PUBLIC NOTICE

US Army Corps
of Engineers ®
New England District
Maine Project Office
675 Western Avenue #3
Manchester, Maine 04351

Date: December 31, 2013
Comment Period Ends: January 23, 2014
File Number: NAE-2013-02561
In Reply Refer To: Jay L. Clement
Or by e-mail: jay.l.clement@usace.army.mil

20 DAY NOTICE

The District Engineer has received a permit application from the applicant below to **conduct work in waters of the United States** as described below. The Corps is soliciting comments on both the project itself and the range of issues to be addressed in the environmental documentation.

APPLICANT: MAINE DEPT. OF TRANSPORTATION, 16 STATE HOUSE STATION, AUGUSTA, MAINE 04333

ACTIVITY: Place fill below the high tide line and perform other work beyond the mean high water line of the 'The Gut' at South Bristol, Maine in order to facilitate the replacement of the existing deteriorated Route 129 Bridge. Approximately 8,177 s.f. of intertidal and subtidal substrate will be filled. This work is designed to replace critical transportation infrastructure, insure public safety, and protect the economic vitality of Maine's transportation network.

In anticipation of unavoidable impacts to aquatic resources, the applicant is proposing compensatory mitigation. He has agreed to compensate for the project's unavoidable wetland impacts by funding $57,317.00 toward Maine's Natural Resources Conservation Fund (In Lieu Fee Program). The applicant is proposing this measure seeking to lessen the project's unavoidable impacts. This notice solicits comments on the proposed measure from the interested or affected public as well as those agencies who speak to the public interest. After receipt of the comments, the Corps of Engineers will obtain any necessary additional information from the applicant and determine whether the proposed measures are practicable and serve to help mitigate this project's unavoidable impacts.

WATERWAY AND LOCATION OF THE PROPOSED WORK: 'The Gut' at South Bristol, Maine. The project site is located on the USGS PEMAQUID POINT, ME quadrangle sheet at latitude 43.86224°N; and longitude -69.55859°W.

AUTHORITY
Permits are required pursuant to:
_X_ Section 10 of the Rivers and Harbors Act of 1899
_X_ Section 404 of the Clean Water Act
___ Section 103 of the Marine Protection, Research and Sanctuaries Act).

OTHER AUTHORITIES

The replacement bridge structure will also require approval from the US Coast Guard. For information concerning their decision criteria, please contact Commander (obr), First Coast Guard District, One South Street - Battery Bldg, New York, NY 10004-5073.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

ESSENTIAL FISH HABITAT (EFH): The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat ("EFH").

The Federal Highway Administration ("FHWA") has initiated consultation with the National Marine Fisheries Act. This consultation is ongoing. Fills associated with this project will potentially impact up to 8.177 s.f. of EFH as shown on the attached plans. Although FHWA has taken the lead in this consultation, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

SECTION 106 COORDINATION: FHWA has initiated consultation with the Maine Historic Preservation Commission and Maine's Indian Tribes pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended. This consultation is ongoing. Although FHWA has taken the lead in this consultation, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. FHWA and the Corps will continue review and consultation to fulfil requirements under the Historic Preservation Act as part of the permit review process.

ENDANGERED SPECIES ACT CONSULTATION: FHWA has initiated consultation with the National Marine Fisheries Service and the US Fish & Wildlife Service pursuant to Section 7 of the Endangered Species

Act regarding the presence of Atlantic salmon, Atlantic salmon critical habitat, shortnose sturgeon, and Atlantic sturgeon. This consultation is ongoing. Although FHWA has taken the lead in this consultation, the District Engineer is hereby requesting that the appropriate Federal Agency also provide comments to the Corps regarding the presence of and potential impacts to listed species or critical habitat.

The following authorizations have been applied for, or have been, or will be obtained:

(X) Permit, License or Assent from State.
( ) Permit from Local Wetland Agency or Conservation Commission.
(X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Jay Clement at 207-623-8367, ext. 1 at our Manchester, Maine Project Office.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

