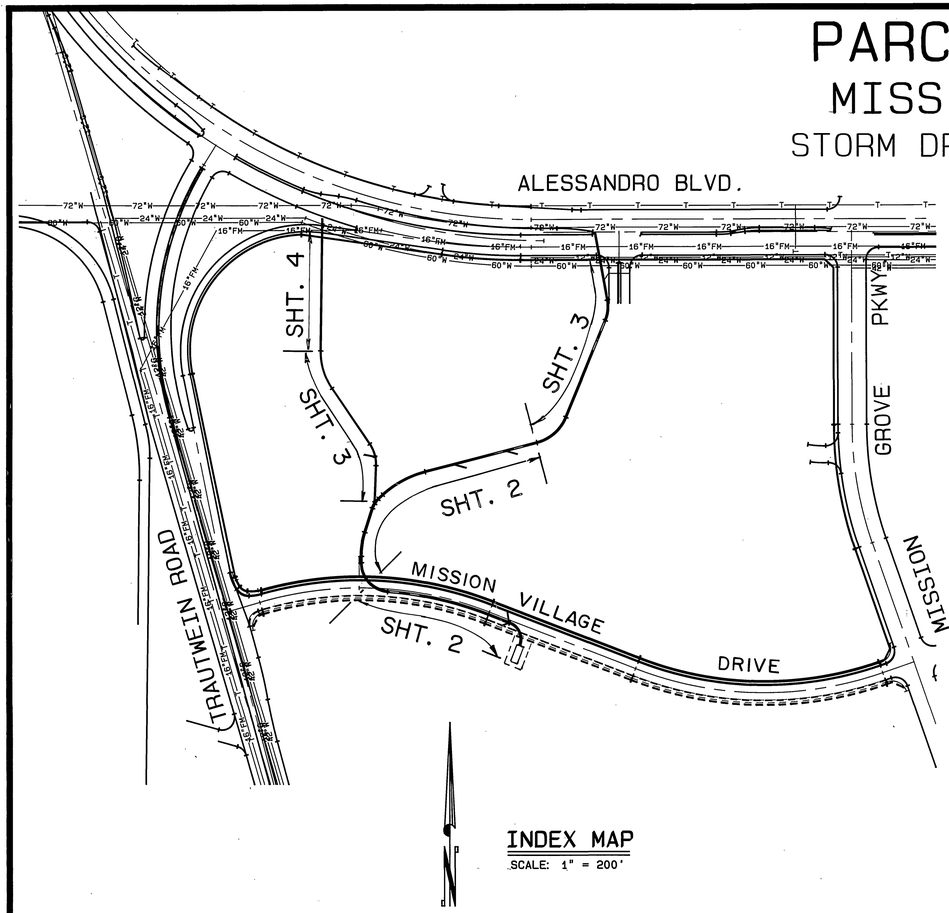
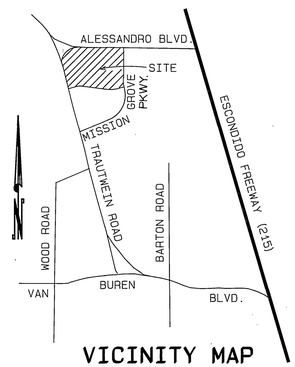
# PARCEL MAP 26320
## MISSION GROVE PLAZA
### STORM DRAIN IMPROVEMENT PLANS




INDEX MAP
SCALE: 1" = 200'




VICINITY MAP
N.T.S.

