

Maine Department of Transportation FY 2024 Competitive Highway Bridge Program

Addendum to the Bridge Investment Program
Planning and Bridge Grants



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FY 2024 CHBP Addendum to the BIP Application

I. Previous Awards

In October of 2024, the State of Maine Department of Transportation (MaineDOT) submitted a grant application in response to a Notice of Funding Opportunity (NOFO) for the FYs 2023 – 2026 Bridge Investment Program (BIP). The BIP grant application requested \$30,495,000 in grant funding for the replacement of nine (9) bridges across rural areas of central Maine.

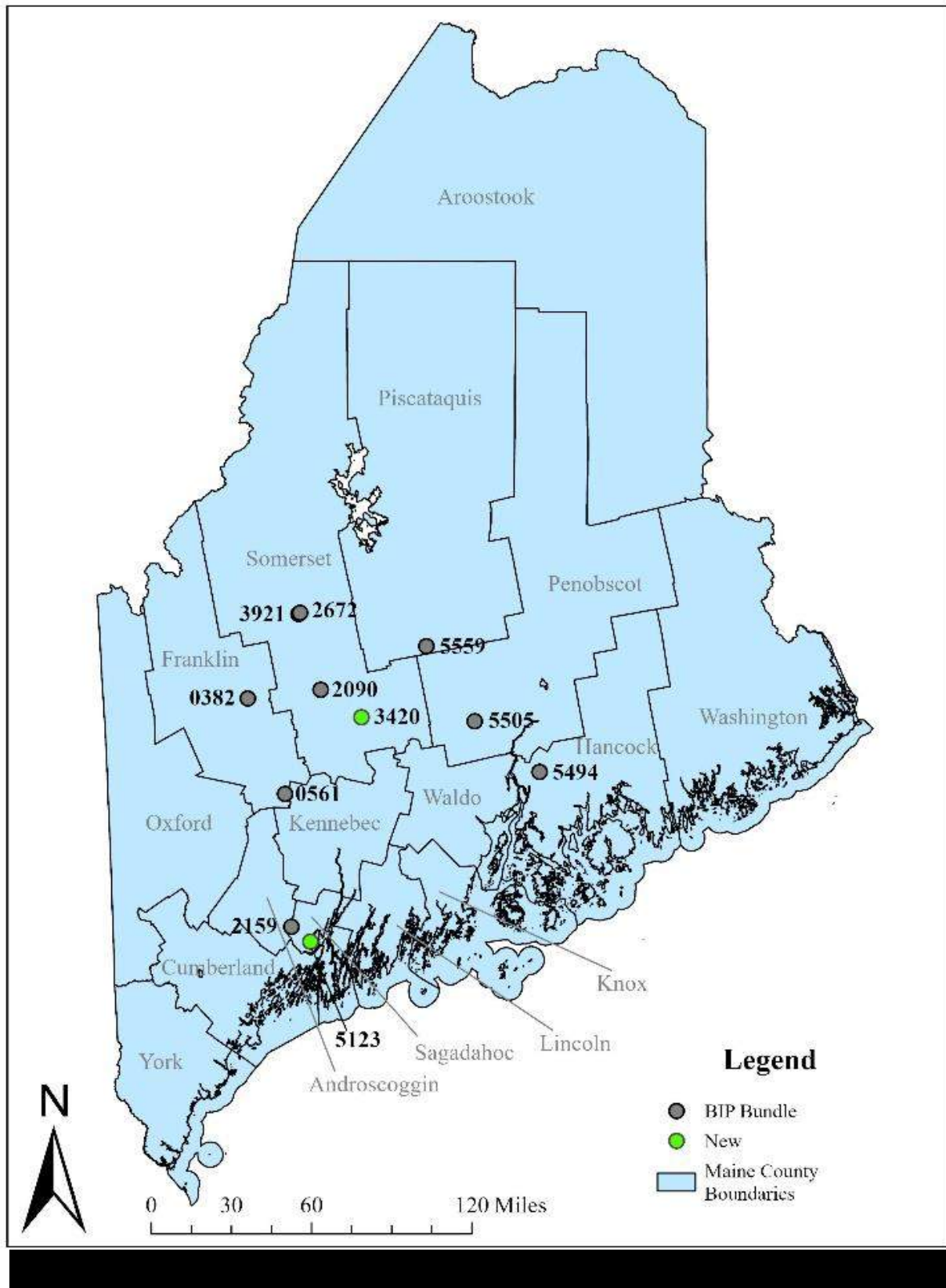
Pursuant to Section 4.F of NOFO (No. 693JJ325NF00010) posted on January 13, 2025, MaineDOT is now submitting an addendum to the original BIP grant application via the FY 2024 Competitive Highway Bridge Program (CHBP). Consistent with Section 3.vi of the NOFO, the addendum increases the requested funding to meet or exceed the minimum award size of \$32,500,000 for the State of Maine.

II. Project Narrative

A. Changes to Project Description and Scope

MaineDOT is requesting \$38,784,000 in CHBP grant funding for the Off-System Bridge Bundle Project (“Project”). This represents an increase of \$8,289,000, or 22%, more than the \$30,495,000 requested in the BIP grant application. The additional funding will allow MaineDOT to replace two (2) additional bridges (Attachment A) to the nine (9) bridge replacements included in the FY2023-2026 BIP grant application; resulting in a total of eleven (11) bridges to be replaced in rural communities throughout central Maine (See Figure 1).

Per Section 1 – Executive Summary of the NOFO, the Project is eligible for FY 2024 CHBP funding as the State of Maine has a population density of less than 115 individuals per square mile (43.1 people per square mile) and less than 26% of total bridges classified as in good condition or greater than or equal to 14% of total bridges classified in poor condition (15.4% are classified as poor or worse). Having similar characteristics in terms of condition, size, location, and use, the two (2) new bridge replacements can utilize the same conceptualized standardized plans as in the BIP grant application and the Project still meets the definition of a bridge bundle.



C. Grant Funds, Sources, and Use of Project Funds

MaineDOT requests \$38,784,000 in CHBP Project Grant funding. This represents an increase of \$7,885,000, or 22%, more than the \$30,495,000 requested in the BIP Bridge Project grant application. This increase is the result of adding two (2) bridges, #3420 and #5123, to the bundle. All mandated budget forms have been revised and uploaded to Grants.gov. The project conforms with the January 13, 2025, CHBP NOFO, and upon award, given the Department's technical capacity and Federal grant experience, MaineDOT expects to satisfy applicable administrative and obligation requirements. See Attachment B for an updated budget breakdown. Important elements of Project Funding include:

1. Non-Federal Match funding includes 20% state funding committed by MaineDOT from its State Highway Fund. In the case of a cost overage MaineDOT will cover the additional costs by using other federal funding. An updated funding commitment letter accompanies the application, Attachment C.
2. There have been no previously incurred expenses to date.
3. According to the updated Benefit Cost Analysis (BCA) the project has a projected benefit of \$902,359,528 over the 30-year analysis period (Attachment D). This represents a decrease of \$21,143,568, or 2.1%, less benefit than the BIP Bridge Project grant application (\$923,503,096). The reason for this decrease in benefits is due to changing the project schedule to adhere to the expenditure deadline of this CHBP Grant.
4. The Project has a benefit-cost ratio of at least 23:1 based on a Net Present Value (NPV) at a 10% discount rate over 30 years (Attachment D).
5. Savings are realized primarily through coordination of construction and bridge closures requiring detours on surrounding roads. This limits greenhouse gas emissions and minimizes travel interruptions. Reduced maintenance costs also contribute to the cost savings.
6. No funding is contingent upon satisfying a condition, nor is it available only during a set period.
7. No funds other than the requested Grant funding are subject to Federal Limits.

D. Effects on Merit Criteria Presented in BIP Project Grant Application

As with the nine (9) bridge identified for replacement within the BIP grant application, the two (2) additional bridges are rural bridges crucial for connecting otherwise geographically isolated communities. According to the National Bridge Inventory (NBI), all eleven (11) bridges are in poor condition, Table 1 shows condition and location information for the two additional bridges.

Like their nine (9) counterparts included in the BIP application, due to their isolation and rural nature, the two (2) additional bridges also experience low traffic volumes, making it challenging to prioritize them for funding within the broader scope of MaineDOT's infrastructure needs. Consequently, they often fall to the bottom of the priority list and continue to deteriorate. These bridges are essential for regional and state roadway networks, connecting people with everyday necessities and essential services such as

places of employment, schools, grocery stores, and medical care. Without replacement or rehabilitation these bridges are at risk of further deterioration to the point of closure, resulting in severe adverse connectivity, environmental, economic, and social impacts to the surrounding communities.

The closure of any of these bridges will result in a delay of the delivery of emergency services and will increase vehicle miles traveled (VMT) and localized greenhouse gas emissions (GHG) through use of detour routes. By improving safety, efficiency, and reliability of the movement of people and freight over these bridges, reducing the number of bridges in poor condition, and leveraging MaineDOT's non-Federal financial contributions, the Project will advance the program goals and objectives of both the BIP, as established in Section A.1.a of the December 20, 2023, NOFO (693JJ324NF00006), as well as the goals of this CHBP Grant, as established in Section 3.ii of the NOFO (693JJ325NF00010).

1. State of Good Repair

The response to the state of good repair criteria from the BIP Bridge Project grant application is not affected by the addition of two (2) bridges. As seen Table 1 below, the condition of the two (2) additional bridges shares similar characteristics with the other nine (9) bridges.

Table 1. Summary of Project Bridge Conditions.

NBI Number	County Name	Town Name	Year Built ¹	Deck Rating	Superstructure Rating	Substructure Rating	Channel Rating	Culvert Rating	Bridge Condition	AADT	Bypass Detour Length	Scour Rating
0382	Franklin	Salem Twp	1974	N	N	N	5	4	3 – Poor	101	100	4
0561	Franklin	Chester ville	1950	4	4	4	6	N	3 – Poor	127	6	3
2090	Somerset	Em bden	1934	5	5	4	6	N	3 – Poor	599	0	3
2159	Sagadahoc	Bowdoin	1936	4	6	4	7	N	3 – Poor	412	100	5
2672	Somerset	Caratunk	1922	4	4	5	5	N	3 – Poor	196	0	4
*3420	Somerset	Cornville	1936	5	5	4	7	N	3 – Poor	170	6	8
3921	Somerset	Caratunk	1945	4	4	5	5	N	3 – Poor	180	100	3
*5123	Sagadahoc	Topsham	1920	4	4	5	6	N	3 – Poor	1089	1	8
5494	Hancock	Orland	1951	5	5	4	6	N	3 – Poor	291	7	2
5505	Penobscot	Carmel	1963	5	4	6	5	N	3 – Poor	600	3	4
5559	Piscataquis	Sangerville	1954	4	4	5	5	N	3 – Poor	103	3	3

¹Red cells indicate substandard roadway widths.

2. Safety and Mobility

The maintenance of traffic scheme for the two (2) additional bridges is a bridge closure with off-site detour during construction, which is consistent with the other bridges when deemed appropriate for the respective location. Bridge #3420 is currently 14.6ft from curb to curb, and bridge #5123 is 21.2ft curb to curb. Bridge #3420 does not meet the current design standard. The safety of the bridges will be improved by increasing the roadway width. Refer to Table 2 for the existing and proposed curb to curb widths, the two (2) additional bridges are marked below.

Table 2. Bridge Roadway Width.

NBI Number	Town Name	Average Daily Traffic	Existing Curb to Curb Width (ft) ¹	Proposed Curb to Curb Width (ft) ²
0382	Salem Twp	101	21	22
0561	Chester ville	127	17.3	22
2090	Em bden	599	23.9	24
2159	Bowdoin	412	19.3	24
2672	Caratunk	196	20	22
*3420	Cornville	170	14.6	22
3921	Caratunk	180	24	24
*5123	Topsham	1089	21	24
5494	Orland	291	18.2	24
5505	Carmel	600	19.1	24
5559	Sangerville	103	24	24

¹Red cells indicate substandard roadway widths.

² Proposed curb to curb widths are conceptual and could change based on Maine state standards for bicycle and pedestrian safety.

In Maine, most crash injuries and fatalities occur on rural roads.¹ Crash data associated directly with the bridges included in the Project show no reported crashes in the last ten (10) years. However, crash data for potential detours in the event of bridge closure show that travelers would experience a higher risk of crash events if redirected for extended periods, the two (2) additional bridges are marked (Table 3). Attachment E shows the detour routes for the two (2) additional bridges.