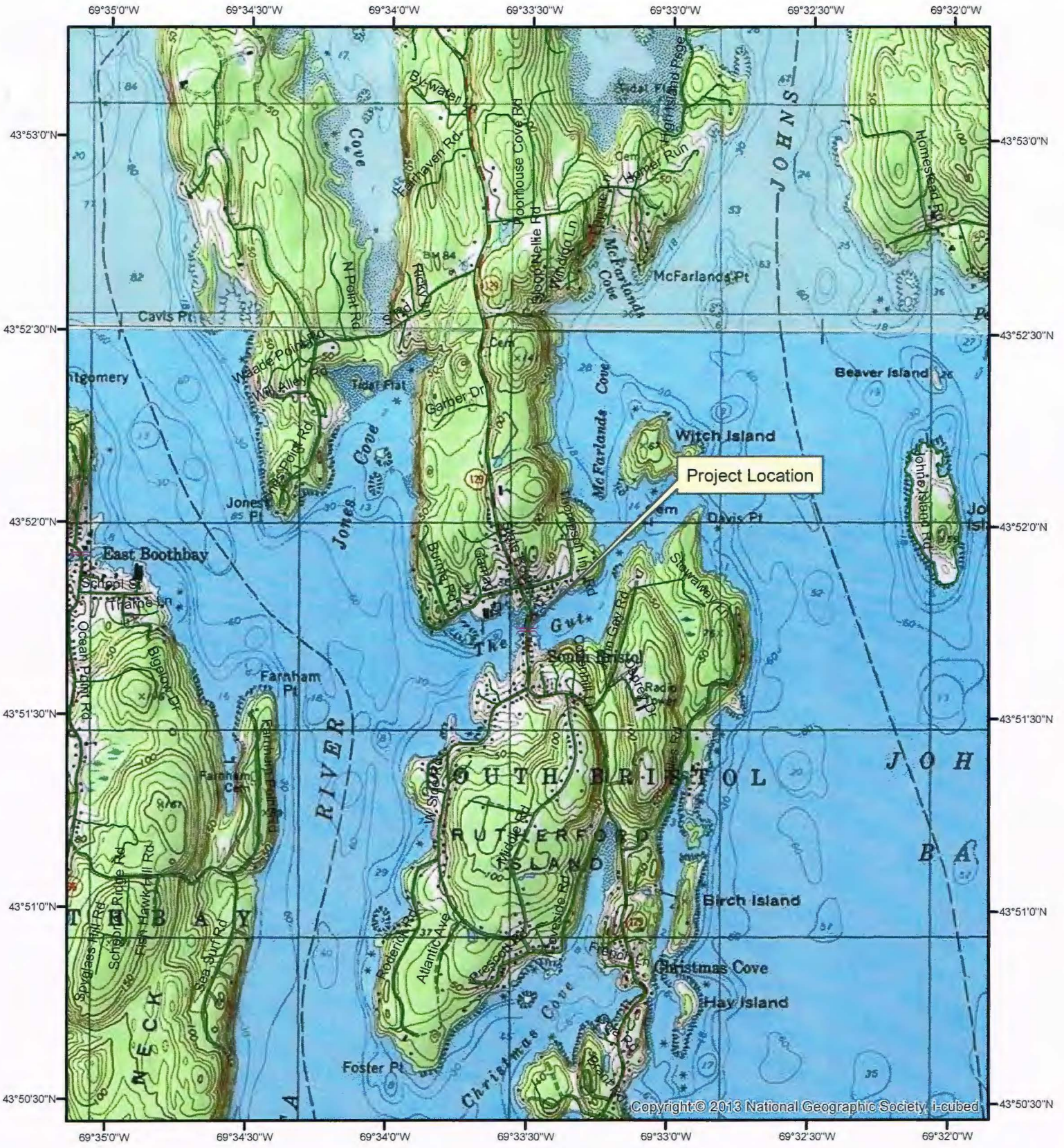
For more information on the New England District Corps of Engineers programs, visit our website at http://www.nae.usace.army.mil.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

Frank J. Del Giudice
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____



MDOT WIN 16750.00
Route 129
South Bristol, Lincoln County

-69.55859°
43.86224°

N
W
E
S

0 330 660 1,320 1,980 2,640 Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Sixth Edition 2012.

DESIGN LOADING

Live Load ..... HL - 93 Modified

TRAFFIC DATA

Current (2010) AADT	1590
Future (2030) AADT	1910
DHV - % of AADT	15%
Design hour Volume	287
Heavy Trucks (% of AADT)	6%
Heavy Trucks (% of DHV)	5%
Directional Distribution (% of DHV)	55%
18 kip Equivalent P 2.0	67
18 kip Equivalent P 2.5	61
Design Speed (mph)	25

TIDAL DATA

Highest Observed Water Level 02/07/1978	8.87'
Mean Highest High Water (M.H.H.W.)	4.73'
Mean High Water (M.H.W.)	4.33'
Mean Sea level (MSL)	-0.32'
Mean Tide Level (MTL)	5.05'
Mean Low Water (MLW)	-5.02'
Mean Lower Low Water (MLLW)	-5.40'
Lowest Observed Water Level 11/30/1955	-7.41'
Spring High Tide Range	10.15'
2014 Predicted High Tide	11.50'
2015 Predicted High Tide	11.60'

