

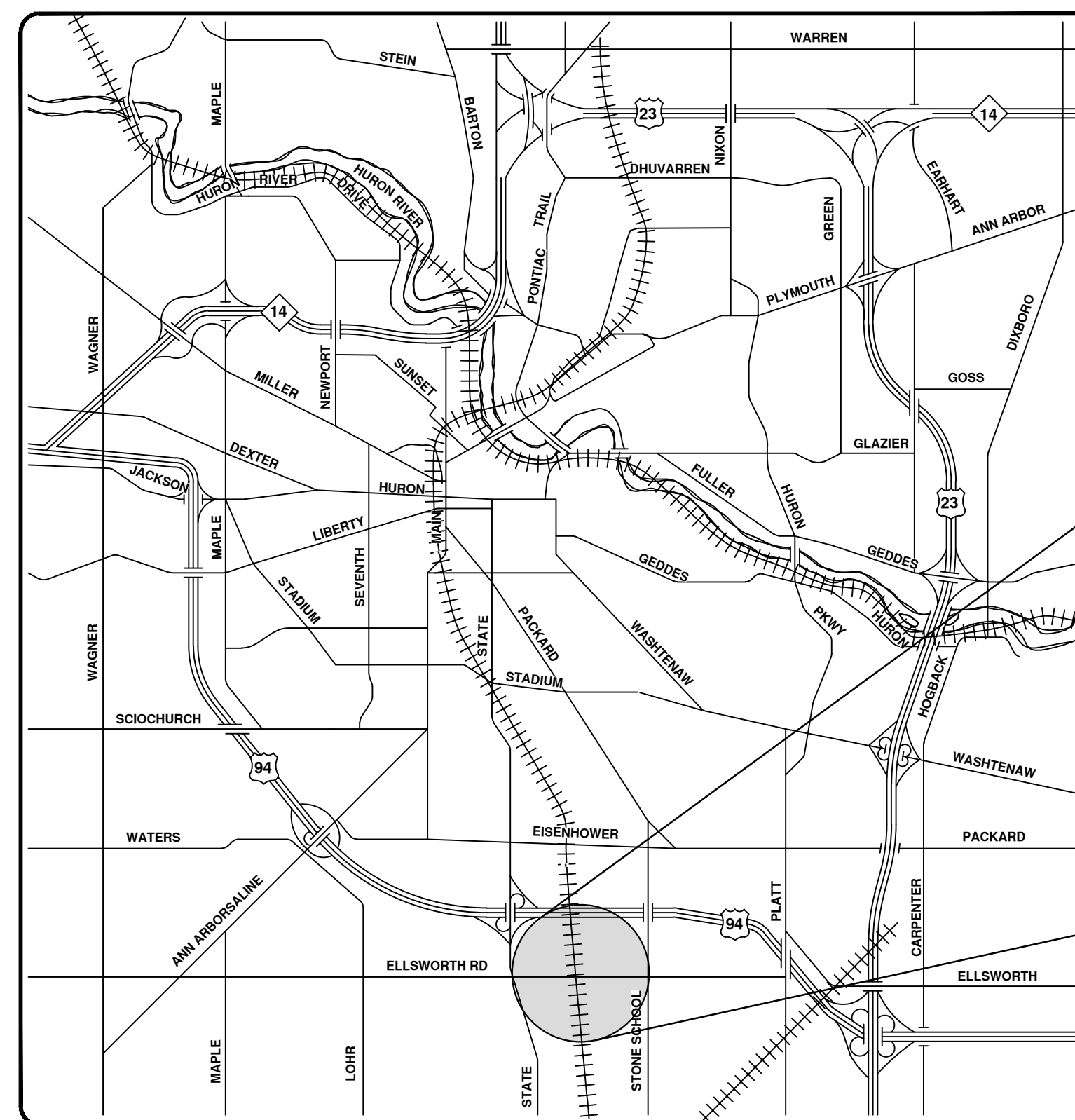


# CITY OF ANN ARBOR ENGINEERING

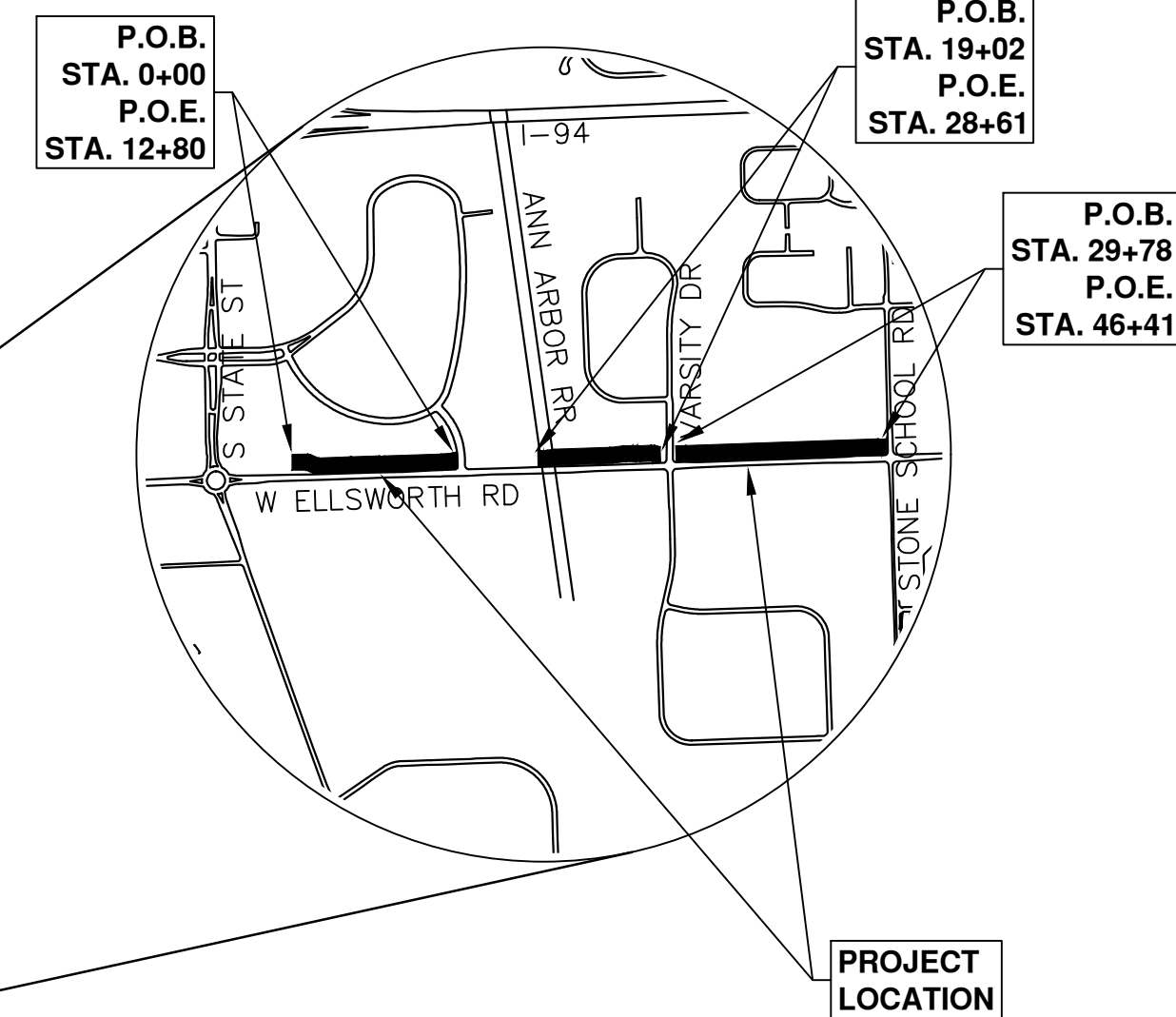
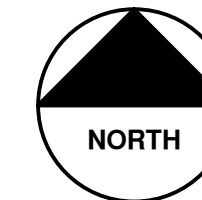
## ELLSWORTH RD SIDEWALK GAP ELIMINATION

RFP 22-49, FILE No. 2022007

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1	COVER SHEET
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13 - 16	PROPOSED SIDEWALK - EAST OF RAILROAD
17 - 20	PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.
21 - 23	PROPOSED STORM SEWER



VICINITY MAP



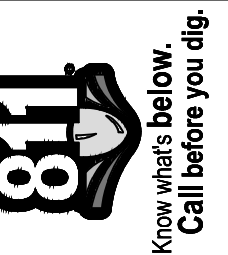
PROJECT LOCATION

**NOTES:**

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, 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.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.



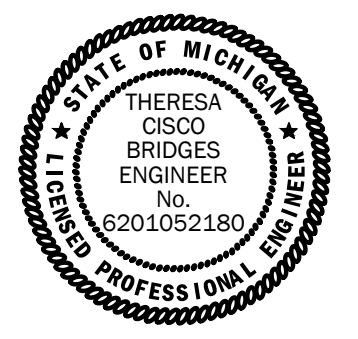
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	FINAL PLANS	6/22/22	KB/DF	TB
00	REVIEW SET	5/20/22	KB/DF	TB

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-8647  
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
PROJECT DESCRIPTION AND LIMITS  
SCALE  
DRAWING No. 2022007-1  
SHEET No. 1 OF 23

PREPARED UNDER THE SUPERVISION OF  
*[Signature]*  
THERESA BRIDGES, P.E. - MI LICENSE No. 6201052180  
PROJECT MANAGER



6 / 22 / 2022  
DATE

**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 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.
- DURING NON-WORKING HOURS NO TRENCH SHALL REMAIN OPEN UNLESS APPROVED BY THE ENGINEER; ANY OPEN TRENCH SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS SHALL BE APPROVED BY THE ENGINEER. ALL MATERIAL STOCKPILES SHALL BE MAINTAINED SUCH THAT DRAINAGE AND SIGHT DISTANCES ARE NOT ADVERSELY IMPACTED. SOIL EROSION REQUIREMENTS SHALL APPLY TO ALL MATERIAL STOCKPILES.
- ALL EXCAVATION REQUIRED FOR PROJECT GRADING WITHIN THE PROJECT LIMITS, INCLUDING PROPOSED PAVEMENT, SIDEWALK, AND SIDEWALK RAMPS SHALL BE INCLUDED IN "STATION GRADING, \_\_\_\_\_."
- EXCAVATION AND BACKFILL BEHIND CURB AND GUTTER SHALL BE INCLUDED IN "STATION GRADING, \_\_\_\_\_." ALL BACKFILL UNDER PROPOSED CONCRETE PAVEMENTS SUCH AS DRIVE APPROACHES, RAMPS, SIDEWALK, ETC., SHALL BE MDOT CLASS II GRANULAR MATERIAL, COMPACTED TO 95% OF ITS MAX. DRY DENSITY AND WILL BE PAID FOR AS "SAND SUBBASE COURSE, CLASS II, C.I.P." BACKFILL FOR OTHER AREAS MUST BE APPROVED BY THE ENGINEER AND COMPACTED TO 95% OF ITS MAX. DRY DENSITY. NO PAYMENT WILL BE MADE FOR SUB-BASE OR AGGREGATE BASE THAT EXTENDS BEYOND 12" BEHIND THE BACK OF CURB OR PROPOSED SIDEWALK EDGE. REFERENCE THE TYPICAL CROSS SECTIONS.
- ALL CURB, SIDEWALK, AND DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY ENGINEER BEFORE THE WORK IS PERFORMED. ALL CONCRETE AND BITUMINOUS MATERIALS SHALL BE SAW-CUT FULL-DEPTH AT THEIR REMOVAL LIMITS PRIOR TO REMOVAL. SAW-CUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE "REMOVAL" ITEMS OF WORK.
- PLACE 4" (MINIMUM) OR 6" (MINIMUM) THICKNESS CLASS II GRANULAR MATERIAL COMPACTED TO 95% OF ITS MAX. DRY DENSITY UNDER CONCRETE SIDEWALK AS SHOWN ON THE DETAILS. THIS WORK SHALL BE INCLUDED IN THE CONTRACT ITEMS "SAND SUBBASE COURSE, CLASS II, C.I.P."
- A UNIFORM COAT(S) OF CURING COMPOUND SHALL BE APPLIED TO FRESHLY PLACED CONCRETE ACCORDING TO THE STANDARD SPECIFICATIONS AND DETAILED SPECIFICATIONS REGARDLESS OF THE DIFFICULTY INVOLVED. THE CONTRACTOR SHALL TAKE CARE TO PREVENT OVERSPRAY WHEN APPLYING CURING COMPOUND. SEVERAL DIFFERENT METHODS MAY NEED TO BE DEVELOPED TO PROTECT VARIOUS SITUATIONS, BUT ALL METHODS USED TO PREVENT OVERSPRAY OF THE CURING COMPOUND SHALL BE COMPLETELY EFFECTIVE. METHODS USED SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE, HOWEVER APPROVAL OF A METHOD DOES NOT GUARANTEE SUCCESS OR ACCEPTABILITY. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR COMPLYING WITH THESE REQUIREMENTS.
- "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 SOLID WASTE PICKUP SERVICE AS WELL AS EMERGENCY VEHICLE ASSESSIBILITY SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
- 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 CONTINUED MAINTENANCE OF 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 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 PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD.
- 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 "STATION GRADING"

**GENERAL**

NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CHAPTER 55 ANN ARBOR UNIFIED DEVELOPMENT CODE, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE 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 CITY OF ANN ARBOR.
- 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, ROADWAYS OR WATERWAYS.
- ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (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 DUST PALLATIVE AS REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL 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 AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
- TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

**SEQUENCE OF EROSION CONTROL MEASURES:**

- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.
- SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:**
- INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
  - STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
  - PERFORM STATION GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
  - CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
  - COMPLETE ALL FINE GRADING.
  - TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
  - REFER TO PLANS FOR PERMANENT SITE STABILIZATION.
  - CLEAN OUT STORM SEWER SYSTEMS.
  - REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
  - ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

**TEMPORARY SEEDING:**

- SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- ANY DISTURBED AREA NOT PAVED, SEEDDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$10,000

ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN:

ELLSWORTH RD.

- Mfa - METAMORA SANDY LOAM, 0 TO 4 PERCENT SLOPES
- NaB - NAPPANEE SILTY CLAY LOAM, 2 TO 6 PERCENT SLOPES
- Sb - SEBEWA LOAM, DISINTEGRATION MORAINES, 0 TO 2 PERCENT SLOPES

ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:

EXCAVATION = 62.49 CY, FILL = 457.32 CY

**PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.**

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

**CONTACT INFORMATION**

PUBLIC UTILITIES	OWNER	CONTACT
WATER		
SANITARY		
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
FORESTRY		
SIGNS SIGNALS STREET LIGHTS		MARK MORENO (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANTHONY IGNASIAK (734) 397-4447
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SOUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	MARC GOODELL (313) 405-0574
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016
FIBER OPTIC	WINDSTREAM 1295 S LINDEN ROAD, SUITE B FLINT, MI 48532	GREG SERICH (810) 244-3500
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	LANCE ALLEY (734) 397-4188

PROJECT NAME BENCHMARKS		
BM #	ELEV	DESCRIPTION
1	827.818	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 25± E. OF BELLE TIRE BLDG.
2	821.877	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS SECOND POLE W. OF DRIVE FOR CAR WASH
3	819.682	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 110± E. OF CL OF DRIVE FOR CAR WASH
4	821.412	TOP OF NW VALVE ON F. HYD ON S. SIDE OF ELLSWORTH. 170± E. OF CL OF DRIVE FOR CAR WASH
5	822.122	TOP OF SE ANCHOR BOLT FOR MAST ARM POLE AT NW CORNER OF RESEARCH PARK DR. AND ELLSWORTH.
6	823.624	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE HAS EMERGENCY SIREN ON IT AND IS 300± E. OF RR TRACKS
7	819.576	TOP OF SE ANCHOR BOLT FOR MAST ARM POLE AT NW CORNER OF ELLSWORTH AND VARSITY DR.
8	816.454	TOP, CENTER OF 36" RCP DRAIN PIPE ON N. SIDE OF ELLSWORTH
9	821.823	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH. POLE IS 25± W. OF EAST DRIVE FOR EOTECH BLDG
10	826.066	SET RR SPIKE IN S. SIDE OF U.P. ON N. SIDE OF ELLSWORTH IN FRONT OF AVL BLDG
11	837.087	STEAMER VALVE ON F. HYD AT NW CORNER OF ELLSWORTH AND STONE SCHOOL RD. (BM#2 FROM STONE SCHOOL RD TOPO, BK 1110 PG 4)
12	837.087	TOP OF NE VALVE ON F. HYD AT SE CORNER OF ELLSWORTH AND STONE SCHOOL RD. (BM#1 FROM STONE SCHOOL RD TOPO, BK 1110 PG 4)
1018	828.700	STATION 1018 IS LOCATED ON THE NORTH SIDE OF ELLSWORTH RD WEST OF THE ANN ARBOR RAILROAD TRACKS. THE STATION IS LOCATED 25.9' WEST OF THE WEST RAIL OF THE RAILROAD TRACKS AND 3.5' NORTH OF THE NORTH BACK OF CURB ALONG ELLSWORTH ROAD. SAID STATION IS A VERTICAL CONTROL STATION AND IS DESCRIBED AS THE 1993 EDITION OF THE CITY OF ANN ARBOR BRASS DISC.



		TB	TB	CHECKED
		KB/DF	KB/DF	DRAWN
		6/22/22	5/20/22	DATE
01	FINAL PLANS			DESCRIPTION
00	REVIEW SET			REV.

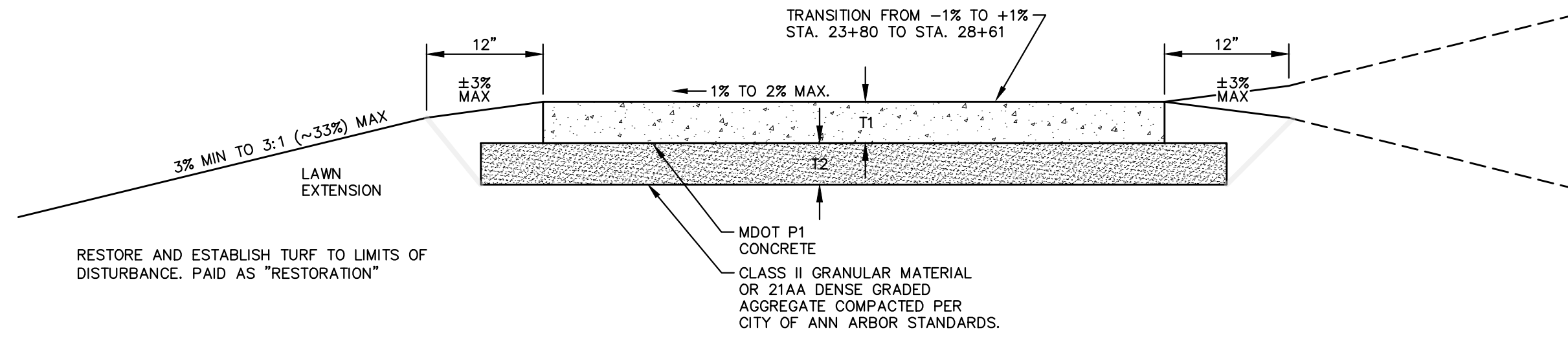
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
P.O. BOX 8647  
ANN ARBOR, MI 48107-8647  
734-794-6410  
www.aagov.org



CITY OF ANN ARBOR - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP  
ELIMINATION  
STANDARD NOTES

SCALE: NTS  
DRAWING No. 2022007-2

SHEET No.



NOTES:

- SIDEWALK SHALL BE A DESIGNED AND CONSTRUCTED TO MEET ALL ADA STANDARDS AND REQUIREMENTS.
- CITY OF ANN ARBOR MINIMUM STANDARD WIDTH OF SIDEWALK IS FIVE (5) FEET.
- CONCRETE SIDEWALK THICKNESS (T1) SHALL BE A MINIMUM OF FOUR (4) INCHES.
- SIDEWALK THICKNESS (T1) SHALL BE INCREASED AT DRIVE APPROACHES TO SIX (6) INCHES FOR SINGLE-FAMILY OR DUPLEX RESIDENTIAL USES. ALL OTHER USES REQUIRE A MINIMUM EIGHT (8) INCH THICKNESS WITHIN THE DRIVE APPROACH.
- BASE THICKNESS (T2) SHALL BE A MINIMUM OF FOUR (4) INCHES.
- THICKNESS OF THE BASE (T2) SHALL BE INCREASED TO A MINIMUM OF SIX (6) INCHES WITHIN THE DRIVE APPROACH.
- IF EXISTING SUBGRADE MATERIAL IS APPROVED BY THE ENGINEER FOR USE, COMPACT THE EXISTING SUBGRADE TO 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY.
- NATIVE MATERIAL MAY BE ACCEPTABLE FOR SIDEWALK CONSTRUCTION, IF THE BASE IS STABLE AND FREE OF ORGANIC OR DELETERIOUS MATERIALS.
- SIDEWALK RAMPS SHALL BE CONSTRUCTED AT STREET INTERSECTIONS AS DIRECTED AND SHALL COMPLY WITH THE REQUIREMENTS OF MDOT DETAIL R-28 (LATEST VERSION).
- SIDEWALKS MAY MEANDER WITHIN THE RIGHT-OF-WAY TO PROTECT AND PRESERVE NATURAL FEATURES.
- EXPANSION AND CONTRACTION JOINTS SHALL BE PROVIDED PER CITY OF ANN ARBOR STANDARD DETAILS AND SPECIFICATIONS.

