REPLY TO ATTENTION OF

DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT CORPS OF ENGINEERS 10117 PRINCESS PALM AVE, SUITE 120 TAMPA, FLORIDA 33610-8302

December 20, 2017

Regulatory Division West Permits Branch Tampa Permits Section SAJ-2017-02335 (NW-LEO)

Manatee County Public Works Department c/o sia Mollanazar 1022 26th Avenue East Bradenton, FL 34208

Via email: sia.mollanazar@mymanatee.org

Dear Applicant:

The U.S. Army Corps of Engineers (Corps) assigned your application for a Department of the Army permit, which the Corps received on November 16, 2017, the file number SAJ-2017-02335. A review of the information and drawings provided indicates that the proposed work would involve conducting Rye Road drainage improvements to three structures (S-4, S-6, and S-7) in surface waters and replacement of triple mitered end sections with endwalls at an existing pedestrian trail crossing in surface waters. Total surface water impact will be 0.101 ac. Project is located on the south side of Sawyer Loop Road, just east of the Seminole & Gulf Railroad right-of-way in Section 14, Township 37 South, Range 18 East, Sarasota County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) Number 3. In addition, project specific conditions have been enclosed. This verification is valid until **March 18, 2022**. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. Please access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory Internet page to access Internet links to view the Final Nationwide Permits, Federal Register Vol. 82, dated January 6, 2017, specifically pages 1983 to 2008, and the table of Regional Conditions. The Internet page address is:

http://www.saj.usace.army.mil/Missions/Regulatory.aspx

Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there you will need to click on "Source Book"; and, then click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions,

which apply specifically to this verification for NWP 3. Enclosed is a list of General Conditions, which apply to all Department of the Army authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

- Reporting Address: The Permittee shall submit all reports, documentation, and correspondence required by conditions of this permit to the following address: <u>SAJ-RD-Enforcement@usace.army.mil</u>. The Permittee shall reference this permit number, SAJ-2017-02335, on all submittals.
- 2. Commencement Notification: Within 10 days from the date of initiating the work authorized by this permit, the Permittee shall provide a written notification of the date of commencement of authorized work to the Corps.
- 3. Self-Certification: Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the enclosed "Self-Certification Statement of Compliance" form and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.
- 4. Eastern Indigo Snake Protection Measures and Inspection: Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated August 12, 2013, as provided in permit letter. All gopher tortoise burrows, active or inactive, shall be evacuated prior to site manipulation in the vicinity of the burrow. If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent permit. The excavation method selected shall minimize the potential for injury of an indigo snake. The Permittee shall follow the excavation guidance provided in the most current FWC Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Holes, cavities, and snake refugia other than gopher tortoise burrows shall be inspected each morning before planned site manipulation of a particular area, and if occupied by an indigo snake, no work shall commence until the snake has vacated the vicinity of the proposed work.

- 5. Regulatory Agency Changes: Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised that a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Tampa Permits Section.
- **6. Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.
- 7. Erosion Control: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.
- **8. Clean Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

9. Cultural Resources/Historic Properties:

- a. No structure or work shall adversely affect impact or disturb properties listed in the *National Register of Historic Places* (NRHP) or those eligible for inclusion in the NRHP.
- b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.
- c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above

Special Condition; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. Prior to the initiation of any construction, projects qualifying for this Nationwide permit must qualify for an exemption under section 403.813(1), Florida Statutes or 373.406, Florida Statutes, or otherwise be authorized by the applicable permit required under Part IV of Chapter 373, Florida Statutes, by the Department of Environmental Protection, a water management district under section 373.069, Florida Statutes, or a local government with delegated authority under section 373.441, Florida Statutes, and receive Water Quality Certification and applicable Coastal Zone Consistency Concurrence or waiver thereto, as well as any authorizations required for the use of state-owned submerged lands under Chapter 253, Florida Statutes, and, as applicable, Chapter 258, Florida Statutes. You should check State-permitting requirements with the Florida Department of Environmental Protection or the appropriate water management district.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact me by telephone at 813-769-7071.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Please be aware this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Sincerely,

LEANNE OBRA Project Manager

Enclosures:

- 1. General Conditions of 33CFR Part 320-330 (1 page)
- 2. Self-Certification Statement of Compliance (1 page)
- 3. Permit Transfer Request (1 page)
- 4. Standard Protection Measures for the Eastern Indigo Snake 2013 (3 pages)
- 5. Project Plans (63 pages)

Copies Furnished:

- 1. Barry Lenz, HDR Engineering, Inc., barry.lenz@hdrinc.com
- 2. CESAJ-RD-PE- U.S. Army Corps, Regulatory Division, Enforcement Section

GENERAL CONDITIONS 33 CFR PART 320-330

- 1. The time limit for completing the work authorized ends on March 18, 2022.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2017-02335 (NW-LEO)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

(TRANSFEREE-SIGNATURE)	(SUBDIVISION)			
(DATE)	(LOT) (BLOC	CK)		
(NAME-PRINTED)	(STREET ADDRES	S)		
(MAILING ADDRESS)				
(CITY, STATE, ZIP CODE)				

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: SAJ-2017-02335

···	ase print or type):
Telephone Number:	
	Date Work Completed:
PROPERTY IS INACCESSIBLE V	NITHOUT PRIOR NOTIFICATION: YES NO
	PLEASE CONTACT
dredging,	stabilization, residential or commercial filling, docks,
Acreage or Square Feet of Impacts	s to Waters of the United States:
Describe Mitigation completed (if a	applicable):
Describe any Deviations from Perr	mit (attach drawing(s) depicting the deviations):
	n (if applicable) was done in accordance with the limitations permit. Any deviations as described above are depicted on
	Signature of Permittee
	Date

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE U.S. Fish and Wildlife Service August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: jaxregs@fws.gov; South Florida Field Office: jaxregs@fws.gov; South Florida Field Office: jaxregs@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via email, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336 Panama City Field Office – (850) 769-0552 South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

- 1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.
- 2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.
- 3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

- 1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
- 2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.
- 3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

ROADWAY PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.

KEY SHEET SIGNATURE SHEET 1 A 7 - 8 TYPICAL SECTIONS 9 - 35 ROADWAY PLANS 36 - 58 CROSS SECTIONS

SHEET DESCIPTION

STORMWATER POLLUTION PREVENTION PLAN NOTES 59 - 60 61 - 65 EROSION CONTROL PLANS

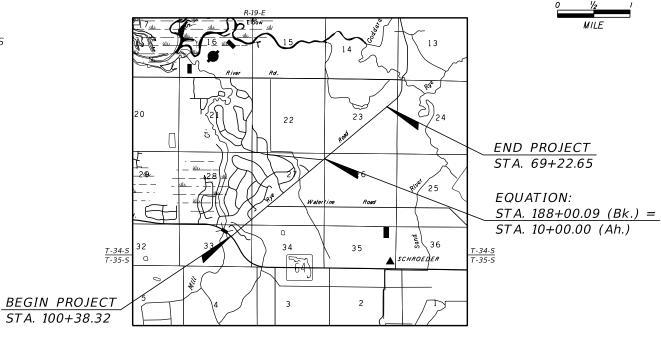
OTHER SURFACE WATER IMPACTS 0SW-1 - 0SW-2

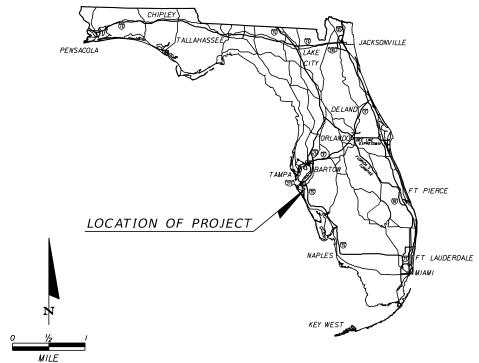
MANATEE COUNTY PUBLIC WORKS DEPARTMENT

CONTRACT PLANS

MANATEE COUNTY (6086160)

RYE ROAD FROM SR 64 TO UPPER MANATEE RIVER ROAD





ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO: JASON L. STARR, P.E. HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232

PLANS PREPARED BY: HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232 (941) 342-2700 WWW.HDRINC.COM FBPR CERTIFICATE OF AUTHORIZATION NO. 4213 VENDOR NO. 47-0680568 CONTRACT NO. C9480

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

SWFWMD SUBMITTAL NOVEMBER 2017

ROADWAY PLANS ENGINEER OF RECORD:

JASON L. STARR

P.E. NO.: 70171

KEY SHEET REVISIONS DESCRIPTION

FISCAL SHEET YEARNO.

PROJECT DESCRIPTION:
THIS PROJECT CONSISTS OF ADDING A 6' PAVED SHOULDER TO RYE ROAD AND WIDENING THE EXISTING PAVEMENT TO 24' (MINIMUM). A LEFT TURN LANE IS ADDED AT WATERLINE SERVICE ROAD AND THE REMAINDER OF THE CORRIDOR RECIEVES FRICTION COURSE.

THERE IS A 12' CONCRETE TRAIL CONSTRUCTED IN THE PROJECT CORRIDOR. THIS PROJECT COMPLETES THE TRAIL. PEDESTRIAN BRIDGES ARE INCLUDED AS WELL AS RYE ROAD BRIDGE WIDENING AT TWO LOCATIONS.

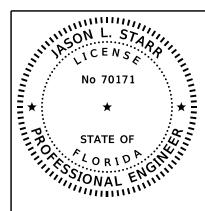
GOVERNING DESIGN STANDARDS: Florida Department of Transportation, FY2017-18 Design Standards eBook (DSeB) and applicable Design Standards Revisions (DSRs) at the following website: http://www.fdot.gov/rddesign/DesignStandards/Standards.shtm

GOVERNING STANDARD SPECIFICATIONS: Florida Department of Transportation, Jan 2018 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

PROJECT LENGTH IS BASED ON B OF SURVEY

LENGTH OF PROJECT			
	LINEAR FEET	MILES	
ROADWAY	14,609.82	2.767	
BRIDGES	74.60	0.014	
NET LENGTH OF PROJECT	14,684.42	2.781	
EXCEPTIONS	0.00	0.000	
GROSS LENGTH OF PROJECT	14,684.42	2.781	

MANATEE COUNTY PROJECT MANAGER: MICHAEL L. STURM, PE



THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JASON L. STARR, P.E. USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232-6212 CERTIFICATE OF AUTHORIZATION NO. 4213 JASON L. STARR, PE NO. 70171

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO. SHEET DESCRIPTION

KEY SHEET SIGNATURE SHEET TYPICAL SECTIONS 1 1A 7 -8 9 - 35 36 - 58 59 - 60 61 - 65 0SW-1 - 0SW-2 ROADWAY PLANS
CROSS SECTIONS
STORMWATER POLLUTION PREVENTION PLAN NOTES

EROSION CONTROL PLANS

OTHER SURFACE WATER IMPACTS

				SCALE AS	NOTED
				DESIGNED BY	
				DRAWN BY	JLS
					JHC
No.	REVISIONS	DATE	BV	CHECKED BY	115

HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232 CERTIFICATE OF AUTHORIZATION 4213

DATE 09/2017 PROJECT NO.

6086160



Manatee MANATEE COUNTY
County PUBLIC WORKS

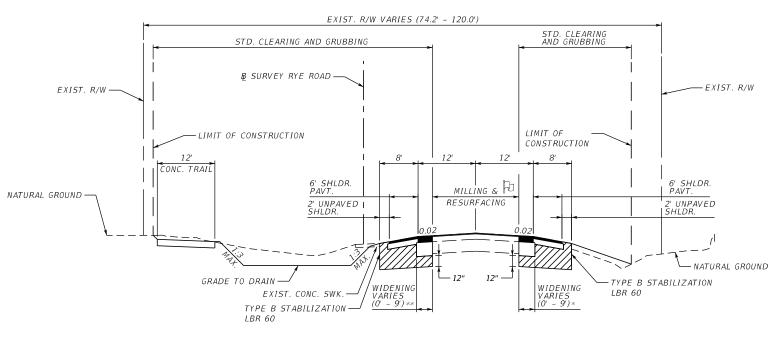
DESIGN ENGINEER

FL. LICENSE NO.

SIGNATURE SHEET

SHEET NO.

/A



TYPICAL SECTION NO. 1 RYE ROAD

STA. 102+17.63 TO STA. 134+70.00 STA. 152+98.27 TO STA. 167+95.00 STA. 30+87.65 TO STA. 49+71.30

NOTE: SEE CROSS SECTIONS FOR SHOULDER SLOPES

12' CONC. TRAIL

STA. 100+38.49 TO STA. 102+46.95 STA. 102+70.95 TO STA. 104+01.89 STA. 107+89.47 TO STA. 110+79.98 STA. 157+38.19 TO STA. 157+61.72 STA. 30+87.65 TO STA. 32+79.14 STA. 32+99.18 TO STA. 49+71.30 ** LT. WIDENING

* RT. WIDENING

STA. 129+90.00 TO STA. 134+70.00 STA. 152+98.27 TO STA. 160+97.28 STA. 165+22.38 TO STA. 167+95.00 STA. 47+68.38 TO STA. 49+71.30 STA. 119+48.64 TO STA. 134+70.00 STA. 152+98.27 TO STA. 154+76.44 STA. 160+97.28 TO STA. 167+95.00 STA. 30+87.65 TO STA. 49+71.30

MILLING

MILL EXISTING ASPHALT PAVEMENT FOR DEPTH (1 1/2")

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2"),

FRICTION COURSE

FRICTION COURSE FC-12.5 (1 1/2") (RUBBER)

WIDENING

OPTIONAL BASE GROUP 9 WITH 3" STRUCTURAL COURSE TYPE SP 12.5 (TRAFFIC C) AND 1 1/2" FRICTION COURSE FC-12.5

SHOULDER PAVEMENT

OPTIONAL BASE GROUP 1 WITH
FRICTION COURSE FC-12.5 (1 1/2") (RUBBER)

				AS NOTED	HDI
					_
				DESIGNED BY	260
				JLS	1200
				DRAWN BY	$\exists s_{AF}$
				JHC	127"
				CHECKED BY	1_{CEF}
No.	REVISIONS	DATE	BY	JLS	CEF

HDR ENGINEERING, INC.

2601 CATTLEMEN ROAD, SUITE 400

SARASOTA, FLORIDA 34232

CERTIFICATE OF AUTHORIZATION 4213

PROJECT NO.
6086160

DATE

Manatee
County

Manatee MANATEE COUNTY
County PUBLIC WORKS

JASON L. STARR

FL. LICENSE NO.

70171

TYPICAL SECTION (1)

MILLING & RESURFACING LIMITS:

STA. 100+38.32 TO STA. 106+85.69

STA. 152+98.29 TO STA. 161+73.64

STA. 161+73.64 TO STA. 167+95.15

STA. 30+87.65 TO STA. 49+71.30

FRICTION COURSE ONLY LIMITS: STA. 106+85.69 TO STA. 134+70.00

NOTE:

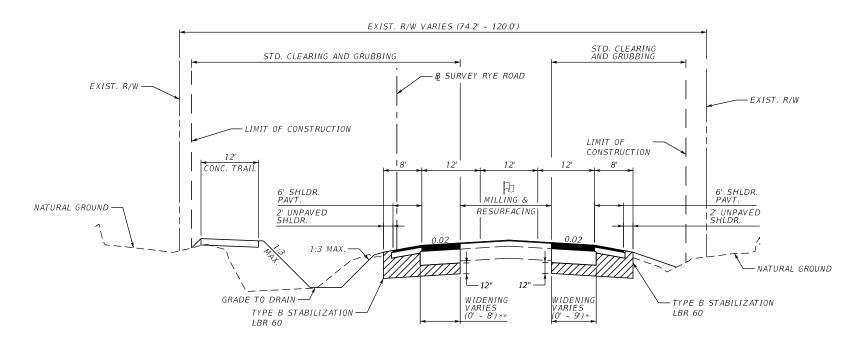
MANATEE COUNTY RESURFACED STRUCTURAL COURSE ALONG THE PROJECT CORRIDOR. PREVIOUSLY RESURFACED PAVEMENT WILL ONLY RECEIVE FRICTION COURSE, WHILE

THE REMAINDER OF THE PROJECT WILL BE MILLED AND RESURFACED PRIOR TO FRICTION COURSE APPLICATION.

SHEET NO.

11/7/2017

PW:\007982\C0N0086775\000000000225338\13.00 CAD\12345615201\roadway\TYPSRD01.DGN



TYPICAL SECTION NO. 2 RYE ROAD

STA. 134+70.00 TO STA. 152+98.27 STA. 167+95.00 TO STA. 30+87.65 STA. 49+71.30 TO STA. 69+22.65

12' CONC. TRAIL

STA. 143+86.06 TO STA. 148+49.13 STA. 180+75.03 TO STA. 183+05.22 STA. 14+04.78 TO STA. 15+29.03 STA. 23+71.95 TO STA. 30+87.65 STA. 49+71.30 TO STA. 52+70.98

** LT. WIDENING

* RT. WIDENING

STA. 134+70.00 TO STA. 146+74.55 STA. 167+95.00 TO STA. 169+98.86 STA. 176+71.15 TO STA. 183+62.35 STA. 10+78.56 TO STA. 15+60.77 STA. 49+71.30 TO STA. 52+48.38 STA. 58+89.50 TO STA. 68+59.37

STA. 134+70.00 TO STA. 147+00.00 STA. 149+44.25 TO STA. 152+98.27 STA. 167+95.00 TO STA. 171+87.87 STA. 173+63.44 TO STA. 182+50.08 STA. 10+78.56 TO STA. 17+33.37 STA. 49+71.30 TO STA. 52+48.34 STA. 58+89.50 TO STA. 63+09.50

MILLING

MILL EXISTING ASPHALT PAVEMENT FOR DEPTH (1 1/2")

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2"),

FRICTION COURSE

FRICTION COURSE FC-12.5 (1 1/2") (RUBBER)

WIDENING

OPTIONAL BASE GROUP 9 WITH 3" STRUCTURAL COURSE TYPE SP 12.5 (TRAFFIC C) AND 1 1/2" FRICTION COURSE FC-12.5

SHOULDER PAVEMENT

OPTIONAL BASE GROUP 1 WITH FRICTION COURSE FC-12.5 (1 1/2") (RUBBER)

MANATEE COUNTY RESURFACED STRUCTURAL COURSE ALONG THE PROJECT CORRIDOR. PREVIOUSLY RESURFACED PAVEMENT WILL ONLY RECEIVE FRICTION COURSE, WHILE THE REMAINDER OF THE PROJECT WILL BE MILLED AND RESURFACED PRIOR TO FRICTION COURSE APPLICATION.

MILLING & RESURFACING LIMITS:

STA. 138+91.65 TO STA. 152+98.29 STA. 68+59.43 TO STA. 69+22.65

FRICTION COURSE ONLY LIMITS:

STA. 134+70.00 TO STA. 138+91.65 STA. 167+95.15 TO STA. 30+87.65 STA. 49+71.30 TO STA. 68+59.43

				AS NOTED	HE
				DESIGNED BY	26
				JLS	
				DRAWN BY	SA
				JHC	
				CHECKED BY	l CE
No.	REVISIONS	DATE	BY	JLS	

HDR ENGINEERING. INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232 CERTIFICATE OF AUTHORIZATION 4213

DATE 09/2017 County PROJECT NO. 6086160

Manatee MANATEE COUNTY **PUBLIC WORKS**

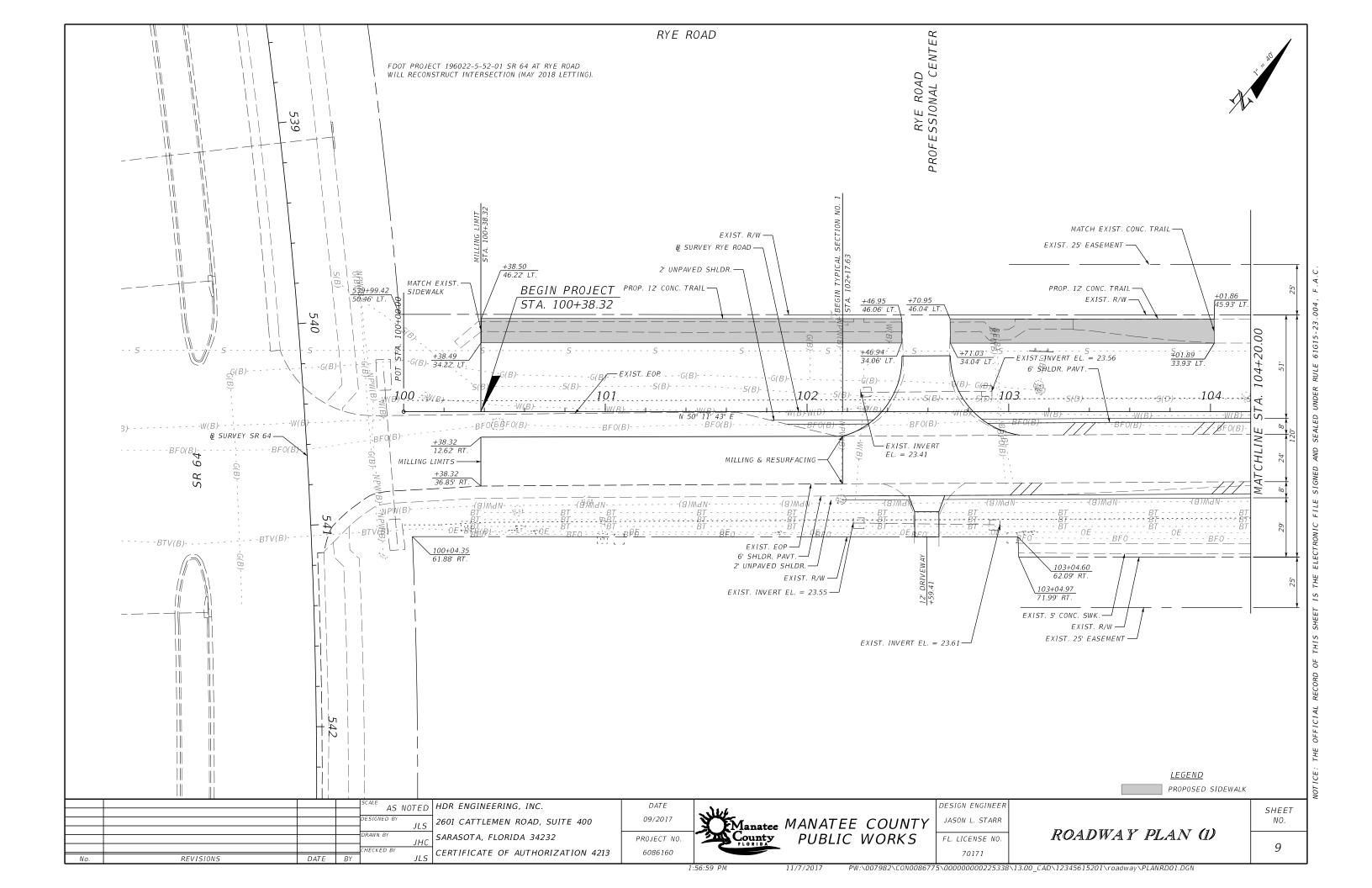
JASON L. STARR FL. LICENSE NO. 70171

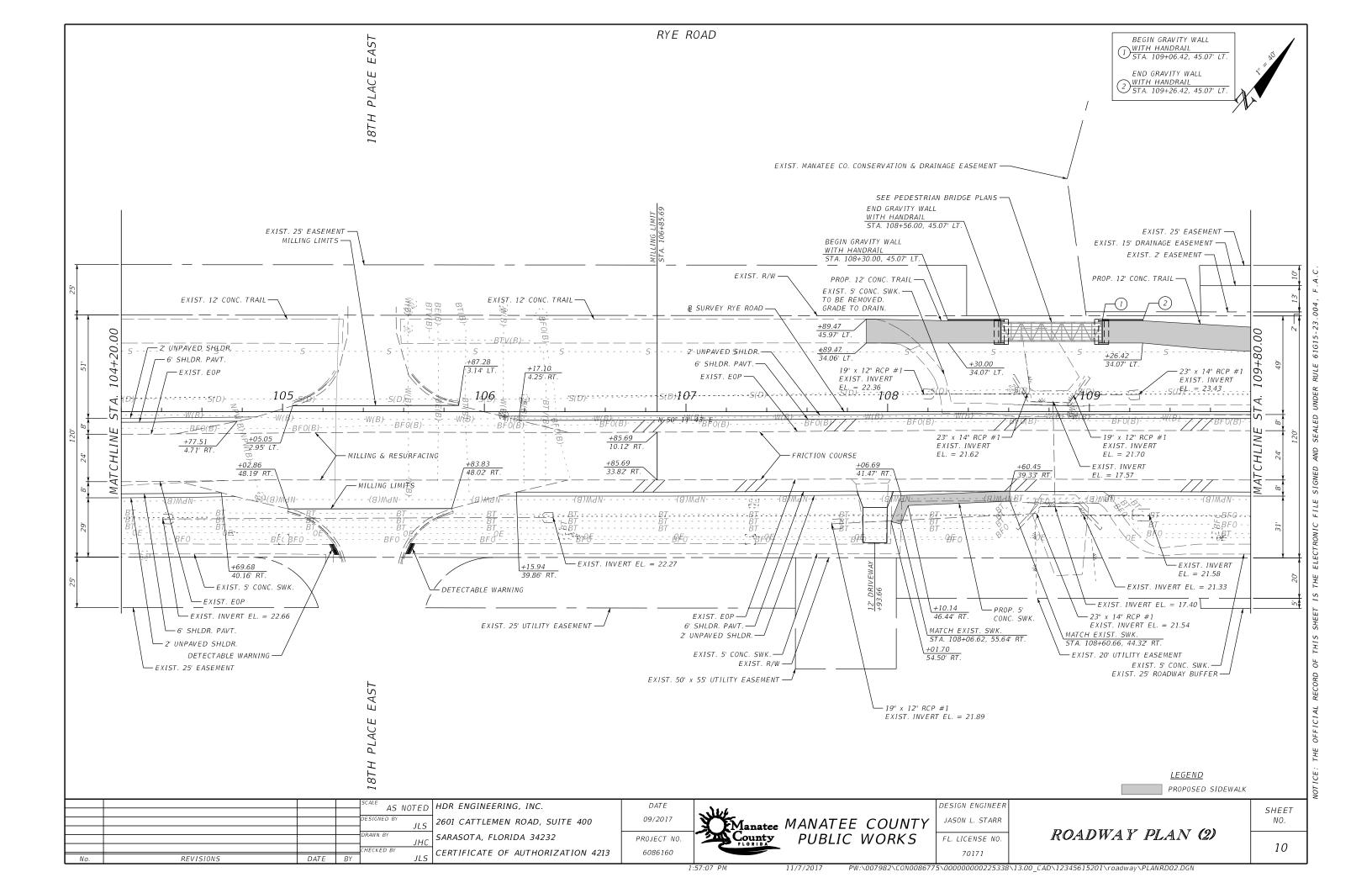
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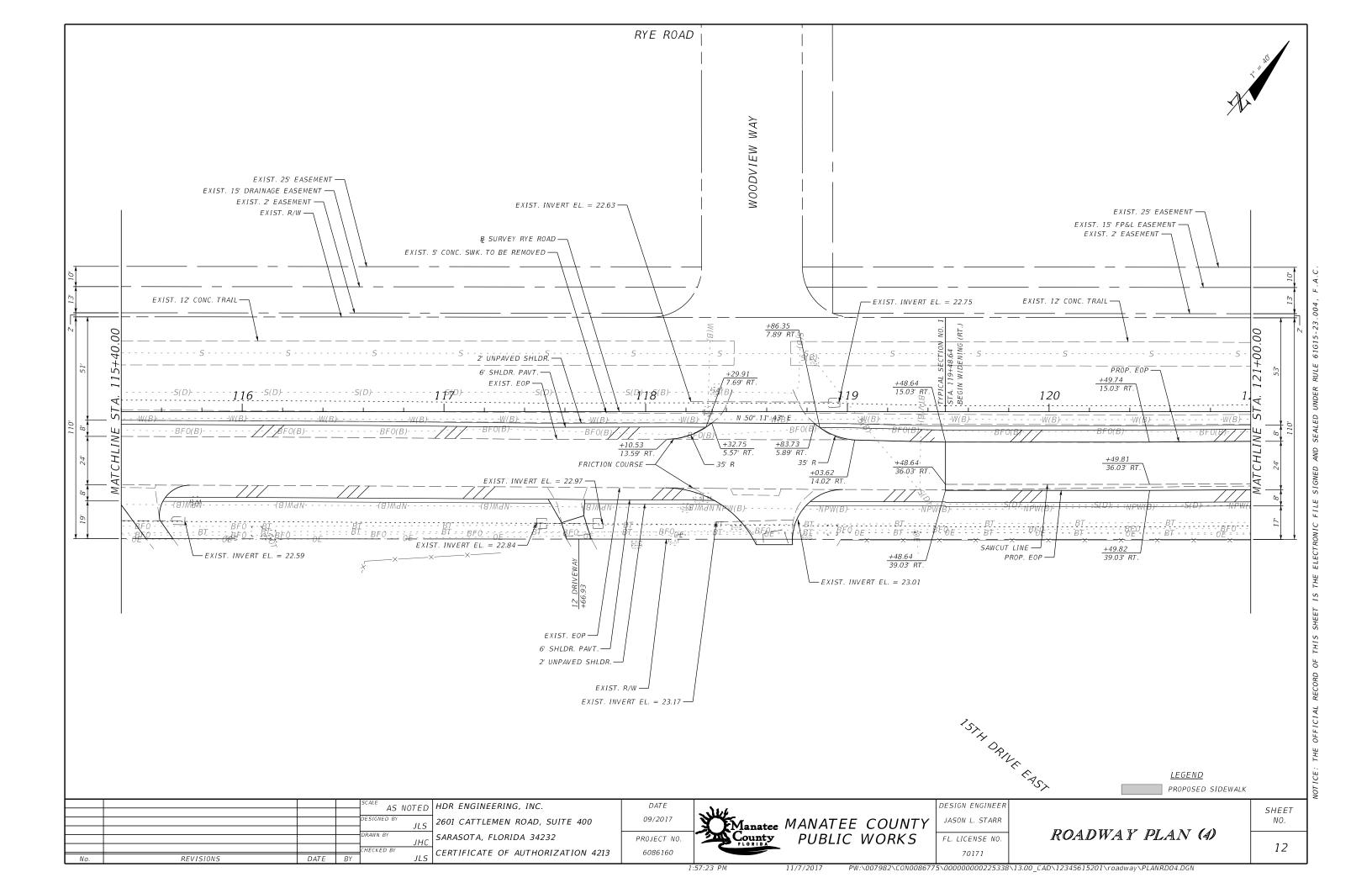
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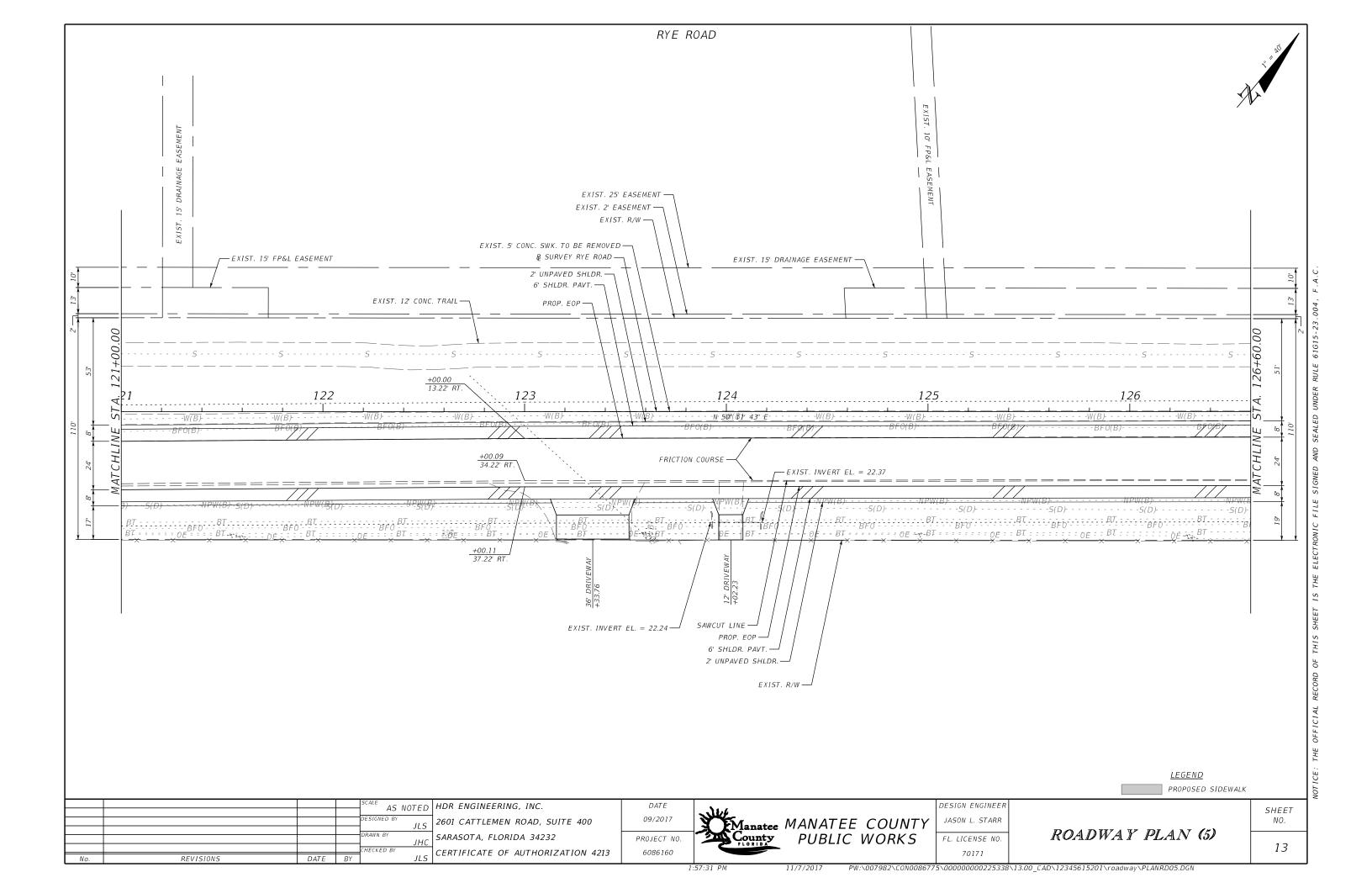
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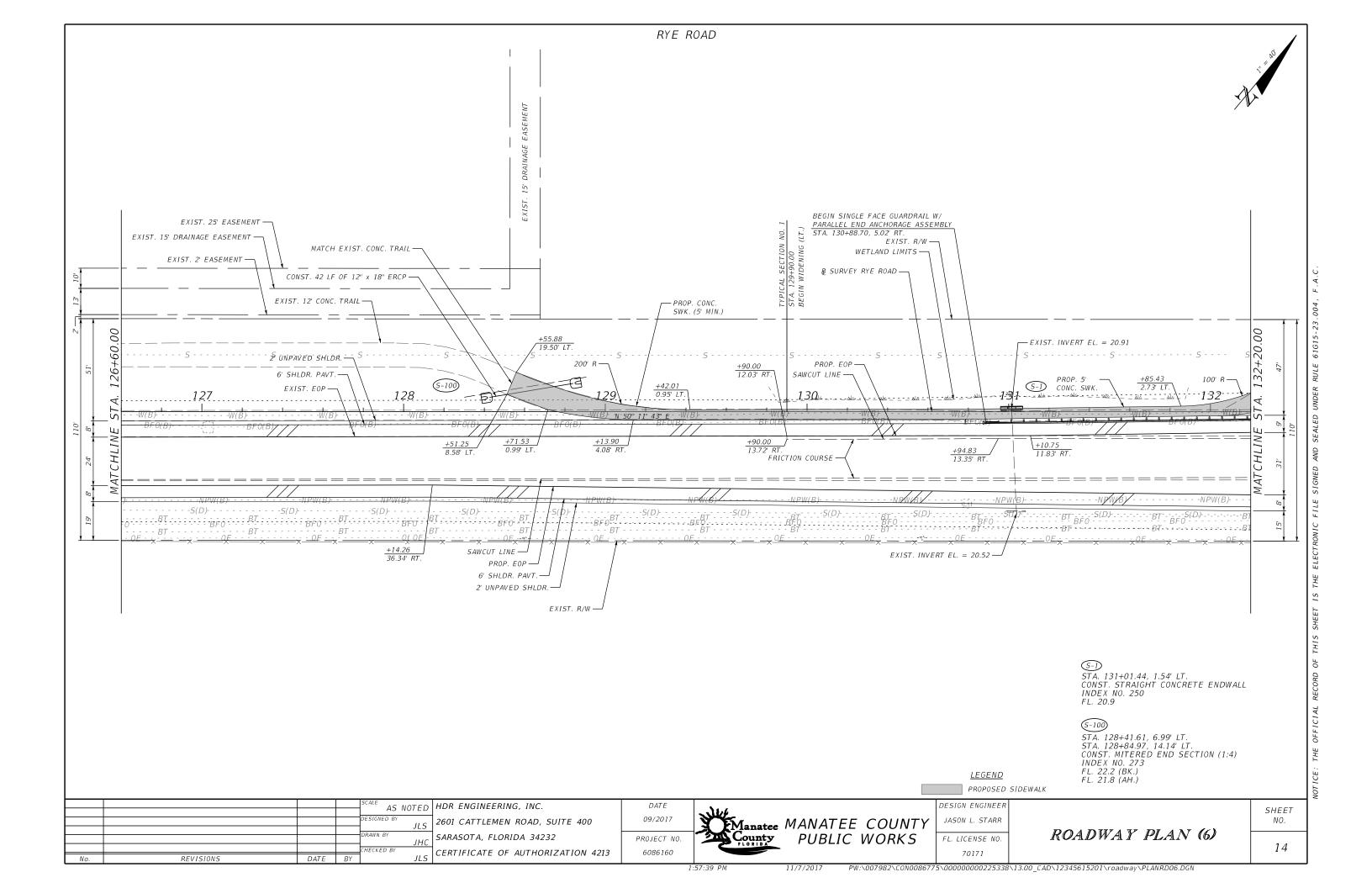
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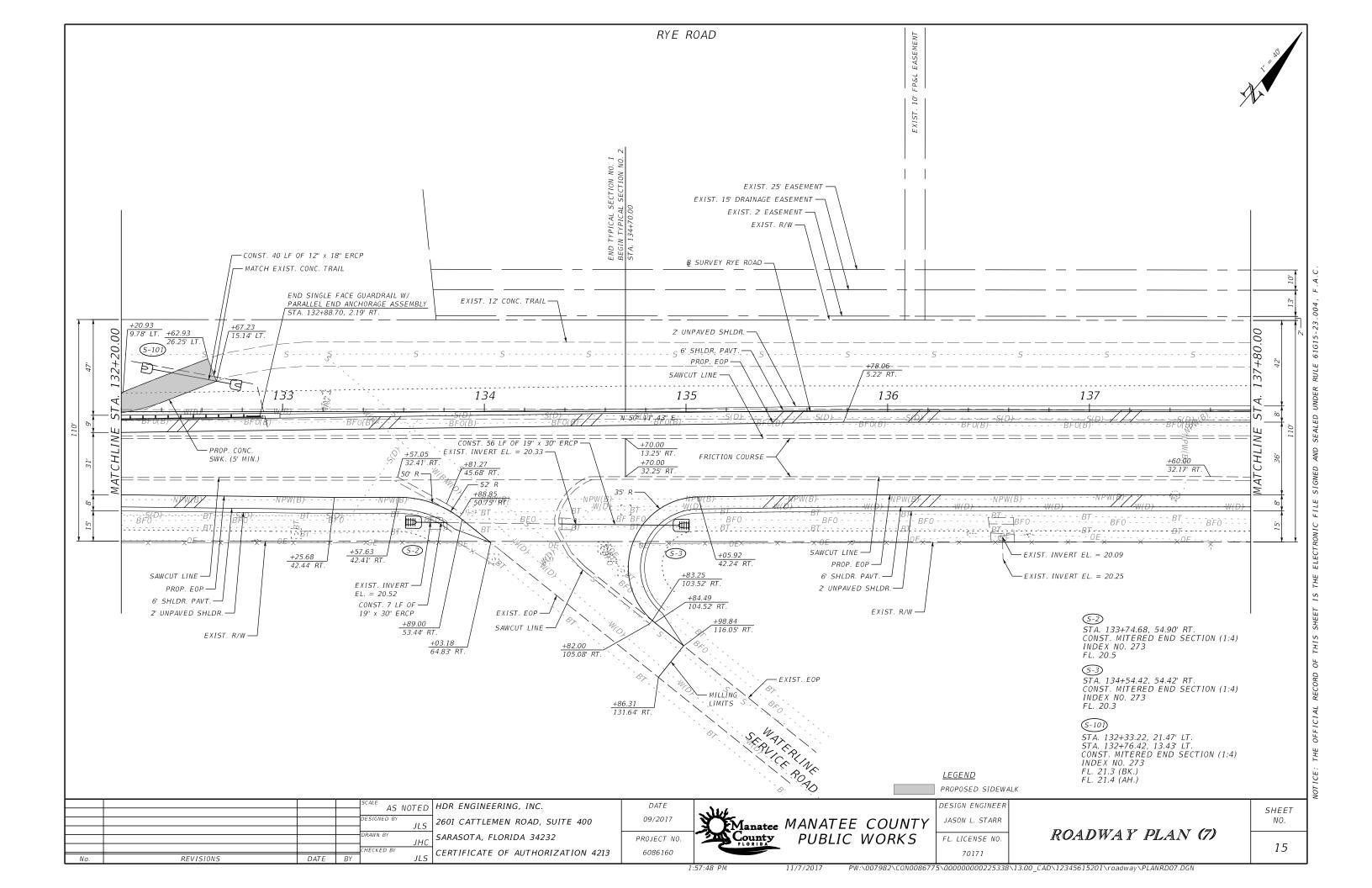