## CONSTRUCTION NOTES — QUANTITIES

| | | | |
|---|---|---|---|
| (1) | Construct M.H. "AX" per City Standard No. 430 | 4 | EA. |
| (2) | Construct M.H. "EZ" per City Standard No. 431 | 2 | EA. |
| (3) | Construct M.H. "JM" per City Standard No. 432 | 2 | EA. |
| (4) | Construct J.S. "B" per City Standard No. 421 | 2 | EA. |
| (5) | Construct 15" R.C.P. (D-2000) | 50 | L.F. |
| (6) | Construct 18" R.C.P. (D-2000) | 90 | L.F. |
| (7) | Construct 24" R.C.P. (D-1350) | 500 | L.F. |
| (8) | Construct 24" R.C.P. (D-2250) | 173 | L.F. |
| (9) | Construct 48" R.C.P. (D-1000) | 1,007 | L.F. |
| (10) | Construct 54" R.C.P. (D-1400) | 717 | L.F. |
| (11) | Construct J.S. No. 4 per City Standard No. 423 | 1 | EA.. |
| (13) | Construct Catch Basin per City Standard No. 405. | 3 | EA. |
| (14) | Construct Concrete Collar per City Standard No. 424. | 3 | EA. |
| (15) | Construct Pipe Headwall per Caltrans Standard D89. (See Detail Sheet 4) | 1 | EA. |
| (16) | Construct Timber Bulkhead per City Standard No. 456 | 1 | EA. |
| (17) | Construct 2 ton grouted Rip-rap per plan. (5.5' Deep) | 50 | TONS |

## STORM DRAIN NOTES

1. Quantities shown are for information only and the City of Riverside is not responsible for their accuracy.
2. Construction shall be in accordance with the City of Riverside Dept. of Public Works, Standard Drawing and the Standard Specifications for Public Works Construction, Current Edition, Standard drawing No. 10.
3. It shall be the responsibility of the contractor to clear the right of way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtenances and at no cost to the City.
4. Notice to contractor. The existence and location of any underground utility pipes or structures shown on these plans were obtained by a search of the available records. To the best of our knowledge there are no existing utilities exept as shown on these plans. The contractor is required to take precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these plans.
5. The private engineer signing these plans is responsible for assuring the accuracy and acceptability of the work hereon. In the event of discrepancies arising during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approval by the City.
6. The contractor shall call in a locations request to UNDERGROUND SERVICE ALERT (USA), Phone No. 1-800-422-4133, two working days before digging. No construction permit will be issued by the Public Works Department involving excavation for underground facilities unless the applicant has been provided an Inquiry Identification Number by U.S.A.
7. The developer shall be responsible for preserving or re-establishing and referencing survey monuments destroyed, disturbed or buried as a result of construction shown hereon.
8. All embankment fill shall be compacted to minimum of 90% maximum dry density and shall be of an approved quality.
9. Any traffic control striping obliterated and/or badly worn during construction shall be restored by the contractor within five (5) days after notification from the City Inspector.
10. Before the Rip-Rap is accepted, as placed, at the outlet of any drainage structure, it shall be tested under flows as close as possible to design conditions with water obtained from fire hydrants in the immediate area.
11. All flagged elevations shall be staked in the field by the private engineer.
12. Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

**Underground Service Alert**
CALL BEFORE YOU DIG
Call: TOLL FREE
1-800
422-4133
TWO WORKING DAYS BEFORE YOU DIG

*PRIVATE ENGINEERING NOTE*

*CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.*

REGISTERED PROFESSIONAL ENGINEER — JOSE MILAD KHAMIS — No. 44621 — CIVIL — STATE OF CALIFORNIA — EXP. 3/31/94

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 44621
EXPIRATION DATE: _____ DATE: 10/26/90
APPROVED BY:

JFD
**J.F. Davidson Associates, Inc.**
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
BUS. TAX CERT. NO. 4994 EXP. 12-31-91
3880 Lemon Street, Suite 300, P.O. Box 493, Riverside, CA 92502, (714) 686-0844, FAX 714-686-5954
11200 S. Mt. Vernon Ave., Suite "D", Colton, CA 92324, (714) 825-1082
73-060 El Paseo, Suite 106, Palm Desert, CA 92260, (619) 346-5691, FAX 619-340-0529

SCALE: AS SHOWN
DATE: OCT 1990
BENCH MARK: P.K. nail and tag in top of 5' x 15' x 3' high granite rock 48' W'ly of Trautwein Road and 0.4 mi. S'ly of Alessandro Blvd. FB735/73 Elev. 1566.731

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| | | | |

DESIGNED BY MWS DRAWN BY CMF CHECKED BY JMF

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

| | BY | DATE |
|---|---|---|
| APPROVED BY | | |
| PRINCIPAL ENGINEER | [signature] | 4/28/9 |
| PARK DEPARTMENT | — | — |
| TRAFFIC DIVISION | — | — |
| CHIEF P.W. ENGR. | [signature] | 3/19/91 |
| | [signature] | 3/19/91 |

