

CITY OF LAWTON  
PLANS OF PROPOSED

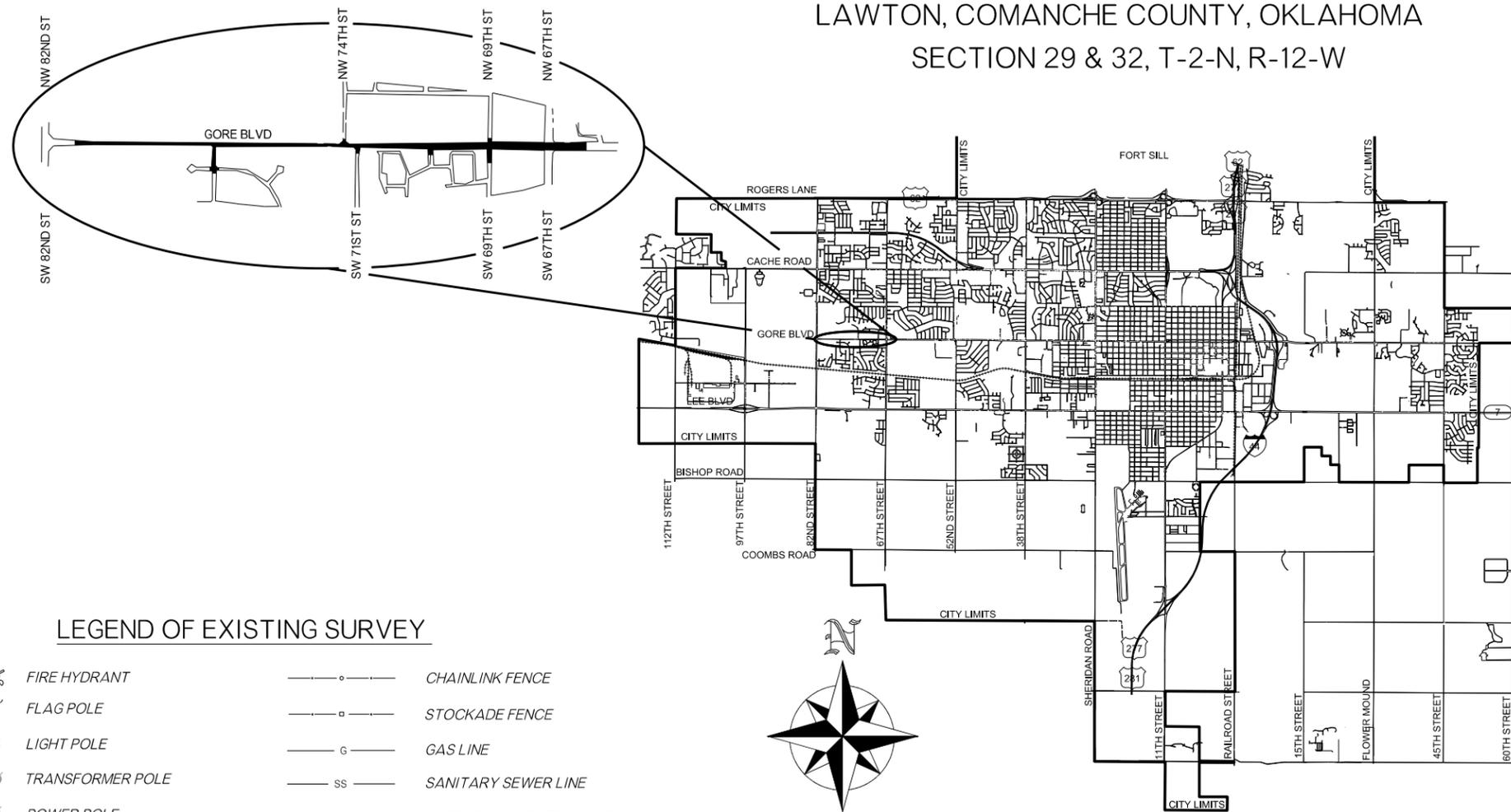
GORE BLVD. WATERLINE AND SEWERLINE RECONSTRUCTION -  
82ND ST. TO 67TH ST.

PROJECT NO. EN1208A

LAWTON, COMANCHE COUNTY, OKLAHOMA  
SECTION 29 & 32, T-2-N, R-12-W

SHEET LIST

001	COVER SHEET
AU001	PAY ITEMS AND NOTES (WATERLINE)
R001	STORM WATER MANAGEMENT PLAN
S001	SURVEY DATA SHEET
U001-U011	12" WATERLINE PLAN & PROFILE
U012-U015	WATERLINE CROSSING PLAN & PROFILE
U016-U019	SANITARY SEWER PLAN & PROFILE



CITY OF LAWTON STANDARD DRAWINGS

- WATER SYSTEM 1
- WATER SYSTEM 2
- SANITARY SEWER SYSTEM 1
- SANITARY SEWER SYSTEM 2

LEGEND OF EXISTING SURVEY

	FIRE HYDRANT		CHAINLINK FENCE
	FLAG POLE		STOCKADE FENCE
	LIGHT POLE		GAS LINE
	TRANSFORMER POLE		SANITARY SEWER LINE
	POWER POLE		OVERHEAD ELECTRIC LINE
	SANITARY SEWER CLEANOUT		UNDERGROUND ELECTRIC LINE
	SIGN		UNDERGROUND TELEPHONE LINE
	WATER METER		WATER LINE
	WATER VALVE		GROUND SURFACE CONTOUR
	MAILBOX		CURB AND GUTTER
	AIR CONDITIONER		TOP OF CURB SPOT ELEVATION
	SANITARY SEWER MANHOLE		GUTTER SPOT ELEVATION

SURVEY CONTROL DATA

- BEARINGS:  
THE BEARINGS SHOWN ARE DERIVED FROM THE NORTH AMERICAN DATUM OF 1993 (NAD93) AND ARE GRID BEARINGS.
- VERTICAL CONTROL:  
LEVEL DATUM IS BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88).

WARD 1 - MARY ANN HANKINS  
WARD 2 - KEITH JACKSON  
WARD 3 - LINDA CHAPMAN  
WARD 4 - JAY BURK

MAYOR  
STAN BOOKER

CITY MANAGER  
MICHAEL CLEGHORN

LAWTON CITY COUNCIL

WARD 5 - ALLAN HAMPTON  
WARD 6 - SEAN FORTENBAUGH  
WARD 7 - ONREKA JOHNSON  
WARD 8 - RANDY WARREN

MAYOR: \_\_\_\_\_ DATE

CITY MANAGER: \_\_\_\_\_ DATE

CITY ENGINEER: \_\_\_\_\_ DATE



NICHOLAS A. DAVIDSON, OKLA. REG. ENGR. 24562

10/6/2021  
DATE

CITY OF LAWTON - ENGINEERING DIVISION

**WATERLINE CONSTRUCTION PAY ITEMS  
CITY OF LAWTON, OKLAHOMA  
W. GORE BOULEVARD RECONSTRUCTION - 82ND ST. TO 67TH ST.**

ITEM NO.	CITY OF LAWTON SPEC. NO.	DESCRIPTION	UNIT	QUANTITY	
1		CONSTRUCTION AS-BUILT	1,2	LS	1.00
2	0201/0205	4" PVC C900 DR14 (TRENCHING)	3	LF	88.00
3	0201/0205	8" PVC C900 DR14 (TRENCHING)	3	LF	100.00
4	0201/0205	12" PVC C900 DR14 (TRENCHING)	3	LF	3,276.00
5	0201/0205	4" PVC C900 DR14 (HORIZONTAL DRILLING)	3	LF	270.00
6	0201/0205	8" PVC C900 DR14 (HORIZONTAL DRILLING)	3	LF	215.00
7	0201/0205	12" PVC C900 DR14 (HORIZONTAL DRILLING)	3	LF	1,925.00
8	0201/0205	FITTINGS		LB	11,539.00
9	0201/0205	4" RESILIENT-SEATED GATE VALVE		EA	4.00
10	0201/0205	8" RESILIENT-SEATED GATE VALVE		EA	3.00
11	0201/0205	12" RESILIENT-SEATED GATE VALVE		EA	16.00
12	0201/0205	FIRE HYDRANT W/ 6" GATE VALVE		EA	14.00
13	0201/0205	WATER METER RECONNECTION 1-1/2"		EA	13.00
14		EROSION CONTROL MEASURES	6	LS	1.00
15		MOBILIZATION		LS	1.00

**SANITARY SEWER LINE CONSTRUCTION PAY ITEMS  
CITY OF LAWTON, OKLAHOMA  
W. GORE BOULEVARD RECONSTRUCTION - 82ND ST. TO 67TH ST.**

ITEM NO.	CITY OF LAWTON SPEC. NO.	DESCRIPTION	UNIT	QUANTITY	
16		CONSTRUCTION AS-BUILT	1,2	LS	1.00
17	0302/0318	8" SANITARY SEWER PIPE (PVC SDR35, D3034)		LF	451.00
18	0302/0318	8" SANITARY SEWER PIPE (PVC SDR35, D3034) (DIRECTIONALLY DRILLED)		LF	57.00
19	0302/0318	12" SANITARY SEWER PIPE (PVC SDR35, D3034)		LF	424.00
20	0302/0318	4' DIA STANDARD DEPTH MANHOLE		EA	7.00
21	0302/0318	4' DIA MANHOLE EXTRA DEPTH		VF	57.00
22	0302/0318	PIPE BURSTING		LF	344.00
23		REMOVE AND REPLACE ASPHALT PAVEMENT	4	SY	25.00
24		BYPASS PUMPING	5	LSUM	1.00

**PAY ITEM NOTES:**

- SPOT ELEVATIONS ON THE MAIN WATERLINE RELATIVE TO FINISHED GRADE SHALL BE PROVIDED AT EACH 100-FT INTERVAL, COMPLETE WITH STATION AND OFFSET. IN ADDITION, ALL VALVES, FITTINGS, FIRE HYDRANTS (TOP OF NUT) AND OTHER MAJOR APPURTENANT ITEMS SHALL BE SHOWN WITH THE PROPER DESCRIPTION, STATION, OFFSET, AND ELEVATION.
- SPOT ELEVATIONS ON WATER METER CANS AND VAULTS SHALL BE SHOWN WITH THE PROPER DESCRIPTION (METER TYPE, METER SIZE, METER NUMBER, SERVICE MATERIAL, SERVICE SIZE), STATION, OFFSET, AND ELEVATION PER PLAN SURVEY CONTROL DATUM.
- PRICE BID FOR THIS ITEM SHALL INCLUDE THE COST OF INSTALLATION OF 12 GAUGE TRACER WIRE BURIED WITH ALL PVC WATERLINE PIPE.
- QUANTITY INCLUDES THE REMOVAL AND REPLACEMENT OF CONCRETE CURB (AS REQUIRED)
- BYPASS PUMPING OPERATIONS SHALL BE UTILIZED TO TEMPORARILY REROUTE SANITARY SEWER FLOWS AROUND SEVERAL WORK AREAS DURING PIPE BURSTING AND/OR PIPE REPLACEMENT ON THIS PROJECT. BYPASS PUMPING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 0300, PARAGRAPH 12 BYPASS PUMPING OF THE CITY'S TECHNICAL SPECIFICATIONS AND THE REQUIREMENTS OF THE BYPASS PUMPING SPECIAL PROVISION. THE COST OF BYPASS PUMPING SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, LABOR, EQUIPMENT, POWER, AND MAINTENANCE REQUIRED TO DIVERT FLOWS AROUND THE WORK AREAS FOR THE DURATION OF THE PIPE BURSTING OR PIPE REPLACEMENT OPERATIONS. NO ADDITIONAL PAYMENT SHALL BE MADE.
- TEMPORARY EROSION AND SEDIMENT CONTROL SHALL CONSIST OF ALL REQUIRED MEASURES TO MINIMIZE POLLUTION TO STREAMS, DITCHES, STORM SEWERS AND PRIVATE PROPERTIES. SUCH MEASURES MAY INCLUDE BERMS, DIKES, SILT FENCE, FIBER LOGS, SEDIMENT FILTERS, MULCHES AND GRASSES.



**GENERAL CONSTRUCTION NOTES**

PAY ITEMS LISTED IN THE BID SCHEDULE ARE THE ONLY PAY ITEMS FOR THE PROJECT. ANY OTHER ITEMS NECESSARY FOR A COMPLETE PROJECT, BUT NOT SHOWN IN THE BID SCHEDULE SHALL BE CONSIDERED AN INCIDENTAL ITEM AND ITS COST TO BE INCLUDED IN OTHER ITEMS.

THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO BIDDING PROJECT. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE, EXCEPT AS NOTED.

ANY CONTRACTOR-CAUSED DAMAGE TO UTILITY AND/OR SERVICE LINES, SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE REPAIRED OR REPLACED AT NO COST TO THE CITY OF LAWTON AND SHALL BE ACCOMPLISHED BY THE CONTRACTOR, SUBCONTRACTOR OR LICENSED PLUMBER AS APPROVED BY THE CITY ENGINEER.

ALL WATER MAINS OR SERVICE LINES THAT ARE TO BE ABANDONED SHALL BE PHYSICALLY SEVERED AS CLOSE TO THE REMAINING WATERLINE AS POSSIBLE AND A MECHANICAL JOINT CAP OR PLUG INSTALLED AS DIRECTED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN THE PROJECT AREA. LIKEWISE, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK AND THAT OF THE INVOLVED UTILITIES IN THE PROJECT AREA.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND INCIDENTAL ITEMS NEEDED TO PROVIDE ADEQUATE CONSTRUCTION SIGNING, BARRICADES, TRAFFIC CONTROL DEVICES AND OTHER RELATED ITEMS FOR THE PROJECT AREA, DURING THE CONSTRUCTION PERIOD. THIS WORK IS TO BE CONSIDERED AN INCIDENTAL ITEM AND THE COST OF THIS ITEM IS TO BE INCLUDED IN OTHER PAY ITEMS.

THE CONTRACTOR SHALL NOTIFY THE L.P.D. CHIEF, L.F.D. CHIEF, CITY ENGINEER, PUBLIC WORKS DIRECTOR AND ALL PRIVATELY OWNED AMBULANCE COMPANIES 24 HOURS IN ADVANCE OF WHEN TRAFFIC IS TO BE RESTRICTED ON ANY STREET. IF AN EMERGENCY ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ALL PARTIES PREVIOUSLY NOTED.

THE CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO RESIDENTIAL, COMMERCIAL AND PUBLIC PROPERTIES IN THE PROJECT AREA. DURING CONSTRUCTION, TRAFFIC MAY BE RESTRICTED TO LOCAL TRAFFIC ONLY WITH APPROVAL OF THE CITY ENGINEER.

THE CONTRACTOR SHALL CAREFULLY REMOVE, STORE AND REINSTALL ALL CITY-OWNED SIGNS WHOSE REMOVAL IS REQUIRED BY HIS CONSTRUCTION WORK IN THE PROJECT AREA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR THE CITY TO INSPECT ALL SIGNS SCHEDULED FOR REMOVAL PRIOR TO THEIR REMOVAL. ONCE SAID SIGNS HAVE BEEN REMOVED, IT WILL BE ASSUMED THAT THEY WERE IN GOOD CONDITION AT THE TIME OF REMOVAL. ANY SIGNS DAMAGED OR LOST BY THE CONTRACTOR SHALL BE REPLACED AT NO COST TO THE CITY. MATERIALS SHALL BE APPROVED BY THE CITY ENGINEER.

ALL POST-MOUNTED SIGNS SHALL BE RESET IN CONCRETE AND AT THE PROPER HEIGHT AND LOCATION (CITY TO PROVIDE LOCATION).

ALL SIDEWALK AND PAVED DRIVEWAY REMOVALS SHALL BE BOUNDED BY JOINTS OR SAWCUTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DRIVEWAY CLOSINGS WITH THE RESPECTIVE PROPERTY OWNERS AND TENANTS, IF PROPERTY IS RENTED.

EXISTING CONCRETE DRIVES WILL BE REPLACED WITH 6" MIN. NON-REINFORCED CLASS 3500 PSI H.E.S. CONCRETE AS SPECIFIED ON THE PLAN DOCUMENTS.

PROPERTY OWNERS WILL BE NOTIFIED BY THE CITY, PRIOR TO CONSTRUCTION, THAT IT WILL BE THE OWNER'S RESPONSIBILITY TO REMOVE OR RELOCATE FENCES, TREES, SHRUBS OR OTHER PROPERTY WHICH THEY INTEND TO KEEP. IF THE ITEMS ARE NOT REMOVED AT THE TIME OF CONSTRUCTION AND ARE IN THE WAY OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ITEMS AS DIRECTED BY THE CITY ENGINEER. FENCES SHALL BE REINSTALLED AT THE CONTRACTOR UNIT PRICE FOR FENCES AS DIRECTED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO THE START OF WORK.

ANY SURPLUS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND DISPOSAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO ADDITIONAL COST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEYING AND CONSTRUCTION STAKING FOR THE PROJECT.

ALL GRADING AND SURFACING SHALL BE IN ACCORDANCE WITH THE PLAN SHEETS AND OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE CONTRACTOR SHALL REMOVE AND STOCKPILE ALL SALVAGED TOPSOIL TO BE USED LATER AS BACKFILL BEHIND CURBS AND DRIVES. THIS IS NOT A PAY ITEM, BUT COST OF SAME IS TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL LEVEL ALL DISTURBED AREAS WITH TOPSOIL AND HAND RAKE TO A UNIFORM APPEARANCE. COST SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS.

CAUTION: FOR UNDERGROUND UTILITY LOCATIONS, CONTACT 1-800-522-6543 PRIOR TO EXCAVATION

THE SPECIFICATIONS WHICH GOVERN THE MATERIALS TO BE FURNISHED AND THE WORK TO BE PERFORMED UNDER THIS CONTRACT ARE THE TECHNICAL SPECIFICATIONS (LATEST EDITION) SO PREPARED BY THE ENGINEERING DIVISION, PUBLIC WORKS DEPARTMENT, CITY OF LAWTON.

IN ADDITION THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS OF HIGHWAY CONSTRUCTION ARE, BY REFERENCE, HEREBY MADE A PART OF THE CONTRACT. IN CASE OF CONFLICT BETWEEN THE CITY'S TECHNICAL SPECIFICATION AND THE ODOT STANDARD SPECIFICATIONS, THE CITY'S TECHNICAL SPECIFICATIONS SHALL GOVERN EXCEPT AS MODIFIED BY THE PROJECT'S CONTRACT DOCUMENTS.

**GENERAL CONSTRUCTION NOTES FOR WATERLINES:**

WATER MAINS SHALL BE CAPPED IF REQUIRED FOR TESTING, PRIOR TO TIE-INS BEING MADE.

ALL EXCAVATION WITHIN 2 FEET OF PAVEMENT SHALL BE BACKFILLED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY WITH LIMESTONE SCREENINGS.

FENCES AND MAILBOXES SHALL BE REMOVED AND REINSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

ALL SERVICE LINE TAPS SHALL BE 1½ INCHES AND SERVICE LINES SHALL BE 1½ INCH IN SIZE UNLESS NOTED.

