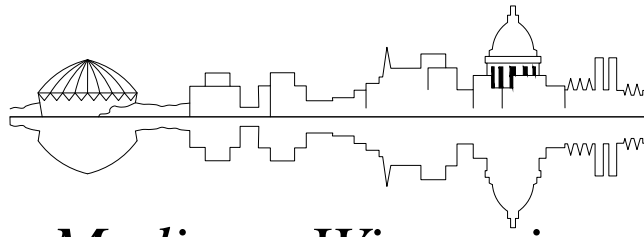


EXHIBIT 1

GREENWAY BOUNDARY MAP AND PROJECT PLANS



Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

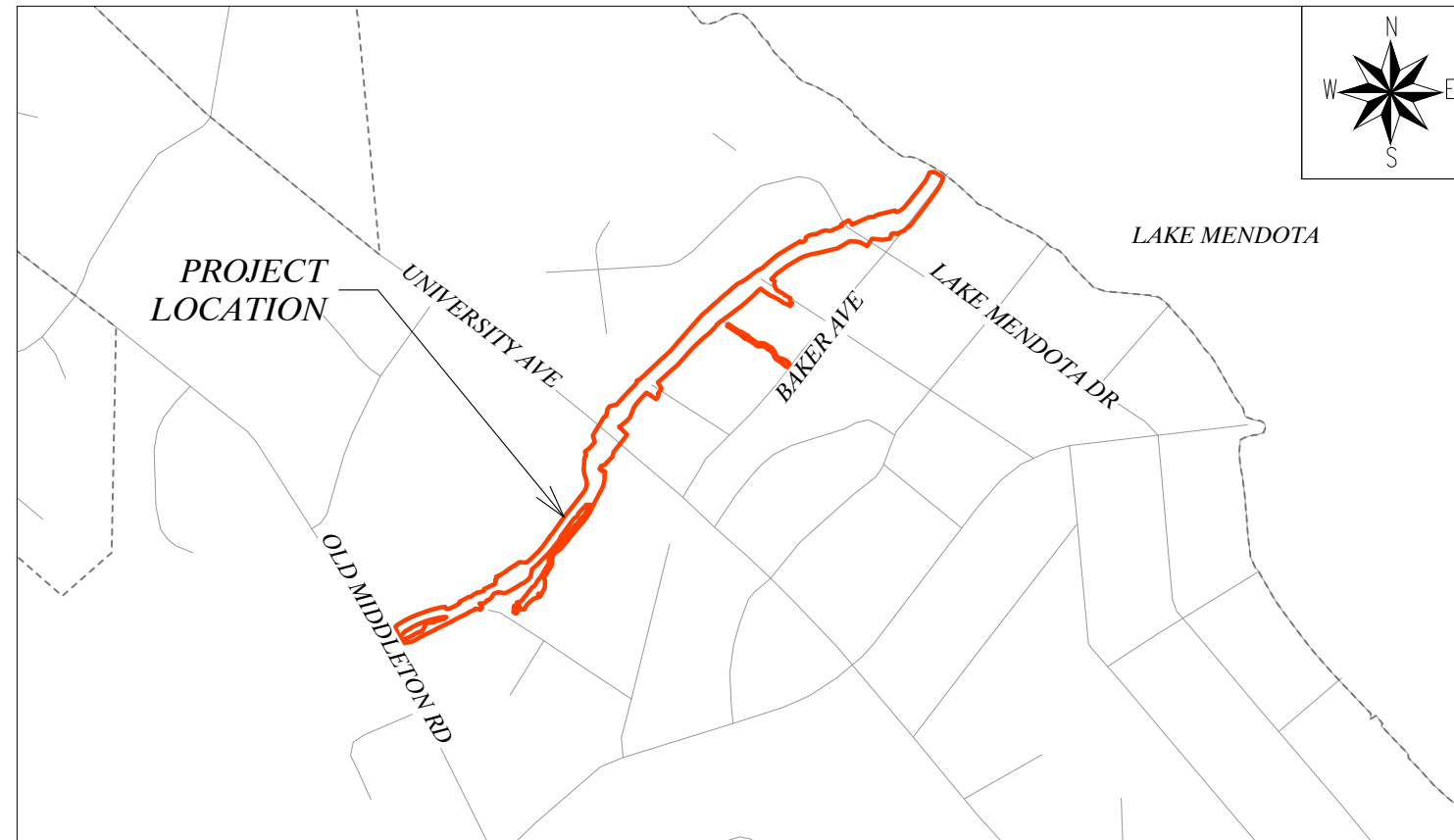
PLAN OF PROPOSED IMPROVEMENT

MENDOTA GRASSMAN GREENWAY FLOOD MITIGATION AND RESTORATION DESIGN

INDEX OF SHEETS

SHEET NO. G1 - G3	DETAILS
SHEET NO. TS1 - TS4	TYPICAL SECTIONS
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SHEET NO. D1 - D2	DEMOLITION PLANS
SHEET NO. B-13-0900 1-4	CAMELOT DRIVE CULVERT PLANS
SHEET NO. C-13-2088 1-3	UNIVERSITY AVE CULVERT PLANS
SHEET NO. PP16 - PP20	GREENWAY PLAN AND PROFILES
SHEET NO. PP21 - PP27	MAINTENANCE PATH AND SAS ACCESS PLAN AND PROFILES
SHEET NO. PP28 - PP30	CAMELOT DR. RESTORATION PLAN AND PROFILES
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SHEET NO. CS24 - CS25	ROADWAY CROSS SECTIONS
SHEET NO. TC1 - TC36	TRAFFIC CONTROL PLANS
SHEET NO. 12882 R-1 - R-9	RESTORATION PLANS

CITY PROJECT NO. 00373112
CONTRACT NO. 9439



PUBLIC IMPROVEMENT PROJECT APPROVED

APPROVED DATE

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

City Engineer

GREENWAY, UTILITY, AND ROADWAY DESIGN BY:

Project Manager

CULVERT STRUCTURAL DESIGN BY:

Project Engineer

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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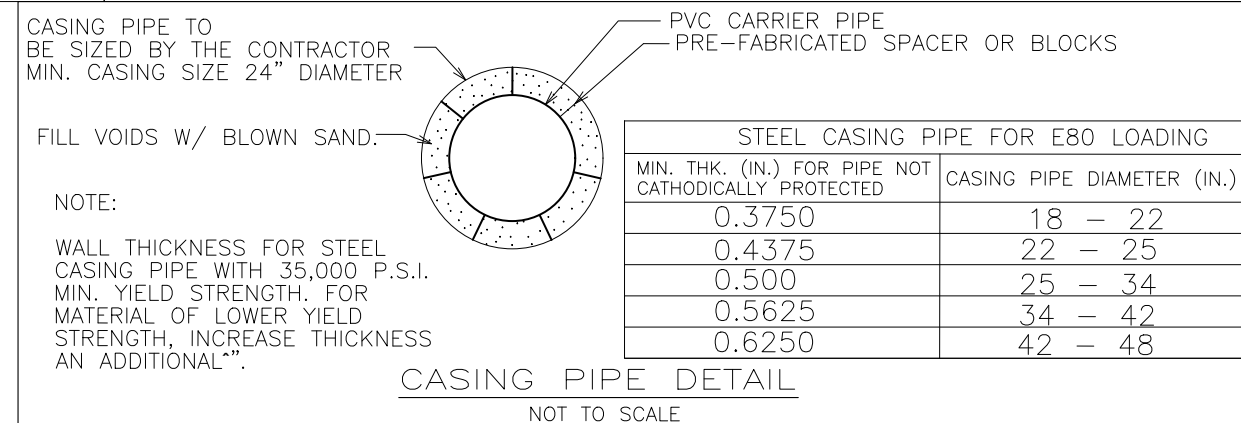
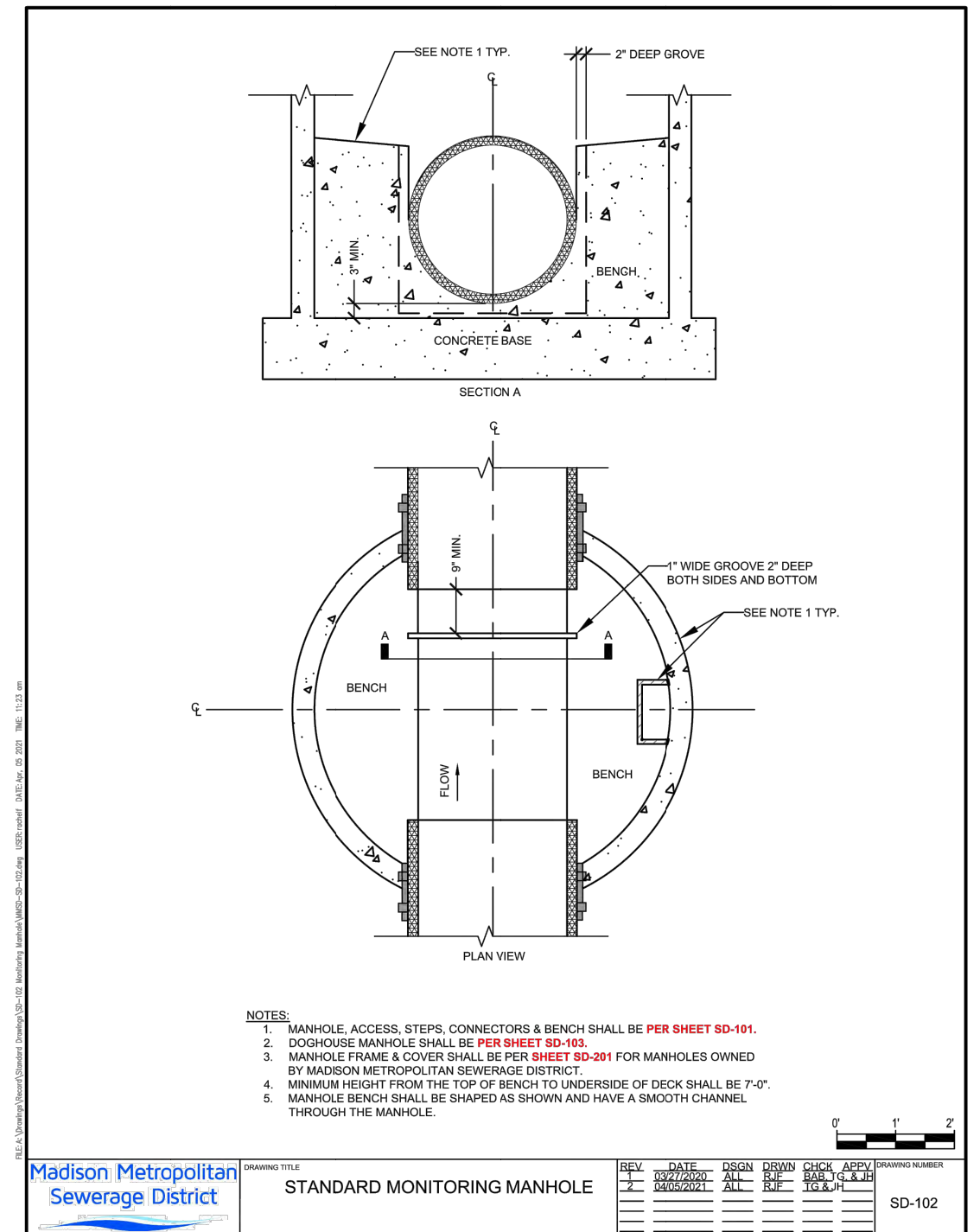
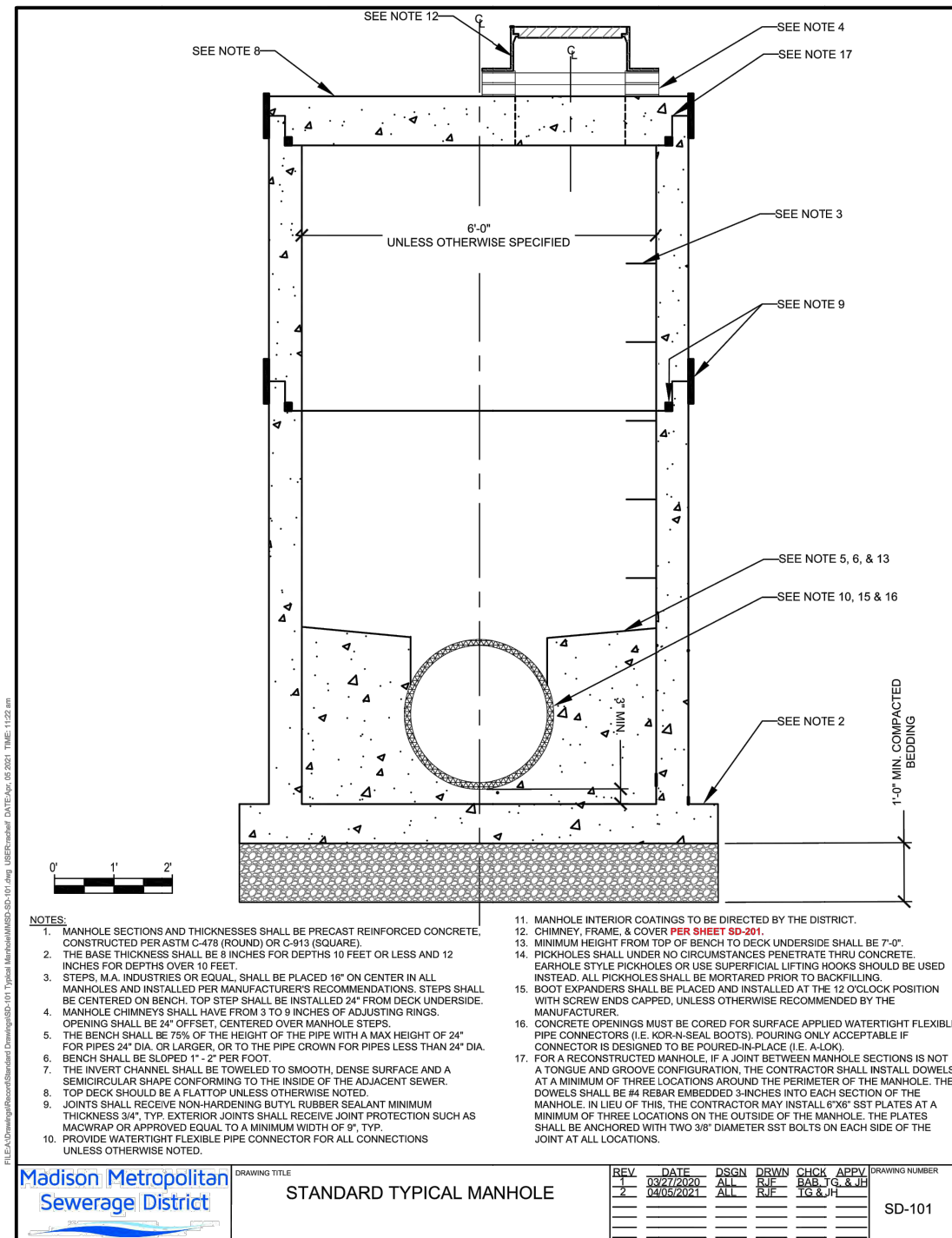


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TITLE SHEET

PROJECT NO.
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SHEET
T1



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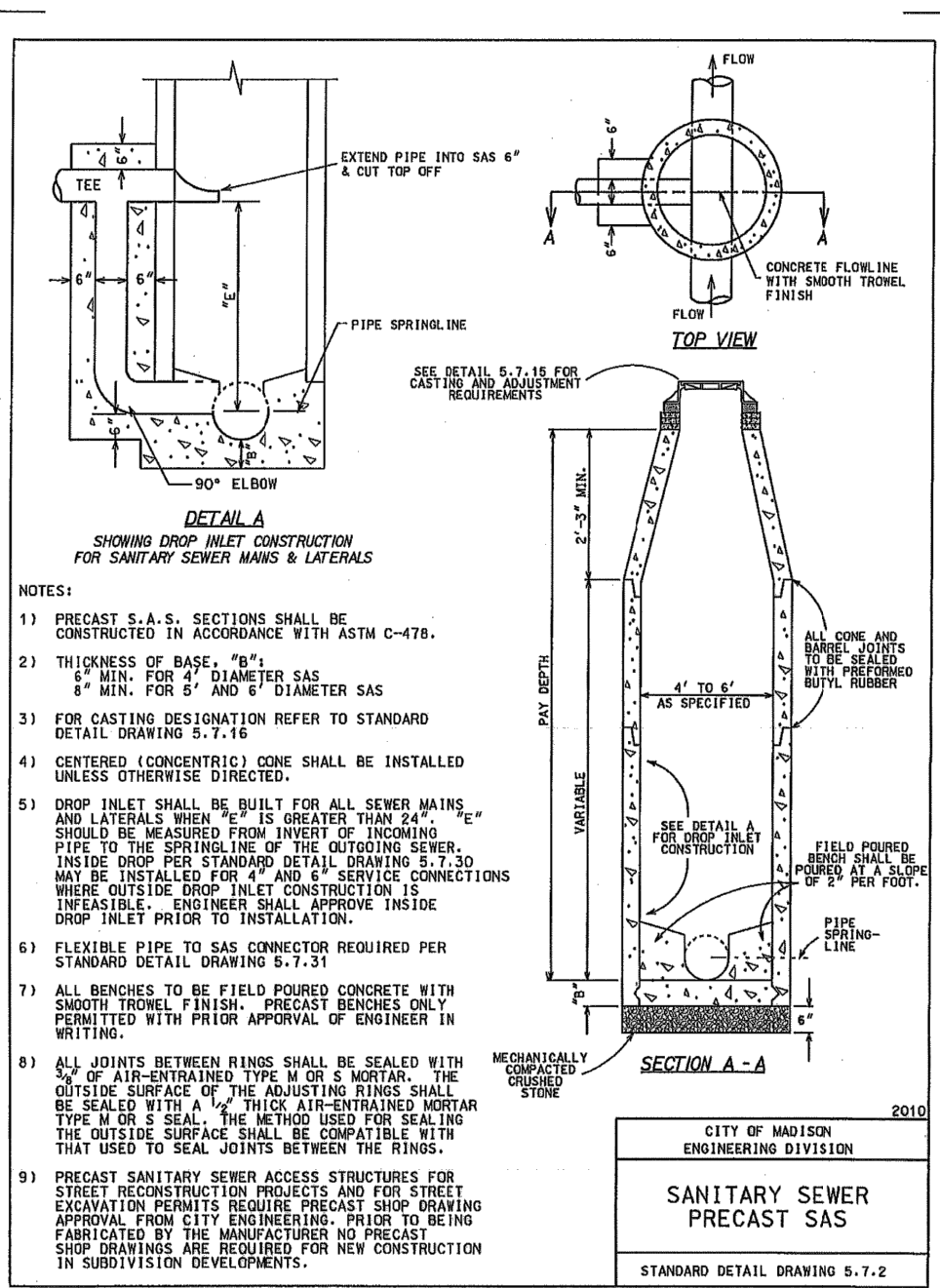
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
CITY OF MADISON
LOCATION

DETAILS - SANITARY

PROJECT NO.
00373112

SHEET
G1



- NOTES:**
- 1) PRECAST S.A.S. SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478.
 - 2) THICKNESS OF BASE, "B": 6" MIN. FOR 4" DIAMETER SAS 8" MIN. FOR 5" AND 6" DIAMETER SAS
 - 3) FOR CASTING DESIGNATION REFER TO STANDARD DETAIL DRAWING 5.7.16
 - 4) CENTERED (CONCENTRIC) CONE SHALL BE INSTALLED UNLESS OTHERWISE DIRECTED.
 - 5) DROP INLET SHALL BE BUILT FOR ALL SEWER MAINS AND LATERALS WHEN "E" IS GREATER THAN 24". "E" SHOULD BE MEASURED FROM INVERT OF INCOMING PIPE TO THE SPRINGLINE OF THE OUTGOING SEWER. INSIDE DROP PER STANDARD DETAIL DRAWING 5.7.30 MAY BE INSTALLED FOR 4" AND 6" SERVICE CONNECTIONS WHERE OUTSIDE DROP INLET CONSTRUCTION IS INFEASIBLE. ENGINEER SHALL APPROVE INSIDE DROP INLET PRIOR TO INSTALLATION.
 - 6) FLEXIBLE PIPE TO SAS CONNECTOR REQUIRED PER STANDARD DETAIL DRAWING 5.7.31
 - 7) ALL BENCHES TO BE FIELD POURED CONCRETE WITH SMOOTH TROWEL FINISH. PRECAST BENCHES ONLY PERMITTED WITH PRIOR APPROVAL OF ENGINEER IN WRITING.
 - 8) ALL JOINTS BETWEEN RINGS SHALL BE SEALED WITH 3/8" OF AIR-ENTRAINED TYPE M OR S MORTAR. THE OUTSIDE SURFACE OF THE ADJUSTING RINGS SHALL BE SEALED WITH A 1/2" THICK AIR-ENTRAINED MORTAR TYPE M OR S SEAL. THE METHOD USED FOR SEALING THE OUTSIDE SURFACE SHALL BE COMPATIBLE WITH THAT USED TO SEAL JOINTS BETWEEN THE RINGS.
 - 9) PRECAST SANITARY SEWER ACCESS STRUCTURES FOR STREET RECONSTRUCTION PROJECTS AND FOR STREET EXCAVATION PERMITS REQUIRE PRECAST SHOP DRAWING APPROVAL FROM CITY ENGINEERING, PRIOR TO BEING FABRICATED BY THE MANUFACTURER. NO PRECAST SHOP DRAWINGS ARE REQUIRED FOR NEW CONSTRUCTION IN SUBDIVISION DEVELOPMENTS.

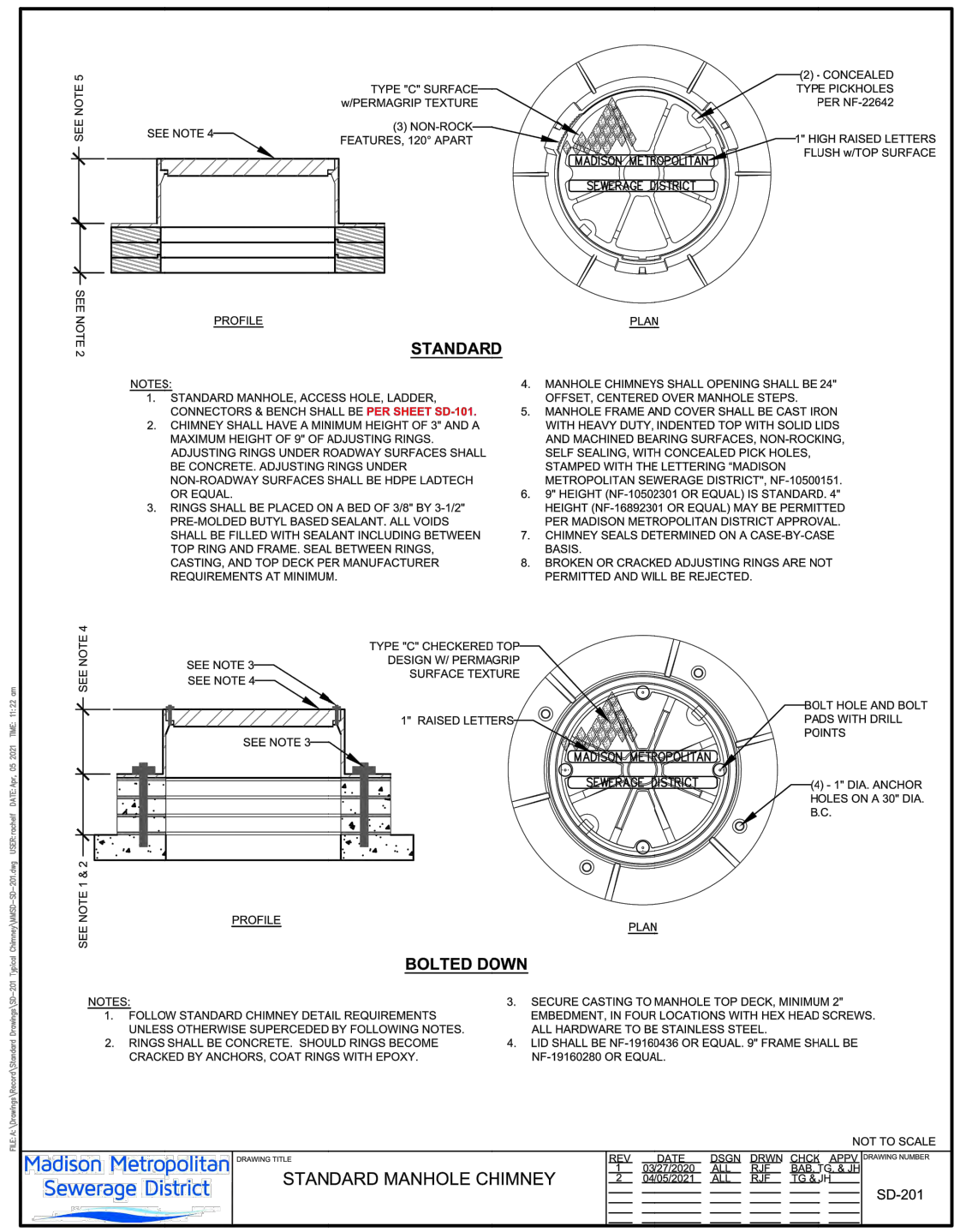
2010

CITY OF MADISON
ENGINEERING DIVISION

**SANITARY SEWER
PRECAST SAS**

STANDARD DETAIL DRAWING 5.7.2

5.7.2



- NOTES:**
1. STANDARD MANHOLE, ACCESS HOLE, LADDER, CONNECTORS & BENCH SHALL BE PER SHEET SD-101.
 2. CHIMNEY SHALL HAVE A MINIMUM HEIGHT OF 3' AND A MAXIMUM HEIGHT OF 9' OF ADJUSTING RINGS. ADJUSTING RINGS UNDER ROADWAY SURFACES SHALL BE CONCRETE. ADJUSTING RINGS UNDER NON-ROADWAY SURFACES SHALL BE HDPE LADTECH OR EQUAL.
 3. RINGS SHALL BE PLACED ON A BED OF 3/8" BY 3-1/2" PRE-MOLDED BUTYL BASED SEALANT. ALL VOIDS SHALL BE FILLED WITH SEALANT INCLUDING BETWEEN TOP RING AND FRAME. SEAL BETWEEN RINGS, CASTING, AND TOP DECK PER MANUFACTURER REQUIREMENTS AT MINIMUM.
 4. MANHOLE CHIMNEYS SHALL OPENING SHALL BE 24" OFFSET, CENTERED OVER MANHOLE STEPS.
 5. MANHOLE FRAME AND COVER SHALL BE CAST IRON WITH HEAVY DUTY, INDENTED TOP WITH SOLID LIDS AND MACHINED BEARING SURFACES, NON-ROCKING, SELF SEALING, WITH CONCEALED PICK HOLES, STAMPED WITH THE LETTERING "MADISON METROPOLITAN SEWERAGE DISTRICT", NF-10500151.
 6. 9" HEIGHT (NF-10502301 OR EQUAL) IS STANDARD. 4" HEIGHT (NF-16892301 OR EQUAL) MAY BE PERMITTED PER MADISON METROPOLITAN DISTRICT APPROVAL.
 7. CHIMNEY SEALS DETERMINED ON A CASE-BY-CASE BASIS.
 8. BROKEN OR CRACKED ADJUSTING RINGS ARE NOT PERMITTED AND WILL BE REJECTED.

NOT TO SCALE

MADISON METROPOLITAN
SEWERAGE DISTRICT

STANDARD MANHOLE CHIMNEY

REV.	DATE	DSGN	DRWN	CHK	APPV	DRAWING NUMBER
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2	04/05/2021	ALL	R/JF	TG & JH		

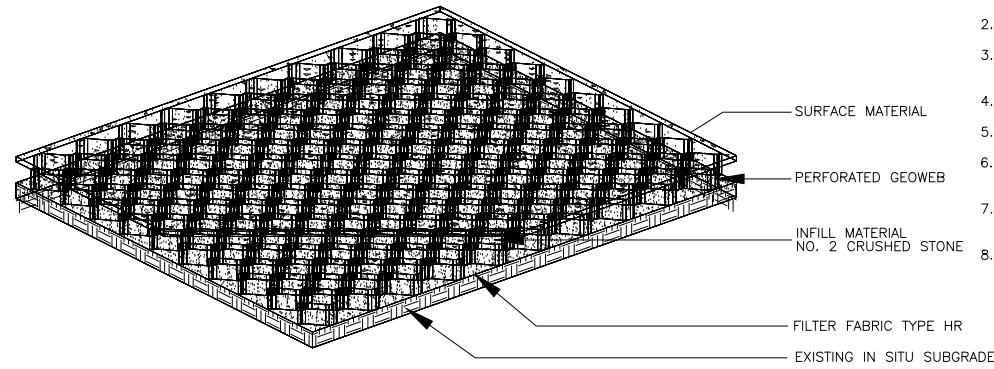
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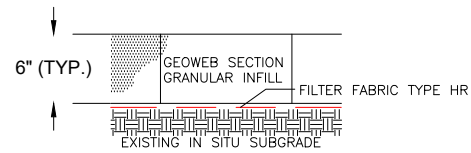
MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
CITY OF MADISON
LOCATION

DETAILS - SANITARY

PROJECT NO:
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SHEET
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ISOMETRIC - TYPICAL LOAD SUPPORT STRUCTURE

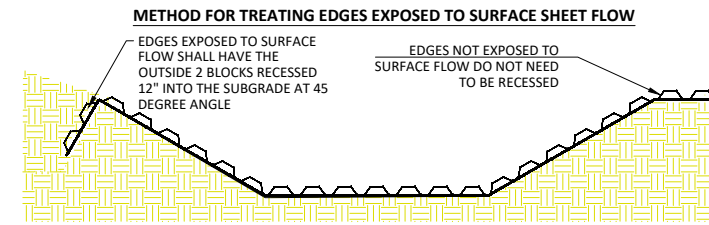


LOAD SUPPORT OVER SOFT SOIL AND AGGREGATE SURFACE STABILIZATION

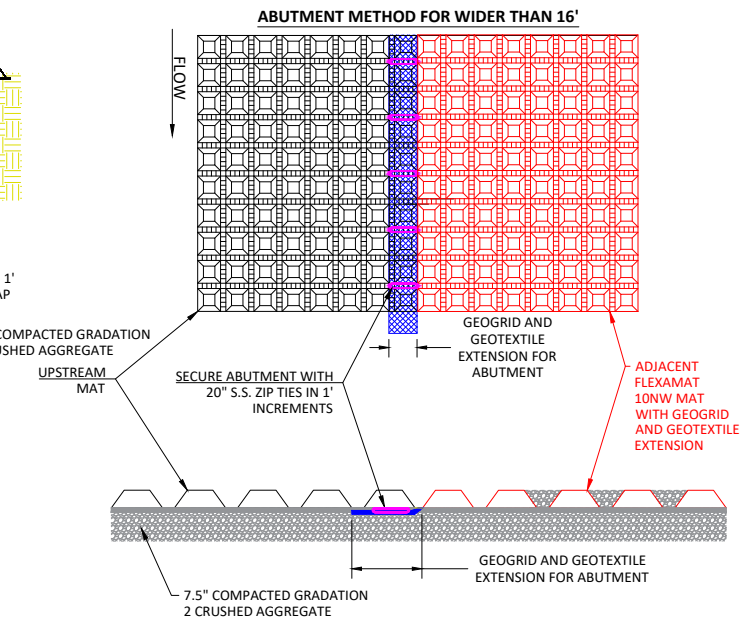
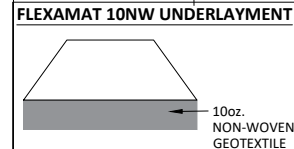
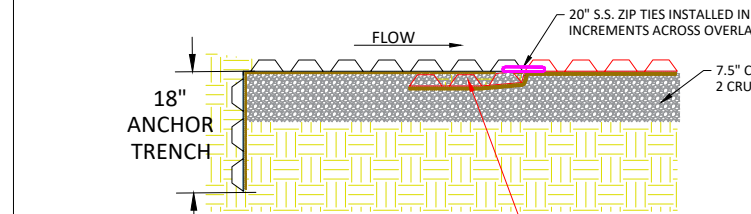
- NOTES:
1. PREPARE THE SUBGRADE AS SHOWN ON THE CONSTRUCTION DRAWINGS.
 2. COMPACT THE SOIL TO A MINIMUM 95% STANDARD PROCTOR.
 3. VERIFY THAT THE SUBGRADE STRENGTH. IF UNACCEPTABLE, THE SOILS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
 4. WHERE REQUIRED, PROVIDE GEOTEXTILE SEPARATION LAYER.
 5. WHERE REQUIRED, PLACE AND COMPACT SUBBASE MATERIAL TO A MINIMUM 95% STANDARD PROCTOR.
 6. EXPAND THE GEOWEB SECTIONS INTO POSITION AND CONNECT THE END TO END AND INTERLEAF CONNECTIONS WITH ATRA KEYS.
 7. PLACE THE SPECIFIED INFILL MATERIAL TO 2 INCHES ABOVE CELL WALLS AND COMPACT TO A MINIMUM 95% STANDARD PROCTOR.
 8. PROVIDE ADDITIONAL SURFACE MATERIAL, AS SPECIFIED.

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<p>GENUINE GEOWEB® LOAD SUPPORT DETAILS</p>	
<p>PRESTO®, GEOWEB®, and ATRA® ARE REGISTERED TRADEMARKS OF PRESTO PRODUCTS.</p>	
DATE	NOVEMBER 2019
FILE NAME	GWLD1F.DWG
SCALE	NTS
SHEET	1
<p>© 2010 PRESTO GEOSYSTEMS</p>	

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LEADING EDGE ANCHOR TRENCH AND OVERLAP SEAMS PERPENDICULAR TO FLOW



FLEXAMAT 10NW CHANNEL - LAYOUT PARALLEL TO FLOW

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURER'S REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. INSTALL FLEXAMAT 10NW ROLLS, USING THE WIDEST ROLLS POSSIBLE TO AVOID SEAMS.
 - 3.1. FOR CHANNELS THAT ARE WIDER THAN 16', INSTALL FLEXAMAT 10NW ROLLS THAT INCLUDE GEOGRID EXTENSIONS WITH 10NW GEOTEXTILE UNDERLAYMENT EXTENSIONS. THESE SEAMS ARE PARALLEL WITH FLOW, THE ADJACENT MAT INSTALLED OVER THE EXTENSIONS. ENSURE GEOGRID AND 10NW UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON SUBGRADE PRIOR TO INSTALLING ADJACENT MAT.
 - 3.2. SECURE THE ABUTMENT PARALLEL WITH FLOW BY INSTALLING 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE EXTENSION OVERLAP. U ANCHORS OR ZIP TIES TO BE INSTALLED PERPENDICULAR TO FLOW. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
4. FOR ADDITIONAL SECTIONS OF MAT, SECURE SEAM PERPENDICULAR WITH FLOW BY OVERLAPPING THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. FLIP END OF UPSTREAM MAT OVER THE INITIAL LEADING EDGE OF DOWNSTREAM MAT.
 - 4.1. SECURE OVERLAPS PERPENDICULAR TO FLOW BY INSTALLING 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE OVERLAP. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
5. AT THE INITIAL LEADING EDGE OF THE FLEXAMAT 10NW ARMORED CHANNEL, EMBED THE MAT 18" IN A VERTICAL ANCHOR TRENCH. FILL AND COMPACT ANCHOR TRENCH WITH SUITABLE FILL. AT ENDING EDGE OF PROTECTION, EMBED THE MAT 18" IN A TERMINATION TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL, AS DETERMINED BY THE ENGINEER OF RECORD.