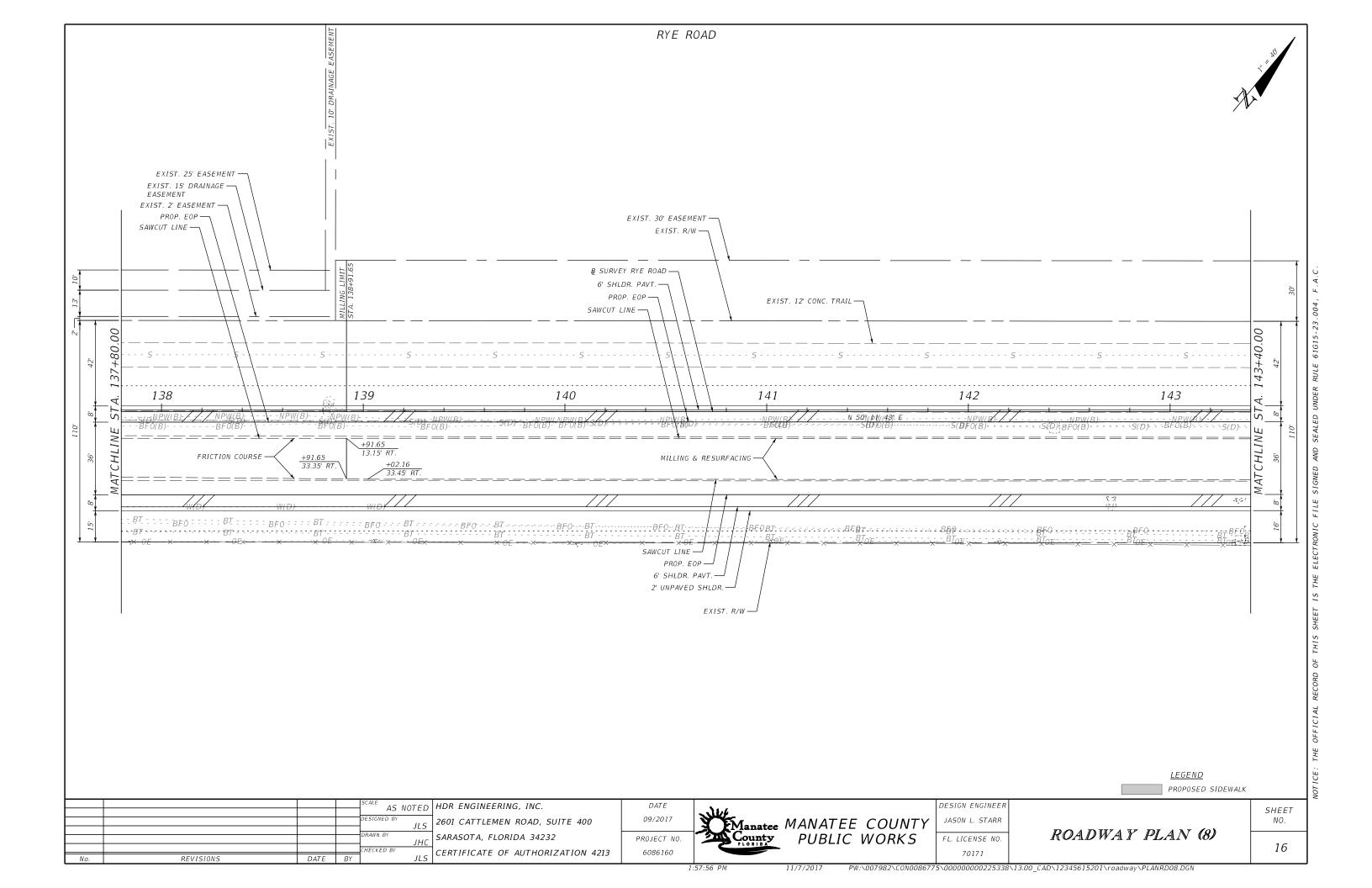


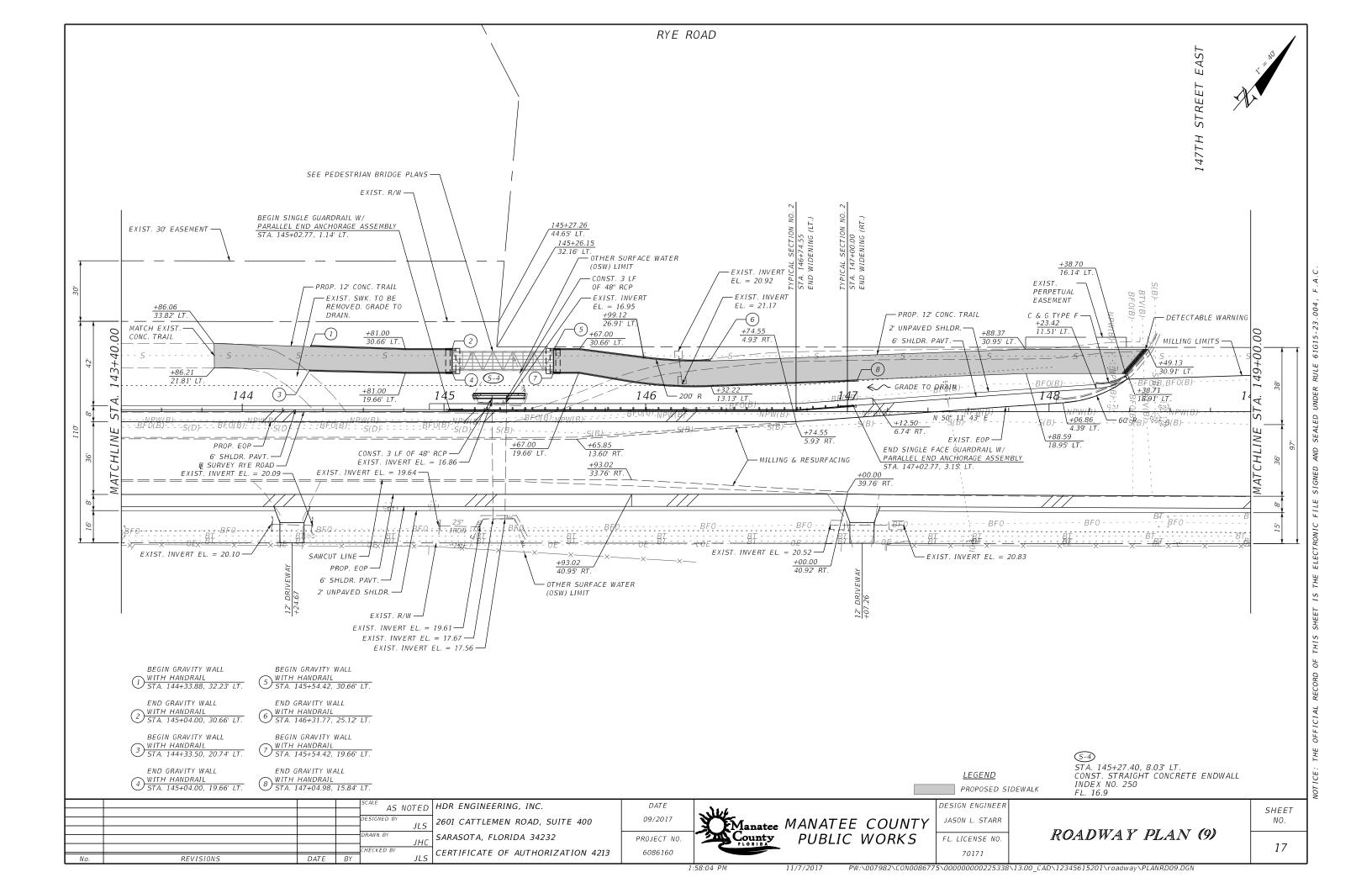


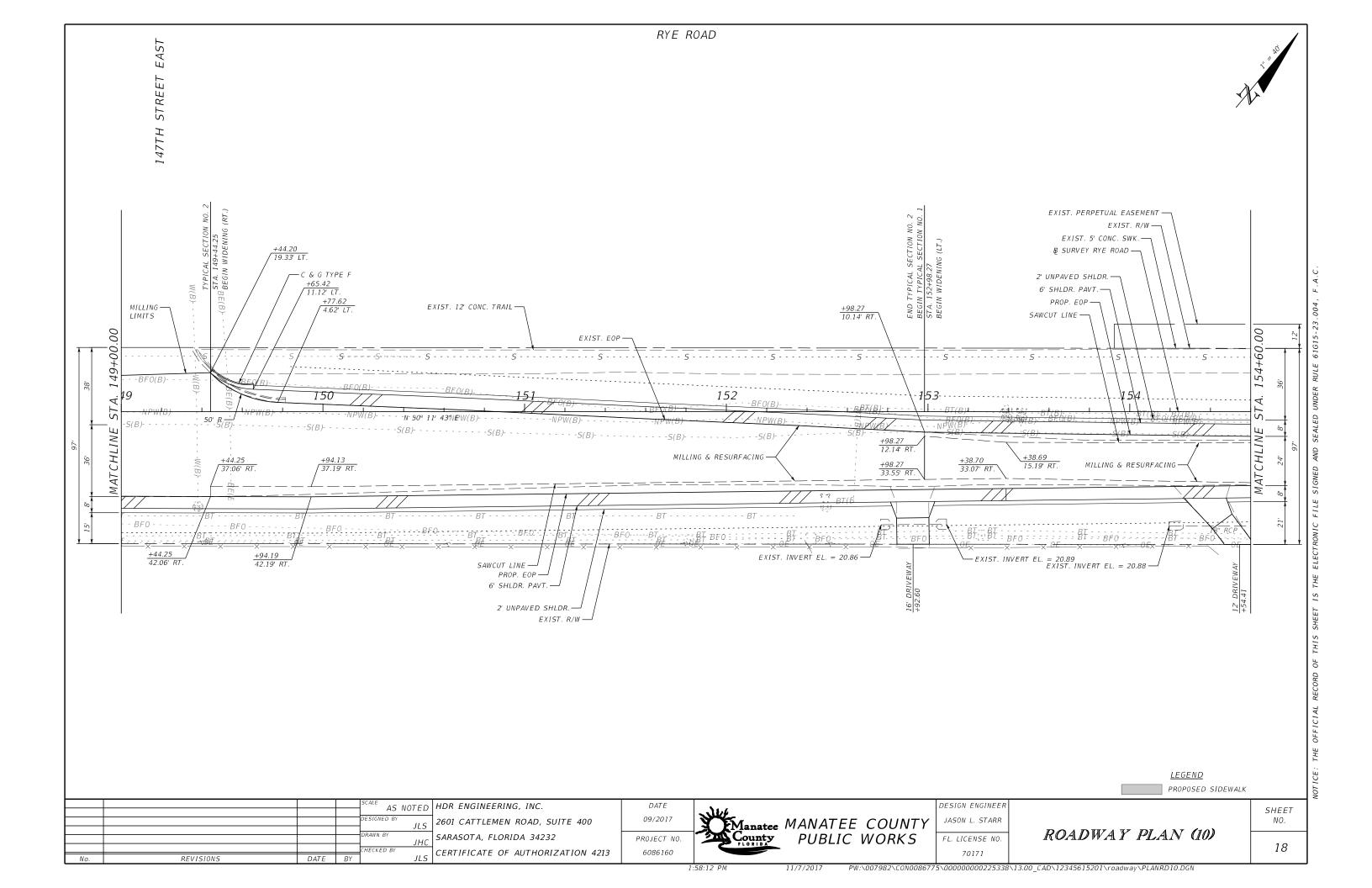


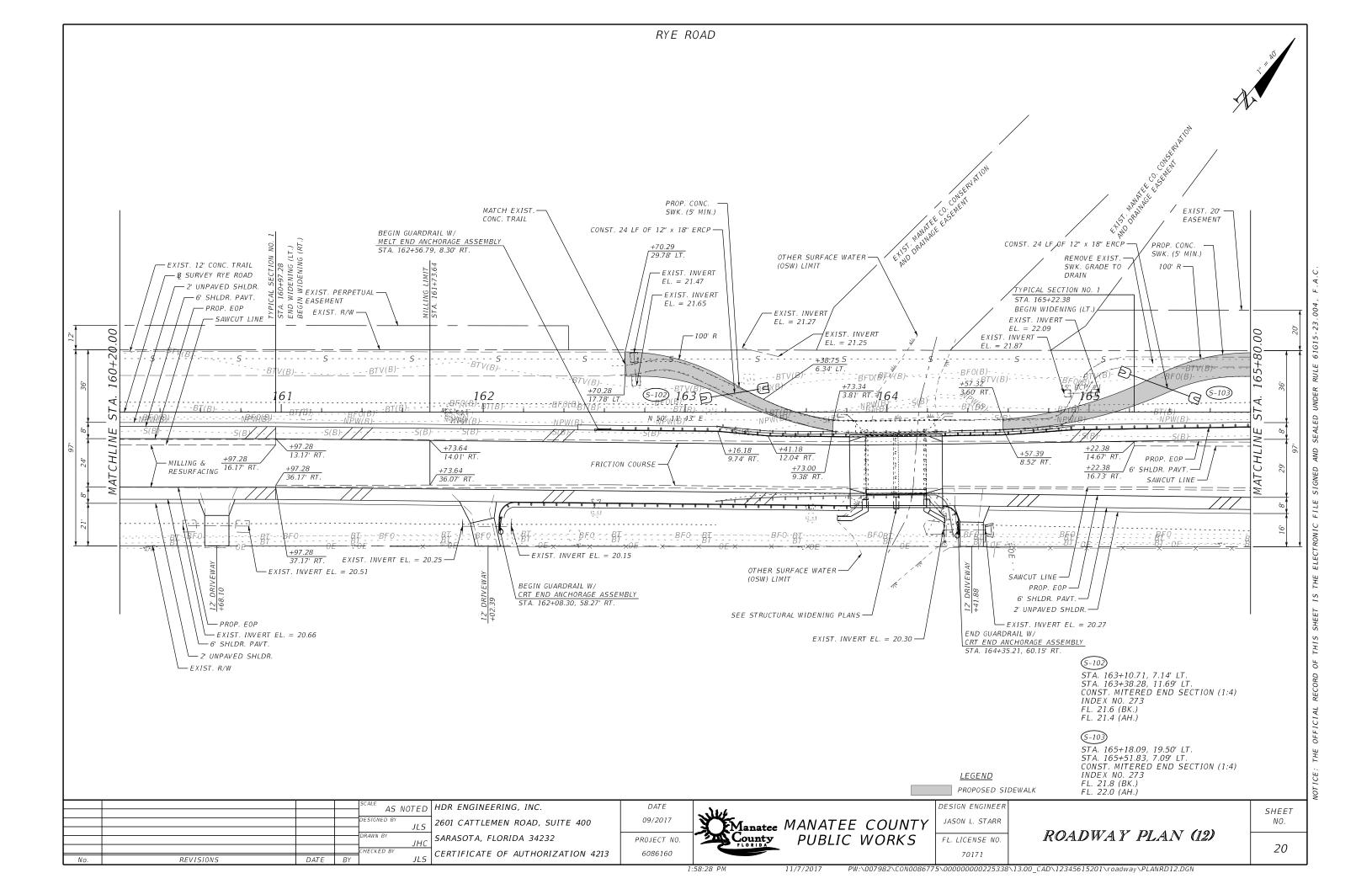




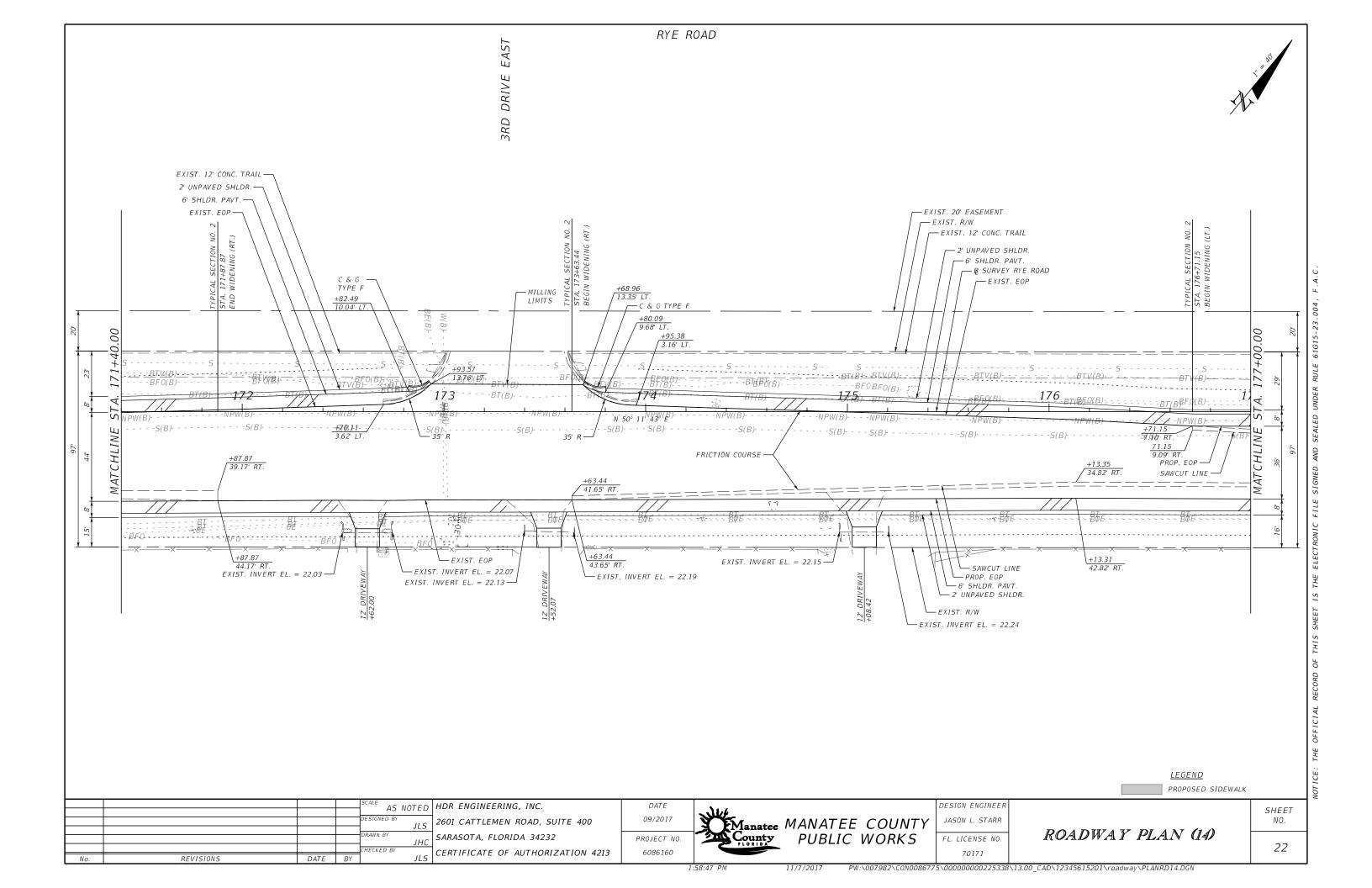


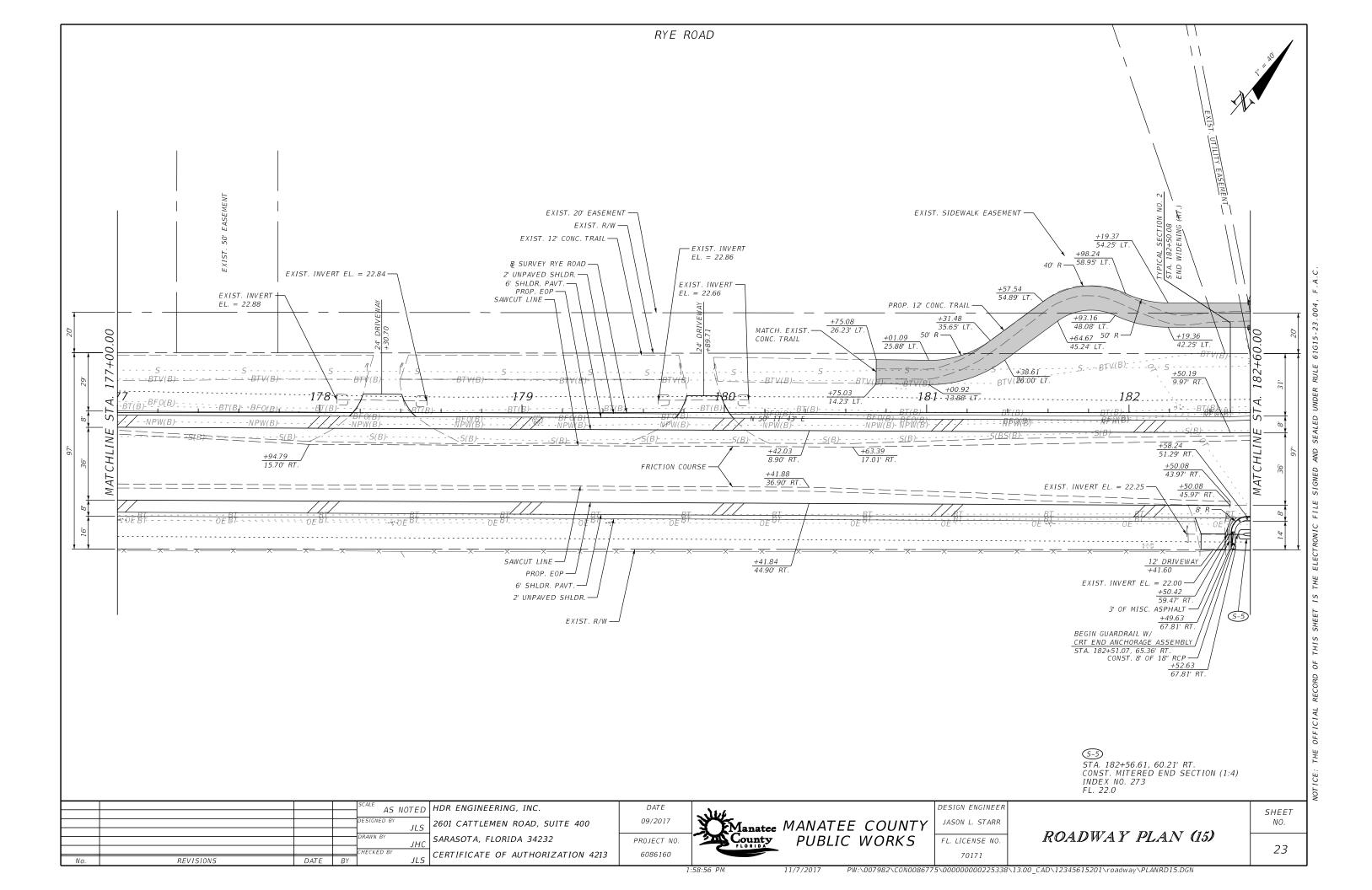






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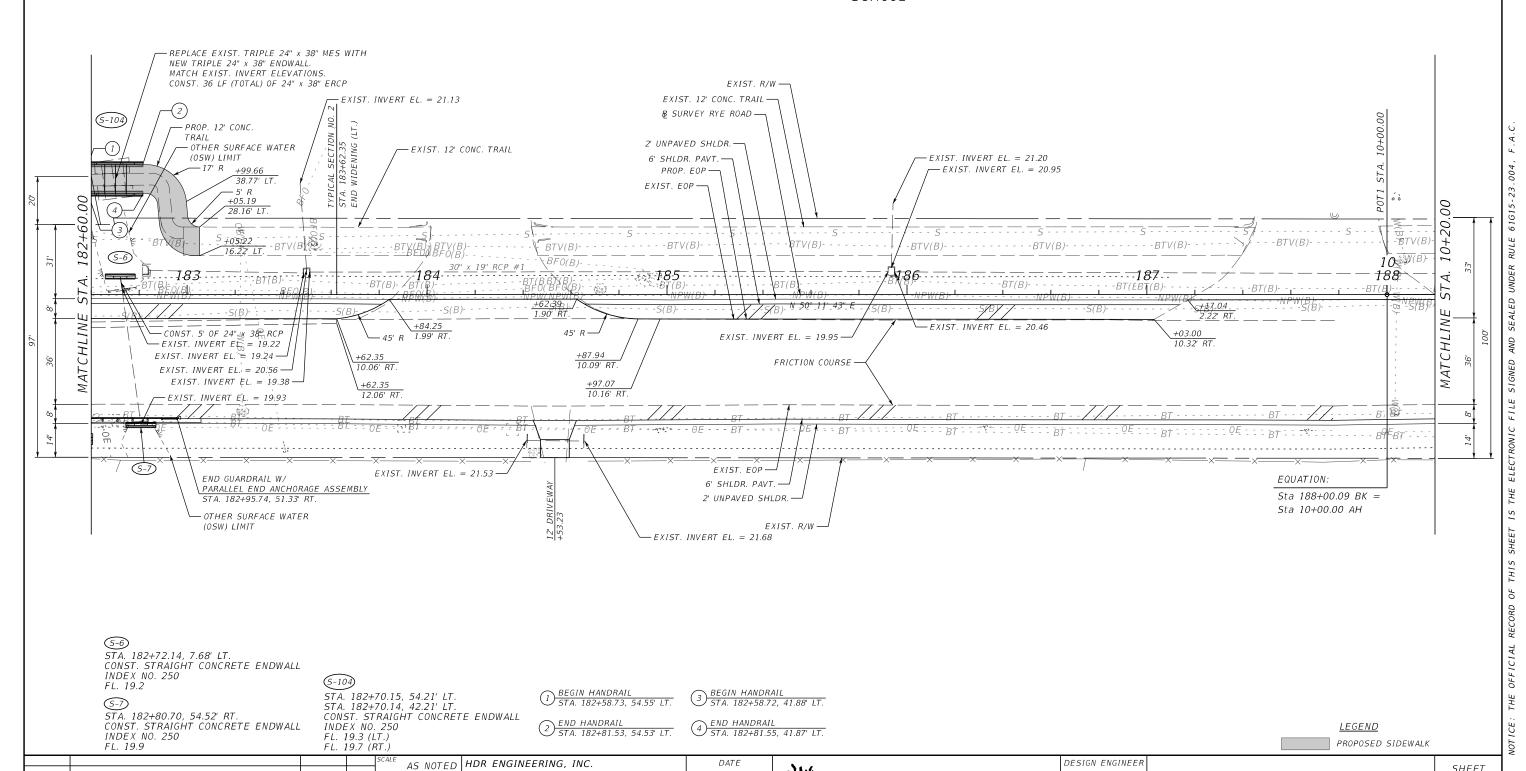


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24

GENE WITT **ELEMENTARY** *SCHOOL*



Manatee MANATEE COUNTY

PUBLIC WORKS

09/2017

PROJECT NO.

2601 CATTLEMEN ROAD, SUITE 400

CERTIFICATE OF AUTHORIZATION 4213

SARASOTA, FLORIDA 34232

REVISIONS

ROADWAY PLAN (16)

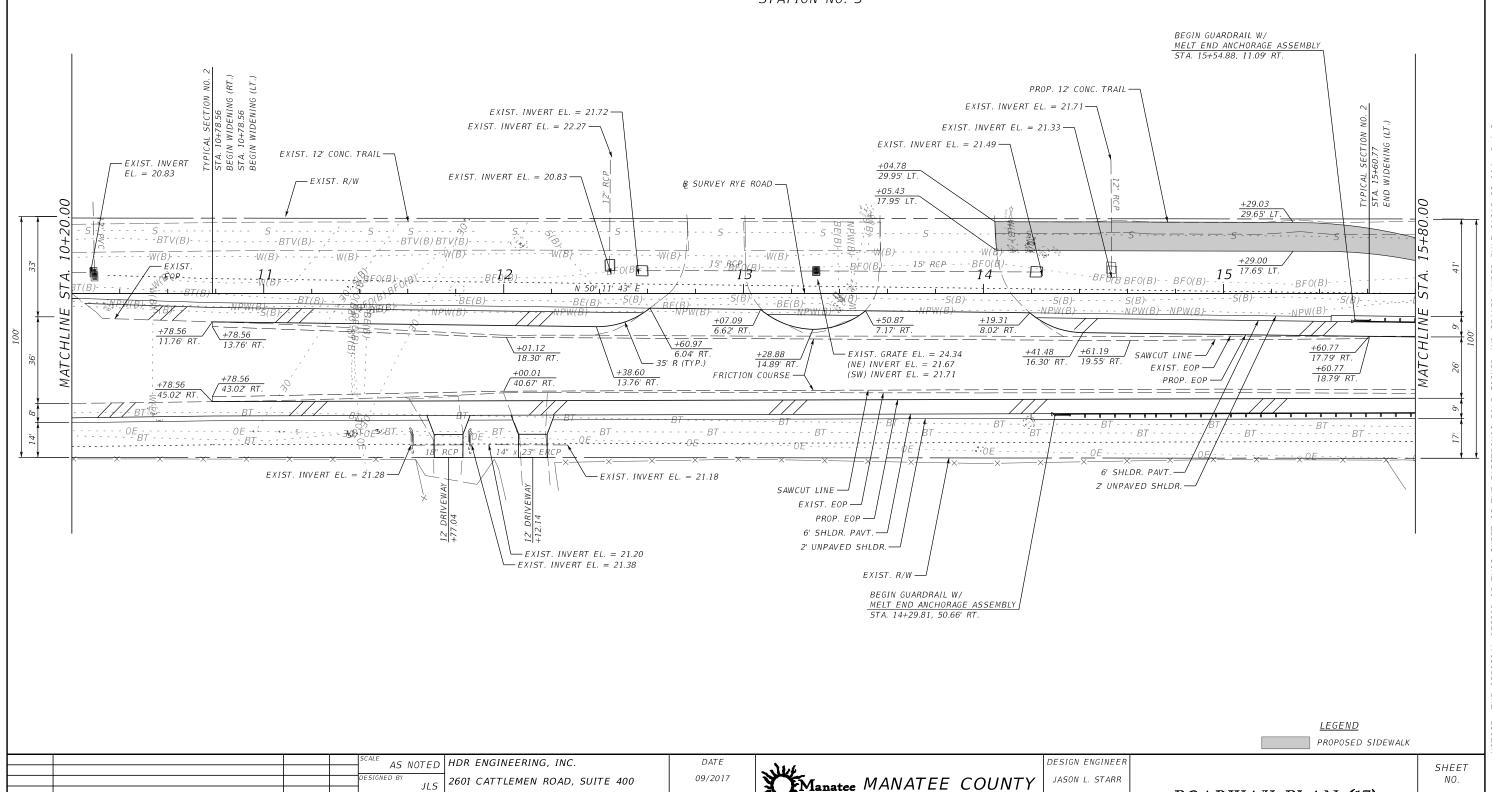
JASON L. STARR

FL. LICENSE NO.

70171



EAST MANATEE FIRE STATION NO. 3



PROJECT NO.

SARASOTA, FLORIDA 34232

REVISIONS

CERTIFICATE OF AUTHORIZATION 4213

FL. LICENSE NO.

