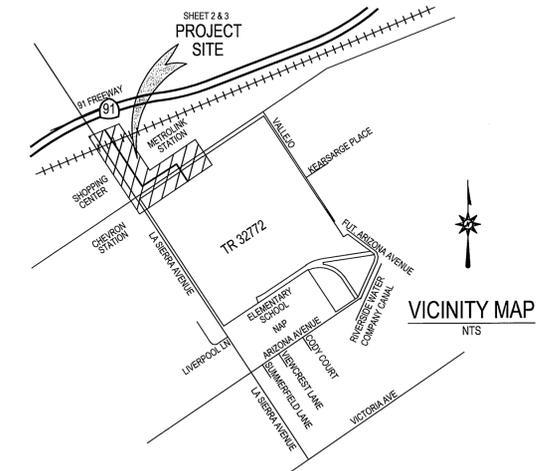


IN THE CITY OF RIVERSIDE, CALIFORNIA
RIVERWALK VISTA VILLAGE
TR 32772
STORM DRAIN
IMPROVEMENT PLANS

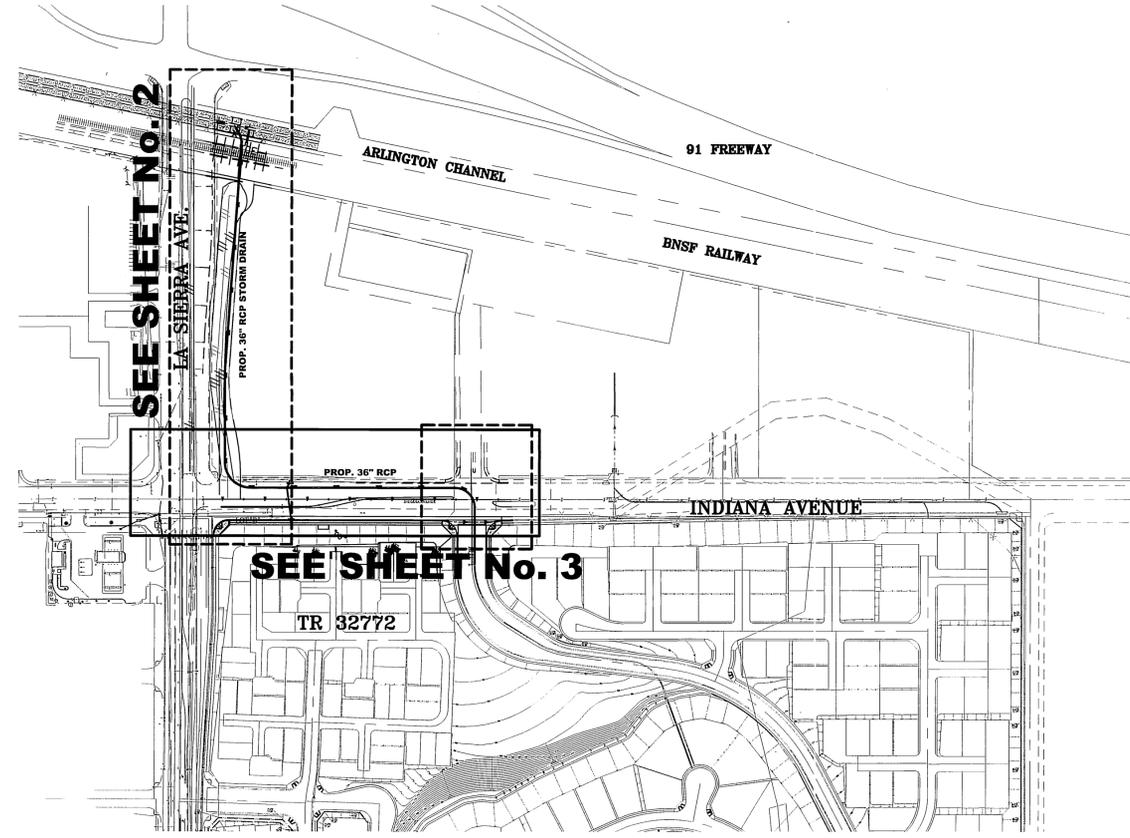


GENERAL NOTES

- NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC'S RIGHT-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
- 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.
- 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.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPT. OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- THE STORM DRAIN CONTRACTOR SHALL ADJUST MANHOLES TO FINAL GRADE AFTER PAVING IS COMPLETED.
- ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE DAYS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
- ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
- THE CONTRACTOR SHALL CALL IN A LOCATIONS REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE NO. 1-800-227-2600, 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.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR REESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
- NOTICE TO CONTRACTOR. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSING AND CONNECTIONS AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES AFFECTED. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BEFORE CONSTRUCTION BEGINS.
- ON ALL AREAS WITHIN PUBLIC'S RIGHT-OF-WAY WHERE THE FILL IS ONE (1) FOOT OR GREATER, A LETTER WILL BE REQUIRED FROM THE SOILS ENGINEER, CERTIFYING THE COMPACTION OF THE FILL BELOW SUBGRADE, PRIOR TO ISSUANCE OF THE CONSTRUCTION PERMIT/CUT SHEETS.
