

REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425"
LOCATED AT THE NORTHEAST CORNER OF THE
RICHMOND RAILROAD OVER E127-00-00 ±60'
SOUTH OF VILLAGE DRIVE IN KEY MAP 409L
IN THE WHITE OAK BAYOU WATERSHED.
ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM "A" - BOX CUT ON "BB" INLET LOCATED
AT THE NORTHWEST CORNER OF SEATTLE STREET
AND SENATE AVENUE. ELEVATION = 103.44'

TBM "B" - BOX CUT ON "BB" INLET LOCATED
AT THE SOUTHWEST CORNER OF SEATTLE
STREET AND CARLSBAD STREET.
ELEVATION = 103.68'

TBM "C" - BOX CUT ON THE END OF THE
CONCRETE SIDEWALK AT THE SOUND WALL
LOCATED ON THE SOUTH SIDE OF SEATTLE
STREET. ELEVATION = 106.16'

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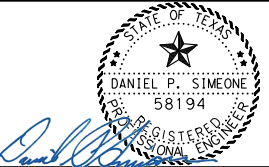
A map of Harris County, Texas, showing major highways and the project location. The map includes labels for Harris County and Brazoria County, and a callout box indicating the project location near the intersection of I-10 and I-27.

LOCATION MAP
N.T.S.

NOTE: THE LOCATION OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



1/2022



**SEATTLE STREET
RECONSTRUCTION PROJECT**

COVER SHEET

NO.	DATE	REVISIONS	BY
DRAWN BY: TJR		APPROVED BY: CAH	
DESIGNED: DPS		DATE: 3/31/2022	
SCALE:		SHEET: 1 OF 53	

TDLR REGISTRATION NO.: TABS2022005533

UTILITY ONE CALL
CONTRACTOR TO CALL
BEFORE DIGGING !!!
PHONE:
HOUSTON (713) 223-4567
(STATEWIDE OUTSIDE
HOUSTON)
1-(800)-545-6005



3/31/2022

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SWPPP CONSTRUCTION NOTES:

- CONTRACTOR SHALL INSTALL INLET PROTECTION DEVICES, STABILIZED CONSTRUCTION ACCESS, ETC. AT LOCATIONS SHOWN ON THE PLANS TO KEEP SILT AND EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS.
- DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SEGMENTS OF 800’ OR LESS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEEPED BACK INTO THE EXCAVATED AREA.
- CONTRACTOR SHALL CLEAN UP STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.
- CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
- CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
 - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN STABILIZED.
 - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - STRUCTURAL CONTROL MEASURES.
 - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION OR BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

TRAFFIC NOTES:

- CONTRACTOR SHALL OBTAIN REQUIRED PERMITS PRIOR TO CLOSING ANY ROADS, LANES, OR SIDEWALKS THE REQUEST MUST MADE BE AT LEAST TEN BUSINESS DAYS IN ADVANCE.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION.
- NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00PM TO 7:00AM.
- CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS.
- CONTRACTOR SHALL MAINTAIN ADA COMPLAINT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO THE BUS STOP.
- CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
- CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES
- ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. CONTRACTORS SHALL COORDINATE WITH PROPERTY OWNER TO TEMPORARILY CLOSE DRIVEWAY. ALTERNATIVELY, CONTRACTOR SHALL PLACE TEMPORARY ASPHALT OR GRAVEL SURFACE THROUGH WORK ZONE TO MAINTAIN ACCESS TO PROPERTY.
- ADDITIONAL OFF DUTY POLICE OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DIRECTION OF THE CITY EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.

WATER CONSTRUCTION NOTES:

- WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF HOUSTON INFRASTRUCTURE DESIGN MANUAL.
- ALL 4" THROUGH 12" WATER LINE TO BE AWWA C-900 PVC DR-18 BLUE PRESSURE RATED WATER MAIN WITH 2" AND SMALLER WATER SERVICE LINE TO BE CONTINUOUS TYPE K COPPER TUBING PER COH STANDARD SPECIFICATION SECTION 02503 OR POLYETHYLENE TUBING WHICH COMPLIES WITH ANSI/NFS 14, SIZED FOR COPPER TUBING PER ASTM D 2737 SDR 11. ALL 4" THRU 54" DI PIPE WATER LINES SHALL BE AWWA C151 WITH INSIDE LINING WITH AWWA C104 AND DOUBLE WRAPPED WITH 8-MIL POLYETHYLENE SHEETS.
- EXISTING WATER SERVICES (BOTH LONG AND SHORT) ARE NOT SHOWN ON PLANS. NOT ALL EXIST WATER METERS ARE SHOWN. CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING ADJACENT TO EXIST WATER METERS.

- CONCRETE THRUST BLOCKS SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT. USE RESTRAINED JOINTS WHERE PREVENTING MOVEMENT OF 16" OR GREATER PIPE IS NECESSARY DUE TO THRUST.
- ALL WATER LINES UNDER PROPOSED OR FUTURE PAVING AND TO A POINT OF ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE.
- ALL WATER LINE AND SEWER LINE CROSSINGS SHALL BE CONSTRUCTED PER TCEQ REGULATIONS.
- ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
- ALL WATER LINES TO BE DISINFECTED IN CONFORMANCE WITH AWWA C-651 AND THE TEXAS STATE DEPARTMENT OF HEALTH. AT LEAST ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EVERY 1,000 LINEAR FEET OF WATER LINE AND SHALL BE REPEATED IF CONTMINATION PERSISTS.
- ALL BELOW GRADE VALVES SHALL BE GASKETED, HUB-END GATE VALVES WITH A CAST IRON BOX, EXCEPT WHERE FLANGES ARE CALLED OUT ON THE PLANS.
- 4" THRU 12" FITTINGS SHALL BE CEMENT MORTAR LINED COMPACT DUCTILE IRON PRESSURE FITTINGS PER ANSI A21.53, OR PUSH ON FITTINGS PER ANSI A21.10 PRESSURE RATED AT 250 PSIG.
- HYDROSTATIC TESTING: ALL WATER PIPE SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS. TESTS ARE TO BE PERFORMED ON THE ENTIRE FOOTAGE OF WATER PIPE LINE INCLUDED IN THE PROJECT.
- ALL WATER LINES TO HAVE 5’ MINIMUM COVER TO FINISHED GRADE AND MINIMUM 12" CLEARANCE TO OTHER UTILITIES AT CROSSING UNLESS OTHERWISE NOTED ON PLANS. ALL WATER LINE INSTALLED OVER 8’ DEEP SHALL UTILIZE RESTRAINED JOINT FITTINGS.
- CONTRACTOR SHALL KEEP WATER PIPE CLEAN AND CAPPED (OR OTHERWISE EFFECTIVELY COVERED) OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.

GRADING NOTES:

- GENERAL CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY BENCHMARK ELEVATION AND NOTIFY ENGINEER IF ANY DISCREPANCY OR CONFLICT IS FOUND.
- CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE AND NO PONDING IN PAVED AREAS, AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING OR PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
- CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND DURING CONSTRUCTION.
- ALL EXISTING CONCRETE PAVING, SIDEWALK, AND CURB DEMOLITION SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. DISPOSAL SHALL BE AT AN APPROVED OFF-SITE, LAWFUL LOCATION, UNLESS DIRECTED OTHERWISE BY THE CITY.

GENERAL NOTES:

- CONTRACTOR TO CONTACT CENTERPOINT ENERGY PRIOR TO ANY WORK ACROSS EXISTING GAS LINE.
- CONTRACTOR SHALL REMOVE AND REPLACE EXISTING MAILBOXES SUCH THAT THE FINAL CONDITION OF THE COMPLETED WORK SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING WORK.
- CONTRACTOR SHALL REMOVE AND REPLACE EXISTING SIDEWALK RAMPS PER ADA REQUIREMENTS.
- CONTRACTOR SHALL ADJUST MANHOLE RIMS, FIRE HYDRANTS, VALVE COVERS, AND METER BOXES TO FINISH GRADE.
- ALL RESIDENTIAL DRIVEWAYS RADII TO BE 5-FOOT TYPICAL.


SANITARY SEWER CONSTRUCTION NOTES:

- ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HOUSTON’S INFRASTRUCTURE DESIGN MANUAL LATEST EDITION AND BE SUBJECT TO A STANDARD EXFILTRATION TEST. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF SEWER LINE INCLUDED IN THE PROJECT. REQUIREMENTS OF TEXAS ADMINISTRATIVE CODE, TITLE 30 CHAPTER 217, "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS" SHALL GOVERN WHERE CONFLICTS EXIST EXCEPT WHERE CITY REQUIREMENTS ARE MORE STRINGENT.

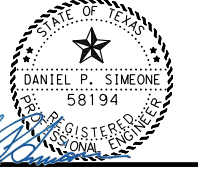
- EXISTING SANITARY SERVICES ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF SERVICE LEADS (SHORT SIDE AND LONG SIDE) PRIOR TO CONSTRUCTION.
- ALL MANHOLES ARE TO BE PER DETAILS SHOWN ON PLANS UNLESS OTHERWISE NOTED.
- SANITARY SEWER MANHOLES WILL HAVE BEDDING AND BACKFILL PER DETAILS SHOWN ON PLANS UNLESS OTHERWISE NOTED.
- THE SANITARY SEWER PVC PIPE SHALL BE ASTM D 3034 TYPE PSM SDR 26 GRAVITY SEWER PIPE, ASTM D2241 SDR 26 PRESSURE RATED SEWER PIPE OR AWWA C-900 DR-18 GREEN PVC PRESSURE RATED SEWER PIPE BASED ON CONSTRUCTION CONDITION REQUIREMENT AND CONFORMING TO ASTM D1784.
- WHEN SS PRESSURE RATED PVC PIPE IS USED ON WATER LINE (WL) CROSSING, THE SAME TYPE OF D2241 SDR 26 PVC PIPE OR C-900 GREEN DR-18 PVC GREEN PRESSURE PIPE SHALL BE USED BETWEEN TWO SS MH’S OR USE A DUCTILE IRON TRANSITION ADAPTER FOR CONNECTING THE ASTM D-3034 PVC GRAVITY PIPE TO THE D.I.-OD AWWA C-900 PVC PIPE CENTERED AT WL WHEN CONNECTING TWO DIFFERENT TYPES OF PVC PIPES FOR SEWER CONSTRUCTION.
- AWWA C-900 DR-18 PVC PIPE USES EITHER AWWA C900 DR-18 PVC FITTINGS OR DUCTILE IRON PIPE FITTINGS.
- ALL SANITARY SEWER LINES UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL HAVE BEDDING PER DETAILS SHOWN ON PLANS AS APPLICABLE, WITH 1 1/2 SACK CEMENT/CY STABILIZED SAND BACKFILL UP TO THE BOTTOM OF THE PAVEMENT SUBGRADE.
- ALL SANITARY SEWERS CROSSING WATER LINES WITH A CLEARANCE BETWEEN 12 INCHES AND 9 FEET SHALL HAVE A MINIMUM OF ONE 18’ JOINT OF 150 PSI DUCTILE IRON OR(GREEN) C900 PVC PIPE MEETING ASTM SPECIFICATION D2241 CENTERED ON WATER LINE.WHEN WATER LINE IS BELOW SANITARY SEWER, PROVIDE MINIMUM 2 FOOT SEPARATION.
- CONTRACTOR SHALL PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 9’ FEET BETWEEN WATER LINES AND SANITARY SEWER MANHOLES AND LINES.
- SANITARY SEWER MANHOLE RIMS OUTSIDE OF PROPOSED PAVING WILL BE SET 3"- 6" ABOVE THE SURROUNDING LEVEL FINISHED GRADE WITH SLOPED BACKFILL ADDED FOR STORM RUNOFF TO DRAIN AWAY FROM MANHOLE RIM.
- IN WET STABLE TRENCH AREAS USE BEDDING PER DETAILS SHOWN ON PLANS.
- DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID SEWER PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5% IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE.THE TEST SHALL BE PERFORMED AS PER 30 TAC 217.57 LATEST AMENDMENT AND WITHOUT MECHANICAL PULLING DEVICES. NO BALL-TYPE MANDREL IS ALLOWED.
- INFILTRATION, EXFILTRATION OR LOW-PRESSURE AIR TEST: EITHER OF THE FOLLOWING TESTS SHALL BE PERFORMED AS PER TAC, TITLE 30 217.57 WITHIN THE SPECIFIED TOLERANCES ON ALL GRAVITY SEWERS.
 - INFILTRATION OR EXFILTRATION TEST: TOTAL LEAKAGE AS DETERMINED BY A HYDROSTATIC HEAD TEST SHALL NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO (2) FEET.
 - LOW-PRESSURE AIR TEST: PERFORM TEST ACCORDING TO UNI-B-6-90 OR OTHER APPROPRIATE PROCEDURES. FOR SECTIONS OF PIPE LESS THAN 36" (INCH) AVERAGE INSIDE DIAMETER,THE MINIMUM ALLOWABLE TIME FOR PRESSURE DROP FROM 3.5 P.S.I.G. TO 2.5 P.S.I.G. SHALL BE AS FOLLOWS:
 - 6" 340 SECONDS OR 0.855(L) FOR TEST LENGTHS GREATER THAN 398’
 - 8" 454 SECONDS OR 1.520(L) FOR TEST LENGTHS GREATER THAN 298’
 - 10" 567 SECONDS OR 2.374(L) FOR TEST LENGTHS GREATER THAN 239’
 - 12" 680 SECONDS OR 3.419(L) FOR TEST LENGTHS GREATER THAN 199’
 - 15" 850 SECONDS OR 5.342(L) FOR TEST LENGTHS GREATER THAN 159’
 - 18" 1020 SECONDS OR 7.693(L) FOR TEST LENGTHS GREATER THAN 133’
- WHERE L = LENGTH OF LINE OF SAME PIPE SIZE IN FEET.
- "SAN. S. E." INDICATES "SANITARY SEWER EASEMENT"
- FOR SANITARY MANHOLE (MH) RIMS SET INSIDE OF OR AT CURB-AND-GUTTER PAVEMENT, OR BELOW TOP-OF-CURB, MH RIMS WILL BE SET FLUSH WITH THE ABUTTING PAVED SURFACE. THE (VALCUN, NEENAH OR EQUAL) HEAVY DUTY BOLTED SOLID MH COVER SHALL BE PROPERLY ATTACHED AND SEALED TO ITS COMPATIBLE GASKETED FRAME BY USING BOTH A NEOPRENE GASKET AND (AT LEAST) 4 COUNTER-SUNK HEXHEAD COARSE THREADED 1/2"-13 UNC STAINLESS STEEL BOLTS. THE HEAVY-DUTY FRAME MH COVER SHALL BE SOLID (NO AIR HOLES). SAID FRAME SHALL BE BOTH EMBEDDED INTO THE MH’S TOP ALSO SECURELY ANCHORED TO THE UNDERLYING MH STRUCTURE WITH EITHER SECURELY ATTACHED EMBEDDED ANCHOR BOLTS OR THE CONCRETE MH’S EXPOSED REBAR WELDED TO THE FRAME OR OTHER EQUALLY SECURED METHOD TO PREVENT MH COVER/FRAME BLOW-OFFS/EJECTIONS.

REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425" LOCATED AT THE NORTHEAST CORNER OF THE BRIDGE ON RIO GRANDE OVER E127-00-00 ±60' SOUTH OF VILLAGE DRIVE IN KEY MAP 409L IN THE WHITE OAK BAYOU WATERSHED. ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)
TEMPORARY BENCHMARKS:
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TBM "C" - BOX CUT ON THE END OF THE CONCRETE SIDEWALK AT THE SOUND WALL LOCATED ON THE SOUTH SIDE OF SEATTLE STREET. ELEVATION = 106.16'


NOTE: THE LOCATION OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRAACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

GENERAL NOTES

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 2 OF 53

3/31/2022

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PRIVATE UTILITY NOTES:

AT&T TEXAS/ SWBT FACILITIES:

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL CALL 1-800-344-8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER ROOSEVELT LEE JR. AT (713) 567-4552 OR EMAIL HIM AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR OUR AT&T TEXAS/SWBT FACILITIES.

VEGETATION PROTECTION AND REMOVAL NOTES:

1. CONTRACTOR SHALL PROTECT ALL TREES ALONG THE RIGHT-OF-WAY LINE AND THE ADJACENT 5 FEET THE RIGHT-OF-WAY (NO SEPARATE PAY).
2. SEE SPECIFICATION SECTION 01562 FOR PROTECTION AND MAINTENANCE OF TREES AND PLANTS.
3. CONTRACTOR SHALL RETURN THE CONSTRUCTION SITE TO THE ORIGINAL OR BETTER CONDITION (NO SEPARATE PAY).

CENTERPOINT ENERGY NOTES:

CAUTION: UNDERGROUND GAS FACILITIES

1. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.
-WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL 713-207-5463 OR 713-945-8037 (7:00 AM TO 4:30 PM) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
-WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
-WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
-FOR EMERGENCIES REGARDING GAS LINES CALL 713-659-3552 OR 713-207-4200
2. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL LINES

1. OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:
-ANY ACTIVITY WHERE PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
-OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.
2. PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT 713-207-2222.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

1. NO APPROVAL TO USE, CROSS, OR OCCUPY NO CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING AND RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769

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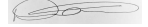
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TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT AT 713-207-2222.

