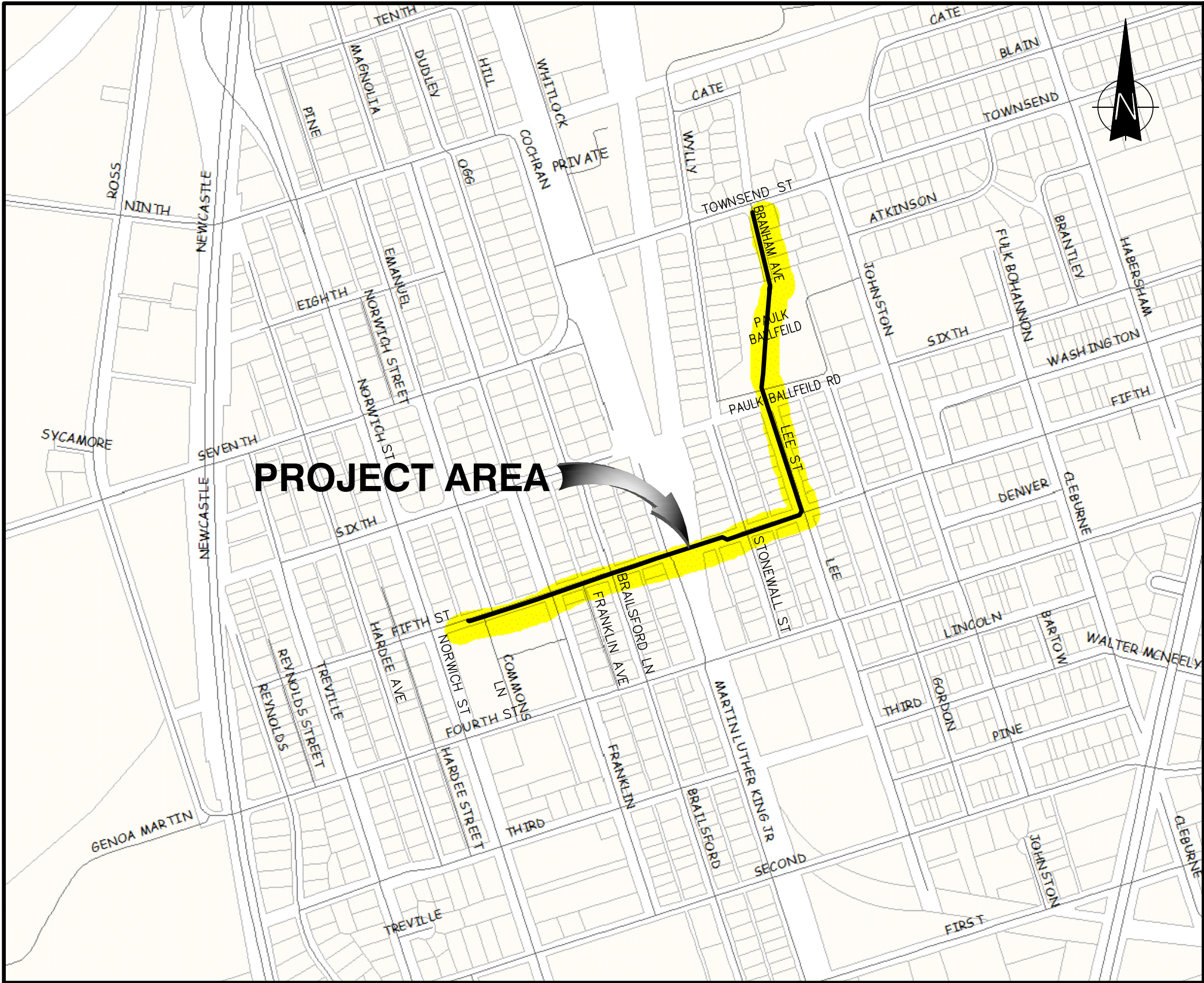


# LIFT STATION 4048 FORCE MAIN IMPROVEMENTS

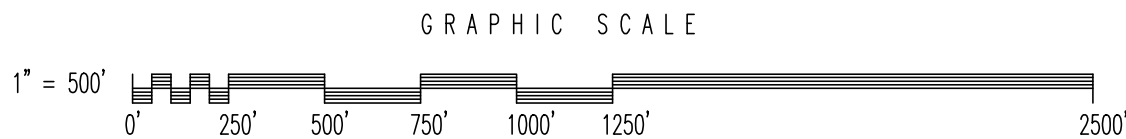
BGJWSC PROJECT NO. 701

FOR THE

## BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION



**VICINITY MAP**  
SCALE: 1" = 500'



MARCH 2017

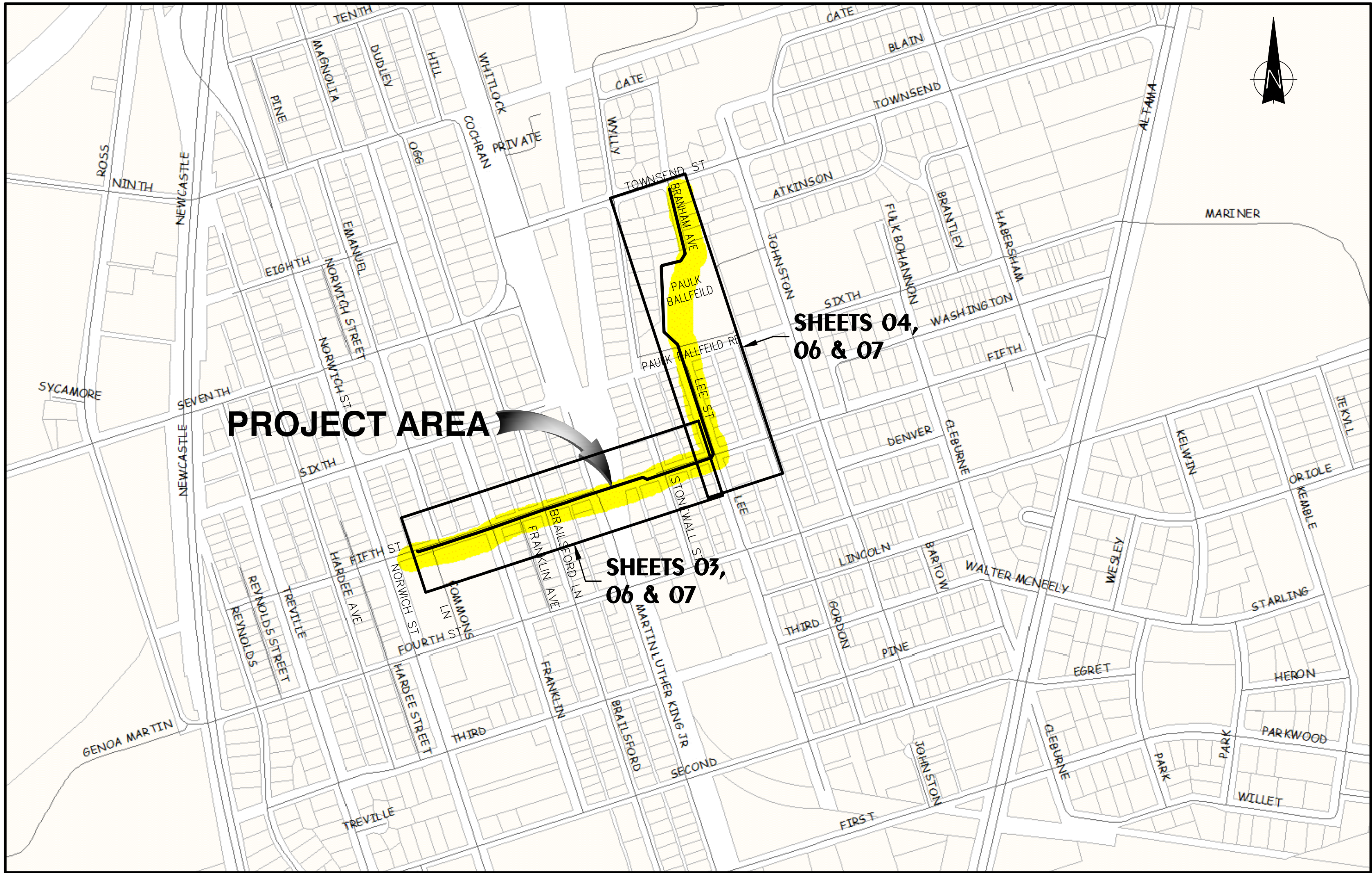
**HUSSEY GAY BELL**  
— Established 1958 —

329 COMMERCIAL DRIVE, SAVANNAH, GA 31406 / T:912.354.4626  
SAVANNAH • ATLANTA • CHARLESTON • COLUMBIA  
[www.husseygaybell.com](http://www.husseygaybell.com)

### SCHEDULE OF DRAWINGS

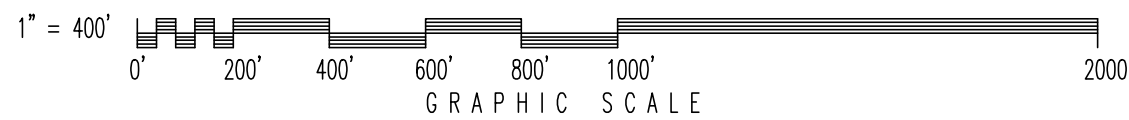
01	COVER - VICINITY - SCHEDULE OF DRAWINGS
02	PROJECT MAP - LEGEND - GENERAL NOTES
03	FORCE MAIN PLAN AND PROFILE
04	FORCE MAIN PLAN AND PROFILE
05	SANITARY SEWER AND FORCE MAIN DETAILS
06	REMOVE AND REPLACE ASPHALTIC CONCRETE PLAN
07	EROSION AND SEDIMENT CONTROL PLAN
08	LDA SCHEDULES NOTES & DETAILS
09	LDA SCHEDULES NOTES & DETAILS





PROJECT MAP

SCALE: 1" = 400'



GENERAL NOTES

1. It is the requirement of the contractor to make his own interpretation of all surface and subsurface data that is presented as to the nature and extent of the materials to be excavated, graded and compacted. The information shown on these plans and within the specifications does not in any way guarantee the amount or the nature of the material which may be encountered.
2. The contractor shall notify the engineer of any conflict with existing utilities not shown on these plans prior to the installation of any pipe.
3. All property/right-of-way lines are approximate, unless monument or pin locations are shown.
4. All property monuments and R/W monuments that are disturbed or damaged shall be replaced by a licensed surveyor. Concrete monument markers shall be a minimum 4" x 4" x 2'6".
5. All fences, posts, sheds, stored items, etc., moved to perform the work shall be replaced or moved back to the original location and any damage caused by removal and replacement shall be repaired so as to place the item in a condition equal to or better than existing at the start of the work.
6. The contractor shall provide a legible set of as-built marked prints to the engineer showing in detail all changes from the design drawings. The locations of all service lines shall be shown with dimensions to permanent structures or manholes.
7. All work shall be performed in a manner as to permit traffic to operate with the least amount of inconvenience possible. At least one travel lane must remain open at all times. All traffic control devices, signs, striping, and flagging shall be furnished by the contractor.
8. All existing drive and crossroads will be provided ingress/egress routes at all times during the construction activities.
9. The contractor shall not leave drainage ditches blocked, except for a brief time during actual installation of pipe. Provide temporary bypass drainage as required to have properly functioning drainage at all other times. Regrade all ditches disturbed by installation of pipe.
10. All ditch banks, existing grass shoulders, and other areas that are disturbed shall be reseeded.
11. All items which are to be removed and are not shown to be reused shall become the property of the contractor and shall be removed from the site. The contractor shall be responsible for the proper final disposal of such material.
12. The contractor is required to contact all utility companies and have utilities located before work begins. It is the contractor's responsibility to protect all utilities. Any damage to utilities shall be repaired at the expense of the contractor. If trench of pipe is within 5ft. of power poles, contractor must notify power company and take all precautions as required by power company. Backfilling and compaction required the same day as excavation occurs.

NOTE:  
HORIZONTAL DATUM IS ON GEORGIA STATE PLANE COORDINATES,  
EAST ZONE, DERIVED FROM EGPS NETWORK OBSERVATIONS.

VERTICAL DATUM IS NAVD88, DERIVED FROM EGPS NETWORK OBSERVATIONS.

13. It is the contractor's responsibility to coordinate with utility company for any guy wire relocation, or temporary utility line disconnections. All fees by the utility company for conducting these services shall be paid by the contractor.
14. The contractor shall pay special attention to underground telephone fiber optic cables, and the underground gas mains and overhead power cables. The contractor must stay a minimum of 7.5 ft. away from power lines for safety of construction activities. The contractor shall comply with the High Voltage Act of Georgia. The contractor shall take every precaution necessary for safety purposes. In areas where construction activities require such, the contractor shall have utility company wrap lines, support poles, etc. The contractor shall pay all fees to the utility company for their work.
15. Required shutdown of utility lines shall be coordinated with the Brunswick-Glynn County Joint Water & Sewer Commission. All requests for disruption shall be made at least by 9:00AM the working day prior to the scheduled interruption.
16. The engineer shall approve any dewatering plan prior to its implementation.
17. All water main piping shall have a minimum of 36" of cover.
18. All force main piping shall have a minimum of 36" of cover.
19. All valves and fittings shall be restrained.
20. Clearing shall be performed to the extent necessary to construct the work within designated clearing easements.
21. The contractor shall schedule and accomplish the work so as to avoid damage to private property and to minimize any inconvenience to property owners and their customers.

LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
SIGN	SIGN	IPF	IRON PIN
OR	SPIGOT	RAILROAD	CONCRETE MONUMENT
	DITCH	ASPHALT PAVEMENT	CASING
SAN	STORM DRAIN LINE	FENCE	RIGHT-OF-WAY
SSMH	DRAINAGE INLET	ROAD CENTERLINE	WOODS LINE
FM	SANITARY SEWER LINE	TREE OR BUSH	LIMITS OF DISTURBANCE
FIRE HYDRANT ASSEMBLY	SANITARY SEWER MANHOLE	TEMPORARY SEDIMENT TRAP S=SENSITIVE(DOUBLE) NS=NON SENSITIVE	TEMPORARY SEDIMENT BASIN BRUSH BARRIER
VALVE	FORCE MAIN	INLET SEDIMENT TRAP	DUST CONTROL
WATER METER	AIR RELEASE VALVE IN MANHOLE	PERMANENT GRASSING	TEMPORARY CONSTRUCTION EXIT
WATER LINE	PLUG VALVE IN MANHOLE	STORM DRAIN OUTLET PROTECTION	CONTOURS
WATER VALVE	FIRE HYDRANT ASSEMBLY	WETLANDS	UTILITY/CONSTRUCTION EASEMENT
LIGHT POLE	VALVE		
GUY WIRE	WATER METER		
GUY POLE	WATER LINE		
TELEPHONE POLE	WATER VALVE		
TELEPHONE BOX	LIGHT POLE		
POWER POLE	GUY WIRE		
GAS METER	GUY POLE		
TRANSFORMER	TELEPHONE POLE		
POWER LINE	TELEPHONE BOX		
TELEPHONE LINE	POWER POLE		
ELECTRIC LINE	GAS METER		
GAS LINE	TRANSFORMER		
FIBER OPTIC CABLE	POWER LINE		
UNDERGROUND CABLE	TELEPHONE LINE		
MAILBOX	ELECTRIC LINE		
	GAS LINE		
	FIBER OPTIC CABLE		
	UNDERGROUND CABLE		
	MAILBOX		



**HUSSEY GAY BELL**  
— Established 1958 —  
329 COMMERCIAL DRIVE, SAVANNAH, GA 31406 / T:912.354-4626

REVISIONS:

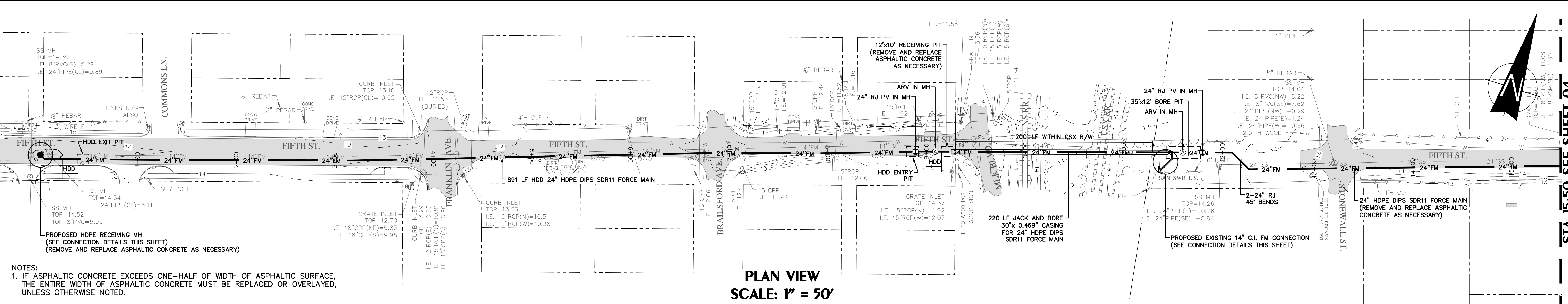
DESIGNED	DRAWN	CHECKED
CB	JK	JO
DATE: MARCH 2017		
JOB NO. 116291602		
SCALE: AS SHOWN		

LIFT STATION 4048 FORCE MAIN IMPROVEMENTS  
BGJWSC PROJECT NO. 701  
FOR THE  
BRUNSWICK-GLYNN COUNTY  
JOINT WATER & SEWER COMMISSION  
PROJECT MAP - LEGEND - GENERAL NOTES

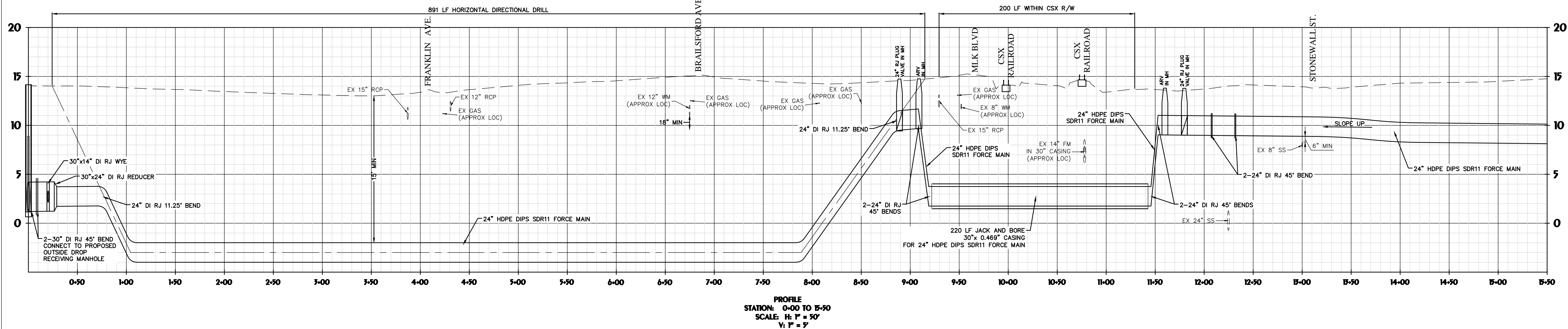
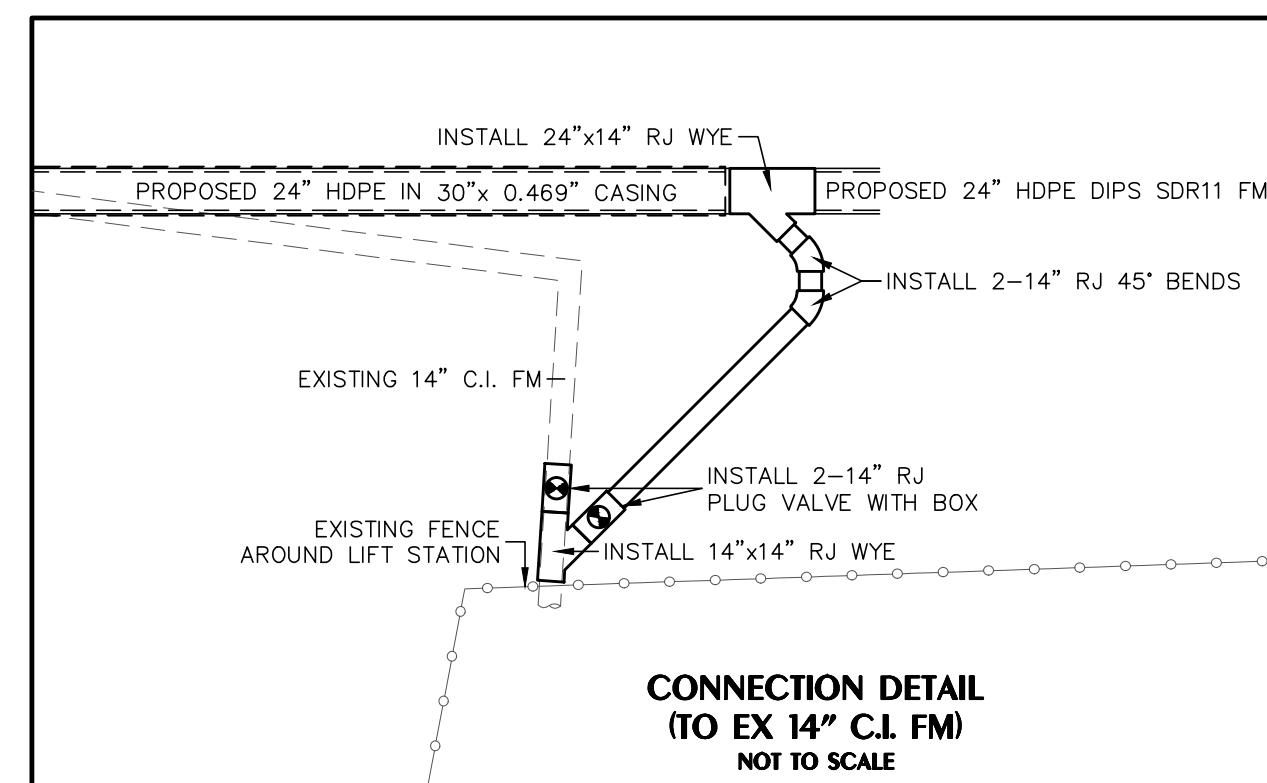
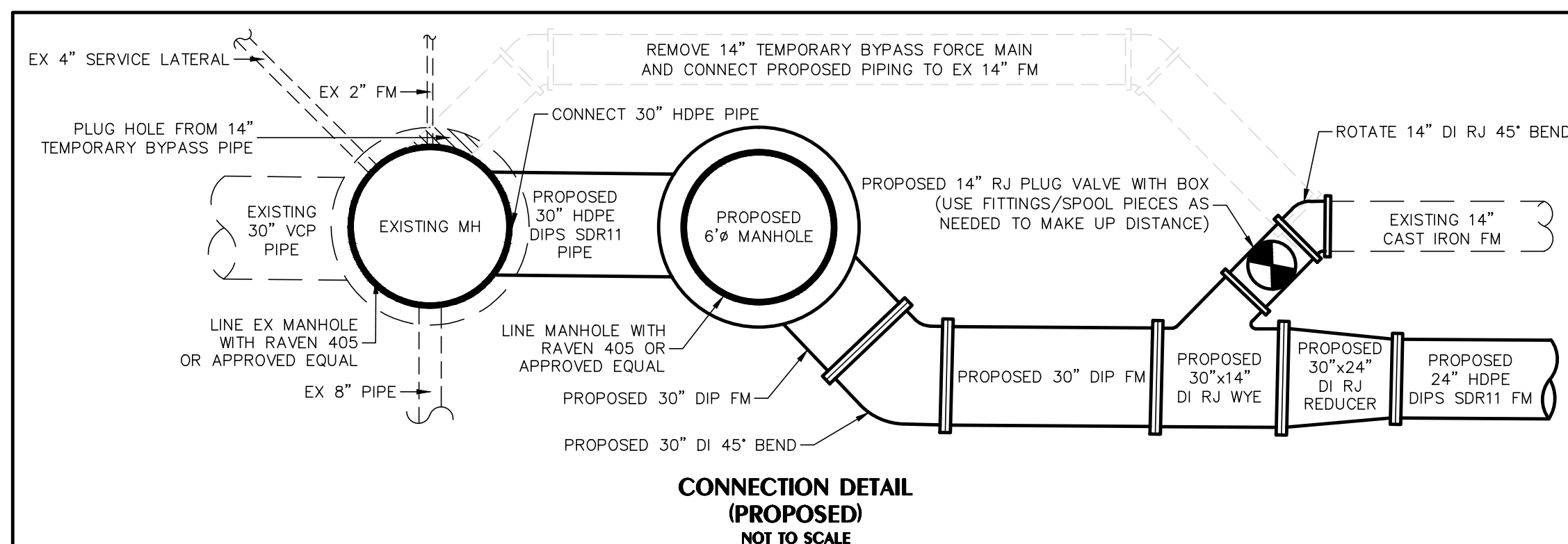
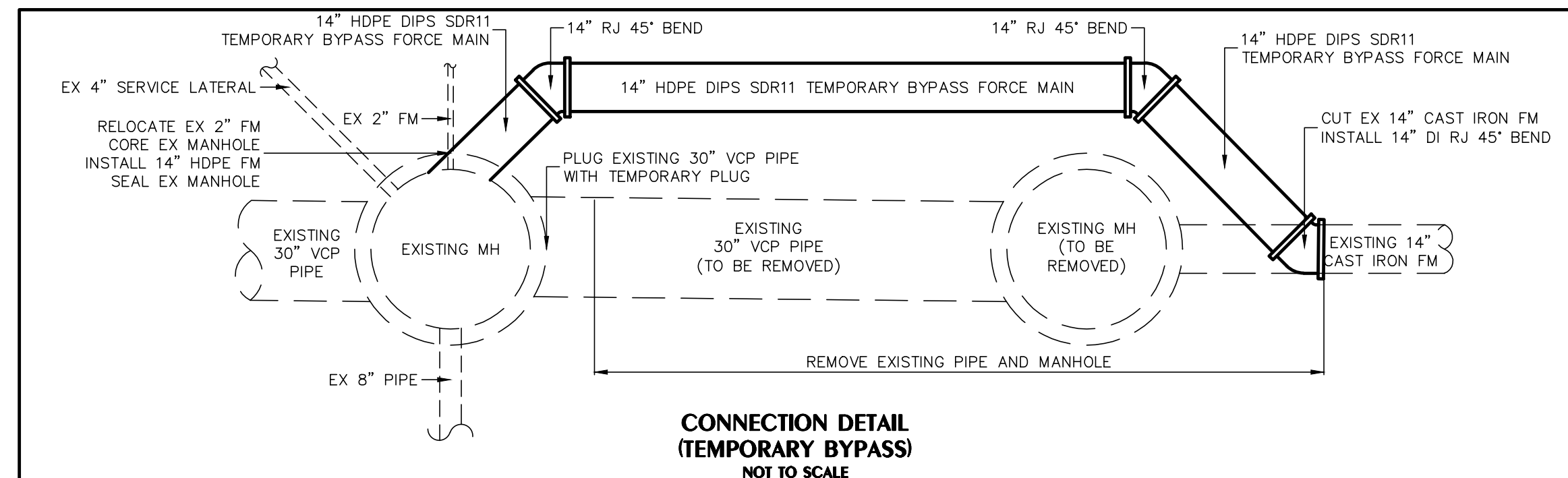
DRAWING NUMBER

