MURPHEY CANDLER PARK DAM CMP SPILLWAY AND RISER REPAIR

> CITY OF BROOKHAVEN DEVELOPMENT FILE # MS23-00094 **FEBRUARY 15, 2024**

> > VICINITY MAP

TAX PARCEL # 18 326 01 041

CITY OF

PROJECT

LOCATION

## SHEET INDEX: G-001 **COVER** C-001 **GENERAL NOTES EXISTING CONDITIONS** 6/13 CONSTRUCTION PLAN CONSTRUCTION DETAILS (1) CU-501 CU-502 **CONSTRUCTION DETAILS (2)** STRUCTURAL GENERAL NOTES, ABBREVIATIONS, AND DETAILS S-001 MANHOLE TOP AND BASE SLAB PLANS S-101 S-102 MANHOLE SECTIONS OVERALL TRAFFIC CONTROL PLAN



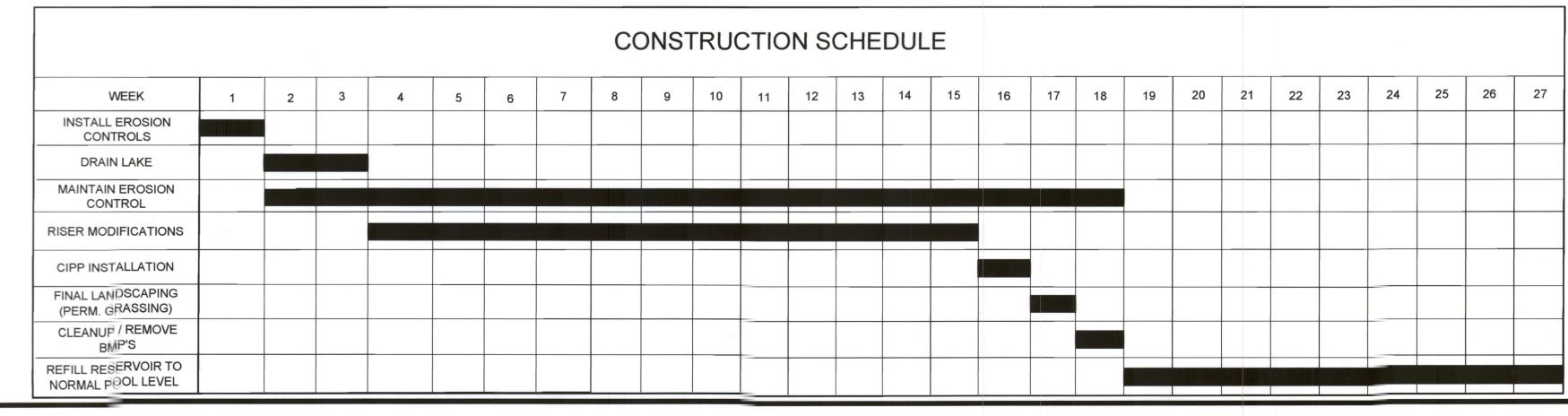


ADJOINING PROPERTIES: 1551 W NANCY CREEK DR OWNER: CITY OF BROOKHAVEN  $DB \times PG \times$ TAX PARCEL # 18 326 01 041 4051 CANDLER LK OWNER: CITY OF BROOKHAVEN  $DB \times PG \times$ TAX PARCEL # 18 331 01 005

BEGINNING OF STRUCTURE: LAT: 33.9095 LONG: -84.3245 END OF STRUCTURE: LAT: 33.9090 LONG: -84.3245

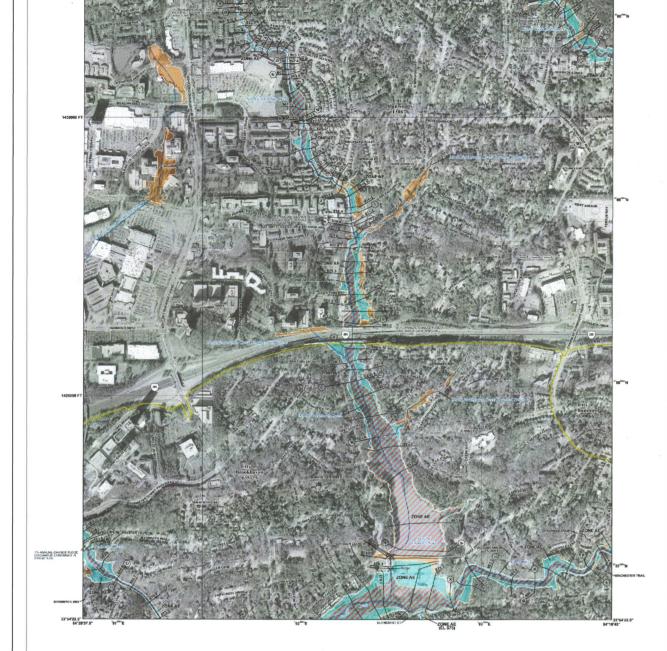
DISTURBED AREA: 0.11 ACRES TOTAL TRACT SIZE: 0.32 ACRES IMPERVIOUS AREA: 0.08 ACRES PCT OF TRACT IMP:

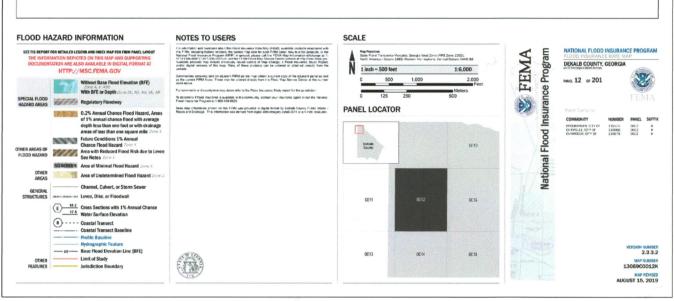
OWNER/PRIMARY PERMITTEE: CITY OF BROOKHAVEN PUBLIC WORKS 4362 PEACHTREE ROAD BROOKHAVEN, GA 30319 **CONTACT: TOM ROBERTS** TOM.ROBERTS@BROOKHAVENGA.GOV 404-906-2747



SAMUEL I. FLEMING, PE LEVEL II CERTIFIED DESIGN PROFESSIONAL GSWCC CERTIFICATION NO. 22173







FEMA MAP PANEL IMAGE FOR PANEL # 0012K PANEL NUMBER 13089C0012K FOR UNINCORPORATED DEKALB COUNTY, GA, EFFECTIVE DATE 8/15/2019

**DEVELOPER:** N/A

24 HOUR EMERGENCY CONTACT: TOM ROBERTS 4362 PEACHTREE ROAD BROOKHAVEN, GA 30319 404-906-2747

**ENGINEER:** SAM FLEMING, PE **DEWBERRY** 2835 BRANDYWINE ROAD SUITE 100 ATLANTA, GA 30341-4015 678.537.8627 678.530.0040 FAX





APPROVED STATE OF GEORGIA APR 2 3 2024

REVISIONS

| 10  | GASDP REVISIONS v4          | 02/15/2024 |
|-----|-----------------------------|------------|
| 9   | GASDP REVISIONS v3          | 12/18/2023 |
| 8   | UPDATED LIMITS OF DISTUR.   | 9/13/2023  |
| 7   | RISER MODIFICATIONS V2      | 8/28/2023  |
| 6   | RISER MODIFICATIONS         | 7/11/2023  |
| 5   | <b>BROOKHAVEN REVISIONS</b> | 6/24/2022  |
| 4   | GASDP REVISIONS v2          | 4/7/2022   |
| 3   | GASDP REVIEW REVISIONS      | 2/16/2022  |
| 2   | 100 PERCENT SUBMITTAL       | 12/17/202  |
| 1   | 90 PERCENT SUBMITTAL        | 11/24/202  |
| NO. | DESCRIPTION                 | DATE       |

DRAWN BY CHECKED B

**COVER SHEET** 

FEB 2 1 2024

PROJECT NO.

G-001

25. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT FROM SEDIMENT BARRIERS AND CHECK DAMS WHICH BECOME SILTED ABOVE ONE-HALF OF THEIR ORIGINAL HEIGHT.

THE CONSTRUCTION ACTIVITIES AT THESE SITES WILL NOT RESULT IN FLOODING OR CHANNEL DEGRADATION DOWNSTREAM. 27. PERMANENT CUT AND FILL SLOPES SHALL MATCH EXISTING EMBANKMENT SLOPE. TEMPORARY

CONSTRUCTION SLOPES FOR TRENCH EXCAVATION SHALL NOT EXCEED 1.5H: 1V. 28. ALL FILL SLOPES WILL HAVE SILT FENCES AT THE TOE OF SLOPES. 29. SURFACE ROUGHENING (Su): ALL CUT AND FILL SLOPES SHALL BE SURFACE ROUGHENED AND

VEGETATED WITHIN (3) THREE DAYS AFTER GRADING IS COMPLETED. 30. AT THE END OF EACH WORK DAY, ALL SLOPES 2:1 OR STEEPER AND HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, POLYMERS, AND MATTING.

