

Ben Grumbles, Secretary Horacio Tablada, Deputy Secretary

May 4, 2021

Re: Notice of Permit Modification Decision

Modification to Nontidal Wetlands and Waterways Permit Application

Tracking Number 18-NT-0086/201860368

Dear Property Owner, Public Official, or Interested Person:

After examination and consideration of the documents received and evidence in the modification application file and record for the Phase I of the I-95 Section 200 Improvements project, the Water and Science Administration has determined that the application meets the statutory and regulatory criteria necessary for issuance of a Nontidal Wetlands and Waterway Permit Modification. Copies of the Notice of Decision, Summary of the Basis for Decision, and Nontidal Wetlands and Waterways Modification of Permit are enclosed with this permit modification decision. Impact Vicinity Maps, Key Maps, and the plan view sheets that correspond to the Impact Vicinity and Key Maps are available at the MDE website under the Public Information heading using the following link:

 $\underline{https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/MdTA\_I-95\_Sect-200\_Improvements.aspx$ 

Hard copies can also be requested from the MDE Wetlands and Waterways office at 410-537-3456 or by email at <a href="mailto:Emily.Dolbin@maryland.gov">Emily.Dolbin@maryland.gov</a>.

This is a final agency determination; there is no further opportunity for administrative review. Any person with standing, who is either the applicant or who participated in the public participation process through the submission or written or oral comments may petition for judicial review in the Circuit Court in the County where the permitted activity is to occur. The petition for judicial review must be filed within 30 days of the publication of the permit decision. Please see the attached Fact Sheet for additional information about the judicial review process.

If you have any questions or need any additional information, please do not hesitate to contact me at 410-537-3766.

Sincerely,

Amanda Sigillito, Chief Nontidal Wetlands Division

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**Enclosures** 

## FACT SHEET JUDICIAL REVIEW PROCESS

Permits can be challenged through a request for direct judicial review in the Circuit Court for the county where the activity authorized by the permit will occur. Applicants, and persons who meet standing requirements under federal law and who participated in a public comment process by submitting written or oral comments (where an opportunity for public comment was provided), may seek judicial review. Judicial review will be based on the administrative record for the permit compiled by the Department and limited to issues raised in the public comment process (unless no public comment process was provided, in which case the review will be limited to issues that are germane to the permit).

#### Who Has Standing?

Anyone who meets the threshold standing requirements under federal law and is either the applicant or someone who participated in the public participation process through the submission of written or oral comments, as provided in Environment Article § 5-204, Annotated Code of Maryland. The three traditional criteria for establishing standing under federal law are injury, causation, and redressability, although how each criterion is applied is highly fact-specific and varies from case to case. Further, an association has standing under federal law to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

#### What is the Procedure for Seeking Judicial Review?

Petitions for judicial review of a final determination or permit decision subject to judicial review must be filed in accordance with § 1-605 of the Environment Article no later than 30 days following publication by the Department of a notice of final determination or final permit decision and must be filed in the circuit court of the county where the permit application states that the proposed activity will occur. Petitions for judicial review must conform to the applicable Maryland Rules of Civil Procedure.

# STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER AND SCIENCE ADMINISTRATION NOTICE OF DECISION

**In the Matter of:** Maryland Transportation Authority

Modification to Nontidal Wetlands and Waterways

Permit Application Number 18-NT-0086/201860368

**Hearing Date:** March 4, 2021

**Hearing Location:** Virtual

**Decision:** Approval

**Date:** May 4, 2021



The review of the Modification to Nontidal Wetlands and Waterways Permit Application in the above-referenced matter has been governed by criteria set forth under Title 5, Subtitle 5, Environment Article, Annotated Code of Maryland, entitled Appropriation or Use of Waters, Reservoirs, and Dams; Subtitle 9, Environment Article, Annotated Code of Maryland, entitled Nontidal Wetlands; and Code of Maryland Regulations (COMAR) Title 26, Subtitle 17, Chapter 04, Construction on Nontidal Waters and Floodplains and Subtitle 23 Nontidal Wetlands. The Modification to Nontidal Wetlands and Waterways Permit Application has been reviewed for compliance with Maryland water quality standards under COMAR Title 26, Subtitle 08, Chapter 02 Water Quality.

After examination of all documents and evidence in the above-referenced matter, I have determined that:

- 1. The applicant has demonstrated a need for impacts to nontidal wetland and waterways;
- 2. The applicant has and will continue to minimize impacts to nontidal wetlands and waterways to the extent practicable;
- 3. No rare, threatened or endangered species have been identified in the area of impact for the proposed project;
- 4. No historical or archeological sites have been identified in the area of impact for the proposed project;
- 5. The project is consistent with State water quality requirements;
- 6. Public notice and public informational hearing requirements have been satisfied; and,
- 7. The applicant has demonstrated that the project has independent utility from any potential future projects.

The Modification to Nontidal Wetlands and Waterways Permit Application 18-NT-0086/201860368 meets the criteria set forth in statute and regulation governing impacts to wetlands and waterways. The Modification to Nontidal Wetlands and Waterways Permit Number 18-NT-0086/201860368 may be issued by the Water and Science Administration to authorize Maryland Transportation Authority to allow design changes, including a revised fence line along I-95 from MD 152 to MD 24, increase in the limits of disturbance (LOD) at the Raphel Road Intersection, full replacement of bridges over Big and Little Gunpowder Falls including removal of existing instream piers, various design changes to erosion and sediment control and stormwater management, transferring a portion of the work from the Section 100 project from Cowenton Road to New Forge Road that has not been constructed (originally permitted under 05-NT-0357), and the installation of two noncompliant noisewalls along I-95 northbound and southbound. The modification work will result in an increase of permanent impacts to 60,472 square feet of forested nontidal wetland, 407 square feet of scrub-shrub nontidal wetland, 23,472 square feet of emergent nontidal wetland, 188,343 square feet of 25-foot nontidal wetland buffer, 19 linear feet of perennial stream, 610 linear feet of intermittent stream, and temporary impacts to 275 linear feet of perennial stream, 596 linear feet of intermittent stream and 7,998 square feet of 100-year nontidal floodplain. This modification also includes decreases in permanent impacts to 61,426 square feet of 100-year nontidal floodplain, and decreases in temporary impacts 3,770 square feet of forested nontidal wetland, 171 square feet of emergent nontidal wetland and 2,070 square feet of 25-foot nontidal wetland buffer. In total, this modification authorizes permanent impacts to 81,825 square feet of forested nontidal wetland, 1,135 square feet of scrub-shrub nontidal wetland, 29,868 square feet of emergent nontidal wetland, 282,816 square feet of 25-foot nontidal wetland buffer, 2,105 linear feet of perennial stream, 4,218 linear feet of intermittent stream, 193,262 square feet of 100year nontidal floodplain, and temporary impacts to 19,160 square feet of forested nontidal wetland, 10,363 square feet of emergent nontidal wetland, 42,618 square feet of 25-foot nontidal wetland buffer, 721 linear feet of perennial stream, 596 linear feet of intermittent stream and 34,653 square feet of 100-year nontidal floodplain. The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore and Harford Counties.

A brief explanation of the rationale for this decision is contained in the attached Summary of Basis for Decision.

Heather L. Nelson

Program Manager

Wetlands and Waterways Program

#### **SUMMARY BASIS FOR DECISION**

Name of Applicant:Application Number:Maryland Transportation Authority (MDTA)18-NT-0086/201860368

Project Manager: Emily Dolbin

Date of Decision: October 10, 2018

Date of Modification: May 4, 2021

This Summary Basis of Decision has been updated in bold with information pertaining specifically to the Permit Modification. The information not in bold was part of the decision-making process for the original 2018 Permit.

The Environment Article, Annotated Code of Maryland and the Code of Maryland Regulations (COMAR) establish criteria for the Maryland Department of the Environment (Department or MDE) to consider when evaluating projects that propose to change the course, current or cross section of a nontidal stream or other body of water or to impact a nontidal wetland. If the criteria are satisfied, the Department may issue a **permit modification** for the proposed activity. The Department may deny a **permit modification** for a waterway construction activity that it believes is inadequate, wasteful, dangerous, impracticable or detrimental to the best public interest. The Department may not issue a nontidal wetland **permit modification** for a regulated activity unless it finds that the Applicant has demonstrated that a regulated activity, which is not water-dependent, has no practicable alternative, will minimize alteration or impairment of the nontidal wetlands, and will not cause or contribute to a degradation of ground or surface waters.

In the case of the proposed permit modification to Stage 1 of the I-95 Section 200 Improvements the question for the Department to address is whether or not the proposed project impacts are acceptable under the regulations as they pertain to such construction activities (see Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland [Application] dated March 2, 2018, and Modification Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland [Modification Application] dated October 22, 2020, and as amended February 4, 2021, in file). The work includes adding a two-lane express toll lane (ETL) on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Raphel Road Overpass, and the Old Joppa Road Overpass; construction of two noise walls; utility relocations; providing a new Intelligent Transportation System (ITS) communication system to improve operations and incident management along both northbound and southbound I-95; stream restoration at the Carsin's Run Stream Mitigation Site, and an onsite stream mitigation site; and, use of temporary erosion and sediment controls. The modification work includes design changes, such as, a revised fence line along I-95 from MD 152 to MD 24, increase in the limits of disturbance (LOD) at the Raphel Road Intersection, full replacement of bridges over Big and Little Gunpowder Falls including removal of existing instream piers, various design changes to erosion and sediment control and stormwater management, transferring a portion of the work from the Section 100 project from Cowenton Road to New Forge Road that has not been constructed (originally permitted under 05-NT-0357), and the installation of two noncompliant noisewalls along I-95 northbound and southbound. The Section 100 permit (05-NT-0357) expired on April 26, 2021, therefore, the remaining portion of the project that has not been constructed, contract KH-3009 South of New Forge Road, has been added to this modification. The MDE Compliance Program is reviewing the noncompliant noisewalls constructed within the Section 100 area. The MD 7 Fish Passage Mitigation Site is no longer part of this project, or acknowledged in this permit modification. This modification authorizes an increase of permanent impacts to 60,472 square feet of forested nontidal wetland, 407 square feet of scrub-shrub nontidal wetland, 23,472 square feet of emergent nontidal wetland, 188,343 square feet of 25-foot nontidal

wetland buffer, 19 linear feet of perennial stream, 610 linear feet of intermittent stream, and temporary impacts to 275 linear feet of perennial stream, 596 linear feet of intermittent stream and 7,998 square feet of 100-year nontidal floodplain. This modification also includes a decrease of permanent impacts to 61,426 square feet of 100-year nontidal floodplain, and temporary impacts to 3.770 square feet of forested nontidal wetland, 171 square feet of emergent nontidal wetland and 2,070 square feet of 25-foot nontidal wetland buffer. In total, the modified permit authorizes permanent impacts to 81,825 square feet of forested nontidal wetland, 1,135 square feet of scrubshrub nontidal wetland, 29,868 square feet of emergent nontidal wetland, 282,816 square feet of 25foot nontidal wetland buffer, 2,105 linear feet of perennial stream, 4,218 linear feet of intermittent stream, 193,262 square feet of 100-year nontidal floodplain, and temporary impacts to 19,160 square feet of forested nontidal wetland, 10,363 square feet of emergent nontidal wetland, 42,618 square feet of 25-foot nontidal wetland buffer, 721 linear feet of perennial stream, 596 linear feet of intermittent stream and 34,653 square feet of 100-year nontidal floodplain. (see Nontidal Wetlands and Waterways Modification of Permit [Modification] dated May 4, 2021, in file). The Permit Modification does not authorize impacts to any Wetlands of Special State Concern (WSSC) or associated 100-foot nontidal wetland buffers (see Modification Application dated October 22, 2020, and as amended February 4, 2021, in file). The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore and Harford Counties. The Modification no longer includes the MD 7 Fish Passage Mitigation Site in Cecil County. The project is located within the Bird River (02130803), Lower Gunpowder Falls (02130802), Little Gunpowder Falls (02130804) and Lower Winters Run (02130702) MDE 8-digit watersheds, within the larger Gunpowder (021308) and Bush River (021307) MDE 6-digit watersheds, all of which are located within the Gunpowder-Patapsco (02060003) 8-digit HUC. MDTA submitted the Modification Application on October 22, 2020, and MDE sent comments on the Modification Application on December 22, 2020 determining the application incomplete. Further comments were sent to complete the application (see Modification Application dated October 22, 2020, and as amended February 4, 2021, in file).

Due to the schedule of the project, each segment is under a separate design schedule (e.g. Segments KH-3009, KH-3010, and KH-3014); however, the segments were permitted together as part of a single and complete project with independent utility. Therefore, the design is subject to change as the design schedules progress. Any changes relating to impacts shall be reviewed and approved by the Department as required by the Special Conditions of the Permit (see Nontidal Wetlands and Waterways Permit [Permit] dated October 10, 2018, in file). At the time of the Permit Modification, Segments KH-3010 MD 152 to MD 24, KH-3013 and KH-3016 Noncompliant Section 100 Noisewalls, KH-3015 Old Joppa Road Overpass Replacement, and KH-3028 Carsins Run Stream Mitigation Site were near-completion of construction or constructed (see Modification Application dated October 22, 2020, and as amended February 4, 2021, in file).

#### **PUBLIC NOTICE**

Adjoining property owners, local government officials, and other interested persons must be notified of proposed impacts to nontidal wetlands and waterways. In addition, an opportunity to comment and request a public informational hearing must be provided via a local newspaper. The public notice for the initial application was published in *The Jeffersonian* on June 21, 2018, *The Aegis* on June 20, 2018, and *The Cecil* Whig on June 20, 2018. Project plans were made available at the Baltimore County Public Library, White Marsh Branch (8133 Sandpiper Circle, Baltimore, Maryland 21236), the Harford County Public Library, Aberdeen Branch (21 Franklin Street, Aberdeen, Maryland 21001), the Cecil County Public Library, North East West Avenue, North East, Maryland 21901), online (106)Cecil mdta.maryland.gov/I95ETLNB/Environmental.html (see Certificate of Publications, June 20, 2018 and

Public Notice, in file). The public notice for this permit modification was published in *The Aegis* on February 17, 2021 and *The Jeffersonian* on February 16, 2021. Project plans were made available online at https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/MdTA\_I-95\_Sect-200\_Improvements.aspx (see Certificate of Publications, February 16 and 17, 2021 and Public Notice, in file). Due to changes in the limit of disturbance and mitigation, an updated adjacent property owner list was provided by MDTA for the permit modification (see Modification Application dated October 22, 2020, and as amended February 4, 2021, in file).

Under COMAR 26.23.02.02.G.1, upon receiving a complete application, the Department issues a public notice of an opportunity to submit written comments or to request a public informational hearing about the application. The public notice contains: (a) The name and address of the applicant; (b) A description of the nature and location of the proposed activity and mitigation plan; (c) Instructions for submission of written comments, requests for a public hearing, and requests to be included on the interested persons list; (d) The expiration date for the opportunity to comment or to request a public informational hearing; (e) A statement that any further notices concerning actions on the application will be provided only by mail to those persons on the interested persons list; (f) The name, address, and telephone number of a person in the Department from which information about the application may be obtained; and (g) A reference to the applicable statute or regulations governing the application process.

In compliance with COMAR 26.23.02.07, this permit modification is considered a major modification due to changes to the original permit which constitute a significant departure from its terms and conditions, including changes in the scope of the project which result in a greater adverse impact to nontidal wetlands than originally authorized. Major modifications are subject to public notice and hearing procedures required for permit applications.

A public informational hearing was requested for the initial project and was held on July 31, 2018 at the Joppa-Magnolia Volunteer Fire Company at 1403 Old Mountain Road South, in Joppa, Maryland. Comments were provided during the public notice period, during the public informational hearing, and additional correspondence was received prior to the closure of the formal record on August 14, 2018 either via phone, letter, or email. Comments received during the public comment period included questions from property owners about how their properties will be affected; inquiries regarding impacts to resources, including the location of stream impacts and their tributaries, and if additional degraded streams could be restored; questions about the purpose and need of the project and whether other forms of transportation, specifically rail transportation, had been considered; questions about whether the project as proposed would alleviate traffic issues; concerns about the protection of wetlands and the effectiveness of mitigation projects; concerns about noise associated with roadway construction; inquiries about roadway runoff; a request for independent documentation of the roadway construction; attending an advisory meeting; flooding concerns near the noise walls; and requests for access to plans and impact plates. No other comments relating to wetland or waterway impacts were received (see Public Comment Log and Public Hearing Transcript dated July 31, 2018, in file). Responses to comments raised at the public informational hearing and during the public comment within the Department's purview will be addressed in the appropriate sections that follow.

A request that MDE attend the next Joppa Community Advisory Board (Board) meeting was received during the public informational hearing. The Department's role in this project is to review proposed impacts to regulated resources. It is the Applicant's responsibility to present and explain the project as proposed. The Applicant plans to attend a future Board meeting. Leading up to the hearing, MDTA has engaged in public outreach efforts for the current project starting in December 2017, which included Baltimore and Harford County government briefings, emergency medical services (EMS) and public school transportation service meetings; Baltimore City government coordination briefings; Maryland Department of

Transportation (MDOT) and Maryland State Highway Administration (SHA) briefings; public meetings on February 26 and 27, 2018; Baltimore Metropolitan Council (BMC) Public and Technical Advisory Committee meetings; homeowner meetings; and BMC Statewide Transportation Improvement Program public meetings (see Comment Response Letter dated August 15, 2018).

Noise concerns were also mentioned during the public hearing. MDTA is installing two noise walls as part of this project; however, the determination regarding the locations of the noise walls is out of the Department's purview. In response to comments received regarding the historic Onion-Rawl House, the Applicant is reviewing the property in relation to the State of Maryland noise policy (see Hearing Transcripts, and August 17, 2018 Comment Responses, in file).

The Applicant requested a public informational hearing be scheduled and included in the public notice due to the original project receiving a public hearing request. Due to the COVID-19 pandemic, a virtual public informational hearing was held on March 4, 2021. Comments were provided during the public notice period and during the virtual public informational hearing, and additional correspondence was received prior to the closure of the formal record, which was extended to April 1, 2021 either via phone, letter, or email. Comments received during the public comment period included: concerns regarding revisions to the MD 7 Fish Passage Mitigation Site; concerns on project impacts on specific properties, such as access to property and safety, property value, and utility pole relocation; questions on project limits; requests of plans and information on impacts relating to specific properties; questions regarding the public informational hearing process; inquiries on noisewall construction limits, specifically for contract KH-3010 MD 152 to MD 24; concerns regarding noise pollution; inquiries on the location of impacted resources and mitigation sites; concerns regarding impacts to the Gunpowder River and fish; a request for downstream monitoring of sediments and other pollutants and compliance with localized and the Bay TMDL pollution diets; request for information on the percentage of impacts and mitigation occurring between Baltimore and Harford Counties; concerns on mitigation occurring in the Jones Falls watershed; requests for information on limits of the NEPA Review and if any portions are subject to an Environmental Impact Statement and Environmental Assessments; request for information on categorization of modification; requests for information on the Phase I Mitigation Plan status and whether the Phase I was put on notice; and requests for information on downstream waterways on the 303(d) list along with their respective impairments and how the mitigation plan addresses the impairments (see Public Hearing Transcript dated March 4, 2021, Public comments combined PDF, and Public comment phone log spreadsheet, in file).

Comments received during the public poster session and informational hearing included: inquiries on the Project's purpose and need, construction schedule, and other Project details such as the cost and monitoring of the toll lanes and project limits; questions on noisewall construction schedules and locations; inquiries regarding the locations and watersheds of impacted resources, including impacts occurring in the Otterpoint Creek Tier II catchment, impacts to Big Gunpowder Falls and Little Gunpowder Falls, if functional assessments of impacted wetlands were considered for mitigation, and if any designated Wetlands of Special State Concern (WSSCs) will be impacted; concerns regarding the location of the proposed mitigation sites; a question on whether mitigation sites are monitored for salinity; questions regarding the offset for impacts to migratory birds and tree mitigation; concerns about the amount of time allotted to review material before the hearing and requesting the extension of the public comment period; concerns from landowners inquiring how the project will impact their properties (e.g. noisewall locations and removal of jersey barriers); inquiries regarding stormwater management methods, design, locations and monitoring; requests for MDE to require real time monitoring to protect downstream water quality at all times; inquiries regarding how the project implicates into the MS4 and the TMDL allocations; and requests for copies of plans and NEPA documents (see Public Hearing Transcript dated March 4, 2021, in file). The applicant responded to many of the comments raised during the public hearing. The Applicant provided a correction regarding the functions and values of impacted wetlands, which were not assessed using the New England Method, but were assessed using best professional judgement and were given a high, medium, or low quality rating (see Revised Compensatory Mitigation Plan dated April 2021 and Public Hearing Transcript dated March 4, 2021 in file). Comments raised at the public informational hearing and during the public comment period that are within the Department's purview are addressed in the appropriate sections that follow. The Department responds to comments related to impacts to regulated resources, such as wetlands, wetland buffers, waterways, and 100-year nontidal floodplain. Comments or concerns regarding federal requirements were sent to the United States Army Corps of Engineers (USACE) for consideration (see Public Hearing Transcript dated March 4, 2021, Public comments combined PDF, and Public comment phone log spreadsheet, in file).

During the public informational hearing for the Permit Modification, a question was asked if the project will affect Gunpowder River near the Mariners Point Area. No impacts are proposed in the vicinity of Mariners Point (see Public Hearing Transcript dated March 4, 2021, in file).

During the Public Comment Period, a question was asked if an Independent Environmental Monitor (IEM) would be assigned to the project. An approved IEM will be required for the project (see Special Condition No. 20 of the Modification, dated May 4, 2021, in file).

#### PROJECT PURPOSE AND NEED

In order for the Department to authorize impacts to nontidal wetlands and their regulated buffers, regulated activities must be determined to be necessary and unavoidable to meet the basic project purpose. It is also important to note that the orderly development and use of land is regulated through planning and zoning controls implemented by the local government. In this particular instance, Baltimore and Harford make the decision about appropriate land use of the property. The Modification no longer includes the MD 7 Fish Passage Mitigation Site; therefore, no work is proposed in Cecil County.

The primary need for this project is to address capacity and safety needs along Section 200 of I-95 in Baltimore and Harford Counties. The purpose of this project is to address these needs and improve access, mobility and safety for local, regional, and inter-regional traffic, including passenger, freight, and transit vehicles. The MDTA plans to address the project need in Stage 1 of the I-95 Section 200 Improvements by adding a two-lane ETL on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Bradshaw Overpass (no impacts to resources), Raphel Road Overpass, and the Old Joppa Road Overpass; construction of two noise walls; utility relocations; and providing a new ITS communication system to improve operations and incident management along both northbound and southbound I-95. The modification work includes design changes, such as, a revised fence line along I-95 from MD 152 to MD 24, increase in the limits of disturbance (LOD) at the Raphel Road Intersection, full replacement of bridges over Big and Little Gunpowder Falls, various design changes to erosion and sediment control and stormwater management, transferring a portion of the work from the Section 100 project from Cowenton Road to New Forge Road that has not been constructed (originally permitted under 05-NT-0357), and the installation of two noncompliant noisewalls along **I-95 northbound and southbound.** The need for this project was identified in the I-95 Master Plan, which was adopted by MDTA in April of 2003. This master plan identified four independent projects for each section of I-95 that MDTA owns and operates in the state of Maryland, one of which being Section 200, and presented long-range transportation needs that establish clear goals for system maintenance, preservation and enhancement (see Application dated March 2, 2018, Section 200 Finding of No Significant Impact [FONSI] dated December 2010, and Modification Application dated October 22, 2020, and as amended February 4, 2021, in file).

The Applicant determined that there is insufficient capacity along Section 200 of I-95. The southbound lanes of I-95 between MD 43 and MD 24 operate at a Level of Service (LOS) D to E during the morning peak hours and the northbound lanes operate at a LOS E during PM peak hours. On Friday and weekend peak periods, traffic is operating at full capacity. Congestion is expected to grow from less than 10 to over 30 hours per week by the year 2030, which is a 300 percent increase. By 2030, weekend peak hours for Section 200 are projected to operate at a LOS F (see Section 200 FONSI dated December 2010, in file).

The Applicant also considered safety concerns when identifying the need for this project. MDTA identified the crash rate for Section 200 as approximately 12 percent higher than the rate of similar state maintained highways. Crashes identified as congestion related, including side-swipes and rear-ends, account for 50 percent of the crashes reported between 2002 and 2004. Section 200 has been identified with 34 Candidate Safety Improvement Locations (CSILs) by SHA. MDTA has determined that an increase in the number and severity of congestion related crashes are likely to increase if Section 200 congestion levels are not addressed (see Section 200 FONSI dated December 2010, in file).

As part of the FONSI Reevaluation, the Applicant conducted additional analysis and studies in 2018 and 2019 to prioritize the immediate congestion, safety, and operational concerns of the corridor, which resulted in the current project. The Applicant confirmed that the 2011 FONSI remains the current/valid NEPA document for the project. The Applicant met with FHWA in 2018 and 2019 to have a reevaluation consultation with FHWA (see Section 200 Reevaluation dated May 2018, and comment responses on March 29, 2021, in file). The Department has determined that the Applicant has satisfied the requirements for the project purpose and need.

#### **ALTERNATIVES ANALYSIS**

For projects that are not water-dependent, the Applicant must conduct an alternatives analysis to demonstrate that the project has no practicable alternative. The factors to be considered are whether the project purpose can be accomplished using one or more alternative sites in the general area; a reduction in the size, scope, configuration or density would result in less impact; the Applicant made a good faith effort to accommodate the site constraints that caused the alternative sites to be rejected; and that the regulated activity is necessary for the project to meet a demonstrated public need.

Three alternatives were chosen to be carried forward as a part of the Alternatives Retained for Detailed Study (ARDS) in the Section 200 FONSI. These alternatives were chosen based upon public feedback, engineering traffic analysis, right-of-way impacts, environmental impacts, and viability and interchange options. During the development of these alternatives, MDTA coordinated with BMC and Maryland Transit Administration (MTA) on potential maximum transit ridership. MTA's transit plan for this part of the region includes the Maryland Rail Commuter (MARC) Investment Plan and express/local bus service enhancements. A separate rail facility was not included within MTA or BMC's regional transit improvements along this I-95 corridor. Therefore, improving intermodal connectivity, including access to the existing transit and rail network, was the primary focus for determining this project's selected alternative (SA) (see Section 200 FONSI dated December 2010, email from MDTA dated August 6, 2018, and Comment Response Letter dated August 15, 2018, in file).

Alternative 1 analyzed a no-build option, would have allowed for maintenance improvements and safety upgrades including replacement of bridge decks, resurfacing of pavement, and replacement and upgrades to traffic barriers, signs and lights, while retaining the existing I-95 highway. This alternate was rejected because it would not fulfill the purpose and need of the project (see Section 200 FONSI dated December 2010, in file).

The second alternative was the GPLs Alternative, which included constructing additional GPLs along the mainline of I-95 from north of MD 43 to north of MD 22 to accommodate the proposed traffic demand. This alternative would create a total of six GPLs in each direction from the northern limit of the I-95 ETLs Project to the MD 24 interchange. This alternative would improve the configuration at the MD 152, MD 24, MD 543 and MD 22 interchanges. The GPLs Alternative was not chosen as the SA because the number of accessible travel lanes would make it difficult to implement a travel demand management program. Based on the FONSI, this option would increase congestion levels on all lanes, and has less incentive for transit or carpooling. Additionally, this alternative created the need for drivers to weave in and out of five to six lanes to exit the highway. This creates more opportunities for crashes to occur and difficulty for disabled vehicles to access the shoulder (see Section 200 FONSI dated December 2010, in file).

The third option, which was chosen as the SA, included adding ETLs to the existing roadway to accommodate the anticipated traffic demand. Under this alternative, I-95 would have four GPLs and two ETLs in each direction, extending from just north of MD 43 to MD 24. This alternative also proposed improvements to the configuration of the MD 152 and MD 24 interchanges. The SA would provide congestion management through a consistently congestion-free travel option, which would continue to be available even as traffic volumes increase over time. The ETLs are anticipated to operate at a superior LOS compared to the LOS of the GPLs in both alternatives by providing predicable and dependable travel times and speeds. Additionally, GPL drivers maximum weave is four lanes and ETL drivers is one lane, which reduces opportunities for crashes and provides easier access to the shoulder for disabled vehicles (see Section 200 FONSI dated December 2010, in file).

Since the Selected Alternative (SA) was determined, no major changes to the design have been made and only minor design changes have occurred; however, funding, as well as a series of analyses and studies conducted in 2017 and 2018 were considered when determining how to prioritize the Section 200 improvements and the project was split into two stages. The current project is referred to as Stage 1 of the Section 200 improvements which includes the area from north of MD 43 to MD 24. The current design (CD) for Phase 1 includes construction of two ETLs along northbound I-95 from Section 100 (north of MD 43) to south of MD 152 by widening into the median where possible and to the outside for the remainder. The on-ramp from MD 152 will be extended as an auxiliary lane to the MD 24/MD 924 off-ramp. Additionally, there will be construction of two noise walls, installation of ITS technology and reconstruction of the I-95 overpass bridges at Bradshaw, Old Joppa and Raphel Roads to accommodate the additional travel lanes (see Section 200 FONSI dated December 2010 and Section 200 Reevaluation dated May 2018, in file). The Department has determined that the Applicant has satisfied the requirements for the project alternatives analysis.

#### AVOIDANCE AND MINIMIZATION

If the alternative site analysis is accepted, the Applicant must demonstrate that adverse impacts to nontidal wetlands, their regulated buffers, and the 100-year frequency floodplain are necessary and unavoidable.

The Applicant has taken measures to avoid and minimize impacts to regulated resources to the greatest extent practicable while still meeting the purpose and need of the project. During the planning and design phases, the following design changes were made in order to avoid and minimize impacts: the proposed ITS fiber-optic cable installation will occur parallel to I-95 between the guardrail and the light poles, where the least natural resources are present; abutments for noise walls proposed adjacent to bridges will not be constructed in streams or the floodplain; widening will occur within the median and an extra lane will be created using the existing outside shoulder between New Forge Road and Bradshaw Road to avoid impacts along the roadway; roadway shoulders have been reduced in width from the American Association of State Highway and Transportation Officials (AASHTO) preferred width to the minimum width; and retaining walls have been incorporated in six areas to minimize impacts to resources along the roadway by

eliminating the need for an extended roadway slope (see Application dated March 2, 2018 and Avoidance and Minimization of Impacts Memo, in file). Since obtaining the original permit, the following design changes have been made in order to further avoid and minimize impacts. Within contract KH-3009, the Big and Little Gunpowder Falls bridges were redesigned to eliminate existing piers within the rivers, and to use of precast concrete girders to eliminate the potential for paint fragments entering the stream; additional retaining walls were utilized to maximize stormwater management and limit impacts to adjacent resources; bioswales for stormwater management are proposed between the edge of the shoulder and noise barrier walls in areas where roadway disturbance is unavoidable; the LOD around 8 of 11 retaining walls was reduced by minimizing required excavation; the proposed fiberoptic cable installation has been relocated to the median and within existing or proposed impervious areas where possible; steeper slopes were utilized throughout the project corridor, limiting impacts to downstream channels; fence replacement has been minimized to areas with degraded fence only; and proposed impacts to several resources have decreased while impacts to WUS 2A, BRBR-WUS2, BRBR-WUS4 and BRBR-WUS7 have been avoided. In contracts KH-3013 and KH-3016, the LOD around BRBR-WUS9 was minimized, all but a small amount of temporary impacts to GP.IR-WUS4 were avoided, and impacts to BRBR-WET1 were avoided and total impacts to its buffer were minimized. Within contract KH-3014, varying grades and slopes along the noisewall reduce wetland impacts and soil disturbance; grass swales for stormwater management are proposed in areas where disturbance due to the roadway project is unavoidable; a grade beam is proposed over the existing drainage culvert to avoid impacts to resources; repairs to fencing are only proposed where impacts to resources can be avoided; existing drainage patterns at proposed stormwater outfalls were replicated by maintaining or reducing outfall volumes for all but one outfall within the LOD; attenuation facilities have been reshaped; and tree protection and erosion and sediment control measure boundaries have been tightened. Additionally, redundant erosion and sediment controls are proposed to provide extra protection from sediment laden water from entering regulated resources (see Modification Application dated October 22, 2020, and as amended February 4, 2021, KH-3009 Redline #1 Avoidance and Minimization Report dated February 16, 2021, KH-3013 and KH-3016 Noise Wall Narrative dated August 19, 2020, and KH-3014 Avoidance and Minimization of Impacts at PS&E Narrative, in file).

Avoidance and minimization for the deferred portion of Section 100 includes proposed retaining walls, steepened embankments, and high headwalls, which were negotiated during the interagency review process. The USACE developed a series of Design Criteria, referenced in their permit. Special condition No. 1 was added to the initial permit for emphasis of continued avoidance and minimization efforts (see Permit dated October 10, 2018 and Department of the Army Permit dated January 7, 2019, in file).

MDTA has determined that the proposed impacts are unavoidable in order to meet the purpose and need of the project. The majority of proposed impacts are associated with proposed widening, stormwater management practices, and noise walls required to mitigate noise impacts to adjacent communities. The majority of resources being impacted are lower quality. MDTA anticipates that stormwater management practices will improve the quality of adjacent resources that currently receive large amounts of unattenuated stormwater runoff from I-95. The impacts due to outside widening between MD 24 and MD 152 are unavoidable due to median site area constraints and drainage conflicts. Oversized headwalls will be used to reduce the length of the culvert extensions in order to minimize stream impacts. MDTA proposes to use the steepest slopes allowable on the backside of required Environmental Site Design (ESD) facilities to reduce wetland impacts. Two intermittent channels located along the I-95 roadway embankment will be relocated and stabilized onsite instead of being piped. Waters V is located in the Lower Winters Run watershed between Winters Run and MD 24, and GPJR-WUS1/1A, transferred from Section 100, is located in the Lower Gunpowder Falls watershed, north of East Joppa Road (see Application dated March 2, 2018, and Avoidance and Minimization of Impacts Memo, and Modification Application

dated October 22, 2020, and as amended February 4, 2021, in file). The primary reasons for impact increases from this permit modification is the transferal of yet to be completed Section 100 impacts, construction of two non-compliant noisewalls, and the identification of new and/or expanded resources within both the Section 100 and 200 corridors. The Big and Little Gunpowder Falls bridges were found to be structurally deficient and in need of replacement, resulting in increased impacts to WUS 6A and WUS 16A. Additionally, small increases to a few resources occurred due to refinements in stormwater management and erosion and sediment control design (see Modification Application dated October 22, 2020, and as amended February 4, 2021, in file).

During the original hearing, questions were asked regarding what the Department considers permanent versus temporary impacts. A wetland impact is typically considered permanent when regulated activities change the topography and hydrology of the wetland, which causes the wetland to lose its functions and values. Impacts are considered temporary when the effected wetland will be restored to original grade with no loss of hydrology or functions. Permanent impacts to wetlands require mitigation, and temporary impacts to wetlands or impacts to the wetland buffer or expanded buffer do not require mitigation (see Maryland Nontidal Wetland Mitigation Guidance dated January 2011, in file).

The design is subject to change due to the design schedule and phasing of this project and any changes relating to impacts will be reviewed and approved by the Department. MDTA is investigating additional avoidance and minimization measures as the design progresses, including use of additional retaining walls, directional drilling of fiber-optic cable beneath resources, and in-kind replacement of regulated roadside ditches onsite. Special Condition No. 1 has been included in the Permit in order to ensure avoidance and minimization measures continue throughout the design-build and construction process. The Permit also requires strict adherence to the "Best Management Practices for Working in Wetlands and Waterways" in Special Condition No. 3. (see Application dated March 2, 2018, Avoidance and Minimization of Impacts Memo and Permit dated October 10, 2018, in file). The Department has determined that the applicant has and will continue to minimize impacts to nontidal wetlands and waterways to the extent practicable.

#### WATER QUALITY

Erosion and sediment control measures and stormwater management practices are designed to prevent the degradation of ground and surface water quality. Sediment pollution is addressed under Maryland's Erosion and Sediment Control Act. The law mandates local Soil Conservation Districts to review and approve erosion and sediment control plans developed in accordance with State standards. The Department's programmatic responsibilities are limited to promulgating regulations, and developing standards, ordinances, and other criteria necessary to administer an erosion and sediment control program, including program oversight and delegation of enforcement authority to local governments. As a result, Maryland Department of the Environment is responsible for the review and approval of an erosion and sediment control plan for the proposed project.

Stormwater discharges are addressed under Maryland's Stormwater Management Act. The law requires counties and municipalities to "adopt ordinances necessary to implement a stormwater management program." The Department's programmatic responsibilities are limited to promulgating regulations defining the minimum features of a stormwater ordinance and program oversight. The Department also reviews the stormwater management program of the counties and municipalities and their field implementation and requires corrective action where a program is found deficient. For most projects, compliance with the County-issued stormwater management approval ensures that the project will not degrade water quality, but for projects affecting Tier II waters, the Department will require a separate anti-degradation analysis. In this particular case, however, the Department is responsible for the review and approval of the project's stormwater management plan.

Stormwater Management for the project will be provided in accordance with the Maryland Stormwater Management and Erosion & Sediment Control Guidelines for State and Federal Projects, February 2015 and the 2000 Maryland Stormwater Design Manual, with revisions based on the Stormwater Management Act of 2007 requiring ESD to the Maximum Extent Practicable (MEP). At a minimum, water quality management will be required for 1-inch of rainfall over 100-percent of the proposed new impervious area and 50-percent of the proposed reconstructed impervious area. Runoff will be treating using MDE approved ESD practices including, but not limited to, bio-swales, grass channels, micro-bioretention, rain gardens, and submerged gravel wetlands, which includes treatment of runoff and additional de-icing materials needed for the increased number of travel lanes. Bioswales proposed along the edge of the roadway collect sediment prior to reaching any wetlands or streams. In addition, full ESD volume (ESDv) will be provided to the MEP. The ESD standard is met when the post-development hydrology is restored to natural hydrologic conditions assuring channel stability is maintained, pre-development groundwater hydrology is replicated, and nonpoint source pollution is minimized for the 1-year 24 hours frequency storm event. This requires capturing and treating from 1-inch to 2.6 inches of rainfall depending on the site conditions. Where practicable the ESD practices will be sized to manage the required ESDv. As needed, structural practices, including detention ponds and underground detention facilities, will be designed to provide Channel Protection volume (CPv) where the full ESDv cannot be provided in the ESD practices. Cpv is 12- or 24- hour extended detention of the post-developed 1-year, 24 hour storm event (See email from MDTA Project Manager dated July 16, 2018, in file). A Water Quality Certification has been issued by MDE and contains conditions to ensure that state water quality standards are met for all designated Use Classifications of receiving water bodies (see WQC dated October 10, 2018, in file). In addition, MDTA operates under a National Pollutant Discharge Elimination System (NPDES) Phase II General Permit for Multiple Separate Storm Sewer System (MS4) for roadway facilities. As part of this permit, the MDTA is required to meet minimum control measures including post construction stormwater management, construction site runoff, illicit discharge detection and elimination, personnel education and outreach, public involvement and outreach, and pollution prevention and good housekeeping. Under the permit, MDTA is also required to submit an annual report to MDE to show compliance with this permit (see Public Hearing Transcript dated March 4, 2021 and public comments combined PDF, in file).

During the application review process, the Department verifies that appropriate Best Management Practices are incorporated into the Sediment and Erosion Control Plans and the Stormwater Management Plans as listed above to protect the State's water resources. The Applicant proposes to incorporate appropriate Best Management Practices during construction to meet State water quality standards to capture and filter sediment, prior to it leaving the project site. Sediment traps, temporary gabion outlet structures, and temporary stone outlet structures are proposed throughout the site to capture sediment laden runoff prior to discharging to downstream receiving waters. The Applicant's plans will include a detailed sequence of construction with staged erosion and sediment control measures and construction work. Special Conditions Nos. 4-8 and 10 have been included in the Permit to require MDTA to submit all plans for Department review and approval prior to construction in regulated resources (see Permit dated October 10, 2018 and Public Hearing Transcript dated March 4, 2021 and Public comments combined PDF, in file).

During the permit modification public informational hearing, a question was asked about stormwater runoff specifically along Fosters Run, Winters Run and Haha Branch. The proposed project will not impact Haha Branch or Fosters Run. Stormwater management has been designed in accordance with MDE regulations and procedures, including in the vicinity of Winters Run (see Public Hearing Transcript dated March 4, 2021, in file).

Streams adjacent to this project and its mitigation sites are designated as Use I (Carsins Run), Use I-P (Winters Run and its tributaries), Use III (Little Gunpowder Falls and its tributaries) and Use IV

(Gunpowder Falls and its tributaries). Maryland Department of Natural Resources (DNR) Environmental Review Program reviewed this project and stated that Gunpowder Falls, Little Gunpowder Falls, Winters Run, and support anadromous fish species, including Yellow Perch. No in-stream work is permitted during the period of March 1 to June 15 in Use I streams; February 15 through June 15 in Use I and I-P streams with the presence of Yellow Perch; October 1 through June 15 in Use III streams with the presence of Yellow Perch; and February 15 through June 15 in Use IV streams with the presence of Yellow Perch, inclusive, during any year. The Modification does not include the MD 7 Fish Passage Mitigation Site, so impacts are no longer proposed to the tributary to Northeast Creek. The design plans will be reviewed by the Department prior to construction of the culvert extensions and/or replacement, bridge widenings, and stream relocation and/or restoration, and in accordance with COMAR 26.17.04 (Construction on Nontidal Waters and Floodplains). Hydrology and Hydraulic reports for the project shall be submitted to the Department for approval prior to any bridge widening, culvert extension or replacement, and/or stream relocation and restoration in-stream construction as required by Special Condition Nos. 7 and 8 of the Permit (see DNR Environmental Review Program Letters dated September 13, 2017 and March 2, 2018, Application dated March 2, 2018, and Permit dated October 10, 2018 in file). Since the original permit, the applicant continues to adhere to Special Condition Nos. 7 and 8 of Permit No. 18-NT-0086/201860368 effective October 10, 2018, for submittal of Stream Relocation and Hydrology and Hydraulics Analysis Reports (see Permit dated October 10, 2018, in file).

During the hearing, it was noted that the streams were difficult to locate on the project plans. The Applicant added labels and overview maps to aid in locating the USGS named stream resources. Concerns regarding flooding near a proposed noise wall were also received, and any noise walls within the 100-year floodplain will be reviewed by the Department. Under COMAR 26.17.04.11.B(6), proposed projects which increase the risk of flooding to other property owners are prohibited, unless there is property owner sign-off, purchase of the affected area, placement of the area in a designated flood easement, or the issue is addressed by other means acceptable to the Department (see Permit dated October 10, 2018, in file, and COMAR 26.17.04.11.B(6)).

During the permit modification public informational hearing, a comment was received asking what treatment will be used to manage salinity and sediment runoff, and if the mitigation sites will be monitored for salination. Based on information provided, MDTA continues to evaluate the most environmentally sensitive yet cost-effective de-icing materials, including contracting with the University of Alabama to investigate commercially available alternatives, and uses the most appropriate de-icing techniques and materials. Additionally, MDTA has adapted several strategies to minimize and optimize usage of de-icing materials; since treatment of stormwater for chlorides is not feasible with current technologies, the best approach for protection of water quality is minimization of chloride use. MDTA pretreats roads with brine, which has been found to decrease overall need for chloride usage throughout a storm. MDTA also strategically times application of deicing materials by only salting at the beginning of a winter event to prevent road pack, plowing during the event, and then salting at the end of the event to clear any remaining accumulation. MDTA also trains their personnel on the most effective application methods. (see Public Hearing Transcript dated March 4, 2021, in file).

#### Tier II Antidegradation Review

Maryland is required by the Clean Water Act to develop policies, guidance, and implementation procedures to protect and maintain existing high quality waters such as Tier II waters and prevent degradations of existing water quality conditions. Tier II waters have chemical or biological characteristics that are significantly better than the minimum water quality requirements. All Tier II designations in Maryland are based on having healthy biological communities of fish and aquatic insects. Enhanced erosion and sediment

control measures are required along the Tier II corridor in order to meet the State's antidegradation policy and to protect and maintain existing high quality waters.

A portion of the project from MD 152 to MD 24 is located within the Otter Point Creek 1 Tier II Catchment, which is located within the greater Bush River watershed (021307). This catchment has been determined to have No Remaining Assimilative Capacity and any impacts to the catchment require antidegradation review by the Department. MDTA is required to incorporate best management practices for working in Tier II catchments into their erosion and sediment/stormwater designs to the maximum extent possible per the Department's direction. Some examples include, but are not limited to, installation of redundant dewatering practices within Tier II buffers, use of baffle boards within sediment ponds to maximize detention time, and installation of enhanced filtering controls (super silt fence) near existing water resources in order to protect water quality. Additionally, the Applicant is required to replant trees within the same Tier II catchment. The Applicant has identified onsite locations for replanting and is working with Harford County to find locations to plant the remaining trees within the Tier II watershed. Special condition 2 has been added to the Permit regarding these requirements (see Permit dated October 10, 2018, and Harford County Director of Planning and Zoning letter dated September 17, 2018, in file). Since the initial permit issuance, the majority of the work in the Tier II catchment had been completed as part of contract KH-3010. The projected Tier II reforestation mitigation requirement is 7.77 acres. A site search was performed to identify mitigation opportunities on publicly owned properties within the Otter Creek catchment. The privately owned Willoughby Beach Road site in Edgewood, MD has been identified as a potential planting site and is estimated to provide a minimum of 5-6 acres of planting to mitigate for Tier II impacts. Due to changes in construction schedules within the Otter Creek catchment, Phase I impacts are being integrated with the overlapping Phase II contract (KH-3019). In order to streamline and simplify submittals for projects within the Tier II, a programmatic approach has recently been agreed upon with the Environmental Assessment and Standards Program (EASP) for Tier II approvals. MDTA is coordinating with EASP for Tier II impacts associated with the I-95 ETL program. On December 17, 2020, the Antidegradation Implementation Coordinator of the EASP stated that they have no further comments relating to Tier II waters for the modification application (see Tier II Procedures Letter, Tier II Agency Coordination dated December 17, 2020, Public Hearing Transcript dated March 4, 2021, and Public Hearing Comment Response email dated March 29, 2021, in file). The Department has determined that the project is consistent with State water quality requirements.

#### **ENDANGERED SPECIES**

Once the application is received, it goes through a screening process. This screening process uses Geographical Information System (GIS) to determine the proposed site location and whether or not there are designated resources in the area such as rare, threatened or endangered species. If there are resources identified, the Division sends copies of the proposed plan to the appropriate agencies to review and send comments.

