

# CONSTRUCTION PLANS FOR AGUA SPECIAL UTILITY DISTRICT 12" WATERLINE ADJUSTMENTS PROJECT W. MILE 2 NORTH ROAD

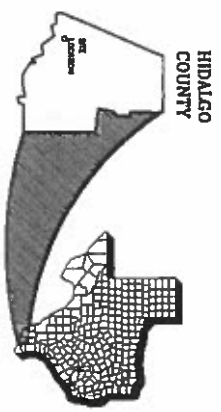
MISSION, TEXAS



AGUA  
Special Utility District



LOCATOR MAP  
NOT TO SCALE



## TABLE OF CONTENTS

SHEET #	CIVIL
01.....	COVER
02.....	GENERAL NOTES & ESTIMATED QUANTITIES
03.....	PROJECT INDEX MAP
04.....	BENCHMARK INDEX MAP
05.....	STA:10+00-14+50_12" WATER LINE IMPROVEMENTS
06.....	STA:14+50-19+50_12" WATER LINE IMPROVEMENTS
07.....	STA:19+50-24+50_12" WATER LINE IMPROVEMENTS
08.....	STA:24+50-29+50_12" WATER LINE IMPROVEMENTS
09.....	STA:29+50-34+50_12" WATER LINE IMPROVEMENTS
10.....	STA:34+50-38+82.82_12" WATER LINE IMPROVEMENTS
11.....	PROPOSED WATER LINE ADJUSTMENT DETAILS
12.....	TYPICAL WATER DETAILS
13-24...	TDOT BARRICADE & CONSTRUCTION BC STANDARDS

### AGUA SPECIAL UTILITY DISTRICT BOARD

- |                       |                          |
|-----------------------|--------------------------|
| PRESIDENT.....        | RICHARD OCHOA            |
| VICE PRESIDENT.....   | EVERARDO CHAPA           |
| BOARD SECRETARY.....  | CESAR RODRIGUEZ JR.      |
| TREASURER.....        | RODRIGO LOPEZ            |
| BOARD MEMBER.....     | FRANCISCO FLORES JR.     |
| BOARD MEMBER.....     | RAMON SEGOVIA            |
| BOARD MEMBER.....     | OSCAR GONZALEZ           |
| DISTRICT MANAGER..... | FRANCISCO "FRANK" FLORES |



**SAMES** S&W Engineering & Surveying, Inc.  
 200 S. CURT BLDG.  
 PALM TRAIL 7517  
 IRVING, TEXAS 75039  
 TEL: (972) 702-8800  
 FAX: (972) 702-8800  
 irving@samestexas.com

**GENERAL CONSTRUCTION NOTES**

- 1) ALL INSTALLATION OF MATERIALS, VALUES, FITTINGS AND FITTINGS SHALL BE IN ACCORDANCE WITH THE AQA SPECIAL UTILITY DISTRICT STANDARDS MANUAL, LATEST EDITION.
- 2) THE INFORMATION SHOWN ON THESE DRAWINGS INCLUDING TYPE AND LOCATION OF UNDERGROUND UTILITIES AND ELECTRICAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE LOCATION AND SIZE HAVE BEEN TAKEN FROM EXISTING RECORDS AND THE BEST AVAILABLE INFORMATION AVAILABLE. HOWEVER, IT IS EXPECTED THAT THERE MAY BE DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL FIELD CONDITIONS. IN SUCH A CASE, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTING SIZE AND LOCATION OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ADVISE THE DESIGN AND RESTORATION OF CONSTRUCTION RESPONSIBILITY FOR THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES FOR ACTUAL LOCATION AND UNDERGROUND OF EXISTING LINE FROM TO EXCAVATION OPERATIONS.
- 3) THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY UNREPORTED OBSTACLES THAT MAY IMPROVE OR PREVENT THE PROPER CONSTRUCTION OF THIS PROJECT.
- 4) ALL CONSTRUCTION OPERATIONS SHALL BE ACCORDANCE IN ACCORDANCE WITH THE APPLICABLE STATE STATUTES AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (OSHA), CODES OF THE OSHA STANDARDS MAY BE PROHIBITED FROM THE U.S. GOVERNMENT.
- 5) THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT, AND WORKMANLY MANNER AT ALL TIMES. JOB SAFETY SHALL NOT BE COMPROMISED. ANY UNSAFE OR UNSATISFACTORY MESSAGE SHALL BE REMOVED OR CORRECTED. YARD CARE OF BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER OR PROJECT ENGINEER.
- 6) EXCAVATIONS, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARBED WIRE, LIGHTS AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.
- 7) CONSTRUCTION OF THIS PROJECT WILL BE SUBJECT TO INSPECTIONS AND TESTING AS DEEMED NECESSARY ON APPROPRIATE BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH NECESSARY LABOR AND EQUIPMENT TO ALLOW THE TESTING PERSONNEL ACCESS TO ALL AREAS OF THE PROJECT. THE TESTING PERSONNEL SHALL BE PROVIDED WITH THE TESTING AND INSPECTION PROGRAM.
- 8) A PART OF THE WORK THAT IS NECESSARY OR REQUIRED TO MAKE EACH SYSTEM OR INSTALLATION SAFE AND OPERATIONAL FOR ITS INTENDED PURPOSES SHALL BE THROUGHLY PERFORMED AS NECESSARY, WORK AS IF IT WERE DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.
- 9) THE ENGINEER DO NOT ALWAYS INDICATE ALL UTILITY SPOTS AND TRENCHES, WHEN NECESSARY, MAKE NECESSARY, TRENCHES BY A DETENTION AT THE JOINTS OR THE INSTALLATION OF FITTINGS, DO NOT DETRACT PIPE JOINTS MORE THAN ONE OF THE MANUFACTURER'S RECOMMENDATION.
- 10) ALL UNDERGROUND PIPING MUST BE INSTALLED WITH A MINIMUM OF 3'-INCHES OF COVER UNLESS OTHERWISE NOTED ON THE PLANS.
- 11) ALL EXCAVATION FOR THIS PROJECT SHALL BE UNCLASSIFIED.
- 12) THERE WILL BE NO BASTING ALLOWED ON THIS PROJECT.
- 13) ALL PIPES, VALVES, FITTINGS AND OTHER APPURTENANCES SHALL BE RATED FOR 150 PSI UNLESS OTHERWISE NOTED.
- 14) ALL DUCTILE IRON PIPE SHALL BE CLASS 200 UNLESS OTHERWISE NOTED. ALL ABOVE GROUND DUCTILE IRON PIPE SHALL HAVE CLASS 125 FLANGED JOINTS AND ALL UNDERGROUND DUCTILE IRON PIPE SHALL HAVE PUSH-ON OR MECHANICAL JOINTS WITH APPROPRIATE RESTRAINTS.
- 15) ALL TRENDS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION WITH THE USE OF PROTECTIVE BARRIERS INSTALLED BY THE CONTRACTOR, AT THE DROP LINE OF EACH TRENCH.
- 16) ANY SAFETY DEVICES, WARNING LIGHTS, CONSIGNS, ALARMS ON OTHER DEVICES SHOWN ON ANY PLANS OR CALLED FOR BY ANY SECTION OF THE SPECIFICATIONS SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY OTHER UTILITIES NECESSARY TO CONNECT THE DEVICE AND MAINTAIN IT OPERATIONAL.
- 17) ALL UTILITIES WHICH ARE TO REMAIN AND WHICH ARE DAMAGED OR REMOVED WILL BE RESTORED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 18) ALL UNDERGROUND PIPE SHALL BE BACK FILLED WITH JOINTS EXPOSED FOR TESTING. BEFORE NEW JOINTS ARE COVERED, PRESSURE LINES ARE TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150 PSI FOR A PERIOD OF TWO (2) HOURS. THE COVER SHALL BE REMOVED AND THE TESTING LINE TESTED. THE TESTING LINE SHALL BE REINSTALLED. CONCRETE THROST BLOCKS HAVE ALSO A MINIMUM OF 24 HOURS.
- 19) THESE NOTES ARE INTENDED TO SUPPLEMENT THE TECHNICAL SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES SHOWN ON THE SPECIFICATIONS. WHERE THERE IS A CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
- 20) AS SHOWN AS INDICATED, ALL PORTIONS OF EXCAVATIONS NOT OCCUPIED BY A PERMANENT STRUCTURE SHALL BE BACKFILLED.