31. DOUBLE ROW TYPE C SILT FENCE REQUIRED WHEN PLACED ALONG STATE WATERS AND AT THE TOE OF SLOPES **EXCEEDING 10' VERTICAL** 

32. ALL SILT FENCES MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT FENCE INSTALLATION IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL SILT RENCES AND TO REPAIR OR REPLACE ANY SILT FENCE THAT IS NOT SATISFACTORY. EROSION CONTROL CHECK DAMS OR FILTER RINGS SHALL BE PLACED IMMEDIATELY AFTER DRAINAGE STRUCTURES ARE IN PLACE. ALL EROSION CONTROL DEVICES SHALL BE PLACED ACCORDING TO THE PLANS AND AS DIRECTED BY THE ENGINEER. SEE THAT GADOT STANDARD SPECIFICATIONS REGARDING EROSION CONTROL AND THE MANUAL FOR EROSION AND SEDIMENT CONTROL BY G.S.W.C.C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING WETLAND AREAS FREE FROM SILTATION. THE CONTRACTOR SHALL OBTAIN AND ABIDE BY ALL CORPS OF ENGINEERS RULES AND REGULATIONS CONCERNING CONSTRUCTION ADJACENT TO WATERWAYS AND MAINTAIN WATER QUALITY.

33. AN UNDISTURBED VEGETATIVE BUFFER (MEETING COUNTY & STATE REGULATIONS) AND THE APPROPRIATE IMPERVIOUS SETBACK ADJACENT TO ALL STATE WATERS WILL BE PRESERVED. 34. CRITICAL AREAS: RIP RAP AND/OR STONE CHECK DAMS SHALL BE PLACED AT ALL CRITICAL EROSION

AREAS INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS. PERMANENT VEGETATION SHALL BE PROVIDED AT THE EARLIEST SUITABLE GROWING SEASON. 36. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR SHALL NOT DEPOSIT ANY

BUILDING OR OTHER EXCAVATION SPOIL DIRT, CONSTRUCTION TRASH OR DEBRIS, ECT. IN THE DRAINAGE COURSE OR ASSOCIATED FLOOD PLAIN. 37. GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY THE MEANS OF BRIDGING OR CULVERTS. EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE: ALL STREAM CROSSINGS WILL BE PERFORMED IN

ACCORDANCE WITH THE LATEST REVISION OF THE "MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA." 38. DISCHARGE OF STORM-WATER RUN-OFF FROM DISTURBED AREAS TO A STREAM SHALL BE CONTROLLED TO THE EXTENT THAT TURBIDITY OF THE STREAM DOWNSTREAM FROM THE DISCHARGE SHALL NOT EXCEED 25 NEPHELOMETRIC TURBIDITY UNITS HIGHER THAN THE TURBIDITY LEVEL OF THE RECEIVING STREAM IMMEDIATELY UPSTREAM FROM THE STORM-WATER RUN-OFF DISCHARGE AT THE TIME OF SUCH

DISCHARGE. 39. DISPOSE OF WASTE SOILS AND CLEARED AND GRUBBED & CONSTRUCTION DEBRIS OFF-SITE AT AN APPROVED LANDFILL SECURED BY THE CONTRACTOR, AND IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

40. ALL SOLID WASTE IS TO BE HAULED OFF-SITE. STUMPS AND CONSTRUCTION DEBRIS SHALL BE DEPOSITED IN A PROPERLY PERMITTED LANDFILL.

41. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFER AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

DEPARTMENT STARTING WITH THE ISSUANCE OF THE DEVELOPMENT PERMIT AND ENDING WHEN THE PROJECT IS RELEASED BY THE INSPECTOR 43. ANY AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL

42. WEEKLY EROSION AND SEDIMENT CONTROL REPORTS SHALL BE SUBMITTED TO THE DEVELOPMENT

44. SEE DETAIL PAGES FOR CHART WITH SYMBOLS, DETAILS, AND DESCRIPTIONS OF FULL EROSION CONTROL MEASURES. 45. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND REPLACED OR REPAIRED AS NEEDED.

46. ALL TREE PROTECTION DEVICES ARE TO BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED. 47. NO PARKING, STORAGE, OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN THE TREE

PROTECTION AREAS. 48. ALL OTHER TREE PROTECTION AREAS TO BE PROTECTED FROM SEDIMENTATION. 49. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE

INITIAL SEDIMENT STORAGE REQUIREMENTS, PERIMETER CONTROL BMPS, AND SEDIMENT BASINS WITHIN 7 DAYS AFTER INSTALLATION.

PRODUCT SPECIFIC PRACTICES

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 WATERS. 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. PROPÉR DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND

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.

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE

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

SOIL CLEANUP AND CONTROL PRACTICES

LOCAL. STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED

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

SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED

5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER). 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 IMPACT, THE GEORGIA EPD WILL BE

8. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACT, THE SPILL WILL BE CLEANED UP AND

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1.320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL

10. SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE

12. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE

SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. 13. THE CONTRACTOR'S SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSON WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THIS INDIVIDUAL WILL BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE

CONCRETE TRUCK SHOOTS AND TOOLS WILL BE WASHED OUT IN THE ADJACENT PARKING LOT TO THE DAM, AND WILL BE CONTAINED AND PREVENTED FROM ENTERING THE STORM DRAINAGE SYSTEM AND LAKE.

4. NO WATER FROM WASHING OFF TOOLS OR SHOOTS WILL LEAVE THE SITE OR DRAIN ONTO UNDISTURBED

STREAM BUFFER ENCROACHMENT

DUE TO THE NATURE OF A LOW DRAIN REHAB PROJECT, WORK WILL OCCUR IN 0.08 ACRES OF STREAM BUFFER OF NORTH FORK NANCY CREEK. SINCE THE ENCROACHMENT IS ASSOCIATED WITH A DRAINAGE STRUCTURE THAT MUST BE CONSTRUCTED IN A STREAM BUFFER, THE WORK IS EXEMPT FROM A STREAM BUFFER VARIANCE PER GADNR RULES 391-3-7.05(1)(B) and 391-3-7.05(1)(C).

**UTILITY CONTACTS** 

**POWER** 

GEORGIA POWER

IKE COLLINS

404-506-4569

**TELECOMUNICATIONS** 

TELECOM TELECOM
CENTURYLINK ZAYO FIBER SOLUTIONS

SANDRA ANDREWS

770-559-6879

NIC FLORES

678-666-2493

WATER & SEWER

DEKALB COUNTY WATER & SEWER

DEKALB COUNTY TRAFFIC & SAFETY COMCAST COMMUNICATIONS

888-723-8010

JEFF WOODS

770-724-1490

**DEKALB** 

KACOLLINS@DEKALBCOUNTYGA.GOV

K. COLLINS

**TELECOM** 

VERIZON/MCI DENNIS RAINEY

478-471-1042

AGL RESOURCES

**TELECOM** 

AT&T DISTRIBUTION

ANGELO HINES 770-784-3972

LEVEL 3 COMMUNICATIONS, INC

877-366-8344 EXT. 3

TELECOM

GOOGLE FIBER EMMANUEL UCHE-ABBA

405-501-4160

MARTIN MAREK

404-584-4126

CURB AND GUTTER (C&G) - FENCE HANDRAIL STORM DRAIN LINE — — — SS— — — SANITARY SEWER ————W——— WATER LINE GAS I NE — — UGE — — — UNDERGROUND POWER LINE OVERHEAD POWER LINE COMMUNICATION --- 100 \_ \_ \_ TOPOGRAPHIC CONTOUR PROPERTY LINE GUARD RAIL WET WEATHER DITCH WATER SPIGOT CATCH BASIN (DWCB) 10 CATCH BASIN (SWCB) DROP NLET (DI) JUNCTION BOX (JB) HEAD WALL (HW) CURB INLET (CI) FLARED END SECTION (FES) OUTLET CONTROL STRUCTURE YARD DRAIN INLET SS MANHOLE (MH) CLEAN OUT (CO) IRRIGATION CONTROL VALVE FIRE HYDRANT (FH) WATER VALVE (WV) WATER METER (WM) FIRE DEPT. CONNECTION (FDC) WATER VALVE MARKER TRANSFORMER BOX (TX) AIR CONDITIONER (AC) ELECTRIC METER (EM) ELECTRIC UTILITY LIGHT POLE (LP) POWER POLE WITH LIGHT POWER POLE (PP) UTILITY MANHOLE (UM) SPOTLIGHT GAS METER (GM) GAS VALVE (GV) TELEPHONE PEDESTAL COM COMMUNICATION BOX 0 BOLLARD (BO) MB MAIL BOX SIGN

| ABBREVIATIONS       |            |                                  |  |
|---------------------|------------|----------------------------------|--|
| C LENGTH            | IPS        | IRON PIN SET (CAPPED)            |  |
| RE<br>CESS EASEMENT | N/F<br>OTP | NOW OR FORMERLY<br>OPEN TOP PIPE |  |

SPOT ELEVATION

CONCRETE AREA

**OVERHANG AREA** 

RIP-RAP AREA

BRICK AREA

TREELINE

BUILDING SETBACK LINE PLAT BOOK POINT OF BEGINNING CHORD LENGTH CHAIN LINK FENCE CONCRETE MONUMENT FOUND RADIUS LENGTH CORRUGATED METAL PIPE CONC. CONCRETE
CTP CRIMP TOP PIPE R/W MON RIGHT OF WAY MONUMENT REINFORCED CONCRETE P DEED BOOK STORM DRAINAGE EASEMEN FIRE DEPARTMENT CONNECTION SQUARE FEET SANITARY SEWER EASEMEN HIGH DENSITY POLYETHYLENE PIPE WPF RON PIN FOUND

X 1000.00

. 4 . 4 .