The GIS screening identified rare, threatened or endangered species within the project area (see Application dated March 2, 2018, in file). The United States Fish and Wildlife Service (USFWS) determined there were no federal records for rare, threatened, or endangered species exist within the vicinity of the Stage 1 of I-95 Section 200 project. DNR Wildlife and Heritage Service determined there were no state or federal records for listed plant or animal species within the Stage 1 of I-95 Section 200 project area. After further review of the proposed project and an expansion of the limits of disturbance (LOD) due to a bridge widening, DNR Wildlife and Heritage Service determined that a state-listed rare species (Ostrich Fern, *Matteuccia struthiopteris*) and a state-listed highly rare species (Flat-Spiked Sedge, *Carex planispicata*) have been documented in the area of the Gunpowder Falls crossing, and that a survey should be conducted if bridge work is proposed in this location. The Department provided comments to MDTA along with

DNR's concerns on April 12, 2018 and received comment responses on May 25, 2018. DNR provided additional comments to MDTA's responses on July 16, 2018, including requesting a survey be conducted for the two rare species identified, and additional details regarding the bridge work over Gunpowder and Little Gunpowder Falls. MDTA responded to DNR's additional comments on August 15, 2018, and DNR approved the results of the RTE survey that found no supporting habitat, individuals, or populations of the two rare species, and therefore no potential impact to the species (see MDNR WHS Letters dated August 22, 2017 and email dated July 11, 2018, Comment Response Letter dated May 25, 2018, DNR Rare, Threatened or Endangered Survey Approval dated August 21, 2018, and USFWS Online Certification Letters dated February 5, 2018 in file). By online certification dated February 1, 2021, the USFWS determined the federally threatened Northern Long-eared Bat (Myotis septentrionalis) has been known to occur within the project area. The USFWS determined the project may affect the northern long-eared bat; however, no further action is needed in respect to the northern long-eared bat. By email dated February 25, 2021, DNR Wildlife and Heritage Service determined there were no concerns for Bog Turtle within Phase 1 of I-95 Section 200 project area (see USFWS Updated Online Certification Letter and Verification Letter for the Northern Long-eared Bat dated February 1, 2021 and DNR Email dated February 25, 2021, in file).

On March 9, 2018, DNR Wildlife and Heritage Service determined there are records for the state-listed threatened Logperch (*Percina bimaculata*) occurring downstream of the Carsin's Run Stream Restoration mitigation site in Swan Creek. DNR Wildlife and Heritage Service encouraged the Applicant to adhere strictly to all appropriate best management practices for sediment and erosion control during all work at this site to reduce the likelihood of adverse impacts to this and other aquatic species. The USFWS determined no federal records for rare, threatened, or endangered species exist within the vicinity of the Carsin's Run Stream Restoration mitigation site (see DNR Wildlife and Heritage Service letter dated March 9, 2018 and email dated March 26, 2018, and USFWS Online Certification Letter dated February 7, 2018, in file). Construction of the Carsin's Run Stream Restoration mitigation site is near completion and appropriate best management practices have been used during construction. By online certification dated August 28, 2020, the USFWS stated except for occasional transient individuals, no federally proposed or listed threatened or endangered species are known to occur within the Carsin's Run project area and therefore, no further consultation is needed (see USFWS Online Certification Letter dated August 28, 2020 and Carsin's Run Stream Restoration KH-3028-0000 Redline 1 Plans dated March 2, 2020, in file).

On March 14, 2018, DNR Wildlife and Heritage Service determined there are no State or federal records for listed plant or animal species within the vicinity of the MD 7 Fish Passage Restoration mitigation site. The USFWS determined the threatened Bog Turtle (*Clemmys muhlenbergii*) may exist within the vicinity of the MD 7 Fish Passage Restoration mitigation site. On March 20, 2018, the USFWS stated the proposed project is not likely to adversely affect the Bog Turtle and no further coordination is required (see DNR Wildlife and Heritage Service Letter dated March 14, 2018, USFWS Species List dated February 20, 2018 and USFWS Letter dated March 20, 2018 in file). **The MD 7 Fish Passage Restoration Mitigation Site has been removed from this permit.** 

#### HISTORIC PRESERVATION

The application was also screened using GIS for historical and archeological resources. The GIS screening identified potential historic properties within the project area (see Application dated March 2, 2018, in file). On July 25, 2017, MDTA notified the Maryland Historic Trust (MHT) that the project may have an effect on historic properties. Several historic properties were identified from the National Register of Historic Places and the Maryland Inventory of Historic Properties. On August 22, 2017, MHT determined no historic properties will be affected by the project (see Application dated March 2, 2018 and MHT coordination dated July 25, 2017 and August 22, 2017, in file). By letter dated September 24, 2020 and

October 20, 2020, MDTA notified MHT they have determined the proposed work resulting from the modification will have no adverse effect on historic properties. On November 5, 2020, MHT concurred no adverse effect by the project (see MHT Coordination dated September 24, 2020 and October 20, 2020, in file).

On February 8, 2018, MDTA notified MHT of the Carsin's Run Stream Restoration mitigation project and MHT determined that no historic properties will be affected by the undertaking on March 8, 2018. On February 23, 2018, MDTA notified MHT of the MD 7 Fish Passage Restoration mitigation project and MHT determined that no historic properties will be affected by the undertaking on March 8, 2018 (see MHT coordination dated February 8 and 23 and March 8, 2018, in file).

Concerns were provided to the Department from an Interested Person regarding their home, the Onion-Rawl House, which is registered as a Maryland Historic Landmark. MDTA plans to continue to coordinate with the property owner, review the State of Maryland Noise Policy, and to discuss reforestation with the property owner as a means to minimize potential visual impacts to the historic property (see August 17, 2018 Comment Responses, in file).

#### **MITIGATION**

Mitigation is only a consideration in a permit decision after steps have been taken to avoid and minimize impacts to nontidal wetlands and their regulated buffers, and nontidal waterways, including the 100-year floodplain. The Permittee is required to mitigate for the loss of 21,353 square feet of forested nontidal wetland, 728 square feet of scrub-shrub nontidal wetland and 6,396 square feet of emergent nontidal wetland for impacts from the highway project by creating the equivalent of at least 42,706 square feet of forested nontidal wetland, 1,456 square feet of scrub-shrub nontidal wetland and 6,396 square feet of emergent nontidal wetland. Additionally, the Permittee is required to mitigate for the loss of 4,005 linear feet of perennial and intermittent waterways. Permanent impacts to wetlands at the stream restoration sites will be replaced at each respective site (see Application dated March 2, 2018, Phase II Mitigation Plan dated September 2018, Permit dated October 10, 2018, and the Phase II Mitigation Approval Letter dated October 10, 2018, in file). Based on the modification, the Applicant is required to mitigate for the loss of 81,405 square feet of forested nontidal wetland, 1,135 square feet of scrub-shrub nontidal wetland, 29,868 square feet of nontidal emergent wetland and 420 square feet of vernal pool for impacts from the highway project by creating the equivalent of at least 162,810 square feet of forested nontidal wetland, 2,270 square feet of scrub-shrub nontidal wetland, 29,868 square feet of emergent nontidal wetland and 1,260 square feet of vernal pool. Permanent stream impacts for the project total 6,323 linear feet; however, permanent stream impacts from the stream mitigation projects (690 linear feet of perennial stream at WUS 18A, and 78 linear feet of perennial and 868 linear feet of intermittent stream at Carsin's Run), permanent stream impacts from the pier removal in Big Gunpowder Falls (WUS 6A, 32 linear feet of perennial stream), work within an existing roadway culvert (WUS 103, 91 linear feet of intermittent stream) and on-site stream relocation (Waters V relocation, 850 linear feet of intermittent stream) are considered self-mitigating and were removed from the total mitigation required. Therefore, the Permittee is required to mitigate for the loss of 3,714 linear feet of perennial and intermittent waterways. This total includes Section 100 stream impacts that were transferred to this permit, which include a total of 192 linear feet of impact to perennial stream and 1,579 linear feet of impact to intermittent stream. Of this total, 82 linear feet of perennial stream and 1,179 linear feet of intermittent stream have already been mitigated for under the Section 100 permit at the White Marsh Run Mitigation Site; therefore, the remaining 110 linear feet of perennial stream impact and 400 linear feet of intermittent stream impact require mitigation for the Section 100 non-compliant noise wall construction, leaving a total of 2,453 linear feet of required stream mitigation under the Section 200 Phase I permit modification (see Modification Application dated October 22, 2020, and as amended February 4, 2021 and Modification dated May 4, 2021, in file).

The mitigation process is in accordance with COMAR, and through coordination with the USACE under the Federal Mitigation Rule adopted April 10, 2008. MDE reviewed proposed mitigation for this Permit, including additional mitigation to offset increased unavoidable impacts associated with this modification, in accordance with current regulations and guidance, and determined the proposed mitigation plan acceptable (see Permittee-Responsible Nontidal Wetland Mitigation Approval Process in Maryland dated December 16, 2019, Site Selection Criteria of Wetland and Waterway Mitigation Sites dated December 26, 2017, and Code of Maryland Regulations 26.23.04.03, in file).

A question about appropriate mitigation needs was asked during the poster session of the public hearing. The amount of mitigation required is based on the cover type classification assigned to each permanently impacted delineated wetland, with higher required ratios for vernal pools (3:1), forested and scrub-shrub wetlands (2:1), than for emergent wetlands (1:1) (see Public Hearing Transcript dated March 4, 2021 and Public comments combined PDF, in file).

MDTA performed a mitigation site search to compensate for wetland and stream impacts associated with the original I-95 ETL Section 200 Phase I authorization. Mitigation site search efforts started in 2009 and continued through 2020. The mitigation site search considered available mitigation banking credits, followed by on-site mitigation, and then off-site mitigation projects. At the time of the site search, no mitigation bank credits were available in the 8-digit HUC watershed (Gunpowder-Patapsco, 02060003); on-site mitigation for a portion of the impacts will be completed at WUS 18A, as well as in-kind replacement of streams on-site as appropriate (see MDTA Mitigation Site Search document, in file).

During the comment period following the public hearing, a question was raised in regards to how the mitigation sites were chosen and why the majority of the mitigation will occur off-site. Mitigation site search efforts spanned from 2009 through 2020. During this time, over 25 mitigation sites were reviewed and considered and additional concrete lined channels were evaluated for restoration potential. An initial mitigation plan was created in 2012 for the Section 200 ultimate build-out. This mitigation site search was conducted using GIS, aerial imagery, and field reviews. MDTA also coordinated with multiple agencies for aid in identification of existing opportunities, field reconnaissance, and assessment of sites; those agencies included USACE, MDE, the Environmental Protection Agency (EPA), the US Department of Agriculture, and the Harford County Departments of Planning and Public Works. Potential on-site mitigation was identified and prioritized. The 2012 mitigation plan also included stream mitigation at Carsins Run, Grays Run, and Winters Run, all of which were considered on-site mitigation due to their locations within the limits of Section 200. Of these sites, following additional study, only enhancement of Carsins Run was determined feasible and appropriate. The restoration efforts at Carsins Run have been completed and credits from these efforts have been applied to the authorization issued for Phase II of the I-95 ETL Section 200 project under Permit No. 19-NT-0150. Previously proposed mitigation at Winters Run consisted of replacement of the existing structure carrying I-95 over that stream as well as removal of concrete from the stream banks and floodplain. Under the current scope of highway improvements, changes to the Winters Run Bridge structure are not proposed. Restoration downstream of the project was determined to not be reasonable or feasible due to access issues, as well as the potential for impacts to other sensitive resources, including wetlands and the Chesapeake Bay Critical Area. Mitigation along Grays Run is also not being pursued, due to large portions of the site being located on private property (see MDTA Mitigation Site Search document and Revised Compensatory Mitigation Plan dated April 2021, in file).

On-site mitigation within MDTA's right of way was prioritized to offset impacts associated with the Permit Modification. In general, the project area provides limited opportunity for on-site mitigation. Space to provide well-designed mitigation resulting in appreciable uplift is limited by the size of the right-of-way, existing topography, stormwater management needs, and a 108-inch water main which cannot be impacted. WUS 32A and WUS 33A were considered but ultimately discarded due to lack of functional uplift. Wetland impacts that were deferred from Section 100 to the current permit include mitigation from the previously approved and constructed Whitemarsh Run mitigation site. USACE identified sites in Harford and Cecil Counties that both MDE and USACE deemed suitable as compensatory mitigation for impacts associated with Section 200 Phase I. These included Lilly Run within the City of Havre de Grace and Maryland 7 Fish Passage in Charlestown. MDTA pursued mitigation at both sites, but both were ultimately infeasible due to property owner issues and other constraints, resulting in their removal from the Section 200 Phase I mitigation package. In 2019, MDTA reached out to Harford County's Watershed Protection and Restoration Office to determine if there were any opportunities to partner with the County on wetland and stream restoration projects, Small Watershed Action Plans were reviewed to identify suitable projects. Through the coordination MDTA learned that the priority sites had already been completed and the remaining sites were determined impractical due to property ownership and other logistical considerations. In 2020, MDTA reached out to Baltimore County's Department of Environmental Protection and Sustainability to determine if there were any opportunities to partner with the County on wetland and stream restoration projects. MDTA was informed that the County was reserving all potential sites to meet TMDL requirements A portion of the Phase I mitigation package occurs at the Eccleston Mitigation Site. The site is located within the Gunpowder-Patapsco (02060003) watershed and was approved by both MDE and USACE as suitable for providing the remainder of the compensatory mitigation needs for unavoidable impacts associated with the I-95 ETL Section 200 Phase I project. The Eccleston site consists of a large-scale restoration of an upper-watershed, heavily agricultureimpacted portion of Jones Falls and its floodplain, as well as preservation of adjacent high-quality wetlands and stream. The proposed mitigation will include restoration of multiple first-order tributaries, second- and third-order tributaries, and floodplain wetlands. Restoration of one large, cohesive system is generally considered to result in greater ecological lift than restoration of several smaller, disconnected sites, which is part of the reasoning behind agency preference for the establishment of mitigation banks (see MDTA Mitigation Site Search document, in file).

In addition, the Eccleston Mitigation Site is located within the upper portion of the watershed, so restoration at the site will not only improve water quality onsite but also contribute to improved water quality downstream. The Eccleston project addresses the decline of the upper reaches of the Jones Falls, a cold-water brown trout fishery which has been studied by Maryland DNR and others since the 1980s. MD DNR has utilized trout from the Eccleston site for collection of roe and distribution of stocked fish throughout the state. The fishery has been in decline and now has fewer trout and more warm water species intrusion. The stream has the distinction of being the only trout stream that flows into the limits of Baltimore City. The Eccleston site provides some of the spawning grounds for that trout population, which will be protected in perpetuity through an easement held by a non-profit entity (see MDTA Mitigation Site Search document, in file). In the absence of available mitigation bank credit within the Gunpowder-Patapsco watershed, the Eccleston Site has been determined to provide suitable mitigation (see MDTA Mitigation Site Search document, in file).

Both the impacts for this project and the proposed off-site mitigation sites Whitemarsh Run and Eccleston, are located within the Gunpowder-Patapsco (02060003) watershed, which is the same 8-digit HUC watershed as the impacts (see Public Hearing Transcript dated March 4, 2021, Public comments combined PDF, and MDTA Mitigation Site Search document, in file).

During the poster session of the public hearing, a question was raised about how the bridge extensions over Big and Little Gunpowder Rivers will be mitigated. The bridge extensions will be clear span, and an existing pier within Big Gunpowder Falls will be removed as part of the bridge replacement. Mitigation for the impacts to the Big and Little Gunpowder Falls rivers will be achieved through the WUS 18A and Eccleston stream mitigation projects (Public Hearing Transcript dated March 4, 2021, in file).

Wetland mitigation will now occur at both White Marsh Run and Eccleston Mitigation Sites. The Whitemarsh Run Wetland Mitigation Site was constructed in 2014 to compensate for impacts associated with the I-95 Section 100 project (05-NT-0357/200660011) and future build-outs within the I-95 corridor. The site is located within the Bird River 8-digit MDE watershed (02130803) and Gunpowder-Patapsco 8-digit HUC (02060003), adjacent to Route 40 between Reames Road and White Marsh Boulevard in Baltimore County. At the site, wetlands were preserved, and created, including the construction of three vernal pools. After five years of monitoring at the White Marsh Run Wetland Mitigation Site, MDE has determined the site created a total of 307,105 square feet of wetland mitigation credit, which left a surplus of 154,449 square feet of credit after mitigation requirements for the I-95 Section 100 project were accounted for. Of the surplus, 147,306 square feet of wetland mitigation credit will be utilized to fulfill the needs of Phase I of the I-95 Section 200 Improvements Project's wetland mitigation requirements. The Eccleston Mitigation Site is currently under design to compensate for impacts associated with multiple phases of the I-95 Section 200 project. The site is located within the Jones Falls MD watershed adjacent to Greenspring Valley Road and Park Heights Avenue in Baltimore County. At the site, wetlands are proposed to be preserved, enhanced and created. The mitigation site will create 639,591 square feet of wetland mitigation credit. Wetland mitigation for the I-95 Section 200 Phase II project utilized 301,046 square feet of wetland credit at this site leaving a surplus of 338,545 square feet. This modification to the I-95 Section 200 Phase I project will utilize 48,902 square feet of wetland credit, leaving a surplus of 289,643 square feet of wetland mitigation credit (see Revised Compensatory Mitigation Plan dated April 2021, Compensatory Mitigation Plan Approval Letter dated May 4, 2021, and Modification dated May 4, 2021, in file).

Stream mitigation for impacts to perennial and intermittent streams will now occur both on-site at the WUS 18A Stream Mitigation Site and off-site at the Eccleston Stream Mitigation Site. The Carsin's Run Stream Restoration Mitigation Site has been deferred to mitigate for impacts for the Section 200 Phase II project, and will no longer be utilized for impacts to Phase I. Stream Waters V will be replaced in-kind onsite within the Lower Winters Run watershed (02130702). These streams will be relocated in-kind adjacent to their existing location. WUS 18A is an onsite perennial stream located within the Little Gunpowder Falls 8-digit MDE watershed (02130804) and Gunpowder-Patapsco 8-digit HUC (02060003) in the MDTA right-of-way, just northwest of I-95 near mile marker 73.0 in Harford County. MDTA plans to restore erosive banks and a perched floodplain along WUS 18A for a total of 630 linear feet of stream credit. The Eccleston Mitigation Site proposes to create 9,732 linear feet of stream mitigation credit by restoring, preserving and creating streams along with providing stream buffer enhancement. Stream mitigation for the Section 200 Phase II project will utilize 6,851 linear feet of stream credit. This modification to the I-95 Section 200 Phase I project will utilize 2,081 linear feet of stream credit, leaving a surplus of 800 linear feet of stream mitigation credit at the Eccleston site (see Modification Application dated October 22, 2020, and as amended February 4, 2021, Waters V Relocation Memo dated February 1, 2021, GPJR-WUS1 and GPJR-WUS1A Relocation Memo dated February 18, 2021, and revised Compensatory Mitigation Plan dated April 2021, in file). Excess stream and wetland credit achieved at these mitigation sites may be applied towards future Section 200 build-outs if approved by the Department (see Application dated March 2, 2018, Phase II Mitigation Plan dated September 2018, Phase II Mitigation Approval Letter dated October 10, 2018 and MDTA email dated August 6, 2018, in file).

MDTA is responsible for monitoring and ensuring successful performance of the compensatory mitigation sites. Annual stream monitoring of the Carsin's Run Stream Restoration Mitigation Site, and the onsite stream restoration of WUS 18A will be conducted for three out of five years, with Monitoring Reports submitted to the Department by December 31 of each year. The Carsin's Run Stream Restoration Mitigation Site has been deferred to mitigate for impacts for Section 200 Phase II; however, all monitoring requirements remain the same under this permit modification. Changes in channel crosssection, pattern and profile, bed materials, channel stability, structure stability and condition, and vegetation viability will be evaluated through the monitoring. Monitoring reports will contain the project overview and assessment; monitoring requirements and performance standards; summary of data collected during each monitoring visit including photos, vegetation success, soils and hydrology data; maps and plans showing data points, photo locations, and other pertinent features of the project site; and conclusions discussing the progress of the mitigation site, potential remediation measures, and whether performance standards are being met. The Whitemarsh Run Wetland Mitigation Site has completed its 5-year wetland mitigation monitoring requirement and is currently in its fourth year of stream monitoring. Mitigation at this site is required to meet performance standards for created and enhanced wetland vegetation in years two, three and five; and for created wetland hydrology and hydric soils by the completion of the five-year monitoring period. Vernal pool and invasive species must also be met by the completion of the five-year monitoring period. Performance standards are outlined in the Whitemarsh Run Mitigation Site Monitoring Plan. As described above, final wetland credits have been modified from initial proposed credits described in the Whitemarsh Run Mitigation Site Monitoring Plan based on the fifth-year wetland monitoring report and field reviews (see Year 5 White Marsh Run Wetland Monitoring Report dated January 6, 2021, Revised Compensatory Mitigation Plan dated April 2021, and Compensatory Mitigation Plan Approval Letter dated May 4, 2021, in file). Annual monitoring reports are required to be submitted to the Department by December 31 of each year, and will include performance of wetland vegetation in the created and enhanced wetland areas, development of hydrology and soils in the created wetland area, performance of constructed vernal pools, documentation of invasive species throughout the site, and documentation of problem areas identified with potential corrective remedial measures (see Whitemarsh Run Mitigation Site Monitoring Plan dated December 2014, Phase II Mitigation Plan dated September 2018, Phase II Mitigation Approval Letter dated October 10, 2018, and MDTA email dated August 6, 2018, in file).

MDTA will continue to monitor and manage each mitigation site until each has met performance standards and been deemed to be self-sustaining by the Department. MDTA is the responsible party for long-term management of each site. MDTA will implement adaptive management strategies if necessary by working with the Department to agree upon and implement corrective measures, which could include options such as invasive species management, and installation of monitoring devices to sure hydrology is adequate. As a state agency, MDTA has been financially assured to construct Stage 1 of the I-95 Section 200 Improvements project, which includes compensatory mitigation construction and monitoring and long-term maintenance of each mitigation site (see Whitemarsh Run Mitigation Site Monitoring Plan dated December 2014, Revised Compensatory Mitigation Plan dated April 2021, and Compensatory Mitigation Plan Approval Letter dated May 4, 2021, in file).

# STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER AND SCIENCE ADMINISTRATION

#### MODIFICATION OF PERMIT

PERMIT NUMBER: 18-NT-0086/201860368

EFFECTIVE DATE: May 4, 2021

EXPIRATION DATE: October 10, 2028

PERMITTEE: Maryland Transportation Authority

8019 Corporate Drive, Suite F

Baltimore, MD 21236 Attn: Mr. Brian Wolfe



IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(a), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04, 26.23.01 AND 26.08.02, NONTIDAL WETLANDS & WATERWAYS PERMIT NUMBER 18-NT-0086/201860368, ISSUED TO MARYLAND TRANSPORTATION AUTHORITY, ("PERMITTEE"), IS HEREBY MODIFIED BY THE WATER AND SCIENCE ADMINISTRATION ("ADMINISTRATION") AS DESCRIBED BELOW:

To authorize an increase of permanent impacts to 60,472 square feet of forested nontidal wetland, 407 square feet of scrub-shrub nontidal wetland, 23,472 square feet of emergent nontidal wetland, 188,343 square feet of 25-foot nontidal wetland buffer, 19 linear feet of perennial stream, 610 linear feet of intermittent stream, and temporary impacts to 275 linear feet of perennial stream, 596 linear feet of intermittent stream and 7,998 square feet of 100-year nontidal floodplain. This modification also includes a decrease of permanent impacts to 61,426 square feet of 100-year nontidal floodplain, and temporary impacts to 3,770 square feet of forested nontidal wetland, 171 square feet of emergent nontidal wetland and 2,070 square feet of 25-foot nontidal wetland buffer. In total, the modified permit authorizes permanent impacts to 81,825 square feet of forested nontidal wetland, 1,135 square feet of scrub-shrub nontidal wetland, 29,868 square feet of emergent nontidal wetland, 282,816 square feet of 25-foot nontidal wetland buffer, 2,105 linear feet of perennial stream, 4,218 linear feet of intermittent stream, 193,262 square feet of 100-year nontidal floodplain, and temporary impacts to 19,160 square feet of forested nontidal wetland, 10,363 square feet of emergent nontidal wetland, 42,618 square feet of 25-foot nontidal wetland buffer, 721 linear feet of perennial stream, 596 linear feet of intermittent stream and 34,653 square feet of 100-year nontidal floodplain. The change in impacts is the result of design changes, such as, a revised fence line along I-95 from MD 152 to MD 24, increase in the limits of disturbance (LOD) at the Raphel Road Intersection, full replacement of bridges over Big and Little Gunpowder Falls including removal of existing instream piers, various design changes to erosion and sediment control and stormwater management, transferring a portion of the work from the Section 100 project from Cowenton Road to New Forge Road that has not been constructed (originally permitted under 05-NT-0357), and the installation of two noncompliant noisewalls along I-95 northbound and southbound.

#### 1. <u>To add the following Special Conditions:</u>

19. <u>Partially/Temporarily Impacted Wetlands/Waterways:</u> At the completion of construction, the Permittee shall demonstrate to the satisfaction of the Administration that any partially/temporarily impacted wetlands/waterways have not suffered a loss of functions and values as a result of the impacts, including wetlands adjacent to project Limits of Disturbance. The Administration may participate in field assessments to determine current status of these wetlands and may make

- recommendations for their restoration. The Permittee shall mitigate for any loss of functions and values in accordance with regulatory standards and the approved mitigation plans. No materials, equipment, debris, or excavated soils will be stockpiled or stored within temporarily impacted wetlands / buffers without specific written approval from the Administration.
- 20. Environmental Monitor: Prior to the start of construction, the Permittee shall retain a qualified Independent Environmental Monitor (IEM) that is independent from the Permittee, design consultants, and construction contractors working on the project. The Administration shall review and approve the qualifications of the IEM. The Permittee shall retain the IEM to assess compliance with all conditions of this and other applicable permits and environmental regulations. The IEM shall:
  - Review design submittals and construction activities for compliance with all conditions of this and other applicable permits and environmental regulations;
  - b. Report findings directly and concurrently to the Water Management Administration Nontidal Wetlands and Waterway Construction Divisions (the "Divisions"), and the Army Corps of Engineers (Corps), notifying them and the Permittee immediately of any reported or observed violations or non-compliance issues within the terms or conditions of this Permit, the Water Quality Certification, or approved plans and specifications;
  - c. Document impacts to regulated resources by developing and maintaining a detailed tracking list of impacted resources;
  - d. Assist with identification of ongoing opportunities for further avoidance and minimization of impacts to regulated environmental resources and protection of water quality.

#### 2. To revise General Condition No. 19 as follows:

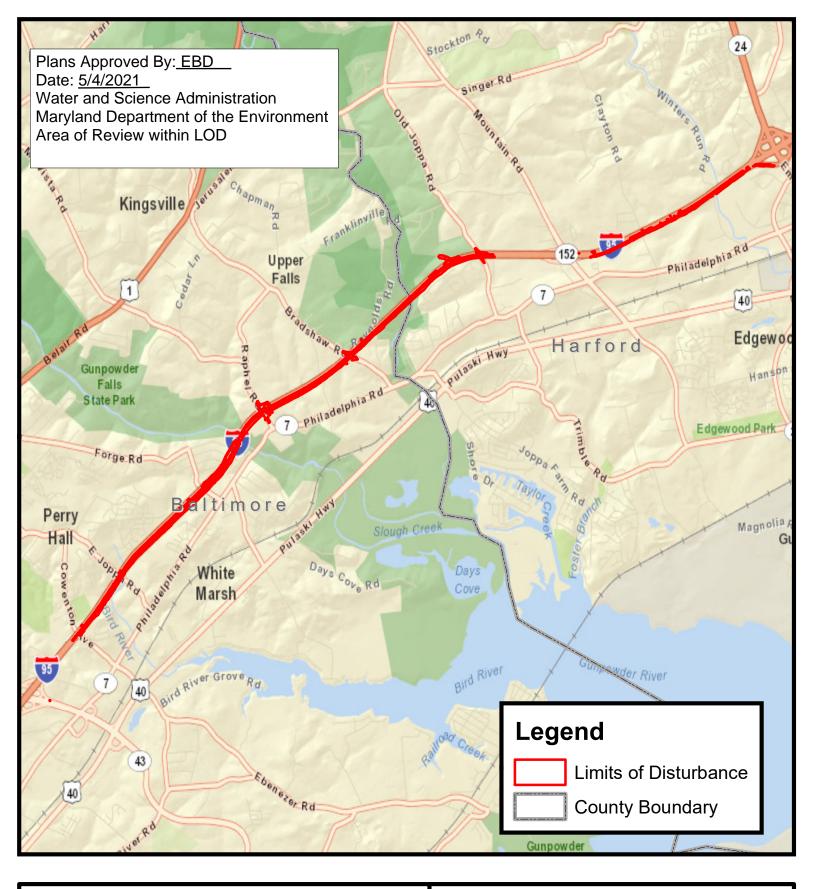
19. **Mitigation**: Permittee shall mitigate for the loss of 81,405 square feet of forested nontidal wetland, 1,135 square feet of scrub-shrub nontidal wetland, 29,868 square feet of emergent nontidal wetland, 420 square feet of vernal pool, and 3,714 linear feet of perennial and intermittent streams by creating the equivalent of at least 162,810 square feet of forested nontidal wetland, 2,270 square feet of scrub-shrub nontidal wetland, 29,868 square feet of emergent nontidal wetland, 1,260 square feet of vernal pool, and restoring 3,714 linear feet of perennial and intermittent streams, in accordance with the approved Phase II Mitigation Plan approved by the Mitigation and Technical Assistance Section ("Section") of the Department, pursuant to COMAR 26.23.04. Permanent wetland impacts from the stream restoration sites will be replaced at a 1:1 ratio at the respective restoration sites. The White Marsh Mitigation Site is located adjacent to Route 40 between Reames Road and White Marsh Boulevard in Baltimore County. The Jones Falls Eccleston Mitigation Site is located adjacent to Greenspring Valley Road and Park Heights Avenue in Baltimore County. Onsite stream restoration of WUS 18A is located with the MDTA right-of-way, just northwest of I-95 near mile marker 73.0 in Harford County. Impacts from the Carsin's Run Stream Restoration Mitigation Site located within the MDTA right-of-way just north of the I-95/MD 22 interchange and west of I-95 in Harford County are included in this Permit, but mitigation credits will now be used for the Section 200 Phase II Project (19-NT-0150). The Permittee shall successfully construct the mitigation site and meet project standards and other requirements, as specified in the Approval Letter and COMAR 26.23.04, in advance or concurrently with the activities authorized in this Permit. In the event of discrepancy with the mitigation requirements found in this Condition, the standards and requirements set forth in Approval Letter shall govern. The Permittee is required to notify the Section upon the start of grading and the completion of

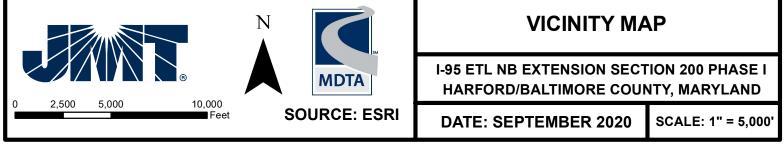
planting of the mitigation project. The Permittee shall submit monitoring reports for the mitigation project to the Section as specified in the Approval Letter. If the Permittee as stated in the Permit, changes, the Permittee must notify the Section. If the mitigation obligation is to be transferred to another party, the Permittee must notify the Section.

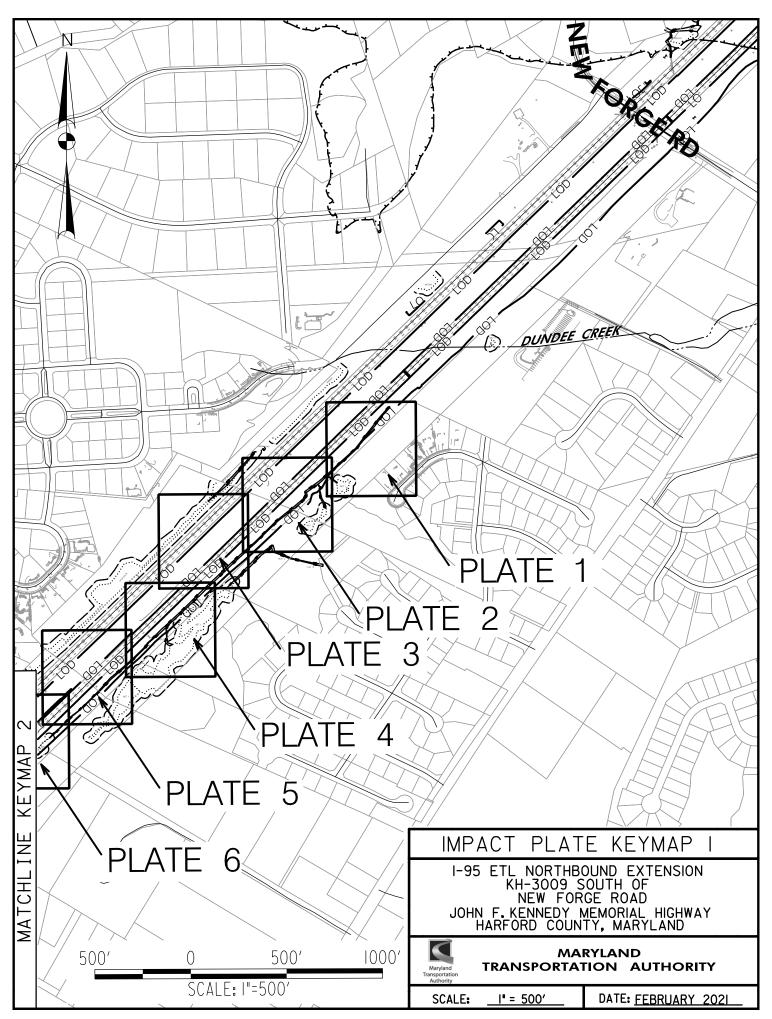
THIS MODIFICATION SHALL BE CONSIDERED AS PART OF NONTIDAL WETLANDS & WATERWAYS PERMIT NUMBER 18-NT-0086/201860368. ALL OTHER CONDITIONS AND ELEMENTS OF THE PERMIT REMAIN IN EFFECT.

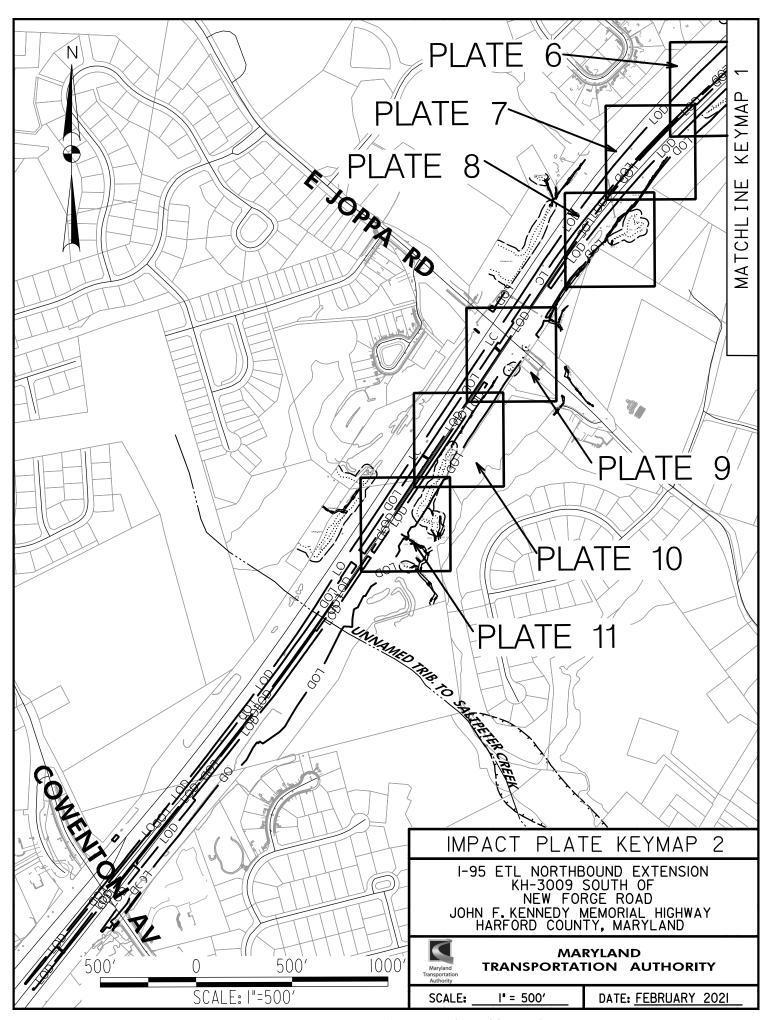
Heather L. Nelson Program Manager Wetlands and Waterways Program

cc: Nick Ozburn, U.S. Army Corps of Engineers MDE Compliance Program









<u>LEGEND</u>	
LIMIT OF DISTURBANCE	LOD
RIGHT-OF-WAY	
100-YEAR FLOODPLAIN	$\overline{}$
WUS BOUNDARY	wus
WETLAND BOUNDARY	• • • • • • •
WETLAND BUFFER BOUNDARY	—— в ——
PROPERTY BOUNDARY	
EXISTING 2' CONTOUR	
WUS IMPACT PERMANENT	
WETLAND IMPACT PERMANENT	
WETLAND BUFFER IMPACT PERMAMENT	

### IMPACT PLATE LEGEND

I-95 ETL NORTHBOUND EXTENSION
KH-3009 SOUTH OF
NEW FORGE ROAD
HARFORD COUNTY, MARYLAND



MARYLAND TRANSPORTATION AUTHORITY

SCALE: N.T.S. DATE: FEBRUARY 2021

#### LEGEND

PROPOSED CONTOUR

STABILIZED CONSTRUCTION ENTRANCE

SUPER SILT FENCE

PORTABLE SEDIMENT TANK

PUMP AROUND PRACTICE

SAND BAG DIVERSION

PROPOSED PIPE AND CULVERT/ RIP RAP OUTFALL PROTECTION

PROPOSED BMP FOOTPRINT AND CHECKDAM STORM DITCH -----90 —

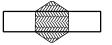


——— SSF ——

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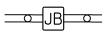






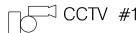


PROPOSED INTELLIGENT TRANSPORTATION SYSTEMS STRUCTURES











#### IMPACT PLATE LEGEND

I-95 ETL NORTHBOUND EXTENSION
KH-3009 SOUTH OF
NEW FORGE ROAD
HARFORD COUNTY, MARYLAND



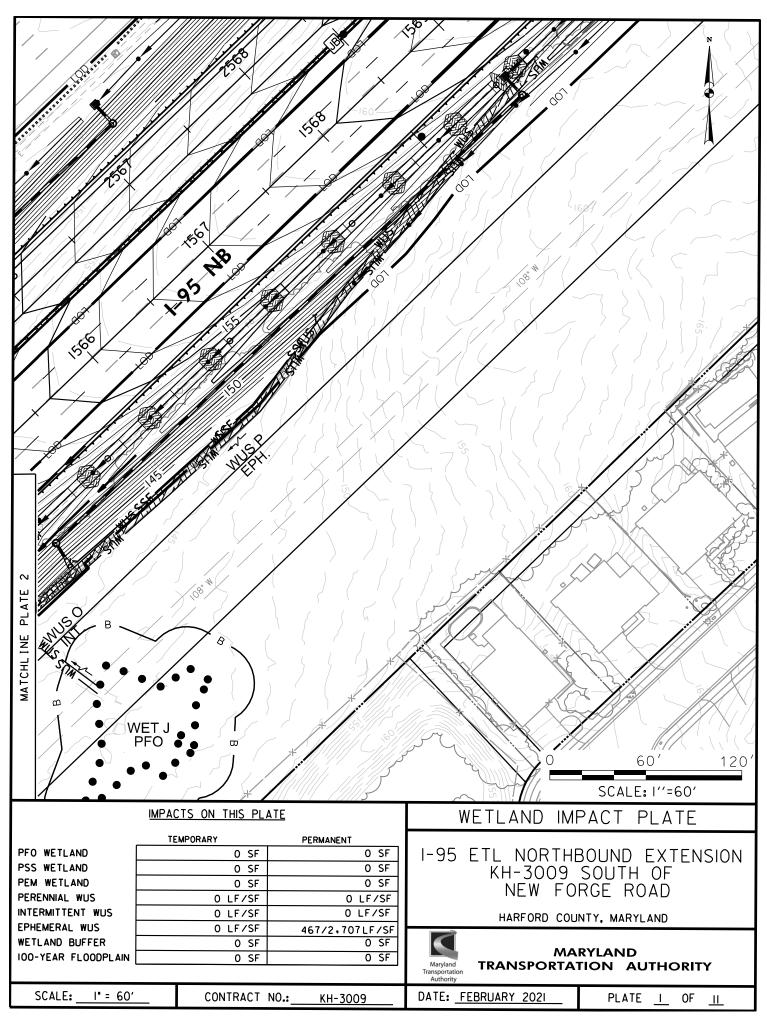
MARYLAND TRANSPORTATION AUTHORITY

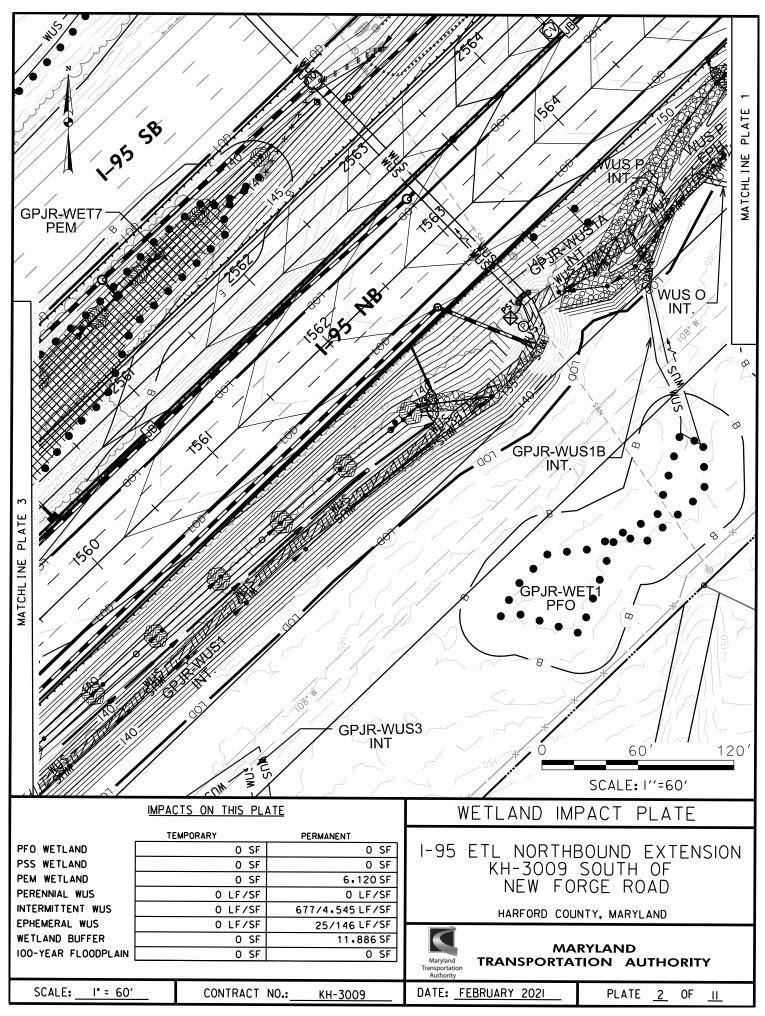
SCALE: N.T.S.