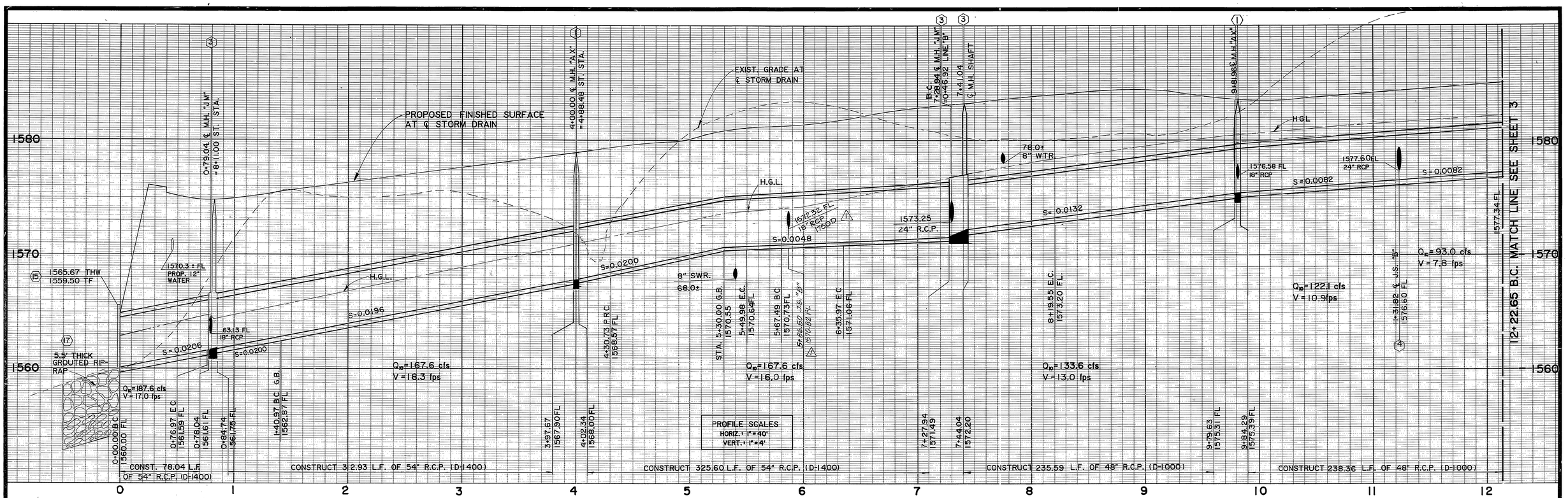
APPROVED BY [signature]
DIRECTOR OF PUBLIC WORKS
DATE 3/5/91