- DEVELOPER AND/OR CONTRACTOR TO GIVE RCFC 5-DAYS WRITTEN NOTICE PRIOR TO STARTING WORK ON STORM DRAIN (OR DOING ANY WORK WITHIN RCFC EASEMENTS). RCFC ENCROACHMENT IS REQUIRED.
- BN & SF ENCROACHMENT PERMIT REQUIRED PRIOR TO STARTING STORM DRAIN IMPROVEMENT WITHIN RAILROAD R/W.

BN & SP STEEL CASING SPECIFICATIONS

- 48" INSIDE DIAMETER STEEL CASING (NOMINAL THICKNESS 0.625") COATED-AREMA MANUAL FOR RAILWAY ENGINEERING TABLE 1-5-1.
- MINIMUM YIELD STRENGTH = 35,000 PSI.
- BORED OR JACKED INSTALLATIONS SHALL HAVE A BORED HOLE DIAMETER ESSENTIALLY THE SAME AS THE OUTSIDE DIAMETER OF THE PIPE PLUS THE THICKNESS OF THE PROTECTIVE COATING. IF VOIDS SHOULD DEVELOP OR IF THE BORED HOLE DIAMETER IS GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE (INCLUDING COATING) BY MORE THAN APPROXIMATELY 1 IN., REMEDIAL MEASURES AS APPROVED BY THE ENGINEER SHALL BE TAKEN. BORING OPERATIONS SHALL NOT BE STOPPED IF SUCH STOPPAGE WOULD BE DETRIMENTAL TO THE RAILWAY.
- ANSI CODES CURRENT AT THE TIME OF CONSTRUCTING THE PIPELINE, SHALL GOVERN THE INSPECTION AND TESTING OF THE FACILITY WITHIN THE RAILROAD RIGHTS-OF-WAY.
- WHERE ENDS OF CASINGS ARE BELOW GROUND THEY SHALL BE SUITABLY SEALED.
- CASING PIPE, WHEN SEALED, SHALL BE PROPERLY VENTED. VENT PIPES SHALL BE OF SUFFICIENT DIAMETER, BUT IN NOW CASE LESS THAN 2 IN., IN DIAMETER SHALL BE ATTACHED NEAR END OF CASING AND PROJECT THROUGH GROUND SURFACE AT THE RIGHT-OF-WAY LINES OR NOT LESS THAN 45 FT. (MEASURED AT RIGHT ANGLES) FROM CENTERLINE OF NEAREST TRACK. VENT PIPE, OR PIPES, SHALL EXTEND NOT LESS THAN 4 FT. ABOVE THE SURFACE. TOP OF VENT PIPE SHALL BE FITTED WITH DOWN-TURNED ELBOW PROPERLY SCREENED, OR A RELIEF VALVE.