## TREE LEGEND (ABBREVIATIONS)

DECIDUOUS CRAPE MYRTLE MAGNOLIA OAK ORN PEAR POP SYC **CYPRESS** ORNAMENTAL PEAR POPLAR CONFEROUS GINGKO SWEET GUM GINGKO GUM **HICKORY** 



Know what's DGIOWL Call before you dig. DEWBERRY ENGINEERS INC. 2835 Brandwine Road

Atlanta, GA 30341-4015

License No. PEF002398

Expires 6/30/2022

Suite 100

P/ SI

**SEAL** 



**COUNTY APPROVAL** 

**APPROVED DEPT OF NATURAL RESOURCES** 

rantian Safe Dams Program

SCALE

GASDP REVISIONS v4 9 GASDP REVISIONS v3 12/18/2023 UPDATED LIMITS OF DISTUR 9/13/2023 RISER MODIFICATIONS V2 8/28/2023 6 RISER MODIFICATIONS BROOKHAVEN REVISIONS 6/24/2022 4 GASDP REVISIONS v2 4/7/2022 3 GASDP REVIEW REVISIONS 2/16/2022 2 100 PERCENT SUBMITTAL 12/17/2021 1 90 PERCENT SUBMITTAL 11/24/2021

**REVISIONS** 

DRAWN BY APPROVED B CHECKED BY DATE 02/15/2024

DESCRIPTION

GENERAL NOTES

PROJECT NO.

SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS

32. RIGHT-OF-WAY MARKERS IN RESIDENTIAL LAWN AND DEVELOPED COMMERCIAL AREAS SHALL BE PLACED FLUSH

PLANE COORDINATE SYSTEM, WEST ZONE AS REFERENCED IN NAD83 (1994 ADJUSTMENT) AND NAVD88. SEE

. IF ANY CONFLICTS OR DISCREPANCIES ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR THE

FIELD CONDITIONS. THE GENERAL CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY, AND SHALL NOT

THE CONTRACTOR SHALL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE INCLUDE. BUT NOT LIMITED TO.

OR REGRADED AS REQUIRED BY THE ENGINEER. EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC

REGARDING TRENCHLESS INSTALLATION. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COST INCURRED TO

REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED, REMOVED

LOCATIONS IN THE PLANS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED COST ESTIMATE. NO SEPARATE

37. CONSTRUCTION LAYOUT WILL BE REQUIRED BY THE CONTRACTOR. ALL COSTS FOR THIS ITEM WILL BE INCLUDED

PUMPING, DEWATERING, LOCALIZED DEWATERING TO CONTROL GROUNDWATER INFLOW, STREAM DIVERSION, AND

CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING GEORGIA SAFE DAMS PROGRAM—APPROVED AND

40. CONTRACTOR TO REPAIR ANY SEPTIC AND/OR IRRIGATION LINES AND APPURTENANCES DAMAGED AS A RESULT

BROOKHAVEN LAND DISTURBANCE PERMIT-APPROVED DRAWINGS AND REQUIRED LDP PERMIT PLACARD ON SITE.

OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE FOR DAMAGE TO SEPTIC AND/OR IRRIGATION LINES

THE CONTRACTOR SHALL STRICTLY ADHERE TO DUST CONTROL REGULATIONS. ALL AREAS SUBJECTED TO DUST

FORMATION MUST BE PERIODICALLY WATERED SUFFICIENT TO RETARD DUST. ALL COSTS FOR DUST CONTROL

42. CITY OF BROOKHAVEN IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS BY ENGINEERS OR OTHER DESIGN

NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS AS MAY BE

NECESSARY FOR THE PROTECTION AND SAFETY SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE

44. THE MULTIUSE PATH PROJECT AT MURPHEY CANDLER DAM HAS BEEN RECENTLY COMPLETED. AND THEREFORE

45. THE INTENT IS TO PROTECT THE ROADWAY SURFACE AND BASE FROM DAMAGE DUE TO CONSTRUCTION. SHOULD

SINGLE LANE AND IS AT LEAST 2' FROM THE CENTERLINE, THE FULL WIDTH OF THE LANE SHALL BE

47. SITE CONTRACTOR SHALL COORDINATE LAKE DRAWDOWN WITH THE CITY'S FISH RELOCATION CONTRACTOR

MILLED/RESURFACED. SHOULD THE DAMAGE OCCUR WITHIN 2' OF THE CENTERLINE OR CROSS INTO THE

EITHER BE DAMAGED. ASPHALT AND ROAD BASE SHALL BE KEY CUT TO A MINIMUM OF 1' ON EITHER SIDE OF

THE DAMAGE. THE DAMAGED SECTION SHALL BE REMOVED AND REPAIRED. IF DAMAGE IS CONTAINED WITHIN A

OPPOSITE LANE, THE FULL WIDTH OF THE ROAD SHALL BE MILLED AND RESURFACED. THE COST FOR PAVEMENT

CONTACT CARLOS SOLER AT 404-734-7838 OR CARLOS.SOLER@BROOKHAVENGA.GOV AND APPLY THROUGH THE

DESIGNATED TO MANAGE ALL LIVE FISH RELOCATION ACTIVITIES. CONTACT INFORMATION TO BE PROVIDED NO

46. WORK IN THE CITY RIGHT-OF-WAY WILL REQUIRE A DEPARTMENT OF PUBLIC WORKS R/W ENCROACHMENT PERMI

THE SIDEWALK AND BOARDWALK IMPROVEMENTS ARE NOT INCLUDED ON SURVEY SHEET 6/13. REFER TO SHEET

38. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF WATER TO INCLUDE BUT NOT LIMITED TO BYPASS

TEMPORARILY LOWERING AND MAINTAINING MURPHEY CANDLER LAKE ELEVATION AT 875' +/- DURING

33. THE SURVEY FOR THIS PROJECT WAS PREPARED BY TERRAMARK AND IS RELATIVE TO THE GEORGIA STATE

34. THE CONTRACTOR SHALL OBSERVE ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS

COMMENCE CONSTRUCTION UNTIL THE CONFLICTS OR DISCREPANCIES ARE RESOLVED.

PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.

PLANS FOR LOCATIONS AND DESCRIPTIONS OF BENCHMARKS USED.

AND APPURTENANCES NOT ILLUSTRATED ON THE CONSTRUCTION PLANS.

PROFESSIONALS ON DESIGN OR COUNTY CODE REQUIREMENTS FOR THIS PROJECT.

CP-101 FOR APPROXIMATE LOCATIONS OF MULTIUSE PATH AND RETAINING WALL.

CITY'S R/W PERMITTING PORTAL: HTTPS://BROOKHAVEN.GA.ROWAY.NET/

REPAIRS SHALL BE SOLELY BORNE BY THE CONTRACTOR.

LATER THAN THE PROJECT KICKOFF MEETING.

WITH THE FINISHED SURFACE.

COMPLY WITH THIS REQUIREMENT.

CONSTRUCTION.

IN THE PRICE BID FOR OTHER CONTRACT ITEMS.

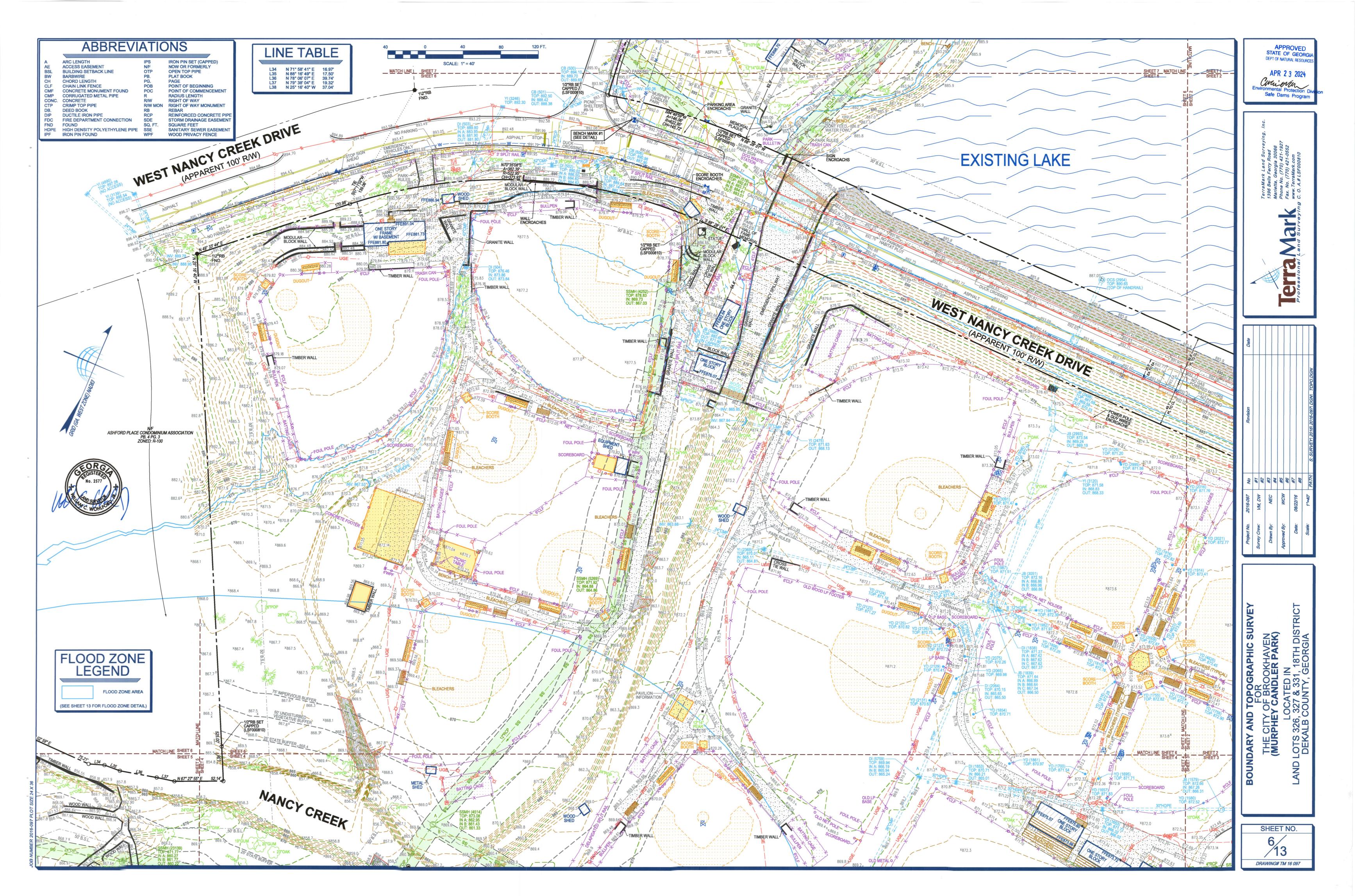
SHALL BE INCIDENTAL TO THE CONTRACT.

