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April 27, 2021

**NOTICE OF ADDENDUM
ADDENDUM NO. 2
CONTRACT NO. 8576**

**NORTH BROOKS STREET, FAHRENBROOK COURT AND COLLEGE COURT RESURFACING
ASSESSMENT DISTRICT - 2021**

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

PAGE D-1 to D-21, SECTION D: SPECIAL PROVISIONS:

Remove and replace with attached Page D-1 to D-16. Bid items 21031 was added, Article 500 was revised, Article 510 was removed, bid item 50361 was added, bid items 90003, 90004 and 90005 were revised, and bid item 90006 was added.

SPECIAL PROVISIONS:

BID ITEM 21031 – INLET PROTECTION, TYPE C - COMPLETE

Type C inlet protection shall be allowed where it is not possible to install RIGID FRAME INLET PROTECTION. Installation shall be approved by the Construction Engineer, inspected weekly, and maintained or replaced when there is debris or damage.

ARTICLE 500 - SEWER AND SEWER STRUCTURES GENERAL

Reference to station crossings on Fahrenbrook Ct removed. References to pipe bursting removed. Added note to state that active sanitary laterals have been dye tested and located within the project limits.

BID ITEM 50361 – WASTEWATER CONTROL

Provides expanded description and scope for wastewater controls.

ARTICLE 510 – SEWER PIPE BURST REHABILITATION OF SANITARY SEWER

Article 510 was removed to eliminate references to pipe bursting. Pipe bursting cannot be completed for the proposed sanitary sewer design.

BID ITEM 90003 – INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING)

References to pipe bursting methods were removed from the BID ITEM.

BID ITEM 90004 – SANITARY SEWER STORM BOX CROSSING

This specification has revised information and details for the Description, Materials, and Construction Methods sections.

BID ITEM 90005 – STORM WATER CONTROL

Adds the text “It may be necessary to provide access to the existing storm box to install dewatering measures. Location of the top slab access hole, if required, shall be determined by Contractor. If top slab access opening is used, reconstruct the top slab as shown on the detail drawings (see sheet D-3). Reconstruction of top slab shall be included with this BID ITEM.”

BID ITEM 90006 – RCBC TOP SLAB OPENING

This BID ITEM was added to provide specific details for box culvert top slab replacement and reinforcement.

PROPOSAL:

A summary of the changes to the proposal is as follows:

ACTION	BID ITEM	DESCRIPTION
ADD	20401	CLEARING
ADD	20406	GRUBBING
DELETE	50201	RCBC ROOF REPAIR, TYPE II
ADD	90006	RCBC TOP SLAB OPENING
MODIFY	20127	CLEAR STONE
MODIFY	20241	RIPRAP FILTER FABRIC, TYPE HR
MODIFY	20311	REMOVE SEWER ACCESS STRUCTURE (SANITARY)
ADD	20314	REMOVE PIPE
ADD	20331	ABANDON SEWER ACCESS STRUCTURE
MODIFY	20335	ABANDON SEWER PIPE WITH SLURRY
MODIFY	40321	UNDERCUT
MODIFY	50212	SELECT BACKFILL SANITARY SEWER
ADD	50225	UTILITY TRENCH PATCH TYPE III
MODIFY	50227	UTILITY TRENCH PATCH TYPE IV
MODIFY	50301	8 INCH PVC SEWER PIPE
MODIFY	50302	10 INCH PVC SEWER PIPE
ADD	50303	12 INCH PVC SEWER PIPE
MODIFY	50321	8 INCH PVC PRESSURE SANITARY SEWER PIPE
MODIFY	50353	SANITARY SEWER LATERAL
MODIFY	50355	SANITARY SEWER LATERAL - PRESSURE PIPE
MODIFY	50356	RECONNECT
DELETE	50357	RECONNECT - PRESSURE PIPE
MODIFY	50390	SEWER ELECTRONIC MARKERS
MODIFY	50701	4' DIA SANITARY SAS
MODIFY	50771	INTERNAL CHIMNEY SEAL
MODIFY	50791	SANITARY SEWER TAP
MODIFY	50797	EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL
MODIFY	50801	UTILITY LINE OPENING (UNDISTRIBUTED)
MODIFY	90003*	INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING)*

Please see Bid Express for bid item quantity.

* BID ITEM name changed to match revised specification

PLANS:

Add attached page D-3: Reinforced Concrete Box Culvert Modifications for sanitary sewer box crossing and top slab replacement.

Add attached page D-4: Existing MMSD sanitary sewer structure detail for Contractor reference.

Remove and replace attached page U-1 to U-8: Updated plans with revised sanitary sewer layout.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

<http://www.bidexpress.com>

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. F. Phillips", with a long horizontal flourish extending to the right.

_____ for:
Robert F. Phillips, P.E., City Engineer

Cc: Greg Fries

SECTION D: SPECIAL PROVISIONS

NORTH BROOKS STREET, FAHRENBROOK COURT AND COLLEGE COURT RESURFACING ASSESSMENT DISTRICT -2021 CONTRACT NO. 8576

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

SECTION 102.11: BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$65,000 for a single trade contract; or equal to or greater than \$318,000 for a multi-trade contract pursuant to MGO 33.07(7).

ARTICLE 104 SCOPE OF WORK

The work under this contract shall include, but is not limited to, replacing sanitary and storm sewer, removing and replacing concrete curb and gutter, sidewalk and drive aprons, excavation cut, crushed aggregate base course, and asphalt pavement as noted in the specifications and on the plans.

The Contractor shall view all sites prior to bidding to become familiar with the existing conditions. It will be the responsibility of the Contractor to work with the utilities located in the right of way to resolve conflicts during the construction process.

North Brooks Street, Fahrenbrook Court and College Court

Work shall include removing and replacing curb & gutter, drive aprons and sidewalks that are in poor condition, storm sewer improvements and sanitary replacements. The street will be paved with 1.75" Bituminous lower layer, 4 LT 58-28S and 1.75" Bituminous upper layer, 4 LT 58-28S.

SECTION 104.4 INCREASED OR DECREASED QUANTITIES

The Contractor shall note that some bid item quantities may increase or decrease based on what is encountered in the field. If the actual field conditions vary from the plan quantity, no additional compensation shall be given for increasing or decreasing quantities. Any overruns shall be paid for under the appropriate bid item(s) without any penalty or change to the bid price for the associated bid item. The Contractor shall not be reimbursed for any deletions to the contract. No change to the unit bid price will be allowed for changes to the quantities.

The Contractor shall note that the bid items for sidewalk removal and replacement may increase or decrease based on what is encountered in the field. It was anticipated that 106 SF of sidewalk removal and replacement would be required for each of the sanitary lateral replacement and 53 SF for the private storm connection. It is also anticipated that there will be 20' of curb & gutter replaced for each lateral that is replaced with this project.

SECTION 104.10 CLEANING UP

Excess concrete from finishing operations and from spillage on adjacent sidewalk and curb & gutter shall be removed immediately. Excess concrete or mortar from the finishing operation and spillage into SASs and inlets shall be removed immediately.

SECTION 105.12 COOPERATION BY THE CONTRACTOR

The Contractor shall use care around existing trees, plantings, fences, walls, steps and driveways that are indicated on the plans to remain. Damage to these items during construction shall be repaired or replaced at the Contractor's expense. No trees, other than those shown on the plan to be removed, shall be cut without the approval of the Engineer and the City Forester; the abutting property owners shall be notified in accordance with the City's Administrative Procedure Memorandum No. 6-2.

The Contractor shall maintain access for property owners, mail delivery and garbage/recycling pickup for all properties in the project area. All private storm sewer discharges shall be maintained for all properties in the project area.

The Contractor shall maintain pedestrian access to all properties within the project limits and shall maintain vehicle access to all commercial driveways within the project limits at all times. All means necessary to maintain this access shall be considered incidental which may include but is not limited to high early strength concrete and temporary plating.

The Contractor will be responsible for coordination and providing work space for any conflict resolution work that will need to be performed by the private utility companies, and work on the sanitary sewer and storm sewer may require some relocation work by the utilities. The existing manholes for several of the facilities within the project limits are large. The Contractor shall coordinate with all utilities for any structure adjustments. Provide a minimum of 1 week notice prior to needing structure adjustments.

New underground utilities will also be installed by the private utility companies during this project. Contractor shall coordinate with the utilities and their contractors to provide space and time to complete the work within the contract timeframe as indicated in Section 109.2 Prosecution of Work. MG&E will be installing new gas main within the project limits.

Existing Facilities located within the project limits include:

Madison Gas & Electric (Gas) - contact Katie Bloomer, (608) 252-7287

Madison Gas & Electric (Electric) – contact Mark Bohm, (608) 252-4730

AT&T Wisconsin - contact Carol Anason, (608) 252-2385 or Ryan Denewellis (608) 252-2879

Charter Communications - contact Jon W Marschke (608) 225-2479

Verizon - contact RJ Cicatello Jr. (262)782-9836

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

Access to businesses and commercial driveways shall be maintained at all times. The Contractor shall coordinate with parking lot property owners to maintain access and notify residents of access routes.

The Contractor shall properly barricade and light all work areas. Sidewalk forms, form pins and other items incidental to the work shall not be left or stored on the sidewalk or in the sidewalk area.

The Contractor shall backfill along both sides of the newly poured sidewalk immediately following removal of the sidewalk forms.

Engineer shall have the final decision on schedule of all work.

SECTION 107.2 PROTECTION AND RESTORATION OF PROPERTY AND PROPERTY OWNERS

Care shall be taken not to disturb property irons, sod areas and retaining walls on private property. Sidewalk forms, form pins and other items incidental to the work shall, at no time, be placed on private property.

SECTION 107.6 DUST PROOFING

The Contractor shall take all necessary steps to control dust arising from operations connected with this contract. When ordered by the Engineer, the Contractor shall dust proof the construction area by using power sweepers and water. Dust proofing shall be incidental with operations connected with this contract.

SECTION 107.7 MAINTENANCE OF TRAFFIC

All signing and barricading shall conform to Part VI of the Federal Highways Administrations “Manual on Uniform Traffic Control Devices” (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall also submit an acceptable Traffic Control Plan, including all necessary phases, to Alexandra Heinritz, aheinritz@cityofmadison.com, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The successful bidder shall work with the City Traffic Engineering Division to develop an approved Traffic Control Plan. The Contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non-permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Temporary pavement markings and electronic message boards shall be paid for as separate bid items. Traffic control to install temporary or permanent pavement markings shall be included in the Traffic Control Lump Sum Bid Item. The contractor shall refer to Chapter 6 in the MUTCD to provide adequate signs and taper lengths. The contractor may use drums as a channelizing device to separate traffic from work zone. Type A warning lights shall be installed on all barricades used in the project per State of Wisconsin S.D.D. 15C2-4B. Contractor shall also place Type C warning lights on any barrels used to taper traffic or lane closures.

The Contractor shall be responsible for installing and maintaining traffic control in accordance with the approved Traffic Control Plan and as directed by the City Traffic Engineer. The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This shall include relocating existing traffic control or providing additional traffic control. The Contractor shall install and maintain any necessary modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

Sanitary Sewer connection within Regent Street:

The work to complete the sanitary connection in Regent Street shall only occur on one weekend—from 8:30 a.m. on a Friday until the following Monday. Reopen all traffic lanes on Regent Street by 3:00 p.m. on Monday.

Traffic control for this work shall consist of both directions of Regent Street traffic on the south half of the street. Restrict all left turns at the intersection. Eastbound and westbound Regent Street traffic shall be separated using flexible, tubular delineators spaced at a maximum of 10 feet through the Brooks Street intersection. Electronic, flashing arrow boards, and traffic barrels with Type “C” steady burn lights shall be used on the Regent Street lane tapers for both directions of travel. Maintain the Metro Transit bus stops on Regent Street. Notify Ali Heinritz, aheinritz@cityofmadison.com, at least one week prior the sanitary connection.

North Brooks Street, College Court and Fahrenbrook Court may be closed to through traffic for the duration of construction except for the following special event dates.

- 1) Move-In/Move-out between Saturday, August 14-Monday August 16th, including the weekends immediately prior to and after these dates.- The streets may remain closed but no work and project site reasonably cleaned and organized to safely allow loading/unloading of residents vehicles.

Maintain local and emergency vehicle access at all times. Notice shall be given to the residents or businesses on the street 48 hours before any work is done that would obstruct their driveways.

Provide access for all mail deliveries.

Contractor shall notify the City of Madison Police Department, Fire Department, Madison Metro, and Traffic Engineering 48 hours in advance of all switchovers of traffic lanes and closures of streets. Notifications must be given by 4:00 P.M. on Thursday for any such work to be done on the following Monday.

The work areas shall be backfilled, plated, or protected by traffic control devices during non-working hours. If steel plates are used, the Contractor shall notify the City of Madison Streets Division, 266-4681, (1) working day prior to placement of the plates.

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contractor is responsible for obtaining and installing temporary no parking signs to facilitate traffic control plan or as necessary to complete the work within the contract. The contractor shall contact John Villarreal with the City of Madison Parking Utility (608-267-8756) at least 3 working days prior to needing the signs. Contractor shall post signs in accordance with the City of Madison Police Department Guidelines for temporary no parking restrictions for construction or special events. The guidelines can be found at the link listed below. This shall be considered incidental to the traffic control lump sum bid item.

http://www.cityofmadison.com/business/pw/documents/guidelines_temporarynoparkingrestrictions.pdf

NOTIFICATION WHEN CLOSING STREET

All Contractors shall give the Traffic Engineer (266-4761) notice of their intent to begin work on any street at least seventy-two (72) hours in advance. The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment.

