BALTIMORE COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF CONSTRUCTION CONTRACTS ADMINISTRATION
111 WEST CHESAPEAKE AVENUE
TOWSON, MARYLAND 21204

Contract No. 24024 GX0
Pittsfield Road Stream Restoration at
Green Valley, Owings Mills, MD. 21117
Owings Mills – District 3c2
Workday No.
Proj-10001417, 214000351, 10000198

ADDENDUM NO. 5

DATE: 4/23/2025

Contact: Anthony Crews, 410-887-3531, tcrews@baltimorecountymd.gov

To All Bidders

This addendum is hereby made a part of the Proposal and the Special Provisions, and is hereby incorporated into the Contract. Should this addendum conflict with any portion of the Special Provisions, the Proposal, or any prior addenda, this addendum shall supersede and control.

Please note the attached changes, corrections, and/or information in connection with the contract and submit bids and be otherwise governed accordingly.

For Your Information

Attached are questions and answers.

In the Specifications

Revised and new pages to be inserted: Revised page 11 Contents, adding section 108 – Mobilization and section 500 – Hot Mix Asphalt Repairs. New page 24 A adding Category 100 Preliminary Section 108 – Mobilization. Revised page 39, section 308.04.19 Stabilized Construction Entrance new description adding replacement of damaged curb and incidentals to complete the work. New page 61 A adding Category 500 Paving – Hot Mix Asphalt Repairs. **Note**: the contract book specification pages were numbered 1 of 65. With the new pages added that would have changed that numbering so it was best to omit that numbering from the revised and new pages. No need to repeat spec pages already in contract with new numbering.

In the Proposal

Revised and attached to be inserted: Page 96, Item 9 – Temporary Orange Construction Fence (Temporary Safety Fence) changing the quantity **to** 10,046 **from** 8,550. Page 97, Item 12 – Bed Mix Type 1, No Brush changing the quantity **to** 492 **from** 601. Item 13 – Bed Mix Type II changing the quantity **to** 905 **from** 796. Page 98, Item 34 – Boulder Bank Protection changing the quantity **to** 229 **from** 253. Page 99, Adding Item 52 Contingent – Hot Mix Asphalt Repairs, unit of measure **is** (TON) with a quantity **of** 40.

In the Drawings

Revised and attached to be inserted sheet 1 of 48 Title Sheet & 18 of 48 Grading Structure Tables.

Contract No.24024 GX0
Addendum No.5

Attachments – 16

PLEASE SIGN BELOW ACKNOWLEDGING RECEIPT OF THIS ADDENDUM AND RETURN WITH YOUR BID.

_____	_____
Company Name	**Signature**

ADDENDUM #5: Contractor Question Reponses:

1. BCR Structure Table on sheet 18 is only showing the key-in lengths for the GCE structures and missing the footage that is instream for each GCE. We would just like to confirm that this is accurate because our takeoff quantities are substantially more for each type of GCE structure than what is included on the table?

   The GCE line items (Boulder Type I GCE, Boulder Type II GCE, Imbricated GCE, and Log GCE) should include the cost of the boulder or logs within the stream as well as the key-in. The key in is incidental to the cost of each respective GCE. The lengths noted in the BCR table on sheet 18 are only the key ins required for each structure. The boulders/logs required between toe of bank to toe of bank are not included in the lengths. Refer to the Boulder Grade Control Element – Cross- Section detail on DE-04. The dimensions between toe of bank to toe of bank can be found on DE-01.

2. The gabions shown on the plans for removal, are these just gabion stone outfalls or actual gabion baskets that will need to be removed?

   The gabions are actual gabion baskets.

3. Sheet 15 has a structured labeled as STP-6, but nothing is included for "STP" on the structure tables. Please confirm this is supposed to be BBP-6?

   Yes, STP-6 should be BBP-6.

4. There is a structure table on sheet 18 for Outfall Stabilization and it includes OS-1 to OS-5. None of these outfalls are called out on the plans anywhere. Can clarification be given for these outfalls?

   The outfall stabilization table accounts for the detail shown on DE-03 at the stations listed in the outfall stabilization table on sheet 18. On the plan sheets, these are shown with the bed mix pattern at each applicable outfall (SD-2 on sheet 12, the downstream extent of SD-6 on sheet 14, SD-7 and SD-8 on sheet 15, and the upstream extent of SD-10 on sheet 17).

5. There are some discrepancies in the takeoff quantities from what is shown on plan view vs what is shown in the structure tables; should contractors follow the plans or the tables?

   Contractors should bid on the material they believe is required for installation. The table quantities are more accurate as the plan representation may be adjusted for clarity. Note that the lengths of structures along pool bends (Boulder Bank Protection, Toe Boulders, and Woody Toe) in the tables on Sheet 18 reflect a length at the toe of slope.

The structures in plan view are depicted at the top of bank for clarity, therefore the lengths on the plans are longer than what is required. Also note the bed mix/pool material quantities in the tables account for the wetted perimeter.

6. *Bed Mix Type 1, No Brush* is showing over a 100 SY more on the bid form than what is actually shown on the plans.

   Bed Mix Type I, No Brush on the bid form is 601 SY, and should be 492 SY. Bed Mix Type II on the bid form was 796 SY, but should be 905 SY. The pool bed mix required for SP-6 was incorrectly summed in the Bed Mix Type I, No Brush total instead of the Bed Mix Type II total for step pools. See revised sheet 18 and revised bid form.

7. Bed Mix Type 2 quantity on the bid form is missing over 100 SY from what is shown on the plans. Specifically the Step Pool structure table on sheet 18 is missing 113.8 SY from the summary total at the bottom, but it is shown on the table in the individual breakouts.

   See response to question 6. See revised sheet 18 and revised bid form.

8. What are contractors to install for the temp privacy fence? No detail or specification has been provided.

   See the specification "Temporary Privacy Screen Fence". Pages 18-19 of the proposal book.

9. Drawings are calling out parking lot repairs for the stockpile pile areas on paving, but no bid item for asphalt repair is included in the bid. Where should this be captured? Also, can an asphalt paving section be provided?

   Any damage should be minimized to the parking lot areas but a contingent line item and specification SECTION 500 has been added to address this question. Proper photo documentation should occur prior to the start of construction to document the existing condition of the pavement.

10. Is Smart Fence acceptable substitute for super silt fence?

    No, as it is not approved on plans that must be approved by Baltimore County Soil Conservation District.

11. Should contractors only clear trees necessary for installation of E&S controls and stream build? Goal is to save as many trees as possible?

    The County will walk the site with the contractor before clearing with the intention of saving as many trees as possible. **Note, that if a construction entrance is not necessary to the contractors, that it not be installed, in an effort to minimize disruption to the community as much as possible.**

12. What size are the 3 sanitary lines being replaced on sheet 17? Only 1 of the 4 of the sanitary replacements is called out with its size.

