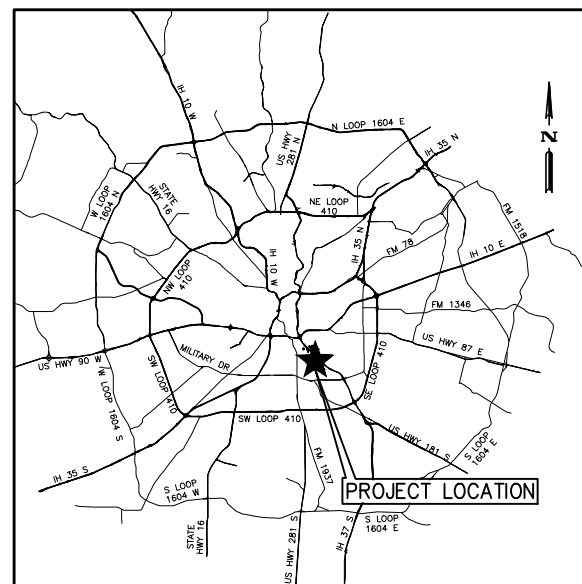


SAN ANTONIO WATER SYSTEM

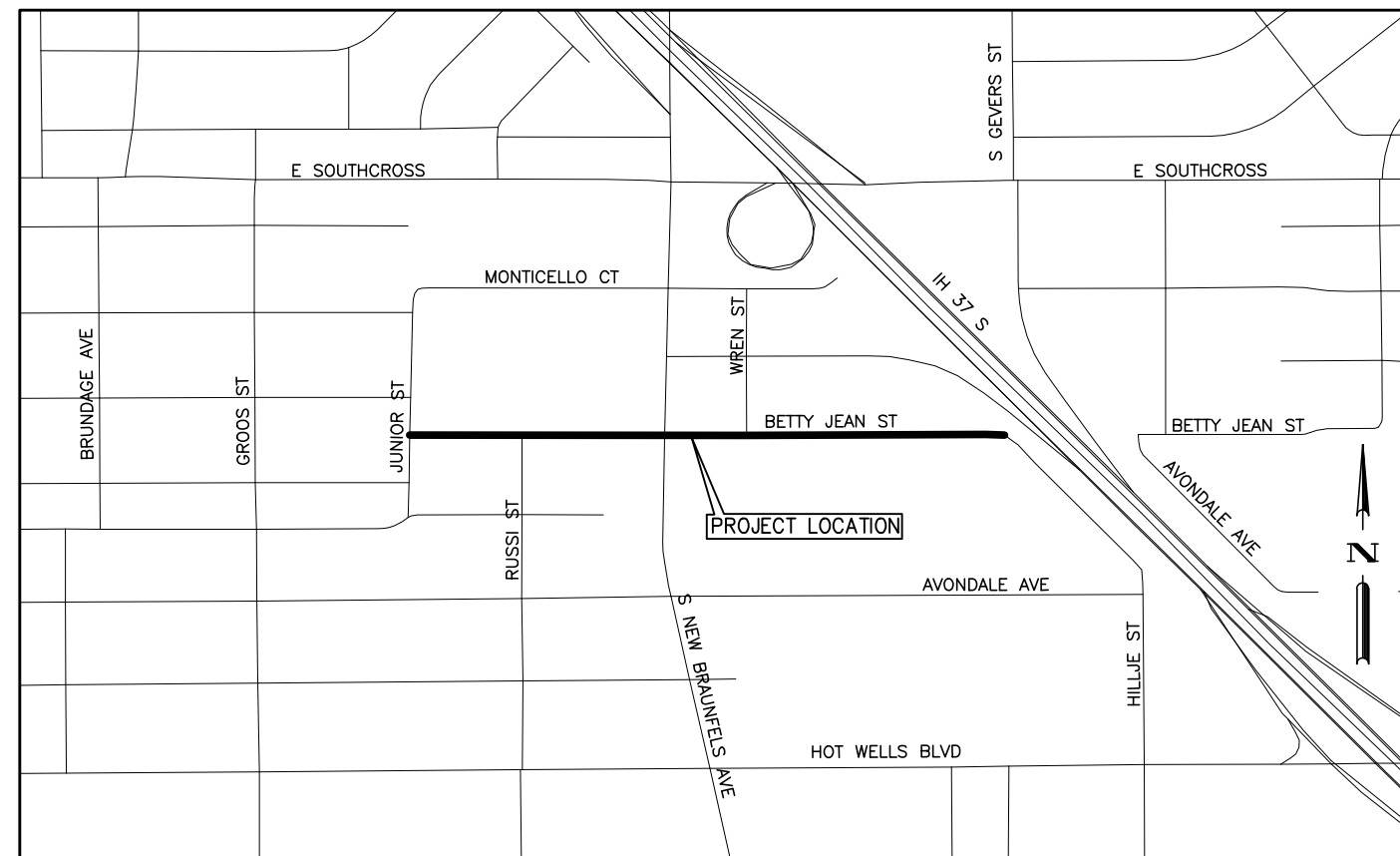
SAWS WATER JOB NO. 17-5112

2018 SMP BETTY JEAN FROM JUNIOR ST TO HILLJE ST

100% DESIGN SUBMITTAL



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

SHEET INDEX

NO.	SHEET DESCRIPTION
1	COVER SHEET
2	CONSTRUCTION NOTES AND QUANTITY SUMMARY
3	OVERALL PROJECT LAYOUT AND SURVEY CONTROL
4	WATER IMPROVEMENTS LINE A STA 1+30 TO STA 4+00
5	WATER IMPROVEMENTS LINE A STA 4+00 TO STA 7+00
6	WATER IMPROVEMENTS LINE A STA 7+00 TO STA 10+00
7	WATER IMPROVEMENTS LINE A STA 10+00 TO STA 14+00
8	WATER IMPROVEMENTS LINE A S NEW BRAUNFELS AVE
9	WATER IMPROVEMENTS LINE A STA 14+00 TO STA 18+00
10	WATER IMPROVEMENTS LINE A STA 18+00 TO STA 22+00
11	WATER IMPROVEMENTS LINE A STA 22+00 TO STA 25+39
12	TREE PRESERVATION PLAN



11/5/18


Brown & Gay Engineers, Inc.
F-1046



BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, Tx 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

BGE, INC. S:\TX\Projects\SAWS\SAWS - Betty Jean\03_CADD\01_Sheets\17-5112_Sheet11.dwg Jan 04, 2018 11:02am acalderon

GENERAL SECTION

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM, TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
- B. CURRENT TxDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
- C. CURRENT SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR CONSTRUCTION."
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.

3. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500, AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 72 HOURS PRIOR TO EXCAVATION.

4. LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

SAN ANTONIO WATER SYSTEM:
SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES

COSA DRAINAGE 210-207-8048
COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720
TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.

7. ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.

8. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

9. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

10. ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.

11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION. THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS (NSPI).

13. POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.

14. CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF DISTURBANCES.

WATER SECTION:

15. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
SAWS PRODUCTION CONTROL CENTER 210-233-2016

16. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS, PAYMENT FOR SUCH WORK IS TO BE MADE UNDER ITEM NO. 3000, "HANDLING ASBESTOS CEMENT PIPE".

17. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)

18. REPLACEMENT OF WATER METER BOXES ARE TO BE AT THE DISCRETION OF THE SAWS INSPECTOR.

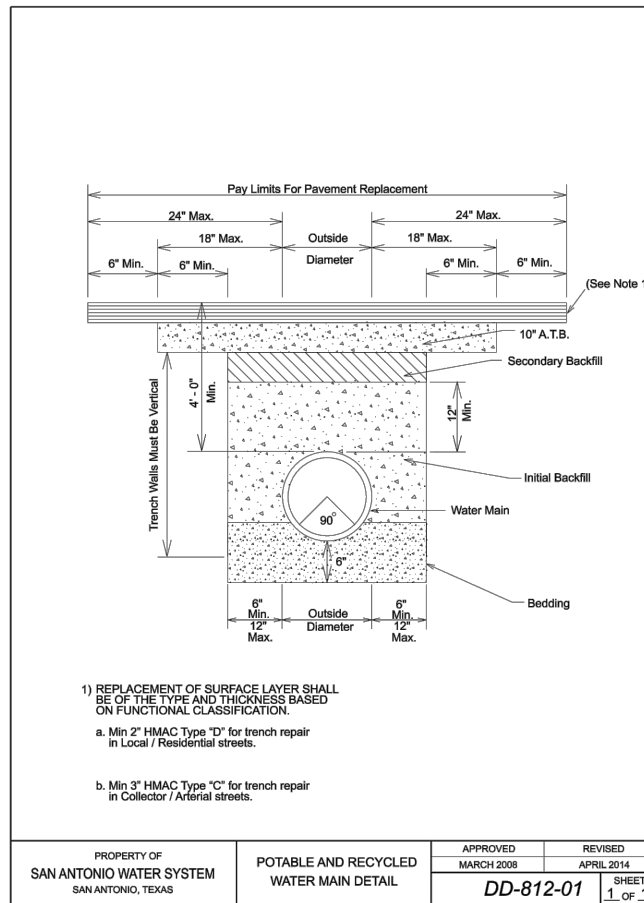
19. CONTRACTOR TO PLACE WATER METER BOXES WITHIN RIGHT-OF-WAY. AT PROPERTY LINE.

20. CONTRACTOR SHALL RESTRAIN ALL PROPOSED PIPES, VALVES AND FITTINGS AT NO ADDITIONAL COST (RL=RESTRAINT LENGTH).

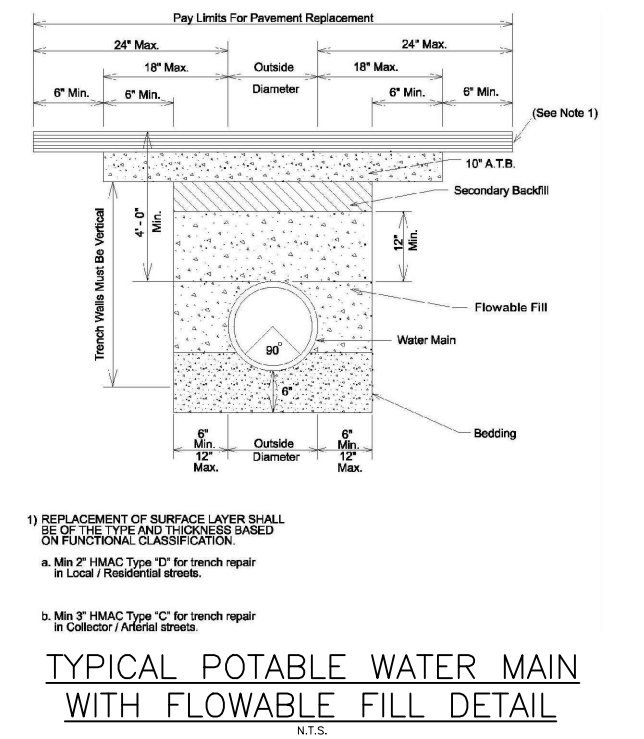
21. FLOWABLE FILL TO FOLLOW SAWS STD DD-858-01 DETAIL.

22. CONTRACTOR TO REMOVE ABANDONED EXISTING WATER VALVES.

23. CONTRACTOR TO PROTECT EXIST WATERLINE DURING CONSTRUCTION AT NO COST TO SAWS.



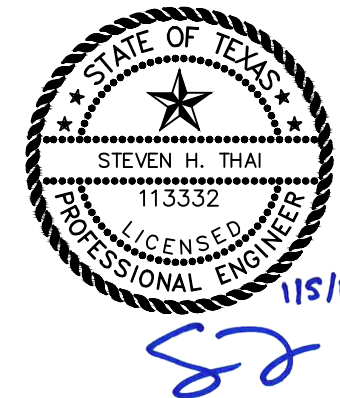
PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	POTABLE AND RECYCLED WATER MAIN DETAIL	APPROVED MARCH 2008	REVISED APRIL 2014
		DD-812-01	SHEET 1 OF 1



TYPICAL POTABLE WATER MAIN WITH FLOWABLE FILL DETAIL
N.T.S.

HORIZONTAL ALIGNMENT DATA						
LINE NO.	DISTANCE	BEARING	STARTING STATION	STARTING NORTHING & EASTING	ENDING STATION	ENDING NORTHING & EASTING
L1	1104.46'	N89° 59' 02"E	1+00.00	N=13683377.63, E=2138981.67	12+04.46	N=13683377.94, E=2140086.13
L2	6.39'	S45° 04' 58"E	12+04.46	N=13683377.94, E=2140086.13	12+10.84	N=13683373.43, E=2140090.65
L3	1315.35'	N89° 54' 24"E	12+10.84	N=13683373.43, E=2140090.65	25+26.20	N=13683375.58, E=2141406.00
L4	5.66'	N44° 54' 24"E	25+26.20	N=13683375.58, E=2141406.00	25+31.85	N=13683379.58, E=2141410.00
L5	2.00'	N89° 54' 24"E	25+31.85	N=13683379.58, E=2141410.00	25+33.85	N=13683379.59, E=2141412.00

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
103	Remove Concrete Curb	LF	21
103	Remove Concrete Sidewalks and Driveways	SF	320
205	Hot Mix Asphaltic Pavement - Type D (2" Compacted Depth)	SY	267
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	1017
208	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2")	SY	260
413	Flowable Fill	CY	75
500	Concrete Curb	LF	21
502	Concrete Sidewalks	SY	26
503	Portland Cement Concrete Driveways	SY	10
513	Removing and Relocating Mailboxes	EA	1
550	Trench Protection	LF	2496
814	6" DI Waterline (Restrained)	LF	15
818	8" PVC Waterline (Restrained)	LF	2481
824	Relay 3/4" Long Service	EA	28
824	Relay 3/4" Short Service	EA	33
824	Relay 1" Long Service	EA	1
828	6" Gate Valve	EA	1
828	8" Gate Valve	EA	8
831	6" X 6" Cut-In Tee	EA	1
833	New Meter Box	EA	63
834	Fire Hydrant	EA	3
836	Pipe Fittings, All Sizes & Types	TN	1.22
840	6" Water Tie-Ins	EA	2
840	8" Water Tie-Ins	EA	3
841	Hydrostatic Testing	EA	5
844	2" Blow-off, Temporary	EA	5
1020	8" Water Main Break/Leak Repairs, all types	EA	2
3000	Removal, Transportation and Disposal of various sizes of A.C. Pipe	LF	39



Brown & Gay Engineers, Inc.
F-1046

BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, Tx 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
CONSTRUCTION NOTES AND
QUANTITY SUMMARY

DEVELOPER: _____
CONT. _____ BUDGET PROJ. _____

SUBMITTED _____
APPROVED _____

MAP No. 170558 AND 172558
SECT. No. _____ SHEET 2
DR. _____ CK. _____ JOB No. 17-5112 OF 12

BGE, INC. C:\Projects\BGS\SAWS - Betty Jean\03_CADD\01_Sheets\BGS_SAWs_Water\01_Sheets2 GCN.dwg Jan 04, 2018 - 11:02am acdtkeron

CAUTION !!!
EXISTING UNDERGROUND GAS AND OVERHEAD ELECTRIC LINES.

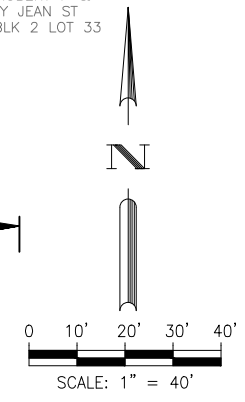
TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OF SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

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NOTE:
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TREE PROTECTION NOTE:
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Prop ID:396775
URBINA JOSE LUIS & 542
MOUNT VERNON CT NCB
7624 BLK 22 LOT 11

STA 1+00.00
AFTER RELEASE FOR SERVICE
TIE PROP 8" PVC DR-18 (C-900) TO
EXIST 6" DI W
INSTALL:
1 - 6" X 6" CUT-IN TEE, MJ
1 - 8" X 6" REDUCER, MJ
1-8" GATE VALVE, MJ
1-6" VALVE BOX, COMP
(SAWS STD DD-839-08)

MACHINE CHLORINATION:
2 - 1" CORP STOP, CC X IP
2 - 1 1/4" SOLID CAPS, THR
2 - 1" COPPER TUBING, CUT AS REQUIRED
2 - 1" COMP X 1 1/4" COUPLING, CURB STOP
(SAWS STD DD-844-01)

WATER SHUT OFF
VALVE APPROX 175 LF

2" TEMPORARY BLOWOFF
8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
(SAWS STD DD-844-01)
(SEE SHEET 2 OF 4)

WATER SHUT OFF
VALVE APPROX 200 LF

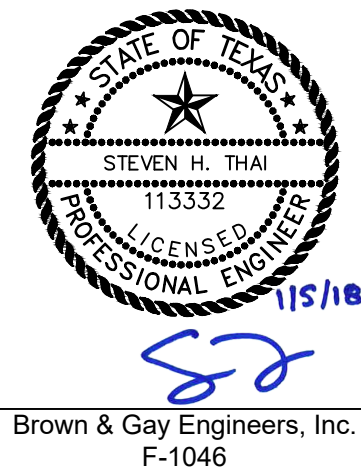
ABANDON EXIST 6" DI WATER MAIN IN PLACE (NSPI)
SAWS SHALL MACHINE CHLORINATE NEW 8" PVC MAIN

MATCH LINE STA 4+00
SEE SHIT 5

LEGEND
[Symbol] FLOWABLE FILL

BGE, INC. 51742\proj\BETTY JEAN WATER PLAN.dwg Jan 04, 2018-11:03am asallidson

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	122
413	Flowable Fill	CY	2
550	Trench Protection	LF	300
818	8" PVC Waterline (Restrained)	LF	300
824	Relay 3/4" Long Service	EA	3
824	Relay 3/4" Short Service	EA	4
828	8" Gate Valve	EA	1
831	6" X 6" Cut-In Tee	EA	1
833	New Meter Box	EA	7
836	Pipe Fittings, All Sizes & Types	TN	0.07
840	6" Water Tie-Ins	EA	1
841	Hydrostatic Testing	EA	1
844	2" Blow-off, Temporary	EA	1



