

EO 11988 Floodplain Management and  
EO 11990 Protection of Wetlands  
Determination

**Town of St. Pauls Flood Improvements Project**  
**EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination**  
***Infrastructure Recovery Program***

July 17, 2023

**Introduction & Overview**

The purpose of Executive Order (EO) 11988 Floodplain Management is “to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” The purpose of EO 11990 Protection of Wetlands is “to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” This determination contains the analysis prescribed by 24 CFR Part 55.

The North Carolina Office of Recovery and Resiliency (NCORR) has received an application from the Town of St. Pauls to use U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant – Mitigation (CDBG-MIT) funding under 24 CFR 58 from the Infrastructure Recovery Program to implement the Town of St. Pauls Flood Improvements Project (“proposed action”) located at South Johnson Street, East Clark Street, East Ross Street and South Elizabeth Street; and Calvary Cornerstone Holiness Church; 400 East Ross Street; 401 East Clark Street; and Town of St. Pauls’ Waste Water Treatment Plant (WWTP) parcel in St. Pauls, Robeson County, NC 28384. The analysis that follows focuses on floodplain and wetland impacts, as there are direct wetland and floodplain impacts associated with this proposed action. Based on the type of land use and improvements, necessity, and other case characteristics described herein, it is concluded that there is a reasonable basis to proceed with funding for this proposed action within a floodplain and wetland. The CDBG-MIT funding is administered through the NCORR Infrastructure Recovery Program which is developing sustainable and resilient communities. Thus, alternatives preventing or impeding the development of sustainable and resilient communities are not considered reasonable alternatives.

**Description of Proposed Action & Land Use**

The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). The proposed action is needed to address frequent flooding in an area located between Johnson Street and Elizabeth Street, and north of Clark Street, which is a natural bowl with overland outlets for stormwater. During the Hurricane Matthew storm event, the Town of Saint Pauls experienced widespread flood damage, especially in areas surrounding South Johnson and East Clark Streets, causing residents in these areas to be stranded and in need of assistance by emergency responders. The proposed action entails upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping (RCP), buried underground in mostly previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the project area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street. As conceived and designed, through a system of underground culverts, this project aims to convey stormwater from a relatively flat geographical area downstream to a point south of East Ross Street, for discharge into Big Marsh Swamp. Currently, stormwater is discharging through a deficient stormwater network into the same outlet point into Big Marsh Swamp. As proposed in design plans, the proposed project will be capable of draining an area of 2,101 acres every 24 hours. According to the Project Information Form dated September 28, 2020, this improvement will address flooding in the area to prevent property damage to homes, churches and businesses, and reduce roadway flooding allowing better transportation accessibility during storm events.

The proposed action will result in temporary impacts to 0.04 acres and permanent impacts to 0.009 acres of 100-year floodplain (Zone AE). The proposed action will result in temporary impacts to 0.0563 acres and permanent impacts to 0.072 acres of National Wetland Inventory (NWI) mapped and U.S. Army Corps of Engineers (USACE) verified delineated wetlands. These impacts to 100-year floodplain and wetlands include the installation of two 24-inch RCPs in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. The culvert outlets will be armored with 18-inch Class B riprap apron to slow flow velocity and prevent erosion. The proposed permanent wetland impacts total approximately 0.0027 acres resulting from the riprap apron. Additional impacts to wetlands will result from installation of two 36-inch RCPs approximately 244 linear feet in length to be installed within the 20-foot easement leading from East Ross Street into the wetland area. The culvert outlets will be armored with 18-inch Class B riprap apron. The proposed permanent impacts total approximately 0.0686 acres resulting from the rip rap apron and fill within the 20-foot easement. All temporary wetland impacts will result from construction access. The proposed action was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp a 177.62-acre Freshwater Forested/ Shrub Wetland (PFO1C).

### **Applicable Regulatory Procedure Per EO 11988 and EO 11990**

The proposed action corresponds with a noncritical action not excluded under 24 CFR §55.12. Funding is permissible for use in the floodplain and wetland if the proposed action is processed under §55.20 and the findings of the determination are affirmative to suggest that the project may proceed.

In accordance with 24 CFR 55, the proposed action involves installation of stormwater improvements in Robeson County which is a participating community in good standing in the regular program of the National Flood Insurance Program (NFIP). Substantial Improvement/ Substantial Damage calculations do not apply to this proposed action. However, this proposed action involves "modification" of floodplain. As such, the full eight-step floodplain determination process in §55.20 is required, and the following analysis examines each step in an EO 11988 Floodplain Management Determination process.

Based on information from the USACE Nationwide Permit (NWP) 18 Permit Verification and Jurisdictional Determination (JD) (see **Appendix 1**), the proposed action involves "new construction" in wetlands for the installation of stormwater improvements as described above. Due to the use of HUD funds, compliance with EO 11990 through completion of the eight-step process under 24 CFR 55.20 is required for projects with wetland impacts. Thus, in accordance with the decision-making process set forth in 24 CFR Part 55, the following analysis examines each step in an EO 11990 Protection of Wetlands Determination process.

### ***Step 1. Determine Whether the Proposed Action is Located in the 100-year Floodplain (500-year for Critical Actions) or results in New Construction in Wetlands.***

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 3720030800J, effective on 1/19/2005, the Subject Property is mostly located in Zone X (**Appendix 1**). A Preliminary FIRM (PFIRM) is not available for the vicinity of the Subject Property according to the FEMA Map Service Center. The Subject Property is not located within a FEMA-designated regulatory floodway. The proposed action does not include an insurable structure according to the National Flood Insurance Program (NFIP) Flood Insurance Manual effective October 1, 2022. The St. Paul's WWTP parcel is the only proposed location with portions in 100-year floodplain and wetlands, approximately 49.37 acres and 62.2 acres respectively. As such, the full eight-step floodplain determination process in §55.20 is required,

and the following analysis examines each step in an EO 11988 Floodplain Management Determination process.

Based on the USACE NWP 18 Permit Verification and JD, the proposed action has activities located in Waters of the United States including wetlands that are subject to the Clean Water Act's (CWA) Section 404, as shown in **Appendix 1**. The Big Marsh Swamp, a 177.62-acre Freshwater Forested/Shrub Wetland habitat classified as a PFO1C, is located partially on the Town of St. Pauls' WWTP property with Parcel ID# 030890981900. According to the USFWS National Wetland Inventory Map, there is a former 0.40-acre Freshwater Pond habitat classified as PUBFh located on the Calvary Cornerstone Holiness Church owned parcel (County Parcel ID# 381404009, 34°48'11.9"N 78°58'05.9"W). However, according to the USFWS NWI Coordinator, "[a]fter reviewing current available aerial imagery and your investigation of the above-mentioned parcel, it is clear that the wetland feature (Coded PUBFh) is no longer present." Therefore, the EO 11990 Protection of Wetlands Determination focuses only on the Big Marsh Swamp wetland. The full eight-step wetlands determination process in §55.20 is required, and the following analysis examines each step in an EO 11990 Protection of Wetlands Determination process.

The proposed project will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC Division of Water Resources (DWR) CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. The project is located in the Lumber River Basin which is not subject to Riparian Buffer Protection Rules. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies.

## **Step 2. Initiate Public Notice for Early Review of Proposal.**

Because the proposed action is located in floodplain and wetlands, NCORR published an early notice and posted supporting documentation that allowed for public and agency input on the decision to provide funding for construction and development activities. Supporting documentation incorporated into the early notice was posted for public review to the NCORR ReBuild NC website and included proposed project location maps with boundaries shown, USFWS NWI Maps (showing Big Marsh Swamp and USFWS confirmation no PUBFh wetland present at Parcel 1 - Calvary Cornerstone Holiness Church), FEMA FIRMettes with parcel boundaries shown, USACE NWP 18 Permit Verification and Jurisdictional Determination with Site Plans showing Wetland Impacts' Areas and Acreage. The early public notice and 15-day comment period is complete. No new, substantive public comments were received.

The early notice and corresponding 15-day public comment period started on June 10, 2023 with the "*Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland*" being published in The Robesonian newspaper, with the 15-day period expiring on June 26, 2023. The notice targeted local residents within the community. The notice was also posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews> and sent via Federal Express and email to the following federal and state agencies on June 9, 2023: HUD NC Field Office; Federal Emergency Management Agency (FEMA); U.S. Environmental Protection Agency (EPA); U.S. Fish and Wildlife Service (USFWS); USACE; and NC State Environmental Clearinghouse. The notice was also sent to Robeson County and the Town of St. Pauls. Project information was sent to the NC State Historic Preservation Office (SHPO) and Catawba Indian Nation for review and comment under Section 106 of the National Historic Preservation Act of 1966 (NHPA) and a project notification letter was sent to the Lumbee Tribe of North Carolina (See *Town of St. Pauls Flood Improvements Project EA ERR*). (See **Appendix 2** for the early notice distributed to these agencies, the newspaper publication affidavit, and distribution documentation).



***Step 3. Identify and Evaluate Practicable Alternatives to Locating the Proposed Action in a 100-year Floodplain or Wetland.***

The North Carolina Infrastructure Recovery Program empowers the State’s most impacted communities with the technical expertise needed to develop thorough and implementable reconstruction plans to build physically, socially, and economically resilient and sustainable communities.

This proposed action involves stormwater infrastructure improvements to deficient existing infrastructure, and project designs have been completed in accordance with agency input to minimize impacts to the floodplain, wetlands, environment and community. Alternative routes and designs were considered during the design phase; however, the proposed action utilizes the most economical and direct route to convey stormwater to the larger drainage area of Big Marsh Swamp. Alternative designs were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts. In order to ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. The proposed project design dated March 2022 originally involved a much larger area of impact to wetlands and no impacts to 100-year floodplain (*see* Draft EA submitted to the State Environmental Clearinghouse). In February 2023, the proposed action was redesigned to minimize impacts to wetlands and avoid compensatory mitigation. However, this new design does involve impacts to a small portion of floodplain

The main alternative is the “No Action” Alternative which is not considered feasible since flooding in the area causes property damage to homes, churches and businesses, and roadway flooding blocks transportation accessibility during and after storm events. This proposed action is critically necessary to protect the residents and community from future storm events. The “No Action” Alternative would provide no protection to the residential neighborhoods and greater community from future flood events, as mitigation would be compromised due to lack of financial support. Thus, the “No Action” Alternative is not feasible in relation to the desired objective of creating area resiliency to future flooding events and the proposed action is still practicable in light of potential adverse impacts on the floodplain and wetlands.

The above-identified alternatives will be re-evaluated in response to public comments received.

***Step 4. Identify and Evaluate Potential Direct and Indirect Impacts Associated with the Occupancy or Modification of 100-year Floodplain and Wetland and the Potential Direct and Indirect Support of Floodplain and Wetland Development that Could Result from Proposed Action.***

The focus of floodplain evaluation should be on adverse impacts to lives and property, and on natural and beneficial floodplain values. Natural and beneficial values include consideration of potential for adverse impacts on water resources such as natural moderation of floods, water quality maintenance, and groundwater recharge.

According to the FEMA Report - A Unified National Program for Floodplain Management, the two definitions commonly used in evaluating actions in floodplain are “structural” and “non-structural” activities. Per the report, structural activity is usually intended to mean adjustments that modify the behavior of floodwaters through the use of measures such as public works dams, levees, and channel work. Non-structural is usually intended to include all other adjustments (e.g., regulations, insurance, etc.) in the way society acts when occupying or modifying a floodplain. These definitions are used in describing impacts that may arise in association with potential advancement of this case.

### ***Natural Moderation of Floods, Water Quality Maintenance, and Groundwater Recharge***

According to the FEMA FIRMs, the proposed action occurs in areas classified as Zone X and 100-year floodplain (Zone AE, Special Flood Hazard Area [SFHA]) (**Appendix 1**). The proposed action will result in temporary impacts to 0.04 acres and permanent impacts to 0.009 acres of 100-year floodplain (Zone AE). The impacts to 100-year floodplain include the installation of two 24-inch RCPs in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. The culvert outlets will be armored with 18-inch Class B riprap apron to slow flow velocity and prevent erosion. A Floodplain Development Permit and, if required, NC DEMLR Erosion and Sediment Control Permit and NPDES Construction Stormwater Permit (NCG010000), will be obtained before commencing work. Mitigation measures for the proposed action includes best management practices (BMPs) for erosion and sedimentation control such as silt fencing which will be utilized during construction.

Natural floodplains and wetlands provide flood risk reduction benefits by slowing runoff and storing flood water. Floodwater storage and conveyance, groundwater discharge or recharge, erosion control, and water quality maintenance will be positively affected because the proposed action will allow for stormwater flow to be directly discharged into Big Marsh Swamp rather than flooding the surrounding residential area causing erosion and accumulating debris and pollutants to enter the wetland. Currently, stormwater is discharging through a deficient stormwater network into the same outlet point into Big Marsh Swamp. Big Marsh Swamp is heavily vegetated and relatively flat which will prevent upstream erosion and provide an avenue for dissipation and wetland hydrology recharge. To mitigate risk of erosion from allowing the stormwater to directly discharge into Big March Swamp, riprap aprons are proposed at the outlets to dissipate energy. Further, the Town has full time staff in charge of inspecting and maintaining the system post installation to ensure proper performance and address routine repairs as needed. With proper maintenance, any eroded area(s) can be repaired and stabilized. Big Marsh Swamp is heavily vegetated and contains areas of standing water which should prevent significant erosion. The stormwater discharge is not anticipated to negatively impact natural wetland hydrology and should aid in recharging downstream wetland hydrology. The proposed action is not anticipated to exceed 1.5 acres of disturbance.

Natural floodplains and wetlands provide important functions for water quality maintenance and groundwater recharge. The proposed action will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. BMPs for erosion and sedimentation control will be utilized during construction. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. The contractor shall provide adequate pump around or diversion to keep the work area dry. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post-construction. The Class B riprap apron was designed to slow flow velocity and prevent erosion and washout at the culvert outlet. Thus, measures will be implemented to ensure the proposed action will have no significant direct or indirect impacts to floodplain and wetlands during construction and operation as a stormwater infrastructure system. This will ensure that water quality and the ability to maintain water quality and allow for groundwater recharge are not impacted by the proposed action.

This proposed action involves stormwater infrastructure improvements to an existing deficient system. The project designs have been completed in accordance with agency input to minimize impacts to the

environment and community. The proposed action will address flooding in the area to prevent property damage to homes, churches and businesses, and reduce roadway flooding allowing better transportation accessibility during and after storm events. Thus, while the proposed action would directly affect the floodplain, it is not anticipated to have an adverse effect on the floodplain for the surrounding communities or environment.

### ***Living Resources such as Flora and Fauna***

For this proposed action, the USFWS Raleigh Ecological Services' online 10-step project review process was completed. The proposed action was determined to have "no effect" on proposed, threatened, endangered, or candidate species and proposed or designated critical habitat under USFWS jurisdiction, and a "no Eagle Act permit required" determination for the Bald Eagle. A Self-certification Letter and 10-step Project Review Package were prepared and submitted to the USFWS Raleigh Ecological Services Field Office (FO) on March 21, 2023. According to the NCWRC comments, it is recommended to minimize impacts to aquatic and terrestrial wildlife resources that the Town of St. Pauls: 1) Maintain a minimum 100-foot undisturbed, native forested buffer along perennial streams and minimum 50-foot buffer along intermittent streams and wetlands. In addition, lay down and staging areas should be located outside wetland areas and at least 100 feet from stream banks.; 2) The project footprint should be surveyed for wetlands and streams where impacts are anticipated to ensure there are no impacts to surface waters. Clean Water Act Temporarily disturbed wetland areas should be returned to original soils and contours, reseeded with annual small grains appropriate for the season (e.g., oats, millet, rye, wheat, or rye grass) and allowed to revert to natural wetland vegetation.; 3) Avoid the removal of large trees at the edges of construction corridors. Disturbed areas should be re-seeded with seed mixtures that are beneficial to wildlife such as season appropriate native, annual small grains and pollinator mixes but fescue-based mixtures are to be avoided.; and 4) Sediment and erosion control measures should be installed prior to any land-disturbing activity. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Preference is given to silt fencing, fiber rolls and/or other products with loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines, but not products reinforced with plastic or metal mesh. (See **Attachment 8** in the *Town of St. Pauls Flood Improvements Project EA ERR* for full details.) Also, the NCWRC has developed the Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality. NCWRC recommends consideration of additional measures in this document to protect aquatic and terrestrial wildlife species.

The project designs have been completed in accordance with agency input to minimize impacts to the environment and community. The proposed action activities will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. BMPs for erosion and sedimentation control such as silt fencing will be utilized during construction. The proposed action has been determined to have "no effect" on proposed, threatened, endangered, or candidate species and proposed or designated critical habitat. Thus, as designed and with mitigation measures implemented, the proposed action will have no or minimal impacts to living resources, such as flora and fauna, during construction and operation as a stormwater infrastructure system.

### ***Impacts to Property and Lives***

The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). During the Hurricane Matthew storm event, the Town of Saint Pauls experienced widespread flood damage, especially in areas surrounding South Johnson and East Clark Streets, causing residents in these areas to be stranded and in need of assistance by emergency responders. The Town proposes a system of stormwater improvements that will carry future stormwater events south of these residential areas and connect with the Town's stormwater processing infrastructure. According to the Project Information Form (PIF) dated September 28, 2020, this improvement will address flooding in the area to prevent property damage to homes, churches and businesses, and reduce roadway flooding allowing better transportation accessibility during and after storm events. The PIF also states that "[t]he Community wants to remain intact and not fear every future significant storm as the residents see storm water rise into their yards." The proposed action is intended to sustain and build resiliency of this area during future flooding events while not detracting from visual quality. Additionally, the proposed action will further protect the residents' public health and safety by safeguarding infrastructure and enhancing emergency response operations during and after severe storm events. The mitigation of future flooding is essential for the safety of residents in the Town of St. Pauls. Therefore, the proposed action is not anticipated to have adverse impacts to property and lives, but rather aims to provide critically necessary protection of property and lives in the surrounding area during storm events.

### ***Cultural Resources such as Archaeological, Historic and Recreational Aspects***

The majority of the proposed action activities will take place in and along residential streets and at existing culverts. As part of this review, the SHPO, Chief and Tribal Historic Preservation Offices (THPO) of all applicable Tribes, Nations, and Communities were consulted regarding any historic properties of religious and cultural significance in the area that could be affected by the proposed actions. The SHPO responded on June 2, 2022 and July 3, 2023 that "[w]e have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed." According to the HUD Tribal Directory Assessment Tool (TDAT), the Catawba Indian Nation is the only federally-recognized tribes with interests in Robeson County, North Carolina. NCORR consulted with the Catawba Indian Nation for discussion of historic properties in the proposed action area that may have religious and cultural significance. On May 13, 2022, the Catawba Indian Nation's Tribal Historic Preservation Office (THPO) responded that "[t]he Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project." On July 12, 2023, NCORR Director Ms. Laura Hogshead sent a notification letter for the proposed project to the Lumbee Tribe of North Carolina Chairman John Lowery. A response has not been received but will be included in the *Town of St. Pauls Flood Improvements Project EA ERR* when received. The SHPO and Catawba Indian Nation Section 106 review and consultation documentation is included in the *Town of St. Pauls Flood Improvements Project EA ERR* along with the Lumbee Tribe of NC project notification letter.

There are several parks and recreational facilities located in St. Pauls according to the Town website (<https://www.stpaulsnc.gov/parks>). The Town has Sugar Park located near the Boy Scout Hut on North 4<sup>th</sup> Street and Hooks Community Building on North 3<sup>rd</sup> Street and West Armfield Street. The St. Pauls Regional Park at 625 East Blue Street is owned by the Town but leased by Robeson County to operate it and has two baseball/ softball fields, a dog park, and the only public swimming pool in Robeson County. The ML Bob Everett Park/North 5th Street Park has basketball courts. The proposed action will not introduce new development that would generate demand for parks, open spaces or recreational areas or impede their access. Instead, the proposed action aims to reduce flooding in the area, safeguard

infrastructure, and public and private properties, and reduce the vulnerability of assets by increasing the resiliency of the community during future flooding events. As such, the proposed action would not have an adverse effect on existing parks, open spaces or recreational areas.

### ***Agricultural, Aquacultural, and Forestry Resources***

The majority of the proposed project activities will take place in and along residential streets and at existing culverts. The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey Soil groups for the Subject Property included from north to south: NoA - Norfolk loamy sand, 0 to 2 percent slopes (Church parcel - *All areas are prime farmland*), WaB - Wagram loamy sand, 0 to 6 percent slopes (north of E. Clark St. - *Farmland of statewide importance*), WkB - Wakulla sand, 0 to 6 percent slopes (E. Clark St. to E. Ross St. - *Not prime farmland*), and JT - Johnston soils (St. Pauls' WWTP parcel - *Not prime farmland*). Thus, the proposed action areas located from approximately E. Clark Street to the St. Pauls' WWTP parcel are not considered "important farmlands" subject to FPPA according to the FPPA Manual, Subpart B – Program Activities and Requirements, Section 523.10(A) - Lands Subject to Provisions of FPPA. The proposed action areas containing *Farmland of statewide importance* and *All areas are prime farmland* are identified as "Land with a 'tint overprint' on the USGS topographical map" and, thus, not subject to provisions of the Farmland Protection Policy Act (FPPA) according to the FPPA Manual, Subpart B – Program Activities and Requirements, Section 523.10(B)(3) - Lands Not Subject to Provisions of FPPA. The Subject property consists of a church, residential neighborhood, and WWTP parcel which are not ideal for agricultural and forestry resources. It is anticipated that due to the proposed project site conditions a limited number of trees will be removed. Thus, the proposed action is not expected to have an adverse impact on agricultural or forestry resources.

According to the NCWRC comments, it is recommended to minimize impacts to aquatic and terrestrial wildlife resources that the Town of St. Pauls: 1) Maintain a minimum 100-foot undisturbed, native forested buffer along perennial streams and minimum 50-foot buffer along intermittent streams and wetlands. In addition, lay down and staging areas should be located outside wetland areas and at least 100 feet from stream banks.; 2) The project footprint should be surveyed for wetlands and streams where impacts are anticipated to ensure there are no impacts to surface waters. Clean Water Act Temporarily disturbed wetland areas should be returned to original soils and contours, reseeded with annual small grains appropriate for the season (e.g., oats, millet, rye, wheat, or rye grass) and allowed to revert to natural wetland vegetation.; 3) Avoid the removal of large trees at the edges of construction corridors. Disturbed areas should be reseeded with seed mixtures that are beneficial to wildlife such as season appropriate native, annual small grains and pollinator mixes but fescue-based mixtures are to be avoided.; and 4) Sediment and erosion control measures should be installed prior to any land-disturbing activity. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Preference is given to silt fencing, fiber rolls and/or other products with loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines, but not products reinforced with plastic or metal mesh. (*See Attachment 8* in the *Town of St. Pauls Flood Improvements Project EA ERR* for full details.) Also, the NCWRC has developed the Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality. NCWRC recommends consideration of additional measures in this document to protect aquatic and terrestrial wildlife species. The proposed action will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. Therefore, the proposed

action is not expected to have an adverse impact on aquacultural resources. Overall, the Subject Property consists of a church, residential neighborhood, and WWTP parcel and is not used for agriculture, aquaculture or forestry and, thus, the proposed action is not expected to have an adverse impact on agricultural, aquacultural or forestry resources.

## **Wetland Evaluation**

The purpose of wetland evaluation is to consider factors relevant to a proposed action's effect on the survival and quality of any wetlands to be disturbed. These factors should include public health (including water supply and water quality), maintenance of natural systems, cost increases attributed to construction in wetland, and other uses of wetland in the public interest. Based on the USACE CWA Section 404 NWP 18 Permit Verification and JD, the proposed action has activities located in Waters of the United States including wetlands that are subject to the Clean Water Act's Section 404. The Big Marsh Swamp, a 177.62-acre Freshwater Forested/Shrub Wetland classified as a PFO1C, is located partially on the Town of St. Pauls' WWTP property with Parcel ID# 030890981900. According to the USFWS NWI Map, there is a former 0.40-acre Freshwater Pond habitat classified as PUBFh located on the Calvary Cornerstone Holiness Church owned parcel (County Parcel ID# 381404009, 34°48'11.9"N 78°58'05.9"W). However, according to the USFWS NWI Coordinator, "[a]fter reviewing current available aerial imagery and your investigation of the above-mentioned parcel, it is clear that the wetland feature (Coded PUBFh) is no longer present." The St. Paul's WWTP parcel is the only proposed location with portions in wetlands, approximately 62.2 acres. Thus, the EO 11990 Protection of Wetlands Determination focuses only on the Big Marsh Swamp wetland.

The proposed action will result in temporary impacts to 0.0563 acres and permanent impacts to 0.072 acres of NWI-mapped and USACE verified delineated wetlands. These impacts to wetlands include the installation of two 24-inch RCPs in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. The culvert outlets will be armored with 18-inch Class B riprap apron. The proposed permanent wetland impacts total approximately 0.0027 acres resulting from the riprap apron. The contractor shall provide adequate pump around or diversion to keep the work area dry. Additional impacts to wetlands will result from installation of two 36-inch RCPs approximately 244 linear feet in length to be installed within the 20-foot easement leading from East Ross Street into the wetland area. The culvert outlets will be armored with 18-inch Class B riprap apron. The proposed permanent impacts total approximately 0.0686 acres resulting from the rip rap apron and fill within the 20-foot easement. All temporary wetland impacts will result from construction access. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post-construction. In order to ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. Alternatives were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts. The Class B riprap apron was designed to slow flow velocity and prevent erosion and washout at the culvert outlet. The proposed action was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp. Further, mitigation measures are incorporated into the design plans, and permit requirements and conditions will be complied with during construction. The proposed action will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls*

*Flood Improvements Project EA ERR* when received from the permitting agencies. Thus, measures will be implemented to ensure the proposed action will have no further impacts to wetlands during construction.

***Public Health, Safety, and Welfare, Including Water Supply, Quality, Recharge, and Discharge; Pollution; Flood and Storm Hazards and Hazard Protection; and Sediment and Erosion***

Wetlands have unique natural characteristics that play an integral role in the ecology of the watershed. The natural and beneficial functions and values related to hydrology and water quality include slowing down stormwater runoff, providing surface and subsurface retention, and filtering out pollutants. Currently, the Big Marsh Swamp wetland functions as a collection point for stormwater from the surrounding properties. However, the existing stormwater infrastructure was insufficient during storms and Hurricane Matthew. The Town is experiencing frequent flooding problems in an area located between Johnson Street and Elizabeth Street, and north of Clark Street, which is a natural bowl with overland outlets for stormwater. This area also experienced substantial flooding during Hurricane Matthew in 2016, resulting in damages to at least seven homes and the Calvary Cornerstone Holiness Church. The area has two small private pump stations that currently remove water during small rain events, but are not adequately sized for larger events and do not have backup power.

Floodwater storage and conveyance, groundwater discharge or recharge, erosion control, and water quality maintenance will be positively affected because the proposed action will allow for stormwater flow to be directly discharged into Big Marsh Swamp rather than flooding the surrounding residential area causing erosion and accumulating debris and pollutants to enter the wetland. Currently, stormwater is discharging through a deficient stormwater network into the same outlet point into Big Marsh Swamp. Big Marsh Swamp is heavily vegetated and relatively flat which will prevent upstream erosion and provide an avenue for dissipation and wetland hydrology recharge. To mitigate risk of erosion from allowing the stormwater to directly discharge into Big Marsh Swamp, riprap aprons are proposed at the outlets to dissipate energy. Further, the Town has full time staff in charge of inspecting and maintaining the system post installation to ensure proper performance and address routine repairs as needed. With proper maintenance, any eroded area(s) can be repaired and stabilized. Big Marsh Swamp is heavily vegetated and contains areas of standing water which should prevent significant erosion. The stormwater discharge is not anticipated to negatively impact natural wetland hydrology and should aid in recharging downstream wetland hydrology. The proposed action is not anticipated to exceed 1.5 acres of disturbance. The proposed project will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC Division of Water Resources CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the ERR when received from the permitting agencies. Therefore, the proposed action is not anticipated to have an adverse impact on water quality, recharge, and discharge; pollution; flood and storm hazards and hazard protection; and sediment and erosion.

The proposed action is necessary to prevent future storm events from flooding the affected areas of the Town of St. Pauls which is a threat to public safety. According to the PIF dated September 28, 2020, this improvement will address flooding in the area to prevent property damage to homes, churches and businesses, and reduce roadway flooding allowing better transportation accessibility during and after storm events. The PIF also states that “[t]he Community wants to remain intact and not fear every future significant storm as the residents see storm water rise into their yards.” The proposed action will further protect the residents’ public health and safety by safeguarding infrastructure and enhancing emergency

response operations during and after severe storm events. Therefore, the proposed action should lessen impacts to *public health, safety, and welfare* in the surrounding area during and after future storm events.

The Town of St. Pauls provides the water to the community according to the Town website. The proposed action will not increase demand for water. Thus, the proposed action will not have an impact on local water supplies. According to the NC DEQ comment, plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the DWR/ Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. If new water lines will be installed or existing water lines relocated as part of this project, plans, specifications, and other reports will need to be submitted to the Public Water Supply Section before construction begins. In addition, all public water supply systems must comply with State and federal drinking water monitoring requirements. If any wells are discovered on the proposed project site, then abandonment of wells must be in accordance with Title 15A. Subchapter 2C.0100. Further, NC DEQ notes that any relocation of existing water lines will require plans to be submitted to the DWR/ Public Water Supply Section prior to construction. All applicable federal, State and local permits will be obtained for the proposed action prior to construction and activities will comply with their requirements and conditions. Therefore, the proposed action is not anticipated to have an adverse impact on water supply onsite and in the surrounding area.

The Town of St. Pauls provides sewer services to the community according to the Town website. The proposed action will not introduce any new development that would generate waste water. Mitigative measures such as BMPs will be utilized during construction to prevent soil and/ or debris from being washed offsite. The proposed action is not anticipated to cause the discharge of sewage to surfaces of the Subject Property or surrounding properties. The proposed action will not create waste water or affect waste water service in the area. Any additional waste water generated during construction activities would be temporary. A permit to construct and operate waste water treatment facilities, non-standard sewer system extensions and sewer systems that do not discharge into state surface waters and a permit to construct and operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system might be required according to the NC DEQ comments (*See Attachment 20* in the *Town of St. Pauls Flood Improvements Project EA ERR* for full details). All applicable federal, State and local permits will be identified and obtained for the proposed action prior to construction and activities will comply with their requirements and conditions. Permits will be appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. Therefore, the proposed action is not anticipated to have an adverse impact on waste water/ sanitary sewers and capacity onsite and in the surrounding area.

***Maintenance of Natural Systems, Including Conservation and Long-Term Productivity of Existing Flora and Fauna; Species and Habitat Diversity and Stability; Natural Hydrologic Function; Wetland Type; Fish; Wildlife; Timber; and Food and Fiber Resources***

Construction for the proposed action will result in approximately 0.07 acres of wooded habitat loss. However, the flood reduction benefits of the proposed action will outweigh this loss of wooded area. Native plants are recommended to be utilized during site restoration at the Subject Property. The proposed action is not anticipated to exceed 1.5 acres of disturbance. The proposed action has been designed and re-designed, and mitigation measures incorporated to have the minimal impacts on these features.

The USFWS Information for Planning and Consultation (IPaC) Official Species List identified a total of five threatened, endangered, or candidate species and three migratory Birds of Conservation Concern (BCC) as species with the potential to occur within the vicinity of the proposed project site. The five proposed, threatened, endangered, or candidate species include the: 1) Tricolored Bat (*Perimyotis subflavus*), 2) Red-cockaded Woodpecker (*Picoides borealis*), 3) American Alligator (*Alligator mississippiensis*), 4) Monarch Butterfly (*Danaus plexippus*), and 5) Michaux's Sumac (*Rhus michauxii*).



The three migratory BCC include the 1) Chimney Swift (*Chaetura pelagica*), 2) Prothonotary Warbler (*Protonotaria citrea*), and 3) Red-headed Woodpecker (*Melanerpes erythrocephalus*).

The NC Natural Heritage Program (NHP) database query report identified one State-listed species (Blackbanded Sunfish, *Enneacanthus chaetodon*) within the proposed project area, and five State-listed species within one-mile of the proposed project area including two dragonfly or damselfly species, one freshwater fish and two vascular plants (Coppery Emerald, *Somatochlora georgiana*; Phantom Darner, *Triacanthagyna trifida*; Blackbanded Sunfish, *Enneacanthus chaetodon*; Georgia Indigo-bush, *Amorpha georgiana*; and Carolina Sunrose, *Crocantemum Carolinianum*). However, based on the USFWS IPaC and USFWS and NMFS Critical Habitat Mappers results, there are no critical habitats identified within one mile of the proposed project area.

The NC NHP was consulted for additional information on the Tricolored Bat which is proposed for listing and uses culverts year-round for habitat. According to Ms. Judith Ratcliffe, Zoologist at the NC NHP, “[t]here are no documented Tricolored Bat maternity roost trees within 150 feet of this project boundary. There are no documented Tricolored Bat hibernacula within 0.25 mile of this project boundary. Individuals of this species have been mist-net captured approximately 20 miles to the southeast of this project boundary (emphasis added).” Since the Tricolored Bat is estimated to be present approximately 20 miles from the proposed project site, a determination of “No Effect” has been made for this proposed species.

None of the above-listed species or potential habitat were observed during the site visits. According to McGill Associates, PA (McGill), Threatened and Endangered (T&E) Species surveys to observe biological habitats and determine the likely occurrence of protected (threatened/ endangered), candidate, and proposed species within the proposed project area and site visits were completed. There was no suitable habitat found within the Limits of Disturbance (LOD). The majority of the proposed project activities (disturbance) will take place in and along residential streets and at existing culverts. It is anticipated that due to the proposed project site conditions a limited number of trees will be removed and any migratory birds in the area will temporarily leave the area during construction. Therefore, a No Effect determination has been made for all of the above-listed species and a “no Eagle Act permit required” determination for eagles. A Self-certification Letter and 10-step Project Review Package were prepared and submitted to the USFWS Raleigh Ecological Services Field Office (FO) on March 21, 2023.

Aquatic resources are highly susceptible to sedimentation. According to the NCWRC comments, it is recommended to minimize impacts to aquatic and terrestrial wildlife resources that the Town of St. Pauls: 1) Maintain a minimum 100-foot undisturbed, native forested buffer along perennial streams and minimum 50-foot buffer along intermittent streams and wetlands. In addition, lay down and staging areas should be located outside wetland areas and at least 100 feet from stream banks.; 2) The project footprint should be surveyed for wetlands and streams where impacts are anticipated to ensure there are no impacts to surface waters. Clean Water Act Temporarily disturbed wetland areas should be returned to original soils and contours, reseeded with annual small grains appropriate for the season (e.g., oats, millet, rye, wheat, or rye grass) and allowed to revert to natural wetland vegetation.; 3) Avoid the removal of large trees at the edges of construction corridors. Disturbed areas should be re-seeded with seed mixtures that are beneficial to wildlife such as season appropriate native, annual small grains and pollinator mixes but fescue-based mixtures are to be avoided.; and 4) Sediment and erosion control measures should be installed prior to any land-disturbing activity. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Preference is given to silt fencing, fiber rolls and/or other products with loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines, but not products reinforced with plastic or metal mesh. (See **Attachment 8** in the *Town of St. Pauls Flood Improvements Project EA ERR* for full details.) Also, the NCWRC has developed the Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and

Terrestrial Wildlife Resources and Water Quality. NCWRC recommends consideration of additional measures in this document to protect aquatic and terrestrial wildlife species.

The proposed action will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. The proposed action has been determined to have “no effect” on proposed, threatened, endangered, or candidate species and proposed or designated critical habitat. In addition, the Subject property consists of a church, residential neighborhood, and WWTP parcel which are not ideal and not used for timber or agriculture and, thus, is not expected to have an adverse impact on timber and food and fiber resources. Thus, there will be minimal to no effect on living resources such as natural systems such as flora and fauna, timber, and food and fiber resources. (Natural hydrologic function and wetland type are discussed further in previous sections.)

#### ***Cost Increases Attributed to Wetland-Required New Construction and Mitigation Measures to Minimize Harm to Wetlands that May Result from Such Use***

The proposed project design dated March 2022 originally involved a much larger area of impact to wetlands and no impacts to 100-year floodplain (*see* Draft EA submitted to the State Environmental Clearinghouse). In February 2023, the proposed action was redesigned to minimize impacts to wetlands and avoid compensatory mitigation. However, this new design does involve impacts to a small portion of floodplain. The additional costs for impacts to wetlands include the wetland delineation for \$7,200 and permit costs of \$8,600. Since the impacts to wetlands are less than one acre, no compensatory mitigation is required. There are additional mitigation measures to minimize harm to wetlands built into existing plans. BMPs for erosion and sedimentation control will be utilized during construction. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. The contractor shall provide adequate pump around or diversion to keep the work area dry. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post-construction. The Class B riprap apron was designed to slow flow velocity and prevent erosion and washout at the culvert outlet. Thus, measures will be implemented to ensure the proposed action will have no further impacts to wetlands during construction and any additional costs that will be incurred during implementation cannot be fully enumerated at this time.

#### ***Other Uses of Wetland in the Public Interest, Including Recreational, Scientific, and Cultural Uses***

The portion of the wetland located on the Town’s WWTP parcel has no identifiable recreational, scientific, or cultural uses that will be impacted by the proposed action. The site is currently used as a municipal waste water treatment facility. As part of the 24 CFR 58 environmental review, the SHPO and Chief Bill Harris and the THPO of the Catawba Indian Nation were consulted regarding any historic or tribal resources in the area that could be affected by the proposed action. On June 2, 2022 and July 3, 2023, the SHPO responded that the project will have no effect on historic resources. On May 13, 2022, the Catawba Indian Nation’s THPO responded that “[t]he Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.” On July 12, 2023, NCORR Director Ms. Laura Hogshhead sent a notification letter for the proposed project to the Lumbee Tribe of

North Carolina Chairman John Lowery. A response has not been received but will be included in the *Town of St. Pauls Flood Improvements Project EA ERR* when received. The SHPO, Catawba Indian Nation, and Lumbee Tribe of NC documentation is included in the *Town of St. Pauls Flood Improvements Project EA ERR*.

**Step 5. Where Practicable, Design or Modify the Proposed Action to Minimize the Potential Adverse Impacts to and from the 100-Year Floodplain and the Wetland and to Restore and Preserve its Natural and Beneficial Functions and Values.**

The proposed project design dated March 2022 originally involved a much larger area of impact to wetlands and no impacts to 100-year floodplain (*see* Draft EA submitted to the State Environmental Clearinghouse). In February 2023, the proposed action was redesigned to minimize impacts to wetlands and avoid compensatory mitigation. However, this new design does involve impacts to a small portion of floodplain. The original design proposed approximately 584 LF of RCP through the wetland ending under the WWTP Access Road with a rip rap apron and armoring. The revised 2023 proposed project design involves the installation of two 24-inch RCPs approximately 26 linear feet in length in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. Additional impacts to wetlands will result from installation of two 36-inch RCPs approximately 244 linear feet in length to be installed within the 20-foot easement leading from East Ross Street into the wetland area. The culvert outlets will be armored with 18-inch Class B riprap apron. In order to ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. Alternatives were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts.

All temporary wetland impacts will result from construction access and will be stabilized and allowed to return to natural conditions post-construction. The contractor shall provide adequate pump around or diversion to keep the work area dry. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. The Class B riprap apron was designed to slow flow velocity and prevent erosion and washout at the culvert outlet. The proposed action was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp. Further, the Town has full time staff in charge of inspecting and maintaining the system post installation to ensure proper performance and address routine repairs as needed. With proper maintenance, any eroded area(s) can be repaired and stabilized. Big Marsh Swamp is heavily vegetated and contains areas of standing water which should prevent significant erosion. The stormwater discharge is not anticipated to negatively impact natural wetland hydrology and should aid in recharging downstream wetland hydrology.

The proposed action will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, if applicable, prior to commencing work: USACE CWA Section 404 NWP 18 Minor Discharges, NC DWR CWA Section 401 Water Quality Certification, NC DEMLR Erosion and Sediment Control Permit, NPDES Construction Stormwater Permit (NCG010000), and Floodplain Development Permit. All necessary permits will be identified and obtained prior to commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA ERR* when received from the permitting agencies. Thus, measures will be implemented to ensure the proposed action will have no significant direct or indirect impacts to floodplain and wetlands during construction and operation as a stormwater infrastructure system.

### **Step 6. Reevaluate the Alternatives and Proposed Action.**

The proposed action will benefit surrounding residential areas by alleviating flooding and preventing private and public property damage. As conceived and designed, through a system of underground culverts, this proposed action aims to convey stormwater from a relatively flat geographical area downstream to a point south of East Ross Street, for discharge into Big Marsh Swamp. The proposed action is not anticipated to exceed 1.5 acres of disturbance.

The proposed action location has been determined to be the most ideal for effective improvement of the existing stormwater infrastructure and only a small portion of the proposed activities will take place in 100-year floodplain and wetland. This proposed action involves stormwater infrastructure improvements to deficient existing infrastructure, and project designs have been completed in accordance with agency input to minimize impacts to the floodplain, wetlands, environment and community. Alternative routes and designs were considered during the design phase; however, the proposed action utilizes the most economical and direct route to convey stormwater to the larger drainage area of Big Marsh Swamp. Alternative designs were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts. In order to ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. The proposed action has been redesigned with agency input to minimize impacts to wetlands and have minimal impacts on floodplain.

The main alternative is the “No Action” Alternative which is not considered feasible since flooding in the area causes property damage to homes, churches and businesses, and roadway flooding blocks transportation accessibility during and after storm events. This proposed action is critically necessary to protect the residents, property and community from future storm events. The “No Action” Alternative would provide no protection to the residential neighborhoods and greater community from future flood events, as mitigation would be compromised due to lack of financial support. The “No Action” Alternative would not address the purpose and need of the proposed action, and leave the surrounding community vulnerable to future flood damage. Thus, the “No Action” Alternative is not feasible in relation to the desired objective of creating area resiliency to future flooding events and the proposed action is still practicable in light of potential adverse impacts on the floodplain and wetlands.

Implementation of the proposed action will abide by all applicable federal, State and local laws, regulations, and permit requirements and conditions. Permits required for this proposed action shall be obtained before commencing work and appended to the *Town of St. Pauls Flood Improvements Project EA environmental review record (ERR)* when received from the permitting agencies. The impacts of these alternatives will be re-evaluated in response to any public comments received.

### **Step 7. Issue Findings and Public Explanation.**

It is the finding of this report that there is no better alternative than to provide funding for the Town of St. Pauls Flood Improvements Project. This proposed action is critically necessary to protect the residents, property and community from future storm events.

A final notice, formally known as “*Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland*” is being published in accordance with 24 CFR 55. However, this notice was combined with the *Notice of Finding of No Significant Impact (FONSI)* and *Notice of Intent to Request Release of Funds (NOI-RROF)* for a 15-day comment period. The 15-day comment period starts with the combined notice publishing in The Robesonian newspaper on July 19, 2023 and ends on August 3, 2023. The notice will be posted at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental->

[reviews](#) and sent via Federal Express and email to the following state and federal agencies on July 19, 2023: HUD NC Field Office; FEMA; EPA; USFWS; USACE; and NC State Environmental Clearinghouse. The notice was also sent to Robeson County and the Town of St. Pauls. Project information was sent to the NC SHPO and Catawba Indian Nation for review and comment under Section 106 of the NHPA and a project notification letter was sent to the Lumbee Tribe of North Carolina (See *Town of St. Pauls Flood Improvements Project EA ERR*). (See **Appendix 3** for the final notice distributed to these agencies).

Supporting documentation, including this EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination, incorporated into the Final Notice was posted for public review to the NCORR ReBuild NC website and included the Early Notice documentation (proposed project location maps with boundaries shown, USFWS NWI Maps [showing Big Marsh Swamp and USFWS confirmation no PUBFh wetland present at Parcel 1 - Calvary Cornerstone Holiness Church], FEMA FIRMettes with parcel boundaries shown, USACE NWP 18 Permit Verification and Jurisdictional Determination with Site Plans showing Wetland Impacts' Areas and Acreage) and additional appendices noted herein. The EA was also posted to the NCORR ReBuild NC website allowing for public and agency input on the decision to provide funding for construction and development activities. Any substantive comments received will be addressed, and incorporated into the EA prior to proceeding with the submission of a request for release of funds..

#### ***Step 8. Implementation and Continuing Responsibility of the Responsible Entity and Recipient.***

NCORR is the responsible entity and will provide educational materials, when available. It is acknowledged there is a continuing responsibility by the responsible entity to ensure, to the extent feasible and necessary, compliance with the Steps herein.

# **APPENDIX 1**

## **TOWN OF ST. PAULS FLOOD IMPROVEMENTS**

### **EARLY NOTICE FLOODPLAIN AND WETLANDS MAPS**

- **Proposed Project Location Maps**
- **USFWS National Wetlands Inventory Maps  
(showing Big Marsh Swamp and USFWS  
confirmation no PUBFh wetland present at  
Parcel 1 - Calvary Cornerstone Holiness Church)**
- **FEMA FIRMettes and NFIP Community Status**
- **Book**
- **USACE NWP 18 Permit Verification and  
Jurisdictional Determination with Site Plans  
showing Wetland Impacts, Pre-Construction  
Notification (PCN) Form, and JD Request**

# **Proposed Project Location Maps**



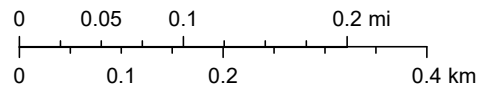
# St. Pauls Flood Improvements - Aerial Map



June 8, 2023

1:9,028

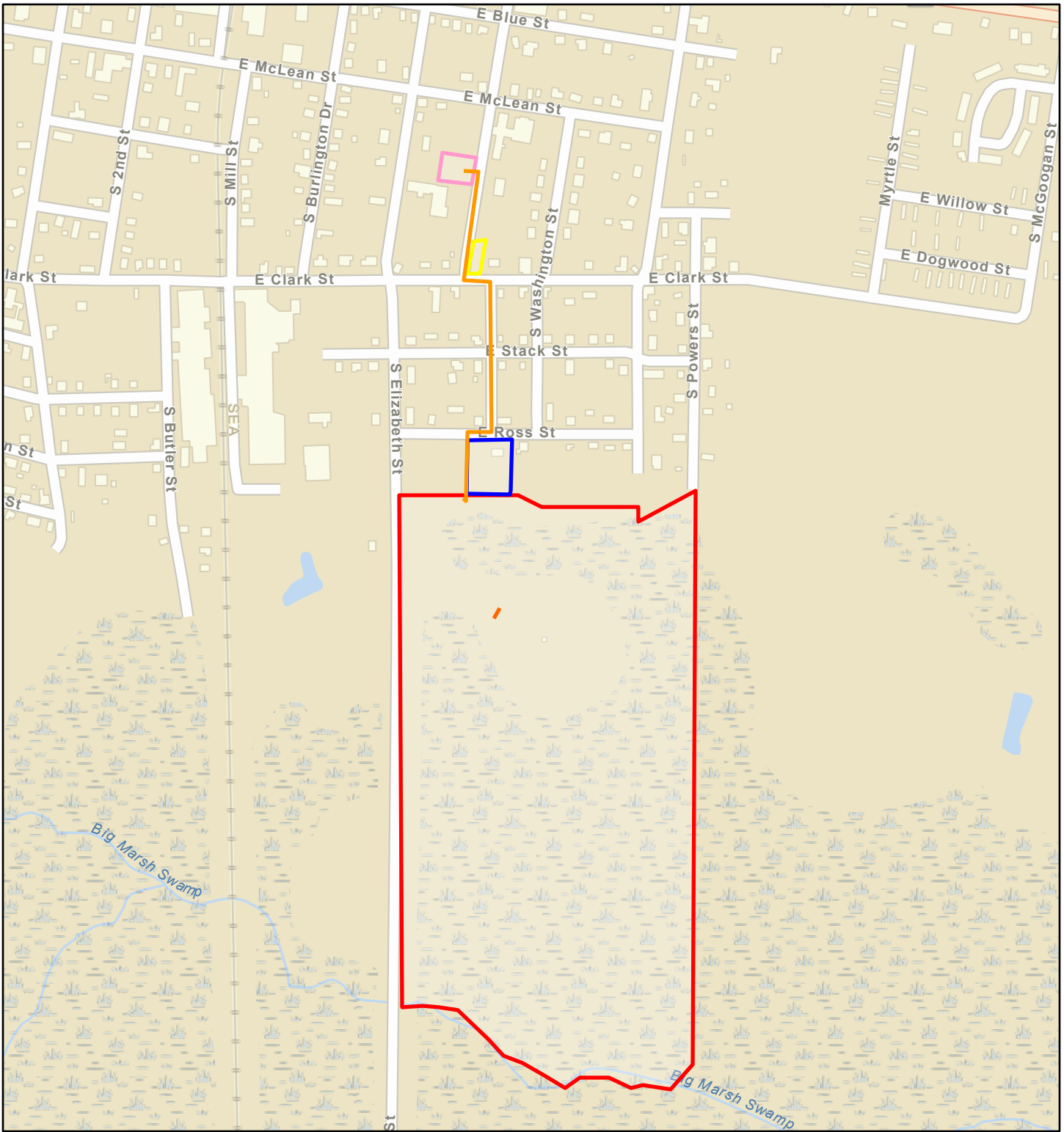
- St. Pauls' Southern Project
- St. Pauls' Northern Project
- Calvary Cornerstone Holiness Church
- 401 East Clark Street
- 400 East Ross Street
- St. Pauls' WWTP



NC CGIA, Maxar, Esri Community Maps Contributors, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



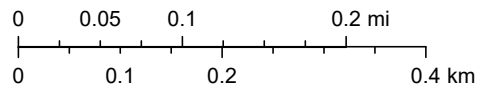
# St. Pauls Flood Improvements - Street Map



June 8, 2023

1:9,028

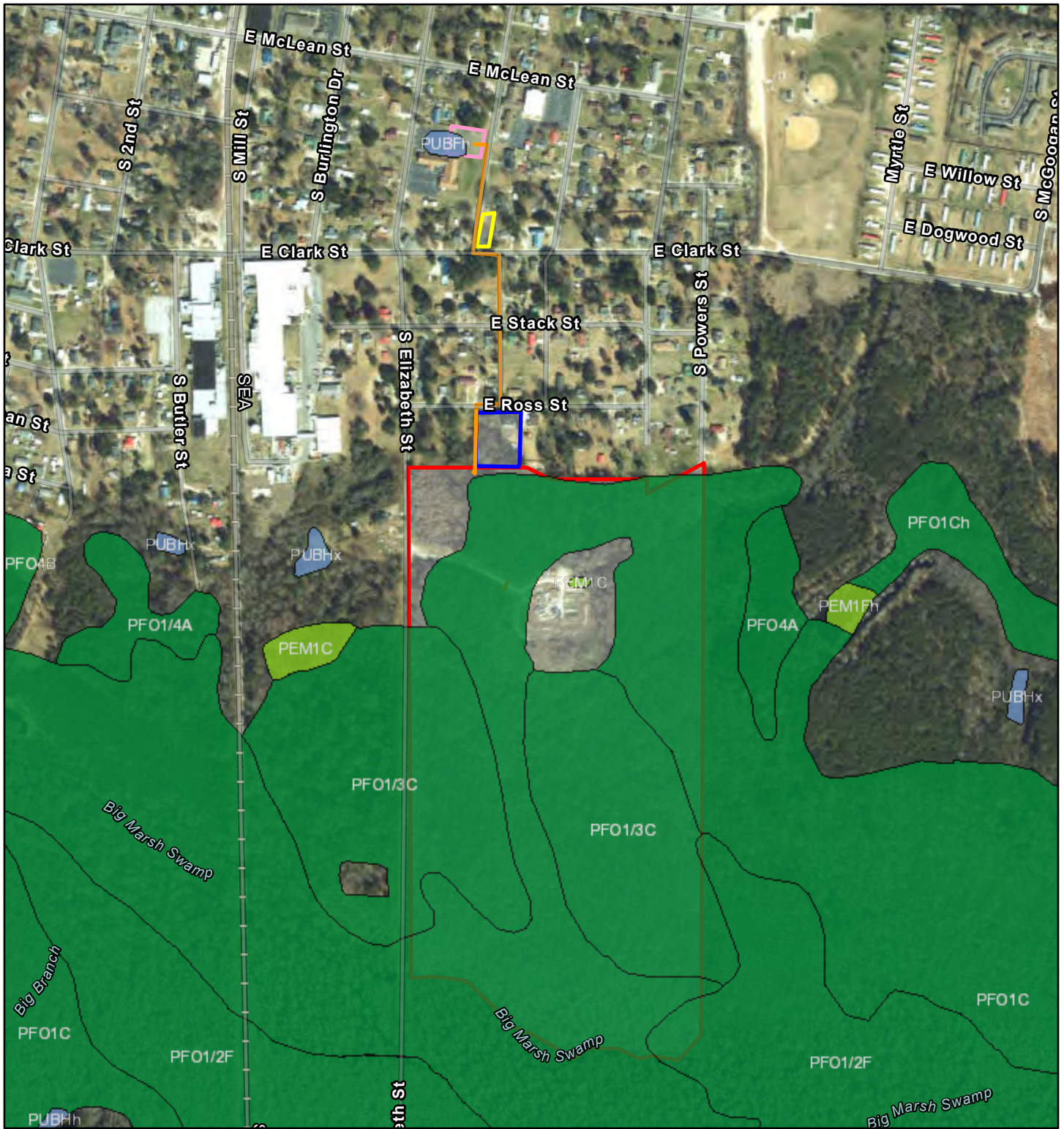
- St. Pauls' Southern Project
- St. Pauls Northern Project
- Calvary Cornerstone Holiness Church
- 401 East Clark Street
- 400 East Ross Street
- St. Pauls' WWTP



Esri Community Maps Contributors, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

**USFWS National Wetlands Inventory Maps  
(showing Big Marsh Swamp and USFWS  
confirmation no PUBFh wetland present at  
Parcel 1 - Calvary Cornerstone Holiness  
Church)**

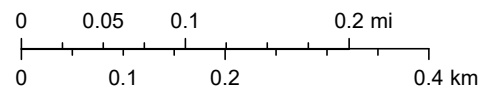
# St. Pauls Flood Improvements - NWI Map



June 8, 2023

1:9,028

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| <b>Wetlands</b>                   | Other                               |
| Estuarine and Marine Deepwater    | Riverine                            |
| Estuarine and Marine Wetland      | St. Pauls' Southern Project         |
| Freshwater Emergent Wetland       | St. Pauls Northern Project          |
| Freshwater Forested/Shrub Wetland | Calvary Cornerstone Holiness Church |
| Freshwater Pond                   | 401 East Clark Street               |
| Lake                              | 400 East Ross Street                |
|                                   | St. Pauls' WWTP                     |



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov, NC CGIA, Maxar, Esri Community Maps Contributors, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA





July 18, 2022

**Wetlands**

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Other
- Freshwater Pond
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## Gievers, Andrea

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**From:** Hunt, Gary <Gary\_Hunt@fws.gov>  
**Sent:** Thursday, March 23, 2023 11:27 AM  
**To:** Gievers, Andrea  
**Subject:** Re: [EXTERNAL] St. Pauls Flood Improvement - NWI Map inconsistency

**CAUTION:** External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

TO: Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
845/682-1700

RE: Analysis of wetland features at South Johnson Street, East Clark Street, Elizabeth Street; and Calvary Cornerstone Holiness Church, Johnson Street, Parcel ID 381404009.

After reviewing current available aerial imagery and your investigation of the above-mentioned parcel, it is clear that the wetland feature (Coded PUBFh) is no longer present.

The U.S. Fish & Wildlife Service National Wetlands Inventory has been collecting and maintaining wetlands data for more than forty years. Due to budget and manpower limitations, some areas originally mapped in the 1970's and 1980's never got updated. Therefore, as in this case, features that once existed when the original data was collected may be altered or in some cases gone all together. This is a common issue with the database, especially in areas of rapid growth or change.

The data for this area was collected in 1983, and has not been updated.

It should also be noted that the National Wetlands Inventory (NWI) is an inventorying and classifying agency, which *only* provides reconnaissance-level wetland maps and information. The National Wetlands Inventory is not a regulatory agency. Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. Entities should not rely solely on this inventory for current wetland status. Modern aerial imagery and on-the-ground investigations may supersede data appearing on the online NWI Wetlands Mapper. For Federally-based jurisdictional determinations, the U.S. Army Corps of Engineers should be consulted.

Feel free to call or email if you have any further questions or concerns.

Sincerely,  
*Gary H Hunt*  
*National Wetlands Inventory Coordinator*  
*Ecological Services*  
*U.S. Fish & Wildlife Service*  
*500 Gold Ave. SW Room 6056*  
*Albuquerque, NM 87102*  
*505-248-6776 (office)*  
*505-248-6922 (fax)*  
[gary\\_hunt@fws.gov](mailto:gary_hunt@fws.gov)

---

**From:** Gievers, Andrea <andrea.l.gievers@rebuild.nc.gov>  
**Sent:** Tuesday, March 21, 2023 11:25 AM  
**To:** Hunt, Gary <Gary\_Hunt@fws.gov>  
**Subject:** [EXTERNAL] St. Pauls Flood Improvement - NWI Map inconsistency

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hello:

The North Carolina Office of Recovery and Resiliency (NCORR), as a recipient of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds from the United States Department of Housing and Urban Development (HUD), is considering funding this Infrastructure Recovery Program project, St. Pauls Flood Improvement. The proposed project location is at South Johnson Street, East Clark Street, Elizabeth Street; and Calvary Cornerstone Holiness Church, Johnson Street, Parcel ID 381404009; 400 East Ross Street, St. Pauls, NC 28384, Parcel ID 38160204101; 401 East Clark Street, St. Pauls, NC 28384, Parcel ID 38140401401; and Town of St. Pauls, Elizabeth Street, Parcel ID 30890981900, Robeson County, NC 28364. During the Hurricane Matthew storm event, the Town of Saint Pauls experienced widespread flood damage, especially in areas surrounding South Johnson and East Clark Streets, causing residents in these areas to be stranded and in need of assistance by emergency responders. The Town proposes a system of stormwater improvements that will carry future stormwater events south of these residential areas and connect with the Town’s stormwater processing infrastructure.

Per HUD regulations at 24 CFR 55.2(b)(11), I am reaching out to you regarding an NWI-mapped wetland that is no longer wetland. The project starts at one parcel with NWI-mapped wetland which is currently a church parking lot and lawn with a catch basin, see attached and below. I have asked USACE Gary Beecher who sent me the Lidar map if he could confirm for me that it is no longer a wetland. Mr. Beecher is working on the PCN submittal for the Big Marsh Swamp portion of the project. *Is it possible to get a sign-off from USFWS that this is no longer a wetland?* Please feel free to contact me if you have any questions. Thank you so much!





