PROJECT COMMITMENTS

Fayetteville Replace Bridge Number 116
On NC 24-210 (Rowan Street)
Over CSX, Norfolk Southern Railroads and Hillsboro Street and Intersection Improvements
Cumberland County
Federal-Aid Project BRNHS-0024(24) WBS Element 33727.1.1
TIP Project **B-4490**

Current status, changes, or additions to the project commitments as shown in the environmental document for the project area printed in italics.

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Hydraulics Unit

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

This commitment will be implemented prior to project construction.

NCDOT Hydraulics Unit / Division Six

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

This commitment will be implemented following project construction.

NCDOT Project Development & Environmental Analysis Unit

Black-powder coated metal traffic signal poles and mast arms are currently proposed adjacent to the National Register-eligible Orange, Chatham, and Moore Streets Historic District. Prior to construction, the location of these signal poles and the signal control box will be reviewed with the State Historic Preservation Office.

This commitment refers to the Rowan Street intersection with Ray Avenue, the City of Fayetteville had requested that black powder-coated signal poles and mast arms be installed at this intersection as part of the project. However, this intersection is outside the project limits. No signal equipment will be replaced at the Ray Avenue/Rowan Street intersection under this project.

NCDOT Signing and Delineation / Division Six

High visibility pavement markings will be provided at the proposed reconfigured Rowan Street intersections with Bragg Boulevard and Murchison Road and at the intersection of Rowan Street with Ray Avenue.

This commitment will be implemented during project construction.

NCDOT Roadway Design Unit

To minimize impacts to the National Register-eligible (former) Shearer Texaco Service Station, the proposed alignment of Bragg Boulevard has been shifted to avoid impacts to the property. No right of way or easements will be required from this property.

A temporary construction easement and a permanent utility easement will be required from the Shearer Texaco Service Station property. A power pole will be placed within the utility easement. The State Historic Preservation Office has concurred this work will have "no adverse effect" on the Shearer Texaco Station property.

Eight-foot pedestrian refuge islands will be provided at the proposed Murchison Road/Bragg Boulevard/Rowan Street intersection.

During project design, it was determined pedestrian refuge islands are not necessary at the proposed intersection because the pedestrian phase of the traffic signal will provide ample time for pedestrians to cross. Project plans show only a four-foot island at the proposed intersection.

NCDOT Roadway Design / Structure Design Units

Five-foot sidewalks and 42-inch rails are proposed on both sides of the new bridges to accommodate pedestrians. Fourteen-foot wide outside travel lanes are proposed on Rowan Street to accommodate bicyclists.

Plans provide five foot sidewalks and fourteen foot outside travel lanes. The railroad requires an eight foot fence on the bridge; with the rail this will provide safety for bicyclists.

Electrical conduit along both sides of the proposed bridges will be provided to allow for future lighting along Rowan Street between the proposed bridges (lighting to be installed and maintained through encroachment by the City).

Conduit requested by the City will be provided, if necessary to accommodate street lighting.

To minimize effects to the National Register-eligible Orange, Chatham, and Moore Streets Historic District, a retaining wall with a maximum height of 10 feet is proposed on the north side of relocated NC 24-210 (Rowan Street) between Chatham Street and the proposed new bridge.

The plans provide for a retaining wall with a maximum height of ten feet

NCDOT Roadside Environmental Unit

In order to minimize effects to the National Register-eligible Orange, Chatham, and Moore Streets historic district, landscaping will be provided near the proposed retaining wall at the corner of Rowan Street and Chatham Street.

At the request of the City of Fayetteville, proposed medians and islands wider than six feet will be landscaped, with the exception of the median along Rowan Street between the proposed Murchison Road/ Bragg Boulevard / Rowan Street intersection and Ray Avenue. The median on Rowan Street between the proposed intersection and Ray Avenue will be brick colored stamped concrete.

Appropriate landscaping will be provided at the proposed Murchison Road/Bragg Boulevard/Rowan Street intersection.

Prior to project construction, NCDOT will coordinate with the City to determine whether the City would like NCDOT to provide landscaping appropriate for the design speed and median width on the project.

NCDOT can fund landscaping in an amount up to 0.5 percent of the project construction cost. The City would be responsible for maintaining any landscaping. If the City prefers, it may submit its own landscaping plan for review, provided the City agrees to fund and maintain it.

These commitments will be implemented following project construction.

NCDOT Roadway Design Unit / Transportation Program Management Unit / Division Six Construction / Fayetteville Area MPO

A portion of the proposed Little Cross Creek Trail will be constructed as a part of this project, if the Fayetteville Area Metropolitan Planning Organization (FAMPO) agrees in writing to participate in the cost and to accept maintenance and liability for the trail. This involves a ten-foot wide multi-use path on the west side of Murchison Road between the proposed Murchison Road/Rowan Street/ Bragg Boulevard intersection and the northern limits of the project. Additional right of way required for the trail and any additional cost of the path above the cost of a five-foot sidewalk will be funded by FAMPO. A municipal agreement will be prepared regarding the trail prior to construction.

Following completion of the FONSI, the Fayetteville Area Metropolitan Planning Organization asked that five-foot sidewalks be provided along Murchison Road instead of a ten-foot multi-use path. Project plans show a five-foot sidewalk along both sides of Murchison Road within the project limits.

NCDOT Roadway Design Unit/Transportation Program Management Unit/City of Fayetteville

The City of Fayetteville has requested the following items be included in the project. The City will be required to fund the additional cost of the special requests listed below:

- Brick colored stamped concrete where raised median is less than six feet wide.
- Black powder-coated traffic signal poles at the proposed realigned intersection of Bragg Boulevard, Murchison Road and Rowan Street.
- Black powder-coated traffic signal poles and mast arms at the intersection of Ray Avenue and Rowan Street.
- Conduit for irrigation pipes.

  A municipal agreement will be prepared regarding these items prior to construction.

NCDOT is coordinating with the City regarding these requests. A municipal agreement is being prepared. Black powder-coated traffic signal poles and mast arms are no longer proposed at the intersection of Ray Avenue and Rowan Street. This intersection is outside the project limits.

NCDOT Roadway Design Unit / Utilities Unit / Program Development Branch / Fayetteville PWC

As the final plans are developed, NCDOT will coordinate with the Fayetteville Public Works Commission (PWC) to enhance the utility relocation schedule and possibly accelerate utility relocation funding.

Utility relocation is currently underway for the project.

COMMITMENTS FROM PERMITTING

<u>USACE Section 404 Permit (Related Laws Section, special condition l)</u>
Clarification for this special condition is provided below.

NCDOT shall comply with its commitments regarding the following historic properties: Haymount Historic District; Orange, Chatham, and Moore Streets Historic District; the Lions Civic Center and Rowan Park; and the Shearer Texaco Service Station. Specifically, NCDOT shall not acquire any right-of-way or easements from the first three named resources and only minimal right-of-way from the Shearer Texaco Service Station, and shall use landscaping measures as described in the December 10, 2012 FONSI Green Sheets and the signed August 9, 2011, January 7, 2014, and May 6, 2015 Concurrence Forms for Assessment of Effects.

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

REPLY TO
ATTENTION OF:

RECEIVED
DEC - 1 2015
OFFICE OF NATURAL ENVIRONMENT

November 19, 2015

Regulatory Division

Action ID. SAW-2009-01703

North Carolina Department of Transportation
Attn: Mr. Richard Hancock, P.E.
PDEA
15598 Mail Service Center
Raleigh, North Carolina 27699

Dear Mr. Hancock:

In accordance with your written request of June 25, 2015 and the ensuing administrative record, enclosed is a copy of a Department of Army (DA) Permit to discharge dredged or fill material in order to replace the existing bridge number 116 on NC 24-210 (Rowan Street) to the north of its current location and reconfigure the intersections of SR 3147 (West Rowan Street) with NC 24/SR 3828 (Bragg Boulevard), and NC 210 (Murchison Road) with SR 3147 (West Rowan Street) at NC 24-210 (Rowan Street) into a single, signalized intersection. The proposed project will permanently impact approximately 859 linear feet of streams (771 linear feet of stream channel associated with culvert placement and 88 linear feet for bank stabilization). In addition, the project will temporarily impact approximately 44 linear feet of stream channel.

Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your permit has been modified.

Carefully read your permit. The general and specific conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

a. You must complete construction before December 31, 2020.

b. You must notify this office in advance as to when you intend to commence and complete work.

c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Ms. Liz Hair at the Wilmington Regulatory Field Office, telephone 910-251-4049.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at http://per2.nwp.usace.army.mil/survey.html and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

Sincerely,

Dale E. Beter
Chief, Wilmington Regulatory Field Office

Enclosures:
Special Conditions
Plans

Copies Furnished (with enclosures):

Chief, Source Data Unit
Attn: Ms. Sharon Tear
NOAA/National Ocean Service
1315 East-West Highway, Room 7316
Silver Spring, Maryland 20910-3282

U.S. Fish and Wildlife Service
Attn: Mr. Pete Benjamin
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

National Marine Fisheries Service
Attn: Mr. Fritz Rohde
Pivers Island
Beaufort, North Carolina 28516

U.S. Environmental Protection Agency
Attn: Ms. Jennifer Derby, Chief
Wetlands Protection Service – Region IV
Water Management Division
61 Forsyth Street
Atlanta, Georgia 30303

U.S. Environmental Protection Agency
Attn: Mr. Todd A. Bowers
Wetlands and Marine Regulatory Section
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8931

North Carolina Department of
Environmental Quality
Attn: Mr. Doug Huggett
Division of Coastal Management
400 Commerce Avenue
Morehead City, North Carolina 28557

National Marine Fisheries Service
Attn: Mr. Pace Wilber
219 Fort Johnson Road
Charleston, South Carolina 29412-9110

DEPARTMENT OF THE ARMY PERMIT

Permittee: NCDOT/PDEA – Attn: Mr. Richard Hancock, P.E.

