

GENERAL NOTES

- NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS OF THE COUNTY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE COUNTY'S PUBLIC WORKS DEPARTMENT.
- 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 COUNTY.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- 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 COUNTY.
- QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE COUNTY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
- WHEN A PORTION OF THE WORK IS TO BE DONE BY THE CITY, THE DEVELOPER AND/OR CONTRACTOR SHALL GIVE THE CITY 60-DAYS NOTICE SO THAT THE DEVELOPER'S WORK AND THE CITY'S WORK CAN BE PROPERLY COORDINATED. THE DEVELOPER SHALL PREPARE AND COMPACT THE SUBGRADE TO ELEVATIONS WITHIN ± 0.1' OF THE DESIGN ELEVATIONS AND SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SUBGRADE UNTIL ACCEPTED BY THE CITY. THE DEVELOPER SHALL ALSO BE RESPONSIBLE FOR ANY BARRICADING DURING THIS TIME.
- THE DEVELOPER AND/OR CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DEPARTMENT 30 DAYS PRIOR TO BEGINNING CONSTRUCTION TO NEGOTIATE THE COST OF THE CITY'S PORTION OF THE WORK.
- 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.
- ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
- THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE # 1-800-433-4122, 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.
- CONTRACTOR IS TO VERIFY EXISTING SEWER ELEVATION PRIOR TO CONSTRUCTION.
- LOCATION OF LATERALS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE OWNER. AVOID CONFLICT WITH PROPOSED AND/OR EXISTING FACILITIES.
- NO FINISHED FLOOR ELEVATION SHALL BE LESS THAN 6" ABOVE THE UPPER MANHOLE RIM ELEVATION OF THE SEWER LINE SEGMENT BEING CONNECTED TO, WITHOUT HAVING PROPER BACKWATER VALVE INSTALLED IN THE LATERAL.
- A PLUG SHALL BE INSTALLED AND WILL REMAIN IN PLACE WHERE THE NEW SEWER CONNECTS WITH THE EXISTING SEWER UNTIL THE NEW SEWER IS ACCEPTED BY THE CITY.
- THE SEWER CONTRACTOR SHALL ADJUST MANHOLES TO FINAL GRADE AFTER PAVING IS COMPLETED.
- PIPE JOINTS FOR VITRIFIED CLAY PIPE SHALL BE TYPE "G" AS SPECIFIED IN SECTION 208-2.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS PROJECTS. IF PLASTIC PIPE IS ALLOWED AS AN ALTERNATIVE, ALL PIPE JOINTS SHALL BE GASKETED. CEMENTED JOINTS SHALL NOT BE ALLOWED.
- THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR PERFORMING A VIDEO INSPECTION OF ALL NEW SEWER AND STORM DRAIN FACILITIES TO BE PUBLICLY OWNED AND MAINTAINED PRIOR TO FINAL ACCEPTANCE OF THE WORK. THE VIDEO INSPECTION MUST BE PERFORMED IN THE PRESENCE OF THE PUBLIC WORKS INSPECTOR. A RECORDING OF THE VIDEO INSPECTION MUST BE SUBMITTED TO THE CITY FOR REVIEW AND ACCEPTANCE.

TRACT 30908-1 AND 30909-1 - SPRINGBROOK ESTATES

OFFSITE SEWER IMPROVEMENT PLANS

UTILITIES

WATER: RIVERSIDE HIGHLAND WATER COMPANY (909) 825-4128
 SEWER: CITY OF RIVERSIDE (951) 826-5341
 CSA 152 (951) 955-8916
 ELECTRIC: SOUTHERN CALIFORNIA EDISON COMPANY, BOB SIEGAL (951) 930-8580
 GAS: SOUTHERN CALIFORNIA GAS COMPANY, HECTOR MARTINEZ (951) 335-7641
 TELEPHONE: PACIFIC BELL/SBC, LEE CORBY (714) 666-5454
 CABLE TV: ADELPHIA COMMUNICATIONS, MIKE MC MILLAN (951) 975-3402
 DEPARTMENT OF WATER RESOURCES (661) 858-5500
 RIVERSIDE COUNTY FIRE DEPARTMENT (951) 955-4777

SCHOOL DISTRICT

RIVERSIDE UNIFIED SCHOOL DISTRICT (951) 788-7134

EMERGENCY CONTACT

VICTOR ELIA
 (951) 847-6750

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSION CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. IN ASSUMING RESPONSIBLE CHARGE, I ACCEPT FULL RESPONSIBILITY FOR THE ENTIRE DESIGN OF THIS PROJECT AS SHOWN ON THESE PLANS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF RIVERSIDE, OR IT'S AGENTS IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

KWC ENGINEERS
 1880 COMPTON AVE STE 100
 CORONA, CA 92881
 (951)847-6750

Victor Elia 5-11-2020
 VICTOR ELIA R.C.E. 64803 DATE

BENCHMARK

PLANS PREPARED WITH NAVD 88 DATUM.
 CITY OF RIVERSIDE NGVD 29 RECORD DATUM IS INCLUDED FOR REFERENCE AS FOLLOWS:
 ELEVATION PER PLAN (NGVD 29 ELEVATION)
 NOTE THAT CONTOURS AND AERIAL TOPOGRAPHY ARE IN NAVD 88.

REFER TO THE FOLLOWING FOR BENCHMARK CONVERSION
 BENCHMARK DATUM: NGVD 29
 BENCHMARK: CITY OF RIVERSIDE B.M. 601-1-68
 ELEVATION 933.410' (NGVD 29) PUBLISHED / 935.900'
 ADJUSTED TO NAVD 88 [ADD 2.49 FEET PER NGS VERTCON PROGRAM = 935.900']
 DESCRIPTION: BRONZE USCGS DISK AT THE NORTH END OF THE WEST HEADWALL OF A CONCRETE CULVERT UNDER THE RAILWAY AND OVER THE RIVERSIDE WATER COMPANY UPPER CANAL. LOCATED 0.55 MILES NORTH ALONG THE ATSF RR FROM THE CENTER ST CROSSING AT HIGHGROVE BETWEEN THE SCE PLANT AND THE IOWA AVE OFFRAMP OF THE RIVERSIDE FREEWAY.

BASIS OF BEARINGS

THE BEARING FOR THIS SURVEY ARE BASED ON THE LINE BETWEEN STATIONS "BILL" AND "NOCO" (POSITIONS PER NATIONAL GEODETIC SURVEY, NAD83, EPOCH 2004, OBEING NORTH 50°25'28.01" WEST PAGES 50 THROUGH 65 OF RECORDS OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY, CALIFORNIA, BEING N 52°25'28.01" WEST.

REFERENCE DRAWINGS

MS 4234 CENTER STREET SEWER
 TR30908 & TR30909 S-2192
 TR30908-F S-2191
 TR30908-1 S-2190
 TR30909-1 S-1956

TRAFFIC CONTROL

REFER TO "WORK AREA TRAFFIC CONTROL HANDBOOK", FIFTH EDITION.

SOURCE OF TOPOGRAPHY

KENNEY AERIAL MAPPING INC.

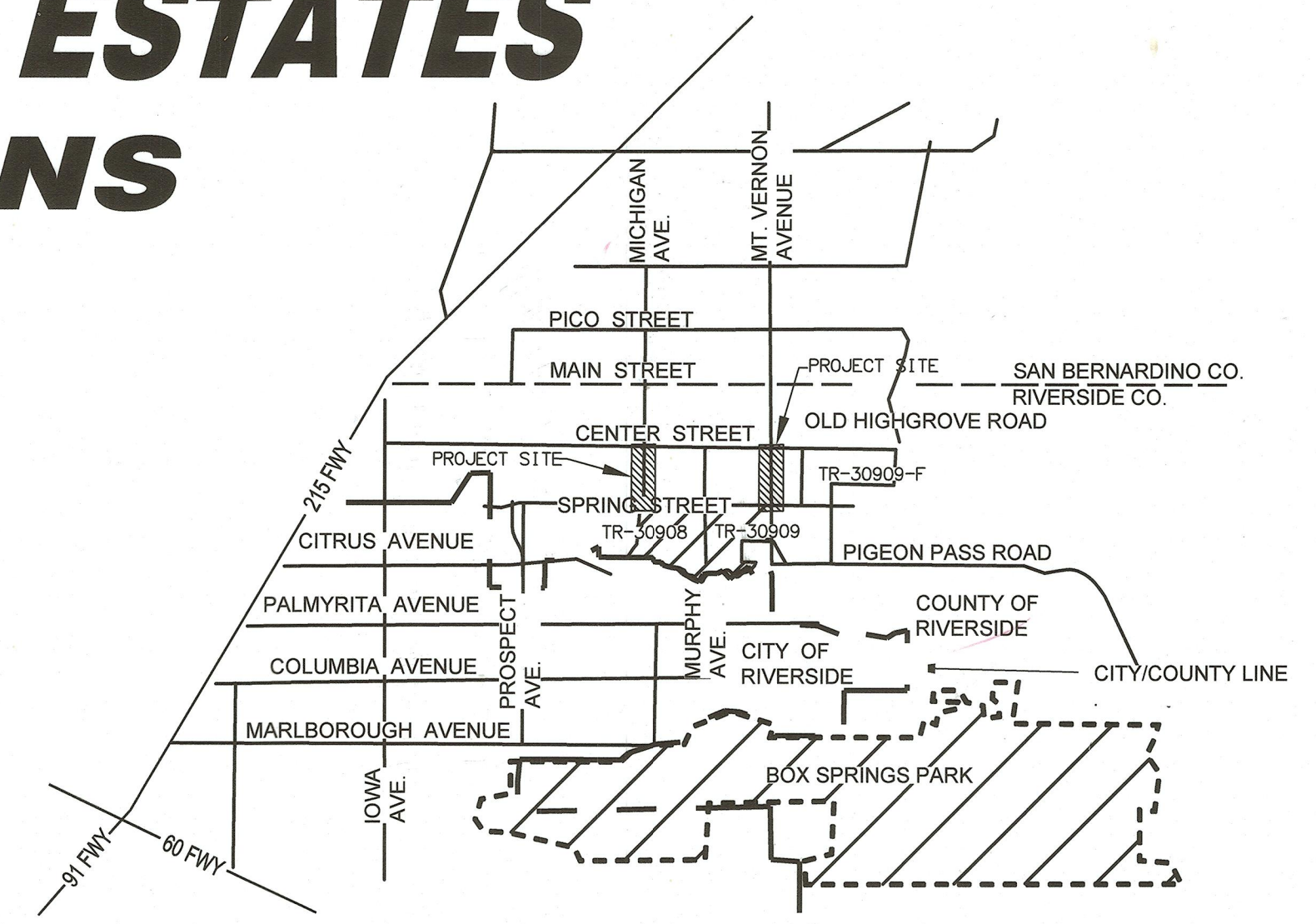
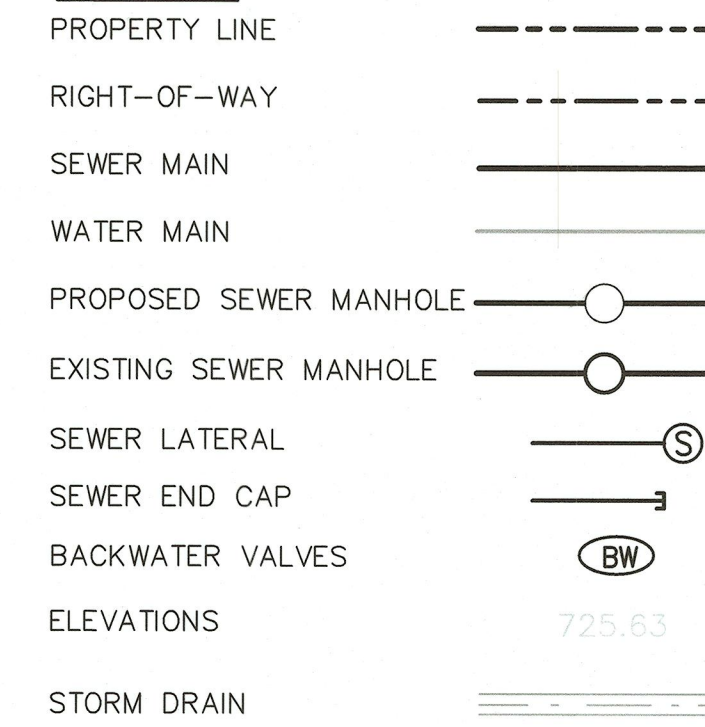
WORK TO BE DONE

IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CURRENT CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS AND THE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION (APWA) "GREEN BOOK" STANDARDS AND SPECIFICATIONS.

ABBREVIATIONS

C&G - CURB & GUTTER
 CL - CENTERLINE
 ELEC. - ELECTRIC
 ELEV. - ELEVATION
 EOP - EDGE OF PAVEMENT
 EXIST. - EXISTING
 INV - INVERT
 MH - MANHOLE
 NO. - NUMBER
 PH - POTHOLE
 PROP. - PROPOSED
 R/W - RIGHT OF WAY
 SD - STORM DRAIN
 STA - STATION
 VCP - VITRIFIED CLAY PIPE
 TOP - TOP OF PIPE
 BOP - BOTTOM OF PIPE

LEGEND



VICINITY MAP

NOT TO SCALE
 THOMAS BROS. MAP BOOK, PAGE 646, GRID E-7, 2001 EDITION.
 SECTION 8 & 9, TOWNSHIP 2 SOUTH, RANGE 4 WEST, SBM

CONSTRUCTION NOTES AND QUANTITIES

| ITEM | QUANTITY | UNIT |
|---|----------|------|
| 3 INSTALL 8" CAP | 1 | EA. |
| 4 CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500 | 8 | EA. |
| 5 CONSTRUCT 60" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500 | 2 | EA. |
| 6 PROTECT IN PLACE | - | - |
| 7 CONSTRUCT 8" X 5' LONG STUB OUT AND PLUG FOR FUTURE CONNECTION | 3 | EA. |
| 8 CONSTRUCT 4" PVC SEWER LATERAL W/ CLEANOUT PER CITY OF RIVERSIDE STD. DWG. NO. 562 AND STD DWG NO. 452 CASE 1 & 453 | 350 | LF. |
| 9 METER MANHOLE PER DETAILS AND SPECIFICATIONS | - | - |
| 10 CONSTRUCT 8" VCP SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2. | 3037 | LF. |
| 11 JACK AND BORE 24" I.D. STEEL CASING (T=0.5"). INSTALL CARRIER PIPE PER CONST NOTE 10. | 60 | LF. |
| 12 CONSTRUCT 60" SEWER MANHOLE PER CITY STANDARD 503 | 1 | EA. |

NOTICE TO CONTRACTOR

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT (PHONE: 1-800-227-2600) 48 HOURS IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

CONTRACTOR WILL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY. NOTIFY THE ENGINEER OF WORK IF ANY DISCREPANCIES IN UTILITY LINE LOCATIONS ARE FOUND.

LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.

CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

UNAUTHORIZED CHANGES & USES

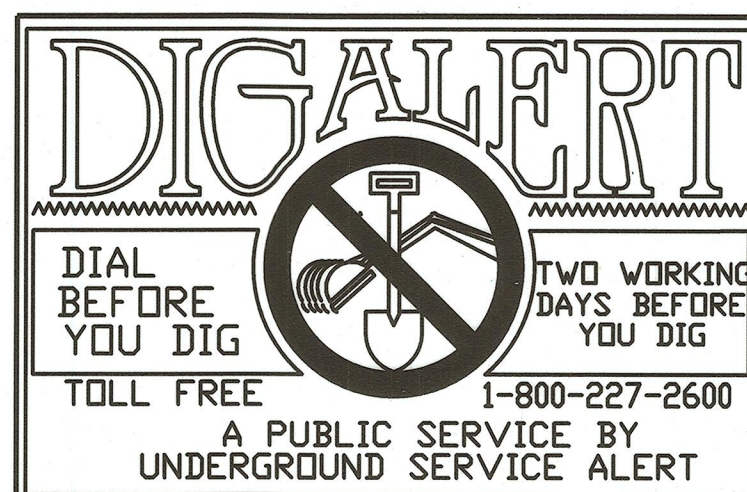
CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

SHEET INDEX

| | |
|---------------------------------|-----|
| TITLE, NOTES, VICINITY MAP..... | 1 |
| INDEX MAP AND DETAILS..... | 2 |
| MOUNT VERNON AVENUE..... | 3-5 |
| MICHIGAN AVENUE..... | 6-7 |

| | | | |
|-------|---------------------------|---------------------|-------------|
| REC'D | COUNTY OVERSIGHT ENGINEER | REGISTRATION NUMBER | DATE SIGNED |
| CS | <i>Angela</i> | 76450 | 9/15/20 |

APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



SEAL-ENGINEER PREPARED BY: **KWC ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA 92881-3370 • 951-734-2130
 VICTOR.ELIA@KWCENGINEERS.COM

Victor Elia R.C.E. NO. 64803
 DATE 5-11-2020

| MARK | BY | DATE | REVISIONS | APPR. | DATE |
|------|-----|--------|--|------------------|------|
| ▲ | VAE | 4/2/21 | SEWER LINE PROFILE REVISION AND ADDED SD RELOCATION FOR REFERENCE. VOID SHEET 4 ± S. REPLACE WITH 4A ± SA. | <i>As Alcala</i> | |

RIVERSIDE PUBLIC UTILITY WATER DEPARTMENT

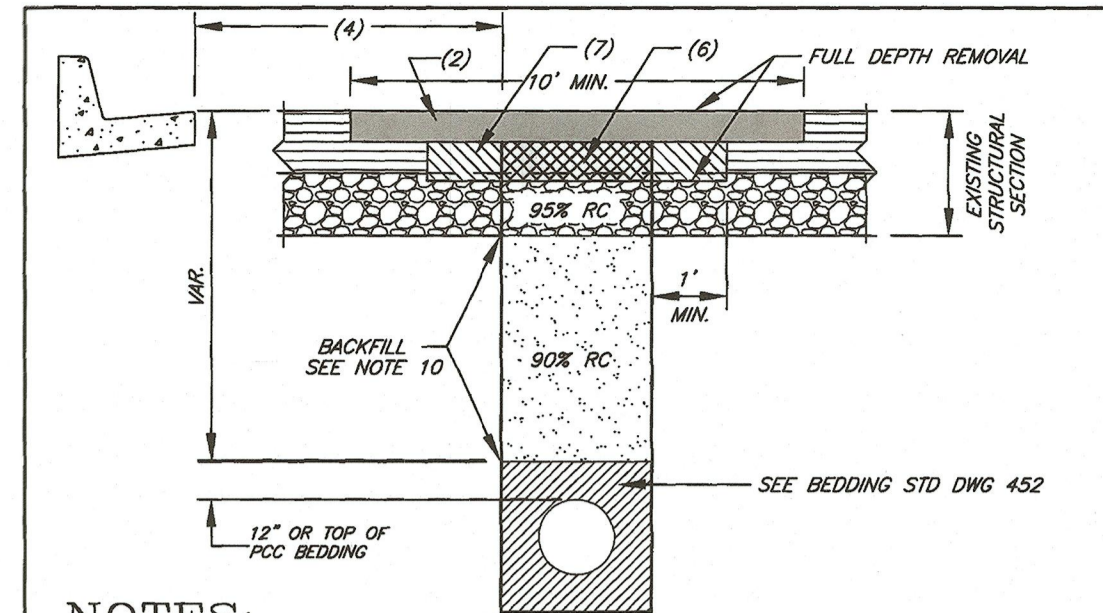
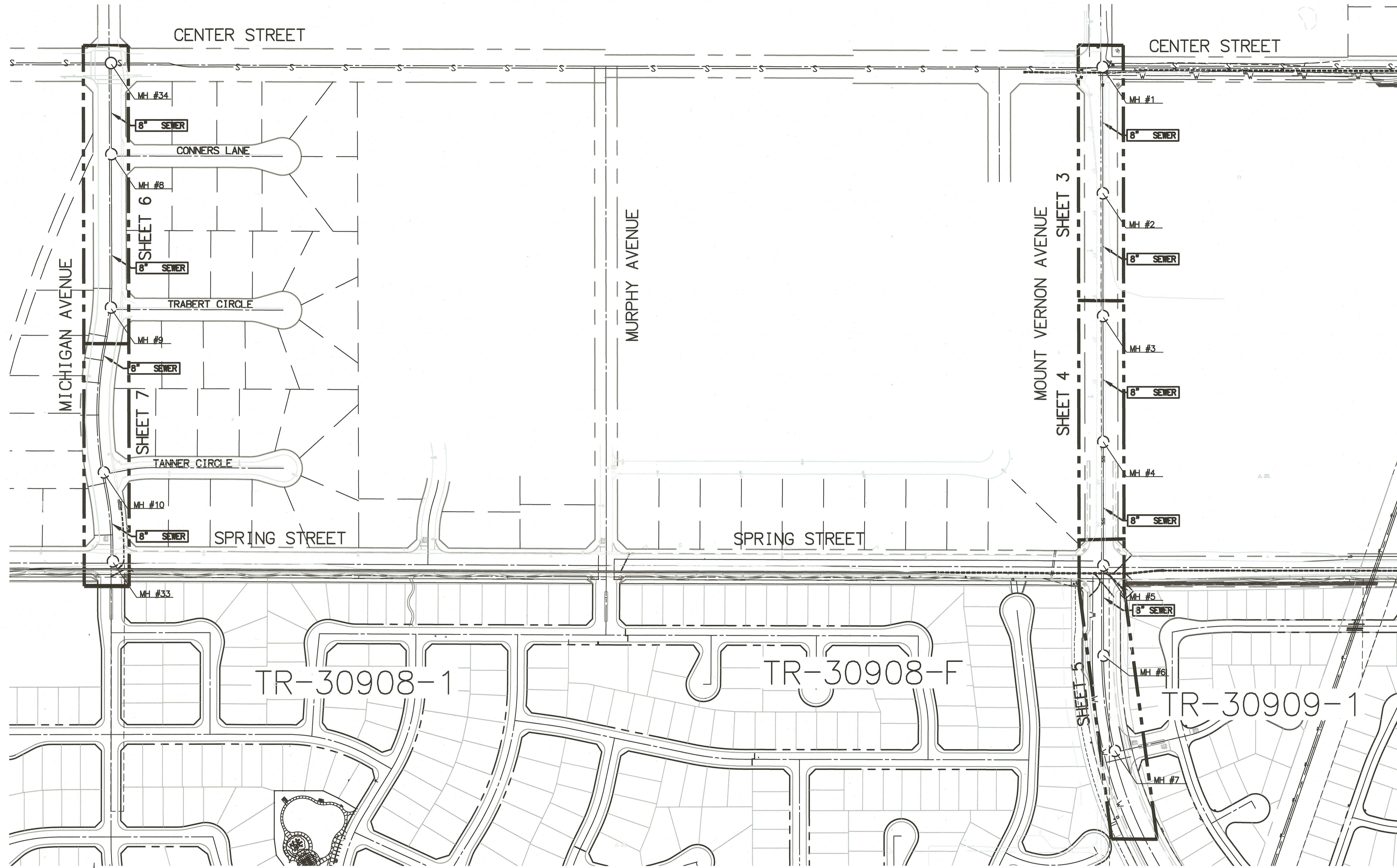
Christina 5/21/20
 APPROVAL DATE

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT

| | | | |
|---------------------|-----------|---------|--------------------|
| APPROVED BY: | BY | DATE | APPROVED BY: |
| PRINCIPAL ENGINEER | <i>As</i> | 5/21/20 | <i>Victor Elia</i> |
| ENGINEERING MANAGER | <i>As</i> | 5/21/20 | |
| TRAFFIC DIVISION | <i>nm</i> | 6/7/20 | CITY ENGINEER |

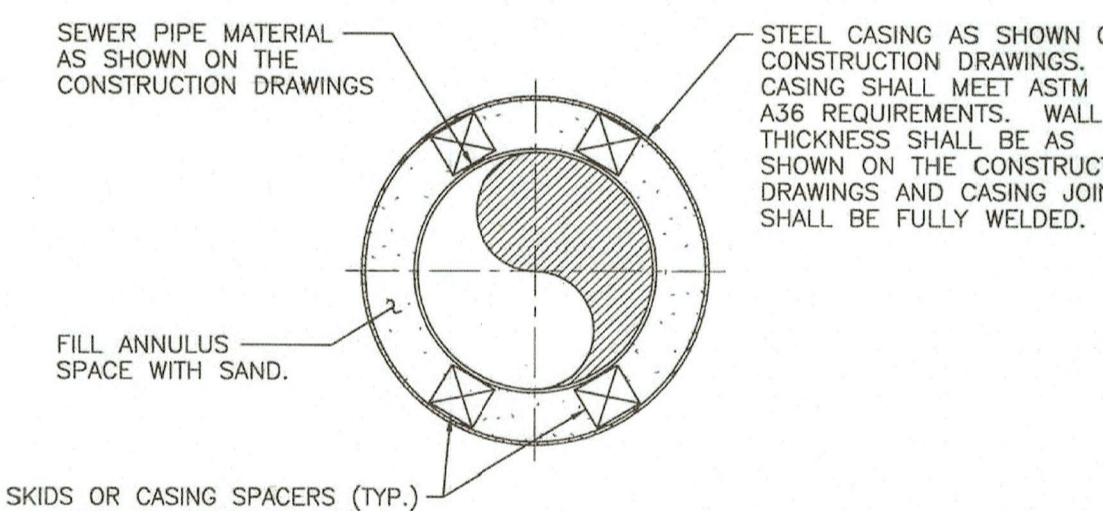
DATE June 15, 2020

| | | |
|--|-----------|-------------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 | | |
| TITLE SHEET & GENERAL NOTES | | 1 OF 2 SHTS |



- NOTES:**
- NO TRENCHING, CUTTING, POT-HOLING, GRINDING OR CORING WILL BE ALLOWED, EXCEPT FOR EMERGENCIES OR TO PROVIDE SERVICE CONNECTIONS. IF THE STREET HAS BEEN PAVED OR RESURFACED WITHIN THE PREVIOUS THREE YEARS.
 - WHEN TRENCHING OR CUTTING INTO ANY STREET, FULL LANE WIDTH (10 FEET WIDE MINIMUM) ASPHALT CONCRETE (AC) PAVEMENT REPLACEMENT, AC COLD MILLING (0.10 FEET THICK) AND AC OVERLAY SHALL BE REQUIRED. REPLACEMENT OF MULTIPLE LANES SHALL BE REQUIRED WHEN WORK AFFECTS MORE THAN ONE LANE. ALTERNATELY, AT THE DISCRETION OF THE CITY ENGINEER, COLD MILL AND CRACK SEALING EXISTING ASPHALT CONCRETE PAVEMENT TO A DEPTH OF 0.10 FEET WITHIN THE TRENCH AREAS AND TO AT LEAST 1 FOOT BEYOND THE EDGES OF THE TRENCH AND SLURRY SEAL THE ENTIRE STREET WIDTH, GUTTER LIP TO GUTTER LIP OR EDGE OF PAVEMENT AS APPLICABLE.
 - WHERE MULTIPLE EXCAVATIONS, TRENCHES, POT HOLES OR EXPLORATORY HOLES OCCUR WITHIN THE SAME BLOCK, COLD MILLING WILL BE REQUIRED TO CONNECT THESE AREAS FOR A UNIFORM AND CONTINUOUS CAP THE ENTIRE LENGTH OF THE BLOCK.
 - IF THE TRENCH EDGE IS 4 FEET OR LESS FROM THE GUTTER LIP, CURB FACE OR EXISTING TRENCH EDGE OF PAVEMENT, THE EXISTING AC PAVEMENT BETWEEN THE TRENCH AND THE GUTTER LIP, CURB FACE OR EXISTING EDGE OF PAVEMENT SHALL BE REMOVED AND REPLACED AS PART OF THE TRENCH BACKFILL, OR AS DIRECTED BY THE ENGINEER.
 - FOR A TRENCH PERPENDICULAR TO THE STREET, COLD MILLING OR GRINDING OF AC PAVEMENT SHALL BE A MINIMUM FULL LANE WIDTH UP TO THE FULL STREET WIDTH. THE LONGITUDINAL LENGTH SHALL BE MINIMUM 40 FEET OR AS DIRECTED BY THE ENGINEER.
 - REPLACEMENT AC PAVEMENT SHALL BE 1 INCH GREATER THAN EXISTING AC PAVEMENT THICKNESS OR 2 INCHES THICK UNLESS OTHERWISE SPECIFIED.
 - ADDITIONAL REPLACEMENT OF AC STRUCTURAL SECTION WILL BE REQUIRED WHERE EXISTING AC THICKNESS IS LESS THAN 3 INCHES, A MINIMUM OF 1 FOOT OUTSIDE OF THE TRENCH, AS COVERED IN NOTE 4 ABOVE.