1: S. Johnson Facing West



5: South Johnson Street Catch Basin Facing West

Sincerely,

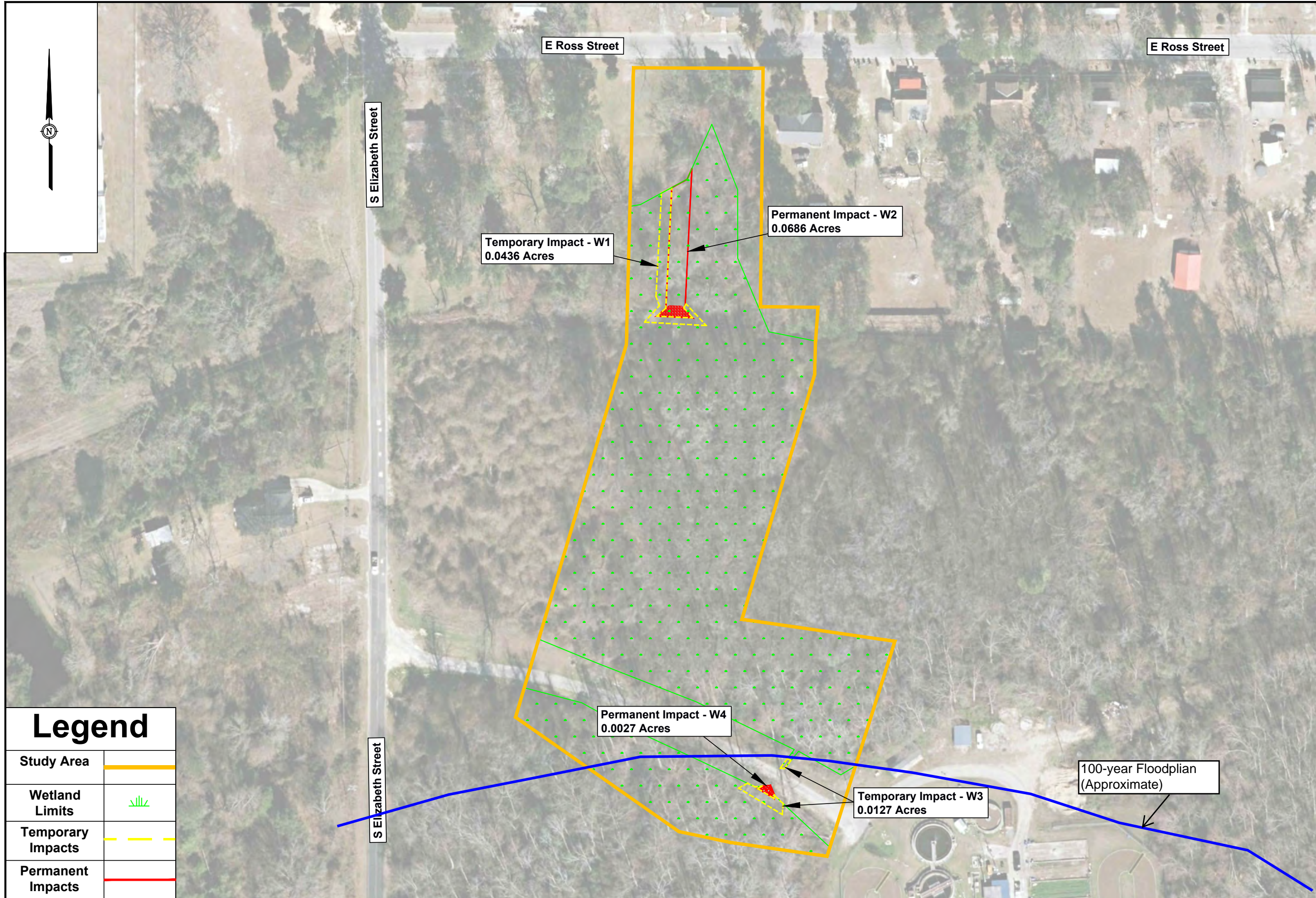
Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

**FEMA FIRMettes and NFIP Community  
Status Book**



P:\2021\21-04016-STPAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DESIGN\PERMITS\404-40\IPCN\IMPACTS MAP\_2\_7\_2023.DWG PLOT DATE 2/8/2023 10:02 AM ALEX LOWDERMILK



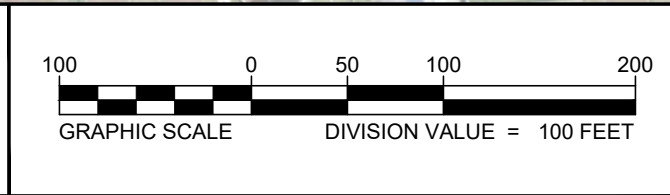
Impacts Table	
Temporary Impact - W1 (Wetland A)	0.0436 Acres
Permanent Impact - W2 (Wetland A)	0.0686 Acres
Temporary Impact - W3 (Wetland A)	0.0127 Acres
Permanent Impact - W4 (Wetland A)	0.0027 Acres

Legend	
Study Area	
Wetland Limits	
Temporary Impacts	
Permanent Impacts	

1240 19th Street Lane NW  
Hickory, NC 28601  
828.328.2024  
NC Firm License # C-0459  
mcgillassociates.com

DATE 2/8/2023	PROJECT # 21.04018
OFFICE MANAGER DC	DESIGNER AL
PROJECT MANAGER DS	REVIEWER JS

ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

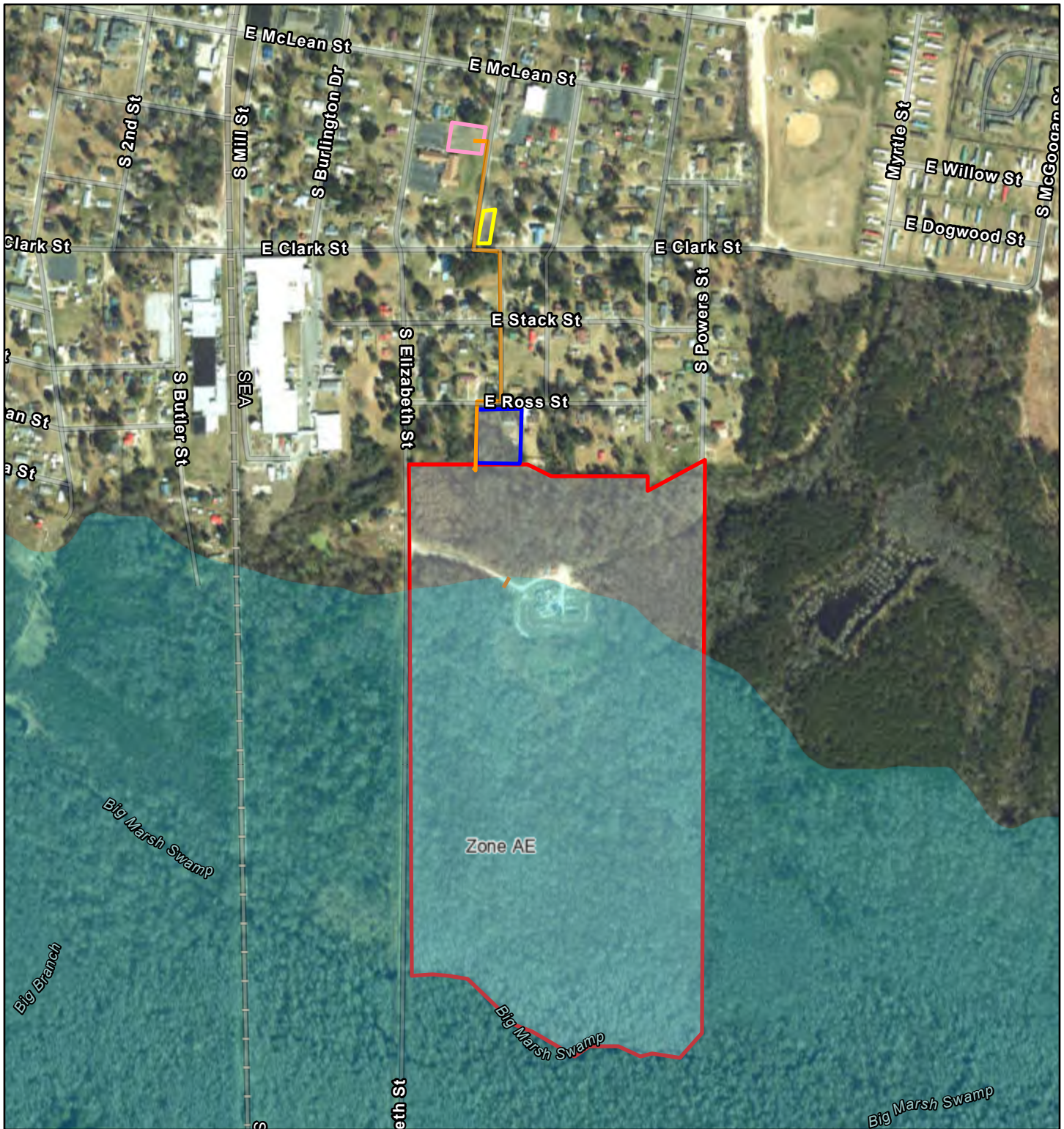


IMPACTS MAP

FIGURE  
**1**



# St. Pauls Flood Improvements - FEMA FIRM

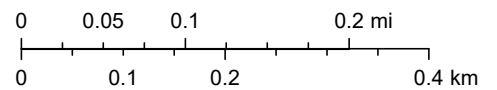


June 8, 2023

1:9,028

## Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard



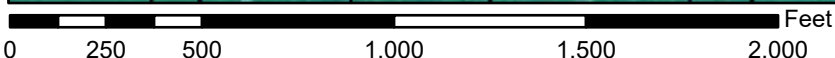
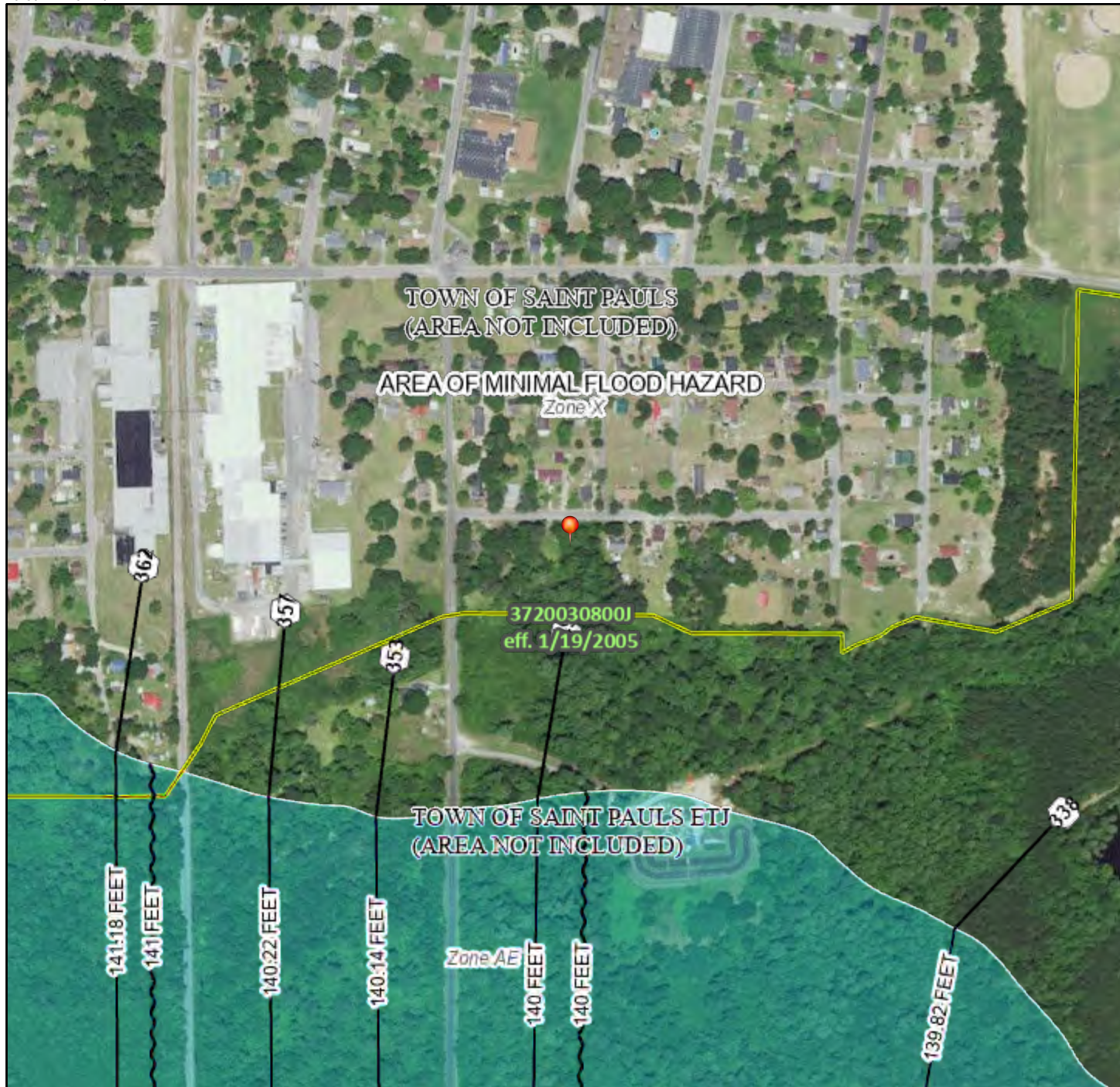
NC CGIA, Maxar, Esri Community Maps Contributors, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



# National Flood Hazard Layer FIRMMette



78°58'24"W 34°48'14"N



1:6,000

78°57'46"W 34°47'45"N

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                                    |  |   |
|------------------------------------|--|---|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br>Zone A, V, A99  |
|                                    |  | With BFE or Depth Zone AE, AO, AH, VE, AR   |
|                                    |  | Regulatory Floodway   |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard Zone X  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. Zone X  |
|                                    |  | Area with Flood Risk due to Levee Zone D  |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard Zone X   |
|                                    |  | Effective LOMRs   |
| <b>GENERAL STRUCTURES</b>          |  | Area of Undetermined Flood Hazard Zone D  |
|                                    |  | Channel, Culvert, or Storm Sewer  |
| <b>OTHER FEATURES</b>              |  | Levee, Dike, or Floodwall   |
|                                    |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation   |
| <b>MAP PANELS</b>                  |  | 17.5  |
|                                    |  | Coastal Transect  |
|                                    |  | Base Flood Elevation Line (BFE)   |
|                                    |  | Limit of Study  |
|                                    |  | Jurisdiction Boundary   |
|                                    |  | Coastal Transect Baseline   |
|                                    |  | Profile Baseline  |
|                                    |  | Hydrographic Feature  |
|                                    |  | Digital Data Available  |
|                                    |  | No Digital Data Available   |
|                                    |  | Unmapped  |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/8/2023 at 10:06 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

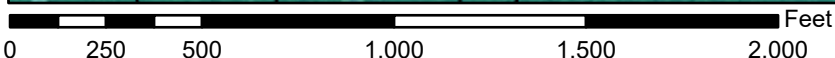
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



# National Flood Hazard Layer FIRMMette



78°58'18"W 34°47'59"N



1:6,000 78°57'41"W 34°47'30"N

Basemap Imagery Source: USGS National Map 2023

### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/18/2023 at 2:38 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



# Community Status Book Report

## Communities Participating in the National Flood Program



NORTH CAROLINA

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal	CRS Entry Date	Curr Eff Date	Curr Class	% Disc SFHA	% Disc Non SFHA
370091K	PINETOPS, TOWN OF	EDGEcombe COUNTY	01/09/74	03/28/80	06/02/15	03/28/80	No					
370160F	PINEVILLE, TOWN OF	MECKLENBURG COUNTY	06/21/74	03/18/87	09/02/15	03/18/87	No	10/01/91	10/01/20	5	25%	10%
370599#	PINK HILL, TOWN OF	LENOIR COUNTY		07/02/04	(NSFHA)	01/26/12	No					
370372L	PITT COUNTY *	PITT COUNTY	06/30/78	01/06/83	06/19/20	01/06/83	No	10/01/02	10/01/18	B	10%	05%
370420K	PITTSBORO, TOWN OF	CHATHAM COUNTY	10/20/78	02/02/07	11/17/17	02/02/07	No					
370618#	PLEASANT GARDEN, TOWN OF	GUILFORD COUNTY		06/18/07	03/16/09	03/17/09	No					
370249#	PLYMOUTH, TOWN OF	WASHINGTON COUNTY	05/20/77	08/19/85	02/04/09	08/19/85	No	10/01/94	10/01/99	B	10%	05%
370194#	POLK COUNTY*	POLK COUNTY	11/29/74	01/01/87	10/02/08	01/01/87	No					
370286#	POLKTON, TOWN OF	ANSON COUNTY	02/10/78	09/03/08	10/16/08	08/20/08	No					
370634#	POLKVILLE, TOWN OF	CLEVELAND COUNTY		02/20/08	02/20/08	03/22/12	No					
370142K	POLLOCKSVILLE, TOWN OF	JONES COUNTY	03/15/74	09/04/86	06/15/22	09/04/86	No					
370485J	PRINCETON, TOWN OF	JOHNSTON COUNTY		10/20/00	06/20/18	02/14/97	No					
370318K	PRINCEVILLE, TOWN OF	EDGEcombe COUNTY	07/25/75	04/15/80	06/02/15	04/15/80	No					
370635#	PROCTORVILLE, TOWN OF	ROBESON COUNTY		01/19/05	01/05/07	10/24/12	No					
370132#	RAEFORD, CITY OF	HOKE COUNTY	12/20/74	06/03/86	12/18/07	06/03/86	No					
370243N	RALEIGH, CITY OF	WAKE COUNTY	06/28/74	08/15/78	07/19/22	08/15/78	No	10/01/91	10/01/14	10		0%
370198#	RAMSEUR, TOWN OF	RANDOLPH COUNTY	02/15/74	03/01/87	03/16/09	03/01/87	No					
370199#	RANDLEMAN, CITY OF	RANDOLPH COUNTY	11/22/74	07/01/87	03/16/09	07/01/87	No					
370195C	RANDOLPH COUNTY *	RANDOLPH COUNTY	01/03/75	07/16/81	11/17/17	07/16/81	No					
370324#	RANLO, TOWN OF	GASTON COUNTY	06/27/75	03/03/03	11/04/09	03/03/03	No					
370079#	RED CROSS, TOWN OF	STANLY COUNTY		09/03/08	06/16/09	07/29/10	No					
370516#	RED OAK, TOWN OF	NASH COUNTY		01/20/82	06/18/13	01/22/99	No					
370204#	RED SPRINGS, TOWN OF	ROBESON COUNTY	04/01/77	05/01/87	01/05/07	05/01/87	No					
370209#	REIDSVILLE, CITY OF	ROCKINGHAM COUNTY	08/01/75	09/29/78	09/28/07	09/29/78	No					
370643#	RENNERT, TOWN OF	ROBESON COUNTY		01/19/05	01/05/07	06/23/11	No					
370041#	RHODHISS, TOWN OF	BURKE COUNTY/CALDWELL COUNTY	06/21/74	07/03/86	07/07/09	07/03/86	No					
370176#	RICH SQUARE, TOWN OF	NORTHAMPTON COUNTY		02/04/09	(NSFHA)	04/25/19	No					
370511#	RICHFIELD, TOWN OF	STANLY COUNTY		09/21/00	06/16/09(M)	01/31/12	No					
370341K	RICHLANDS, TOWN OF	ONSLow COUNTY	07/11/75	07/03/86	06/19/20	07/03/86	No					
370348#	RICHMOND COUNTY*	RICHMOND COUNTY	07/28/78	09/06/89	07/07/14	09/06/89	No					
370432K	RIVER BEND, TOWN OF	CRAVEN COUNTY	05/14/82	08/19/86	06/15/22	08/19/86	No	05/01/10	05/01/10	B	10%	05%
370117#	ROANOKE RAPIDS, CITY OF	HALIFAX COUNTY	03/08/74	04/17/78	02/04/09	04/17/78	No					
370166#	ROBBINS, TOWN OF	MOORE COUNTY	11/22/74	07/03/86	01/02/08	07/03/86	No					
370106#	ROBBINSVILLE, TOWN OF	GRAHAM COUNTY	06/14/74	12/01/89	04/19/10	12/01/89	No					
370156#	ROBERSONVILLE, TOWN OF	MARTIN COUNTY	06/07/74	07/01/87	02/04/09	07/01/87	No					
370202K	ROBESON COUNTY *	ROBESON COUNTY	07/28/78	02/17/89	12/06/19	02/17/89	No					
370350#	ROCKINGHAM COUNTY*	ROCKINGHAM COUNTY	06/16/78	05/15/91	01/02/09	05/15/91	No					
370201#	ROCKINGHAM, CITY OF	RICHMOND COUNTY	06/11/76	09/06/89	09/03/08	09/06/89	No					
370214#	ROCKWELL, TOWN OF	ROWAN COUNTY	03/08/74	05/15/78	06/16/09	05/15/78	No					
370092#	ROCKY MOUNT, CITY OF	EDGEcombe COUNTY/NASH COUNTY	03/01/74	05/01/78	06/18/13	05/01/78	No	10/01/92	10/01/19	7	15%	05%
	THE TOWN OF BATTLEBORO (370088), EDGEcombe COUNTY, WAS MERGED INTO THE CITY OF ROCKY MOUNT EFFECTIVE 7-1-96.											
370468K	ROLESVILLE, TOWN OF	WAKE COUNTY		03/03/92	07/19/22	07/31/01	No					
370258#	RONDA, TOWN OF	WILKES COUNTY	09/06/74	07/03/86	12/03/09(M)	07/03/86	No					
370421#	ROPER, TOWN OF	WASHINGTON COUNTY	06/21/74	08/05/85	02/04/09	08/05/85	No	10/01/94	10/01/99	B	10%	05%
	FORMERLY UNDER WASHINGTON COUNTY											
370375#	ROSE HILL, TOWN OF	DUPLIN COUNTY		02/16/06	02/16/07	07/17/06	No					
375358#	ROSMAN, TOWN OF	TRANSYLVANIA COUNTY	06/03/72	06/02/72	04/19/10	06/02/72	No					
370351B	ROWAN COUNTY *	ROWAN COUNTY	07/28/78	11/01/79	11/16/18	11/01/79	No					
370347K	ROXBORO, CITY OF	PERSON COUNTY	01/13/78	09/14/90	12/06/19	03/25/91	No					
370605#	ROXBEL, TOWN OF	BERTIE COUNTY		02/04/09	08/03/09	02/04/09	No					

**USACE NWP 18 Permit Verification and  
Jurisdictional Determination with Site Plans  
showing Wetland Impacts, Pre-Construction  
Notification (PCN) Form, and JD Request**



U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

Action Id. SAW-2023-00404 County: Robeson County U.S.G.S. Quad: Saint Pauls

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: Town of St. Pauls  
Attn: Mayor Elbert Gibson

Address: 210 West Blue Street  
St. Pauls, NC

Telephone Number: (910) 865-5165

E-mail Address: [debra@stpaulsnc.gov](mailto:debra@stpaulsnc.gov)

Size (acres)	<u>4.03</u>	Nearest Town	<u>St. Pauls, NC</u>
Nearest Waterway	<u>Big Branch</u>	River Basin	<u>Lower Pee Dee</u>
USGS HUC	<u>03040203</u>	Coordinates Latitude:	<u>34.7989</u>
		Longitude:	<u>-78.9681</u>

Location description: This project will take place in the vicinity of South Johnson Street, East Clark Street and East Ross Street in the Town of St. Pauls, Robeson County, NC (Parcel ID: 030890981900).

Description of projects area and activity: A NWP 18 will be used to permanently impact 0.072-acres of 404 wetlands for the use in flood and drainage improvements for the Town of St. Pauls.

Applicable Law:  Section 404 (Clean Water Act, 33 USC 1344);  
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number and/or Nationwide Permit Number: 18  
**SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS**

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated February 13, 2023 & March 17, 2023 Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.**

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's

expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management in Morehead City, NC, at (252) 808-2808.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Gary Beecher at (910) 251-4694 or Gary.H.Beecher@usace.army.mil.**

Corps Regulatory Official: \_\_\_\_\_ Date: **April 11, 2023**  
Expiration Date of Verification: **NWP 18 expires on March 14, 2026**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>

Copy furnished via e-mail to:

**Consultant:**

**Jon Swaim**  
**McGill Associates, PA**  
**(828) 328-2024**  
**[Jon.swaim@mcgillassociates.com](mailto:Jon.swaim@mcgillassociates.com)**



U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

Action Id. SAW-2023-00404

County: Robeson County

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Permittee: Town of St. Pauls  
Attn: Mayor Elbert Gibson

Address: 210 West Blue Street  
St. Pauls, NC

Telephone Number: (910) 865-5165

E-mail Address: [debra@stpaulsnc.gov](mailto:debra@stpaulsnc.gov)

Size (acres) 4.03  
Nearest Waterway Big Branch  
USGS HUC 03040203

Nearest Town St. Pauls, NC  
River Basin Lower Pee Dee  
Coordinates Latitude: 34.7989  
Longitude: -78.9681

Indicate Which of the Following Apply:

A. Preliminary Determination

**X** There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The waters, including wetlands, have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.

**\_** There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The waters, including wetlands, have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This

preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.

- There appear to be waters, including wetlands, on the above described property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). However, since the waters, including wetlands, have not been properly delineated, this preliminary jurisdiction determination may not be used in the permit evaluation process. Without a verified wetland delineation, this preliminary determination is merely an effective presumption of CWA/RHA jurisdiction over all of the waters, including wetlands, at the project area, which is not sufficiently accurate and reliable to support an enforceable permit decision. We recommend that you have the waters of the U.S., including wetlands, on your property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

## ***B. Approved Determination***

- There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are waters of the U.S., including wetlands, on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
  - We recommend you have the waters of the U.S., including wetlands, on your property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.
  - The waters of the U.S., including wetlands, on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, unless there is a change in law or our published regulations, may be relied upon for a period not to exceed five years from the date of this notification.
  - The waters of the U.S., including wetlands, have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on \_\_\_\_\_. Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

- The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Morehead City, NC, at (252) 808-2808 to determine their requirements.

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Gary Beecher at (910) 251-4694 or Gary.H.Beecher@usace.army.mil.**

***C. Basis For Determination: N/A. An Approved JD has not been completed.***

**D. Remarks: A desk top review was conducted on this application using information obtained from the consultant (McGill Associates, P.A.) and from Corps generated Lidar and soils Maps.**

#### **E. Attention USDA Program Participants**

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

#### **F. Appeals Information for Approved Jurisdiction Determinations (as indicated in Section B. above)**

If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers  
South Atlantic Division  
Attn: Mr. Philip A. Shannin  
Administrative Appeal Review Officer  
60 Forsyth Street SW, Floor M9  
Atlanta, Georgia 30303-8803

**AND**

**[PHILIP.A.SHANNIN@USACE.ARMY.MIL](mailto:PHILIP.A.SHANNIN@USACE.ARMY.MIL)**

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **N/A.**

**It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.**

Corps Regulatory Official: \_\_\_\_\_

Date of JD: **April 11, 2023**      Expiration Date: **PJD does not expire**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Copy Furnished via email to:

**Consultant:**

**Jon Swaim**

**McGill Associates, PA**

**(828) 328-2024**

**[Jon.swaim@mcgillassociates.com](mailto:Jon.swaim@mcgillassociates.com)**

**SPECIAL CONDITIONS**

**1. Erosion Control:** The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

**2. Work Limits:** All work authorized by this permit shall be performed in strict compliance with the attached permit plans dated February 13, 2023 & March 17, 2023, which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the U.S. Army Corps of Engineers (Corps) prior to any active construction in waters or wetlands.

**3. Temporary Impacts Restoration Measures:** Within thirty (30) days of the date of completing the authorized work, the Permittee shall remove all temporary fills in waters of the United States and restore the affected areas to pre-construction contours and elevations. The affected areas shall be re-vegetated with native, non-invasive vegetation as necessary to minimize erosion and ensure site stability.

Action ID Number: SAW-2023-00404

County: Robeson County

Permittee: Town of St. Pauls, Attn: Mayor Elbert Gibson

Project Name: Elizabeth-Johnson St Storm Drainage Improvements

Date Verification Issued: April 11, 2023

Project Manager: Gary Beecher

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
Attn: Gary Beecher

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

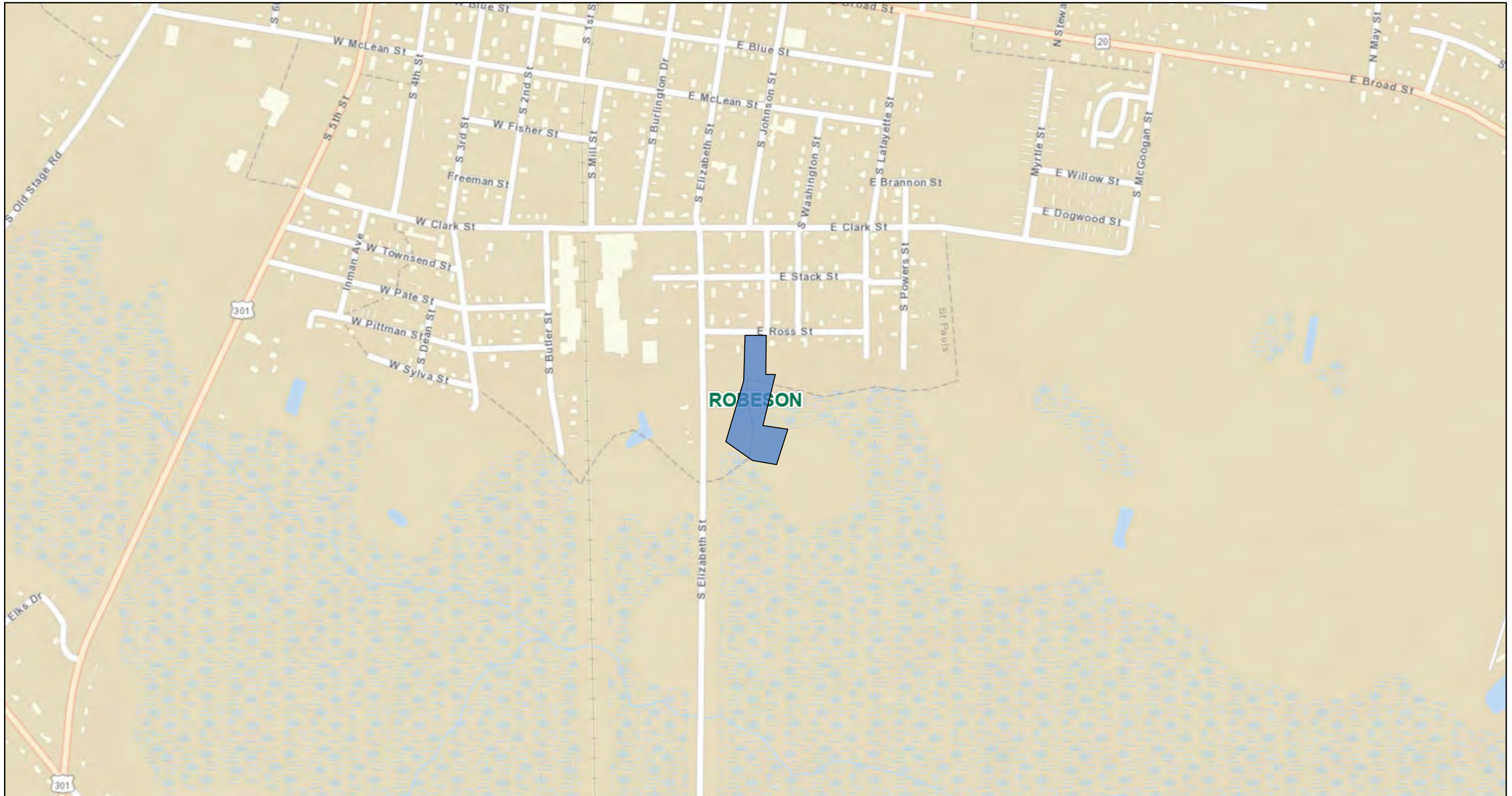
I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee



\_\_\_\_\_  
Date



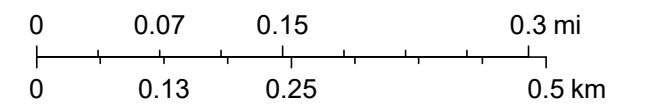
# NCHPO HPOWEB Map



2/7/2023, 11:43:49 AM

-  Study Area\_2\_6\_2023
-  Counties (outline)

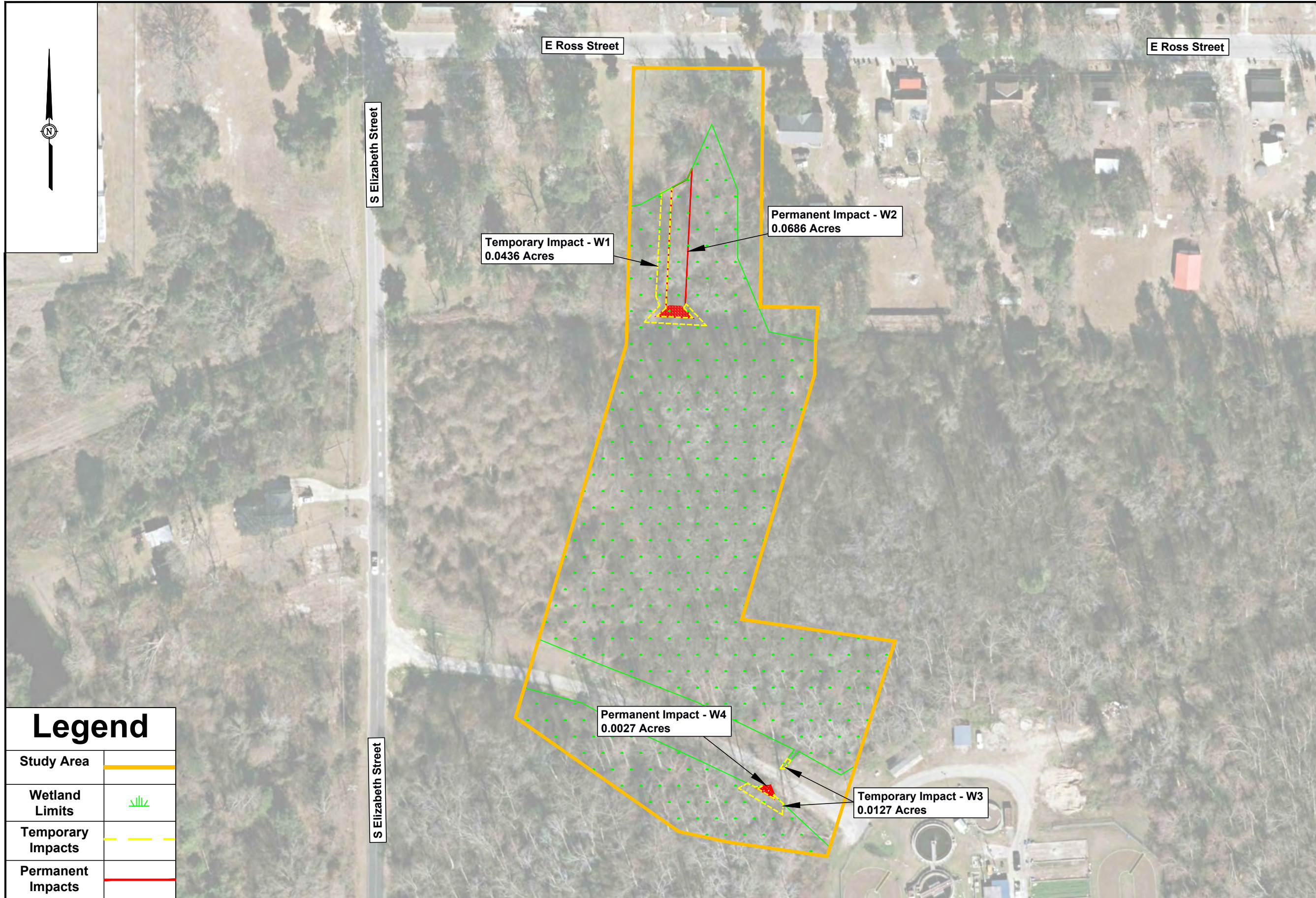
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State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, Intermap, NGA, USGS



P:\2021\21\_04016-STPAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DESIGN\PERMITS\404-40\IPCN\IMPACTS MAP\_2\_7\_2023.DWG PLOT DATE 2/8/2023 10:02 AM ALEX LOWDERMILK



Impacts Table	
Temporary Impact - W1 (Wetland A)	0.0436 Acres
Permanent Impact - W2 (Wetland A)	0.0686 Acres
Temporary Impact - W3 (Wetland A)	0.0127 Acres
Permanent Impact - W4 (Wetland A)	0.0027 Acres

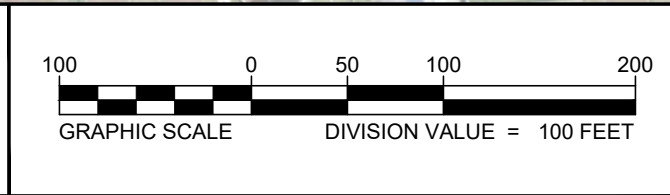
Legend	
Study Area	
Wetland Limits	
Temporary Impacts	
Permanent Impacts	



1240 19th Street Lane NW  
Hickory, NC 28601  
828.328.2024  
NC Firm License # C-0459  
mcgillassociates.com

DATE 2/8/2023	PROJECT # 21.04018
OFFICE MANAGER DC	DESIGNER AL
PROJECT MANAGER DS	REVIEWER JS

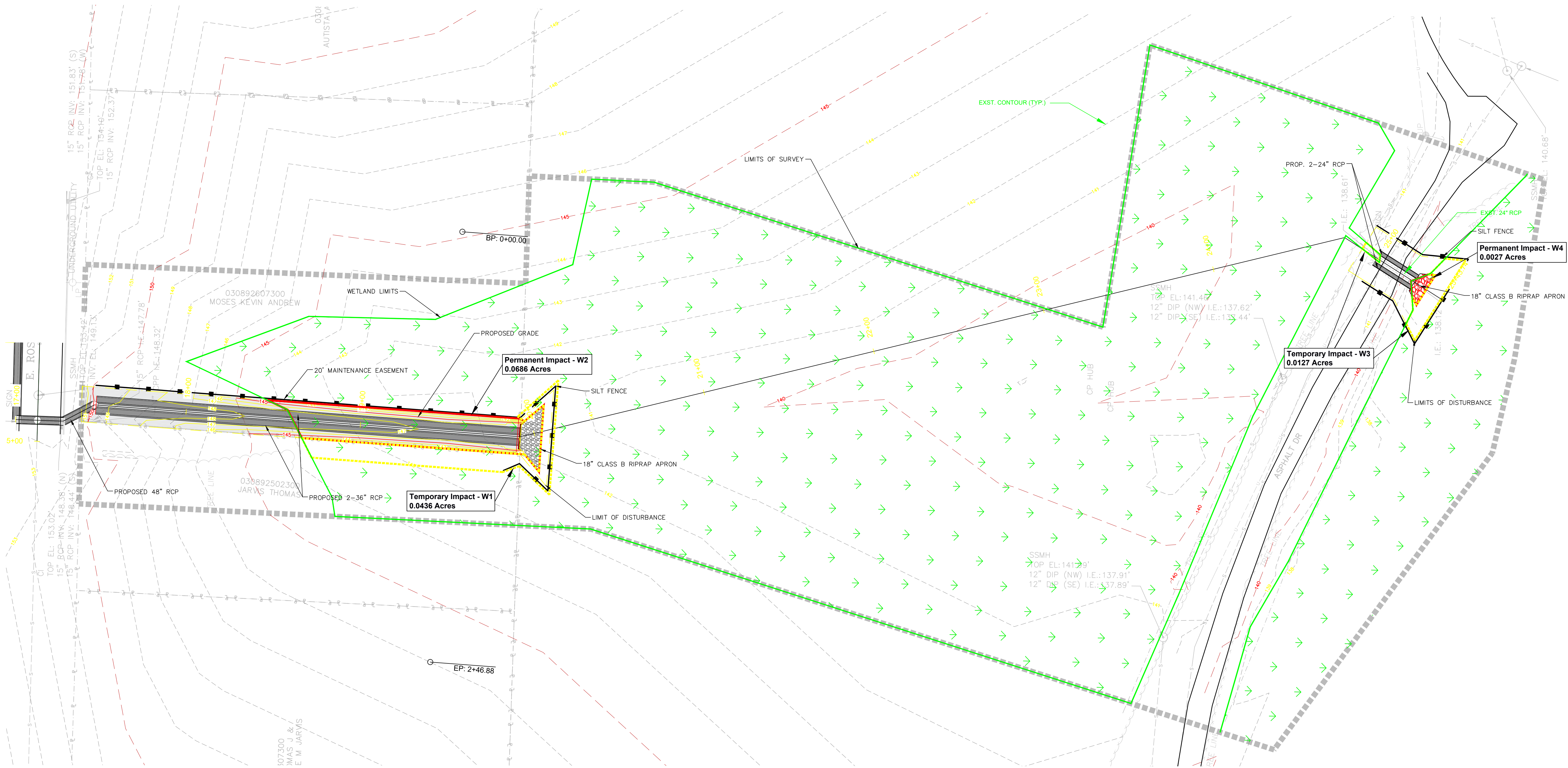
ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



IMPACTS MAP

FIGURE  
**1**





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P:\2021\104018-STPAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE IMPROVEMENTS\10 PROPOSED.DWG PLOT DATE 3/17/2023 1:51 PM JON SWAIM

2104018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

55 Broad Street  
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828.252.0575  
NC Firm License # C-0459  
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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

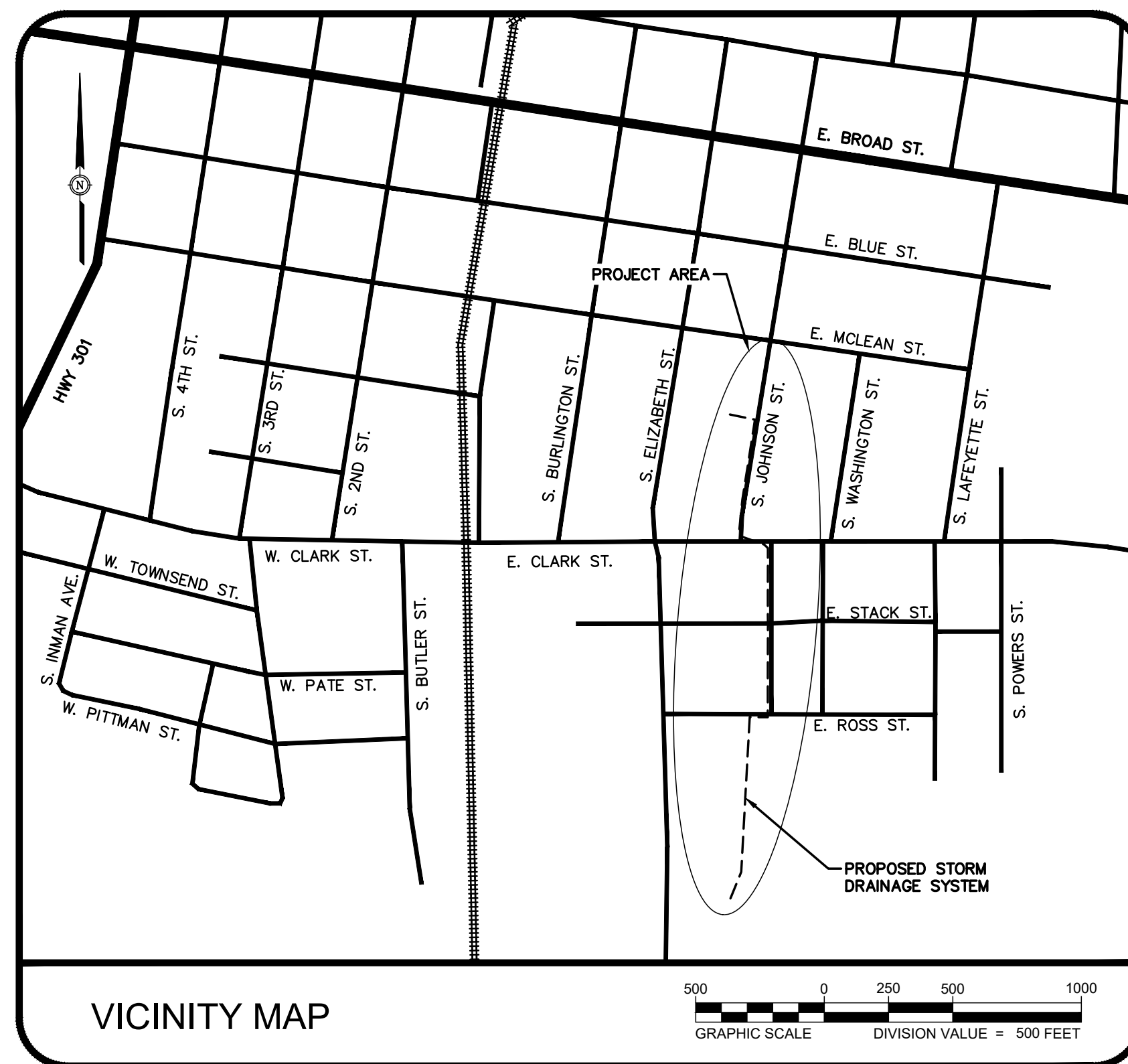
OVERVIEW OF WETLAND IMPACTS STA. 17+00-25+50		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-17**



# ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS TOWN OF ST. PAULS

## ROBESON COUNTY, NORTH CAROLINA



### SCHEDULE OF DRAWINGS

- G-01 Cover
- G-02 Notes & Legend
- G-03 NCDEQ General Permit Notes
- G-04 NCDEQ General Permit Notes
- CE-01 Existing Conditions 1 of 4
- CE-02 Existing Conditions 2 of 4
- CE-03 Existing Conditions 3 of 4
- CE-04 Existing Conditions 4 of 4
- C-10 Proposed Plan and Profile S. Johnson St. Sta. 0+00-5+50
- C-11 Proposed Plan and Profile E. Clark St. Sta. 6+00-7+50
- C-12 Proposed Plan and Profile S. Johnson St. Sta. 8+00-12+00
- C-13 Proposed Plan and Profile S. Johnson St. Sta. 12+00-15+00
- C-14 Proposed Plan and Profile E. Ross St. Sta. 15+00-16+50
- C-15 Proposed Plan and Profile Sta. 17+00-22+00
- C-16 Proposed Plan and Profile Sta. 22+00-25+50
- C-17 Overview of Wetland Impacts Sta. 17+00-25+50
- C-20 Cross Sections Sta. 17+50-20+00
- C-30 Erosion Control Details 1 of 2
- C-31 Erosion Control Detail 2 of 2
- C-32 Miscellaneous Details 1 of 2
- C-33 Miscellaneous Details 2 of 2

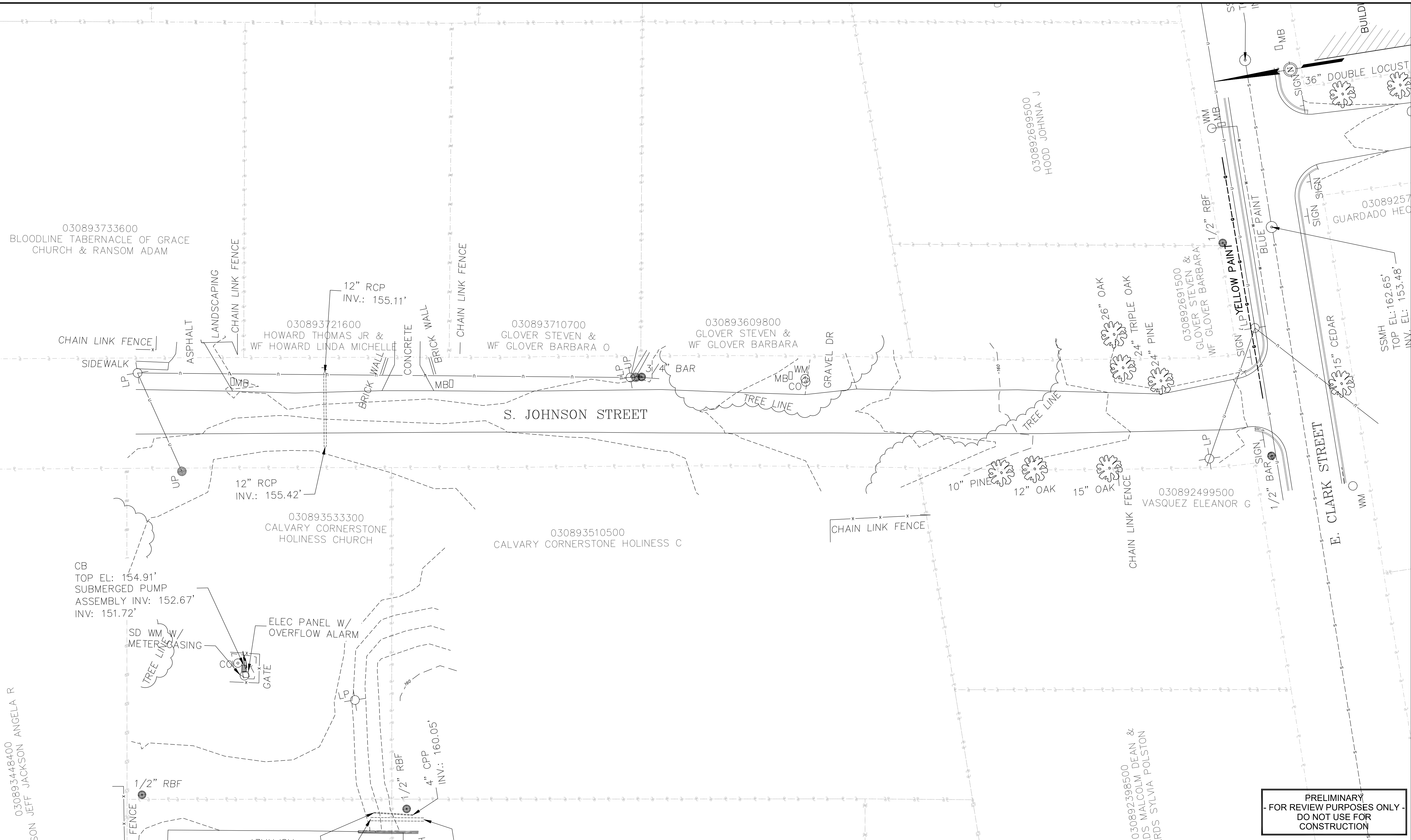


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FEBRUARY 2023

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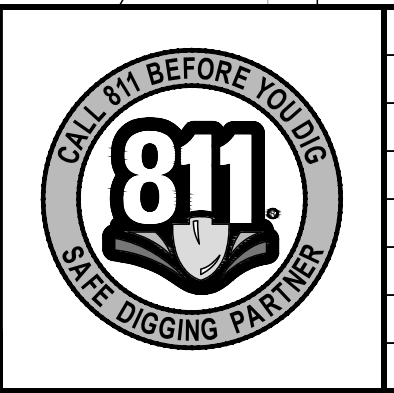


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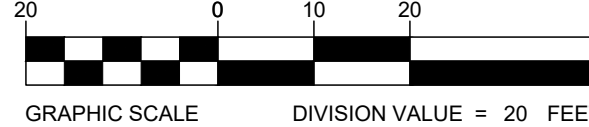
55 Broad Street  
Asheville, NC 28801  
828.252.0575  
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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

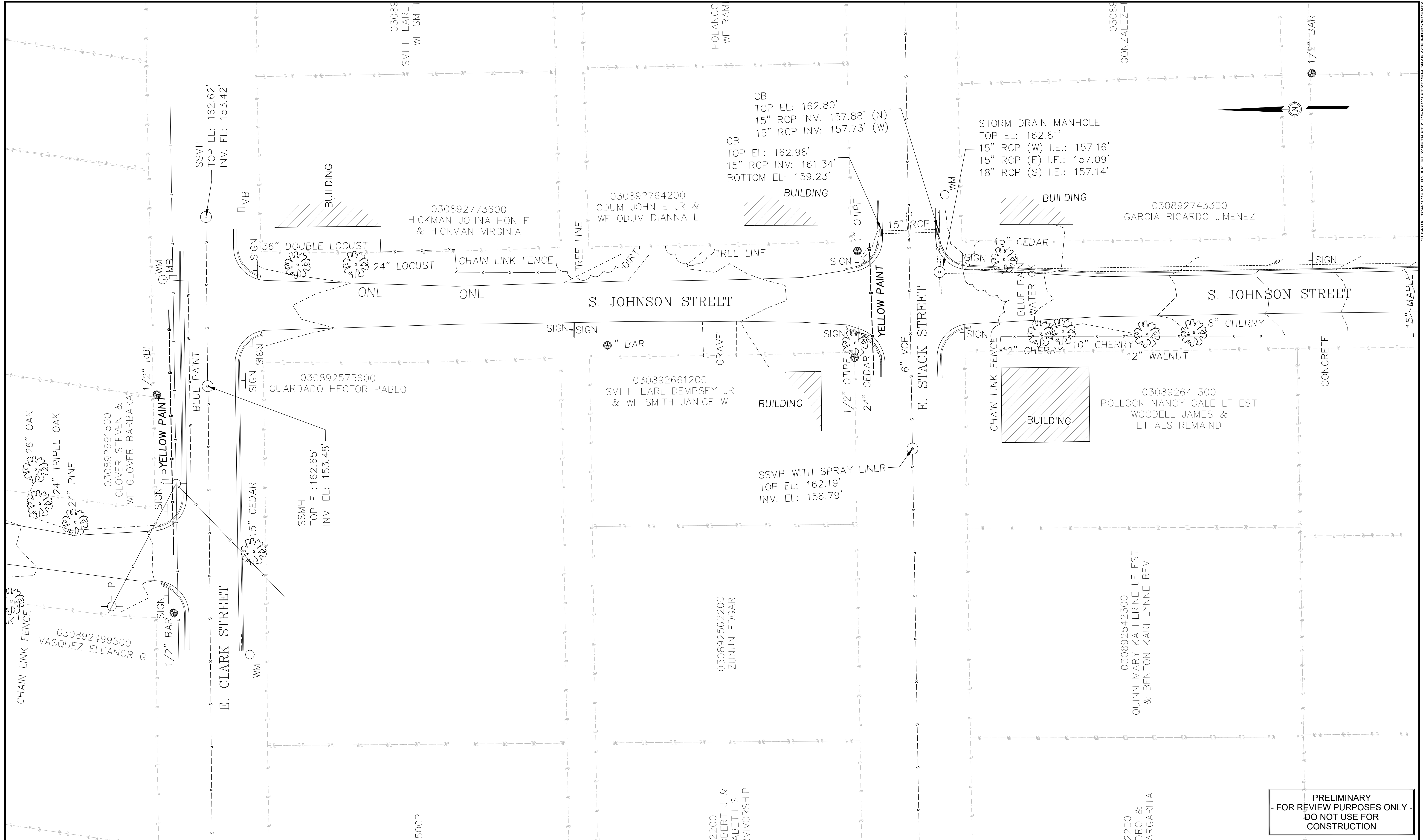
EXISTING CONDITIONS 1 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

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**CE-01**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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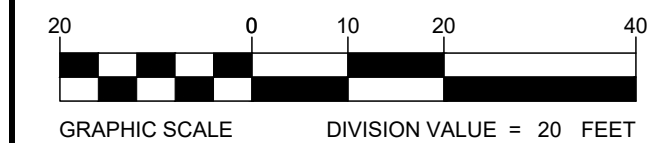
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ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



GRAPHIC SCALE DIVISION VALUE = 20 FEET

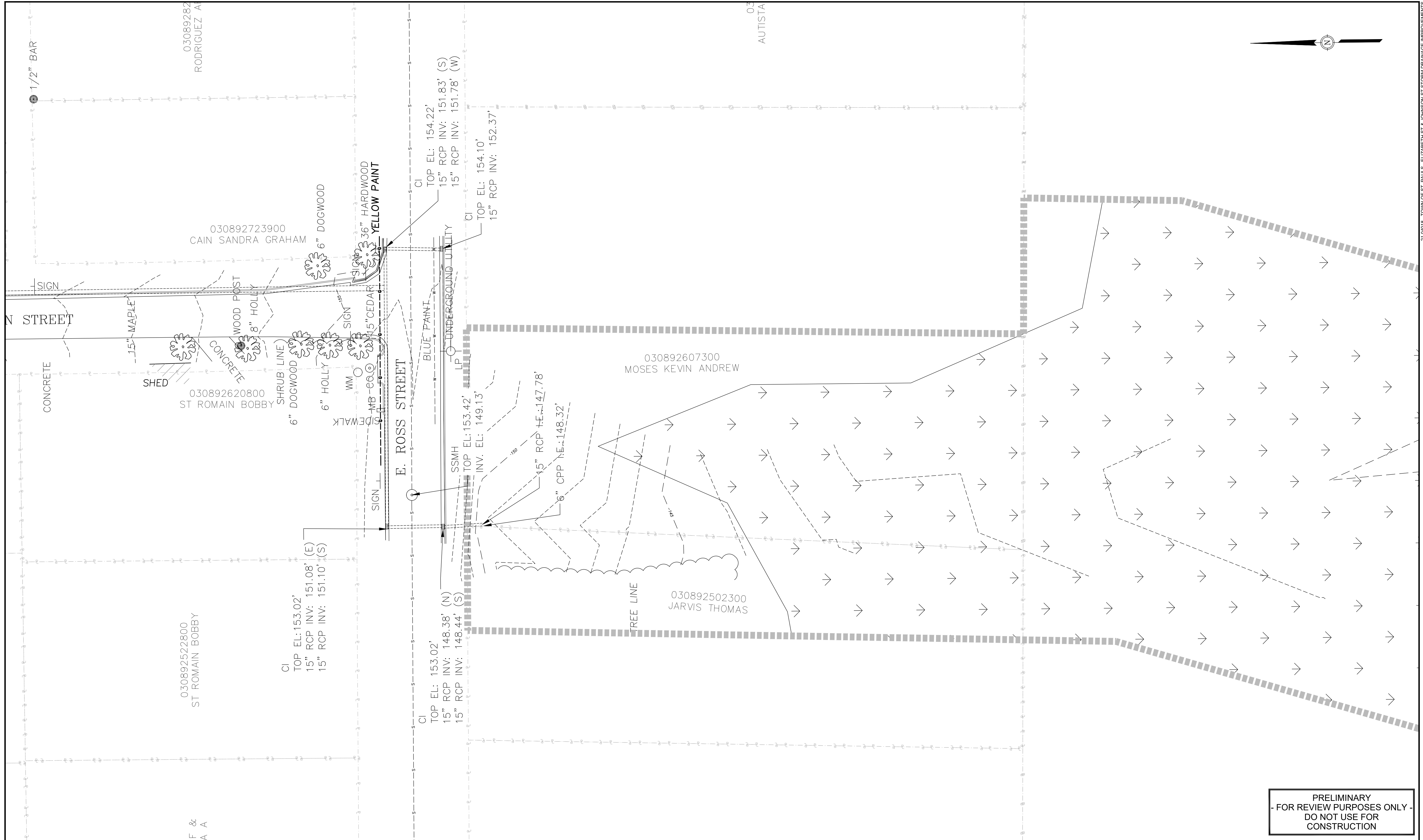
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

EXISTING CONDITIONS 2 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**CE-02**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

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STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

GRAPHIC SCALE DIVISION VALUE = 20 FEET

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

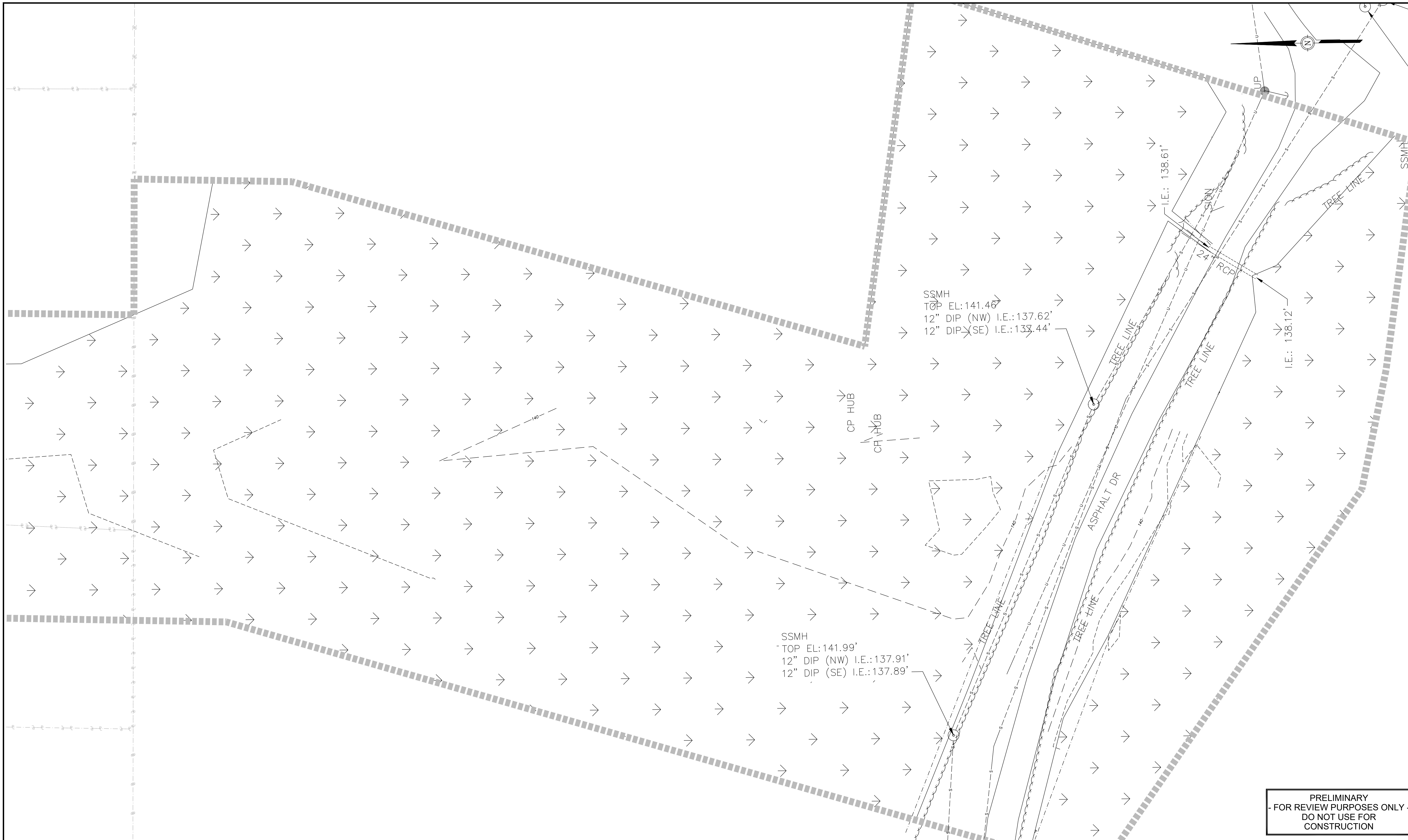
EXISTING CONDITIONS 3 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**CE-03**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

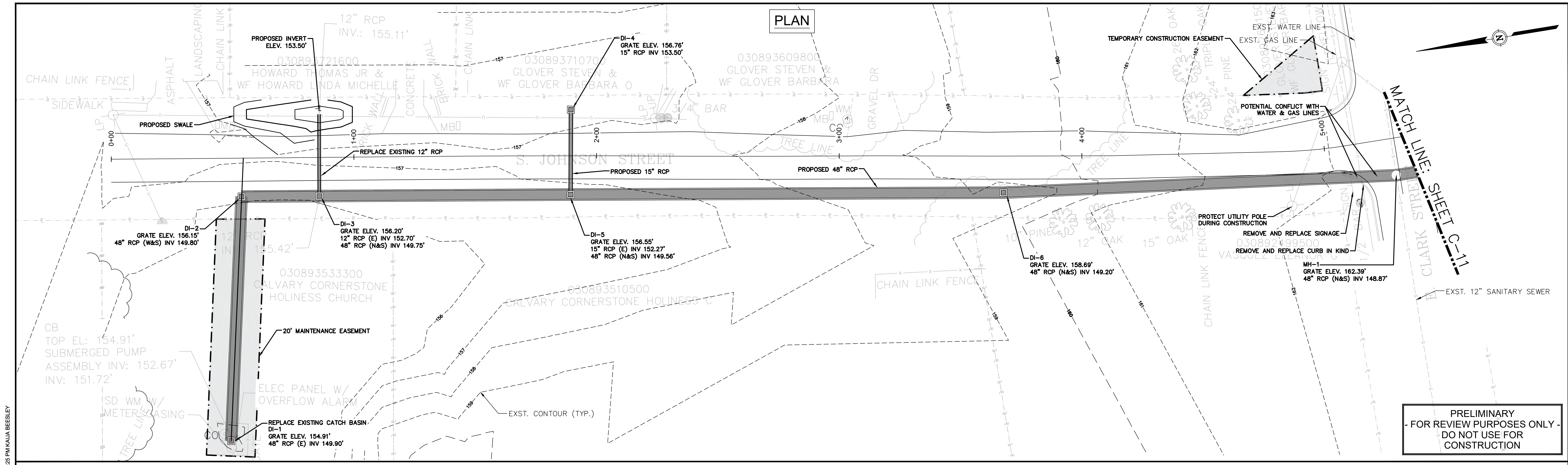
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

EXISTING CONDITIONS 4 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

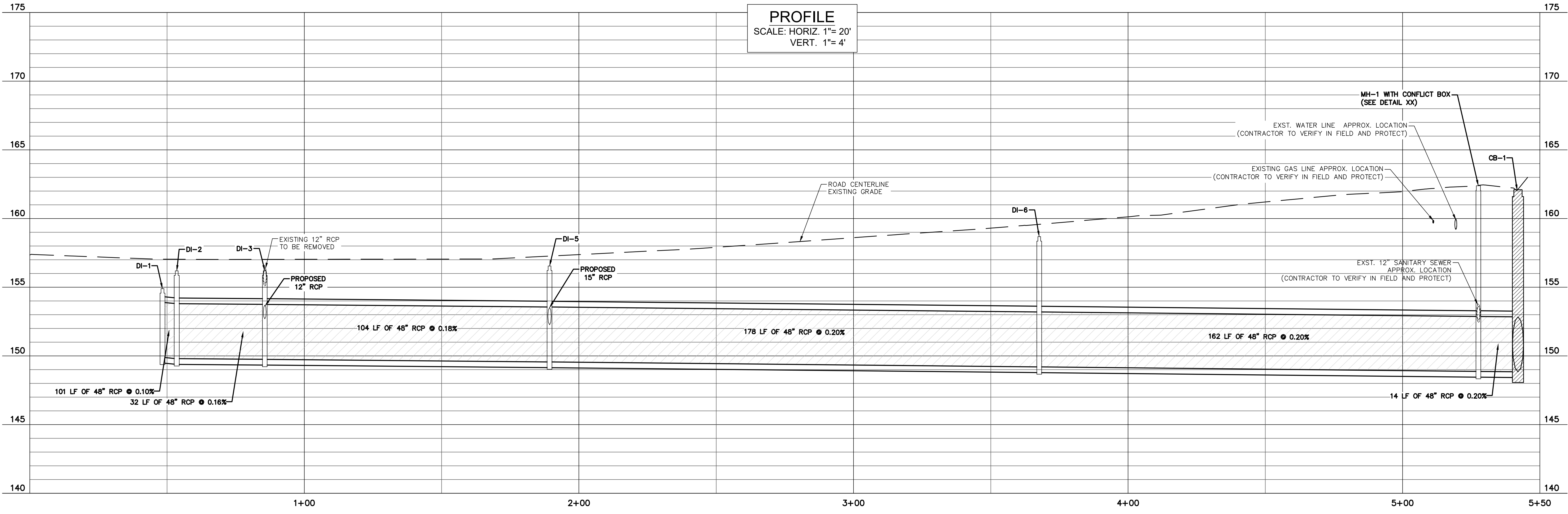
SHEET  
**CE-04**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS





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PROFILE  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'

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828.252.0575  
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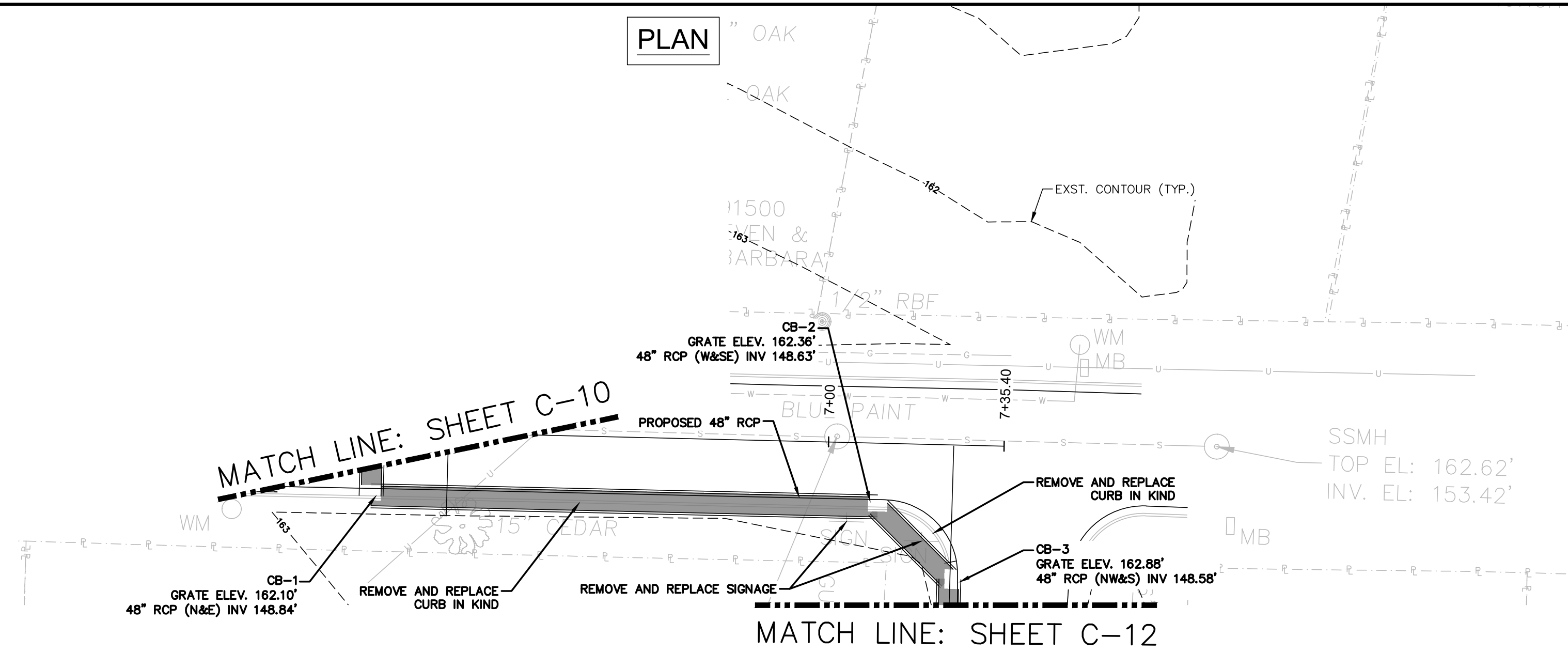
ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

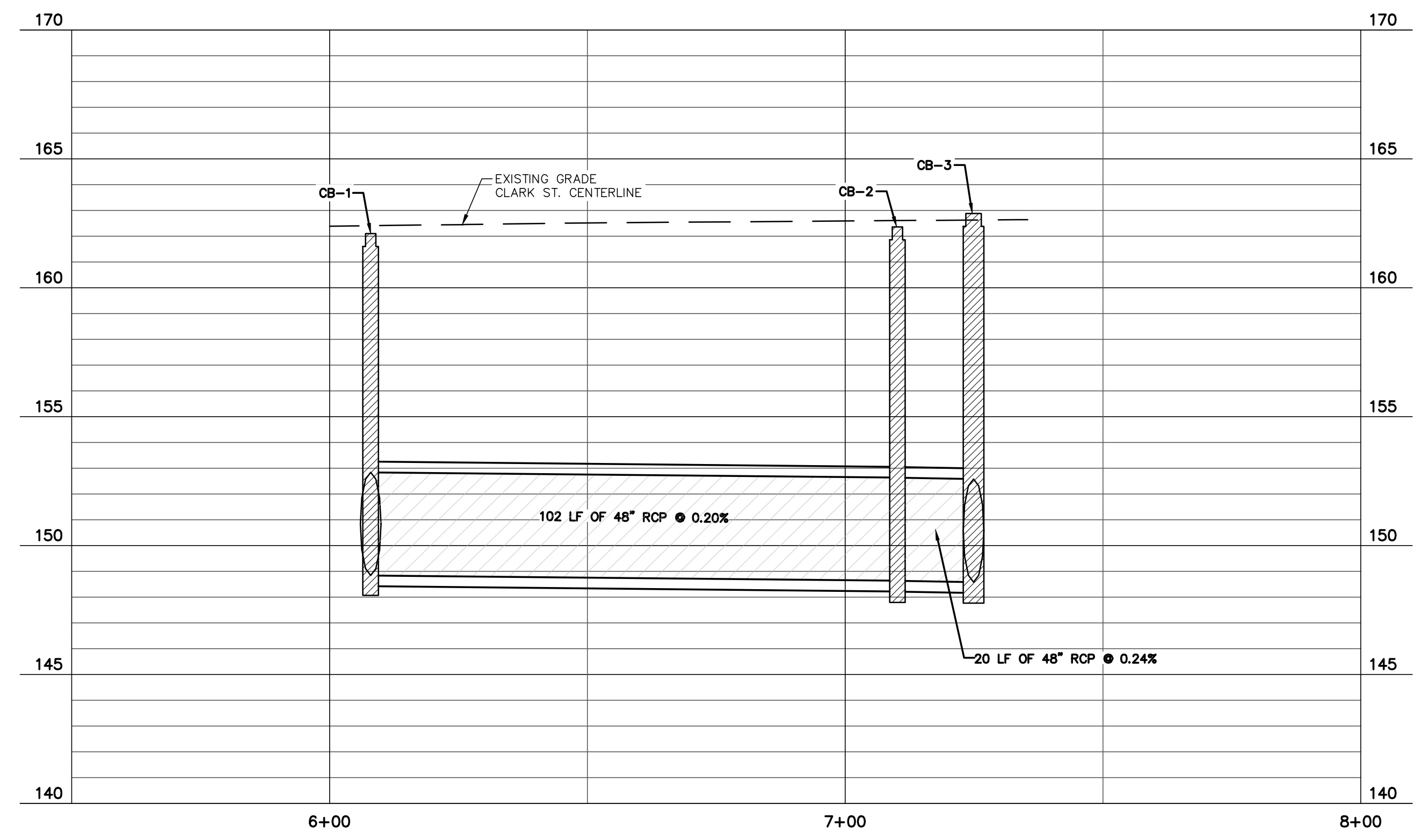
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A
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SHEET  
**C-10**





**PROFILE**  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'



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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

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NC Firm License # C-0459  
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NO.	DATE	BY	DESCRIPTION