NOTICE:
For your safety, you are required by Texas law to call 811 at least 48 hours before you dig so that underground lines can be marked. This signature does not fulfill your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES


 Date: 3/10/2022
CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not to be used for conflict verification. Signature valid for six months.

 Date: 3/10/2022
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY.
(This signature verifies existing underground facilities - not to be used for conflict verification.)
Signature valid for six months.

 Date: 2/1/22

_____. Approved for AT&T TEXAS/SWBT underground conduit facilities only. Date: _____
Signature valid for one year.


NOTE: THE LOCATION OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRAACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.



**16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040**



4/1/2022

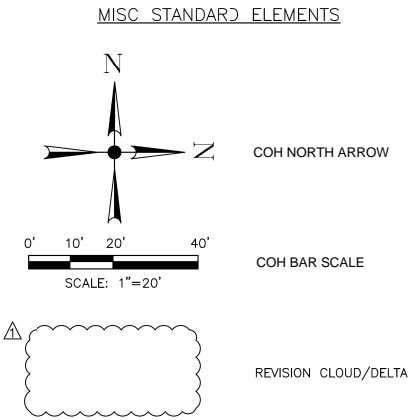
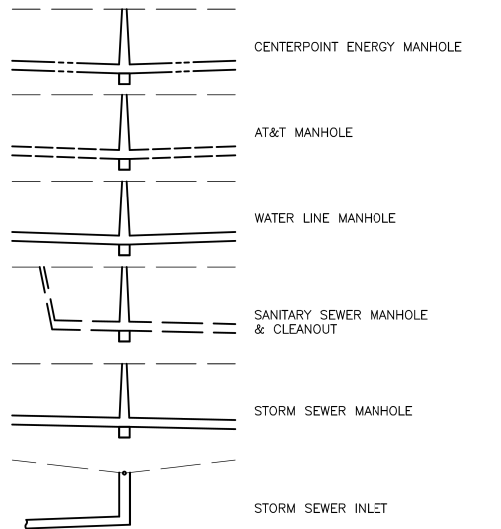
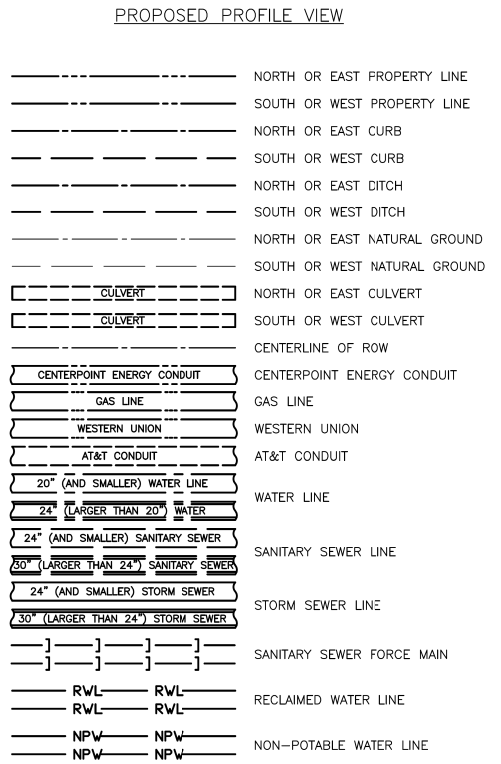
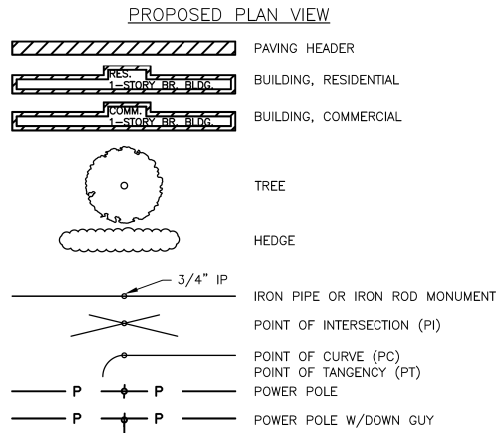
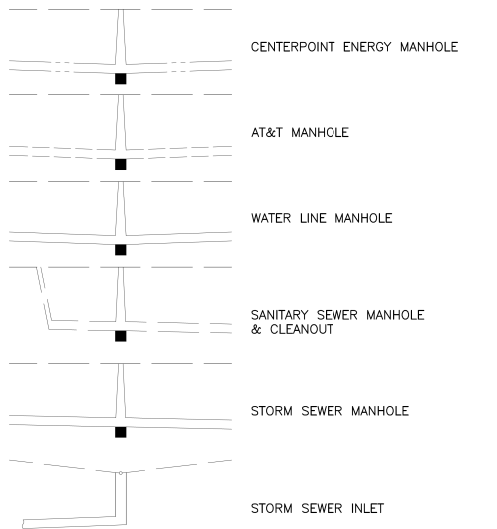
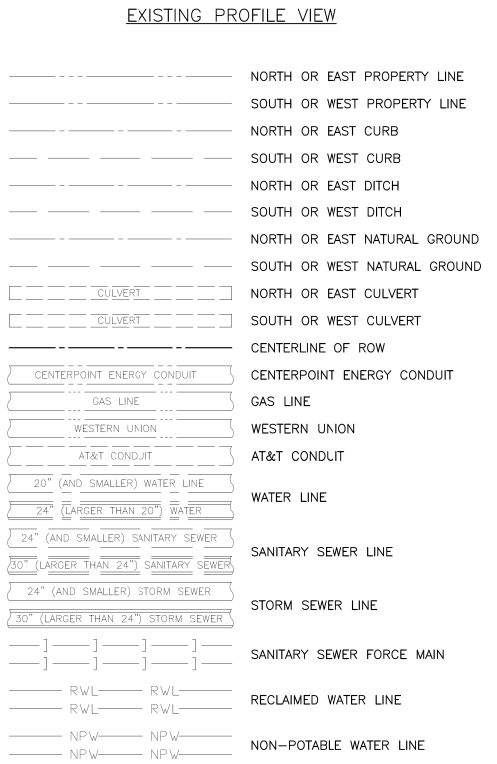
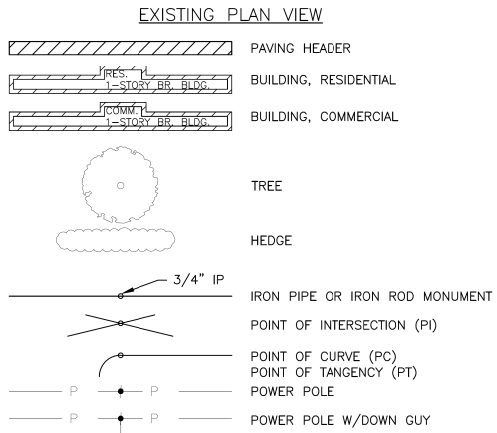
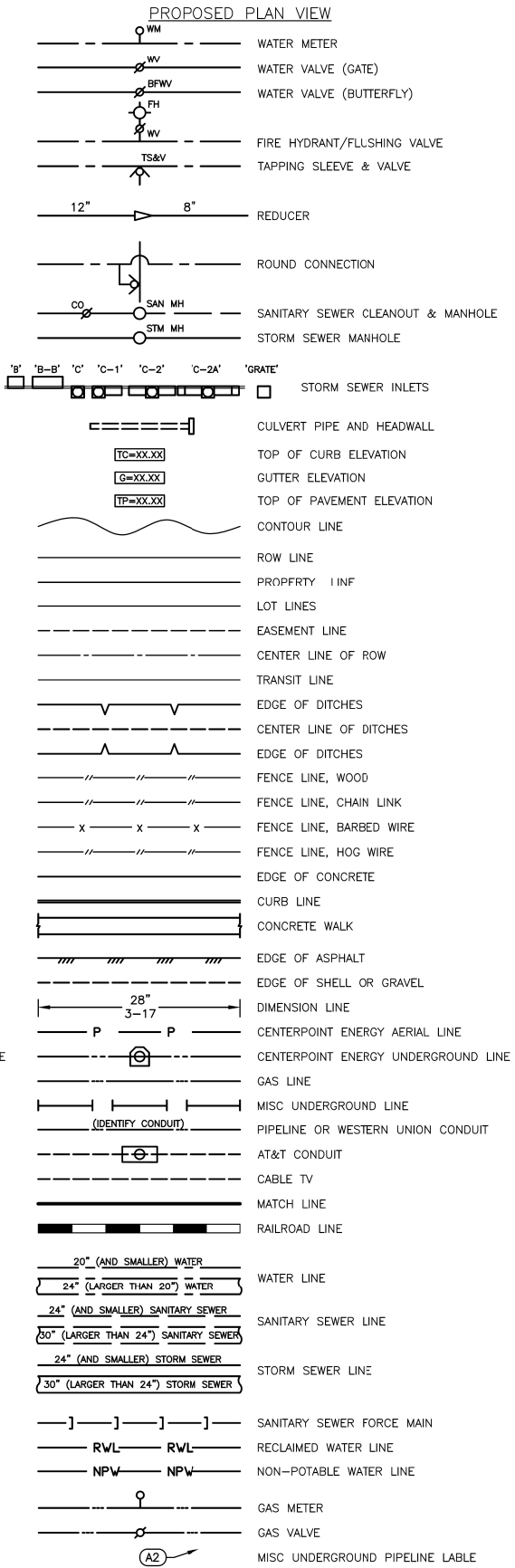
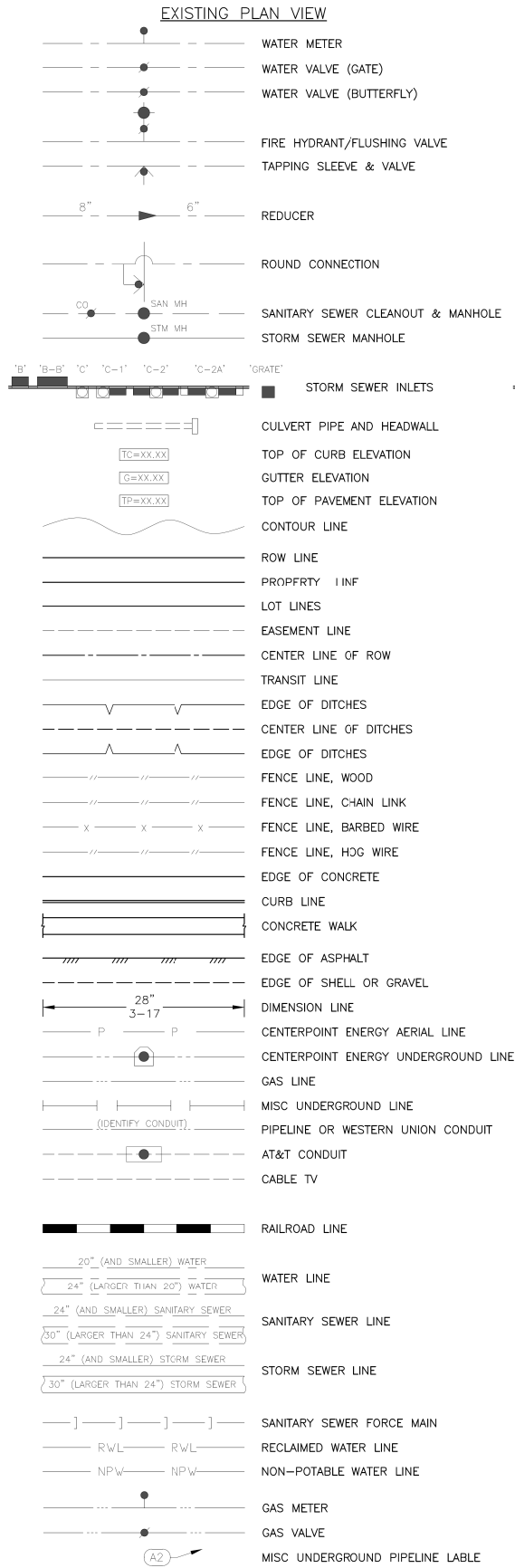


AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

SEATTLE STREET
RECONSTRUCTION PROJECT

GENERAL NOTES

NO.		DATE	REVISIONS	BY
DRAWN BY: TJR			APPROVED BY: CAH	
DESIGNED: DPS			DATE: 3/31/2022	
SCALE:			SHEET: 3 OF 53	



**16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040**

4/1/2022

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

LEGEND

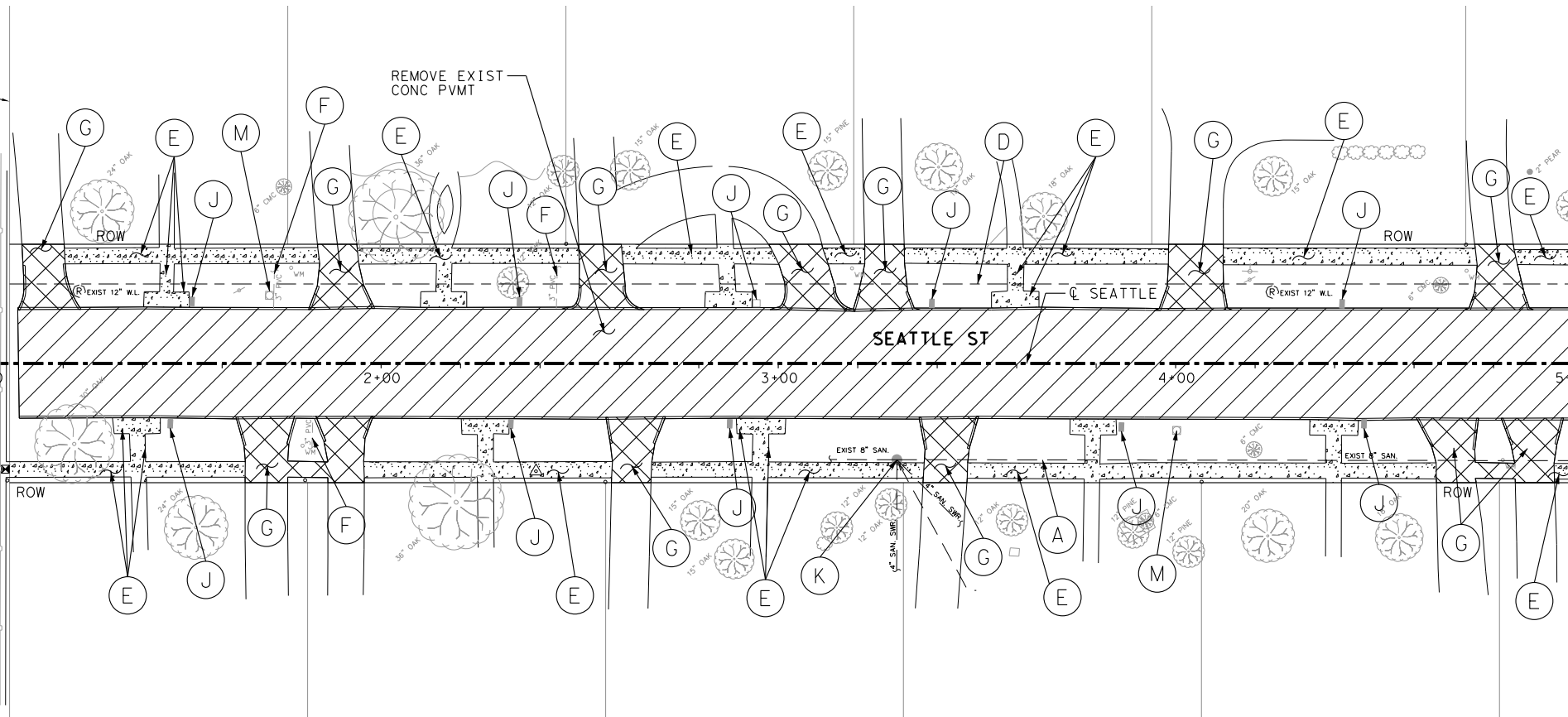
NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 4 OF 53

3/31/2022

... \AF_ROW_REM_LAY_01.dgn

PROPOSED 5'-
PREPARED BY:
DATED: 4/23/
(NO DEED OF 1



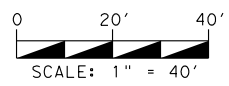
MATCH LINE STA 5+00

KEYED NOTES:

