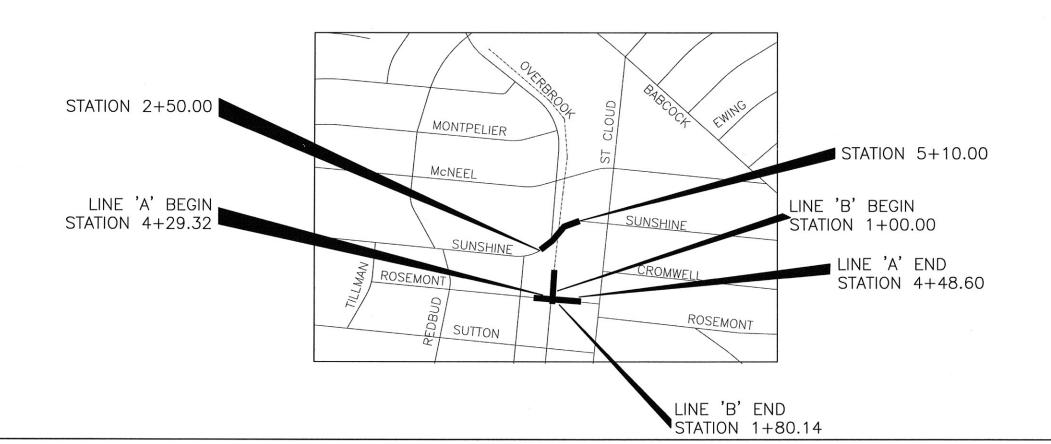
SAN ANTONIO



WATER SYSTEM

JOB NO: 12-5593 UPPER WOODLAWN DRAINAGE ST CLOUD OPTION 2 SANITARY SEWER





GENERAL SEWER NOTES

- 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 TEXAS DEPARTMENT OF TRANSPORTATION (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 PUBLIC WORKS CONSTRUCTION".
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL".
- 2. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500 AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.
- 3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

UTILITY LOCATE:

SAWS UTILITY LOCATES: 233-2009

SAWS PRODUCTION CONTROL CENTER: 233-2016

COSA DRAINAGE: 207-8048

COSA TRAFFIC SIGNAL OPERATIONS: 207-7720

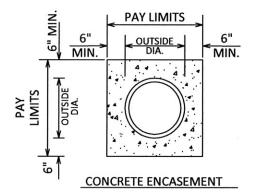
TEXAS STATE WIDE ONE CALL LOCATOR: 1-800-545-6005 OR 811

- 4. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO OVERFLOWS OR SPILLAGE OF SEWAGE OCCURS. SHOULD THIS OCCUR, THE CONTRACTOR SHALL:
- A. IDENTIFY THE SOURCE OF THE SPILL AND ATTEMPT TO ELIMINATE ANY ADDITIONAL SPILLAGE. NOTIFY SAWS CONSTRUCTION INSPECTIONS
- B. CONTAIN THE SPILL IN PLACE AND PREVENT CONTAMINATION OF STREAMS.
- C. CLEAN UP THE SPILL AND DISPOSE OF CONTAMINATED MATERIALS.
- D. DISINFECT THE AREA OF THE SPILL WITH A MIXTURE OF HTH CHLORINE AND WATER.
- E. IDENTIFY AND TRAIN PERSONNEL RESPONSIBLE FOR SPILLAGE PREVENTION AND CONTROL.

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND THE SAWS.

- 5. THE CONTRACTOR SHALL COMPLY WITH CITY OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- 6. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS OR SPOILS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- SERVICE LATERAL CONNECTIONS:
- A. THE EXACT LOCATION AND ELEVATION OF THE SERVICE LATERALS AND MANHOLES SHALL BE FIELD VERIFIED BY THE CONTRACTOR. NO
- B. A MINIMUM OF 3 FEET OF COVER IS TO BE MAINTAINED OVER THE SANITARY SEWER LATERALS AT SUBGRADE,
- C. ALL SEWER LATERAL SERVICES FOR FUTURE CONNECTIONS AS IDENTIFIED ON THE PLANS SHALL HAVE A ONE WAY CLEAN—OUT, CAPPED
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE DURING CONSTRUCTION OF THE SEWER WORK (NSPI).
- E. LATERALS SHALL BE CONSTRUCTED TO SERVE ALL EXISTING HOUSES AND PLATTED VACANT LOTS.
- 8. CONTRACTOR SHALL COORDINATE WITH SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500 AND/OR SAWS LIFT STATIONS OPERATIONS AT LEAST TWO WEEKS IN ADVANCE OF THE SHUTDOWN OF EXISTING FORCE MAINS OF ANY SIZE. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE SHUTDOWN INCLUDING ANY BYPASS PUMPING OR PUMP AND HAUL AS REQUIRED BY SAWS. PUMP AND HAUL WILL NOT BE ALLOWED OVER THE EDWARDS AQUIFER RECHARGE ZONE,

