

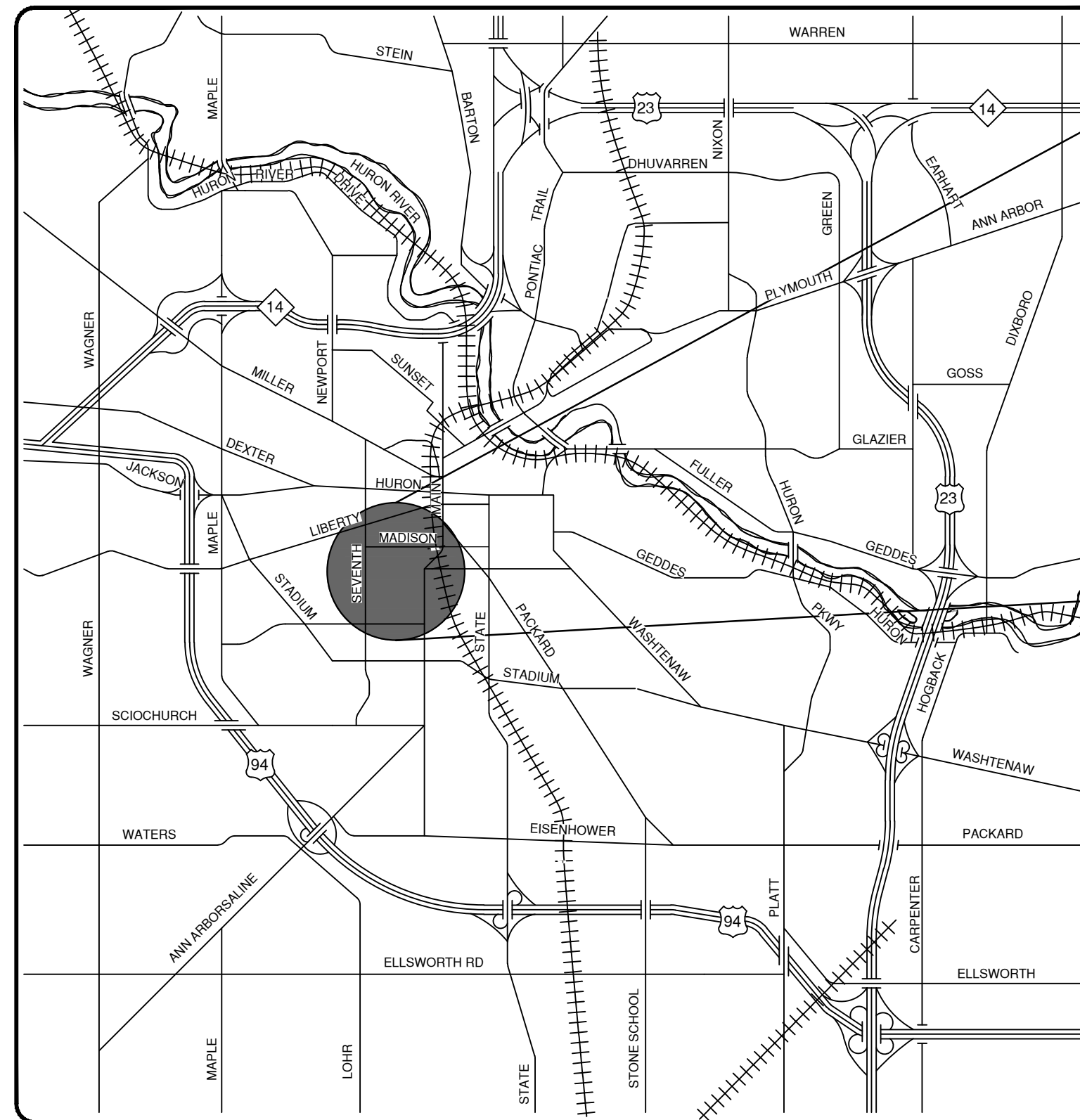
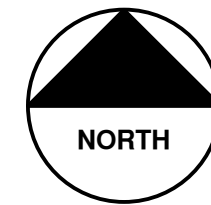


# CITY OF ANN ARBOR PROJECT MANAGEMENT

## WEST MADISON STREET IMPROVEMENTS

BID No. ITB 4288, FILE No. 2012027

APRIL 2013



VICINITY MAP

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	TYPICAL EXISTING SECTIONS
3-4	PROPOSED TYPICAL SECTIONS
5	DETAILS
6	NOTES
7	LEGEND
8	ALIGNMENT & WITNESSES
9	BIORETENTION DETAILS
10	DETOUR ROUTE
11-12	MAINTENANCE OF TRAFFIC
13-14	REMOVALS
15-22	WATER MAIN PLAN AND PROFILE
23-28	STORM SEWER PLAN AND PROFILE
29-34	ROAD PLAN AND PROFILE
35-39	INTERSECTION GRADING
40-41	PAVEMENT MARKINGS AND PERMANENT SIGNING
42-43	SOIL BORINGS


**NOTES:**

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS AND ITS DETAILS WHICH ARE INCLUDED BY REFERENCE. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT PUBLIC SERVICES STANDARD SPECIFICATIONS AND DETAILS.

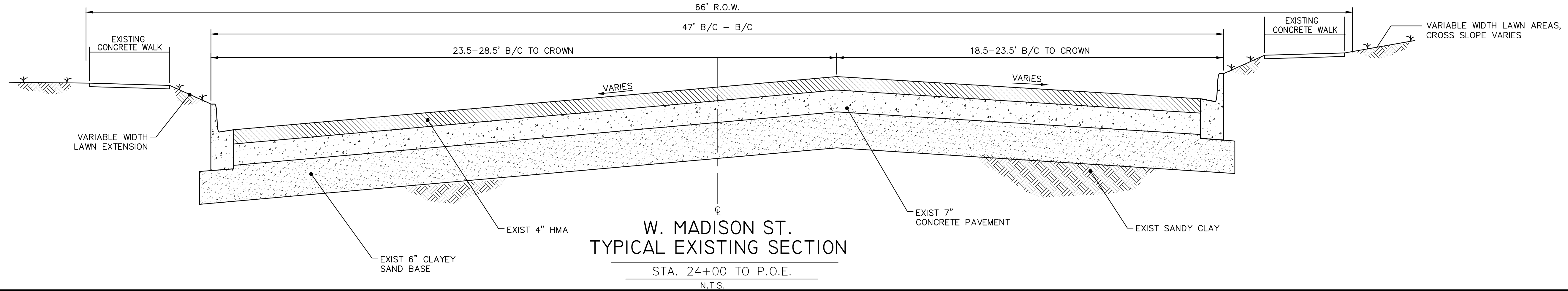
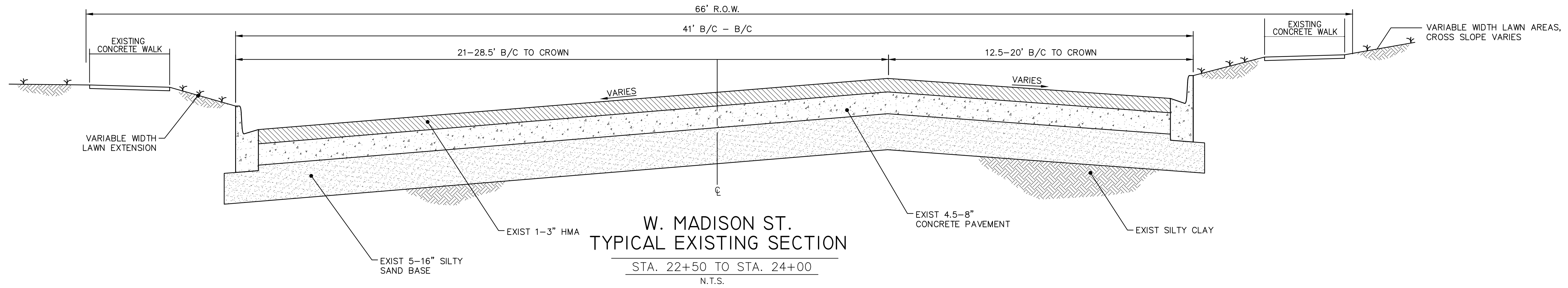
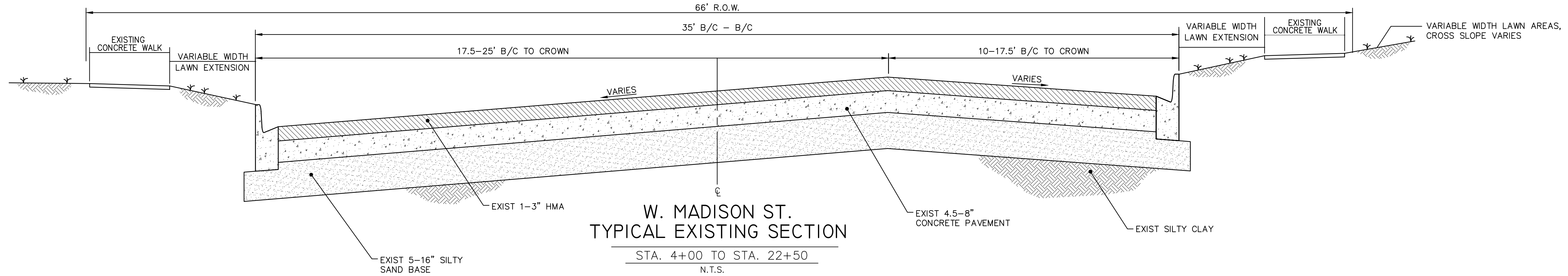
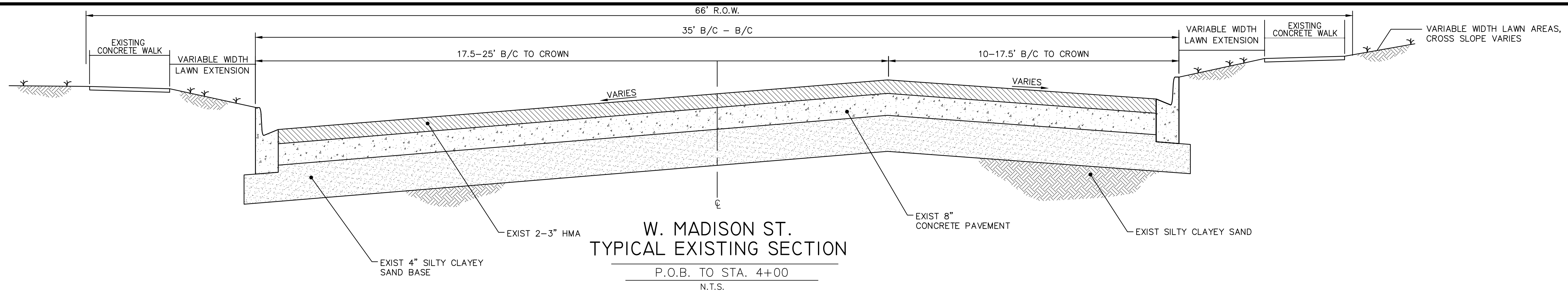
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

 <b>PROJECT MANAGEMENT SERVICE UNIT</b>	
<p style="text-align: center;"><i>Igor V. Kotlyar</i></p> <p style="text-align: center;">IGOR V. KOTLYAR, P.E. - MI LICENSE No. 43287 PROJECT ENGINEER</p> <p style="text-align: right;">4/16/2013 DATE</p>	 <p>ENGINEER'S SEAL</p>
<p style="text-align: center;">PREPARED UNDER THE SUPERVISION OF</p> <p style="text-align: center;"><i>Christopher E. Carson</i></p> <p style="text-align: center;">CHRISTOPHER CARSON, P.E. - MI LICENSE No. 47156 PROJECT ENGINEER</p> <p style="text-align: right;">4/16/2013 DATE</p>	 <p>ENGINEER'S SEAL</p>

	Know what's below. Call before you dig.								
		IVK	IVK	IVK	IVK	IVK	IVK	IVK	IVK
		DPF/CEC	DPF/CEC	DPF/CEC	DPF/CEC	DPF/CEC	DPF/CEC	DPF/CEC	DPF/CEC
		4-16-13	12-19-12	DATE	DATE	DATE	DATE	DATE	DATE
		01	00	REV.	REV.	REV.	REV.	REV.	REV.
		OUT FOR BID	MDEQ SUBMITTAL	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48106-1410 www.a2gov.org									
									
<b>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</b>									
CONTRACT FOR RECONSTRUCTION OF W. MADISON STREET BETWEEN S. SEVENTH STREET AND S. MAIN STREET INCLUDES REPLACEMENT OF HMA PAVEMENT, AGGREGATE BASE, CURB, STORM SEWER, WATER MAIN AND PERMANENT PAVEMENT MARKINGS									
PROJECT DESCRIPTION									
DRAWING No. 2012027 - 01									
SHEET No. 01 TO 49									

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027TSCN.dwg Dwg Created: 16-Aug-12 - a2\_standard.bw.stb - Plot Date: 16-Apr-13

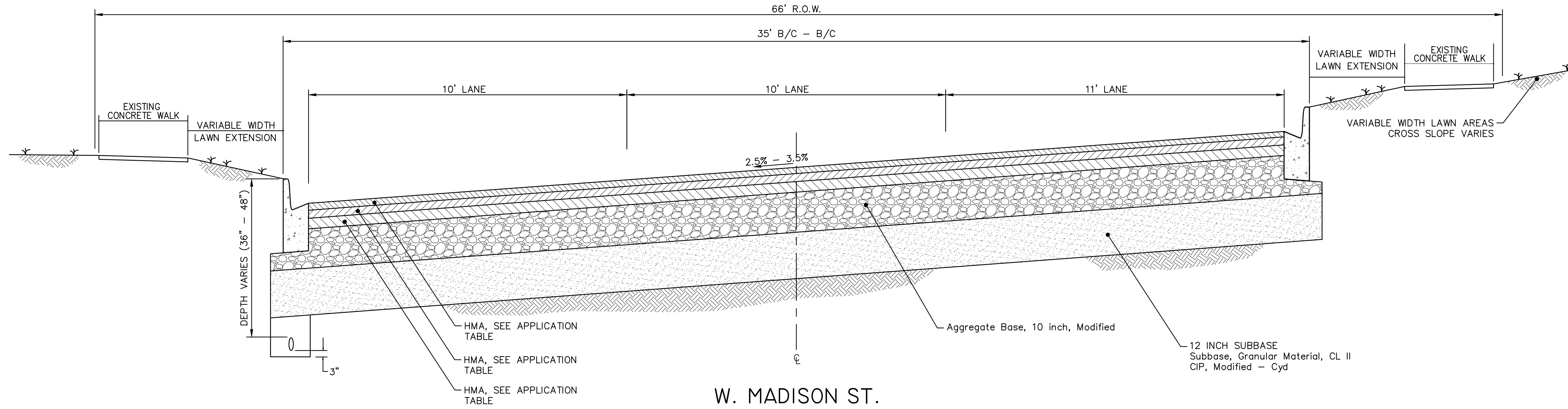


REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DPF/CEC	IWK	OUT FOR BID
00	12-19-12	DPF/CEC	IWK	MOEQ SUBMITTAL

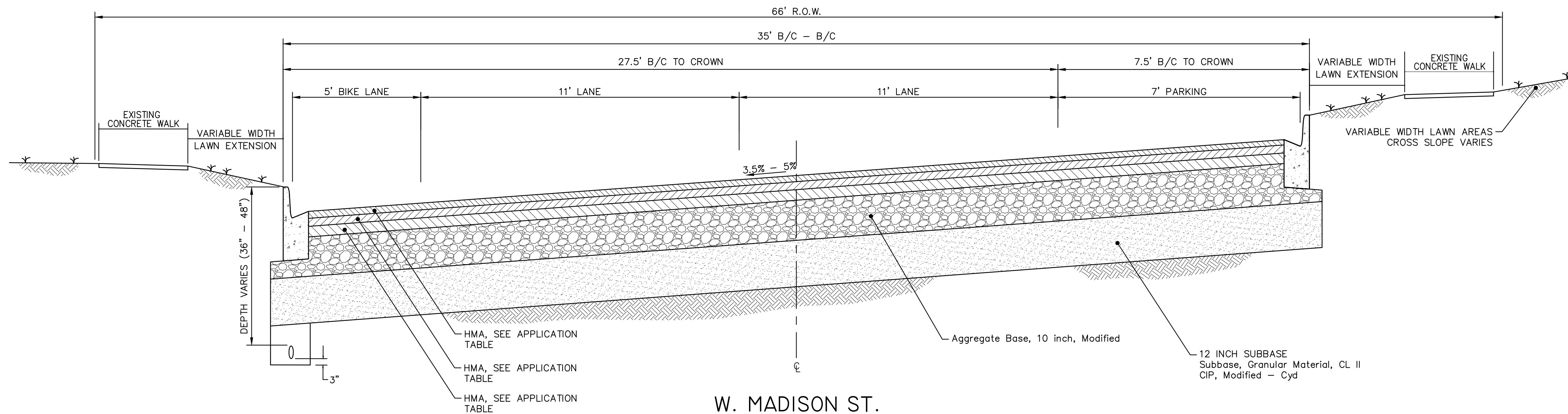
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1500  
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
WEST MADISON STREET IMPROVEMENTS  
TYPICAL EXISTING SECTIONS

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027TSCN.dwg Dwg Created: 16-Aug-12 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**W. MADISON ST.  
TYPICAL PROPOSED SECTION**  
P.O.B. TO STA. 3+00  
N.T.S.



**W. MADISON ST.  
TYPICAL PROPOSED SECTION**  
STA. 3+00 TO STA. 19+50  
N.T.S.

TYPICAL ROAD CROSS SECTION APPLICATION TABLE

MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI	BINDER	LOCATION/NOTES
HMA, 5E3	165 LB/SYD	1.5 INCH	260	PG 64-28	WEARING COURSE
HMA, 4E1	220 LB/SYD	2.0 INCH	-	PG 64-28	LEVELING COURSE
HMA, 3E1	275 LB/SYD	2.5 INCH	-	PG-64-28	BASE COURSE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	OUT FOR BID	4-16-13	DPF/CEC	DPF/CEC
00	MOEQ SUBMITTAL	12-19-12	DPF/CEC	DPF/CEC

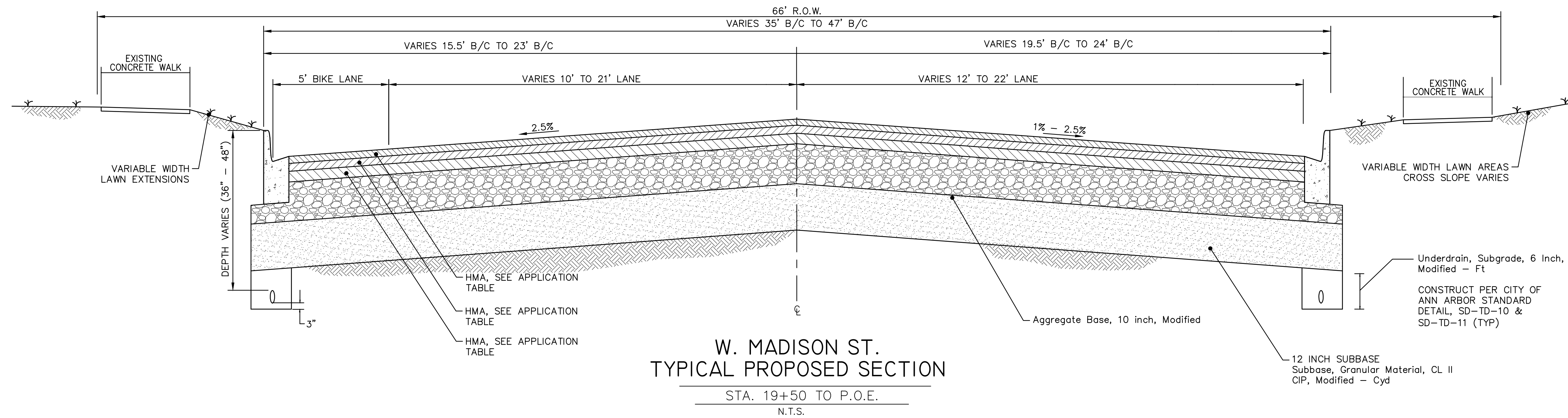
CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1500  
www.a2gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
PROPOSED TYPICAL SECTIONS

SCALE: N.T.S.  
DRAWING No. 2012027-03

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027TSCN.dwg Dwg Created: 16-Aug-12 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**W. MADISON ST.  
TYPICAL PROPOSED SECTION**  
STA. 19+50 TO P.O.E.  
N.T.S.

**TYPICAL ROAD CROSS SECTION APPLICATION TABLE**

MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI	BINDER	LOCATION/NOTES
HMA, 5E3	165 LB/SYD	1.5 INCH	260	PG 64-28	WEARING COURSE
HMA, 4E1	220 LB/SYD	2.0 INCH	-	PG 64-28	LEVELING COURSE
HMA, 3E1	275 LB/SYD	2.5 INCH	-	PG-64-28	BASE COURSE



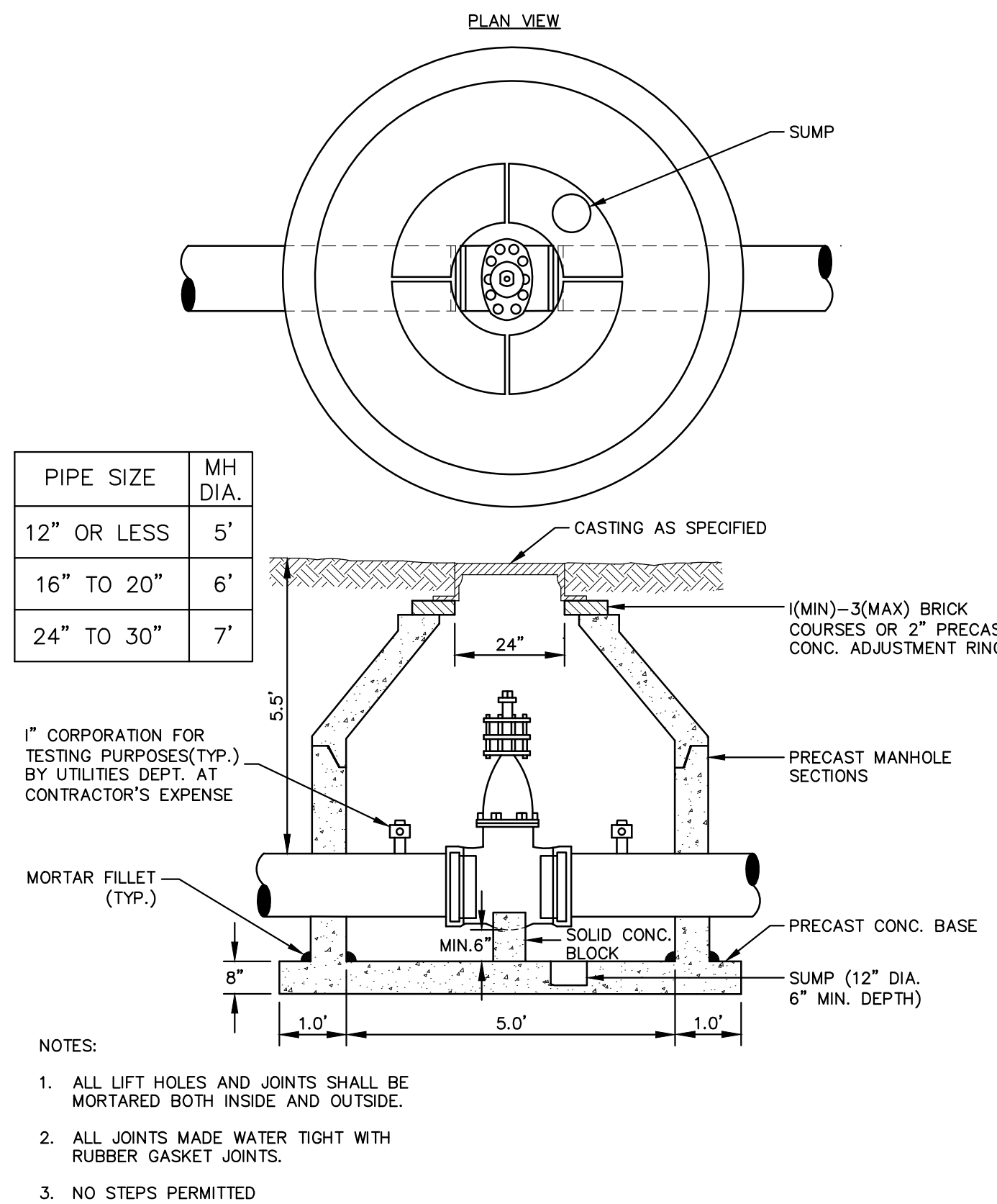
REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL
		DRAWN
		CHECKED

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1500  
www.a2gov.org

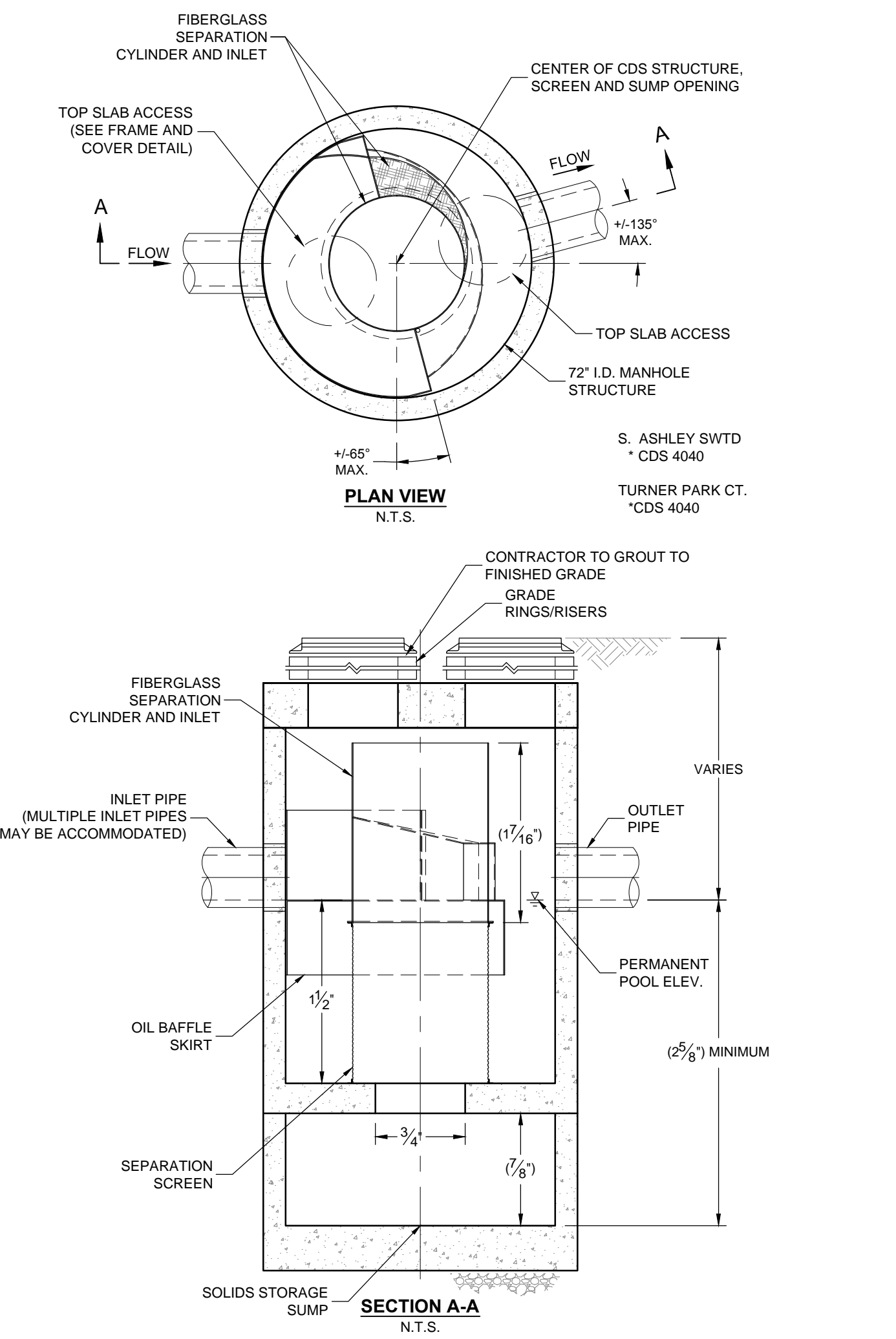
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
SCALE: N.T.S.  
DRAWING No. 2012027-04  
PROPOSED TYPICAL SECTIONS



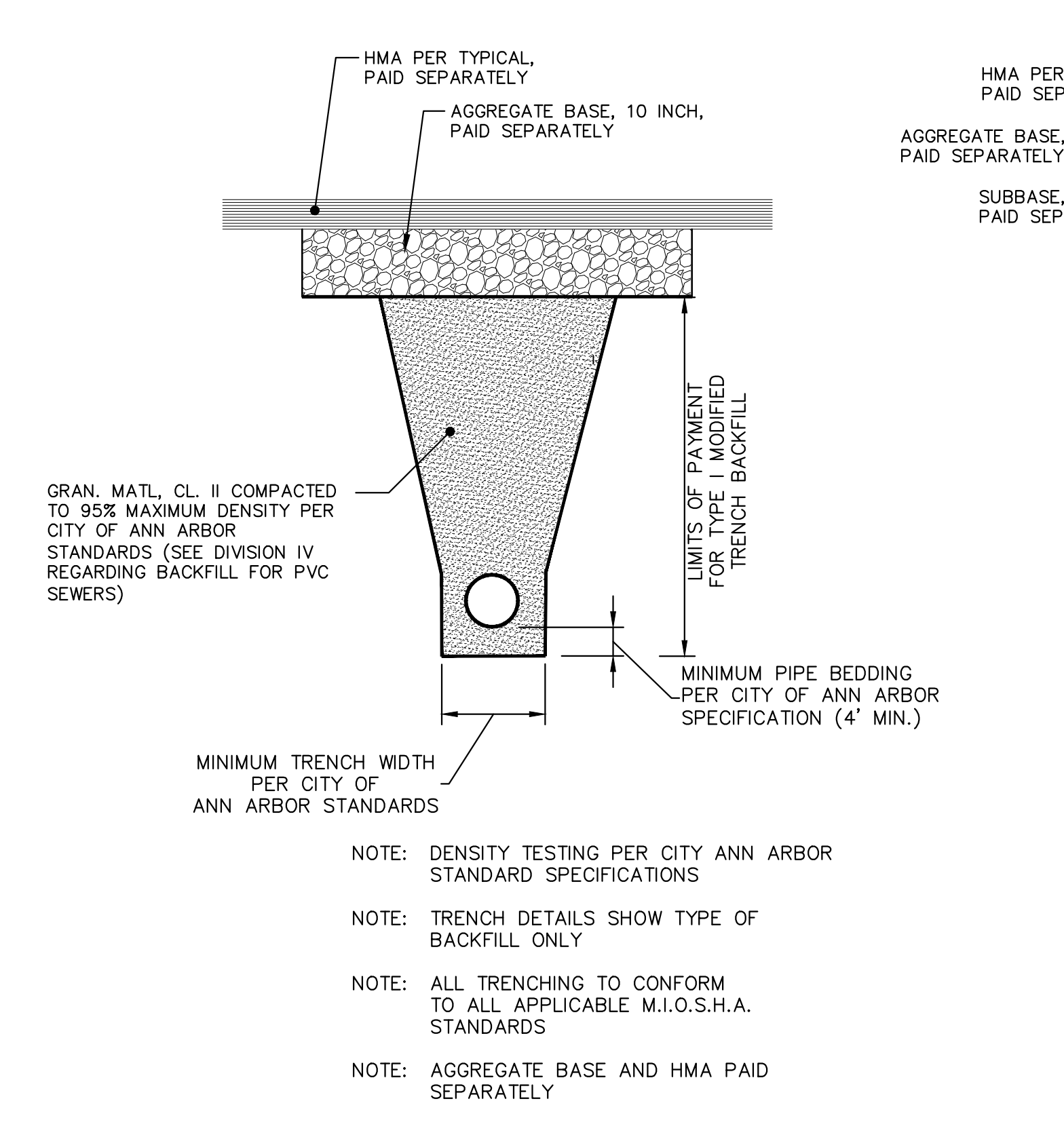
S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027DET.dwg Dwg Created: 16-Aug-12 - 02 standard bw.stb - Plot Date: 16-Apr-13



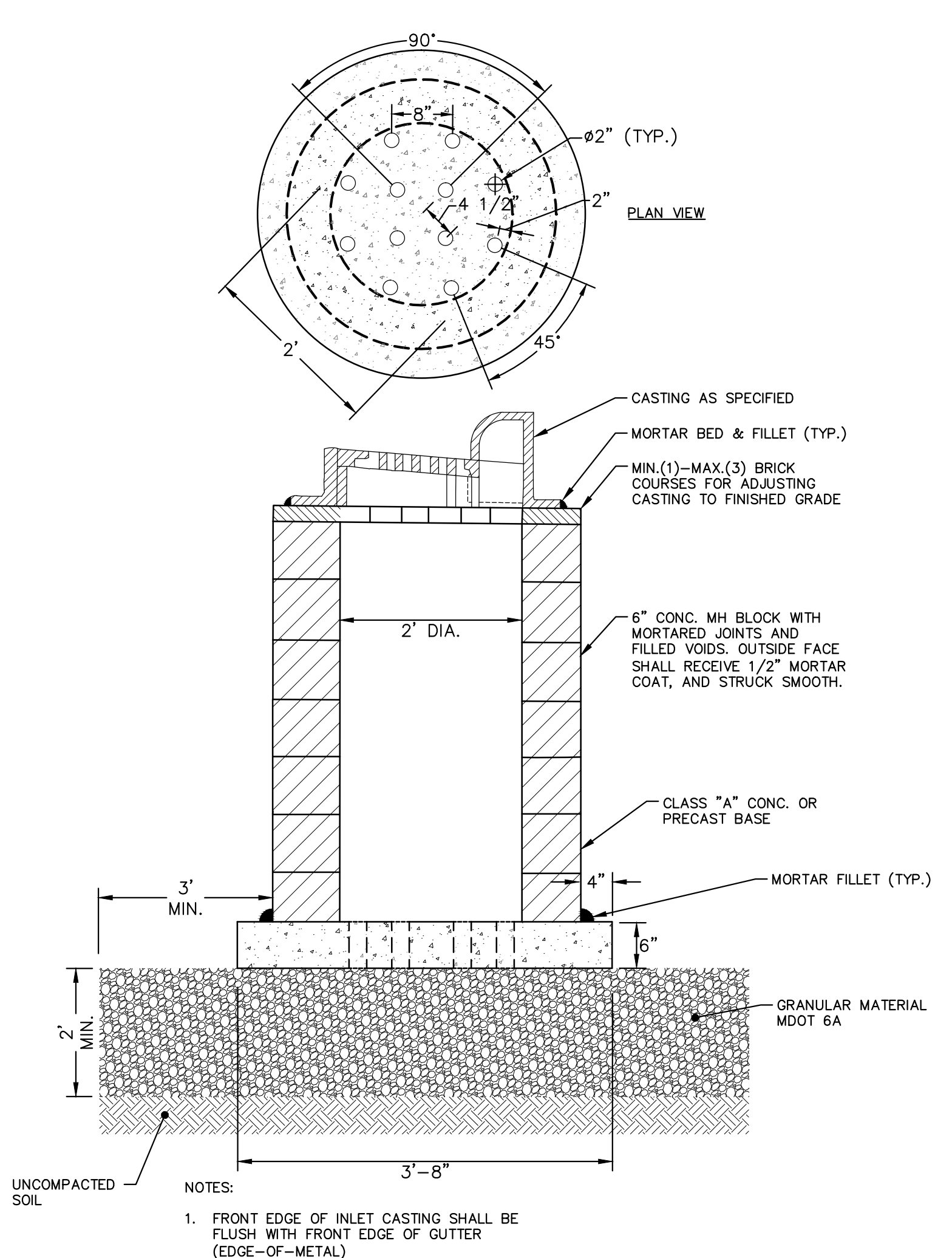
**GATE WELL FOR MAIN 16" & SMALLER SD-W-3**



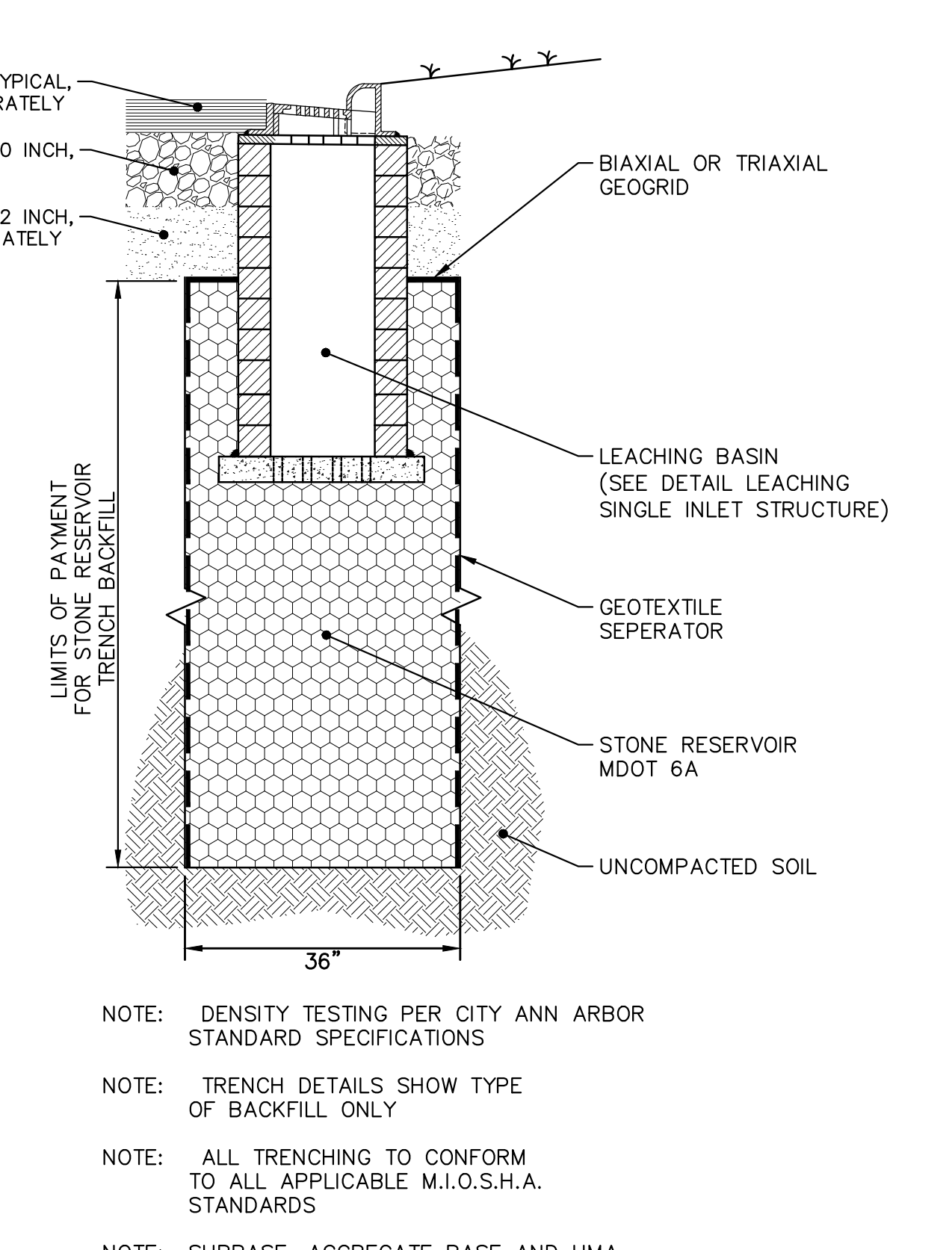
**CDS STORM WATER TREATMENT DEVICE, 72" DIA.**



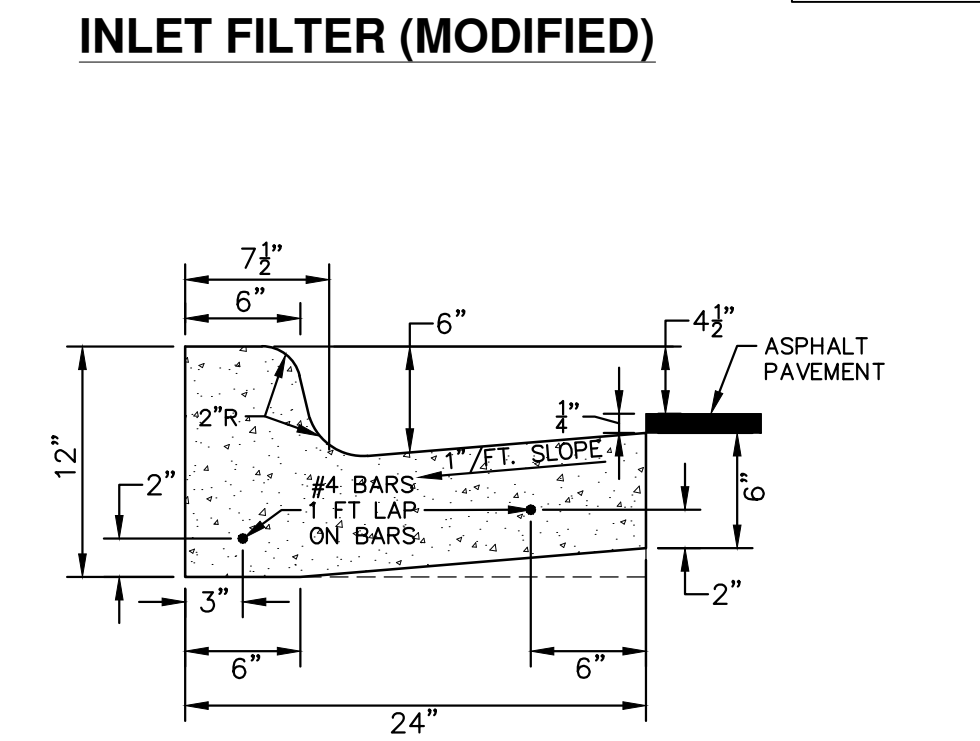
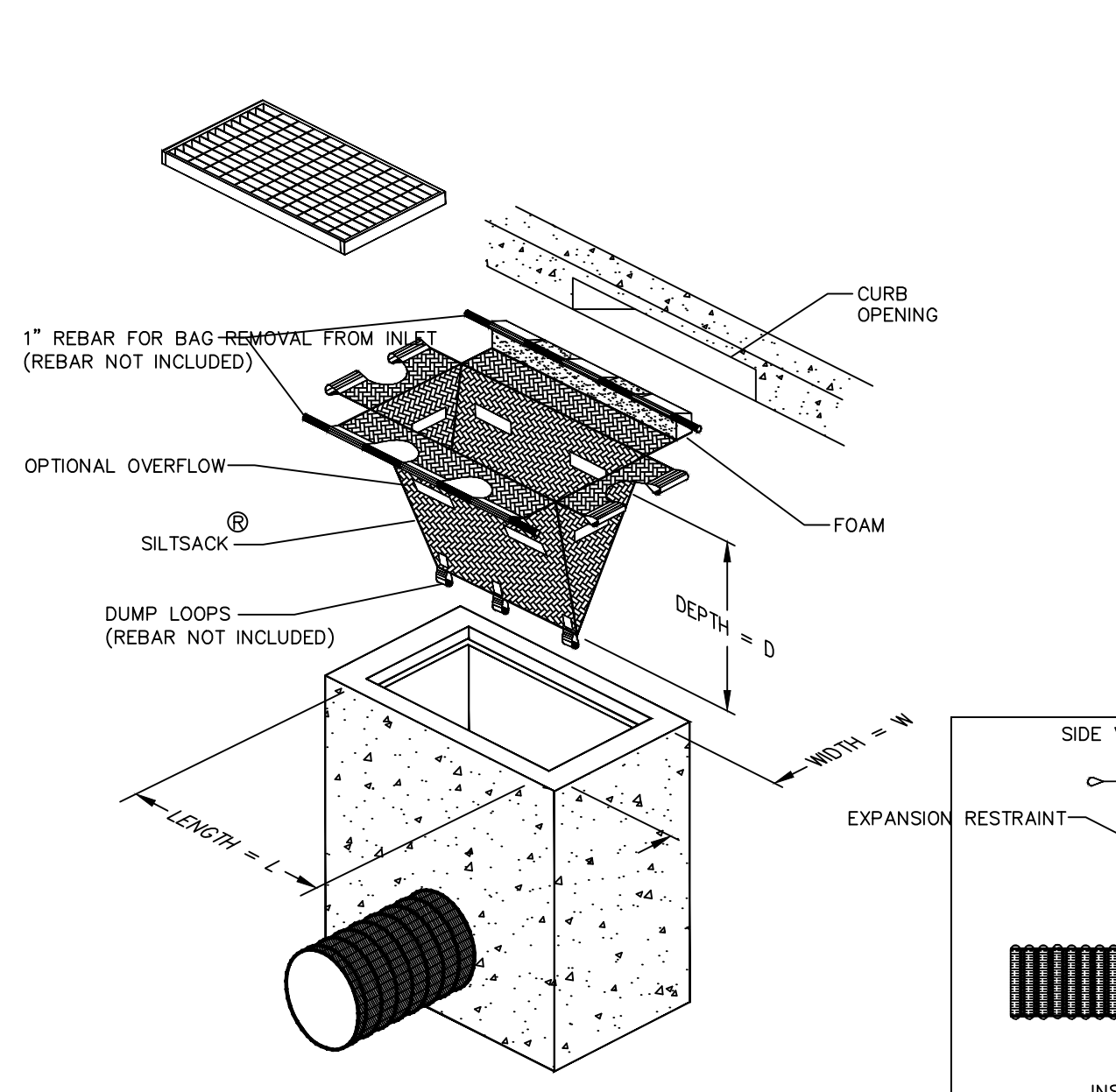
**UTILITY TRENCH - TYPE I MODIFIED**



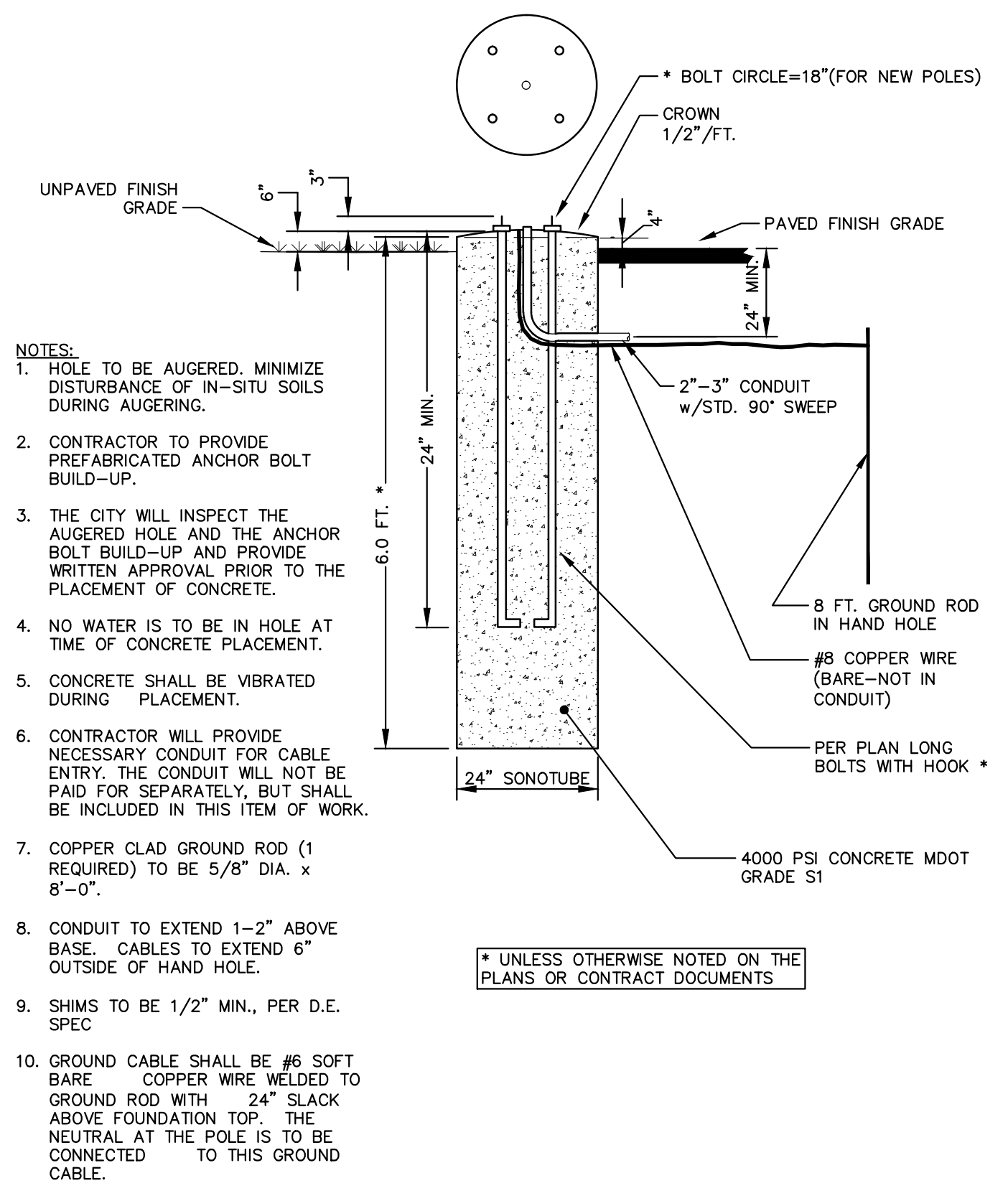
**LEACHING SINGLE INLET STRUCTURE**



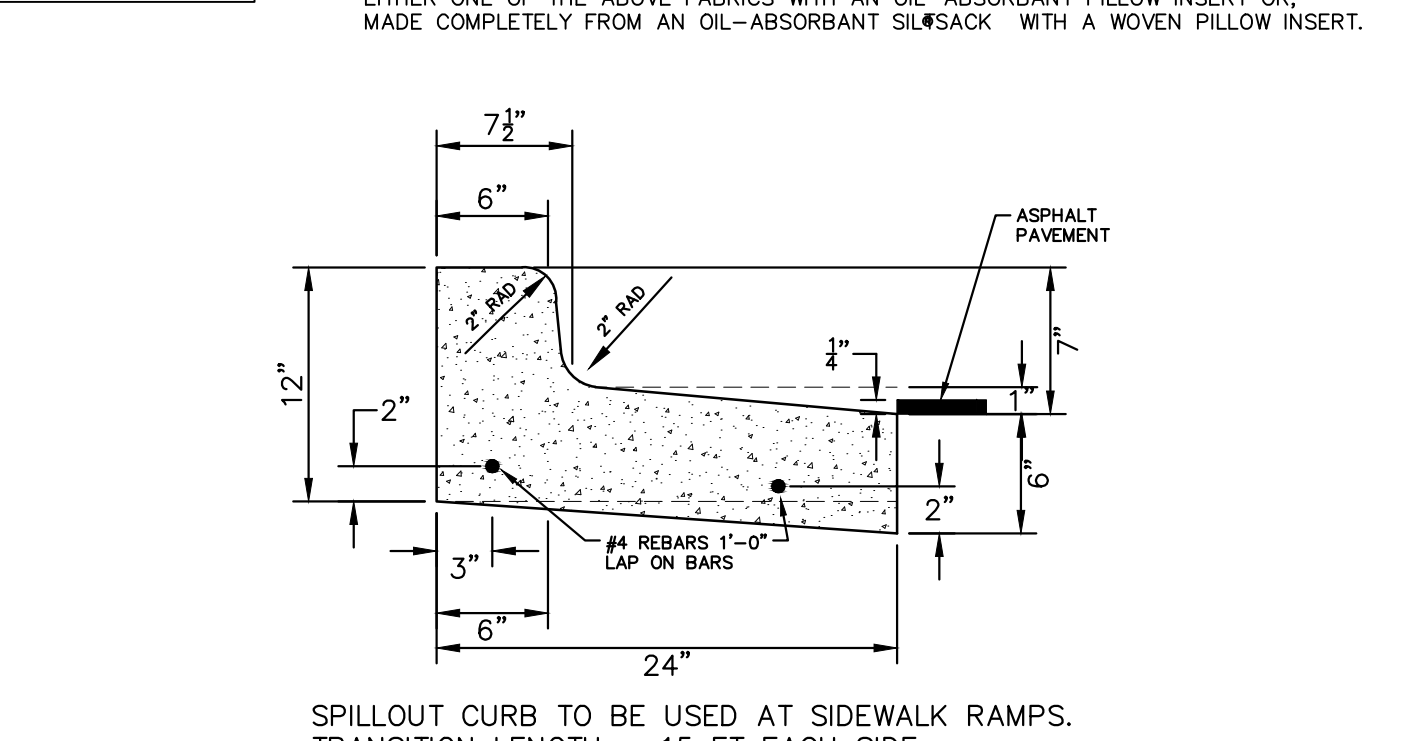
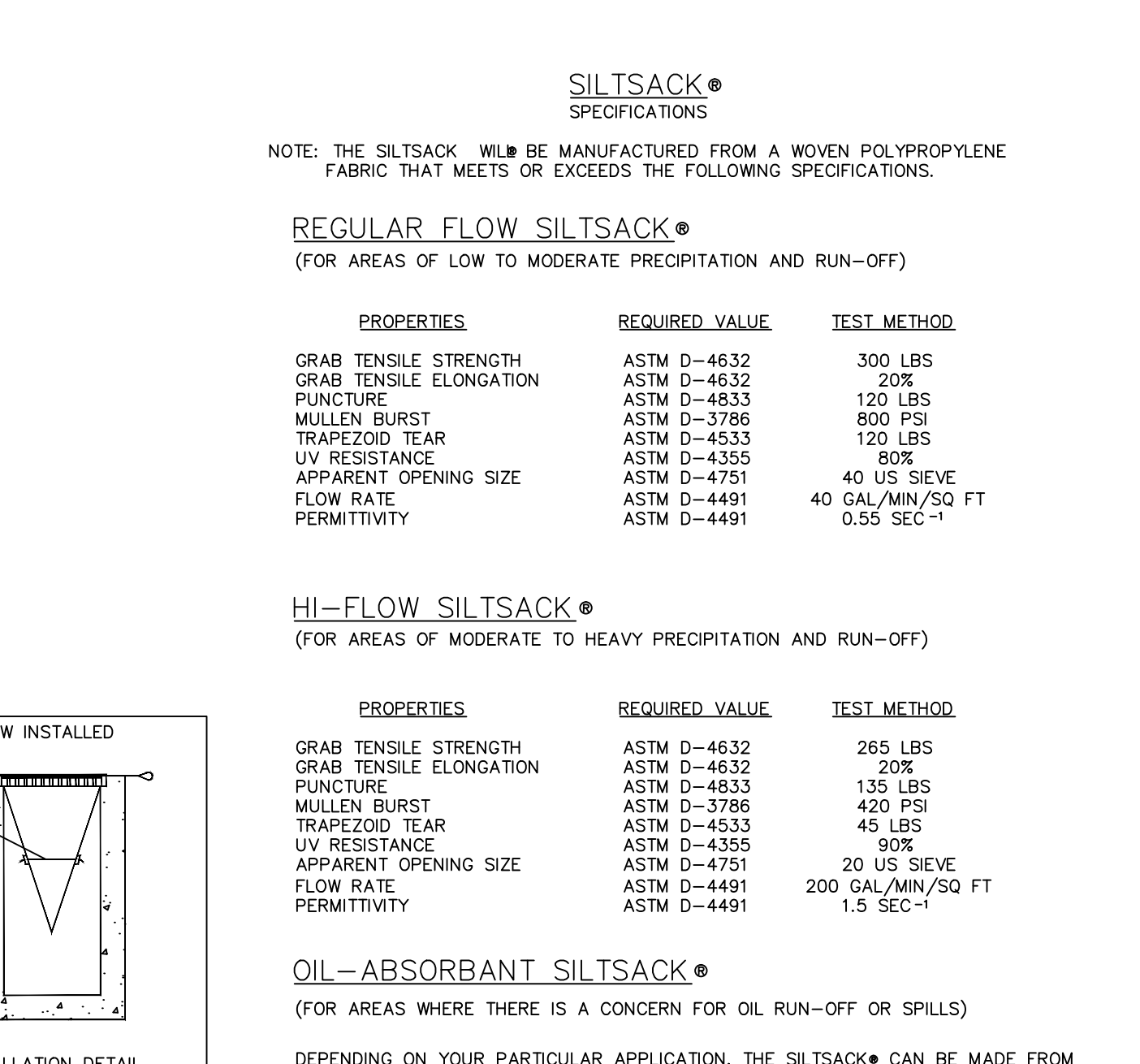
**STONE RESERVOIR TRENCH DETAIL**



**BARRIER CURB AND GUTTER SD-R-1**



**STREETLIGHT FOUNDATION SD-SL-1**



**SPILL-OUT BARRIER CURB & GUTTER SD-R-3**

Know what's below. Call before you dig.

REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DF/CEC	IWK	OUT FOR BID
00	12-19-12	DF/CEC	IWK	MOEQ SUBMITTAL

**CITY OF ANN ARBOR**  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1410  
 www.aagov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**

SCALE: N.T.S. DRAWING No. 2012027-05 SHEET No. 05 OF 49



PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.	
PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
<b>* NO COST TO CONTRACTOR</b>	

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.	
PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
M.D.E.Q. SANITARY SEWER CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

CONTACT INFORMATION		
PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM		KEVIN ERNST (734) 794-6350
FORESTRY		TRACY PENNINGTON (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 17150 ALLEN ROAD MELVINDALE, MI 48122	JAY WILLIAMS (313) 380-7303
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016

WEST MADISON BENCH MARKS		
BM #	ELEV	DESCRIPTION
1	818.72	NAIL IN S. SIDE POWER POLE ON THE NW CORNER OF MADISON AND MAIN
2	819.39	NAIL IN N. SIDE POWER POLE ON THE SE CORNER OF MADISON AND ASHLEY
3	820.62	NAIL IN N. SIDE POWER POLE ON THE S SIDE OF MADISON AT HOUSE # 213
4	823.99	NAIL IN N. SIDE POWER POLE ON THE S SIDE OF MADISON AT HOUSE # 602 FIRST
5	834.55	NAIL IN N. SIDE POWER POLE ON THE SW CORNER OF MADISON AND SECOND
6	839.06	RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON AT HOUSE # 414
7	846.41	RR SPIKE IN S. SIDE POWER POLE ON THE NW CORNER OF MADISON AND THIRD
8	859.20	RR SPIKE IN S. SIDE POWER POLE ON THE NW CORNER OF MADISON AND FOURTH
9	863.57	RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON OPPOSITE TURNER PARK CT.
10	871.84	RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON, 1ST POLE W. OF FIFTH
11	872.05	LARGE PK NAIL IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SIXTH
12	874.60	NAIL IN N. SIDE GUY POLE ON THE S SIDE OF MADISON AT HOUSE # 809
13	875.65	RR SPIKE IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SEVENTH

**CONSTRUCTION SEQUENCE:**

The Contractor shall review the Traffic Maintenance Plans of the Contract Documents and note that each of the two construction Stages (1 and 2) are provided to maintain access at all times to residences solely accessed off of Madison Street, and minimize the impacts on the businesses at the east end of the project. Plans indicate leaving 10 feet of existing pavement for access road for utility installation, final removal limits of pavement as directed by Engineer. The driveways are to be maintained at all times. During crossing of drives with utilities and road building, residents must be notified at least a day in advance so vehicles can be moved prior to the closure. Drives are to be temporarily put back as soon as possible, and opened for resident use at the end of each day. The Contractor may choose to adjust the limits or sequencing of construction in order to complete the work more efficiently. However, changes to the recommended stages and phases must be approved in writing by the Engineer prior to construction and must assure that access is maintained as described above. Work on Seventh Street and Main Street that require lane closure will need to be scheduled 1 full week in advance and approved by the Engineer. Work must be scheduled between the hours of 9am to 3pm and allow lane to be re opened at end of each day or as directed by Engineer.

**STAGE I, PHASES I AND PHASE II**

Stage 1, Phase I shall consist of constructing improvements on southside of Madison from station 10+50 to 25+30 maintaining minimum of 10 foot wide access path on north side of street. Stage 1 Phase II consists of constructing improvements on north side of Madison from station 10+50 to Main Street, maintaining minimum of 10 foot wide access path on south side of street or pavement removal of water main trench only as directed by Engineer.

- Installation of traffic control devices, and maintenance of traffic plan for westbound Madison St. detour and Stage 1 Phase I Maintenance of Traffic Plan. Installation of portable, changeable message signs with messages as directed by the Engineer one week prior to construction. Installation of Soil Erosion Control Devices.
- Removal of pavement and concrete items on south side leaving 10 feet of existing pavement for access lane north side as detailed on Maintenance of Traffic Plan or as directed by Engineer. Access lane to be open and free of obstructions at end of each day.
- Install 8 and 12 inch water main from Main Street to approximate station 10+50.
- With passing pressure test on water main station 10+50 to Main St. schedule and make connection of new 12 inch main to existing 12 inch main at First Street. With placement of aqua swabs east and west of new tee during water main placement flush and remove 8 inch swab from west end and 12 inch swab from east end.
- Excavate and make repairs to sanitary sewer as indicated on plans.
- Test water main per City Detailed Specification for Water Main Testing.
- Once bacteriological samples have passed schedule with Field Operations and transfer water services to new main from Main St. to approximate station 10+50.
- Transfer existing water services to the new 8 inch water main from Main Street to approximate station 10+50.
- Schedule and make connections to the remaining side streets as detailed at Ashley St., Second St., and Third St.
- Place edge drain and construct road cross section for south half of road. Proposed aggregate base will be used as access road during storm placement in Stage 1 Phase II. Aggregate base will be ramped at driveways and be maintained at all times. Any areas of base that become contaminated or deficient will be removed and replaced as directed by Engineer.
- Implement Stage 1 Phase II traffic control with local resident traffic being maintained on the south side of the street.
- Removal of hma and concrete items on north side of Madison.
- Install storm sewer improvements as indicated on plans. Clean and video inspect storm per City of Ann Arbor Standards.
- Finish installation of road cross section and edge drain on north half of Madison starting at Main Street working west. This work is to take place behind storm sewer installation.
- Video inspect private sanitary leads as directed by Engineer. This work needs to be completed before placement of HMA. Any leads found to be deficient will be excavated and repaired by Contractor using pay items provided.
- Grade aggregate base for curb, prep driveways and sidewalk and install concrete items on both sides of street from Main Street to station 10+50. Pre pour meeting required to discuss resident parking during cure time. Drive approaches to be placed same day as curb or no later than next day. Only one side of sidewalk to be removed and replaced at a time. Pedestrian traffic to be maintained on one side of Madison at all times.
- Topsoil, seed and install mulch blankets at all disturbed areas in Stage 1.
- Fine grade aggregate and place hma base and leveling courses.
- Adjust structures in road to finish grade.

**STAGE 2, PHASE I AND PHASE II**

Stage 2, Phases I shall consist of constructing improvements on south side of Madison from station 10+50 to Seventh St. maintaining minimum of 10 foot wide access path on north side of street or pavement removal of water main trench only as directed by Engineer. Stage 2 Phase II consists of constructing improvements on north side of Madison from station 10+50 to Seventh St. maintaining minimum of 10 foot wide access path on south side of street.

- Installation of traffic control devices and maintenance of traffic plan for Stage 2 Phase 2 Maintenance of Traffic Plan. Install Soil Erosion Control Devices.
- Removal of pavement and concrete items on south side leaving 10 feet of existing pavement for access lane north side as detailed on Maintenance of Traffic Plan Stage 2. Access lane to be open and free of obstructions at end of each day.
- Install 8 inch water main from approximate station 10+50 to Seventh Street.
- With passing pressure test on water main station 10+50 to Seventh St., schedule and make connection of 8 inch main to new 8 inch water main at approximate station 10+50.
- Excavate and make repairs to sanitary sewer as indicated on plans.
- Test water main per City Detailed Specification for Water Main Testing.
- Once bacteriological samples have passed, transfer existing water services to new 8 inch water main from Seventh Street to approximate station 10+50.
- Schedule and make connections to remaining side streets as detailed at Fourth St., Fifth St., Sixth St., and Turner Court.
- Place edge drain and construct road cross section for south half of road. Proposed aggregate base will be used as access road during storm placement in Stage 2 Phase II. Aggregate base will be ramped at drives and be maintained at all times. Any areas of base that become contaminated or deficient will be removed and replaced as directed by the Engineer.
- Implement Stage 2 Phase II traffic control with local resident traffic being maintained on south side of street.
- Install storm sewer improvements and stone reservoir as indicated on plans. Clean and video inspect storm per City of Ann Arbor Standards.
- Finish installation of road cross section and edge drain for north half of road starting at station 10+50 working west. This work to take place behind storm sewer and stone reservoir placement.
- Video inspect private sanitary leads as directed by Engineer. This work needs to be completed before placement of HMA. Any leads found to be deficient will be excavated and repaired by Contractor using pay items provided.
- Grade aggregate base for curb, prep driveways and sidewalk and install concrete items on both sides of street from Seventh Street to station 10+50. Pre pour meeting required to discuss resident parking during cure time. Drive approaches to be placed same day as curb or no later than next day. Only one side of sidewalk to be removed and replaced at a time. Pedestrian traffic to be maintained on one side of Madison at all times.
- Topsoil, seed, and install mulch blankets at all disturbed areas in Stage 2.
- Fine grade aggregate and place hma base and leveling courses.
- Adjust structures in road to finish grade.
- Schedule and pave wearing course for entire project Stage 1 and 2.
- Place permanent pavement markings
- Remove soil erosion control and construction signage.
- Open road to normal traffic.