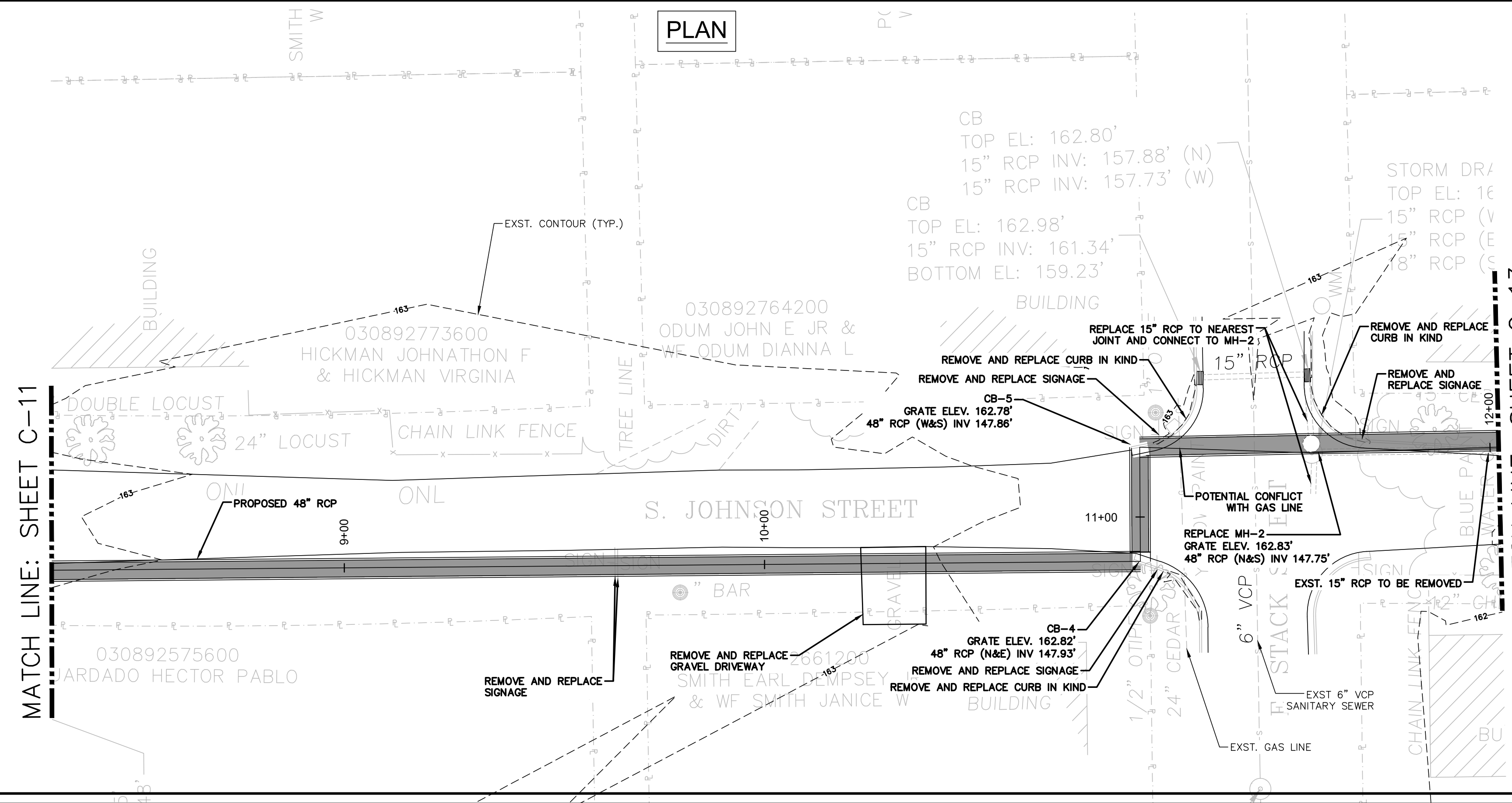
ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

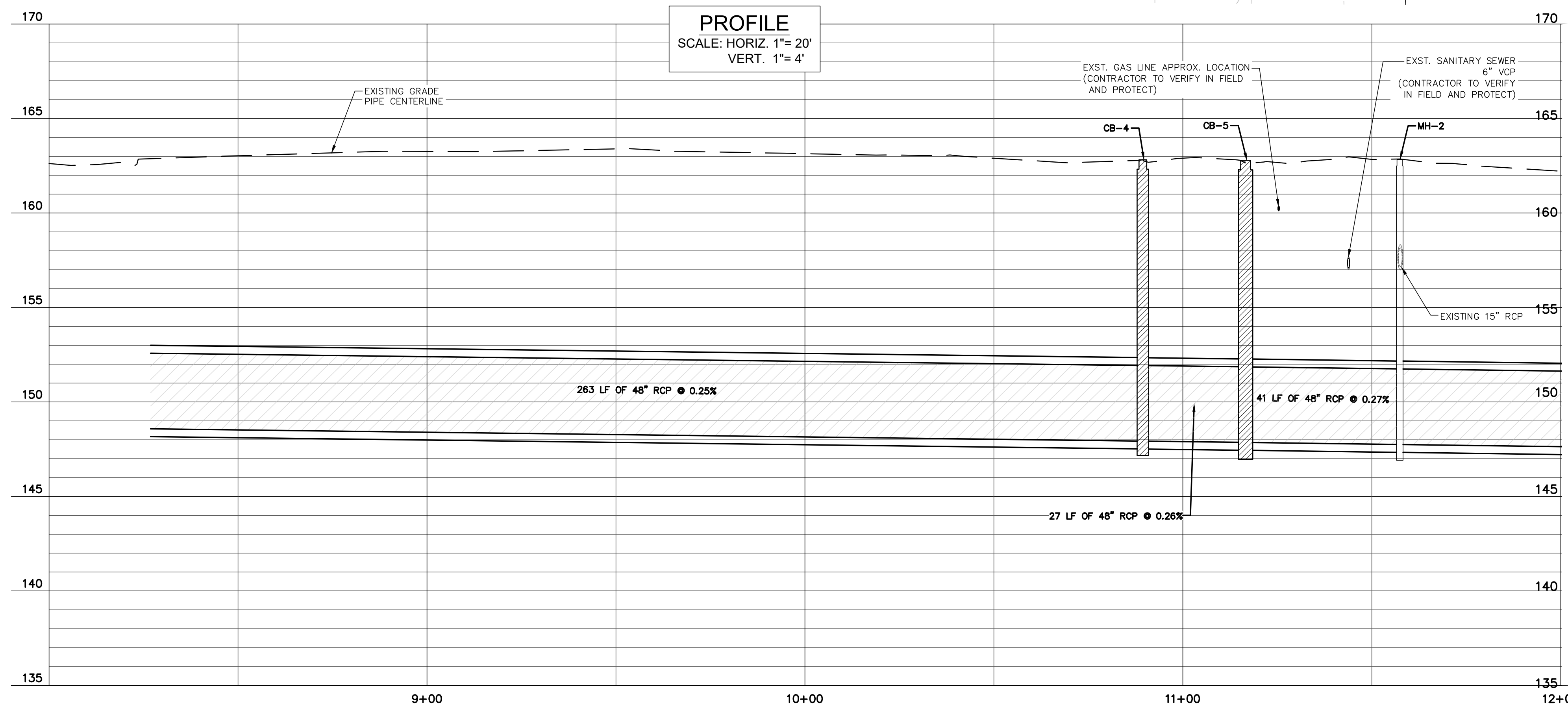
PROPOSED PLAN AND PROFILE E. CLARK ST. STA. 6+00-7+50		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-11**

V:\D.MCGILLEN\ENGINEERS.COM\COMPANY\SHARE\MCGILL PROJECTS\2021\21.04018-STPAULS-ELIZABETH+JOHNSON STREET STORM DRAINAGE IMPROVEMENTS\DRAWINGS\SHEETS\C-10 PROPOSED DWG PLOT DATE 2/22/2023 3:30 PM KALIA BEESLEY



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PRELIMINARY



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

PROPOSED PLAN AND PROFILE S. JOHNSON ST. STA. 8+00-12+00		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-12**

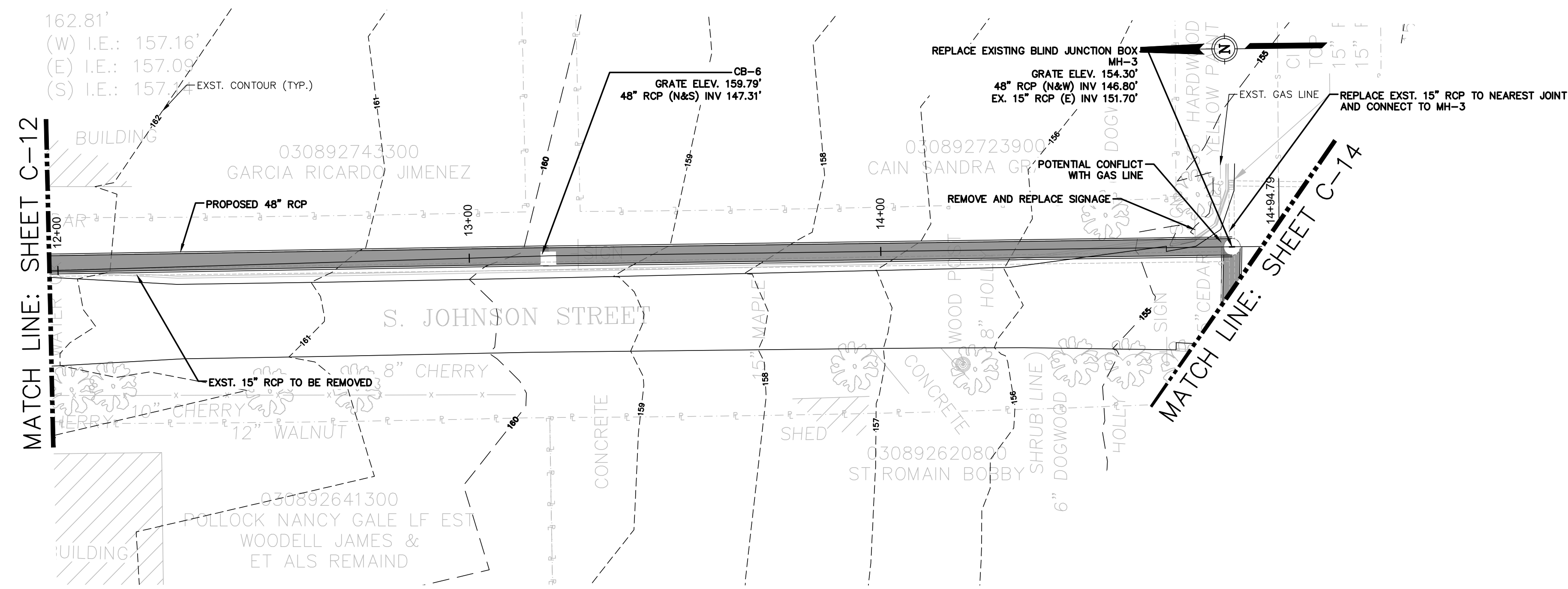
21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



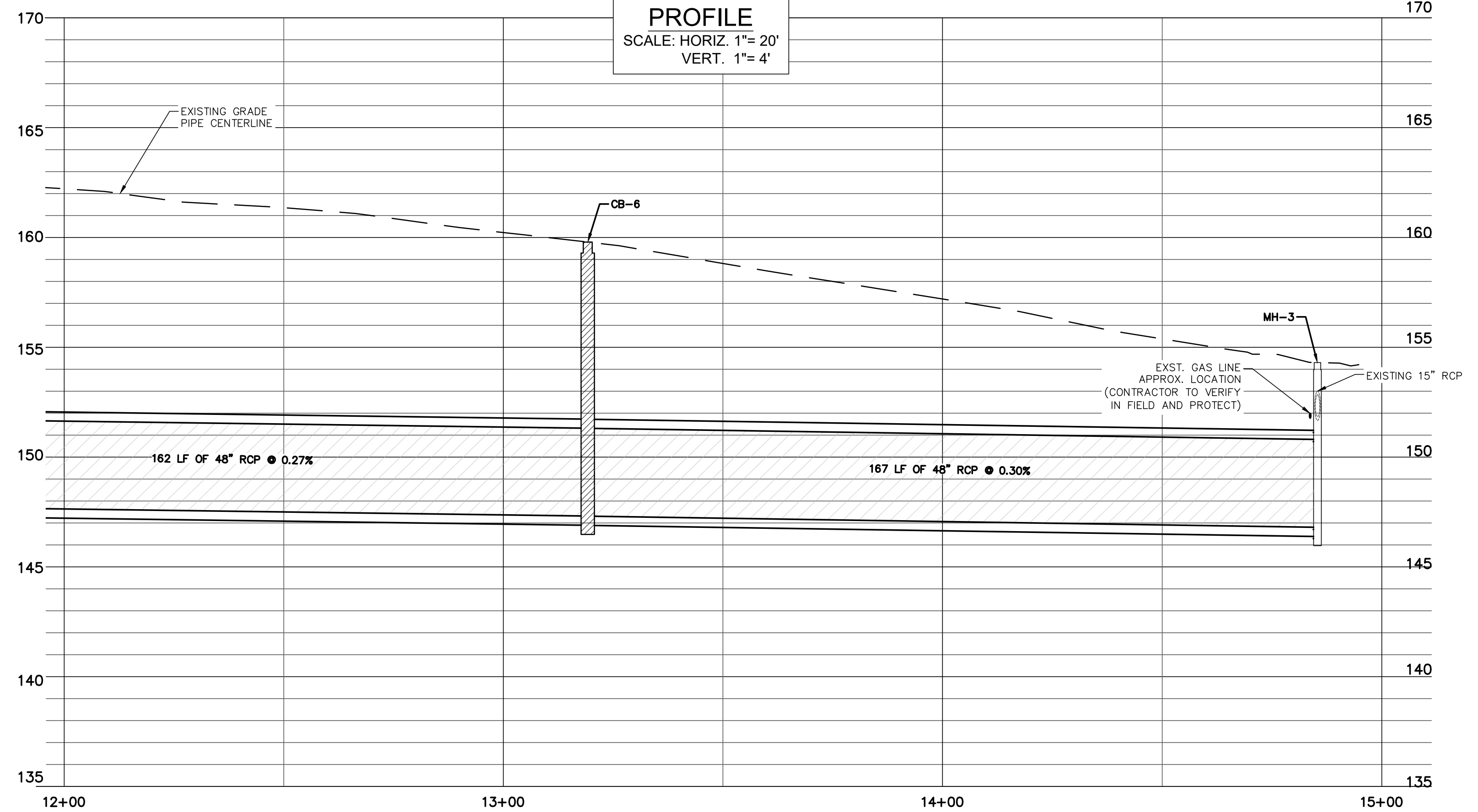
V:\D\MCGILLENINERS.COM\COMPANYSHARE\MCGILL PROJECTS\2021\21.04018-STPAULS-ELIZABETH+JOHNSON STREET STORM DRAINAGE IMPROVEMENTS\DRAWINGS\SHEETS\C-10 PROPOSED DWG PLOT DATE 2/22/2023 3:31 PM KALIA BEESLEY

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

**PLAN**



**PROFILE**  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'



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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

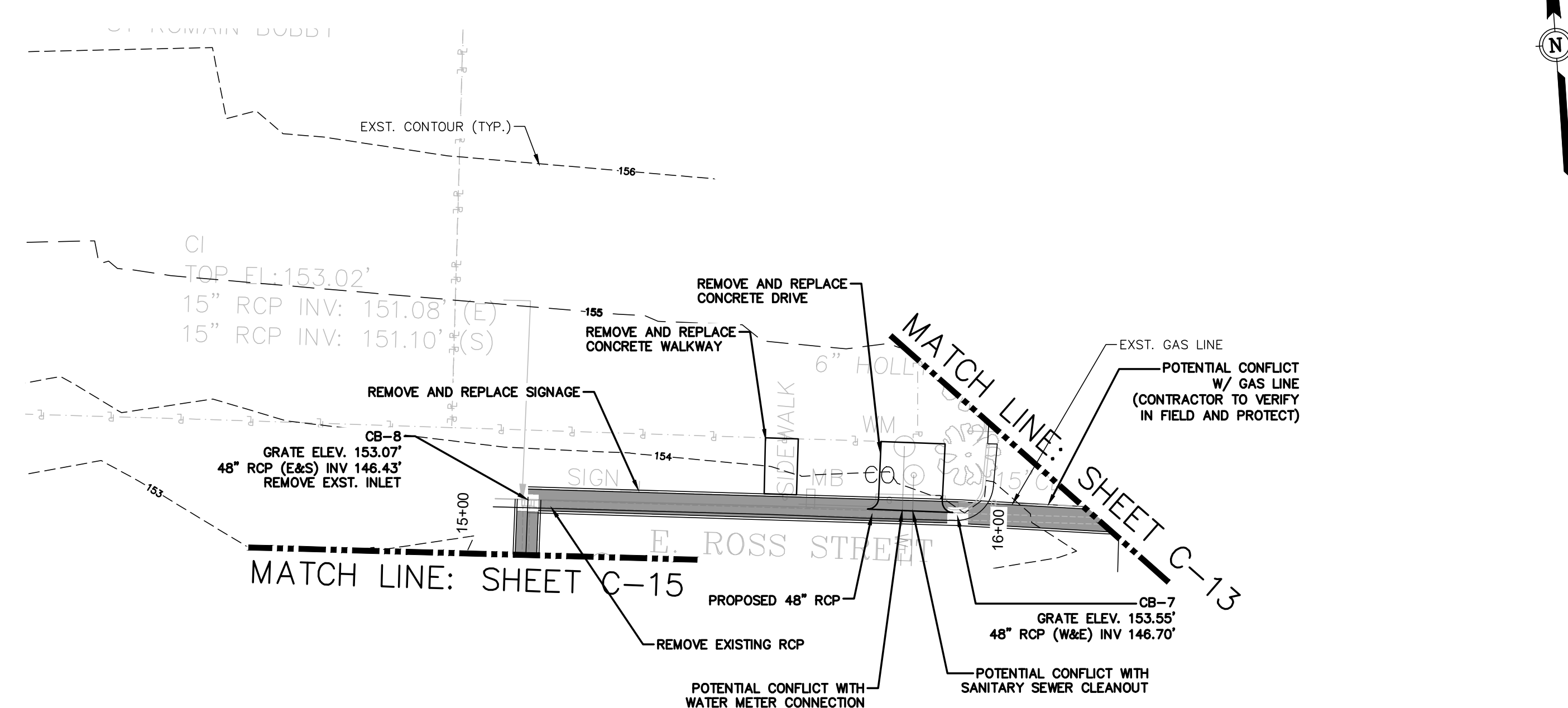
PROPOSED PLAN AND PROFILE S. ST. STA. 12+00-15+00		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-13**

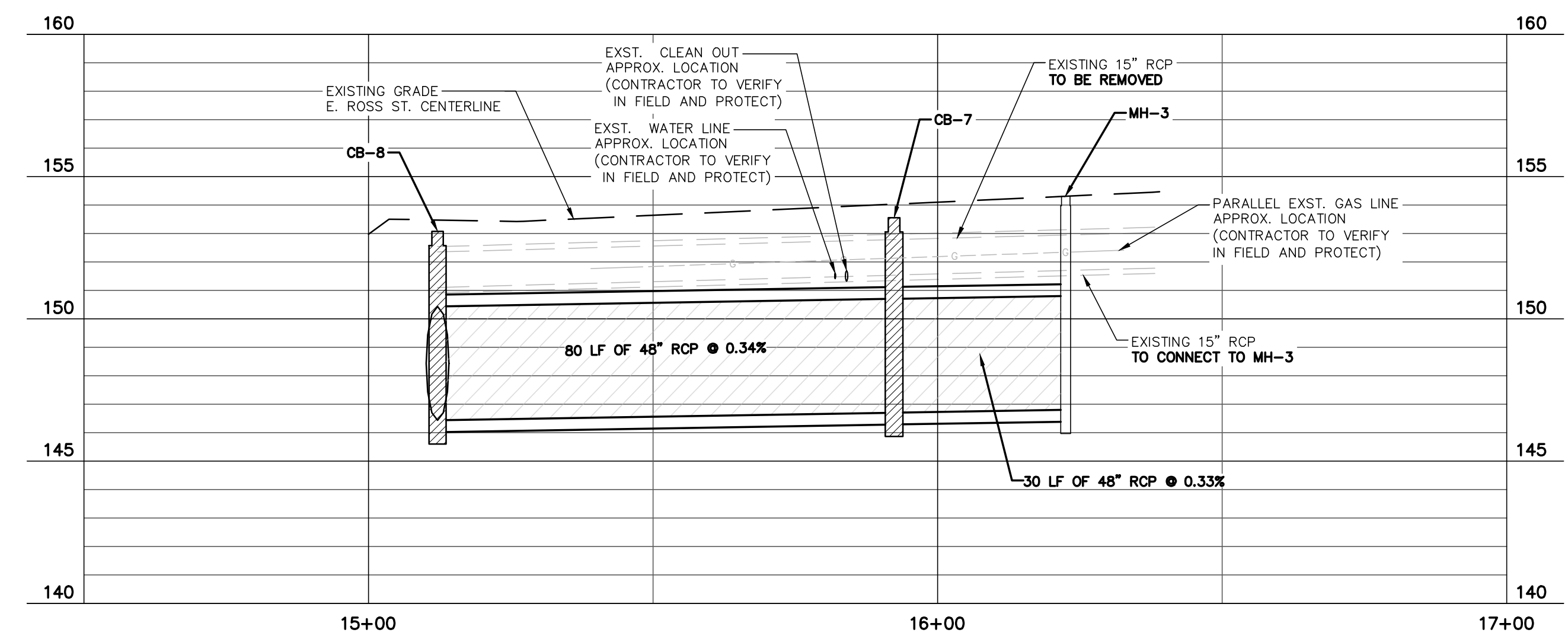
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

**PLAN**



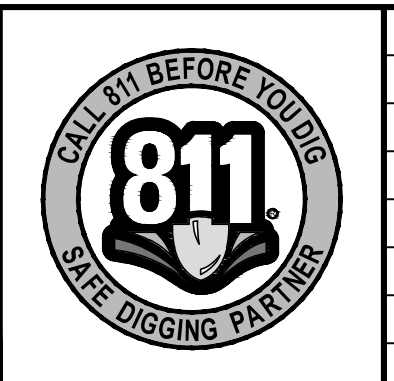
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SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'



PRELIMINARY  
- FOR REVIEW PURPOSES ONLY -  
DO NOT USE FOR  
CONSTRUCTION

55 Broad Street  
Asheville, NC 28801  
828.252.0575  
NC Firm License # C-0459  
mcgillassociates.com

**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

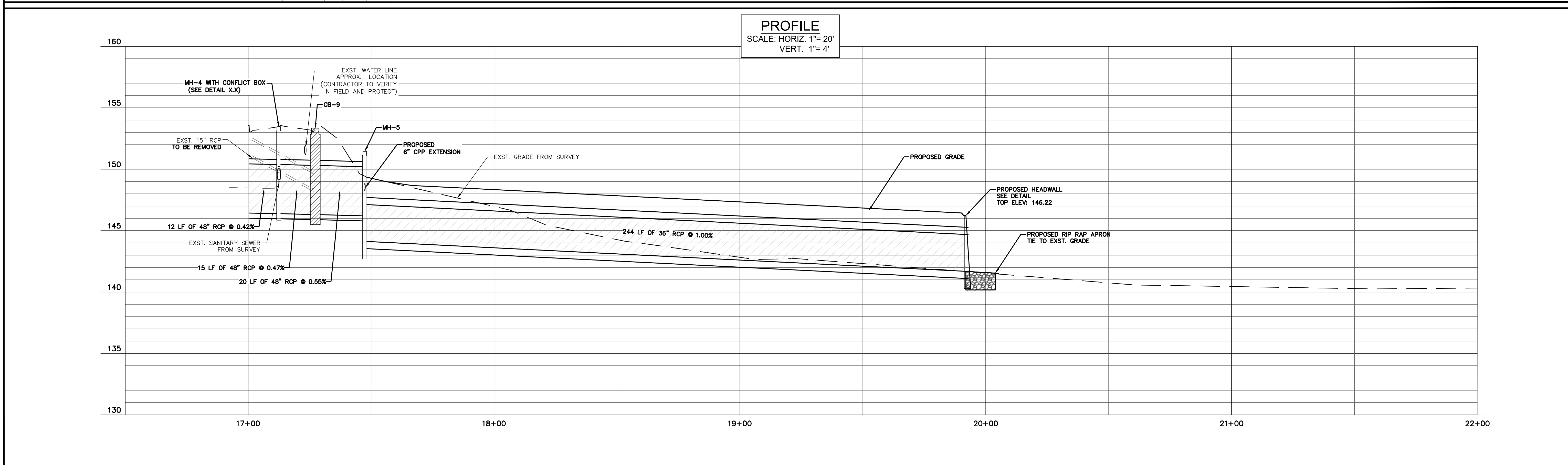
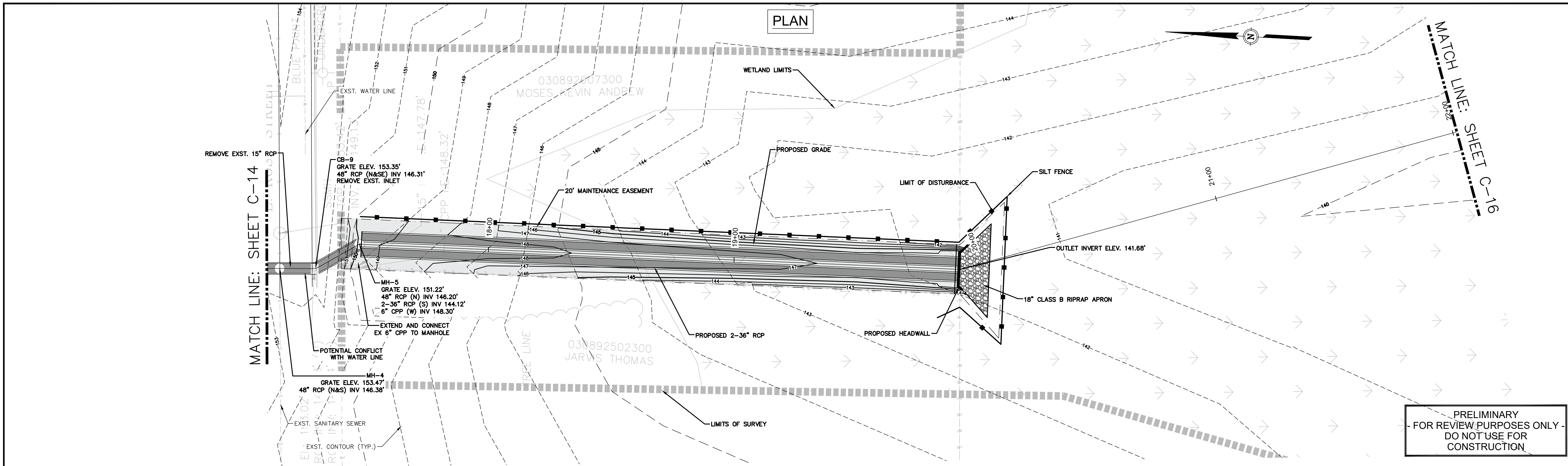
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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

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**C-14**



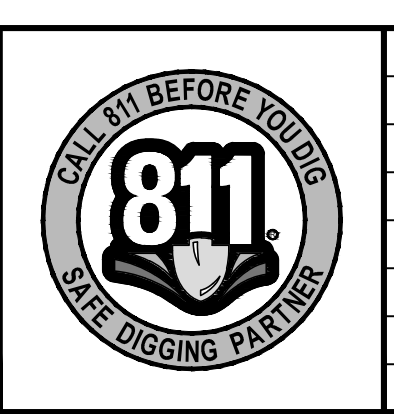
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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**PRELIMINARY**



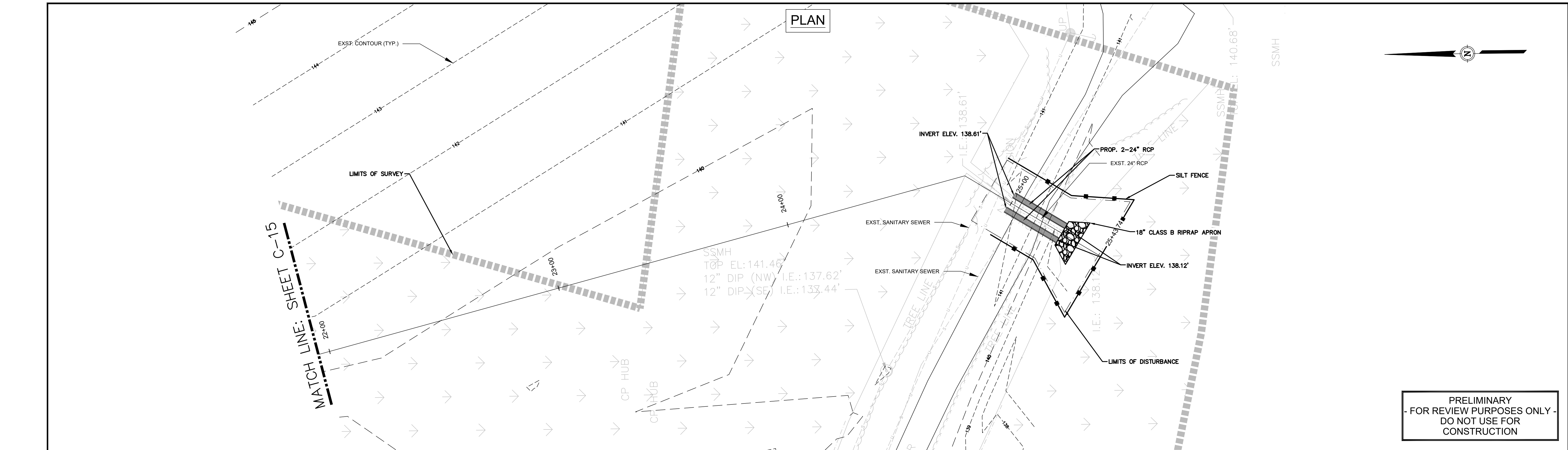
NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

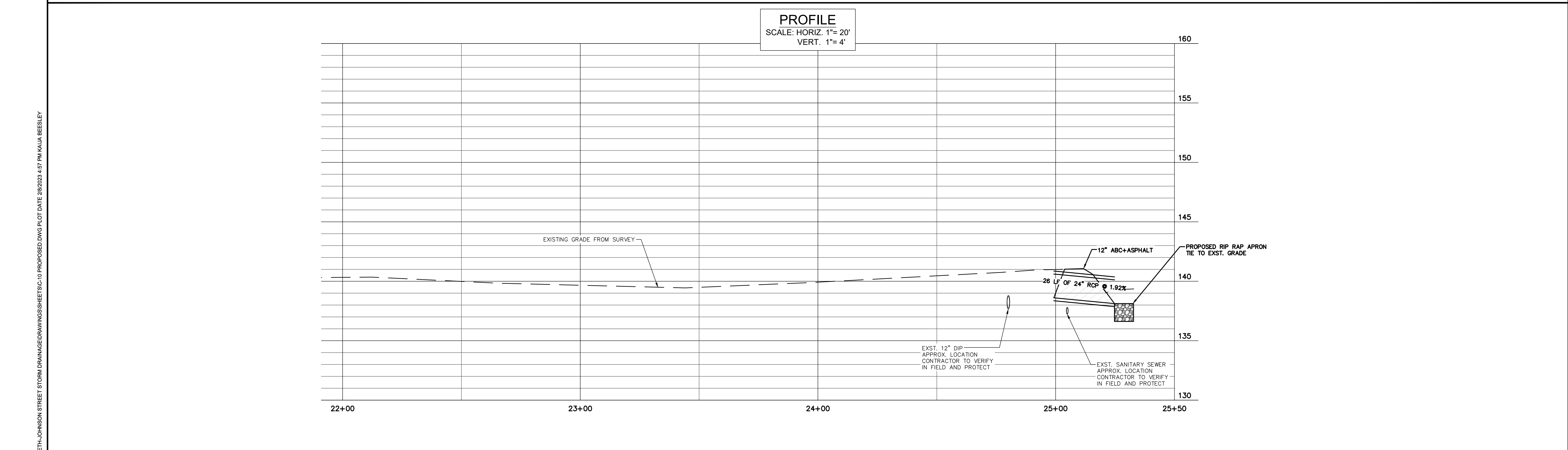
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

PROPOSED PLAN AND PROFILE STA. 17+00-22+00		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-15**



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P:\2021\21-04\018-STPAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE DRAWINGS\SHEETSC-10 PROPOSED.DWG PLOT DATE 2/8/2023 4:57 PM KAJA BEESLEY

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

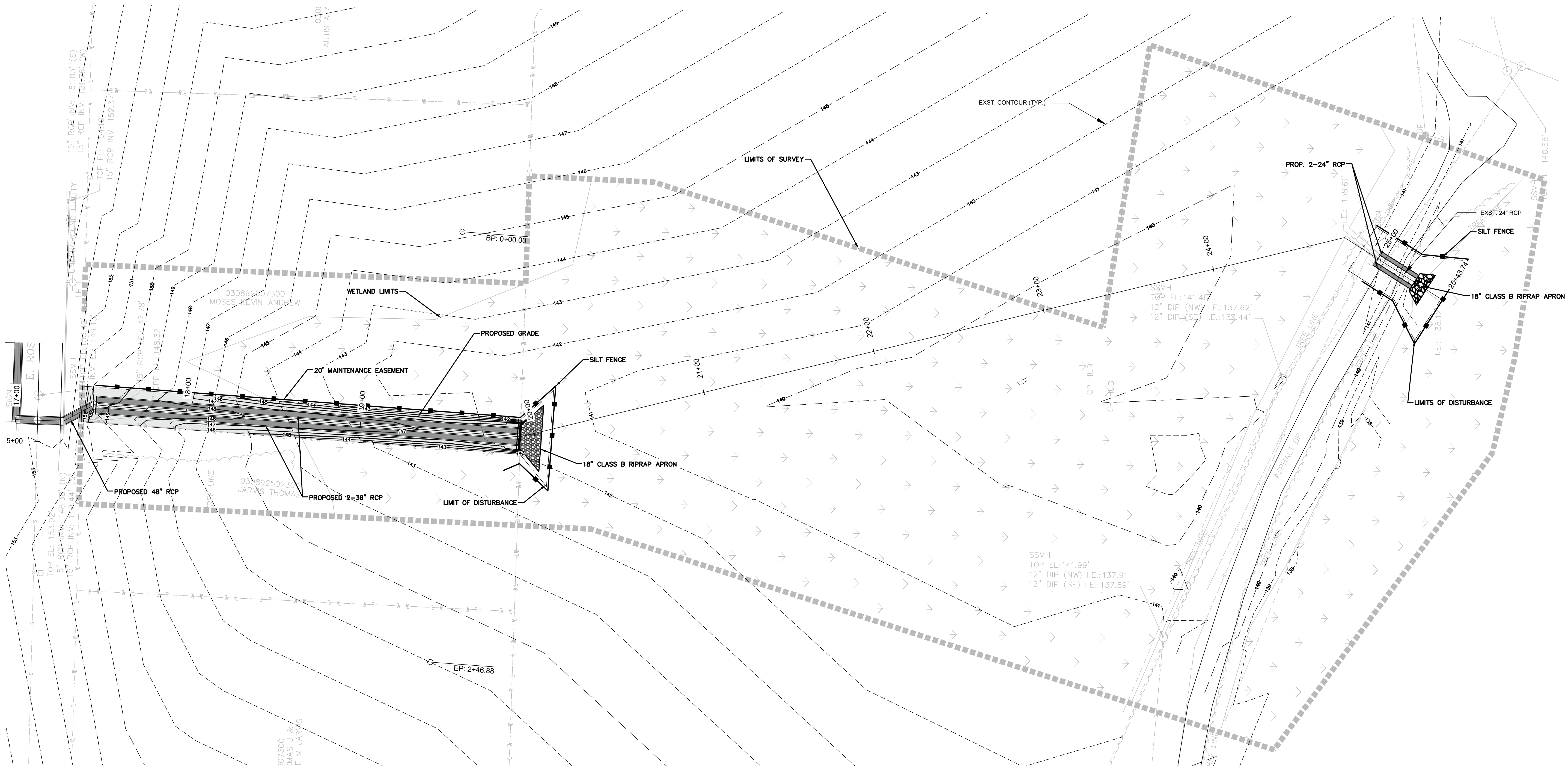
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

PROPOSED PLAN AND PROFILE STA. 22+00-25+50		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-16**



PLAN



PRELIMINARY  
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CONSTRUCTION

P:\2021\104018-ST.PAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE IMPROVEMENTS\10 PROPOSED.DWG PLOT DATE 2/8/2023 5:21 PM KALIA BEESLEY

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NC Firm License # C-0459  
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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

GRAPHIC SCALE DIVISION VALUE = 30 FEET

OFFICE MANAGER	DESIGNER
B. ROARK	C. HEATHCOAT
PROJECT MANAGER	REVIEWER
D. SABEH	D. SABEH

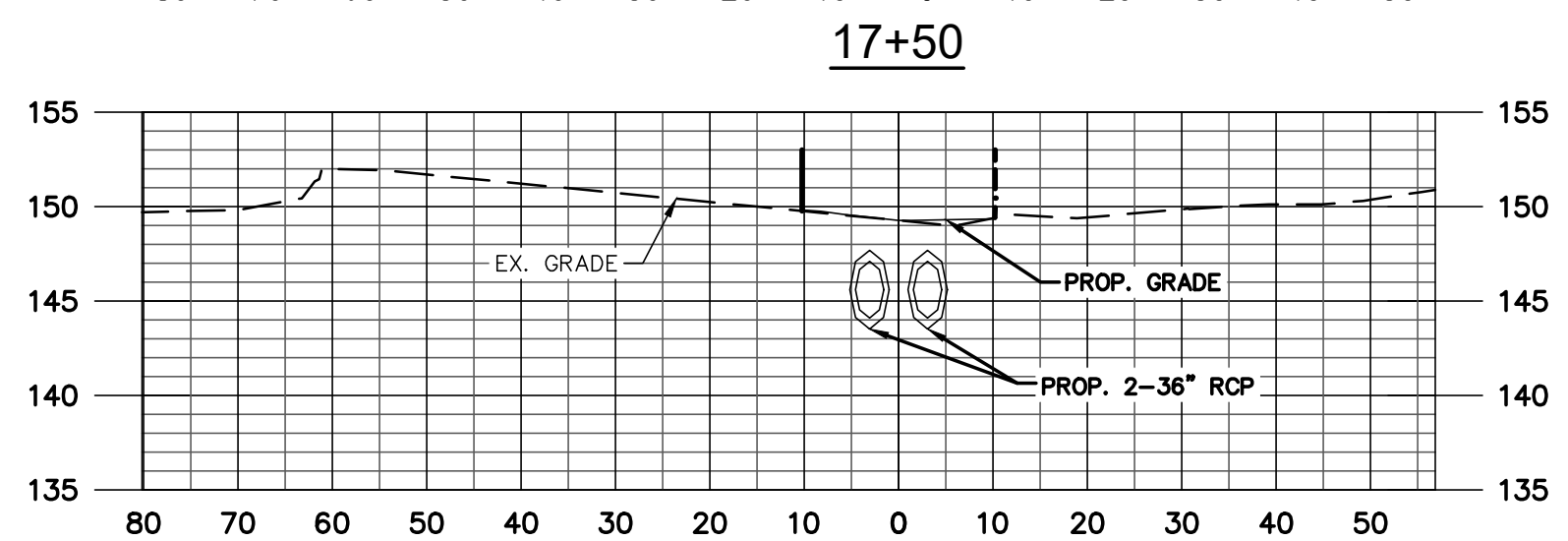
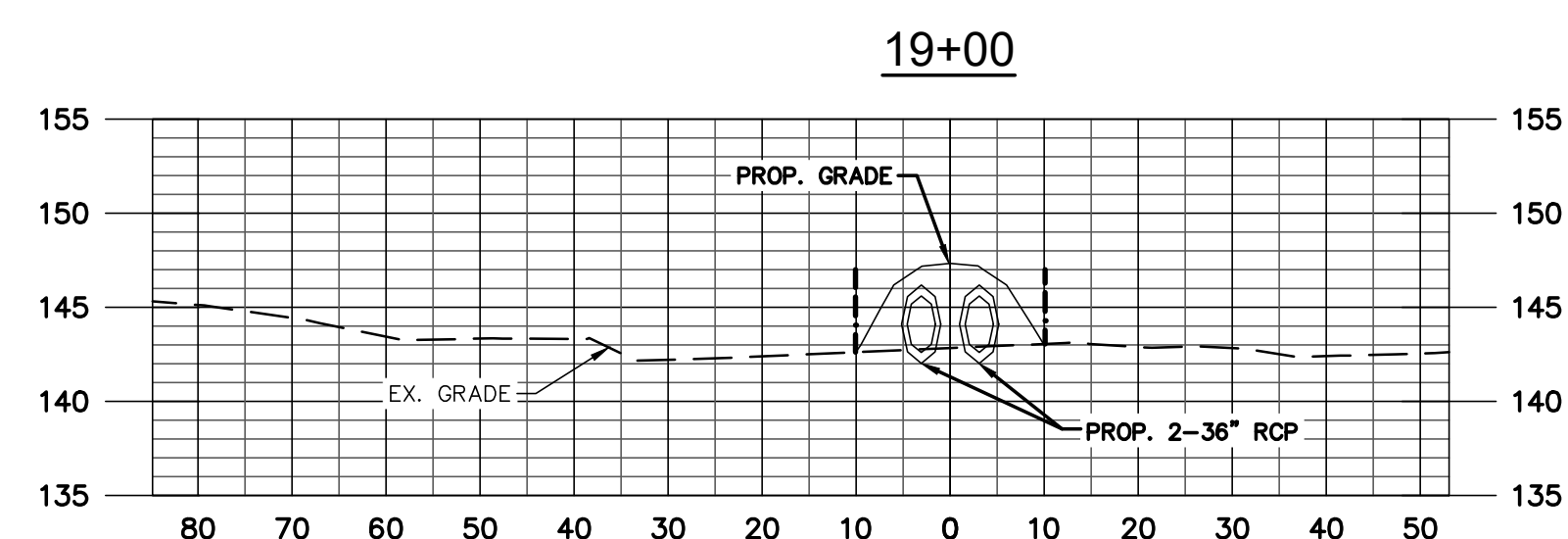
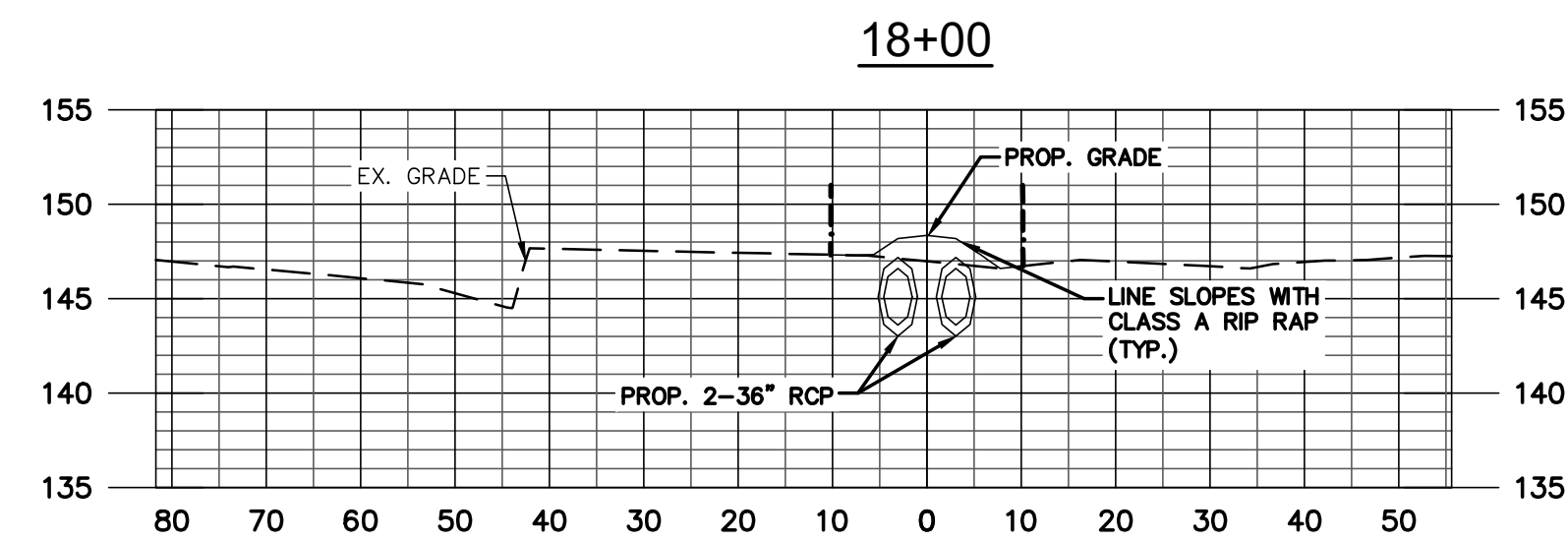
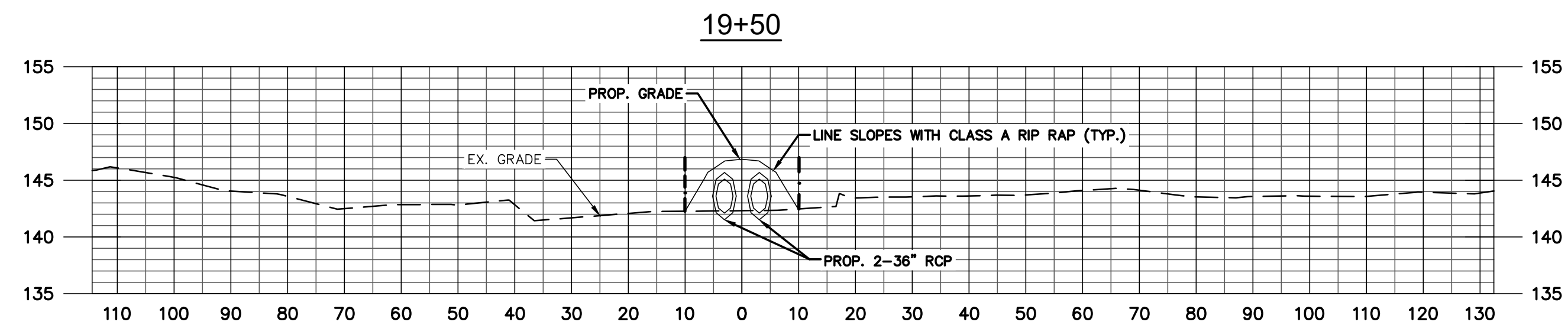
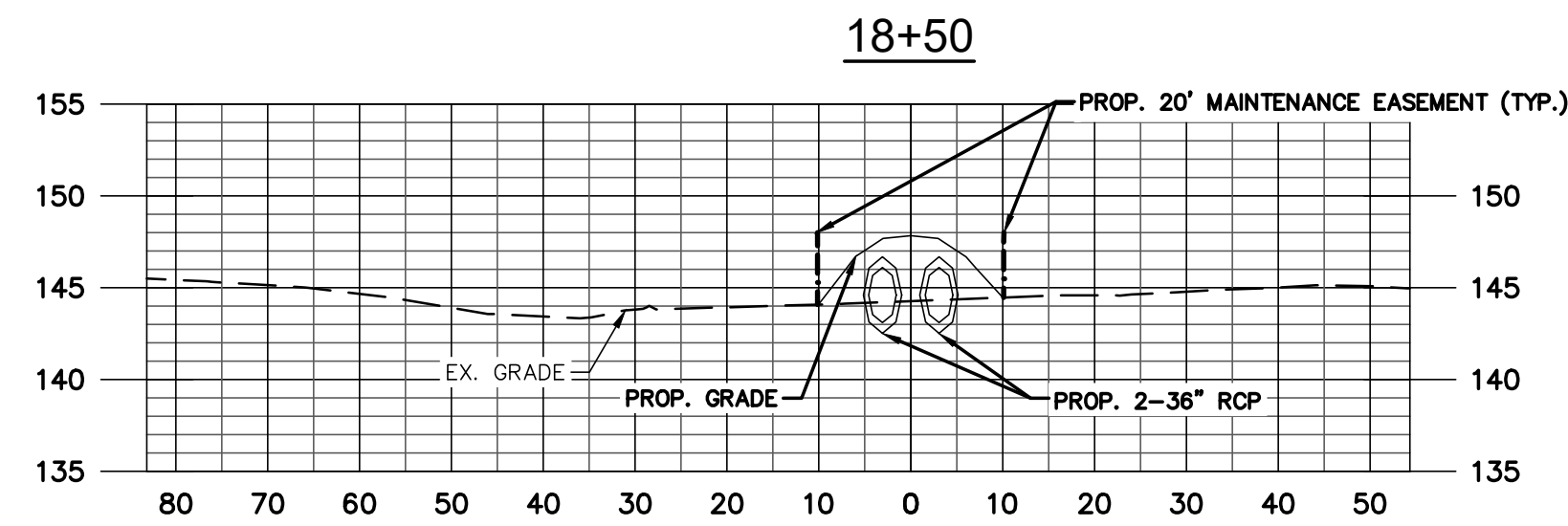
OVERVIEW OF WETLAND IMPACTS  
STA. 17+00-25+50

DATE	PROJECT #	FUNDING #
FEBRUARY 2023	21.04018	N/A

SHEET  
**C-17**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

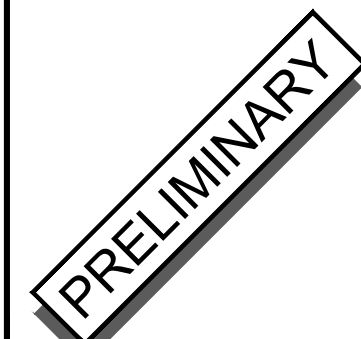
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 VERT. 1"= 2'



PRELIMINARY  
 - FOR REVIEW PURPOSES ONLY -  
 DO NOT USE FOR  
 CONSTRUCTION

V:\D\MCGILLENINERS.COM\COMPANYSHARE\MCGILL PROJECTS\2021\21.04018-STPAULS-ELIZABETH+JOHNSON STREET STORM DRAINAGE IMPROVEMENTS\DRAWINGS\SHEETS\C-10 PROPOSED DWG PLOT DATE 2/22/2023 11:41 AM KAJIA BEESLEY

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
 STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
 ROBESON COUNTY, NORTH CAROLINA

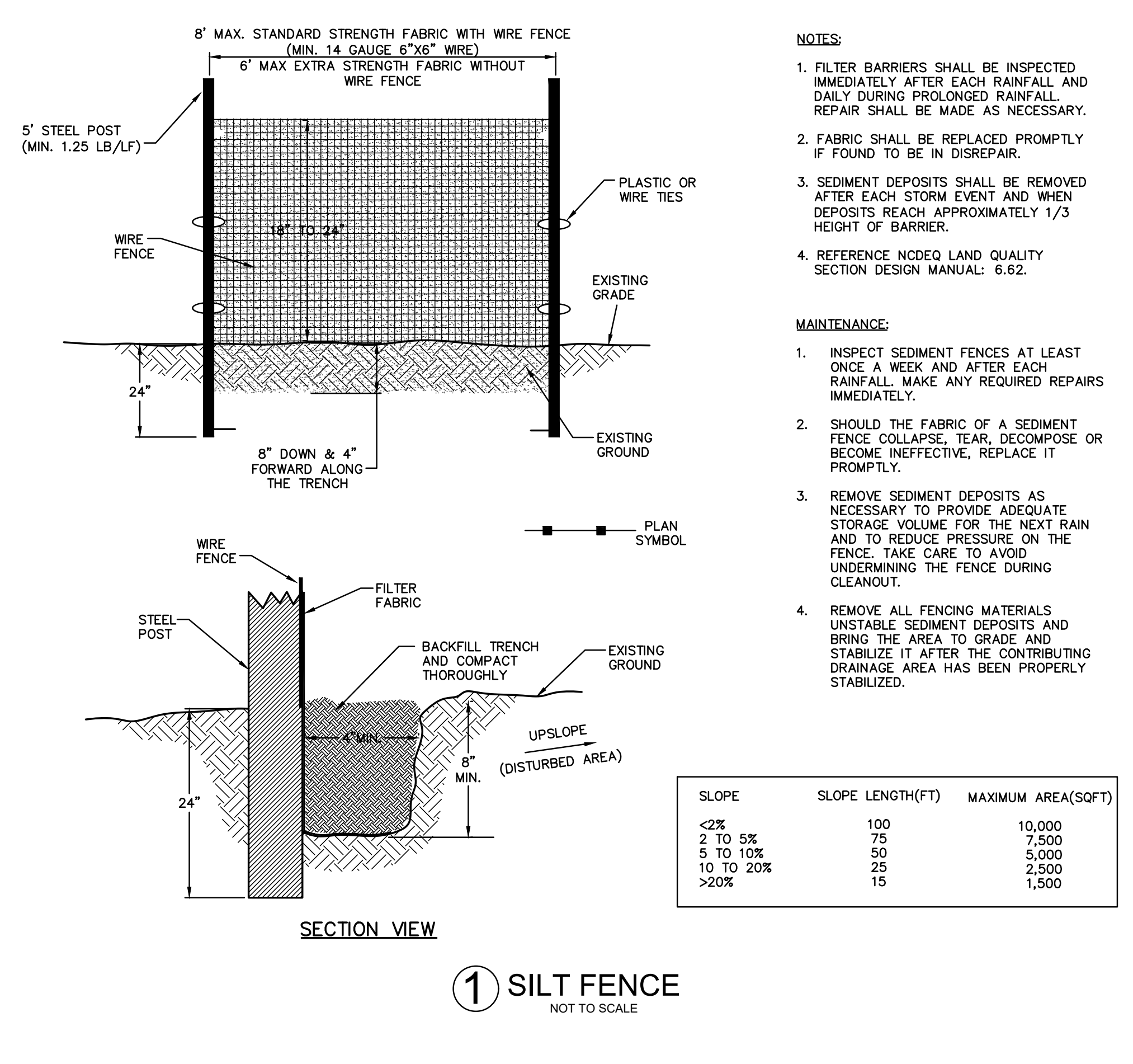
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

CROSS SECTIONS 17+50-20+00		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

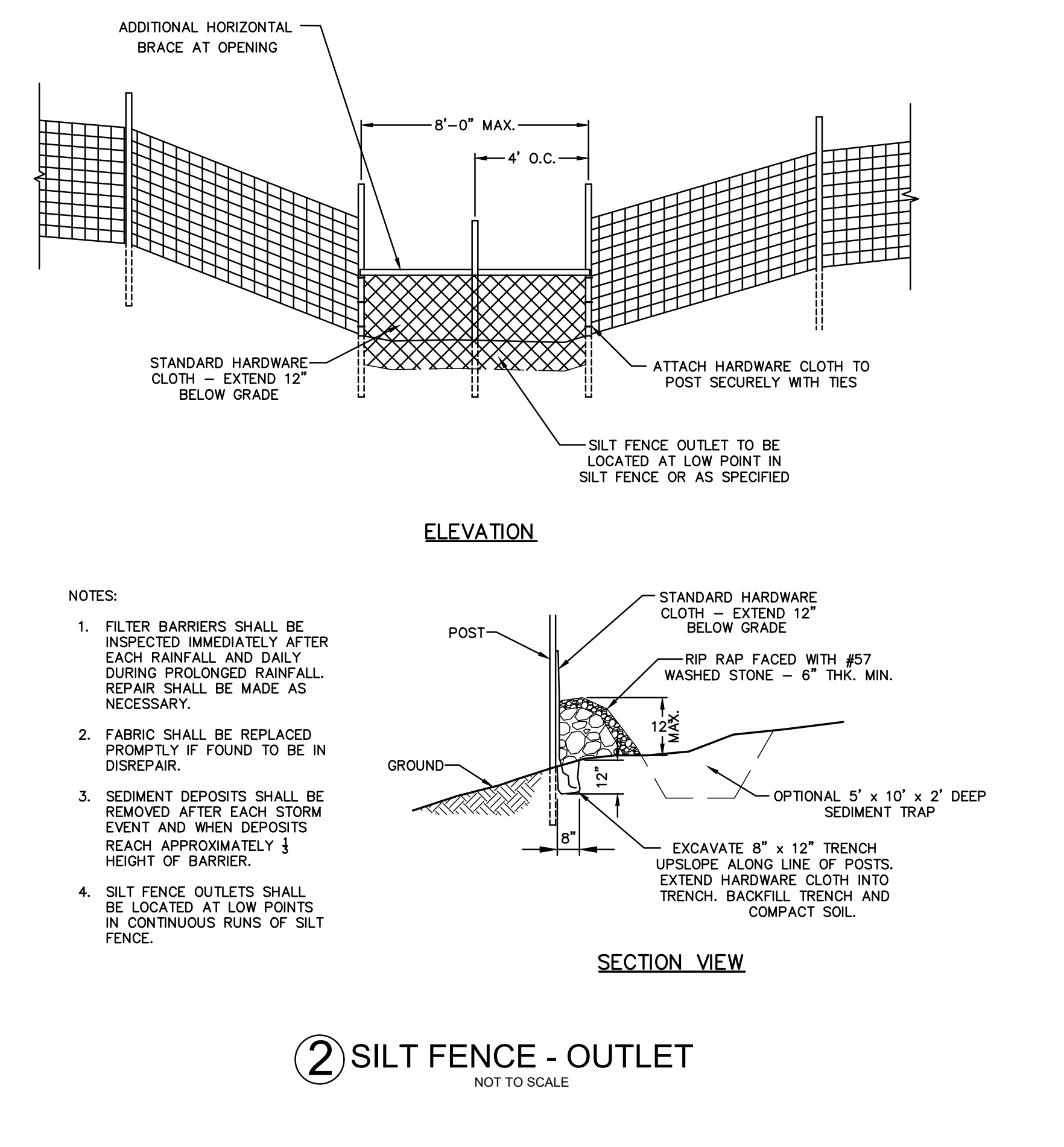
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**C-20**



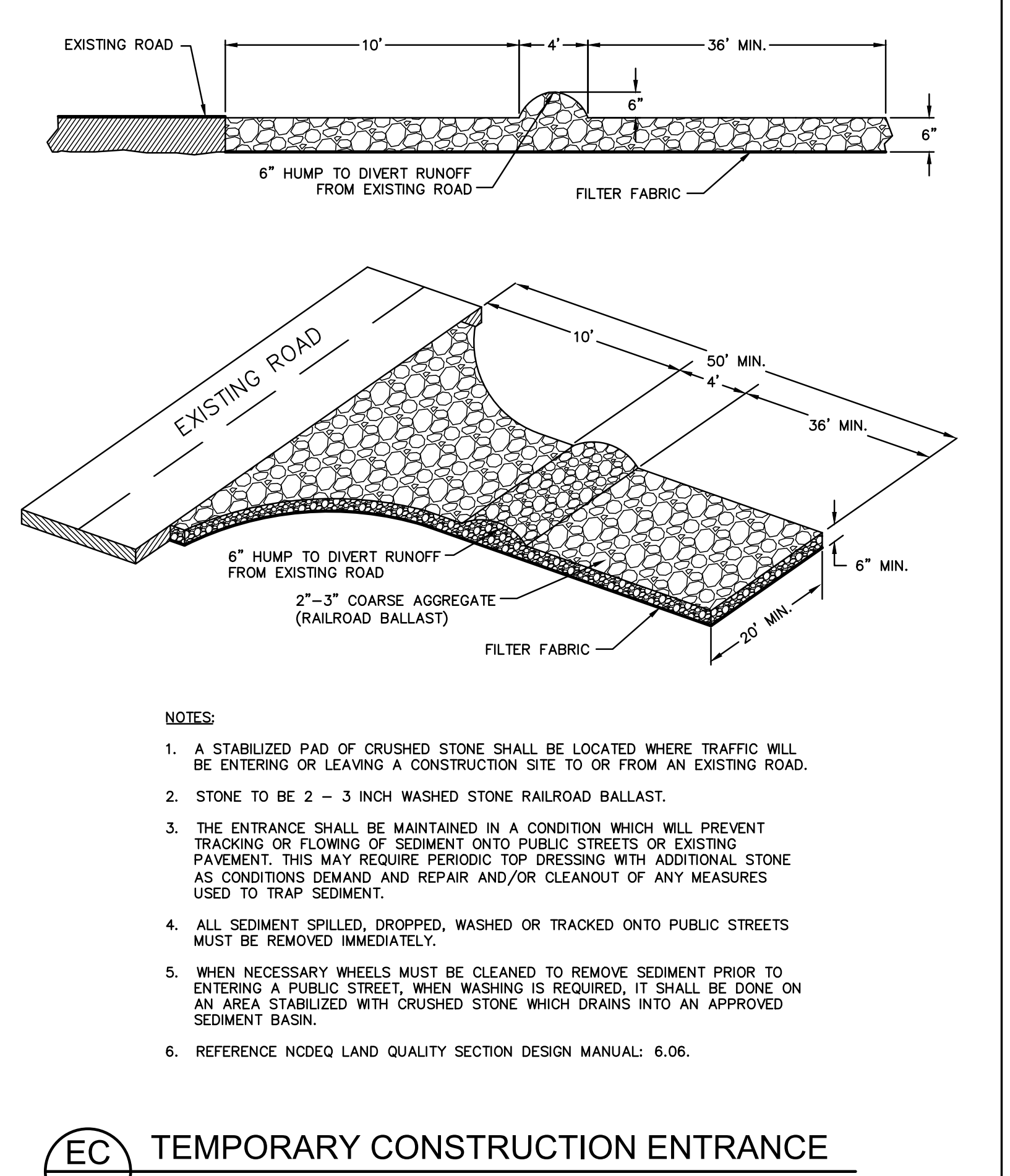
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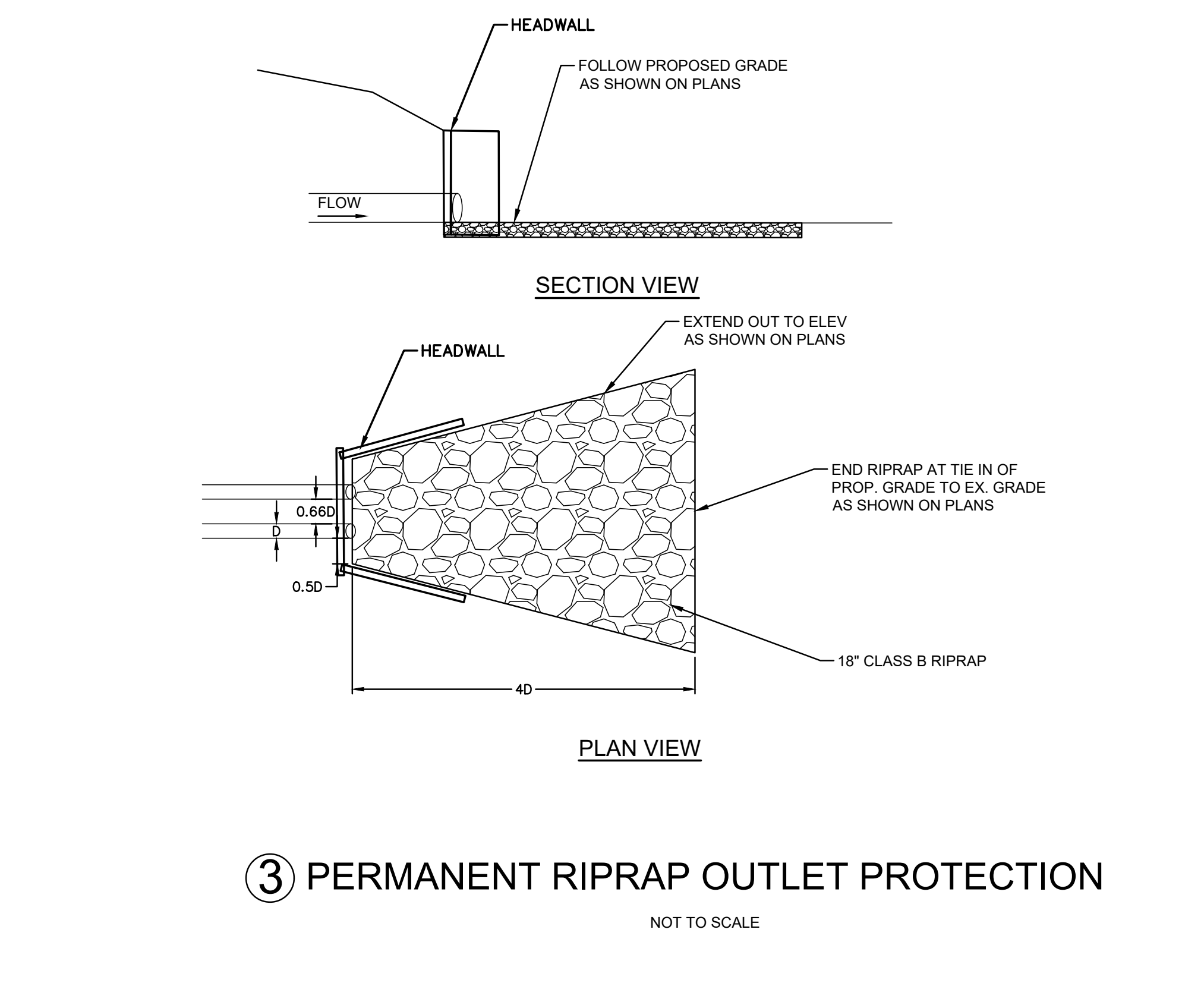
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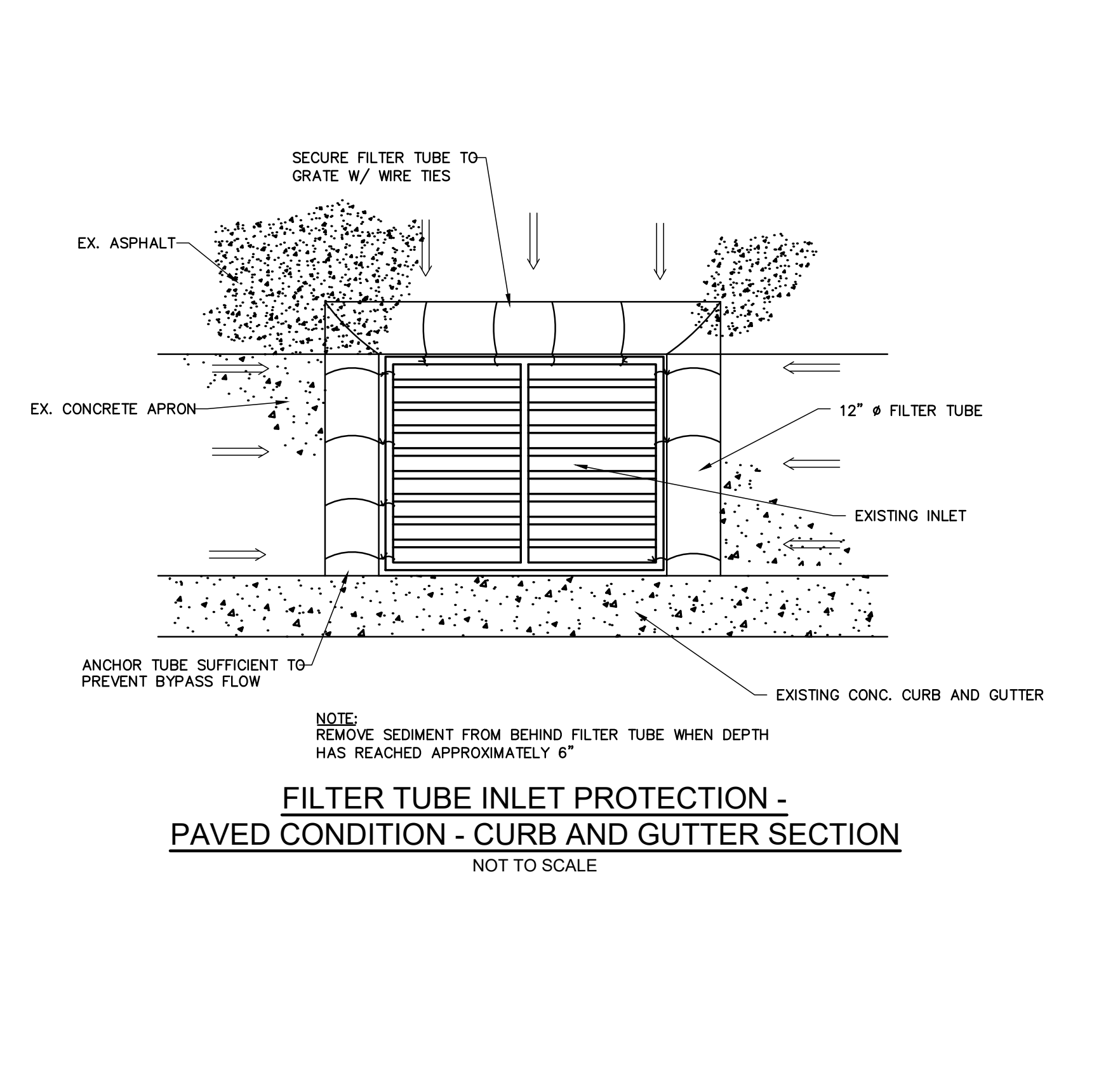
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**EC 24 TEMPORARY CONSTRUCTION ENTRANCE**  
UPDATED MARCH, 2017  
NOT TO SCALE



