



April 29, 2022

**VIA E-MAIL AND U.S. MAIL**

Mr. Bryan Jones VWP Permit Writer  
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**RE: Joint Permit Application Number 20-1619  
Green Ridge Recycling and Disposal Facility, Cumberland County, Virginia  
Response to Additional Information Request Letter dated January 26, 2022**

Dear Mr. Jones,

On behalf of applicant, Green Ridge Recycling and Disposal Facility, LLC ("County Waste" or Company"), this letter and the enclosed information and materials responds to the January 26, 2022 Virginia Department of Environmental Quality ("DEQ") Request for Additional Information regarding the proposed Green Ridge Recycling and Disposal Facility ("Green Ridge Facility" or "Project"). This response and accompanying information and materials supplement but do not in any way controvert, withdraw, supplant or replace any portion of the Company's Joint Permit Application ("JPA") or information previously submitted in support thereof, including but not limited to materials submitted January 11, 2022 via email followed by a hard copy of the comment response on January 14, 2022.

For organizational purposes, County Waste has restated below each DEQ comment/request from your January 26, 2022 letter, and then provided an individual response corresponding to such comment/request. Under separate cover you will receive a courtesy copy of the responses.

1. In accordance with 9 VAC 25-210-80 B 1.g, please provide the following information to clarify alternative selection criteria:

Please provide additional information for how the project selected the 45 mile radius with I-64 and I-95.

Please provide the estimated surface water impact for the alternatives based on the concept layouts presented in Appendix 5 "Figures - Preliminary Layout- Previous Submittal."

Please describe the onsite measures used to avoid or minimize impacts associated with the Miller Lane relocation which now results in surface water impacts that were not previously identified.

Additionally, there is a note on the impact drawing for impact EW.3 that further avoidance and minimization is being evaluated. Please elaborate on the evaluation ongoing for this area.



## Response:

The document entitled, “Purpose and Need - Alternative Analysis,” which was included in the January 11, 2022 response to DEQ has been updated and now addresses the use of the 45 mile radius and surface water impacts of the alternatives. Key to this document is the inclusion of replacement drawings for each alternative (along with update of the narrative). The update for this submittal is included as **ATTACHMENT 1**, to this letter. This document includes the following appendices in addition to the narrative:

- Appendix 1 - Figure - Facility Location to Greater Richmond Metropolitan Area
- Appendix 2 - JPA Response - Comment #1 - 45 Mile Radius Memorandum
- Appendix 3 - Transcript
- Appendix 4 - Letter - LaBella to Prince Edward County - Landfill Capacity
- Appendix 5 - Figures - Constraints Analysis
- Appendix 6 - Report - Alternative Sites Analysis - Revision 1 - Hydrogeologic - Water Supplies - Dams, dated April 29, 2022
- Appendix 7 - Report - Browning and Associates - Cultural Resources Evaluation - 3 Alternatives, 2019
- Appendix 8 - Figure and Table - Transportation Routes, Mileage and Fuel Consumption
- Appendix 9 - Report - KBJW - Threatened and Endangered Species Report dated May 6, 2021
- Appendix 10 - Report - KBJW - Natural Resource Inventory Report dated May 6, 2021
- Appendix 11 - Report - Daguna - Mussel evaluation - Green Ridge dated May 29th, 2019, Revised and Executive Summary Added March 27th, 2021
- Appendix 12 - Figures - Conceptual Layouts - alternatives

Based on the Supplemental Evaluation update the Green Ridge site remains the Least Environmentally Damaging Practicable Alternative (“LEDPA”) for the project. Relative to the relocation of Miller Lane, **ATTACHMENT 2** to this letter includes a memorandum from Draper Aden Associates (DAA) addressing this comment.

Relative to Maple Swamp Creek and further avoidance and minimization at impact EW.3, Draper Aden Associates has completed evaluation of the AECOM modeling data (submitted to FEMA) for the Zone A flood plain in this area and the worst case design criteria have been used to complete the design of the culverts across Maple Swamp Creek. The information is included in the updated DAA Drawings provided in **ATTACHMENT 3**. Primary Impact EW.3 identifies Culvert 7A designed as a bottomless arch culvert with dimensions of 22'+(width) x 9'+(height). Primary Impact EW.4 identifies Culvert 7B designed as a bottomless arch culvert with dimensions of 21'+(width) x 7'+(height). Two small box culverts are also shown but are located outside of the stream, so are not identified as impacts. The next step in the process will be to communicate with the County’s Flood Plain Administrator and to submit a Conditional Letter of Map Revision (CLOMR) application and report to FEMA if required. The engineering team was conservative in their design and does not expect any changes by the County and/or FEMA.

