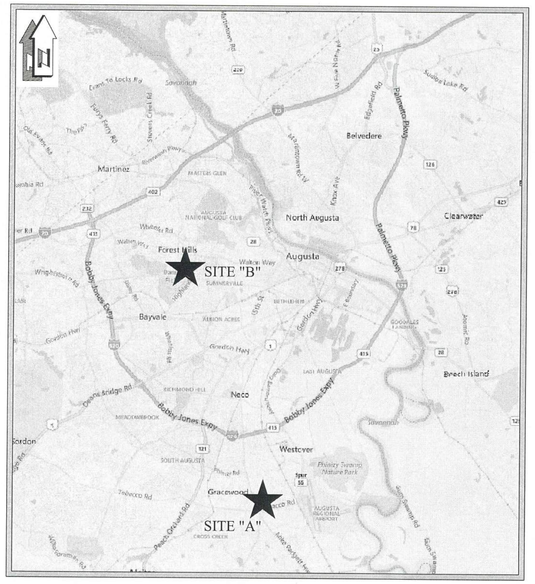
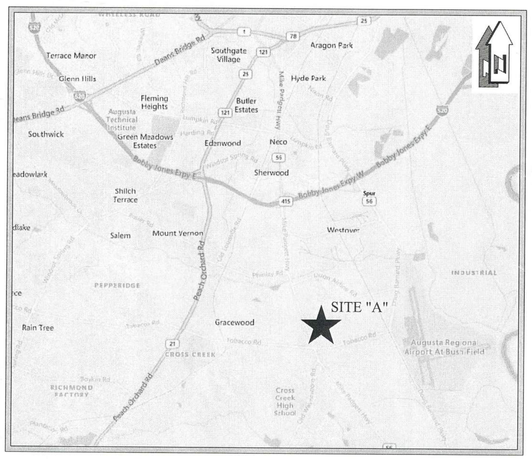
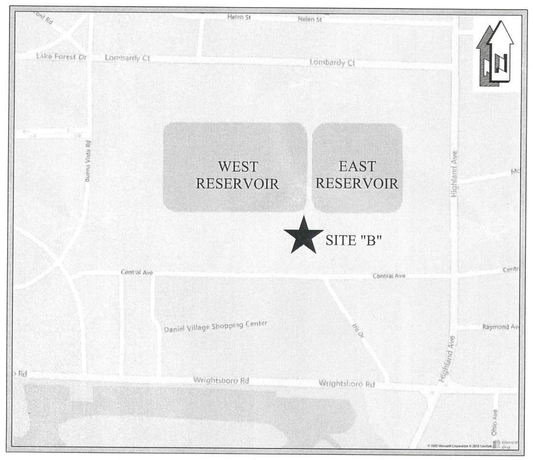


VICINITY MAP
N.T.S.



LOCATION MAP - HICKS WATER PLANT RESERVOIR "A"
N.T.S.



LOCATION MAP - HIGHLAND AVENUE PLANT RESERVOIR "A"
N.T.S.

CONSTRUCTION PLANS FOR

N. MAX HICKS WATER PLANT RESERVOIR DAM IMPROVEMENTS (A)

AND

HIGHLAND AVENUE WATER TREATMENT PLANT RESERVOIR DAM #1 EAST & DAM #2 WEST IMPROVEMENTS (B)

PREPARED FOR

BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA

535 TELFAIR STREET, SUITE 220
AUGUSTA, GA 30901

PREPARED BY

CRANSTON

MAY 25, 2023

RECEIVED
AUG 08 2025
Georgia Environmental Protection Division
Watershed Protection Branch

Sheet Index	
Sheet Number	Sheet Title
01	Cover
02	Legend & Notes
03	Overall Existing Conditions
04	Site Plan
05	Erosion Control Notes
06	Erosion Control Notes
07	Erosion Control Notes
08	Initial Erosion Control Plan
09	Intermediate Erosion Control Plan
10	Final Erosion Control Plan
11	Erosion Control Details
12	Miscellaneous Details

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C100	Cover
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C300	Site Plan
C400	Sections
C401	Sections & Details
C600	Erosion Control Notes
C601	Erosion Control Notes
C602	Erosion Control Notes
C603	Initial Erosion Contral Plan
C604	Intermediate Erosion Control Plan
C605	Final Erosion Control Plan
C606	Erosion Control Details

MAYOR
GARNETT L. JOHNSON

BOARD OF COMMISSIONERS

DISTRICT 1 JORDAN JOHNSON	DISTRICT 2 STACY PULLIAM
DISTRICT 3 CATHERINE SMITH-RICE	DISTRICT 4 ALVIN MASON
DISTRICT 5 DON CLARK	DISTRICT 6 TONY LEWIS
DISTRICT 7 TINA SLENDAK	DISTRICT 8 BRANDON GARRETT
DISTRICT 9 FRANCINE SCOTT	DISTRICT 10 WAYNE GUILFOYLE

1

DIRECTOR OF AUGUSTA UTILITIES DEPARTMENT
WES BYNE, P.E.

APPROVED
STATE OF GEORGIA
DEPT. OF NATURAL RESOURCES
AUG 25 2025
Safe Dams Program
Environmental Protection Division
By: _____ P.E.

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 0000046296
Issued: 12/5/2022 Expires: 12/5/2025

GEORGIA
Cranston Engineering Group
NO. PEF000151
CERTIFICATE OF AUTHORIZATION

GEORGIA
REGISTERED
NO. 11971
PROFESSIONAL
ENGINEER
ELDRIDGE A. WHITEHURST, JR.
7/28/25

REV #	DATE	DESCRIPTION
A0	5/25/2023	HICKS PLANS RENUMBERING
B0	5/25/2023	HIGHLAND PLANS RENUMBERING
1	7/28/2025	COMMISSIONERS

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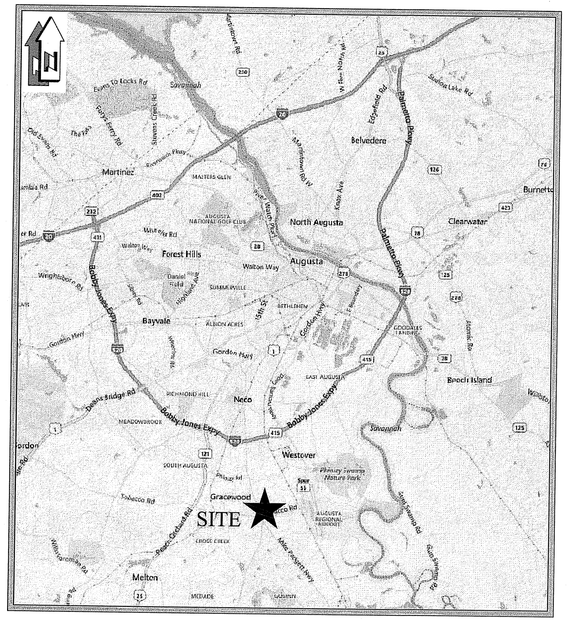
CONSTRUCTION PLANS FOR

N. Max Hicks Water Plant Reservoir Dam Improvements

PREPARED FOR

BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA

535 TELFAIR STREET, SUITE 220
AUGUSTA, GA 30901



VICINITY MAP
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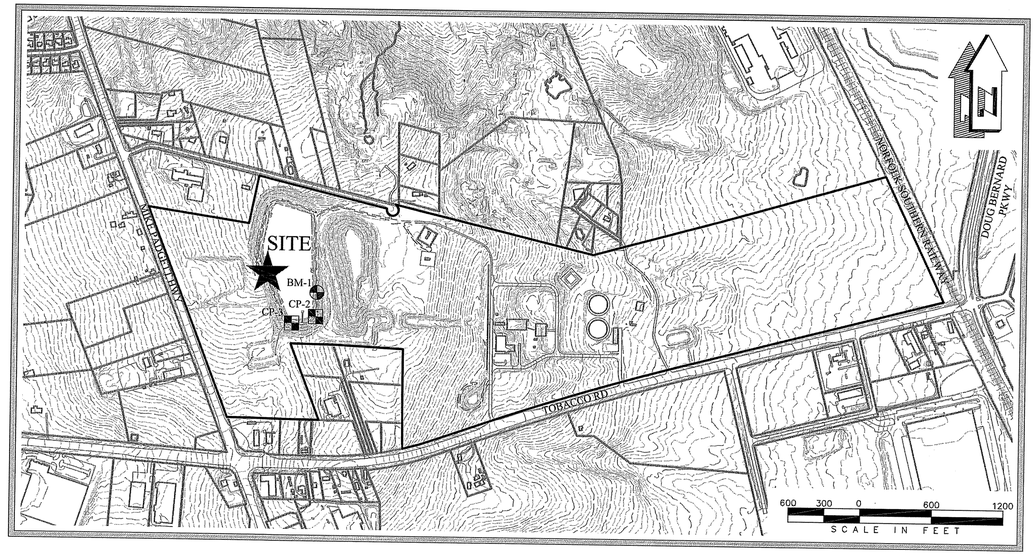

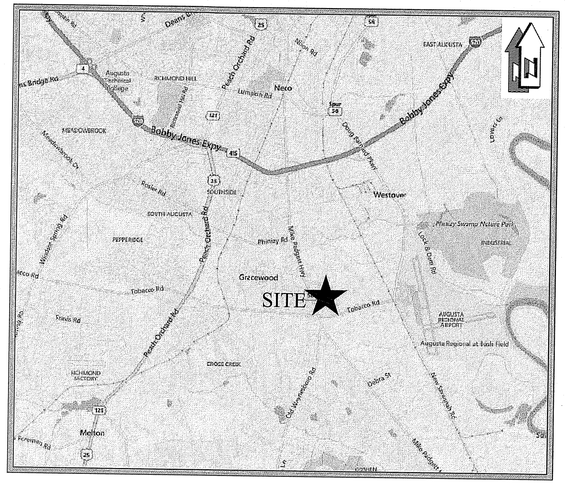

LOCATION MAP
N.T.S.

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11	Erosion Control Details
12	Miscellaneous Details

PROJECT DATA:

1.	ACREAGE OF PROPERTY:	188.5 ACRES
2.	ACREAGE OF DEVELOPMENT:	10.83 ACRES
3.	OWNER/DEVELOPER:	
	BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA	
	C/O AUGUSTA UTILITIES DEPARTMENT	
	452 WALKER STREET, SUITE 200	
	AUGUSTA GA, 30901	
	PHONE: 706-312-4153 (DAY); 843-364-0321 (NIGHT)	
	24 HOUR CONTACT:	
	NAME:	AUD DISPATCH
	PHONE:	706-842-3060
4.	TAX MAP & PARCEL NUMBERS:	157-0-018-08-0
5.	ZONING:	SPECIAL EXCEPTION
6.	STORM WATER OUTFALL:	---
7.	DRAINAGE AREA THIS PROJECT:	3.36 ACRES - A
		2.03 ACRES - B
8.	IMPERVIOUS AREA:	
	EXISTING:	0.00 ACRES
	PROPOSED:	0.00 ACRES
9.	PERVIOUS AREA: (DISTURBED)	
	EXISTING:	5.39 ACRES
	PROPOSED:	5.39 ACRES
10.	RECEIVING STREAM:	UNNAMED TRIBUTARY TO BUTLER CREEK
11.	ULTIMATE STREAM:	SAVANNAH RIVER
12.	EXISTING LAND USE:	INDUSTRIAL
13.	PROPOSED LAND USE:	INDUSTRIAL
14.	DAM HEIGHT:	
	EXISTING:	31 FEET
15.	DAM DRAINAGE BASIN:	9.00 ACRES
16.	LAKE IMPOUNDMENT:	
	EXISTING MAX:	96.26 ACRE-FEET
17.	LAKE SURFACE AREA:	
	EXISTING NORMAL:	7.4 ACRES
18.	PROJECT AREA:	10.83 ACRES
19.	DRAINAGE BASIN AREA:	2.37 ACRES-A
		2.03 ACRES-B
20.	DAM CATEGORY:	1
21.	DAM SIZE:	MEDIUM
22.	GEORGIA DAM IDENTIFICATION	121-040-05493
23.	NATIONAL DAM INVENTORY	GA 05485

BENCHMARK DATA					
NAME	DESCRIPTION	PT #	NORTHING	EASTING	ELEVATION
BM-1	TOP OF IRON IN SURVEY MOVEMENT	100001	1226908.71	708604.18	324.80 (NAVD88)
CP-2	TOP OF IRON IN SURVEY MOVEMENT	100002	1226707.41	708594.59	-
CP-3	TOP OF IRON IN SURVEY MOVEMENT	100003	1226649.90	708394.87	-

PREPARED BY

CRANSTON

APRIL 26, 2019
REV. MAY 25, 2023

STORM WATER QUALITY TABLE

ID #	STRUCTURE #/LOCATION	TYPE OF FEATURE	MANUFACTURER/MODEL #	SHEET #
1	N/A	STORMWATER POND	N/A	10
2	N/A	PERMEABLE PAVER SWALE	N/A	10

STORMWATER QUALITY SYMBOL AT EACH FEAUTRE ON SITE PLAN WHICH CORRESPONDS TO THE ITEM ON THE CHART. SQF-1

TOTAL WATER QUALITY VOLUME REQUIRED 766.40 CF
TOTAL WATER QUALITY VOLUME PROVIDED 910.10 CF

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 000046296
Issued: 12/5/2022 Expires: 12/31/2023
6/9/2023

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER D. SCOTT WILLIAMS
2/20/20

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR.
2/20/20

REV #	DATE	DESCRIPTION
1	2/20/20	PER SAFE DAM COMMENTS
2	5/25/23	PREPARE FOR BIDDING

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2018-0102
01

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GENERAL NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE AUGUSTA UTILITIES DEPARTMENT, AND THE PROJECT SPECIFICATIONS.
2. COORDINATE ROAD CLOSINGS AND DETOURS WITH THE AUGUSTA–RICHMOND COUNTY PUBLIC WORKS & ENGINEERING DEPARTMENT (706) 821–1706.
3. CERTIFIED FLAGGERS AND/OR ARROW BOARDS WILL BE REQUIRED TO MAINTAIN TRAFFIC CONTROL WHILE WORKING WITHIN THE LIMITS OF PUBLIC OR PRIVATE ROADWAYS.
4. DATE OF SURVEY – DATA OBTAINED FROM ORIGINAL CONSTRUCTION PLANS; BENCHMARK ELEVATION FIELD SURVEYED BY CRANSTON ENGINEERING ON AUGUST 21, 2018. (1)
5. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR INDICATED IN ANY WAY THEREBY, WHETHER BY DRAWINGS OR NOTES OR ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY AND ARE NOT GUARANTEED.
6. THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE OWNER IN THE EVENT THAT PREVIOUSLY UNKNOWN HISTORICAL OR ARCHEOLOGICAL SITES ARE DISCOVERED DURING CONSTRUCTION. NO ADDITIONAL WORK IN SUCH AREAS WILL BE ALLOWED UNTIL AUTHORIZED.
7. ALL STRUCTURES, TREES AND SHRUBS WHICH ARE WITHIN THE DESIGNATED CONSTRUCTION AREA, BUT OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
7. CONTRACTOR IS TO CLEAN ALL STORM WATER INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE ANY SILT AND DEBRIS. THE CLEANING OF DROP INLETS, CULVERTS, AND PIPES (EXISTING AND PROPOSED) SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, NO ADDITIONAL PAYMENT WILL BE MADE THEREFOR.
8. UNSUITABLE AND SURPLUS EXCAVATION MATERIAL NOT REQUIRED FOR FILL MAY BE DISPOSED IN ONSITE WASTE OR SPOIL AREAS. CONTRACTOR TO OBTAIN APPROVAL OF ENGINEER FOR EXACT WASTE DISPOSAL AREA.
9. DISTURBANCES TO ANY SURVEY MARKERS OR MONUMENTS REQUIRES RE–ESTABLISHMENT BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
10. ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON THE PLANS OR IN THE SPECIFICATIONS SHOULD BE NOTED ON THE CONTRACTORS PROPOSAL AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO CORRECT THE SAME.
11. ADDITIONAL CLEARING AND GRUBBING BEYOND THE LIMITS SHOWN SHALL BE AT THE CONTRACTORS DISCRETION, SUBJECT TO THE OWNER'S APPROVAL, TO FACILITATE CONSTRUCTION.
12. THE AUGUSTA UTILITIES DEPARTMENT (706–821–1706) SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE DURING REGULAR HOURS (8:30 AM TO 5:00 PM, MONDAY THROUGH FRIDAY, EXCLUDING AUGUSTA, GA HOLIDAYS) BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
13. A PRE–CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE DIRECTOR OF AUGUSTA UTILITIES DEPARTMENT OR HIS REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION. THIS MEETING SHALL BE SCHEDULED WITH THE DEPARTMENT AT THE TIME THE NOTIFICATION OF WORK COMMENCEMENT IS GIVEN.
14. ALL SILT BARRIERS MUST BE PLACED IMMEDIATELY FOLLOWING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIERS INSTALLATION IS COMPLETED.
15. ACCORDING TO THE FEMA FIRM PANEL NUMBERS 13245C0140G & 13245C0230G, NO PORTIONS OF THIS PROPERTY LIE WITHIN THE 100 YEAR FLOOD PLAIN.
16. THE EXISTENCE, ABSENCE, LOCATION AND ELEVATION OF UNDERGROUND UTILITIES ON THE PLANS ARE NOT BASED ON FIELD MARKS, ARE NOT GUARANTEED, AND SHALL BE INVESTIGATED, UNEARTHED IF NECESSARY, AND VERIFIED BY CONTRACTOR BEFORE BEGINNING CONSTRUCTION.
17. ALL UNDERGROUND UTILITIES SHALL BE FIELD LOCATED AND MARKED BEFORE BEGINNING CONSTRUCTION.
18. NO EXTRA PAYMENT WILL BE MADE FOR REPAIRS TO DAMAGE OF EXISTING UTILITIES.
19. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, ABOVE GROUND OR UNDERGROUND, POWER POLES, ETC.; CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH APPROPRIATE UTILITIES PRIOR TO OR DURING CONSTRUCTION.
20. THE FOLLOWING UTILITY OWNERS MAY HAVE FACILITIES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION ON THIS PROJECT:

GEORGIA POWER COMPANY	KMC TELECOM
ATLANTA GAS LIGHT COMPANY	AT&T
AUGUSTA UTILITIES –WATER & SEWER	COMCAST
JEFFERSON EMC	WOW

21. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION INC. "CALL BEFORE YOU DIG" SERVICE, 811 IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION OR CONSTRUCTION.
22. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY IN PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

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6/9/2023

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CRANSTON

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER R. SCOTT WILLIAMS 2/20/20

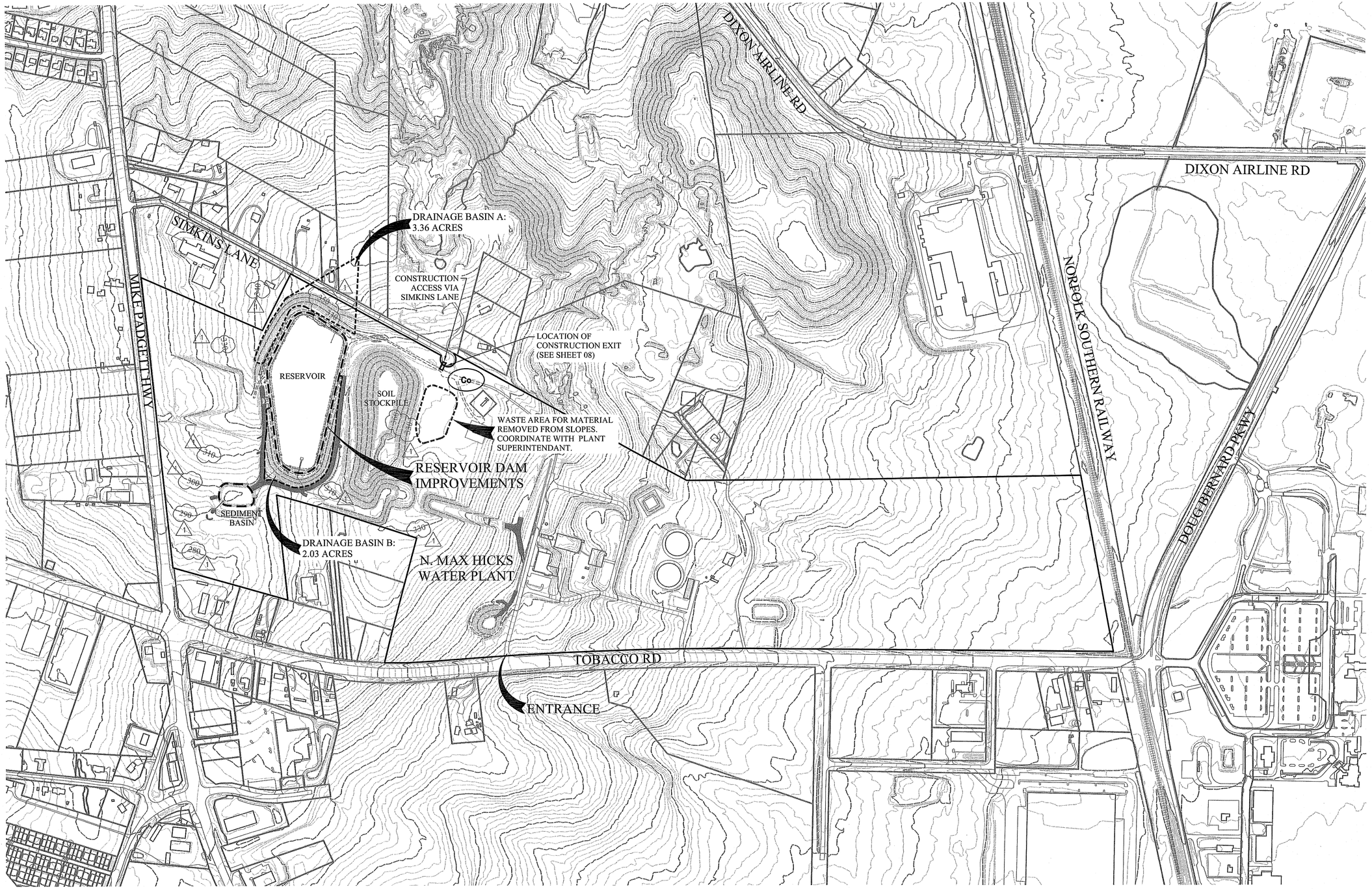
GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. MURDOCK, JR. 2/20/20

REV #	DATE	DESCRIPTION
1	2/20/2020	PER SAFE DAM COMMENTS

N. Max Hicks Water Plant
Reservoir Dam Improvements

Legend & Notes

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	NO SCALE
JOB No.	2018–0102
DRAWING No.	02



NOTE:
TOPOGRAPHIC INFORMATION FROM RICHMOND COUNTY, GEORGIA GIS.