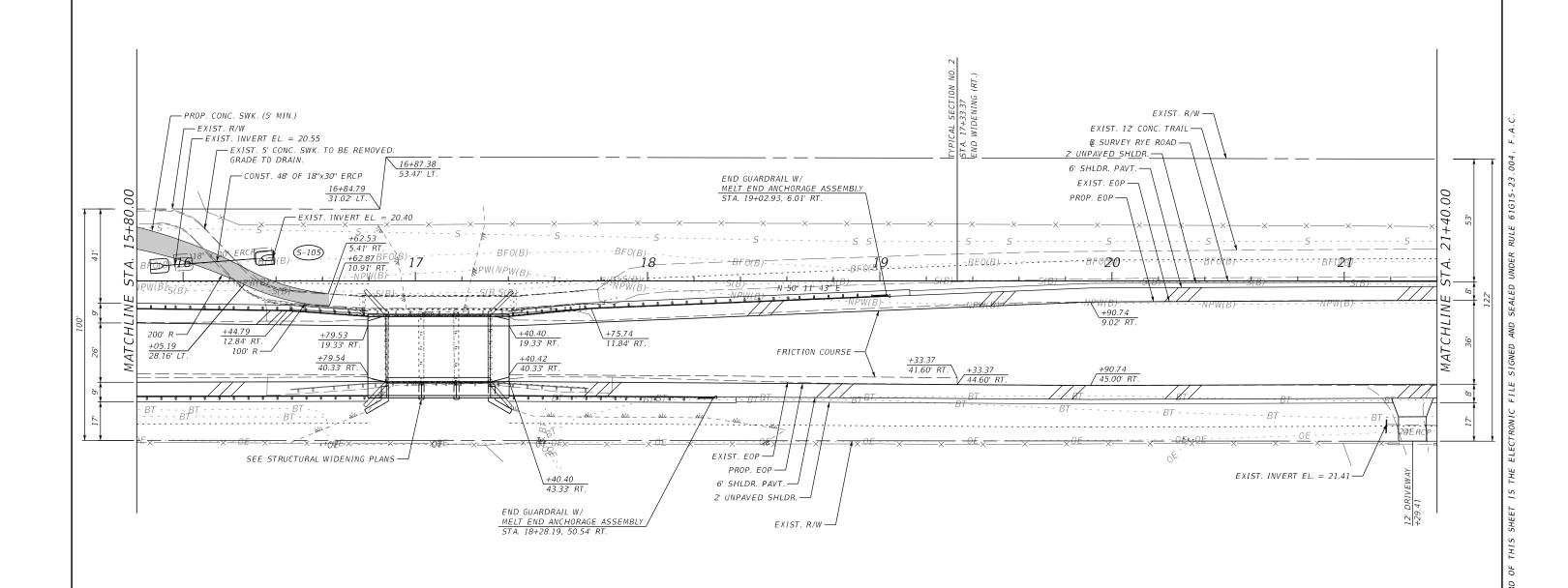
70171

PUBLIC WORKS

ROADWAY PLAN (17)

25





STA. 15+91.26, 6.63' LT. STA. 16+33.78, 9.82' LT. CONST. MITERED END SECTION (1:4) INDEX NO. 273 FL. 20.6 (BK.) FL. 20.4 (AH.)

<u>LEGEND</u> PROPOSED SIDEWALK

REVISIONS

AS NOTED HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232 CERTIFICATE OF AUTHORIZATION 4213

DATE 09/2017 PROJECT NO. 6086160



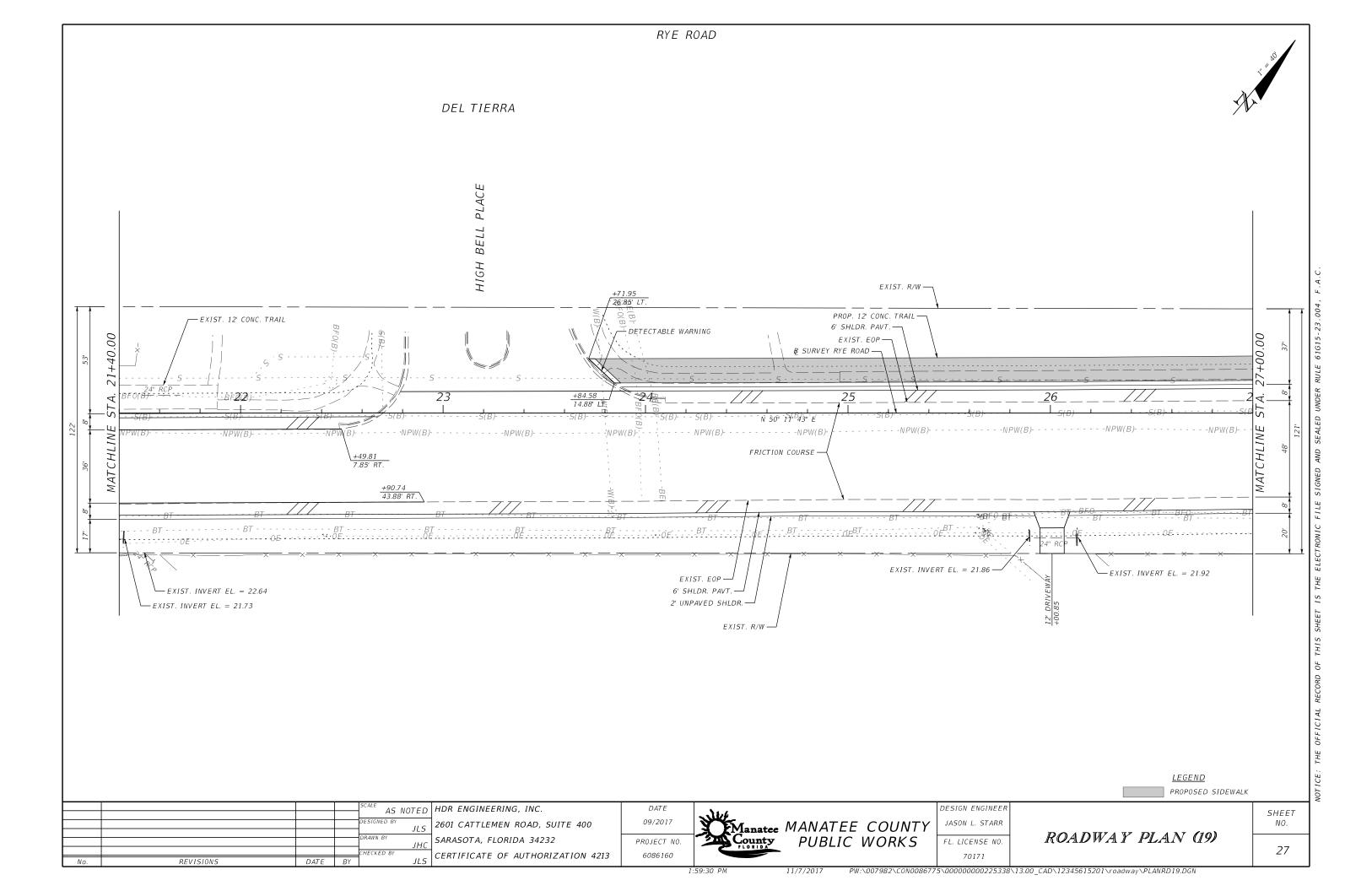
Manatee MANATEE COUNTY
County PUBLIC WORKS

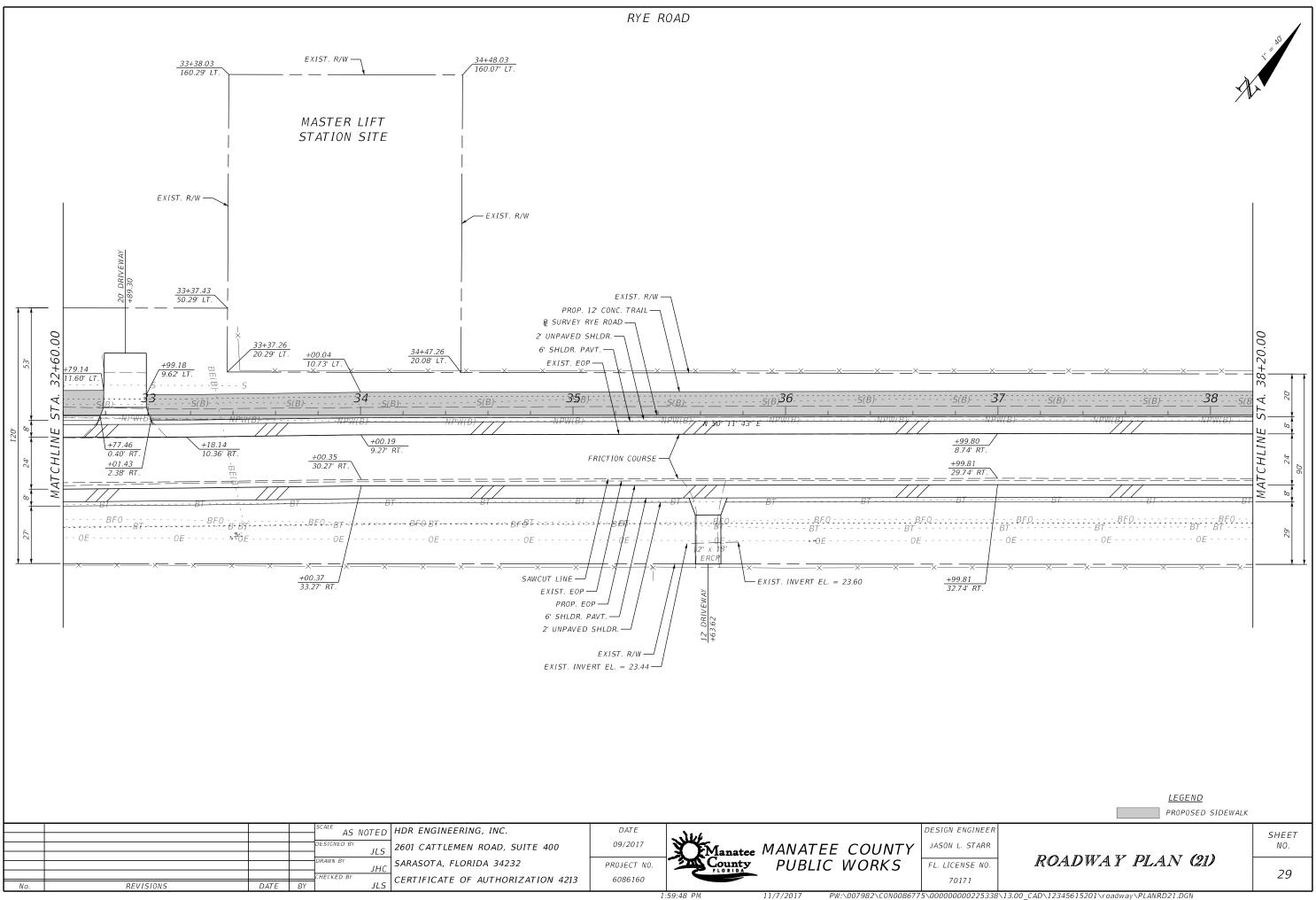
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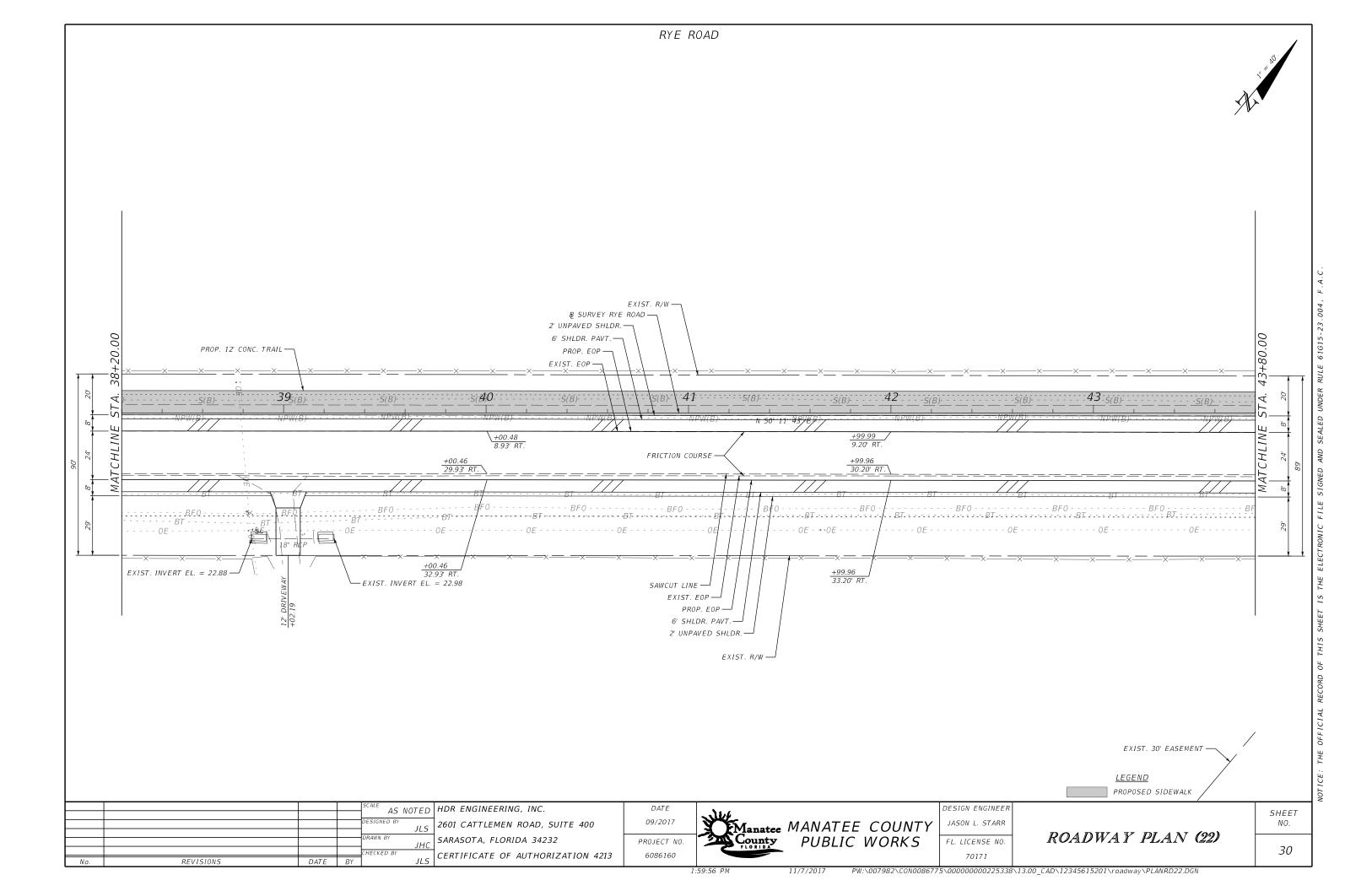
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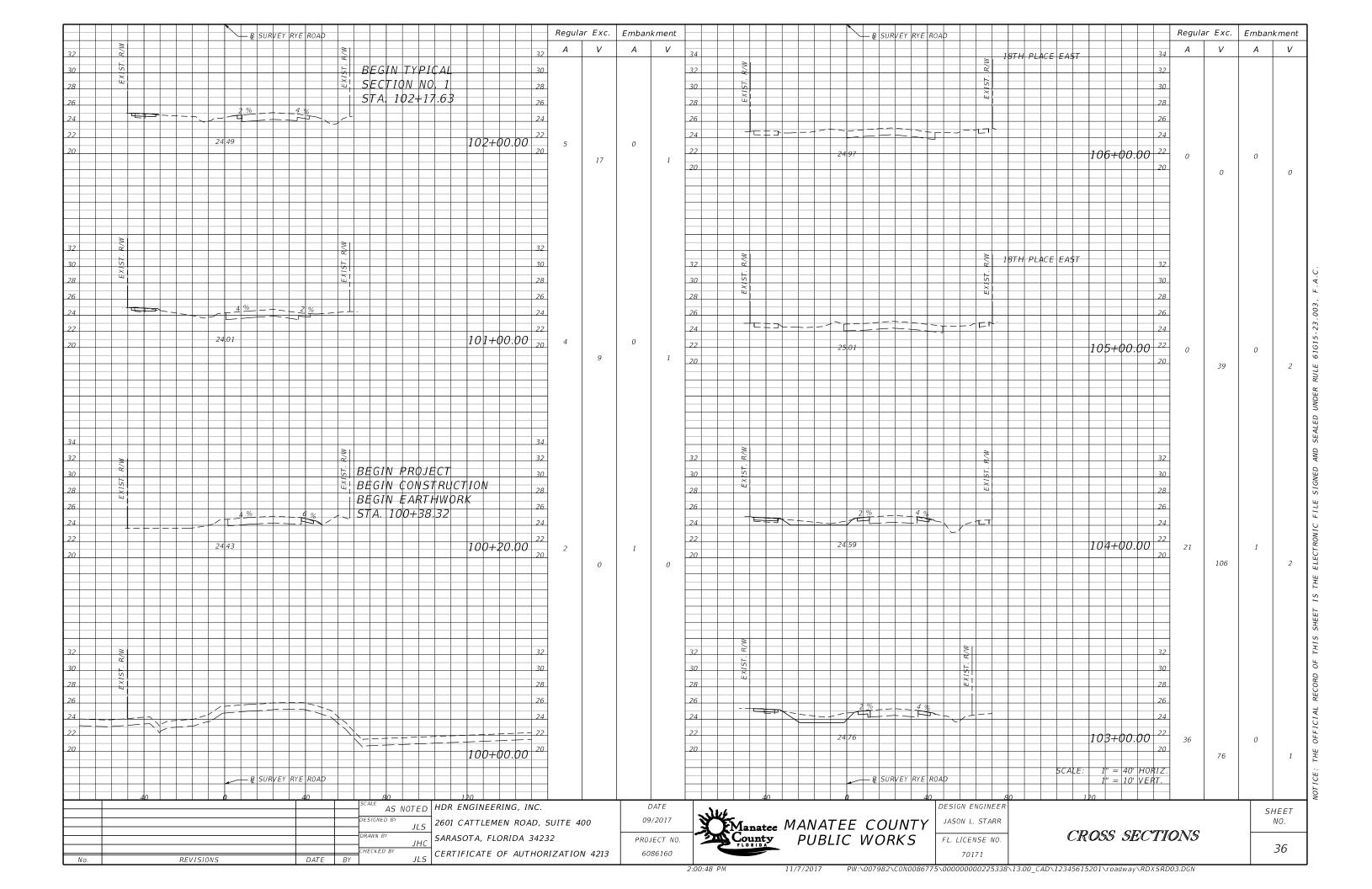
ROADWAY PLAN (18)

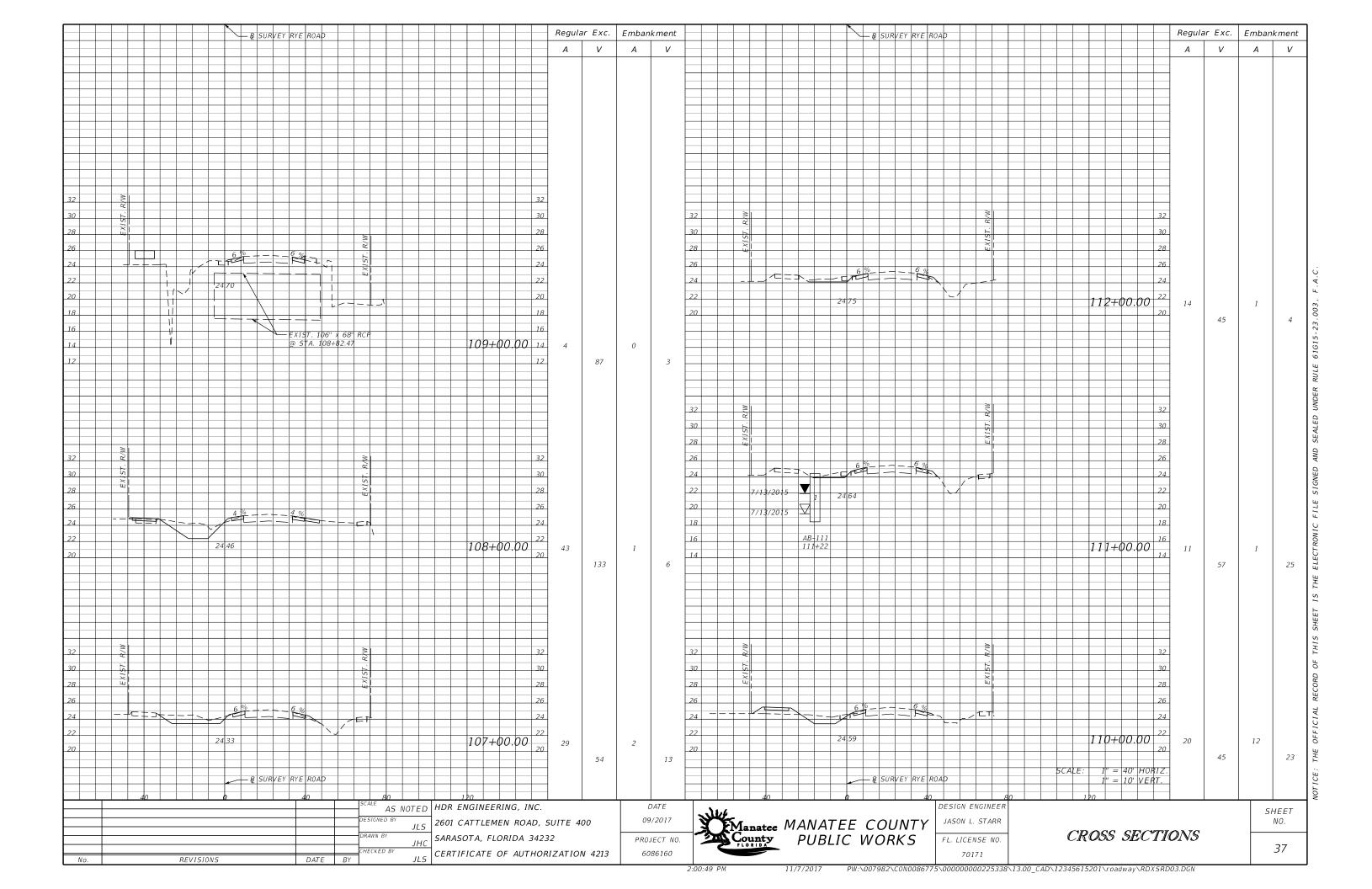
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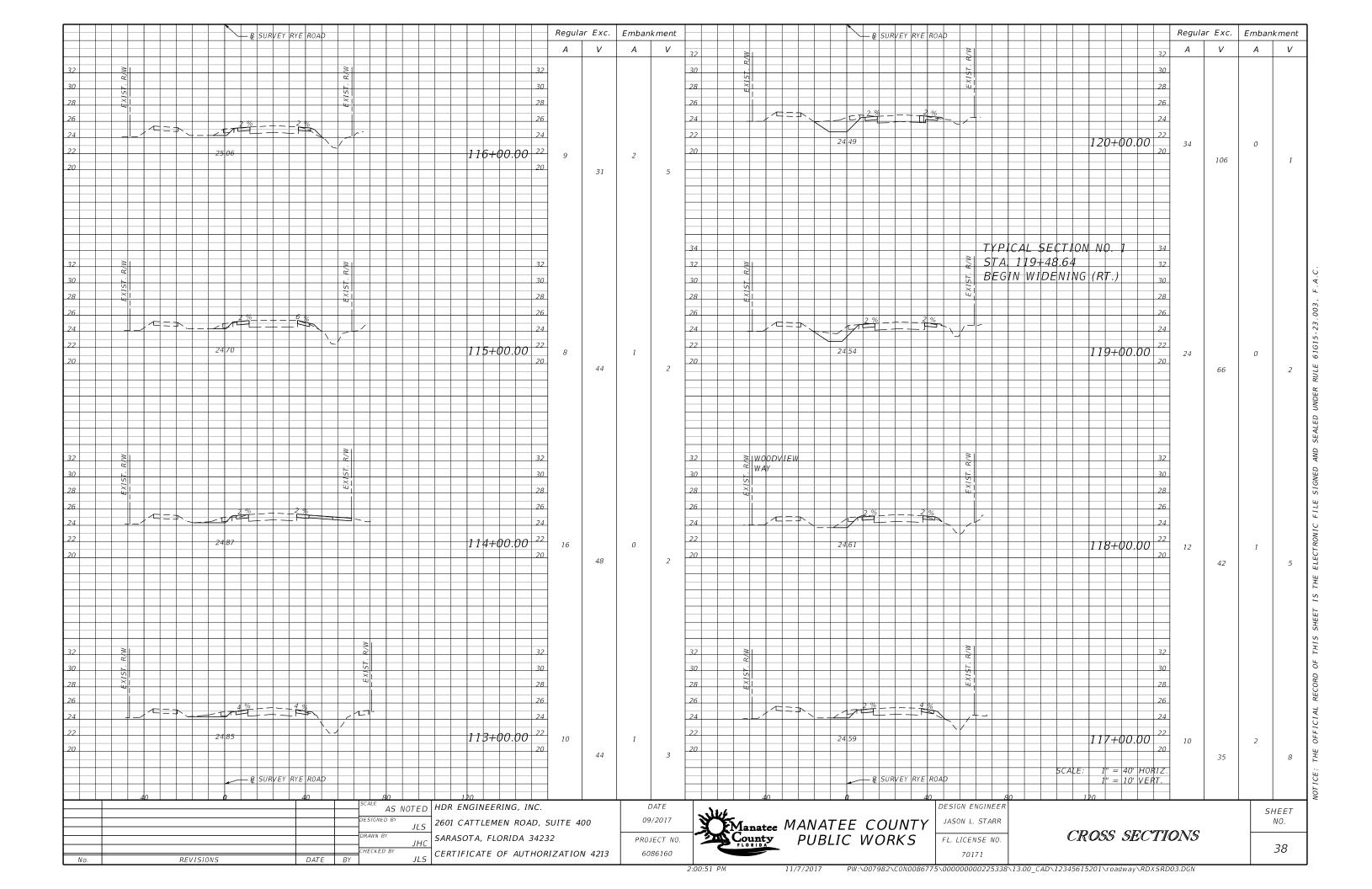