NEW 1½ INCH SERVICE LINES SHALL BE INSTALLED FROM NEW MAIN TO METER BOX ACCORDING TO STANDARD DETAIL SHEET INCLUDING ANGLE VALVE ON ALL METERS LOCATED ADJACENT TO NEW MAIN. FOR SERVICES LOCATED ON THE OPPOSITE SIDE OF THE STREET FROM THE MAIN, THE EXISTING SERVICE LINE SHALL BE UTILIZED AND CONNECTED TO THE NEW MAIN. CITY OF LAWTON TECHNICAL SPECIFICATION DOES NOT ALLOW THE SPLICING OF SERVICE LINES, SO A NEW FULL LENGTH SERVICE LINE MAY BE REQUIRED IN SOME APPLICATIONS.

ADDITIONAL DRIVEWAY REPAIR MAY BE ADDED AS DIRECTED BY THE PROJECT ENGINEER. FOR DRIVEWAY REPAIRS, SEE DETAILS.

SIDEWALK REPAIR SHALL BE PAID UNDER PAY ITEM FOR CONCRETE DRIVE REPAIR.

CONTRACTOR SHALL BORE UNDER TREES IN - LIEU OF TREE REMOVAL AT LOCATIONS DIRECTED BY THE PROJECT ENGINEER. COST SHALL BE INCLUDED IN THE PRICE BID FOR BORE W/O CASING.

ALL WATER MAIN VALVES SHALL BE OPERATED ONLY BY CITY OF LAWTON PUBLIC WORKS PERSONNEL. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS/ENGINEERING DEPARTMENT A MINIMUM OF 96 HOURS IN ADVANCE OF REQUIRED VALVE OPERATIONS.

THE CONTRACTOR SHALL COORDINATE TIE-INS OF NEW WATERLINES TO EXISTING LINES WITH THE CITY OF LAWTON PUBLIC WORKS/ENGINEERING DIRECTOR AND THE CITY OF LAWTON FIRE DEPARTMENT CHIEF.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOOR-TO-DOOR NOTIFICATION OF ALL AFFECTED PERSONS PRIOR TO SHUTTING OFF A WATER MAIN.

ALL NEW FIRE HYDRANTS SHALL BE COVERED WITH BLACK PLASTIC WRAP UNTIL SUCH TIME AS THEY ARE OPERATIONAL.

EXISTING FIRE HYDRANTS AND RELATED VALVES SHALL BE REMOVED AND SALVAGED IN GOOD CONDITION AND DELIVERED TO THE CITY OF LAWTON PUBLIC WORKS/ENGINEERING MAINTENANCE YARD LOCATED AT 2100 SW 6TH STREET DURING NORMAL WORKING HOURS AS DIRECTED BY THE ENGINEER. COSTS TO BE INCLUDED WITH PRICE BID FOR OTHER ITEMS.

THE CONTRACTOR SHALL REMOVE VALVE BOXES FROM VALVES TO BE ABANDONED IN AREAS NOT PAVED AND BACKFILL HOLE WITH SUITABLE MATERIAL. IN PAVED AREAS WHERE THE VALVE BOX CANNOT BE EASILY REMOVED, THE CONTRACTOR SHALL REMOVE THE LID AND FILL THE BOX WITH CONCRETE. SALVAGED VALVE BOXES AND LIDS SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY OF LAWTON PUBLIC WORKS/ENGINEERING YARD.

ALL METERS TO BE RELOCATED SHALL BE PLACED AS CLOSE TO THE PROPERTY LINE AS PRACTICAL, OR AS DIRECTED BY THE PROJECT ENGINEER. THE QUANTITIES SHOWN IN THE SUMMARY OF BID QUANTITIES FOR METER RELOCATION AND 1" SERVICE LINE ARE FOR BIDDING PURPOSES ONLY. THE ACTUAL QUANTITIES REQUIRED WILL BE DETERMINED DURING CONSTRUCTION.

ALL LINES AND FITTINGS SHALL BE THRUST BLOCKED IN ACCORDANCE WITH CITY OF LAWTON WATER STANDARDS.

ALL BACKFILL FOR WATERLINE TRENCHING SHALL BE WATER JETTED AFTER THE CONNECTION OF ALL SERVICE LINES. COST TO BE INCLUDED IN THE UNIT PRICE FOR PIPE, OR AS INCIDENTALS.

THE CONTRACTOR SHALL PLACE A 4 INCH THICK LAYER OF TOPSOIL ON ALL AREAS TO BE GRASSED. THE PRICE OF SALVAGING, IMPORTING, AND PLACING TOPSOIL SHALL BE INCLUDED IN THE UNIT PRICE FOR GRASSING.

MINIMUM COVER FOR THE WATERLINE INSTALLATION SHALL BE FORTY-TWO INCHES (42") FROM THE TOP OF GROUND TO THE TOP OF THE PIPE UNLESS SPECIFIED OTHERWISE.

ALL TAPS SHALL BE ACCOMPLISHED BY THE CONTRACTOR. COST SHALL BE INCLUDED IN THE PRICE BID FOR SERVICE TAPS OR TAPPING SADDLE AND VALVE.

PVC (AWWA C900 DR18) OR POLYBOND LINED D.I. (CLASS 51) SANITARY SEWER PIPE MAY BE REQUIRED AT LOCATIONS WHERE THE MINIMUM SPACING REQUIREMENT WITH WATER MAINS CANNOT BE ACHIEVED. THE CONTRACTOR SHALL FURNISH AND INSTALL (COMPLETE) THE REQUIRED TYPE AND LENGTH OF PIPE AT LOCATIONS AS DIRECTED BY THE ENGINEER. MATERIALS AND METHODS FOR TRENCHING/BACKFILL SHALL FOLLOW SPECIFICATIONS AS SET IN SECTION 0300 SEWERLINE CONSTRUCTION. COST SHALL BE INCLUDED IN THE PRICE BID FOR SANITARY SEWER PIPE (PVC C900 DR18 OR POLYBOND D.I. PIPE CLASS 51).

ALL LINES WHICH ARE TO REMAIN IN SERVICE SHALL BE COMPLETELY DISCONNECTED FROM ABANDONED LINES BY PLUGGING THE LIVE LINE CROSS OR TEE WITH AN M.J. PLUG (MEGALUG OR EQUAL). LEAD JOINT FITTINGS SHALL BE COMPLETELY REMOVED AND A NEW LINE SEGMENT SLEEVED IN. THE END OF ABANDONED PIPE SHALL BE SEALED WITH NON-SHRINK GROUT. FITTINGS SHALL BE PAID AT THE CONTRACT BID PRICE AND ALL OTHER COSTS SHALL BE CONSIDERED INCIDENTAL.

ALL MECHANICAL FITTINGS SHALL BE INSTALLED WITH MJ FITTINGS (MEGALUG OR EQUAL).

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**SUMMARY OF PAY ITEMS  
AND NOTES  
(WATERLINE AND SEWERLINE)**

Project No. J/P# 19144(04) Sheet No. AU01

W. GORE BLVD., 82ND ST. TO 67TH ST.

# STORM WATER MANAGEMENT PLAN

## SITE DESCRIPTION

PROJECT LIMITS: W GORE BLVD, 82ND ST. TO 67TH ST. IN COMANCHE COUNTY

PROJECT DESCRIPTION: WATERLINE AND SEWERLINE RECONSTRUCTION

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: \_\_\_\_\_  
 PRIOR TO INITIATING SOIL DISTURBING ACTIVITIES, THE CONTRACTOR WILL INSTALL ALL PERIMETER TEMPORARY SEDIMENT CONTROLS SPECIFIED. STRIP, STOCKPILE AND STABILIZE TOPSOIL. CLEAR AND GRUB ONLY IN NECESSARY AREAS, PRESERVING AS MUCH NATIVE VEGETATION AS POSSIBLE. INSTALL, MAINTAIN AND/OR MOVE TEMPORARY SEDIMENT ITEMS WITH CONSTRUCTION OPERATIONS AS PRACTICAL. REPLACE SALVAGED TOPSOIL AND DEVICES WHEN AN ACCEPTABLE VEGETATIVE COVER (AT LEAST 70%) HAS BEEN ATTAINED. AS SITE CONDITIONS WARRANT, THE CONTRACTOR MAY CHOOSE TO MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIED PRACTICES TO IMPROVE THEIR EFFECTIVENESS AS APPROVED BY THE ENGINEER. THE CONTRACTOR WILL MAINTAIN A LOG OF THE DATES OF MAJOR SOIL DISTURBANCE ACTIVITIES, AND ALSO THE DATES OF INSTALLATION OF EROSION CONTROL MEASURES.

SOIL TYPE: FAT CLAYS

TOTAL AREA OF THE CONSTRUCTION SITE: 14.90 ACRES

ESTIMATED AREA TO BE DISTURBED: 2.00 ACRES

OFFSITE AREA TO BE DISTURBED: \_\_\_\_\_  
 (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 5.13 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 5.13 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.90

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 34°36' 32.15" N 98°29' 0.00" W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: WEST BRANCH WOLF CREEK

SENSITIVE WATERS OR WATERSHEDS: YES  NO

303(d) IMPAIRED WATERS: YES  NO

IF YES, LIST IMPAIRMENT: \_\_\_\_\_

LOCATED IN A TMDL: YES  NO

LAKE THUNDERBIRD TMDL: YES  NO

MS4 ENTITY YES  NO

IF YES, LOCATION: CITY OF LAWTON

NOTE: THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

## EROSION AND SEDIMENT CONTROLS

**SOIL STABILIZATION PRACTICES:**

- TEMPORARY SEEDING
- PERMANENT SODDING, SPRIGGING OR SEEDING
- VEGETATIVE MULCHING
- SOIL RETENTION BLANKET
- PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

**STRUCTURAL PRACTICES:**

- STABILIZED CONSTRUCTION EXIT
- TEMPORARY SILT FENCE
- TEMPORARY SILT DIKES
- TEMPORARY FIBER LOG
- DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ROCK FILTER DAMS
- TEMPORARY SLOPE DRAIN
- PAVED DITCH W/ DITCH LINER PROTECTION
- TEMPORARY DIVERSION CHANNELS
- TEMPORARY SEDIMENT BASINS
- TEMPORARY SEDIMENT TRAPS
- TEMPORARY SEDIMENT FILTERS
- TEMPORARY SEDIMENT REMOVAL
- RIP RAP
- INLET SEDIMENT FILTER
- TEMPORARY BRUSH SEDIMENT BARRIERS
- SANDBAG BERMS
- TEMPORARY STREAM CROSSINGS

**OFFSITE VEHICLE TRACKING:**

- HAUL ROADS DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD REMOVED DAILY

**NOTES:**

TEMPORARY EROSION AND SEDIMENT CONTROL SHALL CONSIST OF ALL REQUIRED MEASURES TO MINIMIZE POLLUTION TO STREAMS, DITCHES, STORM SEWERS AND PRIVATE PROPERTIES. SUCH MEASURES MAY INCLUDE BERMS, DIKES, SILT FENCE, FIBER LOGS, SEDIMENT FILTERS, MULCHES AND GRASSES.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

**MAINTENANCE AND INSPECTION:**

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

**WASTE MATERIALS:**

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

**HAZARDOUS MATERIALS:**

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIAL IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

**GENERAL NOTES:**

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2019 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

- 103.05 BONDING REQUIREMENTS
- 104.10 FINAL CLEANING UP
- 104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK
- 104.13 ENVIRONMENTAL PROTECTION
- 106.08 STORAGE AND HANDLING OF MATERIAL
- 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED
- 107.20 STORM WATER MANAGEMENT
- 220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
- 221 TEMPORARY SEDIMENT CONTROL

**IN ADDITION:**

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

Design	
Drawn	
Checked	
Approved	
Squad	Dewberry

### STORM WATER MANAGEMENT PLAN

Project No. J/P# 19144(04) Sheet No. R001

W. GORE BLVD., 82ND ST. TO 67TH ST.

### SURVEY CONTROL

OFF-SITE HORIZONTAL AND VERTICAL CONTROL - CITY OF LAWTON GPS NETWORK				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
307	461936.419	1822997.703	1180.582	LAWTON GPS CONTROL
ON-SITE HORIZONTAL AND VERTICAL CONTROL				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
LLS-101	464527.029	1820572.125	1190.52	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-102	464732.851	1823371.923	1177.35	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-104	464566.836	1824771.083	1156.64	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-105	464609.922	1825374.197	1151.91	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-110	464665.077	1820328.499	1183.26	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-111	464460.085	1825721.261	1153.49	#4 BAR W/ "LEMKE CONTROL" CAP
LLS-112	464564.857	1821728.344	1170.01	#4 BAR W/ "LEMKE CONTROL" CAP
HORIZONTAL DATUM: NAD(83) OKLAHOMA STATE PLANE, SOUTH ZONE.				
VERTICAL DATUM: NAVD(88)				

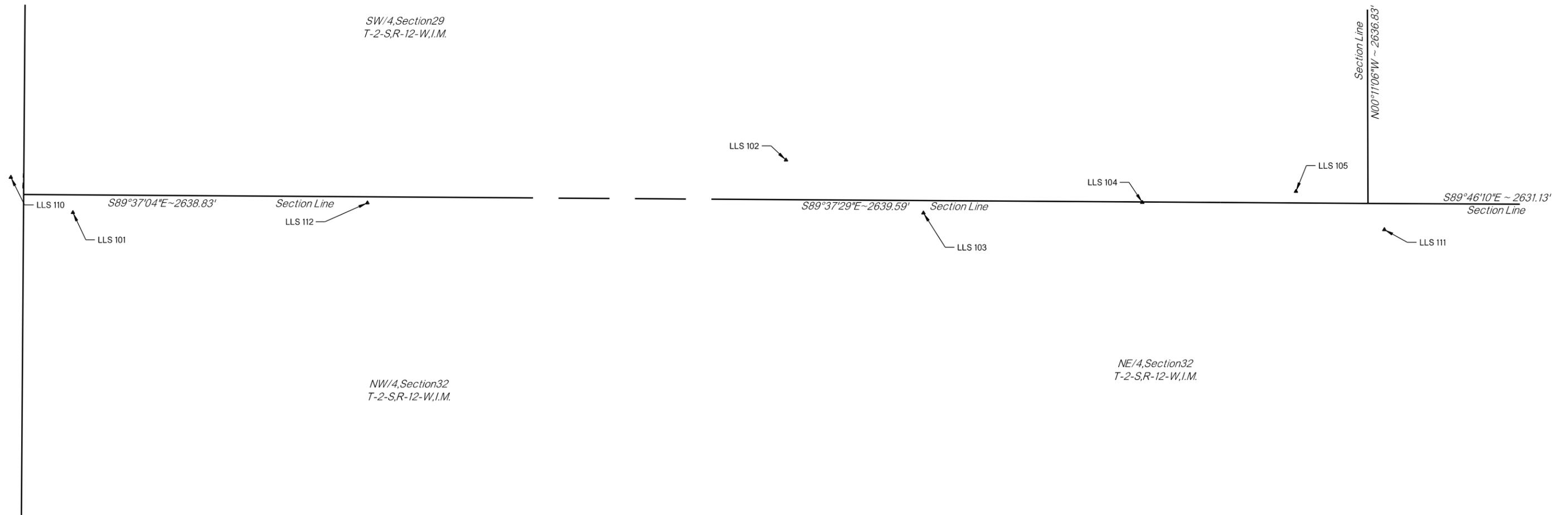
Control Datum is Based on the City of Lawton Certified Corner Record for the Center of Section 32, T-2-N, R-12-W, I.M., (Filed November 6, 2009)

SE/4, Section 29  
T-2-S, R-12-W, I.M.

SW/4, Section 29  
T-2-S, R-12-W, I.M.

NW/4, Section 32  
T-2-S, R-12-W, I.M.

NE/4, Section 32  
T-2-S, R-12-W, I.M.

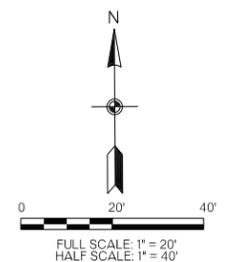
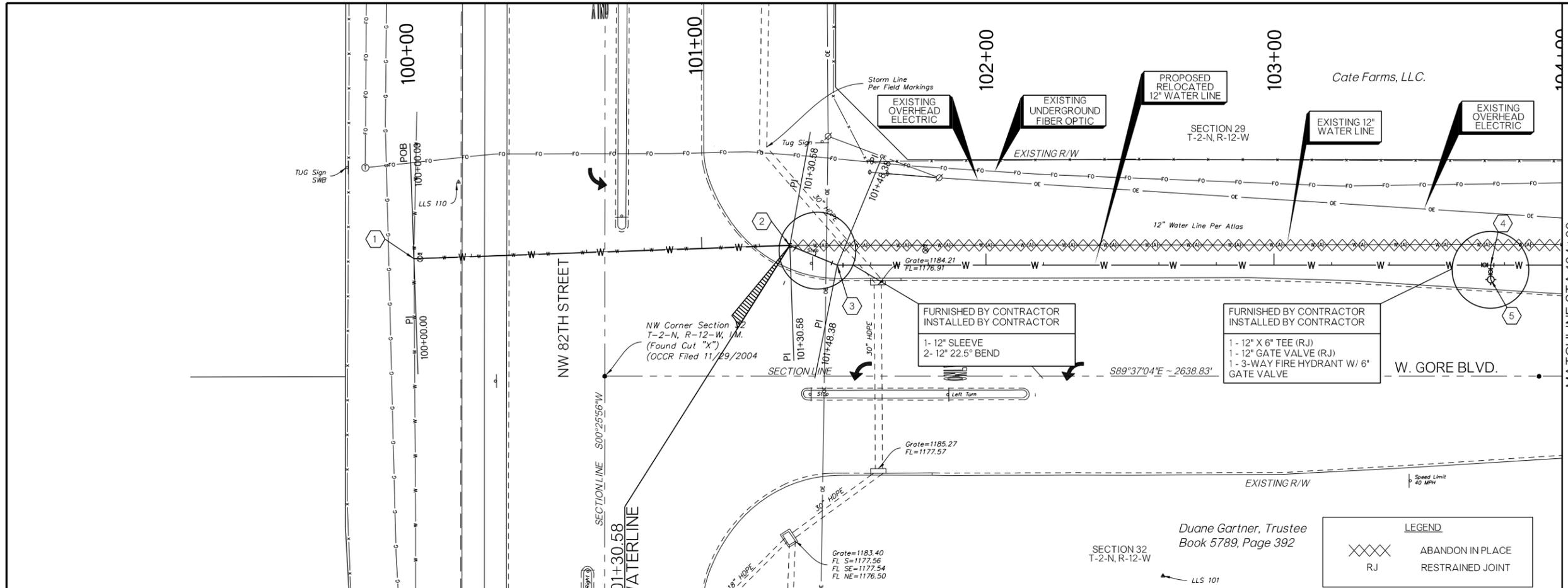


8/9/2021

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

### SURVEY DATA SHEET

Project No. J/P# 19144(04) Sheet No. S001  
W. GORE BLVD., 82ND ST. TO 67TH ST.