OPENING OF SECTION OF STREET TO TRAFFIC

The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction Engineer, that permanent signing is in place and temporary traffic control may be removed.

Contact Alexandra Heinritz, Traffic Engineering Division, ahleinritz@cityofmadison.com

SECTION 108.2 PERMITS

A City of Madison Erosion Control permit is required and will be applied for by the City for this project.

It shall be the responsibility of the Contractor to obtain the permits listed below, if required, and to pay all applicable charges and fees associated with these permits.

- Wisconsin DNR Type II Dewatering
- MMSD Sewer Connection Permits

The Contractor will be responsible for acquiring Madison Metropolitan Sewerage District (MMSD) permits and paying for the permit fees for connection to MMSD MH02-007. The Contractor shall follow all MMSD permit requirements with this proposed work to their facilities. The permitting contact from MMSD for these connections is Ray Schneider (608)347-3628, rays@madsewer.org. MMSD's permit fee for the work under this contract is \$1,150 and shall be paid by the Contractor.

The Contractor shall be responsible for knowing, understanding, and meeting the conditions of all permits and shall keep a copy of each individual permit on site at all times throughout construction. Any questions pertaining to permit compliance shall be immediately brought to the attention of the Project or Construction Engineer.

The Contractor shall meet the conditions of the permits involving properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, as directed by the Construction Engineer or his designees, or as directed by any official representative of the DNR. This work will be paid for under the appropriate bid items, or if appropriate items are not included in the contract, they shall be paid for as Extra Work.

The City's obtaining these permits is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction.

SECTION 109.2 PROSECUTION OF THE WORK

The Contractor may begin work on or after **JUNE 14, 2021**. All work shall be completed on or before **AUGUST 31, 2021**.

Work shall begin only after the start work letter is received. If it is desirable to begin work before the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting.

The total contract time accounts for work days necessary to coordinate with utilities for work being performed on their facilities. No time extensions will be given for coordinating with the utilities and for providing time and space for the private utilities to complete their work within the contract duration.

SECTION 210.1(d) STREET SWEEPING

When required, either by the erosion control plan or by the Construction Engineer, the Contractor shall perform mechanical street sweeping on all streets or paved surfaces affected by construction equipment, hauling or related construction activities that result in mud tracking or siltation. Mechanical street sweeping shall be completed as directed by the Construction Engineer and shall remove all loose material to the satisfaction of the Construction Engineer. Depending on site conditions, construction activities, and hauling methods utilized by the Contractor mechanical street sweeping may be required multiple times throughout the day with an absolute minimum that all streets are clean at the end of the workday. Areas not accessible by mechanical street sweepers may require hand scraping with shovels.

BID ITEM 21031 – INLET PROTECTION, TYPE C – COMPLETE

Type C inlet protection shall be allowed where it is not possible to install RIGID FRAME INLET PROTECTION. Installation shall be approved by the Construction Engineer, inspected weekly, and maintained or replaced when there is debris or damage.

ARTICLE 500 SEWER AND SEWER STRUCTURES GENERAL

The sanitary sewer and storm sewer designer for this project is Daniel Olivares and may be contacted at daolivares@cityofmadison.com or (608) 261-9285.

SANITARY SEWER GENERAL

8", 10", and 12" ASTM D3034 SDR-35 sewer main and lateral as called for on the plan set shall be payable under Sanitary Sewer Main (Bid Item 50301, 50302 & 50303) and Sanitary Lateral (Bid Item 50353). 8" AWWA C900 sewer main and lateral as called for on the plan set shall be payable under Sanitary Sewer Main (Bid Item 50321) and Sanitary Lateral (Bid Item 50355).

STA 13+20 to STA 13+45, and STA 14+65 to 14+90 are anticipated to be challenging to complete with trenched installation. We have included a bid item that allows contractor to decide on the method of installation. Methods include (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING)

All new sanitary sewer access structures shall include Neenah R-1550 castings with the new City of Madison casting detail (see S.D.D. 5.7.16) of the City of Madison Standard Specifications for Public Works Construction, 2021 Edition. All new sewer main connections may be factory cored and shall be included in the structure. All existing main connections shall be field cored to accommodate existing conditions and shall be compensated under Sanitary Sewer Tap (Bid Item 50791). All sewer main and/or laterals not slated for replacement that are damaged during the installation of a structure shall be replaced by the Contractor and shall be considered incidental to the project. All benches and flowlines shall have a smooth trowel finish.

Contractors shall have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal. Each sanitary lateral shall have a maximum of 4 sidewalk squares removed and replaced. No additional compensation shall be awarded beyond this amount for the replacement of a sewer lateral. If laterals called for reinstatement on the plans are to be plugged under the direction of the engineer on-site, Contractors are required to use a sonde device to confirm that the laterals are not active.

All sanitary sewer laterals on this project were located by television inspection of the main and from City records. City Engineering has dye tested and located active laterals for parcels within the project limits.

Connection of new pipes to existing structures shall utilize compression couplings where existing PVC sanitary main is installed at existing sewer access structures. Where it is not possible to connect with compression couplings, the connection shall be accommodated with a Sanitary Sewer Tap (Bid Item 50791) and Reconstruct Bench & Flowline(s) (Bid Item 50103).

It is advised that the Contractor visit the site prior to bidding to determine the type of trench protection that will be necessary for the sanitary sewer main installation.

STORM SEWER GENERAL

Storm sewer pipe work shall include removing, salvaging, replacing, newly installing and/or protecting the existing storm sewer system to install the sanitary sewer.

Reconnection of existing pipes at new or existing structures, or new pipes at new or existing structures, shall be considered to be part of the work required to construct the new structure or to construct the new

sewer pipe and shall not be rewarded with additional compensation. However, if the structure being removed is larger than the new structure, thus requiring additional pipe, the new pipe shall be paid under the appropriate bid item and the connection of the old pipe to the new pipe shall be accomplished with a concrete collar. All private storm connections to a new structure are incidental to the new structure. If a private connection is not shown on the plan, additional compensation shall be paid for as a private reconnection unless the structure is field poured.

Where a new structure is to be constructed at an existing pipe, it is expected that the Contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the Contractor for his or her convenience deems it more suitable to remove the existing pipe to a full joint, the additional pipe and concrete collar required to reconnect to the new structure shall be the Contractor's responsibility and shall not be compensated.

Precast structures are only allowed where field poured structures are not specifically called for, and no precast structures are allowed until ULO's are completed and approval of the design engineer has been received.

Salvaged castings, grates, apron end, and gates may be reinstalled where feasible at the discretion of the Engineer and/or Inspector.

BID ITEMS 90001 & 90002, in reference to the private storm connections at 1002 College Ct, are intended to provide an option for the property owner for connecting existing storm water downspouts in conjunction with the street reconstruction project.

BID ITEM 50227 – UTILITY TRENCH PATCH TYPE IV

Utility Trench Patch Type IV is required on the streets in this contract and areas that will be pulverized for work relating to underground utility excavation.

BID ITEM 50353 & 50355 - SANITARY SEWER LATERAL & SANITARY SEWER LATERAL-PRESSURE PIPE

Sanitary sewer laterals shown on the construction plans were located by City television inspection and records only.

Where the existing sanitary sewer laterals are being extended to connect to the new sanitary sewer main (being installed in a different location as the existing main), pipe plugs shall be required to plug the existing sanitary sewer main on both sides of the old lateral location. The pipe plugs shall be considered incidental to the bid price for SANITARY SEWER LATERAL. All work associated with this bid item shall comply with Article 503 of the Standard Specifications.

Per the City of Madison Standard Specifications for sanitary sewer lateral construction on street reconstruction projects, Contractors are encouraged to begin installation of sanitary lateral pipe at the proposed sewer main. If Contractor starts excavation for the lateral at the property line, it shall be at the Contractor's risk. No Utility Line Openings (ULO's) will be granted for the inability to locate the sanitary lateral at the property line. Any extra sidewalk removal will not be compensated to the Contractor looking for an existing sanitary lateral at the property line. Contractors are encouraged to have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal.

Proposed sanitary lateral locations near trees are subject to change based upon data obtained in the field and property owner involvement. Excavation near trees shall comply with Article 107.13 of the Standard Specifications. If 5 ft of separation from the tree to the excavation cannot be maintained, lateral replacement shall stop at the curb.

Each sanitary sewer lateral shall have a maximum of 4 sidewalk squares (106 sf) removed and replaced.

No additional compensation shall be awarded beyond this amount for the replacement of a sewer lateral.

BID ITEM 50356 & 50357 – RECONNECT SANITARY LATERAL & RECONNECT SANITARY LATERAL-PRESSURE PIPE

All work under this bid item shall be done in accordance with Article 503 of the City of Madison Standard Specifications for Public Works Construction, latest addition. Lateral risers shall be installed in conformance with the S.D.D. 5.3.1 and made payable as Reconnect (Bid Item 50356 & 50357) and Sanitary Sewer Lateral (Bid Item 50353 & 50355)

The first 5 feet of sewer lateral pipe/ fittings measured from the sewer main shall be considered the reconnect for all sewer lateral reconnections. Lateral connections to sewer access structures shall be paid for separately as a sanitary tap. 5' of lateral pipe is not considered incidental to the sanitary tap connection.

BID ITEM 50361 – WASTEWATER CONTROL

DESCRIPTION

Work under this bid item shall include wastewater control (bypass pumping of the sewer being replaced and making the connection to the MMSD manhole) in the amount of 2,500 gpm maximum. Work shall be completed in accordance with Article 503.3 of the City of Madison Standard Specifications for Public Works Construction Latest Edition.

BYPASS PUMPING/DIVERSION

The Contractor shall provide for the continuous flow of wastewater in order to around the sections of sewer designated for replacement and the MMSD manhole being connected to. A bypass system shall be installed by plugging the line at an existing upstream sewer access structure and pumping or directing the flow to a downstream sewer access structure. The pump(s) and bypass lines shall be of adequate capacity and size to handle the flow. Raw sewage shall be routed back to the sanitary sewerage system or hauled and disposed of as approved by MMSD.

Bypass pumping shall be limited to the regular hours of work as provided by MMSD unless necessitated by an emergency beyond the Contractor's control.

If the Contractor elects to use bypass pumping as a means of sewerage control, the methods, equipment, type of hose, etc., shall be subject to approval by the Engineer. Hoses crossing streets, driveways, parking areas, etc., are to be ramped over to prevent damage to the pipes and hoses.

All pumping discharge pipe shall be tested and demonstrated to be leak-free. All discharge pipe shall be hydrostatically tested to 60 psi prior to being placed into service. Protection shall be provided for pipes crossing traffic lanes, driveways, bike lanes, sidewalks, parking areas, etc. Selection of pumping equipment, pipe size, pipe support, and appurtenances shall be the responsibility of the Contractor and subject to approval by the Engineer.

Bypass pumps shall be sized to handle the required peak flow capacities as discussed. Redundant pumps are required for all bypass pumping set ups. Pumps shall be continuous self-priming and capable of running dry unattended.

Bypass system shall include a calibrated flow meter with a visual display showing gallons per minute. Meter shall be accurate to plus or minus 10% at the anticipated flowrates.

At each Bypass suction location, provide a float operated high water alarm at an elevation approved by the Engineer. High water float shall trip audio, visual, and telephone alarms. Telephone alarm shall call at least one phone number that will be answered 24 hours a day by a responsible person.

All pumps shall be started at least once per day to ensure proper operation and reliability. Any pump does not start or is found to be inoperable shall be serviced or replaced immediately.

Bypassing will not be permitted in the event of current or predicted wet weather. The Engineer reserves the right to determine when bypassing will or will not be allowable in wet weather.

No spillage of wastewater to adjacent streets, lawns, etc., shall be tolerated. If any such spillage should occur, all construction operations shall cease and cleanup shall commence immediately and be completed to the satisfaction of the Engineer prior to the resumption of any construction operations.

Contractor shall familiarize himself with the sanitary sewerage facilities and develop an adequate bypassing plan. A written plan shall be submitted to the Engineer and approved by MMSD prior to the start of work.

MMSD's contact regarding wastewater control on MMSD facilities is Jen Hurlebaus 222-1201 Ext: 248 jenh@madsewer.org.

METHOD OF MEASUREMENT

Wastewater Control- City shall be measured by the Lump Sum acceptably completed.

BASIS OF PAYMENT

Wastewater Control- City measured as described, which will be paid at the contract unit price, which shall be full compensation for all materials, labor, equipment, and incidentals necessary to acceptably complete the work as set forth in the description.

BID ITEM 50390 – SEWER ELECTRONIC MARKERS

With regard to the City of Madison Standard Specifications for Public Works Construction 2020 Edition Section 503.3(c), each sanitary lateral shall have a minimum of two (2) electronic markers with the City providing the Contractor with the required number of electronic markers. For sanitary laterals, which only include the installation of a wye, a marker ball shall be installed directly above the wye connection to the main.