    The sizes of the lines that are currently not exposed are unknown. The pipes on sheet 17 are lateral lines and size should be determined by the Contractor in the field per sanitary sewer replacement note #5. Per the specification, they are expected to be 4" to 8".

13. Concrete Sewer Encasement Bid item quantity is 149 LF. Drawings are only showing approx. 124 LF of sewer line replacement and only 100 LF of concrete encasement. What are contractors to assume for the additional quantity on the bid form? We don't know what size pipe or how much encasement to assume for this missing quantity.

    Concrete sewer encasement is measured and paid for per linear foot of pipe replaced. The encasement is incidental. It is anticipated that only 124 LF (corresponding to the callouts) of pipe should be replaced so long as the connection to the existing pipe is in good condition. Because the condition is unknown, the bid tabs include the entire length of pipes from cleanout to mainline for the Hartley trib crossings. No more than approximately 100 LF of concrete encasement as shown on the plans is required.

14. Concrete Sidewalk bid quantity is showing around 100 SF more than is shown on the plans, is this extra amount just to account for extending to the nearest joint?

    The sidewalk replacement corresponds to the total area of concrete path within the LOD at Pittsfield Rd, the two areas off of Hartley Circle, and along Township Drive. The area does not account for joint locations of the sidewalk.

15. There is the possibility to damage 200 LF of concrete curb as well on this project, no bid item is provided for this though. Should contractors include replacing this curb as well? If so, what bid item should it be included in?

    Any damage to concrete curb should be addressed by the contractor and should be considered incidental to the cost of the stabilized construction entrance, see revised wording in specification 308.

16. Can wedge stakes be used to install the coir matting or do contractors need to stick with the detail and us 1.5”x 1.5”x 18” hardwood stakes?

    Yes, wedge stakes can be used.

17. Boulder Bank Protection bid item is showing 253 LF, structure table shows 284 LF and plans are showing 232 LF. Should contractors just price based on the bid form quantity?

    The structure table and bid form quantities have been corrected. The original total on the structure table and the bid item incorrectly omitted the 30.6 LF on the Hartley Trib. In addition, the total on the original bid form of 284 LF overestimated the lengths, and has been adjusted to more accurately account for the confluences specifically at BBP-1 through BBP-3 and BBP-5 through BBP-7. See revised sheet 18 and revised bid form.

18. Toe Boulder measurement and payment states to include the cost of natural fiber matting for the bank stabilization and behind the boulders. Please confirm this is correct and that natural fiber matting for this structure won’t be paid for under Bid Item 50 for natural fiber matting? This is the same for Boulder Bank Protection, Woody Toe Protection and Step Pools?

    Correct, natural fiber matting that is specifically applied within the channel banks as a soil lift is incidental to the cost of toe boulder and woody toe. Natural fiber matting is not applied within the top of bank of step pools or boulder bank protection, so only the key in is considered incidental. Natural fiber matting installed outside the top of bank or along riffle banks is measured and paid for under bid item 50.

19. On the plan there shows removal and replacement of guardrail but the schedule of value does not give a quantity or detail on what type of guardrail it is. Also, what is going to protect the ends of the Guardrail once opened up, and since there is no pay item what item is it to be paid under?

    Guardrail will need to be field verified by the contractor, but is incidental to Mobilization. See revised specification SECTION 108.

20. Drawings are calling for approximately 1,500 LF of tree protection fence, but there is no bid item for tree protection fence. Per the detail this is just additional orange construction fence; will this be captured under the Bid Item 9: Temp Orange Construction Fence? If so, the quantity for this bid item is 1,500 LF short.

    Yes, the TPF is paid for under Bid Item 9: Temp Orange Construction Fence. The total linear footage has been revised to 10,046 LF.

21. Bid Item 8: Remove and Reset Fence, is this bid item to include the guard rail removal and reinstallation? Is there additional fence removal beyond just guard rail? I did not see any other fencing called out on the plans.

The remove and reset fence refers to the SHA chain link fence on sheet 16, at the downstream end of the project, should it need to be removed and reinstalled. This does not include guard rail removal and reinstallation, see response to question 19.

22. Is mobilization cost limited to a certain dollar amount or percentage of the project?

There is no defined limited dollar amount or percentage of the project for mobilization.

23. Is the contractor responsible for turbidity monitoring?

Yes, please refer to Contract proposal Section III, PERMITS.

24. What size of natural river stone is required for the suitable backfill portion of the bed mixes?

Suitable backfill is intended to be approximated by the following gradation, and is subject to Engineer approval.

% less than	Particle Diameter Passing through Sieve (in) or Sieve No.
100	2.5 in
85-100	1 in
60-100	0.5 in
35-70	No. 10
20-50	No. 40
3-20	No. 200

25. What work is the F-3 prequalified sub-contractor required to complete in the project? Is it just the sewer line replacement?

Please see Addendum #4 for clarification revision.

26. What type of fence is to be temporarily removed on sheet 16?

See response to question 21.

27. What are the required dimensions for the rootwads for the woody plugs?

There is no specific required dimension for the rootwads. The material specification for **(c) Woody Debris Material** should be corrected as follows:
Woody Plug Material includes salvaged trees approximately 10 to 20 feet in length with a diameter of 10 to 20 inches, with rootwads. Final log selection will be made after clearing and grubbing prior to any debris removal from site. Material shall be free of vines and invasives.

28. Can the bid due date be delayed?

Please see addendum #4 for revised bid due date.

CONTENTS

CATEGORY 100
PRELIMINARY

SECTION 108 – MOBLIZATION

108.01 DESCRIPTION

ADD:

Mobilization shall also include all maintenance of traffic, including flagging traffic, temporary signs, maintaining pedestrian walkways, temporary crash cushions, and all incidentals required for the work. See detail MD 104.01-70-73 for use of temporary protection with crash cushion at guardrail ends.

308.04.17 Silt Fence on Pavement is measured and paid for at the Contract unit price per linear foot. Removal, maintenance, and resetting of silt fence on pavement will not be measured but will be incidental to contract unit price for silt fence on pavement.

REPLACE: Section 308.04.18 with the following:

308.04.18 Super Silt Fence is measured and paid for at the Contract unit price per linear foot. Removal, maintenance, and resetting of super silt fence will not be measured but will be incidental to contract unit price for super silt fence.

REPLACE: Section 308.04.19 with the following:

308.04.19 Stabilized Construction Entrance (SCE) is measured and paid for at the Contract unit price per each and includes all excavation, geotextile, rehabilitation, replacement of damaged curb and incidentals to complete the work.

DELETE: Section 308.04.21 in its entirety.

REPLACE: Section 308.04.23 with the following:

308.04.23 Maintenance of Stream Flow will not be measured but paid for at the Contract unit price lump sum. The payment will be full compensation for polyethylene sheeting, sandbags, sediment filter bags, straw bales, excavation and clean-out of dewatering basins, pumps, geotextile, hoses, energy dissipaters for hose outfalls, and all other materials, labor, equipment, tools and incidentals necessary to complete the work.

ADD:

Temporary Access Bridge is measured and paid for at the contract unit price per each.