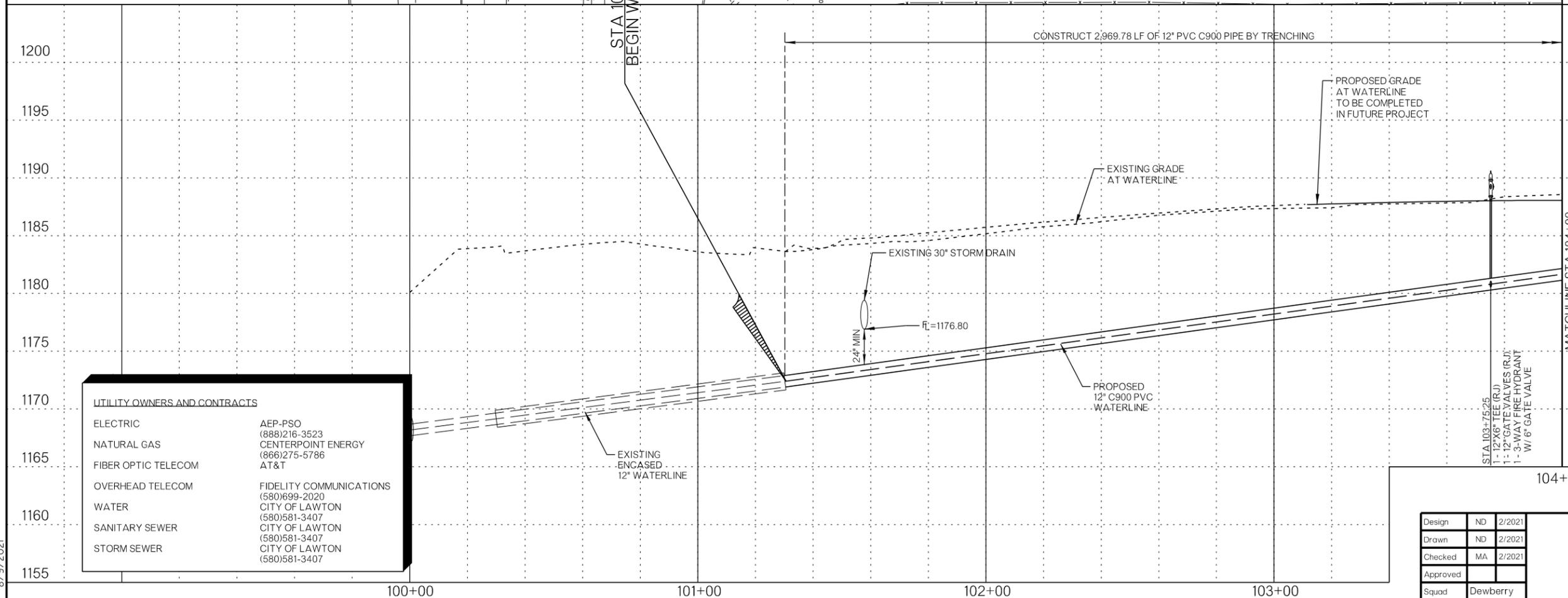


1	STA. 100+00.00 N 464,638.70 E 1,820,312.83
2	STA. 101+30.58 N 464,642.41 E 1,820,443.36
3	STA. 101+48.38 N 464,635.49 E 1,820,459.76
4	STA. 103+75.25 N 464,633.98 E 1,820,686.62
5	STA. 103+75.25 (5.0' RT) N 464,628.98 E 1,820,686.59

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

LEGEND

XXXX	ABANDON IN PLACE
RJ	RESTRAINED JOINT



UTILITY OWNERS AND CONTRACTS

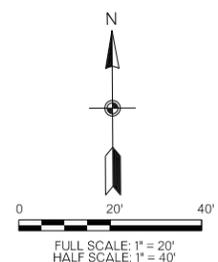
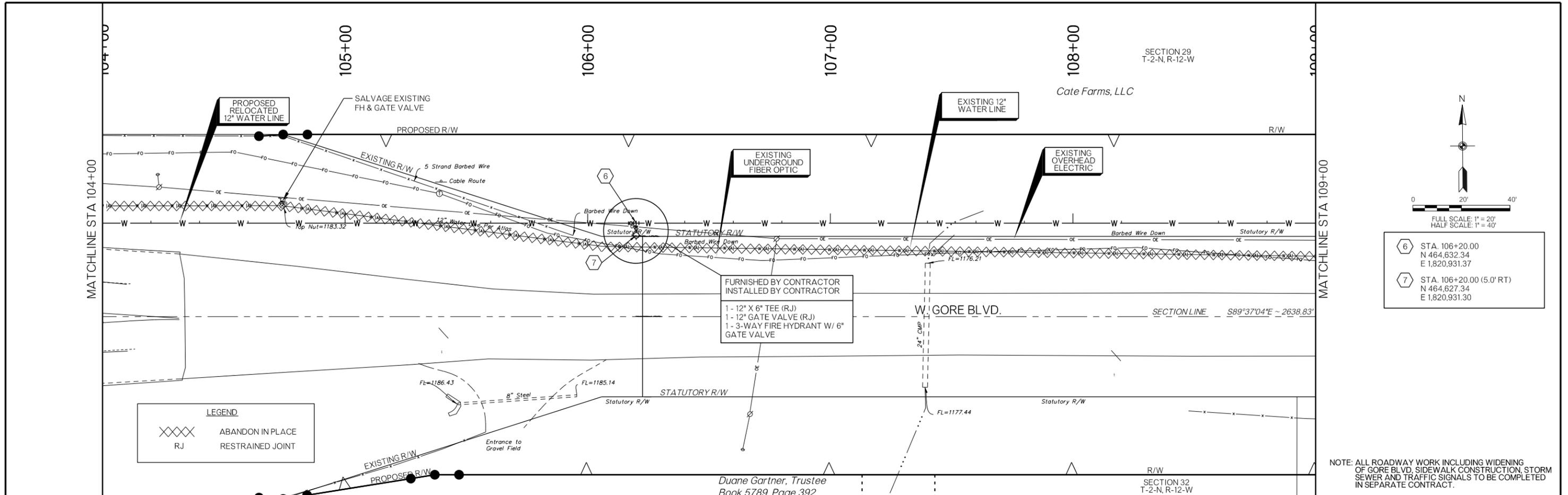
ELECTRIC	AEP-PSO (888)216-3523
NATURAL GAS	CENTERPOINT ENERGY (866)275-5786
FIBER OPTIC TELECOM	AT&T
OVERHEAD TELECOM	FIDELITY COMMUNICATIONS (580)699-2020
WATER	CITY OF LAWTON (580)581-3407
SANITARY SEWER	CITY OF LAWTON (580)581-3407
STORM SEWER	CITY OF LAWTON (580)581-3407

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE**  
STA 100+00.00 TO STA 104+00.00

Project No. J/P# 19144(04) Sheet No. U001  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021

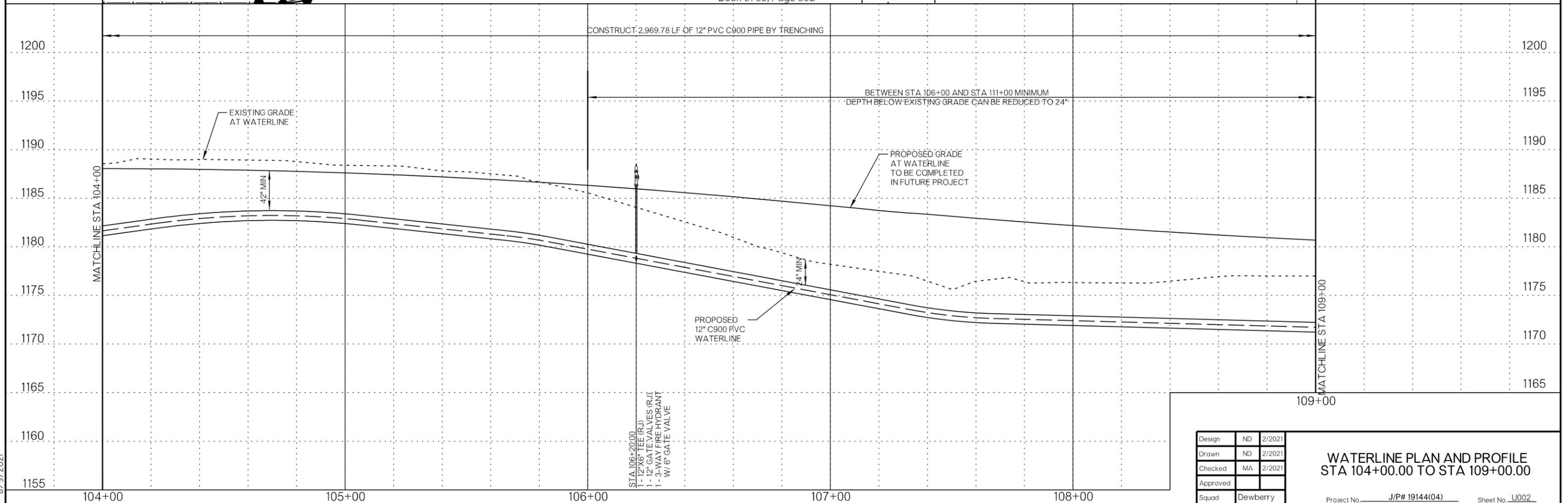


6	STA. 106+20.00 N 464,632.34 E 1,820,931.37
7	STA. 106+20.00 (5.0' RT) N 464,627.34 E 1,820,931.30

**LEGEND**

XXXX	ABANDON IN PLACE
RJ	RESTRAINED JOINT

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 104+00.00 TO STA 109+00.00**

Project No. J/P# 19144(04) Sheet No. U002

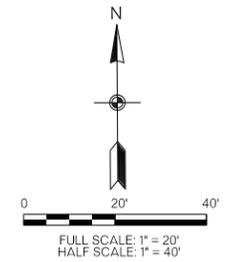
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021

Cate Farms, LLC.

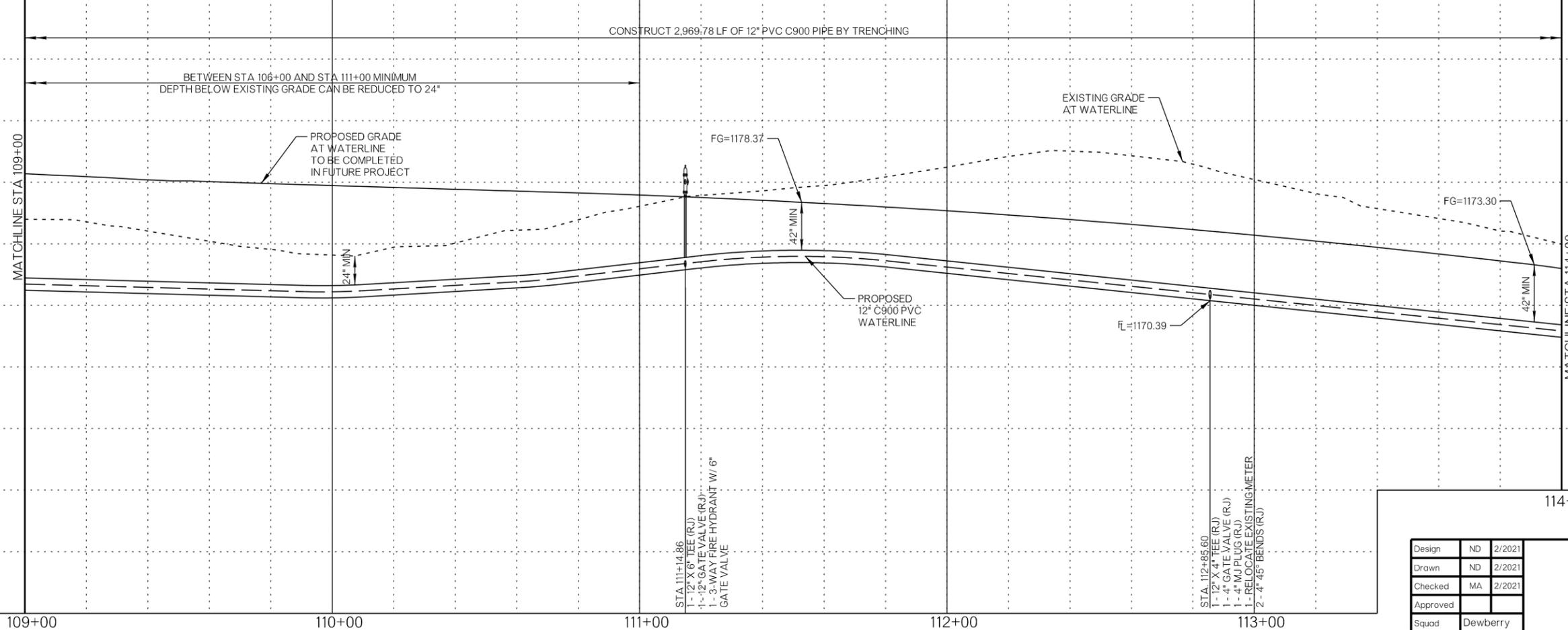
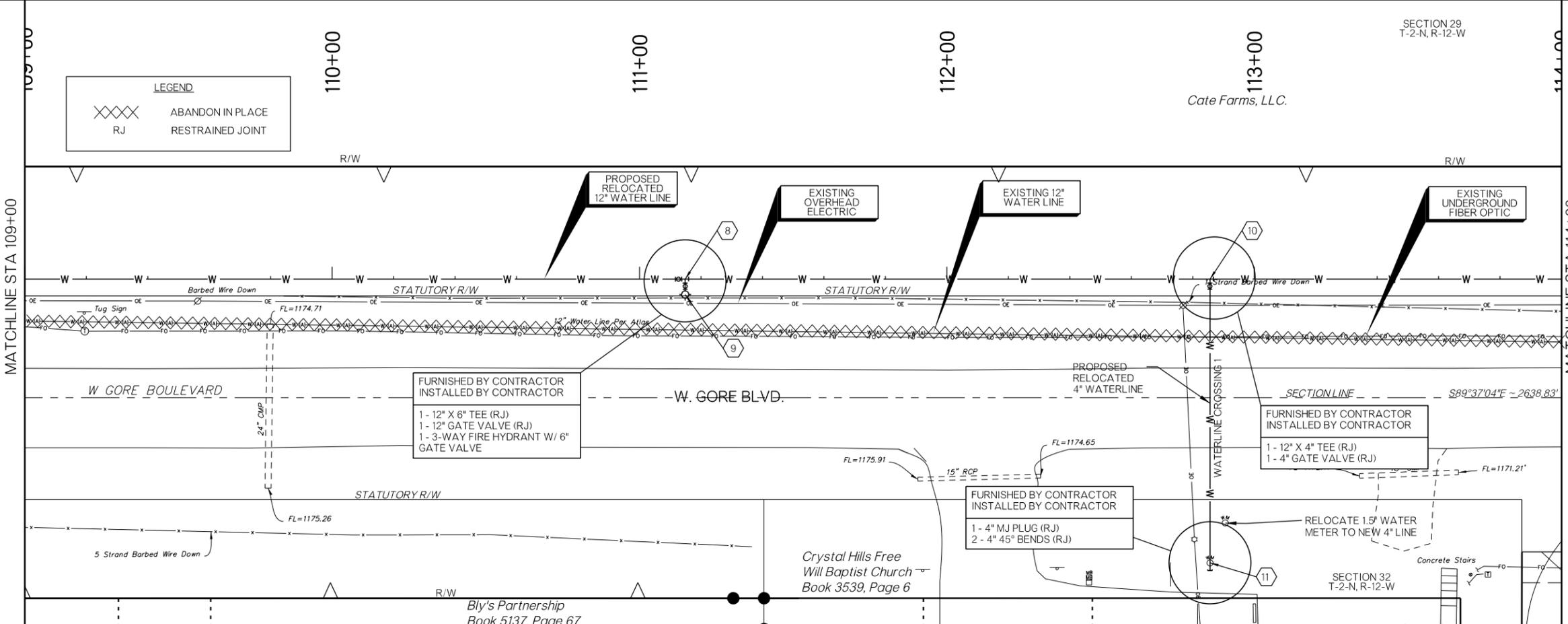
**LEGEND**

XXXX	ABANDON IN PLACE
RJ	RESTRAINED JOINT



8	STA. 111+14.86 N 464,629.04 E 1,821,426.22
9	STA. 111+14.86 (5.0' RT) N 464,624.04 E 1,821,426.18
10	STA. 112+85.60 N 464,627.90 E 1,821,596.95
11	STA. 112+85.60 (92.0' RT) N 464,535.90 E 1,821,596.34

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD., SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

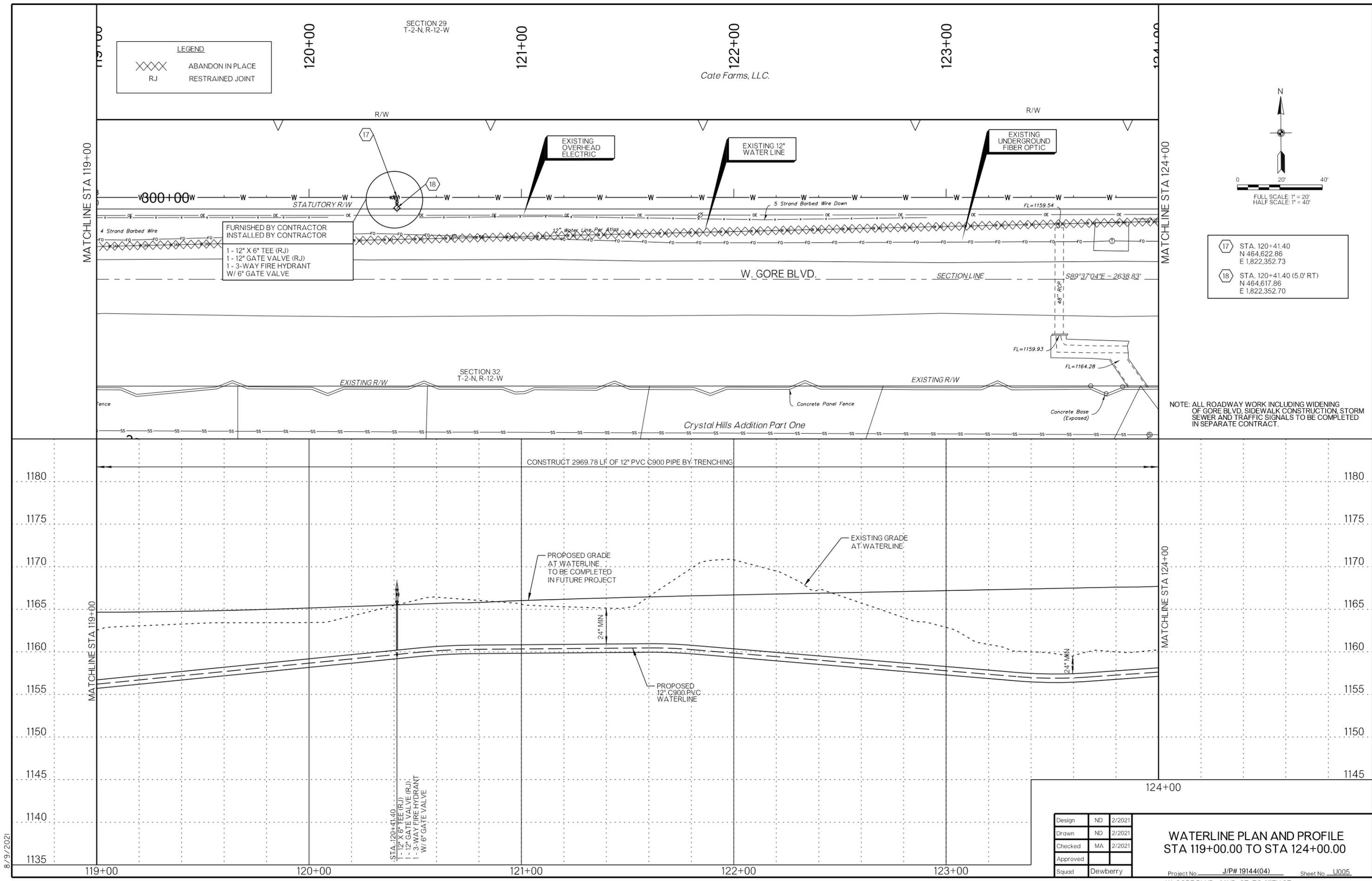


Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 109+00.00 TO STA 114+00.00**

8/9/2021





**LEGEND**  
 XXXX ABANDON IN PLACE  
 RJ RESTRAINED JOINT

120+00

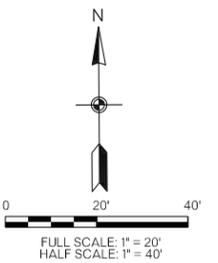
SECTION 29  
 T-2-N, R-12-W

121+00

122+00  
 Cate Farms, LLC.

