

WEST CAMPUS, WATER MAIN REPLACEMENT CAT.5.11
South Dakota State University
Brookings, South Dakota
OSE# R0323--04X/ARPA
2023

CONTRACTOR'S BID DATE: Tuesday, May 9, 2023 at 2:30 PM CT

PLACE TO FILE FOR
CONTRACTOR'S BIDS: Office of the State Engineer
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501-3182

ADDENDUM NO. 1

May 4, 2023

TO ALL PLANHOLDERS:

The following changes, clarifications, additions, and/or deletions are hereby made a part of the contract documents for the above-referenced project, as fully and completely as if the same were fully set forth therein. This addendum takes precedence over any items that may conflict.

GENERAL

1. Question and answer log regarding the project is attached and can be found at <https://www.hrgreen.com/about/bidding-info/>

2. Clarification on IRRIGATION SYSTEM – REPAIR/REPLACEMENT bid item:

The bid item is an allowance specifically to cover any repairs or replacement of the underground yard irrigation system. It is expected that the irrigation system will be encountered between stations 18+00 to 25+80. If the irrigation system only needs to be repaired in one or two locations, then the repairs would be made. If repairs are needed in excess of two locations, then the entire irrigation system will be considered for full replacement within the project limits. All costs associated with repairs or replacements shall be covered by the bid item. Since the bid item is an allowance, all costs shall have prior approval from the Engineer. Any remaining balance or in excess of the balance for the allowance after repairs/replacement shall be made equal via a change order.

PLANS

3. Sheet B001 – ESTIMATE OF QUANTITIES:

Replace in its entirety with the attached.

The sheet now shows all of the bid items and the bid alternates that were present within the bid form.

4. Sheet D005 – GENERAL NOTES:

Add the following to the STORM PIPE MATERIAL notes:

“Storm sewer piping shall match the existing pipe material but for bidding purposes put the piping as PVC SDR 26. Contractor shall verify storm sewer piping material prior to ordering piping.”

5. Sheet D006 – GENERAL NOTES:

Replace the **AG MUSEUM WATER SERVICE RECONNECTION** notes with the following:

“See Sheet H006 and Detail 2/U001. Core drill tunnel wall at elevation of water service located within the tunnel. The bid item “AG MUSEUM WATER SERVICE RECONNECTION” shall be full compensation for core drilling the appropriate size hole through the wall, installing the appropriate size mechanical seal (such as Link Seal) around the pipe, and grouting; see Detail 2/U001. Bid item “AG MUSEUM WATER SERVICE RECONNECTION” shall also include the full compensation for furnishing and installing 2” copper piping from tapping saddle to tie-in to the existing copper building service, including necessary fittings, isolation valve, and cutting casing pipe and installing two casing end seals. Building service requires a 2” tapping saddle on the new proposed water main, the cost associated with the tap and tapping saddle shall be paid under bid item “2” TAPPING SADDLE”.

For **WEST HALL WATER SERVICE RECONNECTION** notes, replace reference to Detail 3/U001 with reference to Detail 2/U001.

For **ART MUSEUM WATER SERVICE RECONNECTION** notes, replace reference to Detail 3/U001 with reference to Detail 2/U001.

For **WECOTA HALL WATER SERVICE RECONNECTION** notes, replace reference to Detail 3/U001 with reference to Detail 2/U001.

6. Sheet H006 – TUNNEL PIPING REMOVALS:

Remove Keynote 4.

7. Sheet I001 – WATER MAIN PLAN AND PROFILE:

Replace in its entirety with the attached.

The sheet now shows the Brookings Municipal Utility (BMU) water main and hydrant to be installed by BMU and/or BMU’s contractor. Also added Keynote #7.

Removed hydrant lead at station 3+17.85.

8. Sheet I003 – WATER MAIN PLAN AND PROFILE:

Replace in its entirety with the attached.

The sheet now has Keynotes #4 and #5.

9. Sheet I005 – WATER MAIN PLAN AND PROFILE:



Replace Keynote 7 with the following:

“7. INSTALL 2" WATER SERVICE PIPE AND TIE INTO EXISTING COPPER WATER SERVICE PIPE INSIDE TUNNEL. CONTRACTOR SHALL CUT AND REMOVE THE CASING PIPE TO PROVIDE SPACE TO INSTALL THE TAPPING SADDLE ON THE WATER MAIN. EITHER SIDE OF THE REMOVED CASING PIPE SHALL HAVE CASING END SEALS. CONTRACTOR SHALL ALSO INSTALL A TAPPING SADDLE, TAP WATER MAIN, AND INSTALL ISOLATION VALVE INSIDE TUNNEL.”