Per the City of Madison Standard Specifications for Public Works Construction 2020 Edition Section 507.3(c), each private storm sewer lateral shall have an electronic marker ball installed at the capped end location on the private property line.

BID ITEM 50797 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL

DESCRIPTION

Where called out for on the plan or by the Engineer, barrel joints shall be sealed on sanitary sewer structures around the outside circumference of the Sewer Access Structure. Manhole joint seal shall be minimum of nine (9) inches wide. The seal shall consist of flexible rubberize seal conforming to ASTM C923 held in place with stainless steel compression bands or butyl adhesive tape conforming to ASTM C877 or heat shrink sleeve over visco-elastic adhesive sealant.

Acceptable products and manufacturers are the following:

1. Mac Wrap, Mar Mac Manufacturing Company, Inc.
2. NPC External Joint Seal, NPC, Inc.
3. EZ-Wrap, Press-Seal Gasket Corporation

4. Riser-Wrap, Pipeline Seal and Insulator

Alternate manufacturers and products not listed above are subject to pre-approval by the Engineer

METHOD OF MEASUREMENT

External Sanitary Sewer Access Structure Joint Seal shall be measured separately as each for each sewer structure wrapped.

BASIS OF PAYMENT

External Sanitary Sewer Structure Joint Seal will be paid for at the contract price, and is considered full compensation for all work as listed above.

BID ITEM 50801 – UTILITY LINE OPENING (ULO)

The work under this item shall be completed in accordance with Article 508 of the Standard Specifications for Public Works Construction. It is the discretion of the Contractor to locate utilities by either a trench excavation or by a pothole technique. However, the Contractor shall not be compensated more than once for multiple utilities located within a maximum distance of five (5) feet apart.

BID ITEM 90001 - PRIVATE STORM DRAINPIPE CONNECTION – TYPE A

DESCRIPTION

The parcel 1002 College Ct has eleven (11) downspout storm connections discharging toward the public College Ct right of way. The property owner, or property management will mark the locations where they currently discharge. Type A connection includes coring the top of the 12x5 box culvert (RCBC) for each extended downspout, extending and connection the PVC downspout with a boot. The area must be restored with topsoil and seeding. Mark each connection with an electronic marker ball.

Please contact Trav Hardy, Forward Management, Inc, (608) 285-8679, travh@rentfmi.com with questions in regard to existing downspout connections.

METHOD OF MEASUREMENT

PRIVATE STORM DRAINPIPE CONNECTION – TYPE A shall be measured by EACH, where each coring, boot, connection, additional PVC pipe & elbows, if necessary, and restoration is completed to the satisfaction of the Construction Inspector.

BASIS OF PAYMENT

PRIVATE STORM DRAINPIPE CONNECTION – TYPE shall be measured as described above and shall be paid for at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90002 - PRIVATE STORM DRAINPIPE CONNECTION – TYPE B

DESCRIPTION

The parcel 1002 College Ct has eleven (11) downspout storm connections discharging toward the public College Ct right of way. The property owner, or property management will mark the locations where they currently discharge. Type B connection includes coring the top of the 12x5 box culvert (RCBC) for an 8-inch PVC pipe header connection with cleanouts on each end. Install an 8-inch PVC header above the 12x5 RCBC, as flush as possible, connect extended downspouts with wye. Removal and replacement of sections of private paths may be required, and will be considered incidental to the installation of Type B

private storm connection. The area must be restored with topsoil and seeding. Mark each connection with an electronic marker ball.

Please contact Trav Hardy, Forward Management, Inc, (608) 285-8679, travh@rentfmi.com with questions in regard to existing downspout connections.

METHOD OF MEASUREMENT

PRIVATE STORM DRAINPIPE CONNECTION – TYPE B shall be measured by LUMP SUM, for all work related to installation and restoration including coring, boot, connection, additional PVC pipe, wyes & cleanouts, concrete removal & replacement, and restoration is completed to the satisfaction of the Construction Inspector.

BASIS OF PAYMENT

PRIVATE STORM DRAINPIPE CONNECTION – TYPE shall be measured as described above and shall be paid for at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90003 – INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING)

DESCRIPTION

Work under this item shall include the installation and material cost to install an 8" DIAMETER SEWER MAIN at proposed slopes. The locations for this bid item are the following: STA 13+20 to STA 13+45, and STA 14+65 to 14+90. Other locations shall be completed by open cut sewer replacement.

Sewer main installed under this BID ITEM is included with this bid item.

Options for installing the pipe in this location shall include PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING. Regardless of the chosen method, the bid item shall include all equipment, materials, and incidentals required to install the pipe in accord with the following specifications.

PUSH METHOD & BORE & JACK - METHODS

The sanitary sewer casing installed by with this bid item shall be a suitable sized "casing pipe". The casing pipe must be sized by the contractor in order for the inner sanitary sewer pipe to properly fit within the casing pipe. All costs for furnishing and installing the steel casing pipe, casing spacers, access and receiving pits, and all work necessary to push the casing pipe shall be included.

Included in this item is the excavation and backfilling of the receiving pits. Disposal of the excess material shall be by the Contractor off site at a location to be determined by the Contractor. Backfilled material shall meet City of Madison Standard Specifications for road construction- Latest Edition. Necessary work and materials to adequately secure the pits with full cover or security fencing shall be incidental to this bid item.

The Contractor is informed that the casing pipe specified shall be at a minimum of 6" larger than the outside diameter of the carrier pipe. The Contractor is responsible to complete installation of a casing pipe under this item and should he/she deem it necessary to utilize a larger diameter casing pipe that shall be the Contractor's option and is included in this item.

MATERIALS

8" Diameter Sewer in Casing- Push Method/ Bore and Jack shall include all materials necessary to install the 8" sanitary sewer pipe in accord with the requirements above. A casing pipe included with this item shall be in accord with the following:

- ASTM specification A139 Grade B or AWWA specification C200
- Outside diameter as specified by the Contractor
- Not coated or cathodically protected, no hydrostatic testing required
- 0.3125" (5/16") minimum thickness
- Specified minimum yield strength, SMYS, of at least 35,000 psi
- New and unused pipe
- Straight and round pipe
- Beveled ends for butt welding

The Contractor shall submit the following to the Engineer for approval prior to ordering of materials and the start of construction:

- Certificate of compliance for the steel casing pipe
- Materials for sand or pea gravel
- Materials for casing spacers and distances between spacers
- Materials and methods for bulk-heading the casing ends

CONSTRUCTION METHODS- PUSH METHOD

Contractor shall install by pushing the casing into place at the desired grade with a backhoe. Soil caught in the casing while pushing the casing into place will need to be removed by the contractor. Water is permitted for removal of the soil from the inside of the casing pipe. Block Spacers shall be placed on the 8" diameter sanitary sewer carrier pipe to adjust the pipe to the proposed grade. The blocks shall be set so that the pipe does not touch the casing. Pipe joints shall be made outside of the casing. After the sanitary sewer is in place at the proper slope, the voids between the sewer main and the casing pipe shall be filled with blown sand or pea gravel into the casing to the spring line of the pipe to provide bedding under the pipe.

The untrenched construction shall be performed by Push Method. Water jacking for excavation of the soil is not allowed. The use of water to facilitate removal of spoil within the pipe after the casing pipe is pushed into place is permitted.

Connection of adjacent lengths of steel pipe shall be done by continuous, circumferential, field butt welding in accordance with AWWA C206. The connection shall result in a straight and true casing with a watertight seal.

The carrier sewer pipe shall be installed on line and grade through the casing pipe. Install approved casing spacers at the approved distances. Fill the annular space between the casing and carrier pipe with the approved material (sand or pea gravel).

Excavation pits shall adjacent to the tunnel shall be backfilled with either pea gravel or slurry backfill after the installation of the sewer and casing pipe is complete.

CONSTRUCTION METHODS- BORE AND JACK

Prior to installing pipe in the casing, a set of four wood blocks shall be strapped to both ends of the pipe five feet (5') from each end. The blocks shall be set so that the pipe does not touch the casing. Pipe joints shall be made outside of the casing. Sand or Pea gravel shall be washed or blown into the casing to the spring line of the pipe to provide bedding under the pipe.

The untrenched construction shall be performed by dry auger boring and jacking. Water jacking for excavation of the soil is not allowed. The use of water to facilitate removal of spoil is permitted.

For the casing installation, the bore hole diameter shall be essentially the same as the outside diameter of the pipe. In soft, unstable soil, the auger shall be inside the casing, but no undersized, so as not to create a void between the casing and the soil. If voids should develop or if the bore hole diameter is greater than the outside diameter of the pipe by more than approximately 1 inch, the voids shall be pressure grouted.

Connection of adjacent lengths of steel pipe shall be done by continuous, circumferential, field butt welding in accordance with AWWA C206. The connection shall result in a straight and true casing with a watertight seal.

The conduit pipe shall be installed on line and grade through the casing pipe. Install approved casing spacers at the approved distances. Fill the annular space between the casing and carrier pipe with the approved material (sand or pea gravel).

Take care to ensure that developed thrust pressures do not disturb existing utilities in or around the bore pit area.

METHOD OF MEASUREMENT

INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING) shall be measured by the linear foot, measured along the longitudinal axis from center of structure to center of structure. Payment will only be granted for sewer that has been installed in accordance with the plans. Back- pitched pipe will not be granted payment.

BASIS OF PAYMENT

INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, OR OPEN CUT TRENCH WITH TUNNELING) shall be measured as described above and shall be paid for at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90004 - SANITARY SEWER STORM BOX CROSSING

DESCRIPTION

Work under this bid item shall include all work necessary to install a 10" sanitary sewer inside of a steel casing across the base slab of the existing 13.5' x 5' box culvert. The base slab of the box shall be sawcut removed in order to install the sewer inside of a casing as shown on the drawings.

10" sanitary sewer main installed within the box crossing is included with this BID ITEM.

Storm water control and dewatering for installation shall be paid under BID ITEM 90005 STORM WATER CONTROL.

MATERIALS

CASING

- ASTM specification A139 Grade B or AWWA specification C200
- Outside diameter as specified by the Contractor
- Not coated or cathodically protected, no hydrostatic testing required
- 0.3125" (5/16") minimum thickness
- Specified minimum yield strength, SMYS, of at least 35,000 psi
- New and unused pipe

- Straight and round pipe
- Beveled ends for butt welding

The Contractor shall submit the following to the Engineer for approval prior to ordering of materials and the start of construction:

- Certificate of compliance for the steel casing pipe
- Materials for sand or pea gravel
- Materials for casing spacers and distances between spacers
- Materials and methods for bulk-heading the casing ends

CONCRETE AND REINFORCING STEEL

Concrete shall be in accordance with Article 301 - Concrete and Concrete Materials. Concrete shall have a minimum compressive strength of 4,000 PSI at 28 days.

Reinforcing steel shall be in accordance with Article 301.3 - Reinforcing Steel. Epoxy coated reinforcement is not required for the box culvert repairs.

Adhesive anchors shall be HIT HY 200 by Hilti, Inc., Red Head C6+ or Red Head A7+ by ITW, Pure 110+ or AC200+ by DeWalt, Set-XP by Simpson Strong-Tie Anchor Systems, or approved equal.

CONSTRUCTION METHODS

CASING WORK

Block Spacers shall be placed on the 10" diameter sanitary sewer carrier pipe to adjust the pipe to the proposed grade. The blocks shall be set so that the pipe does not touch the casing. Pipe joints shall be made outside of the casing. After the sanitary sewer is in place at the proper slope, the voids between the sewer main and the casing pipe shall be filled with blown sand or pea gravel into the casing to the spring line of the pipe to provide bedding under the pipe.

BOX MODIFICATIONS

Dewater area of pipe crossing and remove base slab of box culvert as necessary for installation of pipe crossing as shown on the drawings. Place type HR filter fabric below clear bedding stone. Install casing and 10" sanitary sewer pipe. Provide bar steel reinforcing, adhesive anchors and concrete base slab as shown on the drawings.

METHOD OF MEASUREMENT

SANITARY SEWER STORM BOX CROSSING shall be measured by the LUMP SUM.

BASIS OF PAYMENT

SANITARY SEWER STORM BOX CROSSING shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description.

BID ITEM 90005 – STORM WATER CONTROL

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to control dry and wet weather flow in the storm sewer system during the reconstruction project. The Contractor shall take all necessary steps to protect the new and existing storm mains from damage during construction and to accommodate the existing flows during construction. This item includes all storm control necessary for all aspects of the construction.

Dewatering and storm water control is anticipated with the box culvert top slab access opening at the N Brooks St and College Ct intersection and with the Sanitary Sewer Storm Box Crossing.

It may be necessary to provide access to the existing storm box to install dewatering measures. Location of the top slab access opening, if required, shall be determined by Contractor. If top slab access hole is used, reconstruct the top slab as shown on the detail drawings (see sheet D-3). Reconstruction of top slab shall be included with this BID ITEM.

It is advised that the Contractor visit the site prior to bidding to determine then type of storm water controls that will be necessary for the sanitary sewer main installation.

METHOD OF MEASUREMENT

STORM WATER CONTROL shall be measured by lump sum for all work necessary throughout construction to control storm water flows.

BASIS OF PAYMENT

STORM WATER CONTROL shall be considered full compensation at the contract price for all work, materials, and incidentals to complete the work as described above.