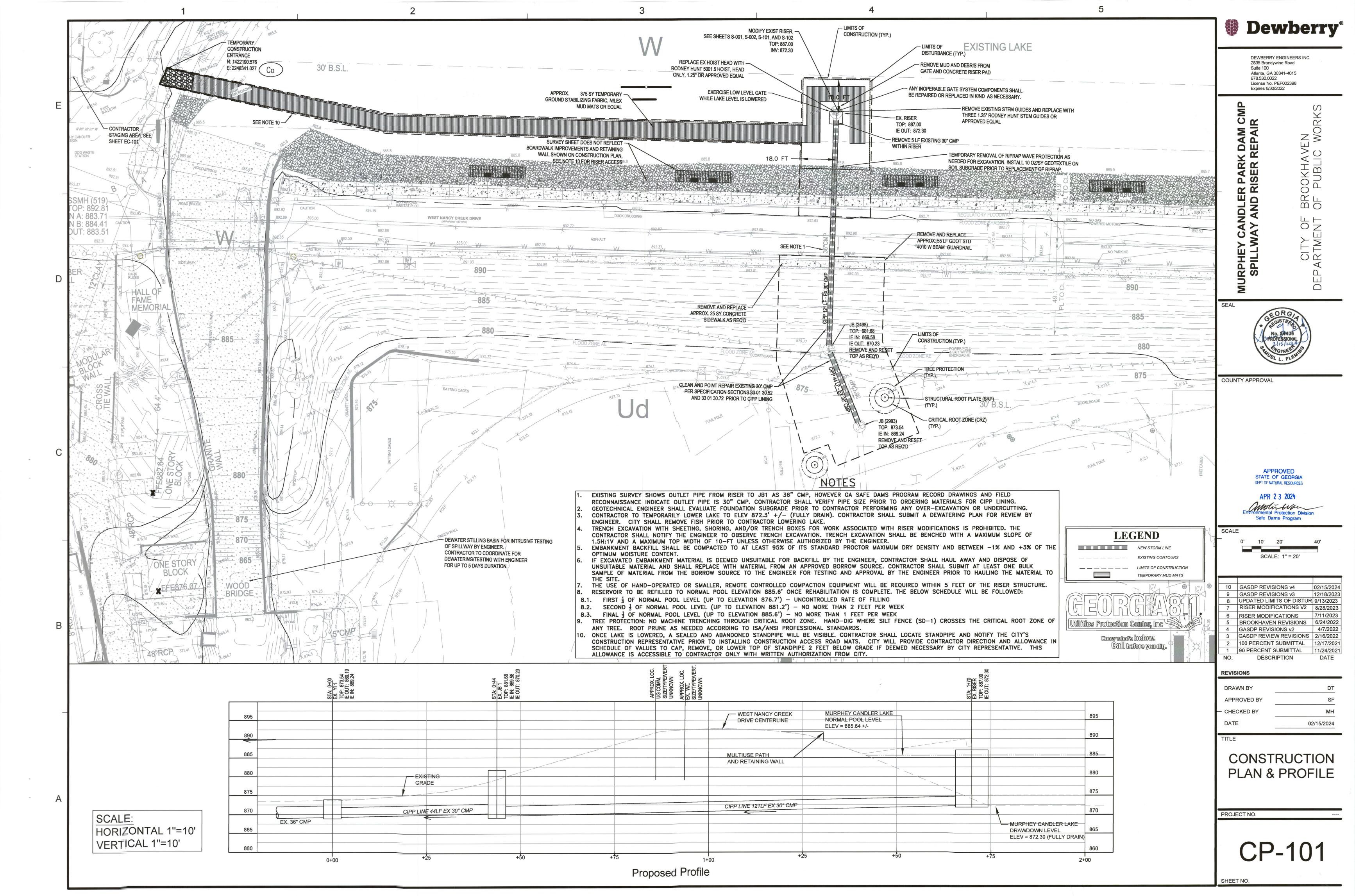
RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON

CONFLICT WITH CONSTRUCTION ARE TO BE REMOVED OR RELOCATED TO CLEAR CONSTRUCTION IN ADVANCE OF

THE PROJECT IN ITS ORIGINAL, RELOCATED, OR NEWLY INSTALLED POSITION. ALL UTILITY FACILITIES WHICH ARE IN

SHEET NO.





## **Stems and Stem Guide**

1.Stems are shipped with thrust nuts and couplings attached. These should be removed before installation.

2.Stem guide brackets should be mounted tightly to the wall with anchor bolts positioned in concrete as indicated in the installation drawings. The stem guide, or collar, should be loose on the bracket.

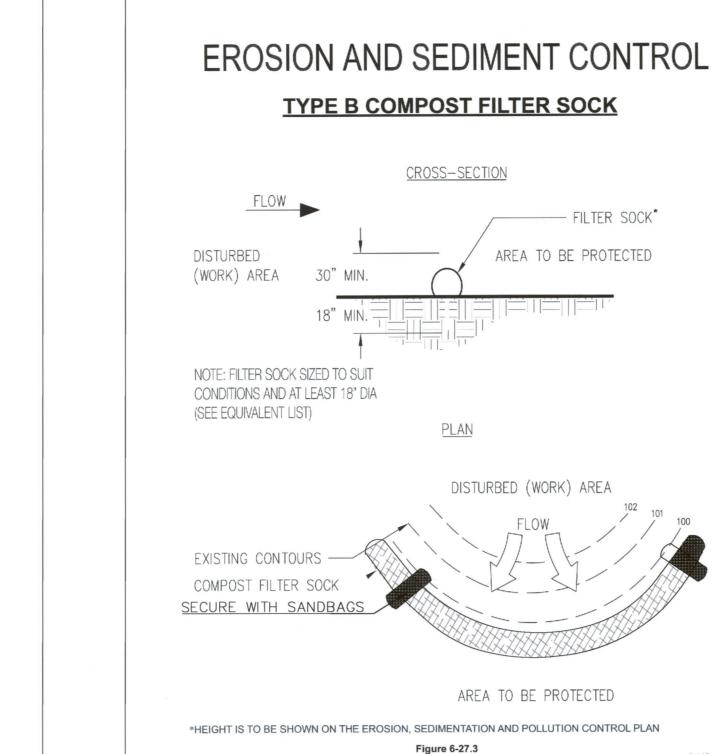
3. The lowest section of the stem should be lowered through the holes in the upper disc ribs and threaded into the bronze thrust nut until the stem is flush with the bottom of the nut.

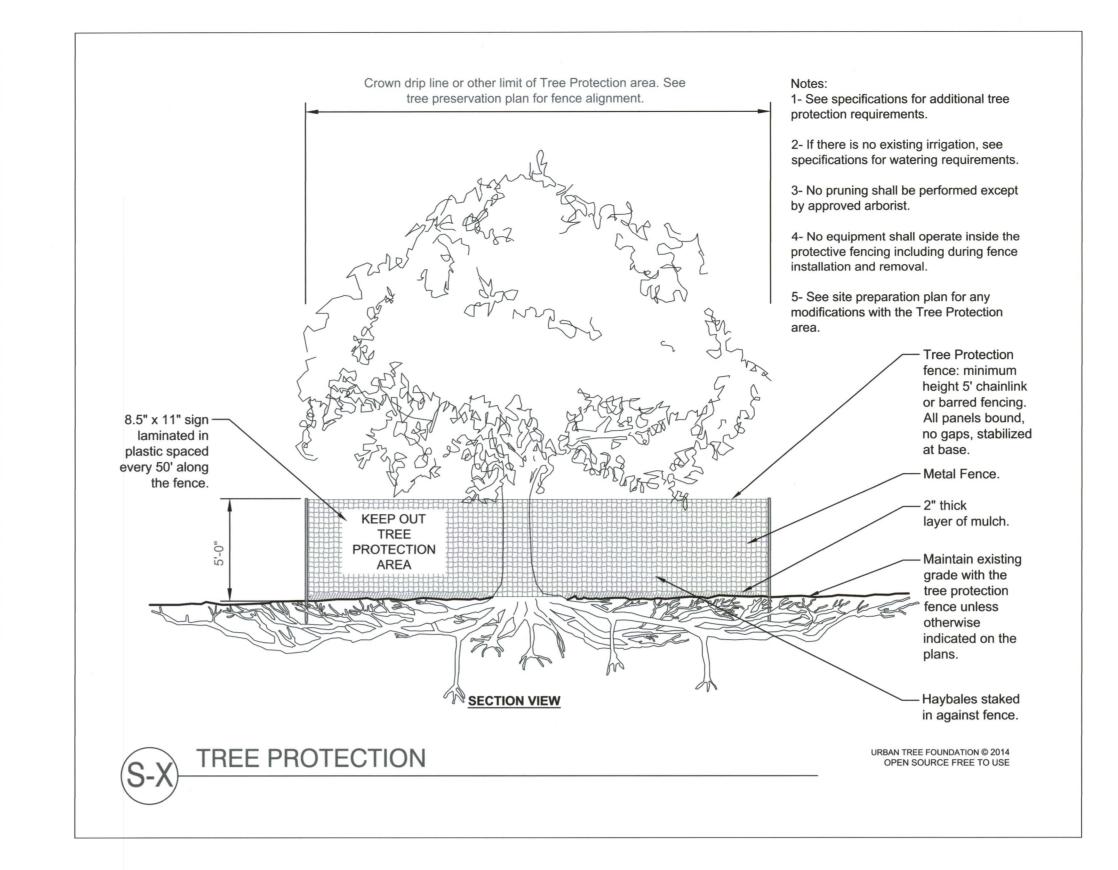
4. The gib head key is inserted from the top and the locking set screw should be tightened. The stem should be lightly supported as it passes through stem guides in the proper sequence.