INDEX MAP
SCALE: 1"=200'

STORM DRAIN CONSTRUCTION NOTES	QNTY	UNITS
1) CONSTRUCT 36" RCP (D-1200).	1430	LF
2) CONSTRUCT 18" RCP (D-2000).	93	LF
3) CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STD. DWG. NO. 405.	2	EA
4) CONSTRUCT MANHOLE "AX" PER CITY OF RIVERSIDE STD. DWG NO. 430.	4	EA
5) CONSTRUCT MANHOLE "JM" PER CITY OF RIVERSIDE STD. DWG. NO. 432.	1	EA
6) INSTALL 48" INSIDE DIA STEEL CASING PIPE FOR E-80		
7) LOADING PER BN & SF UTILITY CROSSING SPECIFICATIONS. SEE DETAIL SHEET 2	105	LF
8) INSTALL TIMBER BULKHEAD PER CITY OF RIVERSIDE STD. DWG. NO. 456.	1	EA
9) CONSTRUCT JUNCTION STRUCTURE No. 6 PER RCFC & WCD STD. JS 231. ENCROACHMENT PERMIT REQUIRED.	1	EA
10) INSTALL TYPE C ENCASEMENT PER CWD-023	10	LF

DEVELOPER/APPLICANT

THE GRIFFIN HOMEBUILDING GROUP, LLC
 4710 RIVERWALK PARKWAY
 RIVERSIDE, CA 92505
 PHONE: (951) 509-8622

OWNER

RIVERSIDE COMMUNITY COLLEGE
 4800 MAGNOLIA AVE
 RIVERSIDE, CA 92506
 PHONE: (951) 222-8044
 FAX: (951) 222-8035

ENGINEER

CANTY ENGINEERING GROUP, INC.
 2010 IOWA AVENUE, SUITE 110
 RIVERSIDE, CA 92507
 PHONE: (951) 683-5234
 FAX: (951) 683-5301

SOURCE OF TOPOGRAPHY

INLAND AERIAL SURVEYS INC. DATE: 06/13/2003

PROJECT AREA:

96.2 ACRES

BASIS OF BEARING

BEARINGS ARE BASED ON THE CENTERLINE OF LA SIERRA AVE AS BEING N33°37'19"N, AS SHOWN ON RECORD OF SURVEY ON FILE IN BOOK 80 AT PAGES 72 THROUGH 77 THERE OF, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

LEGAL DESCRIPTION

BEING A SUBDIVISION OF LOTS 1 THROUGH 3, 8 THROUGH 29, A PORTION OF LOTS 4 THROUGH 7 AND LOTS A,C,D,E AND F OF VALLEY VIEW FARMS PER M.B.11/58, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA, ALSO A PORTION OF LOTS 5,9 THROUGH 12, 15 AND 16 IN BLOCK 38 OF THE LANDS OF THE RIVERSIDE LAND AND IRRIGATION COMPANY PER M.B. 1/70 SAN BERNARDINO COUNTY, CALIFORNIA.

ASSESSOR'S PARCEL No:

138-120-005, 138-130-004, 138-130-010, 138-120-007, 138-130-009, 138-170-008, 009, 010 & 011

SITE ADDRESS:

LA SIERRA AVE. & INDIANA AVE.

THOMAS BROTHERS

PAGE 714, GRID F2 & G2 (2004 EDITION)

FLOOD PLAIN DESIGNATION

FLOOD INSURANCE RATE MAP (FIRM)
 ZONES B & C

SCHOOL DISTRICT

ALVORD UNIFIED SCHOOL DISTRICT

UTILITIES

WATER: CITY OF RIVERSIDE

SEWER: CITY OF RIVERSIDE

GAS: SOUTHERN CALIFORNIA GAS COMPANY

ELECTRIC: CITY OF RIVERSIDE

TELEPHONE: SBC

BENCHMARK: E2-P2

CHISELED SQUARE ON THE TOP OF CURB AT THE WESTERLY END OF A CATCH BASIN FRONTING THE SOUTHERLY CURB OF INDIANA AVE AT THE SOUTHEAST CORNER OF INDIANA AVENUE AND FILLMORE STREET.
 ELEV=738.410