BID ITEM 90006 - RCBC TOP SLAB OPENING

DESCRIPTION

Work under this bid item shall include all work necessary to install a new opening with casting on the top slab of an existing 13.5' x 5' reinforced concrete box culvert. Work shall be completed in accordance with standard specification section 501.6(b) except as noted herein and as shown on the structural details in the drawings.

RCBC top slab opening shall provide access for sanitary sewer main at the storm box crossing.

Storm water control and dewatering, if required for installation shall be paid under BID ITEM 90005 STORM WATER CONTROL.

MATERIALS

Concrete shall be in accordance with Article 301 - Concrete and Concrete Materials. Concrete shall have a minimum compressive strength of 4,000 PSI at 28 days.

Reinforcing steel shall be in accordance with Article 301.3 - Reinforcing Steel. Epoxy coated reinforcement is not required for the box culvert top slab repairs.

Adhesive anchors shall be HIT HY 200 by Hilti, Inc., Red Head C6+ or Red Head A7+ by ITW, Pure 110+ or AC200+ by DeWalt, Set-XP by Simpson Strong-Tie Anchor Systems, or approved equal.

Procurement and installation of casting and adjustment rings is included under this bid item. Install one Neenah R-1050 frame with logo lid 1550-0054, see S.D.D. 5.7.16.

CONSTRUCTION

At locations shown on the drawings, reinforcing bars shall be provided in existing concrete by drilling holes, injecting epoxy adhesive, and inserting the reinforcing bar. All existing surfaces to receive adhesive anchors, including the entire area in contact with the new concrete, shall be cleaned and roughened. Installation procedures shall be in accordance with the manufacturer's printed installation instructions including method for cleaning holes prior to installing adhesive.

Reinforcing steel in existing structure shall be located prior to drilling holes and anchors shall be located to clear reinforcing steel.

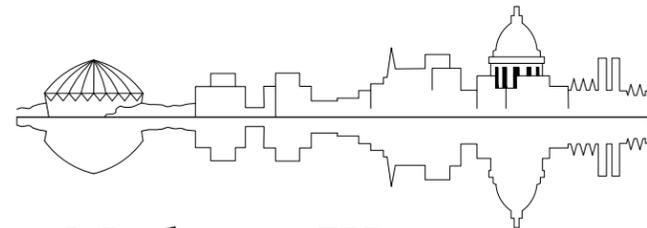
Submit documentation that all Contractor's personnel or subcontractors who install adhesive anchors have been trained by the manufacturer's rep prior to the anchor installation.

METHOD OF MEASUREMENT

RCBC TOP SLAB OPENING shall be measured by the LUMP SUM.

BASIS OF PAYMENT

RCBC TOP SLAB OPENING shall be measured as described above and shall be paid at the contract price, which shall be full compensation for all work, materials, labor, and incidentals required to complete the work set forth in the description and as shown in the drawings.



Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

INDEX OF SHEETS

SHEET NO.	TITLE
1	
D1-D4	DETAILS
EC1	EROSION CONTROL
P1-P6	PLAN & PROFILE
U1-U6	SEWER PLAN & PROFILES
U7-U8	SEWER SCHEDULES

NORTH BROOKS STREET, FAHRENBROOK COURT AND COLLEGE COURT RESURFACING ASSESSMENT DISTRICT-2021

CITY PROJECT NO. 13180
CONTRACT NO. 8576

CONVENTIONAL SIGNS	
FIELD VERIFY ALL UTILITY LOCATIONS	
GAS	— G —
STORM SEWER	— ST —
SANITARY SEWER	— SAN —
WATER	— W —
BURIED ELECTRIC	— E —
OVERHEAD ELECTRIC	— OH —
POWER POLE	
ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD	
COMBUSTIBLE FLUIDS	



PROJECT
LOCATION

PUBLIC IMPROVEMENT PROJECT
APPROVED

APPROVED DATE: MARCH 16, 2021

BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

Greg Fries

Apr 2, 2021

City Engineer

Date

STREET
DESIGNED BY:



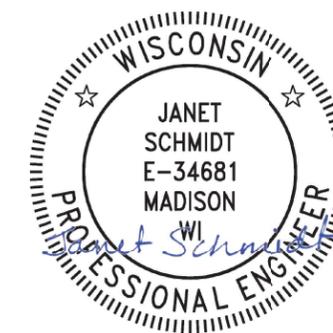
Apr 2, 2021

SANITARY SEWER
DESIGNED BY:



Apr 2, 2021

STORM SEWER
DESIGNED BY:



Apr 2, 2021

NOTES:
ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADE OF 0.50% TOWARD STORM SEWER INLETS.

EARTH WORK SUMMARY:

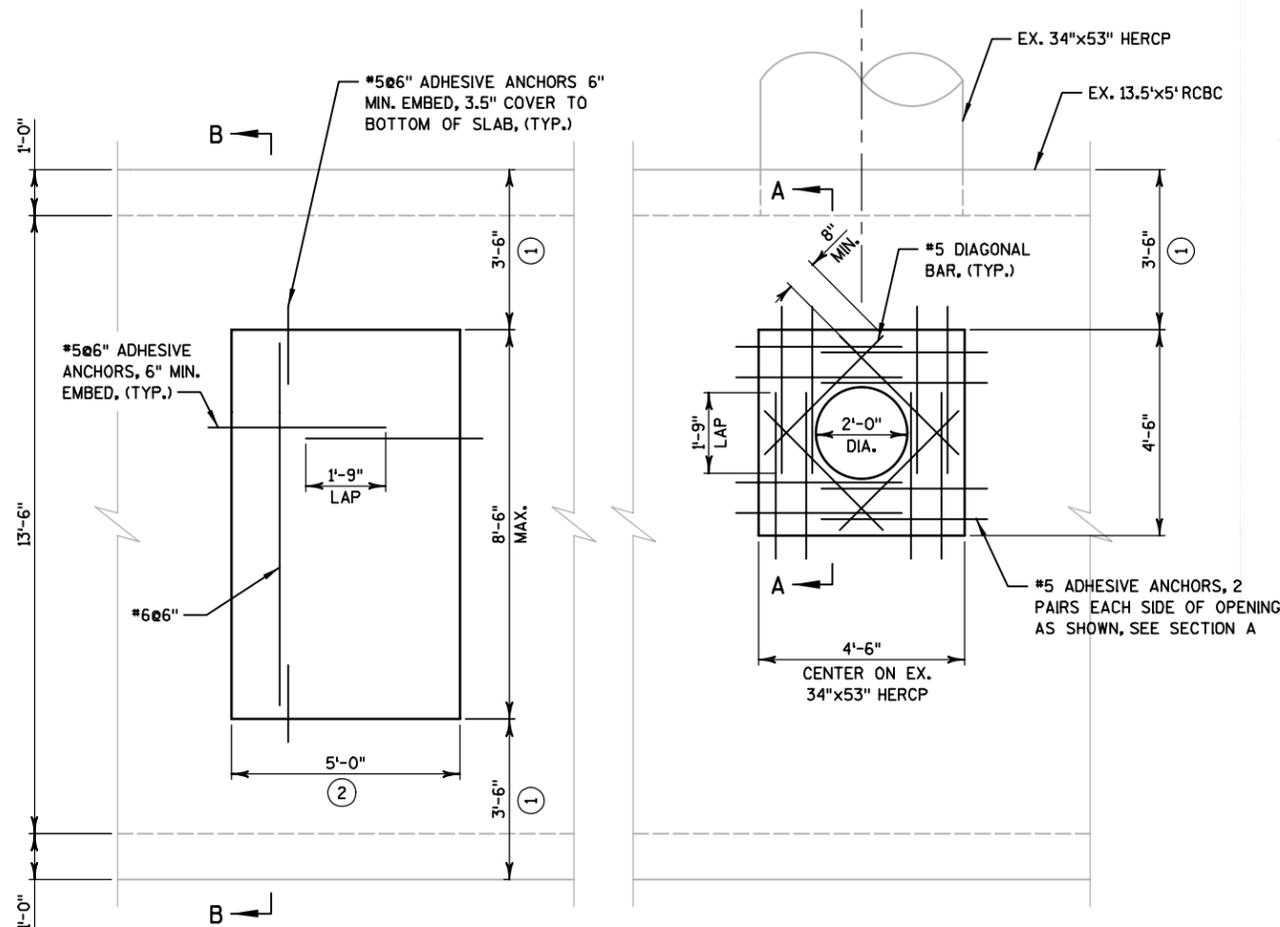
ESTIMATED UNDISTRIBUTED UNDERCUT = 405.0 C.Y.
TOTAL UNCLASSIFIED EXCAVATION CUT = 405.0 C.Y.

PLOT SCALE: 1" = 1'

PLOT NAME: ---

REV. DATE: 4/1/2021 8:57 AM

ORIGINATOR: CITY_OF_MADISON



TOP SLAB AT RCBC ACCESS HOLE

TOP SLAB AT NEW CASTING

NOTE:
RCBC ACCESS HOLE IS NOT REQUIRED. DETAIL IS PROVIDED FOR USE AT CONTRACTOR'S OPTION. SIZE AND LOCATION OF ACCESS TO BE DETERMINED BY CONTRACTOR.

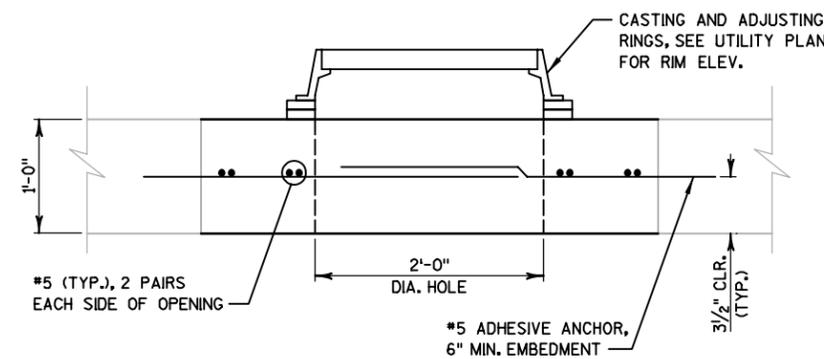


GENERAL NOTES

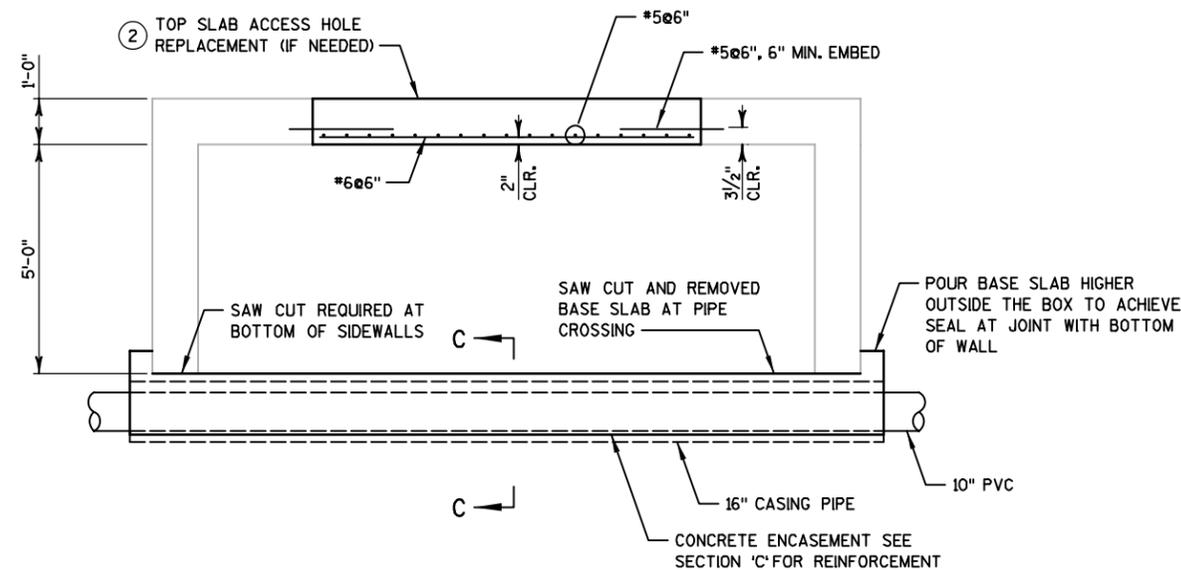
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE APPLICABLE SPECIAL PROVISIONS.
2. REFER TO UTILITY PLANS FOR PIPE REQUIREMENTS AND ELEVATIONS.
3. CONCRETE FOR BOTTOM SLAB REPAIR SHALL NOT BE PLACED UNDER WATER. DE-WATER THE WORK AREA AS REQUIRED AND MAINTAIN DEWATERED CONDITION FOR AT LEAST 6 HOURS AFTER COMPLETION OF CONCRETE POUR.
4. LIMITS OF CONCRETE REMOVAL SHALL BE SAW CUT. DO NOT REMOVE CONCRETE BEYOND THE LIMITS SHOWN ON THIS SHEET WITHOUT PRIOR APPROVAL FROM ENGINEER.
5. CONCRETE FOR THE STRUCTURES SHOWN ON THIS SHEET SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSL.
6. STRUCTURE MODIFICATIONS SHOWN ON THIS SHEET HAVE BEEN DESIGNED BY STRAND ASSOCIATES, INC. DESIGN CONTACT IS BRETT OFTEDAHL, 608-251-4843.