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REV - 1

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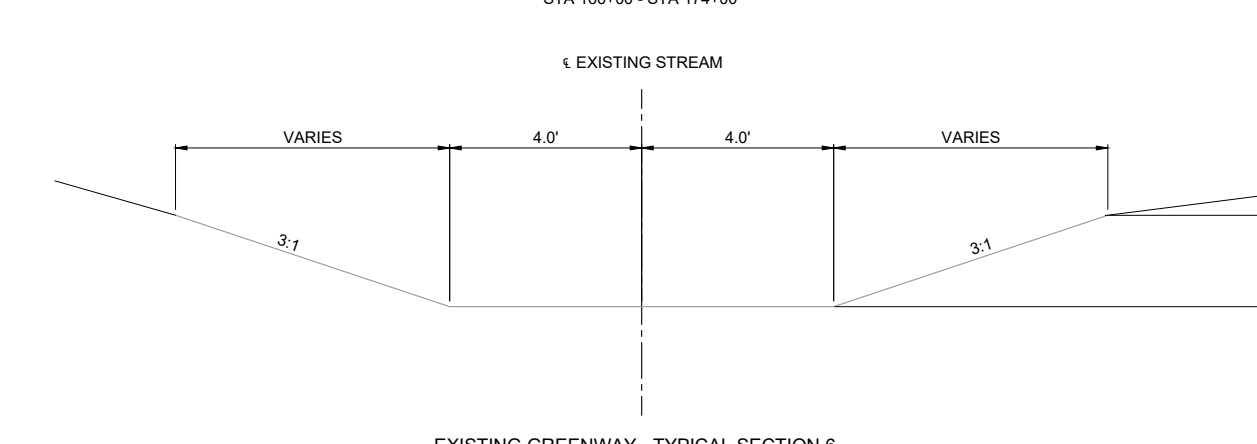
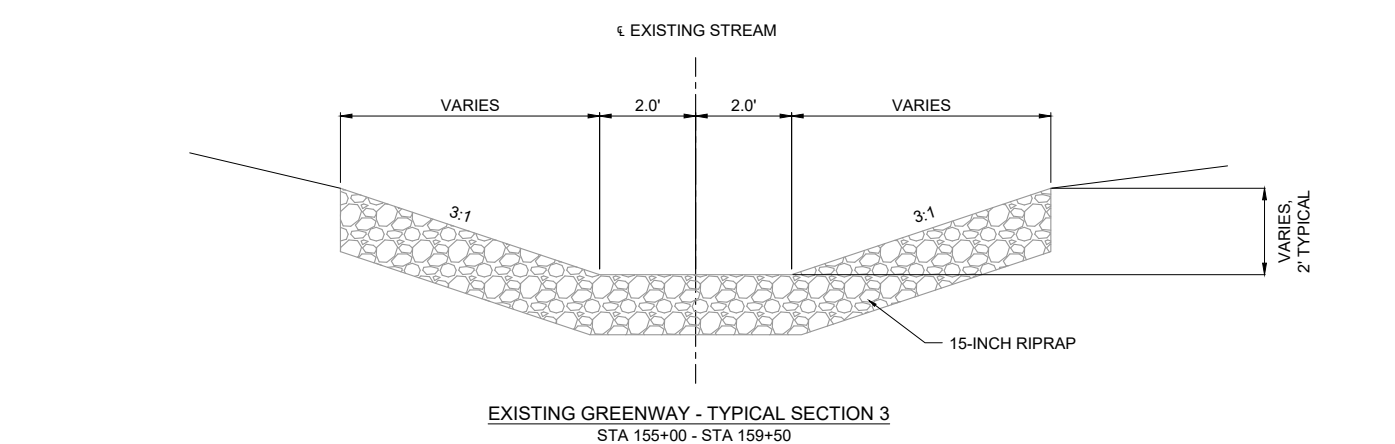
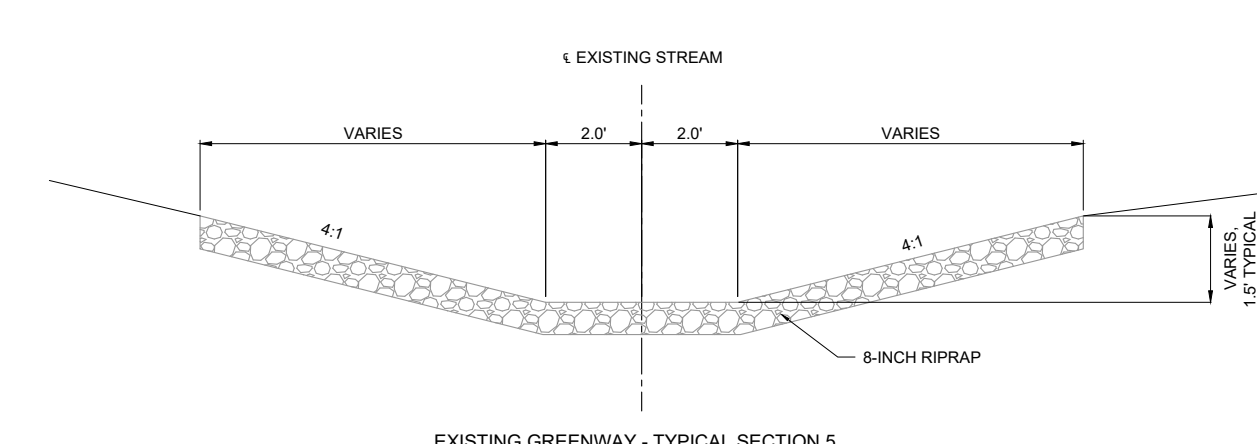
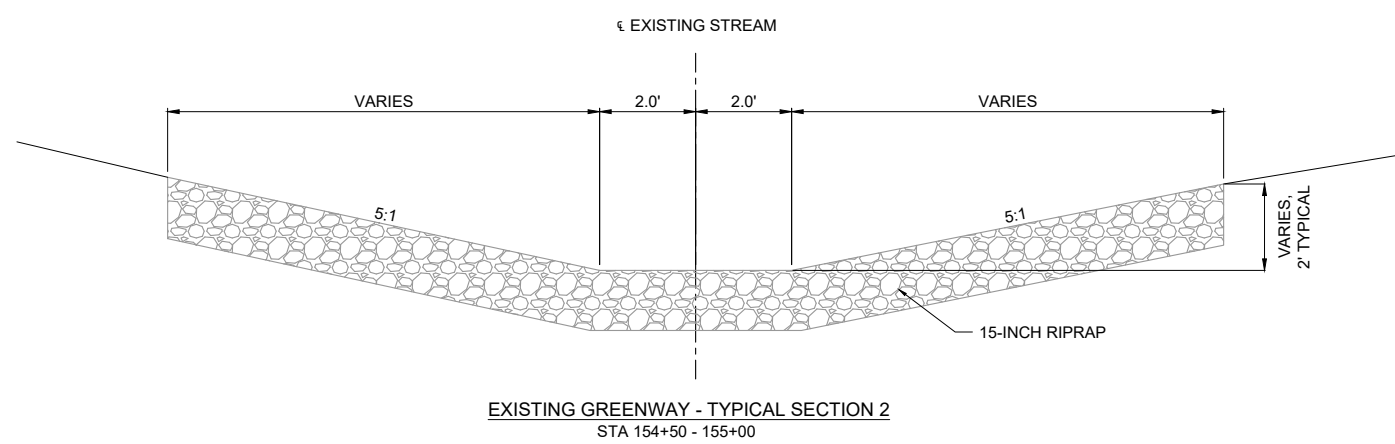
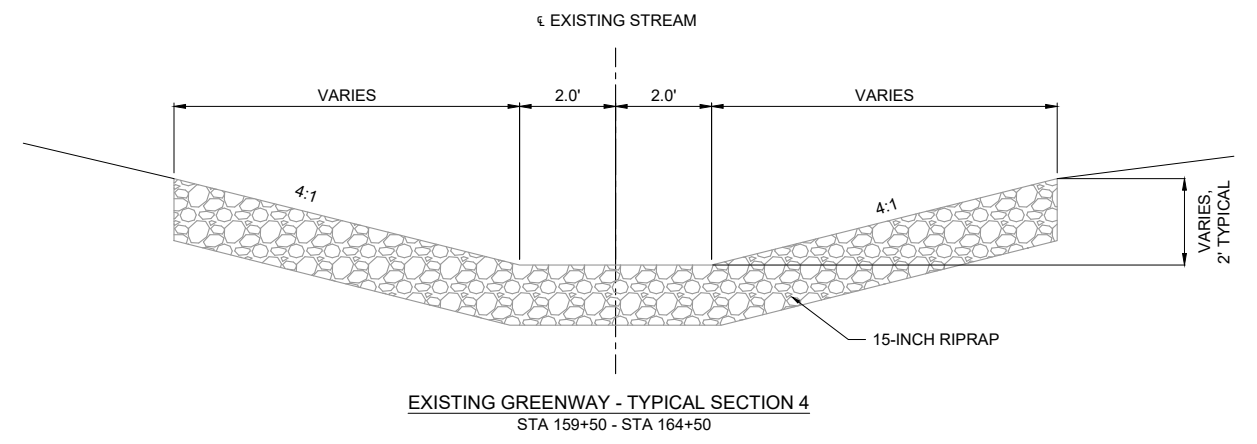
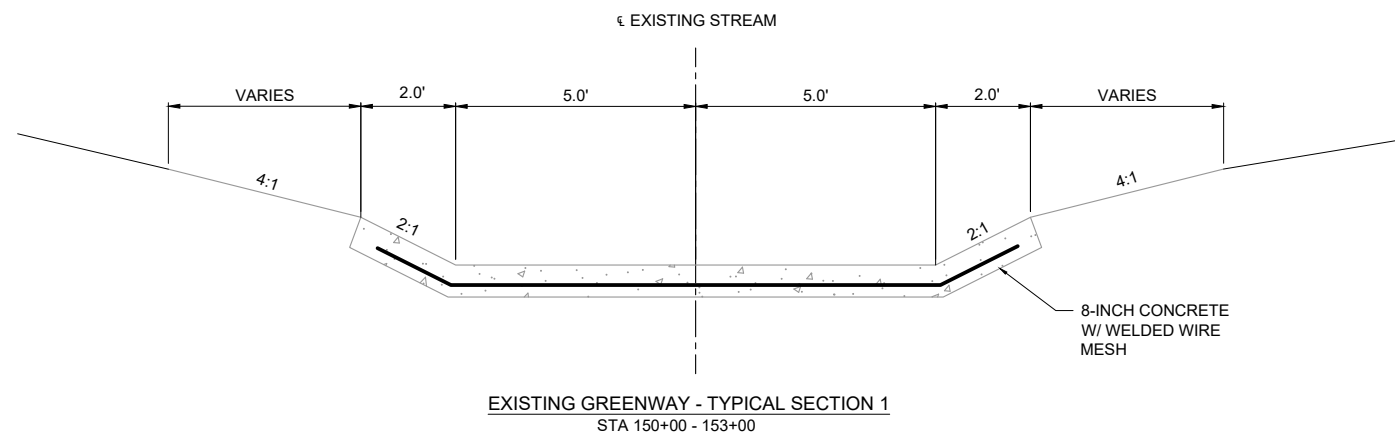


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CITY OF MADISON
LOCATION

DETAILS - EROSION CONTROL

PROJECT NO:
00373112
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G3



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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
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EXISTING GREENWAY TYPICAL SECTIONS

PROJECT NO.
00373112
SHEET
TS1

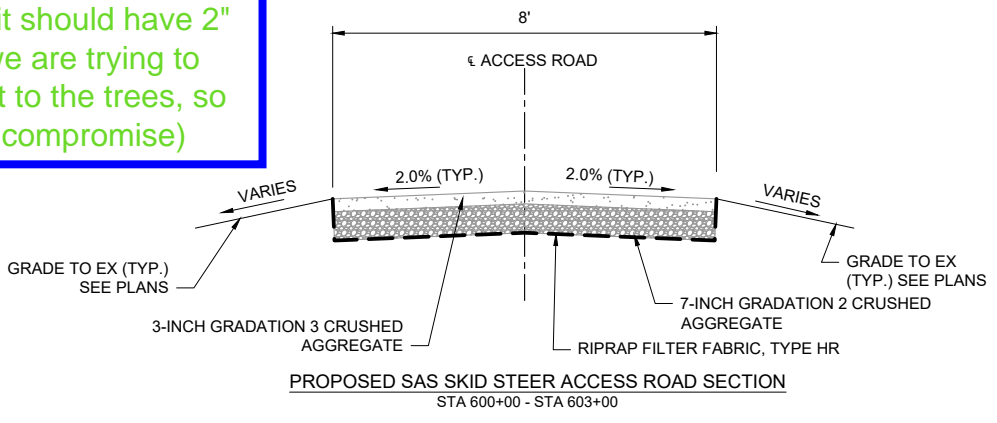
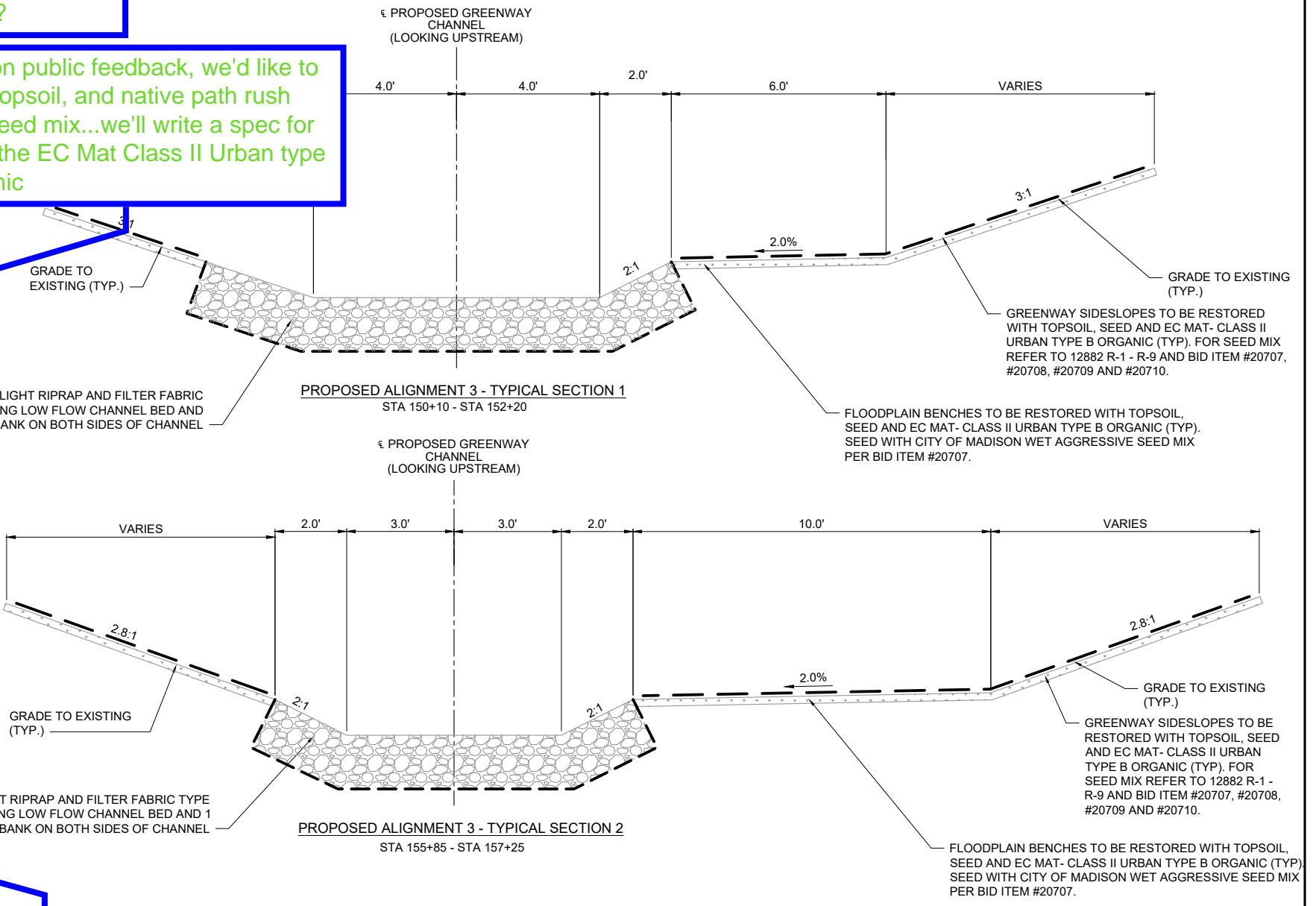
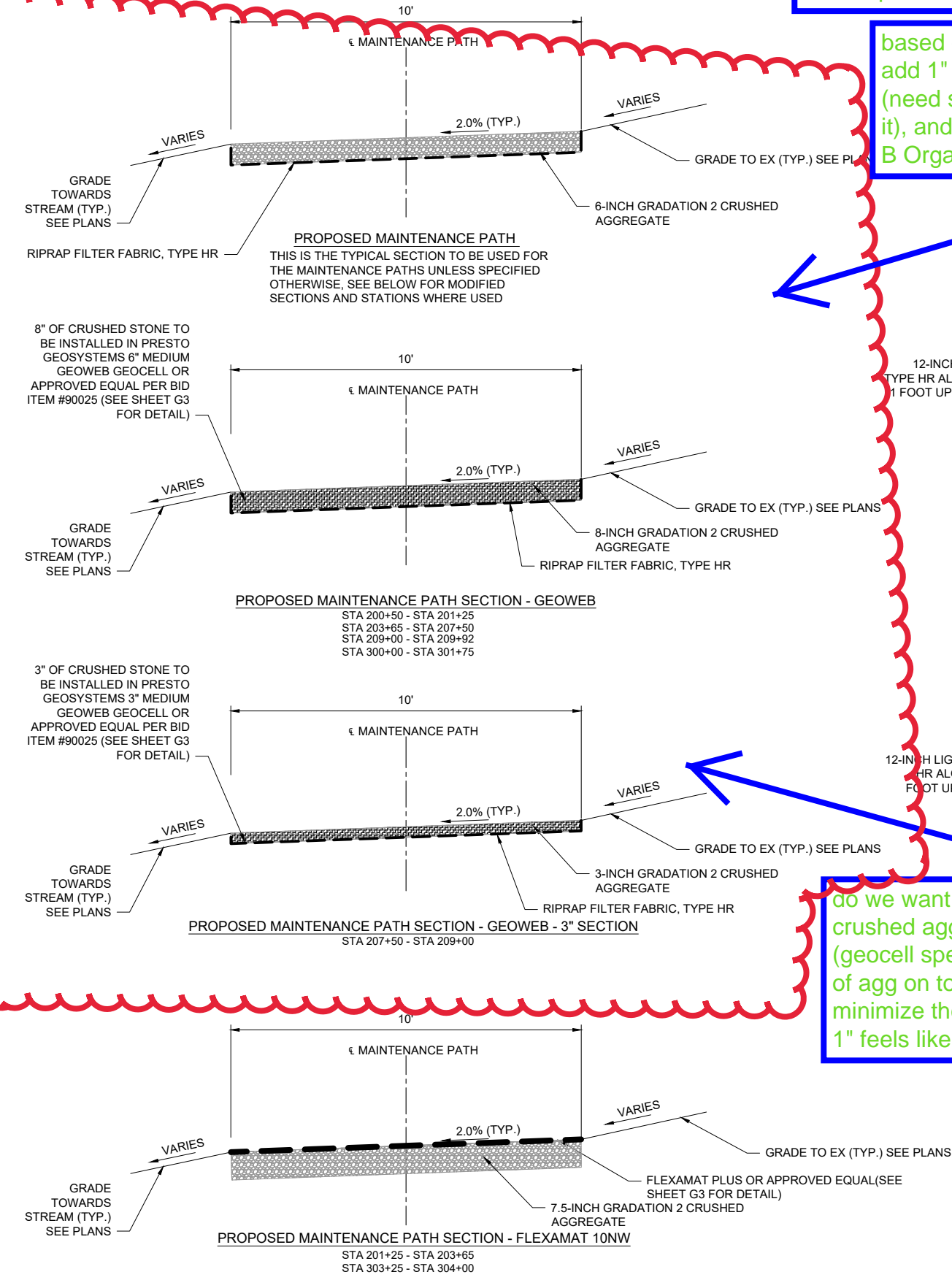
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- NOTES:
- EXCAVATE AN ADDITIONAL 6 INCHES AND PLACE GRADATION 1 CRUSHED AGGREGATE BASE COURSE (3" MIN) IN AREAS WHERE SOILS ARE POOR ALONG THE MAINTENANCE PATH AND AS DIRECTED BY THE ENGINEER
 - REFER TO BID ITEM #90024 FOR TIED CONCRETE BLOCK MAT DETAILS

Greg/Janet-how should this be paid for?

based on public feedback, we'd like to add 1" topsoil, and native path rush (need seed mix...we'll write a spec for it), and the EC Mat Class II Urban type B Organic

do we want to add another inch of crushed agg to cover the 3" geocell? (geocell specs say it should have 2" of agg on top, but we are trying to minimize the impact to the trees, so 1" feels like a good compromise)



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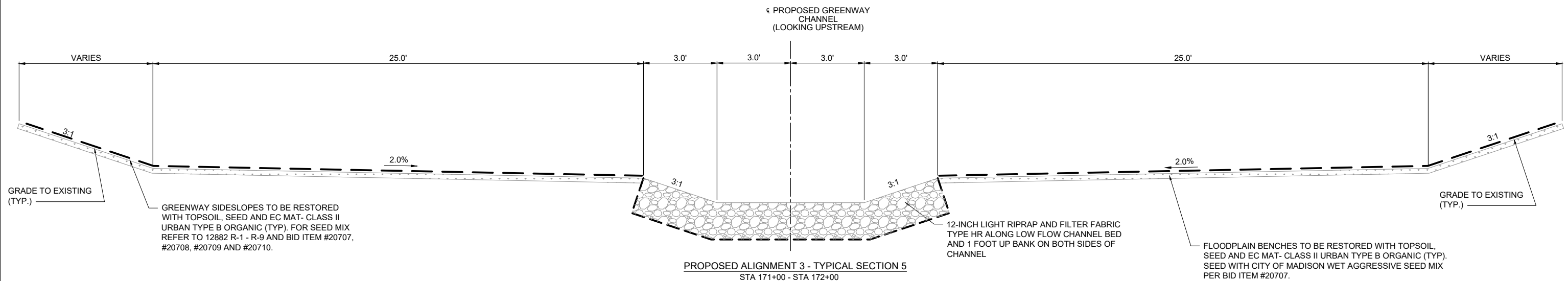
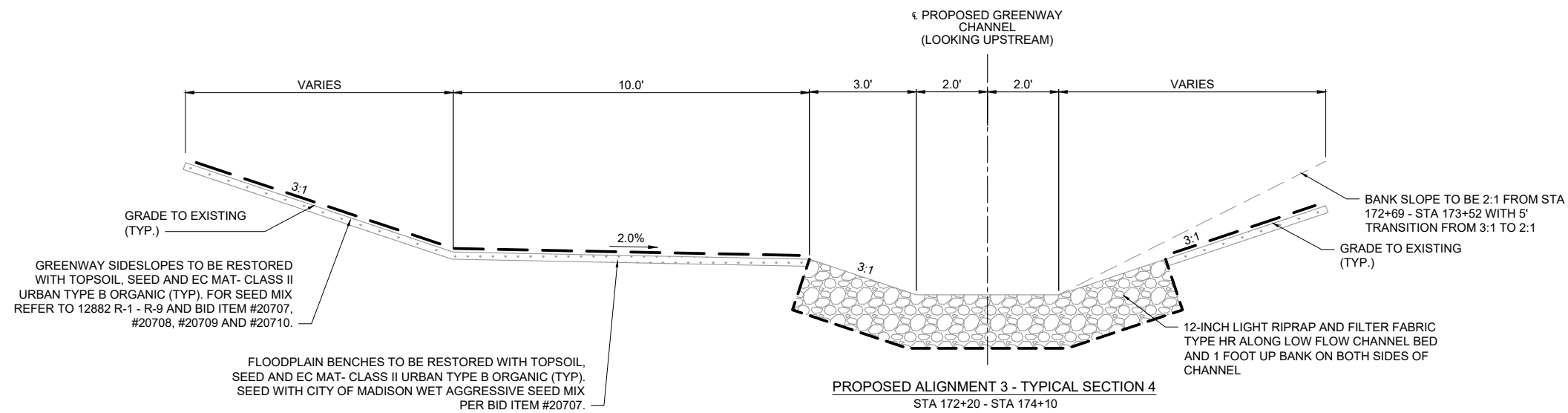
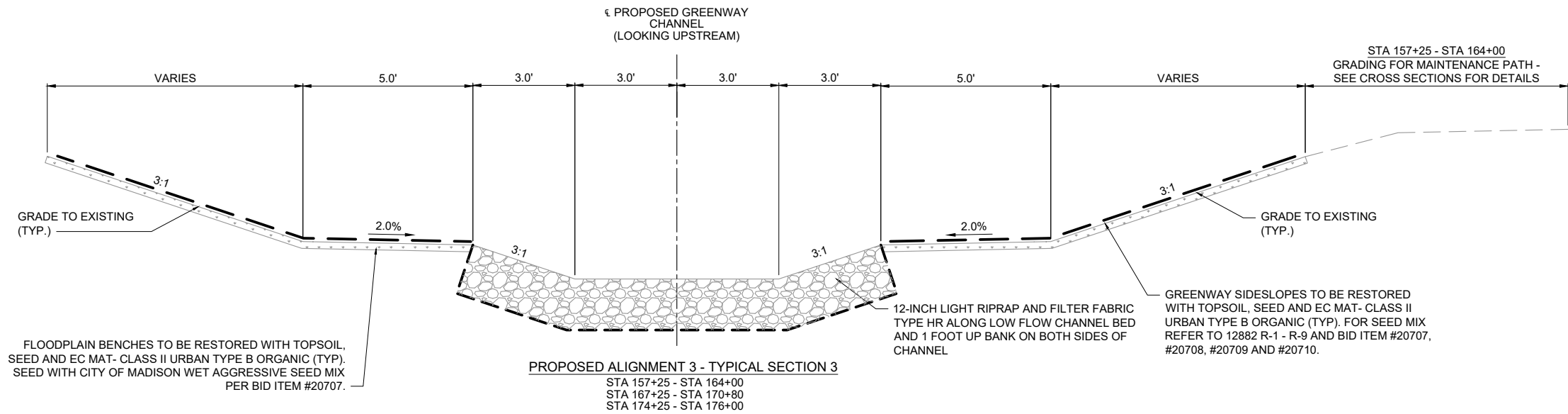


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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
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PROPOSED GREENWAY TYPICAL SECTIONS

PROJECT NO:
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TS2



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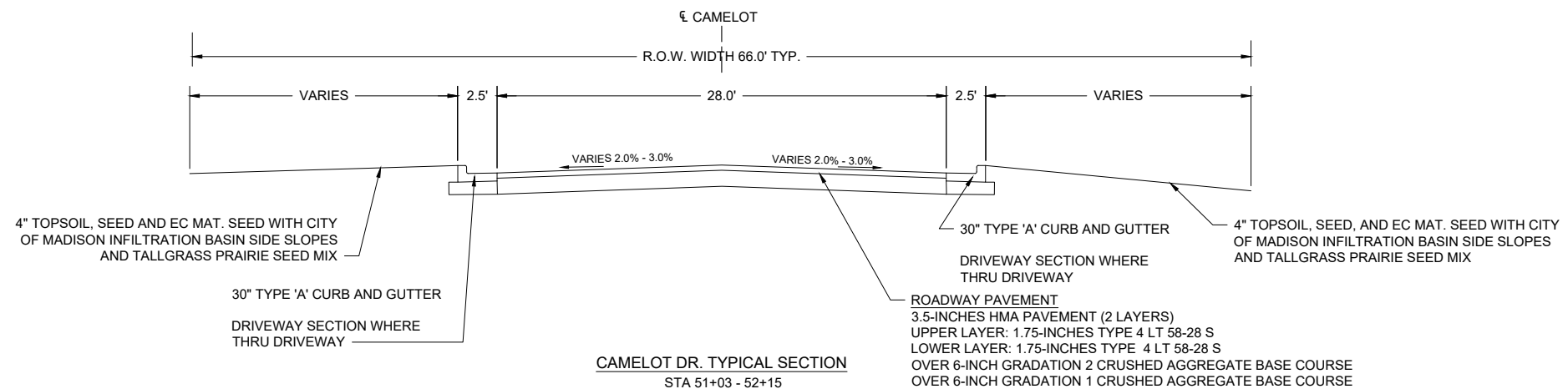
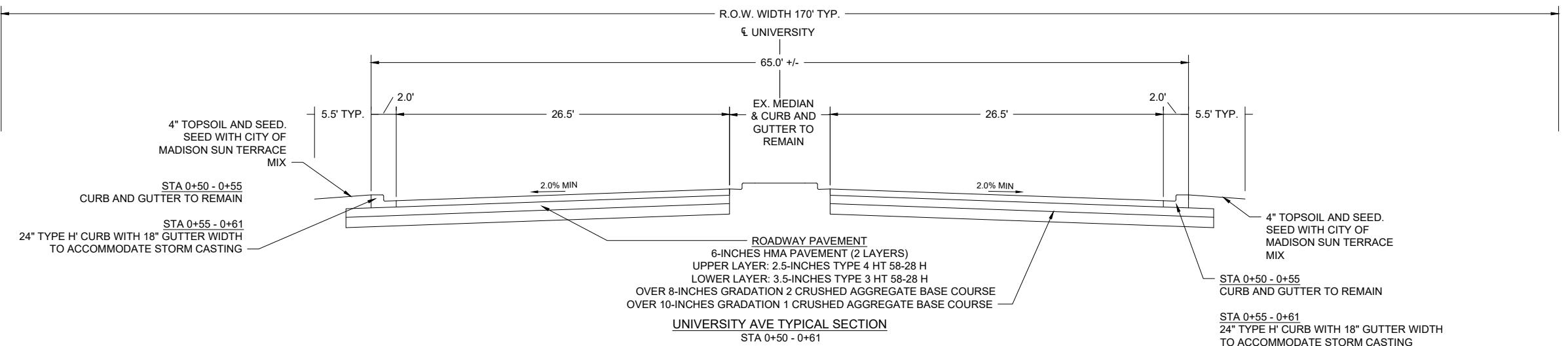
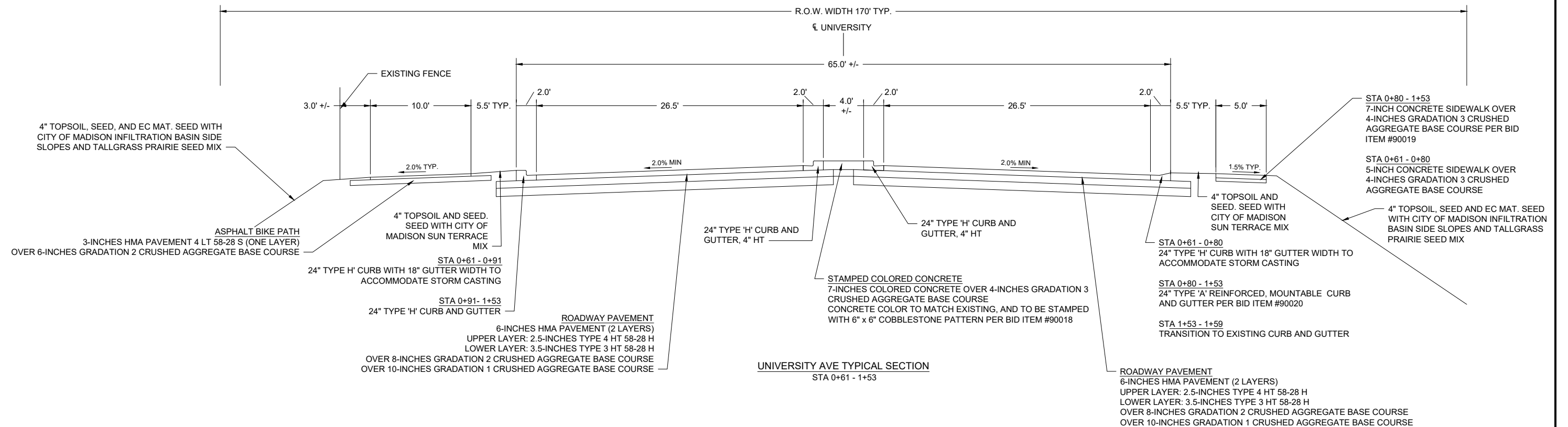


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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
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PROPOSED GREENWAY TYPICAL SECTIONS

PROJECT NO:
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SHEET
TS3



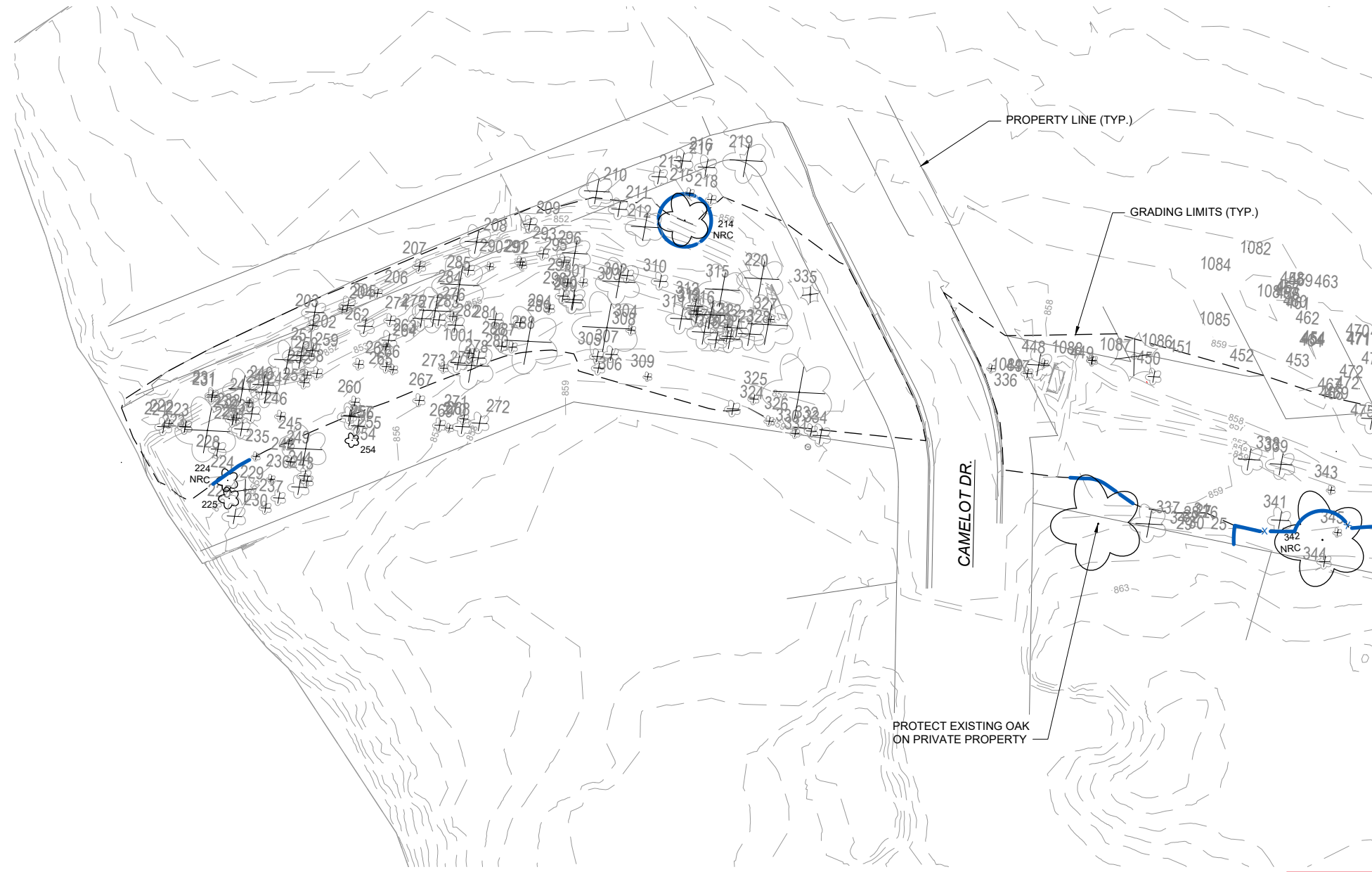
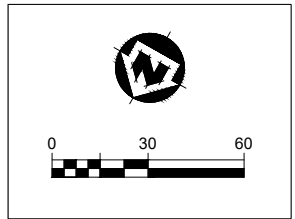
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
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ROADWAY RESTORATION TYPICAL SECTIONS

PROJECT NO.
00373112
SHEET
TS4



CLEARING AND GRUBBING NOTES:

- 1) TREES CALLED OUT WITH A LABEL ARE TREES THAT SHALL BE SAVED.
- 2) THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO LIMBING ANY TREES THAT ARE TO REMAIN.
- 3) BRANCHES BROKEN ON SAVED TREES, DURING THE FELLING OF ADJACENT TREES, SHALL BE CUT OR LIMBED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- 4) STUMPS WITHIN THE GRADING LIMITS SHALL BE GRUBBED.
- 5) STUMPS OUTSIDE OF THE GRADING LIMITS SHALL NO BE GRUBBED, THEY SHALL INSTEAD BE CUT TO WITHIN 3" OF THE GROUND AND TREATED WITH HERBICIDE.
- 6) ALL QUESTIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.

TREE REMOVAL LEGEND

- TREE TO REMAIN & TREE TAG NUMBER, SEE TABLE FOR DETAILS
- TREE TO BE REMOVED, SEE SHEETS TR4-TR5 FOR DETAILS
- INDIVIDUAL TREE PROTECTION FENCING. TO BE INSTALLED A MINIMUM 10-FOOT DIAMETER AROUND TREE, OR AT DRIPLINE WHERE CALLED OUT ON PLANS
- TREE PROTECTION FENCING. INSTALL WHERE SHOWN ON PLANS
- NRC NO ROOT CUTTING PER #90009

TREES TO REMAIN		
TAG #	DBH	SPECIES
214	14,8,22,10,6,10	Silver Maple Acer saccharinum
224	9.5	Walnut Juglans sp.
225	9	Walnut Juglans sp.
254	6	Walnut Juglans sp.
342	39.5	Bur Oak Quercus macrocarpa

labeling convention not the same as other pages. Can you confirm that the view extend far enough over towards University? I dont see tree #476 on here...hard to tell if it's on the next sheet?

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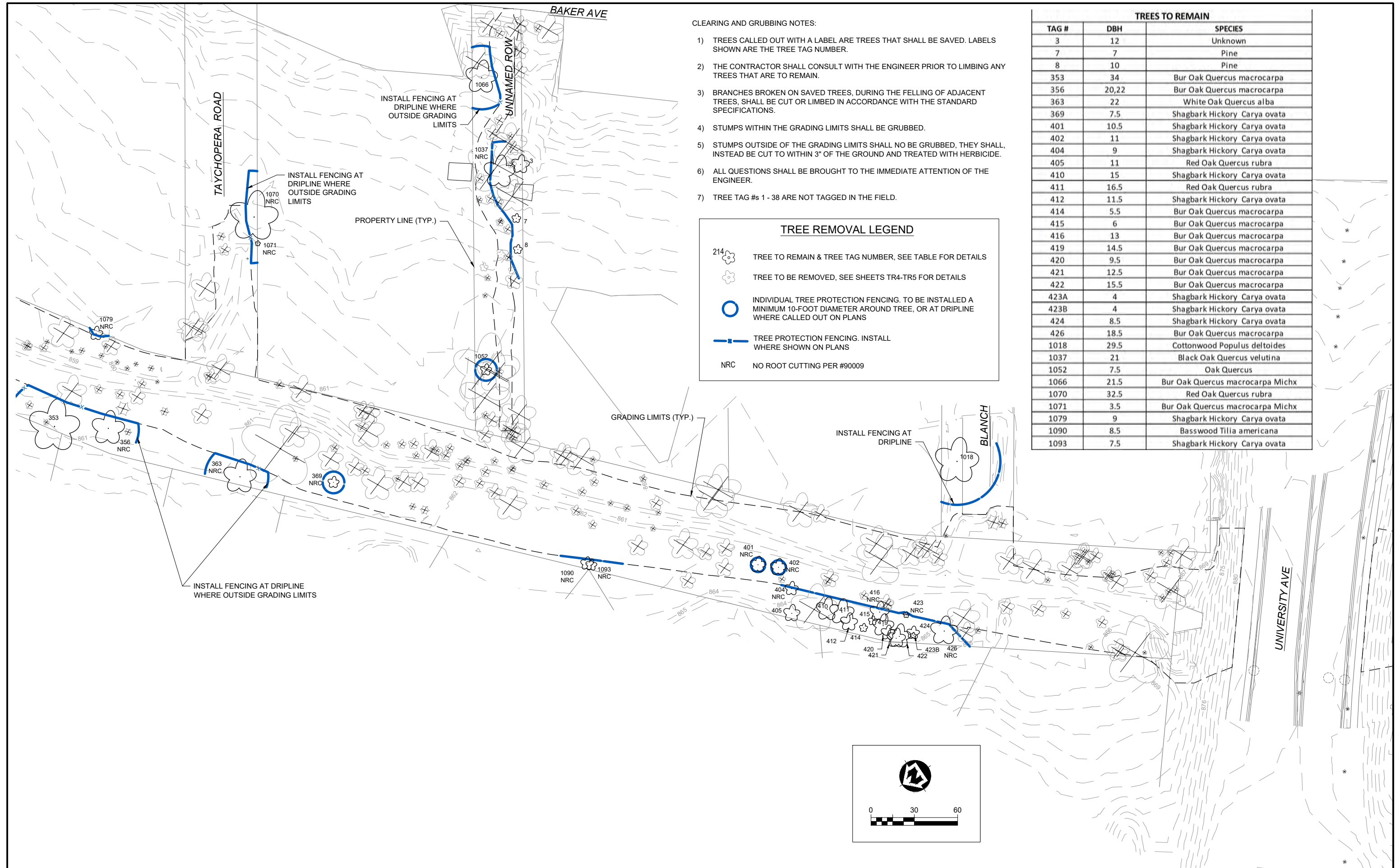
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

TREE REMOVAL PLAN

PROJECT NO.
00373112
 SHEET
TR1



CLEARING AND GRUBBING NOTES:

- 1) TREES CALLED OUT WITH A LABEL ARE TREES THAT SHALL BE SAVED. LABELS SHOWN ARE THE TREE TAG NUMBER.
- 2) THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO LIMBING ANY TREES THAT ARE TO REMAIN.
- 3) BRANCHES BROKEN ON SAVED TREES, DURING THE FELLING OF ADJACENT TREES, SHALL BE CUT OR LIMBED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- 4) STUMPS WITHIN THE GRADING LIMITS SHALL BE GRUBBED.
- 5) STUMPS OUTSIDE OF THE GRADING LIMITS SHALL NOT BE GRUBBED, THEY SHALL INSTEAD BE CUT TO WITHIN 3" OF THE GROUND AND TREATED WITH HERBICIDE.
- 6) ALL QUESTIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- 7) TREE TAG #s 1 - 38 ARE NOT TAGGED IN THE FIELD.

