



BOARD OF COUNTY COMMISSIONERS ESCAMBIA COUNTY, FLORIDA ENGINEERING DEPARTMENT

PLANS PROPOSED FOR

INDEX OF ROADWAY PLANS

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WILLOWBROOK LAKE DAM REPAIR & IMPROVEMENTS

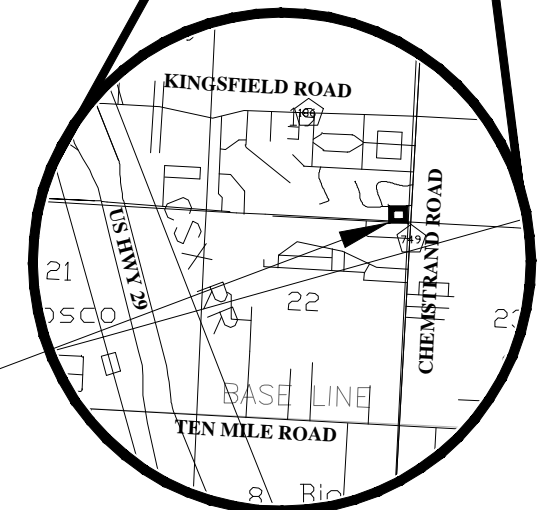
ESCAMBIA COUNTY PROJECT: ENGSALLY 0920-63
NRCS-EWP PROJECT: DSR-SAL-ESC-001

FINAL PLANS
FOR
BIDDING PURPOSES
JULY 2021



3298 SUMMIT BOULEVARD, SUITE 32
PENSACOLA, FLORIDA 32503
PHONE: (850) 332-7912
CERTIFICATE OF AUTHORIZATION #26889

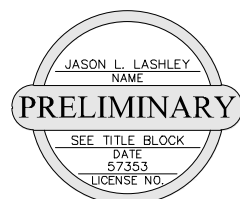
PROJECT SITE



VICINITY MAP

COMMISSIONERS

DISTRICT ONE	JEFF BERGOSH (VICE CHAIRMAN)
DISTRICT TWO	DOUG UNDERHILL
DISTRICT THREE	LUMON MAY
DISTRICT FOUR	ROBERT BENDER (CHAIRMAN)
DISTRICT FIVE	STEVEN BARRY



THIS DOCUMENT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING, RECORDATION
CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT

PROJECT MANAGER: Mr. John Rosenau	
SECTION / TOWNSHIP / RANGE: 22 / T-1-N / R-30-W	DISTRICT: V
PROJECT ENGINEER: Jason L. Lashley, P.E.	REG FLA ENG NO: 57353
SIGNATURE:	DATE:

P:\Projects_Directory\210201 - Willowbrook Lake Dam Repair and Improvements\01800 (CAD Drawings)\02-GENERAL NOTES.dwg, Aug 02, 2021 - 2:12:20PM, Elwera

GENERAL NOTES:

1.

THE CONTRACTORS SHALL NOTIFY THE COUNTY DESIGN ENGINEER OR DESIGNEE 48 HOURS PRIOR TO CONSTRUCTION.
2.

ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY THE ESCAMBIA COUNTY ENGINEER SHALL BE COMPLIED WITH IN EVERY DETAIL.
3.

ALL ROADS DAMAGED BY CONSTRUCTION OPERATIONS ARE TO BE PATCHED OR RECONSTRUCTED AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
4.

THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM INCREASED RUNOFF DURING CONSTRUCTION BY PROVIDING SILT FENCE AND/OR STAKED HAY BALES AS REQUIRED BY THE FLORIDA STORMWATER EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL, 2008 EDITION, OR AS INDICATED ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.
5.

ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ESCAMBIA COUNTY OR ITS DESIGNEE WILL ASSIST CONTRACTOR WITH REQUIRED PERMITS.
6.

THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.
7.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL) AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENTATION IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY ESCAMBIA COUNTY HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS ARE DISTURBED OR DESTROYED THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE MONUMENTS AND HAVE THE MONUMENTS POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.
8.

EXISTING DRAINAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
9.

THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
10.

EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.
11.

ALL ROADWAY CONSTRUCTION SHALL COMPLY WITH THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
12.

ALL MATERIALS, TESTING AND CONSTRUCTION METHODS SHALL CONFORM TO THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
13.

ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.
14.

EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT SHALL BE KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLES. ALL OTHER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE TAKEN DOWN AND STOCKPILED WITHIN THE R/W LIMITS BY THE CONTRACTOR AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE. ANY EXISTING SIGNS THAT ARE TO BE RELOCATED AND ARE DAMAGED BEYOND USE BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
15.

THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE 10' OPEN LANE AT ALL TIMES. NO OPEN EXCAVATION SHALL REMAIN OVER NIGHT. CONTRACTOR SHALL RESTORE ROAD TO TWO LANES OF TRAFFIC AT THE END OF EACH WORK DAY.
16.

CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
17.

ONLY ACCESS TO THE ROAD R/W AS SHOWN IS GUARANTEED BY THE COUNTY. PRIVATE R/W REQUIRED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION SHALL BE ACQUIRED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION OR ASSISTANCE FROM THE COUNTY.
18.

IN THE EVENT THAT SURVEY MONUMENTATION OR REFERENCE POINTS ARE MISSING OR HAVE BEEN DESTROYED, PLEASE CONTACT:

MR. JOE BARRETT, PLS
ESCAMBIA COUNTY SURVEYOR
3363 WEST PARK PLACE
PENSACOLA, FLORIDA 32505 PH (850) 595-3427

MR. BRADLEY J. ROBERTS, PLS
SIGMA CONSULTING GROUP, INC.
10305 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA PH (225) 485-2419
19.

VEGETATION ON R/W AND EASEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED ON THE PLAN SHEETS. COST OF SAID RESTORATION SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.
20.

GRADED AGGREGATE BASE SHALL BE REQUIRED WHERE THE SEASONAL HIGH GROUND WATER ENCROACHES WITHIN TWO (2) FEET OF THE BOTTOM OF BASE.
21.

ALL TREES WITHIN LIMITS OF CONSTRUCTION SHALL REMAIN UNLESS OTHERWISE NOTED IN PLANS.
22.

ALL COMPACTED FILL SHALL BE PLACED IN 4" LIFTS FOR HAND POWERED TAMPERS AND 8" LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS.
23.

MAINTENANCE OF TRAFFIC AS PER FDOT INDEX 600.
24.

ALL EXISTING MAILBOXES INTERFERING WITH NEW CONSTRUCTION SHALL BE RELOCATED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH POSTAL REQUIREMENTS AND IN ACCORDANCE WITH ESCAMBIA COUNTY TECHNICAL SPECIFICATION, FDOT DESIGN STANDARDS AND UNITED POSTAL REQUIREMENTS. ALL EXISTING BRICK MAILBOXES WITHIN LIMITS OF CONSTRUCTION OR COUNTY RIGHT OF WAY SHALL BE REMOVED AND PLACED ON THE PROPERTY LINE OF THE OWNER. CONTRACTOR SHALL REPLACE EXISTING BRICK MAILBOX WITH APPROVED PLASTIC BREAK AWAY MAILBOX.
25.

THE CONTRACTOR SHALL, AT A MINIMUM, MATCH EXISTING SIGNING AND PAVEMENT MARKINGS. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST FDOT SPECIFICATIONS AND STANDARD PLANS.
26.

WHERE UNSUITABLE MATERIAL, AS DEFINED BY THE COUNTY SPECIFICATIONS SECTION 02300, 1.3(l), IS ENCOUNTERED IN THE AREAS PROPOSED FOR PAVING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY ENGINEER OR DESIGNEE PRIOR TO ANY EXCAVATION.
27.

PIPE LENGTHS SHOWN IN THE PLANS DO NOT INCLUDE THE LENGTH OF PIPE THAT MUST BE INSTALLED WITH THE MITERED END SECTION. THEREFORE, ALL PIPES LENGTHS ASSOCIATED WITH MITERED END SECTIONS SHALL BE PAID FOR IN THE UNIT COST OF THE MITERED END SECTION.

29.

IF ARCHAEOLOGICAL MATERIAL/PREHISTORIC ARTIFACTS SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME, THE PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE APPLICANT/RECIPIENT, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AND THE DSH/FEMA REGION IV ENVIRONMENTAL OFFICER AND FDEM STATE ENVIRONMENTAL LIAISON OFFICER FOR FURTHER GUIDANCE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.
30.

IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH F.S. 872.05.

UTILITY NOTES:

1.

THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.
2.

UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES. KNOWN UTILITIES OWNERS INCLUDE:

SEWER/WATER - EMERALD COAST UTILITY AUTHORITY
MR. BRANDON KNIGHT, P.E
P.O. BOX 15311
PENSACOLA, FL. 32514 PH: (850) 969-6650
BRANDON.KNIGHT@ECUA.FL.GOV

NATURAL GAS - PENSACOLA ENERGY
MS. DIANE MOORE
1625 ATWOOD DRIVE
PENSACOLA, FL. 32514 PH: (850) 479-5319
DMOORE@CITYOFFPENSACOLA.COM

TELEPHONE - AT&T FLORIDA
MR. ROB ST. PIERRE
605 W GARDEN ST 2ND FLOOR
PENSACOLA, FL. 32502 PH: (850) 623 -3811
RS634Y@ATT.COM

TRAFFIC DEPARTMENT - ESCAMBIA COUNTY PUBLIC WORKS
MR. JOHNNY COX
3363 WEST PARK PLACE
PENSACOLA, FL. 32505 PH:(850) 595-3404

ELECTRIC - NEXTERA ENERGY
MR. SCOTT LEE
5120 DOGWOOD DRIVE
MILTON, FL. 32570 PH: (850) 444-6420
GARY.LEE@NEXTERAENERGY.COM

CABLE - COX CABLE
MR. RICHARD KOESTER
3405 MCLEMORE DRIVE
PENSACOLA, FL. 32514 PH: (850) 602-2182
RICHARD.KOESTER@COX.COM

SUNSHINE STATE ONE-CALL
7200 LAKE ELLENOR DRIVE, SUITE 200
ORLANDO, FL. 32809 PH: (800) 432-4770
3.