KEY NOTES

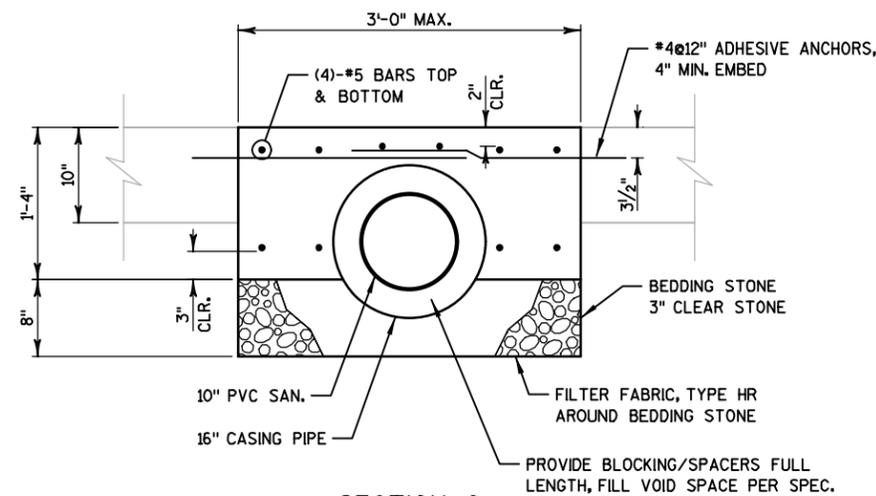
- ① THE OUTER 3'-6" OF THE TOP SLAB SHALL NOT BE REMOVED.
- ② ACCESS HOLE DIMENSIONS SHALL BE DETERMINED BY CONTRACTOR FOLLOWING THE CRITERIA PROVIDED ON THIS SHEET. CONTRACTOR SHALL SUBMIT REQUESTS FOR A DIFFERENT SIZE OF OPENING TO ENGINEER FOR REVIEW.



SECTION A



SECTION B



SECTION C

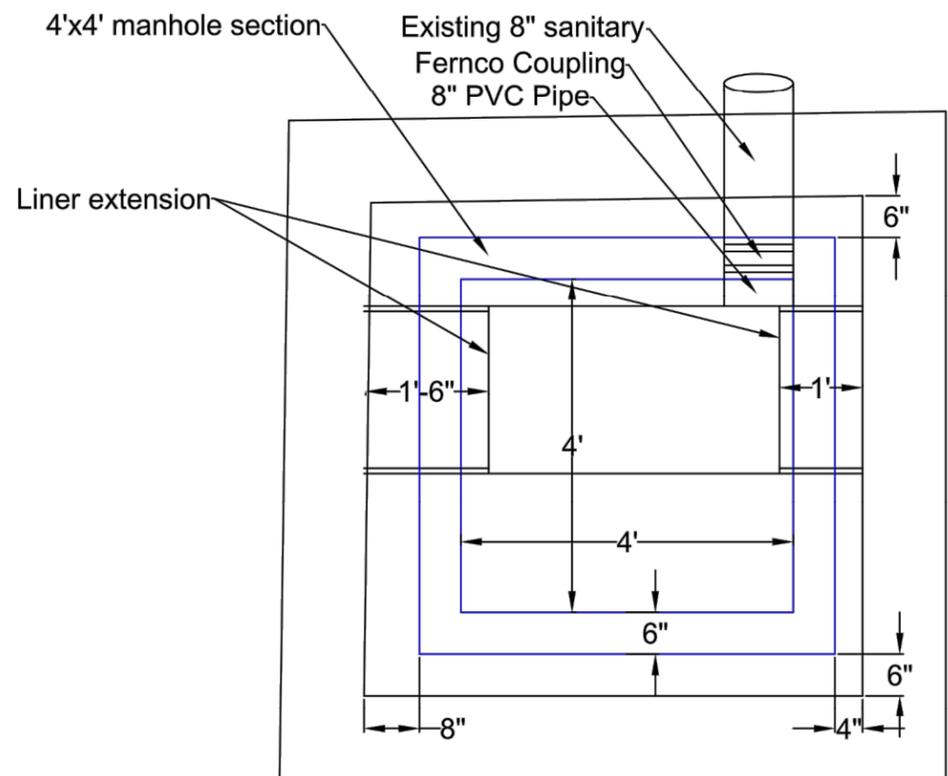
NO.	REVISIONS	DATE
1	ISSUED WITH ADDENDUM NO. 2	4/27/21

REINFORCED CONCRETE
BOX CULVERT MODIFICATIONS
N. BROOKS ST., FAHRENBERG CT. & COLLEGE CT.
RES ASMT DIST-2021 - CONTRACT NO: 8576
CITY OF MADISON
DANE COUNTY

JOB NO.
1020.127
PROJECT MGR.
BRETT O.