PUBLIC UTILITIES DEPARTMENT
 WATER DIVISION
 APPROVED BY: *Paul D. Mosby* 12/27/05
 DATE

Underground Service Alert
 Call: TOLL FREE
 1 - 800
 227-2600
 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
 DAVI L. DRAKE
 No. C 64193
 Exp. 06-30-07
 CIVIL
 STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
[Signature]
 REGISTERED CIVIL ENGINEER NO. C 64193
 EXPIRATION DATE: 06-30-07 DATE: 12-23-05

CEG CANTY ENGINEERING GROUP, INC.
 CIVIL ENGINEERING - PLANNING - SURVEYING
 2010 IOWA AVENUE, SUITE 110, RIVERSIDE, CA 92507
 P.O. BOX 52050, RIVERSIDE, CA 92517
 TEL (951) 683-5234 FAX (951) 683-5301
 CITY OF RIVERSIDE TAX CERT NO: 69372 EXP: 4-7-06
 SCALE: AS NOTED BENCH MARK SEE ABOVE

MARK: _____ REVISIONS: _____ APPR. DATE: _____
 DESIGNED BY: DD DRAWN BY: CA CHECKED BY: _____

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: *[Signature]* DATE: 12/27/05
 PRINCIPAL ENGR. DATE: 12/27/05
 CITY ENGINEER
 DATE: 12/27/05

IN THE CITY OF RIVERSIDE, CALIFORNIA
RIVERWALK VISTA VILLAGE
TR 32772
OFFSITE STORM DRAIN
IMPROVEMENT PLANS
TITLE SHEET
 FOR: GRIFFIN INDUSTRIES