123+00

124+00



17 STA. 120+41.40  
 N 464,622.86  
 E 1,822,352.73  
 18 STA. 120+41.40 (5.0' RT)  
 N 464,617.86  
 E 1,822,352.70

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
 STA 119+00.00 TO STA 124+00.00**

Project No. J/P# 19144(04) Sheet No. U005  
 W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021

LEGEND	
	ABANDON IN PLACE
	RESTRAINED JOINT

125+00

SECTION 29  
T-2-N, R-12-W

126+00

127+00

128+00

NewHaven Church, Inc.  
Book 6932, Page 255

MATCHLINE STA 129+00

MATCHLINE STA 124+00

FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR  
2 - 12" - 45° BENDS (HORIZ.) (R.J.)

Cate Farms, LLC.

ABANDONED 14" WATER LINE

EXISTING UNDERGROUND TELEPHONE

EXISTING OVERHEAD ELECTRIC

EXISTING UNDERGROUND TELEPHONE

PROPOSED RELOCATED 12" WATER LINE

EXISTING 12" WATER LINE

SALVAGE EXISTING GATE VALVE

FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR  
1 - 12" X 6" TEE (R.J.)  
1 - 12" GATE VALVE (R.J.)  
1 - 3-WAY FIRE HYDRANT  
W/ 6" GATE VALVE

SECTION LINE S89°37'04"E - 2638.83' W GORE BOULEVARD

N/4 Corner Section 32  
T-2-N, R-12-W, I.M.  
(Found 4" Spike)  
(OCCR Filed 08/05/2003)

SECTION LINE S89°37'29"E - 2639.59' W GORE BLVD.

FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR  
1 - 12" X 6" TEE (R.J.)  
1 - 12" X 4" TEE (R.J.)  
1 - 4" GATE VALVE (R.J.)  
1 - 3-WAY FIRE HYDRANT  
W/ 6" GATE VALVE

FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR

1 - 4" SOLID SLEEVE (R.J.)  
1 - RECONNECT EXISTING 1 1/2" WATER METER

PROPOSED 12" SANITARY SEWER LINE

PROPOSED RELOCATED 4" WATER LINE

EXISTING 8" SANITARY SEWER LINE

EXISTING OVERHEAD ELECTRIC

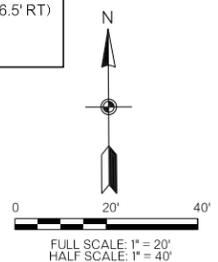
FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR

1 - 4" SOLID SLEEVE (R.J.)  
1 - RECONNECT EXISTING 1 1/2" WATER METER

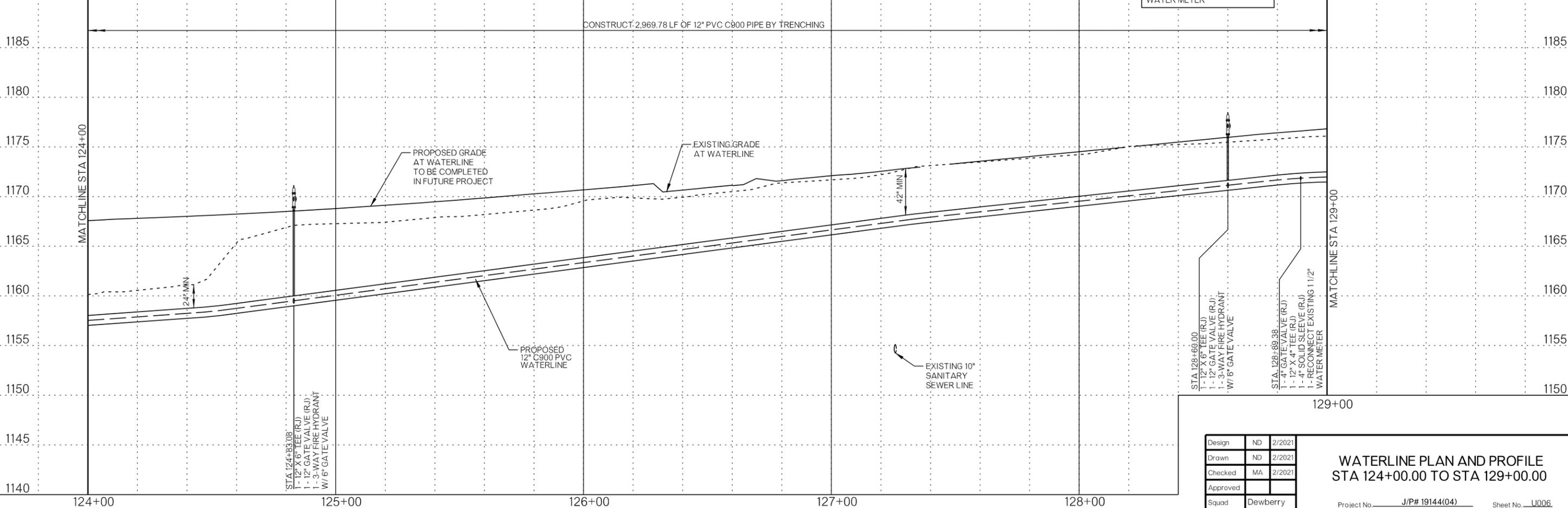
SECTION 32  
T-2-N, R-12-W  
Crystal Hills Addition Part One

Westminster Presbyterian Church  
Acct #160042670

19	STA. 124+83.08 N 464,619.91 E 1,822,794.40
20	STA. 124+83.08 (5.0' RT) N 464,615.42 E 1,822,794.37
22	STA. 126+14.51 N 464,619.03 E 1,822,925.83
23	STA. 126+31.95 N 464,631.29 E 1,822,938.25
24	STA. 128+60.00 N 464,627.25 E 1,823,166.26
25	STA. 128+60.00 (10.3' RT) N 464,616.97 E 1,823,166.00
26	STA. 128+89.38 N 464,626.73 E 1,823,195.63
27	STA. 128+90.45 (96.5' RT) N 464,530.23 E 1,823,195.00



NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



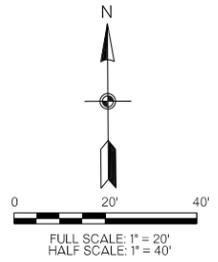
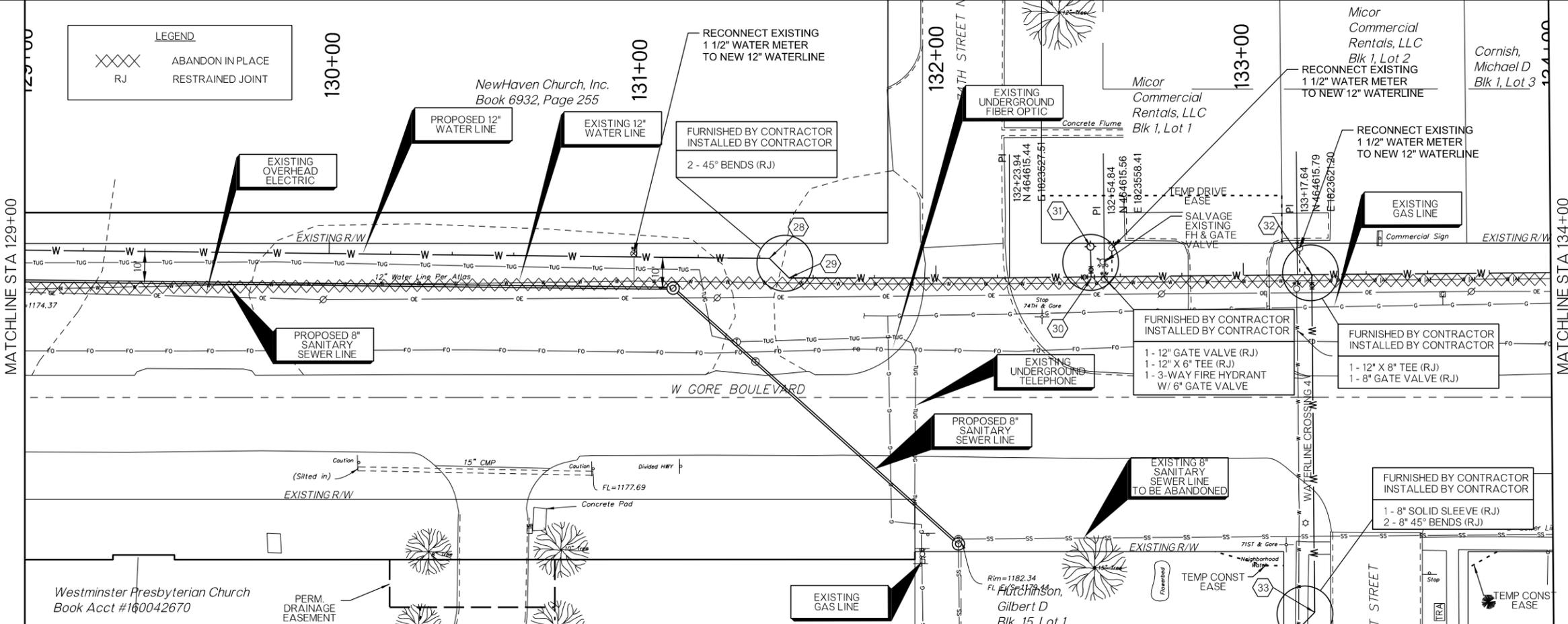
Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 124+00.00 TO STA 129+00.00**

Project No. J/P# 19144(04) Sheet No. U006  
W. GORE BLVD., 82ND ST. TO 67TH ST.

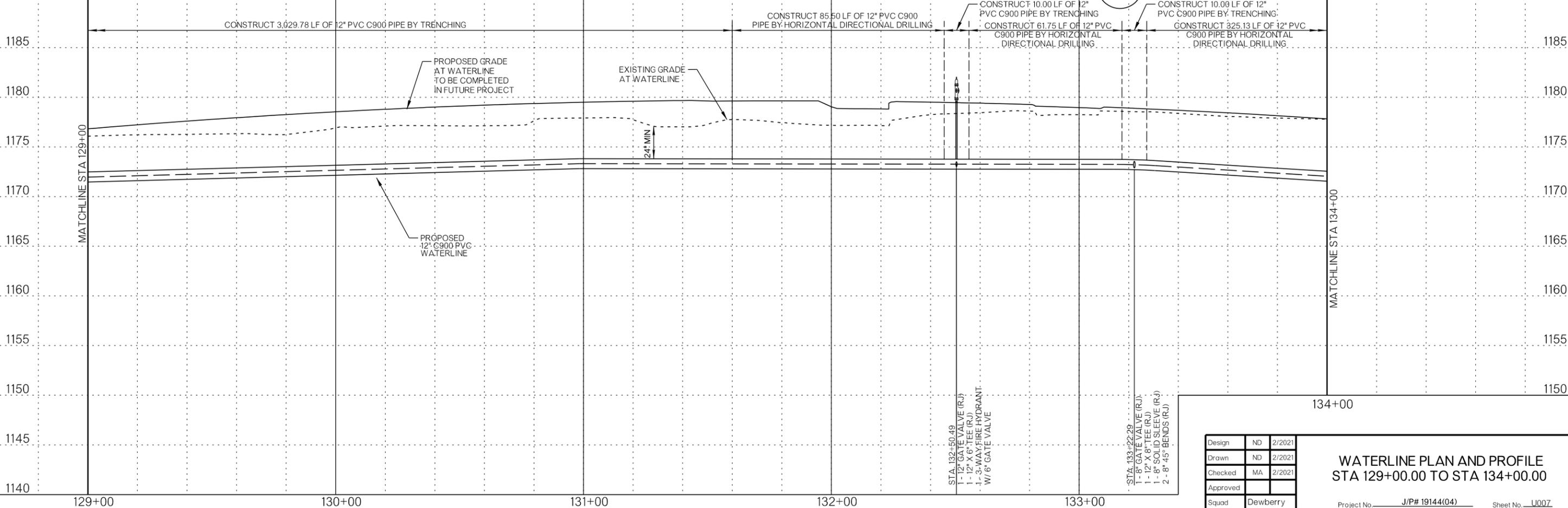
8/9/2021

LEGEND	
	ABANDON IN PLACE
	RESTRAINED JOINT



28	STA. 131+43.17 N 464,622.23 E 1,823,449.38
29	STA. 131+52.21 N 464,615.84 E 1,823,455.77
30	STA. 132+50.49 N 464,615.54 E 1,823,554.06
31	STA. 132+50.49 (10.5' LT) N 464,625.38 E 1,823,553.90
32	STA. 133+22.29 N 464,615.80 E 1,823,625.86
33	STA. 133+22.29 (109.56' RT) N 464,506.24 E 1,823,626.06

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

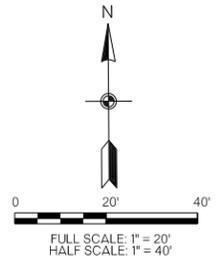
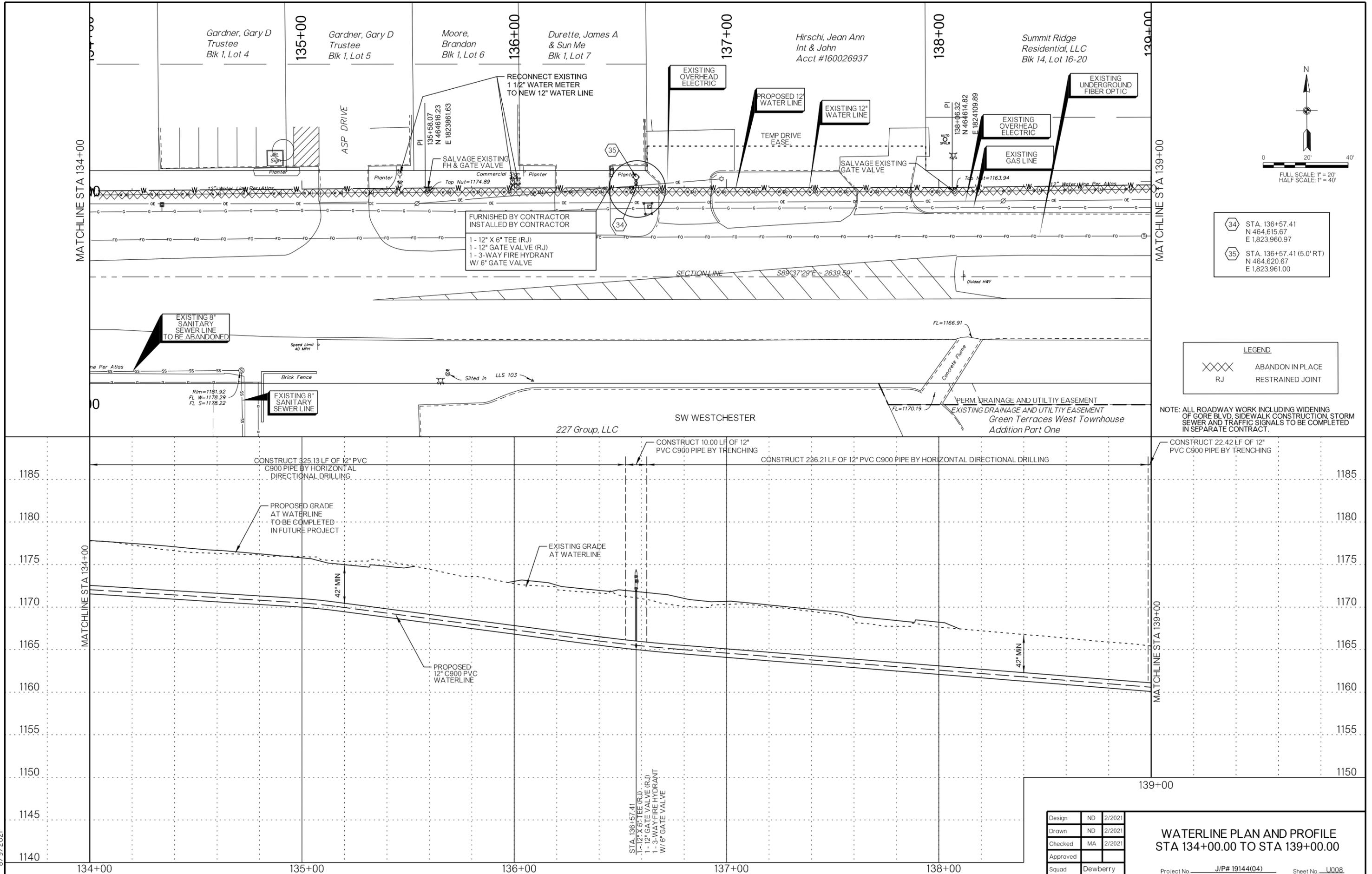


Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE**  
STA 129+00.00 TO STA 134+00.00

Project No. J/P# 19144(04) Sheet No. U007  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021