Table 3. Detour Route Crash Data.¹

Bridge #	Vehicle Crashes										
	0382	0561	2090	2159	2672	*3420	3921	*5123	5494	5505	5559
Crash Severity Code	-	0	0	-	0	0	-	0	0	0	0
Fatal (K)	-	0	0	-	0	0	-	0	0	0	0
Serious Injury (A)	-	0	0	-	0	0	-	0	0	0	0
Minor Injury (B)	-	0	0	-	0	0	-	0	0	0	0
Possible Injury (C)	-	1	0	-	0	0	-	4	4	7	2
Property Damage Only (PD)	-	2	9	-	0	5	-	8	3	7	5
Total	-	3	9	-	0	5	-	12	7	14	7

¹ Source: [Maine Public Crash Query Tool](#)

¹ <https://uploads.mainedotpima.com/300823a7-ddcf-4ccc-9ca9-53d6425d1c4c.pdf>, p. 64

3. Economic Competitiveness and Opportunity

The response to the economic competitiveness and opportunity criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

4. Climate Change, Sustainability, Resiliency, and the Environment

a. Reduction of Air Pollution or Greenhouse Gases

The response to the reduction of air pollution or greenhouse gases criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

b. Improved Resiliency of At-Risk Infrastructure

Both bridges #3420 and #5123 are in Zone A on FEMA's Flood Insurance Study Zones Map.

Six of the nine BIP grant bridges and one of two of the additional bridges are natural constriction points, as their existing structure lengths are less than 1.2 times the bank-full width (BFW) of the channel, which is the typical design length for new bridge infrastructure in the state (Table 4). All bridge replacements for this project will be single span structures with the substructure elements located behind the existing abutments. Span lengths are sized to accommodate 1.2 times BFW, matching the existing hydraulic needs of the location and mitigating the risk of future flood inundation, thereby improving overall resiliency. The two (2) additional bridges are marked below.

Table 4. Existing Hydraulic Conditions by Bridge.

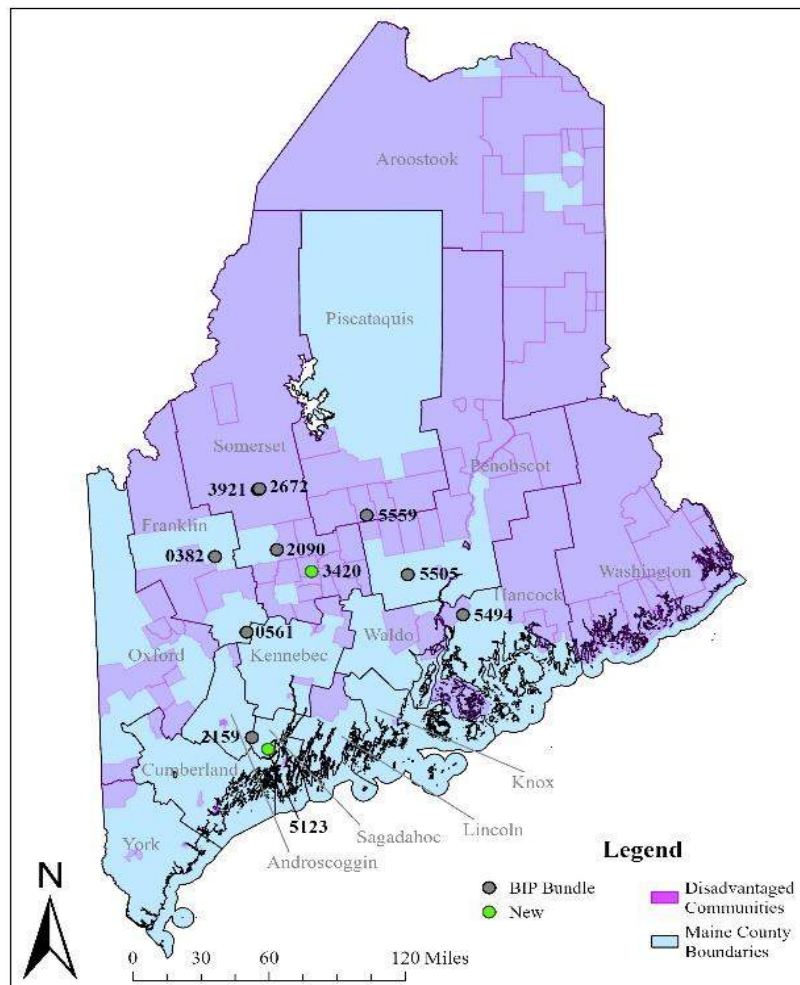
NBI Number	Existing Bridge Length (ft)	1.2*BFW (ft)	FEMA Flood Insurance Study Zones	NBI Item 71 (Waterway Adequacy)	Waterway Adequacy Inspection Report Notes
0382	52.2	46.43	Zone X (500 Year Storm)	5 – Occasional Overtopping of Approaches – Significant Delays	N/A
0561	23	26.89	Zone A (100 Year Storm Without Base Flood Elevations)	5 – Occasional Overtopping of Approaches – Significant Delays	The substructure is completely submerged, and the water level is close to the superstructure.
2090	36	45.01	Zone A (100 Year Storm Without Base Flood Elevations)	8 - Bridge Above Approaches	N/A
2159	60.2	44.05	Zone A (100 Year Storm Without Base Flood Elevations)	9 - Bridge Above Flood Water Elevations	N/A
2672	23.3	43.90	Zone A (100 Year Storm Without Base Flood Elevations)	6 - Occasional Overtopping of Approaches - Insignificant Delays	Erosion on the upstream end has scoured higher up the embankment and removed some larger rocks.
*3420	84.5	4.77	Zone A (100 Year Storm Without Base Flood Elevations)	9 – Bridge Above Flood Water Elevations	N/A
3921	30	43.56	Zone A (100 Year Storm Without Base Flood Elevations)	6 - Occasional Overtopping of Approaches - Insignificant Delays	Adjacent roadway washed out due to flooding and overtopping of the bridge during storms in December 2023.
*5123	61	61.44	Zone A (100 Year Storm Without Base Flood Elevations)	9 – Bridge Above Flood Water Elevations	N/A
5494	41	61.08	Zone A (100 Year Storm Without Base Flood Elevations)	7 - Slight Chance of Overtopping Bridge	N/A
5505	29	32.48	Zone A (100 Year Storm Without Base Flood Elevations)	9 - Bridge Above Flood Water Elevations	N/A
5559	26.9	25.75	Zone AE (100 Year Storm With Base Flood Elevations)	9 - Bridge Above Flood Water Elevations	N/A

c. Improved Wildlife Connectivity, Especially for Aquatic Species

Bridge #3420 is located within an area designated as containing rare, threatened, or endangered species, with Brook Floater as the identified threatened species as mapped by Maine Department of Inland Fisheries & Wildlife's Beginning with Habitat Map Viewer. The proposed design of 1.2 BFW as well as using a single span structure minimizes potential impacts to the threatened species present at bridge #3420.

d. Addressing Disproportionate Negative Environmental Impacts on Disadvantaged Communities

In addition to four (4) of the original nine (9) bridges in the BIP application, one of the new bridges (#3420) is also in a disadvantaged community census tract, Figure 2. Bridge #3420 is also in a census tract that ranks in the 98th percentile for expected agriculture loss rate and in the 91st percentile for asthma.²



² <https://maps.dot.gov/BTS/GrantProjectLocationVerification/> and former Climate and Environmental Justice Screening Tool.

5. Equity and Quality of Life

a. Equity and Engagement

The response to the equity and engagement criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

b. Incorporation of Nonvehicular and/or Public Transportation into the Project

The response to the nonvehicular and/or public transportation criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

6. Innovation

a. Innovative Project Design or Construction Techniques

Both bridges, #3420 and #5123, are proposed to be steel beam for the superstructure type with a span length of 90ft, and conventional abutment types. Table 5 summarizes each bridge location and the proposed replacement bridge geometrics, superstructure, and substructure types.

Table 5. Proposed Replacement Geometrics, Superstructure, and Substructure Types.

NBI Number	BFW	Proposed Span Length (ft)	Proposed Bridge Width (ft)	Proposed Superstructure Depth (ft)	Proposed Super Structure Type	Proposed Profile Change (ft)	Abutment Type Integral vs. Conventional	MOT Scheme
0382	46.43	90	25.33	3.75	Steel Beam	1	Integral	Temporary bridge
0561	26.89	70	25.33	3.75	NEXT 36F	3	Integral	Bridge closure with offsite detour
2090	45.01	70	27.33	3.75	NEXT 36F	1	Conventional	Temporary bridge
2159	44.05	90	27.33	3.75	Steel Beam	1	Integral	Temporary bridge
2672	43.90	70	25.33	3.75	NEXT 36F	1	Integral	Bridge closure with offsite detour
*3420	3.98	90	25.33	3.75	Steel Beam	2	Conventional	Bridge closure with offsite detour
3921	43.56	70	27.33	3.75	NEXT 36F	3	Conventional	Temporary bridge
*5123	51.20	90	25.33	3.75	Steel Beam	1	Conventional	Bridge closure with office detour
5494	61.08	90	27.33	3.75	Steel Beam	2	Integral	Temporary bridge
5505	32.48	70	27.33	3.75	NEXT 36F	1	Integral	Bridge closure with offsite detour
5559	25.75	70	27.33	3.75	NEXT 36F	1	Integral	Bridge closure with offsite detour

b. Innovative Technology

The response to the innovative technology criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

c. Innovative Financing

The EDC-F Final Report states that bundling can be expected to result in approximately 10% savings in construction cost. MaineDOT estimates bridge bundling and employing an owner-engineer to assist in generating an RFP, and the selection of a design-build team, will save \$4,040,000.

d. Innovative Planning and Environmental Review Process Improvements

The response to the innovative planning and environmental review process improvements criteria from the BIP Bridge Project grant application is not affected by the addition of two bridges.

E. Project Readiness and Environmental Risk

a. Technical Feasibility

Each bridge will follow a standardized design detailing. Bridges were selected based on their geographic location and similar span ranges to fully standardize structural elements. Preliminary calculations were developed to understand the required bridge width and length and determine the geometric specifications of each bridge by the type of substructure and superstructure. All bridges will be single-span structures to minimize impacts within the waterway and reduce construction costs associated with in-water pier elements.

The following elements are anticipated to be standardized across all Project bridges:

- Abutment details
- Bearings
- Superstructure girders/beams
- Bridge deck
- Additional components such as diaphragms, railing detail and layout, asphaltic plug joints, scuppers, and approach railing transitions

Attachment F presents conceptual standardized plans with feasible substructure and superstructure configurations. For substructures, the Project will use integral abutments on steel H-piles wherever feasible, providing consistency and ease of construction. In cases where shallow bedrock is present, conventional abutments on spread footings will be utilized. Both types will incorporate consistent details to streamline design and constructability. For superstructures, the Project will use either precast concrete NEXT beams for 70-foot-long bridges or steel plate girders for 90-foot-long bridges.

MaineDOT possesses the technical experience to complete the Project, having successfully designed, built, and maintained similar bridge projects statewide. The Department is a seasoned, meticulous, and dependable recipient of previous TIGER, FASTLANE, INFRA, CHBP, BUILD, Culvert AOP, Rural, and RAISE grant funding. USDOT can trust MaineDOT to fully fund and begin construction on or before the obligation of funds date, ensuring the Project's completion without risk. MaineDOT expends or disburses more than \$675 million per year, including Federal, State, and local funds. MaineDOT will comply with all Federal regulations with regards to all aspects of the Project, including Equal Employment Opportunity (EEO) Policy and Affirmative Action, all NEPA requirements, all Civil Rights policies, the Americans with Disabilities Act (ADA), and any other applicable regulations.