Permit No.: SAW-2009-01703

Issuing Office: CESAW-RG-L

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The proposed project will permanently impact approximately 859 linear feet of streams (771 linear feet of stream channel associated with culvert placement and 88 linear feet for bank stabilization). In addition, the project will temporarily impact approximately 44 linear feet of stream channel. Proposed impacts (permanent and temporary) to jurisdictional resources are associated with roadway construction practices and include clearing, grubbing, placement of roadway fill, bank stabilization, pipe placement, and excavation.

Project Location: Replace the existing bridge number 116 on NC 24-210 (Rowan Street) to the north of its current location and reconfigure the intersections of SR 3147 (West Rowan Street) with NC 24/SR 3828 (Bragg Boulevard), and NC 210 (Murchison Road) with SR 3147 (West Rowan Street) at NC 24-210 (Rowan Street) into a single, signalized intersection.

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2020 If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf
of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity
authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit, Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE) for RICHARD W. HANCOCK, P.E.

11-06-2015
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

for *(DISTRICT ENGINEER)* KEVIN P. LANDERS, SR.,
COLONEL, U.S. ARMY
DISTRICT COMMANDER

11/23/15
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) *(DATE)*

*U.S. GOVERNMENT PRINTING OFFICE: 1986 - 717-425

SPECIAL CONDITIONS
SAW-2009-01703
NCDOT/PDEA – ATTN: Mr. Richard Hancock, P.E.

Work Limits

a) Construction Plans: All work authorized by this permit must be performed in strict compliance with the attached plans received on June 24, 2015 and August 25, 2015, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

b) Unauthorized Dredge or Fill: Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

c) Maintain Circulation and Flow of Waters: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

d) Deviation From Permitted Plans: The permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Ms. Liz Hair, Wilmington Regulatory Field Office prior to any active construction in waters or wetlands.

e) Preconstruction Meeting: The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the appropriate Corps of Engineers representative, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall invite the Corps and NCDWR Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

Related Laws

f) During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

g) No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit.

h) The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades on those areas, prior to project completion.

i) The permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" to assure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standards. 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). Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

j) Water Contamination: All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Resources at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

k) This USACE permit does not authorize you to take a threatened or endangered species, in particular, the Northern Long-eared Bat (NLEB) (*Myotis septentrionalis*). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., a Biological Opinion (BO) under the ESA, Section 7, with "incidental take" provisions with which you must comply). The U.S. Fish and Wildlife Service's (USFWS's) Programmatic BO titled "Northern Long-eared Bat (NLEB) Programmatic Biological Opinion for North Carolina Department of Transportation (NCDOT) Activities in Eastern North Carolina (Divisions 1-8)," dated March 25, 2015, and adopted on May 4, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that are specified in the BO. Your authorization under this USACE permit is conditioned upon your compliance with all the mandatory terms and conditions (incorporated by reference into this permit) associated with incidental take of the BO. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and would also constitute non-compliance with your USACE permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

l) NCDOT shall comply with its commitments regarding the following historic properties: Haymount Historic District, OSM Streets Historic District, the Lions Civic Center and Rowan Park, and the Shearer Texaco Service Station. Specifically, NCDOT shall not acquire any right-of-way or easements from these historic properties, and shall use landscaping measures as described in the December 10, 2012 FONSI Green Sheets and the signed August 9, 2011 Concurrence Form for Assessment of Effects.

Project Maintenance

l) Notification of Construction Commencement and Completion: The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

m) Clean Fill: Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.

n) Permit Distribution: The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or

agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

o) Silt Fencing: 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).

p) The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

Enforcement

q) Reporting Address: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Wilmington Regulatory Field Office, c/o Ms. Liz Hair, Field office address : 69 Darlington Avenue Wilmington, NC 28403, and by telephone at: 910-251-4049. The Permittee shall reference the following permit number, SAW-2009-01703, on all submittals.

r) Reporting Violations of the Clean Water Act and Rivers and Harbors Act: Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

s) Compliance Inspection: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

t) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

u) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands.

Mitigation

v) In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

Concrete Condition

w) Prohibitions on concrete: The permittee shall take measures to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

Culverts

x) Installation of culverts: For construction of culverts, measures will be included in the construction that will promote the safe passage of fish and other aquatic organisms. For all culvert construction activities, the dimension, pattern, and profile of the stream, (above and below a pipe or culvert), should not be modified by widening the stream channel or by reducing the depth of the stream. Culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, culverts must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form

Permittee: NC DOT **Action ID:** SAW-2009-01703
Project Name: B-4490/Replace Bridge 118/Cross Creek **County:** Cumberland

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation* **8-digit HUC and Basin:** 03030004, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
771						

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin:** 03040203, Cape Fear River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
1,542						

Mitigation Site Debited: NC DMS
(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name:_____

Name of Sponsor's Authorized Representative:_____

_____ _____
Signature of Sponsor's Authorized Representative **Date of Signature**

USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

Permanent fill impacts to perennial streams associated with culvert placement will be mitigated at a 2:1 ratio (771 lf impact=1,542 lf credit required).

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil).*** Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager: Liz Hair
USACE Field Office: Wilmington Regulatory Field Office
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403

Email:

HAIR.SARAH.EA.1054693512 Digitally signed by HAIR.SARAH.EA.1054693512 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=HAIR.SARAH.EA.1054693512 Date: 2015.10.22 13:13:04 -04'00'

USACE Project Manager Signature

October 22, 2015
Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at http://ribits.usace.army.mil.

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 the Customer Satisfaction Survey located at our website at http://regulatory.usacesurvey.com/ to complete the survey online.

NCDENR
North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

August 26, 2015

RECEIVED
AUG 31 2015

Mr. Colin Mellor, Group Leader
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed replacement of Bridge No. 116 on NC 24-210 (Rowan St.) over CSX, Norfolk Southern Railroads, and Hillsboro St., and existing Culvert (No. C258) with Intersection Improvements over Cross Creek in Cumberland County, Federal Aid Project No. BRNHS-0024(24), State Project No. 33727.1.1, TIP B-4490.
NCDWR Project No. 20150623

Dear Mr. Mellor:

Attached hereto is a copy of Certification No. 004028 issued to The North Carolina Department of Transportation (NCDOT) dated August 26, 2015.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

S. Jay Zimmerman,
Director, Division of Water Resources

Attachments

Electronic copy only distribution:
Liz Hair, US Army Corps of Engineers, Wilmington Field Office
Jim Rerko, Division 6 Environmental Officer
Chris Rivenbark, NC Department of Transportation
Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
Travis Wilson, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
NC Division of Water Resources Raleigh Central Office
File Copy

401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 903 linear feet of jurisdictional streams in Cumberland County. The project shall be constructed pursuant to the application dated received June 24, 2015 and revisions received on August 25, 2015. The authorized impacts are as described below:

Stream Impacts in the Cape Fear River Basin

Site	Station	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	-L- 17+54 to 19+62	0	0	167	7	174	167
1	-Y3- 20+40 to 26+10	0	0	541	0	541	541
1	-Y3- 26+10 to 26+47	0	0	0	37	37	0
1	-L- 18+00 LT	0	0	88*	0	88*	88*
2	-L- 35+75	0	0	63	0	63	0
Total		0	0	859	44	903	796

Total Stream Impact for Project: 903 linear feet
***denotes bank stabilization**

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received June 24, 2015 and revisions received on August 25, 2015. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

Project Specific Conditions

1. As a condition of this 401 Water Quality Certification, the culvert demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]

2. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)

3. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]

4. Native material shall be placed inside of the reinforced concrete box culvert at Permit Site 1 to create a natural streambed within the low flow barrel(s) of the culvert that matches the upstream and downstream profile and dimensions. If possible, the material placed inside of the culvert should be the same native material that is excavated from the streambed during the construction of the structure. Rip rap may be used only in the floodplain barrel(s) however native material must be place on top of the rip rap to provide a flat surface for animal passage. [15A NCAC 02H.0506(b)(2)]

5. Riprap shall not be placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]

6. For the 63 linear feet of streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]

7. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]

8. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Riparian areas are defined as a distance 25 feet landward from top of stream bank. [15A NCAC 02H.0506(b)(3) and (c)(3)]

9. The project shall be constructed in accordance with the provisions of the NCDOT's National Pollutant Discharge Elimination (NPDES) Stormwater Permit NCS000250, including the applicable requirements of the NCG01000. [15A NCAC 02B.0211].

10. Compensatory mitigation for 796 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Division of Mitigation Service (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. The DMS has indicated in a letter dated June 16, 2015 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the DMS Mitigation Banking Instrument signed July 28, 2010.

General Conditions

11. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]

12. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be

discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]

13. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]

14. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]

15. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]

16. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

17. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]

18. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]

19. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]

20. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]

21. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]

22. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]

23. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]

24. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

25. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]

26. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.

27. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]

28. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Rail Project Manager shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]

29. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction.[15A NCAC 2H.0506(b)(2)]

30. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.[15A NCAC 02H.0506(b)(3) and (c)(3)

31. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3):

    a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual.*
    b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual.* The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
    c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual.*
    d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

32. Where placement of sediment and erosion control devices in wetlands and/or waters is unavoidable, they shall be removed and the natural grade restored upon completion of the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.
The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. Sam M. Hayes, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center

This the 26th day of August 2015

DIVISION OF WATER RESOURCES

S. Jay Zimmerman
Director, Division of Water Resources

WQC No. 004028

NCDENR

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

NCDWR Project No.: _____ **County:** _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion
Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, **or** the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date:_____

Engineer's Certification

_____ Partial _____ Final

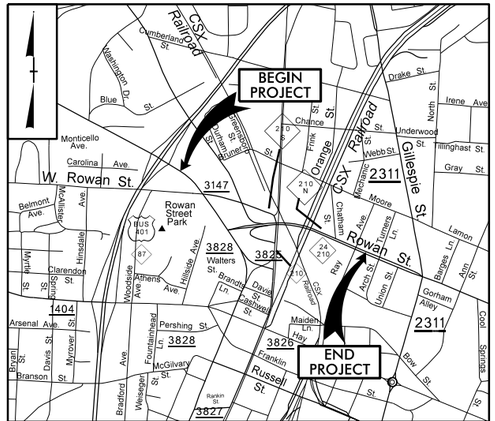
I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project,for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____ Date _____

09/08/99

TIP PROJECT: B-4490

See Sheet 1-A For Index of Sheets (Not Included In R/W Plans)



VICINITY MAP

NOT TO SCALE

ROW PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY

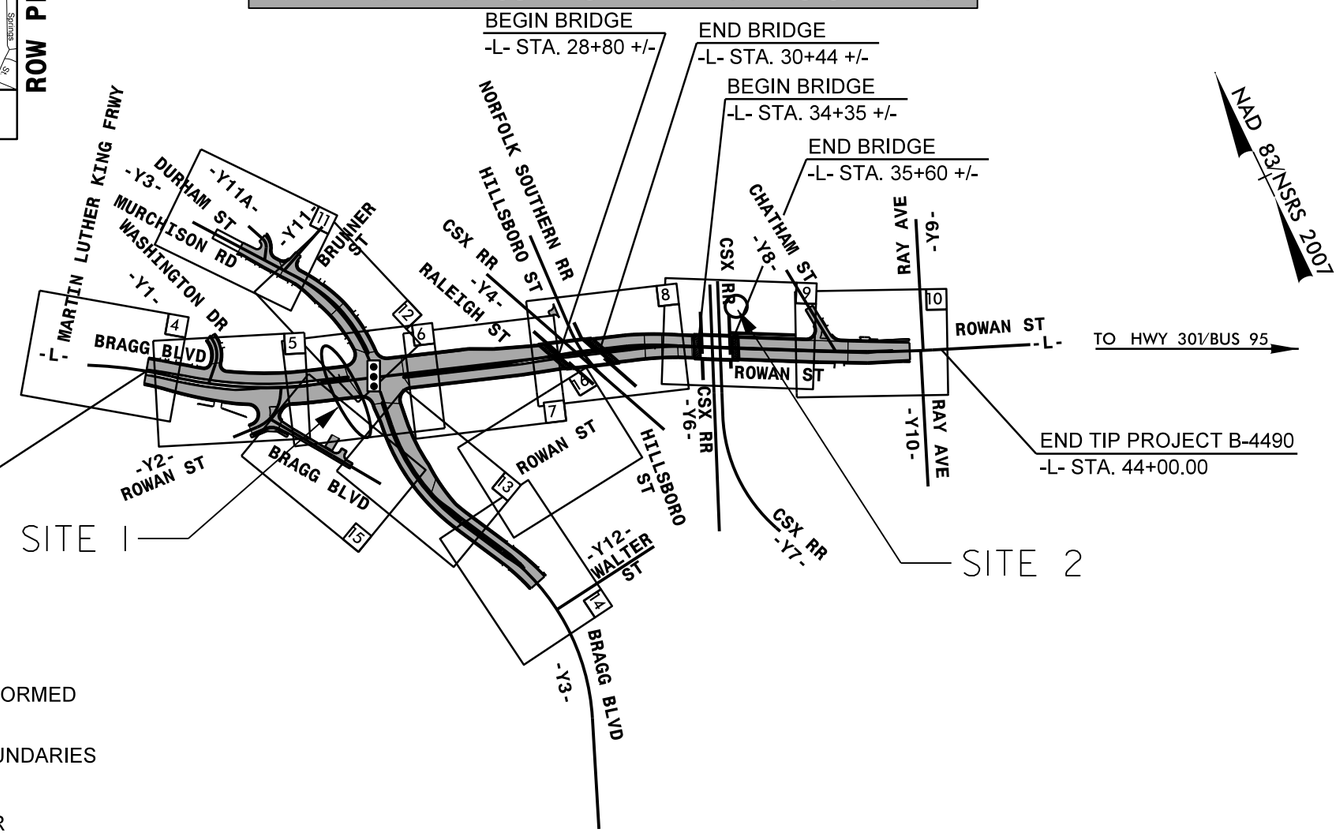
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4490	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
33727.1.1	BRNHS-0024(24)	P.E.
33727.2.FS1	BRNHS-0024(24)	RW
33727.2.FSU1	BRNHS-0024(24)	UTILITIES

LOCATION: BRIDGE NO. 116 OVER CSX RR, NORFOLK SOUTHERN RR, AND HILLSBORO STREET ON NC 24/210

TYPE OF WORK: GRADING, PAVING, DRAINAGE, RETAINING WALL, AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF FAYETTEVILLE.

DESIGN EXCEPTIONS WILL BE REQUIRED FOR EXCEEDING MAXIMUM GRADE ON -L- AND THE SUPERELEVATION ALONG -L- THROUGH THE INTERSECTION WITH -Y3-

PERMIT DRAWING
SHEET 1 OF 14

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:

GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 4 8
PROFILE (VERTICAL)

DESIGN DATA

ADT 2015 = 34,813
ADT 2035 = 47,596
DHV = 10 %
D = 55 %
T = 3 % *
V = 40 MPH
(* TTST 1% + DUAL 2%)
FUNC CLASS = URBAN PRINCIPAL ARTERIAL REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4490	=	0.544 MILES
LENGTH STRUCTURE TIP PROJECT B-4490	=	0.055 MILES
TOTAL LENGTH TIP PROJECT B-4490	=	0.599 MILES

PLANS PREPARED BY:
PARSONS BRINCKERHOFF
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
LICENSE NO. F-0165

PLANS PREPARED FOR:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr.
Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
DECEMBER 31, 2013

LETTING DATE:
DECEMBER 15, 2015

TIM HAYES, PE
PROJECT ENGINEER

DAVIN WALLACE, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT: BRENDA MOORE, PE, CPM

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

11/19/2014
sjsykes
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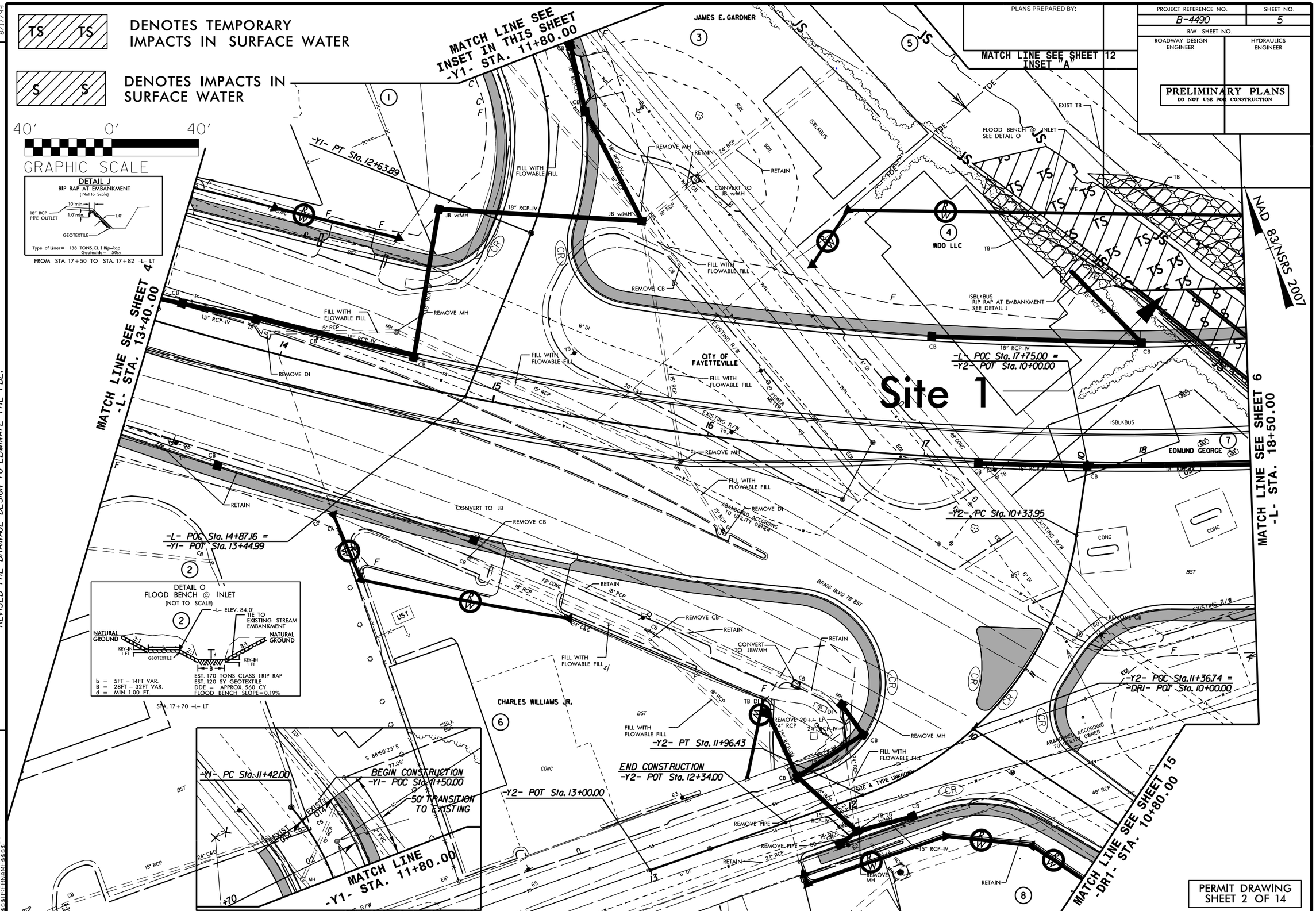