- 9. SEWER LINES LOCATED WITHIN OR CROSSING THE 5-YEAR FLOOD PLAIN OF A DRAINAGE WAY WILL BE PROTECTED FROM INUNDATION AND STREAM VELOCITIES WHICH COULD CAUSE EROSION AND SCOURING OF BACKFILL. THE TRENCH MUST BE CAPPED WITH CONCRETE TO PREVENT SCOURING OF BACKFILL. THE TRENCH MUST BE ENCASED IN CONCRETE. ALL CONCRETE SHALL HAVE A MINIMUM THICKNESS OF
- 10. Where water lines and new sewer lines are installed with a separation distance of less than nine feet (i.e., water lines CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC 217.53(D) (PIPE DESIGN) AND 30 TAC 290.44(E) (WATER DISTRIBUTION).
- 11. 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.
- 12. THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED, IN ACCORDANCE WITH SAWS STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION ITEM NO. 864, "BYPASS PUMPING." PAYMENT FOR SUCH WORK WILL BE MADE UNDER THE BID ITEM SANITARY SEWER "BYPASS PUMPING" AS PER STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION ITEM NO. 864, "BYPASS PUMPING," THE CONTRACTOR SHALL PROVIDE IN WRITING A SEQUENCE OF BYPASS PUMPING FOR REVIEW AND APPROVAL BY THE INSPECTIONS DEPARTMENT. REFER TO THE CONSTRUCTION PLANS FOR THE CONSTRUCTION PHASING AND DIVERSION REQUIREMENTS. THE CONTRACTOR SHALL ALSO PROVIDE A DETAILED SKETCH SHOWING THE LOCATION OF BYPASS PUMPING EQUIPMENT FOR EACH LINE SEGMENT(S) AROUND WHICH FLOWS ARE BEING BYPASSED, ALONG WITH THE SPECIFICATION OF PUMPING EQUIPMENT, TYPE, SIZE, CAPACITY AND AMOUNT OF PUMPS REQUIRED TO HANDLE THE PEAK WET WEATHER FLOW.
- 13. SEE SAWS WEBSITE FOR DETAILS, WWW.SAWS.ORG



NOTE: ALL CONCRETE ENCASEMENT SHALL BE POURED AT A PLANE 6" ABOVE PIPE BETWEEN EXCAVATED TRENCH WALLS. SEE SAWS DETAILS DD-858-01

INDEX OF DRAWINGS

SHT NO. DRAWING TITLE

TITLE SHEET 1

2

SANITARY SEWER NOTES

& SHEET INDEX

ROSEMONT SANITARY SEWER LINE 'A'

ROSEMONT SANITARY SEWER LINE 'B'

OVERALL SEWER LAYOUT

OV	OVERALL SUMMARY OF QUANTITIES					
ITEM	DESCRIPTION OF ITEM	UNIT	QTY			
100.1	MOBILIZATION	LS	1			
101.1	PREPARATION OF RIGHT OF WAY	LS	1			
550	TRENCH EXCAVATION PROTECTION	L.F.	160			
848	8" PVC SANITARY SEWER LINE (0'-6')	L.F.	80			
848	15" PVC SANITARY SEWER LINE (0'-6')	L.F.	20			
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	3			
852.4	DOGHOUSE MANHOLE	EA	1			
858	CONCRETE ENCASEMENT	CY	8.5			
864	BYPASS PUMPING	LS	1			
866	SEWER MAIN PRE-TELEVISING (8"-15")	LF	420			
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	100			
1103	POINT REPAIRS AND OBSTRUCTION REMOVALS	EA	2			