PLAN
HORIZONTAL SCALE 1"=300'

300 150 0 300 600
SCALE IN FEET

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6/9/2023

GA. EAST ZONE GRID

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CRANSTON

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER SCOTT WILLIAMS
2/20/20

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE W. WILLIAMS, JR.

REV #	DATE	DESCRIPTION
1	2/20/2020	PER SAFE DAM COMMENTS

N. Max Hicks Water Plant
Reservoir Dam Improvements

Overall Existing Conditions

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	1" = 300'
JOB No.	2018-0102
DRAWING No.	03

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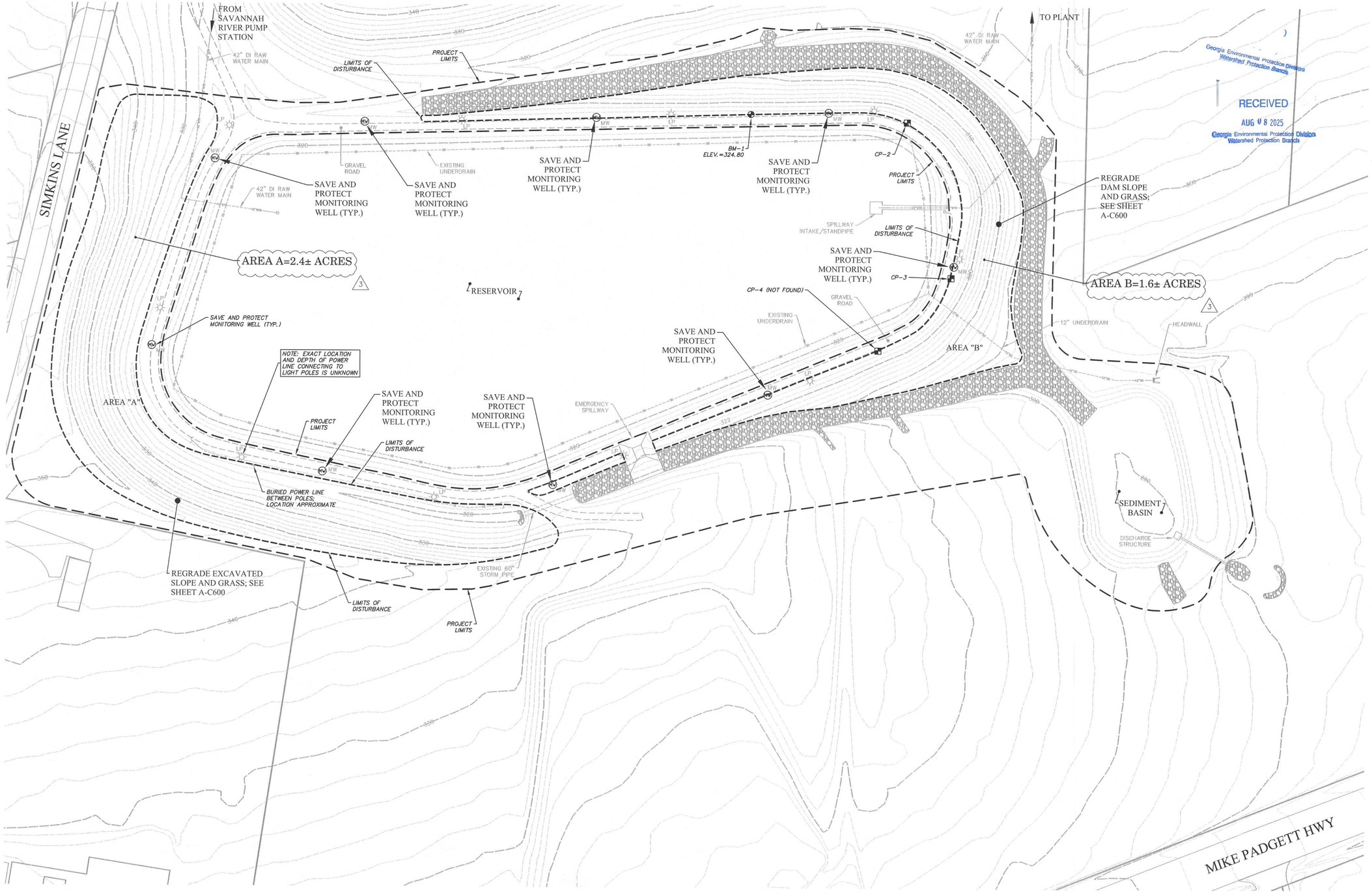

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

LEGEND

- TEMPORARY BENCHMARK (BM)
- CONTROL POINT (CP)
- MONITORING WELL (MW)

NOTE:
TOPOGRAPHIC INFORMATION FROM RECORD DRAWINGS DATED MAY 23, 2007 BY ROSS CONSULTING ENGINEERS, P.C.

Georgia Environmental Protection Division
Watershed Protection Branch

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DEPT. OF NATURAL RESOURCES
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By: _____ P.E.

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GRID
GA. EAST ZONE

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GEORGIA
Cranston Engineering Group
NO. PEF000151
CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED
NO. 11971 PROFESSIONAL
ELDRIDGE M. CUTTER, JR. ENGINEER
7/28/25

REV #	DATE	DESCRIPTION
3	7/28/2025	ADD CLEARING AREAS
2	5/25/2023	PREPARE FOR BIDDING
1	2/20/2020	PER SAFE DAM COMMENTS

N. Max Hicks Water Plant
Reservoir Dam Improvements

Site Plan

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0102
DRAWING No.	04

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GSWCC AND NPDES NOTES:

NOTE:
PUT A "X" IN APPROPRIATE BOX

PROJECT NAME: N. MAX HICKS WATER PLANT RESERVOIR DAM IMPROVEMENTS
ADDRESS: 1731 TOBACCO RD
CITY / COUNTY: AUGUSTA / AUGUSTA-RICHMOND ZIP CODE: 30906
DATE ON PLANS: APRIL 26, 2019

1. [X] GAR 100001 STAND ALONE [ ] GAR 100002 INFRASTRUCTURE [ ] GAR 100003 COMMON DEVELOPMENTS
2. LEVEL II CERTIFICATION: NAME: ELRIDGE A. WHITEHURST, JR. NO#. 02156 EXP. DATE: 11-05-20
3. 24 HOUR CONTACT: NAME: AUD DISPATCH PHONE: 706-842-3060
4. PRIMARY PERMITTEE: NAME: BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA,
   C/O AUGUSTA UTILITIES DEPARTMENT
   ADDRESS: 535 TELFAIR STREET, SUITE 220
   AUGUSTA, GA 30901
   PHONE: 706-312-4153 (DAY); 843-364-0321 (NIGHT)
5. TOTAL ACRES: 10.83 TOTAL ACRES DISTURBED: 5.39
6. (A) TAX MAP NUMBER: 157-0-018-08-0
   (B) CRITICAL AREAS: YES [ ] NO [X]
   IF YES, DESCRIBE: DESCRIPTION OF CRITICAL AREA IF NEEDED
7. VICINITY MAP SHEET 01 OF 12 ON PLANS
8. GRAPHIC SCALE: AS NOTED ON INDIVIDUAL SHEETS.
9. EXISTING AND PROPOSED CONTOUR LINES AT REQUIRED INTERVALS:
   YES [X] NO [ ]
10. BOUNDARY LINE SURVEY: SHEET 01 OF 12 ON PLANS
11. DELINEATION OF DRAINAGE BASIN ON PROJECT SITE: SHEET(S): 03
12. (A) DELINEATION OF ON-SITE WETLANDS: YES [ ] SHEET(S): ---
    NO ON-SITE WETLANDS: NO [X]
    (B) DELINEATION OF STATE WATERS ON OR WITHIN 200 FT. OF PROJECT SITE:
    YES [ ] SHEET(S): ---
    NO STATE WATERS ON OR WITHIN 200 FT. OF PROJECT SITE: NO [X]
13. DELINEATION OF 25 FOOT OR 50 FOOT UNDISTURBED BUFFER:
    NOT APPLICABLE [X] YES [ ] SHEET(S): ---
14. DELINEATE ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMEDIATE STREAMS:
    SHEET 07 OF 12 ON PLANS
15. STORM DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION:
    STORM DRAIN PIPE MUST SHOW Q, V, L, W, D, AND SIZE.
    SHEET(S) 04 OF 12 ON PLANS
16. SOIL SERIES FOR THE PROJECT SITE: (PROVIDE MAP)
    SHEET 07 OF 12 ON PLANS
17. IDENTIFY PROJECT RECEIVING STREAM: SHEET 01 OF 12 ON PLANS
18. IMPAIRED STREAM: YES [ ] NO [X]
19. TMDL IMPLEMENTATION PLAN FOR SEDIMENT:
    YES [ ] NO [X]
20. HYDROLOGY STUDY FOR PRE AND POST DEVELOPED CONDITIONS:
    YES [ ] NO [X]
21. INITIAL DATE ON PLANS THE DATE(S) OF ANY REVISIONS AND WHO REQUESTED THEM YES [X] NO [ ]
22. LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION:
    YES [X] NO [ ] SHEET(S) 08,09 & 10 ON PLANS
23. LIMITS OF DISTURBANCE OVER 60 ACRES:
    YES [ ] NO [X]
24. SEDIMENT STORAGE PER CHECKLIST / PERMIT REQUIREMENTS:
    SHEET 07 OF 12 ON PLANS
25. USE OF ALTERNATE BMPs:
    YES [ ] NO [X]
    IF YES, ALTERNATE BMP CALC SHEET: ---
26. BMPs TO REDUCE OFF-SITE VEHICLE TRACKING (Co) AND GENERATION OF DUST (Du):
    YES [X] NO: [ ]
27. OFF-SITE VEHICLE TRACKING OF DIRT, SOILS, SEDIMENTS AND THE GENERATION OF DUST SHOULD BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL. THE PLAN SHALL INCLUDE THE BMPs TO BE IMPLEMENTED AT THE SITE OR CONSTRUCTION ACTIVITY. A STABILIZED CONSTRUCTION EXIT HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. REFER TO SHEET(S) 08 THRU 11 FOR CONSTRUCTION EXIT LOCATION AND DETAILS. THE PAVED STREETS ADJACENT TO THE SITE SHALL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT, OR ROCK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

CRUSHED STONE CONSTRUCTION EXIT:

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS & DRIVES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES OFFSITE ONTO ADJACENT ROADS AND DRIVES, OR INTO STORM DRAINS, MUST BE REMOVED IMMEDIATELY.

DUST CONTROL (Du) NOTES:

SPRAY-ON ADHESIVES: THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TILLAGE: THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION: THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS: SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLE TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE: APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

REFER ALSO TO SHEET(S) 11 FOR THE "DUST CONTROL ON DISTURBED AREAS (Du) GSWCC DETAIL AND SHEET 11 FOR THE "CONSTRUCTION EXIT (Co)" GSWCC DETAIL.

CONCRETE WASHDOWN:

28. TOOLS
BMPs FOR CONCRETE WASHDOWN OF THE FOLLOWING:
ALL CONCRETE WASH WATER THAT RESULTS FROM THE WASHDOWN OF TOOLS USED FOR CONCRETE WORK SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHDOWN AREA. NO CONCRETE EXPECTED TO BE USED ON PROJECT.

CONCRETE MIXER CHUTES
ALL CONCRETE WASH WATER THAT RESULTS FROM THE RINSING OUT OF CONCRETE MIXER CHUTES SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

HOPPERS
ALL CONCRETE WASH WATER THAT RESULTS FROM RINSING OUT OF CONCRETE HOPPERS SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

REAR OF VEHICLES
ALL CONCRETE WASH WATER THAT RESULTS FROM RINSING OUT OF CONCRETE TRUCKS SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

WASH OUT OR DISCHARGE OF ANY SURPLUS CONCRETE ON THE GROUND OR DRUM WASHOUT FROM CONCRETE TRUCKS AT THE CONSTRUCTION SITE IS PROHIBITED.

SPILL CLEANUP AND CONTROL PRACTICES:

29. BMPs FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS:

LOCAL, STATE, AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO ALL ON-SITE PERSONNEL.

MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDE, BUT IS NOT LIMITED TO: BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST, AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.

SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL STATE, AND FEDERAL REGULATIONS.

FOR SPILLS THAT IMPACT SURFACE WATER (I.E. LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24-HOURS AT 1-(800)-426-2675.

FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24-HOURS AT 1-(800)-426-2675.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION (EPD) WILL BE CONTACTED WITHIN 24-HOURS. GA. EPD (404)-656-4863 OR (800)-241-4113 AND THE NATIONAL RESPONSE CENTER AT (800)-424-8802

FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,320 GALLONS OF PETROLEUM IS STORED ON-SITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. IN SUCH A CASE, THE CONTRACTOR WILL NEED A SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURES PLAN PREPARED BY A LICENSED PROFESSIONAL.

30. FOR PHASED EROSION AND SEDIMENTATION CONTROL PLANS (I.E. INITIAL PHASE, INTERMEDIATE PHASE, AND FINAL PHASE) SHOWING THE LOCATION OF BEST MANAGEMENT PRACTICES (BMPs) THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA, CURRENT EDITION, USING UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND, REFER TO SHEET(S) 08,09 ,10, & 11 ON PLANS.

31. DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY:
RESERVOIR DAM IMPROVEMENTS

32. DESCRIPTION OF THE APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH PHASE OF EROSION AND SEDIMENT CONTROL:

INITIAL PHASE
CONSTRUCTION EXITS (Co) TO PREVENT THE TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS AND DRIVES; DUST CONTROL ON DISTURBED AREAS (Du); DISTURBED AREA STABILIZATION WITH MULCHING ONLY (Ds1); INSTALL PERFORATED HALF-ROUND PIPE WITH STONE FILTER (Rt-P).

INTERMEDIATE PHASE
MAINTAIN CONSTRUCTION EXITS (Co) TO PREVENT THE TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS AND DRIVES; DURING CONSTRUCTION ACTIVITIES; DUST CONTROL ON DISTURBED AREAS (Du); DISTURBED AREA STABILIZATION WITH MULCHING ONLY (Ds1); AND DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING (Ds2). MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER (Rt-P).

FINAL
MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER (Rt-P); DISTURBED AREA STABILIZATION WITH SEEDING (Ds3). REMOVAL OF ALL BMP DEVICES ONCE THE SITE IS FULLY STABILIZED.

33. CONSTRUCTION SCHEDULE
CHART ON SHEET 07 OF 12 ON PLANS

PRODUCT SPECIFIC PRACTICES:

34. PETROLEUM BASED PRODUCTS
CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/ MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS / FINISHES / SOLVENTS
ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

FERTILIZER / HERBICIDES
THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS
NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIALS WILL BE DISPOSED OF IN ACCORDANCE WITH PROPER WASTE DISPOSAL PROCEDURES.

BUILDING MATERIALS, PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS SHALL BE COVERED WITH PLASTIC GREEN SHEETING OR TEMPORARY ROOFS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.

35. DESCRIPTION OF MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED:

MEASURES INCLUDE A COMBINATION OF VEGETATED SWALES AND NATURAL DEPRESSIONS FOR FLOW ATTENUATION, LANDSCAPED AND TURF AREAS, AND IMPERVIOUS SURFACES THAT WILL REDUCE SOIL AND SEDIMENT RUNOFF.

THESE MEASURES WILL ENSURE THAT THE NATURAL, PHYSICAL, AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS OF THE WATER COURSE ARE MAINTAINED AND PROTECTED.

36. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PAGE 14 OF THE PERMIT:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION."

Mitchell B Murchison 46296 (02156) 12/25/2025 (11-05-20)
GSWCC LEVEL II DESIGN PROFESSIONAL GSWCC LEVEL II CERTIFICATION NO. EXP.DATE

37. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMPs AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PAGE 14 OF THE PERMIT:

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AN SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. 100001."

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GSWCC LEVEL II DESIGN PROFESSIONAL GSWCC LEVEL II CERTIFICATION NO. EXP.DATE

38. CERTIFICATION STATEMENT AND SIGNATURE OF THE PERMITTEE OR DULY AUTHORIZED REPRESENTATIVE AS STATED IN SECTION V.G.2.d OF THE STATE GENERAL PERMIT:

STANDARD PERMIT CONDITIONS SIGNATORY REQUIREMENTS CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA 706-312-4153 (DAY); 843-364-0321 (NIGHT)
PRIMARY PERMITTEE PRIMARY PERMITTEE CONTACT PHONE NUMBER

AUD DISPATCH
PRIMARY PERMITTEE CONTACT PRIMARY PERMITTEE CONTACT SIGNATURE DATE
EMAIL: CHENDRIX@AUGUSTAGA.GOV

39. ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: PRE: 0.35 POST: 0.35

40. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

NO WORK ASSOCIATED WITH THIS PROJECT PROPOSES ANY ENCROACHMENT INTO 25-FOOT UNDISTURBED BUFFERS OF STATE WATERS OR 50-FOOT UNDISTURBED BUFFERS ALONG DESIGNATED TROUT STREAMS; THEREFORE, NO SPECIAL VARIANCES OR PERMITS ARE REQUIRED.

41. INDICATION THAT THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION:

WITHIN 7 DAYS OF INSTALLATION OF INITIAL PHASE EROSION CONTROL MEASURES, THE DESIGN PROFESSIONAL, OR AN AUTHORIZED AGENT DESIGNATED BY THE DESIGN PROFESSIONAL, WILL PERFORM AN INSPECTION OF THE EROSION AND SEDIMENTATION CONTROL BMPs THAT HAVE BEEN INSTALLED AND WILL SUBMIT A SIGNED COPY OF A REPORT OF THEIR FINDINGS TO THE PRIMARY OPERATOR, WHICH SHALL BE KEPT ON FILE WITH THE NOTICE OF INTENT (NOI) AND ALL OTHER REQUIRED PAPER WORK.

DATE OF INSPECTION: _____.
"I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLANS ON THE DATE OF INSPECTION."

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INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN:

_____.

_____.

(PROVIDE THIS CERTIFICATION IN LETTER FORMAT FOR RECORDS _____.

THESE DISCREPANCIES MUST BE ADDRESSED AND RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

42. ANY AMENDMENTS/REVISIONS TO THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLANS (ES&PC PLANS), WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT, MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

43. WASTE MATERIALS SHALL NOT BE DISPOSED OF OR DISCHARGED INTO STORM WATER INLETS OR TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DISPOSED OF IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY, AND TRASH WILL BE HAULED AS REQUIRE BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

44. DOCUMENTATION THAT THE ES&PC PLAN IS IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS DURING AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED:

HAZARDOUS WASTES
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS's) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES. THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTER- MEASURES (SPCC) PLAN FOUND WITHIN THE ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORM WATER DISCHARGE WILL BE CONTAINED ON-SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 000046296
Issued: 12/25/2022 Expires: 12/25/2025
Mitchell B Murchison 6/9/2023

24-HOUR LOCAL ES&PC CONTACT:
NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: CHENDRIX@AUGUSTAGA.GOV

GEORGIA811 www.Georgia811.com

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

CRANSTON

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER SCOTT WILLIAMS
4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR.
4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0102
DRAWING No.	05

G:\PROJECTS\2018\2018-0102 - HICKS WATER PLANT DAM IMPROVEMENTS\AC-DRAWINGS\CIVIL\2018102-COVER.DWG 5/31/2023 2:29 PM

GSWCC AND NPDES NOTES (CONT'D):

45. DOCUMENTATION THAT THE ES&PC PLAN IS IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS DURING AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

SANITARY WASTES
ALL PERMITTEES SHALL ENSURE AND DEMONSTRATE THAT THEIR PLAN IS IN COMPLIANCE WITH APPLICABLE STATE AND LOCAL WASTE WATER DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEM REGULATIONS. A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK PER A LICENSED PORTABLE FACILITY PROVIDER IN COMPLIANCE WITH LOCAL AND STATE REGULATIONS. PROJECT DOES NOT PROVIDE FOR POST CONSTRUCTION SANITARY SEWER. ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMPs MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE, SHEET NO. , BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED. SANITARY SEWER WILL NOT BE PROVIDED BY MUNICIPAL AUTHORITY AT THE COMPLETION OF THIS PROJECT.

46. DETAILS ON COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY PRIMARY PERMITTEE:

INSPECTIONS (NPDES GENERAL PERMIT NO. 100001, SEC. IV.D.4.)

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL, PROVIDED BY THE PRIMARY PERMITTEE, SHALL INSPECT: (a.) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (b.) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE AND RECORD RAINFALL WITHIN THE DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IN AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY, OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (c) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL METHODS ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

(6). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE, OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a.(5) OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORTS SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

GSWCC AND NPDES NOTES (CONT'D):

47. DETAILS ON COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS:

SAMPLING FREQUENCY (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.d.)

(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS: (a). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS * (MONDAY THROUGH FRIDAY, 8:00 A.M. TO 5:00 P.M., AND SATURDAY, 8:00 A.M. TO 5:00 P.M., EXCLUDING ALL NON- WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION; (b). IN ADDITION TO (a) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS * THAT OCCURS EITHER 90-DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION, WHICHEVER COMES FIRST; (c). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (a) AND (b) ABOVE, IF BMPs ARE FOUND TO BE PROPERLY DESIGNED, INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPs IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES 0.5 INCH DURING NORMAL BUSINESS HOURS * UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPs ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED. *NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (a) AND (b) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

48. DETAILS ON COMPLETE REQUIREMENTS OF REPORTING:

REPORTING (NPDES GENERAL PERMIT NO.100001 , SEC. IV.E.)

THE APPLICABLE PERMITTEE'S ARE REQUIRED TO SUBMIT A SUMMARY OF THE MONITORING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

(1). ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

(2). ALL MONITORING RESULTS SHALL INCLUDE THE FOLLOWING INFORMATION: (a). THE DATE, EXACT PLACE, AND TIME OF SAMPLING OR MEASUREMENTS; (b). THE NAME(S) OF THE INDIVIDUAL(S) WHO PERFORMED THE SAMPLING AND MEASUREMENTS; (c). THE DATE(S) ANALYSES WERE PERFORMED; (d). THE TIME(S) ANALYSES WERE INITIATED; (e). THE NAME(S) OF THE INDIVIDUAL(S) WHO PERFORMED THE ANALYSES; (f). REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED; AND, (g). THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS. (h). RESULTS WHICH EXCEED 1,000 NTU SHALL BE REPORTED AS "EXCEEDS 1,000 NTU."