**EROSION CONTROL NOTES**

- 1) THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIRE EROSION AND SEDIMENTATION CONTROL FOR ALL CONSTRUCTION PROJECTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EROSION AND SEDIMENTATION CONTROL PLAN.
- 2) A PLAN OF EROSION AND SEDIMENTATION CONTROL SHALL BE SUBMITTED TO THE TCEQ AND EPA FOR APPROVAL. THE PLAN SHALL BE SUBMITTED TO THE TCEQ AND EPA FOR APPROVAL. THE PLAN SHALL BE SUBMITTED TO THE TCEQ AND EPA FOR APPROVAL. THE PLAN SHALL BE SUBMITTED TO THE TCEQ AND EPA FOR APPROVAL.
- 3) ALL SLOPES SHALL BE SLOPED TO ACCORD WITH APPLICABLE GRASS, GRASS MIXTURES OR OTHER COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
- 4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND OTHER FEATURES. SEDIMENT DEPOSITED AFTER A RAINFALL EVENT SHALL BE REMOVED FROM THE SITE OR PLACED IN AN APPROVED DESPatched SOIL DISPOSAL AREA.
- 5) EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BEFORE CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION. LOCATIONS OF DOMESTIC FACILITIES SUCH INSTALLATIONS SHALL BE RECORDED, MAINTAINED BY THE CONTRACTOR FOR EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED IN THE COURSE OF THE WORK, THEY ARE INDICATED.
- 6) ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. SUCH CONTROLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. SUCH CONTROLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 7) ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT THE ACCEPTANCE OF THE PROJECT BY THE OWNER.
- 8) ALL STAKES, MATERIAL STORAGE, STOCKPILE AND REFUSE AREAS SHALL REQUIRE APPLICABLE EROSION AND SEDIMENTATION CONTROL MEASURES.
- 9) ALL CONSTRUCTION DEWASERS SHALL BE CONTAINED WITH APPROPRIATE RECEIPTS (ROLL-OFF CONTAINERS, DUMPSTERS, TRASH CANS, WRE-UPH CANS, ETC.) AND COVERED WITH PERMEABLE EROSION AND SEDIMENTATION CONTROLS.
- 10) THE CONTRACTOR MAY REFER TO THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES (2004 EDITION) ITEM 14.4, SETBACK FOR EROSION CONTROL, AND ITEM 14.4, "VEGETATIVE MATURING" FOR VEGETATIVE STABILIZATION SPECIFICATIONS.
- 11) BEST CONTROL SHALL BE MAINTAINED AS NECESSARY OR AS DIRECTED BY THE DESIGNER. BEST CONTROL MAY CONSIST OF WATERING OR OTHER METHODS APPROVED BY THE PROJECT ENGINEER.
- 12) ALL DEVICES ASSOCIATED WITH OPERATING OPERATIONS SHALL REQUIRE ADEQUATE PROTECTION TO PREVENT DAMAGE TO THE DEVICES. SUCH DEVICES SHALL INCLUDE BUT ARE NOT LIMITED TO SEDIMENTATION BASINS OR FILTER SOCKS.
- 13) CONCRETE WASH-WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM SEWER OR INTO THE GROUND. WASH-WATER SHALL BE COLLECTED AND STORED IN A CONTAINER OF ESTABLISHED DESIGN AND SEDIMENTATION CONTROLS. WASH-WATER SHALL BE APPROVED BY PROJECT ENGINEER.