As a supplement to the above referenced Appendix 9 - Threatened and Endangered Species Report dated May 6, 2021, on April 15, 2022, Koontz Bryant Johnson Williams (KBJW) conducted updated database searches and used best professional judgement to assess potential impacts that may occur to



threatened and endangered species as a result of the Green Ridge Facility. The last database search was conducted greater than 90 days ago which prompted updated database queries searching for new information that may have been added within this region. KBJW queried threatened and endangered species databases to determine if any federal- and/or state-listed species have been documented within five (5)-mile search radius and/or sub-watersheds of each Alternative including Green Ridge Facility. The database searches include the USFWS IPaC database, Virginia Fish and Wildlife Information Service (VAFWIS) of the Virginia Department of Wildlife Resources (VDWR) formally Virginia Department of Game and Inland Fisheries (VDGIF), and the Virginia Department of Conservation and Recreation Division of Natural Heritage (DCR-DNH) online searchable available databases. The results of the database searches are summarized in the table below.

Common Name	Scientific Name	Legal Status	Green Ridge	Alt. Site 1	Alt. Site 2	Alt. Site 3	USFWS IPaC	VAFWIS Confirmed Observation within a 5-mile search radius	DCR-DNH (12-Digit HUC)
Northern long-eared bat	<i>Myotis septentrionalis</i>	FT	X	X	X	X	X		
Yellow Lance	<i>Elliptio lanceolata</i>	FT/ST	X*						X
Atlantic Pigtoe	<i>Fusconaia masoni</i>	FT/ST	X*			X	X		X
James Spiny Mussel	<i>Pleurobema collina</i>	FE	X*				X		
Monarch Butterfly	<i>Danaus plexippus</i>	FC**	X**	X**	X**	X**	X**		
Green Floater	<i>Lasmigona subviridis</i>	ST	X*						X
Loggerhead Shrike	<i>Lanius ludovicianus</i>	ST	X				X		X

FT = Federally Threatened; FE = Federally Endangered; FC = Federal Candidate\*\*; ST = State Threatened  
X = confirmed database search results

\*on-site survey for the imperiled freshwater mussels was conducted. No federally listed or state-protected freshwater mussels were located within or directly downstream of the proposed Green Ridge Recycling and Disposal Facility. See Appendix F, Section 7 of the JPA "Surveys for Protected Freshwater Mussels at the Proposed Green Ridge Facility in Cumberland County, VA" dated May 29th, 2019, Revised and Executive Summary Added March 27th, 2021

\*\*Consultation with U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act is not required for candidate species

- It appears that the project has added new impact areas (RR.5 and RR.6) and has inconsistently reported some impact areas (EW.3). Additionally, Table 1.3 reports a different total impact than what is presented in other parts of the submittal. In accordance with 9 VAC 25-210-80 B 1.h, please confirm the project impacts and ensure the application accurately and consistently reports the proposed surface water impacts. Please update and provide the narrative description of all the proposed impacts to include any added impact areas.

Please ensure that all names and impact information match impact drawings and compensatory mitigation plans.



**Response:**

Impacts as previously presented as RR.5 and RR.6 have been updated with a new impact identifier. Impacts are now labeled as RR.3 and RR.4. All tables have been updated to reflect the recent changes in project impacts including name and impact area. The updates as presented in this submittal are accurate and consistent as it relates to proposed surface water impacts. Impacts RR.3 and RR.4 are for the installation of culvert pipes to maintain hydrologic stream connectivity as part of a roadway alignment.

3. In accordance with 9 VAC 25-210-80 B.1.h (1) & (2), please identify wetland impacts according to their Cowardin classification (i.e., emergent, scrub-shrub, or forested); and for each classification, the individual impacts quantified in square feet to the nearest whole number, cumulatively summed in square feet, and then the sum converted to acres and rounded to two decimal places using commonly accepted arithmetic principles of rounding.