In alignment with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, MaineDOT has issued its own Statement on Equity:

*The essence of equity in transportation is to ensure that all Maine people have access to safe and reliable transportation options that support economic opportunity and quality of life regardless of a person’s economic, social, ethnic, racial, age, sexual orientation, physical, mental, or geographic circumstances.*³

In addition, the Department’s overall mission is “to support economic opportunity and quality of life by responsibly providing our customers the safest and most reliable transportation system possible, given available resources.” MaineDOT values communication with all members of the communities that are impacted by projects.

b. Project Schedule

MaineDOT is an experienced partner able to deliver the Project with minimal risk as the Department is a responsible recipient of previous grant funding. The Project’s non-Federal funding sources are fully committed with funding also available to cover contingency and cost increases. Each bridge is scheduled for two years of construction, the first bridge beginning in 2028 and the final bridge construction ending in 2032. This schedule requires three (3) or four (4) bridge constructed each year. Design, ROW, and NEPA will be completed prior to construction for each bridge. Table 6 provides estimated dates for project milestones. Attachment G shows an estimated construction schedule for each bridge. These schedule dates may change due to finalization of the grant agreement and the contracting approach taken.

Table 6. Project Schedule.¹

Design and Project Status	Planned Start Date	Planned End Date
Preliminary Design	1/1/2026	1/1/2027
NEPA	1/1/2026	9/30/2027
Final Design/RFP Development	1/1/2027	9/30/2027
ROW Acquisition	6/1/2026	9/30/2027
Construction	10/1/2027	8/30/2032

¹ Design, ROW, and NEPA efforts will be phased according to individual bridge construction years.

c. Required Approvals

i. Environmental Permits and Reviews

Environmental permits and approvals necessary for the Project include National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act, the Federal Endangered Species Act, Section 404 Clean Water Act Permit (U.S. Army Corp of Engineers), and Maine Natural Resources Protection Act (NRPA). MaineDOT is deploying innovation to administer the NEPA process and permitting for the Project through Programmatic Agreements already in place as well as pending NEPA assignment, which will ensure timely and consistent reviews and accelerate Project delivery. MaineDOT, the Federal government, and other State agencies have agreements to thoroughly and expeditiously review a Project’s environmental impacts. Specifically, MaineDOT and FHWA Maine Division have a Programmatic Agreement for processing actions classified as Categorical Exclusions (CEs). The agreement authorized MaineDOT

³ <https://www.maine.gov/mdot/publications/docs/2022/MaineDOTEquityStatement6-5-22.pdf>

to determine on behalf of FHWA whether a project qualifies for a CE specifically listed in 23 CFR 771.117. In addition, it authorizes MaineDOT to approve a CE on behalf of FHWA as a “Programmatic CE” pursuant to the Agreement. No separate review or approval of the CE by FHWA is required. Project documentation is available to FHWA upon request. Based on baseline data collection and preliminary plans, the Project is expected to have minimal to no impacts on natural or cultural resources or the environment.

ii. State and Local Approvals

The only state level environmental permit and approval required is the Maine Natural Resources Protection Act (NRPA). Public roads and bridges under the control of MaineDOT are not subject to local zoning controls pursuant to 30-A M.R.S.A. Section 4352.

iii. Federal Transportation Requirements Affecting State and Local Planning

MaineDOT, the Federal government, and other State agencies have agreements to thoroughly and expeditiously review a Project’s environmental impacts. Specifically, MaineDOT and FHWA Maine Division have a Programmatic Agreement for processing actions classified as Categorical Exclusions (CEs). The agreement authorized MaineDOT to determine on behalf of FHWA whether a project qualifies for a CE specifically listed in 23 CFR 771.117. In addition, it authorizes MaineDOT to approve a CE on behalf of FHWA as a “Programmatic CE” pursuant to the Agreement. No separate review or approval of the CE by FHWA is required.

iv. Assessments of Project Risks and Mitigation Strategies

Potential project risks and related mitigation strategies are discussed in Table 7.

Table 7. Project Risk and Mitigation Strategies.

Project Risks	Mitigation
Presence of Atlantic Salmon in all river and stream crossings.	<ul style="list-style-type: none"> Minimize permanent and temporary in-water structures. Plan construction sequence to avoid sensitive times for ATS life stages. Incorporate measures to avoid and minimize effects early in design and scheduling. Utilize avoidance and minimization measures during project construction to reduce potential effects from in-water work. Early coordination with U.S. Fish and Wildlife and Maine Department of Marine Resources to obtain best available information on species.
Presence of Brook Floater	<ul style="list-style-type: none"> Minimize impacts by designing the bridge to 1.2 BFW and as a single span to avoid in water disturbance.
Flood damage due to 100-year storm for bridges 0561, 2159, and 5494.	<ul style="list-style-type: none"> Incorporate climate change resiliency into bridge design.
ROW acquisition and utilities coordination	<ul style="list-style-type: none"> MaineDOT will apply their extensive experience with ROW acquisition and utility coordination well before construction commences.
Inflation	<ul style="list-style-type: none"> MaineDOT will evaluate the workplan priorities to ensure their commitment to construction of these bridges.

III. Project Costs





See Attachments B, C, and D.

IV. Scalable Project Options

As the NOFO indicates, the State of Maine is eligible to receive no less than \$32,500,000 through the CHBP due to the state's population density being less than 115 individuals per square mile and more than fourteen percent (14%) of its bridges classified as in poor condition.

We are asking for \$38,784,000 for eleven rural bridges located throughout the state. This bundle is based on bridge condition and ability to fund replacement for these bridges. If we were to receive less than that requested amount, we would need to review the number of bridges in this bundle and/or funding availability to prioritize public safety and mobility. A reduction in the number of bridges would decrease the savings associated with bundling the eleven bridges identified.

Attachment A – Photos of Additional Bridges

Number	Condition	Year Built	Potential Capital Investment
3420	Poor	1936	Replacement
Huff Road over Wesserunsett Stream – Cornville – Somerset Co. 44° 83' 62.17" N, 69° 65' 29.76" W			
			
Top of roadway surface looking east.		North end of pier bearing area crumbling concrete CR.	
5123	Poor	1920	Replacement
Cathance Road over Cathance River – Town of Topsham – Sagadahoc Co. 43° 96' 17.9" N, 69° 93' 01.32" W			
			
Top of roadway surface looking east.		East shoulder supports with exposed rebar.	

Images Source: Stantec Inspection Reports

Attachment B – Budget

Bridge #	Town Name	PE/CE/ROW ¹	Total Construction Cost (Includes 15% Contingency)	Total Bundled Project Cost	Total Unbundled Project Cost	Non-Federal Funding	Other Federal Funding	CHBP Funding Request Amount	Percent of Total Eligible Cost
0382	Salem Twp	\$740,000	\$3,700,000	\$4,400,000	\$4,884,000	\$888,000	\$0	\$3,552,000	80%
0561	Chesterville/Vienna	\$680,000	\$3,400,000	\$4,080,000	\$4,488,000	\$816,000	\$0	\$3,264,000	80%
2090	Embden	\$780,000	\$3,900,000	\$4,680,000	\$5,148,000	\$936,000	\$0	\$3,744,000	80%
2159	Bowdoin/Lisbon	\$760,000	\$3,800,000	\$4,560,000	\$5,016,000	\$912,000	\$0	\$3,744,000	80%
2672	Caratunk	\$540,000	\$2,700,000	\$3,240,000	\$3,564,000	\$648,000	\$0	\$2,592,000	80%
3420	Cornville	\$860,000	\$4,300,000	\$5,160,000	\$5,676,000	\$1,032,000	\$0	\$4,128,000	80%
3921	Caratunk	\$920,000	\$4,600,000	\$5,520,000	\$6,072,000	\$1,104,000	\$0	\$4,416,000	80%
5123	Topsham	\$800,000	\$4,000,000	\$4,800,000	\$5,280,000	\$960,000	\$0	\$3,840,000	80%
5494	Orland/Bucksport	\$880,000	\$4,400,000	\$5,280,000	\$5,808,000	\$1,056,000	\$0	\$4,224,000	80%
5505	Carmel	\$560,000	\$2,800,000	\$3,360,000	\$3,696,000	\$672,000	\$0	\$2,688,000	80%
5559	Sangerville	\$560,000	\$2,800,000	\$3,360,000	\$3,696,000	\$672,000	\$0	\$2,688,000	80%
Total		\$8,080,000	\$40,400,000	\$48,480,000	\$53,328,000	\$9,696,000	\$0	\$38,784,000	80%

¹All costs are in 2025 dollars

Attachment C – MaineDOT Match Letter



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

March 13, 2025

The Honorable Sean Duffy, Secretary
United States Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Re: Assurance of Matching Funds

Dear Secretary Duffy:

This letter serves as evidence of assurance by the State of Maine Department of Transportation (MaineDOT) that matching funds for the FY Competitive Highway Bridge Project grant application "Off-System Bridge Investment Project" submitted by MaineDOT are committed and will be provided.

MaineDOT is seeking \$38,784,000 in FY 2025 CHBP Grant funding, matched by \$9,696,000 in state funds. Should funds be received, this project is included in MaineDOT's 2025-2028 *Work Plan* and the Statewide Transportation Improvement Program (STIP) for 2025-2028. It is consistent with MaineDOT's long-range plan. MaineDOT is committed to providing these matching funds to the Federal funds requested.

MaineDOT is committed to providing these matching funds to the federal funds requested.

Sincerely,

A handwritten signature in black ink, appearing to read "B. A. Van Note", written over a horizontal line.

Bruce A. Van Note
Commissioner

Attachment D – Benefit Cost Analysis

[See attached Excel file]

Attachment E – Detour Maps

Cornville, Warren Bridge #3420 (Huff Road over Wesserunsett Stream)

NBI Detour = 6.0 miles

Net Detour Calculation: *Figure 2* shows the bypass detour of 7.3 miles (10 min), the original route from point A to B (*Figure 3*) is 1.4 miles (3 min), therefore the net detour is approximately 5.9 miles. Similar to NBI, use NBI value.

Average Detour Travel Speed: 45 mph = (7.3 miles / (10 min / 60))

Note: Abutment to abutment detour (*Figure 1*) is considered due to the remote locations of the bridges and the primarily residential use of these crossings.

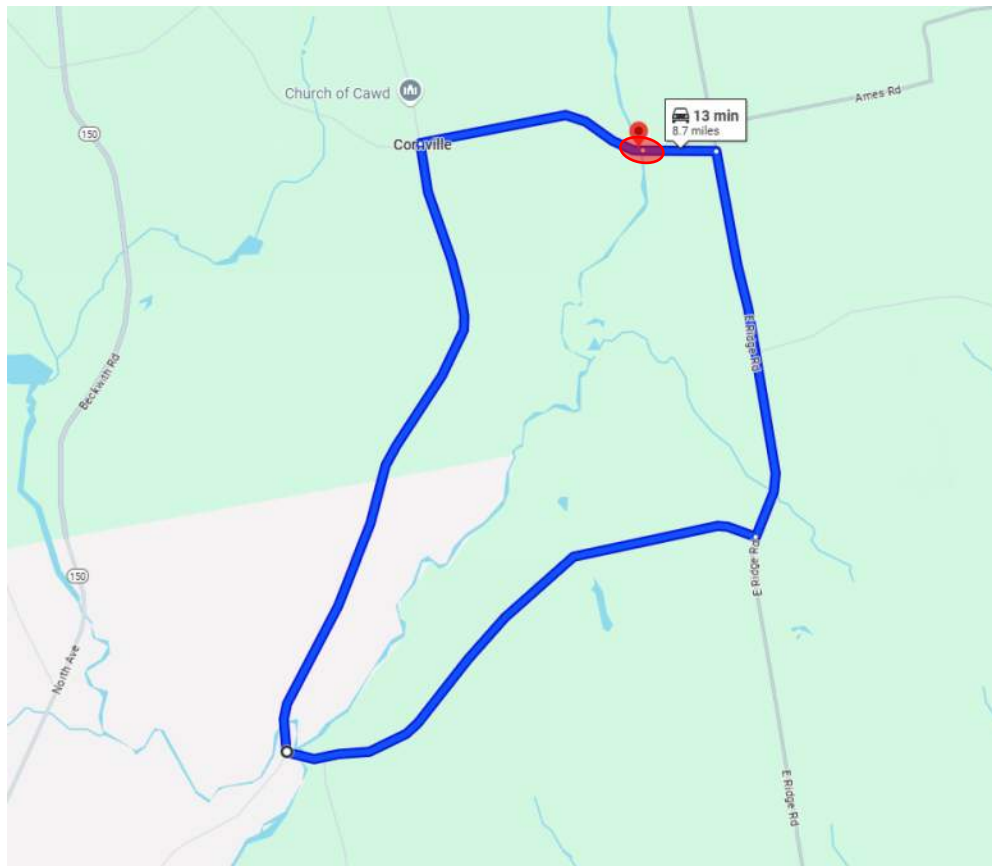


Figure 1 - #3420 Abutment to Abutment Detour Route (Red circle notes bridge location)