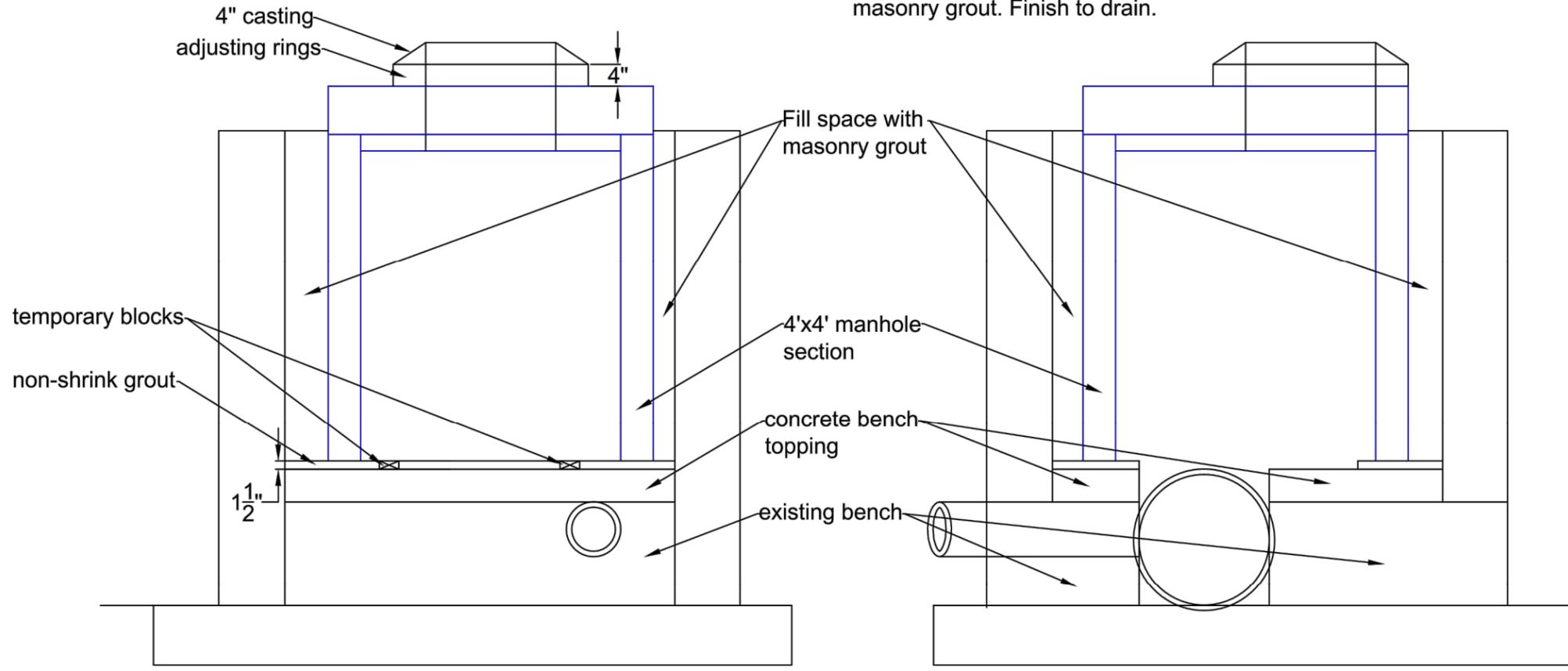


SHEET
D-3

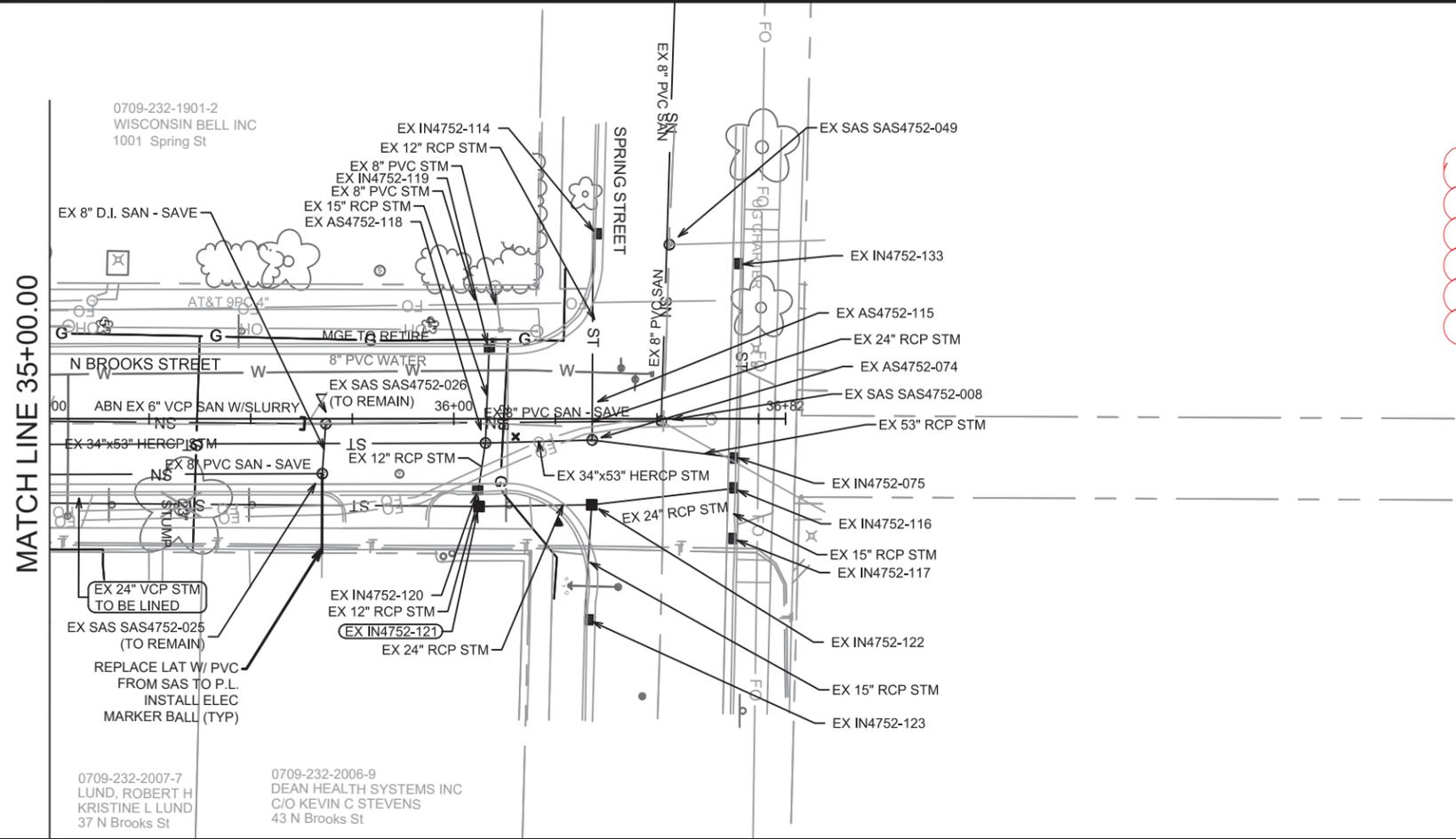


AS-BUILT PROVIDED
BY MMSD FOR
REFERENCE ONLY

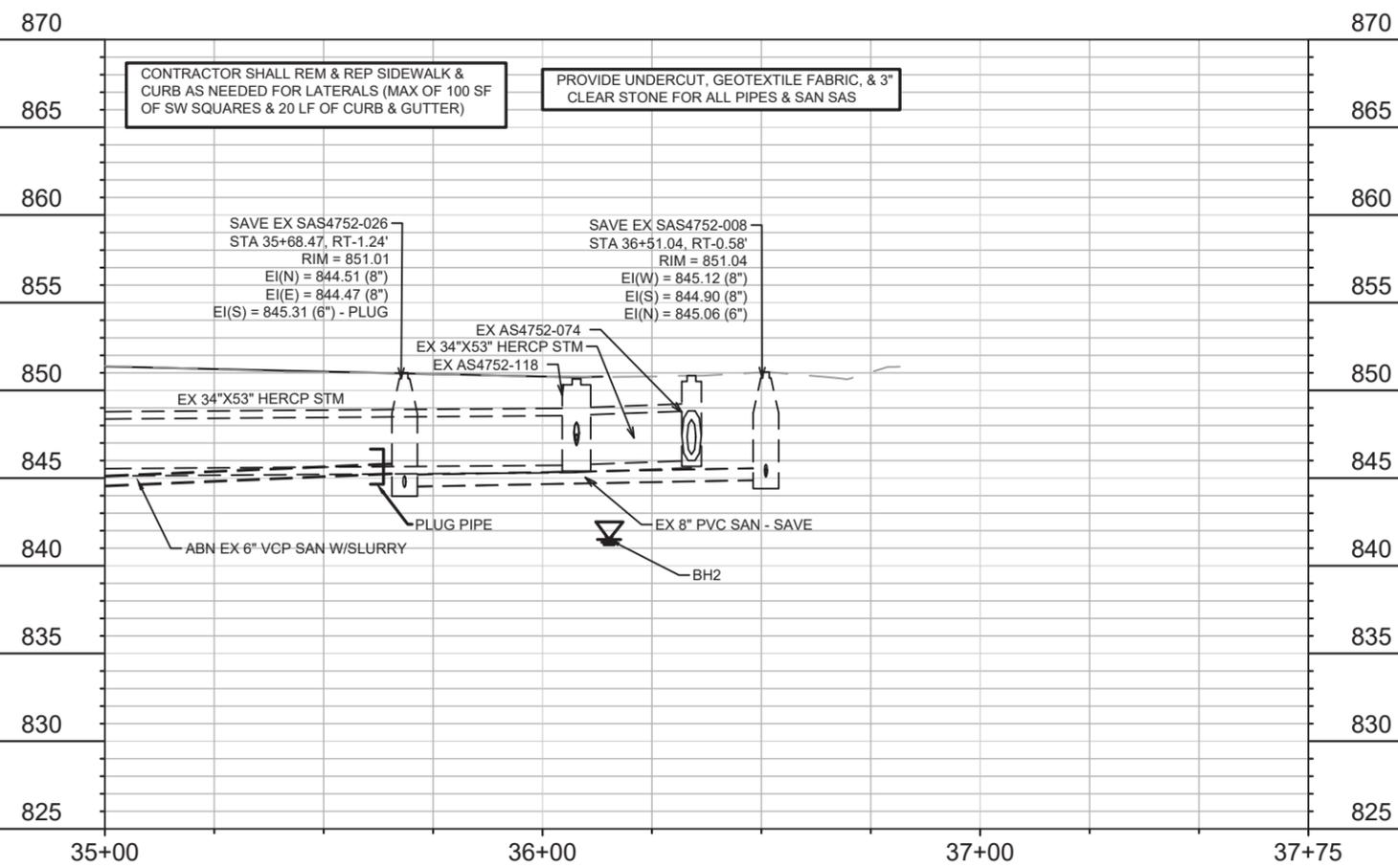
Manhole MH02-007 Repairs
 Extend liner into manhole to limits shown. Power wash existing bench. Remove loose concrete.
 Extend existing 8" sanitary with standard fernco and PVC pipe. Finish flush to channel wall.
 Form for new bench topping flush to channel walls. Place 4000 psi concrete and finish level to top of liner.
 Set 4'x4' manhole section with temporary blocks on manhole bench. Position as shown.
 Form and place 1-1/2" flowable non-shrink grout at manhole section base as shown. After grout has set, remove temporary blocks and grout pack voids.
 Fill annular space between new manhole section walls and old manhole walls with masonry grout. Finish to drain.



13180	13180	ADDENDUM 2	4/27/21	DAO	BY	D-4
EXISTING MMSD MH02-007 DETAIL - FOR REFERENCE ONLY	13180	REVISION	DATE	SCALE	DESIGNED BY	13180
N BROOKS ST, FAHRENBERG BROOK CT & COLLEGE CT RES ASMNT DIST-2021	MADISON, WI	13180	8576	CONTRACT NO:		
M:\DESIGN\Projects\13180\CAD\sewers\D-4 MMSD.dwg						
						
13180						
D-4						



ALL PROPOSED
 SANITARY HAS BEEN
 CHANGED FOR
 ADDENDUM 2



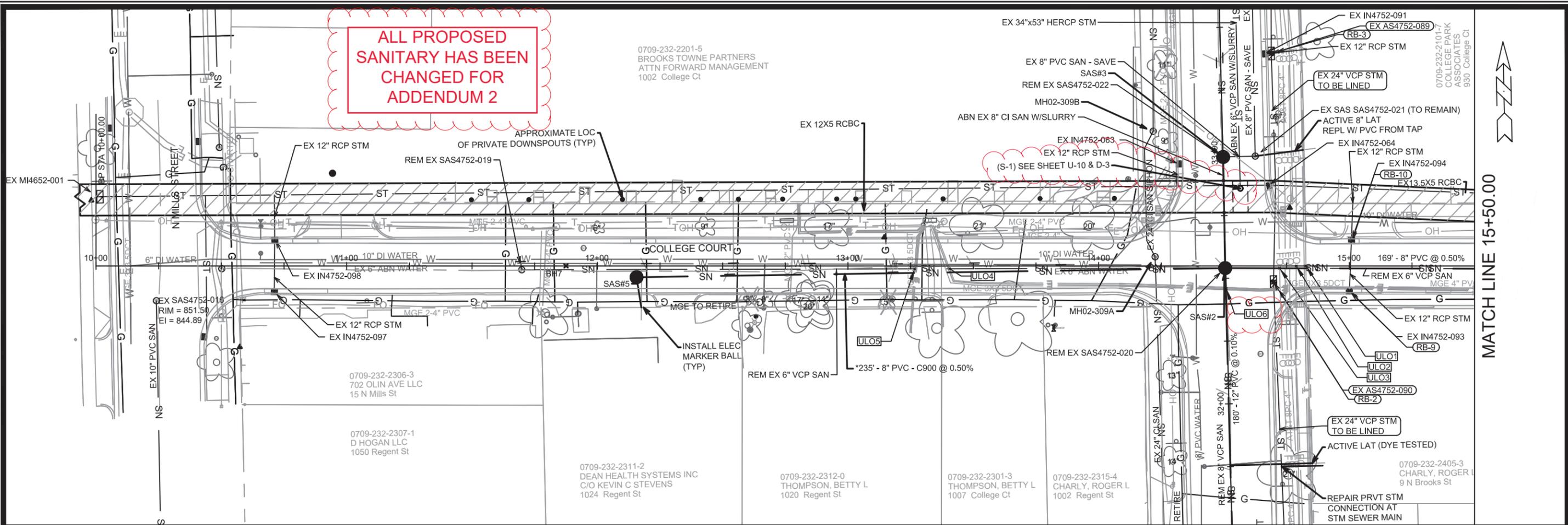
CONTRACTOR SHALL REM & REP SIDEWALK & CURB AS NEEDED FOR LATERALS (MAX OF 100 SF OF SW SQUARES & 20 LF OF CURB & GUTTER)

PROVIDE UNDERCUT, GEOTEXTILE FABRIC, & 3" CLEAR STONE FOR ALL PIPES & SAN SAS

13180	ADDENDUM 2	DATE	BY	U-2
13180	REVISION	Date: 4/27/2021 11:28 AM	Scale: #####	
13180 SEWER UTILITY PLAN & PROFILE - N BROOKS ST N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021 MADISON, WI CONTRACT NO.: 8576 M:\DESIGN\Projects\13180\CAD\SEWERS\13180SEWERS_LAYOUT.dwg				
13180 U-2				

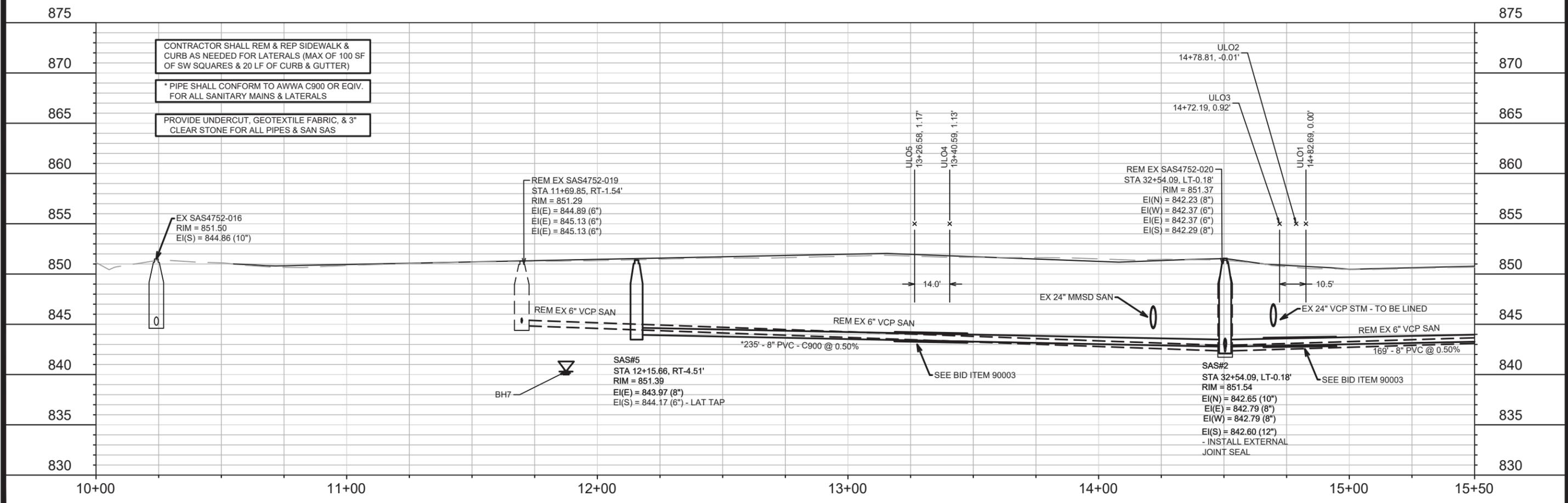
**ALL PROPOSED
SANITARY HAS BEEN
CHANGED FOR
ADDENDUM 2**

0709-232-2201-5
BROOKS TOWNE PARTNERS
ATTN FORWARD MANAGEMENT
1002 College Ct



MATCH LINE 15+50.00

- CONTRACTOR SHALL REM & REP SIDEWALK & CURB AS NEEDED FOR LATERALS (MAX OF 100 SF OF SW SQUARES & 20 LF OF CURB & GUTTER)
- * PIPE SHALL CONFORM TO AWWA C900 OR EQUIV. FOR ALL SANITARY MAINS & LATERALS
- PROVIDE UNDERCUT, GEOTEXTILE FABRIC, & 3" CLEAR STONE FOR ALL PIPES & SAN SAS



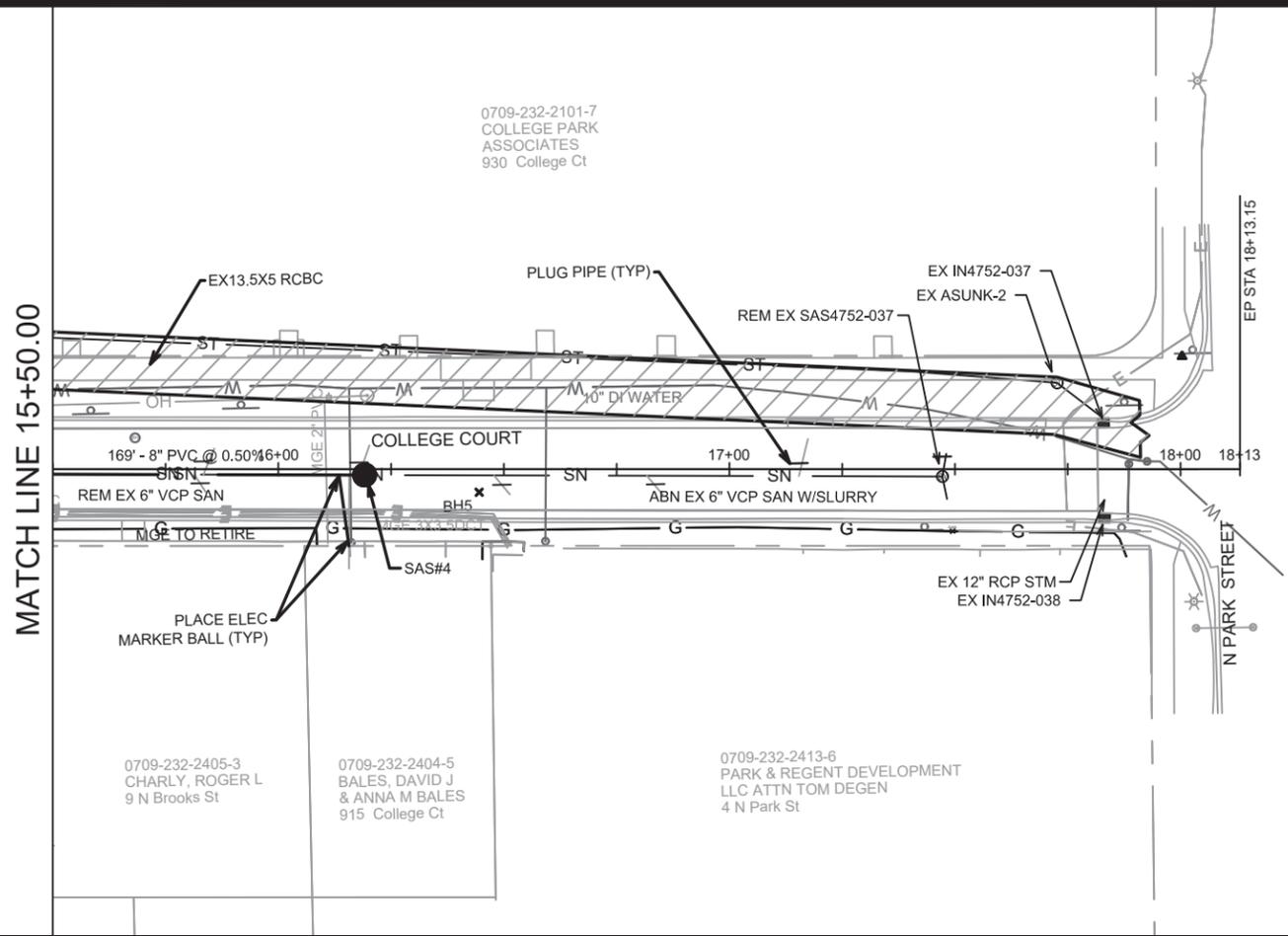
MARK	DATE	BY
ADDENDUM 2	4/26/21	DAO
REVISION	DATE	BY
13180	4/27/2021 9:13 AM	Scale: #####