GSWCC AND NPDES NOTES (CONT'D):

49. DETAILS ON COMPLETE REQUIREMENTS OF RETENTION OF RECORDS:

RETENTION OF RECORDS (NPDES GENERAL PERMIT NO.100001 , SEC. IV.F.)

(1). THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI: (a). A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD; (b). A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; (c). THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT; (d). A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT; (e). A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a. OF THIS PERMIT; (f). A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND, (g). DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(1)(c) OF THIS PERMIT.

(2). COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, MONITORING REPORTS, MONITORING INFORMATION, INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THE NPDES PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

50. DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION:

SAMPLE TYPE (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.b.)

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001"; AND, GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD. ANALYTICAL METHODS USED FOR THE COLLECTION AND ANALYSIS OF SAMPLES FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL USE, AT A MINIMUM, THE GUIDELINES SET FORTH IN PART IV.D.6.a. AND PART IV.D.6.b. OF THIS PERMIT.

SAMPLE TYPE (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.c.)

FOR CONSTRUCTION ACTIVITIES, THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). HOWEVER, PROVIDED FOR IN AND IN ACCORDANCE WITH PART IV.D.6.c.(2) OF THIS PERMIT, PRIMARY PERMITTEES ON AN INFRASTRUCTURE CONSTRUCTION PROJECT MAY SAMPLE THE REPRESENTATIVE RECEIVING WATER(S) OR OUTFALLS, OR A COMBINATION THEREOF. SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE MINIMUM GUIDELINES SET FORTH IN PART IV.D.6.c.(1). OF THIS PERMIT. RECEIVING WATER(S) MUST HAVE AN UPSTREAM AND A DOWNSTREAM SAMPLE LOCATION.

51. "APPENDIX B" RATIONALE FOR OUTFALL SAMPLING POINTS:

SAMPLING REQUIREMENTS (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.a.(3).)

WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OF THE OUTFALLS WILL BE MONITORED, A RATIONALE MUST BE INCLUDED FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES).

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION(S). A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES (BMPs) HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING THE VALUE THAT WAS SELECTED FROM "APPENDIX B" IN THE NPDES GENERAL PERMIT NO. 100001.

THE SELECTED NTU VALUE OF ≥50 IS BASED UPON THE CONSTRUCTION SITE ACREAGE OF 5.39 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF APPROXIMATELY 0.01 SQUARE MILES.

STORMWATER RUNOFF DESCRIPTION

STORMWATER RUNOFF LEAVES THE SITE THROUGH THE FOLLOWING:
DITCH FLOW TO PERMANENT SEDIMENT POND; DISCHARGE OF FLOW FROM 60 INCH RCP; SURFACE FLOW TO UNNAMED TRIBUTARY TO BUTLER CREEK.

GSWCC AND NPDES NOTES (CONT'D):

52. "I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. , THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER."

GSWCC LEVEL II DESIGN PROFESSIONAL	GSWCC LEVEL II CERTIFICATION NO.	EXP.DATE
	~~02158~~ 46296	~~11-05-20~~ 12/25/2025

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 0000046296
Issued: 12/3/2021 Expires: 12/25/2025
6/9/2023

24-HOUR LOCAL ES&PC CONTACT:
NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: CHENDRIX@AUGUSTAGA.GOV

GEORGIA811 www.Georgia811.com

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

CRANSTON

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER SCOTT WILLIAMS 4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR. 4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0102
DRAWING No.	06

G:\PROJECTS\2018\2018-0102 - HICKS WATER PLANT DAM IMPROVEMENTS\AC-DRAWINGS\CIVIL\20180102_COVR.DWG 5/31/2023 2:29 PM

GENERAL EROSION CONTROL NOTES:

1. ALL DISTURBED AREAS SHALL HAVE EROSION CONTROL PROVIDED IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA , CURRENT EDITION.
2. ALL EROSION CONTROL MEASURES SHALL COMPLY WITH THE STATE OF GEORGIA SOIL AND WATER CONSERVATION COMMISSION MANUAL FOR EROSION AND SEDIMENT CONTROL IN THE STATE OF GEORGIA , CURRENT EDITION.
3. FULL COORDINATION SHALL BE MAINTAINED BETWEEN THE CONTRACTOR, DESIGN PROFESSIONAL, AND THE REGULATORY INSPECTOR REGARDING PROJECT SEQUENCE.
4. THE NOTATION (XXX) AS SHOWN ON THE EROSION CONTROL PLAN SHEET(S) AND ON THE EROSION CONTROL DETAIL SHEET FOR THE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES, REFERS TO THE GEORGIA UNIFORM CODING SYSTEM AS DETAILED IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA , CURRENT EDITION.
5. GENERAL STATEMENT OF DESIGNED EROSION CONTROL SYSTEM:
   (a). NO SURFACE WATER FLOWS FROM DISTURBED AREA TO BE ALLOWED INTO THE STORM SEWER SYSTEM WITHOUT FIRST BEING FILTERED BY AN EFFECTIVE SEDIMENT ENTRAPMENT DEVICE.
   (b). SEDIMENT ENTRAPMENT DEVICES ARE TO BE MAINTAINED AT ALL POINTS WHERE SURFACE FLOWS FROM DISTURBED AREAS CAN LEAVE THE SITE. FLOWS ARE TO BE DIRECTED TO ENTRAPMENT DEVICES THROUGHOUT CONSTRUCTION ACTIVITIES.
6. EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES ON-SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. EROSION CONTROL MEASURES SHALL BE INSPECTED AT THE END OF EACH WORKING DAY AND AFTER EACH STORM EVENT TO ENSURE THAT ALL MEASURES ARE FUNCTIONING PROPERLY. ANY REPAIRS SHALL BE MADE BY THE CONTRACTOR.
7. IN ADDITION TO THE NOTE ABOVE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN EVENT, AND REPAIRED AS NECESSARY THESE INSPECTIONS SHALL BE DOCUMENTED WITH COPIES SENT TO THE OWNER.
8. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ON SITE. SILT BARRIER TO BE PLACED AS SHOWN AND/OR AS DIRECTED BY THE PROJECT ENGINEER AND/OR OWNER: BOARD OF COMMISSIONERS OF AUGUSTA, GEORGIA.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES, PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
10. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. ANY DISTURBED AREA LEFT IDLE/EXPOSED FOR A PERIOD GREATER THAN 14-DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING; DISTURBED AREAS IDLE/EXPOSED 30-DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
12. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE INSPECTION.
13. THE CONTRACTOR SHALL COMPLETELY REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (I.E. SILT FENCE, SEDIMENT TRAPS, ETC...) AND TREE PROTECTION FENCING ONCE PERMANENT VEGETATION IS ESTABLISHED.
14. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND FOR CLEARING ANY DEBRIS AND SEDIMENT THAT IS CAUSED BY CONSTRUCTION ACTIVITIES.
15. ALL DISTURBED AREAS SHALL BEST BE STABILIZED AS REQUIRED BY THESE PLANS BY THE SITEWORK CONTRACTOR AS SOON AS CONSTRUCTION PHASES PERMIT.
16. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24-HOURS OF SEEDING.
17. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (Ds1). ON SLOPES 4:1 OR STEEPER, MULCH WILL BE ANCHORED.
18. SILT FENCE SHALL MEET THE MINIMUM REQUIREMENTS OF SECTION 171 OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, CURRENT EDITION, AND/OR GEORGIA EPD "GREEN BOOK" AS AMENDED.
19. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME FOR RETROFITS AND TEMPORARY SEDIMENT BASINS, AND THE 1/2 FULL VOLUME FOR ALL OTHER SEDIMENT STORAGE STRUCTURES (I.E. CHECK DAMS, SILT FENCE, ETC...).
20. ALL SEDIMENT STORAGE DEVICES ARE TO BE CONSTRUCTED COMPLETELY AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
21. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING AND BLANKETS.
22. ALL PERMANENT GRADED EARTH SLOPES, EXCAVATION OR EMBANKMENT (CUT AND FILL), SHALL BE GRADED TO A MAXIMUM FINISHED SLOPE OF TWO (2) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL (MAXIMUM SLOPE 2H:1V).
23. ALL DISTURBED AREAS LEFT MULCHED AFTER 30-DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.
24. SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS.
25. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS, I.E., MANDATORY STOP WORK ORDER.
26. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM A VEHICLE OR FROM THE SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

INITIAL PHASE (CLEARING & GRUBBING) NOTES:

1. ALL STAGING AREAS, MATERIAL STORAGE AREAS, CONCRETE WASH-OUT AREAS, SHALL BE LOCATED AT SETBACK DISTANCES FROM DESIGNATED TREE PROTECTION AREAS AND/OR STREAM BUFFERS AS REQUIRED BY LOCAL AND STATE REGULATIONS.
2. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. POST ON DAY ONE.
3. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DELINEATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
4. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION EXIT (Co) SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY AS SHOWN ON THE PLANS.
   LOCATION:
   LATITUDE: 33.374483 N LONGITUDE: -81.992056
5. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE OF THE EROSION CONTROL PLAN.
6. SILT FENCE OR APPROVED EQUAL SHALL BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA OR AS SHOWN ON THE PLAN. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES HALF THE HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
7. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN.
8. TREE PROTECTION FENCING AND STREAM BUFFER LIMITS SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
9. AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL WITHIN 7 DAYS AFTER INSTALLATION. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION WITH CONSULTATION WITH THE DESIGN PROFESSIONAL.
10. AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT STORAGE DEVICES AS SHOWN ON THE INITIAL PHASE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.
11. INITIAL PHASE BMPs UTILIZED IN THIS PLAN(S) ARE AS FOLLOWS:
    Co, Fr, Sd1-S, Rt-P

INTERMEDIATE PHASE (GRADING & TEMPORARY VEGETATION) NOTES:

1. MAINTAIN PREVIOUSLY INSTALLED BMPs.
2. SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
3. GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION AND SEDIMENTATION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
4. THE SILT FENCE SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES HALF OF THE HEIGHT OF THE BARRIER.
5. SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS.
6. AFTER PRELIMINARY CLEARING AND GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT ENTRAPMENT DEVICES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE DEVICES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT WHEN IT REACHES THE CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
7. SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED WEEKLY AND AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF OF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
8. INTERMEDIATE PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:
   Du, Ds2, Ss-RECP, Ss, Su

FINAL PHASE (STORMWATER MANAGEMENT & PERMANENT VEGETATION) NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT DEVICES AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF EACH DEVICE WHEN IT REACHES THE REQUIRED CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
2. AFTER CURBING AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON THE EXISTING INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION.
3. FINAL STABILIZATION OF PERMANENT GRASS MUST MEET 100% COVERAGE, 70% DENSITY RULE.
4. FINAL PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:
   Ds3

GRASSING:

1. APRIL 15 - SEPTEMBER 15
   A. AREA "A" - WEEPING LOVEGRASS, 40 LBS./ACRE
   B. AREA "B" - HULLED COMMON BERMUDA, 40-45 LBS./ACRE
2. SEPTEMBER 15 - APRIL 15, AVRUZZI RYE, 200 LBS./ACRE
3. FERTILIZER GRADE WILL BE A COMMERCIAL 10-10-10 INCORPORATED INTO THE SOIL AT 1000 LBS./ACRE, ALSO 1500 LBS. DOLOMITIC LIME.
4. NOT LESS THAN 30 DAYS AFTER SEEDING, APPLY AMMONIUM NITRATE (NOT LESS THAN 20% NITRATE) AT A RATE EQUAL TO 60 LBS. OF AVAILABLE NITROGEN /ACRE. APPLICATION BETWEEN JUNE THRU AUGUST.
5. ALL SEEDED AREAS WILL BE MULCHED WITH STRAW OR HAY MULCH AT A RATE OF 2.5 TONS/ACRE.
6. FOR ALL DATES NOT COVERED UNDER THE GRASSING SCHEDULE THE DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED USING POLYACRYLAMIDE.

GRASSING:

1. ONSITE DRAINAGE BASIN = 9.62 ACRES (PORTION OF BASIN A IS OFFSITE)
2. OFFSITE DRAINAGE BASIN = 1.21 ACRES
3. CONTRACTOR TO ENSURE THAT EXISTING ON SITE VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION IS PRESERVED AND THAT ALL DISTURBED PORTIONS OF THE SITE ARE STABILIZED.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. NO WATERS OF THE STATE ARE IMPACTED ON THIS PROJECT.
6. RECEIVING STREAM IS UNNAMED TRIBUTARY TO BUTLER CREEK. SHEET 01 OF 12 ON PLANS

STORMWATER CALCULATIONS:

1. REQUIRED STORMWATER STORAGE = 0 CY
   (AS DETERMINED BY LOCAL ORDINANCE)
2. REQUIRED SEDIMENT STORAGE = 361 CY
   (67 CY/ACRE x 5.39 ACRES DISTURBED AREA)
3. TOTAL REQUIRED STORAGE = 0 CY + 361 CY = 361 CY
4. AVAILABLE STORAGE = 834 CY
5. IS THE AVAILABLE STORAGE (X.XX CY) GREATER THAN STORAGE REQUIRED (361 CY)?
   ☒ YES ☐ NO

SEDIMENT STORAGE:

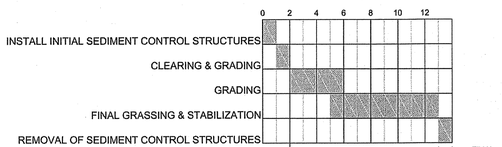
REQUIRED: 5.39 ACRES x 67 CY/ACRE = 361 CY
PROVIDED BY EX SEDIMENT BASIN:
THE VOLUME BETWEEN THE BOTTOM OF THE EXISTING SEDIMENT POND AND THE WEIR ELEVATION AT THE EXISTING RETROFIT IS APPROXIMATELY 834 CY.

THE PRIMARY PERMITTEE SHALL PROVIDE A COPY OF THE APPROVED EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN AND ANY SUBSEQUENT REVISIONS TO THE PLAN TO EACH SECONDARY PERMITTEE.

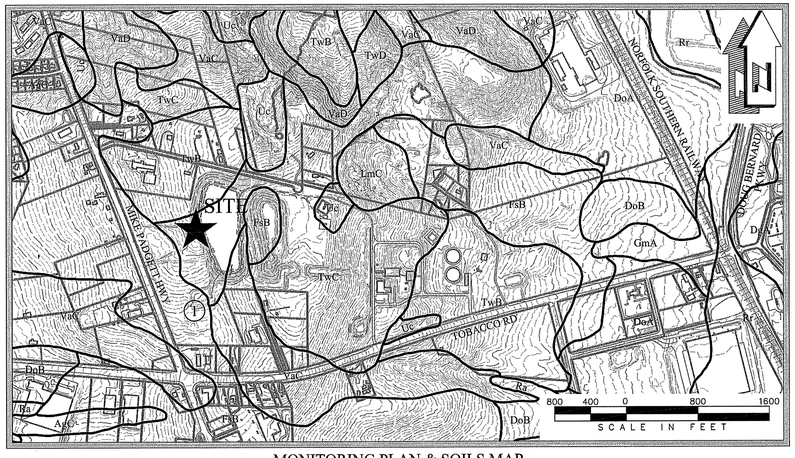
NAME	ADDRESS	PLANS RECIEVED BY/DATE

APPROXIMATE START DATE: JUNE 1, 2019
APPROXIMATE FINISH DATE: AUGUST 30, 2019

WEEKS OF CONSTRUCTIONS ACTIVITIES



NOTES:
1. ALL DISTURBED AREAS NOT INTENDED FOR PAVING SHALL BE STABILIZED USING TEMPORARY MEASURES Ds2 AND PERMANENT MEASURES Ds3.



MONITORING PLAN & SOILS MAP
1"=100'

SITE SOIL TYPE	
SOIL MAP SYMBOL	SOIL NAME
AgC	AILEY LOAMY SAND, 2 TO 6 PERCENT SLOPES
DgA	DOGUE FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES
DoA	DOTHAN LOAMY SAND, 0 TO 2 PERCENT SLOPES
DoB	DOTHAN LOAMY SAND, 2 TO 5 PERCENT SLOPES
FsB	FUQUAY LOAMY SAND, 1 TO 5 PERCENT SLOPES
GmA	GOLDSBORO LOAMY SAND
LmC	LUCY LOAMY SAND, 5 TO 8 PERCENT SLOPES
Ra	RAINS LOAMY SAND
Rr	ROANOKE LOAM
TwB	TROUP FINE SAND, 1 TO 5 PERCENT SLOPES
TwC	TROUP FINE SAND, 5 TO 10 PERCENT SLOPES
TwD	TROUP FINE SAND, 10 TO 17 PERCENT SLOPES
Uc	UDORTHENTS, SANDY AND LOAMY
VaC	VAUCLUSE-AILEY COMPLEX, 5 TO 8 PERCENT SLOPES
VaD	VAUCLUSE-AILEY COMPLEX, 8 TO 17 PERCENT SLOPES

NTU VALUE: Δ50 (THIS IS FOR UPSTREAM AND DOWNSTREAM MONITORING IN WARM WATER STREAMS
SITE SIZE: 10.83 ACRES
DRAINAGE AREA: 0.01 SQUARE MILES

MONITORING POINTS

MONITORING POINT LOCATION IS SHOWN ABOVE:

1 DOWNSTREAM MONITORING POINT AT OUTFALL OF 60" RCP FROM SEDIMENT POND

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Mitchell B Murchison
Level II Certified Design Professional
Certification Number: 0000046396
Issued: 12/25/2022 Expires: 12/25/2025
6/1/2023

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24-HOUR LOCAL ES&PC CONTACT:
NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: CHENDRIX@AUGUSTAGA.GOV

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

CRANSTON

GEORGIA REGISTERED NO. PE031775 PROFESSIONAL ENGINEER SCOTT WILLIAMS
4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITE, JR.
4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	AS SHOWN
JOB No.	2018-0102
DRAWING No.	07

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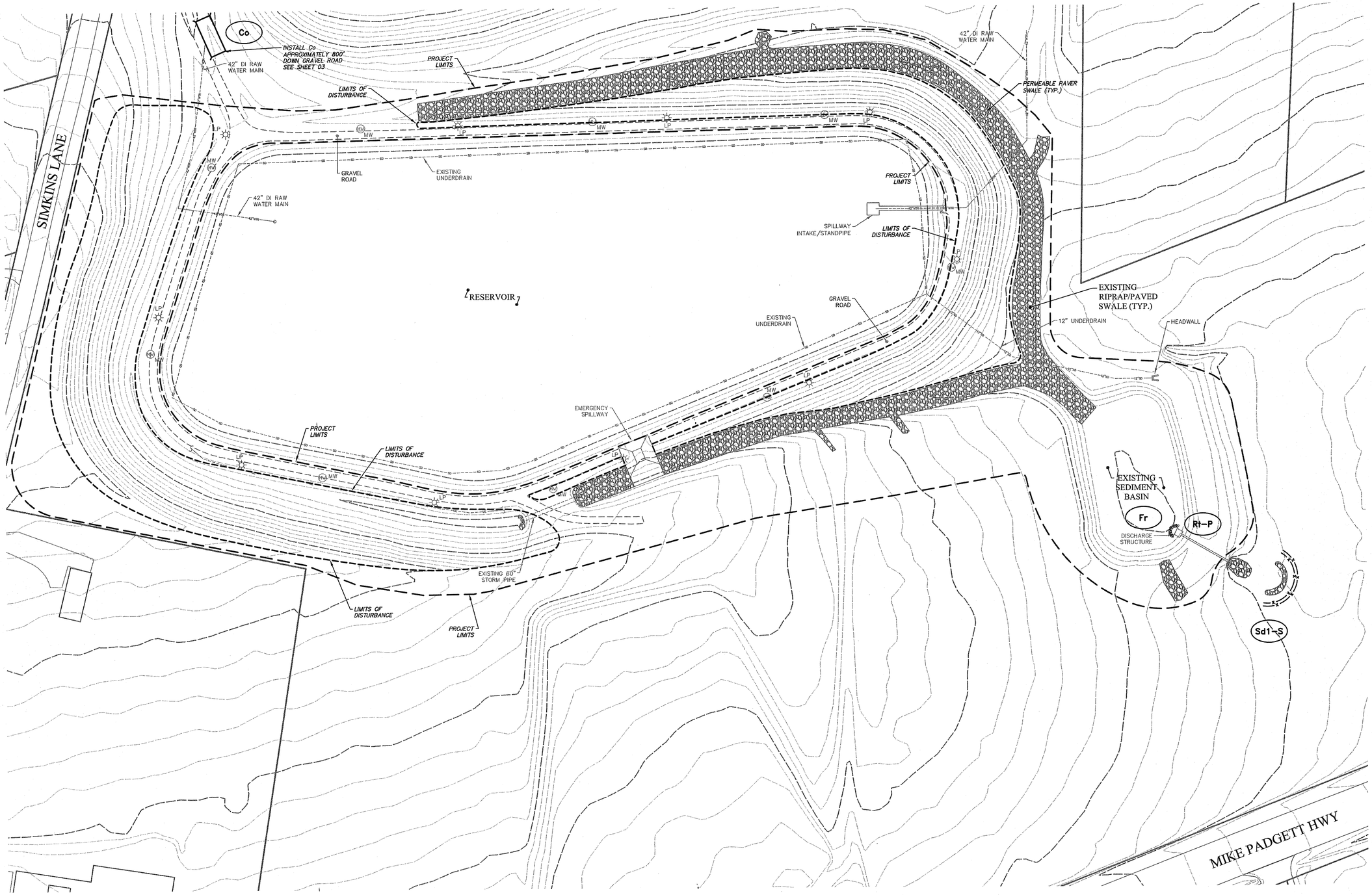

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

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GA. EAST ZONE

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4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE H. WHITEHURST, JR.
4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Initial Erosion Control Plan