SIDEWALK CROSS SECTION, SD-R-9

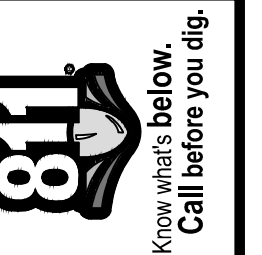
EXISTING LEGEND

- ⊕ FIRE HYDRANT
- I GATE VALVE IN BOX
- ⊗ GATE VALVE IN WELL
- ⊙ STOP BOX
- ⊠ WATER VAULT
- ⊙ WELL
- ⊠ CATCH BASIN (SQ)
- ⊙ CATCH BASIN (RD)
- STORM MANHOLE
- ⊠ NON-CURB CATCH BASIN (SQ)
- ) END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- POST
- ⊕ PEDESTRIAN SIGNAL
- ⊢ SIGN
- ⊠ HAND HOLE
- ⊕ ORNAMENTAL LIGHT
- ⊕ FLOOD LIGHT
- ⊕ UNKNOWN MANHOLE
- ⊕ TELEPHONE MANHOLE
- ⊕ TELEPHONE RISER
- ⊕ GAS VALVE
- GAS VENT
- ⊠ GAS BOX
- ⊕ ELECTRICAL RISER
- ⊕ TRANSFORMER
- ⊕ UTILITY POLE
- LAMP POLE
- ⊕ GUY ANCHOR
- GUY POLE
- ⊕ MONITORING WELL
- ⊕ MAILBOX
- ⊕ SOIL BORING
- △ TRAVERSE POINT
- ⊕ BENCH MARK
- IRON PIPE
- ⊠ MON BOX

- W --- WATER MAIN
- - - - - WATER MAIN ABANDONED
- - - - - STORM SEWER
- - - - - STORM SEWER ABANDONED
- - - - - SANITARY SEWER
- - - - - SANITARY SEWER ABANDONED
- - - - - GAS MAIN
- - - - - GAS MAIN (DEAD)
- - - - - ELECTRICAL OVER HEAD
- - - - - ELECTRICAL UNDER GROUND
- - - - - e duct bank ELECTRICAL DUCT BANK
- - - - - oht TELEPHONE OVER HEAD
- - - - - t TELEPHONE UNDER GROUND
- - - - - t duct bank TELEPHONE DUCT BANK
- - - - - ohtv CABLE TV OVER HEAD
- - - - - tv CABLE TV UNDER GROUND
- - - - - fo FIBER OPTIC
- - - - - fo duct bank FIBER OPTIC DUCT BANK
- BOUNDARY
- /// BUILDING
- CENTERLINE OF DITCH
- CENTERLINE/CROWN OF ROAD
- 800 --- CONTOUR MAJOR
- 799 --- CONTOUR MINOR
- EDGE OF WATER
- FLOODPLAIN
- /// FENCE
- /// GRAVEL
- /// GUARDRAIL
- /// STONE WALL
- R.O.W.
- TREELINE
- WETLAND
- EDGE OF BRUSH
- HEDGE
- TREE (DECIDUOUS)
- ★ TREE (CONIFEROUS)
- SHRUB (DECIDUOUS)
- STUMP
- TREE TO REMAIN & PROTECT (DECIDUOUS)  
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10
- ★ TREE TO REMAIN & PROTECT (CONIFEROUS)  
CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10

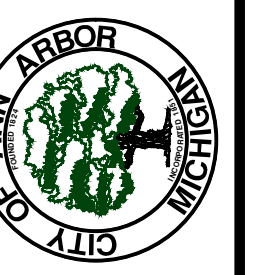
PROPOSED LEGEND

- ⊕ HYDRANT (PLAN)
- ⊗ WATER GATE WELL
- ▽ REDUCER
- I WATER GATE VALVE
- ⊙ WATER STOP BOX
- ⊠ WATER VAULT
- ⊙ INLET
- ⊕ DOUBLE INLET
- ⊙ INLET JUNCTION CHAMBER
- ROUND CATCH BASIN
- STORM MANHOLE
- ▽ DRAIN ARROW
- ▽ FLARED END SECTION
- SANITARY MANHOLE
- CLEAN-OUT
- SIGN
- PUSH BUTTON
- ⊠ HAND HOLE
- W --- WATER MAIN
- R --- STORM SEWER
- S --- SANITARY SEWER
- FO --- FIBER OPTIC
- E --- ELECTRICAL
- CENTERLINE OF DITCH
- CENTERLINE OF ROAD
- FENCE
- GRAVEL
- SILT FENCE
- PROTECTIVE FENCE
- LOT/UNIT
- CURB
- TEMPORARY GRADING PERMIT
- 800 --- CONTOUR MAJOR
- 799 --- CONTOUR MINOR
- WATER EASMENT
- STORM EASEMENT
- SANITARY EASEMENT
- R.O.W.
- LIMITS OF CONSTRUCTION
- LIMIT OF GRADING
- STONE WALL
- DETECTABLE WARNING
- ASPHALT
- CONCRETE
- SIDEWALK
- TREE (DECIDUOUS)
- ★ TREE (CONIFEROUS)
- TREE TO BE REMOVED (DECIDUOUS)
- ★ TREE TO BE REMOVED (CONIFEROUS)
- STUMP TO BE REMOVED



01	FINAL PLANS	6/22/22	KB/DF	TB	TB	CHECKED
00	REVIEW SET	5/20/22	KB/DF	TB	TB	DRAWN
						DATE
						DESCRIPTION
						REV.

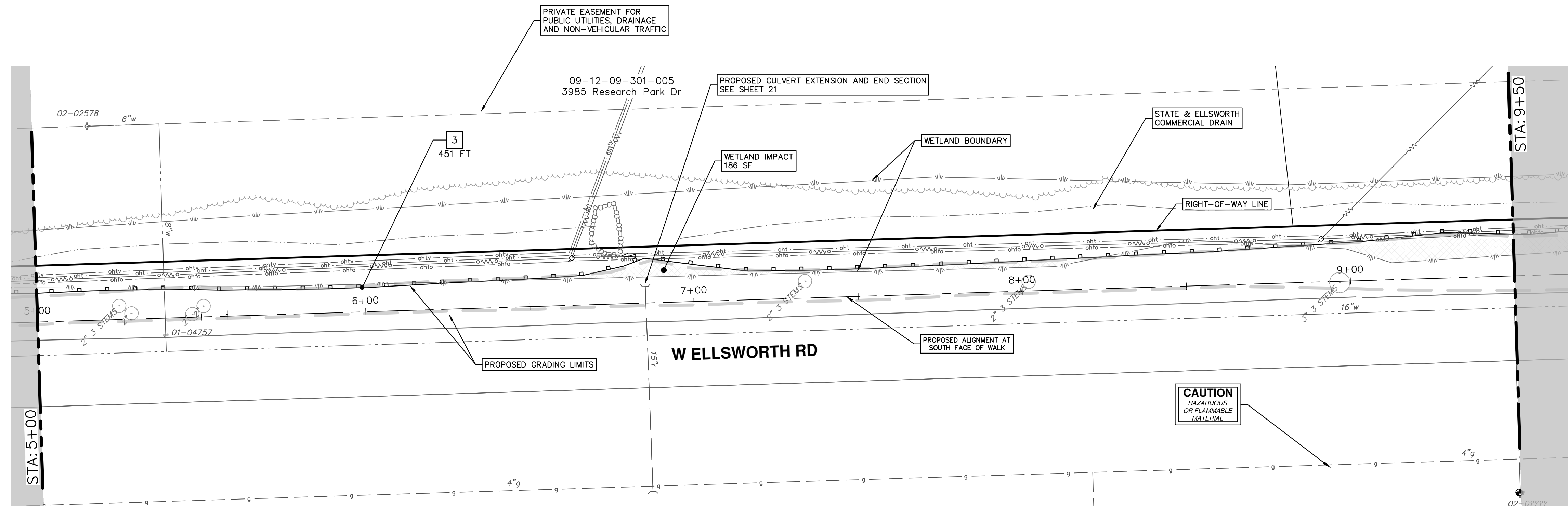
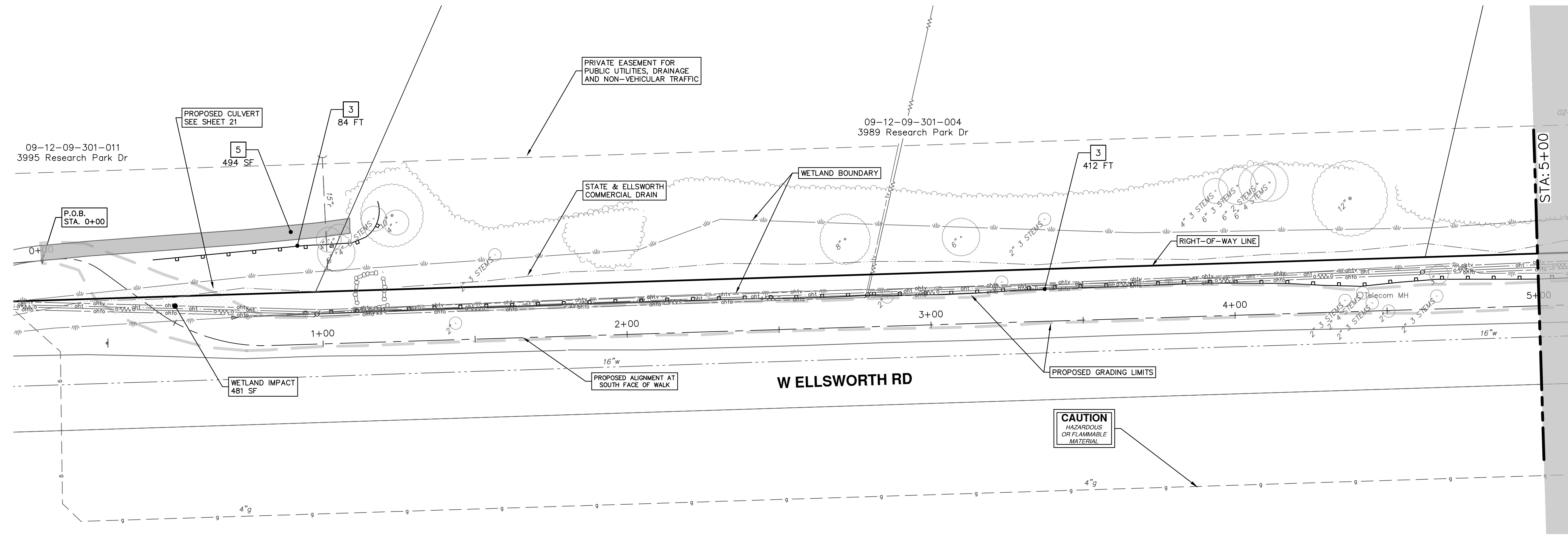
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PUBLIC SERVICES  
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP  
ELIMINATION  
LEGEND & DETAILS

SCALE: NTS  
DRAWING No. 2022007-3  
SHEET No. 3 OF 23

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Rem.dwg Dwg Created: 21-Jun-22 - \_a2 standard bw.stb - Plot Date: 22-Jun-22



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	FINAL PLANS	6/22/22	KB/DF	TB
00	REVIEW SET	5/20/22	KB/DF	TB

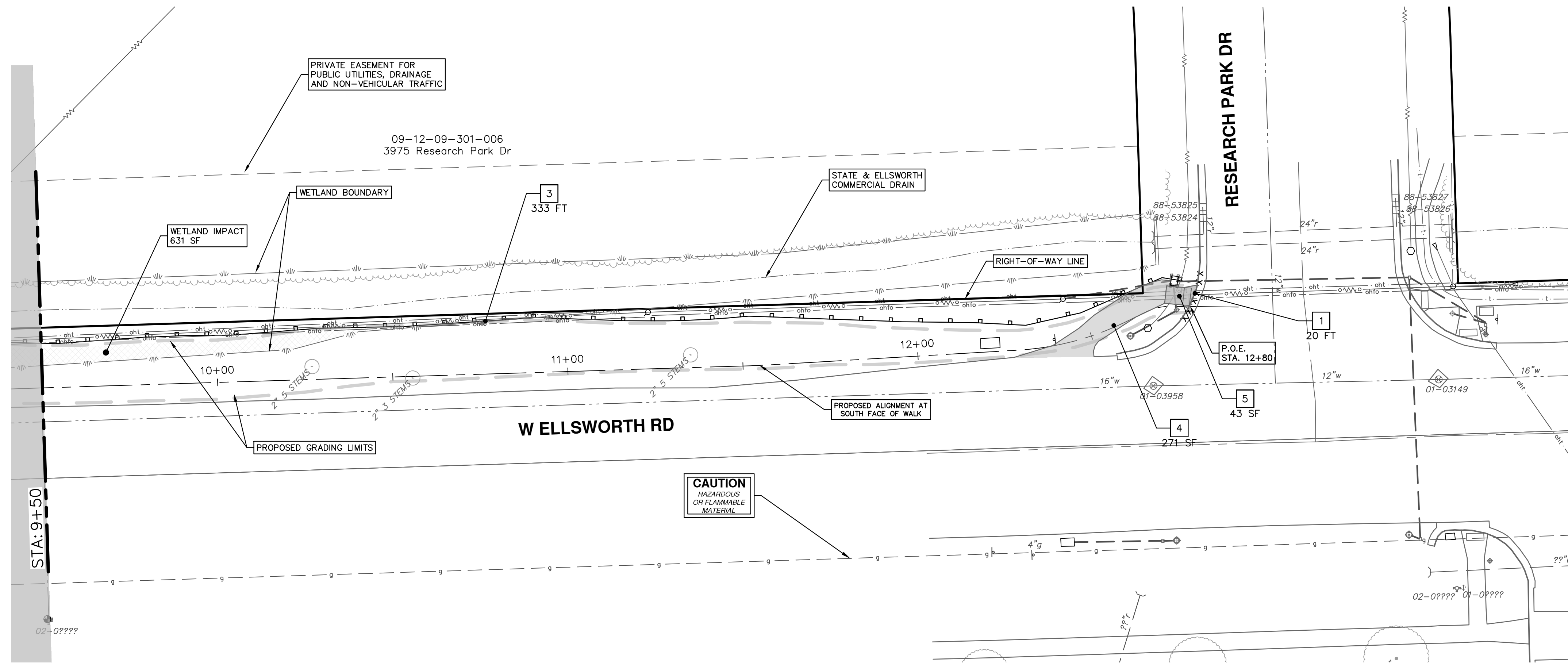
CITY OF ANN ARBOR  
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**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
REMOVALS - WEST OF RESEARCH PARK DR.

P.O.B. STA. 0+00 - STA. 9+50  
SCALE: 1" = 20'  
DRAWING No. 2022007-4

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Rem.dwg Dwg Created: 21-Jun-22 - \_a2 standard bw.stb - Plot Date: 22-Jun-22



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	FINAL PLANS	6/22/22	KB/DF	TB
00	REVIEW SET	5/20/22	KB/DF	TB

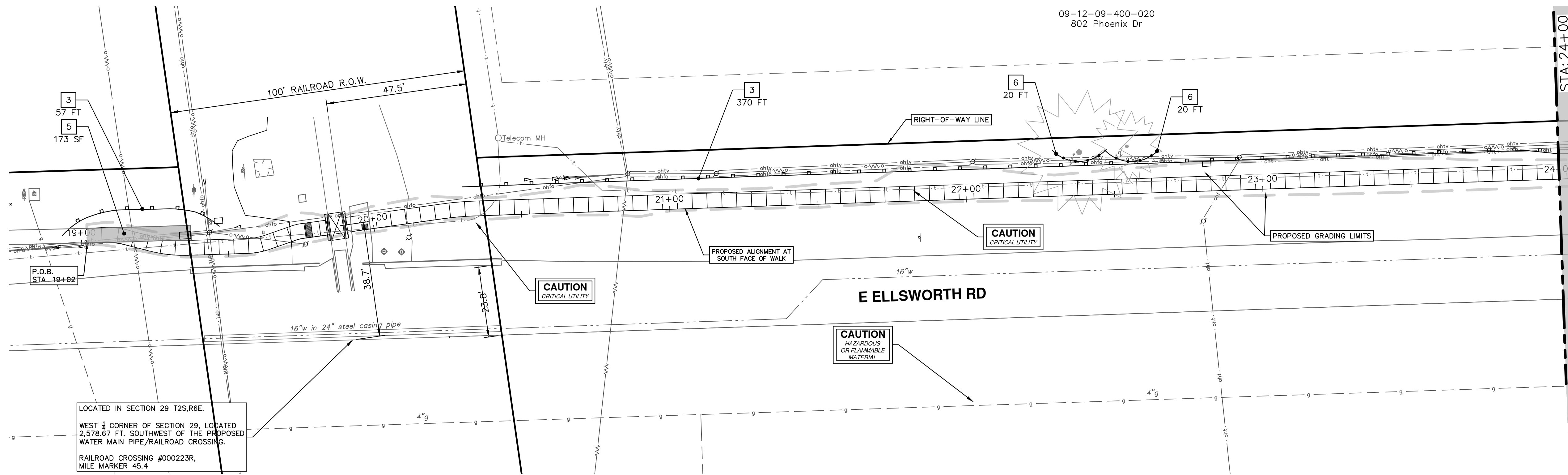
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PUBLIC SERVICES  
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ANN ARBOR MI 48106-8647  
www.a3gov.org



**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
 REMOVALS - WEST OF RESEARCH PARK DR.

SCALE: 1" = 20'  
 DRAWING No. 2022007-5

R:\2022007 Ellsworth SW Gap\_Plan Production\2022007Rem1.dwg Dwg Created: 21-Jun-22 - \_a2 standard bw.stb - Plot Date: 22-Jun-22



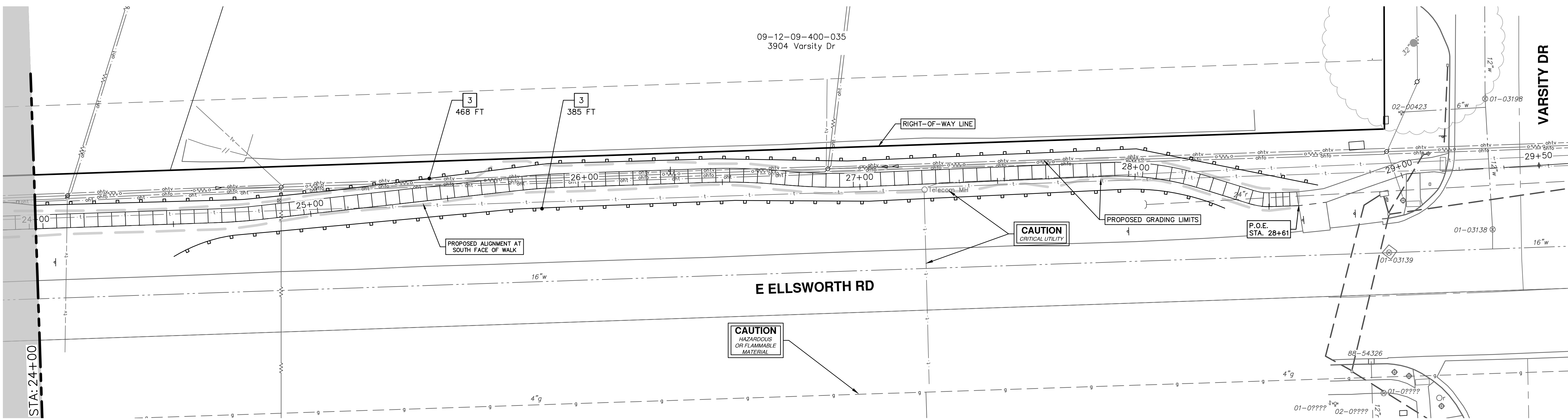
LOCATED IN SECTION 29 T2S,R6E.  
WEST 1/4 CORNER OF SECTION 29, LOCATED  
2,578.67 FT. SOUTHWEST OF THE PROPOSED  
WATER MAIN PIPE/RAILROAD CROSSING.  
RAILROAD CROSSING #000223R,  
MILE MARKER 45.4

09-12-09-400-020  
802 Phoenix Dr

STA: 24+00

REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS



09-12-09-400-035  
3904 Varsity Dr

STA: 24+00

Varsity Dr



REV.	DATE	DESCRIPTION
01	6/22/22	FINAL PLANS
00	5/20/22	REVIEW SET

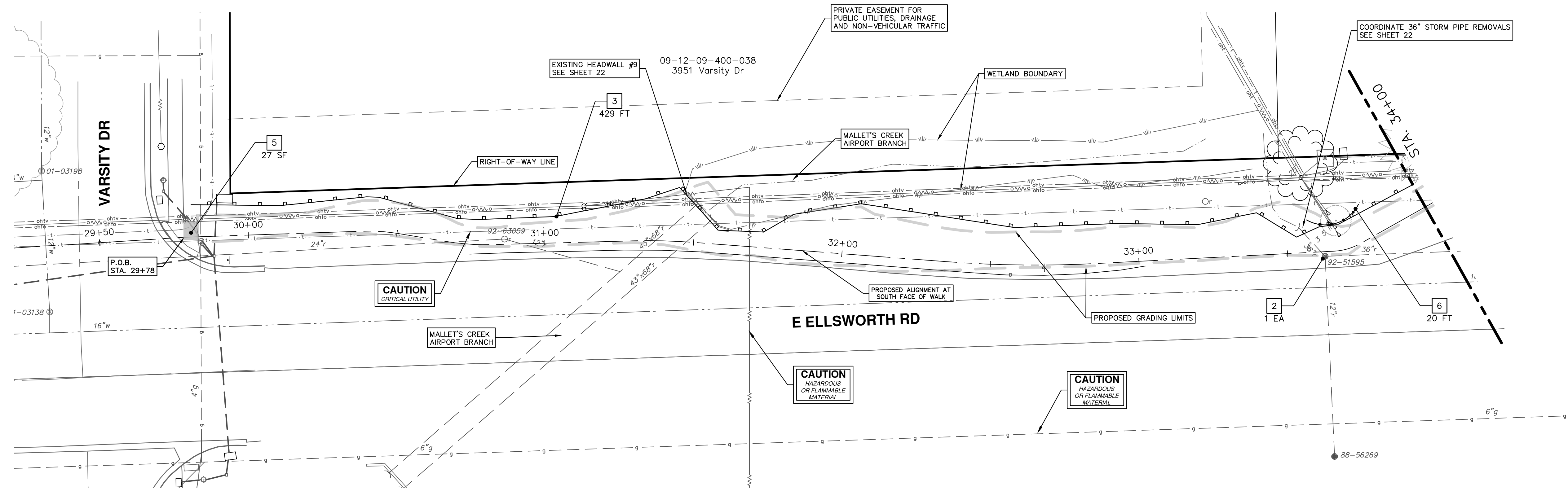
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ANN ARBOR MI 48107-8647  
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP ELIMINATION  
REMOVALS - EAST OF RAIL ROAD  
P.O.B. STA. 19+02 - P.O.E. STA. 28+61