5.Stem couplings, where required, should be threaded onto the lower section of the stem. The upper section of the stem is then threaded into the coupling. Take care to make sure the coupling is threaded an equal amount onto each stem.

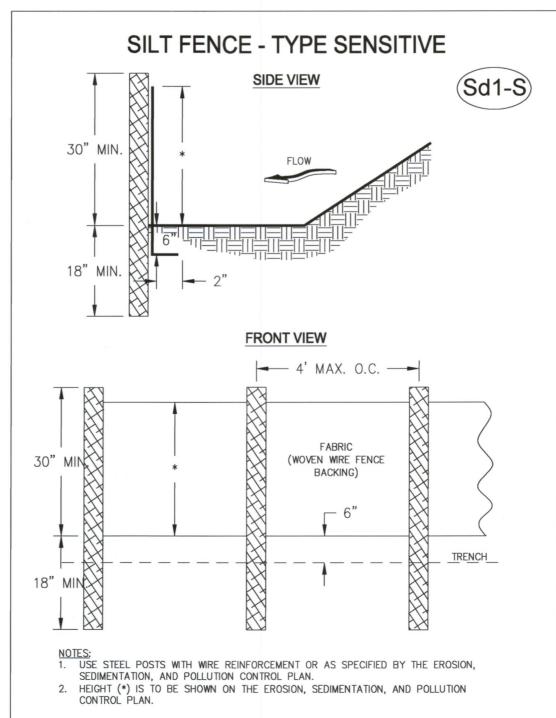
6. The key should then be inserted and locked in place by means of the set screw.

7. The threaded section of stem should be cleaned and checked to make sure that no damage has occurred to the threads during installation.





## SOD MAINTENANCE AND INSTALLATION SOD LAYOUT AND PREPARATION LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES. <u>BUTTING:</u> ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY. DIRECTIONS FOR INITIAL MAINTENANCE Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD Step 3. Mow when the sod is established -- in 2-3 weeks. Set the mower APPEARANCE OF GOOD SOD SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT. THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK). ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH. Ds4



RODNEY HUNT

COUPLING-

THREADED

STEM GUIDE

SET SCREW

& KEYED

TO HOIST

SET SCREW -

THESE BOLTS

MINIMUM AFTER

INSTALLATION

STEM GUIDE

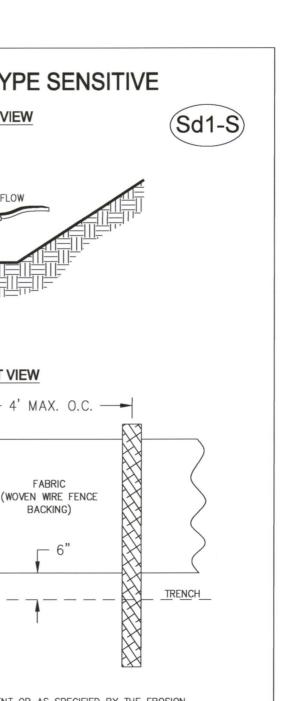
BRACKET -

GATE DISC.

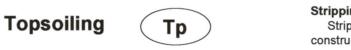
THRUST NUT-

& KEYED

TORQUE TO 85 FT./LBS



GSWCC 2016 Edition



6-143

Stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after

**PURPOSE** To provide a suitable soil medium for vegetative growth on areas where other measures will

not produce or maintain a desirable stand. CONDITIONS This practice is recommended for sites of 2:1

or flatter slopes where: 1. The texture of the exposed subsoil or parent

vegetative growth. 2. The soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and

material is not suitable to produce adequate

3. The soil to be vegetated contains material

CONSTRUCTION SPECIFICATIONS

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toxic to plant growth.

Materials Topsoil should be friable and loamy, free of debris, objectionable weeds and stones and contain no toxic substance that may be harmful to plant growth. A pH range of 5.0-7.5 is acceptable. Soluble salts should not exceed 500 ppm.

Field exploration should be made to determine whether the quantity and quality of surface soil justifies stripping.

Stripping should be confined to the immediate

A 4 to 6 inch stripping depth is common, but may vary depending on the particular soil.

If pH value is less than 6.0, lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoils containing soluble salts greater than 500 parts per million

shall not be used.

Stockpiles The location of topsoil stockpiles should not obstruct natural drainage or cause off-site environmental damage.

Stabilization Stockpiles shall be contained by sediment barriers to prevent sedimentation on adjacent areas. Stockpiles shall be stabilized in accordance with specifications Ds1 and Ds2 - Disturbed Area Stabilization (With Mulching) and (With Temporary Grassing), respectively, or Tac-

Site Preparation (Where topsoil is to be added)

Topsoiling - When topsoiling, maintain needed erosion control practices such as diversions, grade stabilization structures, berms, dikes, level spreaders, waterways, sediment basins, etc.

Grading - Grades on the areas to be topsoiled that have been previously established shall be maintained.

Liming - Soil tests should be used to determine the pH of the soil. Where the pH of the subsoil is 5.0 or less or composed of heavy clays, agricultural limestone shall be spread at the rate of 100 pounds per 1,000 square feet. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedure.

Bonding - Use one of the following methods to insure bonding of topsoil and subsoil:

1. Tilling. After the areas to be topsoiled have

6-223

been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or scarifying to a depth of at least 3 inches to permit bonding of the topsoil to the subsoil.

2. Tracking. Passing a bulldozer over the entire surface area of the slope to leave horizontal

Applying Topsoil 1. Topsoil should be handled only when it is dry enough to work without damaging soil structure.

2. A uniform application of 5 inches (unsettled) is recommended, but may be adjusted at the discretion of the design professional.

Table 6-37.1. Cubic Yards Of Topsoil Required For Application To Various Depths

Per 1,000 Square Feet Per Acre 3.1 403 12.4 537 15.5 672

18.6

806

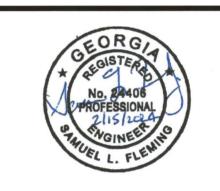


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BROOKHAVEN OF PUBLIC WORKS R PARK DAM C RISER REPAIR RPHEY CA SPILLWA 

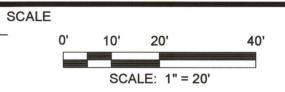
SEAL



COUNTY APPROVAL

**APPROVED** STATE OF GEORGIA DEPT OF NATURAL RESOURCES

APR 2 3 2024 Carolineran Environmental Protection Division Safe Dams Program



| 10  | GASDP REVISIONS v4        | 02/15/202 |
|-----|---------------------------|-----------|
| 9   | GASDP REVISIONS v3        | 12/18/202 |
| 8   | UPDATED LIMITS OF DISTUR. | 9/13/2023 |
| 7   | RISER MODIFICATIONS V2    | 8/28/2023 |
| 6   | RISER MODIFICATIONS       | 7/11/2023 |
| 5   | BROOKHAVEN REVISIONS      | 6/24/2022 |
| 4   | GASDP REVISIONS v2        | 4/7/2022  |
| 3   | GASDP REVIEW REVISIONS    | 2/16/2022 |
| 2   | 100 PERCENT SUBMITTAL     | 12/17/202 |
| 1   | 90 PERCENT SUBMITTAL      | 11/24/202 |
| NO. | DESCRIPTION               | DATE      |

**REVISIONS** 

| DRAWN BY     | D         |
|--------------|-----------|
| APPROVED BY  | S         |
| — CHECKED BY | М         |
| DATE         | 02/15/202 |

TITLE

**DETAILS** 

PROJECT NO.

SHEET NO.

Itilities Protection Center, Inc Know what's below.

Gall before you dig.