10. Sheet I006 – HYDRANT AND SERVICE LEAD PROFILE:

Replace Detail #2, STA 3+17.85 Hydrant, with “DETAIL INTENTIONALLY LEFT BLANK”

All bidders shall acknowledge receipt and acceptance of ADDENDUM NO. 1 by signing the space provided on the Bid Form.

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly registered Professional Engineer under the laws of the State of South Dakota.	
		Date: 5/4/2023
	MATTHEW JAMES PAJL, P.E.	
	License No. 11935	
	My renewal date is December 31, 2023	
	Pages or sheets covered by this seal:	
	Entire document	

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	APPROX QTY
BASE BID			
GENERAL			
1	MOBILIZATION	LS	1
2	CONSTRUCTION STAKING	LS	1
3	CLEAR AND GRUB TREE	EA	3
4	LOCATE UTILITIES	EA	20
5	ORANGE PLASTIC SAFETY FENCE	FT	1,090
6	SALVAGE SIGN AND RESET	EA	2
7	SALVAGE AND REINSTALL STEEL HANDRAIL	EA	1
8	TRAFFIC CONTROL	EA	5
9	REMOVE AND REPLACE FIBER CABLE	LF	15
WATER MAIN			
10	REMOVE FIRE HYDRANT	EA	5
11	TUNNEL PIPE REMOVAL	EA	2
12	REMOVE WATER MAIN	FT	525
13	REMOVE ASBESTOS CEMENT PIPE	FT	23
14	ABANDON VALVE BOX	EA	3
15	REMOVE VALVE BOX	EA	5
16	REMOVE GATE VALVE AND BOX	EA	13
17	1.5" COPPER PIPE	FT	50
18	2" COPPER PIPE	FT	6
19	4" PVC WATER MAIN	FT	10
20	6" PVC WATER MAIN	FT	480
21	8" PVC WATER MAIN	FT	2,600
22	10" PVC WATER MAIN	FT	15
23	8" PVC WATER MAIN, RESTRAINED JOINT	FT	100
24	2" HDPE RESTRAINED JOINT WATER MAIN, SLIPLINING	FT	180
25	8" PVC RESTRAINED JOINT WATER MAIN, HORIZONTAL DIRECTIONAL DRILLING	FT	387
26	16" PVC RESTRAINED JOINT CASING, TRENCHLESS	FT	60
27	16" STEEL CASING, TRENCHLESS	FT	42
28	HORIZONTAL DIRECTIONAL DRILLING PIT	EA	4
29	8" FLANGE ADAPTER	EA	1
30	10" FLANGE ADAPTER	EA	2
31	6" MJ 90 DEGREE ELBOW	EA	3
32	6" MJ 11.25, 22.5, 45 DEGREE BEND	EA	10
33	8" MJ 90 DEGREE ELBOW	EA	1
34	8" MJ 11.25, 22.5, 45 DEGREE BEND	EA	33
35	3" CONCRETE PLUG	EA	3
36	4" MJ CAP	EA	4
37	6" MJ CAP	EA	6
38	8" BLIND FLANGE	EA	1
39	8" RESTRAINED CAP	EA	18
40	SALVAGE AND INSTALL 6X6 MJ TEE	EA	1
41	8X6 MJ TEE	EA	10
42	8X8 MJ TEE	EA	3
43	10X8 MJ TEE	EA	1
44	1.5" TAPPING SADDLE	EA	1
45	2" TAPPING SADDLE	EA	2
46	6X4 MJ REDUCER	EA	3
47	8X6 MJ REDUCER	EA	2
48	8X8 MJ CROSS	EA	1
49	4" MJ SLEEVE	EA	3
50	SALVAGE AND INSTALL 6" MJ SLEEVE	EA	2
51	6" MJ SLEEVE	EA	2
52	8" MJ SLEEVE	EA	5
53	10" MJ SLEEVE	EA	1
54	SALVAGE AND INSTALL 6" GATE VALVE WITH BOX	EA	1
55	6" GATE VALVE WITH BOX	EA	12
56	8" GATE VALVE WITH BOX	EA	8
57	10" GATE VALVE WITH BOX	EA	1
58	STANDARD FIRE HYDRANT	EA	4
59	VALVE BOX	EA	2
60	ADJUST WATER VALVE BOX	EA	15
61	RECONNECT WATER SERVICE	EA	6
62	AG MUSEUM WATER SERVICE RECONNECTION	EA	1
63	WEST HALL WATER SERVICE RECONNECTION	EA	1
64	ART MUSEUM WATER SERVICE RECONNECTION	EA	1