PLANS PREPARED BY:

PROJECT REFERENCE NO.	SHEET NO.
B-4490	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 2 OF 14

REVISED

REVISIONS

02/23/2015 PARCEL 05- COMBINED PARCELS 5 AND 39 INTO PARCEL 5
02/11/2015 PARCEL 39- ADDED MARKERS ON THE PERMANENT DRAINAGE EASEMENT
COMBINED PARCELS 5 AND 39 INTO PARCEL 39.
11/21/2014 PARCEL 7- ADDED A RETAINING WALL AND REVISED THE TCE TO AVOID IMPACTING THE BLOCK BUSINESS BUILDING.
REVISED THE DRAINAGE DESIGN TO ELIMINATE THE PDE.

8/17/99

8/19/2015
cafreeman2
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REVISED

REVISIONS

02/23/2015 PARCEL 05- COMBINED PARCELS 5 AND 39 INTO PARCEL 5
02/11/2015 PARCEL 39- ADDED MARKERS ON THE PERMANENT DRAINAGE EASEMENT
11/21/2014 PARCEL 7- COMBINED PARCELS 5 AND 39 INTO PARCEL 39
ADDED A RETAINING WALL AND REVISED THE TCE TO AVOID IMPACTING THE BLOCK BUSINESS BUILDING.
REVISED THE DRAINAGE DESIGN TO ELIMINATE THE PDE.

8/17/99

8/19/2015
cafreeman2
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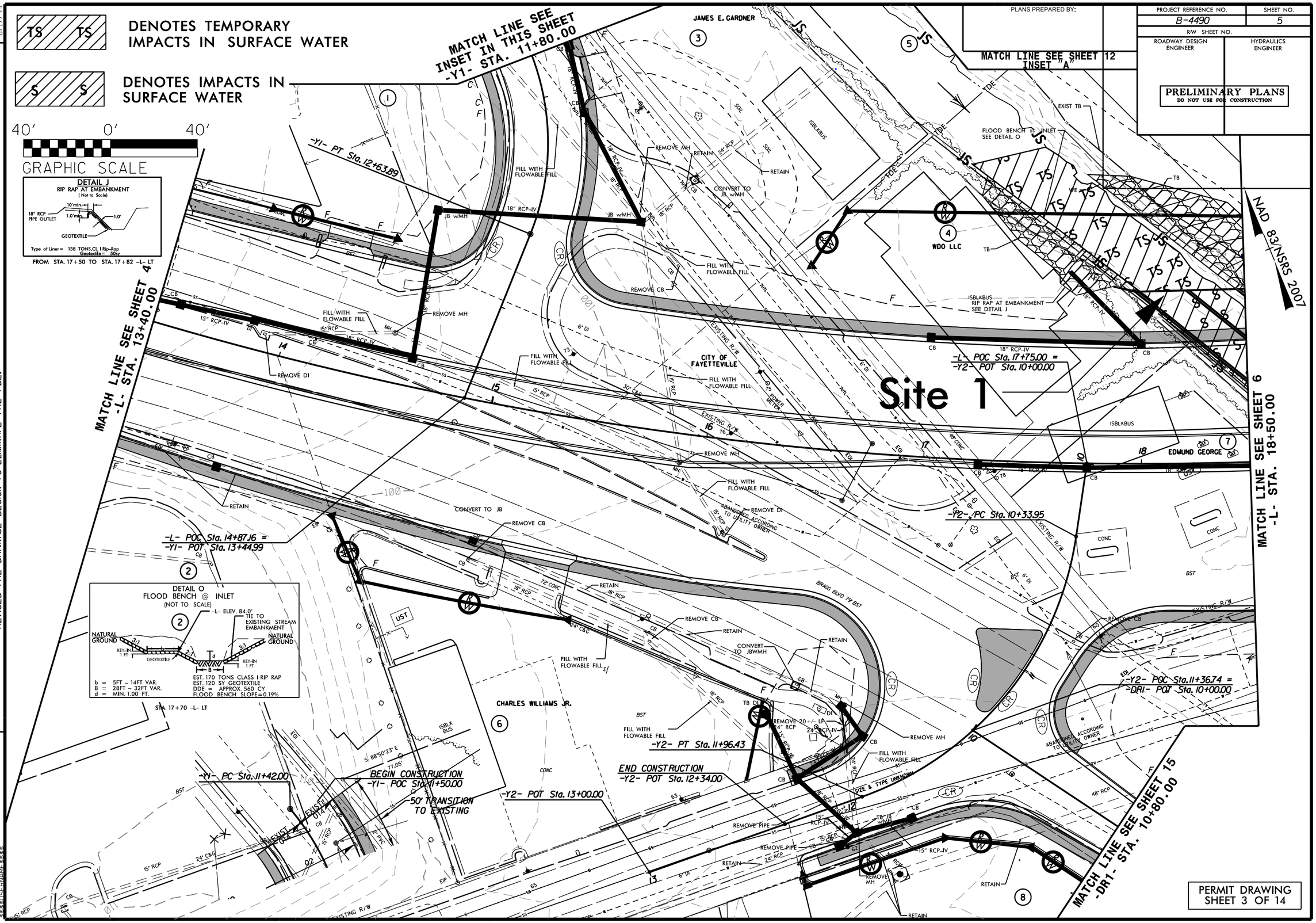
TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

S S DENOTES IMPACTS IN SURFACE WATER

40' 0' 40'
GRAPHIC SCALE

DETAIL J
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner= 138 TONS,CL I Rip-Rap
Geotextile= 50sy
FROM STA. 17+50 TO STA. 17+82 -L- LT



DETAIL O
FLOOD BENCH @ INLET
(NOT TO SCALE)

b = 5FT – 14FT VAR.
B = 28FT – 32FT VAR.
d = MIN. 1.00 FT.
EST. 170 TONS CLASS I RIP RAP
EST. 120 SY GEOTEXTILE
DDE = APPROX. 560 CY
FLOOD BENCH SLOPE=0.19%

PLANS PREPARED BY:

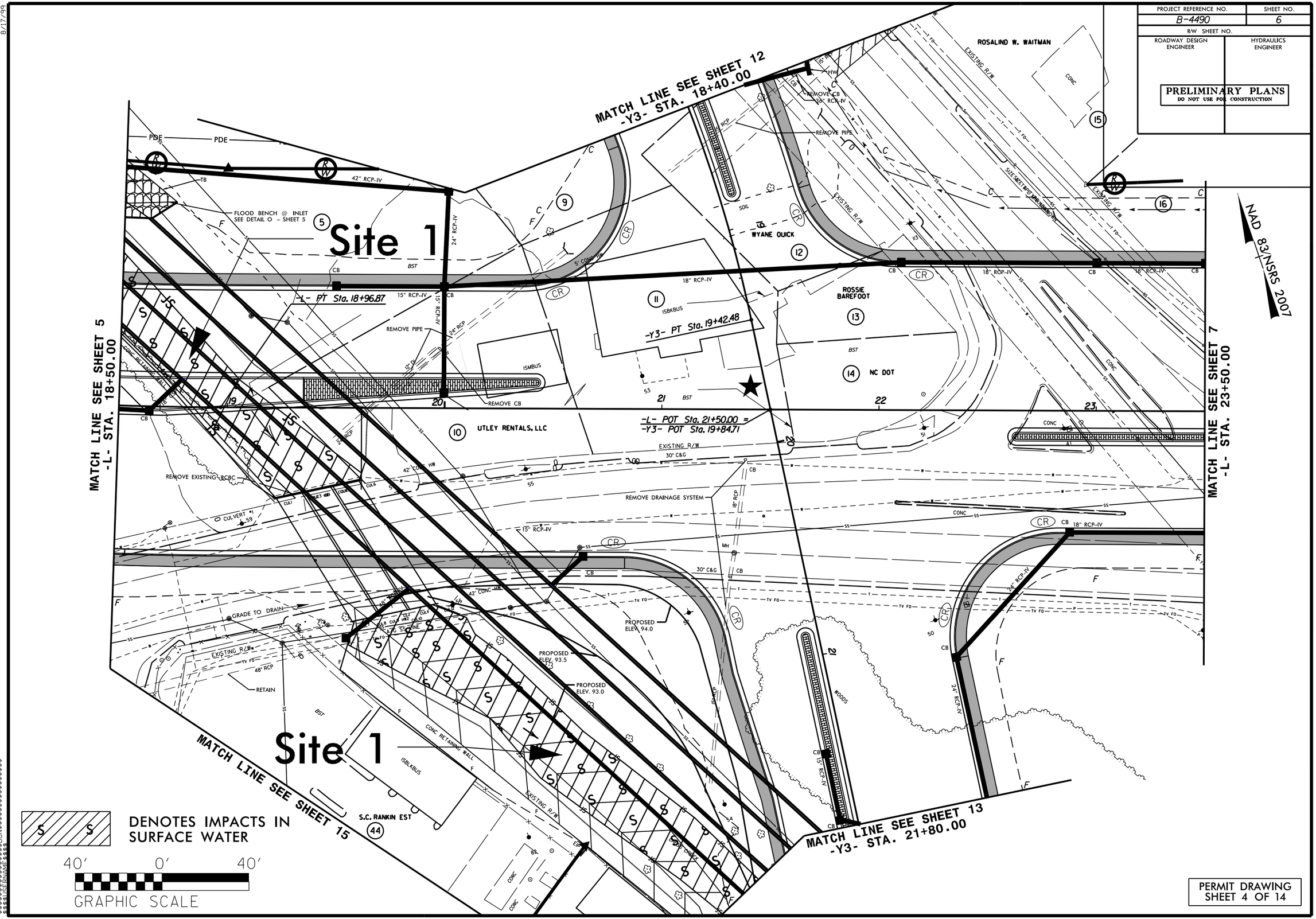
PROJECT REFERENCE NO.	SHEET NO.
B-4490	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 3 OF 14