**3 PERMANENT RIPRAP OUTLET PROTECTION**  
NOT TO SCALE



**FILTER TUBE INLET PROTECTION - PAVED CONDITION - CURB AND GUTTER SECTION**  
NOT TO SCALE

PRELIMINARY  
FOR REVIEW PURPOSES ONLY  
DO NOT USE FOR CONSTRUCTION

PRELIMINARY



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

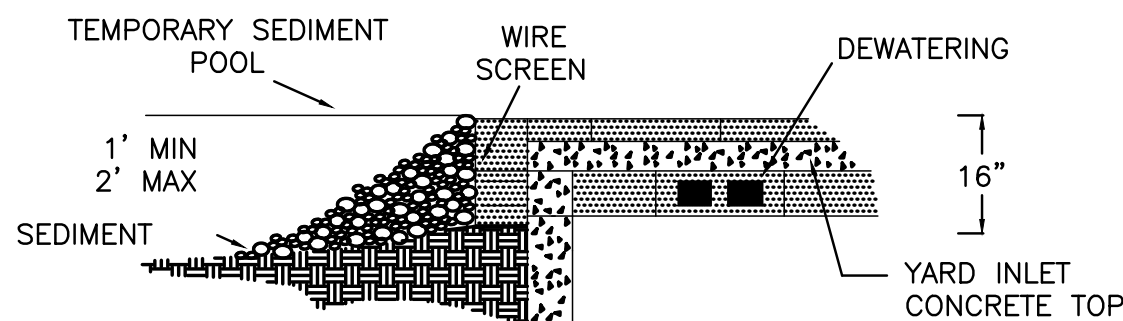
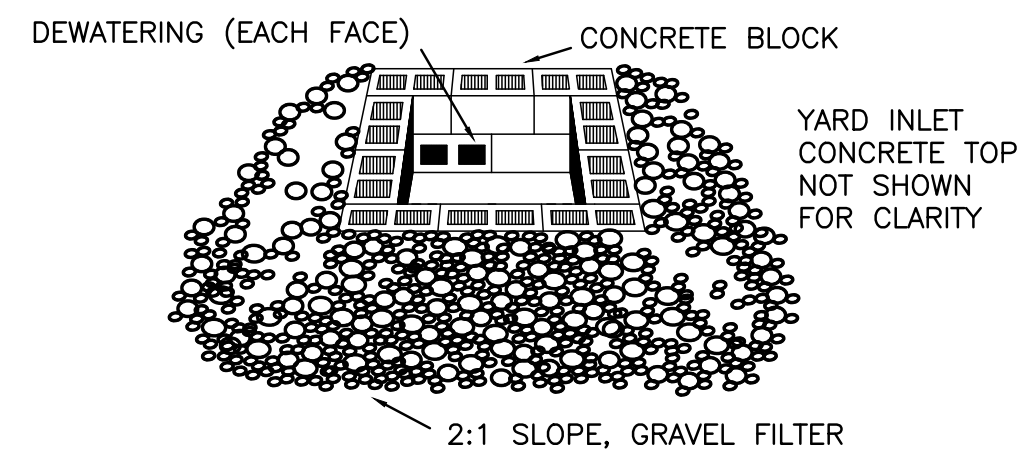
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A
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SHEET  
**C-30**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



V:\0418\ENGINEERS\COMPANYSHARE\MCGILL\PROJECTS\2021\21\_04018-STPAULS-NC-ELIZABETH-ST-STORM DRAINAGE IMPROVEMENTS\DRAWINGS\SHEETS\C-30 EROSION CONTROL DETAIL DWG PLOT DATE 1/31/2023 8:22 PM KALIA BEESLEY

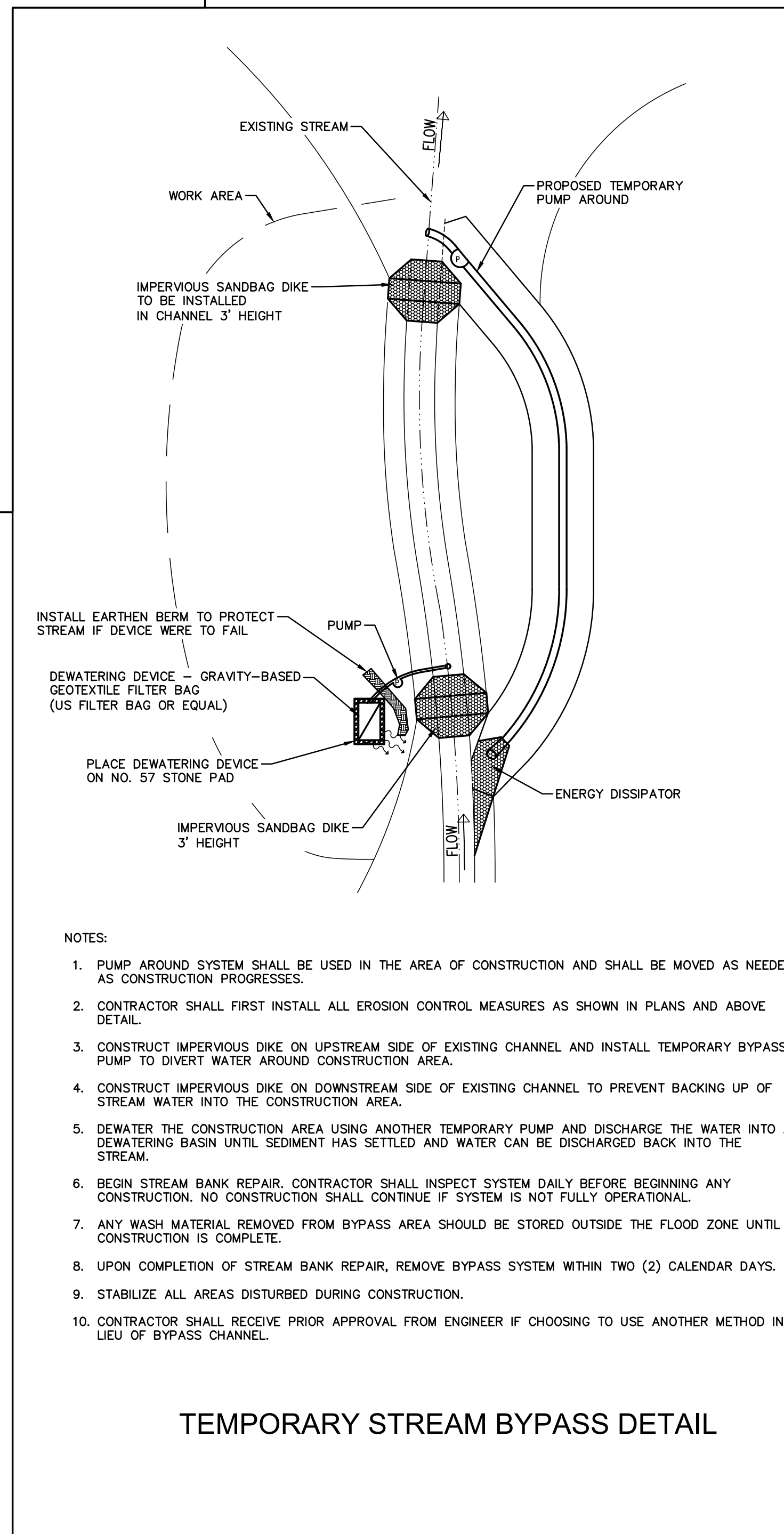


**MAINTENANCE REQUIREMENTS:**

1. CONTRACTOR SHALL INSPECT THE GRAVEL FILTER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED.
2. CONTRACTOR SHALL REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.
3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, CONTRACTOR SHALL REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL. CONTRACTOR SHALL BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT AND APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

**4 TYPICAL GRATE INLET PROTECTION DETAIL (TEMPORARY)**

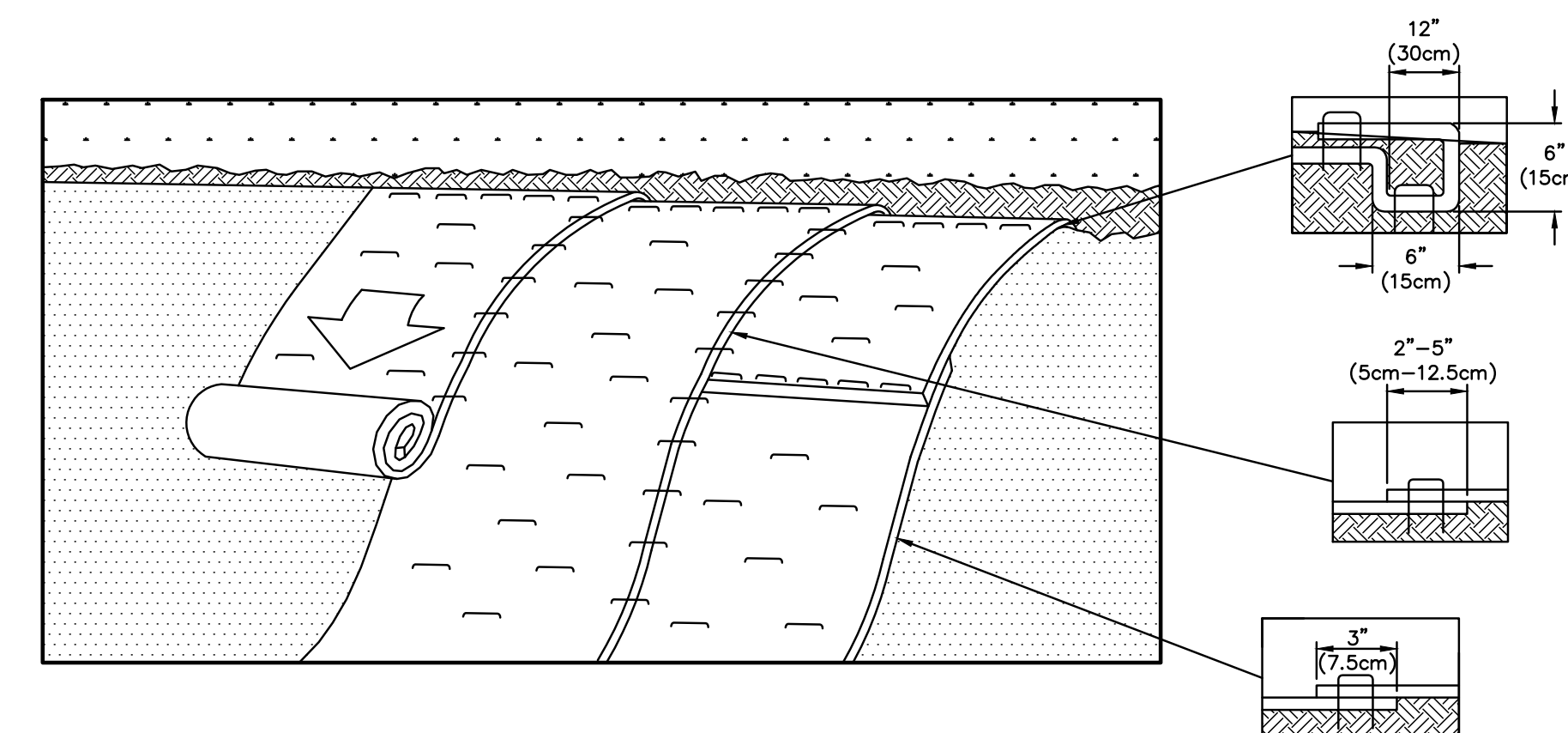
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**NOTES:**

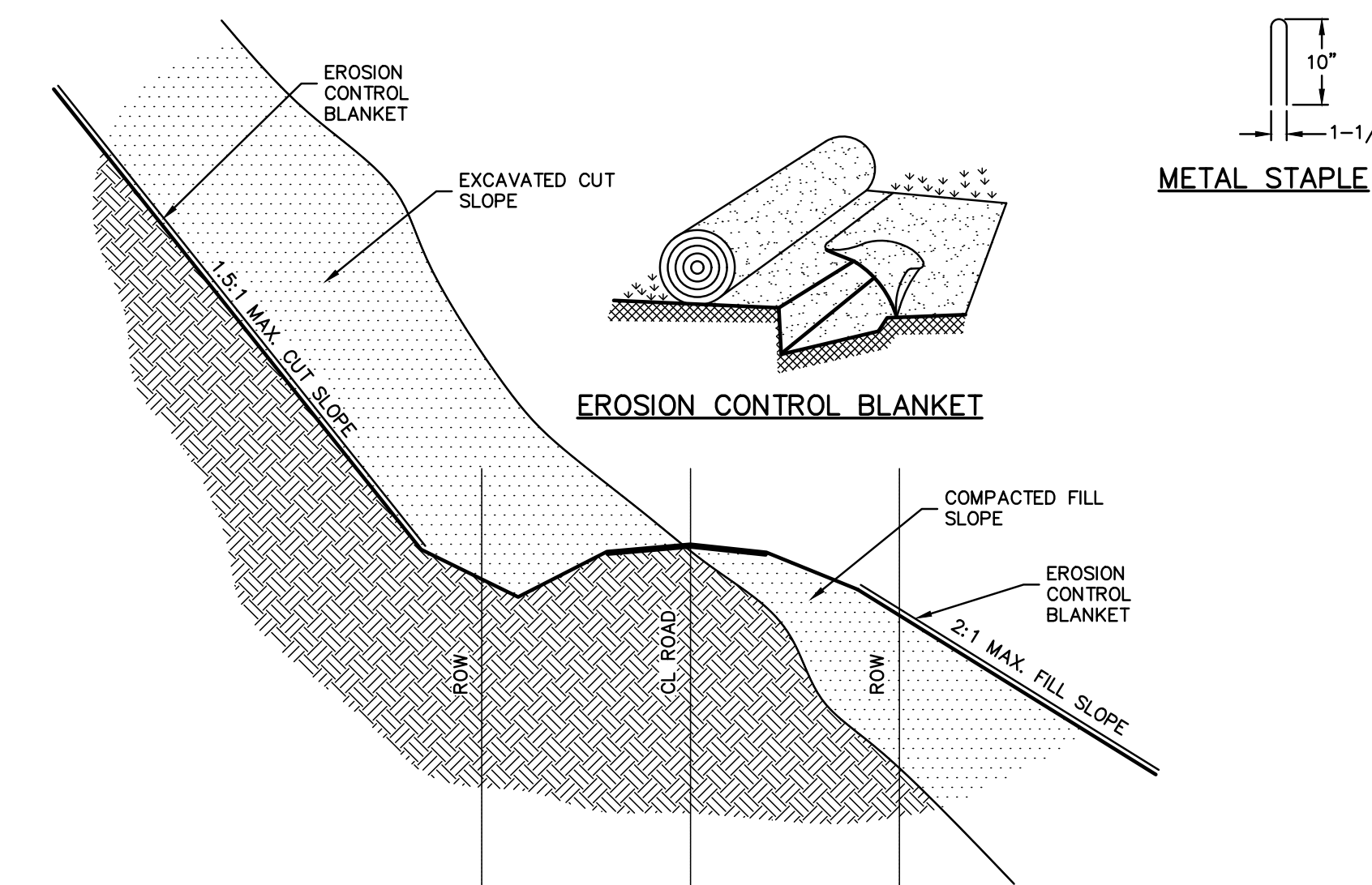
1. PUMP AROUND SYSTEM SHALL BE USED IN THE AREA OF CONSTRUCTION AND SHALL BE MOVED AS NEEDED AS CONSTRUCTION PROGRESSES.
2. CONTRACTOR SHALL FIRST INSTALL ALL EROSION CONTROL MEASURES AS SHOWN IN PLANS AND ABOVE DETAIL.
3. CONSTRUCT IMPERVIOUS DIKE ON UPSTREAM SIDE OF EXISTING CHANNEL AND INSTALL TEMPORARY BYPASS PUMP TO DIVERT WATER AROUND CONSTRUCTION AREA.
4. CONSTRUCT IMPERVIOUS DIKE ON DOWNSTREAM SIDE OF EXISTING CHANNEL TO PREVENT BACKING UP OF STREAM WATER INTO THE CONSTRUCTION AREA.
5. DEWATER THE CONSTRUCTION AREA USING ANOTHER TEMPORARY PUMP AND DISCHARGE THE WATER INTO A DEWATERING BASIN UNTIL SEDIMENT HAS SETTLED AND WATER CAN BE DISCHARGED BACK INTO THE STREAM.
6. BEGIN STREAM BANK REPAIR. CONTRACTOR SHALL INSPECT SYSTEM DAILY BEFORE BEGINNING ANY CONSTRUCTION. NO CONSTRUCTION SHALL CONTINUE IF SYSTEM IS NOT FULLY OPERATIONAL.
7. ANY WASH MATERIAL REMOVED FROM BYPASS AREA SHOULD BE STORED OUTSIDE THE FLOOD ZONE UNTIL CONSTRUCTION IS COMPLETE.
8. UPON COMPLETION OF STREAM BANK REPAIR, REMOVE BYPASS SYSTEM WITHIN TWO (2) CALENDAR DAYS.
9. STABILIZE ALL AREAS DISTURBED DURING CONSTRUCTION.
10. CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM ENGINEER IF CHOOSING TO USE ANOTHER METHOD IN LIEU OF BYPASS CHANNEL.

TEMPORARY STREAM BYPASS DETAIL



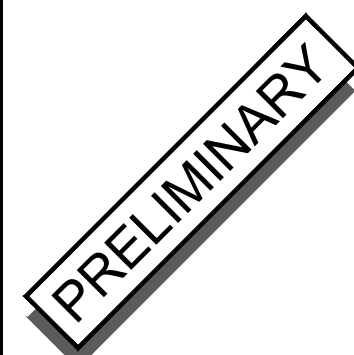
**NOTES:**

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S DOWN OR HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING AND SPACING STAPLES/STAKES IN APPROPRIATE LOCATIONS PER MANUFACTURER RECOMMENDATIONS.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.
7. INSTALLATION OF MATTING SHALL CONFORM TO MANUFACTURER'S REQUIREMENTS.
8. SEE GRADING PLAN FOR LOCATIONS OF CUT AND FILL SLOPES.
9. MATTING SHALL BE : NORTH AMERICAN GREEN SC150, AMERICAN EXCELSIOR EROSION CONTROL BLANKET, OR EQUAL. INSTALL ON ALL DISTURBED SLOPES (CHOSEN PRODUCT MUST BE RATED FOR SLOPES OF 2:1 OR 1:1). SEE PLAN FOR PRODUCT TYPE THAT MAY BE SPECIFIED
10. ALLOW 3" MIN. OVERLAP BETWEEN PARALLEL STRIPS.
11. BURY THE TOP OF THE MAT IN A TRENCH 4" OR MORE IN DEPTH. TAMP THE TRENCH FULL SOIL. SECURE WITH ROW OF STAPLES, 10" SPACING, 4" DOWN FROM THE TRENCH. OVERLAP END OF TOP STRIP 4" AND STAPLE.



**EC 11 SLOPE MATTING INSTALLATION**  
UPDATED MARCH, 2017  
NOT TO SCALE

PRELIMINARY  
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CONSTRUCTION



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

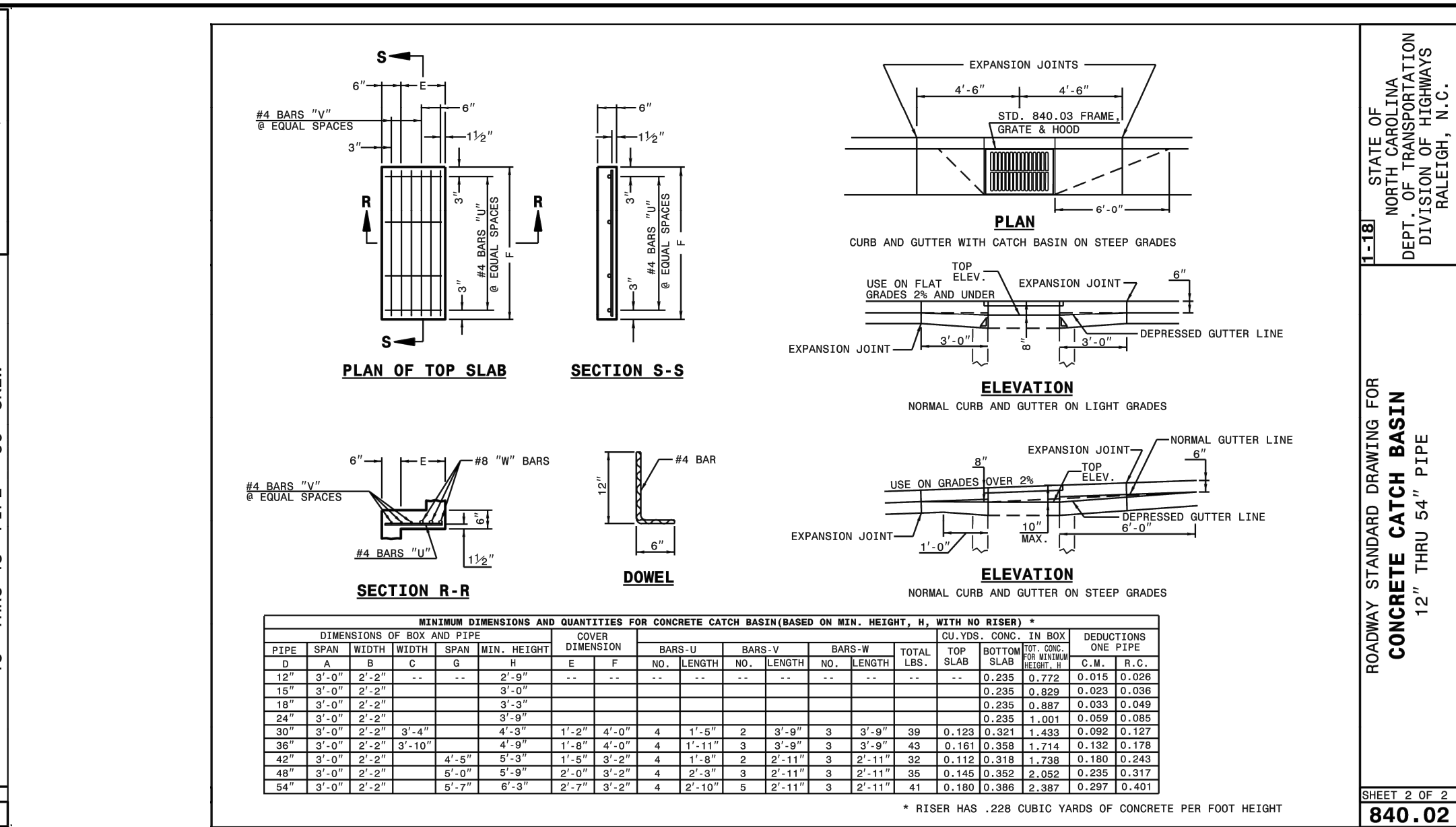
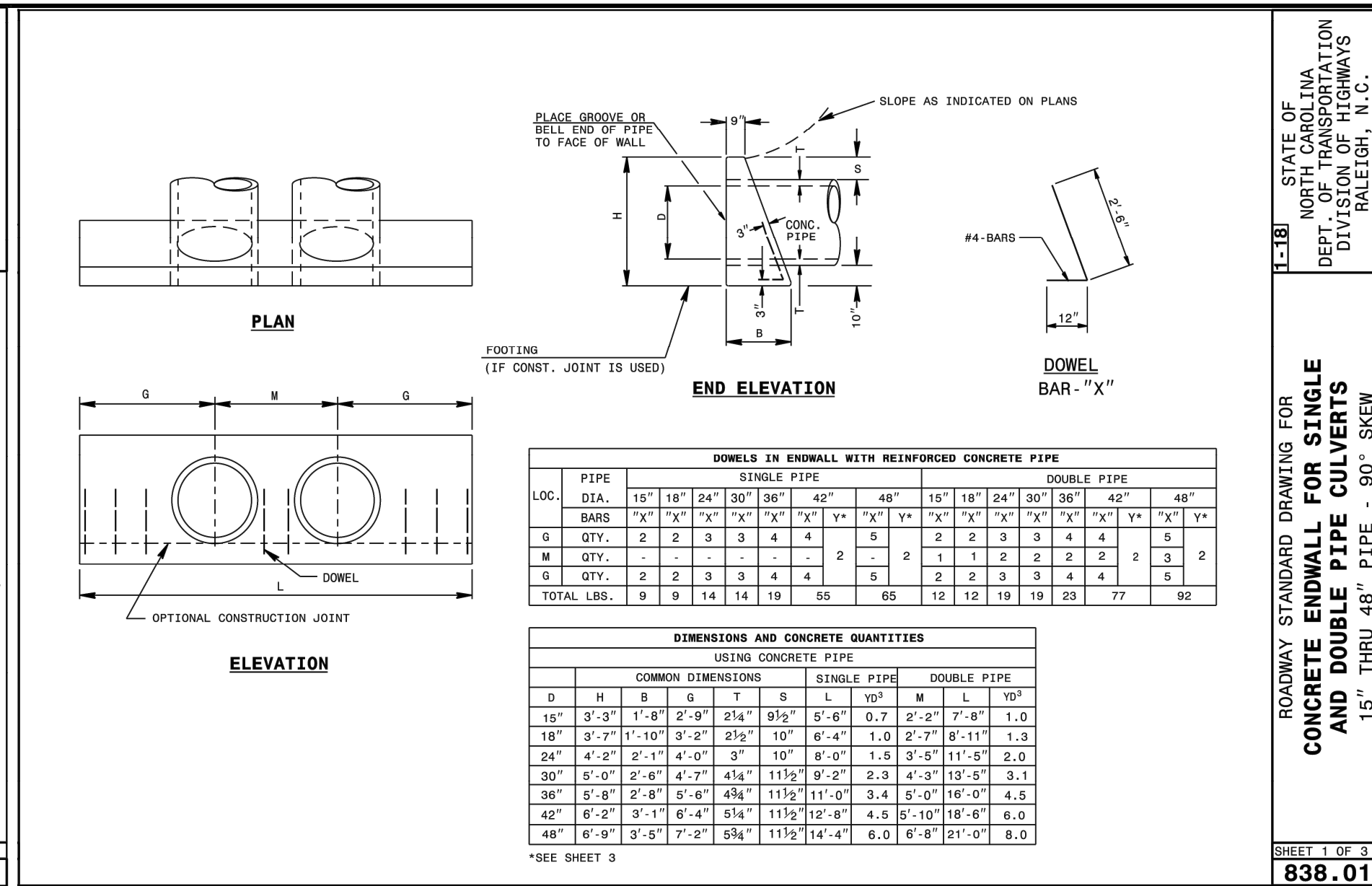
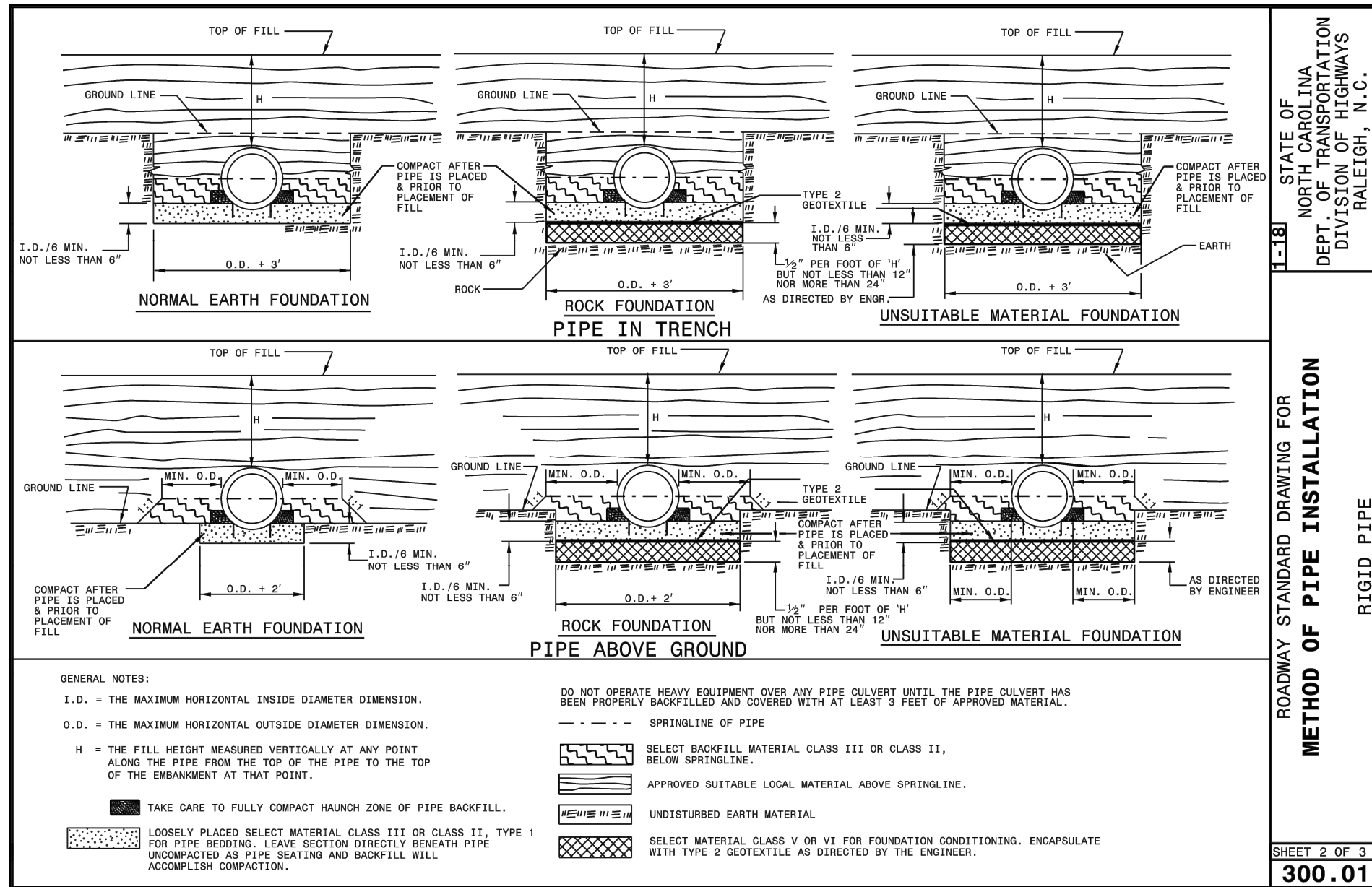
GRAPHIC SCALE 0 25 50 100 DIVISION VALUE = 50 FEET	
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

EROSION CONTROL DETAIL 2 OF 2	
DATE FEBRUARY 2023	PROJECT # 21.04018
FUNDING # N/A	

SHEET  
**C-31**

21\_04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS





**STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.**

**ROADWAY STANDARD DRAWING FOR METHOD OF PIPE INSTALLATION FILL HEIGHT TABLES**

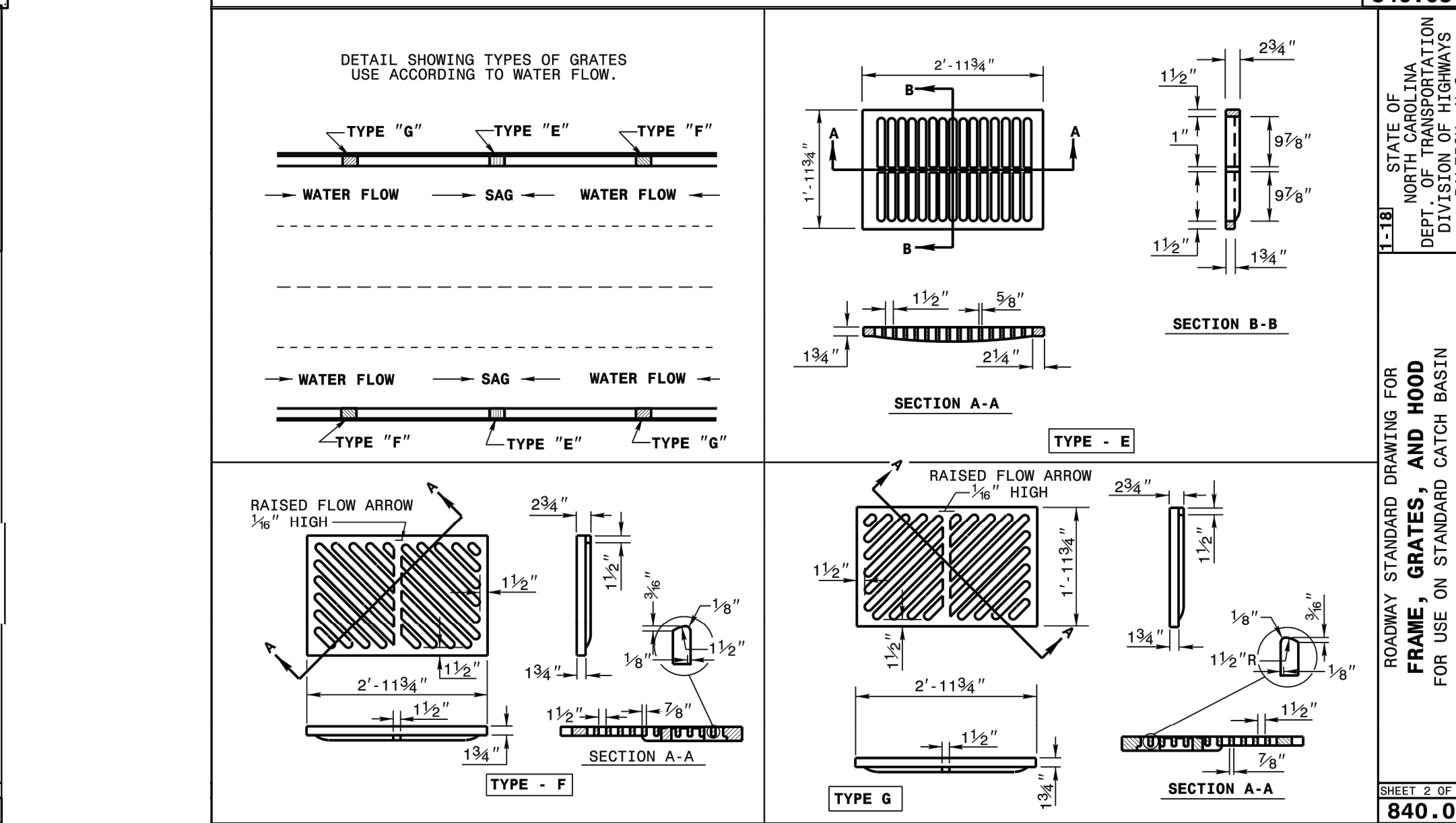
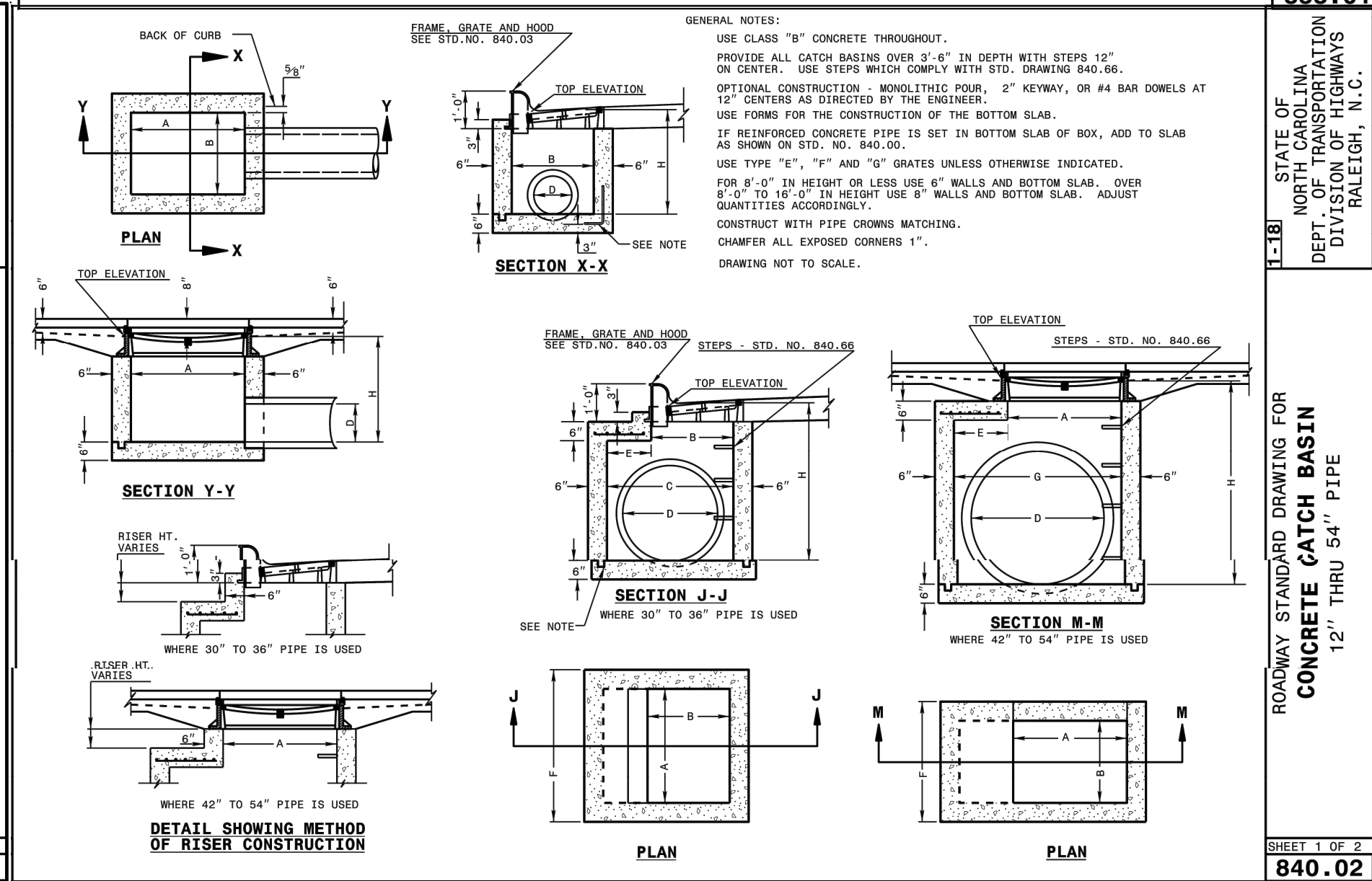
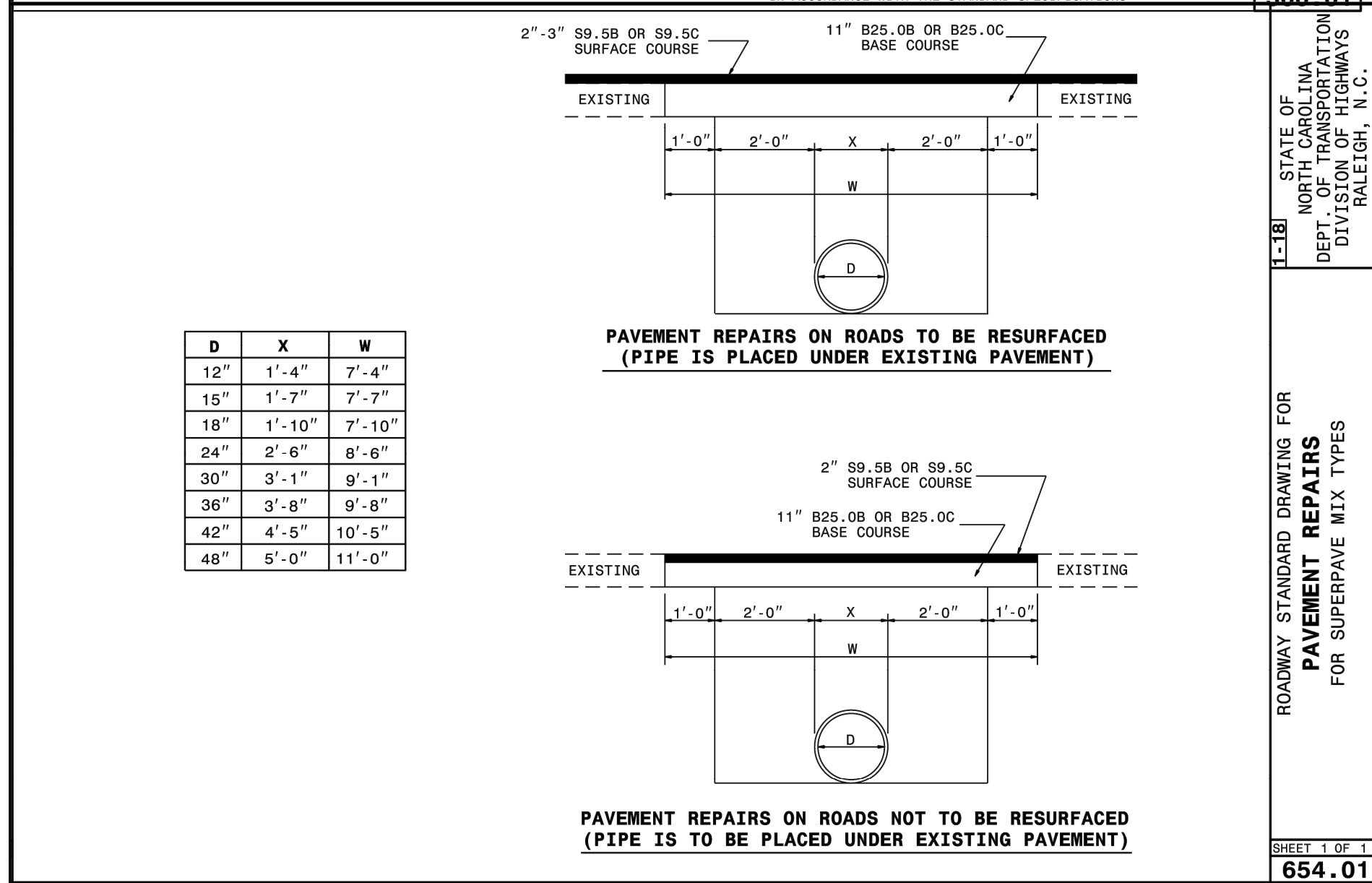
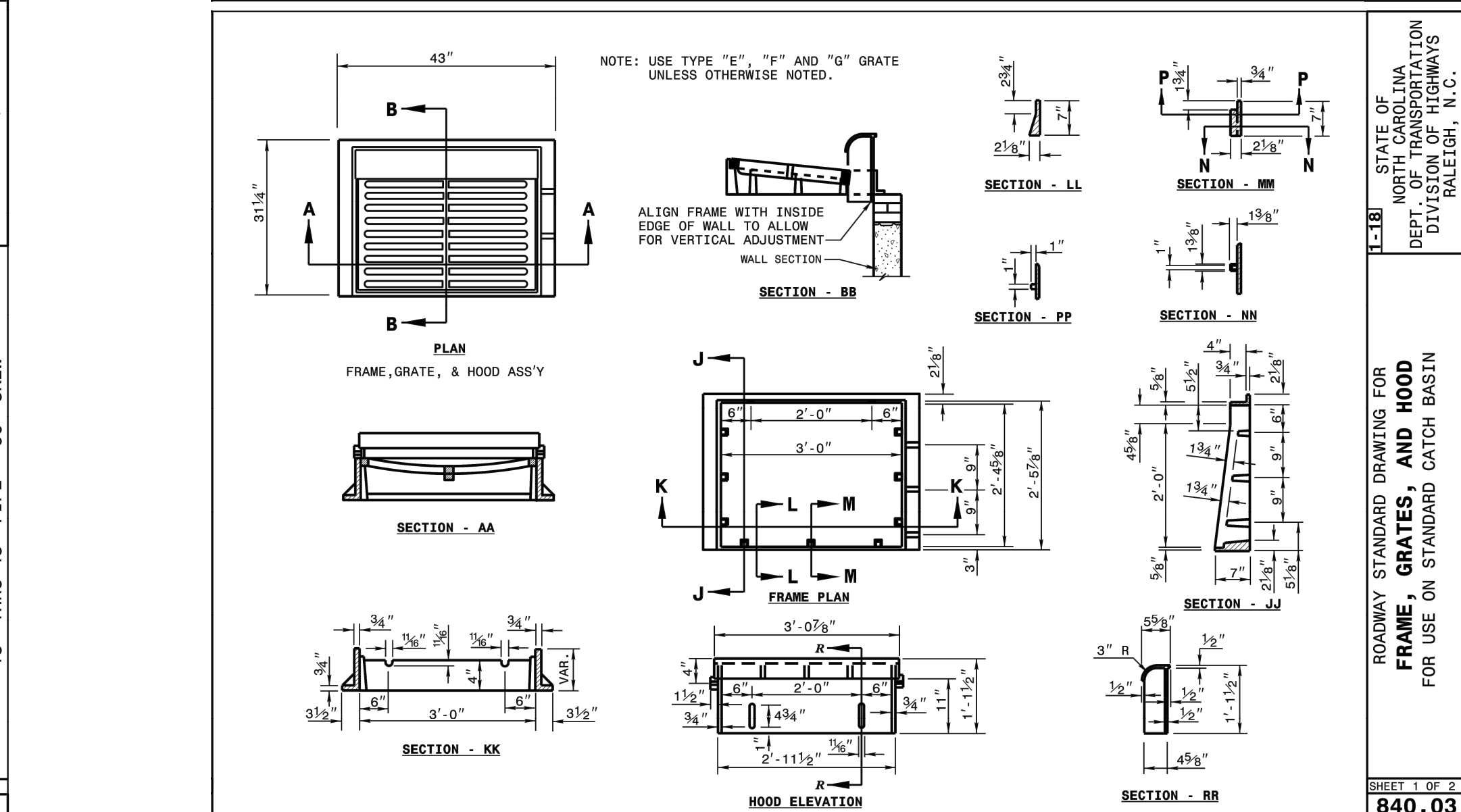
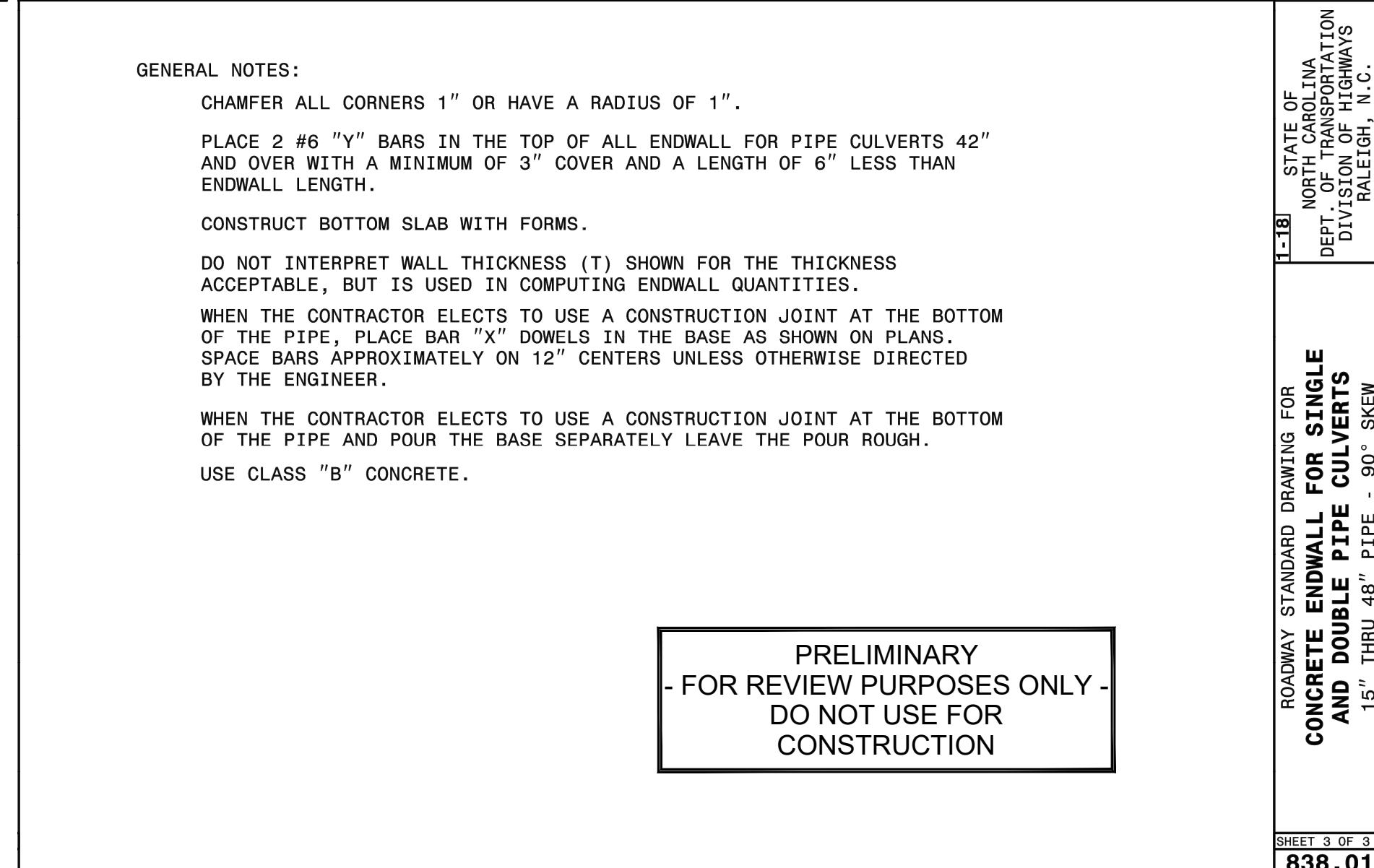
**SHEET 3 OF 3 300.01**

**FLEXIBLE PIPE**

Round Corrugated Steel Pipe (2 2/3 x 1/8 corrugation)	Round Corrugated Aluminum Pipe (2 2/3 x 1/8 corrugation)
Diameter (Inches)	Maximum Height of Cover (feet)
12	12
15	12
18	12
21	12
24	12
30	12
36	12
42	12
48	12
54	12
60	12
66	12
72	12
78	12
84	12

**RIGID PIPE**

RCP - (Minimum fill)	1' for Class IV & Class V	2' for Class III & Class II
10" - Class II pipe	20"	Class III pipe
30" - Class IV pipe	40"	Class V pipe





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**QUANTITY TO BE ADDED FOR EACH 2" INCREMENT INLET OPENING**

ADDITIONAL INLETS	CONCRETE CU. YDS.	REINFORCING STEEL - NO. 4 BARS	REINFORCING STEEL - NO. 3 BARS	REDUCTIONS FOR ONE PIPE
2'-0"	0.191	0.417	0.660	1.146
2'-2"	0.222	0.489	0.778	1.380
2'-4"	0.254	0.561	0.896	1.614
2'-6"	0.286	0.633	1.014	1.848
2'-8"	0.318	0.705	1.132	2.082
2'-10"	0.350	0.777	1.250	2.316
2'-12"	0.382	0.849	1.368	2.550

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR CONCRETE GRATED DROP INLET TYPE 'A' 12" THRU 72" PIPE  
SHEET 2 OF 2  
840.17

GENERAL NOTES:  
USE 4000 PSI MINIMUM COMPRESSIVE STRENGTH CONCRETE.  
USE ASTM A615 GRADE 60 REINFORCING STEEL. USE ASTM A1064 WELDED WIRE FABRIC (W.W.F.).  
FABRICATE, ASSEMBLE AND REASON PRECAST MANHOLE COMPONENTS ACCORDANCE WITH ASHTO M199.  
ASSEMBLE RISER AND GRADE RINGS WITH THE STEPS SPACED 12" FROM THE TOP TO THE BOTTOM OF THE MANHOLE.  
WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, CONSTRUCT THE TOP OF THE MANHOLE FLUSH WITH THE GROUND AND A MINIMUM OF 6" ABOVE THE GROUND AT OTHER LOCATIONS.  
LIMIT DEPTH OF FILL TO 30'-0" FROM FINISH GRADE TO TOP OF BOTTOM SLAB.  
THE MIN. SLAB THICKNESS "T" IS THE DIMENSION OF THE THINNEST PORTION OF THE TOP/BOTTOM SLAB.  
\* TOP MAT OF REINFORCEMENT MAY BE NEGLECTED IF TOP SLAB HAS A DISTINGUISHABLE TOP AND BOTTOM.

FRAME AND GRATES	NO. 40	NO. 30
FRAMING WEIGHT	340.20	340.20
MANHOLE WEIGHT	340.20	340.20
GRATE WEIGHT	340.20	340.20
TOTAL WEIGHT	1020.60	1020.60

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR PRECAST MANHOLE 4'-5" AND 6" DIAMETER 12" THRU 48" PIPE  
SHEET 1 OF 1  
840.52

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR CONCRETE CURB & GUTTER AND CURB & GUTTER  
SHEET 2 OF 3  
846.01

GENERAL NOTES:  
USE CLASS "B" CONCRETE THROUGHOUT.  
PROVIDE ALL GRATED DROP INLETS OVER 3'-8" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.  
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYS, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.  
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.  
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.05.  
CONSTRUCT WITH PIPE CROWNS MATCHING.  
USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24 (SHOWN), 840.25 (NOT SHOWN) OR 840.29 (NOT SHOWN).  
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES.  
CHAMFER ALL EXPOSED CORNERS 1".  
DRAWING NOT TO SCALE.  
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 15 FEET.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR CONCRETE GRATED DROP INLET TYPE 'A' 12" THRU 72" PIPE  
SHEET 1 OF 2  
840.17

SOLID COVER SHOWN PERFORATED. PERFORATED AVAILABLE IF SPECIFIED.  
STATE USE OF SYSTEM ON COVER (I.E.: SEWER, STORM DRAIN, ELECTRICAL)

MINIMUM WEIGHTS - LBS.  
FRAME - 180  
COVER - 120  
TOTAL - 300

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR MANHOLE FRAME AND COVER  
SHEET 1 OF 1  
840.54

NOTES:  
IN THE TRANSITION FROM 4'-0" CONCRETE EXPRESSWAY GUTTER TO 2'-6" CONCRETE CURB AND GUTTER, PLACE 1/2" EXPANSION JOINTS AT 25' INTERVALS.  
PLACE GROOVE JOINTS 1" DEEP AT 12'-6" INTERVALS BETWEEN EXPANSION JOINTS.  
FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND 1" OF CONTRACTION JOINTS WITH APPROVED JOINT SEALING COMPOUND.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR CONCRETE CURB & GUTTER AND CURB & GUTTER  
SHEET 3 OF 3  
846.01

NOTE:  
SEE STD. DWG. 840.25 FOR FRAME ANCHORAGE.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR FRAMES AND WIDE SLOT SAG GRATES  
SHEET 1 OF 1  
840.22

GENERAL NOTES:  
PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.  
JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.  
CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.  
CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.  
FILL ALL CONTRACTION JOINTS, EXCEPT IN 8"X6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.  
SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

FILL 3/8" x 1" DEEP GROOVED OR SAWN JOINT WITH JOINT SEALER

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
ROADWAY STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER  
SHEET 1 OF 3  
846.01

PRELIMINARY  
- FOR REVIEW PURPOSES ONLY -  
DO NOT USE FOR CONSTRUCTION

55 Broad Street  
Asheville, NC 28801  
828.252.0575  
NC Firm License # C-0459  
mcgillassociates.com

CALL 811 BEFORE YOU DIG  
SAFE DIGGING PARTNER

NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

MISCELLANEOUS DETAILS 2 OF 2

DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A
-----------------------	-----------------------	------------------

SHEET  
**C-33**





## Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits  
(along with corresponding Water Quality Certifications)

April 13, 2022 Ver 4.3

Please note: fields marked with a red asterisk \* below are required. You will not be able to submit the form until all mandatory questions are answered.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/0/edoc/624704/PCN%20Help%20File%202018-1-30.pdf>

### A. Processing Information

#### Pre-Filing Meeting Date Request was submitted on: \*

10/11/2021

If this is a courtesy copy, please fill in this with the submission date.

#### County (or Counties) where the project is located: \*

Robeson

#### Is this a NCDMS Project? \*

Yes  No

Click Yes, only if NCDMS is the applicant or co-applicant.

**DO NOT CHECK YES, UNLESS YOU ARE DMS OR CO-APPLICANT.**

#### Is this project a public transportation project? \*

Yes  No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

#### 1a. Type(s) of approval sought from the Corps: \*

- Section 404 Permit (wetlands, streams and waters, Clean Water Act)  
 Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

#### Has this PCN previously been submitted? \*

Yes  
 No

#### 1b. What type(s) of permit(s) do you wish to seek authorization? \*

- Nationwide Permit (NWP)  
 Regional General Permit (RGP)  
 Standard (IP)

#### 1c. Has the NWP or GP number been verified by the Corps? \*

Yes  No

Nationwide Permit (NWP) Number: 14 - Linear transportation

Nationwide Permit (NWP) Number: 18 - Minor Discharges

#### NWP Numbers (for multiple NWPS):

NWP 14 - Linear Transportation and NWP - 18 Minor Discharges

List all NW numbers you are applying for not on the drop down list.

#### 1d. Type(s) of approval sought from the DWR: \*

check all that apply

- 401 Water Quality Certification - Regular  
 Non-404 Jurisdictional General Permit  
 Individual 401 Water Quality Certification  
 401 Water Quality Certification - Express  
 Riparian Buffer Authorization

#### 1e. Is this notification solely for the record because written approval is not required?

\*

For the record only for DWR 401 Certification:

Yes  No



For the record only for Corps Permit:

Yes  No

1f. Is this an after-the-fact permit application? \*

Yes  No

1g. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

Yes  No

Acceptance Letter Attachment

Click the upload button or drag and drop files here to attach document

FILE TYPE MUST BE PDF

1h. Is the project located in any of NC's twenty coastal counties? \*

Yes  No

1j. Is the project located in a designated trout watershed? \*

Yes  No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

## B. Applicant Information



1a. Who is the Primary Contact? \*

Jon Swaim

1b. Primary Contact Email: \*

jon.swaim@mcgillassociates.com

1c. Primary Contact Phone: \*

(xxx)xxx-xxxx  
(828)328-2024

1d. Who is applying for the permit? \*

Owner  
(Check all that apply)

Applicant (other than owner)

1e. Is there an Agent/Consultant for this project? \*

Yes  No

### 2. Owner Information

2a. Name(s) on recorded deed: \*

Town of St Pauls

2b. Deed book and page no.:

N/A - Utility Easement

2c. Contact Person:

(for Corporations)

Elbert Gibson - Mayor

2d. Address \*

Street Address

210 W. Blue Street

Address Line 2

City

St. Pauls

Postal / Zip Code

28384

State / Province / Region

North Carolina

Country

United States

2e. Telephone Number: \*

(xxx)xxx-xxxx

(910)865-5165

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: \*

debra@stpaulsnc.gov

### 4. Agent/Consultant (if applicable)

4a. Name: \*

Jon Swaim

4b. Business Name:

(if applicable)

McGill Associates, P.A.

#### 4c. Address \*

Street Address

1240 19th Street Lane NW

Address Line 2

City

Hickory

Postal / Zip Code

28601

State / Province / Region

North Carolina

Country

United States

#### 4d. Telephone Number: \*

(828)328-2024

(xxx)xxx-xxxx

#### 4e. Fax Number:

(xxx)xxx-xxxx

#### 4f. Email Address: \*

jon.swaim@mcgillassociates.com

## C. Project Information and Prior Project History

### 1. Project Information

#### 1a. Name of project: \*

Elizabeth-Johnson Street Storm Drainage Improvements

#### 1b. Subdivision name:

(if appropriate)

N/A

#### 1c. Nearest municipality / town: \*

St.Pauls

### 2. Project Identification

#### 2a. Property Identification Number:

(tax PIN or parcel ID)

N/A - Utility Easement/030890981900

#### 2b. Property size:

(in acres)

4.03

#### 2c. Project Address

Street Address

No Assigned Address (Project Coordinates: 34.7989°, -78.9681°)

Address Line 2

City

St. Pauls

Postal / Zip Code

28384

State / Province / Region

North Carolina

Country

United States

#### 2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

#### Latitude: \*

34.7989

ex: 34.208504

#### Longitude: \*

-78.9681

-77.796371

### 3. Surface Waters

#### 3a. Name of the nearest body of water to proposed project: \*

Big Marsh Swamp

#### 3b. Water Resources Classification of nearest receiving water: \*

C;Sw

[Surface Water Lookup](#)

#### 3c. What river basin(s) is your project located in? \*

Lumber

#### 3d. Please provide the 12-digit HUC in which the project is located. \*

030402030604

[River Basin Lookup](#)

### 4. Project Description and History

**4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: \***

The proposed improvements consist of the design and construction of a new storm drainage system including the installation of approximately 1,800 linear feet of 48-inch reinforced concrete pipe with inlet boxes and related appurtenances from the flood-prone area to an outlet near Big Marsh Swamp. The new pipes would be installed primarily within the Town's right-of-way, easements, St Paul WWTP access road, and properties of South Johnson Street, East Clark Street, and East Ross Street to outfall in the wetland within the Town property (Parcel ID 030890981900). Adjoining areas consist of residential properties, St. Pauls WWTP, and undeveloped land.

**4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? \***

Yes  No  Unknown

**4f. List the total estimated acreage of all existing wetlands on the property:**

3.123

**4g. List the total estimated linear feet of all existing streams on the property:**

(intermittent and perennial)

N/A

**4h. Explain the purpose of the proposed project: \***

The proposed activity is a Flood and Drainage Improvements project under the Community Recovery Program to reduce flooding and the resulting property damage in the Town of St. Pauls.

**4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: \***

Majority of new pipes to be installed primarily within the Town's right-of-way, easements, and properties of South Johnson Street, East Clark Street, and East Ross Street within existing road shoulders and upland areas. See plan sheets C-10 through C-14.

Project work at the Town of St. Pauls WWTP Property under a Nationwide Permit #14:

Replacement of existing 24" RCP with two 24" RCP to allow for additional flow during storm events under the gravel access road to the St. Pauls WWTP. The two 24" RCP will be installed as close as possible to the existing 24" RCP. The culverts outlets will be armored with 18" Class B Riprap Apron to prevent erosion. See Appendix 2 - Plans Set - C-16. The proposed permanent impacts (Impact W4) are approximately 0.0027 Acres resulting from the Riprap Apron. All temporary impacts (Impact W3 - 0.0127 Acres) for the installation of the two 24" RCP will be from construction access. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands on-site. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post construction. See Appendix 2 Plans Set - Sheet G-02 - Native Plant Seeding Mix for Wetland Stream or Riverbank Stabilization. The contractor shall provide adequate pump around or diversion to keep the work area dry. Appendix 2 Plans Set - Sheet C-31 - Temporary Stream Bypass Detail.

Project work at the Town owned 20' Utility Easement under a Nationwide Permit #18:

The proposed project calls for two 36" RCP approximately 244 LF in length to be installed within the 20' Utility Easement as shown on Appendix 2 - Plans Set - C-15. The culvert outlets will be armored with 18" Class B Riprap Apron. The proposed permanent impacts (Impact W2) are approximately 0.0686 Acres resulting from the 20' Utility Row that will be cleared and maintained permanently and the Riprap Apron. All temporary impacts (Impact W1 - 0.0436 Acres) for the installation of the two 36" RCP will be from construction access. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands on-site. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post construction. See Appendix 2 Plans Set - Sheet G-02 - Native Plant Seeding Mix for Wetland Stream or Riverbank Stabilization.

In order to ensure that stormwater is adequately drained from the surrounding area which is prone to flooding, the two proposed 36" RCP must extend into Wetland A. Alternatives were explored to avoid wetland impacts, but adequate fall was not achievable without the proposed wetland impacts. The Class B Riprap Apron was designed to prevent washout at the culvert outlet. Project was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp. No surface water was noted within the project area during site visits. Groundwater was estimated at 6-inches below natural grade. Estimated fill below ordinary high water totals 597.6 cubic feet or 22.1 cubic yards.

No indirect impacts are anticipated for the proposed project.

It is anticipated typical road construction equipment will be used for the project which might include excavators, bulldozers, frontend loaders, skid steers, and dump trucks.

**5. Jurisdictional Determinations**

**5a. Have the wetlands or streams been delineated on the property or proposed impact areas? \***

Yes  No  Unknown

**Comments:**

See Appendix 5 - Preliminary Jurisdictional Determination

**5b. If the Corps made a jurisdictional determination, what type of determination was made? \***

Preliminary  Approved  Not Verified  Unknown  N/A

**Corps AID Number:**

Example: SAW-2017-99999

N/A

**5c. If 5a is yes, who delineated the jurisdictional areas?**

Name (if known): Jonathan Herman/Jon Swaim

Agency/Consultant Company: McGill Associates, P.A.

Other: 10/13/2021 & 2/7/2023

**6. Future Project Plans**

**6a. Is this a phased project? \***

Yes  No



Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

N/A

## D. Proposed Impacts Inventory

### 1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

- Wetlands
  Streams-tributaries
  Buffers  
 Open Waters
  Pond Construction

### 2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

"W." will be used in the table below to represent the word "wetland".

2a. Site #* (?)	2a1 Reason* (?)	2b. Impact type* (?)	2c. Type of W.*	2d. W. name*	2e. Forested*	2f. Type of Jurisdiction* (?)	2g. Impact area* (acres)
W1	Construction Access	T	Bottomland Hardwood Forest	Wetland A	Yes	Corps	0.044 (acres)
W2	Culvert/ Riprap Apron/ 20' Maintained Utility ROW	P	Bottomland Hardwood Forest	Wetland A	Yes	Corps	0.069 (acres)
W3	Construction Access	T	Bottomland Hardwood Forest	Wetland A	Yes	Corps	0.013 (acres)
W4	Rip Rap Apron	P	Bottomland Hardwood Forest	Wetland A	Yes	Corps	0.003 (acres)

2g. Total Temporary Wetland Impact

0.057

2g. Total Permanent Wetland Impact

0.072

2g. Total Wetland Impact

0.129

2i. Comments:

See Appendix 1 - Impacts Map for approximate impacts.