34	STA. 136+57.41 N 464,615.67 E 1,823,960.97
35	STA. 136+57.41 (5.0' RT) N 464,620.67 E 1,823,961.00

LEGEND	
	ABANDON IN PLACE
	RESTRAINED JOINT

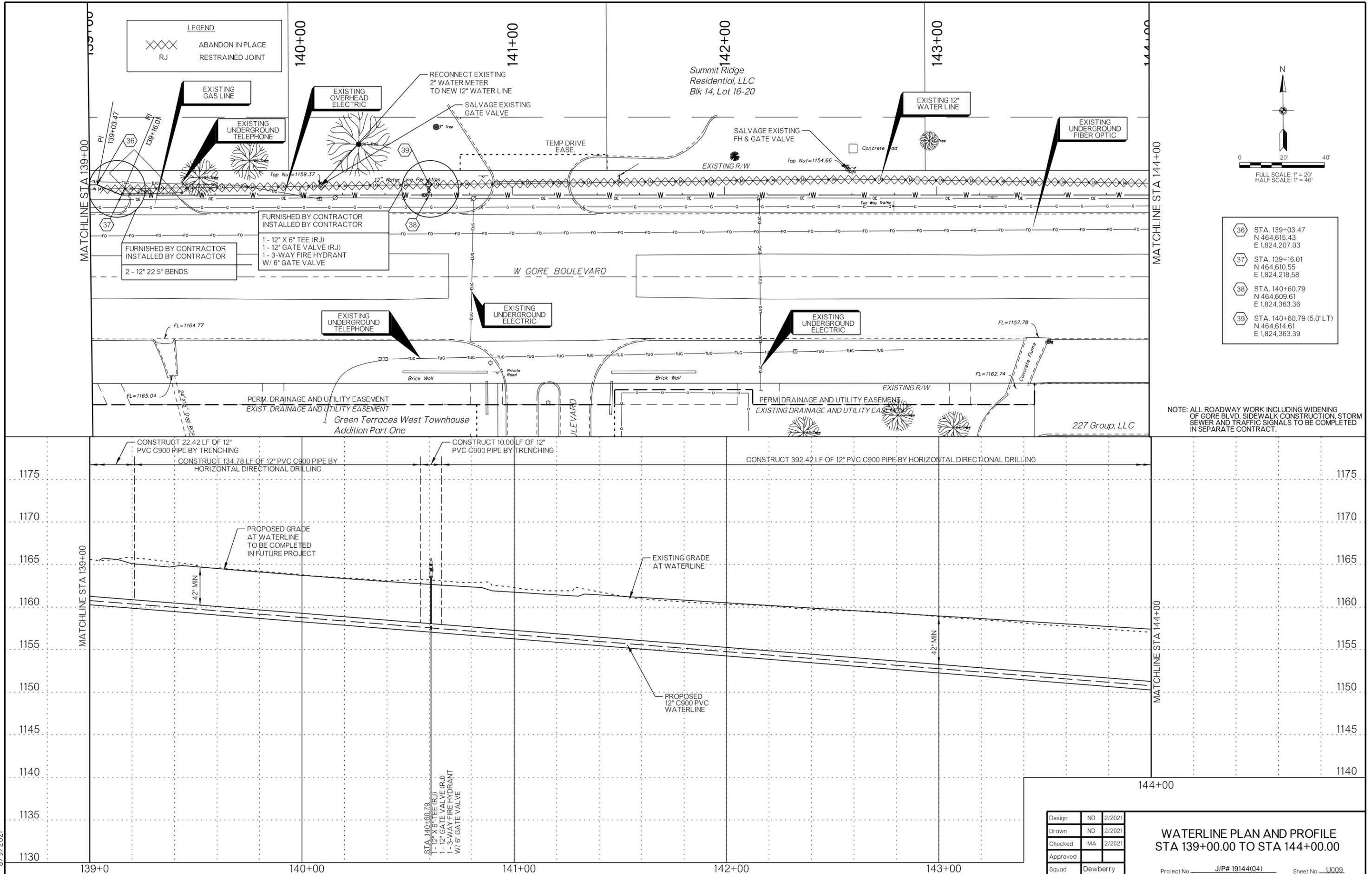
NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 134+00.00 TO STA 139+00.00**

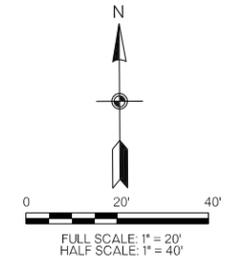
Project No. J/P# 19144(04) Sheet No. U008  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021



**LEGEND**

	ABANDON IN PLACE
RJ	RESTRAINED JOINT



36	STA. 139+03.47 N 464,615.43 E 1,824,207.03
37	STA. 139+16.01 N 464,610.55 E 1,824,218.58
38	STA. 140+60.79 N 464,609.61 E 1,824,363.36
39	STA. 140+60.79 (5.0' LT) N 464,614.61 E 1,824,363.39

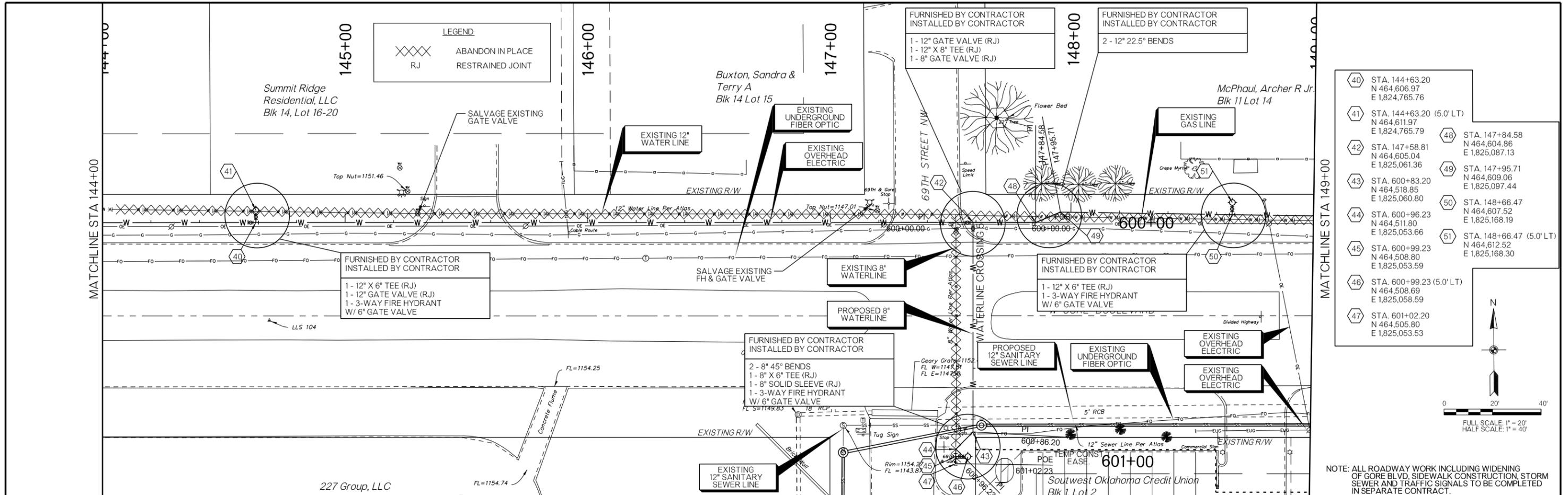
NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 139+00.00 TO STA 144+00.00**

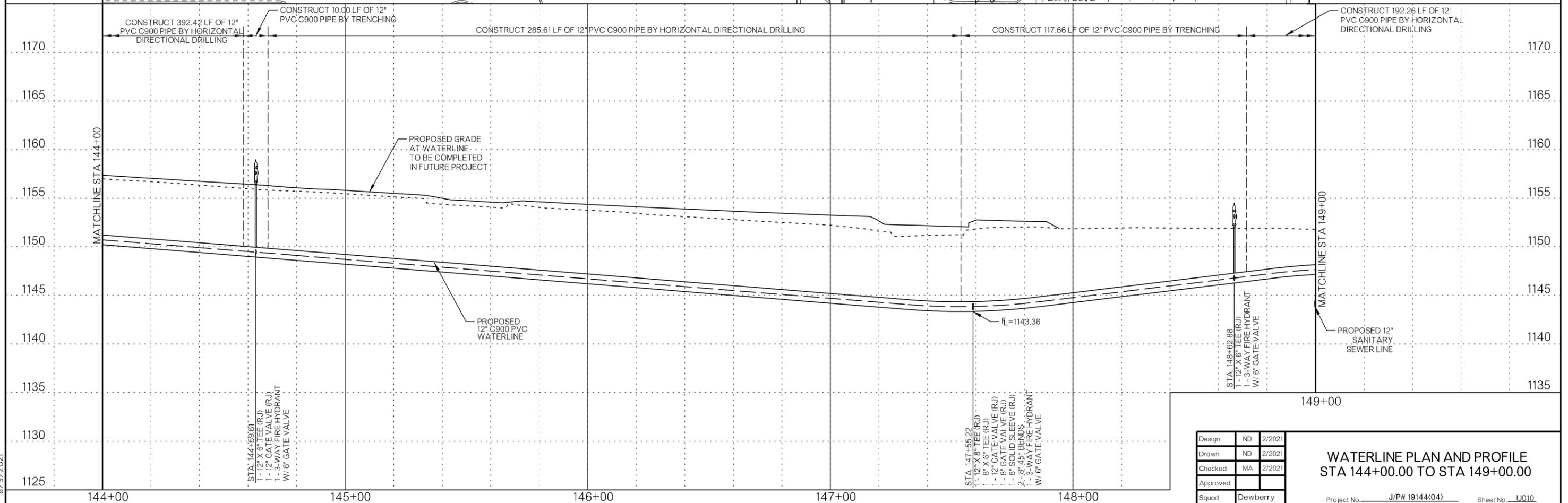
Project No. J/P# 19144(04) Sheet No. U009  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021



40	STA. 144+63.20 N 464,606.97 E 1,824,765.76	48	STA. 147+84.58 N 464,604.86 E 1,825,087.13
41	STA. 144+63.20 (5.0' LT) N 464,611.97 E 1,824,765.79	49	STA. 147+95.71 N 464,609.06 E 1,825,097.44
42	STA. 147+58.81 N 464,605.04 E 1,825,061.36	50	STA. 148+66.47 N 464,607.52 E 1,825,168.19
43	STA. 600+83.20 N 464,518.85 E 1,825,060.80	51	STA. 148+66.47 (5.0' LT) N 464,612.52 E 1,825,168.30
44	STA. 600+96.23 N 464,511.80 E 1,825,053.66		
45	STA. 600+99.23 N 464,508.80 E 1,825,053.59		
46	STA. 600+99.23 (5.0' LT) N 464,508.69 E 1,825,058.59		
47	STA. 601+02.20 N 464,505.80 E 1,825,053.53		

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



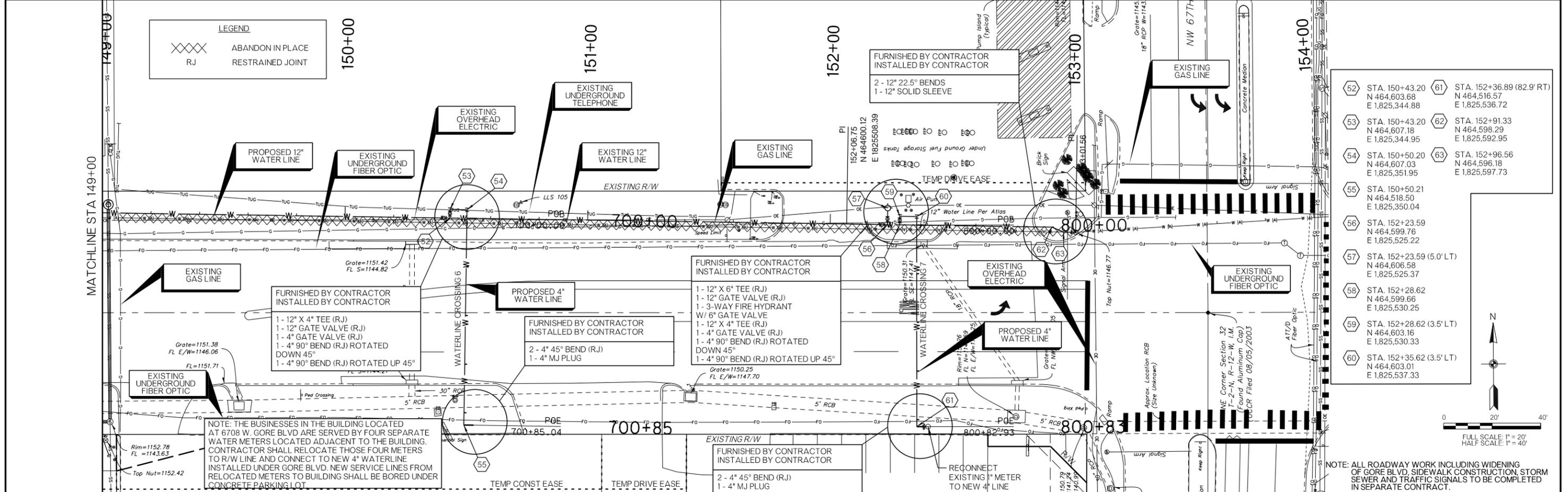
Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE**  
STA 144+00.00 TO STA 149+00.00

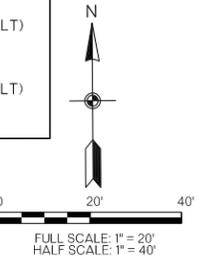
Project No. J/P# 19144(04) Sheet No. U010  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021

LEGEND	
	ABANDON IN PLACE
	RESTRAINED JOINT

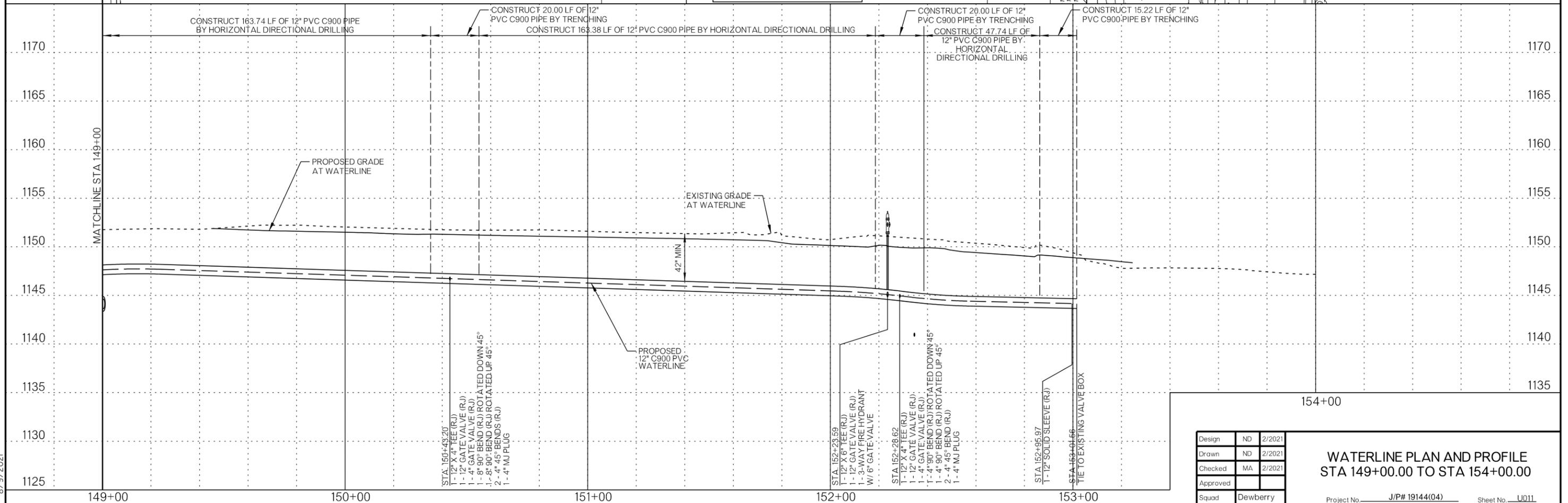


52	STA. 150+43.20 N 464,603.68 E 1,825,344.88	61	STA. 152+36.89 (82.9' RT) N 464,516.57 E 1,825,536.72
53	STA. 150+43.20 N 464,607.18 E 1,825,344.95	62	STA. 152+91.33 N 464,598.29 E 1,825,592.95
54	STA. 150+50.20 N 464,607.03 E 1,825,351.95	63	STA. 152+96.56 N 464,596.18 E 1,825,597.73
55	STA. 150+50.21 N 464,518.50 E 1,825,350.04		
56	STA. 152+23.59 N 464,599.76 E 1,825,525.22		
57	STA. 152+23.59 (5.0' LT) N 464,606.58 E 1,825,525.37		
58	STA. 152+28.62 N 464,599.66 E 1,825,530.25		
59	STA. 152+28.62 (3.5' LT) N 464,603.16 E 1,825,530.33		
60	STA. 152+35.62 (3.5' LT) N 464,603.01 E 1,825,537.33		



NOTE: THE BUSINESSES IN THE BUILDING LOCATED AT 6708 W. GORE BLVD ARE SERVED BY FOUR SEPARATE WATER METERS LOCATED ADJACENT TO THE BUILDING. CONTRACTOR SHALL RELOCATE THOSE FOUR METERS TO R/W LINE AND CONNECT TO NEW 4" WATERLINE INSTALLED UNDER GORE BLVD. NEW SERVICE LINES FROM RELOCATED METERS TO BUILDING SHALL BE BORED UNDER CONCRETE PARKING LOT.