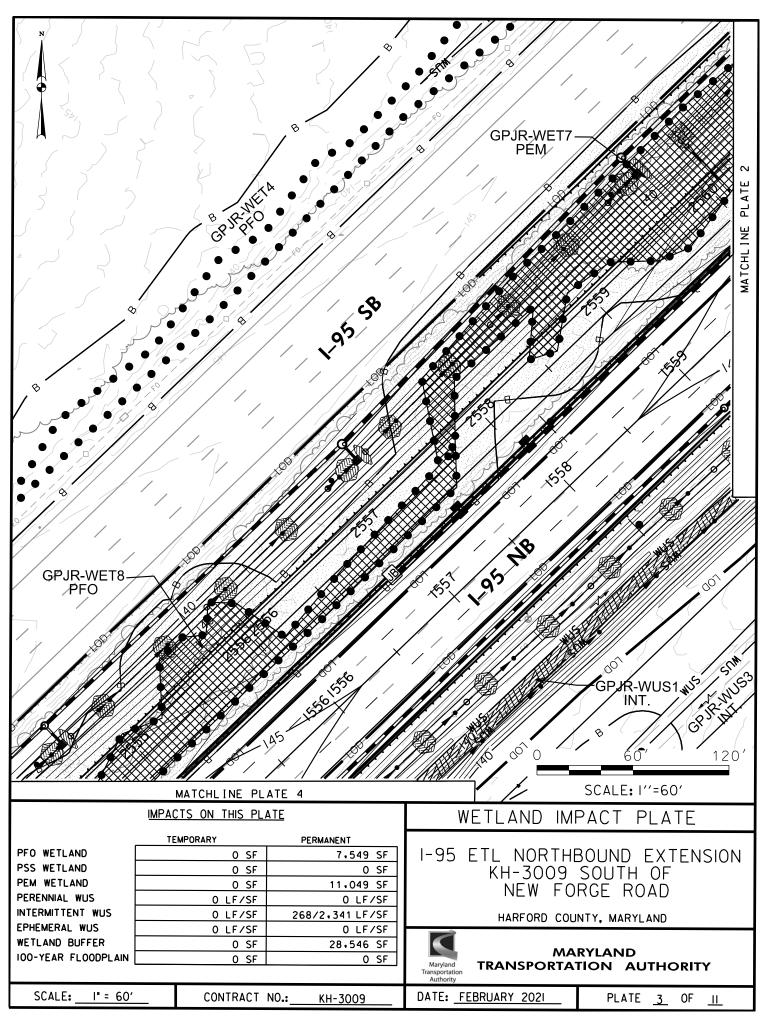
DATE: FEBRUARY 2021

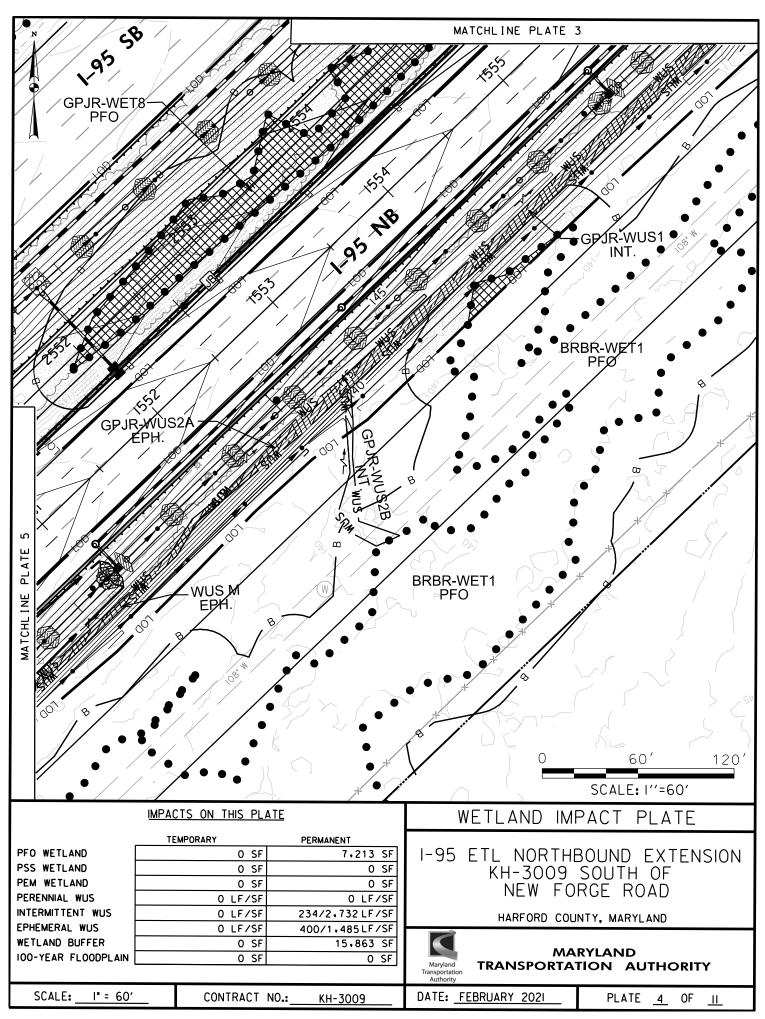
KH-3009 South of New Forge Road Wetland Impact Summary Table											
Plate/Plan Sheet No.	Resource ID	PEM W	/etland	PSS W	etland	PFO W	etland/	25-foot Wetland Buffer			
		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent		
		SF	SF								
PLATE 2	GPJR-WET7	0	6,120	0	0	0	0	0	11,886		
PLATE 3	GPJR-WET7	0	11,049	0	0	0	0	0	28,546		
PLATE 3	GPJR-WET8	0	0	0	0	0	7,549				
PLATE 4	BRBR-WET1	0	0	0	0	0	464	0	2,518		
PLATE 4	GPJR-WET8	0	0	0	0	0	6,749	0	13,345		
PLATE 6	GPJR-WET6	0	0	0	0	0	4,305	0	11,738		
PLATE 6	WET H	0	1,317	0	0	0	0	0	11,721		
PLATE 7	GPJR-WET5	0	0	0	0	0	1,051	0	7,343		
PLATE 9	WET F	0	365	0	0	0	0	0	4,307		
PLATE 10	BRBR-WET22	0	1,020	0	0	0	0	0 7 204			
PLATE 10	BRBR-WET22	0	0	0	966	0	0	0	7,204		
PLATE 11	BRBR-WET22	0	5,864	0	0	0	0	0	12,267		
Total		0	25,735	0	966	0	20,118	0	110,875		

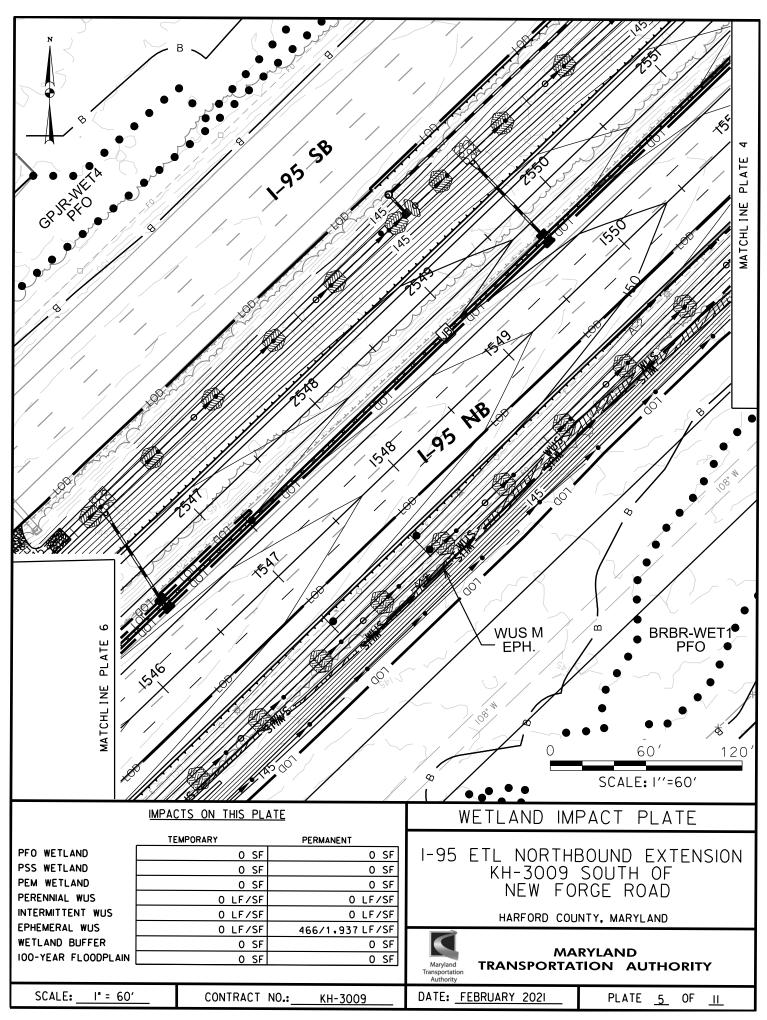
KH-3009 South of New Forge Road WUS Impact Summary Table															
Plate/Plan Sheet No.	Resource ID	Perennial WUS				Intermittent WUS				Ephemeral WUS				100-Year Floodplain	
		Temp	orary	ry Permanent		Temporary Perm		Perm	anent	Temp	oorary Perm		anent	Temporary	Permanent
			SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
PLATE 1	WUS P	0	0	0	0	0	0	0	0	0	0	467	2,707	0	0
PLATE 2	WUS O	0	0	0	0	0	0	7	21	0	0	0	0	0	0
PLATE 2	WUS P	0	0	0	0	0	0	114	700	0	0	25	146	0	0
PLATE 2	GPJR-WUS1	0	0	0	0	0	0	448	3,024	0	0	0	0	0	0
PLATE 2	GPJR-WUS1A	0	0	0	0	0	0	76	700	0	0	0	0	0	0
PLATE 2	GPJR-WUS1B	0	0	0	0	0	0	32	100	0	0	0	0	0	0
PLATE 3	GPJR-WUS1	0	0	0	0	0	0	268	2,341	0	0	0	0	0	0
PLATE 4	GPJR-WUS1	0	0	0	0	0	0	208	2,623	0	0	0	0	0	0
PLATE 4	GPJR-WUS2B	0	0	0	0	0	0	26	109	0	0	0	0	0	0
PLATE 4	GPJR-WUS2A	0	0	0	0	0	0	0	0	0	0	127	790	0	0
PLATE 4	WUS M	0	0	0	0	0	0	0	0	0	0	273	695	0	0
PLATE 5	WUS M	0	0	0	0	0	0	0	0	0	0	466	1,937	0	0
PLATE 6	WUS M	0	0	0	0	0	0	0	0	0	0	107	249	0	0
PLATE 7	WUS K	0	0	0	0	0	0	0	0	0	0	244	412	0	0
PLATE 8	WUS K	0	0	0	0	0	0	0	0	0	0	122	219	0	0
PLATE 9	BRBR-WUS1	0	0	44	429	0	0	0	0	0	0	0	0	0	0
PLATE 11	WUS F	0	0	0	0	0	0	0	0	0	0	47	59	0	0
PLATE 11	BRBR-WUS8	0	0	38	309	0	0	0	0	0	0	0	0	0	0
Total		0	0	82	738	0	0	1,179	9,618	0	0	1,878	7,214	0	0

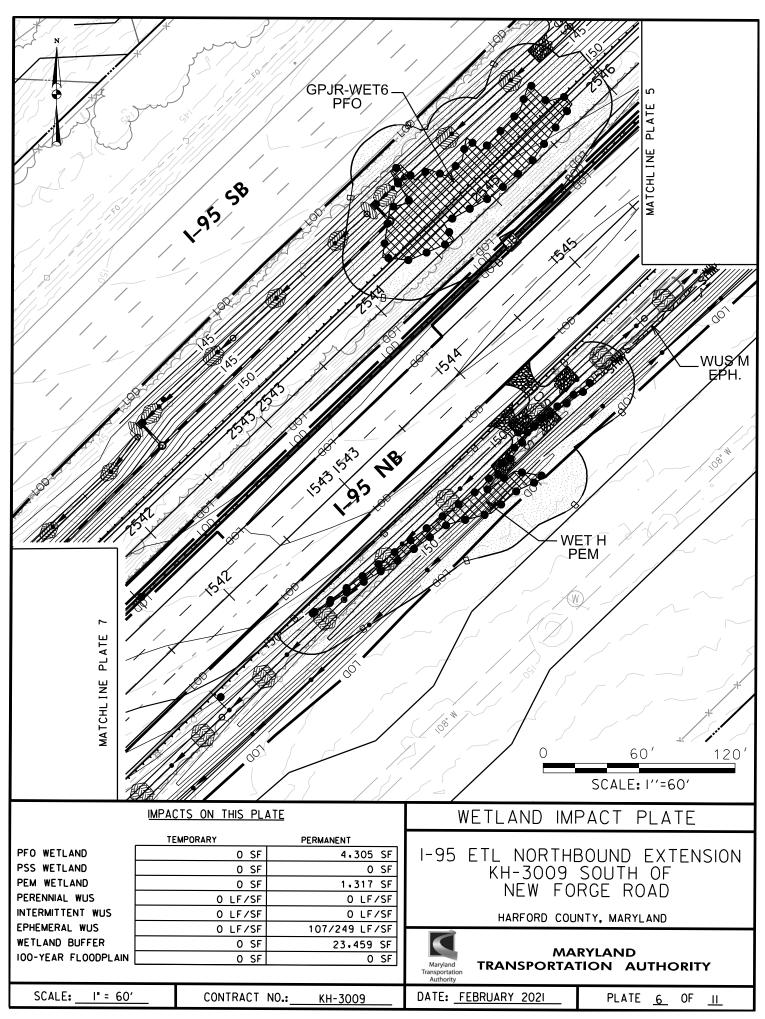


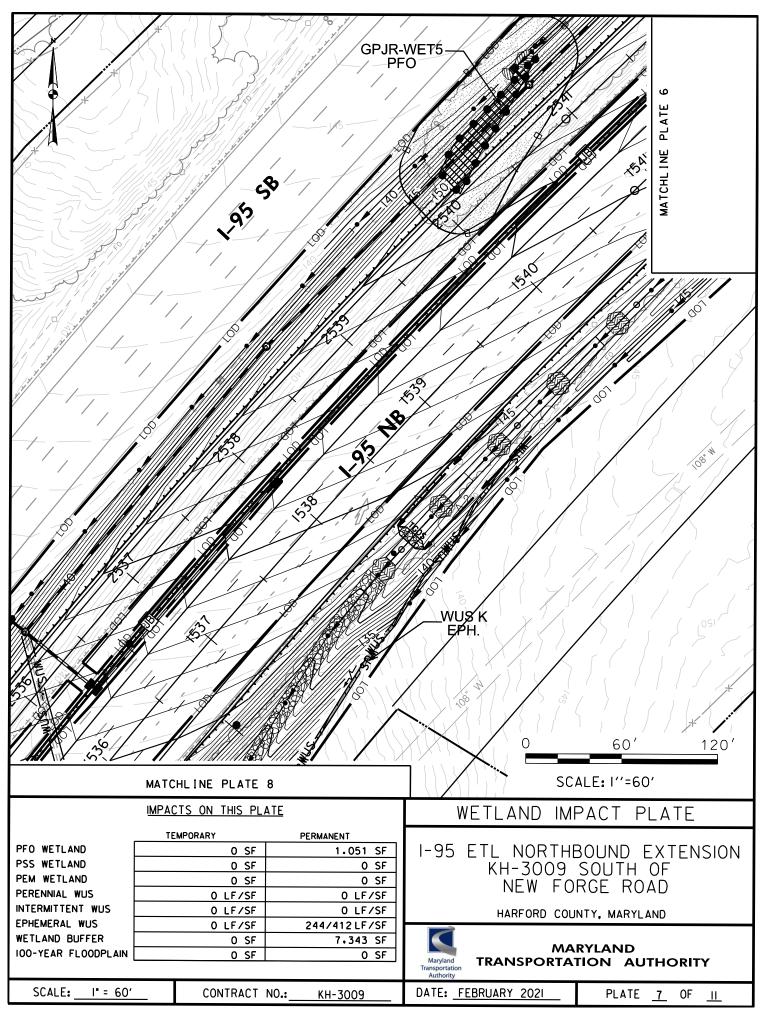


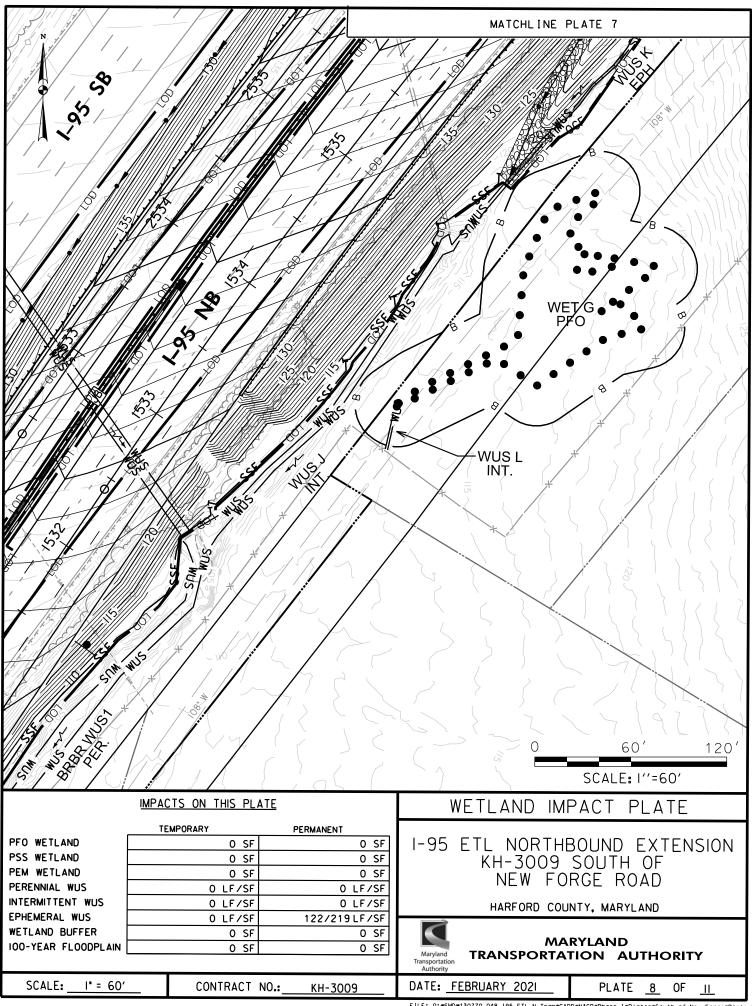


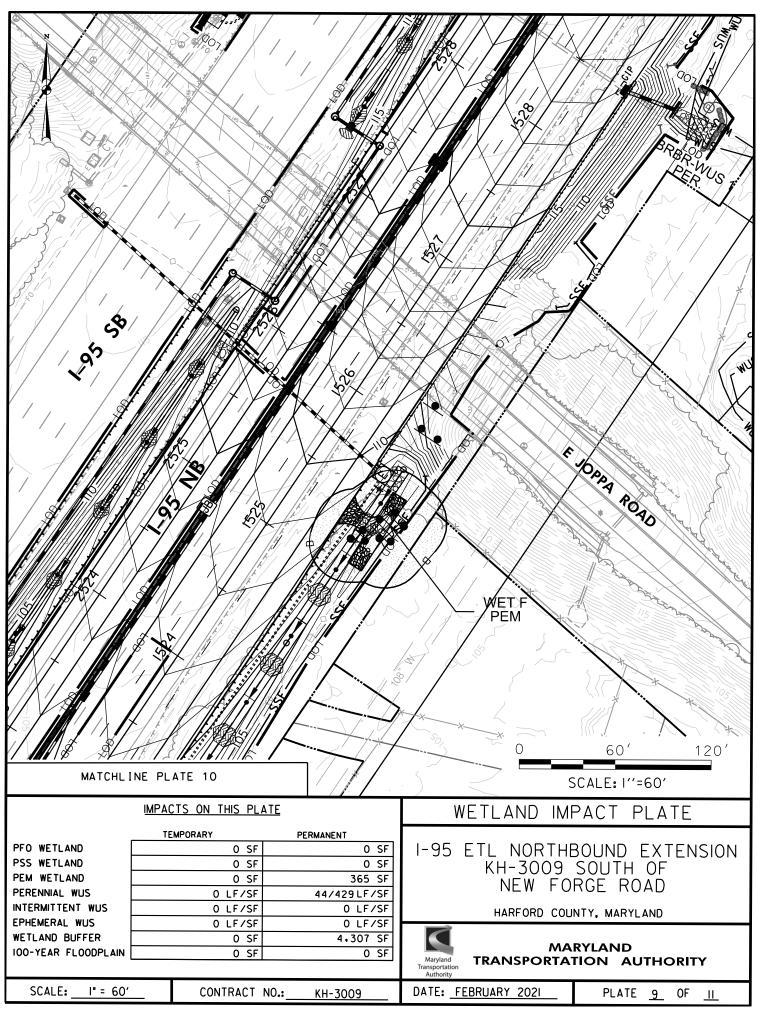


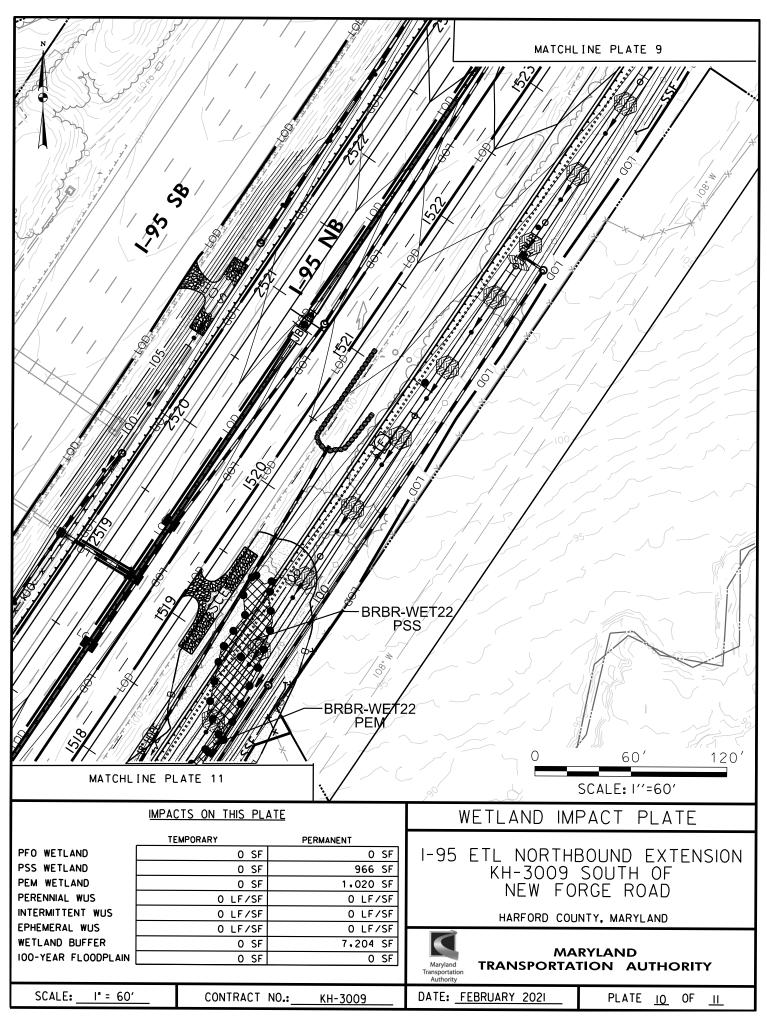


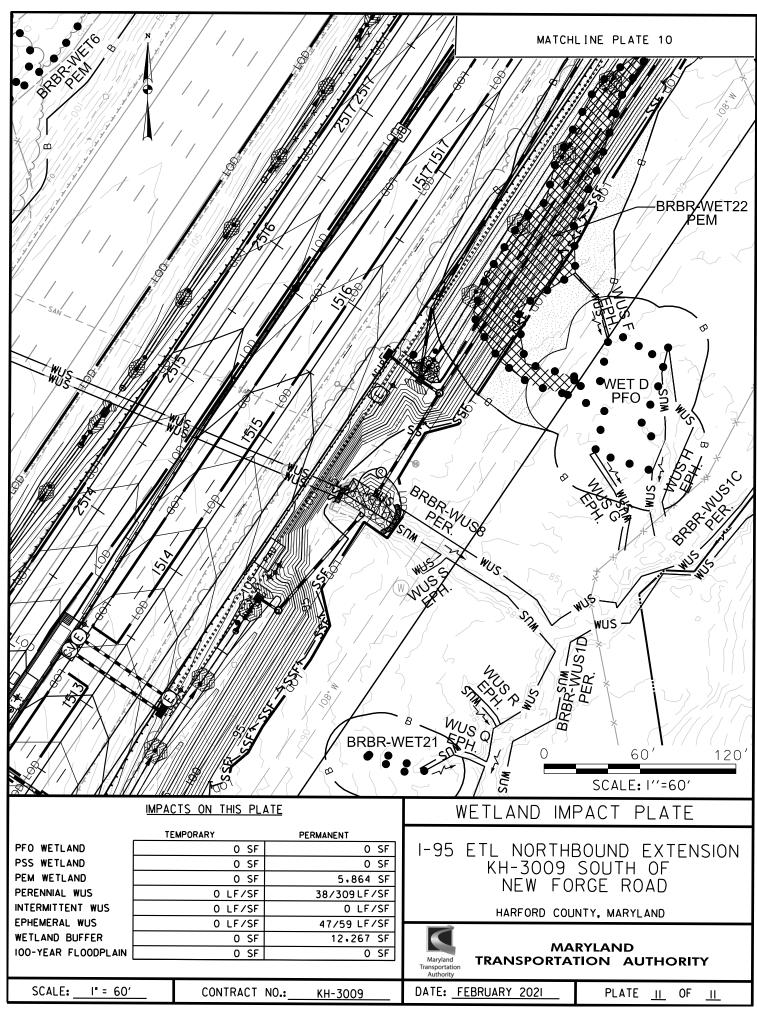


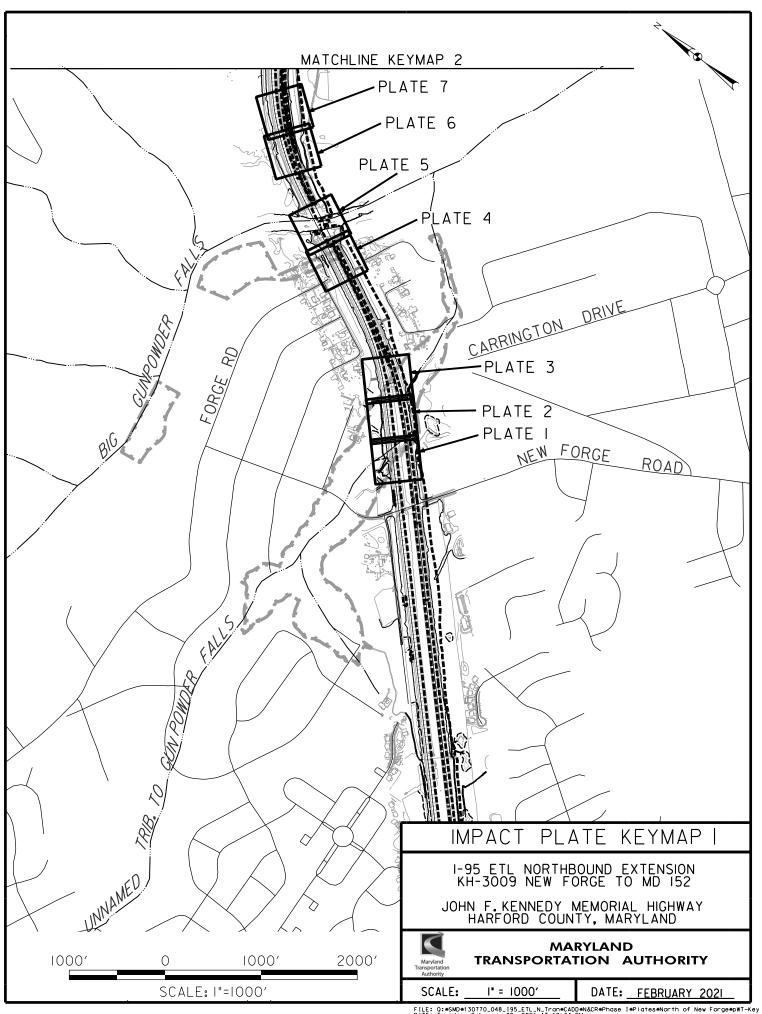


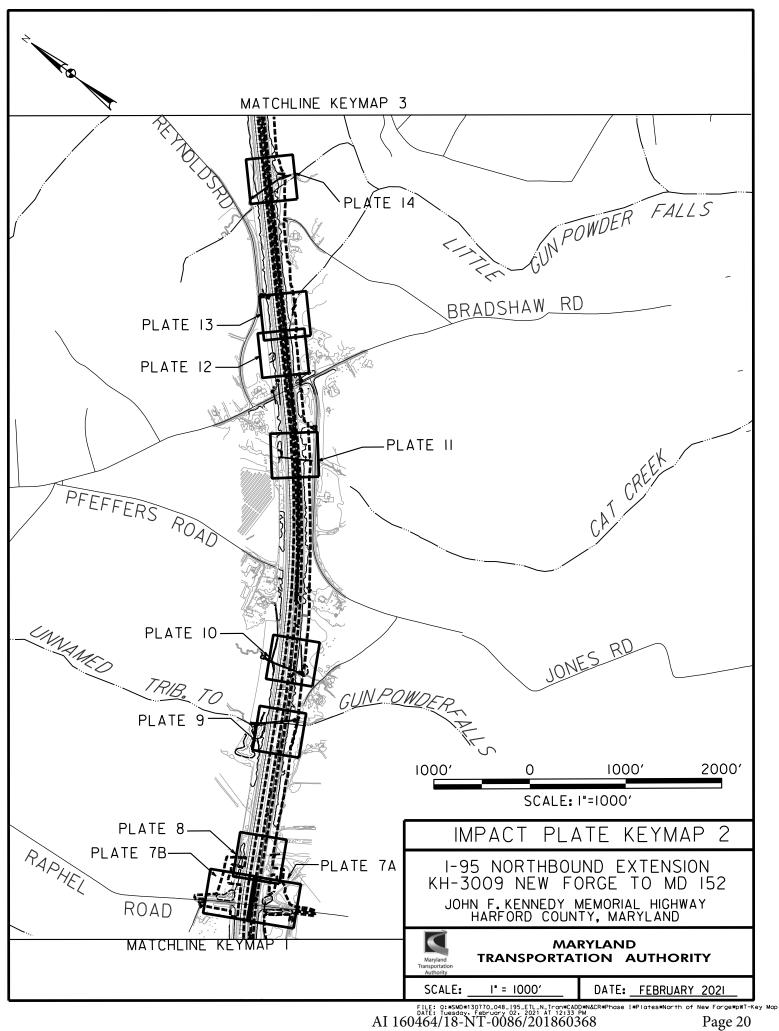


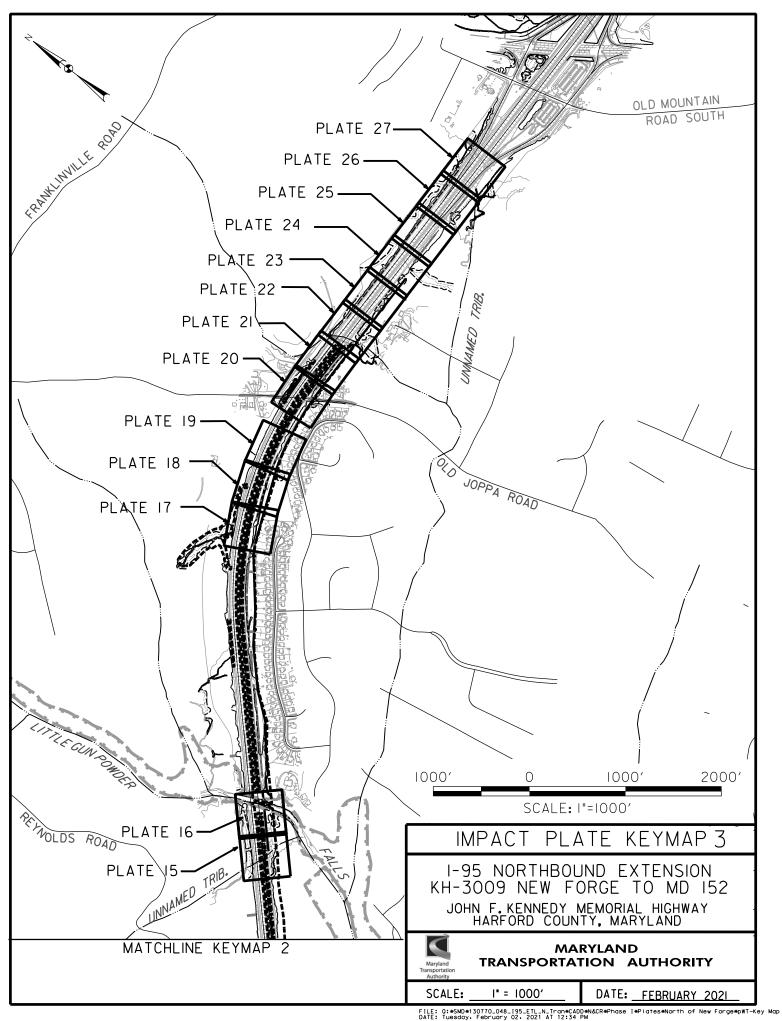












## **LEGEND**

LIMIT OF DISTURBANCE	LOD
LOD-FENCE REPLACEMENT	LOD
RIGHT-OF-WAY	
100-YEAR FLOODPLAIN	$\top$
WUS BOUNDARY	wus
WETLAND BOUNDARY	• • • • • • •
WETLAND BUFFER BOUNDARY	—— в ——
PROPERTY BOUNDARY	
EXISTING 2' CONTOUR	
WUS IMPACT PERMANENT	
WUS IMPACT TEMPORARY	
WETLAND IMPACT PERMANENT	
WETLAND IMPACT TEMPORARY	
WETLAND BUFFER IMPACT PERMAMENT	
WETLAND BUFFER IMPACT TEMPORARY	

# IMPACT PLATE LEGEND

I-95 ETL NORTHBOUND EXTENSION KH-3009 NEW FORGE TO MD 152 JOHN F.KENNEDY MEMORIAL HIGHWAY HARFORD COUNTY, MARYLAND



**MARYLAND** TRANSPORTATION AUTHORITY

SCALE: N.T.S.

DATE: FEBRUARY 2021

### LEGEND

PROPOSED CONTOUR

STABILIZED CONSTRUCTION ENTRANCE

SUPER SILT FENCE

PORTABLE SEDIMENT TANK

PUMP AROUND PRACTICE

SAND BAG DIVERSION

PROPOSED PIPE AND CUI VERT/ RIP RAP OUTFALL PROTECTION

PROPOSED BMP FOOTPRINT AND CHECKDAM STORM DITCH

90

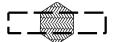


SSF

**⊠** PST

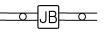








PROPOSED INTELLIGENT TRANSPORTATION SYSTEMS STRUCTURES











PROPOSED PAVEMENT REMOVAL

PROPOSED NOISE BARRIER

PROPOSED ROCK OUTLET PROTECTION







#### IMPACT PLATE LEGEND

I-95 ETL NORTHBOUND EXTENSION KH-3009 NEW FORGE TO MD 152 JOHN F. KENNEDY MEMORIAL HIGHWAY HARFORD COUNTY, MARYLAND

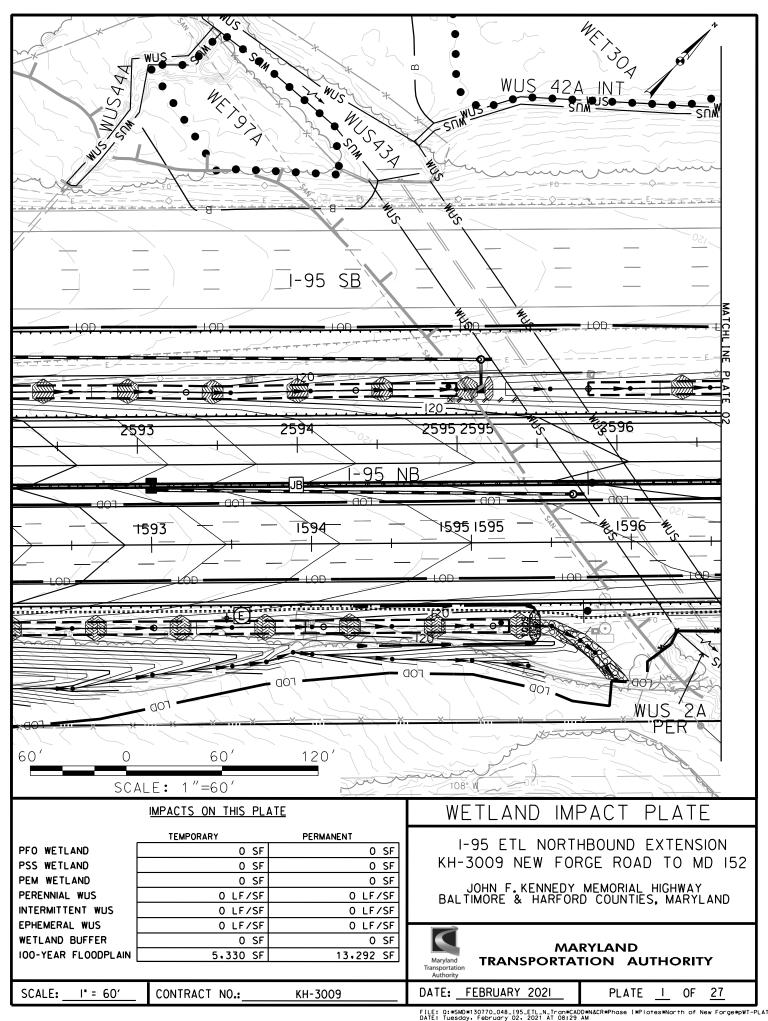


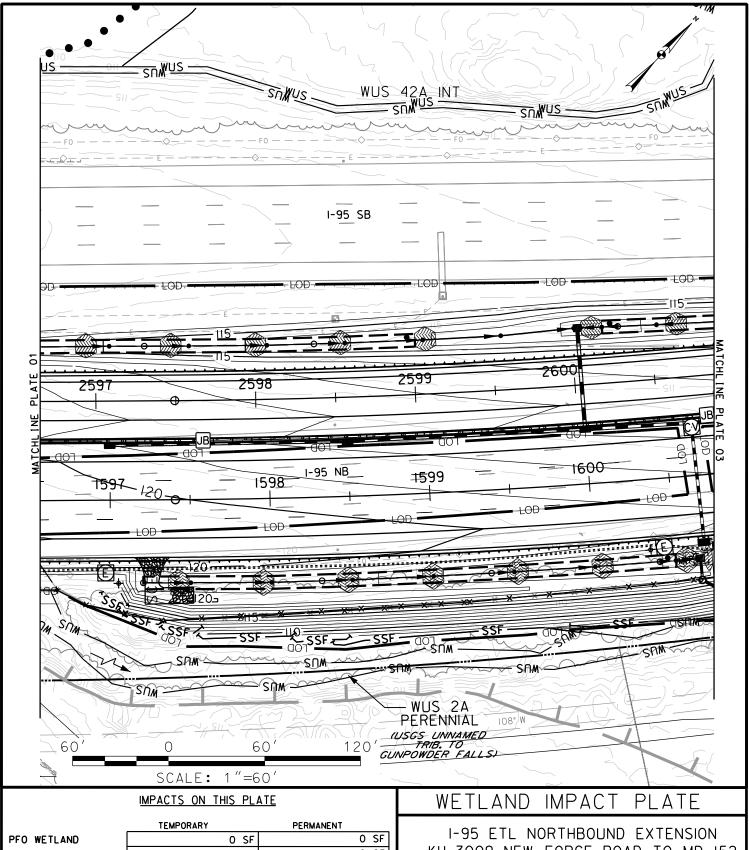
**MARYLAND** TRANSPORTATION AUTHORITY

DATE: FEBRUARY 2021

I-95 ETL Northbound Extension KH-3009 New Forge Road to MD 152											
Plate/Plan Sheet No. Resource ID		PEM W	/etland	PSS W	etland	PFO W	etland	PFO/PEM Wetland		25-foot Wetland Buffer	
Sheet No.		Temporary	porary Permanent Temp		Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
		SF	SF	SF SF		SF	SF	SF	SF	SF	SF
PLATE 7A	WP001	0	0	0	0	0	968	0	0	0	5,771
PLATE /A	WET 104	0	1,595	0 0		0	0	0	0	0	12,410
PLATE 7B	WET 106	0	2,447	0	0	0	0	0	0	0	11,432
PLATE 10	WET 105	0	0	0	0	0	0	0	0	0	1,275
PLATE 16	WET 10A	0	0	0	0	0	0	0	1,670	0	9,887
PLATE 20	WET 11A	0	0	0	0	0	0	0	0	0	867
	Total	0	4,042	0	0	0	968	0	1,670	0	41,642

I-95 ETL Northbound Extension KH-3009 New Forge Road to MD 152															
Plate/Plan Sheet No.	Resource ID	Perennial WUS				Intermittent WUS				Ephemeral WUS			100-Year Floodplain		
		Temporary Per		Pern	nanent	Temporary		Permanent		Temporary		Permanent		Temporary	Permanent
		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
PLATE 1	Floodplain	0	0	0	0	0	0	0	0	0	0	0	0	5,330	13,292
PLATE 2	WUS 2A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLATE 2	Floodplain	0	0	0	0	0	0	0	0	0	0	0	0	8,598	64,671
PLATE 3	WUS 2A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLATE 3	Floodplain	0	0	0	0	0	0	0	0	0	0	0	0	2,101	37,522
PLATE 4	Floodplain	0	0	0	0	0	0	0	0	0	0	0	0	0	317
PLATE 5	WUS 6A	47	8,327	178	1,780	0	0	0	0	0	0	0	0	0	0
PLATE 6	WUS B	0	0	0	0	0	0	0	0	0	0	353	341	0	0
PLATE 7	WUS B	0	0	0	0	0	0	0	0	0	0	398	398	0	0
PLATE 7A	WUS 103	0	0	0	0	0	0	56	143	0	0	0	0	0	0
PLATE 7A	WUS 103 CULVERTED	0	0	0	0	0	0	91	299	0	0	0	0	0	0
PLATE 8	WUS 7A	0	0	0	0	0	0	0	0	0	0	49	294	0	0
PLATE 9	WUS 9A	0	0	30	160	0	0	0	0	0	0	0	0	0	0
PLATE 9	WUS 8A	0	0	0	0	0	0	0	0	37	93	14	14	0	0
PLATE 9	WUS 104	0	0	0	0	0	0	40	215	0	0	0	0	0	0
PLATE 10	WUS C	0	0	0	0	0	0	0	0	0	0	292	652	0	0
PLATE 11	WUS 12A	0	0	55	283	0	0	0	0	0	0	0	0	0	0
PLATE 13	WUS 13A	0	0	0	0	0	0	150	702	0	0	0	0	0	0
PLATE 14	WUS 14A	4	83	43	573	0	0	0	0	0	0	0	0	0	0
PLATE 14	WUS 15A	0	0	0	0	0	0	0	0	0	0	65	210	0	0
PLATE 15	WUS 19A	0	0	0	0	0	0	0	0	0	0	265	850	0	0
PLATE 16	WUS 16A	41	2,589	187	2,027	0	0	0	0	0	0	0	0	0	0
PLATE 16	Floodplain	0	0	0	0	0	0	0	0	0	0	0	0	1,312	9,900
PLATE 17	WUS 18A	0	0	188	1,051	0	0	0	0	0	0	0	0	0	0
PLATE 17	WUS D	0	0	0	0	0	0	0	0	0	0	205	701	0	0
PLATE 18	WUS 18A	0	0	262	1,961	0	0	0	0	0	0	0	0	0	0
PLATE 18	WUS 18A	0	0	0	0	0	0	178	707	0	0	0	0	0	0
PLATE 19	WUS 18A	0	0	0	0	0	0	135	560	0	0	0	0	0	0
PLATE 21	WUS E	0	0	0	0	0	0	0	0	0	0	80	60	0	0
PLATE 22	WUS 20A	0	0	26	32	0	0	0	0	0	0	0	0	0	0
PLATE 22	WUS 21A	0	0	0	0	0	0	0	0	0	0	110	417	0	0
	Total	92	10,999	969	7,867	0	0	650	2,626	37	93	1,831	3,937	17,341	125,702





#### PSS WETLAND PEM WETLAND PERENNIAL WUS INTERMITTENT WUS EPHEMERAL WUS WETLAND BUFFER 100-YEAR FLOODPLAIN

I" = 60'

SCALE:

TEMPORARY	PERMANENT
0 SF	0 SF
0 SF	0 SF
0 SF	0 SF
0 LF/SF	O LF/SF
0 LF/SF	0 LF/SF
0 LF/SF	0 LF/SF
0 SF	0 SF
8,598 SF	64.671 SF

KH-3009

CONTRACT NO .:

KH-3009 NEW FORGE ROAD TO MD 152

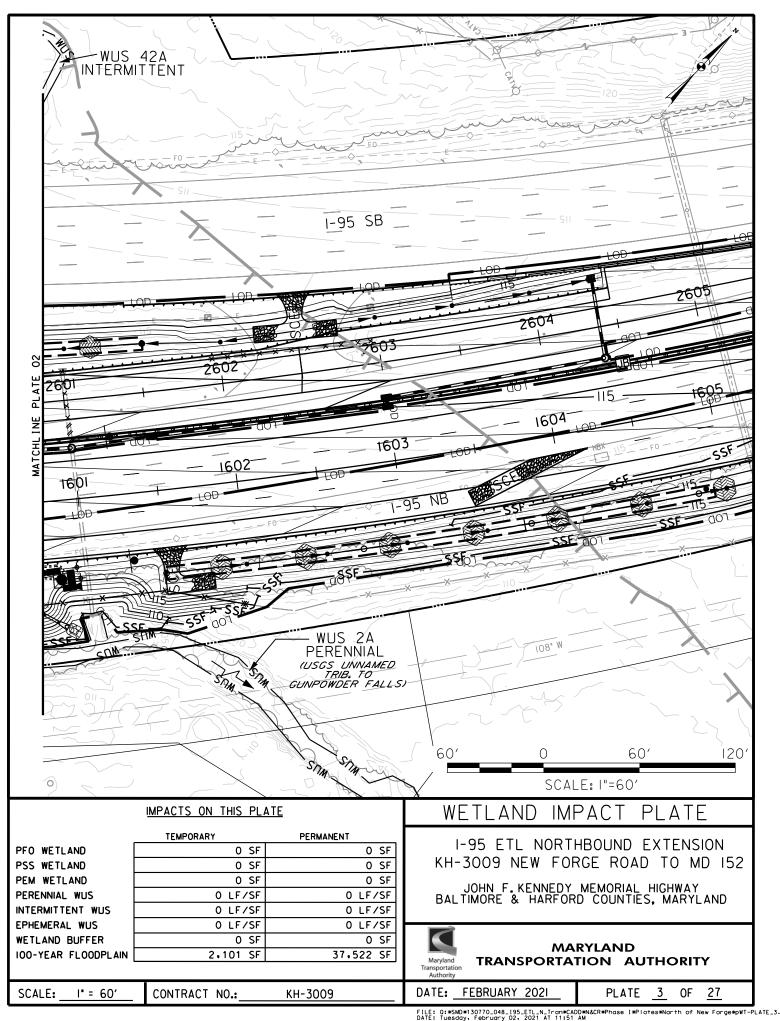
JOHN F.KENNEDY MEMORIAL HIGHWAY BALTIMORE & HARFORD COUNTIES, MARYLAND

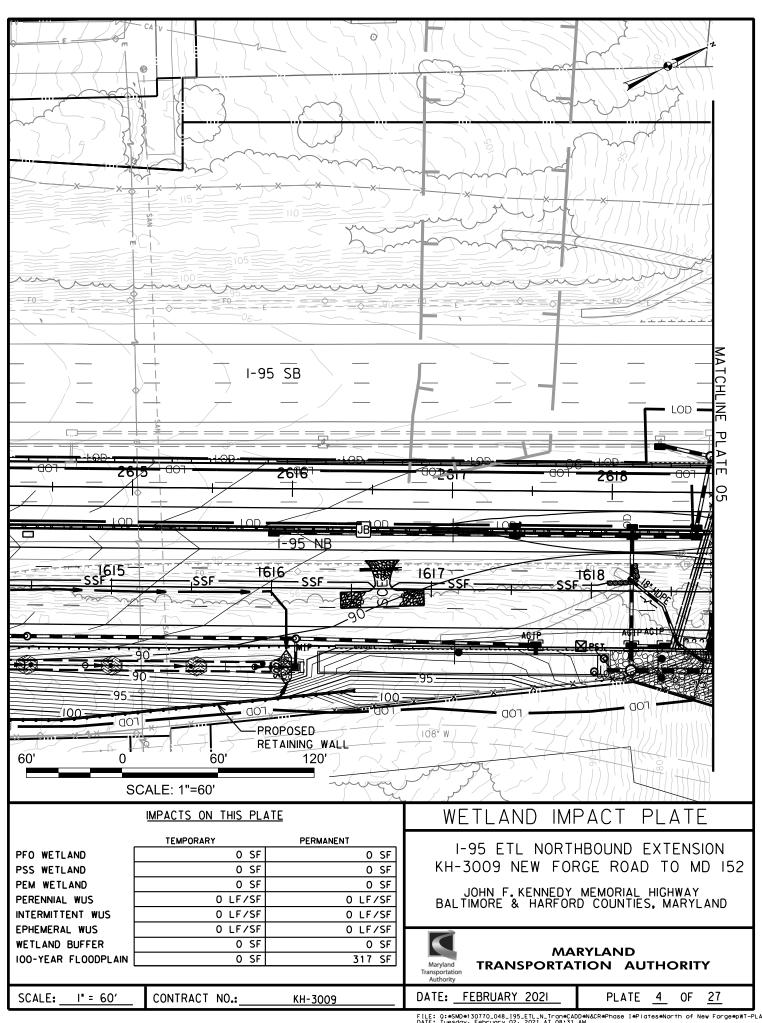


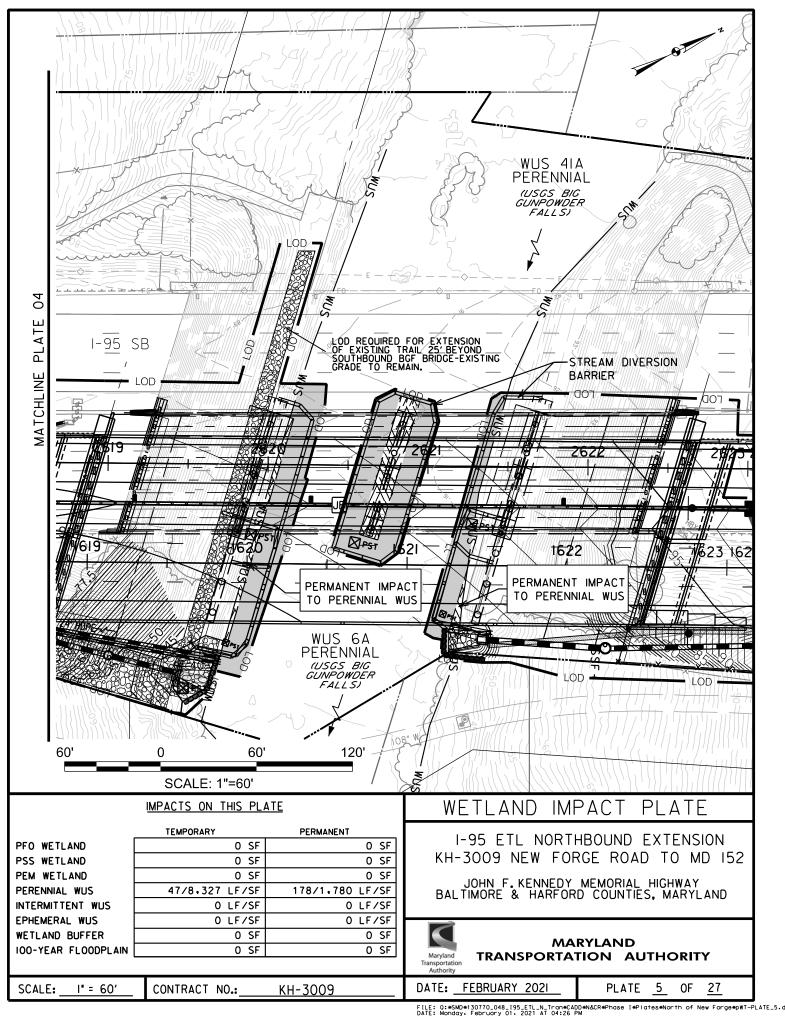
**MARYLAND** TRANSPORTATION AUTHORITY

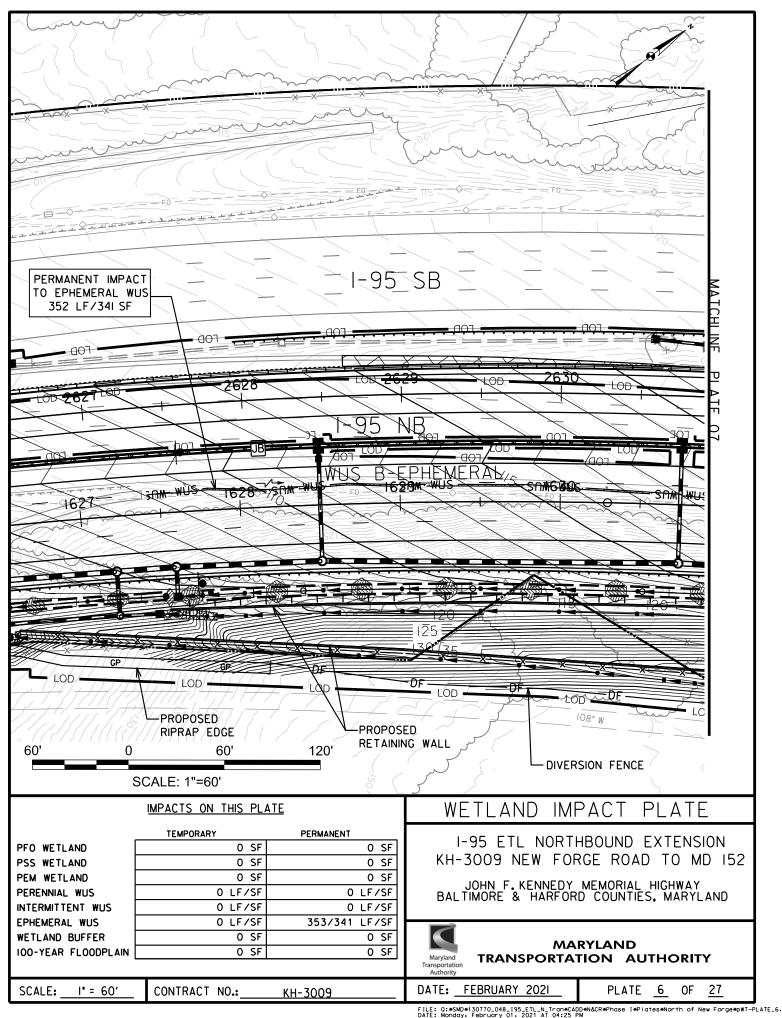
DATE: FEBRUARY 2021

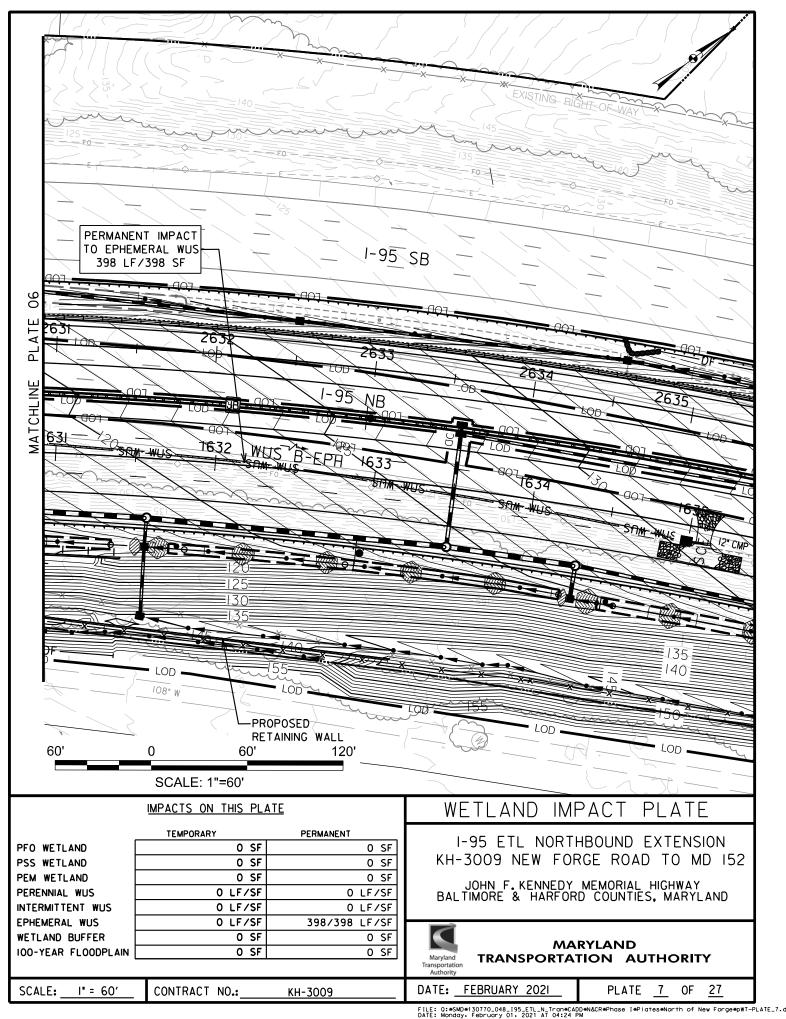
PLATE

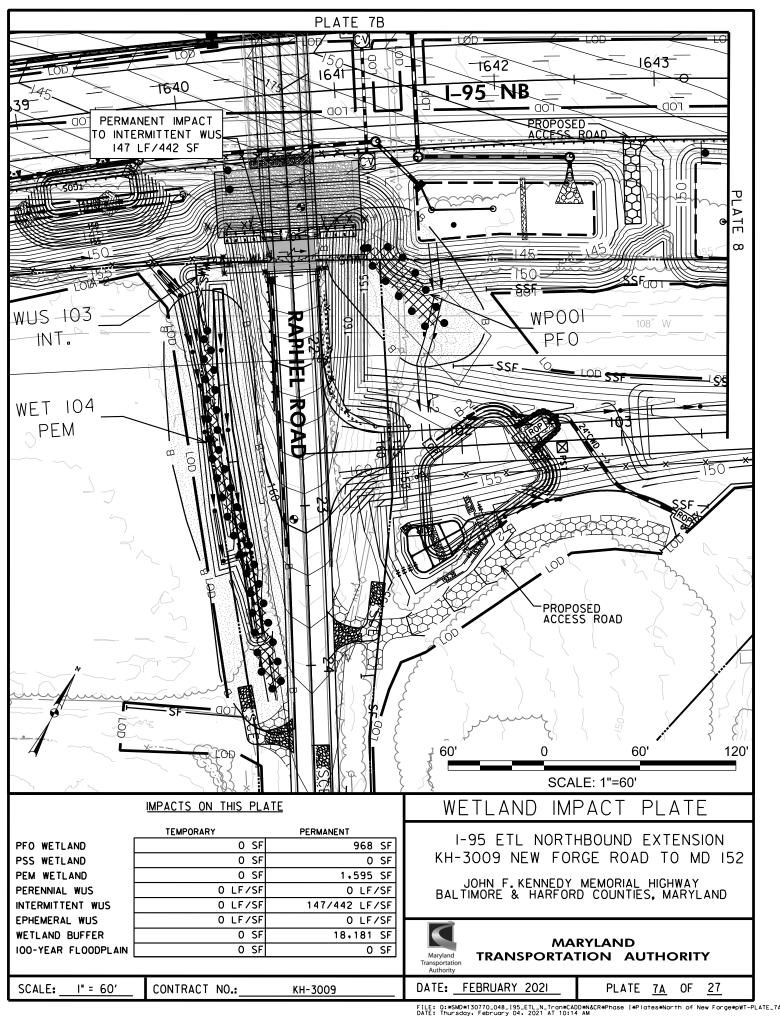


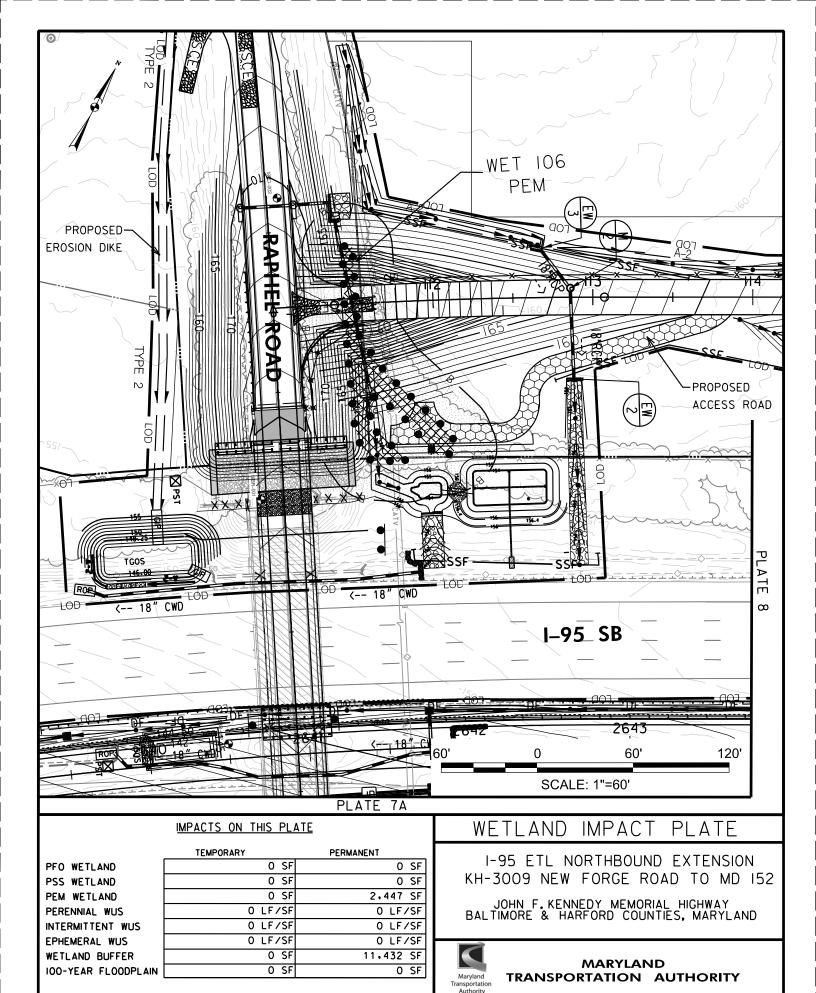












FILE: 0:\*SMD\*130770\_048\_195\_ETL\_N\_Tran\*CADD\*N&CR\*Phase I\*Plates\*North of New Forge\*pWT-PLATE\_78
DATE: Monday, February 01, 2021 AT 04:23 PM

PLATE

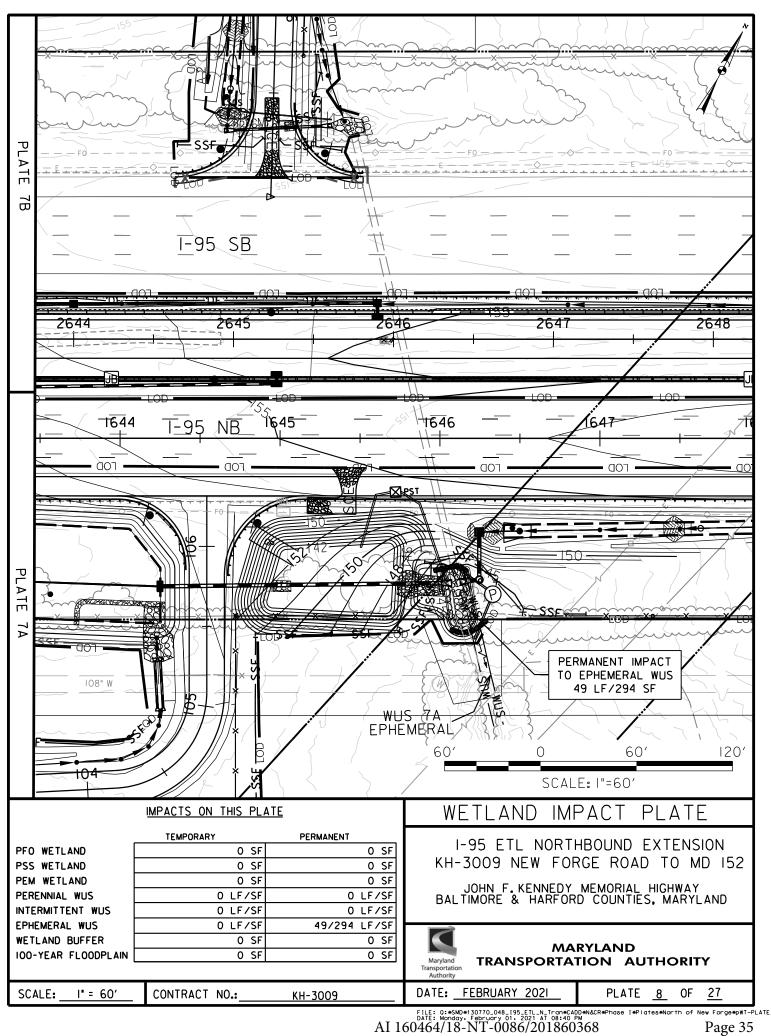
DATE: FEBRUARY 2021

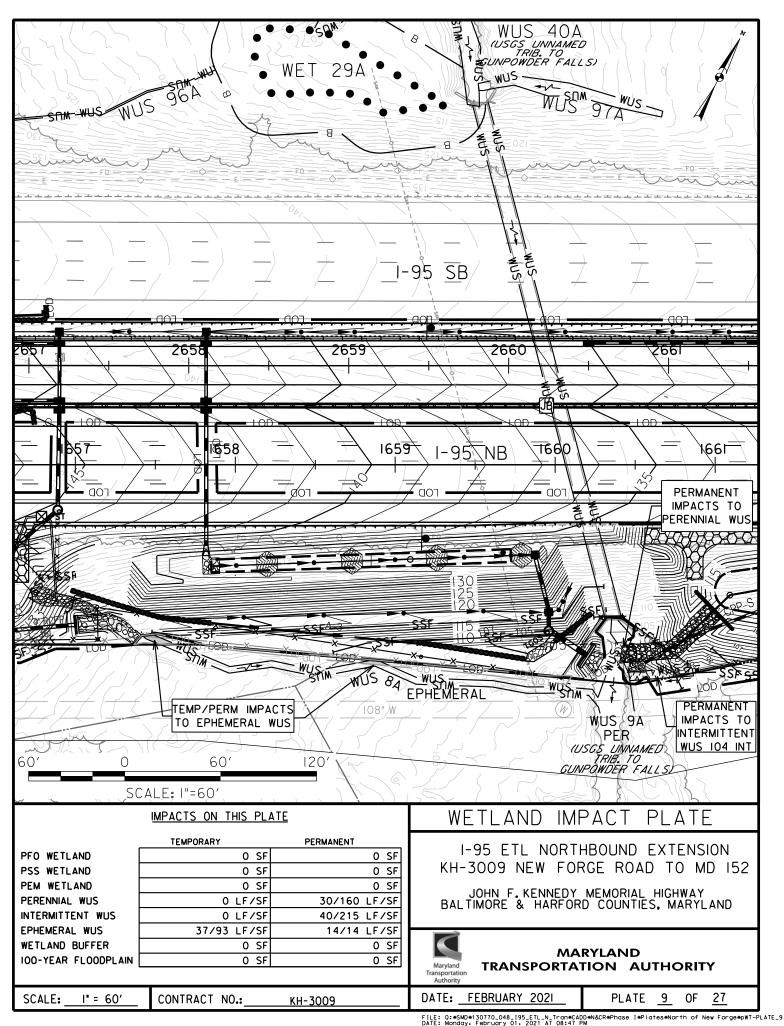
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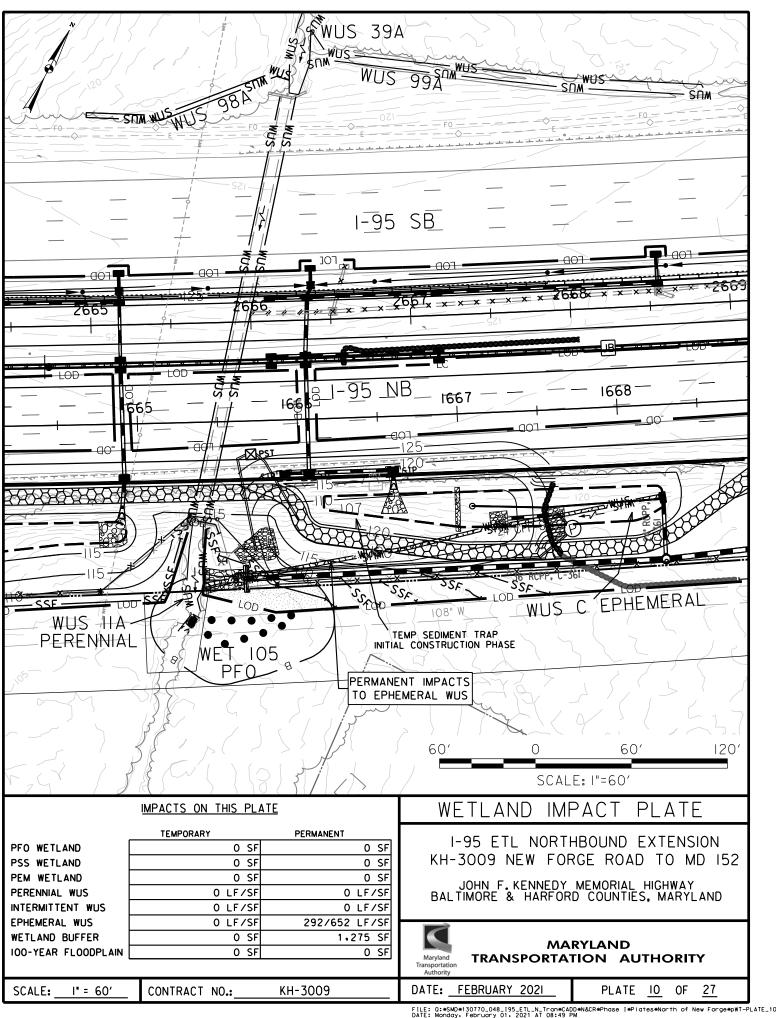
I" = 60'

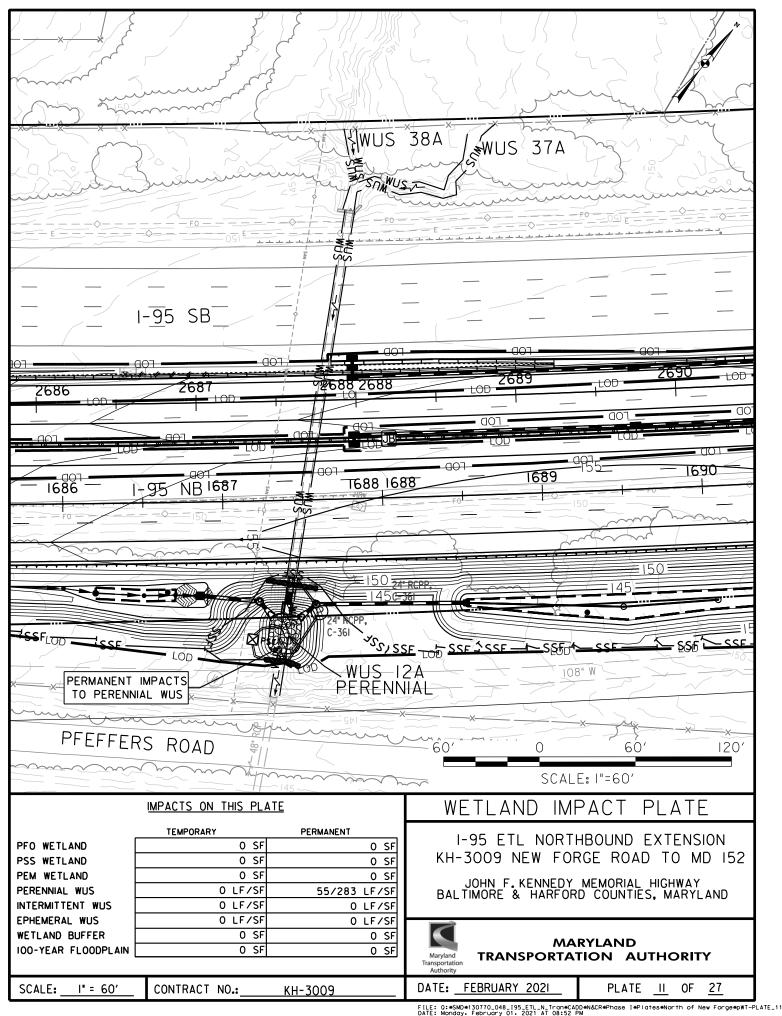
CONTRACT NO .:

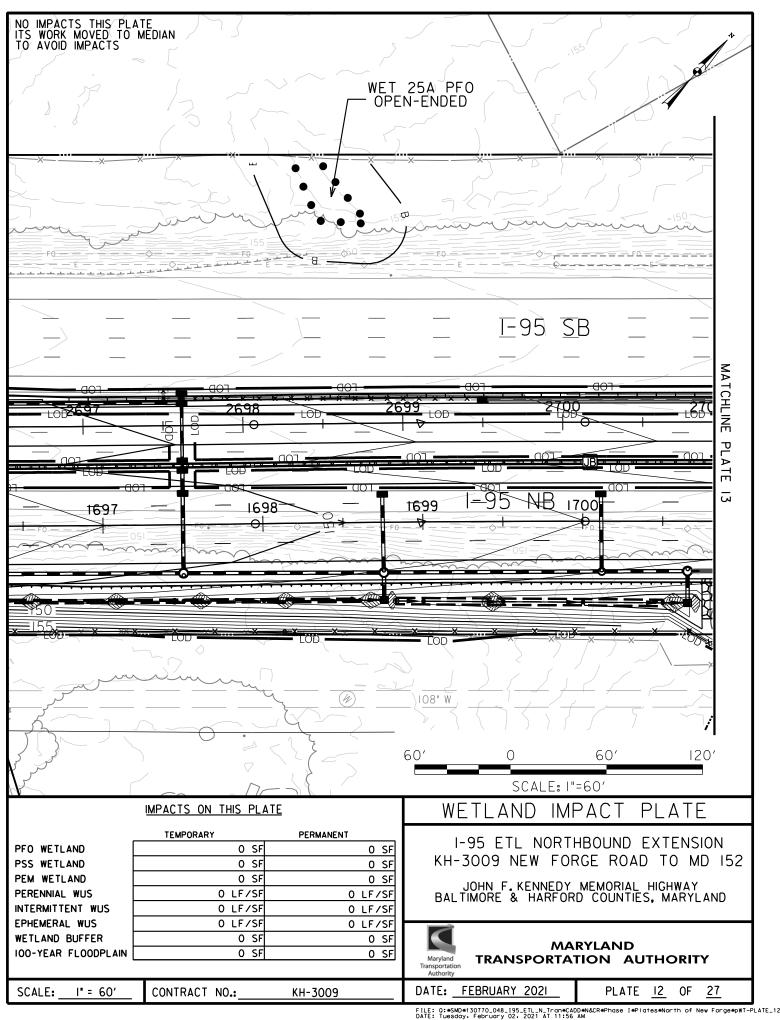
KH-3009

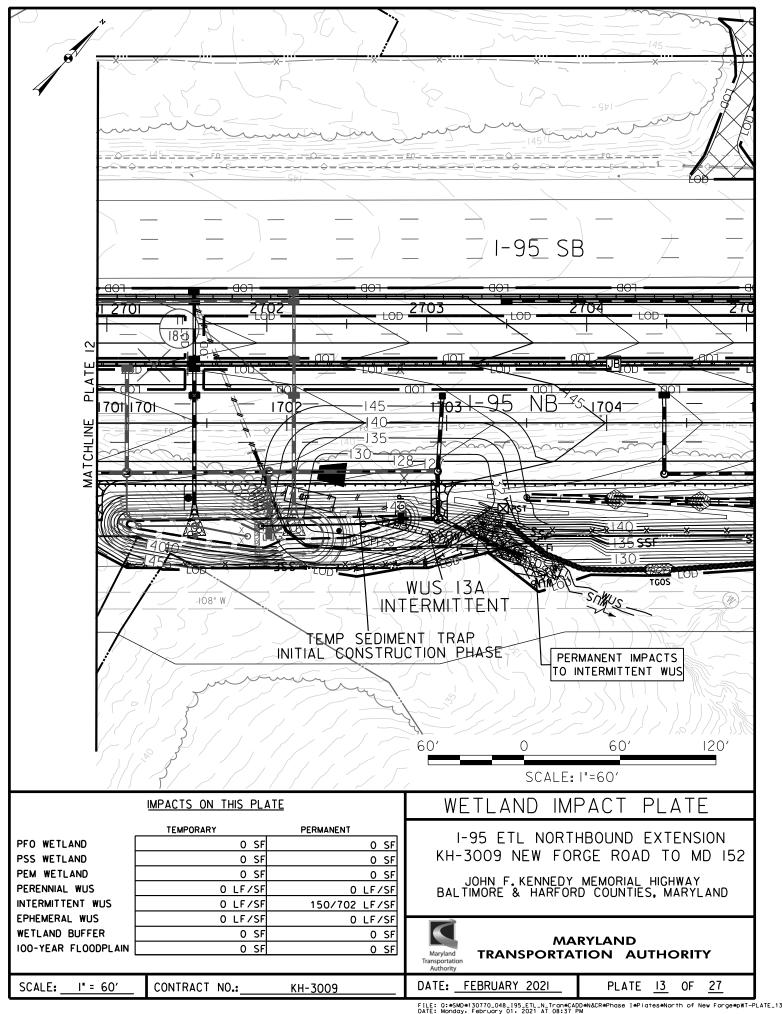


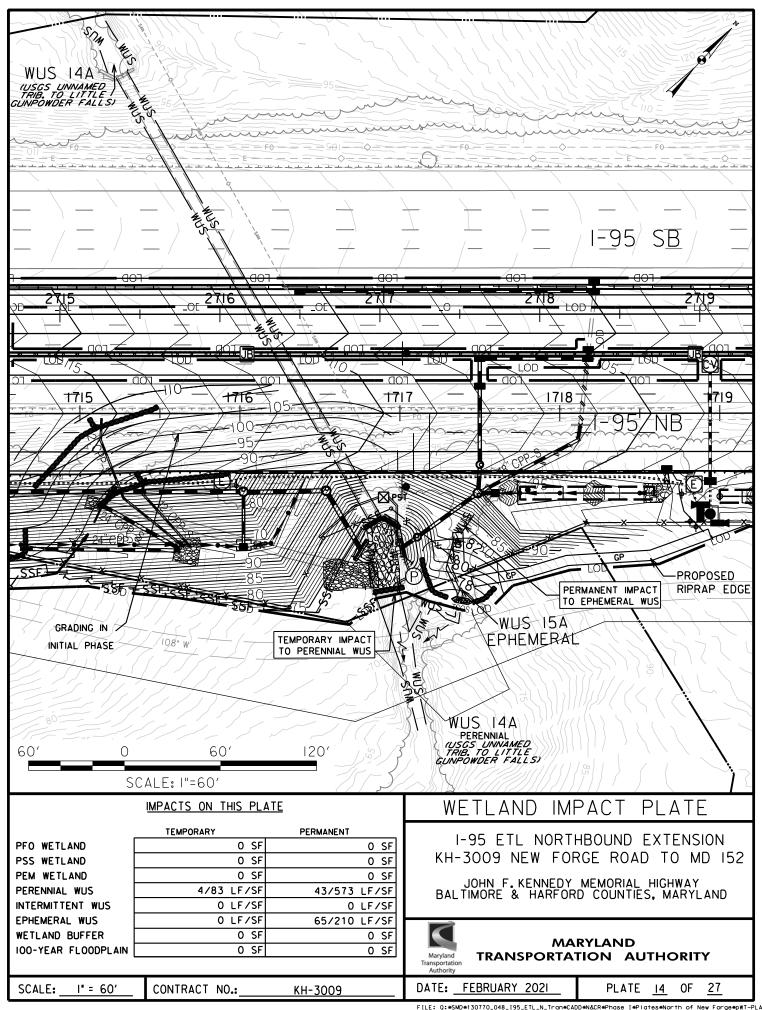


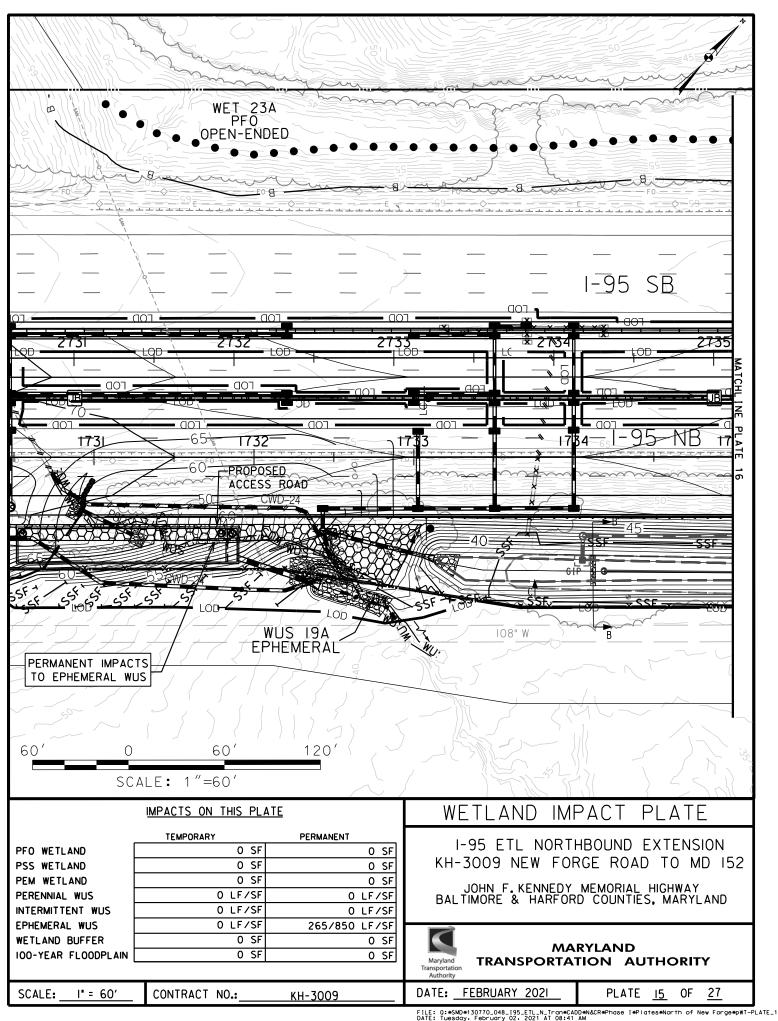


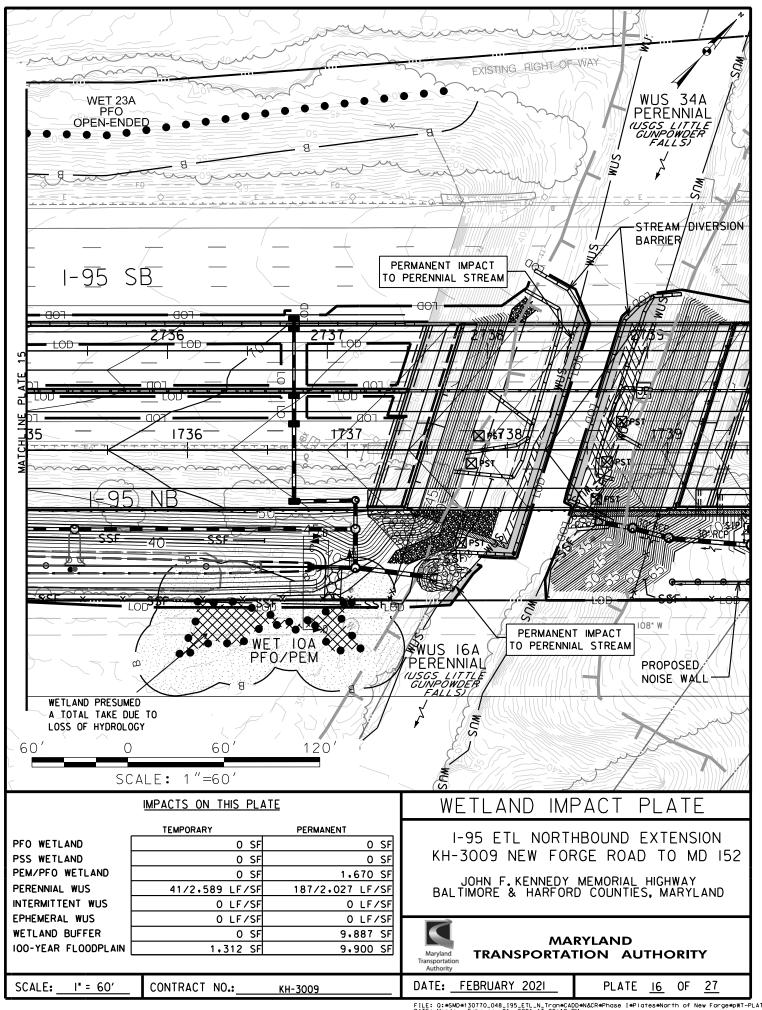


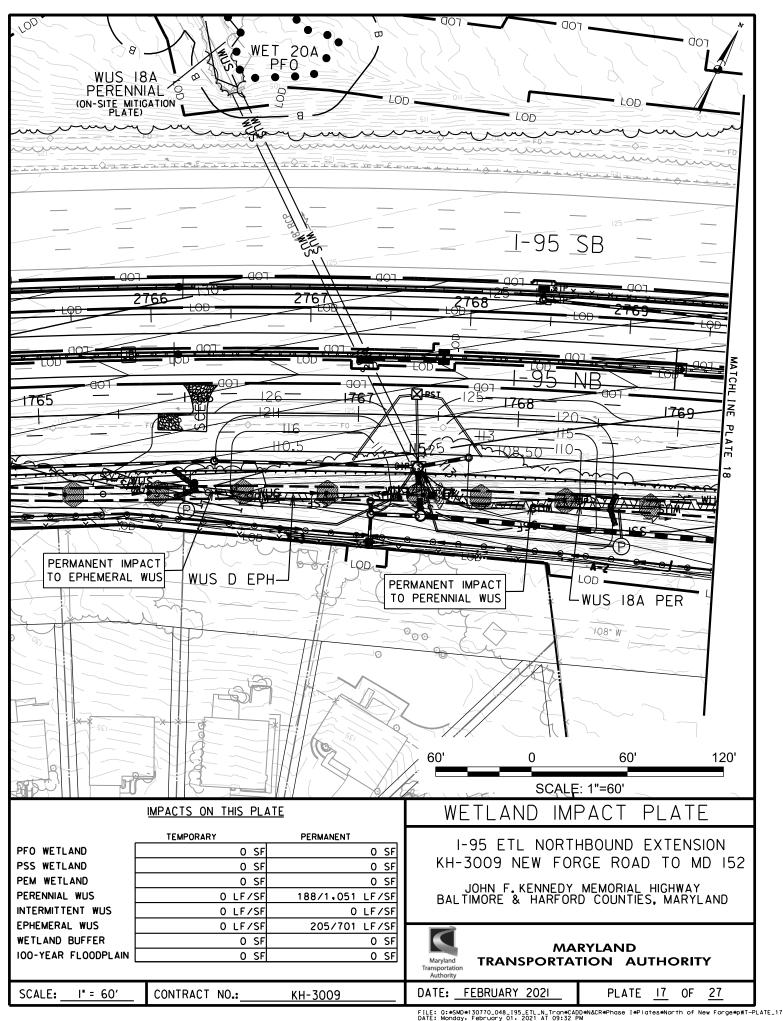


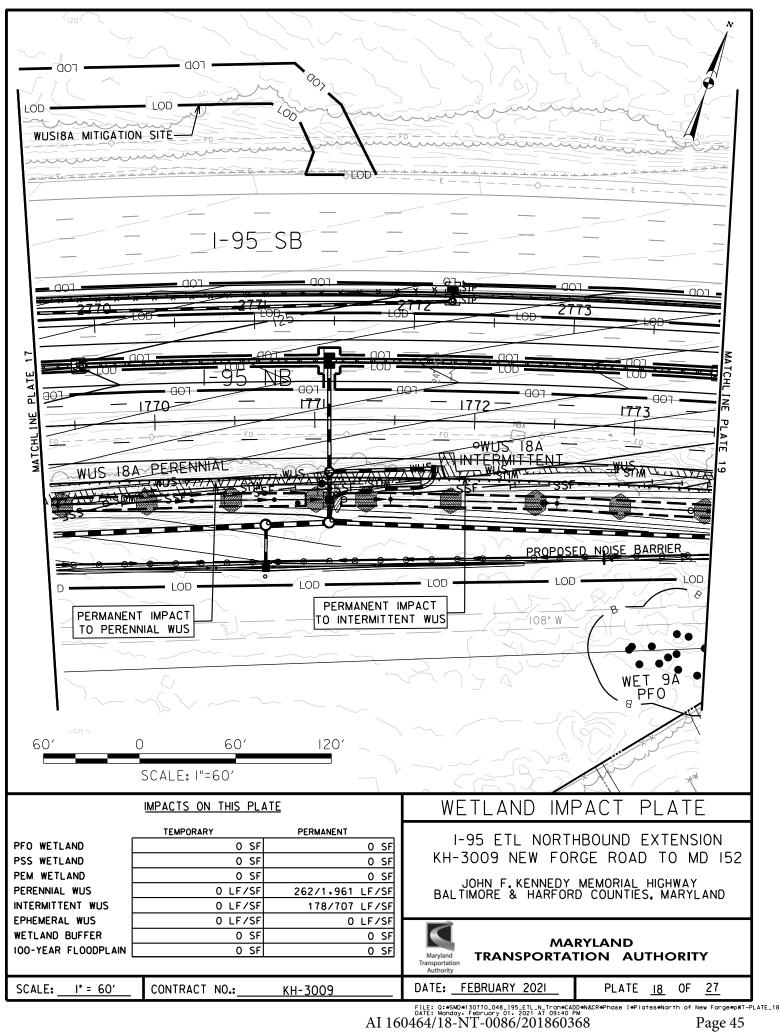


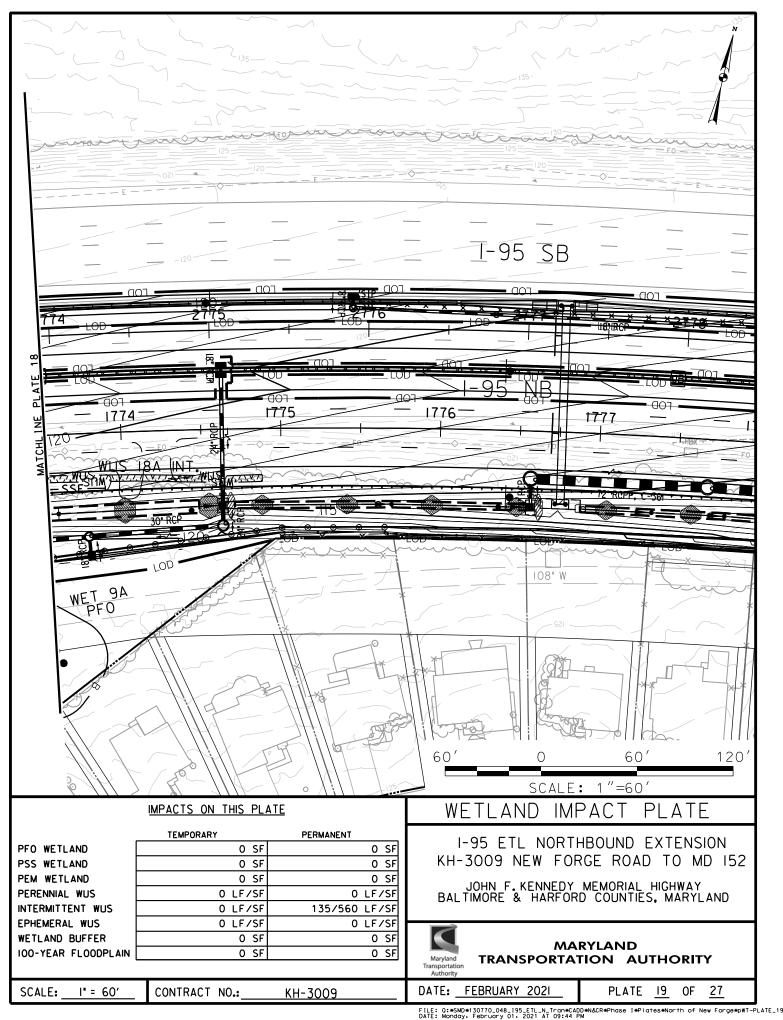


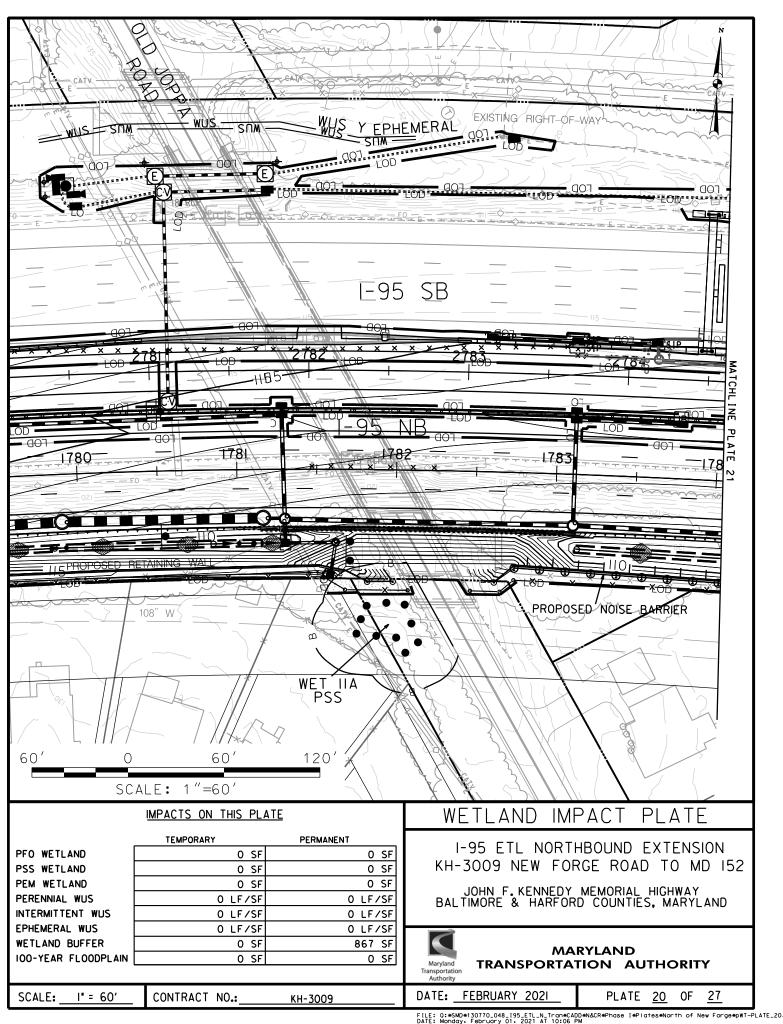


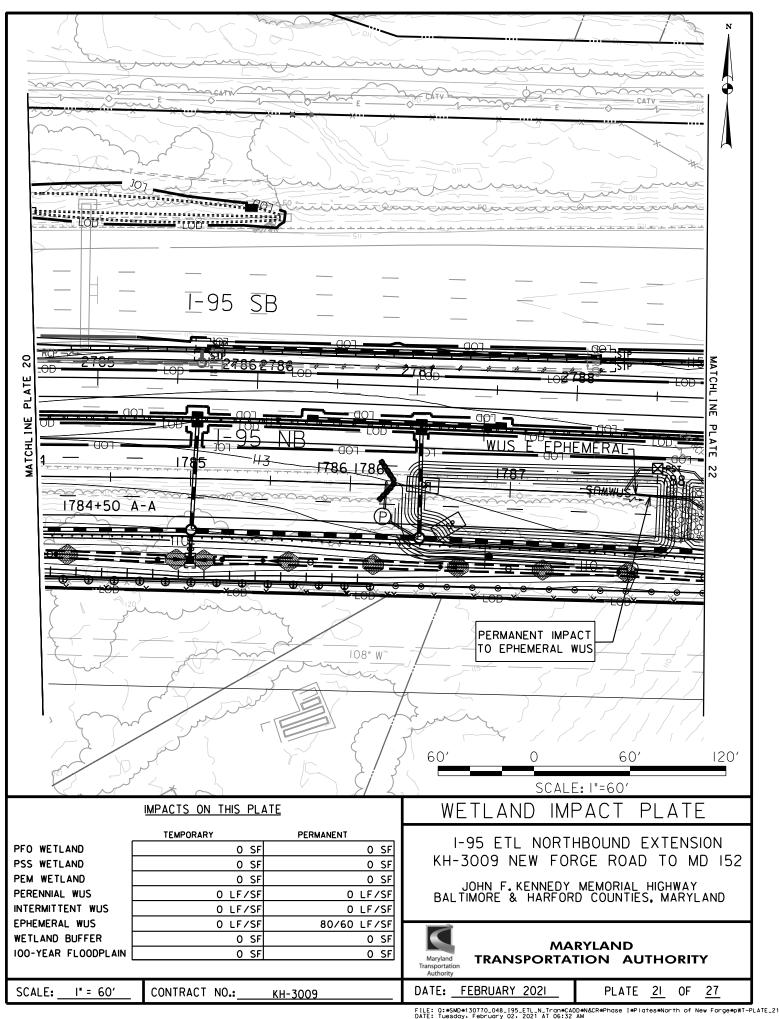


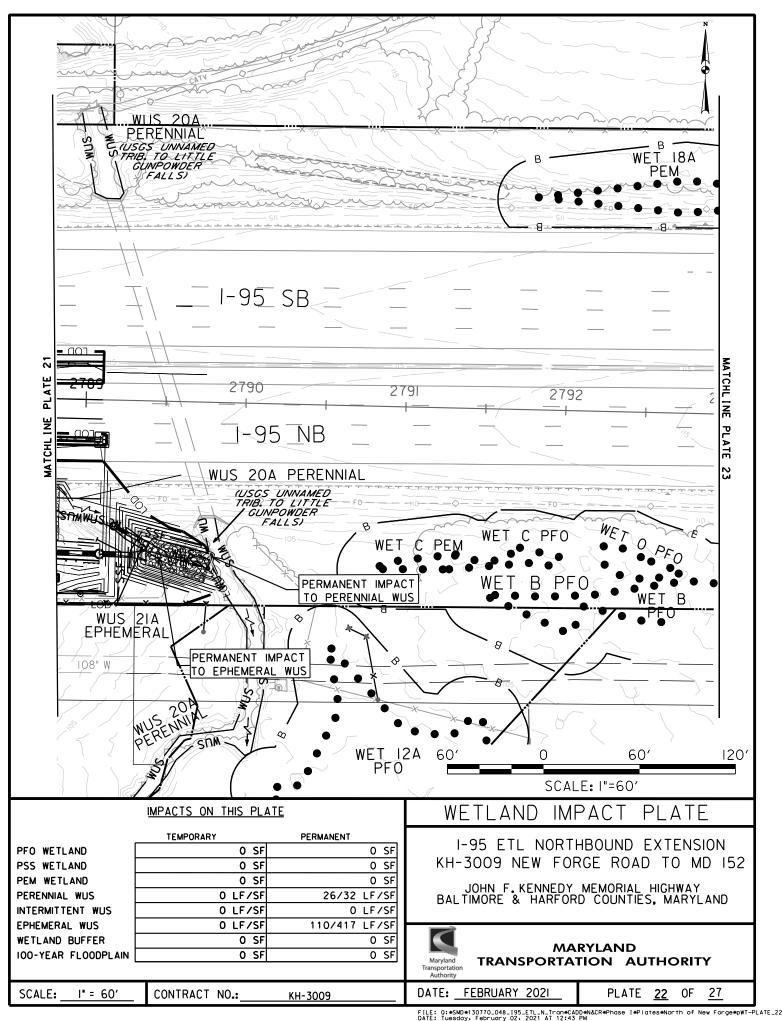


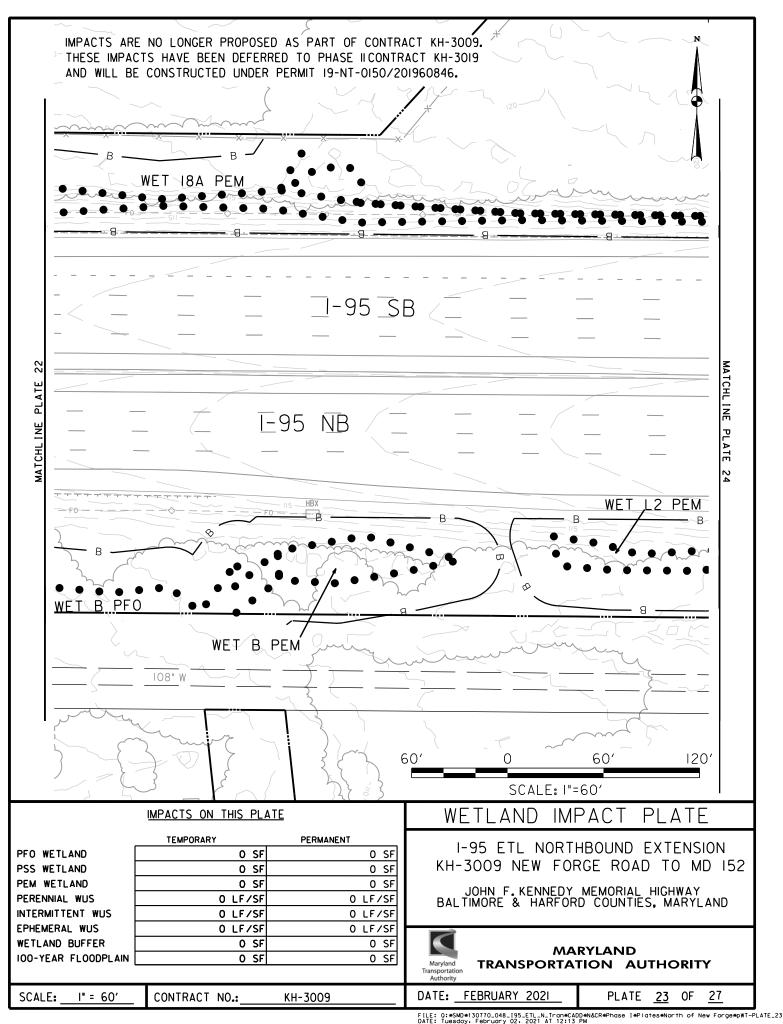


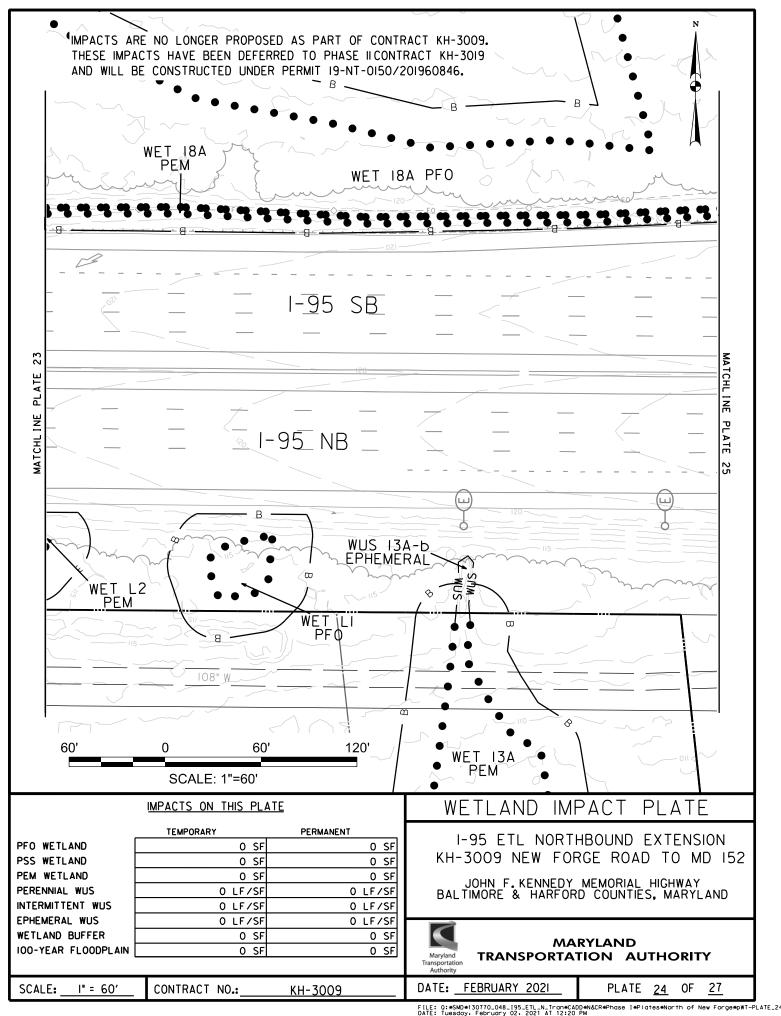




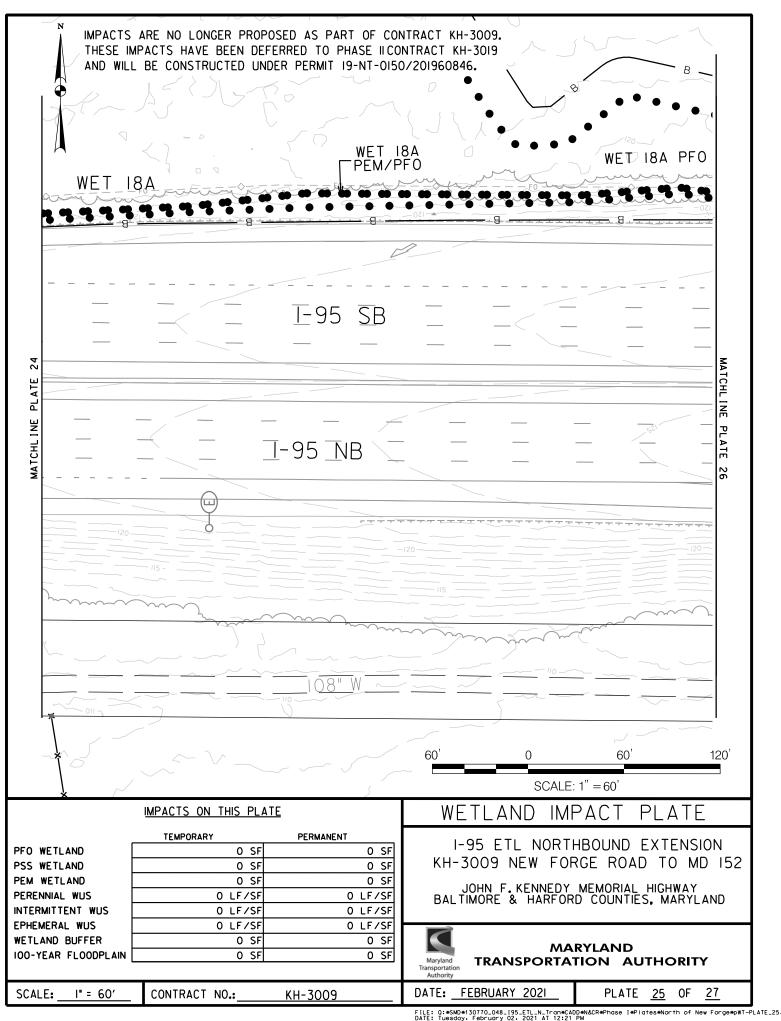


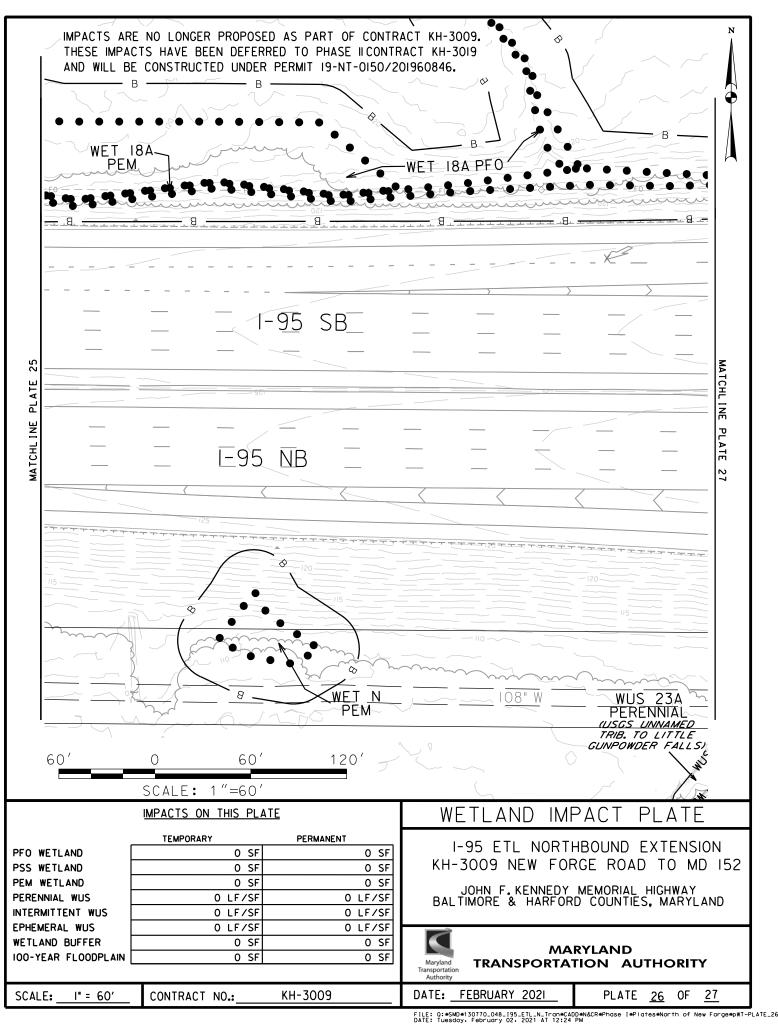


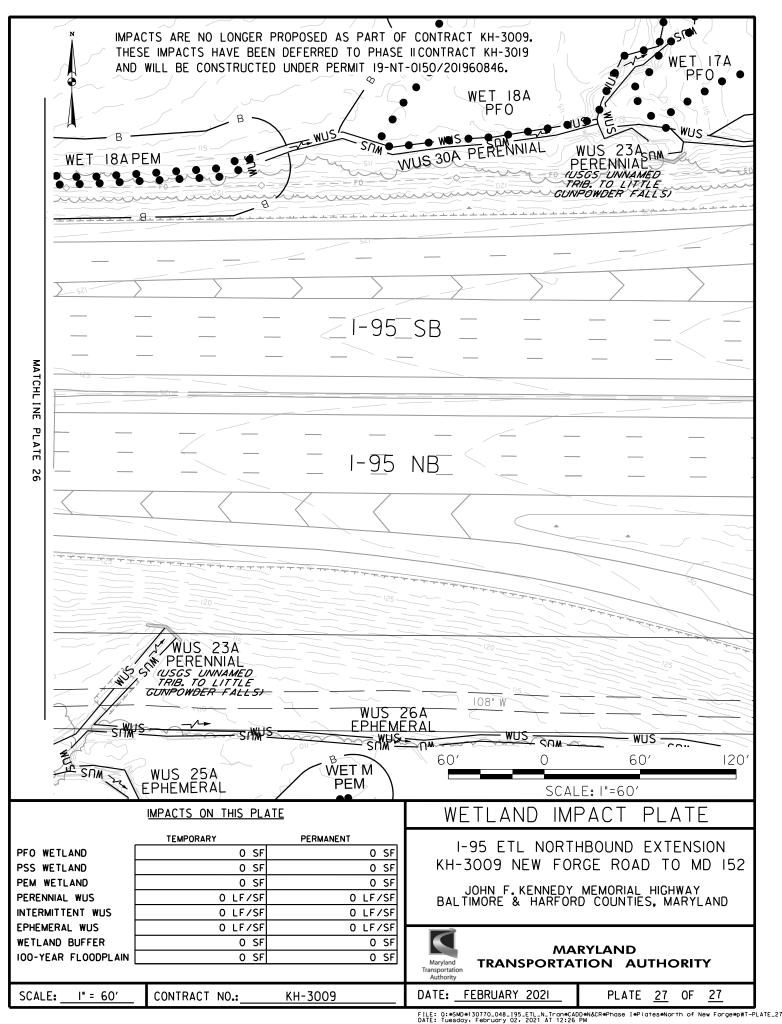


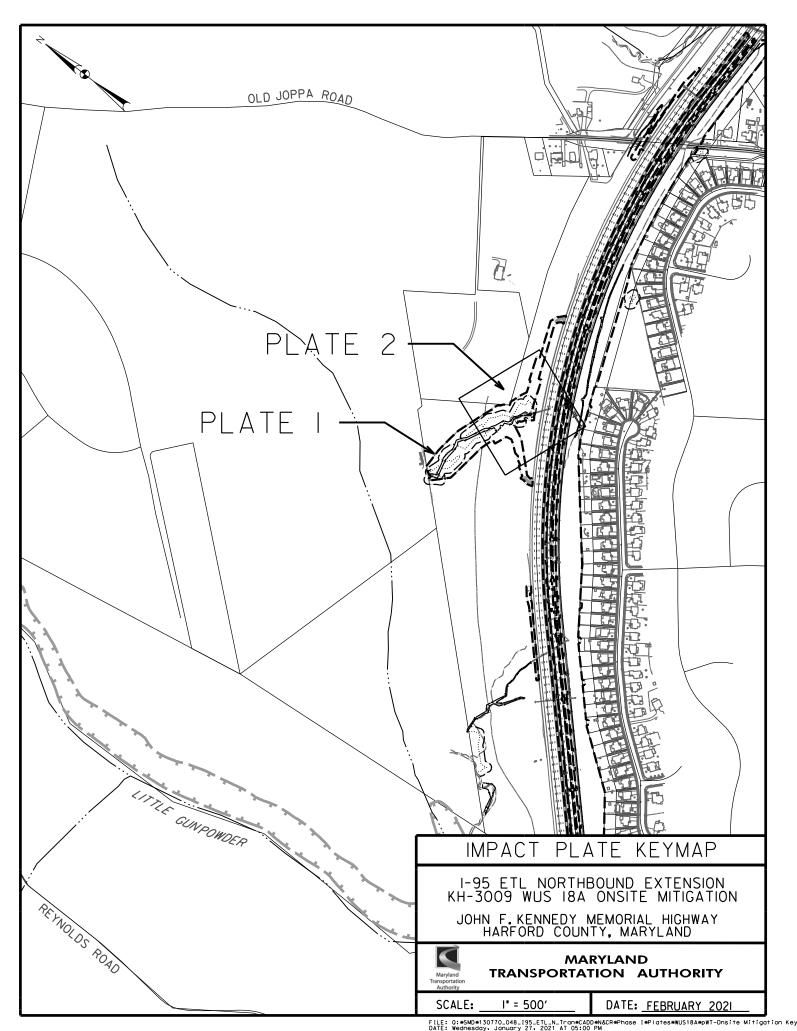


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# LEGEND LIMIT OF DISTURBANCE LOD -RIGHT-OF-WAY 100-YEAR FLOODPLAIN WUS BOUNDARY - WUS -WETLAND BOUNDARY WETLAND BUFFER BOUNDARY WETLAND CREATION STREAM UNDERLAYMENT (CLASS O/I) LOG SILL PUMP AROUND PRACTICE FILTER BAG **⊠**FB PROPOSED CONTOUR -90-24-INCH FILTER LOG – FL-24— WUS IMPACT PERMANENT WUS IMPACT TEMPORARY WETLAND IMPACT PERMANENT WETLAND IMPACT TEMPORARY WETLAND BUFFFR IMPACT PERMAMENT WETLAND BUFFER IMPACT TEMPORARY IMPACT PLATE LEGEND

I-95 ETL NORTHBOUND EXTENSION KH-3009 WUS 18A ONSITE MITIGATION JOHN F. KENNEDY MEMORIAL HIGHWAY HARFORD COUNTY, MARYLAND

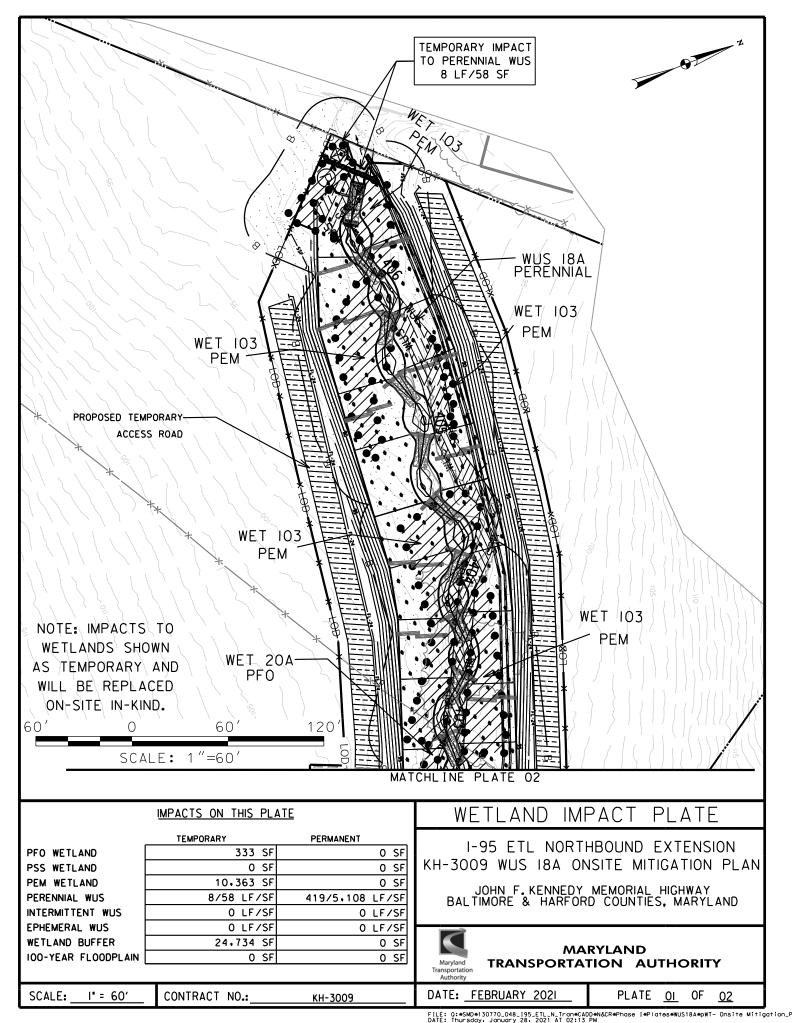


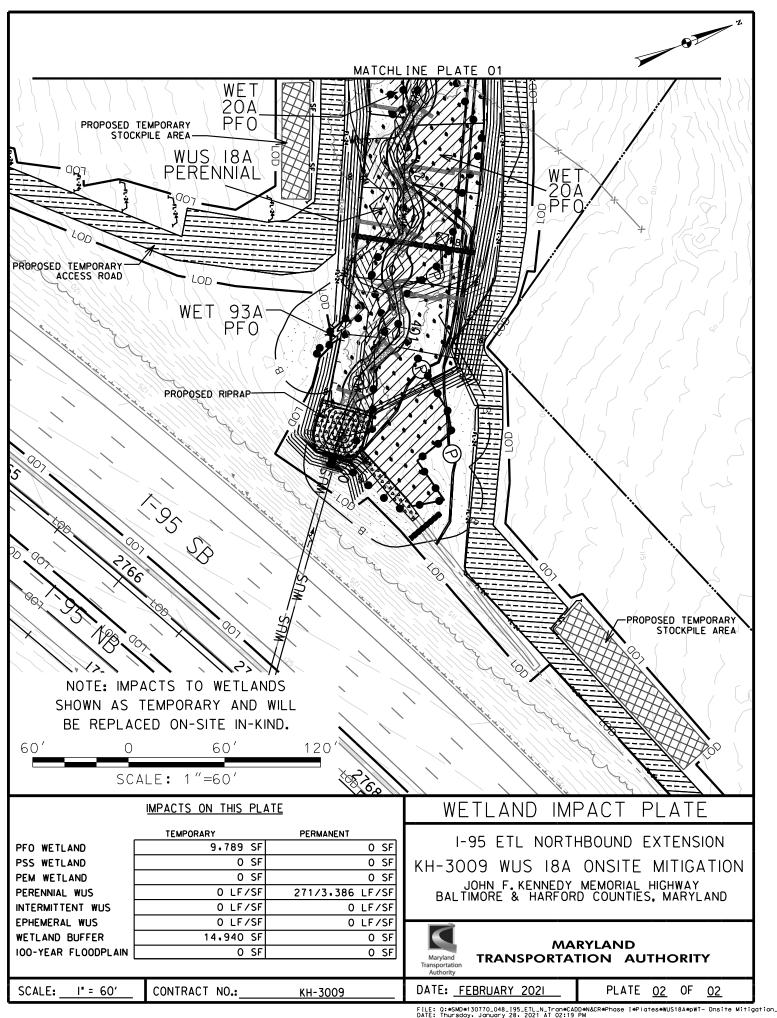
**MARYLAND** TRANSPORTATION AUTHORITY

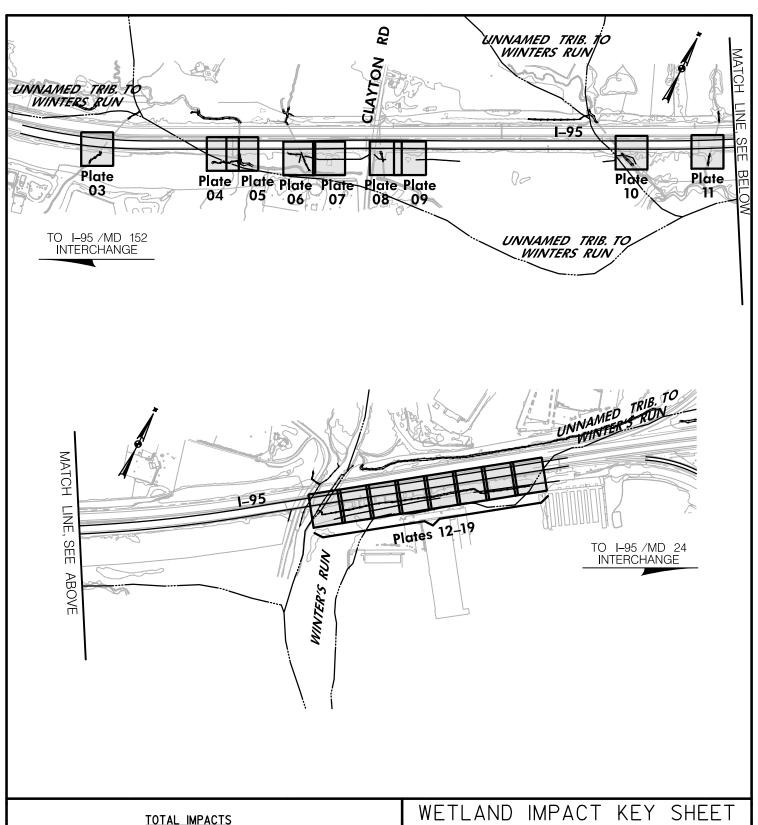
SCALE: DATE: FEBRUARY 2021 N.T.S.

	WUS 18A Onsite Mitigation														
Plate/Plan Sheet	Pocourco	PEM W	/etland	PSS W	etland	PFO W	etland	PFO/PEM	Wetland	25-foot Wetland Buffer					
No.	ID	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent				
NO.	טו	SF	SF												
PLATE 1	WET 103	10,363	0	0	0	0	0	0	0	24,734	0				
PLATE 1	WET 20A	0	0	0	0	333	0	0	0	24,734	0				
PLATE 2	WET 20A	0	0	0	0	9,571	0	0	0	14,940	0				
PLATE 2	WET 93A	0	0	0	0	218	0	0	0	14,940	0				
	Total	10,363	0	0	0	10,122	0	0	0	39,674	0				

	WUS 18A Onsite Mitigation														
Plate/Plan Resource Sheet No. ID	Docourco		Perenn	ial WUS			Intermitt	ent WUS			Epheme	100-Year Floodplain			
		Temporary		Perm	Permanent		Temporary		Permanent		orary	Permanent		Temporary	Permanent
	טו	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
PLATE 1	WUS 18A	8	58	419	5,108	0	0	0	0	0	0	0	0	0	0
PLATE 2	WUS 18A	0	0	271	3,386	0	0	0	0	0	0	0	0	0	0
	Total	8	58	690	8,494	0	0	0	0	0	0	0	0	0	0







#### PFO WETLAND PSS WETLAND PEM WETLAND PFO/PEM WETLAND PERENNIAL WUS INTERMITTENT WUS **EPHEMERAL WUS** WETLAND BUFFER 100-YEAR FLOODPLAIN

SCALE:

I"=700'

<u> </u>	
TEMPORARY	PERMANENT
SF	6,939 SF
SF	SF
SF	SF
SF	2,386 SF
239 LF/1,032 SF	176 LF/1,130 SF
410 LF/2,985 SF	1,121 LF/5,896 SF
LF/SF	LF/SF
SF	20,382 SF
588 SF	38,803 SF

CONTRACT NO.: KH3010-0000

#### WETLAND IMPACT KEY SHEET

I-95 ETL NORTHBOUND EXTENSION MD 152 TO MD 24

JOHN F. KENNEDY MEMORIAL HIGHWAY HARFORD COUNTY, MARYLAND



**MARYLAND** TRANSPORTATION AUTHORITY

DATE: **OCTOBER 2020** PLATE I 0F 19

## LEGEND

LIMIT OF DISTURBANCE - LOD -PARKLAND BOUNDARY CRITICAL AREA BOUNDARY — СВСА — 100-YEAR FLOODPLAIN WUS BOUNDARY - WUS — WETLAND BOUNDARY WETLAND BUFFER BOUNDARY WUS IMPACT TEMPORARY WUS IMPACT PERMANENT WETLAND IMPACT TEMPORARY WETLAND IMPACT PERMANENT WETLAND BUFFER IMPACT TEMPORARY WETLAND BUFFER IMPACT PERMAMENT

# WETLAND IMPACT LEGEND

I-95 ETL NORTHBOUND EXTENSION
MD 152 TO MD 24

JOHN F. KENNEDY MEMORIAL HIGHWAY
HARFORD COUNTY, MARYLAND



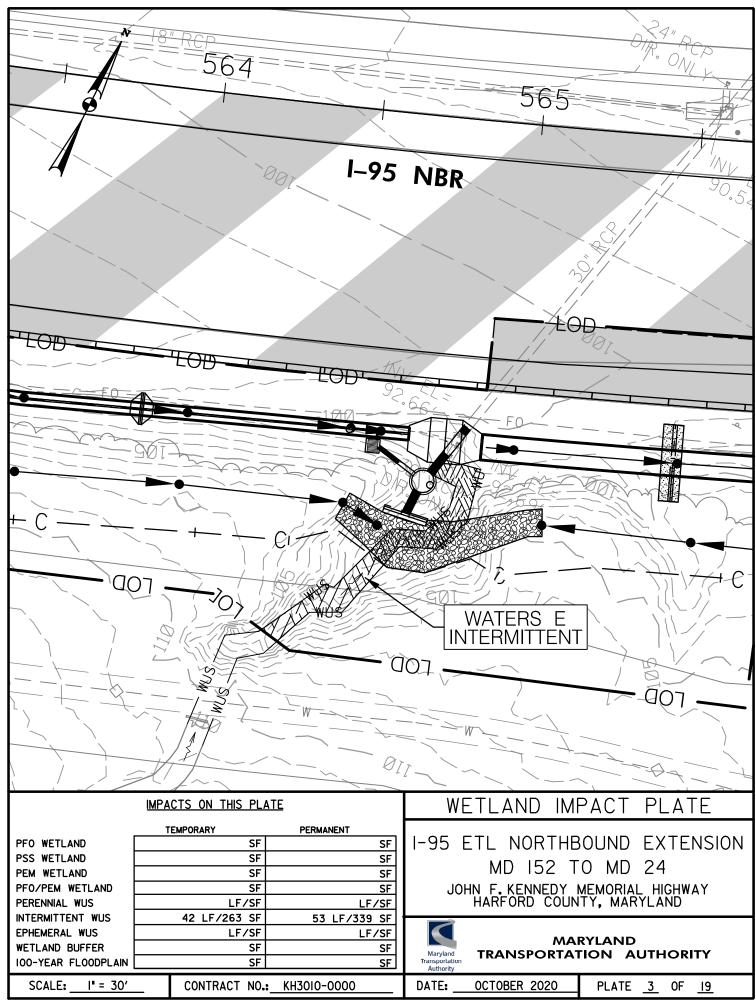
MARYLAND
TRANSPORTATION AUTHORITY

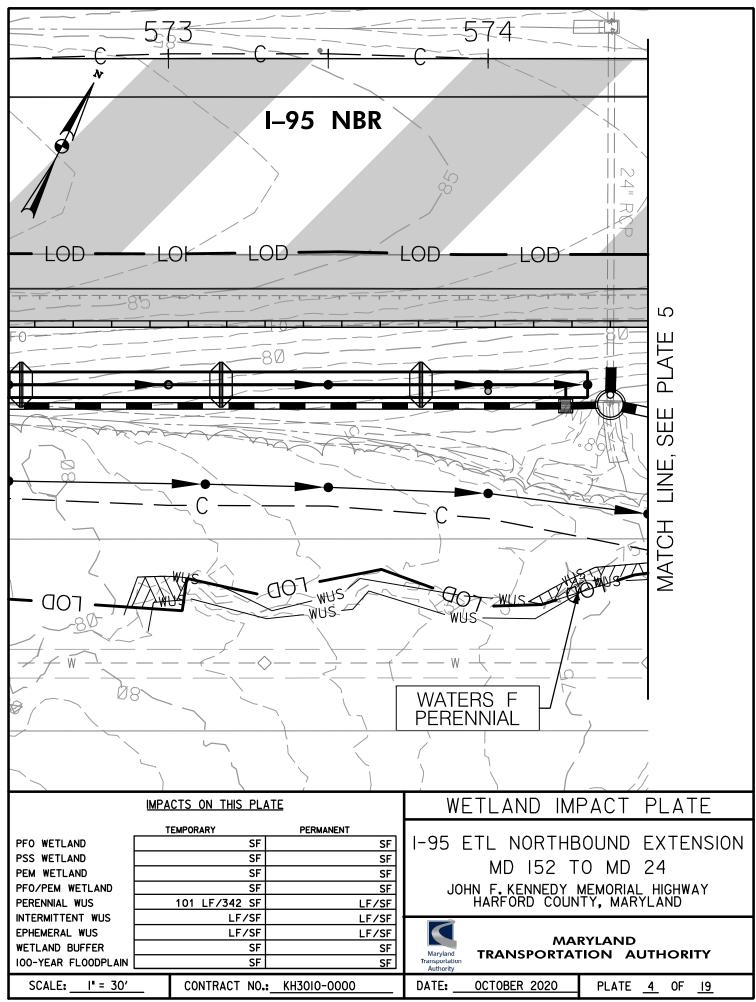
SCALE: NONE CONTRACT NO.: KH3010-0000 DATE: OCTOBER 2020 PLATE 2 OF

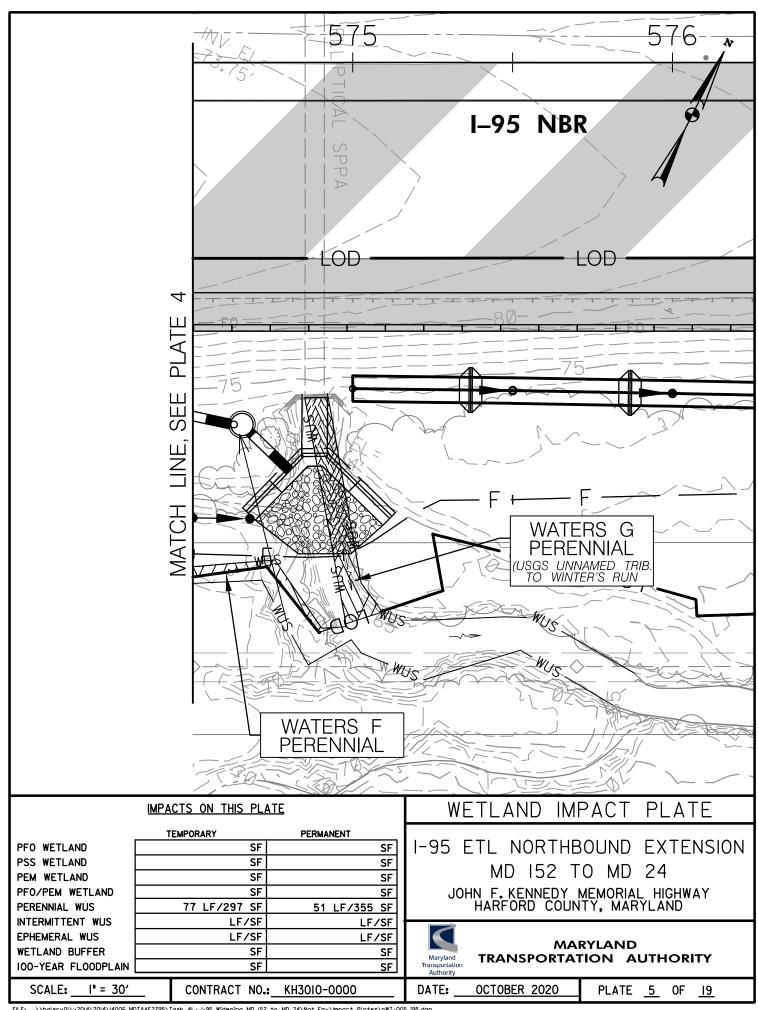
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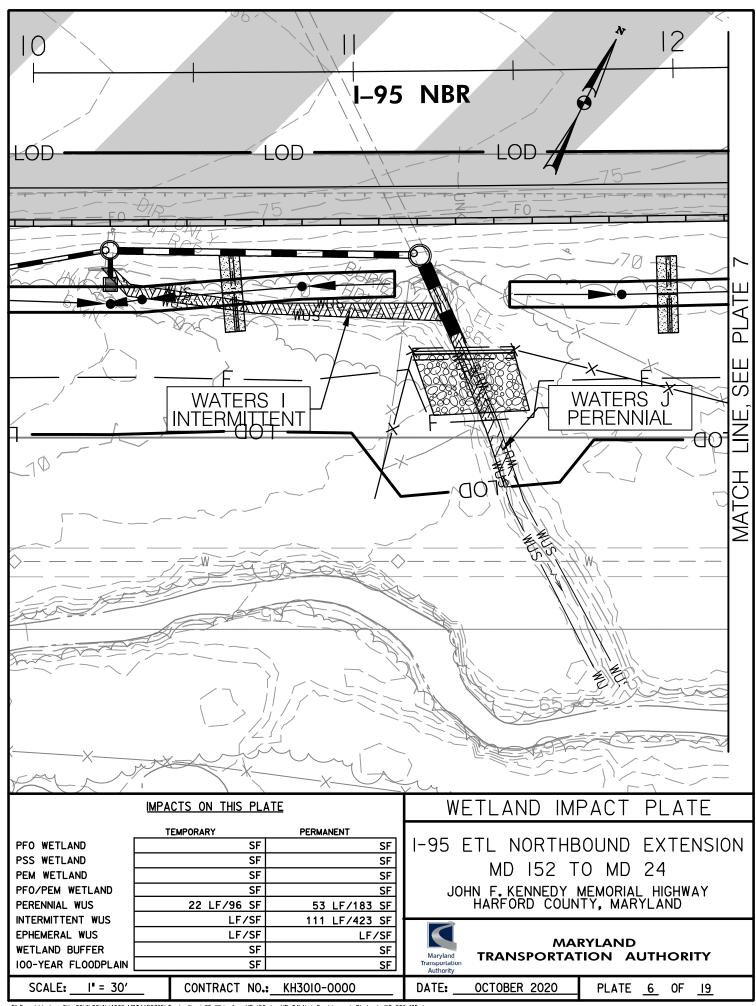
		KH-3010 I	-95 ETL North	bound Extens	ion MD 152 to	o MD 24 Wetl	and Impact Su	ımmary Table	)			
Plate/Plan Sheet No.	Resource ID	PEM W	etland/	PSS W	etland	PFO W	etland	PFO/PEM	l Wetland	25-foot Wetland Buffer		
Sheet No.		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	
		SF SF		SF	SF SF		SF	SF SF		SF	SF	
PLATE 7	WETLAND H	0	0	0	0	0	0	0	2,386	0	5,628	
PLATE 9	WETLAND L	0	0	0	0	0	0	0	0	0	875	
PLATE 17	WETLAND S	0	0	0	0	0	0	0	0	0	1,111	
PLATE 18	WETLAND S	0	0	0	0	0	900	0	0	0	3,835	
PLATE 18	WETLAND X	0 0		0	0	0	857	0	0	0	2,828	
PLATE 19	PLATE 19 WETLAND X 0 0		0	0	0	0	5,182	0	0	0	6,105	
	Total		0	0	0	0	6,939	0	2,386	0	20,382	

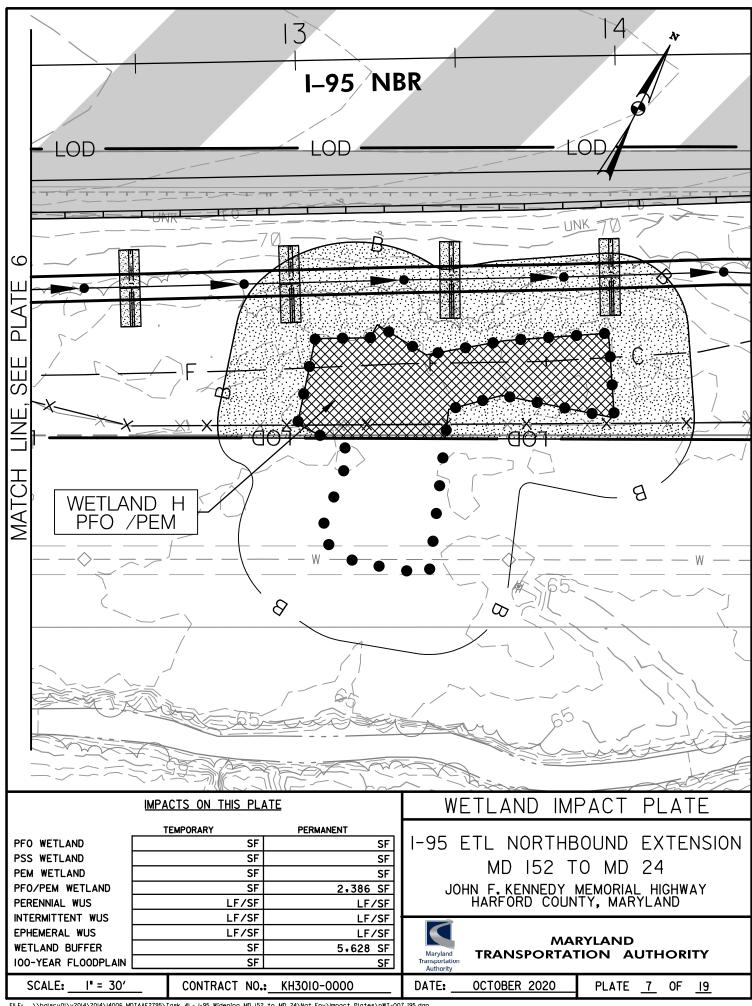
	KH-3010 I-95 ETL Northbound Extension MD 152 to MD 24 WUS Impact Summary Table														
Plate/Plan	Resource ID		Perenni	al WU	S	I	ntermit	tent Wl	JS		Epheme	eral WUS	i	100-Year	Floodplain
Sheet No.		Temp	orary	Perm	anent	Tem	oorary	Perm	anent	Temp	orary	Perm	anent	Temporary	Permanent
		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
PLATE 3	WATERS E	0	0	0	0	42	263	53	339	0	0	0	0	0	0
PLATE 4	WATERS F	101	342	0	0	0	0	0	0	0	0	0	0	0	0
PLATE 5	WATERS F	56	127	0	0	0	0	0	0	0	0	0	0	0	0
PLATE 5	WATERS G	21	170	51	355	0	0	0	0	0	0	0	0	0	0
PLATE 6	WATERS I	0	0	0	0	0	0	111	423	0	0	0	0	0	0
PLATE 6	WATERS J	22	96	53	183	0	0	0	0	0	0	0	0	0	0
PLATE 8	WATERS K	0	0	0	0	16	82	42	402	0	0	0	0	0	0
PLATE 10	WATERS M	39	297	72	592	0	0	0	0	0	0	0	0	0	0
PLATE 11	WATERS N	0	0	0	0	25	174	48	280	0	0	0	0	0	0
PLATE 12	WATERS V	0	0	0	0	35	88	131	492	0	0	0	0	588	12,826
PLATE 13	WATERS V	0	0	0	0	0	0	214	1,173	0	0	0	0	0	12,481
PLATE 14	WATERS V	0	0	0	0	0	0	213	1,035	0	0	0	0	0	10,607
PLATE 15	WATERS V	0	0	0	0	0	0	213	1,110	0	0	0	0	0	2,889
PLATE 16	WATERS V	0	0	0	0	127	1,185	86	588	0	0	0	0	0	0
PLATE 17	WATERS V	0	0	0	0	165	1,193	10	54	0	0	0	0	0	0
	Total		1,032	176	1,130	410	2,985	1,121	5,896	0	0	0	0	588	38,803