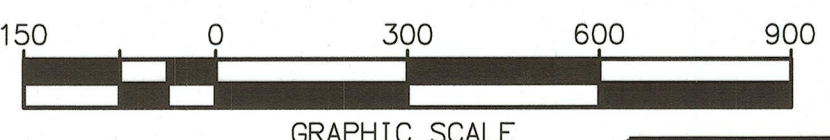
| | | |
|--|-----------------|---|
| APPROVED BY <i>[Signature]</i> CITY ENGINEER | DATE 5/15/20 | CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT TRENCH BACKFILL STANDARD DRAWING NO. 453 Sheet 1 of 2 |
|--|-----------------|---|



- NOTES:**
- CONTRACTOR SHALL SUBMIT FOR OWNER APPROVAL THE CASING SIZE, MATERIAL, SPECIFICATIONS ALONG WITH CARRIER PIPE MANUFACTURER'S RECOMMENDATIONS FOR SKID OR CASING SPACER, AND METHOD OF INSTALLATION.
 - UNLESS OTHERWISE NOTED, CONTRACTOR SHALL BORE AND JACK CASING (AS LOCATED ON CONSTRUCTION DRAWINGS) IN ACCORDANCE WITH SPECIAL REQUIREMENTS SECTION OF THE SPECIFICATIONS. ANY VOIDS CREATED BY BORING AND JACKING SHALL BE FILLED BY PRESSURE GROUTING. FITTINGS FOR PRESSURE GROUTING VOIDS CREATED BY BORING SHALL BE PLACED EVERY 8' ALONG THE CASING. VOIDS SHALL BE GROUTED PRIOR TO INSTALLING THE NEXT SECTION OF CASING. ALL GROUTING SHALL BE COMPLETED AND THE OPEN ENDS OF THE CASING SHALL BE CAPPED AT THE END OF EACH WORK DAY.
 - ENDS OF THE CASING PIPE SHALL BE CLOSED AROUND THE CARRIER PIPE WITH A RUBBER END SEAL.
 - THE STEEL CASING THICKNESS SPECIFIED IS REQUIRED FOR THE CASING IN PLACE AND DOES NOT ACCOUNT FOR CONSTRUCTION LOADS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE CASING DURING CONSTRUCTION, AND THE METHOD OF INSTALLATION.
 - THE HORIZONTAL AND VERTICAL AS-BUILT LOCATION OF THE CASING PIPE SHALL BE IN ACCORDANCE WITH THE SPECIAL REQUIREMENTS SECTION OF THE SPECIFICATIONS AND SHALL BE APPROVED BY THE OWNER PRIOR TO INSTALLATION OF THE CARRIER PIPE.
 - CARRIER PIPE SHALL BE TESTED PRIOR TO FILLING ANNULUS SPACE.

CASING SECTION DETAIL
NOT TO SCALE

INDEX MAP



DIGALERT
DIAL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT



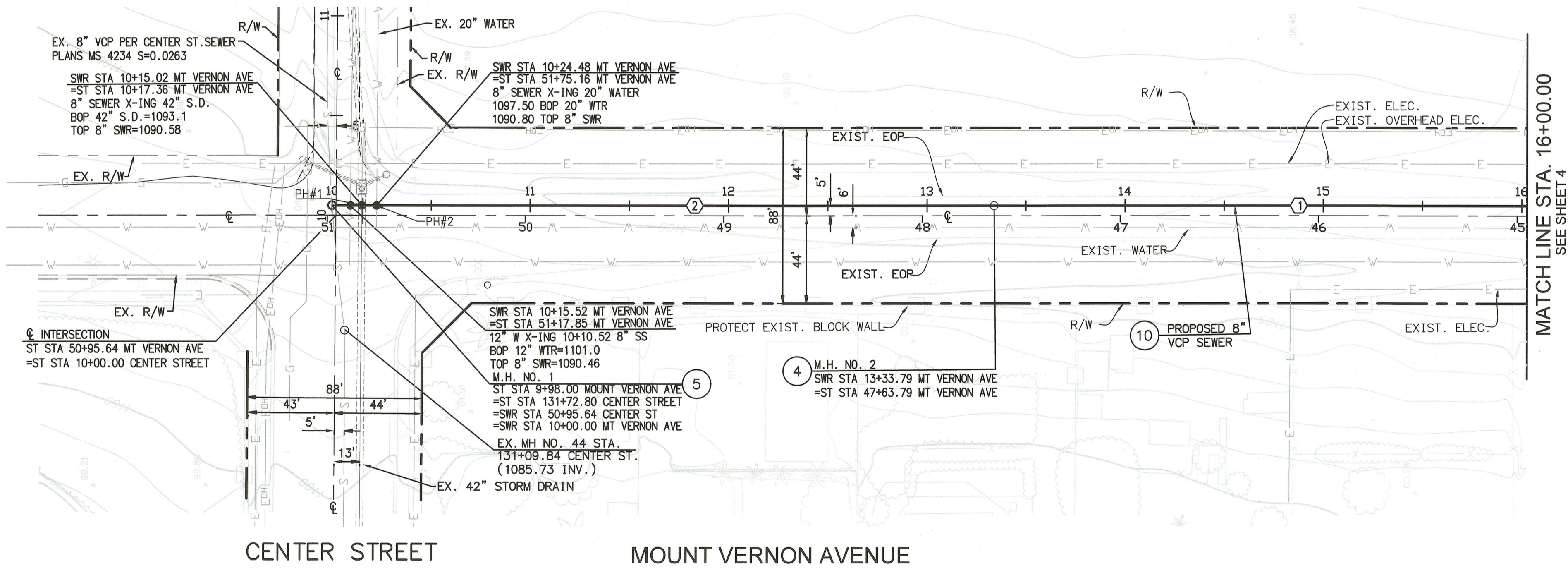
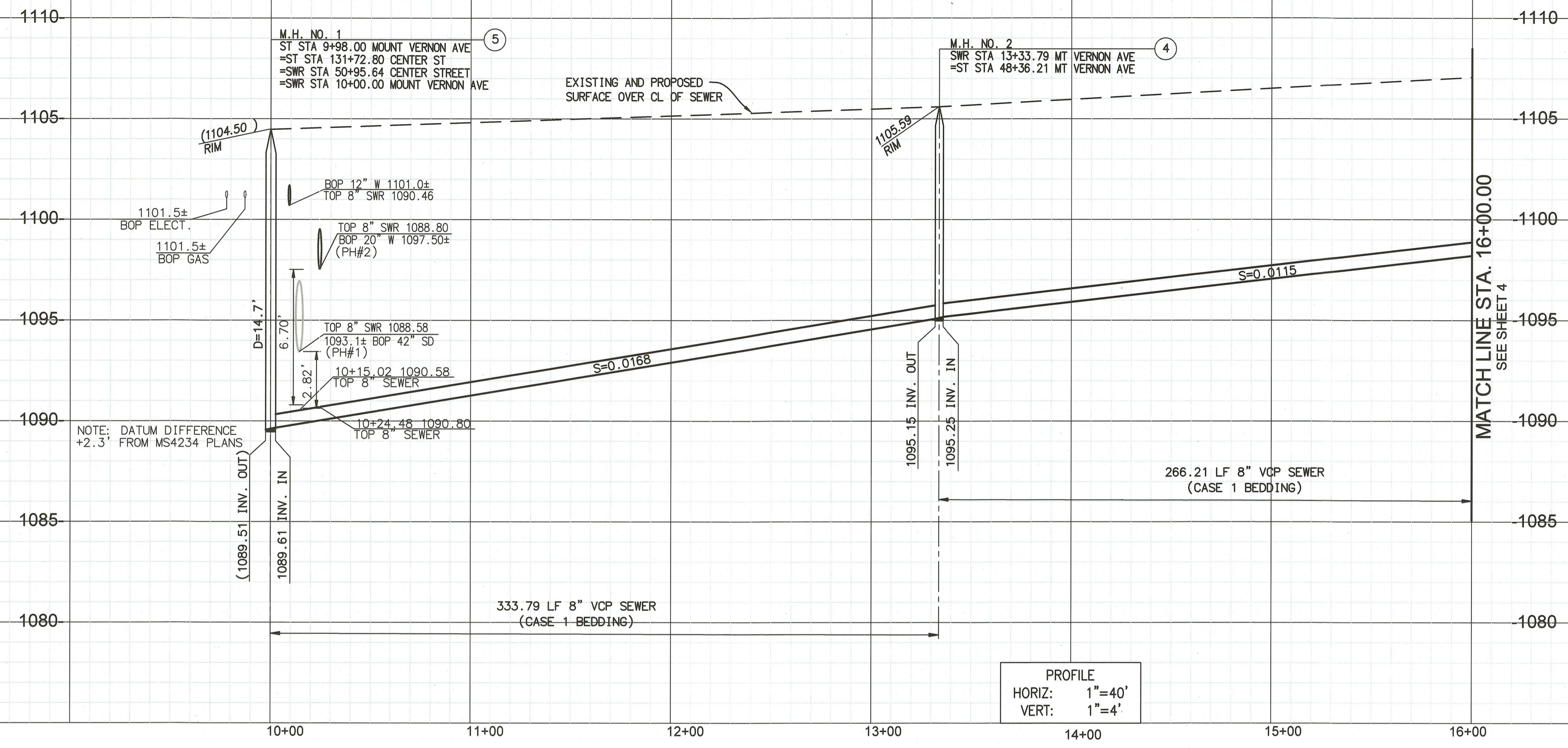
SEAL-ENGINEER
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Victor Elia R.C.E. NO. 64803
DATE 5-11-20

| MARK | BY | DATE | REVISIONS |
|------|----|------|-----------|
| | | | |

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY: [Signature] DATE: 5/15/20
PRINCIPAL ENGINEER
ENGINEERING MANAGER
TRAFFIC DIVISION
APPR. DATE CITY

| | | |
|---|-----------|-----------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 | | 2 |
| INDEX MAP & DETAILS | | OF 2 SHTS |

REC'D COUNTY OVERSIGHT ENGINEER REGISTRATION NUMBER 76450 DATE SIGNED 9/15/20
APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.

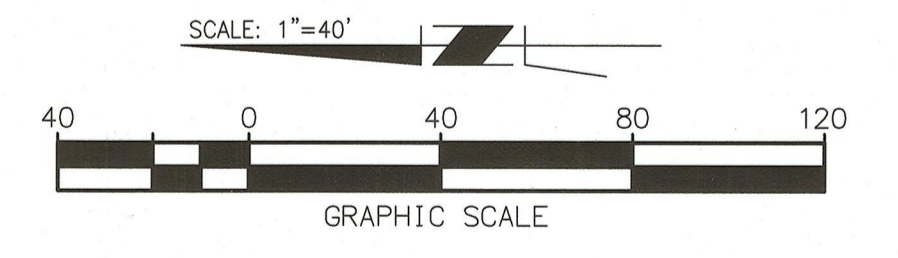


| SEWER DATA | | | |
|------------|-------------|---------|--------|
| DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 | N00°30'12"E | 266.21' | 8" VCP |
| 2 | N00°30'12"E | 333.79' | 8" VCP |

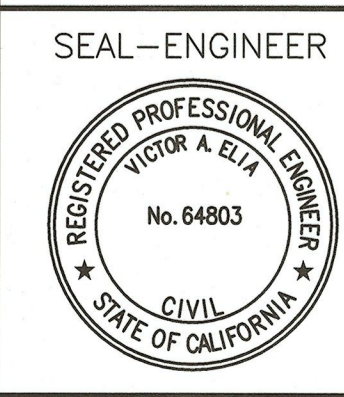
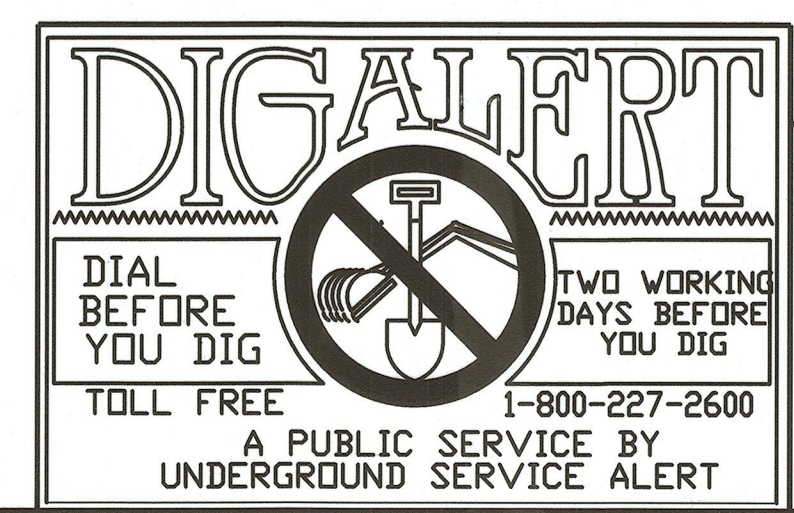
- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑤ CONSTRUCT 60" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑩ CONSTRUCT 8" PVC SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.

