

Revisions

| No. | Date     | Description   |
|-----|----------|---------------|
| BD  | 06/01/18 | BID DRAWINGS  |
| 1   | 06/15/18 | ADDENDUM #001 |
| 2   | 06/25/18 | ADDENDUM #002 |

|               |            |
|---------------|------------|
| Graphic Scale | 0 10' 20'  |
| DFD Number    | 13B3G      |
| Set Type      | CD         |
| Date Issued   | 08/08/2018 |
| Sheet Number  | C500       |

**LEGEND**

- STM--- PROPOSED STORM SEWER
- SAN--- PROPOSED SANITARY SEWER
- W--- PROPOSED WATER MAIN
- E--- PROPOSED ELECTRICAL
- STEAM--- PROPOSED STEAM DUCT
- CWS--- PROPOSED CHILLED WATER SUPPLY LINE
- CWR--- PROPOSED CHILLED WATER RETURN LINE
- T--- PROPOSED TELECOM LINE
- EASE--- PROPOSED UTILITY EASEMENT
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN
- ⊗ PROPOSED GATE VALVE
- PROPOSED HYDRANT
- ⊔ PROPOSED UTILITY PLUG
- PROPOSED TRENCH DRAIN

**GENERAL NOTES**

- SEE SHEET C100 FOR GENERAL NOTES.
- CONTRACTOR SHALL VERIFY ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF PROPOSED UTILITIES.
- BUILDING LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL AND STATE PLUMBING CODES. SITE UTILITY CONTRACTOR SHALL STUB LATERALS WITHIN BUILDING FOUNDATION. THE WATER SERVICE SHALL BE PIPED TO THE FIRST INTERIOR FLANGE FOR THE PC TO MAKE CONNECTION. THE WATER SERVICE SHALL BE TESTED TO 200 PSI BY THE SITE UTILITY CONTRACTOR AND THE TEST MUST BE PROPERLY DOCUMENTED. THE REQUIRED HIGH VOLUME FLUSHING OF THE MAIN SHALL BE CONDUCTED BY THE FIRE PROTECTION CONTRACTOR. SEE INTERIOR PLUMBING PLANS FOR CONTINUATION OF PIPING IN BUILDING BY BUILDING PLUMBING CONTRACTOR.
- CONTRACTOR SHALL CENTER ONE FULL LENGTH OF WATER PIPE ON SEWER AT WATER MAIN CROSSINGS, THAT BOTH JOINTS WILL BE AS FAR FROM SEWER AS POSSIBLE.
- GENERAL CONTRACTOR SHALL COORDINATE WITH LOCAL GAS, TELEPHONE, AND ELECTRICAL UTILITIES FOR EXACT LOCATION, SIZE AND DEPTH OF NEW SERVICE.
- SANITARY SEWER SHALL BE PVC, ASTM D3034, SDR 35 UNLESS INDICATED OTHERWISE.
- WATER MAIN SHALL BE AWWA C900, CLASS 150, DR-18 PVC UNLESS INDICATED OTHERWISE.
- ALL SANITARY PRECAST MANHOLES SHALL CONFORM TO ASTM C-478 AND SHALL BE A MINIMUM OF 48-INCH DIAMETER WITH ECCENTRIC CONE TYPE PRECAST TOPS AND SHALL BE FITTED WITH AN EXTERNAL SEAL. FLAT TOP SLABS SHALL BE USED ONLY WITH APPROVAL OF THE VILLAGE ENGINEER.
- CONTRACTOR SHALL PROVIDE DRAIN TILE AT ALL PROPOSED CATCH BASINS. SEE PLAN VIEW FOR DETAIL DESIGN INFORMATION.
- BUILDING ROOF DRAINS SHALL BE SDR-35, ASTM D3034, PVC, UNLESS OTHERWISE NOTED.
- RIM ELEVATIONS IN CURB AND GUTTER ARE FLANGE GRADES.
- PIPE LENGTHS AND INVERTS ARE TO CENTER OF STRUCTURES.
- CRUSHED STONE BACKFILL SHALL BE USED UNDER AND WITHIN 5' OF ALL PAVED AREAS.
- COORDINATE DOCK SHUTDOWN WITH DFD CONSTRUCTION REPRESENTATIVE. DOCK SHUTDOWN MAY NOT EXCEED 48 HOURS.
- EXERCISE CAUTION DURING UTILITY INSTALLATION TO AVOID DAMAGE TO THE ROOT STRUCTURE OF EXISTING TREES TO REMAIN ALONG MILLS ST.