## E. Impact Justification and Mitigation

### 1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project: \*

Project designed to minimize wetland impacts as much as practical. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post construction. See Appendix 2 Plans Set - Sheet G-02 - Native Plant Seeding Mix for Wetland Stream or Riverbank Stabilization.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques: \*

Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands on-site. The contractor shall provide adequate pump around or diversion to keep the work area dry. Appendix 2 Plans Set - Sheet C-31 - Temporary Stream Bypass Detail.

### 2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

- Yes
  No

2b. If this project DOES NOT require Compensatory Mitigation, explain why:

The project does not exceed thresholds requiring compensatory mitigation for Nationwide Permit 14/18.

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's RIBITS website.

## F. Stormwater Management and Diffuse Flow Plan (required by DWR)

\*\*\* Recent changes to the stormwater rules have required updates to this section.\*\*\*

### 1. Diffuse Flow Plan

1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

Yes  No

For a list of options to meet the diffuse flow requirements, click [here](#).

If no, explain why:

The project is located in the Lumber River Basin which is not subject to Riparian Buffer Protection Rules.

## 2. Stormwater Management Plan

2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? \*

Yes  No

2b. Does this project meet the requirements for low density projects as defined in 15A NCAC 02H .1003(2)? \*

Yes  No

To look up low density requirement click here [15A NCAC 02H .1003\(2\)](#).

Comments:

## G. Supplementary Information



### 1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? \*

Yes  No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? \*

Yes  No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) \*

Yes  No

Comments:\*

Project is currently under environmental review as a Flood and Drainage Improvements project under the Community Recovery Program.

### 2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? \*

Yes  No

### 3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? \*

Yes  No

3b. If you answered "no," provide a short narrative description.

No additional development anticipated as a result of the proposed work.

### 4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? \*

Yes  No  N/A

### 5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? \*

Yes  No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? \*

Yes  No

5c. If yes, indicate the USFWS Field Office you have contacted.

Raleigh

5d. Is another Federal agency involved? \*

Yes  No  Unknown

5e. Is this a DOT project located within Division's 1-8? \*

Yes  No

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? \*

Yes  No

5g. Does this project involve bridge maintenance or removal? \*

Yes  No

Link to the NLEB SLOPES document: [http://saw-reg.usace.army.mil/NLEB/1-30-17-signed\\_NLEB-SLOPES&apps.pdf](http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf)

5h. Does this project involve the construction/installation of a wind turbine(s)? \*

Yes  No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? \*

Yes  No

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? \*

USFWS Information for Planning and Consultation tool (see Appendix 4)

On February 7, 2023 environmental specialists from McGill Associates, P.A. conducted a Threatened and Endangered Species survey on the Limits of Disturbance (LOD). The survey was concentrated on the Red-cockaded Woodpecker (RCW) and Michaux's Sumac during the site survey. No species occurrences or potential habitat were found during the survey for RCW and Michaux's Sumac. No mature pine species generally more than 80 years old found in the study area. All remaining Threatened and Endangered Species found on the USFWS IPAC Report were surveyed for and no species occurrences or potential habitat were found within the LOD.

## 6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? \*

Yes  No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? \*

NOAA Essential Fish Habitat Mapper

## 7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? \*

Yes  No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? \*

NC Historic Preservation Office HPOWEB

See Appendix 3 - NCHPO HPOWEB Map

## 8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? \*

Yes  No

8b. If yes, explain how project meets FEMA requirements:

All appropriate floodplain development permits will be acquired prior to construction.

8c. What source(s) did you use to make the floodplain determination? \*

<https://fris.nc.gov>

## Miscellaneous



### Comments

Please use the space below to attach all required documentation or any additional information you feel is helpful for application review. Documents should be combined into one file when possible, with a Cover Letter, Table of Contents, and a Cover Sheet for each Section preferred.

[Click the upload button or drag and drop files here to attach document](#)

Final Appendices.pdf

36.11MB

File must be PDF or KMZ

## Signature



\*

By checking the box and signing below, I certify that:

- The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief; and
- The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I have given true, accurate, and complete information on this form;



- I agree that submission of this PCN form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the PCN form.

**Full Name: \***

Jon Swaim

**Signature \***

A rectangular box containing a handwritten signature in cursive script that reads "Jon Swaim".

**Date**

2/13/2023

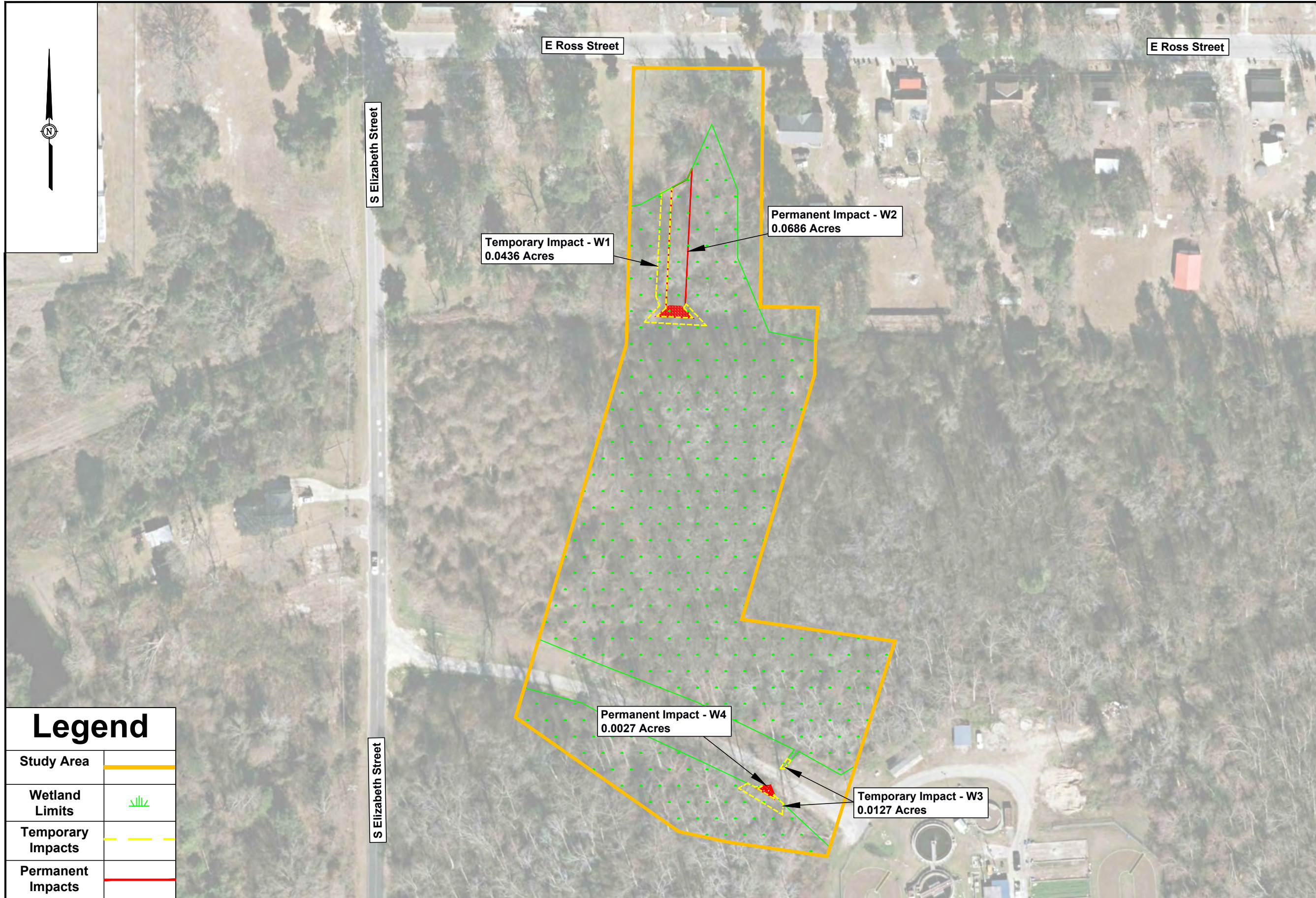
## **APPENDICES**

- 1. Impacts Map**
- 2. Plans Set**
- 3. NCHPO HPOWEB Map**
- 4. IPAC Consultation Package**
- 5. Preliminary Jurisdictional Determination (PJD)**

**APPENDIX 1**  
**Impacts Map**



P:\2021\21\_04016-STPAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DESIGN\PERMITS\404-40\IPCN\IMPACTS MAP\_2\_7\_2023.DWG PLOT DATE 2/8/2023 10:02 AM ALEX LOWDERMILK



Impacts Table	
Temporary Impact - W1 (Wetland A)	0.0436 Acres
Permanent Impact - W2 (Wetland A)	0.0686 Acres
Temporary Impact - W3 (Wetland A)	0.0127 Acres
Permanent Impact - W4 (Wetland A)	0.0027 Acres

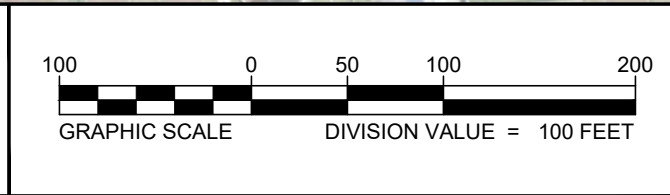
Legend	
Study Area	
Wetland Limits	
Temporary Impacts	
Permanent Impacts	



1240 19th Street Lane NW  
Hickory, NC 28601  
828.328.2024  
NC Firm License # C-0459  
mcgillassociates.com

DATE 2/8/2023	PROJECT # 21.04018
OFFICE MANAGER DC	DESIGNER AL
PROJECT MANAGER DS	REVIEWER JS

ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



IMPACTS MAP

FIGURE  
**1**

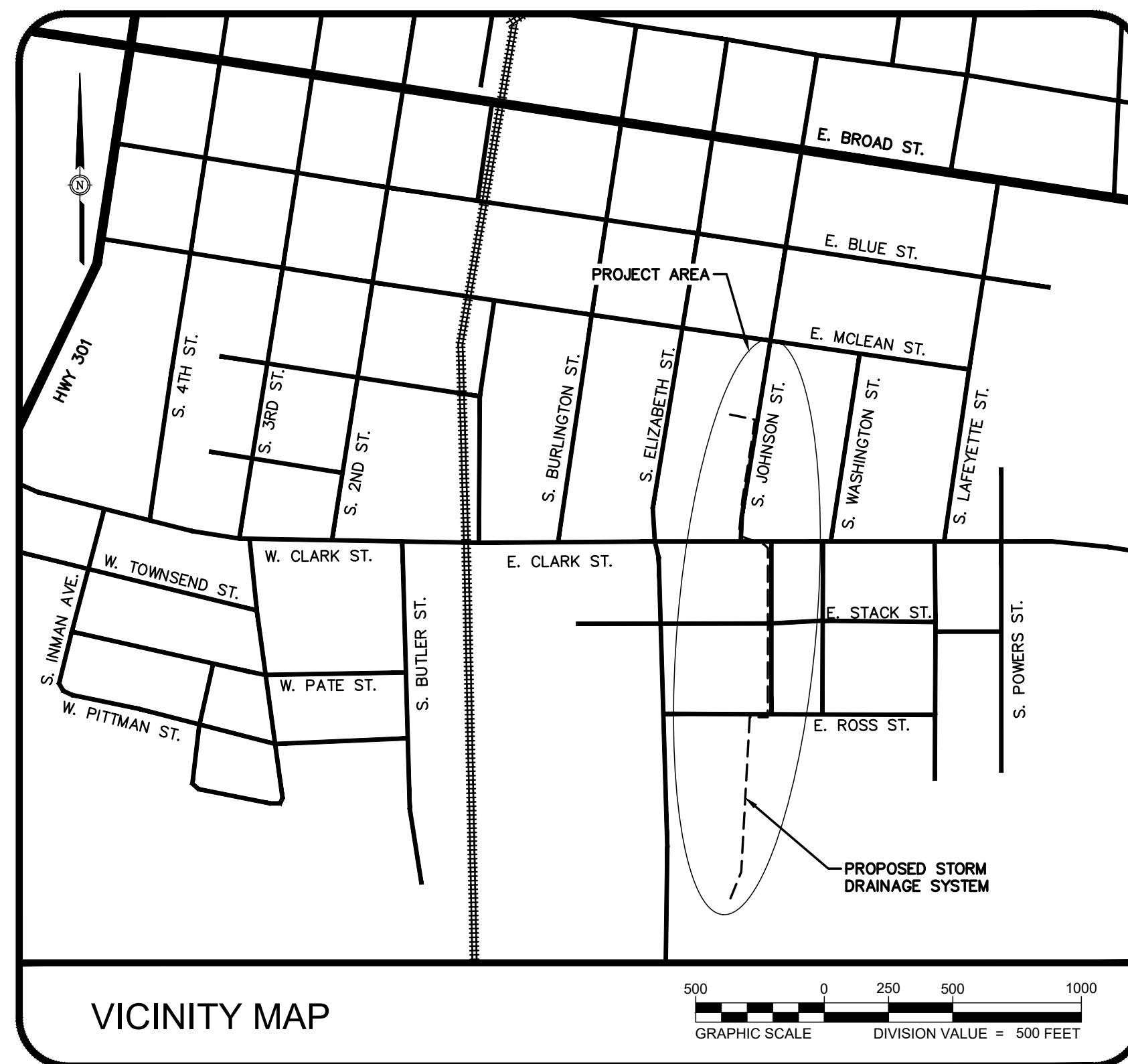


## **APPENDIX 2**

### **Plans Set**

# ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS TOWN OF ST. PAULS

## ROBESON COUNTY, NORTH CAROLINA



### SCHEDULE OF DRAWINGS

- G-01 Cover
- G-02 Notes & Legend
- G-03 NCDEQ General Permit Notes
- G-04 NCDEQ General Permit Notes
- CE-01 Existing Conditions 1 of 4
- CE-02 Existing Conditions 2 of 4
- CE-03 Existing Conditions 3 of 4
- CE-04 Existing Conditions 4 of 4
- C-10 Proposed Plan and Profile S. Johnson St. Sta. 0+00-5+50
- C-11 Proposed Plan and Profile E. Clark St. Sta. 6+00-7+50
- C-12 Proposed Plan and Profile S. Johnson St. Sta. 8+00-12+00
- C-13 Proposed Plan and Profile S. Johnson St. Sta. 12+00-15+00
- C-14 Proposed Plan and Profile E. Ross St. Sta. 15+00-16+50
- C-15 Proposed Plan and Profile Sta. 17+00-22+00
- C-16 Proposed Plan and Profile Sta. 22+00-25+50
- C-17 Overview of Wetland Impacts Sta. 17+00-25+50
- C-20 Cross Sections Sta. 17+50-20+00
- C-30 Erosion Control Details 1 of 2
- C-31 Erosion Control Detail 2 of 2
- C-32 Miscellaneous Details 1 of 2
- C-33 Miscellaneous Details 2 of 2



PRELIMINARY  
- FOR REVIEW PURPOSES ONLY -  
DO NOT USE FOR  
CONSTRUCTION

PRELIMINARY

FEBRUARY 2023



**NORTH CAROLINA LAND QUALITY SECTION EROSION CONTROL NOTES**

GENERAL: ALL EROSION CONTROL MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCEQ), DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES (DEMLR), LAND QUALITY SECTION. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH FOR ALL WORK.

1. INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED BY THE NCEQ.
2. PROCEED WITH GRADING, CLEARING, AND GRUBBING. NO OFF SITE DISPOSAL OF MATERIAL IS ALLOWED UNLESS THE DISPOSAL SITE HAS AN APPROVED EROSION CONTROL PLAN.
3. SEED AND MULCH DENUDED AREA WITHIN TIME FRAME SPECIFIED (SEE TABLE). SEED AND SOIL AMENDMENTS SHALL BE PLACED ON A PREPARED SEEDBED AT THE FOLLOWING RATES PER ACRE. STRAW MULCH SHALL BE TACKED WITH TACKING AGENT APPLIED BY HYDROSEEDER.

OR  
 CREEPING RED FESCUE 100 LBS (NATURAL AREAS AND STREAMBANKS)  
 STRAW MULCH 60-80 BALES  
 FOR SUMMER SEEDING ADD TO THE ABOVE:  
 GERMAN MILLET (SETARIA ITALICA) 40 LBS  
 SMALL-STEMMED SUDAN GRASS (SORGHUM BICOLOR) 50 LBS  
 FOR WINTER SEEDING ADD TO THE ABOVE:  
 RYE GRAIN (SECALE CEREALE) 120 LBS

IF HYDROSEEDING, WOOD CELLULOSE MAY BE USED IN ADDITION TO STRAW MULCH AT THE RATE OF 1,000 LBS PER ACRE.

ALL SEEDING SHALL BE MAINTAINED, WATERED ETC., UNTIL A PERMANENT VEGETATIVE GROUND COVER IS ESTABLISHED OVER ALL DISTURBED AREAS. FOR ALL SLOPES 2:1 OR STEEPER ADD TO THE ABOVE:  
 PURGE LIVE SEED SWITCHGRASS 4 LBS  
 BROWNTOP MILLET OR PEARL MILLET (PENNISETUM GLAUCUM) 8 LBS  
 GRAIN SORGHUM (SORGHUM BICOLOR (L.) MOENCH SSP. BICOLOR) 2 LBS  
 ALL SLOPES 2:1 OR STEEPER SHALL BE COVERED BY EROSION CONTROL MATTING.

**NATIVE PLANT SEEDING MIX FOR WETLAND STREAM OR RIVERBANK STABILIZATION**

1. NATIVE SEED MIX SHALL BE APPLIED AT A RATE OF 20 LBS./AC. AND INCLUDE THE FOLLOWING SPECIES:  
 25% - BIG BLUESTEM (ANDROPOGON GERARDII)  
 25% - INDIAN GRASS (SORGHASTRUM NUTANS)  
 25% - LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)  
 25% - SWITCHGRASS (PANICUM VIRGATUM)
2. ADDITIONALLY A TEMPORARY COVER/NURSE CROP MIX SHALL BE APPLIED AT A RATE OF 25 LBS./ACRE AS FOLLOWS:  
 AUGUST THRU MAY - GREENRYE (SECALE CEREALE)  
 MAY 1 THRU AUGUST - MILLET (PENNISETUM GLAUCUM)
3. ANY SUBSTITUTIONS OR VARIATIONS FROM SPECIFICATIONS ABOVE SHALL BE APPROVED BY THE PROJECT ENGINEER.
4. NO FERTILIZER SHALL BE USED WITHIN 10' OF TOP OF STREAM OR RIVER BANK.
5. MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
6. REQUEST FINAL APPROVAL BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES, LAND QUALITY SECTION.
7. REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREAS.

**ABBREVIATIONS**

AT AREA	MAX. MECH. MANUFACTURER MINIMUM MILE MECHANICAL JOINT NUMBER NORTH NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
A.B.C. ACRE	N/F NOW OR FORMERLY
A.D. ALGEBRAIC DIFFERENCE ABOVE FINISHED FLOOR AREA LIGHT	N.I.C. NOT IN CONTRACT
A.F.F. APPROX. ARCHITECTURAL ASSEMBLY	NTS NOT TO SCALE
AL APPROXIMATE ARCHITECTURAL ASSEMBLY	O.C. ON CENTER(S)
B-B BEARING	O.D. OUTSIDE DIAMETER
BEAR. BLDG. BACK OF CURB	OHE OVERHEAD ELECTRIC OPERATION
BOC BOTTOM CENTERLINE	OPNG OPENING
BOT. CRUSHED AGGREGATE BASE COURSE	PB PLAT BOOK
CB CATCH BASIN	PC POINT OF CURVATURE
C-C CENTER TO CENTER	PERM. PERMANENT
CF CUBIC FEET	PG PAGE
CFM CUBIC FEET PER MINUTE	PI POINT OF INTERSECTION
C&G CURB AND GUTTER	PIFO POINT OF INTERSECTION - TURN OUT
CH CHORD	PL PROPERTY LINE
CI CURB INLET	PP POWER POLE
CL CLASS CONSTRUCTION	PROP. PROPOSED
CNST CLEAN-OUT	PS POINT OF SWITCH
C.O. COMPANY	PSI POUNDS PER SQUARE INCH
CO. COLUMN CONCRETE	PT POINT OF TANGENCY
COL. CONC. CONNECTION	PT POINT OF TANGENCY
CONN CPP CORRUGATED PLASTIC PIPE	PVC POLYVINYL CHLORIDE
CSP CULVERT	P.V.C. POINT OF VERTICAL CURVATURE
CULV. DEGREE(S)	P.V.I. POINT OF VERTICAL INTERSECTION
D / DEG DELTA ANGLE	PVMT PAVEMENT
D / DIA. DIAMETER	P.V.T. POINT OF VERTICAL TANGENCY
DB DEED BOOK	R RADIUS
Dc DEGREE OF CURVATURE	RCP REINFORCED CONCRETE PIPE
DET DETAIL	RD ROAD
DI DROP INLET	RED. REDUCER
DIP DUCTILE IRON PIPE	REQ'D. REQUIRED
DN DOWN	RJ RESTRAINED JOINT
D/W DRIVEWAY	RR RAILROAD
DWG(S). DRAWING(S)	RT RIGHT
E EAST	ROW RIGHT OF WAY
EA. EACH	S SOUTH
EL/ELEV. ELEVATION	SAN SANITARY
ELEC. ELECTRICAL	SCH SCHEDULE
EOP EDGE OF PAVEMENT	SDMH STORM DRAIN MANHOLE
ESMT EASEMENT	SECS SECONDS
EX/EXIST EXISTING	SECT. SECTION
F.D. FLOOR DRAIN	SED. SEDIMENT
FDC FIRE DEPARTMENT CONNECTION(S)	SEW SEWER
FES FLARED END SECTION	SF SQUARE FEET
FFE FINISHED FLOOR ELEVATION	SHT. / SH. SHEET
FH FIRE HYDRANT	SP SERVICE POLE
FHA FIRE HYDRANT ASSEMBLY	SPEC. SPECIFICATION
FI FLOW INDICATOR	SR SQUARE
FLEX. FLEXIBLE	SS STATE ROAD
FL FLANGE	SS STAINLESS STEEL
FM FORCE MAIN	SSCO SANITARY SEWER CLEANOUT
FO FIBER OPTIC CABLE	SSMH SANITARY SEWER MANHOLE
FOP FIBER OPTIC POST	STA. STATION
FOSC FIBER OPTIC SIGNAL CABLE	STD. STANDARD
FOC FACE OF CURB	STL STEEL
FT FEET	S/W SIDEWALK
FUT FUTURE	T/C TOP OF CURB
GA GAUGE	TEL. TELEPHONE
GAL. GALLON	TEMP. TEMPORARY
GALV. GALVANIZED	TK THICK
GEN GENERATOR	T/G TOP OF GRATING
G/L GUTTER LINE	T.O. TOP OF...
GV GATE VALVE	TP TELEPHONE PEDESTAL
GW GUY WIRE/ANCHOR	T/S TOP OF SLAB
HD HEAVY DUTY	TSB TRAFFIC SIGNAL BOX
HEX. HEXAGONAL	TST TEMPORARY SEDIMENT TRAP
HOR(IZ). HORIZONTAL	T/W TOP OF WALL
HP HIGH POINT	TYP. TYPICAL
HWL HIGH WATER LEVEL	U/G UNDER GROUND
HWY. HIGHWAY	UGE UNDER GROUND ELECTRIC
ICV IRRIGATION CONTROL VALVE	UP UTILITY POLE
ID. INSIDE DIAMETER	UV ULTRAVIOLET
IN INCH(ES)	V VALVE
INV. INVERT	VC VERTICAL CURVE
JB JUNCTION BOX	VERT. VERTICAL
K CURVE COEFFICIENT	W WIDTH
L LENGTH	W WEST
LB POUND(S)	W/ WITH
LD LIGHT DUTY	WD WIDE
LF LINEAR FEET	WL WATER LEVEL
LG LONG	W/L WATER LINE
LP LIGHT POLE	WM WATER METER
LT LEFT	WSE WATER SURFACE ELEVATION
LWL LOW WATER LEVEL	WV WATER VALVE
	WWF WELDED WIRE FABRIC
	YD YARD
	YI YARD INLET
	YH YARD HYDRANT

**EXISTING CONDITIONS LEGEND**

TELEPHONE PEDESTAL	△ CALCULATED POINT
ELECTRIC PEDESTAL	○ CIPIS 1/2" REBAR SET WITH CAP
CABLE TV PEDESTAL	☒ CONCRETE MONUMENT
SIGN	☒ CM-R/W RIGHT-OF-WAY MONUMENT
UNDERGROUND CABLE TV SIGN	● DOT MON D.O.T. CONTROL POINT
UNDERGROUND FIBER OPTIC CABLE SIGN	● RB FOUND REBAR FOUND
UNDERGROUND TELEPHONE CABLE SIGN	● RB SPIKE RAILROAD SPIKE
UNDERGROUND GAS LINE SIGN	● PK NL PK NAIL FOUND / SET
UNDERGROUND ELECTRIC LINE SIGN	● SPINDLE SPINDLE FOUND / SET
LIGHT POLE	● GP/HUB HUB & TACK SET
UTILITY POLE	△ CP/NL GPS CONTROL POINT NAIL SET / FOUND
GUY WIRE ANCHOR	△ CP/NL CONTROL POINT/NAIL SET GPS
TRAFFIC SIGNAL POLE	△ CP/TEMP CONTROL POINT TEMPORARY MARK
RAILROAD CROSSING SIGNAL	★ NOS METAL ROD NATIONAL GEODETIC SURVEY METAL ROD
MANHOLE	☒ NOS CM NATIONAL GEODETIC SURVEY CONCRETE MONUMENT
SANITARY SEWER MANHOLE	☒ TEMPORARY CONTROL POINT SET
STORM DRAIN MANHOLE	△ NETWORK TRIANGULATION POINT
COMMUNICATION MANHOLE	▲ STAKE STAKE FOUND
ELECTRICAL MANHOLE	▲ IGH INTERSTATE HIGHWAY
PLAT BOOK	▲ U.S. HIGHWAY
PIGOT/YARD HYDRANT	▲ FFE FINISHED FLOOR ELEVATION
SEWER CLEAN-OUT	▲ ELEVATION MONITORING WELL
ELECTRIC SERVICE STUB-OUT	● MW MONITORING WELL
GAS SERVICE STUB-OUT	● PZ PIEZOMETER
CATCH BASIN	● LANDFILL GAS MONITORING PROBE
CURB INLET	● SURFACE WATER SAMPLING LOCATION
WATER METER	● LANDFILL GAS VENT
FIRE HYDRANT	● LANDFILL GAS COLLECTION WELLHEAD
WATER VALVE	● POTABLE WATER WELL
BLOW OFF VALVE	● MAILBOX OR PAPER BOX
GAS METER	● DPB POSTAL DROP BOX
GAS VALVE	● SAT DISH SATELLITE DISH
IRRIGATION CONTROL VALVE	● YARD ORNAMENT STATUE, BIRD BATHS, ETC.
POST INDICATOR VALVE	● TREES
ELECTRIC JUNCTION BOX OR OUTLET	● SHRUBS / BUSHES
TRAFFIC SIGNAL BOX	(H) HORIZONTAL GROUND DISTANCE
GEOTECHNICAL BORING	(G) NC STATE PLANE GRID DISTANCE
	===== CULVERT
	----- X-----X-----X----- FENCE
	----- S-----S----- SILT FENCE
	----- W-----W----- GUARD RAIL
	----- G-----G----- APPROXIMATE LOCATION OF EXISTING SEWER LINES
	----- DL-----DL-----DL----- APPROXIMATE LOCATION OF EXISTING WATER LINES
	----- CTV-----CTV-----CTV----- APPROXIMATE LOCATION OF EXISTING GAS LINES
	----- TOP OF SLOPE
	----- DL-----DL-----DL----- TOE OF SLOPE
	----- DITCH LINES
	----- CTW-----CTW-----CTW----- APPROXIMATE LOCATION OF UNDERGROUND CABLE TV LINE
	----- APPROXIMATE LOCATION OF OVERHEAD CABLE TV LINE
	----- FOC-----FOC----- APPROXIMATE LOCATION OF UNDERGROUND FIBER OPTIC CABLE LINE
	----- E-----E----- APPROXIMATE LOCATION OF UNDERGROUND ELECTRIC LINE
	----- E-----E----- APPROXIMATE LOCATION OF OVERHEAD ELECTRIC LINE
	----- T-----T----- APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE LINES
	----- T-----T----- APPROXIMATE LOCATION OF OVERHEAD TELEPHONE LINES
	----- ROW-----ROW----- RIGHT-OF-WAY
	----- TREELINE
	----- SHRUBLINE
	----- PROPERTY LINE NOT SURVEYED
	----- ROCKLINE
	----- STREAM LINE
	----- CENTERLINE
	----- CENTERLINE VARIANT
	----- SWAMPLINE/WETLANDS
	----- U-----U----- APPROXIMATE LOCATION OF OVERHEAD UTILITY LINE
IPS IRON PIN SET	CPP CORRUGATED PLASTIC PIPE
CMU CONCRETE MASONRY UNIT	DIP DUCTILE IRON PIPE
R/W RIGHT OF WAY	E&T ELECTRIC & TELEPHONE
℄ CENTERLINE	FOC FIBER OPTIC CABLE
C CURVE (SEE CURVE TABLE)	GP GALVANIZED IRON PIPE
POB POINT OF BEGINNING	O/H OVERHEAD
CP CALCULATED POINT	RCP REINFORCED CONCRETE PIPE
PB PLAT BOOK	U/G UNDERGROUND
DB DEED BOOK	VCP VITRIFIED CLAY PIPE
L LINE (SEE LINE TABLE)	PVC POLYVINYL CHLORIDE PIPE
BLDG BUILDING	FFE FINISHED FLOOR ELEVATION
CIP CAST IRON PIPE	PG PAGE
CMP CORRUGATED METAL PIPE	REF REFERENCE
CONC CONCRETE	DOT DEPARTMENT OF TRANSPORTATION
PROP PROPOSED	NGS NATIONAL GEODETIC SURVEY
EX/EXIST EXISTING	NCSP NORTH CAROLINA STATE PLANE
	MTR BOX METER BOX
	EL ELEVATION

**GENERAL CONSTRUCTION NOTES**

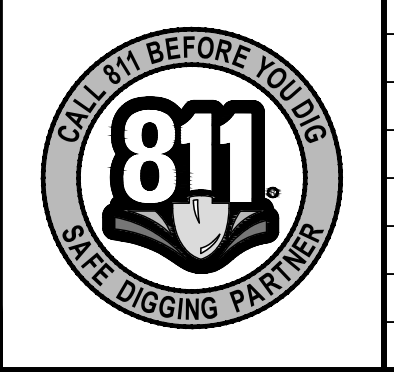
1. SURVEY IS REFERENCED TO HORIZ: NAD83, STATE PLANE (FEET) NORTH CAROLINA (FIS 3200) VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) BY MCGILL ASSOCIATES, MARCH 1, 2022.
2. CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES
3. NOT ALL UTILITIES ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING UTILITIES AND UTILITY INFORMATION PRESENTED ON THESE DRAWINGS. ANY DISCREPANCIES SHALL BE ADDRESSED TO THE ENGINEER IN WRITING. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING AND COORDINATING WORK WITH THE AFFECTED UTILITY COMPANIES WHETHER HE PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK. ANY DAMAGE DONE TO EXISTING UTILITIES (SHOWN OR NOT SHOWN ON PLANS) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT NC ONE CALL AT 1-800-632-4949 AT LEAST THREE WORKING DAYS PRIOR TO CONSTRUCTION. NON-SUBSCRIBERS SHALL BE CONTACTED DIRECTLY.
4. ALL PUBLIC ROADWAYS SHALL REMAIN OPEN AT ALL TIMES UNLESS OTHERWISE NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ROAD SURFACES CLEAN AND FREE OF CONSTRUCTION SEDIMENT AND DEBRIS AT ALL TIMES.
5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL CITY, STATE, AND FEDERAL REGULATIONS AND PERMIT REQUIREMENTS.
6. CONTRACTOR SHALL OBTAIN AND PROVIDE TO THE OWNER TEMPORARY STREET AND DRIVEWAY ACCESS PERMIT FOR CONSTRUCTION ENTRANCES PRIOR TO ANY CONSTRUCTION ACTIVITY.
7. STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III, PER NCDOT STANDARD SPECIFICATIONS SECTION 103.2.
8. PRE-CAST CATCH BASINS SHALL CONFORM TO THE REQUIREMENTS OF NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (LATEST EDITION) ARTICLES 840-1 THROUGH 840-3. CURB INLET CATCH BASIN SHALL CONFORM TO NCDOT STANDARD DETAILS 840.02 THROUGH 840.04. DROP INLETS SHALL CONFORM TO STANDARD DETAIL 840.14. JUNCTION BOXES SHALL CONFORM TO STANDARD DETAIL 840.31. ALL PRE-CAST DRAINAGE STRUCTURES SHALL CONFORM TO NCDOT STANDARDS DETAIL 840.46.
9. CURB INLET FRAME, GRATE AND HOOD SHALL CONFORM TO NCDOT STANDARD DETAIL 840.03.
10. CONCRETE AND MASONRY SHALL MEET THE REQUIREMENTS OF APPROPRIATE SECTION OF NCDOT STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURES (LATEST EDITION). CONCRETE SHALL BE CLASS A OR B, 4000 PSI MINIMUM, MEETING THE REQUIREMENTS OF SECTION 1000, CONSTRUCTED IN ACCORDANCE WITH SECTION 825 UNLESS NOTED OTHERWISE. MASONRY SHALL MEET THE REQUIREMENTS OF SECTION 1040, CONSTRUCTED IN ACCORDANCE WITH SECTION 830 AND/OR 834 UNLESS NOTED OTHERWISE.
11. TOPS OF PROPOSED FRAMES AND GRATES SHALL BE FLUSH WITH FINISHED GRADE.
12. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED UPON COMPLETION OF CONSTRUCTION.

P:2021/01/04/018-STPAULS-NC-ELIZABETH-ST&JOHNSON-STREET-DRAINAGE-IMPROVEMENTS-SHEETS/02-NOTES-&-LEGEND.DWG PLOT DATE: 1/19/2023 12:34 PM KALIA BEESLEY



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 mcgillassociates.com

**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
 STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
 ROBESON COUNTY, NORTH CAROLINA

NOT TO SCALE

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

NOTES & LEGEND

DATE	PROJECT #	FUNDING #
FEBRUARY 2023	21.04018	N/A

SHEET  
**G-02**

**PRELIMINARY  
 - FOR REVIEW PURPOSES ONLY -  
 DO NOT USE FOR  
 CONSTRUCTION**



**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rolled erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rolled erosion control products with grass seed</li> </ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

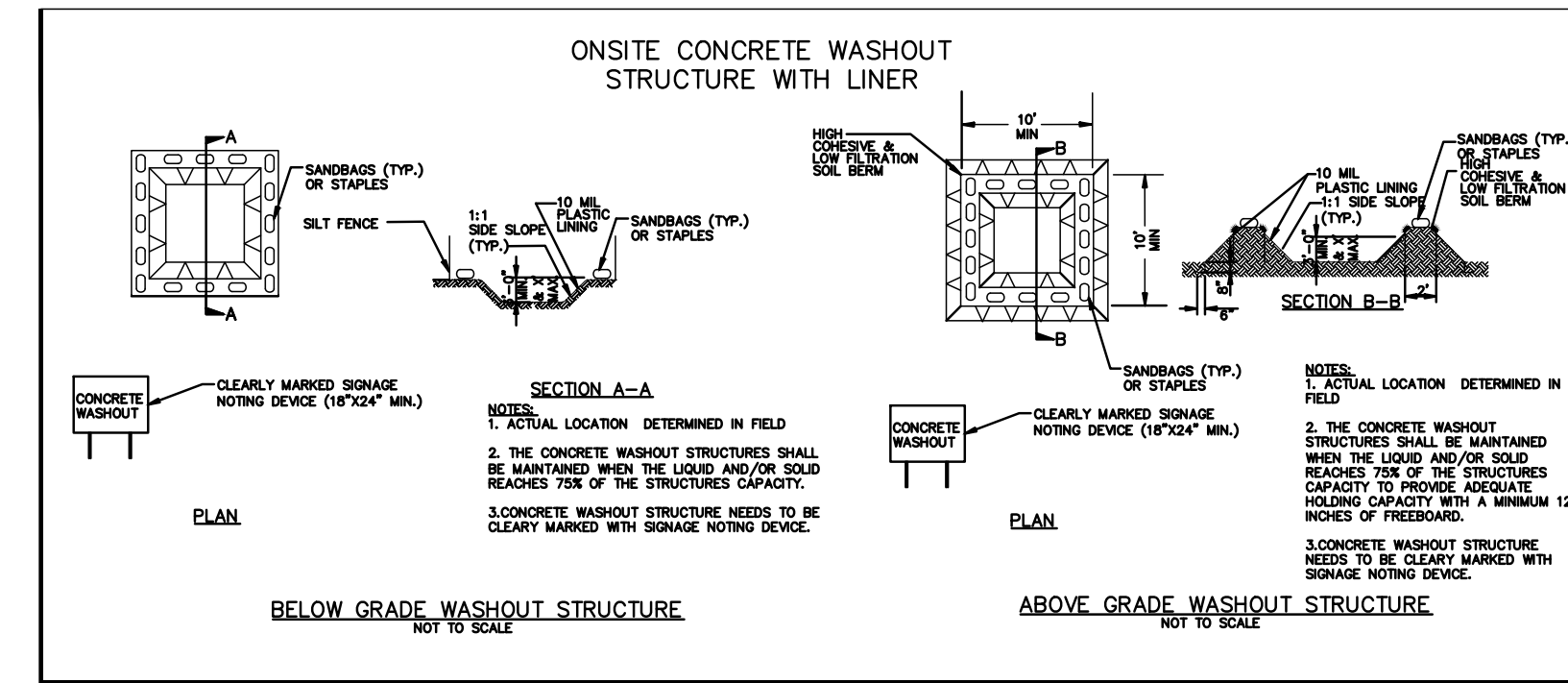
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



**CONCRETE WASHOUTS**

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

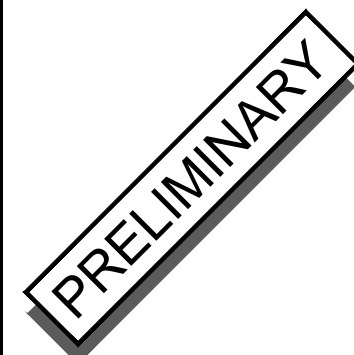
**HAZARDOUS AND TOXIC WASTE**

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING**

**EFFECTIVE: 04/01/19**

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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

NOT TO SCALE	
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

NCDEQ GENERAL PERMIT NOTES			
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A	

SHEET  
**G-03**

P:\2021\21.04018-STPAULS-NC-ELIZABETH-STORM DRAINAGE IMPROVEMENTS\DRAWINGS\PERMITS\03 NCDEQ GENERAL PERMIT NOTES.DWG PLOT DATE: 1/19/2023 12:37 PM KALIA BEESLEY

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION A: SELF-INSPECTION**

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**

**1. E&SC Plan Documentation**

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

**2. Additional Documentation**

In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This general permit as well as the certificate of coverage, after it is received.
- (b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- (c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION C: REPORTING**

**1. Occurrences that must be reported**

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
  - They are 25 gallons or more,
  - They are less than 25 gallons but cannot be cleaned up within 24 hours,
  - They cause sheen on surface waters (regardless of volume), or
  - They are within 100 feet of surface waters (regardless of volume).
- (a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (b) Anticipated bypasses and unanticipated bypasses.
- (c) Noncompliance with the conditions of this permit that may endanger health or the environment.

**2. Reporting Timeframes and Other Requirements**

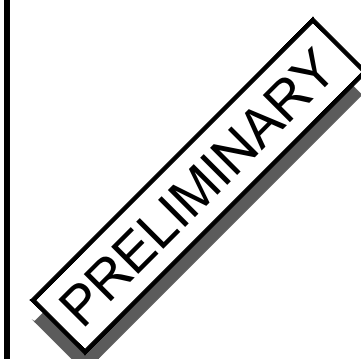
After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>• If the stream is named on the <a href="#">NC 303(d) list</a> as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</li> </ul>
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>• <b>A report at least ten days before the date of the bypass, if possible.</b> The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> </ul>
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6).</li> <li>• Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**EFFECTIVE: 04/01/19**

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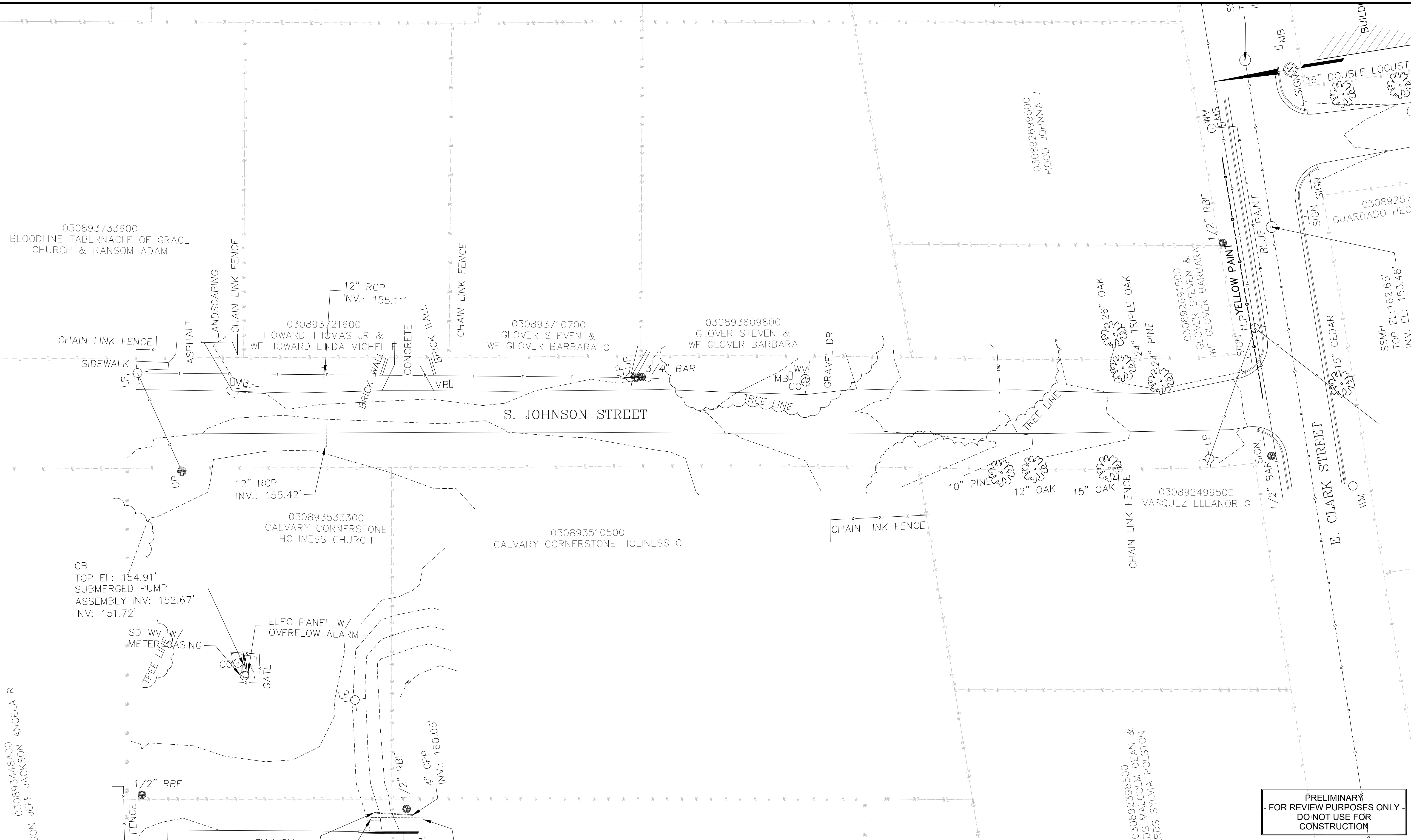
ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

NOT TO SCALE		NCDEQ GENERAL PERMIT NOTES		
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT	DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH			

SHEET  
**G-04**



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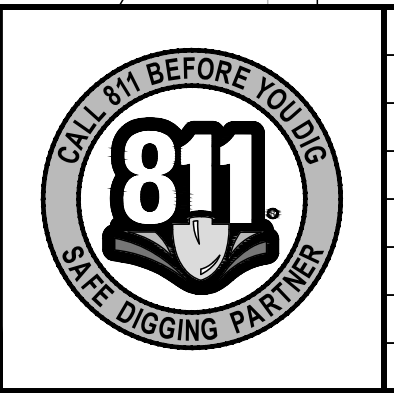


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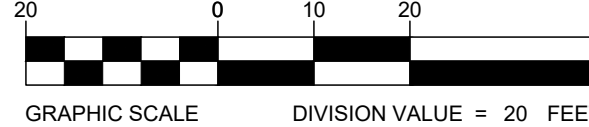
55 Broad Street  
Asheville, NC 28801  
828.252.0575  
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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

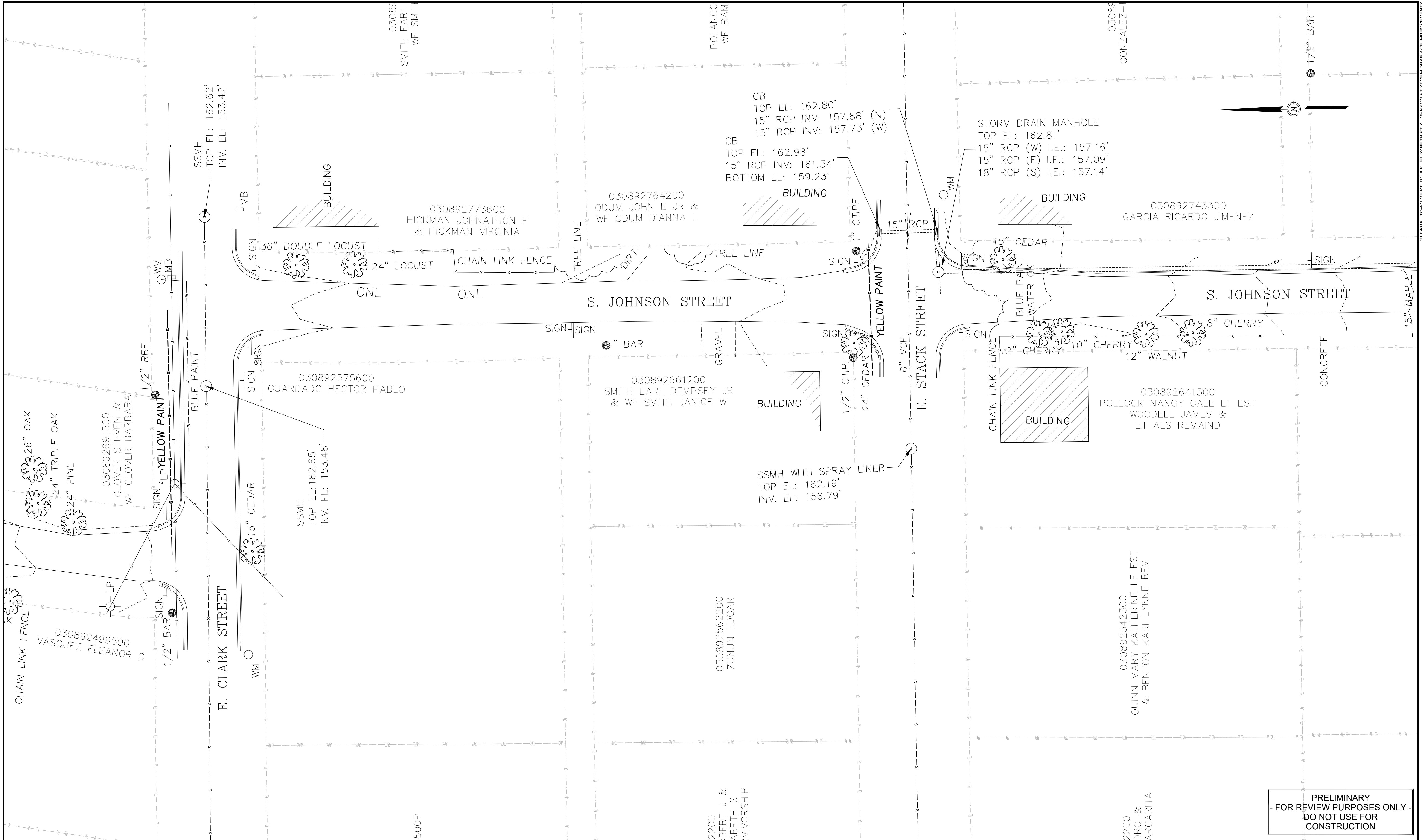
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**CE-01**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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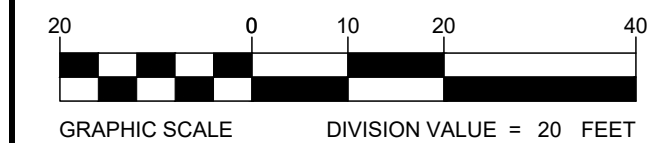
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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



GRAPHIC SCALE DIVISION VALUE = 20 FEET

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

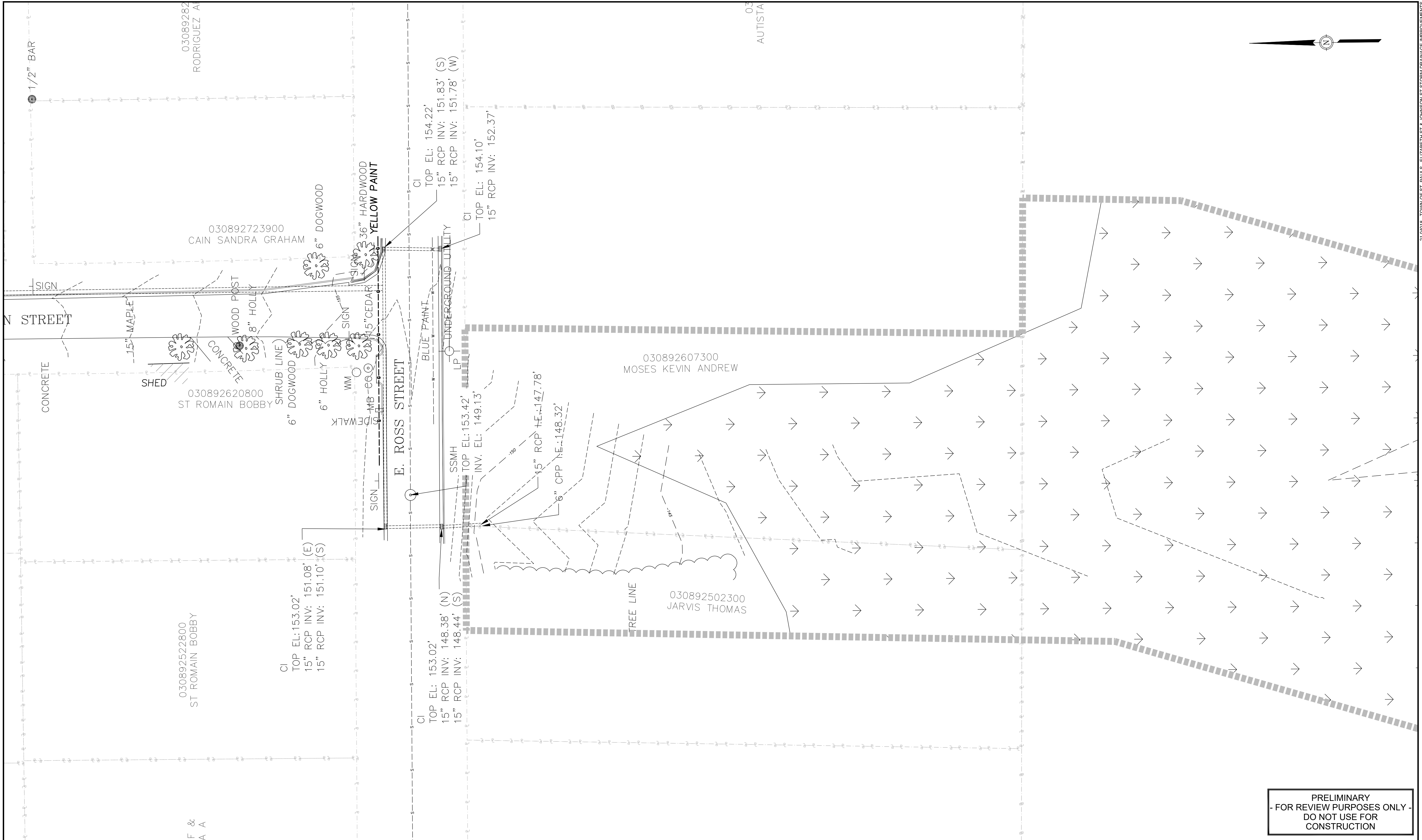
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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**CE-02**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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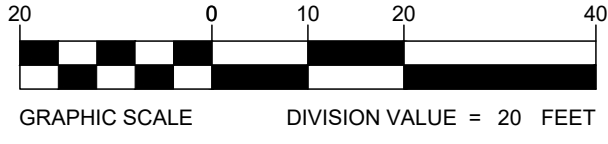
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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



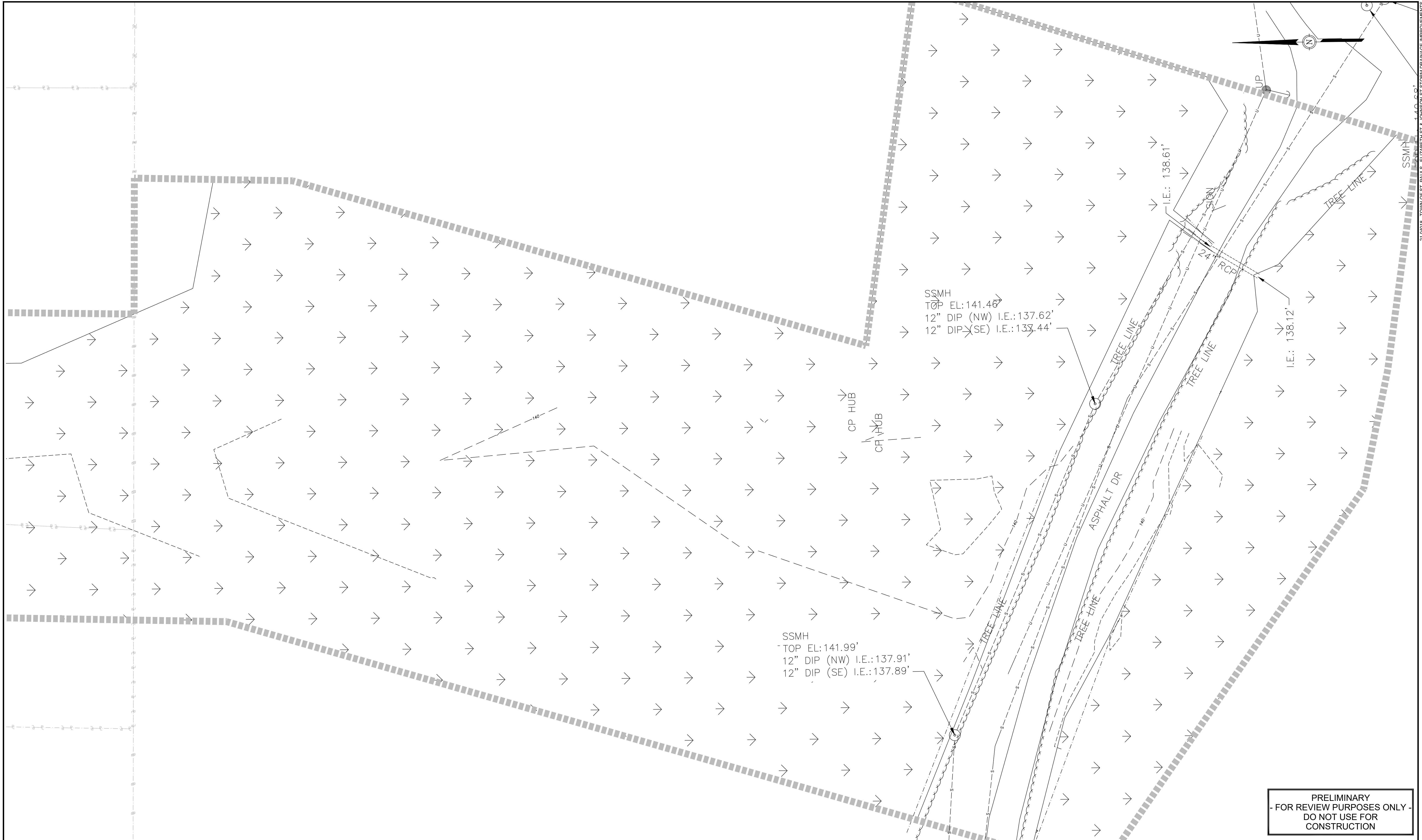
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

EXISTING CONDITIONS 3 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

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**CE-03**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

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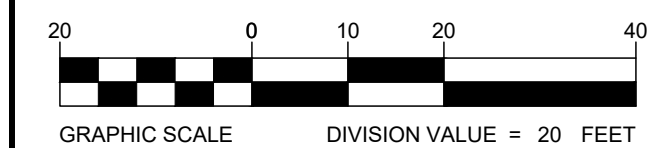
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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA



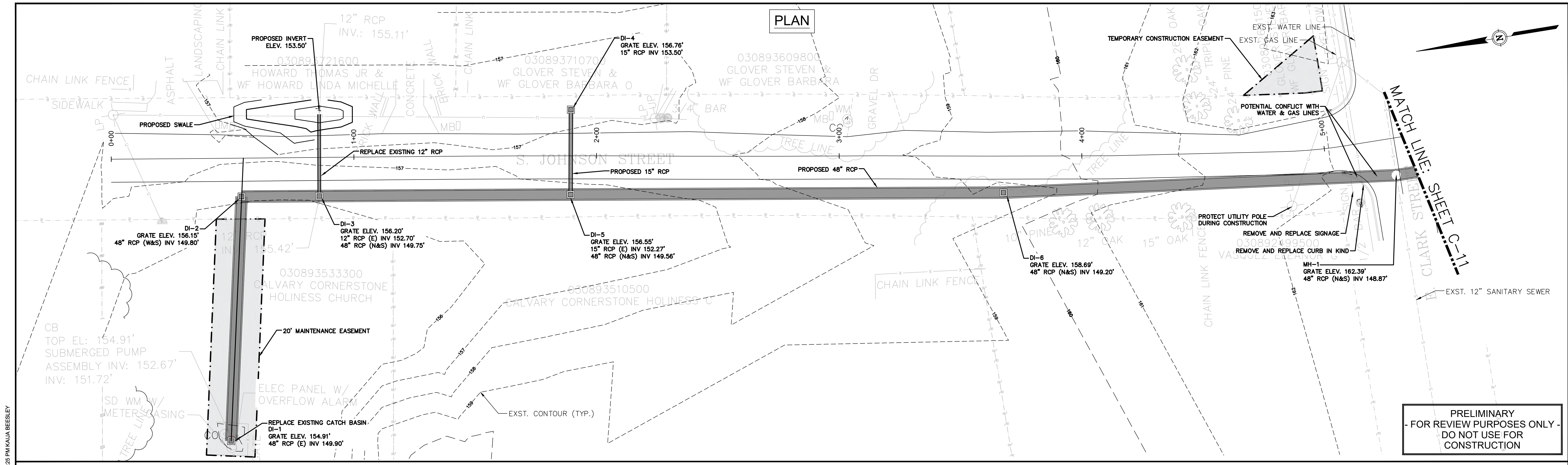
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

EXISTING CONDITIONS 4 OF 4		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

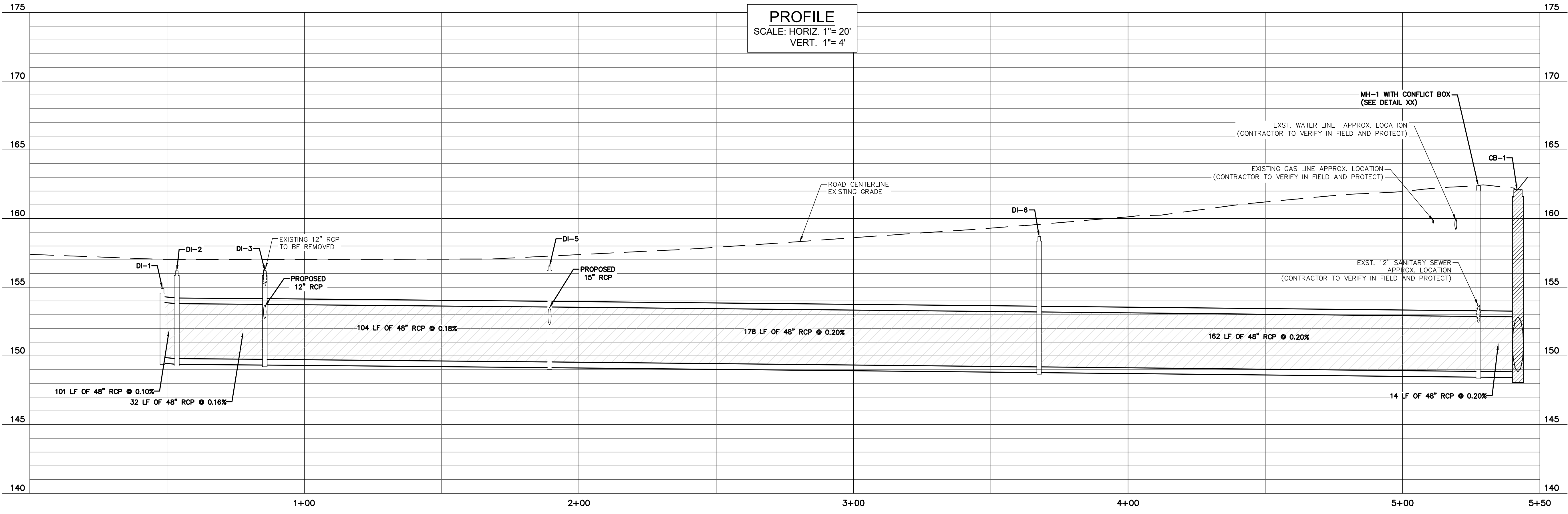
SHEET  
**CE-04**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS





PRELIMINARY  
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PROFILE  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'

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NO.	DATE	BY	DESCRIPTION

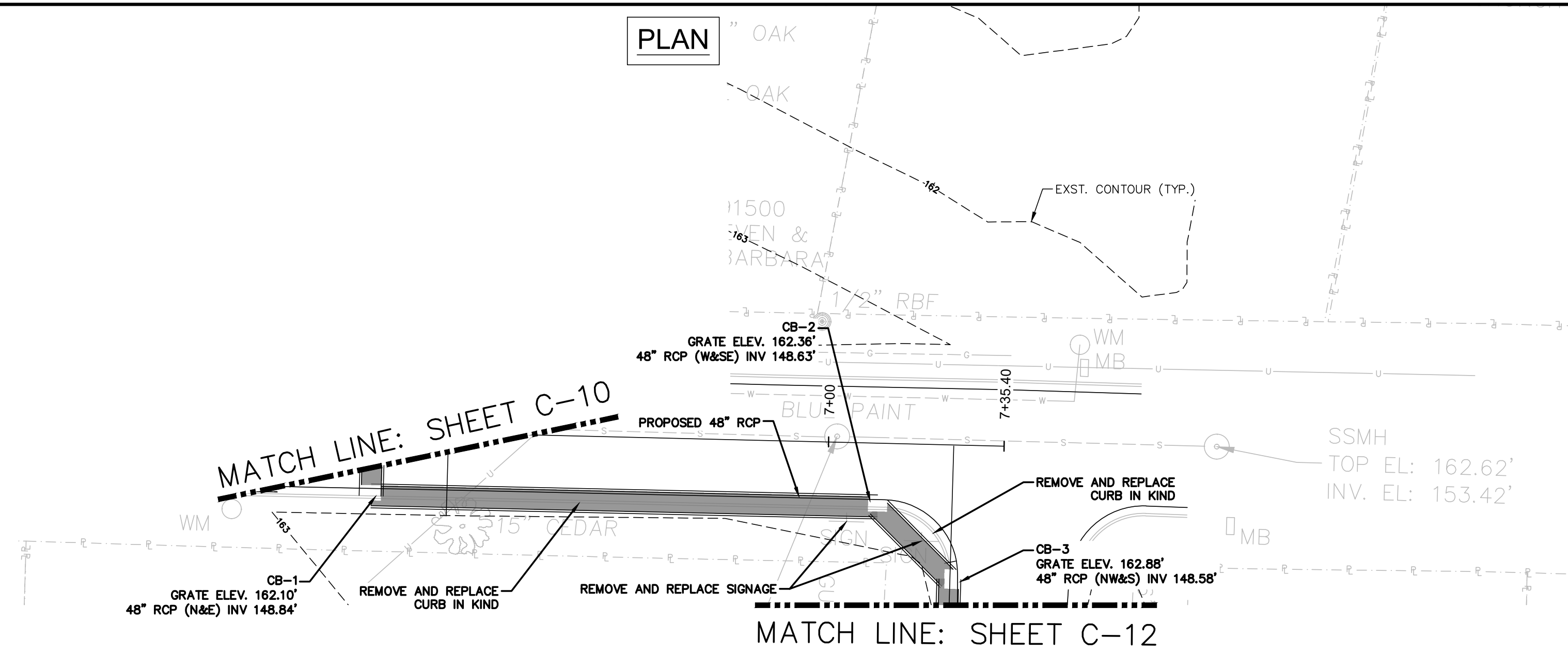
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STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

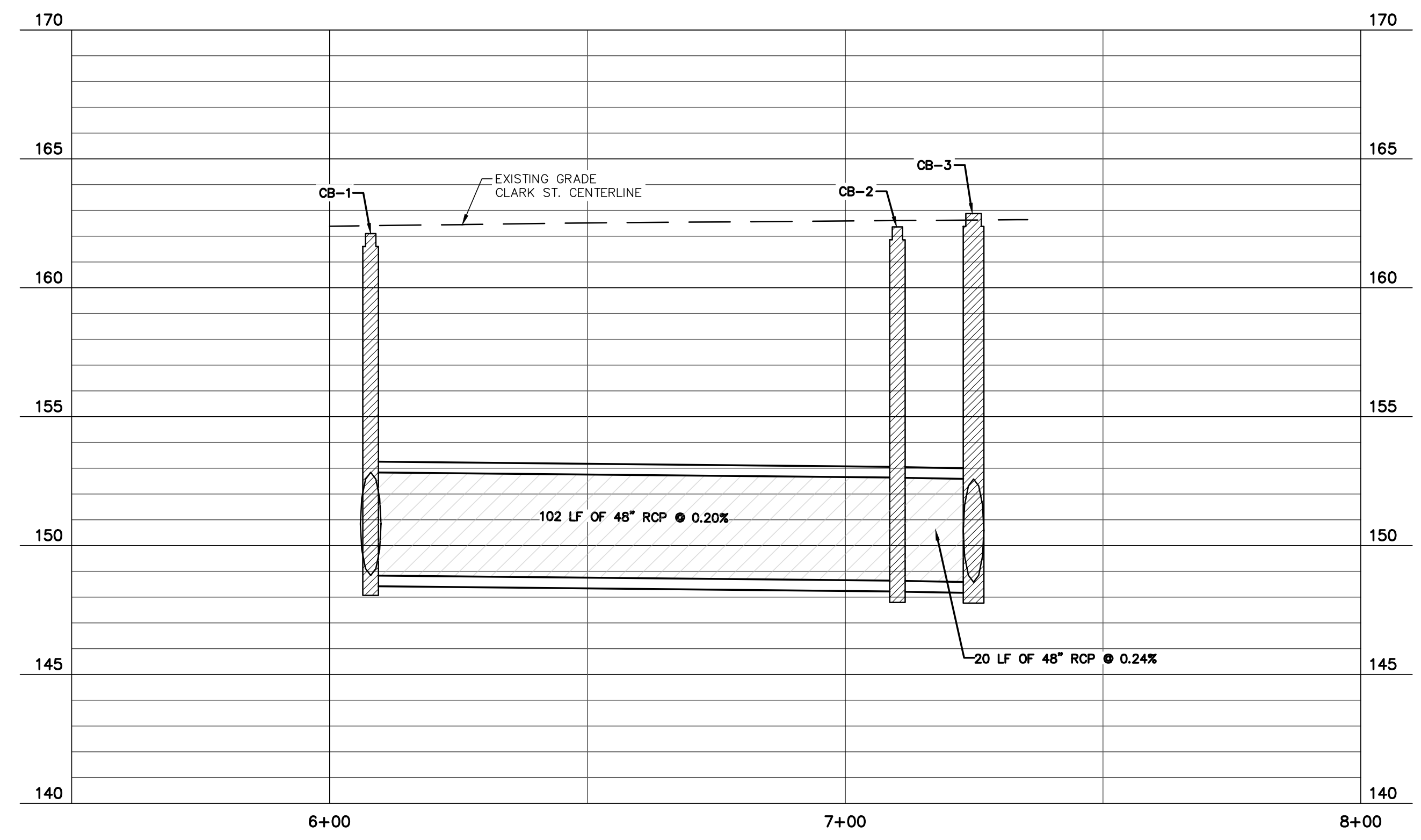
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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