02





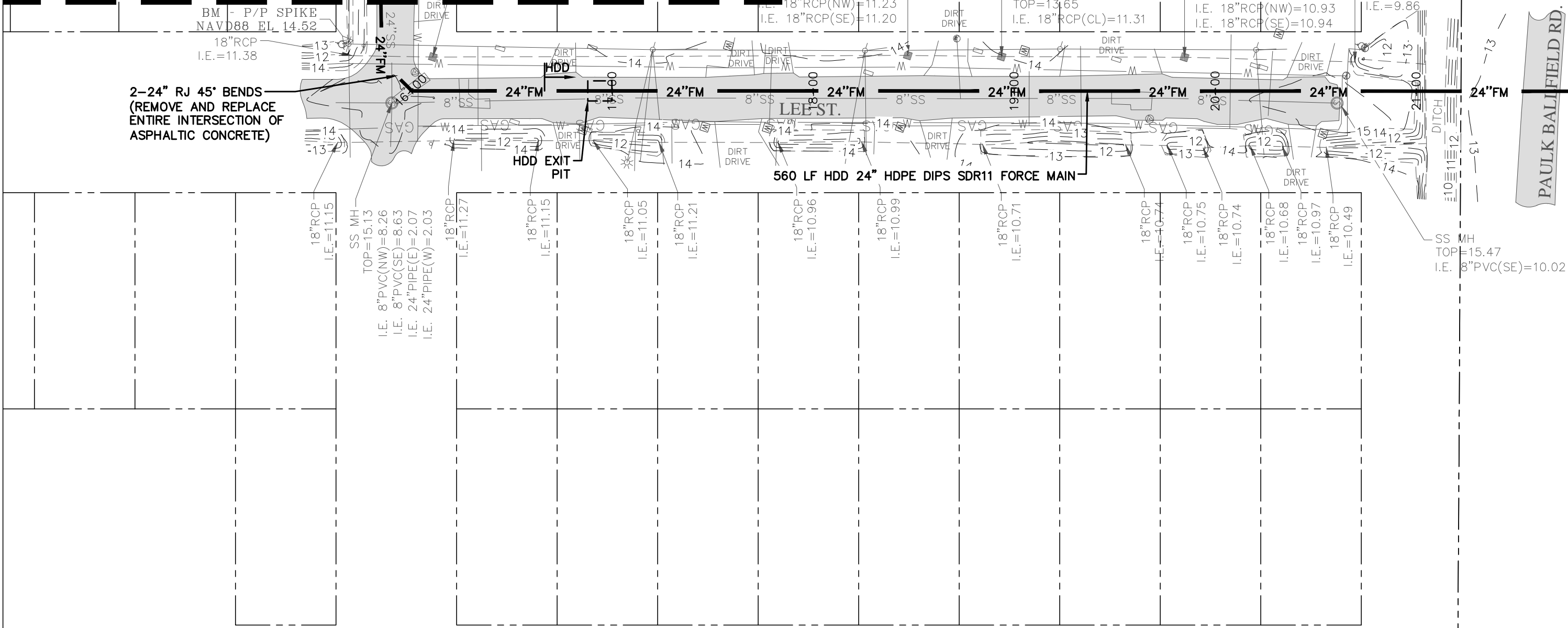
**PLAN VIEW**  
**SCALE: 1" = 50'**





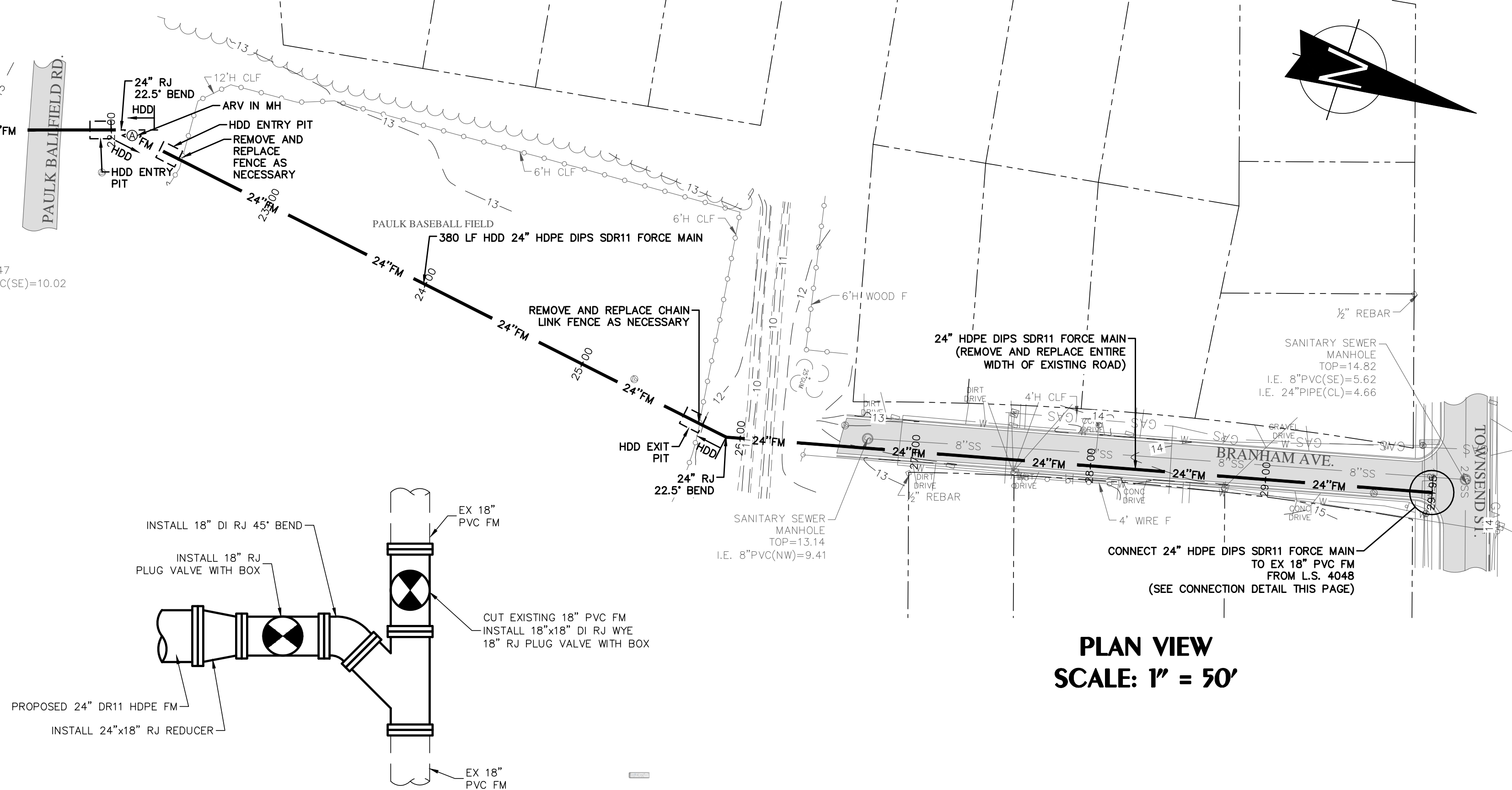
Mar 16, 2017 - 5:05pm Printed By: churke  
DRAWINGS MAY NOT BE REPRODUCED OR COPIED FOR ANY PURPOSE WITHOUT PERMISSION  
ALL RIGHTS RESERVED  
Copyright © 2017  
E:\BG\JWSC\116291602 Lift Station 4048 FM Reroute\CON\_DRAW\04 FORCE MAIN PLAN AND PROFILE.dwg

STA 15+50 SEE SHEET 03



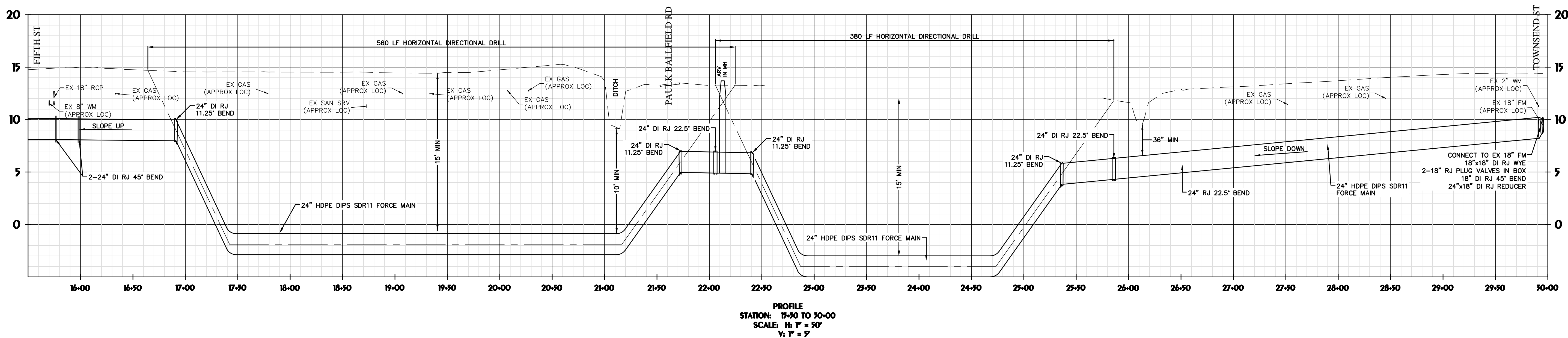
PLAN VIEW  
SCALE: 1" = 50'

- NOTES:
1. IF ASPHALTIC CONCRETE EXCEEDS ONE-HALF OF WIDTH OF ASPHALTIC SURFACE, THE ENTIRE WIDTH OF ASPHALTIC CONCRETE MUST BE REPLACED OR OVERLAYED, UNLESS OTHERWISE NOTED.
  2. ALL PIPING AND FITTINGS TO BE RESTRAINED JOINT.

