ECCLESTON PHASE II WETLAND MITIGATION PLAN – REQUIRED INFORMATION – Revised July 29, 2019

The information below is required by the Department in order for the Phase II Mitigation Plan to be considered complete.

Plan view scaled drawings, including:

☒ A vicinity map showing the mitigation project location and existing land use

Response: See Compensatory Mitigation Plan

☒ The location, type, and acreage of proposed mitigation activities. Plans should clearly show the boundaries of the areas being counted for each type of mitigation credit. Buffers should also be shown. A protected 25-foot buffer is required around all mitigation sites.

☐ The proposed boundary of the site protection mechanism

Response: As MDTA is in the process of coordination with the landowners, this information cannot be provided at this time. At a minimum the boundary will encompass all areas receiving mitigation credit (both wetlands and streams) as well as the required 25 foot buffer surrounding these areas.

☐ The location of sediment and erosion control practices including: a) Limits of Disturbance, b) location of stockpile areas, c) locations of all areas used to store machinery, equipment or supplies, and d) proposed source of borrow materials. Sediment and Erosion Control Plans may be required. Silt fence must be completely removed after construction has been completed. Contact an MDE compliance inspector for confirmation that the site is stabilized prior to removal of silt fence.

Response: Some of these elements are shown on the plans, however final staging and stockpile locations are not shown because this is still being negotiated with the contractor and landowner.

☐ Grading plans with existing and proposed elevations. Include any proposed grading for the stream channel, wetlands, wetland buffer, floodplain, and site access.

Response: Due to the preliminary nature of the design the detailed grading for the proposed stream channel will be provided in a future submittal. The proposed grading included with this submittal shows the preliminary floodplain grading which will be further refined as detailed grading is provided.

☒ Location of all proposed structures (e.g., outfalls and in-stream structures). *Wetland sites with water control structures that can be manipulated will generally not be approved.*

☐ A cross-section drawing showing existing and proposed site conditions, including grade, elevation and slope. Cross-sections should also include existing and proposed wetlands by type (e.g., PFO). Side slopes should be flat enough to reduce erosion potential and blend in with the landscape (e.g. 6:1 or flatter)

Response: Due to the preliminary nature of the design this information is not currently available and will be provided in a future submittal.

☐ Existing well and soil boring locations

Response: Wells were not utilized for this project, but rather a trenching investigation to

show subsurface stratigraphy and presence of hydric soils and groundwater. The results are discussed in the design report.

☐ Proposed well locations

Response: Wells were not utilized for this project, but rather a trenching investigation to show subsurface stratigraphy and presence of hydric soils and groundwater. The results are discussed in the design report.

☒ Location of all habitat features (e.g., wood duck boxes, vernal pools).

☒ Locations of any potentially conflicting land use (e.g. utility easements).

☒ The type of physical protective barrier to be used to reduce human encroachment (e.g. mowing, dumping) including signs, fences, etc. All borders must be marked with a metal post and sign at a minimum of every 50 feet designating the area for conservation.
Response: Deer fencing is proposed for the easement area. Signage will be included in the next design submission if reviewers believe it is also necessary.

☒ Best Management Practices for working in nontidal wetlands, wetland buffers, waterways, and 100-year floodplains

☒ Wetlands, wetland buffers, 100-year floodplains, and waterways

☐ Specifications for soils, microtopography, etc.

Response: Due to the preliminary nature of the design this information is not currently available and will be provided in a future submittal.

Hydrology:

☒ The source and reliability of the water such as ground water, precipitation, and surface water, over various seasons of the year, and any relevant precipitation data

☒ Estimated elevation of surface and/or ground water as measured from the soil surface twice per month, March through May, and monthly, June through October. It may be desirable to delay planting until the contractor confirms that the constructed wetland has the desired hydrology. For example, after grading the site, the contractor may propose to monitor the site for at least six months, including a seasonally dry period, before planting the woody species.

Soils/substrate:

☒ A description of existing and planned soil and substrate conditions. Existing soils should be verified in the field. Soil borings may also be required by the Department. Soil profile descriptions, including identifying restrictive layers, are also important in determining appropriate well depths.

☐ Topsoil to a depth of <u>at least</u> 6 inches is required. Topsoil from the mitigation site or the impacted wetland site should be salvaged whenever possible. Salvaged topsoil should be free of invasive plant species. Site should be graded to below 6 inches of final grade, then 6 inches topsoil spread over the site. For sites being constructed in subsoil, higher amounts of topsoil may be required.