AT&T FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK.
4.

ALL CABLE DAMAGE MUST BE REPORTED TO THE ATT FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.
5.

ALL VEHICLE LOOP INSTALLATION SHALL BE DONE AS PER FDOT INDEX 660-001.
6.

CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
7.

UTILITIES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF UTILITY OWNERS.

DEWATERING NOTES:

1.

DEWATERING IS EXPECTED FOR THE CONSTRUCTION OF THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE DAM EMBANKMENT IS CONSTRUCTED IN DRY CONDITIONS. CONSTRUCTION AND DEMOLITION OF TEMPORARY DEWATERING SYSTEM, INCLUDING ALL MATERIALS, LABOR, AND OTHER WORK EFFORT ANCILLARY TO THE SUCCESSFUL COMPLETION OF THIS CONSTRUCTION ACTIVITY SHALL BE INCLUDED IN THE CONTACT UNIT PRICE FOR DEWATERING, LUMP SUM. FOR ADDITIONAL SOILS INFORMATION AND SUBGRADE PREPARATION REFER TO PROJECT GEOTECHNICAL REPORT PREPARED BY: NOVA ENGINEERING AND ENVIRONMENTAL DATED JULY 12, 2016 (NOVA PROJECT NUMBER: 8216027)
2.

DEWATERING MAY INCLUDE BUT NOT BE LIMITED TO COFFER DAM, WELL POINT SYSTEM, OR BYPASS METHODOLOGIES.
3.

ALL DEWATERING COSTS ASSOCIATED WITH THE PERMITTING, INSTALLATION, MAINTENANCE AND CONSTRUCTION OF THE PROPOSED DEWATERING SYSTEM SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DEWATERING, LUMP SUM. THE CONTRACTOR SHALL SUBMIT FOR PERMITS REQUIRED FOR DEWATERING ACTIVITIES.
4.


THE CONTRACTOR SHALL PROVIDE A DEWATERING/ DIVERSION PLAN TO ESCAMBIA COUNTY FOR REVIEW PRIOR TO THE START OF ANY CONSTRUCTION.

NO.	REVISION	DATE			

Project Number: 210201
Date: JULY 2021
Drawn By: F.E.A.
Designed By: F.E.A.
Checked By: J.L.L.
Sheet: 2

WILLOWBROOK LAKE DAM
REPAIR & IMPROVEMENTS

GENERAL NOTES SHEET



BOARD OF COUNTY COMMISSIONERS
ESCAMBIA COUNTY, FLORIDA
ENGINEERING DEPARTMENT



SIGMA
CONSULTING
GROUP, INC.

3208 SUMMIT BOULEVARD, SUITE 32
PENSACOLA, FLORIDA 32503
PHONE: (850) 332-7912
CERTIFICATE OF AUTHORIZATION #26889

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THE FOLLOWING NARRATIVE OF THE STORMWATER POLLUTION PREVENTION PLAN CONTAINS REFERENCES TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE DESIGN STANDARDS, AND OTHER SHEETS OF THESE CONSTRUCTION PLANS. THE FIRST SHEET OF THE CONSTRUCTION PLANS (CALLED THE KEY SHEET) CONTAINS AN INDEX TO THE OTHER SHEETS. 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.

1.0 SITE DESCRIPTION:

1.A. NATURE OF CONSTRUCTION ACTIVITY:

THE PROJECT CONSISTS OF REMOVAL OF EXISTING EMBANKMENT SECTION AND DAMAGED SPILLWAY, DEWATERING, CONSTRUCTION OF ROADSIDE GRADING, CONSTRUCTION OF DITCH AND STORM DRAIN SYSTEMS, CONSTRUCTION OF CULVERT WINGWALLS, AND CONSTRUCTION OF PROPOSED DAM EMBANKMENT SECTION AND SPILLWAY.

1.B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF MAJOR ACTIVITIES DESCRIBED BELOW, UNLESS THE CONTRACTOR PROPOSES A DIFFERENT SEQUENCE THAT IS EQUAL OR BETTER AT CONTROLLING EROSION AND TRAPPING SEDIMENT AND IS APPROVED BY THE ENGINEER.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED.

1. CLEARING AND GRUBBING, EARTHWORK FOR EMBANKMENT DEMOLITION.
2. CLEARING AND GRUBBING, EARTHWORK FOR DEWATERING ACTIVITIES.
3. CLEARING AND GRUBBING, EARTHWORK FOR EMBANKMENT CONSTRUCTION.

1.C. AREA ESTIMATES:

TOTAL SITE AREA: 1.40 ACRES.
TOTAL AREA TO BE DISTURBED: 1.40 ACRES.

1.D. RUNOFF DATA:

RUNOFF COEFFICIENTS:
BEFORE: 0.35
DURING: 0.35
AFTER: 0.35
SOILS DATA: SILT / LOAM / UNSUITABLE MATERIALS AND DEWATERING IS ANTICIPATED
FOR ADDITIONAL SOILS DATA AND CULVERT BASE PREPARATION SEE PROJECT GEOTECHNICAL REPORT PREPARED BY:
NOVA ENGINEERING AND ENVIRONMENTAL DATED JULY 12, 2016 (NOVA PROJECT NUMBER: 8216027).

OUTFALL INFORMATION:

THERE IS 1 EXISTING OUTFALL:

OUTFALL #1 DESCRIPTION: DAM REPLACEMENT LOCATION
CHEMSTRAND ROAD (CR 749) AT CLEAR CREEK
LOCATION: CHEMSTRAND ROAD APPROXIMATELY 3,300 FEET SOUTH OF KINGSFIELD ROAD (CR 186)
DRAINAGE AREA: 1,900 ACRES
RECEIVING WATER(S): CLEAR CREEK -> ESCAMBIA RIVER -> ESCAMBIA BAY

1.E. SITE MAP:

THE CONSTRUCTION PLANS ARE BEING USED AS THE SITE MAPS. THE LOCATION OF THE REQUIRED INFORMATION IS DESCRIBED BELOW. THE SHEET NUMBERS FOR THE PLAN SHEETS REFERENCED ARE IDENTIFIED ON THE KEY SHEET OF THESE CONSTRUCTION PLANS.

- * DRAINAGE PATTERNS: THE DRAINAGE BASIN DIVIDES AND FLOW DIRECTIONS ARE SHOWN ON THE DRAINAGE MAP.
- * APPROXIMATE SLOPES: THE SLOPES OF THE SITE CAN BE SEEN IN PLAN/PROFILE.
- * AREAS OF SOIL DISTURBANCE: THE AREAS TO BE DISTURBED ARE INDICATED ON THE PLAN/PROFILE SHEETS. ANY AREAS WHERE PERMANENT FEATURES ARE SHOWN TO BE CONSTRUCTED ABOVE OR BELOW GROUND WILL BE DISTURBED.
- * AREAS NOT TO BE DISTURBED: ESSENTIALLY THE ENTIRE PROJECT SITE WILL BE DISTURBED.
- * LOCATIONS OF TEMPORARY CONTROLS: TO BE SHOWN ON THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN.
- * SEDIMENTATION BASIN AND FLOATING / STAKED TURBIDITY BARRIER ARE SUGGESTED
- * LOCATIONS OF PERMANENT CONTROLS: SOD ALL DISTURBED NON-PAVED AREAS (EXCLUDING DITCH BOTTOM)
- * AREAS TO BE STABILIZED: ROADSIDE SWALES/DITCHES, LATERAL CULVERT DITCH SLOPES, AND AT FURTHEST DOWNSTREAM DITCH SECTION AT LOWER END OF CONSTRUCTION ACTIVITIES.

1.F. RECEIVING WATERS:
SEE ITEM 1.D FOR THE OUTFALL LOCATIONS AND RECEIVING WATER NAMES. THERE ARE JURISDICTIONAL WETLANDS ON THE PROJECT SITE.

2.0 CONTROLS:

2.A. EROSION AND SEDIMENT CONTROLS:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STABILIZATION AND STRUCTURAL PRACTICES. THE FOLLOWING RECOMMENDED GUIDELINES ARE BASED ON THE GRADING PLAN OUTLINED IN THE CONSTRUCTION PLANS. THE CONTRACTOR MAY CHOOSE TO ACCEPT THE FOLLOWING GUIDELINES OR MODIFY THEM IN THE SEDIMENT AND EROSION CONTROL PLAN, SUBJECT TO APPROVAL BY THE ENGINEER. AS WORK PROGRESSES, THE CONTRACTOR SHALL MODIFY THE PLAN TO ADAPT TO SEASONAL VARIATION, CHANGES IN CONSTRUCTION ACTIVITIES, AND THE NEED FOR BETTER PRACTICES.

FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS AFTER CLEARING AND GRUBBING NECESSARY FOR INSTALLATION OF CONTROLS BUT BEFORE BEGINNING OTHER WORK FOR THE CONSTRUCTION PHASE. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED.

2.A.1 STABILIZATION PRACTICES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE STABILIZATION PRACTICES PROPOSED TO CONTROL EROSION. THE CONTRACTOR SHALL INITIATE ALL STABILIZATION MEASURES AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. THE STABILIZATION PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE PARAGRAPH ABOVE REFERS TO A 7 DAY LIMIT BEFORE INITIATING STABILIZATION. THE DEP GENERIC PERMIT SPECIFIES 7 DAYS, BUT STRICTER REQUIREMENTS FROM OTHER PERMITTING AGENCIES WILL OFTEN APPLY AND SHOULD BE NOTED.

TEMPORARY:
* ARTIFICIAL COVERINGS IN ACCORDANCE WITH SPECIFICATION SECTION 104.
* TURF AND SOD IN ACCORDANCE WITH SPECIFICATION SECTION 104.

PERMANENT:
* SOD IN ACCORDANCE WITH SPECIFICATION SECTION 570.

2.A.2 STRUCTURAL PRACTICES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT AND OTHERWISE PREVENT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SEDIMENT CONTROLS SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL. THE STRUCTURAL PRACTICES SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER:

TEMPORARY:
* SEDIMENT BARRIERS IN ACCORDANCE WITH DESIGN STANDARD 102 AND SPECIFICATION SECTION 104.
* INLET PROTECTION IN ACCORDANCE WITH DESIGN STANDARD 102 AND SPECIAL DETAILS SHOWN IN THE TTC PLAN.
* SEDIMENT CONTAINMENT SYSTEM: SILT FENCE, HAY BALES, AND FLOATING/STAKED TURBIDITY BARRIER WILL BE UTILIZED AS THE TEMPORARY SEDIMENT CONTAINMENT SYSTEM.

PERMANENT:
* SOD.

2.B STORMWATER MANAGEMENT:

ARMORED SWALE AND STORM DRAIN PIPE WILL BE CONSTRUCTED TO CONVEY RUNOFF TO THE STORMWATER SYSTEM.

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS TO PREVENT THE DISCHARGE OF SOLID MATERIALS, INCLUDING BUILDING MATERIALS, TO WATERS OF THE UNITED STATES. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER:

- * PROVIDING LITTER CONTROL AND COLLECTION WITHIN THE PROJECT DURING CONSTRUCTION ACTIVITIES.
- * DISPOSING OF ALL FERTILIZER OR OTHER CHEMICAL CONTAINERS ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
- * DISPOSING OF SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS OFF THE PROJECT SITE BUT NOT IN SURFACE WATERS, OR WETLANDS.

2.C.2 OFF-SITE VEHICLE TRACKING & DUST CONTROL:
IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATING DUST. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

- * COVERING LOADED HAUL TRUCKS WITH TARPAULINS.
- * REMOVE EXCESS DIRT FROM ROADS DAILY.
- * STABILIZING CONSTRUCTION ENTRANCES ACCORDING TO FDOT DESIGN STANDARD 106.
- * USING ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND HAULING OPERATIONS.

2.C.3 STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS:

IN THE SECTION 104 EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROPOSED PROCEDURES TO COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL, AND SANITARY SEWER OR SEPTIC SYSTEMS.

2.C.4 FERTILIZERS AND PESTICIDES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL DESCRIBE THE PROCEDURES FOR APPLYING FERTILIZERS AND PESTICIDES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF SECTION 570 OF THE SPECIFICATIONS.

2.C.5 TOXIC SUBSTANCES:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A LIST OF TOXIC SUBSTANCES THAT ARE LIKELY TO BE USED ON THE JOB AND PROVIDE A PLAN ADDRESSING THE GENERATION, APPLICATION, MIGRATION, STORAGE, AND DISPOSAL OF THESE SUBSTANCES.

2.D.4 APPROVED STATE AND LOCAL PLANS AND PERMITS:

- * SEE CONSTRUCTION DOCUMENTS

3.0 MAINTENANCE:

IN THE SEDIMENT AND EROSION CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE A PLAN FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT CONSTRUCTION. THE MAINTENANCE PLAN SHALL AT A MINIMUM, COMPLY WITH THE FOLLOWING:

- * SILT FENCE: MAINTAIN PER SECTION 104. THE CONTRACTOR SHOULD ANTICIPATE REPLACING SILT FENCE ON 12 MONTH INTERVALS.
- * SEDIMENT BARRIERS : REMOVE SEDIMENT AS PER MANUFACTURER'S RECOMMENDATIONS OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS.

4.0 INSPECTIONS:

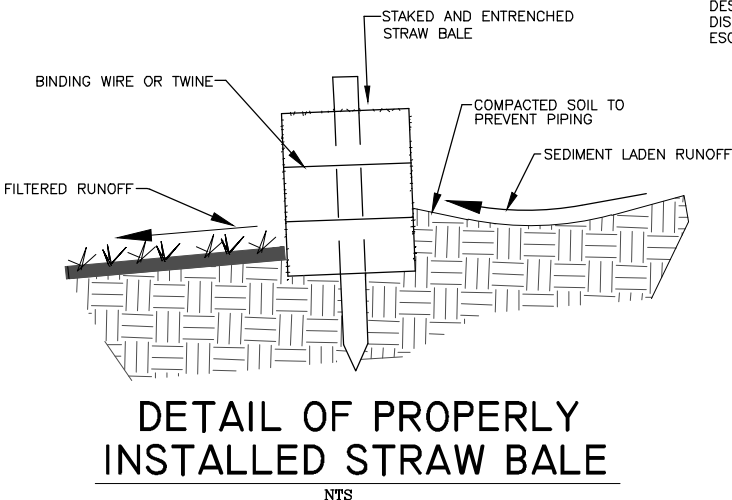
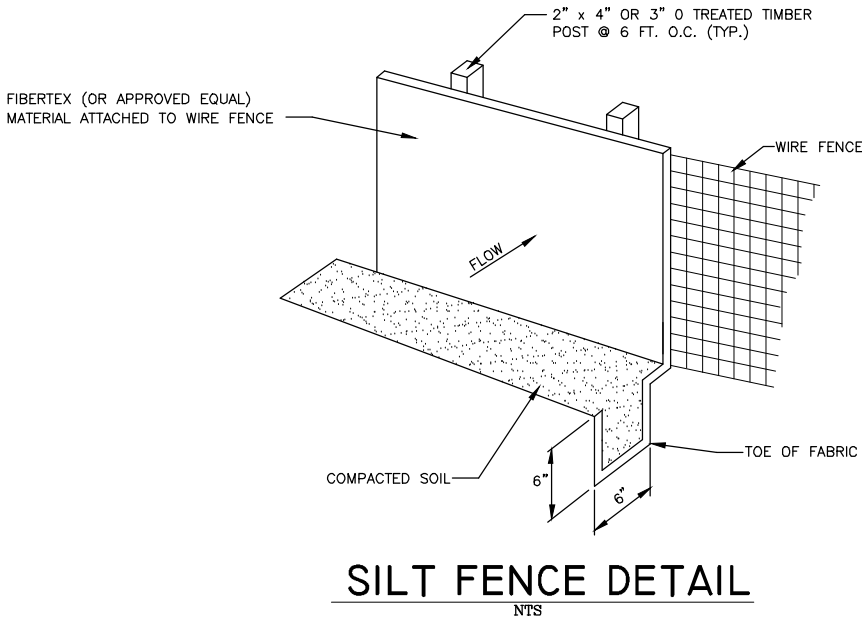
QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. TO COMPLY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES AND RECORD THE DAILY RAINFALL. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.

- * POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM DRAIN SYSTEMS.
- * DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- * AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
- * STRUCTURAL CONTROLS.
- * STORMWATER MANagements SYSTEMS.
- * LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTIONS THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER. IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, AS APPROVED BY THE ENGINEER.

5.0 NON-STORMWATER DISCHARGES:

IN THE SECTION 104 EROSION CONTROL PLAN, THE CONTRACTOR SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES (EXCEPT FLOWS FROM FIRE FIGHTING ACTIVITIES). THE CONTRACTOR SHALL DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION OF THESE NON-STORMWATER DISCHARGES. IF THE CONTRACTOR ENCOUNTERS CONTAMINATED SOIL OR GROUNDWATER, CONTACT ESCAMBIA COUNTY ENGINEERING.