65	WECOTA HALL WATER SERVICE RECONNECTION	EA	1
66	CUT AND TIE TO EXISTING WATER MAIN	EA	7
67	TEMPORARY WATER SERVICE	EA	3
68	TEMPORARY FIRE HYDRANT	EA	2
SANITARY SEWER			
69	MANHOLE FRAME AND LID AND EXTERNAL FRAME SEAL	EA	2
70	ADJUST MANHOLE	EA	2
STORM SEWER			
71	REMOVE STORM SEWER	LF	36
72	6" PVC STORM SEWER, F&I	LF	6
73	8" PVC STORM SEWER, F&I	LF	8
74	10" PVC STORM SEWER, F&I	LF	22
ROADWAY AND LIGHTING			
75	REMOVE WALKWAY LIGHT ASSEMBLY	EA	2
76	WALKWAY LIGHT ASSEMBLY WITH NEW POLE	EA	1
77	WALKWAY LIGHT ASSEMBLY WITH SALVAGE POLE	EA	1
78	COLD MILLING ASPHALT CONCRETE	SY	340
79	REMOVE CONCRETE CURB & GUTTER AND VALLEY GUTTER	FT	702
80	REMOVE ASPHALT CONCRETE PAVEMENT	SY	2,475
81	REMOVE CONCRETE PAVEMENT	SY	90
82	REMOVE CONCRETE SIDEWALK	SY	1,190
83	SALVAGE AGGREGATE BASE COURSE	TON	87
84	UNCLASSIFIED EXCAVATION	CY	100
85	CONTRACTOR FURNISHED FILL	TON	300
86	SCARIFY AND RECOMPACT SUBGRADE	SY	3,430
87	AGGREGATE BASE COURSE	TON	1,811
88	GEOTEXTILE FABRIC FOR SUBGRADE STABILIZATION	SY	3,430
89	ASPHALT CONCRETE COMPOSITE	TON	1,063
90	CONCRETE CURB AND GUTTER	FT	237
91	CONCRETE VALLEY GUTTER 6" THICK	SY	157
92	6" PCC PAVEMENT	SF	809
93	5" CONCRETE SIDEWALK	SF	10,227
94	5" COLORED CONCRETE SIDEWALK	SF	486
95	TYPE 1 DETECTABLE WARNING	SF	32
96	EPOXY PAVEMENT MARKING PAINT, 4" YELLOW	FT	1,706
97	EPOXY PAVEMENT MARKING PAINT, 24" WHITE	FT	84
LANDSCAPING AND EROSION CONTROL			
98	INLET PROTECTION	EA	3
99	CONCRETE WASHOUT AREA	EA	3
100	SEDIMENT CONTROL WATTLE	FT	1,431
101	SILT FENCE	FT	135
102	MINOR IMPACT CONSTRUCTION SITE, VEHICLE TRACKING CONTROL	EA	3
103	LANDSCAPING REMOVALS	SF	1,072
104	CONTRACTOR FURNISHED TOPSOIL	TON	1,103
105	SALVAGE AND PLACE TOPSOIL	CY	385
106	PERMANENT SEED MIXTURE 1	LB	61
107	PERMANENT SEED MIXTURE 2	LB	196
108	WEED CONTROL	SY	4,215
109	BONDED FIBER MATRIX	TON	2
110	PLANT BED PREPARATION	SY	120
111	4" DEPTH SHREDDED BARK MULCH	SY	120
112	2 GALLON DECIDUOUS SHRUB, FURNISH AND PLANT	EA	12
113	5 GALLON DECIDUOUS SHRUB, FURNISH AND PLANT	EA	11
114	IRRIGATION SYSTEM - REPAIR/REPLACEMENT	ALW	1

BID ALTERNATES			
A27	16" STEEL CASING, TRENCHLESS, NON-AIS	FT	42
A29	8" FLANGE ADAPTER, NON-AIS	EA	1
A30	10" FLANGE ADAPTER, NON-AIS	EA	2
A31	6" MJ 90 DEGREE ELBOW, NON-AIS	EA	3
A32	6" MJ 11.25, 22.5, 45 DEGREE BEND, NON-AIS	EA	10
A33	8" MJ 90 DEGREE ELBOW, NON-AIS	EA	1
A34	8" MJ 11.25, 22.5, 45 DEGREE BEND, NON-AIS	EA	33
A36	4" MJ CAP, NON-AIS	EA	4
A37	6" MJ CAP, NON-AIS	EA	6
A38	8" BLIND FLANGE, NON-AIS	EA	1
A39	8" RESTRAINED CAP, NON-AIS	EA	18
A41	8X6 MJ TEE, NON-AIS	EA	10
A42	8X8 MJ TEE, NON-AIS	EA	3
A43	10X8 MJ TEE, NON-AIS	EA	1
A44	1.5" TAPPING SADDLE, NON-AIS	EA	1
A45	2" TAPPING SADDLE, NON-AIS	EA	2
A46	6X4 MJ REDUCER, NON-AIS	EA	3
A47	8X6 MJ REDUCER, NON-AIS	EA	2
A48	8X8 MJ CROSS, NON-AIS	EA	1
A49	4" MJ SLEEVE, NON-AIS	EA	3
A51	6" MJ SLEEVE, NON-AIS	EA	2
A52	8" MJ SLEEVE, NON-AIS	EA	5
A53	10" MJ SLEEVE, NON-AIS	EA	1
A55	6" GATE VALVE WITH BOX, NON-AIS	EA	12
A56	8" GATE VALVE WITH BOX, NON-AIS	EA	8
A57	10" GATE VALVE WITH BOX, NON-AIS	EA	1
A58	STANDARD FIRE HYDRANT, NON-AIS	EA	4
A59	VALVE BOX, NON-AIS	EA	2
A62	AG MUSEUM WATER SERVICE RECONNECTION, NON-AIS	EA	1
A63	WEST HALL WATER SERVICE RECONNECTION, NON-AIS	EA	1
A64	ART MUSEUM WATER SERVICE RECONNECTION, NON-AIS	EA	1
A65	WECOTA HALL WATER SERVICE RECONNECTION, NON-AIS	EA	1
A69	MANHOLE FRAME AND LID AND EXTERNAL FRAME SEAL, NON-AIS	EA	2