Individual stream impacts (i) quantified by length in linear feet to the nearest whole number and by average width in feet to the nearest whole number; (ii) quantified in square feet to the nearest whole number; and (iii) when compensatory mitigation is required, the impacts identified according to the assessed type using the Unified Stream Methodology.

The project appears to have grouped separate stream bed segments into one impact area (1.3, 2.2, 3.2, 5.2, 9.1). Please separate each distinct stream bed segment with a unique impact identifier and update the corresponding USM forms to reflect the updated impact areas. Please complete a separate USM form for each distinct stream bed segment.

**Response:**

Impacts areas have been broken down into individual identifiers according to their Cowardin classification as shown in **ATTACHMENT 4**. Individual impacts were quantified in square feet to the nearest whole number, cumulatively summed in square feet, and then the sum converted to acres and rounded to two decimal places using commonly accepted arithmetic principles of rounding.

Individual stream impacts as shown in **ATTACHMENT 5** were (i) quantified by length in linear feet to the nearest whole number and by average width in feet to the nearest whole number; (ii) quantified in square feet to the nearest whole number; and (iii) when compensatory mitigation is required, the impacts identified according to the assessed type using the Unified Stream Methodology.

The updated information provided has a unique identification number for each distinct stream bed segment being impacted. The corresponding USM forms have been updated to reflect the impact areas as shown in **ATTACHMENT 6**.

Additionally, on March 16, 2022, March 18, 2022, March 25, 2022, March 28, 2022, April 1, 2022, and April 6, 2022 a stream scoring investigation was conducted by Koontz Bryant Johnson Williams at the project site to update the previously recorded stream compensation requirements for the proposed stream impacts. Channel Conditions, Riparian Buffers, Instream Habitat, and Channel Alteration were assessed to assign a Reach Condition Index (RCI) for each reach being impacted. Photographs of each stream reach were taken to include upstream, downstream, left bank, and right bank. For each stream reach being impacted the following was recorded in determining the Compensation Requirements:



- Length of Impact (original length of stream being impacted);
- RCI; and
- Impact Factor (An impact factor of 1 was selected due to the elimination or filling of stream channels)

4. In accordance with 9 VAC 25-210-80 B 1.h, please provide a short narrative for each area where the potential for secondary impacts was evaluated. In this narrative, please include whether or not a secondary impact is expected, how the project reached that conclusion including the summarized data to support that conclusion, and if a secondary impact has been identified, describe the secondary impact and how the project determined the extent of the secondary impact. For the secondary impacts that are identified, please also provide a justification for the need of the impact, how the project avoided and/or minimized the impact, and provide a compensatory mitigation plan for these impacts.

How do the borrow areas impact the drainage areas that support the residual resources? Have all secondary impacts associated with the borrow areas been accounted for by the project? Where will the sediment basins associated with the borrow areas discharge?

**Response:**

On January 11, 2022 a response addressing secondary impacts was submitted as part of an of Additional Information Request Letter dated 5/21/21. Comment 5 and **ATTACHMENT 6** of that response detail the extent of secondary impacts and how it relates to the project.

The Draper Aden Drawings included in **ATTACHMENT 3**, illustrate the design elements of the borrow areas, outlet protection and discharge. The borrow areas BMPs were designed with the same drainage areas pre and post development so there should be no impacts to the residual resources.

5. The surface waters associated with RR.5 and RR.6 do not appear to be included on the project jurisdictional determination for the project. In accordance with 9 VAC 25-210-80 B 1.h(4), please provide a copy of the approved jurisdictional determination when available, or when unavailable, (i) the preliminary jurisdictional determination from the U.S. Army Corps of Engineers (USACE), U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), or DEQ or (ii) other correspondence from the USACE, NRCS, or DEQ indicating approval of the boundary of applicable jurisdictional surface waters, including wetlands data sheets if applicable.

**Response:**

On August 22, 2019, a Preliminary Jurisdictional Determination (PJD) for water of the U.S (including wetlands) was received from the USACE (NAO-2018-0995 (Muddy Creek)). Documentation of this letter was submitted as part of the original submittal of the Joint Permit Application (Appendix LIS-2E). Data sheets associated with this PJD are included as **ATTACHMENT 7**.