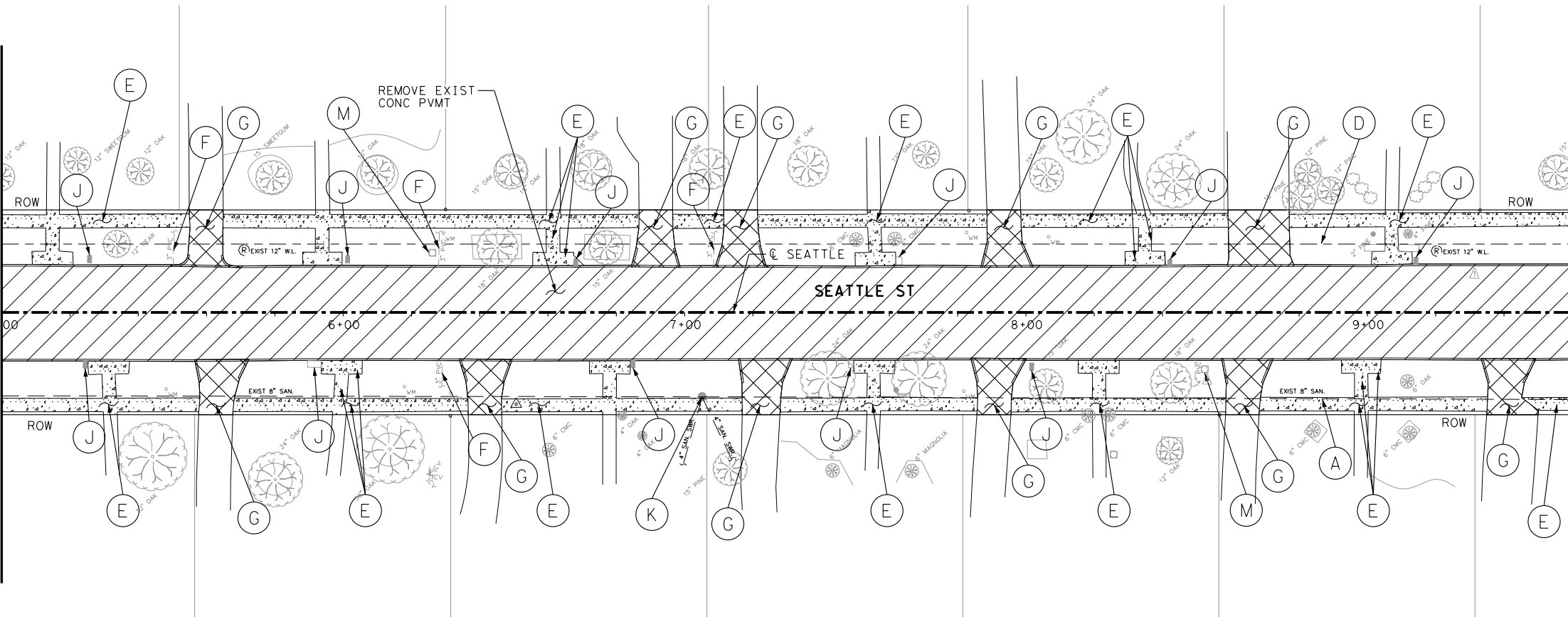
- A EXIST 8" SAN TO BE FILLED AND ABANDONED IN PLACE.
- B REMOVE AND DISPOSE EXISTING 18" STORM SEWER.
- C REMOVE AND DISPOSE EXISTING 24" STORM SEWER.
- D EXISTING 12" WL TO BE ABANDONED.
- E REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK.
- F EXISTING 3" OR 4" PVC THROUGH-CURB DRAIN PIPE TO BE REMOVED AND REPLACED WITH CAST IRON CURB OPENING CASTING (SEE DETAIL).
- G REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY.
- I OMITTED
- J REMOVE, STORE AND REPLACE, OR REMOVE AND REPLACE (IN-KIND) EXISTING MASONRY, WOOD, METAL AND SPECIALTY MAILBOX EQUAL TO OR BETTER THAN EXISTING.
- K REMOVE AD DISPOSE OF EXISTING MANHOLE.
- L REMOVE AND DISPOSE OF EXISTING INLET.
- M EXISTING STREETLIGHTS TO BE DE-ENERGIZED AND REMOVED BY OTHERS. EXISTING CIRCUITS TO BE ABANDONED.

LEGEND


- EXISTING CONCRETE PAVEMENT TO BE REMOVED.
- EXISTING DRIVEWAY TO BE REMOVED.
- EXISTING SIDEWALK AND RAMPS TO BE REMOVED.




MATCH LINE STA 5+00




MATCH LINE STA 9+00



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

**DEMOLITION PLAN
BEGIN TO STA 9+60**

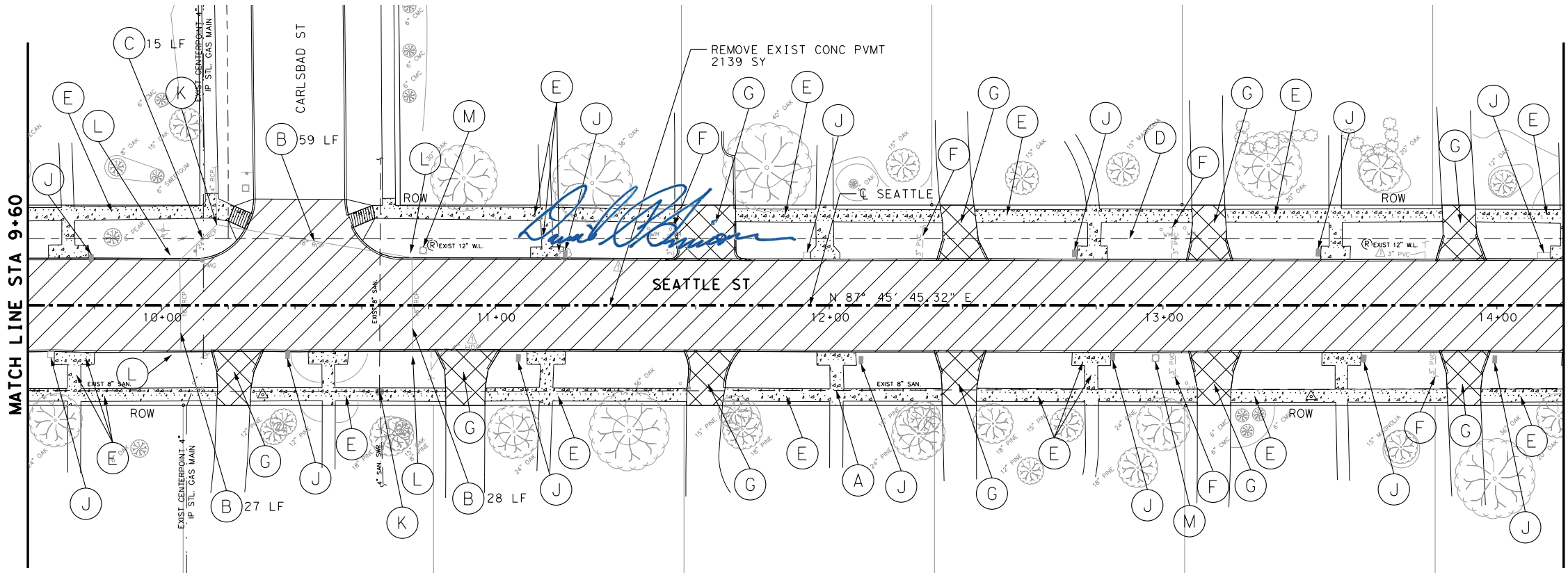
SHEET 1 OF 3

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 5 OF 53

4/4/2022

\\AF_ROW_REM_LAY_02.dgn



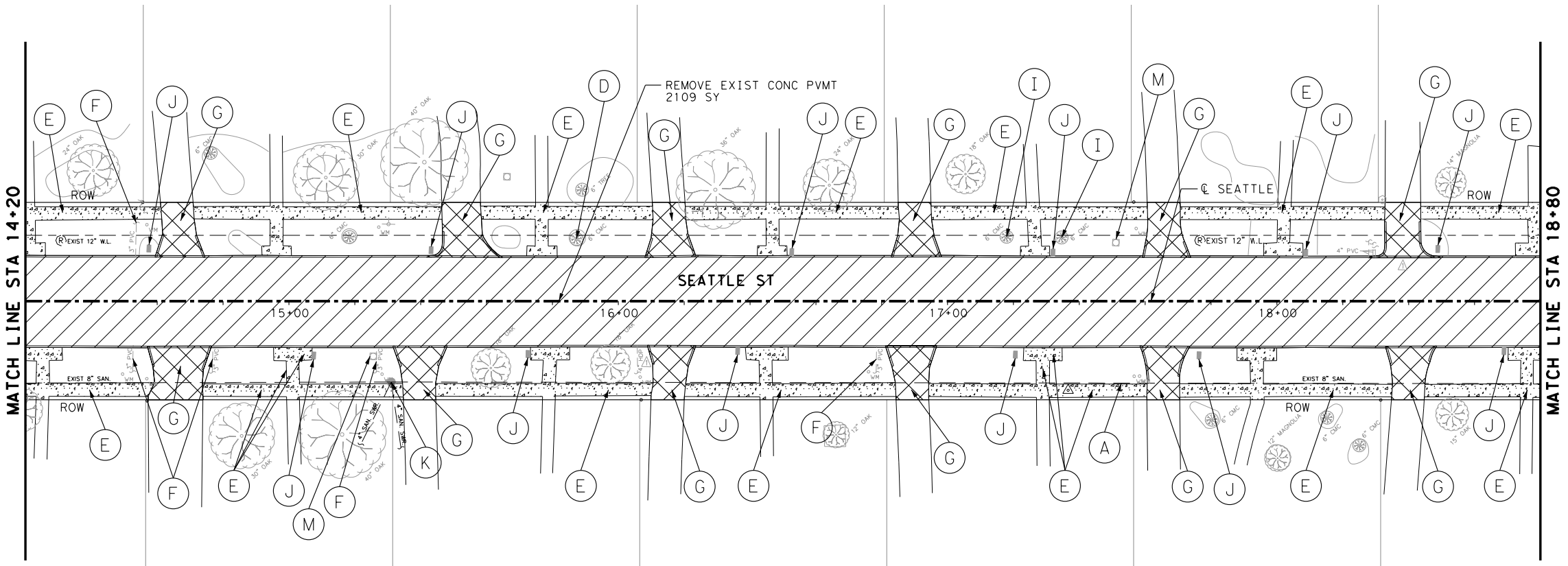
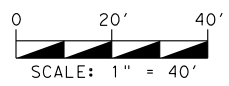
MATCH LINE STA 14+20

KEYED NOTES:


- A EXIST " SAN TO BE FILLED AND ABANDONED IN PLACE.
- B REMOVE AND DISPOSE EXISTING 18" STORM SEWER.
- C REMOVE AND DISPOSE EXISTING 24" STORM SEWER.
- D EXISTING 12" WL TO BE ABANDONED.
- E REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK.
- F EXISTING 3" OR 4" PVC THROUGH-CURB DRAIN PIPE TO BE REMOVED AND REPLACED WITH CAST IRON CURB OPENING CASTING (SEE DETAIL).
- G REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY.
- I OMITTED
- J REMOVE, STORE AND REPLACE, OR REMOVE AND REPLACE (IN-KIND) EXISTING MASONRY, WOOD, METAL AND SPECIALTY MAILBOX EQUAL TO OR BETTER THAN EXISTING.
- K REMOVE AD DISPOSE OF EXISTING MANHOLE.
- L REMOVE AND DISPOSE OF EXISTING INLET.
- M EXISTING STREETLIGHTS TO BE DE-ENERGIZED AND REMOVED BY OTHERS. EXISTING CIRCUITS TO BE ABANDONED.

LEGEND


- EXISTING CONCRETE PAVEMENT TO BE REMOVED.
- EXISTING DRIVEWAY TO BE REMOVED.
- EXISTING SIDEWALK AND RAMPS TO BE REMOVED.




MATCH LINE STA 18+80



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

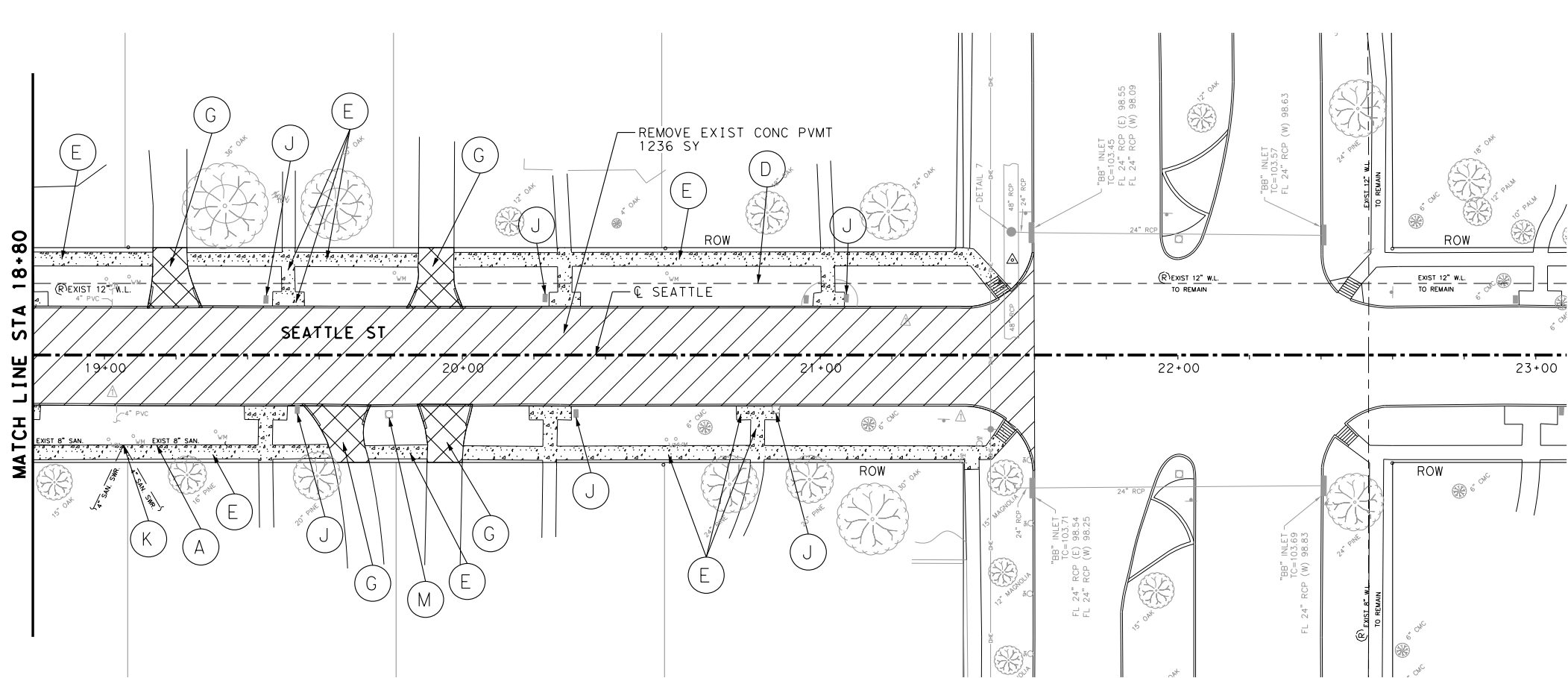
**SEATTLE STREET
RECONSTRUCTION PROJECT**

**DEMOLITION PLAN
9+60 TO STA 18+80**

SHEET 2 OF 3

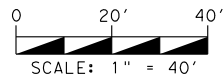
NO.	DATE	REVISIONS	BY


DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 4/4/2022
SCALE:	SHEET: 6 OF 53




- KEYED NOTES:
- A EXIST " SAN TO BE FILLED AND ABANDONED IN PLACE.
 - B REMOVE AND DISPOSE EXISTING 18" STORM SEWER.
 - C REMOVE AND DISPOSE EXISTING 24" STORM SEWER.
 - D EXISTING 12" WL TO BE ABANDONED.
 - E REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK.
 - F EXISTING 3" OR 4" PVC THROUGH-CURB DRAIN PIPE TO BE REMOVED AND REPLACED WITH CAST IRON CURB OPENING CASTING (SEE DETAIL).
 - G REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY.
 - I OMITTED
 - J REMOVE, STORE AND REPLACE, OR REMOVE AND REPLACE (IN-KIND) EXISTING MASONRY, WOOD, METAL AND SPECIALTY MAILBOX EQUAL TO OR BETTER THAN EXISTING.
 - K REMOVE AD DISPOSE OF EXISTING MANHOLE.
 - L REMOVE AND DISPOSE OF EXISTING INLET.
 - M EXISTING STREETLIGHTS TO BE DE-ENERGIZED AND REMOVED BY OTHERS. EXISTING CIRCUITS TO BE ABANDONED.

- LEGEND
- EXISTING CONCRETE PAVEMENT TO BE REMOVED.
 - EXISTING DRIVEWAY TO BE REMOVED.
 - EXISTING SIDEWALK AND RAMPS TO BE REMOVED.