MATERIALS

Concrete

Structural wearing Surface	Class "LP"
Seals	Class "S"
Precast	Class "P"
Fill	Fill
All Other	Class "A"

Reinforcing Steel ..... ASTM A 615, Grade 60, ASTM A1055 Coating

Structural Steel:

All Materials (except as noted)	ASTM A 709, Grade 50 (Metalized)
High Strength Bolts	ASTM A 325, Type 1

BASIC DESIGN STRESSES

Concrete	f'c = 4,000 psi
Precast Concrete	f'c = 6,500 psi
Reinforcing Steel	f'y = 60,000 psi
Structural Steel:	
ASTM A 709, Grade 50	F y = 50,000 psi
ASTM A 709, Grade 36	F y = 36,000 psi
ASTM A 325	F u = 120,000 psi

SOUTH BRISTOL
LINCOLN COUNTY
GUT BRIDGE
OVER
THE GUT
ROUTE 129
PROJECT NO. BH-1675(000)X
PROJECT LENGTH 400 ft.
BRIDGE NO. 2339

LIST OF DRAWINGS

UTILITIES

Central Maine Power Company
Fairpoint Communications
Time Warner Cable
Greater Augusta Utility District

MAINTENANCE OF TRAFFIC

Maintain one 11'-0" wide lane of alternating two - way traffic using traffic signals.

PROJECT LOCATION:	REPLACEMENT OF BRIDGE #2339 IN SOUTH BRISTOL WHICH CARRIES ROUTE 129 OVER THE "GUT"
PROGRAM AREA:	BRIDGE PROGRAM
OUTLINE OF WORK:	REPLACEMENT OF AN EXISTING BOBTAIL SWING BRIDGE WITH A NEW SINGLE LEAF, CABLE-STAYED BASCULE BRIDGE.

NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM		SIGNATURE	
PROJECT MANAGER			
DESIGNER		P.E. NUMBER	
CONSULTANT			
PROJECT RESIDENT		DATE	
CONTRACTOR			
PROJECT COMPLETION DATE			

SOUTH BRISTOL
GUT BRIDGE

TITLE SHEET

SHEET NUMBER
1
OF 141

Date: 12/20/2013 User name: common Division: BRIDGE Filename: ...\CADD\00_Gen\001_title_cvr.dgn

Item *	Description	Quantity	Unit
202.08	Remove Buildings:Control House	1	LS
202.13	Remove Existing Railings - Retained By Department	30	LF
202.19	Remove Existing Bridge	1	LS
203.20	Common Excavation	312	CY
203.21	Rock Excavation	5	CY
203.231	2000 Gallon On Site Holding Tank	1	EA
203.25	Granular Borrow	286	CY
203.35	Crushed Stone Fill	386	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	1,224	CY
206.10	Structural Earth Excavation - Piers	676	CY
304.10	Aggregate Subbase Course-Gravel	80.7	CY
403.208	Hot Mix Asphalt 12.5 MM HMA Surface (1 1/2" Thick)	9.2	T
403.213	Hot Mix Asphalt 12.5 MM Base (2 1/2" Thick)	15.3	T
409.15	Bituminous Tack Coat Applied	11.6	G
426.30	Ultra Thin Bonded Wearing Course	89	SY
MPS.xxx	Micropiles	28	EA
501.55	Steel W24x103 Piles, Delivered	1,085	LF
501.551	Steel W24x103 Piles, In Place	1,085	LF
501.80	Rock Socket (36" Dia.)	330	LF
501.804	Drilling Equipment Mobilization (Micropiles)	1	LS
501.xxx	Installing Precast Panel Logging (At Soldier Pile Wall)	5048	SF
VMM.xxx	Vibration And Movement Monitor And Control	1	LS
502.21	Structural Concrete, Abutments And Retaining Walls	112	CY
502.22	Structural Concrete, Abutments And Retaining Walls (Place Underwater)	333	CY
502.23	Structural Concrete Piers	126	CY
502.24	Structural Concrete Piers (Placed Underwater)	25	CY
502.31	Structural Concrete Approach Slabs	43	LS
502.56	Concrete Fill	4	CY
503.30	Corrosion Resistant Reinforcing System, Fabricated And Deliver	159,235	LB
503.31	Corrosion Resistant Reinforcing System, Placing	159,235	LB
503.171	Mechanical/ Welded Splice	70	EA
504.60	Timber Fender System	1	LS
504.701	Structural Steel, Fab And Del Rolled (5,000 lbs)	1	LS
504.702	Structural Steel, Fab And Del Welded (214,460 lbs)	1	LS
504.71	Structural Steel Erection	1	LS
504.905	Rock Anchors	28	EA
504.xxx	Performance Test For Rock Anchors	3	EA
504.709	Bridge Hardware	1	LS
504.xxx	Furnish And Install Stay Cables	1	LS
504.xxx	Jacking Stay Cables	1	LS
CCS.xxx	Closed Cell Seal		
505.08	Shear Connectors	1	LS