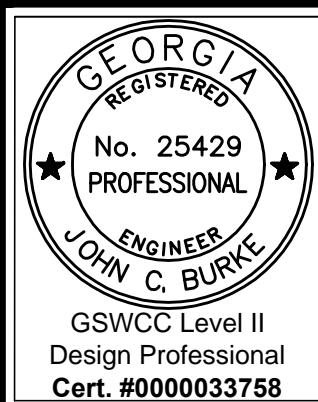


CONNECTION DETAIL  
NOT TO SCALE

PLAN VIEW  
SCALE: 1" = 50'



PROFILE  
STATION: 15+50 TO 30+00  
SCALE: H: 1" = 50'  
V: 1" = 5'



**HUSSEY GAY BELL**  
Established 1958  
329 COMMERCIAL DRIVE, SAVANNAH, GA 31406 / T:912.354.4626

REVISIONS:

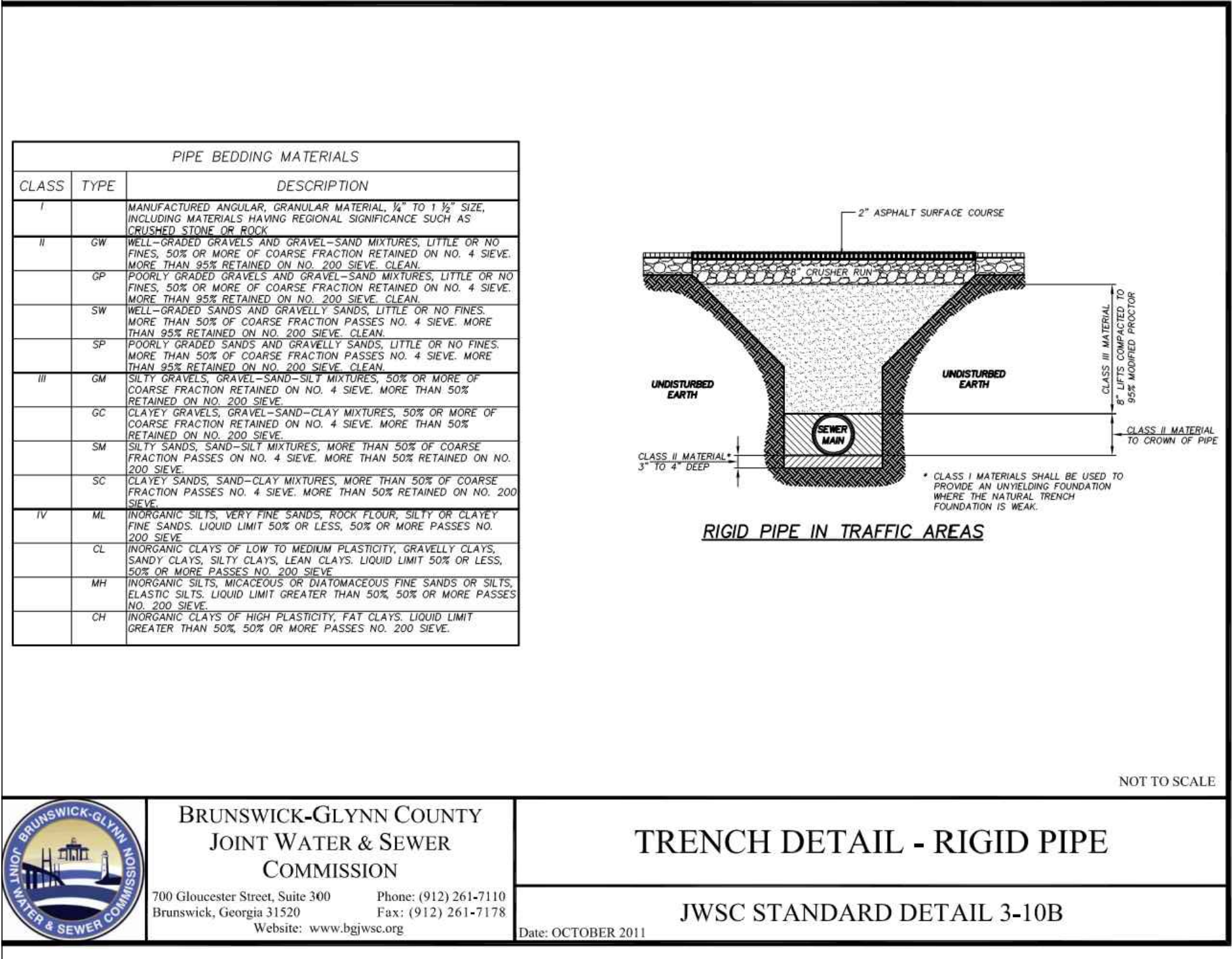
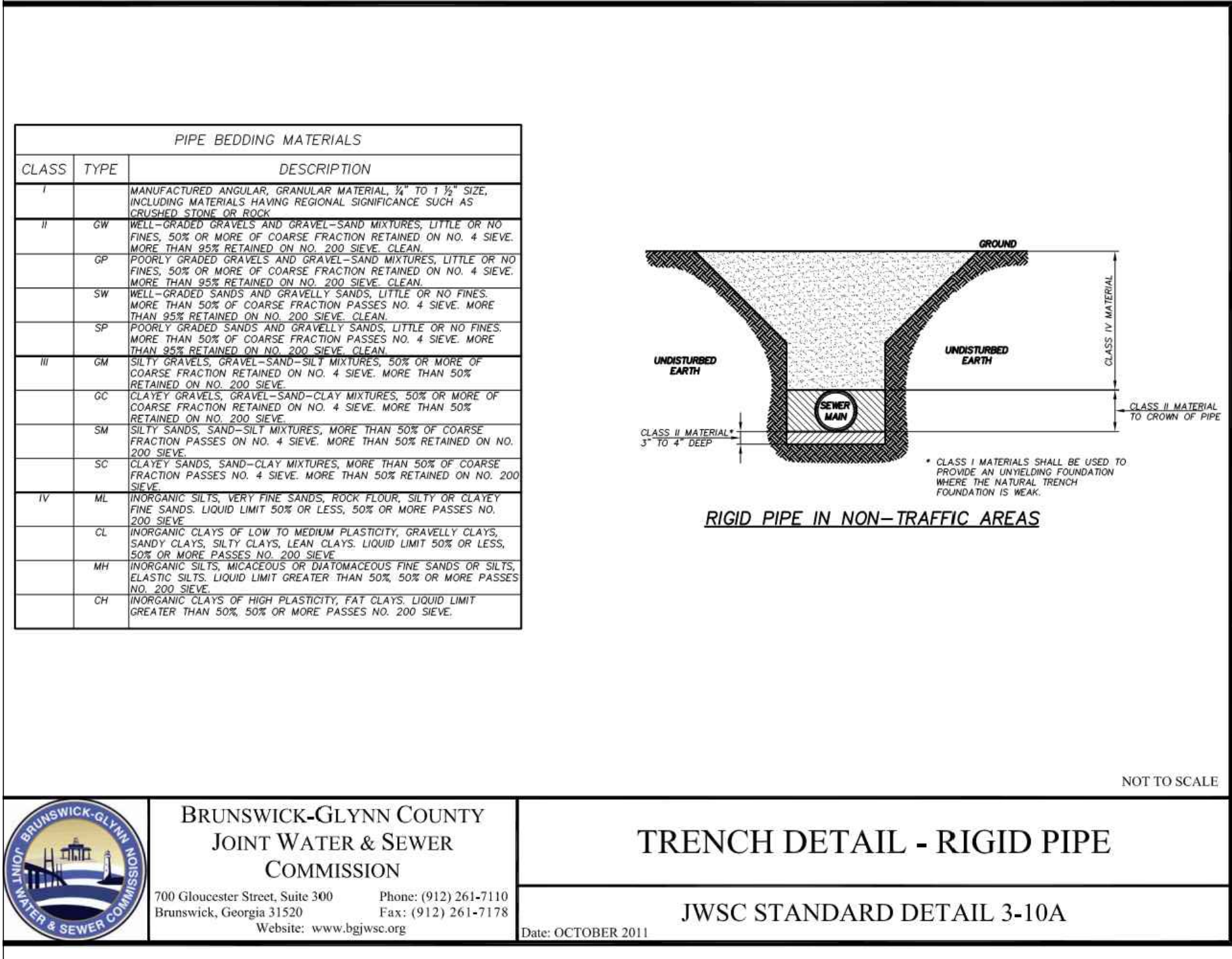
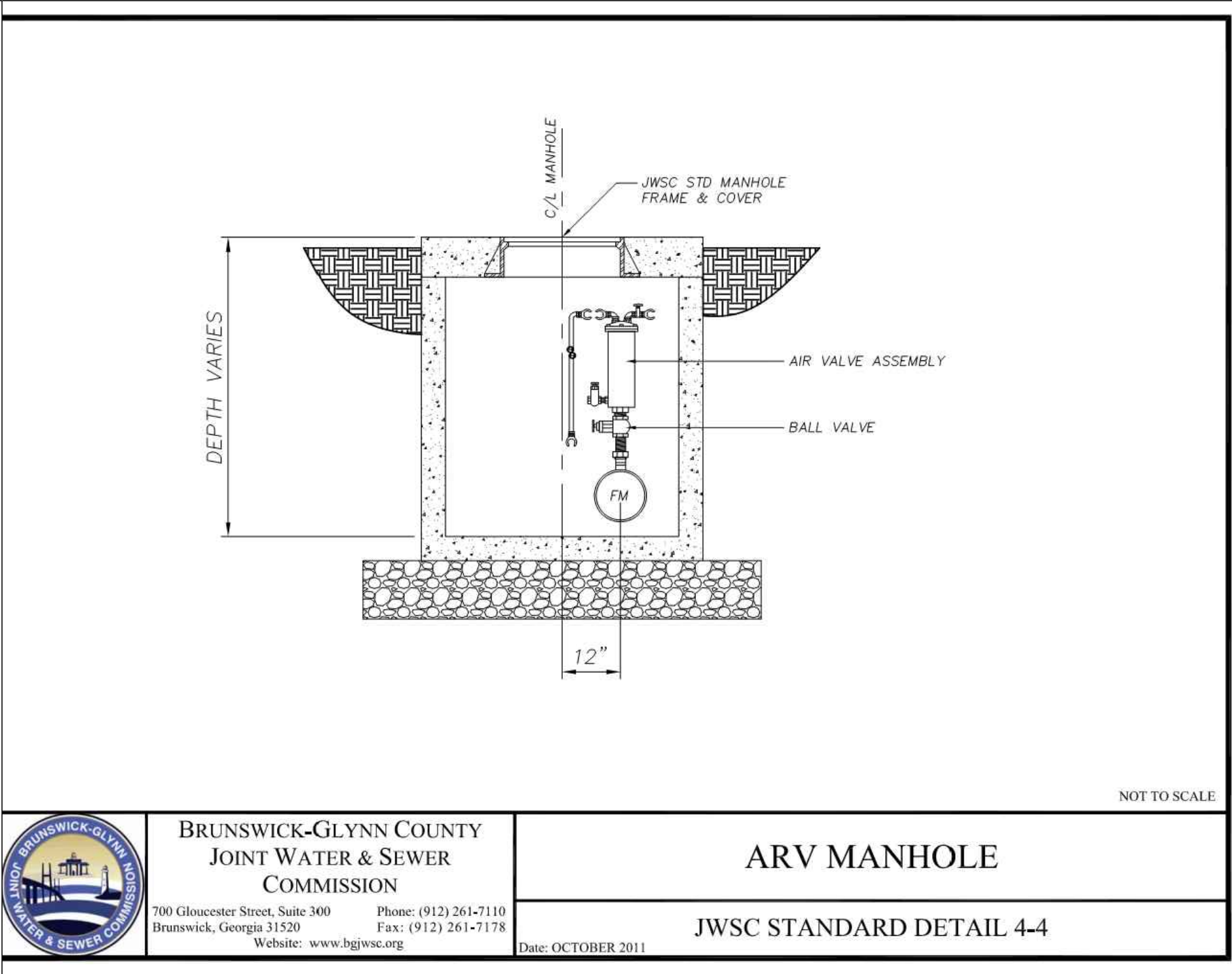
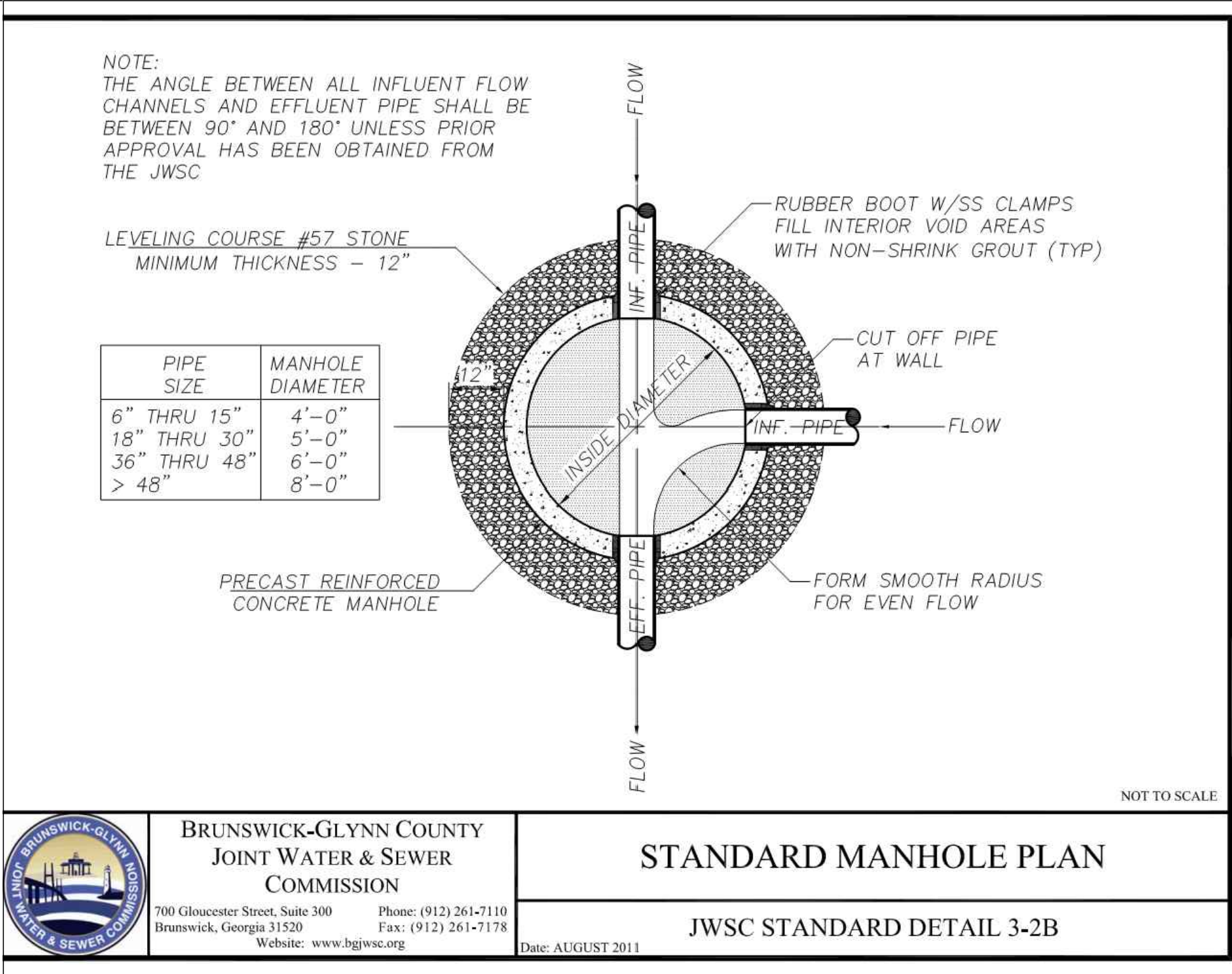
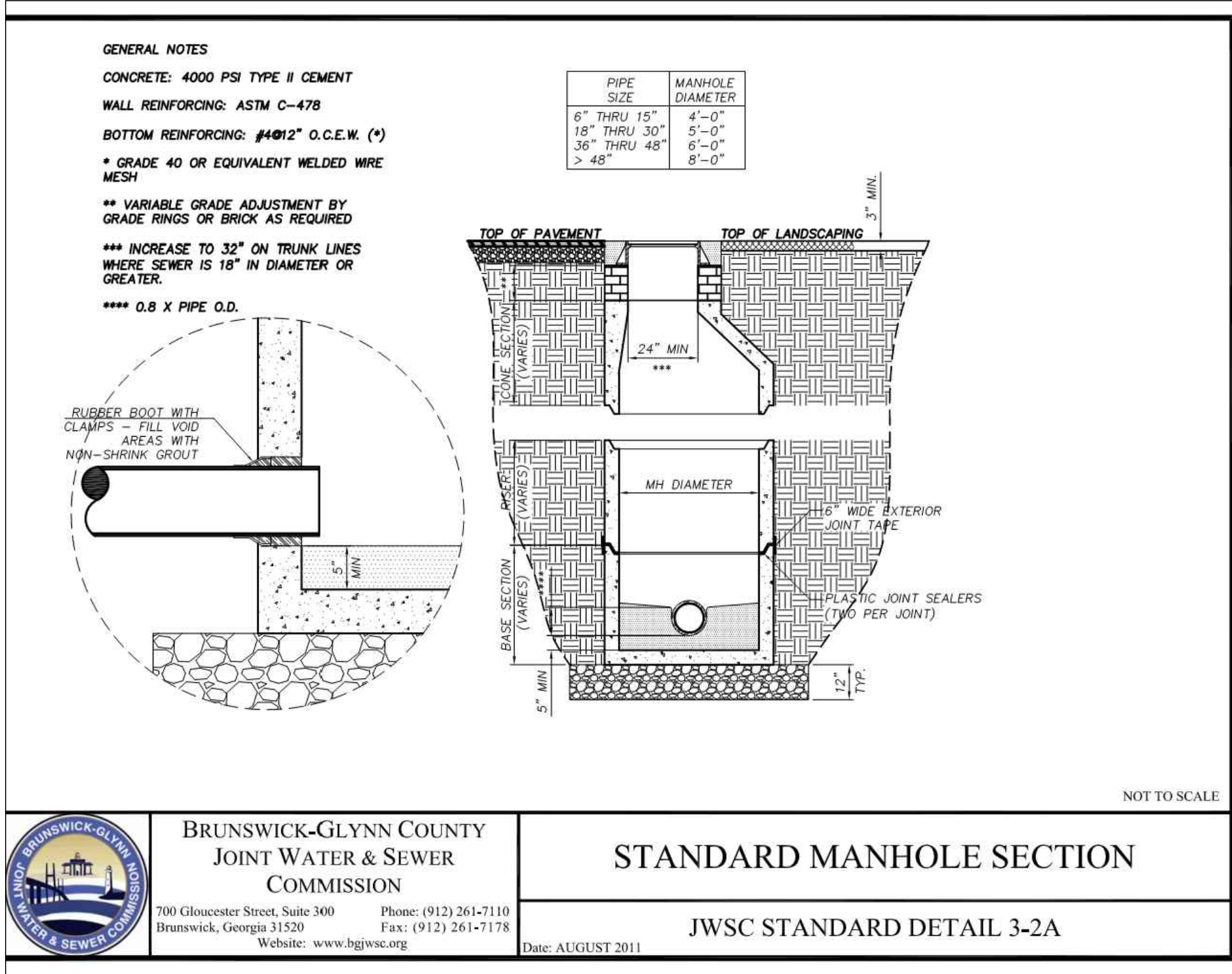
DESIGNED	DRAWN	CHECKED
CB	JK	JO
DATE: MARCH 2017		
JOB NO. 116291602		
SCALE: H:1"=50' V:1"=5'		