16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
T&E FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

**DEMOLITION PLAN
STA 18+80 TO END**

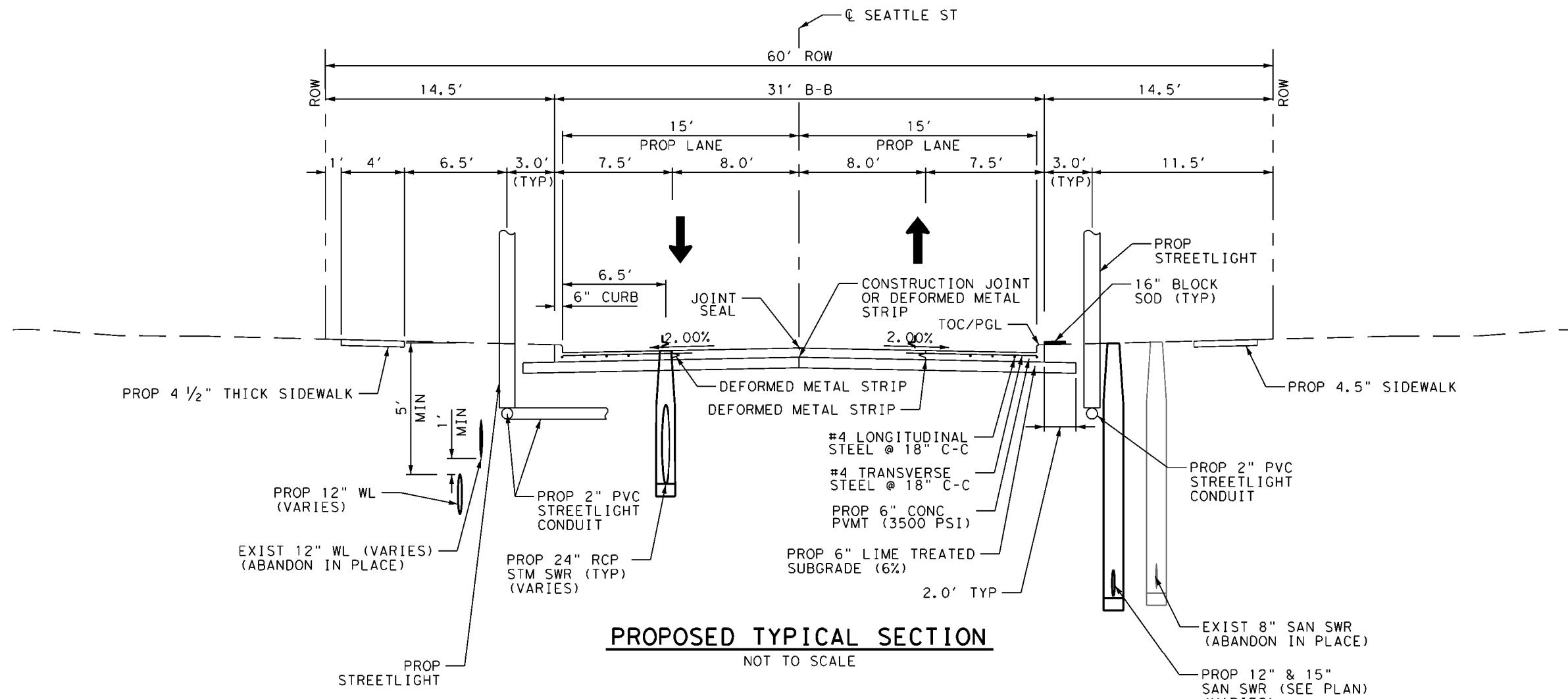
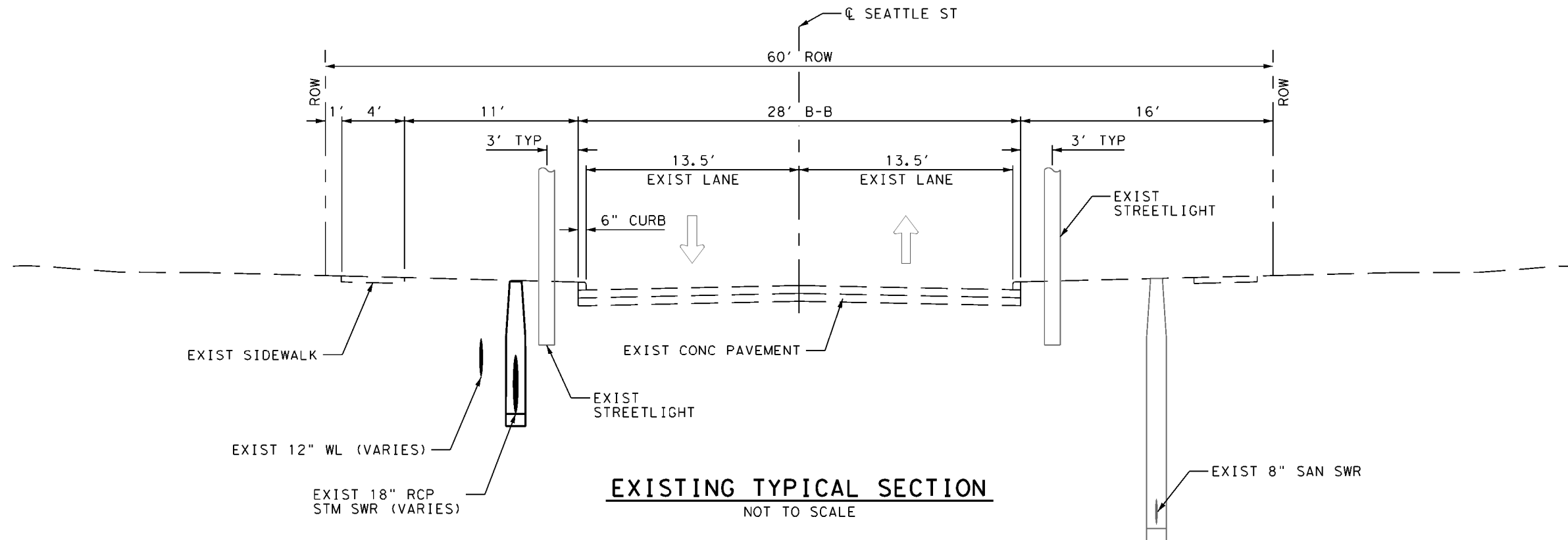
SHEET 3 OF 3


NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 7 OF 53


4/4/2022

...\\GENERAL\AF_GEN_TYP_01.dgn






16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TYPE FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

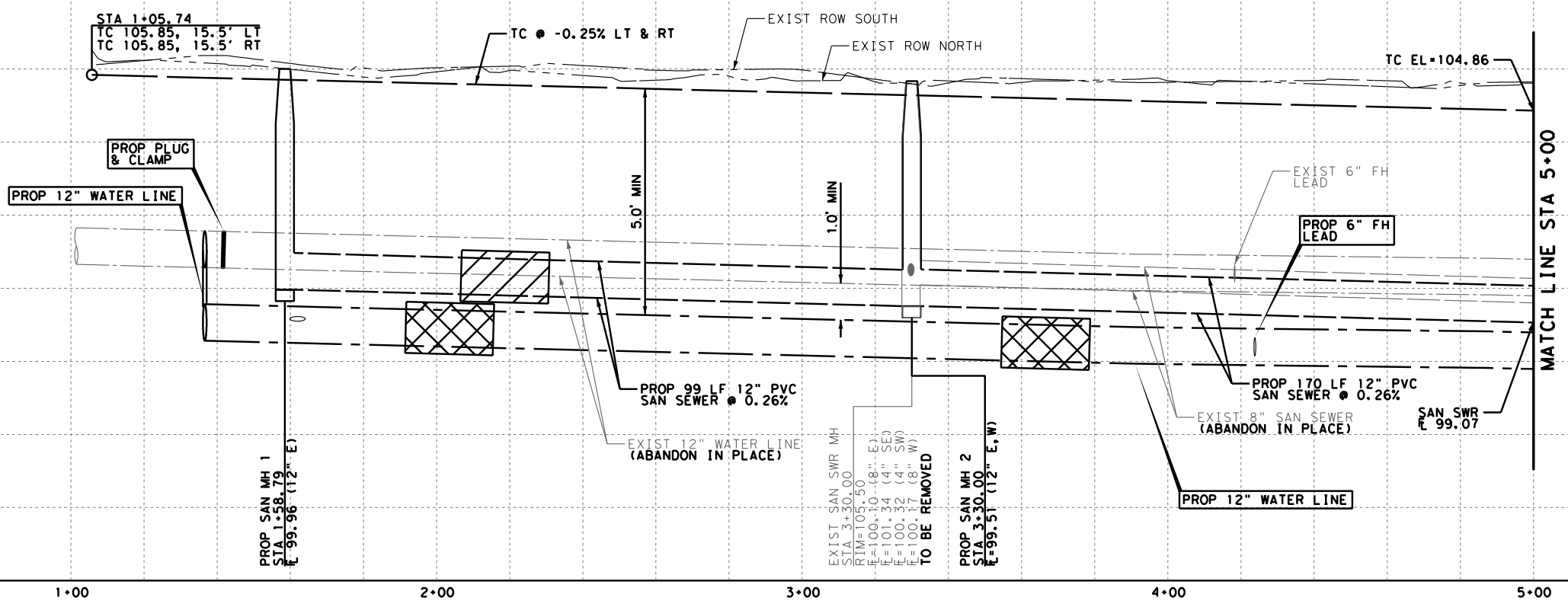
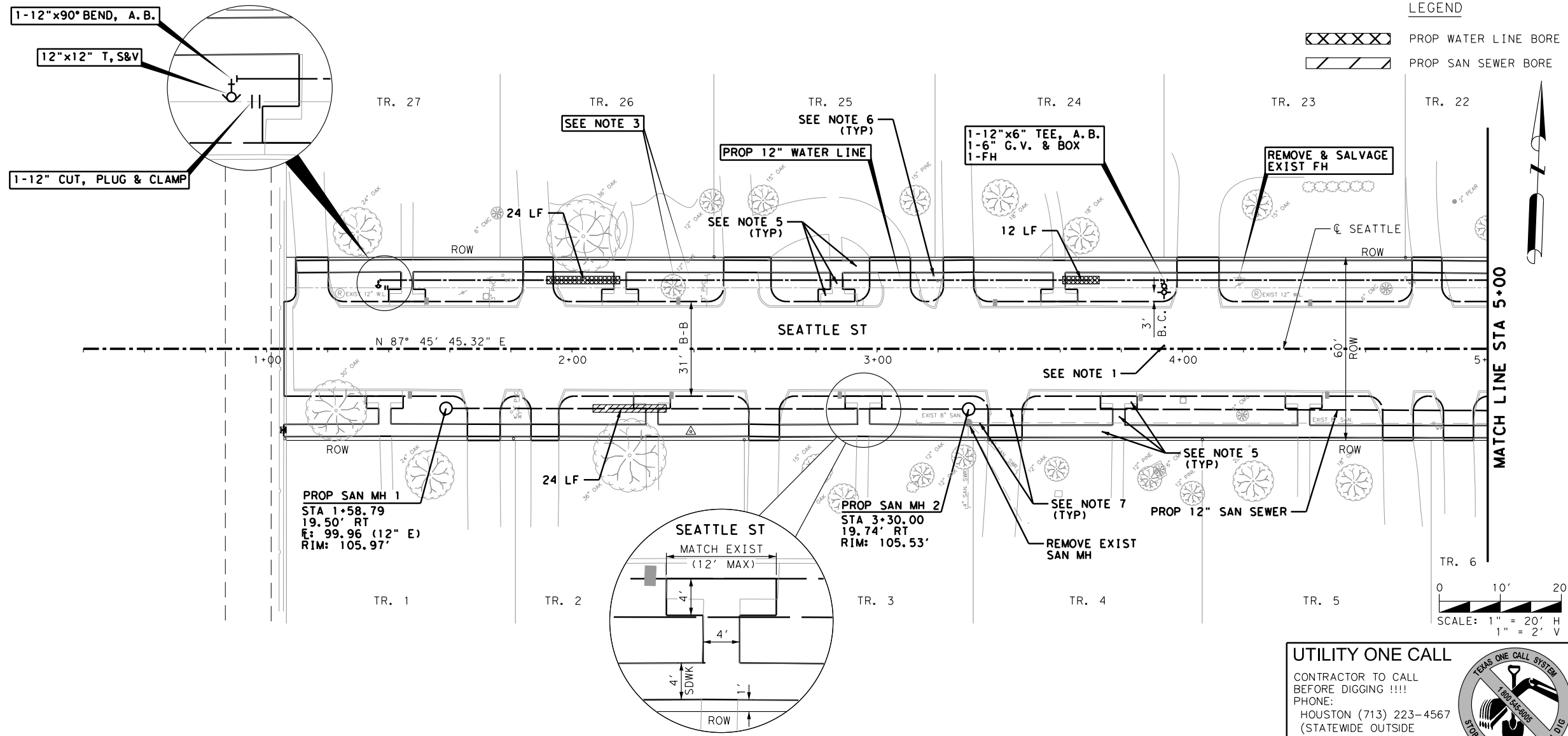
TYPICAL SECTIONS

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 4/4/2022
SCALE:	SHEET: 8 OF 53

4/4/2022

... \03-ROADWAY\AF_RDW_PNP_01.dgn



16327 LAKEVIEW DR. JERSEY VILLAGE, TX 77040

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBE FIRM REGISTRATION # 739

SEATTLE STREET RECONSTRUCTION PROJECT

SEATTLE STREET PLAN & PROFILE BEGIN TO STA 5+00
SHEET 1 OF 5

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR
DESIGNED: DPS
SCALE:

APPROVED BY: CAH
DATE: 4/4/2022
SHEET: 9 OF 53

4/4/2022

...X03-ROADWAY\AF_RDW_PNP_02.dgn

MATCH LINE STA 5+00

MATCH LINE STA 5+00

5+00

6+00

7+00

8+00

9+00

MATCH LINE STA 9+60

9+00

LEGEND

- XXXXXX PROP WATER LINE BORE
/ / / PROP SAN SEWER BORE

REFERENCE BENCHMARK:

RM050425 - BRASS DISK STAMPED "050425"
LOCATED AT THE NORTHEAST CORNER OF THE
BRIDGE ON RIO GRANDE OVER E127-00-00 +60'
SOUTH OF VILLAGE DRIVE IN KEY MAP 409L
IN THE WHITE OAK BAYOU WATERSHED.
ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS: SEE SHEET 50

NOTES:

- 4" SQ. 2-WAY REFLECTORIZED BLUE RAISED PAVEMENT MARKER (TYP II B-B) PLACE 1' NORTH OF SEATTLE STREET CENTERLINE AT LOCATION OF FH.
- PLACE ONE FULL SECTION (MIN. 18-FT) OF W.L. CENTERED AT SAN SWR CROSSING. PROVIDE RESTRAINED JOINS ON W.L. SPACED AT LEAST 9-FT HORIZONTALLY FROM CENTERLINE OF SAN SWR.
- CUT, PLUG AND ABANDON EXISTING WATER LINE ONLY AFTER SERVICES ARE TRANSFERRED FROM EXISTING LINE TO PROPOSED WATER LINE.
- LIMITS OF 12" W.L. W/ RESTRAINED JOINTS.
- PROP 4' WIDE CONCRETE SIDEWALK AND VEHICLE ACCESS PAD.
- REMOVE, SALVAGE, RELOCATE, AND REINSTALL EXISTING WATER METER IN NEW BOX AS NECESSARY TO MAKE NEW SERVICE CONNECTION.
- RECONNECT EXISTING SANITARY SERVICE CONNECTIONS TO PROPOSED SANITARY SEWER PER SPECIFICATION 02534.
- FOR TREE PROTECTION PLAN SEE SHEETS 29 THROUGH 32.

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT AT 713-207-2222.

NOTICE:
For your safety, you are required by Texas law to call 811 at least 48 hours before you dig so that underground lines can be marked.
This signature does not fulfill your obligation to call 811.

VERIFICATION OF PRIVATE UTILITY LINES

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not to be used for conflict verification.
Signature valid for six months.

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY.
(This signature verifies existing underground facilities - not to be used for conflict verification.)
Signature valid for six months.

TEXAS/SWB/T underground conduit facilities only. Date:
Signature valid for one year.