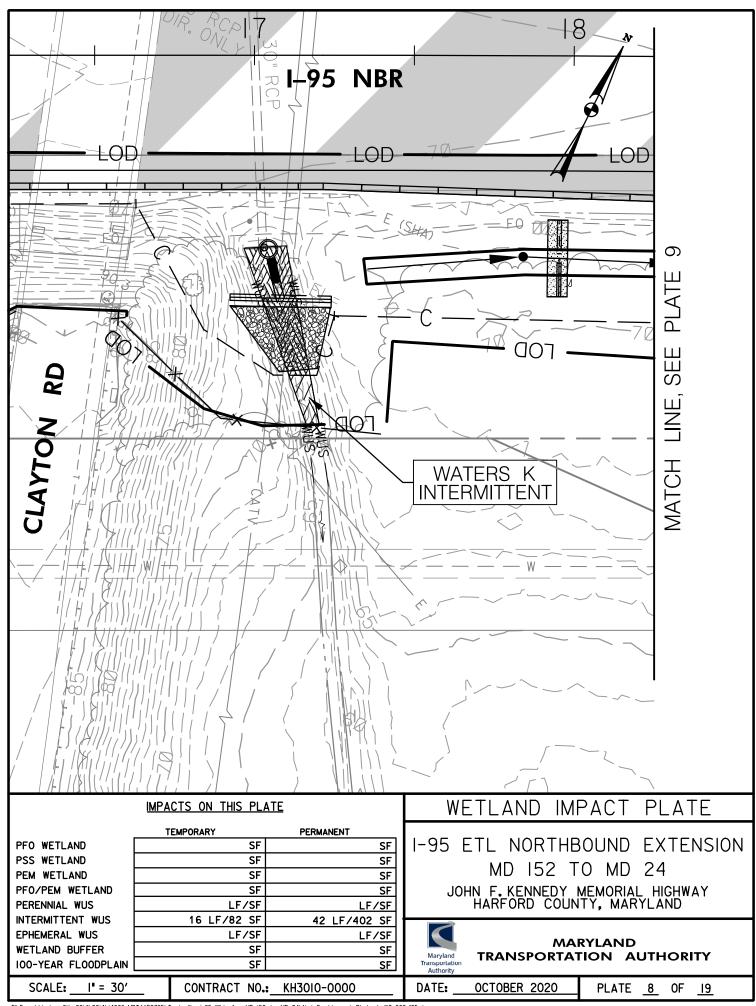


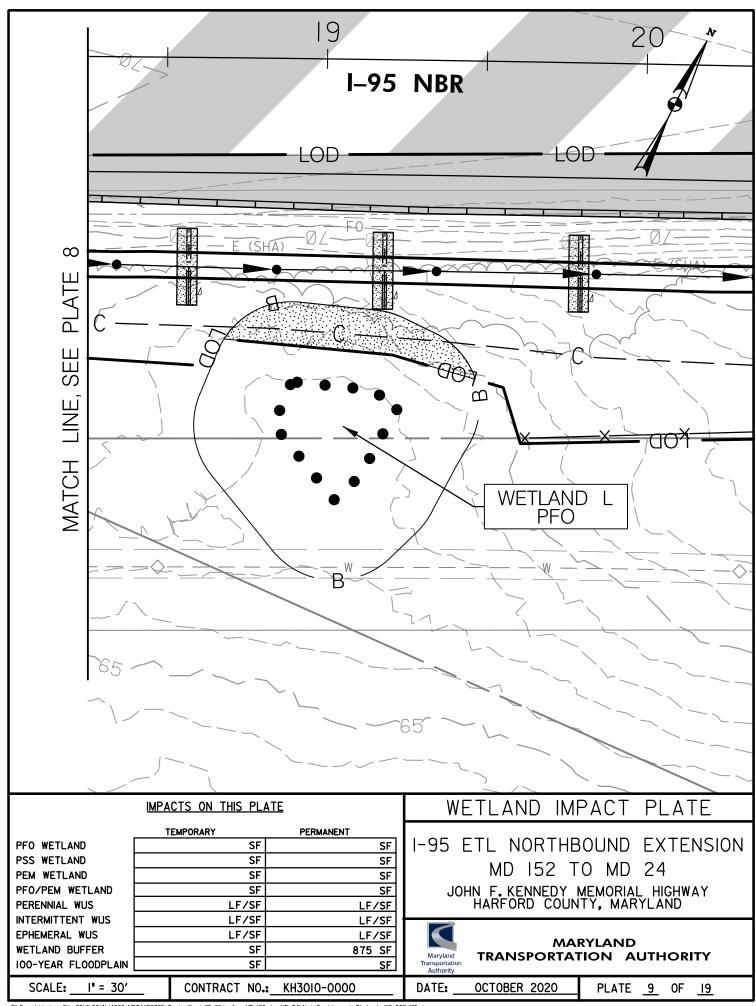


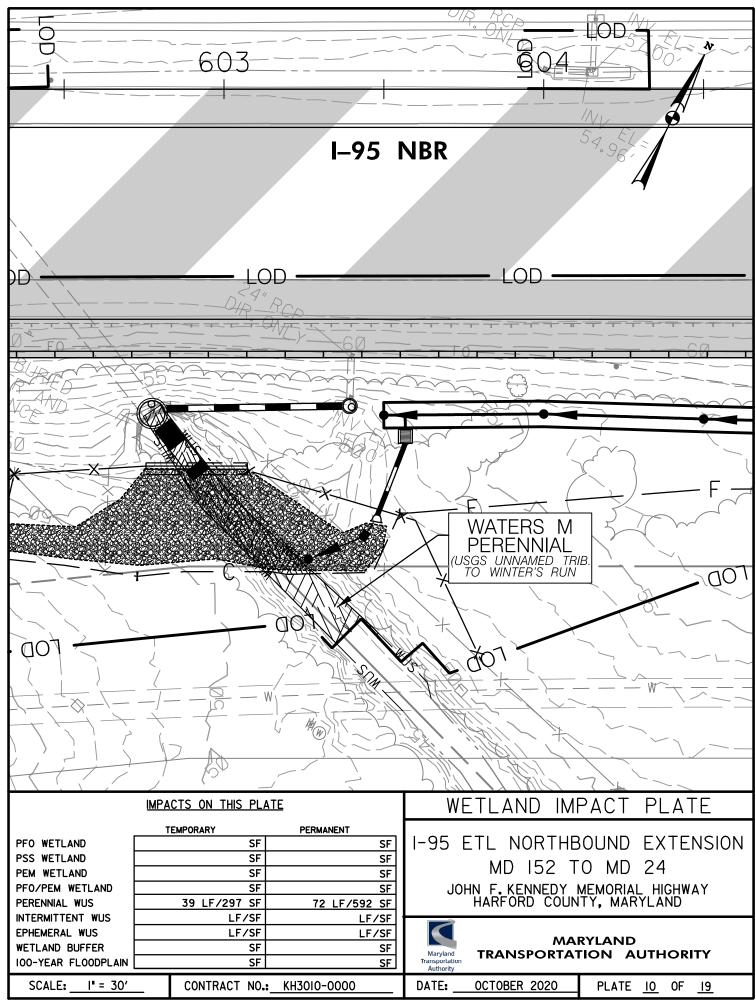


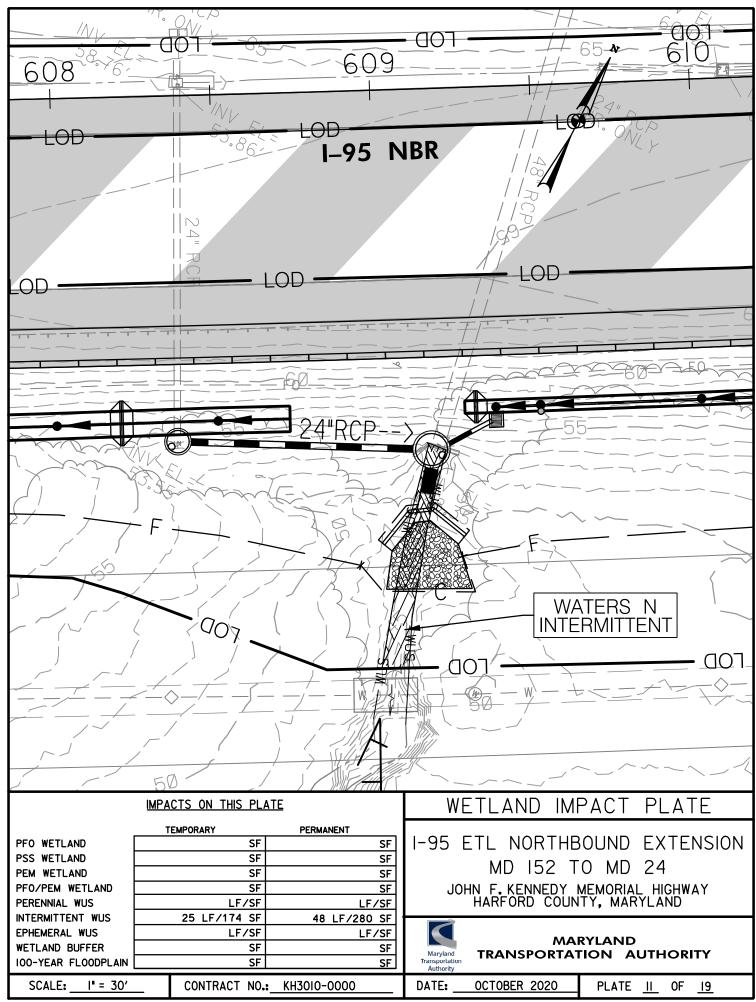


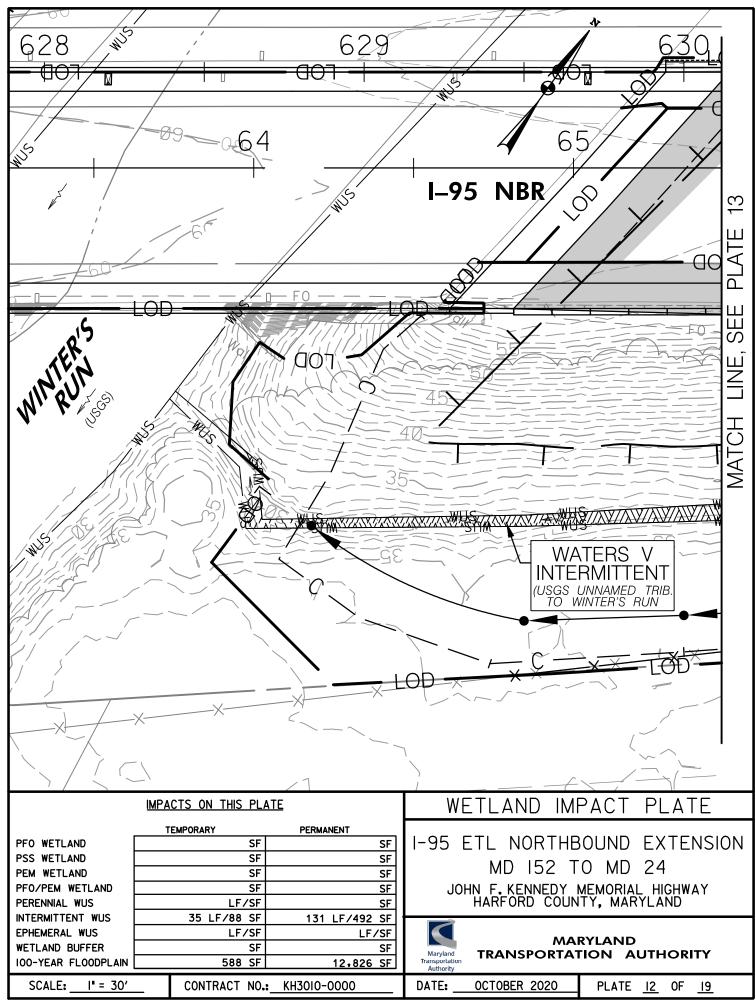


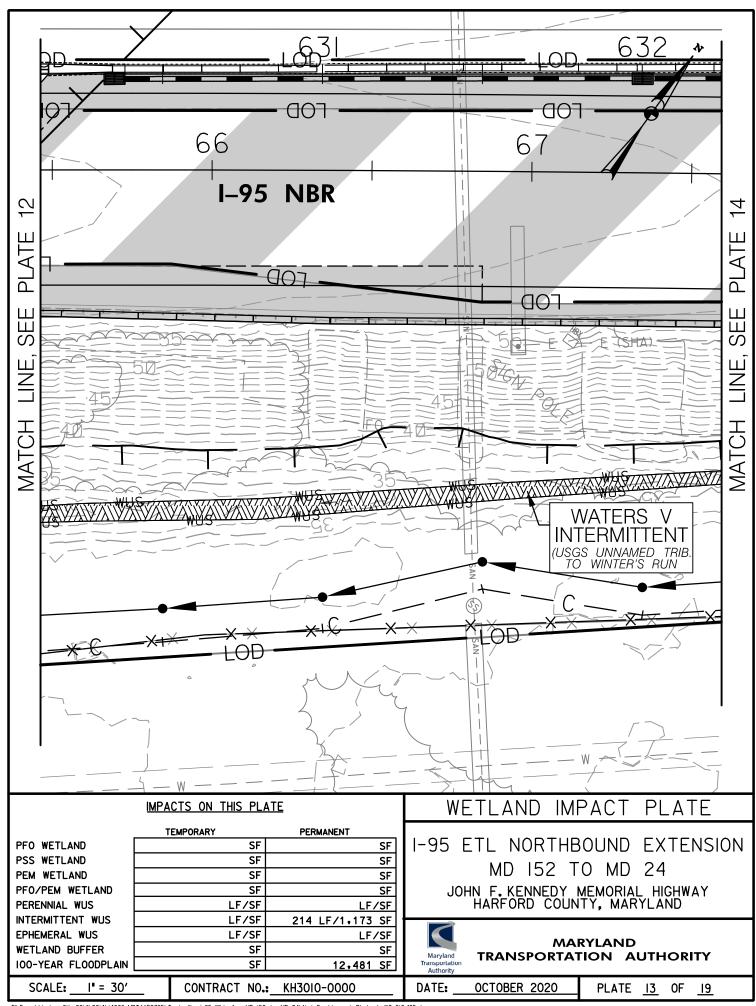


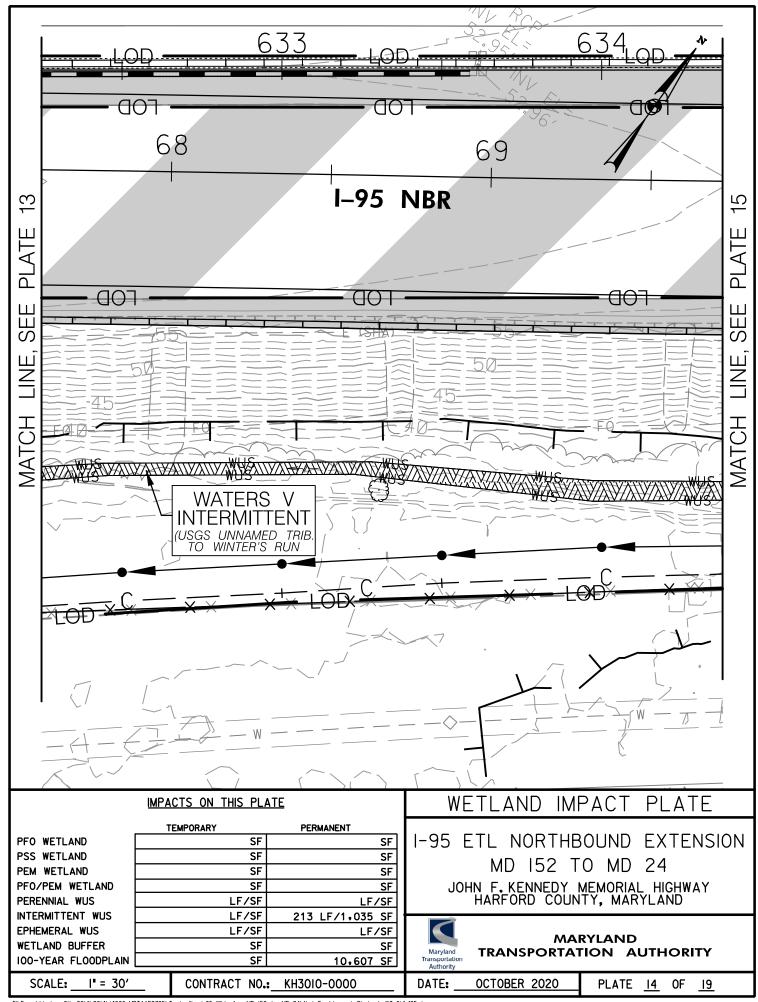


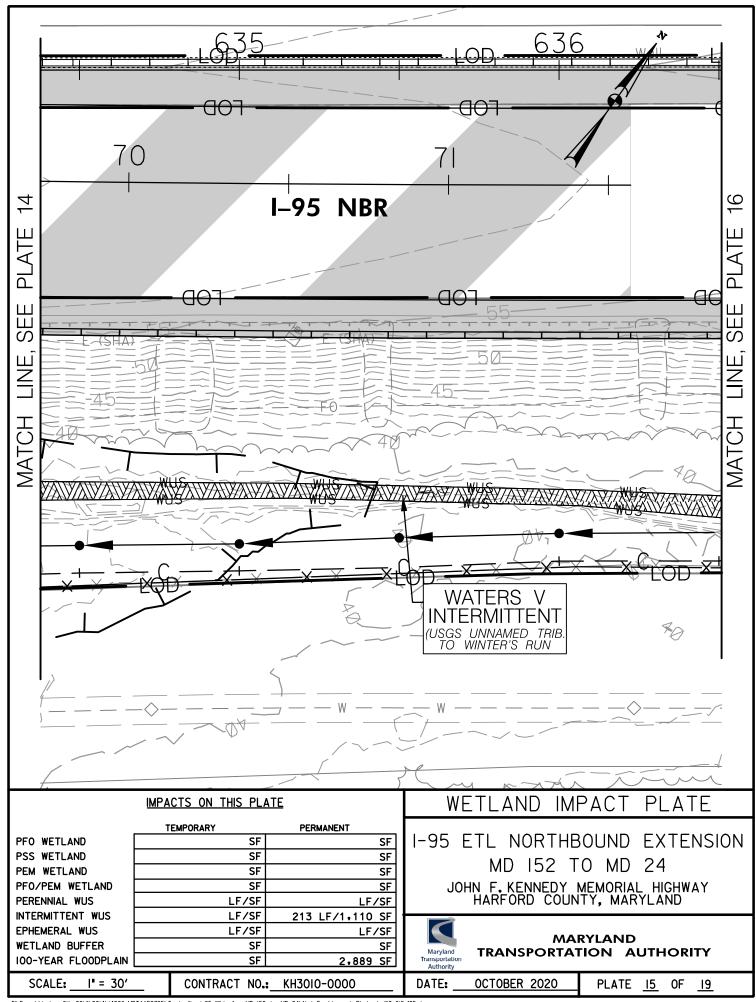


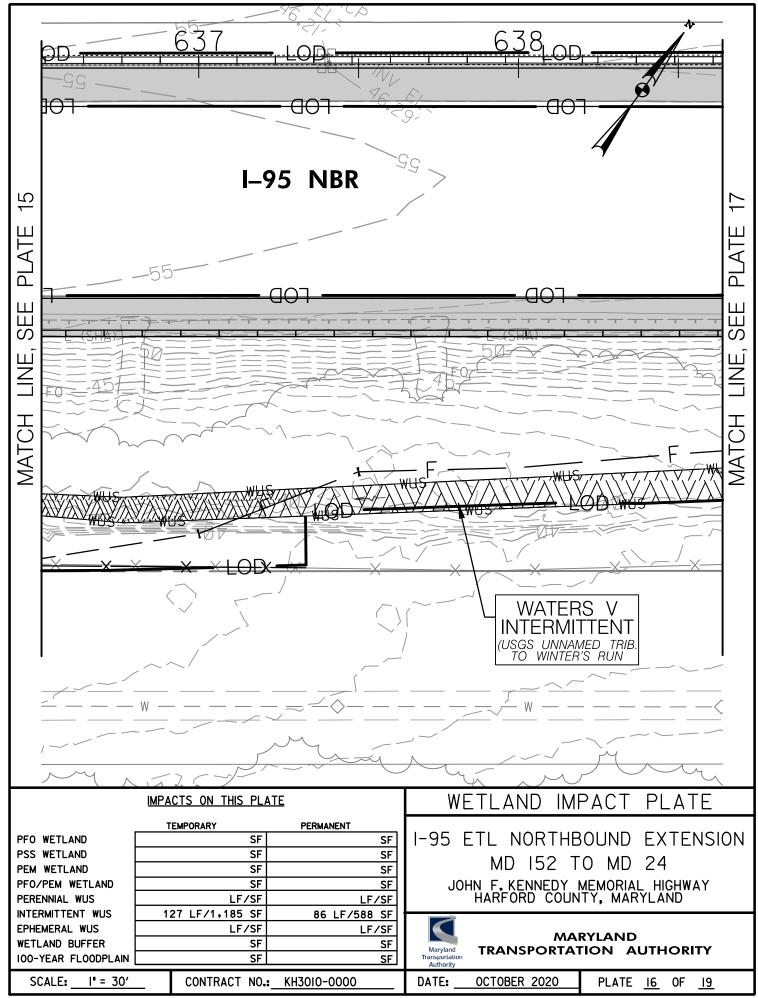


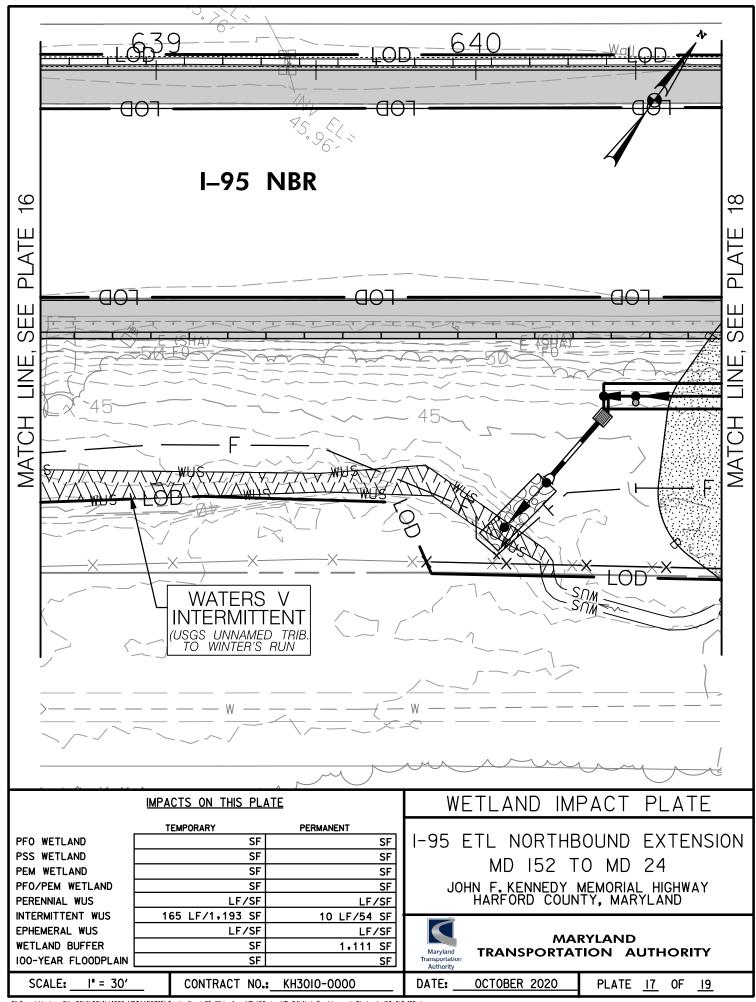




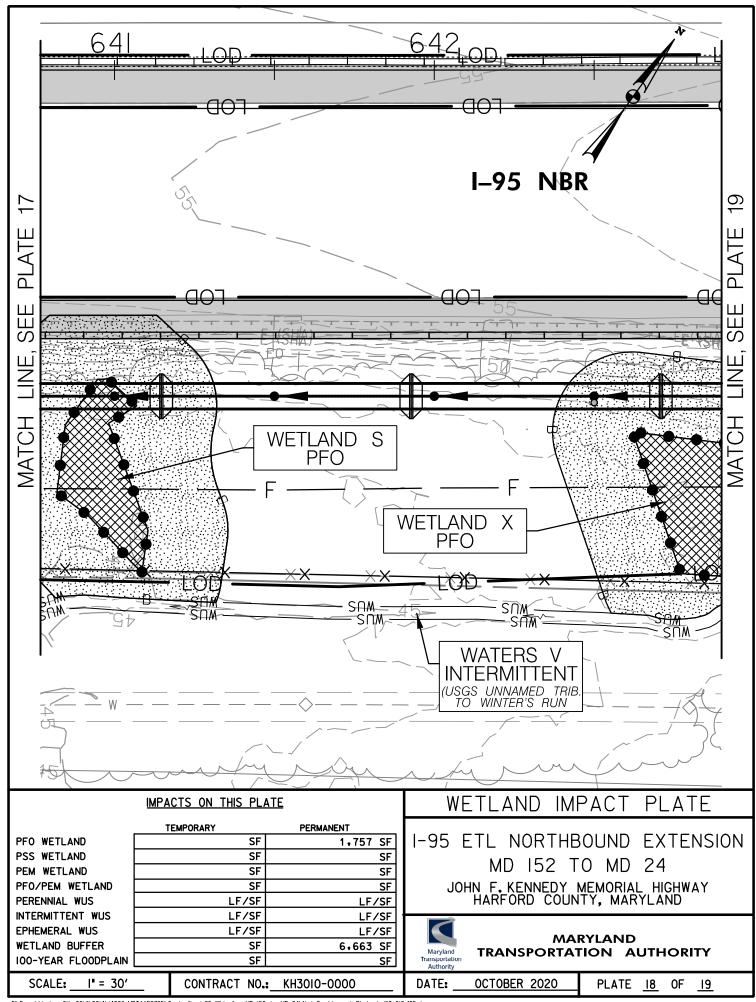


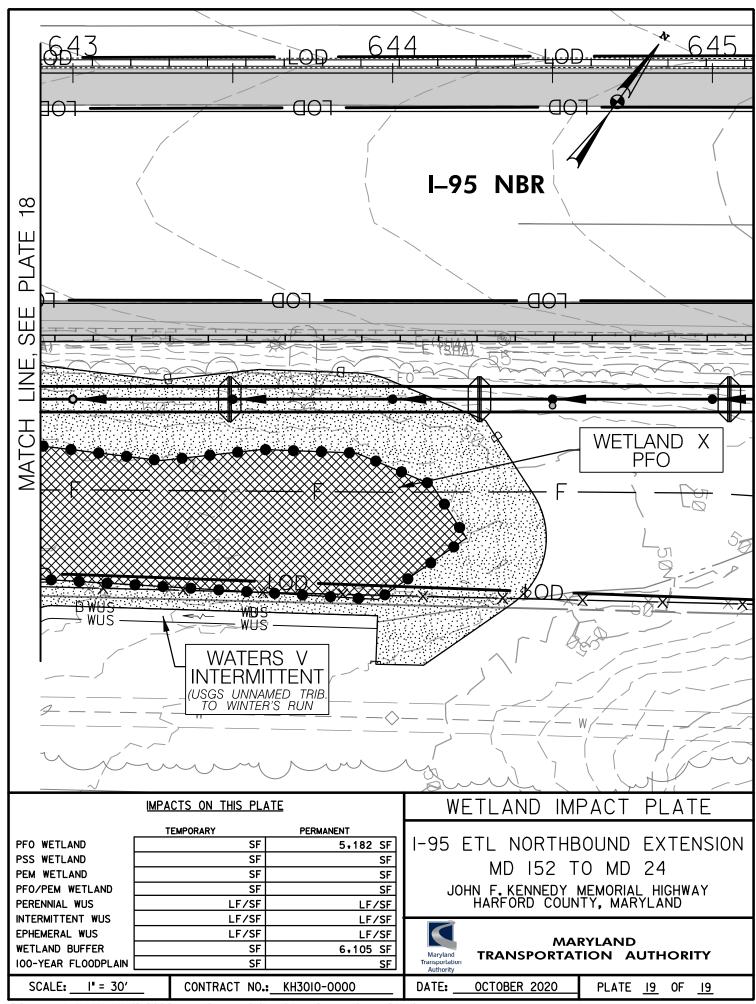


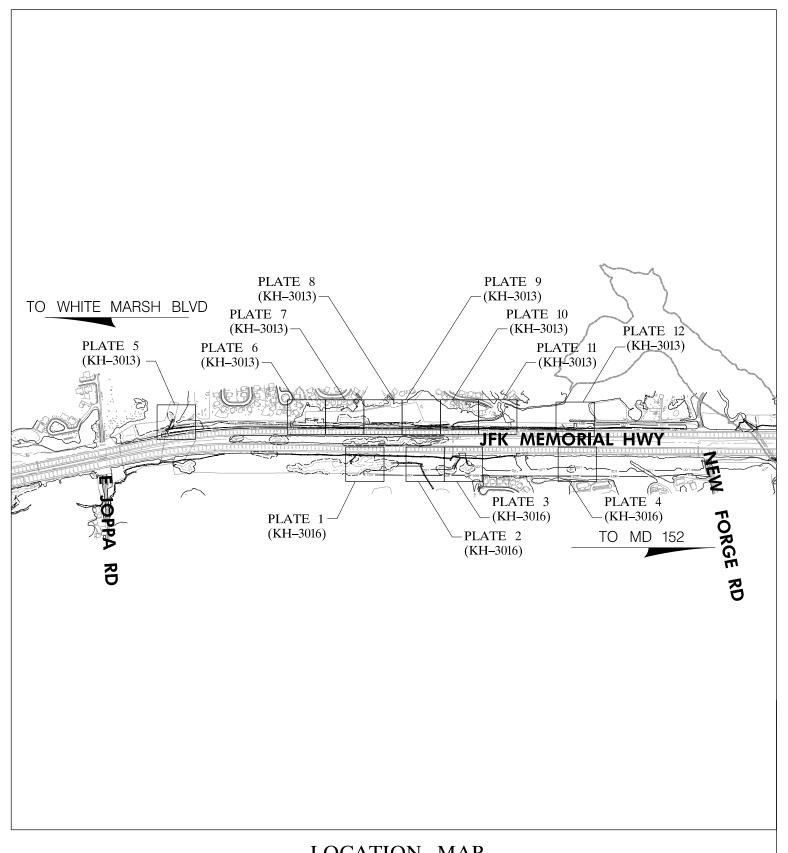




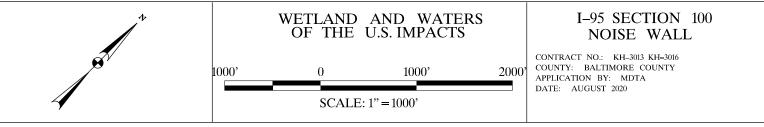
Page 79







### LOCATION MAP



	KH-3016 I-95 Section 100 Noise Wall Wetland Impact Summary Table													
Plate No.	Resource ID	PEM W	/etland	PFO W	etland/	Vernal Poo	ol Wetland	25-foot Wetland Buffer						
		Temporary	Permanent	Temporary	Permanent	Temporary	<del>' '                                   </del>		Permanent					
		SF	SF	SF	SF	SF	SF	SF	SF					
1	BRBR-WET1								1,260					
2	GPJR-WET1				1,933				4,793					
3	GPJR-WET1				1,498				6,990					
3	WET J				3,716				9,515					
4	4 WET K		91				420		4,565					
	Total		91	0	7,147	0	420	0	27,123					

	KH-3013 I-95 Section 100 Noise Wall Wetland Impact Summary Table													
Plate No.	Resource ID	PEM W	etland/	PFO W	etland/	Vernal Poo	ol Wetland	25-foot Wetland Buffer						
		Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent					
		SF	SF	SF	SF			SF	SF					
5	BRBR-WET98				273				2823					
6	GPJR-WET4				7,405			549	14,117					
7	GPJR-WET4				21,483				19,288					
8	GPJR-WET4				7,051				17,380					
9	GPJR-WET4				3,661				10,184					
10	GPJR-WET4								1,330					
10	WET95A				1,214			134	3,118					
11	WET95A				319				6,507					
12	WET96A				628				3,518					
	Tota		0	0	42,034	0	0	683	78,265					

	I	К	H-3016	5 I-95 S	ection	100 N	oise W	all W	JS Impa	ct Sumi	mary Ta	ble		1	
Plate/Plan Sheet No.	Resource ID	Р	erenni	ial WU	S	Ir	ntermit	tent W	US	E	Epheme	eral WU	S	100-Year	Floodplain
		Temp	orary	Perm	anent	Temp	orary	Perm	anent	Temp	orary	Perm	anent	Temporary	Permanent
		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
2	GPJR-WUS3					12	99	76	624						
2	GPJR-WUS10B					5	30	15	68						
3	WUS O							66	213						
3	WUS P					59	473	3	4	4	19				
3	GPJR-WUS1A					6	46	9	17						
3	GPJR-WUS1B							136	688						
	Total		0	0	0	82	648	305	1,614	4	19	0	0	0	0

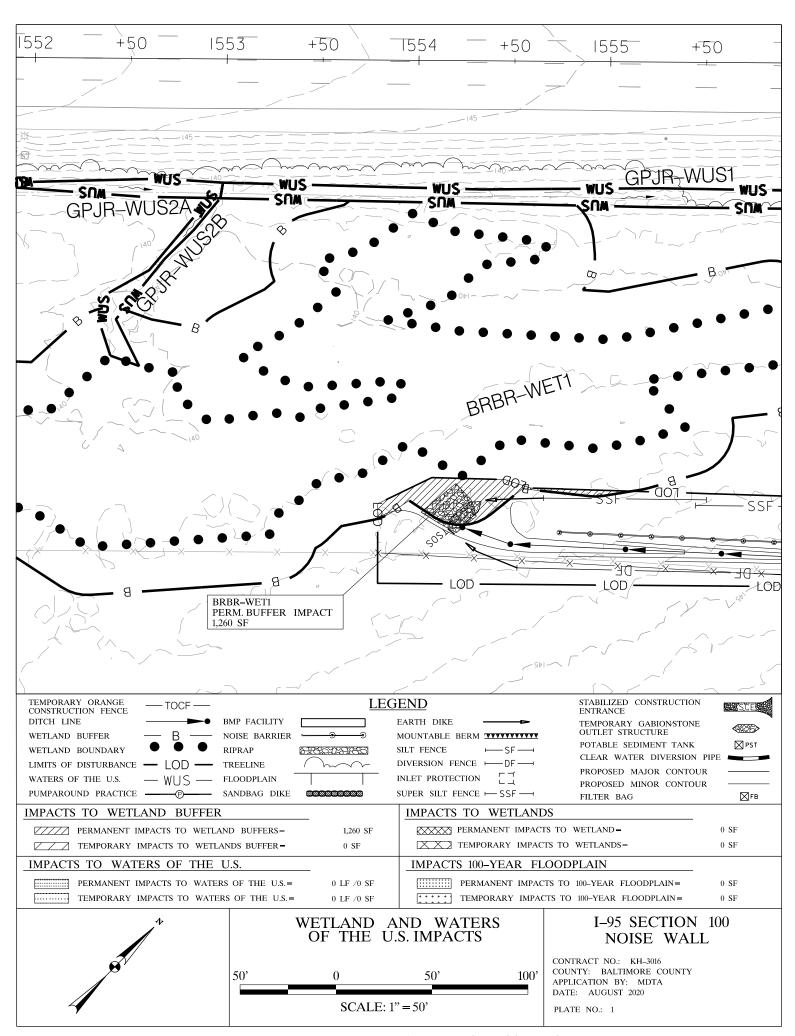
	KH-3013 I-95 Section 100 Noise Wall WUS Impact Summary Table														
Plate/Plan		Р	erenni	ial WU	S	Ir	termit	tent W	US	Е	pheme	ral WU	S	100-Year	Floodplain
Sheet No.	Resource ID	Temp	orary	Perm	anent	Temp	Temporary Permanent			Temporary		Permanent		Temporary	Permanent
		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
5	BRBR-WUS9	12	35	47	236										
5	BRBR-WUS98	5	15	8	25										
5	BRBR-WUS99			28	118	96	503	146	773						
9	GPJR-WUS4	46	34	27	19										
10	GPJR-WUS1	3	21												
	Total 66   105   110   398							146	773	0	0	0	0	0	0

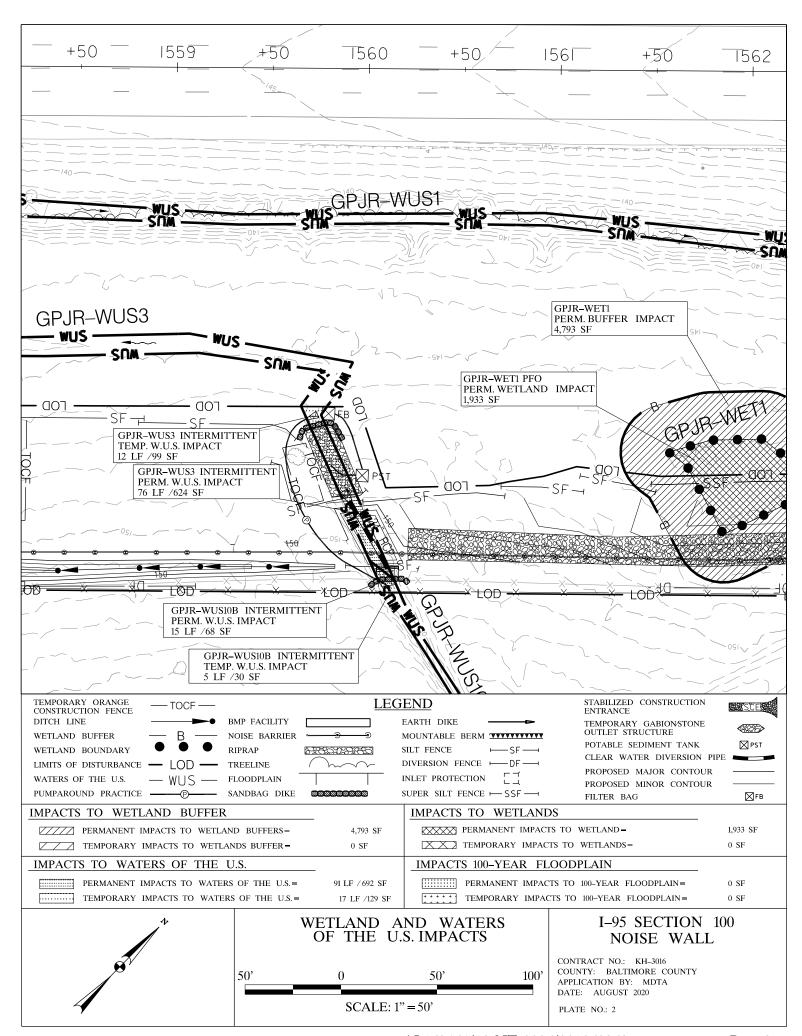
# SUMMARY TABLE

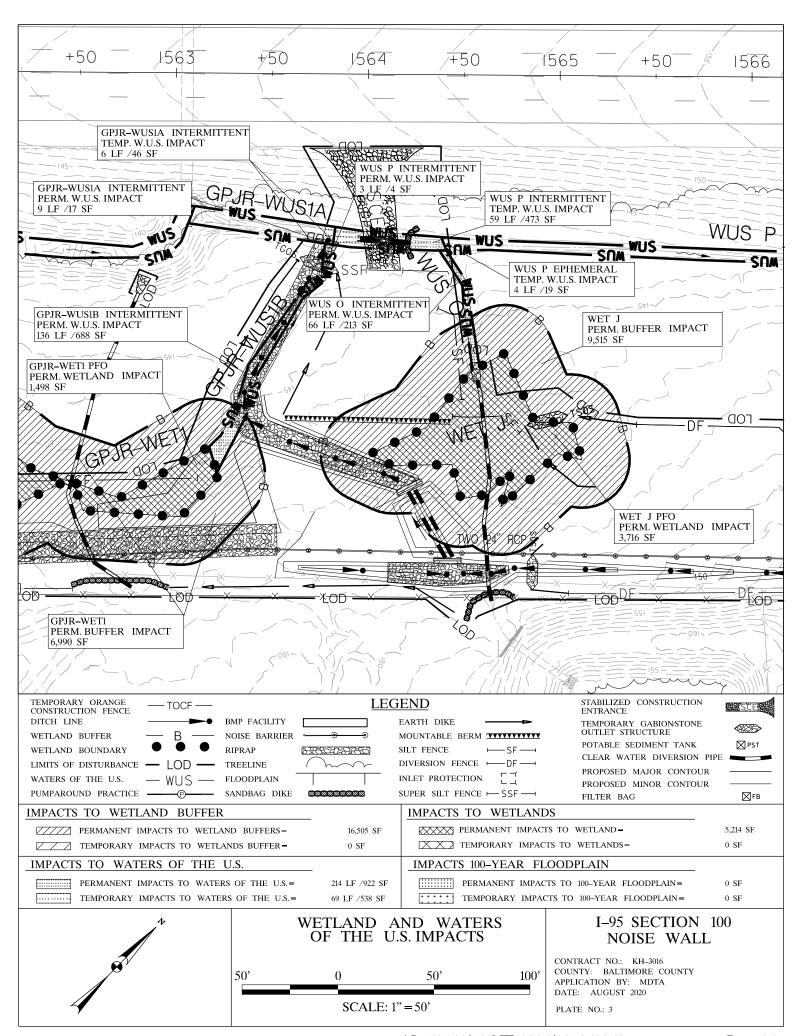
WETLAND AND WATERS OF THE U.S. IMPACTS

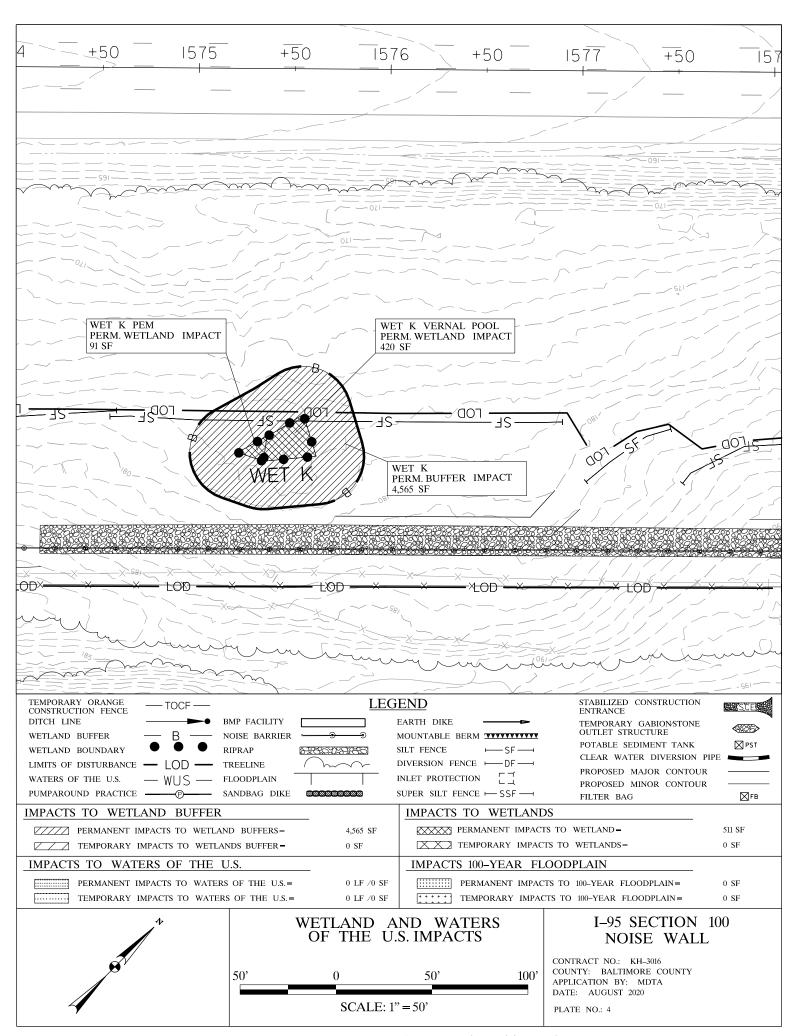
I-95 SECTION 100 NOISE WALL

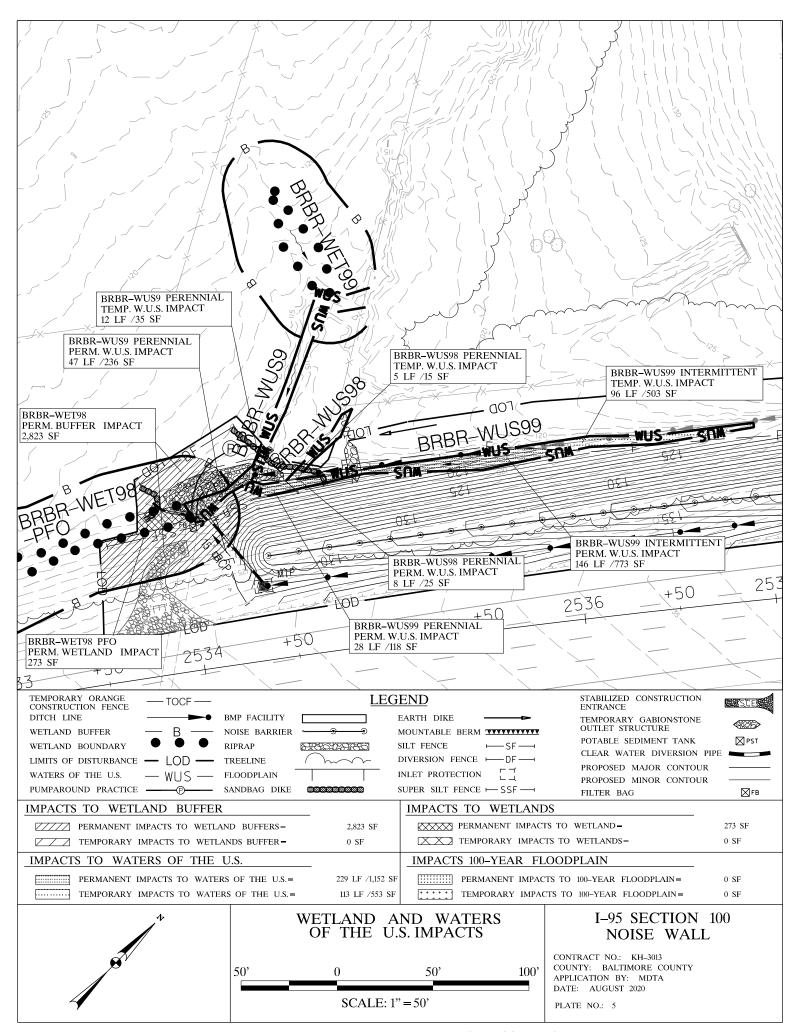
CONTRACT NO.: KH-3013 KH-3016 COUNTY: BALTIMORE COUNTY APPLICATION BY: MDTA DATE: AUGUST 2020

