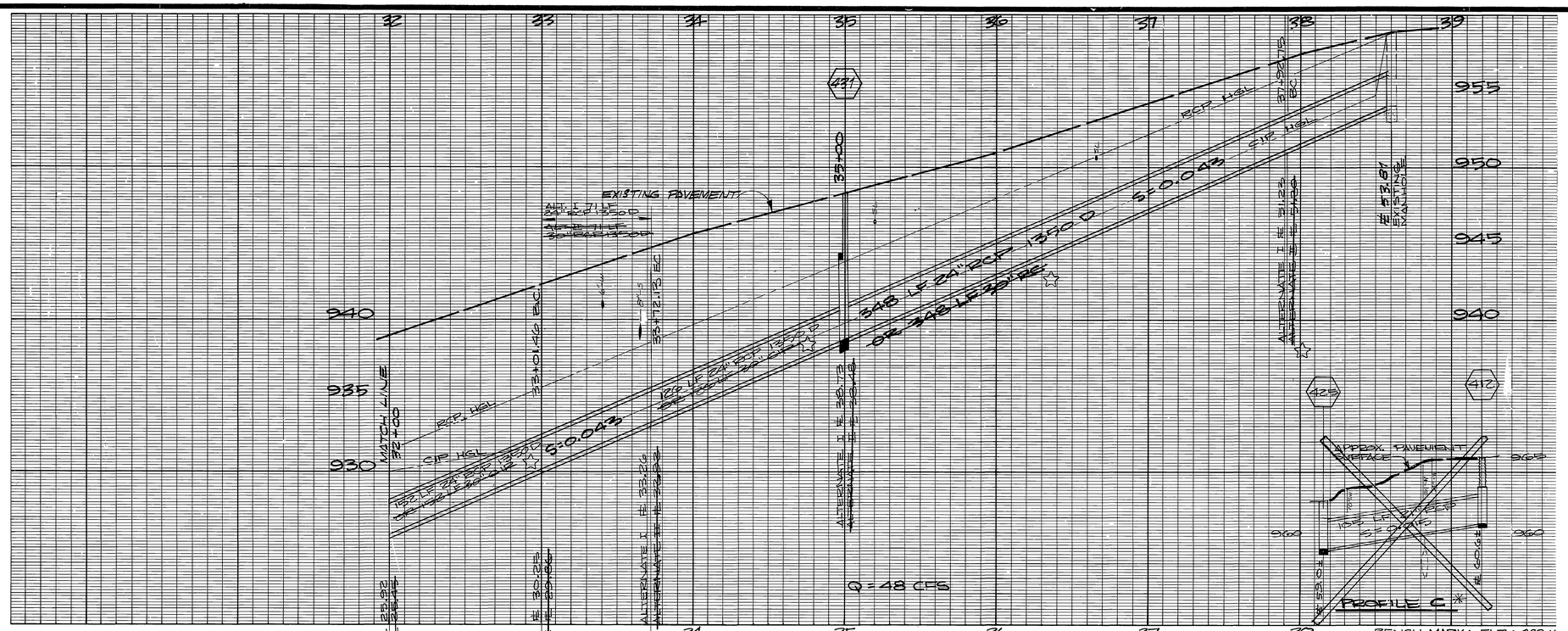
Horace · Lincoln Storm Drain

HORIZ. SCALE: 1"=40' VERT. SCALE: 1"=4'