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0102
DRAWING No.	08

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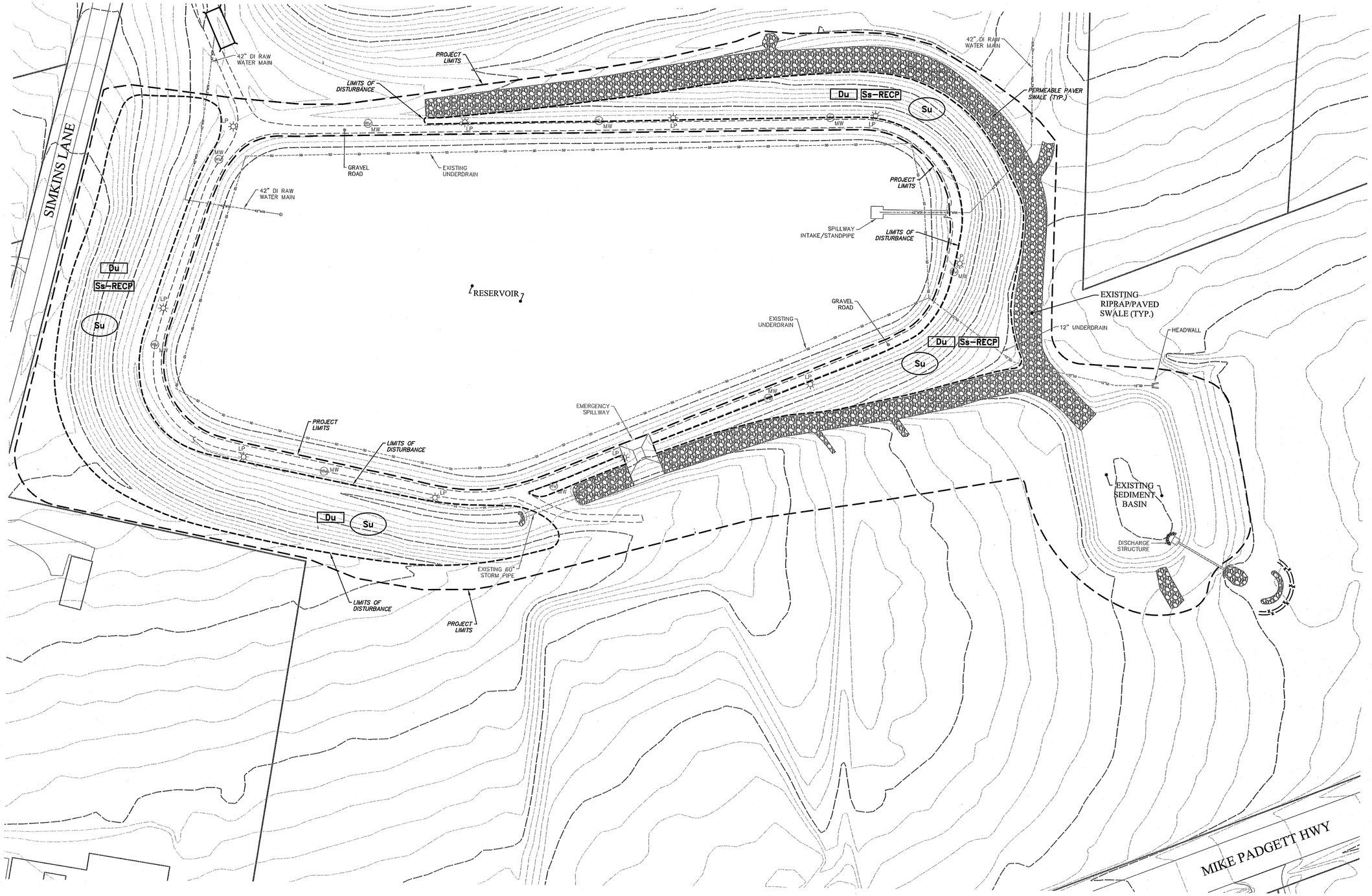

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
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Certification Number 0000465295
Issued: 12/15/2022 Expires: 12/15/2025
6/9/2023

GRID
GA. EAST ZONE

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4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR
4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Intermediate Erosion Control Plan

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0102
DRAWING No.	09

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SIMKINS LANE

42" DI RAW WATER MAIN

PROJECT LIMITS

LIMITS OF DISTURBANCE

GRAVEL ROAD

EXISTING UNDERDRAIN

RESERVOIR

PERMEABLE PAVER SWALE (TYP.)

SPILLWAY INTAKE/STANDPIPE

EXISTING RIPRAP/PAVED SWALE (TYP.)

12" UNDERDRAIN

HEADWALL

EMERGENCY SPILLWAY

EXISTING SEDIMENT BASIN

DISCHARGE STRUCTURE

EXISTING 60" STORM PIPE

MIKE PADGETT HWY

Ds3

SWQ-1

SWQ-2

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

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Issued: 12/21/2021 Expires: 12/21/2025

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GA. EAST ZONE

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4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR

4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Final Erosion Control Plan

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0102
DRAWING No.	10

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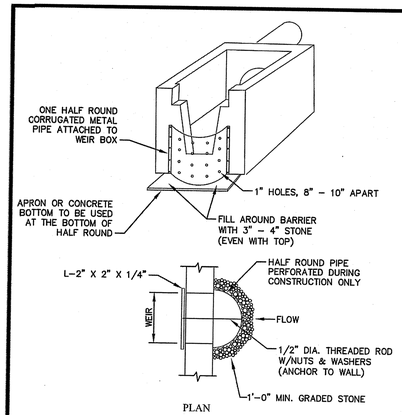
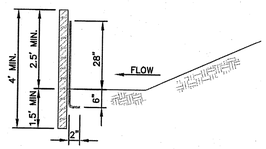
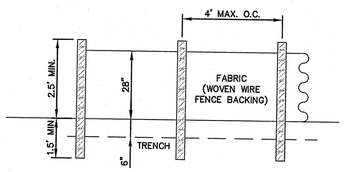


PERFORATED HALF-ROUND PIPE WITH STONE FILTER **Rt–P**

N.T.S.



SIDE VIEW

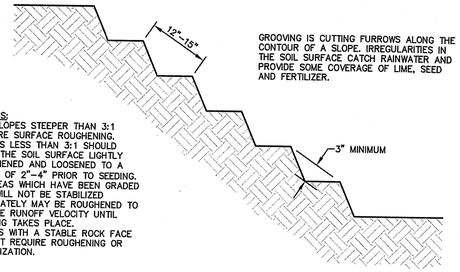


FRONT VIEW

NOTES:
1. USE 36" APPROVED FABRIC, WITH OAK OR STEEL POSTS.
2. P–FACTOR MUST BE LESS THAN 0.045 IAW MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
3. FOR WOOD POSTS, CONNECT WITH A MINIMUM OF 5 EACH, 7 GAUGE STAPLES ¾" WIDE AND ½" LONG, OR OTHER APPROVED METHOD.
4. AT OVERLAPS, USE 18" MINIMUM OR WRAP ENDS TOGETHER AROUND A SINGLE POST TO FORM A CONTINUOUS BARRIER.
5. FOR DOUBLE ROWS, SET FENCES 3 FEET APART.
6. CONTRACTOR MAY USE "C–POP" SILT FENCE IN ACCORDANCE WITH GA. DOT SPECIFICATIONS, IN LIEU OF TYPE–C SILT FENCE.

SILT FENCE - TYPE C **Sd1–S**

N.T.S.

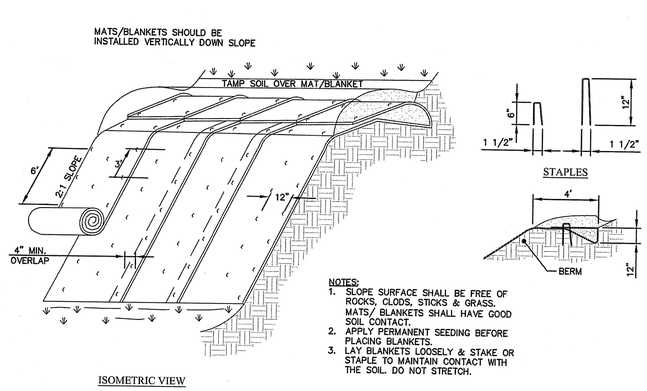


GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME COVERAGE OF LIME, SEED AND FERTILIZER.

CONDITIONS:
1. ALL SLOPES STEEPER THAN 3:1 REQUIRE SURFACE ROUGHENING.
2. SLOPES LESS THAN 3:1 SHOULD HAVE THE SOIL SURFACE LIGHTLY ROUGHENED AND LOOSENED TO A DEPTH OF 2"–4" PRIOR TO SEEDING.
3. 3. AREAS WHICH HAVE BEEN GRADED AND WILL NOT BE STABILIZED IMMEDIATELY MAY BE ROUGHENED TO REDUCE RUNOFF VELOCITY UNTIL SEEDING TAKES PLACE.
4. SLOPES WITH A STABLE ROCK FACE DO NOT REQUIRE ROUGHENING OR STABILIZATION.

SURFACE ROUGHENING **Su**

(GROOVING SLOPES)

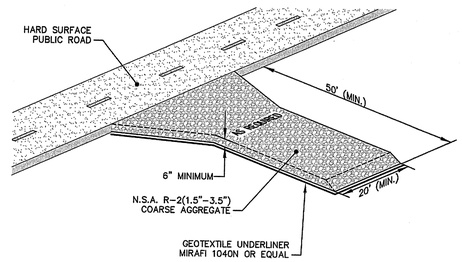


ISOMETRIC VIEW

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS & GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY & STAKE OR STAPLE TO MAINTAIN CONTACT WITH THE SOIL. DO NOT STRETCH.

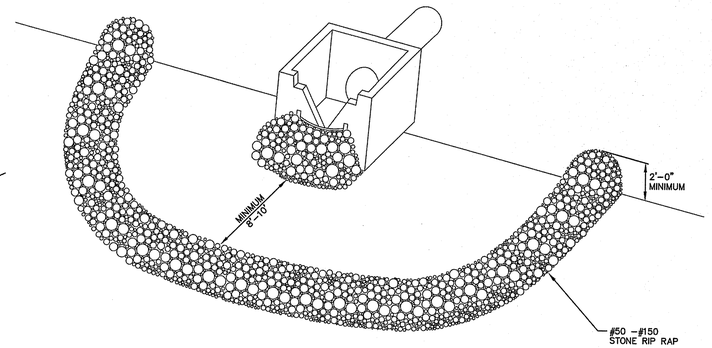
SLOPE STABILIZATION **Ss–RECP**

N.T.S.



CRUSHED STONE CONSTRUCTION OUTLET **Co**

N.T.S.



STONE FILTER RING **Fr**

N.T.S.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT		Co (LABEL)	A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Fr	FILTER RING			A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM INLETS AND POND OUTLETS.
Rt	RETROFITTING		Rt (LABEL)	A DEVICE OR STRUCTURE PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.
Sd1	SEDIMENT BARRIER		TYPE C (INDICATE TYPE)	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR STRAW, BRUSH ,LOGS AND POLES, GRAVEL OR A SILT FENCE.
Su	SURFACE ROUGHENING		Su	A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds3	ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREA.
Du	DUST CONTROL ON DISTURBED AREAS		Du	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE, ROADWAYS AND SIMILAR SITES.
Ss–RECP	SLOPE STABILIZATION		Ss–RECP	A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS

GSWCC Georgia Soil and Water Conservation Commission

Mitchell B Murchison
Level II Certified Design Professional

Certification Number 0000046296
Issued: 12/15/2022 Expires: 12/15/2025

6/9/2023

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4/26/19

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR.

4/26/19

REV #	DATE	DESCRIPTION

N. Max Hicks Water Plant
Reservoir Dam Improvements

Erosion Control Details

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	AS SHOWN
JOB No.	2018–0102
DRAWING No.	11

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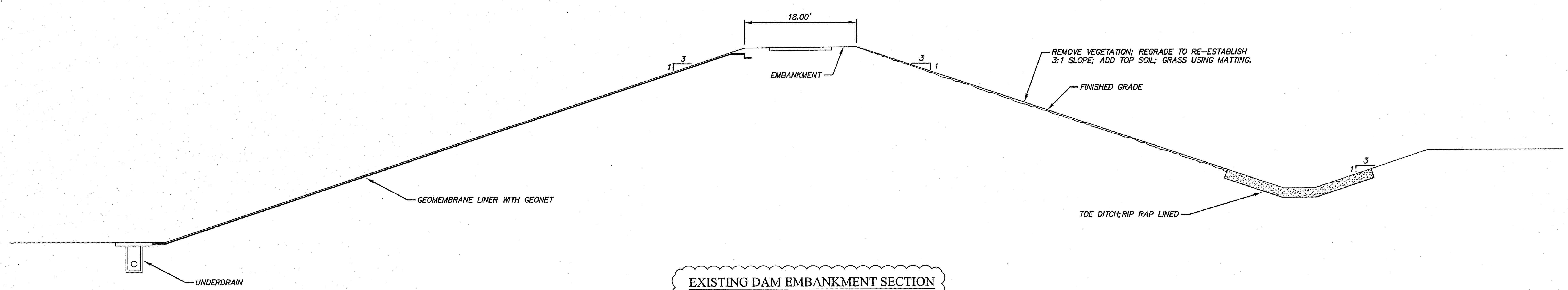
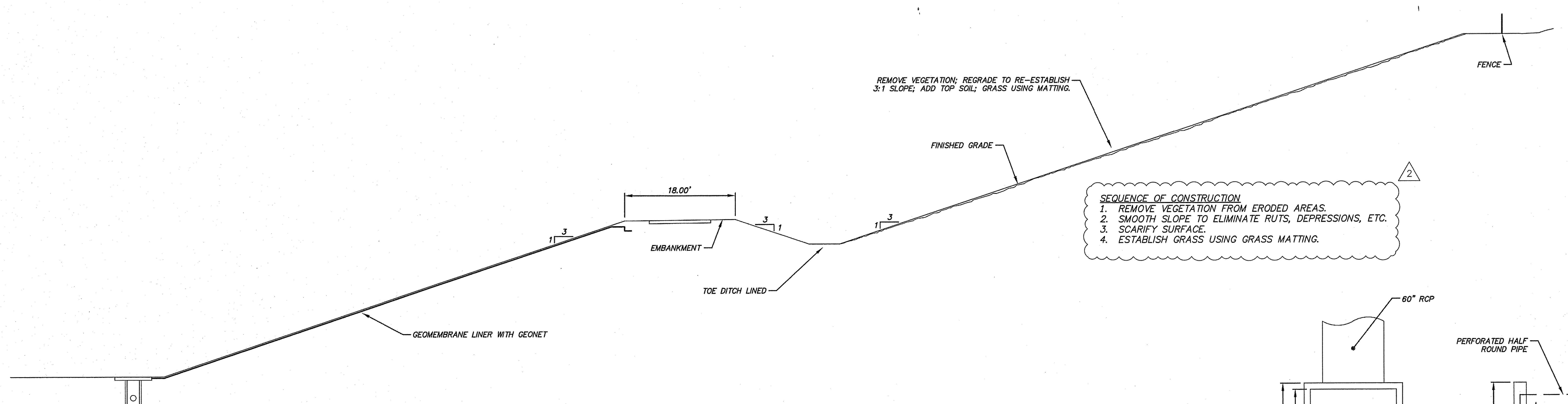


SEQUENCE OF CONSTRUCTION
1. UNDERCUT EXISTING SLOPE 1.5' ON AVERAGE AND REMOVE AND WASTE SOIL AND VEGETATION.
2. IMPORT CLEAN, CLAY-TYPE SOIL AND COMPACT FILL TO RE-ESTABLISH SLOPES AT MINUS 4" BELOW FINAL GRADE.
3. ADD 4" OF IMPORTED TOPSOIL.
4. ESTABLISH GRASS USING GRASS MATTING.

2

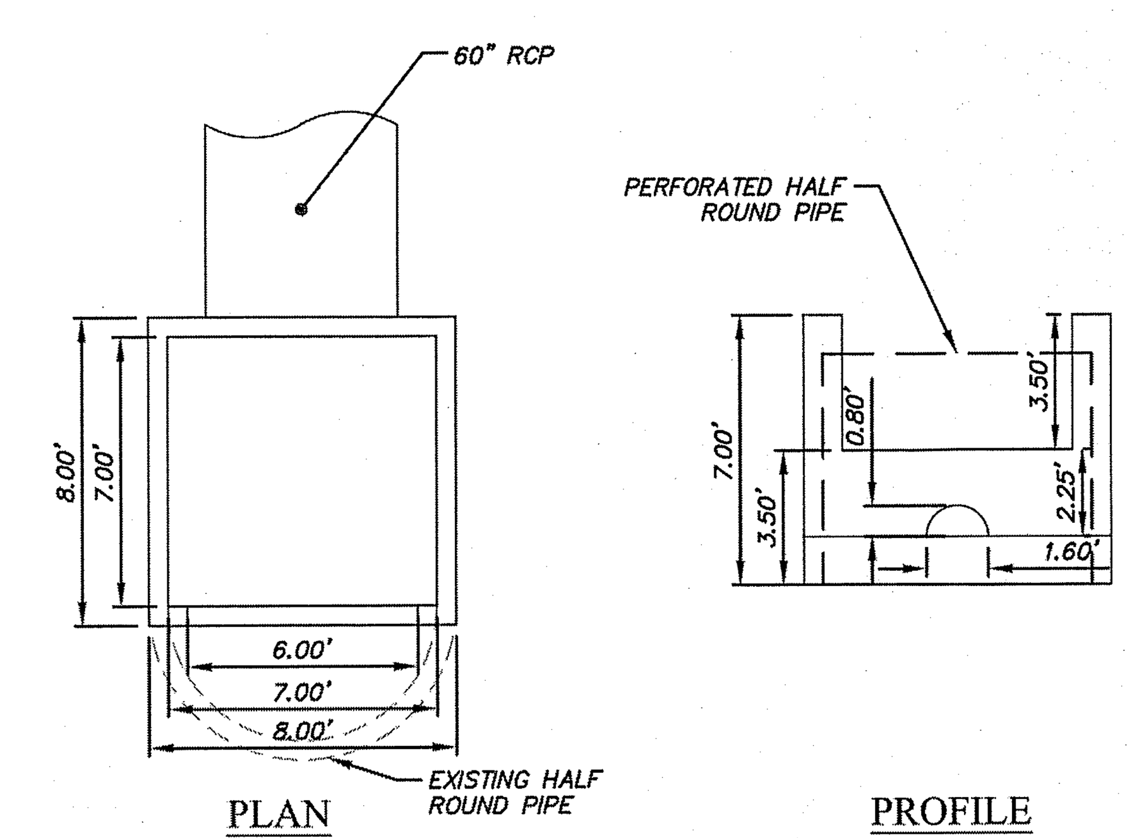
EXISTING DAM EMBANKMENT SECTION
N.T.S.
1



SEQUENCE OF CONSTRUCTION
1. REMOVE VEGETATION FROM ERODED AREAS.
2. SMOOTH SLOPE TO ELIMINATE RUTS, DEPRESSIONS, ETC.
3. SCARIFY SURFACE.
4. ESTABLISH GRASS USING GRASS MATTING.

2

EXISTING DAM EMBANKMENT WITH BACKSLOPE SECTION
N.T.S.
1



PLAN
SCALE: 1"=5'

PROFILE
SCALE: 1"=5'

EXISTING RETROFIT
N.T.S.

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Certification Number 0000046396
Issued: 12/25/2022 Expires: 12/25/2025

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9/29/23

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR.
9/29/23

REV #	DATE	DESCRIPTION
2	9/28/2023	ADD SEQUENCE OF CONSTRUCTION
1	2/20/2020	PER SAFE DAM COMMENTS

N. Max Hicks Water Plant
Reservoir Dam Improvements

Miscellaneous Details

DRAWN BY:	MAB
CHECKED BY:	RDS
APPROVED BY:	EAW
DATE:	APRIL 26, 2019
SCALE:	AS SHOWN
JOB No.	2018-0102
DRAWING No.	12

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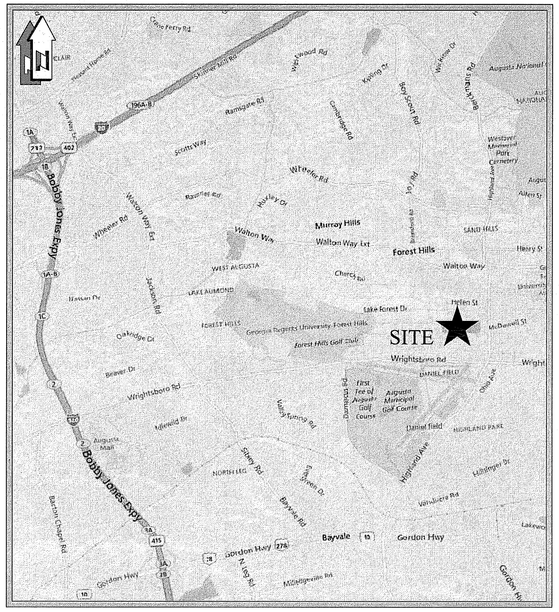
CONSTRUCTION PLANS FOR

HIGHLAND AVENUE WATER TREATMENT PLANT RESERVOIR DAM #1 EAST & DAM #2 WEST IMPROVEMENTS

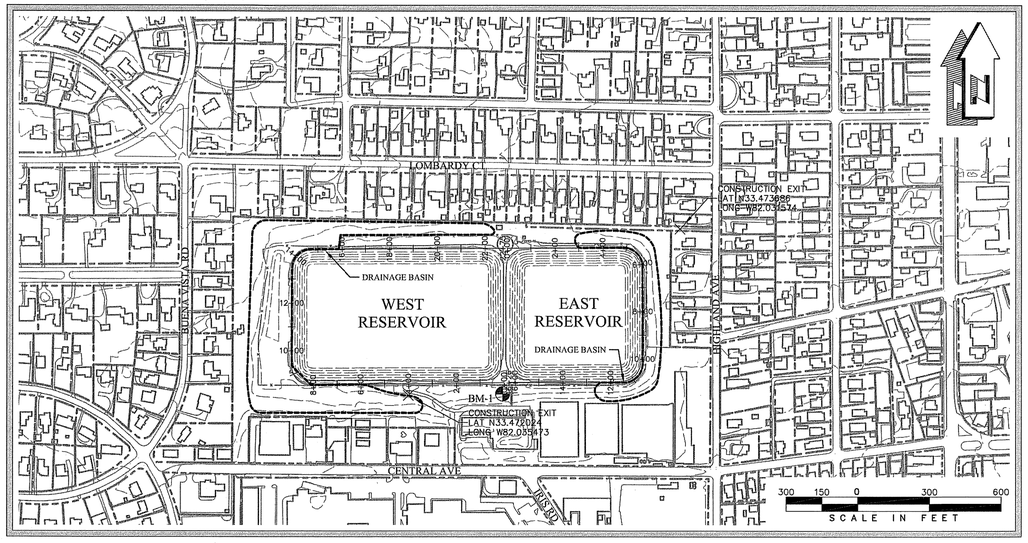
PREPARED FOR

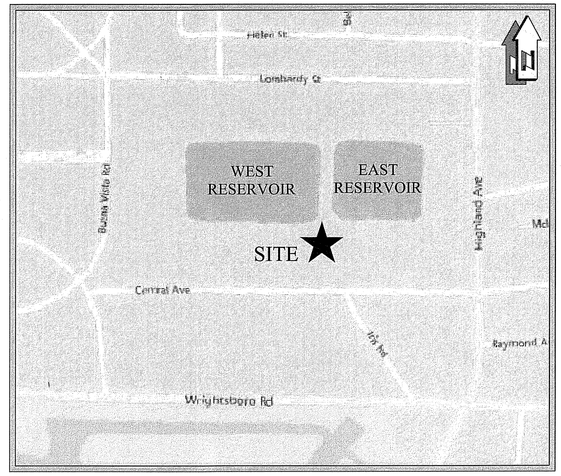
BOARD OF COMMISSIONERS OF AUGUSTA, GEORGIA

535 TELFAIR STREET, SUTIE 220
AUGUSTA, GA 30901



VICINITY MAP
N.T.S.