* The cofferdams listed above are the number of cofferdams anticipated to be required throughout the staged construction. It is the responsibility of the Contractor to determine the final number required.

Item *	Description	Quantity	Unit
506.6101	Zinc Rich Coating System (Shop Applied)	1	LS
506.6102	Galvanizing	1	LS
506.6103	Thermal Spray Coating - Shop Applied	1	LS
506.6105	Polyurea Elastomer Coating	1	LS
507.084	Steel Pipe Hand Railing	124	LF
507.092	Aluminum Bridge Railing, 2 Bar (Feathlite TL-2 Rail)	69.88	LF
510.10	Special Detour ___ Roadway Width Vehicular And Pedestrian Traffic	1	LS
511.071	*Cofferdam 1	1	LS
511.072	*Cofferdam 2	1	LS
511.073	*Cofferdam 3	1	LS
511.074	*Cofferdam 4	1	LS
511.075	*Cofferdam 5	1	LS
512.081	French drains	1	LS
513.22	Crushed Stone Slope Protection		SY
514.06	Curing Box For Concrete Cylinders		EA
515.20	Protective Coating For Concrete Surfaces	1	LS
523.52	Bearing Installation	2	EA
523.xxx	Bascule Girder Bearings, Fab And Del	2	EA
526.301	Temporary Concrete Barrier Type 1	1	LS
526.321	Permanent Concrete Barrier Type 111a	1	LS
526.3401	Permanent Concrete Transition Barrier - Modified	4	EA
527.34	Work Zone Crash Cushion	4	EA
534.xx	Precast Pier (Bascule Piers)	94	CY
535.622	Precast Concrete Panel Logging, Furnished And Installed	5,048	SF
609.70	Composite Beam Sidewalk	1	LS
606.23	Guardrail Type 3C-Single Rail		LF
606.231	Guardrail Type 3C-15 Foot Radius And Less		LF
606.265	Terminal End-Single Rail-Galvanized Steel	4	EA
608.08	Reinforced Concrete Sidewalk (On Approach)	32.4	SY
609.11	Vertical Curb Type 1	32.4	LF
609.12	Vertical Curb Type 1-Circular	32.4	LF
610.08	Plain Riprap	10	CY
610.16	Heavy Riprap	500.0	CY
613.319	Erosion Control Blanket	20	SY
620.582	Erosion Control Geotextile	1	LS
634.168	Pump Equipment And Wiring	1	LS
620.60	Separation Geotextile		SY
626.11	Precast Concrete Junction Box	1	EA
626.37	Special Foundation (Traffic Barrier And Pedestrian Gates)	6	EA
626.371	Special Foundation (Traffic Signal/Warning Beacons)	4	EA
626.34	Signal Pole Foundation	2	EA
626.xxx	Pedestal Pole Foundation	2	EA
627.733	4" White Or Yellow Painted Pavement Marking Line	248	LF
627.75	White Or Yellow Pavement And Curb Marking Stop Bar	52	SF
627.76	Temporary Pavement Marking Line, White Or Yellow	750	LS
627.77	Removing Pavement Markings	302	SF