**UTILITY NOTES**

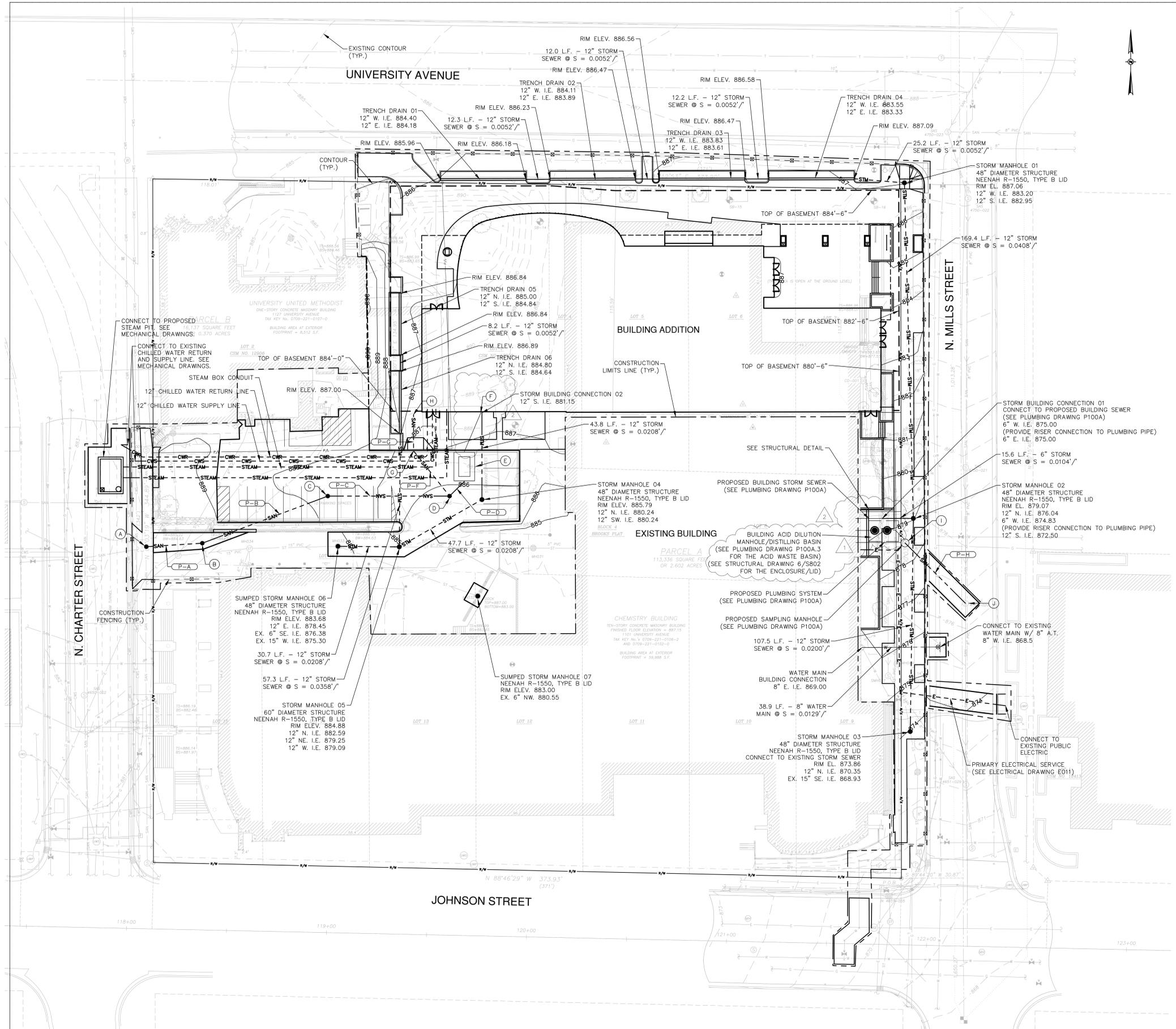
- CONTRACTOR SHALL VERIFY ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF PROPOSED UTILITIES.
- BUILDING LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL AND STATE PLUMBING CODES. SITE UTILITY CONTRACTOR SHALL STUB LATERALS WITHIN BUILDING FOUNDATION. THE WATER SERVICE SHALL BE PIPED TO THE FIRST INTERIOR FLANGE FOR THE PC TO MAKE CONNECTION. THE WATER SERVICE SHALL BE TESTED TO 200 PSI BY THE SITE UTILITY CONTRACTOR AND THE TEST MUST BE PROPERLY DOCUMENTED. THE REQUIRED HIGH VOLUME FLUSHING OF THE MAIN SHALL BE CONDUCTED BY THE FIRE PROTECTION CONTRACTOR. SEE INTERIOR PLUMBING PLANS FOR CONTINUATION OF PIPING IN BUILDING BY BUILDING PLUMBING CONTRACTOR.
- CONTRACTOR SHALL CENTER ONE FULL LENGTH OF WATER PIPE ON SEWER AT WATER MAIN CROSSINGS, THAT BOTH JOINTS WILL BE AS FAR FROM SEWER AS POSSIBLE.
- GENERAL CONTRACTOR SHALL COORDINATE WITH LOCAL GAS, TELEPHONE, AND ELECTRICAL UTILITIES FOR EXACT LOCATION, SIZE AND DEPTH OF NEW SERVICE.
- SANITARY SEWER SHALL BE PVC, ASTM D3034, SDR 35 UNLESS INDICATED OTHERWISE.
- WATER MAIN SHALL BE AWWA C900, CLASS 150, DR-18 PVC UNLESS INDICATED OTHERWISE.
- ALL SANITARY PRECAST MANHOLES SHALL CONFORM TO ASTM C-478 AND SHALL BE A MINIMUM OF 48-INCH DIAMETER WITH ECCENTRIC CONE TYPE PRECAST TOPS AND SHALL BE FITTED WITH AN EXTERNAL SEAL. FLAT TOP SLABS SHALL BE USED ONLY WITH APPROVAL OF THE VILLAGE ENGINEER.
- CONTRACTOR SHALL PROVIDE DRAIN TILE AT ALL PROPOSED CATCH BASINS. SEE PLAN VIEW FOR DETAIL DESIGN INFORMATION.
- BUILDING ROOF DRAINS SHALL BE SDR-35, ASTM D3034, PVC, UNLESS OTHERWISE NOTED.
- RIM ELEVATIONS IN CURB AND GUTTER ARE FLANGE GRADES.
- PIPE LENGTHS AND INVERTS ARE TO CENTER OF STRUCTURES.
- CRUSHED STONE BACKFILL SHALL BE USED UNDER AND WITHIN 5' OF ALL PAVED AREAS.
- COORDINATE DOCK SHUTDOWN WITH DFD CONSTRUCTION REPRESENTATIVE. DOCK SHUTDOWN MAY NOT EXCEED 48 HOURS.
- EXERCISE CAUTION DURING UTILITY INSTALLATION TO AVOID DAMAGE TO THE ROOT STRUCTURE OF EXISTING TREES TO REMAIN ALONG MILLS ST.