Due to a change in the project's LOD, Impacts, RR.3 and RR.4 (previously identified as RR.5 and RR.6) as shown on the impact plates in **ATTACHMENT 4**, have not been verified by the USACE. An updated



PJD is being requested from the US Army Corps of Engineers for areas that were not included as part of the PJD received dated August 22, 2019. A copy of the PJD will be provided once received.

6. Please separate each distinct stream bed segment with a unique impact identifier and update the corresponding USM forms to reflect the updated impact areas.

Additionally, it doesn't appear that the project has depicted outlet protection for the landfill sediment basins and does not show the outfalls for the borrow area basins.

In accordance with 9 VAC 25-210-80 B.1.i, please ensure that plan view drawings are updated based on comments made above.

Please ensure that all proposed contours are shown.

Please ensure the limits of proposed surface water impacts are clearly depicted. Please ensure the location of all existing and proposed infrastructure is shown, including stormwater infrastructure, road culverts, and borrow areas (including and inlet or outlet protection, where required).

Please ensure the entire project area is shown on the map.

#### Response:

Each impact area has been identified with a unique impact identifier. The impact identifier is reflected on the updated USM forms. All impact plates, cross-sections, and profiles have been updated to reflect primary and secondary impacts as shown in **ATTACHMENT 4**.

Drawing Sheet 4.1 in the KBJW Impact Set (**ATTACHMENT 4**), illustrates the landfill sediment basins outfall designs and provides detailed outlet design information as well as the distance from the outlet structure to the stream centerline in the table on the drawing. Drawing 5.1 (Borrow Area 1), Drawing 5.3 (Borrow Area 2) and Drawing 5.5 (Borrow Area 3), included in the KBJW Impact Set (**ATTACHMENT 4**), illustrate the borrow area sediment basins outfall designs and includes the point of analysis, pre and post drainage areas (no changes), and a table summarizing the detailed design for the outlet protection and the distance from the outlet structure to the stream centerline (if applicable). This information was considered for identification of impacts for the project. (Note that this information is also included in the Draper Aden Associates Design drawings included as **ATTACHMENT 3**.)

7. In accordance with 9 VAC 25-210-80 B.1.j, please provide cross-sectional and profile drawing or drawings. Cross-sectional drawing or drawings of each proposed impact area (including the separate stream bed segments that are requested above) includes at a minimum a graphic scale, existing structures, existing and proposed elevations, limits of surface water areas, ebb and flood or direction of flow (if applicable), ordinary high water mark in nontidal areas, tidal wetland boundary, mean low water and mean high water lines in tidal areas, impact limits, and location of all existing and proposed structures. Profile drawing or drawings with this information may be required on a case-by-case basis to demonstrate minimization of impacts. Any application that proposes piping or culverting stream flows shall provide a longitudinal profile of the pipe or culvert position and stream bed thalweg, or shall provide spot elevations of the stream thalweg at the beginning and end of the pipe or culvert, extending to a minimum of 10 feet beyond the limits of the proposed impact.



Please just provide the cross sectional drawings and longitudinal drawings for the proposed impacts and please label them with the same unique impact identifiers used on the plan view drawings. It is not necessary to provide cross sectional drawings for areas of the project that are not proposed surface water impacts.

**Response:**

Updated cross-sectional and longitudinal drawings are provided in **ATTACHMENT 4**.

8. In accordance with 9 VAC 25-210-80 B.1.m, please provide more information to justify the assigned USM scores and update the forms to reflect the unique stream bed segments. DEQ would like to visit the project site to review the USM scores. Please provide your or your agents availability for this visit with the updated forms. Please provide a compensatory mitigation plan for the proposed wetland impacts.

**Response:**

Waters of the U.S. (including wetlands) were evaluated pursuant to the USACE Wetland Delineation Manual, Technical Report Y-87-1 (1987 Manual), the U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) (USACE, April 2012), and subsequent regulatory guidance.

Stream assessment reaches have been assigned for each impact area based on the Cowardin classification system. Cowardin classifications were assigned to stream reaches using the North Carolina Division of Water Quality-Methodology for Identification of Intermittent and Perennial Stream and their Origins v 4.11 as shown on **ATTACHMENT 8**. This methodology focuses on headwater streams using geomorphic, hydrologic, and biological stream features to determine ephemeral, intermittent, and perennial streams. An identification scoring system of streams was established to determine the origin of flow type. Scores less than 19.0 indicate ephemeral flow, a minimum score of 19.0 distinguish ephemeral streams from intermittent streams, and a score of 30.0 or more points determine the presence of perennial flow.