SHEET  
**C-10**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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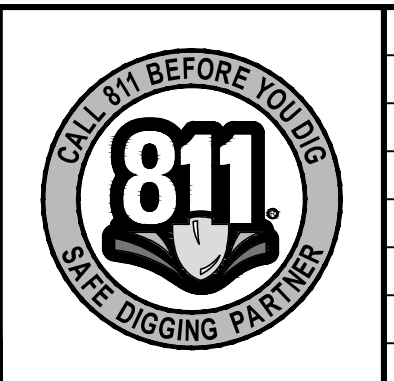
PRELIMINARY  
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

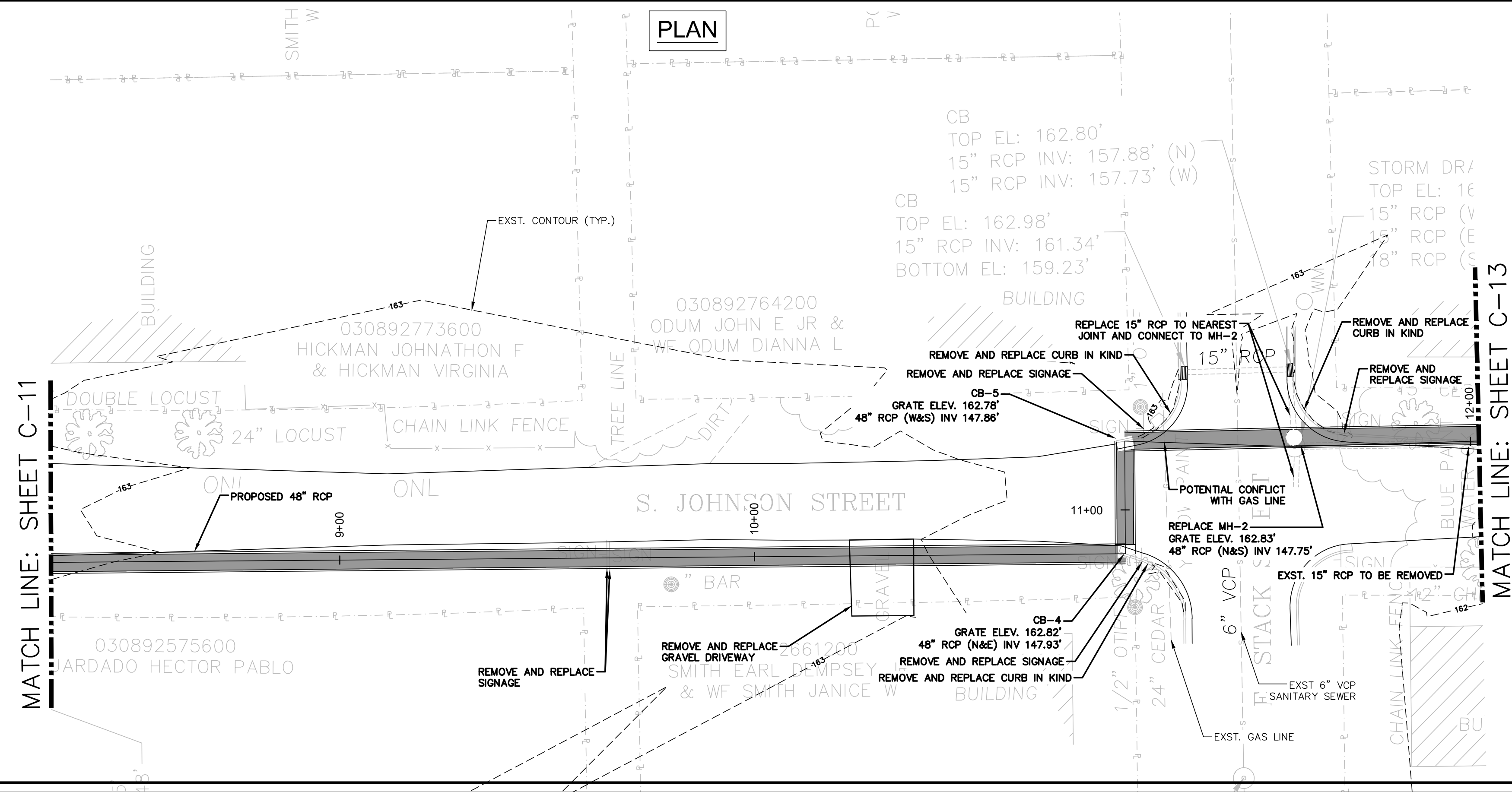
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

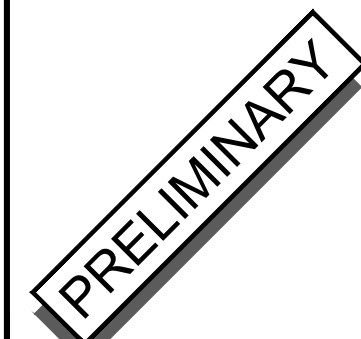
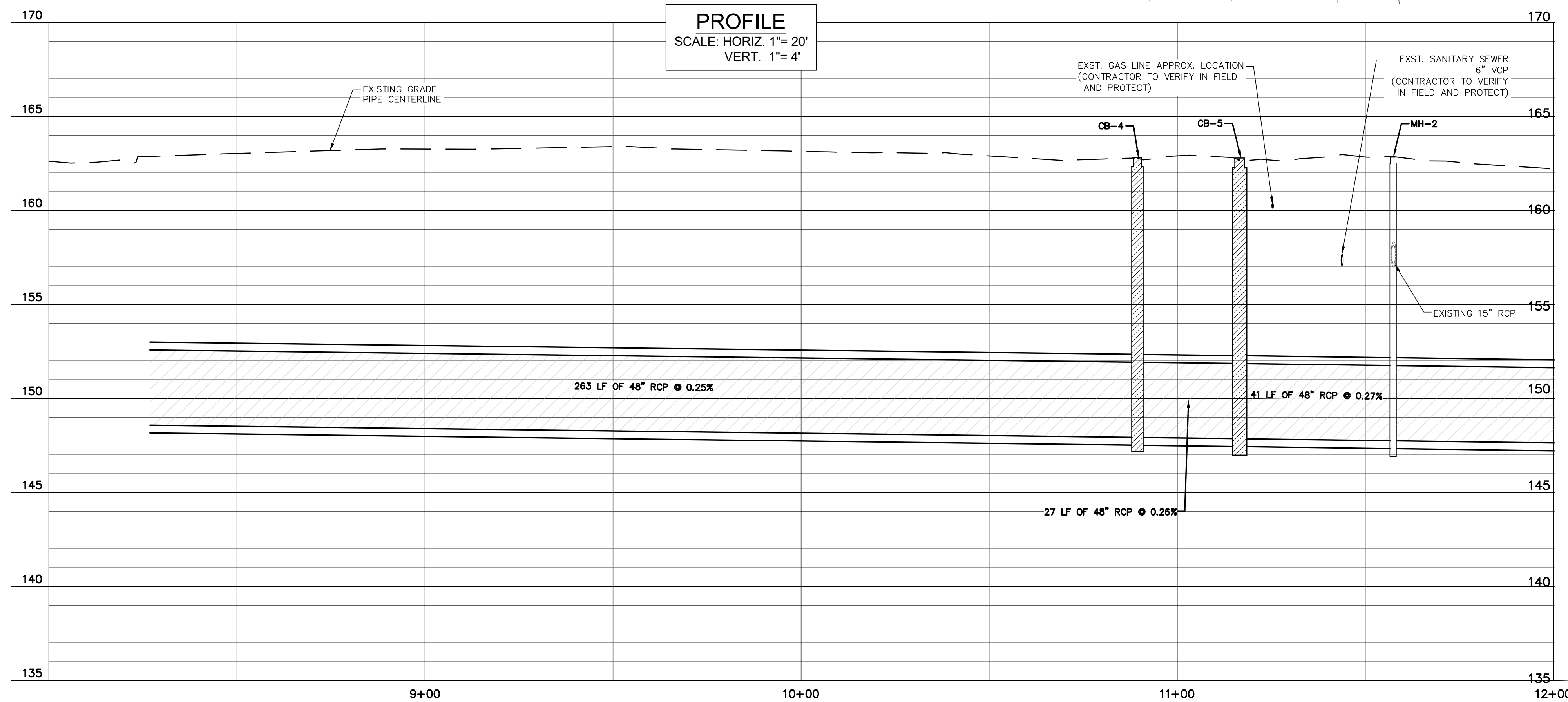
SHEET  
**C-11**



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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

PROPOSED PLAN AND PROFILE S.  
JOHNSON ST. STA. 8+00-12+00

DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A
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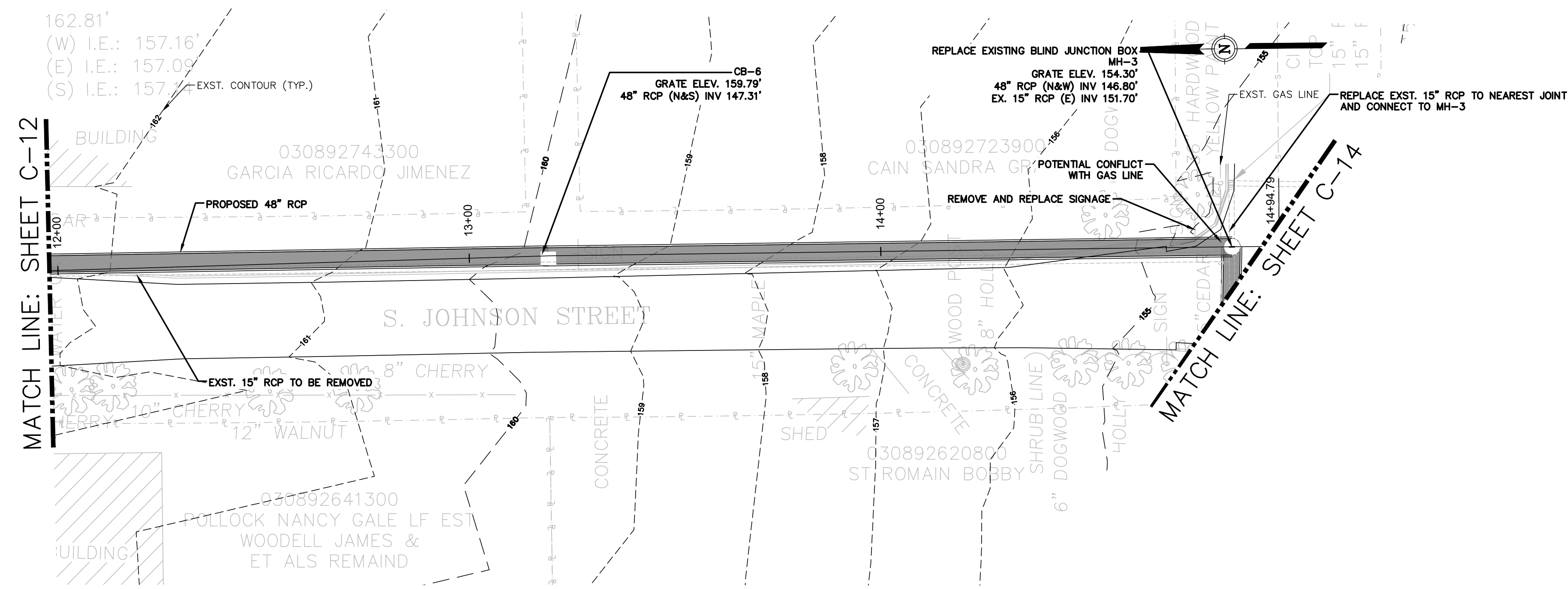
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

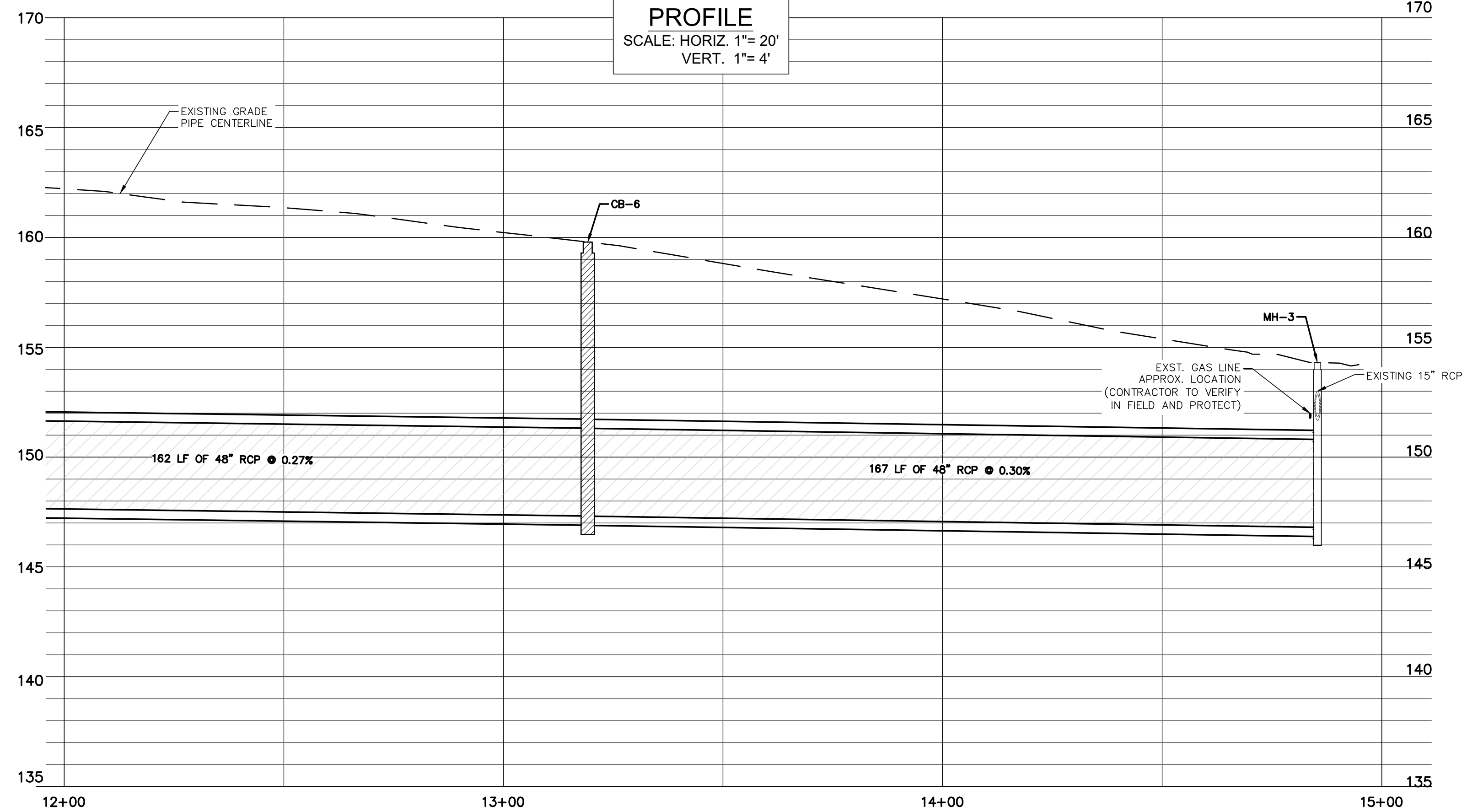
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

**PLAN**



**PROFILE**  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'



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55 Broad Street  
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NC Firm License # C-0459  
mcgillassociates.com

**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

PROPOSED PLAN AND PROFILE S. ST. STA. 12+00-15+00		
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

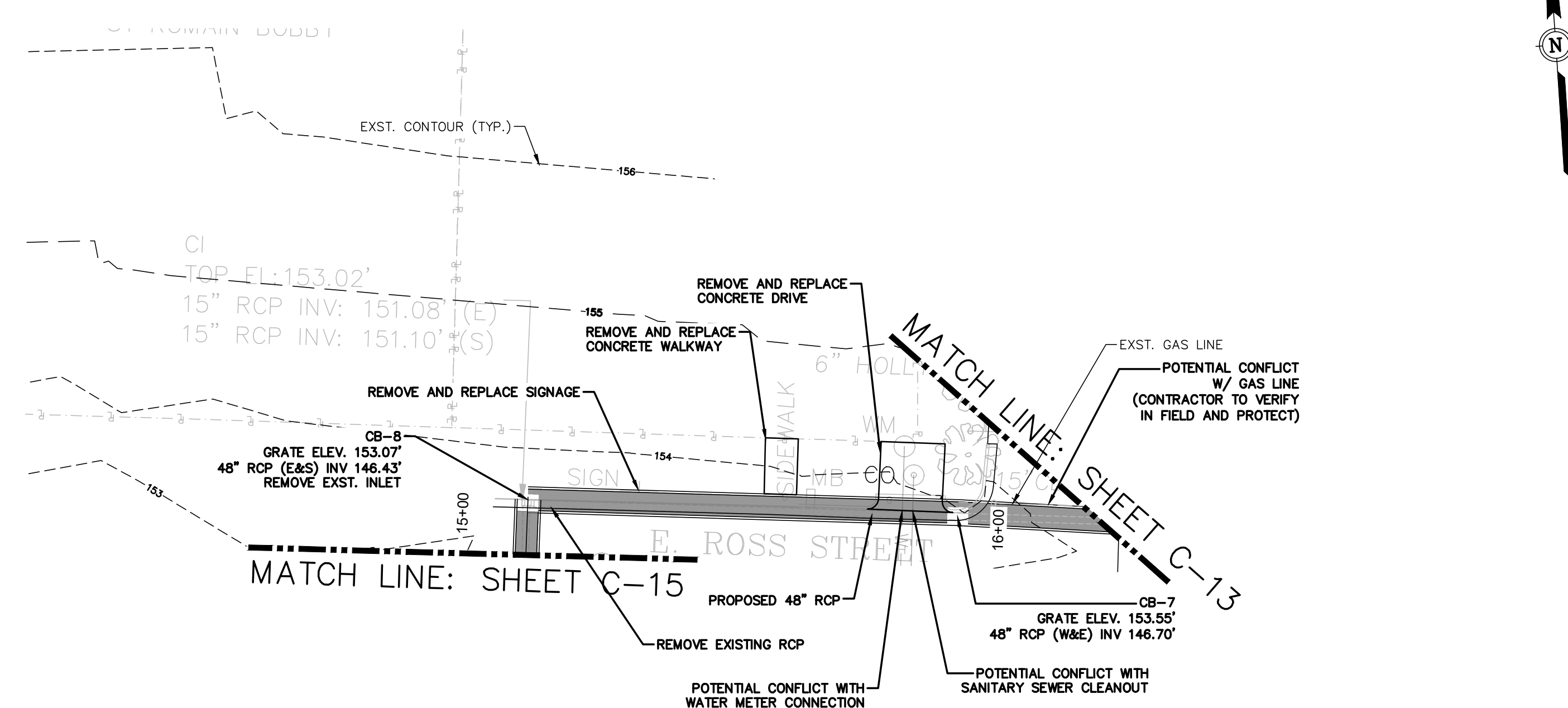
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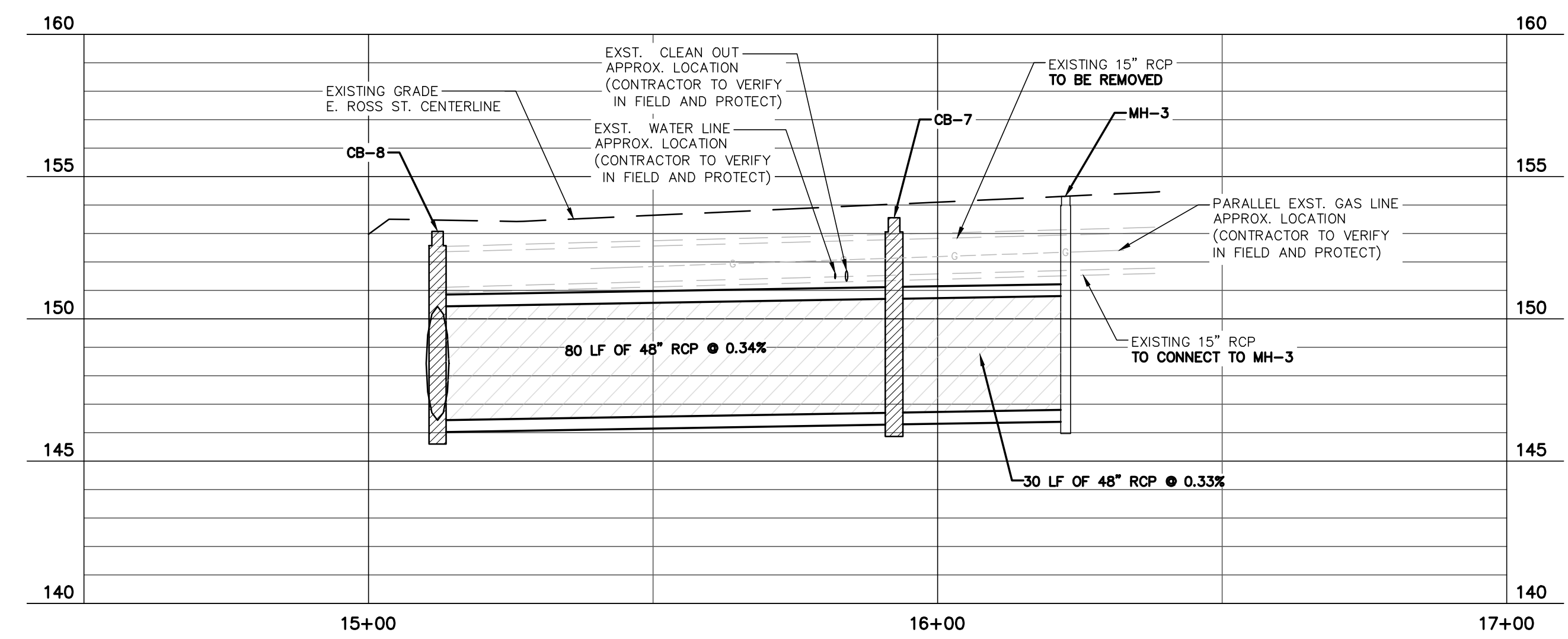
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

**PLAN**



**PROFILE**  
SCALE: HORIZ. 1"= 20'  
VERT. 1"= 4'



PRELIMINARY  
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55 Broad Street  
Asheville, NC 28801  
828.252.0575  
NC Firm License # C-0459  
mcgillassociates.com

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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

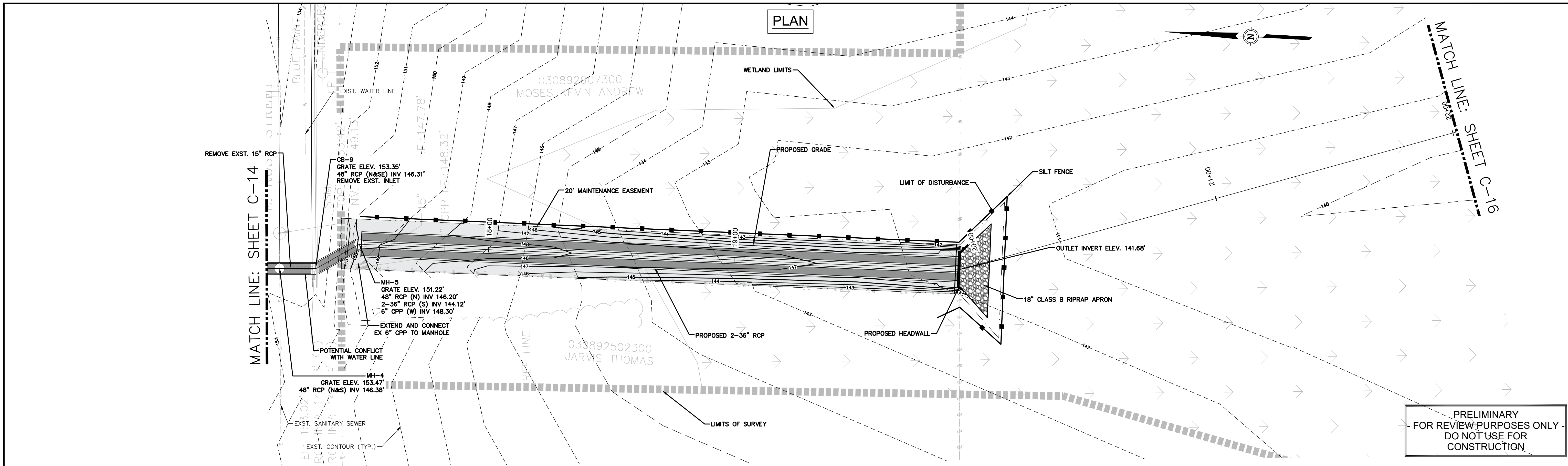
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PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

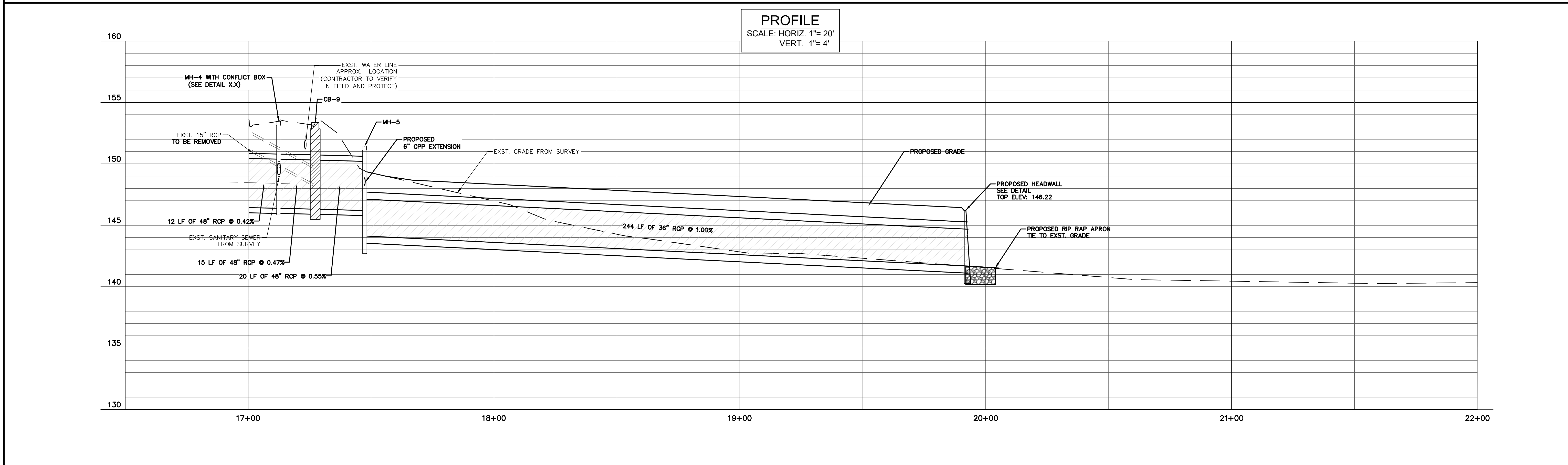
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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS

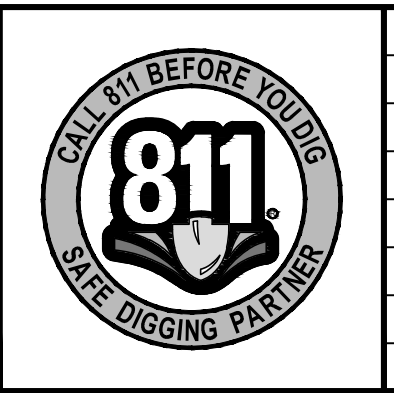


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828.252.0575  
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NO.	DATE	BY	DESCRIPTION

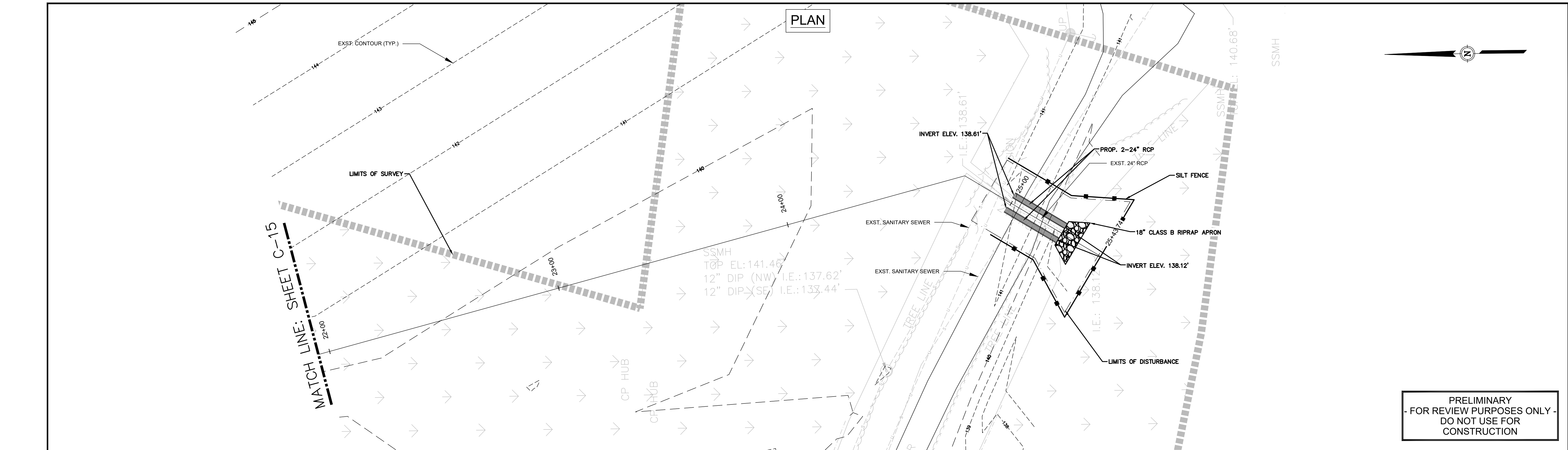
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STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

<p>GRAPHIC SCALE DIVISION VALUE = 20 FEET</p>	
OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

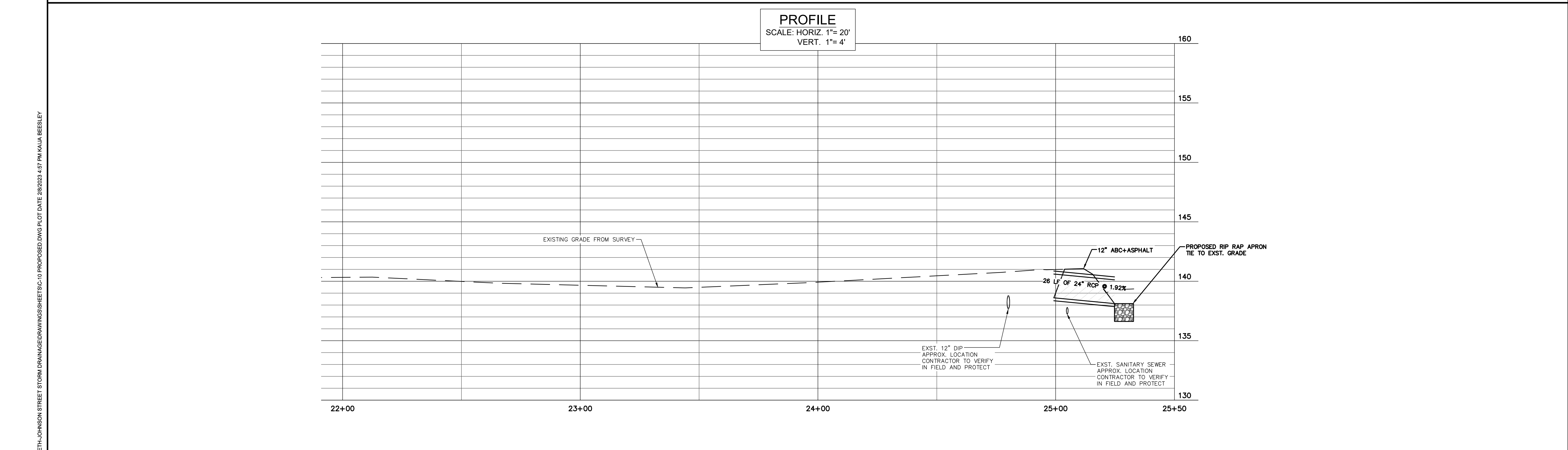
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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

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**C-15**





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CONSTRUCTION



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Asheville, NC 28801  
828.252.0575  
NC Firm License # C-0459  
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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

GRAPHIC SCALE DIVISION VALUE = 20 FEET

OFFICE MANAGER	DESIGNER
B. ROARK	C. HEATHCOAT
PROJECT MANAGER	REVIEWER
D. SABEH	D. SABEH

PROPOSED PLAN AND PROFILE  
STA. 22+00-25+50

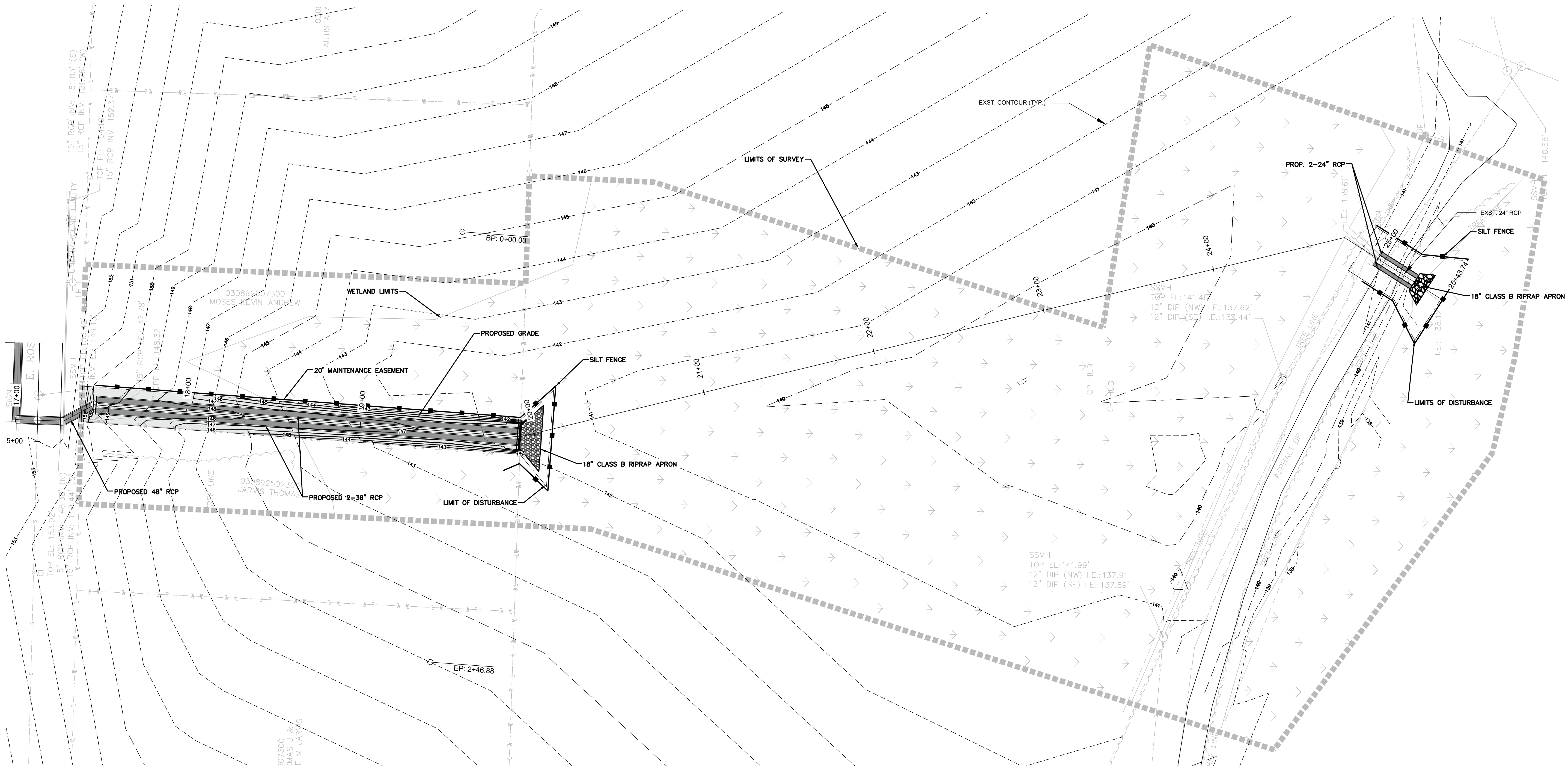
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FEBRUARY 2023	21.04018	N/A

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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



PLAN



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FOR REVIEW PURPOSES ONLY  
DO NOT USE FOR  
CONSTRUCTION

P:\2021\104018-ST.PAULS-NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE DRAWINGS\SHEETS\C-10 PROPOSED.DWG PLOT DATE 2/8/2023 5:21 PM KALIA BEESLEY

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Asheville, NC 28801  
828.252.0575  
NC Firm License # C-0459  
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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

GRAPHIC SCALE DIVISION VALUE = 30 FEET

OFFICE MANAGER	DESIGNER
B. ROARK	C. HEATHCOAT
PROJECT MANAGER	REVIEWER
D. SABEH	D. SABEH

OVERVIEW OF WETLAND IMPACTS  
STA. 17+00-25+50

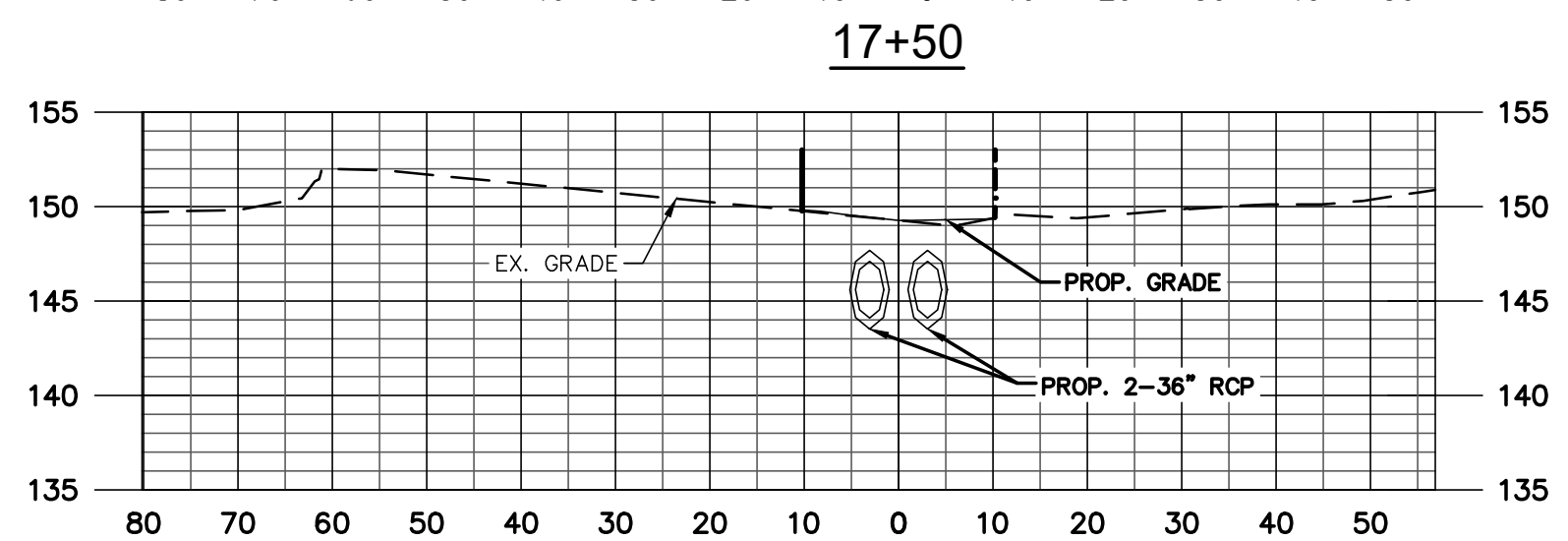
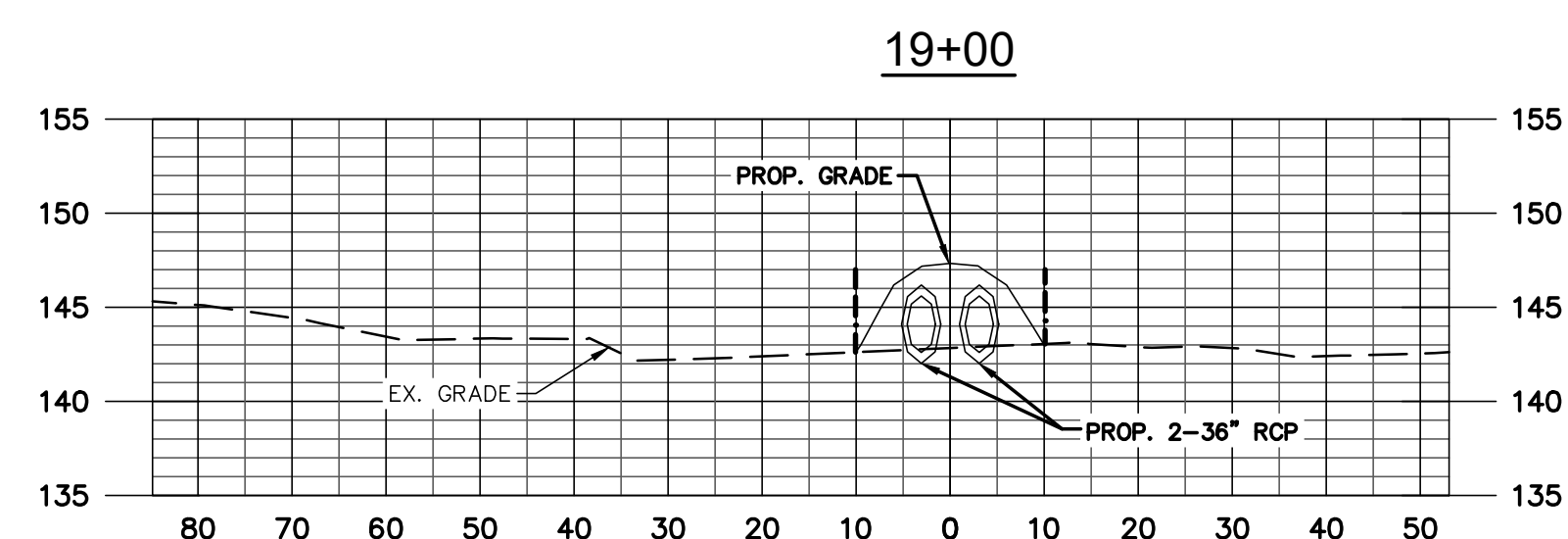
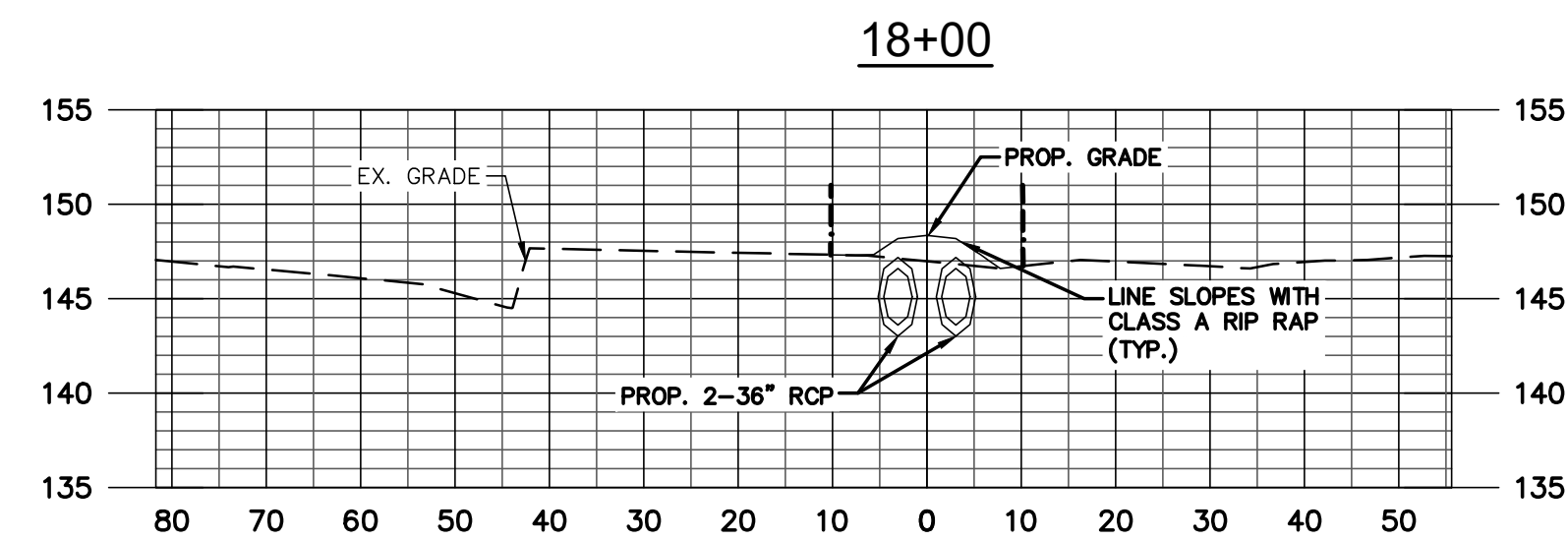
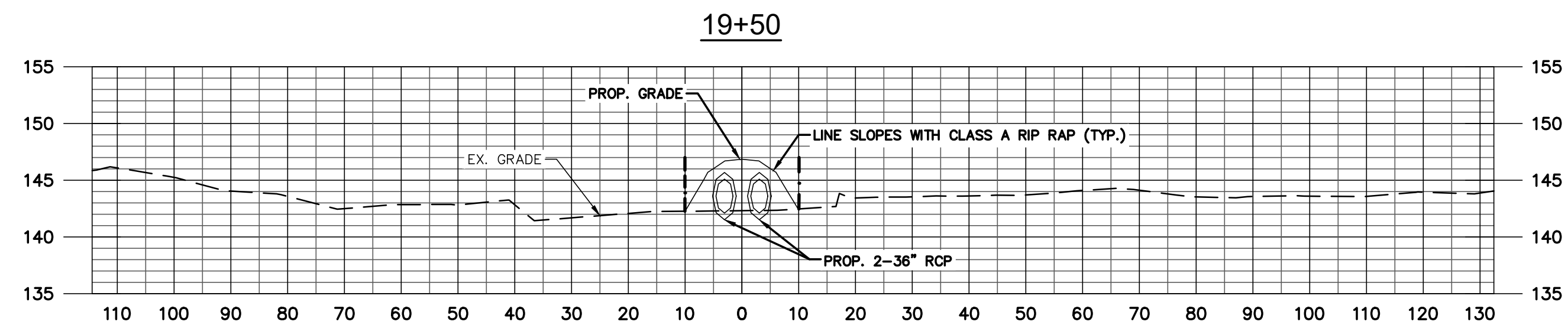
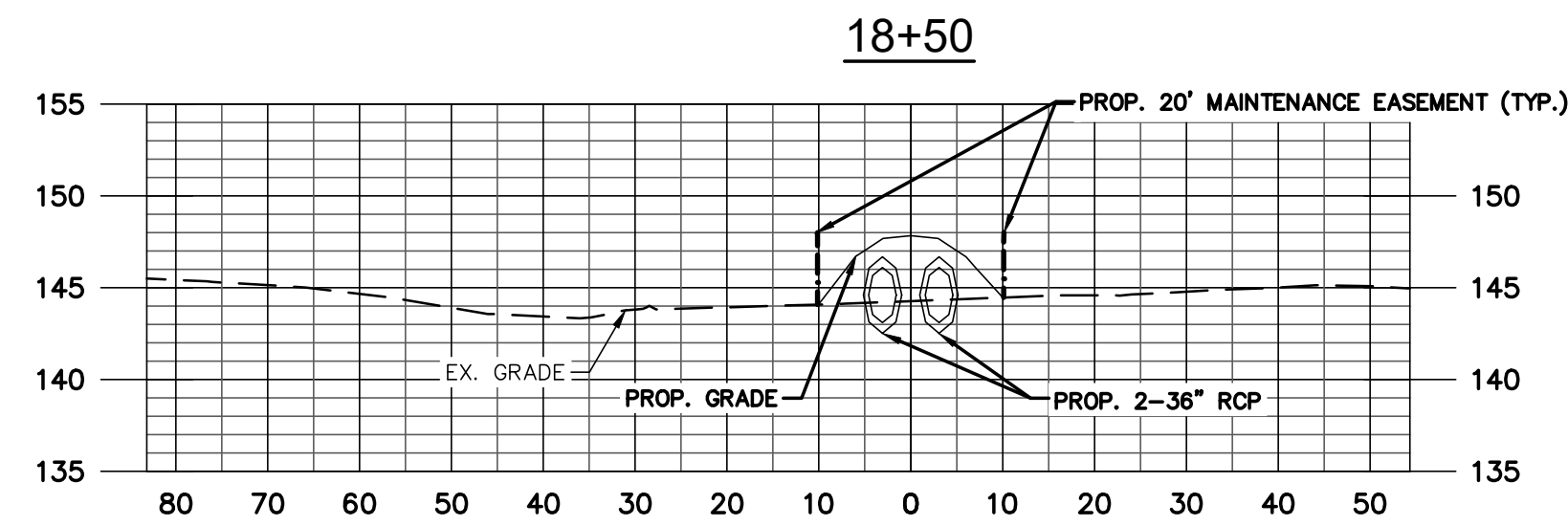
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FEBRUARY 2023	21.04018	N/A

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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



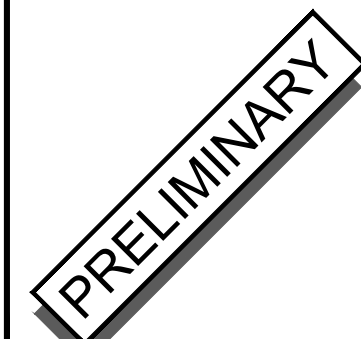
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 VERT. 1"= 2'



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21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



NO.	DATE	BY	DESCRIPTION

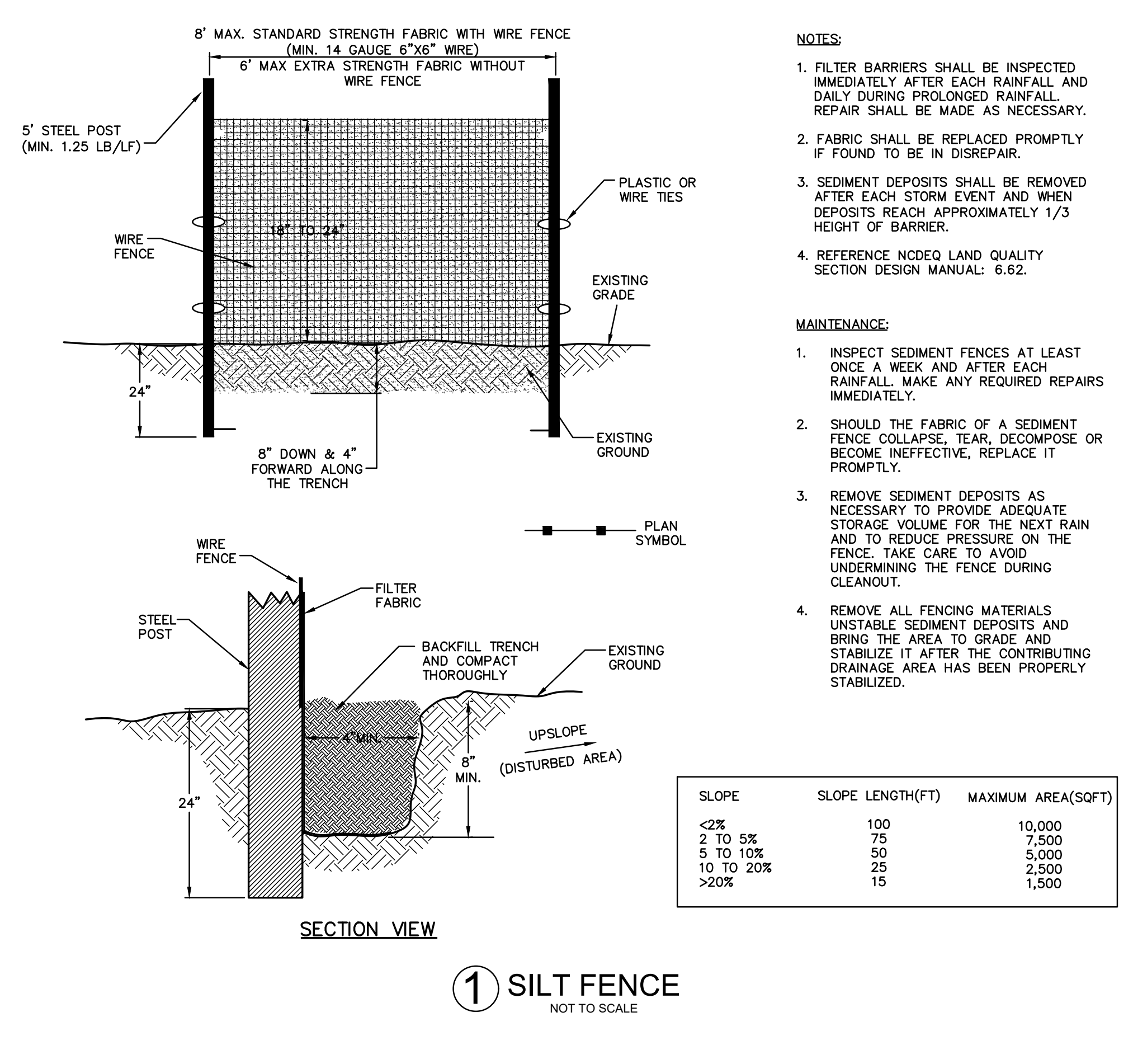
ELIZABETH ST & JOHNSON ST  
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**TOWN OF ST. PAULS**  
 ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

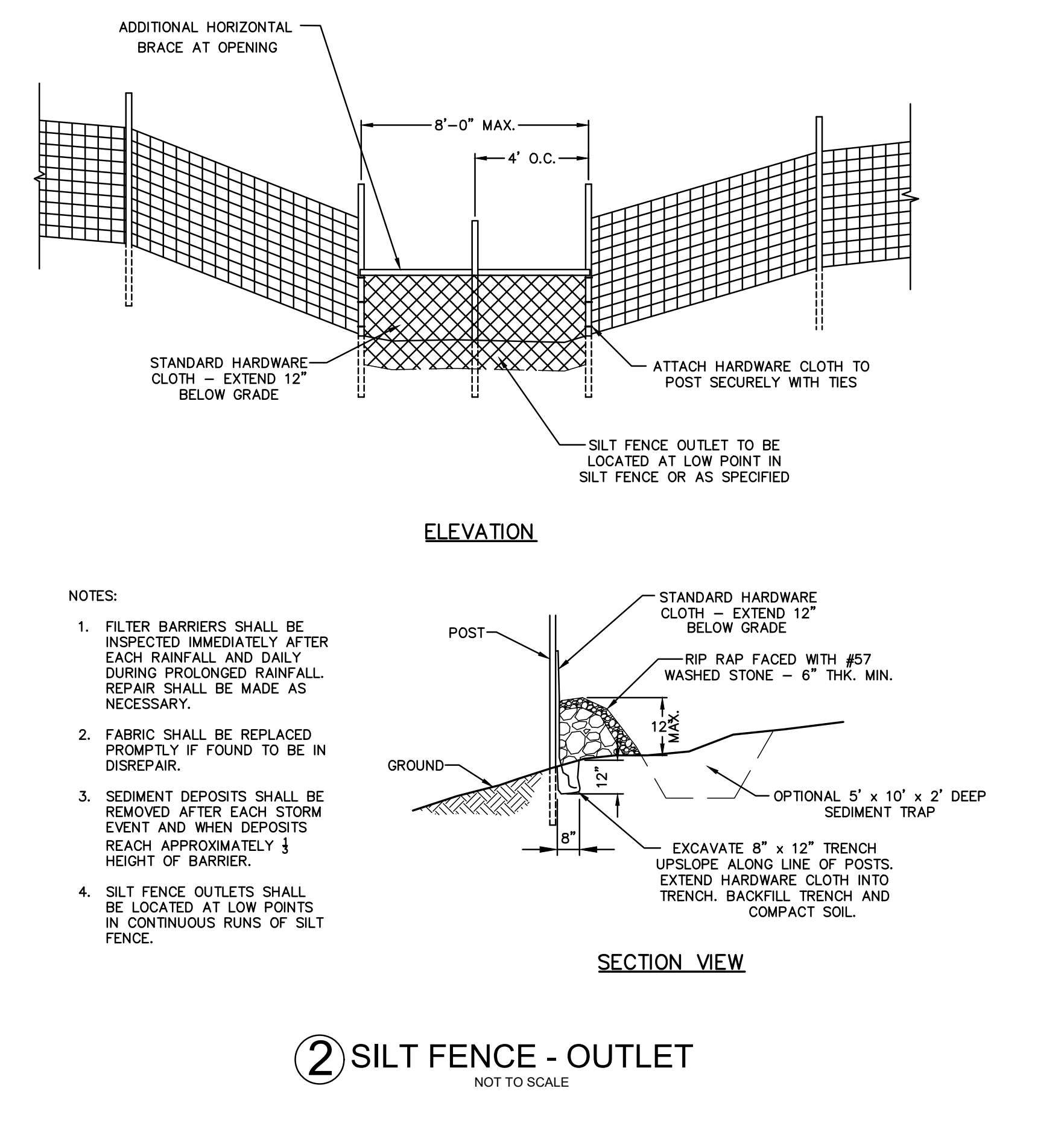
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DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A

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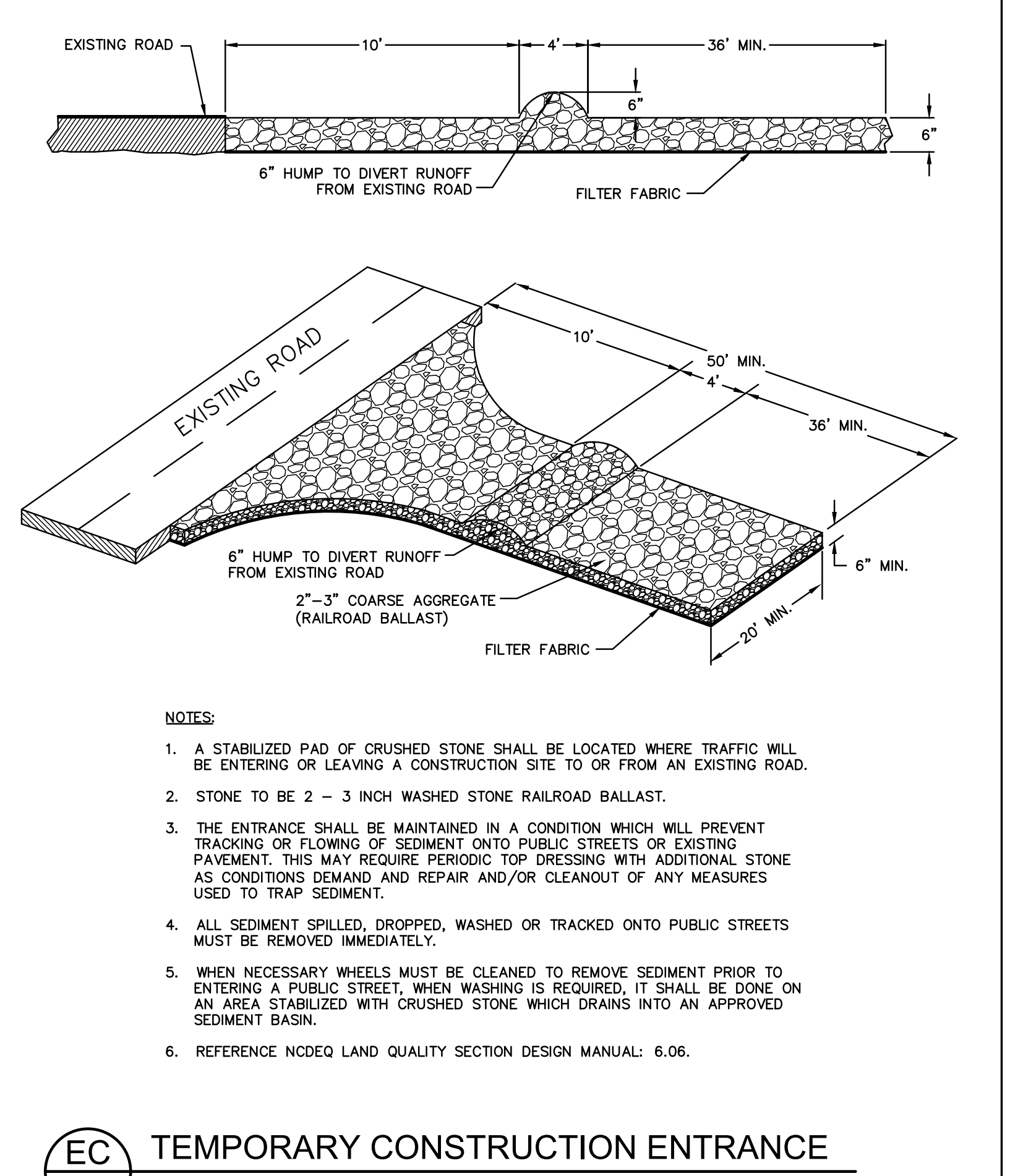
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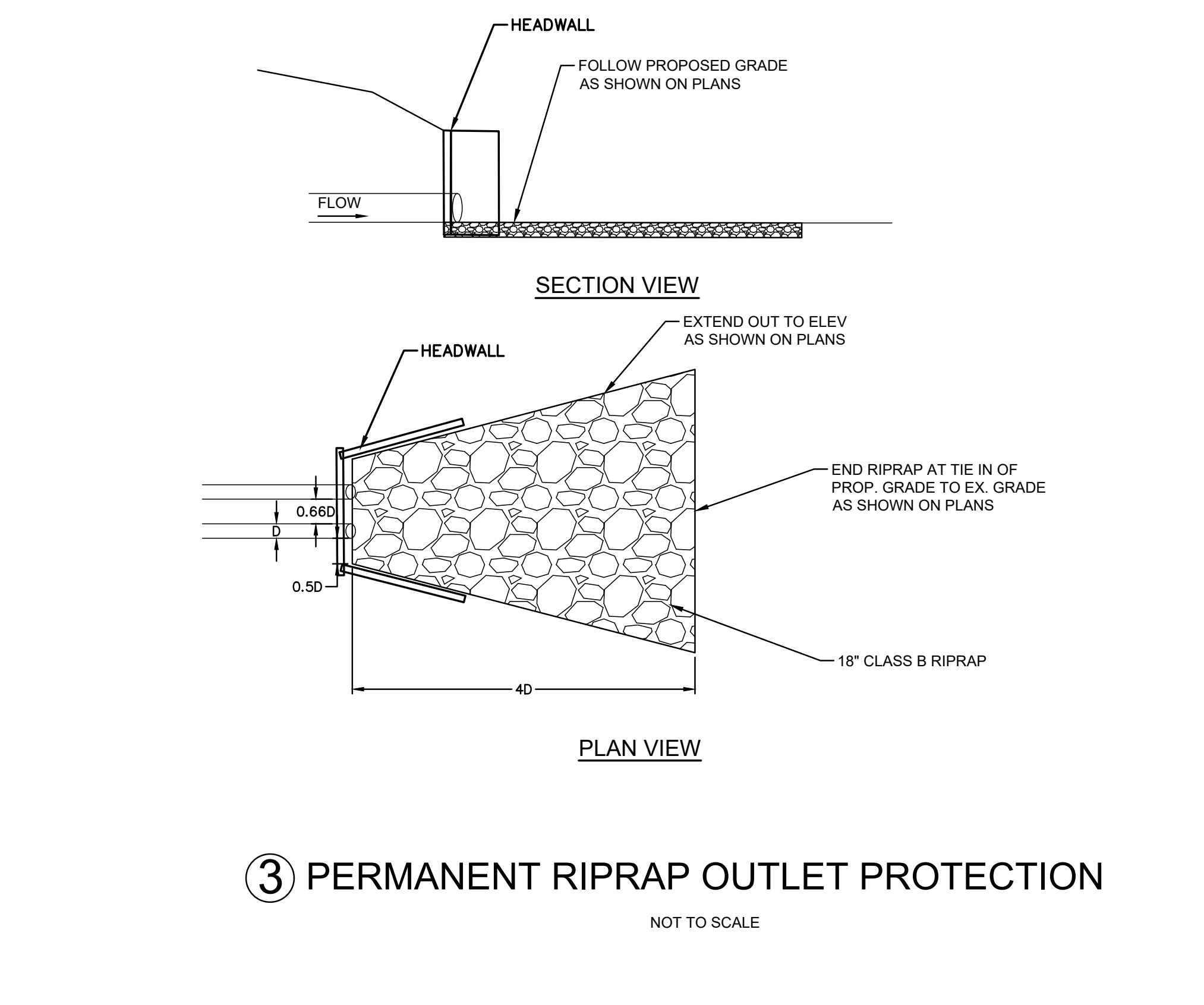
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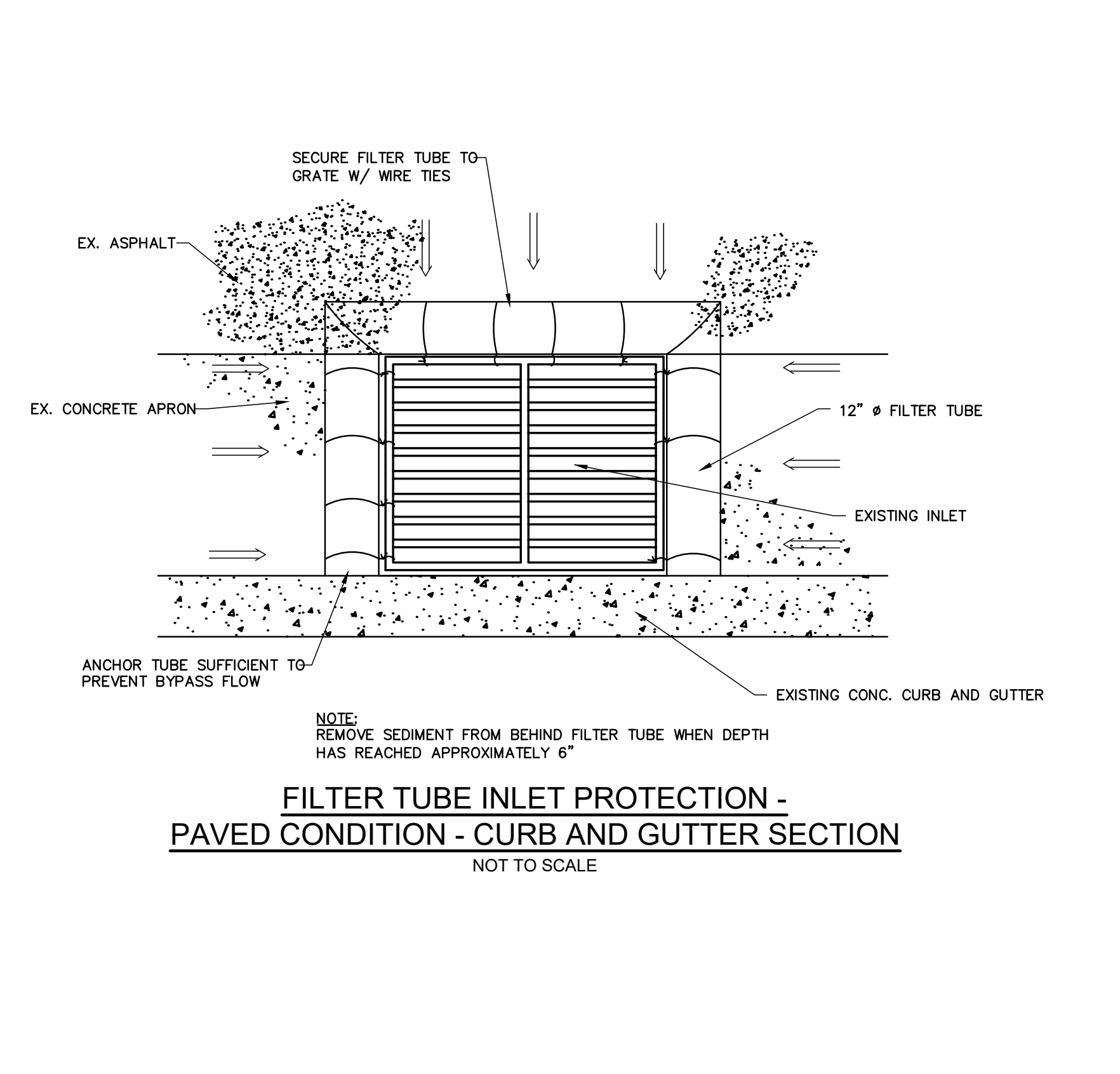
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EC 24 TEMPORARY CONSTRUCTION ENTRANCE  
UPDATED MARCH, 2017  
NOT TO SCALE