END OF SECTION

CATEGORY 500
PAVING

HOT MIX ASPHALT REPAIRS

DESCRIPTION.

This work shall consist of making repairs to asphalt road and parking lot surfaces damaged by construction and traffic related to stream work activities. Contractor is responsible for furnishing and installing hot mix asphalt for patching. Work shall consist of saw-cutting, excavating, and/or milling damaged asphalt surfaces as directed by the engineer in the field, and in accordance section 505 of Baltimore County's Standard Specifications Sept. 2023 edition.

MATERIALS.

Hot Mix Asphalt 9.5 mm level 1 64-22
Hot Mix Asphalt 12.5 mm level 1 64-22
Emulsified Tack Coat

CONSTRUCTION.

Existing pavement will be removed by either saw-cutting the limits of the area to be patched and excavating asphalt within the limits, or by milling the area to be refinished as directed by the engineer. For full depth patches, subgrade shall be dry, even, and densely compacted. Emulsified asphalt tack coat shall be placed on milled surfaces, and all vertical cut/milled edges along the patch edges. Asphalt shall be placed in layers not to exceed 2.5" in depth. Patch shall be rolled using vibratory steel drum roller or mechanical tamper as applicable to achieve required density.

Measurement and Payment.

HMA Repairs will be paid by unit price per TON of asphalt installed, compacted and in place. Payment shall be full compensation for all saw-cutting, milling, excavation, emulsified tack coat, and compaction of asphalt, and levelling/ compaction of existing subgrade.

END OF SECTION

CONTRACT PROPOSAL

Pittsfield Road Stream Restoration at Green Valley Lane
CONTRACT NUMBER : 24024 GX0
WORKDAY NUMBER : 10001417, 214000351, 10000198
COMPLETION DATE CONTRACT: All instream work must be completed by February 28, 2026.
All other work must be completed by May 31, 2026.

CONTRACTOR: _____
ADDRESS: _____
PHONE: _____

BID ITEM	COMM. CODE		DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	0	0000	HEAVY TREE PROTECTION	EA	16		$
2	0	0000	SIESMIC SURVEY & MONITORING	EA	4		$
3	0	0000	STREAM RESTORATION SITE AS-BUILT CERTIFICATION	LS	1		$
4	0	0000	TEMPORARY PRIVACY SCREEN FENCE	LF	120		$
5	110100	0000	CLEARING & GRUBBING	LS	1		$
6	130840	0000	CONSTRUCTION STAKEOUT	LS	1		$
7	130850	0000	MOBILIZATION	LS	1		$
8	695183	0000	REMOVE & RESET EXISTING FENCE	LF	40		$
9	388095	0000	TEMPORARY ORANGE CONSTRUCTION FENCE (TEMPORARY SAFETY FENCE)	LF	10,046		$
10	0	0000	BED MIX TYPE 0	SY	209		$
11	0	0000	BED MIX TYPE 1	SY	434		$
12	0	0000	BED MIX TYPE 1, NO BRUSH	SY	492		$

13	0	0000	BED MIX TYPE II	SY	905		$
14	0	0000	FURNISHED SUITABLE BACKFILL	CY	390		$
15	0	0000	MICROTOPOGRAPHY AND CREATED WETLANDS	SY	2,664		$
16	201035	0000	CLASS 5 EXCAVATION	LS	1		$
17	0	0000	CONCRETE SEWER ENCASEMENT	LF	149		$
18	0	0000	STREAM ACCESS PATHS	LS	1		$
19	0	0000	SILT FENCE ON PAVEMENT	LF	182		$
20	388108	0000	TEMPORARY ACCESS BRIDGE	EA	7		$
21	388067	0000	INLET PROTECTION	EA	6		$
22	388091	0000	STABILIZED CONSTRUCTION ENTRANCE	EA	7		$
23	388102	0000	SUPER SILT FENCE	LF	947		$
24	0	0000	BOULDER TYPE 1 GCE	EA	34		$
25	0	0000	BOULDER TYPE II GCE	EA	51		$
26	0	0000	IMBRICATED GCE	EA	16		$
27	0	0000	LOG GCE	EA	10		$
28	0	0000	CLAY PLUG	CY	112		$
29	0	0000	CONCRETE MONITORING BENCHMARKS	EA	20		$
30	0	0000	FLOODPLAIN LOG SILL	LF	726		$
31	0	0000	STEP / DROP	EA	19		$

32	0	0000	IMBRICATED STEP-POOL CREST	EA	6		$
33	0	0000	BOULDER TYPE II STEP-POOL CREST	EA	21		$
34	0	0000	BOULDER BANK PROTECTION	LF	229		$
35	0	0000	TOE BOULDER	LF	278		$
36	0	0000	WOODY DEBRIS PLUG	EA	12		$
37	0	0000	WOODY TOE PROTECTION	LF	941		$
38	410005	0000	MAINTENANCE OF STREAM FLOW	LS	1		$
39	655415	0000	REPAIR AND REPLACE 4" CONCRETE SIDEWALK	SF	465		$
40	0	0000	LIVE STAKES 3'	EA	2,950		$
41	0	0000	PERMANENT SEEDING FOR LOWLAND RIPARIAN AND LOWLAND RIPARIAN SEED ONLY ZONE	LB	269		$
42	0	0000	PERMANENT SEEDING FOR RIPARIAN ZONE AND RIPARIAN SEED ONLY ZONE	LB	68		$
43	0	0000	SHRUBS 3' HT CONTAINER	EA	1,152		$
44	0	0000	TREES 5' HT CONTAINER	EA	1,091		$
45	0	0000	TEMPORARY SEEDING FOR SITE STABILIZATION	SY	30,687		$
46	705412	0000	TEMPORARY MULCH	SY	30,687		$
47	0	0000	TURFGRASS ESTABLISHMENT (PERMANENT TURF GRASS SEEDING)	LB	56		$
48	701365	0000	PLACING SALVAGED TOPSOIL (6" DEPTH)	SY	11,436		$
49	704365	0000	PLACING FURNISHED TOPSOIL (6" DEPTH)	SY	17,154		$
50	708240	0000	SOIL STABILIZATION MATTING (NATURAL FIBER MATTING)	SY	8,260		$

