

RADFORD UNIVERSITY PCB

TOTAL MAXIMUM DAILY LOAD (TMDL) ACTION PLAN

Located in:

Radford, Virginia



VPDES Permit Number: VAR040136

Project Number: 2429.0

Date: July 13, 2026



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1.0 INTRODUCTION

1.1 Purpose

This guidance document provides Radford University staff, faculty, students, and stakeholders with background information and procedures for the development of goals and actions in the effort to reduce PCB pollutant loads to local waterways. The development of this PCB TMDL Action Plan has been completed as required by the Local TMDL Special Conditions of the 2023–2028 General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.

1.2 Watersheds and Receiving Waters

The Radford University MS4 service area is located entirely within the New River Watershed. The University's regulated MS4 service area encompasses approximately 225.80 acres of the 1,963,520-acre New River Watershed. The New River flows northwest through Virginia and West Virginia before joining the Gauley River to form the Kanawha River, which ultimately drains to the Ohio and Mississippi Rivers.

The primary receiving waters for the Radford University MS4 are the New River and associated tributaries that drain to the New River. Stormwater runoff from developed campus areas is conveyed through the University's storm sewer system and discharged to these receiving waters.

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2.0 PCB TMDL ACTION PLAN

2.1 Waste load Allocations (WLAs)

TMDL Project Name: PCB Total Maximum Daily Load Development for Reed Creek, the Upper New River, Peak Creek, Walker Creek, Stony Creek, and the Lower New River

EPA Approval Date: March 12, 2019

Pollutants of Concern: Polychlorinated Biphenyl (PCB)

Assigned WLA: 78.5 mg/year (Total for all MS4 permits in Lower New River Watershed, per New River PCB TMDL)

Percent Reduction: 99.9%

2.2 Potential Sources of PCBs

Table 1

Potential Source	Applicability within Radford University
Electrical Transformers	Potentially applicable. Older electrical equipment may contain or have historically contained PCBs.
Buildings Constructed Prior to 1980	Potentially Applicable. Building materials such as caulk, sealants, paints, and expansion joint materials may contain PCBs and could become exposed during renovation or demolition activities.
Contaminated Sites	No known contaminated sites have been identified within the University's MS4 service area.
Historic Maintenance and Storage Areas	Potentially applicable. Areas historically used for equipment maintenance, storage, or utility operations may be a source for legacy PCBs.
Stormwater Conveyances and Sediments	Potentially Applicable. Stormwater infrastructure and sediment accumulation areas may act as reservoirs for legacy PCBs.
Pollution Response Program (PREP) Spills	No known PCB spills have been identified or recorded in the University's MS4 area.
Unknown Sources	Potentially Applicable. Unidentified legacy sources may contribute low level PCB contamination to the watershed.

2.3 Best Management Practices to Reduce PCBs

Table 2

Source	BMP	Location
Electrical Transformers	Coordinate with Facilities Management and utility providers to identify and track the replacement of electrical equipment that may contain PCBs.	Campus-wide
Buildings Constructed Prior to 1980	Identify buildings that may have been constructed with materials containing PCBs. Coordinate with Facilities Management and project contractors during demolition, renovation, or maintenance activities to properly manage and dispose of PCB-containing materials.	Campus-wide
Historic Maintenance and Storage Areas	Review records and aerial photography to identify areas where PCB-containing materials may have been used, stored, or disposed.	Campus-wide
Stormwater Conveyances and Sediments	During routine inspections of stormwater infrastructure, evaluate conveyances, outfalls, and sediment accumulation areas to identify potential PCB contamination concerns.	Campus-wide
Unknown Sources	Investigate any newly identified or suspected PCB sources, implement corrective actions as necessary, and notify DEQ of any significant PCB sources discovered within the MS4 service area, and educate applicable staff on the identification, handling, disposal, and reporting of PCB-containing materials.	Campus-wide

2.4 Pollutant Reduction Calculations

The best management practices (BMPs) discussed in Section 2.3 were selected to reduce potential PCB discharges to waterways. These BMPs are qualitative in nature and focus on identification, control, and pollution prevention. Therefore, there are currently no calculations available or required to quantify PCB reduction. Should future monitoring or investigations identify measurable PCB loads, reduction calculations may be developed and incorporated into future revisions of this Action Plan.