D I N F-52	C PH:(2	19 SPECTRU	CONSULTING EI M DR, SUITE 100, FAX:(210) 342-670	SAN ANTON		
LEGEND						
PROP. WATER MAIN EXIST. WATER MAIN -0-6"CLIN-"4" GAS MAIN -2" -0"SA — -0"SA — UTILITY POLE LINE -0" -0"	No.	Revi	sion	Drawn	Approved	Date
ELECTRIC CABLE E			REVIS	IONS		
TELEPHONE CABLET			SA SEWE	NITA R N		3

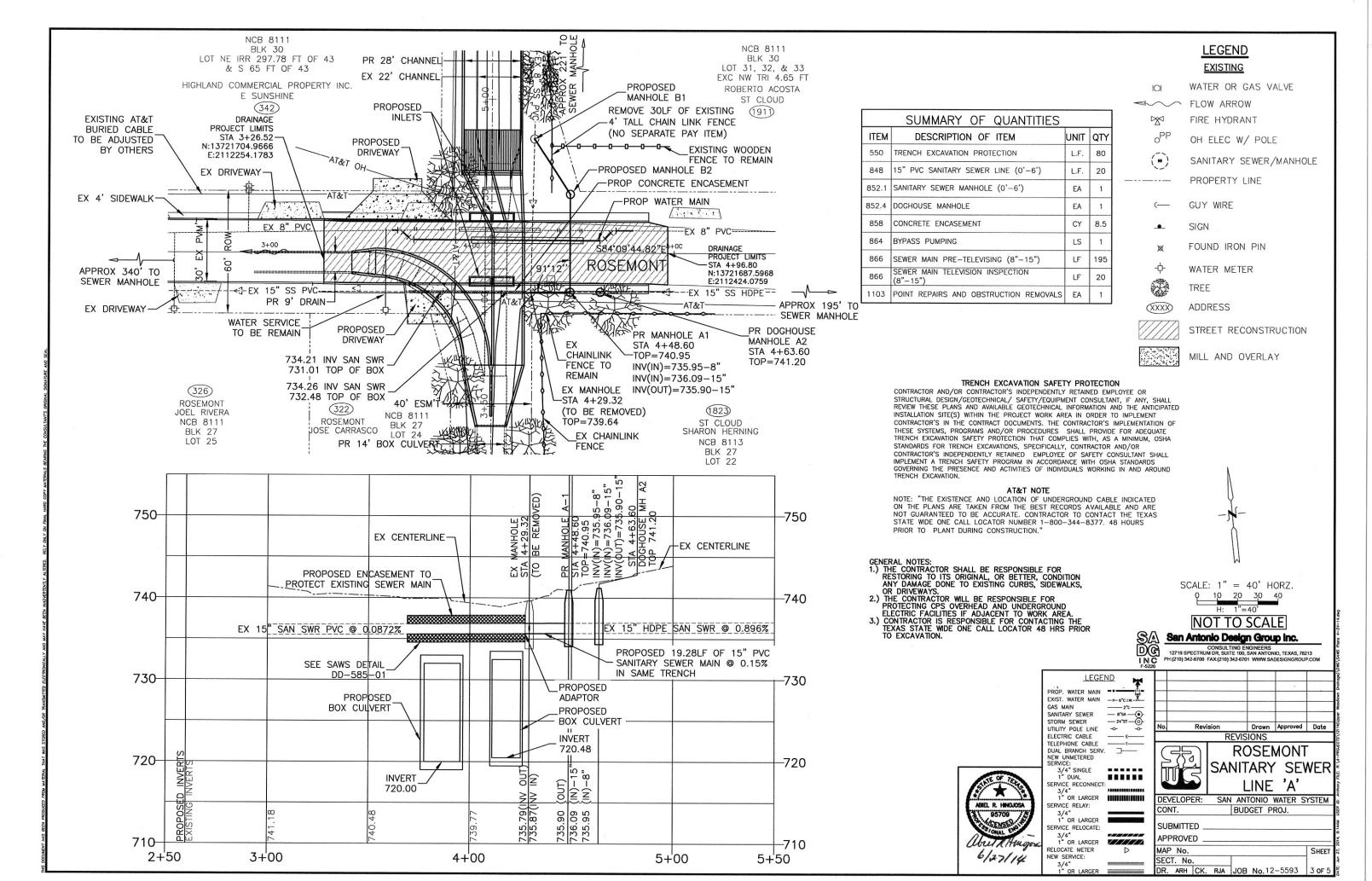
RELOCATE METER 6/27/14 NEW SERVICE:

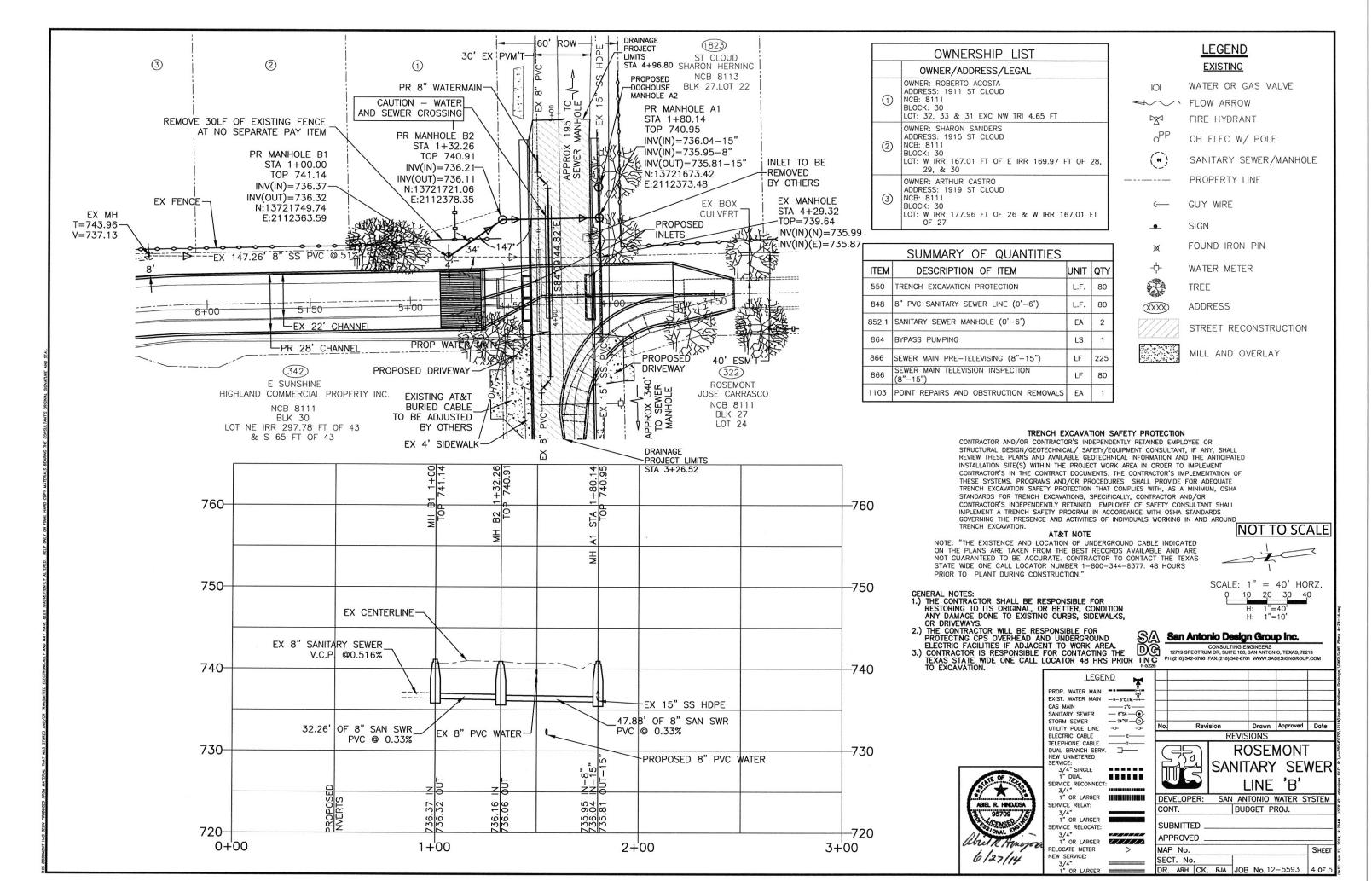
3/4" 1" OR LARGER SERVICE RELAY: 3/4" 1" OR LARGER SERVICE RELOCATE: 3/4" 1" OR LARGER