**CONSTRUCTION NOTES:**

- Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
- The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
- Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
- The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
- During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
- Trenches for transferring water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements.
- City of Ann Arbor Field Services will install the corporation and copper service lead(s) to transfer the connection(s). If an existing water service is found to be failing or is not copper, the lead will be replaced to the curb box by Field Services.
- For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.
- The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.
- All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.
- Cor-blu bolts to be used at all mechanical water main joints at hydrants and Megalug fittings
- When all water services are transferred the Contractor shall abandon the existing water main. Reference the Public Services Department Standard Specifications for water main abandonment procedures. Caps and plugs shall be installed by the Contractor where shown on the plans and shall be included in the item of work for water main abandonment or as directed by Engineer.
- The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" and as approved by the Engineer. All chlorinated water shall be discharged directly into an approved sanitary sewer. The Contractor shall supply all necessary hoses, fittings and the like to accomplish this work.
- Water main fittings, other than those specifically listed as separate pay items, which are required to complete the work, such as blow-off assemblies, concrete thrust blocks, solid sleeves and mechanical plugs, shall not be paid for separately, but shall be included in the pipe pay items.
- "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
- Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
- All fittings, hydrants, valves and castings removed during construction are the property of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
- The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
- All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
- Sawed sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.
- The location of material stock piles and on-site staging areas to be approved by the Engineer.

**SOIL EROSION CONTROL NOTES:**


**GENERAL**

- The contractor shall implement and maintain the soil erosion control measures as shown on the plans at all times during construction on this project. Any modifications or additions to the soil erosion control measures due to construction or changed conditions shall be complied with as required or directed by the owner, project engineer, or the City of Ann Arbor. The contractor is required to obtain a Soil Erosion Control Permit anytime the disturbed area exceeds 1 acre.
- All soil erosion and sedimentation control work shall conform to the permit requirements of the City of Ann Arbor, Chapter 63, and the laws of the State of Michigan.
- Daily or after storm events inspections shall be made by the contractor. Periodic inspections may be made by the owner/project engineer to determine the effectiveness of erosion and sedimentation control measures. Any necessary corrections shall be made without delay, and without additional cost to the Owner.
- Erosion and sedimentation from work on the site shall be contained on the site and not be allowed to collect on any off-site areas or waterways.
- All mud/dirt tracked onto roads from the site due to construction, shall be promptly removed by the contractor. If so ordered, the Contractor shall employ a mechanical street sweeper at no additional cost to the Owner.
- Restoration of all disturbed areas, including placement of topsoil, seed, fertilizer and mulch and/or sod shall be done within 5 days of the completion of final grade
- Construction operations shall be scheduled and performed so that preventative soil erosion control measures are in place prior to excavation in critical areas and temporary stabilization measures are in place immediately following backfilling operations.
- Special precautions will be taken in the use of construction equipment to prevent situations that promote erosion.
- Proper dust control shall be maintained during construction by use of water trucks and/or chloride as required or as directed by Engineer.
- The contractor shall be responsible for maintaining all temporary soil erosion control measures and removal of some upon authorized completion of the project. Completion of project will not be authorized until all site work and utility construction is complete and all soils are stabilized.
- The contractor shall not grade into adjacent properties. Silt fence shall be installed and maintained to prevent grading, erosion and sedimentation into them.
- Tree protection fencing must remain intact until restoration of the site is complete.
- Install silt fence, tree protection fencing and inlet filters on existing storm inlets prior to any clearing or earth moving operation.
- Install inlet filters immediately following installation of proposed storm drainage system.
- Contractor to continually maintain erosion and sedimentation control measures, as required to allow drainage and sediment removal. Remove any accumulated sediment.
- Strip and clear -- maintain erosion control measures around temporary stock piles.
- Rough grade
- Install stormwater management system.
- Connect stormwater management system.

- For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.
- All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- Payment for drainage structure pumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.
- Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
- Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.
- Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re-set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "Machine Grading, Modified"
- In areas where edge drain cannot be installed in accordance with City of Ann Arbor Detail SD-TD-11, the edge drain shall be installed at the depth as indicated on the plans, or as directed by Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth of less than 2' below top of proposed pavement.

- Ensure all soil is stabilized. Remove all temporary soil erosion control measures.
- TEMPORARY SEEDING:
  - Seed in accordance with project drawings and specifications.
  - Any disturbed area not paved, seeded, mulched, sodded or built upon by November 15th or June 30th is to be temporarily stabilized per specifications.
- ROADS:
  - During construction, all roads shall be protected from unvegetated areas washing onto road surface by placement of silt fence behind curb or a 10 foot wide straw mulch bank behind curb or other approved method and/or as shown on the plans.
  - During construction of any portion of the project, adjoining roads shall be maintained free of dirt, silt and construction debris. Contractor required to use vacuum sweeper equipment for cleaning construction site and adjoining roads. The use of broom sweeper is not permitted.
- CATCH BASIN/MANHOLE PROTECTION:
  - Protect storm sewer catch basins with approved inlet filters.


S:\Project Management\Design\2012027Cov.dwg - Plot Date: 16-Apr-13



Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL
		REV.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
WEST MADISON STREET IMPROVEMENTS



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-3647  
www.a3gov.org

NOTES

SCALE: NTS

DRAWING NO.  
2012027-06

SHEET No. 06 OF 49

**EXISTING LEGEND**

	FIRE HYDRANT		WATER MAIN
	GATE VALVE IN BOX		STORM SEWER
⊗	GATE VALVE IN WELL		SANITARY SEWER
⊙	STOP BOX	---	GAS MAIN
▣	WATER VAULT		ELECTRICAL OVER HEAD
●	WELL		ELECTRICAL UNDER GROUND
□	CATCH BASIN (SQ)	---	BOUNDARY
⊙	STORM MANHOLE		BUILDING
□	NON-CURB CATCH BASIN (SQ)	---	CENTERLINE OF DITCH
⊙	SANITARY MANHOLE	---	CENTERLINE/CROWN OF ROAD
⊙	CLEAN-OUT	---	EDGE OF WATER
●	POST		FENCE
⊕	PEDESTRIAN SIGNAL SIGN		GRAVEL
⊕	HAND HOLE		STONE WALL
⊕	ORNAMENTAL LIGHT		R.O.W.
⊕	FLOOD LIGHT		TREELINE
⊙	UNKNOWN MANHOLE		WETLAND
⊙	TELEPHONE MANHOLE		TREE (DECIDUOUS)
⊗	TELEPHONE RISER		TREE (CONIFEROUS)
⊙	GAS VALVE		STUMP
⊙	GAS VENT		SHRUB (DECIDUOUS)
⊗	GAS BOX		
⊗	ELECTRICAL RISER		
⊗	TRANSFORMER		
∅	UTILITY POLE		
○	LAMP POLE		
○	GUY POLE		
⊕	GUY ANCHOR		
⊕	MONITORING WELL		
▣	MAILBOX		
●	SOIL BORING		
△	TRAVERSE POINT		
+	BENCH MARK		
○	IRON PIPE		
▣	MON BOX		

**PROPOSED LEGEND**

	HYDRANT (PLAN)		WATER MAIN
⊗	WATER GATE WELL		STORM SEWER
▼	REDUCER		SANITARY SEWER
	WATER GATE VALVE	---	CENTERLINE OF DITCH
⊙	WATER STOP BOX	---	CENTERLINE OF ROAD
▣	WATER VAULT		FENCE
■	INLET		SILT FENCE
■	DOUBLE INLET	---	LOT/UNIT
⊙	INLET JUNCTION CHAMBER	---	STAGE LINE
●	ROUND CATCH BASIN	---	CURB
○	STORM MANHOLE	---	TEMPORARY GRADING PERMIT
↘	DRAIN ARROW	---	WATER EASEMENT
▽	FLARED END SECTION	---	STORM EASEMENT
○	SANITARY MANHOLE	---	SANITARY EASEMENT
○	CLEAN-OUT	---	R.O.W.
●	BARREL	---	LIMITS OF CONSTRUCTION
+	SIGN		STONE WALL
○	PUSH BUTTON		DETECTABLE WARNING
			ASPHALT
			CONCRETE
			SIDEWALK
			TREE (DECIDUOUS)
			TREE (CONIFEROUS)



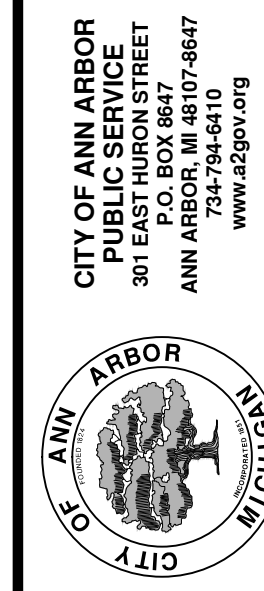
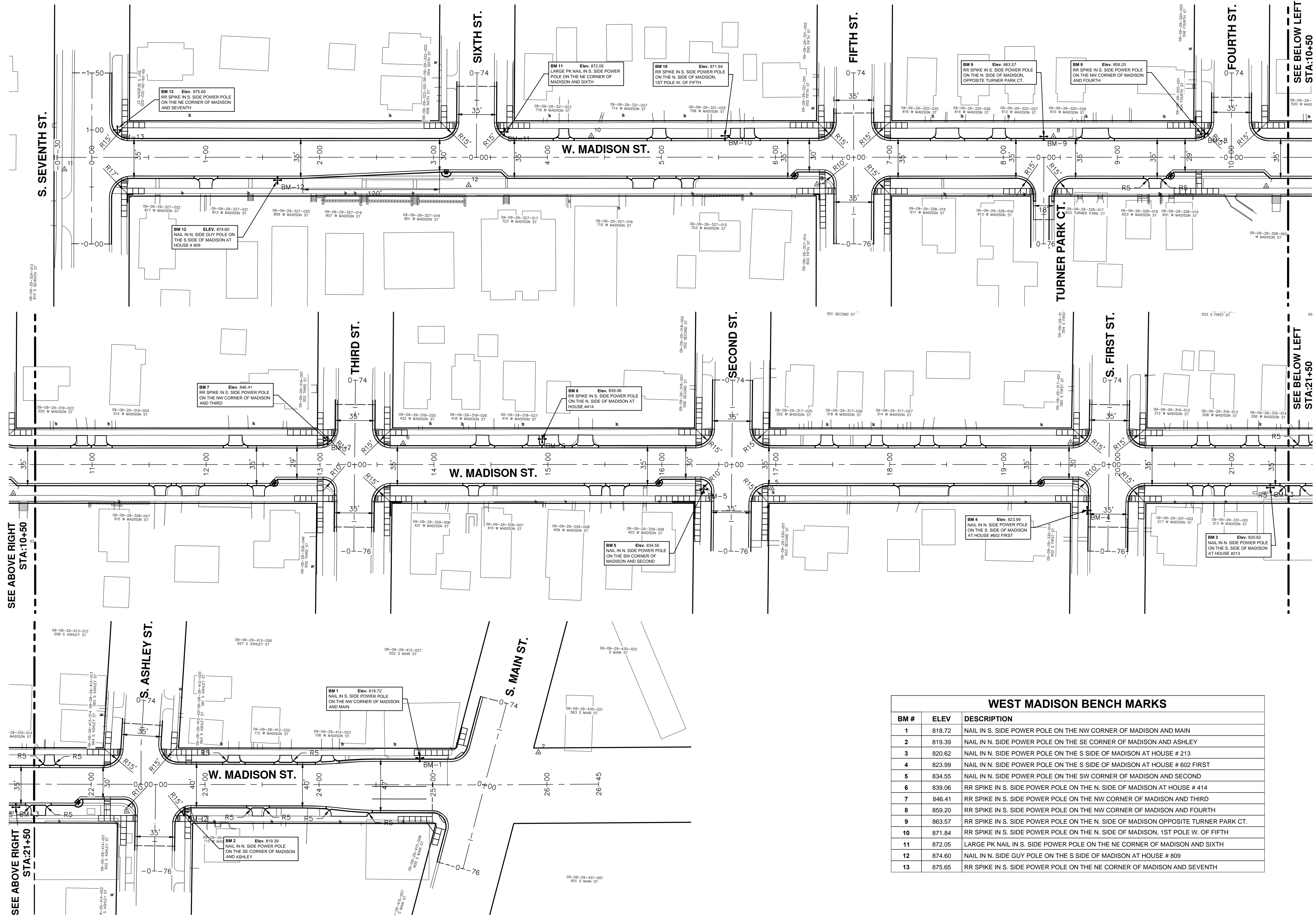
**CITY OF ANN ARBOR**  
**PUBLIC SERVICE**  
 301 EAST HURON STREET  
 ANN ARBOR MI 48106-1410  
 www.a3gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**

SCALE: NTS  
 DRAWING No. 2012027-07

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MODEQ SUBMITTAL
		DRAWN
		CHECKED

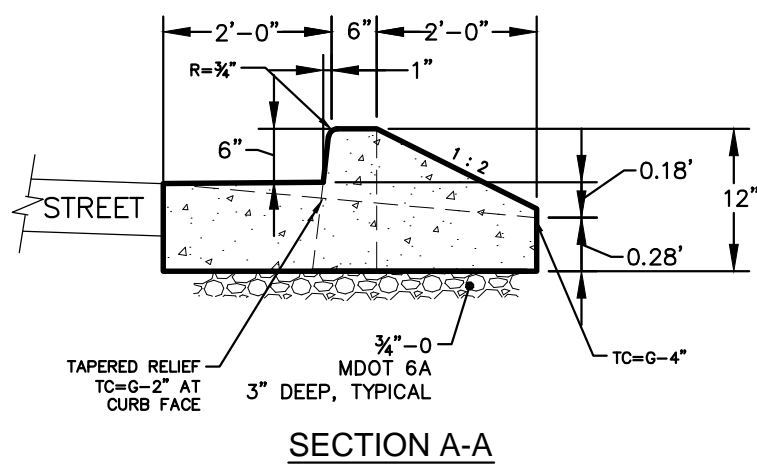
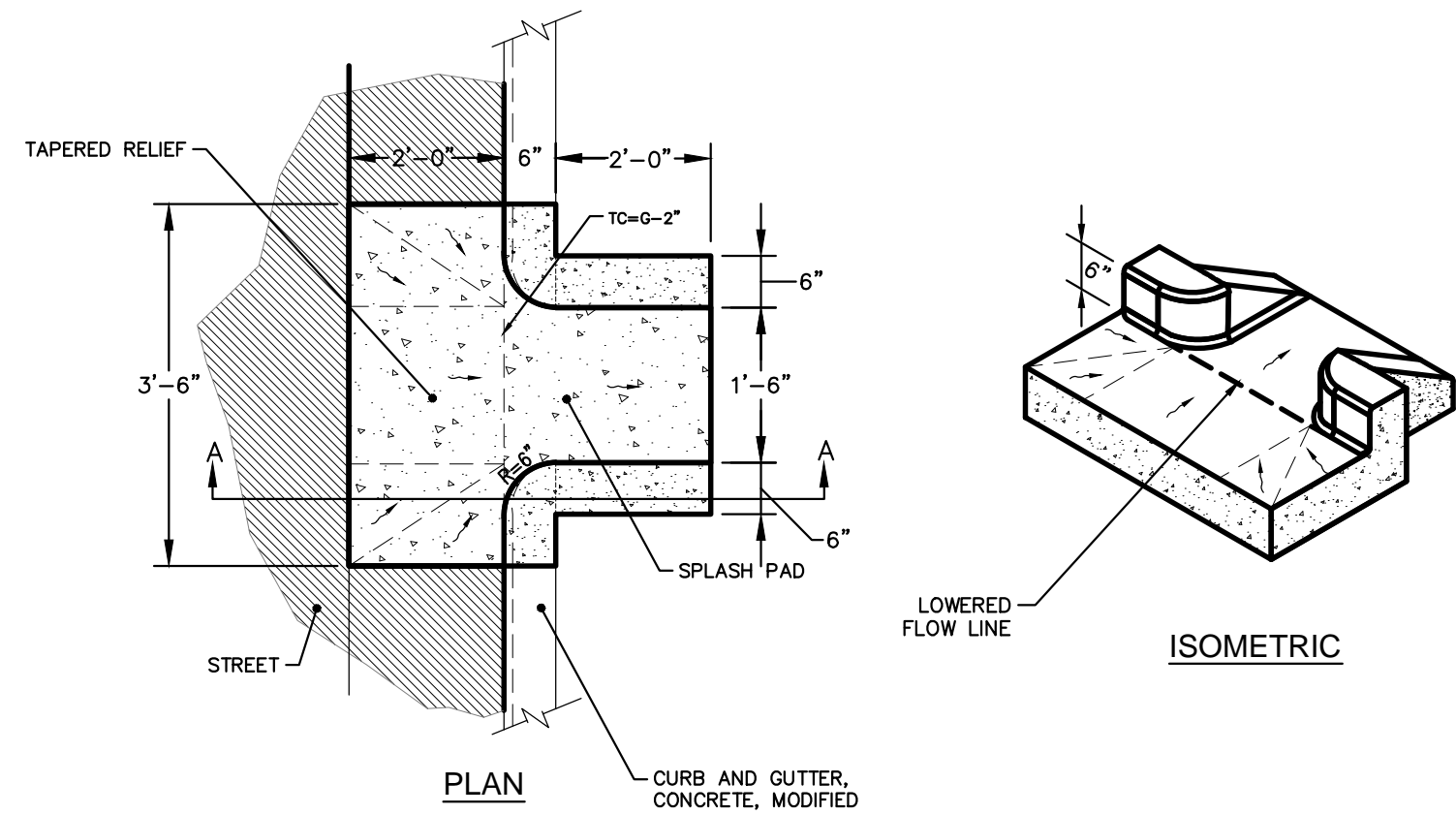




REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MEQO SUBMITTAL

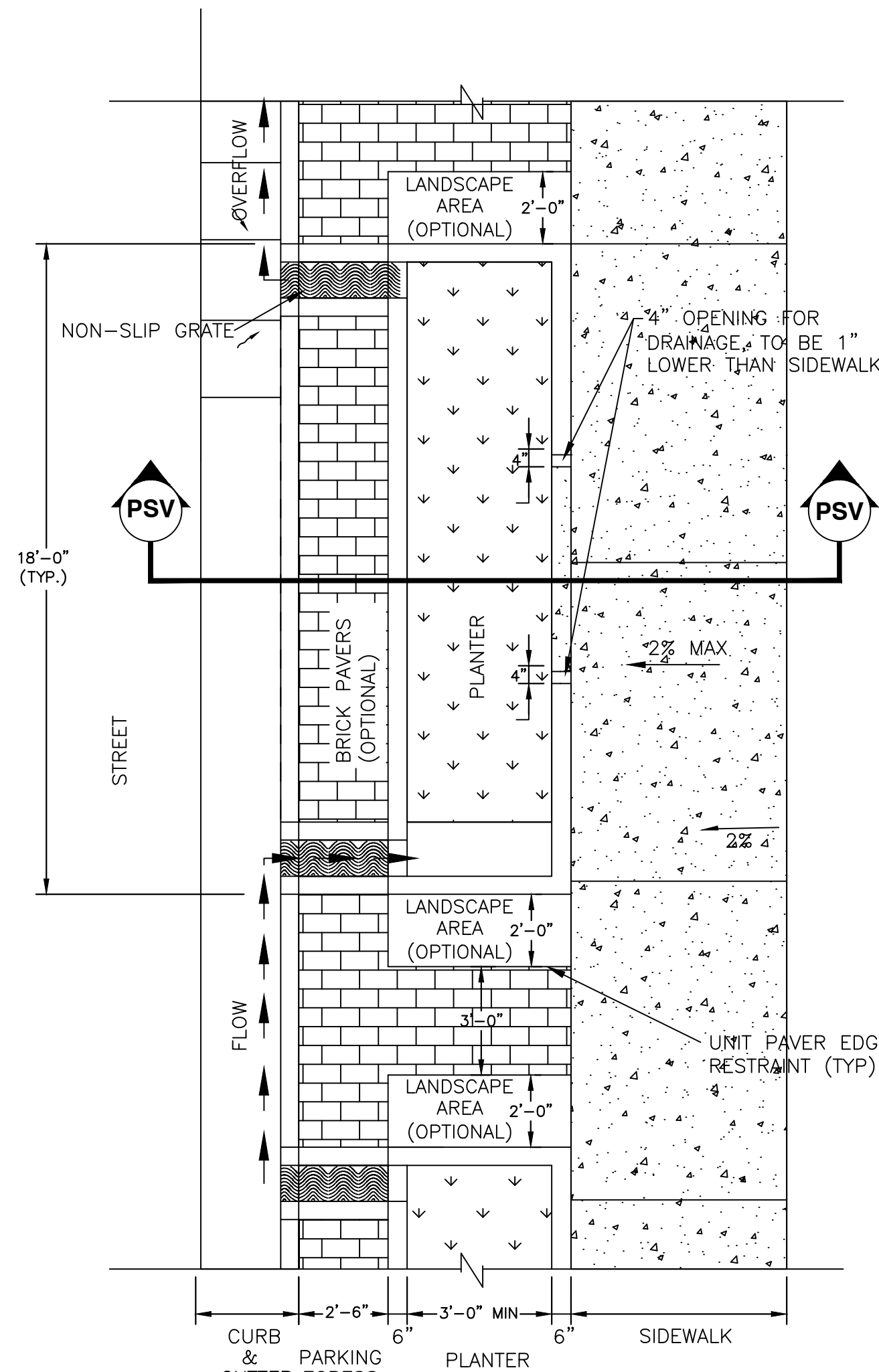


S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027BID\DWG Dwg Created: 13-Dec-12 - \_c2\_standard bw.stb | Plot Date: 16-Apr-13



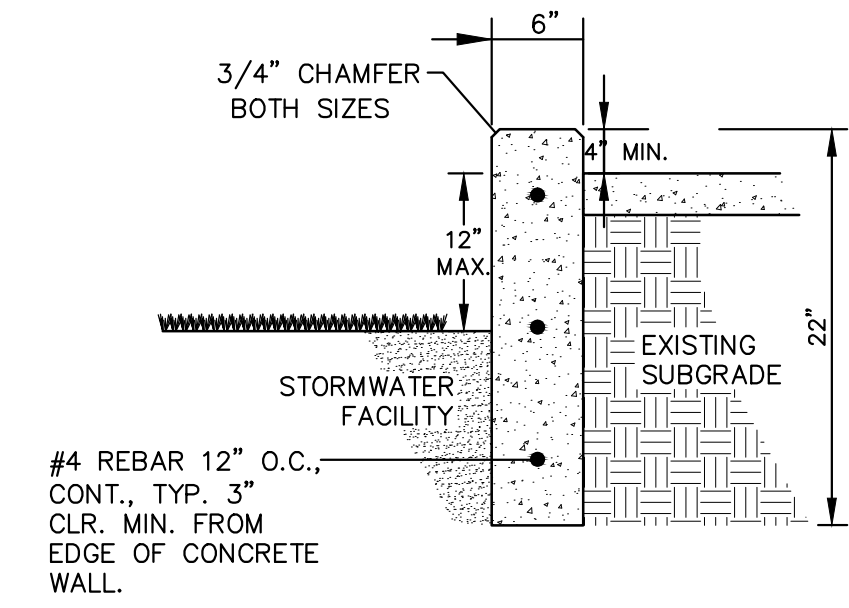
CS SPILLWAY, CONCRETE DETAIL  
NOT TO SCALE

- NOTES:
1. CONCRETE SPLASH PAD NECESSARY WHERE WATER ENTERS AND/OR EXITS FACILITY
  2. FOR STORMWATER FACILITIES, INSTALL WASHED PEA GRAVEL OR RIVER ROCK TO TRANSITION FROM SPLASH PAD TO TOPSOIL



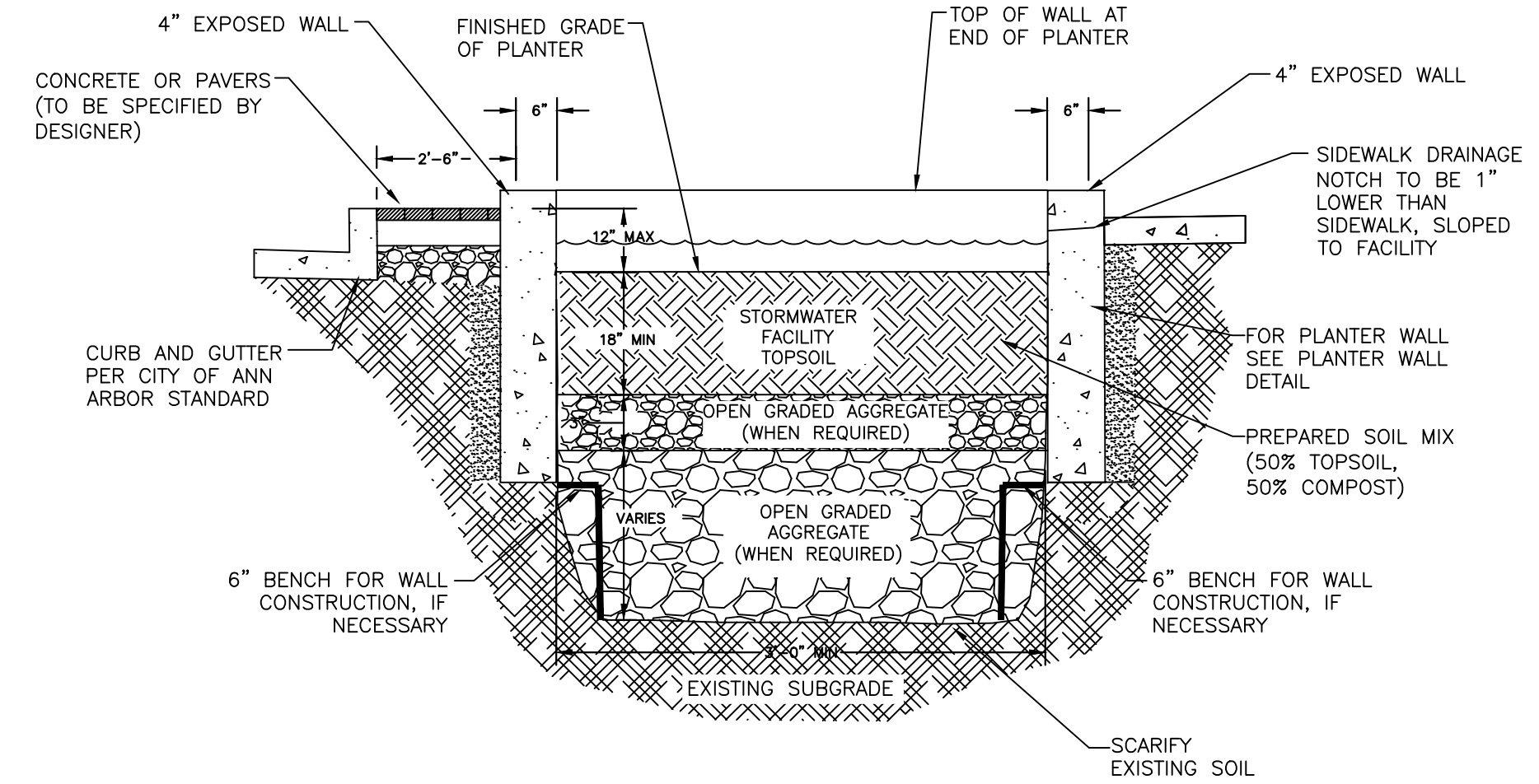
PP PLANTER PLAN  
NOT TO SCALE

1. SIDEWALK ELEVATION MUST BE SET ABOVE INLET AND OUTLET ELEVATIONS TO ALLOW OVERFLOW TO DRAIN TO STREET BEFORE SIDEWALKS.
2. MINIMUM INTERIOR PLANTER WIDTH IS 3 FEET. A MINIMUM 4 FEET INTERIOR PLANTER WIDTH IS REQUIRED FOR STREET TREES IN PLANTER.
3. UTILITY LINES MUST BE SLEEVED OR RELOCATED
4. AREA AND DEPTH OF FACILITY ARE BASED UPON ENGINEERING CALCULATIONS AND RIGHT-OF-WAY CONSTRAINTS.
5. MAY USE CONCRETE OR PAVERS PER CITY STANDARDS.

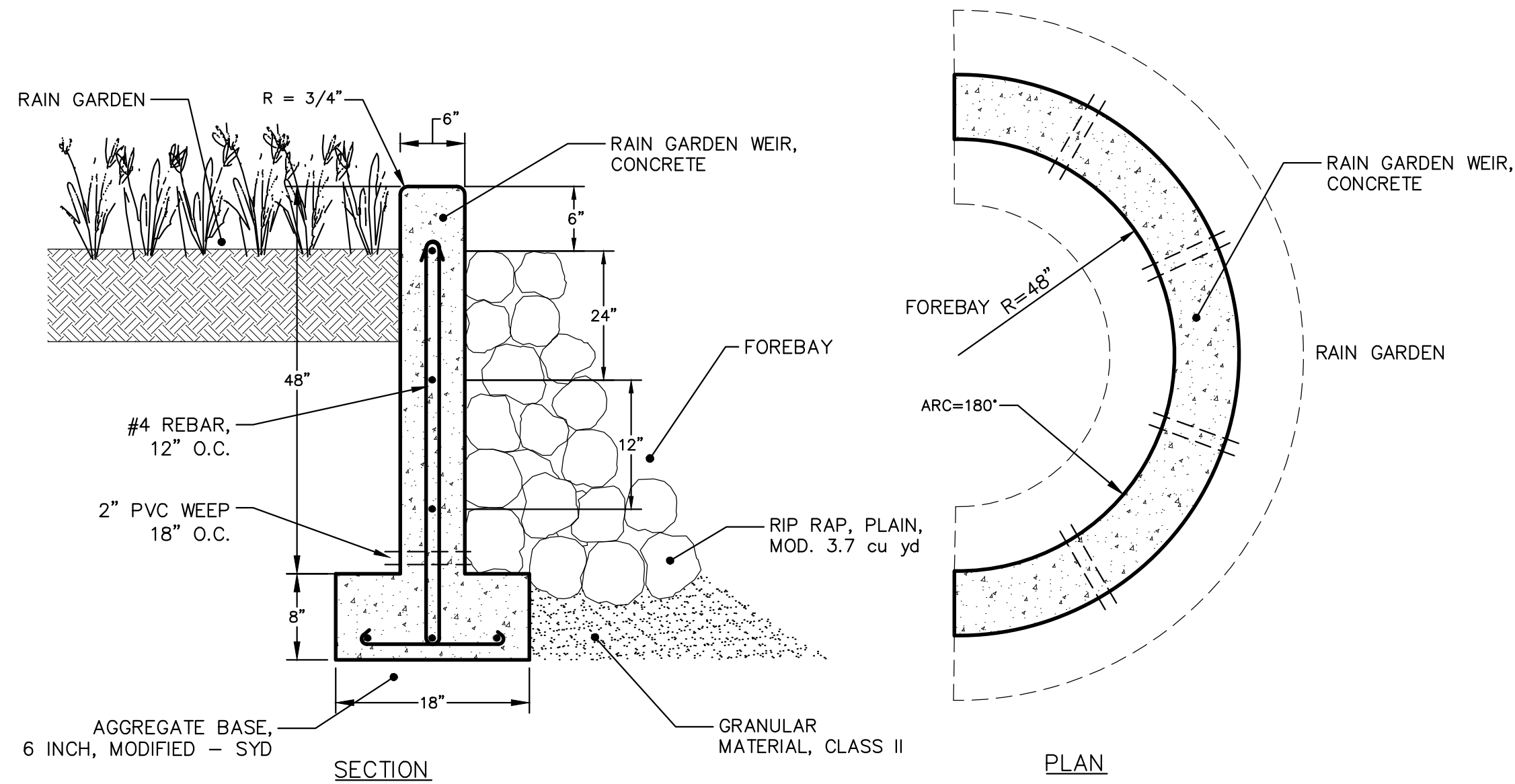


1. SPECIAL DESIGN CONSIDERATIONS OR STRUCTURAL REVIEW MAY BE REQUIRED FOR LONGER PLANTER WALL SPANS. STEEL REINFORCEMENT OR ADDITIONAL CONCRETE CHECK DAMS MAY BE NEEDED FOR STABILITY.
2. FINISH ALL EXPOSED CONCRETE SURFACES.

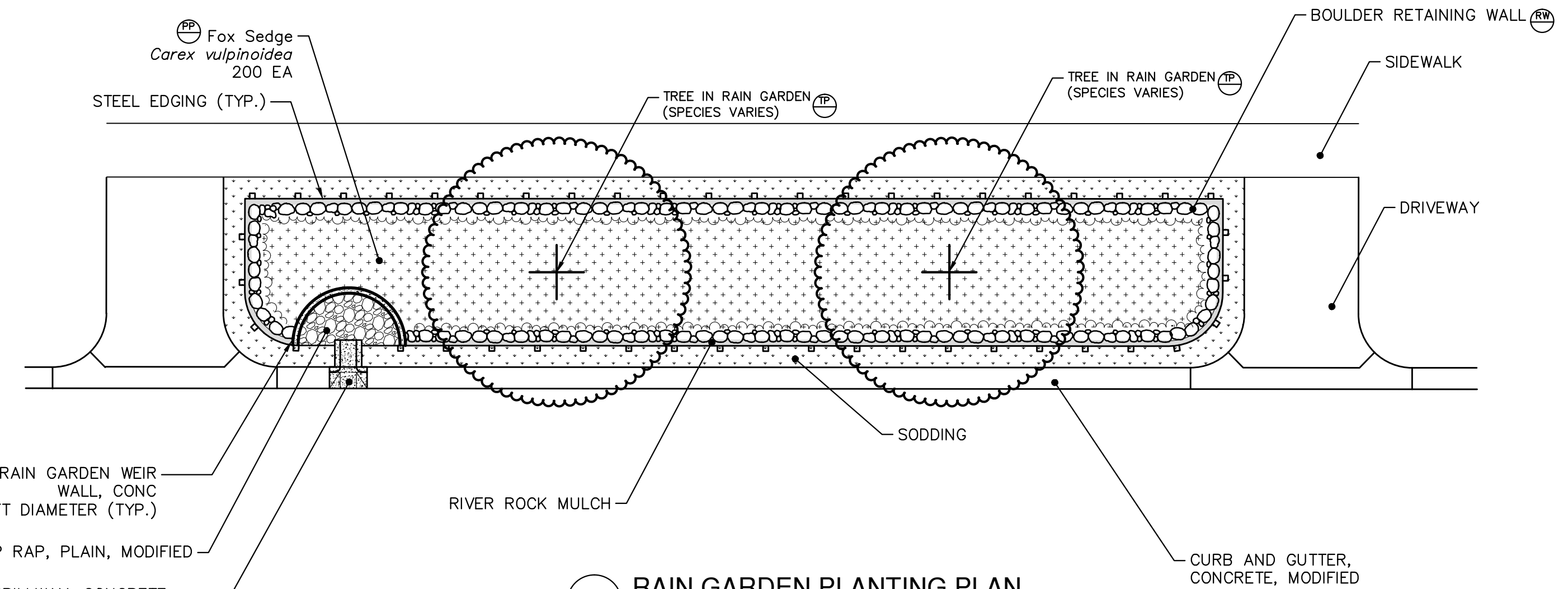
PW PLANTER WALL DETAILS  
NOT TO SCALE



PSV PLANTER SECTION VIEW  
NOT TO SCALE



CW RAIN GARDEN WEIR, CONCRETE  
NOT TO SCALE



RG RAIN GARDEN PLANTING PLAN  
NOT TO SCALE

RAIN GARDEN PLANT MATERIALS						
key	botanical name	common name	quantity	size	condition	remarks / acceptable substitutions
CV	Carex vulpinoidea	Fox Sedge	3575	plug	plug	Fescue sp.
QB	Quercus bicolor	Swamp White Oak	15	1.5-2" cal.	B&B	Quercus macrocarpa, 6' branch height
AR	Nyssa sylvatica	Black Gum	15	1.5-2" cal.	B&B	Acer rubrum, 6' branch height

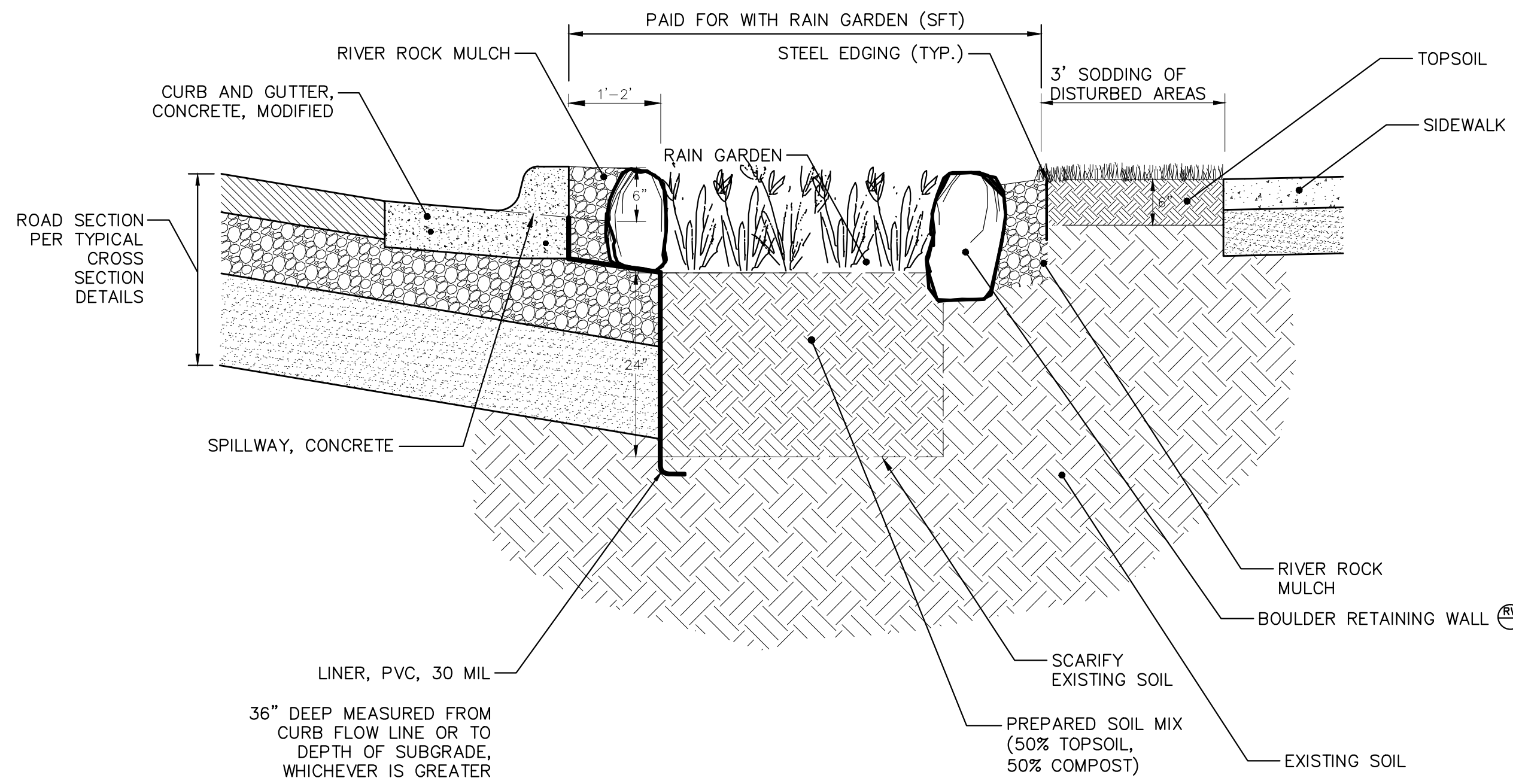
**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1310  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
BIORETENTION  
DETAILS

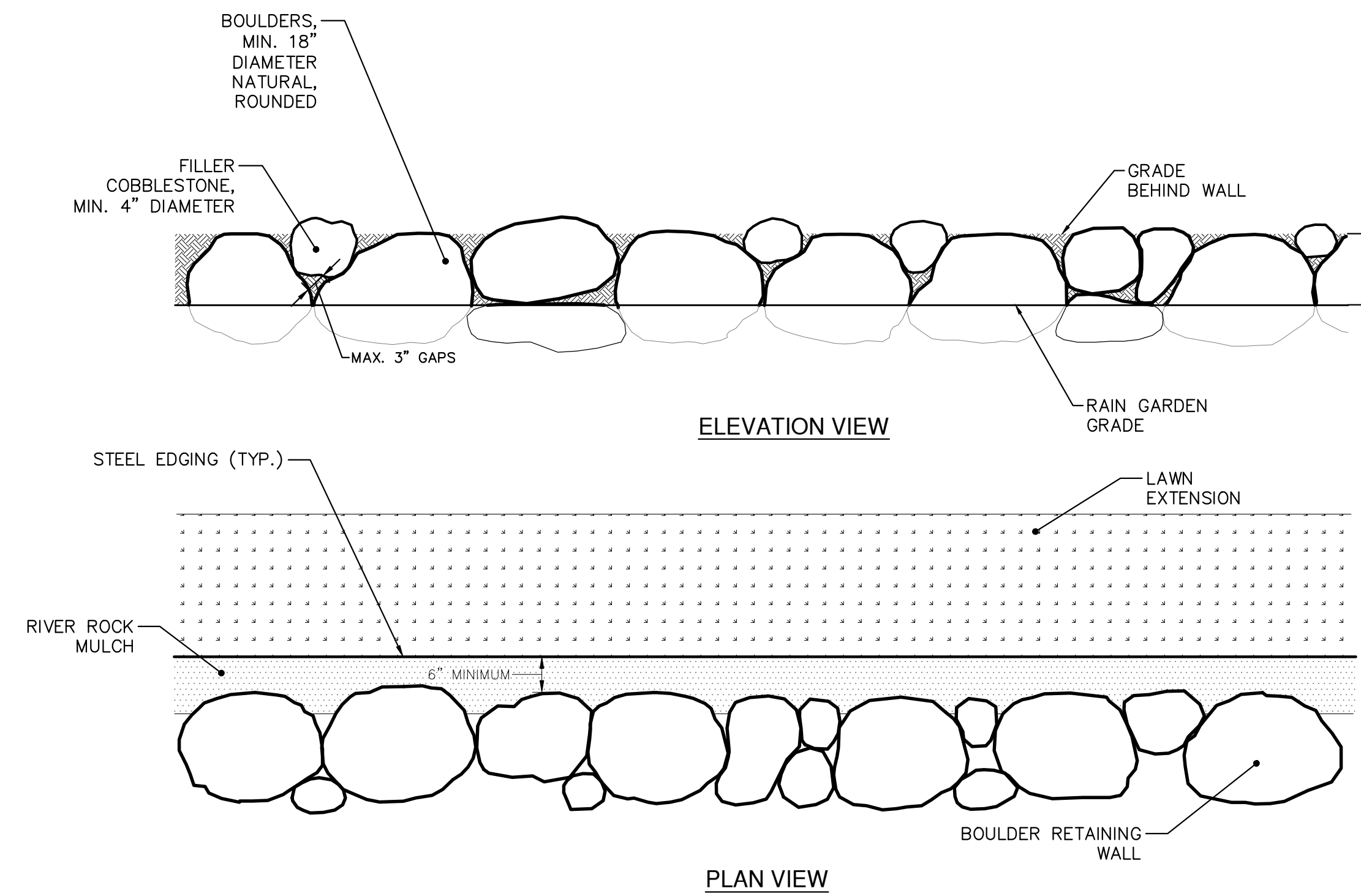
SCALE: N.T.S.  
DRAWING No. 2012027-9  
SHEET No. 9 OF 49

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	OUT FOR BID	4-16-13	DPF/CEC	IWK
00	MOECO SUBMITTAL	12-19-12	DPF/CEC	IWK

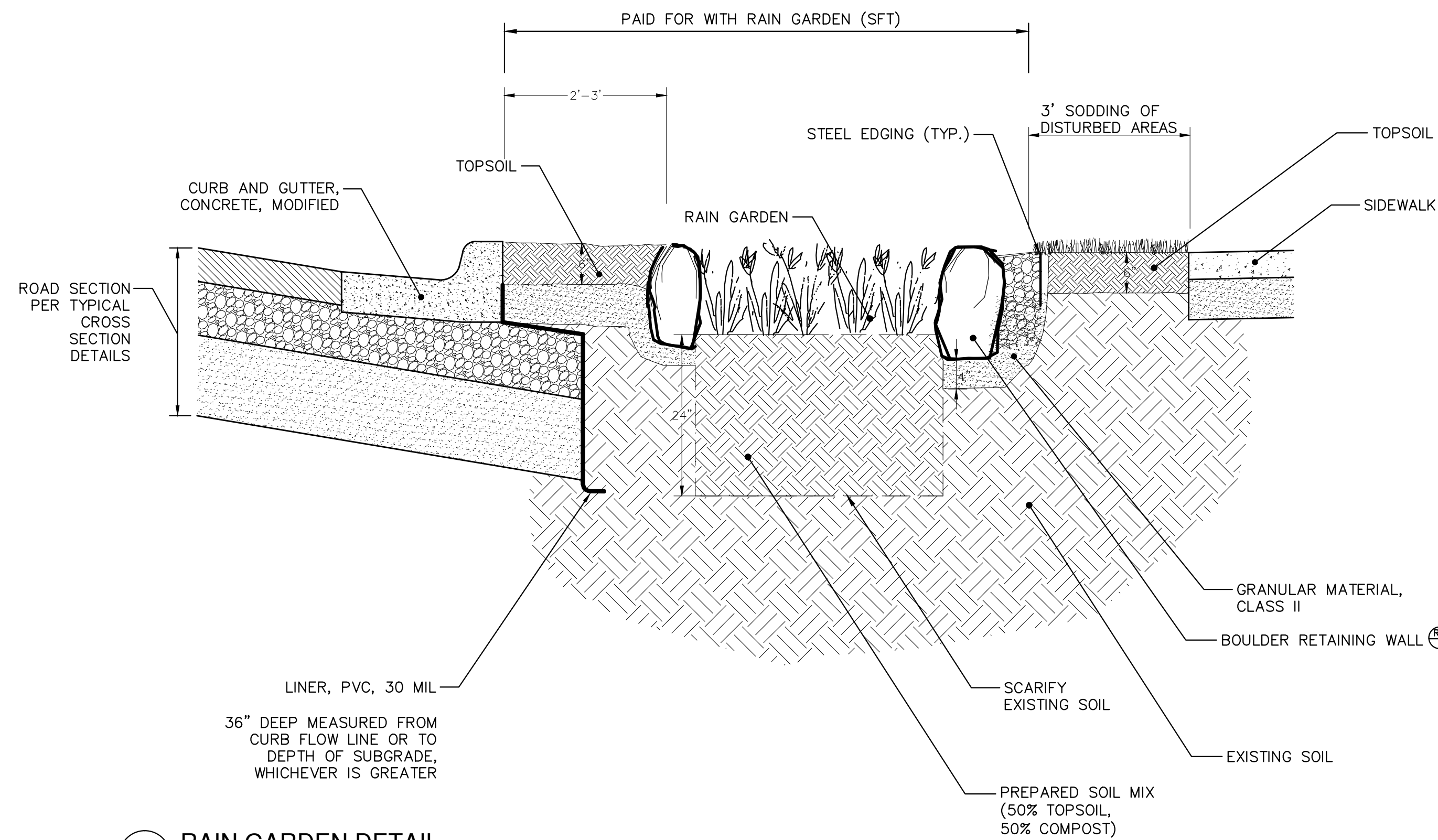
S:\Project Management\Design\201207 Madison\Plan Production\Primary\201207BIDET.dwg Dwg Created: 13-Dec-12 - \_c2\_standard bw.stb = Plot Date: 16-Apr-13



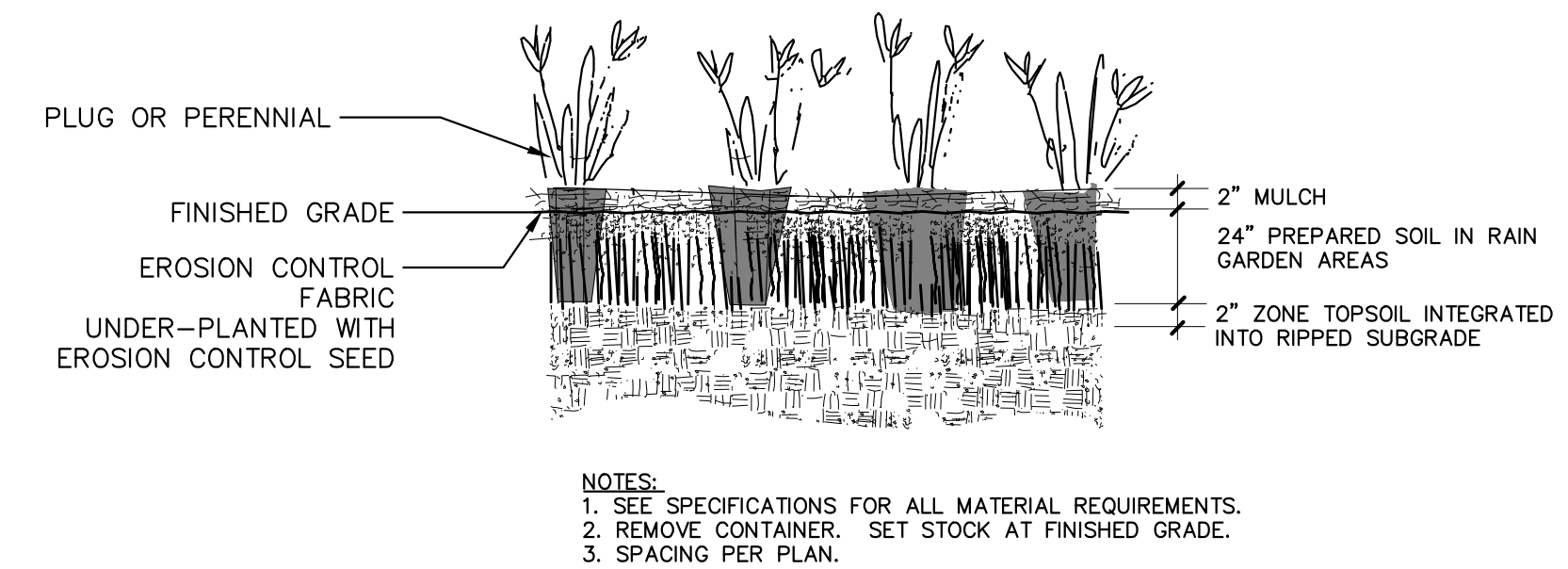
**RG** RAIN GARDEN DETAIL  
NOT TO SCALE



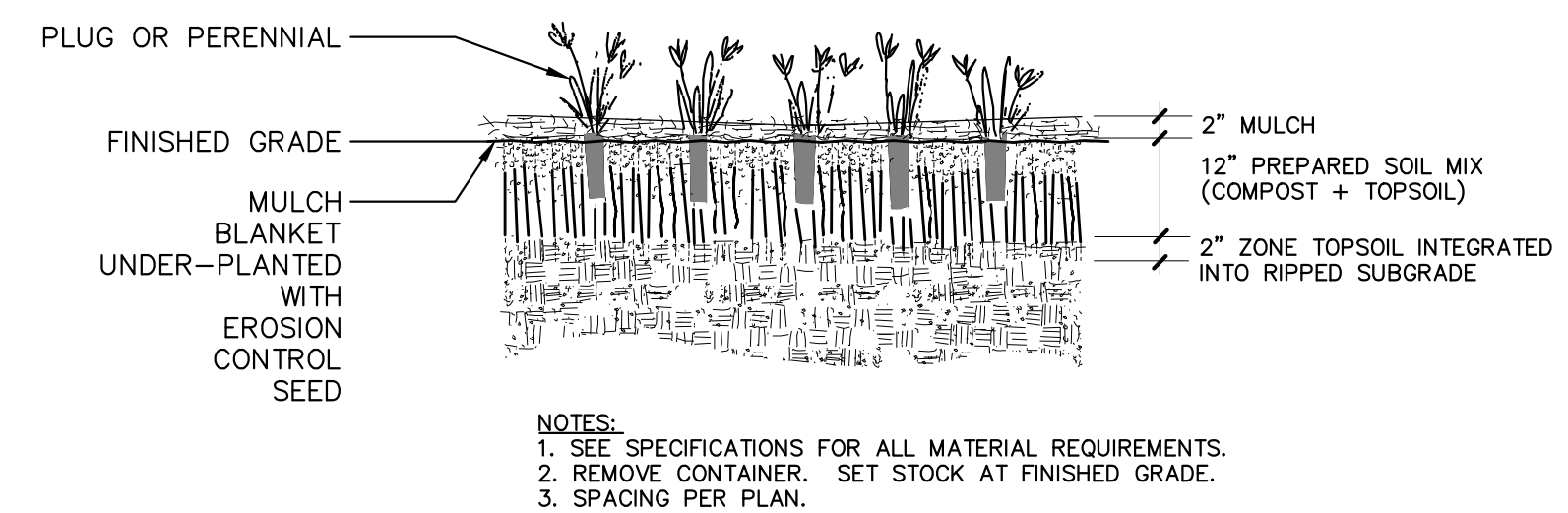
**RW** BOULDER RETAINING WALL DETAIL  
NOT TO SCALE



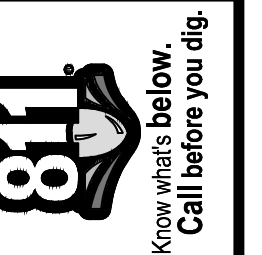
**PP** RAIN GARDEN DETAIL  
NOT TO SCALE



**PP** PERENNIAL PLANTING DETAIL IN RAIN GARDEN AREAS  
NOT TO SCALE



**PP** PERENNIAL PLANTING DETAIL  
NOT TO SCALE



REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DPF/CEC	IVK	OUT FOR BID
00	12-19-12	DPF/CEC	IVK	MOEQ SUBMITTAL

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1607  
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
WEST MADISON STREET IMPROVEMENTS  
BIORETENTION  
DETAILS

SCALE: N.T.S.

DRAWING No. 201207-10

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027DTR.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13

TRAFFIC CONTROL SIGN				
	SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
①	W MADISON ST DETOUR	D3-1	8	12
	M4-9S 30x30		8	50
②	W MADISON ST DETOUR	D3-1	3	5
	M4-9R 30x24		3	15
③	E MADISON ST DETOUR	D3-1	3	5
	M4-9L 30x24		3	15
④	W MADISON ST DETOUR ENDS	D3-1	2	3
	M4-8a 24x18		2	6
⑤	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3 60x30	15	188
⑥	W MADISON AVE CLOSED TO THRU TRAFFIC FOLLOW DETOUR	SPECIAL 48x60	4	80
⑦	DETOUR	M4-9B 30x24	5	25
⑧	END ROAD WORK	G20-2 48x24	2	16
⑨	SIDEWALK CLOSED	R9-9 30x18	4	15
⑩	SIDEWALK CLOSED AHEAD CROSS HERE	R9-11 48x36	4	48
⑪	EASTBOUND W MADISON CLOSED TO THRU TRAFFIC	30X60 SPECIAL	13	163
⑫	R3-2 24x24		7	28
⑬	R3-1 24x24		6	24
⑭	ONE WAY	R6-1R 36x12	7	21
⑮	ONE WAY	R6-1L 36x12	6	18
⑯	ROAD CLOSED	R11-2 48"x30"	1	10
⑰	DETOUR	M4-10R 30"x24"	1	15
⑱	ROAD WORK AHEAD	W20-1 48 X 48	15	240
	W MADISON ST	D3-1	15	23
⑲	W MADISON AVE LOCAL TRAFFIC ONLY NO THRU TRAFFIC	SPECIAL 48x60	3	60
⑳	DETOUR	M4-10L 30"x24"	1	5
	TYPE III BARRICADE		16	
	PLASTIC DRUM LIGHTED FURNISHED/OPERATE		130	

TOTAL TYPE B SIGNS FOR PROJECT= 1380.0 SFT



**811**  
Know what's below.  
Call before you dig.

REV.	DATE	DRAWN	CHECKED
01	4-16-13	DPF/CEC	DPF/CEC
00	12-19-12	DPF/CEC	DPF/CEC

**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1500  
www.a2gov.org

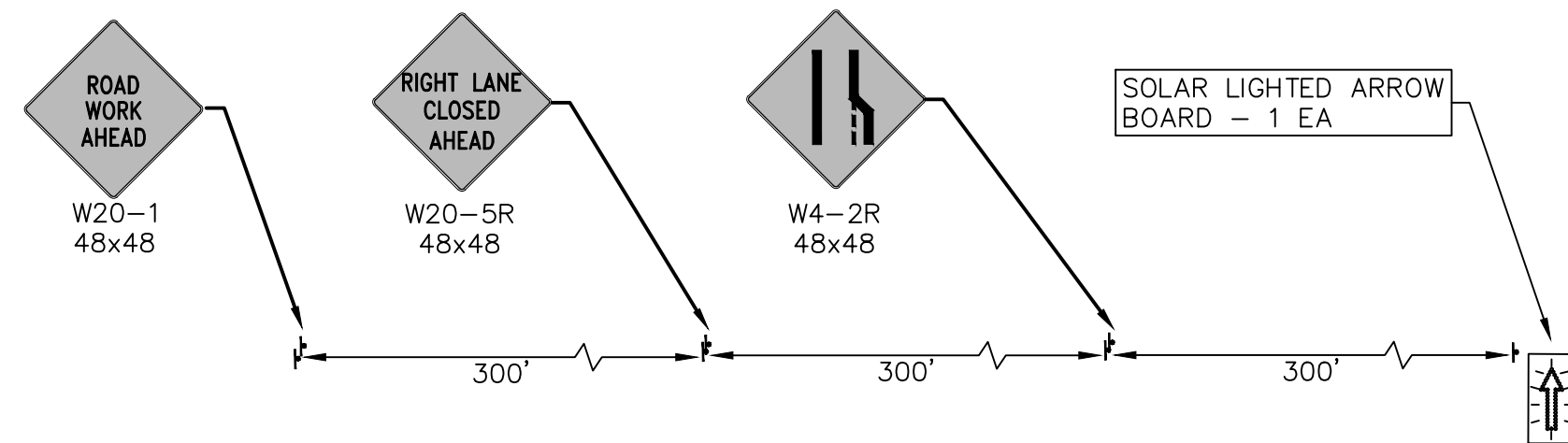
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
MAINTENANCE OF TRAFFIC

DETOUR ROUTE

SCALE PLAN: 1" = 200'  
DRAWING No. 2012027-11  
SHEET No. 11 OF 49

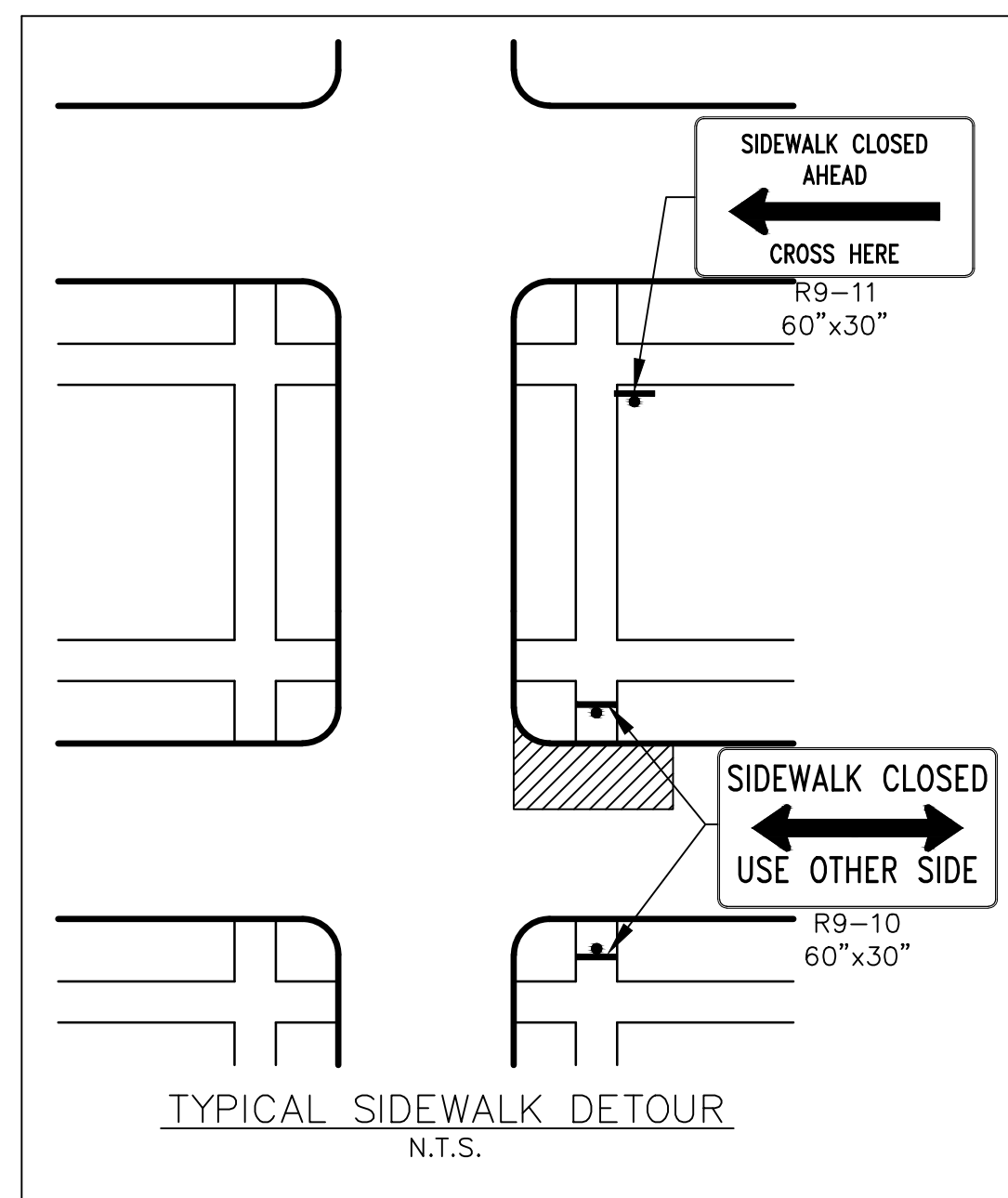


### LANE CLOSURE TYPICAL MAIN AND SEVENTH STREETS



**NOTES:**

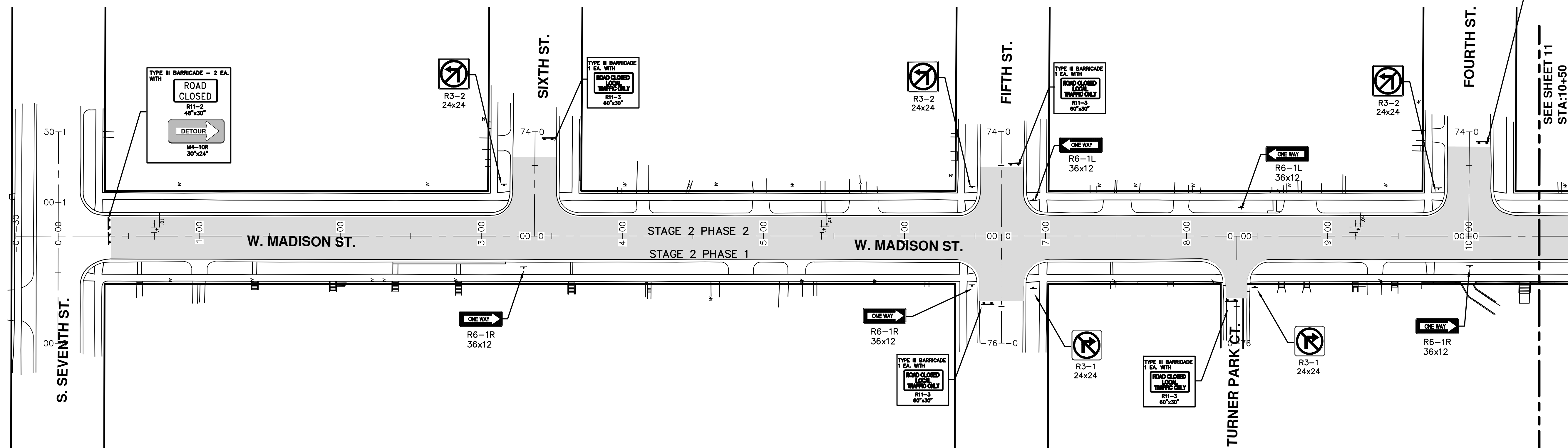
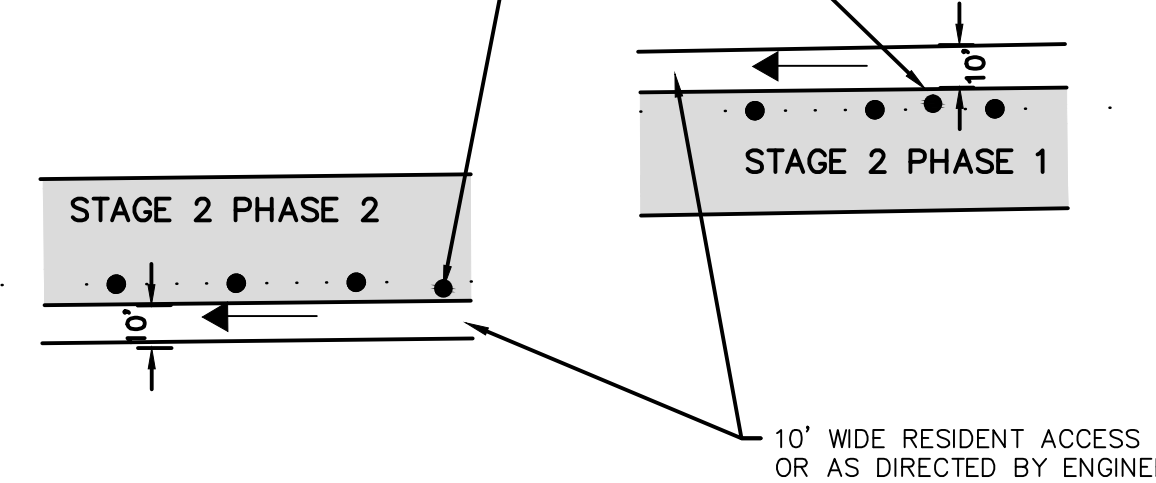
1. MAIN ST. AND SEVENTH ST. WORK WILL REQUIRE MAINTENANCE OF TRAFFIC PLAN SUBMITTED ONE (1) WEEK PRIOR TO WORK IN INTERSECTION FOR REVIEW, APPROVAL AND NOTIFICATION TO PUBLIC. LANE CLOSURE PERMIT TO BE FILLED OUT 48 HOURS IN ADVANCE.
2. PLASTIC DRUMS FURNISHED AND OPERATED 25' C-C (TYP).
3. MERGING TAPER OF 120' REQUIRED OR AS DIRECTED BY ENGINEER.