Response: The proposed wetland design involves grading down to the existing buried hydric soil layer (which has been field verified by trenching) and utilizes the soil layer as the proposed floodplain elevation. Therefore, topsoil would not be appropriate for this

design when hydric soils with high organic content can be utilized. All other grades areas are proposed to remain with sufficient topsoil and stabilized.

☒ Soil and substrate amendments needed to meet hydric soil characteristics and maintain the specified plant species. A minimum of 60 cubic yards of organic matter per acre is required.

☐ The surface of the soil must not be compacted to the extent that it limits plant establishment and microbial activity. Upon completion of initial grading (before adding topsoil), the soil must be disked or chisel plowed to a depth of at least 8 inches.

Response: Anti-compaction measures will be proposed as necessary, which may include disking, chisel plowing, or used of tillage radishes or other techniques.

☒ Include microtopography. It is recommended that microtopography variations are up to 0.5 feet from design elevation, with no more than 25 percent of each wetland cell remaining at the design elevation.

☐ Supplemental large woody debris should be added, at a minimum rate of three dump truck loads per acre. This may include a combination of logs, brush piles, overturned stumps, etc.

Response: No woody material export is proposed. All of this material will be utilized on site for habitat features and this will be detailed in specifications.

Planting plan showing:

☒ All planting zones separated by proposed vegetative types, including the size of each area.

☐ The scientific and common names of all plant species to be used, with quantities and sizes of each. All species planted within the wetland and wetland buffer shall be native to that region of the State. Species should be selected based on nearby reference wetlands. All species used for temporary or permanent seeding must be native or non-persistent. Consideration should be given to what species may readily volunteer from surrounding forest (e.g., Sweetgum) and should not be planted. Planting Loblolly Pine is discouraged. Ash species should not be planted.

Response: We are including plant species and size but are not including quantities with this submittal. Quantities will be provided in a future submission.

☒ With the exception of temporary stabilization species, all species planted in the wetland should have an Indicator Status of Obligate, Facultative Wet, or Facultative. No more than 50% shall be facultative.

☒ Planting dates for each species.

☒ The method to be used for plant protection from herbivory by deer, voles, beaver, etc. (including fencing, tubing or other protection). If tree/shrub protection is used, they must be removed prior to monitoring termination or their long-term maintenance must be addressed (e.g., maintenance of permanent fencing).

Other considerations:

☒ Describe how the mitigation work plan was designed to mimic a representative reference wetland/stream reach within the region or service area. Local reference sites should be

utilized to determine appropriate design, including hydrology, plant material, grading, etc. Reference sites may also help to determine appropriate performance standards.

☒ Design should avoid/minimize impacts to other resources (e.g., RTE species, historic resources, nearby airports). All outstanding issues with other agencies must be resolved prior to Phase II Mitigation Plan approval

☒ Determination of credits

Response: see CMP

☐ Provide the Department with a GIS polygon layer showing the boundary of the area(s) getting mitigation credit. The polygon(s) should not include berms, buffers, upland pockets, etc. unless these areas are getting mitigation credit. If the applicant modifies the mitigation boundary during construction or during the monitoring period, the applicant should submit the updated mitigation boundary. This file should be a shapefile or feature class, in the coordinate system Maryland State Plane NAD 1983 (meters).

Response: A GIS polygon layer of both the stream and the wetlands created will be provided in a future submission following complete landowner coordination.

☐ A monitoring and maintenance schedule establishing responsibility for the removal of exotic and nuisance vegetation, and permanent establishment of the nontidal wetland and its component parts. Monitoring shall be conducted according to the Interagency Review Team's monitoring protocol and should include a monitoring and performance standards summary table.

Response: Monitoring and maintenance will be according to the protocol included in the CMP.

☐ The person/consultant responsible for preparing and submitting the annual monitoring reports. This will require an agreement with a consultant or other qualified person in advance.

Response: MDTA is in the process of procuring these services and will provide the information to MDE as soon as it is available. Ultimately, MDTA as the project owner/sponsor, will be responsible for review and submission of the annual reports prepared by its consultant.

☐ Any proposed impacts to floodplains, waterways, or regulated open water must get authorization from the MDE Waterways Division prior to Phase II Mitigation Plan approval

Response: Authorization is being sought prior to Phase II mitigation plan approval. We respectfully request that Phase II Mitigation approval be included as a special condition in the authorization provided by MDE.

☐ Any disturbance over one acre must apply with MDE Compliance Program for a NOI permit

Response: Noted; an NOI will be applied for from MDE's Compliance Program prior to construction.