Item *	Description	Quantity	Unit
629.05	Hand Labor, Straight Time		HR
631.12	All Purpose Excavator (Including Operator)		HR
631.14	Grader (Including Operator)		HR
631.15	Roller, Earth And Base Course (Including Operator)		HR
631.172	Truck - Large (Including Operator)		HR
635.31	Precast Concrete Block Gravity Wall		SF
635.40	Precast Aggregate-Filled Concrete Block Wall		SF
638.02	Navigation Lights	1	LS
639.18	Field Office Type A	1	EA
STG.xxx	Staff Gauges	1	LS
643.01	Traffic Signals And Gates	1	LS
643.601	Flashing Beacon At North Approach	1	LS
643.602	Flashing Beacon At South Approach	1	LS
643.72	Temporary Traffic Signal	1	LS
643.801	Traffic Signals At North Approach	1	LS
643.802	Traffic Signals At South Approach	1	LS
643.91	Mast Arm Pole	2	EA
643.92	Pedestal Pole	2	EA
652.312	Type III Barricade	0	EA
652.33	Drum	11	EA
652.34	Cone	25	EA
652.35	Construction Signs	120	SF
652.361	Maintenance Of Traffic Control Devices	1	LS
652.38	Flagger		HR
656.75	Temporary Soil Erosion And Water Pollution Control	1	LS
655.01	Standby Generator	1	LS
655.3001	Bridge Electrical And Control Systems	1	LS
659.10	Mobilization (10%)	1	LS
660.21	On The Job Training		HR
815.00	Building, Control House	1	LS
841.47	Steel Bollard	3	EA
845.20	Utility Access Door	1	LS
860.101	Span Operating Machinery - Delivered	1	LS
860.102	Span Operating Machinery - Installed	1	LS
860.201	Trunnion Machinery - Delivered	1	LS
860.202	Trunnion Machinery - Installed	1	LS
860.301	Span Lock Machinery -Delivered	1	LS
860.302	Span Lock Machinery -Installed	1	LS
860.42	Operation And Maintenance Manuals	1	LS
860.43	Training	1	LS
860.46	Field Testing	1	LS
880.02	Bridge Balancing	1	LS
880.03	Balance Material - Lead	1	LS
880.112	Balance Material -Concrete	3	CY

NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER:
CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM		SIGNATURE	
PROJECT MANAGER			
DESIGNER		P.E. NUMBER	
CONSULTANT			
PROJECT RESIDENT		DATE	
CONTRACTOR			
PROJECT COMPLETION DATE			

SOUTH BRISTOL
GUT BRIDGE
ESTIMATE OF QUANTITIES

SHEET NUMBER
2
OF 141

Filename: ...\002_estimate_quantities.dgn Division: BRIDGE Username: common Date: 12/20/2013

GENERAL NOTES

SPECIFICATIONS

1. Design Specifications:
   -American Association of State Highway and Transportation Officials (AASHTO) LRFD Bridge Design Specifications, 6th edition, 2012, AASHTO LRFD -AASHTO LRFD Movable Highway Bridge Design Specifications, 2nd edition, 2007 with Interim Revisions through 2008, 2010 and 2012.
   -MaineDOT Bridge Design Guide 2003 with updates through 2008.

2. Standard Specifications: State of Maine Department of Transportation Standard Specifications, Revision of 2002.

LOADS:

1. Design Live Load: HL-93 as per AASHTO LRFD Bridge Design Specifications and modified as per MaineDOT Bridge Design Guide. Impact: Percentage of live load as per AASHTO LRFD Bridge Design Specifications; the floorbeams at the movable span joints are proportioned for full live load plus twice the normal impact.

2. Sidewalk Live Load: 75 psf as per AASHTO LRFD Bridge Design Specifications.

3. Wind Load: As per AASHTO LRFD Bridge Design Specifications

4. Ice Load: As per AASHTO LRFD Bridge Design Specifications

MOVABLE BRIDGE TERMS:

1. "Bridge Open" means span up to clear navigational vessels.

2. "Bridge Closed" means span seated to permit vehicular and pedestrian traffic.

STRUCTURAL STEEL - GENERAL:

1. All structural steel shall be in accordance with ASTM A709, Grade 50, unless otherwise noted.

2. All ASTM A709 structural steel as designated on the plans shall receive charpy v-notch testing in accordance with ASTM A709.

3. All bolted connections of structural steel shall be ⅞" diameter ASTM A325 Type 1 High Strength bolts, in ⅞" diameter holes, installed as Friction Type connections, unless otherwise noted. All faying surfaces of all connections shall be cleaned and painted with shop-applied inorganic zinc rich primer which meets RCSC Class B coefficient and creep testing requirements, unless otherwise noted. Bolt threads shall be excluded from the shear planes.

4. S.S. denotes stainless steel.

5. All structural steel designated as Fracture Critical Members (FCM) on the plans or in the specifications shall conform to the provisions of Chapter 12 of the AASHTO/AWS D1.5 Bridge Welding Code.