**ESTIMATED QUANTITIES**

ITEM	UNIT	QUANTITY
12" PVC WATER LINE (C-900, DR-18)	L.F.	879
12" HDPE WATERLINE (C-906, DR-11)	L.F.	280
12" 45° MJ ELBOW	E.A.	7
20" # STEEL CASING (BY BORE)	L.F.	30
WATER SERVICE ADJUSTMENT	E.A.	8
PAVEMENT REPAIR	S.Y.	75

- 1) THE METHOD OR RELOCATION OF EXISTING UTILITIES AND TRAFFIC CONTROL SIGNALS AND BOXES SHALL BE AS SHOWN ON THE PLANS AND SHALL BE APPROVED BY THE PROJECT ENGINEER.
- 2) THE REPAIR OF ANY DAMAGED UNPAVED AREAS, PAVEMENT, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR WATERLINE.
- 3) THE REPAIR OF ALL ASPHALT, CONCRETE, AND CULVERT PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR WATERLINE.
- 4) THE REPAIR OF EXISTING PIPE AS CALLED FOR THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR WATERLINE.
- 5) TRENCH PROTECTION SHALL BE UTILIZED WHEN TRENCH EXCEEDS 5 FEET IN DEPTH, AND SHALL BE INCIDENTAL TO THE PRICE BID FOR WATERLINE.

STATE OF TEXAS  
 LICENSED PROFESSIONAL ENGINEER  
 JOSE A. RODRIGUEZ  
 117300  
 01/30/2015

**2-MILE LINE ROAD  
 12" WATER LINE  
 ADJUSTMENTS PROJECT  
 MISSION, TEXAS**

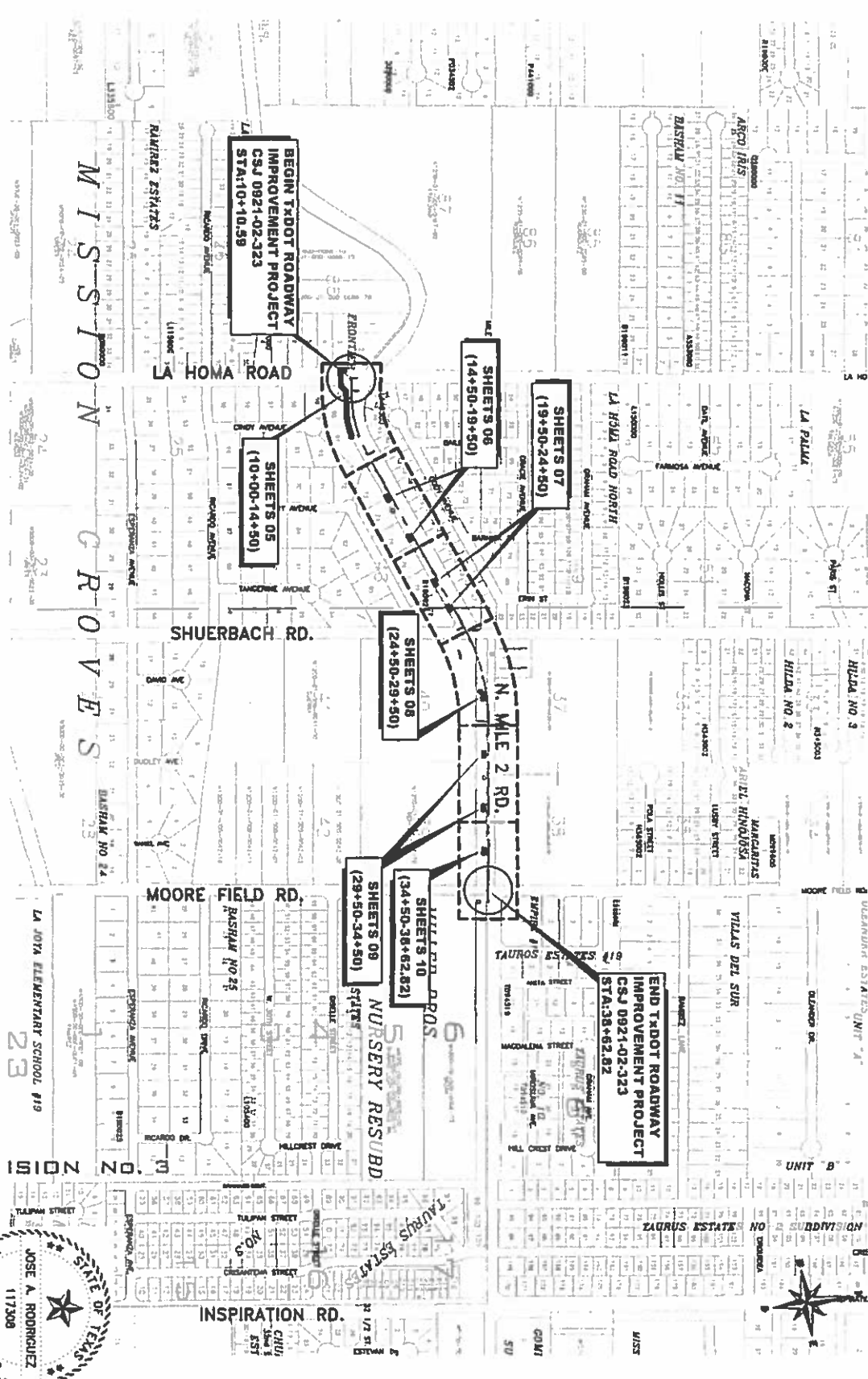
**SAMES**  
 200 S. CAGE BLVD.  
 FRISCO, TEXAS 75777  
 TEL: (956) 702-8880  
 FAX: (956) 702-8883  
 TEXAS REGISTERED ENGINEERING FIRM  
 P-10022