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WEST CAMPUS, WATER MAIN REPLACEMENT CAT 5.11

SOUTH DAKOTA STATE UNIVERSITY

BROOKINGS, SOUTH DAKOTA – OSE# R0323--04X/ARPA

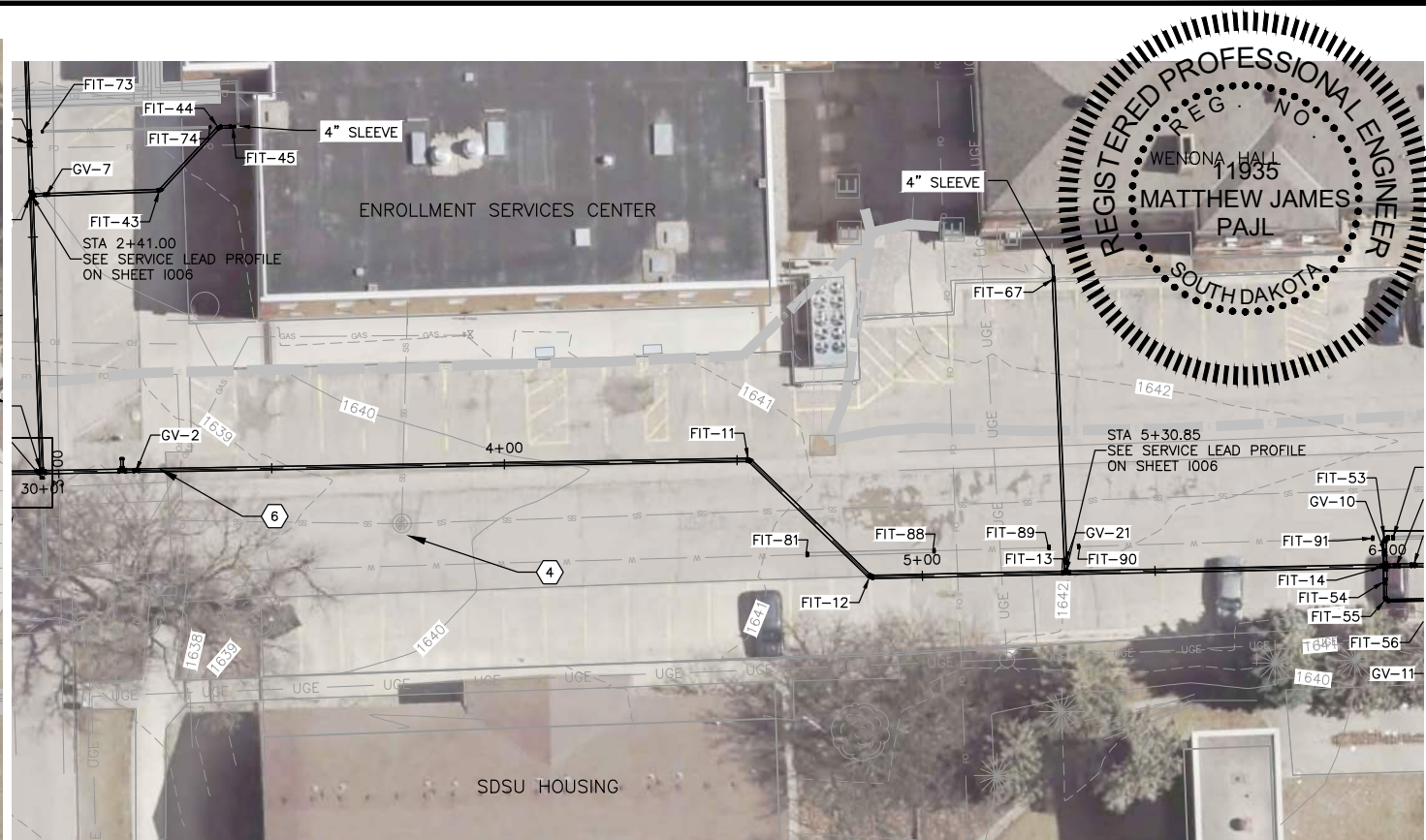
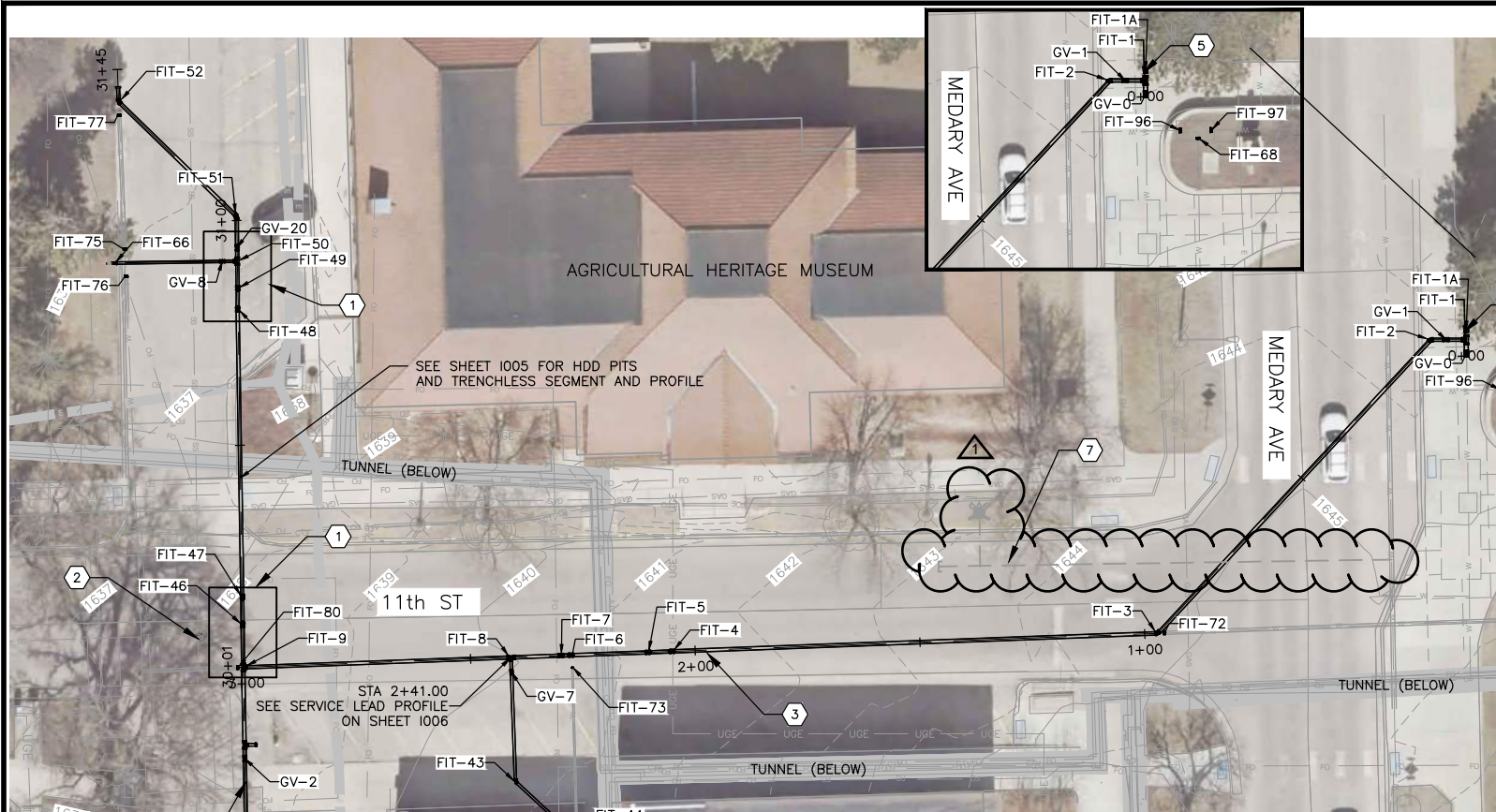
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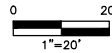
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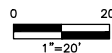
1 WATER MAIN PLAN