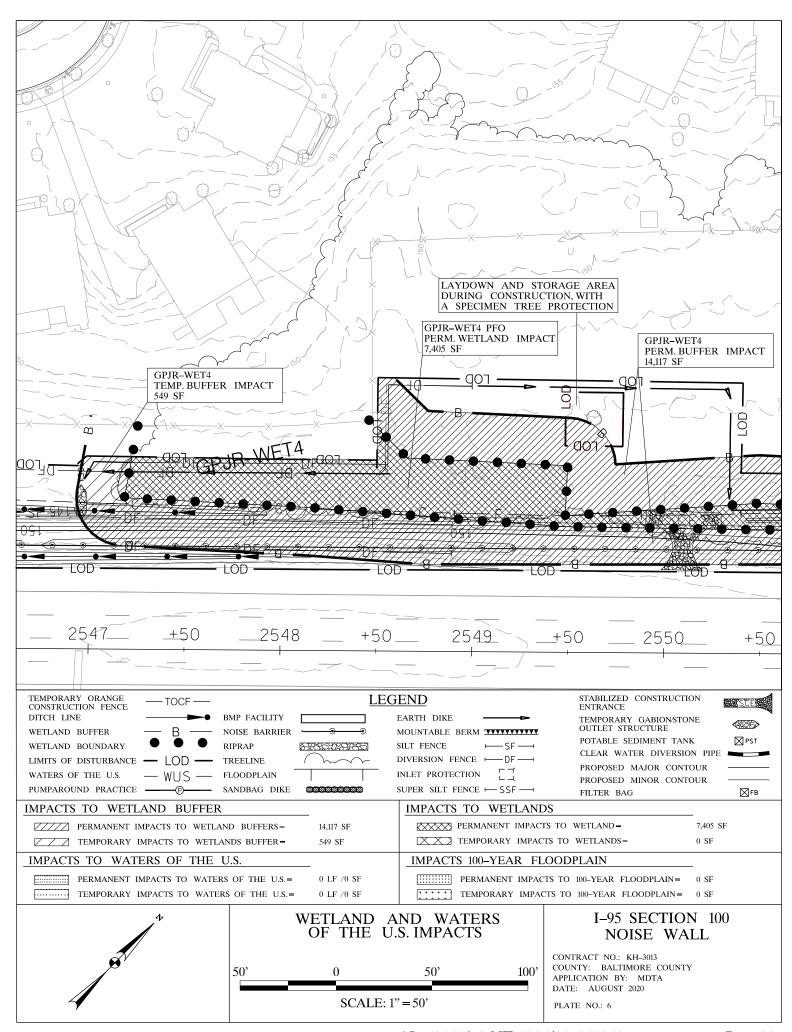


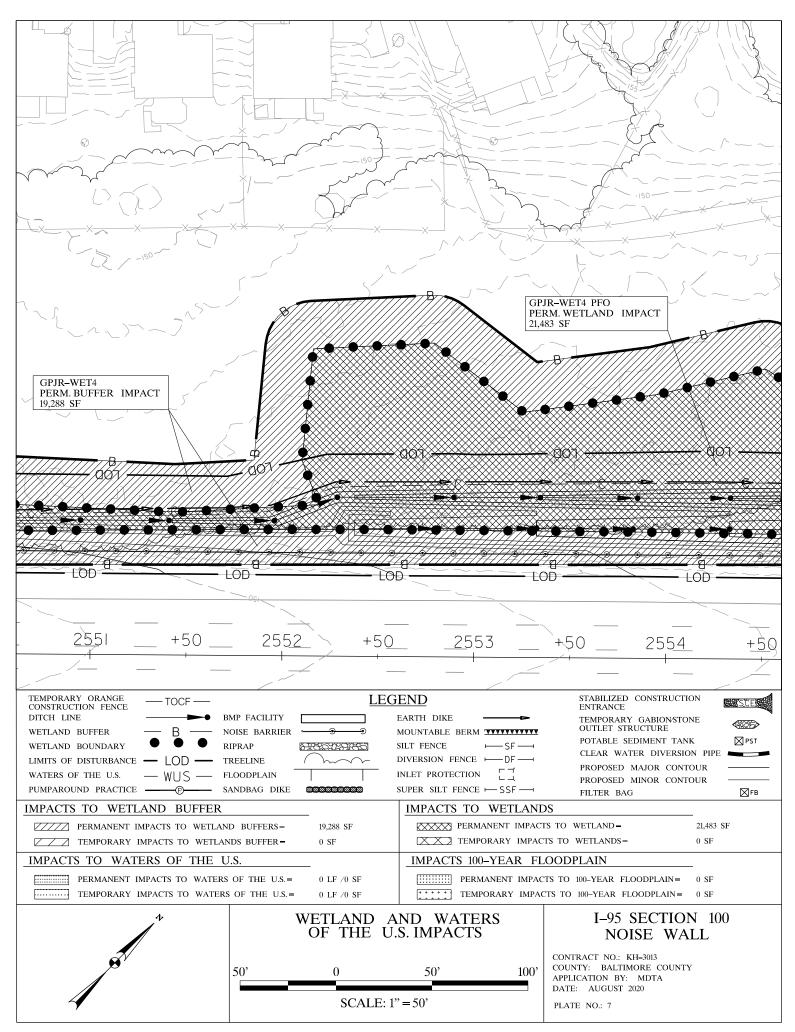


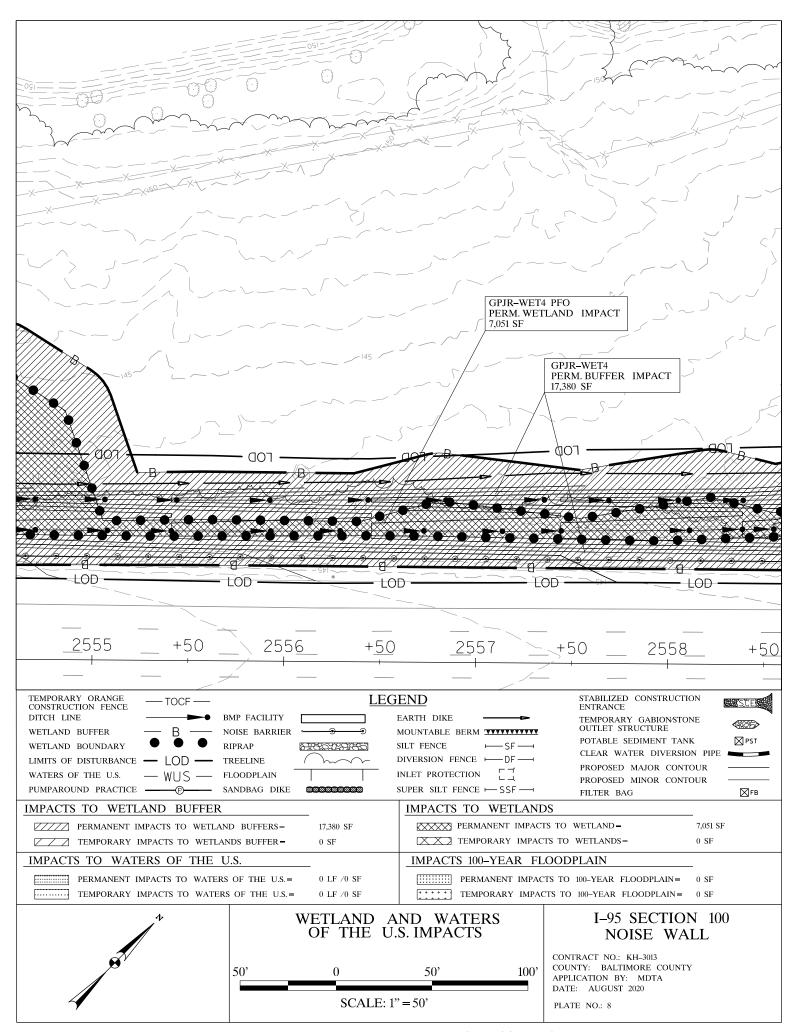


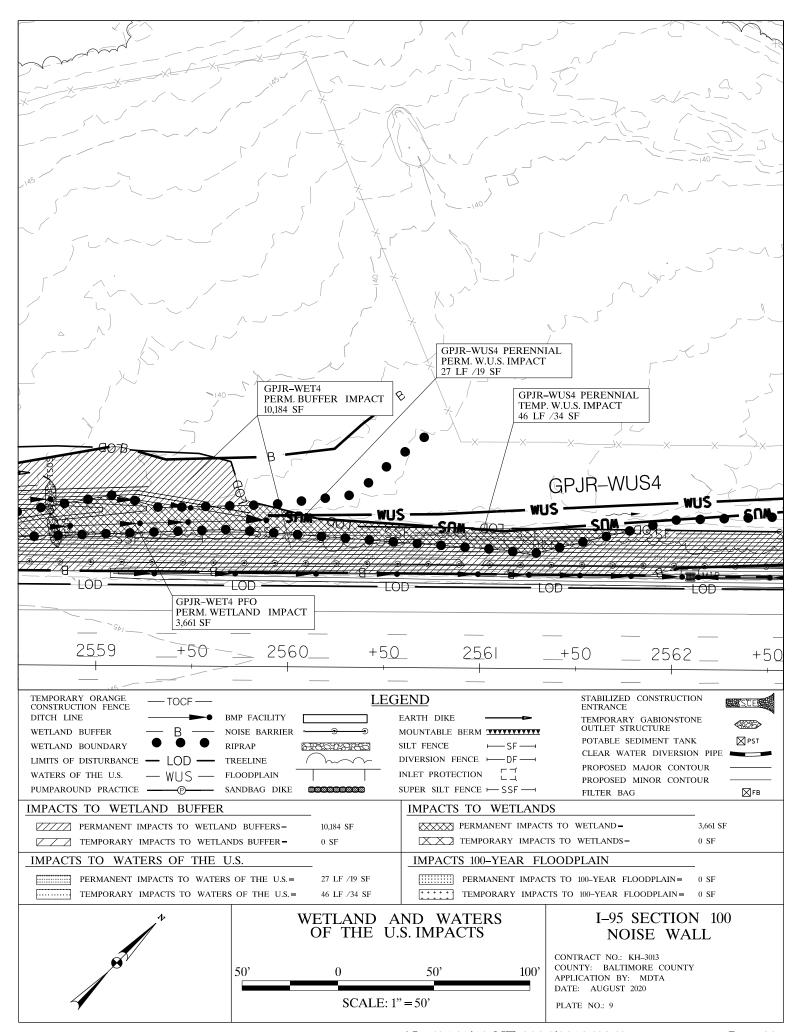


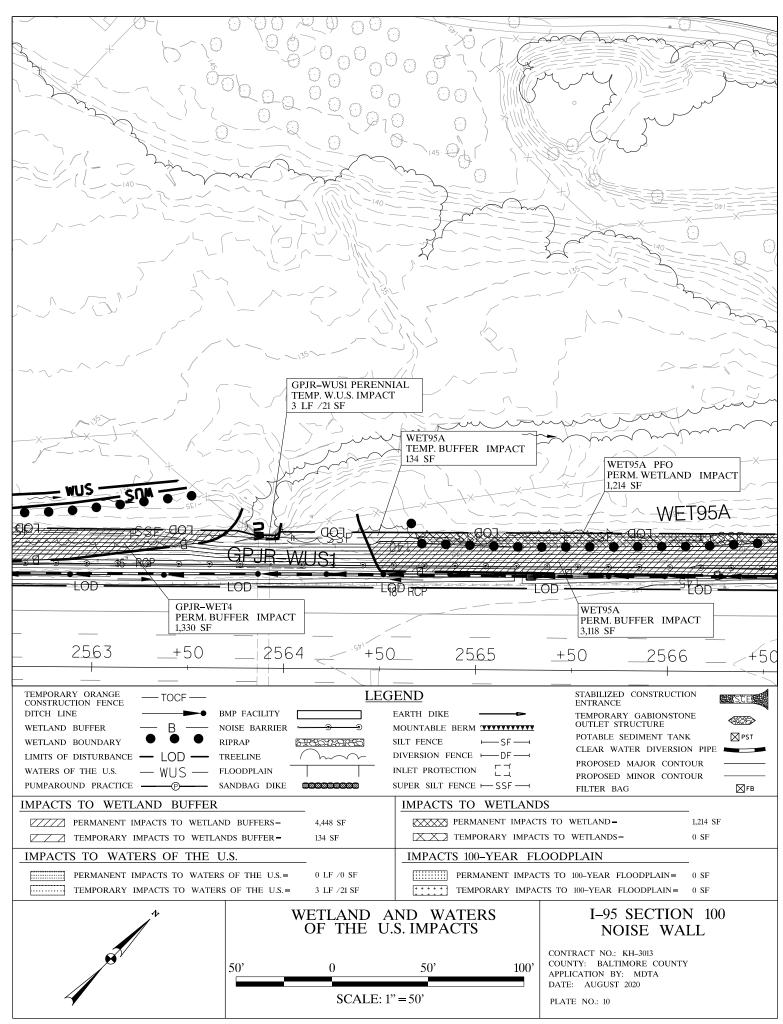


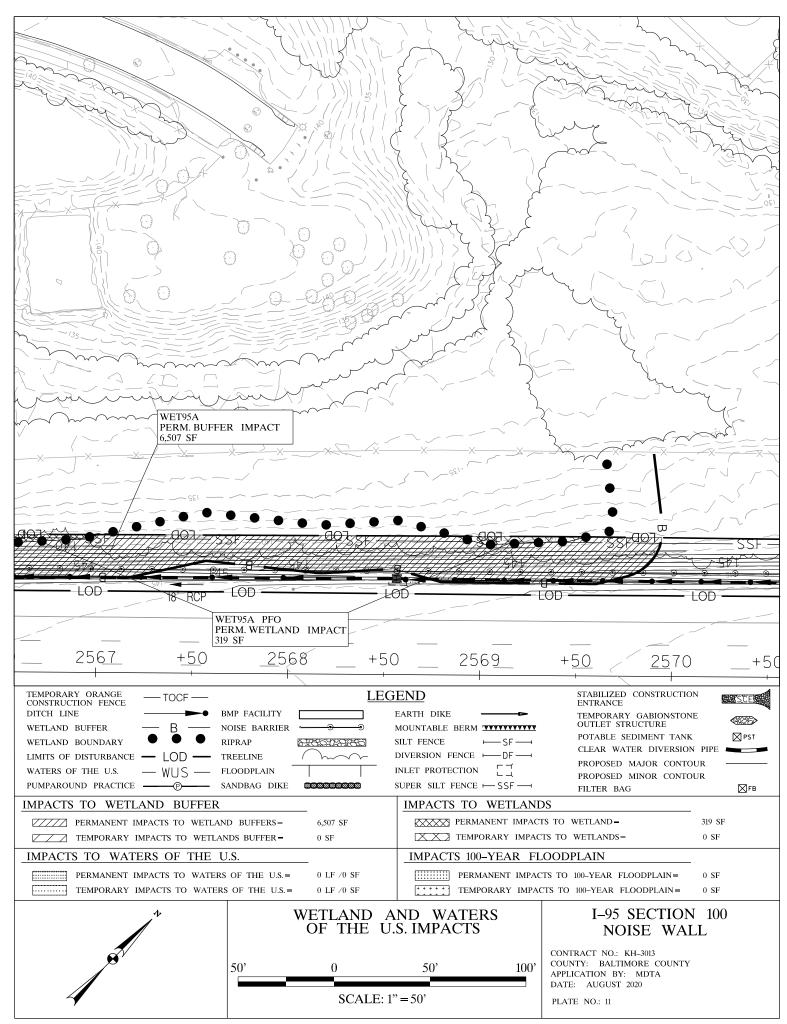


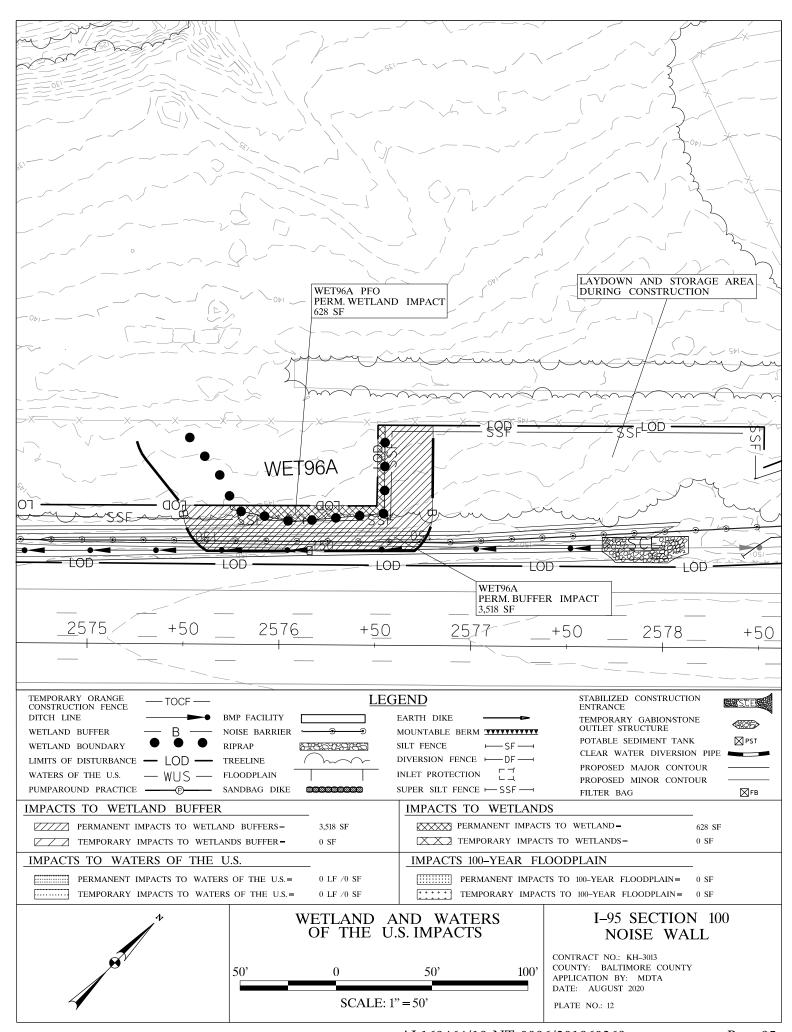


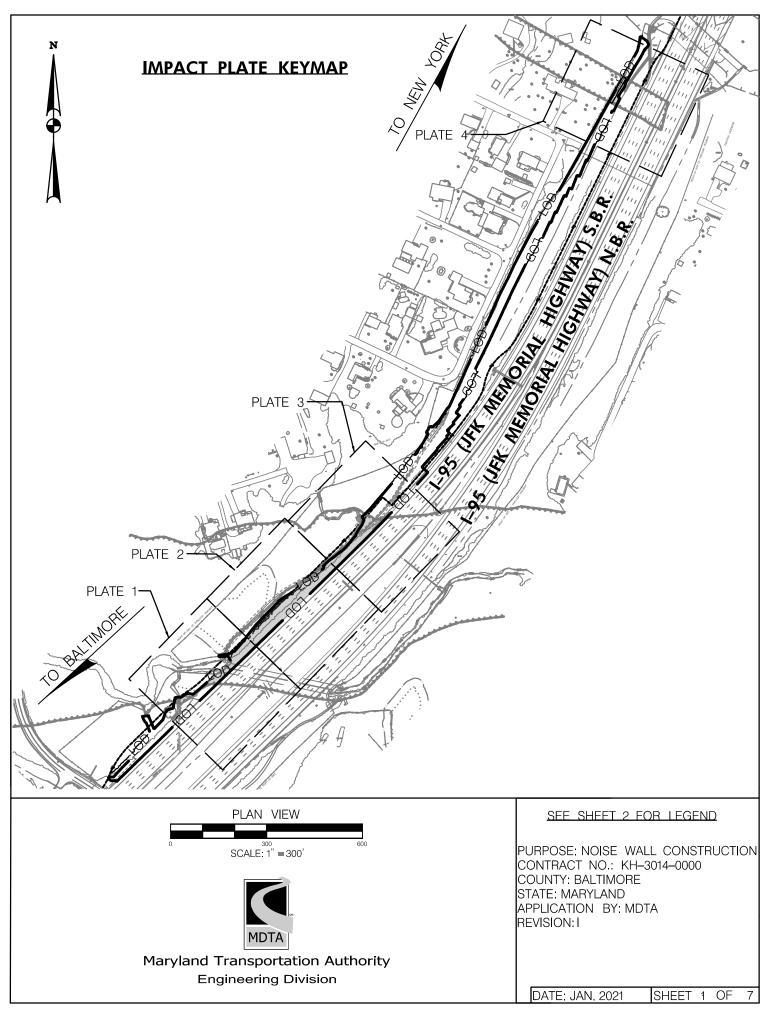












#### **LEGEND** CLASS I RIPRAP OR LIMIT OF DISTURBANCE LOD — STONE AND GABION **RIGHT-OF-WAY** CONCRETE WASHOUT CWS 100-YEAR FLOODPLAIN FILTER LOG (FL X-X) **→** FL **----WUS BOUNDARY** WUS -SANDBAG DIKE (SBD X-X) WETLAND BOUNDARY **PUMP** WETLAND BUFFER BOUNDARY STANDARD INLET **WUS IMPACT PERMANENT** PROTECTION (SIP X-X) WETLAND IMPACT PERMANENT TEMPORARY STONE OUTLET TSOS STRUCTURE (TSOS X-X) WETLAND BUFFER **IMPACT PERMANENT ⊠**FВ FILTER BAG (FB X-X) PIPE SLOPE DRAIN (PSD X-X) 100-YR FLOODPLAIN **IMPACT PERMANENT TEMPORARY ORANGE** -TOCF -100-YR FLOODPLAIN CONSTRUCTION FENCE **IMPACT TEMPORARY** STABILIZED CONSTRUCTION **EXISTING CONTOUR ENTRANCE** PROPOSED CONTOUR PROPOSED NOISE BARRIER WITH DRILLED SHAFTS **FENCE DITCH FLOW ARROWS** SUPER SILT FENCE -SSF —



Maryland Transportation Authority Engineering Division

PURPOSE: NOISE WALL CONSTRUCTION

CONTRACT NO.: KH-3014-0000

COUNTY: BALTIMORE STATE: MARYLAND APPLICATION BY: MDTA **REVISION: I** 

DATE: JAN. 2021 SHEET 2 OF

## **IMPACT SUMMARY TABLE**

			WETLAND	July 2020	RY TABLE			
Impact		Tempor	ary Nontidal Wetl	and Impacts	Permanent	t Nontidal Wetla	nd Impacts	Perm. Wetland
Sheet	Resource ID	PEM	PSS	PFO	PEM	PSS	PFO	Buffer
Number		SF	SF	SF	SF	SF	SF	SF
Plate 1	WET 30A	0	0	0	0	0	0	2 442
riate 1	WET 97A	0	0	0	0	0	143	3,112
Plate 2	WET 30A	0	0	0	0	0	0	
riate 2	WET 97A	0	0	0	0	0	0	0
Plate 3	WET 30A	0	0	0	0	0	0	
Fiate 3	WET 97A	0	0	0	0	0	0	0
Plate 4	WET 30A	0	0	0	0	0	0	_
riate 4	WET 97A	0	0	0	0	0	0	0

						W		SUMMAR ly 2020	YTABLE						
Impact		Temporary WUS Impacts							P	ermanent	WUS Impac	ts		Temporary Floodplain	Permanent Floodplain
Sheet Number	Resource ID	Pere	nnial	Intern	nittent	Ephe	meral	Pere	nnial	Interr	nittent	Ephemeral		Impacts	Impacts
Number		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF
	WUS 42A	0	0	0	0	0	0	0	0	0	0	0	0		
Plate 1	WUS 43A	0	0	0	0	0	0	0	0	0	0	0	0	0	6,411
	WUS 44A	0	0	0	0	0	0	0	0	0	0	52	282		
	WUS 42A	0	0	0	0	0	0	0	0	0	0	0	0		14,685
Plate 2	WUS 43A	0	0	0	0	0	0	0	0	0	0	0	0	0	
	WUS 44A	0	0	0	0	0	0	0	0	0	0	0	0	1	,
	WUS 42A	0	0	0	0	0	0	0	0	0	0	0	0		
Plate 3	WUS 43A	0	0	0	0	0	0	0	0	0	0	0	0	0	6,810
	WUS 44A	0	0	0	0	0	0	0	0	0	0	0	0	٦	
	WUS 42A	0	0	0	0	0	0	0	0	0	0	0	0		<u> </u>
Plate 4	WUS 43A	0	0	0	0	0	0	0	0	0	0	0	0	950	851
	WUS 44A	0	0	0	0	0	0	0	0	0	0	0	0	1	551



Maryland Transportation Authority
Engineering Division

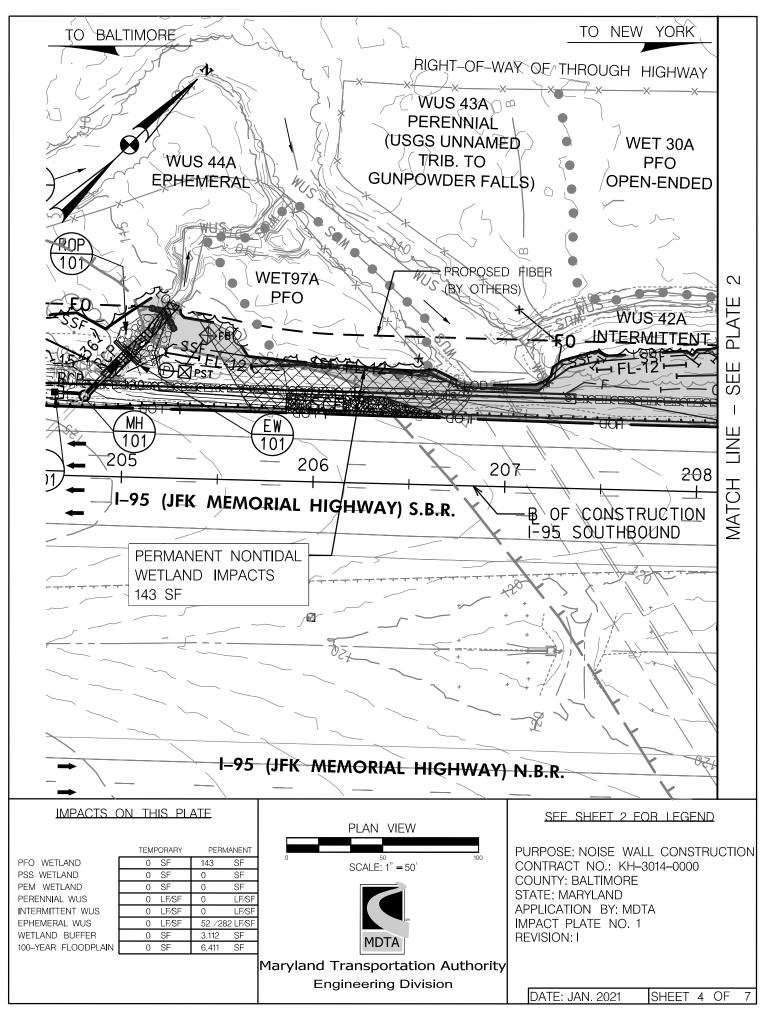
PURPOSE: NOISE WALL CONSTRUCTION

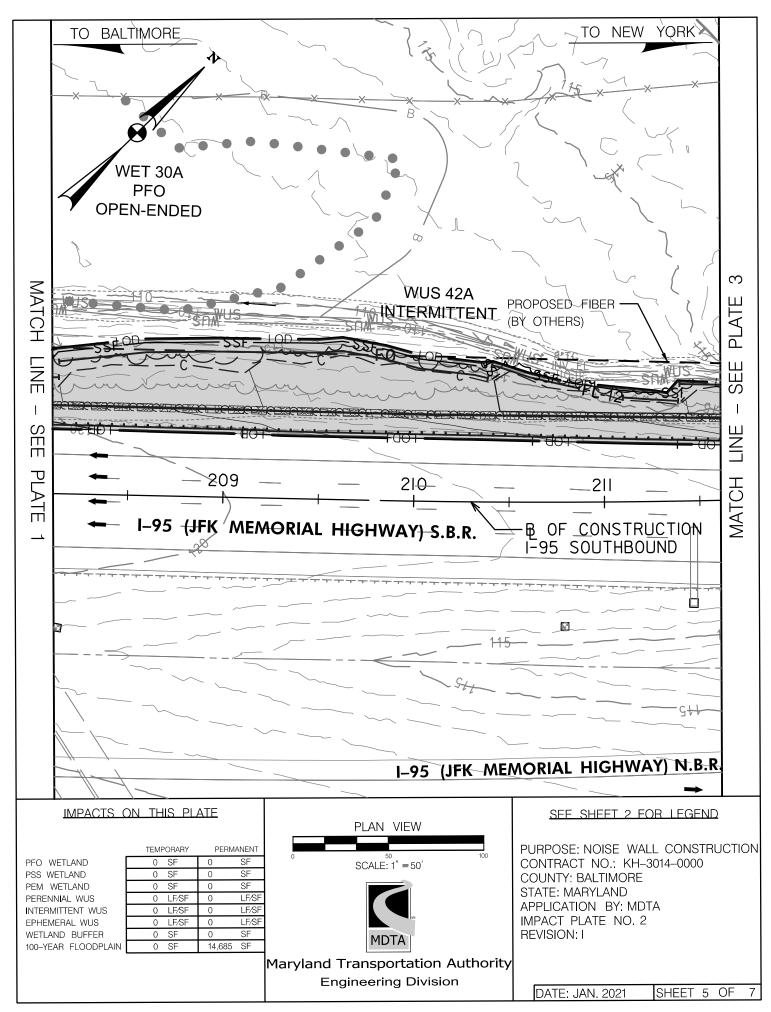
CONTRACT NO.: KH-3014-0000

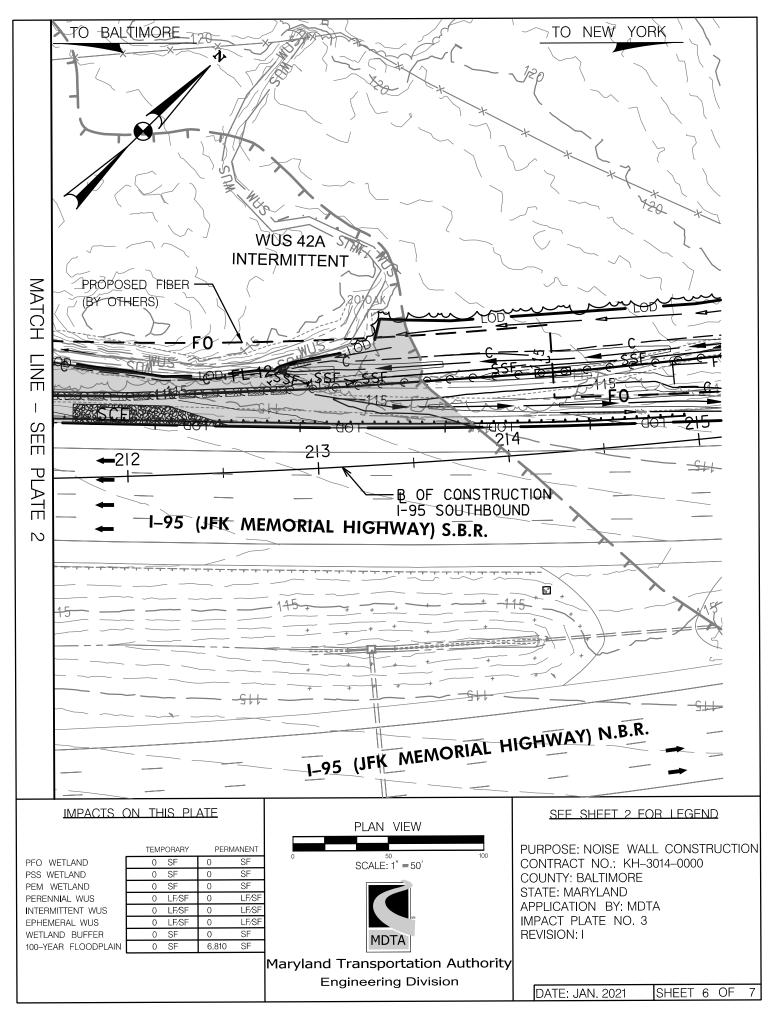
COUNTY: BALTIMORE STATE: MARYLAND APPLICATION BY: MDTA

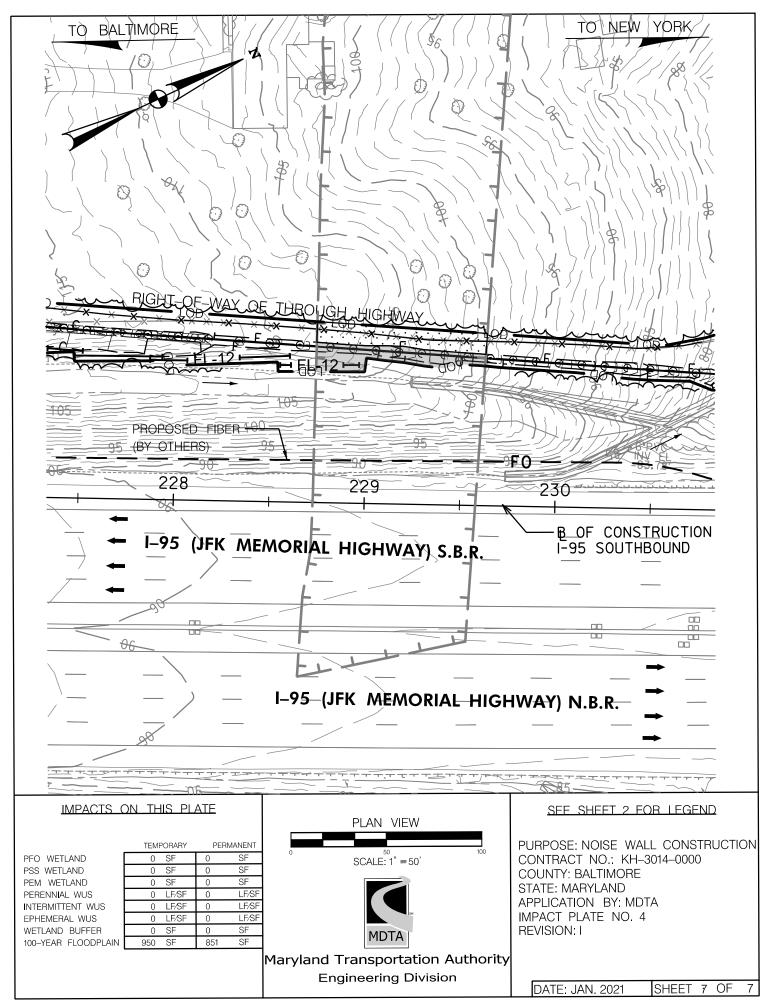
REVISION: I

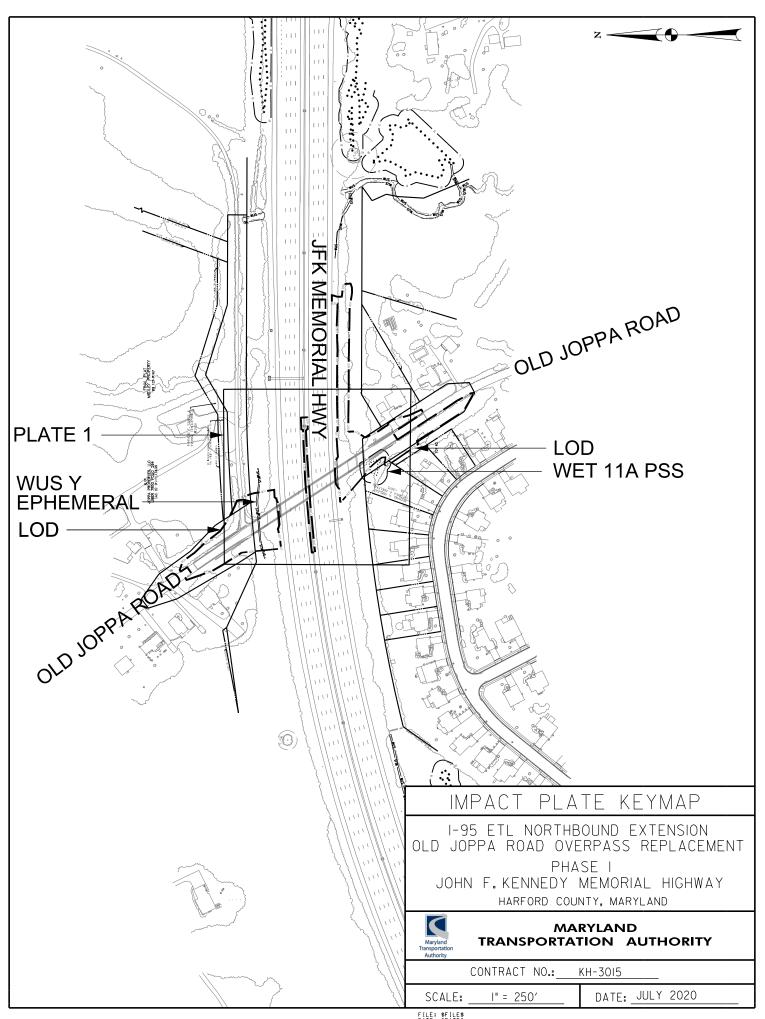
DATE: JAN. 2021 SHEET 3 OF 7











# LEGEND

LIMIT OF DISTURBANCE - LOD -RIGHT-OF-WAY 100-YEAR FLOODPLAIN WUS BOUNDARY ---- WUS ---CULVERTED WUS WETLAND BOUNDARY WETLAND BUFFER BOUNDARY – B -WUS IMPACT TEMPORARY WUS IMPACT PERMANENT WETLAND IMPACT TEMPORARY WETLAND IMPACT PERMANENT WETLAND BUFFER IMPACT TEMPORARY WETLAND BUFFER IMPACT PERMAMENT

2' CONTOURS

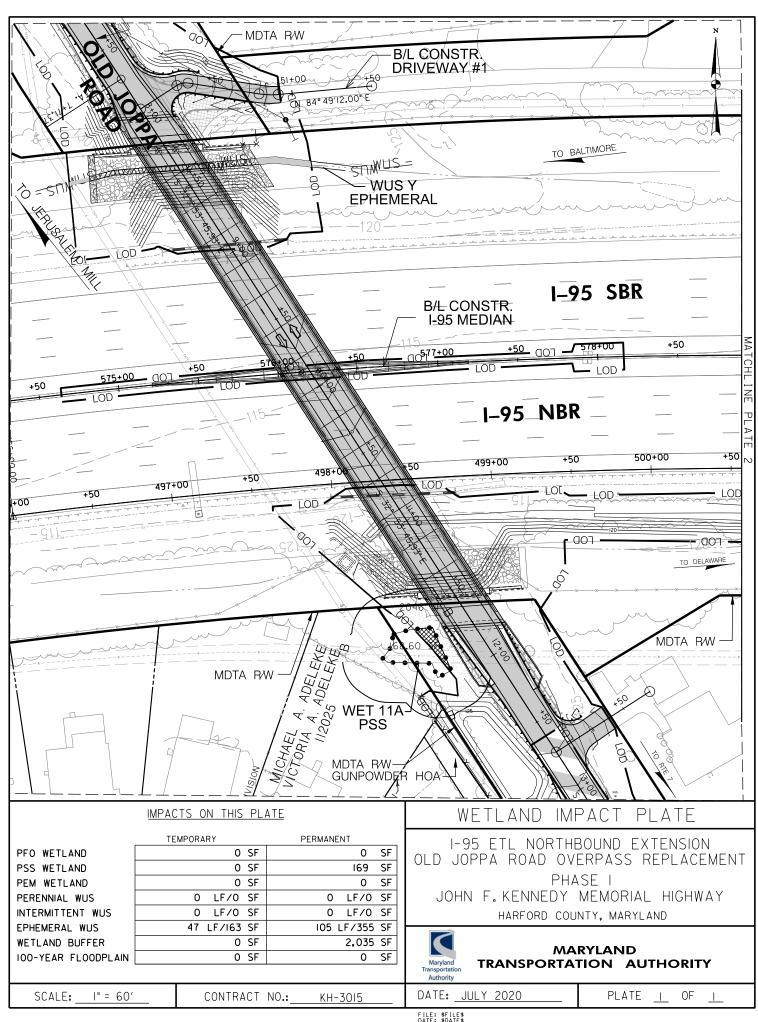
### LEGEND

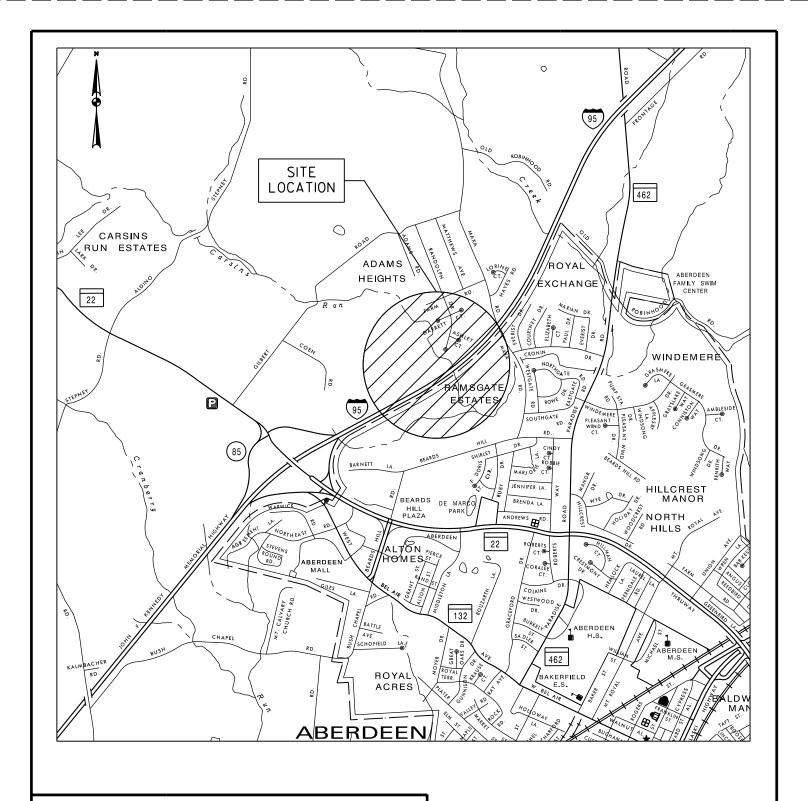
I-95 ETL NORTHBOUND EXTENSION OLD JOPPA ROAD OVERPASS REPLACEMENT PHASE I

HARFORD COUNTY, MARYLAND

MARYLAND
TRANSPORTATION AUTHORITY

DATE: JULY 2020





	IMPACT TOTALS TEMPORARY	PERMANENT
PFO WETLAND CLEARED		
& REPLANTED	6.019 SF	0 SF
PFO WETLAND GRADED		
& REPLACED	3,019 SF	0 SF
PSS WETLAND	0 SF	0 SF
PEM WETLAND	0 SF	0 SF
PERENNIAL WUS	316 LF/ 10.571 SF	78 LF/ 1.114 SF
INTERMITTENT WUS	73 LF/ 448 SF	868 LF/ 6.131 SF
EPHEMERAL WUS	0 LF/ 0 SF	167 LF/ 1.460 SF
WETLAND BUFFER	2,261 SF	0 SF
100-YEAR FLOODPLAIN	15,774 SF	0 SF

# VICINITY MAP

I-95 ETL NORTHBOUND EXTENSION CARSINS RUN STREAM MITIGATION JOHN F. KENNEDY MEMORIAL HIGHWAY HARFORD COUNTY, MARYLAND

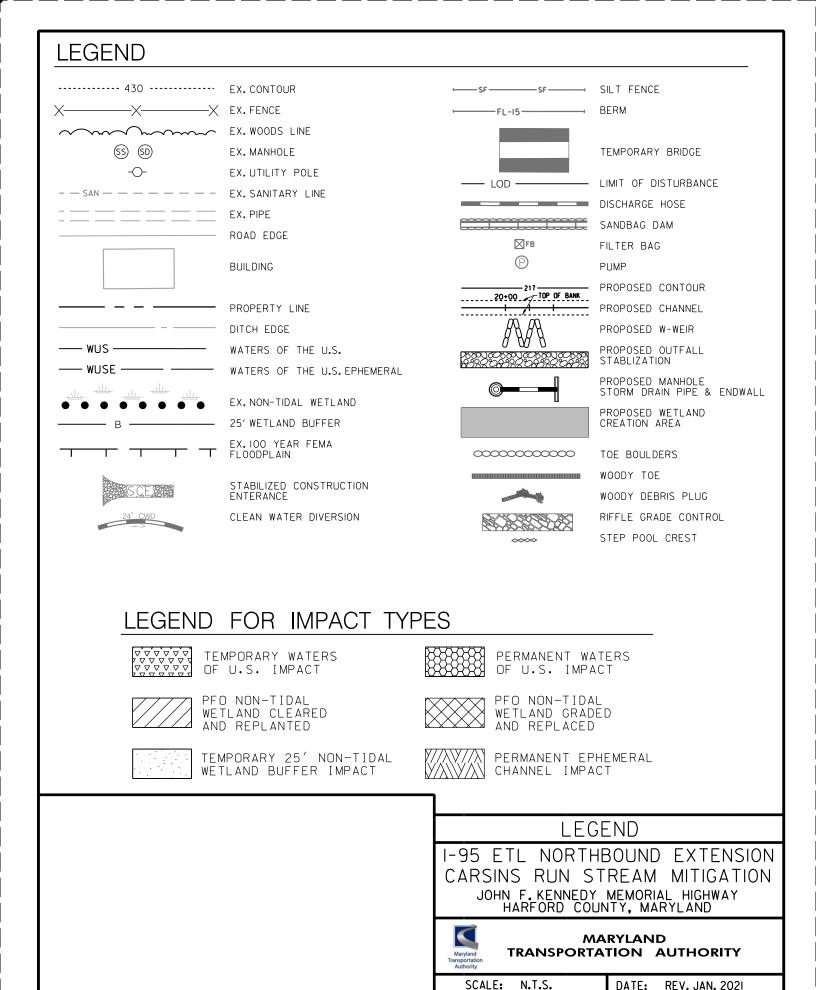


# MARYLAND TRANSPORTATION AUTHORITY

SCALE: I" = 2,00	0′	DATE: _	RE۱	/ <b>.</b> JA	N. 20	)21	
CONTRACT NO.: KH-302	28	PLA	ΓE		OF	9	

	KH-3028 Carsins Run WUS Impact Summary Table															
Plate	Resource ID	Perennial WUS			Intermittent WUS			Ephemeral WUS				100-Year Floodplain				
		Temporary		Permanent		Temp	orary	Perm	Permanent		orary	Perm	anent	Temporary	Permanent	
		LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	LF	SF	SF	SF	
PLATE 5	WUS WL003	0	0	0	0	0	0	58	394	0	0	0	0	0	0	
PLATE 6	WUS WL003	0	0	0	0	73	448	251	1,672	0	0	0	0	0	0	
PLATE 7	WUS WL003	0	0	0	0	0	0	462	3,461	0	0	0	0	406	0	
PLATE 8	Waterway WL002	0	0	0	0	0	0	0	0	0	0	14	118	3,293	0	
PLATE 8	WUS WL001	81	3,478	50	1,035	0	0	0	0	0	0	0	0	3,293	O	
PLATE 9	Waterway WL004	0	0	0	0	0	0	0	0	0	0	153	1,342			
PLATE 9	WUS WL001	235	7,093	28	79	0	0	0	0	0	0	0	0	12,075	0	
PLATE 9	WUS WL003	0	0	0	0	0	0	97	604	0	0	0	0			
	Total	316	10,571	78	1,114	73	448	868	6,131	0	0	167	1,460	15,774	0	

	KH-3028 Carsins Run W	etland Impact	t Summary Ta	ble			
Plate	Resource ID	PFO W	etland	25-foot Wetland Buffer			
		Temporary	Permanent	Temporary	Permanent		
		SF	SF	SF	SF		
PLATE 5	WETLAND WL007	4,505	0	988	0		
PLATE 6	WETLAND WL007	4,533	0	1,273	0		
	Total	9,038	0	2,261	0		