M-L REPRESENTS TO MOUNTAIN; BLUE RIDGE; AND RIDGES AND VALLEYS MLRA'S P REPRESENTS THE PIEDMONT

C REPRESENTS THE SOUTHERN COASTAL PLAIN; SAND HILLS; AND ATLANTIC COAST. FLATWOOS MLRA'S

# DISTURBED AREA STABILIZATION (TEMP)

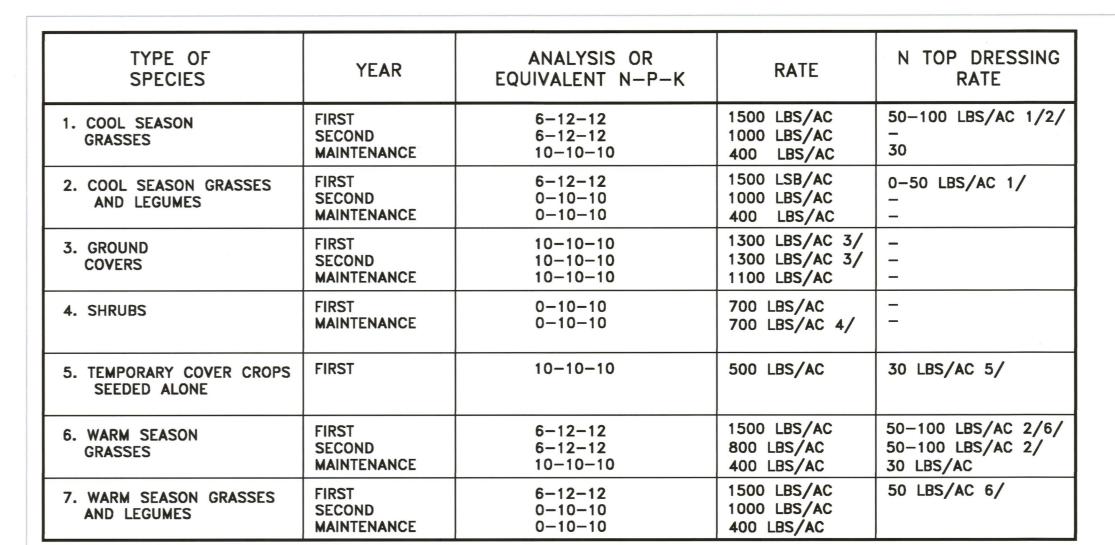
SCALE:NTS

insure bonding of topsoil and subsoil:

1. Tilling. After the areas to be topsoiled have

Ds2

| SCALE:NTS   |   | £4Z   |                   |                                   |          |
|---|---|---|-------------------|-----------------------------------|----------|
|   |   |   |                   |                                   |          |
| Topsoiling Tp   | Stripping Stripping should be confined to the immediate construction area.  | been brought to grade, and immediately prior<br>to dumping and spreading the topsoil, the<br>subgrade shall be loosened by discing or                     |                   | Cubic Yards Of Ilication To Vario |          |
| DEFINITION.   | A 4 to 6 inch stripping depth is common, but may vary depending on the particular soil.   | scarifying to a depth of at least 3 inches to permit bonding of the topsoil to the subsoil.   | Depth<br>(Inches) | Per 1,000<br>Square Feet          | Per Acre |
| DEFINITION  Stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after  | Topsoil pH  | <ol><li>Tracking. Passing a bulldozer over the entire<br/>surface area of the slope to leave horizontal</li></ol>   | 1                 | 3.1                               | 134      |
| completion of construction activities.  | If pH value is less than 6.0, lime shall be applied and incorporated with the topsoil to adjust   | depressions.  | 2                 | 6.2                               | 268      |
| PURPOSE   | the pH to 6.5 or higher. Topsoils containing soluble salts greater than 500 parts per million   | Applying Topsoil  1. Topsoil should be handled only when it is  | 3                 | 9.3                               | 403      |
| To provide a suitable soil medium for vegeta-<br>tive growth on areas where other measures will   | shall not be used.  | dry enough to work without damaging soil  | 4                 | 12.4                              | 537      |
| not produce or maintain a desirable stand.  | Stockpiles  | structure.  | 5                 | 15.5                              | 672      |
| CONDITIONS  This practice is recommended for sites of 2:1 or flatter slopes where:  | The location of topsoil stockpiles should not obstruct natural drainage or cause off-site environmental damage.   | <ol><li>A uniform application of 5 inches (unsettled)<br/>is recommended, but may be adjusted at the<br/>discretion of the design professional.</li></ol> | 6                 | 18.6                              | 806      |
| <ol> <li>The texture of the exposed subsoil or parent material is not suitable to produce adequate vegetative growth.</li> <li>The soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and food.</li> </ol> | Stabilization Stockpiles shall be contained by sediment barriers to prevent sedimentation on adjacent areas. Stockpiles shall be stabilized in accordance with specifications Ds1 and Ds2 - Disturbed Area Stabilization (With Mulching) and (With Temporary Grassing), respectively, or TacTackifiers.   |   |                   |                                   |          |
| <ol><li>The soil to be vegetated contains material<br/>toxic to plant growth.</li></ol>   | Site Preparation<br>(Where topsoil is to be added)  |   |                   |                                   |          |
| CONSTRUCTION SPECIFICATIONS  Materials  Topsoil should be friable and loamy, free of debris, objectionable weeds and stones and contain no toxic substance that may be harmful to plant growth. A pH range of 5.0-7.5 is acceptable. Soluble salts should not exceed 500 ppm.       | Topsoiling - When topsoiling, maintain needed erosion control practices such as diversions, grade stabilization structures, berms, dikes, level spreaders, waterways, sediment basins, etc.  Grading - Grades on the areas to be topsoiled that have been previously established shall be maintained.   |   |                   |                                   |          |
| Testing Field exploration should be made to determine whether the quantity and quality of surface soil justifies stripping.   | Liming - Soil tests should be used to determine the pH of the soil. Where the pH of the subsoil is 5.0 or less or composed of heavy clays, agricultural limestone shall be spread at the rate of 100 pounds per 1,000 square feet. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedure. |   |                   |                                   |          |
|   | Bonding - Use one of the following methods to   |   |                   |                                   |          |



**MULCHING RATES:** 

1. DRY STRAW: 2 TONS PER ACRE.

SCALE:NTS

2. DRY HAY: 2-1/2 TONS PER ACRE.

3. FOR HYDRAULIC SÉEDING USE WOOD CELLULOSE MULCH OR WOOD PULP FIBER AT THE RATE OF 500 POUNDS PER ACRE.

1/ APPLY IN SPRING FOLLOWING SEEDING.

2/ APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.

3/ APPLY IN 3 SPLIT APPLICATIONS. 4/ APPLY WHEN PLANTS ARE PRUNED.

5/ APPLY TO GRASS SPECIES ONLY.

6/ APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

FERTILIZER AND MULCHING REQUIREMENTS

Dewberry\*

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BROOKHAVEN OF PUBLIC WORKS RPHEY CANDLER PARK DAM C SPILLWAY AND RISER REPAIR  $\vdash$ CITY OF DEPARTMENT

SEAL



COUNTY APPROVAL

**APPROVED** DEPT OF NATURAL RESOURCES

Safe Dams Program

SCALE: 1" = 20'

9 GASDP REVISIONS v3 8 UPDATED LIMITS OF DISTUR 9/13/2023 7 RISER MODIFICATIONS V2 6 RISER MODIFICATIONS 5 BROOKHAVEN REVISIONS 4 GASDP REVISIONS v2 3 GASDP REVIEW REVISIONS 2/16/2022 2 | 100 PERCENT SUBMITTAL | 12/17/2021 1 90 PERCENT SUBMITTAL 11/24/2021 DESCRIPTION

**REVISIONS** 

DRAWN BY APPROVED B CHECKED B. DATE 02/15/2024

**DETAILS** 

PROJECT NO.

SHEET NO.

Know what's DOLOW. Call before you dig.

GSWCC 2016 Edition

HORIZ. HORIZONTAL

LLH LONG LEG HORIZONTAL

INT. INTERIOR

## GENERAL STRUCTURAL NOTES

- THE GENERAL STRUCTURAL NOTES ARE INTENDED TO AUGMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THE DRAWINGS, SPECIFICATIONS, AND GENERAL STRUCTURAL NOTES. THE STRICTEST PROVISION SHALL
- STRUCTURAL DESIGN OF CAST-IN-PLACE CONCRETE STRUCTURES SHALL CONFORM TO THE REQUIREMENTS OF THE GEORGIA DOT BRIDGE AND STRUCTURES DESIGN MANUAL, 2021 EDITION AND THE GEORGIA DOT STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, 2021 EDITION.
- DESIGN LOADS AND DESIGN DATA ARE AS FOLLOWS:

100 PSF A. LIVE LOAD (MINIMUM): B. WIND LOAD: BASIC WIND SPEED (3 SECOND GUST) 107 MPH RISK CATEGORY WIND EXPOSURE CATEGORY