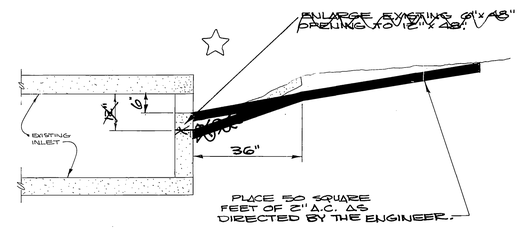
ACCOUNT No: 09-573-469

DRAWING NUMBER D·251

SHEET 4 OF 6

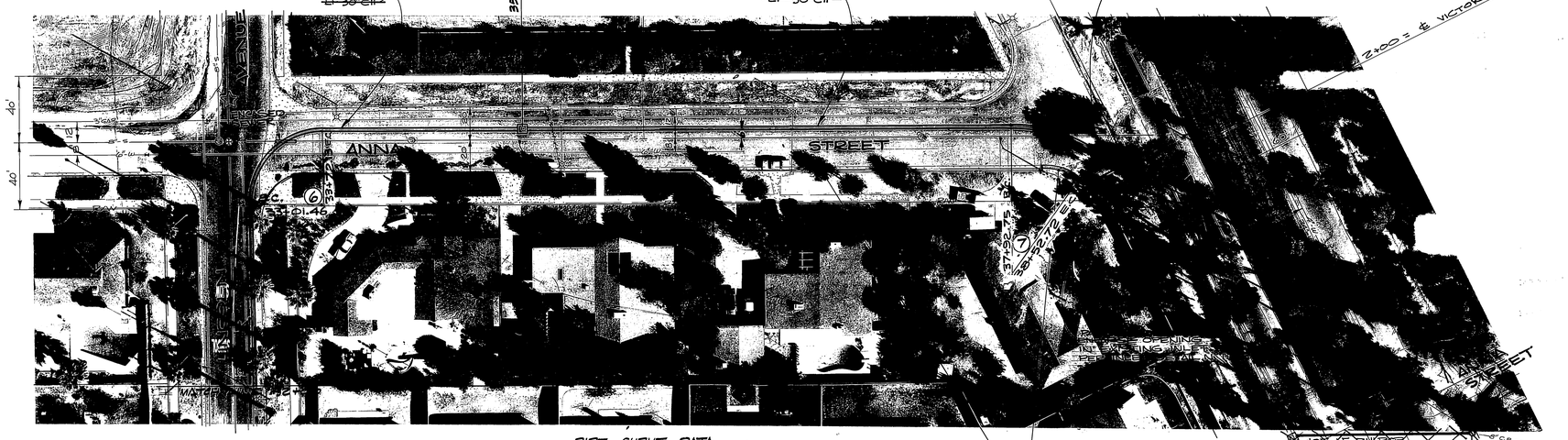


BENCH MARK: ELEV. 889.16
PK. NAIL IN TOP ON RETAINING WALL ON SOUTH SIDE OF ARLINGTON AVENUE, 75' WEST OF HORACE STREET.



INLET DETAIL Nº1

SCALE: 1" = 2'



PIPE CURVE DATA

Nº	RADIUS	DELTA	TANGENT	LENGTH
6	45'	89°58'30"	44.98'	70.67'
7	90'	38°18'00"	31.15'	59.97'

* CONTINGENCY ITEMS

☆ "AS BUILT" 4-76 BY RPB

MARK	REVISIONS	APPR.	DATE

DESIGNED BY RDT DRAWN BY RDH CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

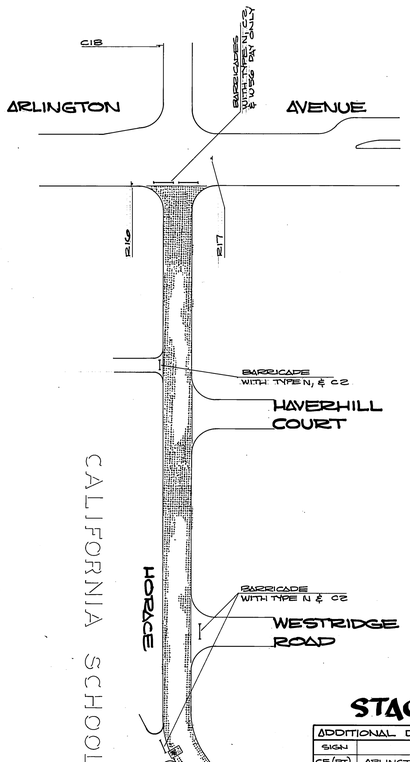
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		7-6-75
PARK DEPARTMENT		
TRAFFIC DIVISION		4-30
CHIEF PUB. WKS. ENGR.		7-25