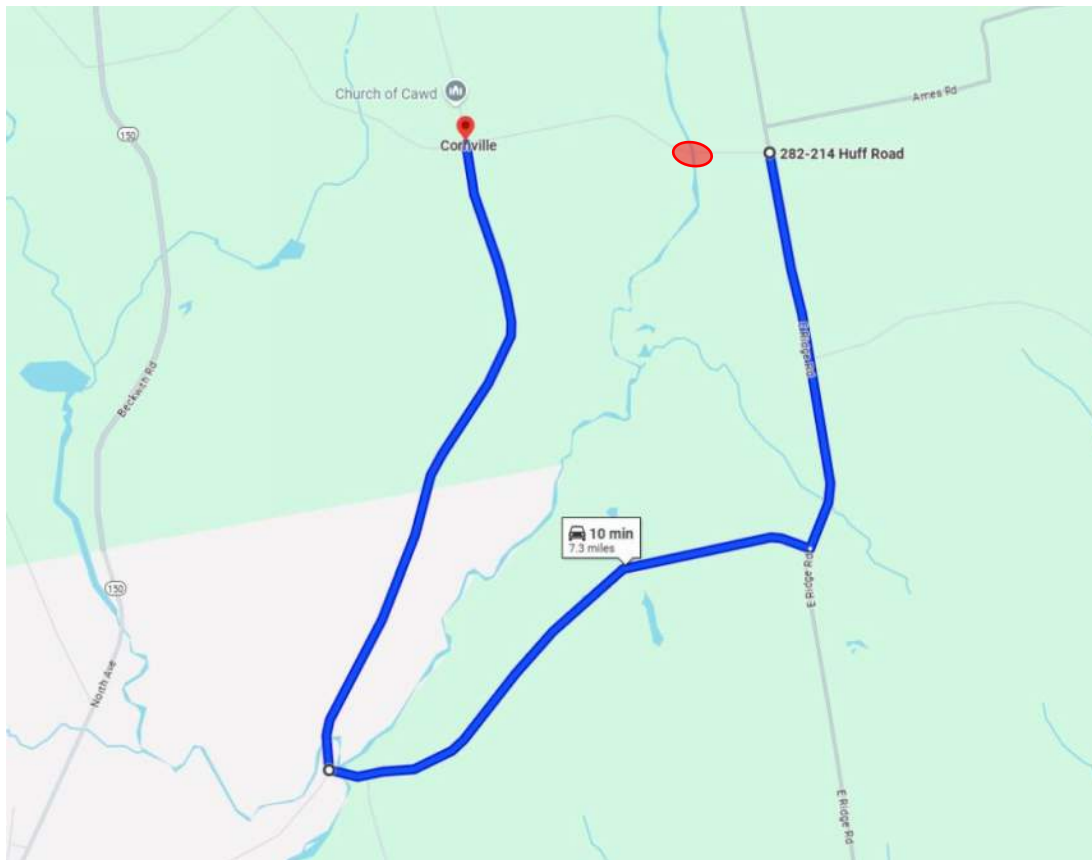


Figure 2 - #3420 Bypass Detour Route (Red circle notes bridge location)

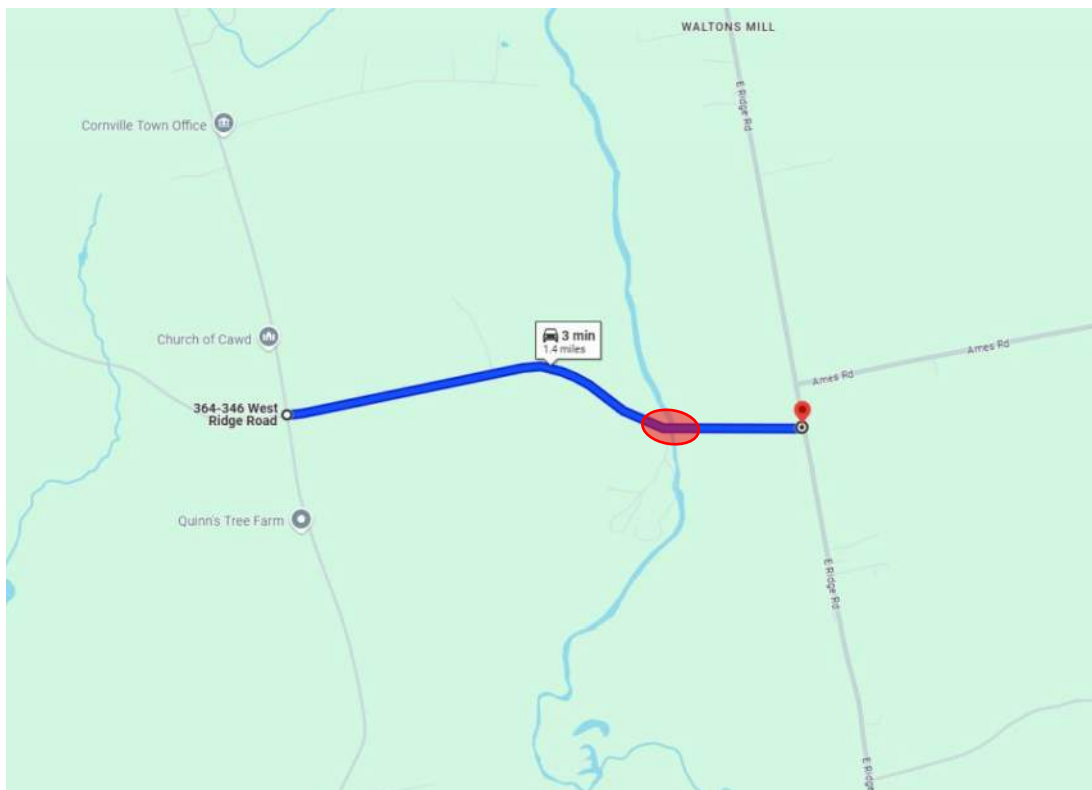


Figure 3 - #3420 Normal Route (Red circle notes bridge location)

Topsham, Cathance Bridge #5123 (Cathance Road over Cathance River)

NBI Detour = 1.0 miles

Net Detour Calculation: *Figure 5* shows 6.0 miles (9 min), the original route (*Figure 6*) from point A to B is 5.3 miles (9 min), therefore net detour is approximately 0.7 miles. Similar to NBI, use NBI value.

Average Detour Travel Speed: 40 mph = (6.0 miles / (9 min / 60))

Note: Abutment to abutment detour (*Figure 4*) is considered due to the remote locations of the bridges and the primarily residential use of these crossings.

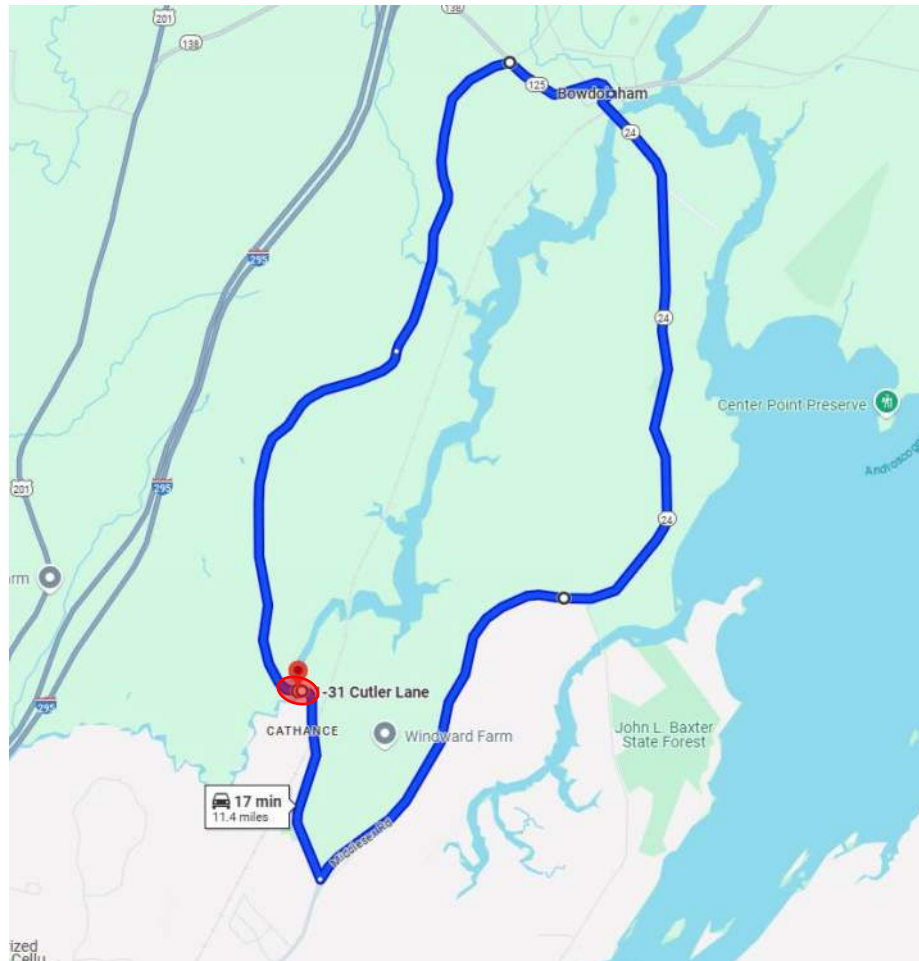


Figure 4 - #5123 Abutment to Abutment Detour Route (Red circle notes bridge location)

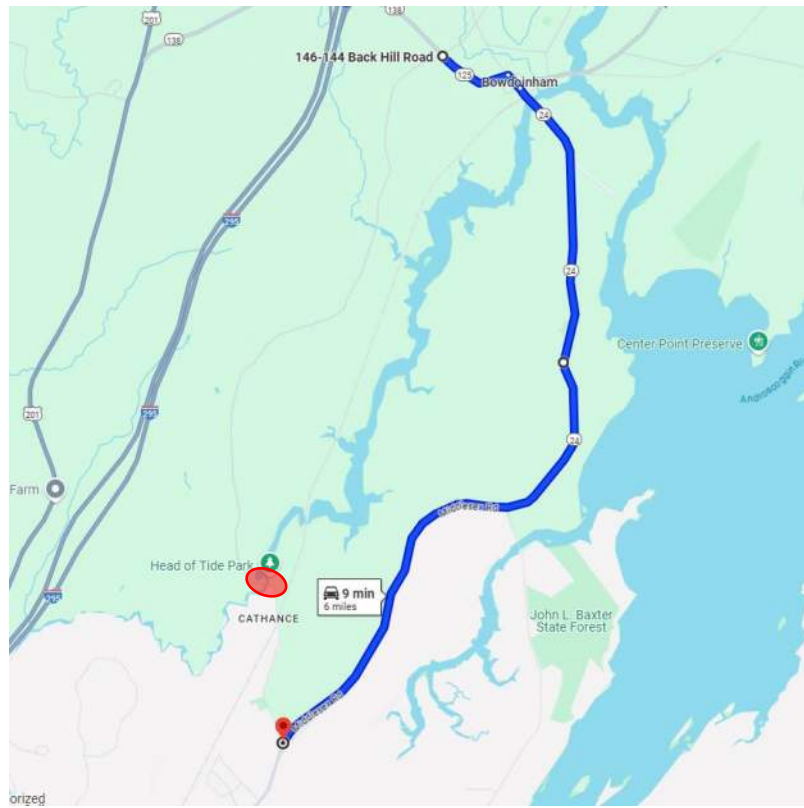


Figure 5 - #5123 Bypass Detour Route (Red circle notes bridge location)

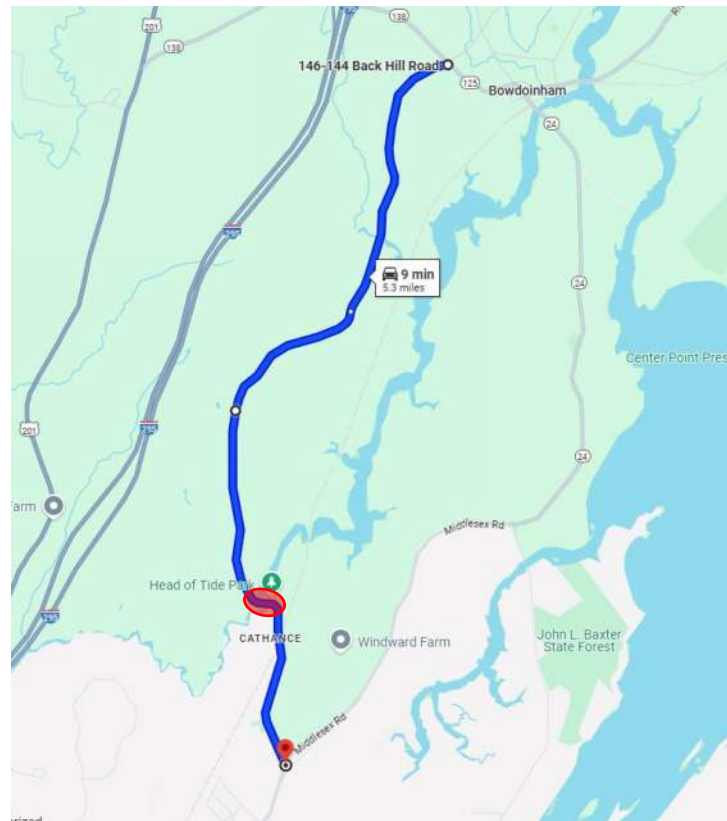


Figure 6 - #5123 Normal Route (Red circle notes bridge location)

Attachment F – Concept Plans

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

DESIGN LOADING

Live Load..... HL - 93 Modified for Strength 1

TRAFFIC DATA

Varies per location, refer to NBI data for traffic volumes. Additional information to be compiled during design phase, not available at this time.