PW05-0616
 D-790
 SHEET 1 OF 3
 FILE NO.: 1104-007

RFC

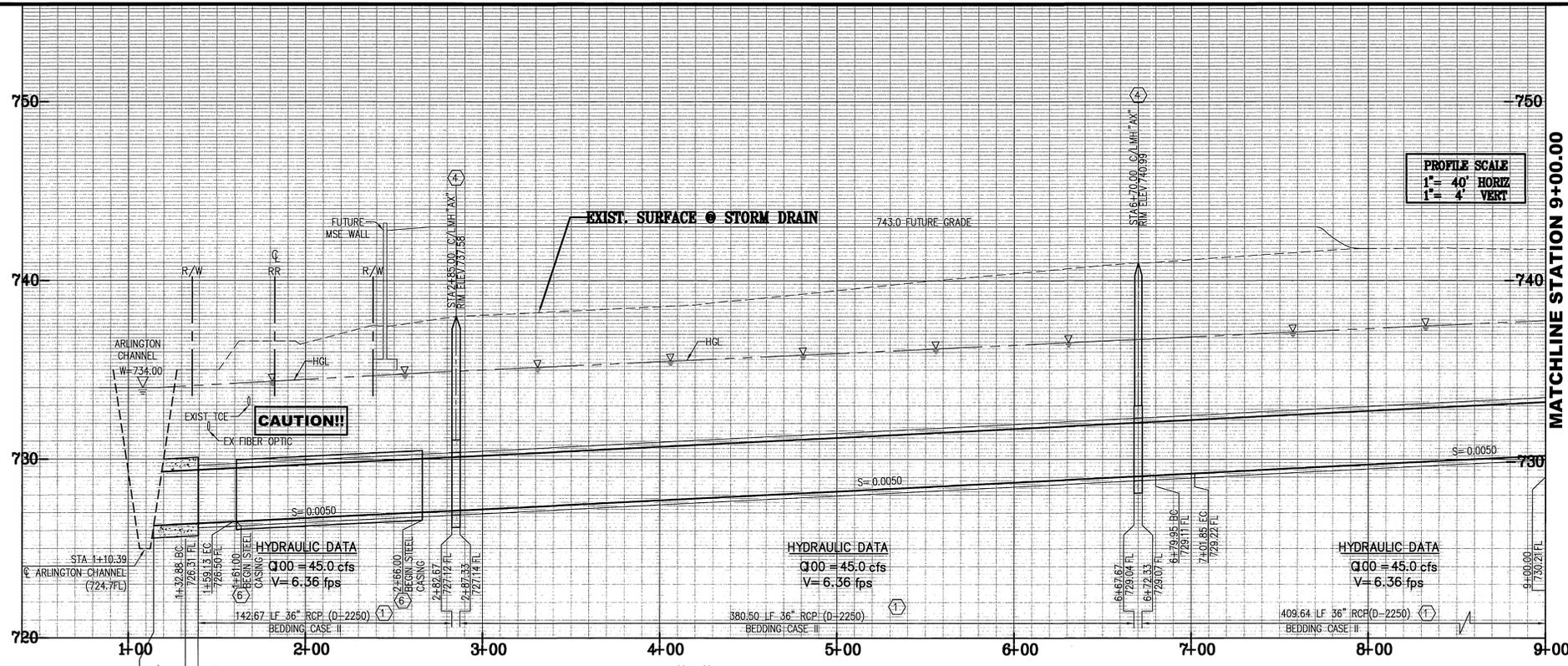
INDEXED 2-21-06 LF

NOTE: CONTRACTOR IS TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION

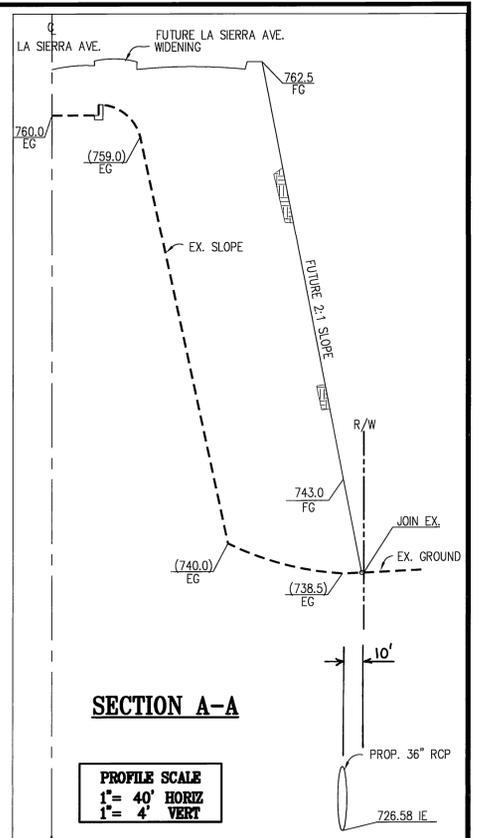
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6. INSTALL 48" INSIDE DIA STEEL CASING PIPE FOR E-80.
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8. INSTALL TIMBER BULKHEAD PER CITY OF RIVERSIDE STD. DWG. NO. 456.
9. CONSTRUCT JUNCTION STRUCTURE No. 6 PER RCFC & WCD STD. JS 231. ENCROACHMENT PERMIT REQUIRED.

NOTE: CONTRACTOR IS TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION



MATCHLINE STATION 9+00.00
SEE SHEET 3



LINE "A"

CURVE DATA

No.	DELTA	RADIUS	LENGTH	TANGENT
1	33°25'21"	45'	26.25'	13.51'
2	04°11'03"	300'	21.91'	10.96'



J.S. No. 6 1+06.93 LINE A	
D	36"
L	29.61'
C	22.68'
A	40°49'01"

RCFCD ENCROACHMENT PERMIT REQUIRED

BN & SF ENCROACHMENT PERMIT REQUIRED FOR WORK IN THIS AREA.

PUBLIC UTILITIES DEPARTMENT
WATER DIVISION

APPROVED BY: *Paul C. Moly* 12/27/05
DATE

PRIVATE ENGINEERING NOTE
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PREPARED UNDER THE DIRECTION OF:
David L. Drake
REGISTERED CIVIL ENGINEER NO. C 64193
EXPIRATION DATED 06-30-07 DATE: 12-23-05