TRAFFIC CONTROL SIGN			
SIGN	NUMBER	QUANTITY	TOTAL AREA (SFT)
SIDEWALK CLOSED USE OTHER SIDE	R9-10 60X30	4	50
DETOUR	M4-9B 30x24	4	20
SIDEWALK CLOSED CROSS HERE	R9-11 60X30	4	50
SIDEWALK CLOSED	R9-9 30x18	4	16
SIDEWALK CLOSED AHEAD CROSS HERE	R9-11 48x36	4	48

SIGN TYPE B TOTAL THIS SHEET 184 SFT

PLASTIC DRUM STAGE 1 PHASE 1 AND 2 LIGHTED - FURNISHED & OPERATE 25' O.C. (TYP.) - 60 EA



REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-3667  
www.a2gov.org

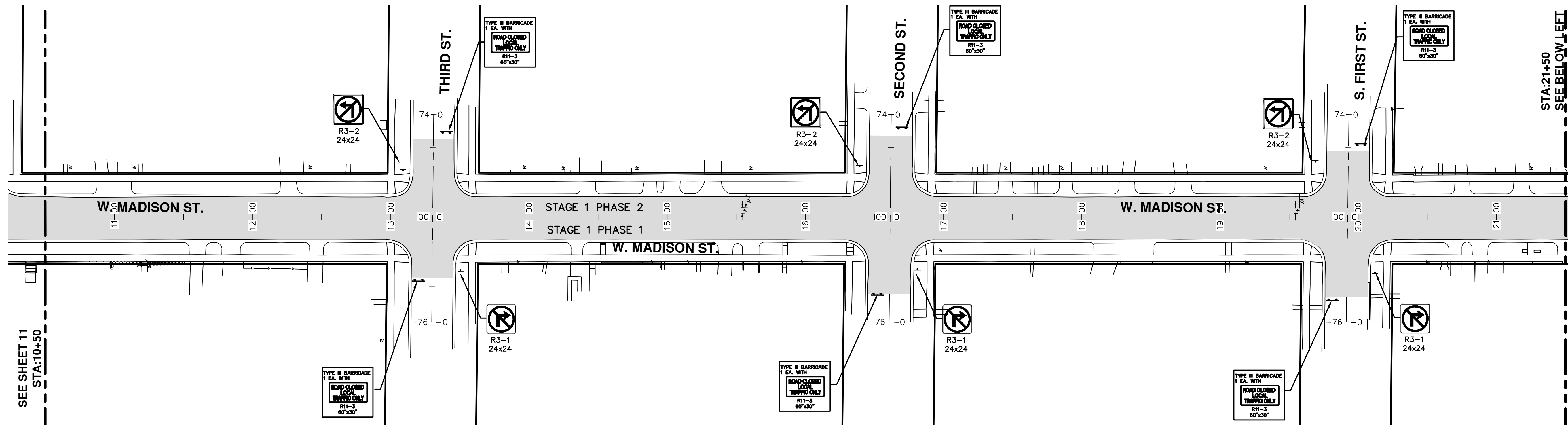


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
WEST MADISON STREET IMPROVEMENTS  
MAINTENANCE OF TRAFFIC  
STA. 0+00 TO STA. 10+50  
STAGE 2 PHASE 1 AND 2

SCALE PLAN: 1"=40'  
DRAWING No. 2012027-12



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027MTRF1.dwg Dwg Created: 12-Jul-12 - a2\_standard.bw.stb - Plot Date: 16-Apr-13

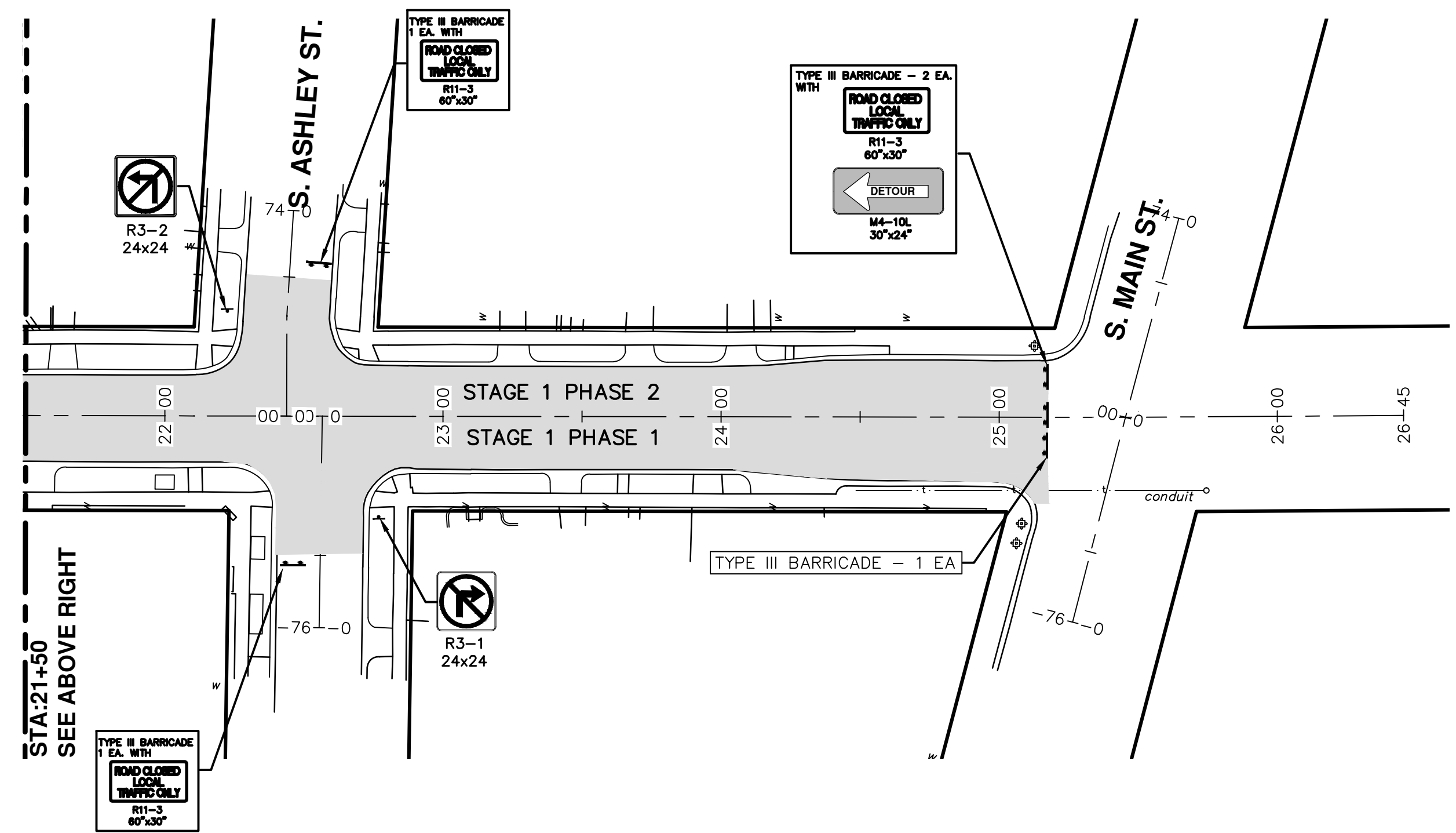
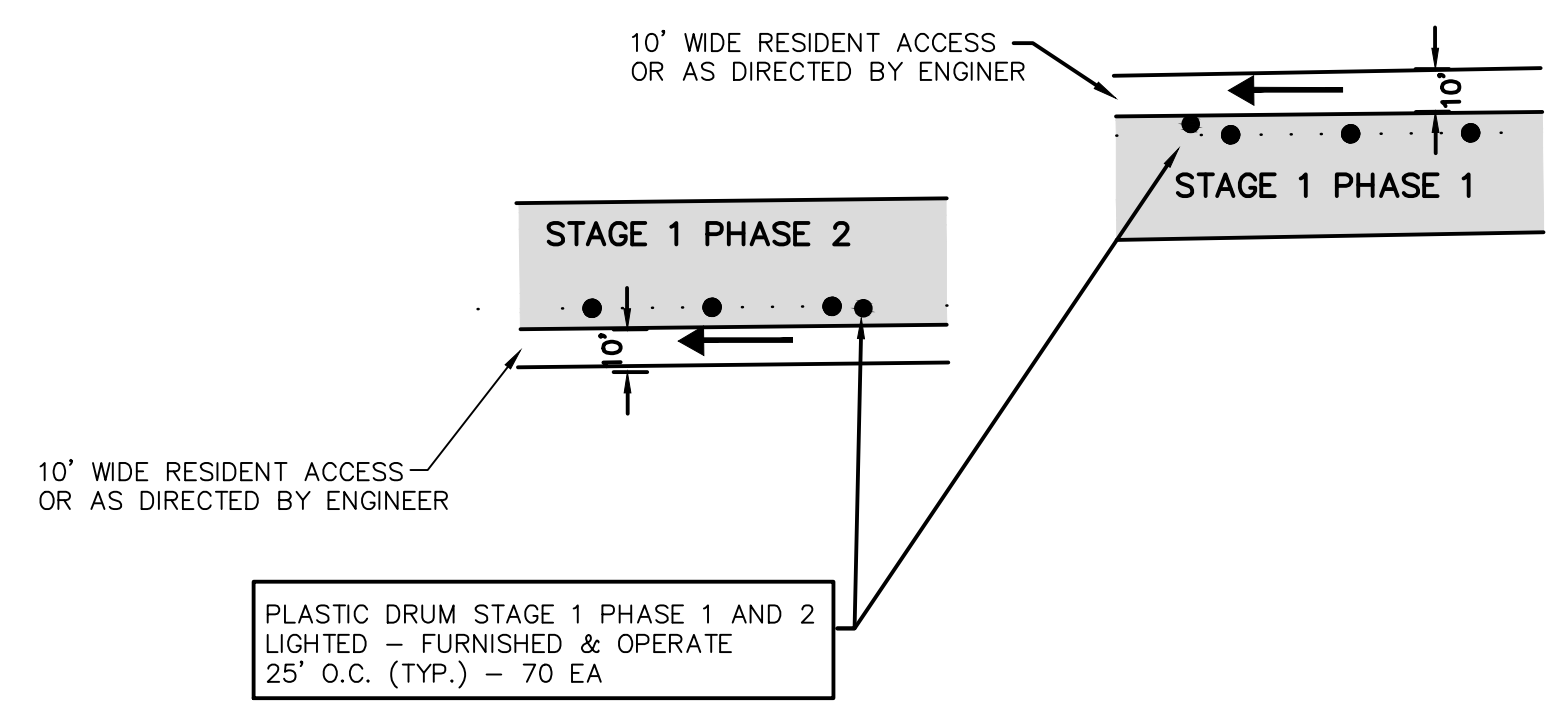


SEE SHEET 11  
STA:10+50

STA:21+50  
SEE BELOW LEFT

**NOTES FOR STAGE 1 AND STAGE 2:**

1. CONTRACTOR TO COORDINATE WITH THE CITY OF ANN ARBOR FIELD OPERATIONS UNIT (SIGNS, SIGNALS AND COMMUNICATIONS) FOR THE BAGGING OF EXISTING TRAFFIC SIGNALS TO FACILITATE TRAFFIC CONTROL AT MAIN STREET. 48 HOUR ADVANCED NOTICE IS REQUIRED.
2. FINAL LIMITS OF PAVEMENT REMOVAL FOR UTILITY INSTALLATION WILL BE AS DIRECTED BY ENGINEER.
3. COVER CONFLICTING SIGNS AS NEEDED OR AS DIRECTED BY ENGINEER PAID AS MINOR TRAFFIC CONTROL.
4. ONLY ONE (1) INTERSECTION QUADRANT AT A TIME SHALL BE CLOSED FOR CONSTRUCTION. PEDESTRIAN DETOURS SHALL BE PLACED AT INTERSECTIONS. DETOURS SHALL BE APPROVED BY CITY PRIOR TO PLACEMENT. MISCELLANEOUS QUANTITIES FOR FURNISHING AND OPERATING TYPE B SIGNS HAVE BEEN PROVIDED.
5. WORK TO BE SCHEDULED THAT SIDEWALK EITHER NORTH OR SOUTHSIDE IS IN PLACE AT ALL TIMES.
6. MAIN ST. AND SEVENTH ST. WORK WILL REQUIRE MAINTENANCE OF TRAFFIC PLAN SUBMITTED ONE (1) WEEK PRIOR TO WORK IN INTERSECTION FOR REVIEW, APPROVAL AND NOTIFICATION TO PUBLIC.
7. CONTRACTOR SHALL PLACE PORTABLE, CHANGEABLE MESSAGE SIGNS A MINIMUM OF ONE (1) WEEK PRIOR TO THE START OF CONSTRUCTION IN LOCATIONS INDICATED BY ENGINEER. MESSAGE TO BE PROVIDED BY THE ENGINEER.



STA:21+50  
SEE ABOVE RIGHT

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**WEST MADISON STREET IMPROVEMENTS**

MAINTENANCE OF TRAFFIC

STA 10+50 TO STA 25+30

STAGE 1 PHASE 1 AND 2

SCALE PLAN: 1"=40'

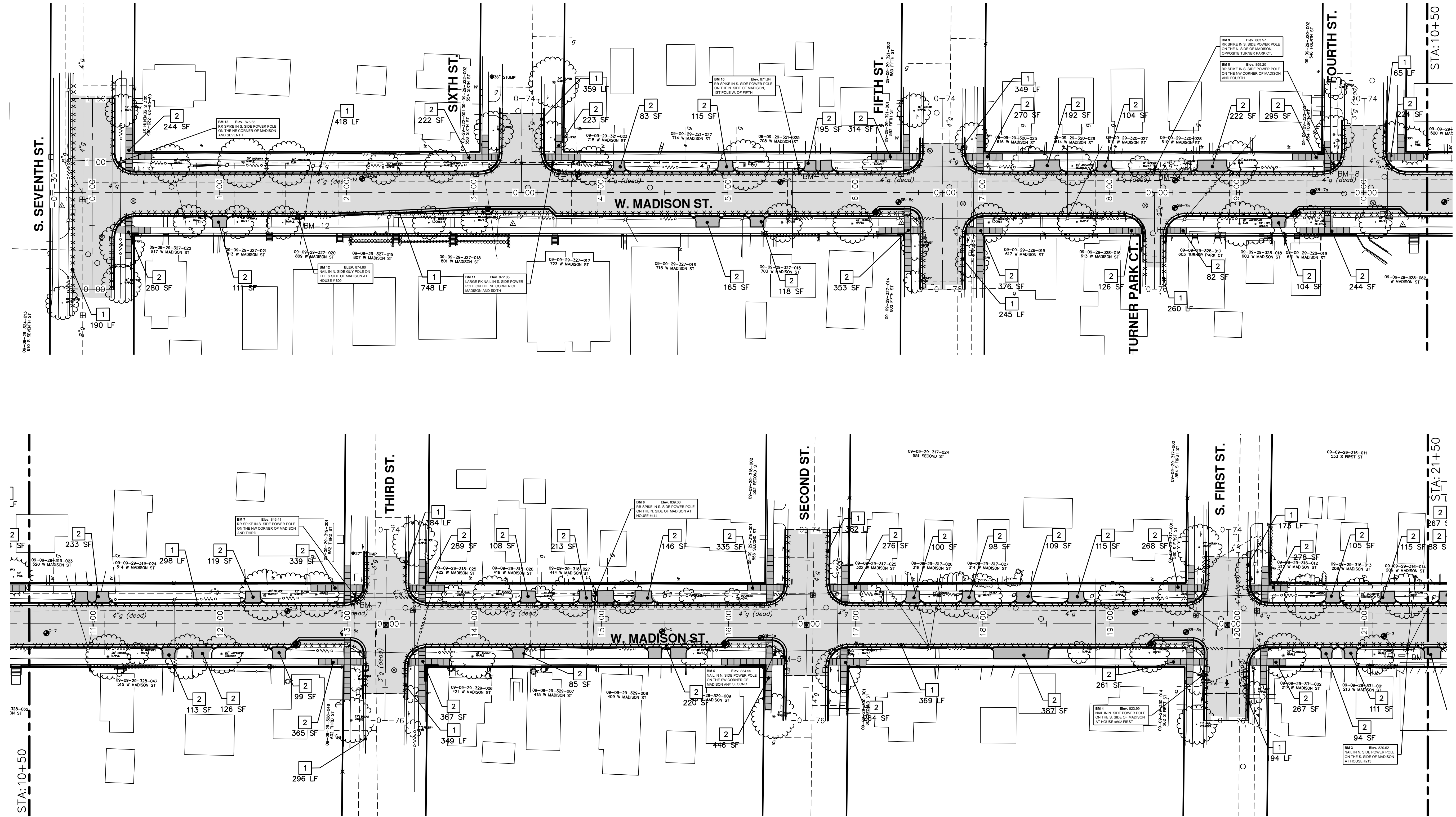
DRAWING No. 2012027-13

SHEET No. 13 OF 49

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-3867  
www.a2gov.org

REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DPF/CEC	IWK	OUT FOR BID
00	12-19-12	DPF/CEC	IWK	MOEQ SUBMITTAL

Know what's below.  
Call Before you dig.



REMOVAL KEY	
KEY	DESCRIPTION
1	CURB AND GUTTER, REMOVAL
2	REMOVE CONCRETE SIDEWALK AND DRIVES, ANY THICKNESS
3	HMA SURFACE, REMOVAL

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**WEST MADISON STREET IMPROVEMENTS**

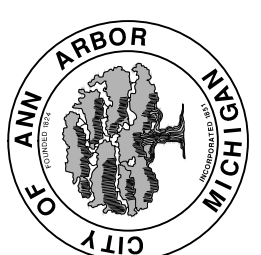
REMOVAL PLAN

STA. 0+00 TO STA. 21+50

SCALE PLAN: 1" = 40'

DRAWING No. 2012027-14

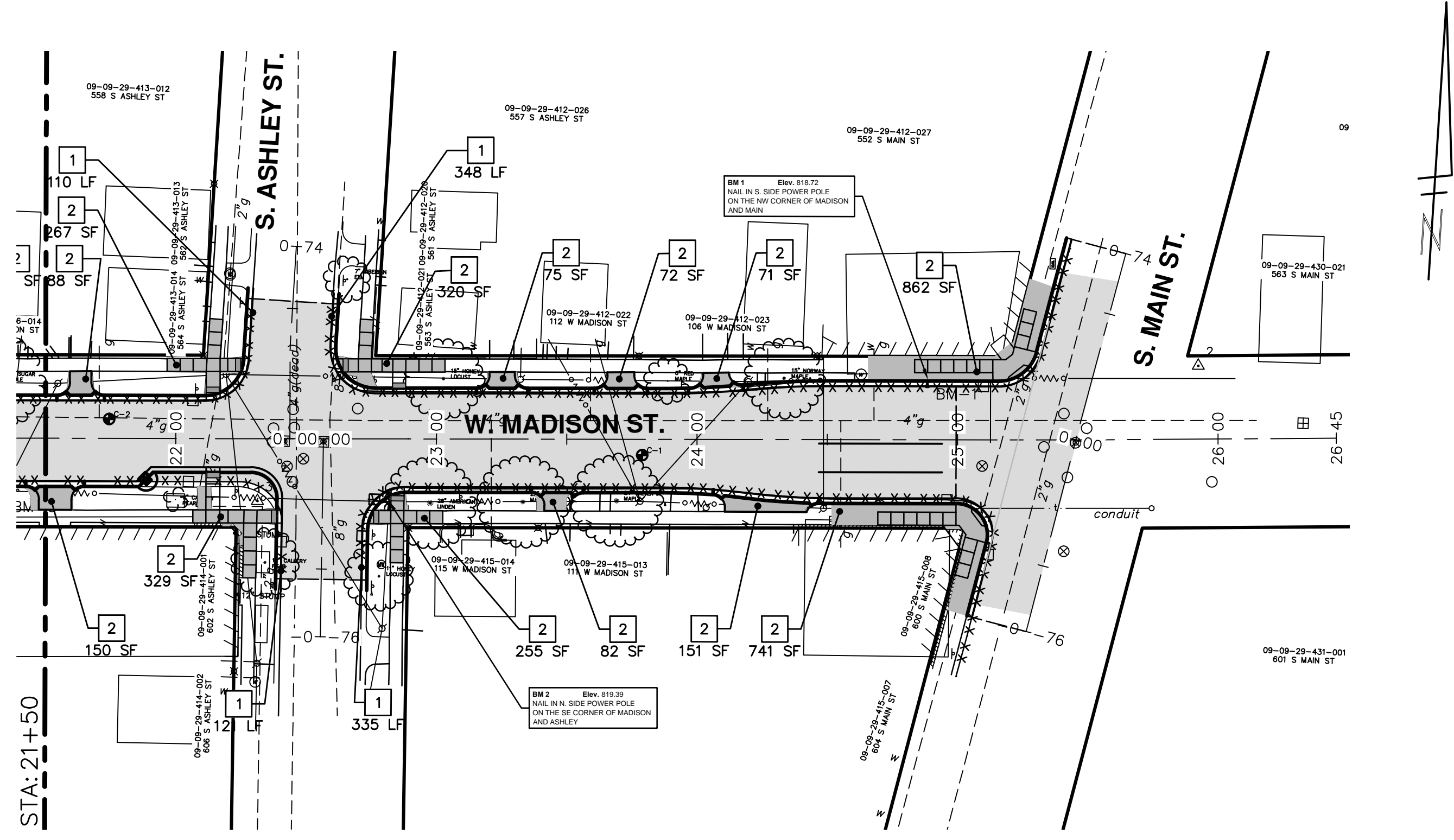
SHEET No. 14 OF 49



CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1500  
www.a2gov.org

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MEQO SUBMITTAL

811  
Know what's below.  
Call Before you dig.



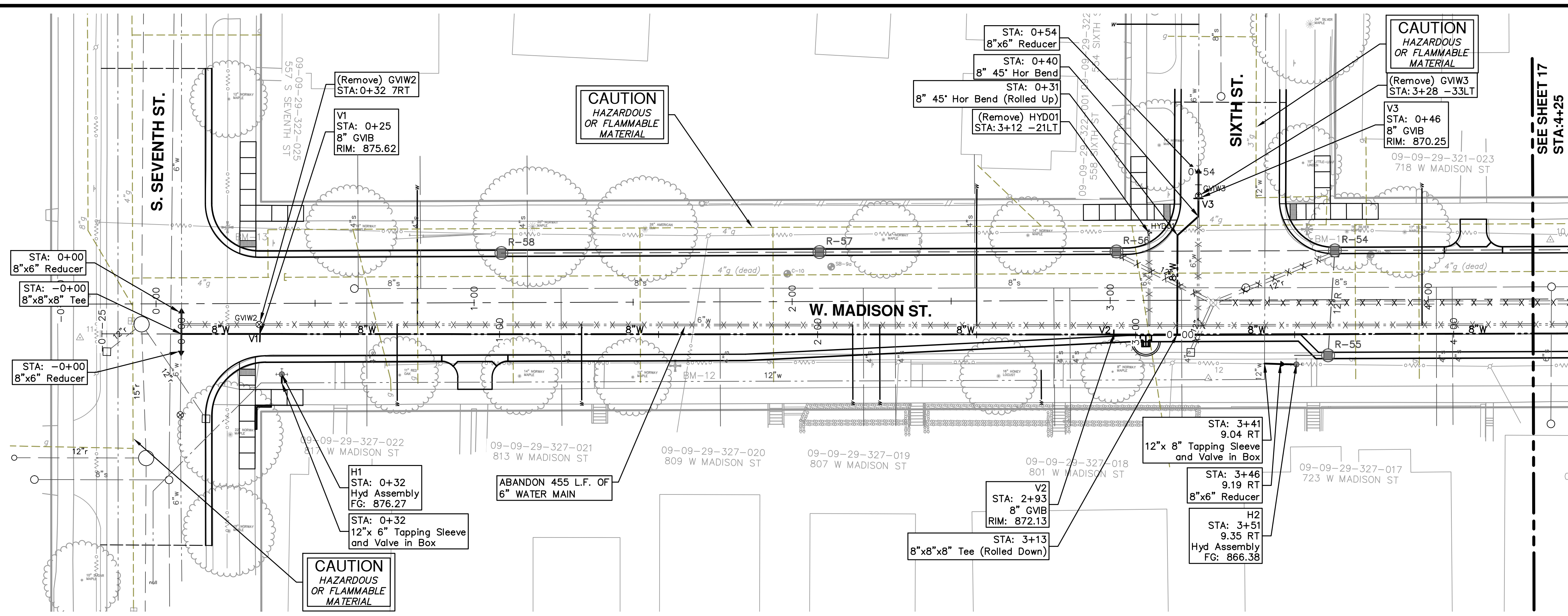
REMOVAL KEY	
KEY	DESCRIPTION
1	CURB AND GUTTER, REMOVAL
2	REMOVE CONCRETE SIDEWALK AND DRIVES, ANY THICKNESS
3	HMA SURFACE, REMOVAL



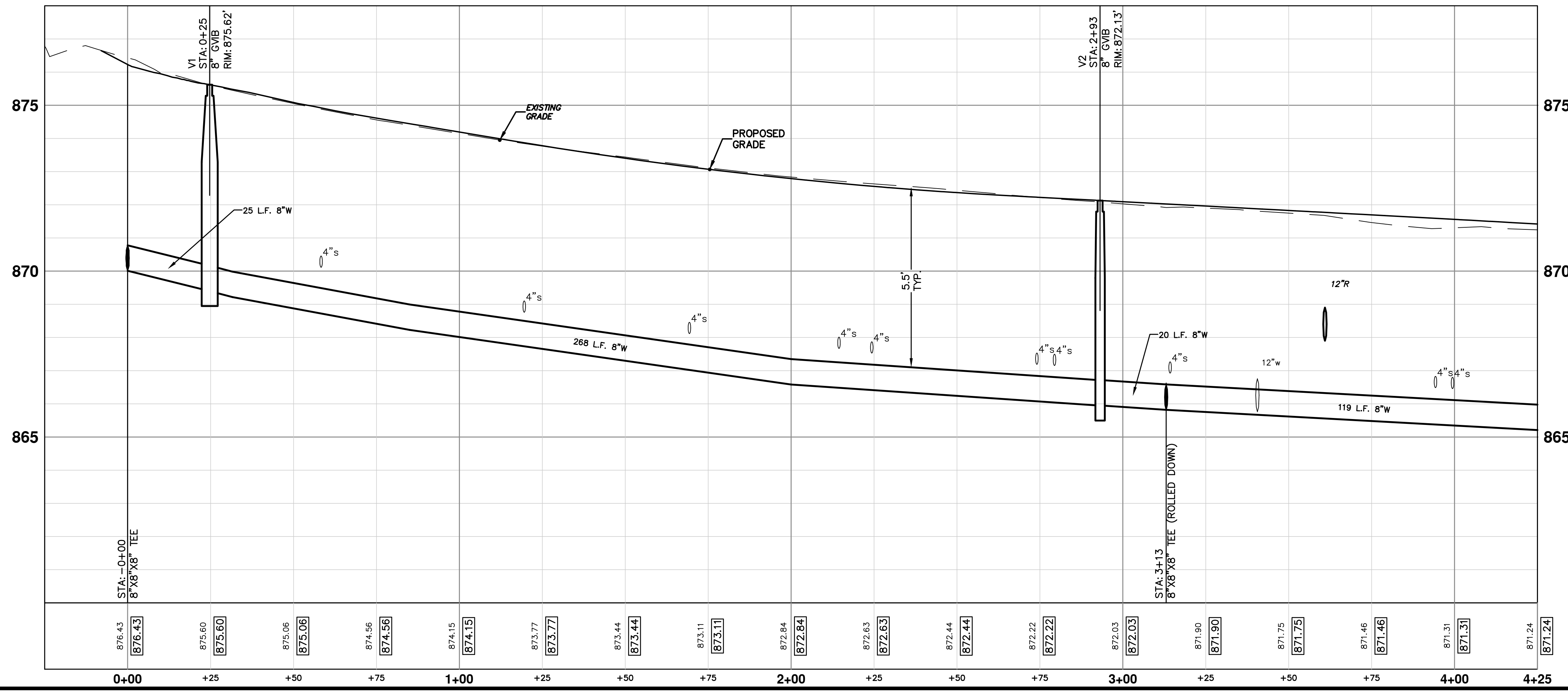
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	OUT FOR BID	4-16-13	DPF/CEC	IWK
00	MOEQ SUBMITTAL	12-19-12	DPF/CEC	IWK



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**PR WATER**



**WATER MAIN STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
V1	8" GVI	0+25	875.62	6.17
V3	8" GVI	0+46	870.25	6.26
V2	8" GVI	2+93	872.13	6.13

**WATER MAIN REMOVALS STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVIW2	(Remove)	0+32	875.59	8.00
HYD01	(Remove)	3+12	871.01	8.00
GVIW3	(Remove)	3+28	870.01	8.00

**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

**BM 13** Elev. 875.65  
 RR SPIKE IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SEVENTH

**BM 12** ELEV. 874.60  
 NAIL IN N. SIDE GUY POLE ON THE S. SIDE OF MADISON AT HOUSE # 899

**BM 11** Elev. 872.05  
 LARGE PK NAIL IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SIXTH

**811**  
 Know what's below. Call before you dig.

01 OUT FOR BID  
 00 MDEQ SUBMITTAL

4-16-13  
 12-19-12

DATE  
 DRAWN

DESCRIPTION  
 CHECKED

---

**CITY OF ANN ARBOR**  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1500  
 WWW.ANARBORMI.GOV

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS  
 WATER MAIN

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING No. 2012027-16

SHEET No. 16 OF 49

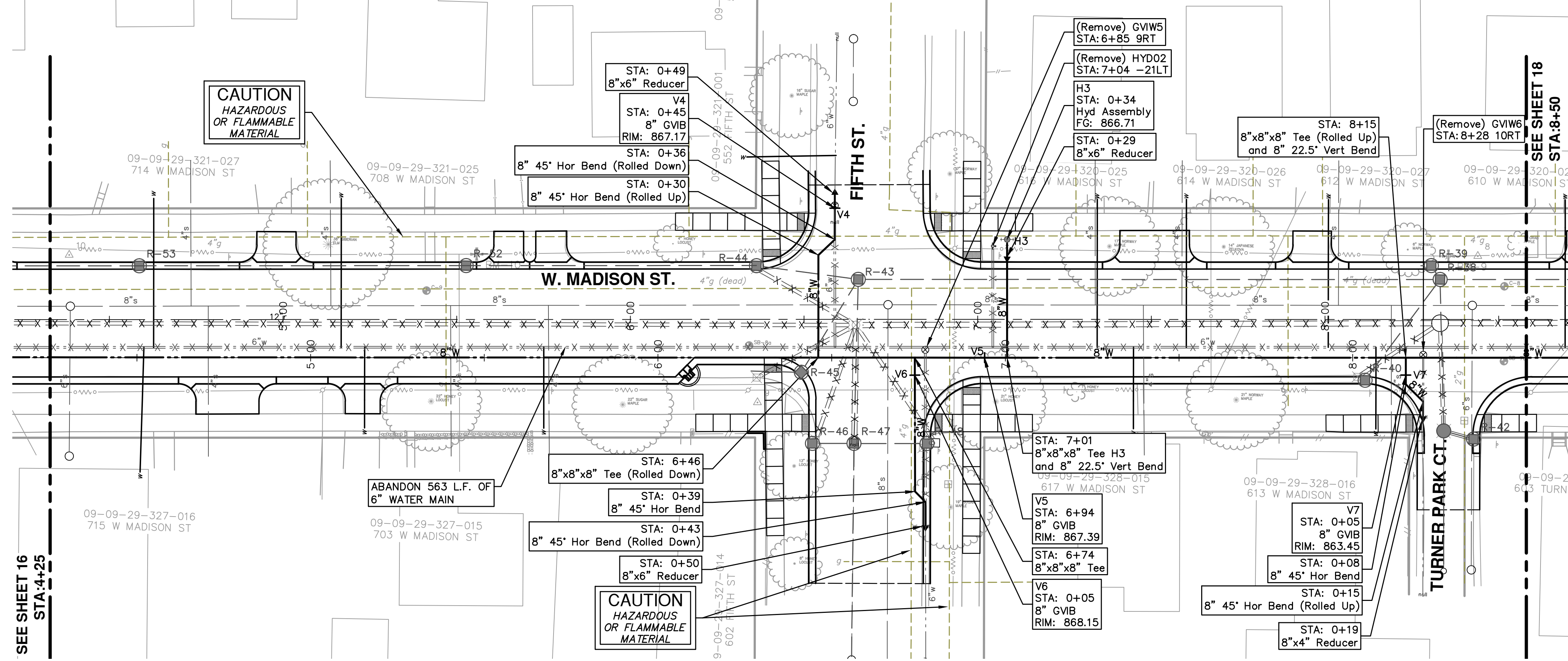
---

STA. 0+00 TO STA. 4+25

STA. 0+00 TO STA. 4+25



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**BM 10** Elev. 871.84  
RR SPIKE IN S. SIDE POWER POLE  
ON THE N. SIDE OF MADISON.  
1ST POLE W. OF FIFTH

**BM 9** Elev. 863.57  
RR SPIKE IN S. SIDE POWER POLE  
ON THE N. SIDE OF MADISON,  
OPPOSITE TURNER PARK CT.

**WATER MAIN STRUCTURE TABLE**

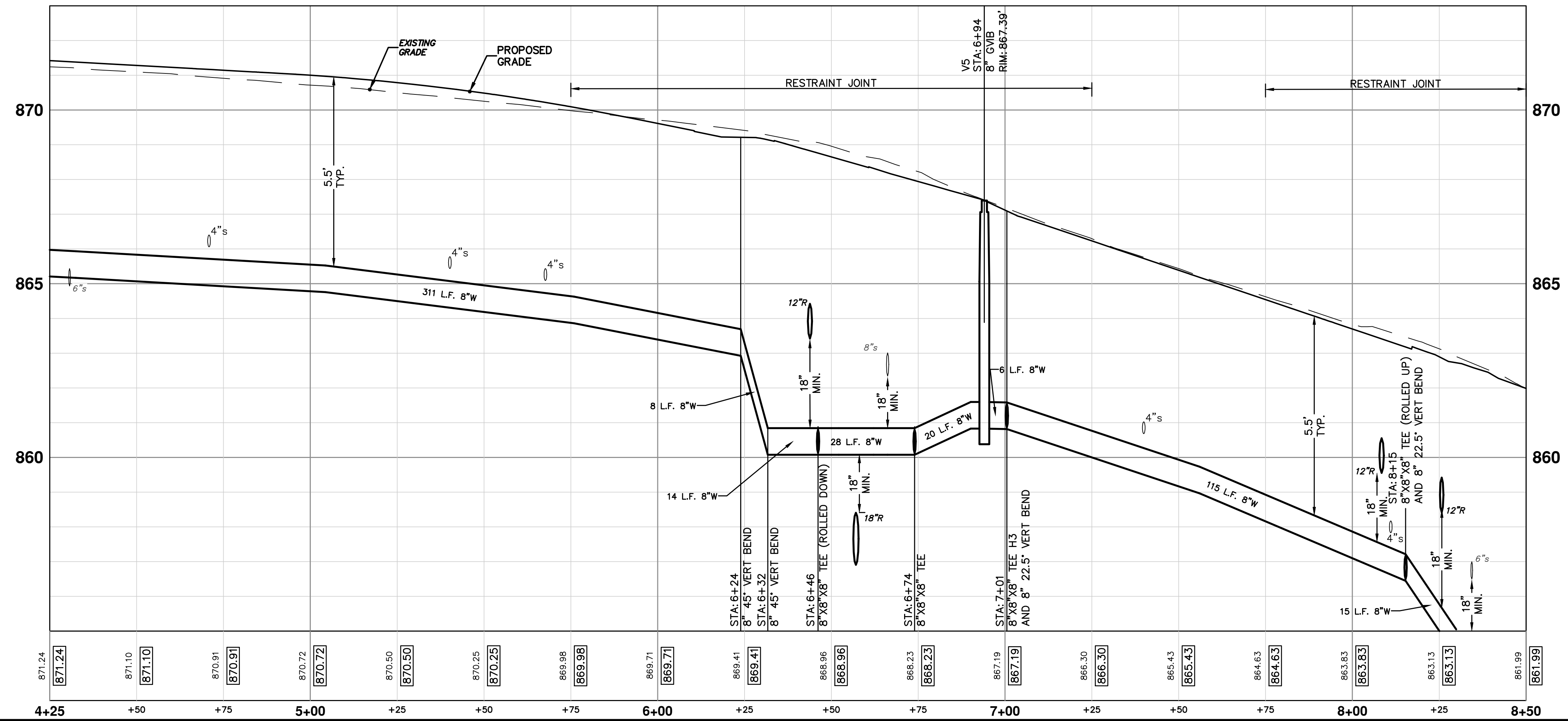
STRUCTURE	TYPE	STATION	RIM	DEPTH
V7	8" GVI6	0+05	863.45	6.11
V6	8" GVI6	0+05	868.15	6.61
H3	Hyd Assembly	0+34	866.71	5.81
V4	8" GVI6	0+45	867.17	5.51
V5	8" GVI6	6+94	867.39	6.52

**WATER MAIN REMOVALS STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVI5	(Remove)	6+85	868.17	8.00
HYD02	(Remove)	7+04	866.89	8.00
GVI6	(Remove)	8+28	863.31	7.83

**NOTE:**  
FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

**PR WATER**



**811**  
Know what's below.  
Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL

**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
WATER MAIN

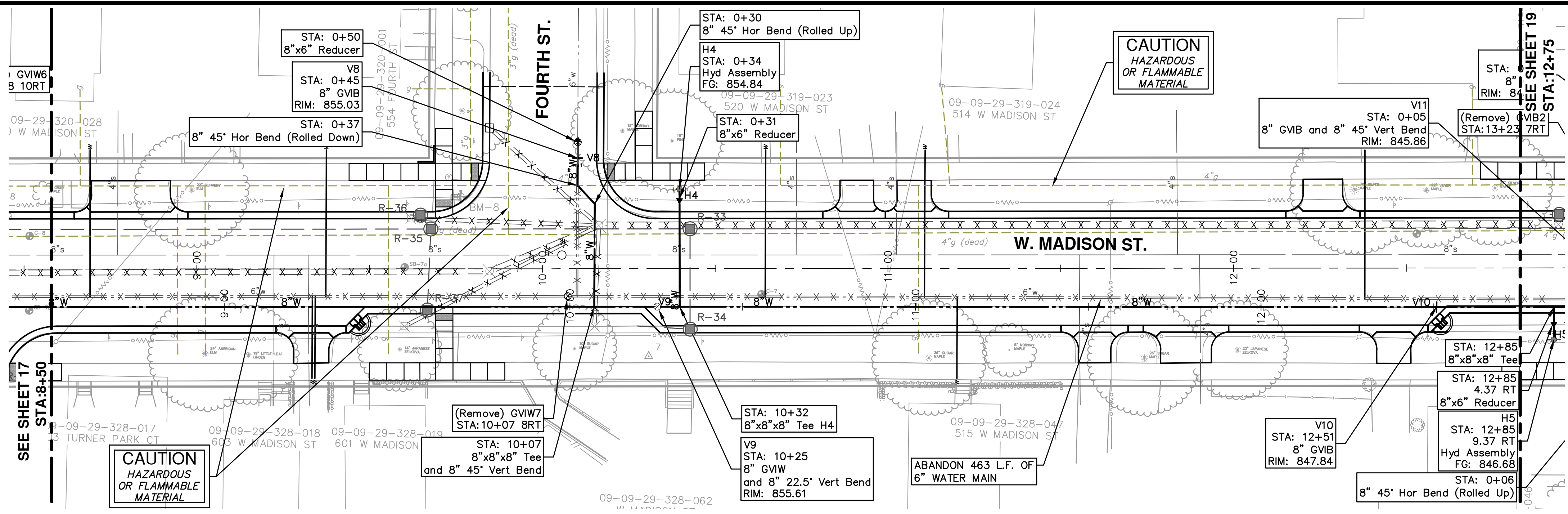
STA. 4+25 TO STA. 8+50

SHEET No. **17 OF 49**

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. **2012027-17**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**CAUTION**  
HAZARDOUS  
OR FLAMMABLE  
MATERIAL

BM 6 Elev: 859.20  
RR SPIKE IN S. SIDE POWER POLE  
ON THE NW CORNER OF MADISON  
AND FOURTH



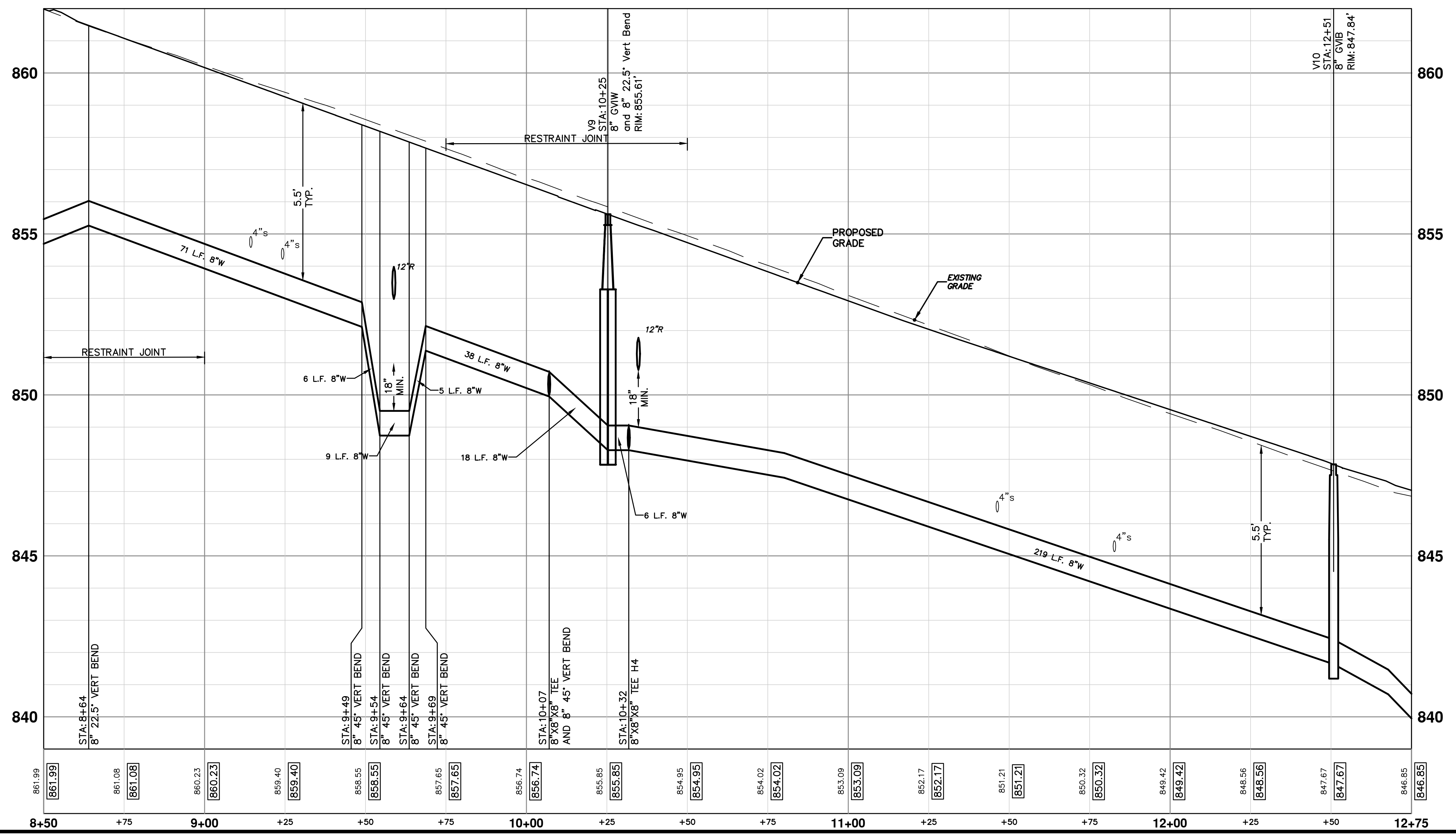
**WATER MAIN STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
H4	Hyd Assembly	0+34	854.84	5.23
V8	8" GVIW	0+45	855.03	6.44
V9	8" GVIW and 8" 22.5° Vert Bend	10+25	855.61	7.28
V10	8" GVIW	12+51	847.84	6.16

**WATER MAIN REMOVALS STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVIW7	(Remove)	10+07	856.78	8.00

**NOTE:**  
FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



**CITY OF ANN ARBOR PUBLIC SERVICES**  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1607  
www.a3gov.org

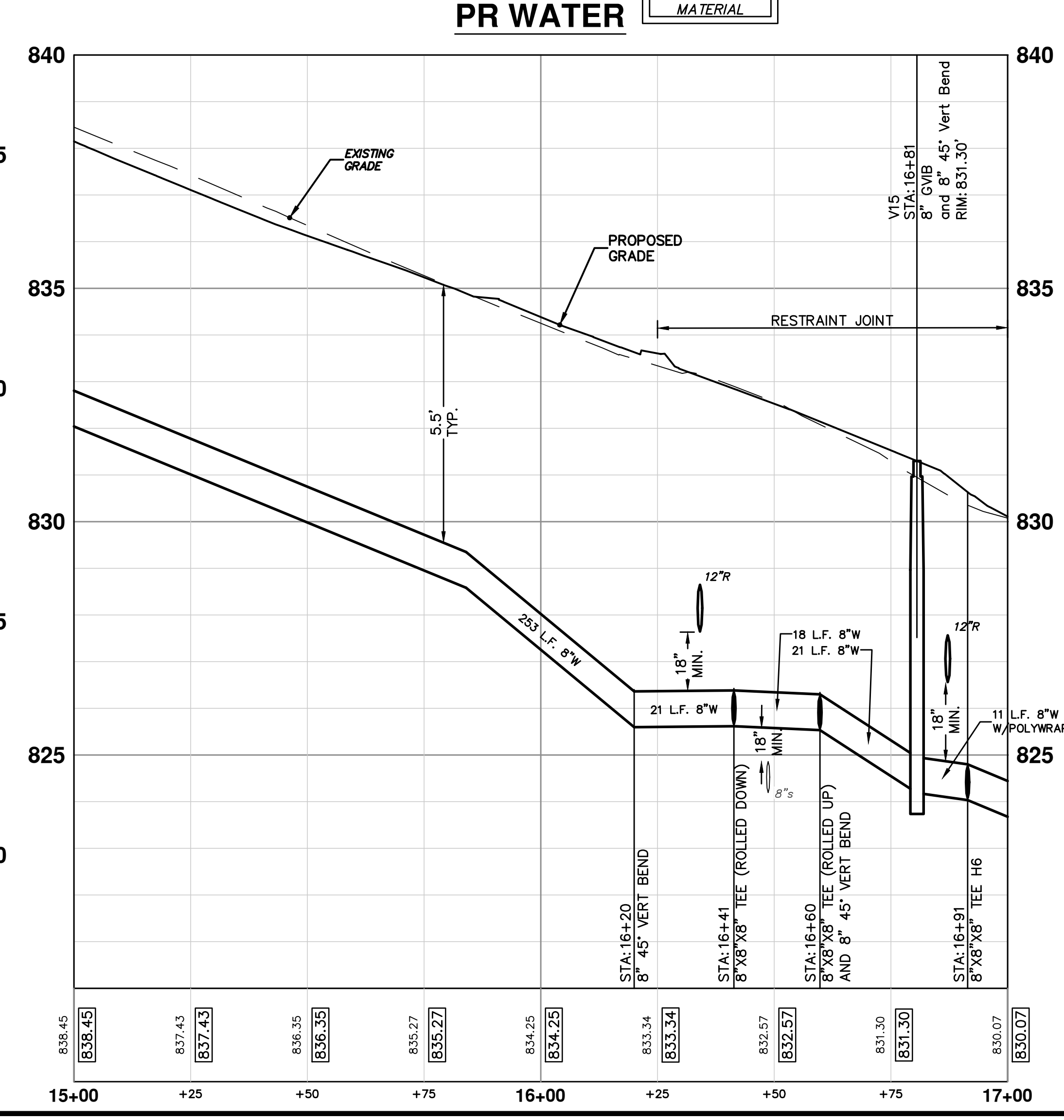
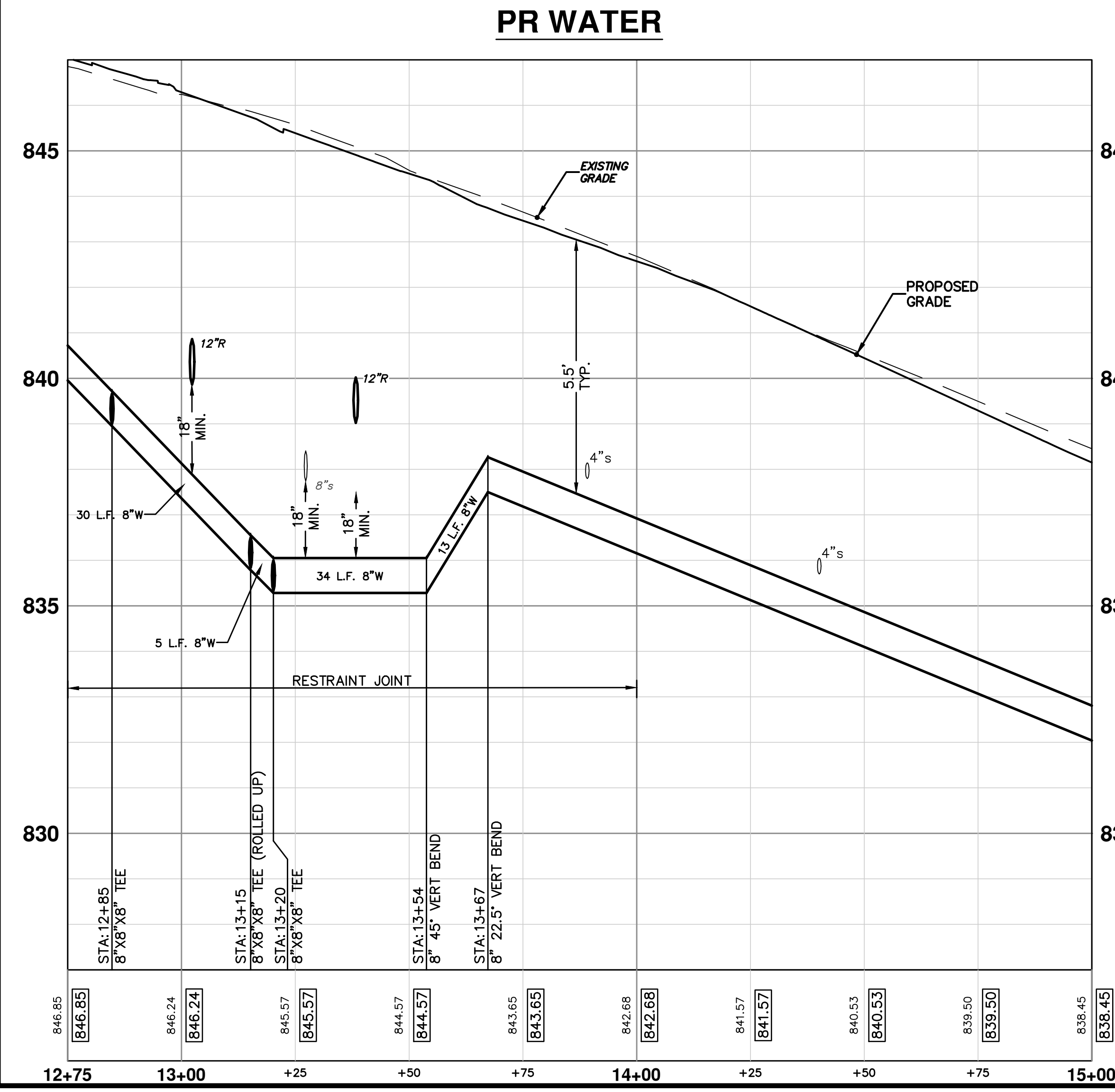
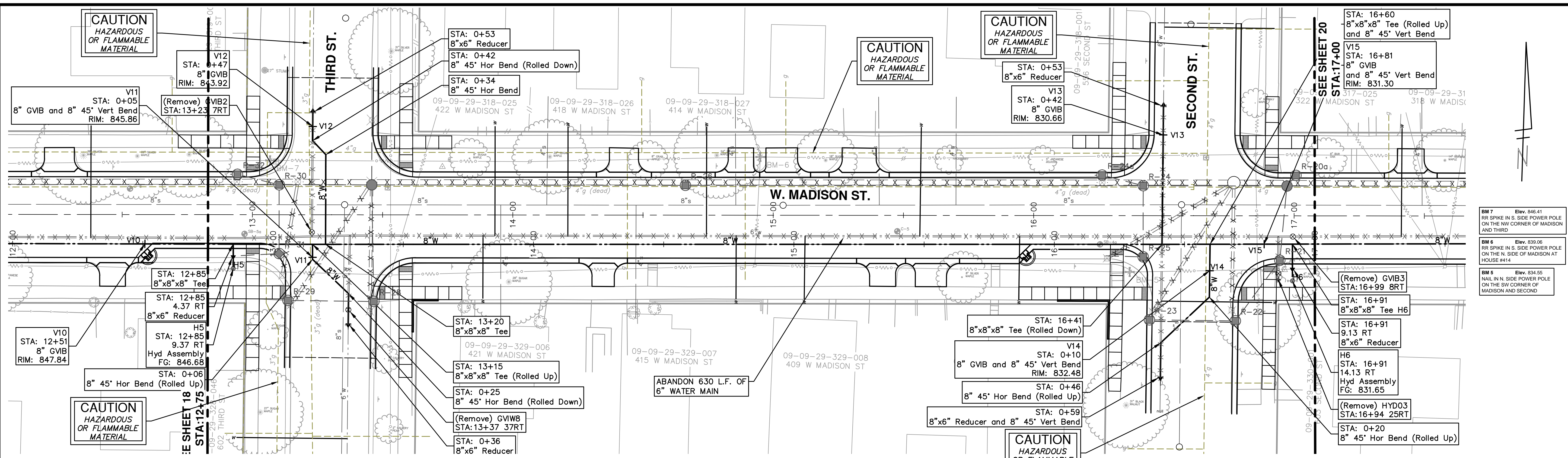
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
WATER MAIN  
STA. 8+50 TO STA. 12+75

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING NO.: 2012027-18  
SHEET NO.: 18 OF 49

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



STRUCTURE	TYPE	STATION	RIM	DEPTH
V11	8" GVB and 8" 45' Vert Bend	0+05	845.86	6.11
V14	8" GVB and 8" 45' Vert Bend	0+10	832.48	6.48
V13	8" GVB	0+42	830.66	7.33
V12	8" GVB	0+47	843.92	6.92
H5	Hyd Assembly	12+85	846.68	6.02
V15	8" GVB and 8" 45' Vert Bend	16+81	831.30	7.06
H6	Hyd Assembly	16+91	831.65	6.49

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVB2	(Remove)	13+23	845.75	8.00
GVIW8	(Remove)	13+37	846.27	8.00
HYD03	(Remove)	16+94	831.90	7.46
GVB3	(Remove)	16+99	830.35	8.00

**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

**811**  
Know what's below. Call before you dig.

CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0667  
 www.a3gov.org

---

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS  
 WATER MAIN

STA. 12+75 TO STA. 17+00

---

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING NO.  
**2012027-19**

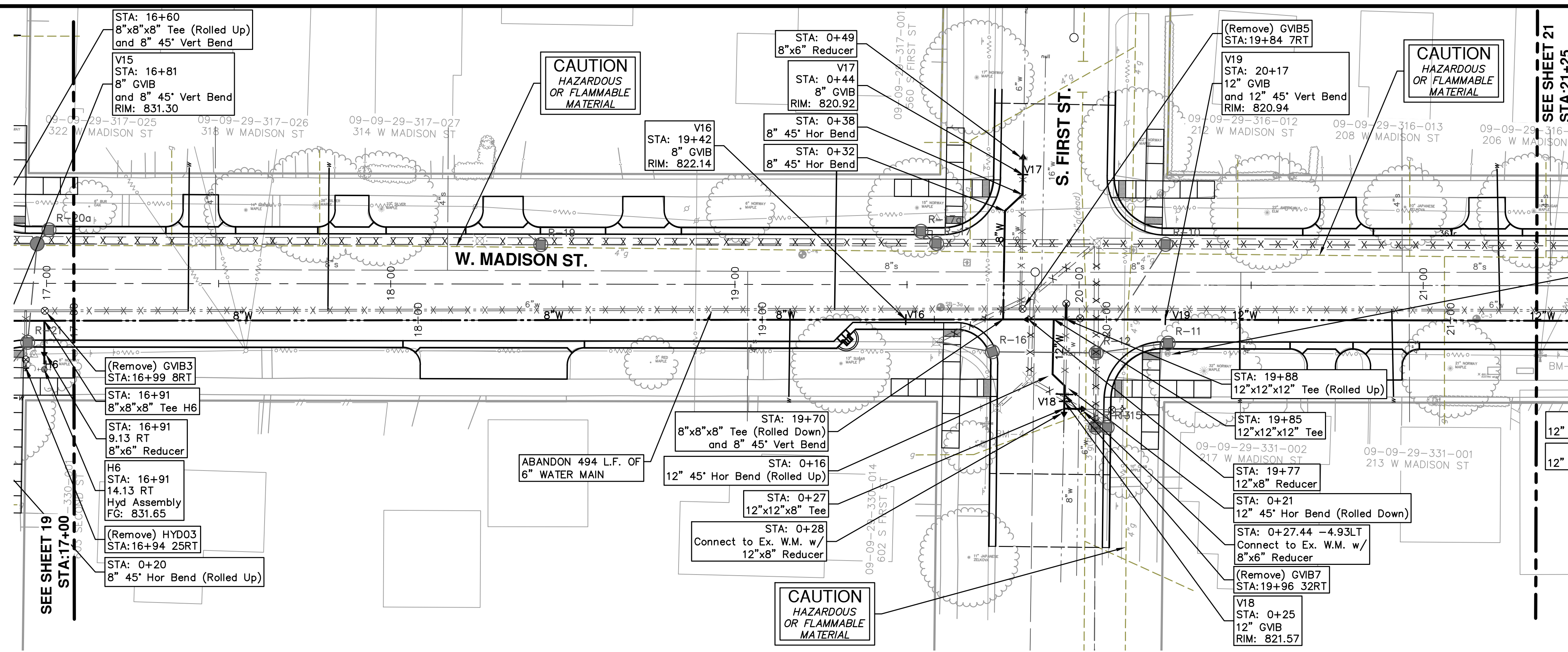
---

SHEET NO.  
**19 OF 49**

DATE: 4-16-13  
 12-19-12  
 REV. DESCRIPTION



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**WATER MAIN STRUCTURE TABLE**

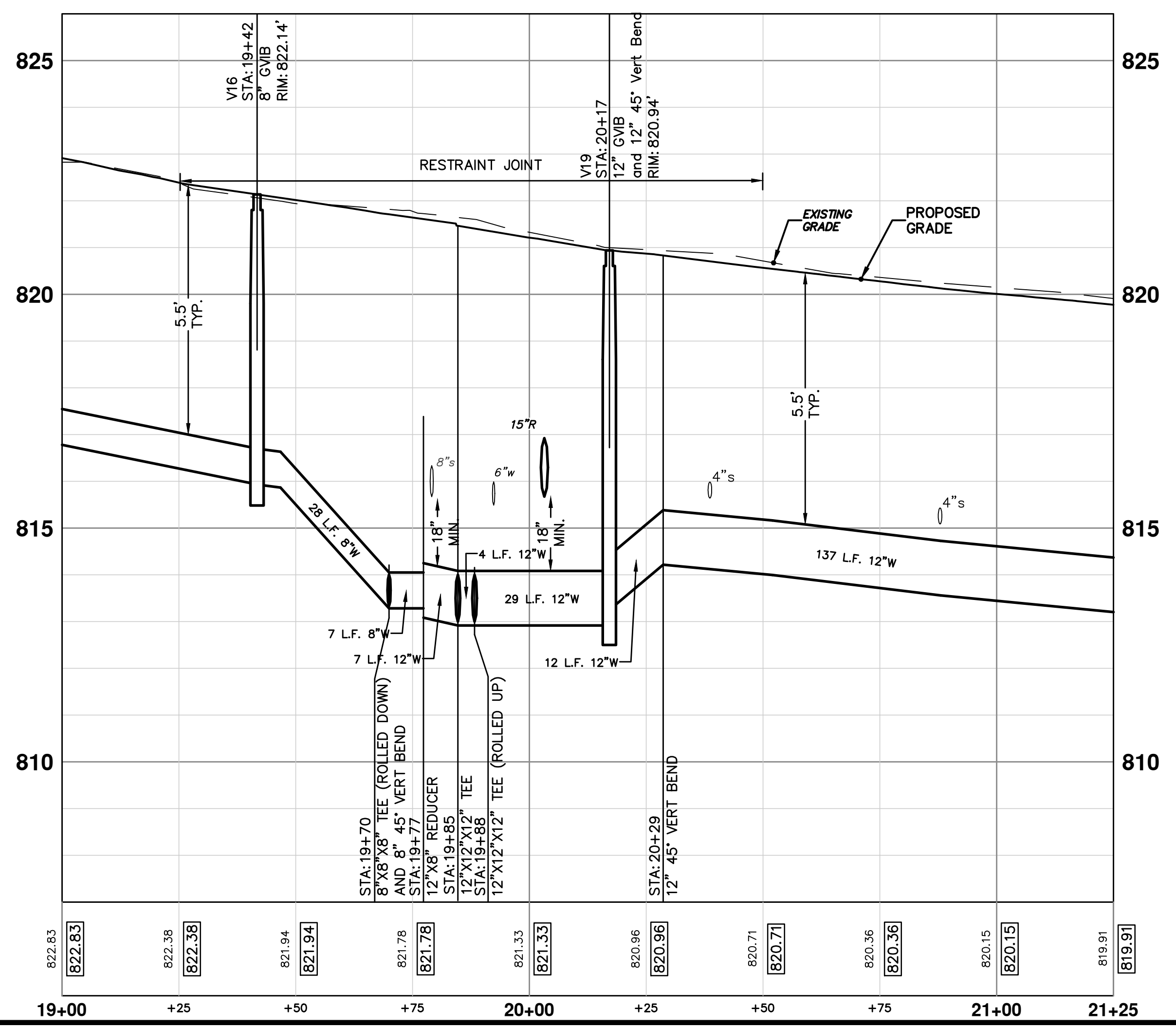
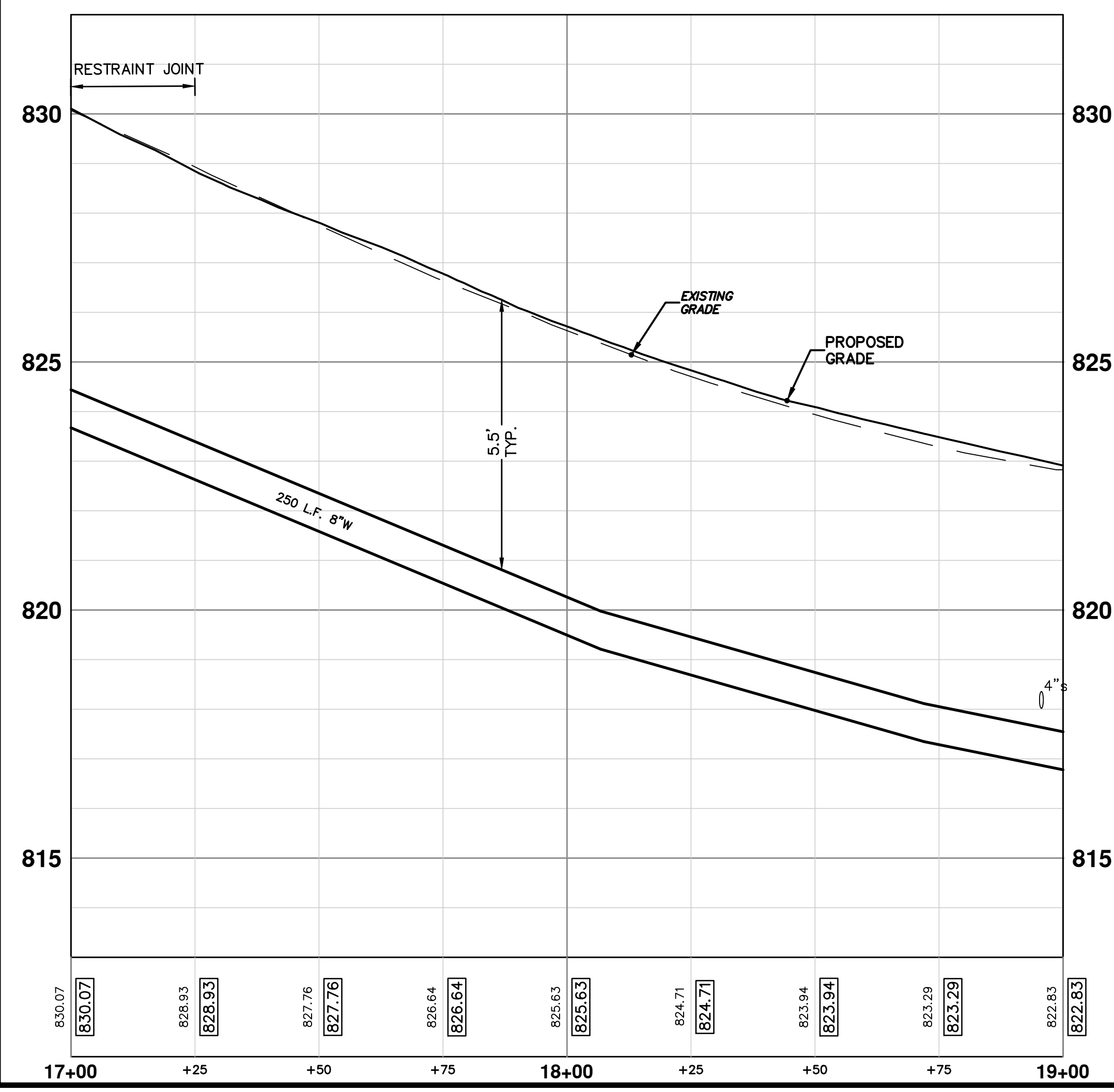
STRUCTURE	TYPE	STATION	RIM	DEPTH
V18	12" GVB	0+25	821.57	6.25
V17	8" GVB	0+44	820.92	5.92
V16	8" GVB	19+42	822.14	6.15
V19	12" GVB and 12" 45° Vert Bend	20+17	820.94	7.94