TREE REMOVAL LEGEND

- TREE TO REMAIN & TREE TAG NUMBER, SEE TABLE FOR DETAILS
- TREE TO BE REMOVED, SEE SHEETS TR4-TR5 FOR DETAILS
- INDIVIDUAL TREE PROTECTION FENCING. TO BE INSTALLED A MINIMUM 10-FOOT DIAMETER AROUND TREE, OR AT DRIPLINE WHERE CALLED OUT ON PLANS
- TREE PROTECTION FENCING. INSTALL WHERE SHOWN ON PLANS
- NRC NO ROOT CUTTING PER #90009

TREES TO REMAIN		
TAG #	DBH	SPECIES
3	12	Unknown
7	7	Pine
8	10	Pine
353	34	Bur Oak Quercus macrocarpa
356	20,22	Bur Oak Quercus macrocarpa
363	22	White Oak Quercus alba
369	7.5	Shagbark Hickory Carya ovata
401	10.5	Shagbark Hickory Carya ovata
402	11	Shagbark Hickory Carya ovata
404	9	Shagbark Hickory Carya ovata
405	11	Red Oak Quercus rubra
410	15	Shagbark Hickory Carya ovata
411	16.5	Red Oak Quercus rubra
412	11.5	Shagbark Hickory Carya ovata
414	5.5	Bur Oak Quercus macrocarpa
415	6	Bur Oak Quercus macrocarpa
416	13	Bur Oak Quercus macrocarpa
419	14.5	Bur Oak Quercus macrocarpa
420	9.5	Bur Oak Quercus macrocarpa
421	12.5	Bur Oak Quercus macrocarpa
422	15.5	Bur Oak Quercus macrocarpa
423A	4	Shagbark Hickory Carya ovata
423B	4	Shagbark Hickory Carya ovata
424	8.5	Shagbark Hickory Carya ovata
426	18.5	Bur Oak Quercus macrocarpa
1018	29.5	Cottonwood Populus deltoides
1037	21	Black Oak Quercus velutina
1052	7.5	Oak Quercus
1066	21.5	Bur Oak Quercus macrocarpa Michx
1070	32.5	Red Oak Quercus rubra
1071	3.5	Bur Oak Quercus macrocarpa Michx
1079	9	Shagbark Hickory Carya ovata
1090	8.5	Basswood Tilia americana
1093	7.5	Shagbark Hickory Carya ovata

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
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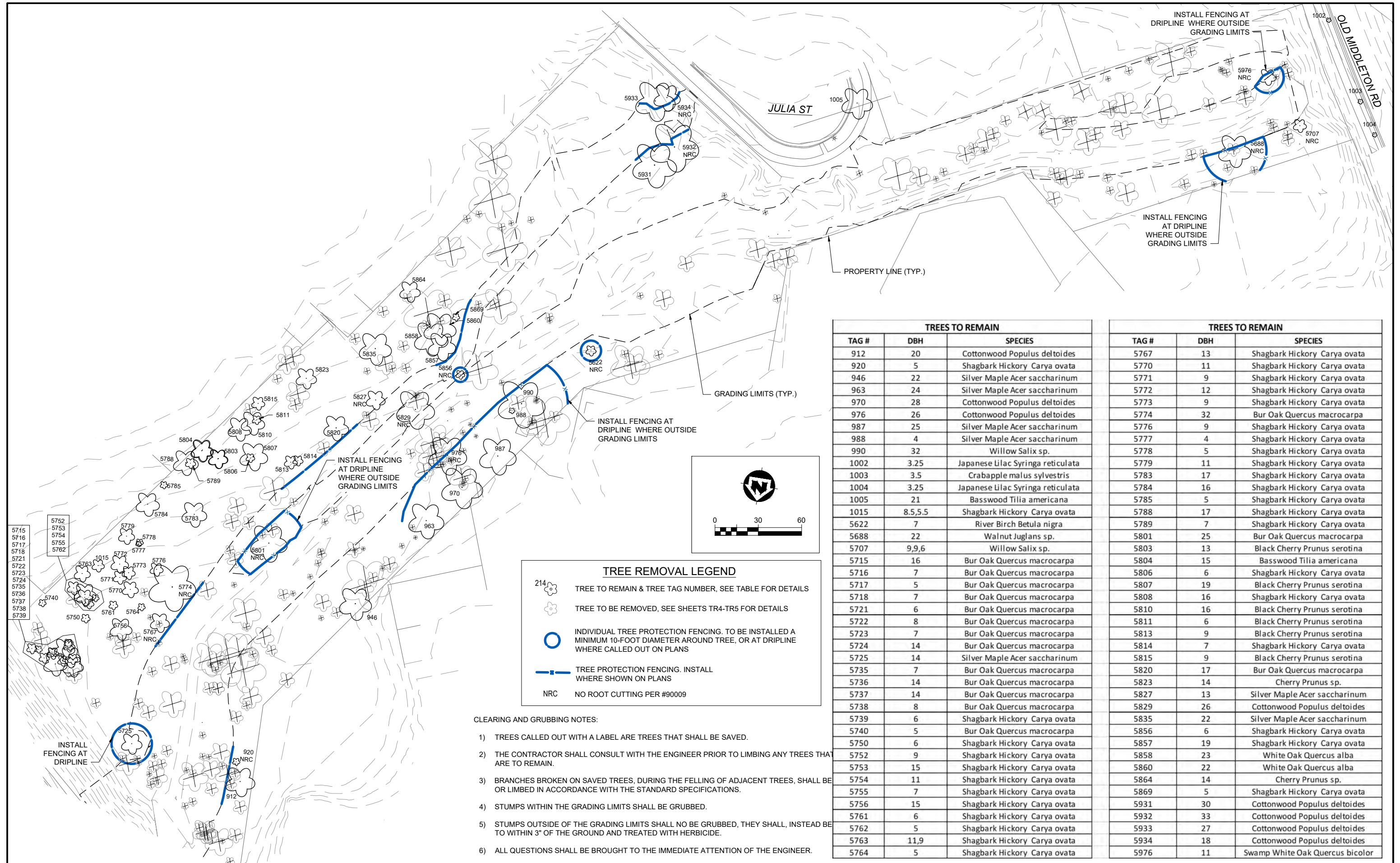
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

TREE REMOVAL PLAN

PROJECT NO.
00373112

SHEET
TR2



TREE REMOVAL LEGEND

- TREE TO REMAIN & TREE TAG NUMBER, SEE TABLE FOR DETAILS
- TREE TO BE REMOVED, SEE SHEETS TR4-TR5 FOR DETAILS
- INDIVIDUAL TREE PROTECTION FENCING. TO BE INSTALLED A MINIMUM 10-FOOT DIAMETER AROUND TREE, OR AT DRIPLINE WHERE CALLED OUT ON PLANS
- TREE PROTECTION FENCING. INSTALL WHERE SHOWN ON PLANS
- NRC NO ROOT CUTTING PER #90009

- CLEARING AND GRUBBING NOTES:**
- TREES CALLED OUT WITH A LABEL ARE TREES THAT SHALL BE SAVED.
 - THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO LIMBING ANY TREES THAT ARE TO REMAIN.
 - BRANCHES BROKEN ON SAVED TREES, DURING THE FELLING OF ADJACENT TREES, SHALL BE OR LIMBED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
 - STUMPS WITHIN THE GRADING LIMITS SHALL BE GRUBBED.
 - STUMPS OUTSIDE OF THE GRADING LIMITS SHALL NO BE GRUBBED, THEY SHALL, INSTEAD BE TO WITHIN 3" OF THE GROUND AND TREATED WITH HERBICIDE.
 - ALL QUESTIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.

TREES TO REMAIN			TREES TO REMAIN		
TAG #	DBH	SPECIES	TAG #	DBH	SPECIES
912	20	Cottonwood Populus deltoides	5767	13	Shagbark Hickory Carya ovata
920	5	Shagbark Hickory Carya ovata	5770	11	Shagbark Hickory Carya ovata
946	22	Silver Maple Acer saccharinum	5771	9	Shagbark Hickory Carya ovata
963	24	Silver Maple Acer saccharinum	5772	12	Shagbark Hickory Carya ovata
970	28	Cottonwood Populus deltoides	5773	9	Shagbark Hickory Carya ovata
976	26	Cottonwood Populus deltoides	5774	32	Bur Oak Quercus macrocarpa
987	25	Silver Maple Acer saccharinum	5776	9	Shagbark Hickory Carya ovata
988	4	Silver Maple Acer saccharinum	5777	4	Shagbark Hickory Carya ovata
990	32	Willow Salix sp.	5778	5	Shagbark Hickory Carya ovata
1002	3.25	Japanese Lilac Syringa reticulata	5779	11	Shagbark Hickory Carya ovata
1003	3.5	Crabapple malus sylvestris	5783	17	Shagbark Hickory Carya ovata
1004	3.25	Japanese Lilac Syringa reticulata	5784	16	Shagbark Hickory Carya ovata
1005	21	Basswood Tilia americana	5785	5	Shagbark Hickory Carya ovata
1015	8.5,5.5	Shagbark Hickory Carya ovata	5788	17	Shagbark Hickory Carya ovata
5622	7	River Birch Betula nigra	5789	7	Shagbark Hickory Carya ovata
5688	22	Walnut Juglans sp.	5801	25	Bur Oak Quercus macrocarpa
5707	9,9,6	Willow Salix sp.	5803	13	Black Cherry Prunus serotina
5715	16	Bur Oak Quercus macrocarpa	5804	15	Basswood Tilia americana
5716	7	Bur Oak Quercus macrocarpa	5806	6	Shagbark Hickory Carya ovata
5717	5	Bur Oak Quercus macrocarpa	5807	19	Black Cherry Prunus serotina
5718	7	Bur Oak Quercus macrocarpa	5808	16	Shagbark Hickory Carya ovata
5721	6	Bur Oak Quercus macrocarpa	5810	16	Black Cherry Prunus serotina
5722	8	Bur Oak Quercus macrocarpa	5811	6	Black Cherry Prunus serotina
5723	7	Bur Oak Quercus macrocarpa	5813	9	Black Cherry Prunus serotina
5724	14	Bur Oak Quercus macrocarpa	5814	7	Shagbark Hickory Carya ovata
5725	14	Silver Maple Acer saccharinum	5815	9	Black Cherry Prunus serotina
5735	7	Bur Oak Quercus macrocarpa	5820	17	Bur Oak Quercus macrocarpa
5736	14	Bur Oak Quercus macrocarpa	5823	14	Cherry Prunus sp.
5737	14	Bur Oak Quercus macrocarpa	5827	13	Silver Maple Acer saccharinum
5738	8	Bur Oak Quercus macrocarpa	5829	26	Cottonwood Populus deltoides
5739	6	Shagbark Hickory Carya ovata	5835	22	Silver Maple Acer saccharinum
5740	5	Bur Oak Quercus macrocarpa	5856	6	Shagbark Hickory Carya ovata
5750	6	Shagbark Hickory Carya ovata	5857	19	Shagbark Hickory Carya ovata
5752	9	Shagbark Hickory Carya ovata	5858	23	White Oak Quercus alba
5753	15	Shagbark Hickory Carya ovata	5860	22	White Oak Quercus alba
5754	11	Shagbark Hickory Carya ovata	5864	14	Cherry Prunus sp.
5755	7	Shagbark Hickory Carya ovata	5869	5	Shagbark Hickory Carya ovata
5756	15	Shagbark Hickory Carya ovata	5931	30	Cottonwood Populus deltoides
5761	6	Shagbark Hickory Carya ovata	5932	33	Cottonwood Populus deltoides
5762	5	Shagbark Hickory Carya ovata	5933	27	Cottonwood Populus deltoides
5763	11,9	Shagbark Hickory Carya ovata	5934	18	Cottonwood Populus deltoides
5764	5	Shagbark Hickory Carya ovata	5976	11	Swamp White Oak Quercus bicolor

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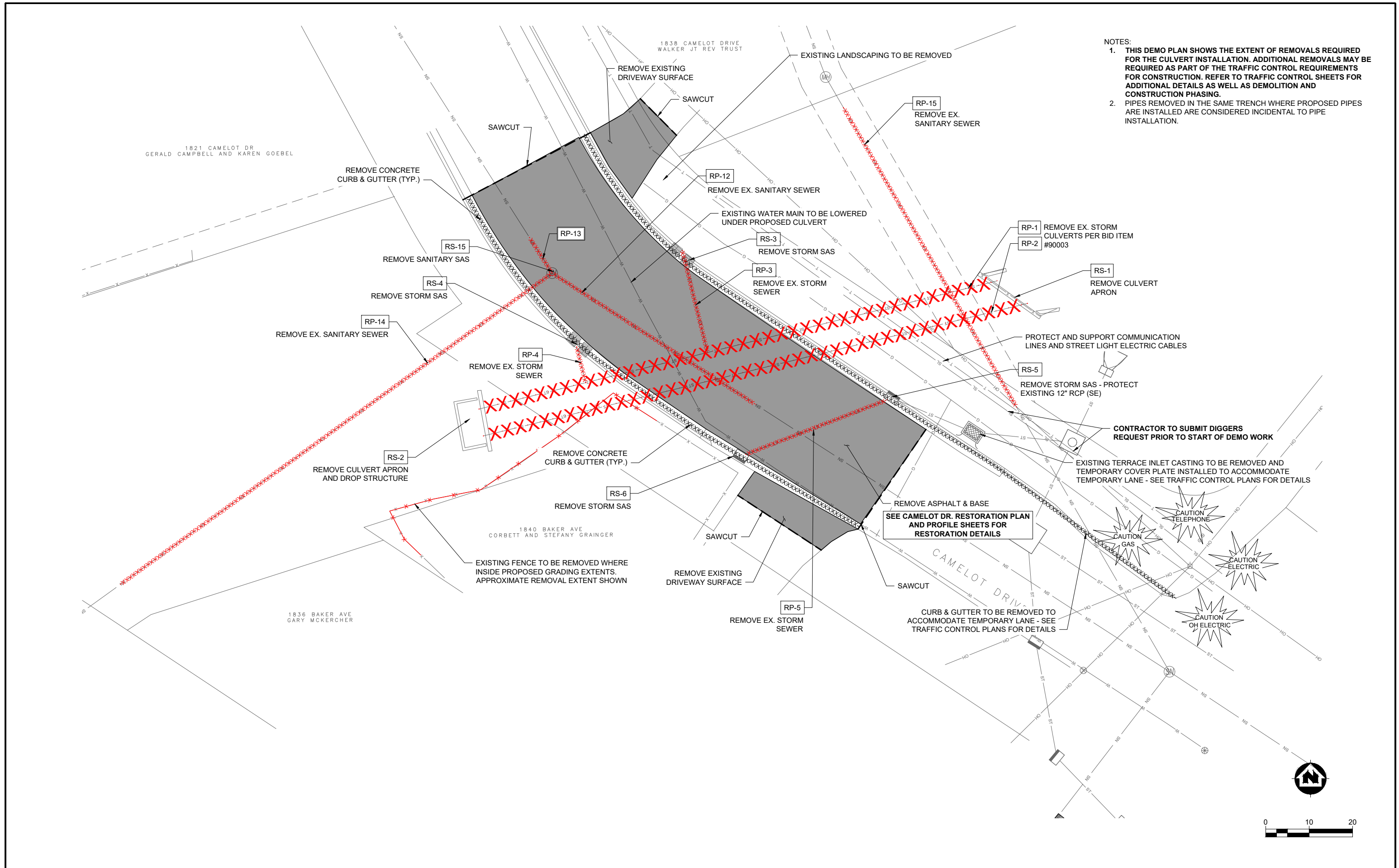
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

TREE REMOVAL PLAN

PROJECT NO:
00373112
SHEET
TR3



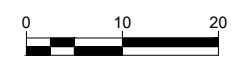
- NOTES:
- 1. THIS DEMO PLAN SHOWS THE EXTENT OF REMOVALS REQUIRED FOR THE CULVERT INSTALLATION. ADDITIONAL REMOVALS MAY BE REQUIRED AS PART OF THE TRAFFIC CONTROL REQUIREMENTS FOR CONSTRUCTION. REFER TO TRAFFIC CONTROL SHEETS FOR ADDITIONAL DETAILS AS WELL AS DEMOLITION AND CONSTRUCTION PHASING.
 - 2. PIPES REMOVED IN THE SAME TRENCH WHERE PROPOSED PIPES ARE INSTALLED ARE CONSIDERED INCIDENTAL TO PIPE INSTALLATION.

CONTRACTOR TO SUBMIT DIGGERS REQUEST PRIOR TO START OF DEMO WORK

EXISTING TERRACE INLET CASTING TO BE REMOVED AND TEMPORARY COVER PLATE INSTALLED TO ACCOMMODATE TEMPORARY LANE - SEE TRAFFIC CONTROL PLANS FOR DETAILS

SEE CAMELOT DR. RESTORATION PLAN AND PROFILE SHEETS FOR RESTORATION DETAILS

CURB & GUTTER TO BE REMOVED TO ACCOMMODATE TEMPORARY LANE - SEE TRAFFIC CONTROL PLANS FOR DETAILS



PROJECT DATE:	NO.	DATE	REVISION	BY
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DESIGNED BY: Init	-	-	-	-
CHECKED BY: Init	-	-	-	-

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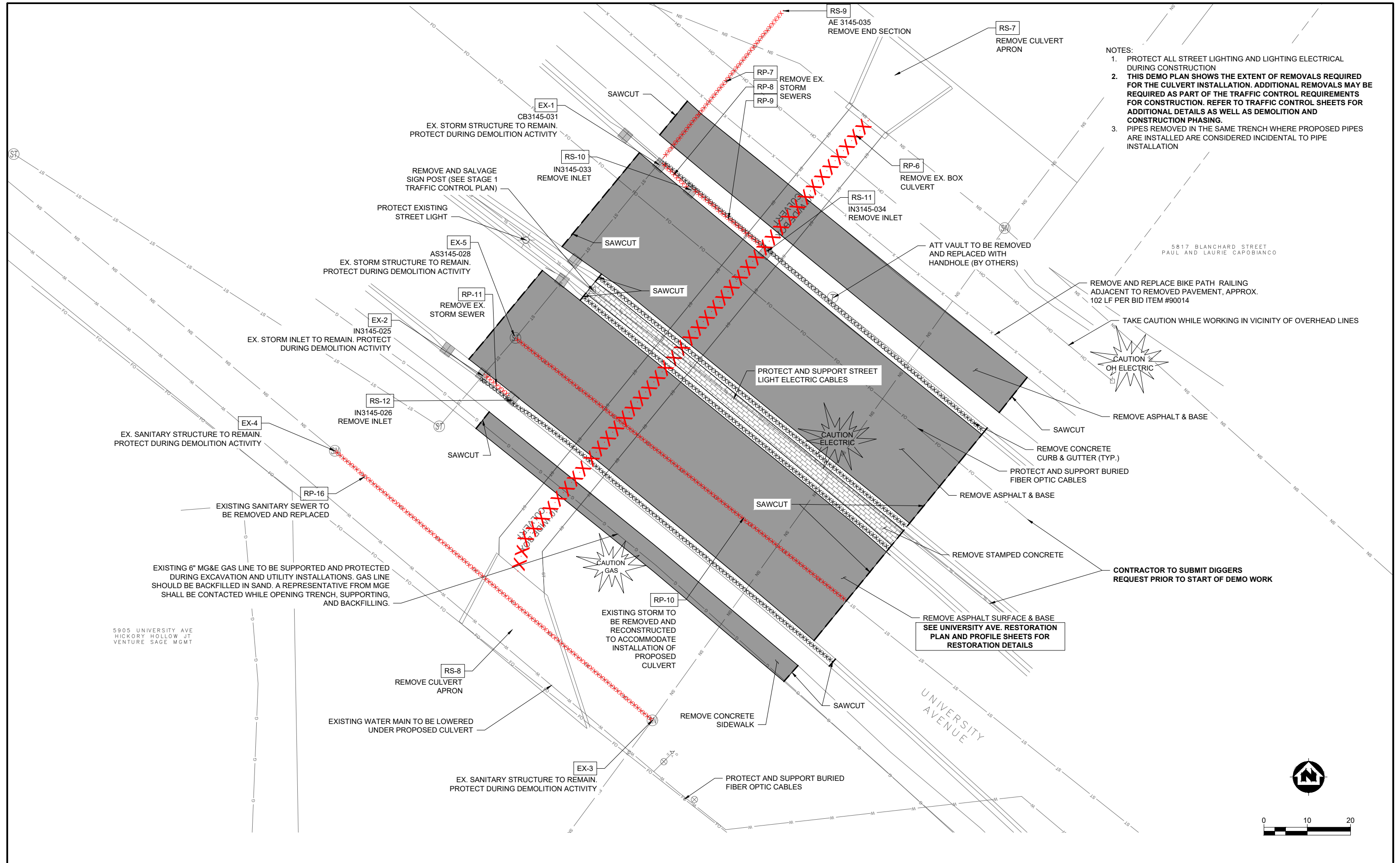
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

CAMELOT DR. DEMOLITION PLAN

PROJECT NO:
00373112

SHEET
D1



- NOTES:
1. PROTECT ALL STREET LIGHTING AND LIGHTING ELECTRICAL DURING CONSTRUCTION
 2. THIS DEMO PLAN SHOWS THE EXTENT OF REMOVALS REQUIRED FOR THE CULVERT INSTALLATION. ADDITIONAL REMOVALS MAY BE REQUIRED AS PART OF THE TRAFFIC CONTROL REQUIREMENTS FOR CONSTRUCTION. REFER TO TRAFFIC CONTROL SHEETS FOR ADDITIONAL DETAILS AS WELL AS DEMOLITION AND CONSTRUCTION PHASING.
 3. PIPES REMOVED IN THE SAME TRENCH WHERE PROPOSED PIPES ARE INSTALLED ARE CONSIDERED INCIDENTAL TO PIPE INSTALLATION

5905 UNIVERSITY AVE
HICKORY HOLLOW JT
VENTURE SAGE MGMT

5817 BLANCHARD STREET
PAUL AND LAURIE CAPOBIANCO

REMOVE AND REPLACE BIKE PATH RAILING
ADJACENT TO REMOVED PAVEMENT, APPROX.
102 LF PER BID ITEM #90014

TAKE CAUTION WHILE WORKING IN VICINITY OF OVERHEAD LINES



REMOVE ASPHALT & BASE

REMOVE CONCRETE
CURB & GUTTER (TYP.)

PROTECT AND SUPPORT BURIED
FIBER OPTIC CABLES

REMOVE ASPHALT & BASE

REMOVE STAMPED CONCRETE

CONTRACTOR TO SUBMIT DIGGERS
REQUEST PRIOR TO START OF DEMO WORK

REMOVE ASPHALT SURFACE & BASE
SEE UNIVERSITY AVE. RESTORATION
PLAN AND PROFILE SHEETS FOR
RESTORATION DETAILS

EXISTING STORM TO
BE REMOVED AND
RECONSTRUCTED
TO ACCOMMODATE
INSTALLATION OF
PROPOSED
CULVERT

EXISTING 6" MG&E GAS LINE TO BE SUPPORTED AND PROTECTED
DURING EXCAVATION AND UTILITY INSTALLATIONS. GAS LINE
SHOULD BE BACKFILLED IN SAND. A REPRESENTATIVE FROM MGE
SHALL BE CONTACTED WHILE OPENING TRENCH, SUPPORTING,
AND BACKFILLING.

EXISTING SANITARY SEWER TO
BE REMOVED AND REPLACED

EX. SANITARY STRUCTURE TO REMAIN.
PROTECT DURING DEMOLITION ACTIVITY

EX. STORM STRUCTURE TO REMAIN.
PROTECT DURING DEMOLITION ACTIVITY

EX. STORM STRUCTURE TO REMAIN.
PROTECT DURING DEMOLITION ACTIVITY

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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CITY OF MADISON
LOCATION

UNIVERSITY AVE DEMOLITION PLAN

PROJECT NO.
00373112
SHEET
D2

DESIGN DATA

LIVE LOAD:
DESIGN LOAD : HL-93

EARTH LOAD:
DESIGNED FOR FILL HEIGHT RANGE OF 0.5 TO 3.5 FEET

MATERIAL PROPERTIES:
CONCRETE MASONRY ————— f'c = 4,000 P.S.I.
CONCRETE MASONRY (PRECAST BARREL) — f'c = 5,000 P.S.I.
BAR STEEL REINFORCEMENT ————— fy = 60,000 P.S.I.
WELDED WIRE FABRIC ————— fy = 65,000 P.S.I.

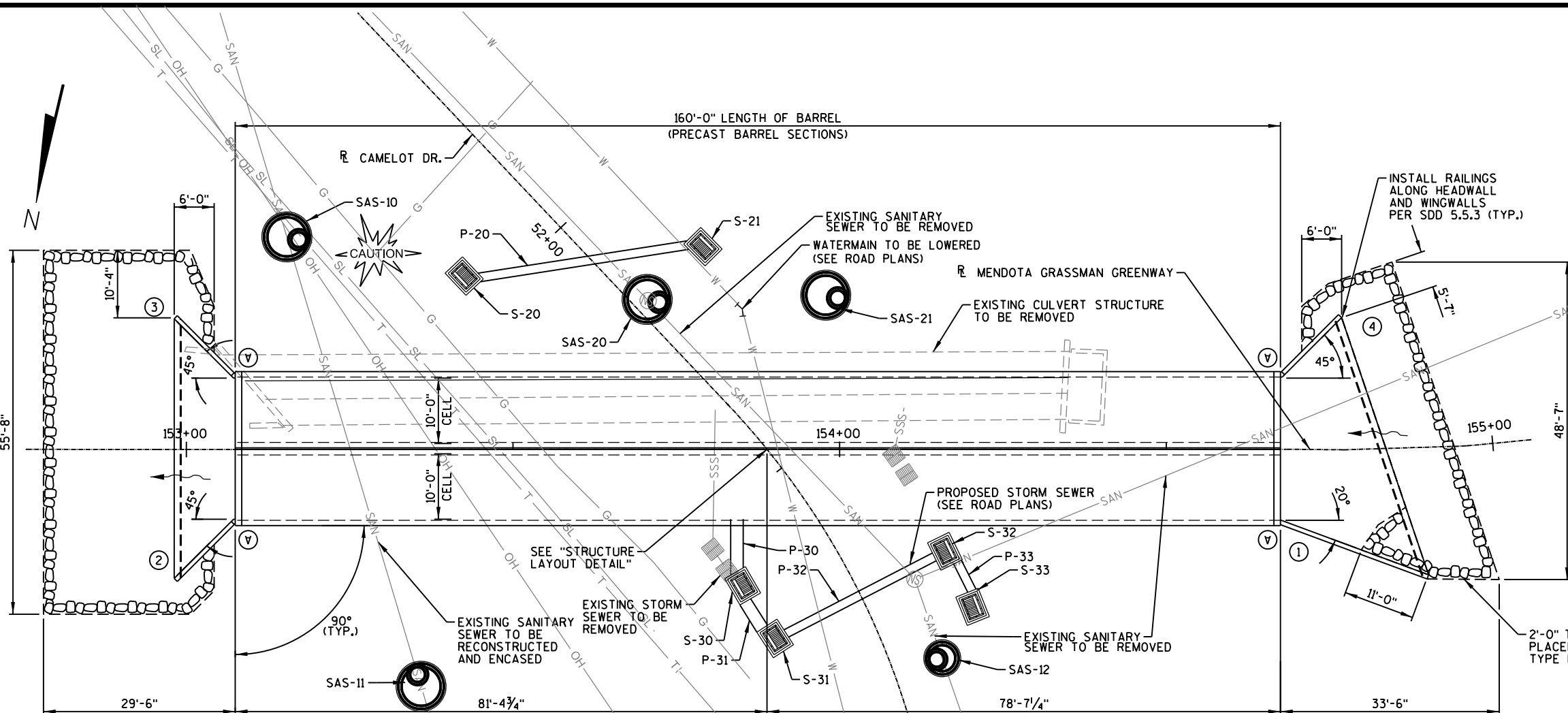
HYDRAULIC DATA

100 YEAR FREQUENCY
DRAINAGE AREA = 0.80 SQ.MI.
Q₁₀₀ = 717 CFS
VELOCITY = 9.1 FPS
WATERWAY AREA = 76 SF
HIGH WATER₁₀₀ ELEVATION = EL. 857.69
OVERTOPPING ROADWAY = N/A
SCOUR CODE = 8

2 YEAR FREQUENCY
Q₂ = 206 CFS
HIGH WATER₂ ELEVATION = EL. 854.44
VELOCITY = 5.0 FPS

LIST OF DRAWINGS

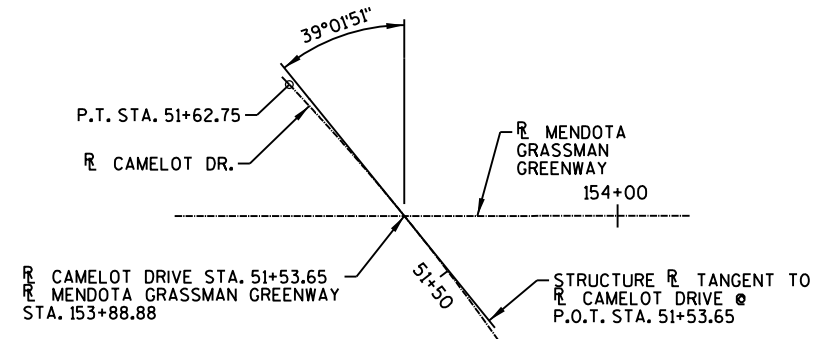
1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION



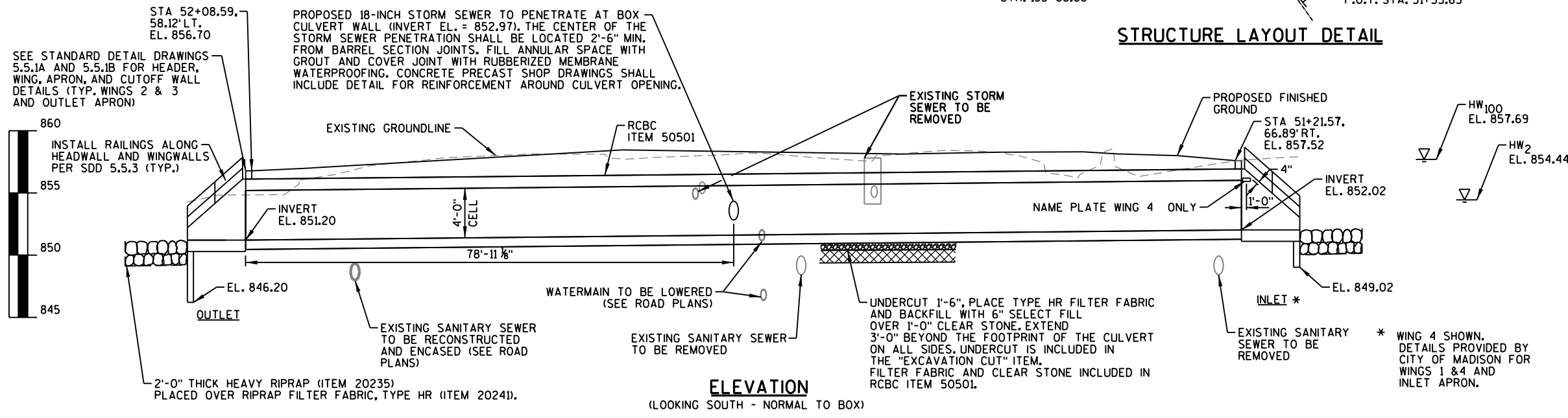
LEGEND

- — INDICATES WING NUMBER
- SAN — SANITARY SEWER (SEE ROAD PLANS)
- SSS — STORM SEWER (SEE ROAD PLANS)
- Ⓟ — ADJUST WINGWALL THICKNESS AT CORNERS TO MATCH BOX CULVERT SIDE WALL THICKNESS OVER A LONGITUDINAL DISTANCE NO MORE THAN 4 FEET AND NO LESS THAN 2 FEET.

NOTE: CONTRACTOR TO PROVIDE PLAN FOR HANDLING STREAM FLOW THROUGH ALL STAGES OF CONSTRUCTION. SEE SPECIAL PROVISION FOR STORM CONTROL PLAN AND IMPLEMENTATION.



STRUCTURE LAYOUT DETAIL



ELEVATION

(LOOKING SOUTH - NORMAL TO BOX)

NO.	DATE	REVISION	BY

CAMELOT DRIVE OVER MENDOTA GRASSMAN GREENWAY STRUCTURE B-13-0900

GENERAL PLAN

County	DANE	Town/City/Village	MADISON
Design Spec.	AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS		
Designed By	JFM	Design Checked	KHB
Drawn By	RLR	Plans Checked	KHB

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DATE	F.B.	MSA PROJECT NUMBER
		00373112

STRUCTURE ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL
20101	EXCAVATION CUT	CY	2600
20204	SELECT FILL	TON	490
20235	HEAVY RIPRAP - GLACIAL FIELD STONE	CY	130
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	215
30141	TYPE A SLURRY	CY	235
50501	PRECAST REINFORCED CONCRETE BOX CULVERT, 10 FT X 4 FT	LF	320
***	50511 BOX CULVERT WINGWALLS, B-13-0900, OUTLET END	EA	1
◇	90001 STORM CONTROL PLAN AND IMPLEMENTATION	LS	1
	90003 REMOVE EXISTING TWIN 48" PIPES (CAMELOT)	EA	1
	90005 TEMPORARY SHORING B-13-0900	SF	225
	90006 CULVERT WINGWALL RAILINGS	LF	106
△	90007 BOX CULVERT WINGWALLS, B-13-0900, INLET END	EA	1

*** INCLUDES CAST-IN PLACE HEADER, WINGWALLS, APRON, CUTOFF WALL, AND ALL INCLUDED REINFORCING AND ADHESIVE ANCHOR CONNECTIONS AS SHOWN ON STANDARD DETAIL DRAWINGS 5.5.1A AND 5.5.1B. EACH UNIT FOR THE "BOX CULVERT WINGWALL" ITEM IS QUANTIFIED AS THE TOTAL OF ALL ELEMENTS NECESSARY TO CONSTRUCT THE OUTLET END IN ACCORDANCE WITH THE STANDARD DETAIL DRAWINGS.

△ INCLUDES CAST-IN PLACE HEADER, WINGWALLS, APRON, CUTOFF WALL, AND ALL INCLUDED REINFORCING AND ADHESIVE ANCHOR CONNECTIONS AS SHOWN ON THE PLANS. EACH UNIT FOR THE "BOX CULVERT WINGWALL" ITEM IS QUANTIFIED AS THE TOTAL OF ALL ELEMENTS NECESSARY TO CONSTRUCT THE INLET END IN ACCORDANCE WITH DETAILS PROVIDED BY THE CITY OF MADISON FOR WINGS 1 & 4 AND INLET APRON.

◇ A TEMPORARY WATER DIVERSION SHALL BE PROVIDED TO ESTABLISH DRY CONDITIONS DURING CONSTRUCTION OF THE BOX CULVERTS.

◇ PLACE BASE AGGREGATE DENSE TO TOP OF BOX IN LIEU OF "SELECT FILL" OR SELECT CRUSHED MATERIAL IF THE ROADWAY BASE AGGREGATE DENSE ENCRACHES WITHIN THESE LIMITS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION REGARDING PROPOSED UTILITY LOCATIONS.

THIS STRUCTURE WILL REPLACE EXISTING TWIN 48" STEEL PIPE CULVERTS WITH CONCRETE HEADWALLS AND WINGS.

REMOVAL OF THE EXISTING STRUCTURE WILL BE PAID FOR UNDER (90003) BID ITEM "REMOVE EXISTING TWIN 48" PIPES (CAMELOT)".

THE UPPER LIMITS OF "EXCAVATION CUT" SHALL BE THE EXISTING GROUND LINE.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (1991 ADJUSTED), AND WERE ESTABLISHED AT THE SITE USING GPS TECHNOLOGY.

CONSTRUCT STRUCTURE IN STAGES CONFORMING TO THE TRAFFIC STAGING PLAN.

CONSTRUCTION OF THE EXISTING STRUCTURE AND THE TEMPORARY WATER DIVERSION IS TO BE COORDINATED AND DETERMINED BY THE CONTRACTOR.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.II OF THE WISDOT STANDARD SPECIFICATIONS AND WISDOT STANDARD DETAIL DRAWING (SDD) I2A3.

THE CENTER OF STORM SEWER PENETRATIONS SHALL BE LOCATED A MINIMUM OF 2'-6" FROM BARREL SECTION JOINTS. ADJUST LENGTH OF PRECAST BARREL SECTIONS TO ACCOMMODATE STORM SEWER PENETRATIONS.

PRECAST CONCRETE ELEMENTS SHALL BE PROVIDED WITH SUITABLE LIFTING DEVICES FOR HANDLING AND PLACEMENT OF THE ELEMENTS. NOT MORE THAN FOUR (4) HOLES MAY BE CAST, DRILLED OR OTHERWISE NEATLY MADE IN THE SHELL OF EACH PIECE OF BOX SECTION FOR HANDLING. THE HOLES SHALL BE TAPERED UNLESS DRILLED, HOLES SHALL BE FILLED WITH PORTLAND CEMENT MORTAR EXCEPT TAPERED HOLES MAY BE FILLED WITH CONCRETE PLUGS SECURED WITH PORTLAND CEMENT MORTAR OR OTHER APPROVED ADHESIVE.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

MEMBER THICKNESSES SHOWN ON THIS PLAN ARE BASED ON ENGINEERING JUDGEMENT. CONTRACTOR SHALL HAVE A REGISTERED ENGINEER DESIGN THE PRECAST BOX CULVERTS AND PROVIDE SEALED DRAWINGS TO THE CITY OF MADISON FOR APPROVAL. IF MEMBER THICKNESSES SHOWN ON THIS PLAN REQUIRE MODIFICATION, ADJUST WINGWALL, HEADWALL, APRON, AND REINFORCEMENT DIMENSIONS AS NECESSARY.

DETAILS FOR MATERIALS, FABRICATION, CONSTRUCTION, AND DESIGN OF PRECAST BOX CULVERTS NOT SHOWN OR STATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT ASTM SPECIFICATION, C1577; AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS; EXCEPT THAT THE CONCRETE MIXTURE SHALL CONTAIN NOT LESS THAN 565 LBS. OF CEMENTITIOUS MATERIALS PER CUBIC YARD.