**SANITARY STRUCTURES**

- (A) CONNECT TO PROPOSED SANITARY SEWER RELAY MANHOLE (SEE CHARTER STREET PROJECT 13B3G)  
RIM EL. 883.40  
8" E. I.E. 871.11  
8" N. I.E. 870.86
- (B) SANITARY MANHOLE 48" DIAMETER STRUCTURE NEENAH R-1550, TYPE B LID  
RIM EL. 883.78  
8" NE. I.E. 871.53  
8" W. I.E. 871.40
- (C) SANITARY MANHOLE 48" DIAMETER STRUCTURE NEENAH R-1550, TYPE B LID  
RIM EL. 887.64  
8" E. I.E. 872.36  
8" SW. I.E. 872.23
- (D) SANITARY MANHOLE W/ OUTSIDE DROP 60" DIAMETER STRUCTURE NEENAH R-1550, TYPE B LID  
RIM EL. 885.82  
8" N. D.D. 879.99  
8" N. I.E. 873.24  
8" NW. I.E. 873.24  
8" W. I.E. 872.99
- (E) ACID DILUTION BASIN (SEE PLUMBING DRAWING P100A.3 FOR THE ACID WASTE BASIN) (SEE STRUCTURAL DRAWING DETAIL 5/S802 FOR THE ENCLOSURE/LID)  
RIM EL. 887.07  
8" NE. I.E. 880.71  
8" SW. I.E. 880.21
- (F) ACID WASTE BUILDING CONNECTION (SEE PLUMBING DRAWINGS FOR DETAILS)
- (G) 8" X45' 8" I.E. 878.09
- (H) SANITARY BUILDING CONNECTION 8" S. I.E. 881.15
- (I) CONNECT TO PROPOSED SAMPLING MH (SEE INTERNAL PLUMBING DRAWINGS)  
RIM EL. 878.55  
6" W. I.E. 875.00  
6" E. I.E. 875.00
- (J) EXISTING SANITARY MANHOLE RIM EL. 876.51 (EX.) 8" N. I.E. 868.33 (PR.) 6" W. I.E. 873.21 (EX.) 8" S. I.E. 868.33