PROJECT REFERENCE NO.	SHEET NO.
B-4490	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



PERMIT DRAWING
SHEET 4 OF 14

8/17/99

11/19/2014
sjsykes
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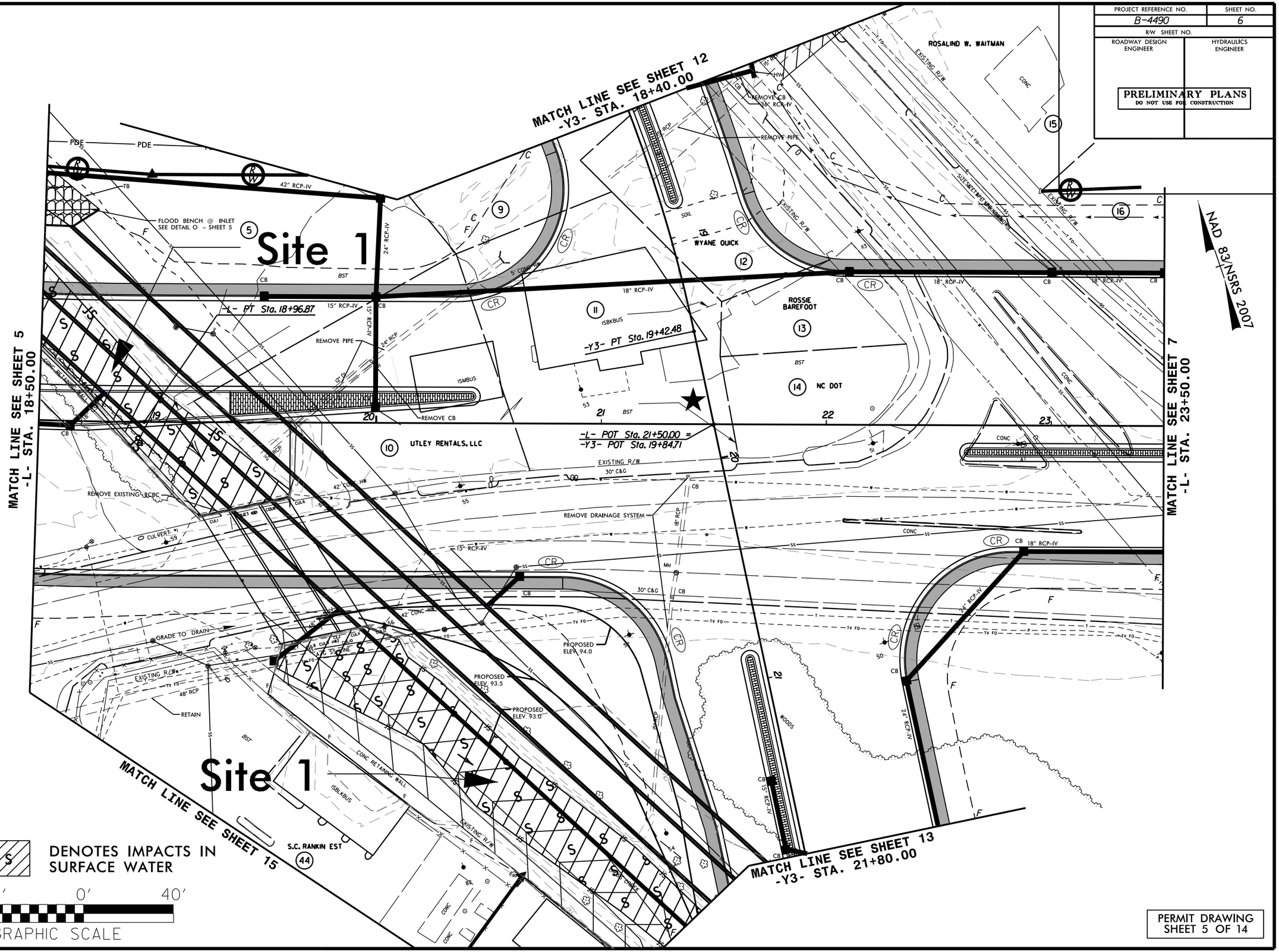
$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$USERNAME$$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
B-4490	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



PERMIT DRAWING
SHEET 5 OF 14

11/19/2014
sjsykes
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$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$USERNAME$$$$$$$$
8/17/99

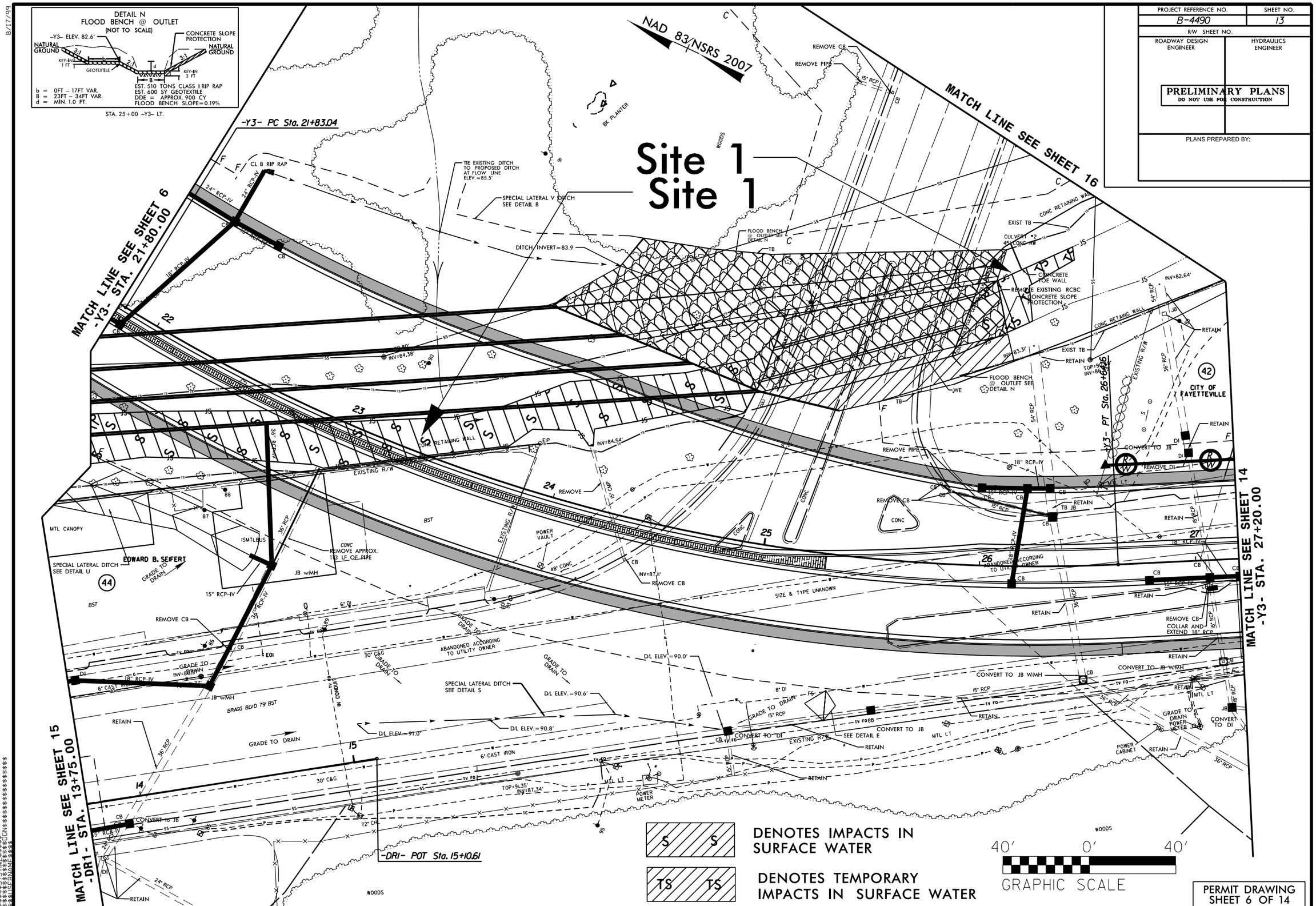
REVISED

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-4490	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PLANS PREPARED BY:



PERMIT DRAWING
SHEET 6 OF 14

8/19/2015
cafreeman2
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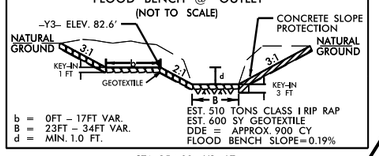
REVISED

8/17/99

DETAIL N
FLOOD BENCH @ OUTLET
(NOT TO SCALE)



STA. 25+00 -Y3- LT.