LEGEND

- PROP. WATER MAIN [Symbol]
- PROP. SAN SERVICE [Symbol]
- CLEANOUT [Symbol]
- EXIST. WATER MAIN [Symbol]
- GAS MAIN [Symbol]
- SANITARY SEWER [Symbol]
- STORM SEWER [Symbol]
- UTILITY POLE LINE [Symbol]
- ELECTRIC CABLE [Symbol]
- TELEPHONE CABLE [Symbol]
- DUAL BRANCH SERV. [Symbol]
- NEW UNMETERED SERVICE:
 - 3/4" SINGLE [Symbol]
 - 1" DUAL [Symbol]
- SERVICE RECONNECT:
 - 3/4" [Symbol]
 - 1" OR LARGER [Symbol]
- SERVICE RELAY:
 - 3/4" [Symbol]
 - 1" OR LARGER [Symbol]
- SERVICE RELOCATE:
 - 3/4" [Symbol]
 - 1" OR LARGER [Symbol]
- RELOCATE METER [Symbol]
- NEW SERVICE:
 - 3/4" [Symbol]
 - 1" OR LARGER [Symbol]

BGE BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, Tx 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
STA 1+30 TO STA 4+00

DEVELOPER: [Signature]
CONT. [Signature] BUDGET PROJ.
SUBMITTED [Signature]
APPROVED [Signature]
MAP No. 170558 AND 172558 SHEET 4
SECT. No. [Signature] 4
DR. [Signature] CK. [Signature] JOB No. 17-5112 OF 12

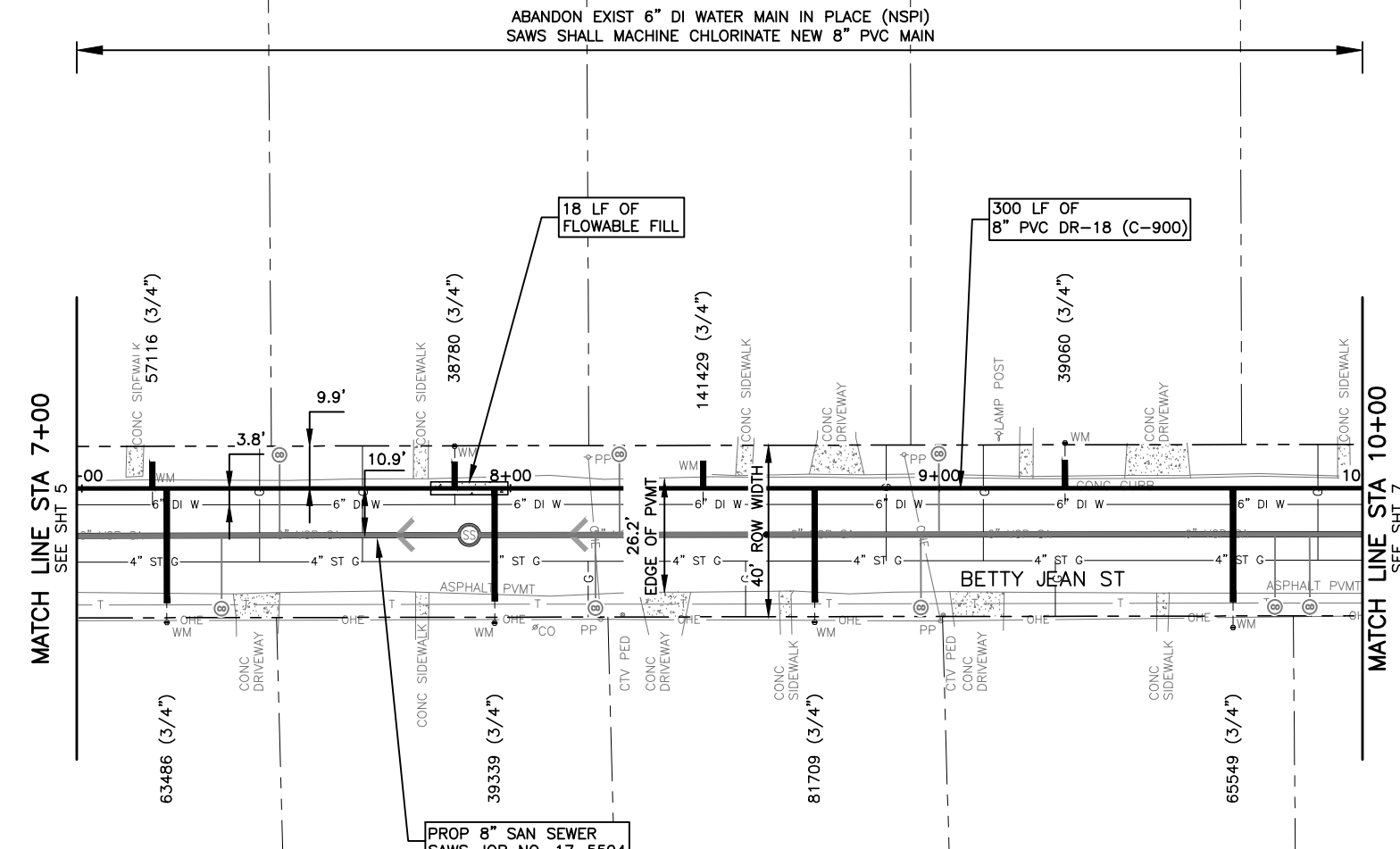
Prop ID:396115
VILLARREAL LINDA & VILLARREAL DANIEL
& VILLARREAL RAMON
203 BETTY JEAN ST
NCB 7584 BLK 2 LOT 29

Prop ID:396114
MALTOS JOSE E
205 BETTY JEAN ST
NCB 7584 BLK 2 LOT 28

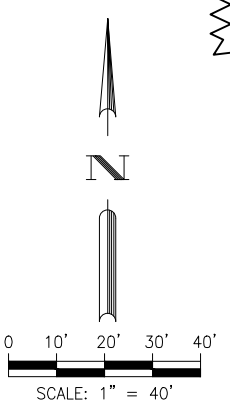
Prop ID:396113
CARRANZA BELEN R
207 BETTY JEAN ST
NCB 7584 BLK 2 LOT 27

Prop ID:396112
STAVINOHA ESTELLA J
209 BETTY JEAN ST
NCB 7584 BLK 2 LOT 26

Prop ID:396111
EVANS RENABETH
211 BETTY JEAN ST
NCB 7584 BLK 2 LOT 25



CAUTION !!!
EXISTING
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OVERHEAD ELECTRIC LINES.



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LEGEND

FLOWABLE FILL

Prop ID:396038
EVANS RENABETH
202 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 172.8 FT OF 2

Prop ID:396068
ORTIZ OSCAR R
204 BETTY JEAN ST
NCB 7582 BLK 5 LOT 32

Prop ID:396039
ROSALES GEORGE & RITA
206 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 140 FEET OF 4

Prop ID:396040
MCFALL MICHAEL KELLY
208 BETTY JEAN ST
NCB 7582 BLK 5 LOT 5

Prop ID:396041
NG EDWARD & ESTHER
210 BETTY JEAN ST
NCB 7582 BLK 5 LOT 6

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	122
413	Flowable Fill	CY	2
500	Concrete Curb	LF	2
550	Trench Protection	LF	300
818	8" PVC Waterline (Restrained)	LF	300
824	Relay 3/4" Long Service	EA	4
824	Relay 3/4" Short Service	EA	4
833	New Meter Box	EA	8



Brown & Gay Engineers, Inc.
F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
- SERVICE RECONNECT:
- 3/4"
- 1" OR LARGER
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

BGE BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, Tx 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
STA 7+00 TO STA 10+00

DEVELOPER: _____

CONT. BUDGET PROJ. _____

SUBMITTED _____

APPROVED _____

MAP No. 170558 AND 172558	SHEET
SECT. No.	6
DR. CK. JOB No. 17-5112	Of 12

BGE, INC. S:\TX\proj\2018\170558\172558\BETTY JEAN WATER PLAN.dwg Jan 04, 2018-11:03am asallidson

Prop ID:396111
EVANS RENABETH
211 BETTY JEAN ST
NCB 7584 BLK 2 LOT 25

Prop ID:396110
QUINTERO MICHELLE A
213 BETTY JEAN ST
NCB 7584 BLK 2 LOT SW
146.45FT OF 24 2010-SPLIT PER
CR# 21930 RECEIVED 9/23/2009

Prop ID:396108
BAUMANN DORIS E
217 BETTY JEAN ST
NCB 7584 BLK 2 LOT E IRR 62.17 FT
OF 22

Prop ID:396107
OLVERA JUNIOR G
219 BETTY JEAN ST
NCB 7584 BLK 2 LOT 21

Prop ID:396106
MARTINEZ GABRIEL A &
221 BETTY JEAN ST
NCB 7584 BLK 2 LOT 20

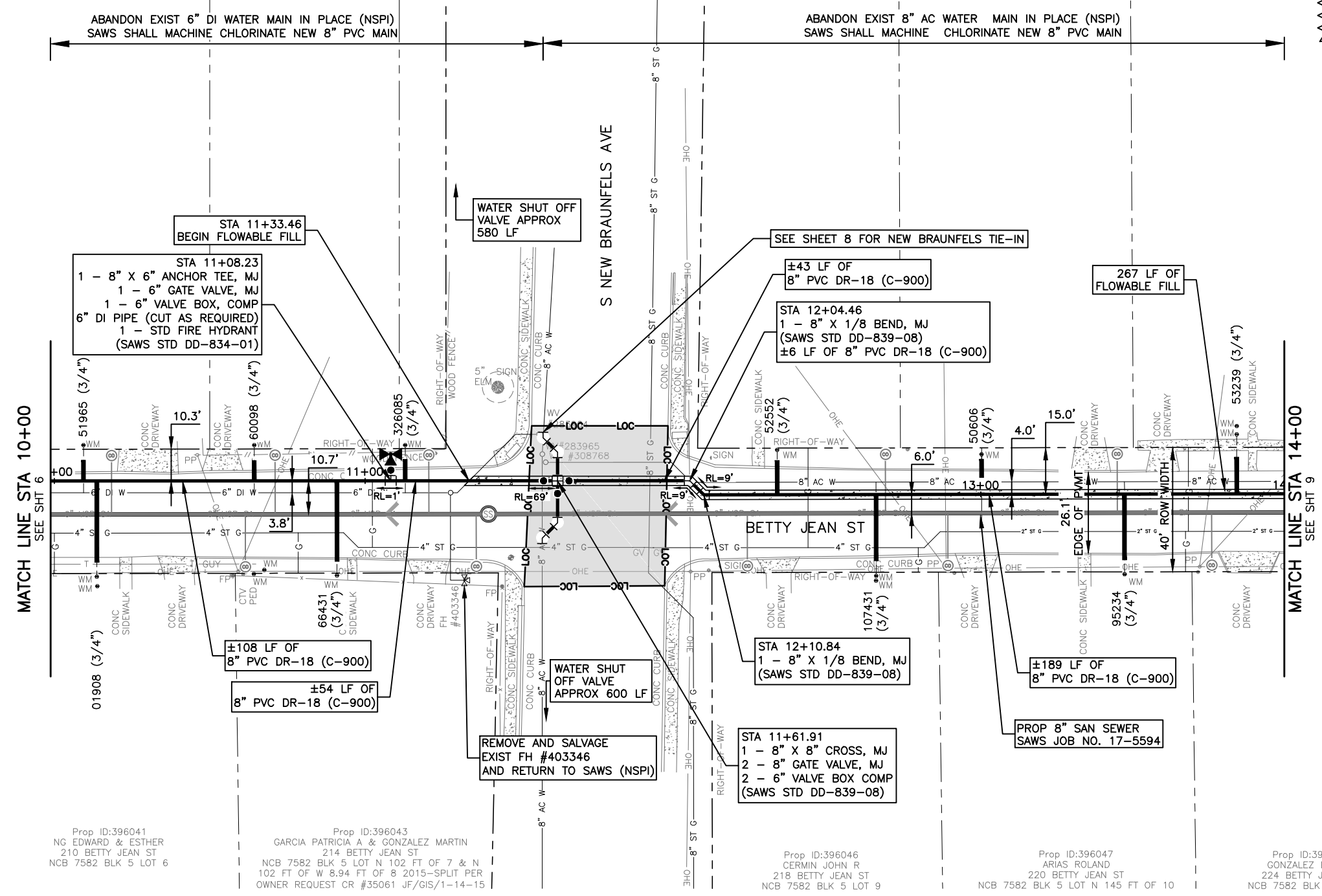
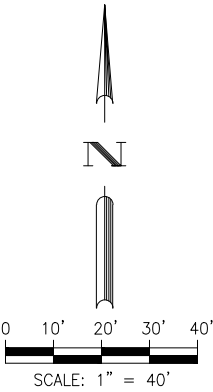
CAUTION !!!
EXISTING
UNDERGROUND GAS AND
OVERHEAD ELECTRIC LINES.

TRENCH EXCAVATION SAFETY PROTECTION:
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ASBESTOS CEMENT (AC) PIPE:
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NOTE:
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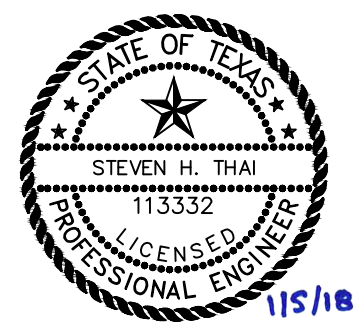
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LEGEND

- FLOWABLE FILL
- 2" MILL AND 2" TYPE D ASPHALT

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type D (2" Compacted Depth)	SY	260
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	163
208	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2")	SY	260
413	Flowable Fill	CY	24
500	Concrete Curb	LF	5
550	Trench Protection	LF	400
818	8" PVC Waterline (Restrained)	LF	400
824	Relay 3/4" Long Service	EA	4
824	Relay 3/4" Short Service	EA	6
828	8" Gate Valve	EA	2
833	New Meter Box	EA	10
834	Fire Hydrant	EA	1
836	Pipe Fittings, All Sizes & Types	TN	0.23
841	Hydrostatic Testing	EA	1
1020	8" Water Main Break/Leak Repairs, all types	EA	1



Brown & Gay Engineers, Inc.
F-1046

- LEGEND**
- PROP. WATER MAIN
 - PROP. SAN SERVICE
 - CLEANOUT
 - EXIST. WATER MAIN
 - GAS MAIN
 - SANITARY SEWER
 - STORM SEWER
 - UTILITY POLE LINE
 - ELECTRIC CABLE
 - TELEPHONE CABLE
 - DUAL BRANCH SERV.
 - NEW UNMETERED SERVICE:
 - 3/4" SINGLE
 - 1" DUAL
 - SERVICE RECONNECT:
 - 3/4"
 - 1" OR LARGER
 - SERVICE RELAY:
 - 3/4"
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TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date

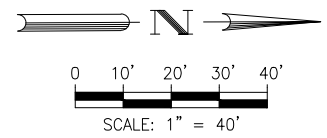
2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
STA 10+00 TO STA 14+00

DEVELOPER: _____
CONT. _____ BUDGET PROJ. _____
SUBMITTED _____
APPROVED _____
MAP No. 170558 AND 172558
SECT. No. _____ SHEET 7
DR. _____ CK. _____ JOB No. 17-5112 OF 12

BGE, INC. C:\TAC\Projects\SAWS\BETTY JEAN\WATER PLAN.dwg Jan 04, 2018-11:03am asakidoro

Prop ID:396041
NG EDWARD & ESTHER
210 BETTY JEAN ST
NCB 7582 BLK 5 LOT 6

Prop ID:396111
EVANS RENABETH
211 BETTY JEAN ST
NCB 7584 BLK 2 LOT 25



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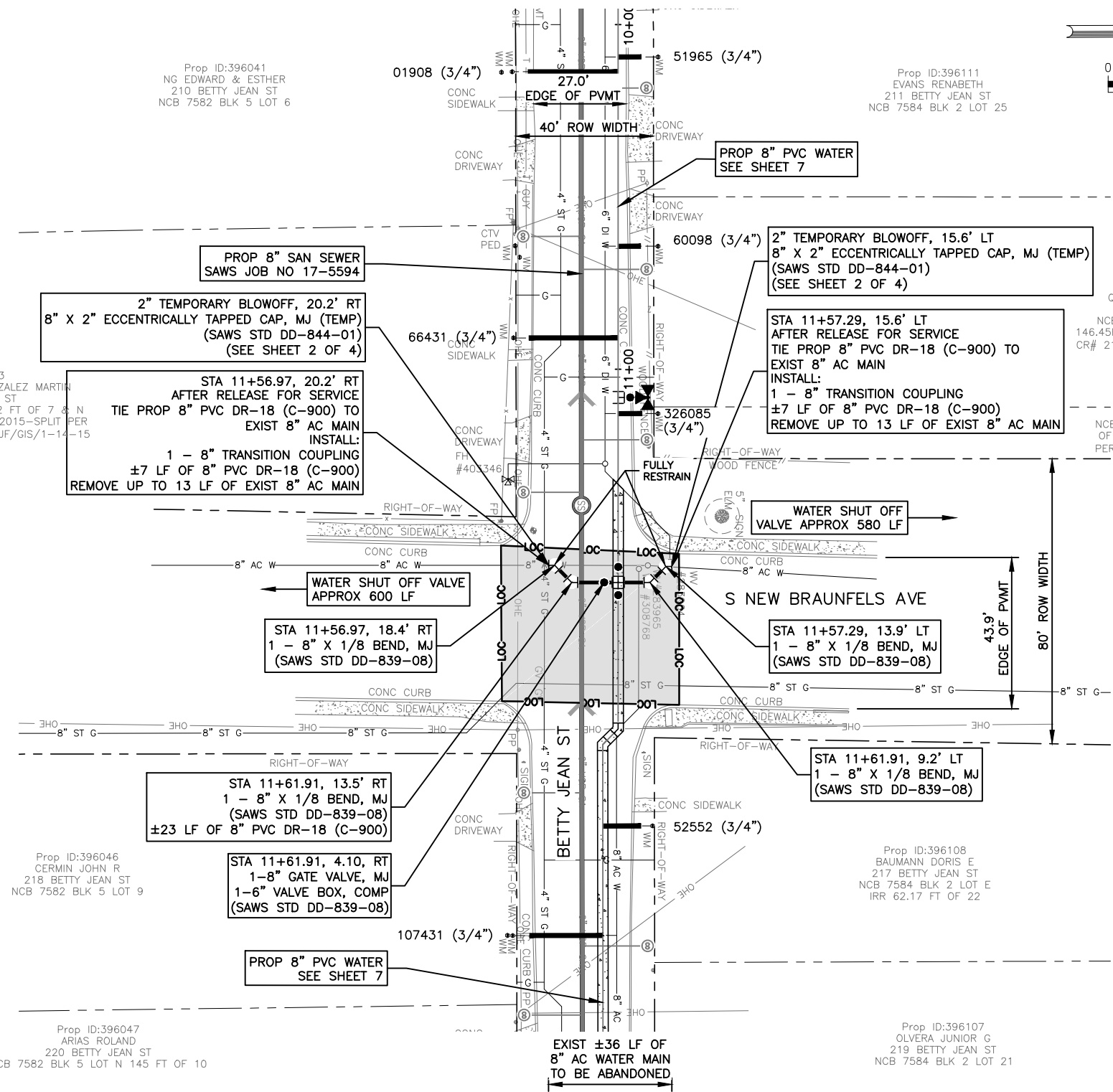
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LEGEND