THE DESIGN OF PRECAST BOX CULVERTS WITH ALL FILL HEIGHTS SHALL BE AS STATED IN ASTM C1577.

THE JOINT ON THE BOTTOM OF THE CULVERT AND THE SIDES OF THE CULVERT FROM THE BOTTOM TO A POINT 1'-0" FROM THE CEILING SHALL BE SEALED WITH A PREFORMED MASTIC. MASTIC MUST CONFORM TO AASHTO MATERIALS. SPECIFICATION M198, TYPE B. A 2'-0" STRIP OF GEOTEXTILE TYPE OF DF SCHEDULE A SHALL BE PLACED OVER THE JOINTS ON THE TOP AND SIDES OF THE CULVERT. THE GEOTEXTILE SHALL CONFORM TO WISDOT STANDARD SPECIFICATION 645.22.4. (FABRIC NOT REQUIRED OVER INSIDE WALL JOINTS OF MUTCCELL INSTALLATION.)

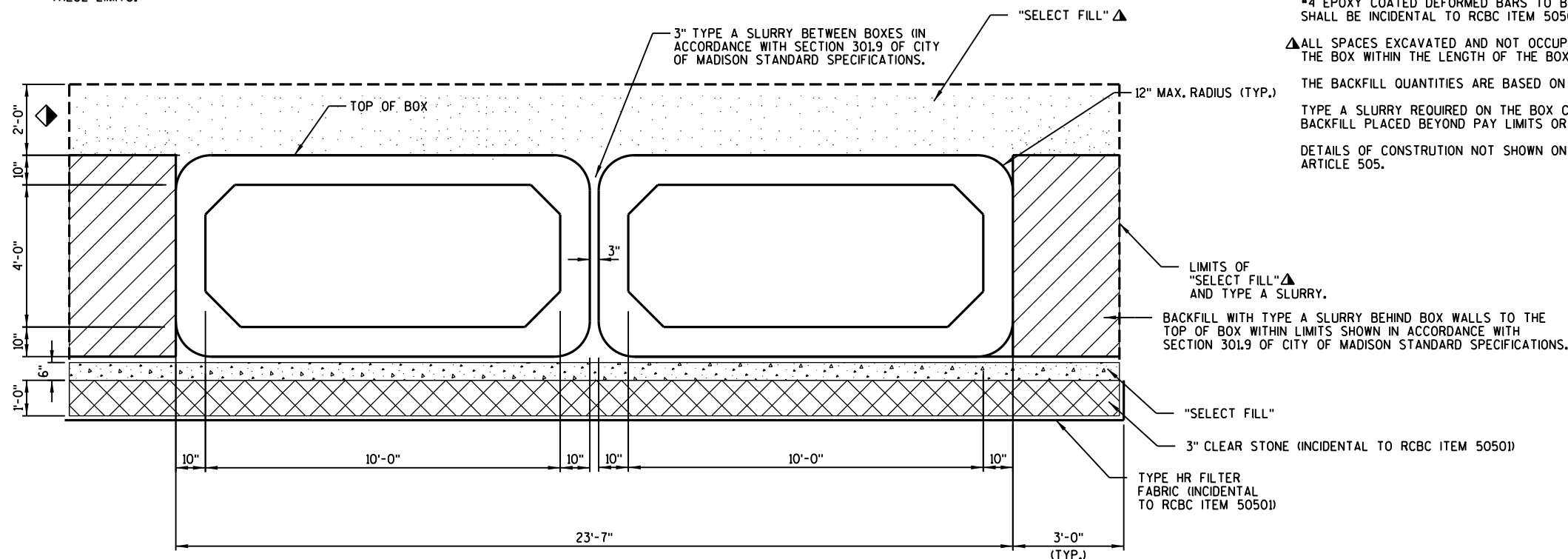
*4 EPOXY COATED DEFORMED BARS TO BE PLACED IN END SECTIONS DURING FABRICATION OF THE BOX CULVERT. ALL DOWEL BARS SHALL BE INCIDENTAL TO RCBC ITEM 50501.

△ ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH "SELECT FILL" ABOVE THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES.

TYPE A SLURRY REQUIRED ON THE BOX CULVERT SIDES AND "SELECT FILL" REQUIRED BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO "EXCAVATION CUT".

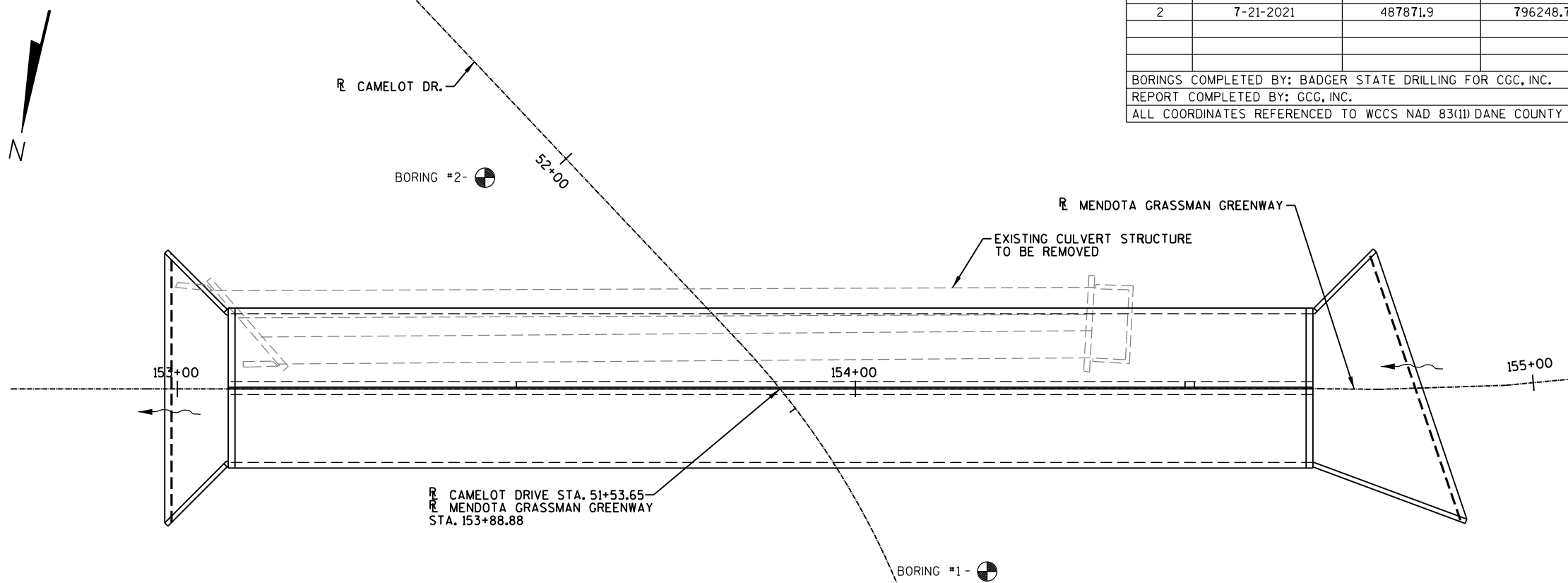
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE CITY OF MADISON STANDARD SPECIFICATIONS ARTICLE 505.



TYPICAL SECTION THRU CULVERT

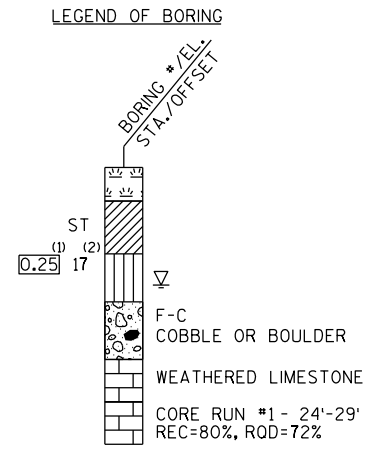
No.	Date	Revision	By
 ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 1702 PANKRATZ STREET., MADISON WI 53704 (608) 242-7779 www.msa-ps.com <small>© MSA Professional Services, Inc.</small>			
STRUCTURE		B-13-0900	
Drawn By	RLR	Plans Checked	KHB
CROSS SECTION, QUANTITIES & NOTES		SHEET 2 OF 3	
		MSA PROJECT NUMBER 00373112	

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	7-21-2021	487915.2	796160.5
2	7-21-2021	487871.9	796248.7
BORINGS COMPLETED BY: BADGER STATE DRILLING FOR CGC, INC.			
REPORT COMPLETED BY: CGC, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(11) DANE COUNTY			



MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

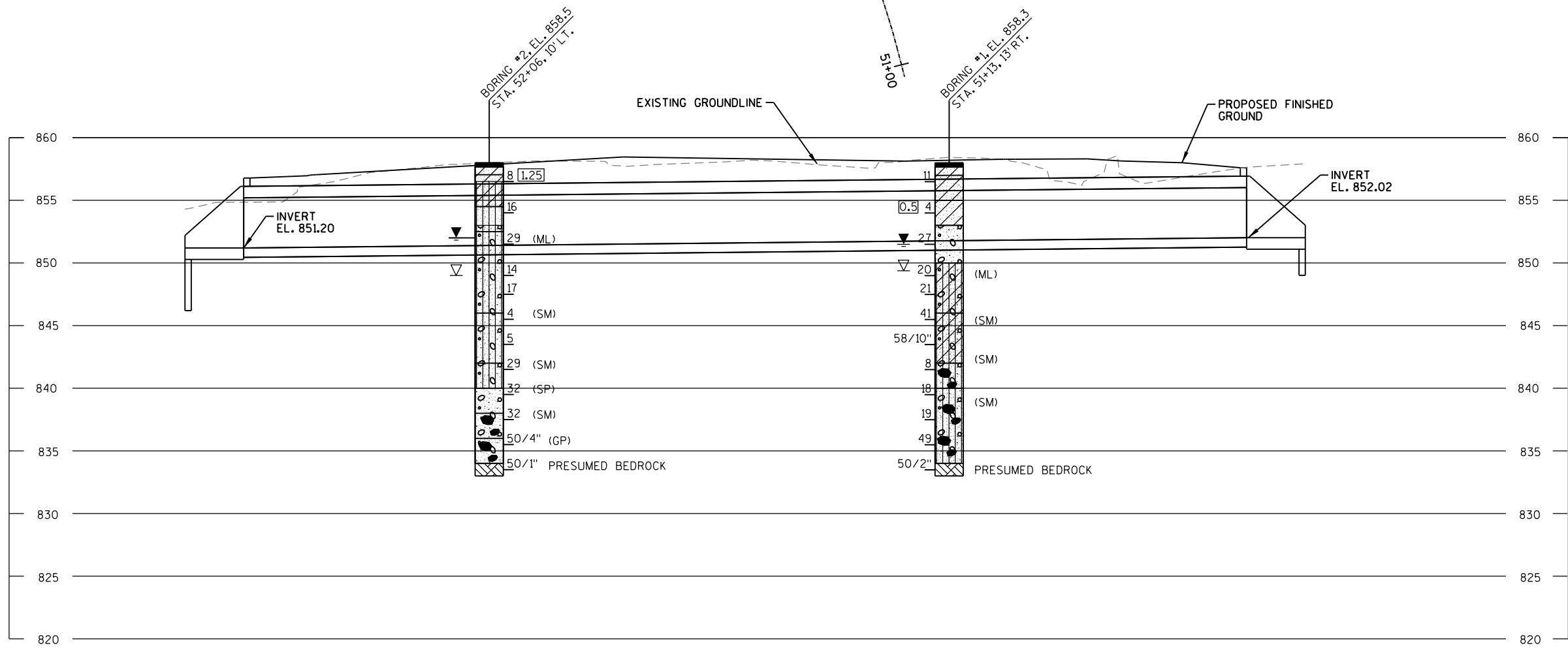
(2) UNLESS OTHERWISE SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING
 ▽ END OF DRILLING
 ▾ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE



SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

No.	Date	Revision	By

ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
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STRUCTURE B-13-0900

Drawn By: **EKK** Plans Checked: **KHB**

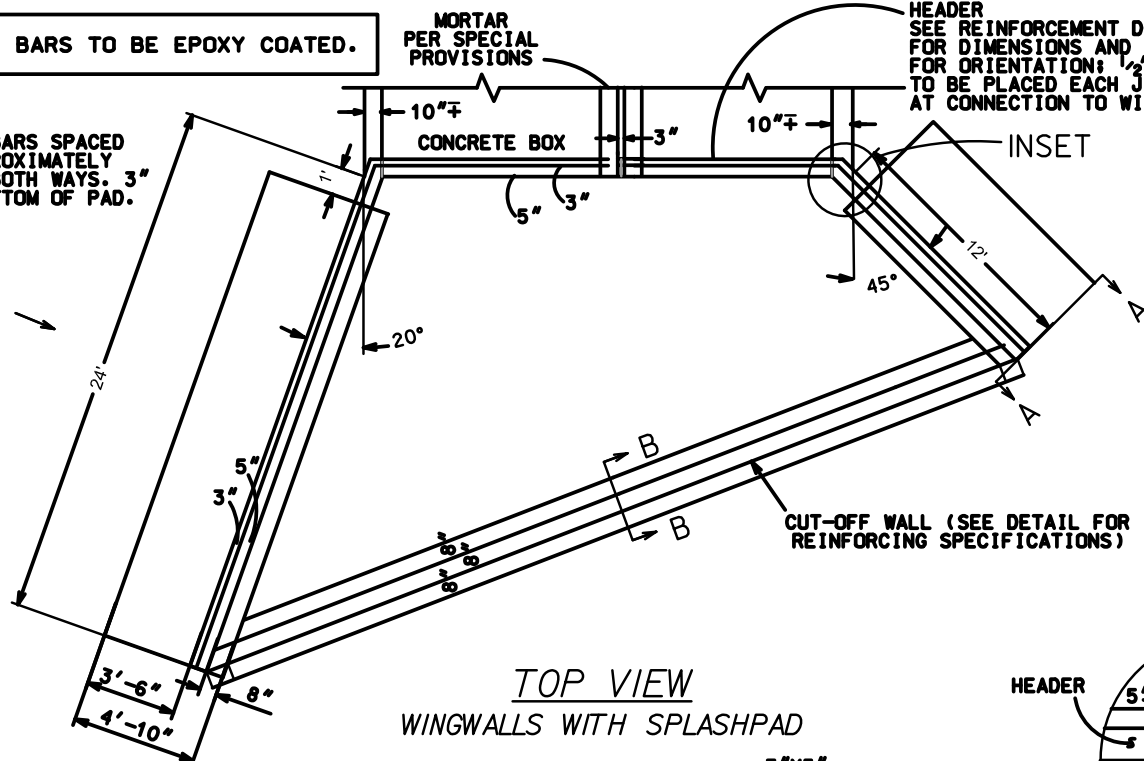
SUBSURFACE EXPLORATION

SHEET 3 OF 3
 MSA PROJECT NUMBER 00373112

NOTE: ALL BARS TO BE EPOXY COATED.

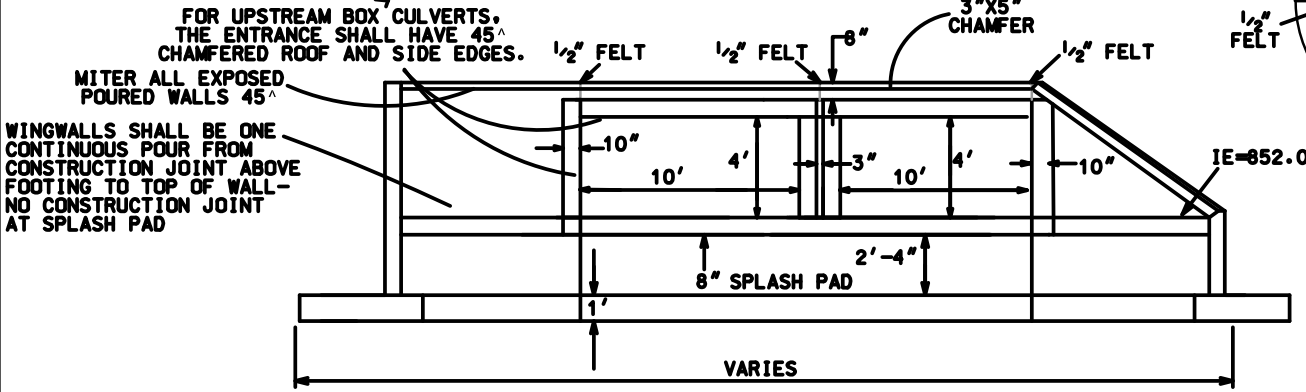
SPLASH PAD
8" THICK; #4 BARS SPACED
EVENLY AT APPROXIMATELY
24" CENTERS BOTH WAYS. 3"
CLEAR FROM BOTTOM OF PAD.

SIDE VIEW



HEADER
SEE REINFORCEMENT DETAIL
FOR DIMENSIONS AND INSET
FOR ORIENTATION; 1/2" FELTS
TO BE PLACED EACH JOINT AND
AT CONNECTION TO WINGWALLS

TOP VIEW
WINGWALLS WITH SPLASHPAD

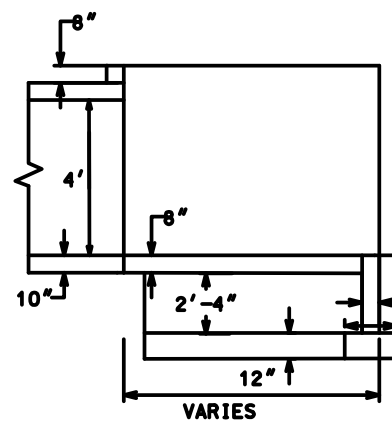


FRONT VIEW
WINGWALLS WITH SPLASHPAD

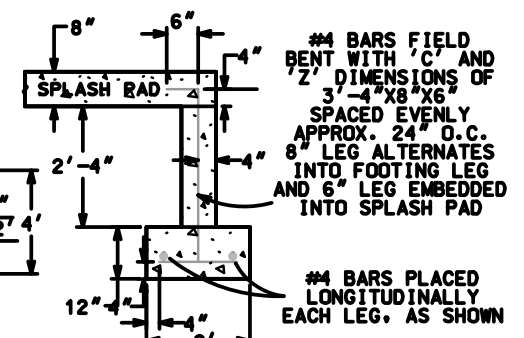
FOR UPSTREAM BOX CULVERTS,
THE ENTRANCE SHALL HAVE 45°
CHAMFERED ROOF AND SIDE EDGES.
MITER ALL EXPOSED
POURED WALLS 45°

WINGWALLS SHALL BE ONE
CONTINUOUS POUR FROM
CONSTRUCTION JOINT ABOVE
FOOTING TO TOP OF WALL -
NO CONSTRUCTION JOINT
AT SPLASH PAD

5.5.1



SIDE VIEW
WINGWALLS WITH SPLASHPAD



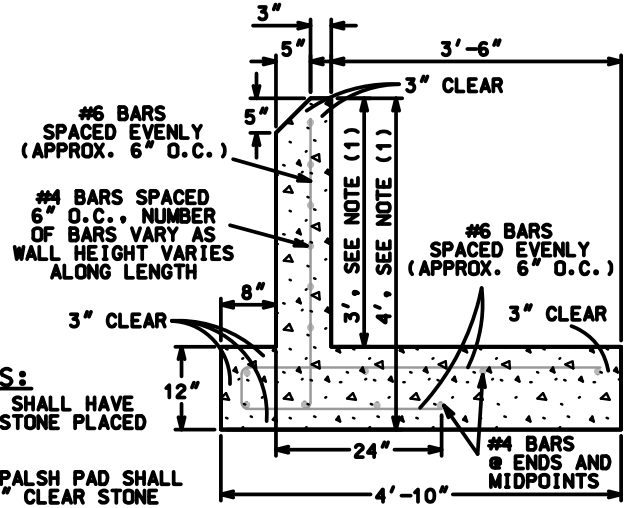
SECTION B-B
CUT-OFF WALL DETAIL

#4 BARS FIELD
BENT WITH 'C' AND
'Z' DIMENSIONS OF
3'-4" X 8" X 6"
SPACED EVENLY
APPROX. 24" O.C.
8" LEG ALTERNATES
INTO FOOTING LEG
AND 6" LEG EMBEDDED
INTO SPLASH PAD

#4 BARS PLACED
LONGITUDINALLY
EACH LEG, AS SHOWN

BEDDING NOTES:

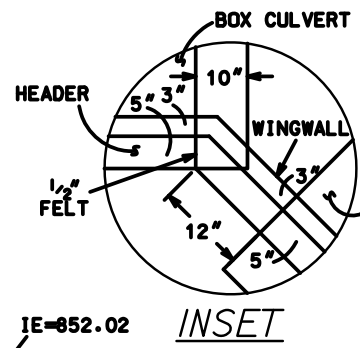
- (1) ALL FOOTINGS SHALL HAVE 12" OF 3" CLEAR STONE PLACED AS BEDDING.
- (2) AREA BELOW SPLASH PAD SHALL BE FILLED WITH 3" CLEAR STONE



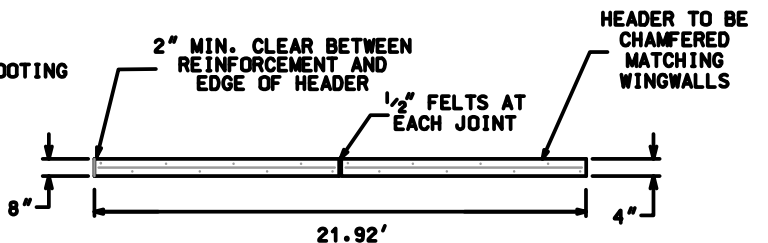
NOTE:
(1) VERTICAL DIMENSION SHOWN IS AT END OF WALL. DIMENSION INCREASES ALONG WALL LENGTH. SEE SIDE VIEW.
(2) THE WINGWALL SHALL BE ONE CONTINUOUS POUR FROM CONSTRUCTION JOINT ABOVE FOOTING TO TOP OF WALL.

SECTION A-A

WINGWALL DETAIL AT END OF WALL



INSET



VERTICAL REINFORCEMENT PER SECTION STAGGERED
#4 BARS SPACED EVENLY ON APPROXIMATELY 1'-3" CENTERS.
2" CLEAR EACH SIDE; BARS TO BE EMBEDDED IN CONCRETE 4".
HORIZONTAL REINFORCEMENT PER SECTION:
(W' + 2 # 1' - 4") OF #4 BAR CENTERED BOTH DIRECTION IN PROPOSED BOX CULVERT HEADER.

TOP VIEW

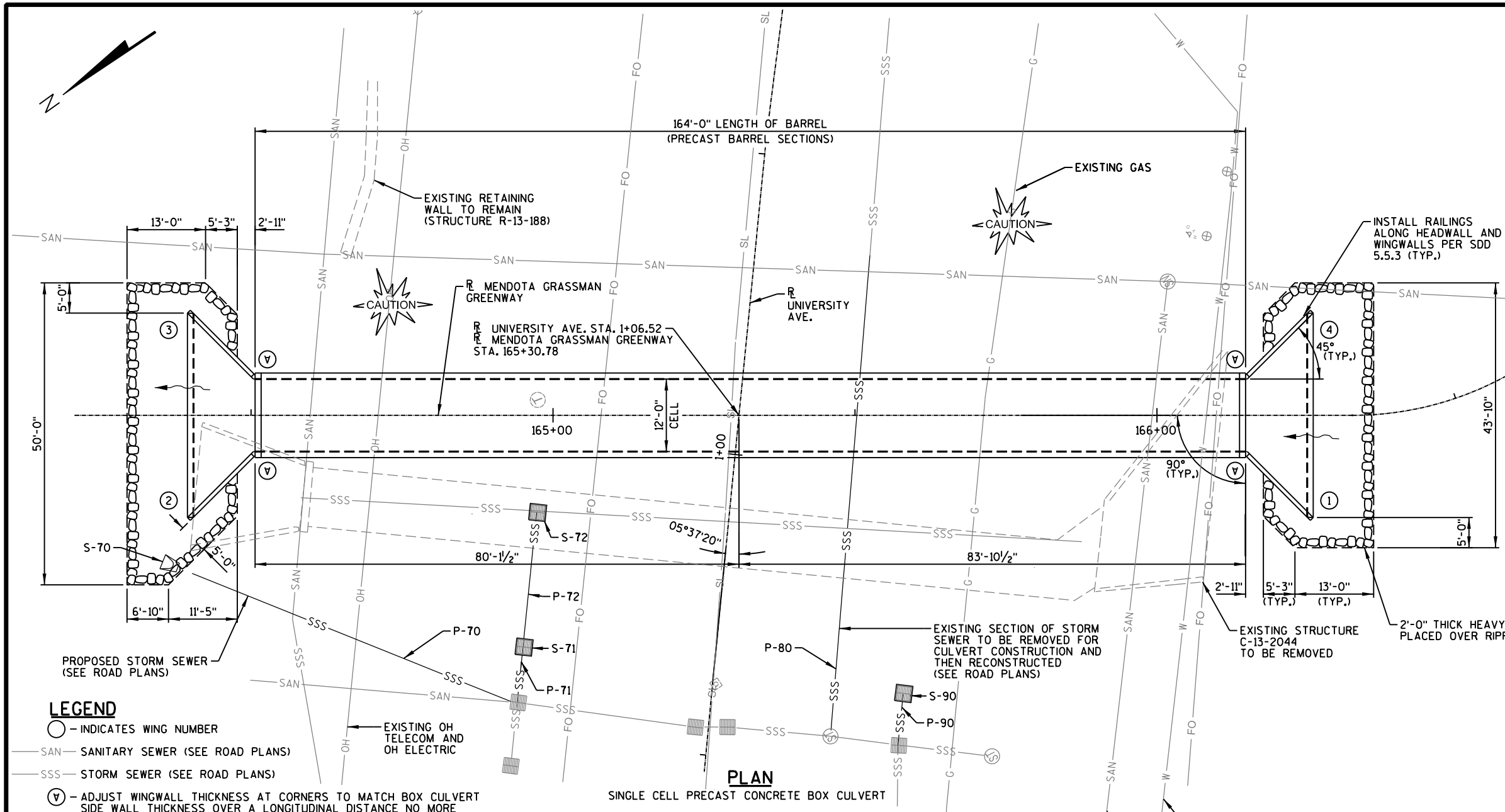
BOX CULVERT HEADER REINFORCEMENT DETAIL

STEEL CONNECTION NOTES:

- (1) CONNECTION OF SPLASH PAD TO BOX CULVERTS:
12" LONG #6 REBARS SPACED EVENLY ON APPROXIMATELY 2'-6" CENTERS. TIGHT DRIVEN 6" INTO END OF BOX CULVERT FLOOR AND EMBEDDED 6" INTO SPLASH PAD FLOOR WITH 2" CLEAR SPACING EACH SIDE.
- (2) CONNECTION OF WINGWALL TO BOX CULVERT:
#4 REBARS FIELD BENT WITH 'L' DIMENSIONS OF 6" X 6" SPACED EVENLY ON APPROXIMATELY 8" CENTERS. ONE 6" LEG DRIVEN INTO SIDE OF BOX AND THE OTHER EMBEDDED 6" INTO THE WINGWALL. BARS SHALL HAVE 2" CLEAR SPACING TOP AND BOTTOM. (SAME EACH WINGWALL)
- (3) CONNECTION OF SPLASH PAD TO WINGWALLS:
#4 REBARS FIELD BENT WITH 'L' DIMENSIONS OF 12" X 8" SPACED EVENLY ON APPROXIMATELY 12" CENTERS. THE 12" LEG EMBEDDED INTO THE SPLASH PAD AND THE 8" LEG EMBEDDED DOWNWARD INTO THE WINGWALL. BARS SHALL BE CENTERED IN THE SPLASH PAD AND THE WINGWALL. WINGWALLS SHALL BE ONE CONTINUOUS POUR FROM CONSTRUCTION JOINT ABOVE FOOTING TO TOP OF THE WALL. THERE SHOULD BE NO CONSTRUCTION JOINT AT PAD ELEVATION.
- (4) CONNECTION OF SPLASH PAD TO THE CUT-OFF WALL:
(SEE CUT-OFF WALL DETAIL) THE #4 BAR REINFORCING OF THE CUT-OFF WALL SHALL BE FIELD BENT INTO A 'C' AND 'Z' SHAPES WITH THE DIMENSIONS 3'-4" X 8" X 6" SPACED EVENLY ON APPROXIMATELY 24" CENTERS. THE 8" LEG ALTERNATES INTO FOOTING LEG AND 6" EMBEDDED INTO SPLASH PAD. THE BARS SHALL BE CENTERED IN THE CUT-OFF WALL.

DRAWING NOT TO SCALE 2021

CITY OF MADISON ENGINEERING DIVISION
BOX CULVERT WINGWALL
UPSTREAM CAMELOT DRIVE CULVERT



PLAN
SINGLE CELL PRECAST CONCRETE BOX CULVERT

LEGEND

- - INDICATES WING NUMBER
- SAN - SANITARY SEWER (SEE ROAD PLANS)
- SSS - STORM SEWER (SEE ROAD PLANS)
- Ⓟ - ADJUST WINGWALL THICKNESS AT CORNERS TO MATCH BOX CULVERT SIDE WALL THICKNESS OVER A LONGITUDINAL DISTANCE NO MORE THAN 4 FEET AND NO LESS THAN 2 FEET.

DESIGN DATA

LIVE LOAD:
DESIGN LOAD : HL-93

EARTH LOAD:
DESIGNED FOR FILL HEIGHT RANGE OF 1.5 TO 13.0 FEET

MATERIAL PROPERTIES:
 CONCRETE MASONRY _____ f'c = 4,000 P.S.I.
 CONCRETE MASONRY (PRECAST BARREL)- f'c = 5,000 P.S.I.
 BAR STEEL REINFORCEMENT _____ fy = 60,000 P.S.I.
 WELDED WIRE FABRIC _____ fy = 65,000 P.S.I.

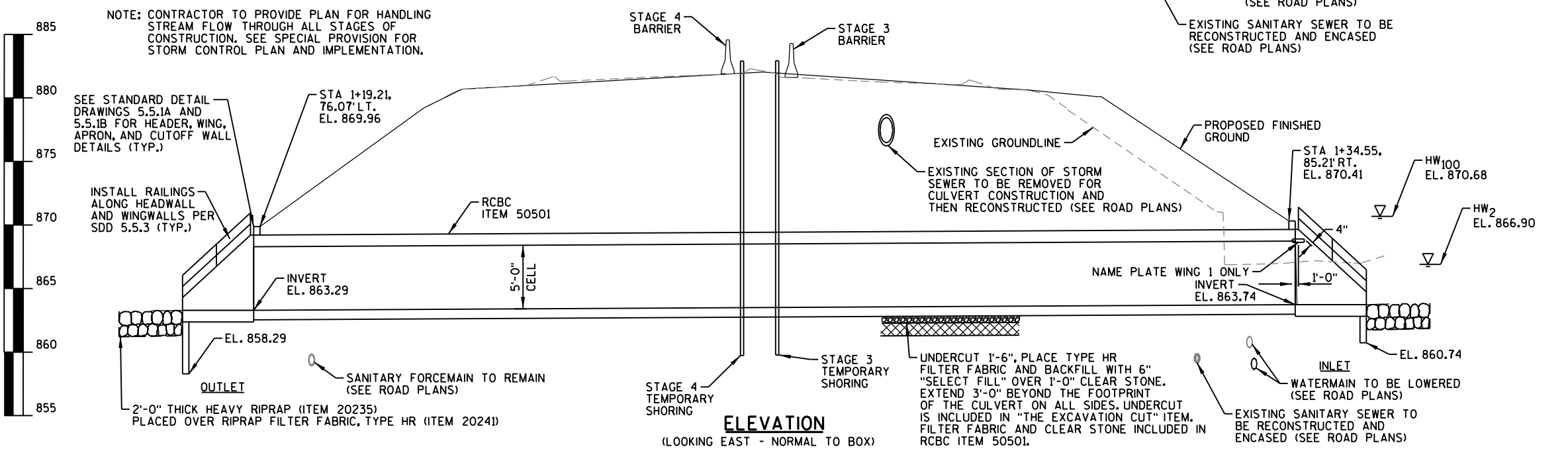
HYDRAULIC DATA

100 YEAR FREQUENCY
 DRAINAGE AREA = 0.70 SQ. MI.
 Q₁₀₀ = 586 CFS
 VELOCITY = 10.1 FPS
 WATERWAY AREA = 58 SF
 HIGH WATER₁₀₀ ELEVATION = EL. 870.68
 OVERTOPPING ROADWAY = N/A
 SCOUR CODE = 8

2 YEAR FREQUENCY
 Q₂ = 185 CFS
 HIGH WATER₂ ELEVATION = EL. 866.90
 VELOCITY = 5.1 FPS

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, QUANTITIES & NOTES
3. SUBSURFACE EXPLORATION



ELEVATION

(LOOKING EAST - NORMAL TO BOX)

NO.	DATE	REVISION	BY
UNIVERSITY AVE. OVER MENDOTA GRASSMAN GREENWAY STRUCTURE C-13-2088			
GENERAL PLAN			
County	DANE	Town/City/Village	MADISON
Design Spec.	AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS		
Designed By	JFM	Design Checked	KHB
Drawn By	RLR	Plans Checked	KHB
MSA		ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 1702 PANKRATZ STREET., MADISON WI 53704 (608) 242-7779 www.msa-ps.com © MSA Professional Services, Inc.	
DATE	F.B.	MSA PROJECT NUMBER	00373112
SHEET 01 of 03			

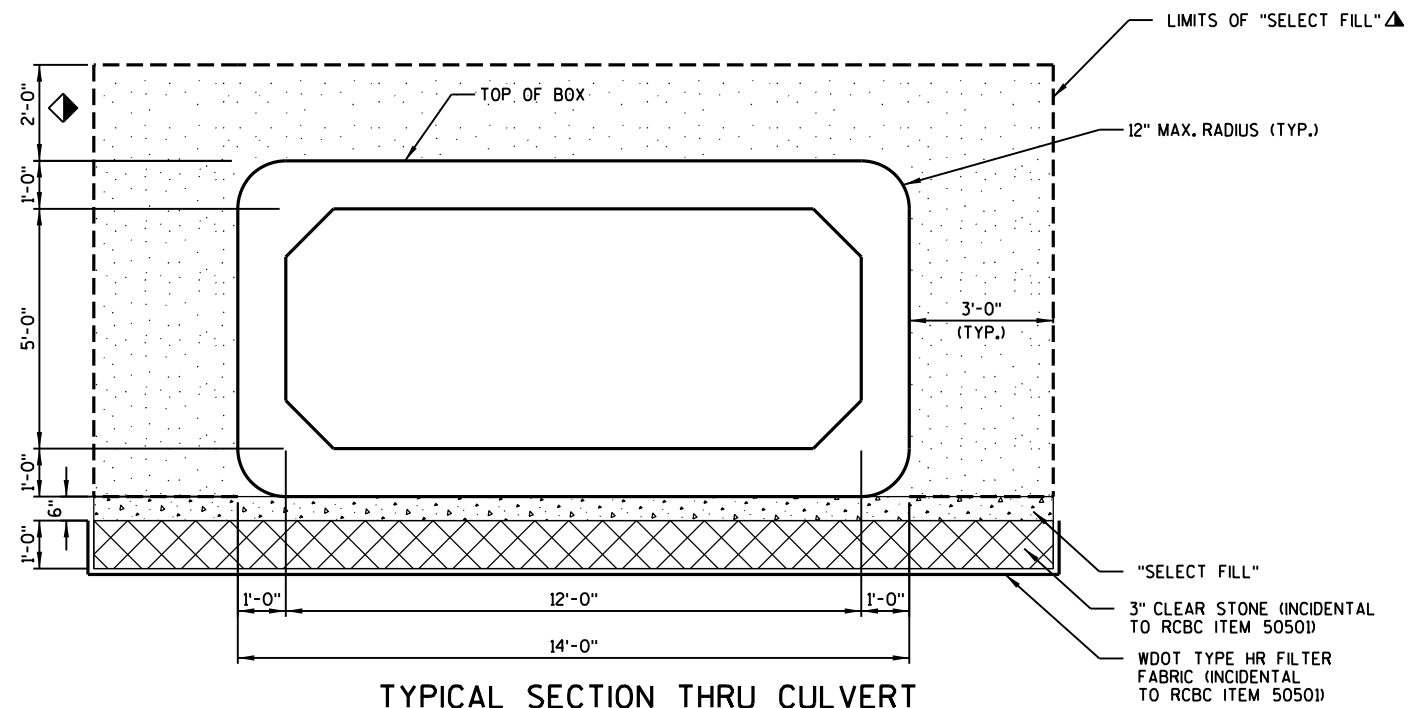
STRUCTURE ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTAL	
20101	EXCAVATION CUT	CY	6900	
20204	SELECT FILL	TON	1310	
20235	HEAVY RIPRAP - GLACIAL FIELD STONE	CY	82	
20241	RIPRAP FILTER FABRIC, TYPE HR	SY	142	
50501	PRECAST REINFORCED CONCRETE BOX CULVERT, 12 FT X 5 FT	LF	164	
***	50511	BOX CULVERT WINGWALLS, C-13-2088	EA	2
◇	90001	STORM CONTROL PLAN AND IMPLEMENTATION	LS	1
	90002	REMOVE EXISTING STRUCTURE C-13-2044	EA	1
	90004	TEMPORARY SHORING C-13-2088	SF	2600
	90006	CULVERT WINGWALL RAILINGS	LF	86

*** INCLUDES CAST-IN-PLACE HEADER, WINGWALLS, APRON, CUTOFF WALL, AND ALL INCLUDED REINFORCING AND ADHESIVE ANCHOR CONNECTIONS AS SHOWN ON STANDARD DETAIL DRAWINGS 5.5.1A AND 5.5.1B. EACH UNIT FOR THE "BOX CULVERT WINGWALL" ITEM IS QUANTIFIED AS THE TOTAL OF ALL ELEMENTS NECESSARY TO CONSTRUCT THE INLET END OR OUTLET END IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.

◇ A TEMPORARY WATER DIVERSION SHALL BE PROVIDED TO ESTABLISH DRY CONDITIONS DURING CONSTRUCTION OF THE BOX CULVERTS.

◇ PLACE BASE AGGREGATE DENSE TO TOP OF BOX IN LIEU OF "SELECT FILL" OR SELECT CRUSHED MATERIAL IF THE ROADWAY BASE AGGREGATE DENSE ENCRACHES WITHIN THESE LIMITS.



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION REGARDING PROPOSED UTILITY LOCATIONS.

THIS STRUCTURE WILL REPLACE EXISTING STRUCTURE C-13-2044, A 6'-0" X 10'-0" REINFORCED CONCRETE BOX CULVERT

REMOVAL OF THE EXISTING STRUCTURE WILL BE PAID FOR UNDER (90002) BID ITEM "REMOVE EXISTING STRUCTURE C-13-2044"

THE UPPER LIMITS OF "EXCAVATION CUT" SHALL BE THE EXISTING GROUND LINE.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (1991 ADJUSTED), AND WERE ESTABLISHED AT THE SITE USING GPS TECHNOLOGY.

CONSTRUCT STRUCTURE IN STAGES CONFORMING TO THE TRAFFIC STAGING PLAN.