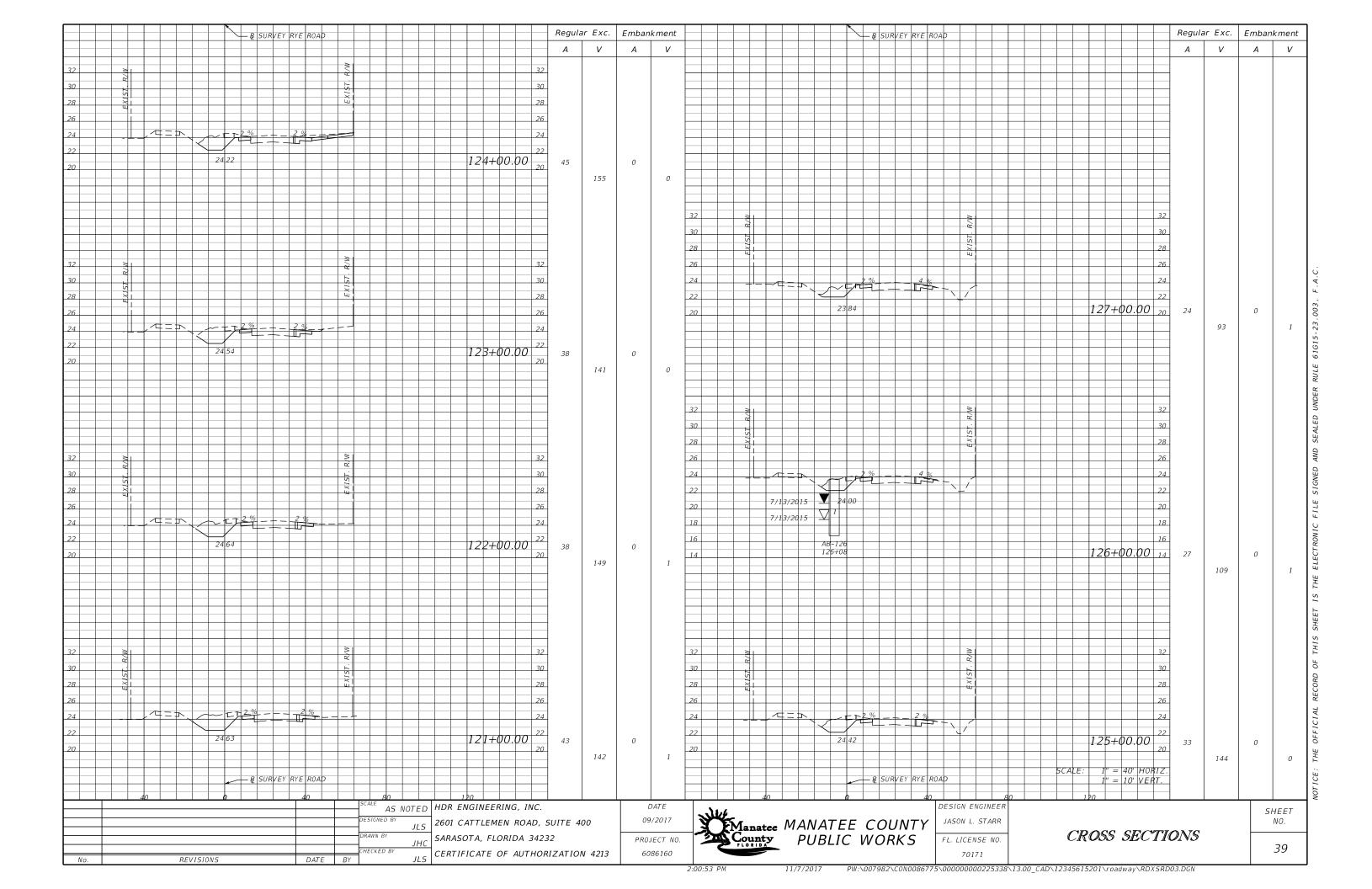


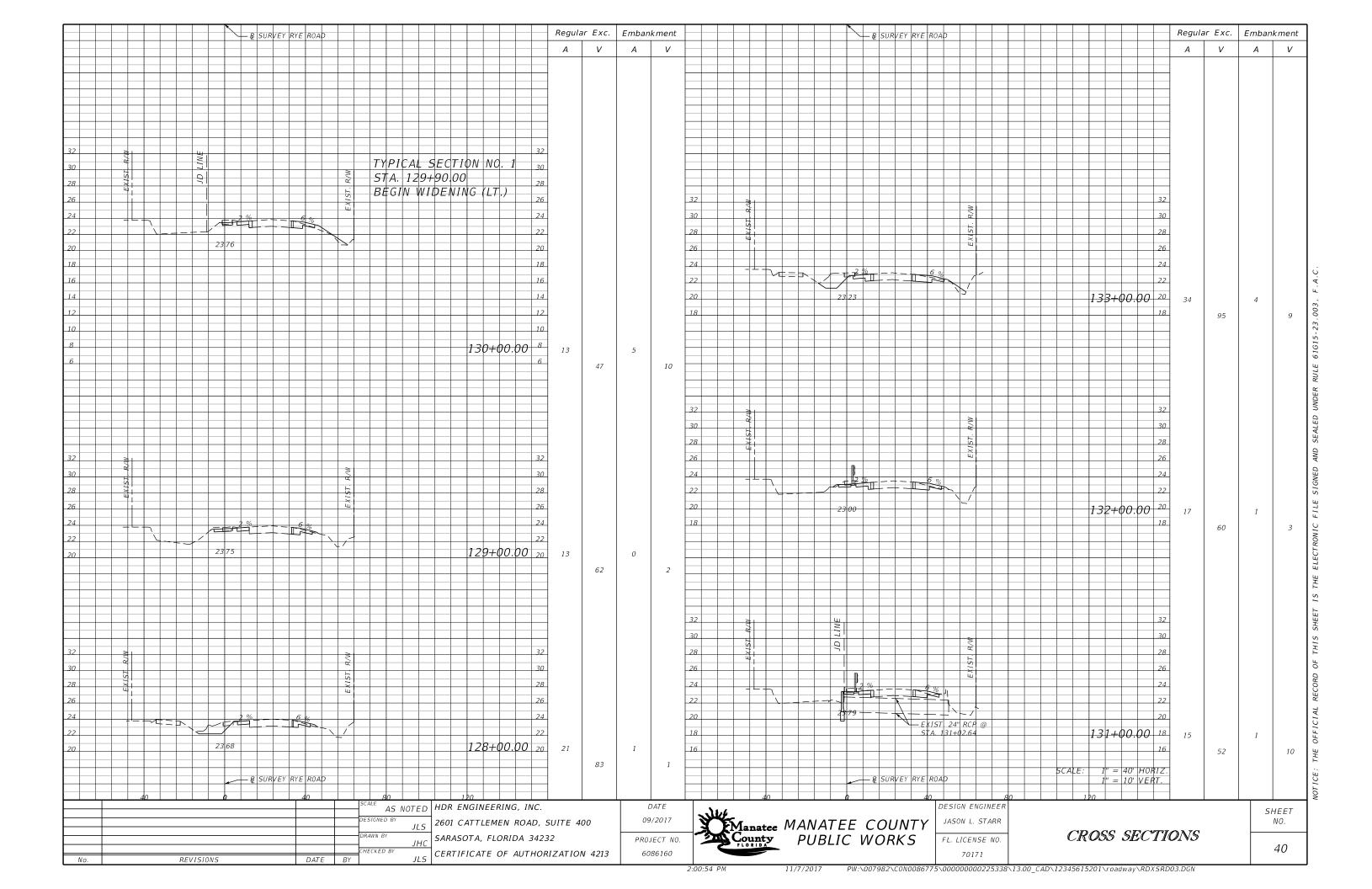


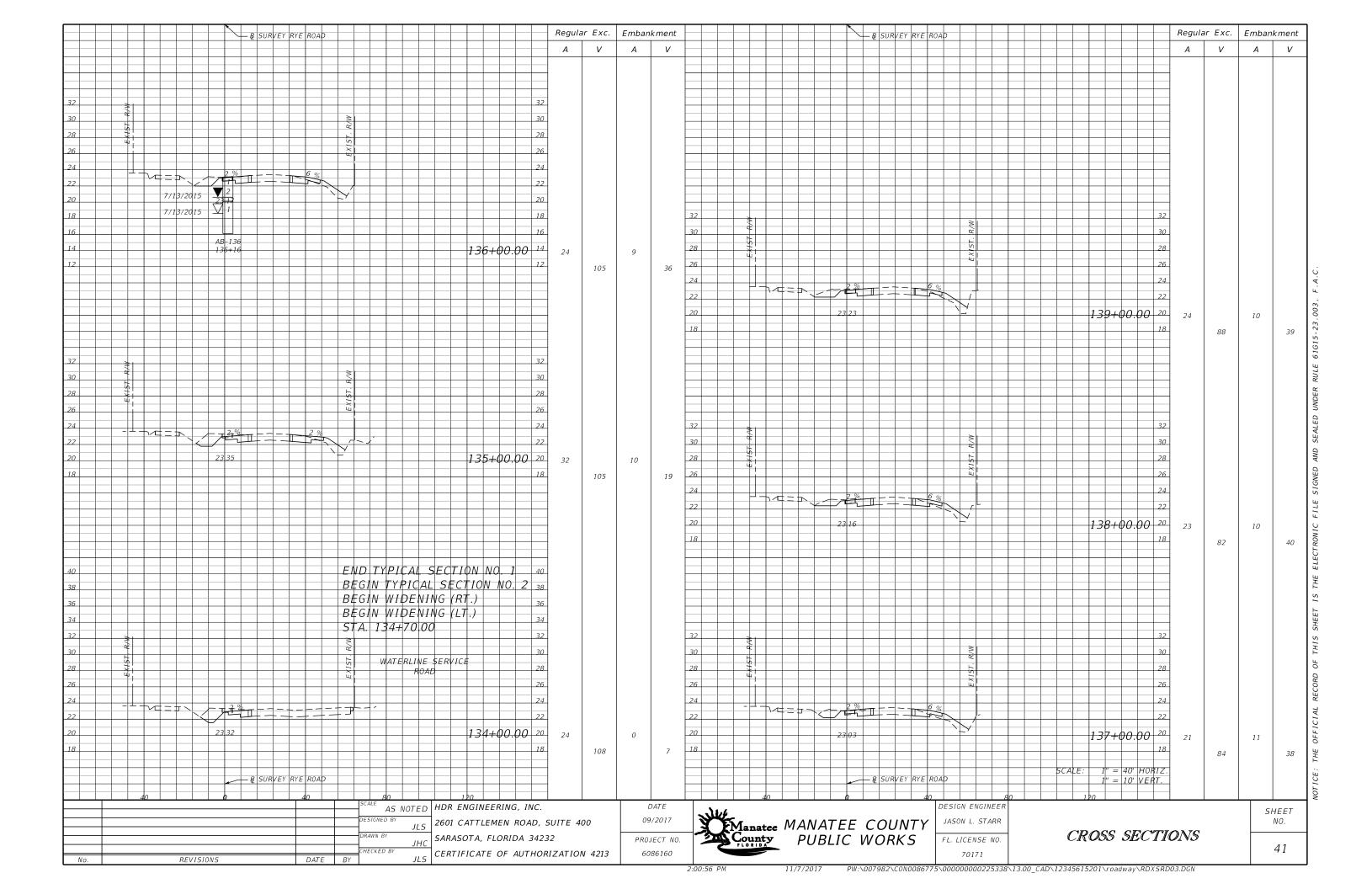


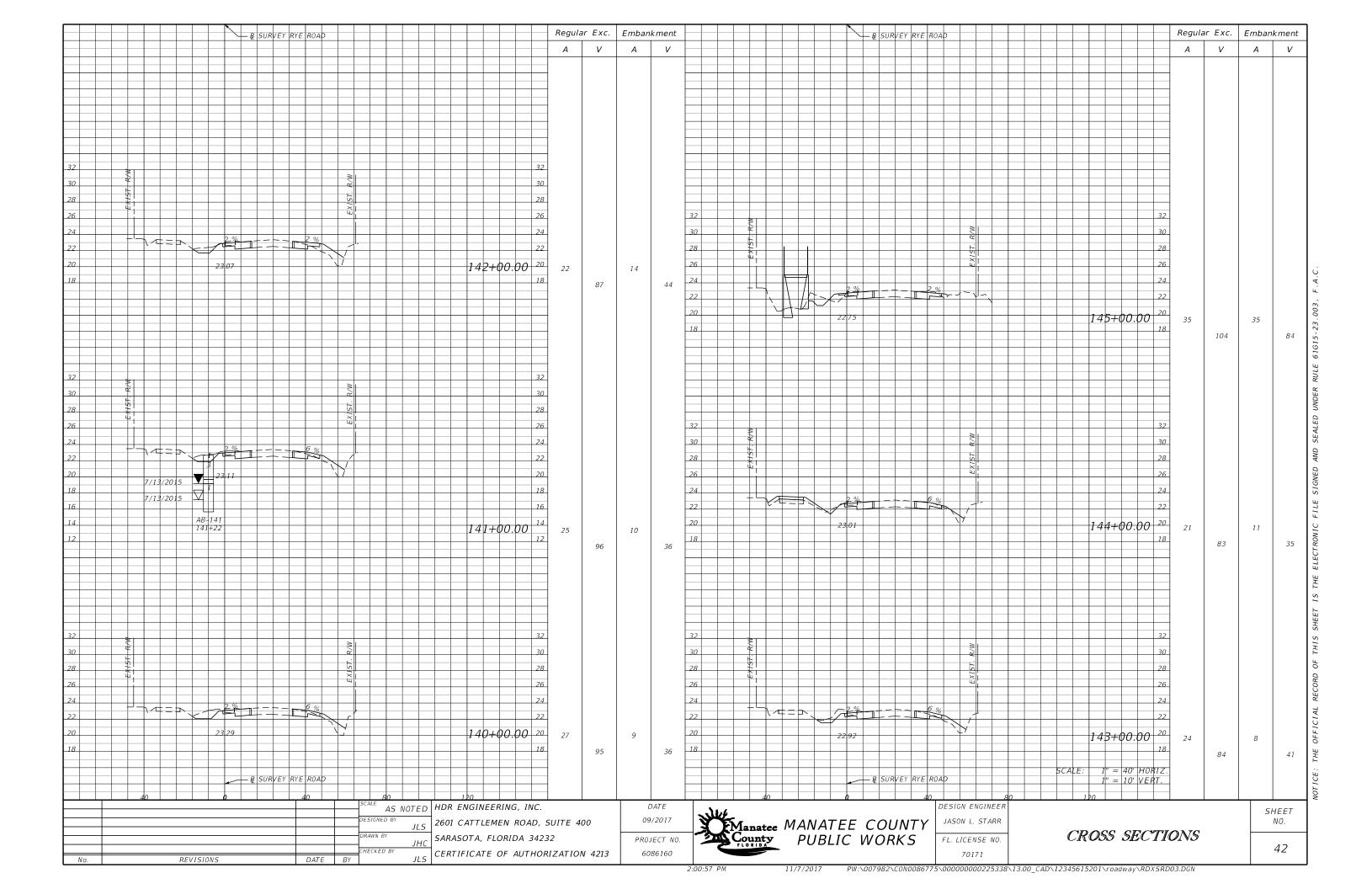


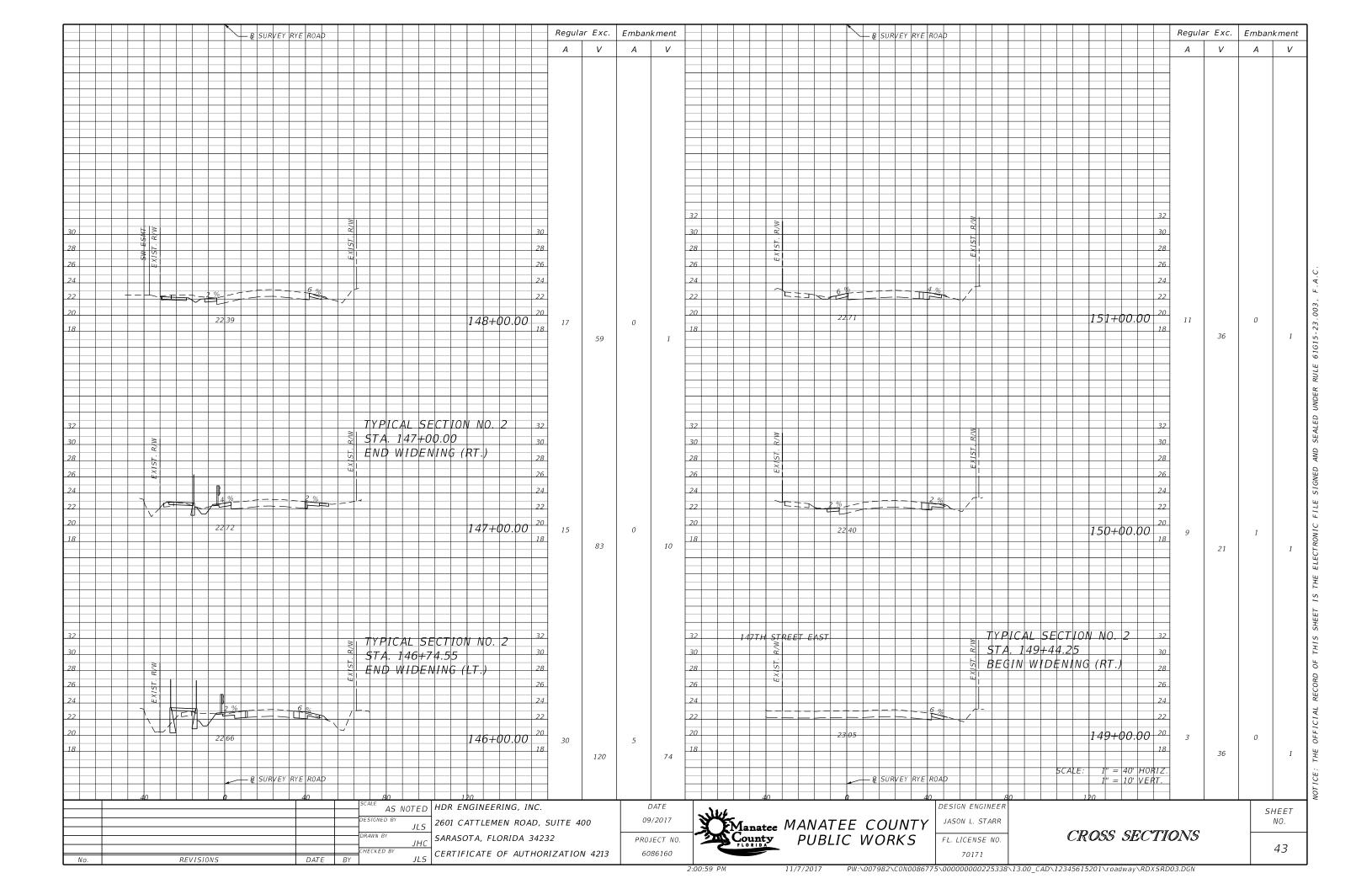


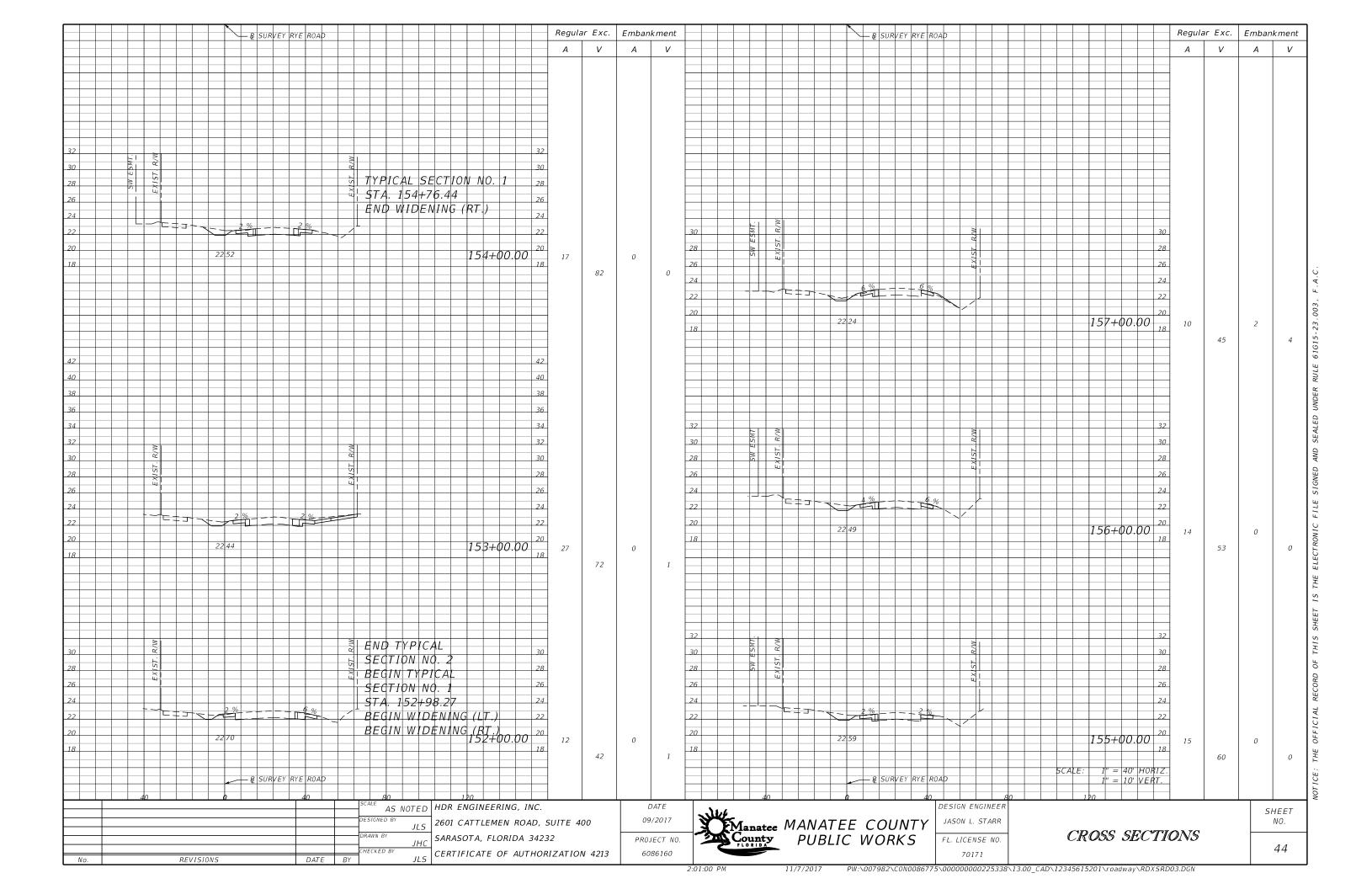


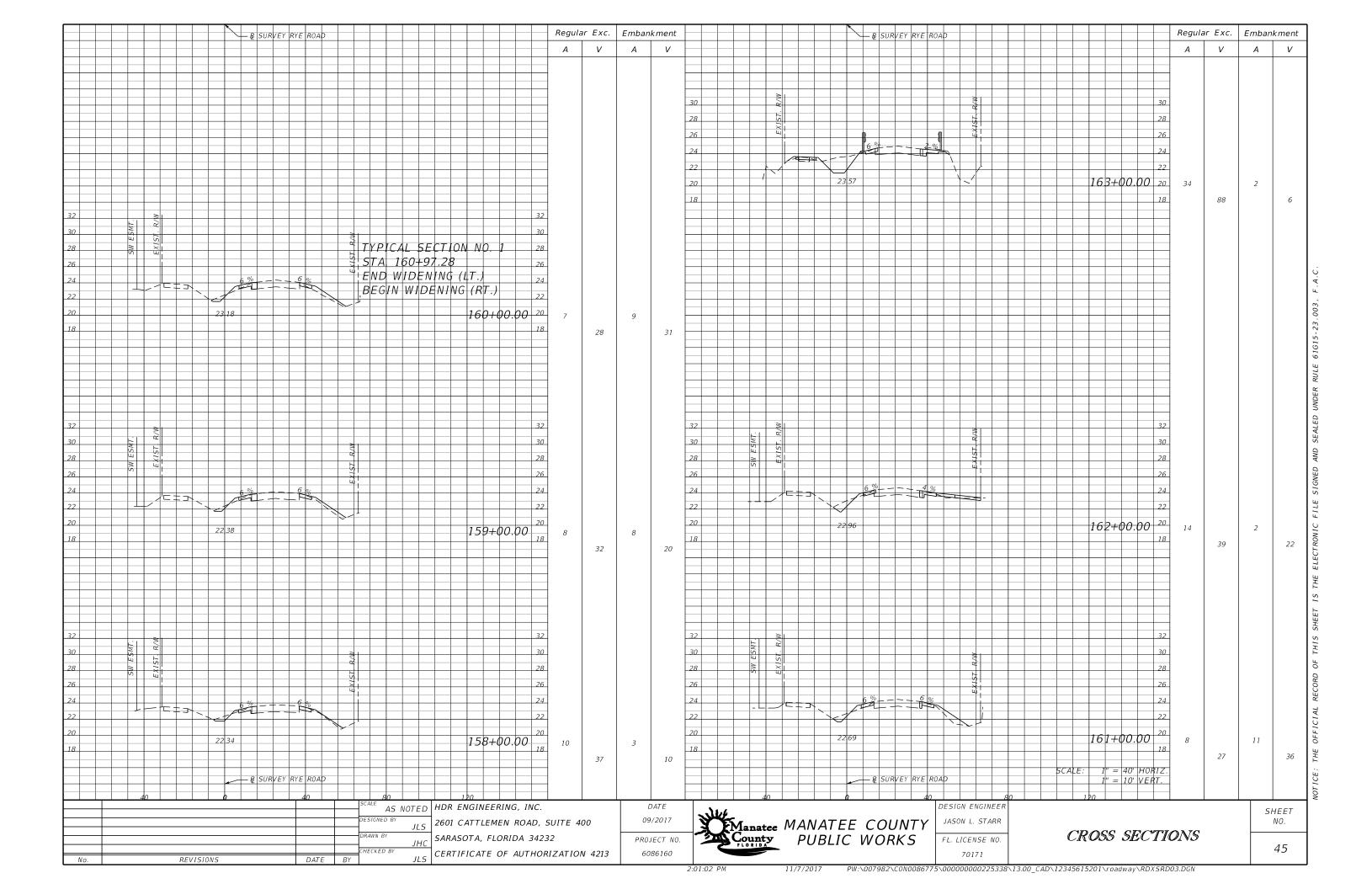


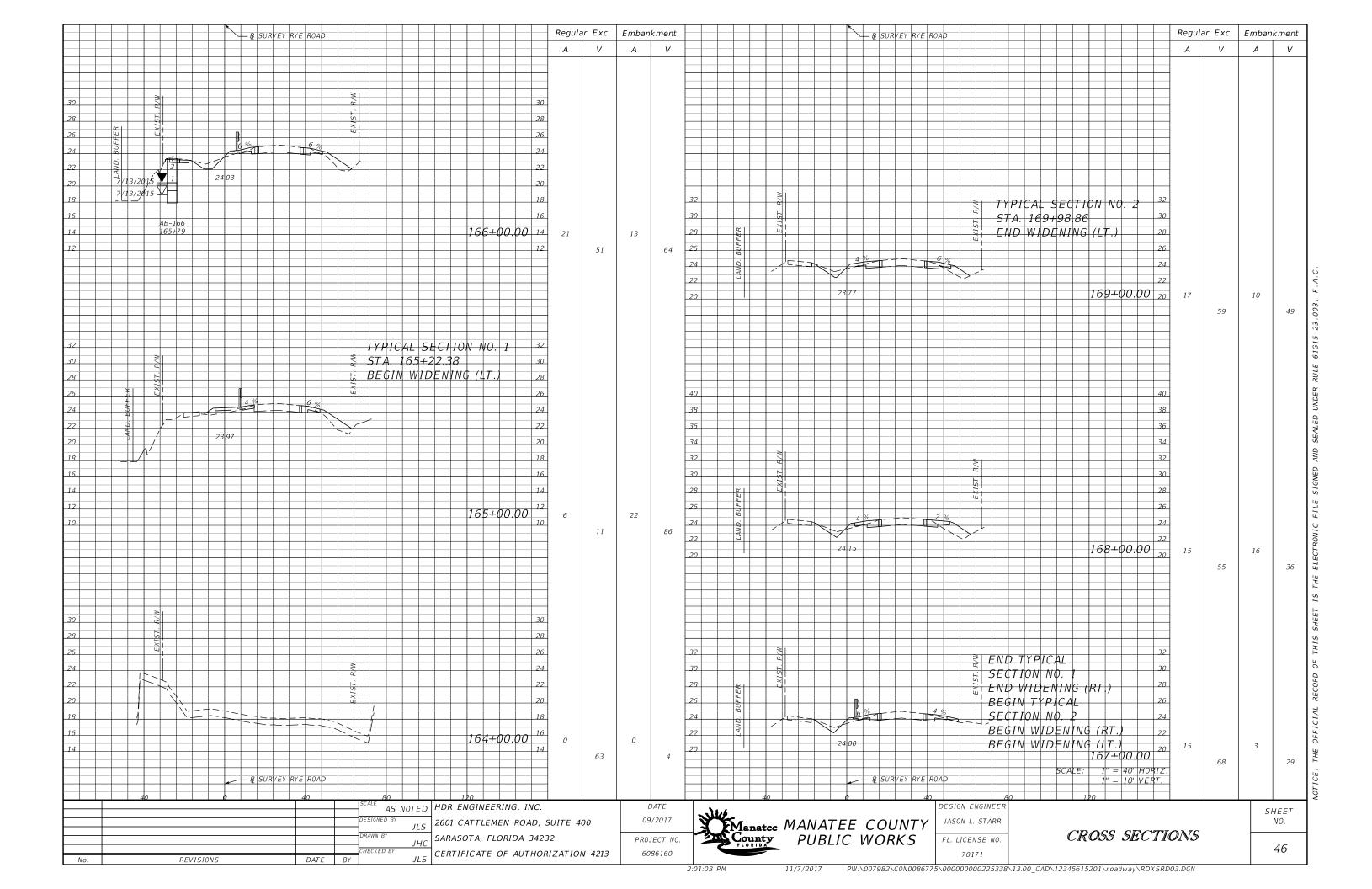


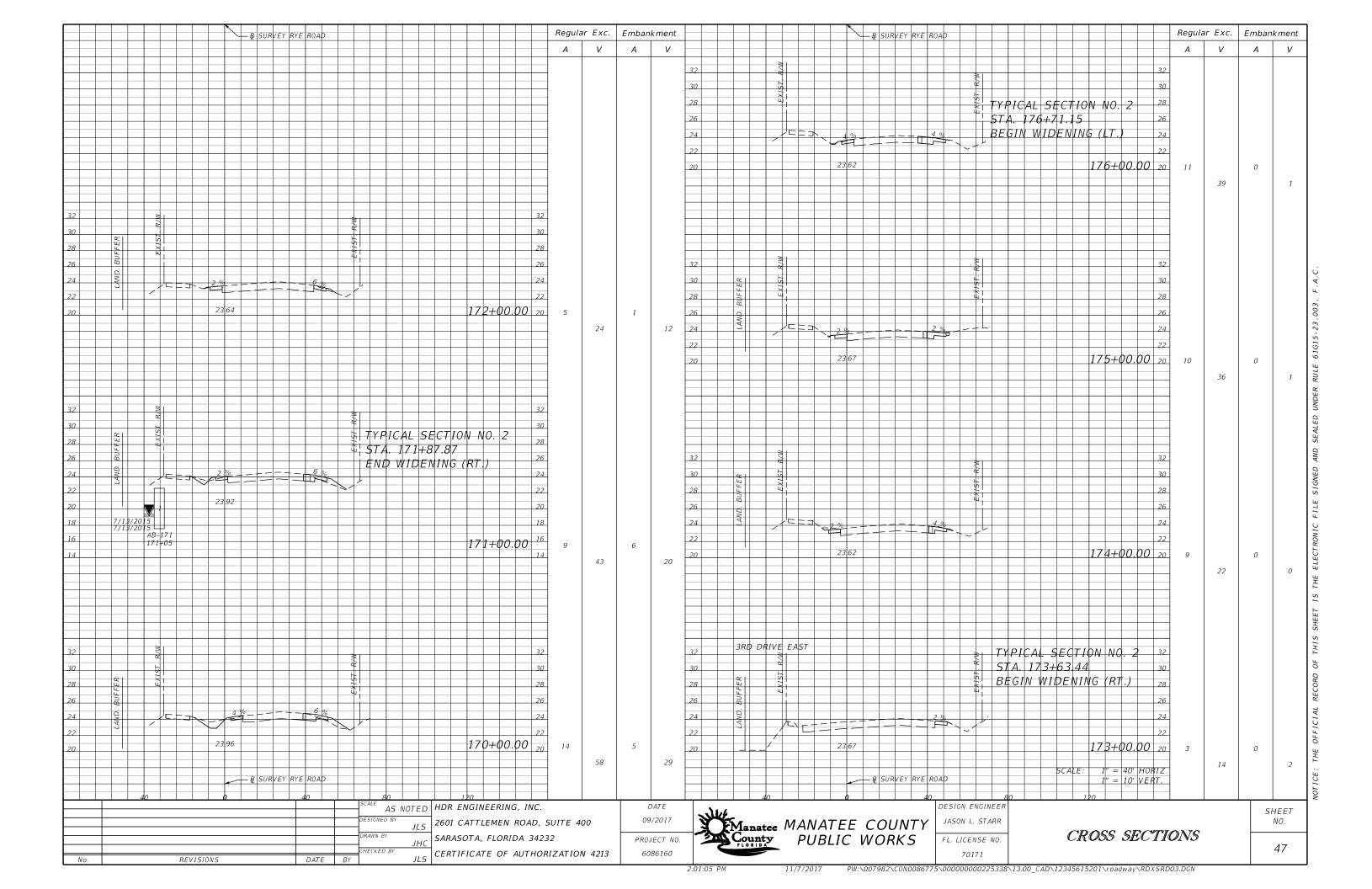