- FLOWABLE FILL
- 2" MILL AND 2" TYPE D ASPHALT (QUANTITIES INCLUDED ON SHEET 7)



Prop ID:396043
GARCIA PATRICIA A & GONZALEZ MARTIN
214 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 102 FT OF 7 & N 102 FT OF W 8.94 FT OF 8 2015-SPLIT PER OWNER REQUEST CR #35061 JF/GIS/1-14-15

Prop ID:396110
QUINTERO MICHELLE A
213 BETTY JEAN ST
NCB 7584 BLK 2 LOT SW
146.45FT OF 24 2010-SPLIT PER CR# 21930 RECEIVED 9/23/2009

Prop ID:1142951
QUINTERO MICHELLE A
4521 S NEW BRAUNFELS AVE
NCB 7584 BLK 2 LOT NW 141.89FT OF 24 2010-NEW ACCT PER SPLIT PER CR# 21930 RECEIVED 9/23/09 FROM PID 396110

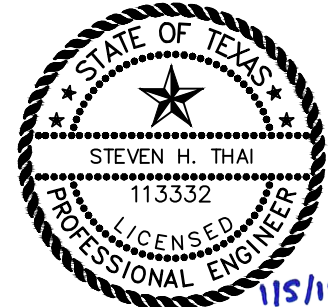
Prop ID:396046
CERMIN JOHN R
218 BETTY JEAN ST
NCB 7582 BLK 5 LOT 9

Prop ID:396108
BAUMANN DORIS E
217 BETTY JEAN ST
NCB 7584 BLK 2 LOT E
IRR 62.17 FT OF 22

Prop ID:396047
ARIAS ROLAND
220 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 145 FT OF 10

Prop ID:396107
OLVERA JUNIOR G
219 BETTY JEAN ST
NCB 7584 BLK 2 LOT 21

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	15
550	Trench Protection	LF	37
818	8" PVC Waterline (Restrained)	LF	37
828	8" Gate Valve	EA	1
836	Pipe Fittings, All Sizes & Types	TN	0.35
840	8" Water Tie-Ins	EA	2
841	Hydrostatic Testing	EA	1
844	2" Blow-off, Temporary	EA	2
3000	Removal, Transportation and Disposal of various sizes of A.C. Pipe	LF	26



Brown & Gay Engineers, Inc.
F-1046

- LEGEND**
- PROP. WATER MAIN
 - PROP. SAN SERVICE
 - CLEANOUT
 - EXIST. WATER MAIN
 - GAS MAIN
 - SANITARY SEWER
 - STORM SEWER
 - UTILITY POLE LINE
 - ELECTRIC CABLE
 - TELEPHONE CABLE
 - DUAL BRANCH SERV.
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 - 1" DUAL
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 - 3/4"
 - 1" OR LARGER
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 - NEW SERVICE:
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 - 1" OR LARGER

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No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
S NEW BRAUNFELS AVE

DEVELOPER: _____

CONT. _____ BUDGET PROJ. _____

SUBMITTED _____

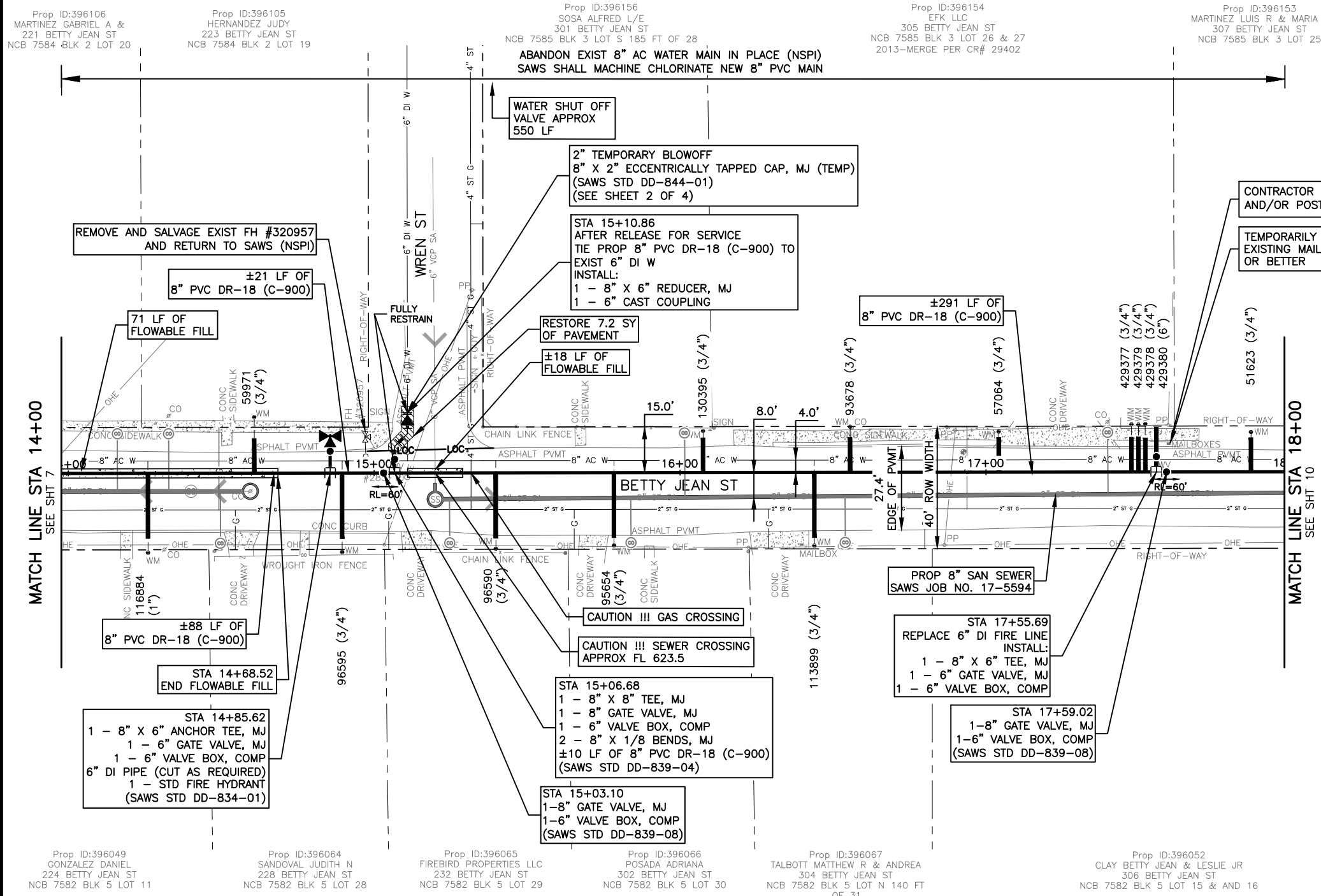
APPROVED _____

MAP No. 170558 AND 172558 SHEET 8

SECT. No. _____

DR. _____ CK. _____ JOB No. 17-5112 OF 12

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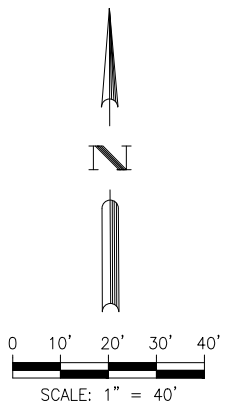
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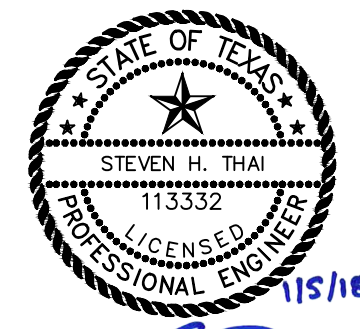
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LEGEND
 FLOWABLE FILL
 PAVEMENT RESTORATION

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type D (2" Compacted Depth)	SY	7
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	173
413	Flowable Fill	CY	8
513	Removing and Relocating Mailboxes	EA	1
550	Trench Protection	LF	425
814	6" DI Waterline (Restrained)	LF	15
818	8" PVC Waterline (Restrained)	LF	410
824	Relay 3/4" Long Service	EA	4
824	Relay 3/4" Short Service	EA	8
824	Relay 1" Long Service	EA	1
828	6" Gate Valve	EA	1
828	8" Gate Valve	EA	3
833	New Meter Box	EA	14
834	Fire Hydrant	EA	1
836	Pipe Fittings, All Sizes & Types	TN	0.39
840	6" Water Tie-Ins	EA	1
841	Hydrostatic Testing	EA	1
844	2" Blow-off, Temporary	EA	1
1020	8" Water Main Break/Leak Repairs, all types	EA	1



Brown & Gay Engineers, Inc.
F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV. NEW UNMETERED SERVICE:
 - 3/4" SINGLE
 - 1" DUAL
- SERVICE RECONNECT:
 - 3/4"
 - 1" OR LARGER
- SERVICE RELAY:
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No.	Revision	Drawn	Approved	Date

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BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
STA 14+00 TO STA 18+00

DEVELOPER: _____
CONT. BUDGET PROJ.
SUBMITTED _____
APPROVED _____
MAP No. 170558 AND 172558 SHEET 9
SECT. No. _____ OF 12
DR. CK. JOB No. 17-5112

BGE, INC. S:\TX\proj\BETTY JEAN WATER PLAN.dwg Jan 04, 2018-11:03am asalderon

Prop ID:396153
MARTINEZ LUIS R & MARIA J
307 BETTY JEAN ST
NCB 7585 BLK 3 LOT 25

Prop ID:396152
JIMENEZ EDWARD E & MARISELA
309 BETTY JEAN ST
NCB 7585 BLK 3 LOT 24

Prop ID:396151
VIGIL FRANCISCO & ROXANN O
311 BETTY JEAN ST
NCB 7585 BLK 3 LOT 23

Prop ID:396150
CASTRO JULIO III & KATHERINE
313 BETTY JEAN ST
NCB 7585 BLK 3 LOT 22

Prop ID:396148
RODRIGUEZ MARIA TERESA
315 BETTY JEAN ST
NCB 7585 BLK 3 LOT 5 IRR 269.5 FT
OF 21

Prop ID:396147
CAMACHO ISIAH & OLGA G
317 BETTY JEAN ST
NCB 7585 BLK 3 LOT 5 IRR 252 FT
OF 20

Prop ID:396052
CLAY BETTY JEAN & LESLIE JR
306 BETTY JEAN ST
NCB 7582 BLK 5 LOT 15 & AND 16

Prop ID:396053
ZAMARRIPA PEDRO B & CHRISTI
308 BETTY JEAN ST
NCB 7582 BLK 5 LOT 17

Prop ID:396054
MEDINA MONICA
310 BETTY JEAN ST
NCB 7582 BLK 5 LOT 18

Prop ID:396055
KENNEALLY IVY L/E
312 BETTY JEAN ST
NCB 7582 BLK 5 LOT 19

Prop ID:396056
VIRAMONTES MARIO R &
314 BETTY JEAN ST
NCB 7582 BLK 5 LOT 20

Prop ID:396057
LUNA JOSE ALEJANDRO & MARGA
318 BETTY JEAN ST
NCB 7582 BLK 5 LOT 21

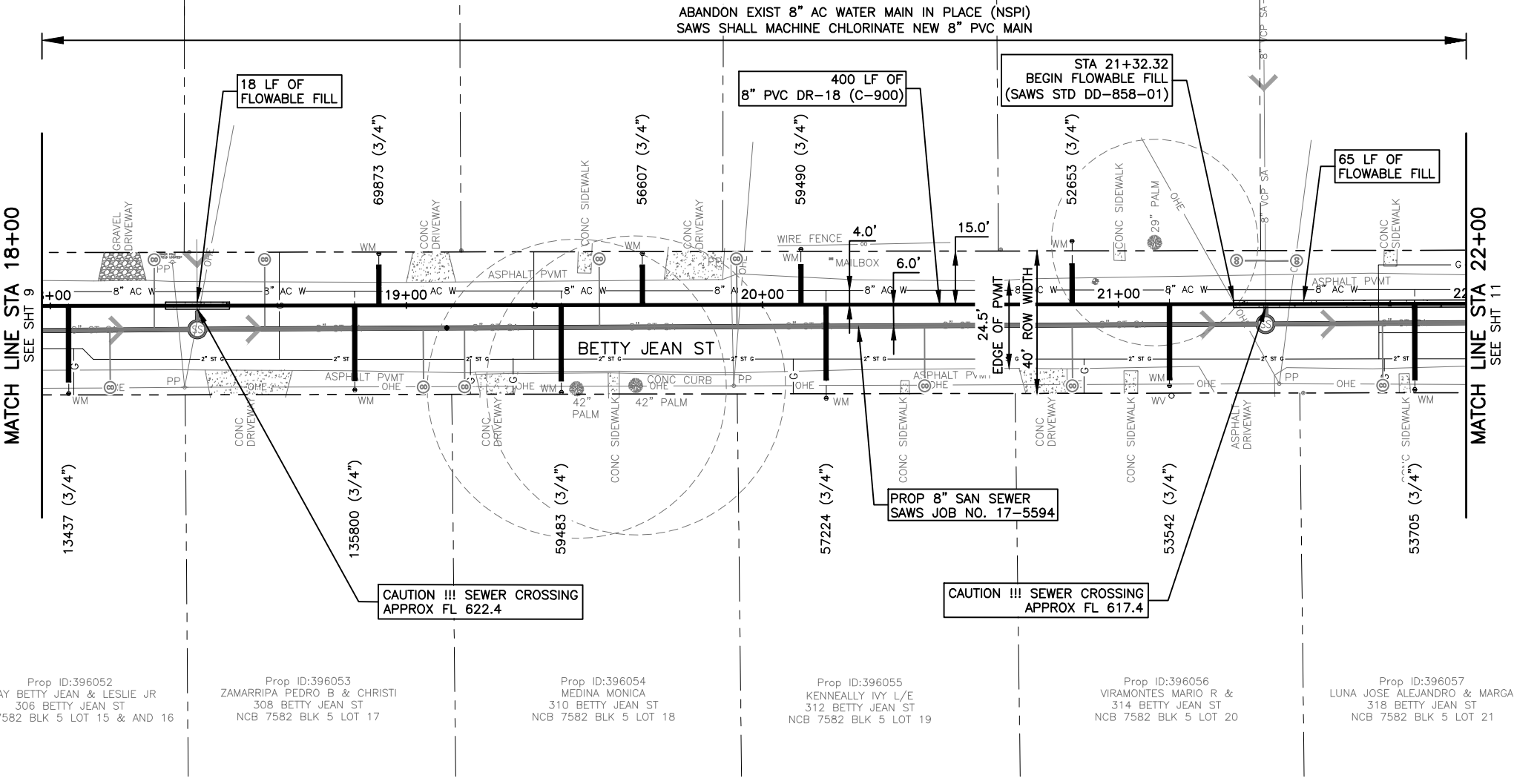
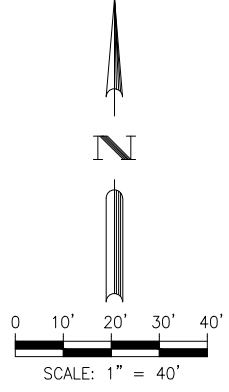
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LEGEND

Flowable Fill

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	163
413	Flowable Fill	CY	7
500	Concrete Curb	LF	2
550	Trench Protection	LF	400
818	8" PVC Waterline (Restrained)	LF	400
824	Relay 3/4" Long Service	EA	6
824	Relay 3/4" Short Service	EA	4
833	New Meter Box	EA	10



Brown & Gay Engineers, Inc.
F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
- SERVICE RECONNECT:
- 3/4"
- 1" OR LARGER
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

BGE BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, Tx 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
WATER IMPROVEMENTS LINE A
STA 18+00 TO STA 22+00