SCALE: 1" = 20'  
DRAWING No. 2022007-6

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Rem2.dwg Dwg Created: 21-Jun-22 -- \_a2 standard bw.stb -- Plot Date: 22-Jun-22



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS



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www.a2gov.org



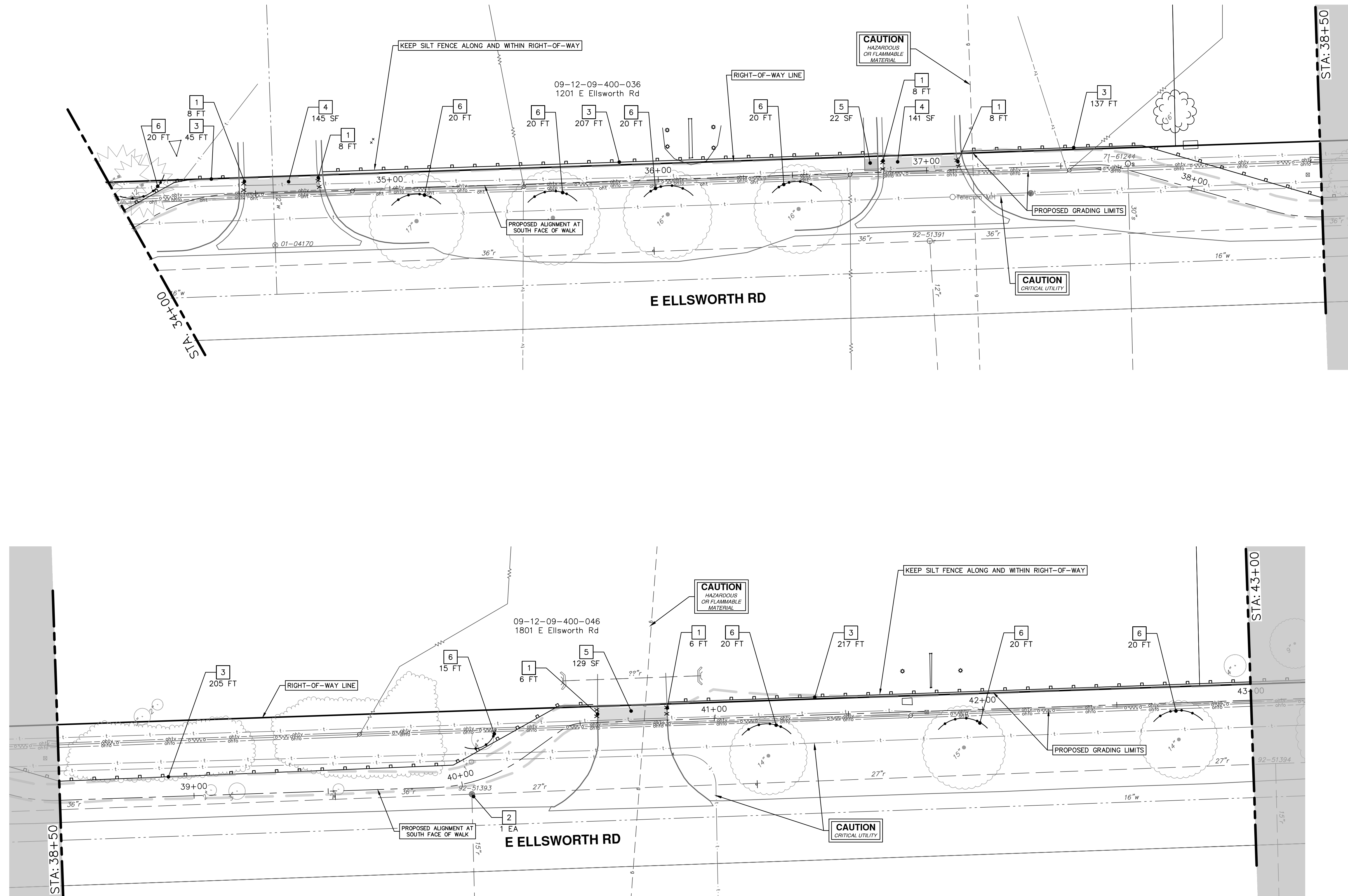
**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
REMOVALS - VARSITY DR. TO STONE SCHOOL RD.  
P.O.B. STA. 29+78 - STA. 34+00

SCALE: 1" = 20'  
DRAWING No. 2022007-7

SHEET No. 7 OF 23

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	FINAL PLANS	6/22/22	KB/DF	TB
00	REVIEW SET	5/20/22	KB/DF	TB

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Rem3.dwg Dwg Created: 21-Jun-22 - \_a2 standard bw.stb - Plot Date: 22-Jun-22



REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS



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PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-1667  
www.a3gov.org



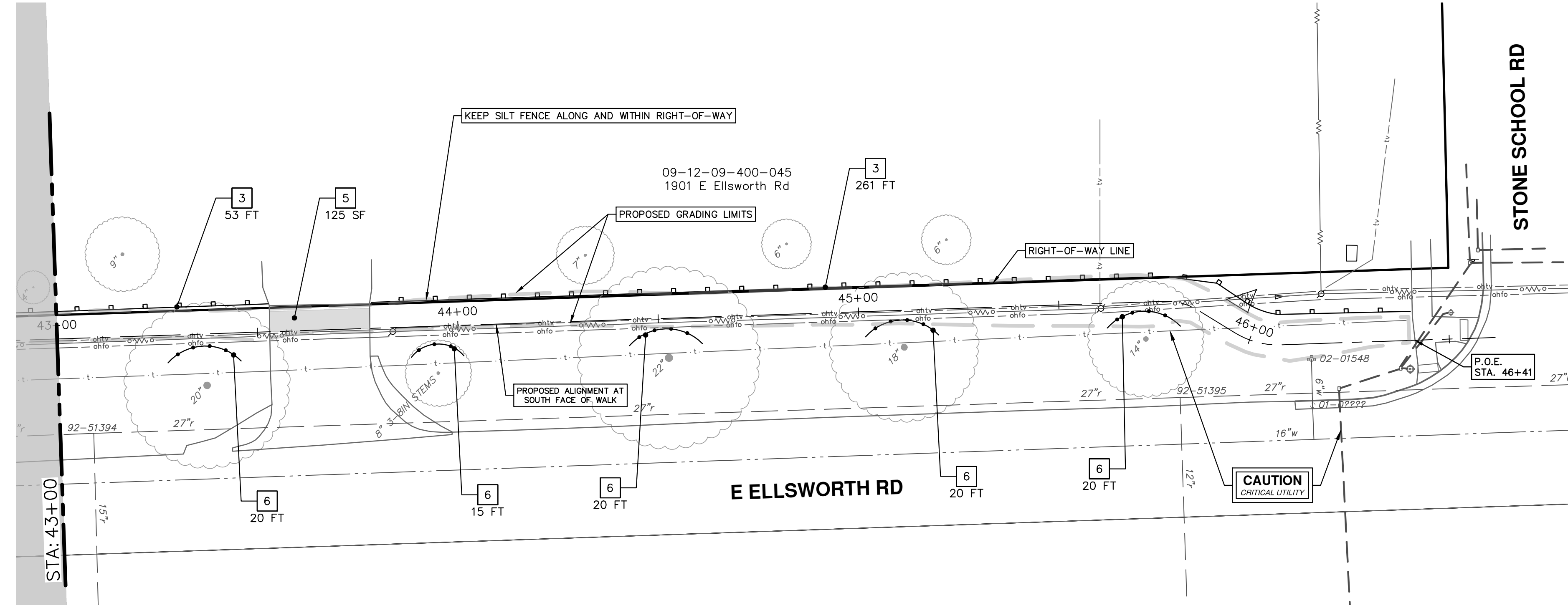
**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
REMOVALS - VARSITY DR. TO STONE SCHOOL RD.

SCALE: 1" = 20'  
DRAWING No. 2022007-8

REV.	DATE	DESCRIPTION
01	6/22/22	FINAL PLANS
00	5/20/22	REVIEW SET

TB	DATE	DRAWN	CHECKED
TB	6/22/22	KB/DF	KB/DF
TB	5/20/22	KB/DF	KB/DF





REMOVAL KEY	
KEY	DESCRIPTION
1	REMOVE CONCRETE CURB AND GUTTER - ANY THICKNESS*
2	EROSION CONTROL, INLET PROTECTION
3	EROSION CONTROL, SILT FENCE
4	REMOVE HMA PAVEMENT
5	REMOVE CONCRETE SIDEWALK OR DRIVE - ANY THICKNESS
6	PROTECTIVE FENCING

\* SAWCUT FULL DEPTH AT REMOVAL LIMITS

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**


REMOVALS - VARSITY DR. TO STONE SCHOOL RD.

SCALE: 1" = 20'

DRAWING No. 2022007-9

SHEET No. 9 OF 23

STA. 43+00 - P.O.E. STA. 46+41

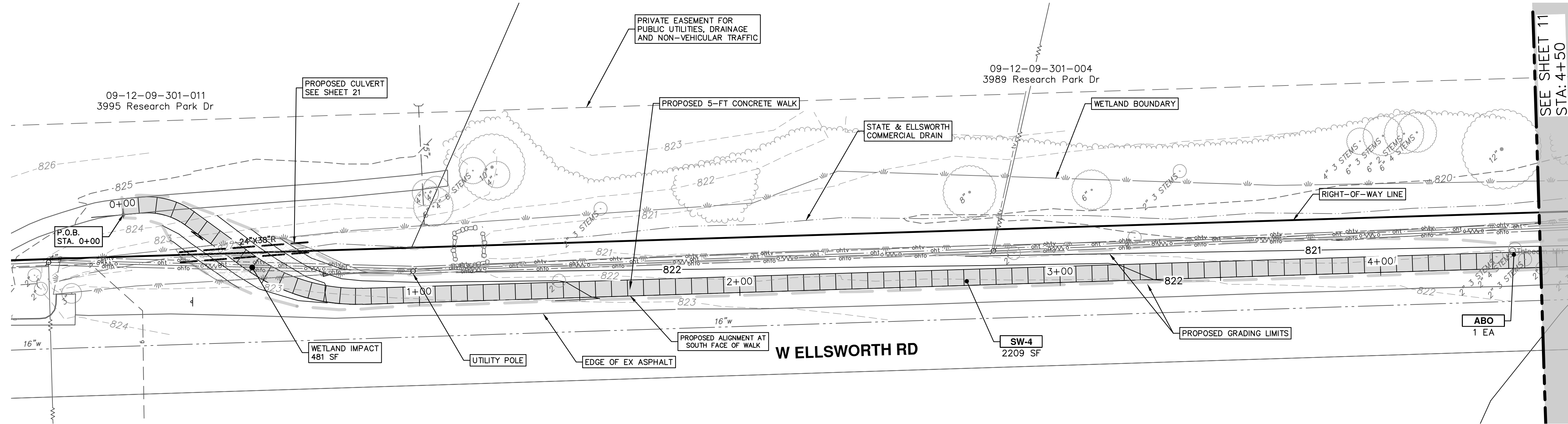


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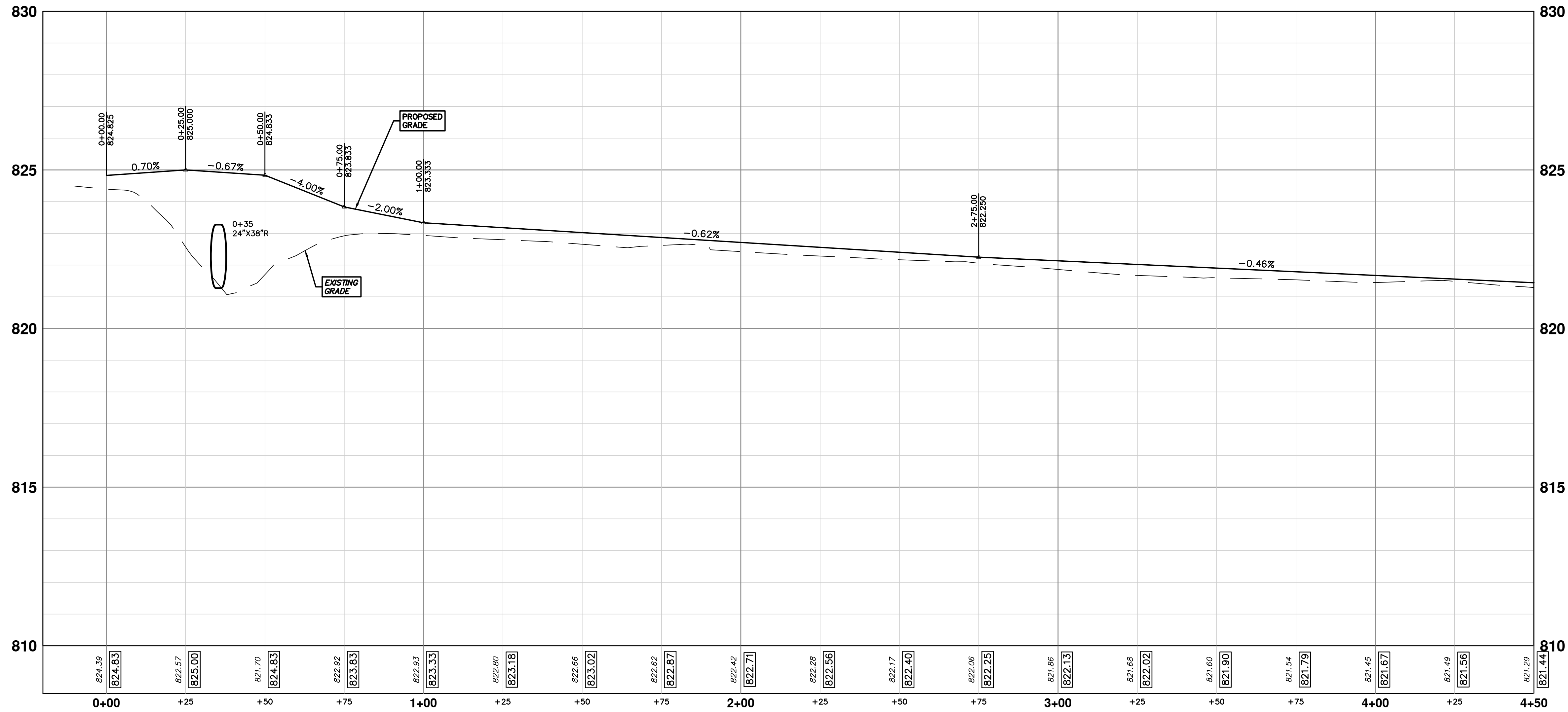
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00	REVIEW SET	5/20/22	KB/DF	TB	
	REV.		DATE	DRAWN	CHECKED

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

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Prwalk.dwg Dwg Created: 21-Jun-22 - \_o2 standard bw.sib - Plot Date: 22-Jun-22



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



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

01 FINAL PLANS  
00 REVIEW SET

6/22/22  
5/20/22

KB/DF  
KB/DF

TB  
TB

CHECKED  
DRAWN

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

PROPOSED SIDEWALK - WEST OF RESEARCH PARK DR.

P.O.B. STA. 0+00 - STA. 4+50

SCALE PLAN: 1" = 20'

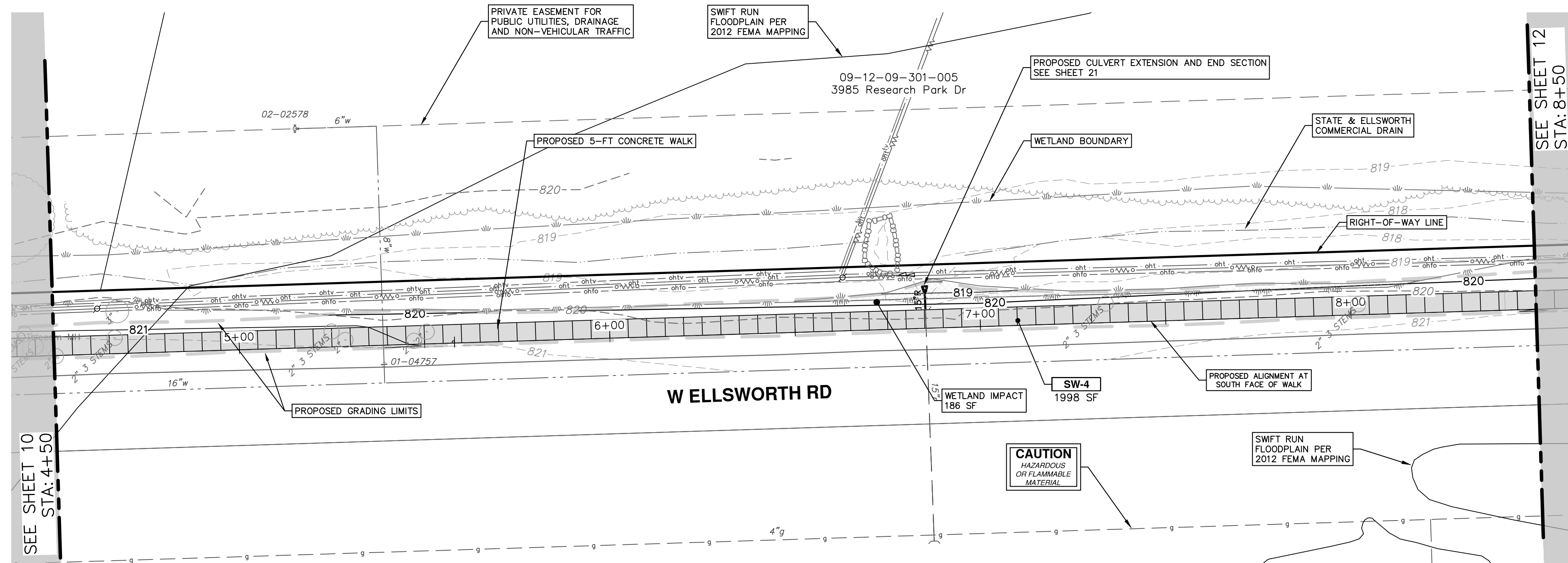
PROFILE: 1" = 2'

DRAWING No. 2022007-10

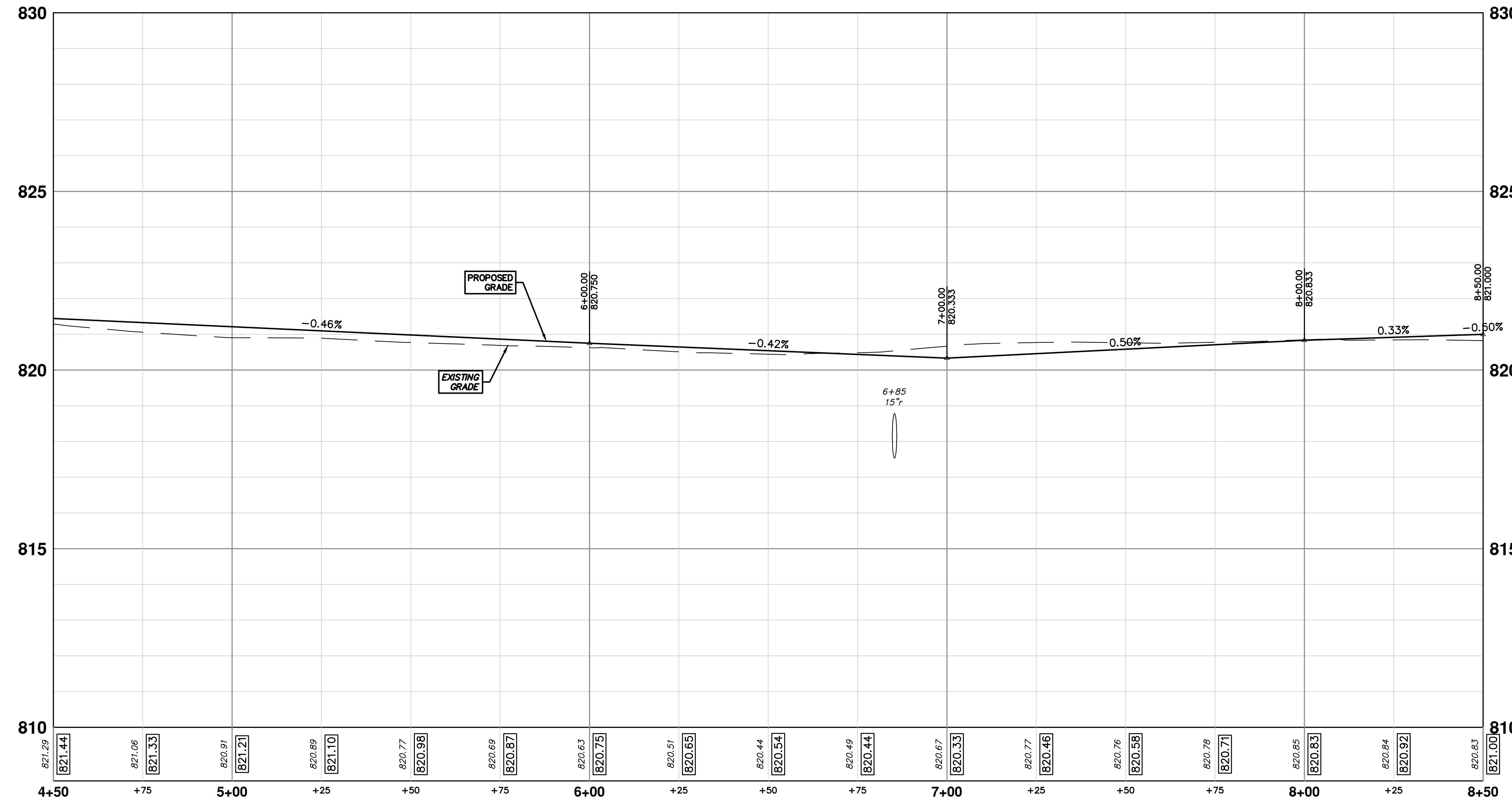
SHEET No. 10 OF 23

DATE: 6/22/22

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Prwalk.dwg Dwg Created: 21-Jun-22 - \_o2\_standard bw.sib - Plot Date: 22-Jun-22



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



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

01 FINAL PLANS 6/22/22 KB/DF  
00 REVIEW SET 5/20/22 KB/DF

DESCRIPTION  
REV. CHECKED

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
 PROPOSED SIDEWALK - WEST OF RESEARCH PARK DR.