**SAM Engineering & Surveying, Inc.**

REVISIONS  
 NO. DATE DESCRIPTION  
 1 01/30/2015  
 SHEET NAME: GENERAL NOTES  
 SHEET NUMBER: 02

NOTE:  
TWO ROADWAY IMPROVEMENT  
PROJECT INFORMATION SHOWN ON THIS  
SHEET IS TO BE USED FOR REFERENCE  
ONLY.

PROJECT INDEX MAP



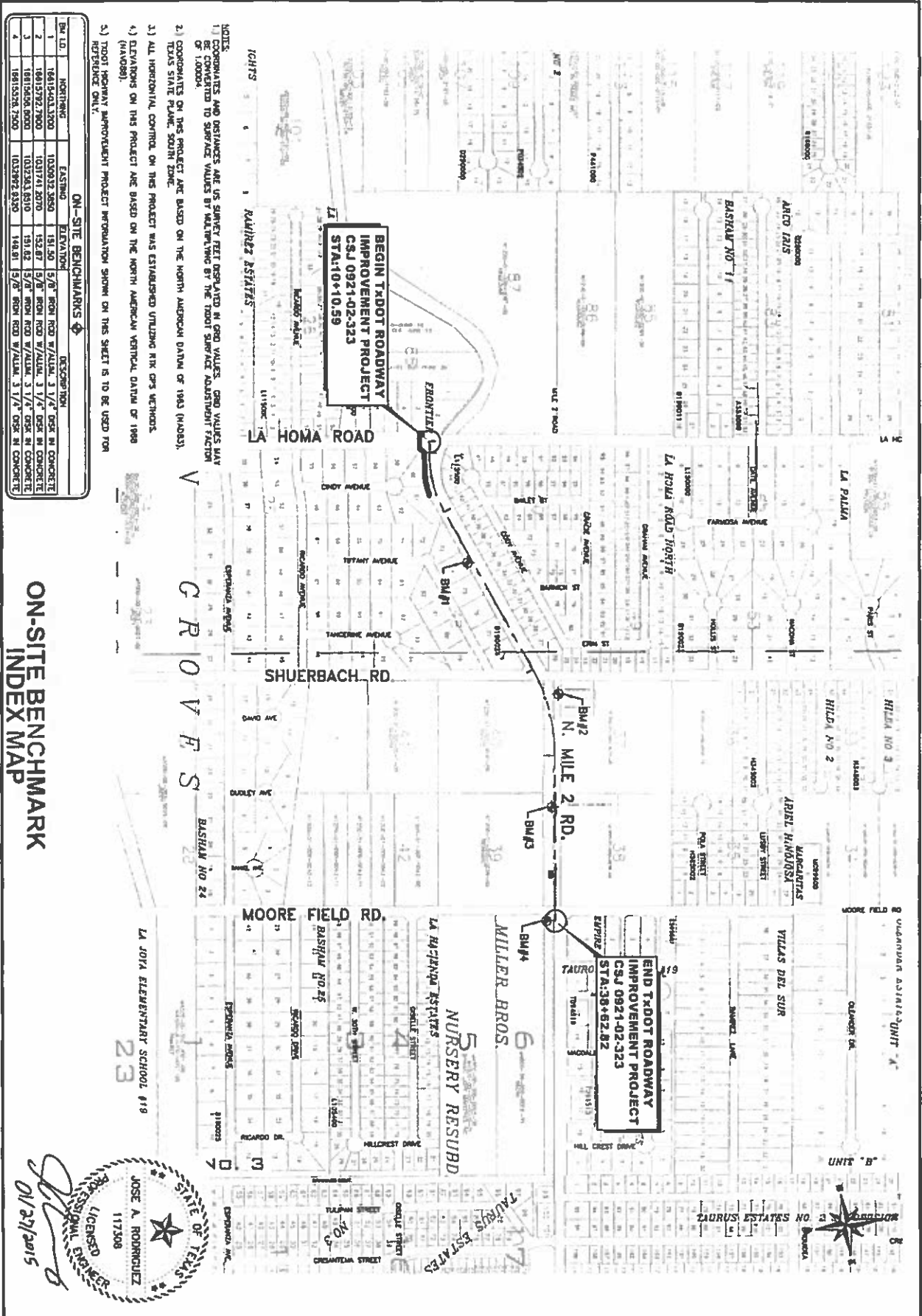
STATE OF TEXAS  
  
 JOSE A. RODRIGUEZ  
 117300  
 LICENSED PROFESSIONAL ENGINEER  
 01/21/2015

REVISIONS	
NO.	DESCRIPTION

PROJECT INDEX MAP  
SHEET NUMBER 03

2-MILE LINE ROAD  
12" WATER LINE  
ADJUSTMENTS PROJECT  
MISSION, TEXAS

**SAMES** SAM Engineering & Surveying, Inc.  
 200 S. CAGG BLVD. TEL: (956) 702-8880  
 PEARL, TEXAS 78277 FAX: (956) 702-8883  
TE XAS REG 00121803 ENGINEER V43 FIRM 7-12002