PROJECT REFERENCE NO.	SHEET NO.
B-4490	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PLANS PREPARED BY:

NAD 83/NSRS 2007

NOTE: ALL EXISTING PIPES TO BE RETAINED ARE GOOD CONDITION UNLESS OTHERWISE NOTED

Site 1
Site 1

MATCH LINE SEE SHEET 16

MATCH LINE SEE SHEET 6 -Y3- STA. 21+80.00

MATCH LINE SEE SHEET 14 -Y3- STA. 27+20.00

MATCH LINE SEE SHEET 15 -DR1- STA. 13+75.00

-Y3- PC Sta. 21+83.04

-Y3- PT Sta. 26+54.16

-DR1- POT Sta. 15+10.61

GRASSED V-DITCH DEPTH=1.0' S.S.=2:1 TOP WIDTH=5' TIE EXISTING DITCH TO PROPOSED DITCH AT FLOW LINE ELEV.=85.5'

SPECIAL LATERAL V DITCH SEE DETAIL B

DITCH INVERT=83.9

CL B RIP RAP

24" RCP-IV

18" RCP-IV

15" RCP-IV

36" RCP

54" RCP

CONC RETAINING WALL

EXISTING R/W

FLOOD BENCH @ OUTLET SEE DETAIL N

CONCRETE TOE WALL

REMOVE EXISTING RCBC CONCRETE SLOPE PROTECTION

EXIST TB

CULVERT #2 45' CONC PIPE

INV=82.64'

INV=83.31'

INV=84.38'

INV=84.54'

INV=87.11'

TOP=90.35' INV=87.34'

TOP=90.35' INV=86.46'

CITY OF FAYETTEVILLE

EDWARD B. SEIFERT

MTL CANOPY

SPECIAL LATERAL DITCH SEE DETAIL U

GRADE TO DRAIN

BST EXISTING PIPE REMOVED TO IMPROVE SLOPE CAPACITY OF SYSTEM

REMOVE CB

JB w/MH

ISMTLBUS

CONC REMOVE APPROX. 113 LF OF PIPE

POWER VAULT

48" CONC

REMOVE PIPE

REMOVE CB

CONC

ABANDONED ACCORDING TO UTILITY OWNER

SIZE & TYPE UNKNOWN

RETAIN

CONVERT TO JB

CONVERT TO DI

CONVERT TO JB W/MH

REMOVE DI

REMOVE CB COLLAR AND EXTEND 18" RCP

SPECIAL LATERAL DITCH SEE DETAIL S

D/L ELEV.=90.0'

D/L ELEV.=90.6'

D/L ELEV.=90.8'

D/L ELEV.=91.0'

BRAGG BLVD 79' BST

6" CAST IRON

30" C&G

72" CH

SEE DETAIL E

MTL LT

POWER METER

POWER CABINET

PROPOSED UNDER CONSTRUCTION OF ADJACENT PROPERTY

REMOVED DURING DEVELOPMENT OF ADJACENT PROPERTY PER PARKVIEW DEVELOPMENT PLANS

WOODS

S S — DENOTES IMPACTS IN SURFACE WATER

TS TS — DENOTES TEMPORARY IMPACTS IN SURFACE WATER

40' 0' 40'
GRAPHIC SCALE

PERMIT DRAWING
SHEET 7 OF 14

8/19/2015
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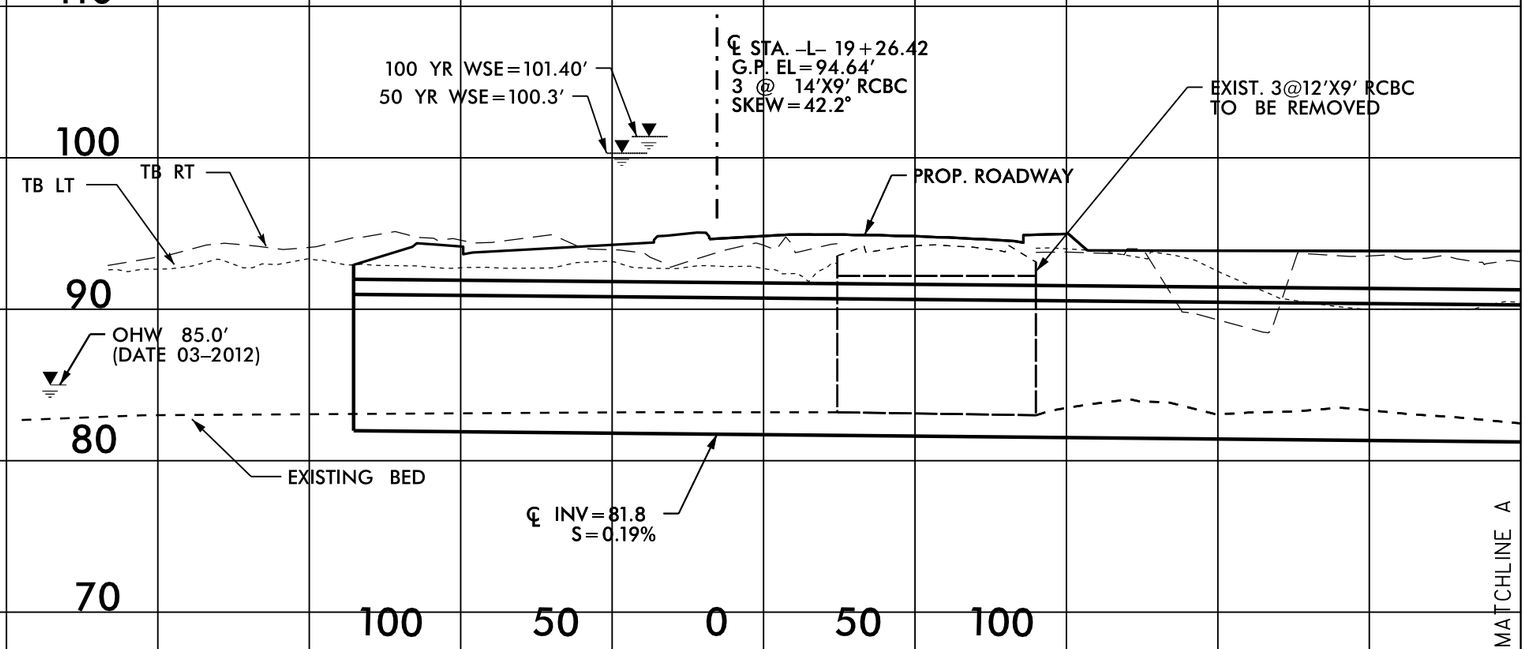
REVISED

10′ 0′ 10′
VERTICAL SCALE

50′ 0′ 50′
HORIZONTAL SCALE

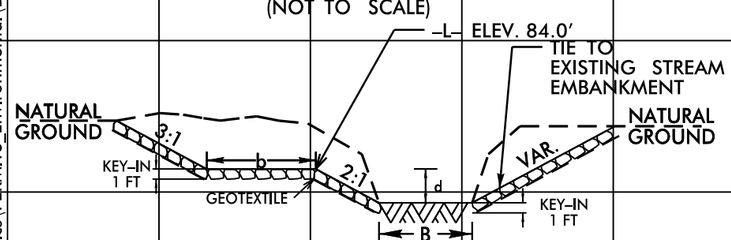
Backfill Proposed Culvert with Native Material. Native Material consists of material that is excavated from the stream bed or floodplain at the project site during culvert construction. Only material that is excavated from the stream bed may be used to line the low flow culvert barrel. Rip rap may be used to supplement the Native Material in the high flow culvert barrel(s). If rip rap is used to line the high flow culvert barrel(s), Native Material should be placed on top to fill voids and provide a flat surface for animal passage. Native Material is subject to approval by the engineer and may be subject to permit conditions.

PROFILE



MATCHLINE A

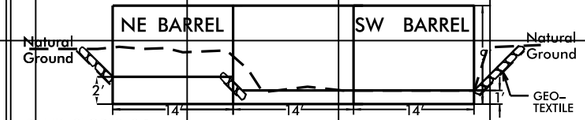
FLOOD BENCH @ INLET
(NOT TO SCALE)



b = 5FT – 14FT VAR.
B = 28FT – 32FT VAR.
d = MIN. 1.00 FT.

EST. 170 TONS CLASS I RIP RAP
EST. 120 SY GEOTEXTILE
DDE = APPROX. 560 CY
FLOOD BENCH SLOPE=0.19%

CULVERT SILL INLET/OUTLET
(NOT TO SCALE)



BANK SLOPES 3:1
BENCH SLOPE 2:1
CLASS I RIP RAP KEYED IN 1FT

SW BARREL SILL HEIGHT = 1 FT.
NE BARREL SILL HEIGHT = 2 FT.