LOCATION MAP
N.T.S.

PROJECT DATA:

1.	ACREAGE OF PROPERTY:	48.05 ACRES
2.	ACREAGE OF DEVELOPMENT:	5.6 ACRES
3.	OWNER/DEVELOPER:	
	BOARD OF COMMISIONERS OF AUGUSTA, GEORGIA	
	452 WALKER STREET, SUITE 200	
	AUGUSTA, 30901	
	PHONE: 706-312-4153	
	24 HOUR CONTACT:	
	NAME: AUD DISPATCH	
	PHONE: 706-842-3060	
4.	TAX MAP & PARCEL NUMBERS:	043-2-153-00-0
5.	ZONING: R-1B	
6.	DRAINAGE AREA THIS PROJECT:	5.6 ACRES
7.	IMPERVIOUS AREA:	
	EXISTING:	0 ACRES
	PROPOSED:	0 ACRES
8.	PERVIOUS AREA:	
	EXISTING:	5.6 ACRES
	PROPOSED:	5.6 ACRES
9.	RECEIVING STREAM:	VARIOUS
10.	ULTIMATE STREAM:	SAVANNAH RIVER

Sheet Index	
Sheet Number	Sheet Title
C100	Cover
C200	Notes
C300	Site Plan
C400	Sections
C401	Sections & Details
C600	Erosion Control Notes
C601	Erosion Control Notes
C602	Erosion Control Notes
C603	Initial Erosion Contral Plan
C604	Intermediate Erosion Control Plan
C605	Final Erosion Control Plan
C606	Erosion Control Details

BENCHMARK DATA			
NAME	NORTHING	EASTING	ELEVATION
BM-1	1262955.387	696590.381	469.85 (NAVD88)

PREPARED BY

CRANSTON ENGINEERING

ENGINEERS - PLANNERS - SURVEYORS

452 Ellis Street, Augusta, Georgia 30901
Telephone 706-722-1588
CranstonEngineering.com

NOVEMBER 26, 2019

LAST REV. MARCH 12, 2021

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 0000046296
Issued: 12/15/2022 Expires: 12/15/2025
6/9/2023

GEORGIA 811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE WHITEHURST, JR.
3/12/21

GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

2018-0273
C100

G:\PROJECTS\2018\2018-0273 - HIGHLAND AVENUE WATER PLANT RESERVOIR DAM\AC-DRAWINGS\CIVIL\2018-0273_COVR_01.DWG 5/31/2023 2:47 PM

GENERAL NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE AUGUSTA UTILITIES DEPARTMENT, AND THE PROJECT SPECIFICATIONS.
2. COORDINATE ROAD CLOSINGS AND DETOURS WITH THE AUGUSTA–RICHMOND COUNTY PUBLIC WORKS & ENGINEERING DEPARTMENT (706) 821–1706.
3. CERTIFIED FLAGGERS AND/OR ARROW BOARDS WILL BE REQUIRED TO MAINTAIN TRAFFIC CONTROL WHILE WORKING WITHIN THE LIMITS OF PUBLIC OR PRIVATE ROADWAYS.
4. DATE OF SURVEY – DATA OBTAINED FROM ORIGINAL CONSTRUCTION PLANS; NO SEPARATE SURVEY MADE.
5. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR INDICATED IN ANY WAY THEREBY, WHETHER BY DRAWINGS OR NOTES OR ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY AND ARE NOT GUARANTEED.
6. THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE OWNER IN THE EVENT THAT PREVIOUSLY UNKNOWN HISTORICAL OR ARCHEOLOGICAL SITES ARE DISCOVERED DURING CONSTRUCTION. NO ADDITIONAL WORK IN SUCH AREAS WILL BE ALLOWED UNTIL AUTHORIZED.
7. ALL STRUCTURES, TREES AND SHRUBS WHICH ARE WITHIN THE DESIGNATED CONSTRUCTION AREA, BUT OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
7. CONTRACTOR IS TO CLEAN ALL STORM WATER INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE ANY SILT AND DEBRIS. THE CLEANING OF DROP INLETS, CULVERTS, AND PIPES (EXISTING AND PROPOSED) SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, NO ADDITIONAL PAYMENT WILL BE MADE THEREFOR.
8. UNSUITABLE AND SURPLUS EXCAVATION MATERIAL NOT REQUIRED FOR FILL MAY BE DISPOSED IN ONSITE WASTE OR SPOIL AREAS. CONTRACTOR TO OBTAIN APPROVAL OF ENGINEER FOR EXACT WASTE DISPOSAL AREA.
9. DISTURBANCES TO ANY SURVEY MARKERS OR MONUMENTS REQUIRES RE–ESTABLISHMENT BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
10. ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON THE PLANS OR IN THE SPECIFICATIONS SHOULD BE NOTED ON THE CONTRACTORS PROPOSAL AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO CORRECT THE SAME.
11. ADDITIONAL CLEARING AND GRUBBING BEYOND THE LIMITS SHOWN SHALL BE AT THE CONTRACTORS DISCRETION, SUBJECT TO THE OWNER'S APPROVAL, TO FACILITATE CONSTRUCTION.
12. THE AUGUSTA UTILITIES DEPARTMENT (706–821–1706) SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE DURING REGULAR HOURS (8:30 AM TO 5:00 PM, MONDAY THROUGH FRIDAY, EXCLUDING AUGUSTA, GA HOLIDAYS) BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
13. A PRE–CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE DIRECTOR OF AUGUSTA UTILITIES DEPARTMENT OR HIS REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION. THIS MEETING SHALL BE SCHEDULED WITH THE DEPARTMENT AT THE TIME THE NOTIFICATION OF WORK COMMENCEMENT IS GIVEN.
14. ALL SILT BARRIERS MUST BE PLACED IMMEDIATELY FOLLOWING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIERS INSTALLATION IS COMPLETED.
15. ACCORDING TO THE FEMA FIRM PANEL NUMBER 13245C0110G, NO PORTIONS OF THIS PROPERTY LIE WITHIN THE 100 YEAR FLOOD PLAIN.
16. THE EXISTENCE, ABSENCE, LOCATION AND ELEVATION OF UNDERGROUND UTILITIES ON THE PLANS ARE NOT BASED ON FIELD MARKS, ARE NOT GUARANTEED, AND SHALL BE INVESTIGATED, UNEARTHED IF NECESSARY, AND VERIFIED BY CONTRACTOR BEFORE BEGINNING CONSTRUCTION.
17. ALL UNDERGROUND UTILITIES SHALL BE FIELD LOCATED AND MARKED BEFORE BEGINNING CONSTRUCTION.
18. NO EXTRA PAYMENT WILL BE MADE FOR REPAIRS TO DAMAGE OF EXISTING UTILITIES.
19. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, ABOVE GROUND OR UNDERGROUND, POWER POLES, ETC.; CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH APPROPRIATE UTILITIES PRIOR TO OR DURING CONSTRUCTION.
20. THE FOLLOWING UTILITY OWNERS MAY HAVE FACILITIES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION ON THIS PROJECT:

GEORGIA POWER COMPANY	KMC TELECOM
ATLANTA GAS LIGHT COMPANY	AT&T
AUGUSTA UTILITIES –WATER & SEWER	COMCAST
JEFFERSON EMC	WOW

21. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION INC. "CALL BEFORE YOU DIG" SERVICE, 811 IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION OR CONSTRUCTION.
22. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY IN PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
23. USE SIKADUR–51 NS, NON–SAGGING, FLEXIBLE JOINT SEALER BY SIKA, USA TO SEAL CRACKS IN CONCRETE LINER AND TO SEAL ANY LEAKS FOUND IN MANHOLES.

1

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 0000046296
Issued 12/5/2022 Expires 12/5/2025
6/9/2023

GEORGIA 811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

CRANSTON ENGINEERING
ENGINEERS - PLANNERS - SURVEYORS
452 Ellis Street, Augusta, Georgia 30901
Telephone 706-722-1588
CranstonEngineering.com

GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

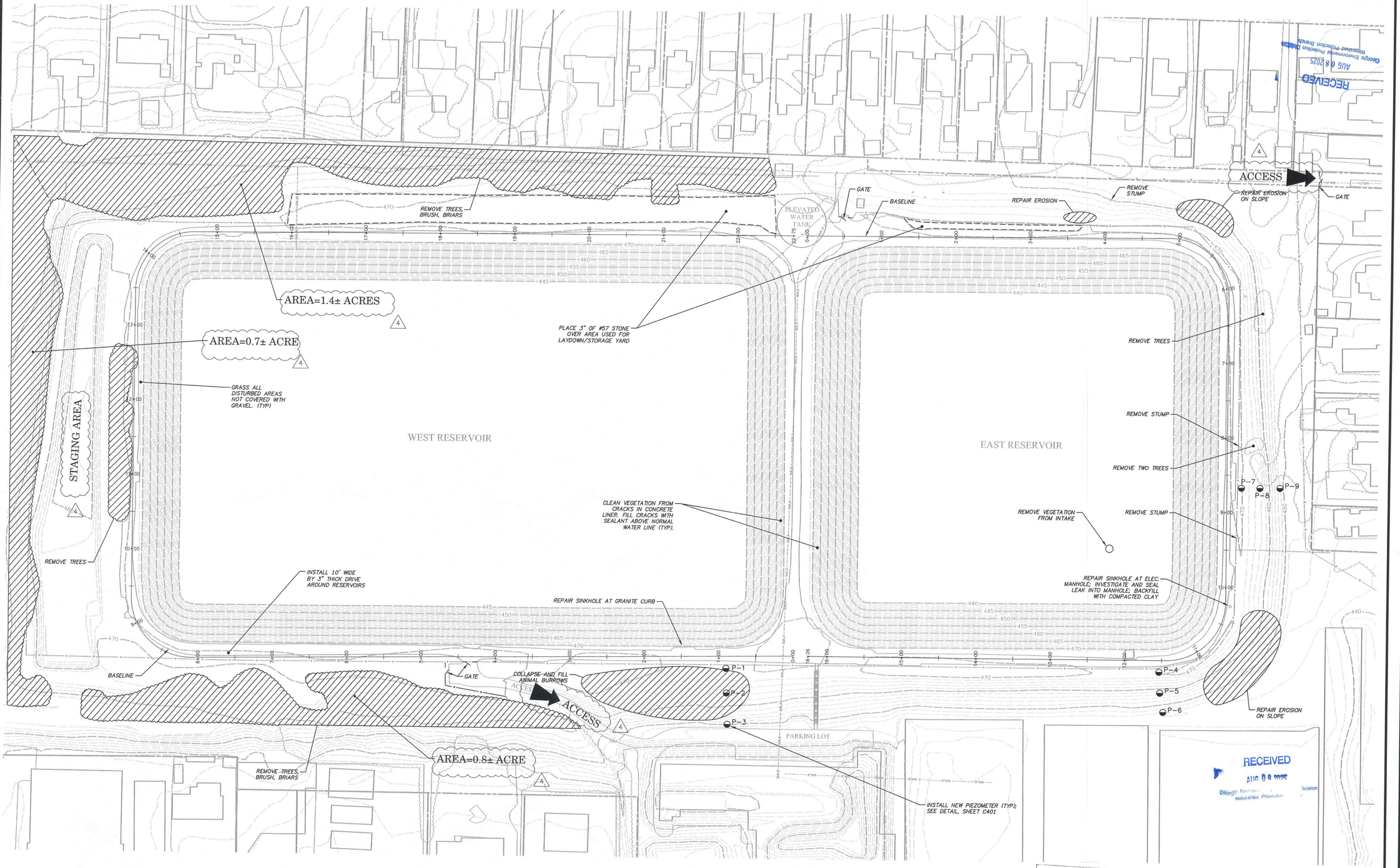
GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WENTHROP, JR. 3/12/21

REV #	DATE	DESCRIPTION
1	3/12/2021	ADD NOTE 23

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Notes

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	NO SCALE
JOB No.	2018–0273
DRAWING No.	C200



PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

RECEIVED
AUG 08 2025
Georgia Environmental Protection Division
Watershed Protection Branch

RECEIVED
AUG 08 2025
Georgia Environmental Protection Division
Watershed Protection Branch

APPROVED
STATE OF GEORGIA
DEPT. OF NATURAL RESOURCES
AUG 25 2025
Safe Dams Program
Environmental Protection Division
By: _____, P.E.

GA. EAST ZONE GRID

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
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Certification Number 0000046296
Issued: 12/25/2022 Expires: 12/25/2025

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CRANSTON

GEORGIA
Cranston Engineering Group
NO. PEF000151
CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED
NO. 11971 PROFESSIONAL
ELRIDGE A. YOUNG, JR.
ENGINEER
7/28/25

REV #	DATE	DESCRIPTION
4	7/28/2025	MISC. REVISIONS
3	5/25/2023	PREPARE FOR BIDDING
2	3/12/2021	ADD PIEZOMETERS
1	7/30/2020	PER SAFE DAMS REVIEW

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Site Plan

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0273
DRAWING No.	C300

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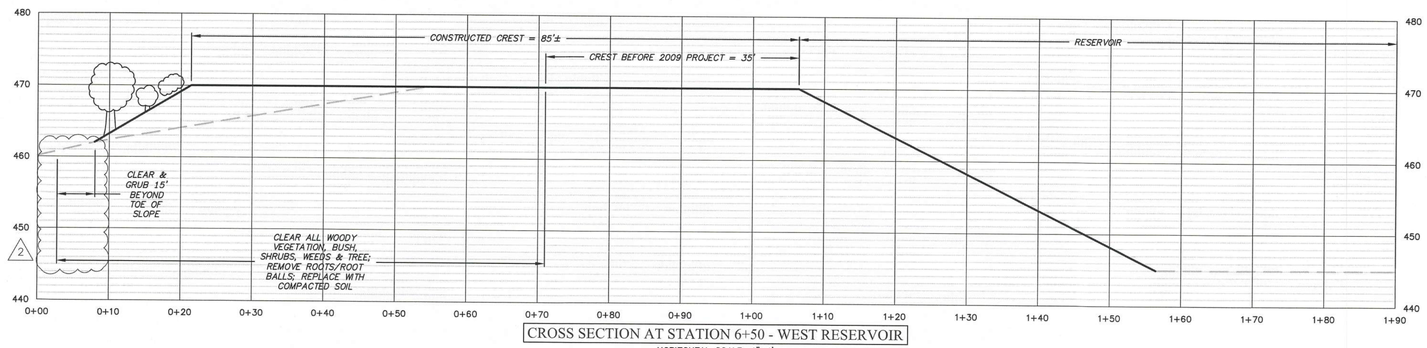

CROSS SECTION AT STATION 6+50 - WEST RESERVOIR

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

RECEIVED
AUG 08 2025
Georgia Environmental Protection Division
Watershed Protection Branch

AUG 25 2025
Safe Dams Program
Environmental Protection Division
By: _____ P.E.

GSWCC Georgia Soil and Water Conservation Commission
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GEORGIA
REGISTERED
NO. 11971
PROFESSIONAL
ELDRIDGE A. WHITEHEAD, JR.
ENGINEER
7/28/25

REV #	DATE	DESCRIPTION
2	7/28/2025	ADD 15' DIMENSION
1	5/25/2023	PREPARE FOR BIDDING

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Sections

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	1" = 10'
JOB No.	2018-0273
DRAWING No.	C400

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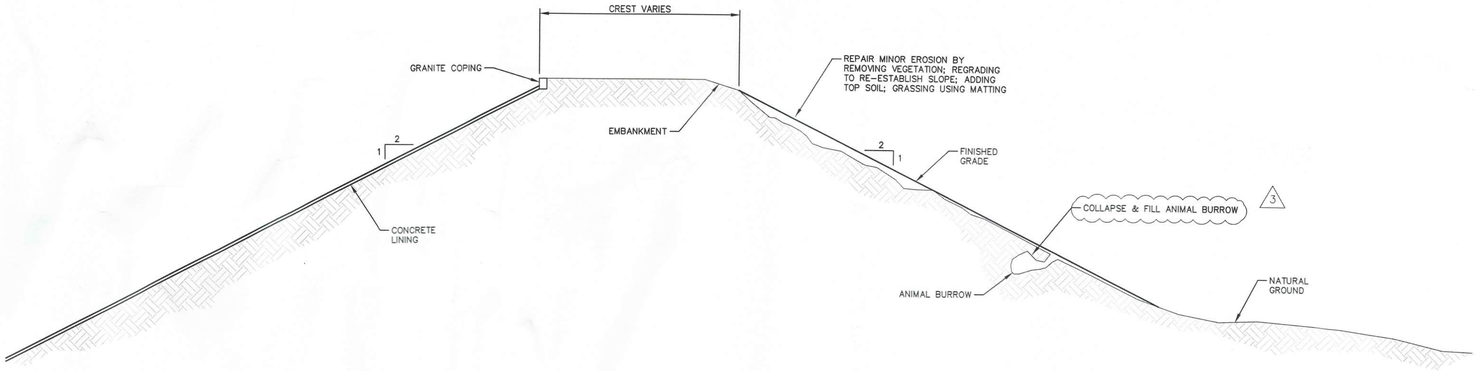
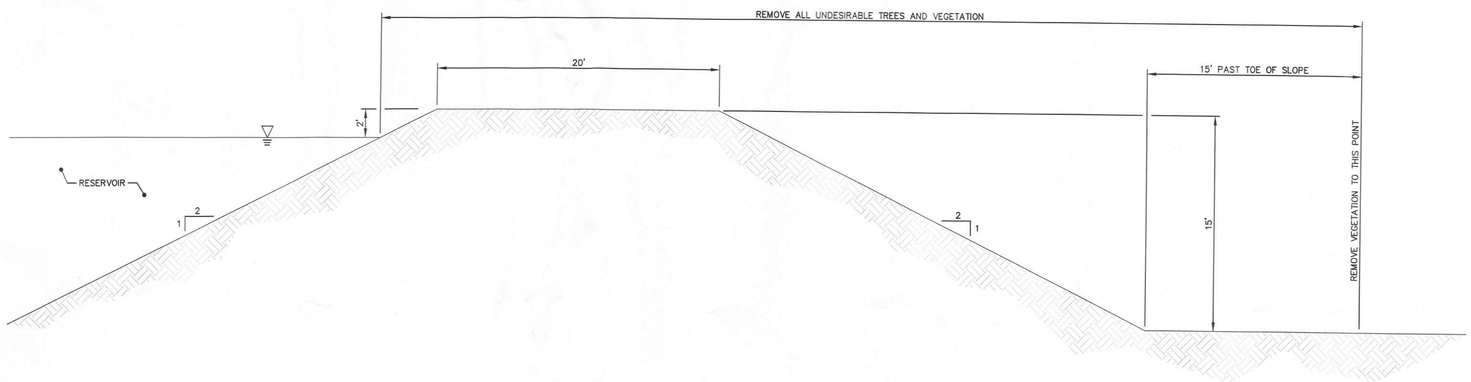


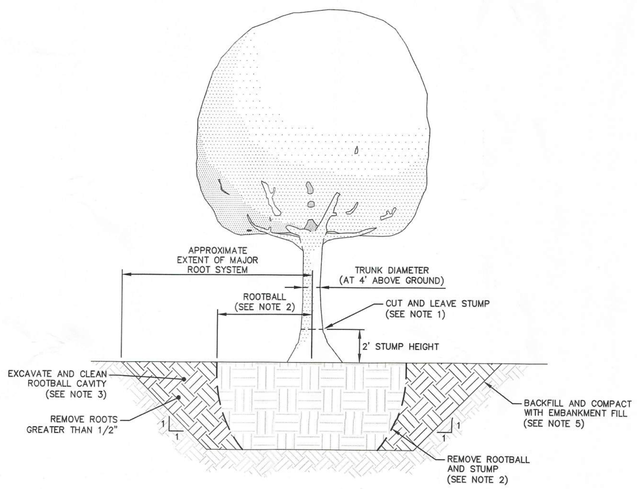
TYPICAL DAM EMBANKMENT REPAIR SECTION

N.T.S.



TYPICAL TREE AND VEGETATION REMOVAL DETAIL

N.T.S.

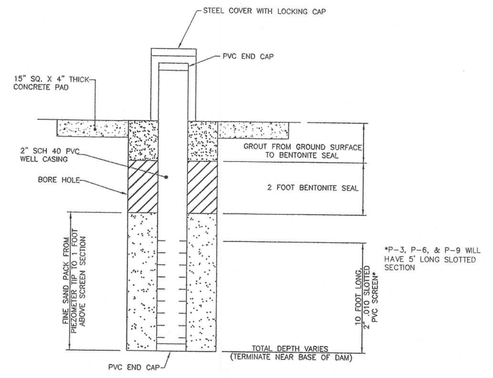


TYPICAL TREE REMOVAL - PROFILE VIEW

N.T.S.