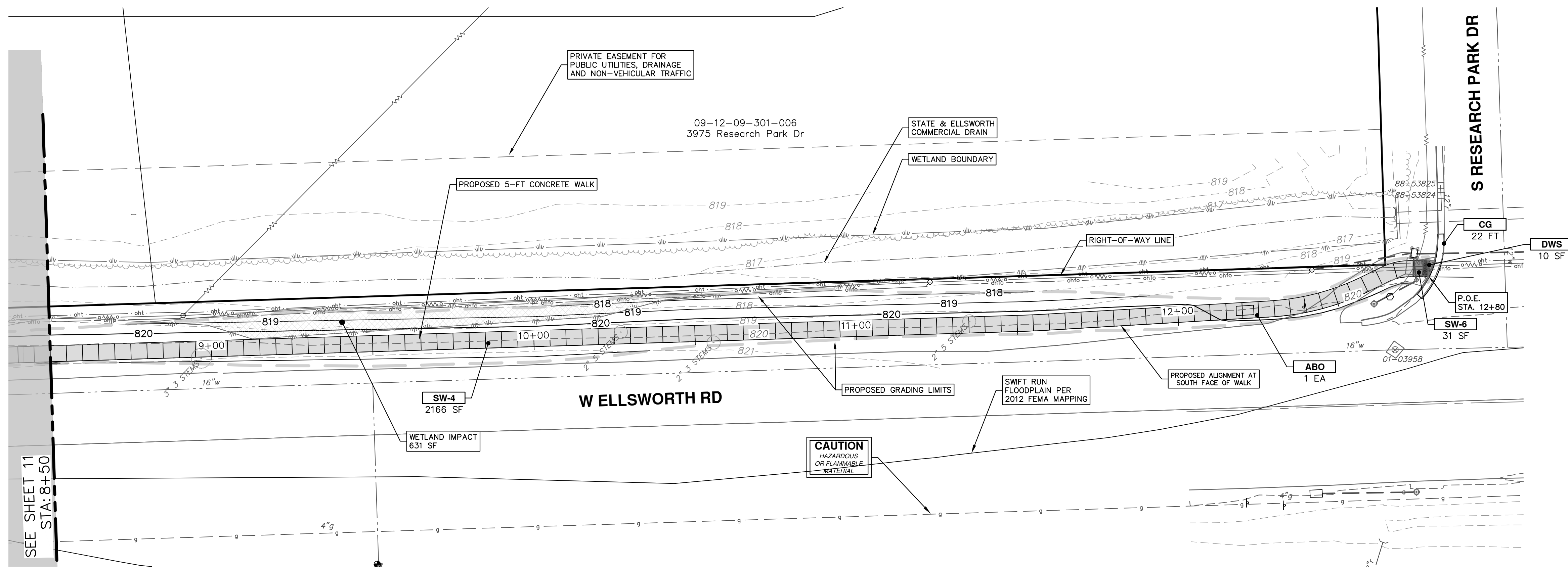
SHEET No. 11 OF 23

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

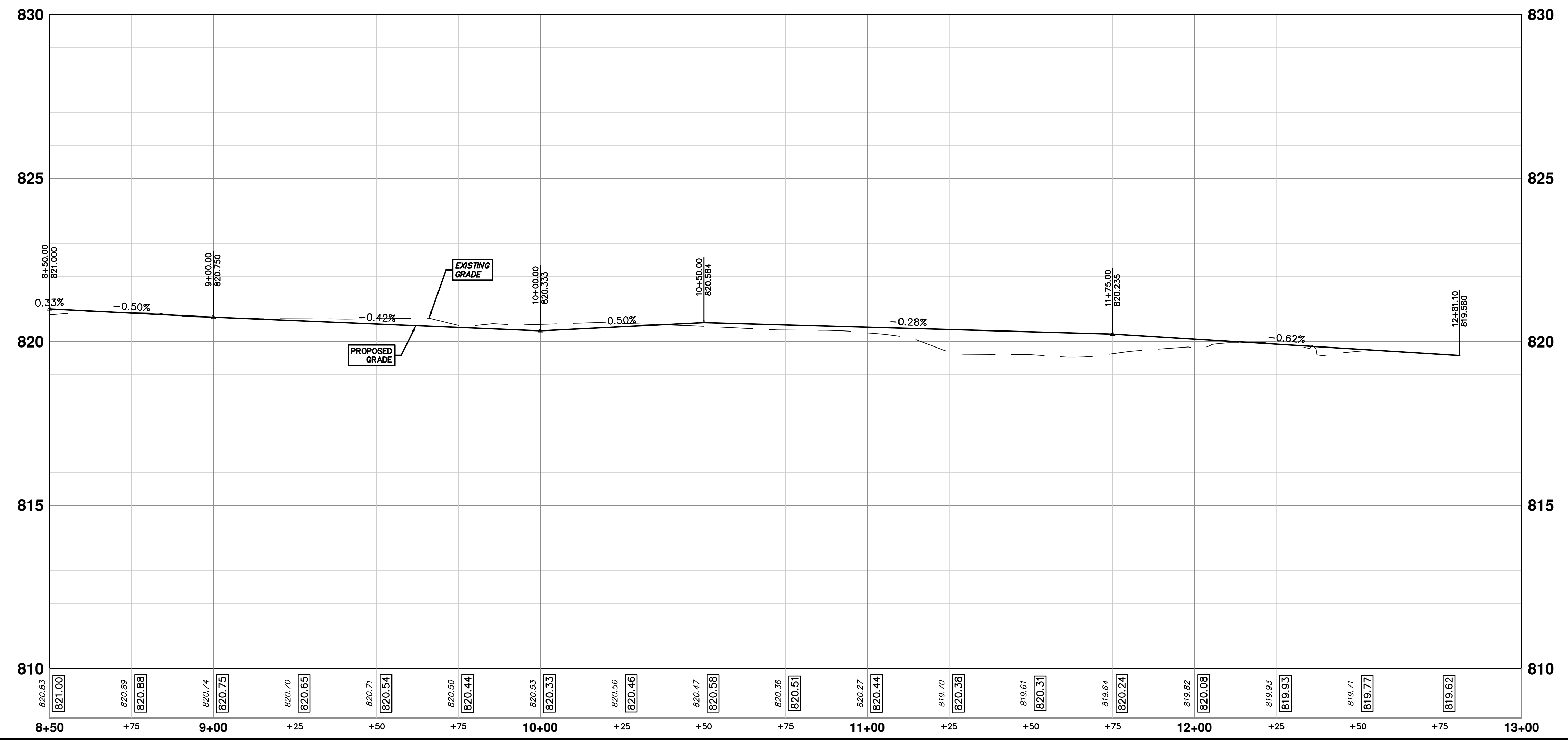
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STA. 4+50 - STA. 8+50

R:\2022007 Ellsworth SW Gap\Plan Production\2022007Prwalk.dwg Dwg Created: 21-Jun-22 - \_o2\_standard bw.sib - Plot Date: 22-Jun-22



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



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

DATE: 6/22/22  
DRAWN: KB/DF  
CHECKED: TB

DATE: 5/20/22  
DRAWN: KB/DF  
CHECKED: TB

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

PROPOSED SIDEWALK - WEST OF RESEARCH PARK DR.

STA. 8+50 - P.O.E. STA. 12+80

SHEET No. **12 OF 23**

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

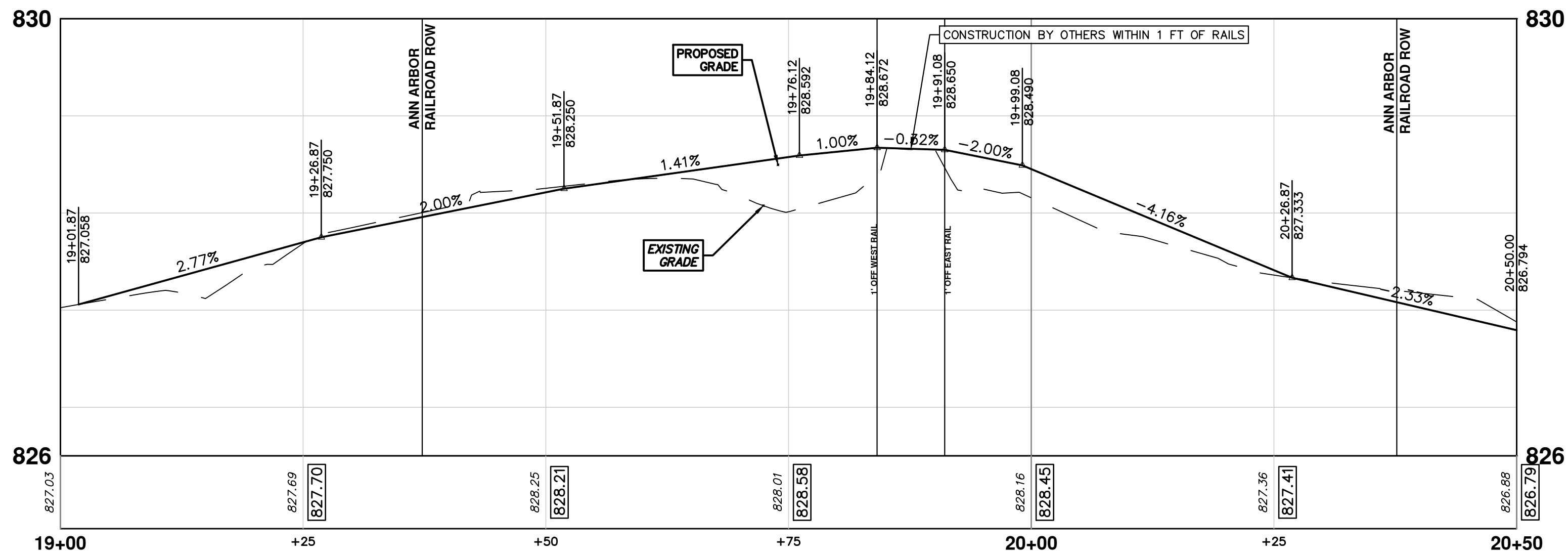
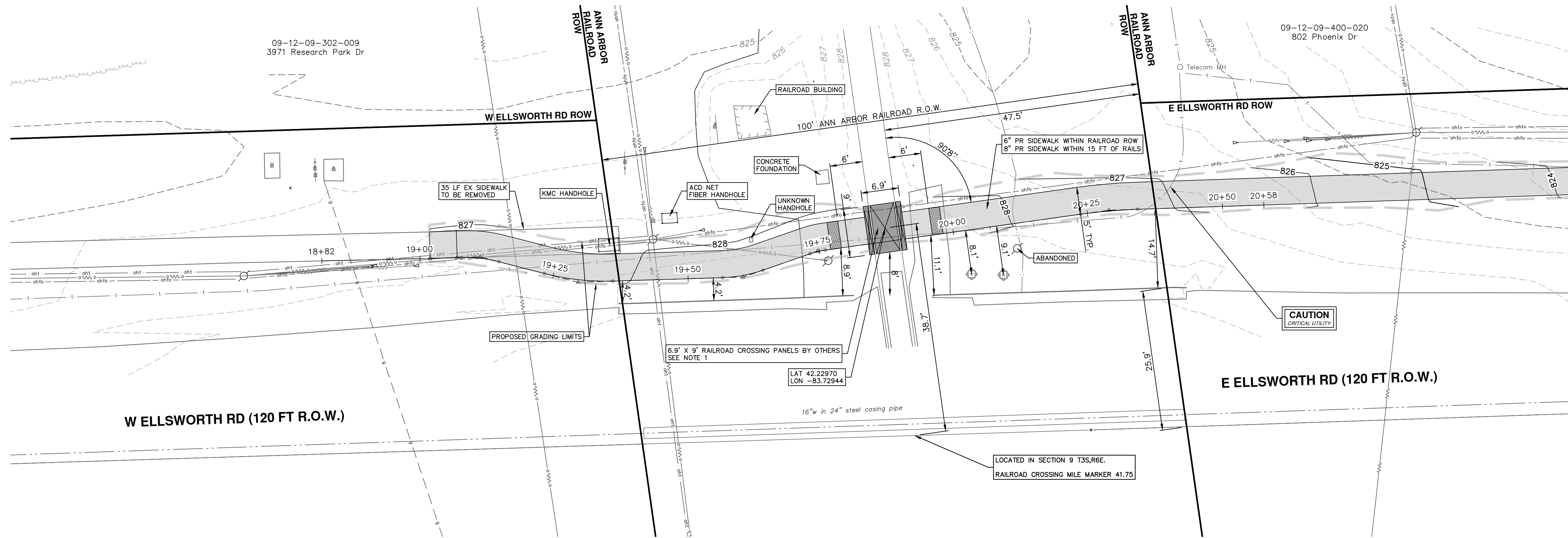
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REV. DESCRIPTION

01 FINAL PLANS  
00 REVIEW SET


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R:\2022007 Ellsworth SW Gap\Source Drawings\Align-Corridor\2022007 RR\ing Waco.dwg Dwg Created: 3-Jun-22 - Plot Date: 22-Jun-22




**NOTES:**

1: THE ANN ARBOR RAILROAD (AARR) WILL PROVIDE AND PLACE THE CROSSING MATERIAL OVER THE RAILROAD TRACKS. THE AARR SHALL ALSO PROVIDE AND PLACE A PEDESTAL MOUNTED PEDESTRIAN SIGNALS AND RR CROSSING SIGNS (W10-1) AT THE CROSSING FOR THE PROPOSED SIDEWALK. THE CONTRACTOR SHALL COORDINATE ALL SIDEWALK CONSTRUCTION WITH THE RAILROAD SO THAT THE WORK IS PERFORMED IN A LOGICAL MANNER WITHOUT DISRUPTION TO THE AARR SERVICE, SIGNAL WIRES, OR ANY OTHER RELATED FEATURE AT OR NEAR THE SITE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS TO ACCOUNT FOR THE AARR'S WORK WITH RESPECT TO THE INSTALLATION OF THE CROSSING MATERIAL, THE PEDESTAL MOUNTED PEDESTRIAN SIGNALS, AND SIGNAGE SO THAT THEIR CONSTRUCTION OPERATIONS ARE NOT DELAYED. PAYMENT FOR COORDINATION WITH THE AARR INCLUDED IN "MACHINE GRADING, MODIFIED, ELLSWORTH, SIDEWALK".



Know what's below.  
Call Before you dig.

01	FINAL PLANS	KB/DF	TB	6/22/22	KB/DF	TB			
00	REVIEW SET	KB/DF	TB	5/20/22	KB/DF	TB			
	REV.			DATE					



**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

RAILROAD CROSSING WATCO

SHEET No. 13 OF 23

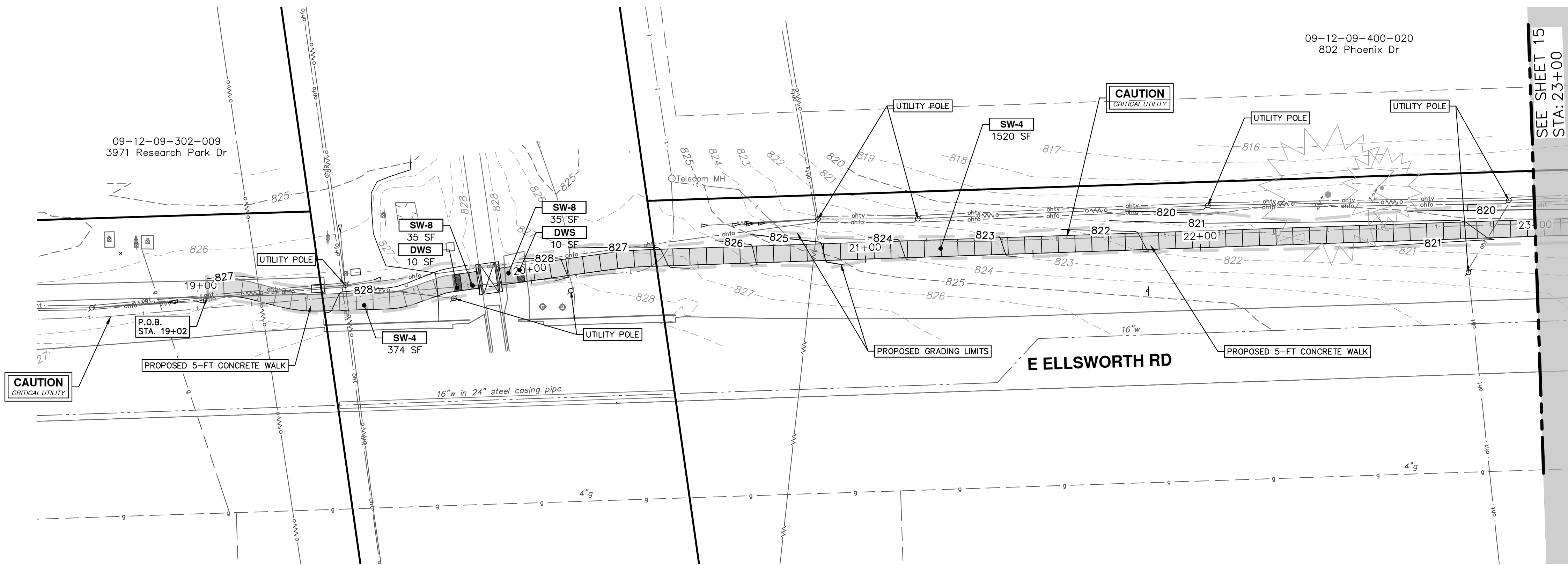
SCALE PLAN: 1" = 10'

PROFILE: 1" = 1'

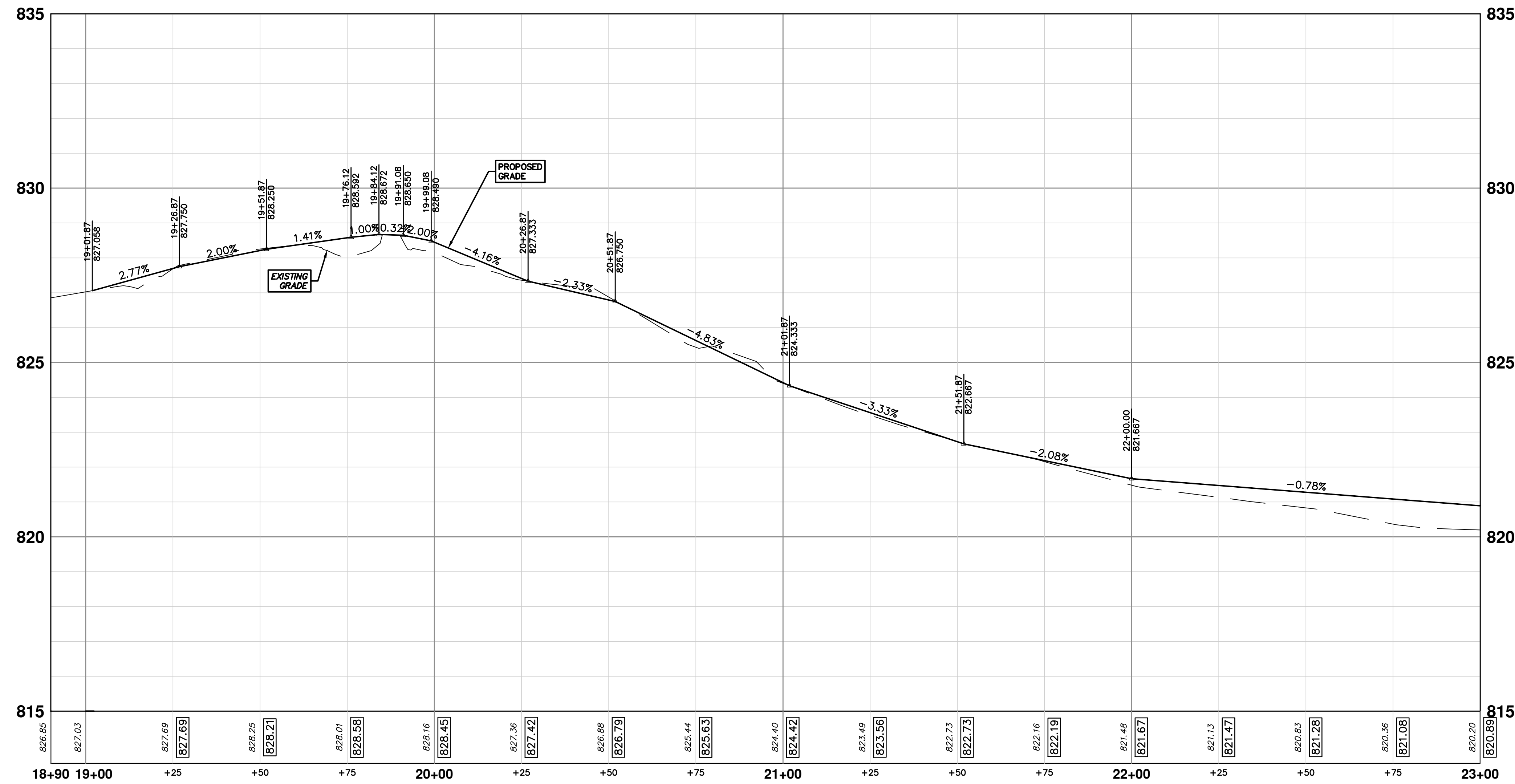
DRAWING No. 2022007-13

DESCRIPTION

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CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC. AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