As a collaborative effort between the US Army Corps of Engineers and the Virginia Department of Environmental Quality, the Unified Stream Methodology document for use in Virginia established a rapid assessment of streams to determine possible compensation requirements for permitted stream impact locations. Each stream reach, Impact Area, was either assessed using the corresponding USM form, Form 1 and/or Form 1a. All stream impact locations were assessed on-site, forms were updated, completed and are provided as **ATTACHMENT 6**. Flagging with a unique impact identifier was placed in the field to establish each impact reach. KBJW is available to conduct an on-site visit with DEQ and will send an availability letter to schedule an on-site meeting.

9. The provided RIBITS ledger indicates that there are enough credits available to service the project. If the provided information is not accurate, please update your response and include updated documentation. If enough credits are available, please provide the following information described in 9 VAC 25-210-116 B.1 which is as follows: "An analysis shall be required to justify that permittee-responsible compensatory mitigation is ecologically and environmentally preferable to the purchase of mitigation bank credits or in-lieu fee program





credits, if such credits are available in sufficient quantity for the project at the projected time of need. The analysis shall address the ability of the permittee-responsible compensatory mitigation sites to replace lost wetland acreage and functions or lost stream functions and water quality benefits. The analysis comparing the impacted and compensation sites may use a method that assesses water quality or habitat metrics, such as that required by 9VAC25-210-80 C, or a method that assesses such criteria as water quality benefits, distance from impacts, hydrologic source and regime, watershed, vegetation type, soils, constructability, timing of compensation versus impact, property acquisition, and cost.”

**Response:**

As of 4/13/22, RIBITS is showing 6,059 stream credits available between banks and VARTF for the project area. There are not enough credits to meet the project need and if credits were purchased, it would use up the remaining credits available, leaving smaller projects, where PRM is not a feasible option, with no credits for purchase. The Concept Mitigation Plan narrative has been updated to reflect this (see ATTACHMENT 9, ATTACHMENT B - RIBITS Ledger).

**If credits are not available, the next option for compensatory mitigation in the hierarchy is permittee-responsible compensation using a watershed approach. Please demonstrate how the proposed Boxwood PRM is using a “watershed approach” as defined in 9 VAC 25-210-10.**

**Response:**

The Concept Mitigation Plan narrative has been updated to demonstrate this (see Section 1.4).

**In accordance with 9 VAC 25-210-80 B.1.m, please provide a more detailed narrative describing how the new permittee responsible mitigation (PRM) site achieves no net loss of stream functions and water quality benefits.**

**Response:**

This is discussed in more detail in Section 1.3 of the Concept Mitigation Plan narrative.

**Your response indicates the proposed Boxwood PRM site is superior to the Martin PRM site that was originally proposed. What makes the Boxwood site superior to the Martin site?**

**Response:**

The Martin site is no longer available to be included as part of the project. While the Martin property was closer in proximity to the landfill site, the Boxwood PRM site can provide more credits than the mitigation requirement and, due to the extent of the proposed restoration and planting, the site supports a watershed scale approach to restoration. In addition, the proposed PRM will expand the buffers along the completed TMDL restoration reaches along Randolph and Little Creeks providing an expanded ecological uplift along these reaches. Furthermore, the proposed PRM at Boxwood will protect and preserve the upper headwaters of seven tributaries on the Boxwood site.

- 10. If the project would like to pursue the PRM site and can satisfactorily provide the information requested above, in accordance with 9 VAC 25-210-80 B.1.m (2) & (3), please ensure the**





plan includes the following (this item was included in a previous request, however it does not appear that the items in bold were included):

(2) If permittee-responsible compensation is proposed for stream impacts, a conceptual stream compensatory mitigation plan shall be submitted in order for an application to be deemed complete and shall include at a minimum (i) the goals and objectives in terms of water quality benefits and replacement of stream functions; (ii) a detailed location map including the latitude and longitude to the nearest second and the fourth order subbasin, as defined by the hydrologic unit boundaries of the National Watershed Boundary Dataset, at the center of the site; (iii) a description of the surrounding land use; (iv) the proposed stream segment restoration locations including plan view and cross-section drawings; (v) the stream deficiencies that need to be addressed; (vi) data obtained from a DEQ-approved, stream impact assessment methodology such as the Unified Stream Methodology; (vii) the proposed restoration measures to be employed including channel measurements, proposed design flows, types of instream structures, and conceptual planting scheme; (viii) reference stream data, if available; (ix) inclusion of buffer areas; (x) schedule for restoration activities; and (xi) measures for the control of undesirable species.