51	713010	C	LARGE TREE FELLING	EA	5		$
52		C	HOT MIX ASPHALT REPAIRS	TON	40		$
TOTAL COST FOR CONTRACT							$

TOTAL COST FOR CONTRACT IN WORDS

OFFICER SIGNATURE

TITLE

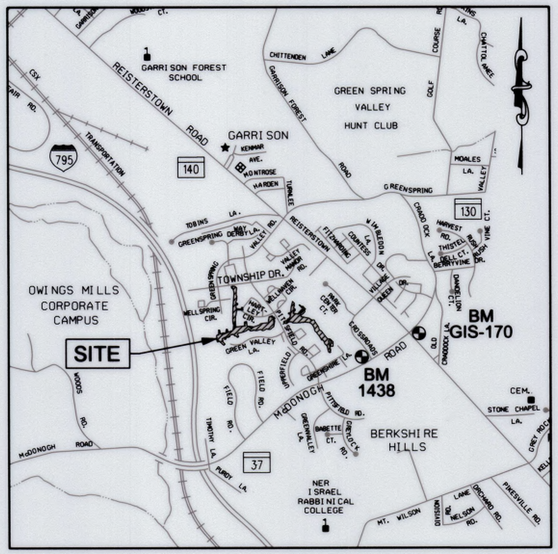
UNNAMED TRIBUTARY TO GWYNNS FALLS AT PITTSFIELD ROAD STREAM RESTORATION PROJECT

OWINGS MILLS, MARYLAND 21117

PREPARED FOR:
BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

PREPARED BY:

KCI TECHNOLOGIES
Engineers
Planners
Scientists
Construction Managers
936 Ridgebrook Road
Sparks, Maryland 21152
Telephone: (410) 316-7800
Fax: (410) 316-7818



PROJECT LENGTH: 4,692 LF

VICINITY MAP
SCALE: 1" = 1000'

SHEET INDEX

EXISTING CONDITIONS LEGEND

- EX. CONTOUR
- EX. STORM DRAIN
- EX. SANITARY SEWER
- EX. MANHOLE
- EX. WATER LINE
- EX. WATER METER
- EX. HAND BOX
- EX. TELEPHONE PEDESTAL
- EX. LIGHT POST
- EX. MAILBOX
- EX. SIGN
- SURVEY TRAVERSE POINT
- EX. WOOD FENCE
- EX. CHAIN LINK FENCE
- EX. GUARDRAIL
- EX. WOODS LINE
- EX. SHRUBS
- EX. BUSH
- EX. TREE
- SPECIMEN TREE / CRITICAL ROOT ZONE
- PROPERTY LINE
- EASEMENT LINE
- SOILS LINE
- EX. EDGE OF WATER
- WATERS OF THE U.S.
- EX. STREAM THALWEG
- EX. NON-TIDAL WETLAND
- 25' WETLAND BUFFER
- EX. 100-YEAR FLOODPLAIN
- EX. GABION / RIPRAP

PROPOSED STREAM STRUCTURES

- WOODY TOE PROTECTION
- BOULDER BANK PROTECTION
- TOE BOULDER W/LIVE STAKES
- STEP-POOL CREST
- STEP / DROP
- WOODY DEBRIS PLUG
- CLAY PLUG
- BED MIX
- FLOODPLAIN LOG SILL
- BOULDER GRADE CONTROL ELEMENT
- LOG GRADE CONTROL ELEMENT
- PROP. CONTOUR

GENERAL NOTES

1. THE FOLLOWING HORIZONTAL AND VERTICAL DATUMS ARE BASED ON THE MARYLAND STATE COORDINATE SYSTEM NAD 83 (2011) FOR HORIZONTAL AND NAVD 88 FOR VERTICAL AND ARE DERIVED FROM THE FOLLOWING BALTIMORE COUNTY SURVEY CONTROL POINTS:

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1438	630,039.55	1,382,609.56	536.65	INTERSECTION (CAPPED REBAR) OF MCDONOUGH RD. AND REISTERSTOWN RD.
GIS-170	630,420.61	1,383,312.41	550.05	INTERSECTION (BRASS DISK) OF MCDONOUGH RD. AND CROSSROADS DR.

2. THE PROPOSED GRADING SHOWN ON THESE PLANS MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
3. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.
4. THERE SHALL BE NO CLEAR CUTTING, AND ONLY MINIMAL CLEARING AND GRUBBING AS NECESSARY. TREES SHALL BE AVOIDED WHERE POSSIBLE, UNLESS NOTED FOR REMOVAL.
5. STORMWATER MANAGEMENT HAS BEEN ADDRESSED THROUGH STORMWATER MANAGEMENT VARIANCE. SEE APPROVAL LETTER DATED: 02/21/2023
6. OVERALL LIMIT OF DISTURBANCE: 7.12 AC. / 309,964 SF.
7. THE UNNAMED TRIBUTARIES TO GWYNNS FALLS IN THE PROJECT AREA ARE DESIGNATED "USE I". ALL IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE OF ANY YEAR.
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF BALTIMORE COUNTY CONTAINED HEREIN PLUS MSHA 2022 STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
9. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
10. EXISTING UTILITIES ARE BASED ON FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS.
11. OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND KCI TECHNOLOGIES, INC. DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE CONTRACTOR MUST VERIFY SUCH INFORMATION TO HIS OWN SATISFACTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE SANITARY SEWER LINES AND EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
13. CONTRACTOR TO PERFORM SEISMIC TESTING AND MONITORING FOR THE FOLLOWING FOUR LOCATIONS ADJACENT TO CONSTRUCTION ENTRANCES: 1 HARTLEY CIRCLE; BETWEEN 12 & 14 HARTLEY CIRCLE; 8120 TOWNSHIP DRIVE; AND 8116 GREEN VALLEY LANE.

Contract No.24024 GX0
Addendum No.5
Revised, April 23, 2025

OWNER'S/DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

SIGNATURE OWNER/DEVELOPER — DATE: 5/8/2024

Horacio Tablada — Director
PRINT NAME — TITLE

CONSULTANT'S CERTIFICATION:

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE — DATE: 4/30/2024

SHANNON CP. LUCAS — 33079
PRINT NAME — P.E. NO.

OWNER'S/DEVELOPER'S CERTIFICATION - GRADING:

I/WE CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

SIGNATURE OWNER/DEVELOPER — Director TITLE — DATE: 5/8/2024

Horacio Tablada
PRINT NAME

SEAL

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 33079
EXPIRATION DATE: 01/16/2025

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

DIRECTOR Horacio Tablada — DATE: 5/8/2024

DESIGNED AW, HS, SL, JK	BUREAU OF ENGINEERING AND CONSTRUCTION
DRAWN CSD, AW, JS	REVIEWED
CHECKED SL	DATE

BUR. OF ENGINEERING & CONSTRUCTION
APPROVED _____ CHIEF
DATE _____

KCI TECHNOLOGIES
ENGINEER SHANNON CP. LUCAS
936 RIDGEBROOK RD., SPARKS, MD 21152
410-316-7800 / SHANNON.LUCAS@KCI.COM
DATE 3/21/2024 LIC. NO. 33079

ROAD PERMIT AND GRADES
PERMIT REQUESTED _____
PERMIT NUMBER _____
GRADE ESTABLISHED _____
PROFILE NUMBER _____

REVISED AS PER RECORD PRINT	DATE	REVISION	BY
DRAFTSMAN	DATE		
HH	APRIL 2025 ⚠1	STRUCTURE TABLE REVISIONS	SL

HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER

DEPARTMENT OF PUBLIC WORKS
APPROVED _____ DIRECTOR
DATE _____

P. W. A. DIR. NO.	KEY SHEET
	PNE
RIGHT OF WAY	POSITION SHEET
	37NW 27, 28 36NW 27, 28

SCALE
PLAN: AS SHOWN
PROFILE:
HOR. N/A
VERT. N/A

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL 5-16-24 (Date)
DISTRICT OFFICIAL — Plan No. 071-25A7-24
Technical Review for the District by: Stuart Darley
This plan approval will expire three (3) years from the approval date.