WILLOWBROOK LAKE DAM
REPAIR & IMPROVEMENTS

SWPPP NOTES

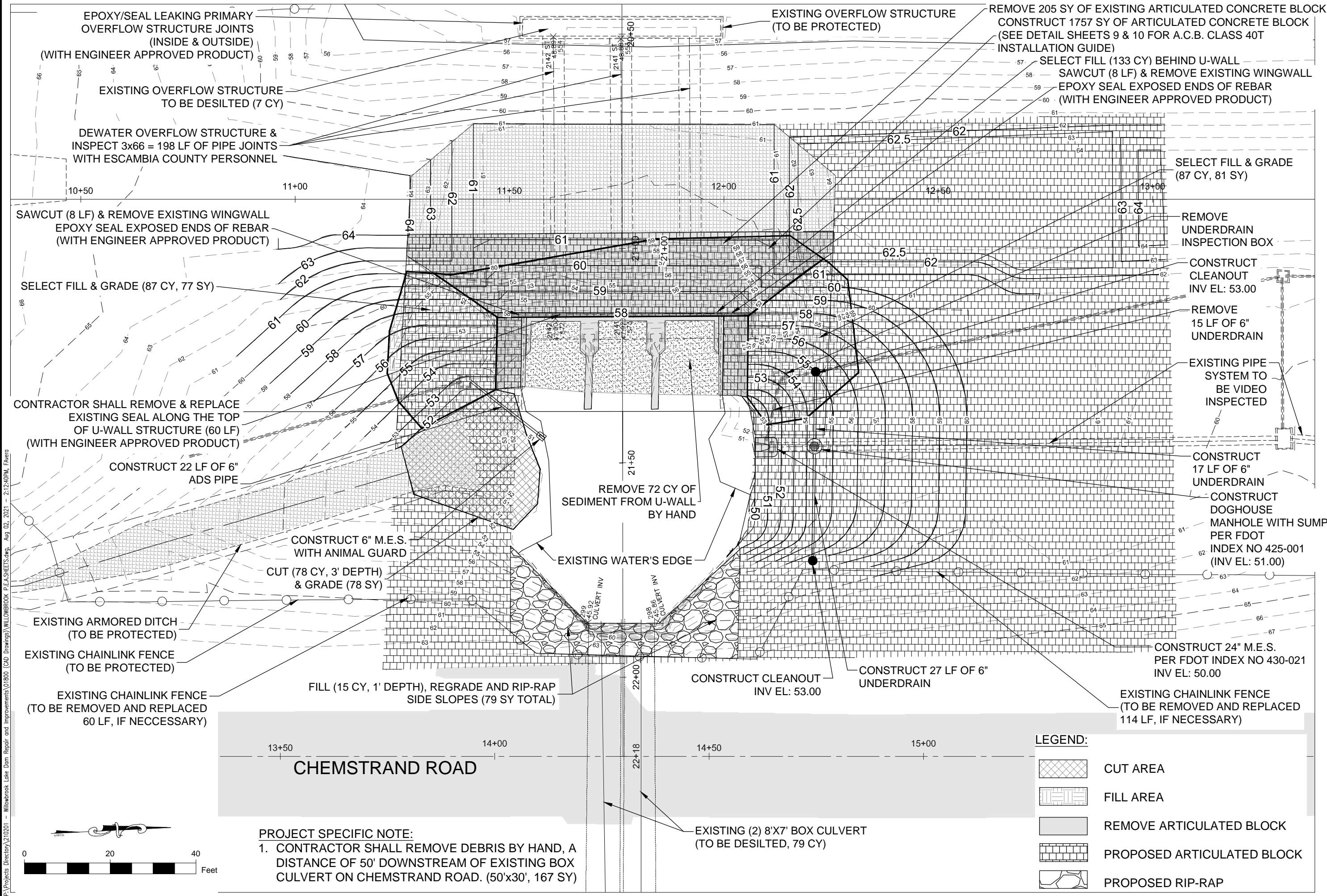
NO		REVISION	DATE

Project Number:	210201
Date:	JULY 2021
Drawn By:	F.E.A.
Designed By:	F.E.A.
Checked By:	J.L.L.
Sheet:	3

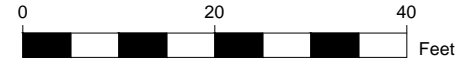
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ESCAMBIA COUNTY, FLORIDA
ENGINEERING DEPARTMENT



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3208 SUMMIT BOULEVARD, SUITE 32
PENSACOLA, FLORIDA 32503
PHONE: (850) 332-7912
CERTIFICATE OF AUTHORIZATION #26889



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PROJECT SPECIFIC NOTE:
1. CONTRACTOR SHALL REMOVE DEBRIS BY HAND, A DISTANCE OF 50' DOWNSTREAM OF EXISTING BOX CULVERT ON CHEMSTRAND ROAD. (50'x30', 167 SY)

LEGEND:	
	CUT AREA
	FILL AREA
	REMOVE ARTICULATED BLOCK
	PROPOSED ARTICULATED BLOCK
	PROPOSED RIP-RAP

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WILLOWBROOK LAKE
DAM REPAIRS & IMPROVEMENTS

GRADING PLAN

NO.	REVISION	DATE

Project Number:
210201

Date:
JULY 2021

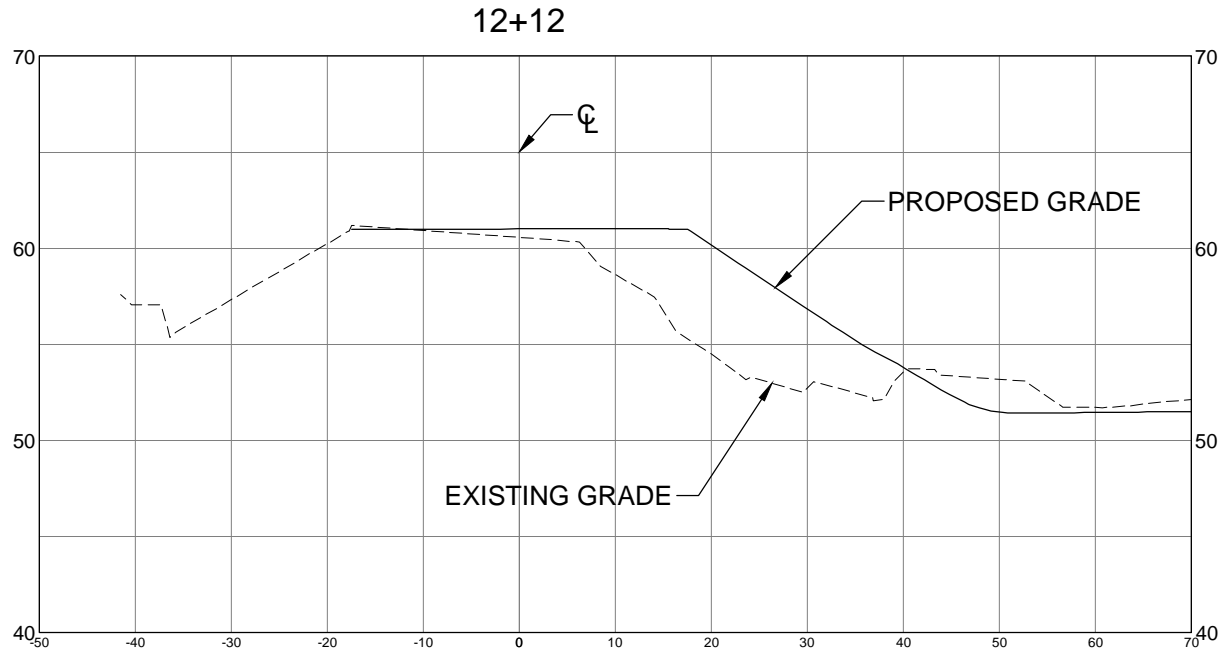
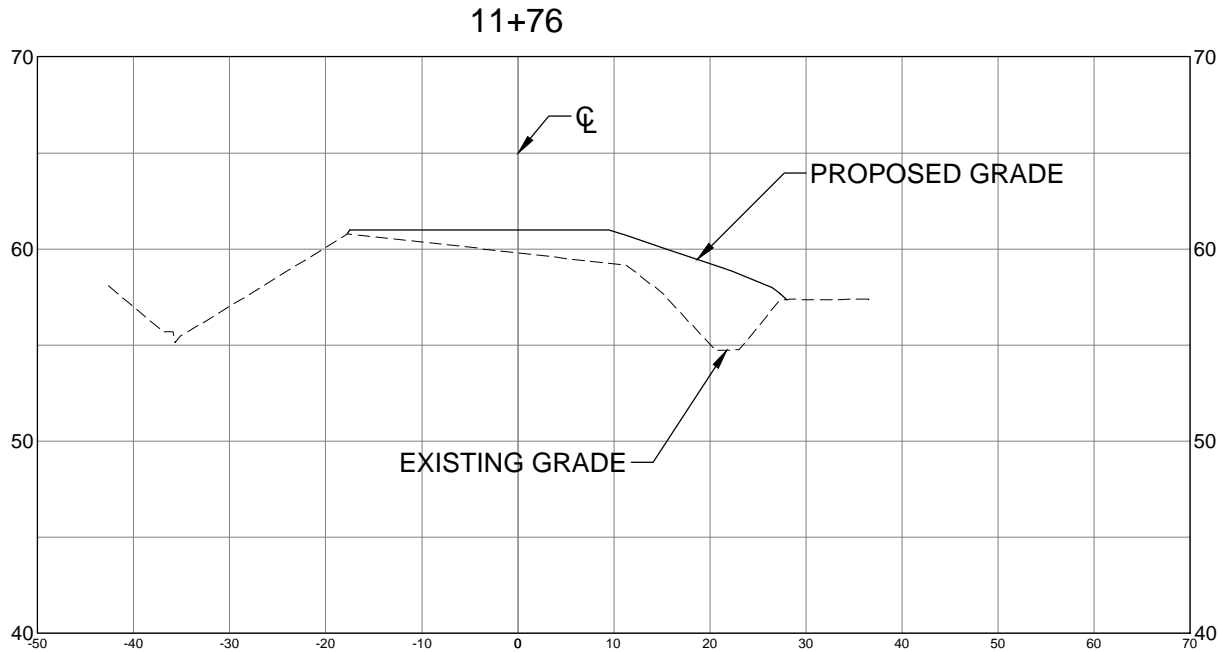
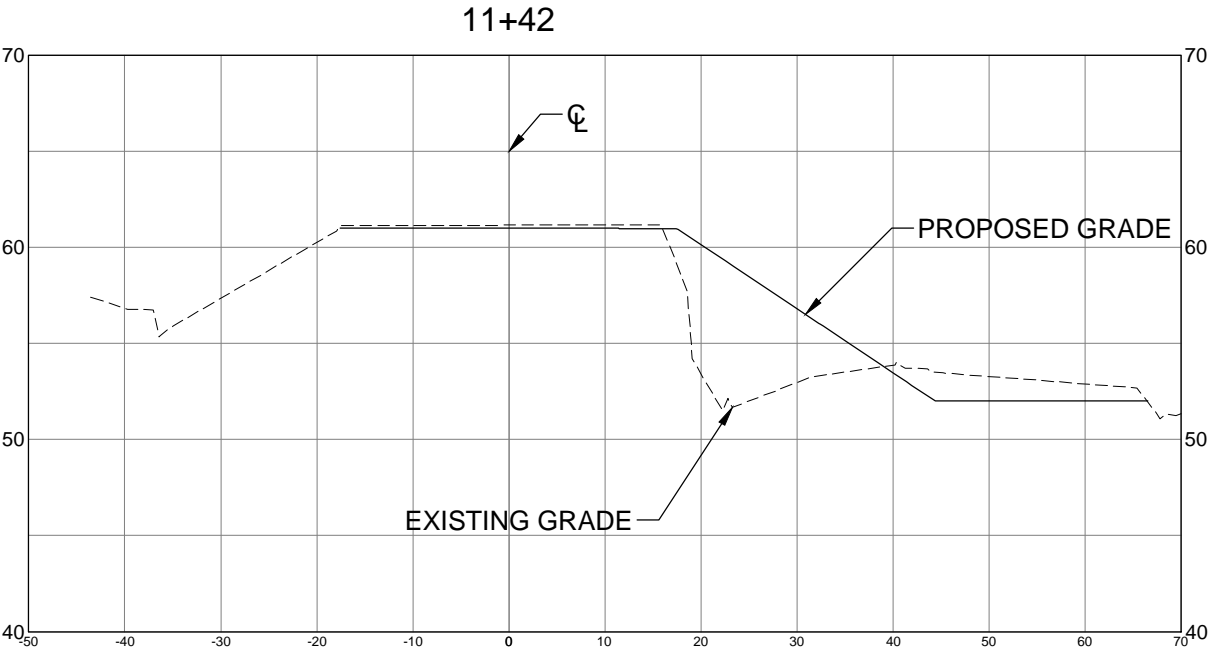
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F.E.A.