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: 33727.1.1 (B-4490)
BRIDGE NO. 116 OVER CSX RR,
NORFOLK SOUTHERN RR AND
HILLSBORO STREET ON NC 24/210

SHEET 8 OF 14 8/18/15

8/18/2015
cafreeman2
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REVISED

10' 0' 10'
VERTICAL SCALE

50' 0' 50'
HORIZONTAL SCALE

PROFILE

MATCHLINE A

EXIST. 3@12'X9' RCBC
TO BE REMOVED

110

℄ STA. –Y3– 22+47.30
G.P. EL=93.80'
3 @ 14'X9' RCBC
SKEW=30.7°

TB RT

TB LT

100

PROP. ROADWAY

90

80

℄ INV=81.0
S=0.19%

EXISTING BED

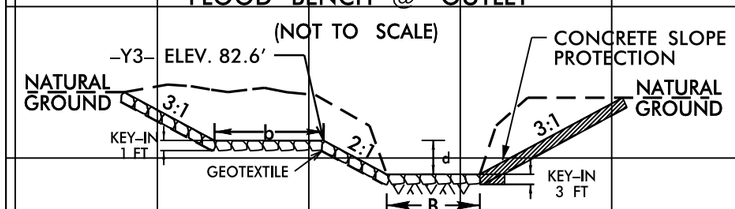
70

MATCHLINE A

100 50 0 50 100

FLOOD BENCH @ OUTLET

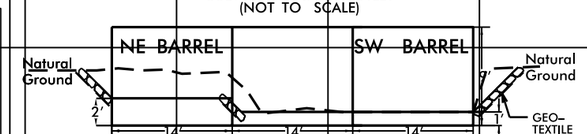
(NOT TO SCALE)



b = 0FT – 17FT VAR.
B = 23FT – 34FT VAR.
d = MIN. 1.0 FT.

EST. 510 TONS CLASS I RIP RAP
EST. 600 SY GEOTEXTILE
DDE = APPROX. 900 CY
FLOOD BENCH SLOPE=0.19%

CULVERT SILL INLET/OUTLET
(NOT TO SCALE)



BANK SLOPES 3:1
BENCH SLOPE 2:1
CLASS I RIP RAP KEYED IN 1FT

SW BARREL SILL HEIGHT = 1 FT.
NE BARREL SILL HEIGHT = 2 FT.

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT: 33727.1.1 (B-4490)
BRIDGE NO. 116 OVER CSX RR,
NORFOLK SOUTHERN RR AND
HILLSBORO STREET ON NC 24/210

SHEET 9 OF 14

8/18/15

8/18/2015
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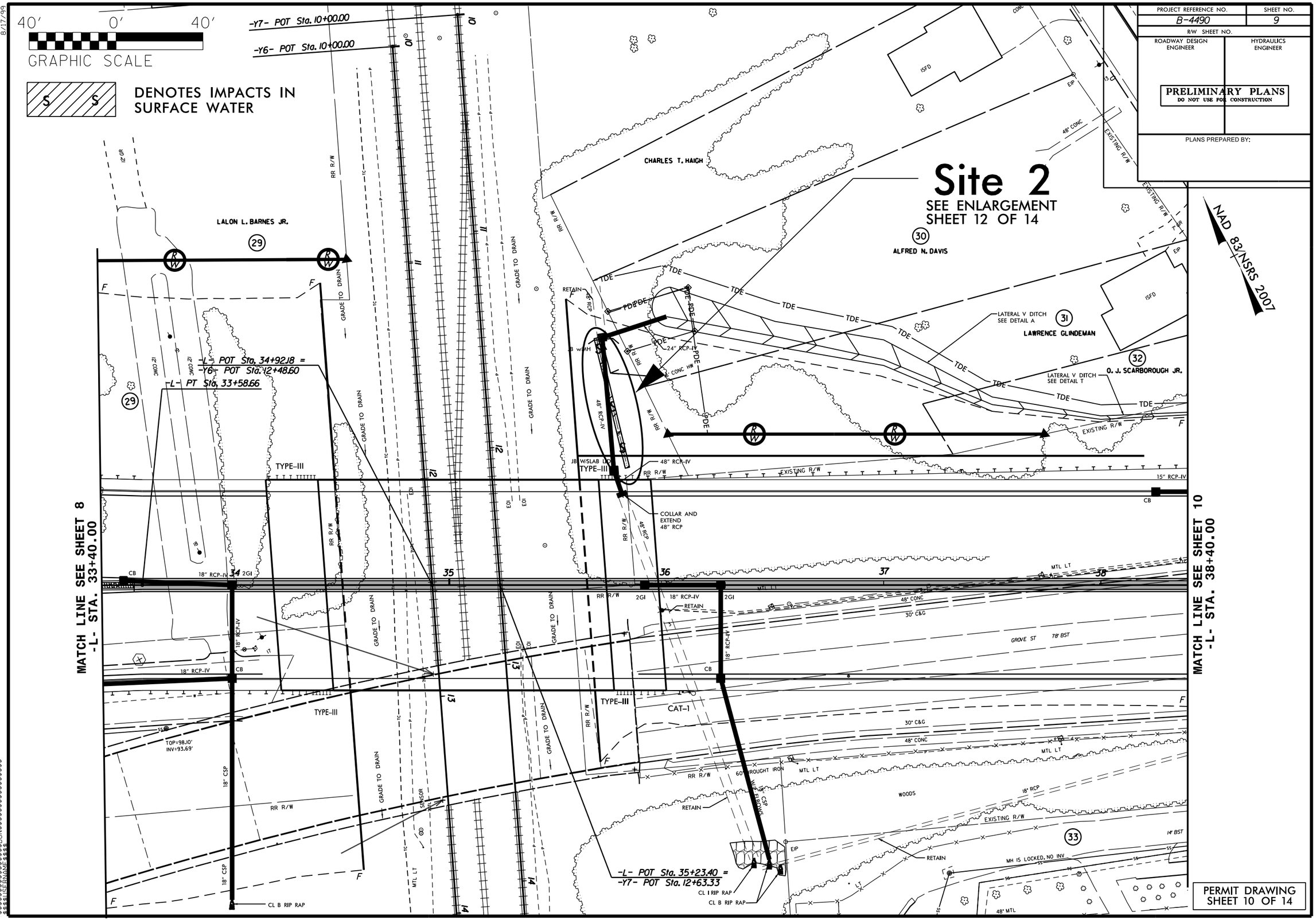

PROJECT REFERENCE NO.	SHEET NO.
B-4490	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PLANS PREPARED BY:

PERMIT DRAWING
SHEET 10 OF 14

8/17/99

11/19/2014
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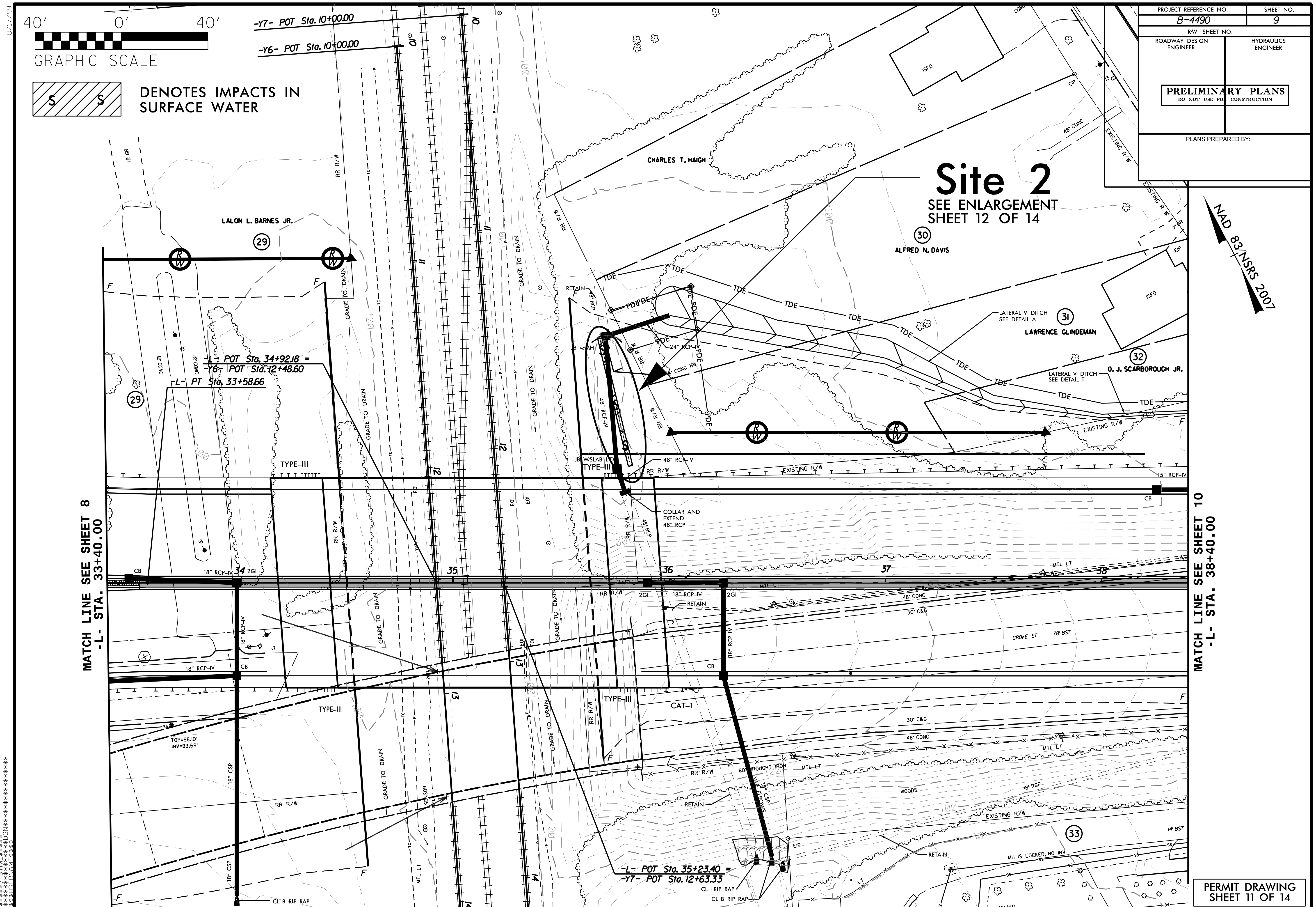