**Response:**

The plans have been updated to include the requested information.

(3) For any permittee-responsible compensatory mitigation, the conceptual compensatory mitigation plan shall also include a draft of the intended protective mechanism or mechanisms, in accordance with 9VAC25-210-116 B 2, such as, but not limited to, a conservation easement (This is DEQ's preference) held by a third party in accordance with the Virginia Conservation Easement Act (§ 10.1-1009 et seq. of the Code of Virginia) or the Virginia Open-Space Land Act (§ 10.1-1700 et seq. of the Code of Virginia), a duly recorded declaration of restrictive covenants, or other protective instrument. The draft intended protective mechanism shall contain the information in subdivisions (a), (b), and (c) of this subdivision B 1 m (3) or in lieu thereof shall describe the intended protective mechanism or mechanisms that contain or contains the information required as follows:

(a) A provision for access to the site;

(b) The following minimum restrictions: no ditching, land clearing, or discharge of dredge or fill material, and no activity in the area designated as compensatory mitigation area with the exception of maintenance; corrective action measures; or DEQ-approved activities described in the approved final compensatory mitigation plan or long-term management plan; and

(c) A long-term management plan that identifies a long-term steward and adequate financial assurances for long-term management in accordance with the current standard for mitigation banks and in-lieu fee program sites, except that financial assurances will not be necessary for permittee-responsible compensation provided by government agencies on government property. If approved by DEQ, permittee-responsible compensation on government property and long-term protection may be provided through federal facility management plans, integrated natural resources management plans, or other alternate management plans submitted by a government agency or public authority.



**Response:**

A conservation easement will be used for the Boxwood site. A draft plat and conservation easement document will be provided once developed. RES is working with Broadwater Innovations to establish a conservation easement.

**Please explain why the project is proposing to use a deed restriction instead of a conservation easement for the proposed Boxwood PRM site.**

**Response:**

The project is proposing to use a conservation easement on the Boxwood PRM site. Declaration of restrictions are proposed to be used for the preservation reaches on the Green Ridge facility. Declaration of restrictions have been used on recent PRM projects.

**Please identify any existing areas that have a land protective instrument within the proposed Boxwood PRM site.**

**Response:**

There are currently no existing land protective instruments within the proposed Boxwood PRM site. A protective instrument will be placed on the adjacent TMDL project as part of that project's LTMP.

**Please complete the attached Property Owners Access Agreement form for the proposed Boxwood PRM site.**

**Response:**

Please see **ATTACHMENT J of ATTACHMENT 9** for the completed Property Owners Access Agreement.

**Please provide the USM crediting forms for the reaches where restoration and enhancement are proposed.**

**Response:**

The updated USM crediting forms are included in **ATTACHMENT A of ATTACHMENT 9**.

**Please provide a map that depicts the proposed buffer segments so that they can be compared to the associated USM crediting form.**

**Response:**

The Concept Mitigation Plan Set (**ATTACHMENT C of ATTACHMENT 9**) includes labels for the buffer segments for easy reference.



**Please recheck the USM crediting forms to ensure the project is excluding any area and associated credit that was generated for the existing TMDL project. Have any credits been generated by enhancing wetlands onsite? If so, please identify where.**

**Response:**

The USM forms do not include any area associated with credit that was generated for the existing TMDL project. A 0.32 acre of wetland enhancement area has been identified within the Boxwood property, adjacent to the Randolph Creek floodplain as noted in the mitigation plan set. The wetland will be enhanced by removing invasive species and replanting with native wetland species and monitored in accordance with the MMP. The proposed wetland enhancement will generate 0.05 wetland credits using 7:1 ratio.

**Please update the performance standard section for invasive species management. Please list the species that will be treated and include the DCR Invasiveness Ranking. Please provide one or more maps of the invasive species inventory that correlates to the proposed buffer sections.**

**Response:**

The Invasive Species Inventory Maps and Management Plan have been updated and are included in ATTACHMENT G of ATTACHMENT 9.