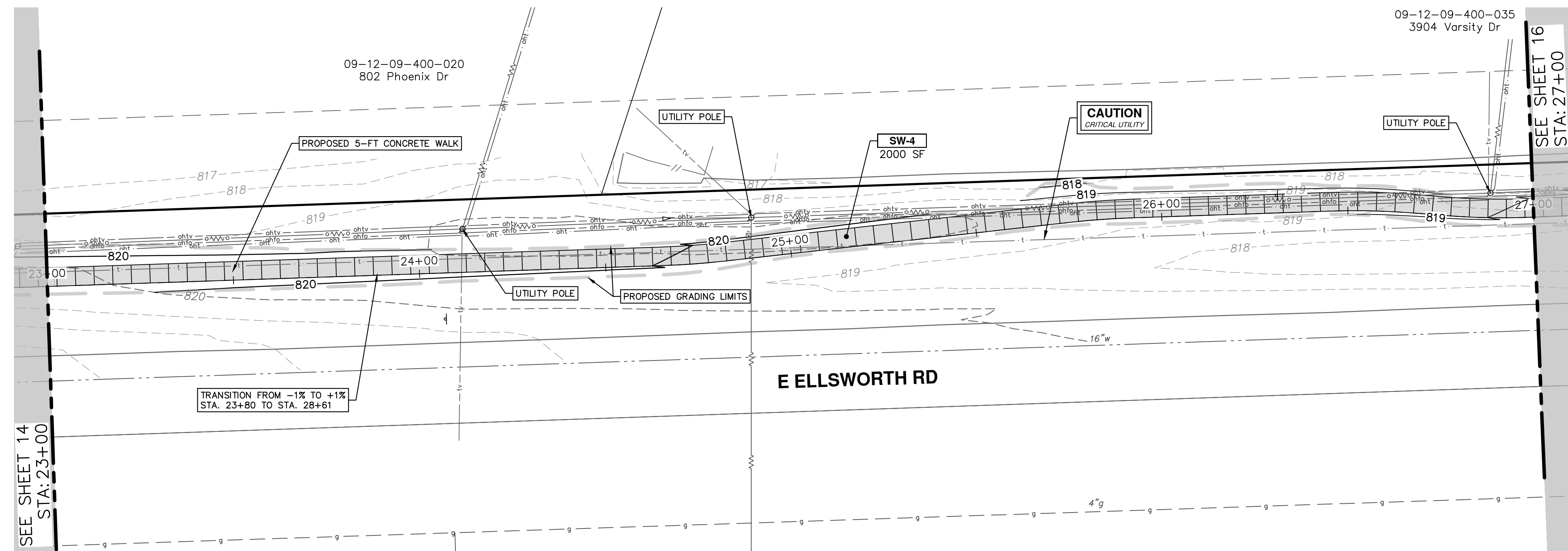
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ANN ARBOR, MI 48106-1667  
www.a2gov.org

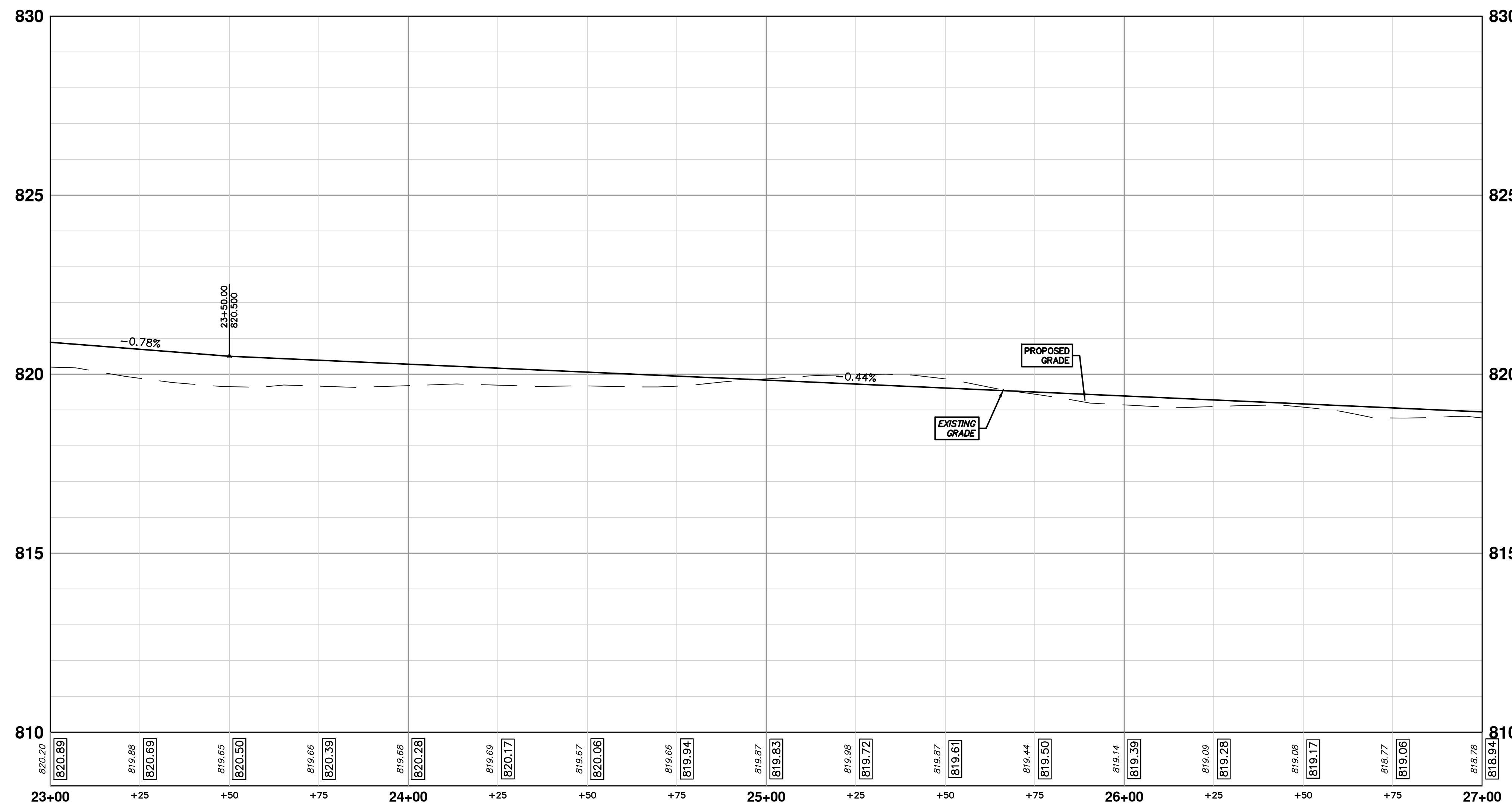


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP ELIMINATION  
PROPOSED SIDEWALK - EAST OF RAIL ROAD  
P.O.B. STA. 19+02 - STA. 23+00

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. 2022007-14



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



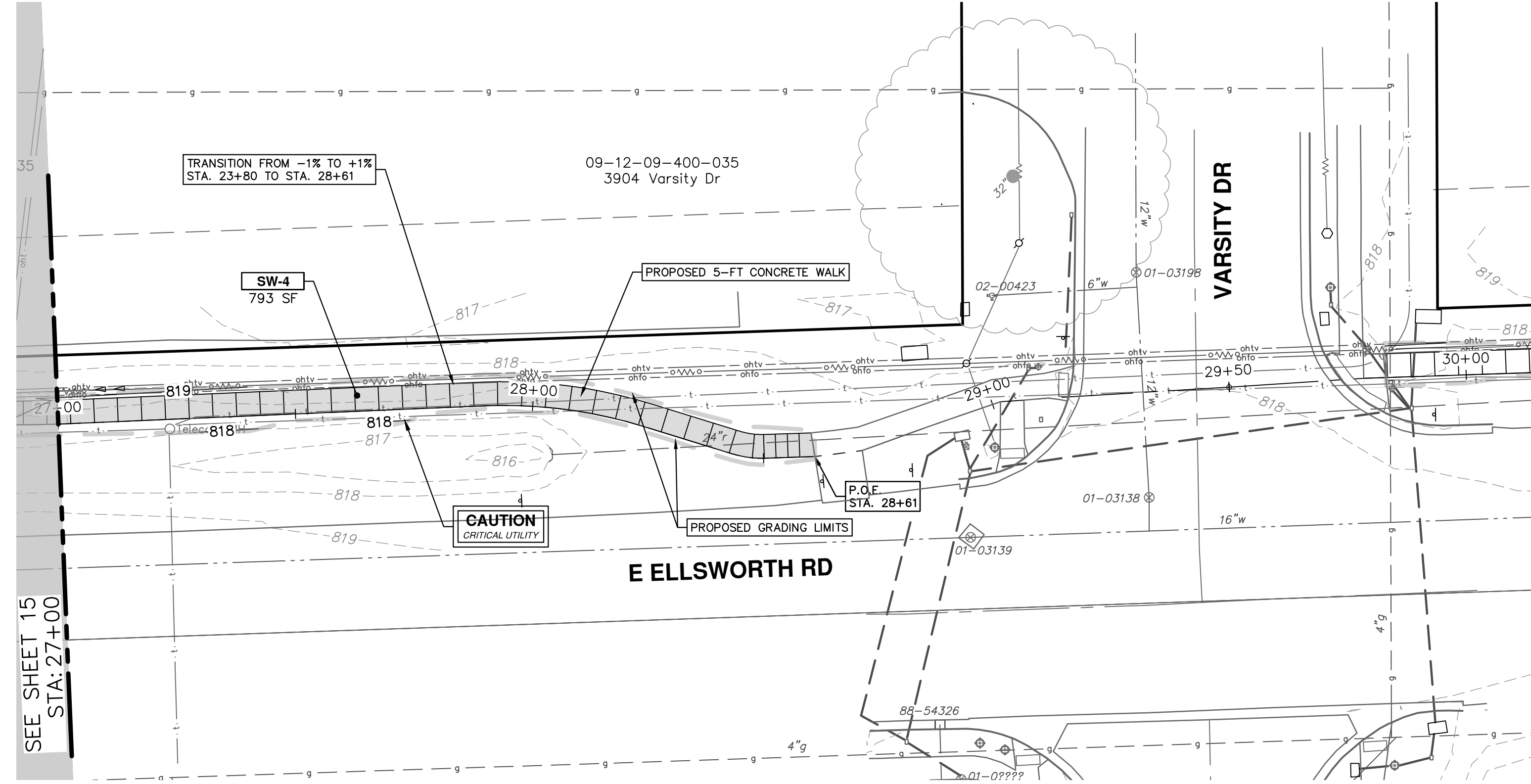
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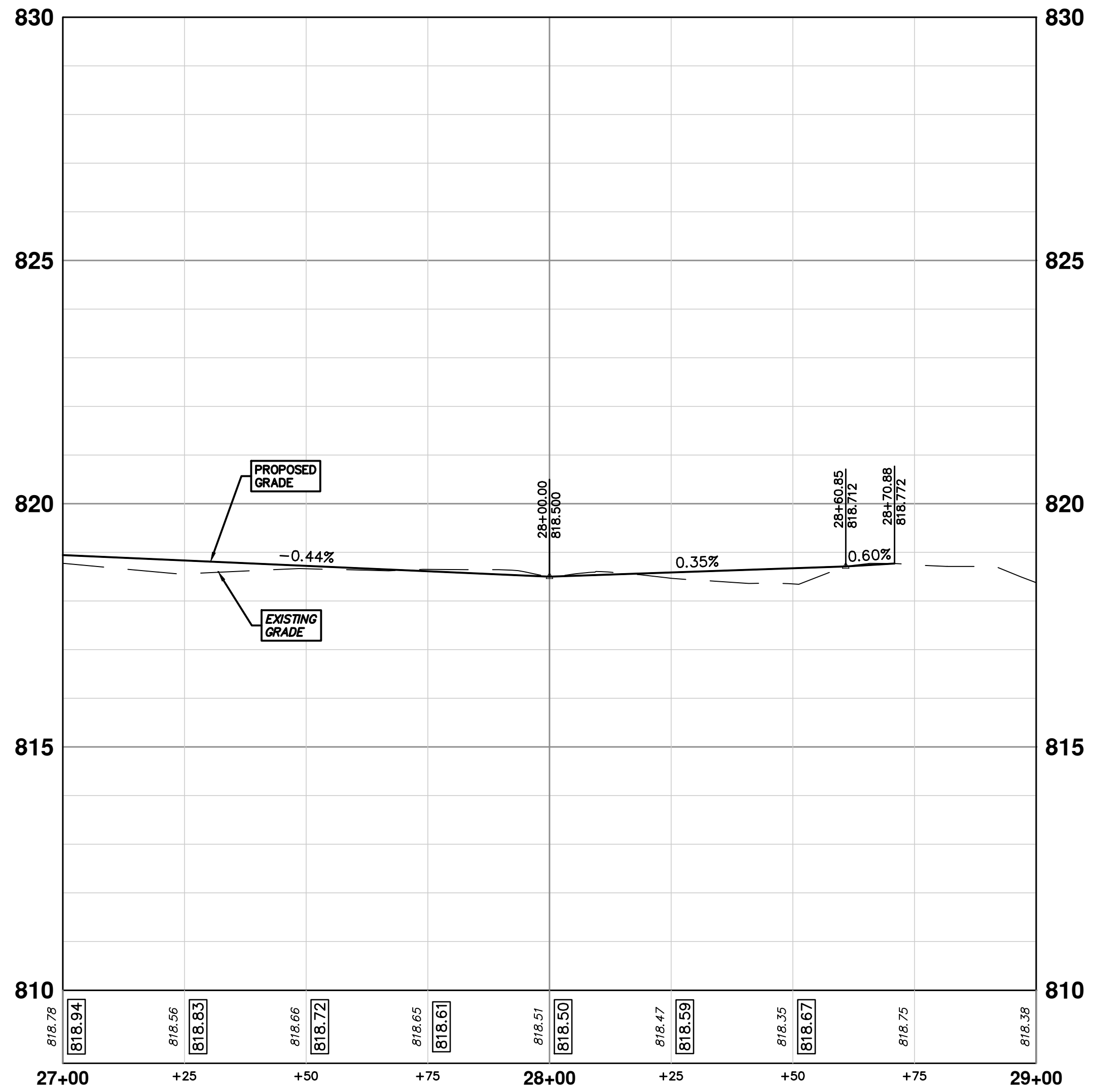


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP ELIMINATION  
PROPOSED SIDEWALK - EAST OF RAIL ROAD  
STA. 23+00 - STA. 27+00

SHEET No. 15 OF 23  
SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. 2022007-15



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

PROPOSED SIDEWALK - EAST OF RAIL ROAD

STA. 27+00 - P.O.E. STA. 28+61

SHEET No. 16 OF 23

SCALE PLAN: 1" = 20'

PROFILE: 1" = 2'

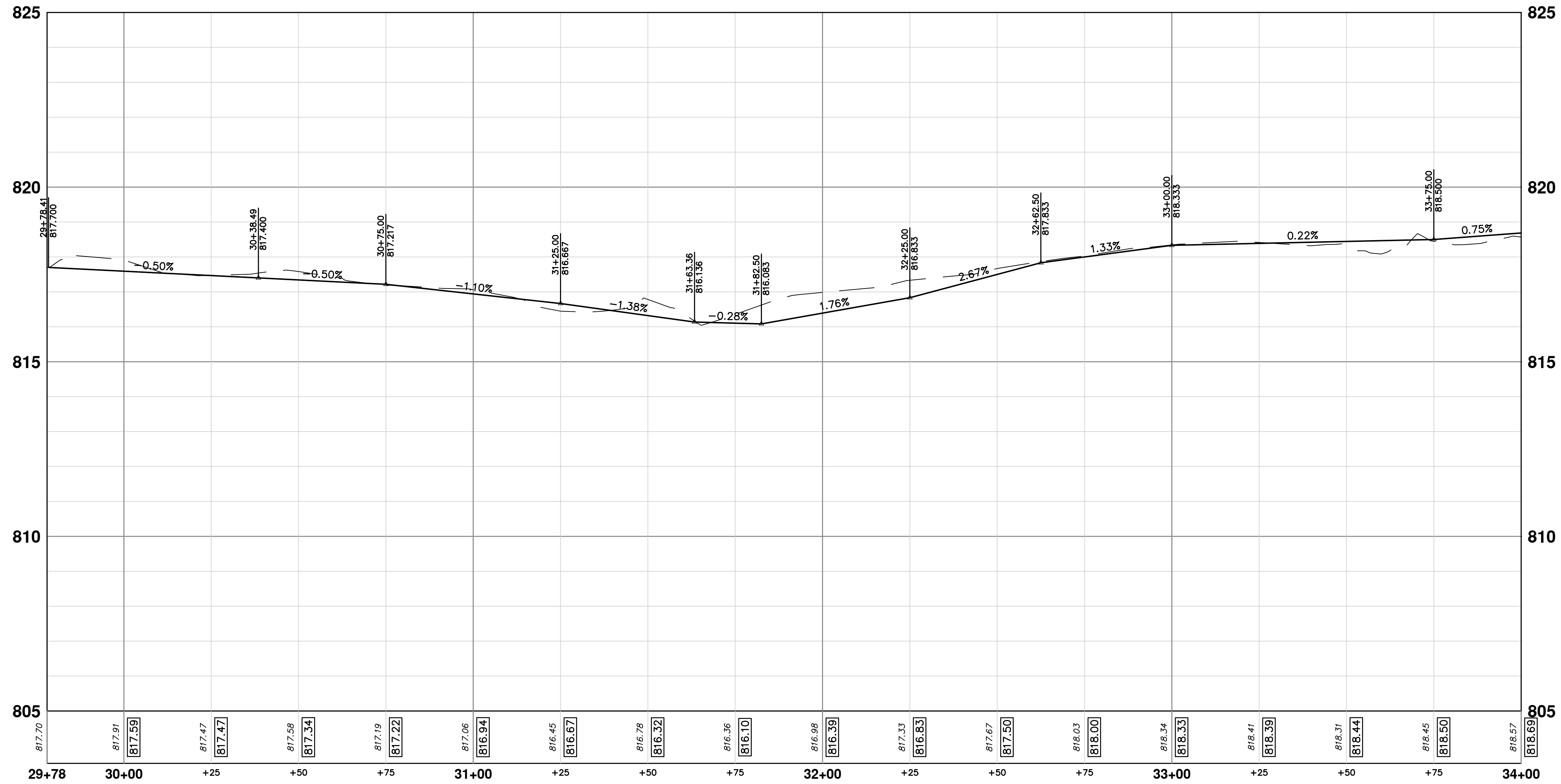
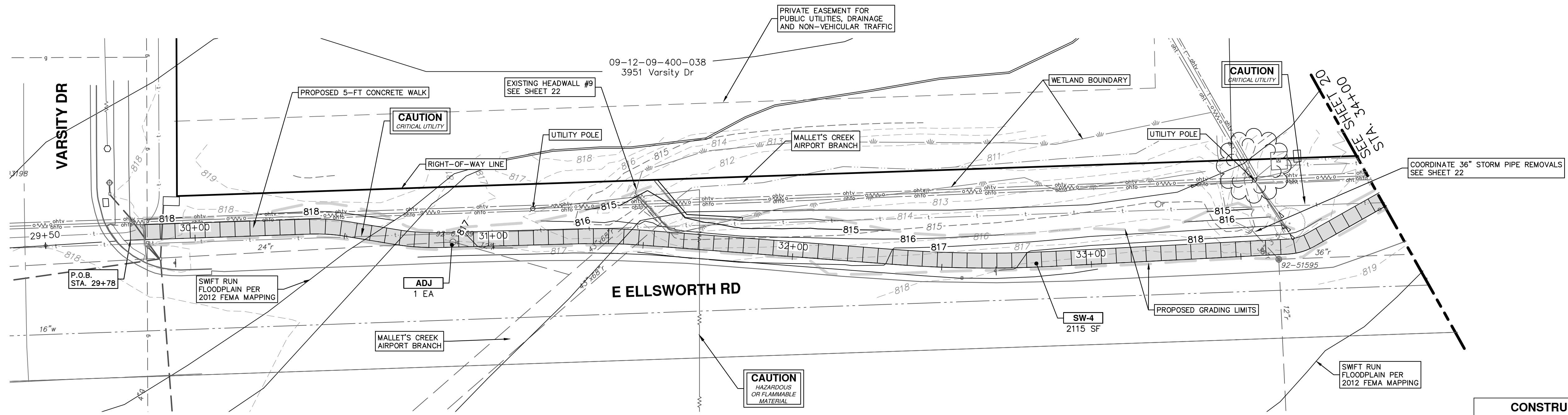
DRAWING No. 2022007-16

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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	FINAL PLANS	6/22/22	KB/DF	TB
00	REVIEW SET	5/20/22	KB/DF	TB

Know what's below.  
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CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS

Know what's below. Call Before you dig.