DEVELOPER: _____

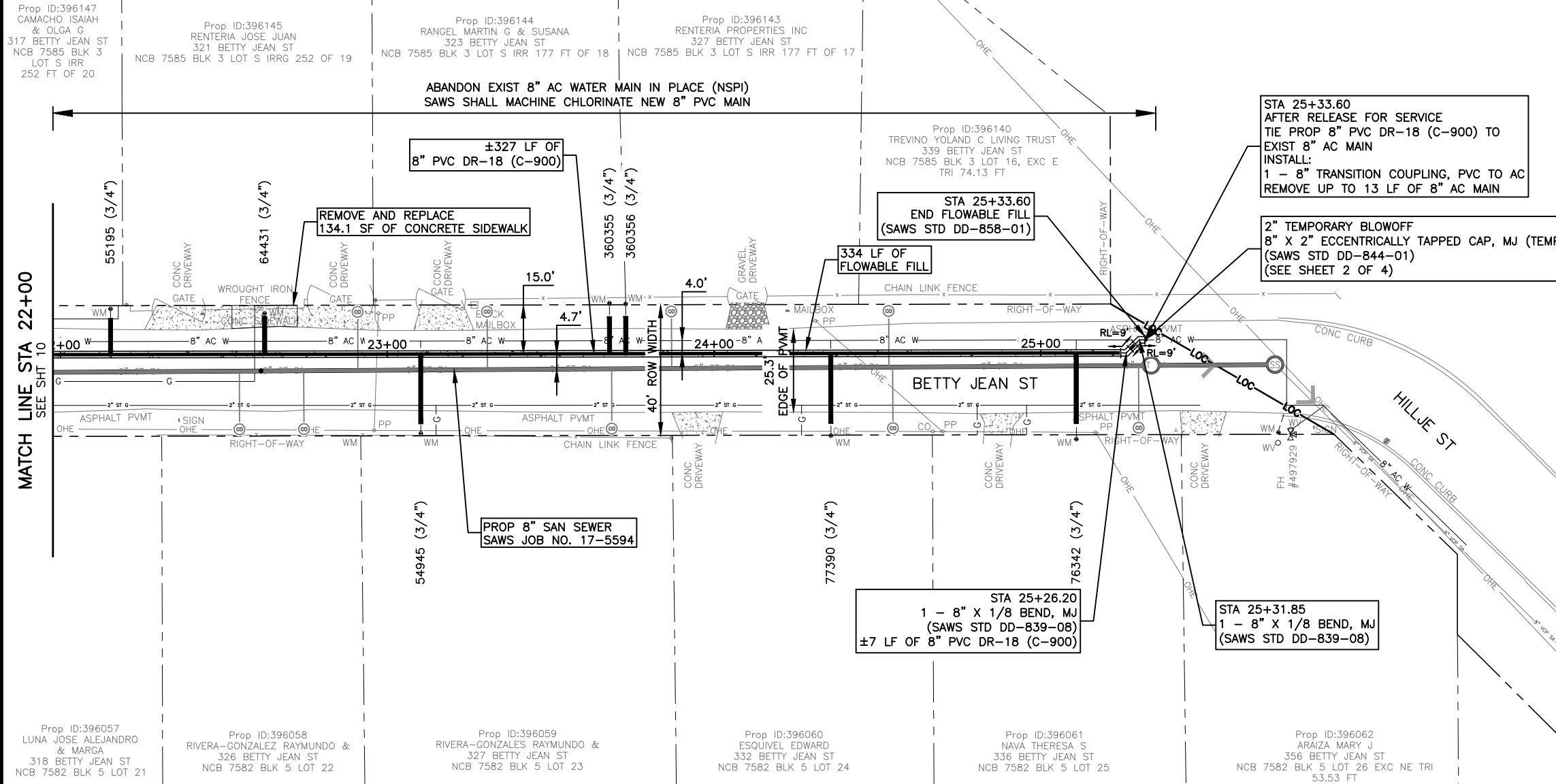
CONT. BUDGET PROJ. _____

SUBMITTED _____

APPROVED _____

MAP No. 170558 AND 172558	SHEET 10
SECT. No. _____	10
DR. CK. _____	JOB No. 17-5112 Of 12

BGE, INC. S:\XAC\projects\SAWS\SAWS - Betty Jean\03_CADD\01_Sheets\Betty Jean_Water\01_Sheets\BETTY JEAN WATER PLAN.dwg Jan 04, 2018-11:03am asallison



TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OF SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

ASBESTOS CEMENT (AC) PIPE:

ASBESTOS CEMENT PIPE, ALSO KNOWN AS TRANSITE PIPE, AND WHICH IS KNOWN TO CONTAIN ASBESTOS - CONTAINING MATERIAL (ACM) IS LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THE PIPE OCCUR. PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000. (SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE)

NOTE:

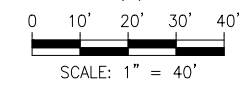
LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

TREE PROTECTION NOTE:

THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS ONE FOOT (1') PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A TEN INCH (10") DIAMETER TREE WOULD HAVE A TEN FOOT (10') RADIUS ROOT PROTECTION ZONE AROUND THE TREE ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL OAK WOUNDS SHALL BE PAINTED OVER, WITHIN TWENTY (20) MINUTES TO PREVENT OAK WILT.

LEGEND

..... FLOWABLE FILL



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 Tel: 210-581-3600 • www.bgeinc.com
 TBPE Registration No. F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
- SERVICE RECONNECT:
- 3/4"
- 1" OR LARGER
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- 3/4"
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- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
 BETTY JEAN ST
 FROM JUNIOR ST TO HILLJE ST
 WATER IMPROVEMENTS LINE A
 STA 22+00 TO STA 25+39

DEVELOPER: _____

CONT. _____ BUDGET PROJ. _____

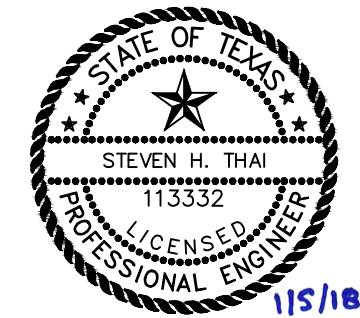
SUBMITTED _____

APPROVED _____

MAP No. 170558 AND 172558	SHEET
SECT. No. _____	11
DR. _____ CK. _____	JOB No. 17-5112 OF 12

CAUTION !!!
 EXISTING UNDERGROUND GAS AND OVERHEAD ELECTRIC LINES.

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
103	Remove Concrete Sidewalks and Driveways	SF	134
205	Hot Mix Asphaltic Pavement - Type B (12" Compacted Depth)	SY	136
413	Flowable Fill	CY	30
502	Concrete Sidewalks	SY	15
550	Trench Protection	LF	334
818	8" PVC Waterline (Restrained)	LF	334
824	Relay 3/4" Long Service	EA	3
824	Relay 3/4" Short Service	EA	4
833	New Meter Box	EA	7
840	8" Water Tie-Ins	EA	1
841	Hydrostatic Testing	EA	1
844	2" Blow-off, Temporary	EA	1
3000	Removal, Transportation and Disposal of various sizes of A.C. Pipe	LF	13



Signature
 Brown & Gay Engineers, Inc.
 F-1046

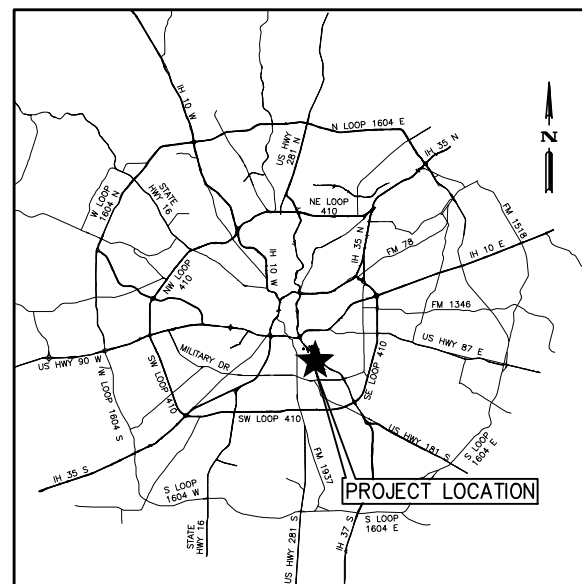
BGE, INC. S:\TXC\projects\SAWS\SAWS - Betty Jean\03_CADD\01_Sheets\BETTY JEAN WATER PLAN.dwg Jan 04, 2018-11:03am asakalderon

SAN ANTONIO WATER SYSTEM

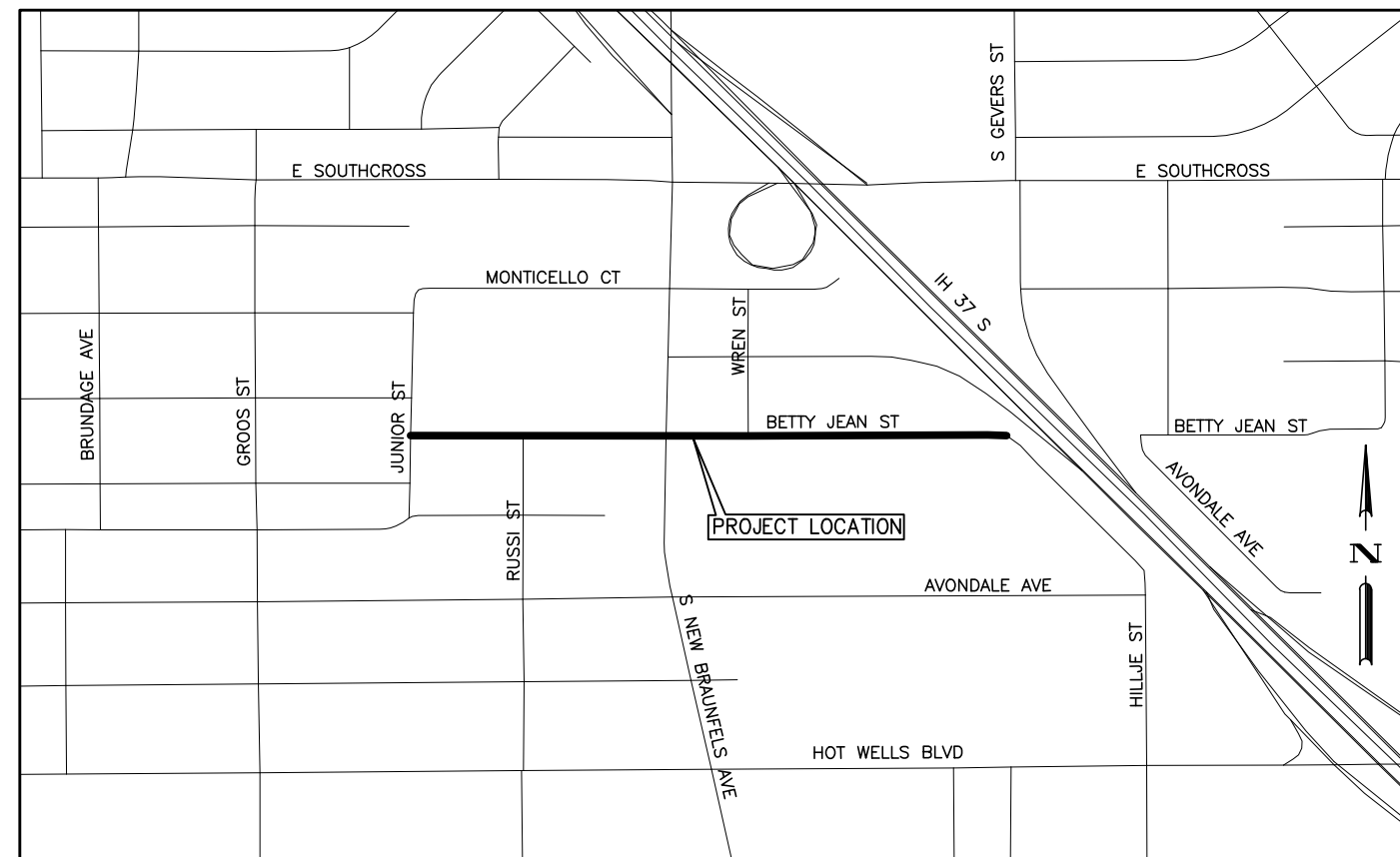
SAWS SEWER JOB NO. 17-5594

2018 SMP BETTY JEAN FROM JUNIOR ST TO HILLJE ST

100% DESIGN SUBMITTAL

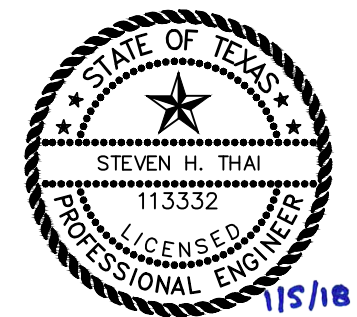


VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

SHEET INDEX	
NO.	SHEET DESCRIPTION
1	COVER SHEET
2	CONSTRUCTION NOTES AND QUANTITY SUMMARY
3	OVERALL PROJECT LAYOUT AND SURVEY CONTROL
4	SANITARY SEWER – LINE A STA 1+00 TO STA 4+50
5	SANITARY SEWER – LINE A STA 4+50 TO STA 8+50
6	SANITARY SEWER – LINE A STA 8+50 TO STA 12+00
7	SANITARY SEWER – LINE A STA 12+00 TO STA 15+50
8	SANITARY SEWER – LINE A STA 15+50 TO STA 19+00
9	SANITARY SEWER – LINE A STA 19+00 TO STA 22+50
10	SANITARY SEWER – LINE A STA 22+50 TO STA 25+22
11	TREE PRESERVATION PLAN



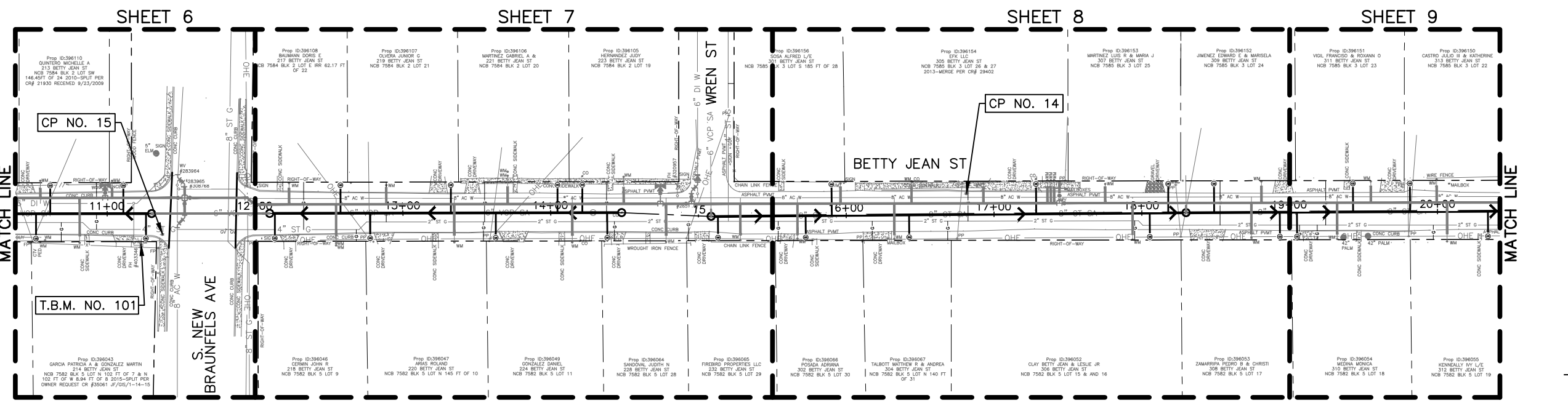
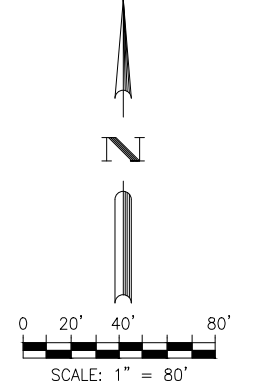
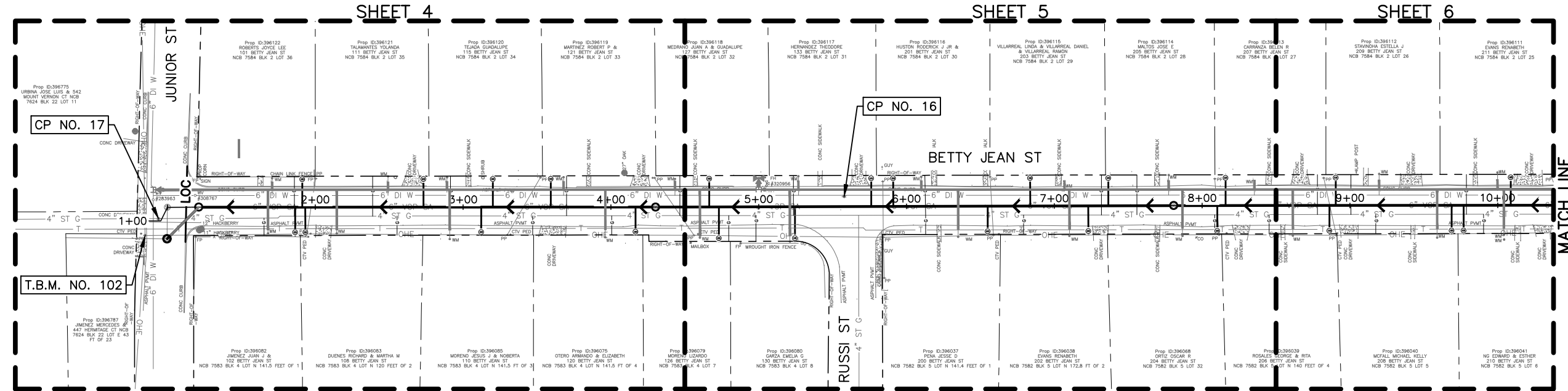
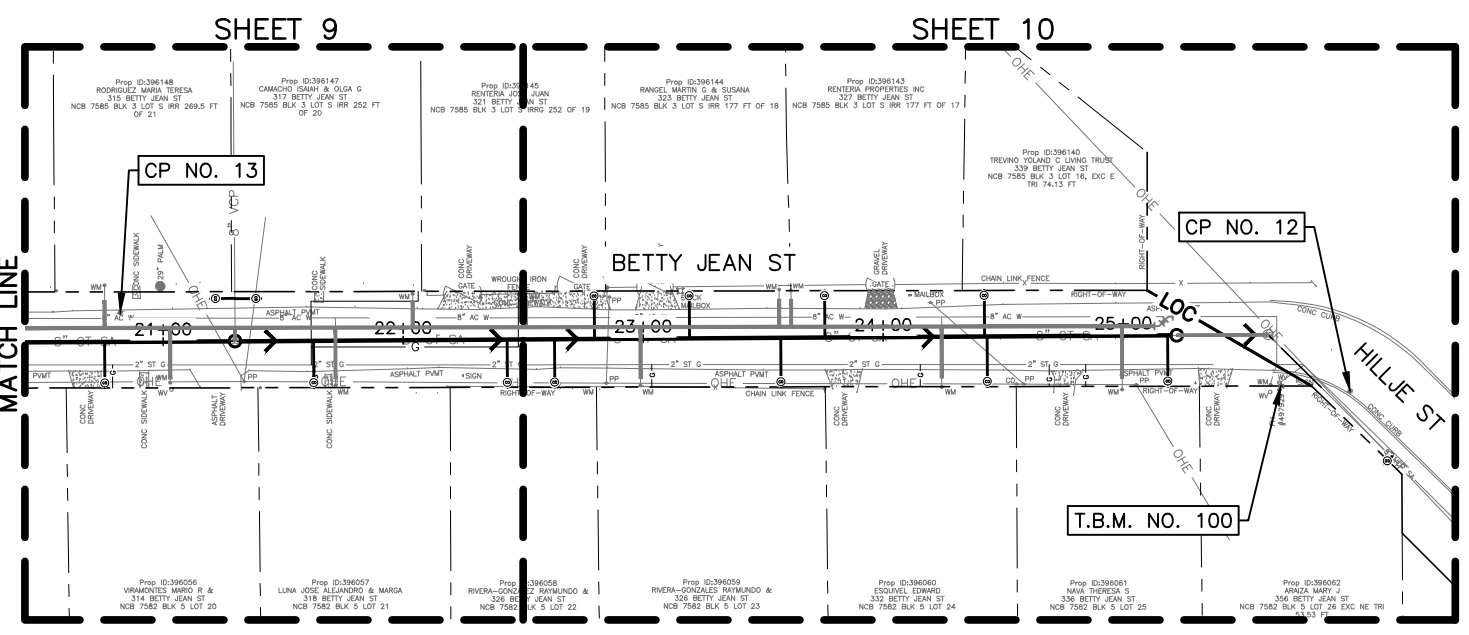
Signature