13180
MADISON, WI
CONTRACT NO: 8576

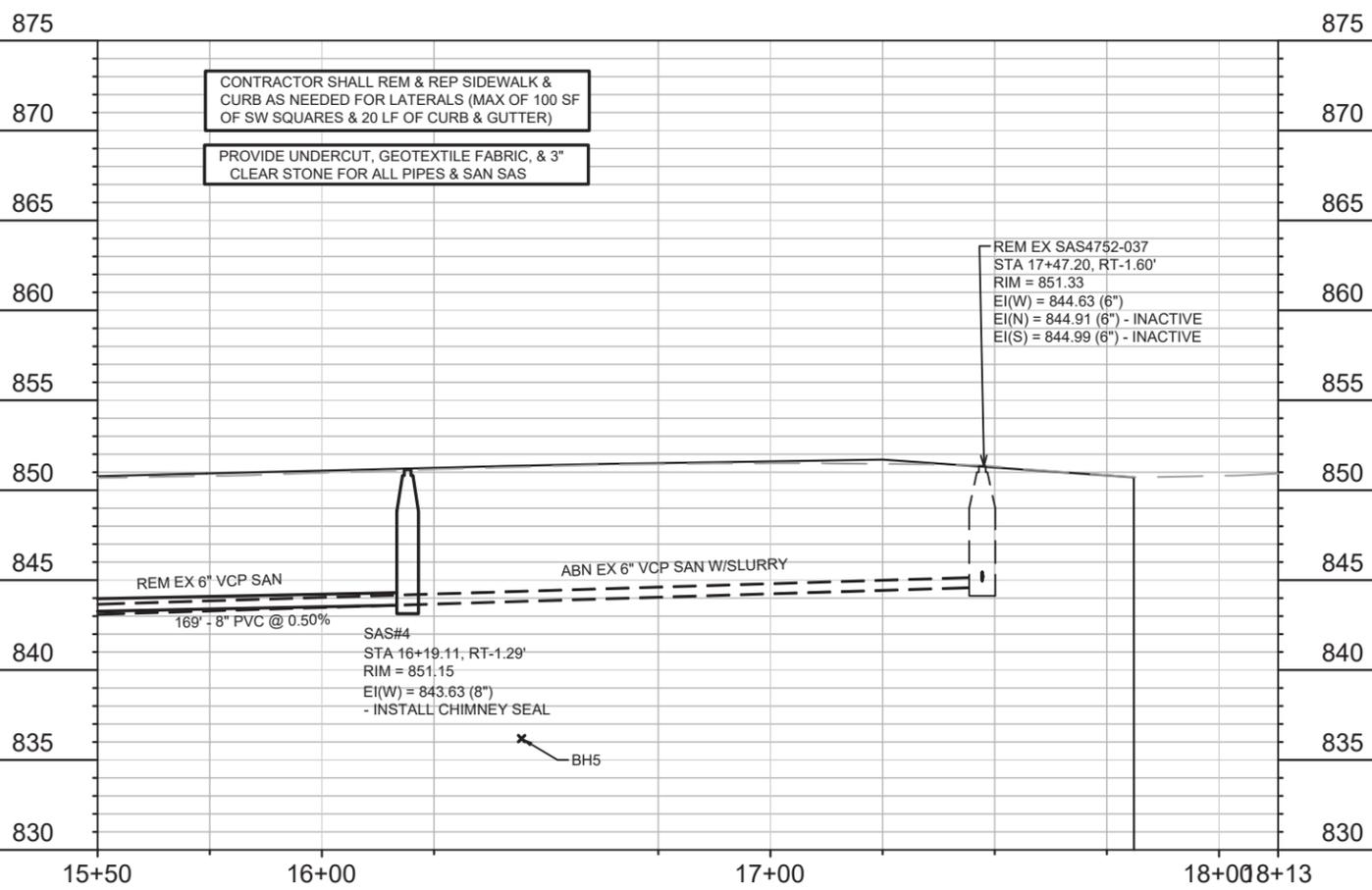
SEWER UTILITY PLAN & PROFILE - COLLEGE CT
N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021
U-3



13180
U-3

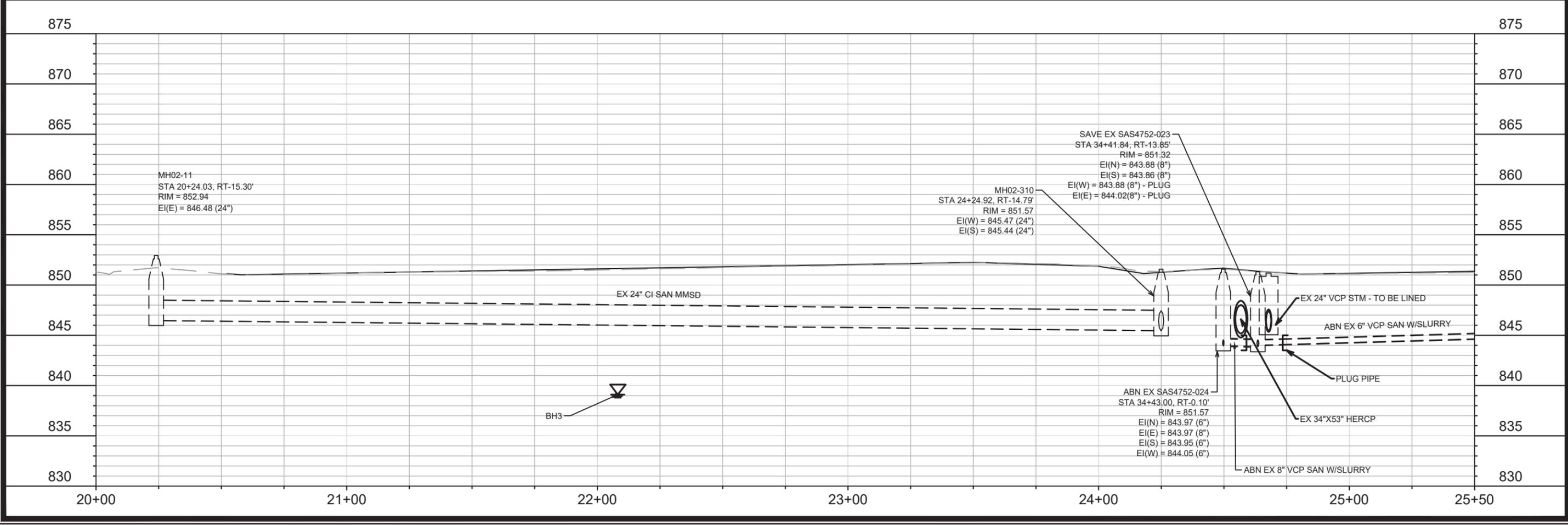
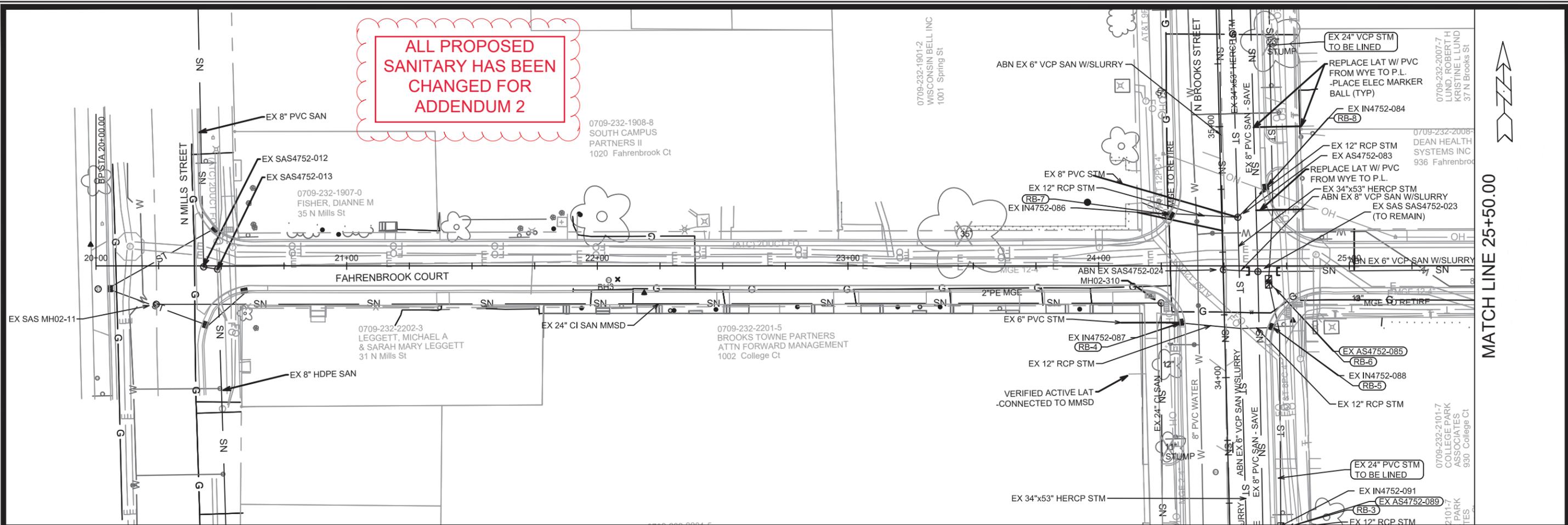


ALL PROPOSED
SANITARY HAS BEEN
CHANGED FOR
ADDENDUM 2



13180	13180	13180	13180	13180
U-4	U-4	U-4	U-4	U-4
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**ALL PROPOSED
SANITARY HAS BEEN
CHANGED FOR
ADDENDUM 2**



MATCH LINE 25+50.00

13180	ADDENDUM 2	DATE	BY	U-5
13180	REVISION	Date: 4/26/2021 3:54 PM		
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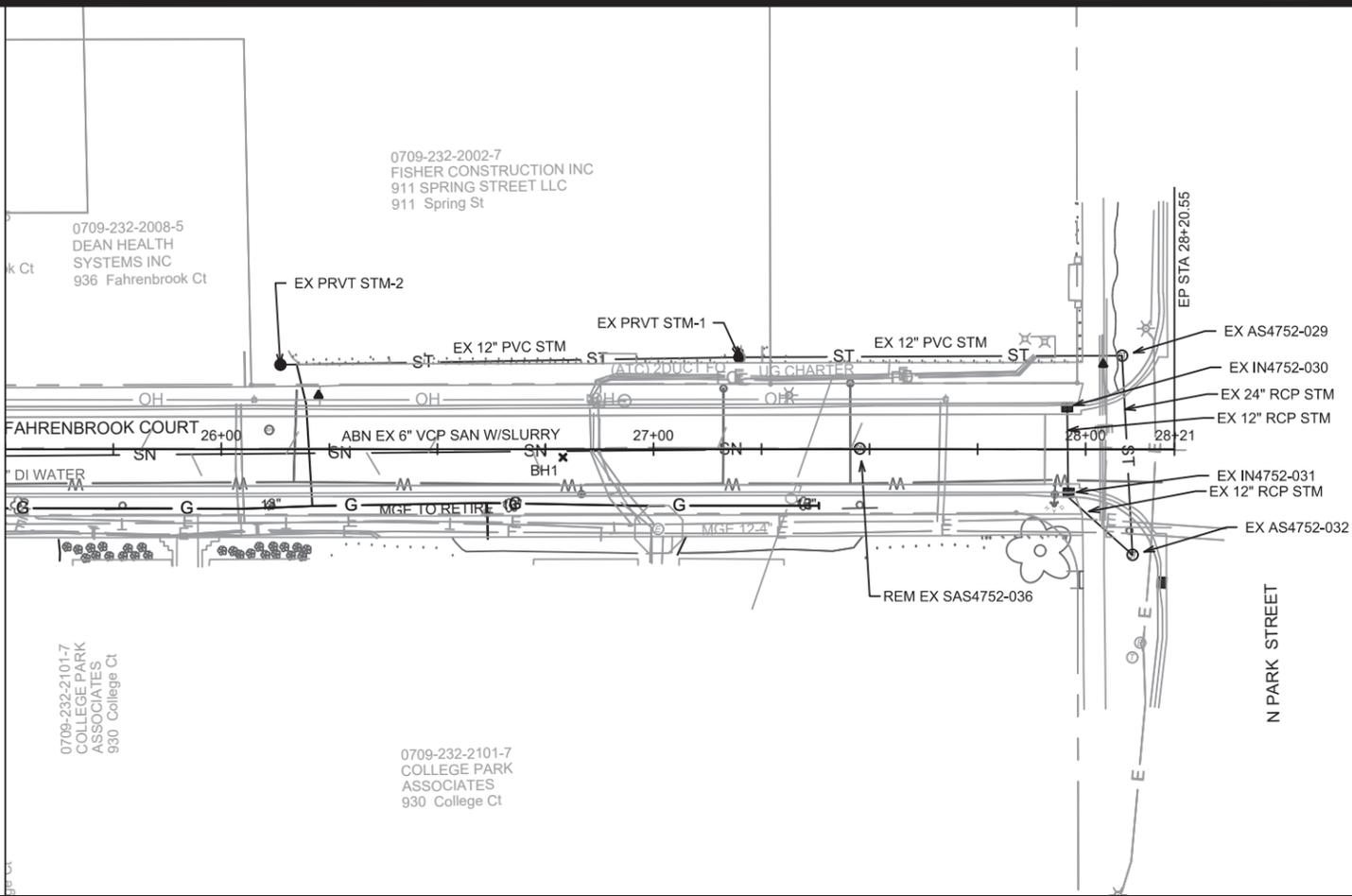
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CONTRACT NO: 8576