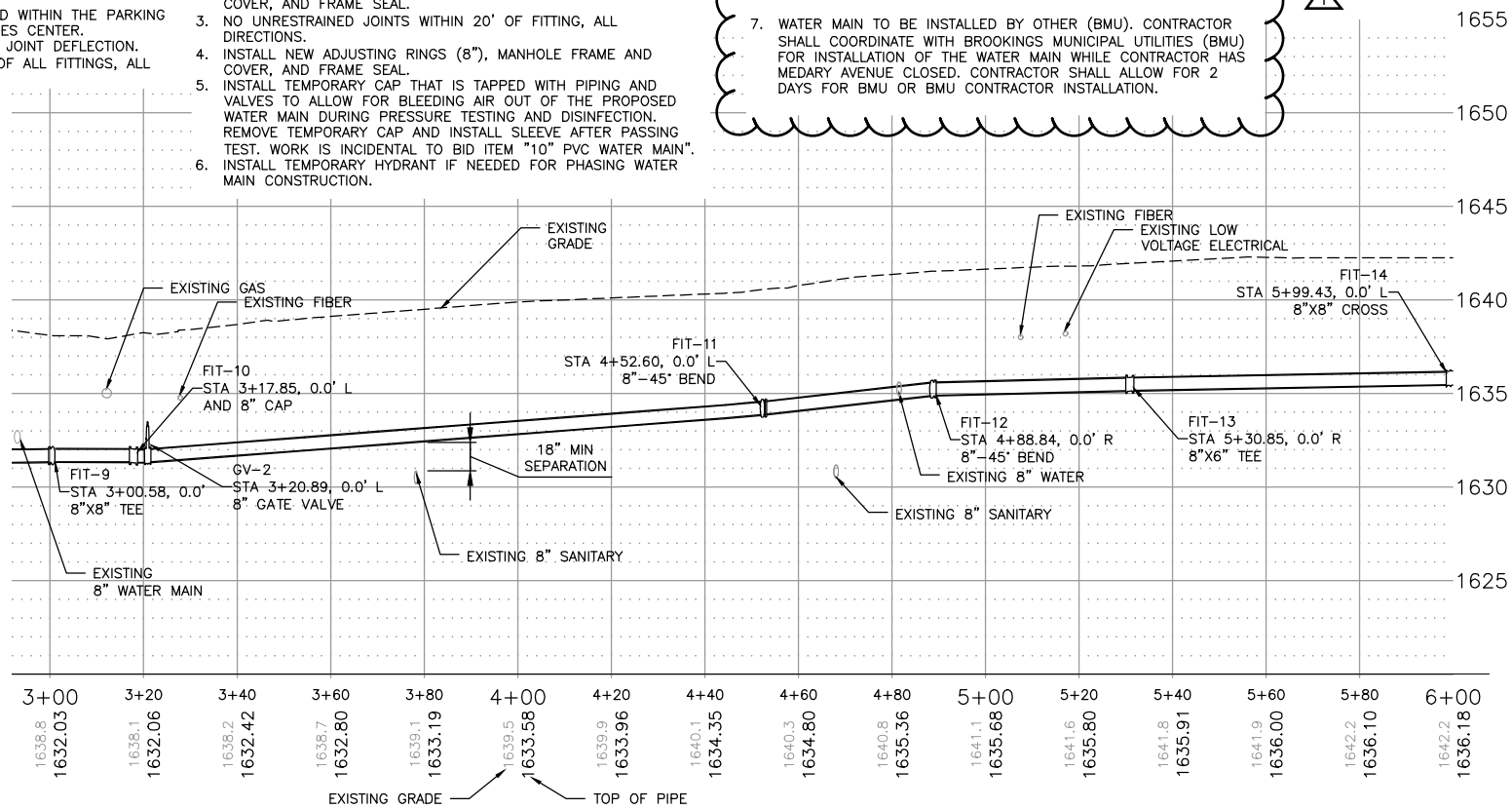
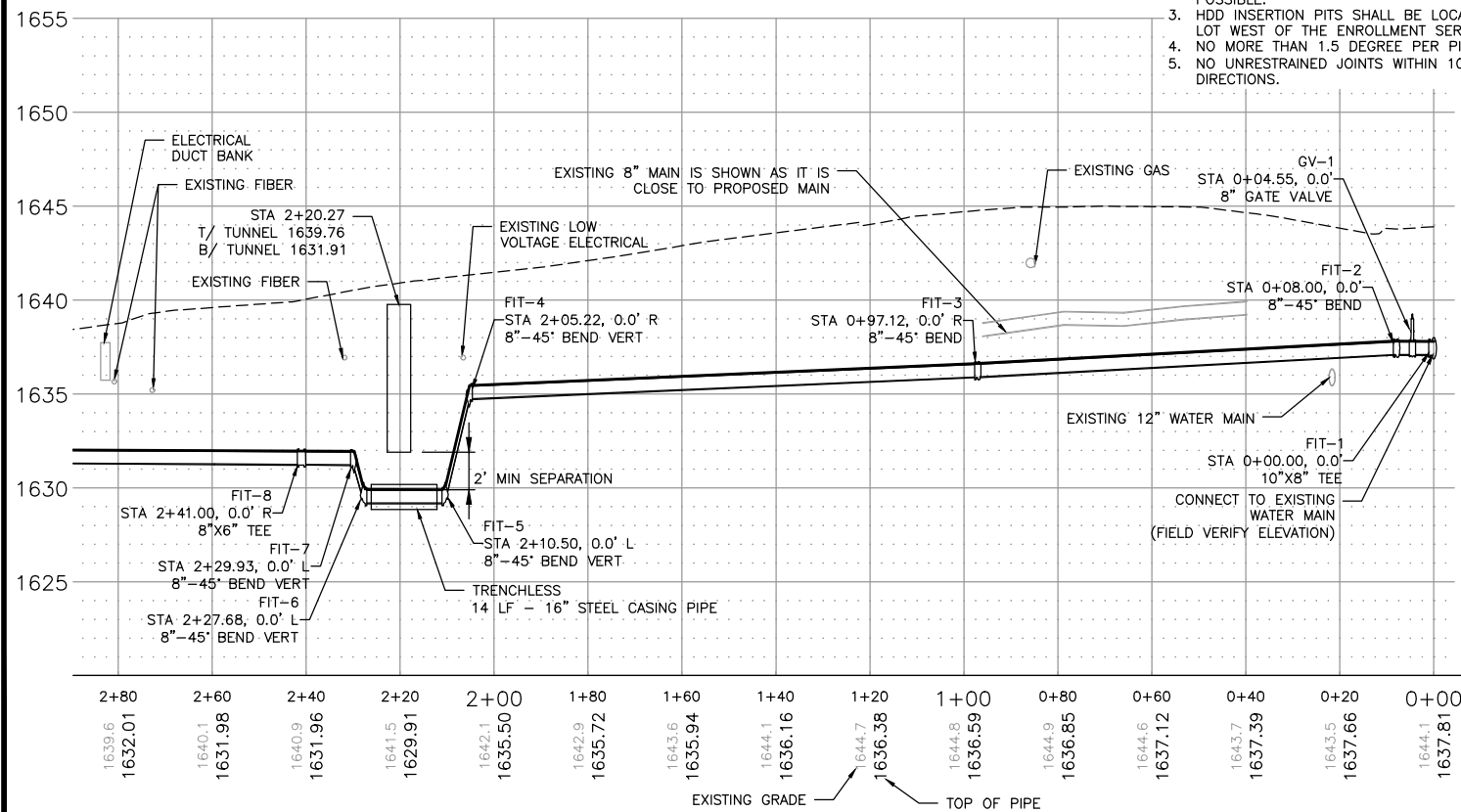
- GENERAL NOTE:
- CONTRACTOR TO SUPPORT UTILITY CROSSINGS DURING CONSTRUCTION AND TAKE PRECAUTIONS WHEN CROSSING THE HIGH VOLTAGE ELECTRICAL DUCT BANKS.
 - HDD PIT SIZES ARE APPROXIMATE TO ANTICIPATE LIMITS OF REMOVALS. CONTRACTOR SHALL MINIMIZE PIT SIZES WHERE POSSIBLE.
 - HDD INSERTION PITS SHALL BE LOCATED WITHIN THE PARKING LOT WEST OF THE ENROLLMENT SERVICES CENTER.
 - NO MORE THAN 1.5 DEGREE PER PIPE JOINT DEFLECTION.
 - NO UNRESTRAINED JOINTS WITHIN 10' OF ALL FITTINGS, ALL DIRECTIONS.