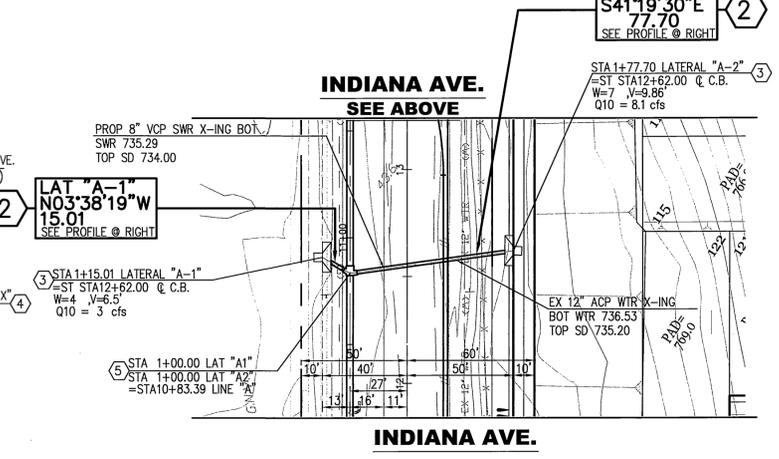
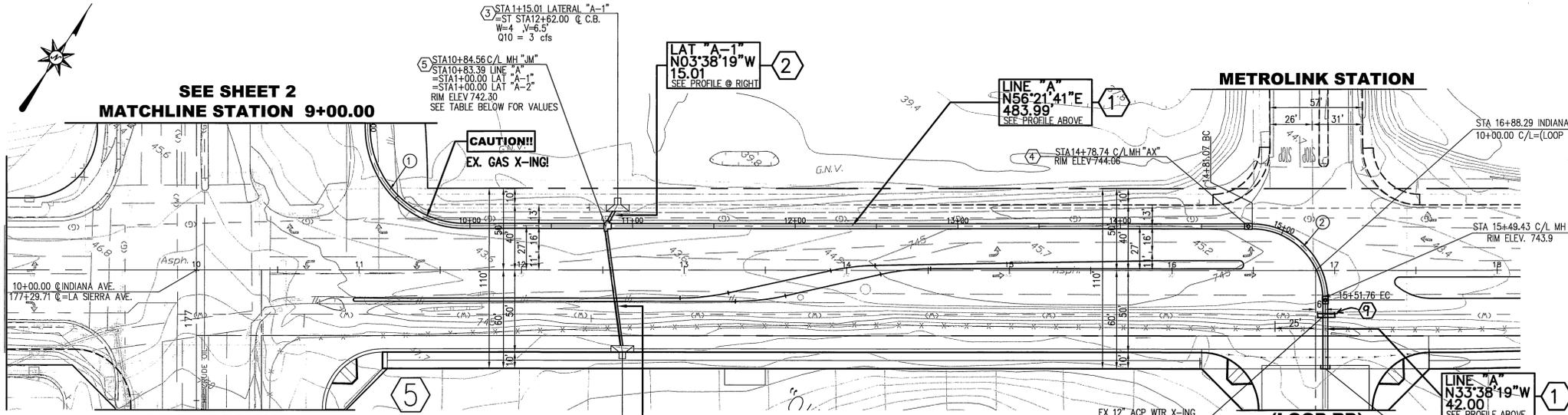
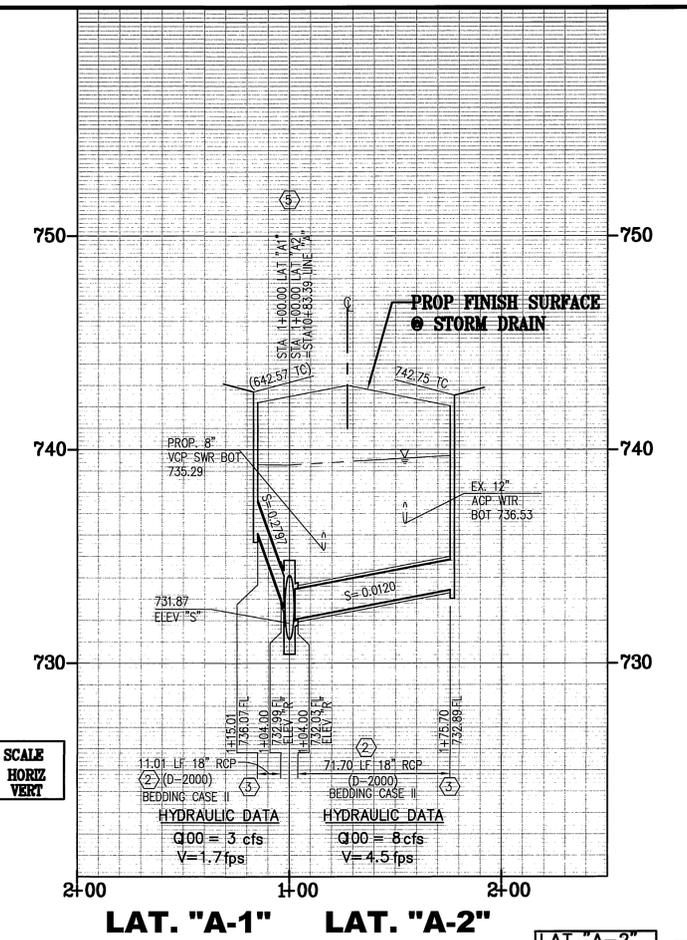
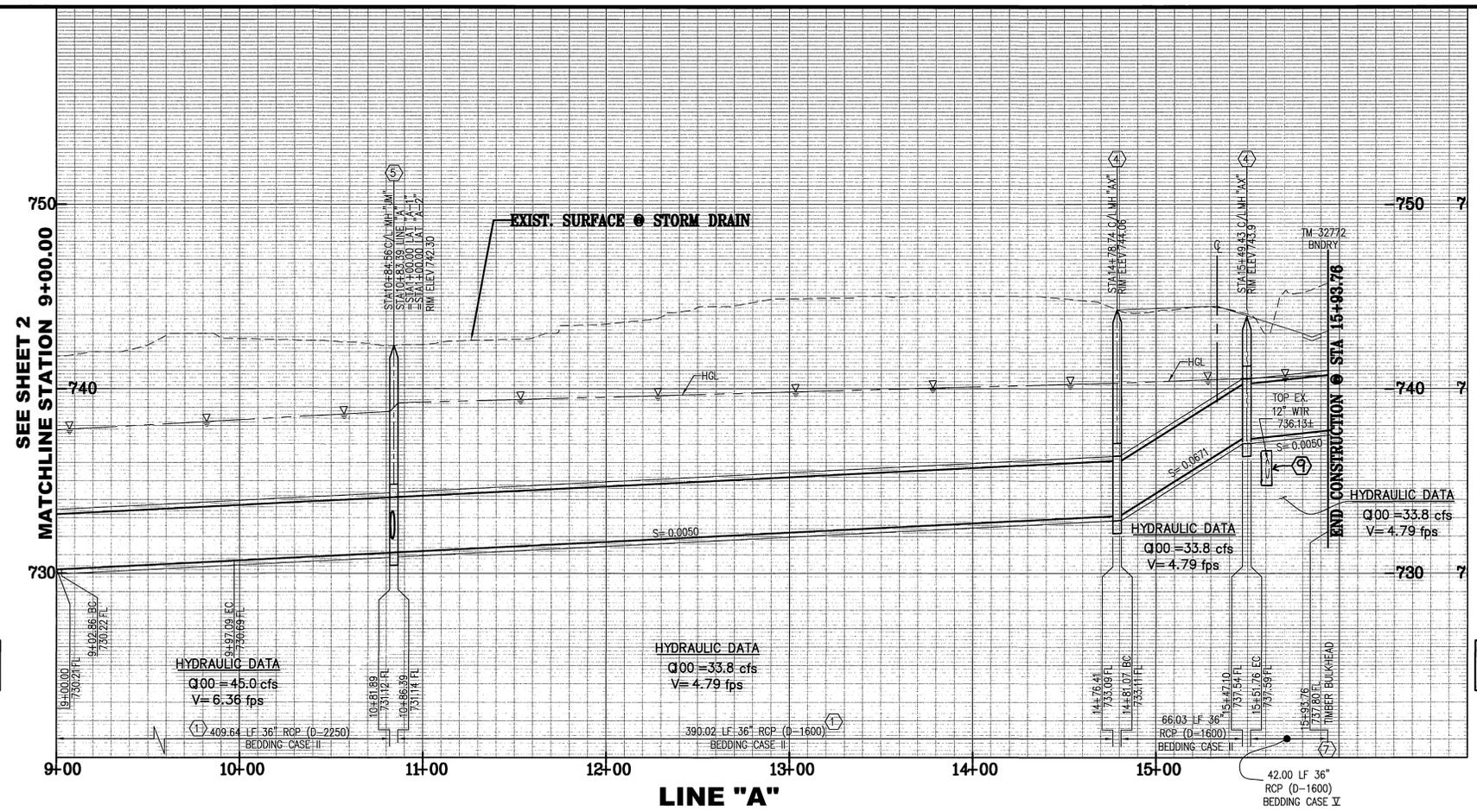
CEG CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING - PLANNING - SURVEYING
2010 IOWA AVENUE, SUITE 110, RIVERSIDE, CA 92507
P.O. BOX 52050, RIVERSIDE, CA 92517
TEL (951) 683-5234 FAX (951) 683-5301
CITY OF RIVERSIDE TAX CERT NO: 69372 EXP: 4-7-06
SCALE: AS NOTED BENCH MARK DATE: DECEMBER 2005