2.5 Implementation Schedule

Table 3

Source	BMP	Implementation Schedule
Electrical Transformers	Coordinate replacement of potential PCB-containing equipment.	Ongoing; review of applicable equipment completed within the permit term.
Buildings Constructed Prior to 1980	Identify and manage PCB-containing building materials during renovation and demolition activities.	Identification of applicable buildings completed within the permit term; management activities performed during applicable projects.
Historic Maintenance and Storage Areas	Identify potential legacy PCB source areas through records review.	Review completed within the permit term.
Stormwater Conveyances and Sediments	Evaluate stormwater infrastructure for potential PCB concerns during routine inspections.	Ongoing through routine inspections and maintenance activities.
Unknown Sources	Investigate suspected PCB sources, implement corrective actions, notify DEQ as required, and educate applicable staff.	As needed upon identification of a suspected source. Staff education completed within permit term.

2.6 Evaluation and Adaptive Management

Radford University will periodically evaluate the effectiveness of the BMP's identified in this action plan through routine inspections, maintenance activities, and any monitoring or investigations conducted in the service area. The University will assess suspected sources, review findings, and determine whether BMP modifications or new implementation strategies are necessary. If new significant PCB sources are found, the University will update this action plan as needed to incorporate additional measures to further reduce the potential of PCBs discharging to waterways.

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3.0 PUBLIC COMMENT

The draft PCB TMDL Action Plan was made available for public for a minimum of 2 weeks at the Radford University MS4 webpage.

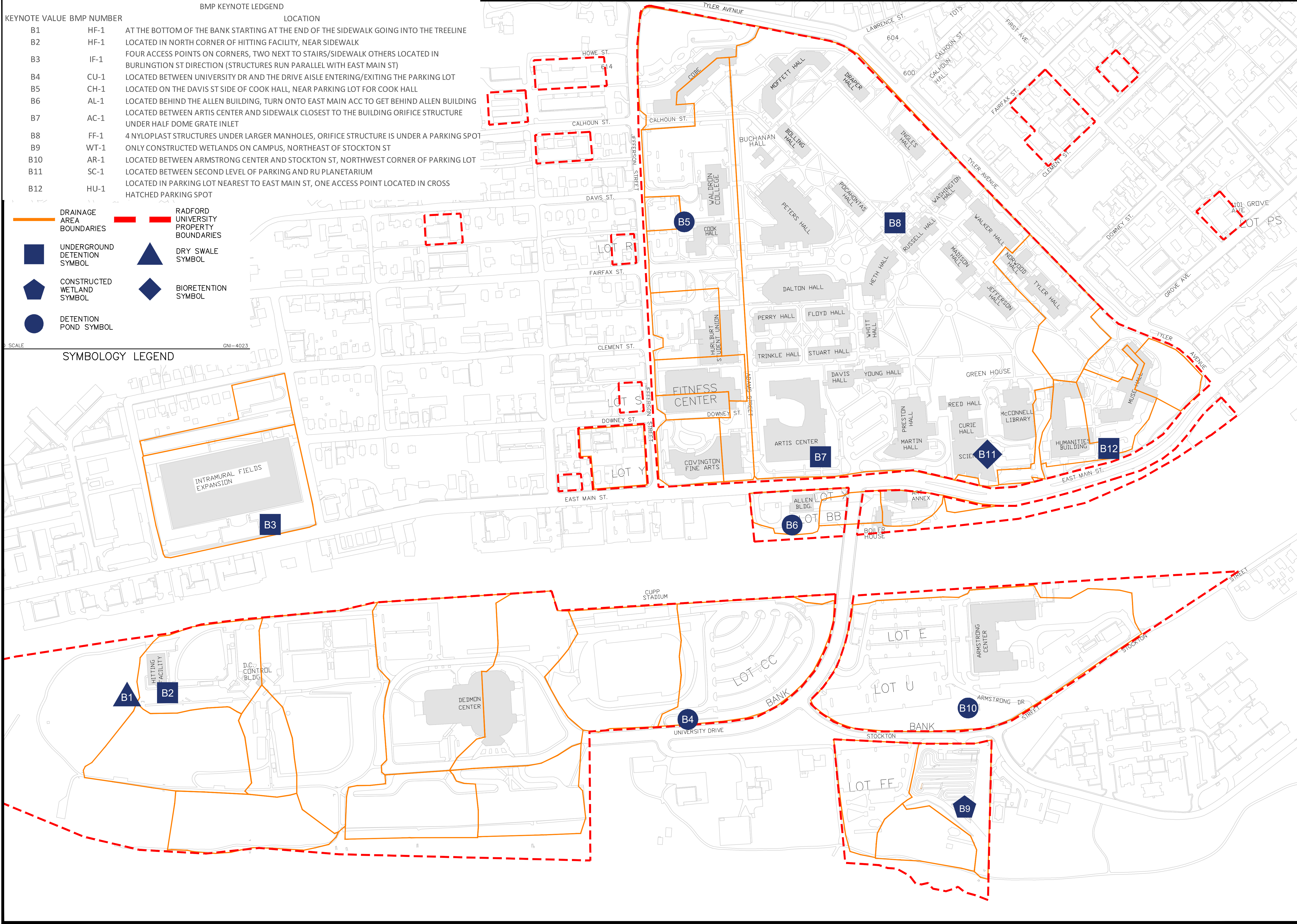
At the time of publication of this draft document, the public comment period remains open, and no final summary of comments has been prepared. Following the close of the comment period, this section will be updated with a summary of comments received and any resulting revisions to the Action Plan.