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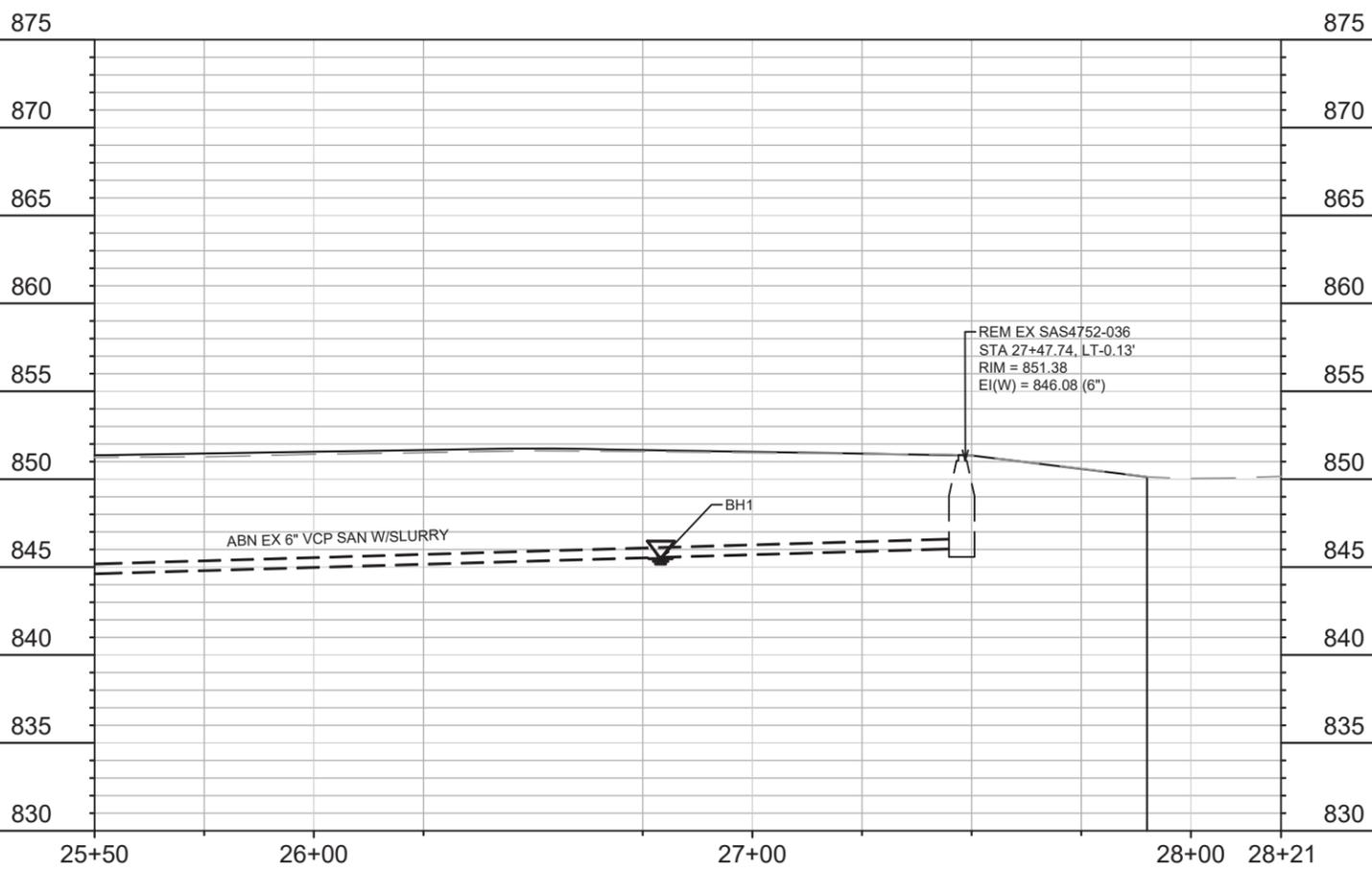
SEWER UTILITY PLAN & PROFILE - FAHRENBROOK CT
N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021

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MATCH LINE 25+50.00



ALL PROPOSED
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ADDENDUM 2



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SEWER UTILITY PLAN & PROFILE - FAHRENBROOK CT
N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021
MADISON, WI
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SANITARY SEWER SCHEDULE

* ADDENDUM 2 - DAO 4/26/21

N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021 PROJECT NO. 12956	SHEET NO. U-7
SANITARY SEWER SCHEDULE	
CITY OF MADISON	

U-7

PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
<u>N BROOKS ST</u>						
SAS#1	30+73.77	RT-0.18	850.49	842.37	8.12	(1)(2)
SAS#2	32+54.09	LT-0.18	851.54	842.60	8.94	(2)
SAS#3	32+98.36	RT-0.10	851.22	842.69	8.53	(1)(2)
<u>COLLEGE CT</u>						
* SAS#4	16+19.11	RT-1.29	851.15	843.63	7.52	(1)
* SAS#5	12+15.66	RT-4.51	851.39	843.97	7.42	

PROPOSED SANITARY PIPES

FROM (DNSTM)	TO (UPSTM)	DWNSTRM E.I.	UPSTRM E.I.	PLAN LGTH (FT)	SLOPE (%)	PIPE SIZE	PVC TYPE	NOTES
<u>N BROOKS ST</u>								
* MH02-007	SAS#1	842.35	842.37	16	0.10%	12"	SDR-35	
* SAS#1	SAS#2	842.42	842.60	180	0.10%	12"	SDR-35	
SAS#2	SAS#3	842.65	842.69	44	0.10%	10"	SDR-35	
<u>COLLEGE CT</u>								
* SAS#2	SAS#4	842.79	843.63	169	0.50%	8"	SDR-35	(3); STA 13+20 TO STA 13+45
* SAS#2	SAS#5	842.79	843.97	235	0.50%	8"	C900	(3); STA 14+65 TO STA 14+90

SANITARY STRUCTURE REMOVALS & ABANDONMENTS

STRUCTURE ID NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
<u>N BROOKS ST</u>						
SAS4752-018	30+73.75	LT-0.18	850.49	842.73	7.76	
SAS4752-020	32+54.09	LT-0.18	851.34	842.23	9.11	
SAS4752-022	32+98.36	LT-0.05	851.15	843.05	8.10	
* SAS4752-024	34+43.00	LT-0.10	851.57	843.95	7.62	ABANDON
<u>COLLEGE CT</u>						
SAS4752-019	11+69.85	RT-1.54	851.29	844.89	6.40	
SAS4752-037	17+47.20	RT-1.60	851.33	844.63	6.70	
<u>FAHRENBROOK CT</u>						
SAS4752-036	27+47.74	LT-0.13	851.38	846.08	5.30	

SANITARY PIPE REMOVALS

REMOVE FROM	REMOVE TO	TOTAL LGTH PIPE (FT)	PIPE TYPE	PIPE SIZE	PAID (Y/N)	PD REM LEN (FT)	PD ABN W/SLURRY LEN (FT)
<u>N BROOKS ST</u>							
MH02-007	SAS4752-018	16	VCP	6"	N		
SAS4752-018	SAS4752-020	180	VCP	6"	N		
* SAS4752-020	SAS4752-022	44	DI	6"	Y		44
* SAS4752-022	SAS4752-024	145	VCP	6"	Y		145
* SAS4752-023	SAS4752-024	7	VCP	8"	Y		7
* SAS4752-024	SAS4752-026	126	VCP	6"	Y		126
<u>COLLEGE CT</u>							
* SAS4752-020	SAS4752-019	281	VCP	6"	Y	43	
* SAS4752-020	SAS4752-037	297	VCP	6"	Y		144
<u>FAHRENBROOK CT</u>							
* SAS4752-023	SAS4752-036	284	VCP	6"	Y		284

ULOS

ULO NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
<u>COLLEGE CT</u>				
ULO1	14+82.69	CL	TELE	
ULO2	14+78.81	LT-0.01	FIBER	
ULO3	14+72.19	RT-0.92	FIBER	
ULO4	13+40.59	RT-1.13	ELEC	
ULO5	13+26.58	RT-1.17	ELEC	
<u>N BROOKS ST</u>				
* ULO6	32+45.89	RT-0.09	ELEC	

SPECIFIC NOTES

- (1) INSTALL INTERNAL CHIMNEY SEAL
- (2) PROVIDE EXTERNAL SAS JOINT SEAL
- (3) INSTALL 8 INCH DIAMETER SEWER (PUSH METHOD, BORE & JACK, PIPE BURSTING, OR OPEN CUT TRENCH WITH TUNNELING)) (SEE BID ITEM 90003)

STORM SEWER SCHEDULE

* ADDENDUM 2 - DAO 4/26/21

N BROOKS ST, FAHRENBROOK CT & COLLEGE CT RES ASMNT DIST-2021 PROJECT NO. 13180	SHEET NO. U-8	8 U
STORM SEWER SCHEDULE		
CITY OF MADISON		

REBUILD STORM STRUCTURES

STRUC. NO.	ID NO.	STATION	LOCATION (OFFSET)	TYPE	DEPTH	NOTES	NOTES
<u>N BROOKS ST</u>							
RB-1	IN4752-099	30+91.57	LT-17.54	H INLET	3.18	FP; (1)	
RB-2	AS4752-090	32+48.05	RT-18.97	5X7 CB	7.40	(2)	
RB-3	AS4752-089	33+39.08	RT-20.30	5X7 CB	8.50	(2)	
RB-4	IN4752-087	34+22.39	LT-17.43	H INLET	3.53	FP; (1)	
RB-5	IN4752-088	24+19.68	RT-18.98	H INLET	3.26	FP; (1)	
RB-6	AS4752-085	34+37.70	RT-18.03	5X7 CB	5.80	(2)	
RB-7	IN4752-086	34+65.45	LT-20.27	H INLET	2.18	FP; (1)	
RB-8	IN4752-084	34+75.41	RT-17.89	H INLET	2.55	FP; (1)	
<u>COLLEGE CT</u>							
RB-9	IN4752-093	15+00.03	RT-10.24	H INLET	2.10	FP; (1)	
RB-10	IN4752-094	15+00.99	LT-10.56	H INLET	4.48	FP; (1)	

PROPOSED STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
* S-1	32+84.01	RT-6.44	ROOF REPL W/CASTING	851.13	844.10	7.03	FP; (4)

PROPOSED STORM PIPES TO BE LINED

FROM (DNSTM)	TO (UPSTM)	PIPE SIZE	PIPE LGTH (FT)	TYPE	LATERALS	NOTES
<u>N BROOKS ST</u>						
UNK IN AT REGENT	AS4752-090	24"	170	VCP	1	(3)
AS4752-090	AS4752-089	24"	91	VCP	0	
AS4752-089	AS4752-085	24"	99	VCP	0	
AS4752-085	IN4752-121	24"	169	VCP	0	

SPECIFIC NOTES

- (1) REBUILD H-INLET W/ SALVAGED CASTINGS
- (2) RECONSTRUCT ROOF; REPLACE CASTING W/ TWO 1550-0054
- (3) REPAIR 6" STORM LATERAL AT MAIN; REPLACE W/ PVC IF NECESSARY
- * (4) PROVIDE OPENING IN ACCORDANCE WITH STRUCTURAL DETAILS ON SHEET D-3; INSTALL NEENAH CASTING 1550-0054 AT STA 32+84.01, RT-6.44, RIM = 851.13

STANDARD NOTES:

-PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

-ALL REBAR FOR FIELD POURED STRUCTURES SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED IN SPECIAL BID ITEM SPECIFICATIONS OR DETAIL DRAWINGS. ANY EXPOSED STEEL SHALL BE TOUCHED UP OR RECOATED PRIOR TO USE.

-ALL PRECAST SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.5.

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN

- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.

- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS'S.

- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.

- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT DANIEL OLIVARES OF CITY ENGINEERING AT (608) 261-9285 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO DAOLIVARES@CITYOFMADISON.COM.