**SANITARY PIPES**

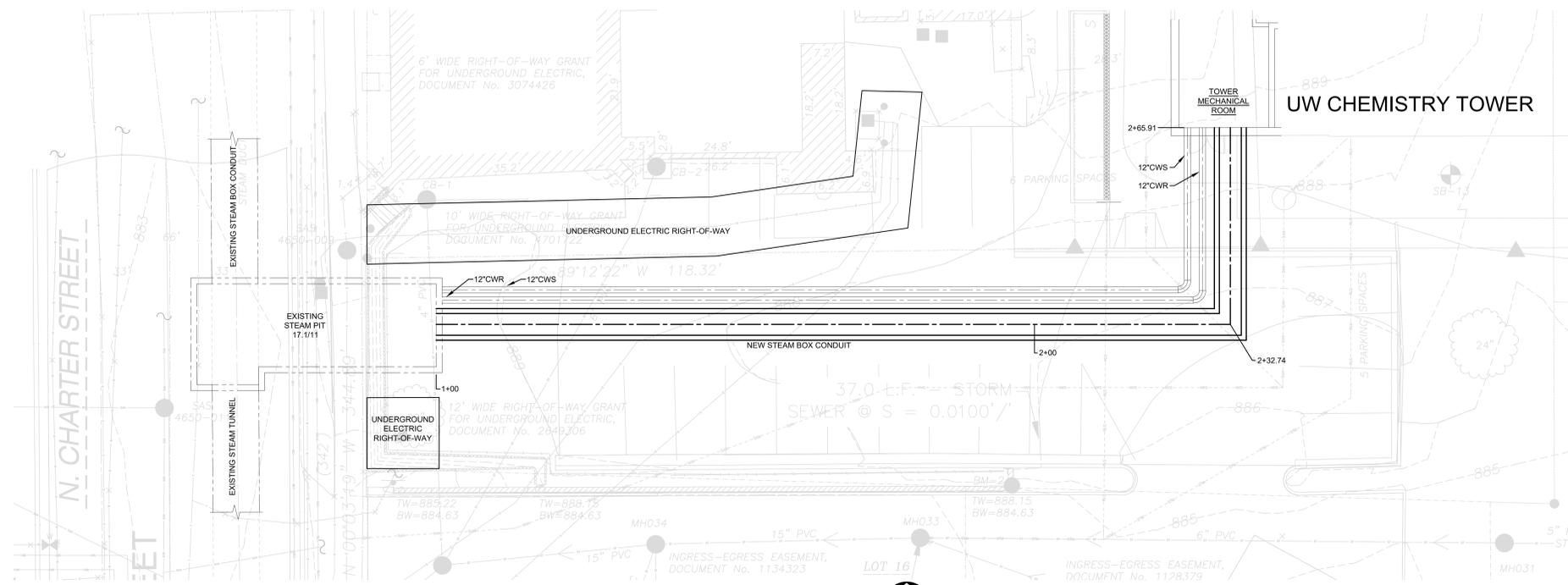
- (P-A) 28.0 L.F. - 8" SANITARY SEWER @ S = 0.0104'/'
- (P-B) 67.1 L.F. - 8" SANITARY SEWER @ S = 0.0104'/'
- (P-C) 60.9 L.F. - 8" SANITARY SEWER @ S = 0.0104'/'
- (P-D) 10.4 L.F. - 8" SANITARY SEWER @ S = 0.0208'/'
- (P-E) NOT USED
- (P-F) 29.1 L.F. - 8" SANITARY SEWER @ S = 0.1670'/'
- (P-G) 18.3 L.F. - 8" SANITARY SEWER @ S = 0.1670'/'
- (P-H) 42.9 L.F. - 6" SANITARY SEWER @ S = 0.0417'/'