UTILITY ONE CALL

CONTRACTOR TO CALL BEFORE DIGGING !!!
PHONE:
HOUSTON (713) 223-4567
(STATEWIDE OUTSIDE HOUSTON)
1-(800)-545-6005



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040

4/1/2022

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

**SEATTLE STREET
PLAN & PROFILE
STA 5+00 TO STA 9+60**
SHEET 2 OF 5

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR

DESIGNED: DPS

SCALE:

APPROVED BY: CAH

DATE: 4/4/2022

SHEET: 10 OF 53

TYPE C INLET (INL 8A)
STA 5+80.00
15.50' LT
TC 104.65'
E: 100.82 (19"x30" ECP S)

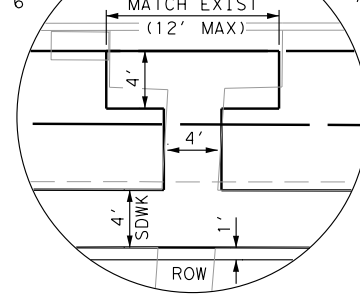
TYPE C MH (MH-8)
STA 5+80.00
9.00' LT
RIM: 104.28

SEE NOTE 3

PROP 19"x30" ECP
25 LF @ 0.20%

TYPE C INLET (INL 8B)
STA 5+80.00
15.50' RT
TC 104.65'
E: 100.82 (19"x30" ECP N)

SEATTLE ST
MATCH EXIST
(12' MAX)



TYPE C INLET (INL 1A)
STA 7+70.00
15.50' LT
TC 104.20'
E: 100.50 (19"x30" ECP S)

TYPE C MH (MH-1)
STA 7+70.00
9.00' LT
RIM: 103.83'

SEE NOTE 5 (TYP)

PROP SAN MH 3
STA 7+04.74
21.00' RT
RIM: 104.75'

CONNECT EXIST SAN
LEAD/SEWER TO PROP
SAN MH

PROP 12" SAN SEWER

TYPE C INLET (INL 1B)
STA 7+70.00
15.50' RT
TC 104.20'
E: 100.50 (19"x30" ECP N)

PROP 19"x30" ECP
25 LF @ 0.20%

SEE NOTE 5 (TYP)

PROP 12" WATER LINE

PROP 19"x30" ECP
7 LF @ 0.71%

PROP 24"x38" ECP

PROP 19"x30" ECP
7 LF @ 0.71%

PROP 24"x38" ECP

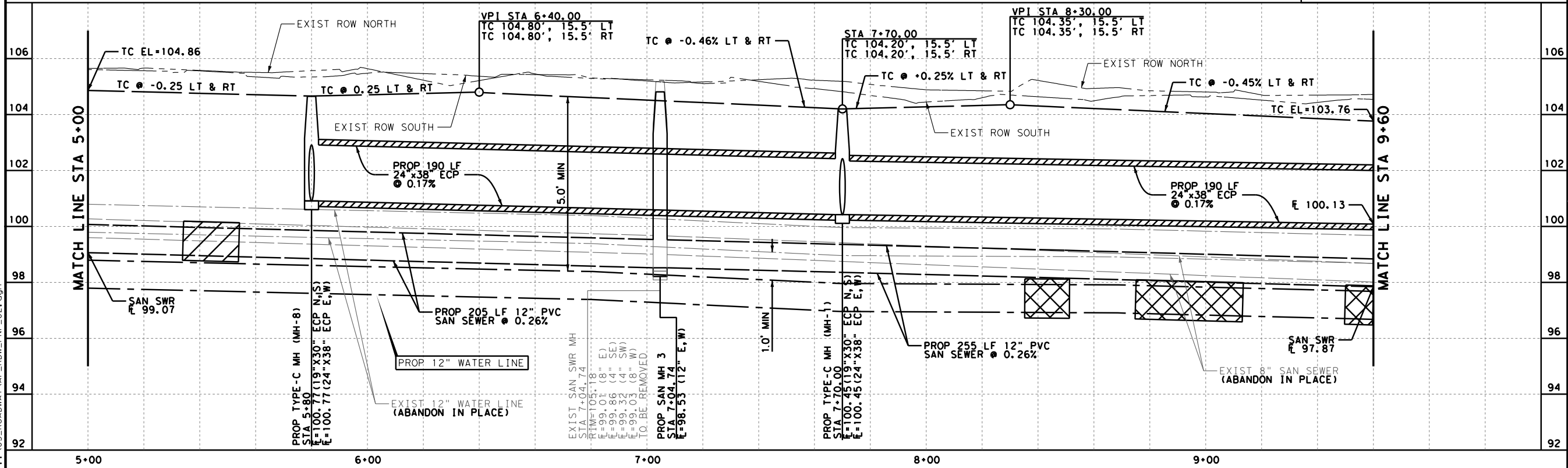
38 LF

10 LF

EXIST 8" SAN SEWER
ABANDONED IN PLACE

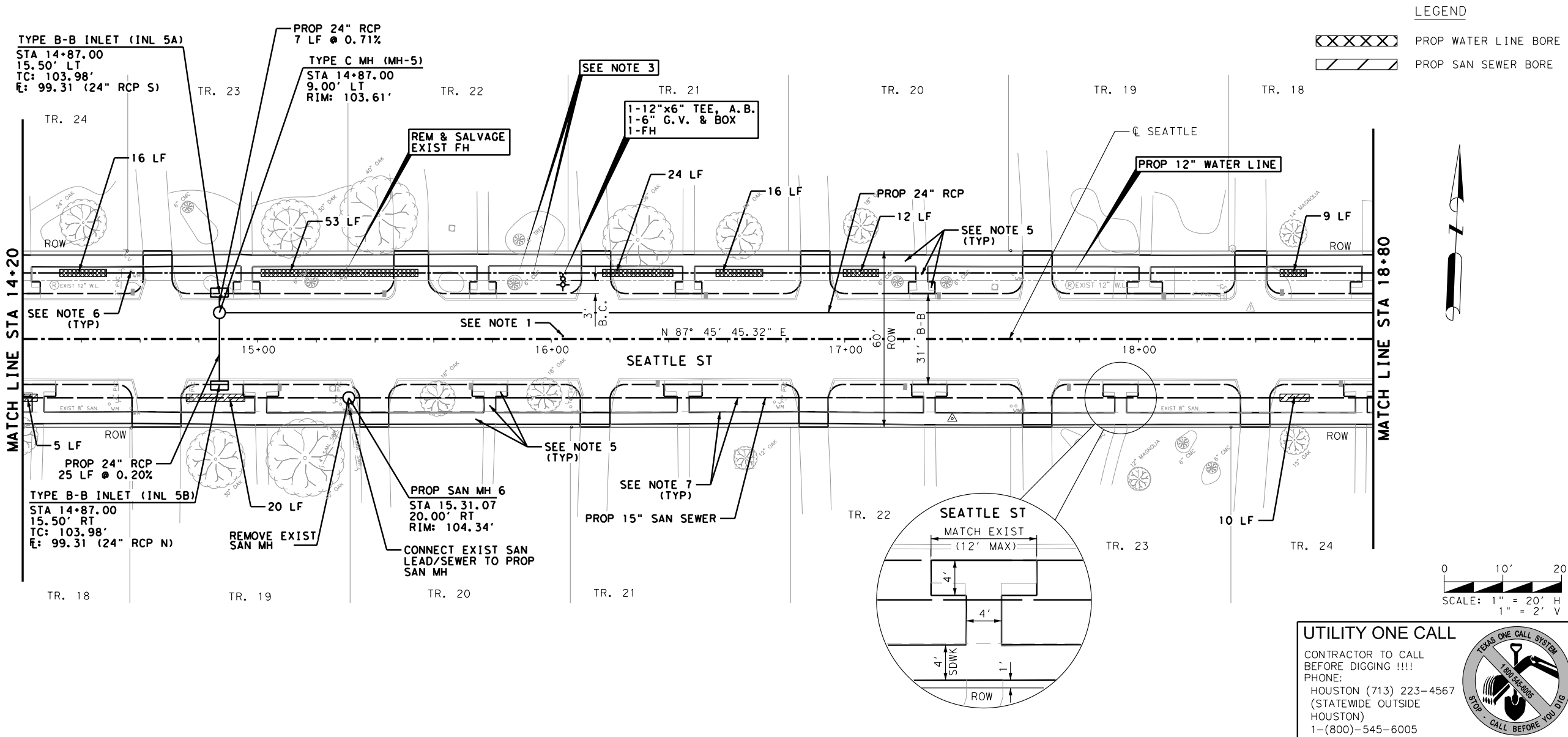
REMOVE EXIST
SAN MH

SEE NOTE 7 (TYP)



4/4/2022

... \03-ROADWAY\AF_RDW_PNP_04.dgn



LEGEND

- XXXXX PROP WATER LINE BORE
- ////// PROP SAN SEWER BORE

- REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425" LOCATED AT THE NORTHEAST CORNER OF THE BRIDGE ON RIO GRANDE OVER E127-00-00 ±60' SOUTH OF VILLAGE DRIVE IN KEY MAP 409L IN THE WHITE OAK BAYOU WATERSHED. ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)
- TEMPORARY BENCHMARKS: SEE SHEET 50
- NOTES:
- 4" SQ. 2-WAY REFLECTORIZED BLUE RAISED PAVEMENT MARKER (TYP II B-B) PLACE 1' NORTH OF SEATTLE STREET CENTERLINE AT LOCATION OF FH.
 - PLACE ONE FULL SECTION (MIN. 18-FT) OF W.L. CENTERED AT SAN SWR CROSSING. PROVIDE RESTRAINED JOINS ON W.L. SPACED AT LEAST 9-FT HORIZONTALLY FROM CENTERLINE OF SAN SWR.
 - CUT, PLUG AND ABANDON EXISTING WATER LINE ONLY AFTER SERVICES ARE TRANSFERRED FROM EXISTING LINE TO PROPOSED WATER LINE.
 - LIMITS OF 12" W.L. W/ RESTRAINED JOINTS.
 - PROP 4' WIDE CONCRETE SIDEWALK AND VEHICLE ACCESS PAD.
 - REMOVE, SALVAGE, RELOCATE, AND REINSTALL EXISTING WATER METER IN NEW BOX AS NECESSARY TO MAKE NEW SERVICE CONNECTION.
 - RECONNECT EXISTING SANITARY SERVICE CONNECTIONS TO PROPOSED SANITARY SEWER PER SPECIFICATION 02534.
 - FOR TREE PROTECTION PLAN SEE SHEETS 29 THROUGH 32.

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CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not to be used for conflict verification. Signature valid for six months.

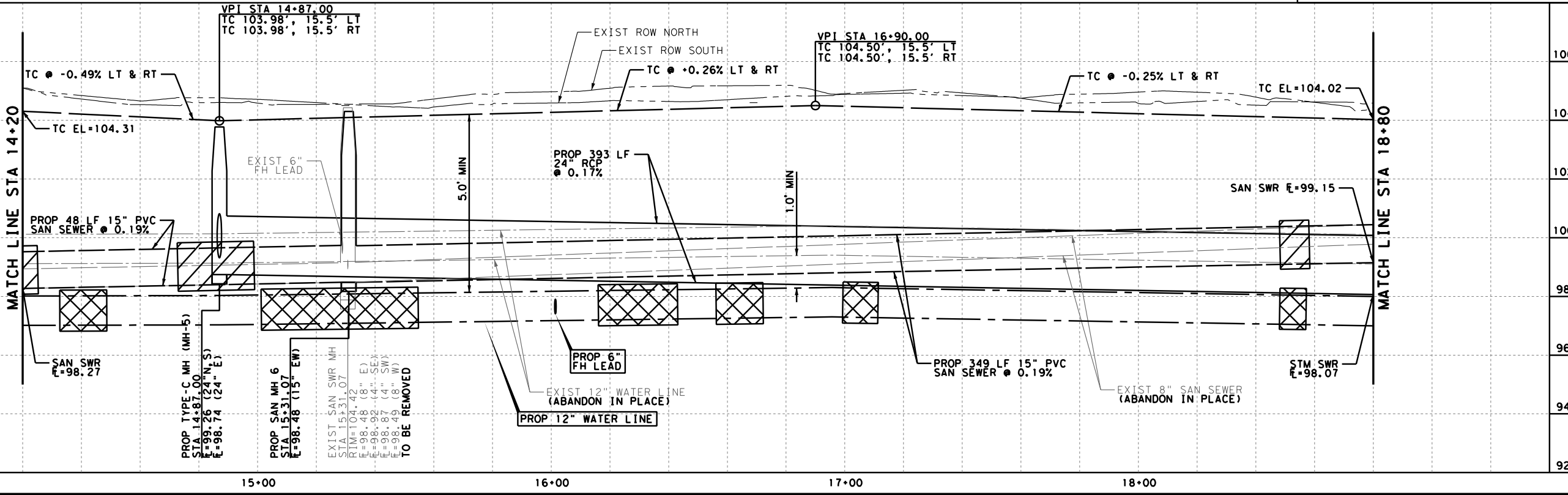
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification.) Signature valid for six months.

APPROVED FOR AT&T

TEXAS/SWB/T underground conduit facilities only. Date: Signature valid for one year.

UTILITY ONE CALL

CONTRACTOR TO CALL BEFORE DIGGING !!!!
PHONE:
HOUSTON (713) 223-4567
(STATEWIDE OUTSIDE HOUSTON)
1-(800)-545-6005



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040

4/1/2022

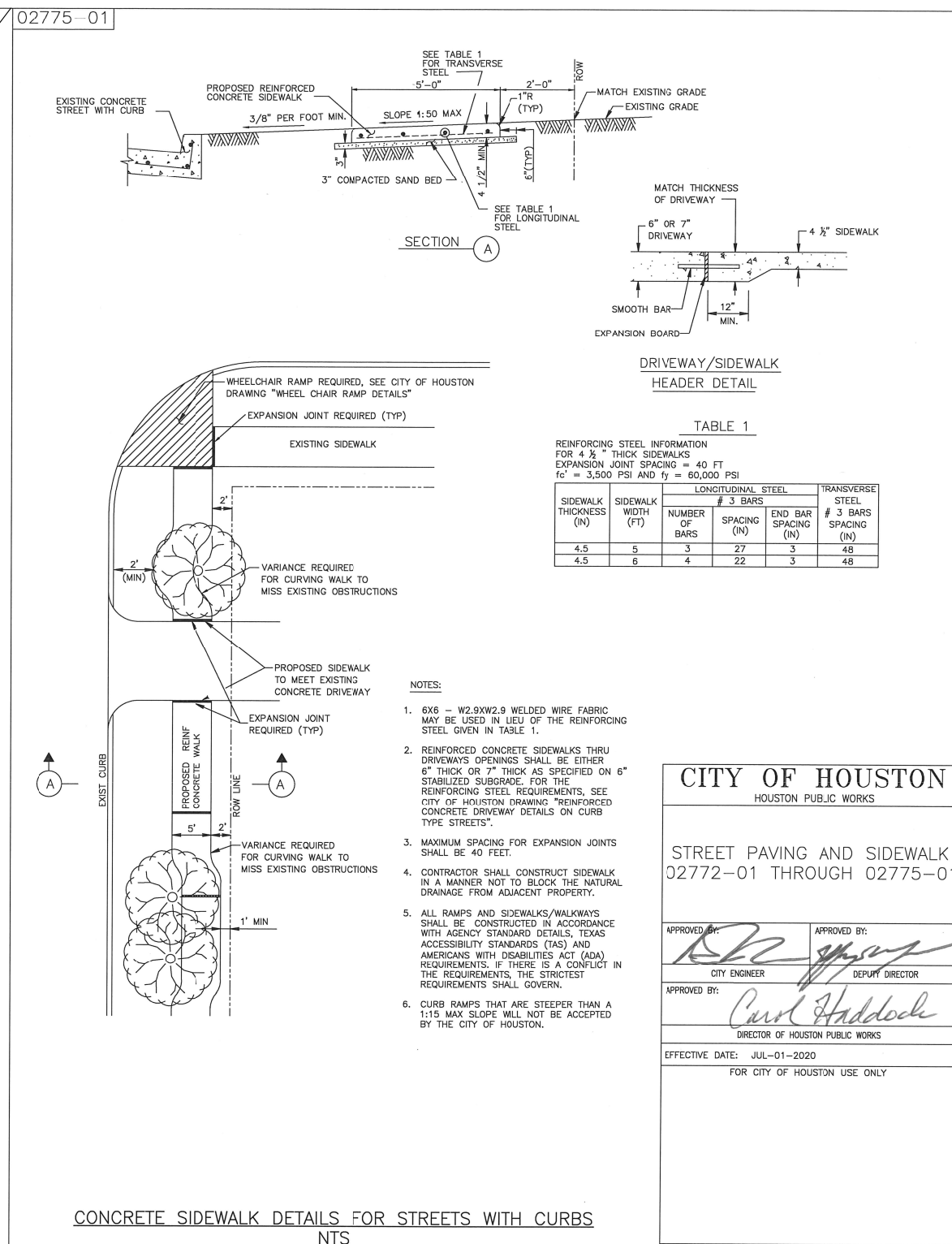
AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

SEATTLE STREET RECONSTRUCTION PROJECT

SEATTLE STREET PLAN & PROFILE
STA 14+20 TO STA 18+80


NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 4/4/2022
SCALE:	SHEET: 12 OF 53