NOTES:

1. CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.



REC'D COUNTY OVERSIGHT ENGINEER
 REGISTRATION NUMBER 76450
 DATE SIGNED 9/15/20
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



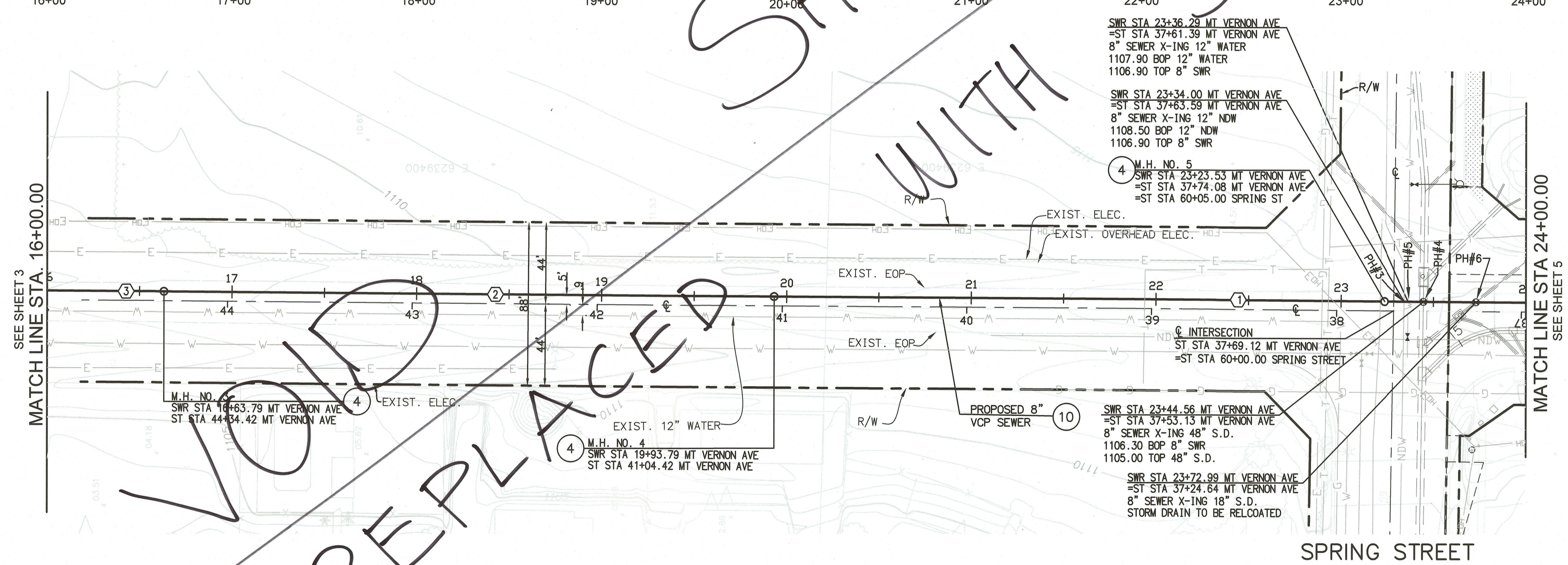
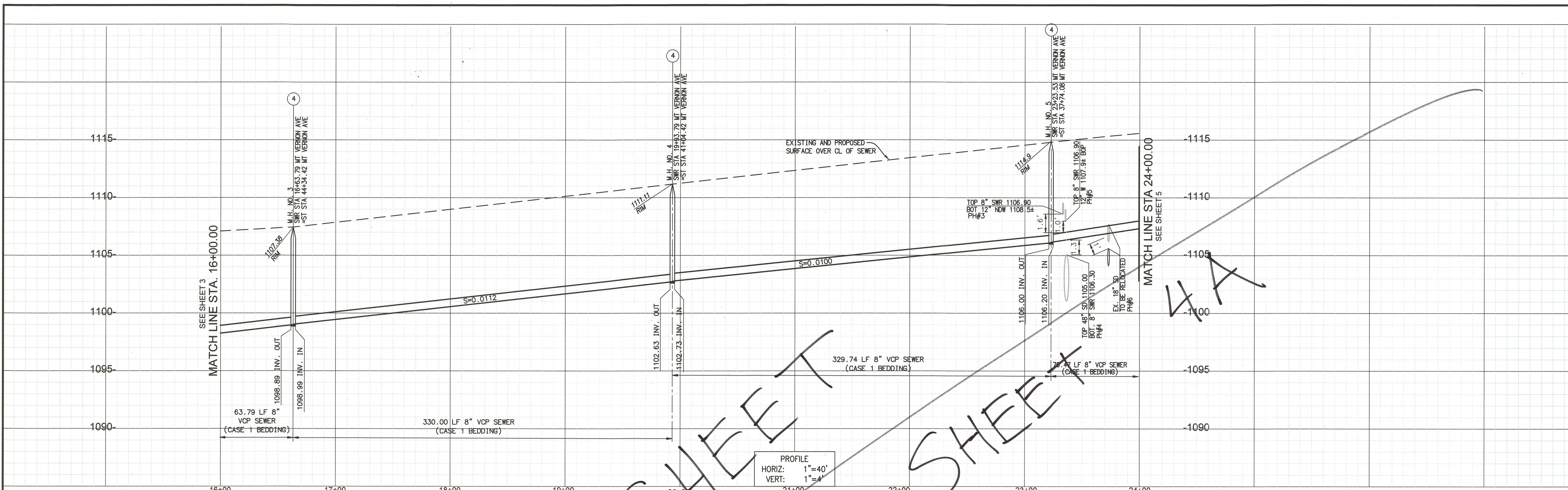
SEAL-ENGINEER
 PREPARED BY: **KWG ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
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 VICTOR.ELIA@KWGENGINEERS.COM
 Victor Elia R.C.E. NO. 64803
 DATE 5-11-20

| MARK | BY | DATE | REVISIONS | APPR. | DATE |
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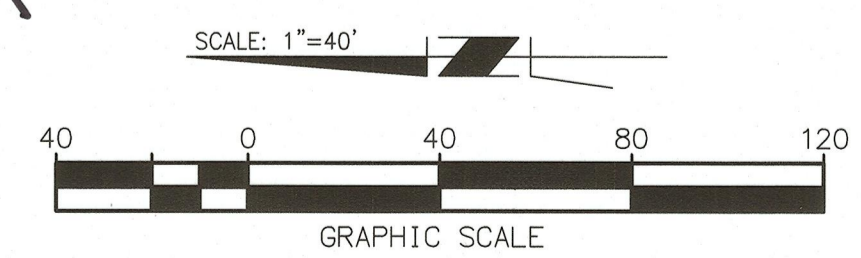
**CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT**
 APPROVED BY: [Signature] DATE: June 15, 2020
 PRINCIPAL ENGINEER: [Signature] DATE: 6/15/20
 ENGINEERING MANAGER: [Signature] DATE: 6/15/20
 TRAFFIC DIVISION: [Signature] DATE: 6/15/20
 CITY ENGINEER: [Signature] DATE: June 15, 2020

| | | |
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| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | SHEET NO. |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 10+00.00 - 16+00.00 | | 3 |
| | | OF 2 SHTS |

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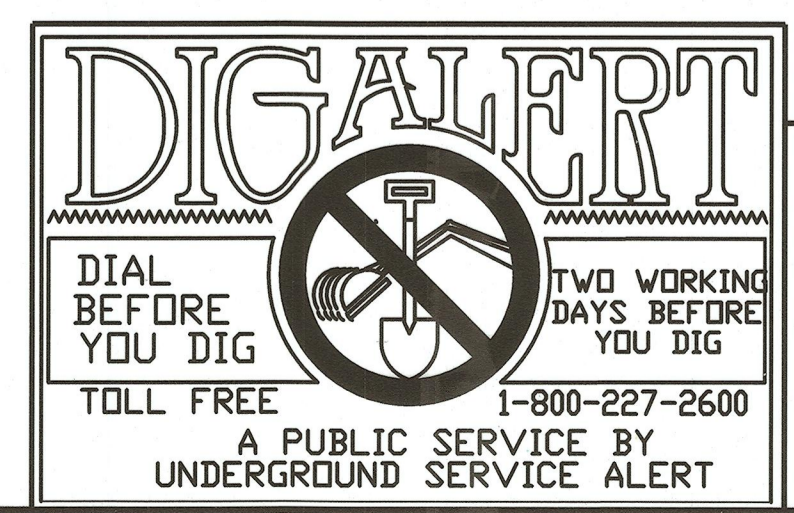


| SEWER DATA | | | |
|-----------------|--------|--------|--------|
| DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 N00°30'12\"/> | | | |



- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑩ CONSTRUCT 8" VCP SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.
- NOTES:**
1. CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.

REC'D COUNTY OVERSIGHT ENGINEER
 DATE SIGNED 9/15/20
 REGISTRATION NUMBER 76450
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



SEAL-ENGINEER
 PREPARED BY: **KWC ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA 92881-3370 • 951-734-2130
 VICTOR.ELIA@KWCENGINEERS.COM
 Victor Elia R.C.E. NO. 64803
 DATE 5-11-20

| MARK | BY | DATE | REVISIONS |
|------|--------|-----------------------------------|------------|
| VAE | 9/2/21 | VOID SHEET. REPLACE WITH SHEET 4A | CLS A/2/21 |

**CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT**

APPROVED BY: [Signature]
 PRINCIPAL ENGINEER
 ENGINEERING MANAGER
 TRAFFIC DIVISION

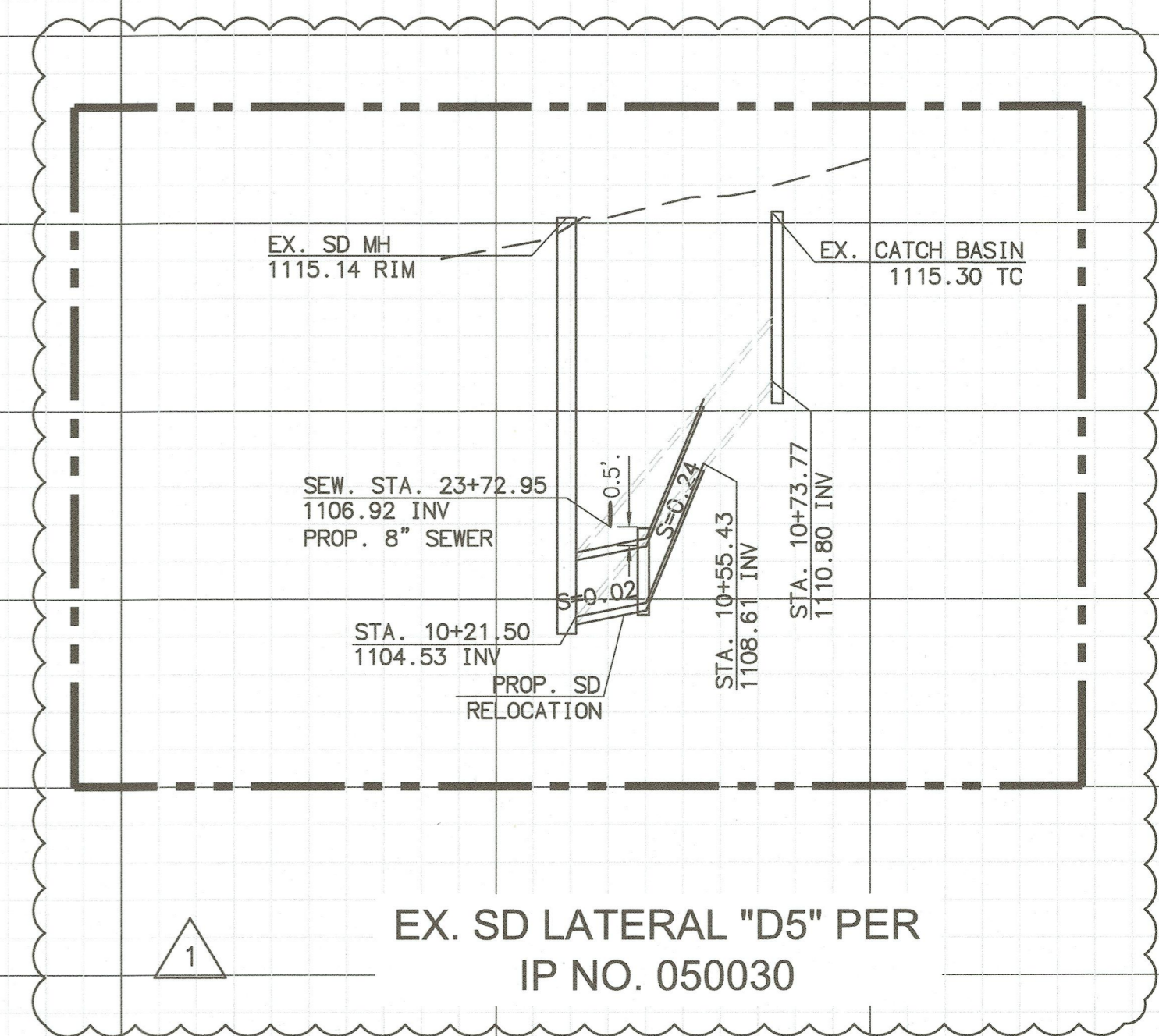
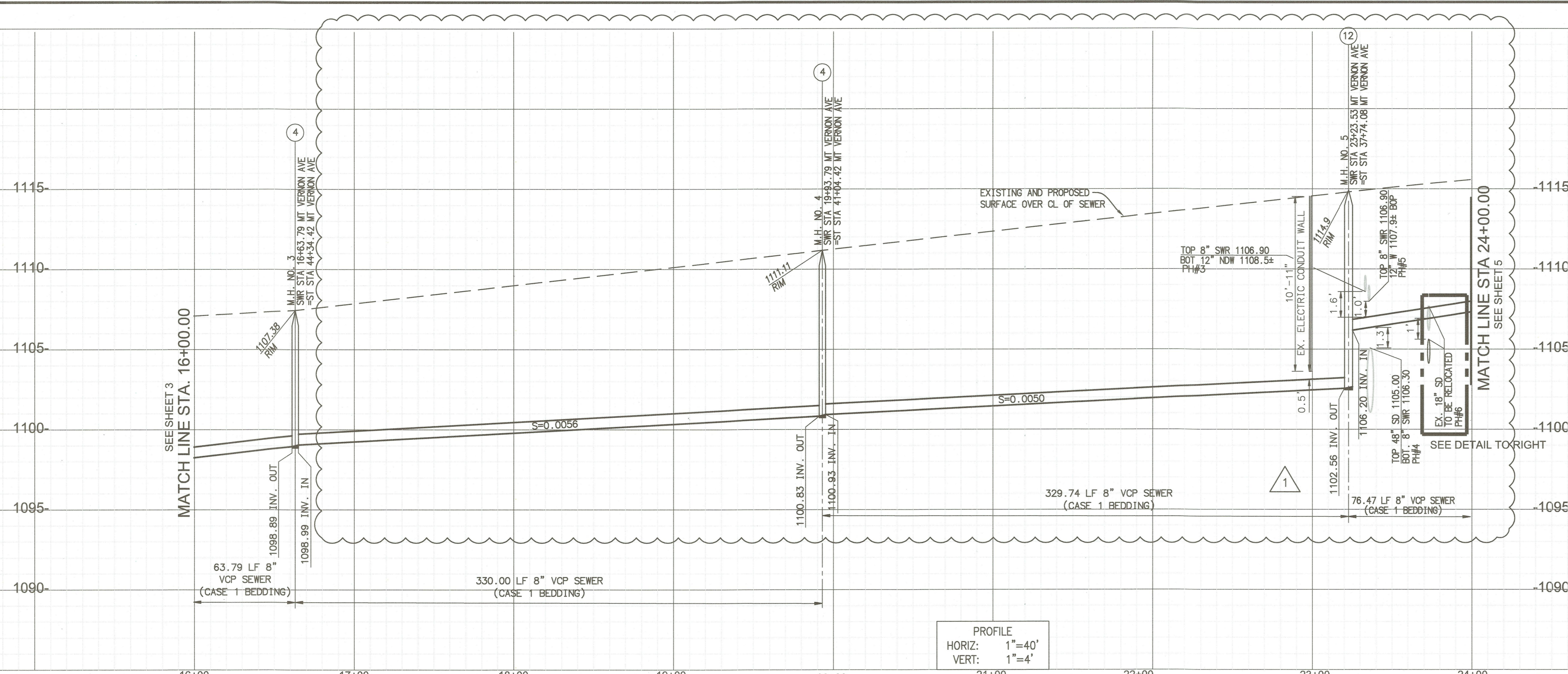
DATE: JUNE 15, 2020

| | |
|--|-----------|
| PW19-1195 | S-2192 |
| TRACT NO. 30908-1, 30909-1 | IP-190055 |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 16+00.00 - 24+00.00 | |
| SHEET NO. 4 OF 2 SHTS | |