☐ Mitigation areas proposed for Forest Conservation Act requirements should be clearly shown

Response: No Forest Conservation Act mitigation is being proposed at this site.

☒ Wetland mitigation credit areas cannot also be used for TMDL credits

☐ The type of financial assurances that shall be payable to the State and conditioned upon successful achievement of specific milestones (e.g., construction, monitoring completion, etc.) according to an approved mitigation plan. Financial assurances are due prior to commencing the authorized impacts or within 60 days of the Phase II Mitigation Plan approval, whichever comes first

Response: Phase II of the I-95 ETL Northbound Extension project as well as the associated mitigation is included within the State of Maryland's Transportation Improvement Program. The MDTA is responsible for design, construction, monitoring and any adaptive management that may be required to ensure the success of this project.

☐ A detailed description of the site protection mechanism to be used. While conservation easements are the preferred option, other methods include deed restrictions, restrictive covenants, or deeding the land to an organization or public agency. Documentation that the selected protection mechanism has been recorded must be submitted to the Department within 60 days of the completion of construction of the mitigation project.

Response: A Conservation Easement is in the process of being obtained for this site.

☐ Evidence of a legal right to implement the proposed mitigation plan on the selected site(s). Acceptable methods of securing legal right to undertake the mitigation project include recorded deeds, executed conservation easements, landowner agreements, or contracts of sale for the selected site.

Response: MDTA is currently in the process of coordinating with the property owners.

☐ An "as-built" site design plan shall be submitted to the Department within 60 days of the completion of the mitigation project. The "as-built" plan must show the original contours, the previously proposed contours, as well as the constructed contours. The as-built plans must also show a polygon depicting the boundaries of the area(s) getting mitigation credit that includes the area calculation(s) called out in square feet.

Response: An as-built site design plan will be submitted to MDE within 60 days of completion of the mitigation project.

☒ For all projects that qualify under the Maryland State Programmatic General Permit-5 (MDSPGP-5), the Mitigation Plan must also meet the requirements of the 2008 Federal Mitigation Rule, as specified in 33 CFR 332.4(c). Address in detail the 12 elements (attached).

All of the requested information listed above should be submitted to:

Maryland Department of the Environment
Wetlands and Waterways Program
Mitigation and Technical Assistance Section
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230

The Department will render a decision concerning the acceptability of Phase II of the mitigation

plan within 45 days of receipt of a completed plan, unless a final permit decision has not been made. If the Department fails to notify the applicant within the 45-day period, the plan shall be considered acceptable unless a final permit decision has not been made.

12 Components of a Compensatory Mitigation Plan / Elements of the 2008 Mitigation Rule

1. Objectives. A description of the resource type(s) and amount(s) that will be provided, the method of compensation (restoration, establishment, preservation etc.), and how the anticipated functions of the mitigation project will address watershed needs.
2. Site selection. A description of the factors considered during the site selection process. This should include consideration of watershed needs, onsite alternatives where applicable, and practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the mitigation project site.
3. Site protection instrument. A description of the legal arrangements and instrument including site ownership, that will be used to ensure the long-term protection of the mitigation project site.
4. Baseline information. A description of the ecological characteristics of the proposed mitigation project site, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other characteristics appropriate to the type of resource proposed as compensation. The baseline information should include a delineation of waters of the United States on the proposed mitigation project site. A prospective permittee planning to secure credits from an approved mitigation bank or in-lieu fee program only needs to provide baseline information about the impact site.
5. Determination of credits. A description of the number of credits to be provided including a brief explanation of the rationale for this determination.
    - For permittee-responsible mitigation, this should include an explanation of how the mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.
    - For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and resource type of credits to be secured and how these were determined.
6. Mitigation work plan. Detailed written specifications and work descriptions for the mitigation project, including: the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water; methods for establishing the desired plant community; plans to control invasive plant species; proposed grading plan; soil management; and erosion control measures. For stream mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.
7. Maintenance plan. A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.
8. Performance standards. Ecologically-based standards that will be used to determine whether the mitigation project is achieving its objectives.
9. Monitoring requirements. A description of parameters monitored to determine whether the mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting monitoring results to the DE must be included.
10. Long-term management plan. A description of how the mitigation project will be managed

after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management.

11. Adaptive management plan. A management strategy to address unforeseen changes in site conditions or other components of the mitigation project, including the party or parties responsible for implementing adaptive management measures.
12. Financial assurances. A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the mitigation project will be successfully completed, in accordance with its performance standards.