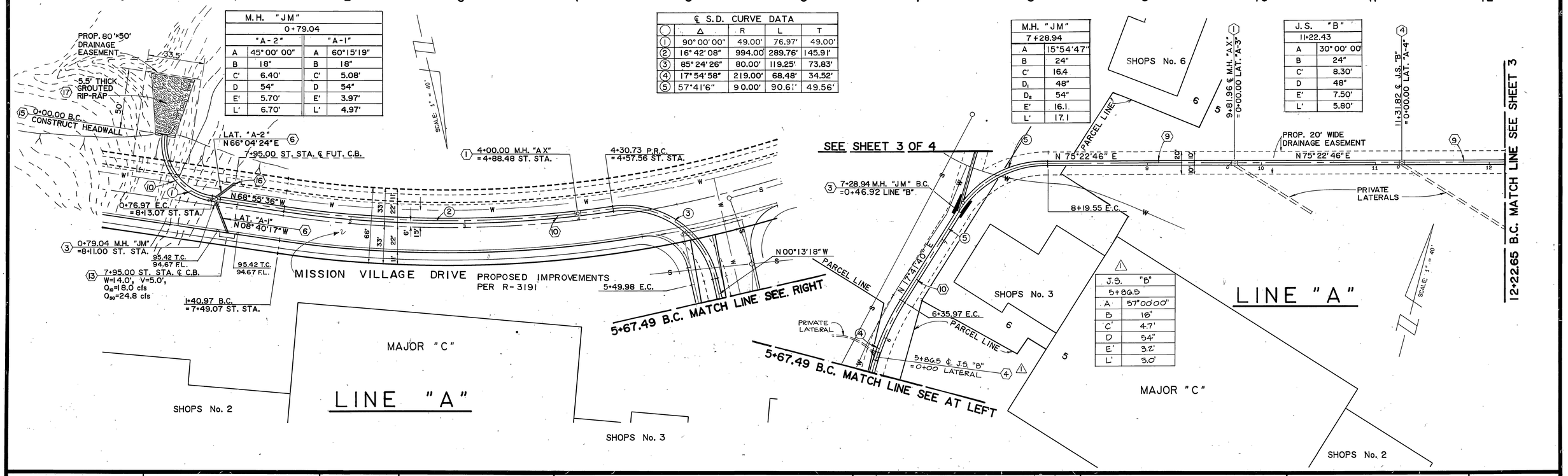
P. M. 26320
TITLE SHEET
STORM DRAIN
PLAN & PROFILE
FOR: REGIONAL PROPERTIES

PROJECT NO. D-591
SHEET 1 OF 4
FILE NO.: 8911101

FILED

INDEXED 4-9-91 KH




| M.H. "JM" 0+79.04 | | | |
|---|---|---|---|
| "A-2" | | "A-1" | |
| A | 45° 00' 00" | A | 60° 15' 19" |
| B | 18" | B | 18" |
| C' | 6.40' | C' | 5.08' |
| D | 54" | D | 54" |
| E' | 5.70' | E' | 3.97' |
| L' | 6.70' | L' | 4.97' |

| ℄ S.D. CURVE DATA | | | | |
|---|---|---|---|---|
| | Δ | R | L | T |
| (1) | 90° 00' 00" | 49.00' | 76.97' | 49.00' |
| (2) | 16° 42' 08" | 994.00' | 289.76' | 145.91' |
| (3) | 85° 24' 26" | 80.00' | 119.25' | 73.83' |
| (4) | 17° 54' 58" | 219.00' | 68.48' | 34.52' |
| (5) | 57° 41' 6" | 90.00' | 90.61' | 49.56' |

| M.H. "JM" 7+28.94 | |
|---|---|
| A | 15° 54' 47" |
| B | 24" |
| C' | 16.4 |
| $D_1$ | 48" |
| $D_2$ | 54" |
| E' | 16.1 |
| L' | 17.1 |

| J.S. "B" 11+22.43 | |
|---|---|
| A | 30° 00' 00 |
| B | 24" |
| C' | 8.30' |
| D | 48" |
| E' | 7.50' |
| L' | 5.80' |

| J.S. "B" 5+86.5 | |
|---|---|
| A | 57° 00' 00" |
| B | 18" |
| C' | 4.7' |
| D | 54" |
| E' | 3.2' |
| L' | 3.0' |

**Underground Service Alert**
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE 1-800 422-4133
TWO WORKING DAYS BEFORE YOU DIG

*PRIVATE ENGINEERING NOTE*

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER JOSE MILAD FARAH RCE 44521 EXP. 3/31/94 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF: Joe Farah
REGISTERED CIVIL ENGINEER NO. 44521 EXPIRATION DATE: _____ DATE: 10/26/90
APPROVED BY:

J.F. Davidson Associates, Inc.
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
3860 Lemon Street, Suite 300, P.O. Box 493, Riverside, CA 92502, (714) 686-0844, FAX 714-686-5954
11200 S. Mt. Vernon Ave., Suite "D", Colton, CA 92324, (714) 825-1082
73-080 El Paseo, Suite 106, Palm Desert, CA 92260, (619) 346-5691, FAX 619-340-0529

BUS. TAX CERT. NO. 4994 EXP. 12-31-91
SCALE: 1" = 40'
DATE: OCT. 1990
BENCH MARK: P.K. nail and tag in top of 5' x 15' x 3' high granite rock 48' W'ly. of Trautwein Road and 0.4 mi. S'ly. of Alessandro Blvd. FB 735/73 Elev. 1566.73

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| 1 | ADD PRIVATE LATERAL @ 5+86.5 FRED | | 11/21/91 |