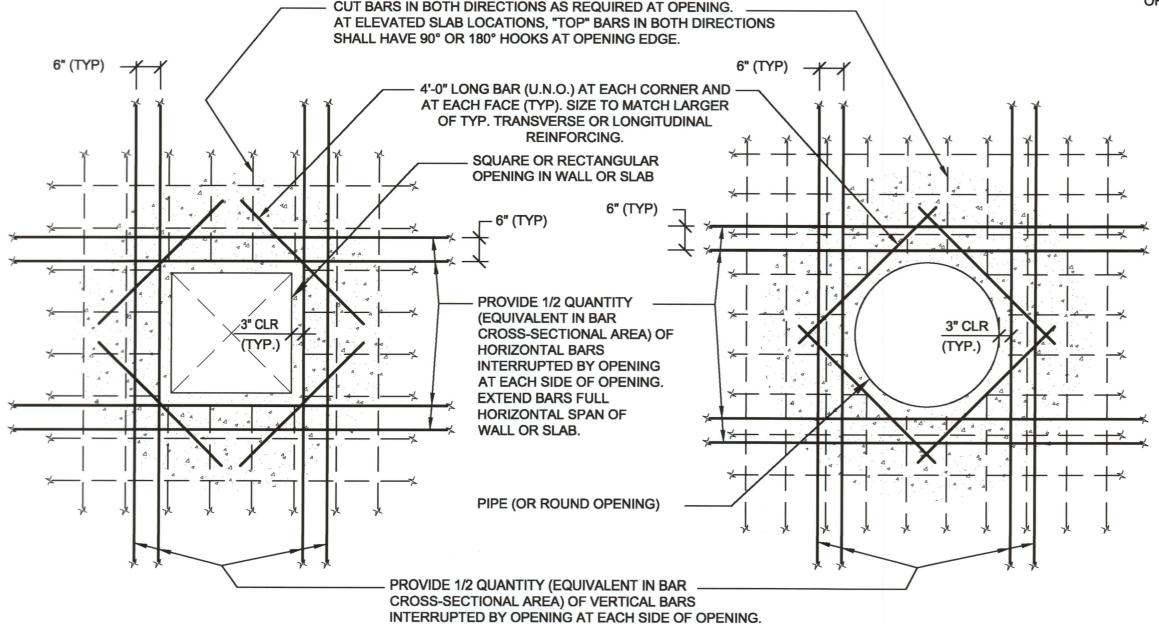
C. SEISMIC DESIGN DATA:

RISK CATEGORY SEISMIC IMPORTANCE FACTOR (IE) SEISMIC RESPONSE ACCELERATION, SS 0.196 SEISMIC RESPONSE ACCELERATION, S1 0.087 SPECTRAL RESPONSE COEFFICIENT, SDS 0.209 SPECTRAL RESPONSE COEFFICIENT, SD1 0.140 SITE CLASS (ASSUMED) SEISMIC DESIGN CATEGORY

### **FOUNDATIONS:**

- 1. THE STRUCTURAL FOUNDATION DESIGN IS BASED UPON THE RECOMMENDATION IN THE GEOTECHNICAL TECHNICAL MEMORANDUM No. GL21464834.001 PREPARED BY WSP DATED JULY 24, 2023.
- 2. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS ENCOUNTERED IN THE FIELD CONTRARY TO THOSE ASSUMED FOR DESIGN.
- 3. FOUNDATION ASSUMED BEARING PRESSURE USED IN DESIGN (POUNDS PER SQUARE FOOT): 1,500 PSF.
- 4. ALL COMPACTED FILL, EXCAVATIONS, SUBGRADES, AND BEARING SURFACES SHALL BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF GEORGIA (OR A QUALIFIED GEOTECHNICAL TECHNICIAN WORKING UNDER THE DIRECT SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER) TO VERIFY SPECIFIED GEOTECHNICAL CONFORMANCE REQUIREMENTS.
- 5. CONTRACTOR SHALL CONTROL SITE GROUNDWATER AND/OR SURFACE WATER BY ALL MEANS NECESSARY TO MAINTAIN A WATER LEVEL A MINIMUM 3 FEET BELOW FOUNDATION SUBGRADE SO AS TO NOT DAMAGE FOUNDATION EXCAVATIONS. THE BASE OF ALL FOUNDATION EXCAVATIONS SHOULD BE FREE OF ALL WATER AND LOOSE SOIL PRIOR TO PLACING CONCRETE. ANY SUBGRADE SOILS WHICH HAVE BEEN WEAKENED DUE TO SATURATION OR DISTURBANCE SHALL BE RECOMPACTED OR REMOVED AND REPLACED WITH BACKFILL AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR DEWBERRY REVIEW PRIOR TO THE START OF EXCAVATION.
- 7. CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PLAN FOR DEWBERRY REVIEW PRIOR TO THE START OF EXCAVATION.
- 8. LOOSE OR SOFT SOILS SHALL BE CLEANED FROM FOUNDATION EXCAVATION BOTTOMS PRIOR TO PLACING OF CONCRETE. SUBGRADES NEEDING UNDERCUTTING SHALL BE BACKFILLED TO THE ORIGINAL SUBGRADE ELEVATION WITH COMPACTED No. 57 STONE UNLESS DIRECTED OTHERWISE BY THE GEOTECHNICAL ENGINEER. A FILTER FABRIC MATERIAL (MIRAFI 1100L OR APPROVED EQUAL) SHALL BE PLACED BETWEEN THE STONE BACKFILL AND SUBGRADE. THE FILTER FABRIC SHALL BE WRAPPED OVER THE TOP OF STONE BACKFILL. THE OVER-EXCAVATED AREA SHALL EXTEND A MINIMUM OF 1 FEET BEYOND THE EDGES OF THE STRUCTURE BASE SLAB OR FOOTING.
- 9. FOUNDATION CONCRETE SHOULD BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATIONS ARE MADE. IF THE BEARING SOILS ARE SOFTENED BY SURFACE WATER INTRUSION OR EXPOSURE, THEN THE SOFTENED SOILS MUST BE REMOVED FROM THE FOUNDATION EXCAVATION BOTTOM IMMEDIATELY PRIOR TO PLACING OF CONCRETE. IF THE EXCAVATION MUST REMAIN OPEN OVERNIGHT, OR IF RAINFALL IS IMMINENT WHILE THE BEARING SOILS ARE EXPOSED, THEN A 2 TO 3 INCH THICK LAYER OF LEAN CONCRETE (500 PSI MINIMUM STRENGTH) SHALL BE PLACED ON THE BEARING SOILS BEFORE THE PLACEMENT OF REINFORCING STEEL. THE SUBGRADE SHALL BE EXCAVATED AS REQUIRED TO ACCEPT THE LEAN CONCRETE SO THAT THE INTENDED BOTTOM OF FOUNDATION ELEVATION IS NOT CHANGED.
- 10. ALL EXCAVATIONS SHALL CONFORM TO APPLICABLE OSHA REGULATIONS.
- 11. ALL CONFINED SPACE WORK SHALL CONFORM TO APPLICABLE OSHA REGULATIONS.
- 12. ALL BACKFILL SHALL BE COMPACTED TO ATLEAST 95% OF ITS STANDARD PROCTOR DRY DENSITY AND BETWEEN -1% AND +3% OF THE OPTIMUM MOISTURE CONTENT.
- 13. USE A HAND OPERATED OR SMALLER, REMOTE CONTROLLED COMPACTION EQUIPMENT WITHIN 5 FEET OF RISER STRUCTURE.

NOTE: THIS DETAIL APPLIES TO SQUARE OR RECTANGULAR OPENINGS WITH MAXIMUM OPENING DIMENSION LESS THAN OR EQUAL TO 4'-0" AND TO CIRCULAR OPENINGS UP TO 3'-0" IN DIAMETER MAXIMUM.



### REINFORCED CONCRETE FOR SPECIAL STRUCTURES:

- UNLESS NOTED OTHERWISE, ALL CONCRETE WORK, DETAILING, FABRICATION, AND PLACING OF REINFORCING AND CONCRETE SHALL BE GOVERNED BY THE LATEST REVISIONS OF:
  - A. ACI 301, ACI 315, AND ACI 318.
  - B. CRSI RECOMMENDED PRACTICE OF PLACING REINFORCING BARS.
  - C. ACI 306 AND ACI 305 FOR COLD AND HOT WEATHER CONCRETING, RESPECTIVELY.
- ALL CONCRETE SHALL BE NORMAL WEIGHT WITH A MAXIMUM UNIT WEIGHT OF 150 POUNDS PER CUBIC FOOT. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH, AS SPECIFIED BELOW, FOR THE RESPECTIVE

RISER WALLS, BASE SLAB, AND ELEVATED TOP SLAB

- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, AND SHALL BE GRADE 60 U.N.O.
- REINFORCING BAR LAP SPLICES AND HOOK DIMENSIONS SHALL BE AS REQUIRED PER THE SCHEDULE ON THIS SHEET
- 5. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE FOLLOWING CONCRETE COVER SHALL BE PROVIDED OVER
  - A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:

### **EXISTING STRUCTURES AND FACILITIES:**

**B. ALL OTHER CONCRETE:** 

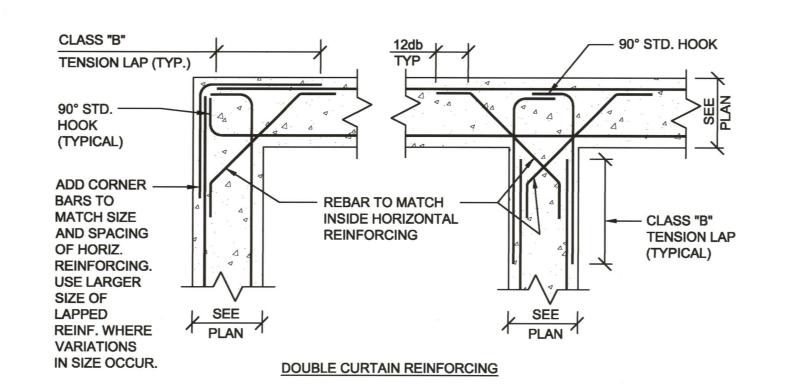
- SIZES, ELEVATIONS, AND DIMENSIONS OF EXISTING SITE ELEMENTS ARE BASED ON EXISTING DRAWINGS PROVIDED BY THE OWNER AND/OR FIELD MEASUREMENTS AND ARE FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE STARTING WORK.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN ANY AND ALL WORK NECESSARY TO PROTECT EXISTING FACILITIES (THIS INCLUDES BUT IS NOT LIMITED TO: BUILDINGS, MANHOLES, PAVEMENT, SIDEWALKS, DRAINAGE STRUCTURES, TREES, AND PLANTED AREAS). ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND OWNER AT THE SOLE EXPENSE OF THE CONTRACTOR AND/OR THEIR SUB-CONTRACTORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ERECTION OF ALL NECESSARY FORMWORK. TEMPORARY BRACING, AND SHORING REQUIRED DURING EXCAVATION OF SOIL ADJACENT TO EXISTING STRUCTURES.
- 4. THE CONTRACTOR SHALL VERIFY ANY CONFLICTS WITH EXISTING UTILITIES. IF A CONFLICT IS ENCOUNTERED. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER AND OWNER AND A RESOLUTION SHALL BE REACHED BEFORE WORK PROCEEDS IN THE AFFECTED AREA.
- ALL EXISTING UTILITIES HAVE BEEN LOCATED FROM THE INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE SIZE AND ACCURATELY LOCATE BOTH HORIZONTALLY AND VERTICALLY ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION (ONE CALL CENTER 811). COST TO REPAIR DAMAGED UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- 6. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF AN ITEM IN QUESTION IS BELIEVED TO HAVE BEEN DAMAGED DURING CONSTRUCTION AND THERE IS NO PHOTOGRAPHIC PROOF OF ITS STATE PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING TO THE SATISFACTION OF THE ENGINEER AND OWNER AT THE SOLE EXPENSE OF THE CONTRACTOR AND/OR THEIR SUB-CONTRACTORS.