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APPENDIX A

- MS4 BMP Map
- MS4 Outfall Map

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Layout1, 06/26/2025 4:19:38 PM, nscogues, AutoCAD, PLOT (General Documentation)pc3, 11



BMP KEYNOTE LEDGEND		
KEYNOTE VALUE	BMP NUMBER	LOCATION
B1	HF-1	AT THE BOTTOM OF THE BANK STARTING AT THE END OF THE SIDEWALK GOING INTO THE TREELINE
B2	HF-1	LOCATED IN NORTH CORNER OF HITTING FACILITY, NEAR SIDEWALK
B3	IF-1	FOUR ACCESS POINTS ON CORNERS, TWO NEXT TO STAIRS/SIDEWALK OTHERS LOCATED IN BURLINGTON ST DIRECTION (STRUCTURES RUN PARALLEL WITH EAST MAIN ST)
B4	CU-1	LOCATED BETWEEN UNIVERSITY DR AND THE DRIVE AISLE ENTERING/EXITING THE PARKING LOT
B5	CH-1	LOCATED ON THE DAVIS ST SIDE OF COOK HALL, NEAR PARKING LOT FOR COOK HALL
B6	AL-1	LOCATED BEHIND THE ALLEN BUILDING, TURN ONTO EAST MAIN ACC TO GET BEHIND ALLEN BUILDING
B7	AC-1	LOCATED BETWEEN ARMSTRONG CENTER AND STOCKTON ST, NORTHWEST CORNER OF PARKING LOT UNDER HALF DOME GRATE INLET
B8	FF-1	4 NYLOPLAST STRUCTURES UNDER LARGER MANHOLES, ORIFICE STRUCTURE IS UNDER A PARKING SPOT
B9	WT-1	ONLY CONSTRUCTED WETLANDS ON CAMPUS, NORTHEAST OF STOCKTON ST
B10	AR-1	LOCATED BETWEEN ARMSTRONG CENTER AND STOCKTON ST, NORTHWEST CORNER OF PARKING LOT
B11	SC-1	LOCATED BETWEEN SECOND LEVEL OF PARKING AND RU PLANETARIUM
B12	HU-1	LOCATED IN PARKING LOT NEAREST TO EAST MAIN ST, ONE ACCESS POINT LOCATED IN CROSS HATCHED PARKING SPOT

- DRAINAGE AREA BOUNDARIES
- UNDERGROUND DETENTION SYMBOL
- CONSTRUCTED WETLAND SYMBOL
- DETENTION POND SYMBOL
- RADFORD UNIVERSITY PROPERTY BOUNDARIES
- DRY SWALE SYMBOL
- BIORETENTION SYMBOL