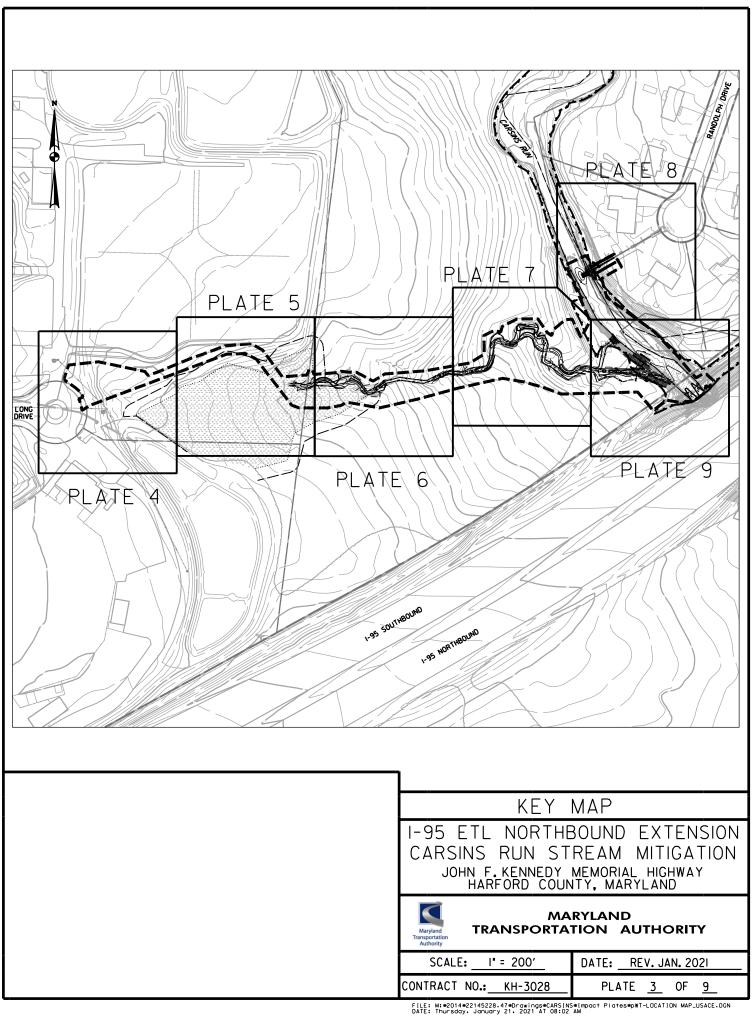


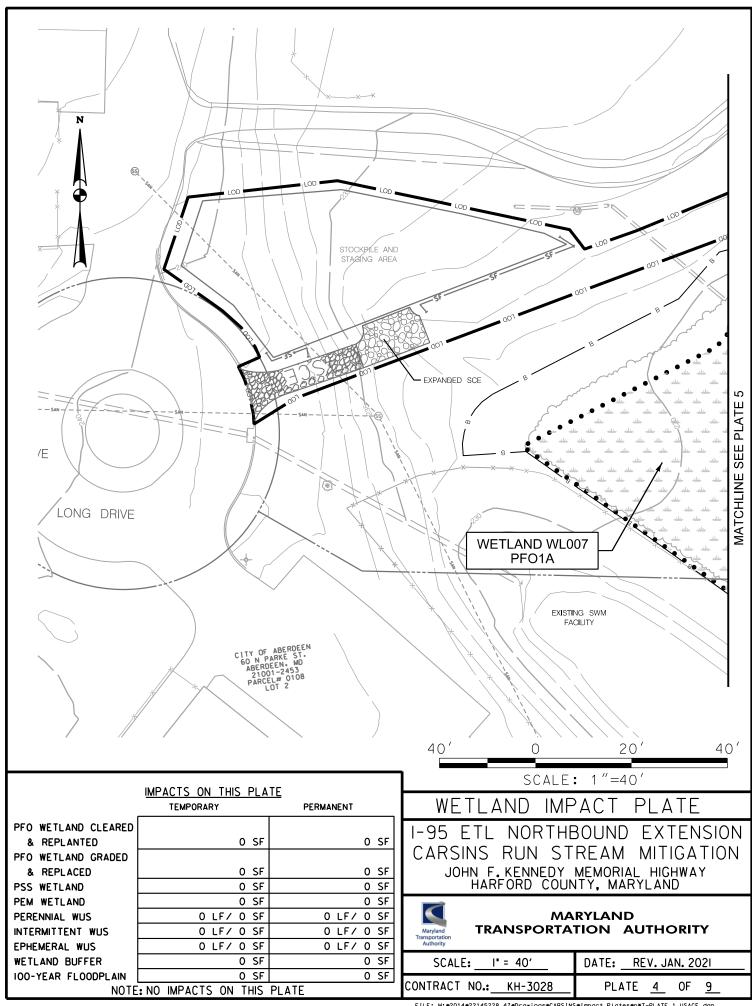
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PLATE

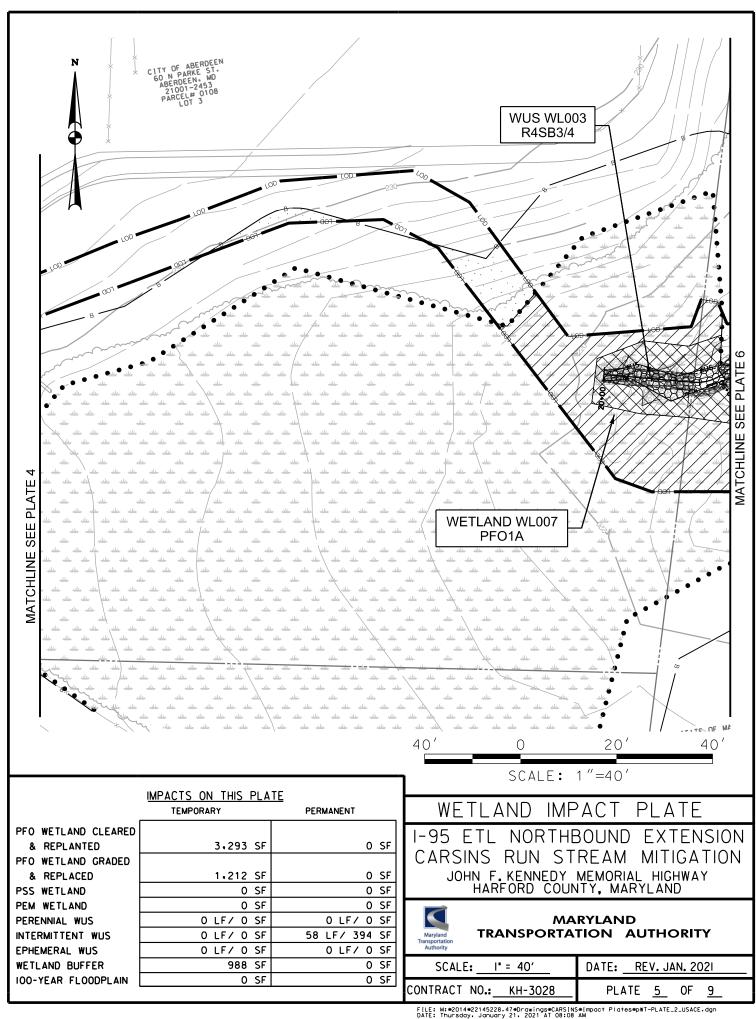
KH-3028

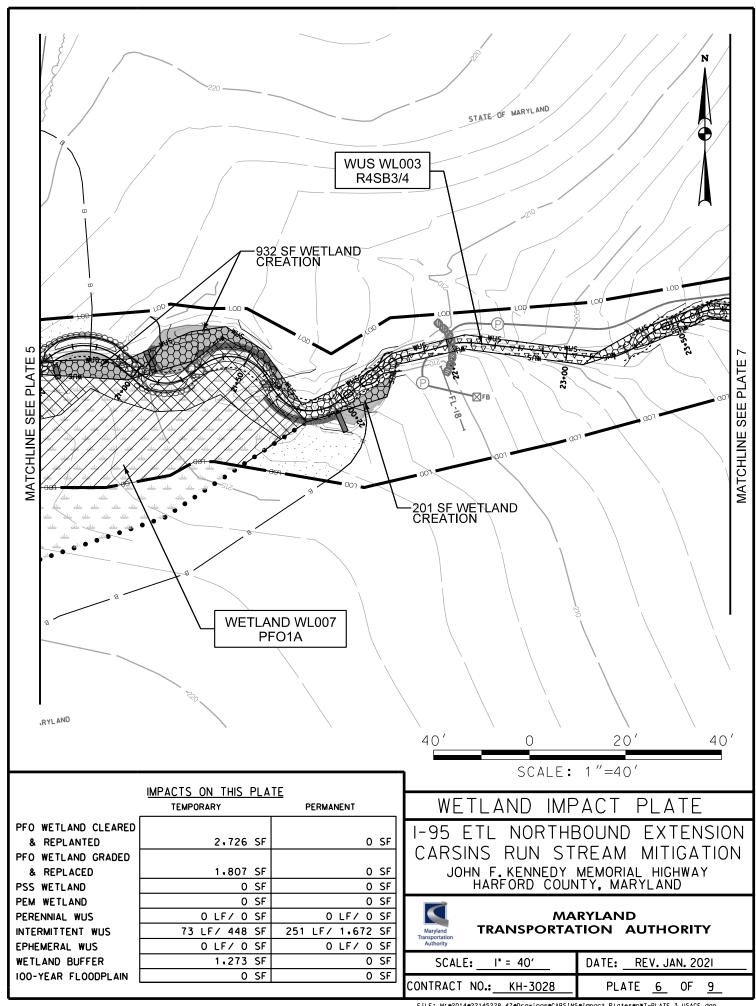
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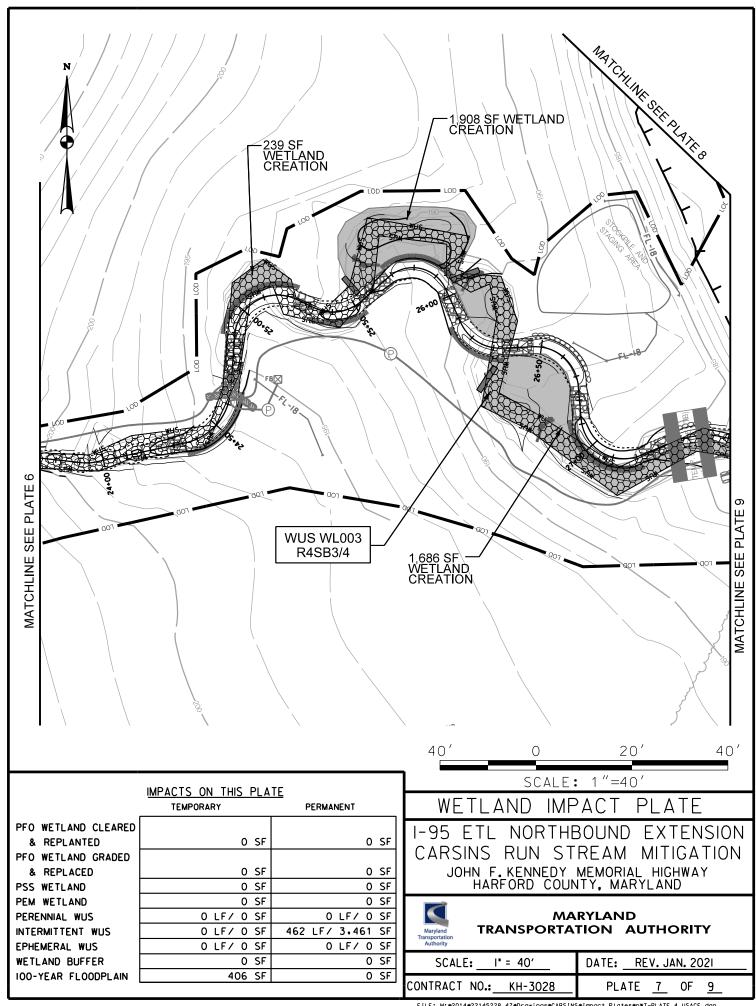


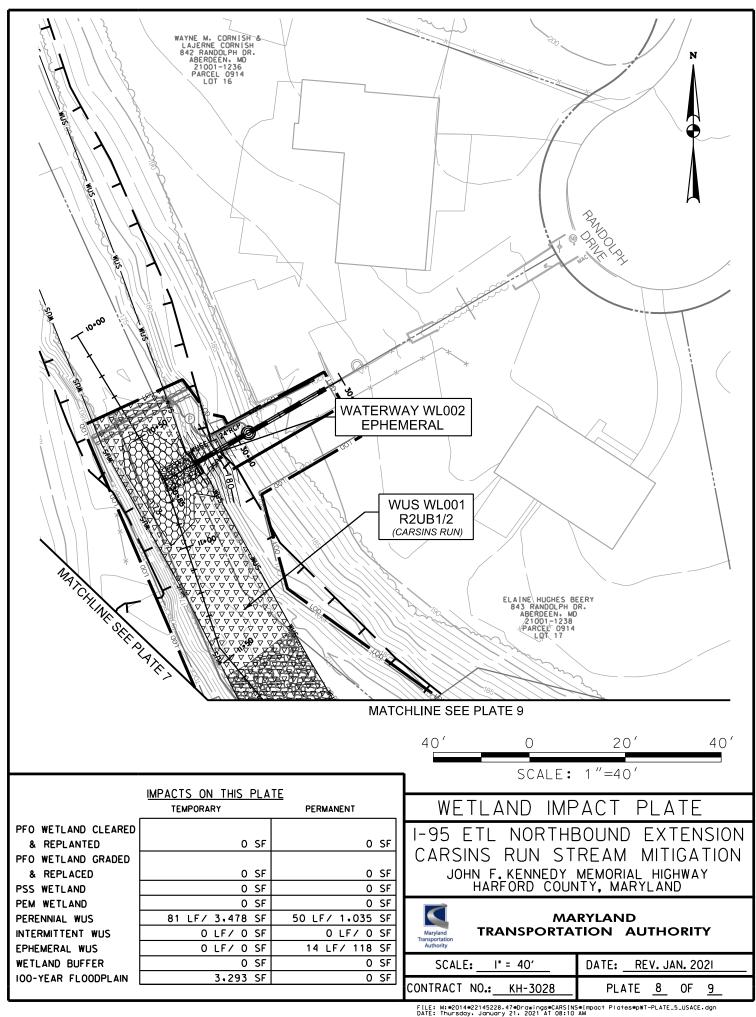


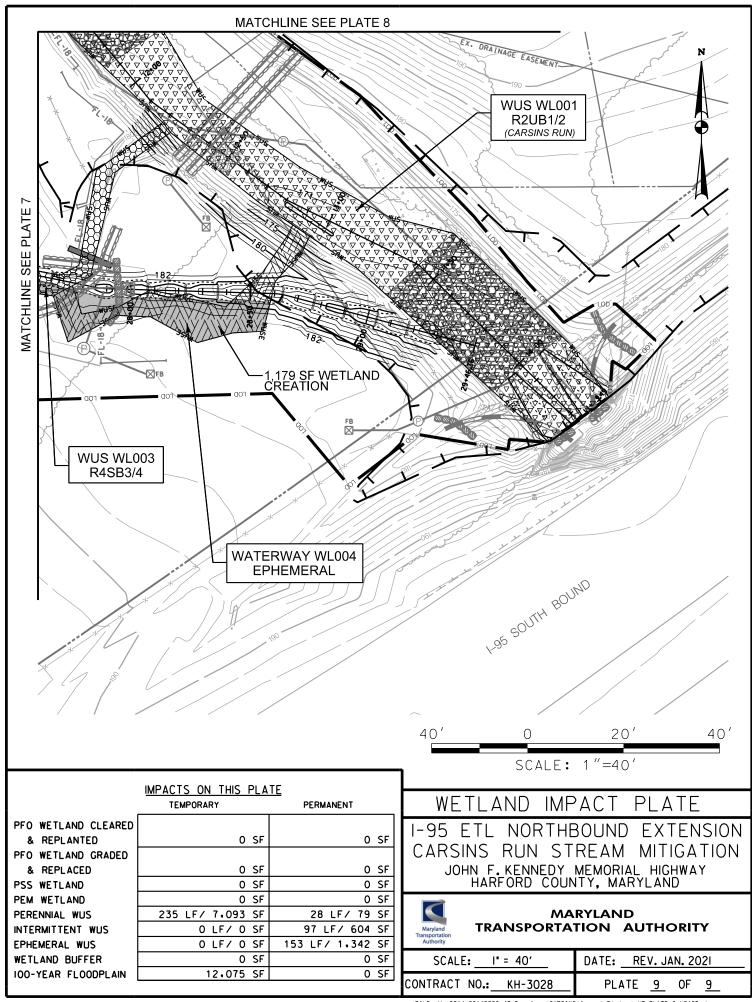
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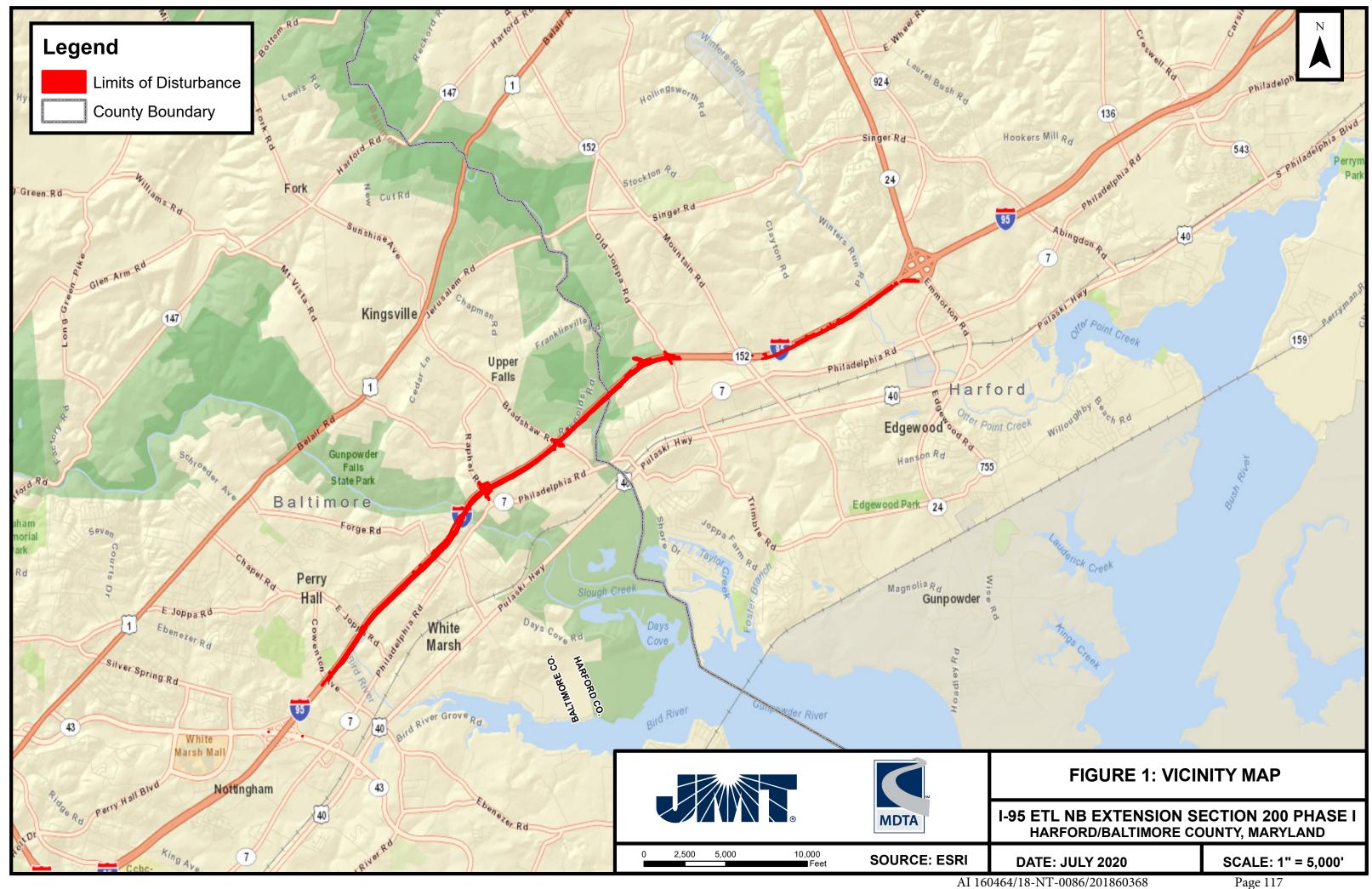


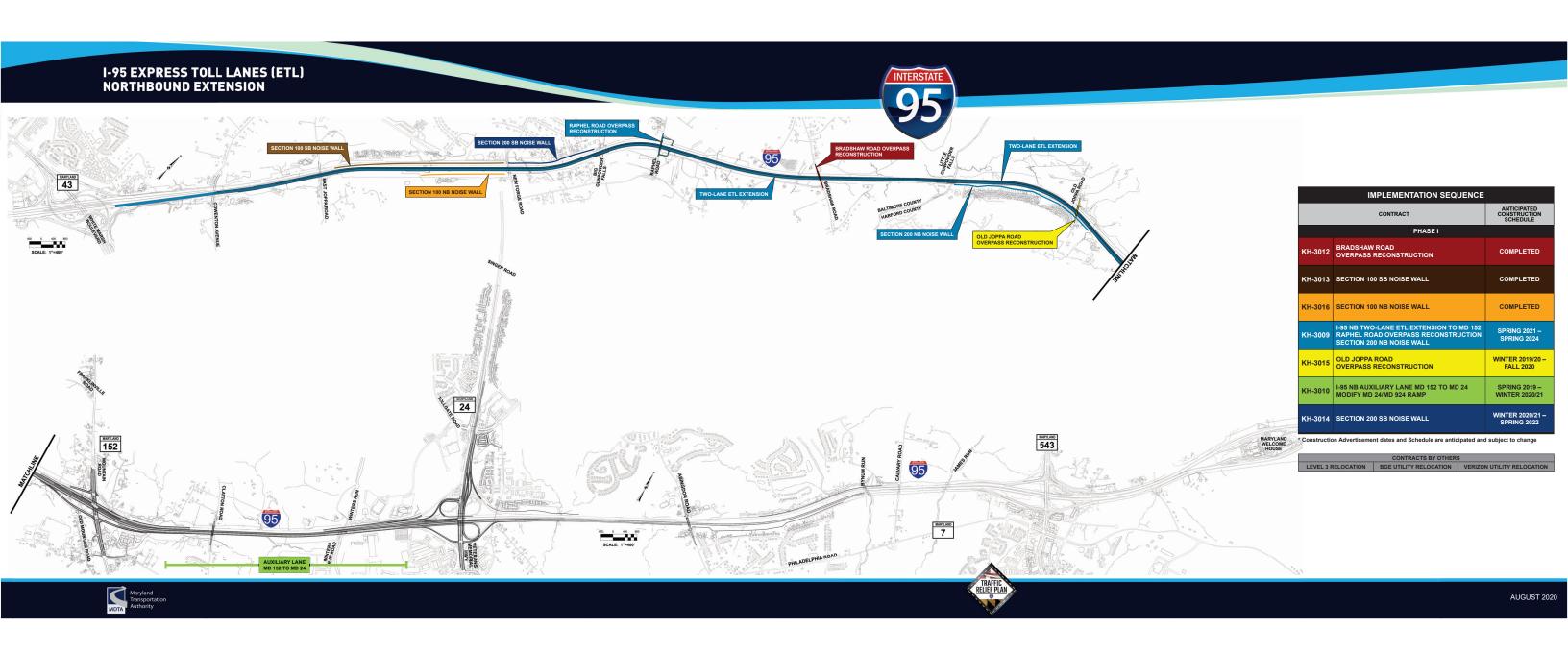


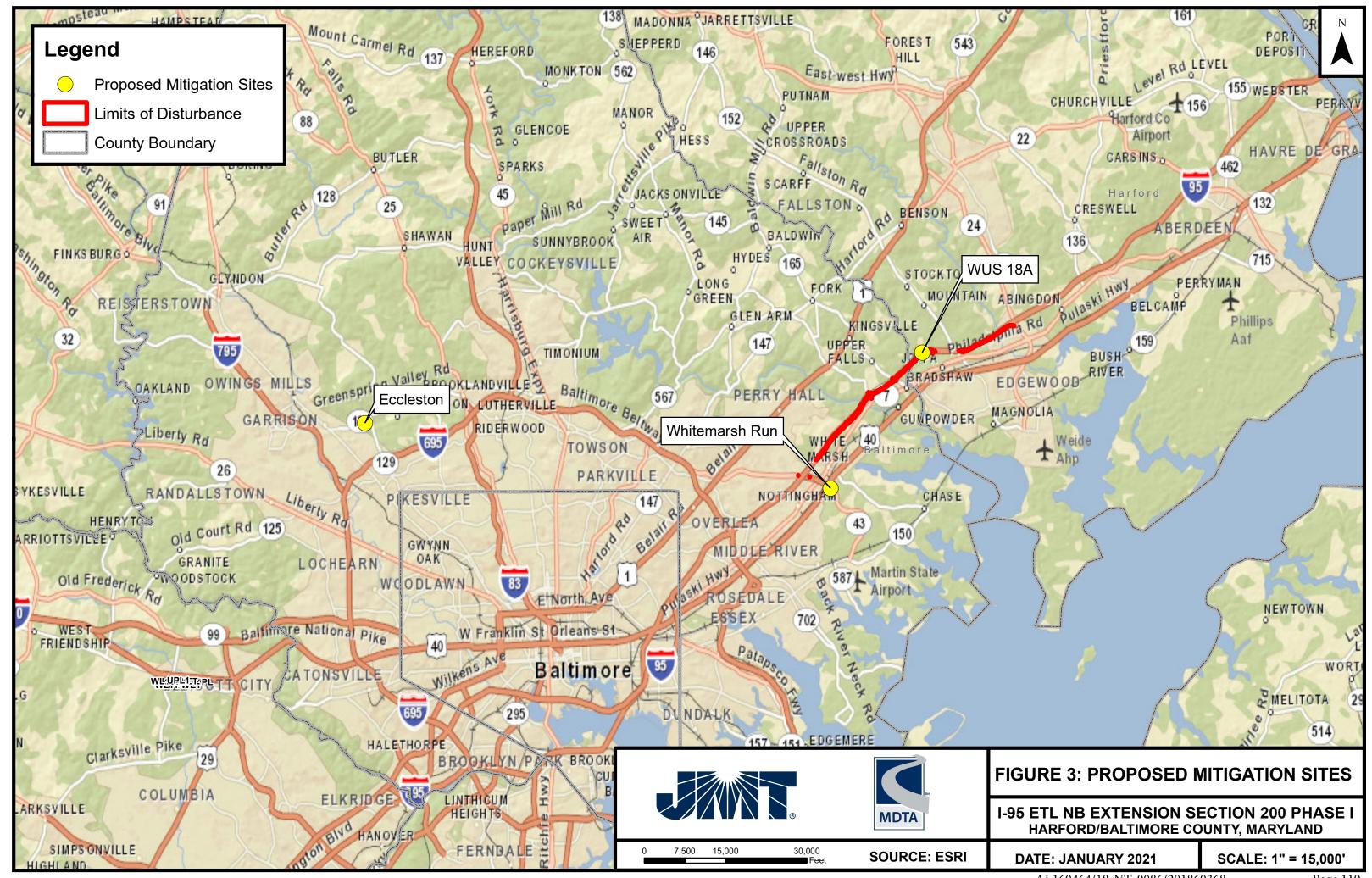


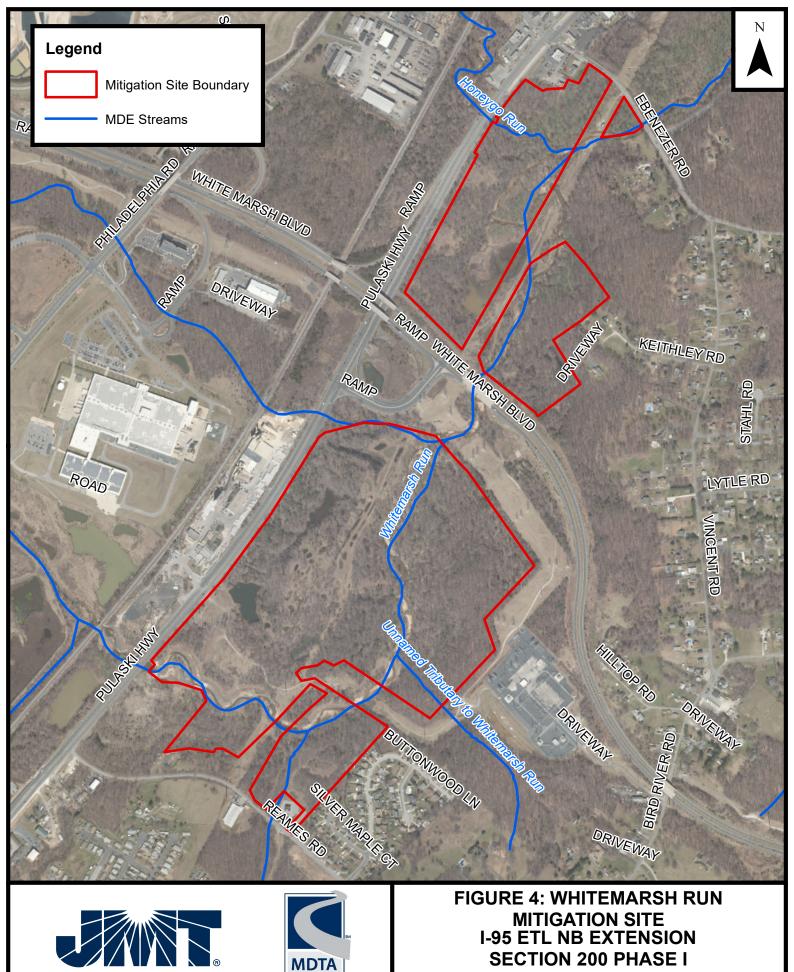


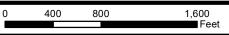










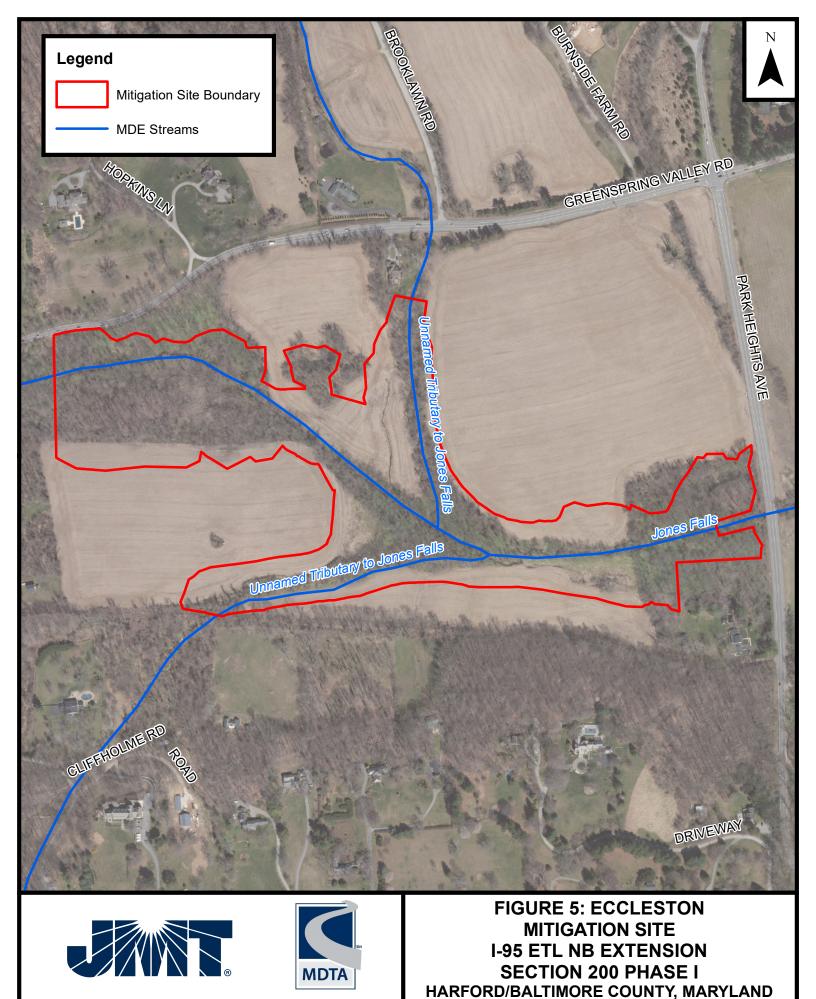


**SOURCE: ESRI** 

**SECTION 200 PHASE I** HARFORD/BALTIMORE COUNTY, MARYLAND

DATE: JULY 2020

SCALE: 1" = 800'



400

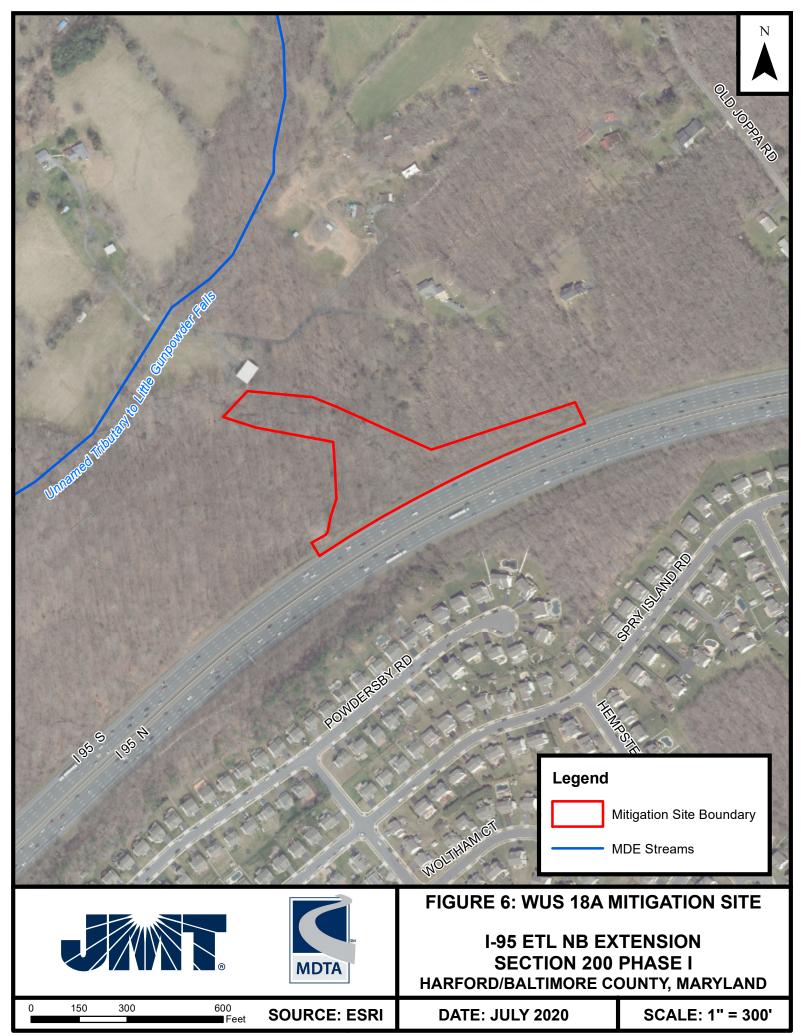
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SOURCE: ESRI

200

DATE: JULY 2020

**SCALE: 1" = 400'** 



### I-95 ETL NB Extension, Section 200 Phase I Wetland Impact Summary Table February 2021

			USACE	MDE	Mitigation	Total Wetland	d Impacts (SF)	Total Wetl	and Buffer ts (SF)
Contract	Wetland	Classification	Regulated	Regulated	Required	Permanent	Temporary	Permanent	Temporary
KH-3009 and KH-3016	BRBR-WET1	PFO	Υ	Υ	Υ	464	0	3,778	0
KH-3009	BRBR-WET22	PEM	Y	Υ	Υ	6,884	0	40.474	0
KH-3009	BRBR-WET22	PSS	Y	Υ	Υ	966	0	19,471	0
KH-3009	GPJR-WET5	PFO	Y	Υ	Υ	1,051	0	7,343	0
KH-3009	GPJR-WET6	PFO	Υ	Υ	Υ	4,305	0	11,738	0
KH-3009	GPJR-WET7	PEM	Υ	Υ	Υ	17,169	0		_
KH-3009	GPJR-WET8	PFO	Υ	Υ	Υ	14,298	0	53,777	0
KH-3009	WET 10A	PFO/PEM	Y	Υ	Υ	1,670	0	9,887	0
KH-3009 and KH-3015*	WET 11A	PSS	N	Υ	Υ	169	0	2,284	0
KH-3009	WET 104	PEM	N	Υ	Υ	1,595	0	12,410	0
KH-3009	WET 105	PFO	N	Υ	N	0	0	1,275	0
KH-3009	WET 106	PEM	N	Υ	Υ	2,447	0	11,432	0
KH-3009	WET F	PEM	Υ	Υ	Υ	365	0	4,307	0
KH-3009	WET H	PEM	Y	Υ	Υ	1,317	0	11,721	0
KH-3009	WP001	PFO	N	Υ	Υ	968	0	5,771	0
KH-3009 Onsite Mitigation	WET 103	PEM	Υ	Υ	N	0	10,363		
KH-3009 Onsite Mitigation	WET 20A	PFO	Y	Υ	N	0	9,904	0	39,674
KH-3009 Onsite Mitigation	WET 93A	PFO	Y	Υ	N	0	218		
KH-3010	WETLAND H	PFO/PEM	Y	Υ	Υ	2,386	0	5,628	0
KH-3010	WETLAND L	PFO	N	Υ	N	0	0	875	0
KH-3010	WETLAND S	PFO	Y	Υ	Υ	900	0	4,946	0
KH-3010	WETLAND X	PFO	Υ	Υ	Υ	6,039	0	8,933	0
KH-3013	BRBR-WET98	PFO	Υ	Υ	Υ	273	0	2,823	0
KH-3013	GPJR-WET4	PFO	Υ	Υ	Υ	39,600	0	62,299	549
KH-3013	WET95A	PFO	Υ	Υ	Υ	1,533	0	9,625	134
KH-3013	WET96A	PFO	Υ	Υ	Υ	628	0	3,518	0
KH-3014	WET 97A	PFO	Υ	Υ	Υ	143	0	3,112	0
KH-3016	GPJR-WET1	PFO	Y	Υ	Υ	3,431	0	11,783	0
KH-3016	WET J	PFO	Υ	Υ	Υ	3,716	0	9,515	0
KH-3016	WET K	PEM	N	Υ	Υ	91	0	4,565	0
KH-3016	WET K	Vernal Pool	N	Υ	Υ	420	0	4,505	J
KH-3028 Mitigation	WETLAND WL007	PFO	Υ	Υ	N	0	9,038	0	2,261
				- II	mpact Totals	112.828	29,523	282,816	42,618

Impact Totals 112,828 29,523 282,816 42,618 \*Please note that the LODs of KH-3009 and KH-3015 overlap in the vicinity of WET 11A's buffer. Due to this overlap, the buffer impact listed in this table does not match the totals shown on either the KH-3009 or KH-3015 plates. The impact listed here has been calculated in a way that avoids double-counting.

	Wetland II	mpacts (SF)	Buffer In	npacts (SF)
Agency-Specific Impact Totals	Permanent	Temporary	Permanent	Temporary
USACE Regulated Wetland Totals				
Total PEM	25,735	10,363	N/A	N/A
Total PSS	966	0	N/A	N/A
Total PFO	76,381	19,160	N/A	N/A
Total Vernal Pool	0	0	N/A	N/A
Total PFO/PEM	4,056	0	N/A	N/A
USACE TOTAL	107,138	29,523	N/A	N/A
MDE Regulated Wetland Totals				
Total PEM	29,868	10,363	N/A	N/A
Total PSS	1,135	0	N/A	N/A
Total PFO	77,349	19,160	N/A	N/A
Total Vernal Pool	420	0	N/A	N/A
Total PFO/PEM	4,056	0	N/A	N/A
Total Wetland Buffer	N/A	N/A	282,816	42,618
MDE TOTAL	 112,828	29,523	282,816	42,618

#### I-95 ETL NB Extension, Section 200 Phase I Waterway Impact Summary Table February 2021

								way Impad			· (CE)
			USACE	MDE	Mitigation		anent	Temp		•	in Impacts (SF)
Contract	Waterway	Classification	Regulated	Regulated	Required	LF	SF	LF	SF	Permanent	Temporary
KH-3009 and KH-3014	Floodplain	N/A	N	Υ	N	-	-	-	-	154,459	18,291
KH-3009	BRBR-WUS1	Perennial	Υ	Υ	Y	44	429	0	0	-	-
KH-3009	BRBR-WUS8	Perennial	Υ	Υ	Υ	38	309	0	0	-	-
KH-3009	GPJR-WUS1	Intermittent	Υ	Υ	Υ	924	7,988	0	0	-	-
KH-3009 and KH-3016*	GPJR-WUS1A	Intermittent	Υ	Υ	Υ	76	700	0	0	-	-
KH-3009 and KH-3016*	GPJR-WUS1B	Intermittent	Υ	Υ	Υ	136	688	0	0	-	-
KH-3009	GPJR-WUS2A	Ephemeral	Υ	N	N	127	790	0	0	-	-
KH-3009	GPJR-WUS2B	Intermittent	Υ	Υ	Υ	26	109	0	0	-	-
KH-3009	WUS 2A	Perennial	Υ	Y	N	0	0	0	0	-	-
KH-3009	WUS 6A (Big Gunpowder	Perennial	Υ	Υ	N	32	1,195	0	0	-	-
aaaa	Pier Removal)		.,	.,	.,	4.46		4-7	0.007		
KH-3009	WUS 6A (Big Gunpowder)	Perennial	Y	Y	Y	146	585	47	8,327	-	-
KH-3009	WUS 7A	Ephemeral	Y	N	Y	49	294	0	0	-	-
KH-3009	WUS 8A	Ephemeral	Υ	N	N	14	14	37	93	-	-
KH-3009	WUS 9A	Perennial	Y	Υ	Υ	30	160	0	0	-	-
KH-3009	WUS 12A	Perennial	Υ	Υ	Y	55	283	0	0	-	-
KH-3009	WUS 13A	Intermittent	Υ	Υ	Υ	150	702	0	0	-	-
KH-3009	WUS 14A	Perennial	Υ	Υ	Υ	43	573	4	83	-	•
KH-3009	WUS 15A	Ephemeral	Υ	N	N	65	210	0	0	-	-
KH-3009	WUS 16A (Little Gunpowder)	Perennial	Υ	Υ	Υ	187	2,027	41	2,589	-	-
KH-3009	WUS 18A	Intermittent	Υ	Υ	Υ	313	1,267	0	0	-	
KH-3009	WUS 18A	Perennial	Υ	Υ	Υ	450	3,012	0	0	-	-
KH-3009	WUS 19A	Ephemeral	Υ	N	Y	265	850	0	0	-	-
KH-3009	WUS 20A	Perennial	Υ	Υ	Υ	26	32	0	0	-	-
KH-3009	WUS 21A	Ephemeral	Υ	N	N	110	417	0	0	-	-
KH-3009	WUS 103	Intermittent	N	Υ	Y	56	143	0	0	-	-
KH-3009	WUS 103 Culverted	Intermittent	N	Υ	N	91	299	0	0	_	-
KH-3009	WUS 104	Intermittent	Y	Y	Y	40	215	0	0	_	_
KH-3009	WUS B	Ephemeral	Y	N	N	751	739	0	0	_	_
KH-3009	WUS C		Y	N	1	292	652	0	0		-
		Ephemeral			N			0			
KH-3009	WUS D	Ephemeral	Y	N	N	205	701		0	-	-
KH-3009	WUS E	Ephemeral	Y	N	N	80	60	0	0	-	-
KH-3009	WUS F	Ephemeral	Υ	N	N	47	59	0	0	-	-
KH-3009	WUS K	Ephemeral	Y	N	N	366	631	0	0	-	-
KH-3009	WUS M	Ephemeral	Υ	N	N	846	2,881	0	0	-	-
KH-3009 and KH-3016*	WUS O	Intermittent	Υ	Υ	Y	66	213	0	0	-	-
KH-3009 and KH-3016*	WUS P	Ephemeral	Υ	N	N	492	2,853	0	0	-	-
KH-3009 and KH-3016*	WUS P	Intermittent	Υ	Υ	Υ	114	700	0	0	-	-
KH-3009 Onsite Mitigation	WUS 18A	Perennial	Υ	Υ	N	690	8,494	8	58	-	-
KH-3010	Floodplain	N/A	N	Υ	N	ı	-	-	-	38,803	588
KH-3010	WATERS E	Intermittent	Υ	Υ	Υ	53	339	42	263	-	ı
KH-3010	WATERS F	Perennial	Υ	Υ	Υ	0	0	157	469	-	ı
KH-3010	WATERS G	Perennial	Υ	Υ	Υ	51	355	21	170	-	-
KH-3010	WATERS I	Intermittent	Υ	Υ	Υ	111	423	0	0	-	-
KH-3010	WATERS J	Perennial	Υ	Υ	Υ	53	183	22	96	-	-
KH-3010	WATERS K	Intermittent	Υ	Υ	Υ	42	402	16	82	-	-
KH-3010	WATERS M	Perennial	Υ	Υ	Υ	72	592	39	297	-	-
KH-3010	WATERS N	Intermittent	Υ	Υ	Υ	48	280	25	174	-	-
KH-3010	WATERS V Relocation	Intermittent	Υ	Υ	N	850	4,388	34	146	-	-
KH-3010	WATERS V	Intermittent	Υ	Υ	Υ	17	64	293	2,320	-	-
KH-3013	BRBR-WUS9	Perennial	Υ	Υ	Υ	47	236	12	35	-	-
KH-3013	BRBR-WUS98	Perennial	Υ	Υ	Υ	8	25	5	15	-	-
KH-3013	BRBR-WUS99	Intermittent	Υ	Υ	Υ	146	773	96	503	-	-
KH-3013	BRBR-WUS99	Perennial	Υ	Υ	Υ	28	118	0	0	-	-
KH-3013	GPJR-WUS1	Perennial	Υ	Υ	Υ	0	0	3	21	-	-
KH-3013	GPJR-WUS4	Perennial	Υ	Υ	Υ	27	19	46	34	-	-
KH-3014	WUS 44A	Ephemeral	Υ	N	N	52	282	0	0	-	-
KH-3015	WUS Y	Ephemeral	Υ	N	N	105	355	47	163	-	-
KH-3016	GPJR-WUS3	Intermittent	Υ	Υ	Υ	76	624	12	99	-	-
KH-3016	GPJR-WUS10B	Intermittent	Υ	Υ	Υ	15	68	5	30	-	-
KH-3028 Mitigation	Floodplain	N/A	N	Υ	N	-	-	-	-	0	15,774
KH-3028 Mitigation	WUS WL001 (Car)	Perennial	Υ	Υ	N	78	1,114	316	10,571	-	-
KH-3028 Mitigation	WUS WL002 (Car)	Ephemeral	Υ	N	N	14	118	0	0	-	-
KH-3028 Mitigation	WUS WL003 (Car)	Intermittent	Y	Υ	N	868	6,131	73	448	-	-
KH-3028 Mitigation	WUS WL004	Ephemeral	Y	N	N	153	1,342	0	0	_	_
IND-2020 MINIBANON								1 ()			

\*Please note that the LODs of KH-3009 and KH-3016 overlap in the vicinity of resources WUS P INT, WUS P EPH, GPJR-WUS1A, GPJR-WUS1B, and WUS O. Due to this overlap, the impacts listed in this table may not exactly match the totals shown on the KH-3009 or KH-3016 plates. The impacts listed here have been calculated in a way that avoids double-counting.

	Waterway Impacts				Floor	dplain
	Perm	ermanent Temporary			Impac	cts (SF)
Agency-Specific Impact Totals	LF	SF	LF	SF	Permanent	Temporary
USACE Regulated Waterways Totals						
Total Perennial	2,105	19,741	721	22,765	N/A	N/A
Total Intermittent	4,071	26,074	596	4,065	N/A	N/A
Total Ephemeral	4,033	13,248	84	256	N/A	N/A
USACE TOTAL	10,209	59,063	1,401	27,086	N/A	N/A
MDE Regulated Wetland Totals						
Total Perennial	2,105	19,741	721	22,765	N/A	N/A
Total Intermittent	4,218	26,516	596	4,065	N/A	N/A
Total Floodplain	N/A	N/A	N/A	N/A	193,262	34,653
MDE TOTAL	6,323	46,257	1,317	26,830	193,262	34,653