③ PERMANENT RIPRAP OUTLET PROTECTION  
NOT TO SCALE



FILTER TUBE INLET PROTECTION -  
PAVED CONDITION - CURB AND GUTTER SECTION  
NOT TO SCALE

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NO.	DATE	BY	DESCRIPTION

ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK	DESIGNER C. HEATHCOAT
PROJECT MANAGER D. SABEH	REVIEWER D. SABEH

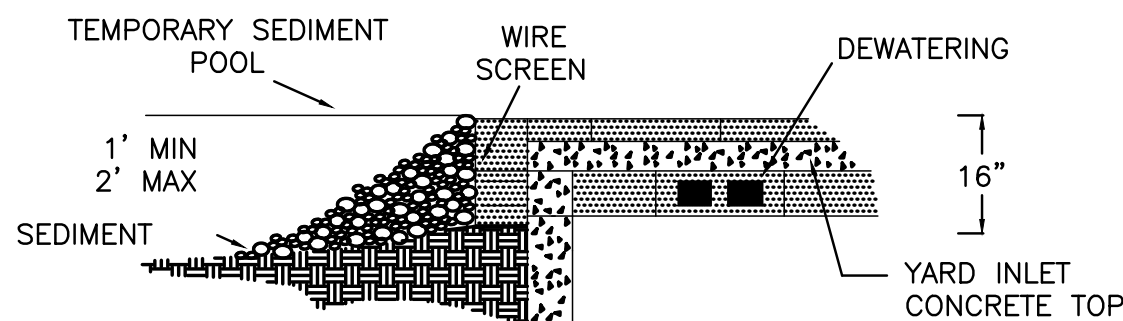
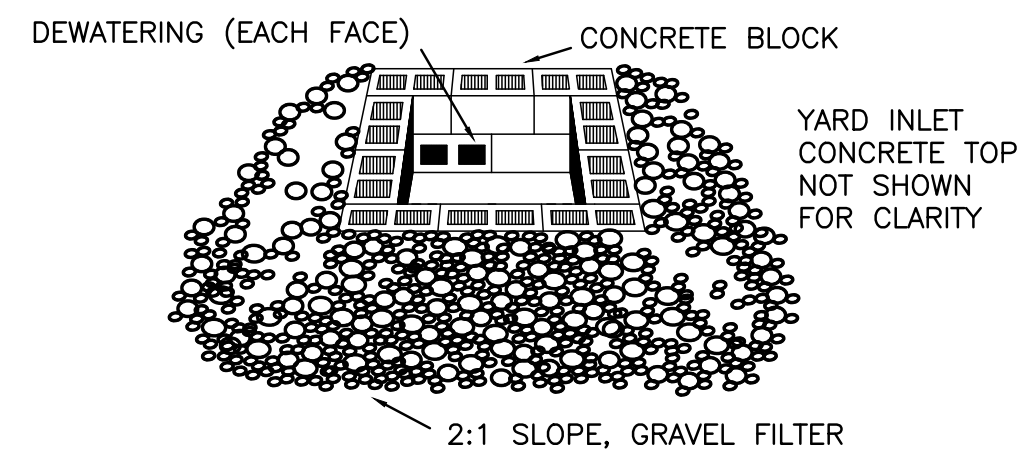
EROSION CONTROL DETAILS 1 OF 2	
DATE FEBRUARY 2023	PROJECT # 21.04018
FUNDING # N/A	

SHEET  
**C-30**

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



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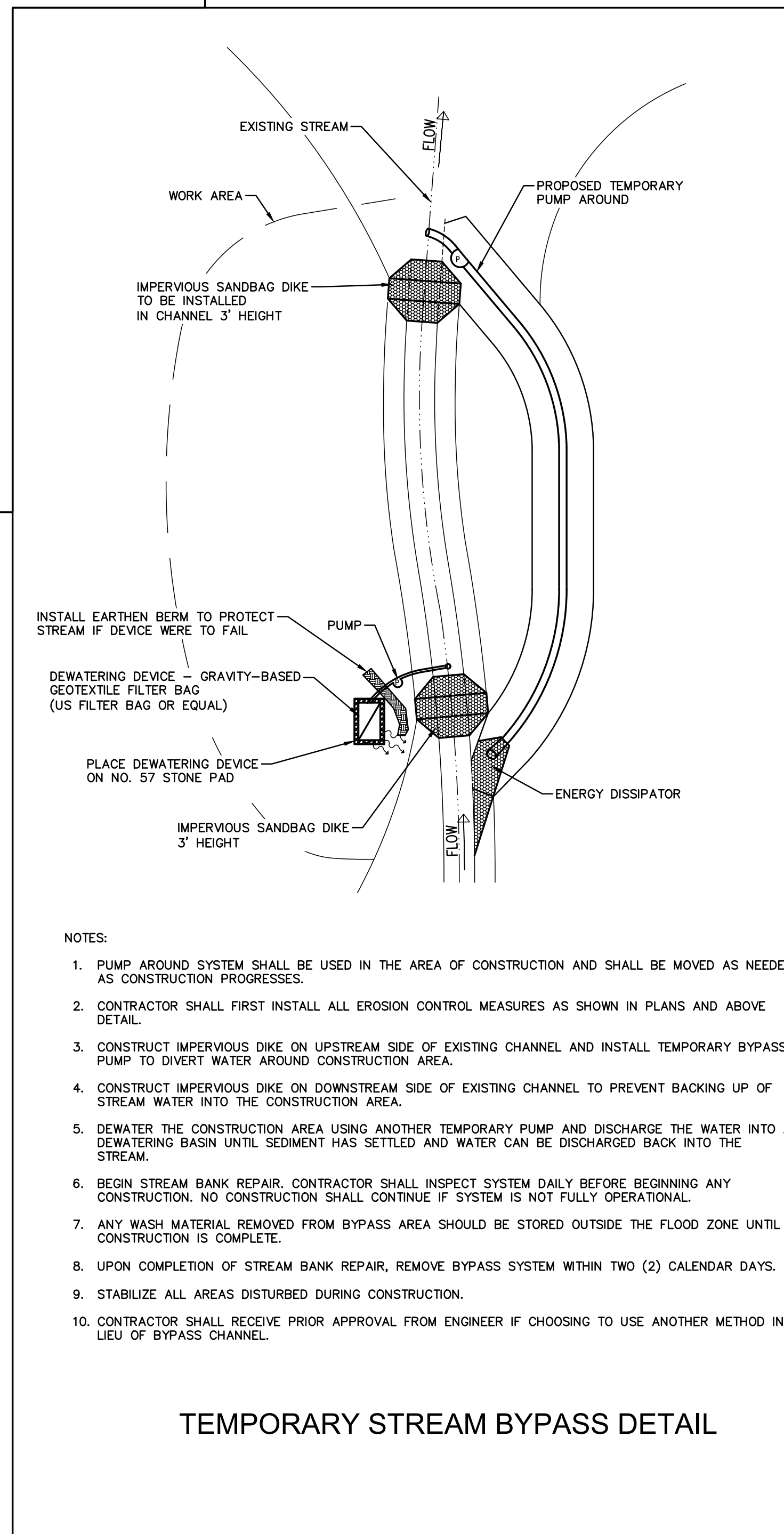


**MAINTENANCE REQUIREMENTS:**

1. CONTRACTOR SHALL INSPECT THE GRAVEL FILTER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED.
2. CONTRACTOR SHALL REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.
3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, CONTRACTOR SHALL REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL. CONTRACTOR SHALL BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT AND APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

**4 TYPICAL GRATE INLET PROTECTION DETAIL (TEMPORARY)**

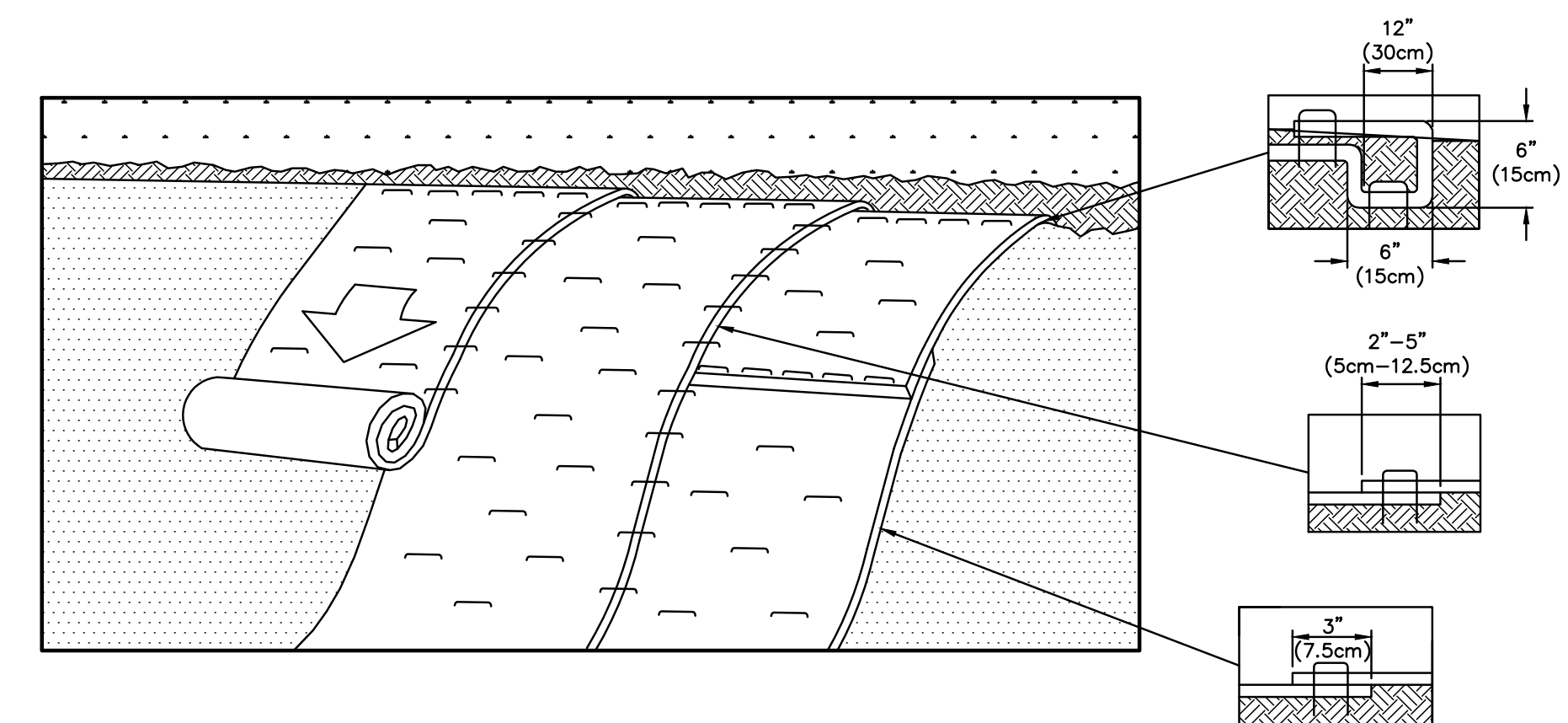
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**NOTES:**

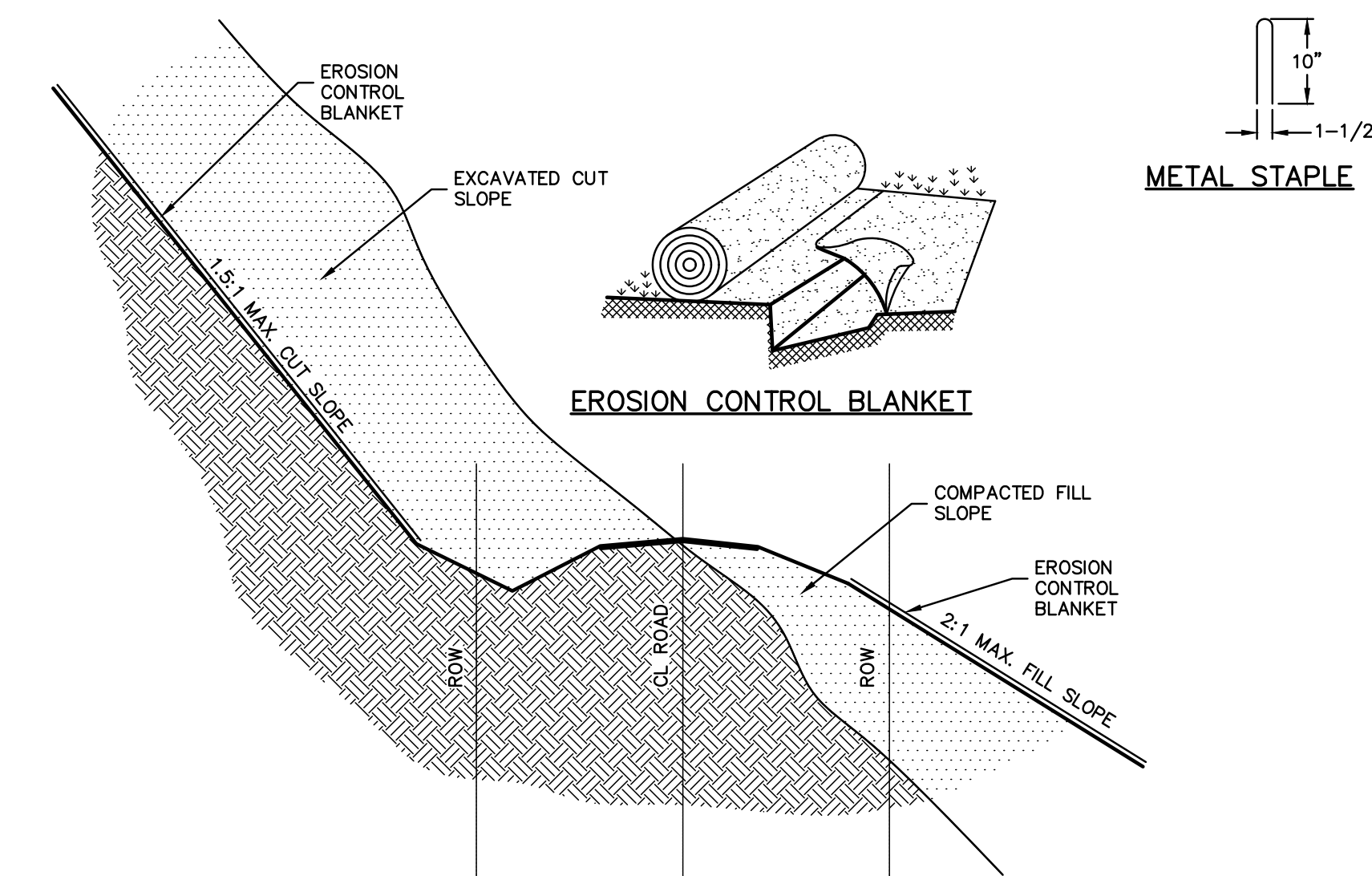
1. PUMP AROUND SYSTEM SHALL BE USED IN THE AREA OF CONSTRUCTION AND SHALL BE MOVED AS NEEDED AS CONSTRUCTION PROGRESSES.
2. CONTRACTOR SHALL FIRST INSTALL ALL EROSION CONTROL MEASURES AS SHOWN IN PLANS AND ABOVE DETAIL.
3. CONSTRUCT IMPERVIOUS DIKE ON UPSTREAM SIDE OF EXISTING CHANNEL AND INSTALL TEMPORARY BYPASS PUMP TO DIVERT WATER AROUND CONSTRUCTION AREA.
4. CONSTRUCT IMPERVIOUS DIKE ON DOWNSTREAM SIDE OF EXISTING CHANNEL TO PREVENT BACKING UP OF STREAM WATER INTO THE CONSTRUCTION AREA.
5. DEWATER THE CONSTRUCTION AREA USING ANOTHER TEMPORARY PUMP AND DISCHARGE THE WATER INTO A DEWATERING BASIN UNTIL SEDIMENT HAS SETTLED AND WATER CAN BE DISCHARGED BACK INTO THE STREAM.
6. BEGIN STREAM BANK REPAIR. CONTRACTOR SHALL INSPECT SYSTEM DAILY BEFORE BEGINNING ANY CONSTRUCTION. NO CONSTRUCTION SHALL CONTINUE IF SYSTEM IS NOT FULLY OPERATIONAL.
7. ANY WASH MATERIAL REMOVED FROM BYPASS AREA SHOULD BE STORED OUTSIDE THE FLOOD ZONE UNTIL CONSTRUCTION IS COMPLETE.
8. UPON COMPLETION OF STREAM BANK REPAIR, REMOVE BYPASS SYSTEM WITHIN TWO (2) CALENDAR DAYS.
9. STABILIZE ALL AREAS DISTURBED DURING CONSTRUCTION.
10. CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM ENGINEER IF CHOOSING TO USE ANOTHER METHOD IN LIEU OF BYPASS CHANNEL.

**TEMPORARY STREAM BYPASS DETAIL**



**NOTES:**

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S DOWN OR HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING AND SPACING STAPLES/STAKES IN APPROPRIATE LOCATIONS PER MANUFACTURER RECOMMENDATIONS.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.
7. INSTALLATION OF MATTING SHALL CONFORM TO MANUFACTURER'S REQUIREMENTS.
8. SEE GRADING PLAN FOR LOCATIONS OF CUT AND FILL SLOPES.
9. MATTING SHALL BE : NORTH AMERICAN GREEN SC150, AMERICAN EXCELSIOR EROSION CONTROL BLANKET, OR EQUAL. INSTALL ON ALL DISTURBED SLOPES (CHOSEN PRODUCT MUST BE RATED FOR SLOPES OF 2:1 OR 1:1). SEE PLAN FOR PRODUCT TYPE THAT MAY BE SPECIFIED
10. ALLOW 3" MIN. OVERLAP BETWEEN PARALLEL STRIPS.
11. BURY THE TOP OF THE MAT IN A TRENCH 4" OR MORE IN DEPTH. TAMP THE TRENCH FULL SOIL. SECURE WITH ROW OF STAPLES, 10" SPACING, 4" DOWN FROM THE TRENCH. OVERLAP END OF TOP STRIP 4" AND STAPLE.



**EC 11**

**SLOPE MATTING INSTALLATION**

UPDATED MARCH, 2017  
NOT TO SCALE

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**PRELIMINARY**



NO.	DATE	BY	DESCRIPTION

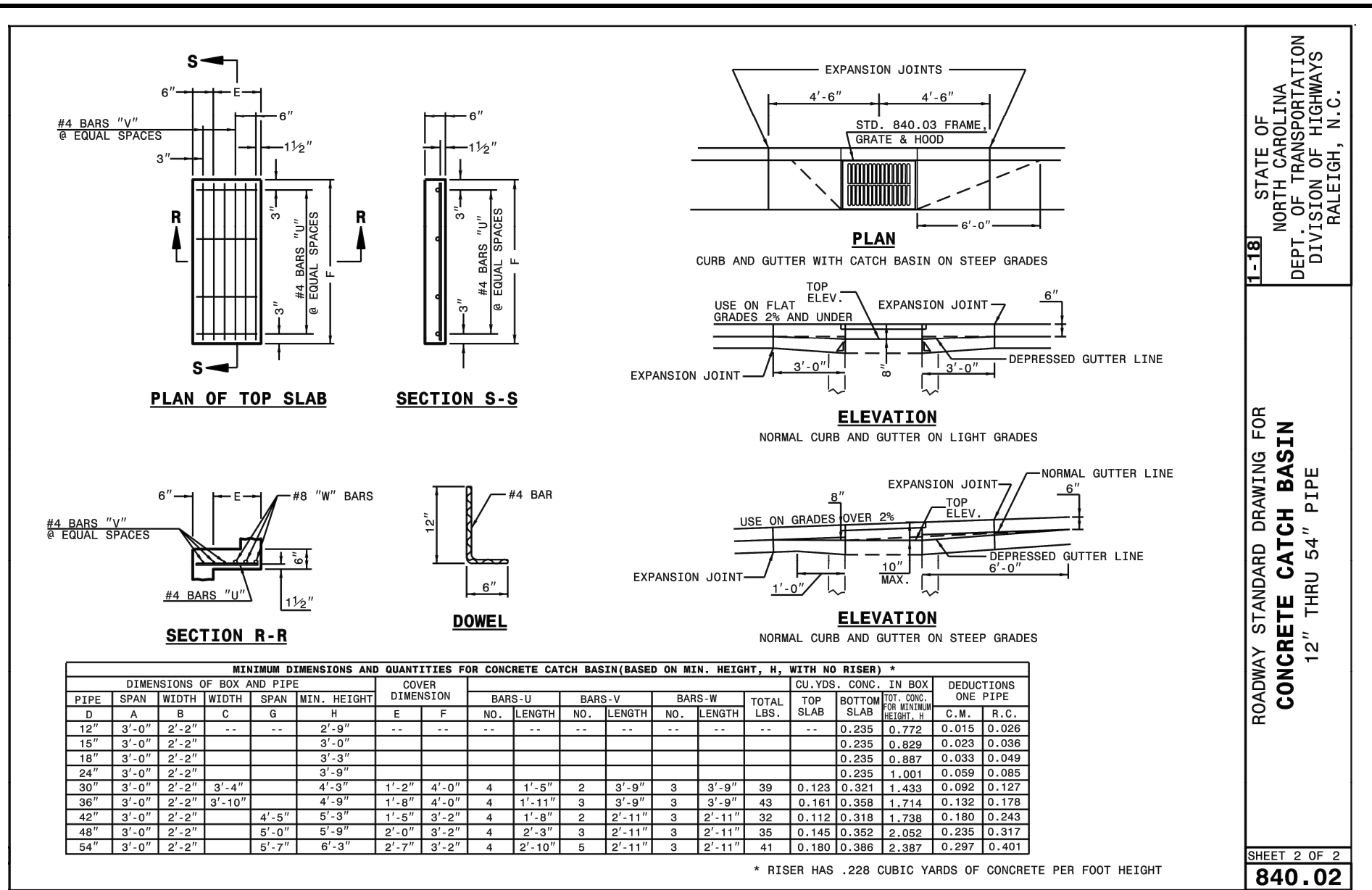
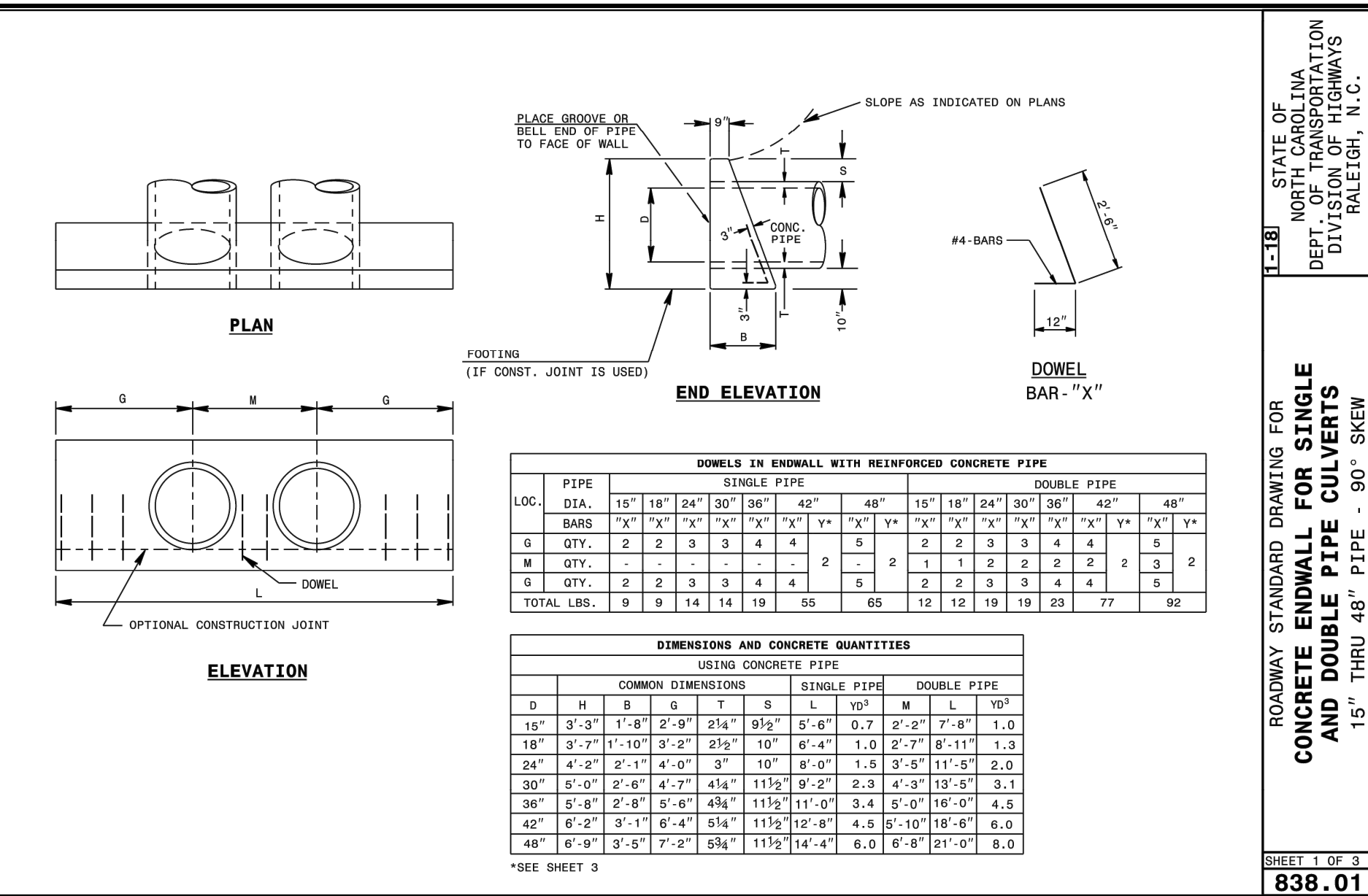
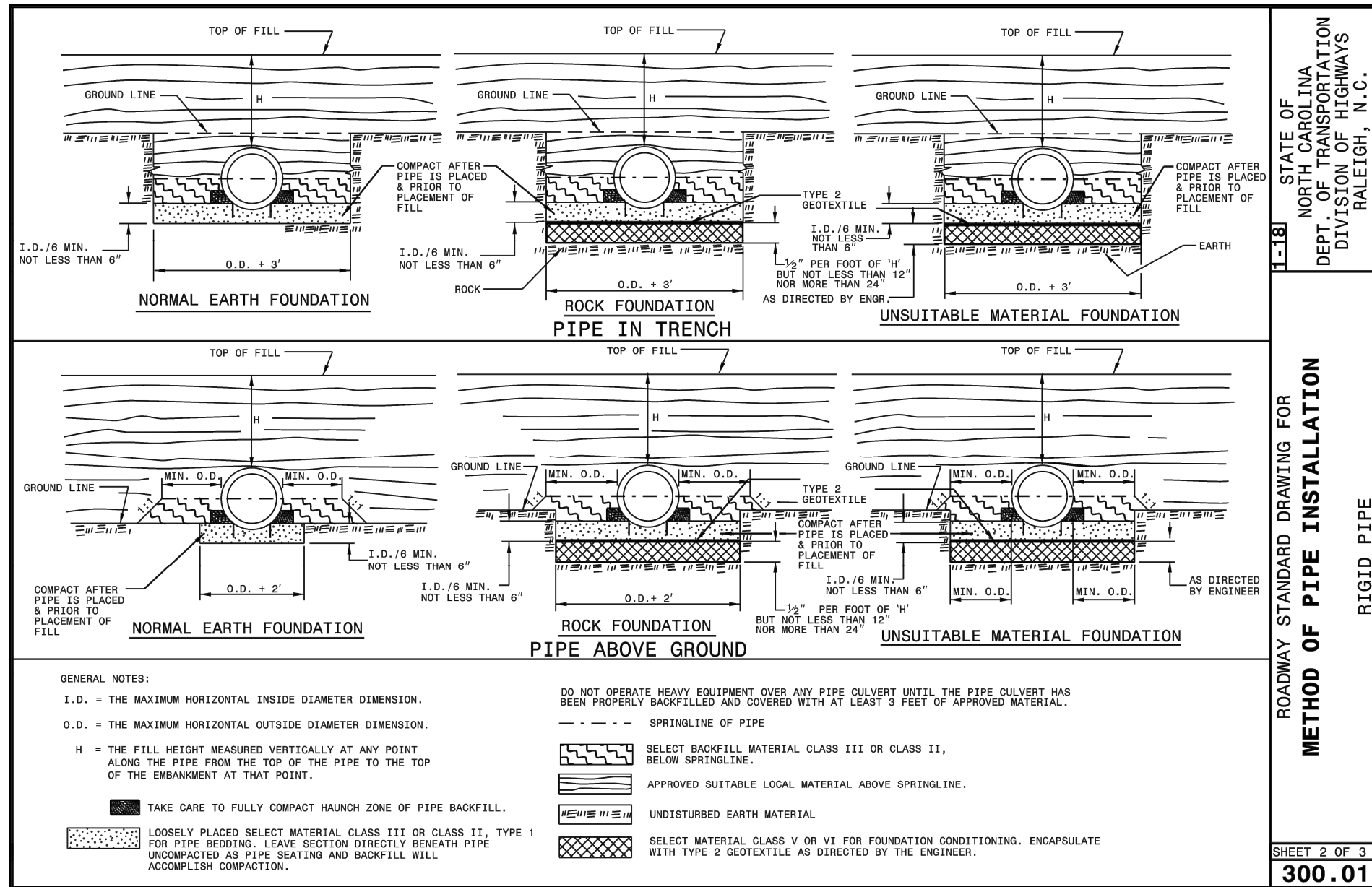
ELIZABETH ST & JOHNSON ST  
STORM DRAINAGE IMPROVEMENTS  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

OFFICE MANAGER B. ROARK		DESIGNER C. HEATHCOAT	
PROJECT MANAGER D. SABEH		REVIEWER D. SABEH	

GRAPHIC SCALE 0 25 50 100 DIVISION VALUE = 50 FEET		EROSION CONTROL DETAIL 2 OF 2	
DATE FEBRUARY 2023	PROJECT # 21.04018	FUNDING # N/A	SHEET <b>C-31</b>

21.04018 - TOWN OF ST. PAULS - ELIZABETH ST & JOHNSON ST STORM DRAINAGE IMPROVEMENTS



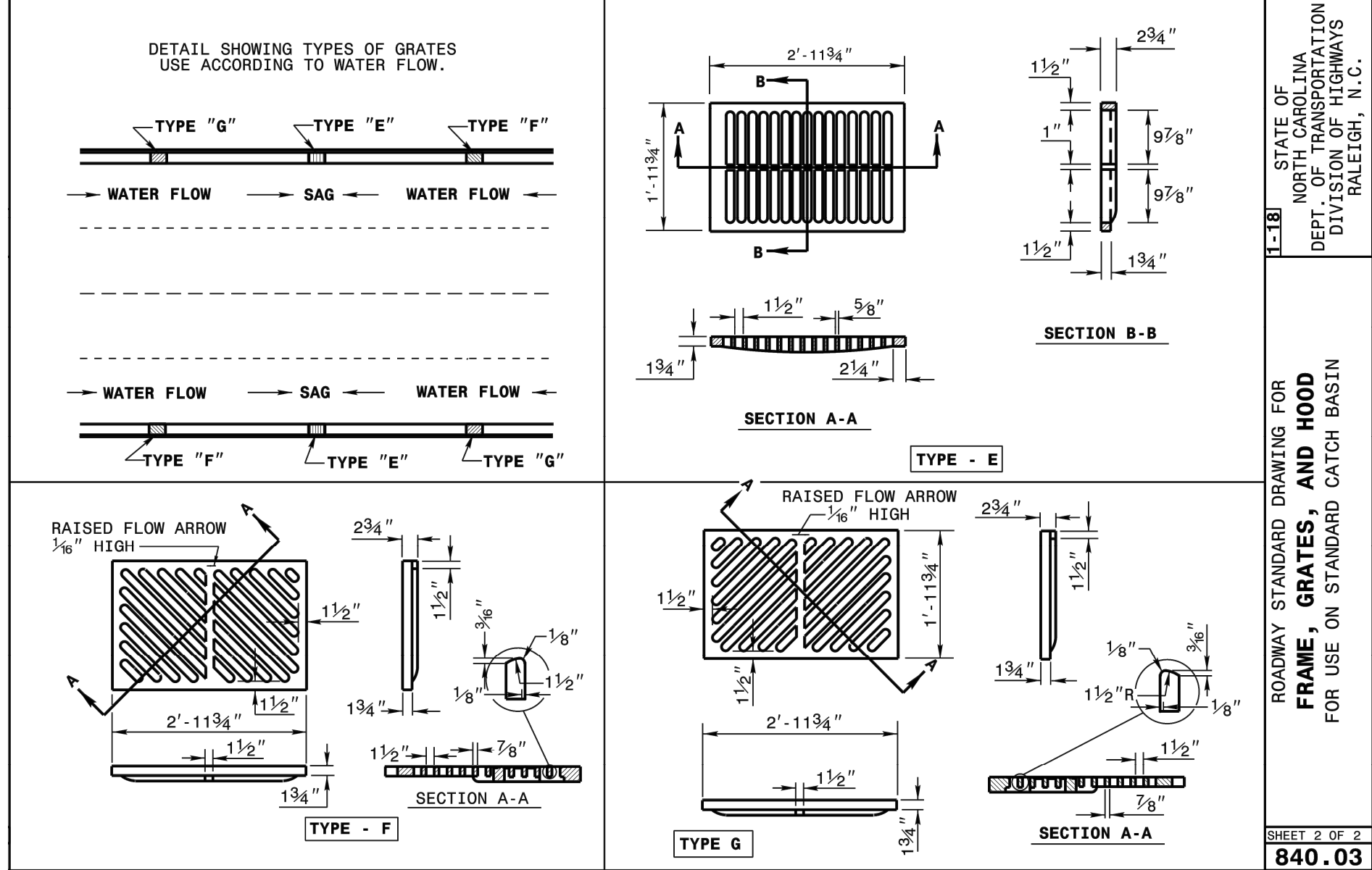
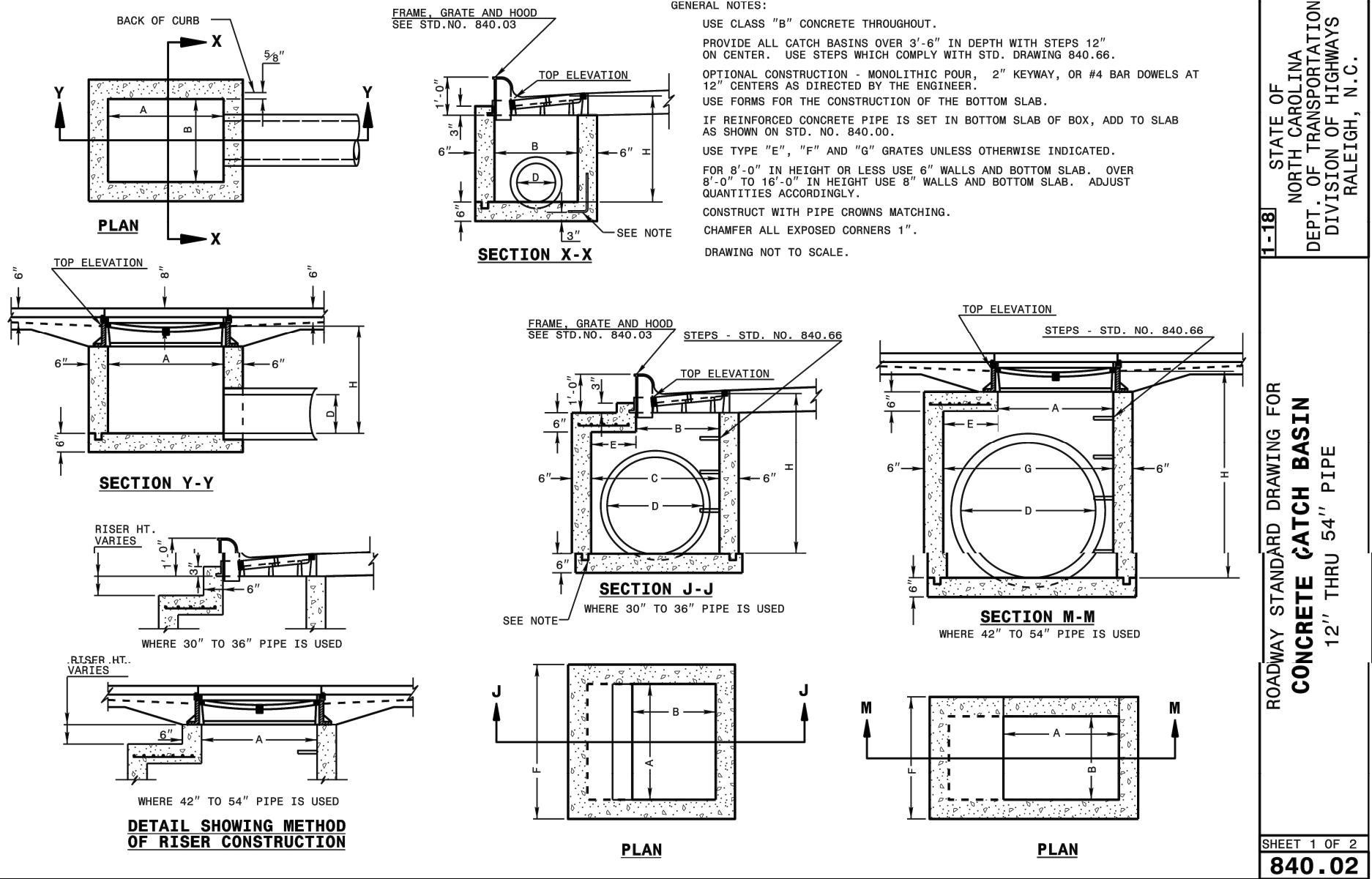
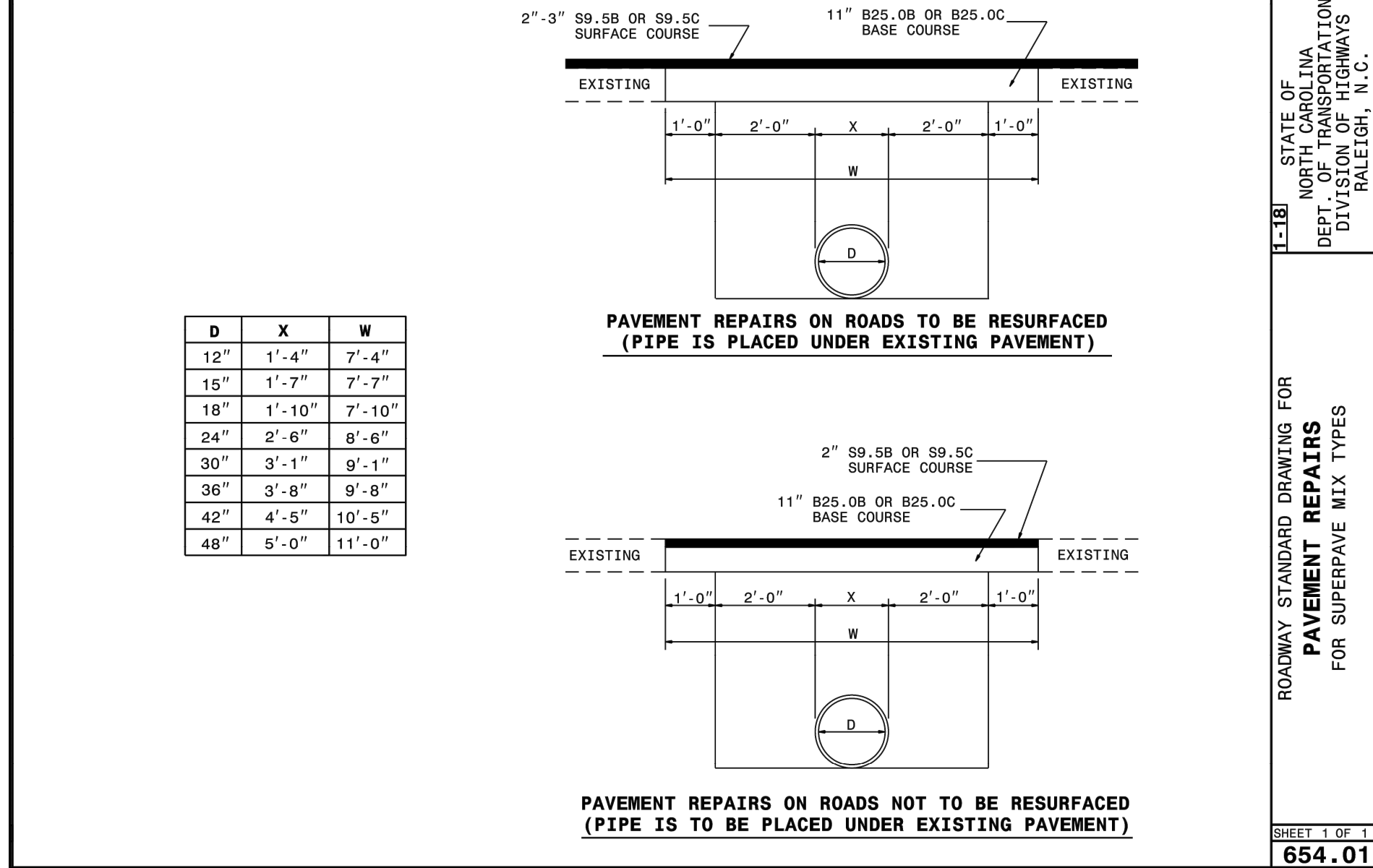
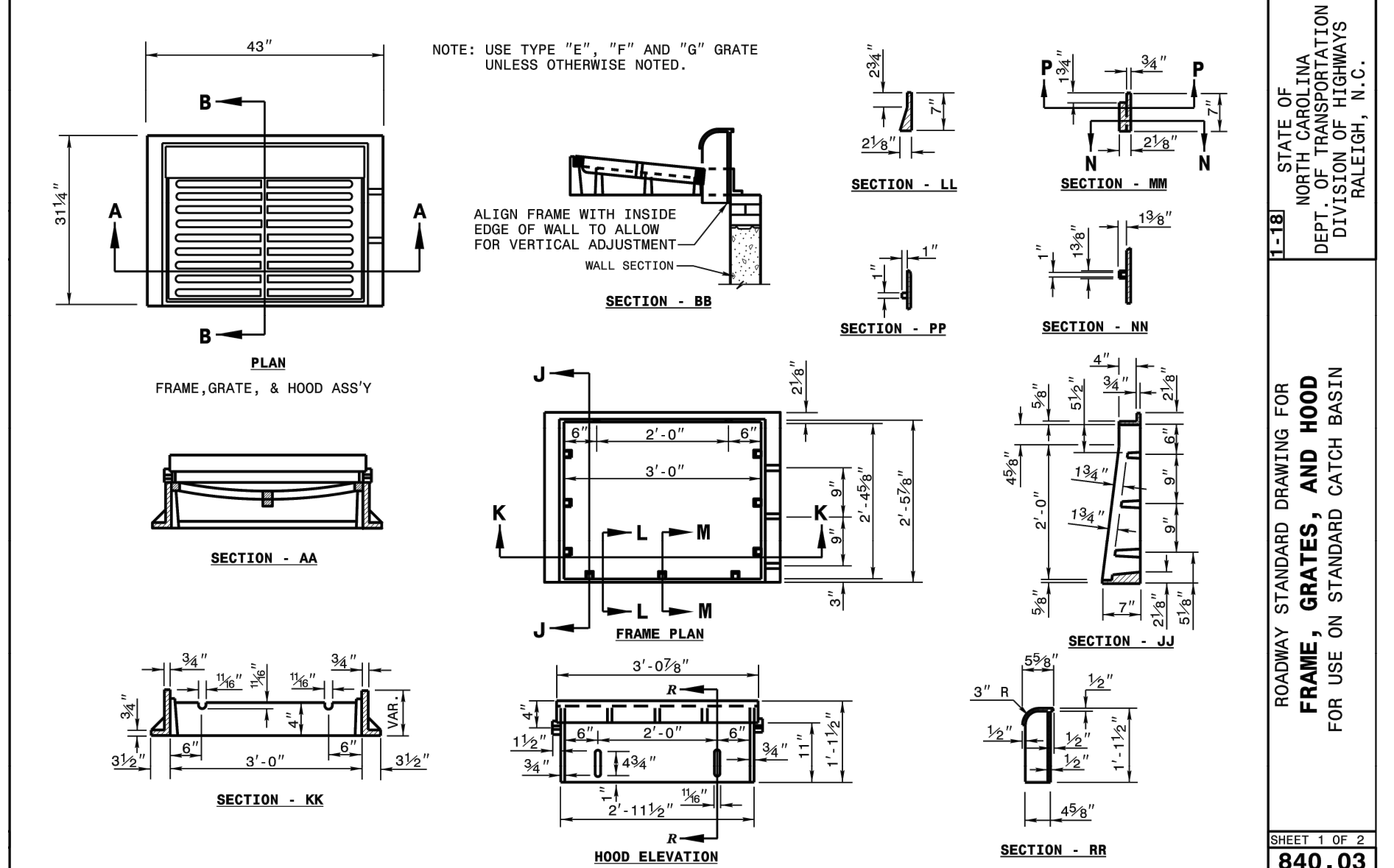
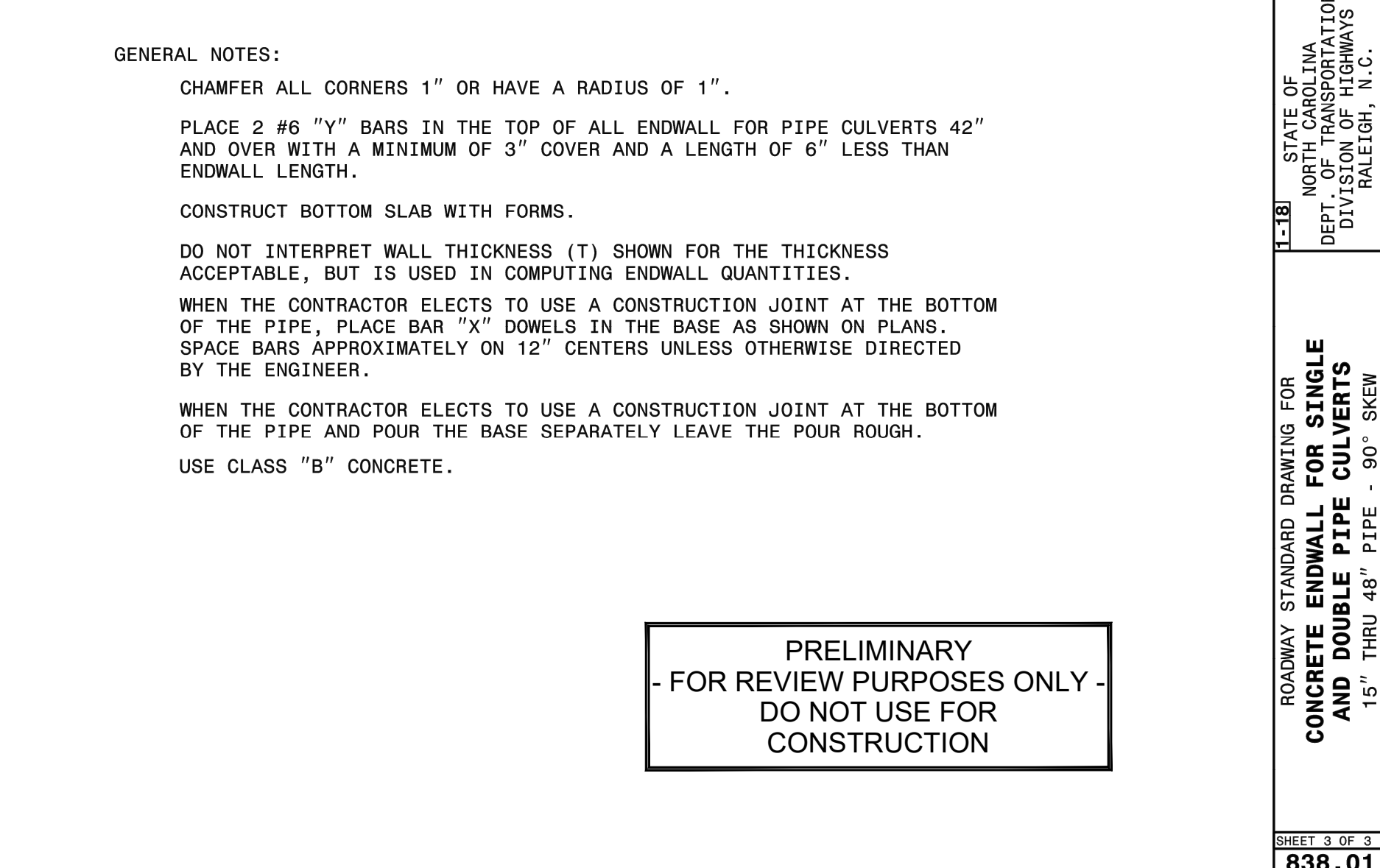


**ROADWAY STANDARD DRAWING FOR METHOD OF PIPE INSTALLATION**  
FILL HEIGHT TABLES

**STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.**

**SHEET 3 OF 3 300.01**

Round Corrugated Steel Pipe			
Diameter (Inches)	Minimum cover (Inches)	Maximum Height of Cover (feet)	
		12"	15"
12	12	204	256
15	12	162	204
18	12	135	169
21	12	115	145
24	12	100	128
30	12	79	100
36	12	65	83
42	12	55	70
48	12	48	61
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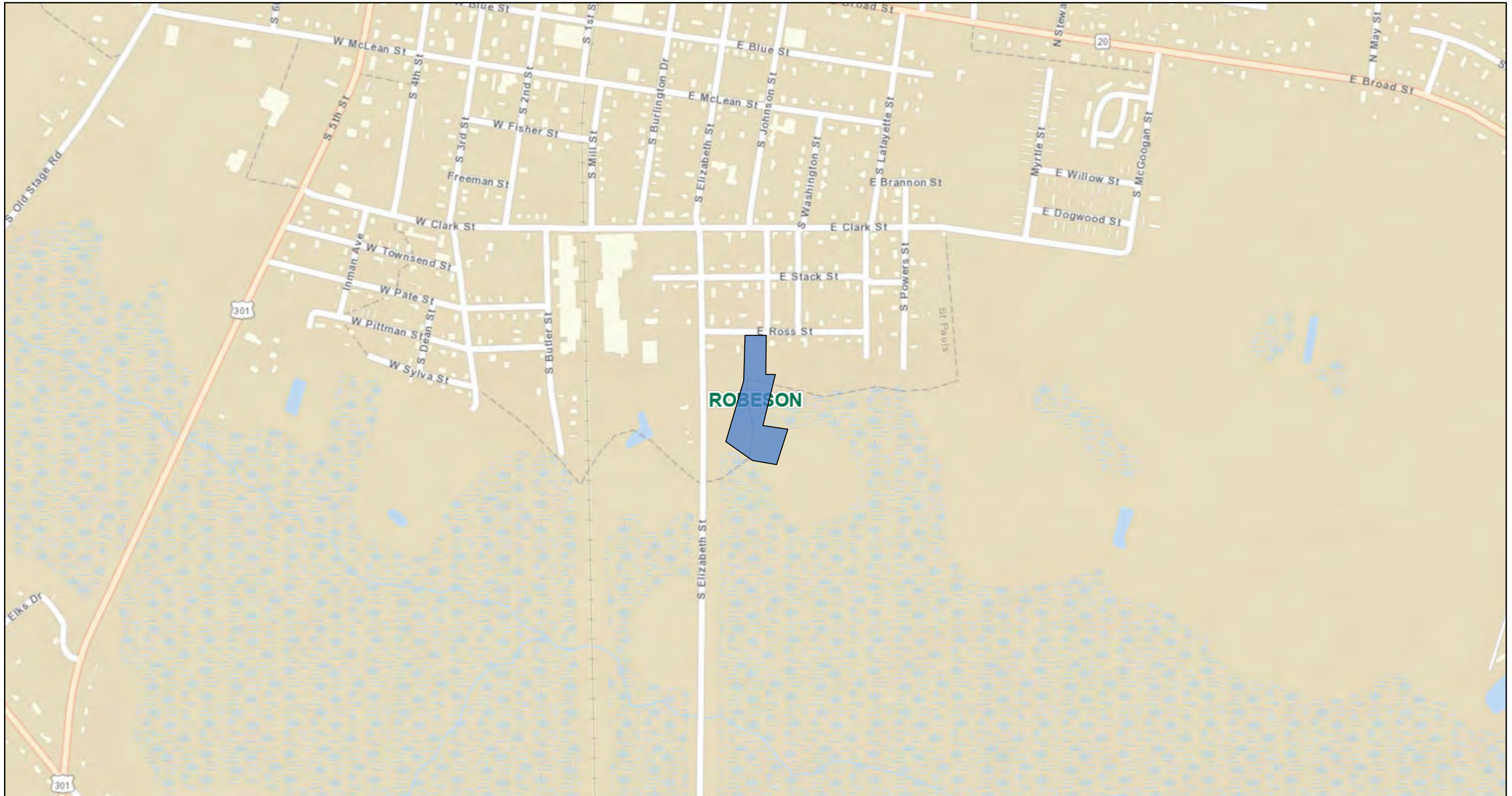






**APPENDIX 3**  
**NCHPO HPOWEB Map**



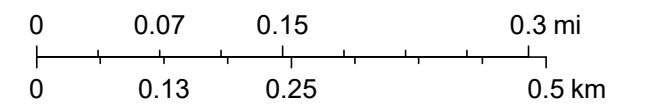
# NCHPO HPOWEB Map



2/7/2023, 11:43:49 AM

-  Study Area\_2\_6\_2023
-  Counties (outline)

1:9,028



State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, Intermap, NGA, USGS

## **APPENDIX 4**

### **IPAC Consultation Package**





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Raleigh Ecological Services Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Phone: (919) 856-4520 Fax: (919) 856-4556

In Reply Refer To:

February 06, 2023

Project Code: 2023-0042046

Project Name: St.Pauls Elizabeth-Johnson Street Storm Drainage Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). If your project area contains suitable habitat for any of the federally-listed species on this species list, the proposed action has the potential to adversely affect those species. If suitable habitat is present, surveys should be conducted to determine the species' presence or absence within the project area. The use of this species list and/or North Carolina Natural Heritage program data should not be substituted for actual field surveys.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - Migratory Birds
-

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Raleigh Ecological Services Field Office**

Post Office Box 33726

Raleigh, NC 27636-3726

(919) 856-4520

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## Project Summary

Project Code: 2023-0042046

Project Name: St.Pauls Elizabeth-Johnson Street Storm Drainage Project

Project Type: Drainage Project

Project Description: St.Pauls, North Carolina

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.79889085,-78.96804406651196,14z>



Counties: Robeson County, North Carolina

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## Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

### Birds

NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7614">https://ecos.fws.gov/ecp/species/7614</a>	Endangered

### Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/776">https://ecos.fws.gov/ecp/species/776</a>	Similarity of Appearance (Threatened)

### Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate



## Flowering Plants

NAME	STATUS
Michaux's Sumac <i>Rhus michauxii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5217">https://ecos.fws.gov/ecp/species/5217</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

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## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

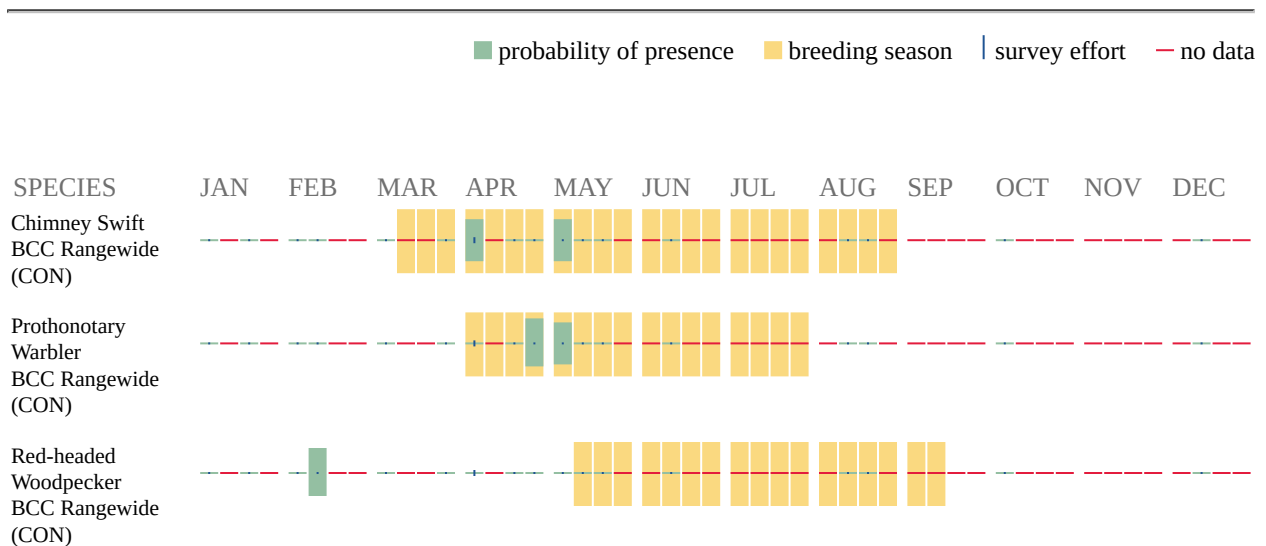
### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

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Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.



The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
  2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
  3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## **IPaC User Contact Information**

Agency: St. Pauls town

Name: Alex Lowdermilk

Address: 1240 19th Street Lane NW

City: Hickory

State: NC

Zip: 28601

Email [alex.lowdermilk@mcgillassociates.com](mailto:alex.lowdermilk@mcgillassociates.com)

Phone: 8285140345

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## **APPENDIX 5**

### **Preliminary Jurisdictional Determination (PJD)**



February 8, 2023

Gary Beecher  
US Army Corps of Engineers  
Washington Regulatory Field Office  
2407 West Fifth Street  
Washington, North Carolina 27889

RE: Elizabeth-Johnson Storm Drainage Project  
Jurisdictional Determination  
Saint Pauls, North Carolina

Dear Mr. Beecher:

This letter is to request confirmation of a Preliminary Jurisdictional Determination on the referenced site. The request is based on data, site observations, and a site visit on October 13, 2021 and February 7, 2023. We are requesting confirmation of the jurisdictional limits of 'Wetland A'. The location of Wetland A is shown and labeled on the attached Delineation Map. Included in this letter are the following:

- Agent Authorization Form
- PJD Request Forms
- Location Map
- USGS Topographic Map
- Delineation Map
- NWI Map
- Photo Sheet
- Soils Map
- Wetland Determination Data Sheets

Please include McGill Associates on the copy list of all correspondence for this project. If you have any questions regarding this information, please contact me at 828-328-2024.

Sincerely,  
**MCGILL ASSOCIATES, PA**

A handwritten signature in black ink, appearing to read "Jon Swaim".

**JON SWAIM**  
Project Manager / Environmental Services

P:\2021\21.04018-StPaulsNC-Elizabeth-Johnson Street Storm Drainage

# Jurisdictional Determination Request

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**US Army Corps  
of Engineers**  
Wilmington District

This form is intended for use by anyone requesting a jurisdictional determination (JD) from the U.S. Army Corps of Engineers, Wilmington District (Corps). Please include all supporting information, as described within each category, with your request. You may submit your request via mail, electronic mail, or facsimile. Requests should be sent to the appropriate project manager of the county in which the property is located. A current list of project managers by assigned counties can be found on-line at:

<http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/Contact/CountyLocator.aspx>, by calling 910-251-4633, or by contacting any of the field offices listed below. Once your request is received you will be contacted by a Corps project manager.

## **ASHEVILLE & CHARLOTTE REGULATORY FIELD OFFICES**

US Army Corps of Engineers  
151 Patton Avenue, Room 208  
Asheville, North Carolina 28801-5006  
General Number: (828) 271-7980  
Fax Number: (828) 281-8120

## **WASHINGTON REGULATORY FIELD OFFICE**

US Army Corps of Engineers  
2407 West Fifth Street  
Washington, North Carolina 27889  
General Number: (910) 251-4610  
Fax Number: (252) 975-1399

## **RALEIGH REGULATORY FIELD OFFICE**

US Army Corps of Engineers  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587  
General Number: (919) 554-4884  
Fax Number: (919) 562-0421

## **WILMINGTON REGULATORY FIELD OFFICE**

US Army Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403  
General Number: 910-251-4633  
Fax Number: (910) 251-4025

## **INSTRUCTIONS:**

**All requestors must complete Parts A, B, C, D, E, F and G.**

**NOTE TO CONSULTANTS AND AGENCIES:** If you are requesting a JD on behalf of a paying client or your agency, please note the specific submittal requirements in **Part H**.

**NOTE ON PART D – PROPERTY OWNER AUTHORIZATION:** Please be aware that all JD requests must include the current property owner authorization for the Corps to proceed with the determination, which may include inspection of the property when necessary. This form must be signed by the current property owner(s) or the owner(s) authorized agent to be considered a complete request.

**NOTE ON PART D - NCDOT REQUESTS:** Property owner authorization/notification for JD requests associated with North Carolina Department of Transportation (NCDOT) projects will be conducted according to the current NCDOT/USACE protocols.

**NOTE TO USDA PROGRAM PARTICIPANTS:** A Corps approved or preliminary JD may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should also request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.



# Jurisdictional Determination Request

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**A. PARCEL INFORMATION**

Street Address: \_\_\_\_\_

City, State: \_\_\_\_\_

County: \_\_\_\_\_

Parcel Index Number(s) (PIN): \_\_\_\_\_

**B. REQUESTOR INFORMATION**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Electronic Mail Address: \_\_\_\_\_

Select one:

- I am the current property owner.
- I am an Authorized Agent or Environmental Consultant<sup>1</sup>
- Interested Buyer or Under Contract to Purchase
- Other, please explain. \_\_\_\_\_

**C. PROPERTY OWNER INFORMATION<sup>2</sup> OWNER**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Electronic Mail Address: \_\_\_\_\_

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<sup>1</sup> Must provide completed Agent Authorization Form/Letter.

<sup>2</sup> Documentation of ownership also needs to be provided with request (copy of Deed, County GIS/Parcel/Tax Record).

## Jurisdictional Determination Request

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### D. PROPERTY ACCESS CERTIFICATION<sup>3,4</sup>

By signing below, I authorize representatives of the Wilmington District, U.S. Army Corps of Engineers (Corps) to enter upon the property herein described for the purpose of conducting on-site investigations, if necessary, and issuing a jurisdictional determination pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. I, the undersigned, am either a duly authorized owner of record of the property identified herein, or acting as the duly authorized agent of the owner of record of the property.

\_\_\_\_\_  
Print Name

Capacity:  Owner  Authorized Agent<sup>5</sup>

\_\_\_\_\_  
Date

*Jon Swain*

\_\_\_\_\_  
Signature

### E. REASON FOR JD REQUEST: (Check as many as applicable)

- I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
- I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
- I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
- A Corps JD is required in order obtain my local/state authorization.
- I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- I believe that the site may be comprised entirely of dry land.
- Other: \_\_\_\_\_

<sup>3</sup> For NCDOT requests following the current NCDOT/USACE protocols, skip to Part E.

<sup>4</sup> If there are multiple parcels owned by different parties, please provide the following for each additional parcel on a continuation sheet.

<sup>5</sup> Must provide agent authorization form/letter signed by owner(s).

## Jurisdictional Determination Request

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### F. JURISDICTIONAL DETERMINATION (JD) TYPE (Select One)

I am requesting that the Corps provide a preliminary JD for the property identified herein.

A Preliminary Jurisdictional Determination (PJD) provides an indication that there may be “waters of the United States” or “navigable waters of the United States” on a property. PJDs are sufficient as the basis for permit decisions. For the purposes of permitting, all waters and wetlands on the property will be treated as if they are jurisdictional “waters of the United States”. PJDs cannot be appealed (33 C.F.R. 331.2); however, a PJD is “preliminary” in the sense that an approved JD can be requested at any time. PJDs do not expire.