**WATER MAIN REMOVALS STRUCTURE TABLE**


STRUCTURE	TYPE	STATION	RIM	DEPTH
GVB5	(Remove)	19+84	821.72	8.00
GVB7	(Remove)	19+96	821.59	7.08

**PR WATER**

**PR WATER**

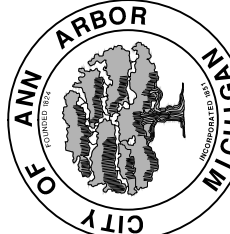


**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL



**CITY OF ANN ARBOR**  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 P.O. BOX 8647  
 ANN ARBOR, MI 48106-8647  
 www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS  
 WATER MAIN

STA. 17+00 TO STA. 21+25

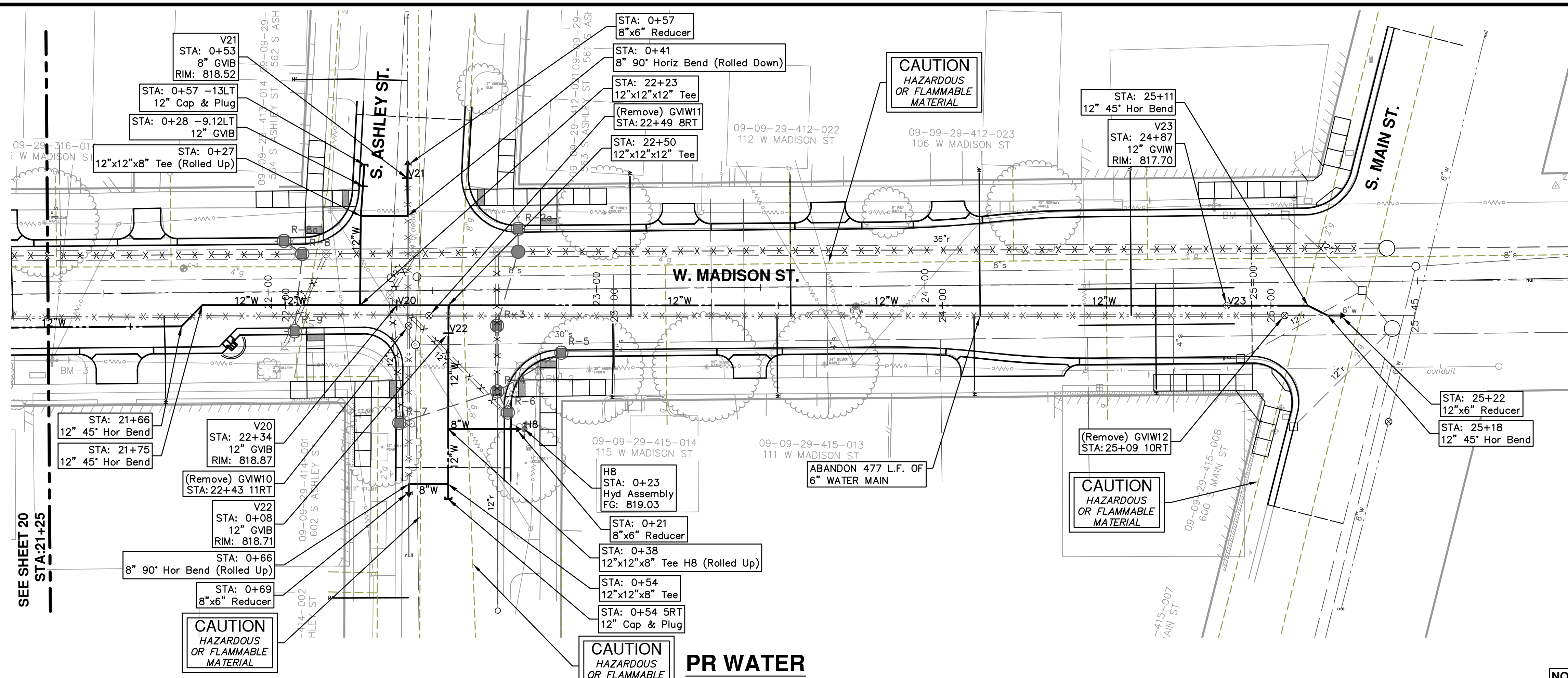
SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING No. **2012027-20**

SHEET No. **20 OF 49**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



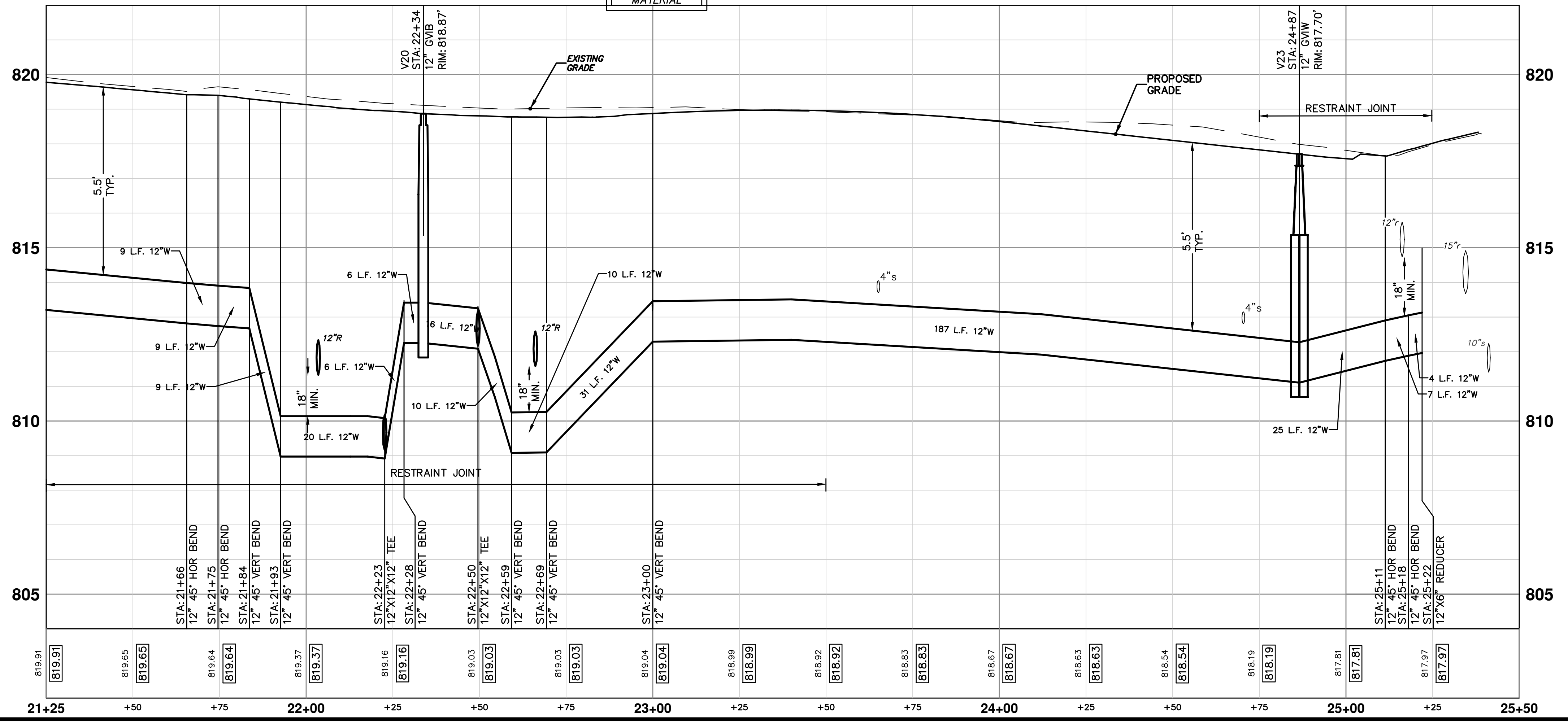
**WATER MAIN STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
V22	12" GVIB	0+08	818.71	6.54
H8	Hyd Assembly	0+23	819.03	5.55
V21	8" GVIB	0+53	818.52	7.18
V20	12" GVIB	22+34	818.87	6.54
V23	12" GVW	24+87	817.70	6.51

**WATER MAIN REMOVALS STRUCTURE TABLE**

STRUCTURE	TYPE	STATION	RIM	DEPTH
GVIW10	(Remove)	22+43	818.93	7.13
GVIW11	(Remove)	22+49	818.98	8.00
GVIW12	(Remove)	25+09	817.72	7.60

**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



BM 3 Elev. 820.62  
 NAIL IN N. SIDE POWER POLE ON THE S. SIDE OF MADISON AT HOUSE #213

BM 2 Elev. 819.39  
 NAIL IN N. SIDE POWER POLE ON THE SE CORNER OF MADISON AND ASHLEY

BM 1 Elev. 818.72  
 NAIL IN S. SIDE POWER POLE ON THE NW CORNER OF MADISON AND MAIN

Know what's below. Call before you dig.

01	OUT FOR BID	4-16-13	DP/CEC	IVK					
00	MOEQ SUBMITTAL	12-19-12	DP/CEC	IVK	DATE	DRAWN	CHECKED		
	REV.				DESCRIPTION				

**CITY OF ANN ARBOR**  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0001  
 WWW.A2GOV.ORG

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS  
 WATER MAIN  
 STA. 21+25 TO STA. 25+09

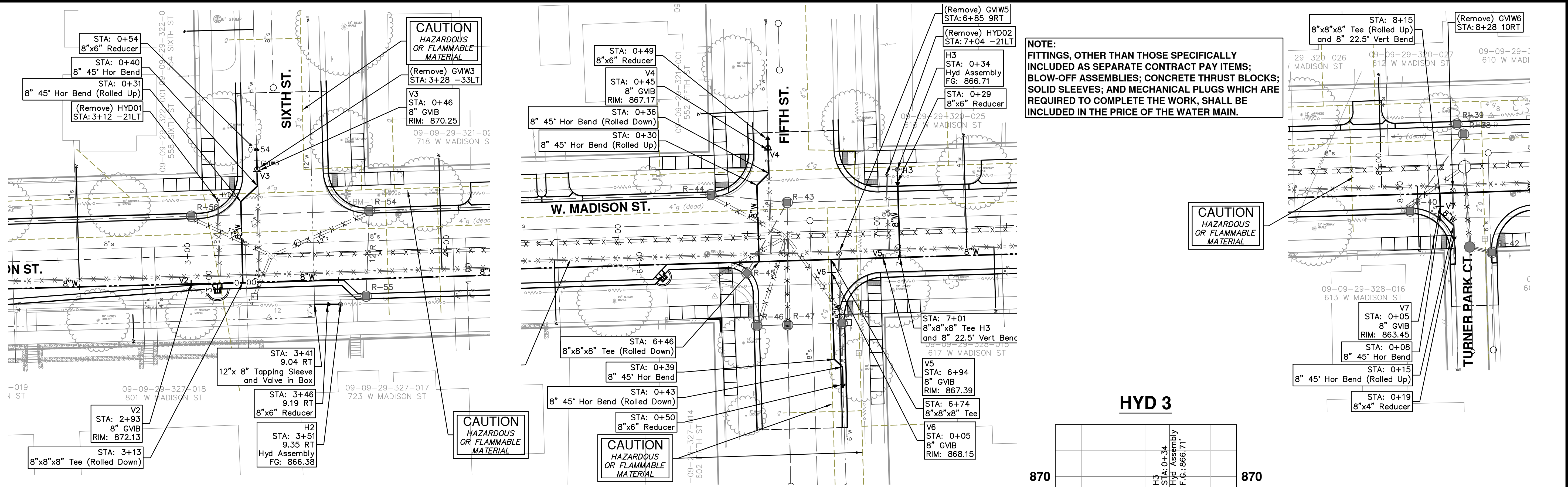
SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING NO. 2012027-21

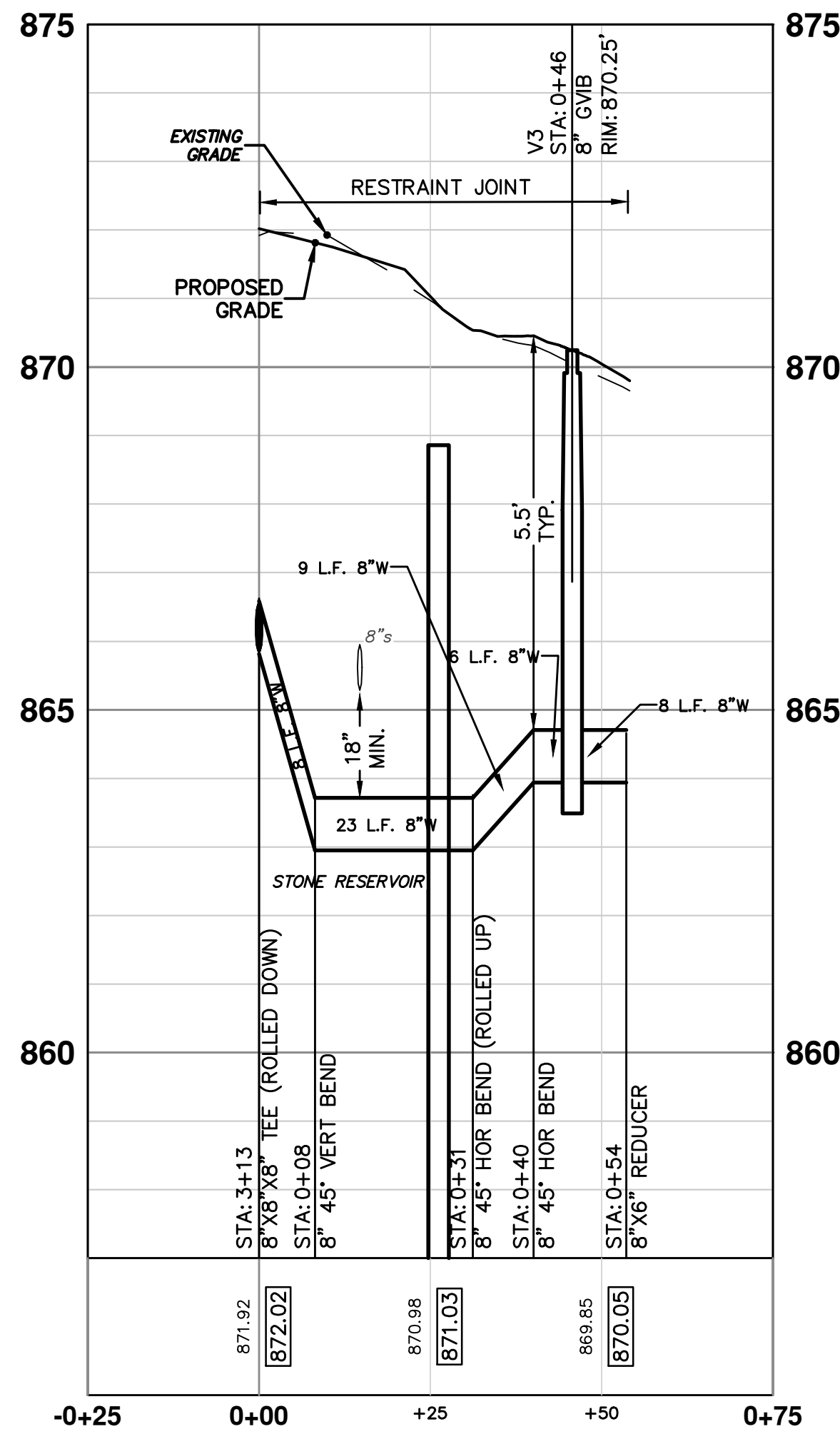
SHEET NO. 21 OF 49



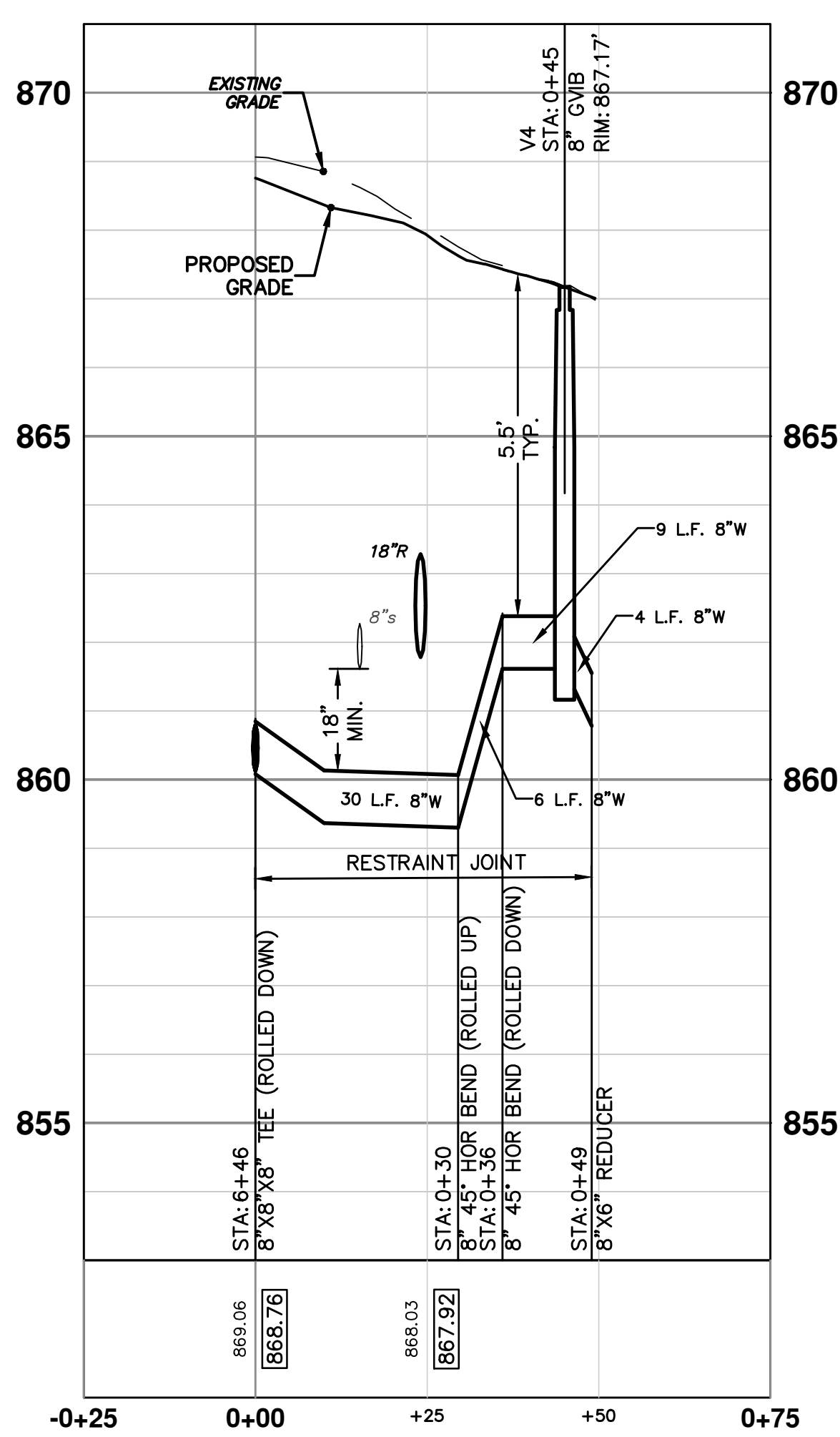
S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



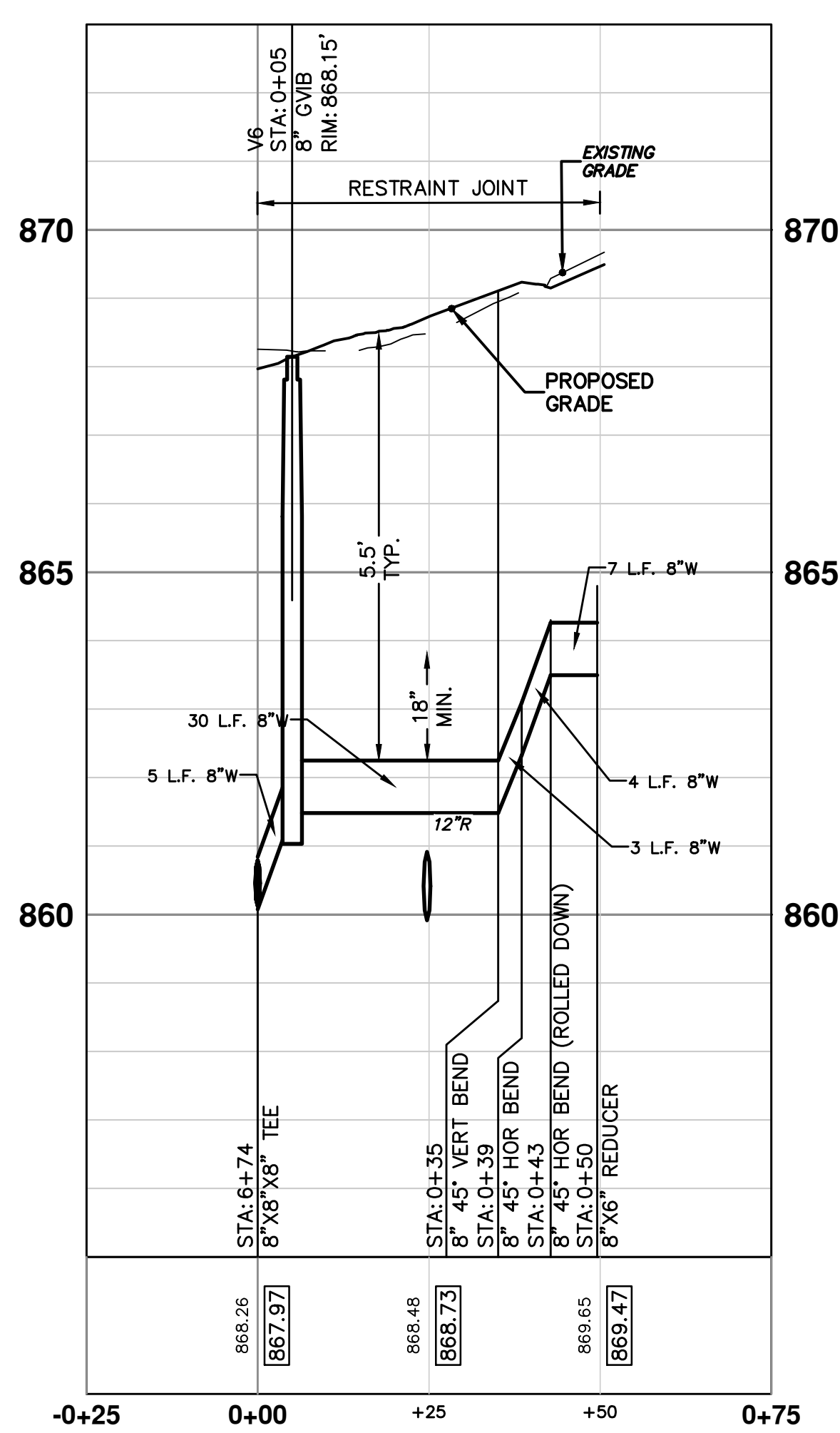
**6TH N - PR WATER**



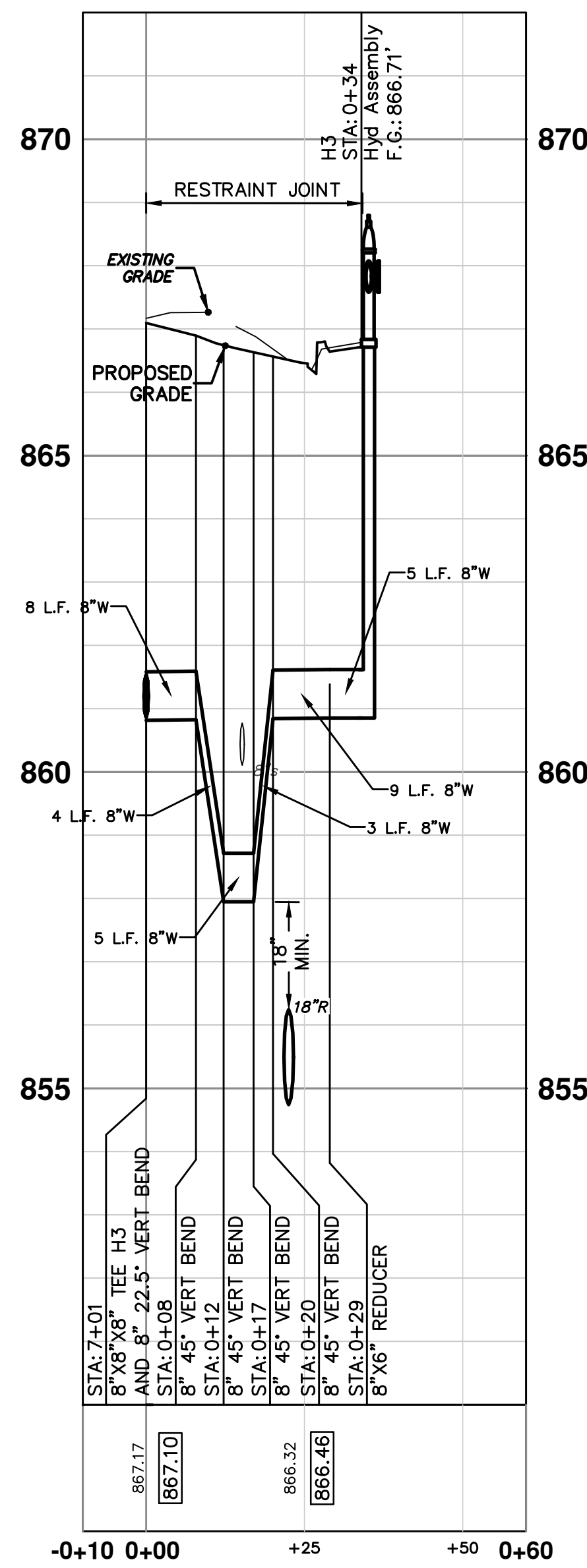
**5TH N - PR WATER**



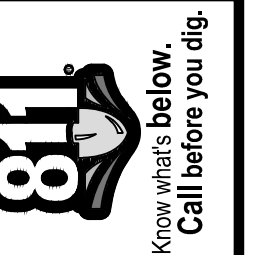
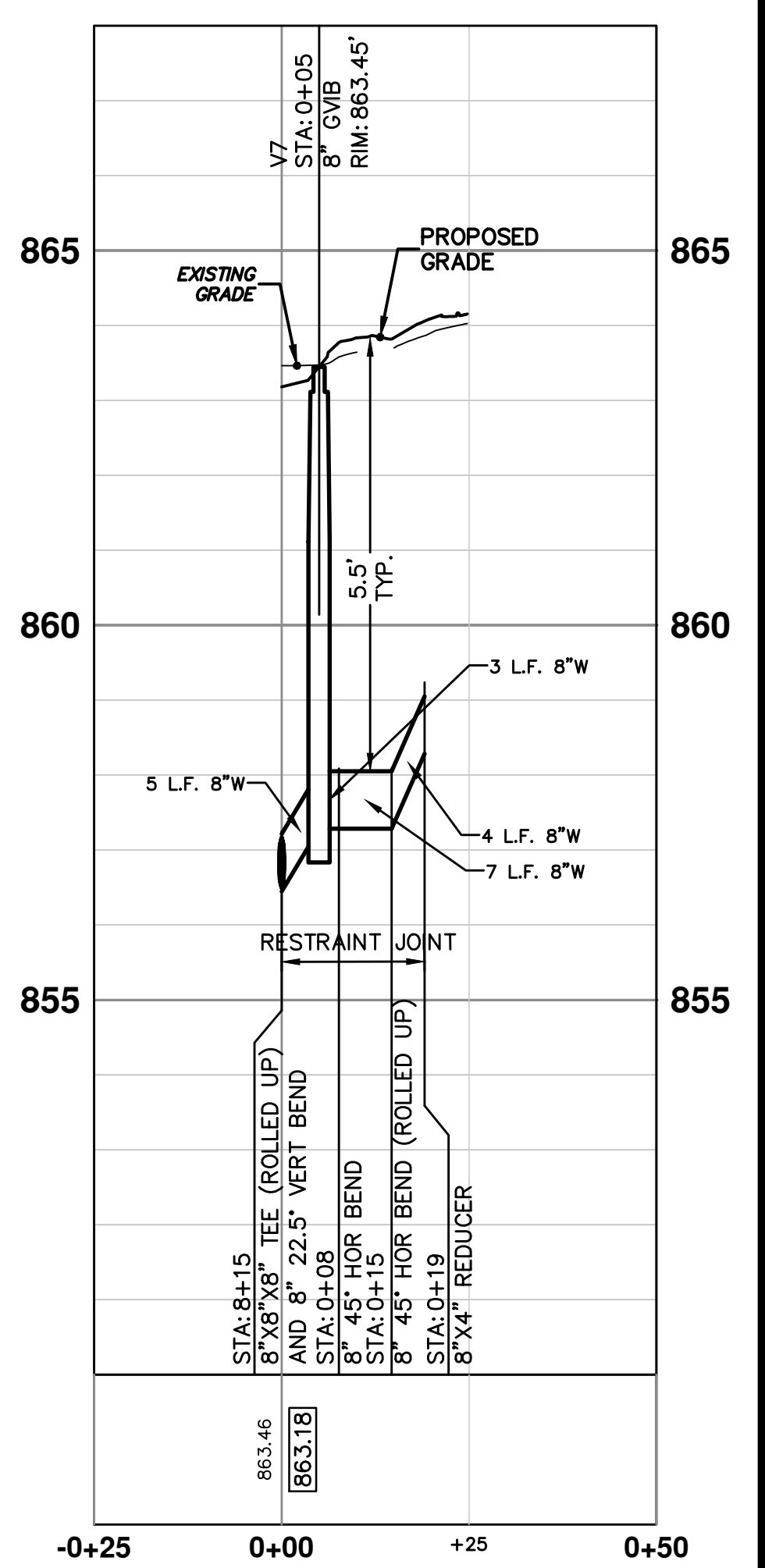
**5TH S - PR WATER**



**HYD 3**



**TURNER - PR WATER**

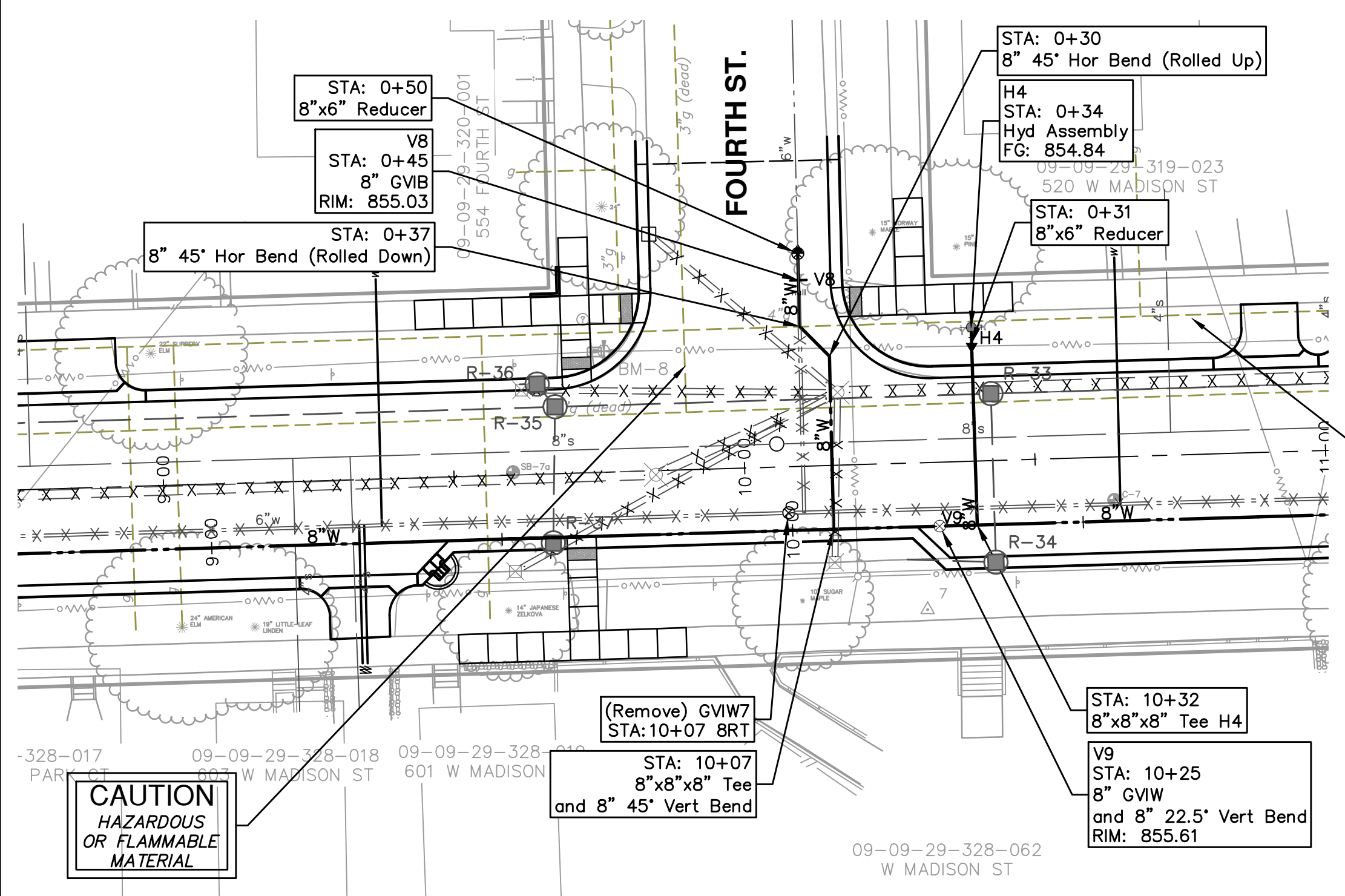


REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOECO SUBMITTAL

**CITY OF ANN ARBOR**  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0647  
 www.a3gov.org



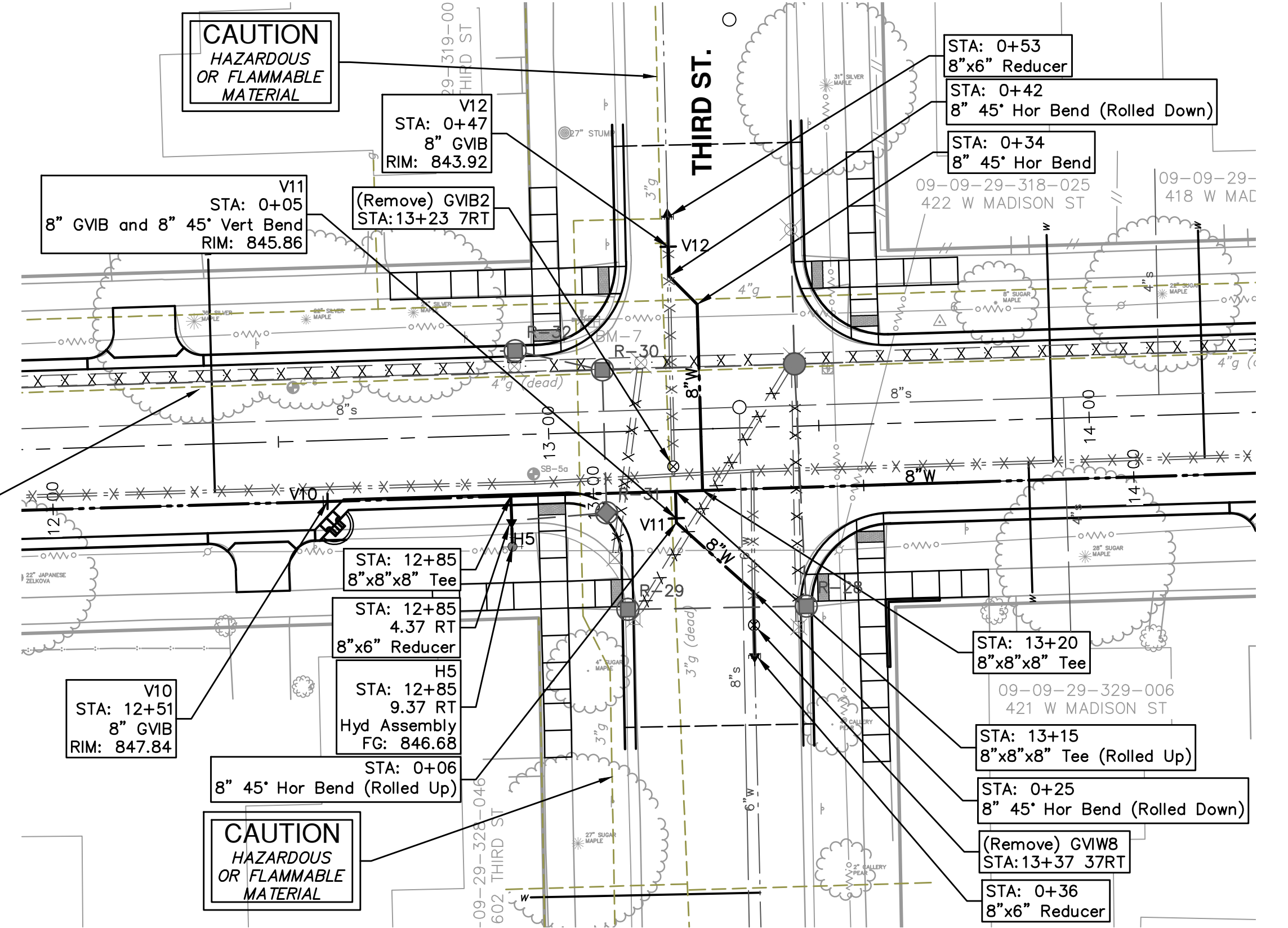
S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13



**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

**CAUTION**  
 HAZARDOUS OR FLAMMABLE MATERIAL

**CAUTION**  
 HAZARDOUS OR FLAMMABLE MATERIAL

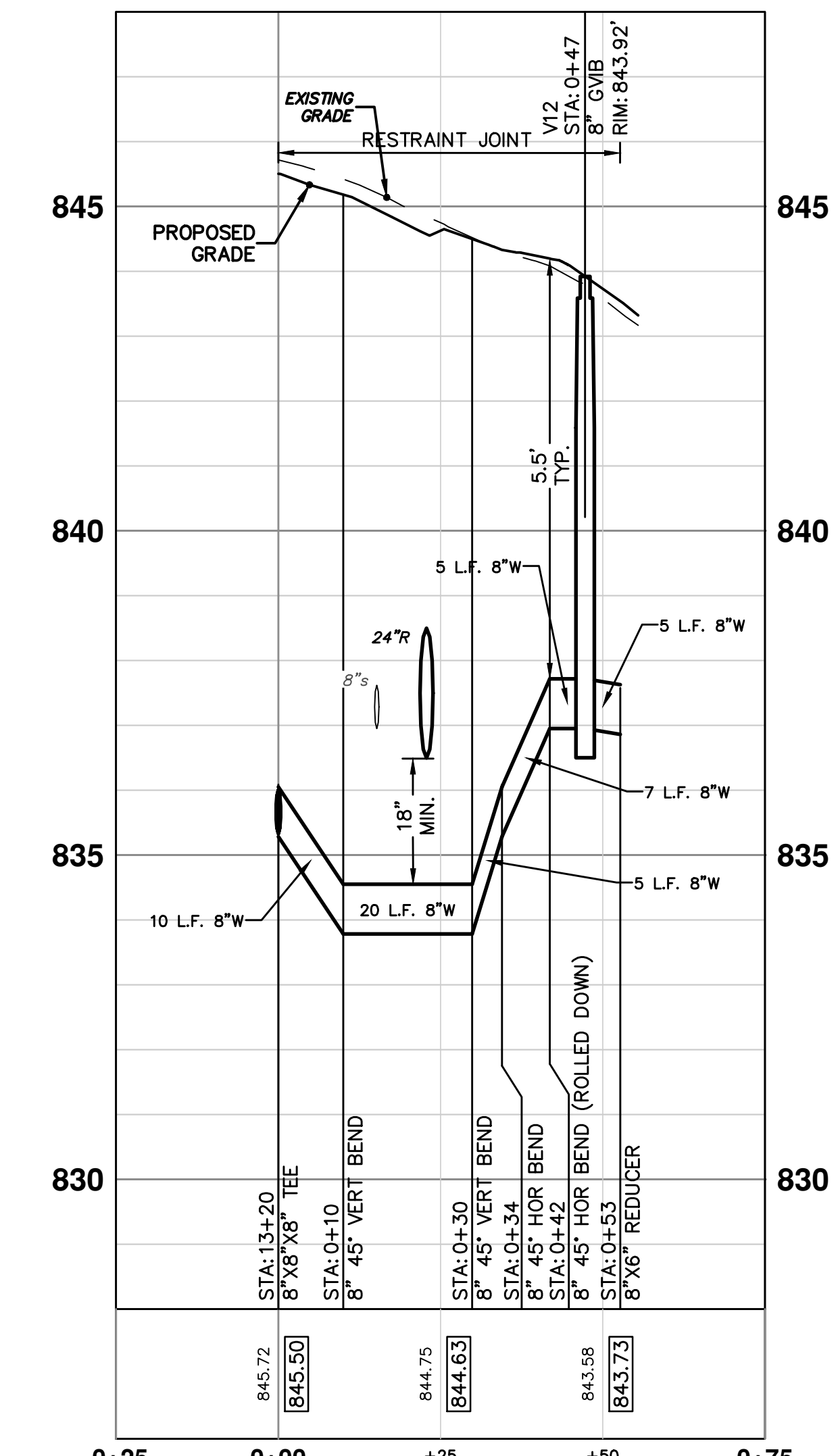
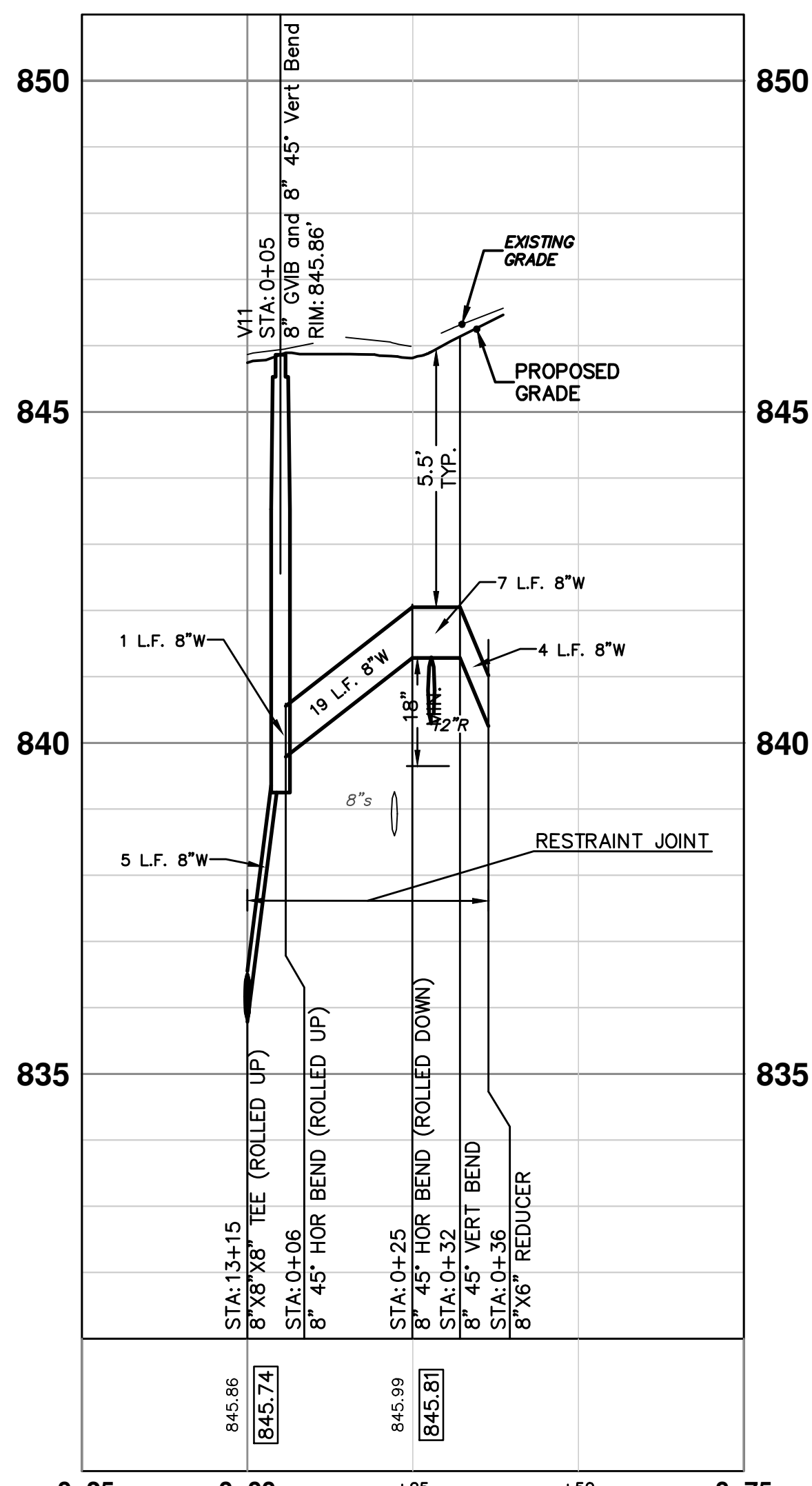
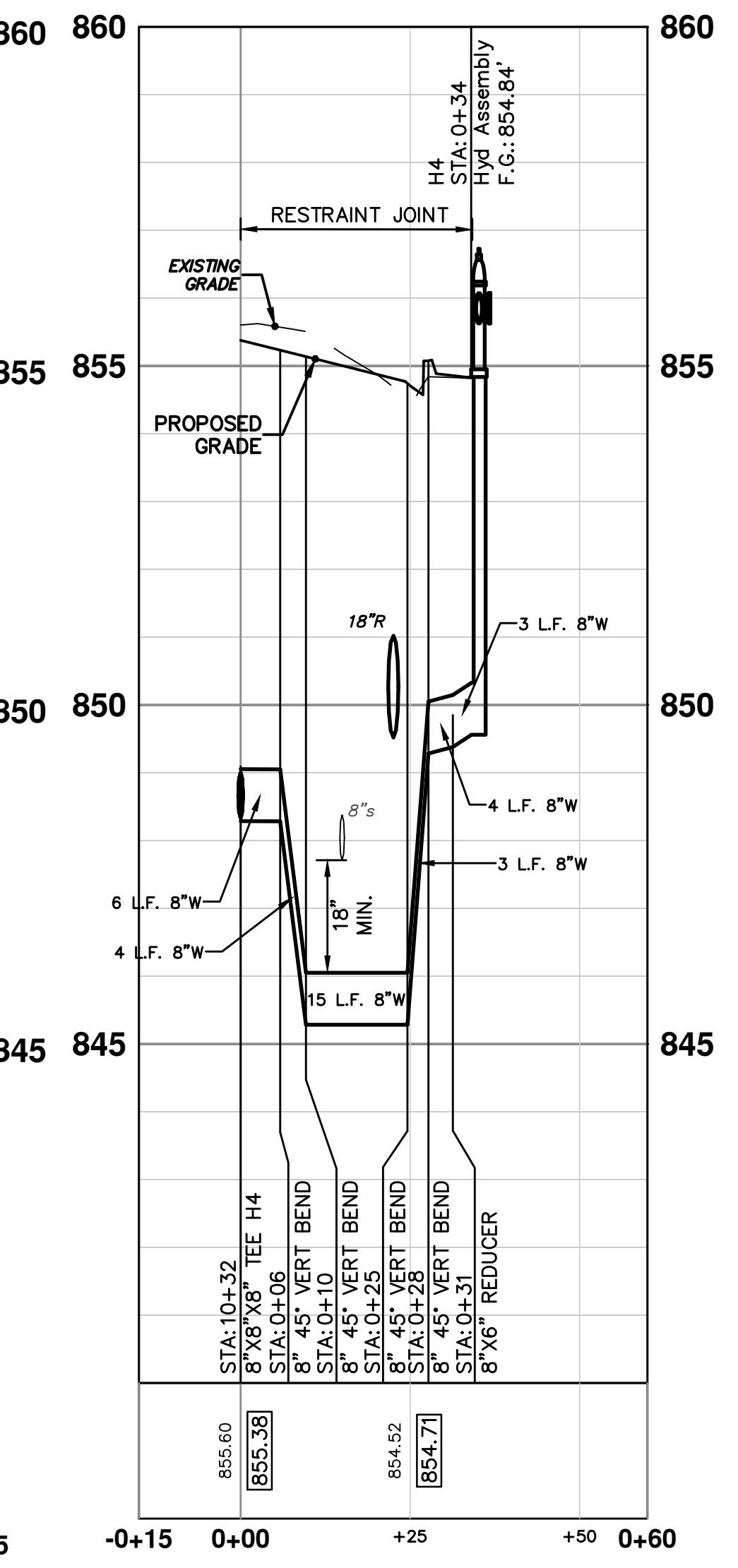
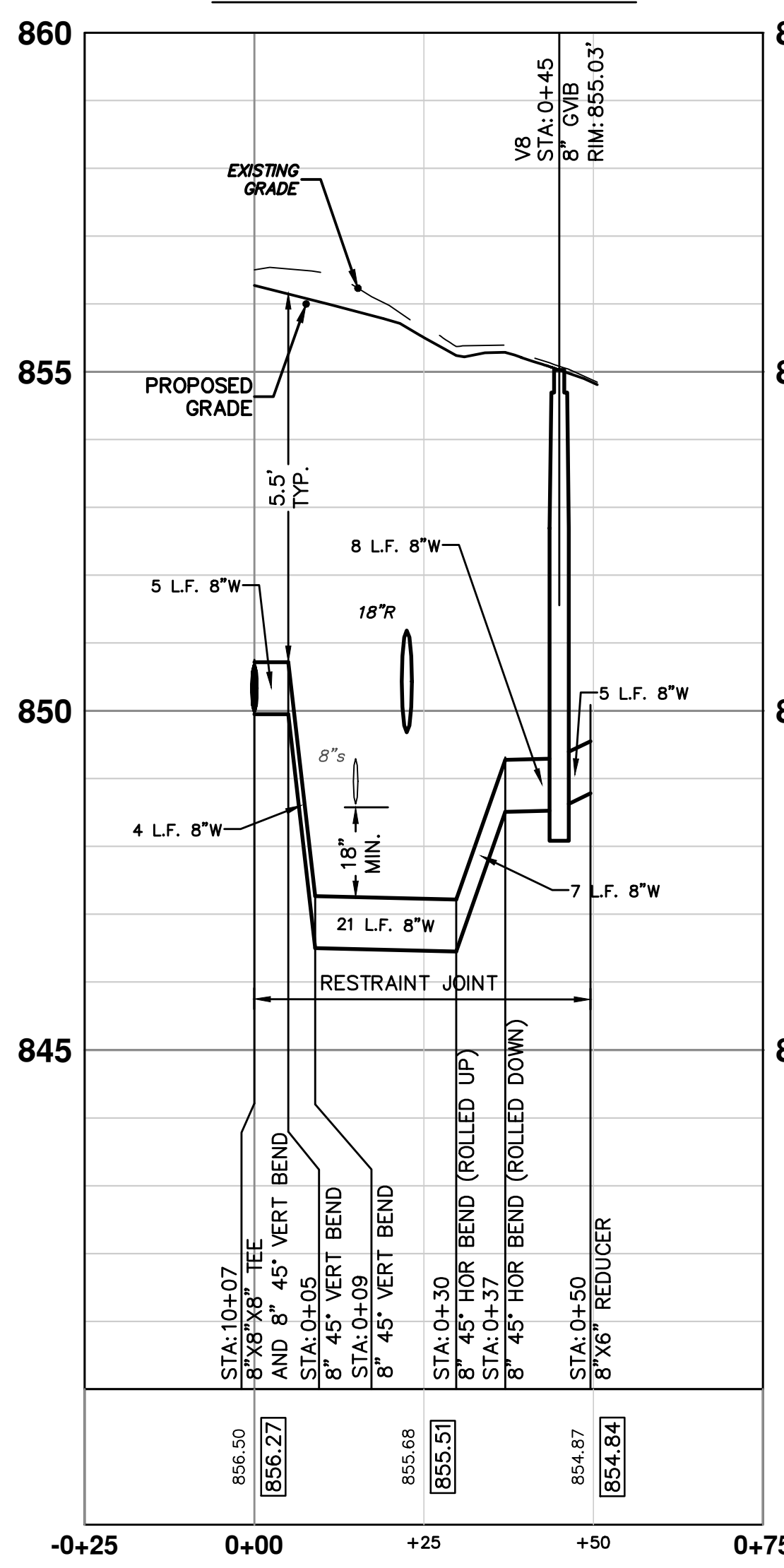


**3RD S - PR WATER**

**3RD N - PR WATER**

**4TH N - PR WATER**

**HYD 4**



**811**  
 Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOECC SUBMITTAL
		DRAWN
		CHECKED

**CITY OF ANN ARBOR**  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0667  
 www.a2gov.org

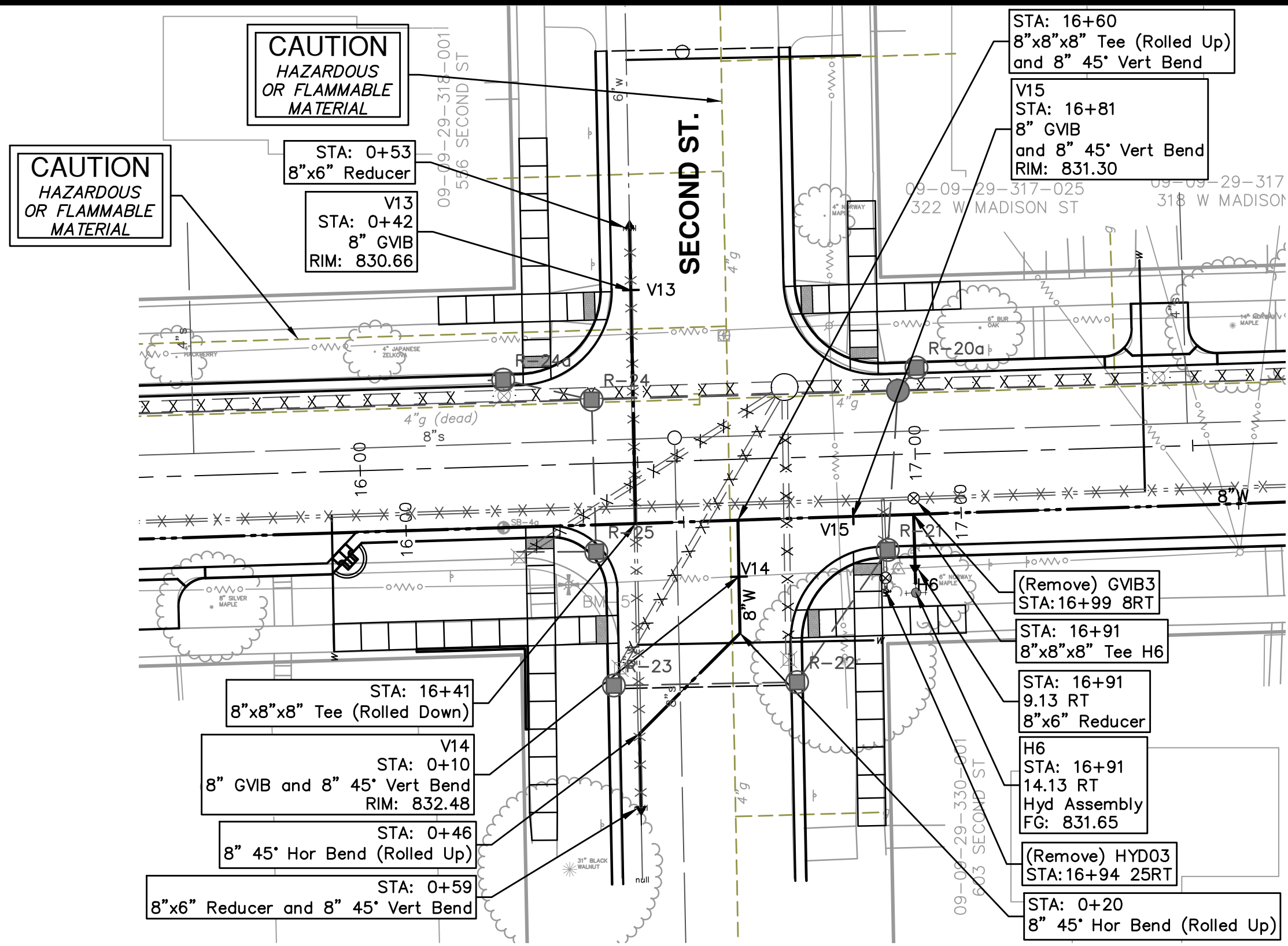
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS  
 WATER MAIN  
 PROFILES

SCALE: PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING NO.: 2012027-23  
 SHEET NO.: 23 OF 49

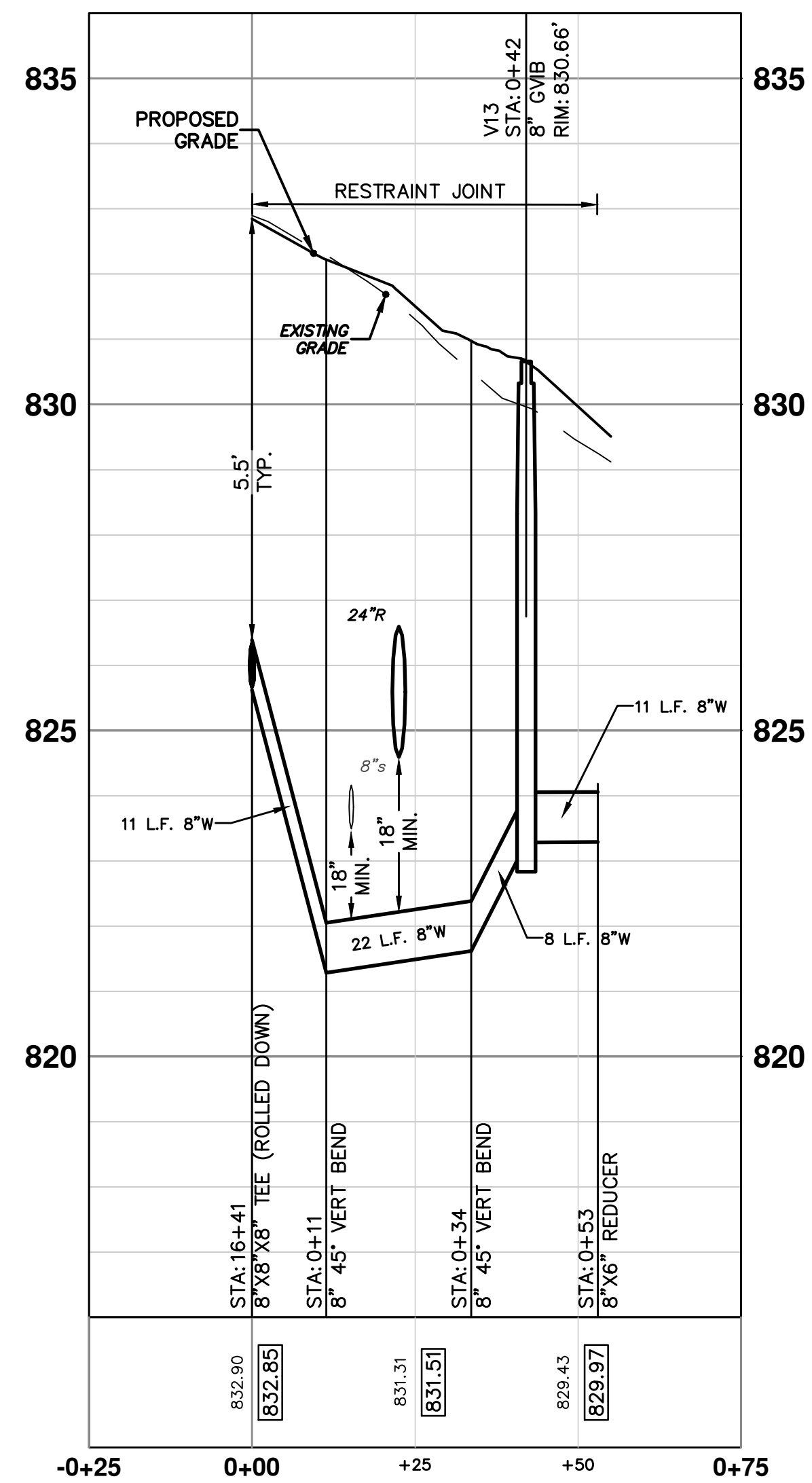
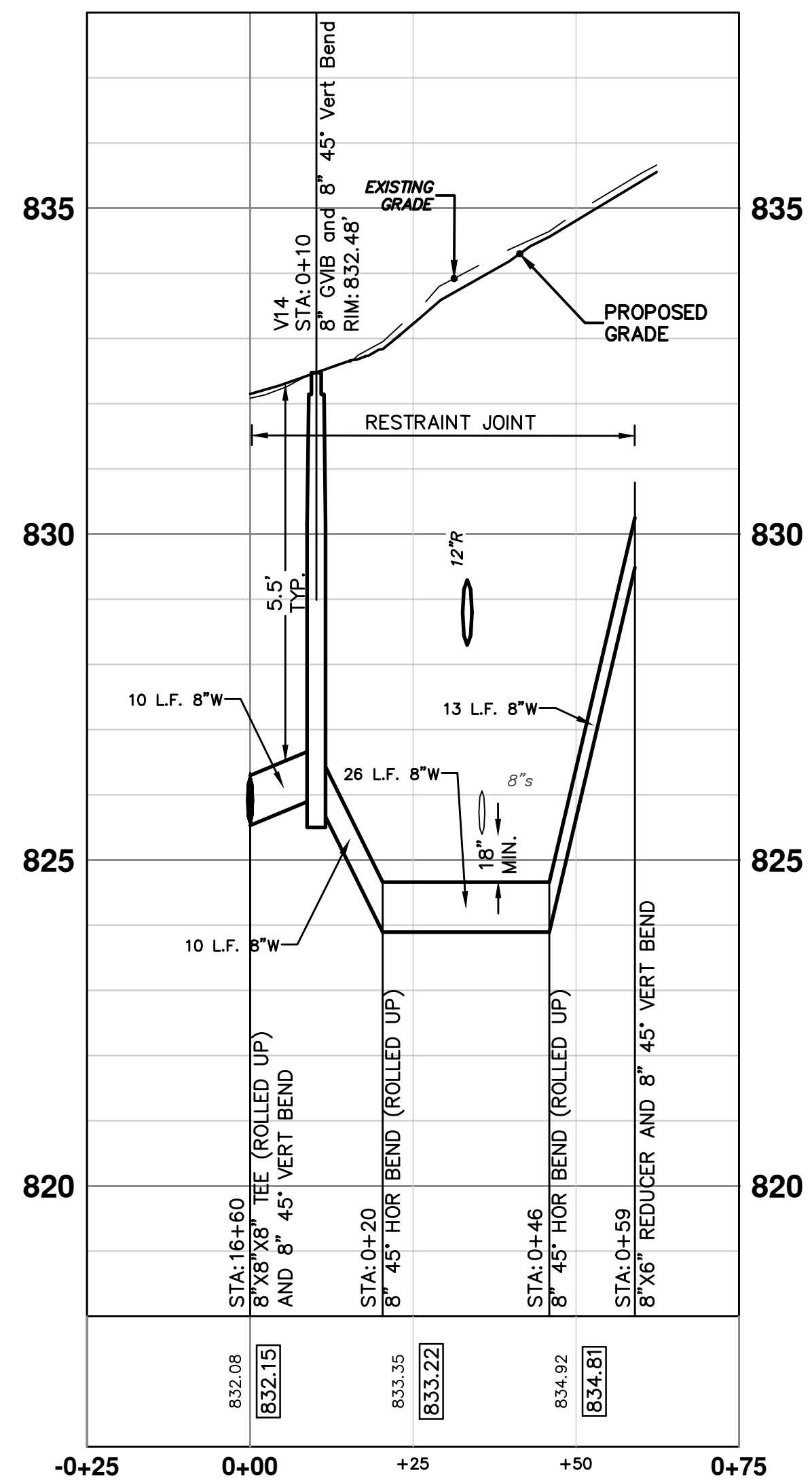