STAGING FOR REMOVAL OF THE EXISTING STRUCTURE AND THE TEMPORARY WATER DIVERSION IS TO BE COORDINATED AND DETERMINED BY THE CONTRACTOR.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE WISDOT STANDARD SPECIFICATIONS AND WISDOT STANDARD DETAIL DRAWING (SDD) 12A3.

THE CENTER OF STORM SEWER PENETRATIONS SHALL BE LOCATED A MINIMUM OF 2'-6" FROM BARREL SECTION JOINTS. ADJUST LENGTH OF PRECAST BARREL SECTIONS TO ACCOMMODATE STORM SEWER PENETRATIONS.

PRECAST CONCRETE ELEMENTS SHALL BE PROVIDED WITH SUITABLE LIFTING DEVICES FOR HANDLING AND PLACEMENT OF THE ELEMENTS. NOT MORE THAN FOUR (4) HOLES MAY BE CAST, DRILLED OR OTHERWISE NEATLY MADE IN THE SHELL OF EACH PIECE OF BOX SECTION FOR HANDLING. THE HOLES SHALL BE TAPERED UNLESS DRILLED. HOLES SHALL BE FILLED WITH PORTLAND CEMENT MORTAR EXCEPT TAPERED HOLES MAY BE FILLED WITH CONCRETE PLUG SECURED WITH PORTLAND CEMENT MORTAR OR OTHER APPROVED ADHESIVE.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

EXISTING RETAINING WALL STRUCTURE R-13-188 SHALL REMAIN AND ITS MSE REINFORCING STRAPS SHALL NOT BE DISTURBED OR DAMAGED DURING CONSTRUCTION OF STRUCTURE C-13-2088.

MEMBER THICKNESSES SHOWN ON THIS PLAN ARE BASED ON ENGINEERING JUDGEMENT. CONTRACTOR SHALL HAVE A REGISTERED ENGINEER DESIGN THE PRECAST BOX CULVERTS AND PROVIDE SEALED DRAWINGS TO THE CITY OF MADISON FOR APPROVAL. IF MEMBER THICKNESSES SHOWN ON THIS PLAN REQUIRE MODIFICATION, ADJUST WINGWALL, HEADWALL, APRON, AND REINFORCEMENT DIMENSIONS AS NECESSARY.

DETAILS FOR MATERIALS, FABRICATION, CONSTRUCTION, AND DESIGN OF PRECAST BOX CULVERTS NOT SHOWN OR STATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT ASTM SPECIFICATION, C1577; AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS; EXCEPT THAT THE CONCRETE MIXTURE SHALL CONTAIN NOT LESS THAN 565 LBS. OF CEMENTIOUS MATERIALS PER CUBIC YARD.

THE DESIGN OF PRECAST BOX CULVERTS WITH ALL FILL HEIGHTS SHALL BE AS STATED IN ASTM C1577.

THE JOINT ON THE BOTTOM OF THE CULVERT AND THE SIDES OF THE CULVERT FROM THE BOTTOM TO A POINT 1'-0" FROM THE CEILING SHALL BE SEALED WITH A PREFORMED MASTIC. MASTIC MUST CONFORM TO AASHTO MATERIALS, SPECIFICATION M198, TYPE B. A 2'-0" STRIP OF GEOTEXTILE TYPE DF SCHEDULE A SHALL BE PLACED OVER THE JOINTS ON THE TOP AND SIDES OF THE CULVERT. THE GEOTEXTILE SHALL CONFORM TO WISDOT STANDARD SPECIFICATION 645.22.4 (FABRIC NOT REQUIRED OVER INSIDE WALL JOINTS OF MULTICELL INSTALLATION.)

*4 EPOXY COATED DEFORMED BARS TO BE PLACED IN END SECTIONS DURING FABRICATION OF THE BOX CULVERT. ALL DOWEL BARS SHALL BE INCIDENTAL TO RCBC ITEM 50501.

▲ ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH "SELECT FILL" TO THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES.

"SELECT FILL" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO "EXCAVATION CUT"

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE CITY OF MADISON STANDARD SPECIFICATIONS ARTICLE 505.

No.	Date	Revision	By
 ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 1702 PARKRATZ STREET, MADISON WI 53704 (608) 242-7779 www.msa-ps.com <small>© MSA Professional Services, Inc.</small>			
STRUCTURE		C-13-2088	
Drawn By	EKK	Plans Checked	KHB
CROSS SECTION, QUANTITIES & NOTES			SHEET 2 OF 3
			MSA PROJECT NUMBER 00373112

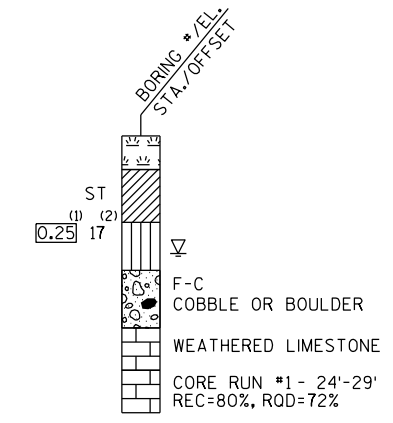
BORING #4

BORING #3

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
3	10-8-2021	487116.3	795357.1
4	10-12-2021	487180.3	795396.9
BORINGS COMPLETED BY: BADGER STATE DRILLING FOR CGC, INC.			
REPORT COMPLETED BY: CGC, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(11) DANE COUNTY			

MATERIAL SYMBOLS		
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CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

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GROUND WATER ELEVATION

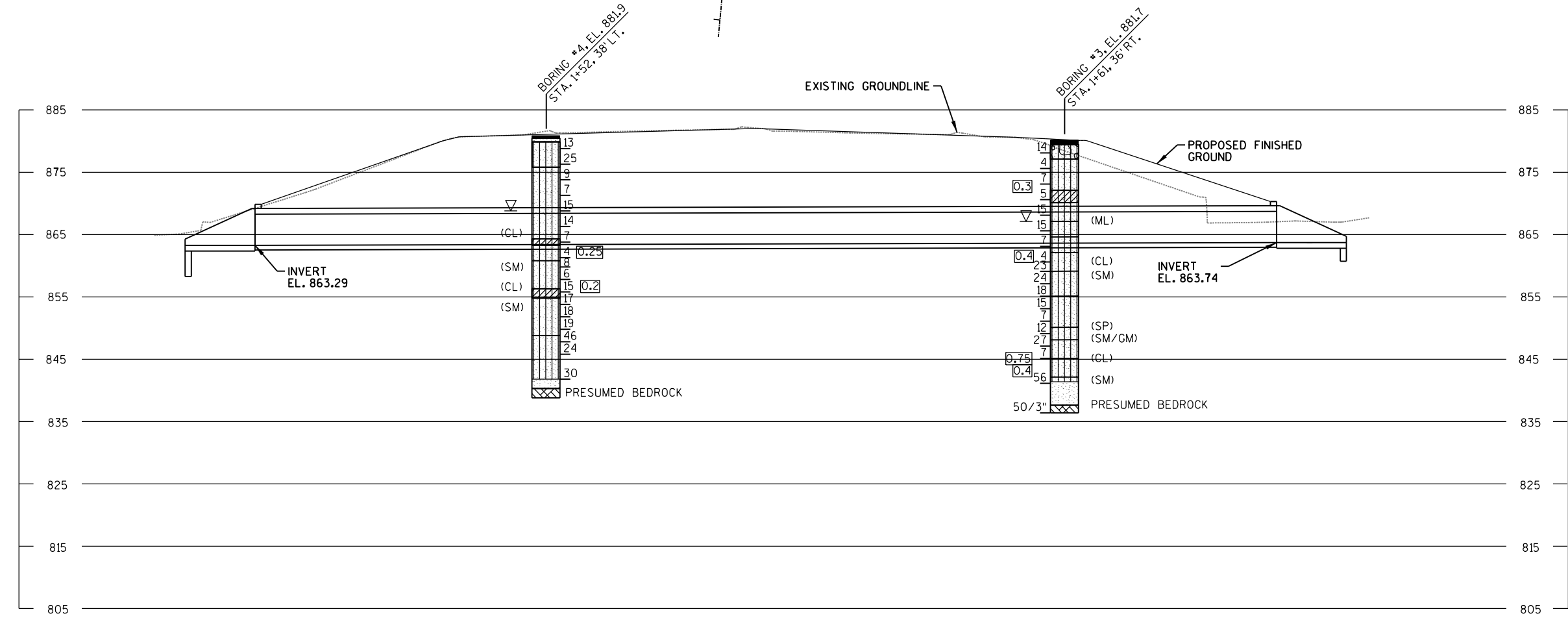
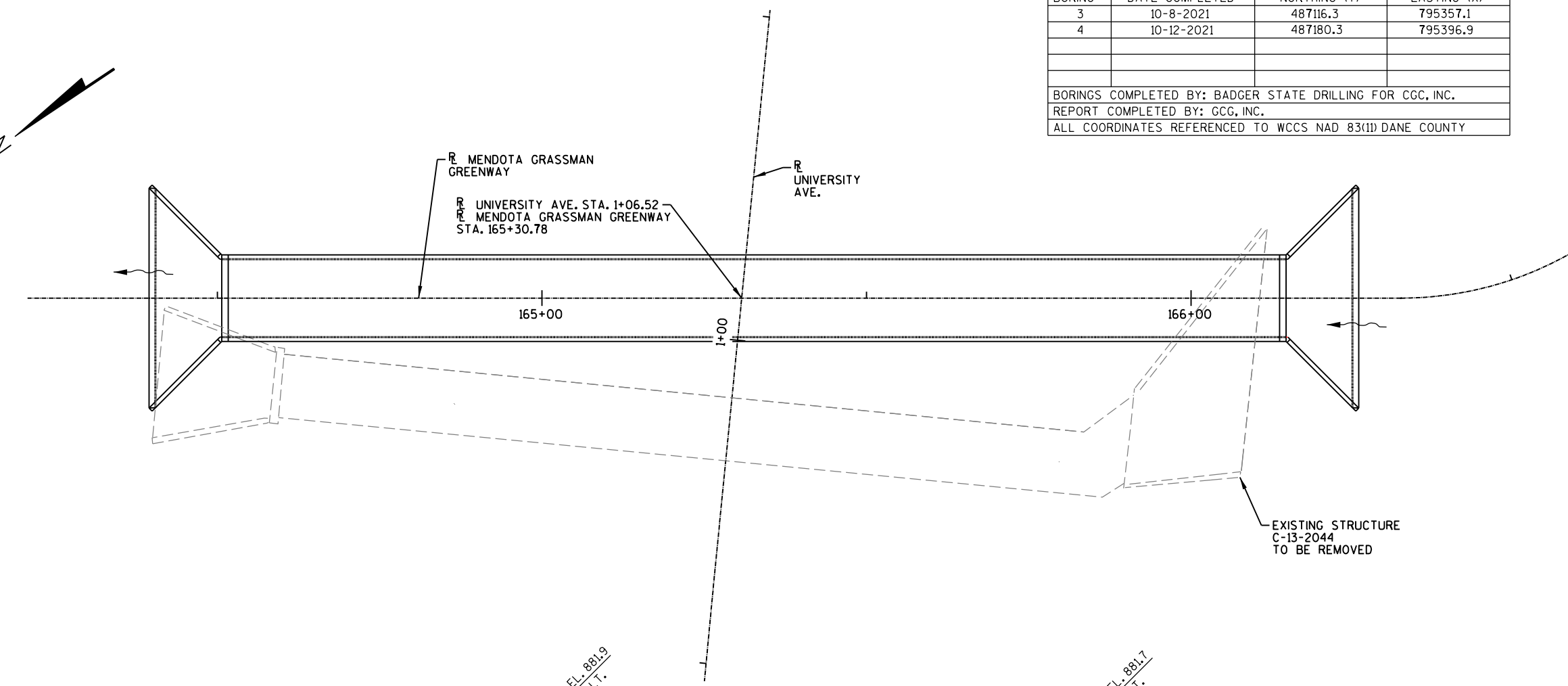
- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.



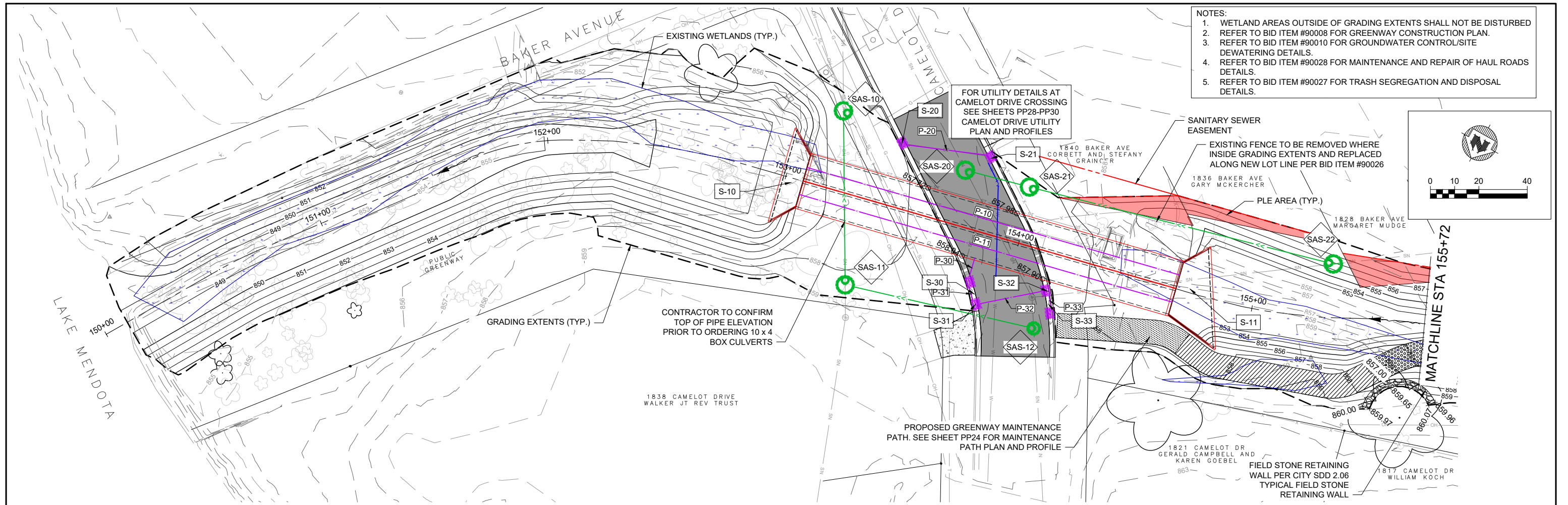
No.	Date	Revision	By

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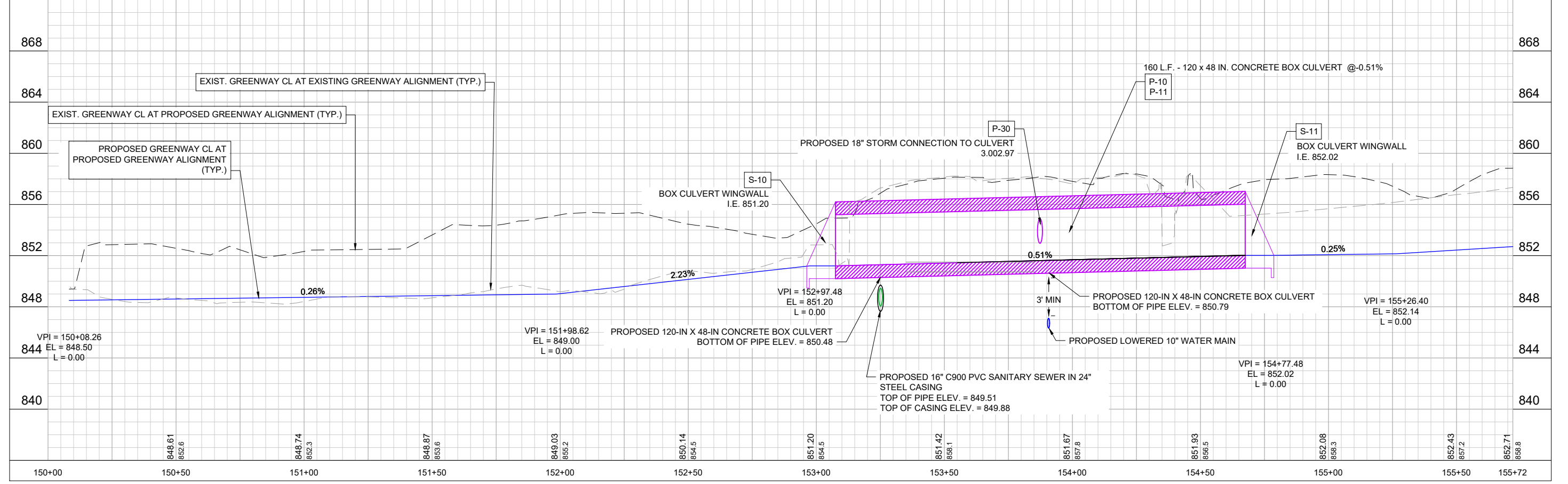
STRUCTURE C-13-2088

Drawn By: EKK Plans Checked: KHB

SUBSURFACE EXPLORATION SHEET 3 OF 3
 MSA PROJECT NUMBER 00373112



- NOTES:
1. WETLAND AREAS OUTSIDE OF GRADING EXTENTS SHALL NOT BE DISTURBED
 2. REFER TO BID ITEM #90008 FOR GREENWAY CONSTRUCTION PLAN.
 3. REFER TO BID ITEM #90010 FOR GROUNDWATER CONTROL/SITE DEWATERING DETAILS.
 4. REFER TO BID ITEM #90028 FOR MAINTENANCE AND REPAIR OF HAUL ROADS DETAILS.
 5. REFER TO BID ITEM #90027 FOR TRASH SEGREGATION AND DISPOSAL DETAILS.



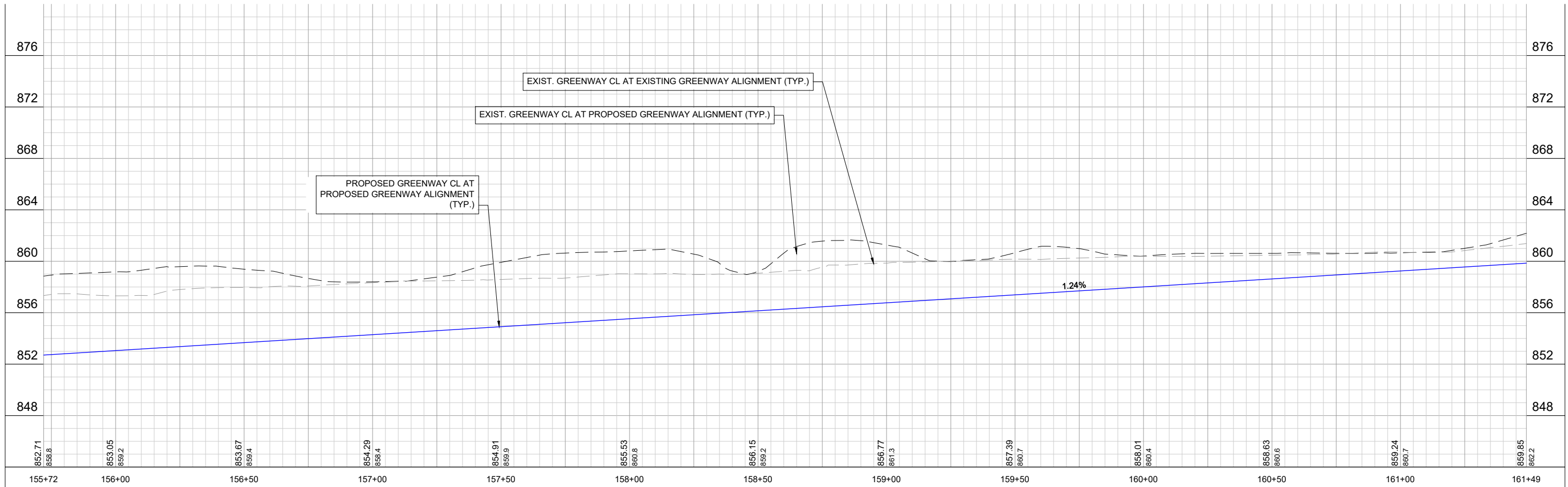
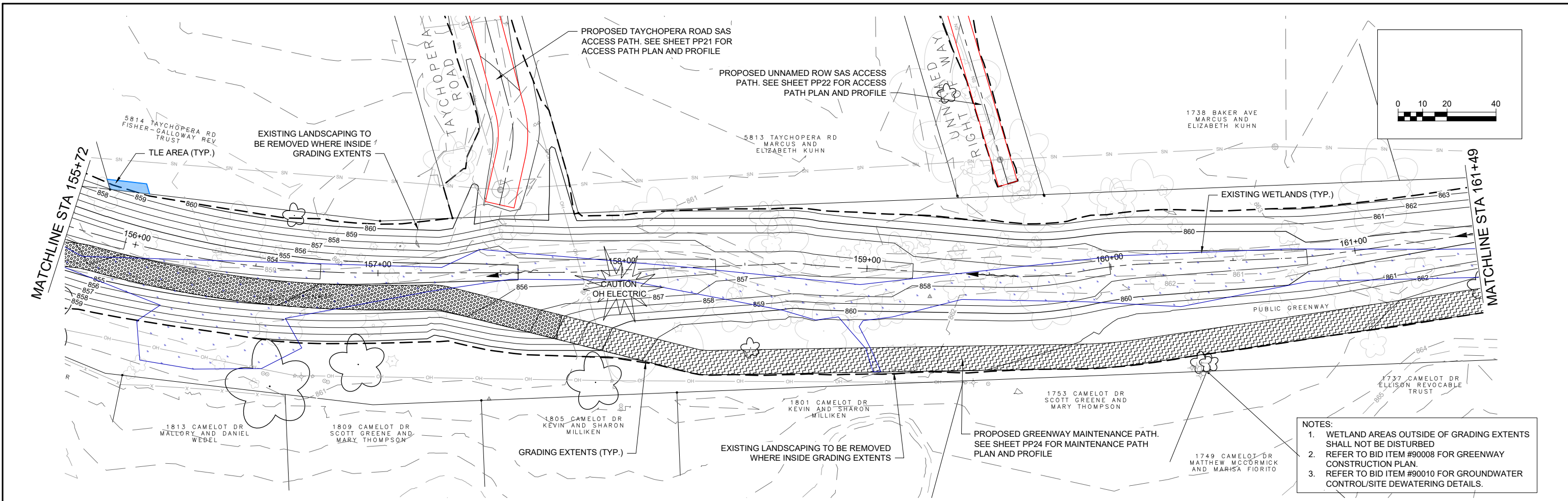
PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	INIT				
	INIT				
	INIT				

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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

PLAN & PROFILE - GREENWAY

PROJECT NO.
00373112
 SHEET
PP16



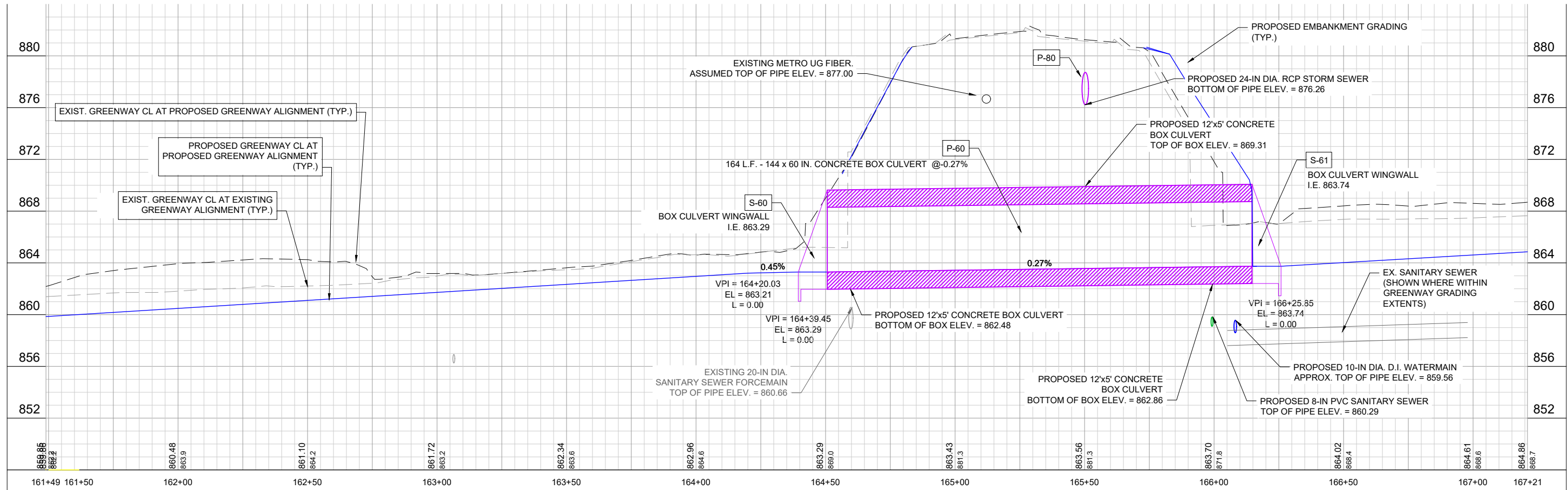
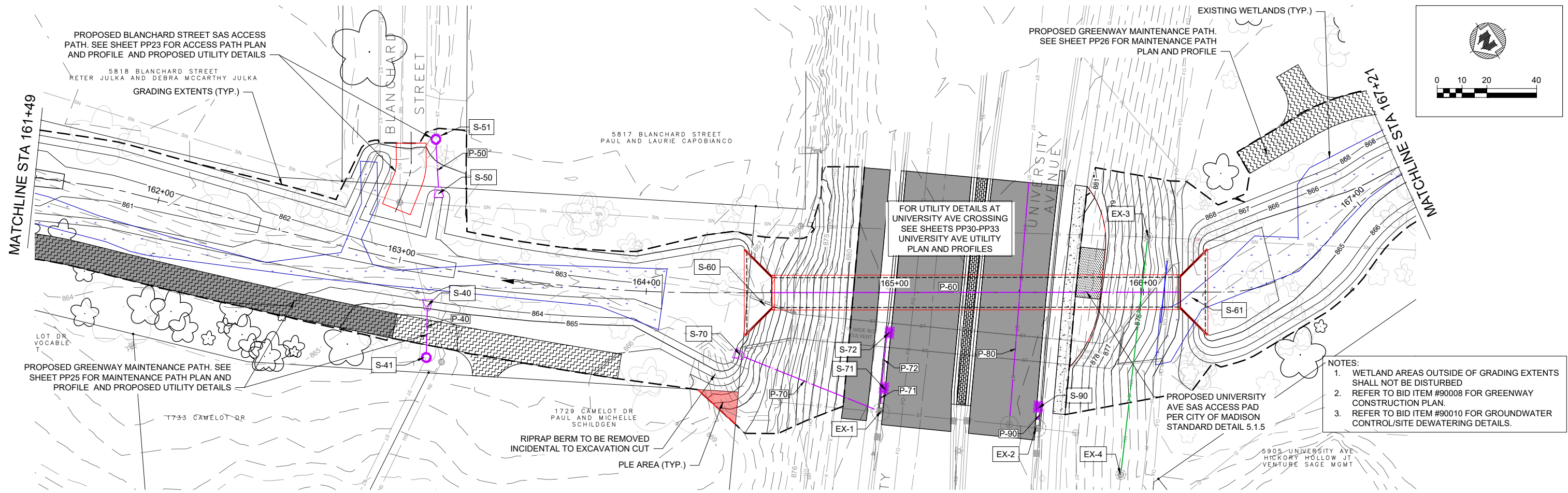
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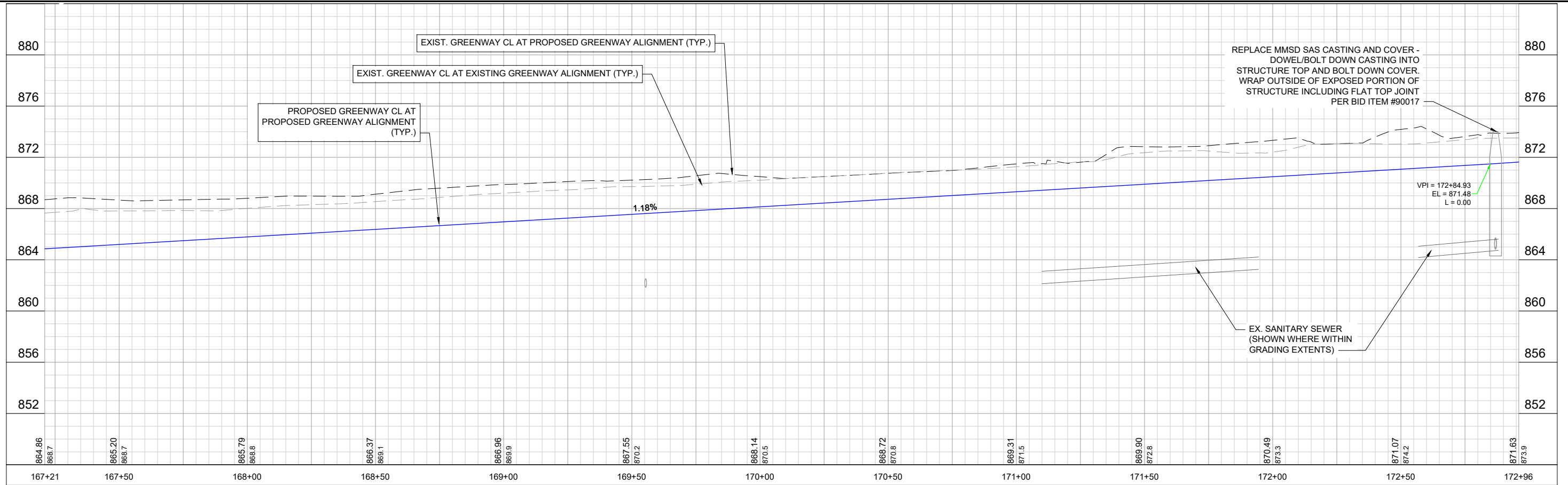
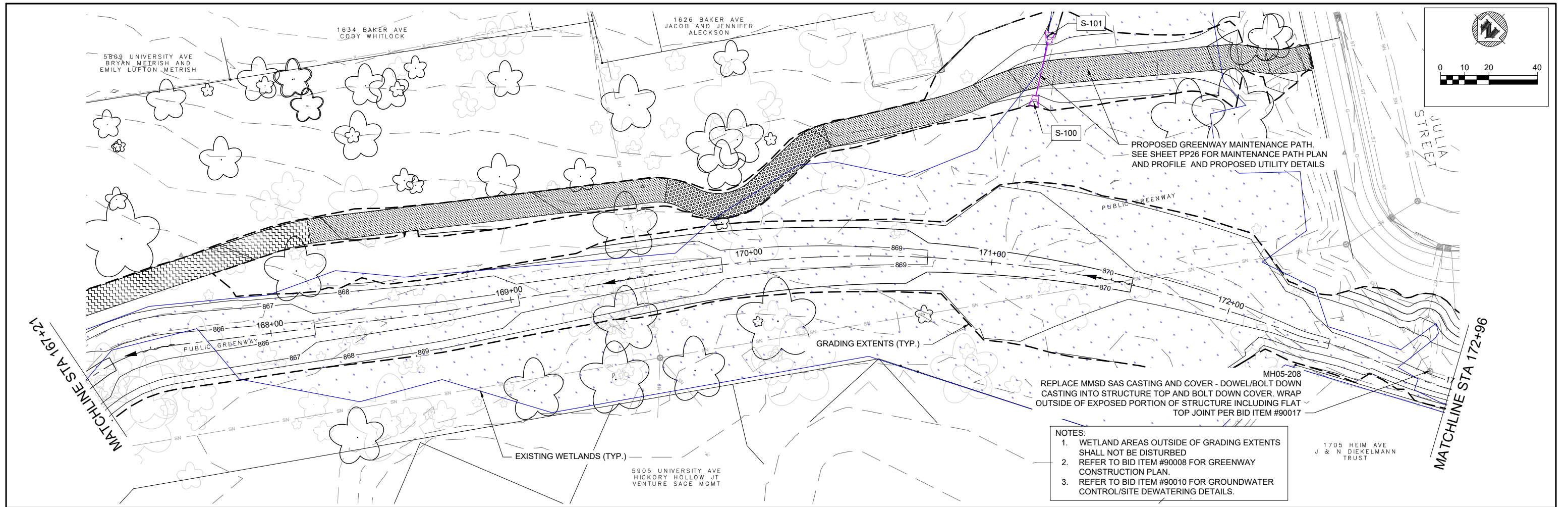
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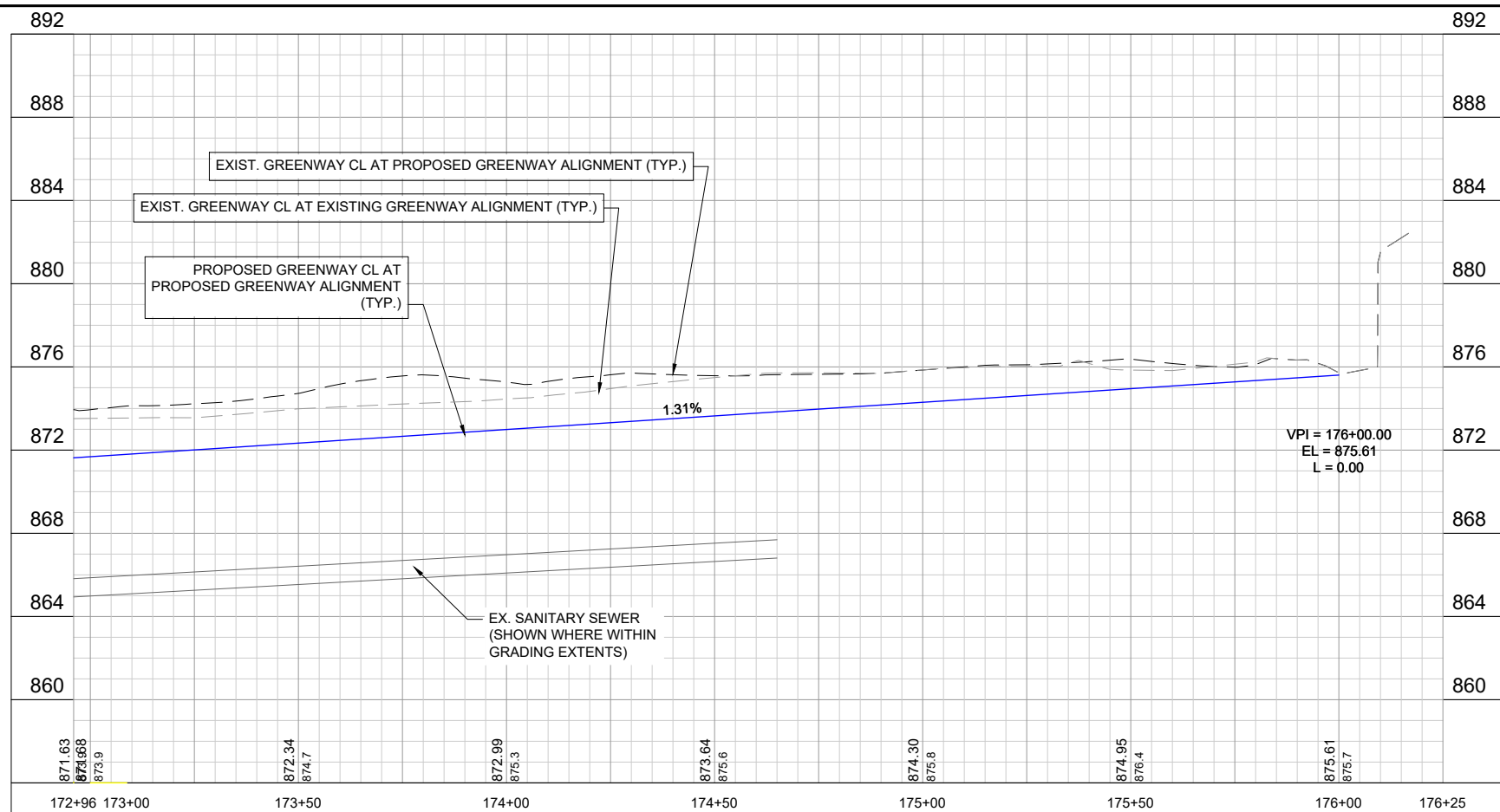
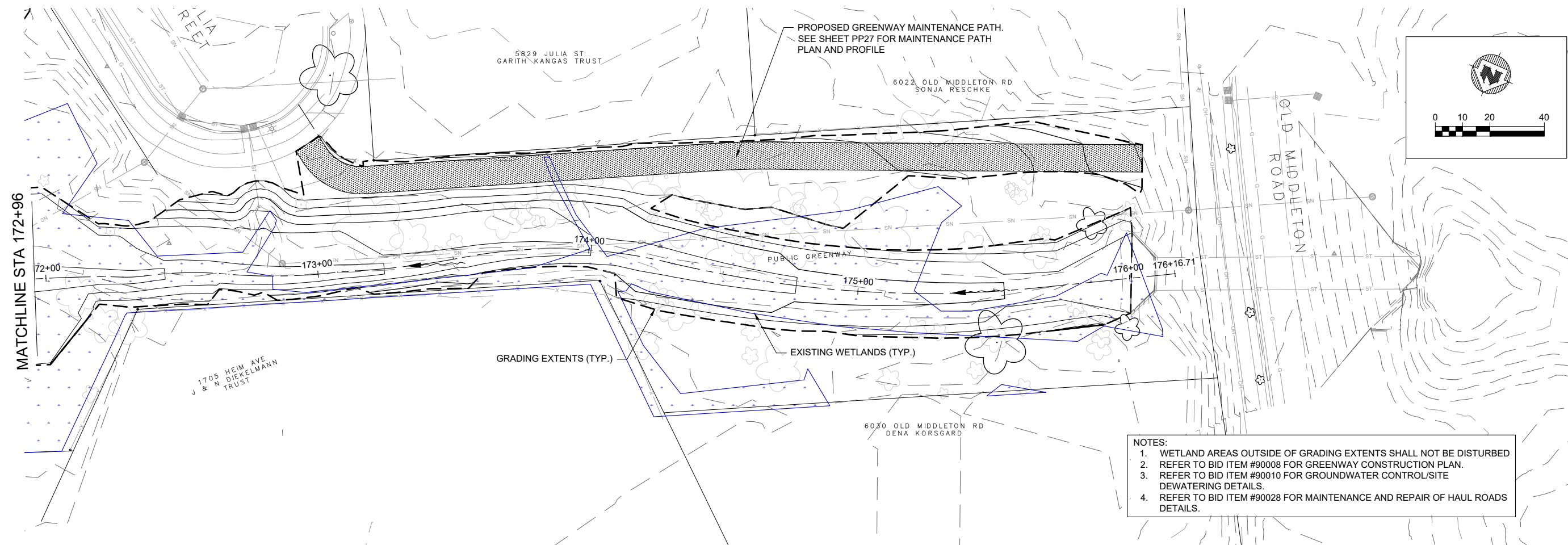
MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