NOTES:

1. CUT THE TREE APPROXIMATELY TWO FEET ABOVE GROUND LEVEL, LEAVING A PROMINENT STUMP FOR USE IN THE ROOTBALL REMOVAL PROCESS.
2. LOOSEN THE ROOTBALL BY PULLING THE STUMP FROM DIFFERENT DIRECTIONS AND THEN REMOVE THE ROOTBALL AND STUMP ALL TOGETHER. THE ROOTBALL CAN BE ESTIMATED, IN FEET, TO EXTEND 0.625 TIMES THE TRUNK DIAMETER (IN INCHES) FROM THE TREE. THE MAJOR ROOT SYSTEM CAN EXTENT CAN BE ESTIMATED (IN FEET) AS TWICE THE ROOTBALL EXTENT (IN FEET). (FOR EXAMPLE FOR A 16 INCH TRUCK DIAMETER ROOTBALL WILL EXTEND APPROXIMATELY 10 FEET FROM THE TREE AND THE MAJOR ROOT SYSTEM WILL EXTEND 20'.)
3. CLEAN THE ROOTBALL CAVITY TO REMOVE LOOSE SOIL AND THE REMAINING ROOT SYSTEM BY EXCAVATING AND UNDERCUTTING THE ROOTBALL CAVITY MAXIMUM 1:1 (HORIZONTAL AND VERTICAL) SIDE SLOPES AND A HORIZONTAL BOTTOM.
4. INSPECT UNDERCUT AREA TO CONFIRM THAT ALL MAJOR ROOT SYSTEMS GREATER THAN ABOUT ONE-HALF IN IN DIAMETER HAVE BEEN REMOVED DURING THE UNDERCUTTING OPERATION.
5. BACKFILL WITH EXCAVATED EMBANKMENT FILL OR SIMILAR SUITABLE MATERIAL AND COMPACT IN MAXIMUM LOOSE LIFTS OF EIGHT INCHES. COMPACT WITH MANUALLY OPERATED OR BACKHOE-MOUNTED COMPACTION EQUIPMENT. MATERIALS CONSIDERED UNSUITABLE FOR BACKFILLING INCLUDE TOPSOIL, ORGANIC MATTER, CONTAMINATED SOIL, CONSTRUCTION DEBRIS, PERISHABLE MATERIALS, SOFT/COMPRESSIBLE SOILS, AND ROCKS OR LUMPS OF CEMENTED SOIL OVER 2 INCHES IN MAXIMUM DIMENSION.
6. ESTABLISH GRASS COVER (OR EROSION PROTECTION) ON ALL DISTURBED AREAS.



PIEZOMETER DETAIL

NOT TO SCALE

RECEIVED
AUG 08 2025
Georgia Environmental Protection Division
Watershed Protection Branch

APPROVED
DEPARTMENT OF NATURAL RESOURCES
AUG 25 2025
Safe Dams Program
Environmental Protection Division
By: _____ P.E.

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7/28/25

REV #	DATE	DESCRIPTION
3	7/28/2025	ADD NOTE
2	5/25/2023	PREPARE FOR BIDDING
1	3/12/2021	ADD PIEZOMETER DETAIL

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Sections & Details

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0273
DRAWING No.	C401

G:\PROJECTS\2018\2018-0273 - HIGHLAND AVENUE WATER PLANT RESERVOIR DAM\AC-DRAWINGS\CIVIL\2018-0273_DTLS_01.DWG 7/31/2025 10:21 AM

GSWCC AND NPDES NOTES:

NOTE:
PUT A "X" IN APPROPRIATE BOX

PROJECT NAME: HIGHLAND AVENUE WATER TREATMENT PLANT RESERVOIR
DAM #1 EAST & DAM #2 WEST IMPROVEMENTS
ADDRESS: 2882 CENTRAL AVENUE
CITY / COUNTY: AUGUSTA / RICHMOND ZIP CODE: 30909
DATE ON PLANS: NOVEMBER 26, 2019

1. [X] GAR 100001 STAND ALONE [ ] GAR 100002 INFRASTRUCTURE [ ] GAR 100003 COMMON DEVELOPMENTS
2. LEVEL II CERTIFICATION: NAME: MITCHELL B. MURCHISON NO#. 46296 EXP. DATE: 11/01/22
3. 24 HOUR CONTACT: NAME: AUD DISPATCH PHONE: 706-842-3060
4. PRIMARY PERMITTEE: NAME: BOARD OF COMMISSIONERS OF AUGUSTA, GEORGIA
   ADDRESS: 535 TELFAIR STREET, SUTIE 220
   AUGUSTA, GA 30901
   PHONE: CLIENT PHONE NUMBER
   EMAIL: CLIENT EMAIL
5. TOTAL ACRES: 5.6 TOTAL ACRES DISTURBED: 3.9
6. (A) TAX MAP NUMBER: 043-2-153-00-0
   (B) CRITICAL AREAS: YES [ ] NO [X]
   IF YES, DESCRIBE: DESCRIPTION OF CRITICAL AREA IF NEEDED
7. VICINITY MAP SHEET C100 ON PLANS
8. GRAPHIC SCALE: AS NOTED ON INDIVIDUAL SHEETS.
9. EXISTING AND PROPOSED CONTOUR LINES AT REQUIRED INTERVALS:
   YES [X] NO [ ]
10. BOUNDARY LINE SURVEY: SHEET C300 ON PLANS
11. DELINEATION OF DRAINAGE BASIN ON PROJECT SITE: SHEET(S): C100
12. (A) DELINEATION OF ON-SITE WETLANDS: YES [ ] SHEET(S): N/A
    NO ON-SITE WETLANDS: NO [X]
    (B) DELINEATION OF STATE WATERS ON OR WITHIN 200 FT. OF PROJECT SITE:
    YES [ ] SHEET(S): N/A
    NO STATE WATERS ON OR WITHIN 200 FT. OF PROJECT SITE: NO [X]
13. DELINEATION OF 25 FOOT OR 50 FOOT UNDISTURBED BUFFER:
    NOT APPLICABLE [X] YES [ ] SHEET(S): N/A
14. DELINEATE ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMEDIATE STREAMS:
    SHEET --- ON PLANS
15. STORM DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION:
    STORM DRAIN PIPE MUST SHOW Q, V, L, W, D, AND SIZE.
    SHEET(S) N/A ON PLANS
16. SOIL SERIES FOR THE PROJECT SITE: (PROVIDE MAP)
    SHEET C602 ON PLANS
17. IDENTIFY PROJECT RECEIVING STREAM: SHEET N/A ON PLANS
18. IMPAIRED STREAM: YES [ ] NO [X]
19. TMDL IMPLEMENTATION PLAN FOR SEDIMENT:
    YES [ ] NO [X]
20. HYDROLOGY STUDY FOR PRE AND POST DEVELOPED CONDITIONS:
    YES [ ] NO [X]
21. INITIAL DATE ON PLANS THE DATE(S) OF ANY REVISIONS
    AND WHO REQUESTED THEM YES [X] NO [ ]
22. LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION:
    YES [X] NO [ ] SHEET(S) C603,C604 & C605 ON PLANS
23. LIMITS OF DISTURBANCE OVER 50 ACRES:
    YES [ ] NO [X]
24. SEDIMENT STORAGE PER CHECKLIST / PERMIT REQUIREMENTS:
    SHEET C602 ON PLANS
25. USE OF ALTERNATE BMPs:
    YES [ ] NO [X]
    IF YES, ALTERNATE BMP CALC SHEET: N/A
26. BMPs TO REDUCE OFF-SITE VEHICLE TRACKING (Co) AND GENERATION OF DUST (Du):
    YES [X] NO: [ ]
27. OFF-SITE VEHICLE TRACKING OF DIRT, SOILS, SEDIMENTS AND THE GENERATION OF DUST SHOULD BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL. THE PLAN SHALL INCLUDE THE BMPs TO BE IMPLEMENTED AT THE SITE OR CONSTRUCTION ACTIVITY. A STABILIZED CONSTRUCTION EXIT HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. REFER TO SHEET(S) C603 THRU C605 & C606 FOR CONSTRUCTION EXIT LOCATION AND DETAILS. THE PAVED STREETS ADJACENT TO THE SITE SHALL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT, OR ROCK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

CRUSHED STONE CONSTRUCTION EXIT:

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS & DRIVES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES OFFSITE ONTO ADJACENT ROADS AND DRIVES, OR INTO STORM DRAINS, MUST BE REMOVED IMMEDIATELY.

DUST CONTROL (Du) NOTES:

SPRAY-ON ADHESIVES: THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TILLAGE: THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION: THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS: SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLE TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE: APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

REFER ALSO TO SHEET(S) C606 FOR THE "DUST CONTROL ON DISTURBED AREAS (Du) GSWCC DETAIL AND SHEET C606 FOR THE "CONSTRUCTION EXIT (Co)" GSWCC DETAIL.

CONCRETE WASHDOWN:

28. TOOLS
BMPs FOR CONCRETE WASHDOWN OF THE FOLLOWING:
ALL CONCRETE WASH WATER THAT RESULTS FROM THE WASHDOWN OF TOOLS USED FOR CONCRETE WORK SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHDOWN AREA. DETAIL ON SHEET ON PLANS

CONCRETE MIXER CHUTES
ALL CONCRETE WASH WATER THAT RESULTS FROM THE RINSING OUT OF CONCRETE MIXER CHUTES SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

HOPPERS
ALL CONCRETE WASH WATER THAT RESULTS FROM RINSING OUT OF CONCRETE HOPPERS SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

REAR OF VEHICLES
ALL CONCRETE WASH WATER THAT RESULTS FROM RINSING OUT OF CONCRETE TRUCKS SHALL BE CONTAINED IN A DESIGNATED CONCRETE WASHOUT AREA.

WASH OUT OR DISCHARGE OF ANY SURPLUS CONCRETE ON THE GROUND OR DRUM WASHOUT FROM CONCRETE TRUCKS AT THE CONSTRUCTION SITE IS PROHIBITED.

SPILL CLEANUP AND CONTROL PRACTICES:

29. BMPs FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS:

LOCAL, STATE, AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO ALL ON-SITE PERSONNEL.

MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDE, BUT IS NOT LIMITED TO: BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST, AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.

SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL STATE, AND FEDERAL REGULATIONS.

FOR SPILLS THAT IMPACT SURFACE WATER (I.E. LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24-HOURS AT 1-(800)-426-2675.

FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24-HOURS AT 1-(800)-426-2675.

FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION (EPD) WILL BE CONTACTED WITHIN 24-HOURS. GA. EPD (404)-656-4863 OR (800)-241-4113 AND THE NATIONAL RESPONSE CENTER AT (800)-424-8802

FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1,320 GALLONS OF PETROLEUM IS STORED ON-SITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. IN SUCH A CASE, THE CONTRACTOR WILL NEED A SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURES PLAN PREPARED BY A LICENSED PROFESSIONAL.

30. FOR PHASED EROSION AND SEDIMENTATION CONTROL PLANS (I.E. INITIAL PHASE, INTERMEDIATE PHASE, AND FINAL PHASE) SHOWING THE LOCATION OF BEST MANAGEMENT PRACTICES (BMPs) THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA, CURRENT EDITION, USING UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND, REFER TO SHEET(S) C603,C604 ,C605, & C606 ON PLANS.

31. DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY:
EMBANKMENT REPAIR

32. DESCRIPTION OF THE APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH PHASE OF EROSION AND SEDIMENT CONTROL:

INITIAL PHASE
INSTALLATION OF PERIMETER CONTROL BMPs (SILT FENCE (Sd1-NS) AT THE LIMITS OF DISTURBANCE); CONSTRUCTION EXITS (Co) TO PREVENT THE TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS AND DRIVES

INTERMEDIATE PHASE
MAINTAIN SILT FENCE TYPE-"C" (Sd1-NS) FOR PERIMETER CONTROL; MAINTAIN CONSTRUCTION EXITS (Co) TO PREVENT THE TRACKING OR FLOW OF MUD ONTO ADJACENT ROADS AND DRIVES; DUST CONTROL ON DISTURBED AREAS (Du); DISTURBED AREA STABILIZATION WITH MULCHING ONLY (Ds1); AND DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING (Ds2).

FINAL
MAINTAIN SILT FENCE TYPE-"C" (Sd1-C) FOR PERIMETER CONTROL; DISTURBED AREA STABILIZATION WITH GRASS (Ds4). REMOVAL OF ALL BMP DEVICES ONCE THE SITE IS FULLY STABILIZED.

33. CONSTRUCTION SCHEDULE
CHART ON SHEET C602 ON PLANS

PRODUCT SPECIFIC PRACTICES:

34. PETROLEUM BASED PRODUCTS
CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/ MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS / FINISHES / SOLVENTS
ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

FERTILIZER / HERBICIDES
THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS
NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIALS WILL BE DISPOSED OF IN ACCORDANCE WITH PROPER WASTE DISPOSAL PROCEDURES.

BUILDING MATERIALS, PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS SHALL BE COVERED WITH PLASTIC GREEN SHEETING OR TEMPORARY ROOFS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.

35. DESCRIPTION OF MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED:

MEASURES INCLUDE A COMBINATION OF VEGETATED SWALES AND NATURAL DEPRESSIONS FOR FLOW ATTENUATION, LANDSCAPED AND TURF AREAS, AND IMPERVIOUS SURFACES THAT WILL REDUCE SOIL AND SEDIMENT RUNOFF.

THESE MEASURES WILL ENSURE THAT THE NATURAL, PHYSICAL, AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS OF THE WATER COURSE ARE MAINTAINED AND PROTECTED.

36. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PAGE 19 OF THE PERMIT:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION."

Mitchell Murchison 46296 12/25/2025 ~~11/01/22~~
GSWCC LEVEL II DESIGN PROFESSIONAL GSWCC LEVEL II CERTIFICATION NO. EXP.DATE

37. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMPs AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PAGE 19 OF THE PERMIT:

"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AN SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. 100001."

Mitchell Murchison 46296 12/25/2025 ~~11/01/22~~
GSWCC LEVEL II DESIGN PROFESSIONAL GSWCC LEVEL II CERTIFICATION NO. EXP.DATE

38. CERTIFICATION STATEMENT AND SIGNATURE OF THE PERMITTEE OR DULY AUTHORIZED REPRESENTATIVE AS STATED IN SECTION V.G.2.d OF THE STATE GENERAL PERMIT:

STANDARD PERMIT CONDITIONS SIGNATORY REQUIREMENTS CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

BOARD OF COMMISSIONERS OF AUGUSTA, GEORGIA CLIENT PHONE NUMBER
PRIMARY PERMITTEE PRIMARY PERMITTEE CONTACT PHONE NUMBER

AUD DISPATCH
PRIMARY PERMITTEE CONTACT PRIMARY PERMITTEE CONTACT SIGNATURE DATE
EMAIL: 24 HOUR CONTACT EMAIL

39. ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: PRE: 0.3 POST: 0.3

40. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

NO WORK ASSOCIATED WITH THIS PROJECT PROPOSES ANY ENCROACHMENT INTO 25-FOOT UNDISTURBED BUFFERS OF STATE WATERS OR 50-FOOT UNDISTURBED BUFFERS ALONG DESIGNATED TROUT STREAMS; THEREFORE, NO SPECIAL VARIANCES OR PERMITS ARE REQUIRED.

41. INDICATION THAT THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION:

WITHIN 7 DAYS OF INSTALLATION OF INITIAL PHASE EROSION CONTROL MEASURES, THE DESIGN PROFESSIONAL, OR AN AUTHORIZED AGENT DESIGNATED BY THE DESIGN PROFESSIONAL, WILL PERFORM AN INSPECTION OF THE EROSION AND SEDIMENTATION CONTROL BMPs THAT HAVE BEEN INSTALLED AND WILL SUBMIT A SIGNED COPY OF A REPORT OF THEIR FINDINGS TO THE PRIMARY OPERATOR, WHICH SHALL BE KEPT ON FILE WITH THE NOTICE OF INTENT (NOI) AND ALL OTHER REQUIRED PAPER WORK.

DATE OF INSPECTION: _____.
"I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLANS ON THE DATE OF INSPECTION."

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INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN:

_____.

_____.

(PROVIDE THIS CERTIFICATION IN LETTER FORMAT FOR RECORDS _____.

THESE DISCREPANCIES MUST BE ADDRESSED AND RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

42. ANY AMENDMENTS/REVISIONS TO THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLANS (ES&PC PLANS), WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT, MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

43. WASTE MATERIALS SHALL NOT BE DISPOSED OF OR DISCHARGED INTO STORM WATER INLETS OR TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DISPOSED OF IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY, AND TRASH WILL BE HAULED AS REQUIRE BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

44. DOCUMENTATION THAT THE ES&PC PLAN IS IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS DURING AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED:

HAZARDOUS WASTES
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS's) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES. THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTER- MEASURES (SPCC) PLAN FOUND WITHIN THE ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORM WATER DISCHARGE WILL BE CONTAINED ON-SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 0000046256
Issued: 12/05/2022 Expires: 12/05/2025

Mitchell Murchison 6/9/2023

GEORGIA811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

24-HOUR LOCAL ES&PC CONTACT:
NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: 24 HOUR CONTACT EMAIL

CRANSTON ENGINEERING
ENGINEERS - PLANNERS - SURVEYORS
452 Ellis Street, Augusta, Georgia 30901
Telephone 706-722-1588
CranstonEngineering.com

GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ELDRIDGE A. WHITEHURST JR. ENGINEER
3/12/21

REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0273
DRAWING No.	C600

G:\PROJECTS\2018\2018-0273 - HIGHLAND AVENUE WATER PLANT RESERVOIR DAM\AC-DRAWINGS\CIVIL\2018-0273_COVR_01.DWG 5/31/2023 2:48 PM

GSWCC AND NPDES NOTES (CONT'D):

45. DOCUMENTATION THAT THE ES&PC PLAN IS IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS DURING AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

SANITARY WASTES

ALL PERMITTEES SHALL ENSURE AND DEMONSTRATE THAT THEIR PLAN IS IN COMPLIANCE WITH APPLICABLE STATE AND LOCAL WASTE WATER DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEM REGULATIONS. A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK PER A LICENSED PORTABLE FACILITY PROVIDER IN COMPLIANCE WITH LOCAL AND STATE REGULATIONS. PROJECT DOES NOT PROVIDE FOR POST CONSTRUCTION SANITARY SEWER. ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMPs MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE, SHEET NO. , BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED. SANITARY SEWER WILL NOT BE PROVIDED BY MUNICIPAL AUTHORITY AT THE COMPLETION OF THIS PROJECT.

46. DETAILS ON COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY PRIMARY PERMITTEE:

INSPECTIONS (NPDES GENERAL PERMIT NO. 100001, SEC. IV.D.4.)

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL, PROVIDED BY THE PRIMARY PERMITTEE, SHALL INSPECT: (a.) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (b.) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE AND RECORD RAINFALL WITHIN THE DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IN AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY, OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (c) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL METHODS ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

(6). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE, OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a.(5) OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORTS SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

GSWCC AND NPDES NOTES (CONT'D):

47. DETAILS ON COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS:

SAMPLING FREQUENCY (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.d.)

(1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

(2). HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

(3). SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING EVENTS: (a). FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS * (MONDAY THROUGH FRIDAY, 8:00 A.M. TO 5:00 P.M., AND SATURDAY, 8:00 A.M. TO 5:00 P.M., EXCLUDING ALL NON- WORKING FEDERAL HOLIDAYS, WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION; (b). IN ADDITION TO (a) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS * THAT OCCURS EITHER 90-DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION, WHICHEVER COMES FIRST; (c). AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (a) AND (b) ABOVE, IF BMPs ARE FOUND TO BE PROPERLY DESIGNED, INSTALLED AND MAINTAINED, NO FURTHER ACTION IS REQUIRED. IF BMPs IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES 0.5 INCH DURING NORMAL BUSINESS HOURS * UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPs ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED. *NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (a) AND (b) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK.

48. DETAILS ON COMPLETE REQUIREMENTS OF REPORTING:

REPORTING (NPDES GENERAL PERMIT NO.100001 , SEC. IV.E.)

THE APPLICABLE PERMITTEE'S ARE REQUIRED TO SUBMIT A SUMMARY OF THE MONITORING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

(1). ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

(2). ALL MONITORING RESULTS SHALL INCLUDE THE FOLLOWING INFORMATION: (a). THE DATE, EXACT PLACE, AND TIME OF SAMPLING OR MEASUREMENTS; (b). THE NAME(S) OF THE INDIVIDUAL(S) WHO PERFORMED THE SAMPLING AND MEASUREMENTS; (c). THE DATE(S) ANALYSES WERE PERFORMED; (d). THE TIME(S) ANALYSES WERE INITIATED; (e). THE NAME(S) OF THE INDIVIDUAL(S) WHO PERFORMED THE ANALYSES; (f). REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED; AND, (g). THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS. (h). RESULTS WHICH EXCEED 1,000 NTU SHALL BE REPORTED AS "EXCEEDS 1,000 NTU."

GSWCC AND NPDES NOTES (CONT'D):

49. DETAILS ON COMPLETE REQUIREMENTS OF RETENTION OF RECORDS:

RETENTION OF RECORDS (NPDES GENERAL PERMIT NO.100001 , SEC. IV.F.)

(1). THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI: (a). A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD; (b). A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; (c). THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT; (d). A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT; (e). A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a. OF THIS PERMIT; (f). A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND, (g). DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(1)(c) OF THIS PERMIT.

(2). COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, MONITORING REPORTS, MONITORING INFORMATION, INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THE NPDES PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

50. DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION:

SAMPLE TYPE (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.b.)

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001"; AND, GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD. ANALYTICAL METHODS USED FOR THE COLLECTION AND ANALYSIS OF SAMPLES FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL USE, AT A MINIMUM, THE GUIDELINES SET FORTH IN PART IV.D.6.a. AND PART IV.D.6.b. OF THIS PERMIT.

SAMPLE TYPE (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.c.)

FOR CONSTRUCTION ACTIVITIES, THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). HOWEVER, PROVIDED FOR IN AND IN ACCORDANCE WITH PART IV.D.6.c.(2) OF THIS PERMIT, PRIMARY PERMITTEES ON AN INFRASTRUCTURE CONSTRUCTION PROJECT MAY SAMPLE THE REPRESENTATIVE RECEIVING WATER(S) OR OUTFALLS, OR A COMBINATION THEREOF. SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE MINIMUM GUIDELINES SET FORTH IN PART IV.D.6.c.(1). OF THIS PERMIT. RECEIVING WATER(S) MUST HAVE AN UPSTREAM AND A DOWNSTREAM SAMPLE LOCATION.

51. "APPENDIX B" RATIONALE FOR OUTFALL SAMPLING POINTS:

SAMPLING REQUIREMENTS (NPDES GENERAL PERMIT NO.100001 , SEC. IV.D.6.a.(3).)

WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OF THE OUTFALLS WILL BE MONITORED, A RATIONALE MUST BE INCLUDED FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX B. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES).

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION(S). A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES (BMPs) HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING THE VALUE THAT WAS SELECTED FROM "APPENDIX B" IN THE NPDES GENERAL PERMIT NO. 100001.