16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



Daniel P. Simeone

4/1/2022



AGUIRRE & FIELDS
 ENGINEERING INNOVATORS
 TBPB FIRM REGISTRATION # 739

**SEATTLE STREET
 RECONSTRUCTION PROJECT**

PAVING DETAILS

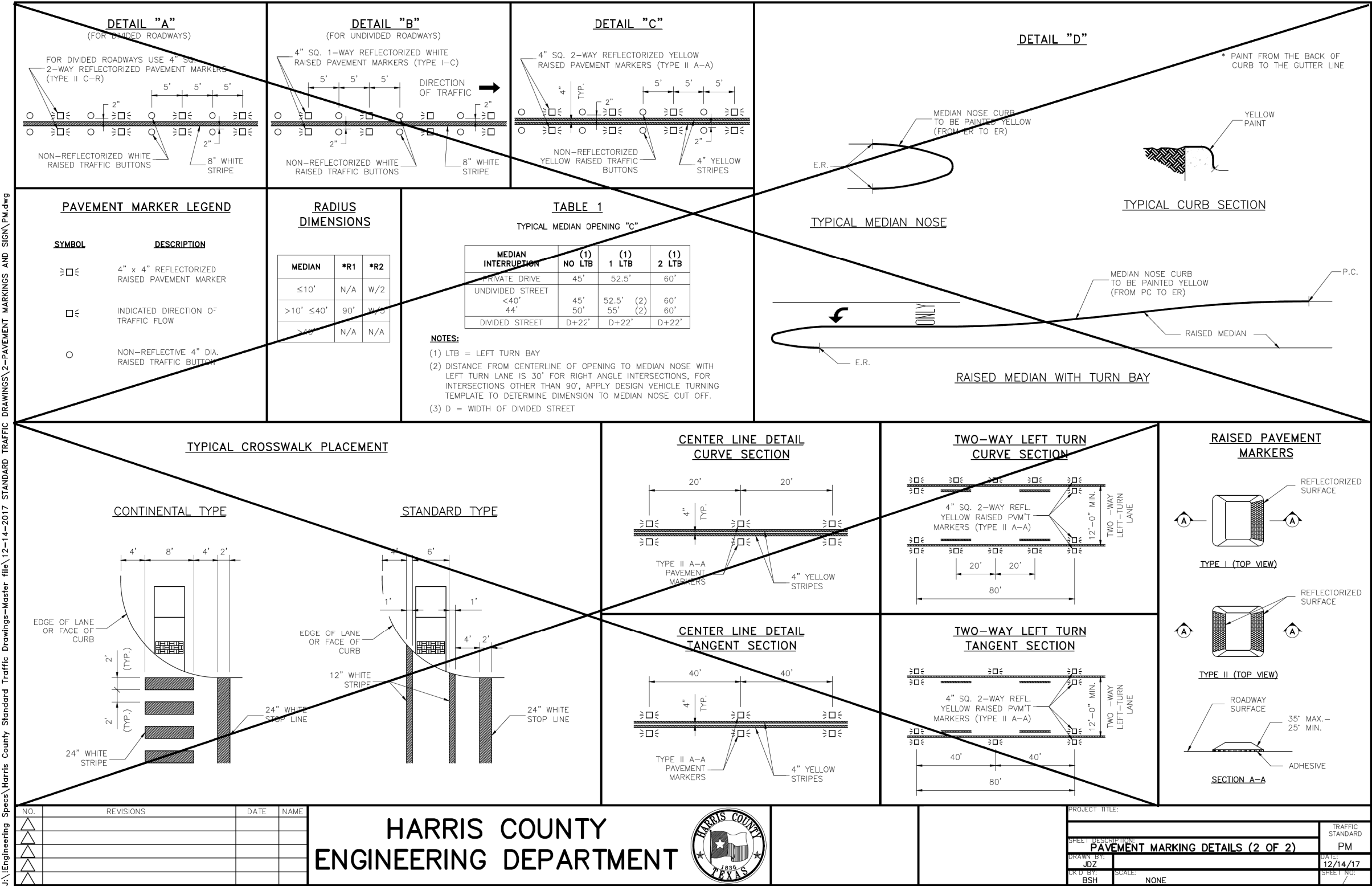
SHEET 4 OF 5

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 17 OF 53

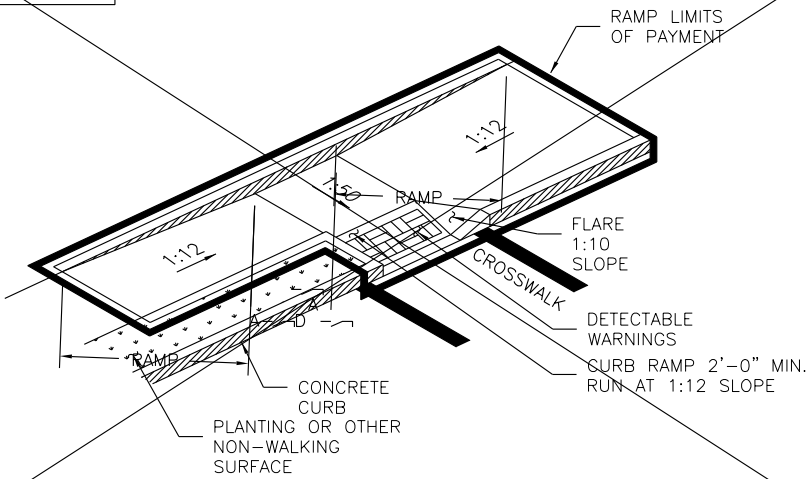
REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425"
LOCATED AT THE NORTHEAST CORNER OF THE
BRIDGE ON RIO GRANDE OVER E127-00-00 160'
SOUTH OF VILLAGE DRIVE IN KEY MAP 409L
IN THE WHITE OAK BAYOU WATERSHED.
ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:
TBM "A" - BOX CUT ON "BB" INLET LOCATED
AT THE NORTHWEST CORNER OF SEATTLE STREET
AND SENATE AVENUE. ELEVATION = 103.44'
TBM "B" - BOX CUT ON "BB" INLET LOCATED
AT THE SOUTHWEST CORNER OF SEATTLE
STREET AND CARLSBAD STREET.
ELEVATION = 103.68'
TBM "C" - BOX CUT ON THE END OF THE
CONCRETE SIDEWALK AT THE SOUND WALL
LOCATED ON THE SOUTH SIDE OF SEATTLE
STREET. ELEVATION = 106.16'



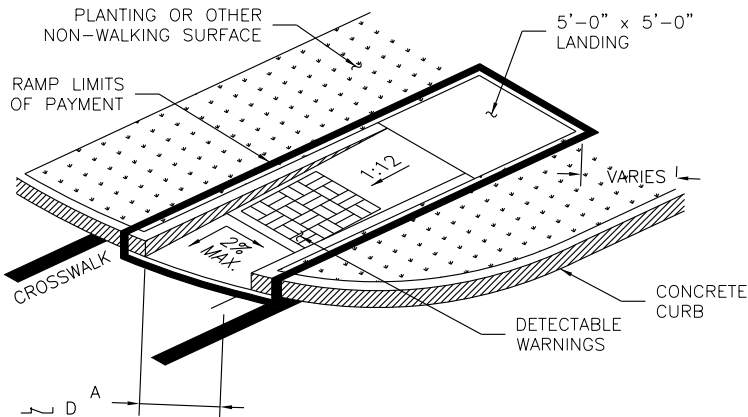
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TYPE 3



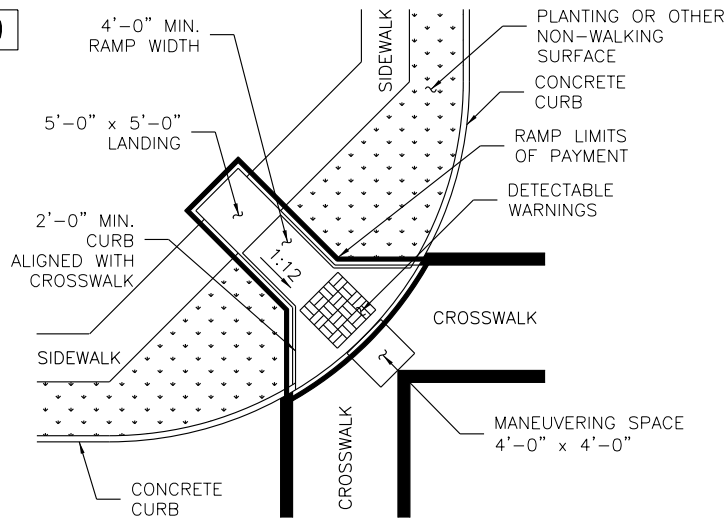
COMBINATION CURB RAMP
N.T.S.

TYPE 7



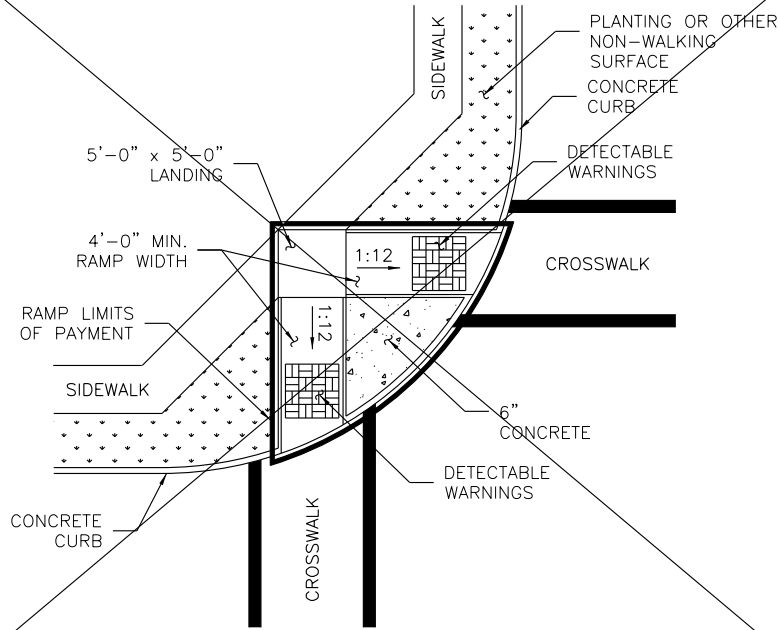
DIRECTIONAL CURB RAMP WITHIN RADIUS
N.T.S.

TYPE 9



DIAGONAL CURB RAMP (RETURNED CURB)
N.T.S.

TYPE 12

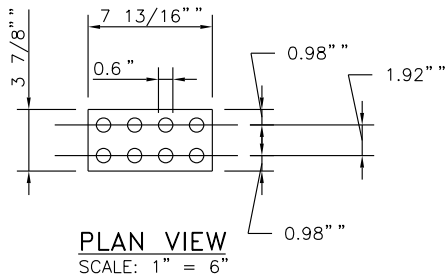


COMBINATION DIRECTIONAL CURB RAMP
N.T.S.

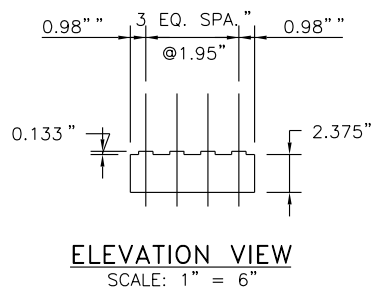
DETECTABLE WARNING GENERAL NOTES:

1. SURFACE-APPLIED, TRUNCATED DOME MATS WHICH SATISFY TAS AND TDLR REQUIREMENTS MAY BE SUBSTITUTED FOR CONCRETE PAVER UNITS. MATS MUST BE APPLIED WITH INDUSTRIAL ADHESIVE AND ANCHORING HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION
2. CONCRETE PAVER UNITS SHALL MEET ALL REQUIREMENTS OF ASTM C936, C33, AND SHALL BE LAID IN A TWO BY TWO UNIT BASKET WEAVE PATTERN, UNLESS OTHERWISE SHOWN IN THE PLANS.
3. CONCRETE PAVER UNITS SHALL BE BRICK RED AND HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS.
4. CONCRETE PAVER UNITS SHALL BE SAW CUT ONLY AND ANY CUT UNIT SHALL BE NOT LESS THAN 25 PERCENT OF A FULL UNIT.
5. DETECTABLE WARNING SHALL BE A MINIMUM OF 24" IN DEPTH (IN THE DIRECTION OF PEDESTRIAN TRAVEL), AND EXTEND THE FULL WIDTH OF THE RAMP. (REFER TO TAS AND TDLR GUIDELINES)

TRUNCATED DOME PATTERN



PLAN VIEW
SCALE: 1" = 6"



ELEVATION VIEW
SCALE: 1" = 6"

CONCRETE PAVER WITH
TRUNCATED DOME SURFACE

ACCESSIBLE CURB RAMPS AND LANDINGS GENERAL NOTES:

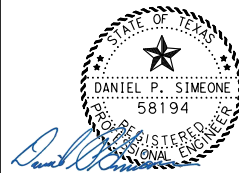
1. THE DESIGN AND CONSTRUCTION OF ALL ELEMENTS OF PEDESTRIAN FACILITIES SHALL MEET THE CRITERIA ESTABLISHED IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS), AS PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR), UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. PEDESTRIAN FACILITIES AT SIGNALIZED INTERSECTION SHALL BE IN ACCORDANCE WITH APPLICABLE TRAFFIC SIGNAL DESIGN DRAWINGS.
3. ADJUSTMENT TO SIDEWALKS THAT CONNECT TO WHEELCHAIR RAMPS AND LANDINGS MAY BE NECESSARY TO MATCH BOTH THE GRADE AND THE WIDTH OF THE LANDING. THESE ADJUSTMENTS MAY NOT BE SHOWN ON THE DRAWINGS. WHEN DEEMED NECESSARY BY THE ENGINEER, FIELD ADJUSTMENT TO THE SIDEWALK SHALL BE MADE AS DIRECTED BY THE ENGINEER AND PAID FOR SEPARATELY, AS DIRECTED BY THE ENGINEER.
4. ALL ITEMS NECESSARY FOR THE CONSTRUCTION OF THE WHEELCHAIR RAMPS AND LANDINGS WITHIN THE "LIMITS OF PAYMENT" INDICATED ON APPROPRIATE WHEELCHAIR RAMP DETAILS AND DESIGN DRAWINGS (I.E., SAW CUT OF PAVEMENT, REMOVAL OF MATERIAL, EXCAVATION, DISPOSAL OF MATERIALS, ETC.) SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WHEELCHAIR RAMP FOR PROJECTS THAT ARE DESIGNED AND/OR CONSTRUCTED USING HARRIS COUNTY RESOURCES.
5. FLATTER SLOPES THAT WILL STILL DRAIN PROPERLY MAY BE USED WHERE APPROPRIATE, SUBJECT TO THE REQUIREMENT OF NOTES 7, 8, AND 9.
6. RAMPS AND LANDINGS WITH DROP-OFFS GREATER THAT 6 INCHES IN HEIGHT SHALL HAVE CURB, RAILINGS, OR PROJECTING SURFACES. REFER TO TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE ENGINEER.
7. ALL SLOPES SHOWN ARE MAXIMUM ALLOWABLE. THE CROSS SLOPE OF AN ACCESSIBLE ROUTE AND/OR LANDING MUST NOT EXCEED 1:50 (2%). ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP.
8. IF A RAMP HAS A RISE GREATER THAT 6 INCHES, OR A HORIZONTAL PROJECTION GREATER THAT 72 INCHES, THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES. THE ONLY EXCEPTIONS SHALL BE AT CURB RAMPS. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
9. RAMP LENGTH OF GRADE OF APPROACH SIDEWALK SHALL BE SUBJECT TO ADJUSTMENT IN THE FIELD BY THE ENGINEER.
10. THE MAXIMUM ALLOWABLE CROSS SLOPE ON A SIDEWALK SHALL BE 2%.
11. THE MINIMUM THICKNESS FOR CURB RAMPS SHALL BE 4-1/2 INCHES.
12. CURB RAMPS WITH RETURN CURB MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. OTHERWISE, FLARED SIDES SHALL BE PROVIDED.
13. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS. FLARED SIDES ASSOCIATED WITH CURB RAMPS ARE EXCLUDED FROM THIS REQUIREMENT.
14. A SMOOTH TRANSITION, IN ACCORDANCE WITH APPROPRIATE CONSTRUCTION DETAILS OR AS DIRECTED BY THE ENGINEER, AND SHALL BE PROVIDED WHERE CURB RAMPS CONNECT TO ADJACENT ROADWAY.
15. MANEUVERING SPACES AT THE BOTTOM OF THE CURB RAMPS SHALL BE A MINIMUM 4 FOOT X 4 FOOT CLEAR AREA, SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK OUTSIDE OF THE PARALLEL VEHICULAR TRAVEL PATH.
16. A MINIMUM WIDTH OF 36 INCHES SHALL BE PROVIDED LANDINGS AROUND OBSTRUCTIONS (I.E., SIGN SUPPORTS, SIGNAL SUPPORTS, POLES, ETC.) LOCATED TO ADJACENT TO THE PEDESTRIAN ROUTE.
17. MINIMUM SIDEWALK WIDTH OF 4 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
18. CROSSWALKS WILL NOT BE REQUIRED AT UNSIGNALIZED INTERSECTIONS, UNLESS DIRECTED BY THE ENGINEER.
19. DETECTABLE WARNINGS ARE PLACED WHERE A PEDESTRIAN ACCESS ROUTE ENTERS THE ROADWAY, CROSSWALK, OR OTHER VEHICULAR AREA.
20. A MINIMUM OF 32 INCHES OF CLEARANCE IS REQUIRED FOR OBSTRUCTIONS LESS THAN 24 INCHES IN LENGTH, AND A MINIMUM OF 36 INCHES OF CLEARANCE IS REQUIRED FOR OBSTRUCTIONS GREATER THAN OR EQUAL TO 24 INCHES IN LENGTH.