SCALE GNI-4023

SYMBOLGY LEGEND

FORESIGHT

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MS4 BMP MAPPING

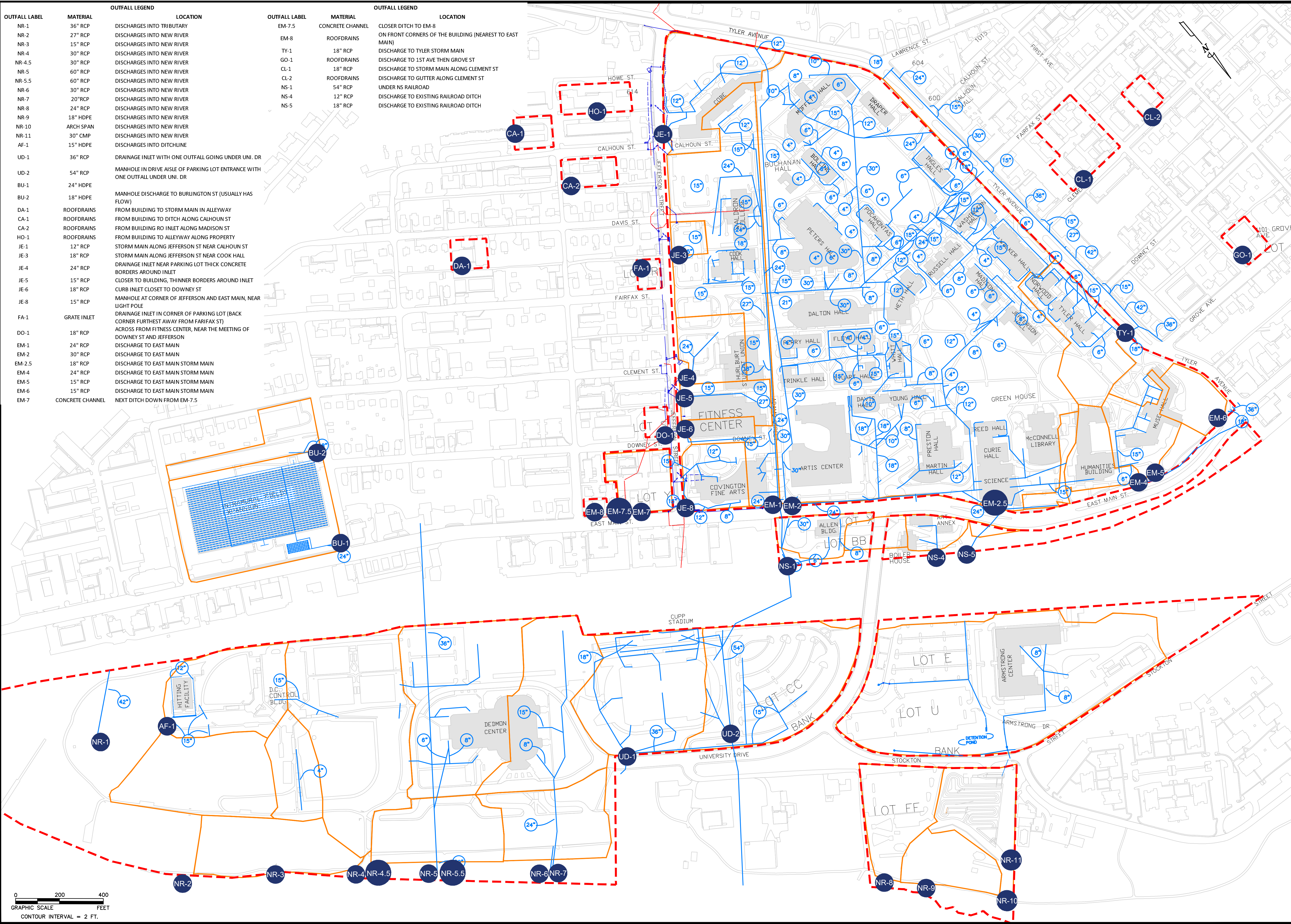
REVISIONS		
NO.	COMMENTS	DATE
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ISSUE DATE	
5/29/2025	
FDS JOB NO.	
2429	
SHEET TITLE	
MS4 BMP LOCATION MAP	
SHEET NUMBER	
1 OF 1	