STORMWATER MANAGEMENT PERMIT NOT REQUIRED

BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
APPROVED FOR GRADING
05.21.24
Date

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL: NAD 83 / 2011 & VERTICAL: NAVD 88

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION

UNNAMED TRIBUTARY TO GWYNNS FALLS AT PITTSFIELD ROAD STREAM RESTORATION PROJECT

COUNCIL DISTRICT NO. 02

TITLE SHEET

SUBDIVISION: MCDONOGH TOWNSHIP — EL. DISTRICT NO. 03

CONTRACT NO.	24024 GX0
JOB ORDER NO.	247-221-0400-0351
SHEET 1 OF 46	
DWG. NO.	2023-1187

TI-01

PLOTTED: "11:01 AM on Friday, April 26, 2024"
FILE: M:\2016\16160620.12\drawings\TI-P001_Pittsfield.dgn

WOODY DEBRIS PLUG*

NAME	US STATION	US OFFSET DISTANCE (FT)	DS STATION	DS OFFSET DISTANCE (FT)	OFFSET SIDE	PLUG (EA)
GREENSHIRE						
WDP-1	32+52.1	29.4	32+57.9	9.3	L	1
WDP-2	33+28.5	24.5	33+31.5	33	L	1
WDP-3	37+02.0	28.1	37+03.0	5.2	L	1
WELLHAVEN						
WDP-4	41+73.0	8	41+92.0	9.5	R	1
MAINSTEM						
WDP-5	1+05.0	21	1+25.0	9	L	1
WDP-6	8+84.7	33	9+11.0	28	L	1
WDP-7	12+56.0	16	12+76.0	16	L	1
WDP-8	13+72.1	11	13+92.4	22.2	L	1
WDP-9	14+87.0	57.5	14+90.0	39	R	1
WDP-10	15+03.5	42	15+09.0	58.5	R	1
WDP-11	15+14.5	25.5	15+19.5	41.5	R	1
WDP-12	15+27.0	58.5	15+34.0	50	R	1
				TOTAL PLUGS (EA)		12

*- FIELD DIRECTED AND ADJUSTED BY THE ENGINEER AS NECESSARY

FLOODPLAIN LOG SILL*

NAME	CENTERLINE STATION**	RB OFFSET STATION	RB OFFSET DISTANCE (LF)	LB OFFSET STATION	LB OFFSET DISTANCE (LF)	SILL LENGTH (LF)***
GREENSHIRE						
FPLS-1	34+18.2	33+93.0	39.5	34+19.0	33	72
WELLHAVEN						
FPLS-2	42+84.2	42+58.0	52.5	42+84.0	21.5	87
MAINSTEM						
FPLS-3	1+53.1	1+56.4	28.4	1+48.0	37.5	56
FPLS-4	2+61.4	2+63.8	28.6	2+59.0	27.5	44.9
FPLS-5	10+11.2	10+17.5	46	10+07.0	45	80.4
FPLS-6	12+28.6	N/A	N/A	12+38.7	27.4	23.7
FPLS-7	13+18.9	N/A	N/A	13+16.6	37.4	31.8
FPLS-8	14+09.5	14+02.0	73.5	14+09.0	20.8	83.1
FPLS-9	17+57.6	17+42.0	70	17+47.0	44	112
FPLS-10	18+97.9	19+02.0	100.7	18+83.0	49.2	135
					TOTAL LENGTH (LF)	725.9

*- FIELD DIRECTED AND ADJUSTED BY THE ENGINEER AS NECESSARY

**-CENTERLINE STATION IS THE LOCATION OF THE DS EDGE OF LOG, OFFSETS ARE MEASURED FROM MIDDLE OF LOG

***- LENGTH DOES NOT INCLUDE OVERLAP REQUIRED

OUTFALL STABILIZATION

NAME	US STATION	DS STATION	BED MIX TYPE	BED MIX (SY)
SD-2				
OS-1	102+00.0	102+34.2	I, NO BRUSH	23.6
SD-6				
OS-2	106+18.0	106+28.6	II	7.1
SD-7				
OS-3	107+00.0	107+24.7	I, NO BRUSH	16.8
SD-8				
OS-4*	108+49.5	108+73.6	I, NO BRUSH	32.7
SD-10				
OS-5	110+00.0	110+07.3	I, NO BRUSH	5.0
			TOTAL TYPE I, NO BRUSH BED MIX SY	78.0
			TOTAL TYPE II BED MIX SY	7.1

*BED MIX TO TIE INTO BCR-37

ROCK LINED POOLS

NAME	FROM STATION	TO STATION	BED MIX TYPE	BED MIX (SY)
MAINSTEM				
POOL-1	0+00.0	0+20.0	I, NO BRUSH	46.4
SD-5				
POOL-2	50+00.0	50+12.0	I, NO BRUSH	13.7
HARTLEY				
POOL-3	90+00.0	90+15.0	II	21.5
POOL-8	92+71.5	93+04.2	II	55.6
POOL-9	93+29.9	93+64.3	II	58.6
POOL-10	93+83.0	94+08.4	II	43.2
			TOTAL BED MIX TYPE II (SY)	178.8
			TOTAL BED MIX TYPE I, NO BRUSH (SY)	60.2

⚠ BOULDER BANK PROTECTION

NAME	FROM STATION (PC)	TO STATION (PT)	OFFSET DISTANCE*	OFFSET SIDE	BOULDER TYPE	LENGTH* (LF)	
GREENSHIRE							
BBP-1	~~31+38.4~~ 31+44.3	31+54.0	2	R	II	~~16.5~~ 11.8	
BBP-2	32+98.0	33+35.0	2.5	L	II	~~40.3~~ 37.8	
BBP-2***				MAINSTEM			
BBP-3	12+03.8	~~12+28.6~~ 12+21.1	6	L	I	~~28.5~~ 19.6	
BBP-4	13+77.0	14+08.8	6	R	I	~~36.7~~ 33.1	
BBP-5	~~15+76.0~~ 15+88.5	16+12.2	7	L	II	~~42.5~~ 29.9	
BBP-6	~~16+43.9~~ 16+56.4	16+74.9	7	R	II	~~36.4~~ 25.0	
BBP-7	18+39.0	18+84.2	7	L	II	~~52.2~~ 47.4	
BBP-7***				HARTLEY			
BBP-8	98+28.0	98+57.3	2	R	I	~~30.6~~ 24.3	
					TOTAL LENGTH (LF) :	~~253.1~~ 228.9	