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



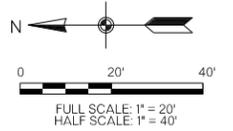
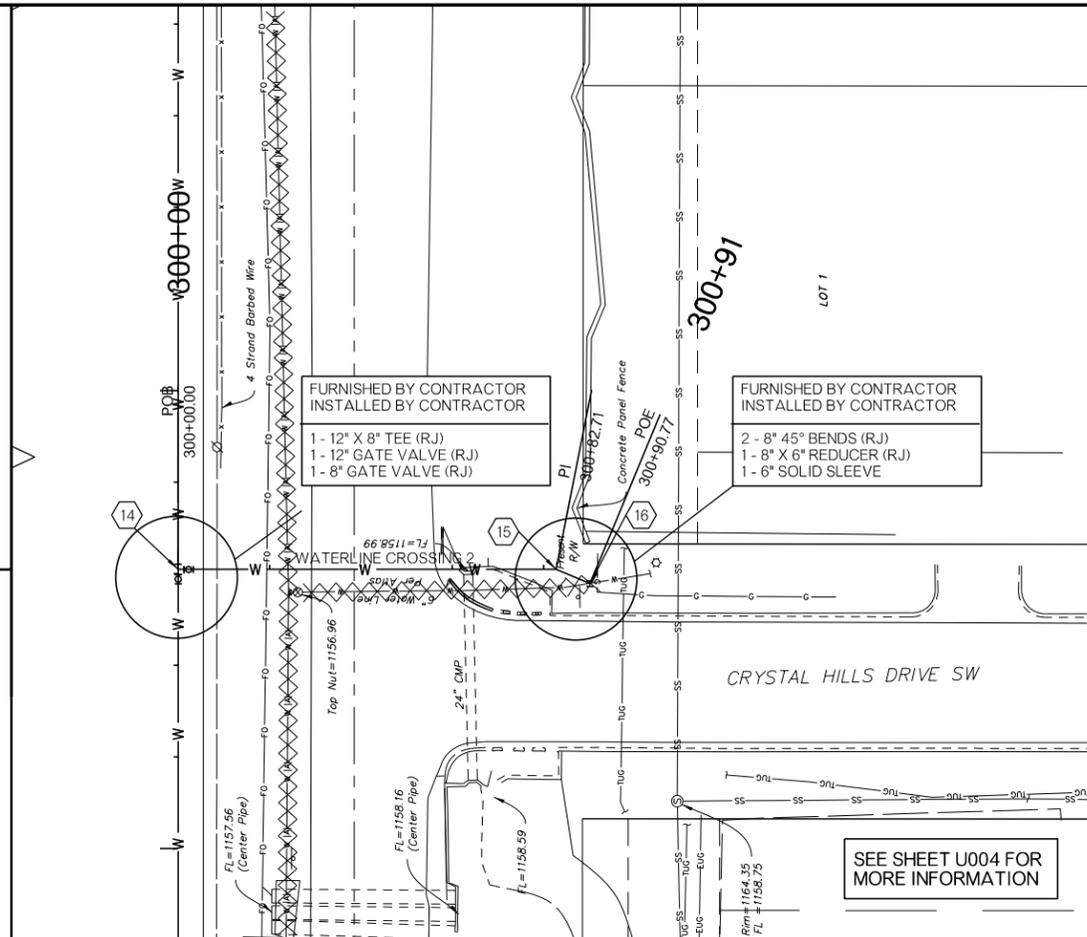
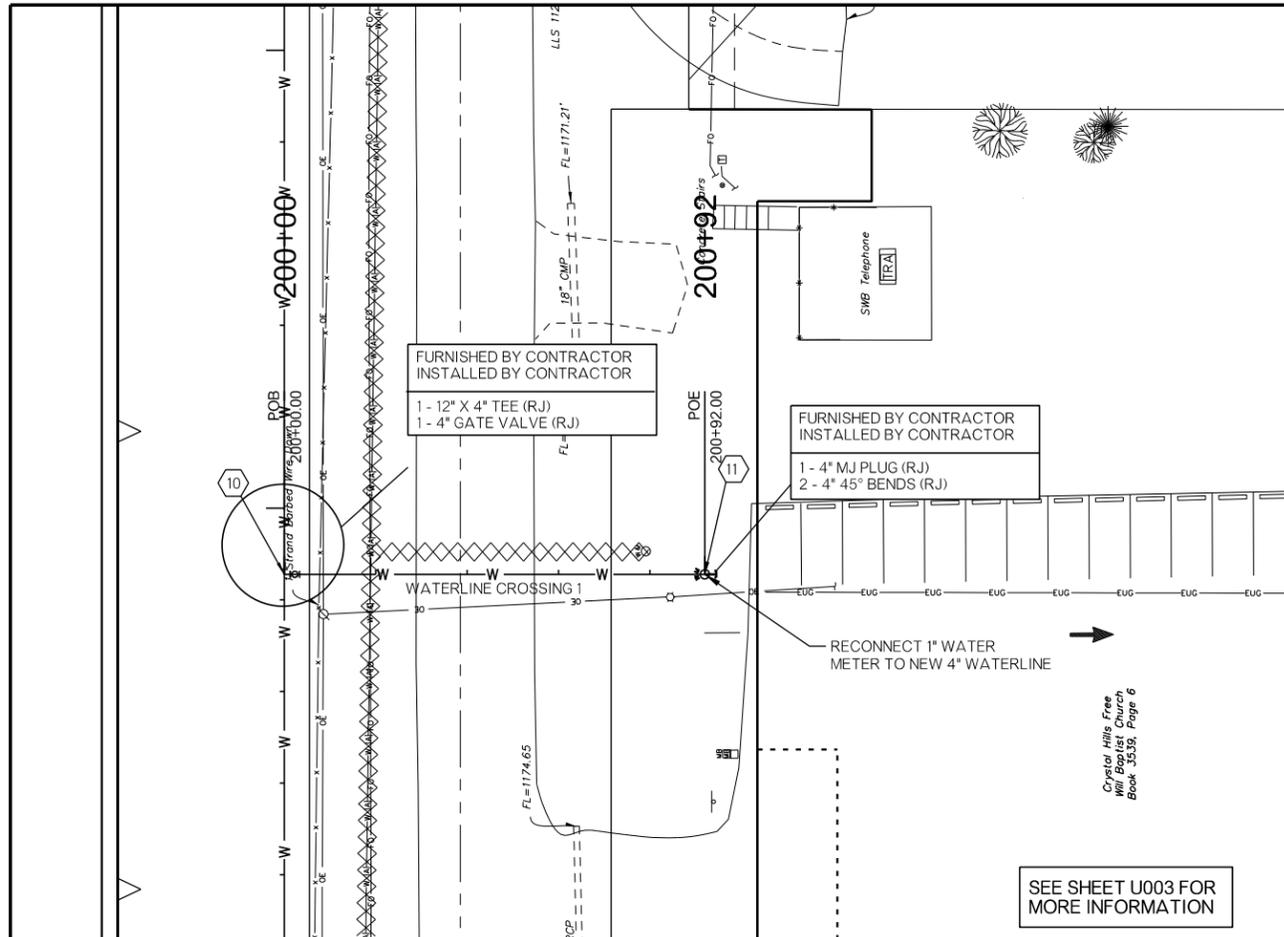
Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

**WATERLINE PLAN AND PROFILE  
STA 149+00.00 TO STA 154+00.00**

Project No. J/P# 19144(04) Sheet No. U011  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021

8/9/2021

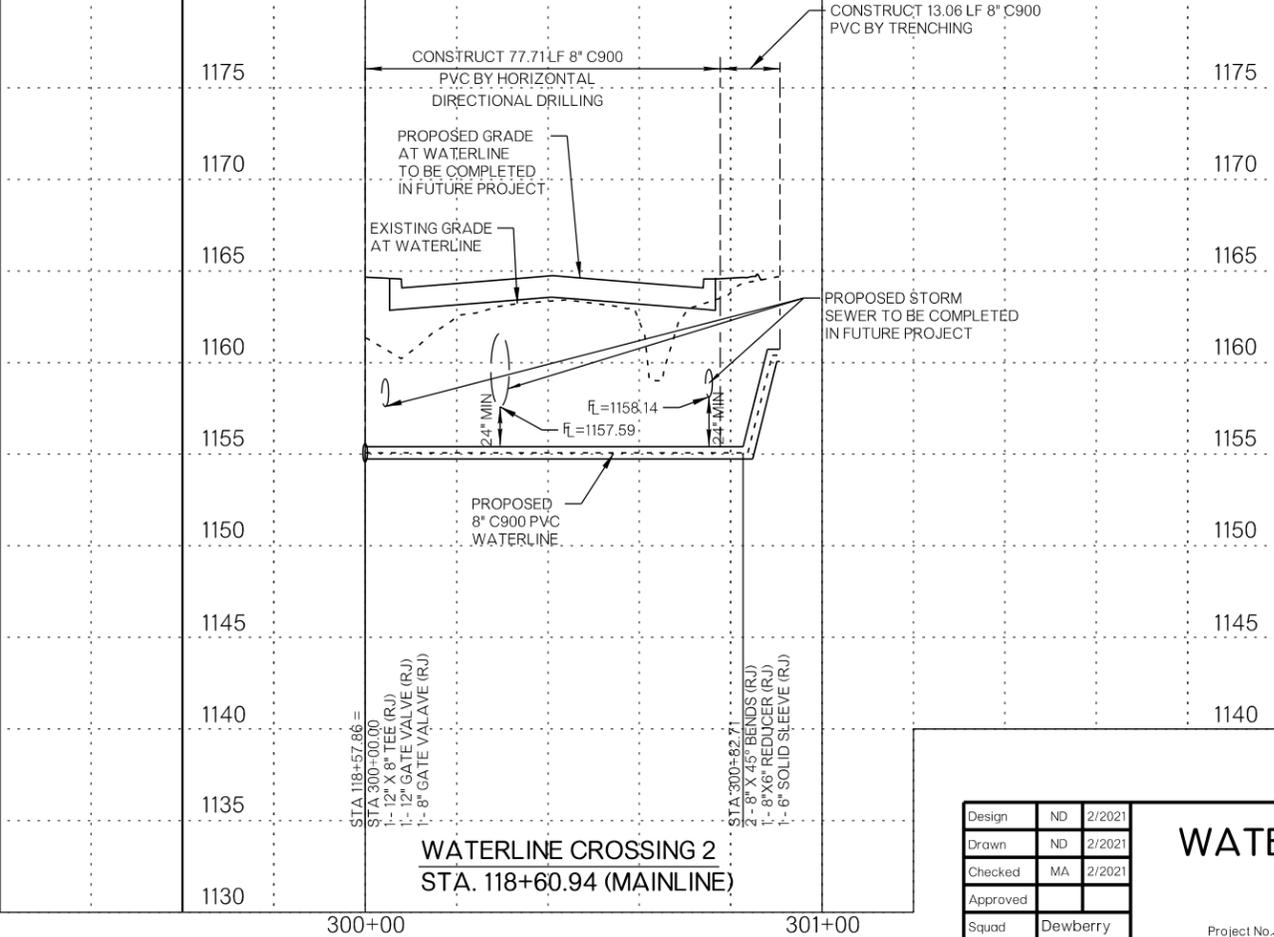
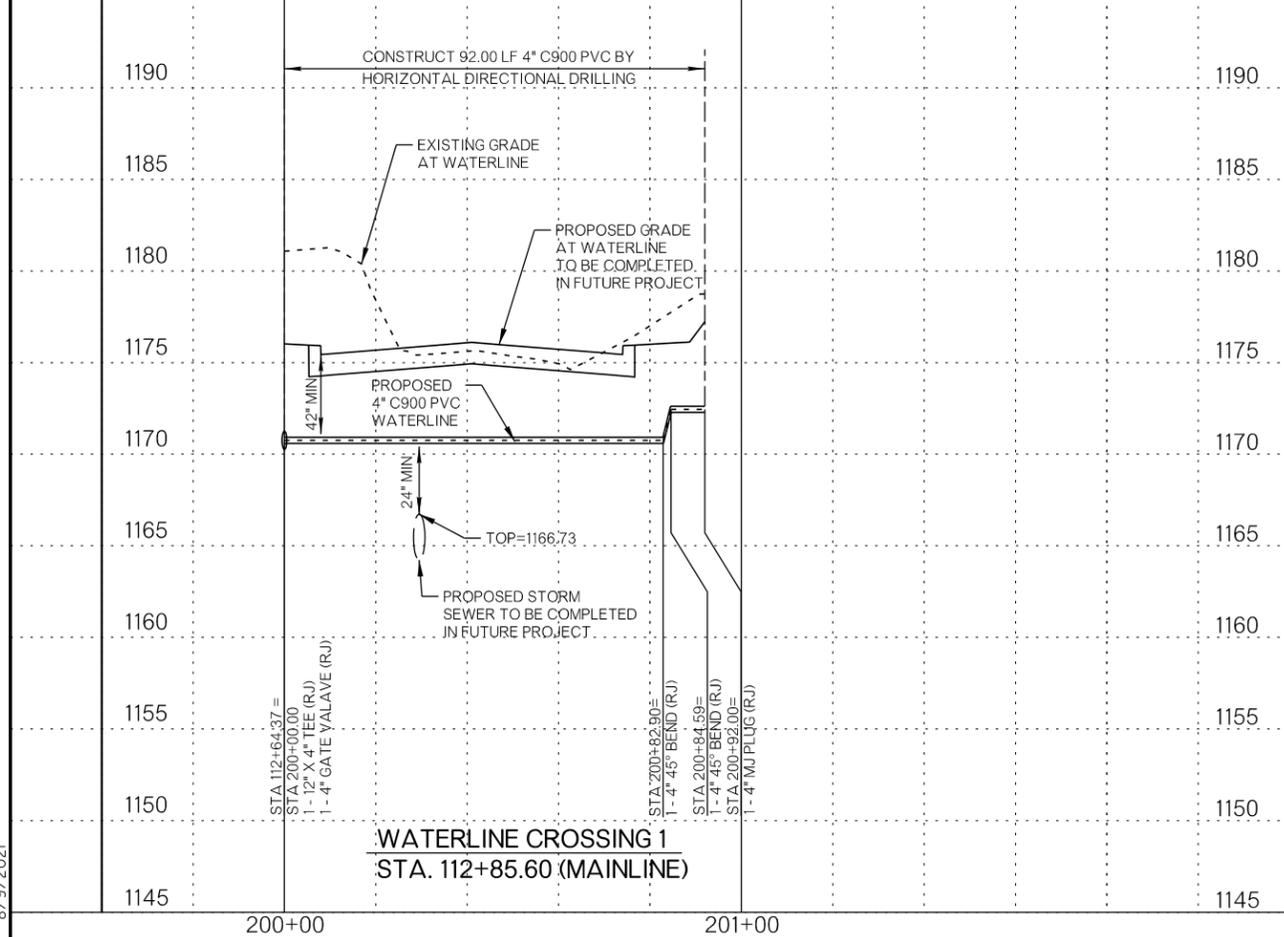


ALL WATERLINE CROSSINGS TO BE CONSTRUCTED BY OTHER THAN OPEN CUT (BOTOC).

**LEGEND**

	ABANDON IN PLACE
	RESTRAINED JOINT

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



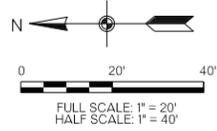
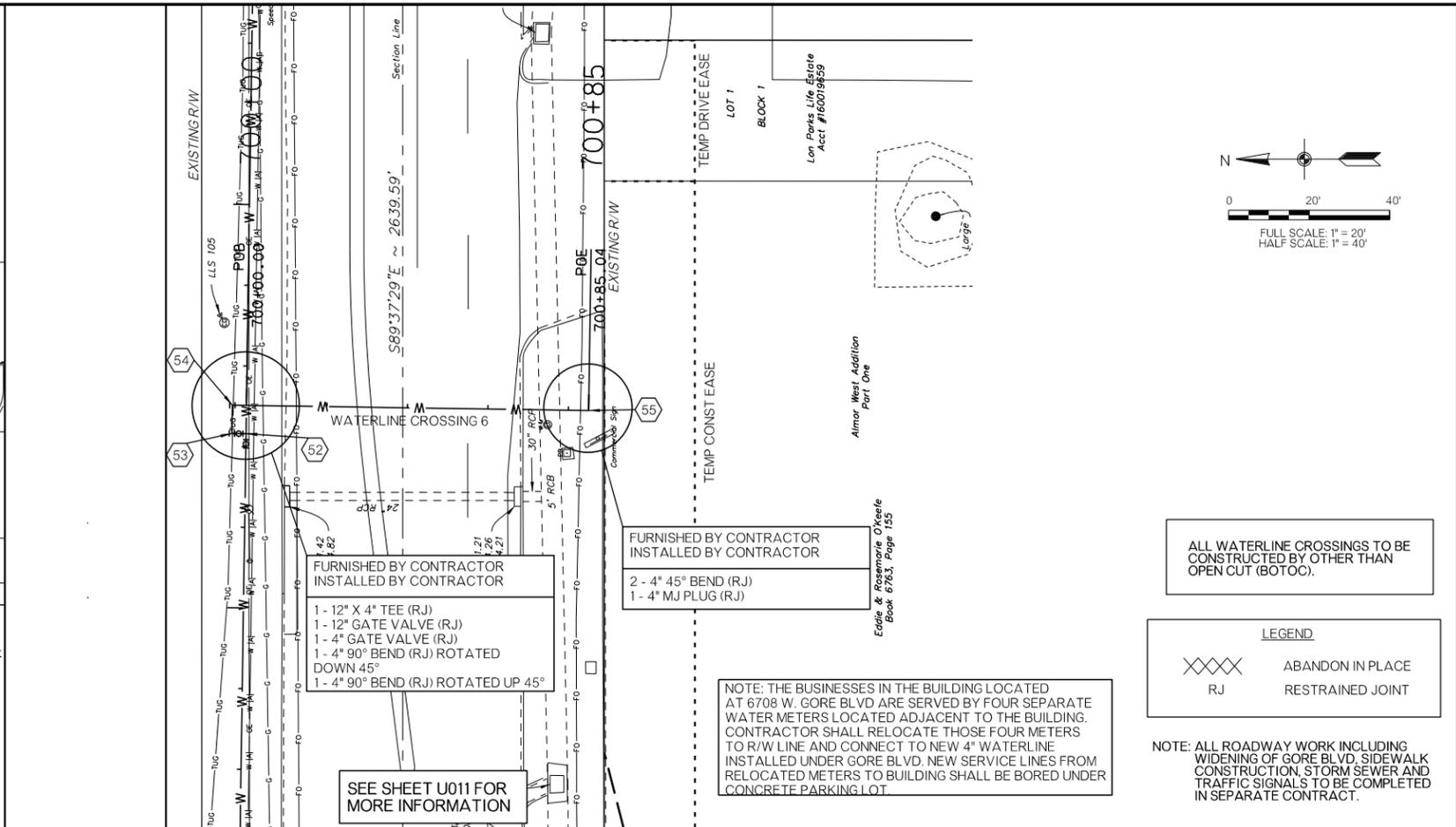
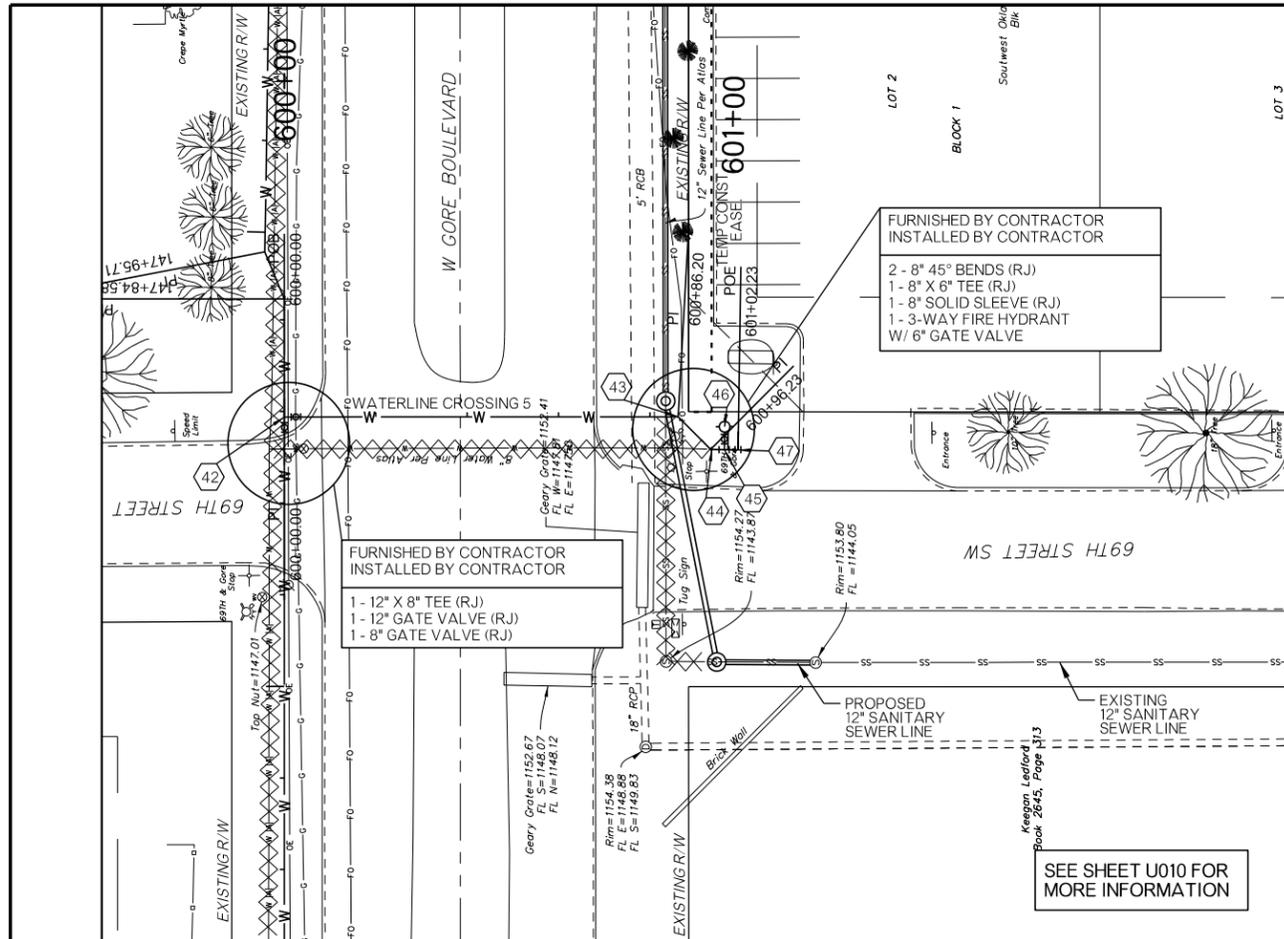
Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

## WATERLINE CROSSINGS 1 AND 2

Project No. J/P# 19144(04) Sheet No. U012  
W. GORE BLVD., 82ND ST. TO 67TH ST.