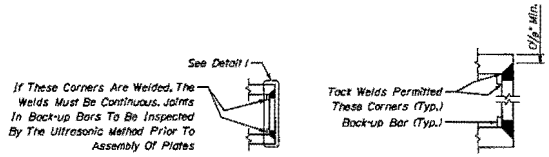
6. The Contractor shall coordinate all structural work, including structural steel fabrication and erection, with mechanical, electrical and other structural work. The Contractor shall coordinate the final details of machinery supports, electrical equipment and attachments with the actual machinery and electrical equipment approved for installation, subject to approval by the Resident.

7. Bearing stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.

8. Filler plates may be steel conforming to the requirements of ASTM A709, Grade 36.

STRUCTURAL STEEL - WELDING:

1. All groove welds shall be complete penetration. Joint detail is optional with the fabricator, subject to AWS requirements, where backing bar strips are to be left in place, they shall be continuous for the full length of the weld. See detail this sheet. Backing bars shall meet all material and toughness requirements of the structural steel to which it is attached.



TYPICAL WELDING DETAIL FOR BOX MEMBERS

DETAIL 1

2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 ft or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. No transverse butt weld splices will be allowed in areas of stress reversal.

3. Multiple pass welds inspected by the magnetic particle method shall have each pass or layer inspected and accepted before proceeding to the next pass or layer.

4. All welds that join at least one plate designated as Fracture Critical shall be considered FCM, regardless of the direction of stress, and shall meet the requirements of AWS D1.5 fracture critical control plan for non-redundant members.

5. No field welding is permitted unless shown on the plans.

6. Stainless Steel welding details, procedures and testing methods shall conform to AWS D1.6: 2007.

LADDERS, PLATFORMS AND RAILINGS:

1. Structural steel for ladders, platforms and railings shall confirm to ASTM A36 OR ASTM A992 and shall be hot-dip galvanized in accordance with ASTM A123, with the exception of the sidewalk railing, which shall be stainless steel ASTM A276 Type 316. Welding shall conform to AWS D1.1 and AWS D1.6.

CONCRETE:

1. All concrete shall be in accordance with Sections 502 and 701 of the Standard Specifications.

2. Concrete cover:
   -CIP Substructure = 3"
   -Precast substructure = 1½"
   -Approach Barrier = 1½"
   -Approach Spans= 1"

3. Concrete covers shown on the plans do not include placement and fabrication tolerances unless shown as "minimum cover".

4. Concrete edges: ¾" chamfer unless otherwise noted.

5. The Contractor shall allow 2 days to elapse between placement of adjacent casts for all substructure units unless approved by the Engineer.

BEARING NOTES

1. Masonry plates, sole plates and shear pins shall meet the requirements of ASTM A709, Grade 50. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swedged on the embedded portion of the rod.

2. Masonry plates shall be galvanized in accordance with Section 506. Sole plates for steel superstructures shall be treated in the same manner as the structural steel. Anchor rods, washers, nuts and shear pins shall be galvanized to ASTM A 153 or ASTM B695, Class 50, Type 1.

3. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.

4. Bearings shall be covered during transit.

5. The bearings are designed so that the superstructure may be erected when the ambient air temperature is within the range of 65°F and 90°F. If the ambient air temperature is outside this range, the bearings shall be reset as directed by the Resident.

DATUM:

1. North American Vertical Datum (NAVD) 1988.

PLAN DIMENSIONS:

1. All dimensions in these plans are measured in feet and inches either horizontally or vertically, unless otherwise noted.

U.S. COAST GUARD:

1. For additional information, the Contractor is directed to the requirements of the Coast Guard permit for this Contract.

2. A copy of the Contractor's plan, schedule and sequence of operations shall be submitted to the U.S. Coast Guard MSO and the construction Resident for approval 30 days prior to starting any work.

3. Upon completion of the bridge, an inspection of the waterway bottom shall be performed again to insure that all bridge construction waste materials have been completely removed. This inspection shall consist of both a fathometric survey (soundings) and a wire drag fathometric survey and shall be taken on a 10 ft grid, covering the area surveyed previously. The wire drag shall be performed after a review and comparison of the soundings have been made by the Coast Guard and when adequate manpower and equipment is available at the bridge site to locate and remove any waste materials or debris. The wire drag shall be conducted in the presence of a Coast Guard Representative. Arrangements shall be coordinated with the Coast Guard at least two weeks in advance of the desired date of inspection.

4. During the progress of work, should any material, machinery or equipment be lost, dumped, sunk or misplaced, that object must be removed immediately. The Contractor shall notify the U.S. Coast Guard and the Engineer immediately and file a report within 24 hours.