S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13

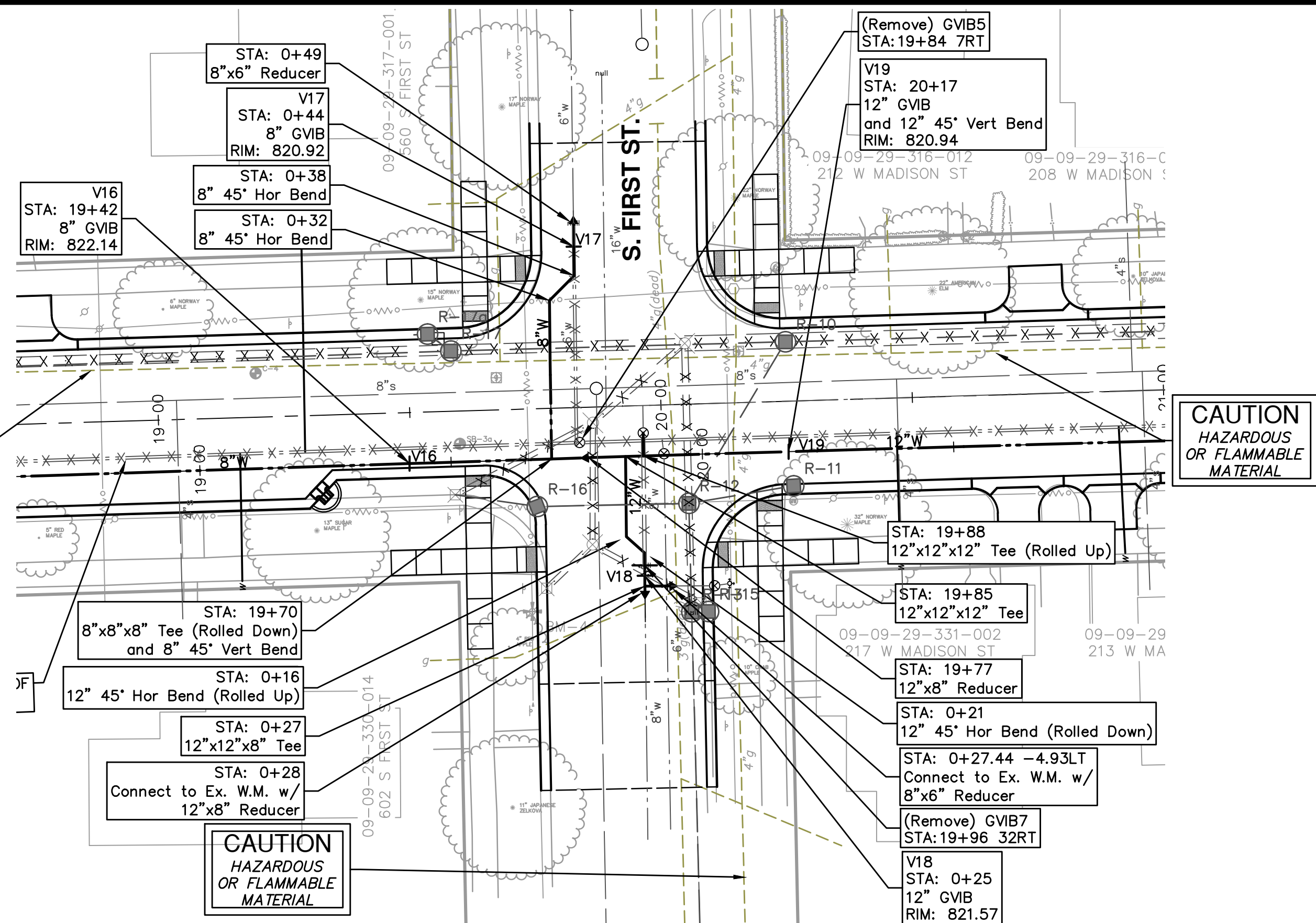


2ND S - PR WATER

2ND N - PR WATER

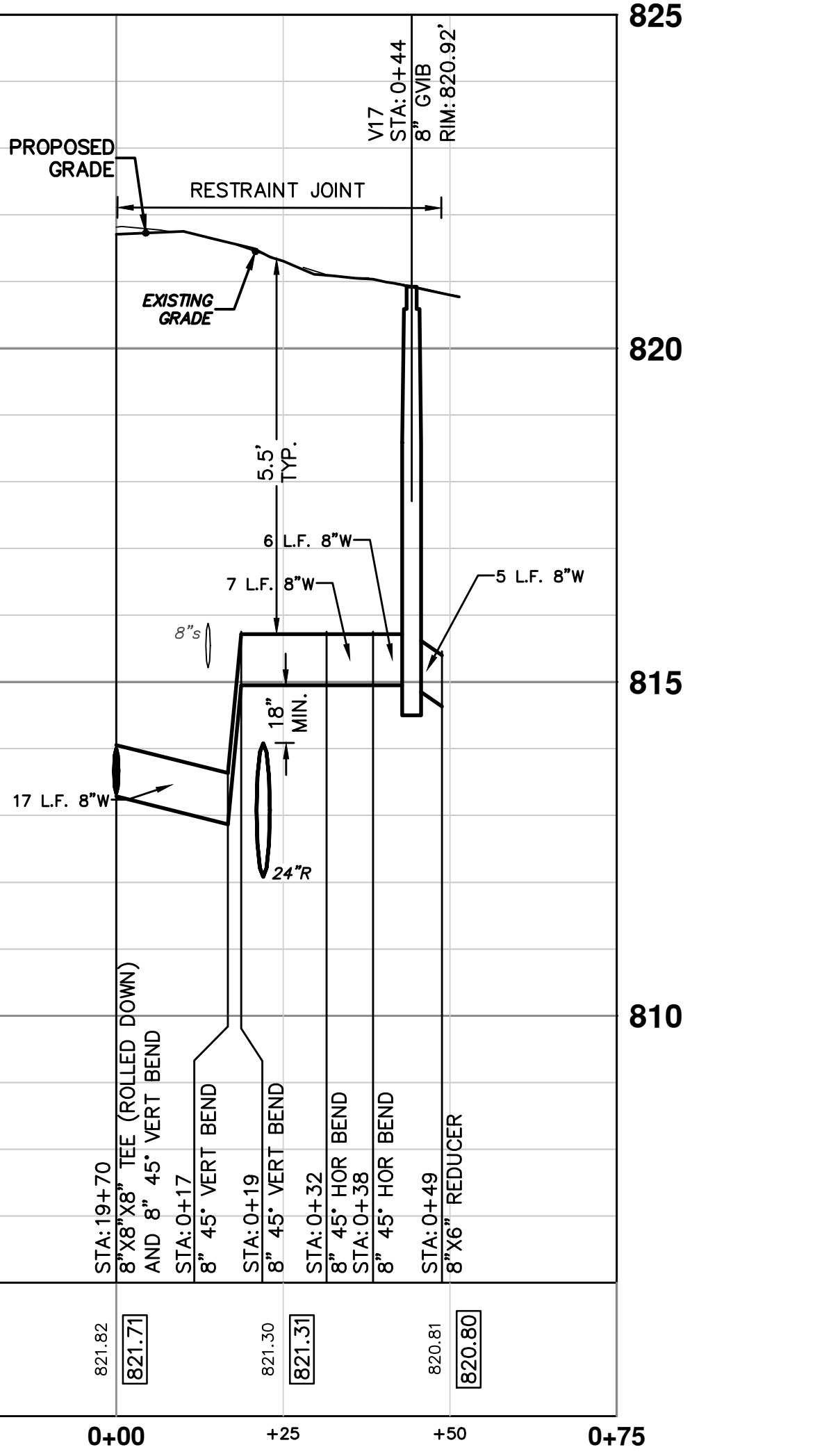
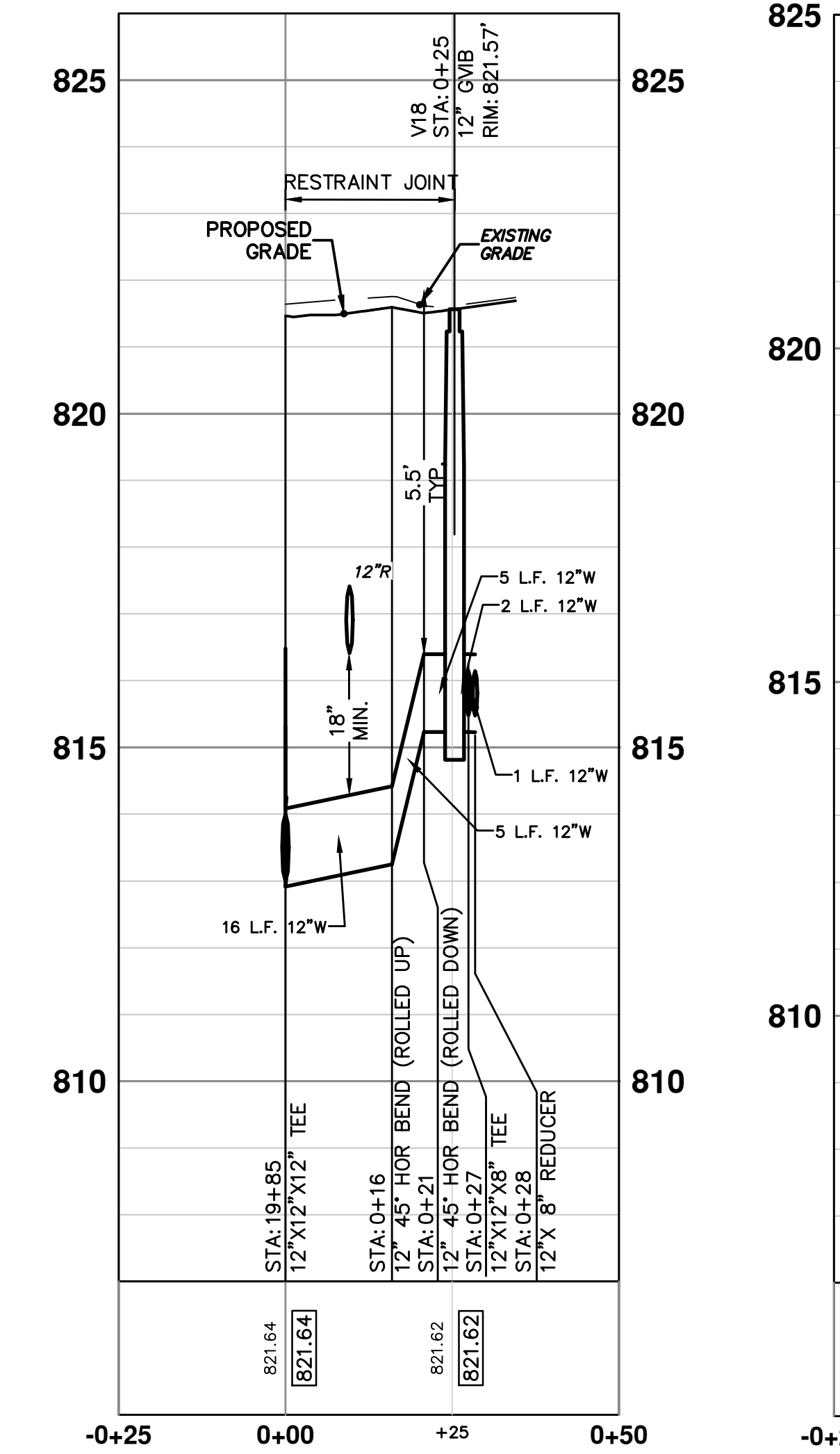


**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.



1ST S - PR WATER

1ST N - PR WATER



**811**  
 Know what's below. Call before you dig.

01 OUT FOR BID 4-16-13  
 00 MDCO SUBMITTAL 12-19-12  
 REV. DATE DESCRIPTION

**CITY OF ANN ARBOR**  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0867  
 www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 WEST MADISON STREET IMPROVEMENTS

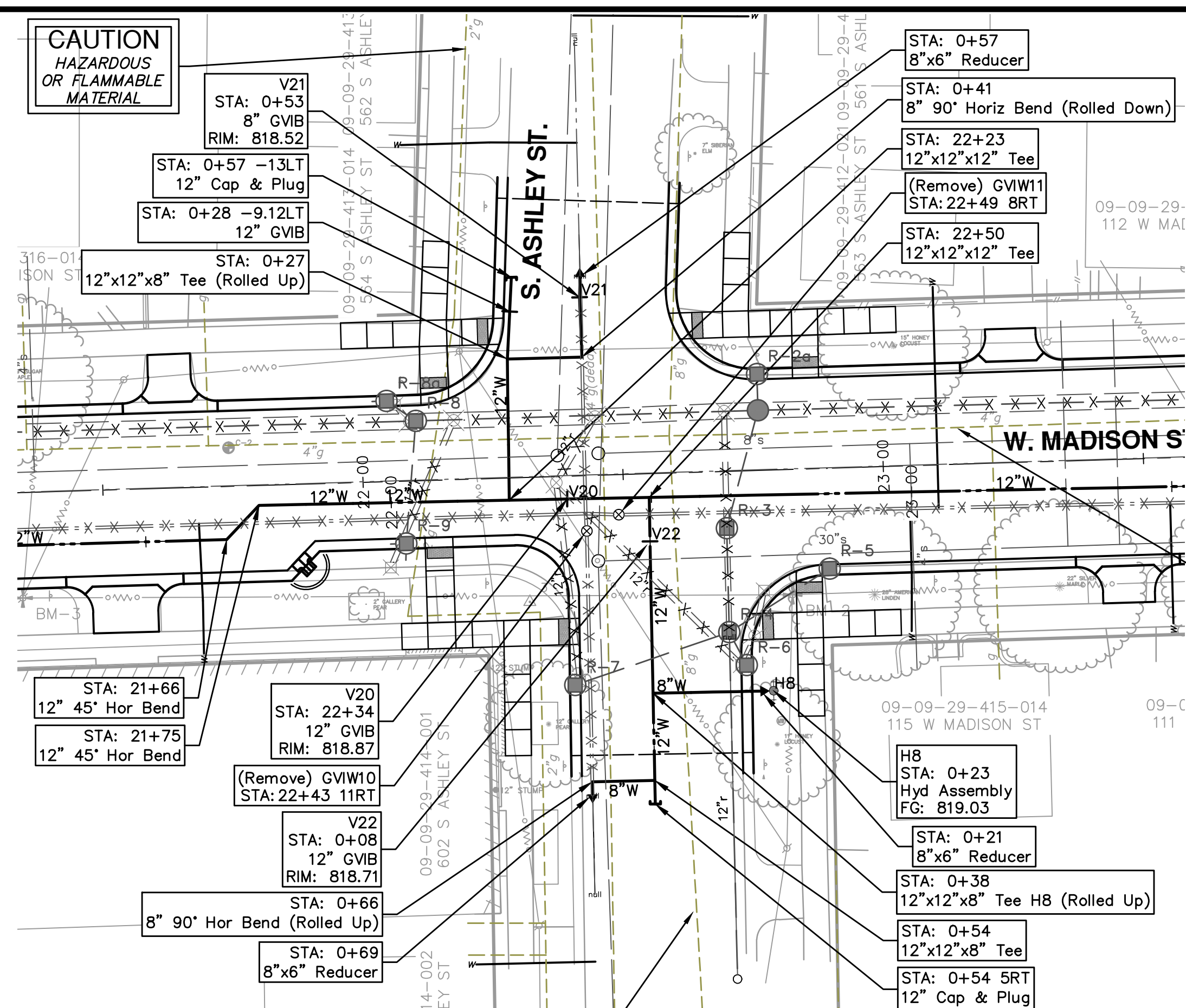
PROFILES

SCALE: PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING NO.: 2012027-24  
 SHEET NO.: 24 OF 49



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027WATR.dwg Dwg Created: 15-Mar-13 - a2\_standard bw.stb - Plot Date: 16-Apr-13

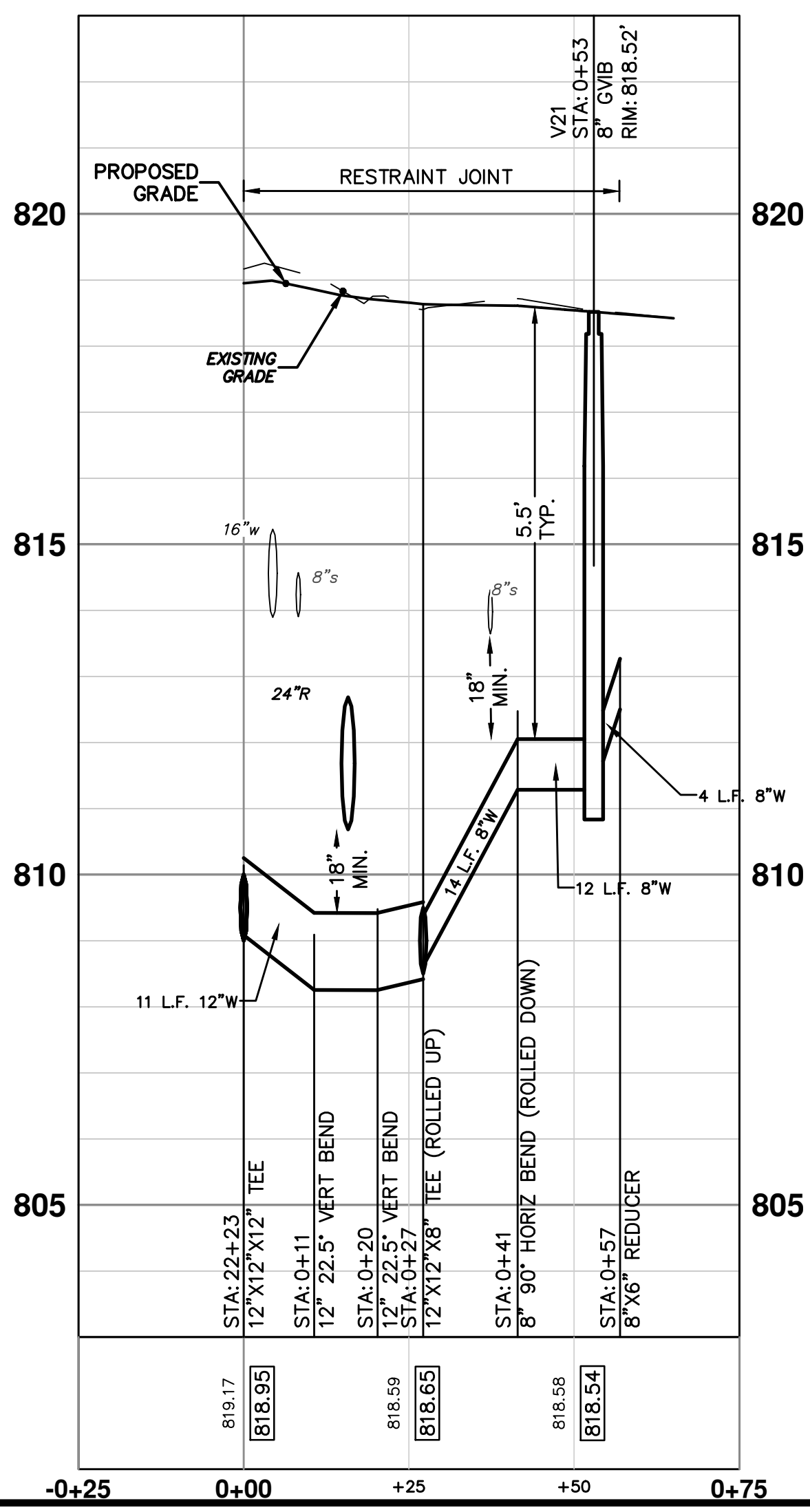


**NOTE:**  
 FITTINGS, OTHER THAN THOSE SPECIFICALLY INCLUDED AS SEPARATE CONTRACT PAY ITEMS; BLOW-OFF ASSEMBLIES; CONCRETE THRUST BLOCKS; SOLID SLEEVES; AND MECHANICAL PLUGS WHICH ARE REQUIRED TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE OF THE WATER MAIN.

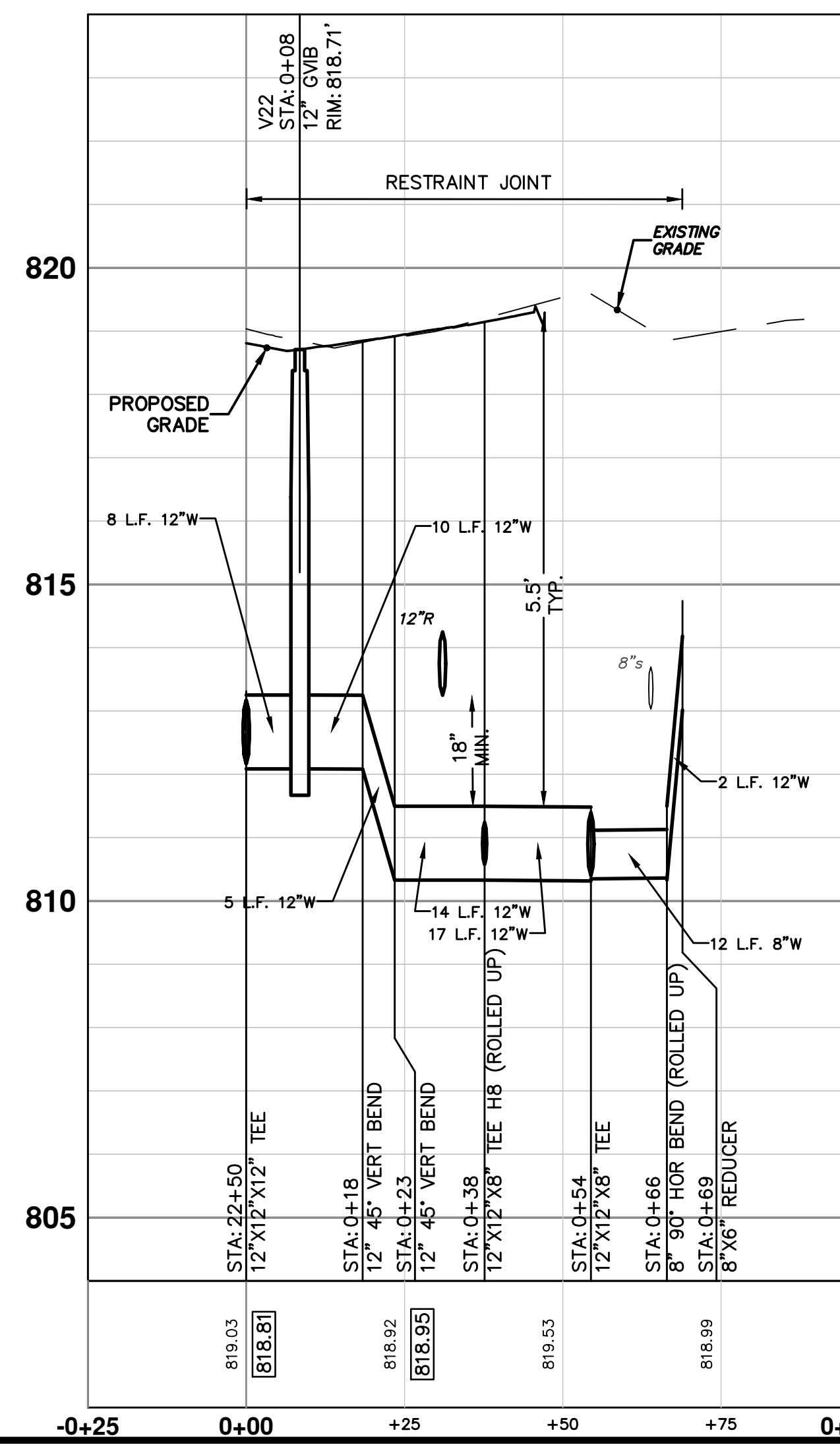
**CAUTION**  
 HAZARDOUS OR FLAMMABLE MATERIAL

**CAUTION**  
 HAZARDOUS OR FLAMMABLE MATERIAL

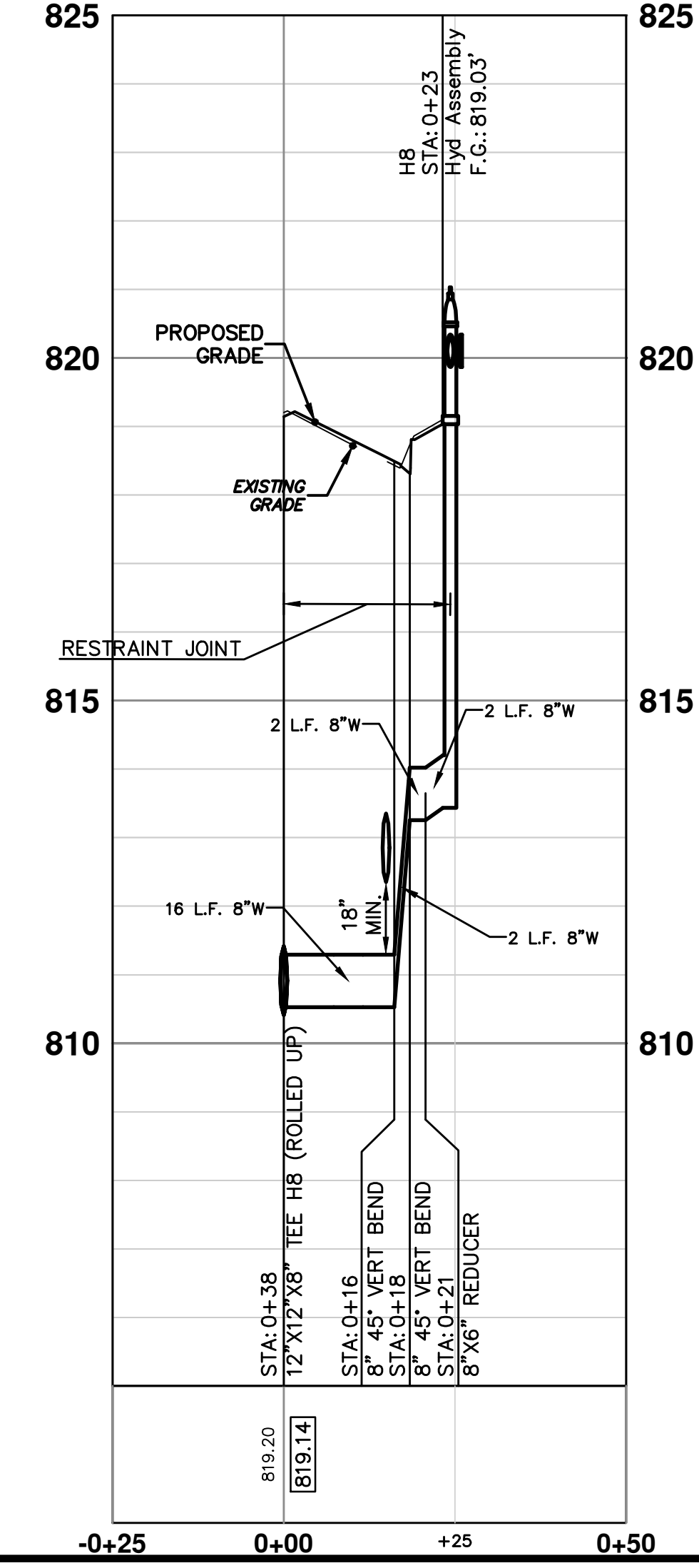
**ASHLEY N - PR WATER**



**ASHLEY S - PR WATER**



**HYD 8**



**811**  
 Know what's below. Call before you dig.

01 OUT FOR BID  
 00 MDEQ SUBMITTAL

---

CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR MI 48106-1310  
 www.a2gov.org

DATE: 4-16-13  
 DRAWN: [blank]  
 CHECKED: [blank]

---

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**

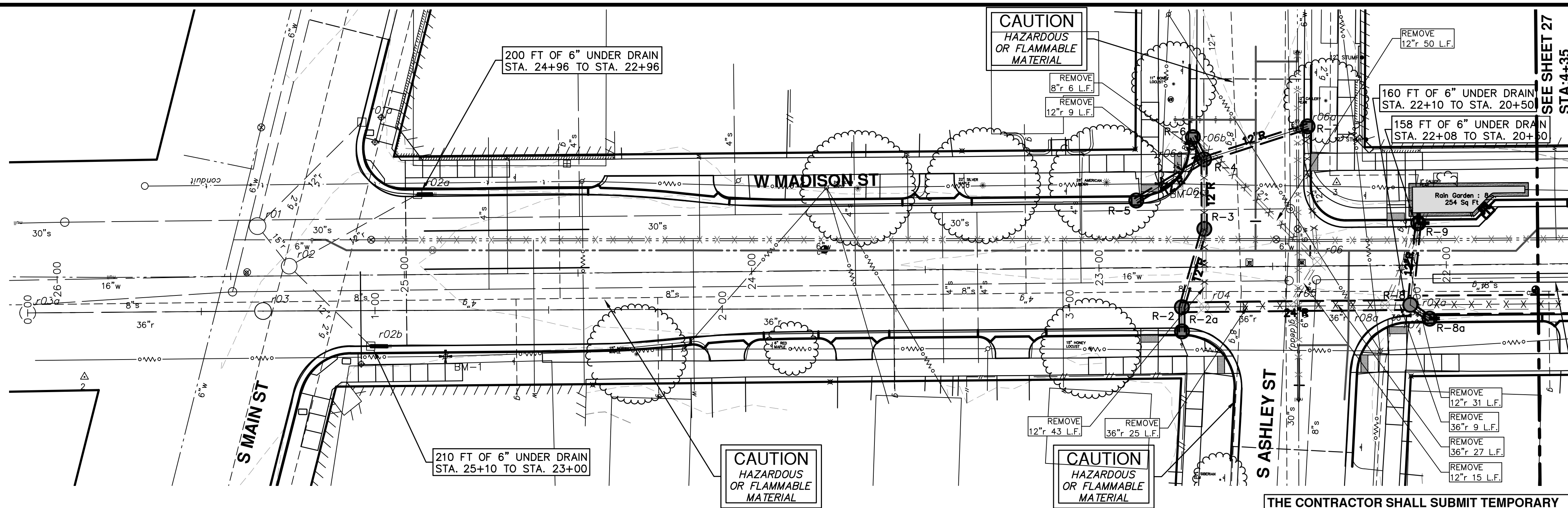
**PROFILES**

---

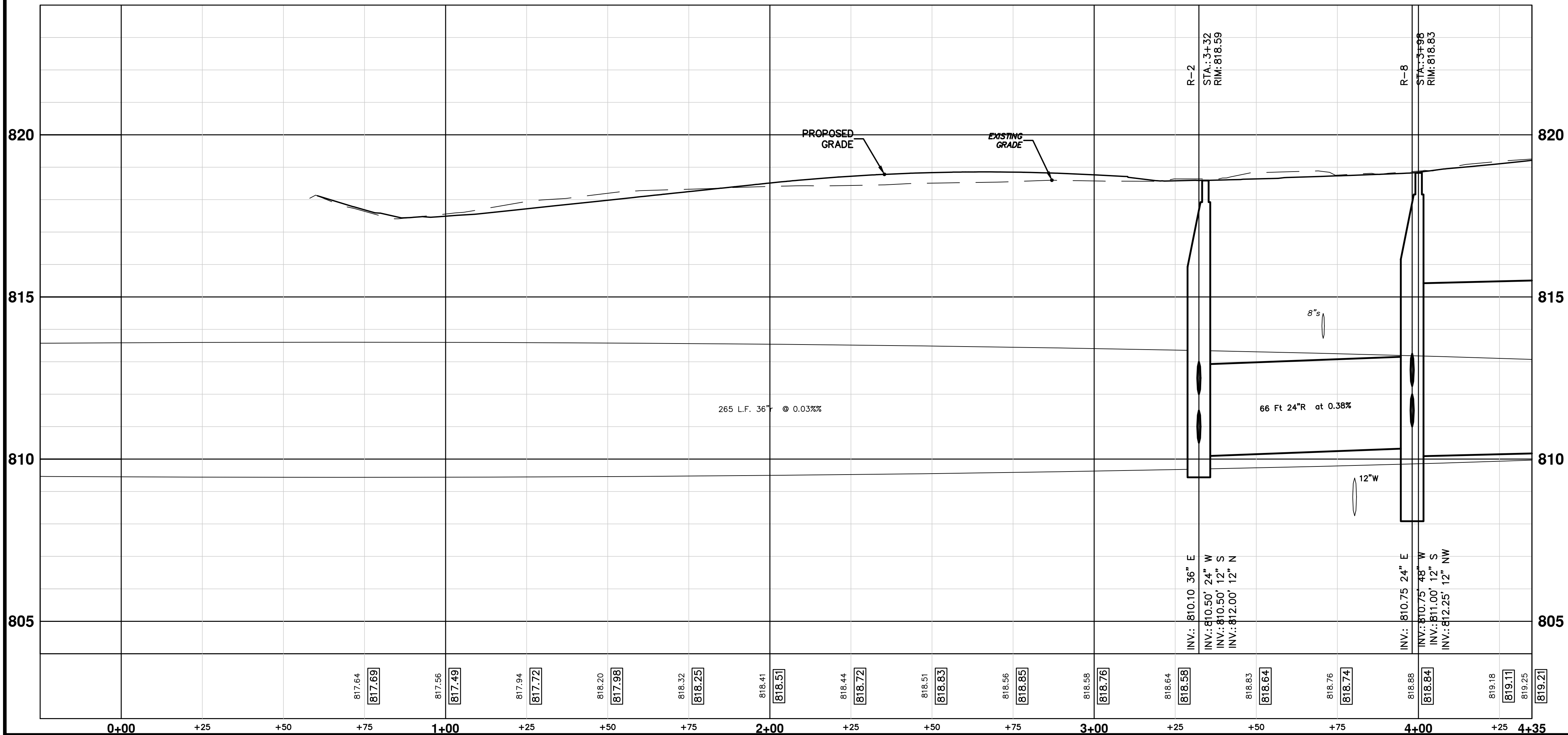
SCALE: PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING NO.: 2012027-25  
 SHEET NO.: 25 OF 49

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\20120275TRM.dwg Dwg Created: 7-Sep-12 - \_a2 standard bw.stb - Plot Date: 16-Apr-13




**PR STRM**



PR. STORM SEWER STRUCTURE TABLE					
STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-2	3+32	818.59	8.49	6" MH Cover B	24" W 810.50 12" S 810.50 12" N 812.00 36" E 810.10
R-2a	3+32	818.32	7.32	2' Inlet Cover K	12" S 813.00
R-3	3+39	818.64	8.64	6" MH Cover B	12" S 812.00 12" N 812.00
R-4	3+39	818.50	8.15	6" MH Cover B	12" S 812.35 12" W 812.50 12" NE 812.50 12" SE 812.50 12" N 812.35
R-5	3+19	818.44	7.44	2' Inlet Cover K	12" SW 813.00
R-6	3+36	818.25	7.25	2' Inlet Cover K	12" NW 813.00
R-7	3+69	818.38	6.38	2' Inlet Cover K	12" E 814.00
R-8	3+98	818.83	10.08	6" MH Cover B	48" W 810.75 12" S 811.00 12" NW 812.25 24" E 810.75
R-8a	4+04	818.74	8.24	2' Inlet Cover K	6" W 812.75 12" SE 812.50
R-9	4+01	818.95	9.45	2' Inlet Cover K	8" S 811.83 6" W 811.75 12" N 811.50

EX. STORM SEWER STRUCTURE TABLE					
STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r-03	0+68	817.90	9.98	Ex MH	36" W 810.02 36" E 809.92
r01	25+42	818.34	4.70	Storm MH	12" SW 813.74 15" S 813.64 15" NW 813.64
r01a	25+12	818.19	4.90	Storm CB	12" NE 815.29
r02	25+33	817.92	4.19	Storm MH	12" SW 814.92 12" NW 813.92 15" SE 813.72
r02a	24+96	817.57	5.20	Storm CB	6" W 814.60 12" NE 814.37
r02b	25+10	817.36	4.60	Storm CB	6" W 815.01 12" SE 814.76
r03a	26+09	813.51	???	Storm MH	36" W 809.72
r04	22+70	818.65	8.20	Storm MH (Remove)	36" W 810.45 36" E 810.45
r05	22+45	818.88	8.61	Storm MH (Remove)	36" W 810.47 12" SW 813.07 36" E 810.27
r06	22+37	819.21	6.62	Storm MH (Remove)	12" SE 814.79 12" S 814.69 12" NE 814.59
r06a	22+41	818.47	3.00	Storm CB (Remove)	12" N 815.47
r06b	22+72	818.29	2.50	Storm CB (Remove)	8" NE 815.96 12" NW 815.79
r06c	22+76	818.45	3.20	Storm CB (Remove)	12" S 815.25
r06e	22+74	815.88	???	Storm MH (Remove)	12" N 814.11 8" SW 815.10
r07	22+07	818.63	4.20	Storm CB (Remove)	12" SE 814.43
r07a	22+09	814.40	???	Storm MH (Remove)	36" W 810.61 12" NW 812.61 36" E 810.61
r08	22+05	818.54	2.30	Storm CB (Remove)	12" NE 816.24
r08a	22+18	814.36	???	Storm MH (Remove)	36" W 810.57 12" SW 812.57 36" E 810.57




Know what's below. Call before you dig.

---

**CITY OF ANN ARBOR**  
**PUBLIC SERVICES**  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0001  
 734.764.8410  
 www.a3gov.org

---



**CITY OF ANN ARBOR**

---

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
 STORM SEWER  
 STA. 0+00 TO STA. 4+35

---

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

---

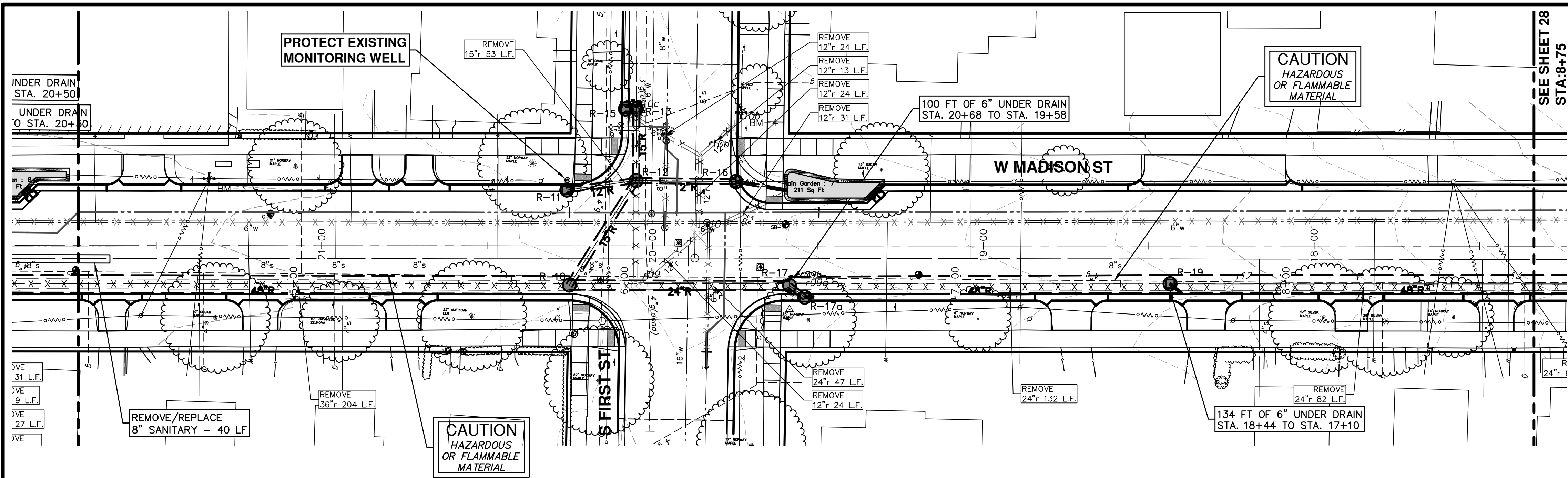
DRAWING No. **2012027-26**

---

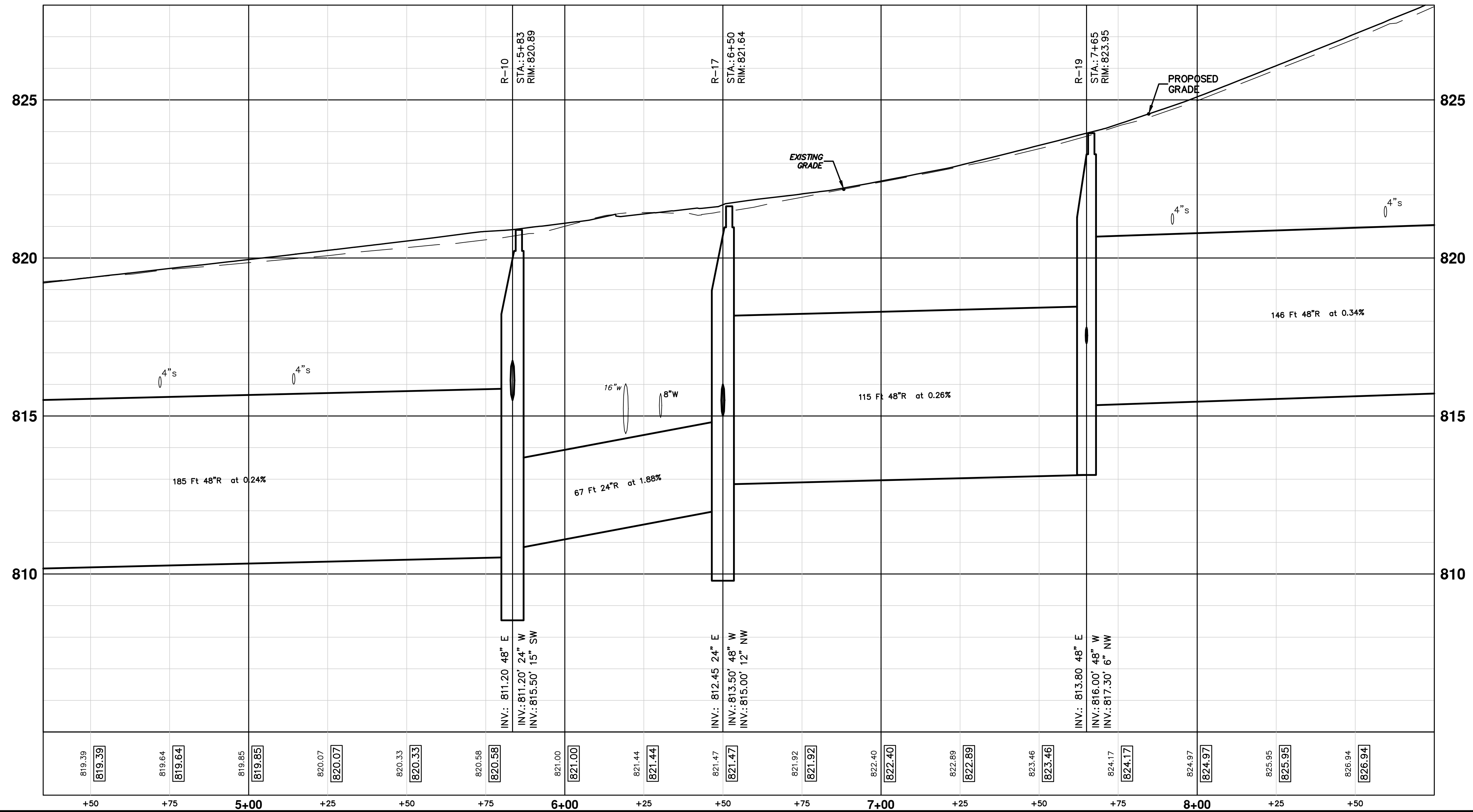
SHEET No. **26 OF 49**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\20120275TRM.dwg Dwg Created: 7-Sep-12 - \_a2 standard bw.stb - Plot Date: 16-Apr-13



**PR STRM**




THE CONTRACTOR SHALL SUBMIT TEMPORARY DRAINAGE CONTROL PLAN FOR MAINTAINING STORM RUN-OFF FROM STAGE 1 CONSTRUCTION UNTIL CONSTRUCTION OF STORM SYSTEM IN STAGE 2 IS COMPLETE. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN UNIT PRICES FOR THE APPROPRIATE STORM SEWER ITEMS.

STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-10	5+83	820.89	11.69	6' MH Cover B	24" W 811.20 15" SW 815.50 48" E 811.20
R-11	5+83	820.75	6.25	2' Inlet Cover K	12" W 816.50
R-12	6+04	821.14	7.39	4' MH Cover B	15" S 815.75 12" W 816.00 12" E 816.00 15" NE 815.75
R-13	6+04	821.30	7.24	4' MH Cover B	15" S 816.05 12" E 816.25 15" N 816.05
R-15	6+00	821.10	6.10	2' Inlet Cover K	12" W 817.00
R-16	6+34	821.50	6.50	2' Inlet Cover K	8" W 817.83 12" E 817.00
R-17	6+50	821.64	11.18	6' MH Cover B	48" W 813.50 12" NW 815.00 24" E 812.45
R-17a	6+55	821.47	7.97	2' Inlet Cover K	6" W 815.75 12" SE 815.50
R-19	7+65	823.95	10.15	5' MH Cover B	48" W 816.00 6" NW 817.30 48" E 813.80

STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r09	20+05	821.08	9.70	Storm MH (Remove)	24" W 814.78 12" SW 816.38 15" S 815.58 36" E 811.38
r09a	19+56	821.32	4.70	Storm MH (Remove)	12" SE 818.62
r09b	19+58	818.48	???	Storm MH (Remove)	24" W 815.92 12" NW 816.92 24" E 815.92
r10	19+86	821.64	4.50	Storm MH (Remove)	12" SW 817.65 12" S 817.65 12" NE 817.15
r10a	19+59	821.62	4.50	Storm CB (Remove)	12" NE 819.12
r10b	19+76	821.75	4.50	Storm CB (Remove)	12" NE 819.25
r10c	20+07	822.41	3.67	Storm CB (Remove)	12" NW 818.74
r10d	19+86	819.42	???	Storm MH (Remove)	12" SW 818.10 12" SE 818.10 12" N 818.10
r12	18+26	824.30	5.20	Storm MH (Remove)	24" W 819.10 24" E 819.10
r13	17+44	827.41	6.40	Storm MH (Remove)	24" W 821.01 24" E 821.01


BM 4 Elev. 823.99  
NAIL IN N. SIDE POWER POLE ON THE S. SIDE OF MADISON AT HOUSE #602 FIRST

BM 3 Elev. 820.62  
NAIL IN N. SIDE POWER POLE ON THE S. SIDE OF MADISON AT HOUSE #213



Know what's below. Call before you dig.

REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DPF/CEC	IVK	OUT FOR BID
00	12-19-12	DPF/CEC	IVK	MOEQ SUBMITTAL

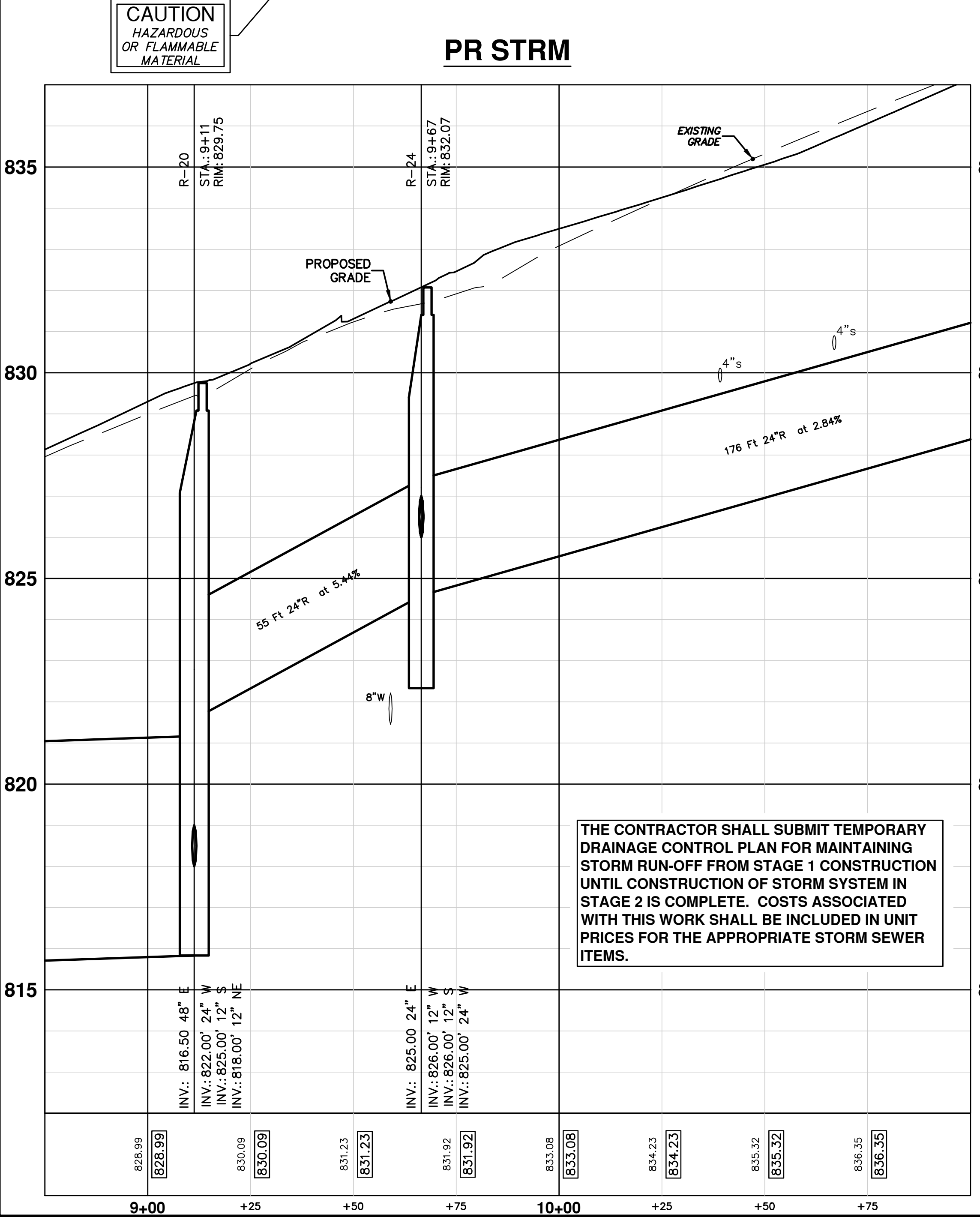
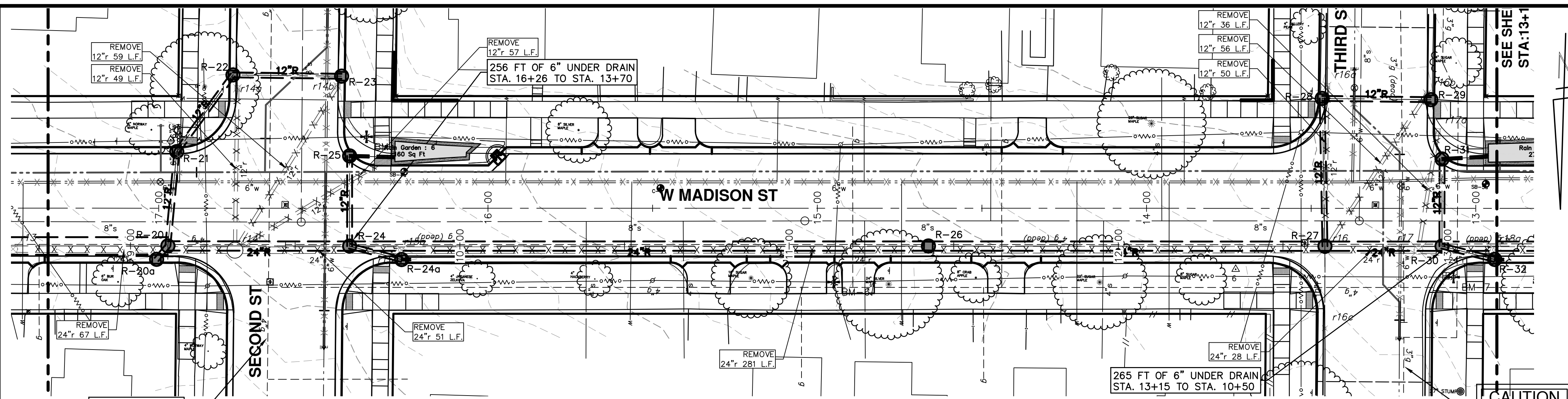


CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0867  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
STORM SEWER  
STA. 4+35 TO STA. 8+75

SHEET No. 27 OF 49  
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. 2012027-27

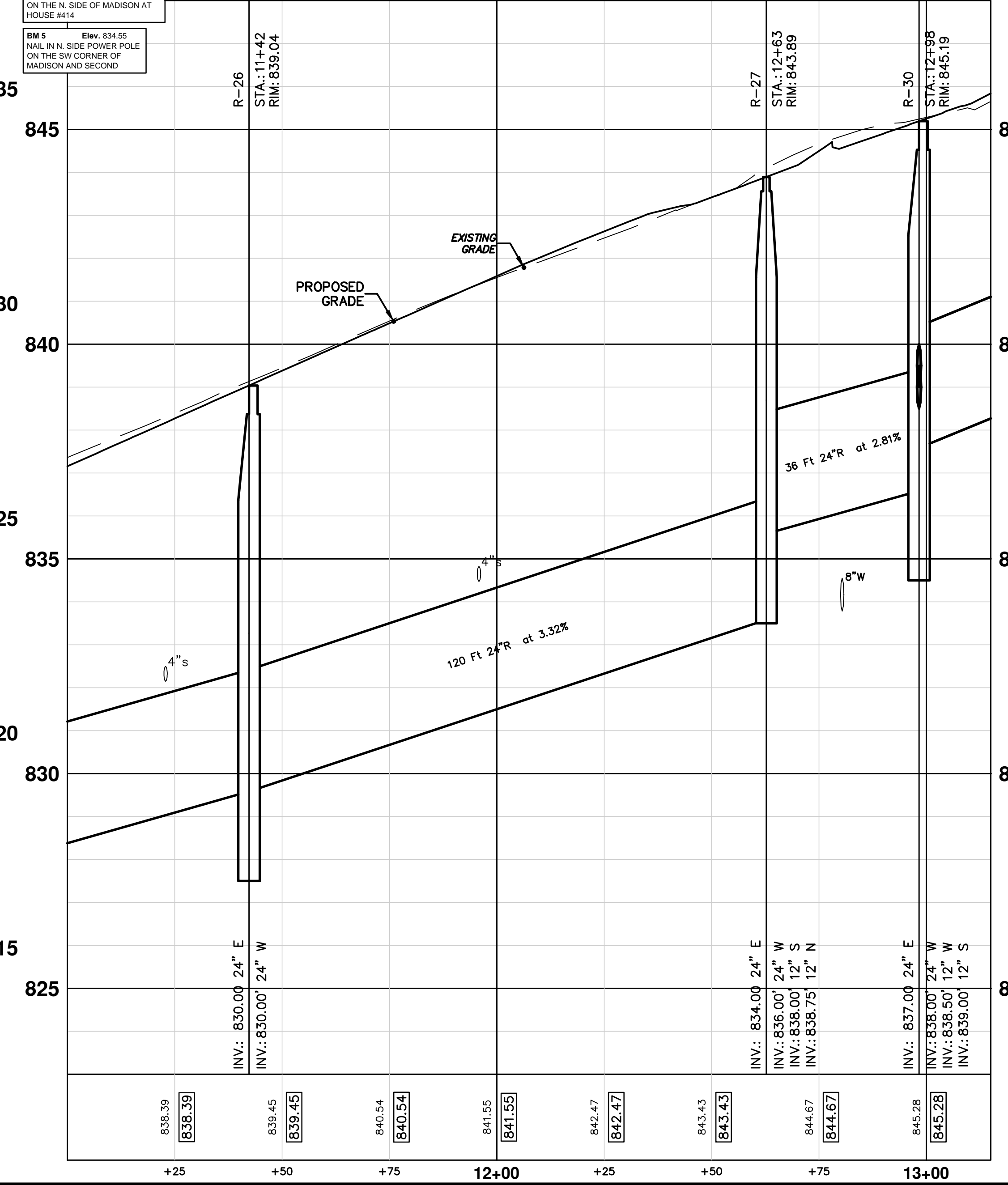
S:\Project Management\Design\2012027 Madison\Plan Production\Primary\20120275TRM.dwg Dwg Created: 7-Sep-12 - a2 standard bw.stb - Plot Date: 16-Apr-13



BM 7 Elev. 845.41  
RR SPIKE IN S. SIDE POWER POLE ON THE NW CORNER OF MADISON AND THIRD

BM 6 Elev. 839.06  
RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON AT HOUSE #414

BM 5 Elev. 834.55  
NAIL IN N. SIDE POWER POLE ON THE SW CORNER OF MADISON AND SECOND



STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-20	9+11	829.75	13.25	6' MH Cover B	24" W 822.00 12" S 825.00 12" NE 818.00 48" E 816.50
R-20a	9+08	829.77	13.27	2' Inlet Cover K	12" SW 818.50
R-21	9+14	831.17	6.17	2' Inlet Cover K	12" SW 827.00 12" N 827.00
R-22	9+31	832.70	6.70	2' Inlet Cover K	12" W 828.00 12" NE 828.00
R-23	9+64	834.01	7.51	2' Inlet Cover K	12" E 828.50
R-24	9+67	832.07	9.07	5' MH Cover B	12" W 826.00 12" S 826.00 24" W 825.00 24" E 825.00
R-24a	9+82	832.32	7.32	2' Inlet Cover K	6" W 827.25 12" E 827.00
R-25	9+67	833.40	7.40	2' Inlet Cover K	8" W 828.33 12" N 828.00
R-26	11+42	839.04	11.04	4' MH Cover B	24" W 830.00 24" E 830.00
R-27	12+63	843.89	9.89	4' MH Cover B	24" W 836.00 12" S 838.00 12" N 838.75 24" E 834.00
R-28	12+62	845.39	7.39	2' Inlet Cover K	12" W 840.00 12" N 840.00
R-29	12+95	846.62	7.62	2' Inlet Cover K	12" E 841.00
R-30	12+98	845.19	10.19	4' MH Cover B	24" W 838.00 12" W 838.50 12" S 839.00 24" E 837.00
R-31	12+98	846.17	8.17	2' Inlet Cover K	12" N 840.00 8" W 840.33
R-32	13+14	845.58	8.58	2' Inlet Cover K	6" W 839.25 12" E 839.00

STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r14	16+77	830.33	7.80	Storm MH	24" W 823.33 12" SW 825.13 12" S 824.33 24" E 822.53
r14a	16+76	832.45	5.50	Storm CB (Remove)	12" N 828.95
r14b	16+46	833.81	3.90	Storm CB (Remove)	12" NE 829.91
r14c	16+28	833.41	3.61	Storm CB (Remove)	12" NE 829.80
r15	16+26	831.62	4.00	Storm CB (Remove)	12" S 827.62
r15a	16+26	828.07	???	Storm MH (Remove)	24" W 825.52 12" N 826.52 24" E 825.52
r16	13+46	844.04	6.40	Storm MH (Remove)	24" W 837.64 12" S 838.64 12" SW 838.64 12" N 838.74 24" E 837.64
r16a	13+45	845.72	4.20	Storm CB (Remove)	12" N 841.52
r16b	13+15	846.57	4.50	Storm CB (Remove)	12" NE 842.07
r17	13+17	845.07	6.80	Storm MH (Remove)	24" W 838.57 12" S 838.64 12" SW 839.47 24" E 838.27
r17a	13+12	846.04	2.50	Storm CB (Remove)	12" N 843.54
r18	12+94	845.23	4.30	Storm CB	12" S 840.93
r18a	12+94	842.08	???	Storm MH (Remove)	24" W 839.52 12" N 840.52 24" E 839.52

THE CONTRACTOR SHALL SUBMIT TEMPORARY DRAINAGE CONTROL PLAN FOR MAINTAINING STORM RUN-OFF FROM STAGE 1 CONSTRUCTION UNTIL CONSTRUCTION OF STORM SYSTEM IN STAGE 2 IS COMPLETE. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN UNIT PRICES FOR THE APPROPRIATE STORM SEWER ITEMS.

**811** Know what's below. Call before you dig.

CITY OF ANN ARBOR PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-0667  
www.a3gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
STORM SEWER  
STA. 8+75 TO STA. 13+15

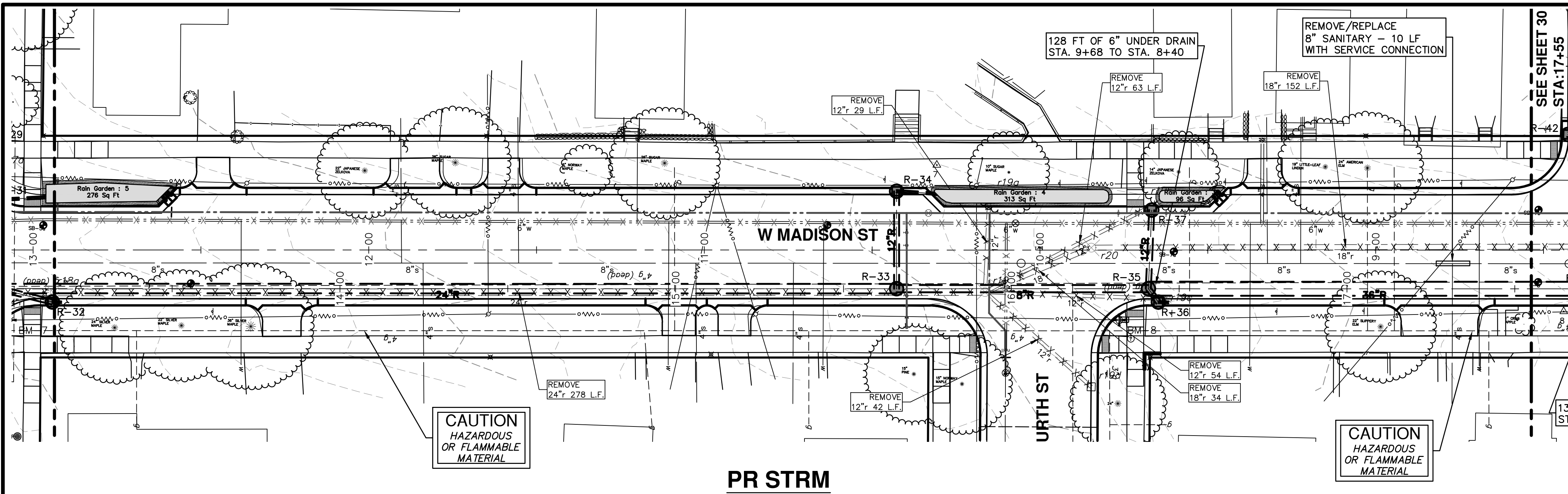
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

DRAWING NO. 2012027-28

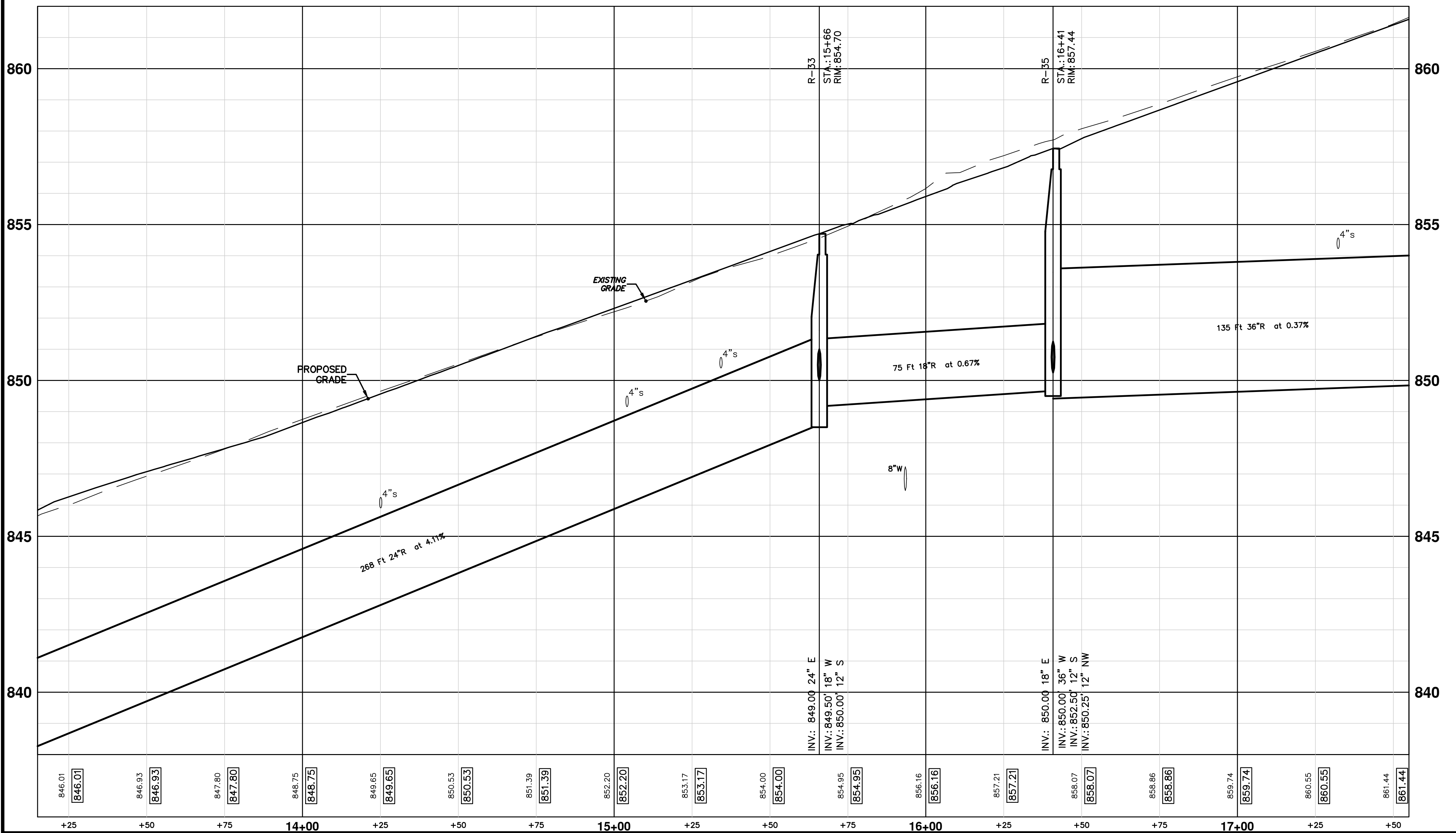
SHEET NO. 28 OF 49



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\20120275TRM.dwg Dwg Created: 7-Sep-12 - \_a2\_standard bw.stb - Plot Date: 16-Apr-13




THE CONTRACTOR SHALL SUBMIT TEMPORARY DRAINAGE CONTROL PLAN FOR MAINTAINING STORM RUN-OFF FROM STAGE 1 CONSTRUCTION UNTIL CONSTRUCTION OF STORM SYSTEM IN STAGE 2 IS COMPLETE. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN UNIT PRICES FOR THE APPROPRIATE STORM SEWER ITEMS.