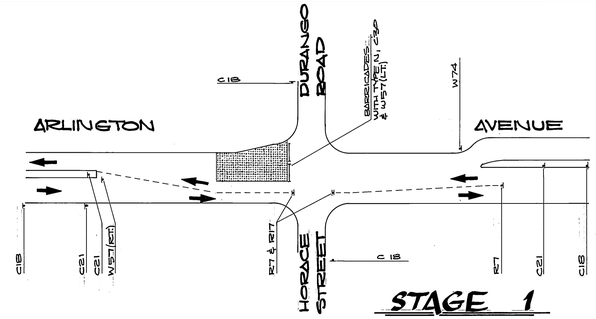
APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 7-28-75

Horace · Lincoln Storm Drain

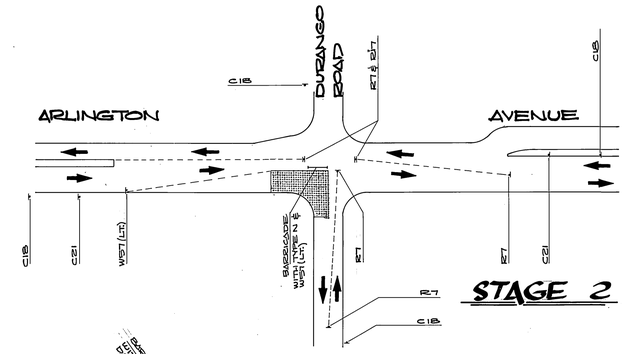
HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