PLAN & PROFILE - GREENWAY

PROJECT NO.
00373112
 SHEET
PP17







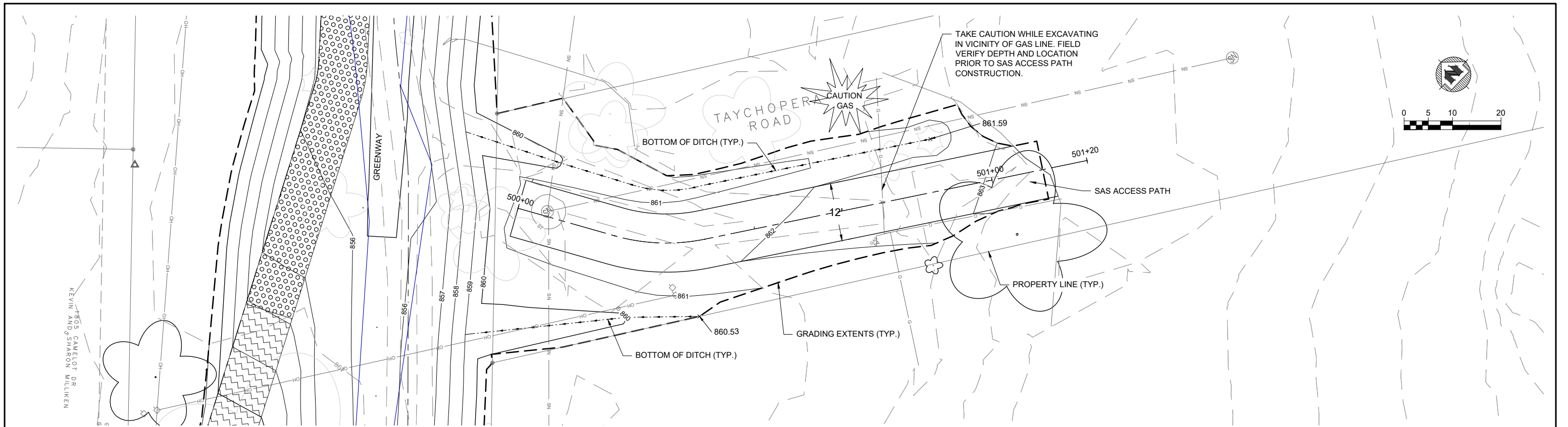
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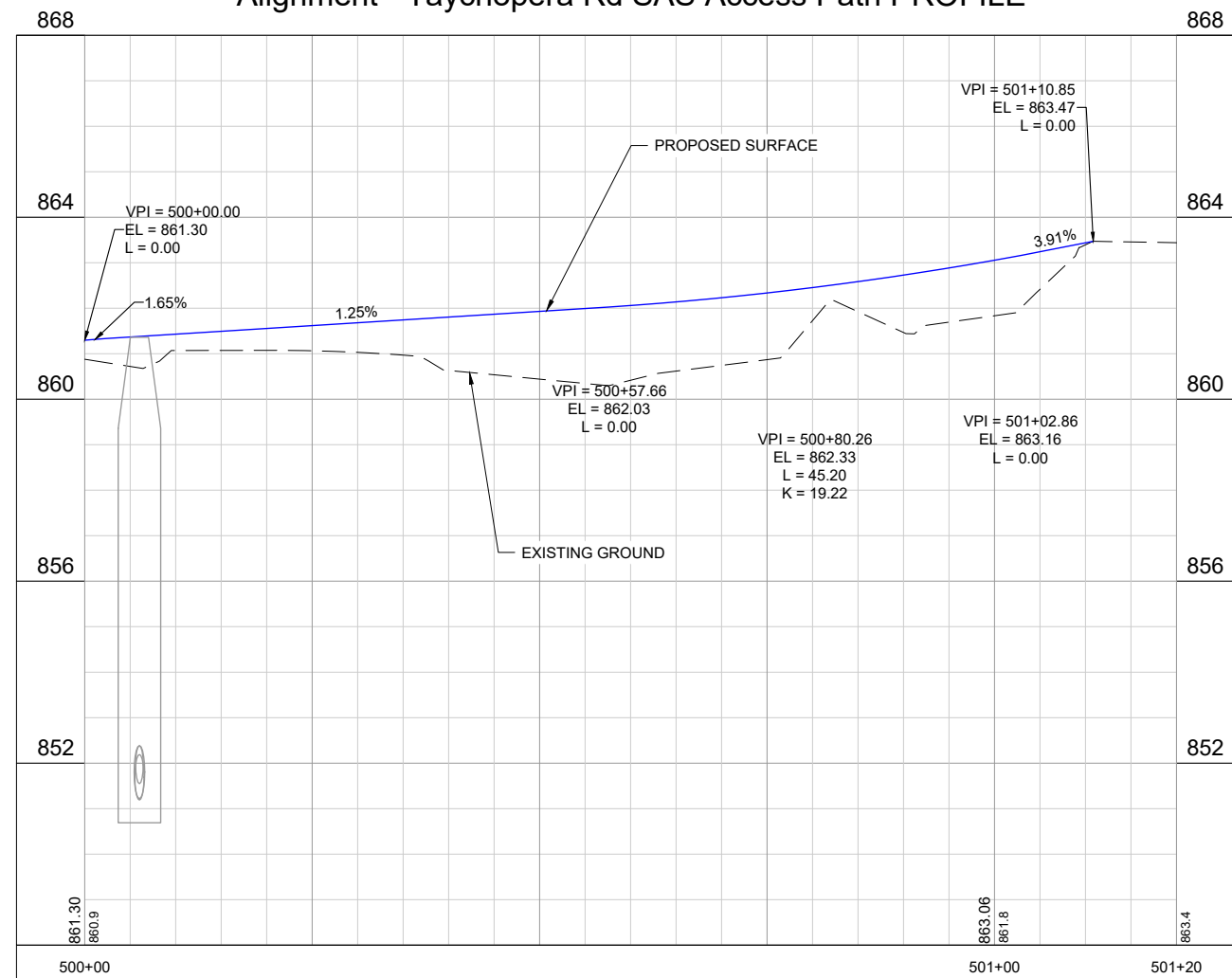
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CITY OF MADISON
LOCATION

PLAN & PROFILE - GREENWAY

PROJECT NO.
00373112
SHEET
PP20



Alignment - Taychopera Rd SAS Access Path PROFILE



NOTE:
SEE SHEET CS20 TAYCHOPERA SAS ACCESS
ROAD CROSS SECTIONS FOR DETAILS

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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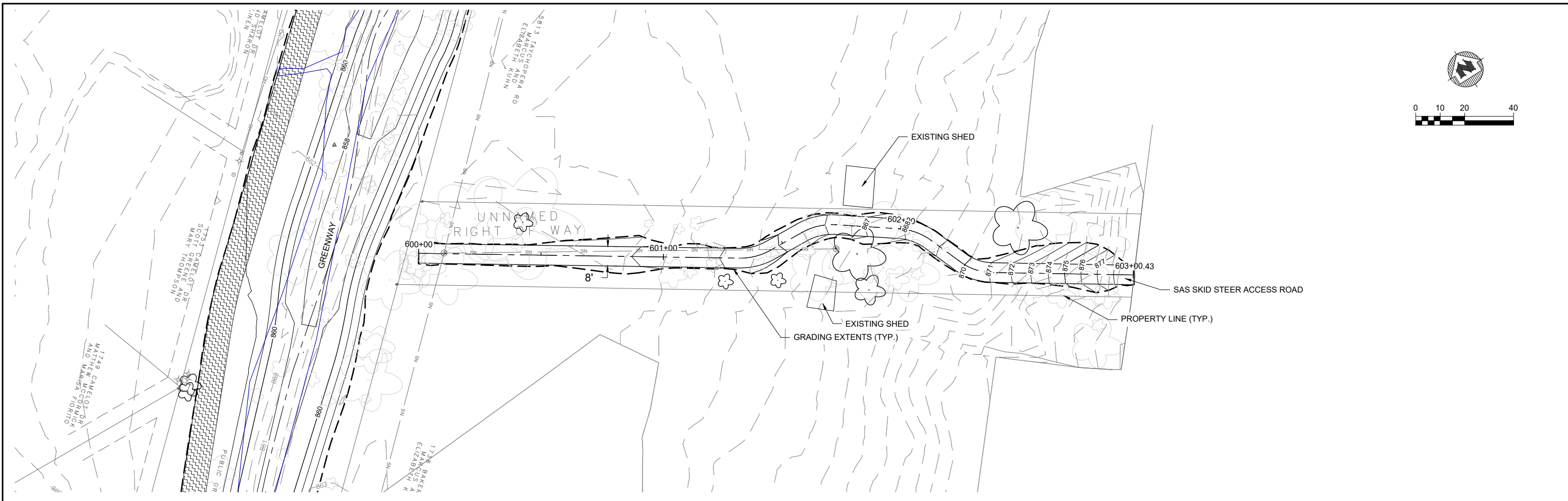


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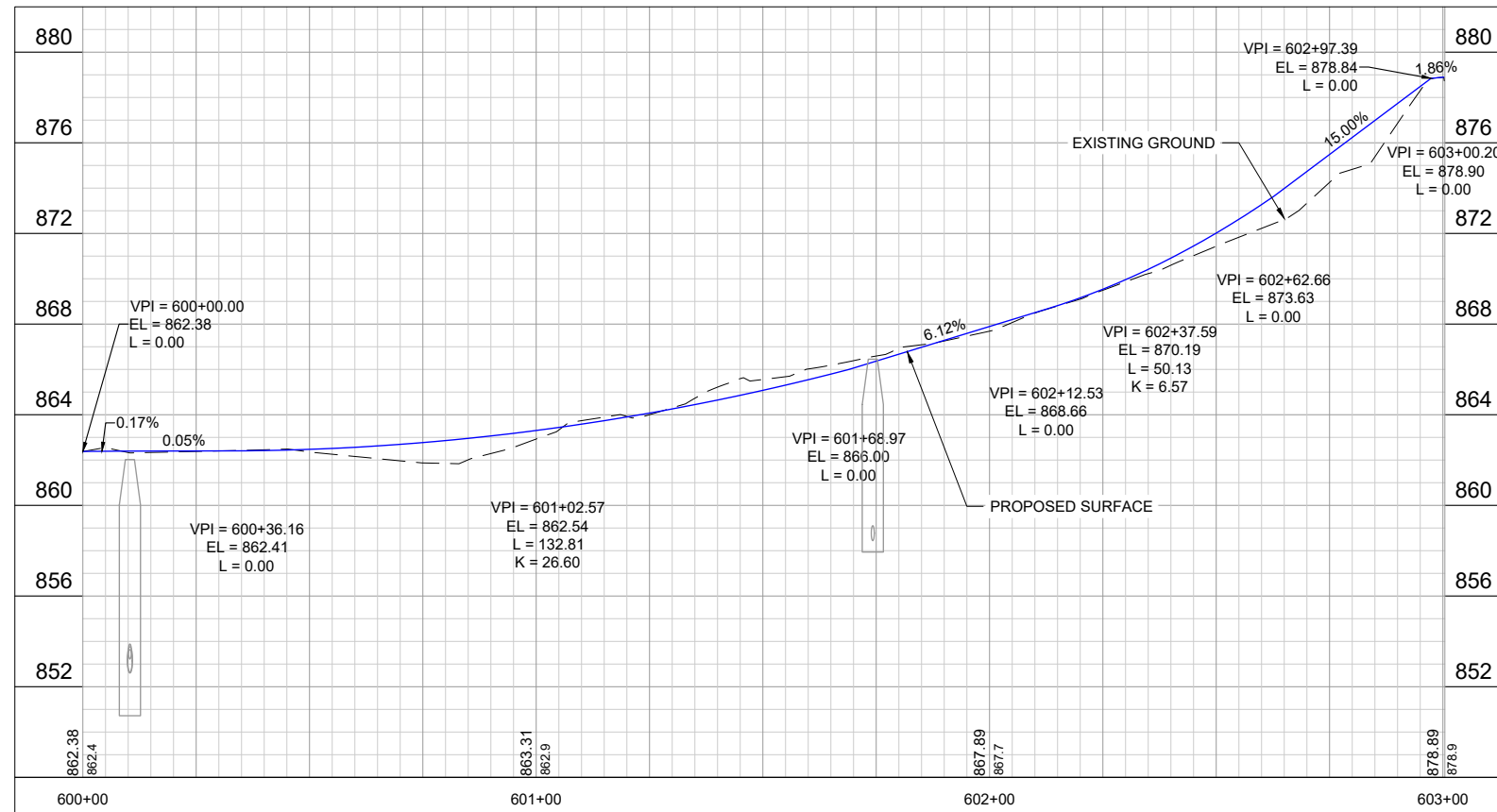
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PLAN & PROFILE - TAYCHOPERA SAS ACCESS PATH

PROJECT NO:
00373112
SHEET
PP21



Alignment - Unnamed ROW Path PROFILE



NOTE:
SEE SHEET CS21 UNNAMED ROW SAS ACCESS
ROAD CROSS SECTIONS FOR DETAILS

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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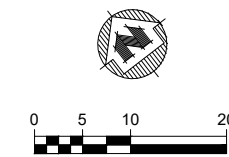
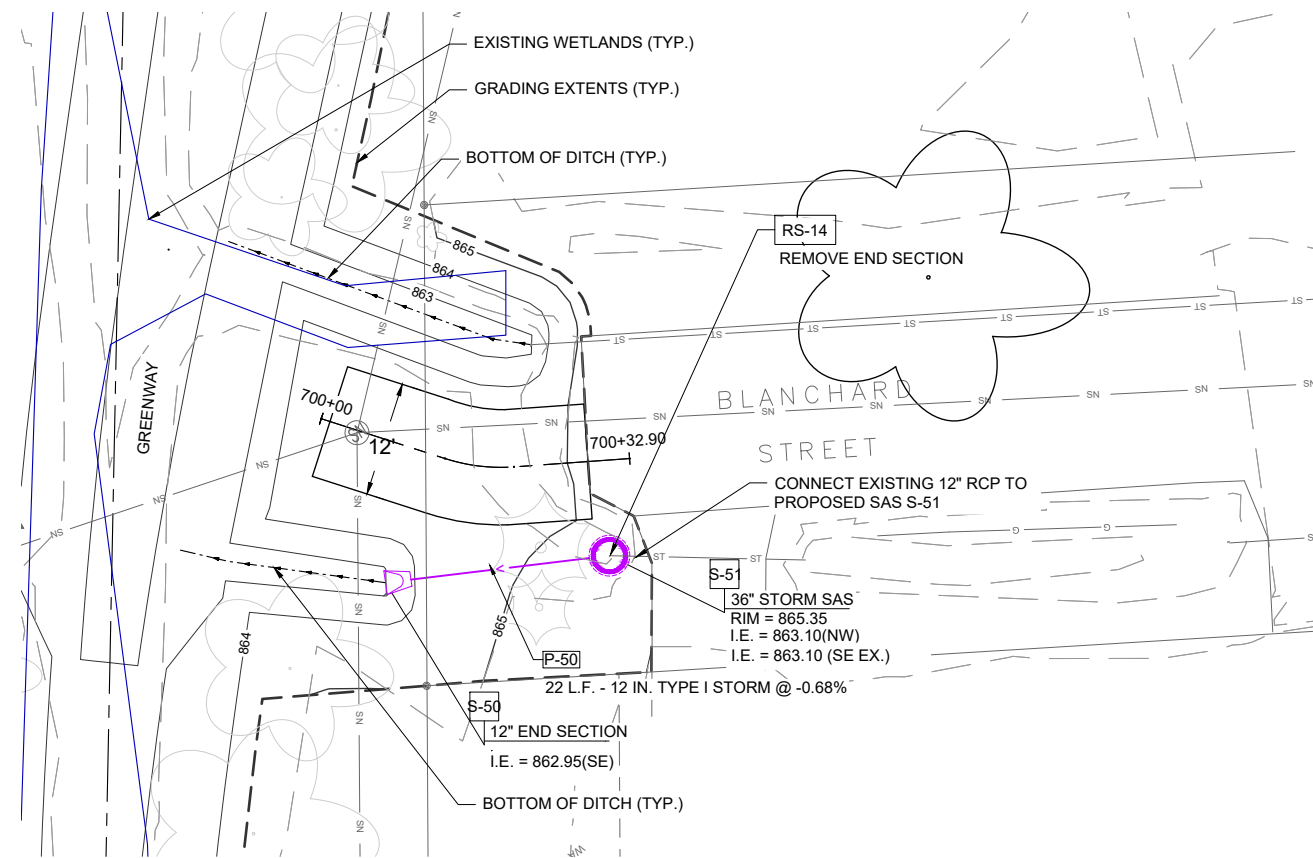


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PLAN & PROFILE - UNNAMED ACCESS ROAD SAS ACCESS
PATH

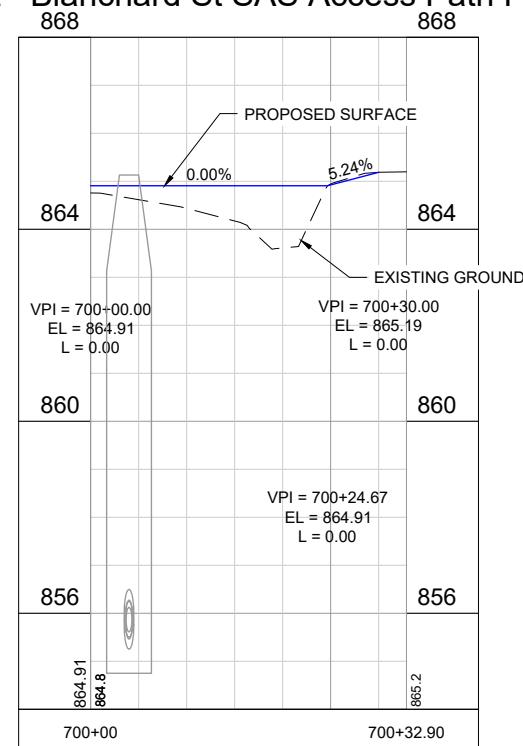
PROJECT NO:
00373112
SHEET
PP22



NOTE:
WETLAND AREAS OUTSIDE OF GRADING
EXTENTS SHALL NOT BE DISTURBED

NOTE:
SEE SHEET CS22 BLANCHARD ST SAS ACCESS
ROAD CROSS SECTIONS FOR DETAILS

Alignment - Blanchard St SAS Access Path PROFILE



Station

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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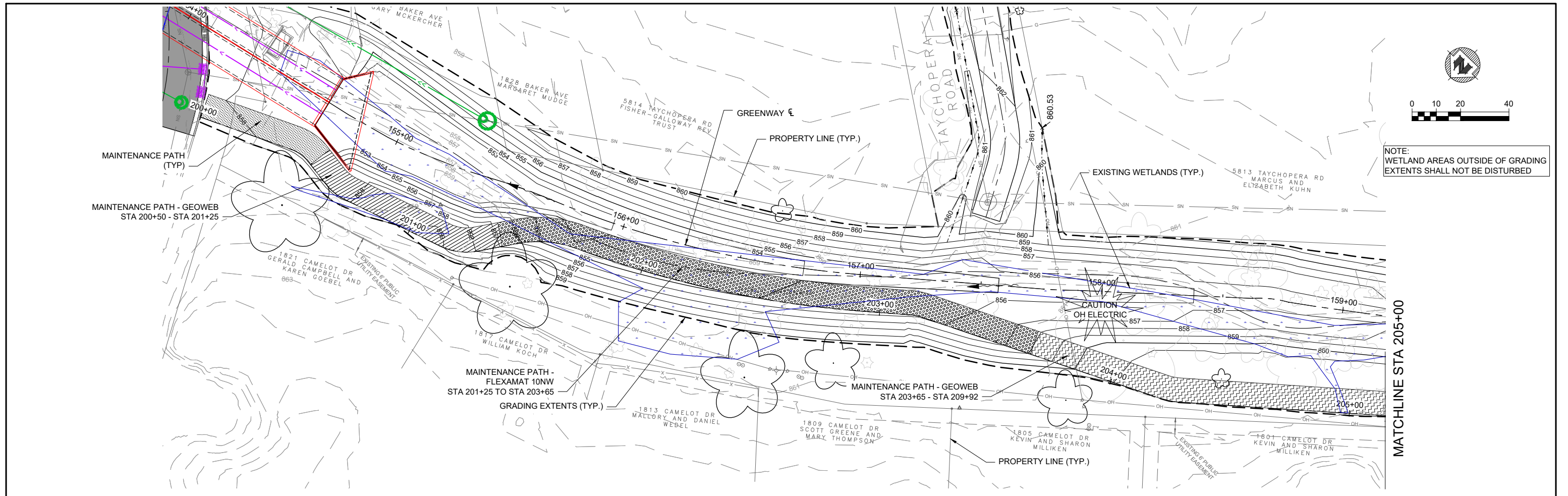


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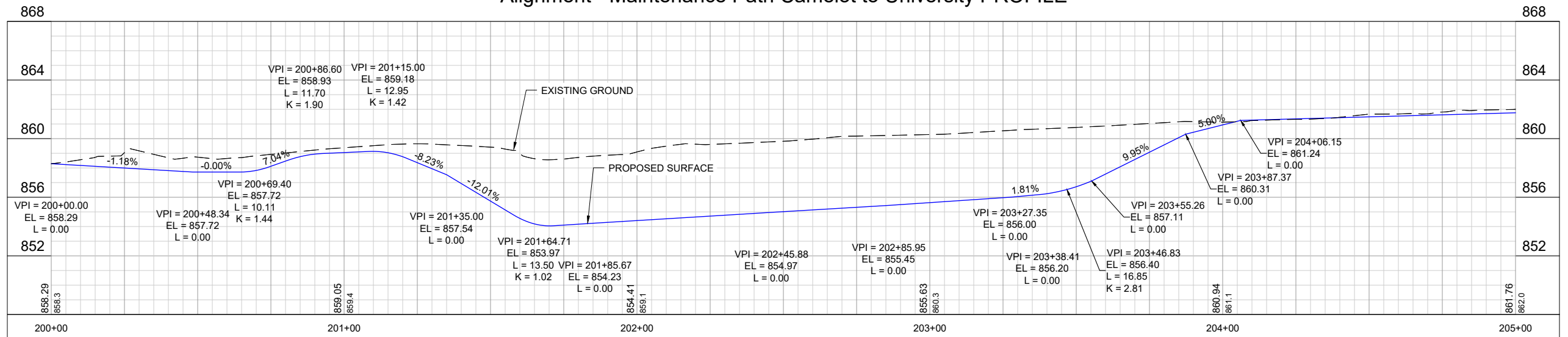
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CITY OF MADISON
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PLAN & PROFILE - BLANCHARD ST SAS ACCESS PATH

PROJECT NO:
00373112
SHEET
PP23



Alignment - Maintenance Path Camelot to University PROFILE



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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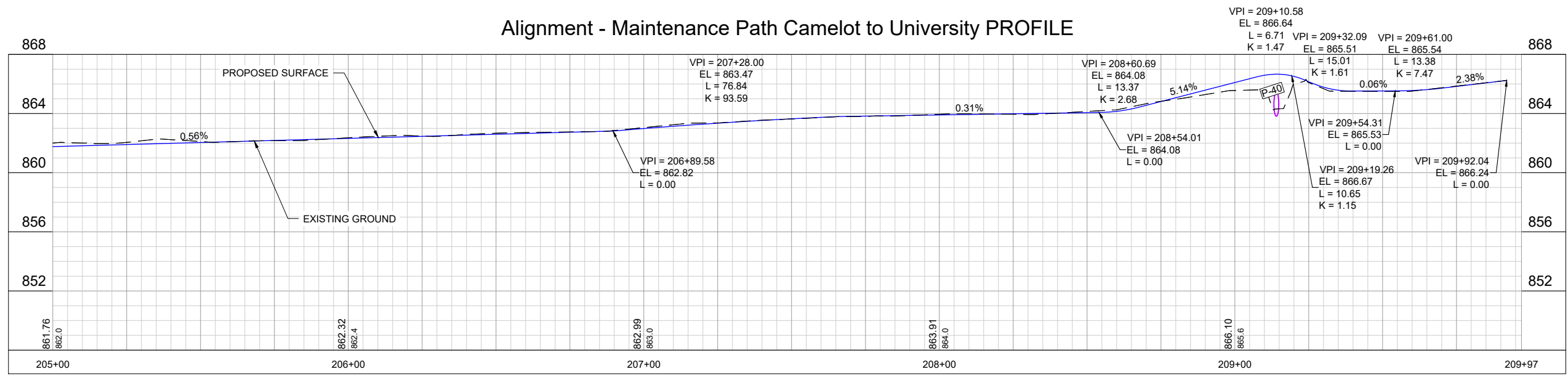
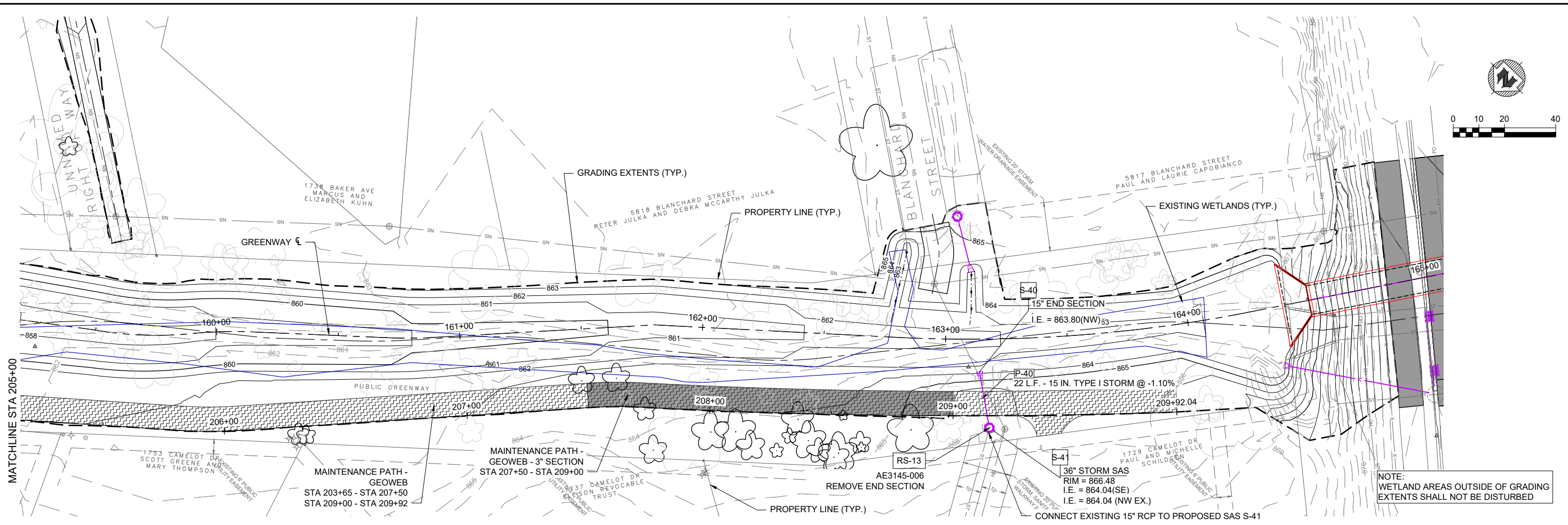


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PLAN & PROFILE - MAINTENANCE PATH CAMELOT DR. TO
 UNIVERSITY AVE

PROJECT NO.
00373112
 SHEET
PP24



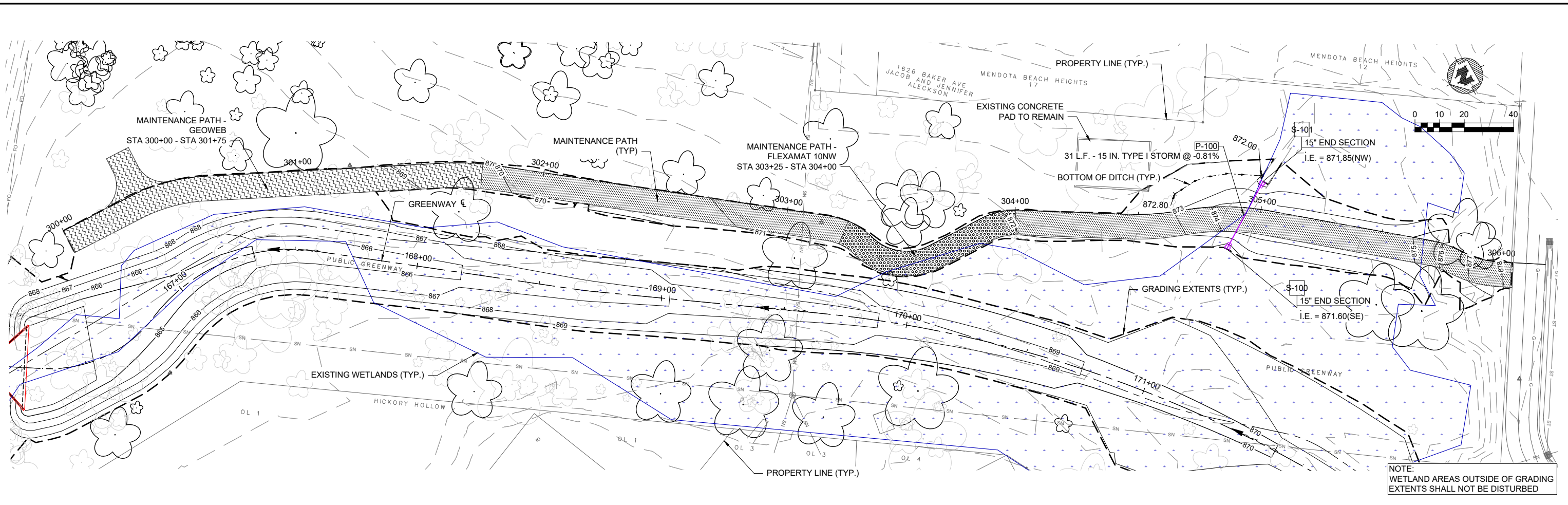
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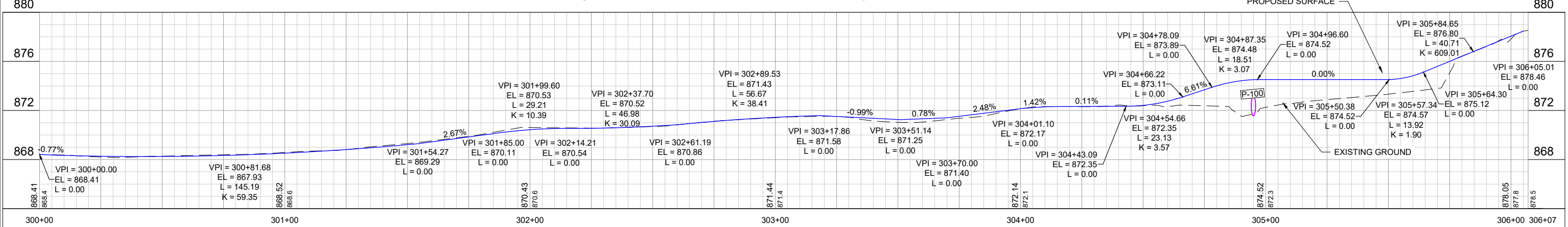
PLAN & PROFILE - MAINTENANCE PATH CAMELOT DR. TO
 UNIVERSITY AVE

PROJECT NO:
00373112
 SHEET
PP25



NOTE:
WETLAND AREAS OUTSIDE OF GRADING
EXTENTS SHALL NOT BE DISTURBED

Alignment - Maintenance Path University to Julia PROFILE



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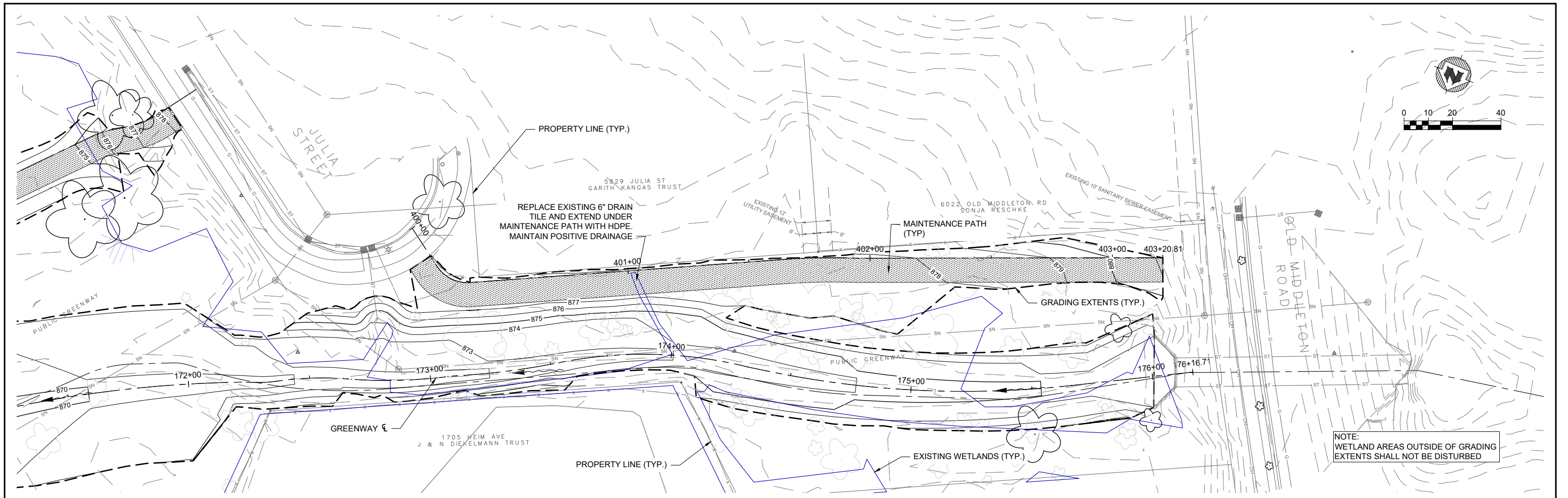
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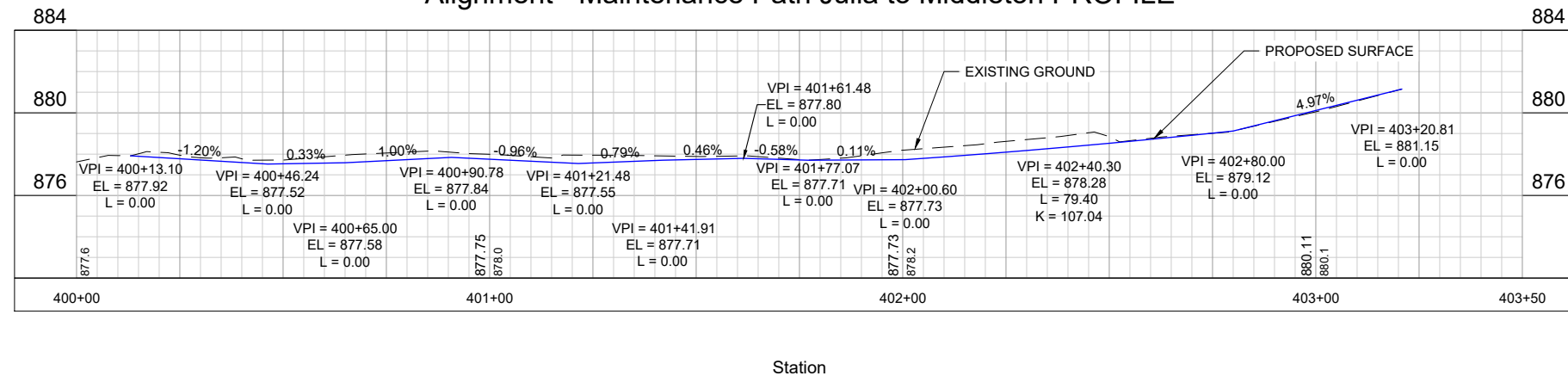
PLAN & PROFILE - MAINTENANCE PATH UNIVERSITY AVE TO
JULIA ST

PROJECT NO.
00373112
SHEET
PP26

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Alignment - Maintenance Path Julia to Middleton PROFILE



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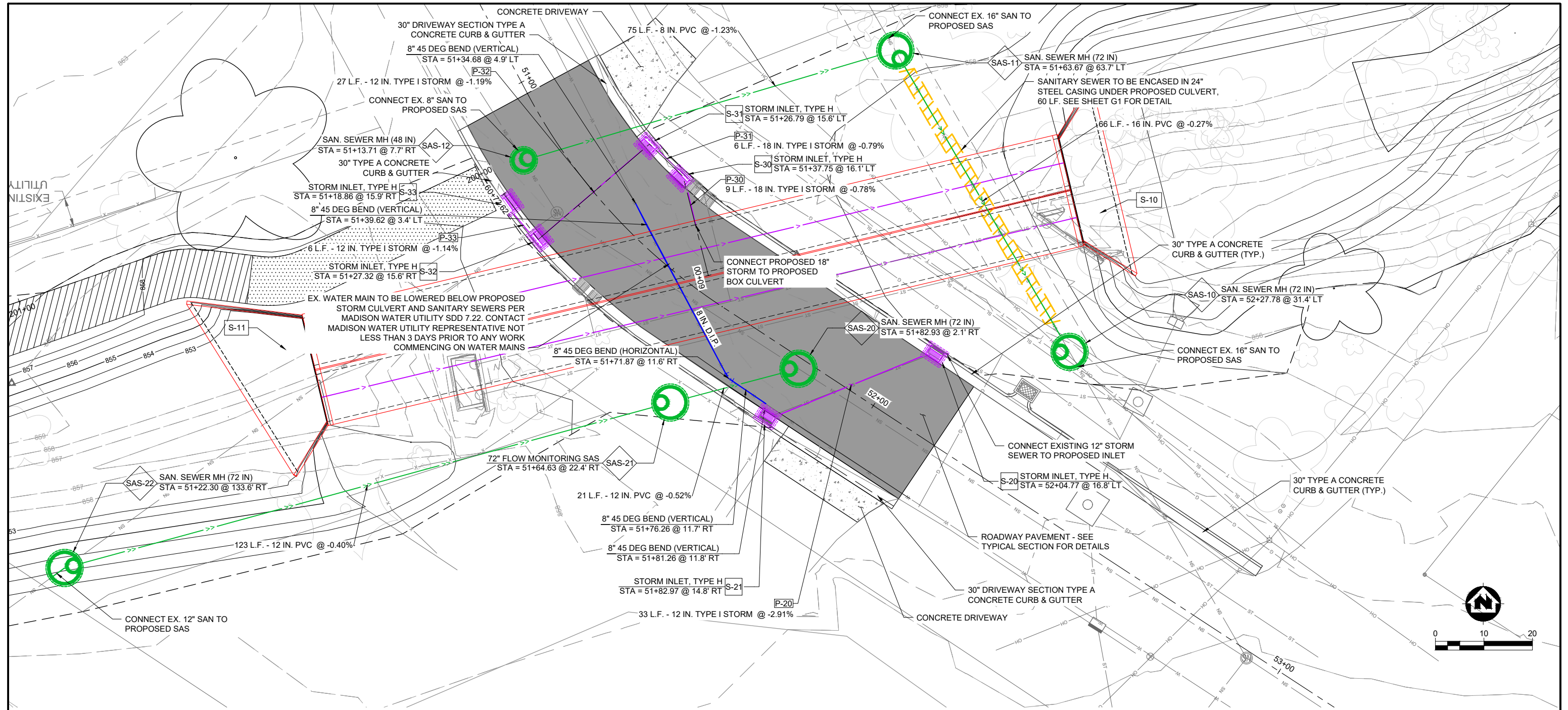