LIFT STATION 4048 FORCE MAIN IMPROVEMENTS  
FOR THE  
BRUNSWICK-GLYNN COUNTY  
JOINT WATER & SEWER COMMISSION  
**FORCE MAIN PLAN AND PROFILE**

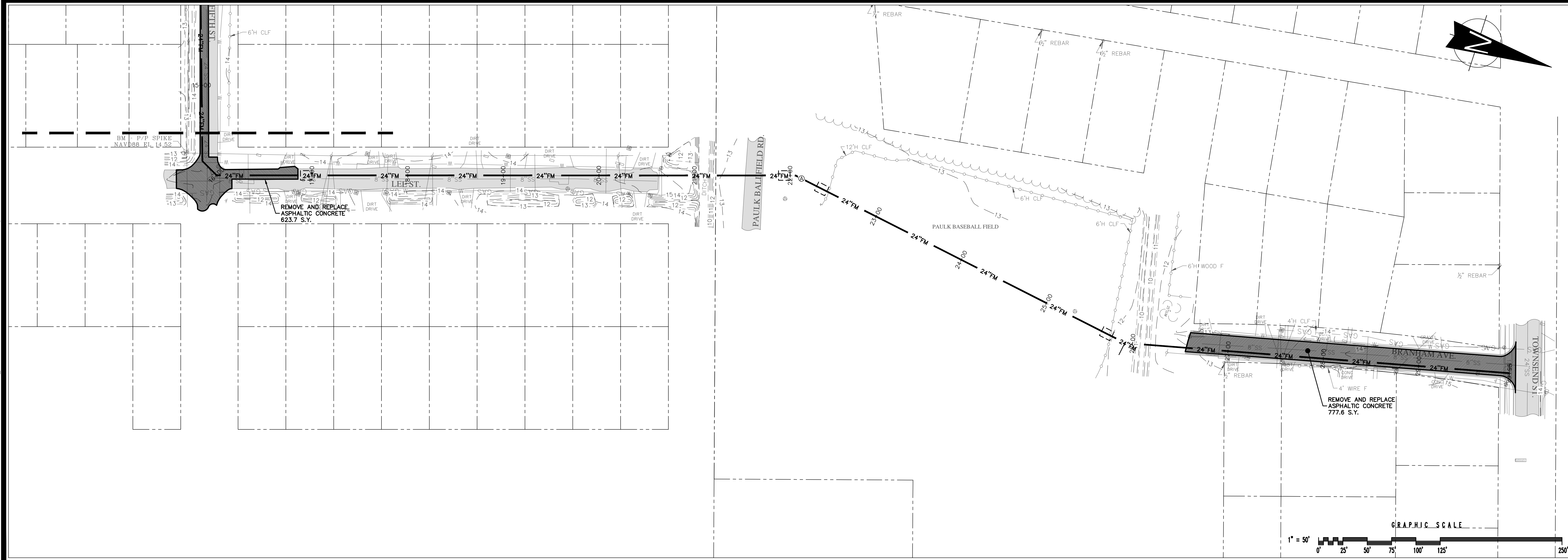
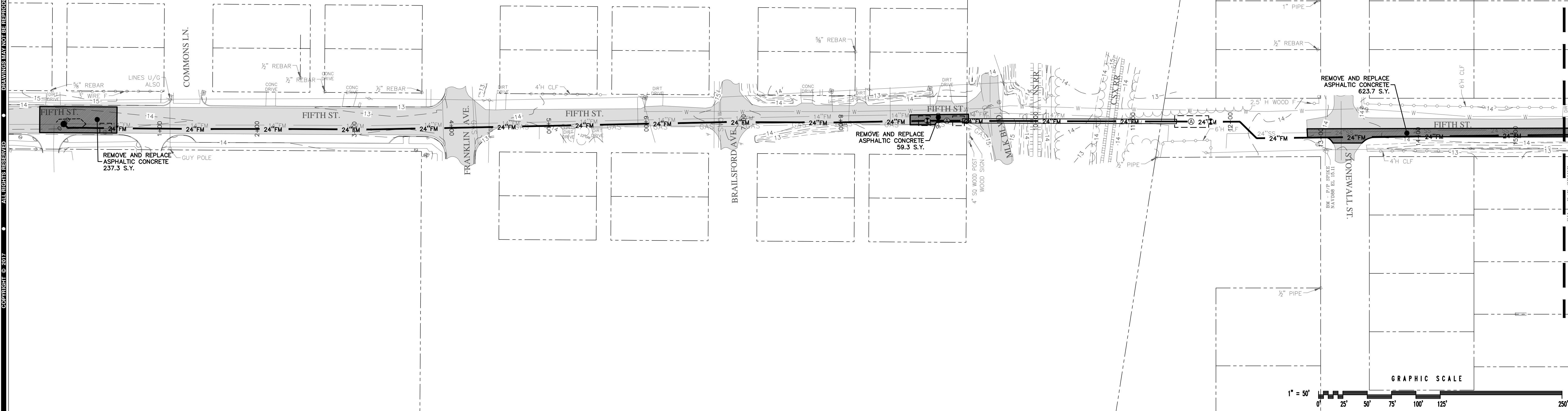
DRAWING NUMBER

04











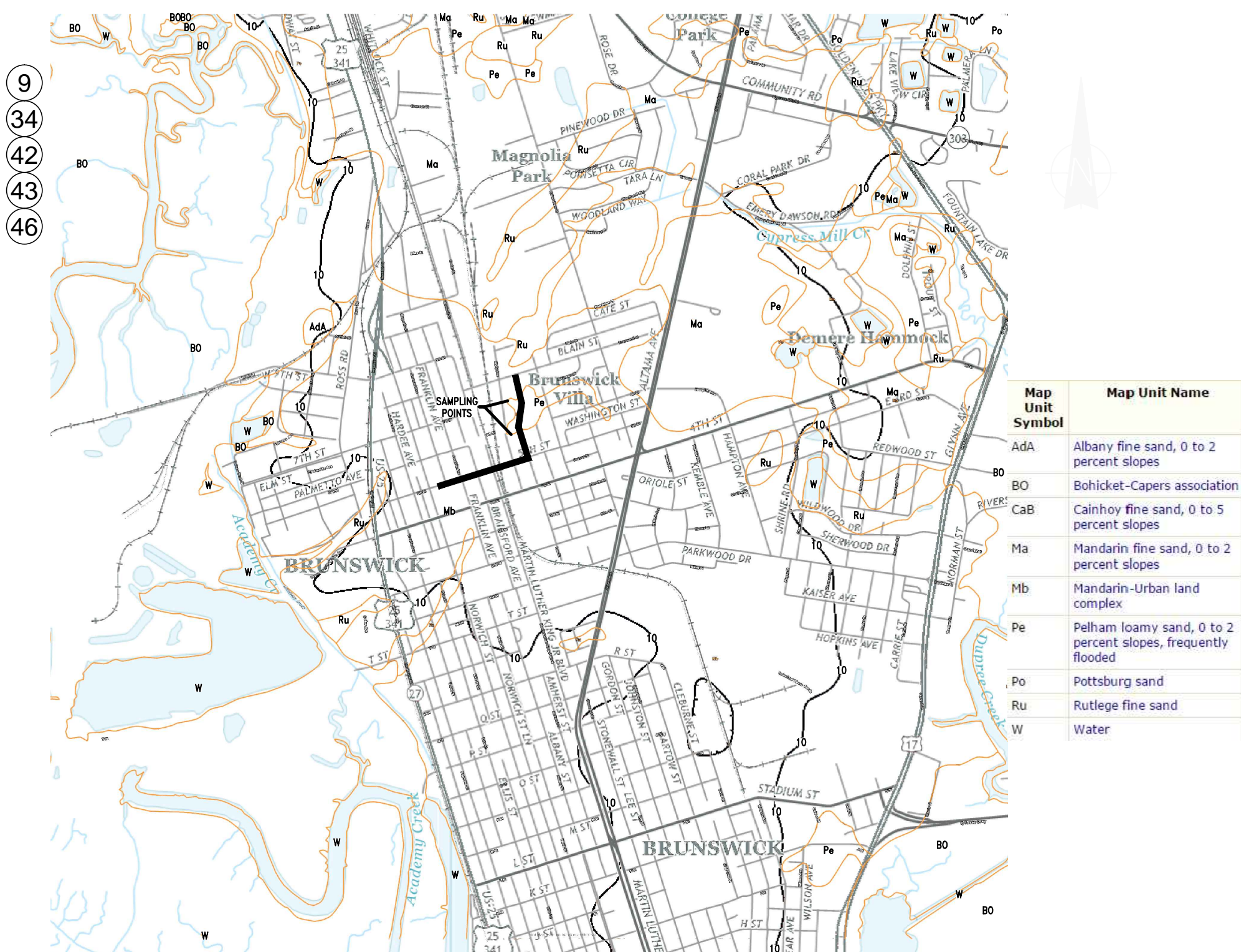




EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN (ESPCP)  
GENERAL NOTE: ALL MEASURES OUTLINED IN THIS PLAN ARE TO BE IN ACCORDANCE WITH THE  
"MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA," LATEST EDITION