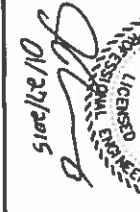


- NOTES:**
- 1) COMPUTATIONS AND DISTANCES ARE IN SI UNITS. FEET OPERATED IN GROUND VALUES. GROUND VALUES MAY BE CONVERTED TO SURFACE VALUES BY MULTIPLYING BY THE TYPICAL SURFACE ADJUSTMENT FACTOR OF 1.00004.
  - 2) CORRECTIONS ON THIS PROJECT ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83). LOCAL STATE PLANE SOUTH ZONE.
  - 3) ALL HORIZONTAL CONTROL ON THIS PROJECT WAS ESTABLISHED UTILIZING NIKK CP3 METHODS (NAD83).
  - 4) ELEVATIONS ON THIS PROJECT ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
  - 5) TYPICAL ROADWAY IMPROVEMENT PROJECT INFORMATION SHOWN ON THIS SHEET IS TO BE USED FOR REFERENCE ONLY.

**ON-SITE BENCHMARKS**

B.M. NO.	HORIZONTAL	EASTING	ELEVATION	DESCRIPTION
1	1861502.1300	1030922.2650	151.50	5/8" IRON ROD 3/4" DIA. IN CONCRETE
2	1861572.7800	1031741.2070	152.87	5/8" IRON ROD 3/4" DIA. IN CONCRETE
3	1861506.8000	1032343.8310	151.82	5/8" IRON ROD 3/4" DIA. IN CONCRETE
4	1861526.7300	1032872.8350	148.81	5/8" IRON ROD 3/4" DIA. IN CONCRETE

**ON-SITE BENCHMARK INDEX MAP**

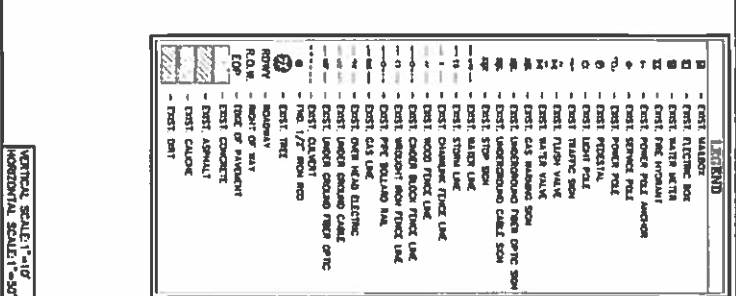
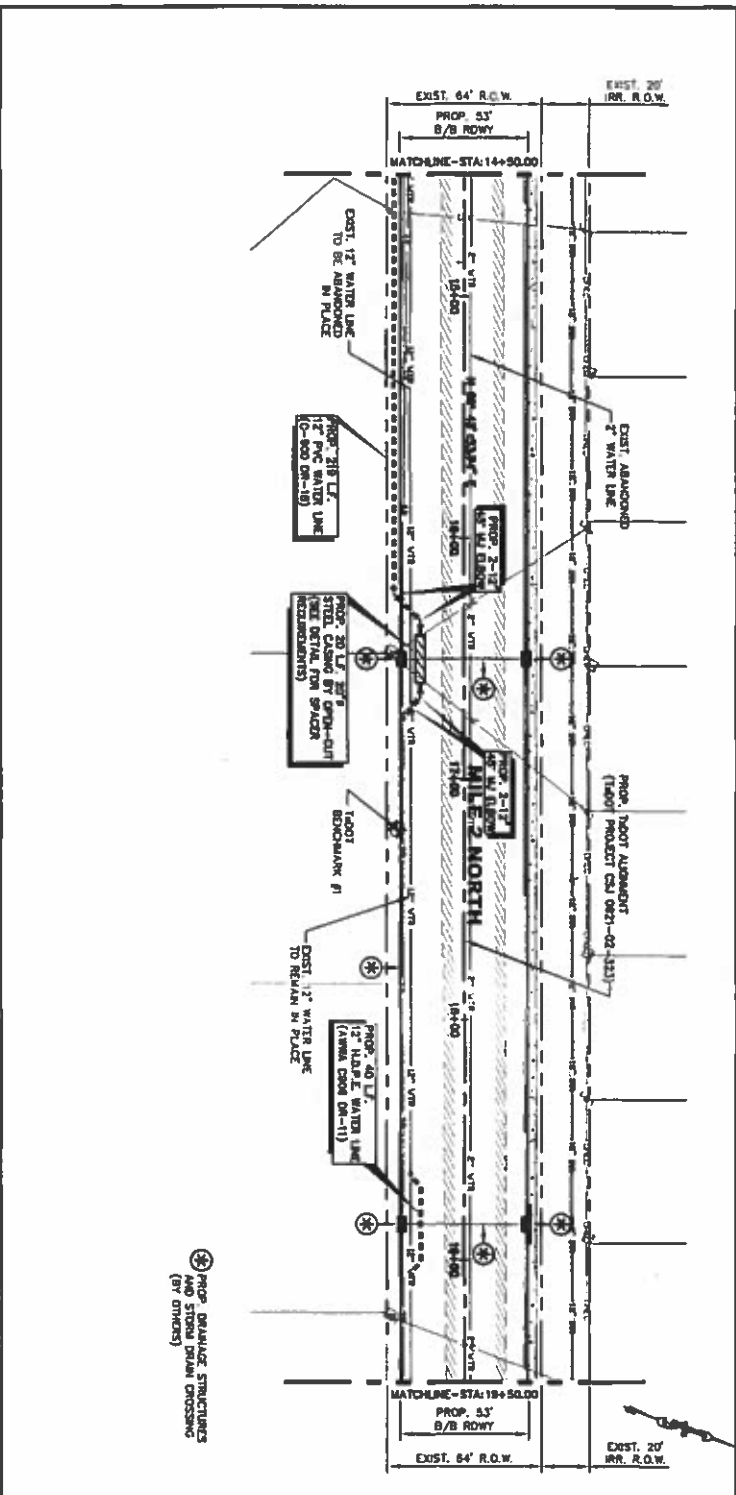
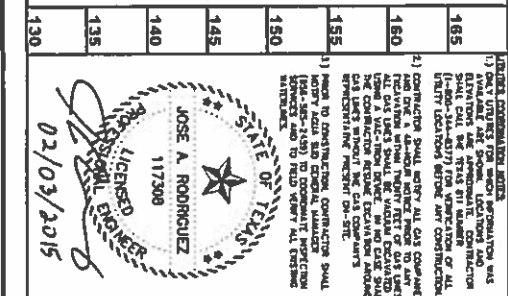
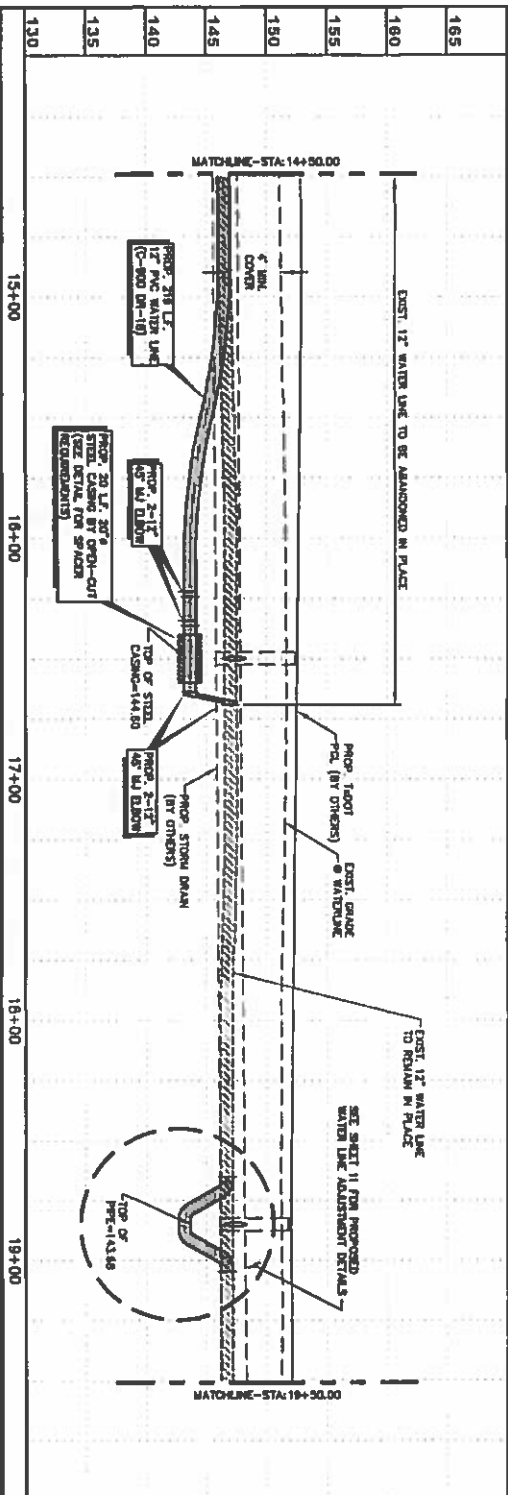