ACCOUNT No. 02-573-469
DRAWING NUMBER
D-251
SHEET 5 OF 6

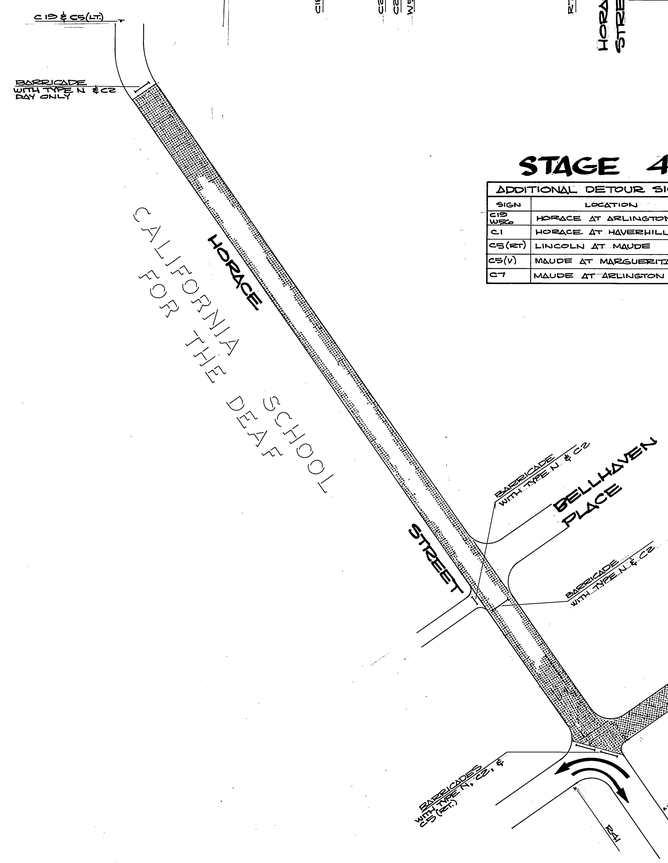




STAGE 1



STAGE 2

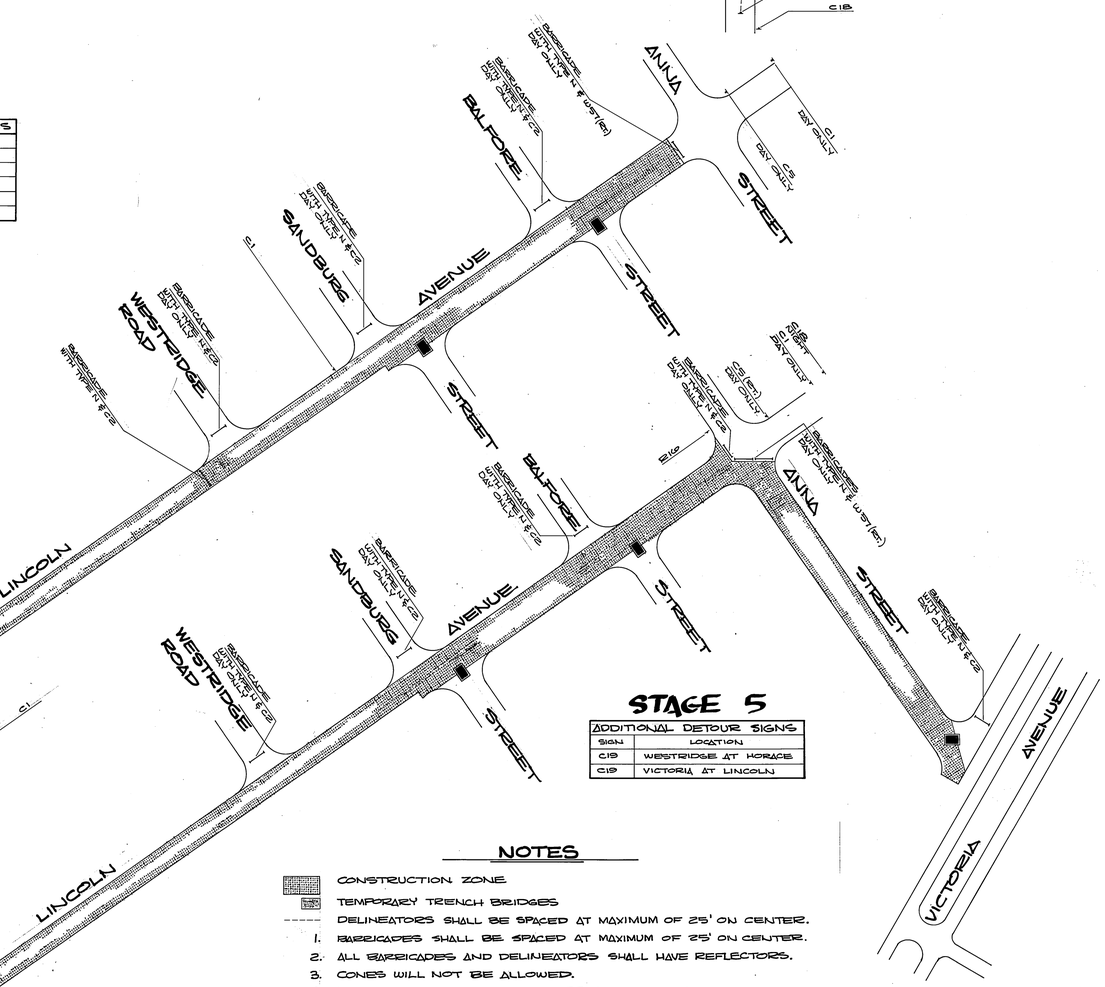


STAGE 4

ADDITIONAL DETOUR SIGNS	
SIGN	LOCATION
C18 W15G	HORACE AT ARLINGTON
C1	HORACE AT HAVERHILL
C5(RT)	LINCOLN AT MAUDE
C5(V)	MAUDE AT MARGUERITA
C7	MAUDE AT ARLINGTON