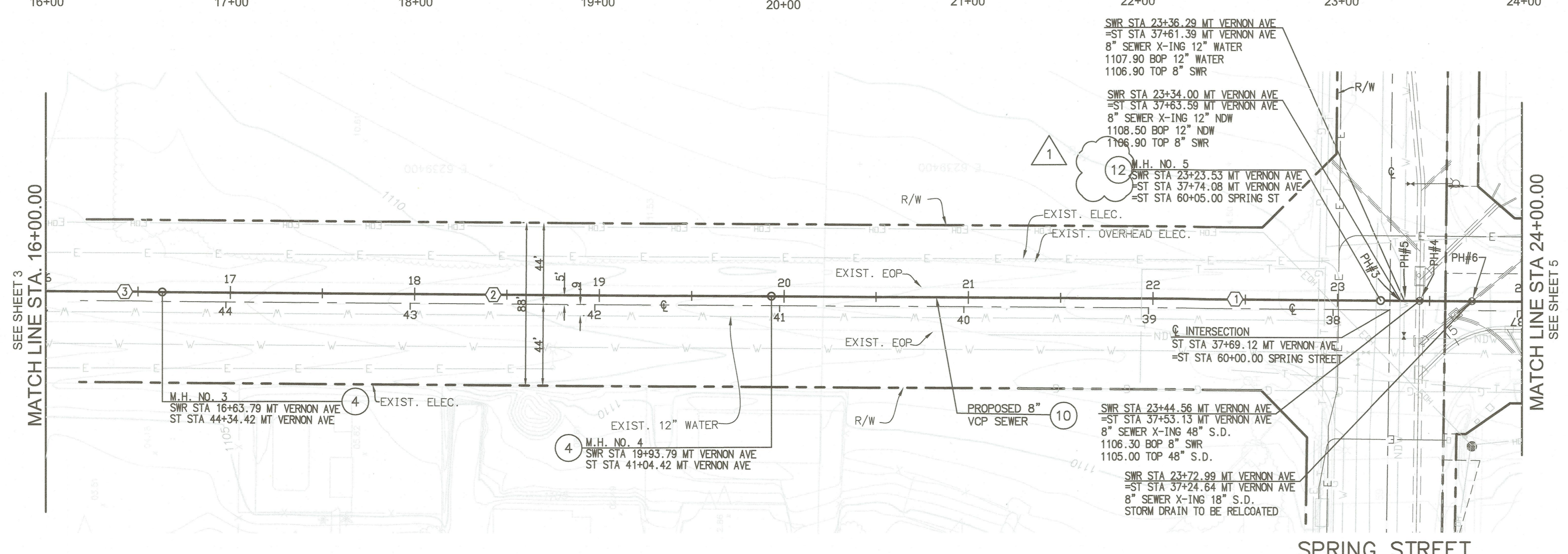
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REC'D COUNTY OVERSIGHT ENGINEER DATE SIGNED 9/10/20
 DDS 76450 REGISTRATION NUMBER

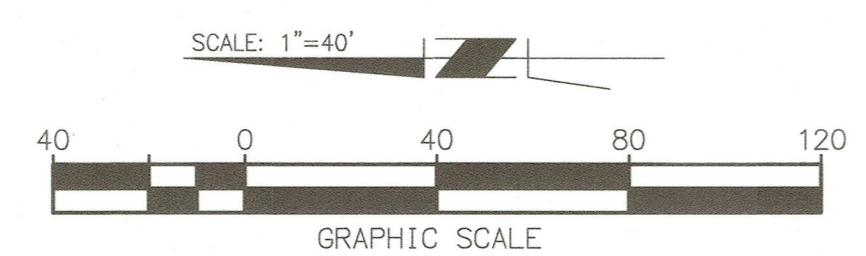
APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



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

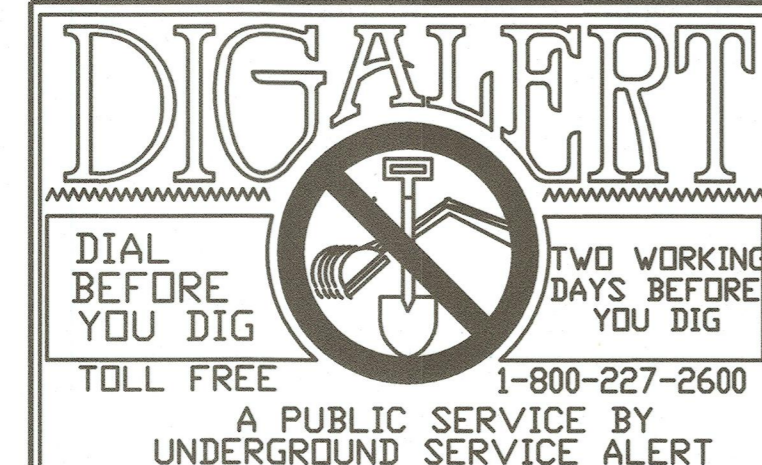


| SEWER DATA | | | |
|---------------|--------|---------|--------|
| DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 N00°30'12"E | -- | 329.74' | 8" VCP |
| 2 N00°30'12"E | -- | 330.00' | 8" VCP |
| 3 N00°30'12"E | -- | 63.79' | 8" VCP |



- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑩ CONSTRUCT 8" PVC SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2
 - ⑫ CONSTRUCT 60" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 503

NOTES:
 1. CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.



SEAL-ENGINEER
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 VICTOR.ELIA@KWCENGINEERS.COM
 Victor Elia 4-7-21 R.C.E. NO. 64803
 VICTOR ELIA DATE 5-11-20

| MARK | BY | DATE | REVISIONS | APPR. | DATE |
|------|---------|---|-----------|-------|------|
| VAE | 4/02/21 | SEWER LINE PROFILE REVISION AND ADDED SD RELOCATION FOR REFERENCE | 4/21/21 | | |

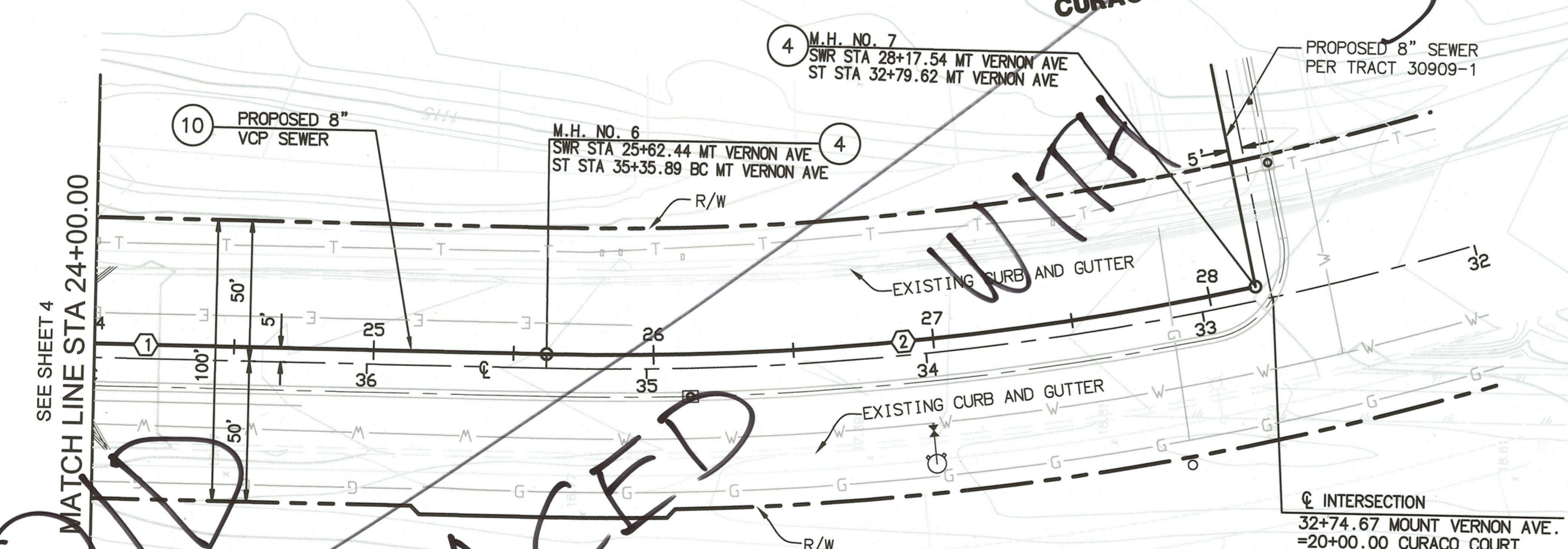
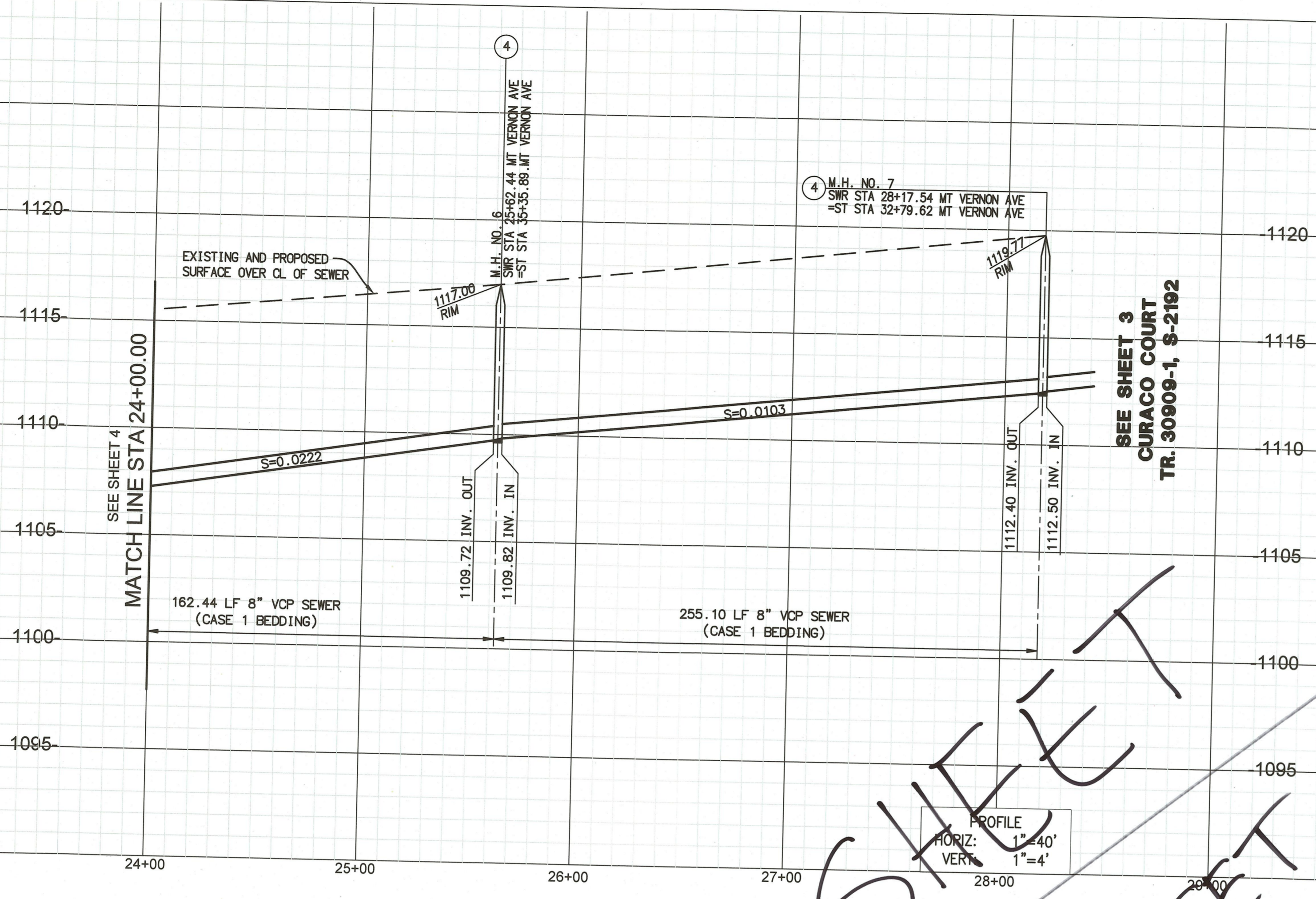
CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature] DATE: 6/15/20
 PRINCIPAL ENGINEER
 ENGINEERING MANAGER [Signature] DATE: 6/12/20
 TRAFFIC DIVISION [Signature] DATE: 6/12/20
 CITY ENGINEER [Signature] DATE: June 15, 2020

| | | |
|---|-----------|--------------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 16+00.00 - 24+00.00 | IP-190055 | SHEET NO. 4A |
| | | OF 2 SHTS |

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REC'D COUNTY OVERSIGHT ENGINEER DATE SIGNED 9/15/20
 REGISTRATION NUMBER 76950
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.