Brown & Gay Engineers, Inc.
F-1046



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BGE, INC. S:\TX\Projects\SAWS\SAWS - Betty Jean\03_CADD\01_Sheets\01_Sheets\01_Betty Jean SSWR OVR.dwg Jan 05, 2018 12:08pm acadfiron

SURVEY CONTROL				
CP	NORTHING	EASTING	DESCRIPTION	
10	13682802.73	2142056.43	MAG NAIL WITH WASHER MARKED "LNV-SA"	
11	13683112.69	2141765.39	MAG NAIL WITH WASHER MARKED "LNV-SA"	
12	13683348.60	2141485.68	MAG NAIL WITH WASHER MARKED "LNV-SA"	
13	13683381.24	2140973.34	MAG NAIL WITH WASHER MARKED "LNV-SA"	
14	13683380.85	2140572.48	MAG NAIL WITH WASHER MARKED "LNV-SA"	
15	13683353.27	2140028.57	MAG NAIL WITH WASHER MARKED "LNV-SA"	
16	13683373.23	2139449.20	MAG NAIL WITH WASHER MARKED "LNV-SA"	
17	13683358.03	2138985.29	MAG NAIL WITH WASHER MARKED "LNV-SA"	

T.B.M.	NORTHING	EASTING	DESCRIPTION	ELEVATION
100	13683351.00	2141457.00	CHISLED PLUS ON FIRE HYDRANT BOLT	616.33
101	13683347.00	2140014.00	CHISLED PLUS ON FIRE HYDRANT BOLT	631.72
102	13683347.00	2138976.00	COTTON SPINDEL IN POWER POLE	621.79

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
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TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
OVERALL PROJECT LAYOUT
AND SURVEY CONTROL

DEVELOPER: [Signature]
CONT. BUDGET PROJ.
SUBMITTED
APPROVED

MAP No. 170558 AND 172558 **SHEET 3**
SECT. No. **DR. CK. JOB No. 17-5594** **Of 11**

PROP ID:396775
URBINA JOSE LUIS & 542
MOUNT VERNON CT NCB
7624 BLK 22 LOT 11

PROP ID:396122
ROBERTS JOYCE LEE
101 BETTY JEAN ST
NCB 7584 BLK 2 LOT 36

PROP ID:396121
TALAMANTES YOLANDA
111 BETTY JEAN ST
NCB 7584 BLK 2 LOT 35

PROP ID:396120
TEJADA GUADALUPE
115 BETTY JEAN ST
NCB 7584 BLK 2 LOT 34

PROP ID:396119
MARTINEZ ROBERT P &
121 BETTY JEAN ST
NCB 7584 BLK 2 LOT 33

PROP ID:396118
MEDRANO JUAN A & GUADALUPE
127 BETTY JEAN ST
NCB 7584 BLK 2 LOT 32

NOTE:

LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

CAUTION !!!
EXISTING
UNDERGROUND GAS AND
OVERHEAD ELECTRIC LINES.

TRENCH EXCAVATION SAFETY PROTECTION:

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CAUTION!! GAS CROSSING

EXIST SAWS MANHOLE #92675
(TO BE ABANDONED) (NSPI)
EXIST 6" INV IN (E) = 612.59
EXIST 6" INV OUT (S) = 612.43

EXIST 6" VCP SA TO BE ABANDONED (NSPI)

EXIST 6" VCP SA (TO REMAIN)
EXIST SAWS MANHOLE #92649
(TO BE REMOVED AND DISPOSED OF) (NSPI)
EXIST 6" INV IN (N) = 612.41
EXIST 6" INV OUT (W) = 612.34

PROP ID:396787
JIMENEZ MERCEDES &
447 HERMITAGE CT NCB
7624 BLK 22 LOT E 43
FT OF 23

STA 1+21.19
INSTALL: 1-STD MH (WATERTIGHT)
N=13683365.89
E=2139012.46
PROP 8" PVC SDR-26 IN (E) = 612.73
PROP 8" PVC SDR-26 OUT (S) = 612.63

PROP 8" WATER SAWS JOB NO 17-5112

STA 4+30.34
INSTALL: 1-STD MH (WATERTIGHT)
N=13683365.99
E=2139321.61
PROP 8" PVC SDR-26 OUT (W) = 614.99
PROP 8" PVC SDR-26 IN (E) = 614.99

PROP 30.32 LF OF 8" PVC SDR-26 @ 0.73%
RESTORE 4.85 SY OF PAVEMENT

STA 0+90.87
INSTALL: 1-STD MH (WATERTIGHT)
N=13683344.44
E=2138991.03
PROP 8" PVC SDR-26 IN (NE) = 612.41
EXIST 6" VCP SA OUT (W) = 612.34

PROP 309.15 LF OF 8" PVC SDR-26 @ 0.73%

PROP 19.66 LF OF 8" PVC SDR-26 @ 0.82%

PROP ID:396082
JIMENEZ JUAN J &
102 BETTY JEAN ST
NCB 7583 BLK 4 LOT N 141.5 FEET OF 1

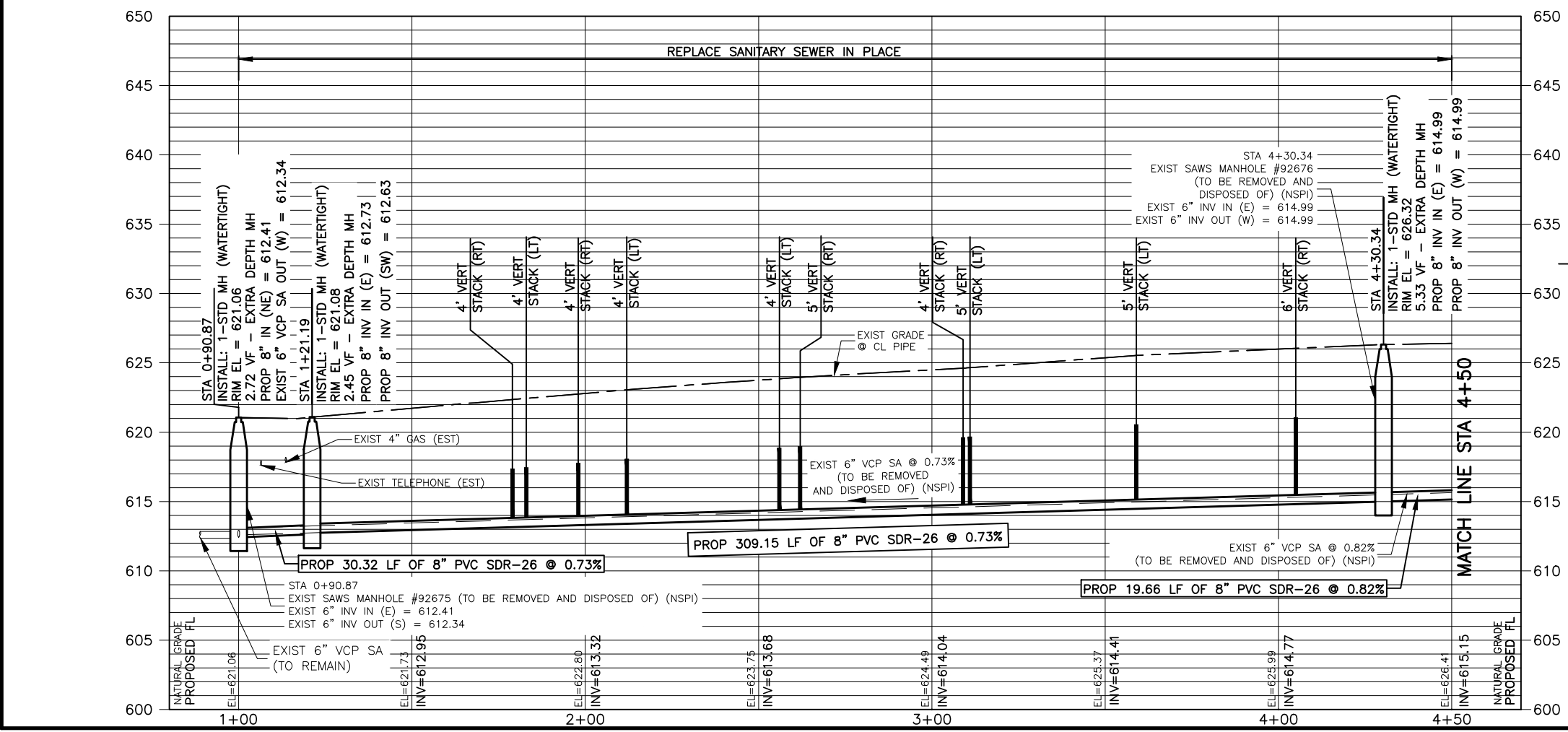
PROP ID:396083
DUENES RICHARD & MARTHA M
108 BETTY JEAN ST
NCB 7583 BLK 4 LOT N 120 FEET OF 2

PROP ID:396085
MORENO JESUS J & NOBERTA
110 BETTY JEAN ST
NCB 7583 BLK 4 LOT N 141.5 FT OF 3

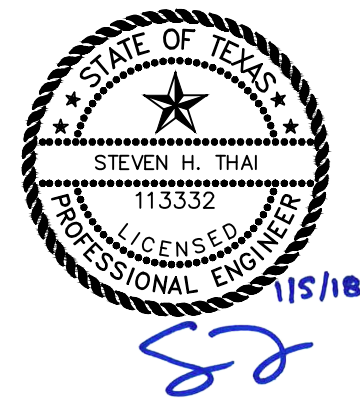
PROP ID:396075
OTERO ARMANDO & ELIZABETH
120 BETTY JEAN ST
NCB 7583 BLK 4 LOT N 141.5 FT OF 4

PROP ID:396079
MORENO LIZARDO
126 BETTY JEAN ST
NCB 7583 BLK 4 LOT 7

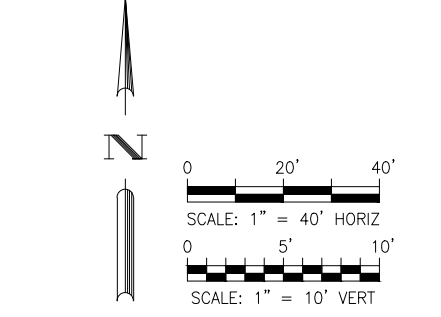
8" PVC - LINE A



SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type D (2" Compacted Depth)	SY	5
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	146
550	Trench Protection	LF	359
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	359
852	Sanitary Sewer Manhole (0'-6')	EA	3
852	Extra Depth Manholes (greater than 6')	VF	11
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	202
854	Two-Way Sanitary Sewer Clean-out	EA	10
860	Vertical Stacks	VF	45
864	Small Diameter - Bypass Pumping System	EA	1
866	Pre Sewer Main Television Inspection (6"-12")	LF	359
866	Post Sewer Main Television Inspection (8"-12")	LF	359



Brown & Gay Engineers, Inc.
F-1046



LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
- EXIST. WATER MAIN
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- SANITARY SEWER
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- 3/4" SINGLE
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- SERVICE RECONNECT:
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Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
SANITARY SEWER - LINE A
STA 1+00 TO STA 4+50

DEVELOPER: _____

CONT. _____ BUDGET PROJ.

SUBMITTED _____

APPROVED _____

MAP No. 170558 AND 172558

SECT. No. _____ SHEET 4

DR. _____ CK. _____ JOB No. 17-5594 OF 11

BGE, INC. S:\TX\Projects\SanSewer\Betsy_Jean_Sewer\01_Sheet\Betsy_Jean_Sewer\01_Sheet.dwg Jan 05, 2018 - 12:06pm scale: none