01 FINAL PLANS 6/22/22 KB/DF TB

00 REVIEW SET 5/20/22 KB/DF TB

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.

P.O.B. STA. 29+78 - STA. 34+00

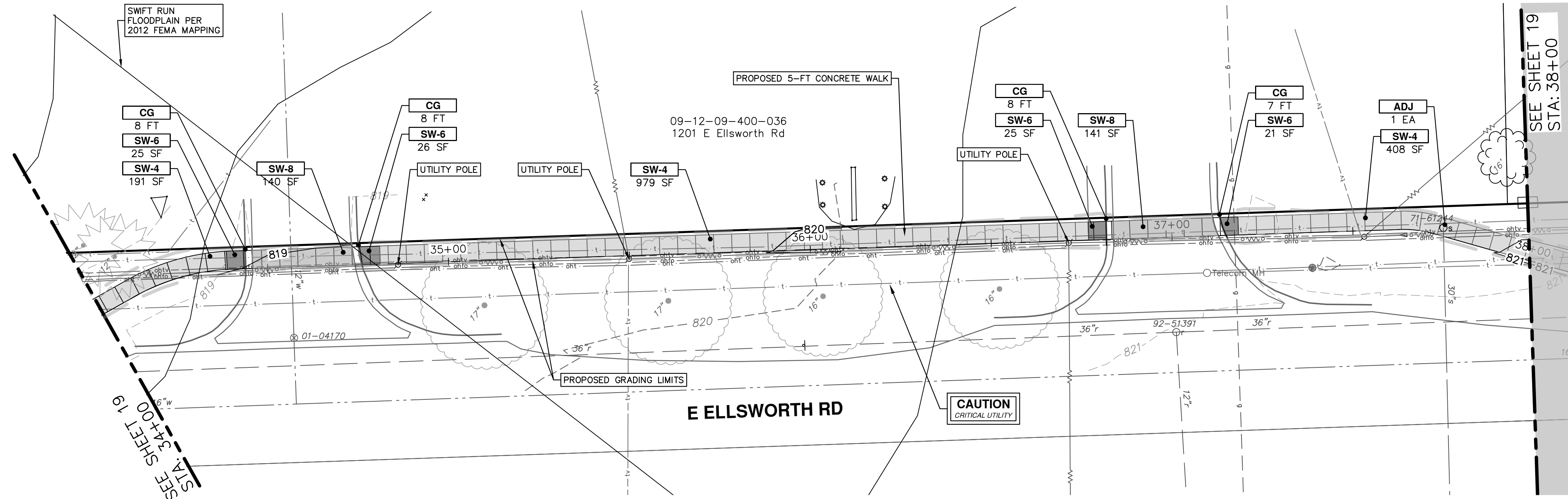
SCALE PLAN: 1" = 20'

PROFILE: 1" = 2'

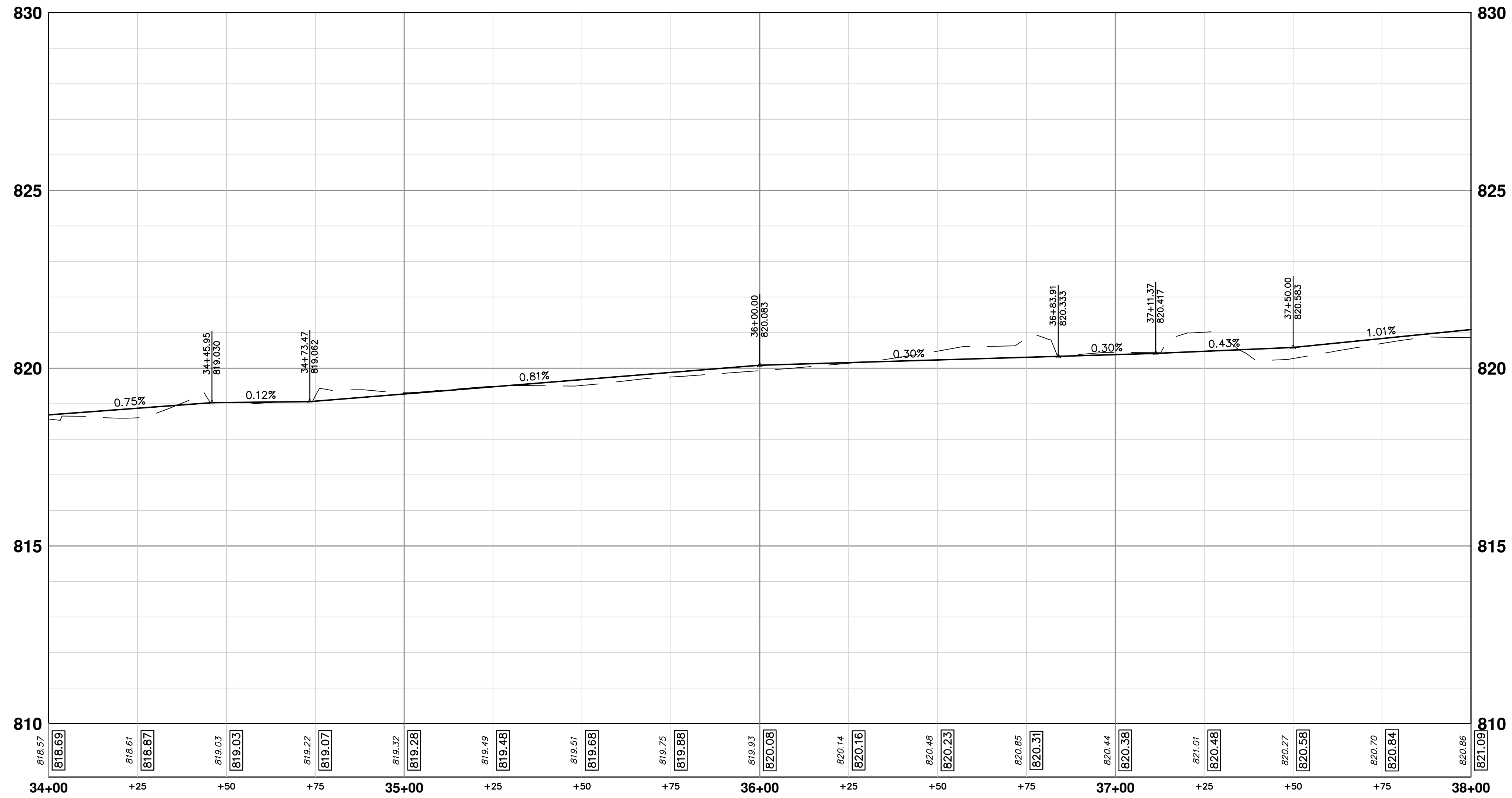
DRAWING No. 2022007-17

SHEET No. 17 OF 23

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ANN ARBOR MI 48106-8647  
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CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



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

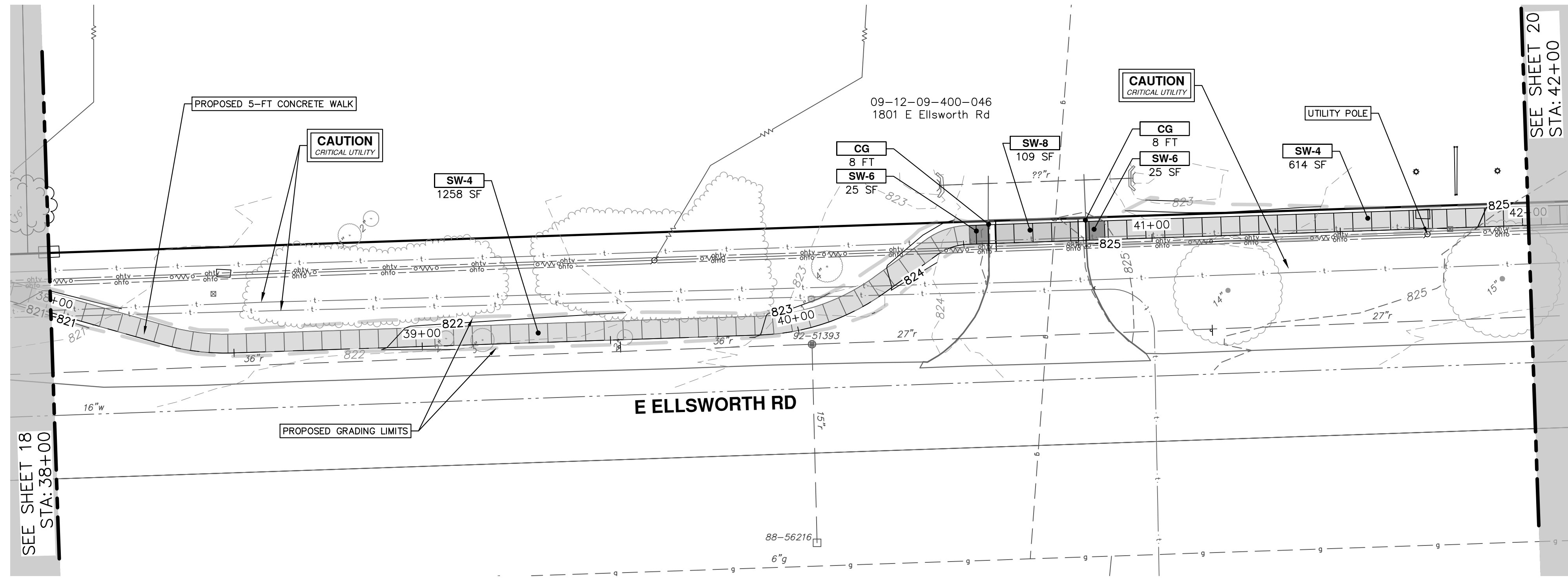
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00	REVIEW SET	5/20/22	KB/DF	TB	DRAWN
	REV.		DATE		

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
 PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.  
 STA. 34+00 - STA. 38+00

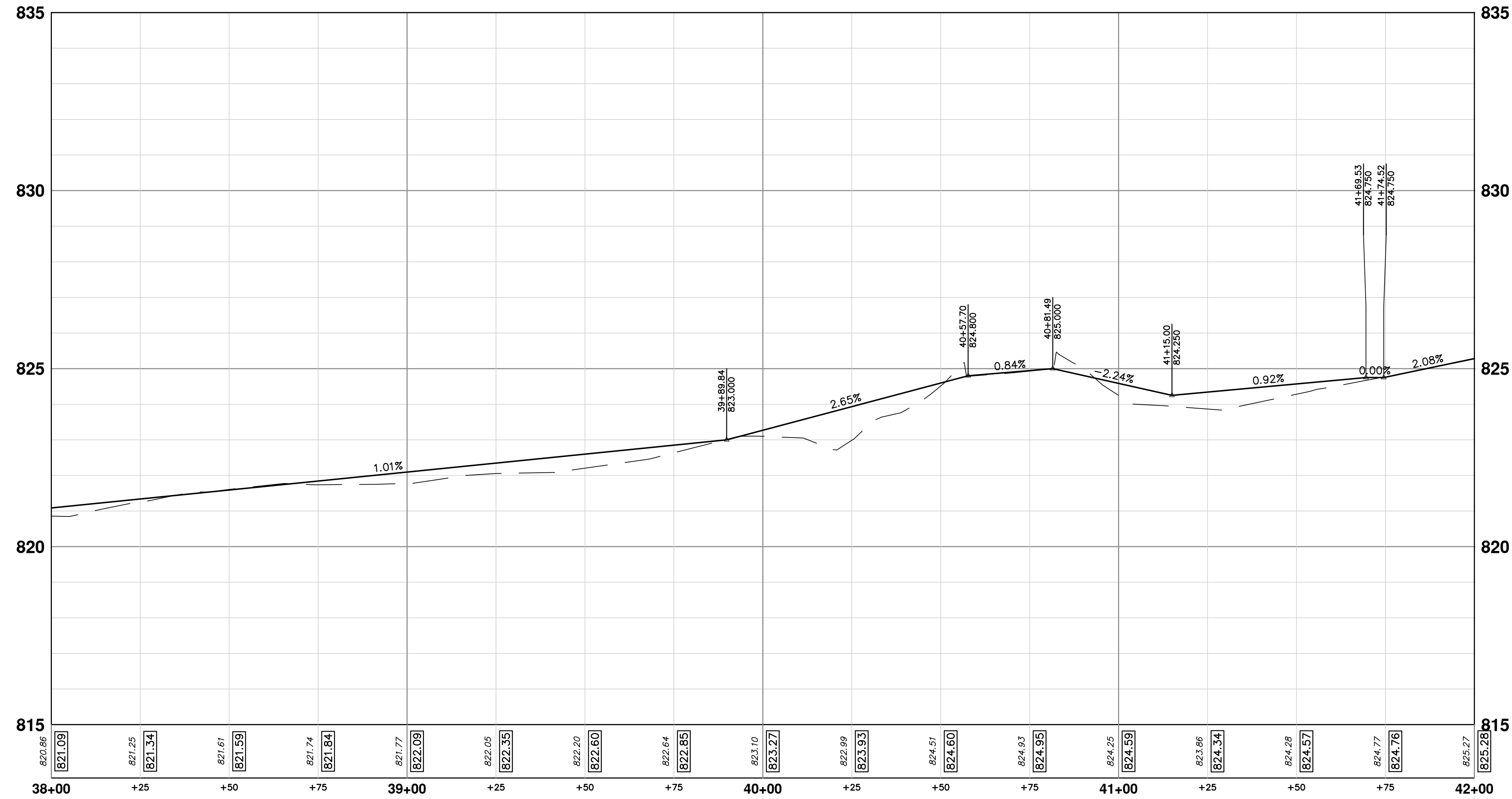
SHEET No. **18 OF 23**

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

DRAWING No. **2022007-18**



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

**ELLSWORTH RD SIDEWALK GAP ELIMINATION**

PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.

STA. 38+00 - STA. 42+00

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

DRAWING No. 2022007-19

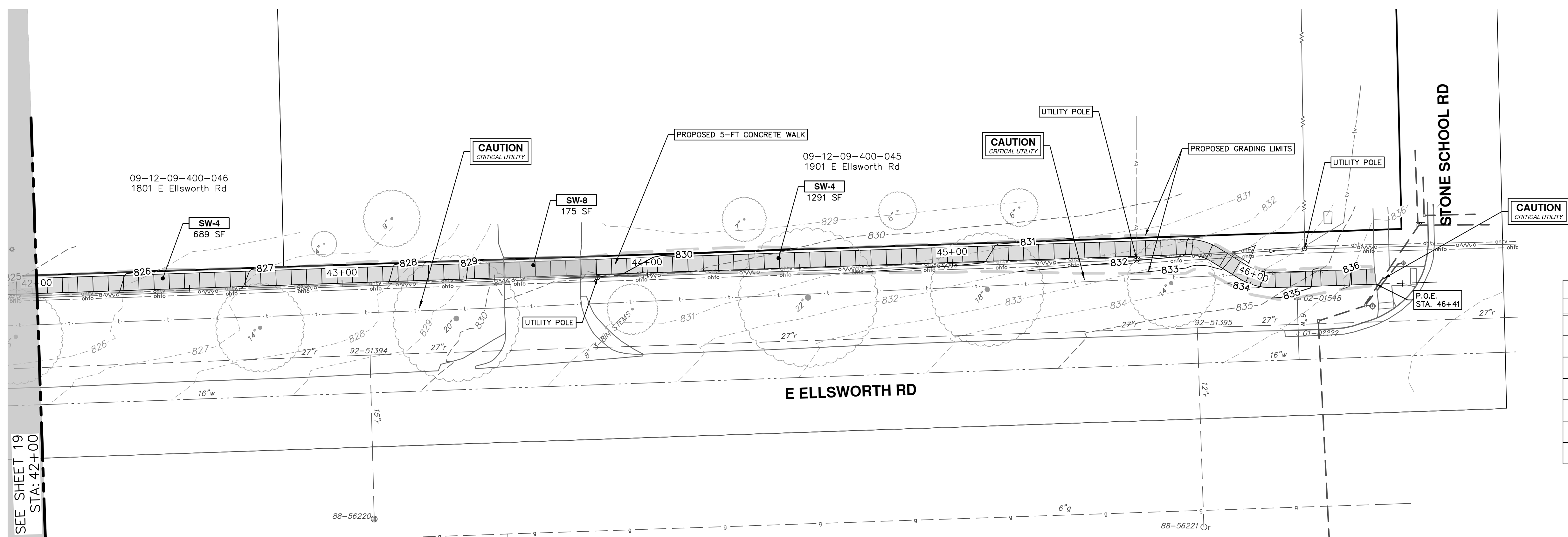
**811**  
Know what's below.  
Call Before you dig.

01	FINAL PLANS	6/22/22	KB/DF	TB	CHECKED
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	REV.		DATE		

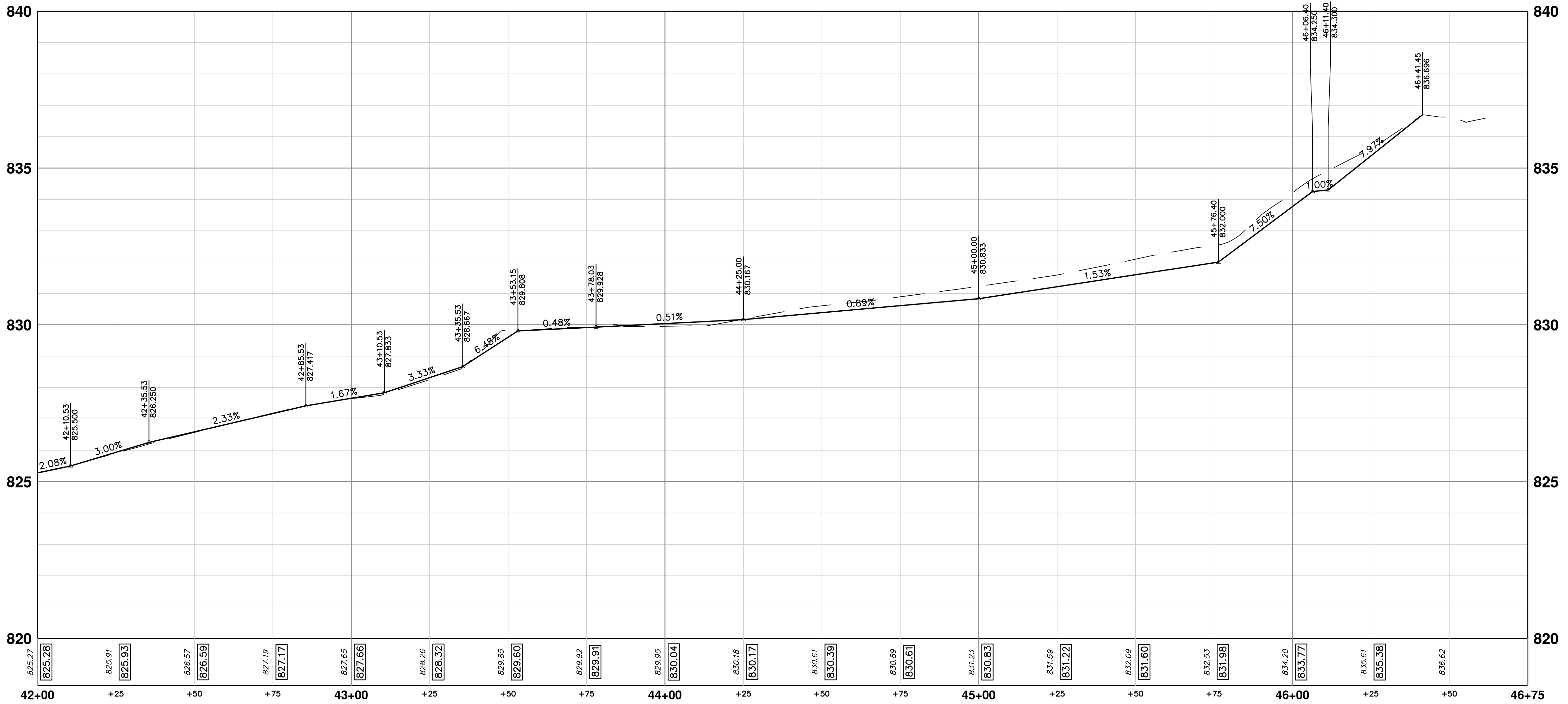
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**CITY OF ANN ARBOR MICHIGAN**

SHEET No. 19 OF 23



CONSTRUCTION KEY	
KEY	DESCRIPTION
SW-4	4 INCH SIDEWALK OR RAMP
SW-6	6 INCH DRIVE APPROACH, RAMP, OR SIDEWALK
SW-8	8 INCH DRIVE APPROACH, OR SIDEWALK
CG	CURB AND GUTTER, CONC, AA DET SD-R-1, MODIFIED
DWS	DETECTABLE WARNING, CAST IN PLACE
ADJ	ADJUST STRUCTURE COVER
ABO	ADJUST BY OTHERS



**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

ELLSWORTH RD SIDEWALK GAP ELIMINATION

PROPOSED SIDEWALK - VARSITY DR. TO STONE SCHOOL RD.