//////

DEVELOPER: SAN ANTONIO WATER SYSTEM

CONT.		BUDGET PROJ.	
SUBMITTED APPROVED			
MAP No.	W		SHEE
SECT. No.			1
DD ABU CV	DIA	IOD No 12-5503	2 05





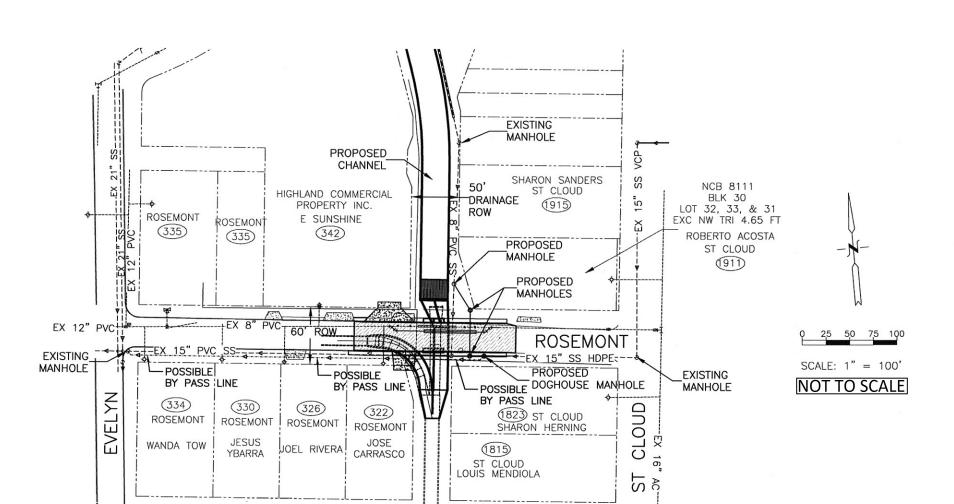
SANITARY SEWER PIPE FLOW DATA

PIPE NAME	FROM	TO	SIZE (DIA.)	SLOPE	LENGTH	Q (FULL)
LINE 'A'	ST CLOUD	PROPOSED MANHOLE A-1	15 INCH HDPE	0.896%	175LF	3243 GAL/MIN

<u>LEGEND</u>					
IOI	WATER OR GAS VALVE				
\sim	FIRE HYDRANT				
oPP	OH ELEC W/ POLE				
(•)	SANITARY SEWER/MANHOLE				
	PROPERTY LINE				
-ф-	WATER METER				
(XXXX)	ADDRESS				

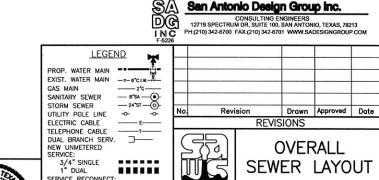
MILL AND OVERLAY

STREET RECONSTRUCTION



SANITARY SEWER BYPASS NOTES

- 1.) ALL WORK FOR BYPASS PUMPING SHALL BE DONE IN ACCORDANCE TO SÁWS SPECIFICATION NO. 864 BYPASS PUMPING.
- 2.) THE CONTRACTOR SHALL FIELD VERIFY MANHOLE INVERTS AND SANITARY SEWER LINE SLOPES PRIOR TO COMMENCING BYPASS WORK.
- 3.) THE CONTRACTOR SHALL MAINTAIN SEWAGE FLOW IN THE CONSTRUCTION AREA IN ORDER TO PREVENT BACKUP AND/OR OVERFLOW INTO PIPE SEGMENTS AND LATERALS, ADJACENT DITCHES, STORM SEWERS AND WATERWAYS.
- 4.) THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE PUMPING EQUIPMENT, FORCE MAINS AND OTHER NECESSARY APPURTENANCES IN ORDER TO MAINTAIN RELIABLE SANITARY SEWER SERVICE IN ALL SANITARY SEWER LINES AS REQUIRED FOR CONSTRUCTION.
- 5.) ANY SPILLAGE, BACKUPS AND/OR OVERFLOWS, ETC. AS A RESULT OF INADEQUATE EQUIPMENT ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.





SERVICE RECONNECT: 3/4" 1" OR LARGER ERVICE RELAY: 3/4" 1" OR LARGER SERVICE RELOCATE:

3/4"
1" OR LARGER RELOCATE METER

CONT. BUDGET PROJ. SUBMITTED APPROVED MAP No.

DEVELOPER:

SHEET SECT. No. DR. ARH CK. RJA JOB No.12-5593

SAN ANTONIO WATER SYSTEM