8/9/2021



ALL WATERLINE CROSSINGS TO BE CONSTRUCTED BY OTHER THAN OPEN CUT (BOTOC).

**LEGEND**

	ABANDON IN PLACE
	RESTRAINED JOINT

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

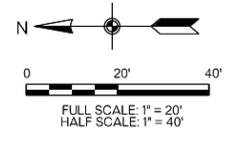
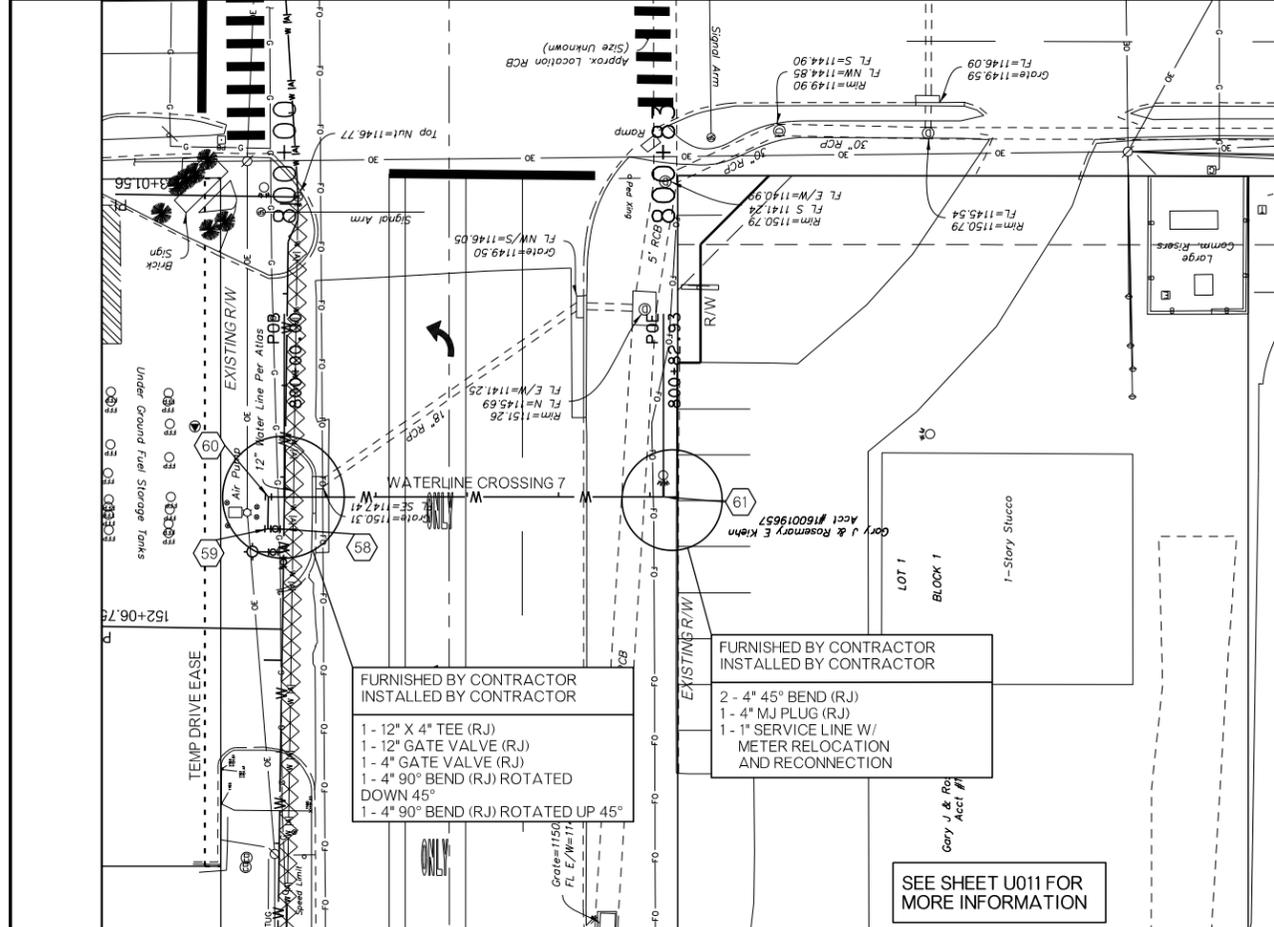
1165	CONSTRUCT 77.35 LF 8" C900 PVC BY HORIZONTAL DIRECTIONAL DRILLING	1165	1165	CONSTRUCT 72.04 LF 4" C900 PVC BY HORIZONTAL DIRECTIONAL DRILLING	1165	1165
1160	<p>PROPOSED GRADE AT WATERLINE TO BE COMPLETED IN FUTURE PROJECT</p> <p>EXISTING GRADE AT WATERLINE</p>	1160	1160	<p>PROPOSED GRADE AT WATERLINE TO BE COMPLETED IN FUTURE PROJECT</p> <p>EXISTING GRADE AT WATERLINE</p>	1160	1160
1155		1155	1155			
1150	<p>PROPOSED STORM SEWER TO BE COMPLETED IN FUTURE PROJECT</p> <p>EXISTING 60" RCP STORM SEWER</p> <p>PROPOSED 12" SANITARY SEWER LINE</p> <p>FL=1147.40</p>	1150	1150	<p>EXISTING 60" RCP STORM SEWER</p> <p>FL=1146.88</p> <p>PROPOSED 60" RCP STORM SEWER TO BE COMPLETED IN FUTURE PROJECT</p> <p>FL=1142.98</p>	1150	1150
1145		1145	1145			
1140	<p>PROPOSED 8" C900 PVC WATERLINE</p> <p>FL=1143.36</p>	1140	1140	<p>FL=1142.98</p>	1140	1140
1135		1135	1135			
1130	<p><b>WATERLINE CROSSING 5</b></p> <p>STA. 147+58.81 (MAINLINE)</p>	1130	1130	<p><b>WATERLINE CROSSING 6</b></p> <p>STA. 150+43.20 (MAINLINE)</p>	1130	1130
1125	<p>STA 147+58.81 =</p> <p>STA 600+00.00</p> <p>1-12" X 8" TEE (RJ)</p> <p>1-12" GATE VALVE (RJ)</p> <p>1-8" GATE VALVE (RJ)</p>	1125	1125	<p>STA 150+43.20 =</p> <p>STA 700+00.00</p> <p>1-12" X 4" TEE (RJ)</p> <p>1-12" GATE VALVE (RJ)</p> <p>1-4" GATE VALVE (RJ)</p> <p>1-4" 90° BEND (RJ) ROTATED DOWN 45°</p> <p>1-4" 90° BEND (RJ) ROTATED UP 45°</p>	1125	1125
1120	<p>STA 600+77.36</p> <p>1-8" 45° BEND (RJ)</p> <p>STA 600+86.20</p> <p>1-8" VERT BEND (RJ)</p> <p>STA 600+99.23</p> <p>2-8" 45° BENDS (RJ)</p> <p>1-8" X 6" TEE (RJ)</p> <p>1-8" SOLID SLEEVE (RJ)</p> <p>1-3-WAY FIRE HYDRANT W/ 6" GATE VALVE</p>	1120	1120	<p>STA 700+85.04</p> <p>2-4" 45° BENDS (RJ)</p> <p>1-4" MJ PLUG (RJ)</p> <p>4-1" SERVICE LINE W/ METER RELOCATION AND RECONNECTION</p>	1120	1120
600+00		601+00		700+00		701+00

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

# WATERLINE CROSSINGS 5 & 6

Project No. J/P# 19144(04) Sheet No. U014

W. GORE BLVD., 82ND ST. TO 67TH ST.



ALL WATERLINE CROSSINGS TO BE CONSTRUCTED BY OTHER THAN OPEN CUT (BOTOC).

**LEGEND**

XXXXX ABANDON IN PLACE  
RJ RESTRAINED JOINT

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

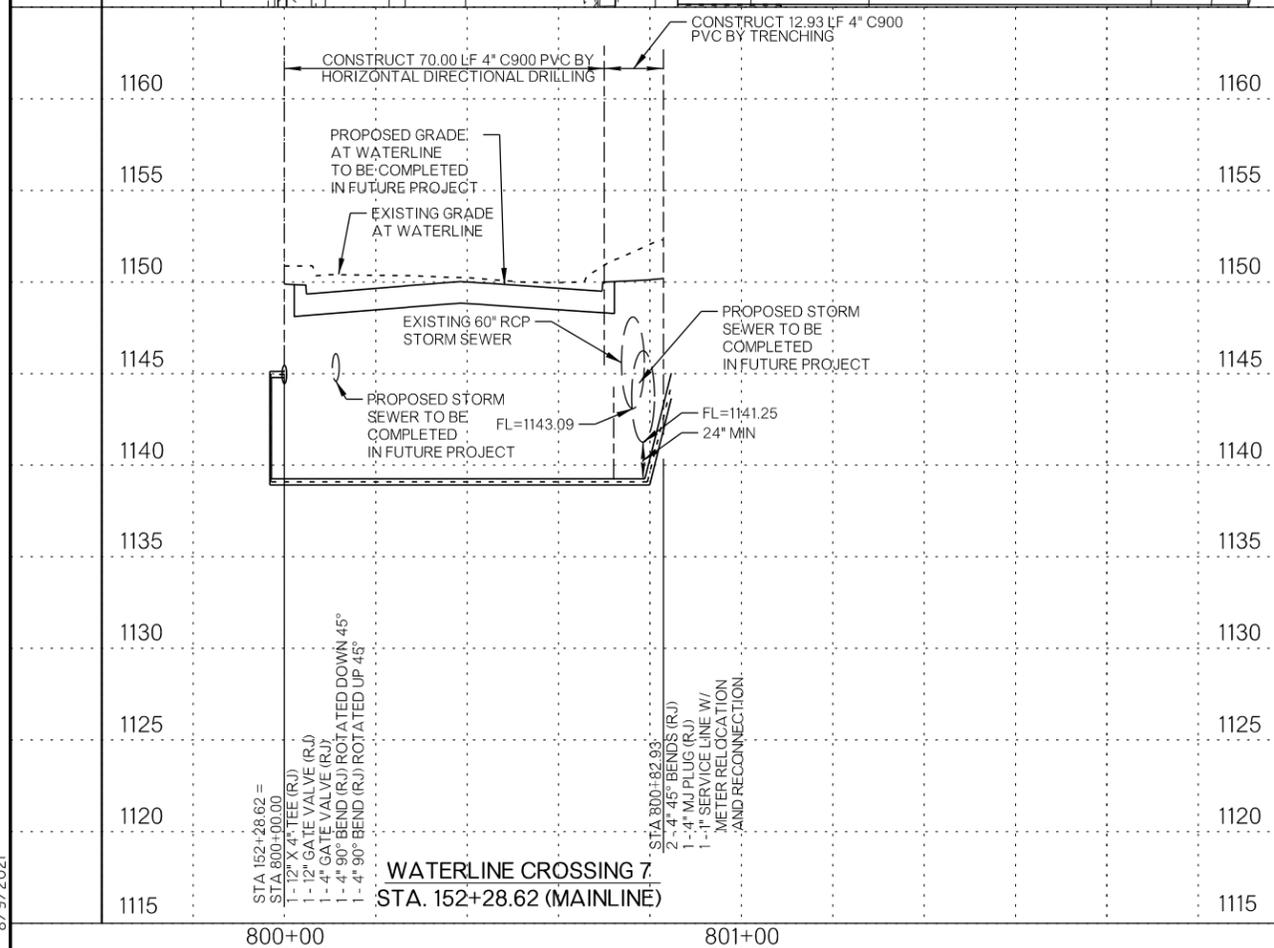
FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR

2 - 4" 45° BEND (RJ)  
1 - 4" MJ PLUG (RJ)  
1 - 1" SERVICE LINE W/  
METER RELOCATION  
AND RECONNECTION

FURNISHED BY CONTRACTOR  
INSTALLED BY CONTRACTOR

1 - 12" X 4" TEE (RJ)  
1 - 12" GATE VALVE (RJ)  
1 - 4" GATE VALVE (RJ)  
1 - 4" 90° BEND (RJ) ROTATED  
DOWN 45°  
1 - 4" 90° BEND (RJ) ROTATED UP 45°

SEE SHEET U011 FOR MORE INFORMATION



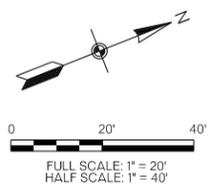
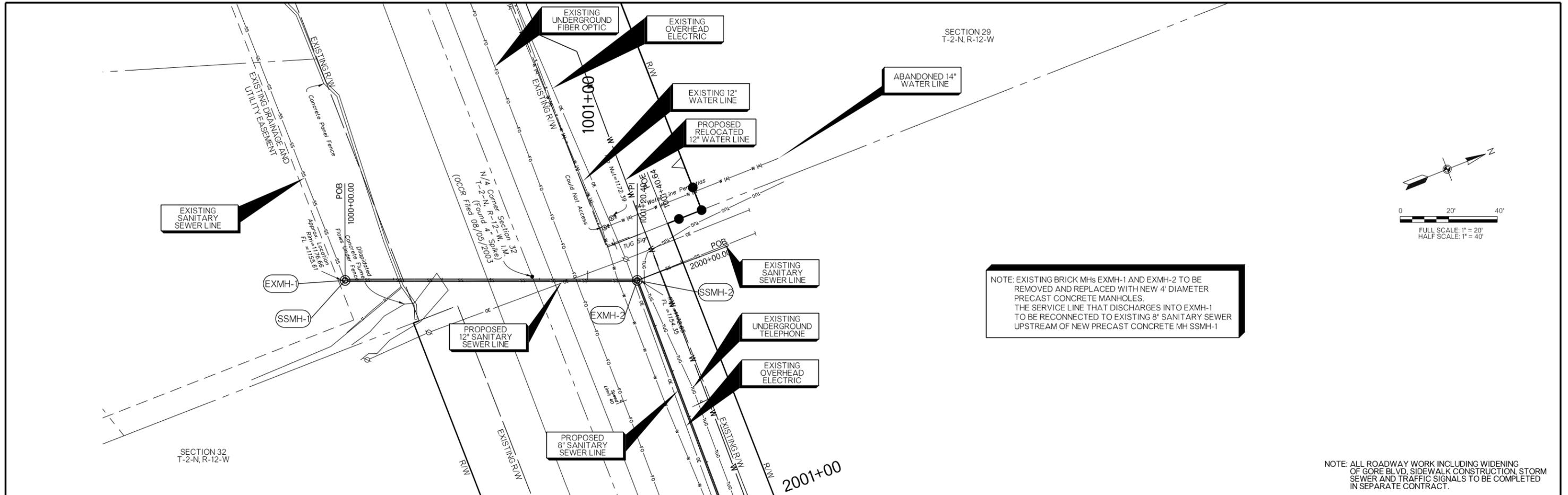
**WATERLINE CROSSING 7**  
STA. 152+28.62 (MAINLINE)

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

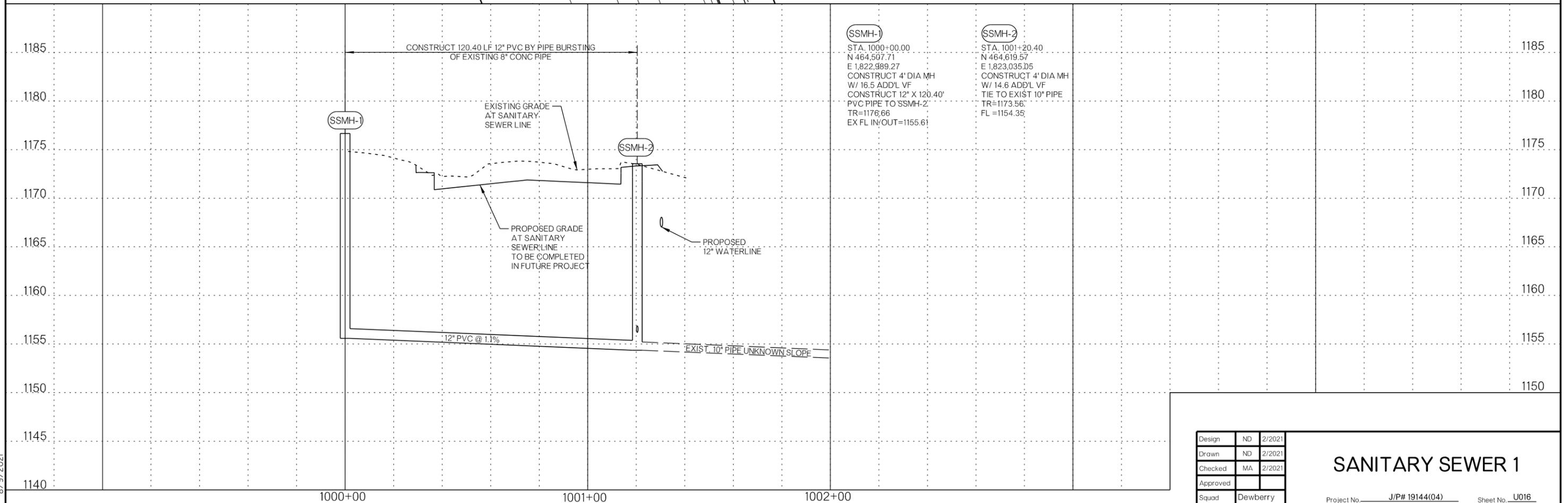
# WATERLINE CROSSINGS

## 7

8/9/2021



NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



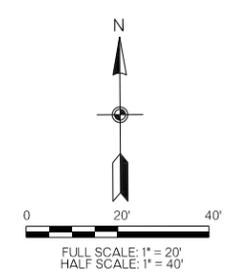
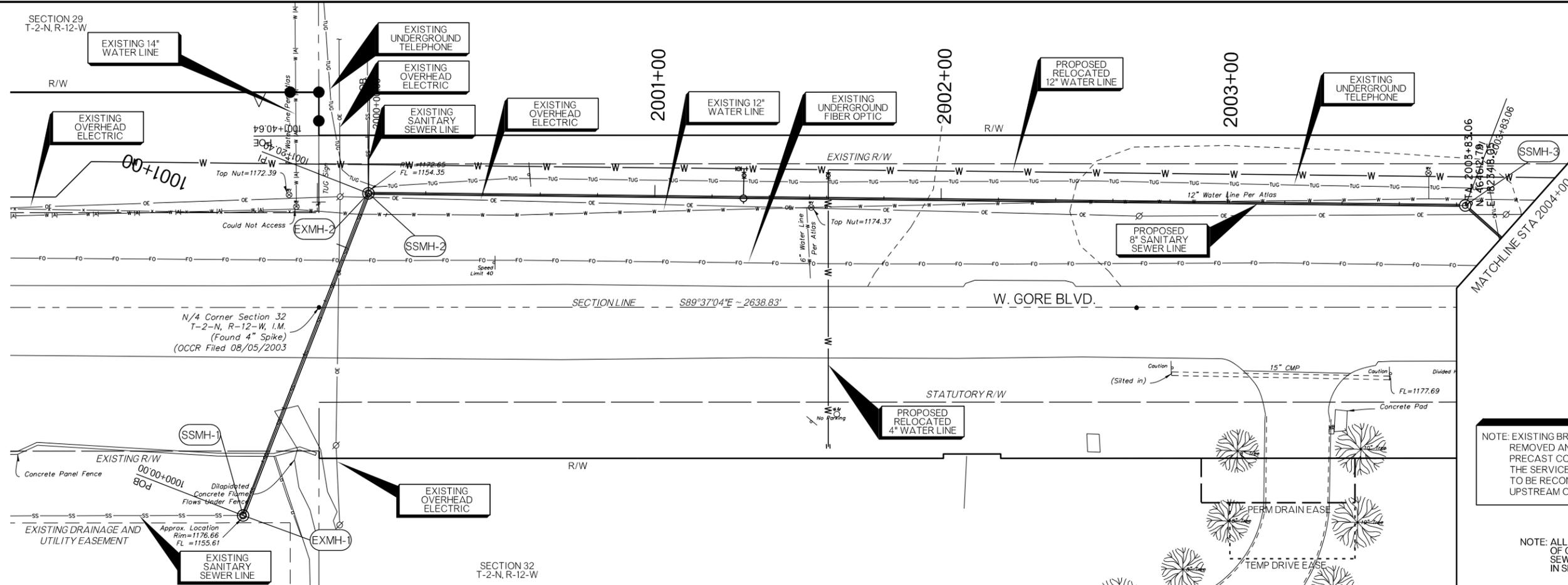
8/9/2021