STA. 42+00 - P.O.E. STA. 46+41

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

DRAWING No. 2022007-20

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

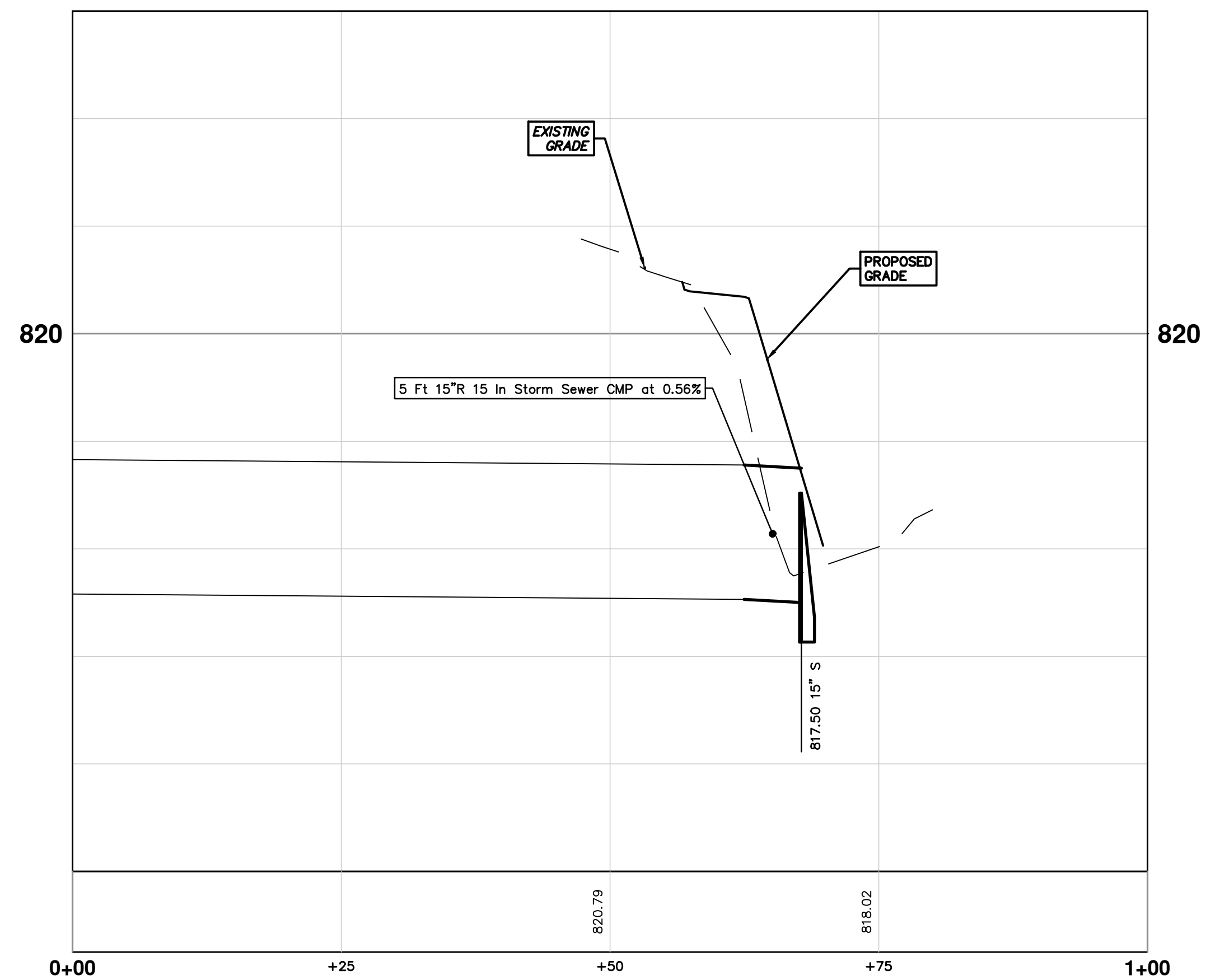
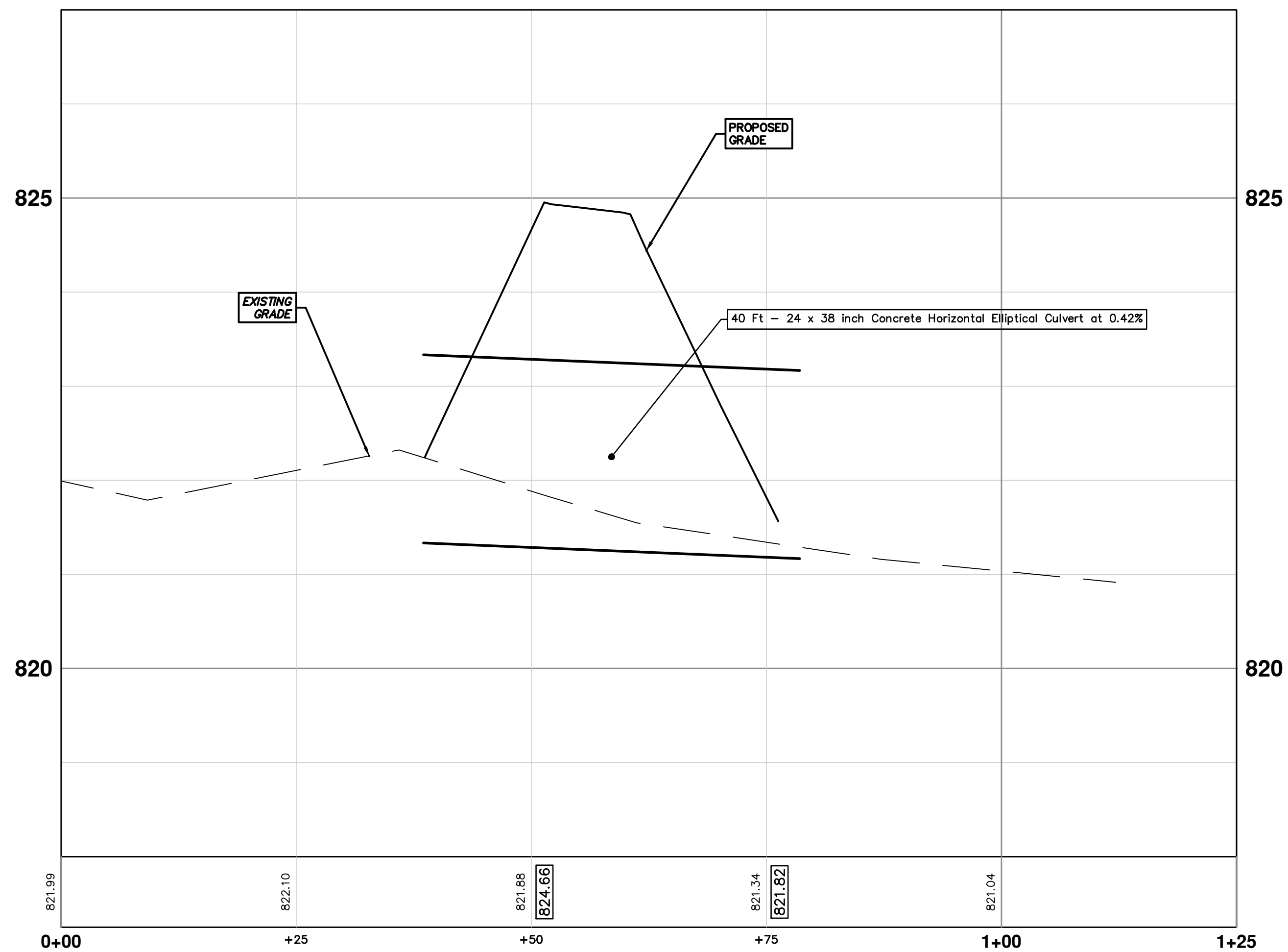
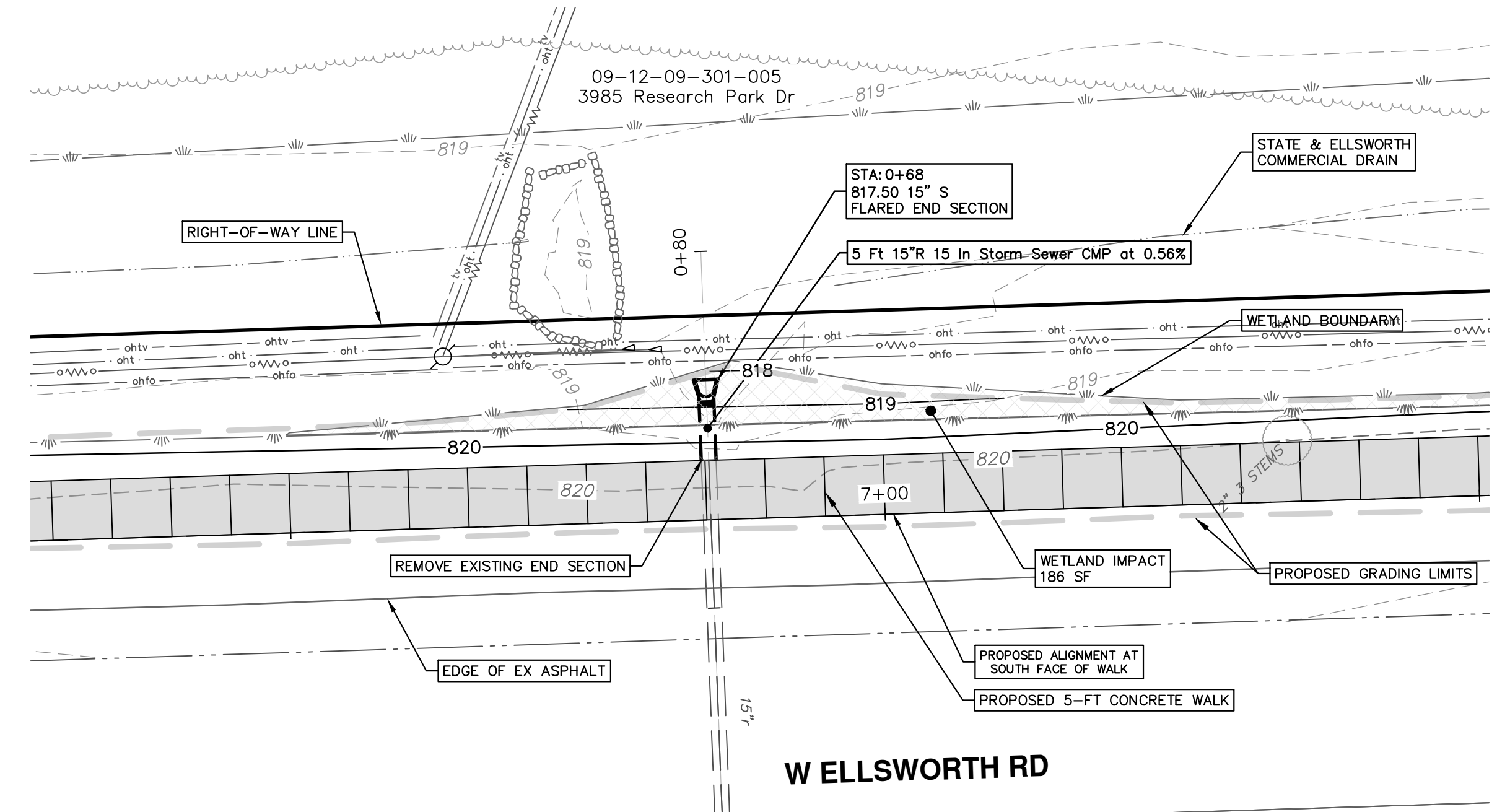
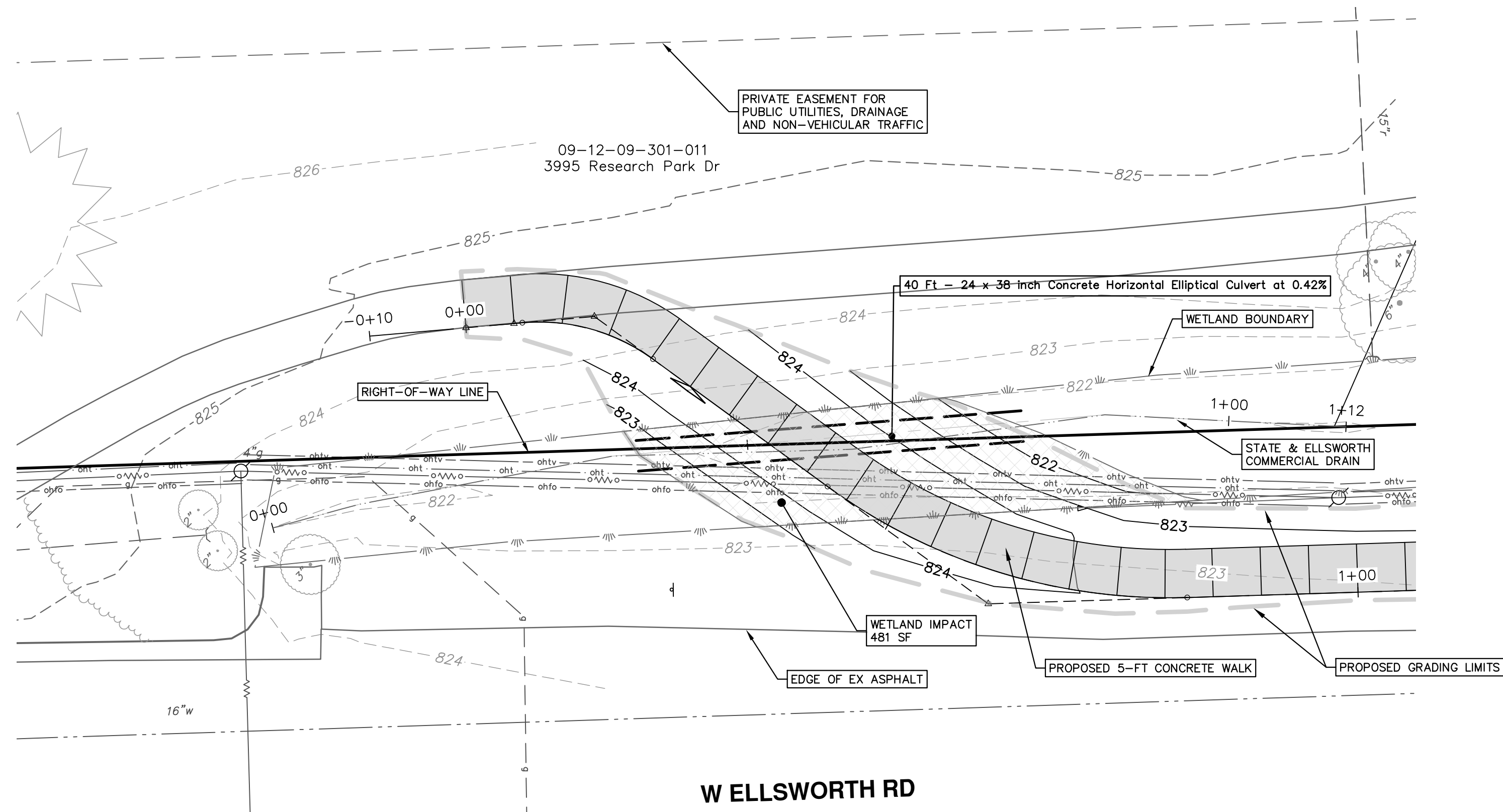
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	REV.		DATE		

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**CITY OF ANN ARBOR**  
MICHIGAN

SHEET No. 20 OF 23

R:\2022007 Ellsworth SW Gap\Plan Production\2022007PrStrm.dwg Dwg Created: 21-Jun-22 - \_g2 standard bw.stb - Plot Date: 22-Jun-22



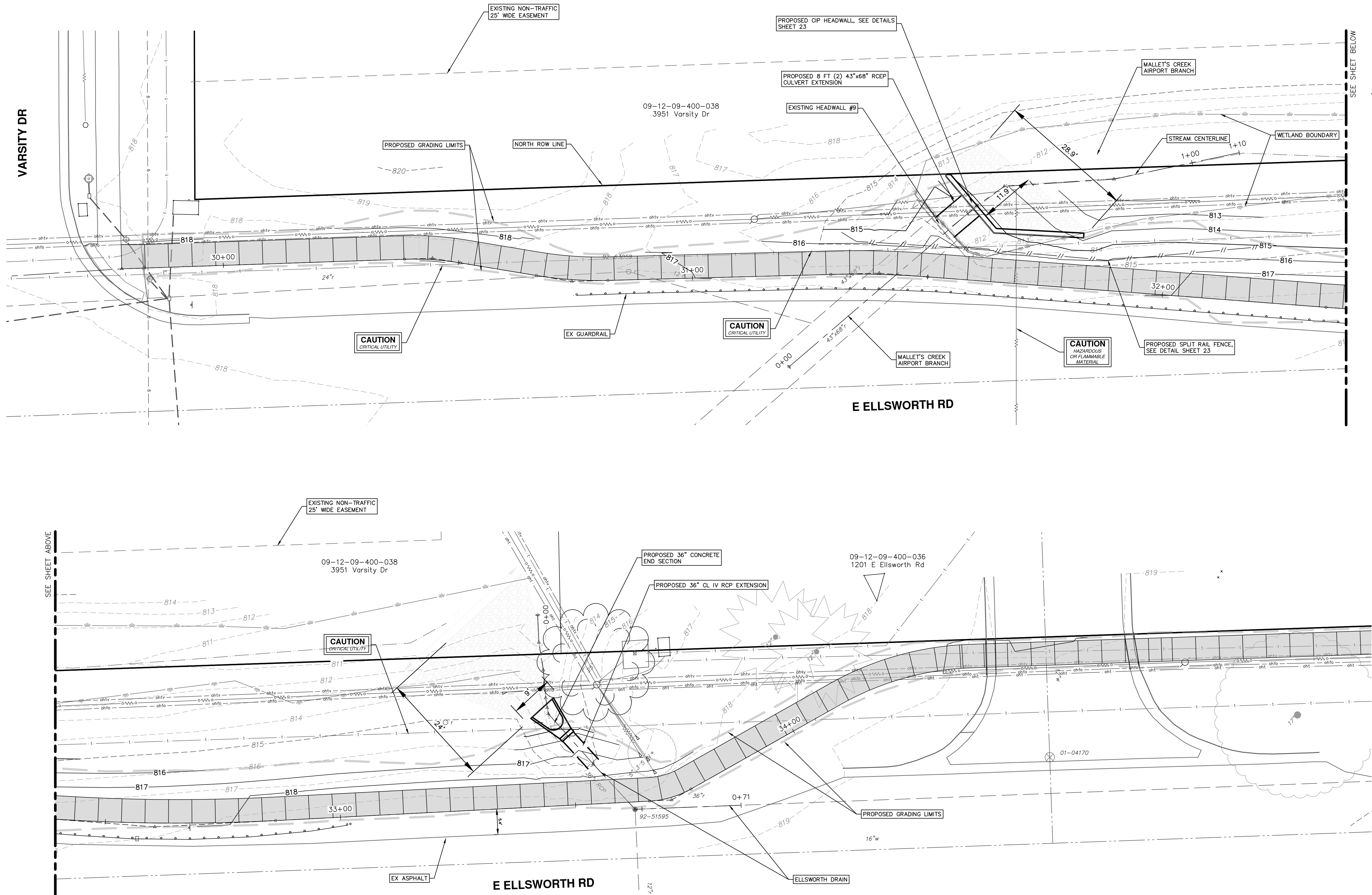
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00	REVIEW SET	5/20/22	KB/DF	TB

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING  
ELLSWORTH RD SIDEWALK GAP ELIMINATION  
PROPOSED STORM SEWER  
CULVERT AND END SECTION EXTENSIONS  
DRAWING No. 2022007-21  
PROFILE: 1" = 1'  
SCALE PLAN: 1" = 10'

R:\2022007 Ellsworth SW Gap\Stantec\2022007 Ellsworth Sidewalk Layout - Stantec 4-13-22.dwg Dwg Created: 15-Jun-22 - Plot Date: 22-Jun-22



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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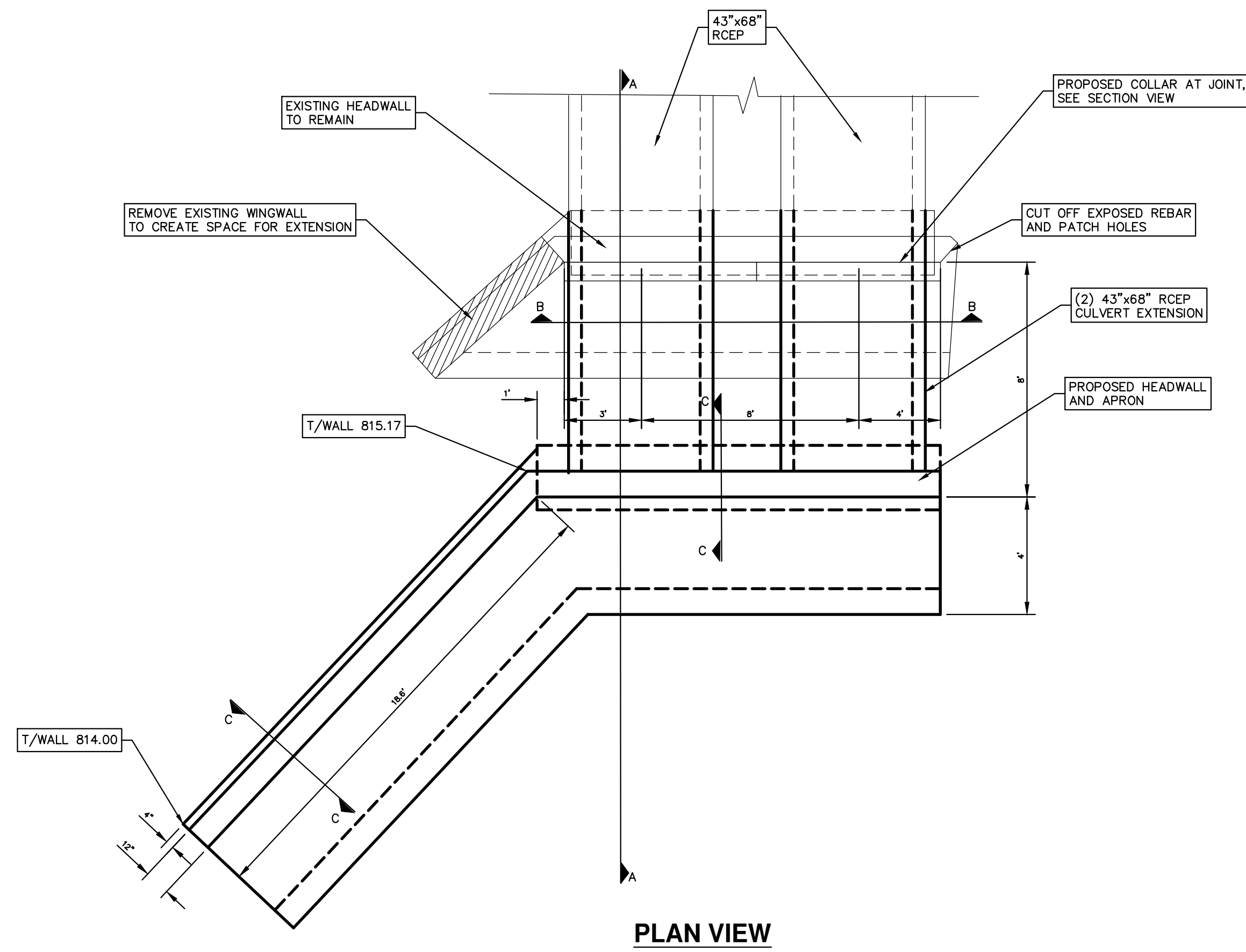
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**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**  
**ELLSWORTH RD SIDEWALK GAP ELIMINATION**  
PROPOSED STORM SEWER  
CULVERT AND HEADWALL EXTENSIONS