NO.	REVISIONS	DATE	NAME
△			
△			
△			
△			
△			

HARRIS COUNTY
ENGINEERING DEPARTMENT



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TYPE FIRM REGISTRATION # 739

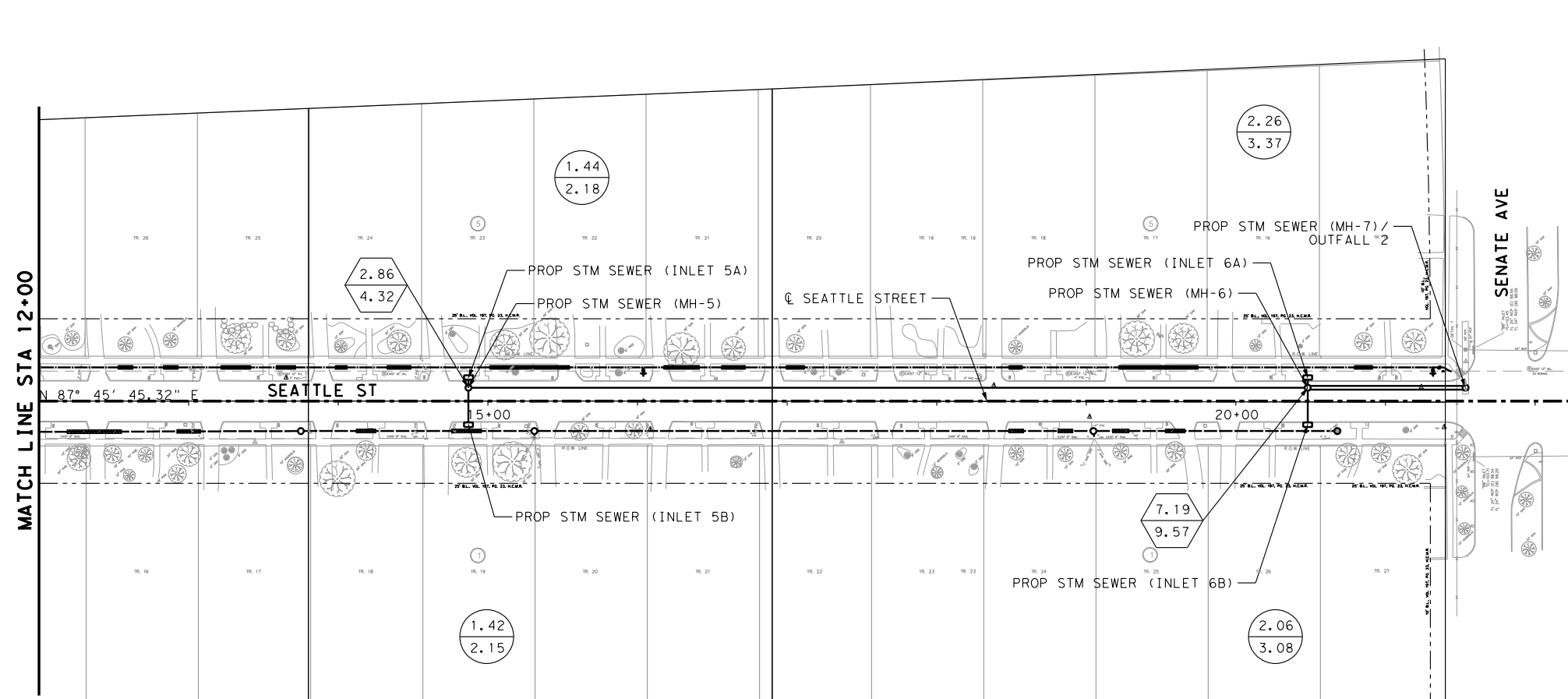


4/1/2022

PROJECT TITLE:		SEATTLE STREET	
		RECONSTRUCTION PROJECT	
SHEET DESCRIPTION:		ADA RAMP DETAILS	
DRAWN BY:	JDZ	DATE:	8/15/17
CK'D BY:	PDG	SCALE:	AS NOTED
		SHEET NO:	
		19 OF 53	

3/31/2022

...X05_DRAINAGE\AF_DRG_DAM_01.dgn




XX.XX AREA AT INLET IN ACRES
XX.XX RUNOFF AT INLET IN C.F.S.

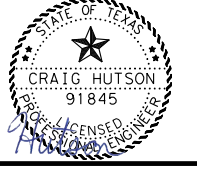
XX.XX AREA CONTRIBUTION TO LINE IN ACRES
XX.XX RUNOFF CONTRIBUTIN GTO LINE IN C.F.S.

REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425" LOCATED AT THE NORTHEAST CORNER OF THE BRIDGE ON RIO GRANDE OVER E127-00-00 ±60' SOUTH OF VILLAGE DRIVE IN KEY MAP 409L IN THE WHITE OAK BAYOU WATERSHED. ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)


TEMPORARY BENCHMARKS:
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16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

DRAINAGE AREA MAP

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 20 OF 53

3/31/2022

... \05_DRAINAGE\AF_DRG_COMP_01.dgn

STORM SEWER COMPUTATION 2-YEAR FREQUENCY																		
INLET OR MH	INLET OR MH	AREA	SUM OF	C	INTENSITY	SUM OF FLOW	TIME OF CONC.	REACH	DIAMETER OR RISE	SPAN	AREA OF PIPE	HYDRAULIC RADIUS OF PIPE	SLOPE	MANNING'S	DESIGN CAPACITY	DESIGN VELOCITY	FALL	MANHOLE DROP
FROM	TO	(ACRES)	A		I (IN/HR)	(CFS)	(MIN)	(FT)	(IN)	(IN)	(SF)	(FT)	(FT/FT)	N	(CFS)	(FT/S)	(FT)	(FT)
I-5B	MH-5	1.42	1.42	0.45	3.36	2.15	25.64	25.0	24		3.14	0.500	0.0020	0.013	10.15	3.23	0.05	0.52
I-5A	MH-5	1.44	1.44	0.45	3.36	2.18	25.66	7.0	24		3.14	0.500	0.0071	0.013	19.12	6.08	0.05	0.52
MH-5	MH-6	0.00	2.86	0.45	3.35	4.32	25.83	561.0	24		3.14	0.500	0.0017	0.013	9.35	2.98	0.95	0.00
I-6B	MH-6	2.06	2.06	0.45	3.32	3.08	26.36	25.0	24		3.14	0.500	0.0020	0.013	10.14	3.23	0.05	0.10
I-6A	MH-6	2.26	2.26	0.45	3.30	3.37	26.55	7.0	24		3.14	0.500	0.0071	0.013	19.11	6.08	0.05	0.10
MH-6	MH-7/OUT2	0.00	7.19	0.45	2.96	9.57	32.64	105.5	30		4.91	0.625	0.0017	0.013	16.96	3.45	0.18	0.00
I-8B	MH-8	2.08	2.08	0.45	3.31	3.10	26.38	25.0	19	30	3.28	0.490	0.0020	0.013	10.45	3.19	0.05	0.00
I-8A	MH-8	2.45	2.45	0.45	3.29	3.63	26.71	7.0	19	30	3.28	0.490	0.0071	0.013	19.69	6.00	0.05	0.00
MH-8	MH-1	0.00	4.53	0.45	3.29	6.70	26.81	190.0	24	38	5.10	0.613	0.0017	0.013	17.39	3.41	0.32	0.00
I-1B	MH-1	0.87	0.87	0.45	3.42	1.34	24.76	25.0	19	30	3.28	0.490	0.0020	0.013	10.45	3.19	0.05	0.00
I-1A	MH-1	0.74	0.74	0.45	3.44	1.14	24.47	7.0	19	30	3.28	0.490	0.0071	0.013	19.69	10.00	0.05	0.00
MH-1	MH-2	0.00	6.14	0.45	3.14	8.68	29.23	235.5	24	38	5.10	0.613	0.0017	0.013	17.39	5.54	0.40	0.00
I-2B	MH-2	0.97	0.97	0.45	3.41	1.49	25.00	25.0	19	30	3.28	0.490	0.0020	0.013	10.45	3.19	0.05	0.00
I-2A	MH-2	0.86	0.86	0.45	3.41	1.31	25.00	7.0	19	30	3.28	0.490	0.0071	0.013	19.69	10.00	0.05	0.00
MH-2	MH-3	0.00	7.97	0.45	3.01	10.80	31.53	11.0	24	38	5.10	0.613	0.0020	0.013	18.86	3.70	0.02	0.00
I-4B	MH-4	1.56	1.56	0.45	3.35	2.35	25.81	25.0	19	30	3.28	0.490	0.0020	0.013	10.45	5.31	0.05	0.00
I-4A	MH-4	1.47	1.47	0.45	3.36	2.22	25.70	7.0	19	30	3.28	0.490	0.0071	0.013	19.69	10.00	0.05	0.00
MH-4	MH-3	0.00	3.02	0.45	3.31	4.51	26.39	59.00	24		3.14	0.500	0.0017	0.013	9.35	2.98	0.10	0.00
MH-3	OUT1	0.00	10.99	0.45	3.27	16.17	27.08	15.0	24		3.14	0.500	0.0017	0.013	Too Small	#VALUE!	0.03	0.00

STORM SEWER COMPUTATION 2-YEAR FREQUENCY											
INLET OR MH	INLET OR MH	FLOWLINE ELEVATION UPSTREAM	FLOWLINE ELEVATION UPSTREAM	ACTUAL VELOCITY	FRICTION LOSS	HYDRAULIC GRADIENT	CHANGE IN HEAD	ELEVATION OF HYDRAULIC GRADIENT	ELEVATION OF HYDRAULIC GRADIENT	TOP OF CURB UPSTREAM	TOP OF CURB DOWNSTREAM
FROM	TO	(FT)	(FT)	(FT/S)	(FT)	%	(FT)	US (FT)	DS (FT)	(FT)	(FT)
I-5B	MH-5	99.31	99.26	0.69	0.00	0.009	0.002	101.26	101.26	103.98	103.61
I-5A	MH-5	99.31	99.26	0.69	0.00	0.009	0.001	101.26	101.26	103.98	103.61
MH-5	MH-6	98.74	97.78	1.37	0.13	0.036	0.203	100.36	100.16	103.61	103.23
I-6B	MH-6	97.93	97.88	0.98	0.00	0.018	0.005	100.16	100.16	103.60	103.23
I-6A	MH-6	97.93	97.88	1.07	0.00	0.022	0.002	100.16	100.16	103.60	103.23
MH-6	MH-7/OUT2	97.78	97.60	1.95	0.04	0.054	0.057	100.16	100.10	103.23	103.36
I-8B	MH-8	100.82	100.77	0.95	0.00	0.023	0.006	102.70	102.70	104.65	104.28
I-8A	MH-8	100.82	100.77	1.11	0.00	0.032	0.002	102.75	102.70	104.65	104.28
MH-8	MH-1	100.77	100.45	1.31	0.04	0.033	0.063	102.70	102.40	104.28	103.83
I-1B	MH-1	100.50	100.45	0.41	0.00	0.012	0.003	102.45	102.40	104.20	103.83
I-1A	MH-1	100.50	100.45	0.35	0.00	0.009	0.001	102.45	102.40	104.20	103.83
MH-1	MH-2	100.45	100.05	1.70	0.08	0.147	0.346	102.40	102.10	103.83	103.19
I-2B	MH-2	100.15	100.10	0.45	0.00	0.015	0.004	102.10	102.10	103.56	103.19
I-2A	MH-2	100.10	100.05	0.40	0.00	0.012	0.001	102.10	102.10	103.56	103.19
MH-2	MH-3	100.05	100.03	2.12	0.01	0.228	0.025	102.10	102.08	103.19	103.23
I-4B	MH-4	100.18	100.13	0.72	0.00	0.037	0.009	102.16	102.15	103.45	103.08
I-4A	MH-4	100.18	100.13	0.68	0.00	0.034	0.002	102.15	102.15	103.45	103.08
MH-4	MH-3	100.13	100.03	1.44	0.01	0.040	0.023	102.15	102.08	103.08	103.23
MH-3	OUT1	100.03	100.00	5.15	0.05	0.005	0.001	102.08	102.00	103.23	104.07

NOTES:


1. THE PROPOSED STORM SEWER SYSTEMS WERE NOT DESIGNED UNDER CITY OF JERSEY VILLAGE CRITERIA PER JERSEY VILLAGE ORDINANCES UNDER SECTION 14.233. THE IDF COEFFICIENT VALUES THAT WERE USED ARE NOT FOR ATLAS-14 STORM EVENTS.WE DID NOT USE THE ATLAS-14 CRITERIA SINCE THE EXISTING DOWNSTREAM SEWER SYSTEMS WERE NOT DESIGNED TO ATLAS-14 CRITERIA. WE USED THE CITY OF HOUSTON IDF COEFFICENTS THAT WERE APPLICABLE AT THE TIME OF THE ORIGINAL DESIGN.
2. FOR CALCULATION PURPOSES, THE STARTING 2-YEAR HGL ELEVATION FOR BOTH STORM SEWER SYSTEMS WAS THE SOFFIT ELEVATION OF THE MOST DOWNSTREAM PIPE, NO OTHER INFORMATION WAS AVAILABLE OR PROVIDED.



16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



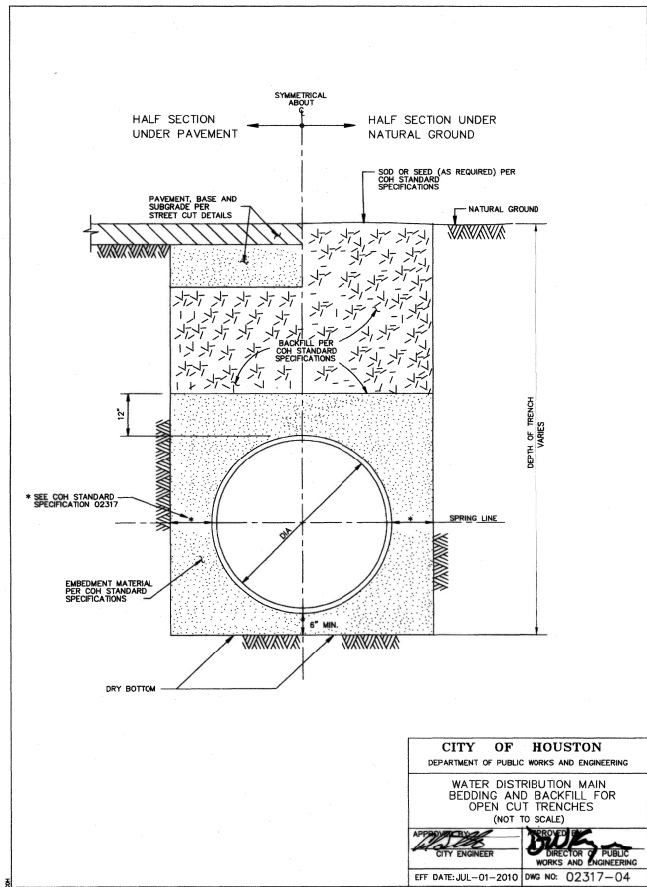
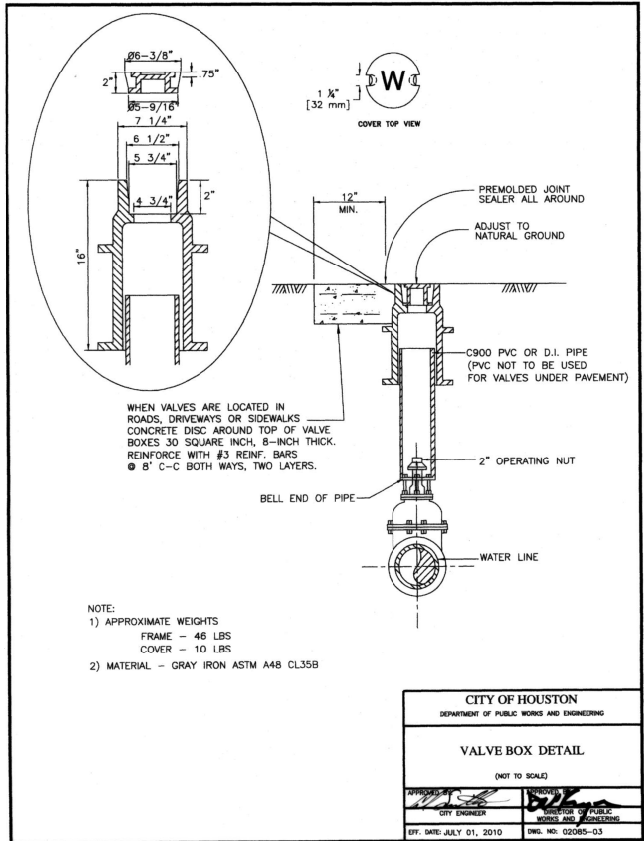
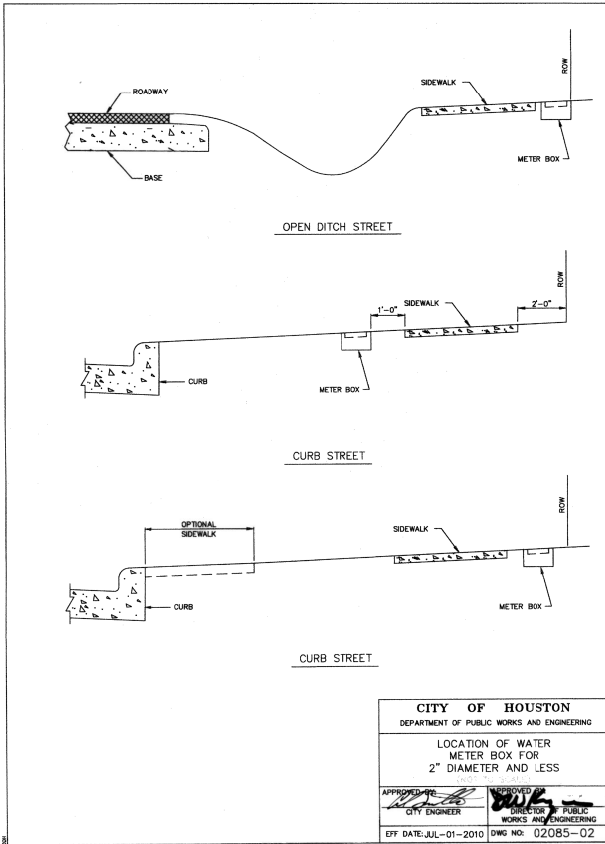
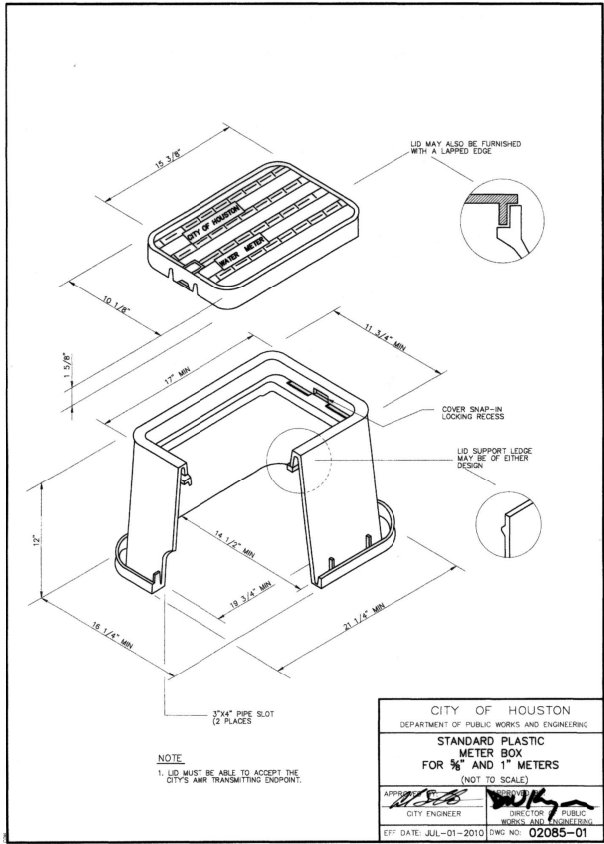
AGUIRRE & FIELDS
ENGINEERING INNOVATORS
T&PE FIRM REGISTRATION # 739