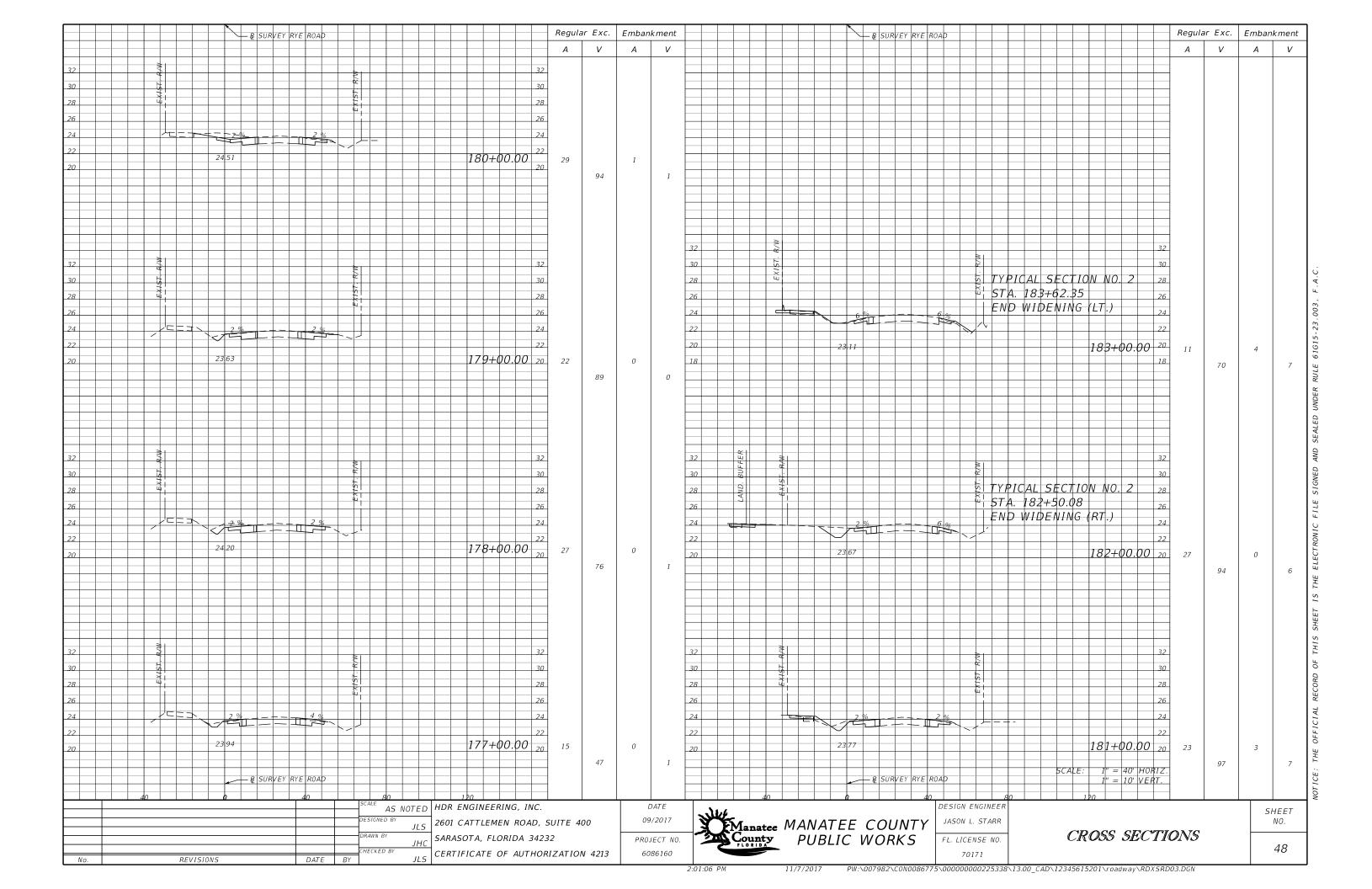


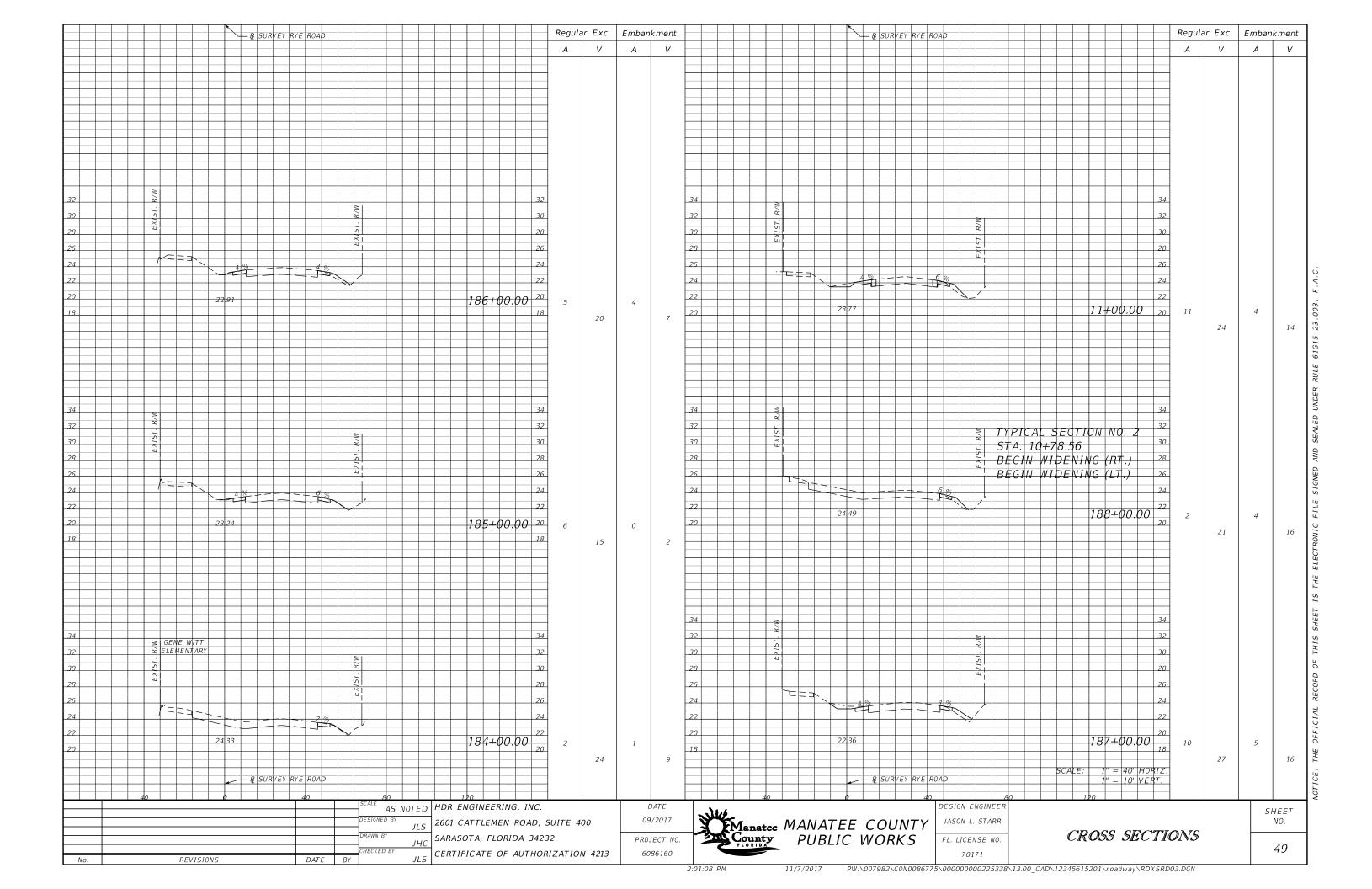


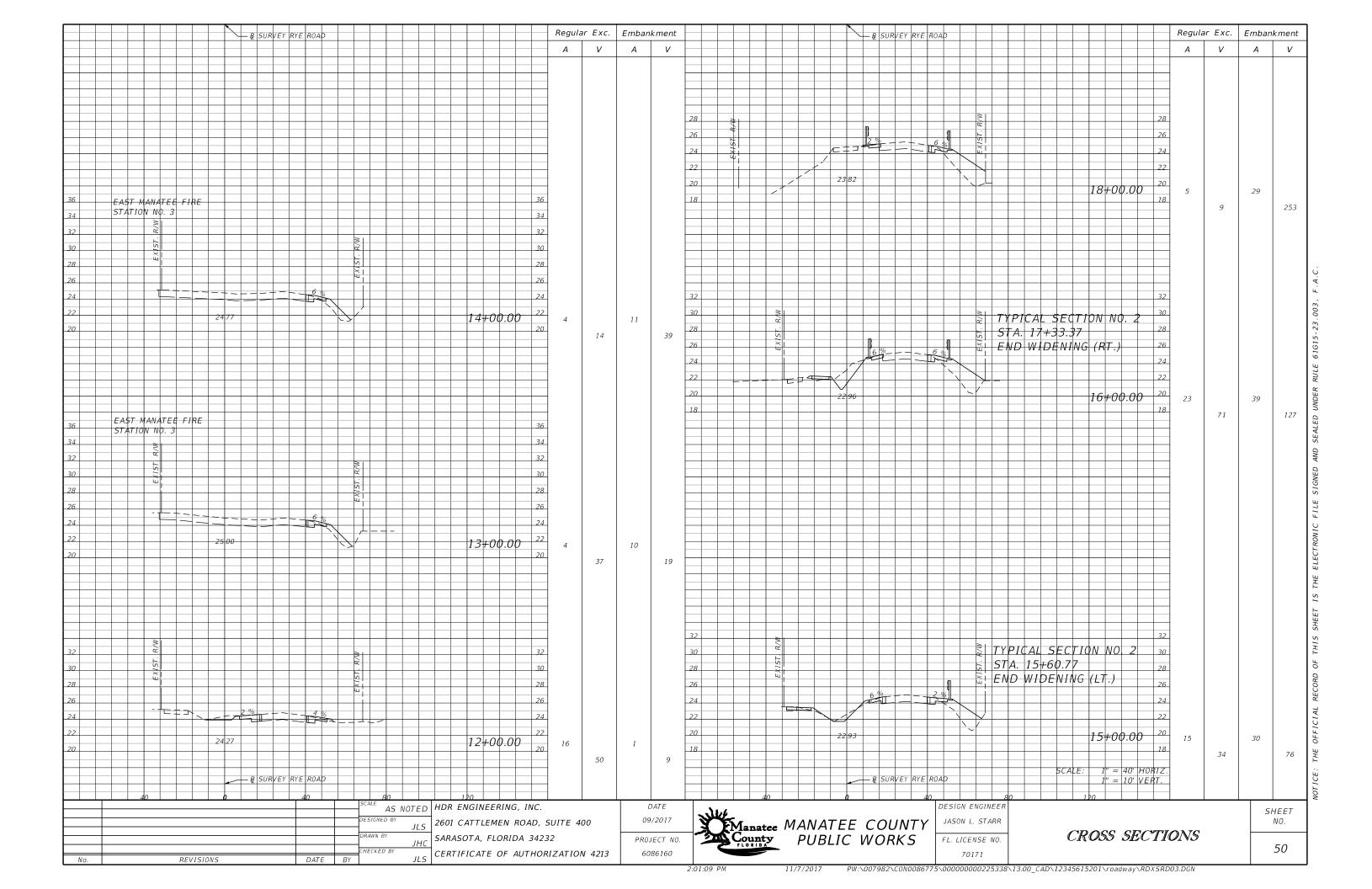


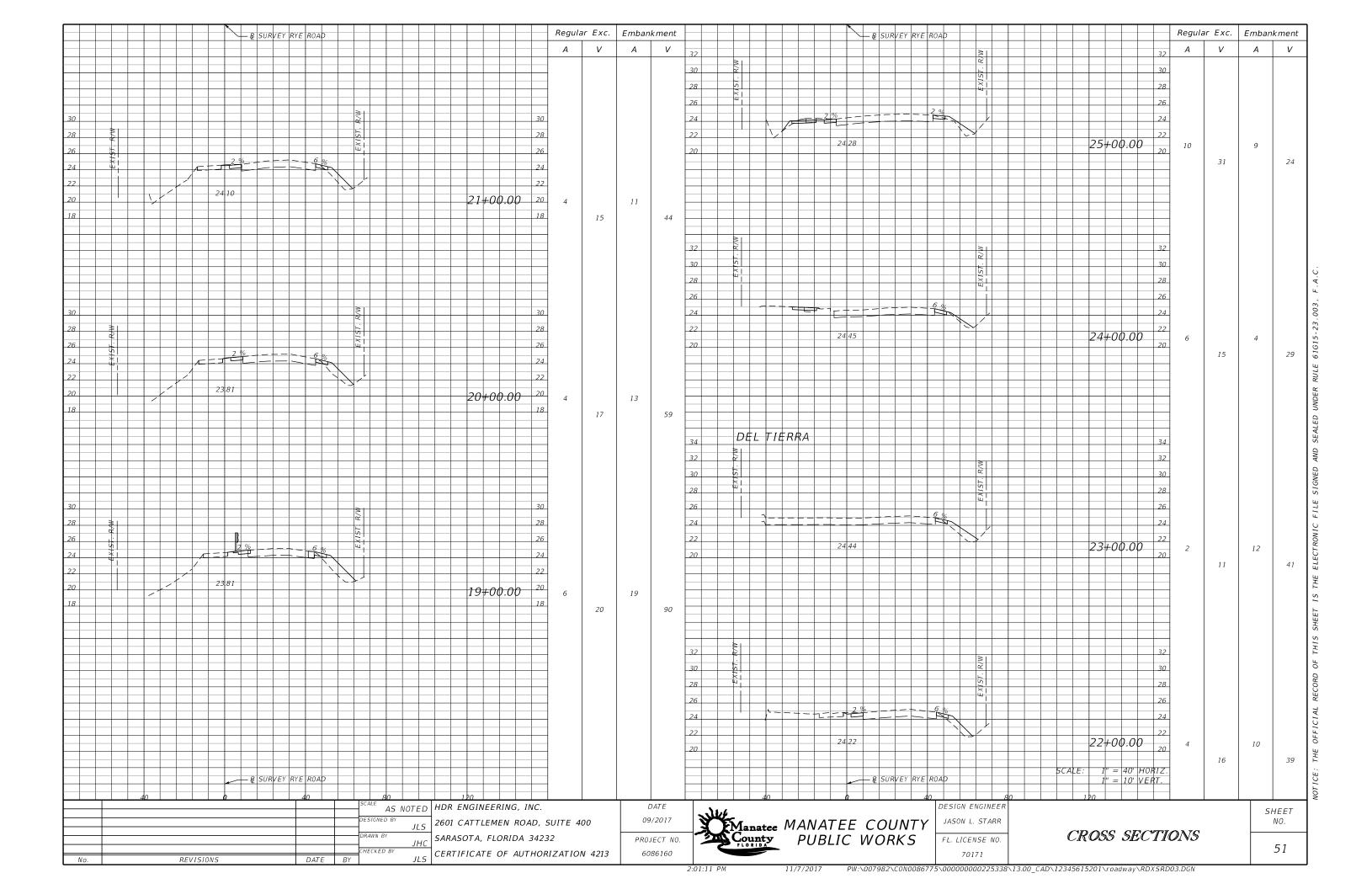


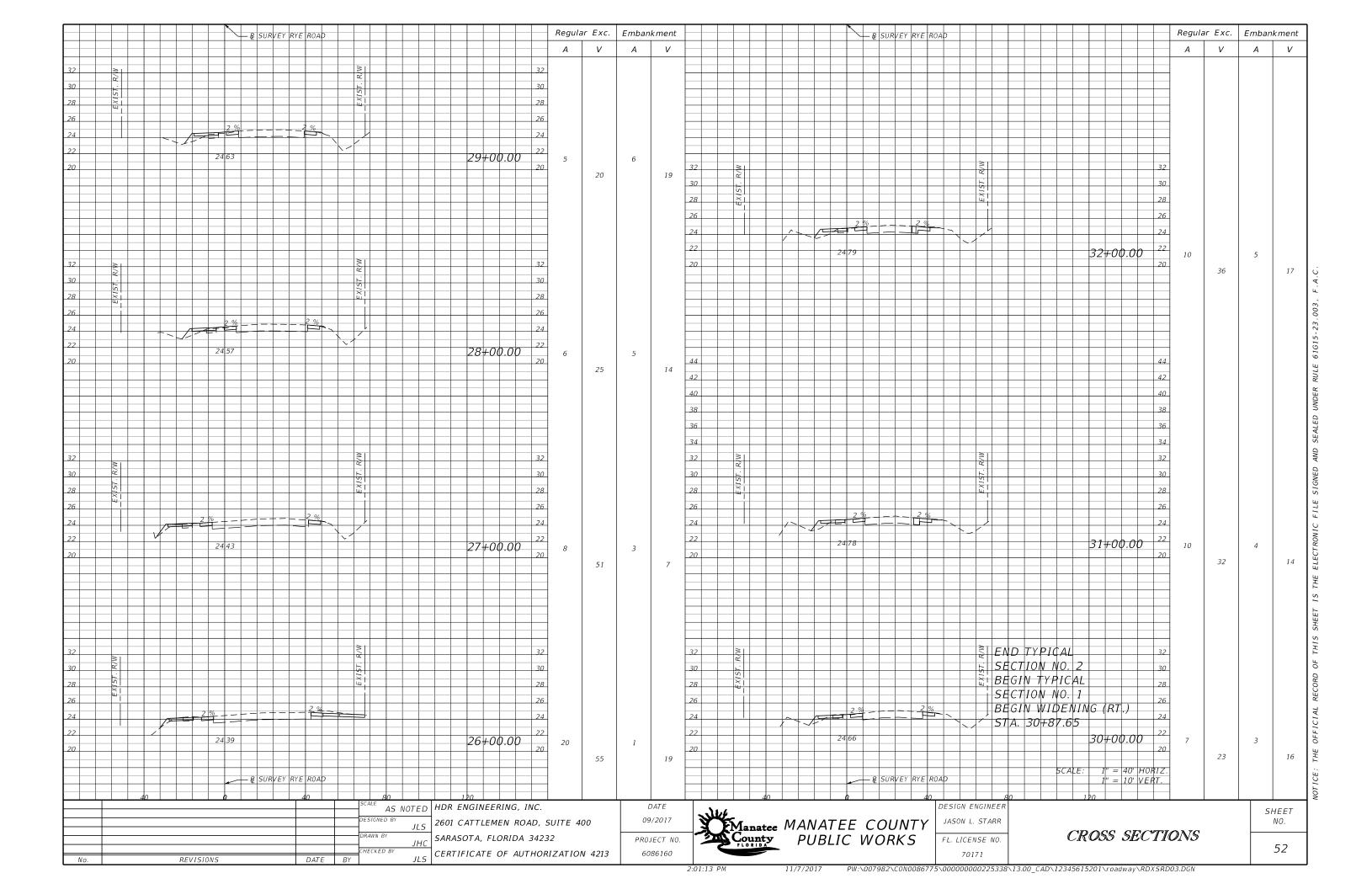


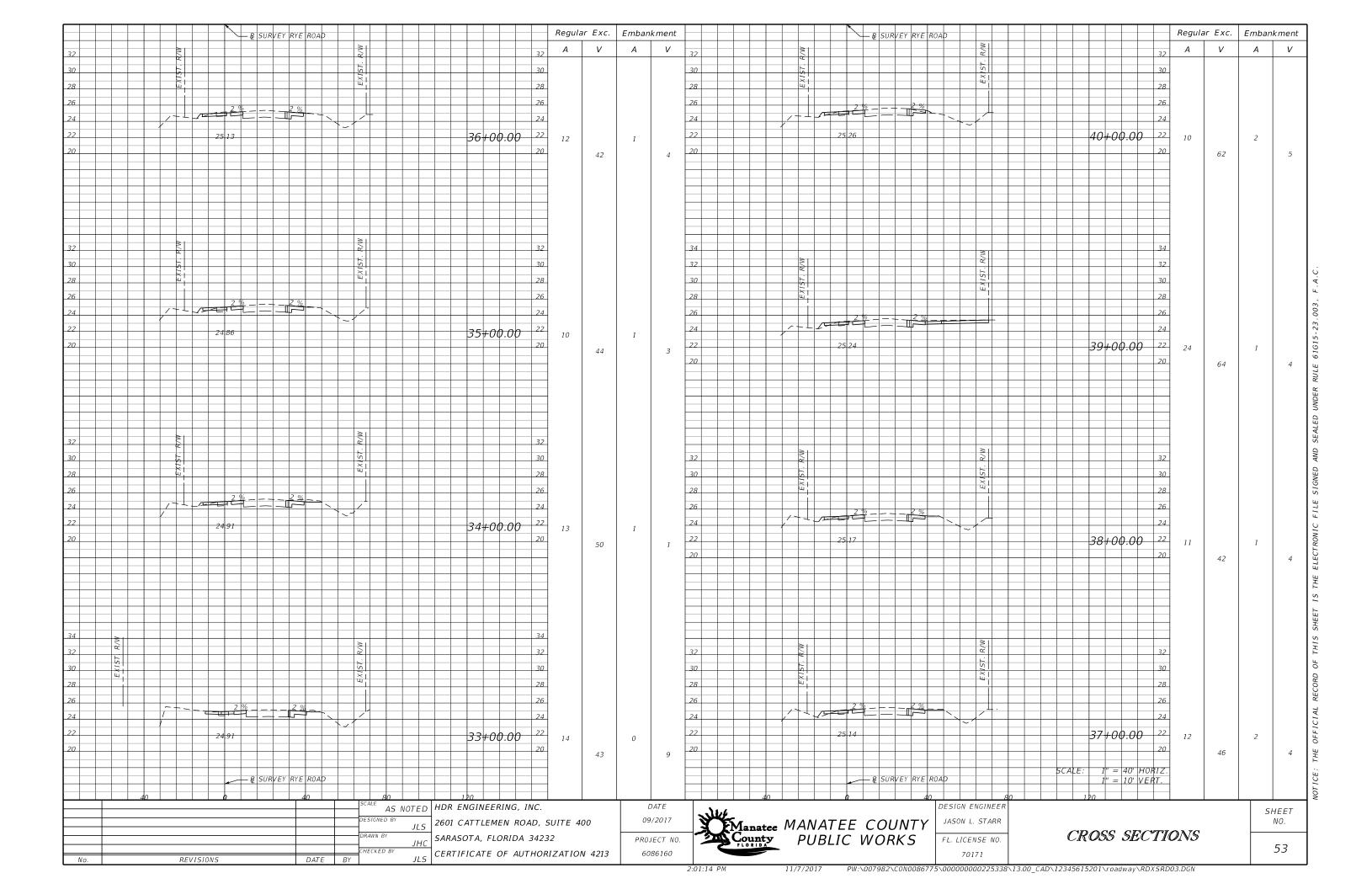


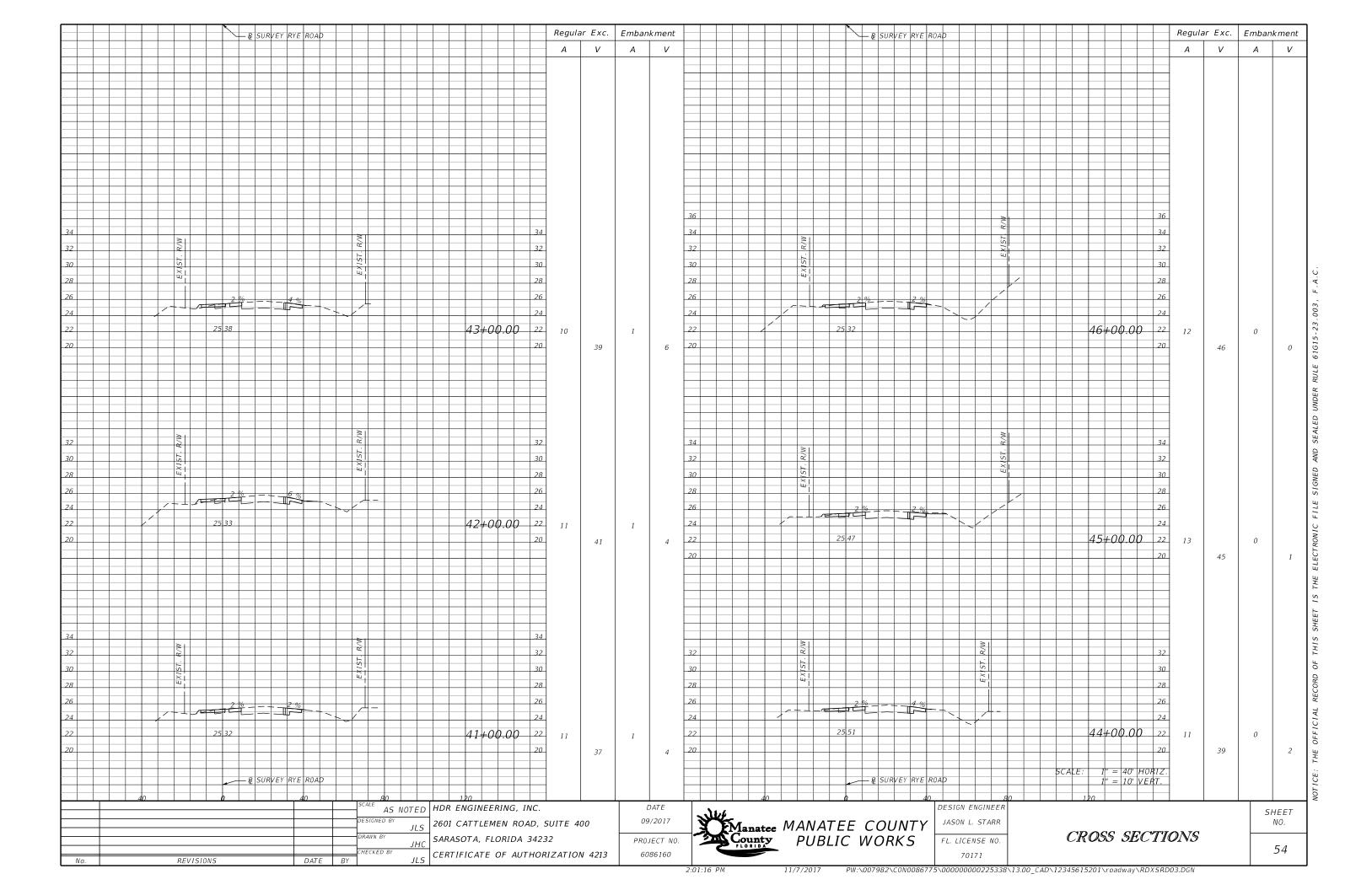


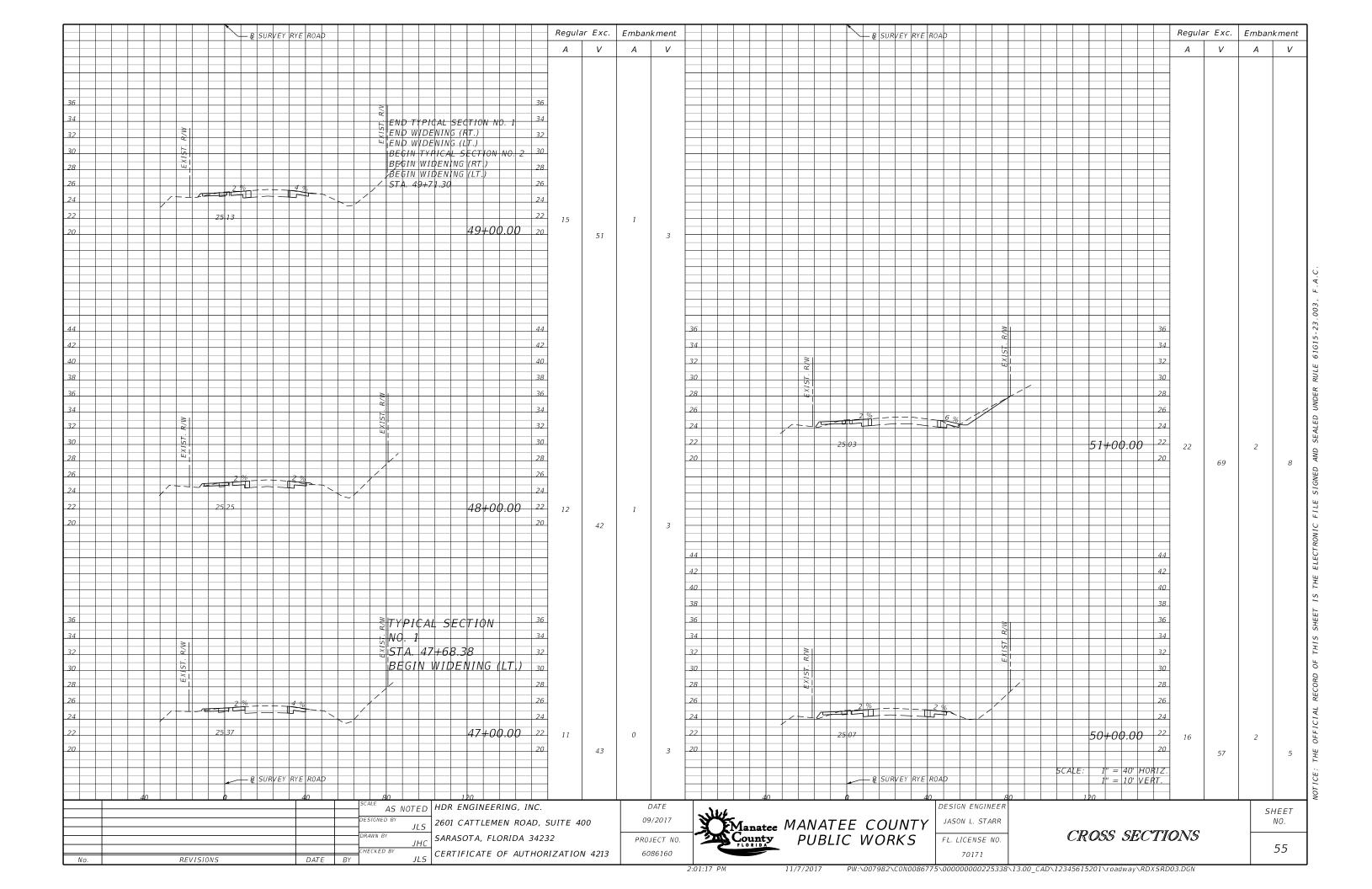


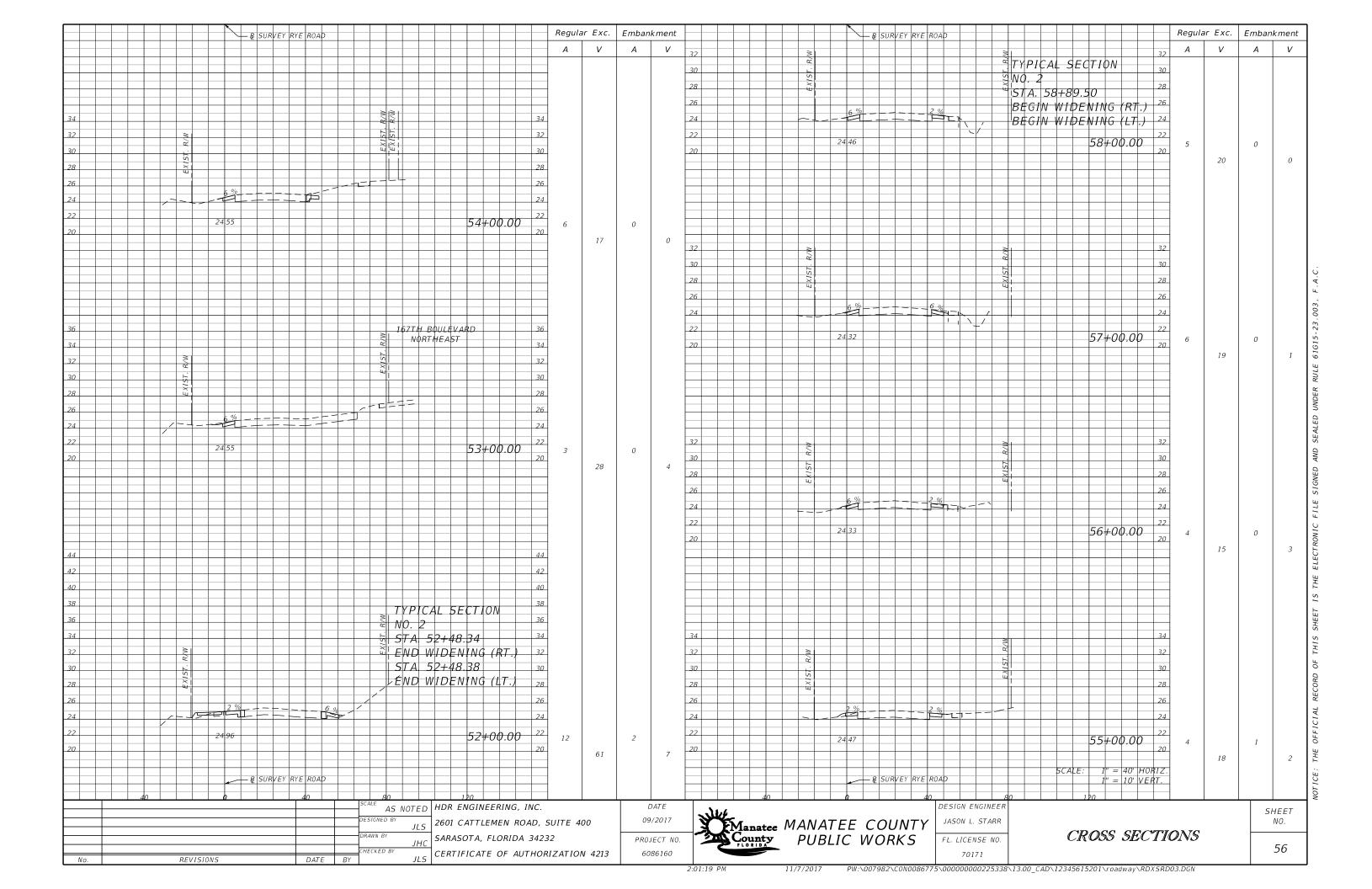