SHOWN ON PLANS: 1 2 7 36 37 41 47 49  
N/A 13 22 23 38 39 40 45

- 3 PROJECT NAME: LIFT STATION 4048 24" FORCE MAIN ROUTE  
24-HOUR LOCAL EROSION AND SEDIMENTATION CONTROL CONTACT:  
TODD KLINE, P.E., 912-216-7100
- 4 PERMITTEE INFORMATION: BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION ADDRESS: 1703 GLOUCESTER ST. BRUNSWICK, GA 31520PHONE: (912) 216-7100
- 5 TOTAL DISTURBED AREA DEVELOPMENT: 1.43 ACRES ESTIMATED TOTAL SITE ACREAGE: N/A TOTAL DISTURBED AREA DEVELOPMENT: 1.43 ACRES
- 6 LOCATION: BRUNSWICK, GLYNN COUNTY, GEORGIA CONSTRUCTION EXT: LATITUDE: N31.1818 LONGITUDE: W81.4966  
NARRATIVE NOTES AND OTHER INFORMATION
- 8 PROJECT DESCRIPTION AND NATURE OF CONSTRUCTION ACTIVITY: PROJECT TO REROUTE 24" FORCE MAIN FROM BRANHAM AVE & TOWNSEND TO PROPOSED 8" DIA MANHOLE ON FIFTH ST APPROX 150' EAST OF NORWICH ST BY WAY OF BRANHAM AVE, LEE ST AND FIFTH ST.



SOILS, TOPOGRAPHY AND STORMWATER SAMPLE POINT LOCATIONS  
SCALE: 1" = 2000'

STORMWATER SAMPLING POINTS: STORMWATER SAMPLING SHALL BE CONDUCTED AT THE POINTS AS INDICATED WITHIN THIS ESPCP.

- 10 NAME OF RECEIVING WATER IS ACADEMY CREEK, WHICH IS TRIBUTORY TO FANCY BLUFF CREEK. THIS RIVER IS NOT IDENTIFIED AS A TROUT STREAM ACCORDING TO THE RULES & REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6, REVISED JULY 2000 BY THE GEORGIA DNR EPD.
- 11 "I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION."
- SIGNATURE: JOHN C. BURKE, P.E. GA. 25429 DATE:
- 12 "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 CURRENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (ANNUAL) 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 GEORGIA NPDES PERMIT NO. GAR 100002."
- SIGNATURE: JOHN C. BURKE, P.E. GA. 25429 DATE:  
LEVEL II CERTIFIED DESIGN PROFESSIONAL
- 14 THE DESIGN PROFESSIONAL WHO PREPARED THE ESPCP PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.
- DATE OF INSPECTION: \_\_\_\_\_
- SIGNATURE: JOHN C. BURKE, P.E. GSWCC CERTIFICATION NO. 33758 DATE:  
INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ESPCP PLAN:
- \_\_\_\_\_

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

- 15 NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS 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.
- 16 THERE ARE NO BUFFER ENCROACHMENTS AND THEREBY NO BUFFER VARIANCE IS REQUIRED
- 17 AMENDMENTS/REVISIONS TO THE ESPCP PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- 18 WASTE MATERIALS SHALL NOT BE DISCHARGED INTO STORM WATER INLETS OR 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 DEPOSITED 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 REQUIRED 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. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

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 IN USE 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 OF 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 COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS 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 STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE OBTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORM WATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES: 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 BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORM WATER 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, BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED. SANITARY SEWER WILL BE PROVIDED BY MUNICIPAL AUTHORITY/SEPTIC SYSTEM AT THE COMPLETION OF THE PROJECT.

- 19 THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
- 20 EROSION 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.
- 21 ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- 24 PRODUCT SPECIFIC PRACTICES:
- 25 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 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.
- CONCRETE TRUCK WASHING : NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON SITE.
- 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 MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.
- 25 SPILL CLEANUP AND CONTROL PRACTICES:
1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
2. 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 CONTAINERS.
3. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN OR SURFACE WATER), AND FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
6. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACT, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
8. 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 1320 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. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

COASTAL PLAIN VEGETATIVE COVERS [DS2] [DS3]					
MONTH OF PLANTING	TEMPORARY GRASS	MONTH OF PLANTING	RATE	PERMANENT GRASS	MONTH OF PLANTING
MARCH-JUNE	COMMON BERMUDA (HULLED)	MARCH-JUNE	10 LBS/AC	COMMON BERMUDA (HULLED)	MARCH-JUNE
					10 LBS/AC
JULY-AUGUST	BROWN TOP MILLET	APRIL-AUGUST	40 LBS/AC	COMMON BERMUDA (HULLED) & BROWN TOP MILLET	JULY-AUGUST
					10 LBS/AC
SEPTEMBER-FEBRUARY	RYE GRASS	SEPTEMBER-FEBRUARY	40 LBS/AC	COMMON BERMUDA (UNHULLED) & RYE GRASS	SEPTEMBER-FEBRUARY
					10 LBS/AC
					1/2 BU/AC

- VEGETATIVE METHODS:
- A. A VEGETATIVE COVER SHALL BE ESTABLISHED AND MAINTAINED OVER ALL FINAL GRADING AND OTHER DISTURBED AREAS OF THE SITE. SEE COASTAL PLAIN VEGETATIVE COVERS FOR AN OUTLINE OF THE ESTABLISHMENT OF VEGETATIVE COVERS.
- B. WEEKLY INSPECTION OF THE GRASS COVER SHALL BE PERFORMED TO IDENTIFY AREAS REQUIRING RE-ESTABLISHMENT OF GRASS.
- C. LINE RATE: 1 TO 2 TONS/ACRE
- FERTILIZER: 1500 LBS. OF 6-12-12 PER ACRE
- MULCH: MULCH, SHALL BE UNCHOPPED, UNKNOTTED, DRY STRAW, HAY, OR WOOD WASTE SHALL BE APPLIED TO A DEPTH OF 2-3 INCHES PROVIDING COMPLETE SOIL COVERAGE. IN AREAS TO BE EVENTUALLY COVERED BY PERENNIAL VEGETATION THE CONTRACTOR SHALL APPLY 20-30 POUNDS OF NITROGEN/AC. IN ADDITION TO THE NORMAL AMOUNT, MULCHING RATE FOR STRAW SHALL BE 2 TONS/AC. AND FOR HAY 2-1/2 TONS/AC. MULCH MATERIAL SHALL BE RELATIVELY FREE FROM ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS WHICH ARE: CANADA THISTLE, JOHNSONGRASS AND QUACKGRASS. SPREAD MULCH MECHANICALLY OR UNFORMALLY BY HAND; MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY PEG AND TWINE METHOD, MULCH ANCHORING TOOL, NETTING OR LIQUID MULCH BINDERS.
- D. STRUCTURAL CONTROLS TO BE USED: CONSTRUCTION EXIT, CHECK DAMS, SEDIMENT BARRIER.
- E. SCHEDULE OF EROSION AND SEDIMENT CONTROL - SEE THIS SHEET.
- F. DEVELOPMENT PLANS ARE TO CONFORM TO TOPOGRAPHY AND SOIL TYPE

TENTATIVE ACTIVITY SCHEDULE (180 DAYS)						
	JULY 2017	AUG 2017	SEPT 2017	OCT 2017	NOV 2017	DEC 2017
INSTALLATION OF SEDIMENT CONTROLS AND TREE PROTECTION BARRICADES						
MAINTENANCE OF SEDIMENT CONTROLS						
UTILITY INSTALLATION						
GRASSING (TEMPORARY & PERMANENT)						
REMOVAL OF SEDIMENT CONTROLS						

- 29 INSPECTIONS (TO BE COMPLETED BY PRIMARY PERMITTEE):
- (A) PERMITTEE REQUIREMENTS.
- (1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, QUALIFIED 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; AND
- (2). MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS 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 FOURTEEN (14) 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 SEDIMENTATION 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 MEASURES 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 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 IS SUBMITTED TO EPD) 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 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, NTS 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 PROJECT 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 REPORT SHALL CONTAIN A STATEMENT THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.B.2. OF THIS PERMIT.

- 29 REPORTING (TO BE COMPLETED BY PRIMARY PERMITTEE):
- 30 1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART 11. 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 SIGNED IN ACCORDANCE WITH V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.
2. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
- A. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
- B. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERMITTED THE SAMPLING AND MEASUREMENTS;
- C. THE DATE(S) ANALYSES WERE PERFORMED
- D. THE TIME(S) ANALYSES WERE INITIATED;
- E. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
- F. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
- G. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISK OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
- H. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS " EXCEEDS 1000 NTU; " AND
- I. CERTIFICATION STATEMENT THAT THE SAMPLING WAS CONDUCTED AS PER THE PLAN.
3. 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 OF THE PROOF OF SUBMITTAL SHALL BE SUBMITTED IN ACCORDANCE WITH PART VI. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.
- 30 SAMPLING FREQUENCY (TO BE COMPLETED BY PRIMARY PERMITTEE):
- (1). THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
- (A) THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT, IF THE STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL HAS BEGUN AT OR PRIOR TO THE ACCUMULATION, OR
- (B) THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT.
- (2). HOWEVER, WHERE THE BMPs ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED (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 THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) THAT OCCURS AFTER ALL CLEARING AND/OR 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 2 BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 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.
- (D). WHERE SAMPLING PURSUANT TO (A), (B), OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV. D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED, PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE AND
- (E). EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE THAN AS REQUIRED BY (C) ABOVE.
- 31 PRIMARY PERMITTEE:
- (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 SAMPLING 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 I.II.D.2. OF THIS PERMIT; AND
- (G) DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(1)(C) OF THIS PERMIT;
- 32 STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE ASEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 75, THE VALUE THAT WASAKESAGE OF 8.1 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF LESS THAN 4.99 SQUARE MILES, AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES. THERE ARE NO CRITICAL WORK ZONES ON THIS PROJECT.
- 33
- | APPENDIX B<br>Nephelometric Turbidity Unit (NTU) TABLES                                 |        |        |          |          |          |            |            |      |  |
|---|--------|--------|----------|----------|----------|------------|------------|------|--|
| Cold Water (Trout Stream)<br>Surface Water Drainage Area, square miles                  |        |        |          |          |          |            |            |      |  |
|   | 0-4.99 | 5-9.99 | 10-24.99 | 25-49.99 | 50-99.99 | 100-249.99 | 250-499.99 | 500+ |  |
| 1.00-10   | 25     | 50     | 75       | 150      | 300      | 500        | 500        | 500  |  |
| 10.01-25  | 25     | 25     | 50       | 75       | 150      | 200        | 500        | 500  |  |
| 25.01-50  | 25     | 25     | 25       | 50       | 75       | 100        | 300        | 500  |  |
| 50.01-100   | 20     | 25     | 25       | 35       | 59       | 75         | 150        | 300  |  |
| 100.01+   | 20     | 20     | 25       | 25       | 25       | 50         | 60         | 100  |  |
| Warm Water (Sporting Warm Water Fisheries)<br>Surface Water Drainage Area, square miles |        |        |          |          |          |            |            |      |  |
|   | 0-4.99 | 5-9.99 | 10-24.99 | 25-49.99 | 50-99.99 | 100-249.99 | 250-499.99 | 500+ |  |
| 1.00-10   | 75     | 150    | 200      | 400      | 750      | 750        | 750        | 750  |  |
| 10.01-25  | 50     | 100    | 100      | 200      | 300      | 500        | 750        | 750  |  |
| 25.01-50  | 50     | 50     | 100      | 100      | 200      | 300        | 750        | 750  |  |
| 50.01-100   | 50     | 50     | 50       | 100      | 100      | 150        | 300        | 600  |  |
| 100.01+   | 50     | 50     | 50       | 50       | 50       | 100        | 200        | 100  |  |
- OTHER CONTROLS:
- 35 1. OFF-SITE VEHICLE TRACKING A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS ADJACENT TO THE SITE WILL BE SWEEP AND SCRAPED REGULARLY TO REMOVE ANY EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE CONSTRUCTION AREA. A SOURCE OF FRESH WATER FOR WASHING SEDIMENT FROM TRUCKS, ESPECIALLY DURING PERIODS OF WET WEATHER, MAY BE PROVIDED IN ORDER TO MINIMIZE THE AMOUNT OF STREET SWEEPING AND SCRAPING REQUIRED. ANY WASTEWATER RESULTING FROM THIS OPERATION WILL BE DIRECTED INTO A SEDIMENT TRAP.
2. WASTE MATERIALS ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE HAULED TO AN APPROVED LANDFILL. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON-SITE. ALL PERSONNEL WILL RECEIVE INSTRUCTIONS REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES DESCRIBING THESE PRACTICES WILL BE POSTED IN THE CONSTRUCTION OFFICE. THE SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED. EMPLOYEE WASTE AND OTHER LOOSE MATERIALS WILL BE COLLECTED SO AS TO PREVENT THE RELEASE OF "FLOATABLES" DURING RUNOFF EVENTS. NO WASTE MATERIALS SHALL BE DUMPED INTO ANY ADJACENT STATE WATER.
3. HAZARDOUS WASTE NO HAZARDOUS WASTE IS EXPECTED TO BE GENERATED OR ENCOUNTERED IN THIS PROJECT. IN THE EVENT THAT HAZARDOUS WASTE IS ENCOUNTERED, ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. THE SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.
4. SANITARY WASTE THE ESPCP SHALL INCORPORATE AND ADHERE TO ALL FEDERAL AND STATE WASTE DISPOSAL AND SANITARY SEWER SYSTEM REGULATIONS. ANY PORTABLE SANITARY UNITS SHALL BE LOCATED AWAY FROM STORM DRAIN INLETS. A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR WILL REGULARLY COLLECT ALL SANITARY WASTE FROM THE UNITS.
5. GRADING EQUIPMENT GRADING EQUIPMENT SHALL CROSS-FLOWING STREAMS BY THE MEANS OF BRIDGES OR CULVERTS, EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE, PROVIDED IN ANY CASE THAT SUCH CROSSINGS SHOULD BE KEPT TO A MINIMUM.
6. DUST CONTROL DURING GRADING OPERATIONS (IF APPLICABLE), PERIODICALLY APPLY MOISTURE SPRAY TO LARGE AREAS FOR DUST CONTROL.
- 44 THE PRE-CONSTRUCTION AND POST-CONSTRUCTION RUNOFF COEFFICIENT IS Cn=0.25.
- 48 TEMPORARY SEDIMENT STORAGE:
- THE DISTURBED AREA FOR THIS PROJECT IS 5.37 AC., THEREFORE, THE REQUIRED SEDIMENT STORAGE VOLUME IS 5.37 AC X .67 CY/AC = 355. CY OF STORAGE REQUIRED, THE PROVIDED STORAGE METHOD BEING UTILIZED FOR THIS PROJECT WILL BE 4.841 LF (SENSITIVE/DOUBLE) = 9.682 LF +14,456 LF (NON-SENSITIVE/SINGLE) = TOTAL: 24,138 LF SILT FENCE/SEDIMENT BARRIER, THEREFORE, THE VOLUME WILL BE 24,138 LF X .093 CY/LF = 2,245. CY OF STORAGE PROVIDED. PROJECT IS LINEAR IN NATURE, THEREFORE SEDIMENT STORAGE IS BETTER ACHIEVED BY THE USE OF SILT FENCE AND/OR HAY BALES RATHER THAN A TEMPORARY SEDIMENT BASIN. A TEMPORARY SEDIMENT BASIN WOULD CAUSE ADDITIONAL LAND DISTURBANCE AND WOULD NOT ACHIEVE A COMPREHENSIVE METHOD OF CONTROLLING SEDIMENT FOR LINEAR PROJECTS.