5. It shall be the responsibility of the Contractor to insure that channel depths are not affected by the work. Should it be suspected that channel depths may have been impaired or that an obstruction may exist from the work, the Contractor shall, upon request of the Coast Guard or Corps of Engineers, provide the necessary equipment and personnel to undertake a survey to determine the presence of any obstruction, objects, or silt that may have occured during construction. The cost for this work to be borne by the Contractor.

6. Contractor intending the use of a barge shall get proper permits from the Coast Guard and shall meet the following requirements:

   -Contractor shall notify the Coast Guard 14 days prior to placement of the barge.

   -All construction equipment in the waterway shall be lighted in accordance with the provisions as outlined in the navigation rules internation - inland.

   -If any barges or work floats are to be kept in place by anchors, the anchor lines must be marked by lighted buoys if the equipment will be at the work site overnight. Coast Guard must be advised of the method of screening silt form cofferdam de-watering operations.

BASCULE SPAN ERECTION NOTES:

1. The design of this structure assumes that the structural steel is assembled in a dead-load condition in accordance with the Bascule Span Erection Sequence on Sheet No. 67.

2. There shall be no separate payment for any temporary supports, temporary bracing or temporary balance material required throughout construction. The cost for the design, installation and removal shall be included in the various bid items of the project.

3. The Contractor shall employ a licensed Professional Engineer registered in the State of Maine to develop the proposed erection procedure, which shall be submitted to the Engineer for review no less than 30 days prior to the start of work.

4. The Contractor shall employ a licensed Professional Engineer registered in the State of Maine to design all temporary shoring, bracing, supports, falsework, jacking or any other temporary provision to allow for construction of the bascule span. All calculations shall be submitted to the Engineer for review.

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

GENERAL NOTES 1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION			
PROGRAM		SIGNATURE	
PROJECT MANAGER			
DESIGNER			
CONSULTANT		P.E. NUMBER	
PROJECT RESIDENT			
CONTRACTOR		DATE	
PROJECT COMPLETION DATE			

SHEET NUMBER
3
OF 141

Filename: ...\003_general_notes_01.dgn Division: BRIDGE Username: common Date: 12/20/2013

BASCULE SPAN ERECTION NOTES (CONT.)

5. For the Bascule Span Erection, the Contractor has the option to either erect the leaf in position or have the leaf delivered to the site partially or fully assembled.

6. If the Contractor proposes to deliver the leaf to the site either partially or fully assembled, he shall submit details that describe his proposed procedure, including complete details and calculations for proposed supports and required lifting operations during all phases of the work, including off-site erection, shipment to the site, and lifting into place to the engineer for review no less than 30 days prior to the start of erection. Proposed lifting points are to be identified. All procedures and calculations shall be prepared by a licensed Professional Engineer registered in the State of Maine.

7. Coordination between structural, mechanical and electrical work is required. It is recommended the Contractor perform shop machining and installation of the trunnion hubs and rack onto each bascule girder. Machine mill mating surfaces between the bascule girder and trunnion hub, and bascule girder and rack perpendicular to the trunnion centerline of rotation. In the steel fabrication shop, subdrill holes for these machinery components. An ANSI FN2 force fit is required between the trunnion hubs and bascule girder. Drill and ream holes for the trunnion hubs and install final bolts in the shop. The rack can be removed and shipped separately.

8. The actual field erection shall result in bascule girders which are straight and parallel to each other. Floorbeams shall be perpendicular to the girders. Ribs shall be parallel to the girders, webs of girders and floorbeams shall be vertical; ribs shall be normal to the deck plate.

9. A land surveyor licensed in the State of Maine shall perform all survey work required for Bascule Span Erection. The degree of accuracy of the work shall be of the first order. A written procedure of obtaining first order accuracy shall be submitted to the Engineer for review prior to the state of any survey work.

10. The Contractor shall submit, in detail, his proposed procedure and sequence for the installation and settings/final alignment of the tie joint, heel joint and span locks to the Engineer for review prior to the start of work.

BACULE SPAN ALIGNMENT NOTES AND PROCEDURE:

The following procedure should be used to set the elevation at the top of each steel support, and set the position in both the span longitudinal and lateral directions for the trunnion pedestal and the Bi pinion bearing to the specified elevation and span position in the Plans.

1. Bearing Bi support is aligned after final alignment of the trunnion support.

2. Degree of accuracy for surveying work required for Final Bascule Span Alignment shall be of the first order as defined by the Federal Geodetic Control Subcommittee Standards. A written procedure for obtaining first order accuracy shall be submitted to the Resident prior to start of this work.