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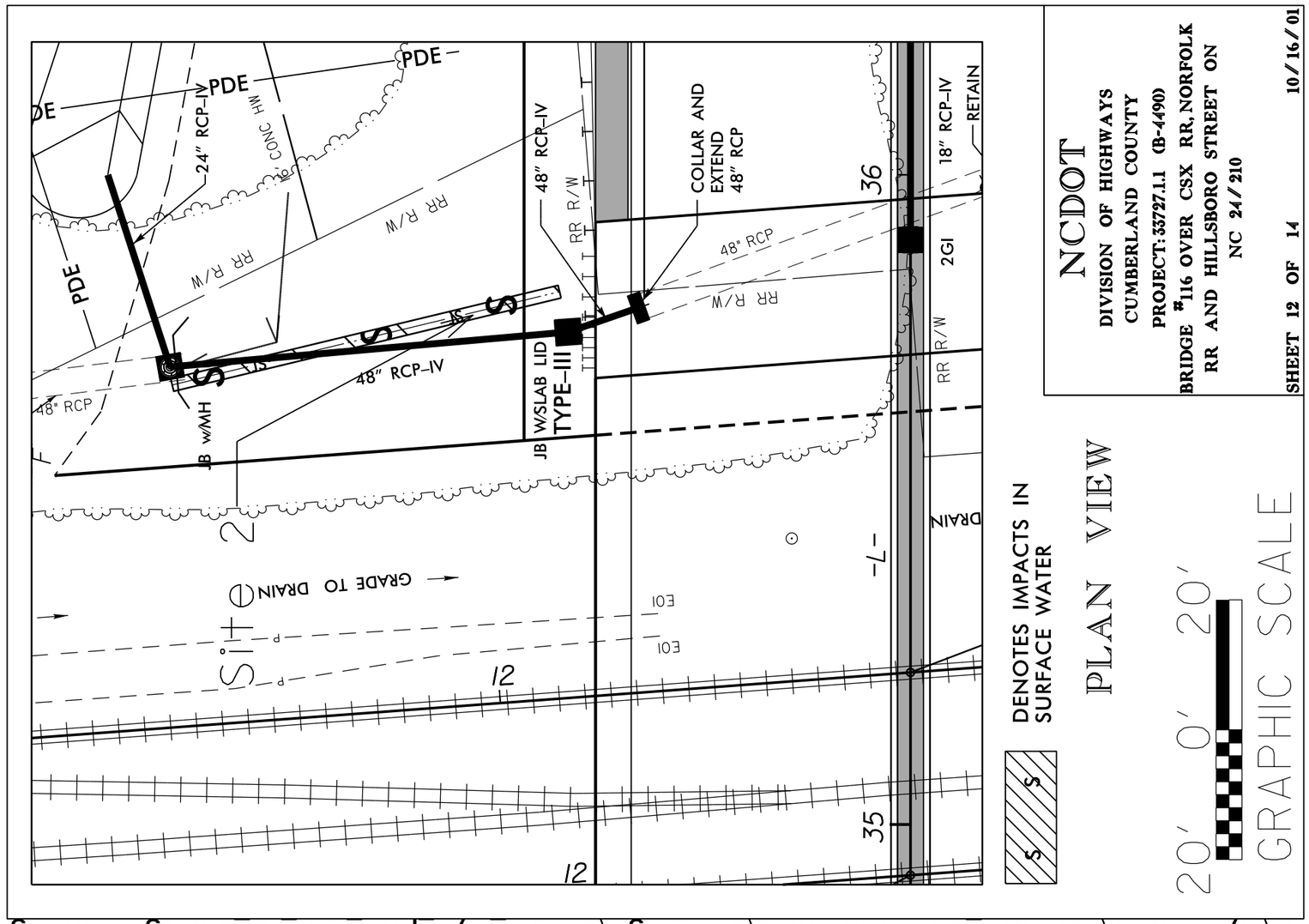

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT:33727.1.1 (B-4490)
BRIDGE #116 OVER CSX RR, NORFOLK
RR AND HILLSBORO STREET ON
NC 24/210

SHEET 12 OF 14 10/16/01

11/19/2014
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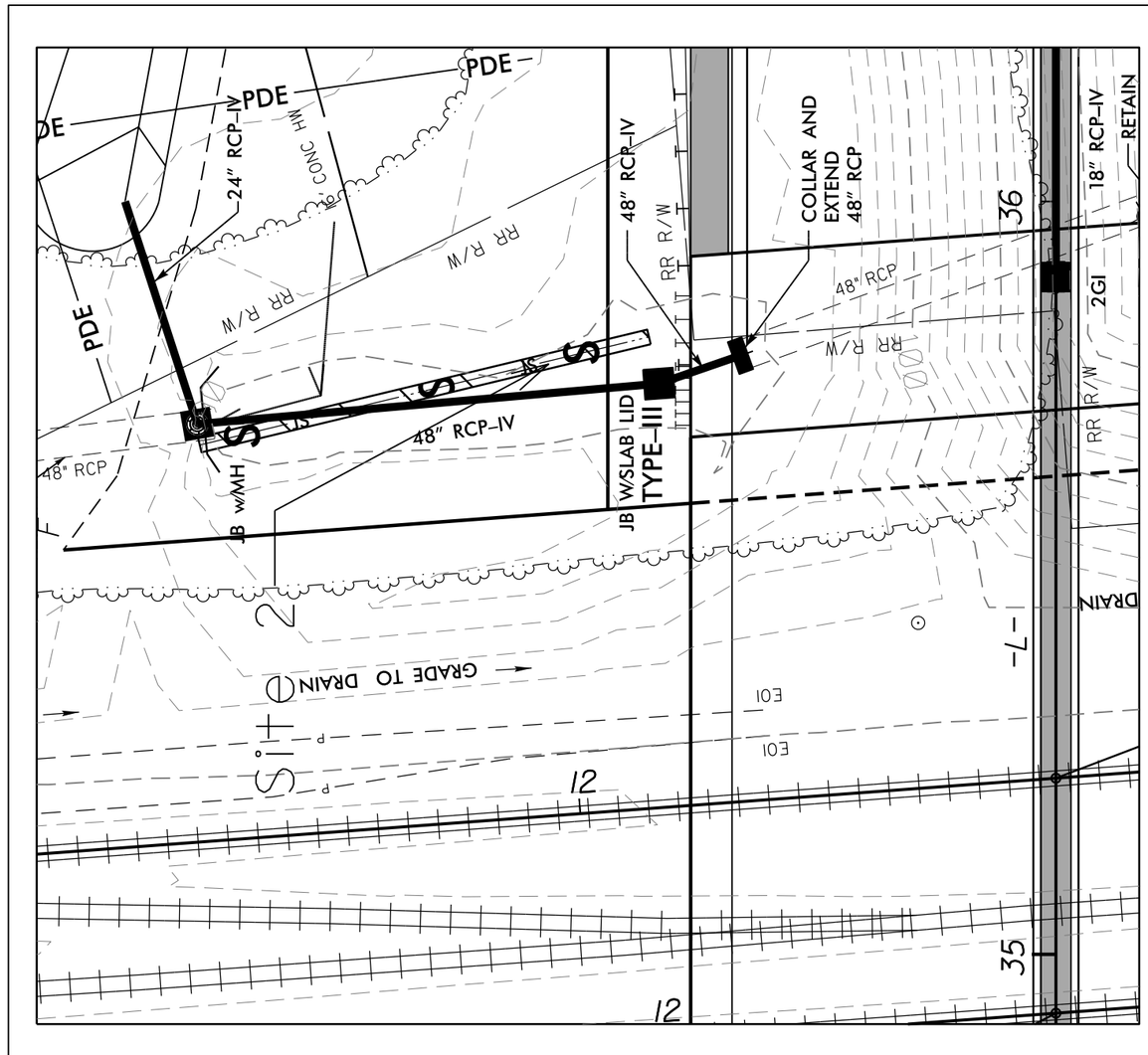

DENOTES IMPACTS IN SURFACE WATER

PLAN VIEW

20' 0' 20'

GRAPHIC SCALE

NCDOT
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY
PROJECT:33727.1.1 (B-4490)
BRIDGE #116 OVER CSX RR, NORFOLK RR AND HILLSBORO STREET ON NC 24/210

SHEET 13 OF 14 10/16/01

11/19/2014
sjsykes
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REVISED

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS: Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	SURFACE WATER IMPACTS: Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	L Sta 17+54 to 19+62	3 @ 14' x 9' RCBC						0.11	0.06	167	7	
1	Y3 Sta 20+40 to 26+10	3 @ 14' x 9' RCBC						0.29		541		
1	Y3 Sta 26+10 to 26+47	3 @ 14' x 9' RCBC							0.01		37	
1	L Sta 18+00 Lt.	BANK STABILIZATION								88		
2	L Sta 35+75 Lt.	48" RCP						< 0.01		63		
TOTALS*:								0.40	0.07	859	44	0

*Rounded totals are sum of actual impacts

NOTES:
The existing culvert at Y3 Sta 25+00 LT. will be removed resulting in 90 LF of the stream being day-lighted.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Revised August 18, 2015
Cumberland County
TIP # B-4490
WBS # 33727.1.1

Revised 2015 6 15