Designed By:
F.E.A.

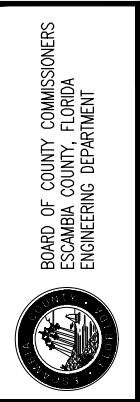
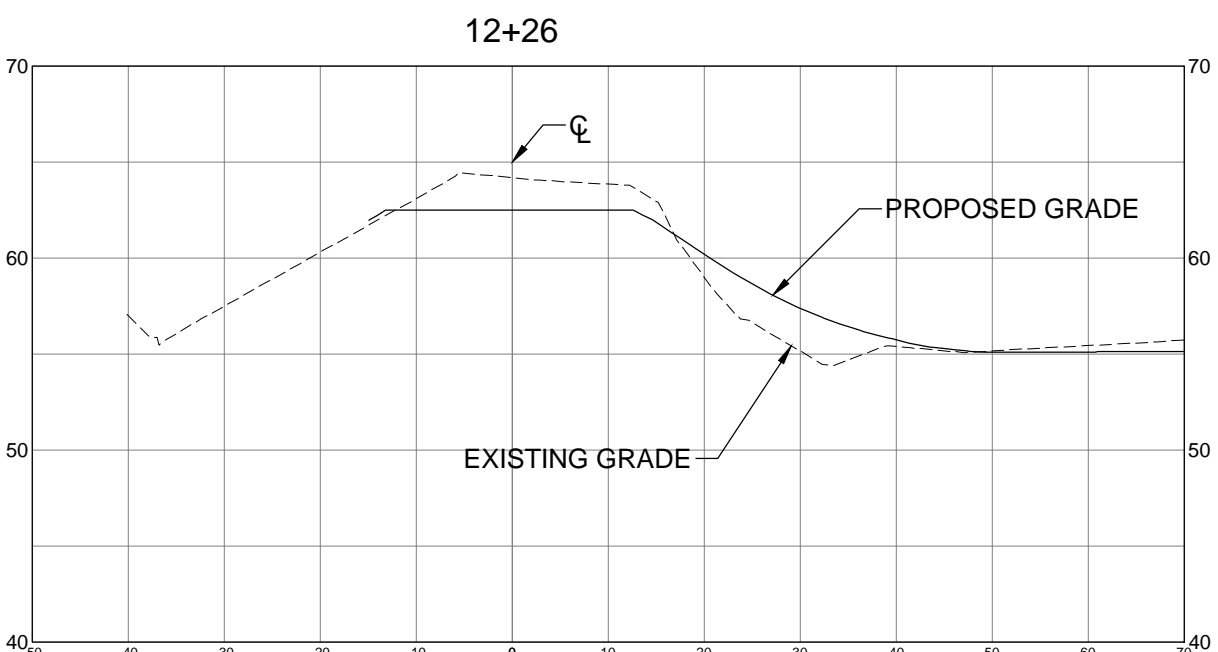
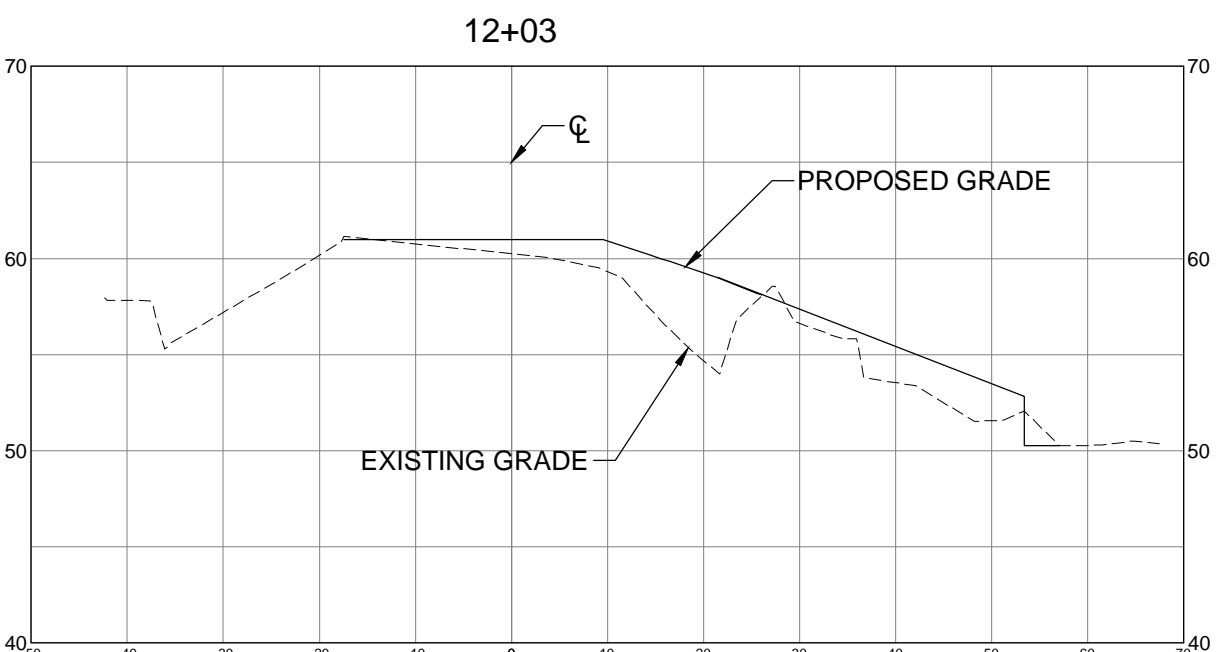
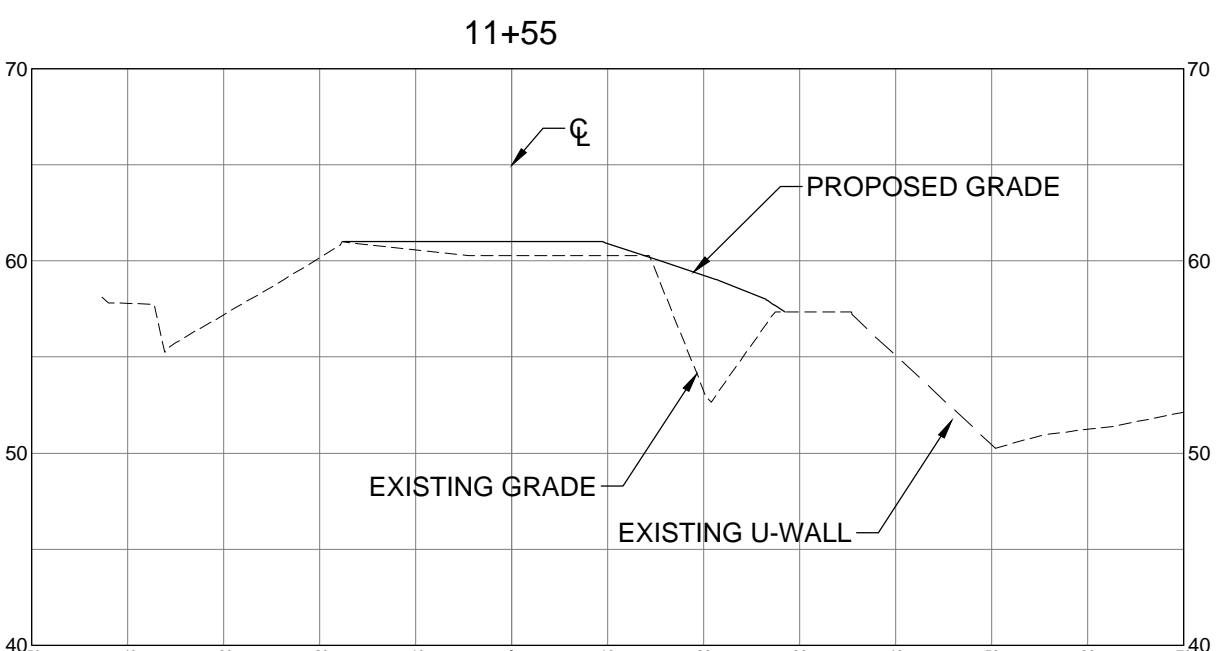
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VERTICAL SCALE = 1"=10'