PROP ID:396118
MEDRANO JUAN A & GUADALUPE
127 BETTY JEAN ST
NCB 7584 BLK 2 LOT 32

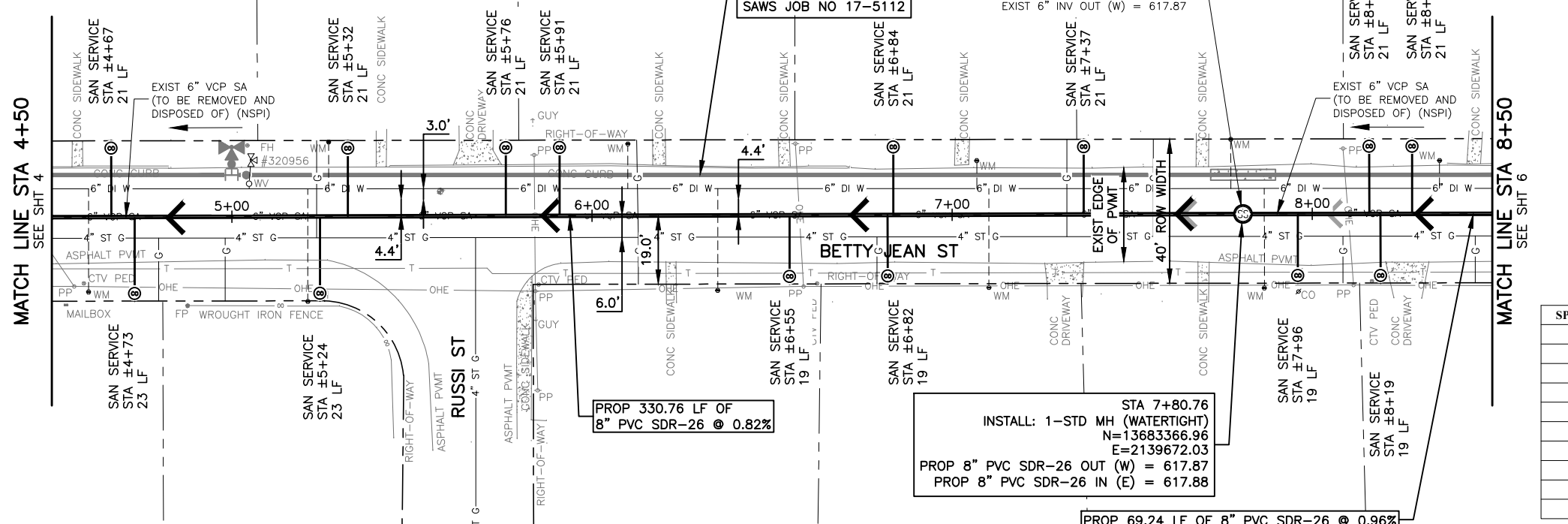
PROP ID:396117
HERNANDEZ THEODORE
133 BETTY JEAN ST
NCB 7584 BLK 2 LOT 31

PROP ID:396116
HUSTON RODERICK J JR &
201 BETTY JEAN ST
NCB 7584 BLK 2 LOT 30

PROP ID:396115
VILLARREAL LINDA & VILLARREAL DANIEL
& VILLARREAL RAMON
203 BETTY JEAN ST
NCB 7584 BLK 2 LOT 29

PROP ID:396114
MALTOS JOSE E
205 BETTY JEAN ST
NCB 7584 BLK 2 LOT 28

PROP ID:396113
CARRANZA BELEN R
207 BETTY JEAN ST
NCB 7584 BLK 2 LOT 27



PROP ID:396079
MORENO LIZARDO
126 BETTY JEAN ST
NCB 7583 BLK 4 LOT 7

PROP ID:396080
GARZA EMELIA G
130 BETTY JEAN ST
NCB 7583 BLK 4 LOT 8

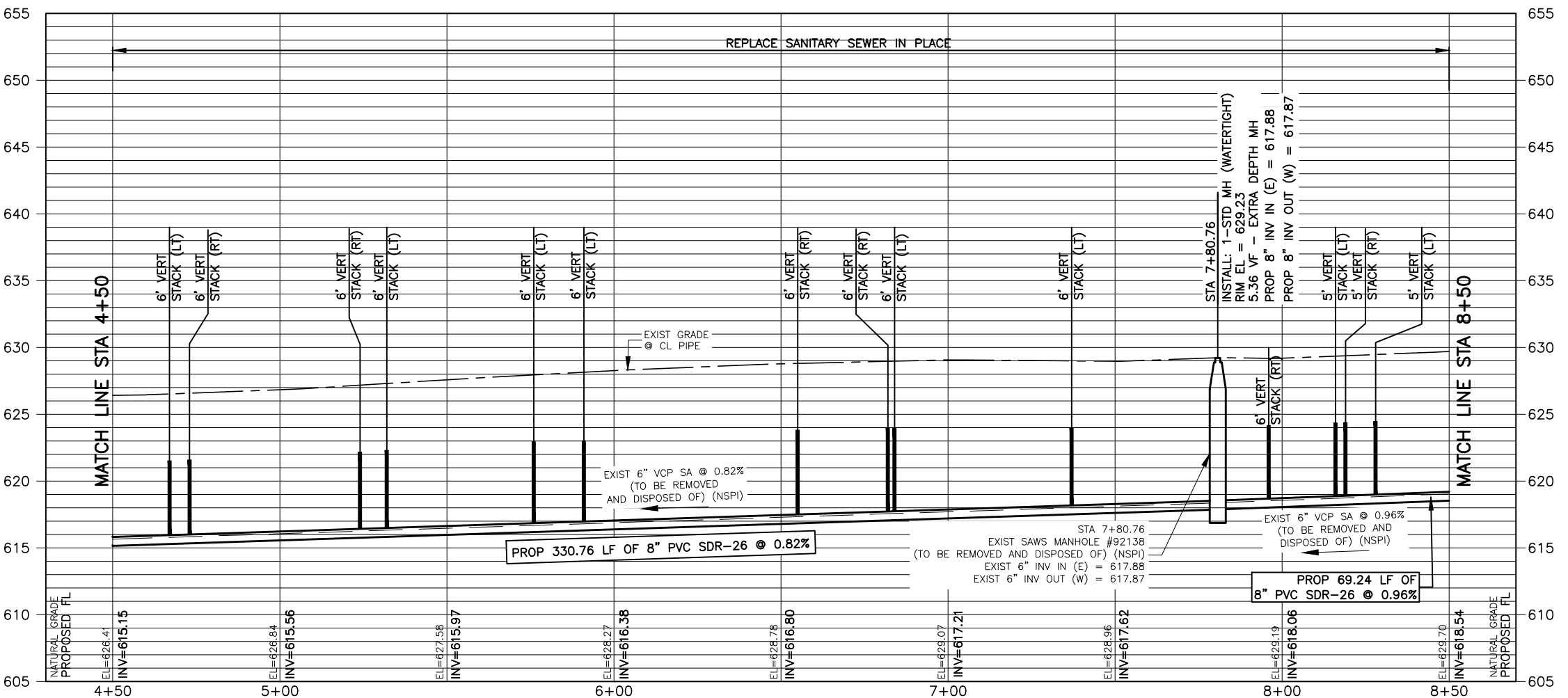
PROP ID:396037
PENA JESSE D
200 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 141.4 FEET OF 1

PROP ID:396038
EVANS RENABETH
202 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 172.8 FT OF 2

PROP ID:396068
ORTIZ OSCAR R
204 BETTY JEAN ST
NCB 7582 BLK 5 LOT 32

PROP ID:396039
ROSALES GEORGE & RITA
206 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 140 FEET OF 4

8" PVC - LINE A

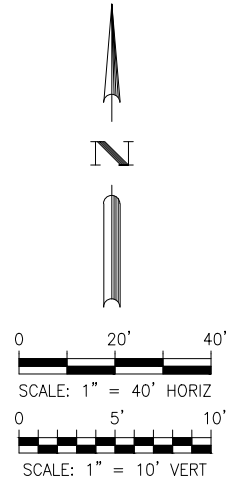


CAUTION !!!
EXISTING UNDERGROUND GAS AND OVERHEAD ELECTRIC LINES.

TRENCH EXCAVATION SAFETY PROTECTION:
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OF SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

TREE PROTECTION NOTE:
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SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	163
550	Trench Protection	LF	400
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	400
852	Sanitary Sewer Manhole (0'-6")	EA	1
852	Extra Depth Manholes (greater than 6')	VF	5
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	290
854	Two-Way Sanitary Sewer Clean-out	EA	14
860	Vertical Stacks	VF	81
866	Pre Sewer Main Television Inspection (6"-12")	LF	400
866	Post Sewer Main Television Inspection (8"-12")	LF	400



Brown & Gay Engineers, Inc.
F-1046

BGE BGE, Inc.
7330 San Pedro, Suite 202 San Antonio, TX 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
SANITARY SEWER - LINE A
STA 4+50 TO STA 8+50

DEVELOPER: _____
CONT. _____ BUDGET PROJ. _____
SUBMITTED _____
APPROVED _____
MAP No. 170558 AND 172558
SECT. No. _____ SHEET 5
DR. _____ CK. _____ JOB No. 17-5594 OF 11

BGE, INC. S:\TX\Projects\SanSewer\Bettys\Bettys_Sewer\01_Sheet\Bettys_Sewer.dwg Jan 05, 2018 - 12:06pm acalderon

PROP ID:396113
CARRANZA BELEN R
207 BETTY JEAN ST
NCB 7584 BLK 2 LOT 27

PROP ID:396112
STAVINOHA ESTELLA J
209 BETTY JEAN ST
NCB 7584 BLK 2 LOT 26

PROP ID:396111
EVANS RENABETH
211 BETTY JEAN ST
NCB 7584 BLK 2 LOT 25

PROP ID:396110 QUINTERO MICHELLE A
213 BETTY JEAN ST
NCB 7584 BLK 2 LOT SW 146.45FT OF 24
2010-SPLIT PER CR# 21930 RECEIVED
9/23/2009

PROP ID:396039
ROSALES GEORGE & RITA
206 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 140 FEET OF 4

PROP ID:396040
MCFALL MICHAEL KELLY
208 BETTY JEAN ST
NCB 7582 BLK 5 LOT 5

PROP ID:396041
NG EDWARD & ESTHER
210 BETTY JEAN ST
NCB 7582 BLK 5 LOT 6

PROP ID:396043
GARCIA PATRICIA A & GONZALEZ MARTIN
214 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 102 FT OF 7 & N
102 FT OF W 8.94 FT OF 8 2015-SPLIT PER
OWNER REQUEST CR #35061 JF/GIS/1-14-15

NOTE:

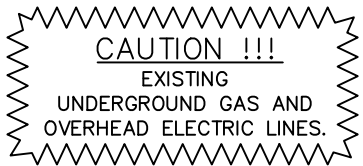
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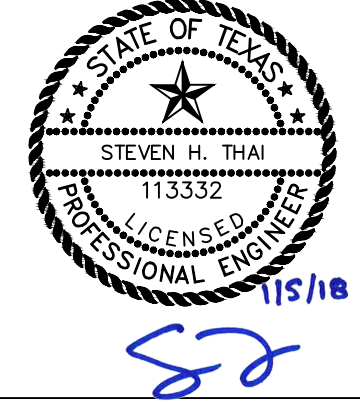
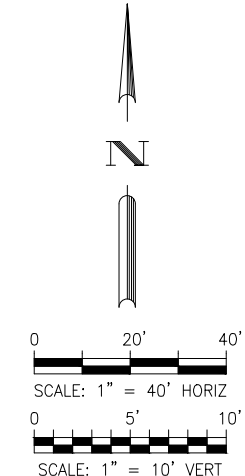
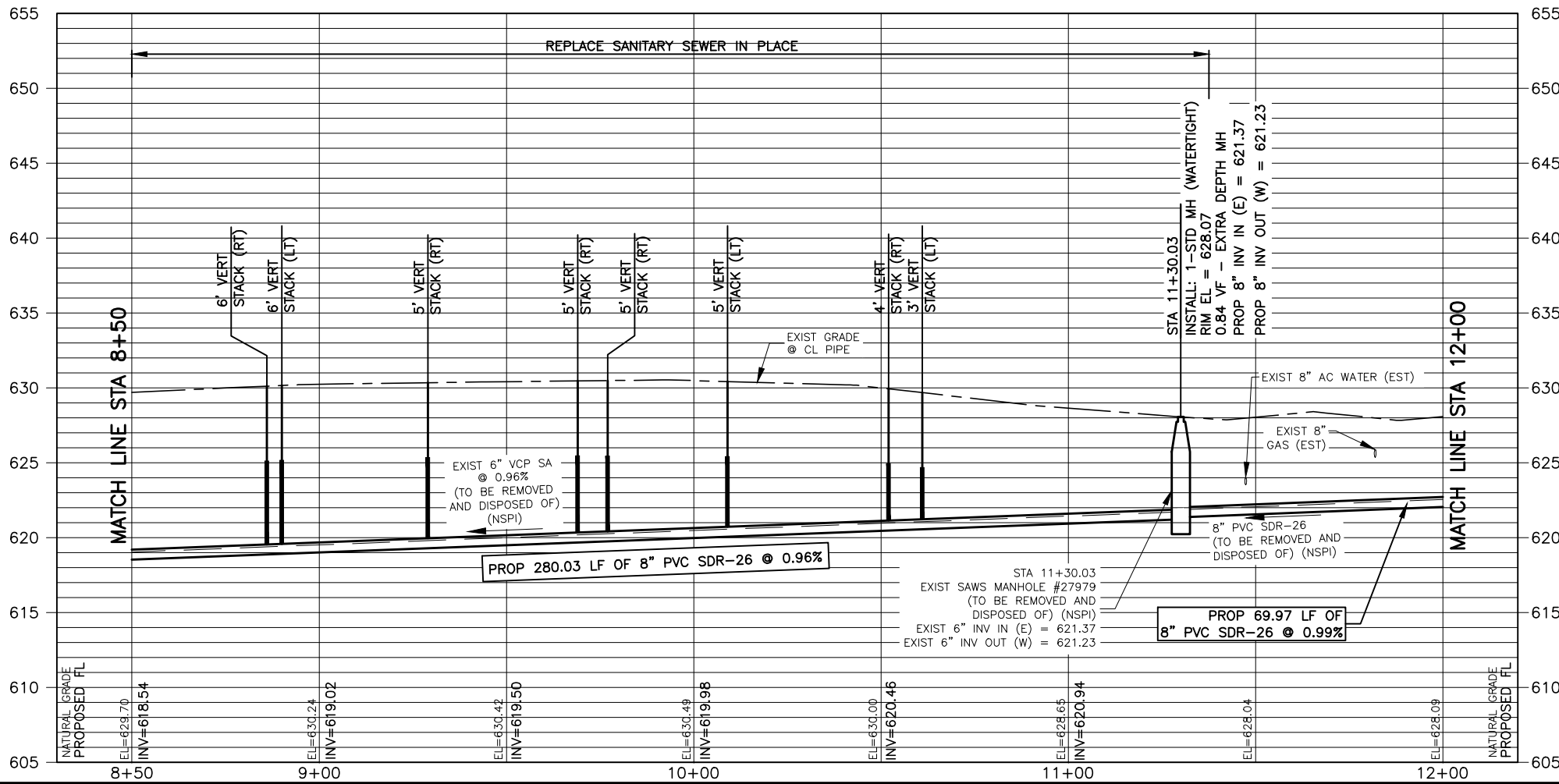


SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	143
550	Trench Protection	LF	350
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	350
852	Sanitary Sewer Manhole (0'-6')	EA	1
852	Extra Depth Manholes (greater than 6')	VF	1
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	219
854	Two-Way Sanitary Sewer Clean-out	EA	11
860	Vertical Stacks	VF	39
866	Pre Sewer Main Television Inspection (6"-12")	LF	350
866	Post Sewer Main Television Inspection (8"-12")	LF	350

MATCH LINE STA 8+50
SEE SHT 5

MATCH LINE STA 12+00
SEE SHT 7

8" PVC - LINE A



Brown & Gay Engineers, Inc.
F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
- SERVICE RECONNECT:
- 3/4"
- 1" OR LARGER
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

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TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				

2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
SANITARY SEWER - LINE A
STA 8+50 TO STA 12+00

DEVELOPER: _____

CONT. BUDGET PROJ. _____

SUBMITTED _____

APPROVED _____

MAP No. 170558 AND 172558
SECT. No. _____
DR. CK. JOB No. 17-5594

SHEET 6 OF 11

BGE, INC. S:\Projects\SSW\SSW - Betty Jean\03_CADD\01_Sheets\BETTY JEAN SSW R\PROP.dwg Jan 05 2018 12:07pm acalderon

PROP ID:396108
BAUMANN DORIS E
217 BETTY JEAN ST
NCB 7584 BLK 2 LOT E IRR 62.17 FT
OF 22

PROP ID:396107
OLVERA JUNIOR G
219 BETTY JEAN ST
NCB 7584 BLK 2 LOT 21

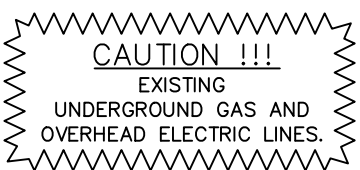
PROP ID:396106
MARTINEZ GABRIEL A &
221 BETTY JEAN ST
NCB 7584 BLK 2 LOT 20

PROP ID:396105
HERNANDEZ JUDY
223 BETTY JEAN ST
NCB 7584 BLK 2 LOT 19

PROP ID:396156
SOSA ALFRED L/E
301 BETTY JEAN ST
NCB 7585 BLK 3 LOT S 185 FT OF 28

NOTE:

LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.