*LENGTH MEASURED ALONG OUTSIDE BANK AT ~~TOE~~ TOP OF SLOPE

**LENGTH ADJUSTED TO ACCOUNT FOR BREAK AT CONFLUENCE

CLAY PLUGS

NAME	US STATION	US OFFSET DISTANCE	DS STATION	DS OFFSET DISTANCE	OFFSET SIDE	CLAY VOLUME (CY)
GREENSHIRE						
CP-1	32+80.7	11	32+97.0	21	L	17.9
CP-2	34+41.4	26.8	34+45.0	16.9	L	32.3
CP-3	36+91.5	25.1	36+91.5	12.1	L	12.8
MAINSTEM						
CP-4	03+28.3	9.7	03+37.5	29.6	L	37.5
WELLHAVEN						
CP-5	43+34.5	11.4	43+42.2	19.4	R	7.6
CP-6	42+32.4	8.3	42+38.7	19.8	R	3.6
					TOTAL CLAY VOLUME (CY)	111.6

TOE BOULDERS

NAME	FROM STATION (PC)	TO STATION (PT)	OFFSET DISTANCE*	OFFSET SIDE	BOULDER TYPE	LENGTH* (LF)
GREENSHIRE						
TB-1	30+25.0	30+48.8	2	L	II	25.7
TB-2	30+93.1	31+07.5	2	L	II	15.3
TB-3	31+95.0	32+14.3	2	L	II	20.4
TB-4	35+15.3	35+51.3	2	L	II	38.5
TB-5	35+72.0	35+85.2	2	R	II	14.1
TB-6	36+28.2	36+40.2	2	L	II	12.8
MAINSTEM						
TB-7	0+63.8	0+93.6	5.5	L	I	33.9
TB-8	2+87.9	3+25.9	4	R	I	41.9
TB-9	4+39.0	4+67.5	4	R	I	31.3
TB-10	9+48.2	9+86.6	6	L	I	44.2
					TOTAL LENGTH (LF):	278.1

*LENGTH MEASURED ALONG OUTSIDE BANK AT TOE OF SLOPE

STEP DROPS

NAME	US STATION	DS STATION
SD-1		
STDR-1	101+00.0	101+03.0
STDR-2	101+03.0	101+06.0
STDR-3	101+06.0	101+09.0
STDR-4	101+09.0	101+12.0
STDR-5	101+12.0	101+15.0
STDR-6	101+15.0	101+18.0
STDR-7	101+18.0	101+19.8
SD-3		
STDR-8	103+00.0	103+03.0
STDR-9	103+03.0	103+06.0
SD-6		
STDR-10	106+00.0	106+03.0
STDR-11	106+03.0	106+06.0
STDR-12	106+06.0	106+09.0
STDR-13	106+09.0	106+12.0
STDR-14	106+12.0	106+15.0
STDR-15	106+15.0	106+18.0
SD-10		
STDR-16	110+07.3	110+10.3
STDR-17	110+10.3	110+13.3
STDR-18	110+13.3	110+16.3
STDR-19	110+16.3	110+17.6
TOTAL STEP/DROP (EA)		19

MICROTOPOGRAPHY

NAME	AREA (SY)
GREENSHIRE	
MT-1	53.9
MT-2	117.6
MT-3	101.4
MT-4	24.3
WELLHAVEN	
MT-5	121.4
MT-6	46.0
MT-7	55.0
MT-8	67.7
MT-9	31.6
MAINSTEM	
MT-10	138.5
MT-11	111.9
MT-12	552.6
MT-13	125.5
MT-14	56.6
MT-15	92.1
MT-16	127.3
MT-17	151.9
MT-18	337.9
TOTAL AREA (SY)	2313.2

CREATED WETLAND

NAME	AREA (SY)
MAINSTEM	
CW-1	350.0
TOTAL AREA (SY)	350.0

⚠ STEP-POOL

NAME	CREST US STATION	CREST DS STATION	CREST BOULDER SIZE	POOL US STATION	POOL DS STATION	POOL BED MIX	POOL MATERIAL (SY)
MAINSTEM							
SP-1	4+67.5	4+69.5	IMBRICATED	4+69.5	4+88.8	I, NO BRUSH	38.2
SP-2	4+88.8	4+90.8	IMBRICATED	4+90.8	5+10.1	I, NO BRUSH	38.2
SP-3	5+10.1	5+12.1	IMBRICATED	5+12.1	5+31.5	I, NO BRUSH	38.2
SP-4	5+31.5	5+33.5	IMBRICATED	5+33.5	5+52.8	I, NO BRUSH	38.2
SP-5	5+52.8	5+54.8	IMBRICATED	5+54.8	5+59.2	I, NO BRUSH	8.7
SP-6	8+54.9	8+57.9	IMBRICATED	8+57.9	9+00.0	II	108.5
GREEN VALLEY							
SP-7	60+00.0	60+02.0	II	60+02.0	60+16.2	I, NO BRUSH	22.3
SP-8	60+16.2	60+18.2	II	60+18.2	60+32.3	I, NO BRUSH	22.4
SP-9	60+32.3	60+34.3	II	60+34.3	60+48.5	I, NO BRUSH	22.3
SP-10	60+48.5	60+50.5	II	60+50.5	60+64.7	I, NO BRUSH	22.4
SP-11	60+64.7	60+66.7	II	60+66.7	60+73.7	I, NO BRUSH	11.1
SD-3							
SP-12	103+06.0	103+08.0	II	103+08.0	103+17.1	I, NO BRUSH	8.1
SP-13	103+17.1	103+19.1	II	103+19.1	103+28.2	I, NO BRUSH	8.1
SP-14	103+28.2	103+30.2	II	103+30.2	103+34.5	I, NO BRUSH	3.8
SD-4							
SP-15	N/A	N/A	N/A	104+00.0	104+11.1	II	13.8
SP-16	104+11.1	104+13.1	II	104+13.1	104+22.1	II	11.3
SP-17	104+22.1	104+24.1	II	104+24.1	104+28.5	II	5.4
SD-5							
SP-18	50+12.0	50+14.0	II	50+14.0	50+24.4	II	11.9
SP-19	50+24.4	50+26.4	II	50+26.4	50+36.9	II	11.9
SP-20	50+36.9	50+38.9	II	50+38.9	50+49.3	II	11.9
SP-21	50+49.3	50+51.3	II	50+51.3	50+61.7	II	11.9
SP-22	50+61.7	50+63.7	II	50+63.7	50+74.1	II	11.9
SP-23	50+74.1	50+76.1	II	50+76.1	50+82.0	II	6.7
SD-9							
SP-24	N/A	N/A	N/A	109+00.0	109+09.5	I, NO BRUSH	8.0
SP-25	109+09.5	109+11.5	II	109+11.5	109+19.1	I, NO BRUSH	6.4
SP-26	109+19.1	109+21.1	II	109+21.1	109+28.6	I, NO BRUSH	6.4
SP-27	109+28.6	109+30.6	II	109+30.6	109+38.1	I, NO BRUSH	6.4
SP-28	109+38.1	109+40.1	II	109+40.1	109+49.0	I, NO BRUSH	7.5
SD-11							
SP-29	N/A	N/A	N/A	111+00.0	111+11.5	II	14.8
SP-30	111+11.5	111+13.5	II	111+13.5	111+18.3	II	6.2