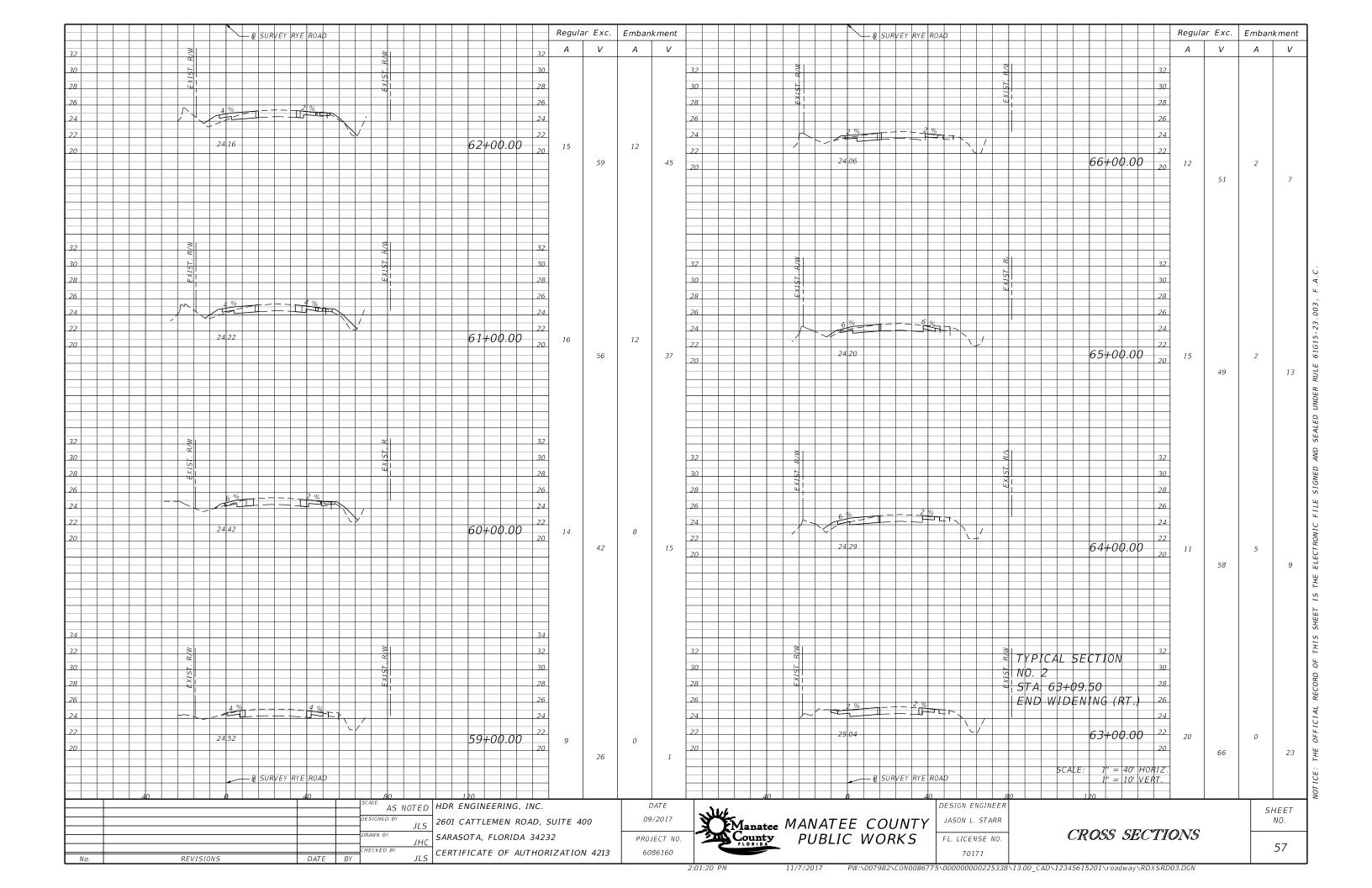


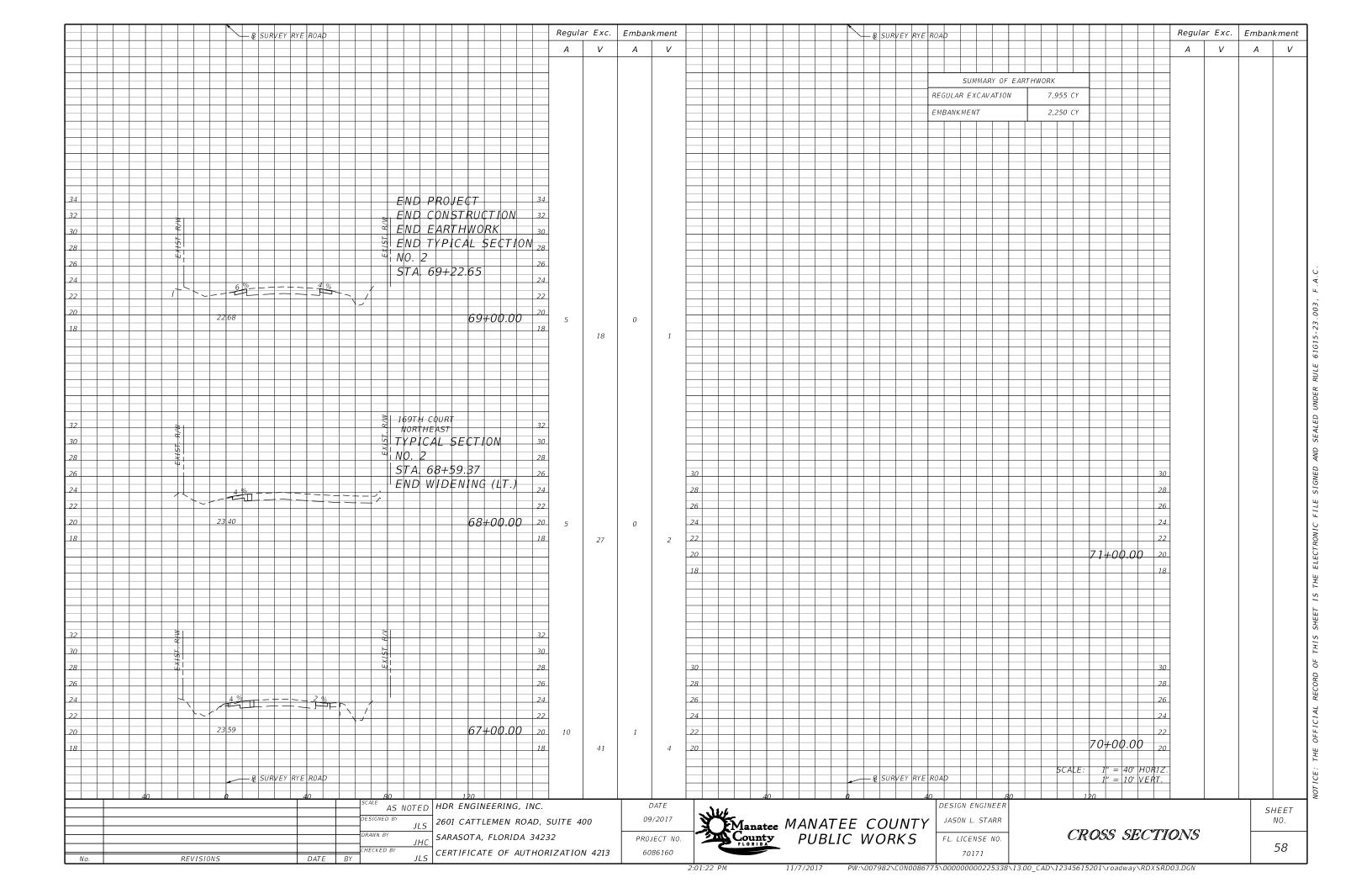












THE FOLLOWING NARRATIVE OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONTAINS REFERENCES TO THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE FDOT DESIGN STANDARDS, THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, AND OTHER SHEETS OF THESE CONSTRUCTION PLANS.