DESIGNED BY MWS DRAWN BY CMF CHECKED BY JMF

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | [signature] | 4/29/91 |
| PARK DEPARTMENT | — | — |
| TRAFFIC DIVISION | — | — |
| CHIEF P. W. ENGR. | RNC<br>DMC | 3/11/91<br>3/11/91 |

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS
DATE 3/5/91

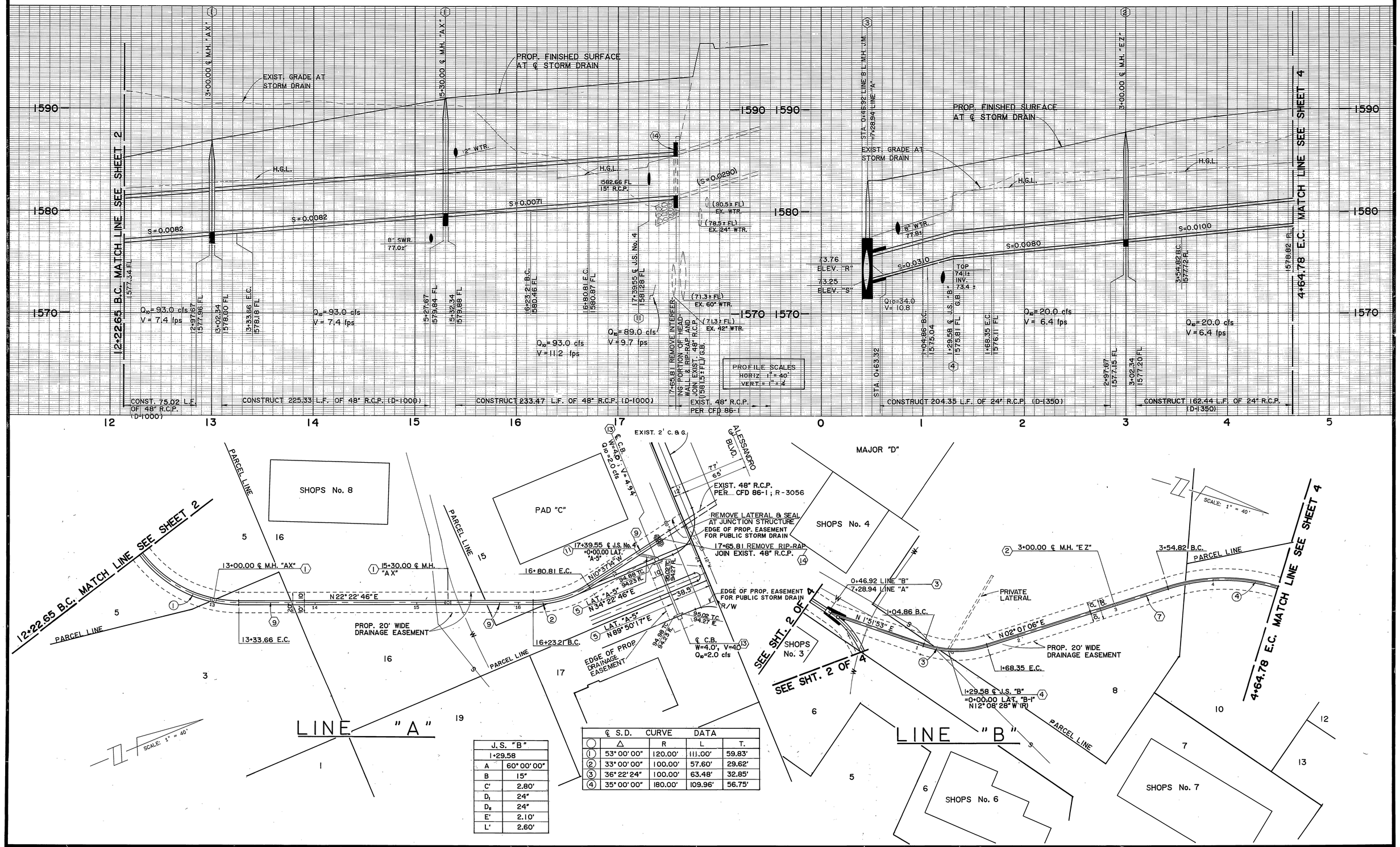
PM 26320
STORM DRAIN
PLAN AND PROFILE
LINE "A"