SEATTLE STREET
RECONSTRUCTION PROJECT

PROPOSED 2 YEAR
STORM SEWER
COMPUTATIONS

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 21 OF 53



REFERENCE BENCHMARK:
RM050425 - BRASS DISK STAMPED "050425" LOCATED AT THE NORTHEAST CORNER OF THE BRIDGE ON RIO GRANDE OVER E127-00-00 ±60' SOUTH OF VILLAGE DRIVE IN KEY MAP 409L IN THE WHITE OAK BAYOU WATERSHED. ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)

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16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040



4/1/2022



AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

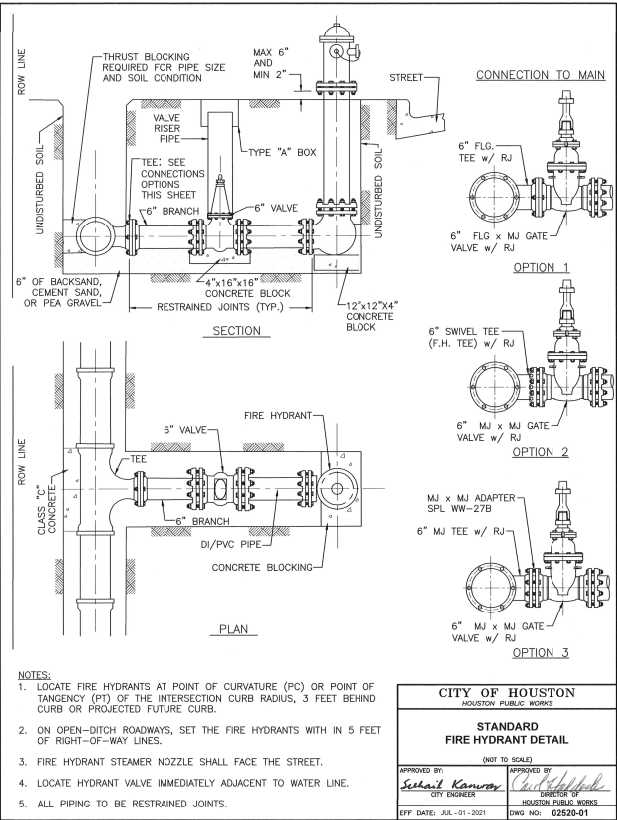
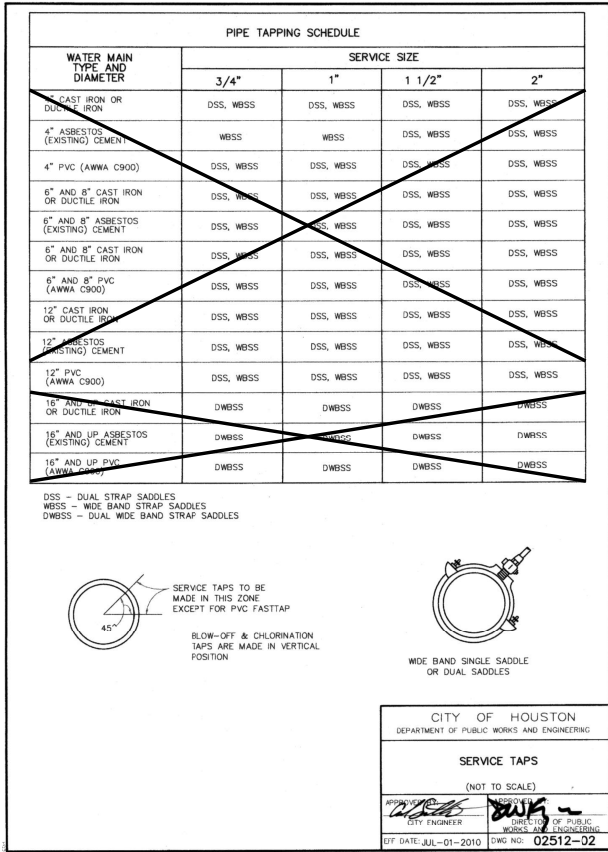
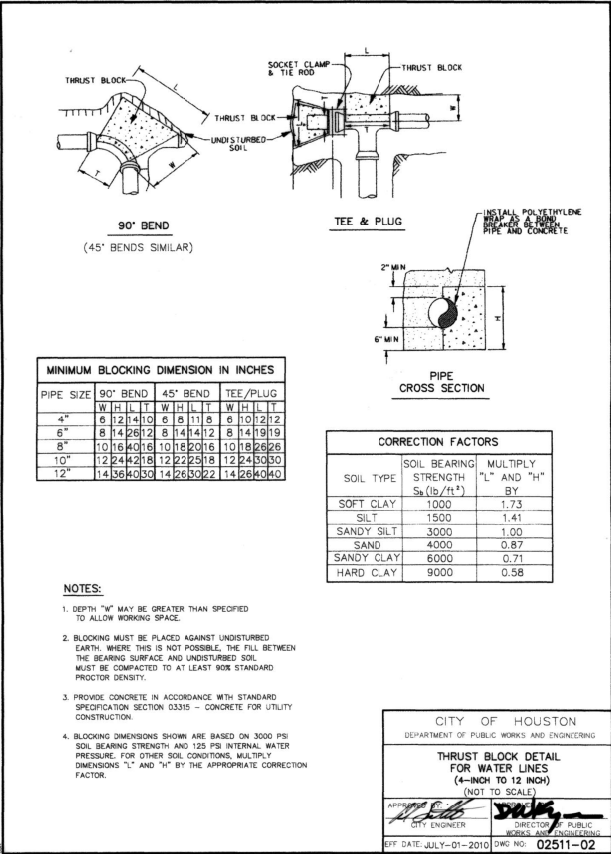
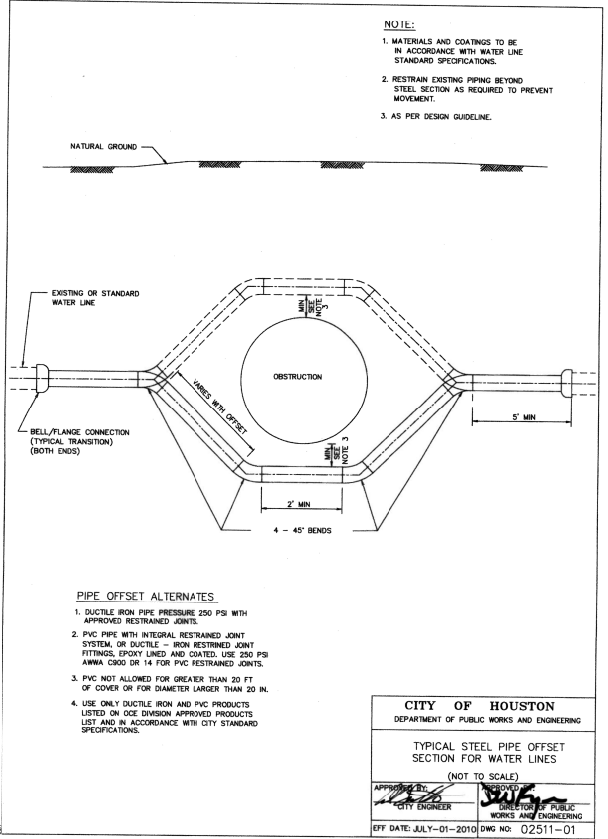
**SEATTLE STREET
RECONSTRUCTION PROJECT**

WATER DETAILS

SHEET 1 OF 2

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR	APPROVED BY: CAH
DESIGNED: DPS	DATE: 3/31/2022
SCALE:	SHEET: 22 OF 53



REFERENCE BENCHMARK:

RM050425 - BRASS DISK STAMPED "050425" LOCATED AT THE NORTHEAST CORNER OF THE BRIDGE ON RIO GRANDE OVER E127-00-00 ±60' SOUTH OF VILLAGE DRIVE IN KEY MAP 409L IN THE WHITE OAK BAYOU WATERSHED. ELEVATION = 104.75' (NAVD 88, 2001 ADJ.)

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CITY OF JERSEY VILLAGE
TEXAS STAR COMMUNITY

16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040

STATE OF TEXAS
DANIEL P. SIMEONE
58194
REGISTERED PROFESSIONAL ENGINEER

4/1/2022

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBP# FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

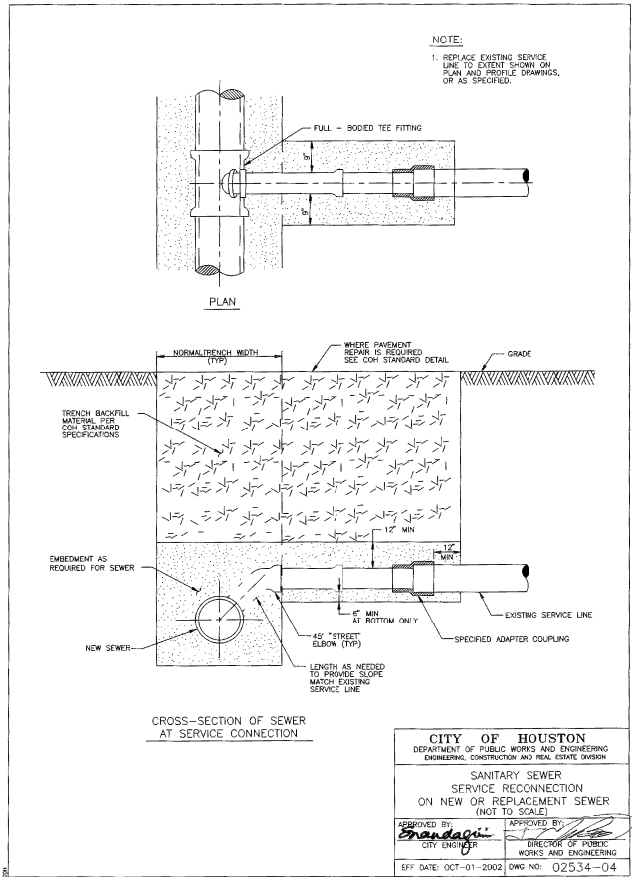
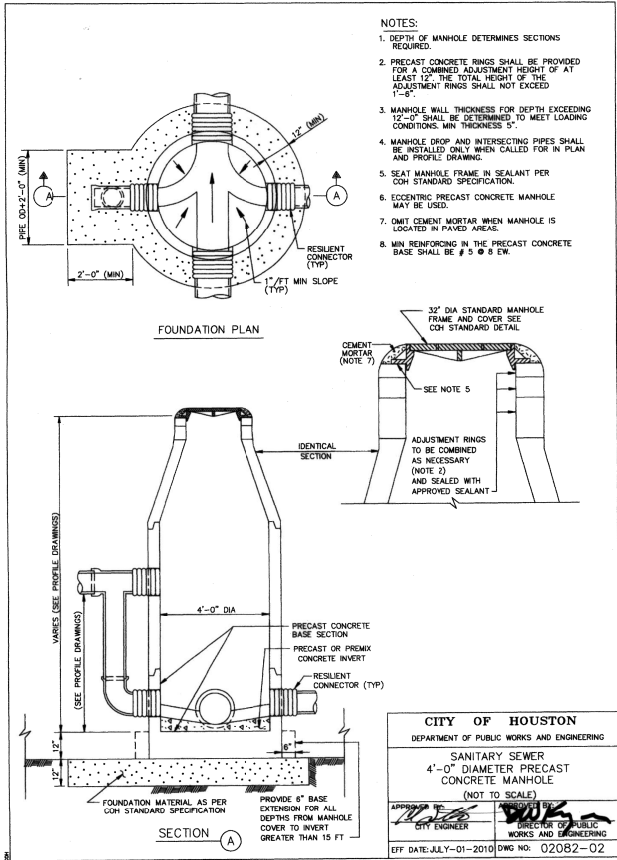
WATER DETAILS

SHEET 2 OF 2

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR
DESIGNED: DPS
SCALE:

APPROVED BY: CAH
DATE: 3/31/2022
SHEET: 23 OF 53



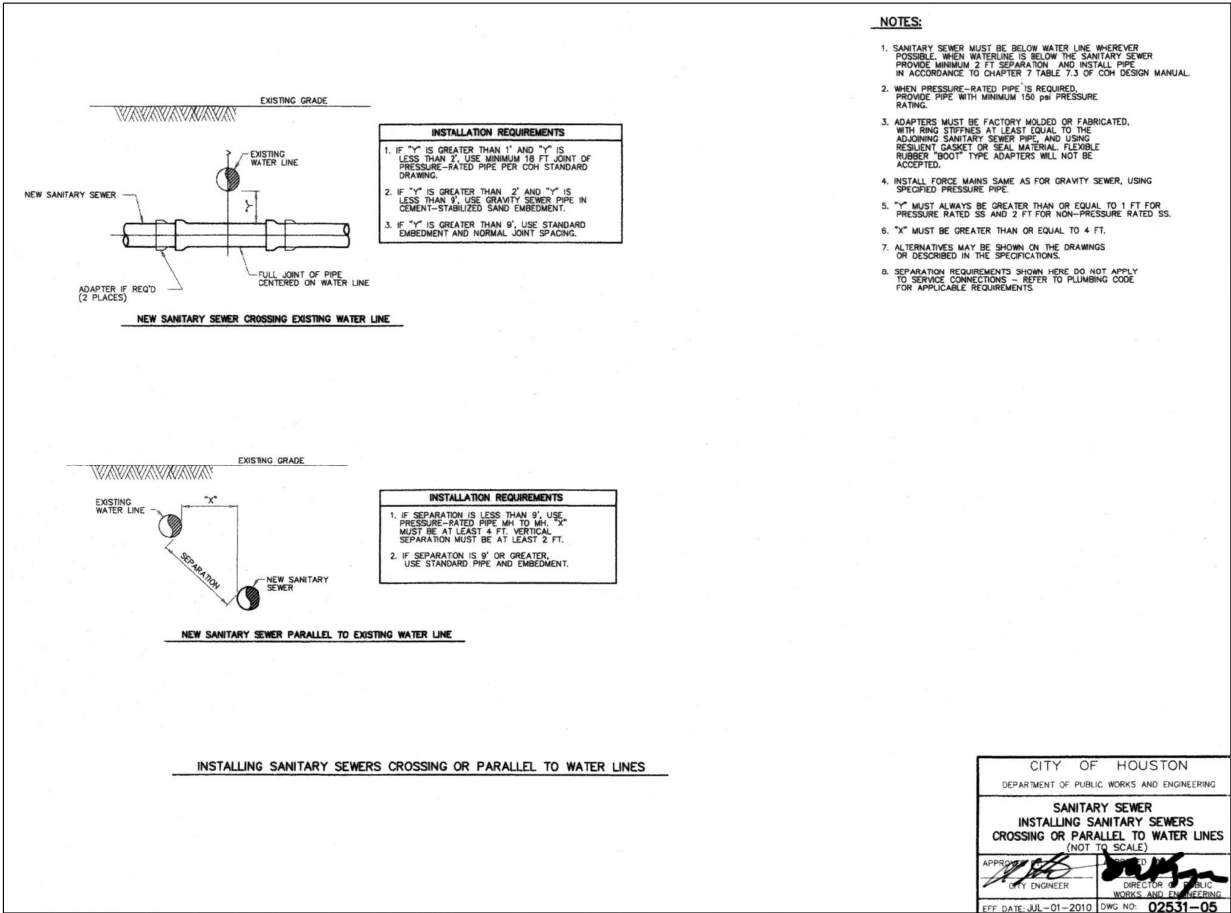
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TEXAS STAR COMMUNITY

16327 LAKEVIEW DR.
JERSEY VILLAGE, TX 77040

STATE OF TEXAS
DANIEL P. SIMEONE
58194
REGISTERED PROFESSIONAL ENGINEER

4/1/2022

AGUIRRE & FIELDS
ENGINEERING INNOVATORS
TBE FIRM REGISTRATION # 739

**SEATTLE STREET
RECONSTRUCTION PROJECT**

**SANITARY SEWER
DETAILS**

NO.	DATE	REVISIONS	BY

DRAWN BY: TJR APPROVED BY: CAH

DESIGNED: DPS DATE: 3/31/2022

SCALE: SHEET: 24 OF 53