STEP-POOL QUANTITY SUMMARY

TOTAL IMBRICATED CREST (EA)	6	BED MIX TYPE I, NO BRUSH TOTAL (SY)	316.7 ~~425.2~~
TOTAL BOULDER TYPE II CREST (EA)	21	BED MIX TYPE II TOTAL (SY)	226.4 ~~117.8~~

WOODY TOE PROTECTION

NAME	FROM STATION (PC)	TO STATION (PT)	OFFSET DISTANCE*	OFFSET SIDE	LENGTH* (LF)
GREENSHIRE					
WT-1	30+66.4	30+87.2	2	R	22.3
WT-2	32+52.2	32+86.7	2.5	R	37.4
WT-3	33+57.7	33+93.9	2.5	R	39.4
WT-4	34+18.2	34+49.4	2.5	L	34
WT-5	34+53.5	34+87.1	2.5	R	36.6
WT-6	36+63.5	36+88.0	2	R	26.2
WELLHAVEN					
WT-7	40+91.2	41+11.0	2	L	21.5
WT-8	41+37.2	41+61.4	2	R	26.5
WT-9	41+93.8	42+27.0	2	L	36
WT-10	42+34.4	42+73.1	2	R	42.1
WT-11	42+84.2	43+26.1	2	L	45.6
WT-12	43+37.4	43+69.5	2	R	34.9
WT-13	43+71.4	43+91.9	2	L	22.3
MAINSTEM					
WT-14	1+53.1	2+00.5	5.5	R	53.9
WT-15	2+17.1	2+61.4	4	L	48.7
WT-16	10+11.2	10+58.2	6	R	54
WT-17	11+56.1	11+86.3	6	R	34.8
WT-18	12+79.8	13+18.9	6	R	44.9
WT-19	13+47.1	13+72.1	6	L	29.2
WT-20	14+23.2	14+72.1	6	L	55
WT-21	15+06.0	15+44.4	6	R	44.1
WT-22	16+89.1	17+16.4	7	L	32.1
WT-23	17+57.6	18+08.3	7	R	57.8
WT-24	18+97.9	19+18.4	7	R	23.6
HARTLEY					
WT-25	97+78.7	98+15.1	2	L	38.5
				TOTAL LENGTH (LF):	941.4

*LENGTH MEASURED ALONG OUTSIDE BANK AT TOE OF SLOPE

⚠ BRUSH / COBBLE RIFFLE (BCR)

NAME	FROM STATION (PT)	TO STATION (PC)	BED MIX TYPE	BED MIX* (SY)	US GCE TYPE ***	US GCE KEY IN LENGTH LB (FT)	US GCE KEY IN LENGTH RB (FT)	DS GCE TYPE ***	DS GCE KEY IN LENGTH LB (FT)	DS GCE KEY IN LENGTH RB (FT)
GREENSHIRE										
BCR-1	30+21.6	30+25.0	II	1.5	N/A	N/A	N/A	II	5.7	7.5
BCR-2	30+48.8	30+66.4	II	12.5	IMBRICATED	6.7	10.0	IMBRICATED	2.0	2.0
BCR-3	30+87.2	30+93.1	II	3.7	IMBRICATED	9.6	6.0	N/A	N/A	N/A
BCR-4	31+07.5	31+38.4	II	24.9	IMBRICATED	7.0	7.2	IMBRICATED	2.0	2.0
BCR-5	31+54.0	31+95.0	II	34.5	II	7.9	6.8	II	2.0	2.0
BCR-6	32+14.3	32+52.2	II	31.3	IMBRICATED	6.0	14.7	IMBRICATED	2.0	2.0
BCR-7	32+86.7	32+98.0	I	4.9	I	6.0	6.0	I	2.0	2.0
BCR-8	33+35.0	33+57.7	I	11.6	LOG	6.5	6.5	LOG	2.5	2.5
BCR-9	33+93.9	34+18.2	I	12.6	LOG	6.5	6.5	LOG	2.5	2.5
BCR-10	34+49.4	34+53.5	II	2.6	II	6.5	6.5	N/A	N/A	N/A
BCR-11	34+87.1	35+15.3	II	22.8	II	6.0	6.0	II	2.0	2.0
BCR-12	35+51.3	35+72.0	II	15.9	II	12.3	2.0	II	6.5	2.0
BCR-13	35+85.2	36+28.2	II	36.5	II	8.3	6.7	II	9.4	9.8
BCR-14	36+40.2	36+63.5	II	18.2	II	2.0	2.0	II	2.0	2.0
BCR-15	36+88.0	37+18.9	II	25.3	II	6.8	6.0	II	6.0	4.0
WELLHAVEN										
BCR-16	40+67.5	40+91.2	I	9.4	I	13.0	5.5	I	5.0	5.5
BCR-17	41+11.0	41+37.2	0	10.9	LOG	6.0	5.5	LOG	1.5	1.5
BCR-18	41+61.4	41+93.8	0	13.6	LOG	15.7	5.5	LOG	1.5	1.5
BCR-19	42+27.0	42+34.4	0	2.6	LOG	5.5	5.5	N/A	N/A	N/A
BCR-20	42+73.1	42+84.2	0	4.6	LOG	1.5	1.5	N/A	N/A	N/A
BCR-21	43+26.1	43+37.4	I	3.9	I	5.5	5.5	I	2.0	2.0
BCR-22	43+69.5	43+71.4	N/A	N/A	II	5.5	12.9	N/A	N/A	N/A
BCR-23	43+91.9	44+33.0	I	16.7	II	2.0	2.0	N/A	N/A	N/A
MAINSTEM										
BCR-24	0+20.0	0+63.8	0	41.3	I	15.0	7.5	I	8.0	13.0
BCR-25	0+93.6	1+53.1	0	57.8	I	11.8	9.0	I	3.5	3.5
BCR-26	2+00.5	2+17.1	I	8.8	II	6.5	6.5	II	2.5	2.5
BCR-27	2+61.4	2+87.9	I	15.3	II	2.5	2.5	II	2.5	2.5
BCR-28	3+25.9	3+51.1	I NO BRUSH	14.4	II	2.5	6.5	II	2.5	2.5
BCR-29	3+85.9	4+39.0	I	33.0	II	6.5	6.5	II	6.5	6.5
BCR-30	9+00.0	9+48.2	0	35.6	I	13.0	7.0	I	3.0	3.0
BCR-31	9+86.6	10+11.2	I	17.2	I	7.0	7.0	I	3.0	3.0
BCR-32	10+58.2	10+83.2	I	17.5	I	8.5	7.0	I	12.4	3.0
BCR-33	11+27.9	11+56.1	I	20.0	I	21.9	3.0	I	3.0	7.0
BCR-34	11+86.3	12+03.8	I	11.7	I	7.0	7.0	I	3.0	3.0
BCR-35	12+28.6	12+79.8	I	37.1	II	7.0	3.0	II	3.0	3.0
BCR-36	13+18.9	13+47.1	I	20.1	I	13.7	3.0	I	3.0	3.0
BCR-37**	13+72.1	13+81.9	0	11.2	I	3.0	15.1	N/A	N/A	N/A
BCR-38	14+08.8	14+23.2	I	8.5	II	3.0	3.0	II	3.0	3.0
BCR-39	14+72.1	15+06.0	I	23.7	II	7.6	8.8	II	3.0	3.0
BCR-40	15+44.4	15+76.0	0	22.7	I	21.5	7.0	I	3.0	3.0
BCR-41	16+12.2	16+43.9	I NO BRUSH	22.6	I	8.5	6.8	I	3.0	6.7
BCR-42	16+74.9	16+89.1	I	8.3	II	20.6	8.5	II	3.0	3.0
BCR-43	17+16.4	17+57.6	I	29.3	II	8.5	8.5	II	3.0	3.0
BCR-44	18+08.3	18+39.0	I	21.1	II	7.1	7.1	II	3.1	3.1
BCR-45	18+84.2	18+97.9	I	8.8	I	3.1	3.1	I	3.1	3.1
BCR-46	19+18.4	19+42.9	I	16.4	II	8.5	21.3	IMBRICATED	8.5	8.5
HARTLEY										
BCR-47	90+15.0	90+40.7	II	33.1	II	6.8	6.8	II	4.3	4.3
BCR-48	90+75.0	91+00.7	II	33.1	II	6.8	6.8	II	4.3	4.3
BCR-49	91+35.0	91+60.7	II	33.0	II	10.0	6.8	II	4.3	4.3
BCR-50	91+81.1	92+17.6	II	49.2	II	7.3	6.8	II	4.3	4.3
BCR-51	92+42.9	92+71.5	II	35.1	IMBRICATED	6.7	6.7	IMBRICATED	4.3	4.3
BCR-52	93+04.2	93+29.9	II	30.8	IMBRICATED	10.0	7.0	IMBRICATED	4.3	4.3
BCR-53	93+64.3	93+83.0	II	20.9	IMBRICATED	6.8	7.5	IMBRICATED	4.3	4.3
BCR-54	94+08.4	94+31.6	II	27.3	IMBRICATED	7.1	11.5	IMBRICATED	4.3	4.3
BCR-55	94+63.2	94+90.8	I	22.4	II	6.9	8.1	II	4.3	4.3
BCR-56	95+17.8	95+44.1	I	21.2	II	8.0	7.0	II	4.3	4.3
BCR-57	95+84.0	96+12.2	I	23.1	II	7.0	7.8	II	4.3	4.3
BCR-58	97+57.4	97+78.7	I	10.4	I	6.5	6.5	I	2.5	2.5
BCR-59	98+15.1	98+28.0	0	5.8	I	6.5	6.5	I	2.5	2.5
BCR-60	98+57.3	98+63.6	0	2.8	I	6.1	6.5	N/A	N/A	N/A