**Has the proposed Boxwood PRM project been withdrawn from IRT review?**

**Response:**

Yes, the Boxwood PRM project has been withdrawn from IRT review as a potential Bank.

**What is the status of the TMDL project? Could any corrective action items or maintenance items required for the TMDL project impact the proposed Boxwood PRM project? If so, how will the project mitigate those impacts?**

**Response:**

The TMDL project is complete and has entered the first year of monitoring in 2022. Access routes to the TMDL project have been identified on the Overall Concept Map. Access paths will be planted with pollinator mix and replanted if degraded by maintenance crews. Outside of access, it is not anticipated that maintenance on the TMDL project would impact the Boxwood PRM project.

**It doesn't appear that the project is proposing to enhance or restore any of the streams or buffers associated with the Green Ridge preservation and the proposed activity is strictly preservation which is last on the mitigation hierarchy. The project identified the proposed Green Ridge preservation area as an area that was originally proposed for impact, but ultimately avoided the surface water impacts in this area. Please provide more information to justify the inclusion of the Green Ridge preservation as part of the compensatory mitigation plan. Please include information that demonstrates how the project expects to protect the long term fidelity of these proposed preservation areas despite their proximity to**



the proposed project. Please include any information that demonstrates any unique or noteworthy components of these areas.

**Response:**

The Boxwood PRM site alone produces sufficient credits to meet the mitigation requirements of the Green Ridge project. The intent of the inclusion of the Green Ridge site preservation reaches, is to provide additional protection to existing high quality streams within the project area. The CMP has been revised to remove the stream preservation areas adjacent to the proposed landfill cell as credit generating reaches. However, they will remain as preservation and the streams will be monitored per section I.C.6 (Non-Credit Generating Stream Preservation Monitoring and Reporting) in the Draft Monitoring and Maintenance Plan (MMP) in **ATTACHMENT H of ATTACHMENT 9**. These reaches have been removed from credit generation due to their location and the risk of meeting the required performance standards. The remaining reaches are still proposed as credit generating and will be monitored in accordance with the MMP. The mitigation plans have been revised to identify the credit generating and non-credit generating stream reaches.

Please provide enough information in order for DEQ to verify the amount of proposed credits that are to be generated by the conceptual mitigation plan. This will include more detail where and how structures will be implemented, clearly defining buffer sections and adding labels so that data sheets, tables, and plans can be easily cross-referenced. DEQ would like to set up a site visit to proposed mitigation site once more information is provided.

**Response:**

The plans have been updated to allow DEQ to verify the amount of proposed credits that are to be generated by the CMP.

DEQ would like to request a site visit to the proposed Boxwood PRM site. Please let me know you or your agent's availability for this visit.

**Response:**

Please contact Rick Atkinson (ratkinson@res.us) to schedule a site visit.

11. In accordance with 9 VAC 25-210-80 B 1.n, please provide a jurisdiction determination for the entire proposed PRM project area.

**Response:**

The delineation report for the project area is still pending review by the Corps. A PJD is anticipated to be forthcoming. The delineation report, data, and mapping can be found in **ATTACHMENT D of ATTACHMENT 9**.



12. In accordance with 9 VAC 25-210-80 B 1.p, a permit application fee is required to complete the application. Once the proposed impact information has been determined, DEQ will notify you of the fee amount.

**Response:**

Once the fee amount of the permit application is received a payment will be made.

Please contact me if you have any questions or concerns regarding this request. Thank you for your cooperation in this matter.

Sincerely,  
**KOONTZ BRYANT JOHNSON WILLIAMS**

A handwritten signature in black ink, appearing to read 'Brent Johnson'.

Brent Johnson P.E., P.G., AOSE  
Vice President - Geotechnical & Environmental

**Attachments:**

1. Supplemental Statement of Purpose and Need and Alternatives Analysis
2. Miller Lane Realignment Memorandum
3. DAA Drawings
4. Impact Plates
5. Impact Summary Table
6. USM Forms
7. Wetland Determination Data Form - Eastern Mountains and Piedmont Region
8. North Carolina Division of Water Quality-Methodology for Identification of Intermittent and Perennial Stream and their Origins
9. Concept Mitigation Plan for the Proposed Green Ridge Recycling and Disposal Facility Cumberland and Buckingham Counties, Virginia