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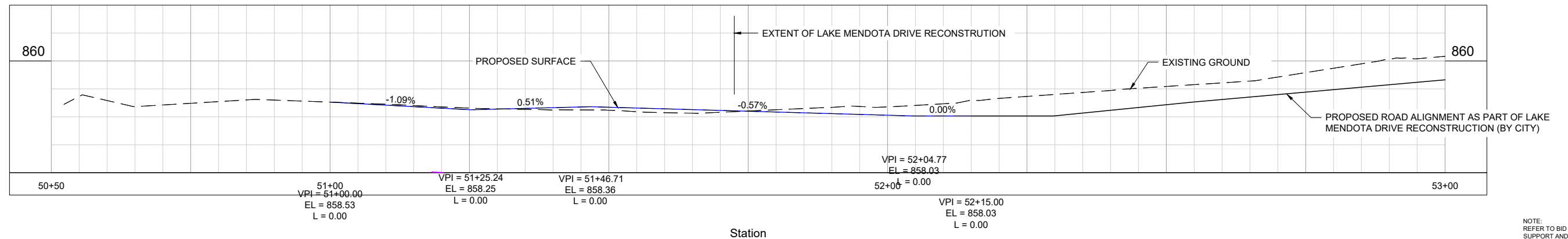
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PLAN & PROFILE - MAINTENANCE PATH JULIA ST TO OLD
 MIDDLETON ROAD

PROJECT NO.
00373112
 SHEET
PP27



CAMELOT DRIVE CL PROFILE



NOTE: REFER TO BID ITEM #0013 FOR UTILITY SUPPORT AND PROTECTION DETAILS

PROJECT DATE:	NO.	DATE	REVISION	BY

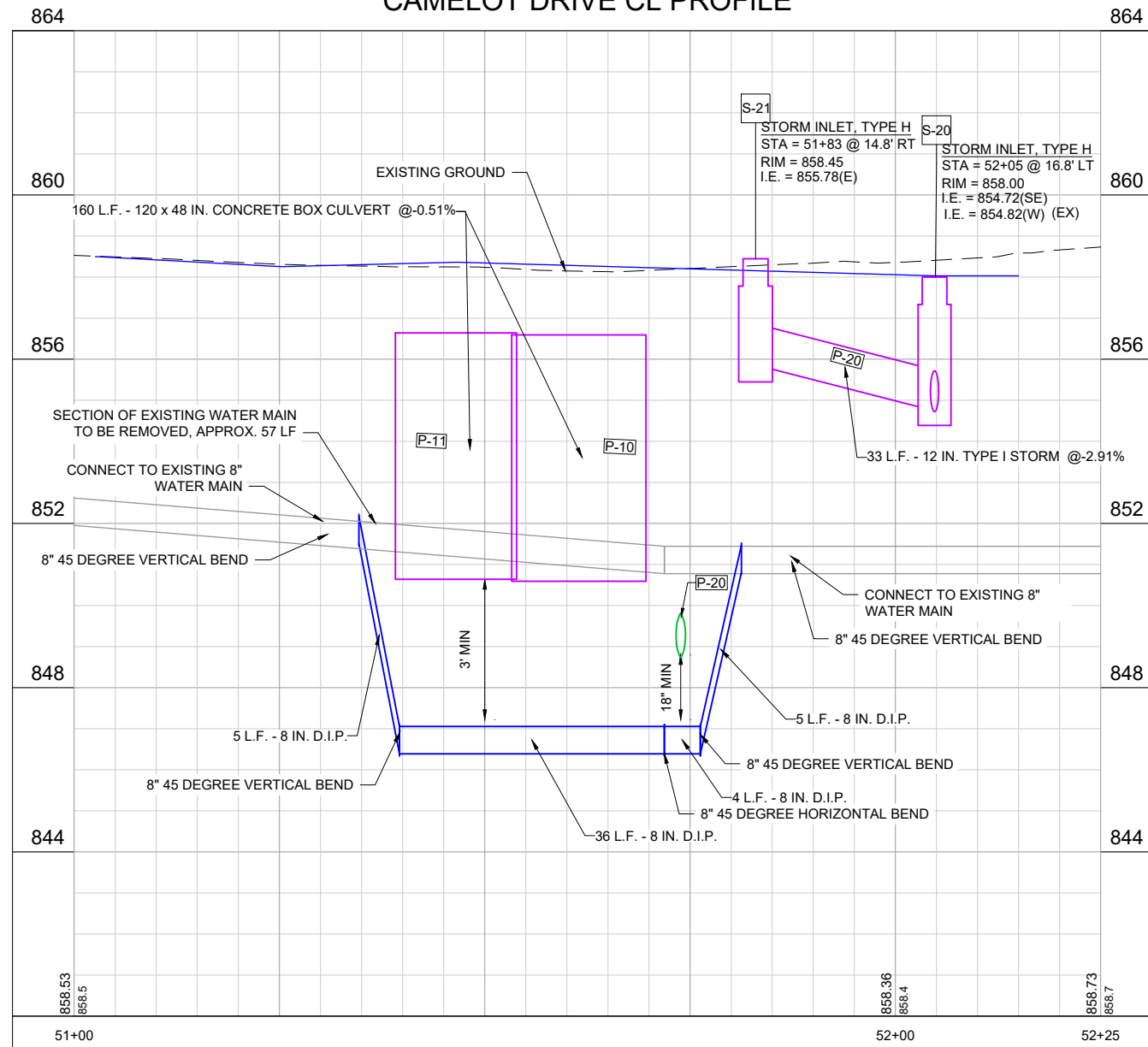
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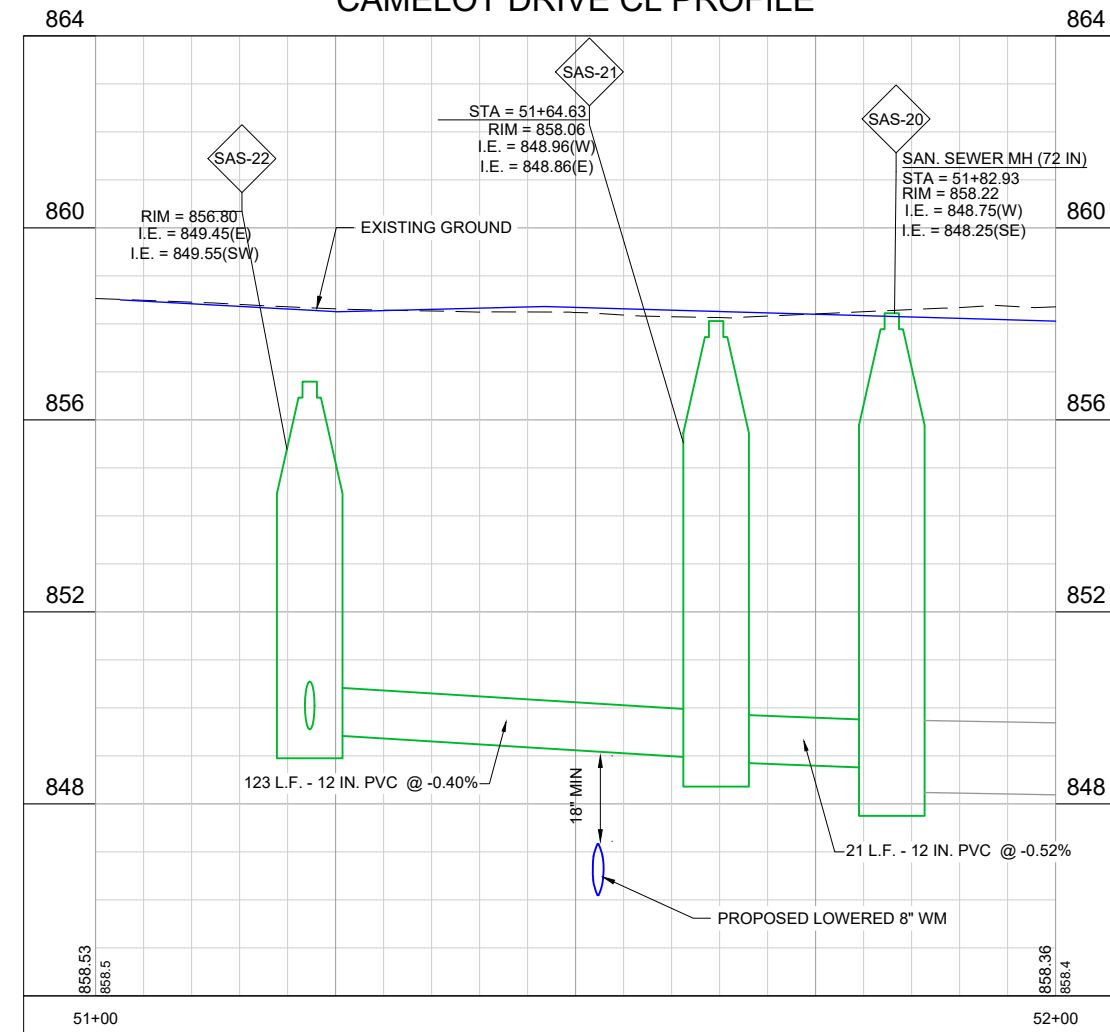
CAMELOT DR. RESTORATION PLAN AND PROFILE

PROJECT NO:
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CAMELOT DRIVE CL PROFILE



CAMELOT DRIVE CL PROFILE



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PLOT DATE: 10/31/2022 3:41 PM, G:\00\00373\00373112\CADD\Construction Documents\00373112 University and Camelot Utility PP.dwg

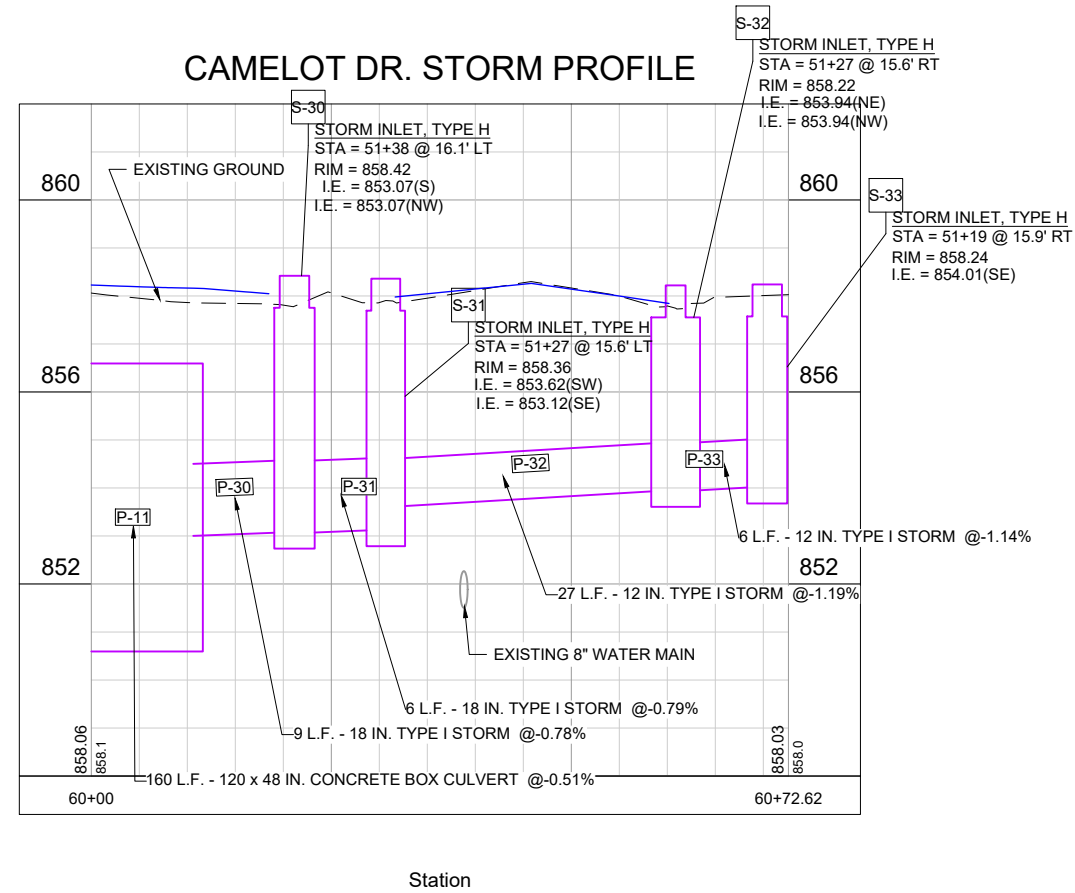
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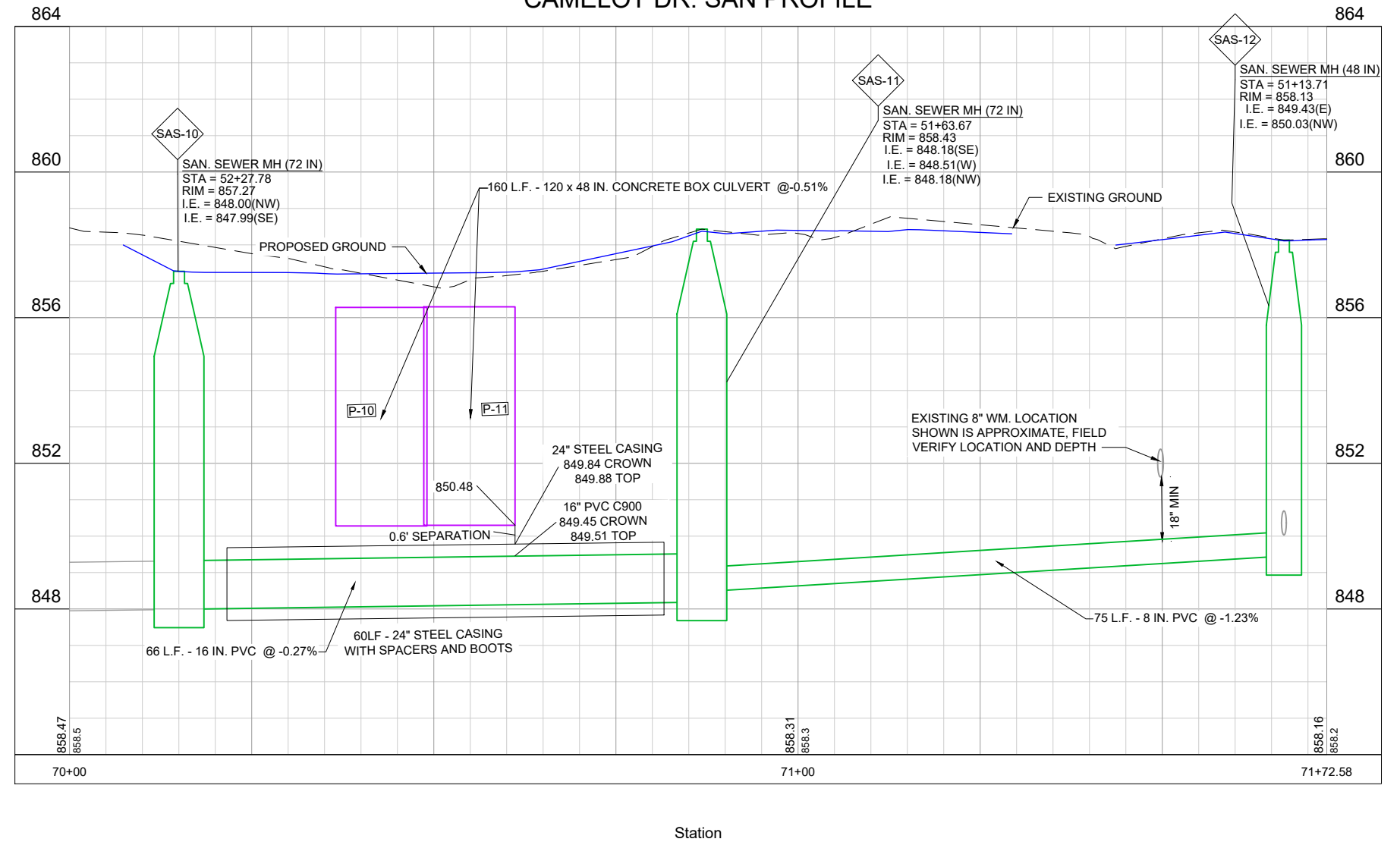
CAMELOT DR. UTILITY PROFILES

PROJECT NO:
00373112
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CAMELOT DR. STORM PROFILE



CAMELOT DR. SAN PROFILE



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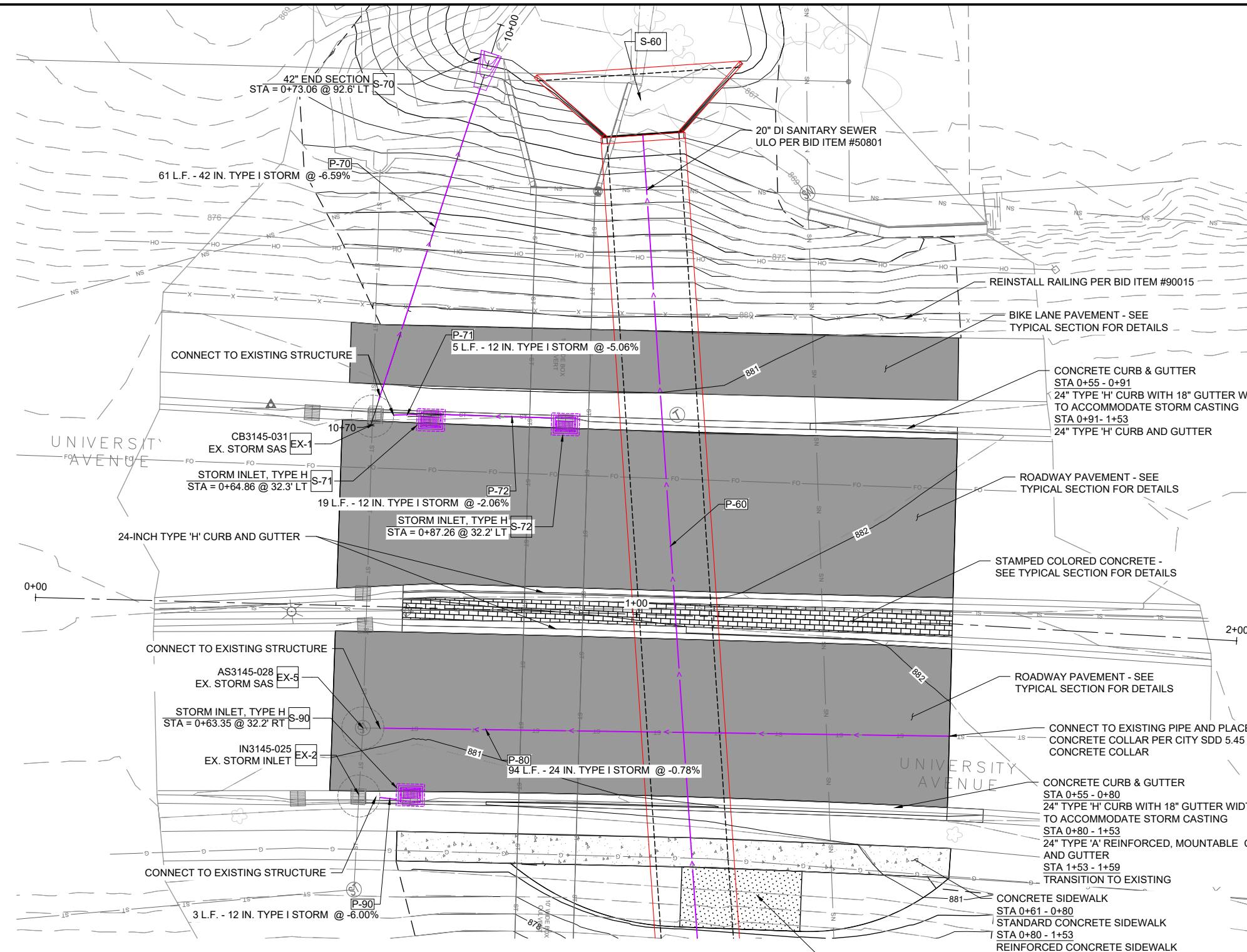
MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
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CAMELOT DR. UTILITY PROFILES

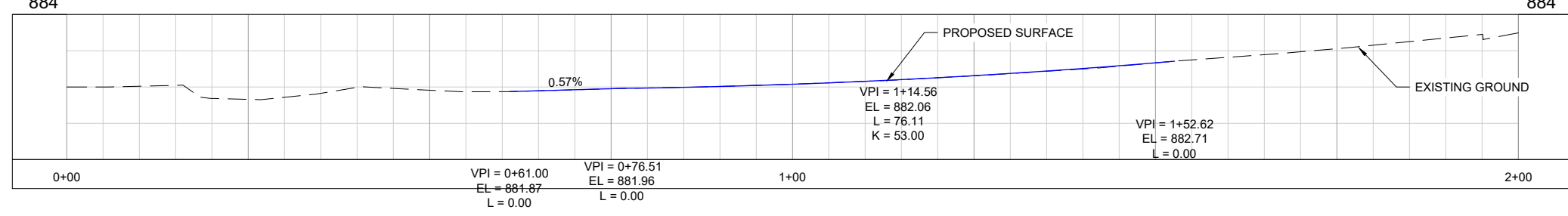
PROJECT NO.
00373112
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PP30



- NOTE:**
1. THIS PLAN SHOWS THE EXTENT OF RESTORATION REQUIRED FOR THE CULVERT AND OTHER UTILITY INSTALLATIONS. ADDITIONAL RESTORATION WORK MAY BE REQUIRED AS PART OF THE TRAFFIC CONTROL REQUIREMENTS FOR CONSTRUCTION. REFER TO TRAFFIC CONTROL SHEETS FOR ADDITIONAL DETAILS AS WELL AS CONSTRUCTION PHASING.
 2. REFER TO BID ITEM #90013 FOR UTILITY SUPPORT AND PROTECTION DETAILS



UNIVERSITY AVE CL PROFILE



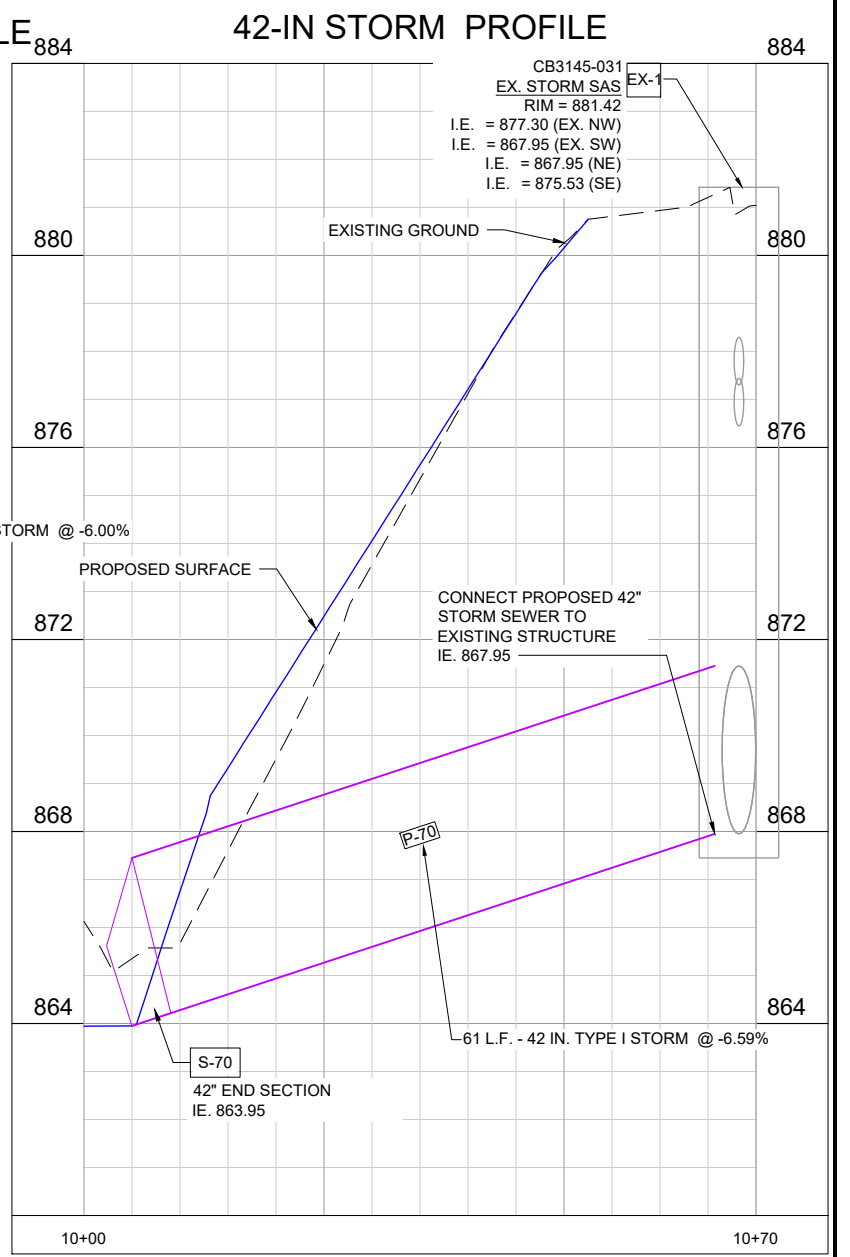
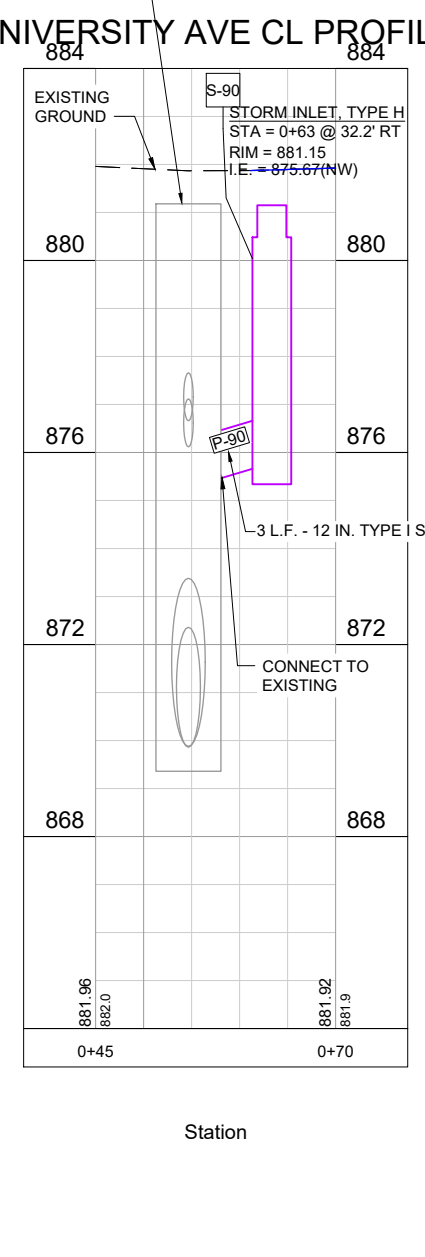
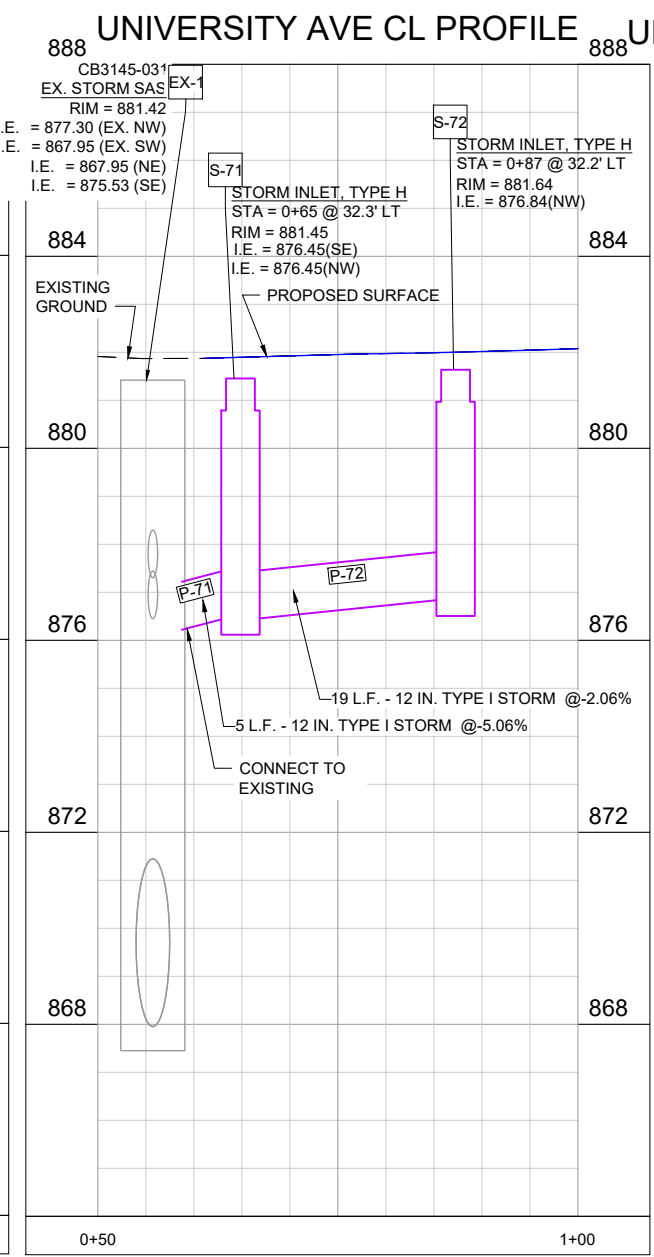
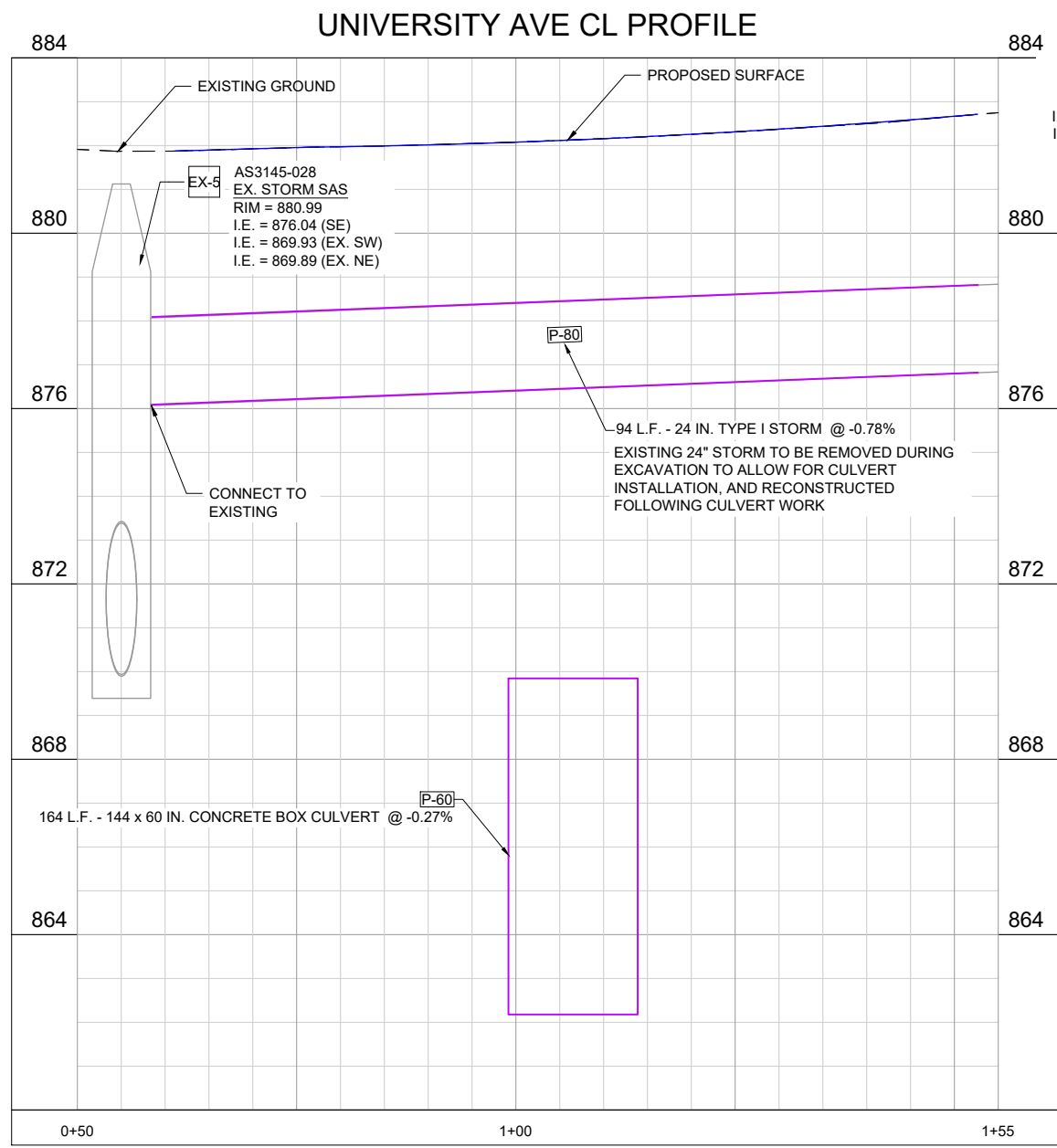
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UNIVERSITY AVE RESTORATION PLAN AND PROFILE

PROJECT NO:
00373112
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PP31

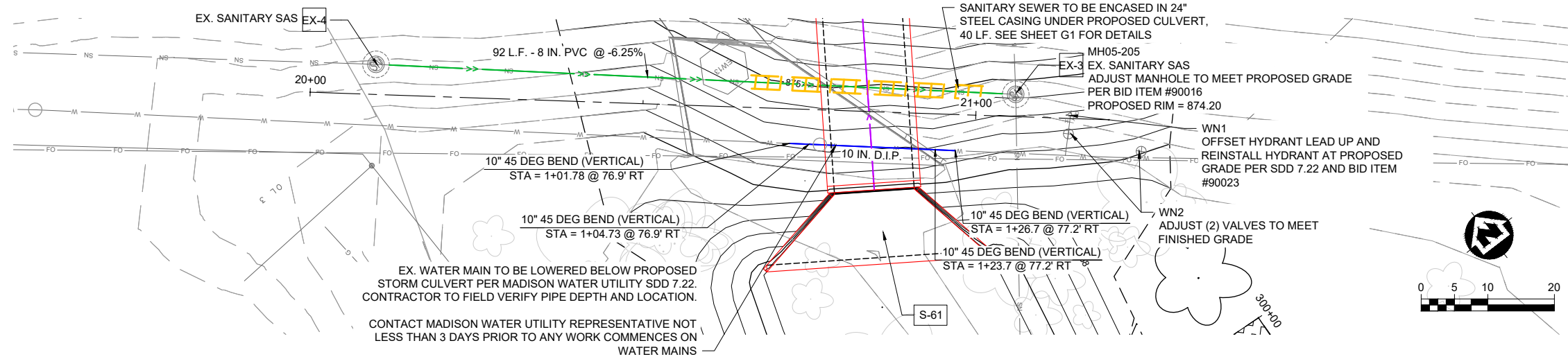


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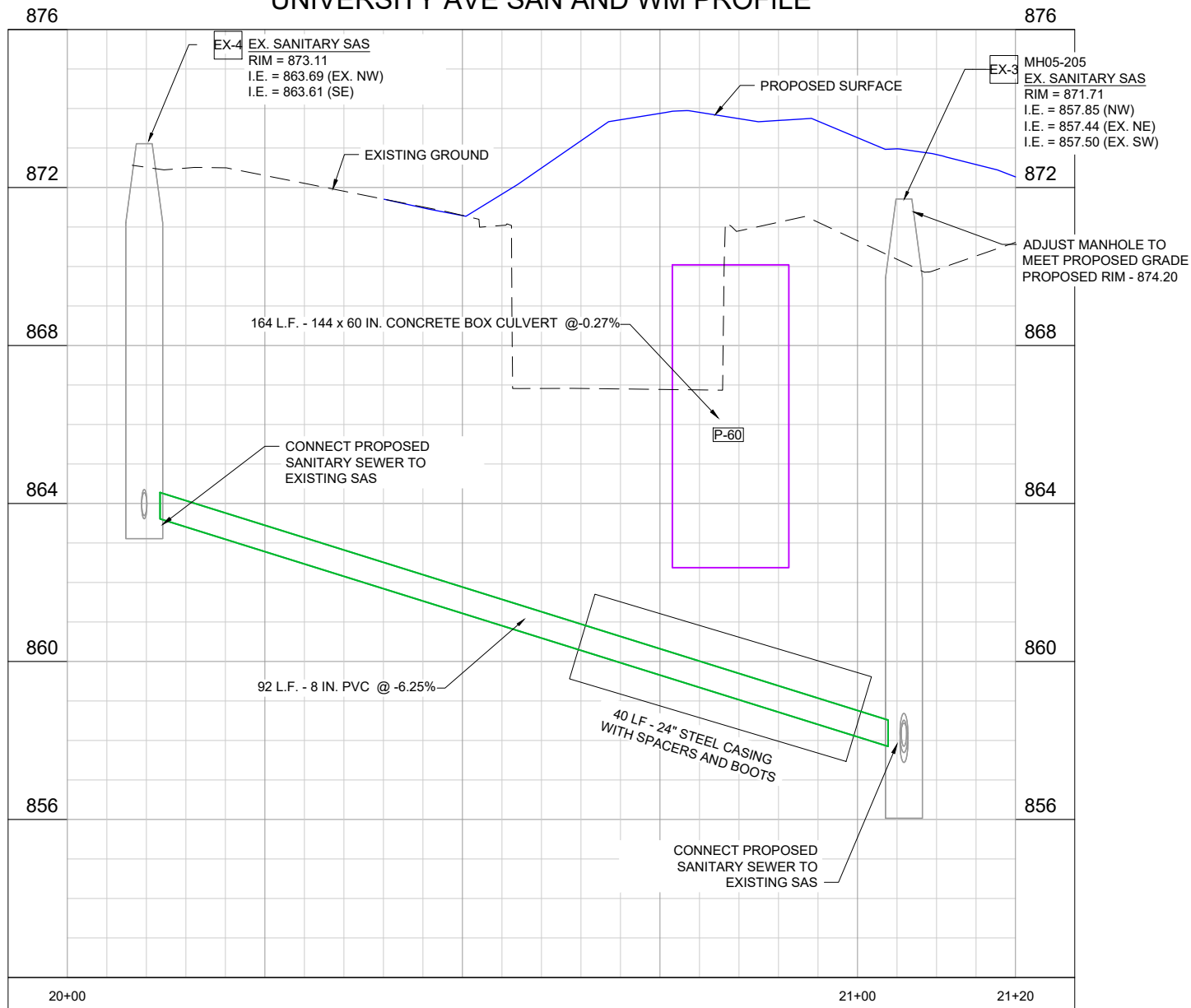
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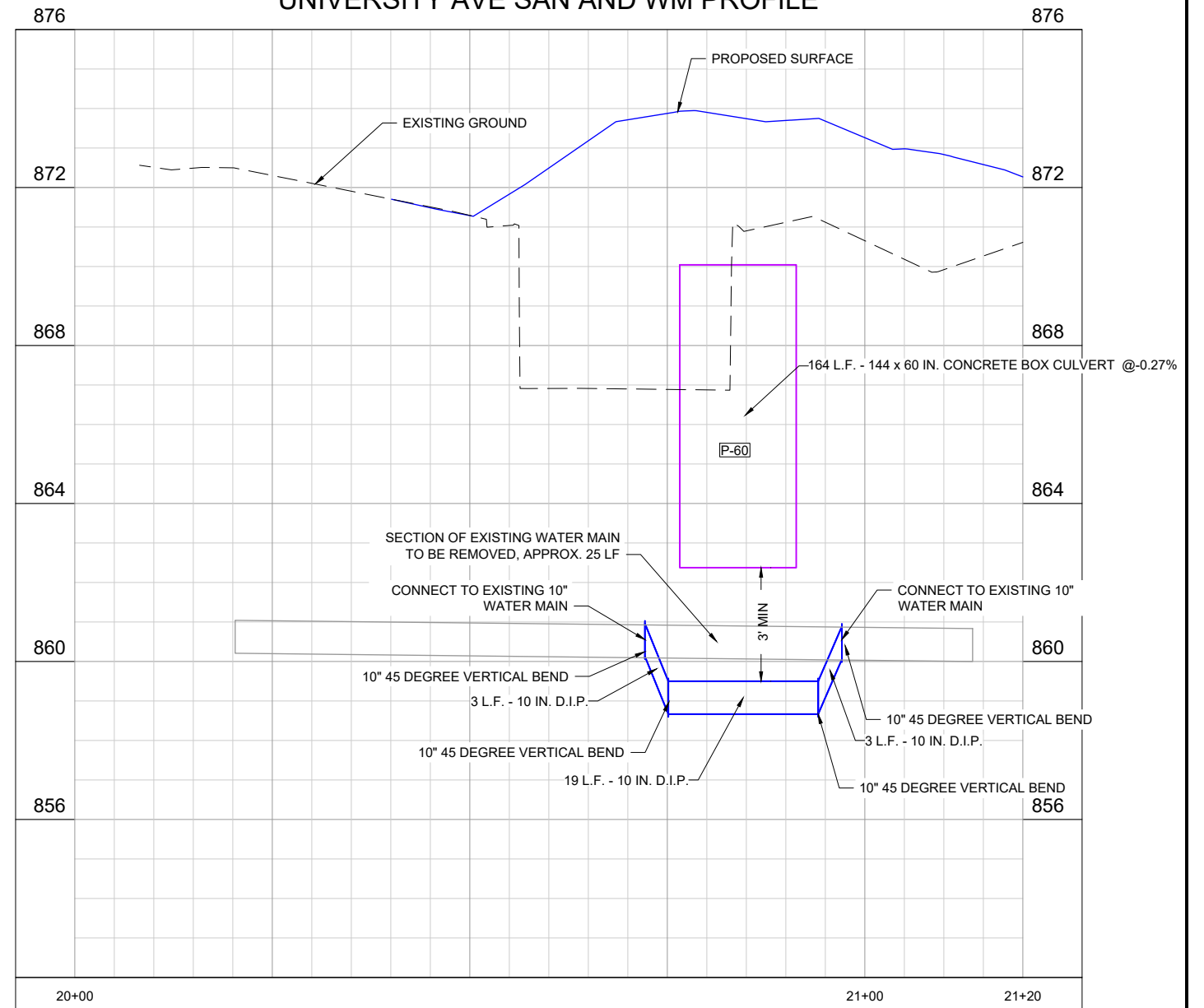
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UNIVERSITY AVE SAN AND WM PROFILE