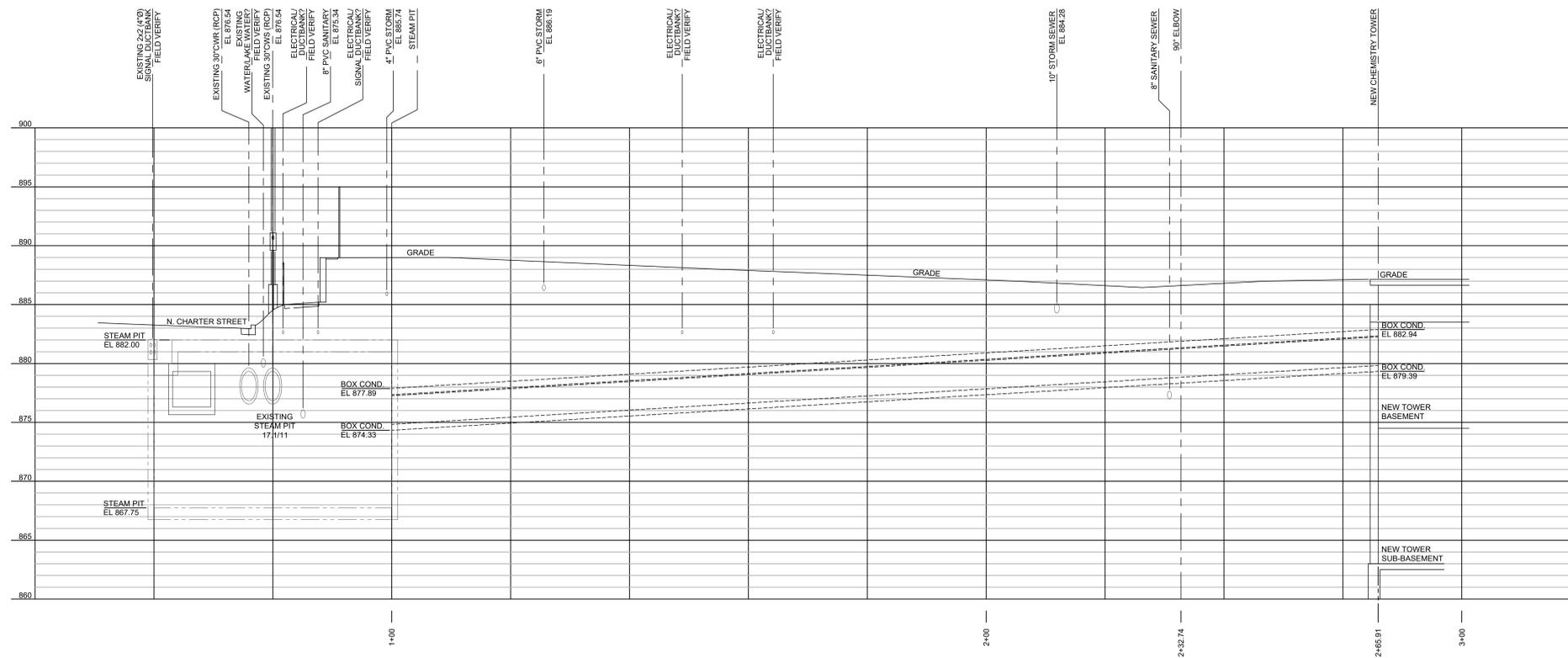
**NOTICE:**  
In accordance with Wisconsin statute 182.0175, damage to transmission facilities, excavator shall be solely responsible to provide advance notice to the designated "ONE CALL SYSTEM" not less than three working days prior to commencement of any excavation required to perform work contained on this drawing, and further, excavator shall comply with all other requirements of this statute relative to excavator's work.

**DISCLAIMER:**  
The underground utilities shown have been located from field survey information and existing drawings. GRAEF makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. GRAEF further does not warrant that the underground utilities shown are in the exact location indicated. GRAEF has not physically located the underground utilities.