VOID REPLACED WITH SHEET 5A

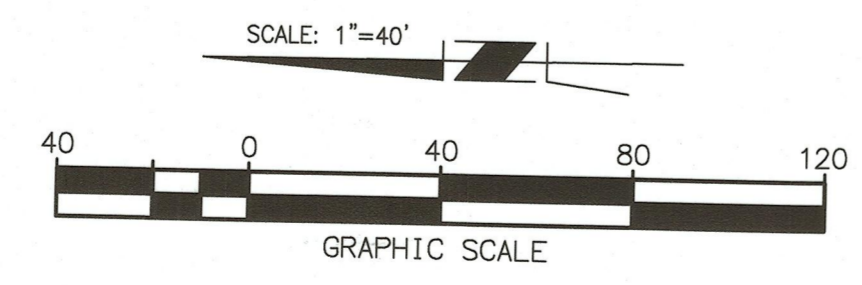


| SEWER DATA | | | |
|------------|---------------|----------|-----------------|
| Δ | DELTA/BRG | RADIUS | REMARK |
| 1 | N00°30'03\"E | --- | 159.75' 8\" VCP |
| 2 | ? = 13°8'20\" | 1095.00' | 251.10' 8\" VCP |

- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48\" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑩ CONSTRUCT 8\" PVC SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.

NOTES:

- CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.



SEAL-ENGINEER PREPARED BY: **KWC ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA 92881-3370 • 951-734-2130
 VICTOR.ELIA@KWCENGINEERS.COM
 Victor Elia R.C.E. NO. 64803
 VICTOR ELIA DATE 5-11-20

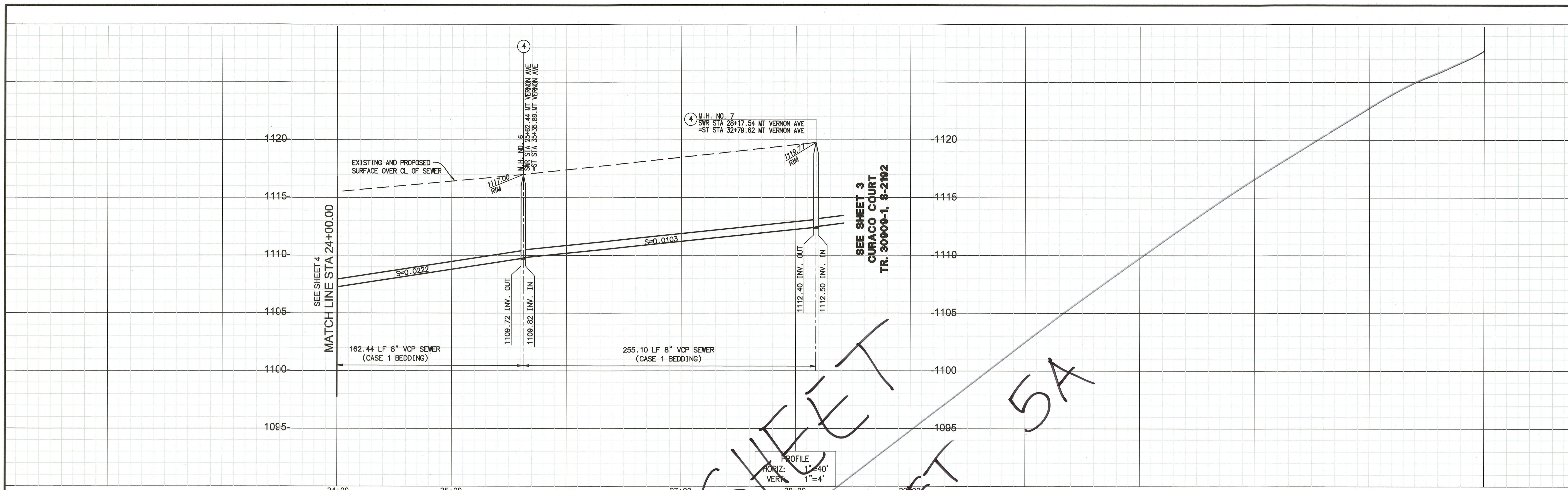
| MARK | BY | DATE | REVISIONS | APPR. | DATE |
|------|--------|-----------------------------------|-----------|-------|---------|
| VAE | 4/2/21 | VOID SHEET. REPLACE WITH SHEET 5A | | VE | 4/29/21 |

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT

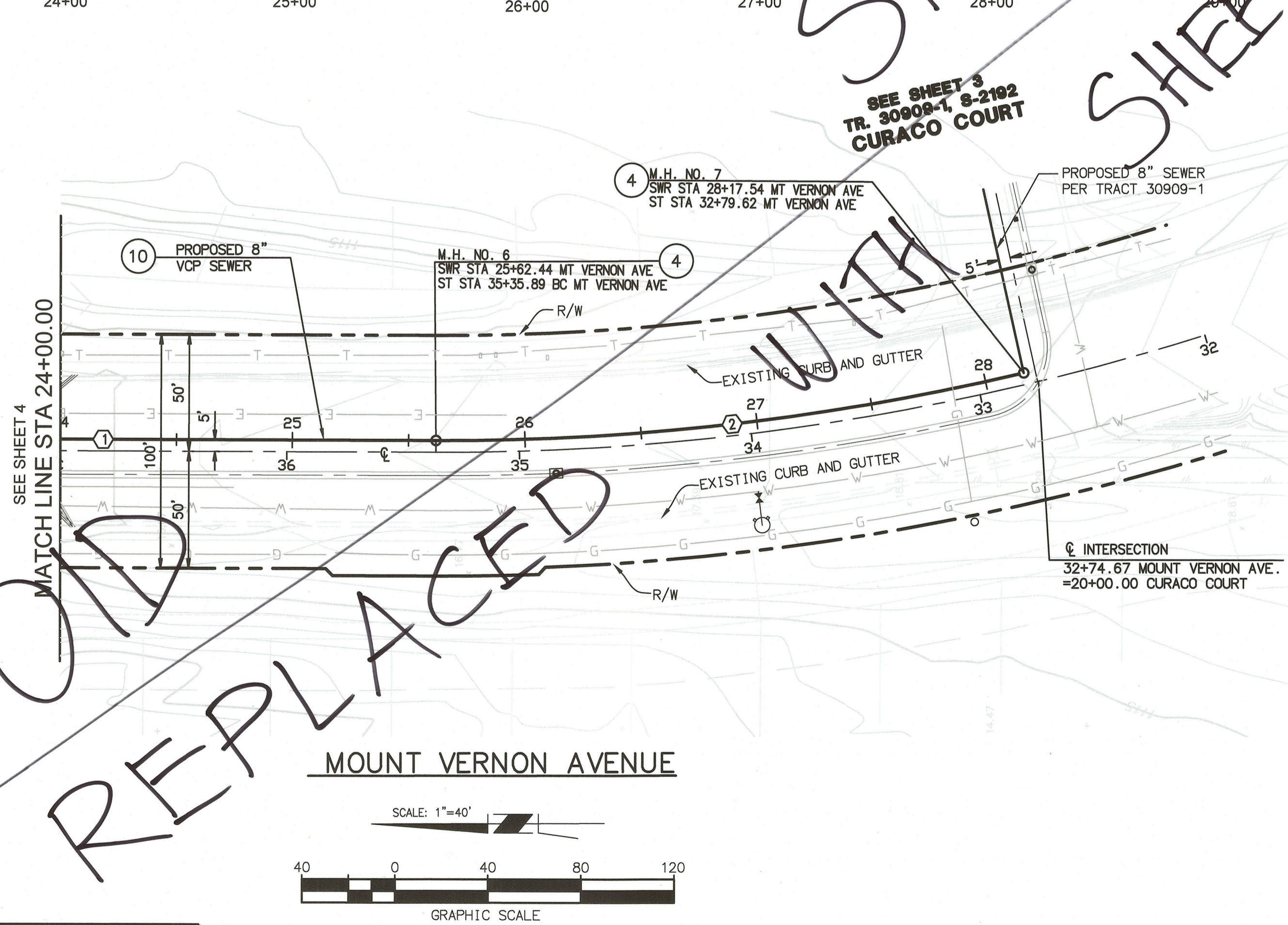
APPROVED BY: [Signature] BY: [Signature] DATE: 6/15/20
 PRINCIPAL ENGINEER
 ENGINEERING MANAGER
 TRAFFIC DIVISION

APPROVED BY: [Signature] BY: [Signature] DATE: June 15, 2020
 CITY ENGINEER

| | | |
|---|-----------|-------------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | SHEET NO. 5 |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 24+00.00 TO STA. 28+17.54 | | OF 2 SHTS |



VOID SHEET REPLACED WITH SHEET 5A



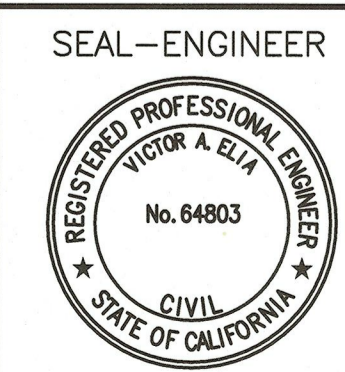
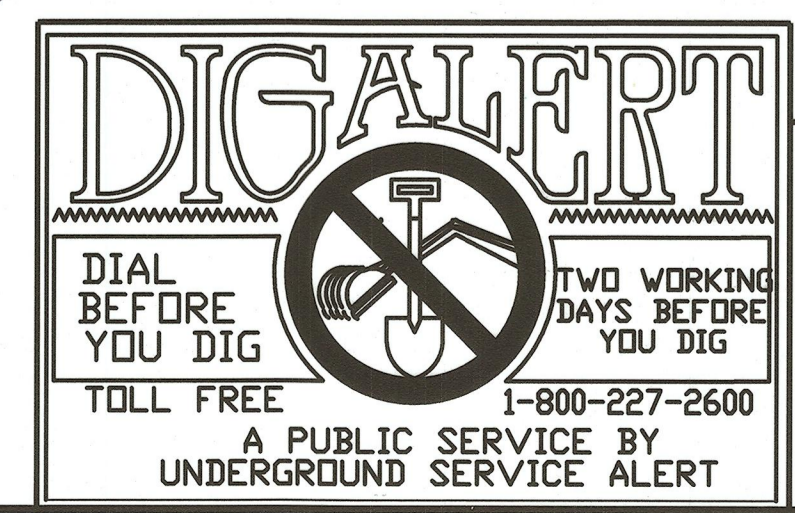
| SEWER DATA | | | | |
|------------|---------------|--------|--------|--------|
| Δ | DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 | N00°30'03\"/> | | | |

- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48\"/>

NOTES:

- CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.

REC'D COUNTY OVERSIGHT ENGINEER REGISTRATION NUMBER DATE SIGNED
 CS *Bugles* 76150 9/15/20
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.