NO.	REVISION	DATE

**2-MILE LINE ROAD  
12" WATER LINE  
ADJUSTMENTS PROJECT  
MISSION, TEXAS**

**SAMES** SAM Engineering & Surveying, Inc.  
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 FAX: (956) 702-0883  
 TEXAS REG. CERTIFIED ENGINEER 19943 PPM  
 P. 1/2008





NO.	REVISION	DATE
1	ISSUED FOR PERMIT	02/03/2015

**2-MILE LINE ROAD  
12" WATER LINE  
ADJUSTMENTS PROJECT  
MISSION, TEXAS**

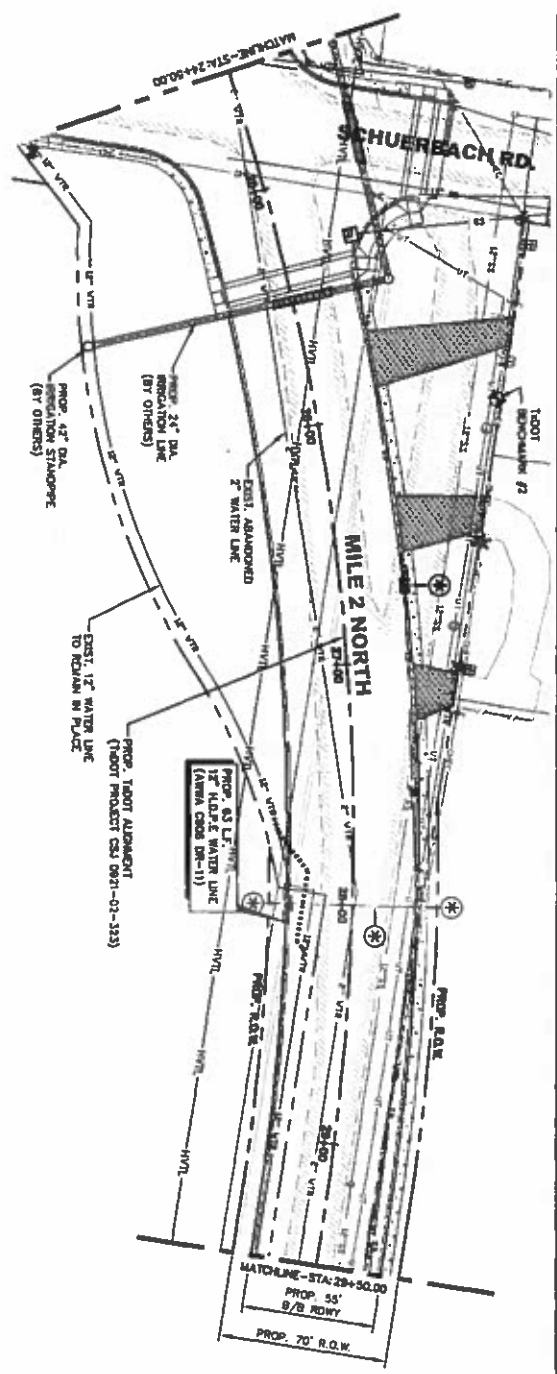
**SAMES** SAM Engineering & Surveying, Inc.  
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 PRARR, TEXAS 75877 FAX: (956) 702-8883  
 TEXAS REGISTERED ENGINEER ROAD FORM P-10022