X:\MID\2018\20180509\CAD\Site\dwg\001C\_00\_C500\_Utility\_5066 8/8/2018 10:47 AM



**1 PLAN - STEAM BOX CONDUIT**  
 SCALE: 1" = 10'-0"  
 NORTH

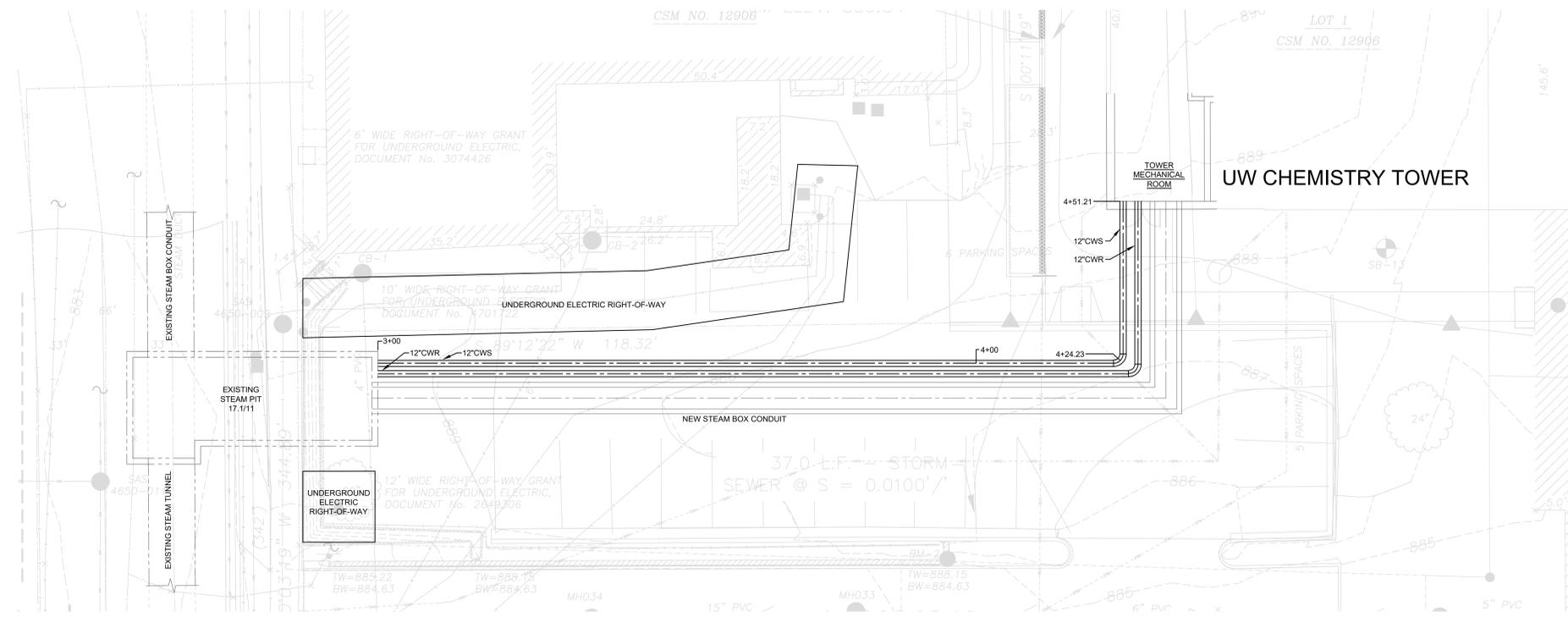


**2 PROFILE - STEAM BOX CONDUIT**  
 SCALE: HORIZONTAL: 1" = 10'-0"  
 VERTICAL: 1" = 5'-0"

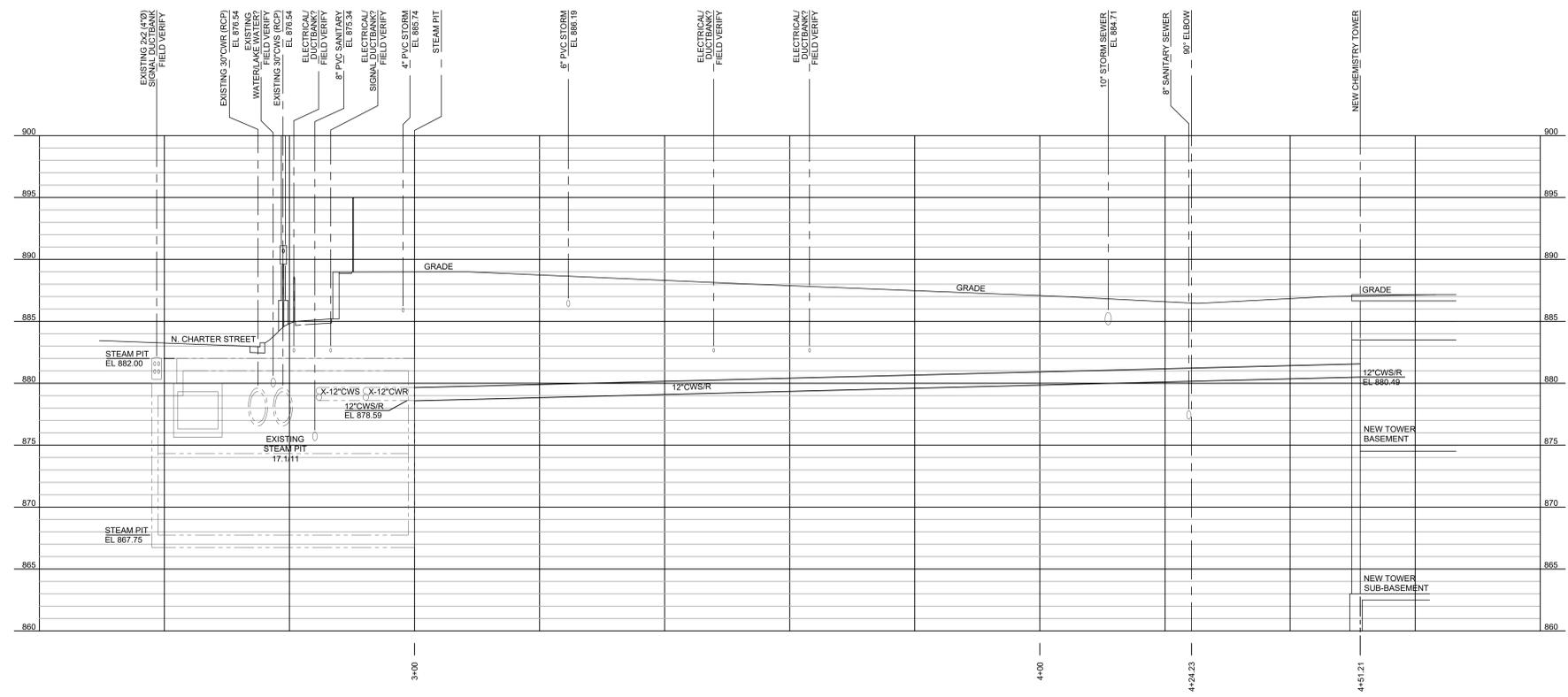
| Revisions |          |              |
|-----------|----------|--------------|
| No.       | Date:    | Description: |
| BD        | 06/01/18 | BID DRAWINGS |

|               |            |
|---------------|------------|
| Graphic Scale | VARIABLE   |
| DFD Number    | 13B3G      |
| Set Type      | CD         |
| Date Issued   | 08/08/2018 |
| Sheet Number  | C700       |

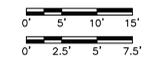
**811**  
 Know what's below.  
 Call before you dig.  
**DIGGERS HOTLINE**  
 Call 811 3 Work Days Before You Dig  
 or Toll Free (800) 242-8511  
 Hearing Impaired TDD (800) 542-2289  
 www.DiggersHotline.com