HYDROLOGIC DATA

Data to be compiled and collected during design phase, not available at this time.

MATERIALS

Concrete:
Curbs & Transition Barriers.....Class "LP"
Precast..... Class "P"
All Other.....Class "A"

Reinforcing Steel:
Plain Reinforcing Steel.....ASTM A 615, Grade 60
Low-Carbon Chromium..... ASTM A 1035, Type CS, Grade 100
Glass Fiber Reinforced Polymer (GFRP)..... ASTM D7957
Prestressing Strands.....AASHTO M 203 (ASTM A 416),
Grade 270, Low Relaxation

BASIC DESIGN STRESSES

Concrete:
Concrete, Class "A"..... f 'c = 4,000 psi
Concrete, Class "P"..... f 'ci = 6,500 psi
..... f 'c = 8,000 psi
Concrete, Class "LP"..... f 'c = 5,000 psi

Reinforcing:
Plain Reinforcing Steel..... f y = 60,000 psi
Low-Carbon Chromium Reinforcing Steel..... f y = 100,000 psi
Prestressing Strands..... F μ = 270,000 psi
Glass Fiber Reinforced Polymer:
#5 Bar..... f fu = 100,000 psi
#6 Bar..... f fu = 100,000 psi
#7 Bar..... f fu = 95,000 psi
#8 Bar..... f fu = 90,000 psi
Minimum Elastic Modulus..... E = 6,150,000 psi
Minimum Nominal Design Tensile Strain..... e fu = 1.226%

LIST OF DRAWINGS

Title Sheet..... 1
Location Map..... 2
General Plans..... 3-13
Abutment Details.....14-17
Typical Sections.....18-19

OFF-SYSTEM
BRIDGE BUNDLE
PLANNING STUDY
CONCEPT PLANS FOR
STANDARDIZED DESIGN

11 BRIDGE LOCATIONS

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025



PROJECT LOCATION:	Varies, see location map
PROGRAM AREA:	Planning
OUTLINE OF WORK:	Conceptual plans for bridge replacement standardized design details to support grant application development.

OFF-SYSTEM BRIDGE BUNDLE	PROJECT INFORMATION		STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
	PROGRAM	PLANNING		
	PROJECT MANAGER	ANDREW BICKMORE		
	DESIGNER	RICH TETREAU		
	CONSULTANT	HNTB		
	PROJECT RESIDENT			
	CONTRACTOR			
	PROJECT COMPLETION DATE			
	SIGNATURE			
	P.E. NUMBER			
DATE				
COMMISSIONER:				
CHIEF ENGINEER:				

Date:3/12/2025

Username:

Division:

Filename001_Title.dgn

Date: 3/12/2025

Username:

Division:

Filename: 002_Location Map.dgn



CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

BRIDGE LOCATIONS
11 Bridges



STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
CONCEPT PLANS		PLANNING PHASE	
OFF-SYSTEM BRIDGE BUNDLE		LOCATION MAP	
SHEET NUMBER		2	
OF 19			
PROJ. MANAGER	R. Tetreault	BY	DATE
DESIGN-DETAILED	J. McCauley	E. Benoit	04/2024
CHECKED-REVIEWED	K. Brophy	J. O'Neil	04/2024
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE		P.E. NUMBER	
DATE		DATE	



BRIDGE NOTES:
AADT = 101
Bypass Detour = 100 Miles
MOT = Temporary Bridge

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - HOWARD ROAD OVER WEST BRANCH CARRABASSET RIVER
Bridge #0382



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	HOWARD ROAD WEST BRANCH CARRABASSET RIVER FRANKLIN		PROJ. MANAGER	R. Tetreault	BY	DATE
	SALEM TOWNSHIP		CHECKED-DESIGNED	J. McCauley	E. Benoit	04/2024
	PLAN		CHECKED-REVIEWED	K. Brophy	J. O'Neil	04/2024
	SHEET NUMBER		DESIGN-DETAILED			SIGNATURE
CONCEPT PLANS			REVISIONS 1			P.E. NUMBER
			REVISIONS 2			DATE
			REVISIONS 3			
			REVISIONS 4			
PLANNING PHASE			FIELD CHANGES			



EXISTING BRIDGE ELEVATION

BRIDGE NOTES:
AADT = 127
Bypass Detour = 6 Miles
MOT = Bridge Closure with Offsite Detour

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

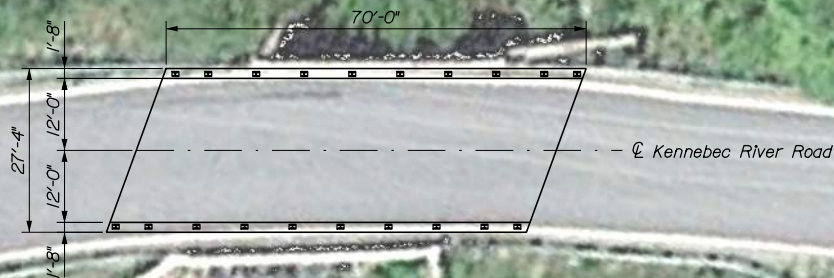
PLAN - MACE ROAD OVER MCGURDY STREAM
Bridge #0561



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SIGNATURE		DATE
	P.E. NUMBER		DATE
	DATE		
SHEET NUMBER		DATE	
4		OF 19	
MACE ROAD MCGURDY STREAM CHESTERVILLE		FRANKLIN	
PLAN		FIELD CHANGES	
CONCEPT PLANS		PLANNING PHASE	



EXISTING BRIDGE ELEVATION



AADT = 599
Bypass Detour = 0 Miles
MOT = Temporary Bridge

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - KENNEBEC RIVER ROAD OVER MARTIN STREAM
Bridge #2090



SHEET NUMBER 5	KENNEBEC RIVER ROAD MARTIN STREAM EMBDEN	SOMERSET	PROJ. MANAGER	R. Tetreault	BY	DATE
			DESIGN-DETAILED	J. McColley	E. Beausoleil	04-2024
			CHECKED-REVIEWED	K. Broyley	J. Olund	04-2024
			DESIGN2-DETAILED2			SIGNATURE
			DESIGN3-DETAILED3			P.E. NUMBER
			REVSIONS 1			DATE
PLAN			REVSIONS 2			
			REVSIONS 3			
			REVSIONS 4			
			FIFTH CHANGES			
STATE OF MAINE DEPARTMENT OF TRANSPORTATION CONCEPT PLANS PLANNING PHASE						

BRIDGE NOTES:
AADT = 412
Bypass Detour = 100 Miles
MOT = Temporary Bridge

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - BURROUGH ROAD OVER LITTLE RIVER
Bridge #2159



EXISTING BRIDGE ELEVATION

BURROUGH ROAD LITTLE RIVER BOWDOIN	SHEET NUMBER		STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
	6		CONCEPT PLANS			
	OF 19		PLANNING PHASE			
		DESIGN-DETAILED	R. Tetreault	BY	DATE	
		CHECKED-REVIEWED	J. McCauley	E. Benoit	04/2024	SIGNATURE
		DESIGN-DETAILED	K. Brody	J. O'Neil	04/2024	P.E. NUMBER
		REVISIONS 1				DATE
		REVISIONS 2				
		REVISIONS 3				
		REVISIONS 4				
		FIELD CHANGES				



STATE OF MAINE DEPARTMENT OF TRANSPORTATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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BRIDGE NOTES:
AADT = 170
Bypass Detour = 6 Miles
MOT = Bridge Closure with Offsite Detour

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - HUFF ROAD OVER WESSERUNSETT STREAM
Bridge #3420



STATE OF MAINE DEPARTMENT OF TRANSPORTATION					
	CONCEPT PLANS				
	PLANNING PHASE				
HUFF ROAD WESSERUNSETT STREAM SOMERSET CORNVILLE PLAN	PROJ. MANAGER	R. Tetreault	BY	DATE	
	DESIGN-DETAILED	J. McCauley	E. Beausoleil	04/2024	
	CHECKED-REVIEWED	K. Brayley	J. Olund	04/2024	SIGNATURE
	DESIGN2-DETAILED02				
	DESIGN3-DETAILED03				P.E. NUMBER
	REVISIONS 1				
	REVISIONS 2				
	REVISIONS 3				
	REVISIONS 4				DATE
	FIELD CHANGES				
SHEET NUMBER					
8					
OF 19					



BRIDGE NOTES:
AADT = 180
Bypass Detour = 100 Miles
MOT = Temporary Bridge

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - PLEASANT POND ROAD OVER PLEASANT POND STREAM
Bridge #3921



9		SHEET NUMBER	
CARATUNK		SOMERSET	
PLAN		PROJ. MANAGER	
DESIGN-DETAILED		R. Tetreault	
CHECKED-REVIEWED		E. Beausoleil	
DESIGN2-DETAILED2		J. O'Neil	
DESIGN3-DETAILED3		J. O'Neil	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4		DATE	
FIELD CHANGES			
PLEASANT POND ROAD		STATE OF MAINE	
PLEASANT POND STREAM		DEPARTMENT OF TRANSPORTATION	
CONCEPT PLANS		CONCEPT PLANS	
PLANNING PHASE		PLANNING PHASE	



CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

HNTB



EXISTING BRIDGE ELEVATION

SHEET NUMBER 10 OF 19	TOPSHAM CATHANCE RIVER CATHANCE ROAD SAGADAHOC PLAN	PROJ. MANAGER	R. Tetreault	BY	DATE
		DESIGN-DETAILED	J. McCollay	E. Brousselle	04/2024
		CHECKED-REVIEWED	K. Broyley	J. Ouard	04/2024
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			
		REVISIONS 1			P.E. NUMBER
		REVISIONS 2			
		REVISIONS 3			
		REVISIONS 4			DATE
		FIELD CHANGES			
STATE OF MAINE DEPARTMENT OF TRANSPORTATION CONCEPT PLANS PLANNING PHASE					



STATE OF MAINE		PROJ. MANAGER	R. Tetreault	BY	E. Benoit	DATE	04/2024
DEPARTMENT OF TRANSPORTATION		CHECKED-REVIEWED	J. McCauley			SIGNATURE	
CONCEPT PLANS		DESIGN DETAIL	K. Brophy			P.E. NUMBER	
PLANNING PHASE		REVISIONS 1				DATE	
		REVISIONS 2					
		REVISIONS 3					
		REVISIONS 4					
		FIELD CHANGES					
BALD MOUNTAIN ROAD		HANCOCK					
MOOSEHORN CREEK		ORLAND					
PLAN		SHEET NUMBER					
		11					
		OF 19					



EXISTING BRIDGE ELEVATION

BRIDGE NOTES:
AADT = 600
Bypass Detour = 3 Miles
MOT = Bridge Closure with Offsite Detour