### POST-INSTALLED ANCHORS:

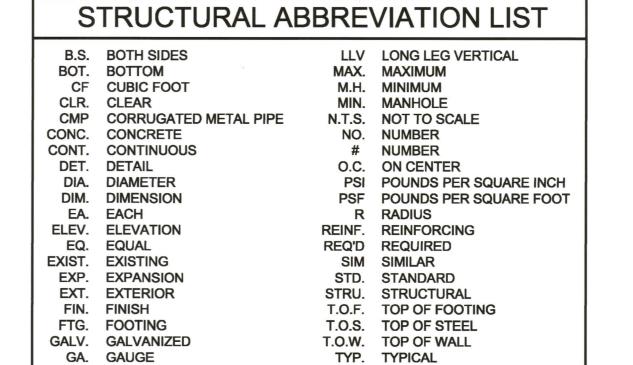
1. UNLESS OTHERWISE INDICATED ON PLANS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES, OR APPROVED EQUALS.

|    |               | ADHESIVE ANCHOR  | MECHANICAL ANCHOR  |
|----|---------------|--|--|
| so | OLID CONCRETE | HILTI HY 200 V3 SAFE SET SYSTEM<br>(ICC ESR-4868) HILTI RE 500v3<br>SAFE SET SYSTEM (ICC ESR-3814) | HILTI KWIK HUS EZ SAFE SET SYSTEM (ICC ESR-3027)<br>HILTI KWIK BOLT TZ2 EXPANSION ANCHOR SAFE SET<br>SYSTEM (ICC ESR 4266) |

- 2. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT, SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE.
- 3. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- 4. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- 5. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- 6. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS OTHERWISE NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS.



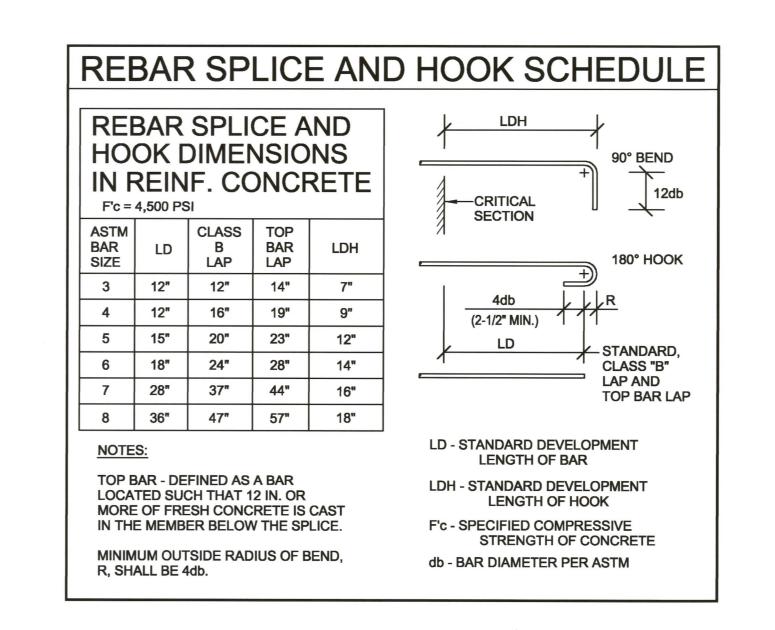




U.N.O. UNLESS NOTED OTHERWISE

V.I.F. VERIFY IN FIELD

VERT. VERTICAL





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**SEAL** 🛣 Í PROFESSIONA

**COUNTY APPROVAL** 

**APPROVED** STATE OF GEORGIA DEPT OF NATURAL RESOURCES

APR 2 3 2024 Mintraun nvironmental Protection Division Safe Dams Program

**SCALE** 

DESCRIPTION

**REVISIONS** 

DRAWN BY APPROVED B CHECKED BY **ACH** 

TITLE

DATE

STRUCTURAL GENERAL NOTES, ABBREVIATIONS, AND DETAILS

12/18/2023

PROJECT NO. 50146369

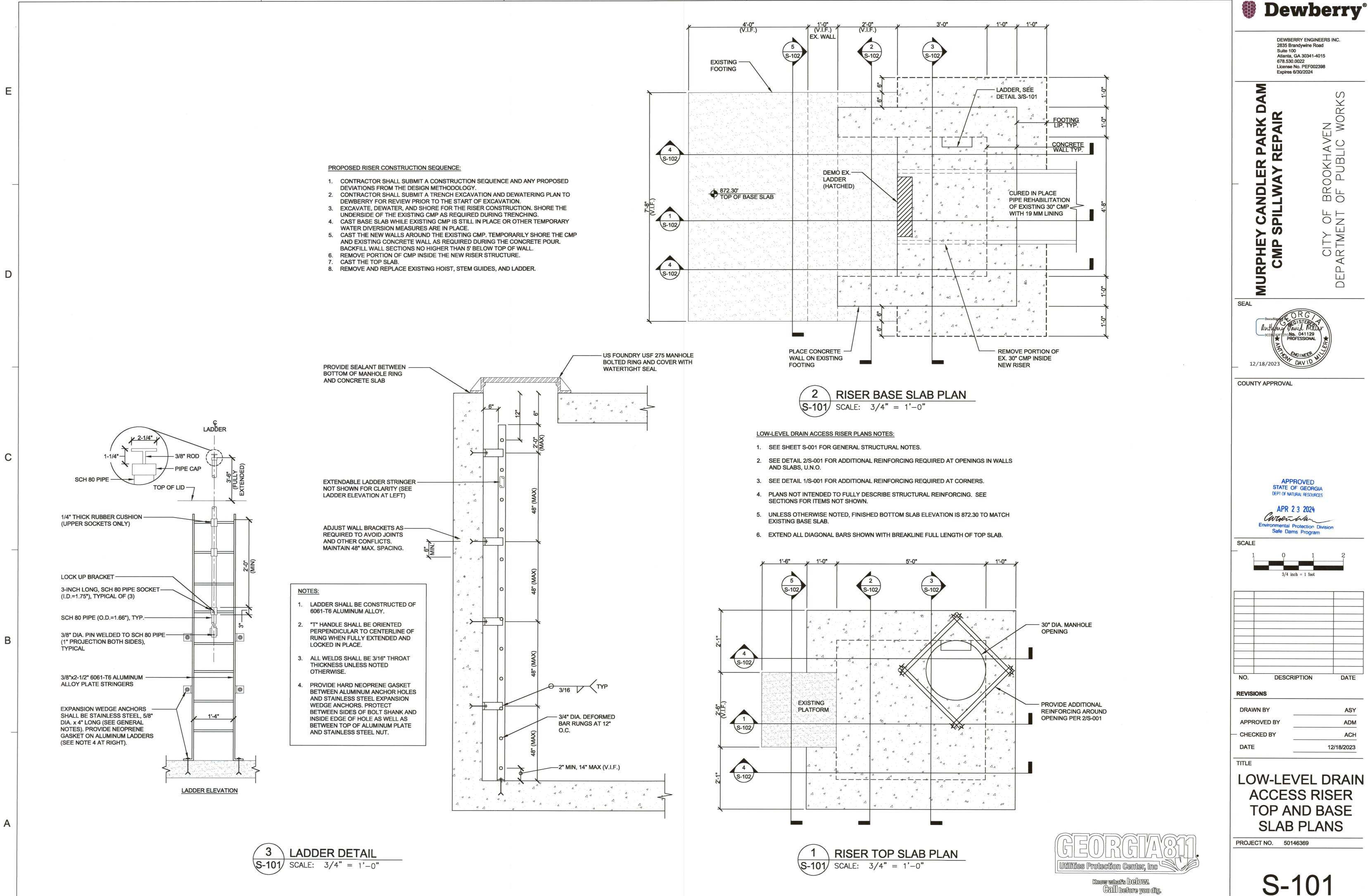
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Know what's below.

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WALL OR SLAB OPENING REINF. DETAIL SCALE: NOT TO SCALE

EXTEND BARS FULL VERTICAL SPAN OF WALL OR SLAB.



DocuSign Envelope ID: 03560581-B1ED-4414-9979-05470CA01593

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