PR. STORM SEWER STRUCTURE TABLE					
STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-33	15+66	854.70	5.70	4' MH Cover B	18" W 849.50 12" S 850.00 24" E 849.00
R-34	15+66	855.30	6.30	Cylindrical Structure Slab Top Circular Frame	8" W 851.33 12" N 851.00
R-35	16+41	857.44	7.44	4' MH Cover B	36" W 850.00 12" S 852.50 12" NW 850.25 18" E 850.00
R-36	16+44	857.38	8.88	2' Inlet Cover K	6" W 850.75 12" SE 850.50
R-37	16+42	857.96	6.96	2' Inlet Cover K	12" N 853.00

EX. STORM SEWER STRUCTURE TABLE					
STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r19	10+16	855.67	4.90	Storm MH (Remove)	18" SW 851.67 12" NW 850.87 12" W 850.97 12" SW 851.57 12" S 851.67 24" E 850.77
r19a	10+15	856.40	3.50	Storm CB (Remove)	12" N 852.90
r19b	9+60	858.33	3.50	Storm CB (Remove)	12" NE 854.83
r19c	9+62	857.82	3.30	Storm CB (Remove)	12" E 854.52
r19d	9+85	855.59	2.80	Storm CB	12" SE 852.79
r20	9+85	857.65	5.40	Storm MH (Remove)	18" W 852.25 18" NE 852.25



Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL



CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1500  
www.a2gov.org

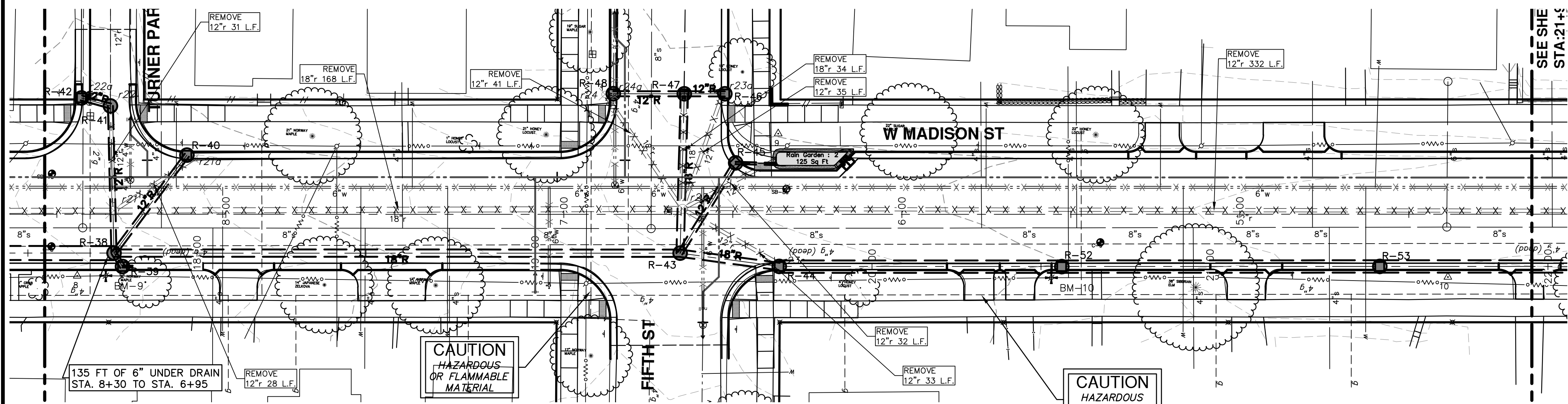
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
STORM SEWER  
STA. 13+15 TO STA. 17+35

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

DRAWING No. 2012027-29

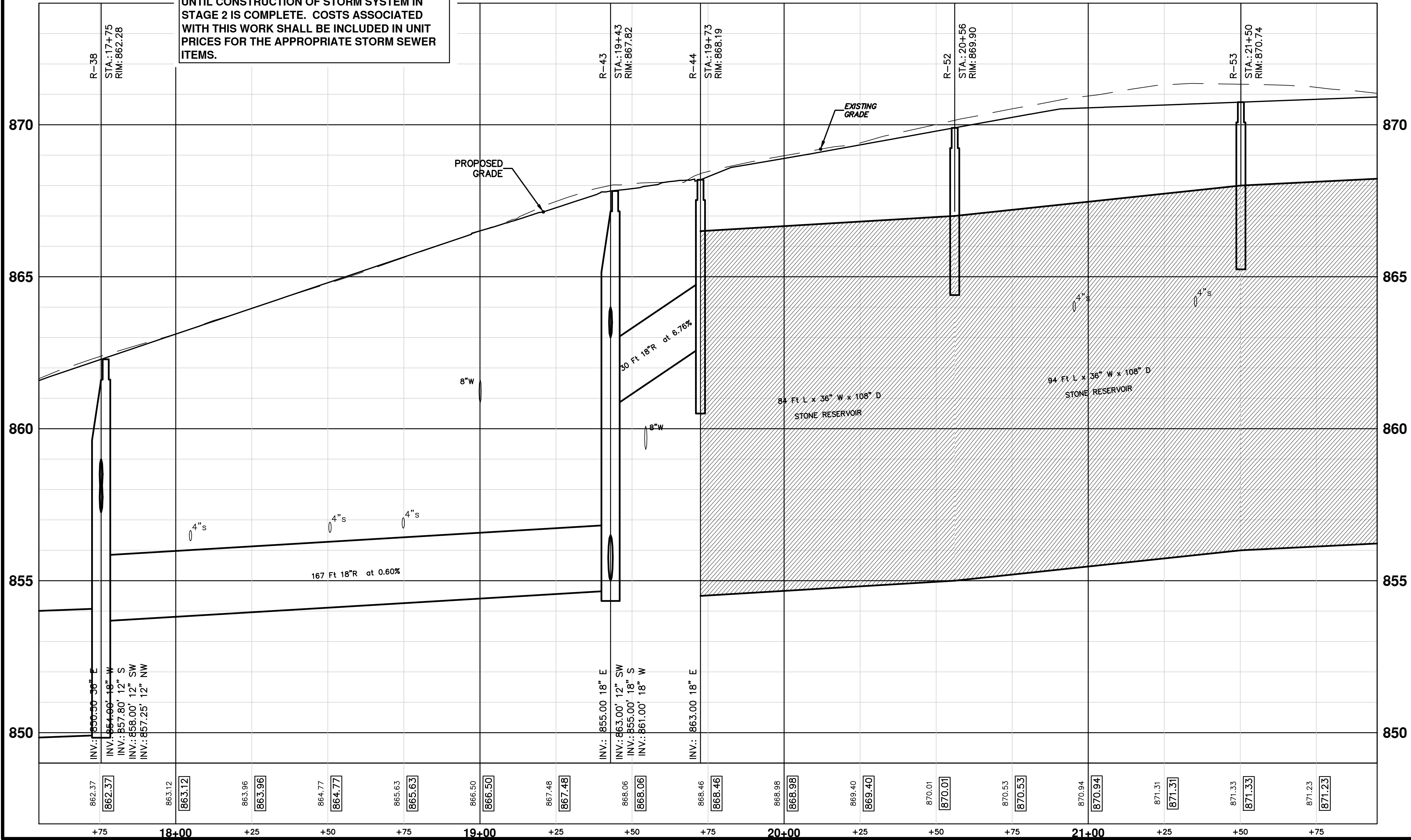
SHEET No. 29 OF 49

S:\Project Management\Design\20120275\TRM.dwg - Plot Date: 16-Apr-13



THE CONTRACTOR SHALL SUBMIT TEMPORARY DRAINAGE CONTROL PLAN FOR MAINTAINING STORM RUN-OFF FROM STAGE 1 CONSTRUCTION UNTIL CONSTRUCTION OF STORM SYSTEM IN STAGE 2 IS COMPLETE. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN UNIT PRICES FOR THE APPROPRIATE STORM SEWER ITEMS.

**PR STRM**




PR. STORM SEWER STRUCTURE TABLE					
STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-38	17+75	862.28	11.78	5' MH Cover B	18" W 854.00 12" S 857.80 12" SW 858.00 12" NW 857.25 36" E 850.50
R-39	17+78	862.19	6.69	2' Inlet Cover K	6" W 857.75 12" SE 857.50
R-40	17+97	863.70	5.70	2' Inlet Cover K	12" NE 860.00
R-41	17+74	863.66	4.66	4' MH Cover B	12" E 859.00 12" S 859.85 12" N 859.00
R-42	17+66	863.46	3.46	2' Inlet Cover K	12" W 860.00
R-43	19+43	867.82	12.82	5' MH Cover B	12" SW 863.00 18" S 855.00 18" W 861.00 18" E 855.00
R-44	19+73	868.19	7.19	2' Inlet Cover K	18" E 863.00
R-45	19+56	868.98	7.48	2' Inlet Cover K	8" W 866.00 12" NE 863.50
R-46	19+50	869.43	7.43	2' Inlet Cover K	12" E 864.00
R-47	19+43	869.41	12.41	4' MH Cover B	18" S 863.30 12" E 859.50 12" W 863.00 18" N 859.00
R-48	19+23	868.48	10.48	2' Inlet Cover K	12" W 860.00
R-52	20+56	869.90	5.00	2' Leaching Inlet Cover K	
R-53	21+50	870.74	5.00	2' Leaching Inlet Cover K	

EX. STORM SEWER STRUCTURE TABLE					
STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r21	8+33	862.97	5.60	Storm MH (Remove)	18" W 857.37 12" S 858.27 12" SW 858.17 18" E 857.37
r21a	8+09	863.64	3.70	Storm CB (Remove)	12" NE 859.94
r22	8+34	863.87	4.20	Storm MH (Remove)	12" E 859.87 12" S 859.87 12" N 859.67
r22a	8+43	863.25	2.20	Storm CB (Remove)	12" W 861.05
r23	6+65	868.59	7.50	Storm MH (Remove)	12" W 861.49 12" NW 863.39 12" SW 863.19 12" S 863.19 12" SE 862.99 18" S 863.29 18" E 861.09
r23a	6+53	869.37	5.30	Storm CB (Remove)	12" N 866.07
r23b	6+36	869.15	3.00	Storm CB (Remove)	12" NE 866.15
r23c	6+36	868.27	2.80	Storm CB (Remove)	12" SE 865.47
r24	6+88	868.67	5.40	Storm MH (Remove)	12" SW 865.27 12" NW 865.57
r24a	6+84	868.32	2.40	Storm CB (Remove)	12" NE 865.92


BM 10 Elev. 871.84  
RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON, 1ST POLE W. OF FIFTH

BM 9 Elev. 863.57  
RR SPIKE IN S. SIDE POWER POLE ON THE N. SIDE OF MADISON, OPPOSITE TURNER PARK CT.



Know what's below.  
Call Before you dig.

01	OUT FOR BID	00	REQ SUBMITTAL	DATE	DRAWN	CHECKED	REV.			



CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
PO BOX 8647  
ANN ARBOR MI 48106-8647  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
STORM SEWER  
STA. 17+35 TO STA. 21+95

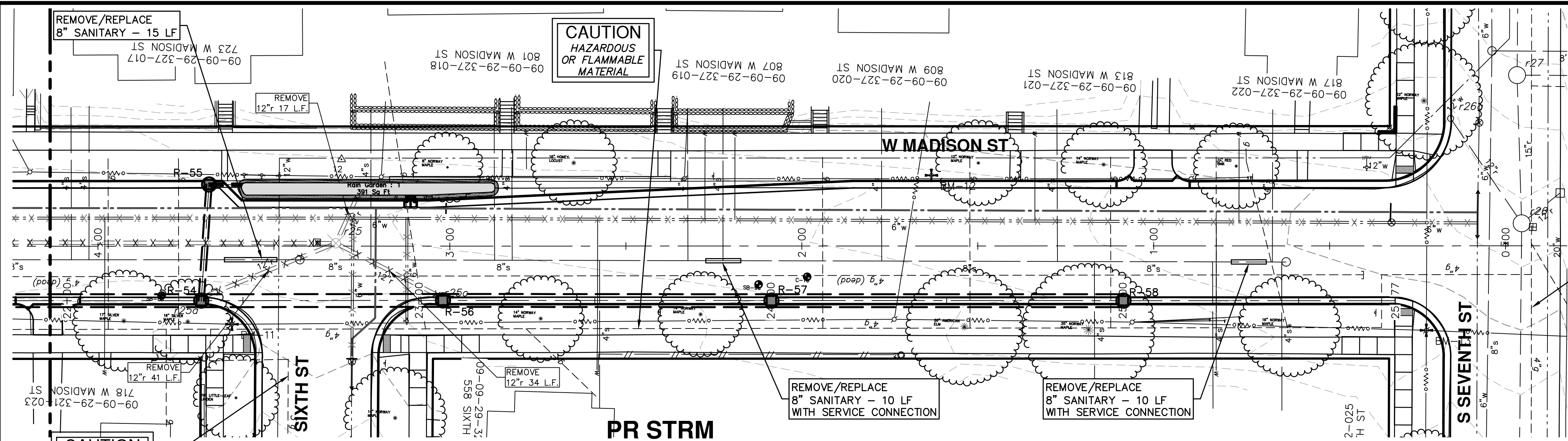
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

DRAWING No. **2012027-30**

SHEET No. **30 OF 49**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\20120275TRM.dwg Dwg Created: 7-Sep-12 - \_a2\_standard bw.stb - Plot Date: 16-Apr-13

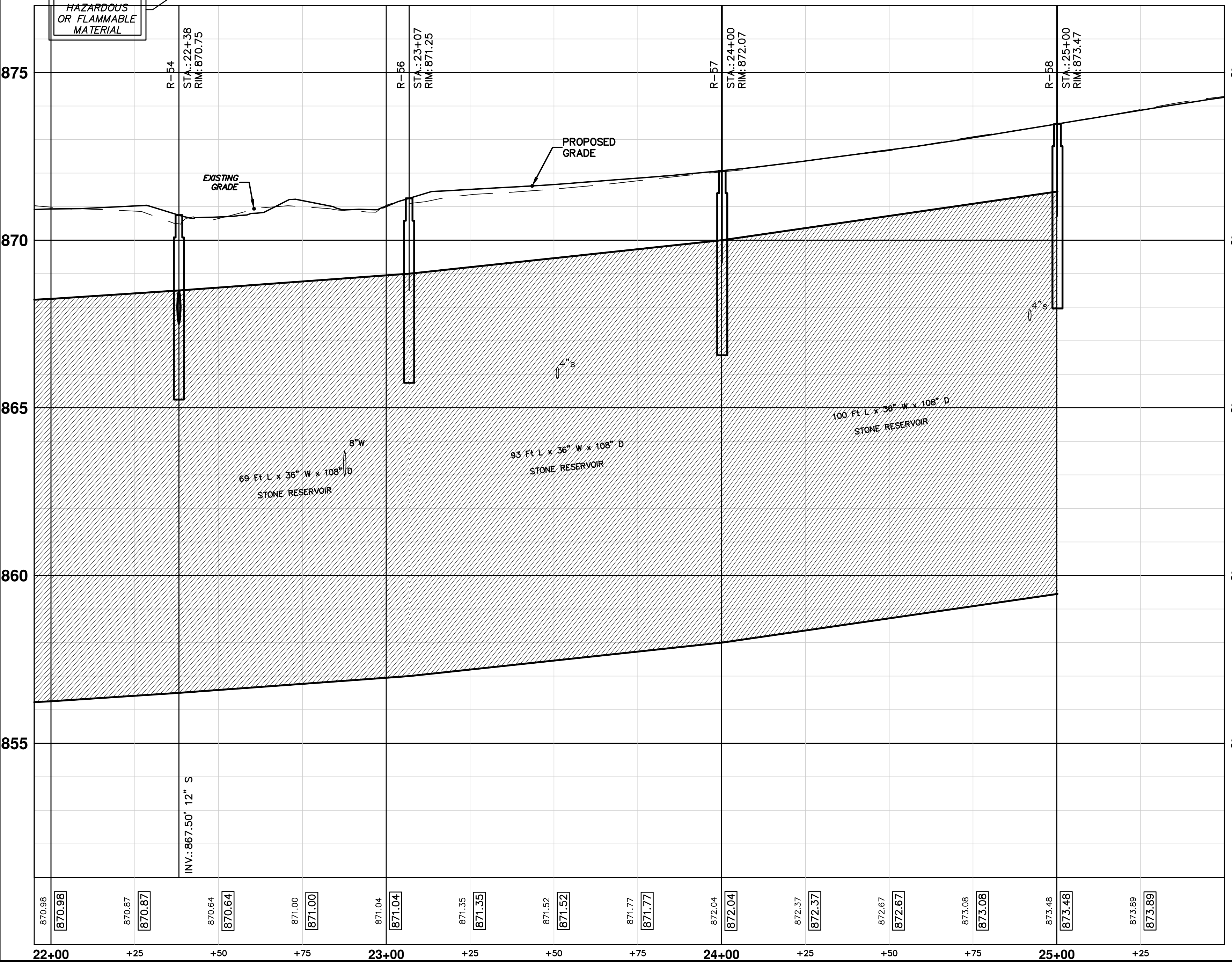


**PR. STORM SEWER STRUCTURE TABLE**

STRUCTURE	UTILITY STATION	RIM	DEPTH	TYPE	INVERTS
R-54	22+38	870.75	5.00	2' Leaching Inlet Cover K	12" S 867.50
R-55	22+40	871.81	5.81	2' Inlet Cover K	8" W 868.33 12" N 868.00
R-56	23+07	871.25	5.00	2' Leaching Inlet Cover K	
R-57	24+00	872.07	5.00	2' Leaching Inlet Cover K	
R-58	25+00	873.47	5.00	2' Leaching Inlet Cover K	

**EX. STORM SEWER STRUCTURE TABLE**

STRUCTURE	ROAD STATION	RIM	DEPTH	TYPE	INVERTS
r25	3+32	871.83	5.10	Storm MH (Remove)	12" NW 866.83 12" NE 866.93 12" SW 866.93 12" E 866.73
r25a	3+71	870.56	4.10	Storm CB	12" SW 868.46
r25b	3+25	871.73	3.00	Storm CB	12" NE 868.73
r25c	3+02	870.92	3.19	Storm CB	12" SE 867.72



THE CONTRACTOR SHALL SUBMIT TEMPORARY DRAINAGE CONTROL PLAN FOR MAINTAINING STORM RUN-OFF FROM STAGE 1 CONSTRUCTION UNTIL CONSTRUCTION OF STORM SYSTEM IN STAGE 2 IS COMPLETE. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN UNIT PRICES FOR THE APPROPRIATE STORM SEWER ITEMS.

- BM 13 Elev. 875.65 RR SPIKE IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SEVENTH
- BM 12 Elev. 874.60 NAIL IN N. SIDE GUY POLE ON THE S SIDE OF MADISON AT HOUSE # 809
- BM 11 Elev. 872.05 LARGE PK NAIL IN S. SIDE POWER POLE ON THE NE CORNER OF MADISON AND SIXTH

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
 STORM SEWER  
 STA. 21+95 TO STA. 25+00

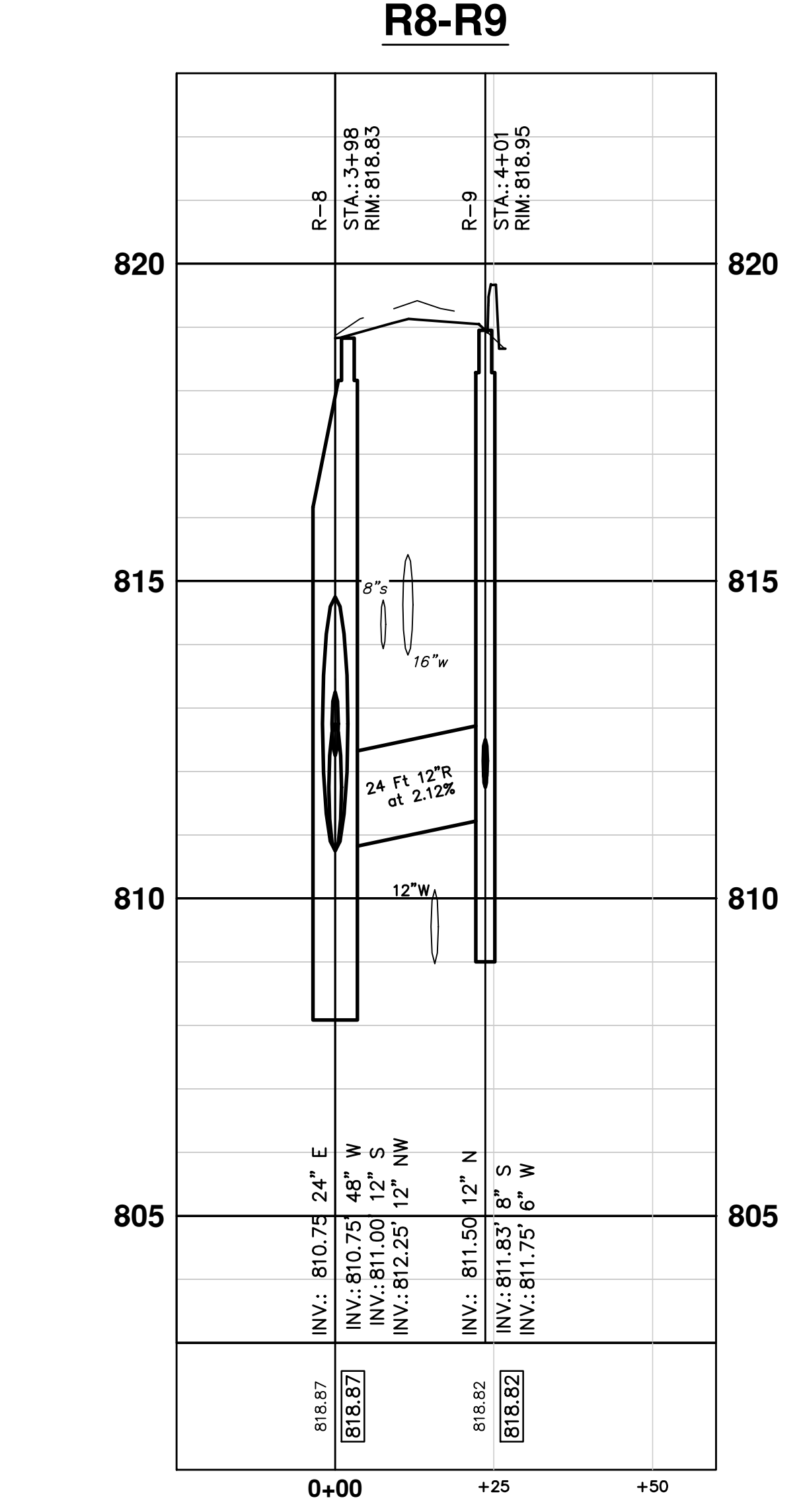
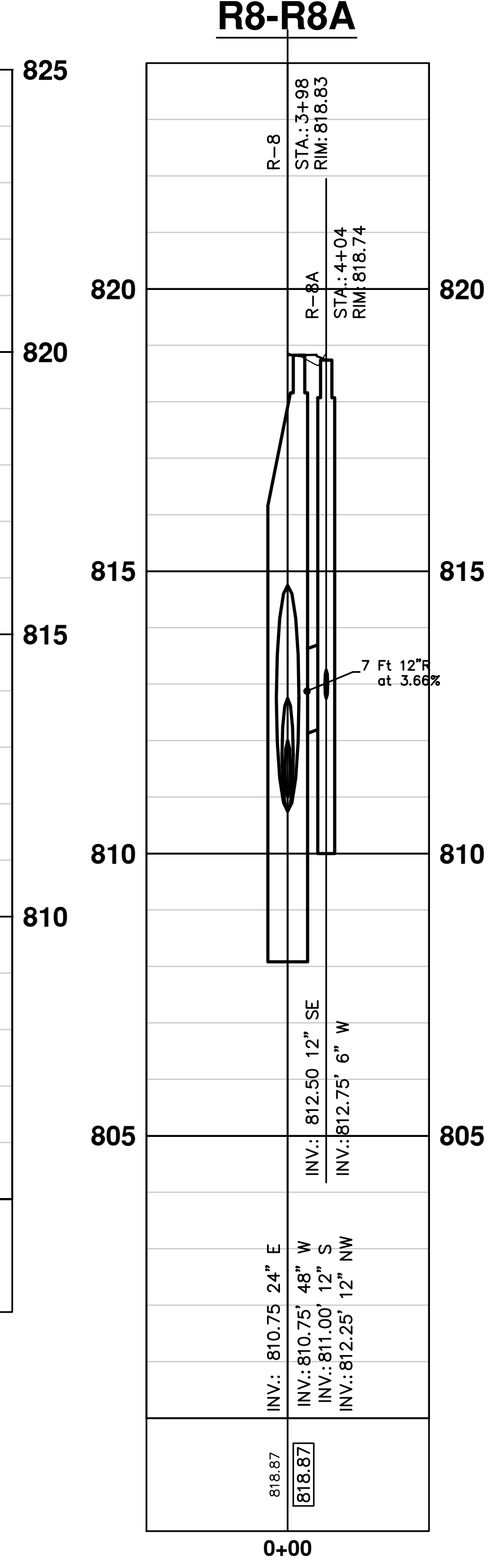
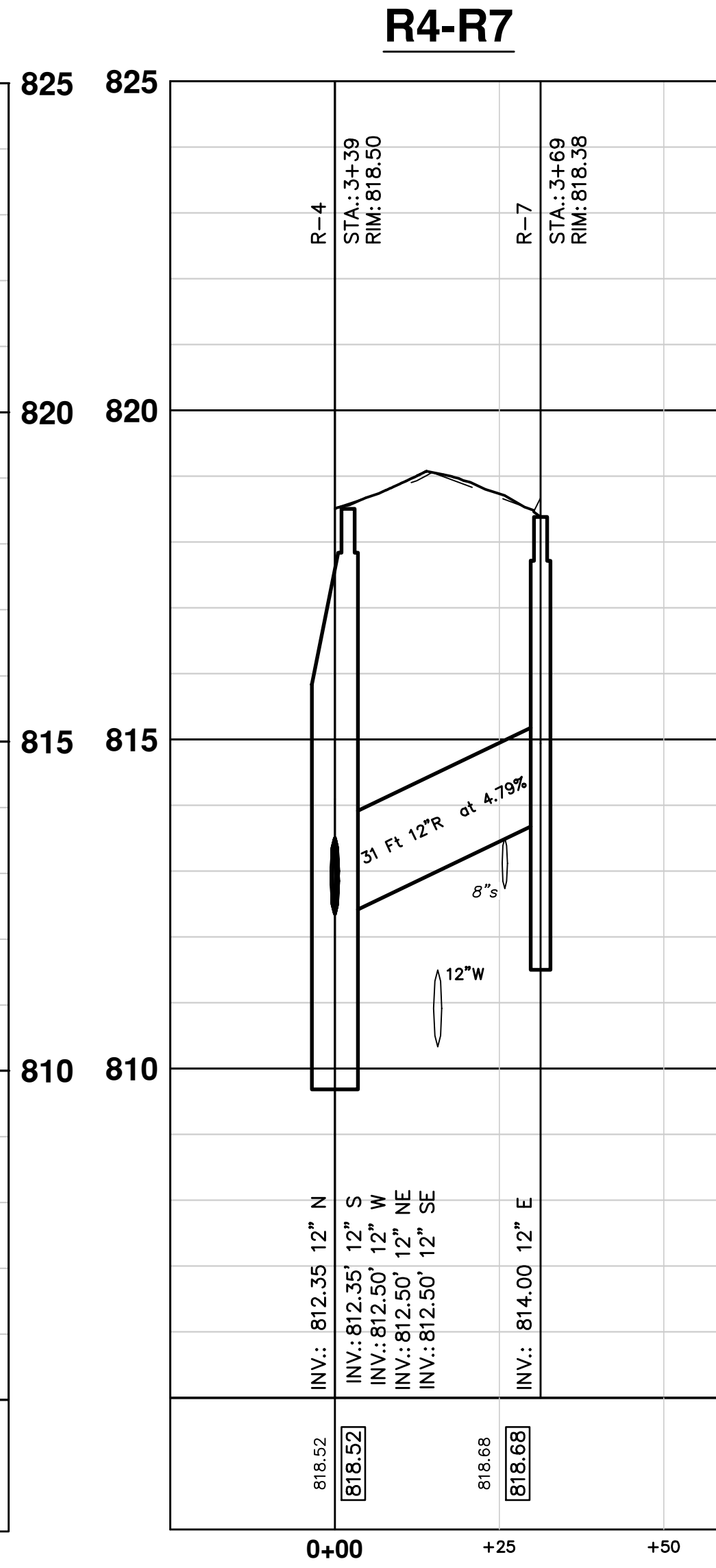
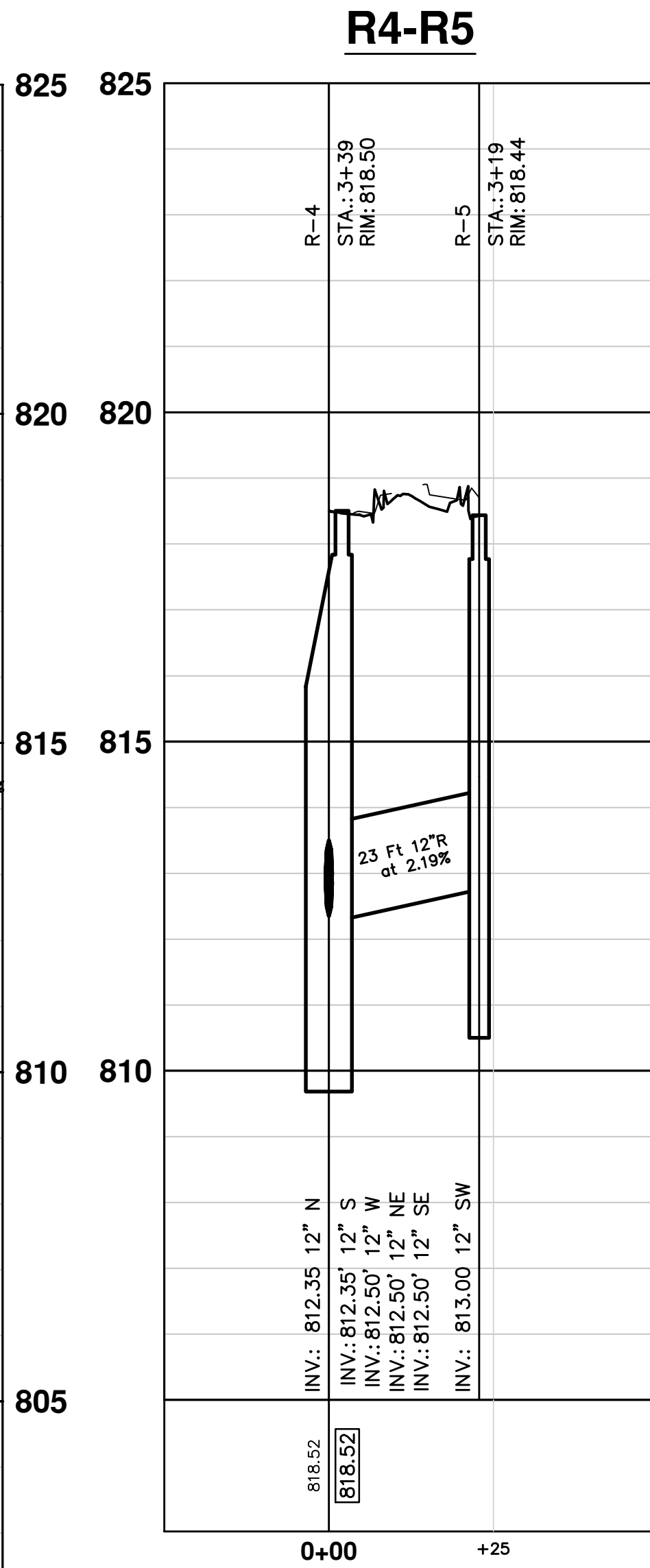
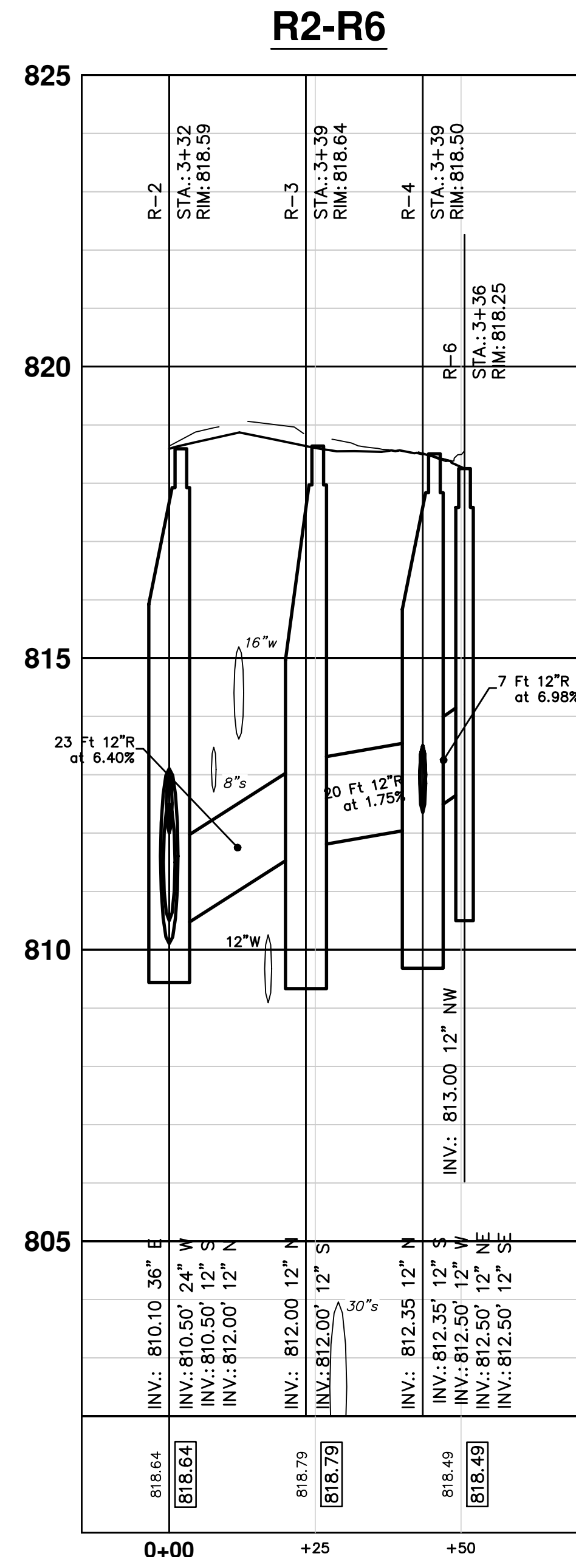
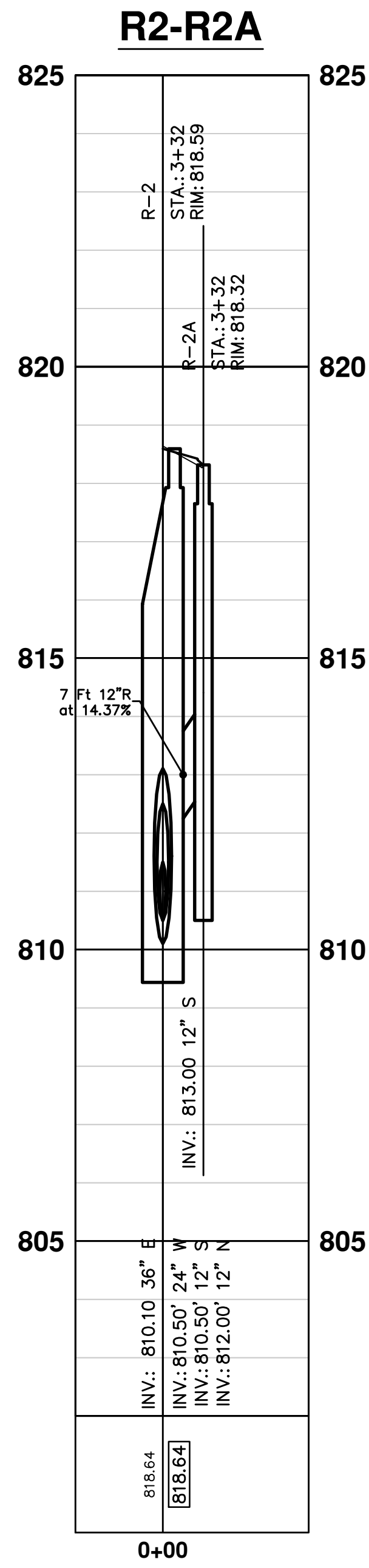
SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING No. 2012027-31

31 OF 49

REV.	DATE	DRAWN	CHECKED	DESCRIPTION
01	4-16-13	DPF/CEC	IVK	OUT FOR BID
00	12-19-12	DPF/CEC	IVK	MOEQ SUBMITTAL

**CITY OF ANN ARBOR**  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1500  
 WWW.ANARBOR.MI.GOV



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE: HOR: 1" = 20'

DRAWING No. 2012027-32

SHEET No. 32 OF 49

**WEST MADISON STREET IMPROVEMENTS**

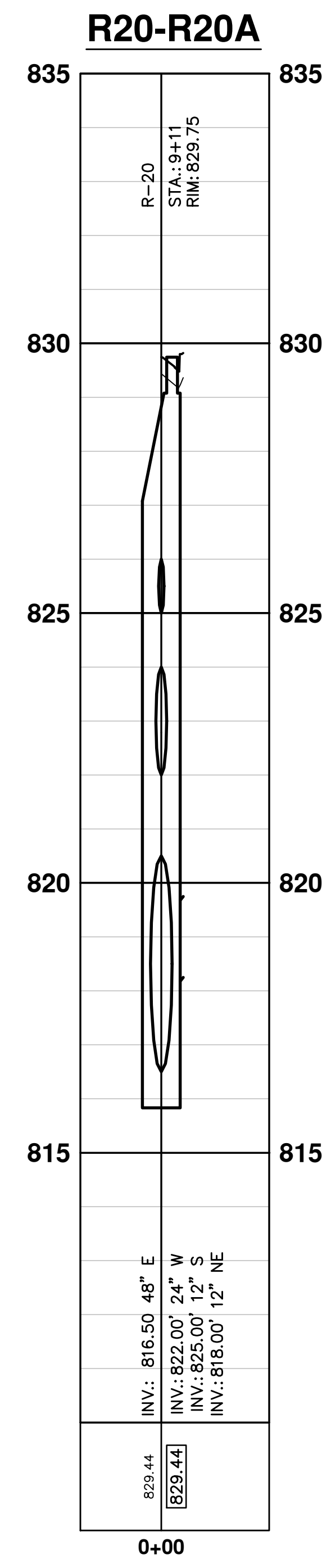
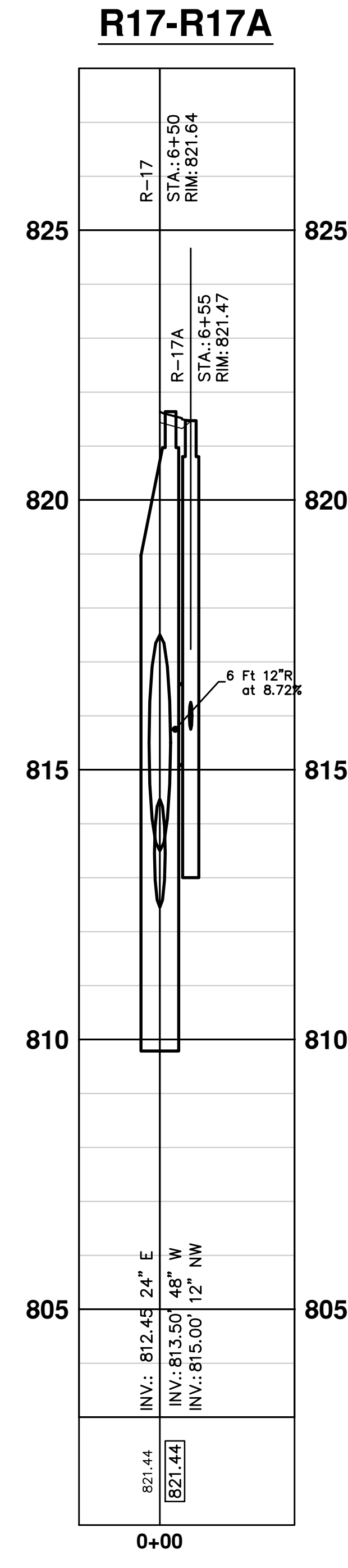
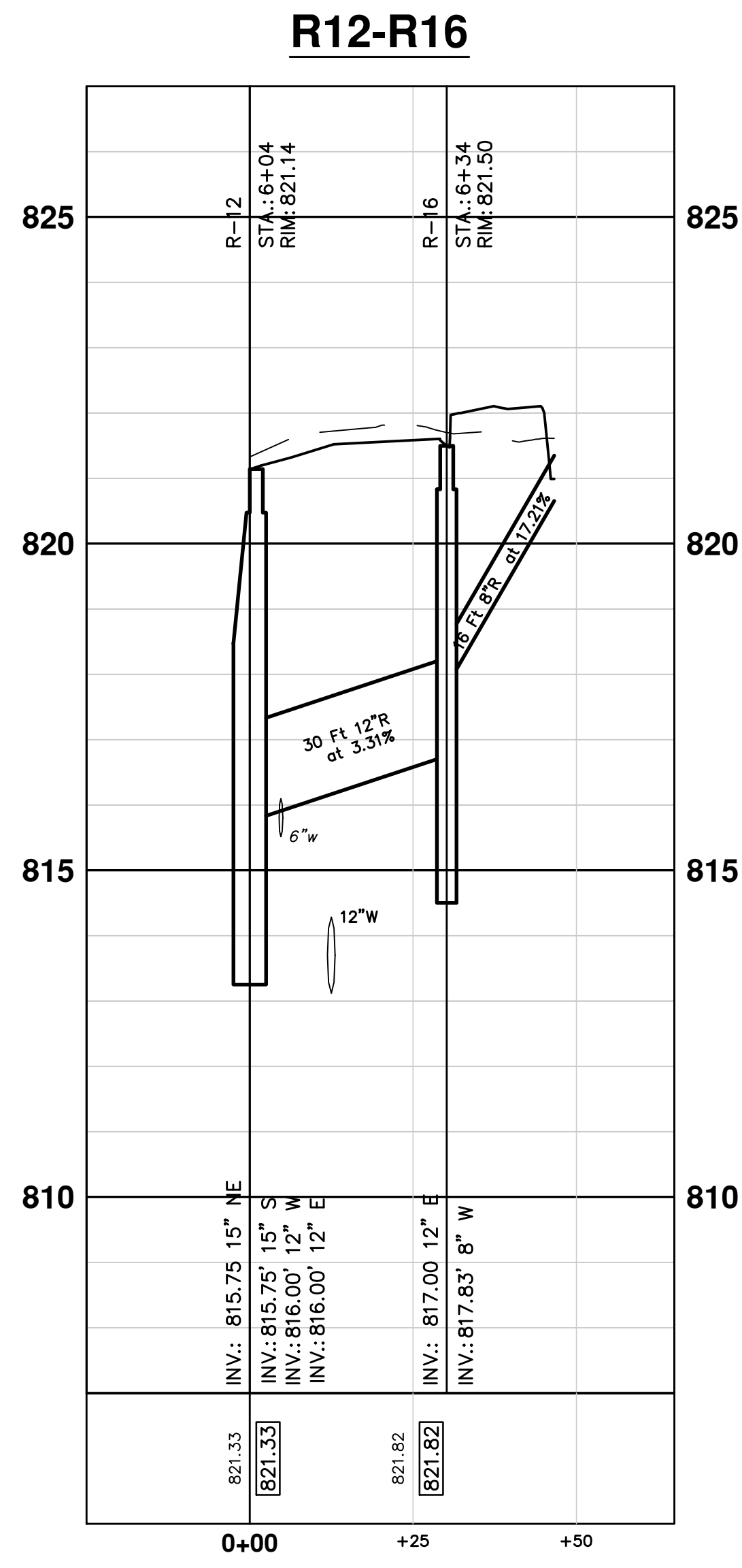
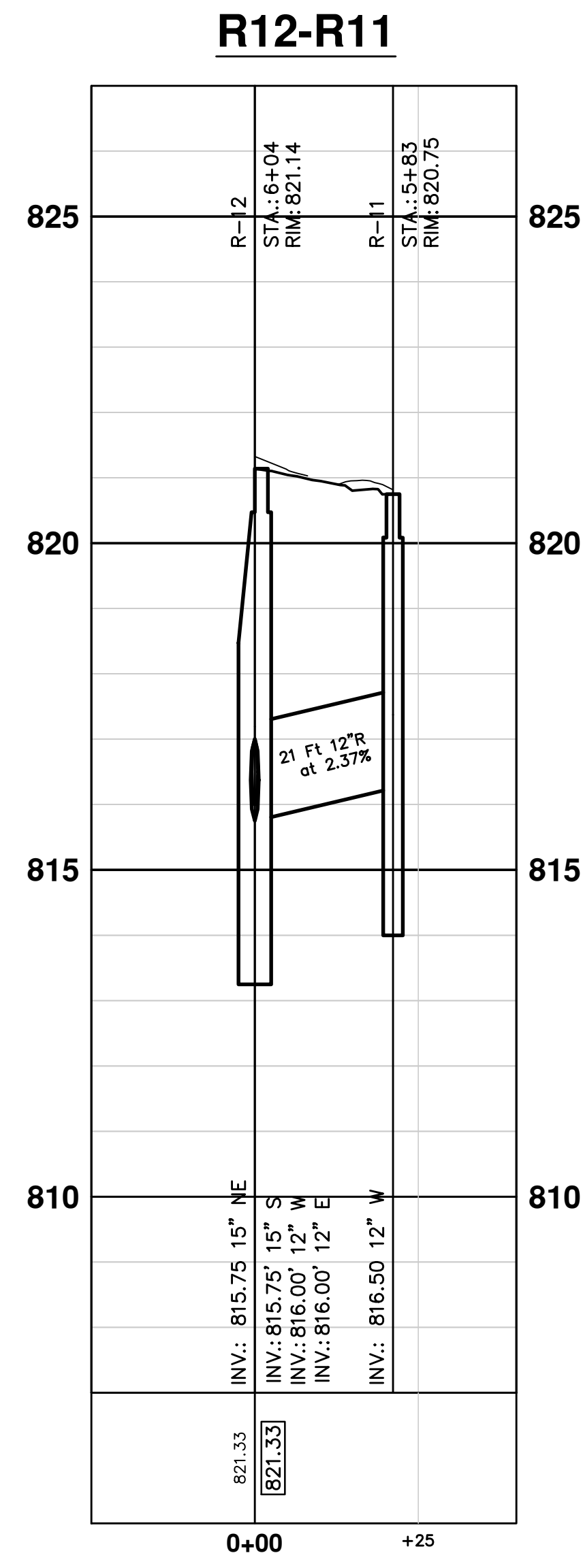
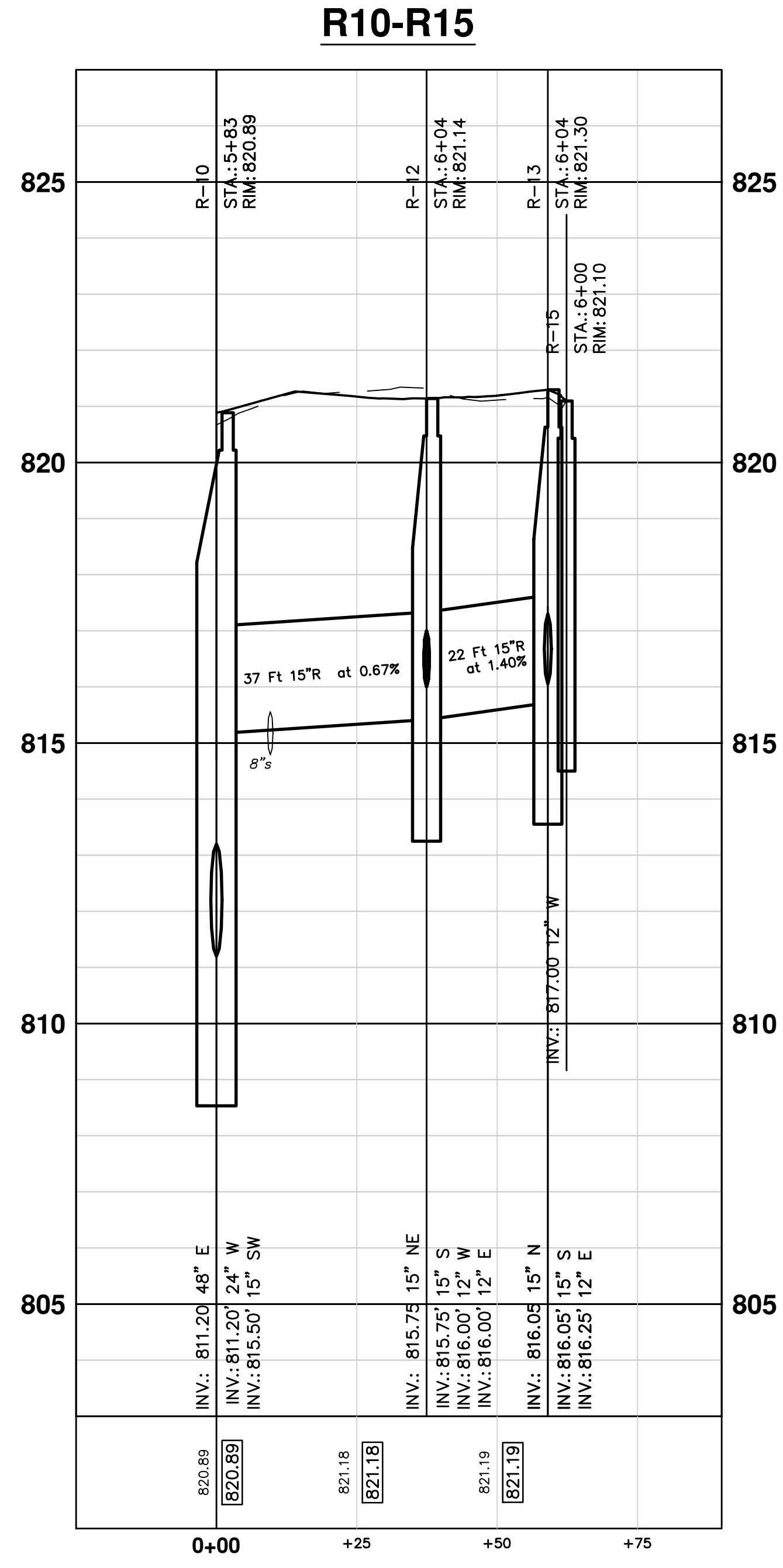
STORM SEWER PROFILES

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-3647  
www.a3gov.org

DATE: 4-16-13  
DRAWN: DPF/CEC  
CHECKED: DPF/CEC  
REV. 00: MDEQ SUBMITTAL  
01: OUT FOR BID

Know what's below. Call before you dig.





**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**WEST MADISON STREET IMPROVEMENTS**

**STORM SEWER**

PROFILES

SCALE: HOR: 1" = 20'  
PROFILE: 1" = 2'

DRAWING No. 2012027-33

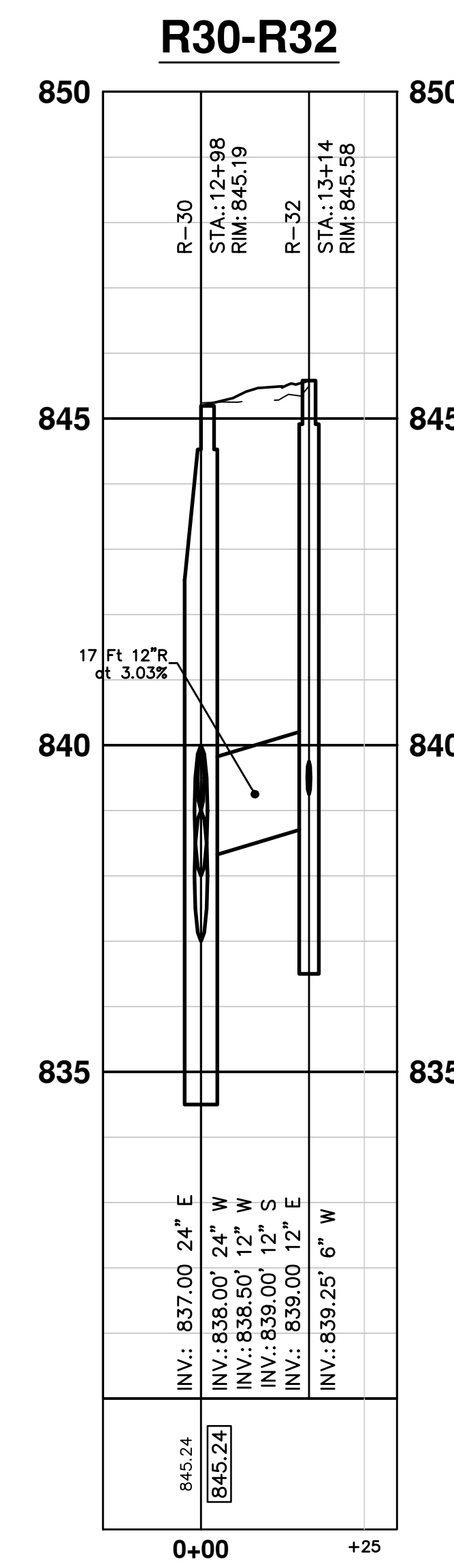
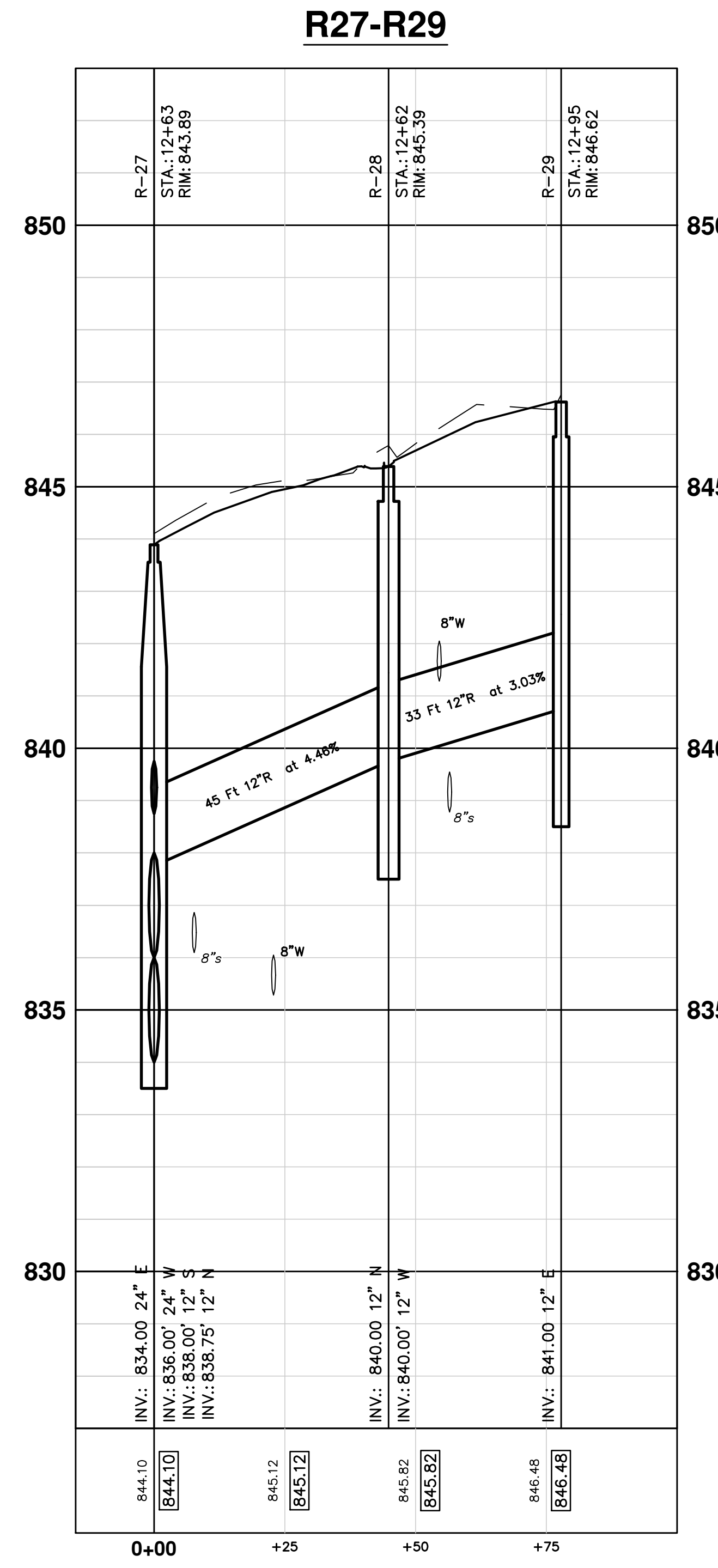
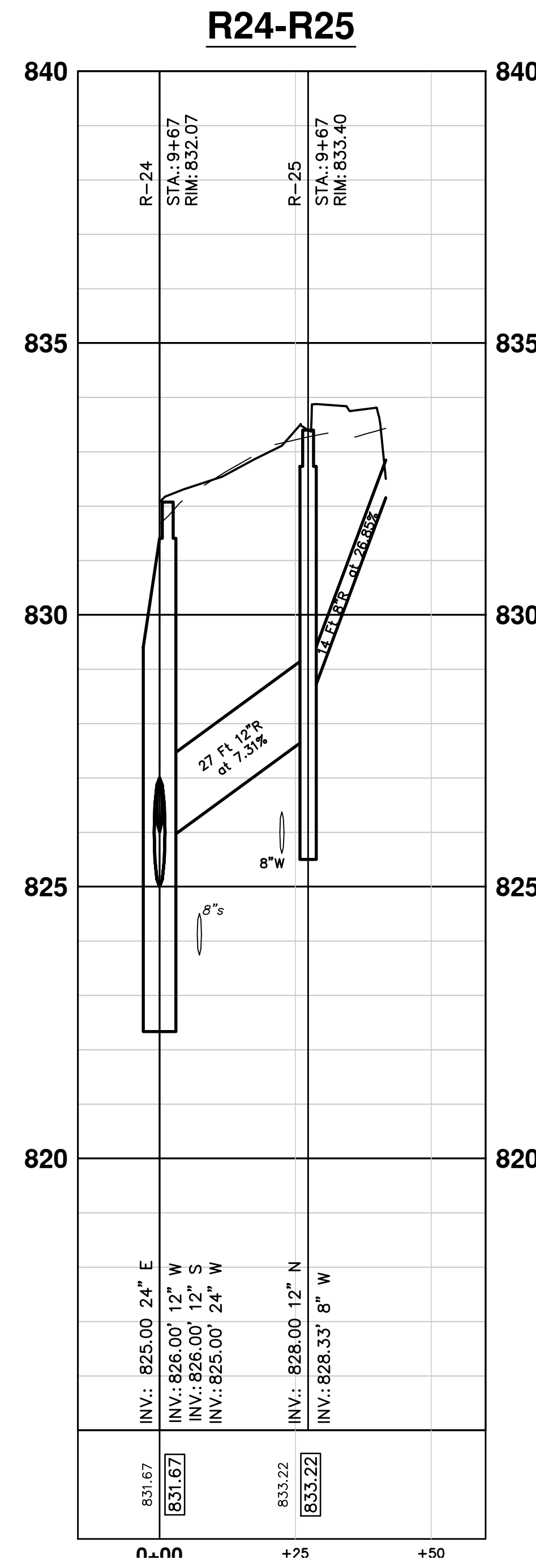
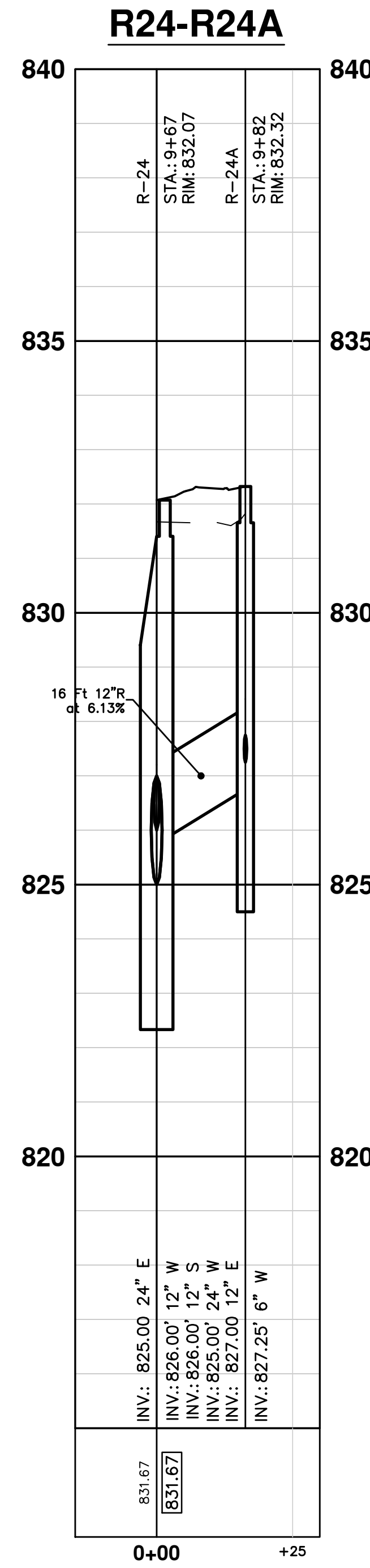
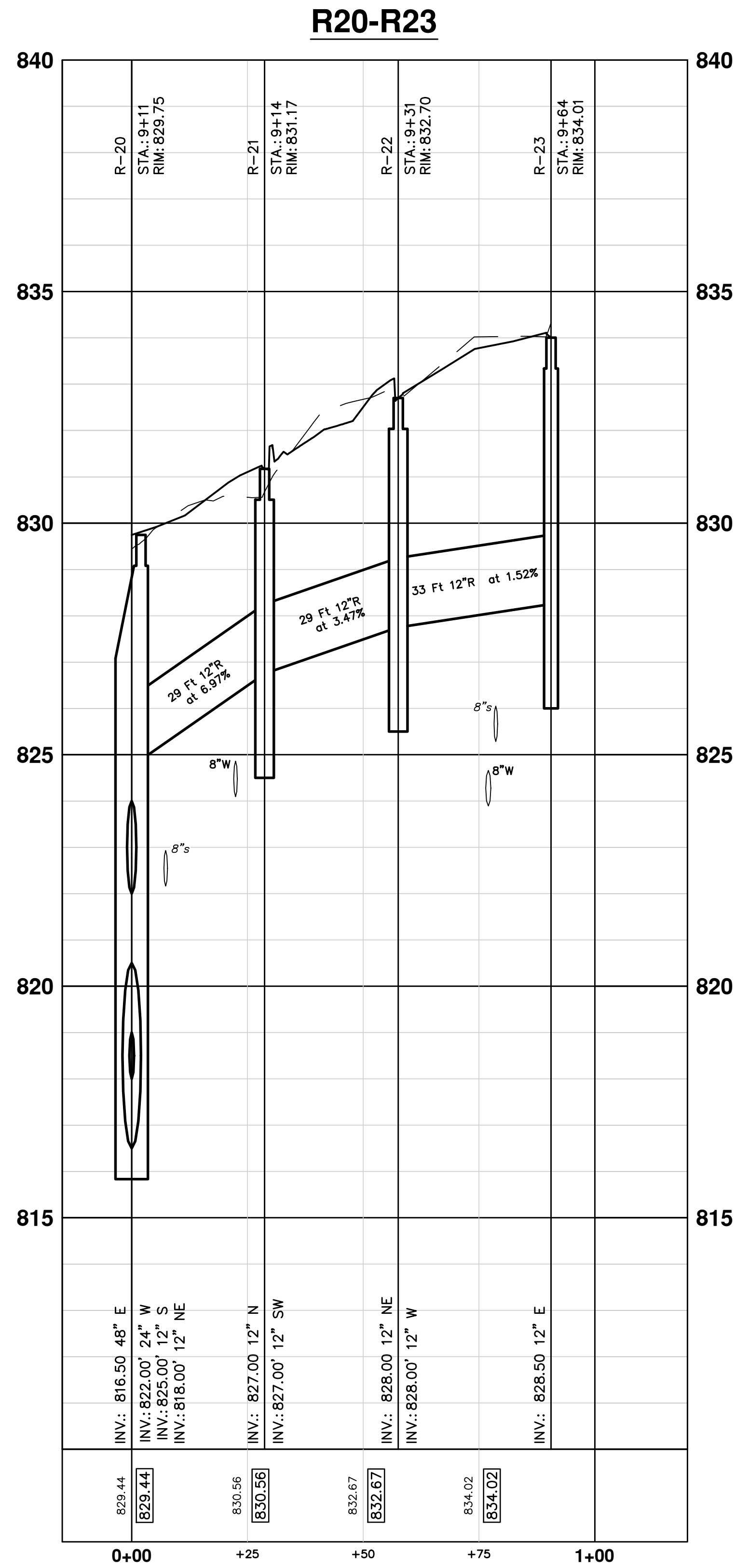
SHEET No. 33 OF 49

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-3647  
www.a2gov.org

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL

Key:  DWG  
 CHECKED  
 DRAWN  
 DATE  
 REV.