**1 PLAN - CHILLED WATER PIPING**  
SCALE: 1" = 10'-0"



**2 PROFILE - CHILLED WATER PIPING**  
SCALE: HORIZONTAL: 1" = 10'-0"  
VERTICAL: 1" = 5'-0"



KEY PLAN

State of Wisconsin  
Department of Administration  
Division of Facilities Development (DFD)  
Project Address:  
1101 UNIVERSITY AVENUE  
MADISON, WI 53706-1322

Project Title:  
CHEMISTRY BUILDING  
ADDITION AND RENOVATION  
Agency / Institution:  
UNIVERSITY OF WISCONSIN-MADISON  
Sheet Title:  
CHILLED WATER PLAN AND  
PROFILE

| Revisions |          |              |
|-----------|----------|--------------|
| No.       | Date     | Description  |
| BD        | 06/01/18 | BID DRAWINGS |

|               |            |
|---------------|------------|
| Graphic Scale | VARIABLES  |
| DFD Number    | 13B3G      |
| Set Type      | CD         |
| Date Issued   | 08/08/2018 |
| Sheet Number  | C701       |

Call 811 3 Work Days Before You Dig  
or Toll Free (800) 242-8511  
Hearing Impaired TDD (800) 542-2289  
www.DiggersHotline.com