PROJECT NAME: 2-MILE LINE ROAD 12" WATER LINE ADJUSTMENTS PROJECT  
 STA. 14+50.00-19+50.00  
 SHEET NUMBER: 08

DATE: 02/03/2015  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

PROJECT NO.: 15-000  
 SHEET NO.: 08

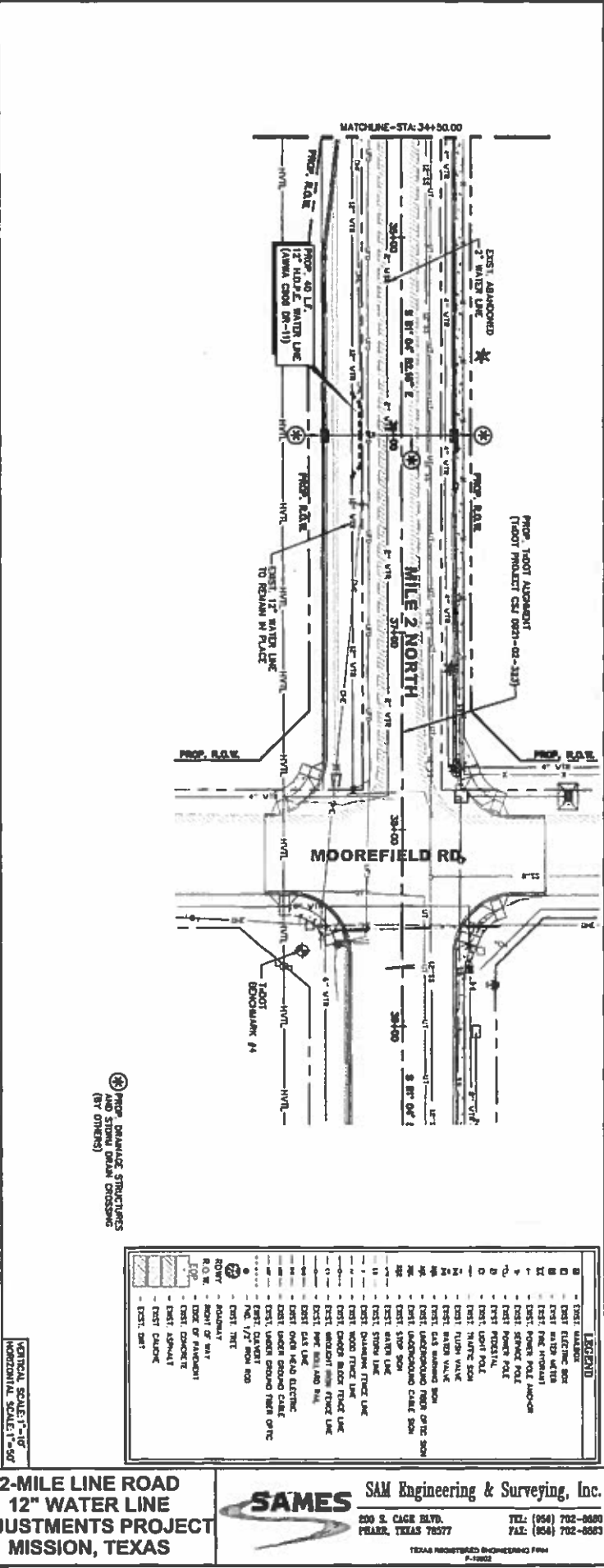
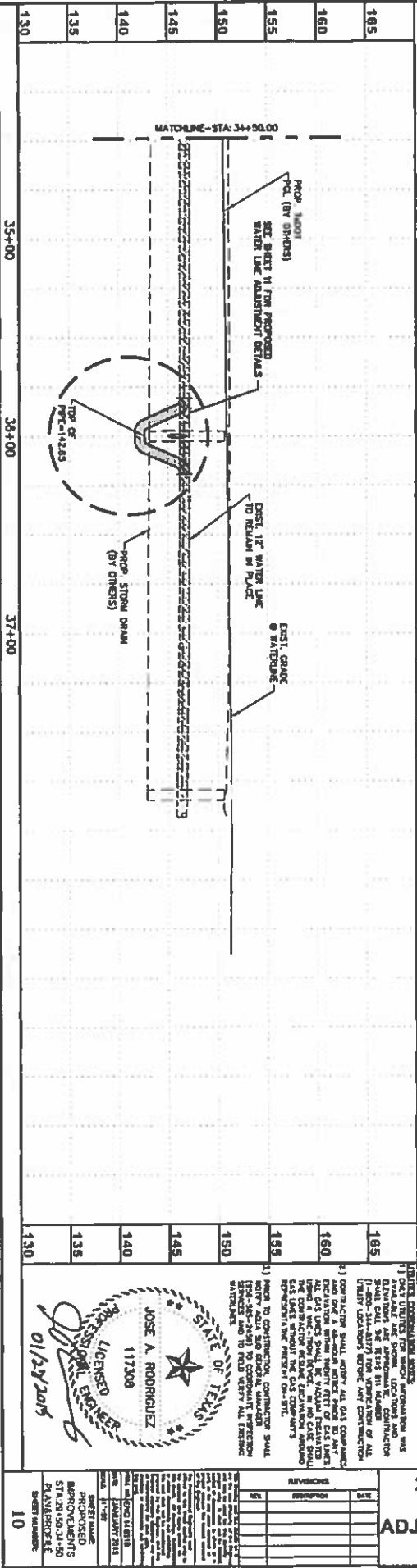