For: REGIONAL PROPERTIES

PROJECT NO. 8911101
D-591
SHEET 2 OF 4
FILE NO.:

FRED

INDEXED 4-9-91 (pll




| J. S. "B" | |
|---|---|
| 1+29.58 | |
| A | 60° 00' 00" |
| B | 15" |
| C' | 2.80' |
| $D_1$ | 24" |
| $D_2$ | 24" |
| E' | 2.10' |
| L' | 2.60' |

| ℄ S.D. CURVE DATA | | | | |
|---|---|---|---|---|
| | Δ | R | L | T. |
| (1) | 53° 00' 00" | 120.00' | 111.00' | 59.83' |
| (2) | 33° 00' 00" | 100.00' | 57.60' | 29.62' |
| (3) | 36° 22' 24" | 100.00' | 63.48' | 32.85' |
| (4) | 35° 00' 00" | 180.00' | 109.96' | 56.75' |

Underground Service Alert
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TWO WORKING DAYS BEFORE YOU DIG

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REGISTERED PROFESSIONAL ENGINEER MILAD FARAH CIVIL STATE OF CALIFORNIA
RCE 44521 EXP. 3/31/91

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO. 44521
EXPIRATION DATE: DATE: 10/26/90
APPROVED BY:

J.F. Davidson Associates, Inc.
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
BUS. TAX CERT. NO. 4994 EXP. 12-31-91
3880 Lemon Street, Suite 300, P.O. Box 493, Riverside, CA 92502, (714) 686-0844, FAX 714-686-5954
11200 S. Mt. Vernon Ave., Suite "D", Colton, CA 92324, (714) 825-1082
73-080 El Paseo, Suite 106, Palm Desert, CA 92260, (619) 346-5691, FAX 619-340-0529

SCALE: 1" = 40'
DATE: OCT 1990
BENCH MARK: P.K. nail and tag in top of 5' x 15' x 3' high granite rock 48' W'ly. of Travelwin Road and 0.4 mi. S'ly. of Alessandro Blvd. FB 735/73 Elev. 1566.731

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY MWS DRAWN BY CMF CHECKED BY JMF

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | | 3/15/91 |
| PARK DEPARTMENT | — | — |
| TRAFFIC DIVISION | — | — |
| CHIEF P.W. ENGR. | RHL | 3/15/91 |
| | JJE | 3/14/91 |

APPROVED BY DIRECTOR OF PUBLIC WORKS
DATE 3/5/91

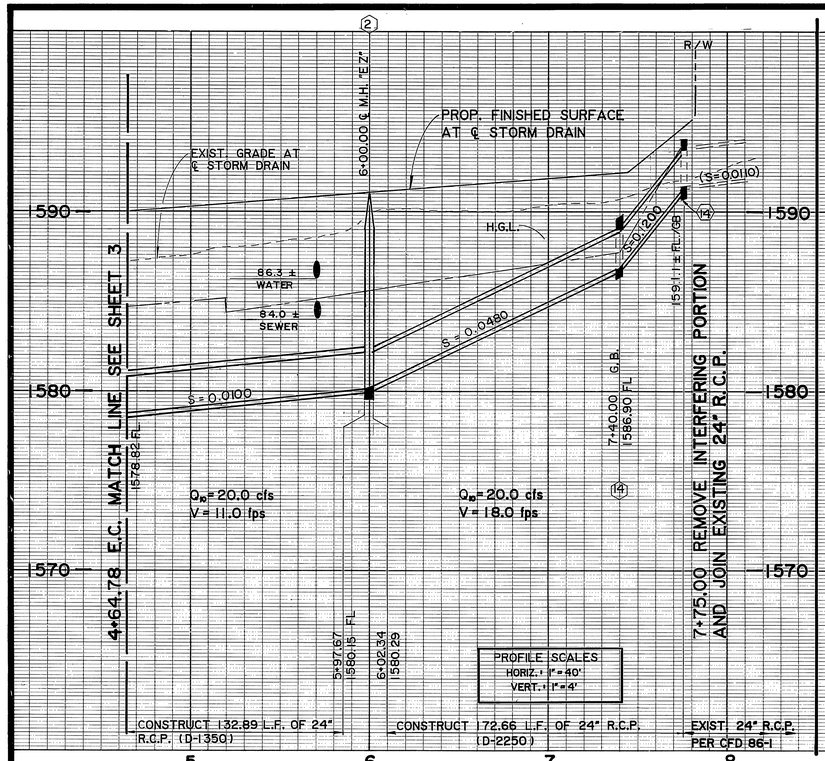
# PM 26320
# STORM DRAIN PLAN AND PROFILE LINE "A" & LINE "B"