- KEYNOTES:
- CONTRACTOR SHALL SETUP HDD EQUIPMENT AND INSERTION PIT SO THAT INSERTION PIT IS LOCATED IN PARKING LOT WEST OF ENROLLMENT SERVICES CENTER. EXCAVATE APPROXIMATE 10'X20' HDD PIT FOR TERMINATION OF WATER MAIN INSTALLED VIA HDD.
 - INSTALL NEW ADJUSTING RINGS (6"), MANHOLE FRAME AND COVER, AND FRAME SEAL.
 - NO UNRESTRAINED JOINTS WITHIN 20' OF FITTING, ALL DIRECTIONS.
 - INSTALL NEW ADJUSTING RINGS (8"), MANHOLE FRAME AND COVER, AND FRAME SEAL.
 - INSTALL TEMPORARY CAP THAT IS TAPPED WITH PIPING AND VALVES TO ALLOW FOR BLEEDING AIR OUT OF THE PROPOSED WATER MAIN DURING PRESSURE TESTING AND DISINFECTION. REMOVE TEMPORARY CAP AND INSTALL SLEEVE AFTER PASSING TEST. WORK IS INCIDENTAL TO BID ITEM "10" PVC WATER MAIN".
 - INSTALL TEMPORARY HYDRANT IF NEEDED FOR PHASING WATER MAIN CONSTRUCTION.