THE SELECTED NTU VALUE OF 75 IS BASED UPON THE CONSTRUCTION SITE ACREAGE OF 5.6 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF APPROXIMATELY 0.008 SQUARE MILES.

STORMWATER RUNOFF LEAVES THE SITE THROUGH THE FOLLOWING:
SURFACE FLOW

GSWCC AND NPDES NOTES (CONT'D):

52. "I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. , THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER."

GSWCC LEVEL II DESIGN PROFESSIONAL	GSWCC LEVEL II CERTIFICATION NO.	EXP.DATE
[signature]	46296	~~11/01/22~~ 12/25/2025

GSWCC Georgia Soil and Water Conservation Commission
Mitchell B Murchison
Level II Certified Design Professional
Certification Number 000046296
Issued: 12/25/2022 Expires: 12/25/2025
[signature] 6/9/2025

24-HOUR LOCAL ES&PC CONTACT:

NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: 24 HOUR CONTACT EMAIL

GEORGIA 811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

CRANSTON
ENGINEERING
ENGINEERS - PLANNERS - SURVEYORS
452 Ellis Street, Augusta, Georgia 30901
Telephone 706-722-1588
CranstonEngineering.com

GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE ... WHITEHURST, JR. 3/12/2[?]

REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0273
DRAWING No.	C601

GENERAL EROSION CONTROL NOTES:

1. ALL DISTURBED AREAS SHALL HAVE EROSION CONTROL PROVIDED IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA , CURRENT EDITION.
2. ALL EROSION CONTROL MEASURES SHALL COMPLY WITH THE STATE OF GEORGIA SOIL AND WATER CONSERVATION COMMISSION MANUAL FOR EROSION AND SEDIMENT CONTROL IN THE STATE OF GEORGIA , CURRENT EDITION.
3. FULL COORDINATION SHALL BE MAINTAINED BETWEEN THE CONTRACTOR, DESIGN PROFESSIONAL, AND THE REGULATORY INSPECTOR REGARDING PROJECT SEQUENCE.
4. THE NOTATION (XXX) AS SHOWN ON THE EROSION CONTROL PLAN SHEET(S) AND ON THE EROSION CONTROL DETAIL SHEET FOR THE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES, REFERS TO THE GEORGIA UNIFORM CODING SYSTEM AS DETAILED IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA , CURRENT EDITION.
5. GENERAL STATEMENT OF DESIGNED EROSION CONTROL SYSTEM:
   (a). NO SURFACE WATER FLOWS FROM DISTURBED AREA TO BE ALLOWED INTO THE STORM SEWER SYSTEM WITHOUT FIRST BEING FILTERED BY AN EFFECTIVE SEDIMENT ENTRAPMENT DEVICE.
   (b). SEDIMENT ENTRAPMENT DEVICES ARE TO BE MAINTAINED AT ALL POINTS WHERE SURFACE FLOWS FROM DISTURBED AREAS CAN LEAVE THE SITE. FLOWS ARE TO BE DIRECTED TO ENTRAPMENT DEVICES THROUGHOUT CONSTRUCTION ACTIVITIES.
6. EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES ON-SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. EROSION CONTROL MEASURES SHALL BE INSPECTED AT THE END OF EACH WORKING DAY AND AFTER EACH STORM EVENT TO ENSURE THAT ALL MEASURES ARE FUNCTIONING PROPERLY. ANY REPAIRS SHALL BE MADE BY THE CONTRACTOR.
7. IN ADDITION TO THE NOTE ABOVE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY, AFTER EACH RAIN EVENT, AND REPAIRED AS NECESSARY THESE INSPECTIONS SHALL BE DOCUMENTED WITH COPIES SENT TO THE OWNER.
8. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ON SITE. SILT BARRIER TO BE PLACED AS SHOWN AND/OR AS DIRECTED BY THE PROJECT ENGINEER AND/OR OWNER: BOARD OF COMMISSIONERS OF AUGUSTA, GEORGIA.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES, PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
10. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. ANY DISTURBED AREA LEFT IDLE/EXPOSED FOR A PERIOD GREATER THAN 14-DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING; DISTURBED AREAS IDLE/EXPOSED 30-DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
12. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON-SITE INSPECTION.
13. THE CONTRACTOR SHALL COMPLETELY REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (I.E. SILT FENCE, SEDIMENT TRAPS, ETC...) AND TREE PROTECTION FENCING ONCE PERMANENT VEGETATION IS ESTABLISHED.
14. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND FOR CLEARING ANY DEBRIS AND SEDIMENT THAT IS CAUSED BY CONSTRUCTION ACTIVITIES.
15. ALL DISTURBED AREAS SHALL BEST BE STABILIZED AS REQUIRED BY THESE PLANS BY THE SITEWORK CONTRACTOR AS SOON AS CONSTRUCTION PHASES PERMIT.
16. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24-HOURS OF SEEDING.
17. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (Ds1). ON SLOPES 4:1 OR STEEPER, MULCH WILL BE ANCHORED.
18. SILT FENCE SHALL MEET THE MINIMUM REQUIREMENTS OF SECTION 171 OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, CURRENT EDITION, AND/OR GEORGIA EPD "GREEN BOOK" AS AMENDED.
19. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME FOR RETROFITS AND TEMPORARY SEDIMENT BASINS, AND THE 1/2 FULL VOLUME FOR ALL OTHER SEDIMENT STORAGE STRUCTURES (I.E. CHECK DAMS, SILT FENCE, ETC...).
20. ALL SEDIMENT STORAGE DEVICES ARE TO BE CONSTRUCTED COMPLETELY AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
21. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING AND BLANKETS.
22. ALL PERMANENT GRADED EARTH SLOPES, EXCAVATION OR EMBANKMENT (CUT AND FILL), SHALL BE GRADED TO A MAXIMUM FINISHED SLOPE OF TWO (2) FEET HORIZONTAL TO ONE (1) FOOT VERTICAL (MAXIMUM SLOPE 2H:1V).
23. ALL DISTURBED AREAS LEFT MULCHED AFTER 30-DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.
24. SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS.
25. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS, I.E., MANDATORY STOP WORK ORDER.
26. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM A VEHICLE OR FROM THE SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

INITIAL PHASE (CLEARING & GRUBBING) NOTES:

1. ALL STAGING AREAS, MATERIAL STORAGE AREAS, CONCRETE WASH-OUT AREAS, SHALL BE LOCATED AT SETBACK DISTANCES FROM DESIGNATED TREE PROTECTION AREAS AND/OR STREAM BUFFERS AS REQUIRED BY LOCAL AND STATE REGULATIONS.
2. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. POST ON DAY ONE.
3. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DELINEATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
4. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION EXIT (Co) SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY AS SHOWN ON THE PLANS.
   LOCATION:
   LATITUDE: N33.473686 LONGITUDE: W82.031574
   LATITUDE: N33.472024 LONGITUDE: W82.035473
5. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE OF THE EROSION CONTROL PLAN.
6. SILT FENCE OR APPROVED EQUAL SHALL BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA OR AS SHOWN ON THE PLAN. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES HALF THE HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
7. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN.
8. TREE PROTECTION FENCING AND STREAM BUFFER LIMITS SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
9. AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL WITHIN 7 DAYS AFTER INSTALLATION. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION WITH CONSULTATION WITH THE DESIGN PROFESSIONAL.
10. AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT STORAGE DEVICES AS SHOWN ON THE INITIAL PHASE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.
11. INITIAL PHASE BMPs UTILIZED IN THIS PLAN(S) ARE AS FOLLOWS:
    Co, Sd1-S

INTERMEDIATE PHASE (GRADING & TEMPORARY VEGETATION) NOTES:

1. MAINTAIN PREVIOUSLY INSTALLED BMPs.
2. SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
3. GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION AND SEDIMENTATION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
4. THE SILT FENCE SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES HALF OF THE HEIGHT OF THE BARRIER.
5. SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS.
6. AFTER PRELIMINARY CLEARING AND GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT ENTRAPMENT DEVICES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE DEVICES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT WHEN IT REACHES THE CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
7. SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED WEEKLY AND AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF OF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
8. INTERMEDIATE PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:
   Du, Sr, Ss-RECP

FINAL PHASE (STORMWATER MANAGEMENT & PERMANENT VEGETATION) NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT DEVICES AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF EACH DEVICE WHEN IT REACHES THE REQUIRED CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
2. AFTER CURBING AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON THE EXISTING INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION.
3. FINAL STABILIZATION OF PERMANENT GRASS MUST MEET 100% COVERAGE, 70% DENSITY RULE.
4. FINAL PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:
   Ds3

NOTE:
THESE ARE STANDARD NOTES PROVIDED BY THE LOCAL ISSUING AUTHORITY AND MODIFIED BY THE DESIGN PROFESSIONAL.

GRASSING:

1. SEPTEMBER 15 - FEBRUARY 15, A MIXTURE OF UNHULLED COMMON BERMUDA 6 LBS./ACRE AND RYE GRASS SEED 28 LBS./ACRE APPLIED SIMULTANEOUSLY.
2. OCTOBER 1 - MARCH 1, UNHULLED COMMON BERMUDA 10 LBS./ACRE.
3. APRIL 1 - JUNE 1, HULLED COMMON BERMUDA 10 LBS./ACRE.
4. FERTILIZER GRADE WILL BE A COMMERCIAL 6-12-12 INCORPORATED INTO THE SOIL AT 1500 LBS./ACRE, ALSO 1500 LBS. DOLOMITIC LIME.
5. NOT LESS THAN 30 DAYS AFTER SEEDING, APPLY AMMONIUM NITRATE (NOT LESS THAN 20% NITRATE) AT A RATE EQUAL TO 60 LBS. OF AVAILABLE NITROGEN /ACRE. APPLICATION BETWEEN JUNE THRU AUGUST.
6. ALL SEEDED AREAS WILL BE MULCHED WITH STRAW OR HAY MULCH AT A RATE OF 2.5 TONS/ACRE.
7. FOR ALL DATES NOT COVERED UNDER THE GRASSING SCHEDULE THE DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED USING POLYACRYLAMIDE.

GENERAL INFORMATION: (2)

1. ONSITE DRAINAGE BASIN = 5.6 ACRES
2. OFFSITE DRAINAGE BASIN = 0.0 ACRES
3. CONTRACTOR TO ENSURE THAT EXISTING ON SITE VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION IS PRESERVED AND THAT ALL DISTURBED PORTIONS OF THE SITE ARE STABILIZED.
4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
5. NO WATERS OF THE STATE ARE IMPACTED ON THIS PROJECT.
6. RECEIVING STREAM IS VARIOUS.

THE PRIMARY PERMITTEE SHALL PROVIDE A COPY OF THE APPROVED EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN AND ANY SUBSEQUENT REVISIONS TO THE PLAN TO EACH SECONDARY PERMITTEE.

NAME	ADDRESS	PLANS RECIEVED BY/DATE

STORMWATER CALCULATIONS:

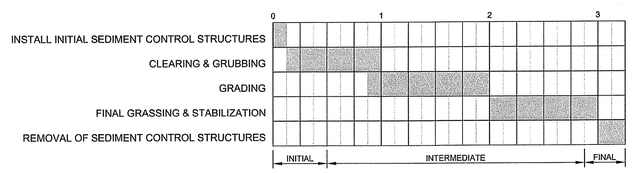
1. REQUIRED STORMWATER STORAGE = 0.00 CY
   (AS DETERMINED BY LOCAL ORDINANCE)
2. REQUIRED SEDIMENT STORAGE = 262 CY
   (67 CY/ACRE x 3.9 ACRES DISTURBED AREA)
3. TOTAL REQUIRED STORAGE = 0.00 CY + 262 CY = 262 CY
4. AVAILABLE STORAGE = 470 CY
5. IS THE AVAILABLE STORAGE (470 CY) GREATER THAN STORAGE REQUIRED (262 CY)?
   ☒ YES ☐ NO

SEDIMENT STORAGE:

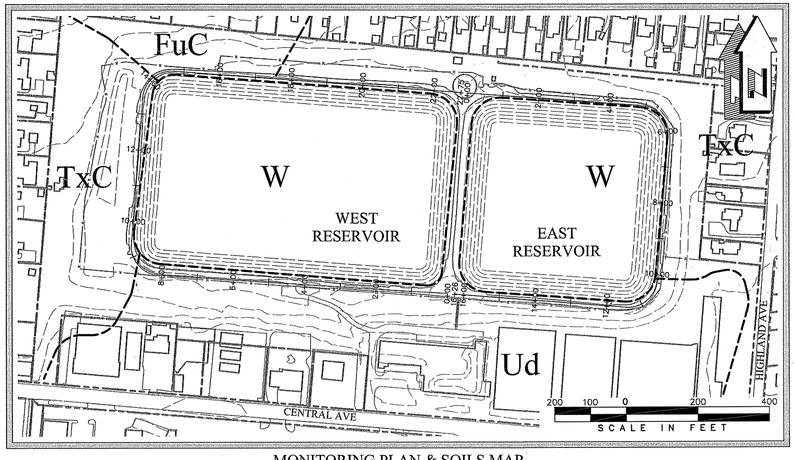
REQUIRED:	3.9 ACRES x 67 CY/ACRE	= 262 CY
PROVIDED BY SILT FENCE:	AVERAGE HEIGHT	= 1.25 FEET
	AVERAGE DEPTH	= 6.25 FEET
	AREA	= 3.90 SF
	VOLUME	= 12,695 CF = 470 CY

APPROXIMATE START DATE: ---
APPROXIMATE FINISH DATE: ---

MONTHS OF CONSTRUCTIONS ACTIVITIES



NOTES:
1. ALL DISTURBED AREAS NOT INTENDED FOR PAVING SHALL BE STABILIZED USING TEMPORARY MEASURES Ds2 AND PERMANENT MEASURES Ds3.



MONITORING PLAN & SOILS MAP
1"=200'

SOILS:

FuC	FUQUAY-URBAN LAND COMPLEX, 2 TO 8 PERCENT SLOPES
TxC	TROUP-URBAN LAND COMPLEX, 1 TO 8 PERCENT SLOPES
Ud	URBAN LAND
W	WATER

NTU VALUE:	Δ50 (THIS IS FOR UPSTREAM AND DOWNSTREAM MONITORING IN WARM WATER STREAMS
SITE SIZE:	5.6 ACRES
DRAINAGE AREA:	0.008 SQUARE MILES

MONITORING POINTS

MONITORING POINT LOCATIONS ARE SHOWN ABOVE:

THERE ARE NO DISTINCT MONITORING POINTS AVAILABLE

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Certification Number: 0000046296
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6/9/2025

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24-HOUR LOCAL ES&PC CONTACT:
NAME: AUD DISPATCH
PHONE: 706-842-3060
EMAIL: 24 HOUR CONTACT EMAIL

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GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. MURCHISON, JR. 3/12/21

REV #	DATE	DESCRIPTION
2	3/12/2021	PER SAFE DAMS OFFICE
1	7/30/2020	PER SAFE DAMS REVIEW

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Erosion Control Notes

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	AS SHOWN
JOB No.	2018-0273
DRAWING No.	C602

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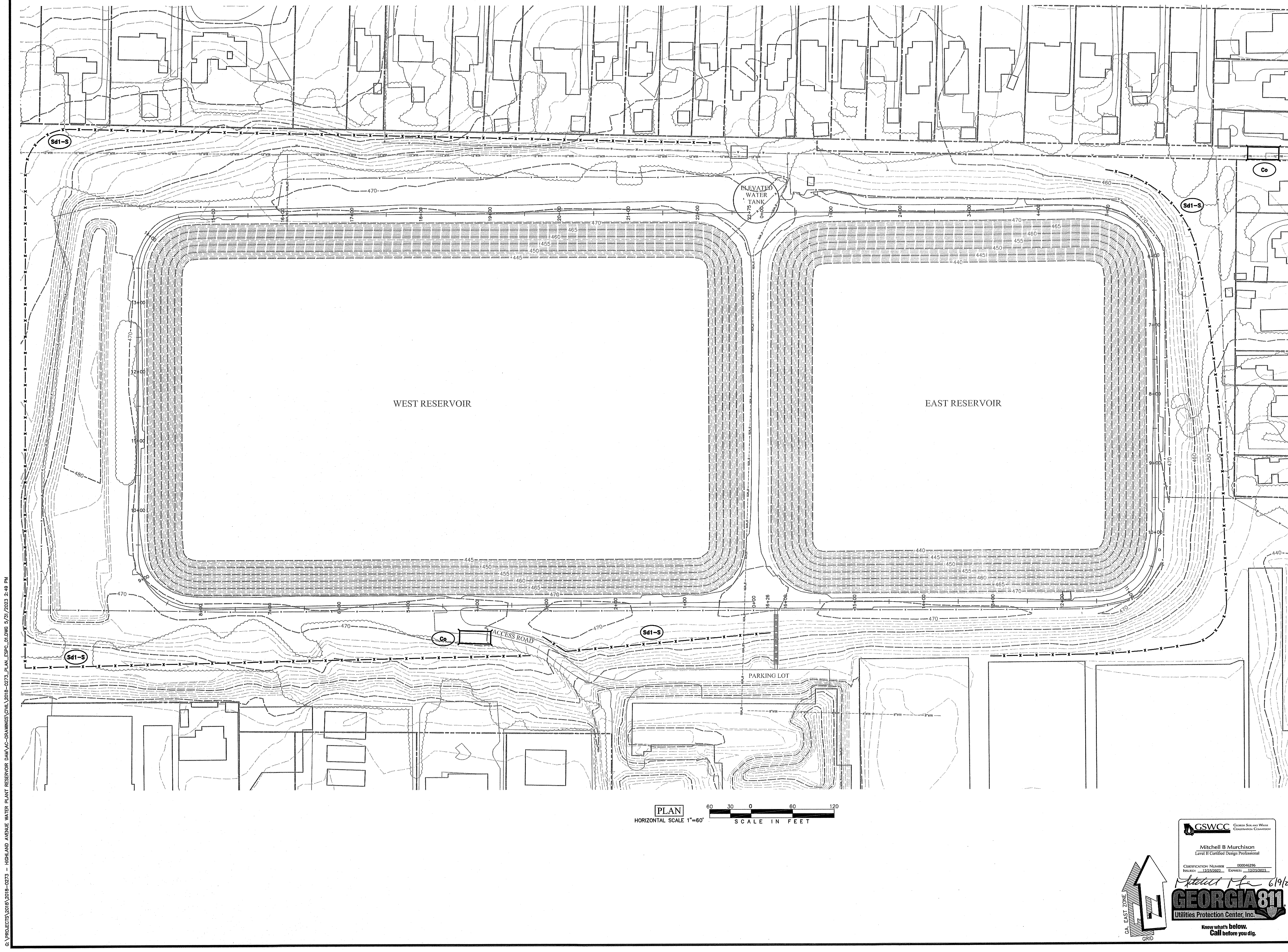

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GEORGIA Cranston Engineering Group NO. PEF000151 CERTIFICATE OF AUTHORIZATION

GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER ELDRIDGE A. WHITEHURST, JR.

3/12/21

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Certification Number 000046296
Issued: 12/25/2022 Expires: 12/25/2025

6/9/2023

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REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Initial Erosion Contral Plan

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0273
DRAWING No.	C603

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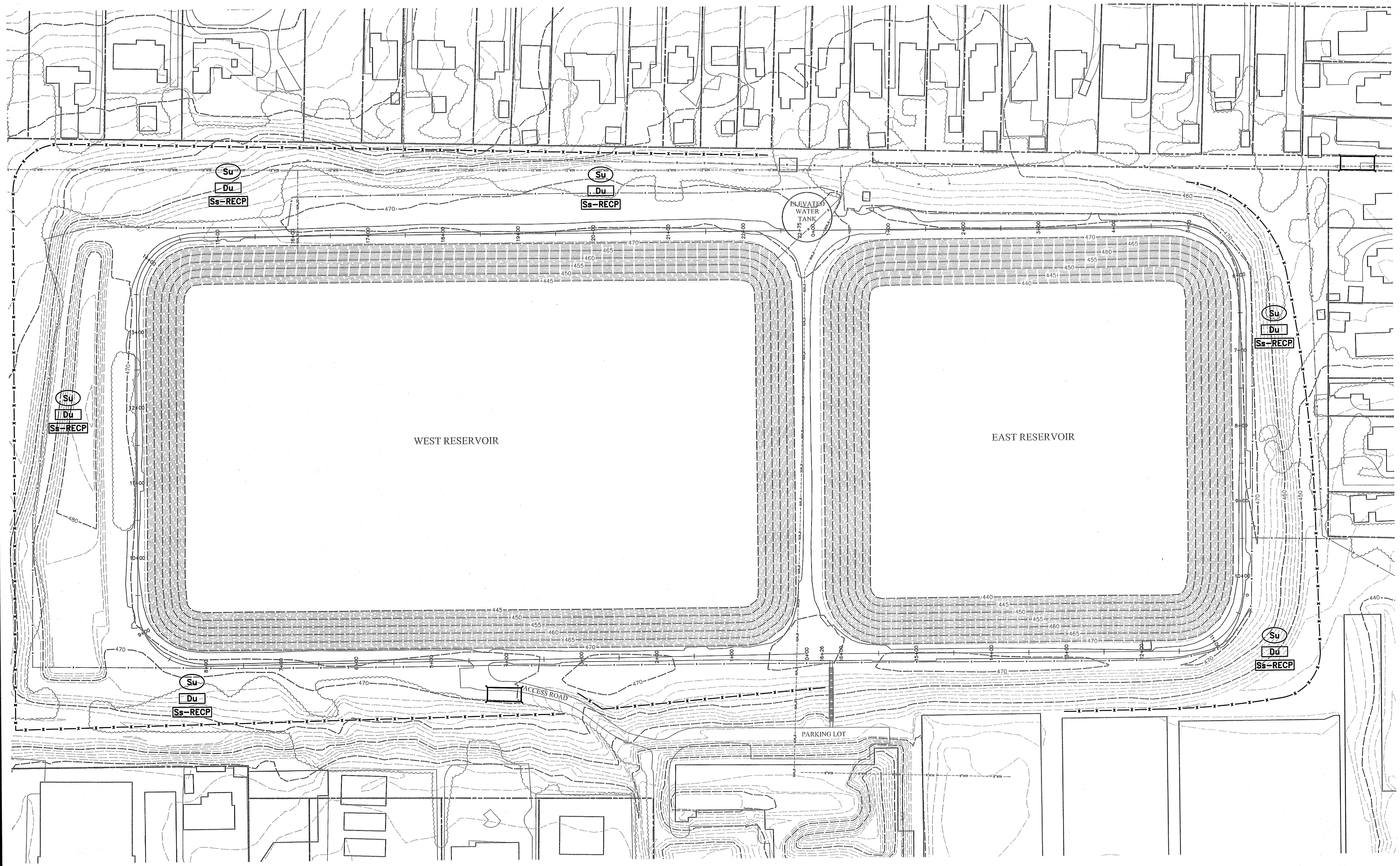