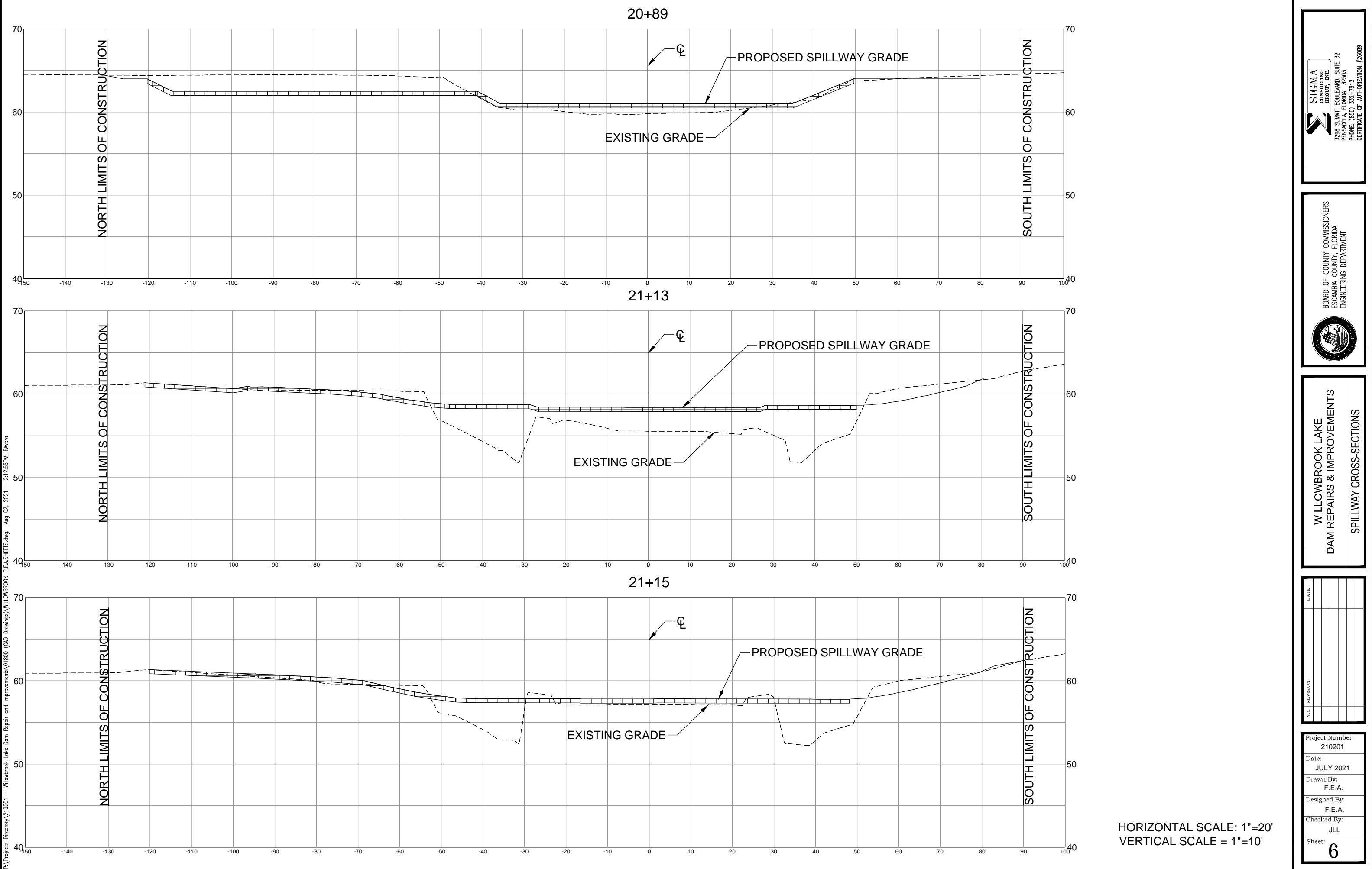


WILLOWBROOK LAKE
DAM REPAIRS & IMPROVEMENTS
DAM CROSS-SECTIONS

NO.	REVISION	DATE

Project Number:
210201
Date:
JULY 2021
Drawn By:
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5

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WILLOWBROOK LAKE
DAM REPAIRS & IMPROVEMENTS

SPILLWAY CROSS-SECTIONS

NO.	REVISION	DATE

Project Number:
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Date:
JULY 2021

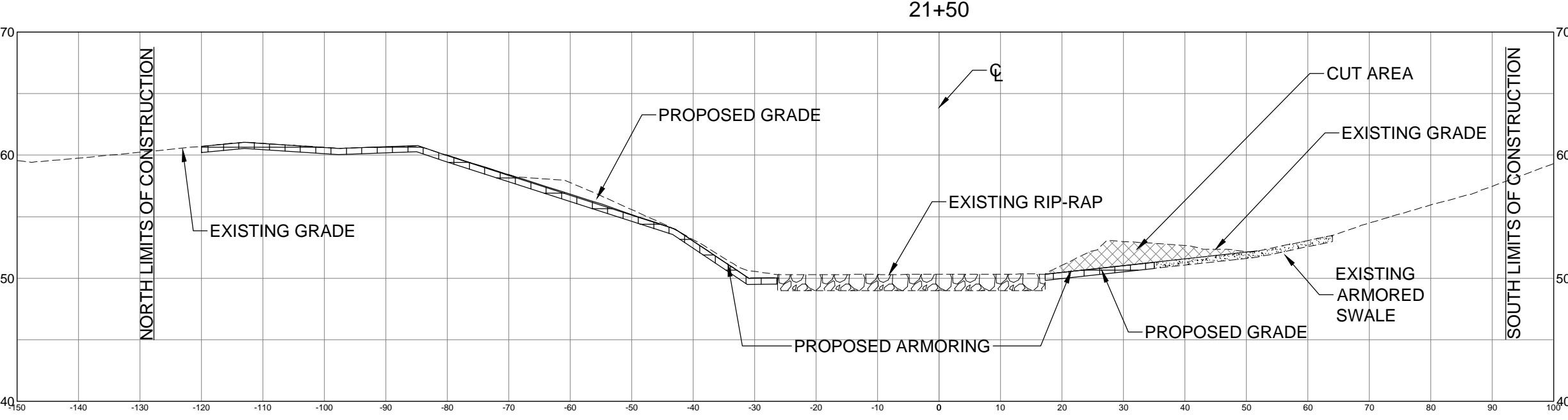
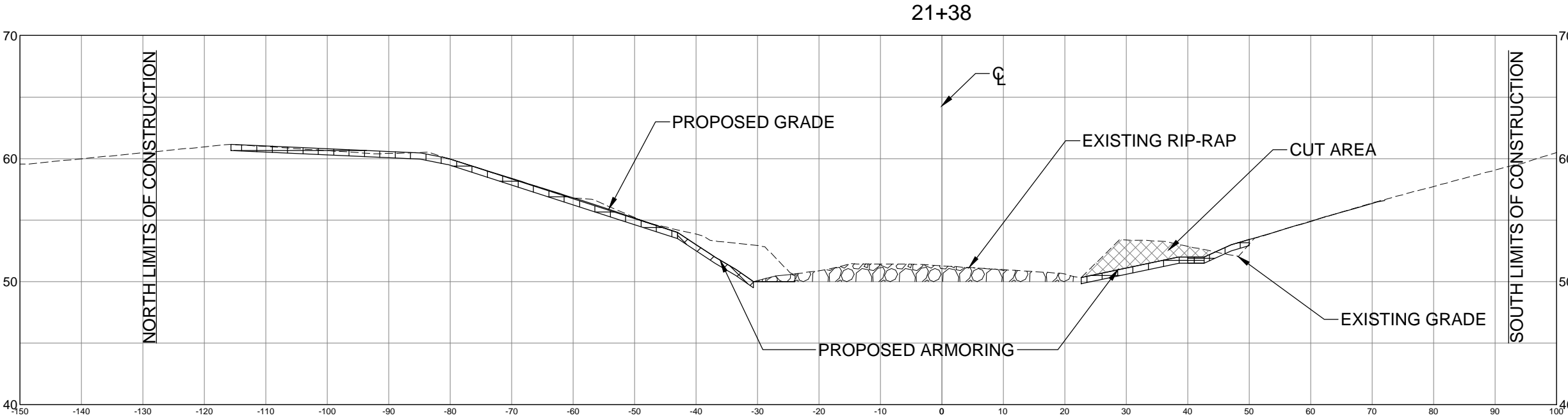
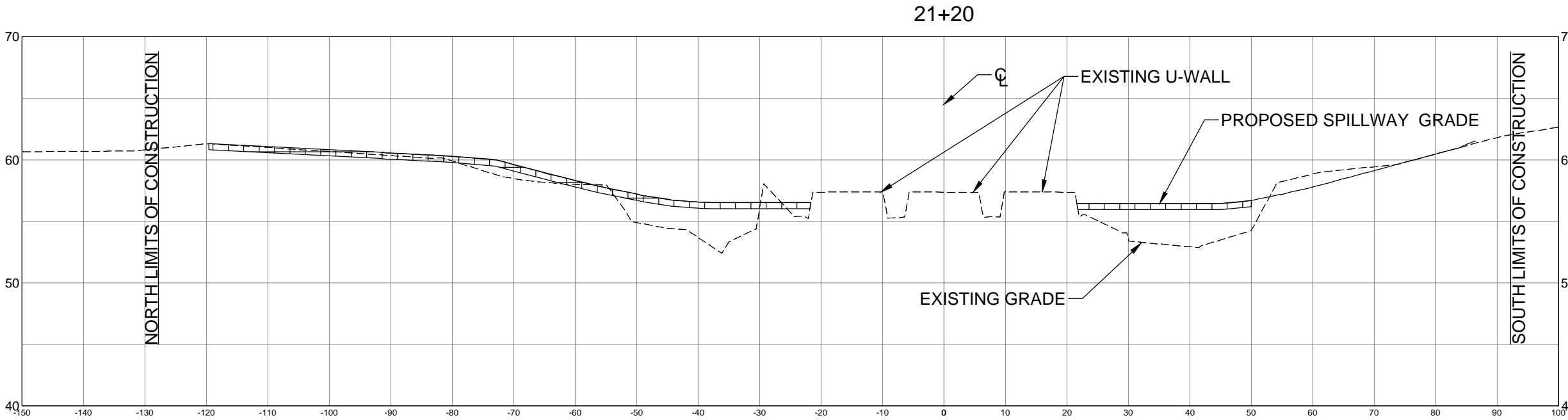
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Designed By:
F.E.A.