⊕ PROP. DRAINAGE STRUCTURES AND STORM DRAIN CROSSING (BY OTHERS)

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238	EXIST. 651\"/>
239	EXIST. 654\"/>
240	EXIST. 657\"/>
241	EXIST. 660\"/>
242	EXIST. 663\"/>
243	EXIST. 666\"/>
244	EXIST. 669\"/>
245	EXIST. 672\"/>
246	EXIST. 675\"/>
247	EXIST. 678\"/>
248	EXIST. 681\"/>
249	EXIST. 684\"/>
250	EXIST. 687\"/>
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252	EXIST. 693\"/>
253	EXIST. 696\"/>
254	EXIST. 699\"/>
255	EXIST. 702\"/>
256	EXIST. 705\"/>
257	EXIST. 708\"/>
258	EXIST. 711\"/>
259	EXIST. 714\"/>
260	EXIST. 717\"/>
261	EXIST. 720\"/>
262	EXIST. 723\"/>
263	EXIST. 726\"/>
264	EXIST. 729\"/>
265	EXIST. 732\"/>
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268	EXIST. 741\"/>
269	EXIST. 744\"/>
270	EXIST. 747\"/>
271	EXIST. 750\"/>
272	EXIST. 753\"/>
273	EXIST. 756\"/>
274	EXIST. 759\"/>
275	EXIST. 762\"/>
276	EXIST. 765\"/>
277	EXIST. 768\"/>
278	EXIST. 771\"/>
279	EXIST. 774\"/>
280	EXIST. 777\"/>
281	EXIST. 780\"/>
282	EXIST. 783\"/>
283	EXIST. 786\"/>
284	EXIST. 789\"/>
285	EXIST. 792\"/>
286	EXIST. 795\"/>
287	EXIST. 798\"/>
288	EXIST. 801\"/>
289	EXIST. 804\"/>
290	EXIST. 807\"/>
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292	EXIST. 813\"/>
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301	EXIST. 840\"/>
302	EXIST. 843\"/>
303	EXIST. 846\"/>
304	EXIST. 849\"/>
305	EXIST. 852\"/>
306	EXIST. 855\"/>
307	EXIST. 858\"/>
308	EXIST. 861\"/>
309	EXIST. 864\"/>
310	EXIST. 867\"/>
311	EXIST. 870\"/>
312	EXIST. 873\"/>
313	EXIST. 876\"/>
314	EXIST. 879\"/>
315	EXIST. 882\"/>
316	EXIST. 885\"/>
317	EXIST. 888\"/>
318	EXIST. 891\"/>
319	EXIST. 894\"/>
320	EXIST. 897\"/>
321	EXIST. 900\"/>
322	EXIST. 903\"/>
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354	EXIST. 999\"/>
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388	EXIST. 1101\"/>
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392	EXIST. 1113\"/>
393	EXIST. 1116\"/>
394	EXIST. 1119\"/>
395	EXIST. 1122\"/>
396	EXIST. 1125\"/>
397	EXIST. 1128\"/>
398	EXIST. 1131\"/>
399	EXIST. 1134\"/>
400	EXIST. 1137\"/>
401	EXIST. 1140\"/>
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453	EXIST. 1296\"/>
454	EXIST. 1





PROJ. DRAINAGE STRUCTURES AND STORM DRAIN CROSSING (BY OTHERS)

**LEGEND**

- 1 - EXIST. WATER MAIN
- 2 - EXIST. ELECTRIC BOX
- 3 - EXIST. WATER METER
- 4 - EXIST. FIRE HYDRANT
- 5 - EXIST. POWER POLE AND/OR
- 6 - EXIST. SERVICE POLE
- 7 - EXIST. POWER POLE
- 8 - EXIST. POWER POLE
- 9 - EXIST. POWER POLE
- 10 - EXIST. POWER POLE
- 11 - EXIST. SERVICE POLE
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- 100 - EXIST. SERVICE POLE

**VERTICAL SCALE: 1"=10'**

**PROPOSED**

**12" WATER LINE**

**ADJUSTMENTS PROJECT**

**MISSION, TEXAS**

**JOSE A. RODRIGUEZ**  
 LICENSED ENGINEER  
 117306  
 01/27/2015

**STATE OF TEXAS**

**PROPOSED**

**12" WATER LINE**

**ADJUSTMENTS PROJECT**

**MISSION, TEXAS**

**10**

**SAMES** SAM Engineering & Surveying, Inc.

200 S. CAGE BLVD.  
 PRATER, TEXAS 76577

TEL: (954) 702-8880  
 FAX: (954) 702-8883

TEXAS REGISTERED ENGINEERING FIRM  
 P-10002