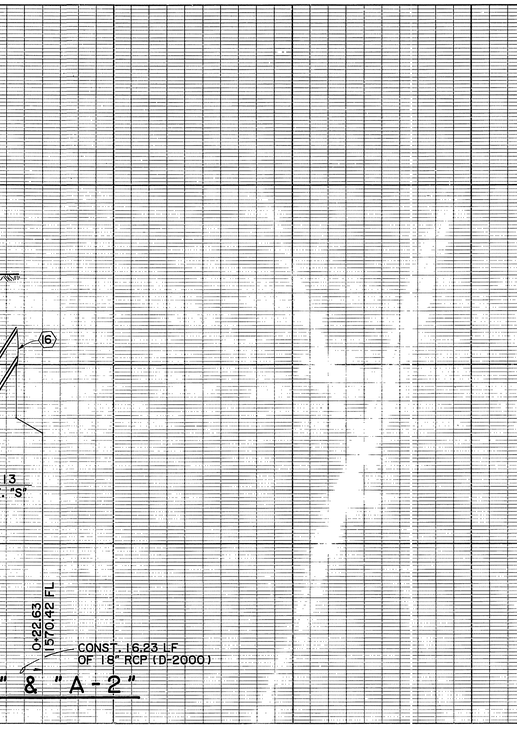
For: REGIONAL PROPERTIES

PROJECT NO. 8911101
D-591
SHEET 3 OF 4
FILE NO.:

FIED

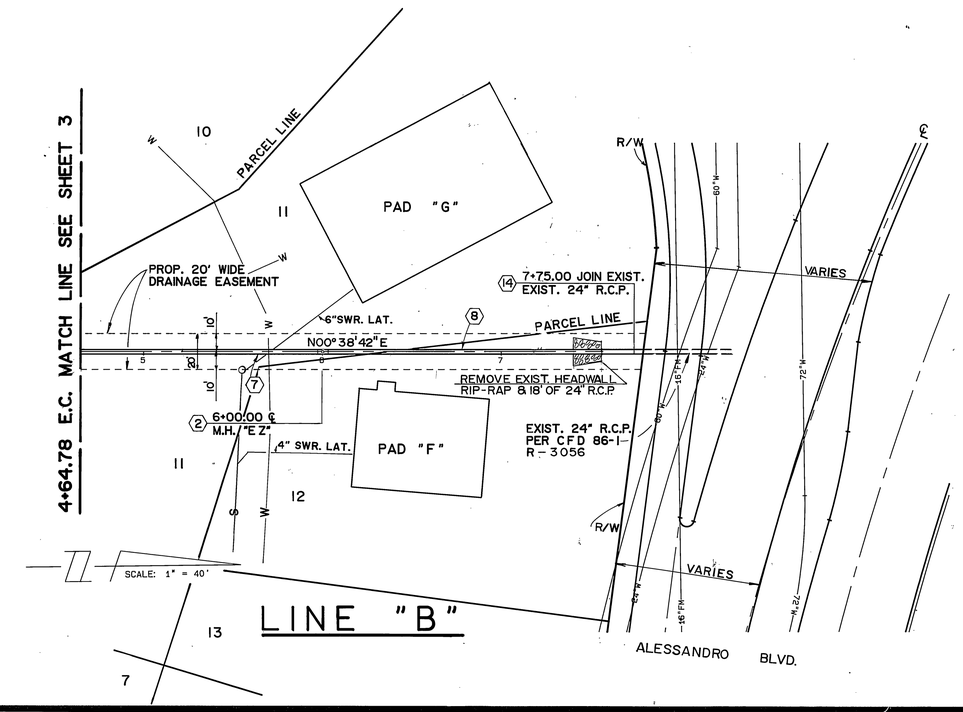
Indexed 4-9-91 tht



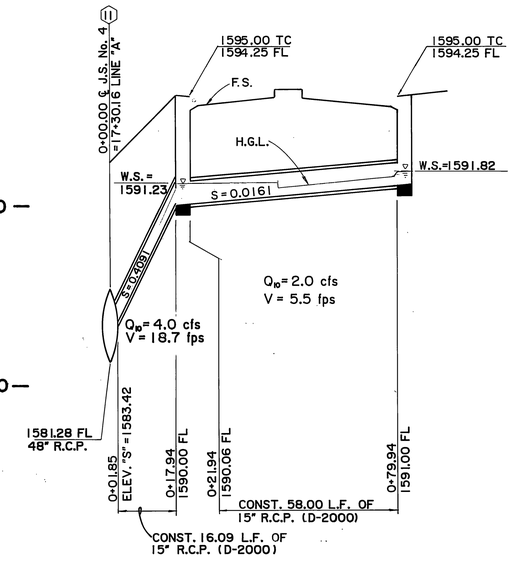




## LAT. "A-1" & "A-2"

HORIZ.: 1"=20'
VERT.: 1"=4'

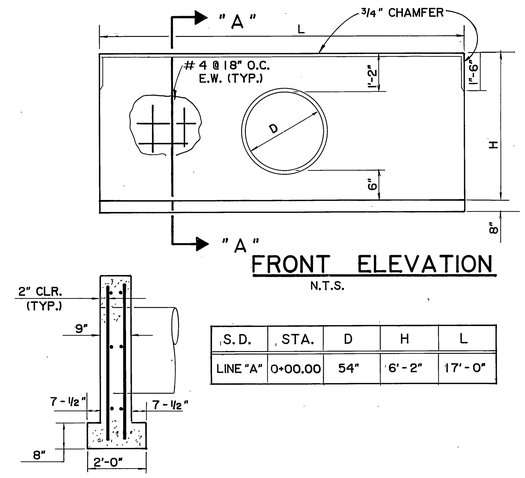



## LINE "B"




## LAT. "A-5"

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




## FRONT ELEVATION

N.T.S.

| S.D. | STA. | D | H | L |
|---|---|---|---|---|
| LINE "A" | 0+00.00 | 54" | 6'-2" | 17'-0" |

## SECTION "A"-"A"

N.T.S.

## PIPE HEADWALL DETAILS

N.T.S.

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**Underground Service Alert**

DIG BEFORE YOU DIG

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TWO WORKING DAYS BEFORE YOU DIG

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REGISTERED PROFESSIONAL ENGINEER — JOE MILAD FARAH — RCE 44521 EXP. 3/31/91 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

REGISTERED CIVIL ENGINEER NO. 44521

EXPIRATION DATE: _____ DATE: 10/26/90

APPROVED BY: _____

BUS. TAX CERT. NO.4994 EXP. 12-31-91

SCALE: 1" = 40'

DATE: OCT 1990

**J.F. Davidson Associates, Inc.**
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE

3880 Lemon Street, Suite 300, P.O. Box 493, Riverside, CA 92502, (714) 686-0844, FAX 714-686-5954
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73-080 El Paseo, Suite 106, Palm Desert, CA 92260, (619) 346-5691, FAX 619-340-0529

BENCH MARK: P.K. nail and tag in top of 5' x 15' x 3' high granite rock 48' W'ly. of Trautwein Road and 0.4 mi. S'ly. of Alessandro Blvd. F.B 735/73 Elev. 1566.73'

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY MWS DRAWN BY CMF CHECKED BY JMF

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

| | BY | DATE |
|---|---|---|
| APPROVED BY | | |
| PRINCIPAL ENGINEER | [illegible] | 3/5/91 |
| PARK DEPARTMENT | — | — |
| TRAFFIC DIVISION | — | — |
| CHIEF P.W. ENGR. | [illegible] | 3/5/91 |

APPROVED BY [signature] DIRECTOR OF PUBLIC WORKS

DATE 3/5/91

# PM 26320
# STORM DRAIN PLAN AND PROFILE LINE "B", LATERALS AND HEADWALL DETAILS

For: REGIONAL PROPERTIES

PROJECT NO. 8911101

D-591

SHEET 4 OF 4

FILE NO.:

FRED

INDEXED 4-9-91 FH