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: *Paul C. Moly* 12/27/05
PRINCIPAL ENGR. DATE
APPROVED BY: *Paul C. Moly* 12/27/05
CITY ENGINEER DATE
DESIGNED BY: DD DRAWN BY: CA CHECKED BY:

IN THE CITY OF RIVERSIDE, CALIFORNIA
RIVERWALK VISTA VILLAGE
TR 32772
STORM DRAIN IMPROVEMENT PLANS
LA SIERRA AVE.
FOR: GRIFFIN INDUSTRIES

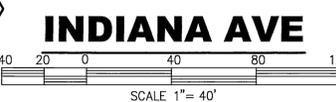
PW05-0616
D-790
SHEET 2 OF 3
FILE NO.: 1104-007

INDEXED 2-21-06 fH



MANHOLE "JM" 10+83.39 LINE "A"

D2	36"
B	18"
A	60"
C	4.0'
E	3.5'
L	4.5'



CURVE DATA

No.	DELTA	RADIUS	LENGTH	TANGENT
①	89°58'37"	60.00'	94.22'	59.98'
②	90°00'00"	45.00'	70.69'	45.00'

- STORM DRAIN CONSTRUCTION NOTES**
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 - INSTALL TYPE C ENCASUREMENT PER CWD-023.

PUBLIC UTILITIES DEPARTMENT
WATER DIVISION

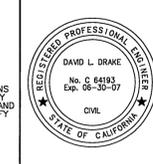
Karl M. Moly 12/27/05
APPROVED BY DATE

Underground Service Alert
Call: TOLL FREE
1 - 800
227-2600

TWO WORKING DAYS BEFORE YOU DIG

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PREPARED UNDER THE DIRECTION OF:

[Signature]

REGISTERED CIVIL ENGINEER NO. C 64193
EXPIRATION DATE 08-30-07 DATE: 12-23-05

CEG CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING - PLANNING - SURVEYING
2010 IOWA AVENUE, SUITE 110, RIVERSIDE, CA 92507
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TEL (951) 683-5234 FAX (951) 683-5301
CITY OF RIVERSIDE TAX CERT NO: 69372 EXP: 4-7-06

SCALE: AS NOTED BENCH MARK SEE SHEET 1
DATE: DECEMBER 2005

MARK REVISIONS APPR. DATE

DESIGNED BY DD DRAWN BY CA CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *[Signature]* DATE: 1/20/06
CITY ENGINEER

IN THE CITY OF RIVERSIDE, CALIFORNIA
RIVERWALK VISTA VILLAGE
TR32772
OFFSITE STORM DRAIN IMPROVEMENT PLANS
INDIANA AVENUE

FOR: GRIFFIN INDUSTRIES

PW05-0616
D-790
SHEET 3 OF 3
FILE NO.: 1104-007