UNIVERSITY AVE SAN AND WM PROFILE



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UNIVERSITY AVE SANITARY AND WATER PLAN AND
 PROFILES

PROJECT NO:
00373112
 SHEET
PP33

PROPOSED STORM STRUCTURE REMOVALS					
STRUC. NO.	SHEET	STATION	LOCATION (OFFSET)	ID NO.	TYPE
RS-1	D1 - CAMELOT DR. DEMOLITION PLAN		DOWNSTREAM APRON		CULVERT APRON
RS-2	D1 - CAMELOT DR. DEMOLITION PLAN		UPSTREAM APRON		CULVERT APRON AND DROP STRUCTURE
RS-3	D1 - CAMELOT DR. DEMOLITION PLAN	52+45.52	07-35.62		DOUBLE INLET STRUCTURE
RS-4	D1 - CAMELOT DR. DEMOLITION PLAN	52+46.45	07-34.59		DOUBLE INLET STRUCTURE
RS-5	D1 - CAMELOT DR. DEMOLITION PLAN	52+04.75	07-36.02		TYPE "H" INLET
RS-6	D1 - CAMELOT DR. DEMOLITION PLAN	52+42.82	07-33.92		TYPE "H" INLET
RS-7	D2 - UNIVERSITY AVE DEMOLITION PLAN		DOWNSTREAM APRON		CULVERT APRON
RS-8	D2 - UNIVERSITY AVE DEMOLITION PLAN		UPSTREAM APRON		CULVERT APRON
RS-9	D2 - UNIVERSITY AVE DEMOLITION PLAN	0+23.34	07-77.28	AES45-025	42" APRON ENOFPALL
RS-10	D2 - UNIVERSITY AVE DEMOLITION PLAN	0+64.87	07-32.44	IN345-033	TYPE "H" INLET
RS-11	D2 - UNIVERSITY AVE DEMOLITION PLAN	0+67.22	07-32.23	IN345-034	TYPE "H" INLET
RS-12	D2 - UNIVERSITY AVE DEMOLITION PLAN	0+62.91	07-32.84	IN345-026	TYPE "H" INLET
RS-13	PPS - PLAN & PROFILE - MAINTENANCE PATH CAMELOT DR. TO UNIVERSITY AVE	208+15.78	07-53.00	AES45-036	12" APRON ENOFPALL
RS-14	PPS - PLAN & PROFILE - BLANCHARD ST SAS ACCESS PATH	708+20.08	07-53.94		12" APRON ENOFPALL

PROPOSED STORM PIPE REMOVALS							
REMOVAL NO.	REMOVE FROM	REMOVE TO	LGTH (FT)	PIPE SIZE (IN.)	PIPE TYPE	PAID (Y/N)	SHEET WHERE REMOVAL IS SHOWN
RP-1	RS-1	RS-2	123	48	CMP CULVERT	Y	D1 - CAMELOT DR. DEMOLITION PLAN
RP-2	RS-1	RS-2	123	48	CMP CULVERT	Y	D1 - CAMELOT DR. DEMOLITION PLAN
RP-3	RS-1	RS-3	26	12	RCP	N	D1 - CAMELOT DR. DEMOLITION PLAN
RP-4	RS-1	RS-4	9	12	RCP	N	D1 - CAMELOT DR. DEMOLITION PLAN
RP-5	RS-5	RS-6	34	12	RCP	N	D1 - CAMELOT DR. DEMOLITION PLAN
RP-6	RS-7	RS-8	133	72x12	BOX CULVERT	Y	D2 - UNIVERSITY AVE DEMOLITION PLAN
RP-7	RS-9	RS-10	44	42	RCP	Y	D2 - UNIVERSITY AVE DEMOLITION PLAN
RP-8	RS-11	RS-12	8	12	RCP	N	D2 - UNIVERSITY AVE DEMOLITION PLAN
RP-9	RS-10	RS-11	21	12	RCP	N	D2 - UNIVERSITY AVE DEMOLITION PLAN
RP-10	RS-13	SEE PLANS	98	24	RCP	N	D2 - UNIVERSITY AVE DEMOLITION PLAN
RP-11	RS-12	RS-12	8	12	RCP	N	D2 - UNIVERSITY AVE DEMOLITION PLAN

PROPOSED SANITARY STRUCTURE REMOVALS						
STRUC. NO.	SHEET	STATION	LOCATION (OFFSET)	ID NO.	TYPE	DEPTH (FT)
RS-15	D1 - CAMELOT DR. DEMOLITION PLAN	51+25.68	RT-8.54	MH05-201	48" SANITARY SAS	9.54

PROPOSED SANITARY PIPE REMOVALS								
REMOVAL NO.	REMOVE FROM	REMOVE TO	LGTH (FT)	PIPE SIZE (IN.)	PIPE TYPE	PAID (Y/N)	SHEET WHERE REMOVAL IS SHOWN	NOTES
RP-12	RS-12	SE	56	18	DI	Y	D1 - CAMELOT DR. DEMOLITION PLAN	
RP-13	RS-12	NW	10	8	DI	N	D1 - CAMELOT DR. DEMOLITION PLAN	
RP-14	RS-12	SW	123	12	DI	Y	D1 - CAMELOT DR. DEMOLITION PLAN	
RP-15		SEE PLANS	80	16	DI	N	D1 - CAMELOT DR. DEMOLITION PLAN	
RP-16	EX-3	EX-4	96	8	LINED VCP	N	D2 - UNIVERSITY AVE DEMOLITION PLAN	

NOTES:

- PIPES REMOVED IN THE SAME TRENCH WHERE PROPOSED PIPES ARE INSTALLED ARE CONSIDERED INCIDENTAL TO PIPE INSTALLATION.
- REMOVAL OF EXISTING CULVERTS, APRONS AND DROP STRUCTURES ARE INCLUDED IN THE PRICE OF THE PROPOSED CULVERTS.

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PIPE AND STRUCTURE REMOVAL SCHEDULES

PROJECT NO.
00373112
 SHEET
SCH1

PROPOSED STORM STRUCTURES								
STRUC. NO	SHEET	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
S-10	PP16- PLAN & PROFILE - GREENWAY	152+98.12	0.00	CULVERT WINGWALL	N/A	851.20 (120" x 48" BOX CULVERT)	N/A	
S-11	PP16- PLAN & PROFILE - GREENWAY	154+76.85	0.00	CULVERT WINGWALL	N/A	852.02 (120" x 48" BOX CULVERT)	N/A	
S-20	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	52+04.77	LT-16.82'	STORM INLET, TYPE H	858.00	854.82 (12" W) 854.72 (EX 12" SE)	3.28	W/R - 3067-7004-V
S-21	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+82.97	RT-14.81'	STORM INLET, TYPE H	858.45	855.78 (12")	2.67	W/R - 3067-7004-V
S-30	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+37.75	LT-16.10'	STORM INLET, TYPE H	858.42	853.07 (18" S) 853.07 (18" N)	5.35	W/R - 3067-7004-V
S-31	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+26.79	LT-15.64'	STORM INLET, TYPE H	858.36	853.12 (18" S) 853.62 (12" SW)	5.26	W/R - 3067-7004-V
S-32	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+27.32	RT-15.55'	STORM INLET, TYPE H	858.22	853.94 (12" NE) 853.94 (12" NW)	4.30	W/R - 3067-7004-V
S-33	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+18.86	RT-15.90'	STORM INLET, TYPE H	858.24	854.01 (12" SE)	4.27	W/R - 3067-7004-V
S-40	PP25 - PLAN & PROFILE - MAINTENANCE PATH CAMELOT DR. TO UNIVERSITY AVE	209+10.92	LT-18.05'	15" END SECTION	865.32	863.80 (15" NW)	N/A	
S-41	PP25 - PLAN & PROFILE - MAINTENANCE PATH CAMELOT DR. TO UNIVERSITY AVE	209+14.91	RT-5.00'	36" STORM SAS	866.48	864.04 (15") 864.04 (EX. 15")	2.44	W/R - 3067-7004-V
S-50	PP23 - PLAN & PROFILE - BLANCHARD ST SAS ACCESS PATH	700+11.61	RT-14.20'	12" END SECTION	864.18	862.95 (12")	N/A	
S-51	PP23 - PLAN & PROFILE - BLANCHARD ST SAS ACCESS PATH	700+30.08	RT-9.94'	36" STORM SAS	865.35	863.10 (12" NW) 863.10 (12" SE)	2.25	W/R - 3067-7004-V
S-60	PP18- PLAN & PROFILE - GREENWAY	164+39.45	0.00	CULVERT WINGWALL	N/A	853.29 (144" x 60" BOX CULVERT)	N/A	
S-61	PP18- PLAN & PROFILE - GREENWAY	166+25.85	0.00	CULVERT WINGWALL	N/A	863.74 (144" x 60" BOX CULVERT)	N/A	
S-70	PP31- UNIVERSITY AVE RESTORATION PLAN AND PROFILE	0+73.06	LT-92.56'	42" END SECTION	867.91	863.95 (42")	N/A	
S-71	PP31- UNIVERSITY AVE RESTORATION PLAN AND PROFILE	0+64.86	LT-32.27'	STORM INLET, TYPE H	881.45	876.45 (12" NW) 876.45 (12" SE)	5.00	W/R - 3067-7004-V
S-72	PP31- UNIVERSITY AVE RESTORATION PLAN AND PROFILE	0+87.26	LT-32.23'	STORM INLET, TYPE H	881.64	876.84 (12" NW)	4.80	W/R - 3067-7004-V
S-90	PP31- UNIVERSITY AVE RESTORATION PLAN AND PROFILE	0+63.35	RT-32.21'	STORM INLET, TYPE H	881.15	875.67 (12" NW)	5.48	W/R - 3067-7004-V
S-100	PP26 - PLAN & PROFILE - MAINTENANCE PATH UNIVERSITY AVE TO JULIA ST	304+86.26	RT-17.12'	15" END SECTION	873.16	871.60 (15")	N/A	
S-101	PP26 - PLAN & PROFILE - MAINTENANCE PATH UNIVERSITY AVE TO JULIA ST	304+99.16	LT-11.36'	15" END SECTION	873.37	871.85 (15")	N/A	

PROPOSED STORM PIPES										
PIPE NO.	FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PAY LENGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE (IN.)	TYPE	NOTES
P-10	S-10	S-11	851.20	852.02	160	160	0.51%	120 x 48	CONCRETE BOX CULVERT	
P-11	S-10	S-11	851.20	852.02	160	160	0.51%	120 x 48	CONCRETE BOX CULVERT	
P-20	S-20	S-21	854.78	855.82	31	31	3.35%	12	TYPE I STORM	
P-30	S-11	S-30	853.00	853.07	11	9	0.76%	18	TYPE I STORM	
P-31	S-30	S-31	853.07	853.12	10	6	0.87%	18	TYPE I STORM	
P-32	S-31	S-32	853.62	853.94	31	27	1.18%	12	TYPE I STORM	
P-33	S-32	S-33	853.94	854.01	10	6	1.17%	12	TYPE I STORM	
P-40	S-40	S-41	863.80	864.04	23	22	1.09%	15	TYPE I STORM	
P-50	S-50	S-51	862.95	863.10	23	22	0.68%	12	TYPE I STORM	
P-60	S-60	S-61	863.29	863.74	164	164	0.27%	144 x 60	CONCRETE BOX CULVERT	
P-70	S-70	EX-1	863.95	867.95	65	61	6.56%	42	TYPE I STORM	
P-71	EX-1	S-71	876.22	876.45	8	5	4.60%	12	TYPE I STORM	
P-72	S-71	S-72	876.45	876.84	22	19	2.00%	12	TYPE I STORM	
P-80	NA	NA	876.04	876.82	94	94	0.83%	24	TYPE I STORM	
P-90	EX-2	S-90	875.47	875.67	8	3	6.67%	12	TYPE I STORM	
P-100	S-100	S-101	871.60	871.85	31	26	0.96%	15	TYPE I STORM	

NOTES:

- PAY LENGTH IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. PIPE SLOPE CALCULATED USING PIPE LENGTH.
- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; SAS = SEWER ACCESS STRUCTURE; TOC = TOP OF CASTING
- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING (TOC) GRADE GIVEN IS THE BACK OF CURB FOR STRUCTURES WITHIN THE TERRACE ROADS, AND THE FINISHED GRADE FOR STRUCTURES IN GREEN SPACES.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

PROPOSED SANITARY STRUCTURES								
STRUC. NO	SHEET	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH (FT)	NOTES
SAS-10	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	52+27.78	LT-31.43'	72" SANITARY SAS	857.27	847.99 (EX 16" SE) 848.00 (16" C900 NW)	9.28	
SAS-11	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+63.67	LT-63.74'	72" SANITARY SAS	858.43	848.18 (16" C900 SE) 848.18 (EX 16" NW) 848.51 (8" PVC W)	10.25	
SAS-12	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+13.71	RT-7.72'	48" SANITARY SAS	858.13	849.43 (8" PVC E) 850.03 (EX 8" NW)	8.70	
SAS-20	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+82.93	RT-2.08'	72" SANITARY SAS	858.22	848.25 (EX 18" SE) 848.75 (12" PVC W)	9.97	
SAS-21	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+64.63	RT-22.40'	72" FLOW MONITORING SAS	858.06	848.86 (12" PVC E) 848.96 (12" PVC W)	9.10	SEE SHEET G1 FOR DETAIL
SAS-22	PP28 - CAMELOT DR. RESTORATION PLAN AND PROFILE	51+22.30	RT-133.61'	72" SANITARY SAS	856.80	849.45 (12" PVC E) 849.55 (EX 12" PVC SW)	7.35	

PROPOSED SANITARY PIPES										
FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PAY LENGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE (IN.)	TYPE	NOTES	
SAS-10	SAS-11	848.00	848.18	72	66	0.23%	36	PVC CRIB	WITH PIPE CASING UNDER CULVERT	
SAS-11	SAS-12	848.51	848.48	80	75	1.23%	8	PVC		
SAS-20	SAS-21	848.75	848.86	37	31	0.53%	12	PVC		
SAS-21	SAS-22	848.96	848.45	125	125	0.40%	12	PVC		
EX-3	EX-4	857.25	867.95	96	92	6.25%	8	PVC	WITH PIPE CASING UNDER CULVERT	

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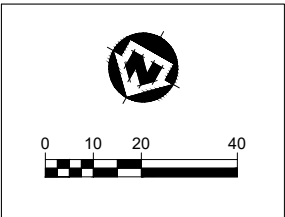
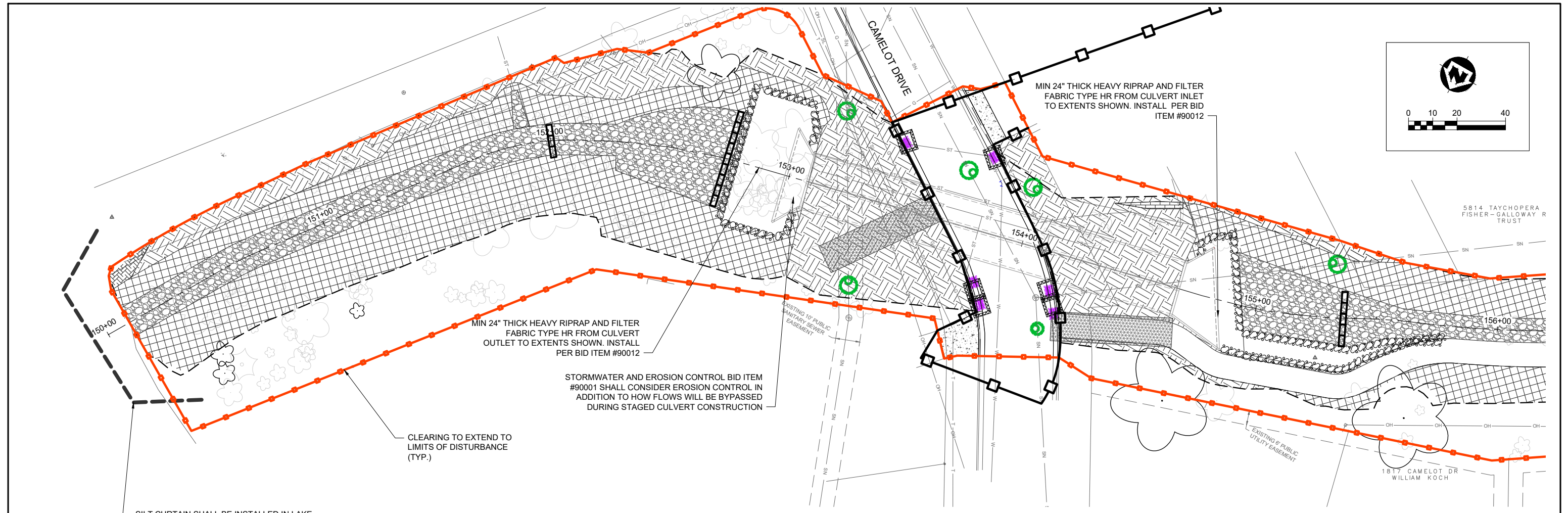


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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

PROPOSED PIPE AND STRUCTURE SCHEDULES

PROJECT NO:
00373112
 SHEET
SCH2



MIN 24" THICK HEAVY RIPRAP AND FILTER FABRIC TYPE HR FROM CULVERT INLET TO EXTENTS SHOWN. INSTALL PER BID ITEM #90012

MIN 24" THICK HEAVY RIPRAP AND FILTER FABRIC TYPE HR FROM CULVERT OUTLET TO EXTENTS SHOWN. INSTALL PER BID ITEM #90012

STORMWATER AND EROSION CONTROL BID ITEM #90001 SHALL CONSIDER EROSION CONTROL IN ADDITION TO HOW FLOWS WILL BE BYPASSED DURING STAGED CULVERT CONSTRUCTION

CLEARING TO EXTEND TO LIMITS OF DISTURBANCE (TYP.)

SILT CURTAIN SHALL BE INSTALLED IN LAKE MENDOTA AT THE MOUTH OF THE DRAINAGE PER WDNR TECHNICAL STANDARD 1070 - SILT CURTAIN

- EROSION CONTROL NOTES:**
- 1) EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
 - 2) THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.
 - 3) THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNR SOC STANDARDS AND THE CITY OF MADISON STANDARD SPECIFICATIONS.
 - 4) THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
 - 5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGE.
 - 6) POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.
 - 7) NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL.
 - 8) THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
 - 9) ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
 - 10) ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
 - 11) THE CONTRACTOR SHALL USE APPROPRIATE CONCRETE WASTE CATCHMENT. ALL POINTS ON THIS SITE DRAIN DIRECTLY TO THE GREENWAY. THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTIONS SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
 - 12) CONTRACTOR SHALL RESTORE GRADED AREA EVERY TWO DAYS.

EROSION CONTROL AND RESTORATION LEGEND

	VEHICLE TRACKING PAD
	TOPSOIL & SEED
	SLOPES BETWEEN 5:1 AND 3:1 TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE A
	SLOPES STEEPER THAN 3:1 TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE B
	TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS II URBAN TYPE B ORGANIC PER BID ITEM #90011
	MIN 12" LIGHT RIPRAP AND FILTER FABRIC TYPE HR
	INLET PROTECTION
	STONE DITCH CHECKS
	SILT FILTER FENCE
	LIMITS OF DISTURBANCE

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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION











EROSION CONTROL AND RESTORATION PLAN

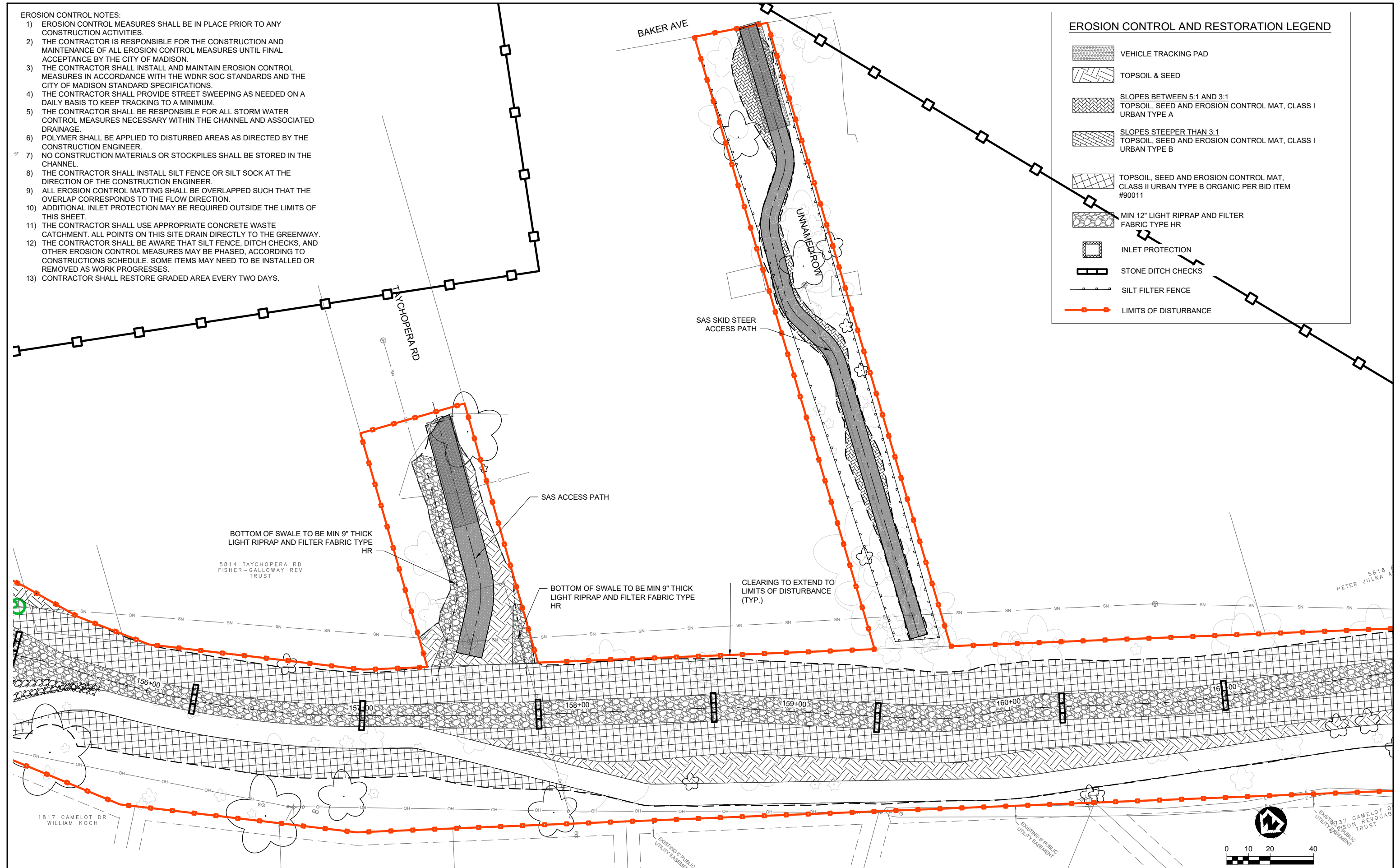
PROJECT NO:
00373112
 SHEET
EC1

EROSION CONTROL NOTES:

- 1) EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- 2) THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.
- 3) THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNR SOC STANDARDS AND THE CITY OF MADISON STANDARD SPECIFICATIONS.
- 4) THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
- 5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGE.
- 6) POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.
- 7) NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL.
- 8) THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
- 9) ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
- 10) ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
- 11) THE CONTRACTOR SHALL USE APPROPRIATE CONCRETE WASTE CATCHMENT. ALL POINTS ON THIS SITE DRAIN DIRECTLY TO THE GREENWAY.
- 12) THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTIONS SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
- 13) CONTRACTOR SHALL RESTORE GRADED AREA EVERY TWO DAYS.

EROSION CONTROL AND RESTORATION LEGEND

-  VEHICLE TRACKING PAD
-  TOPSOIL & SEED
-  SLOPES BETWEEN 5:1 AND 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE A
-  SLOPES STEEPER THAN 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE B
-  TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS II URBAN TYPE B ORGANIC PER BID ITEM #90011
-  MIN 12" LIGHT RIPRAP AND FILTER FABRIC TYPE HR
-  INLET PROTECTION
-  STONE DITCH CHECKS
-  SILT FILTER FENCE
-  LIMITS OF DISTURBANCE



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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
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 LOCATION

EROSION CONTROL AND RESTORATION PLAN

PROJECT NO:
00373112
 SHEET
EC2

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EROSION CONTROL NOTES:




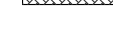




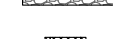

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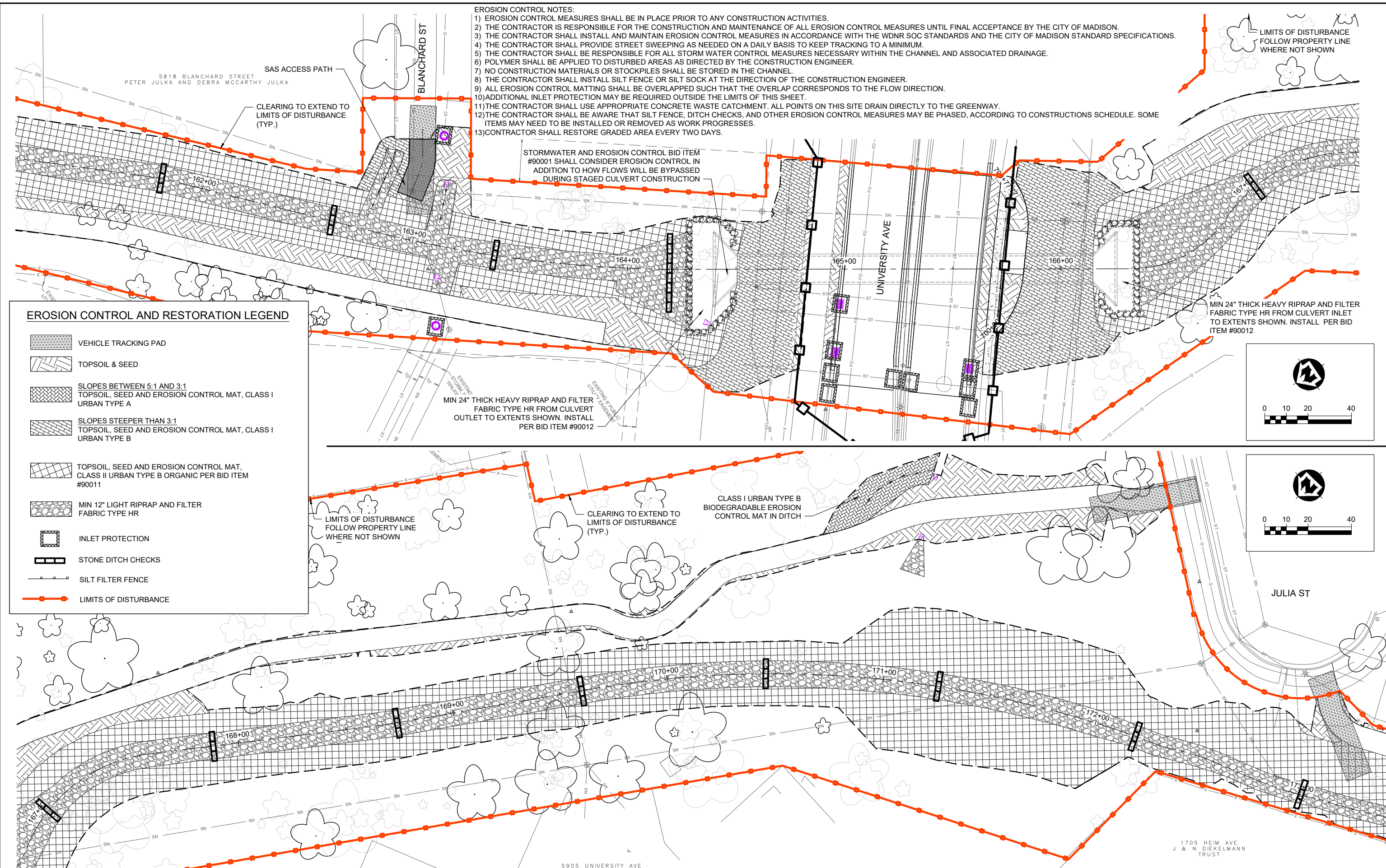
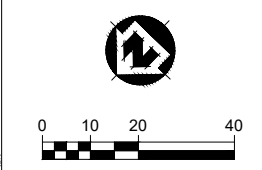
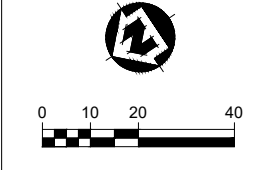
STORMWATER AND EROSION CONTROL BID ITEM #90001 SHALL CONSIDER EROSION CONTROL IN ADDITION TO HOW FLOWS WILL BE BYPASSED DURING STAGED CULVERT CONSTRUCTION

MIN 24" THICK HEAVY RIPRAP AND FILTER FABRIC TYPE HR FROM CULVERT INLET TO EXTENTS SHOWN. INSTALL PER BID ITEM #90012

MIN 24" THICK HEAVY RIPRAP AND FILTER FABRIC TYPE HR FROM CULVERT INLET TO EXTENTS SHOWN. INSTALL PER BID ITEM #90012

EROSION CONTROL AND RESTORATION LEGEND

-  VEHICLE TRACKING PAD
-  TOPSOIL & SEED
-  SLOPES BETWEEN 5:1 AND 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE A
-  SLOPES STEEPER THAN 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I URBAN TYPE B
-  TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS II URBAN TYPE B ORGANIC PER BID ITEM #90011
-  MIN 12" LIGHT RIPRAP AND FILTER FABRIC TYPE HR
-  INLET PROTECTION
-  STONE DITCH CHECKS
-  SILT FILTER FENCE
-  LIMITS OF DISTURBANCE



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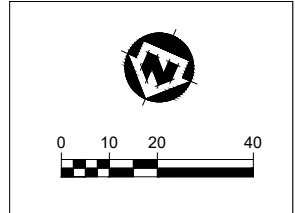
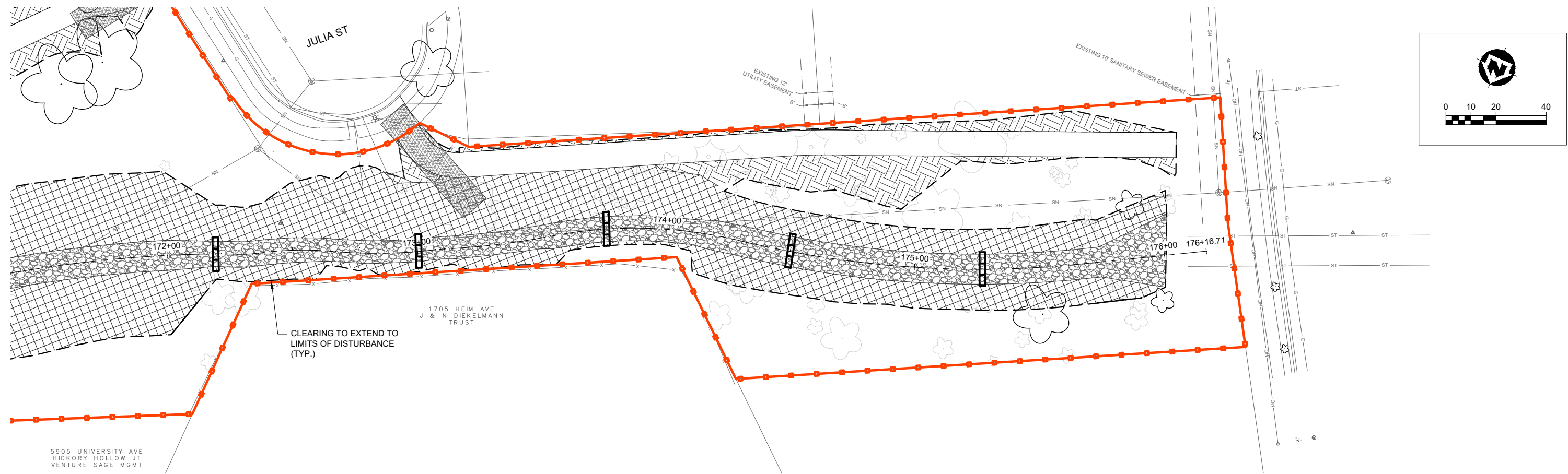
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EROSION CONTROL AND RESTORATION PLAN











PROJECT NO.
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EC3

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- EROSION CONTROL NOTES:**
- 1) EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
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 - 4) THE CONTRACTOR SHALL PROVIDE STREET SWEEPING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.
 - 5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN THE CHANNEL AND ASSOCIATED DRAINAGE.
 - 6) POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.
 - 7) NO CONSTRUCTION MATERIALS OR STOCKPILES SHALL BE STORED IN THE CHANNEL.
 - 8) THE CONTRACTOR SHALL INSTALL SILT FENCE OR SILT SOCK AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.
 - 9) ALL EROSION CONTROL MATTING SHALL BE OVERLAPPED SUCH THAT THE OVERLAP CORRESPONDS TO THE FLOW DIRECTION.
 - 10) ADDITIONAL INLET PROTECTION MAY BE REQUIRED OUTSIDE THE LIMITS OF THIS SHEET.
 - 11) THE CONTRACTOR SHALL USE APPROPRIATE CONCRETE WASTE CATCHMENT. ALL POINTS ON THIS SITE DRAIN DIRECTLY TO THE GREENWAY.
 - 12) THE CONTRACTOR SHALL BE AWARE THAT SILT FENCE, DITCH CHECKS, AND OTHER EROSION CONTROL MEASURES MAY BE PHASED, ACCORDING TO CONSTRUCTIONS SCHEDULE. SOME ITEMS MAY NEED TO BE INSTALLED OR REMOVED AS WORK PROGRESSES.
 - 13) CONTRACTOR SHALL RESTORE GRADED AREA EVERY TWO DAYS.

EROSION CONTROL AND RESTORATION LEGEND

-  VEHICLE TRACKING PAD
-  TOPSOIL & SEED
-  SLOPES BETWEEN 5:1 AND 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I
URBAN TYPE A
-  SLOPES STEEPER THAN 3:1
TOPSOIL, SEED AND EROSION CONTROL MAT, CLASS I
URBAN TYPE B
-  TOPSOIL, SEED AND EROSION CONTROL MAT,
CLASS II URBAN TYPE B ORGANIC PER BID ITEM
#90011
-  MIN 12" LIGHT RIPRAP AND FILTER
FABRIC TYPE HR
-  INLET PROTECTION
-  STONE DITCH CHECKS
-  SILT FILTER FENCE
-  LIMITS OF DISTURBANCE

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
	INIT	-	-		-
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MENDOTA GRASSMAN GREENWAY IMPROVEMENTS
 CITY OF MADISON
 LOCATION

EROSION CONTROL AND RESTORATION PLAN

PROJECT NO.
00373112
 SHEET
EC4

PLOT DATE: Monday, October 31, 2022 3:43:58 PM. G:\00\00373\00373112\CADD\Construction Documents\00373112 Erosion Control & Restoration Sheets.dwg