* TYPE II BED MIX TO BE PLACED FROM TOB TO TOB, TYPE I AND 0 TO BE PLACED FROM TOE TO TOE

**BED MIX TO EXTEND TO DOWNSTREAM EXTENT OF CONFLUENCE WITH SD-8

*** SEE DIMENSION REQUIREMENTS ON DE-01

BRUSH / COBBLE RIFFLE (BCR) QUANTITY SUMMARY

TOTAL BED MIX TYPE 0 (SY)	208.8	TOTAL NUMBER OF BOULDER TYPE I GCE (EA)	34.0	TOTAL LENGTH OF KEY IN BOULDER TYPE I (LF)	424.4
TOTAL BED MIX TYPE I (SY)	433.2	TOTAL NUMBER OF BOULDER TYPE II GCE (EA)	51.0	TOTAL LENGTH OF KEY IN BOULDER TYPE II (LF)	568.1
TOTAL BED MIX TYPE I NO BRUSH (SY)	37.1	TOTAL NUMBER OF IMBRICATED GCE (EA)	16.0	TOTAL LENGTH OF KEY IN IMBRICATED BOULDERS (LF)	193.5
TOTAL BED MIX TYPE II (SY)	492.1	TOTAL NUMBER OF LOG GCE (EA)	10.0	TOTAL LENGTH OF KEY IN HEADER LOG (LF)	88.7

Contract No.24024 GX0
Addendum No.5
Revised, April 23, 2025

SEAL

STATE OF MARYLAND — SHANNON CP LUCAS — No. 33079 — PROFESSIONAL ENGINEER

4/23/2024

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 33079
EXPIRATION DATE: 01/16/2025

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

DIRECTOR — DATE 5/8/2024

DESIGNED AW,HS,SL, JK	BUREAU OF ENGINEERING AND CONSTRUCTION
DRAWN CSD, AW, JS	REVIEWED
CHECKED SL	DATE

BUR. OF ENGINEERING & CONSTRUCTION
APPROVED _____ CHIEF
DATE _____

REVISED AS PER RECORD PRINT	DATE	REVISION	BY
DRAFTSMAN	DATE		
HH	APRIL 2025 ⚠	STRUCTURE TABLE REVISIONS	SL

KCI TECHNOLOGIES
ENGINEER SHANNON CP. LUCAS
936 RIDGEBROOK RD., SPARKS, MD 21152
410-316-7800 / SHANNON.LUCAS@KCI.COM
DATE 3/21/2024 LIC. NO. 33079

ROAD PERMIT AND GRADES
PERMIT REQUESTED
PERMIT NUMBER
GRADE ESTABLISHED
PROFILE NUMBER

HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER

DEPARTMENT OF PUBLIC WORKS
APPROVED _____ DIRECTOR
DATE _____

P. W. A. DIR. NO.	KEY SHEET
	PNE
RIGHT OF WAY	POSITION SHEET
	37NW 27, 28 38NW 27, 28

SCALE
PLAN: AS SHOWN
PROFILE:
HOR. N/A
VERT. N/A

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL: NAD 83 / 2011 & VERTICAL: NAVD 88

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION

UNNAMED TRIBUTARY TO GWYNNS FALLS AT PITTSFIELD ROAD STREAM RESTORATION PROJECT

COUNCIL DISTRICT NO. 02

GRADING STRUCTURE TABLES

SUBDIVISION: MCDONOGH TOWNSHIP — EL. DISTRICT NO. 03

GR-07

CONTRACT NO.	24024 GX0
JOB ORDER NO.	247-221-0400-0351
SHEET	18 OF 46
DWG. NO.	2023-1204

PLOTTED: "11:12 AM on Thursday, March 21, 2024"
FILE NM: \2016\16802620.12\Drawings\GR-P007_Structure-Tables_Pittsfield.dgn