I am requesting that the Corps provide an approved JD for the property identified herein.

An Approved Jurisdictional Determination (AJD) is a determination that jurisdictional “waters of the United States” or “navigable waters of the United States” are either present or absent on a site. An approved JD identifies the limits of waters on a site determined to be jurisdictional under the Clean Water Act and/or Rivers and Harbors Act. Approved JDs are sufficient as the basis for permit decisions. AJDs are appealable (33 C.F.R. 331.2). The results of the AJD will be posted on the Corps website. A landowner, permit applicant, or other “affected party” (33 C.F.R. 331.2) who receives an AJD may rely upon the AJD for five years (subject to certain limited exceptions explained in Regulatory Guidance Letter 05-02).

I am unclear as to which JD I would like to request and require additional information to inform my decision.

### G. ALL REQUESTS

Map of Property or Project Area. This Map must clearly depict the boundaries of the review area.

Size of Property or Review Area \_\_\_\_\_ acres.

The property boundary (or review area boundary) is clearly physically marked on the site.



# Jurisdictional Determination Request

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## H. REQUESTS FROM CONSULTANTS

Project Coordinates (Decimal Degrees): Latitude: \_\_\_\_\_  
Longitude: \_\_\_\_\_

A legible delineation map depicting the aquatic resources and the property/review area. Delineation maps must be no larger than 11x17 and should contain the following: (Corps signature of submitted survey plats will occur after the submitted delineation map has been reviewed and approved).<sup>6</sup>

- North Arrow
- Graphical Scale
- Boundary of Review Area
- Date
- Location of data points for each Wetland Determination Data Form or tributary assessment reach.

### For Approved Jurisdictional Determinations:

- Jurisdictional wetland features should be labeled as Wetland Waters of the US, 404 wetlands, etc. Please include the acreage of these features.
- Jurisdictional non-wetland features (i.e. tidal/navigable waters, tributaries, impoundments) should be labeled as Non-Wetland Waters of the US, stream, tributary, open water, relatively permanent water, pond, etc. Please include the acreage or linear length of each of these features as appropriate.
- Isolated waters, waters that lack a significant nexus to navigable waters, or non-jurisdictional upland features should be identified as Non-Jurisdictional. Please include a justification in the label regarding why the feature is non-jurisdictional (i.e. “Isolated”, “No Significant Nexus”, or “Upland Feature”). Please include the acreage or linear length of these features as appropriate.

### For Preliminary Jurisdictional Determinations:

- Wetland and non-wetland features should not be identified as Jurisdictional, 404, Waters of the United States, or anything that implies jurisdiction. These features can be identified as Potential Waters of the United States, Potential Non-wetland Waters of the United States, wetland, stream, open water, etc. Please include the acreage and linear length of these features as appropriate.

Completed Wetland Determination Data Forms for appropriate region  
(at least one wetland and one upland form needs to be completed for each wetland type)

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<sup>6</sup> Please refer to the guidance document titled “Survey Standards for Jurisdictional Determinations” to ensure that the supplied map meets the necessary mapping standards. <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Jurisdiction/>

## Jurisdictional Determination Request

---

- Completed appropriate Jurisdictional Determination form
  - **PJDs**, please complete a Preliminary Jurisdictional Determination Form<sup>7</sup> and include the Aquatic Resource Table
  - **AJDs**, please complete an Approved Jurisdictional Determination Form<sup>8</sup>
- Vicinity Map
- Aerial Photograph
- USGS Topographic Map
- Soil Survey Map
- Other Maps, as appropriate (e.g. National Wetland Inventory Map, Proposed Site Plan, previous delineation maps, LIDAR maps, FEMA floodplain maps)
- Landscape Photos (if taken)
- NCSAM and/or NCWAM Assessment Forms and Rating Sheets
- NC Division of Water Resources Stream Identification Forms
- Other Assessment Forms

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<sup>7</sup> [www.saw.usace.army.mil/Portals/59/docs/regulatory/regdocs/JD/RGL\\_08-02\\_App\\_A\\_Prelim\\_JD\\_Form\\_fillable.pdf](http://www.saw.usace.army.mil/Portals/59/docs/regulatory/regdocs/JD/RGL_08-02_App_A_Prelim_JD_Form_fillable.pdf)

<sup>8</sup> Please see <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Jurisdiction/>

**Principal Purpose:** The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

**Routine Uses:** This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USAGE website.

**Disclosure:** Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

Preliminary ORM Data Entry Fields for New Actions

ACTION ID #: SAW-

Begin Date (Date Received):

Prepare file folder

Assign Action ID Number in ORM

1. Project Name [PCN Form A2a]:

2. Work Type:      Private              Institutional              Government              Commercial

3. Project Description / Purpose [PCN Form B3d and B3e]:

4. Property Owner / Applicant [PCN Form A3 or A4]:

5. Agent / Consultant [PNC Form A5 – or ORM Consultant ID Number]:

6. Related Action ID Number(s) [PCN Form B5b]:

7. Project Location – Coordinates, Street Address, and/or Location Description [PCN Form B1b]:

8. Project Location – Tax Parcel ID [PCN Form B1a]:

9. Project Location – County [PCN Form A2b]:

10. Project Location – Nearest Municipality or Town [PCN Form A2c]:

11. Project Information – Nearest Waterbody [PCN Form B2a]:

12. Watershed / 8-Digit Hydrologic Unit Code [PCN Form B2c]:

Authorization: Section 10

Section 404

Section 10 and 404

Regulatory Action Type:

Standard Permit

Nationwide Permit #

Regional General Permit #

Jurisdictional Determination Request

Pre-Application Request

Unauthorized Activity

Compliance

No Permit Required





- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "*may be*" waters of the U.S. and/or that there "*may be*" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:  
Map: \_\_\_\_\_.
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report. Rationale: \_\_\_\_\_.
- Data sheets prepared by the Corps: \_\_\_\_\_.
- Corps navigable waters' study: \_\_\_\_\_.
- U.S. Geological Survey Hydrologic Atlas: \_\_\_\_\_.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: \_\_\_\_\_.
- Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.
- National wetlands inventory map(s). Cite name: \_\_\_\_\_.
- State/local wetland inventory map(s): \_\_\_\_\_.
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_.(National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): \_\_\_\_\_.  
or  Other (Name & Date): \_\_\_\_\_.
- Previous determination(s). File no. and date of response letter: \_\_\_\_\_.
- Other information (please specify): \_\_\_\_\_.

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

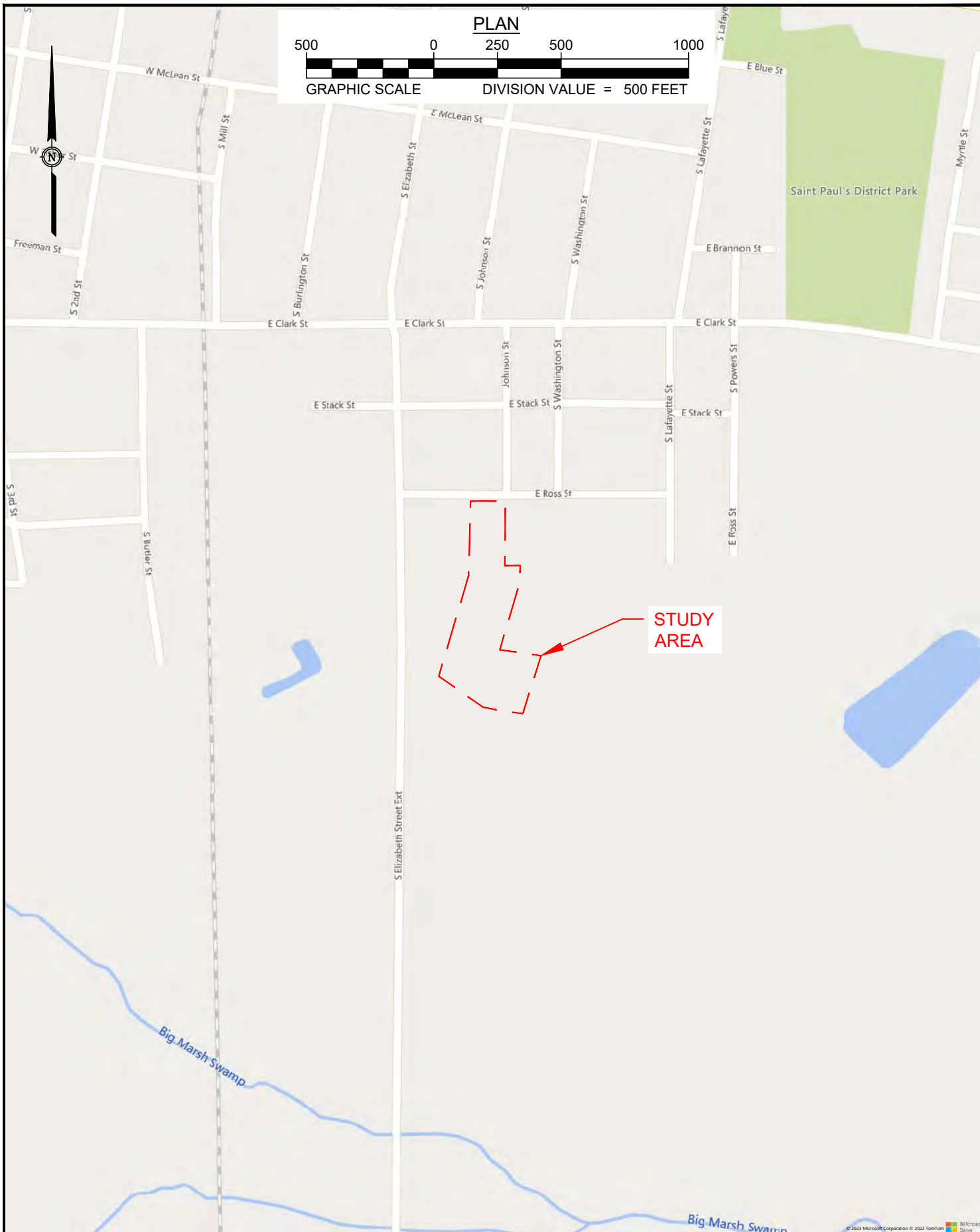
\_\_\_\_\_  
Signature and date of  
Regulatory staff member  
completing PJD

*Jon Swain* 2/8/2023  
\_\_\_\_\_  
Signature and date of  
person requesting PJD  
(REQUIRED, unless obtaining  
the signature is impracticable)<sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



P:\2021\21.04018-STPAULS-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DRAWINGS\FIGURES\DWG PLOT DATE 2/7/2023 8:26 AM ALEX LOWDERMILK




1240 19th Street Lane NW  
Hickory, NC 28601  
828.328.2024  
NC Firm License # C-0459  
mcgillassociates.com

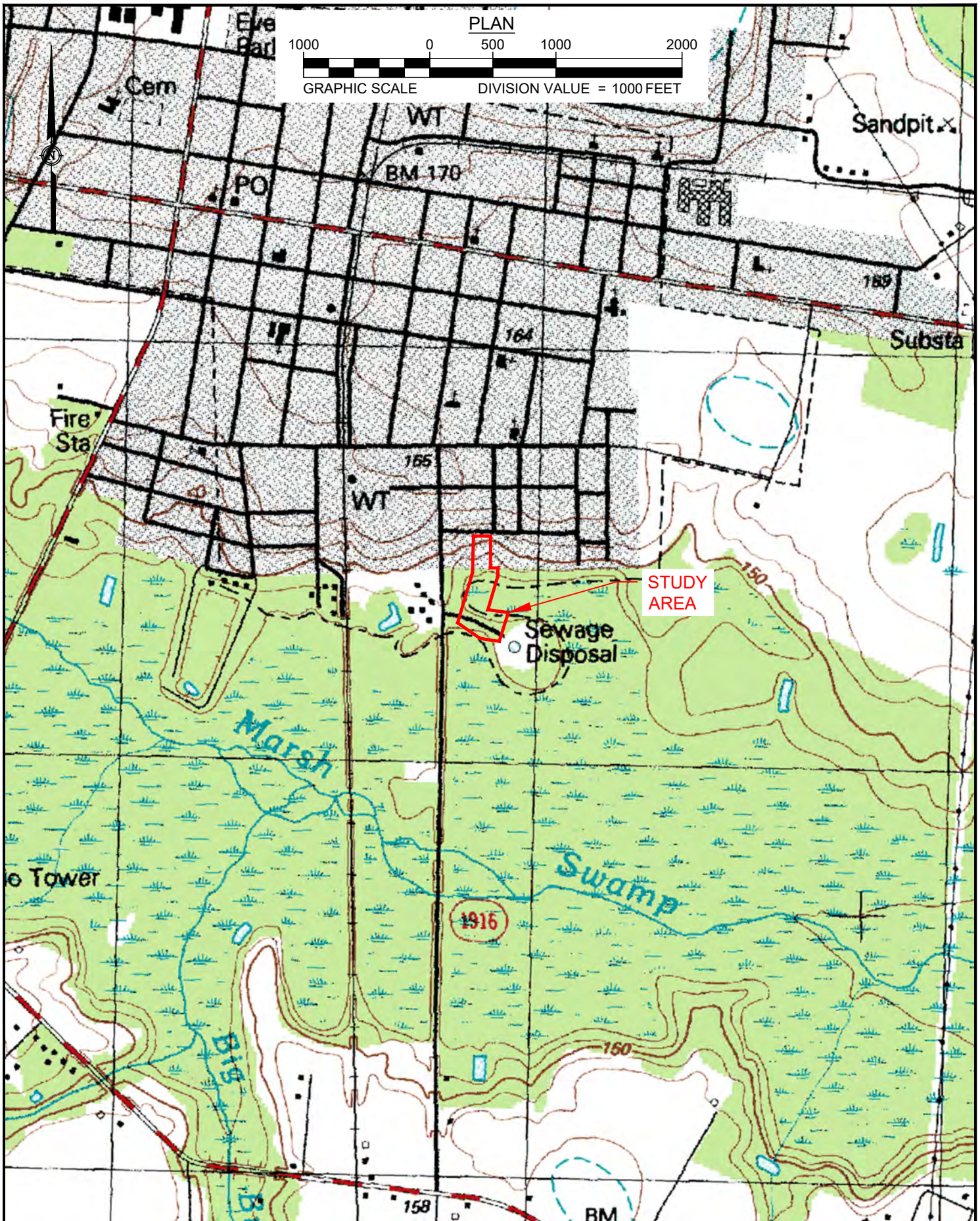
DATE	2/7/2023
PROJECT #	21.04018
PROJECT MANAGER	D. SABEH

ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

LOCATION MAP

FIGURE  
**1**





P:\2021\21.04018-STPAULS\NC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DRAWINGS\FIGURES\DWG PLOT DATE 2/7/2023 9:31 AM ALEX LOWDERMILK



1240 19th Street Lane NW  
Hickory, NC 28601  
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NC Firm License # C-0459  
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DATE  
2/7/2023  
PROJECT #  
21.04018  
PROJECT MANAGER  
D. SABEH

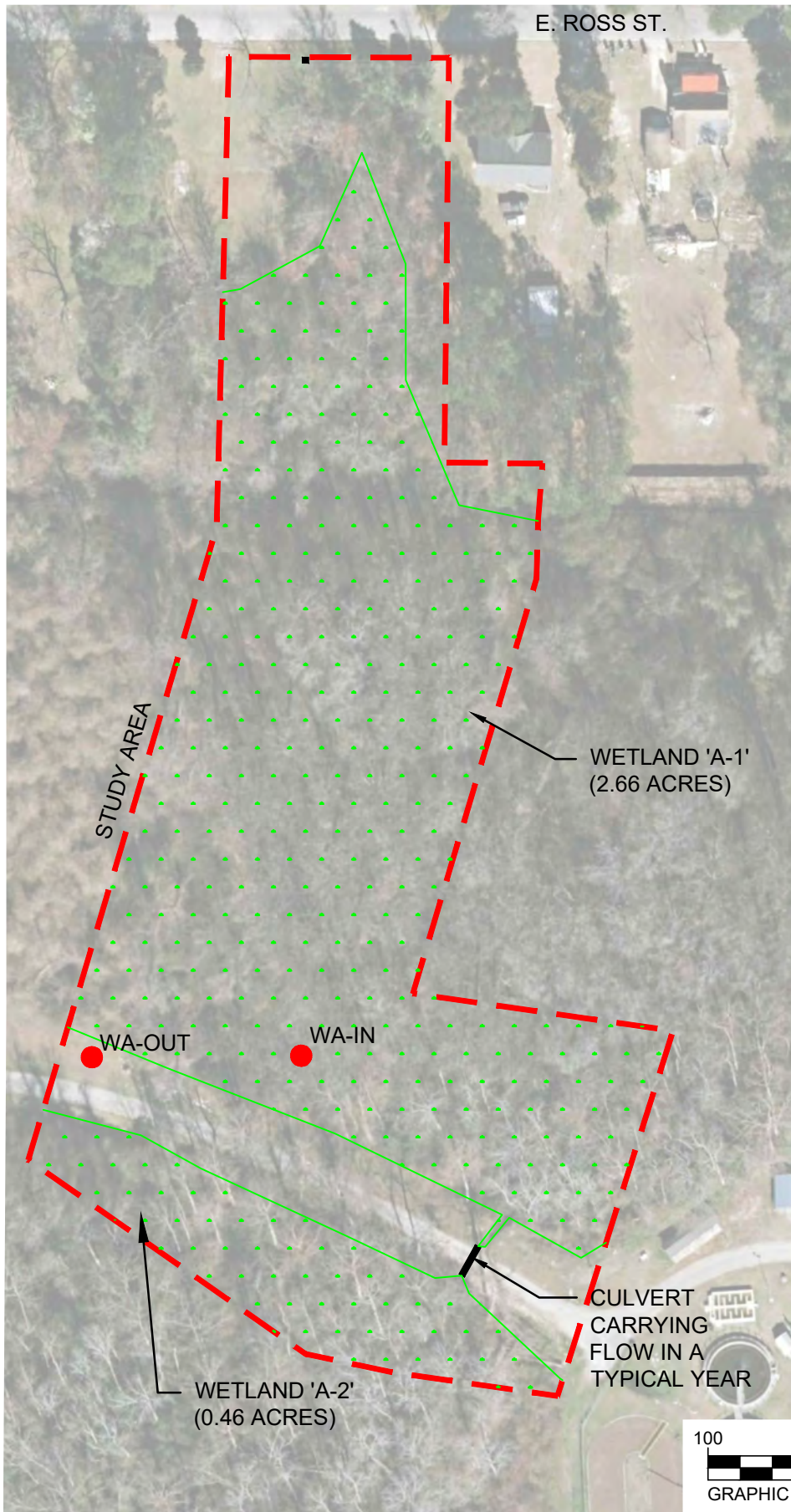
ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

USGS LOCATION MAP

FIGURE  
**2**

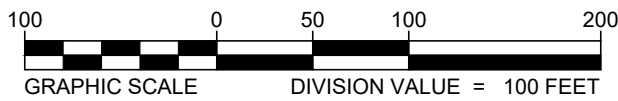


P:\2021\21 04018-STPAULSNC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DESIGN\PERMITS\404-401\LD\DELIN\LINEATION\MAP\_2\_6\_2023.DWG PLOT DATE 2/8/2023 10:38 AM ALEX LOWDERMILK



- NOTES:**
1. JURISDICTIONAL AQUATIC RESOURCES IDENTIFIED ON THIS MAP HAVE BEEN LOCATED WITHIN SUB-METER ACCURACY UTILIZING A GLOBAL POSITIONING SYSTEM (GPS) AND THE SUBSEQUENT DIFFERENTIAL CORRECTION OF THAT DATA. GPS POINTS MAY DEMONSTRATE UNCORRECTABLE ERRORS DUE TO TOPOGRAPHY, VEGETATIVE COVER, AND/OR MULTIPATH SIGNAL ERROR.
  2. THE ILLUSTRATED AQUATIC RESOURCE LOCATIONS ARE APPROXIMATE. THESE AREAS HAVE BEEN FLAGGED IN THE FIELD; HOWEVER, THEY HAVE NOT BEEN SURVEYED. ALTHOUGH MCGILL ASSOCIATES, P.A. (MCGILL) IS CONFIDENT IN OUR ASSESSMENT, THE US ARMY CORPS OF ENGINEERS IS THE ONLY AGENCY THAT CAN MAKE FINAL DECISIONS REGARDING JURISDICTIONAL WETLANDS AND WATERS OF THE US.
  3. THIS MAP WAS PREPARED BY MCGILL USING THE BEST INFORMATION AVAILABLE TO MCGILL AT THE TIME OF PRODUCTION. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED TO DETERMINE PRECISE BOUNDARIES, ROADWAYS, PROPERTY BOUNDARY LINES, NOR LEGAL DESCRIPTIONS. THIS MAP SHALL NOT BE CONSTRUED TO BE AN OFFICIAL SURVEY OF ANY DATA DEPICTED.
  4. BASE INFORMATION PROVIDED BY ROBESON COUNTY GIS.

Legend	
Study Area	
Existing Culverts	
Total Jurisdictional Wetlands (3.123 ac.)	
Data Point	



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2/8/2023

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21.04018

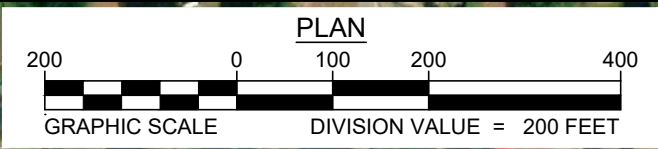
PROJECT MANAGER  
D. SABEH

ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

DELINERATION MAP

FIGURE  
**3**





P:\2021\21.04018-STPAULS-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DRAWINGS\FIGURES\DWG PLOT DATE 2/7/2023 8:15 AM ALEX LOWDERMILK

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PROJECT # 21.04018
PROJECT MANAGER D. SABEH

ELIZABETH-JOHNSON STREET  
STORM DRAINAGE  
**TOWN OF ST. PAULS**  
ROBESON COUNTY, NORTH CAROLINA

NATIONAL WETLAND  
INVENTORY MAP

FIGURE  
**4**



P:\2021\21.04018-STPAULS-SINC-ELIZABETH-JOHNSON STREET STORM DRAINAGE\DESIGN\PERMITS\404-401\UD\ELIZABETH-JOHNSON ST PHOTOSHEETS.DWG PLOT DATE 10/21/2021 4:07 PM JONATHAN M. HERMAN



**Photo One: View looking northwest at Wetland A-1.**

**Photo Two: View looking north within Wetland A-1 near the wastewater treatment plant access road.**

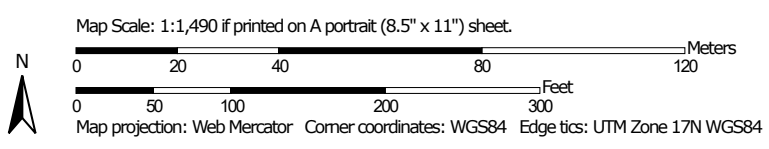
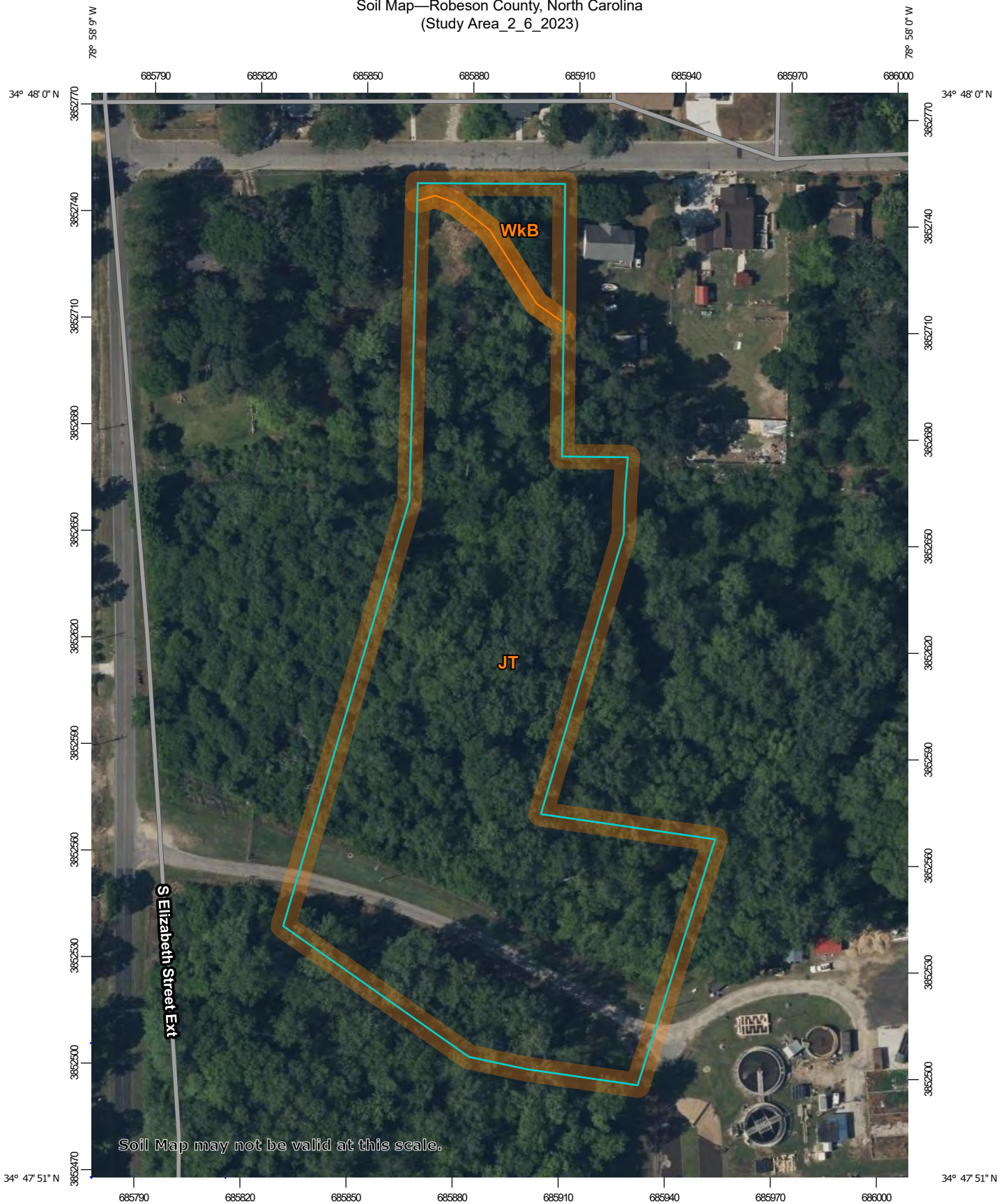


**Photo Three: View looking south at Wetland A-1 near E Ross Street.**

**Photo Four: View looking south at culvert outlet near Wetland A-2 .**




Soil Map—Robeson County, North Carolina  
(Study Area\_2\_6\_2023)





## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Robeson County, North Carolina  
Survey Area Data: Version 21, Sep 12, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 11, 2022—May 15, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
JT	Johnston soils	3.9	95.5%
WkB	Wakulla sand, 0 to 6 percent slopes	0.2	4.5%
<b>Totals for Area of Interest</b>		<b>4.0</b>	<b>100.0%</b>

Project/Site: Elizabeth-Johnson Street Storm Drainage City/County: Robeson Sampling Date: 10/13/21  
 Applicant/Owner: Town of St. Pauls State: NC Sampling Point: WA-IN  
 Investigator(s): Jonathan Herman Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): floodplain/tread Local relief (concave, convex, none): Flat Slope (%): 1  
 Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Johnston (JT) NWI classification: PFO1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		

Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1)      _____ Aquatic Fauna (B13) _____ High Water Table (A2)      _____ Marl Deposits (B15) <b>(LRR U)</b> <input checked="" type="checkbox"/> Saturation (A3)      _____ Hydrogen Sulfide Odor (C1) _____ Water Marks (B1)      _____ Oxidized Rhizospheres on Living Roots (C3) _____ Sediment Deposits (B2)      _____ Presence of Reduced Iron (C4) _____ Drift Deposits (B3)      _____ Recent Iron Reduction in Tilled Soils (C6) _____ Algal Mat or Crust (B4)      _____ Thin Muck Surface (C7) _____ Iron Deposits (B5)      _____ Other (Explain in Remarks) _____ Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) _____ Sphagnum Moss (D8) <b>(LRR T, U)</b>
--	---

<b>Field Observations:</b> Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: WA-IN

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>100</u> )				
1. <u>Magnolia virginiana</u>	<u>5</u>	No	FACW	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. <u>Liriodendron tulipifera</u>	<u>5</u>	No	FACU	
3. <u>Nyssa sylvatica</u>	<u>15</u>	Yes	FAC	
4. <u>Acer rubrum</u>	<u>15</u>	Yes	FAC	
5. _____				
6. _____				
7. _____				
8. _____				
	<u>40</u>	=Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>50</u> x 1 = <u>50</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>120</u> (A) <u>245</u> (B) Prevalence Index = B/A = <u>2.04</u>
50% of total cover: <u>20</u>	20% of total cover: <u>8</u>			
<b>Sapling/Shrub Stratum</b> (Plot size: <u>100</u> )				
1. <u>Ligustrum sinense</u>	<u>10</u>	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Acer rubrum</u>	<u>5</u>	No	FAC	
3. <u>Cyrilla racemiflora</u>	<u>5</u>	No	FACW	
4. <u>Magnolia virginiana</u>	<u>10</u>	Yes	FACW	
5. _____				
6. _____				
7. _____				
8. _____				
	<u>30</u>	=Total Cover		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>15</u>	20% of total cover: <u>6</u>			
<b>Herb Stratum</b> (Plot size: <u>100</u> )				
1. <u>Saururus cernuus</u>	<u>40</u>	Yes	OBL	<b>Definitions of Four Vegetation Strata:</b> <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
2. <u>Woodwardia areolata</u>	<u>10</u>	Yes	OBL	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>50</u>	=Total Cover		
50% of total cover: <u>25</u>	20% of total cover: <u>10</u>			
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____				
3. _____				
4. _____				
5. _____				
		=Total Cover		
50% of total cover: _____	20% of total cover: _____			

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: WA-IN

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 2/1	100					Mucky Loam/Clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?    Yes     No \_\_\_\_\_

Remarks:

Project/Site: Elizabeth-Johnson Street Storm Drainage City/County: Robeson Sampling Date: 10/13/21  
 Applicant/Owner: Town of St. Pauls State: NC Sampling Point: WA-OUT  
 Investigator(s): Jonathan Herman Section, Township, Range: Town of St. Pauls  
 Landform (hillside, terrace, etc.): road embankment Local relief (concave, convex, none): Flat Slope (%): 3  
 Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 34.7983 Long: -78.9685 Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b>	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		

Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) <b>(LRR T, U)</b>
--	--

<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: WA-OUT

Tree Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Sapling/Shrub Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Herb Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Festuca rubra</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Elymus repens</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	<u>100</u> = Total Cover		
	50% of total cover: <u>50</u>	20% of total cover: <u>20</u>	

Woody Vine Stratum (Plot size: <u>10</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>100</u>	x 4 = <u>400</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>400</u> (B)
Prevalence Index = B/A = <u>4.00</u>	

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

   2 - Dominance Test is >50%

   3 - Prevalence Index is ≤3.0<sup>1</sup>

   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes         No X

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: WA-OUT

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/2	100					Sandy	
6-12	10YR 6/3	100					Sandy	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLRA 153B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (outside MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

## **APPENDIX 2**

- **Early Notice and Public Review of a Proposed Activity in 100-Year Floodplain and Wetlands**
- **Affidavit for Publication of Early Notice**
- **Distribution List to Interested Agencies, Groups and Individuals**
- **Early Notice Comments**





# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND

#### TOWN OF ST. PAULS FLOOD IMPROVEMENTS SOUTH JOHNSON, EAST CLARK, SOUTH ELIZABETH AND EAST ROSS STREETS, ST. PAULS, ROBESON COUNTY, NC 28384

**JUNE 10, 2023**

To: All interested Agencies, Groups and Individuals

This is to give notice that the North Carolina Office of Recovery and Resiliency (NCORR) has received an application from the Town of St. Pauls to use U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant – Mitigation (CDBG-MIT) funding under 24 CFR 58 from the Infrastructure Recovery Program to implement the Town of St. Pauls Flood Improvements Project (“Proposed Activity”) located at South Johnson Street, East Clark Street, South Elizabeth Street; and Calvary Cornerstone Holiness Church; 400 East Ross Street; 401 East Clark Street; and Town of St. Pauls’ Waste Water Treatment Plant (WWTP) parcel in St. Pauls, Robeson County, NC 28384. NCORR is conducting an evaluation as required by Executive Orders 11988 and 11990 in accordance with HUD regulations (24 CFR Part 55) including identifying and evaluating practicable alternatives to locating the Proposed Activity in floodplain and wetlands and the Proposed Activity’s potential impacts on these special areas. There are three primary purposes for this notice. First, people who may be affected by activities in floodplain and wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Commenters are encouraged to offer alternative locations outside of the floodplain and wetlands, alternative methods to serve the same project purpose, and methods to minimize and mitigate impacts. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplain and wetlands facilitates and enhances governmental efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplain and wetlands, it must inform those who may be put at greater or continued risk.

The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). The Proposed Activity is needed to address frequent flooding in an area located between Johnson Street and Elizabeth Street, and north of Clark Street, which is a natural bowl with overland outlets for stormwater. During the Hurricane Matthew storm event, the Town

**Mailing Address:**  
Post Office Box 110465  
Durham, NC 27709



**Phone: (984) 833-5350**  
[www.ncdps.gov](http://www.ncdps.gov)  
[www.rebuild.nc.gov](http://www.rebuild.nc.gov)

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of Saint Pauls experienced widespread flood damage, especially in areas surrounding South Johnson and East Clark Streets, causing residents in these areas to be stranded and in need of assistance by emergency responders. The Town proposes a system of stormwater improvements that will carry future stormwater events south of these residential areas and connect with the Town's stormwater processing infrastructure. The Proposed Activity entails upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping (RCP), buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the project area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

The Proposed Activity will result in temporary impacts to 0.04 acres and permanent impacts to 0.009 acres of 100-year floodplain (Zone AE). The Proposed Activity will result in temporary impacts to 0.0563 acres and permanent impacts to 0.072 acres of National Wetland Inventory (NWI) mapped and USACE verified delineated wetlands. These impacts to 100-year floodplain and wetlands include the installation of two 24-inch RCPs in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. The culvert outlets will be armored with 18-inch Class B riprap apron to slow flow velocity and prevent erosion. The proposed permanent wetland impacts total approximately 0.0027 acres resulting from the riprap apron. The contractor shall provide adequate pump around or diversion to keep the work area dry. Additional impacts to wetlands will result from installation of two 36-inch RCPs approximately 244 linear feet in length to be installed within the 20-foot easement leading from East Ross Street into the wetland area. The culvert outlets will be armored with 18-inch Class B riprap apron. The proposed permanent impacts total approximately 0.0686 acres resulting from the rip rap apron and fill within the 20-foot easement. All temporary wetland impacts will result from construction access. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post-construction. In order to ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. Alternatives were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts. The Class B riprap apron was designed to prevent washout at the culvert outlet. The Proposed Activity was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp a 177.62-acre Freshwater Forested/ Shrub Wetland (PFO1C).

Natural floodplains and wetlands provide flood risk reduction benefits by slowing runoff and storing flood water. In addition, floodplains and wetlands are beneficial by providing diverse wildlife habitat, flood and erosion control, surface water quality maintenance, groundwater recharge, and educational, scientific, cultural, and recreational opportunities. Wetlands have unique natural characteristics that play an integral role in the ecology of the watershed. Floodwater storage and conveyance, groundwater discharge or recharge, erosion control, and water quality maintenance will be positively affected because the Proposed Activity will allow for stormwater flow to be directly discharged into Big Marsh Swamp rather than flooding the surrounding residential area causing erosion and accumulating debris and pollutants to enter the wetland. Big Marsh Swamp is heavily vegetated and relatively flat which will prevent upstream erosion and provide an avenue for dissipation and wetland hydrology recharge. Construction will result in approximately 0.07 acres of wooded habitat loss. No additional indirect floodplain/wetland impacts or negative impacts to floodplain/wetland values are anticipated. The Proposed Activity will benefit surrounding residential areas by alleviating flooding and preventing private property damage. As conceived and designed, through a system of underground culverts, this Proposed Activity aims to convey stormwater from a relatively flat geographical area downstream to a point south of East Ross Street, for discharge into Big Marsh Swamp. The Proposed Activity is not anticipated to exceed 1.5 acres of disturbance. The Proposed Activity will be completed in accordance with all applicable federal, State, and

local laws, regulations, and permit requirements and conditions including the U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) 18 Minor Discharges, NC Division of Water Resources CWA Section 401 Water Quality Certification, and Floodplain Development Permit.

Floodplain maps based on the FEMA Flood Insurance Rate Maps (FIRM), the USACE NWP 18 Permit Verification and Jurisdictional Determination, NWI wetlands maps, and supporting documentation are available for review at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. A full description of the Proposed Activity may also be viewed in person, by appointment only, at: NCORR, 200 Park Offices Drive, Durham, NC 27709. Call (984) 833-5350 to make an appointment.

Written comments must be received by NCORR at the following address on or before June 26, 2023: Laura Hogshead, Director, NCORR, ATTN: St. Pauls Flood Improvements, P.O. Box 110465, Durham, NC 27709. Comments may also be submitted by email to [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) with “ATTN: St. Pauls Flood Improvements Comments” in the subject line.



**EARLY NOTICE AND PUBLIC REVIEW OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND TOWN OF ST. PAULS FLOOD IMPROVEMENTS SOUTH JOHNSON, EAST CLARK, SOUTH ELIZABETH AND EAST ROSS STREETS, ST. PAULS, ROBESON COUNTY, NC 28384**

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***EARLY NOTICE FLOODPLAIN & WETLAND DISTRIBUTION LIST***

**TOWN OF ST. PAULS FLOOD IMPROVEMENTS**

**SOUTH JOHNSON, EAST CLARK, SOUTH ELIZABETH AND EAST ROSS STREETS, ST.  
PAULS, ROBESON COUNTY, NC 28384**

Published in The Robesonian on 6/10/23, comments end 6/26/23

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11990/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Mr. John Blevins, Acting Regional Administrator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	FedEx
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a> cc: <a href="mailto:leigh_mann@fws.gov">leigh_mann@fws.gov</a>

<b>TRIBES, NATIONS AND COMMUNITIES (who asked to be notified)</b>		
<b>Catawba Indian Nation</b>	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730	Does not want Notice
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	Does not want Notice
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARINGHOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Kellie Blue County Manager Robeson County. NC 550 North Chestnut Street Lumberton, NC 28358 Phone: 910-671-3022	<a href="mailto:kellie.blue@co.robeson.nc.us">kellie.blue@co.robeson.nc.us</a>
<b>COUNTY</b>	Tammy Freeman Clerk to the Board Robeson County. NC 550 North Chestnut Street Lumberton, NC 28358 Phone: 910-671-3022	<a href="mailto:tammy.freeman@co.robeson.nc.us">tammy.freeman@co.robeson.nc.us</a>
<b>COUNTY</b>	Myron Neville Director of Public Works Robeson County. NC Phone: 910-671-3488	<a href="mailto:myron.neville@co.robeson.nc.us">myron.neville@co.robeson.nc.us</a>
<b>TOWN</b>	Ms. Debra McNeil Interim Town Administrator/ Town Clerk Town of St. Pauls 210 West Blue Street St. Pauls, NC 28384 Phone: 910-865-5164	<a href="mailto:debra@stpaulsnc.gov">debra@stpaulsnc.gov</a>



## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:10 PM  
**To:** Smith, Lenwood E  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:11 PM  
**To:** FEMA-R4EHP@fema.dhs.gov  
**Subject:** REVIEW REQUEST: 11988/NEPA - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:14 PM  
**To:** Kajumba, Ntale  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. A hard copy of the revised Early Notice has also been sent via Federal Express to Mr. Blevins. Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700



## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:18 PM  
**To:** john\_ellis@fws.gov  
**Cc:** Mann, Leigh  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:20 PM  
**To:** State Clearinghouse  
**Cc:** Best, Crystal  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. *Design modifications to minimize wetland impacts include impacts to a small portion of the 100-year floodplain.* Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:20 PM  
**To:** Blue; Kellie  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. *Design modifications to minimize wetland impacts include impacts to a small portion of the 100-year floodplain.* Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700



## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:21 PM  
**To:** tammy.freeman@co.robeson.nc.us  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. *Design modifications to minimize wetland impacts include impacts to a small portion of the 100-year floodplain.* Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:22 PM  
**To:** myron.neville@co.robesson.nc.us  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. *Design modifications to minimize wetland impacts include impacts to a small portion of the 100-year floodplain.* Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700

## Gievers, Andrea

---

**From:** Gievers, Andrea  
**Sent:** Friday, June 9, 2023 1:23 PM  
**To:** Mcneill, Debra  
**Subject:** Public Notice - Early Notice - Town of St. Pauls Flood Improvements Project, Robeson County, NC  
**Attachments:** NCORR Early Notice St. Pauls Flood Imp 6.10.23.pdf

Hello:

Please find attached the Public Notice for HUD 24 CFR §55.20(b) - *Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland* publishing June 10, 2023 for the NCORR Infrastructure Recovery Program's Town of St. Pauls Flood Improvements proposed project in the Town of St. Pauls, Robeson County, NC. *Design modifications to minimize wetland impacts include impacts to a small portion of the 100-year floodplain.* Please feel free to contact me if you have any questions. Thank you for your time and assistance.

Sincerely,

Andrea

Andrea Gievers, JD, MSEL, ERM  
Environmental SME  
Community Development  
NC Office of Recovery and Resiliency  
[Andrea.L.Gievers@Rebuild.NC.Gov](mailto:Andrea.L.Gievers@Rebuild.NC.Gov)  
(845) 682-1700



**1 From** Please print and press hard.  
 Date **6/9/23** Sender's FedEx Account Number **8950-9899-0**  
 Sender's Name **Andrea Gierens** Phone **845682-1700**  
 Company **NCORR**  
 Address **123 Kings Hill Road** Dept./Floor/Suite/Room  
 City **Walden** State **NY** ZIP **12586**

**4 Express Package Service** \*To most locations. Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day	2 or 3 Business Days
<input type="checkbox"/> FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.	<input type="checkbox"/> FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.
<input type="checkbox"/> FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.	<input checked="" type="checkbox"/> FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
<input type="checkbox"/> FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.	<input type="checkbox"/> FedEx Express Saver Third business day.* Saturday Delivery NOT available.

**2 Your Internal Billing Reference** First 24 characters will appear on invoice. **St. Pauls - EN with Flood change**

**5 Packaging** \*Declared value limit \$500.  
 FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other

**3 To**  
 Recipient's Name **Mr. John Blevins** Phone ( )  
 Company **EPA, Region 4**  
 Address **980 College Station Road** Dept./Floor/Suite/Room  
 We cannot deliver to P.O. boxes or P.O. ZIP codes.  
 Address Use this line for the HOLD location address or for continuation of your shipping address.  
 City **Athens** State **GA** ZIP **30605-2720**

**6 Special Handling and Delivery Signature Options** Fees may apply. See the FedEx Service Guide.

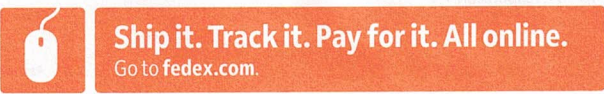
Saturday Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required  
Package may be left without obtaining a signature for delivery.

Direct Signature  
Someone at recipient's address may sign for delivery.

Indirect Signature  
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

**Does this shipment contain dangerous goods?**  
 One box must be checked.  
 No  Yes As per attached Shipper's Declaration.  Yes Shipper's Declaration not required.  Dry Ice Dry ice, 9, UN 1845 x kg  
 Cargo Aircraft Only



**7 Payment Bill to:** This airbill can be used only when billing to a FedEx account number. For cash, check, or credit card transactions, please go to a staffed shipping location.

Sender Acct. No. in Section 1 will be billed. Enter FedEx Acct. No. below.  
 Recipient  Third Party

FedEx Acct. No. \_\_\_\_\_

Total Packages Total Weight Total Declared Value<sup>1</sup>

\_\_\_\_\_ lbs. \$ \_\_\_\_\_ .00

<sup>1</sup>Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this airbill you agree to the service conditions on the back of this airbill and in the current FedEx Service Guide, including terms that limit our liability.  
 Rev. Date 4/22 - Part #167002 • ©2012-2022 FedEx • PRINTED IN U.S.A. **644**

**1 From** Please print and press hard.  
 Date **6/9/23** Sender's FedEx Account Number **8950-9899-0**  
 Sender's Name **Andrea Gierens** Phone **845682-1700**  
 Company **NCORR**  
 Address **123 Kings Hill Road** Dept./Floor/Suite/Room  
 City **Walden** State **NY** ZIP **12586**

**4 Express Package Service** \*To most locations. Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.  
 NOTE: Service order has changed. Please select carefully.

Next Business Day	2 or 3 Business Days
<input type="checkbox"/> FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	<input type="checkbox"/> FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.
<input type="checkbox"/> FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	<input checked="" type="checkbox"/> FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
<input type="checkbox"/> FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.	<input type="checkbox"/> FedEx Express Saver Third business day.* Saturday Delivery NOT available.

**2 Your Internal Billing Reference** First 24 characters will appear on invoice. **St. Pauls - EN with flood change**

**5 Packaging** \*Declared value limit \$500.  
 FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other

**3 To**  
 Recipient's Name **Ms. Gracia Szczec** Phone ( )  
 Company **FEMA, Region 4**  
 Address **3003 Chamblee Tucker Road** Dept./Floor/Suite/Room  
 We cannot deliver to P.O. boxes or P.O. ZIP codes.  
 Address Use this line for the HOLD location address or for continuation of your shipping address.  
 City **Athens** State **GA** ZIP **30341**

**6 Special Handling and Delivery Signature Options**

SATURDAY Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required  
Package may be left without obtaining a signature for delivery.

Direct Signature  
Someone at recipient's address may sign for delivery. **Fees applies.**

Indirect Signature  
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. **Fees applies.**

**Does this shipment contain dangerous goods?**  
 One box must be checked.  
 No  Yes As per attached Shipper's Declaration.  Yes Shipper's Declaration not required.  Dry Ice Dry ice, 9, UN 1845 x kg  
 Cargo Aircraft Only

**7 Payment Bill to:** This airbill can be used only when billing to a FedEx account number. For cash, check, or credit card transactions, please go to a staffed shipping location.

Sender Acct. No. in Section 1 will be billed. Enter FedEx Acct. No. or Credit Card No. below.  
 Recipient  Third Party  Credit Card  Cash/Check

FedEx Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_  
 Credit Card No. \_\_\_\_\_

Total Packages Total Weight Total Declared Value<sup>1</sup>

\_\_\_\_\_ lbs. \$ \_\_\_\_\_ .00

<sup>1</sup>Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.  
 Rev. Date 1/12 • Part #167002 • ©2012 FedEx • PRINTED IN U.S.A. SRF **644**





**Roy Cooper**  
Governor

**Pamela B. Cashwell**  
Secretary

June 27, 2023

Andrea Gievers  
Town of St. Pauls  
c/o NC Department of Public Safety  
Office of Recovery and Resiliency  
Durham, NC 27709-

**Re: SCH File # 23-E-4600-0249 Proposed project is for the installation of upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping, buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance**

Dear Andrea Gievers:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act.

No comments were made during the review of this document. If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

If you have any questions, please do not hesitate to contact me at (984) 236-0000.

Sincerely,

CRYSTAL BEST  
State Environmental Review Clearinghouse

Attachments

**Mailing**  
1301 Mail Service Center | Raleigh, NC 27699-1301



[ncadmin.nc.gov](http://ncadmin.nc.gov)

**Location**  
116 West Jones St. | Raleigh NC 27603  
984-236-0000 T



Control No.: 23-E-4600-0249

Date Received: 6/13/2023

County.: ROBESON

Agency Response: 6/23/2023

Review Closed: 6/23/2023

DEVON BORGARDT  
CLEARINGHOUSE COORDINATOR  
DEPT OF NATURAL & CULTURAL  
RESOURCE

Project Information

Type: National Environmental Policy Act Environmental Assessment

Applicant: Town of St. Pauls

Project Desc.: Proposed project is for the installation of upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping, buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

As a result of this review the following is submitted:

No Comment

Comments Below

Documents Attached

Reviewed By: DEVON BORGARDT

Date: 7/6/2023





**North Carolina Department of Natural and Cultural Resources  
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Roy Cooper  
Secretary D. Reid Wilson

Office of Archives and History  
Deputy Secretary, Darin J. Waters, Ph.D.

July 3, 2023

MEMORANDUM

TO: Crystal Best [crystal.best@doa.nc.gov](mailto:crystal.best@doa.nc.gov)  
North Carolina State Clearinghouse  
Department of Administration

FROM: Ramona M. Bartos, Deputy  
State Historic Preservation Officer *RMB for Ramona M. Bartos*

SUBJECT: Flood improvements, South Johnson, East Clark, South Elizabeth and East Ross Streets, St. Pauls, Robeson County, 23-E-4600-0249, ER 23-1289

Thank you for your submission of May 26 and June 2, 2023, concerning the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or [environmental.review@ncdcr.gov](mailto:environmental.review@ncdcr.gov). In all future communication concerning this project, please cite the above referenced tracking number.

Control No.: 23-E-4600-0249

Date Received: 6/13/2023

County.: ROBESON

Agency Response: 6/23/2023

Review Closed: 6/23/2023

LYN HARDISON  
CLEARINGHOUSE COORDINATOR  
DEPT OF ENVIRONMENTAL QUALITY

Project Information

Type: National Environmental Policy Act Environmental Assessment

Applicant: Town of St. Pauls

Project Desc.: Proposed project is for the installation of upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping, buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

As a result of this review the following is submitted:

No Comment

Comments Below

Documents Attached

Reviewed By: LYN HARDISON

Date: 6/22/2023

Control No.: 23-E-4600-0249

Date Received: 6/13/2023

County.: ROBESON

Agency Response: 6/23/2023

Review Closed: 6/23/2023

JINTAO WEN  
CLEARINGHOUSE COORDINATOR  
DPS - DIV OF EMERGENCY MANAGEMENT

Project Information

Type: National Environmental Policy Act Environmental Assessment

Applicant: Town of St. Pauls

Project Desc.: Proposed project is for the installation of upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping, buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

As a result of this review the following is submitted:

No Comment

Comments Below

Documents Attached

Reviewed By: JINTAO WEN

Date: 6/21/2023



Control No.: 23-E-4600-0249

Date Received: 6/13/2023

County.: ROBESON

Agency Response: 6/23/2023

Review Closed: 6/23/2023

JESSICA MOSLEY  
CLEARINGHOUSE COORDINATOR  
DEPT OF TRANSPORTATION

Project Information

Type: National Environmental Policy Act Environmental Assessment

Applicant: Town of St. Pauls

Project Desc.: Proposed project is for the installation of upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping, buried underground in previously-disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

As a result of this review the following is submitted:

No Comment

Comments Below

Documents Attached

Reviewed By: JESSICA MOSLEY

Date: 6/21/2023

## **APPENDIX 3**

- **Combined FONSI/NOI-RROF/ Final Notice and Public Explanation of a Proposed Activity in a 100-year Floodplain and Wetland**
- **Affidavit for Publication of Final Notice *(to be added)***
- **Distribution List to Interested Agencies, Groups and Individuals**
- **Final Notice Comments and Response *(to be added)***



# North Carolina Department of Public Safety

## Office of Recovery and Resiliency

Roy Cooper, Governor  
Eddie M. Buffaloe, Jr., Secretary

Laura H. Hogshead, Director

### PUBLIC NOTICE

#### **COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT (FONSI), NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS (NOI-RROF), AND FINAL NOTICE AND PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

#### **TOWN OF ST. PAULS FLOOD IMPROVEMENTS SOUTH JOHNSON, EAST CLARK, SOUTH ELIZABETH AND EAST ROSS STREETS, ST. PAULS, ROBESON COUNTY, NC 28384**

**July 19, 2023**

To: All interested Agencies, Groups and Individuals

**Name of Responsible Entity and Recipient:** North Carolina Office of Recovery and Resiliency (NCORR), P.O. Box 110465, Durham, NC 27709. Contact: Director Laura Hogshead (984) 833-5350.

Pursuant to 24 CFR Section 58.43, this combined Notice of Finding of No Significant Impact (FONSI), Notice of Intent to Request Release of Funds (NOI-RROF), and Final Notice and Public Explanation of a Proposed Activity in a Floodplain and Wetland satisfies three separate procedural requirements for project activities proposed to be undertaken by NCORR.

**Project Description:** NCORR is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Mitigation (CDBG-MIT) program in North Carolina. NCORR proposes to provide CDBG-MIT funding from the Infrastructure Recovery Program of \$451,500.00 for the Town of St. Pauls Flood Improvements Project (“Proposed Activity”) located at South Johnson Street, East Clark Street, South Elizabeth Street, East Ross Street; and Calvary Cornerstone Holiness Church (Parcel ID 381404009, 0.34 acre); 400 East Ross Street (Parcel ID 38160204101, 1.3 acres); 401 East Clark Street (Parcel ID 38140401401, 0.17 acre); and Town of St. Pauls’ Waste Water Treatment Plant (WWTP) parcel (Parcel ID 212002007, Pin 30890981900, 73.92 acres) in St. Pauls, Robeson County, NC 28384. The Proposed Activity is anticipated to have a total cost of \$801,500.00 and entails upgrades to stormwater conveyance infrastructure that includes the installation of catch basins and varying sizes of reinforced concrete piping (RCP), buried underground in previously-

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Post Office Box 110465  
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disturbed areas, and placed at a depth and slope that will facilitate conveyance of stormwater from the project area served by South Johnson Street, East Clark Street, East Ross Street, and South Elizabeth Street.

The State of North Carolina was adversely impacted by the landfall of Hurricanes Matthew (October 8, 2016) and Florence (September 14, 2018). The Proposed Activity is needed to address frequent flooding in an area located between Johnson Street and Elizabeth Street, and north of Clark Street, which is a natural bowl with overland outlets for stormwater. During the Hurricane Matthew storm event, the Town of Saint Pauls experienced widespread flood damage, especially in areas surrounding South Johnson and East Clark Streets, causing residents in these areas to be stranded and in need of assistance by emergency responders. The Town proposes a system of stormwater improvements that will carry future stormwater events south of these residential areas and connect with the Town's stormwater processing infrastructure. The Town has selected the Proposed Activity to assist its residents and community to be protected from future storm damage and flooding.

### **PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND**

NCORR has conducted an evaluation as required by Executive Orders (EO) 11988 and 11990, in accordance with HUD regulations at 24 CFR 55 Subpart C Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The Proposed Activity will result in temporary impacts to 0.04 acres and permanent impacts to 0.009 acres of 100-year floodplain (Zone AE). The Proposed Activity will result in temporary impacts to 0.0563 acres and permanent impacts to 0.072 acres of National Wetland Inventory (NWI) mapped and U.S. Army Corps of Engineers (USACE) verified delineated wetlands. These impacts to 100-year floodplain and wetlands include the installation of two 24-inch RCPs in the location of the existing single 24-inch RCP they are replacing to allow for additional flow during storm events under the gravel access road to the St. Pauls' WWTP. The culvert outlets will be armored with 18-inch Class B riprap apron to slow flow velocity and prevent erosion. The proposed permanent wetland impacts total approximately 0.0027 acres resulting from the riprap apron. Additional impacts to wetlands will result from installation of two 36-inch RCPs approximately 244 linear feet in length to be installed within the 20-foot easement leading from East Ross Street into the wetland area. The culvert outlets will be armored with 18-inch Class B riprap apron. The proposed permanent impacts total approximately 0.0686 acres resulting from the rip rap apron and fill within the 20-foot easement. All temporary wetland impacts will result from construction access. The Proposed Activity was designed to allow stormwater discharge to dissipate via sheet flow through the forested wetland before entering Big Marsh Swamp a 177.62-acre Freshwater Forested/ Shrub Wetland (PFO1C). The St. Paul's WWTP parcel is the only proposed location with portions in 100-year floodplain and wetlands, approximately 49.37 acres and 62.2 acres respectively.

NCORR has considered the alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values. This Proposed Activity involves stormwater infrastructure improvements to deficient existing infrastructure, and project designs have been completed in accordance with agency input to minimize impacts to the floodplain, wetlands, environment and community. Alternative designs were explored to avoid floodplain and wetland impacts, but adequate fall was not achievable without the proposed impacts. In order to

ensure that stormwater is adequately drained from the surrounding area, which is prone to flooding, the two proposed 36-inch RCPs must extend into the wetland. The main alternative is the “No Action” Alternative which is not considered feasible since flooding in the area causes property damage to homes, churches and businesses, and roadway flooding blocks transportation accessibility during and after storm events. This Proposed Activity is critically necessary to protect the residents and community from future storm events. The “No Action” Alternative would provide no protection to the residential neighborhoods and greater community from future flood events, as mitigation would be compromised due to lack of financial support. Natural floodplains and wetlands provide flood risk reduction benefits by slowing runoff and storing flood water. In addition, floodplains and wetlands are beneficial by providing diverse wildlife habitat, flood and erosion control, surface water quality maintenance, groundwater recharge, and educational, scientific, cultural, and recreational opportunities. Wetlands have unique natural characteristics that play an integral role in the ecology of the watershed. Floodwater storage and conveyance, groundwater discharge or recharge, erosion control, and water quality maintenance will be positively affected because the Proposed Activity will allow for stormwater flow to be directly discharged into Big Marsh Swamp rather than flooding the surrounding residential area causing erosion and accumulating debris and pollutants to enter the wetland. Currently, stormwater is discharging through a deficient stormwater network into the same outlet point into Big Marsh Swamp. Big Marsh Swamp is heavily vegetated and relatively flat which will prevent upstream erosion and provide an avenue for dissipation and wetland hydrology recharge. Construction will result in approximately 0.07 acres of wooded habitat loss. The Proposed Activity is not anticipated to exceed 1.5 acres of disturbance. No additional indirect floodplain/wetland impacts or negative impacts to floodplain/wetland values are anticipated.

The Proposed Activity will be completed in accordance with all applicable federal, State, and local laws, regulations, and permit requirements and conditions. The following permits will be obtained, as applicable, prior to commencing work: USACE Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) 18 Minor Discharges, NC Division of Water Resources CWA Section 401 Water Quality Certification, sedimentation and erosion control plan approval, and Floodplain Development Permit. Best Management Practices for erosion and sedimentation control will be utilized during construction. Timber mats will be used if conditions within wetlands are saturated to prevent rutting. Silt fence will be installed during construction to prevent runoff from impacting adjacent wetlands onsite. The contractor shall provide adequate pump around or diversion to keep the work area dry. All temporary wetland impacts will be stabilized and allowed to return to natural conditions post-construction. The Class B riprap apron was designed to slow flow velocity and prevent erosion and washout at the culvert outlet. The Proposed Activity and site locations are the most suitable, feasible options selected by the Town after a lengthy process to assist its residents and community to be protected from future storm events; the “No Action” alternative would not effectively address the area’s flooding; and mitigation measures include erosion and sedimentation controls, permit conditions, a project design that minimizes impacts, and native plants used in site restoration.

Since the action will include modification of floodplain and new construction in wetland, EOs 11988 and 11990 require that the Proposed Activity not be supported if there are practicable alternatives to floodplain and wetland impacts. NCORR has reevaluated the alternatives to modification of floodplain and new construction in wetland, and has determined that it has no

practicable alternative. The 8-step process has been further documented in the EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination which is available for viewing and copying as described below in Public Review.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and wetlands and those who have an interest in the protection of the natural environment are given an opportunity to express their concerns and provide information about these areas. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

### **FINDING OF NO SIGNIFICANT IMPACT**

An Environmental Assessment (EA) for the Proposed Activity has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and HUD environmental review regulations at 24 CFR Part 58. The EA is incorporated by reference into this FONSI. Subject to public comments, no further review of the Proposed Activity is anticipated. NCORR has determined that the EA for the project identified herein complies with the requirements of HUD environmental review regulations at 24 CFR Part 58. NCORR has determined that the Proposed Activity will have no significant impact on the human environment and, therefore, does not require the preparation of an environmental impact statement under NEPA.

**Public Review:** Public viewing of the EA, environmental review record, and EO 11988 Floodplain Management and EO 11990 Protection of Wetlands Determination is available online at <https://www.rebuild.nc.gov/about/plans-policies-reports/environmental-reviews>. Documents may also be viewed in person by appointment only at: NCORR, 200 Park Offices Drive, Durham, NC 27709. Call (984) 833-5350 to make an appointment.

Further information may be requested by writing to the above address, emailing [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov) or calling (984) 833-5350. This combined notice is being sent to individuals and groups known to be interested in these activities, local news media, appropriate local, state and federal agencies, the regional office of the U.S. Environmental Protection Agency having jurisdiction, and the HUD Field Office, and is being published in a newspaper of general circulation in the affected community.

**Public Comments on the Proposed Activity within Floodplain and Wetland, FONSI and/or NOIRROF:** Any individual, group or agency may submit written comments on the Proposed Activity. The public is hereby advised to specify in their comments which “notice” their comments address. Comments should be submitted via email, in the proper format, on or before August 3, 2023 at [publiccomments@rebuild.nc.gov](mailto:publiccomments@rebuild.nc.gov). Written comments may also be submitted by mail, in the proper format, to be received on or before August 3, 2023, and addressed to: Laura Hogshead, Director, NCORR, ATTN: St. Pauls Flood Improvements Project, P.O. Box 110465, Durham, NC 27709. All comments must be received on or before August 3, 2023 or they will not be considered.



If modifications result from public comment, these will be made prior to proceeding with the submission of a request for release of funds.

**REQUEST FOR RELEASE OF FUNDS AND CERTIFICATION**

On or after August 4, 2023, the NCORR certifying officer will submit a request and certification to HUD for the release of CDBG-MIT funds as authorized by related laws and policies for the purpose of undertaking this project under the North Carolina CDBG-MIT Infrastructure Recovery Program.

NCORR certifies to HUD that Laura Hogshead, in her capacity as Certifying Officer, consents to accept the jurisdiction of the U.S. federal courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD's approval of the certification satisfies its responsibilities under NEPA and related laws and authorities, and allows NCORR to use CDBG-MIT program funds.

**Objection to Release of Funds:** HUD will accept objections to its release of funds and NCORR's certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later). Potential objectors should contact HUD or the NCORR Certifying Officer to verify the actual last day of the objection period.

The only permissible grounds for objections claiming a responsible entity's non-compliance with 24 CFR Part 58 are: (a) certification was not executed by NCORR's Certifying Officer; (b) the responsible entity has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the grant recipient or other participants in the development process have committed funds, incurred costs or undertaken activities not authorized by 24 CFR Part 58 before HUD's release of funds and approval of environmental certification; or (d) another federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR 58.76) and shall be addressed to Tennille Smith Parker, Director, Disaster Recovery and Special Issues Division, Office of Block Grant Assistance, U.S. Department of Housing & Urban Development, 451 7<sup>th</sup> Street SW, Washington, DC 20410, Phone: (202) 402-4649, or emailed to [disaster\\_recovery@hud.gov](mailto:disaster_recovery@hud.gov).

Laura Hogshead  
Certifying Officer  
July 19, 2023

***FONSI/NOI-RROF/FINAL NOTICE DISTRIBUTION LIST***

**TOWN OF ST. PAULS FLOOD IMPROVEMENTS**

**SOUTH JOHNSON, EAST CLARK, SOUTH ELIZABETH AND EAST ROSS STREETS, ST.  
PAULS, ROBESON COUNTY, NC 28384**

Published in The Robesonian on 7/19/23, comments end 8/3/23

**FEDERAL AGENCIES**

<b>Agency</b>	<b>Name &amp; Address</b>	<b>Method</b>
<b>HUD NC</b>	Mr. Lenwood E. Smith, II Environmental Protection Specialist Greensboro Field Office U.S. Dept. of Housing and Urban Development 1500 Pinecroft Road, Suite 401 Greensboro, NC 27407-3838	<a href="mailto:Lenwood.E.Smith@hud.gov">Lenwood.E.Smith@hud.gov</a>
<b>FEMA, Region IV</b>	Ms. Gracia B. Szczech, Regional Administrator U.S. Dept. of Homeland Security FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, GA 30341	FedEx
<b>FEMA ATTN: 11988</b>	<i>Hard copies may also be mailed to</i> Attn: 11990/NEPA Reviewer (EHP) DHS/FEMA RIV 3003 Chamblee Tucker Road Atlanta, GA 30341	<a href="mailto:FEMA-R4EHP@fema.dhs.gov">FEMA-R4EHP@fema.dhs.gov</a> with the subject line <b>REVIEW REQUEST: 11988/NEPA</b>
<b>US EPA, Region 4</b>	Ms. Ntale Kajumba, NEPA Coordinator U.S. EPA, Region 4 Laboratory Services & Applied Science Div. 980 College Station Road Athens, GA 30605-2720	<a href="mailto:Kajumba.ntale@epa.gov">Kajumba.ntale@epa.gov</a>
<b>USFWS – Raleigh Field Office</b>	USFWS – Raleigh Field Office ATTN: John Ellis P.O. Box 33726 Raleigh, NC 27636 ph.: 919-856-4520, ext. 26	<a href="mailto:john_ellis@fws.gov">john_ellis@fws.gov</a> cc: <a href="mailto:leigh_mann@fws.gov">leigh_mann@fws.gov</a>
<b>TRIBES, NATIONS AND COMMUNITIES (who asked to be notified)</b>		
	Dr. Wenonah George Haire, THPO ATTN: THPO Archaeology Dept. Catawba Indian Nation 1536 Tom Steven Road	Does not want Notice

<b>Catawba Indian Nation</b>	Rock Hill, SC 29730	
<b>Catawba Indian Nation</b>	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730	Does not want Notice
<b>NC STATE AGENCIES</b>		
<b>STATE CLEARING-HOUSE</b>	Ms. Crystal Best North Carolina Department of Administration State Environmental Review Clearinghouse 1301 Mail Service Center Raleigh, North Carolina 27699-1301	<a href="mailto:State.Clearinghouse@doa.nc.gov">State.Clearinghouse@doa.nc.gov</a> <a href="mailto:crystal.best@doa.nc.gov">crystal.best@doa.nc.gov</a>
<b>LOCAL AGENCIES</b>		
<b>COUNTY</b>	Kellie Blue County Manager Robeson County. NC 550 North Chestnut Street Lumberton, NC 28358 Phone: 910-671-3022	<a href="mailto:kellie.blue@co.robeson.nc.us">kellie.blue@co.robeson.nc.us</a>
<b>COUNTY</b>	Tammy Freeman Clerk to the Board Robeson County. NC 550 North Chestnut Street Lumberton, NC 28358 Phone: 910-671-3022	<a href="mailto:tammy.freeman@co.robeson.nc.us">tammy.freeman@co.robeson.nc.us</a>
<b>COUNTY</b>	Myron Neville Director of Public Works Robeson County. NC Phone: 910-671-3488	<a href="mailto:myron.neville@co.robeson.nc.us">myron.neville@co.robeson.nc.us</a>
<b>TOWN</b>	Ms. Debra McNeil Interim Town Administrator/ Town Clerk Town of St. Pauls 210 West Blue Street St. Pauls, NC 28384 Phone: 910-865-5164	<a href="mailto:debra@stpaulsnc.gov">debra@stpaulsnc.gov</a>