HUSSEY GAY BELL  
Established 1958  
329 COMMERCIAL DRIVE, SAVANNAH, GA 31406 / T:912.354.4626

REVISIONS:			
DESIGNED	DRAWN	CHECKED	
CB	JK	JO	

DATE: MARCH 2017

JOB NO. 116291602

SCALE: N.T.S.

LIFT STATION 4048 FORCE MAIN IMPROVEMENTS  
FOR THE  
BRUNSWICK-GLYNN COUNTY  
JOINT WATER & SEWER COMMISSION  
LDA SCHEDULES NOTES & DETAILS

DRAWING NUMBER  
08



50 TEMPORARY SEDIMENT DETAILS

SPRAY ON ADHESIVE REQUIREMENTS				
ADHESIVE EMULSION	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL/AC)	
ANIONIC ASPHALT	7:1	COARSE	1,200	
LATEX	12.5:1	FINE	235	
RESIN-IN-WATER	4:1	FINE	300	

Du DUST CONTROL

CONDITIONS:  
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS:

1. TEMPORARY METHODS  
A. MULCHES (Ds1) - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD T6-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATAK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.  
B. VEGETATIVE COVER - DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING.  
C. SPRAY ON ADHESIVES - THESE ARE USED ON MINERAL SOILS (NON EFFECTIVE ON ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO TACKIFIERS AND BINDERS.  
D. 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.  
E. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.  
F. BARRIERS - SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 FEET. THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.  
G. CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.  
2. PERMANENT METHODS  
A. PERMANENT VEGETATION - DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION. EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.  
B. TOPSOILING - THIS ENTAILS COVERING THE SURFACE WITH LESS EROSION SOIL MATERIAL.  
C. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

Ds1 MULCHING ONLY

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED. ANCHORED AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF ANY AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED. REFER TO DS2 -DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING), DS3 - DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING), AND DS4 - DISTURBED AREA STABILIZATION (WITH SODDING).

MULCHING MATERIALS - SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:  
1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE.  
ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.  
2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.  
3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

Ds2 TEMPORARY GRASSING

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. REFER TO SPECIFICATION DS1-DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

SEEDING: SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTI-PACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE RAKED LIGHTLY TO COVER SEED WITH SOIL IF SEED BY HAND.

DS2 GRASSING SCHEDULE (FOR TEMPORARY)

SPECIES	PLS RATE	DATES	LIME
RYEGRASS (ANNUAL)	40 LBS./AC.	8/15 - 4/1	1 TON/ACRE
WEEDING LOVEGRASS (PERENNIAL)	4 LBS./AC.	3/15 - 6/15	1 TON/ACRE
SUDANGRASS	60 LBS./AC.	4/1 - 8/15	1 TON/ACRE

FERTILIZER REQUIREMENTS				
TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST	6-12-12	1500 LBS PER ACRE	50-100 LBS PER ACRE 1- 2-
	SECOND	6-12-12	1000 LBS PER ACRE	-
2. COOL SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS PER ACRE	30
	SECOND	0-10-10	1000 LBS PER ACRE	0-50 LBS PER ACRE 1-
3. GROUND COVERS	FIRST	10-10-10	1300 LBS PER ACRE 3-	-
	SECOND	10-10-10	1300 LBS PER ACRE 3-	-
4. PINE SEEDLINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	-
	SECOND	0-10-10	700 LBS PER ACRE	-
5. SHRUB LESPEDeza	FIRST	0-10-10	700 LBS PER ACRE 4-	-
	SECOND	10-10-10	500 LBS PER ACRE	30 LBS PER ACRE 5-
6. TEMPORARY COVER CROPS SEEDD ALONE	FIRST	10-10-10	500 LBS PER ACRE	30 LBS PER ACRE 5-
7. WARM SEASON GRASSES	FIRST	6-12-12	1500 LBS PER ACRE	50-100 LBS PER ACRE 2- 6-
	SECOND	6-12-12	800 LBS PER ACRE	50-100 LBS PER ACRE 2-
8. WARM SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS PER ACRE	30 LBS PER ACRE
	SECOND	0-10-10	800 LBS PER ACRE	50 LBS/ACRE 6-
	FIRST	0-10-10	400 LBS PER ACRE	30 LBS PER ACRE 6-
	SECOND	0-10-10	400 LBS PER ACRE	30 LBS PER ACRE 6-

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.

Ds3 PERMANENT GRASSING

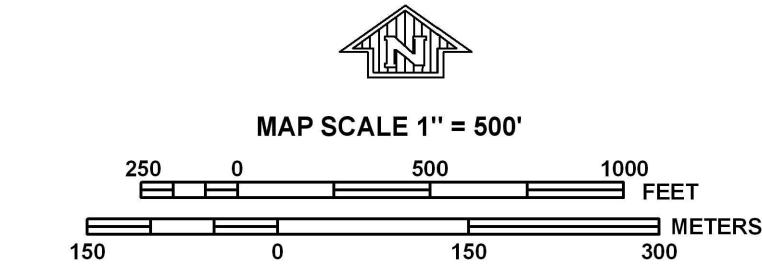
THIS PRACTICE SHALL BE APPLIED IMMEDIATELY TO ROUGH GRADED AREAS THAT WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS. THIS PRACTICE OR SODDING SHALL BE APPLIED IMMEDIATELY TO ALL AREAS AT FINAL GRADE. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND THAT FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY THE GA EPO FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES. PERMANENT VEGETATION SHALL CONSIST OF, PLANTED TREES, SHRUBS, PERENNIAL VINES; OR A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGION, SUCH THAT WITHIN THE GROWING SEASON A 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION. FOR LINEAR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL OR SILVICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY STABILIZING THE DISTURBED LAND FOR ITS AGRICULTURAL OR SILVICULTURAL USE. UNTIL THIS STANDARD IS SATISFIED AND PERMANENT CONTROL MEASURES AND FACILITIES ARE OPERATIONAL, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION.

PLANTS SHALL BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS, SITE AND SOIL CONDITIONS, PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING, METHOD OF PLANTING; AND THE NEEDS AND DESIRES OF THE LAND USER.

Stand Alone Crops			
	Broadcast lbs/Acre	Drilled lbs/Acre	Dates
Fescue	50	25	September 1 - March 15
Bermuda hulled	20	10	April 15 - September 1
Bermuda Unhulled	25	15	January 1 - September 1
Bahia	50	25	April 15 -September 1
Lespedeza, Seresia	50	30	April 15 -September 1
Weeping Lovegrass	5	2	April -September 1
Browntop millet (Temporary)	30	15	April 15 -September 1
Annual Ryegrass (Temporary)	50	30	September 1 - March 15
Rye Grain (Temporary)	75	40	September 1 - March 15

- NOTES:
1. ALL SEEDING RATES ARE EXPRESSED AS PURE LIVE SEED (PLS).
  2. SLOPE STABILIZATION (Ss) ARE REQUIRED ON SLOPES STEEPER THAN 2H:1V.
  3. THE LANDSCAPE PLANS, IF ANY WILL SUPERCEDE THIS DETAIL FOR PERMANENT VEGETATION.
  4. MULCHING ONLY (Ds1) TEMPORARY GRASSING (Ds2) SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE AND WHEN ROUGH GRADED DISTURBANCE WILL LAST FOR LESS THAN SIX MONTHS, IF ROUGH GRADED AREAS WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS OR AREA IS AT FINAL GRADE, THEN PERMANENT VEGETATION (DS3) SHALL BE USED.
  5. BLOCK SOD (Ss4) PROVIDES IMMEDIATE COVER AND IS ESPECIALLY EFFECTIVE IN CONTROLLING EROSION ADJACENT TO CONCRETE FLUMES AND OTHER STRUCTURES.
  6. THE CONTRACTOR SHALL SELECT A BMP SUITABLE TO THE SEASON OF THE YEAR AND THE GRADING STATUS OF THE AREA TO BE STABILIZED.
  7. CONSTRUCTION SPECIFICATIONS FOR EACH BMP SHALL BE AS PUBLISHED IN THE MANUAL FOR SEDIMENT AND EROSION CONTROL IN GEORGIA, LATEST EDITION.