RADFORD, VIRGINIA

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OUTFALL LABEL	MATERIAL	LOCATION
NR-1	36" RCP	DISCHARGES INTO TRIBUTARY
NR-2	27" RCP	DISCHARGES INTO NEW RIVER
NR-3	15" RCP	DISCHARGES INTO NEW RIVER
NR-4	30" RCP	DISCHARGES INTO NEW RIVER
NR-4.5	30" RCP	DISCHARGES INTO NEW RIVER
NR-5	60" RCP	DISCHARGES INTO NEW RIVER
NR-5.5	60" RCP	DISCHARGES INTO NEW RIVER
NR-6	30" RCP	DISCHARGES INTO NEW RIVER
NR-7	20" RCP	DISCHARGES INTO NEW RIVER
NR-8	24" RCP	DISCHARGES INTO NEW RIVER
NR-9	18" HDPE	DISCHARGES INTO NEW RIVER
NR-10	ARCH SPAN	DISCHARGES INTO NEW RIVER
NR-11	30" CMP	DISCHARGES INTO NEW RIVER
AF-1	15" HDPE	DISCHARGES INTO DITCHLINE
UD-1	36" RCP	DRAINAGE INLET WITH ONE OUTFALL GOING UNDER UNI. DR
UD-2	54" RCP	MANHOLE IN DRIVE AISLE OF PARKING LOT ENTRANCE WITH ONE OUTFALL UNDER UNI. DR
BU-1	24" HDPE	
BU-2	18" HDPE	
DA-1	ROOFDRAINS	MANHOLE DISCHARGE TO BURLINGTON ST (USUALLY HAS FLOW)
CA-1	ROOFDRAINS	FROM BUILDING TO STORM MAIN IN ALLEYWAY
CA-2	ROOFDRAINS	FROM BUILDING TO DITCH ALONG CALHOUN ST
HO-1	ROOFDRAINS	FROM BUILDING TO INLET ALONG MADISON ST
JE-1	12" RCP	FROM BUILDING TO ALLEYWAY ALONG PROPERTY
JE-2	18" RCP	STORM MAIN ALONG JEFFERSON ST NEAR CALHOUN ST
JE-3	18" RCP	STORM MAIN ALONG JEFFERSON ST NEAR COOK HALL
JE-4	24" RCP	DRAINAGE INLET NEAR PARKING LOT THICK CONCRETE BORDERS AROUND INLET
JE-5	15" RCP	CLOSER TO BUILDING, THINNER BORDERS AROUND INLET
JE-6	18" RCP	CURB INLET CLOSET TO DOWNEY ST
JE-8	15" RCP	MANHOLE AT CORNER OF JEFFERSON AND EAST MAIN, NEAR LIGHT POLE
FA-1	GRATE INLET	DRAINAGE INLET IN CORNER OF PARKING LOT (BACK CORNER FURTHEST AWAY FROM FARIFAX ST)
DO-1	18" RCP	ACROSS FROM FITNESS CENTER, NEAR THE MEETING OF DOWNEY ST AND JEFFERSON
EM-1	24" RCP	DISCHARGE TO EAST MAIN
EM-2	30" RCP	DISCHARGE TO EAST MAIN
EM-2.5	18" RCP	DISCHARGE TO EAST MAIN STORM MAIN
EM-4	24" RCP	DISCHARGE TO EAST MAIN STORM MAIN
EM-5	15" RCP	DISCHARGE TO EAST MAIN STORM MAIN
EM-6	15" RCP	DISCHARGE TO EAST MAIN STORM MAIN
EM-7	CONCRETE CHANNEL	NEXT DITCH DOWN FROM EM-7.5

OUTFALL LABEL	MATERIAL	LOCATION
EM-7.5	CONCRETE CHANNEL	CLOSER DITCH TO EM-8
EM-8	ROOFDRAINS	ON FRONT CORNERS OF THE BUILDING (NEAREST TO EAST MAIN)
TY-1	18" RCP	DISCHARGE TO TYLER STORM MAIN
GO-1	18" RCP	DISCHARGE TO 1ST AVE THEN GROVE ST
CL-1	18" RCP	DISCHARGE TO STORM MAIN ALONG CLEMENT ST
CL-2	ROOFDRAINS	DISCHARGE TO GUTTER ALONG CLEMENT ST
NS-1	54" RCP	UNDER NS RAILROAD
NS-4	12" RCP	DISCHARGE TO EXISTING RAILROAD DITCH
NS-5	18" RCP	DISCHARGE TO EXISTING RAILROAD DITCH

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MS4 OUTFALL MAPPING

RADFORD, VIRGINIA

REVISIONS		
NO.	COMMENTS	DATE
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MS4 OUTFALL LOCATION MAP		
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1 OF 1		

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