2 WATER MAIN PLAN



7. WATER MAIN TO BE INSTALLED BY OTHER (BMU). CONTRACTOR SHALL COORDINATE WITH BROOKINGS MUNICIPAL UTILITIES (BMU) FOR INSTALLATION OF THE WATER MAIN WHILE CONTRACTOR HAS MEDARY AVENUE CLOSED. CONTRACTOR SHALL ALLOW FOR 2 DAYS FOR BMU OR BMU CONTRACTOR INSTALLATION.



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WEST CAMPUS, WATER MAIN REPLACEMENT CAT 5.11
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I - UTILITY PLAN AND PROFILE
WATER MAIN PLAN AND PROFILE

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1001

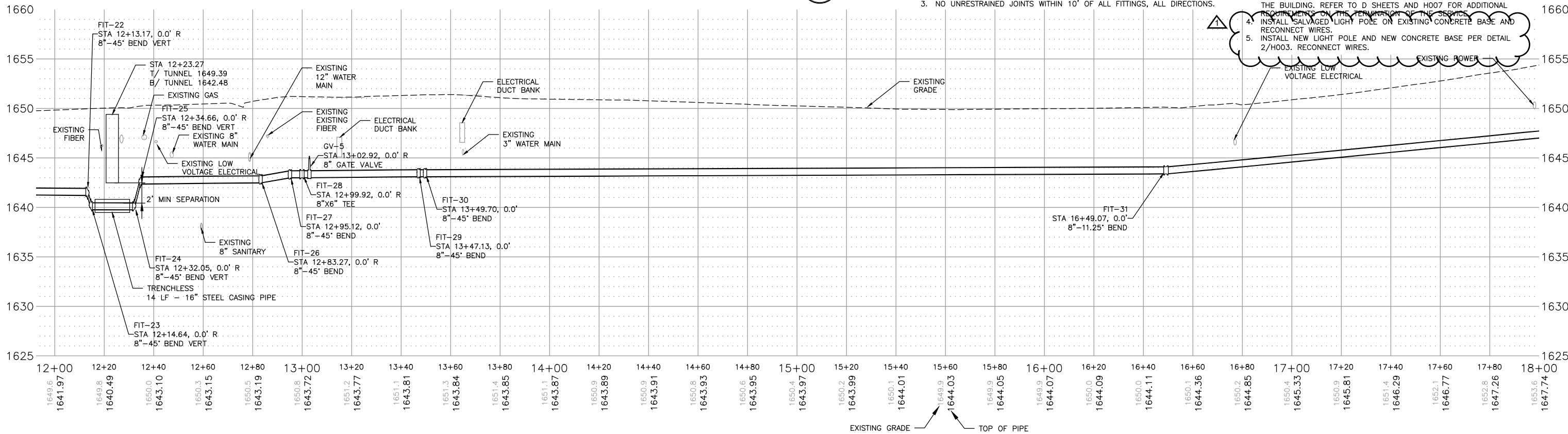


1 WATER MAIN PLAN



- GENERAL NOTE:
- CONTRACTOR TO SUPPORT UTILITY CROSSINGS DURING CONSTRUCTION AND TAKE PRECAUTIONS WHEN CROSSING THE HIGH VOLTAGE ELECTRICAL DUCT BANKS.
 - NO MORE THAN 1.5 DEGREE PER PIPE JOINT DEFLECTION.
 - NO UNRESTRAINED JOINTS WITHIN 10' OF ALL FITTINGS, ALL DIRECTIONS.

- KEYNOTES:
- NO UNRESTRAINED JOINTS WITHIN 25' OF FITTING, ALL DIRECTIONS.
 - INSTALL TEMPORARY HYDRANT IF NEEDED FOR PHASING WATER MAIN CONSTRUCTION.
 - CONTRACTOR SHALL TAKE THE ART MUSEUM WATER SERVICE INTO THE BUILDING. REFER TO D SHEETS AND H007 FOR ADDITIONAL REQUIREMENTS ON THE PERMANENCE OF THE SERVICE.
 - INSTALL SALVAGED LIGHT POLE ON EXISTING CONCRETE BASE AND RECONNECT WIRES.
 - INSTALL NEW LIGHT POLE AND NEW CONCRETE BASE PER DETAIL 2/H003. RECONNECT WIRES.



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1 - UTILITY PLAN AND PROFILE
WATER MAIN PLAN AND PROFILE

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