Know what's below.  
Call Before you dig.



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
STORM SEWER PROFILES

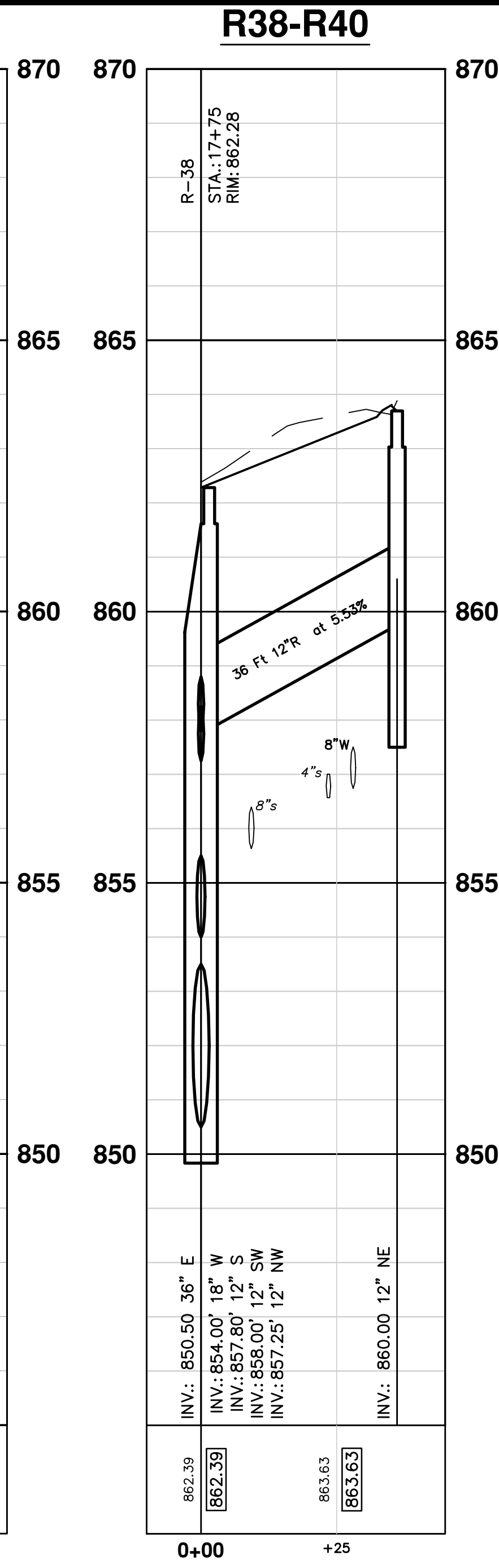
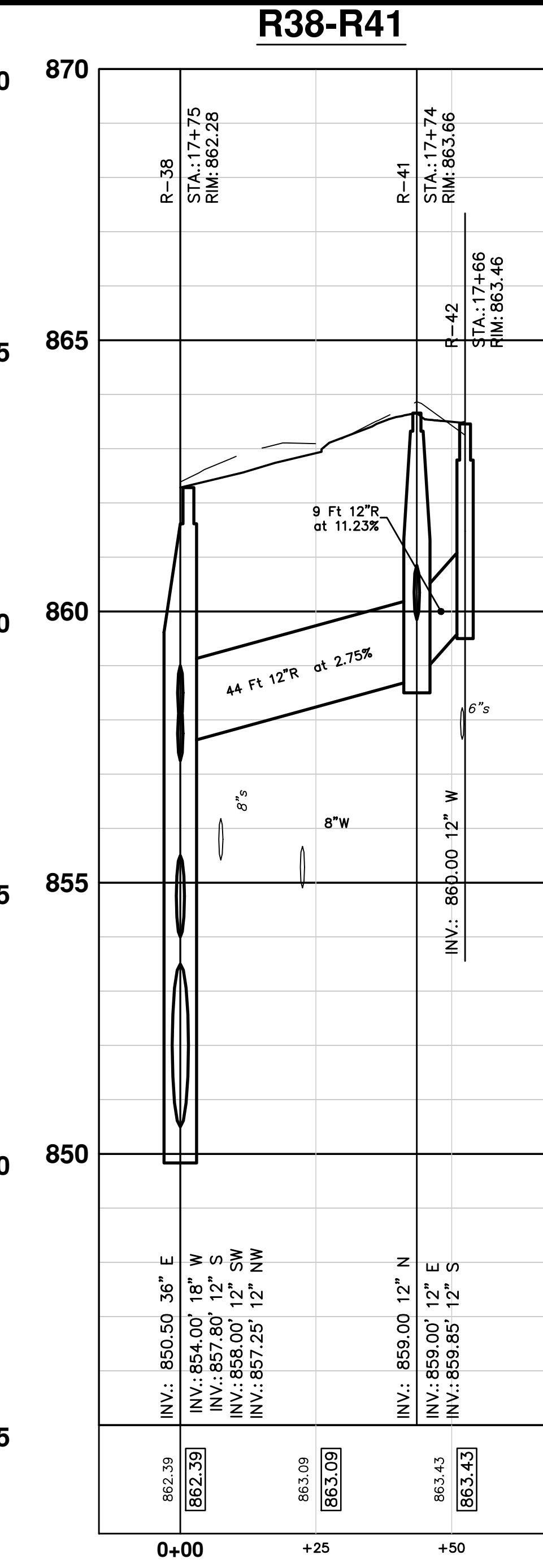
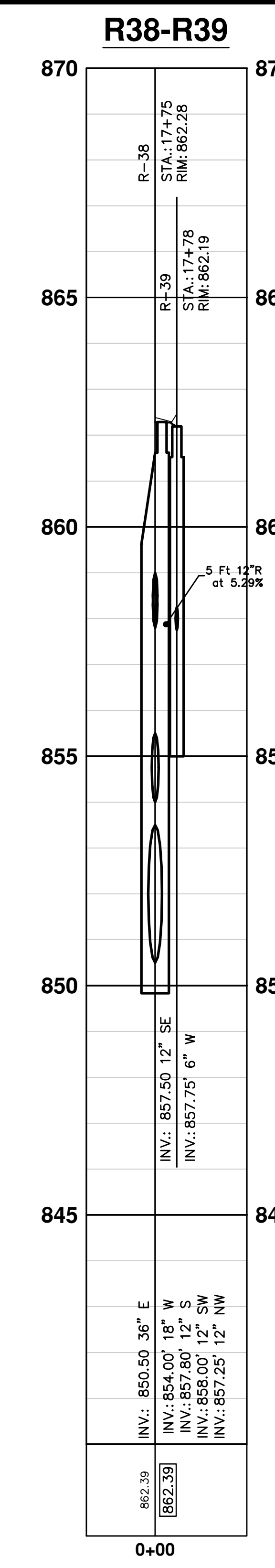
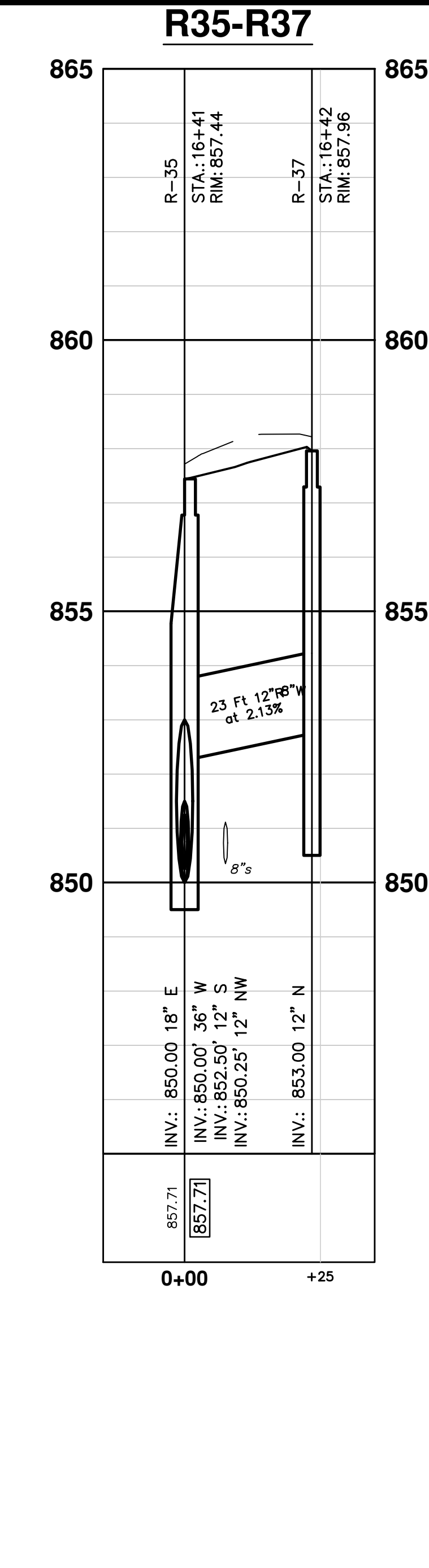
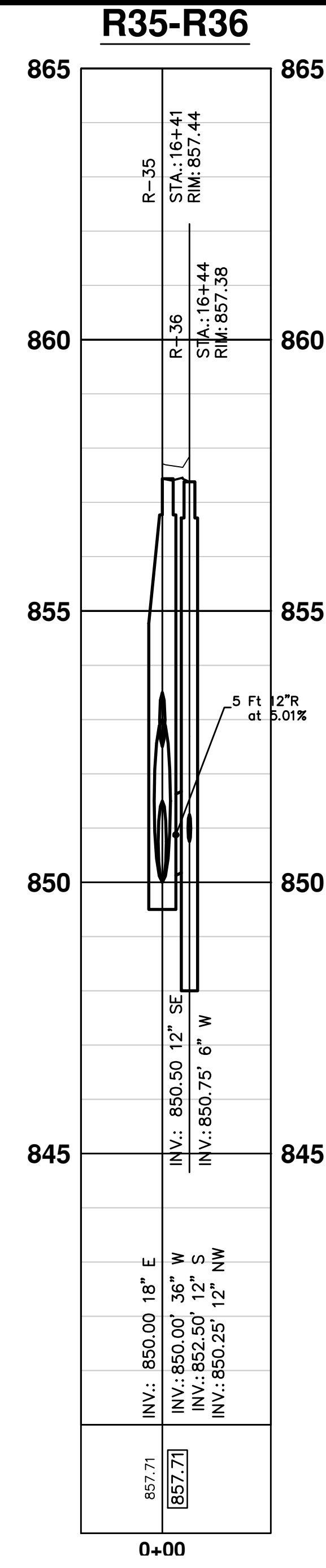
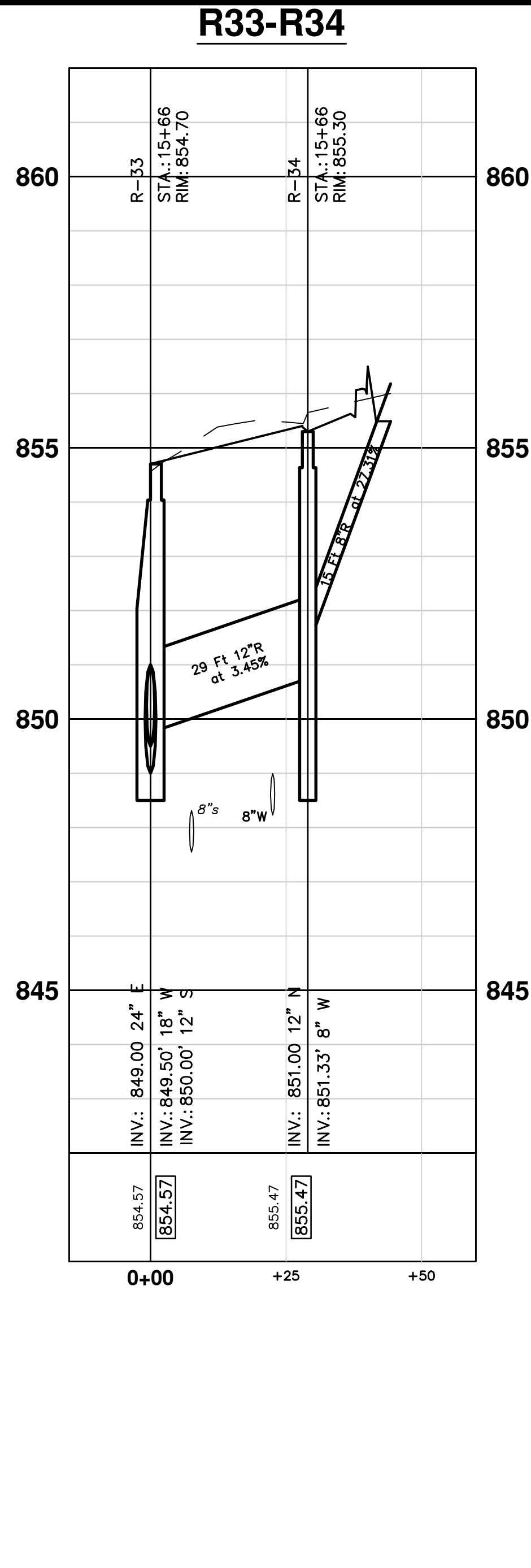
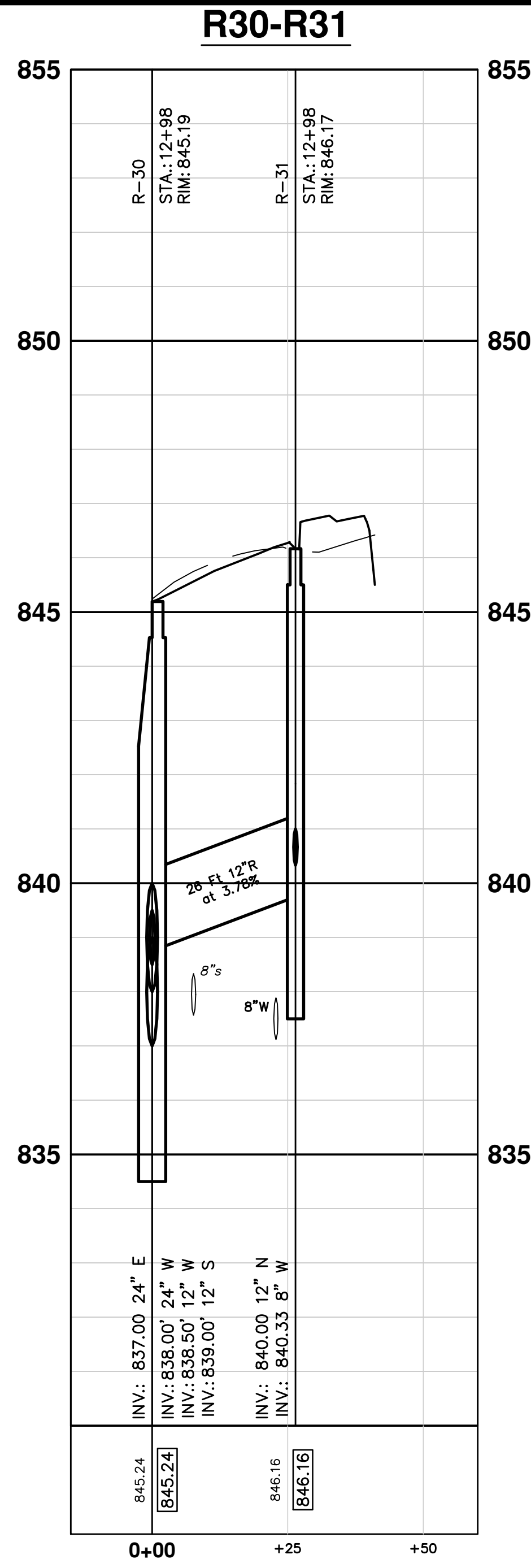
SCALE: HOR: 1" = 20'  
DRAWING No. 2012027-34

**811**  
Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL
		DRAWN
		CHECKED

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1300  
ANN ARBOR 734.764.4410  
www.a2gov.org





**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

SCALE: HOR: 1" = 20'

DRAWING No. **2012027-35**

SHEET No. **35 OF 49**

**PROFILES**

**WEST MADISON STREET IMPROVEMENTS**

**STORM SEWER**

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0867  
www.a2gov.org

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL

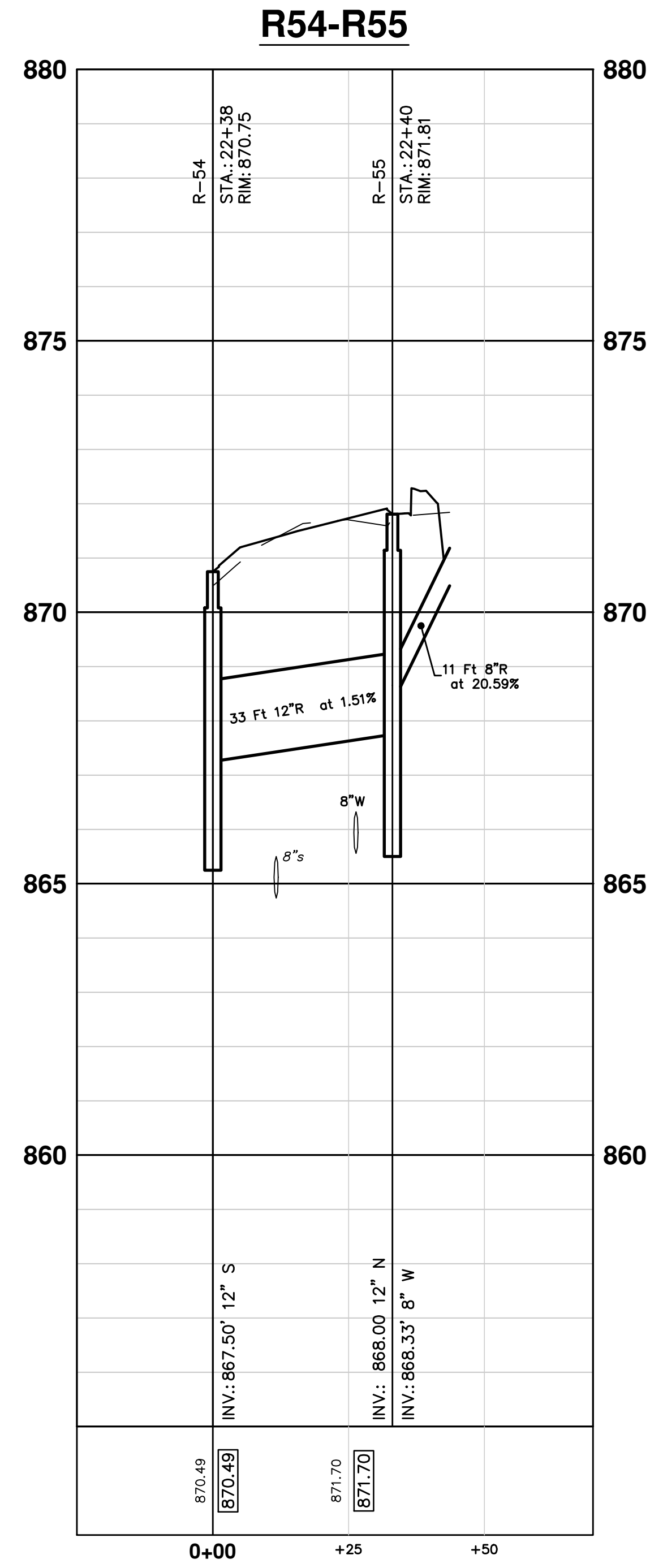
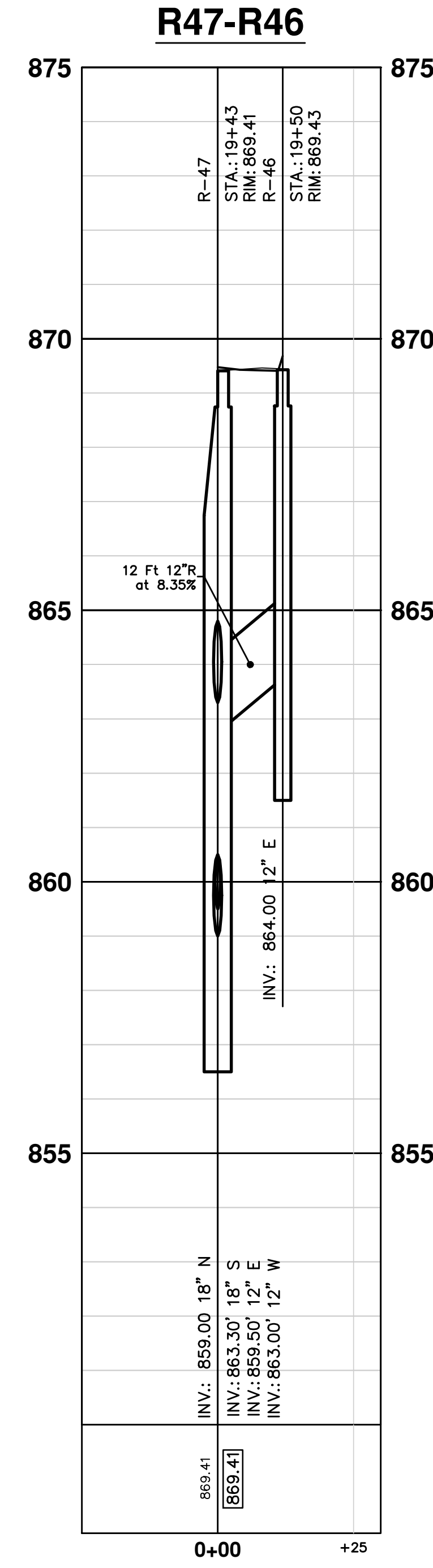
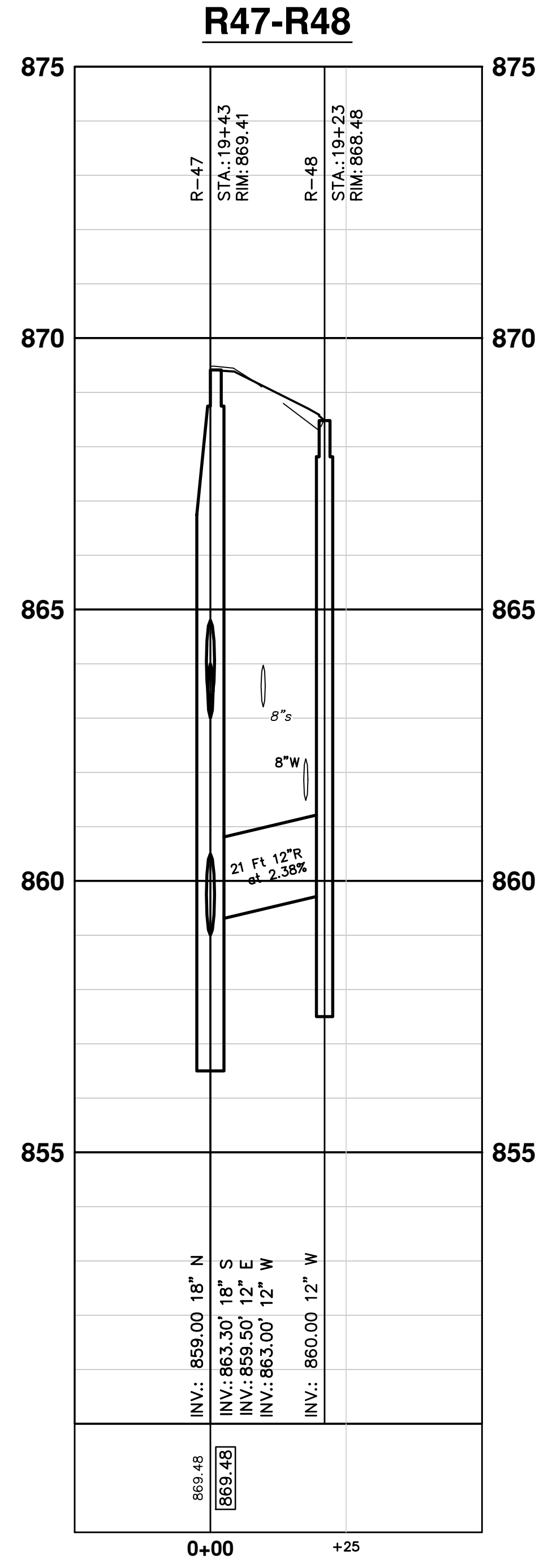
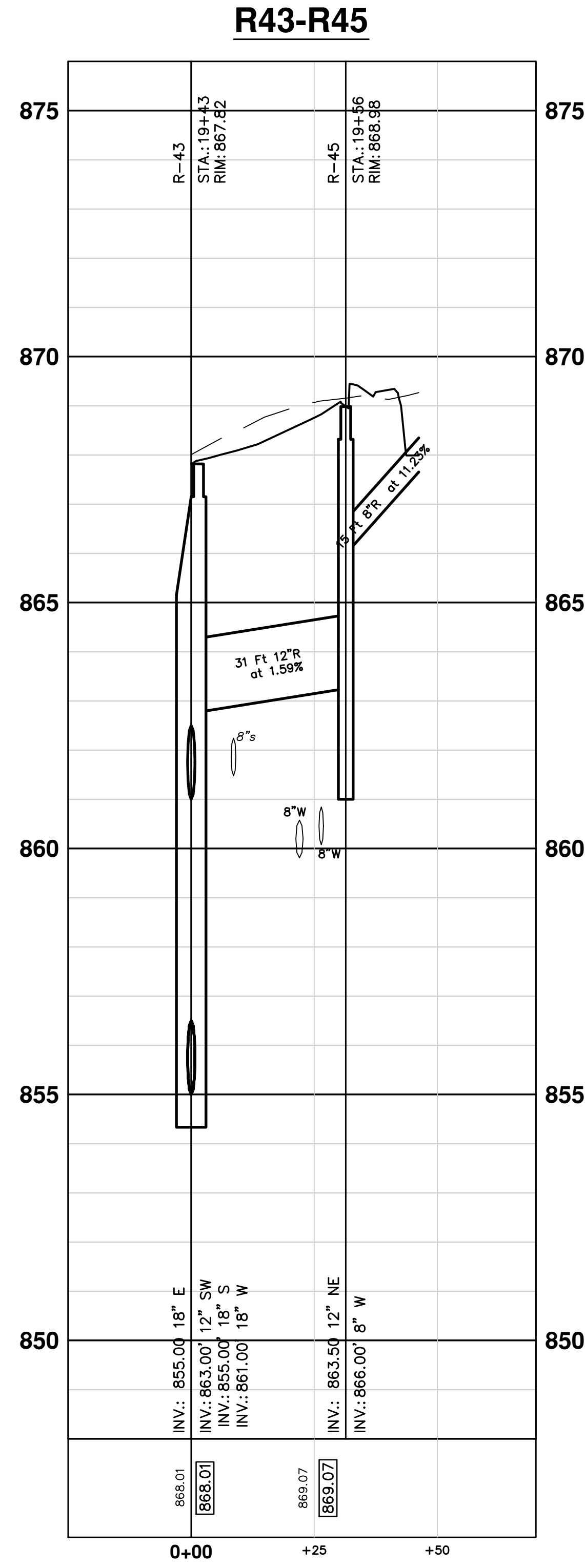
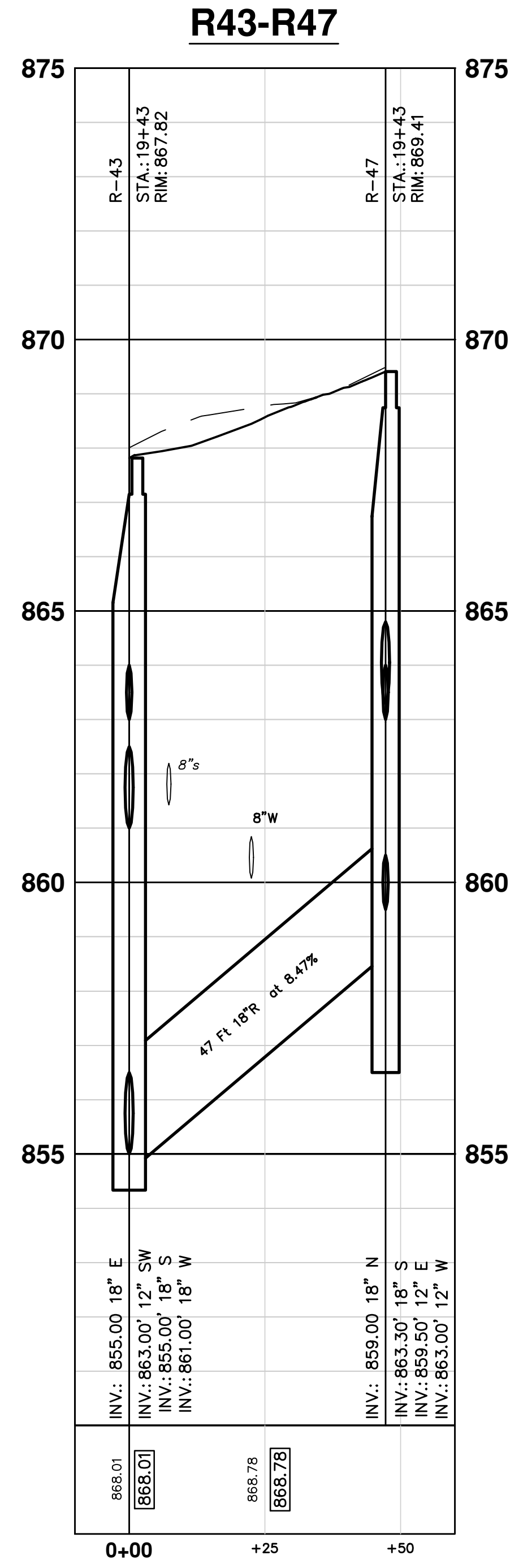
811

Know what's below.  
Call Before you dig.

DATE

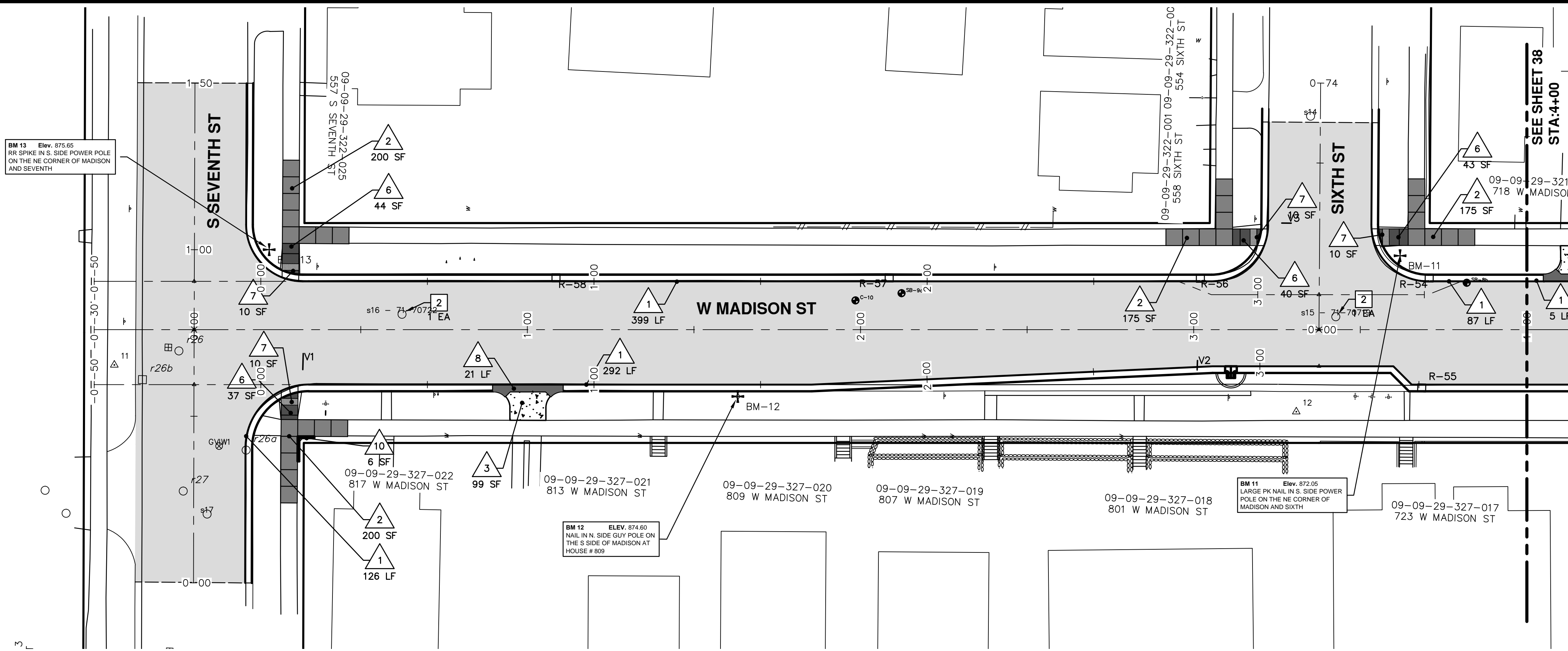
DESCRIPTION

REV.



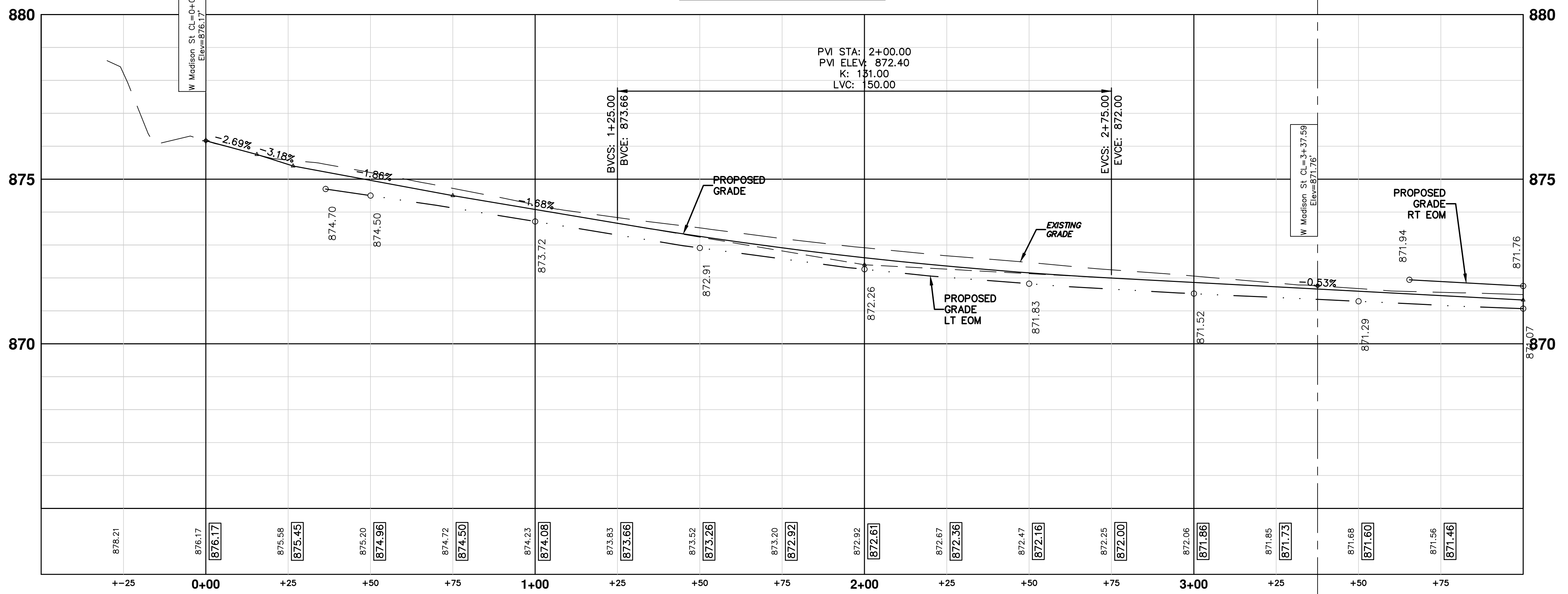


S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027FFRD.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13




CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
4	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
5	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
6	DETECTABLE WARNING SURFACE, MODIFIED
7	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
8	HMA DRIVEWAY WEDGING
9	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
10	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
11	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
12	REMOVE AND REPLACE MDOT TYPE A CASTING, MODIFIED
13	REMOVE AND REPLACE MDOT TYPE K CASTING, MODIFIED
14	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
15	POINT STRUCTURE.
16	ADJUST MDOT TYPE A CASTING TO FINISH GRADE
17	ADJUST MDOT TYPE K CASTING TO FINISH GRADE

**W MADISON ST CL**




Structure Table		
STRUCTURE	RIM	TYPE
GVW1	877.49	GVW
R-54	870.75	2' Leaching Inlet Cover K
R-55	871.81	2' Inlet Cover K
R-56	871.25	2' Leaching Inlet Cover K
R-57	872.07	2' Leaching Inlet Cover K
R-58	873.47	2' Leaching Inlet Cover K
r26	876.64	Storm MH
r26a	876.80	Storm MH
r26b	876.69	Storm CB
r27	878.76	Storm MH
s14	868.57	4' MH
s15 - 71-70719	871.58	4' MH
s16 - 71-70722	874.72	4' MH
s17	878.95	4' MH
V1	875.62	8" GVIB
V2	872.13	8" GVIB
V3	870.25	8" GVIB



Know what's below.  
Call Before you dig.

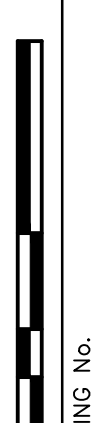
01	OUT FOR BID	4-16-13	DATE	00	MOEQ SUBMITTAL		DESCRIPTION		REV.



**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
ROAD PLAN AND PROFILE  
STA. 0+00 TO STA. 4+00

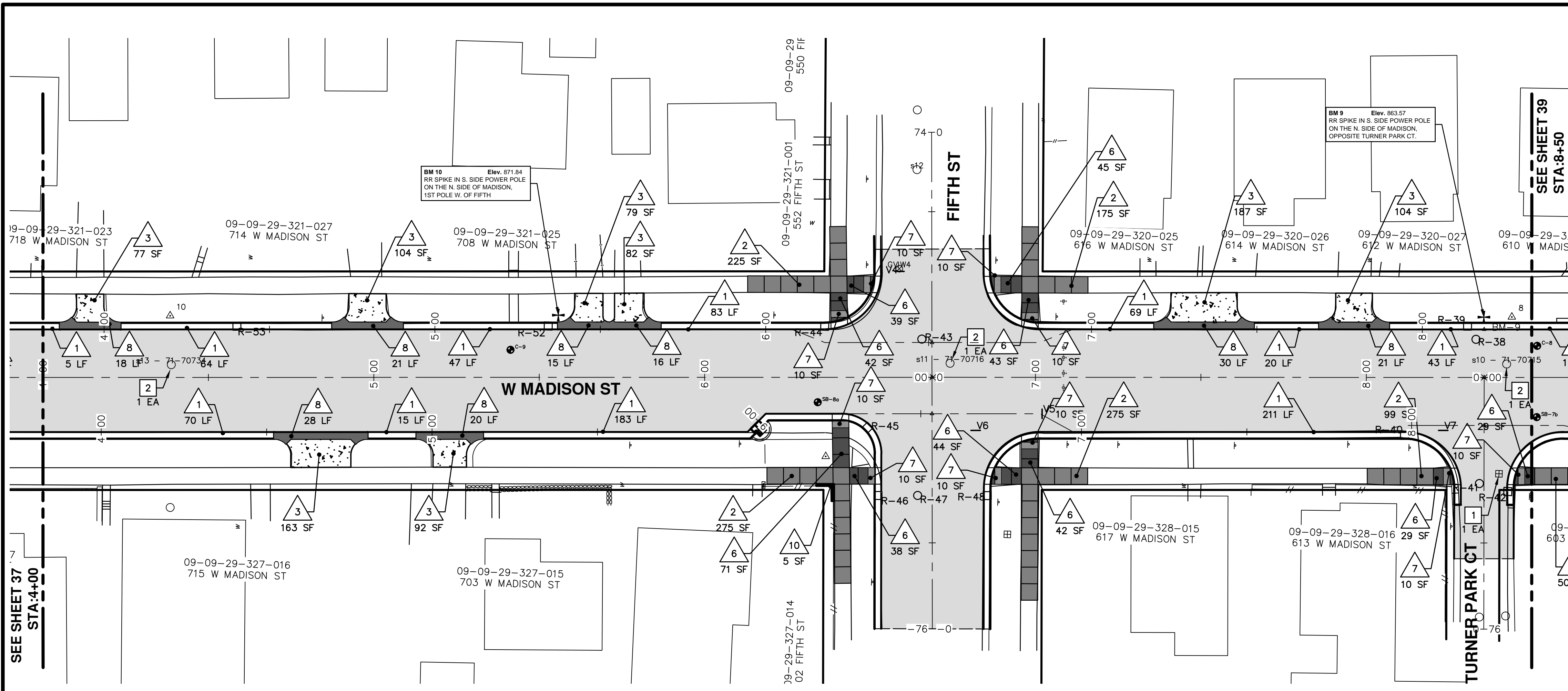
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'



DRAWING No. **2012027-37**

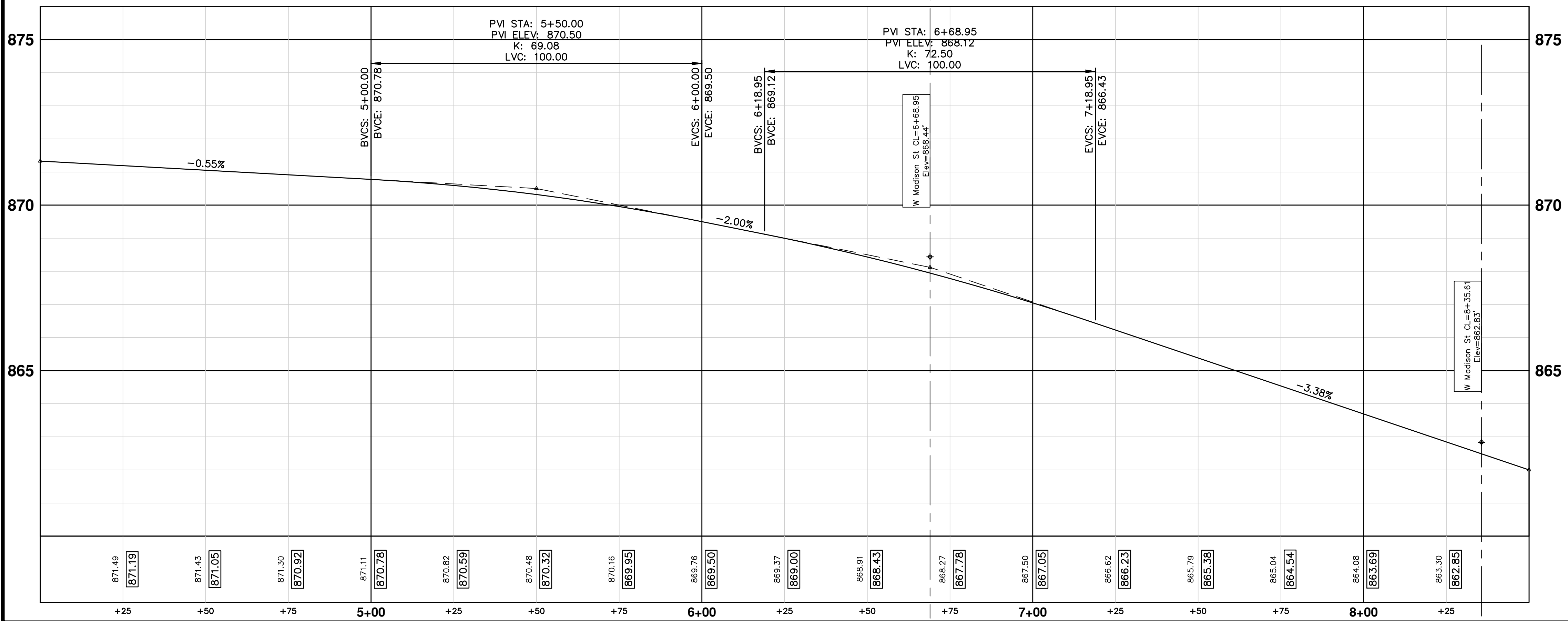
SHEET No. **37 OF 49**

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027PFRD.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13




CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
5	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
9	HMA DRIVEWAY WEDGING
10	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX, GAS BOX
2	REMOVE AND REPLACE MDOT TYPE A CASTING, MODIFIED
3	REMOVE AND REPLACE MDOT TYPE K CASTING, MODIFIED
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	ADJUST MDOT TYPE A CASTING TO FINISH GRADE
7	ADJUST MDOT TYPE K CASTING TO FINISH GRADE

**W MADISON ST CL**




Structure Table		
STRUCTURE	RIM	TYPE
GVW4	867.19	GVW
R-38	862.28	5' MH Cover B
R-39	862.19	2' Inlet Cover K
R-40	863.70	2' Inlet Cover K
R-41	863.66	4' MH Cover B
R-42	863.46	2' Inlet Cover K
R-43	867.82	5' MH Cover B
R-44	868.19	2' Inlet Cover K
R-45	868.98	2' Inlet Cover K
R-46	869.43	2' Inlet Cover K
R-47	869.41	4' MH Cover B
R-48	868.48	2' Inlet Cover K
R-52	869.90	2' Leaching Inlet Cover K
R-53	870.74	2' Leaching Inlet Cover K
s10 - 71-70715	862.43	4' MH
s11 - 71-70716	868.18	4' MH
s12	865.56	4' MH
s13 - 71-70734	871.44	4' MH
V4	867.17	8" GVIB
V5	867.39	8" GVIB
V6	868.15	8" GVIB
V7	863.45	8" GVIB



Know what's below.  
Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL



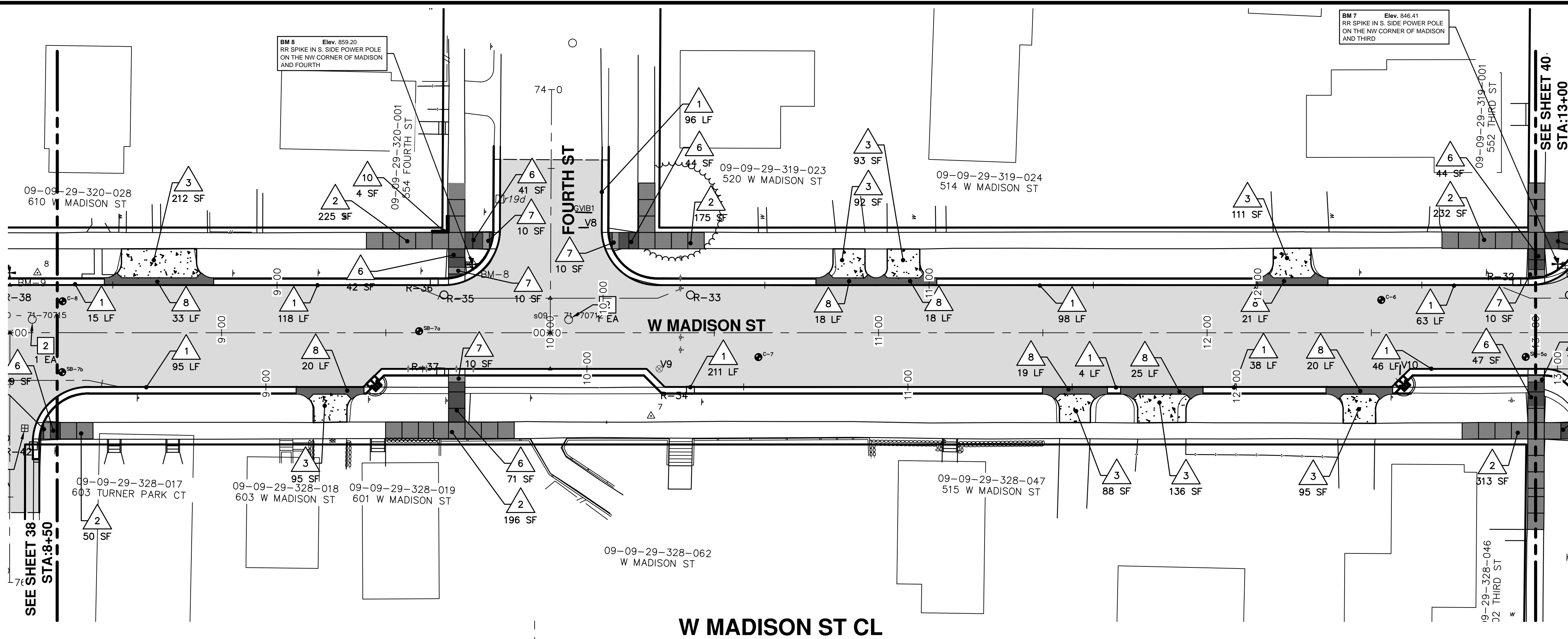
**CITY OF ANN ARBOR**  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1500  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
ROAD PLAN AND PROFILE  
STA. 4+00 TO STA. 8+50

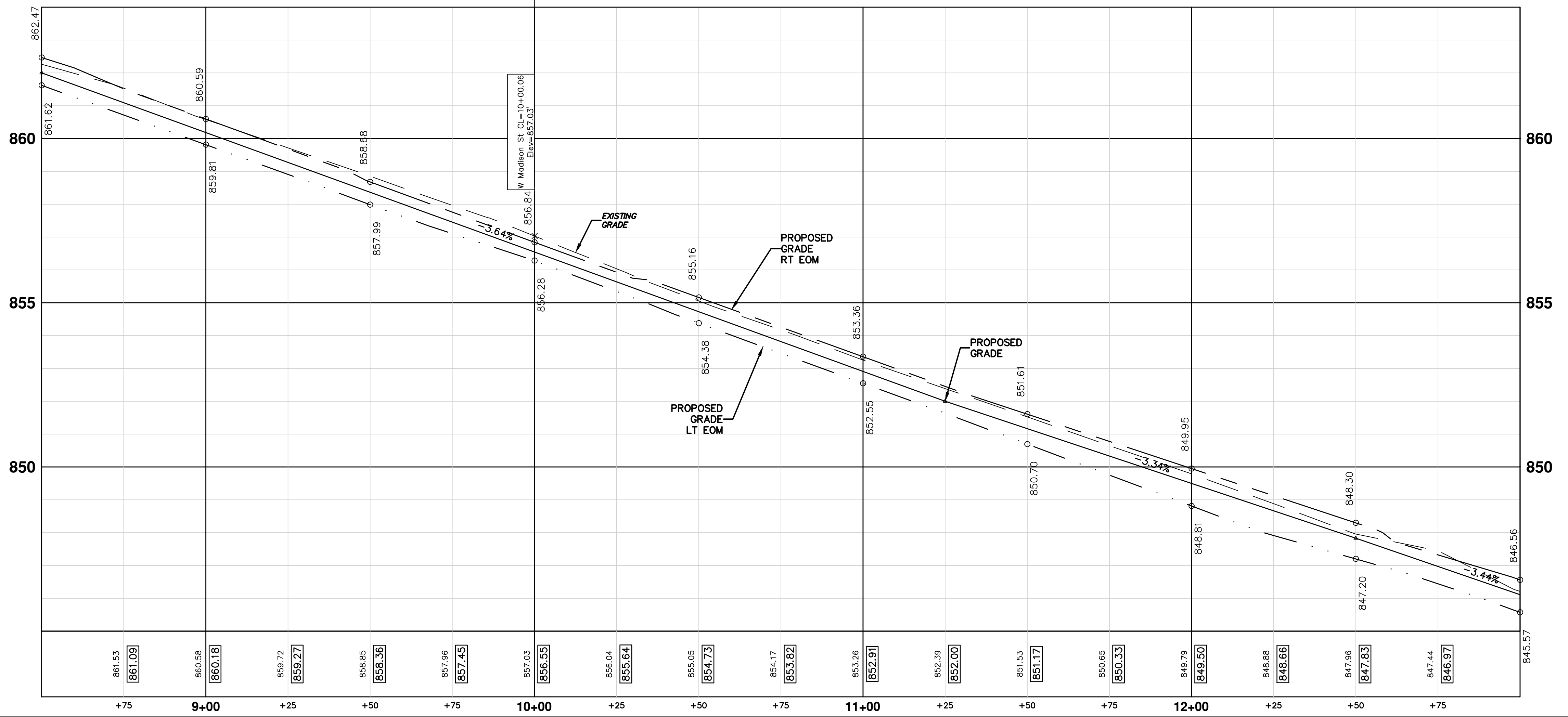
SHEET No. **38 OF 49**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027\FRD.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
5	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
9	HMA DRIVEWAY WEDGING
10	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX, GAS BOX
2	REMOVE AND REPLACE MDO TYPE A CASTING, MODIFIED
3	REMOVE AND REPLACE MDO TYPE K CASTING, MODIFIED
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	ADJUST MDO TYPE A CASTING TO FINISH GRADE
7	ADJUST MDO TYPE K CASTING TO FINISH GRADE



Structure Table		
STRUCTURE	RIM	TYPE
GVB1	854.89	GVB
R-32	845.58	2' Inlet Cover K
R-33	854.70	4' MH Cover B
R-34	855.30	Cylindrical Structure Slab Top Circular Frame
R-35	857.44	4' MH Cover B
R-36	857.38	2' Inlet Cover K
R-37	857.96	2' Inlet Cover K
r19d	855.59	Storm CB
s09 - 71-70712	856.68	4' MH
v8	855.03	8" GVB
v9	855.61	8" GVB and 8" 22.5' Vert Bend
v10	847.84	8" GVB

**CITY OF ANN ARBOR**  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1500  
www.a2gov.org

01	OUT FOR BID	4-16-13	DATE	
00	MOEQ SUBMITTAL	12-19-12	DATE	
	REV.		DESCRIPTION	

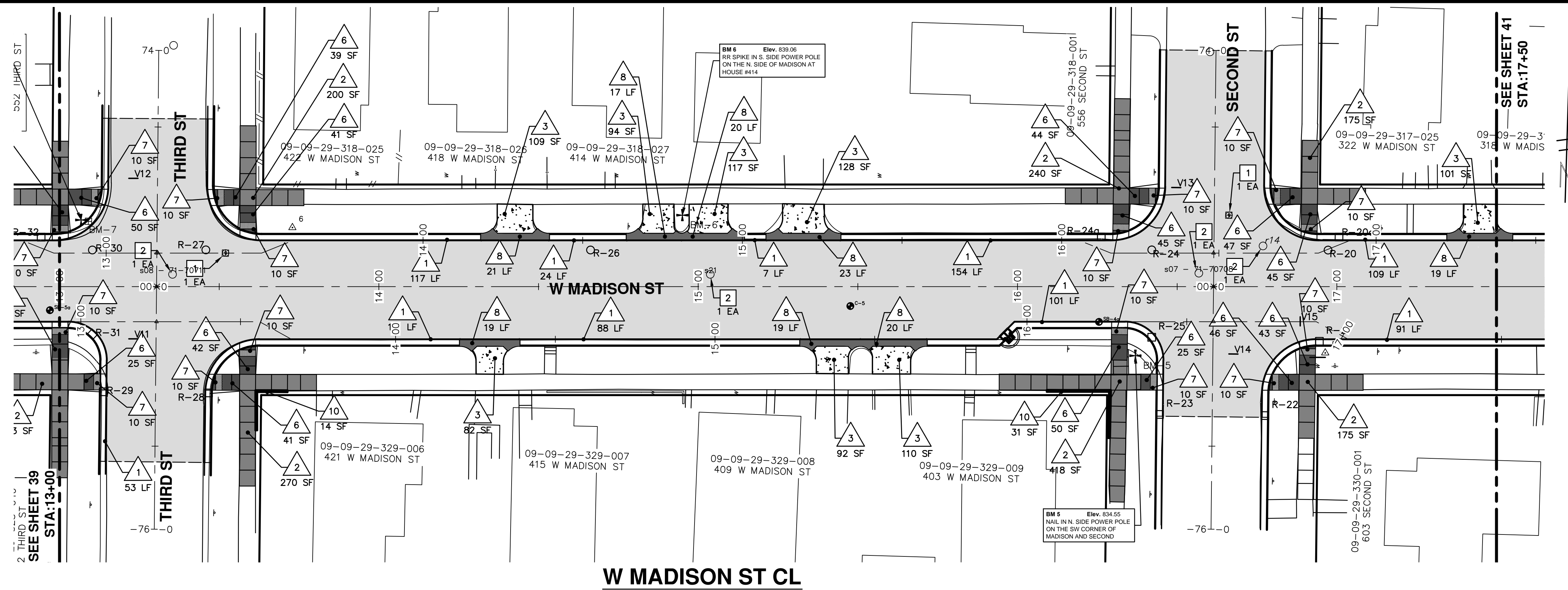
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
ROAD PLAN AND PROFILE  
STA. 8+50 TO STA. 13+00

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

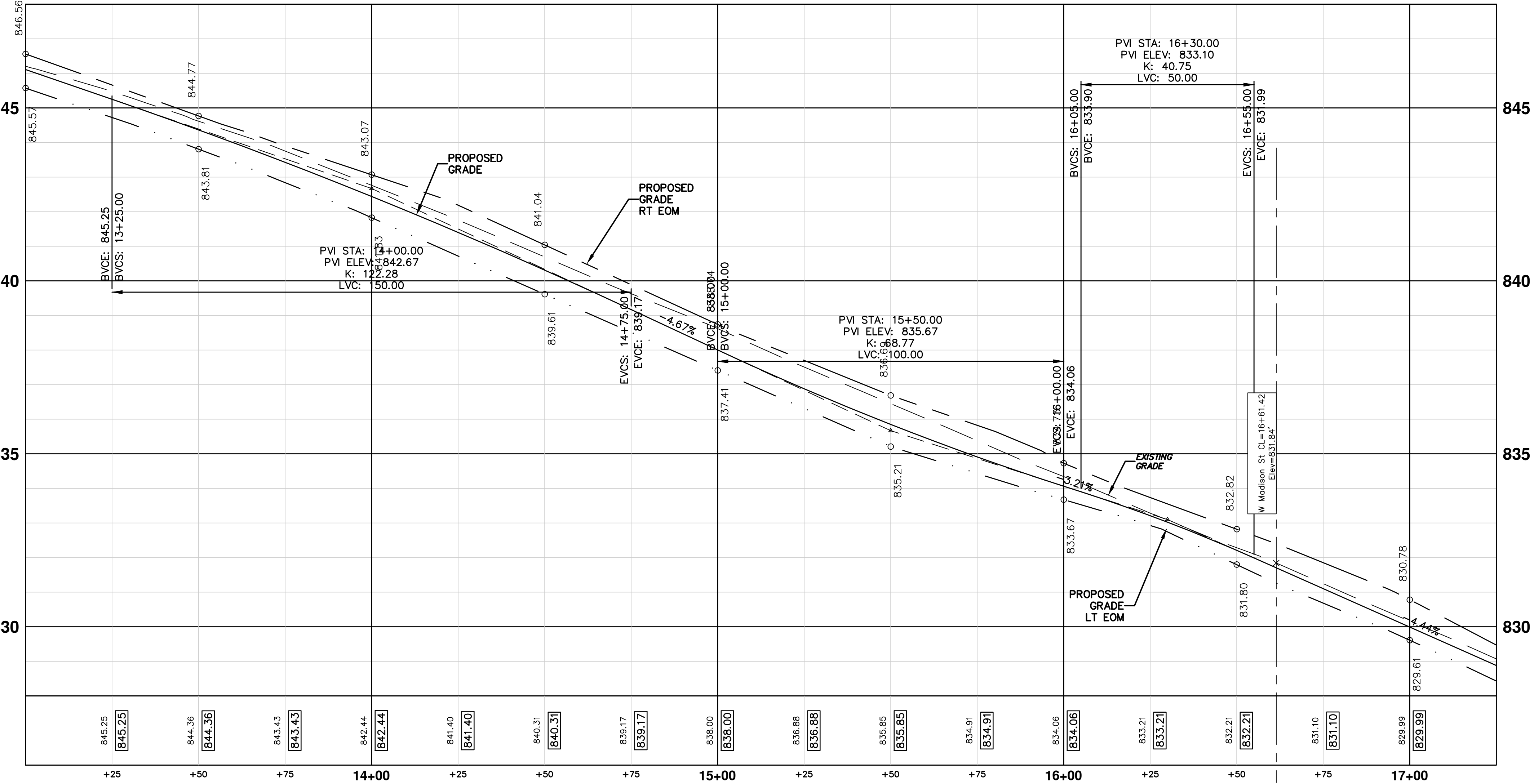
DRAWING No.  
**2012027-39**

SHEET No.  
**39 OF 49**


S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027PFRD.dwg Dwg Created: 12-Jul-12 - a2\_standard bw.stb - Plot Date: 16-Apr-13



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
5	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
9	HMA DRIVEWAY WEDGING
10	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX, GAS BOX
2	REMOVE AND REPLACE MDO TYPE A CASTING, MODIFIED
3	REMOVE AND REPLACE MDO TYPE K CASTING, MODIFIED
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	ADJUST MDO TYPE A CASTING TO FINISH GRADE
7	ADJUST MDO TYPE K CASTING TO FINISH GRADE




Structure Table		
STRUCTURE	RIM	TYPE
R-20	829.75	6' MH Cover B
R-20a	829.77	2' Inlet Cover K
R-21	831.17	2' Inlet Cover K
R-22	832.70	2' Inlet Cover K
R-23	834.01	2' Inlet Cover K
R-24	832.07	5' MH Cover B
R-24a	832.32	2' Inlet Cover K
R-25	833.40	2' Inlet Cover K
R-26	839.04	4' MH Cover B
R-27	843.89	4' MH Cover B
R-28	845.39	2' Inlet Cover K
R-29	846.62	2' Inlet Cover K
R-30	845.19	4' MH Cover B
R-31	846.17	2' Inlet Cover K
r14	830.33	Storm MH
s07 - 71-70708	831.81	4' MH
s08 - 71-70711	844.98	4' MH
s21	838.21	4' MH
V11	845.86	8" GVIB and 8" 45' Vert Bend
V12	843.92	8" GVIB
V13	830.66	8" GVIB
V14	832.48	8" GVIB and 8" 45' Vert Bend
V15	831.30	8" GVIB and 8" 45' Vert Bend



Know what's below.  
Call before you dig.

REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL



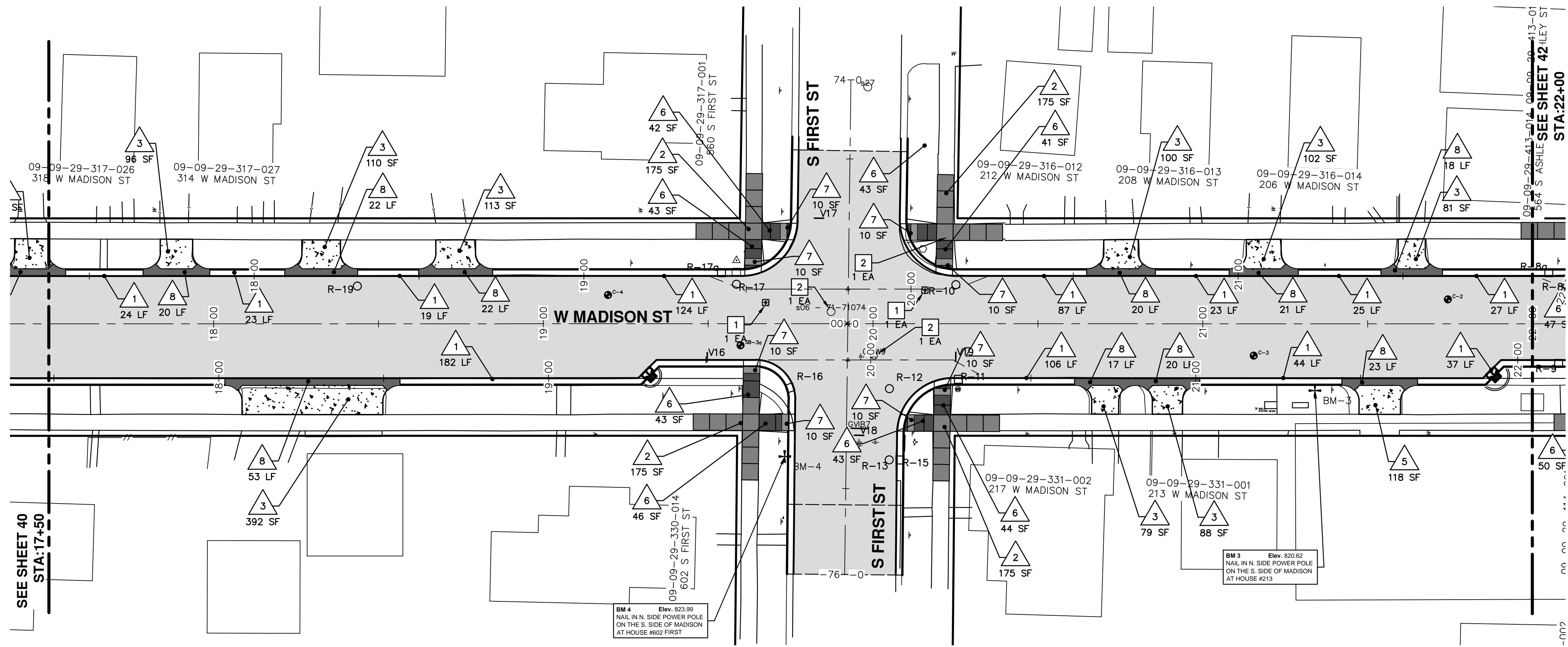
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
ROAD PLAN AND PROFILE  
STA. 13+00 TO STA. 17+50

SHEET No. **40 OF 49**  
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. **2012027-40**

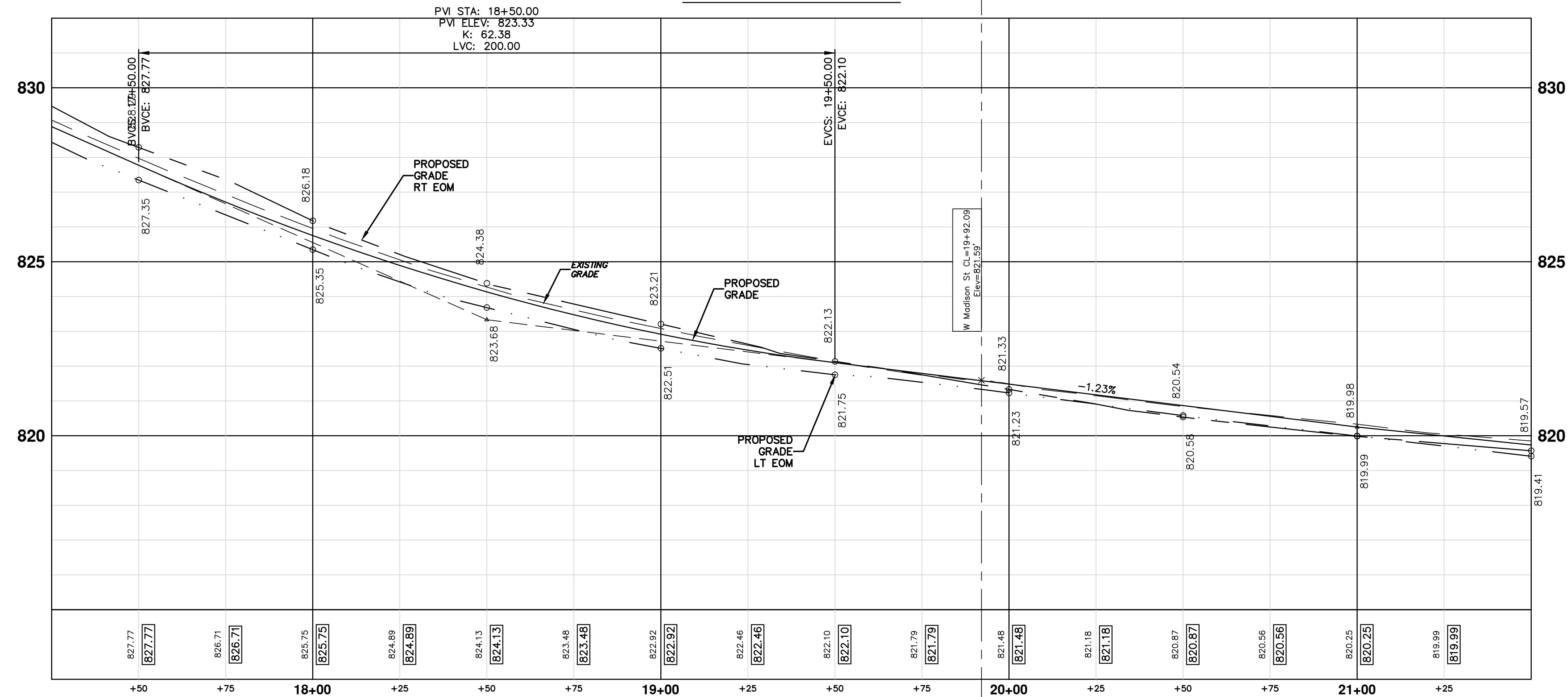


S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027FFRD.dwg Dwg Created: 12-Jul-12 - a2\_standard bw.stb - Plot Date: 16-Apr-13



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
5	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
9	HMA DRIVEWAY WEDGING
10	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE A CASTING, MODIFIED
3	REMOVE AND REPLACE MDOT TYPE K CASTING, MODIFIED
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	ADJUST MDOT TYPE A CASTING TO FINISH GRADE
7	ADJUST MDOT TYPE K CASTING TO FINISH GRADE

**W MADISON ST CL**



Structure Table		
STRUCTURE	RIM	TYPE
GWV9	821.49	GWV
R-10	820.89	6' MH Cover B
R-11	820.75	2' Inlet Cover K
R-12	821.14	4' MH Cover B
R-13	821.30	4' MH Cover B
R-15	821.10	2' Inlet Cover K
R-16	821.50	2' Inlet Cover K
R-17	821.64	6' MH Cover B
R-17a	821.47	2' Inlet Cover K
R-19	823.95	5' MH Cover B
s06 - 71-71074	821.59	4' MH
s27	820.10	4' MH
V16	822.14	8" GVIB
V17	820.92	8" GVIB
V18	821.57	12" GVIB
V19	820.94	12" GVIB and 12" 45' Vert Bend



Know what's below. Call before you dig.

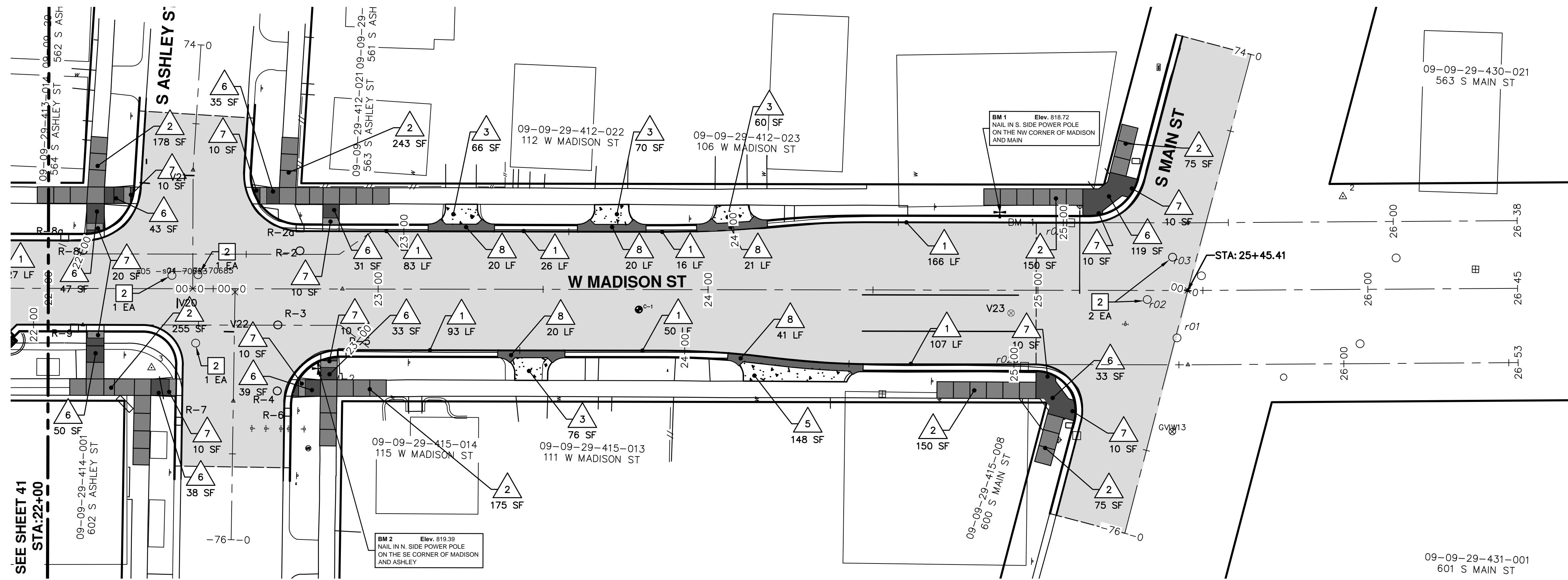
REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR MI 48106-0667  
www.a3gov.org



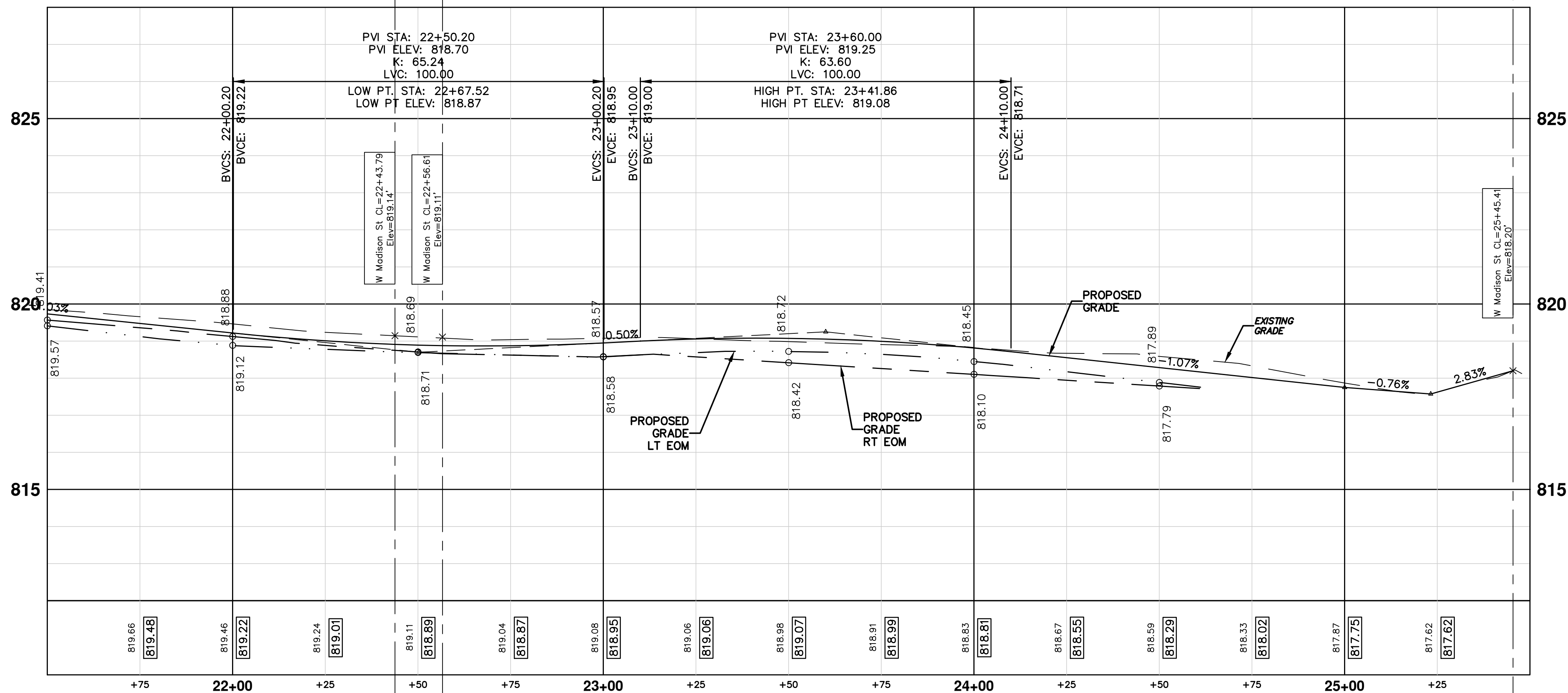
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
ROAD PLAN AND PROFILE  
STA. 17+50 TO STA. 22+00

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. 2012027-41



CONSTRUCTION KEY	
KEY	DESCRIPTION
1	PLACE CURB AND GUTTER, CONCRETE, MODIFIED
2	PLACE SIDEWALK, CONCRETE, 4 INCH
3	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 6 INCH HIGH EARLY
5	PLACE SIDEWALK, RAMP, OR DRIVE, CONCRETE, 8 INCH HIGH EARLY
6	SIDEWALK RAMP, CONCRETE, 6 INCH MODIFIED
7	DETECTABLE WARNING SURFACE, MODIFIED
8	DRIVE OPENING, CONCRETE, DET M, MODIFIED HIGH EARLY
9	HMA DRIVEWAY WEDGING
10	SIDEWALK RETAINING WALL, LESS THAN 18 INCH
11	BLOCK RETAINING WALL, MORTARLESS, UNREINF, MODIFIED
1	ADJUST GATE VALVE BOX OR MONUMENT BOX. GAS BOX
2	REMOVE AND REPLACE MDOT TYPE A CASTING, MODIFIED
3	REMOVE AND REPLACE MDOT TYPE K CASTING, MODIFIED
4	REMOVE STRUCTURE AND REPLACE 2' DIA. DRAINAGE STRUCTURE.
5	POINT STRUCTURE.
6	ADJUST MDOT TYPE A CASTING TO FINISH GRADE
7	ADJUST MDOT TYPE K CASTING TO FINISH GRADE

**W MADISON ST CL**



Structure Table		
STRUCTURE	RIM	TYPE
R-2	818.59	6' MH Cover B
R-2a	818.32	2' Inlet Cover K
R-3	818.64	6' MH Cover B
R-4	818.50	6' MH Cover B
R-5	818.44	2' Inlet Cover K
R-6	818.25	2' Inlet Cover K
R-7	818.38	2' Inlet Cover K
R-8	818.83	6' MH Cover B
R-8a	818.74	2' Inlet Cover K
R-9	818.95	2' Inlet Cover K
r02	817.92	Storm MH
r02a	817.57	Storm CB
r02b	817.36	Storm CB
r03	817.82	Storm MH
s02 - 71-70680	818.77	4' MH
s04 - 71-70685	819.02	4' MH
s05 - 71-70683	819.07	4' MH
V20	818.87	12" GVIB
V21	818.52	8" GVIB
V22	818.71	12" GVIB
V23	817.70	12" GVIB

**CITY OF ANN ARBOR**  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1600  
www.a2gov.org

Know what's below.  
Call before you dig.

01	OUT FOR BID	4-16-13	DATE
00	MOEQ SUBMITTAL	12-19-12	DATE
			CHECKED
			DRAWN
			REV.

---

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
WEST MADISON STREET IMPROVEMENTS  
ROAD PLAN AND PROFILE  
STA. 22+00 TO STA. 25+45.41

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

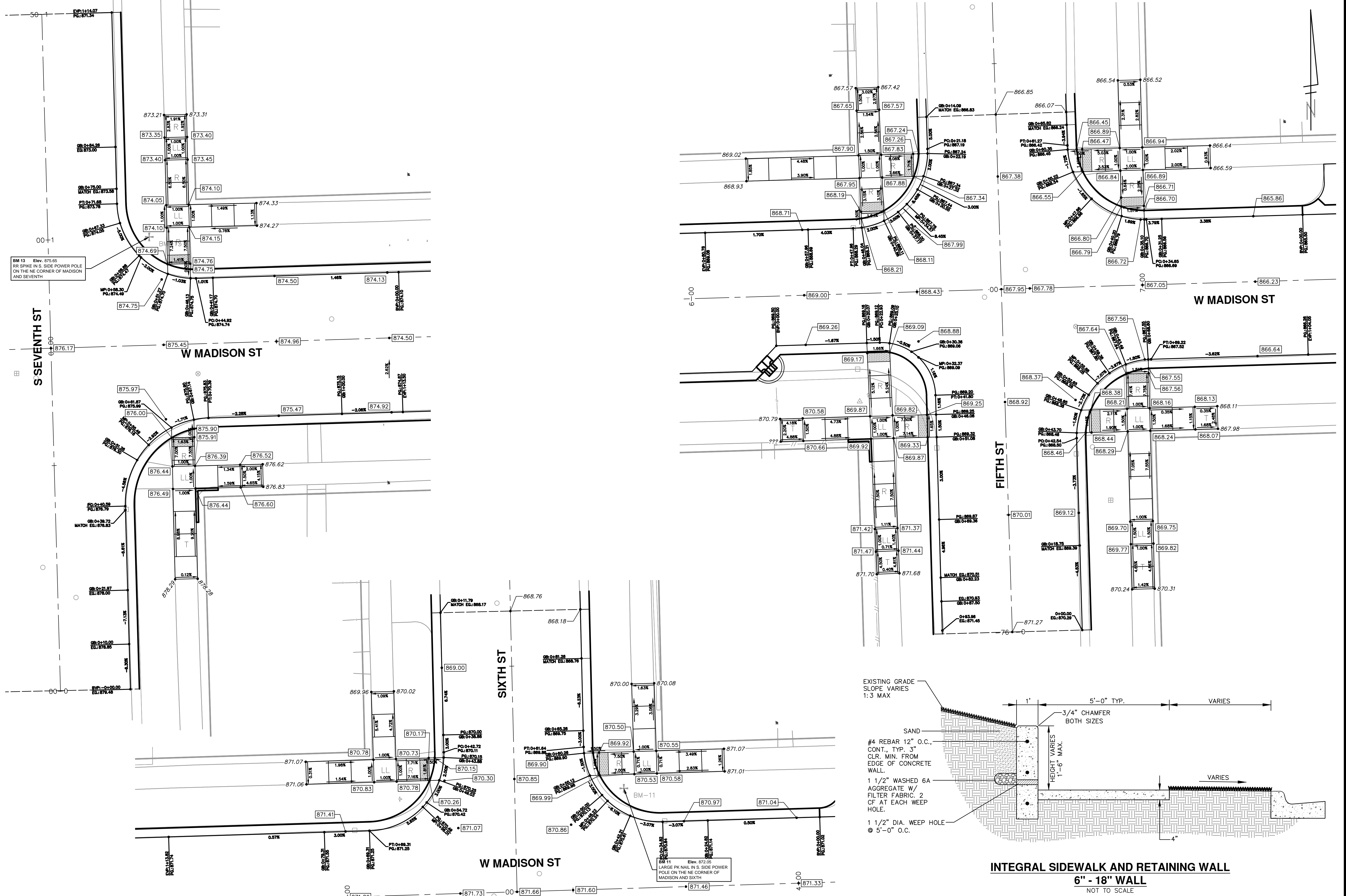
DRAWING No.  
**2012027-42**

---

SHEET No. **42 OF 49**



S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027\INT.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13



REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL
		DRAWN
		CHECKED

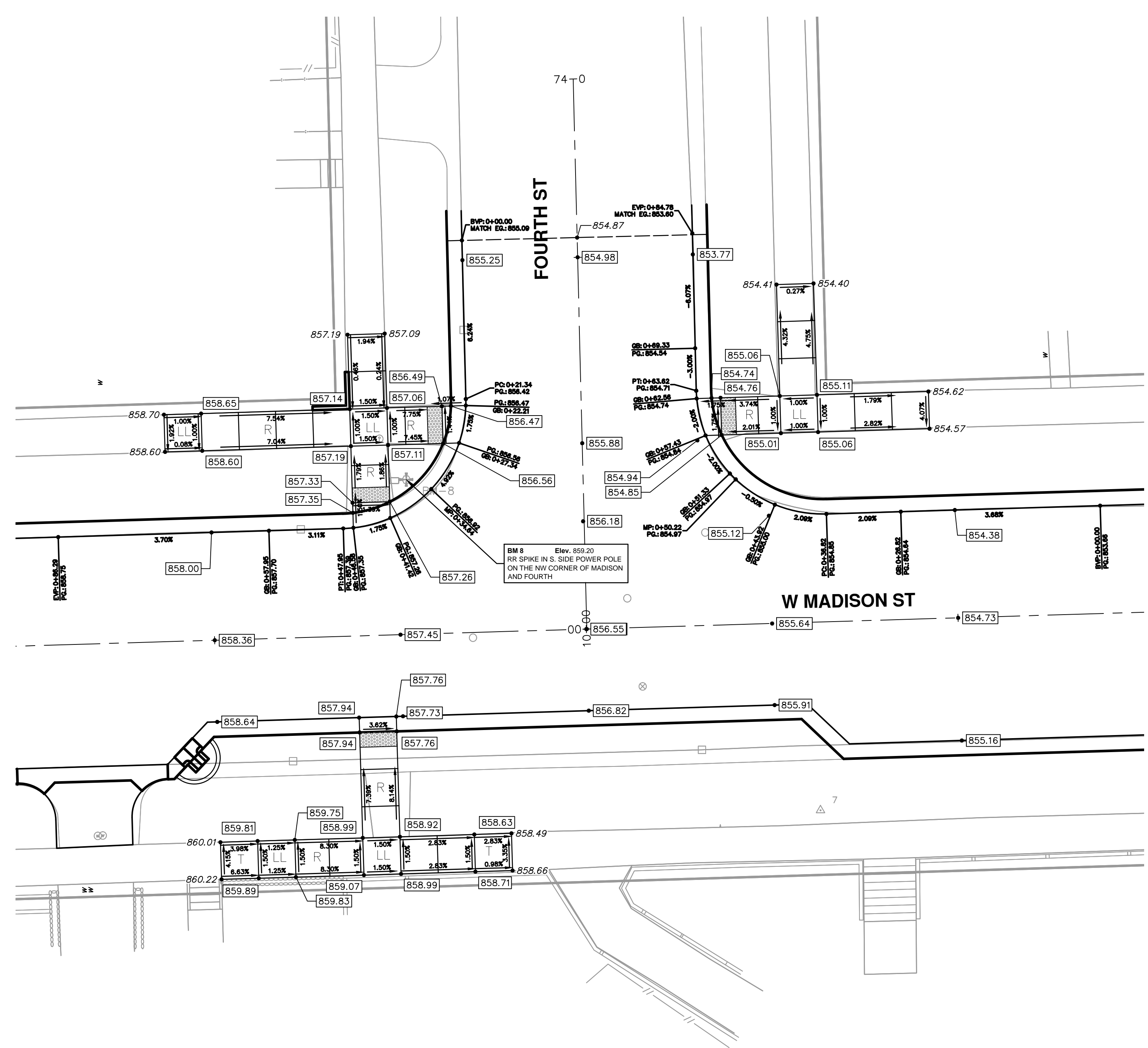
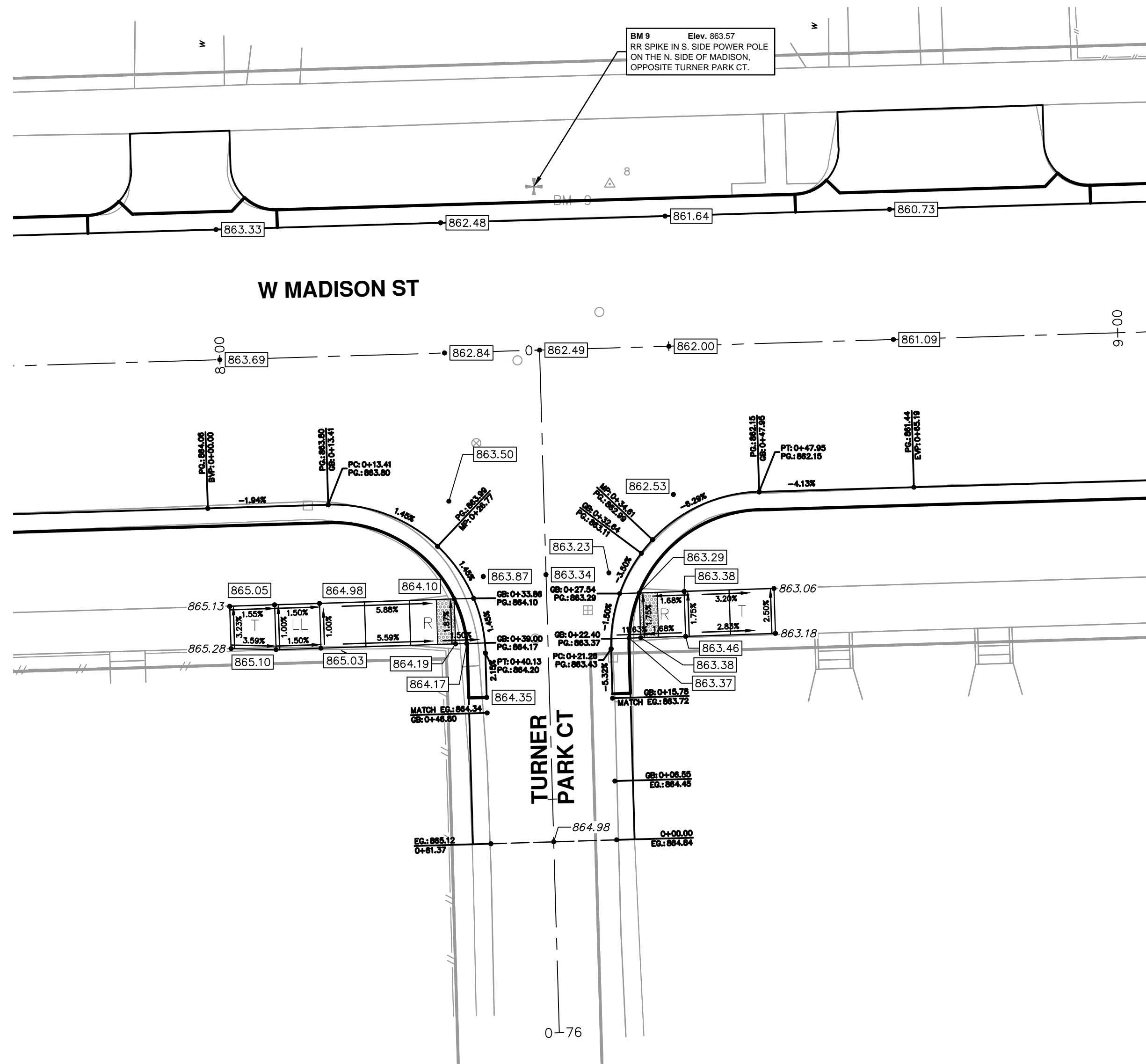
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0647  
www.a2gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
INTERSECTION GRADING  
MADISON & 7TH, 6TH, 5TH

SCALE PLAN: 1" = 10'  
DRAWING NO.: 2012027-43  
SHEET NO. 43 OF 49

S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027\INT.dwg Dwg Created: 12-Jul-12 - \_a2\_standard bw.stb - Plot Date: 16-Apr-13



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	OUT FOR BID	4-16-13	DFF/CEC	IWK
00	MOEQ SUBMITTAL	12-19-12	DFF/CEC	IWK

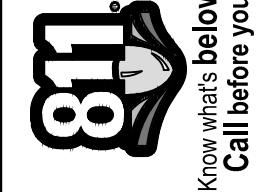
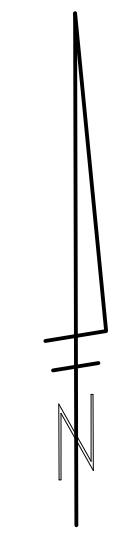
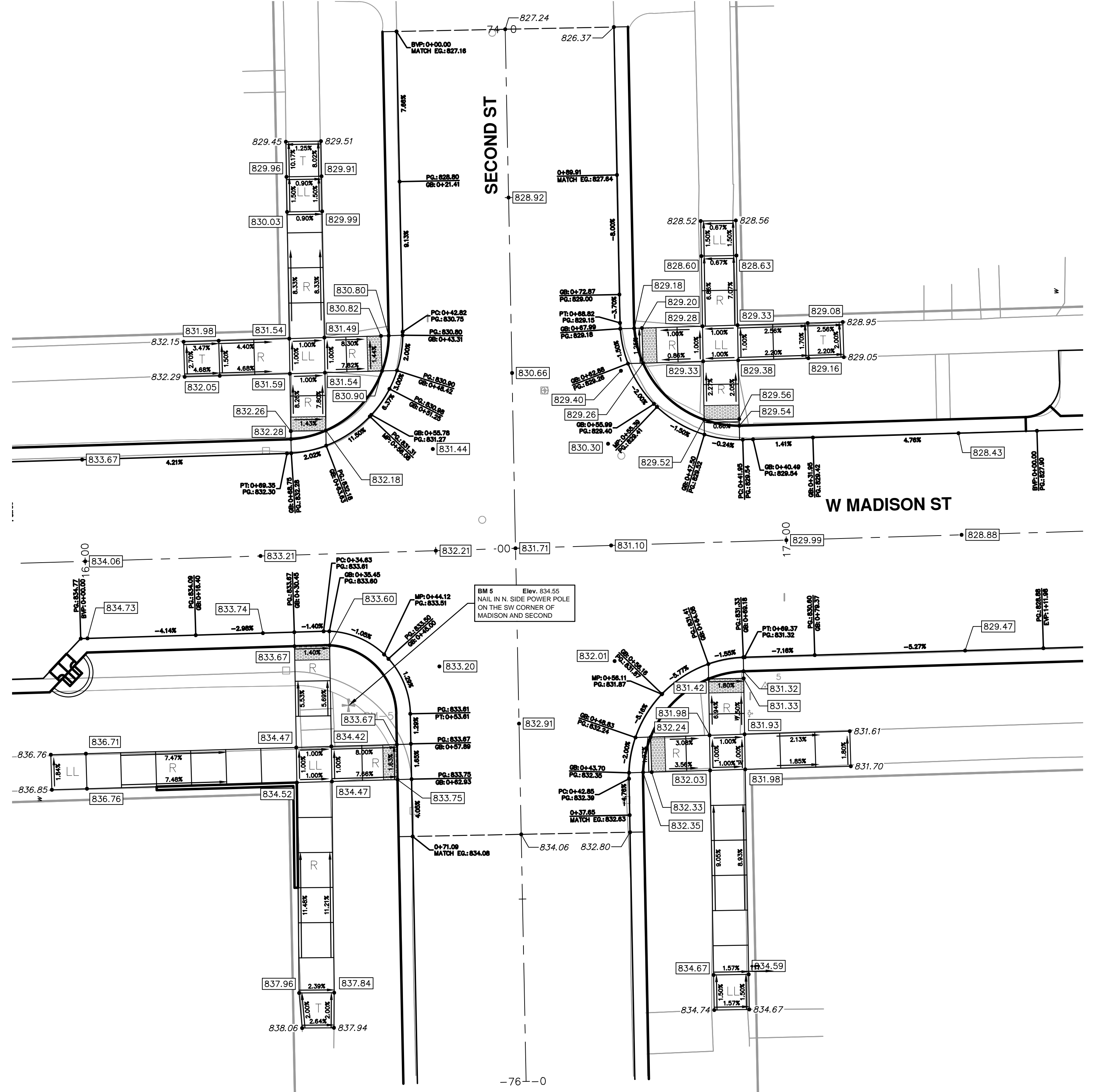
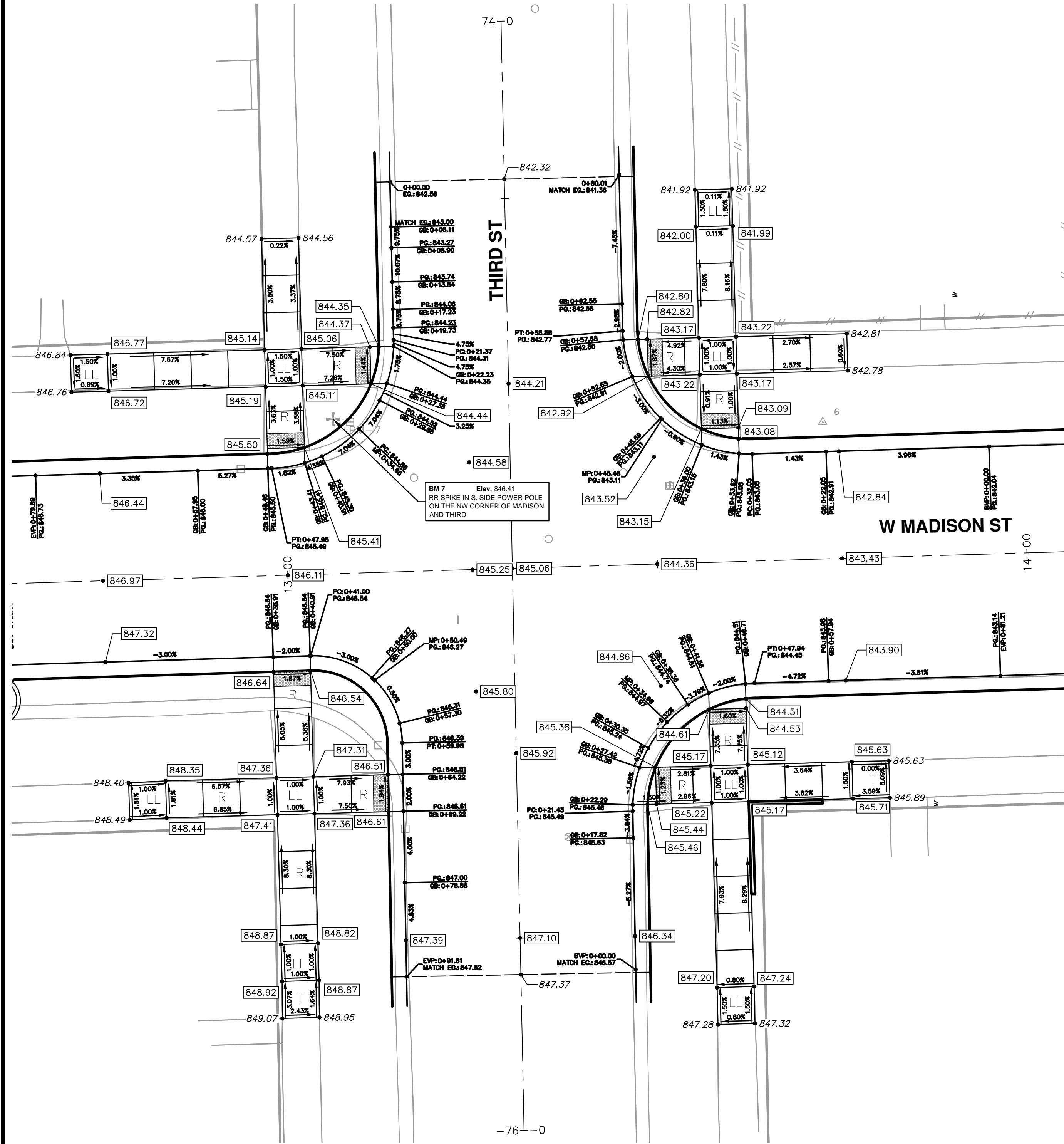
CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-1410  
 www.a2gov.org

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
 INTERSECTION GRADING  
 MADISON & TURNER PARK CT, 4TH

SCALE PLAN: 1" = 10'  
 DRAWING No.  
**2012027-44**



S:\Project Management\Design\2012027\Madison\Plan Production\Primary\2012027\INT.dwg Dwg Created: 12-Jul-12 - a2 standard bw.stb - Plot Date: 16-Apr-13



REV.	DATE	DESCRIPTION
01	4-16-13	OUT FOR BID
00	12-19-12	MOEQ SUBMITTAL
		DRAWN
		CHECKED

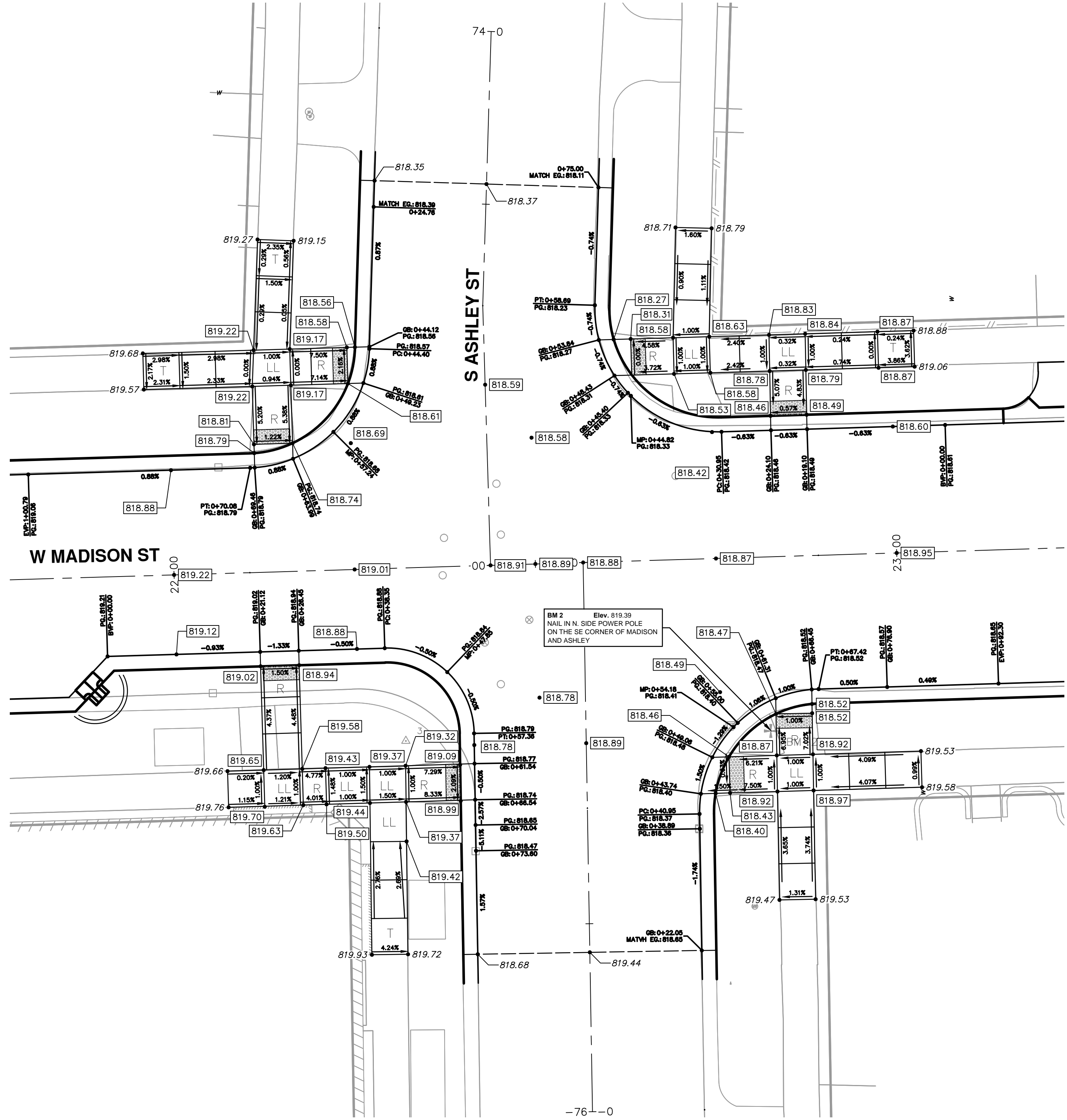
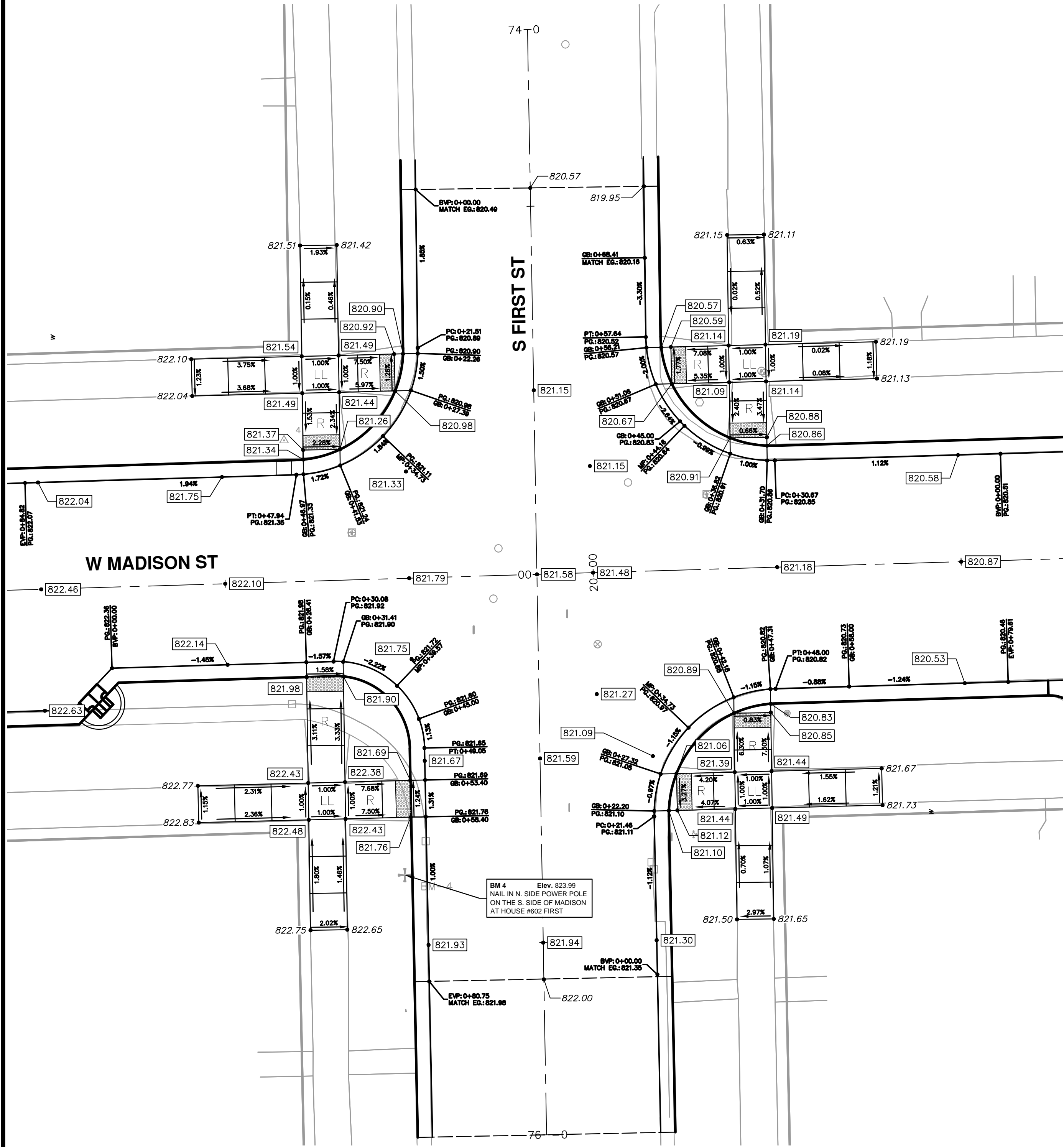
CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR MI 48106-0647  
www.a2gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
MADISON & 3RD, 2ND

SCALE PLAN: 1" = 10'  
DRAWING No. 2012027-45  
SHEET No. 45 OF 49

S:\Project Management\Design\2012027\Madison\_Plan Production\Primary\2012027\INT.dwg Dwg Created: 12-Jul-12 - a2\_standard bw.stb - Plot Date: 16-Apr-13

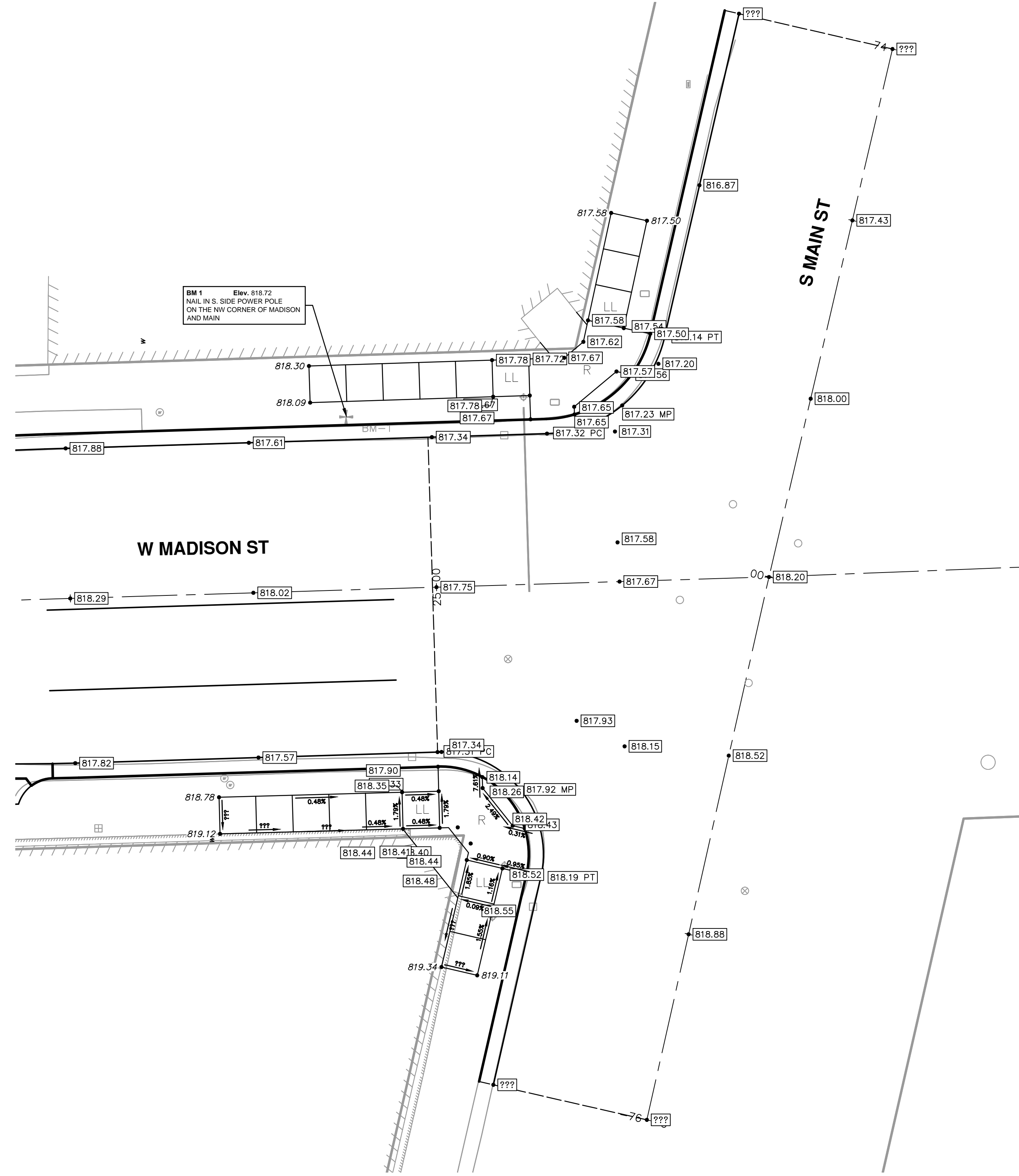


CITY OF ANN ARBOR  
 PUBLIC SERVICE  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0667  
 www.a2gov.org

REV.	DATE	DRAWN	CHECKED	DESCRIPTION
00	12-19-12	DPF/CEC	DPF/CEC	MOEQ SUBMITTAL
01	4-16-13	DPF/CEC	IWK	OUT FOR BID







**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**WEST MADISON STREET IMPROVEMENTS**  
**INTERSECTION GRADING**  
**MADISON & MAIN**

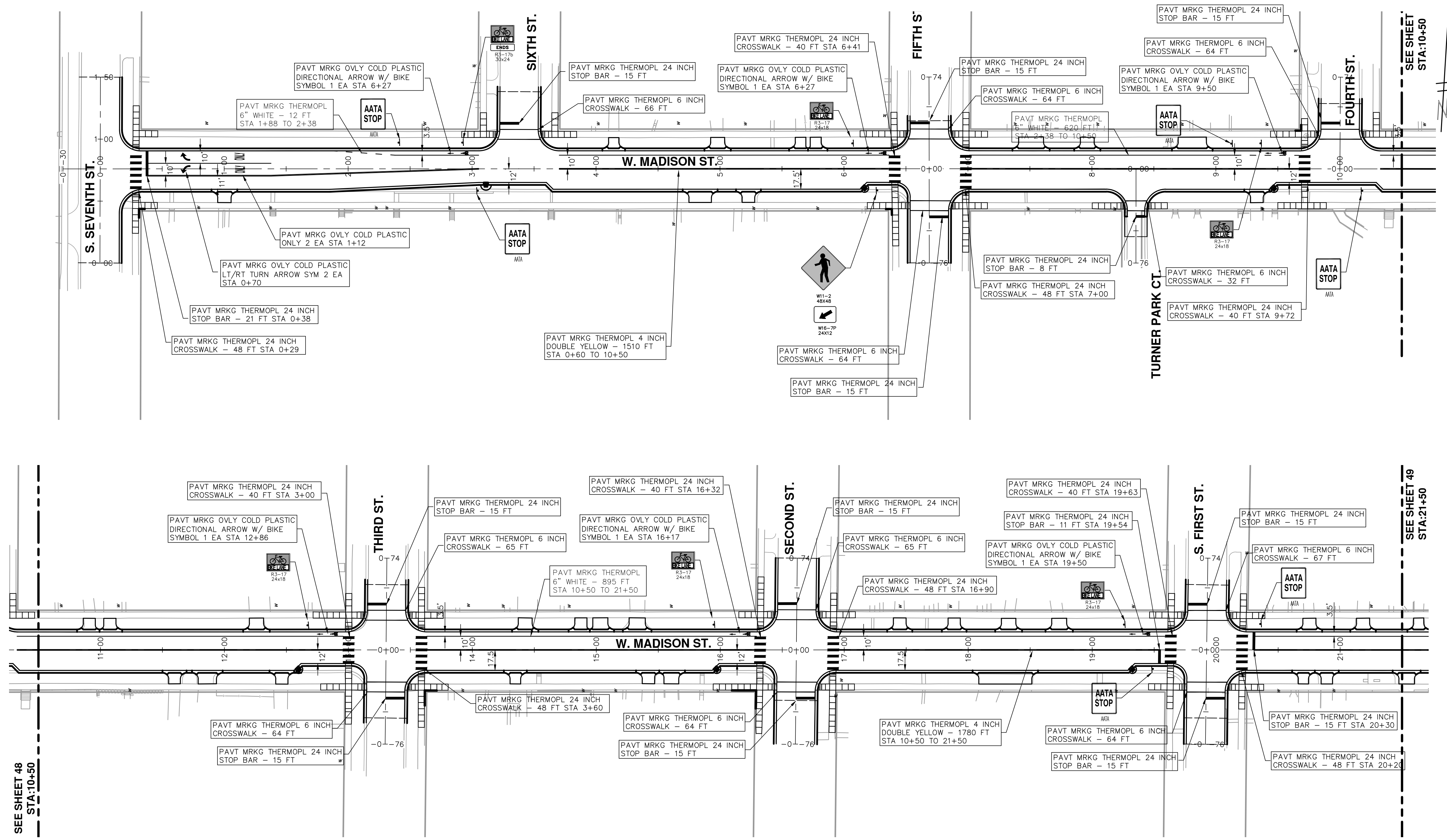
SCALE PLAN: 1" = 10'  
 DRAWING No. 2012027-47



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	OUT FOR BID	4-16-13	DPF/CEC	IWK
00	MOEQ SUBMITTAL	12-19-12	DPF/CEC	IWK



S:\Project Management\Design\2012027\Madison\Plan Production\Primary\2012027\PMK.dwg Dwg Created: 12-Jul-12 - \_o2 standard bw.stb - Plot Date: 16-Apr-13



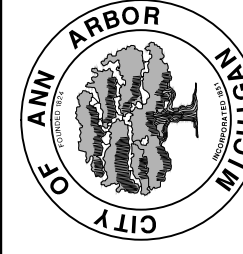
SEE SHEET 48  
STA:10+50

SEE SHEET 49  
STA:21+50



Know what's below.  
Call before you dig.

CITY OF ANN ARBOR  
PUBLIC SERVICE  
301 EAST HURON STREET  
ANN ARBOR MI 48106-1500  
www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
WEST MADISON STREET IMPROVEMENTS  
PAVEMENT MARKINGS AND PERMANENT SIGNING PLANS  
STA. 0+00 TO STA. 21+50

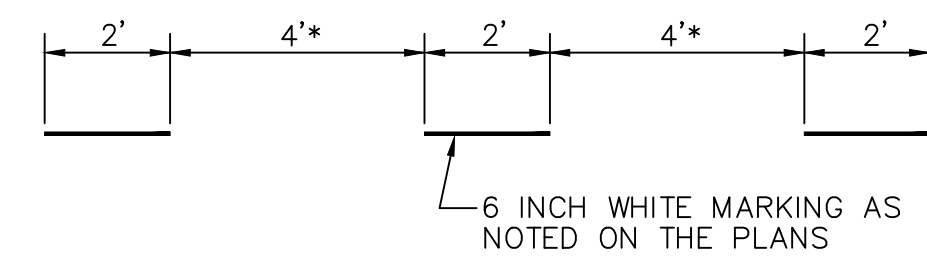
SCALE PLAN: 1" = 40'  
DRAWING No. 2012027-48

SHEET No. 48 OF 49

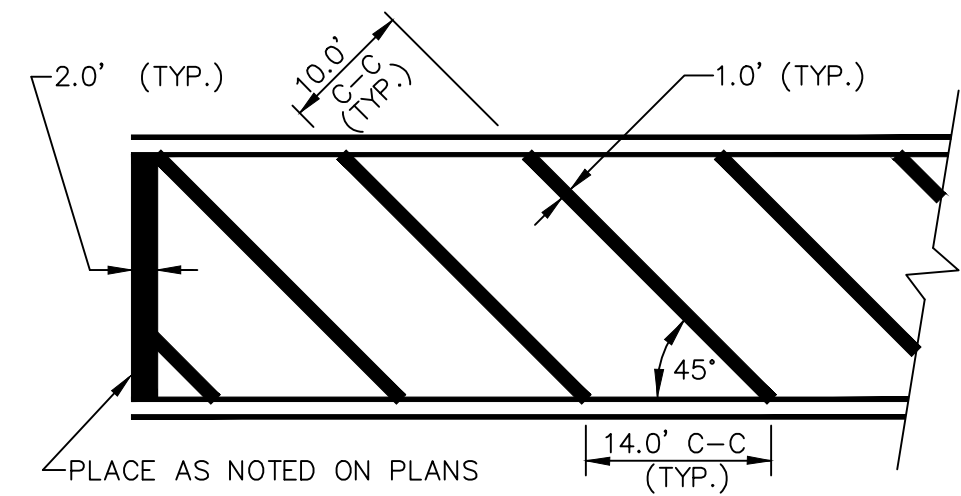
REV.	DATE	DESCRIPTION	DRAWN	CHECKED
01	4-16-13	OUT FOR BID	DPF/CEC	IVK
00	12-19-12	MOEQ SUBMITTAL	DPF/CEC	IVK



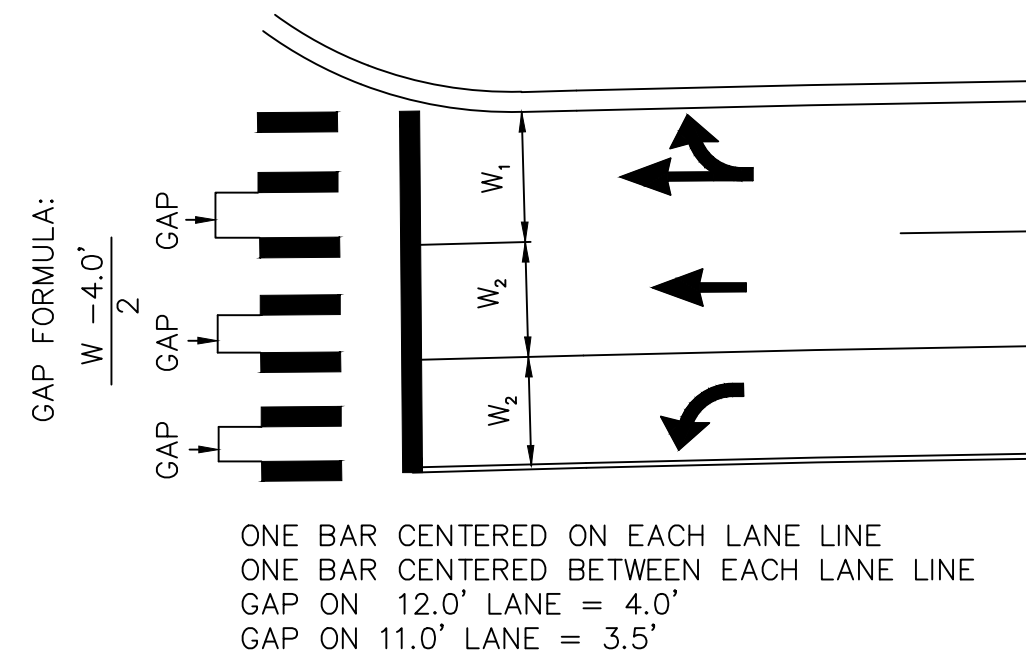
S:\Project Management\Design\2012027 Madison\Plan Production\Primary\2012027FMK.dwg Dwg Created: 12-Jul-12 - \_o2\_standard bw.stb - Plot Date: 16-Apr-13



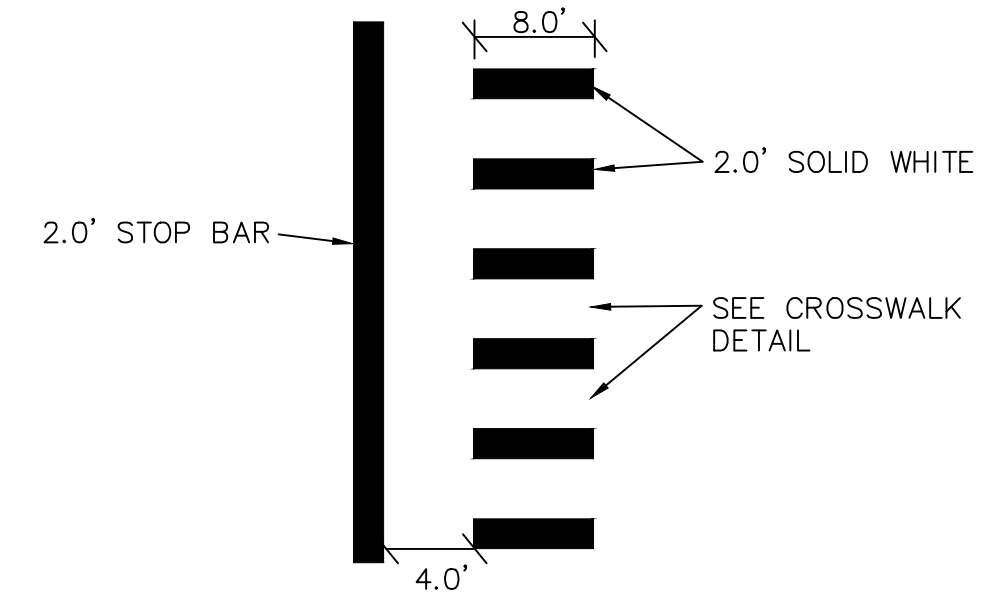
DOTTED LINE DETAIL  
\* NOTE FOR BROKEN LINE, USE 6' GAPS.



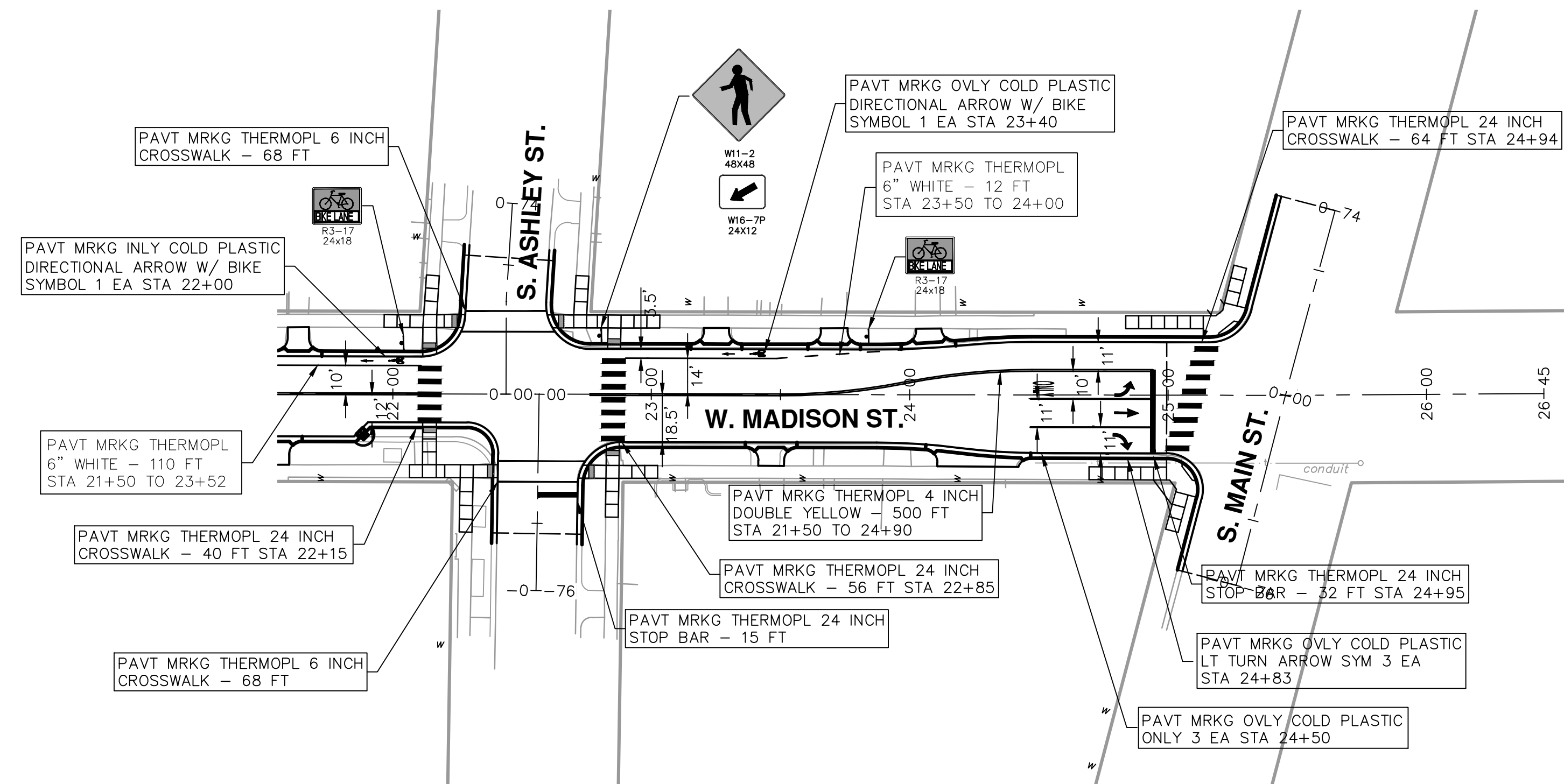
PAVEMENT MARKING CROSS-HATCHING  
DETAIL



CROSSWALK  
DETAIL



STOP BAR  
DETAIL



CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48106-1500 www.a2gov.org	PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR WEST MADISON STREET IMPROVEMENTS PAVEMENT MARKINGS AND PERMANENT SIGNING PLANS STA. 21+50 TO P.O.E.
SHEET No. 49 OF 49	DRAWING No. 2012027-49
REV.	DESCRIPTION
01 OUT FOR BID	DATE
00 MDEQ SUBMITTAL	DRAWN
00	CHECKED
00	IVK
00	IVK
00	DATE
00	CHECKED
00	IVK
00	IVK
00	DATE
00	CHECKED