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HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE = 1"=10'

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WILLOWBROOK LAKE
DAM REPAIRS & IMPROVEMENTS

SPILLWAY CROSS-SECTIONS

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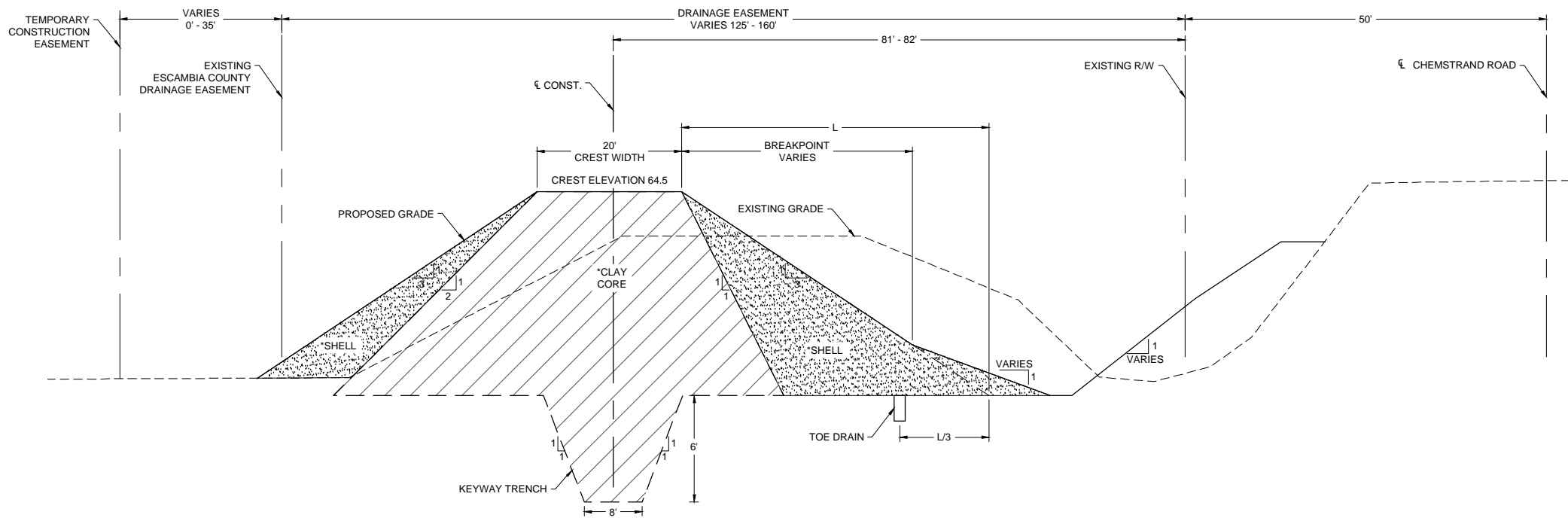
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Designed By:
F.E.A.

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Sheet:
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*** NOTES**

1. CLAY CORE AND SHELL MATERIAL SHALL CONFORM TO THE GEOTECHNICAL REQUIREMENTS SPECIFIED IN THE GEOTECHNICAL REPORT PREPARED BY NOVA ENGINEERING & ENVIRONMENTAL DATED JULY 12, 2016 (PROJECT #8216027)


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Date:	JULY 2021
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Designed By:	F.E.A.
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**WILLOWBROOK LAKE
DAM REPAIRS & IMPROVEMENTS**
TYPICAL SECTION

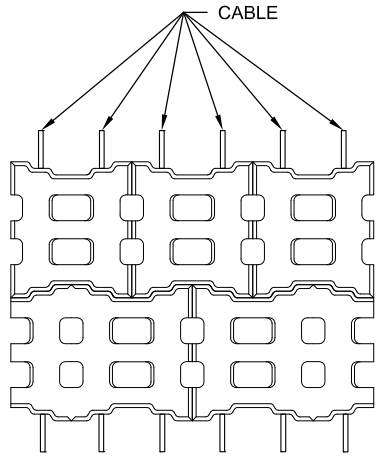


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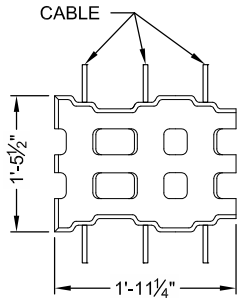


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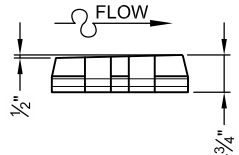
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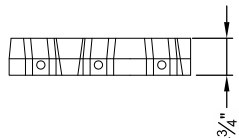
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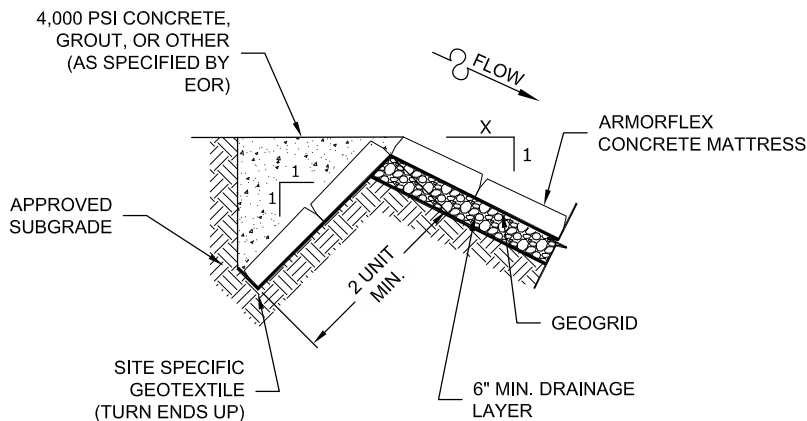


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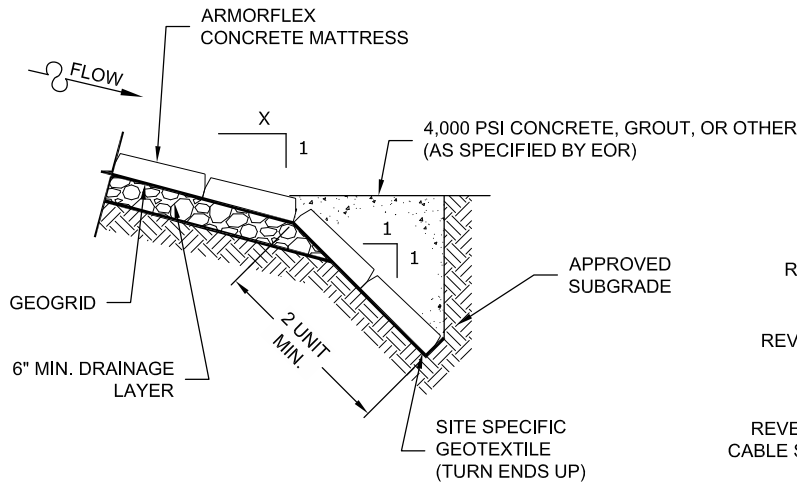