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

PLAN - FULLER ROAD OVER HARVEY BROOK
Bridge #5505

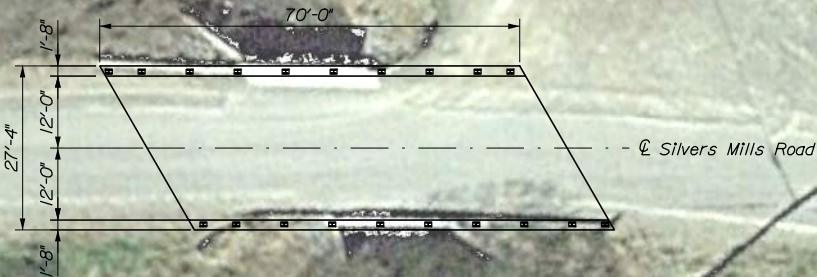


CARMEL	FULLER ROAD HARVEY BROOK	PENOBSCOT	STATE OF MAINE			
			DEPARTMENT OF TRANSPORTATION			
			CONCEPT PLANS			
			PLANNING PHASE			
			SHEET NUMBER			
			12			
			OF 19			
			PROJ. MANAGER	R. Tetreault	BY	DATE
			DESIGN-DETAILED	J. McCauley	E. Beausoleil	04/2024
			CHECKED-REVIEWED	K. Broyley	J. O'Neil	04/2024
DESIGN2-DETAILED2						
DESIGN3-DETAILED3						
REVISIONS 1			P.E. NUMBER			
REVISIONS 2						
REVISIONS 3						
REVISIONS 4			DATE			
FIELD CHANGES						
			SIGNATURE			
			P.E. NUMBER			
			DATE			



BRIDGE NOTES:
AADT = 103
Bypass Detour = 3 Miles
MOT = Bridge Closure with Offsite Detour

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025



PLAN - SILVERS MILLS ROAD OVER FRENCH MILLS BROOK
Bridge #5559



EXISTING BRIDGE ELEVATION

NOTES:
1. Curb and railing are in good condition due to recent repair project, however remainder of superstructure and substructure condition are fair to poor condition. Discussion warranted could justify leaving existing bridge due to recent repair investment.



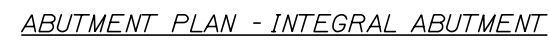
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SILVERS MILLS ROAD FRENCH MILLS BROOK PISCATAQUIS SANGERVILLE		PROJ. MANAGER	R. Tetreault	BY	DATE
			DESIGN-DETAILED	J. McCauley	E. Beausoleil	04/2024
			CHECKED-REVIEWED	K. Broyley	J. Oulind	04/2024
			DESIGN2-DETAILED2			
			DESIGN3-DETAILED3			
CONCEPT PLANS	PLAN		REVISIONS 1			P.E. NUMBER
			REVISIONS 2			
			REVISIONS 3			
			REVISIONS 4			DATE
			FIELD CHANGES			
PLANNING PHASE						

SHEET NUMBER

13

OF 19

2. Details show steel girders for the integral abutments. Other superstructure types anticipated to be similar.



This diagram illustrates the cross-section of a bridge structure, showing the relationship between various levels and components. The structure is divided into three main horizontal sections: the deck, the girder, and the pile foundation.

- Deck Levels:** The top of the deck is labeled **EL. "D"**. The bottom of the deck is labeled **EL. "C"**. The top of the deck on the right side is labeled **EL. "F"**. The bottom of the deck on the right side is labeled **EL. "E"**.
- Girder Levels:** The top of the girder is labeled **EL. "G"**. The bottom of the girder is labeled **EL. "H"**. The top of the girder on the right side is labeled **EL. "I"**. The bottom of the girder on the right side is labeled **EL. "J"**.
- Pile Levels:** The top of the pile is labeled **EL. "K"**. The bottom of the pile is labeled **EL. "L"**. The top of the pile on the right side is labeled **EL. "M"**. The bottom of the pile on the right side is labeled **EL. "N"**.
- Components:**
 - Construction:** Indicated by a vertical dashed line.
 - Girder Support (Typ.):** Indicated by a vertical dashed line.
 - Level (Typ.):** Indicated by a horizontal dashed line.
 - 2'-0" Diameter Concrete Jacket (Typ.):** Indicated by a vertical dashed line.
 - Steel H-Pile (Typ.):** Indicated by a vertical dashed line.
- Dimensions:**
 - 2'-0" (Typ.):** Indicated by a vertical dimension line.
 - 3'-0" (Typ.):** Indicated by a vertical dimension line.

ABUTMENT ELEVATION - INTEGRAL ABUTMENT

ABUTMENT DIMENSIONS															
Bridge	Abutment	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	EL. "H"	EL. "I"	EL. "J"	EL. "K"	EL. "L"	EL. "M"	EL. "N"
#XXXX	No. 1	Dimensions vary per bridge, to be filled out during preliminary/final design.													
	No. 2														

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

DESIGN-DETAIL	J. McCadey	E. Beauchamp	04-2024
CHECKED-REVIEWED	K. Broley	J. Ound	04-2024
DESIGN-Detailed02			
DESIGN-Detailed03			
REVISIONS 1			
REVISIONS 2			P.E. NUMBER
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			DATE

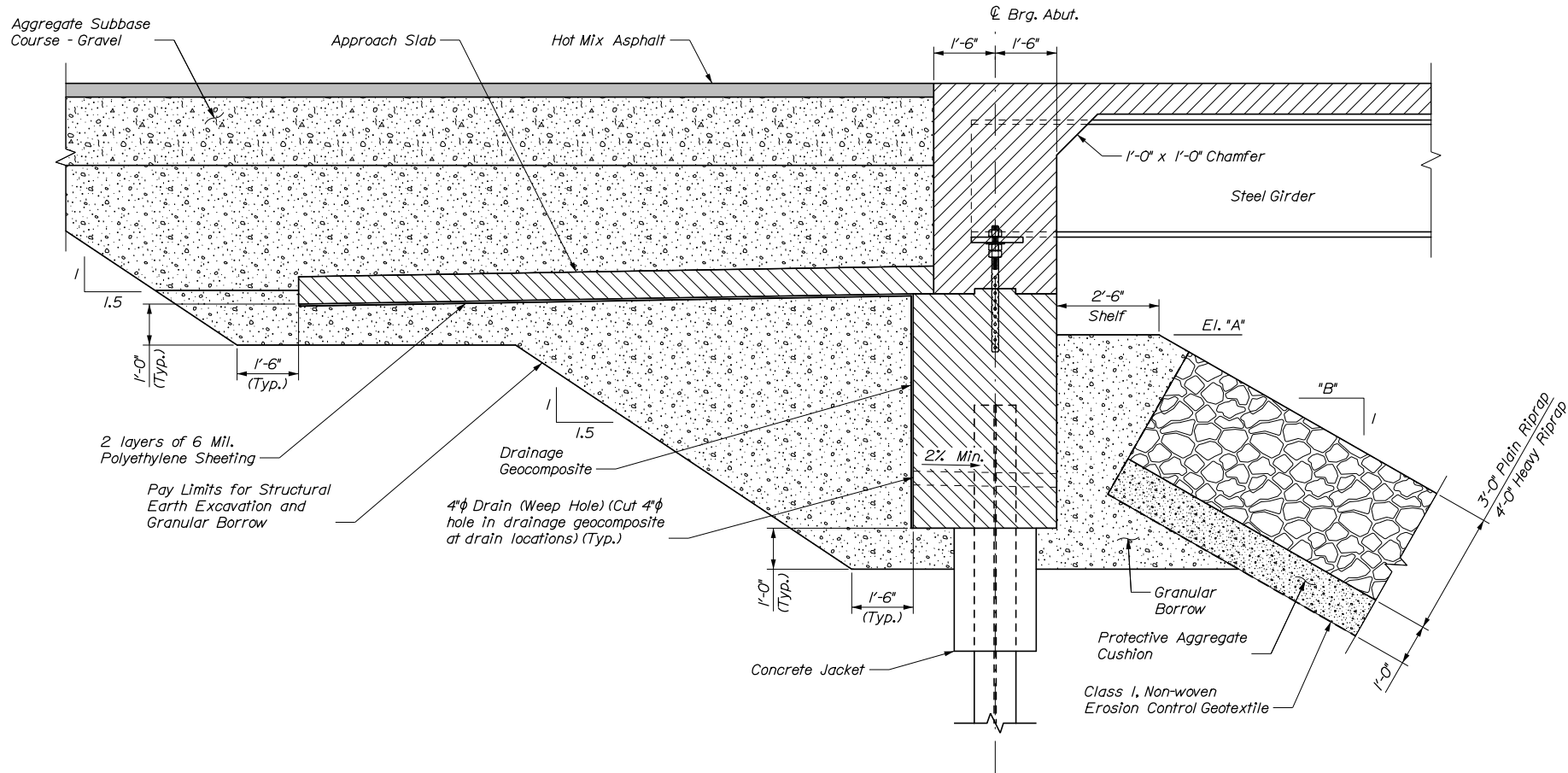
OFF-SYSTEM BRIDGE BUNDLE

ABUTMENT DETAILS I INTEGRAL ABUTMENT

SHEET NUMBER

14

F 19



INTEGRAL ABUTMENT BACKFILL DETAIL

ABUTMENT DIMENSIONS			
Bridge	Abutment	"A"	"B"
#XXXX	No. 1	Dimensions vary per bridge, to be filled out during preliminary/final design.	
	No. 2		
#XXXX	No. 1		
	No. 2		
#XXXX	No. 1		
	No. 2		
#XXXX	No. 1		
	No. 2		
#XXXX	No. 1		
	No. 2		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CONCEPT PLANS

PLANNING PHASE

OFF-SYSTEM
BRIDGE BUNDLE
ABUTMENT DETAILS II
INTEGRAL ABUTMENT

SHEET NUMBER
15
OF 19

PROJ. MANAGER	R. Tetreault	BY	DATE
DESIGN-DETAILED	J. McCauley	E. Benoitelli	04/2024
CHECKED-REVIEWED	K. Broyley	J. Oland	04/2024
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

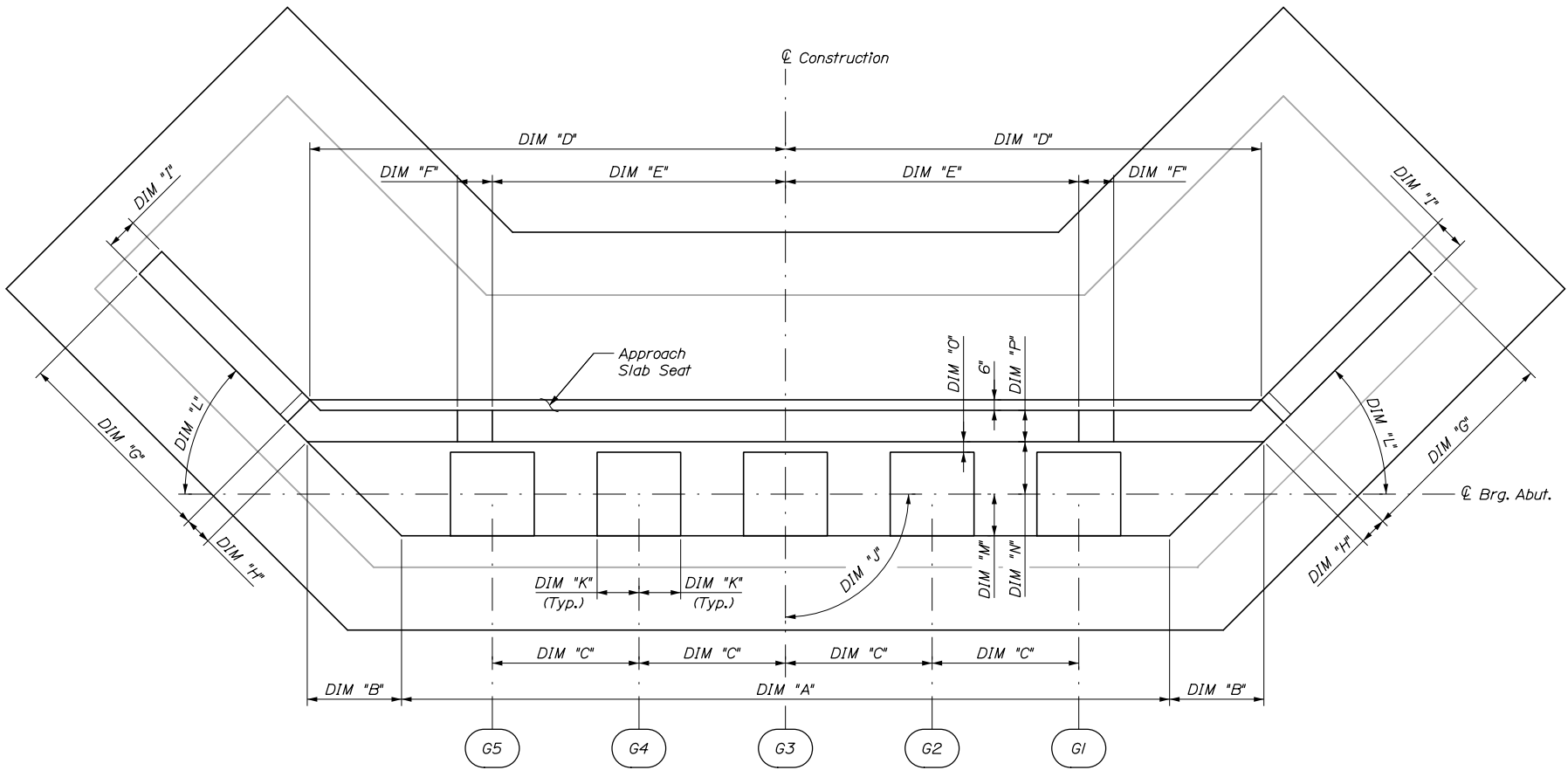
DATE

Date:3/12/2025

Username:

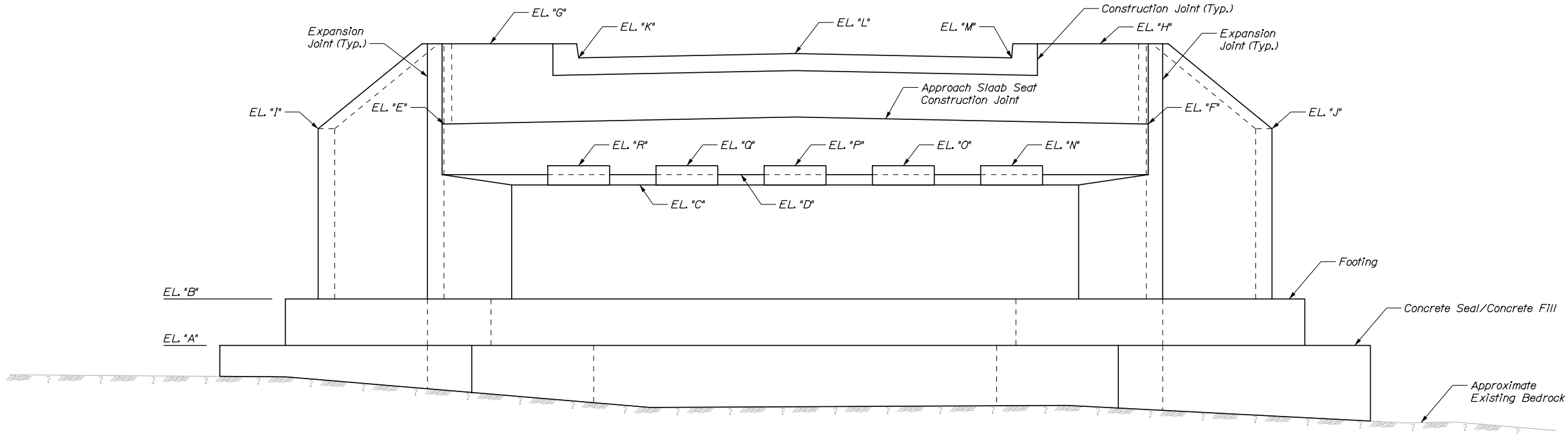
Division:

Filename: 016_Abutment Details 1 - CONV.dgn



ABUTMENT PLAN - CONVENTIONAL ABUTMENT

ABUTMENT DIMENSIONS																	
Bridge	Abutment	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "I"	DIM "J"	DIM "K"	DIM "L"	DIM "M"	DIM "N"	DIM "O"	DIM "P"
*XXXX	No. 1	Dimensions vary per bridge, to be filled out during preliminary/final design.															
	No. 2																



ABUTMENT ELEVATION - CONVENTIONAL ABUTMENT

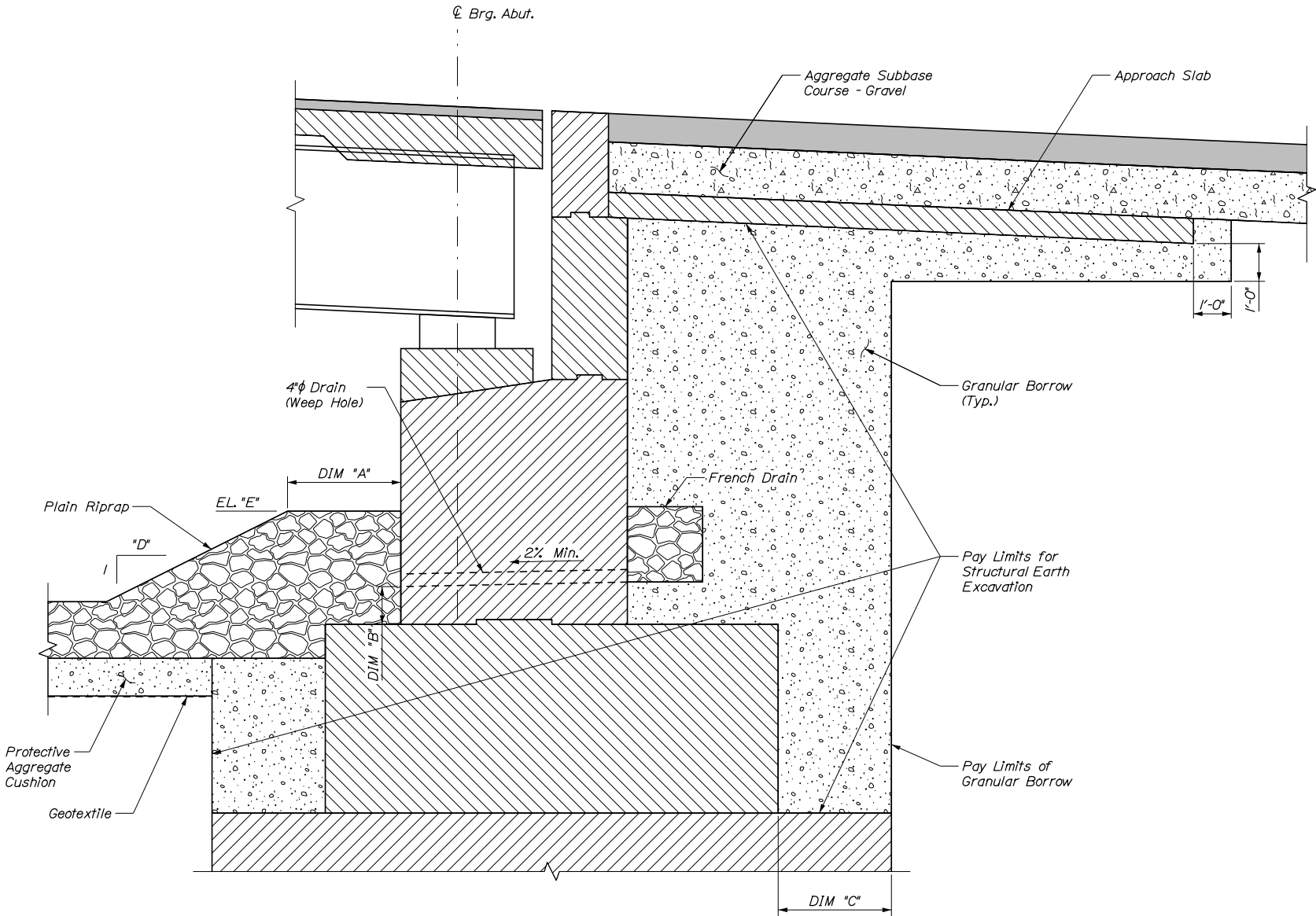
CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

ABUTMENT DIMENSIONS																			
Bridge	Abutment	EL "A"	EL "B"	EL "C"	EL "D"	EL "E"	EL "F"	EL "G"	EL "H"	EL "I"	EL "J"	EL "K"	EL "L"	EL "M"	EL "N"	EL "O"	EL "P"	EL "Q"	EL "R"
*XXXX	No. 1	Dimensions vary per bridge, to be filled out during preliminary/final design.																	
	No. 2																		

HNTB

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
R. Tetreault	E. Benoit	04/2024			
J. McCauley	J. O'Neil	04/2024			
CHECKED-REVIEWED					
DESIGN DETAIL					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

CONCEPT PLANS TO
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MARCH 13, 2025



CONVENTIONAL ABUTMENT BACKFILL DETAIL

ABUTMENT DIMENSIONS						
Bridge	Abutment	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"
#XXXX	No. 1	Dimensions vary per bridge, to be filled out during preliminary/final design.				
	No. 2					

Date:3/12/2025

Username:

Division:

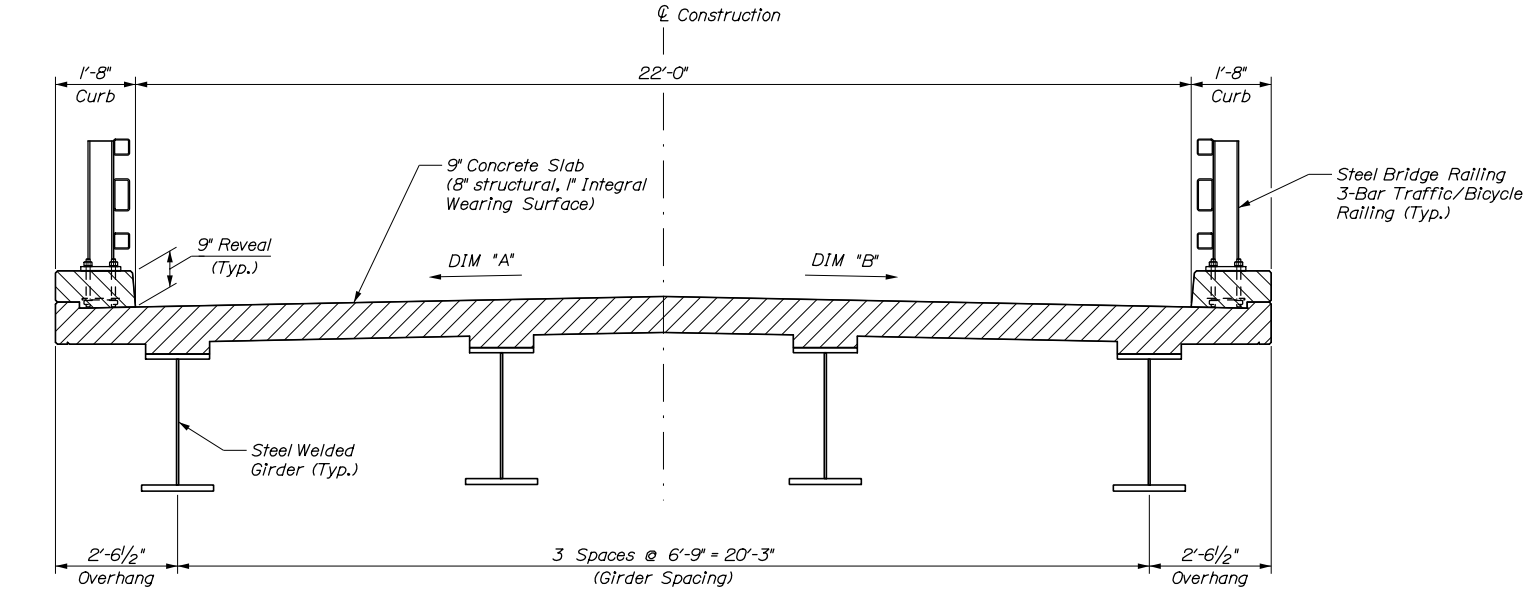
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GENERAL NOTES ALL TYPICAL SECTIONS:

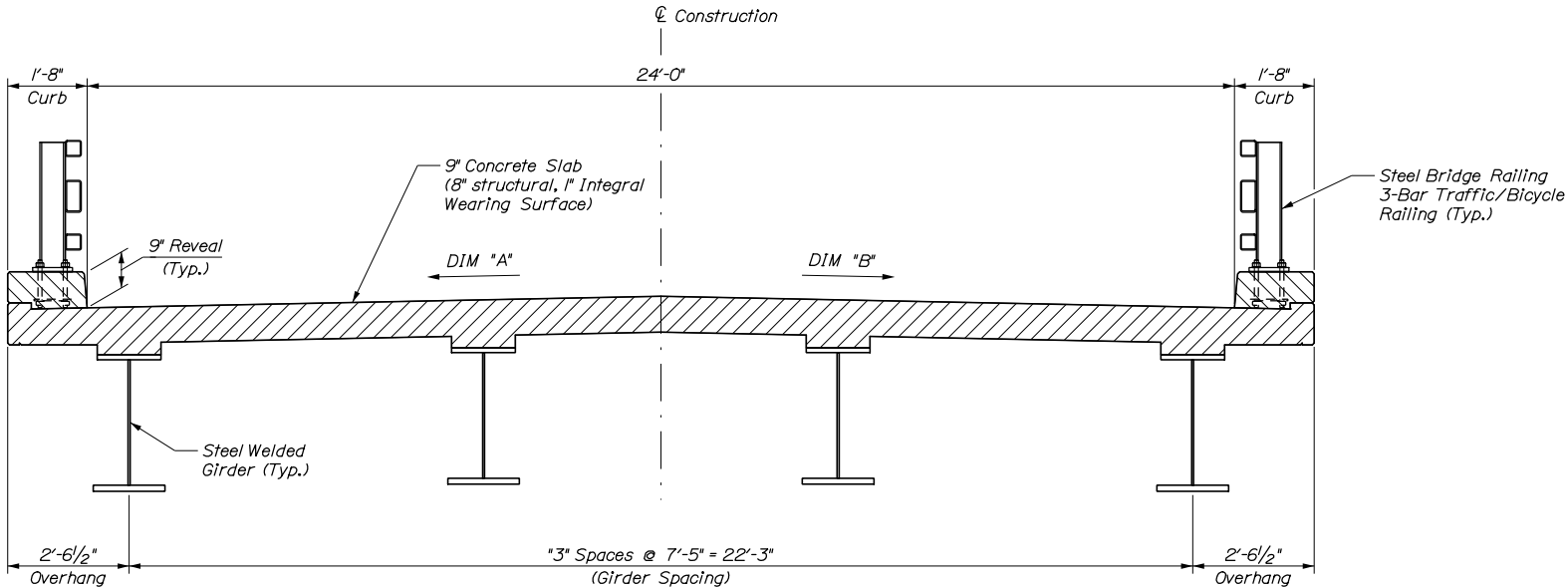
1. The following elements are anticipated to be standardized for all bridges either by the use of MaineDOT Standard Details, or Standard Detail Plan Sheets:
- Girders/Beams Details for each span length, including deflections
 - Deck reinforcing size and spacing
 - Bearings (elastomeric)
 - Diaphragms
 - Railing & Transitions
 - Joints (APJs)
 - Scuppers (if necessary)
2. The following elements are not anticipated to be standardized and will require unique plan sheets for each bridge:
- General Plan, Profile & Cross Sections
 - Boring Logs
 - Hydraulics & Traffic Data
 - Framing Plans & Deck Plans
 - Bottom of Slab & Camber
3. Majority of structures will be normal crown with 2% cross-slope. Some locations with require superelevation and geometrics will be tabulated to detail those locations in a later design phase.

STEEL GIRDER NOTES:

1. Two general typical section widths are anticipated, both with standard 1'-8" wide curbs and either a 22' travel width or a 24' travel width. The superstructure types for these two configurations are broken into Types A through B.



TYPICAL SECTION - TYPE A



TYPICAL SECTION - TYPE B

TYPICAL SECTION DIMENSIONS		
Bridge	DIM "A"	DIM "B"
*XXXX	Dimensions vary per bridge, to be filled out during preliminary/final design.	
*XXXX		
*XXXX		
*XXXX		
*XXXX		

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CONCEPT PLANS

PLANNING PHASE

PROJ. MANAGER
R. Tetreault

DESIGN-DETAILED
J. McCauley

DESIGN-REVIEWED
K. Broyles

DESIGN-DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

BY
E. Benoit
J. O'Neil

DATE
04/2024
04/2024

SIGNATURE

P.E. NUMBER

DATE

OFF-SYSTEM
BRIDGE BUNDLE

TYPICAL SECTION
STEEL GIRDER

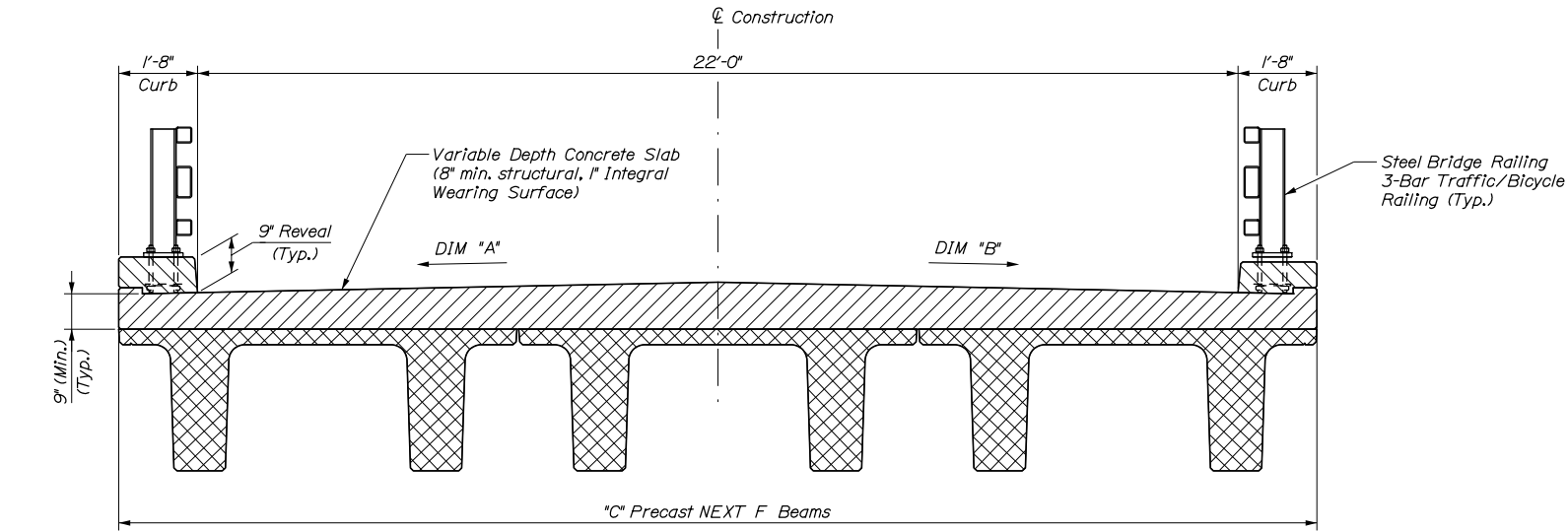
SHEET NUMBER

18

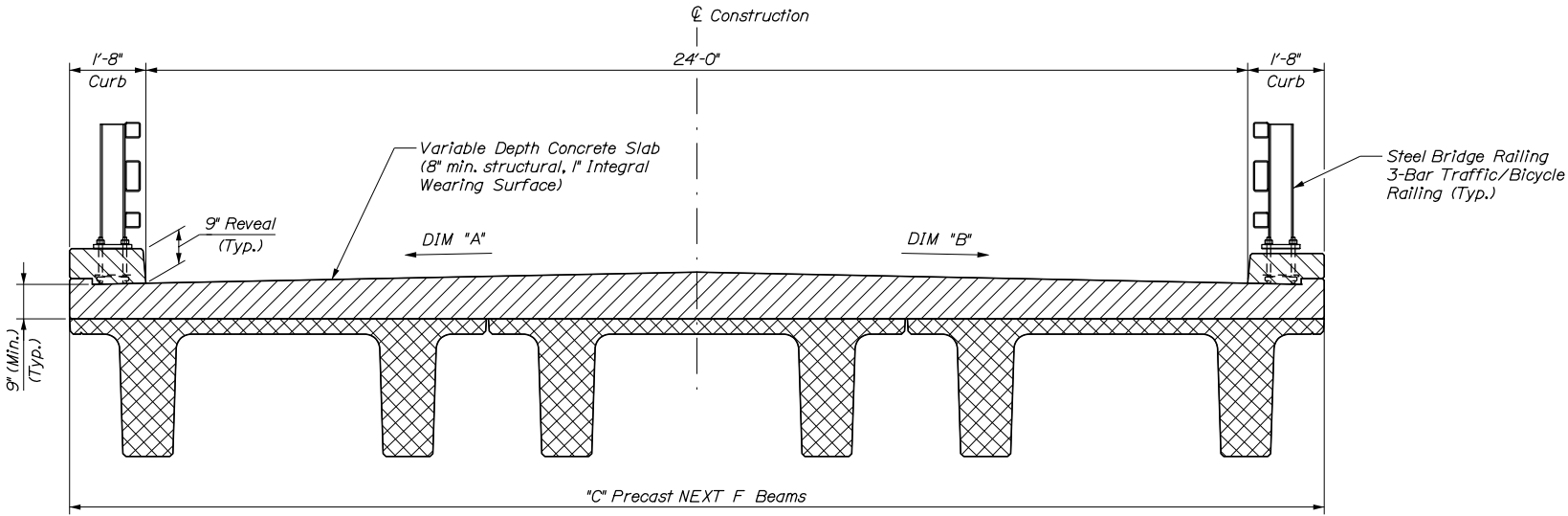
OF 19

NEXT BEAM NOTES:

1. NEXT Beam 36F is assumed based on span lengths.
2. Two general typical section widths are anticipated, both with standard 1'-8" wide curbs and either a 22' travel width or a 24' travel width. The superstructure types for these two configurations are broken into Types C through D.



TYPICAL SECTION - TYPE C



TYPICAL SECTION - TYPE D

TYPICAL SECTION DIMENSIONS				
Bridge	BEAM SIZE	DIM "A"	DIM "B"	DIM "C"
*XXXX	Dimensions vary per bridge, to be filled out during preliminary/final design.			
*XXXX				
*XXXX				
*XXXX				
*XXXX				

CONCEPT PLANS TO
SUPPORT GRANT APPLICATION
MARCH 13, 2025

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	CONCEPT PLANS		PLANNING PHASE
OFF-SYSTEM BRIDGE BUNDLE TYPICAL SECTION NEXT BEAM		SHEET NUMBER 19 OF 19	

PROJ. MANAGER	R. Tetreault	BY	E. Benoit	DATE	04/2024
DESIGN-DETAILED	J. McCauley	CHECKED-REVIEWED	K. Broley	SIGNATURE	
DESIGN-DETAILED		DESIGN-DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES					

Attachment G – Schedule

Bridge #	Town Name	Advertise	Construction Start	Construction Completion	Preliminary Design	Final Design/RFP Development	ROW Acquisition	NEPA Determination Type	NEPA	Scope of Project
0382	Salem Twp	10/1/2027	6/1/2029	12/1/2030	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
0561	Chesterville/Vienna	10/1/2027	6/1/2029	12/1/2030	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
2090	Embden	10/1/2027	6/1/2029	12/1/2030	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
2159	Bowdoin/Lisbon	10/1/2027	10/1/2027	6/1/2029	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
2672	Caratunk	10/1/2027	10/1/2027	6/1/2029	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
3420	Cornville	10/1/2027	6/1/2029	12/1/2030	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
3921	Caratunk	10/1/2027	10/1/2027	6/1/2029	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
5123	Topsham	10/1/2027	10/1/2027	6/1/2029	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
5494	Orland/Bucksport	10/1/2027	12/1/2030	8/30/2032	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
5505	Carmel	10/1/2027	12/1/2030	8/30/2032	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement
5559	Sangerville	10/1/2027	12/1/2030	8/30/2032	1/1/2026 - 1/1/2027	1/1/2027 - 9/30/2027	6/1/2026 - 9/30/2027	Categorical Exclusion	1/1/2026 - 8/31/2027	Bridge Replacement