Du Ds1 Ds2 Ds3 DUST CONTROL / DISTURBED AREA STABILIZATION



PANEL 0217F

**FIRM**

FLOOD INSURANCE RATE MAP

GLYNN COUNTY, GEORGIA AND INCORPORATED AREAS

PANEL 217 OF 345

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

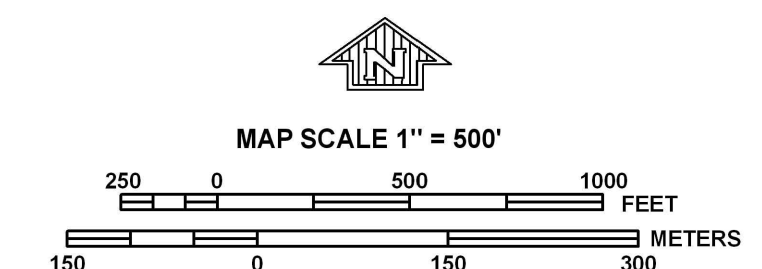
COMMUNITY	NUMBER	PANEL	SUFFIX
BRUNSWICK CITY OF GLYNN COUNTY	130093	0217	F
	130092	0217	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 13127C0217F

EFFECTIVE DATE SEPTEMBER 6, 2006

Federal Emergency Management Agency



PANEL 0236F

**FIRM**

FLOOD INSURANCE RATE MAP

GLYNN COUNTY, GEORGIA AND INCORPORATED AREAS

PANEL 236 OF 345

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BRUNSWICK CITY OF GLYNN COUNTY	130093	0236	F
	130092	0236	F

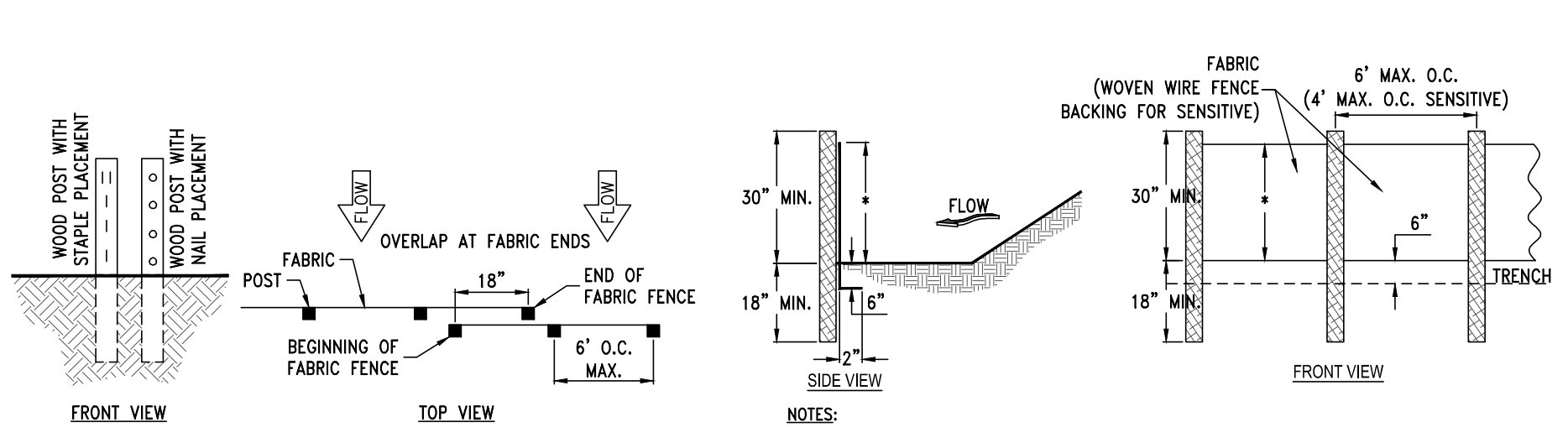
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 13127C0236F

EFFECTIVE DATE SEPTEMBER 6, 2006

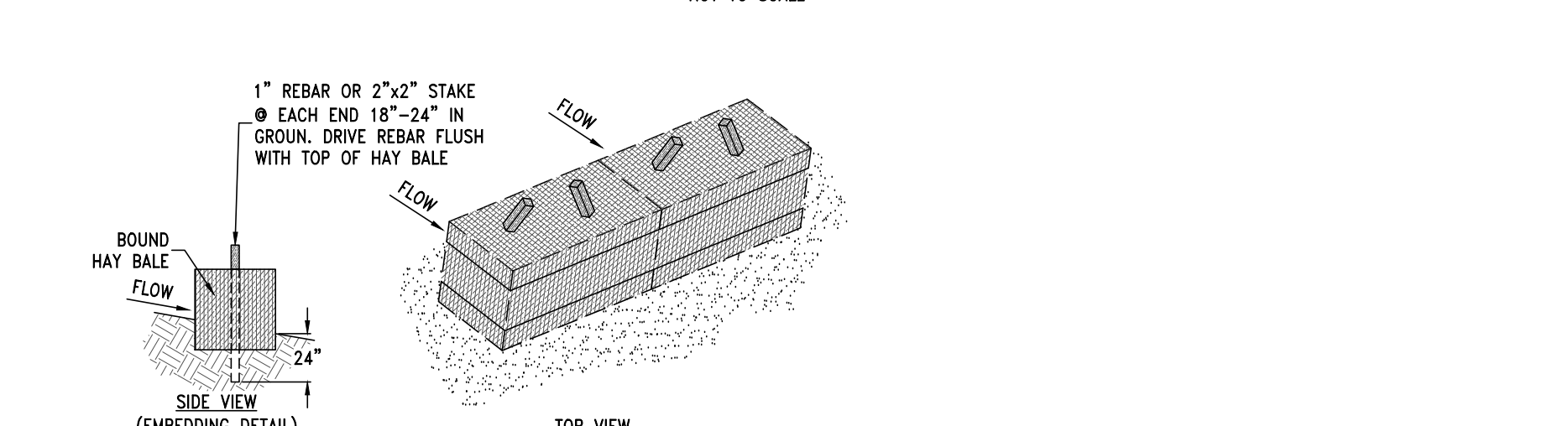
Federal Emergency Management Agency

FEMA FLOODPLAIN MAPS



NOTES:

1. THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.
2. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
3. HEIGHT (H) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.



NOTES:

1. TEMPORARY HAY BALES SHALL BE PLACED AS SHOWN TO PREVENT SEDIMENT FROM LEAVING THE SITE.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING, REPLACING AND REMOVING THE TEMPORARY HAY BALES AS NECESSARY DURING CONSTRUCTION.
3. ANCHOR AND EMBED INTO SOIL TO PREVENT WASHOUT OR WATER WORKING UNDER BARRIER.
4. REPAIR OR REPLACEMENT MUST BE MADE PROMPTLY AS NEEDED.

Table 6-27.2 Post Size			
Type	Min Length	Type of Post	Size of Post
NS	4'	Soft wood	3" dia. or 2x4
		Oak	1.5"x1.5"
S	4'	Steel	1.3lb./ft. min.
		Steel	1.3lb./ft. min.

Table 6-27.3 Fasteners for Wood Posts			
Wire Staples	Guage	Length	Staples/ Post
17 min.	3/4"	1 1/2"	5 min.
14 min.	3/4"	1 1/2"	4 min.

Note: Filler Fabric may also be attached to the post by wire, chords, and pockets or any other method provided minimum P-factor, as required by GSWCC, is met.

CONSTRUCTION SPECIFICATIONS

TYPE NS SEDIMENT BARRIER-NONSENSITIVE AREAS

SEDIMENT BARRIERS BEING USED AS TYPE NS SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 6 FEET. ON CENTER, WITH EACH DRIVEN INTO THE GROUND A MINIMUM OF 18 INCHES. TYPE NS SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.045.

TYPE S SEDIMENT BARRIER-SENSITIVE AREAS

SEDIMENT BARRIERS BEING USED AS TYPE S SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 4 FEET ON CENTER, WITH EACH DRIVEN INTO THE GROUND 18 INCHES. TYPE S SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.030.

INSTALLATION

TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING SPECIFICATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE DESIGN PROFESSIONAL.

ALONG ALL STATE WATERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE S SEDIMENT BARRIERS SHALL BE USED. THE TWO ROWS TYPE S SHOULD BE PLACED A MINIMUM OF 36 INCHES APART.

FOR INSTALLATION OF THE BARRIERS, SEE FIGURES 6-27.1, 6-27.2, 6-27.3 AND 6-27.4, RESPECTIVELY. IT IS IMPORTANT TO REMEMBER THAT NOT ALL SEDIMENT BARRIERS NEED TO BE TRENCHED INTO THE GROUND BUT MOST TALLER SEDIMENT BARRIERS DO.

POST INSTALLATION SHALL START AT THE CENTER OF A LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED NO GREATER THAN 6 FEET APART FOR TYPE NS SEDIMENT BARRIERS AND NO GREATER THAN 4 FEET APART FOR TYPE S SEDIMENT BARRIERS. FOR POST SIZE REQUIREMENTS, SEE TABLE 6-27.2. FASTENERS FOR WOOD POSTS ARE LISTED IN TABLE 6-27.3.

REFER TO FIGURE 6-27.5 AND TABLES 6-27.2 AND 6-27.3.

MAINTENANCE

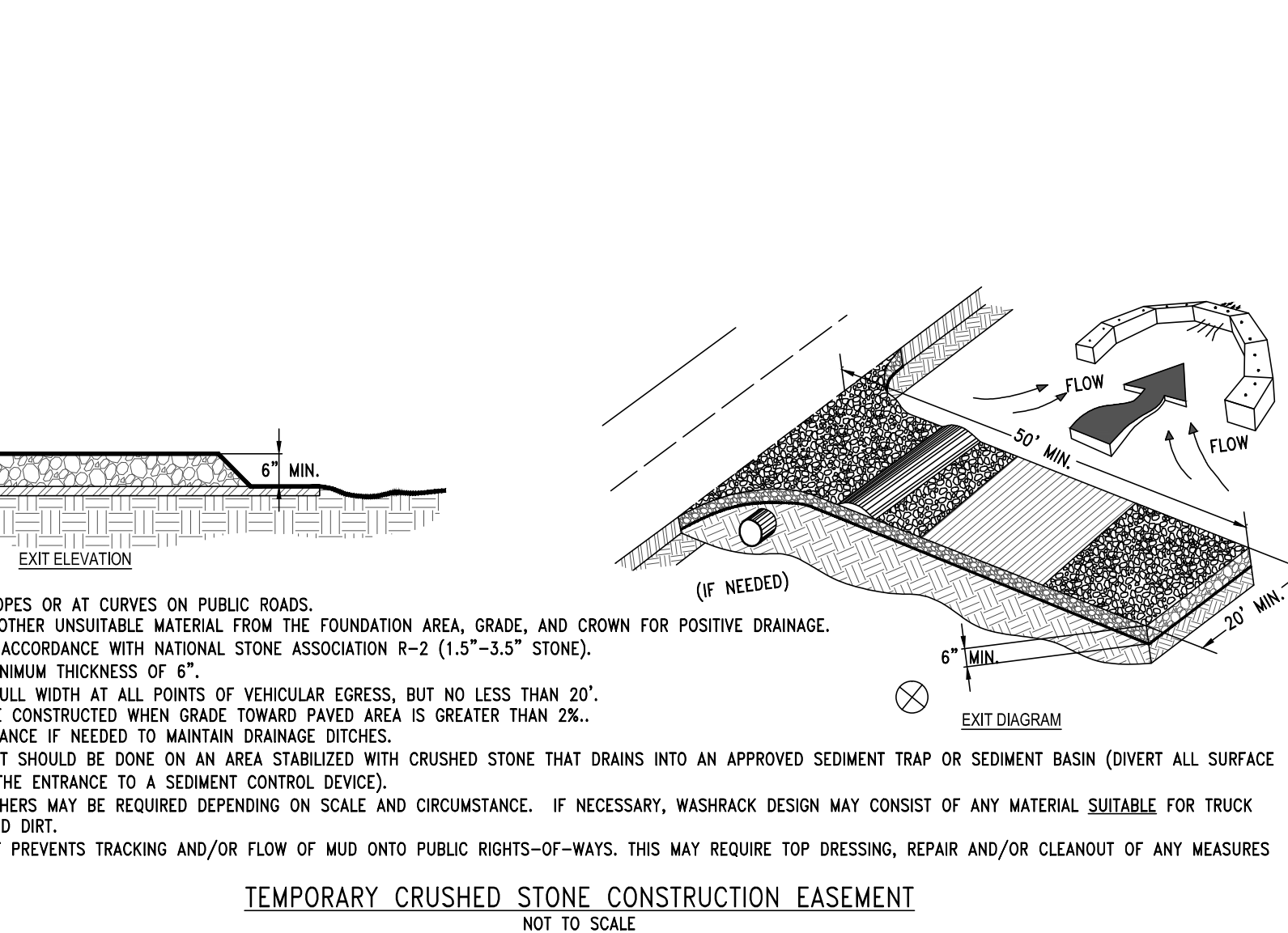
SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. THIS IS EXTREMELY IMPORTANT WHEN SELECTING BMPs WITH A LOWER PROFILE.

SEDIMENT BARRIERS SHALL BE REPLACED WHENEVER THEY HAVE DEGRADED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE PRODUCT IS REDUCED (APPROXIMATELY SIX MONTHS) OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING 80% OF ITS PROPERLY INSTALLED HEIGHT.

TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

PRODUCTS

ALL ALLOWABLE PRODUCTS MUST BE ON THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S SEDIMENT BARRIERS APPROVED PRODUCTS LIST (APL).



TEMPORARY CRUSHED STONE CONSTRUCTION EASEMENT



**HUSSEY GAY BELL**

Established 1958

329 COMMERCIAL DRIVE, SAVANNAH, GA 31406 / T:912.354.4626

REVISIONS:		
NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DESIGNED	DRAWN	CHECKED
CB	JK	JO
DATE: MARCH 2017		
JOB NO. 116291602		
SCALE: NTS		

LIFT STATION 4048 FORCE MAIN IMPROVEMENTS

FOR THE BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION

LDA SCHEDULES NOTES & DETAILS

DRAWING NUMBER

09