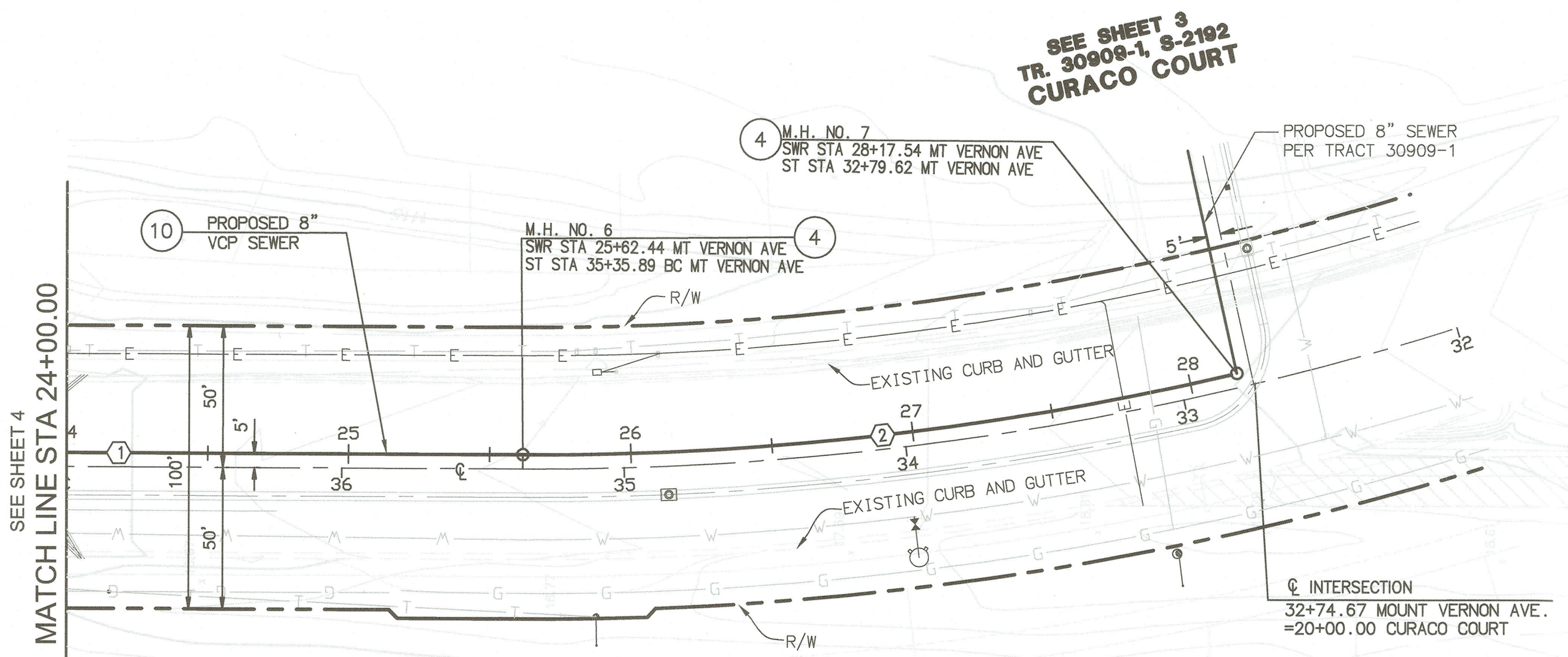
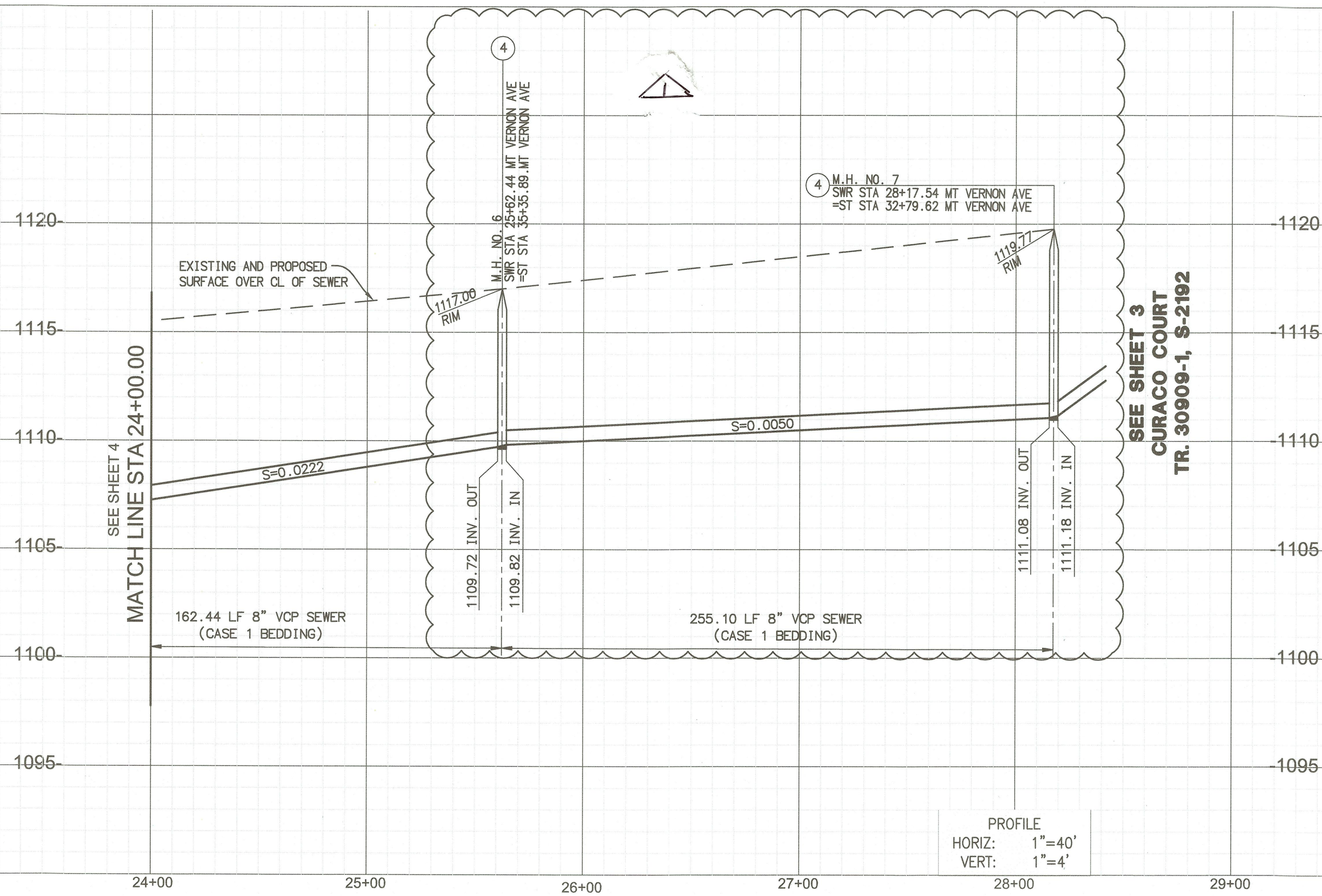


SEAL-ENGINEER PREPARED BY: **KWC ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA. 92881-3370 • 951-734-2130
 VICTOR.ELIA@KWCENGINEERS.COM
 Victor Elia R.C.E. NO. 64803
 VICTOR ELIA DATE 5-11-20

VAE 4/2/21 VOID SHEET. REPLACE WITH SHEET 5A
 1/5 4/29/21
 MARK BY DATE REVISIONS APPR. DATE CITY

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature] BY DATE: 6/15/20
 PRINCIPAL ENGINEER [Signature] 6/15/20
 ENGINEERING MANAGER [Signature] 6/15/20
 TRAFFIC DIVISION [Signature] 6/15/20
 CITY ENGINEER [Signature]
 DATE: June 15, 2020

| | |
|---|-----------|
| PW19-1195 | S-2192 |
| TRACT NO. 30908-1, 30909-1 | IP-190055 |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 24+00.00 TO STA. 28+17.54 | |
| SHEET NO. 5 OF 2 SHTS | |

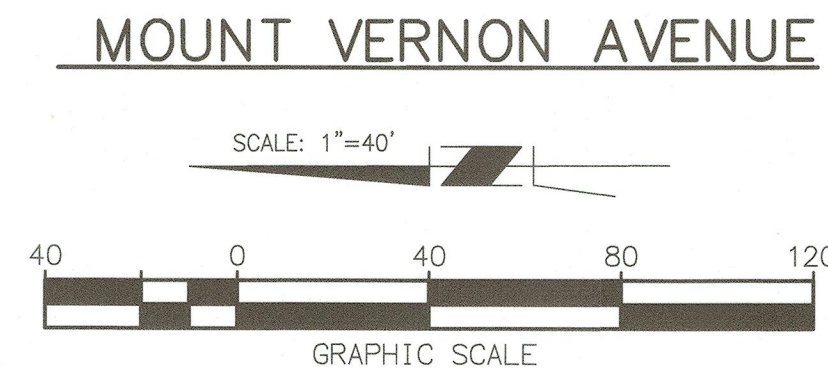


| SEWER DATA | | | | |
|------------|--------------|----------|---------|--------|
| NO. | DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 | N00°30'03"E | -- | 159.75' | 8" VCP |
| 2 | ? = 13°8'20" | 1095.00' | 251.10' | 8" VCP |

- CONSTRUCTION NOTES**
- ④ CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑩ CONSTRUCT 8" VCP SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.

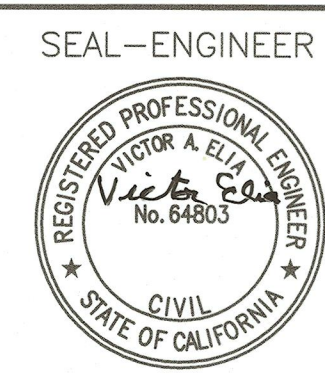
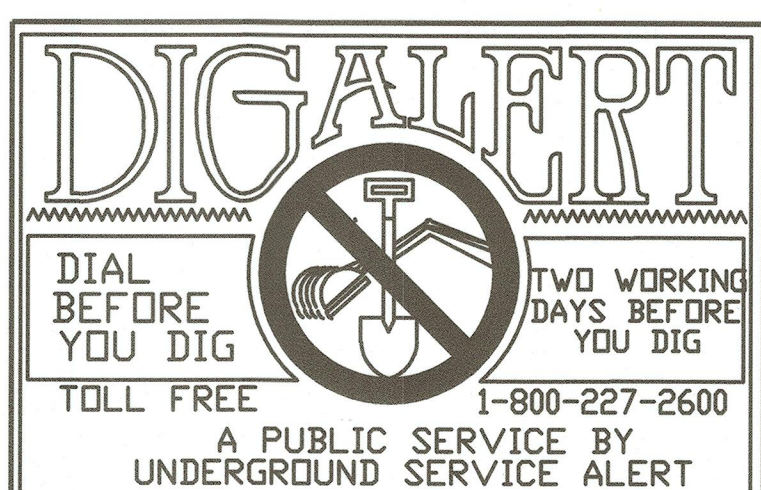
NOTES:

- CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.



REC'D COUNTY OVERSIGHT ENGINEER REGISTRATION NUMBER DATE SIGNED
 CS *Bygones* 76450 9/15/20

APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



SEAL-ENGINEER PREPARED BY: **KWG ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA 92681-3370 • 951-734-2130
 VICTOR ELIA 4-7-21 R.C.E. NO. 64803 DATE 5-11-20

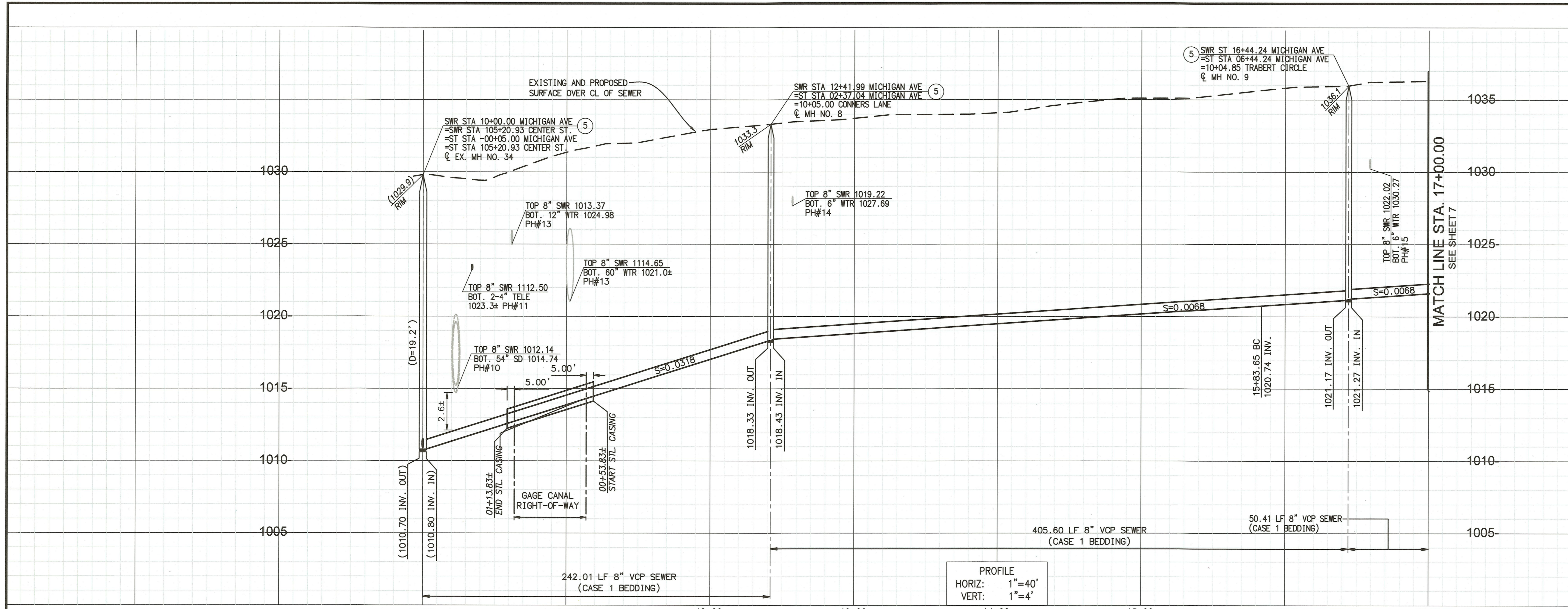
| MARK | BY | DATE | REVISIONS | APPR. | DATE |
|------|---------|-----------------------------|-----------|-------|---------|
| VAE | 4/05/21 | SEWER LINE PROFILE REVISION | | CS | 4/15/20 |

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT

| | | | |
|---------------------|-----|---------|--------------|
| APPROVED BY: | BY: | DATE: | APPROVED BY: |
| PRINCIPAL ENGINEER | TJ | 6/15/20 | |
| ENGINEERING MANAGER | CS | 5/20/20 | |
| TRAFFIC DIVISION | NM | 6/15/20 | |

CITY ENGINEER DATE June 15, 2020

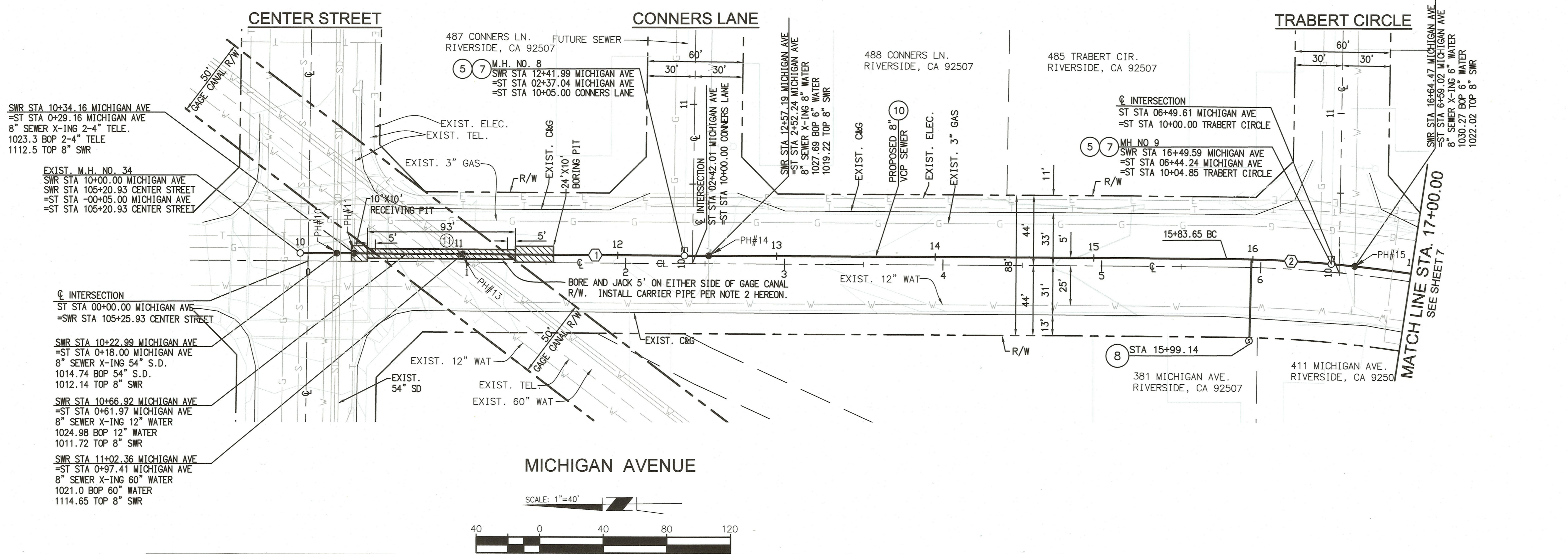
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|---|-----------|--------------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | SHEET NO. 5A |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MT. VERNON AVE. STA. 24+00.00 TO STA. 28+17.54 | | OF 2 SHTS |