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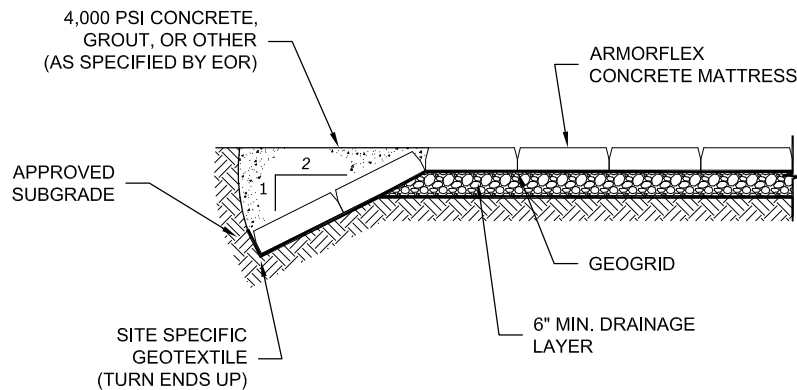
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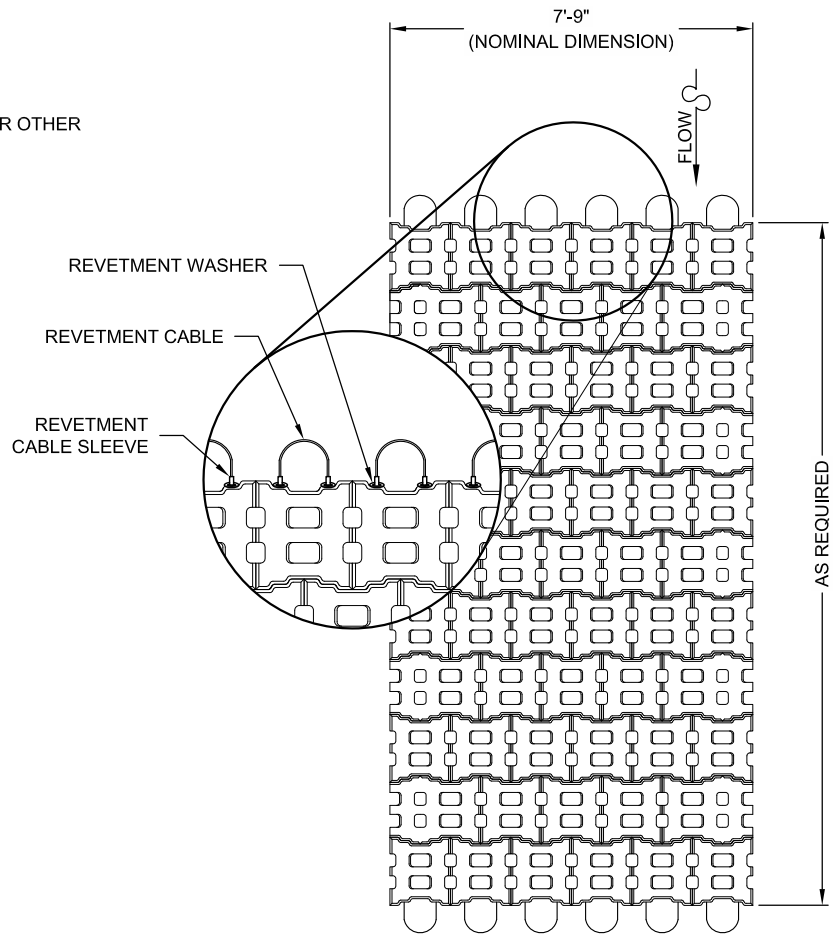
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SECTION B
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SECTION C
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TYP. 40T BLOCK 1.5 MAT
NOT TO SCALE

PRELIMINARY
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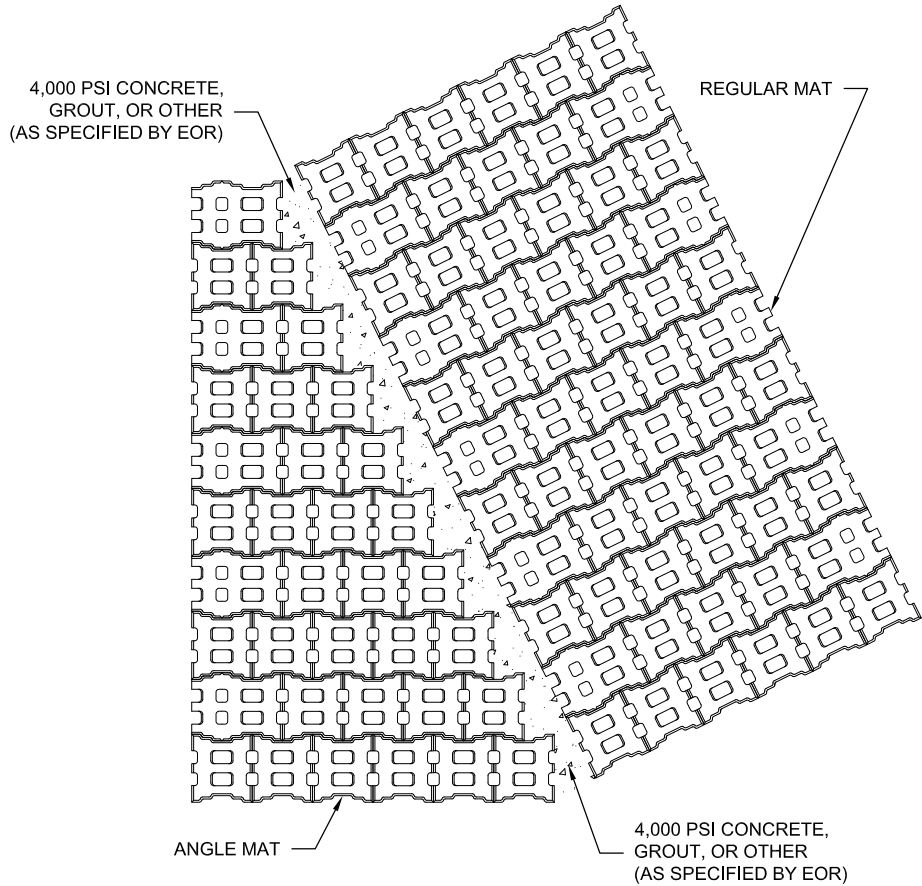
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Erosion Control Solutions

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ARMORFLEX CLASS 40T BLOCK 1.5 STANDARD TERMINATION DETAILS

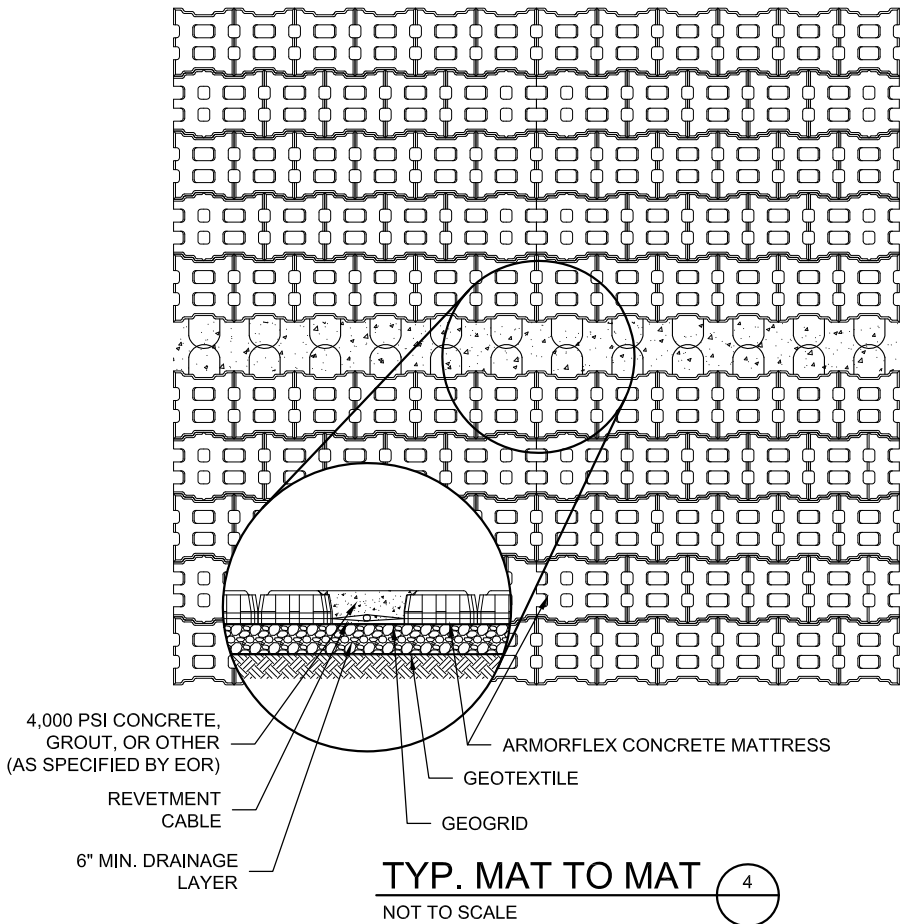
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CHECKED: ----	APPROVED: ----	
SHEET NO.: 9	OF 10	

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NOTE:
ANGLE MATS WILL BE CONSTRUCTED
BY OMITTING THE REQUIRED UNITS SO THE
REQUIRED MAT DIMENSIONS CAN BE OBTAINED.

TYP. ANGLE MAT 3
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STANDARD TERMINATION DETAILS

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