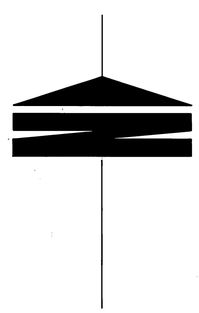
STAGE 3

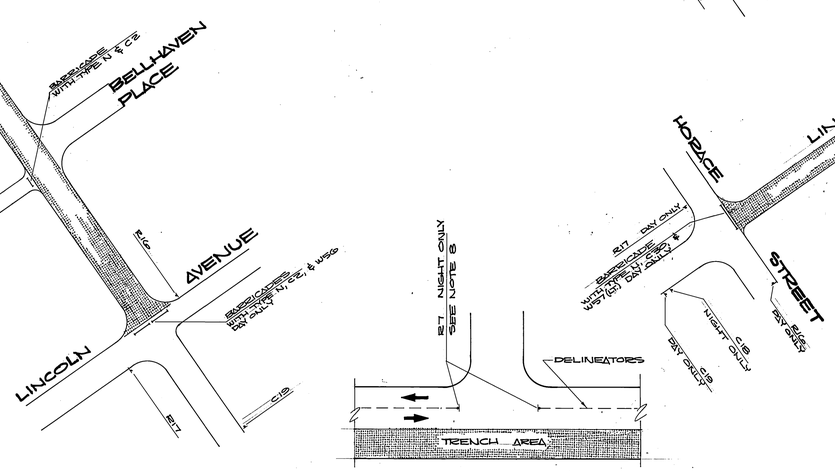
ADDITIONAL DETOUR SIGNS	
SIGN	LOCATION
C5(RT)	ARLINGTON AT ANNA
C5(RT)	ANNA AT LINCOLN
C5(V)	LINCOLN AT SANDBURG
C5(LT)	LINCOLN AT MAUDE
C5(V)	MAUDE AT MARGUERITA
C5(LT)	ARLINGTON AT MAUDE
C18 W57(RT)	WESTRIDGE AT DUQUESNE



STAGE 5

ADDITIONAL DETOUR SIGNS	
SIGN	LOCATION
C19	WESTRIDGE AT HORACE
C19	VICTORIA AT LINCOLN





TYPICAL DETAIL OF TRAFFIC THROUGH CONSTRUCTION ZONE
BETWEEN 4:30 P.M. & 8:30 A.M.

NOTES

- CONSTRUCTION ZONE
- TEMPORARY TRENCH BRIDGES
- DELINEATORS SHALL BE SPACED AT MAXIMUM OF 25' ON CENTER.

1. BARRICADES SHALL BE SPACED AT MAXIMUM OF 25' ON CENTER.
2. ALL BARRICADES AND DELINEATORS SHALL HAVE REFLECTORS.
3. CONES WILL NOT BE ALLOWED.
4. LOCAL TRAFFIC SHALL HAVE ACCESS AT ALL TIMES.
5. PLACE C18'S 500' IN ADVANCE OF CONSTRUCTION AREA ON ARLINGTON.
6. CONTACT TRAFFIC SIGNAL MAINTENANCE BEFORE CONSTRUCTION ON ARLINGTON. PHONE: 787-7576.
7. NOTIFY CALIFORNIA SCHOOL FOR THE DEAF BEFORE CONSTRUCTION ON HORACE IN STAGE 3.
8. LOCATION OF R7'S AS DIRECTED BY THE ENGINEER.

STAGING PLANS FOR CAST-IN-PLACE OPTION ONLY

MARK	REVISIONS	APPR.	DATE

DESIGNED BY [illegible] DRAWN BY [illegible] CHECKED BY [illegible]

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	[illegible]	7/23
PARK DEPARTMENT		
TRAFFIC DIVISION	[illegible]	7/30
CHIEF PUB. WKS. ENGR.	[illegible]	7-28

APPROVED BY [illegible]
DIRECTOR OF PUBLIC WORKS
DATE 7-28-75

Horace · Lincoln Storm Drain

SCALE: 1" = 100'

ACCOUNT No. 08-575-468
DRAWING NUMBER
D-251
SHEET 20 OF 20