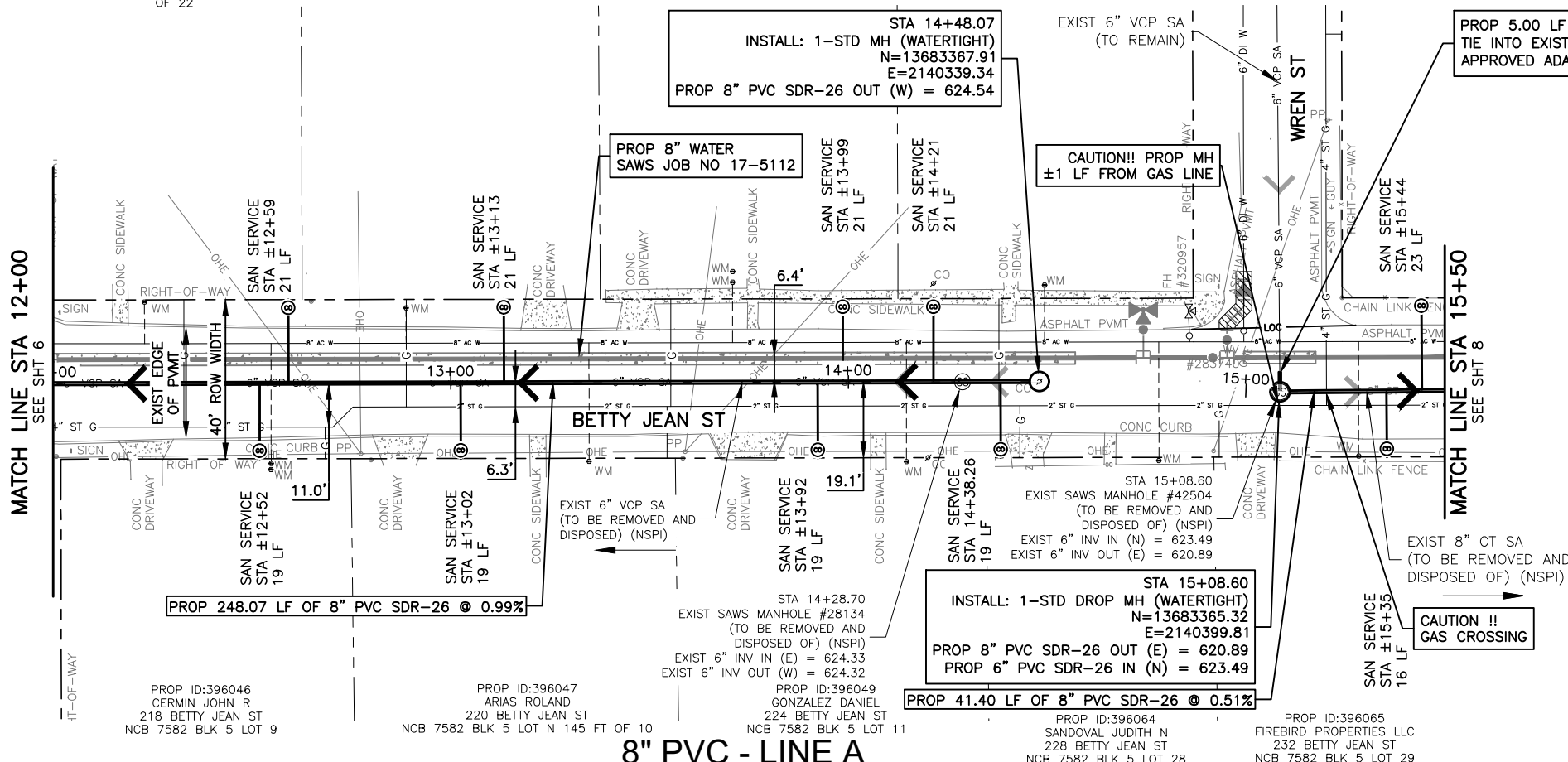
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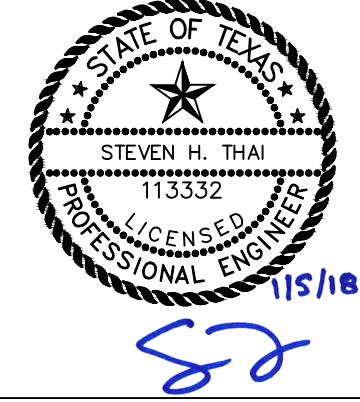
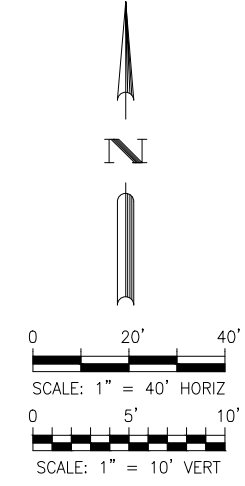
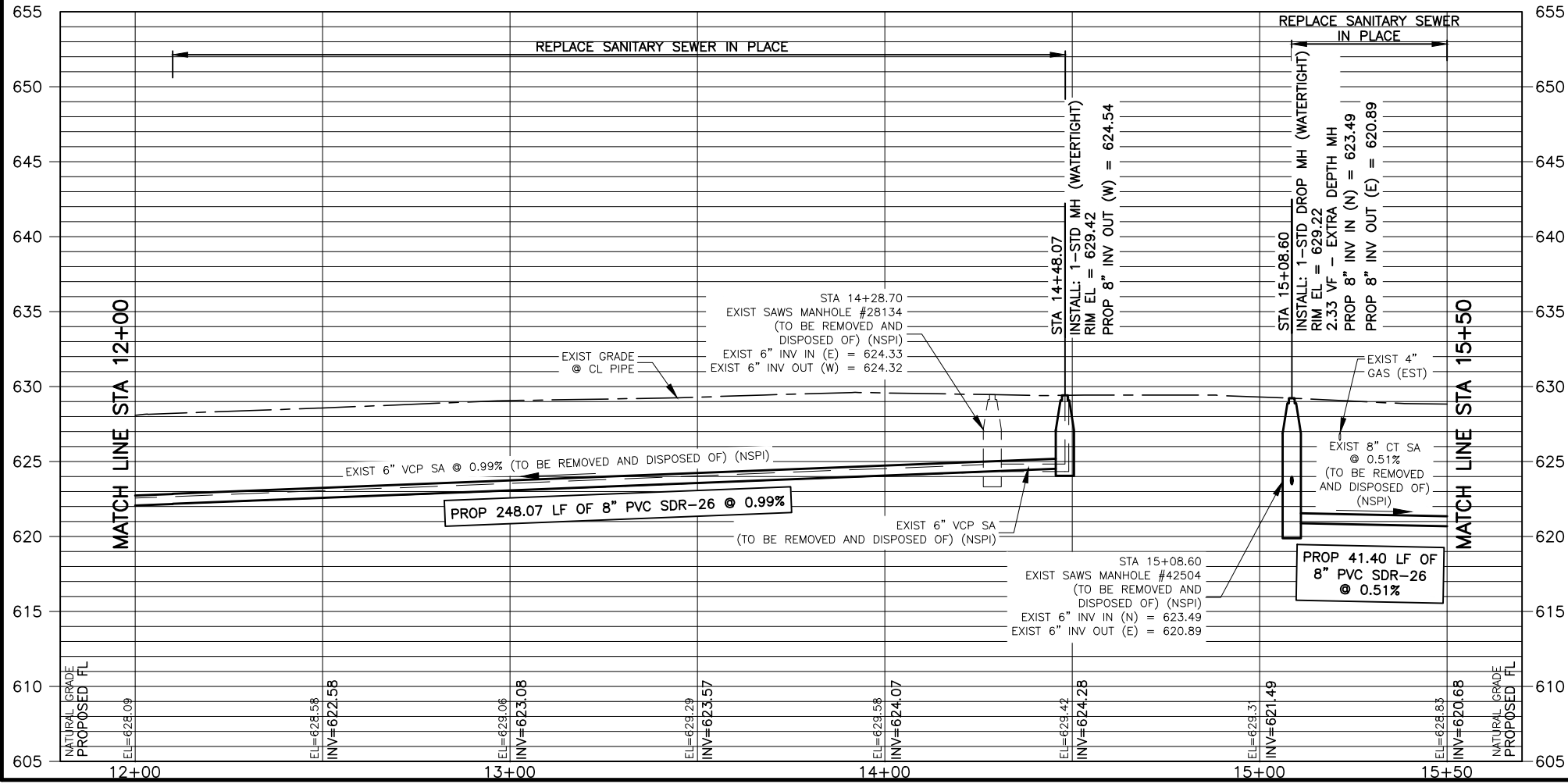
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SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	120
550	Trench Protection	LF	294
848	6" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	5
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (0'-6' cut)	LF	248
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	41
852	Sanitary Sewer Manhole (0'-6')	EA	1
852	Sanitary Sewer Drop Manhole (0'-6')	EA	1
852	Extra Depth Manholes (greater than 6')	VF	2
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	199
854	Two-Way Sanitary Sewer Clean-out	EA	10
866	Pre Sewer Main Television Inspection (6"-12")	LF	294
866	Post Sewer Main Television Inspection (8"-12")	LF	294



8" PVC - LINE A



Brown & Gay Engineers, Inc.
F-1046

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LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
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- SERVICE RELAY:
- 3/4"
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- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

No.	Revision	Drawn	Approved	Date
REVISIONS				
2018 SMP BETTY JEAN ST FROM JUNIOR ST TO HILLJE ST SANITARY SEWER - LINE A STA 12+00 TO STA 15+50				
DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED				
APPROVED				
MAP No. 170558 AND 172558				SHEET
SECT. No.				7
DR.	CK.	JOB No. 17-5594		Of 11

BGE, INC. S:\TX\Projects\SanSewer\Bettjean\03_CADD\01_Sheets\Bettjean_Sewer\01_Sheet\Bettjean_Sewer.dwg Jan 05 2018 12:07pm scale:anon

PROP ID:396156
SOSA ALFRED L/E
301 BETTY JEAN ST
NCB 7585 BLK 3 LOT S 185 FT OF 28

PROP ID:396154
EFK LLC
305 BETTY JEAN ST
NCB 7585 BLK 3 LOT 26 & 27
2013-MERGE PER CR# 29402

PROP ID:396153
MARTINEZ LUIS R & MARIA J
307 BETTY JEAN ST
NCB 7585 BLK 3 LOT 25

PROP ID:396152
JIMENEZ EDWARD E & MARISELA
309 BETTY JEAN ST
NCB 7585 BLK 3 LOT 24

NOTE:

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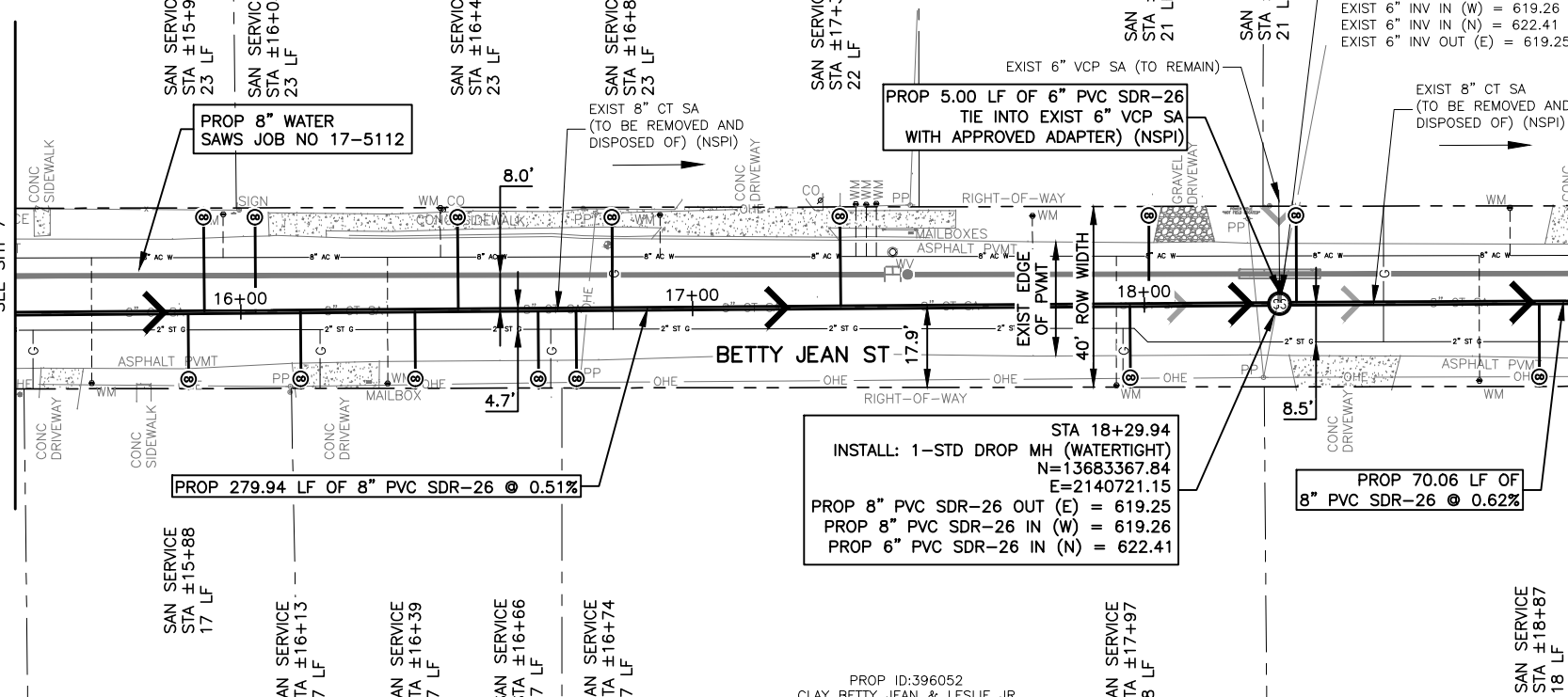
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MATCH LINE STA 15+50
SEE SHIT 7

MATCH LINE STA 19+00
SEE SHIT 9



STA 18+29.94
INSTALL: 1-STD DROP MH (WATERTIGHT)
N=13683367.84
E=2140721.15
PROP 8" PVC SDR-26 OUT (E) = 619.25
PROP 8" PVC SDR-26 IN (W) = 619.26
PROP 6" PVC SDR-26 IN (N) = 622.41

PROP 70.06 LF OF
8" PVC SDR-26 @ 0.62%

PROP 279.94 LF OF 8" PVC SDR-26 @ 0.51%

PROP ID:396066
POSADA ADRIANA
302 BETTY JEAN ST
NCB 7582 BLK 5 LOT 30

PROP ID:396067
TALBOTT MATTHEW R & ANDREA
304 BETTY JEAN ST
NCB 7582 BLK 5 LOT N 140 FT
OF 31

PROP ID:396052
CLAY BETTY JEAN & LESLIE JR
306 BETTY JEAN ST
NCB 7582 BLK 5 LOT 15 & AND 16

PROP ID:396053
ZAMARRIPA PEDRO B & CHRISTI
308 BETTY JEAN ST
NCB 7582 BLK 5 LOT 17

8" PVC - LINE A

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	145
550	Trench Protection	LF	355
848	6" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	5
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	350
852	Sanitary Sewer Drop Manhole (0'-6')	EA	1
852	Extra Depth Manholes (greater than 6')	VF	2
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	277
854	Two-Way Sanitary Sewer Clean-out	EA	14
866	Pre Sewer Main Television Inspection (6"-12")	LF	355
866	Post Sewer Main Television Inspection (8"-12")	LF	355



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No.	Revision	Drawn	Approved	Date
REVISIONS				

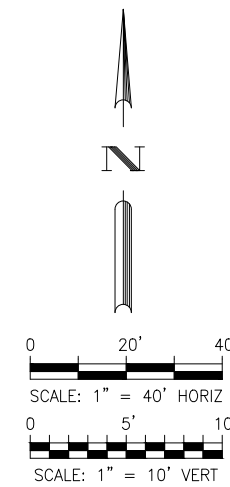
2018 SMP
BETTY JEAN ST
FROM JUNIOR ST TO HILLJE ST
SANITARY SEWER - LINE A
STA 15+50 TO STA 19+00

DEVELOPER:
CONT. BUDGET PROJ.

SUBMITTED

APPROVED

MAP No. 170558 AND 172558
SECT. No. 8
DR. CK. JOB No. 17-5594 OF 11



LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
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- DUAL BRANCH SERV.
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- 1" OR LARGER

BGE, INC. S:\TX\proj\BettysSawS\Bettys_SawS\Bettys_SawS\01_Sheet\Bettys_SawS.dwg Jan 05, 2018 - 12:07pm acalderon

PROP ID:396151 VIGIL FRANCISCO & ROXANN O 311 BETTY JEAN ST NCB 7585 BLK 3 LOT 23
 PROP ID:396150 CASTRO JULIO III & KATHERINE 313 BETTY JEAN ST NCB 7585 BLK 3 LOT 22
 PROP ID:396148 RODRIGUEZ MARIA TERESA 315 BETTY JEAN ST NCB 7585 BLK 3 LOT S IRR 269.5 FT OF 21
 PROP ID:396147 CAMACHO ISAAH & OLGA G 317 BETTY JEAN ST NCB 7585 BLK 3 LOT S IRR 252 FT OF 20
 PROP ID:396145 RENTERIA JOSE JUAN 321 BETTY JEAN ST NCB 7585 BLK 3 LOT S IRR 252 OF 19

CAUTION !!!
 EXISTING UNDERGROUND GAS AND OVERHEAD ELECTRIC LINES.

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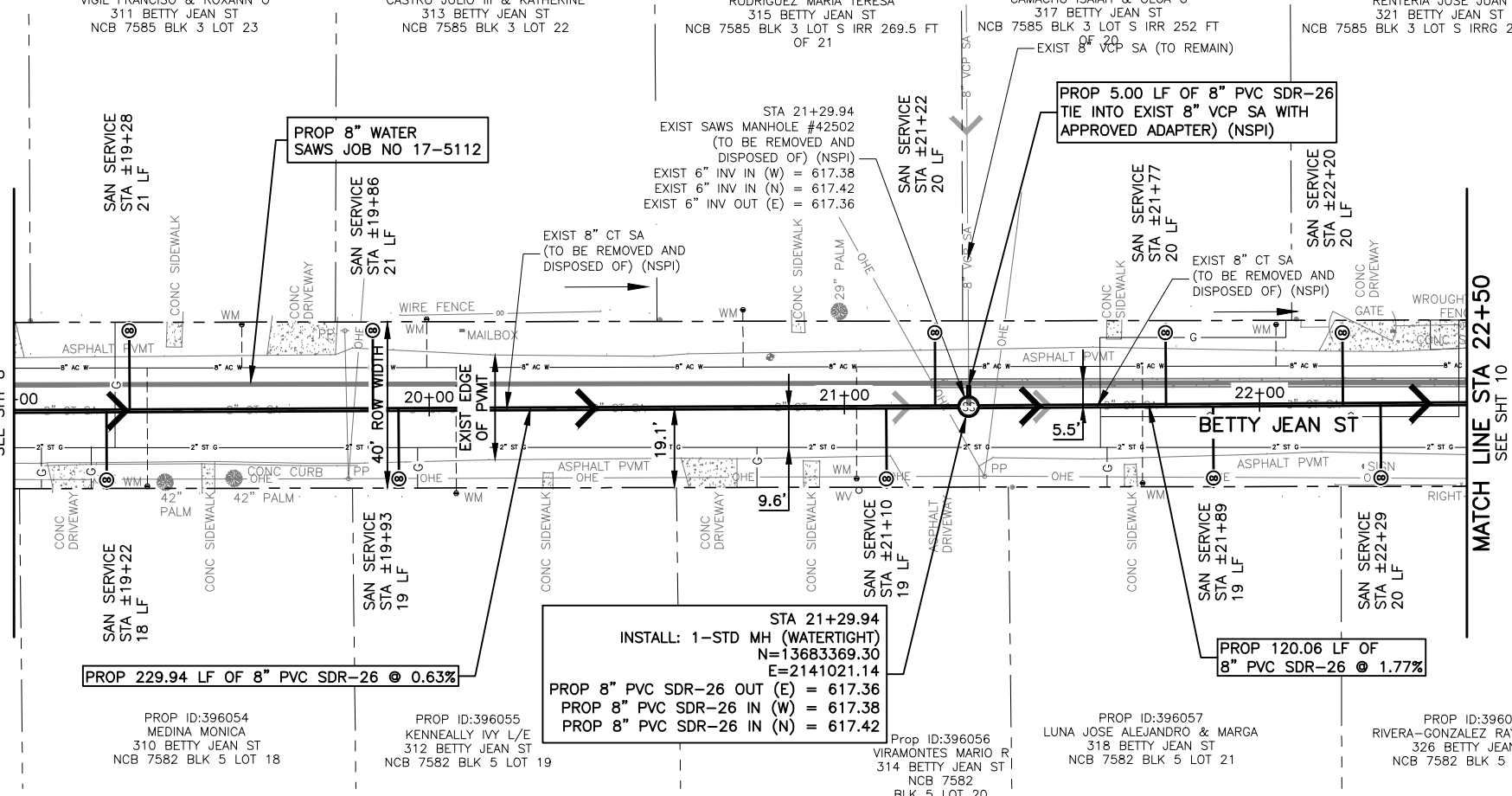
TREE PROTECTION NOTE:

THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS ONE FOOT (1') PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A TEN INCH (10") DIAMETER TREE WOULD HAVE A TEN FOOT (10') RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL OAK WOUNDS SHALL BE PAINTED OVER, WITHIN TWENTY (20) MINUTES TO PREVENT OAK WILT.

SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	145
550	Trench Protection	LF	355
848	6" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	5
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14' cut)	LF	350
852	Sanitary Sewer Manhole (0'-6')	EA	1
852	Extra Depth Manholes (greater than 6')	VF	1
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	197
854	Two-Way Sanitary Sewer Clean-out	EA	10
866	Pre Sewer Main Television Inspection (6"-12")	LF	355
866	Post Sewer Main Television Inspection (8"-12")	LF	355

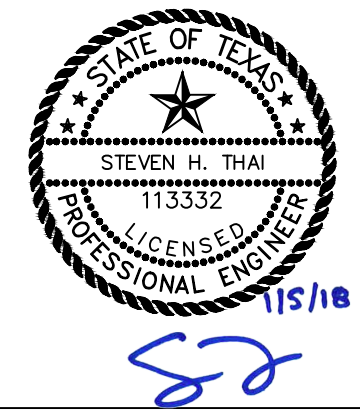
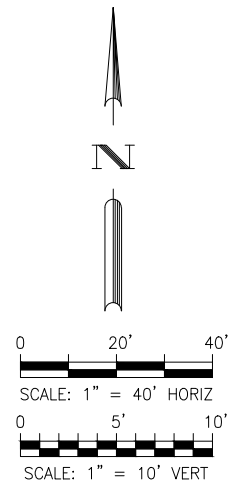
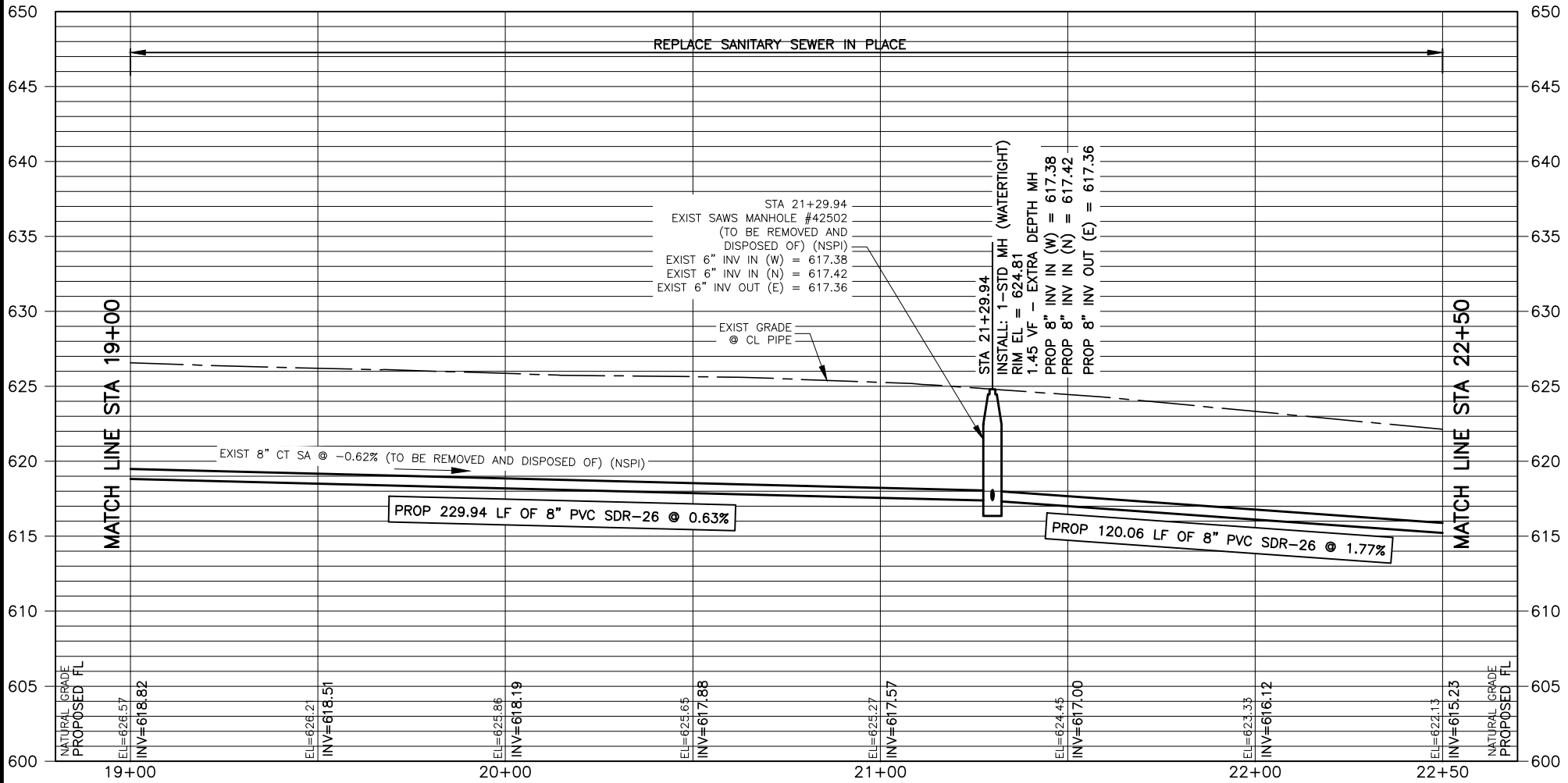
MATCH LINE STA 19+00
SEE SHT 8

MATCH LINE STA 22+50
SEE SHT 10



STA 21+29.94
 INSTALL: 1-STD MH (WATERTIGHT)
 N=13683369.30
 E=2141021.14
 PROP 8" PVC SDR-26 OUT (E) = 617.36
 PROP 8" PVC SDR-26 IN (W) = 617.38
 PROP 8" PVC SDR-26 IN (N) = 617.42

8" PVC - LINE A



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 F-1046

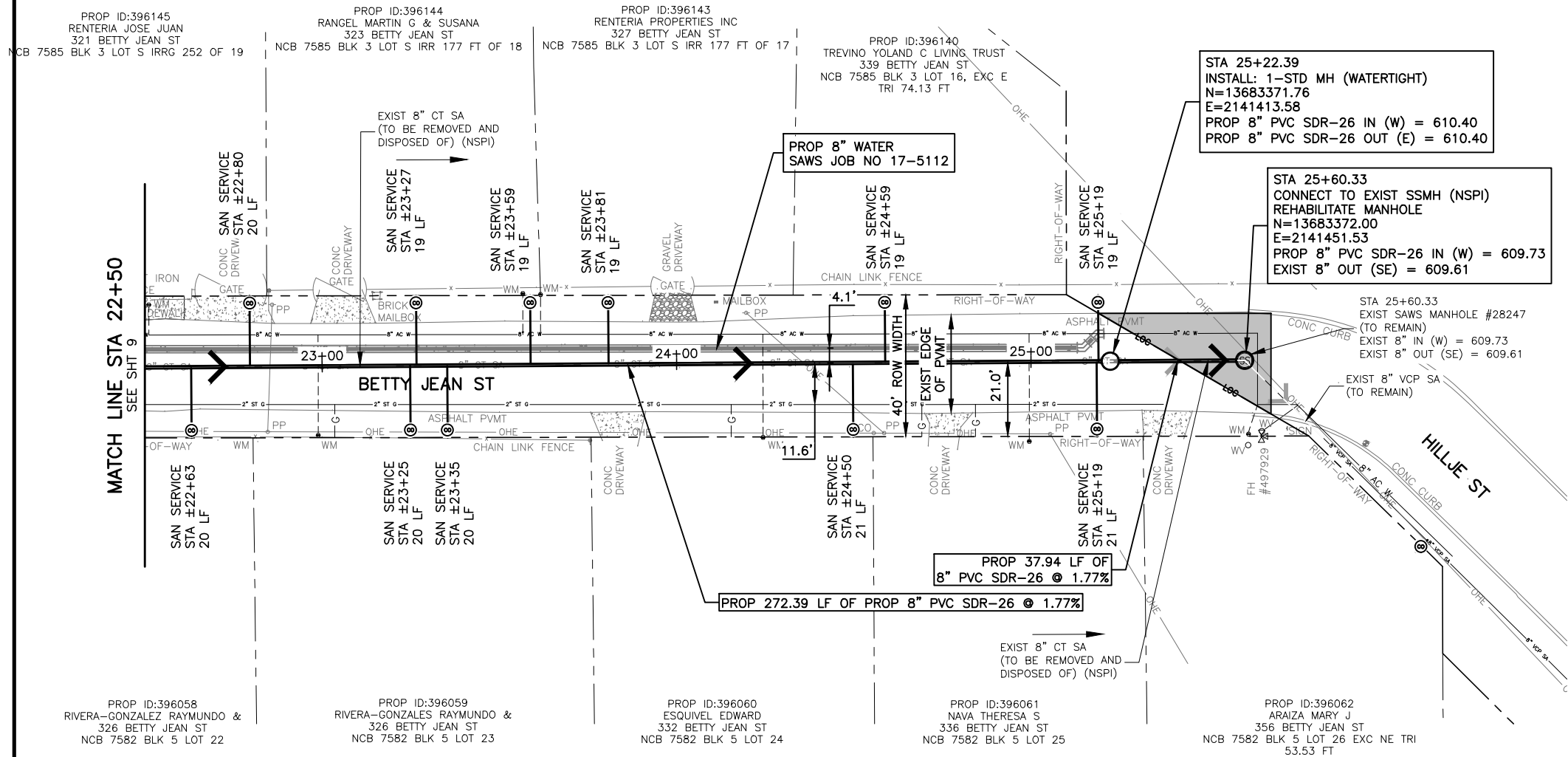
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 7330 San Pedro, Suite 202 San Antonio, TX 78216
 Tel: 210-581-3600 • www.bgeinc.com
 TBPE Registration No. F-1046

LEGEND

- PROP. WATER MAIN
- PROP. SAN SERVICE
- 2-WAY CLEANOUT
- EXIST. WATER MAIN
- GAS MAIN
- SANITARY SEWER
- STORM SEWER
- UTILITY POLE LINE
- ELECTRIC CABLE
- TELEPHONE CABLE
- DUAL BRANCH SERV.
- NEW UNMETERED SERVICE:
- 3/4" SINGLE
- 1" DUAL
- SERVICE RECONNECT:
- 3/4"
- 1" OR LARGER
- SERVICE RELAY:
- 3/4"
- 1" OR LARGER
- SERVICE RELOCATE:
- 3/4"
- 1" OR LARGER
- RELOCATE METER
- NEW SERVICE:
- 3/4"
- 1" OR LARGER

No.	Revision	Drawn	Approved	Date
REVISIONS				
2018 SMP BETTY JEAN ST FROM JUNIOR ST TO HILLJE ST SANITARY SEWER - LINE A STA 19+00 TO STA 22+50				
DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED				
APPROVED				
MAP No. 170558 AND 172558				SHEET
SECT. No.				9
DR.	CK.	JOB No. 17-5594		OF 11

BGE, INC. S:\Projects\SanSewer - Betty Jean\03_CADD\01_Sheets\BETTY JEAN SANITARY SEWER.dwg Jan 05 2018 12:07pm acalderon



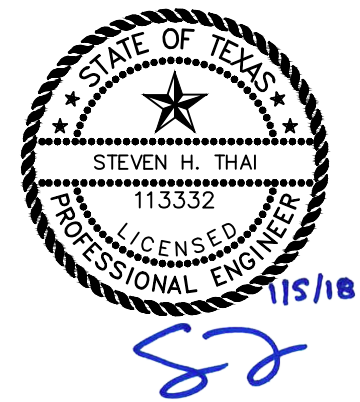
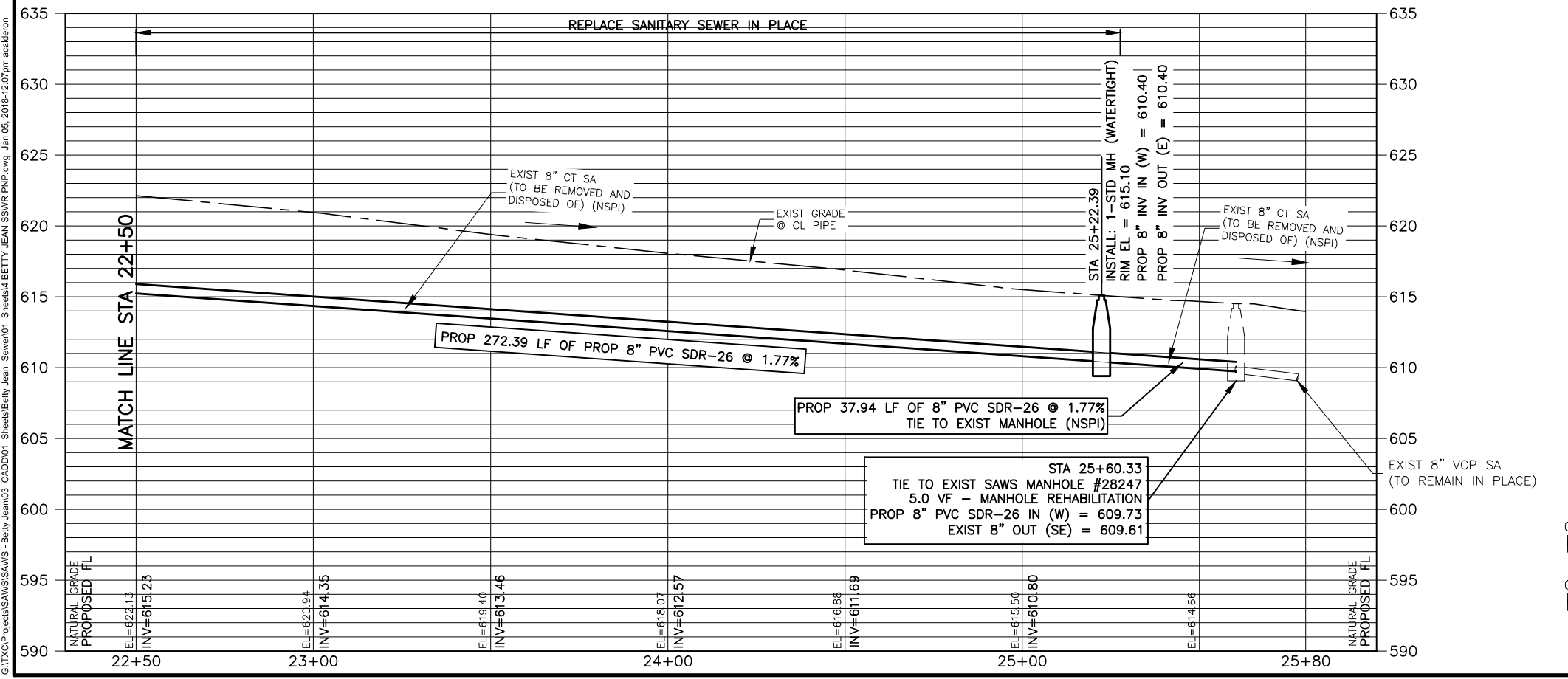
CAUTION !!!
 EXISTING
 UNDERGROUND GAS AND
 OVERHEAD ELECTRIC LINES.

TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OF SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

TREE PROTECTION NOTE:
 THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS ONE FOOT (1') PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A TEN INCH (10") DIAMETER TREE WOULD HAVE A TEN FOOT (10') RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL OAK WOUNDS SHALL BE PAINTED OVER, WITHIN TWENTY (20) MINUTES TO PREVENT OAK WILT.

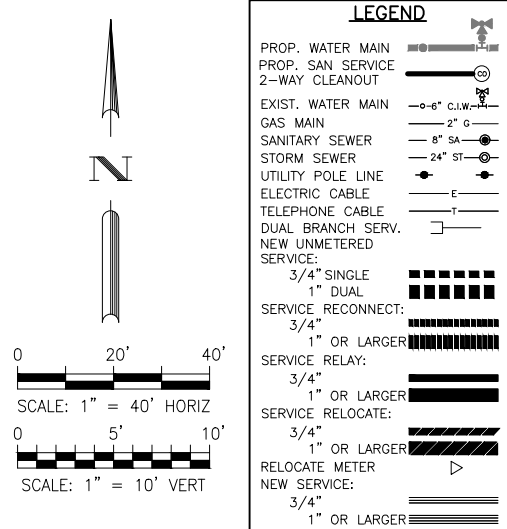
SPEC NO.	UNIT DESCRIPTION	UNIT	QUANTITY
205	Hot Mix Asphaltic Pavement, Type D (2" Compacted Depth)	SY	77
205	Hot Mix Asphaltic Pavement, Type B (12" Compacted Depth)	SY	126
208	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2")	SY	77
550	Trench Protection	LF	310
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (0'-6" cut)	LF	219
848	8" PVC Gravity Sanitary Sewer Pipe (SDR 26-2241, 160 psi) (6'-14" cut)	LF	91
852	Sanitary Sewer Manhole (0'-6")	EA	1
854	Sanitary Sewer Laterals, (SDR 26, ASTM 2241, 160 psi)	LF	217
854	Two-Way Sanitary Sewer Clean-out	EA	11
866	Pre Sewer Main Television Inspection (6"-12")	LF	310
866	Post Sewer Main Television Inspection (8"-12")	LF	310
910	Manhole Rehabilitation	VF	5

8" PVC - LINE A



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2" MILL AND 2" TYPE D ASPHALT



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 7330 San Pedro, Suite 202 San Antonio, Tx 78216
 Tel: 210-581-3600 • www.bgeinc.com
 TBPE Registration No. F-1046

No.	Revision	Drawn	Approved	Date
REVISIONS				
2018 SMP BETTY JEAN ST FROM JUNIOR ST TO HILLJE ST SANITARY SEWER - LINE A STA 22+50 TO STA 25+22				
DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED				
APPROVED				
MAP No. 170558 AND 172558				SHEET
SECT. No.				10
DR.	CK.	JOB No. 17-5594		Of 11

BGE, INC.
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