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

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GA EAST ZONE GRID

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REGISTERED
NO. 11971
PROFESSIONAL
ENGINEER
ELDRIDGE ... JR.
3/12/21

REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Intermediate Erosion Control Plan

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0273
DRAWING No.	C604

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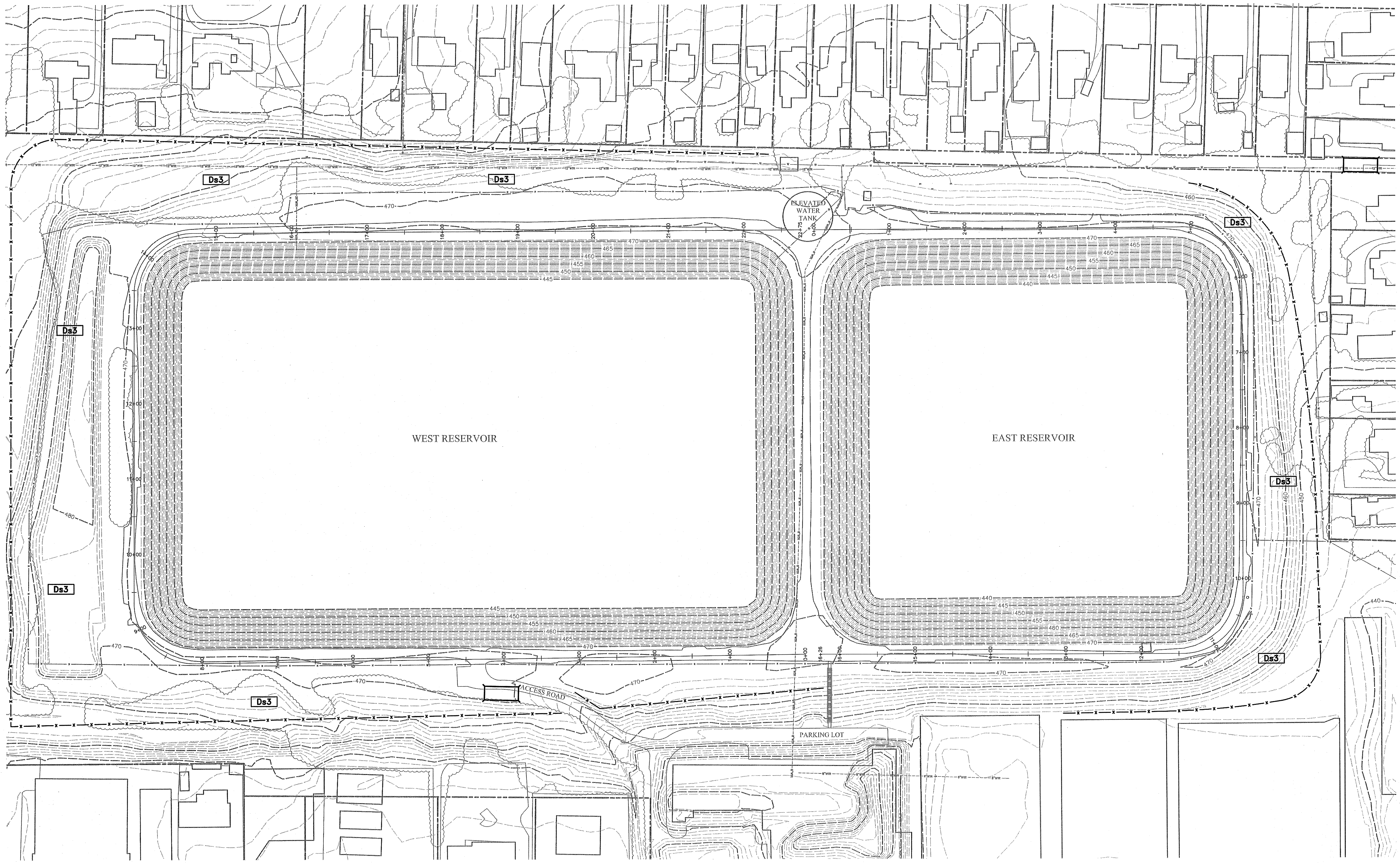

PLAN
HORIZONTAL SCALE 1"=60'

60 30 0 60 120
SCALE IN FEET

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GEORGIA
REGISTERED
NO. 11971
PROFESSIONAL
ENGINEER
ELDRIDGE A. WOODHURST, JR.
3/12/21

REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Final Erosion Control Plan

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	1" = 60'
JOB No.	2018-0273
DRAWING No.	C605

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Level II Certified Design Professional
Certification Number 000046296
Issued: 12/23/2022 Expires: 12/23/2025
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GA EAST ZONE
GRID

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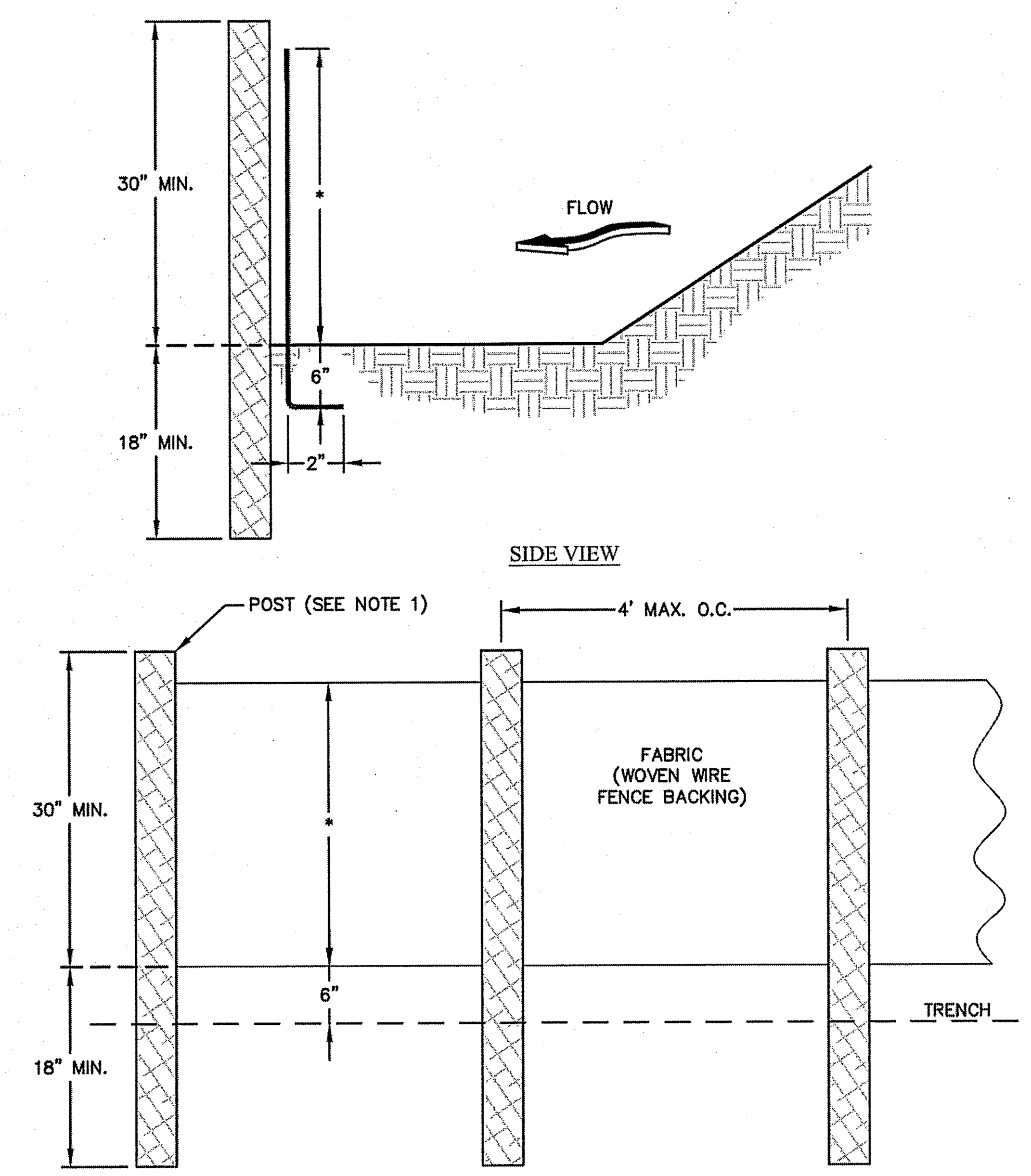


NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

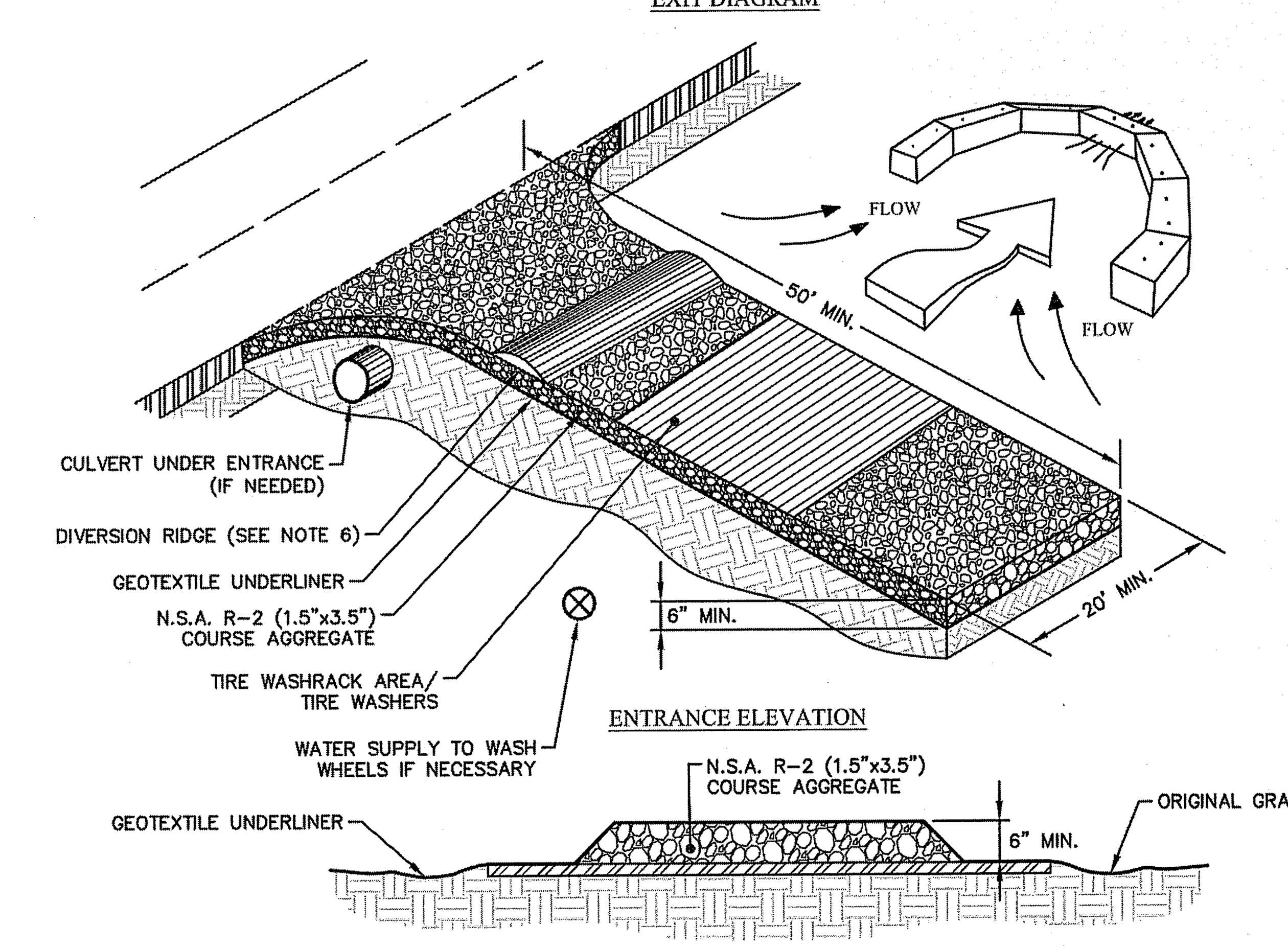
SILT FENCE - TYPE C (Sd1-S)
N.T.S.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT		Co (LABEL)	A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Sd1	SEDIMENT BARRIER		TYPE (INDICATE TYPE)	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH ,LOGS AND POLES, GRAVEL OR A SILT FENCE.
Su	SURFACE ROUGHENING		Su	A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.

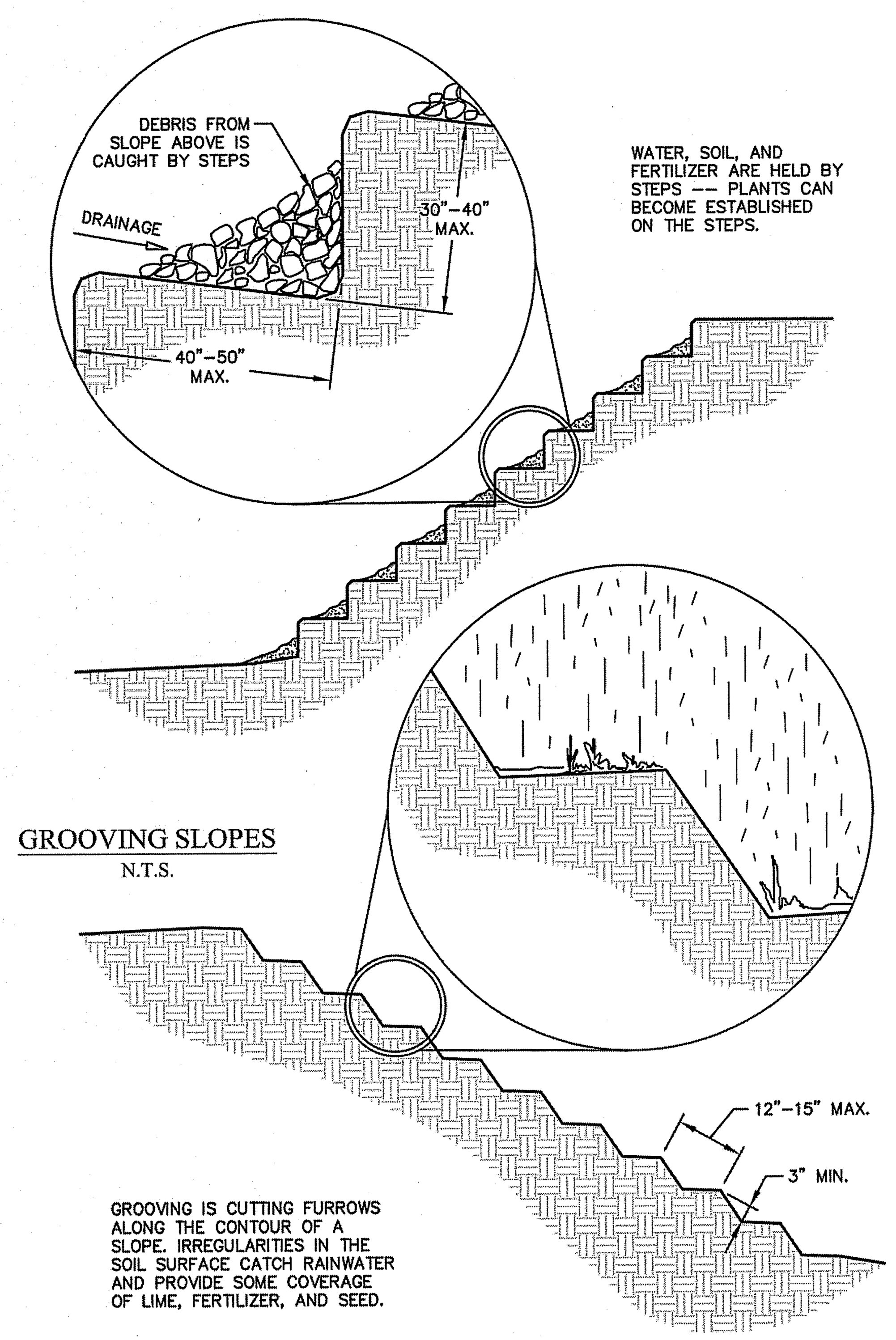
VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds3	ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREA.
Du	DUST CONTROL ON DISTURBED AREAS		Du	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE, ROADWAYS AND SIMILAR SITES.
Ss-RECP	SLOPE STABILIZATION		Ss-RECP	A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS

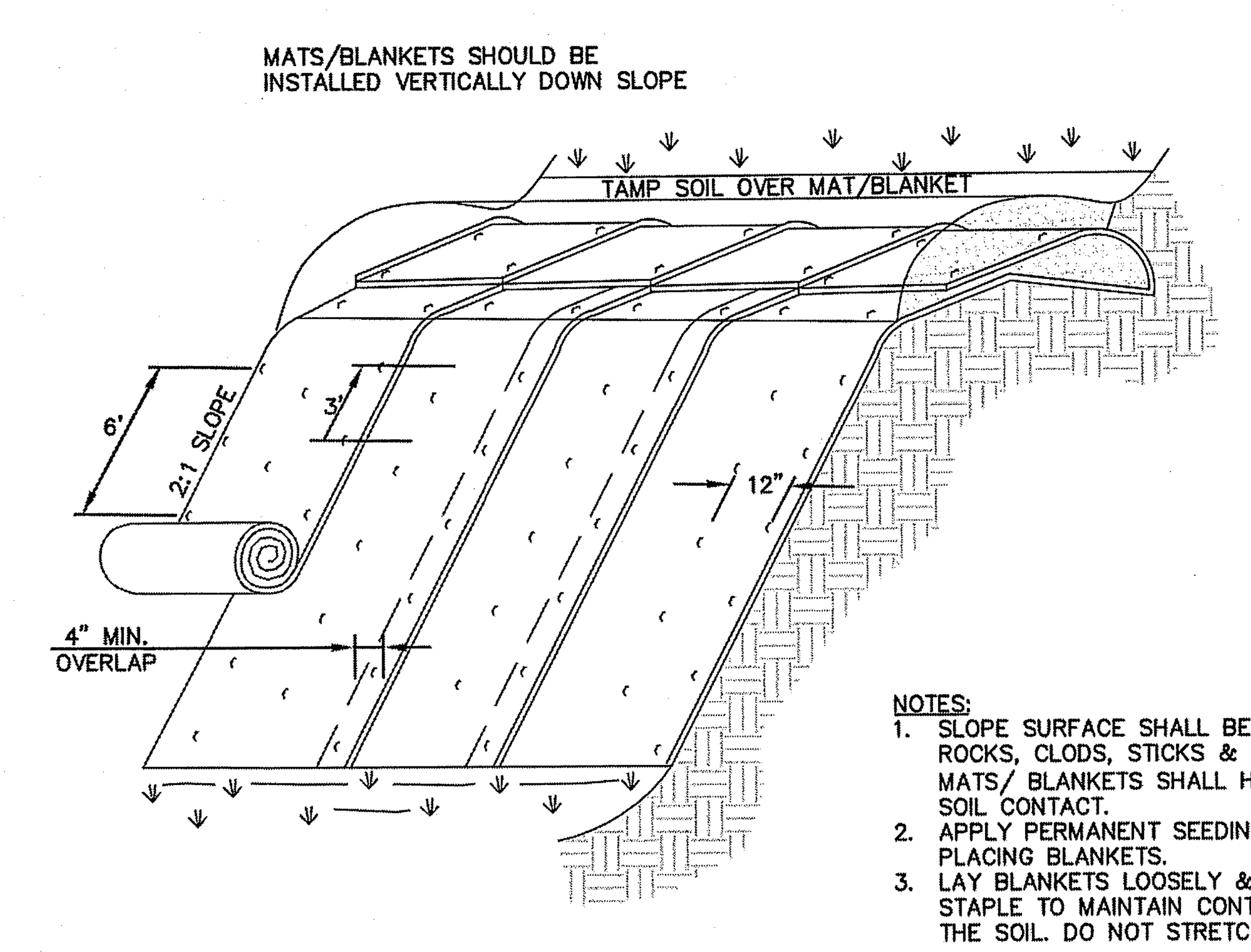


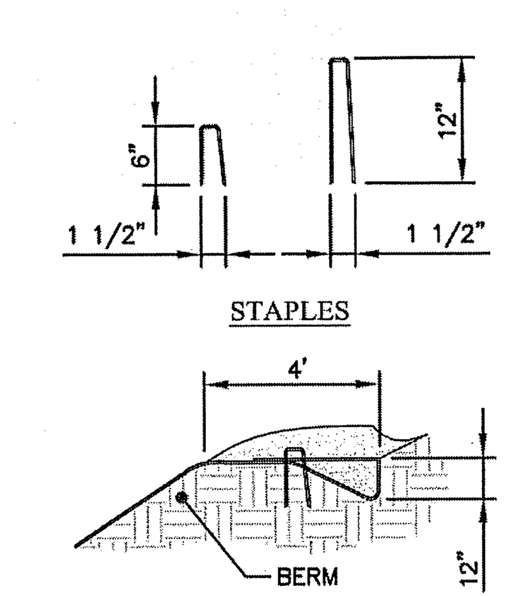
NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CRUSHED STONE CONSTRUCTION OUTLET (Co)
N.T.S.



STAIR STEPPING CUT SLOPES (Su)
N.T.S.





NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS & GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY & STAKE OR STAPLE TO MAINTAIN CONTACT WITH THE SOIL. DO NOT STRETCH.

SLOPE STABILIZATION (Ss-RECP)
N.T.S.

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GEORGIA REGISTERED NO. 11971 PROFESSIONAL ENGINEER
3/12/21

REV #	DATE	DESCRIPTION

Highland Avenue Water Treatment Plant Reservoir Dam #1 East & Dam #2 West Improvements

Erosion Control Details

DRAWN BY:	MAB
CHECKED BY:	WPM
APPROVED BY:	EAW
DATE:	NOVEMBER 26, 2019
SCALE:	NO SCALE
JOB No.	2018-0273
DRAWING No.	C606