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

# SANITARY SEWER 1

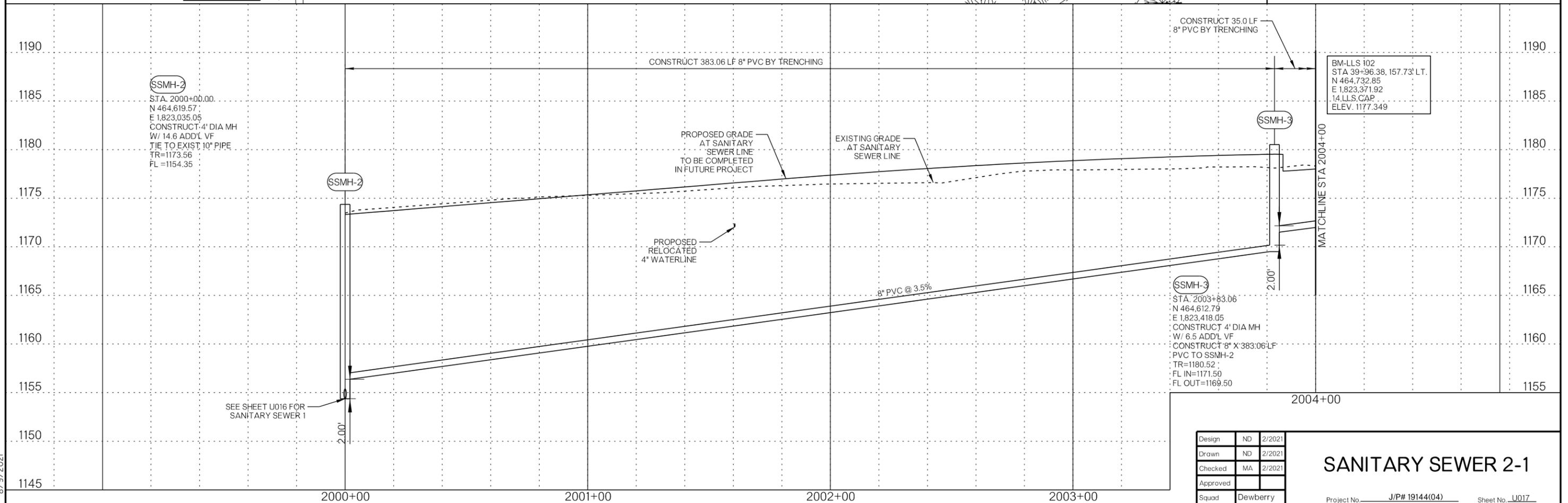
Project No. J/P# 19144(04) Sheet No. U016  
W. GORE BLVD., 82ND ST. TO 67TH ST.

SECTION 29  
T-2-N, R-12-W



NOTE: EXISTING BRICK MHS EXMH-1 AND EXMH-2 TO BE REMOVED AND REPLACED WITH NEW 4' DIAMETER PRECAST CONCRETE MANHOLES. THE SERVICE LINE THAT DISCHARGES INTO EXMH-1 TO BE RECONNECTED TO EXISTING 8" SANITARY SEWER UPSTREAM OF NEW PRECAST CONCRETE MH SSMH-1

NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD. SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.

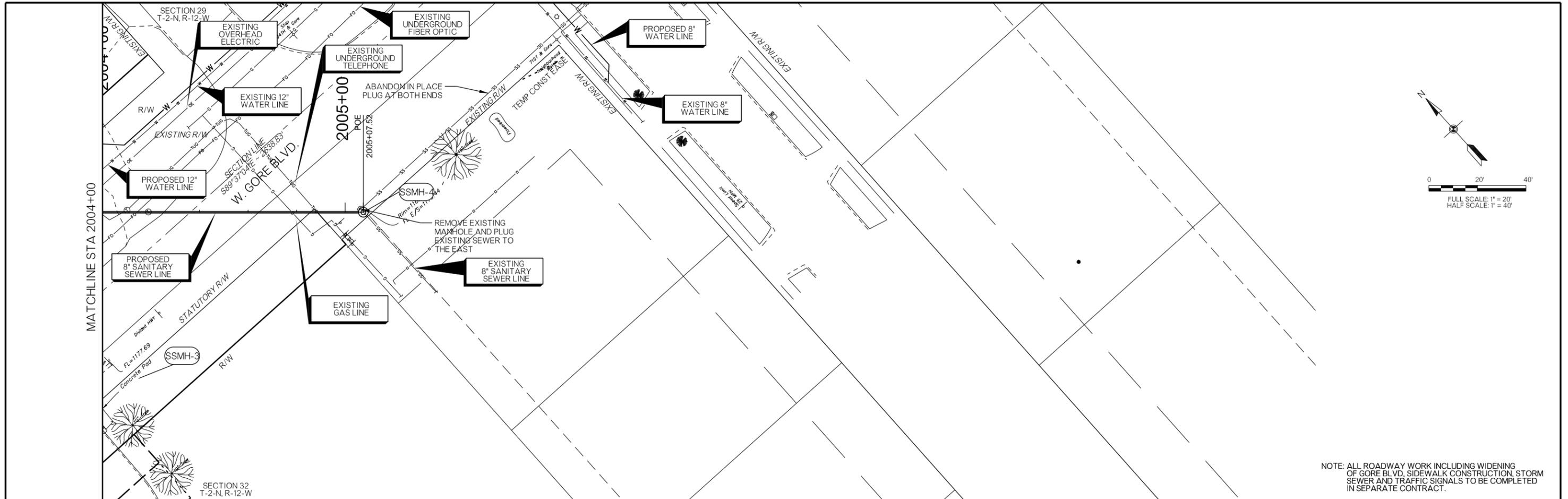


Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

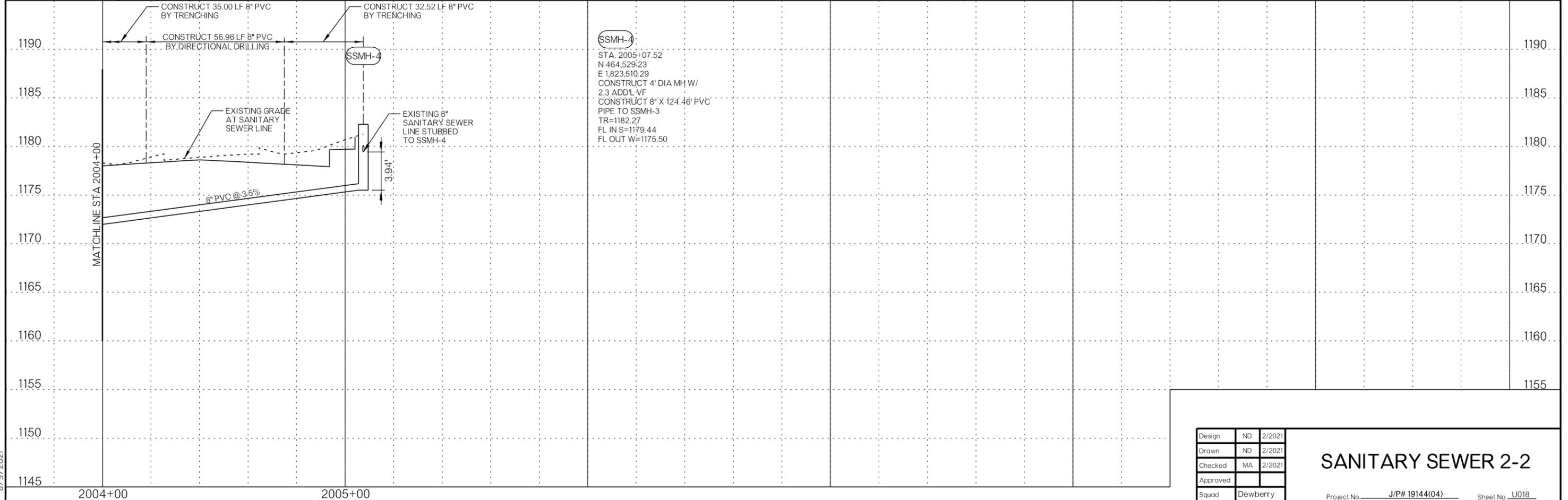
# SANITARY SEWER 2-1

Project No. J/P# 19144(04) Sheet No. U017  
W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021



NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



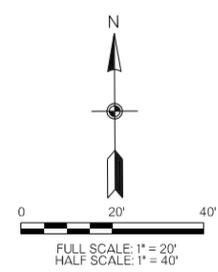
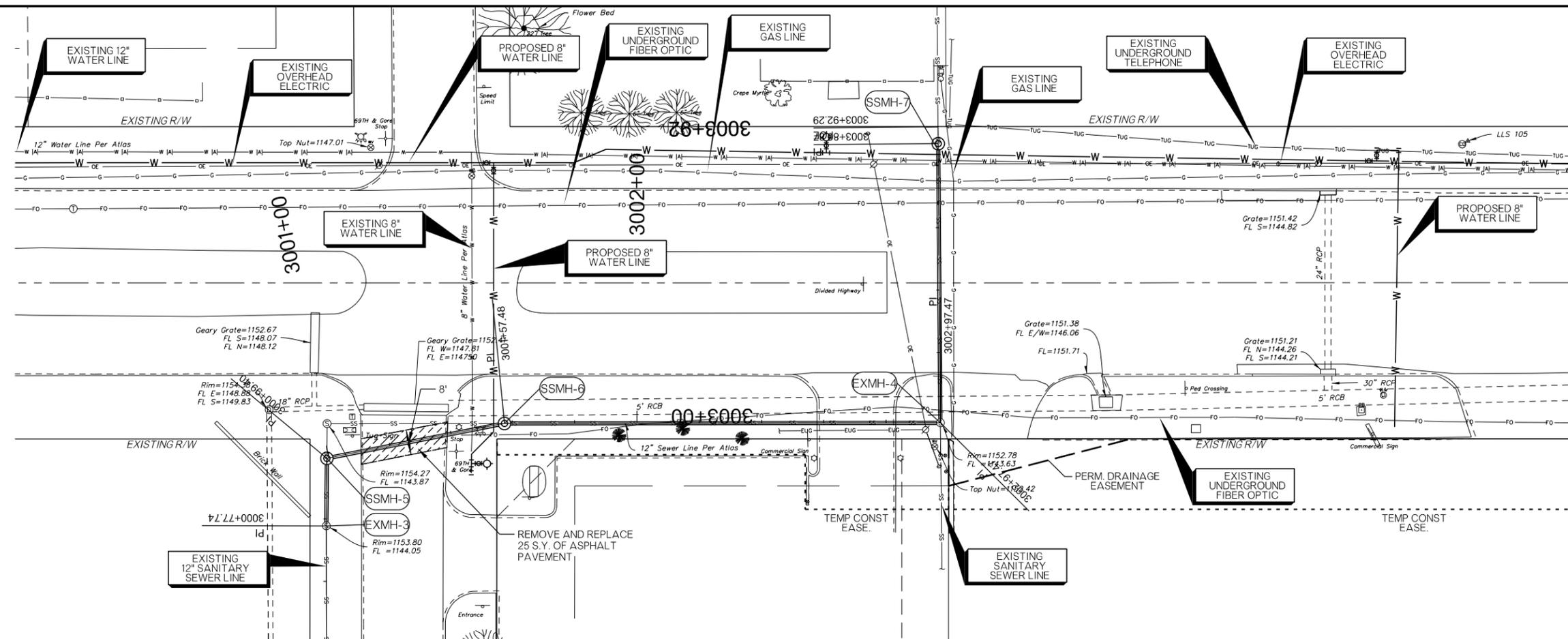
SSMH-4  
 STA. 2005+07.52  
 N 464,529.23  
 E 1,823,510.29  
 CONSTRUCT 4' DIA MH W/  
 2.3 ADD'L V/F  
 CONSTRUCT 8" X 124.46' PVC  
 PIPE TO SSMH-3  
 TR=1182.27  
 FL IN S=1179.44  
 FL OUT W=1175.50

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

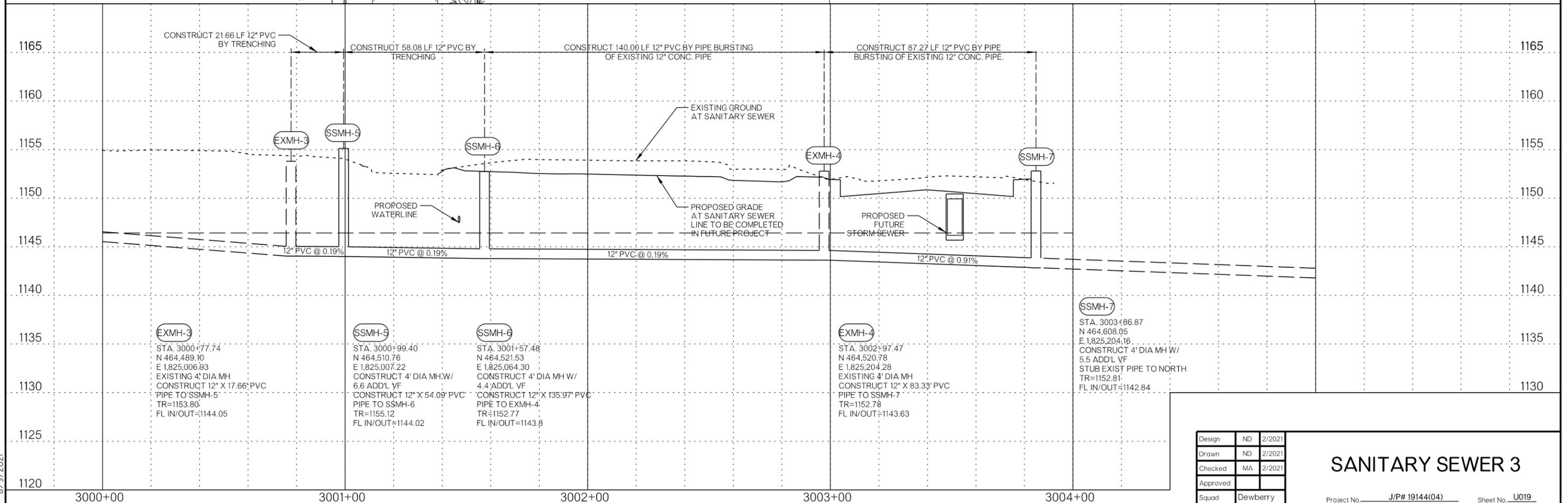
### SANITARY SEWER 2-2

Project No. J/P# 19144(04) Sheet No. U018  
 W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021



NOTE: ALL ROADWAY WORK INCLUDING WIDENING OF GORE BLVD, SIDEWALK CONSTRUCTION, STORM SEWER AND TRAFFIC SIGNALS TO BE COMPLETED IN SEPARATE CONTRACT.



EXMH-3  
 STA. 3000+77.74  
 N 464,489.10  
 E 1,825,006.93  
 EXISTING 4' DIA MH  
 CONSTRUCT 12" X 17.66' PVC  
 PIPE TO SSMH-5  
 TR=1153.80'  
 FL IN/OUT=1144.05

SSMH-5  
 STA. 3000+99.40  
 N 464,510.76  
 E 1,825,007.22  
 CONSTRUCT 4' DIA MH W/  
 6.6 ADD'L VF  
 CONSTRUCT 12" X 54.09' PVC  
 PIPE TO SSMH-6  
 TR=1155.12  
 FL IN/OUT=1144.02

SSMH-6  
 STA. 3001+57.48  
 N 464,521.53  
 E 1,825,064.30  
 CONSTRUCT 4' DIA MH W/  
 4.4' ADD'L VF  
 CONSTRUCT 12" X 135.97' PVC  
 PIPE TO EXMH-4  
 TR=1152.77  
 FL IN/OUT=1143.8

EXMH-4  
 STA. 3002+97.47  
 N 464,520.78  
 E 1,825,204.28  
 EXISTING 4' DIA MH  
 CONSTRUCT 12" X 83.33' PVC  
 PIPE TO SSMH-7  
 TR=1152.78  
 FL IN/OUT=1143.63

SSMH-7  
 STA. 3003+86.87  
 N 464,608.05  
 E 1,825,204.16  
 CONSTRUCT 4' DIA MH W/  
 5.5' ADD'L VF  
 STUB EXIST PIPE TO NORTH  
 TR=1152.81'  
 FL IN/OUT=1142.84

Design	ND	2/2021
Drawn	ND	2/2021
Checked	MA	2/2021
Approved		
Squad	Dewberry	

# SANITARY SEWER 3

Project No. J/P# 19144(04) Sheet No. U019  
 W. GORE BLVD., 82ND ST. TO 67TH ST.

8/9/2021