SCALE PLAN: 1" = 10'  
DRAWING No. 2022007-22

R:\2022007 Ellsworth SW Gap\Stantec\2022007 Ellsworth Sidewalk Layout - Stantec 4-13-22.dwg Dwg Created: 15-Jun-22 - Plot Date: 22-Jun-22



PLAN VIEW

**NOTES:**  
EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS, OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDING TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2020 EDITION.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:  
CONCRETE: GRADE 3000  $f_c = 3,000$  psi  
CONCRETE: PRECAST SECTIONS  $f_c = 5,000$  psi  
STEEL REINFORCEMENT  $f_y = 60,000$  psi

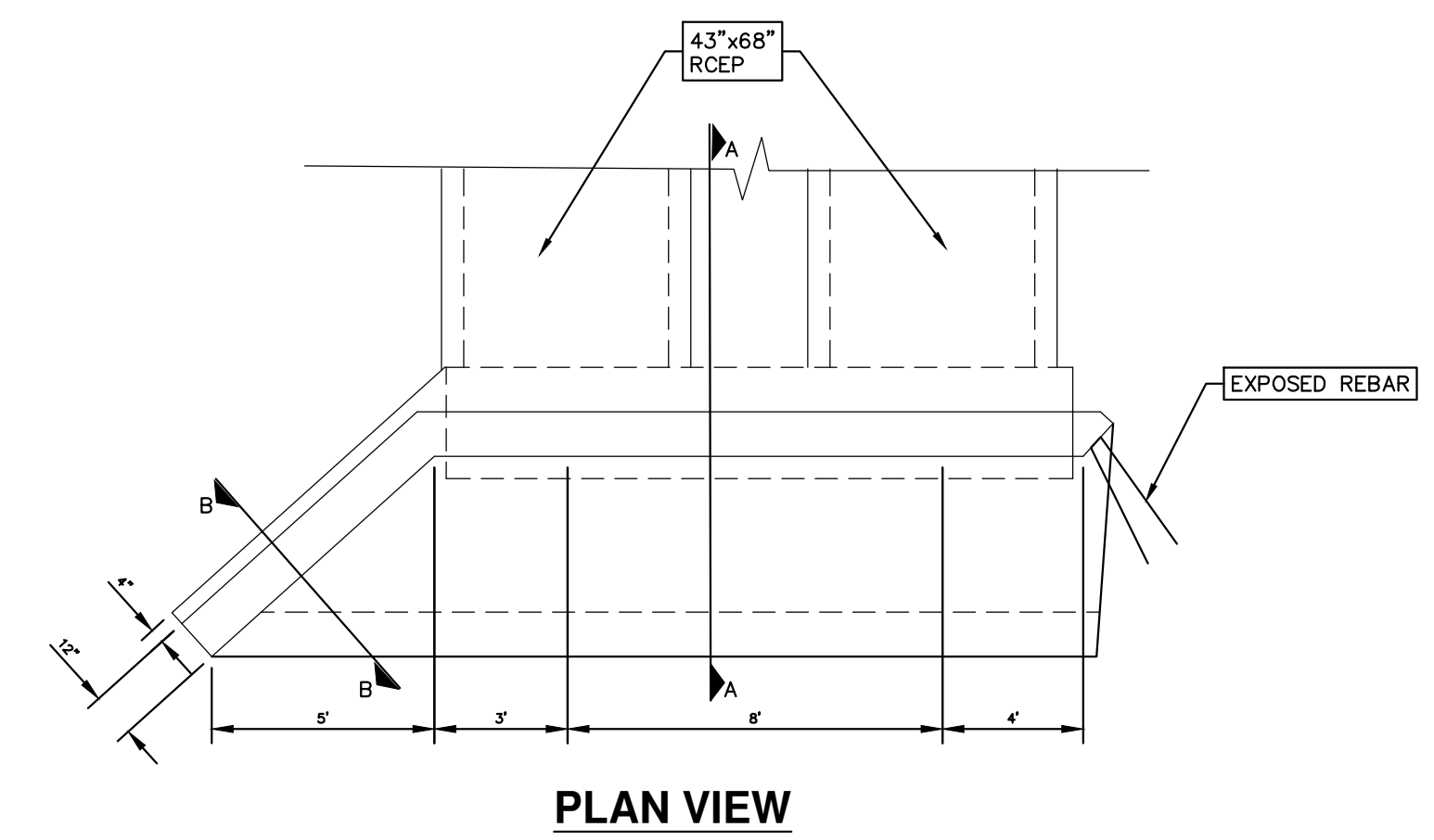
ALL EXPOSED CONCRETE CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BEVELED WITH  $\frac{1}{2}$ " TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

UNLESS OTHERWISE SHOWN ON THE PLANS PROVIDE MINIMUM CONCRETE CLEAR COVER FOR REINFORCEMENT ACCORDING TO THE FOLLOWING:  
CONCRETE CAST AGAINST EARTH: 3 IN.  
ALL OTHER UNLESS SHOWN ON PLANS: 2 IN.

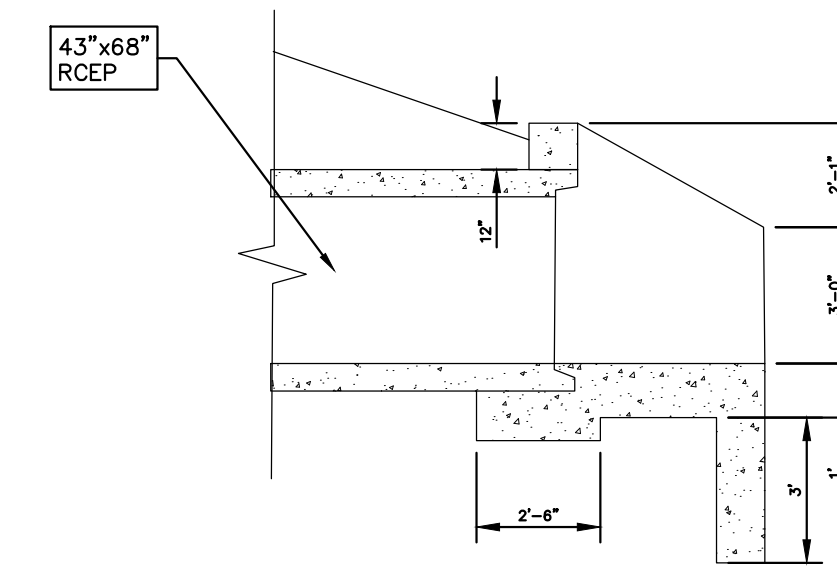
BACKFILL SURROUNDING CULVERT EXTENSION AND CAST IN PLACE CONCRETE WALLS SHALL BE MDOT CL II SAND

SOIL CLASSIFIED AS UNSUITABLE BY THE ENGINEER SHALL BE UNDERCUT AND REPLACED WITH BACKFILL, STRUCTURE, CIP COMPACTED TO 100 PERCENT OF MAXIMUM UNIT WEIGHT. ACTUAL LIMITS OF EXCAVATION WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

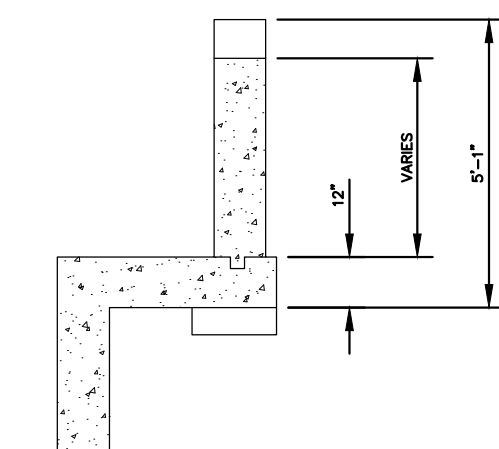
A COFFERDAM HAS NOT BEEN PROVIDED FOR THIS STRUCTURE. OTHER MEANS OF WATER CONTROL MAY BE USED, AS APPROVED BY THE ENGINEER. WATER CONTROL WHETHER IT BE BY COFFERDAM OR OTHER APPROVED MEANS, WILL BE INCLUDED IN THE CULVERT EXTENSION BID ITEM.



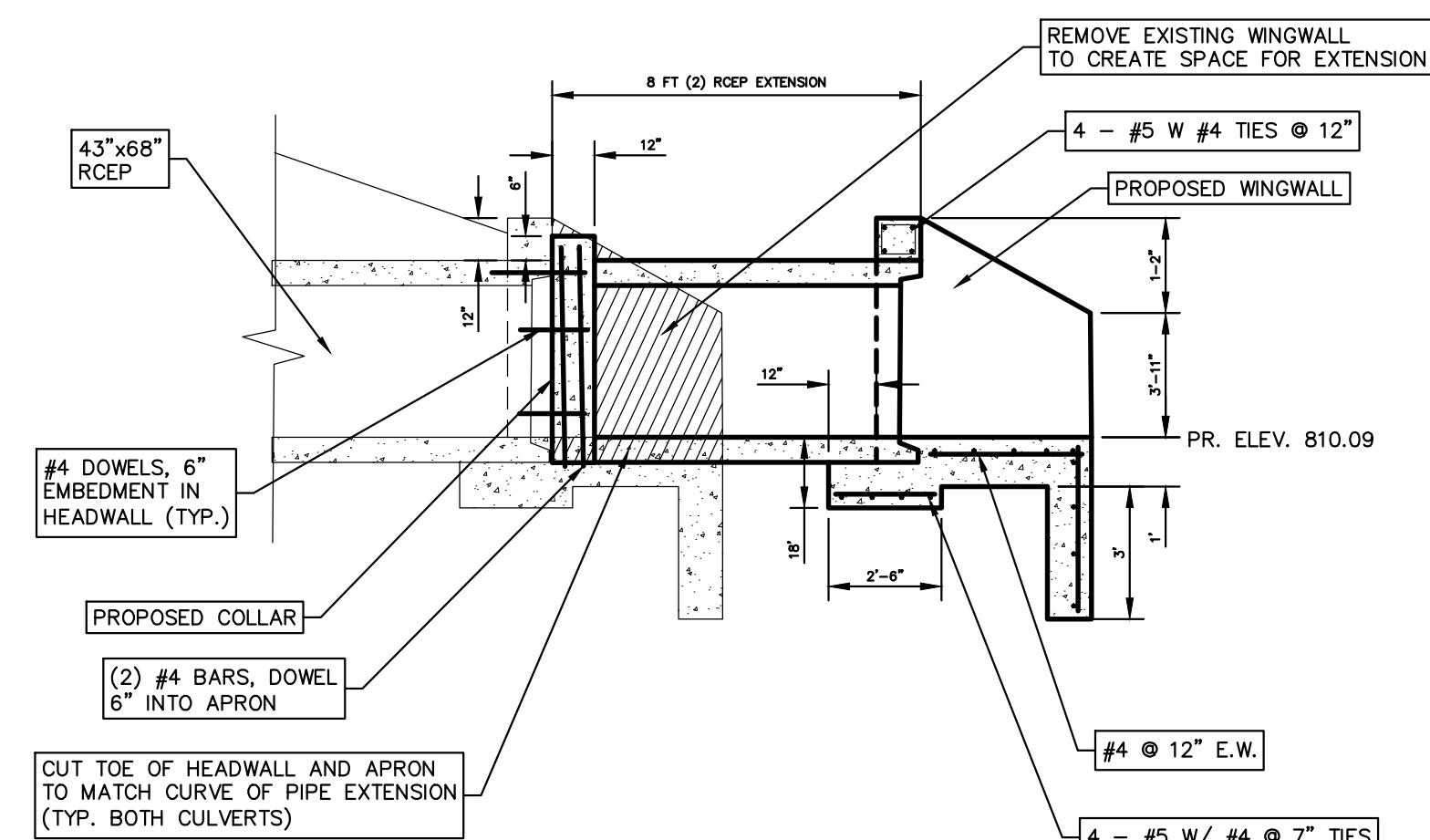
PLAN VIEW



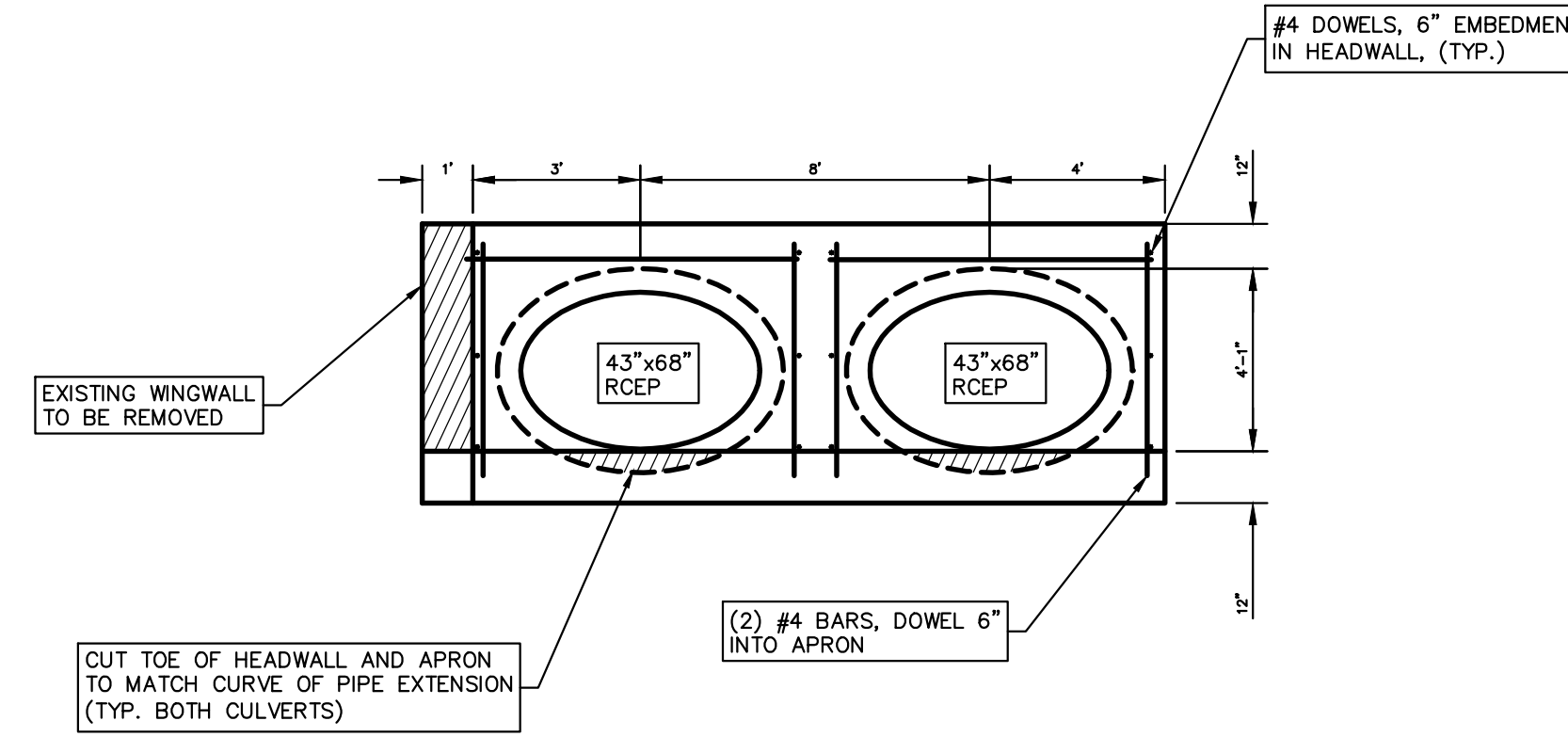
SECTION A-A



SECTION B-B

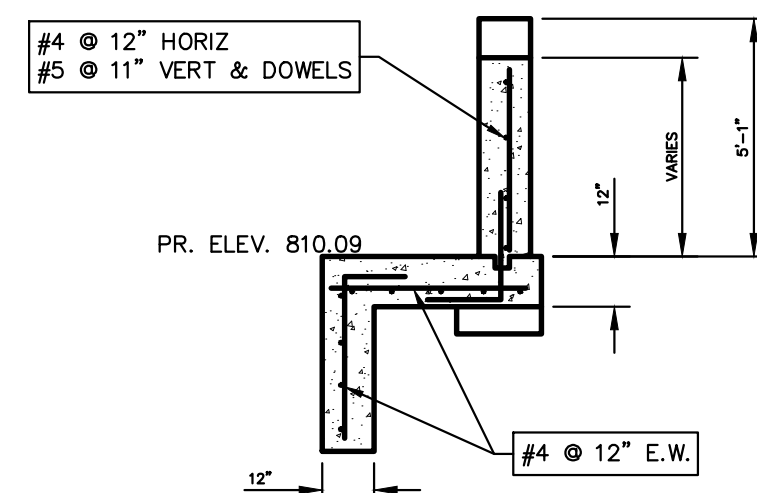


SECTION A-A



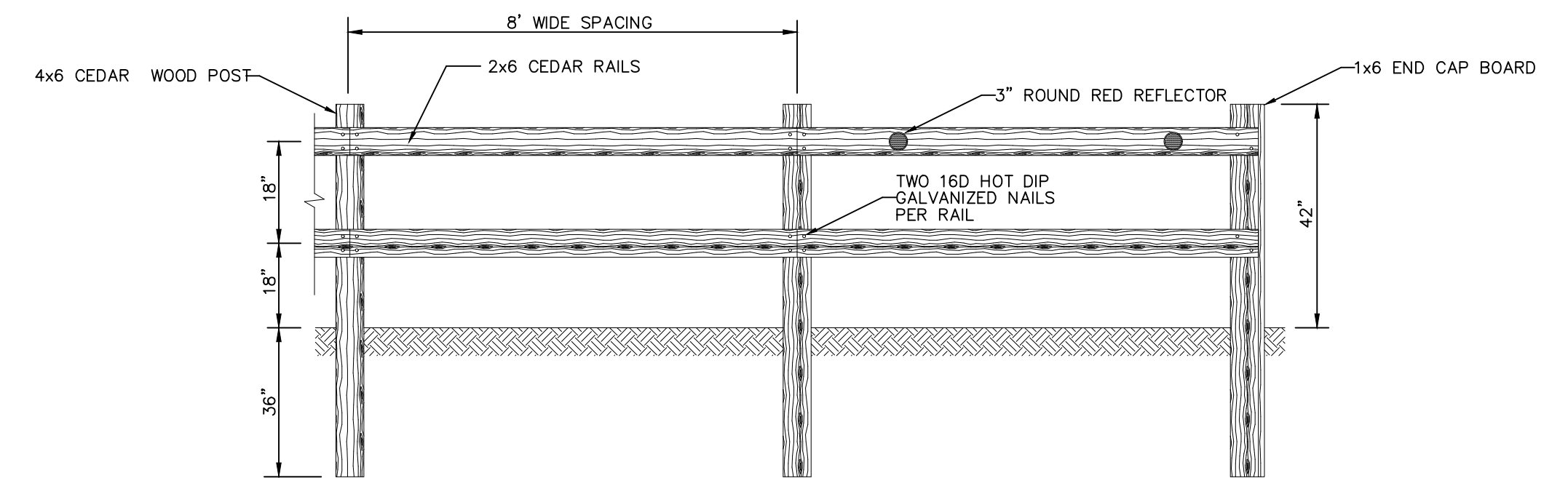
SECTION B-B

EXISTING HEADWALL #9 DETAIL

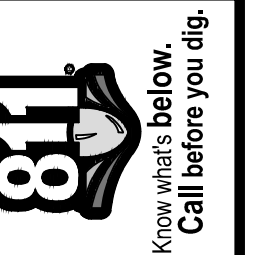


SECTION C-C

CULVERT EXTENSION DETAIL



SPLIT RAIL FENCE DETAIL



REV.	DATE	DESCRIPTION
01	6/22/22	FINAL PLANS
00	5/20/22	REVIEW SET

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ELLSWORTH RD SIDEWALK GAP ELIMINATION  
PROPOSED STORM SEWER  
CULVERT AND HEADWALL DETAILS

SCALE PLAN: NTS  
DRAWING No. 2022007-23