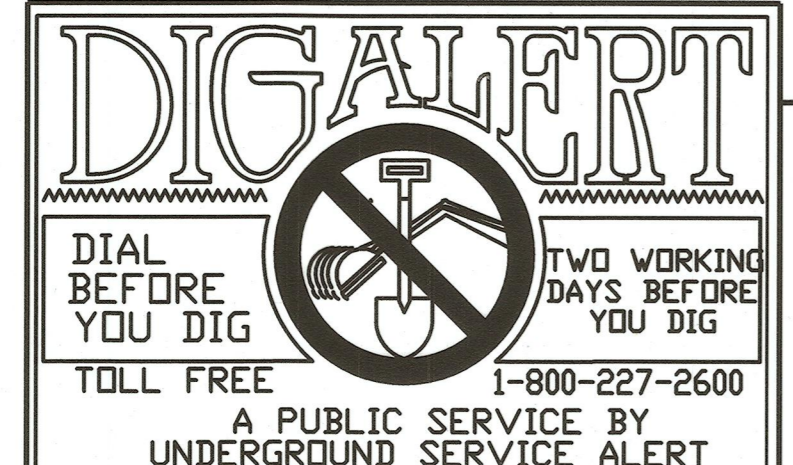
| SEWER DATA | | | |
|------------|-----------------|--------|--------|
| DELTA/BRG | RADIUS | LENGTH | REMARK |
| 1 | N00°22'28.5\"/> | | |

- CONSTRUCTION NOTES**
- ⑤ CONSTRUCT 60" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑦ CONSTRUCT 8" X 5' LONG STUB OUT AND PLUG FOR FUTURE CONNECTION
 - ⑧ CONSTRUCT 4" PVC SEWER LATERAL W/ CLEANOUT PER CITY OF RIVERSIDE STD. DWG. NO. 562 AND STD DWG NO. 452 CASE 1 & 453
 - ⑩ CONSTRUCT 8" PVC SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.
 - ⑪ BORE AND JACK 24" I.D. STEEL CASING (T=0.5"). INSTALL CARRIER PIPE PER CONST NOTE 10.

- NOTES:**
- 1. CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.
 - 2. INSTALL 8" VCP MICROTUNNELING CARRIER PIPE INSIDE CASING. REFER TO DETAIL ON SHEET 2.



REC'D COUNTY OVERSIGHT ENGINEER DATE SIGNED 7/15/20
 REGISTRATION NUMBER 76450
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.



SEAL-ENGINEER PREPARED BY: **KWG ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
 1880 COMPTON AVENUE, SUITE 100 • CORONA, CA 92881-3370 • 951-734-2130
 VICTOR.ELIA@KWGENGINEERS.COM
 Victor Elia R.C.E. NO. 64803 DATE 5-11-20

| MARK | BY | DATE | REVISIONS |
|------|----|------|-----------|
| | | | |
| | | | |

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature] DATE: June 15, 2020
 PRINCIPAL ENGINEER: [Signature] DATE: June 15, 2020
 ENGINEERING MANAGER: [Signature] DATE: June 15, 2020
 TRAFFIC DIVISION: [Signature] DATE: June 15, 2020
 CITY ENGINEER: [Signature] DATE: June 15, 2020

| | |
|---|-----------|
| PW19-1195 | S-2192 |
| TRACT NO. 30908-1, 30909-1 | IP-190055 |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS | |
| TRACT NO. 30908-1, 30909-1 | |
| MICHIGAN AVE. STA. 00+00.00 - STA. 07+00.00 | |
| 6 | OF 2 SHTS |

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REC'D COUNTY OVERSIGHT ENGINEER DATE SIGNED 9/15/20
 CS Big Cus REGISTRATION NUMBER 76450
 APPROVED AS TO COMPLIANCE WITH APPLICABLE COUNTY STANDARDS AND PRACTICES.

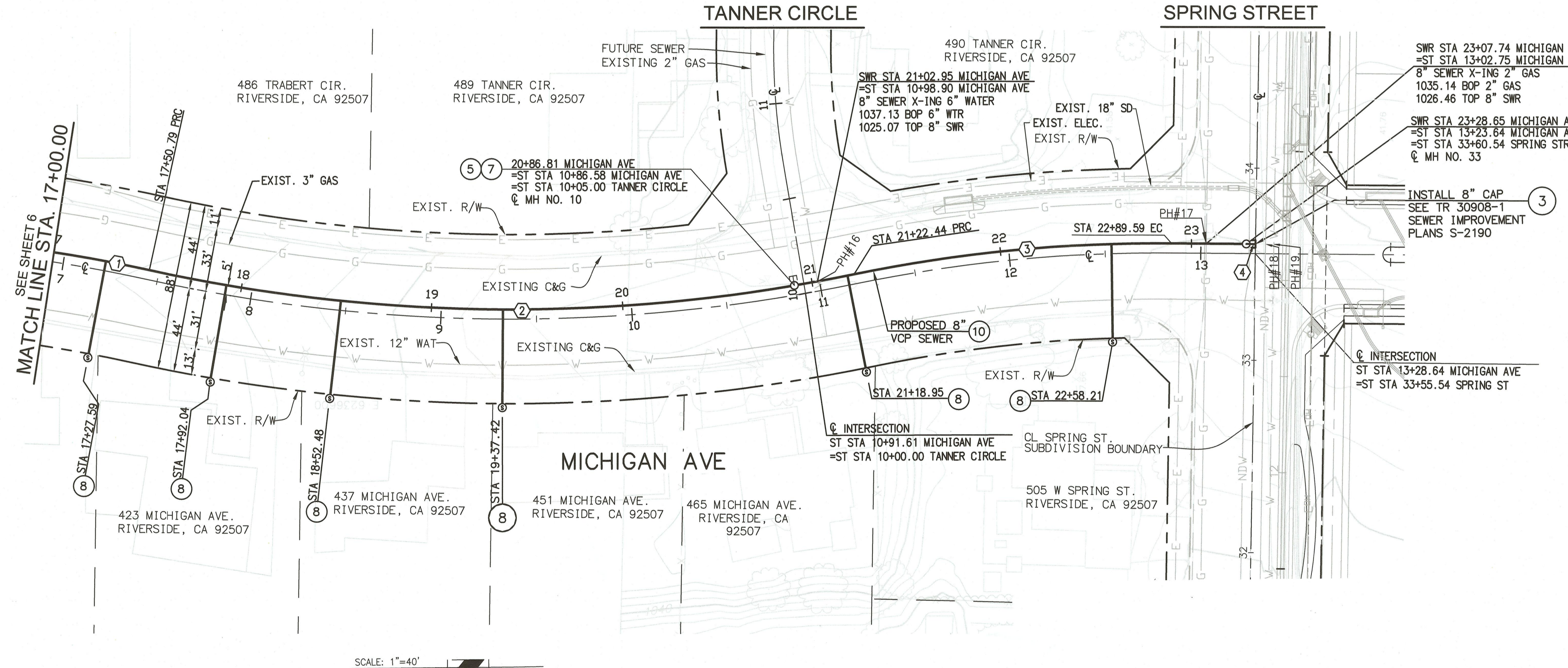
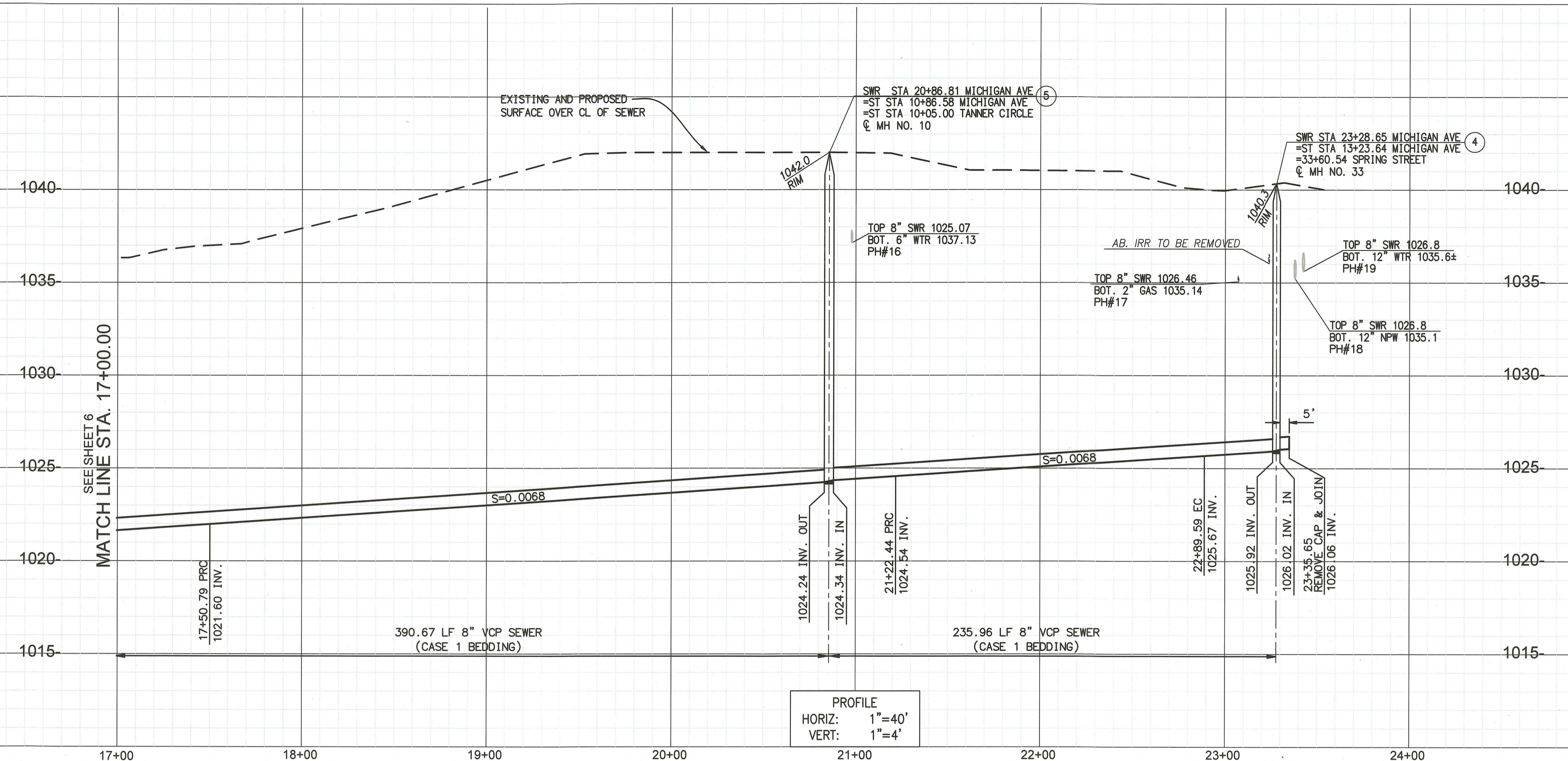


SEAL-ENGINEER PREPARED BY: **KWG ENGINEERS**
 CIVIL ENGINEERS • PLANNERS • SURVEYORS
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 VICTOR.ELIA@KWGENGINEERS.COM
 Victor Elia R.C.E. NO. 64803
 VICTOR ELIA DATE 5-11-20

| MARK | BY | DATE | REVISIONS | APPR. | DATE |
|------|----|------|-----------|-------|------|
| | | | | | |
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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature] BY: [Signature] DATE: 6/15/20
 PRINCIPAL ENGINEER TN 6/15/20
 ENGINEERING MANAGER [Signature] 6/15/20
 TRAFFIC DIVISION [Signature] 6/15/20
 CITY ENGINEER [Signature]
 DATE: JUNE 15, 2020

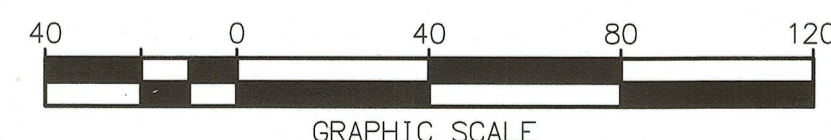
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|---|-----------|-----------|
| TRACT NO. 30908-1, 30909-1 | PW19-1195 | S-2192 |
| IP-190055 | | SHEET NO. |
| CITY OF RIVERSIDE SEWER IMPROVEMENT PLANS FOR TRACT NO. 30908-1, 30909-1 MICHIGAN AVE. STA. 7+00.00 - 13+23.64 | | 7 |
| | | OF 2 SHTS |



| DELTA/BRG | RADIUS | LENGTH | REMARK |
|-----------------|---------|---------|--------|
| 1 Δ = 03°36'54" | 805.00' | 50.79' | 8" VCP |
| 2 Δ = 23°47'33" | 895.00' | 371.66' | 8" VCP |
| 3 Δ = 11°53'47" | 805.00' | 167.14' | 8" VCP |
| 4 N 00°27'17" E | — | 5.00' | 8" VCP |

- CONSTRUCTION NOTES**
- ③ INSTALL 8" CAP
 - ④ CONSTRUCT 48" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑤ CONSTRUCT 60" SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
 - ⑦ CONSTRUCT 8" X 5' LONG STUB OUT AND PLUG FOR FUTURE CONNECTION
 - ⑧ CONSTRUCT 4" PVC SEWER LATERAL W/ CLEANOUT PER CITY OF RIVERSIDE STD DWG. NO. 562 AND STD DWG NO. 452 CASE 1 & 453
 - ⑩ CONSTRUCT 8" PVC SEWER PER CITY OF RIVERSIDE STANDARD 452 & 453. SEE TRENCH DETAIL ON SHEET 2.

NOTES:
 1. CONTRACTOR TO VERIFY THE DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES AND LATERALS PRIOR TO CONSTRUCTION.



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