THE COMPLETE STORMWATER POLLUTION PREVENTION PLAN INCLUDES SEVERAL ITEMS:

THIS NARRATIVE DESCRIPTION,

THE DOCUMENTS REFERENCED IN THIS NARRATIVE.

THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN REQUIRED BY SPECIFICATION SECTION 104, AND REPORTS OF INSPECTIONS MADE DURING CONSTRUCTION.

HAZARDOUS MATERIALS SPILL CONTROL PLAN

THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THESE ITEMS TO FDEP IN ORDER FOR THE NPDES PERMIT TO BE PROCESSED. ALL COSTS OF DOCUMENT PREPARATION SHALL BE PAID FOR UNDER THE COST OF THE MOBILIZATION PAY ITEM.

THE CONTRACTOR MAY ELECT TO SUBMIT A REVISED SWPPP THAT IS IN COMPLIANCE WITH THE STORM WATER REGULATIONS AT 40 CFR 122.26(B)(14) AND STATE WATER QUALITY STANDARDS. THE CONTRACTOR'S MODIFIED SWPPP MUST RECEIVE APPROVAL FROM THE COUNTY ENGINEER PRIOR TO IMPLEMENTATION.

THIS INFORMATION SHOULD BE SUBMITTED TO THE COUNTY THIRTY DAYS PRIOR TO ANY CLEARING AND GRUBBING ACTIVITIES. NO SOIL DISTURBING ACTIVITIES CAN BE CONDUCTED UNTIL THE NPDES PACKAGE HAS BEEN SUBMITTED TO THE FDEP.

(1) NATURE OF CONSTRUCTION ACTIVITY

MANATEE COUNTY PROPOSES TO MILL & RESURFACE AND WIDEN APPROXIMATELY 2.8 MILES OF RYE ROAD TO A MINIMUM OF 24 FT WIDE. PAVED SHOULDERS ARE PROPOSED FOR THE PROJECT LENGTH AND A LEFT TURN LANE IS PROPOSED AT THE INTERSECTION WITH WATERLINE ROAD. NO CULVERTS OR BRIDGES SHALL BE EXTENDED.

- (2) SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:
 - (a) THE CONTRACTOR SHALL BE REQUIRED TO PREPARE A SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN ALONG WITH A DETAILED CONSTRUCTION SCHEDULE TO INDICATE DATES OF MAJOR GRADING ACTIVITIES AND DETERMINE SEQUENCES OF TEMPORARY AND PERMANENT SOIL DISTURBING ACTIVITIES ON ALL PORTIONS OF THE PROJECT.
 - (b) THE CONTRACTOR WILL BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS, CONSTRUCTION ACTIVITY VARIATIONS, OR AS DIRECTED BY THE ENGINEER.
 - APPLICABLE EROSION AND SEDIMENT CONTROL DEVICES AND IMPLEMENTATION PROCEDURES ARE SUPPLIED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEW MANUAL (E&SC MANUAL).
 - THE ENGINEER IS RESPONSIBLE FOR DETERMINING IF ANY MODIFICATIONS OR ADDITIONAL CONTROLS ARE REQUIRED AND TO OBTAIN DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES FROM THE CONTRACTOR.

(3) GENERAL NOTES:

- (a) ALL EROSION AND SEDIMENT CONTROL DEVICES FOR EACH PHASE OF WORK ARE TO BE INSTALLED PRIOR TO BEGINNING WORK ON THAT PHASE.
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES WHERE LISTED IN THE CONTRACTOR'S APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR PERIMETER CONTROLS BEFORE THE LAND IS DISTURBED.
- PROVIDE SEDIMENT BARRIERS WHERE LISTED IN THE CONTRACTOR'S APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR DITCH/SWALE CHECK DAMS DURING CONSTRUCTION.
- PROVIDE INLET PROTECTION SYSTEMS AT INLET OPENINGS.
- (e) COVER OR STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
- DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
- TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS.
- DO NOT REMOVE PERIMETER CONTROLS UNTIL ALL UPSTREAM AREAS ARE FULLY STABILIZED AND PERMANENT VEGETATION IS ESTABLISHED.

THE ESTIMATED TOTAL PROJECT AREA IS 34.84 ACRES. THE ESTIMATED AREA TO BE DISTURBED DURING CONSTRUCTION ACTIVITIES IS 23.41 ACRES.

(5) RUNOFF COEFFICIENTS BEFORE Cw (B), DURING Cw (D) AND AFTER Cw (A) CONSTRUCTION:

RUNOFF COEFFICIENT FOR: GRASSED SHOULDERS ADJACENT TO ROADWAY: C=0.35 IMPERVIOUS ROADWAYS AND PAVED SHOULDER: C=0.95 DISTURBED AREAS, EXPOSED SOIL, ETC., DURING CONSTRUCTION: C=0.40

WEIGHTED RUNOFF COEFFICIENT:

DURING: Cw(D) = 0.50AFTER: Cw(A) = 0.68BEFORE: Cw(B) = 0.42

THE RUNOFF COEFFICIENT DURING CONSTRUCTION, Cw (D), IS CALCULATED ASSUMING THAT THE MAXIMUM ALLOWABLE AREA OF SOIL IS DISTURBED DURING CONSTRUCTION AND THE REMAINING AMOUNT IS THE EXISTING IMPERVIOUS AND GRASSED SHOULDER AREAS.

(6) DESCRIPTION OF SOIL OR QUALITY OF DISCHARGE:

THE SOILS WITHIN THE PROJECT AREA ARE PRIMARILY COMPOSED OF 20 - EAU GALLIE FINE SAND WITH ADDITIONAL SEGMENTS OF 48 - WABASSO FINE SAND. 11 - CASSIA FINE SAND. 26 - FLORIDANA-IMMOKALEE-OKEELANTA ASSOCIATION, AND 3 - BRADEN FINE SAND ACCORDING TO THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS).

- (7) ESTIMATED DRAINAGE FLOW DIRECTION AND AVERAGE SLOPE OF DRAINAGE AREA FOR EACH OUTFALL:
 - (a) SITE MAP: THE CONSTRUCTION PLANS ARE BEING USED AS THE SITE MAP.
 - DRAINAGE PATTERNS: THE DRAINAGE PATTERNS AND GENERAL FLOW DIRECTIONS ARE SHOWN ON THE PLAN SHEETS AND CROSS SECTIONS.
 - APPROXIMATE SLOPES: THE EXISTING AND PROPOSED SLOPES WITHIN THE PROJECT LIMITS ARE DEPICTED IN THE CROSS SECTIONS AND ON THE TYPICAL SECTION SHEETS.
- (8) RECEIVING WATERS:

MILL CREEK

MANATEE RIVER BELOW DAM

- (9) THE MILL CREEK OUTFALLS ARE 303(d) LISTED, IMPAIRED WATERS FOR NUTRIENTS AND DISSOLVED OXYGEN AND FECAL COLIFORM. MANATEE RIVER BELOW DAM IS IMPAIRED FOR FECAL COLIFORM ONLY.
- (10) OUTFALL LOCATIONS: (PERMANENT)

	DESCRIPTION	LATITUDE	LONGITUDE
(a)	(1) 106" X 68" PIPE	N 27° 29′ 00″	W 82° 24′ 12″
(b)	(1) 24" PIPE	N 27° 29′ 15″	W 82° 23′ 53″
(c)	(2) 48" PIPE	N 27° 29′ 24″	W 82° 23′ 41″
(d)	(1) 30' BRIDGE	N 27° 29′ 36″	W 82° 23′ 25″
(e)	(1) 38" X 24" PIPE	N 27° 29′ 48″	W 82° 23′ 09″
(f)	(1) 43' BRIDGE	N 27° 29′ 55″	W 82° 22′ 58″

- (11) WETLAND AND/OR SURFACE WATER IMPACTS ASSOCIATED WITH THIS PROJECT ARE LESS THAN 0.1 ACRES.
- (12) DESCRIPTION OF STORMWATER MANAGEMENT: (EXISTING/PROPOSED)
 - (a) EXISTING DRAINAGE FLOWS ARE TYPICALLY THROUGH ROADSIDE DITCHES TO BRIDGE CULVERTS.
 - (b) OFF-SITE RUNOFF SHOULD BE DIVERTED AWAY OR THROUGH THE CONSTRUCTION AREA, IF POSSIBLE. THIS ADDITIONAL FLOW, IF NOT DIVERTED, CAN ADD VOLUME AND SIZE TO STRUCTURAL PRACTICES, REQUIRING MORE FREQUENT MAINTENANCE AND LIMITING EFFECTIVENESS OF EROSION AND SEDIMENT
 - (c) THE CONTRACTOR WILL PROVIDE POLLUTION CONTROL BY IMPLEMENTING DUST CONTROL DURING ALL PHASES OF CONSTRUCTION. SEDIMENT CONTROL WILL BE ACCOMPLISHED BY USING STREET OR VACUUM
 - THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT UNAUTHORIZED MATERIALS FROM ENTERING WETLANDS, WATERWAYS, OTHER SURFACE WATERS OR WATERS OF THE U.S.

II. CONTROLS:

SEDIMENT AND EROSION CONTROLS

- (1) WATER QUALITY MONITORING:
 - (a) WATER QUALITY MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH THE SPECIAL CONDITIONS OF ANY ENVIRONMENTAL PERMIT OR BY THE CONTRACTOR UPON THE OBSERVATION THAT WATER QUALITY STANDARDS MAY BE VIOLATED BY THE CONTRACTOR'S ACTIVITIES, MONITORING LOCATIONS MAY BE SPECIFIED IN THE ENVIRONMENTAL PERMIT OR MAY BE DESIGNATED BY THE CONTRACTOR AND APPROVED BY THE PROJECT ADMINISTRATOR
 - (b) THE PROJECT ADMINISTRATOR WILL BE RESPONSIBLE FOR MONITORING ANY ACTIVITIES FOR VIOLATION OF WATER QUALITY STANDARDS AS THEY RELATE TO TURBIDITY (NO GREATER THAN 29 NTU'S ABOVE BACKGROUND OR GREATER THAN O NTU'S ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OFW'S).
 - (c) IF WATER QUALITY STANDARDS ARE VIOLATED, CONSTRUCTION SHALL BE STOPPED IMMEDIATELY, THE ENVIRONMENTAL PERMIT CONDITIONS FOLLOWED AND EROSION AND SEDIMENT CONTROL DEVICES REEVALUATED AND APPROVED BY THE ENGINEER PRIOR TO ANY CONTINUATION OF ACTIVITY. MONITORING ACTIVITIES AND TURBIDITY READINGS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION REPORT AND CONTINUED UNTIL TURBIDITY READINGS FALL BELOW AN ACCEPTABLE LEVEL (LESS THAN 29 NTU'S ABOVE BACKGROUND OR LESS THAN O NTU'S ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OFW'S).
 - WATER QUALITY MONITORING MAY BE CONDUCTED DURING ANY PHASE OF CONSTRUCTION AS DIRECTED BY THE PROJECT ENGINEER.

2601 CATTLEMEN ROAD, SUITE 400

SARASOTA, FLORIDA 34232 CERTIFICATE OF AUTHORIZATION 4213

DATE 09/2017

6086160



Manatee MANATEE COUNTY **PUBLIC WORKS**

DESIGN ENGINEER JASON L. STARR

70171

STORMWATER POLLUTION FL. LICENSE NO. PREVENTION PLAN NOTES (1) SHEET NO.

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(b) STABILIZATION SHALL TAKE PLACE AS SOON AS PRACTICAL IN PORTIONS OF THE PROJECT WHERE CONSTRUCTION ACTIVITIES HAVE CEASED, BUT NO LATER THAN 7 DAYS AFTER ANY CONSTRUCTION ACTIVITY CEASES EITHER TEMPORARILY OR PERMANENTLY.

ALL EROSION CONTROL DEVICES SHALL BE INSTALLED ACCORDING TO THE CONTRACT DOCUMENTS, AND THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN.

ANY TEMPORARY MATERIAL USED FOR POLLUTION OR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT AND FINAL STABILIZATION OF THE PROJECT HAS BEEN ACHIEVED.

(e) SEDIMENT BARRIERS SHOULD BE USED ALONG THE LENGTH OF THE PROJECT WHERE THE GROUND SLOPES AWAY FROM THE RIGHT OF WAY OR WHERE THERE IS POTENTIAL FOR SEDIMENT TO BE DIRECTED OFF-SITE. PARTICULAR CARE SHOULD BE USED WHEN THERE ARE WETLANDS OR WATERS OF THE U.S. ARE INVOLVED. SEDIMENT BARRIERS SHOULD BE USED AROUND THE PERIMETER OF STOCKPILE AREAS.

(f) SPACING OF SEDIMENT BARRIERS USED AS DITCH OR SWALE CHECKS/DAMS SHOULD BE BASED UPON THE HEIGHT OF THE BARRIER AND THE SLOPE OF THE DITCH OR SWALE.

(g) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING SOIL TRACKING PREVENTION SYSTEMS OR PROCEDURES AS NEEDED.

(3) STRUCTURAL PRACTICES FOR EROSION AND SEDIMENT CONTROL

(a) ROLLED EROSION CONTROL PRODUCTS (ARTIFICIAL COVERINGS)

PURPOSE: TO PROTECT DISTURBED SLOPE SURFACES AGAINST EROSION DUE TO RAINFALL OR FLOWING WATER.

(1) USED FOR PAUSES IN CONSTRUCTION DUE TO INCLEMENT WEATHER OR OTHER CIRCUMSTANCES. COULD INCLUDE NATURAL OR SYNTHETIC FIBER MATS, PLASTIC SHEETING OR NETS.

USED FOR EROSION CONTROL THAT FACILITATES PLANT GROWTH WHILE PERMANENT GRASS IS ESTABLISHED. COULD INCLUDE BIODEGRADABLE EROSION CONTROL BLANKETS INSTALLED ON A SEEDED AREA, ON FILL SLOPES OR IN DITCHES.

(3) USED TO STABILIZE DRAINAGE CHANNELS. CONSULT E&SC MANUAL TO DETERMINE CORRECT PRODUCT TYPE FOR CHANNEL STABILIZATION.

(b) SEDIMENT BARRIERS (TEMPORARY CONSTRUCTION SITE BMP'S)

PURPOSE: SEDIMENT BARRIERS EITHER OBSTRUCT FLOW OR PREVENT THE PASSAGE OF WATER WHILE CONSTRUCTION ACTIVITIES OCCUR. SMALLER SEDIMENT BARRIERS MAY FUNCTION AS A SMALL SEDIMENT CONTAINMENT SYSTEM OR AS A METHOD TO REDUCE FLOW VELOCITY.

(1) THESE CONSTUCTION BMP'S CAN INCLUDE SYNTHETIC BALES, STAKED SILT FENCE, TURBIDITY BARRIER, STORM SEWER INLET BARRIERS, ROCK BARRIERS, GEOSYNTHETIC BARRIERS, ETC.

APPROPRIATE LOCATIONS INCLUDE SITE PERIMETER, BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION, BELOW THE TOE OF EXPOSED AND ERODIBLE SLOPES, ALONG THE TOE OF STREAM AND CHANNEL BANKS, AROUND DRAINS AND INLETS LOCATED IN LOWPOINTS OR THE DOWNSTREAM EDGE OF AREAS UNDERGOING VERTICAL OR BOX CULVERT CONSTRUCTION ACTIVITIES.

(3) INAPPROPRIATE LOCATIONS FOR THESE SAME MEASURES INCLUDE PARALLEL TO A HILLSIDE CONTOUR, IN CHANNELS WITH CONCENTRATED FLOW (UNLESS PROPERLY REINFORCED), UPSTREAM OR DOWNSTREAM OF CULVERTS WITH CONCENTRATED FLOW, IN FRONT OF OR AROUND INLETS ON A GRADE WITH CONCENTRATED FLOW OR IN FLOWING STREAMS.

(c) FLOATING TURBIDITY BARRIER

PURPOSE: USED IN PERMANENT BODIES OF WATER TO RETAIN SEDIMENT AND FLOATING DEBRIS FROM A CONSTRUCTION AREA SO THAT REMOVAL OR CONTAINMENT OF THE MATERIAL IS POSSIBLE. THEY ARE ALSO USED TO CONTROL MIGRATION OF SUSPENDED SEDIMENTS.

(1) TYPE I, LIGHT DUTY, IS USED WHERE THERE IS LITTLE OR NO CURRENT, NO WIND AND NO WAVE ACTION.

TYPE II. MODERATE DUTY. IS USED WITH SOME CURRENT (<3.5 FT. PER SECOND) AND SOME EXPOSURE TO WIND.

(3) TYPE III, HEAVY DUTY, IS USED WITH GREATER CURRENT (3.5-5.0 FT. PER SECOND), MODERATE WIND AND WAVE ACTION

BARRIER MUST BE ATTACHED AT BOTH ENDS AND WEIGHTED ON THE BOTTOM.

MULTIPLE LINES OF BARRIER MAY BE USED IN SOME CIRCUMSTANCES FOR ADDITIONAL PROTECTION.

STANDARD PANELS FOR WATER DEPTHS ARE 5.0'. ADDITIONAL PANELS CAN BE USED FOR WATER DEPTHS > 5.0'.

(d) SOIL TRACKING PREVENTION DEVICE

PURPOSE: TEMPORARY STRUCTURES TO ASSIST WITH THE REMOVAL OF SOIL MATERIAL CAPTURED ON VEHICLE TIRES BEFORE THE VEHICLES ENTER THE ROADWAY.

(1) USE ONE DEVICE PER MILE WITH A MINIMUM OF TWO PER PROJECT.

USE ADDITIONAL DEVICES FOR CONSRUCTION AREAS THAT ARE NOT ADJACENT TO THE ROAD RIGHT OF WAY AND NO ACCESS IS PROVIDED THROUGH A SOIL TRACKING PREVENTION DEVICE.

(3) RRR PROJECTS SHOULD BE HANDLED ON A CASE BY CASE BASIS.

III. OTHER CONTROLS:

(1) WASTE DISPOSAL

(a) THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES.

ALL FERTILIZER AND CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.

NO SOLID MATERIALS, INCLUDING BUILDING AND CONSTRUCTION MATERIALS, SHALL BE DISCHARGED TO WETLANDS OR BURIED ON SITE.

ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATIONS.

(2) OFF-SITE VEHICLE TRACKING - WILL BE CONTROLLED BY THE FOLLOWING METHODS:

(a) LOADED HAUL TRUCKS ARE TO BE COVERED BY A TARPAULIN AT ALL TIMES.

(b) EXCESS DIRT ON ROAD WILL BE REMOVED DAILY.

(3) STATE AND FEDERAL REGULATIONS: PERMITS WILL BE REQUIRED FROM THE FOLLOWING AGENCIES:

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) PERMIT EXEMPTION FOR ROADWAY WIDENING

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERIC PERMIT FOR STORMWATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES.

(4) NON-STORMWATER (INCLUDING SPILL REPORTING)

THE CONTRACTOR WILL PROVIDE THE FDOT WITH AN EROSION AND SEDIMENT CONTROL PLAN THAT WILL INCLUDE SPILL CONTAINMENT, REPORTING, AND RESPONSES. THE PLAN SHALL SPECIFY WHAT MANAGEMENT PRACTICES AND CONTAINMENT METHODS WILL BE USED TO PREVENT POTENTIAL POLLUTANTS (FUEL, LUBRICANTS, HERBICIDES, ETC.) FROM SPILLING ONTO THE SOIL OR INTO THE SURFACE WATERS. IF A SPILL DOES OCCUR, OR IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT MANATEE COUNTY AT (941) 708-7480.

IV. MAINTENANCE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES WHEN NOTICE OF TERMINATION IS MAILED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND PROPER DISPOSAL OF SEDIMENT BUILDUP THROUGH THE LIFE OF THE INSTALLED EROSION AND SEDIMENT CONTROL DEVICES.

(1) ALL CONTROL MEASURES WILL BE MAINTAINED DAILY BY THE CONTRACTOR AND ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF NOTICE.

(2) SODDING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

(3) SYNTHETIC BALES SHALL BE MAINTAINED TO ENSURE THEIR USEFULNESS AND NOT BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.

(4) STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED TO PREVENT CLOGGING OF ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.

V. INSPECTION:

(1) THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAINFALL IN ACCORDANCE WITH THE NPDES PERMIT.

(2) ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED DAILY BY CONTRACTOR'S PERSONNEL WHO ARE F.D.E.P. CERTIFIED STORMWATER MANAGEMENT INSPECTORS.

(3) THE CONTRACTOR SHALL COMPLETE ALL SWPPP INSPECTION REPORT FORMS REQUIRED FOR THE NPDES PERMIT.

VI. TRACKING AND REPORTING:

(1) THE CONTRACTOR SHALL SUBMIT A WEEKLY REPORT TO THE DEPARTMENT DOCUMENTING THE DAILY INSPECTIONS AND MAINTENANCE OR REPAIRS TO THE EROSION AND SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL MAINTAIN ALL REQUIRED REPORTS AND COMPLETE ALL SWPPP INSPECTION FORMS.

(2) PREPARATION OF ALL THE CONTRACTOR'S REPORTS OF INSPECTION, MAINTENANCE AND REPAIRS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION, SHALL BE INCLUDED IN THE INDIVIDUAL COSTS OF THE EROSION AND SEDIMENT CONTROL DEVICES.

(3) THE CONTRACTOR SHALL USE THE SWPPP CONSTRUCTION INSPECTION REPORT FORM # 650-040-03, FOR DAILY INSPECTIONS.

AS NOTED HDR ENGINEERING, INC.

2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232 CERTIFICATE OF AUTHORIZATION 4213

DATE 09/2017 County PROJECT NO. 6086160

Manatee MANATEE COUNTY **PUBLIC WORKS**

DESIGN ENGINEER JASON L. STARR FL. LICENSE NO.

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STORMWATER POLLUTION PREVENTION PLAN NOTES (2) SHEET NO.

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