A. Survey locations of bascule and rest piers with respect to the navigation channel width. Survey roadway elevation and alignment for establishing the position of the trunnion supports. Survey longitudinal centerline of each bascule girder relative to their bascule pier, and the trunnion centerline across both bascule piers. These centerlines must be perpendicular to each other.

B. Install trunnion supports centered on the trunnion centerline and set position of supports parallel to the Bascule Girder centerlines within +/- 1/8" of the dimension specified in the Plans.

C. Align inboard trunnion supports to the elevation specified in the Plans and level to each other within a tolerance of +/- 1/8". Align the outboard support to its adjacent inboard support within an elevation of +/- 0.05 inch. Allow for 1/2" nominal thickness of shims under trunnion pedestal.

D. Install Bearing Bi support relative to the position of the aligned trunnion support to the specified dimensions in the Plans at a vertical and horizontal tolerance of +/- 1/16". Allow for 1/2" nominal thickness of shims under bearing.

E. Top of trunnion and bearing Bi supports should be flat across its entire surface within a tolerance of +/- 0.03 inch.

F. Secure supports to reinforcement bars and threaded anchors, and tighten anchor nuts.

G. Pour pier concrete. Top of supports should be 2" above top of concrete. Leave pockets under top plate of each support for installing machinery components turned bolts. Survey and scribe centerline marks on supports. Refer to 860.13 for trunnion installation and alignment.

GENERAL CONSTRUCTION NOTES

1. For easements, construction limits and right of way lines, refer to Right of Way Map.

2. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

3. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

4. All embankment material, except as otherwise shown, placed below E.L. +6.0 shall be Crushed Stone meeting the requirements of Subsection 703.31 Crushed Stone.

5. Protective Coating for Concrete Surfaces shall be applied to the following areas:

All exposed surfaces of concrete curbs and sidewalks.
All exposed surfaces of Concrete Transition Barriers.
Concrete wearing surfaces.
Concrete barriers.
Abutments.
Bascule piers

6. Project information referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/comprehensive-list-projects/project-information.php.

7. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

8. The following project geotechnical reports may be accessed at the MaineDOT web address:

A. Soils Report 2001-31, "Report on Proposed Bridge Replacement, Route 129, South Bristol, Maine", Haley & Aldrich, Inc., July 2000.

B. Soils Report 2005-07, "Final Geotechnical Design Report for the Replacement of Gut Bridge", MaineDOT, May 2005.

C. Soils Report 2012-02C, "Final Geotechnical Design Report, Route 129 Bridge over The Gut, South Bristol, Maine", January 2012, GZA GeoEnvironmental, Inc. (GZA).

D. "Geophysical Investigation, Route 129 Top of Rock Profiling, South Bristol, Maine", August 2011, NDT Corporation.

E. Soils Report, 2013-30C, "Supplemental Geotechnical Data Summary, Route 129 Bridge over The Gut", August 2013, GZA.

9. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

10. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

A. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

B. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

C. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

11. The Contractor shall submit a Bridge Demolition Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. No work related to the removal of the bridge shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting and finalizing the Demolition Plan will be considered incidental to the bridge removal pay item.

GENERAL CONSTRUCTION NOTES (CONT.)

12. The existing bridge shall be removed by and become the property of the Contractor. The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required to remove and dispose of the existing bridge will be considered incidental to the bridge removal pay item.

13. A Maine Department of Transportation (MaineDOT) Environmental Office investigation associated with this project discovered data suggesting petroleum related contamination was present at roughly MaineDOT station 118+00 to roughly MaineDOT station 119+00. Subsequent on-site work confirmed petroleum contamination. However, based on the scope of work presented, available data suggests that this contamination may be deeper than and adjacent to any work proposed in this area. In light of MaineDOT's findings, the contractor shall employ appropriate health and safety measures to protect its workers against hazards associated with working near petroleum-impacted soils. Furthermore, the Contractor shall remain alert for any additional evidence of contamination. If the Contractor encounters evidence of soil or groundwater contamination, the Contractor shall secure the excavation, stop work in the contaminated area, and immediately notify the Resident. The Resident shall contact the Hydrogeologist in MDOT's Environmental Office at 207-624-3100 and the Maine Department of Environmental Protection at 800-482-0777. Work may only continue with authorization from the Resident.

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

GENERAL NOTES II

PROJECT INFORMATION

PROGRAM		SIGNATURE	
PROJECT MANAGER			
DESIGNER		P.E. NUMBER	
CONSULTANT			
PROJECT RESIDENT		DATE	
CONTRACTOR			
PROJECT COMPLETION DATE			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

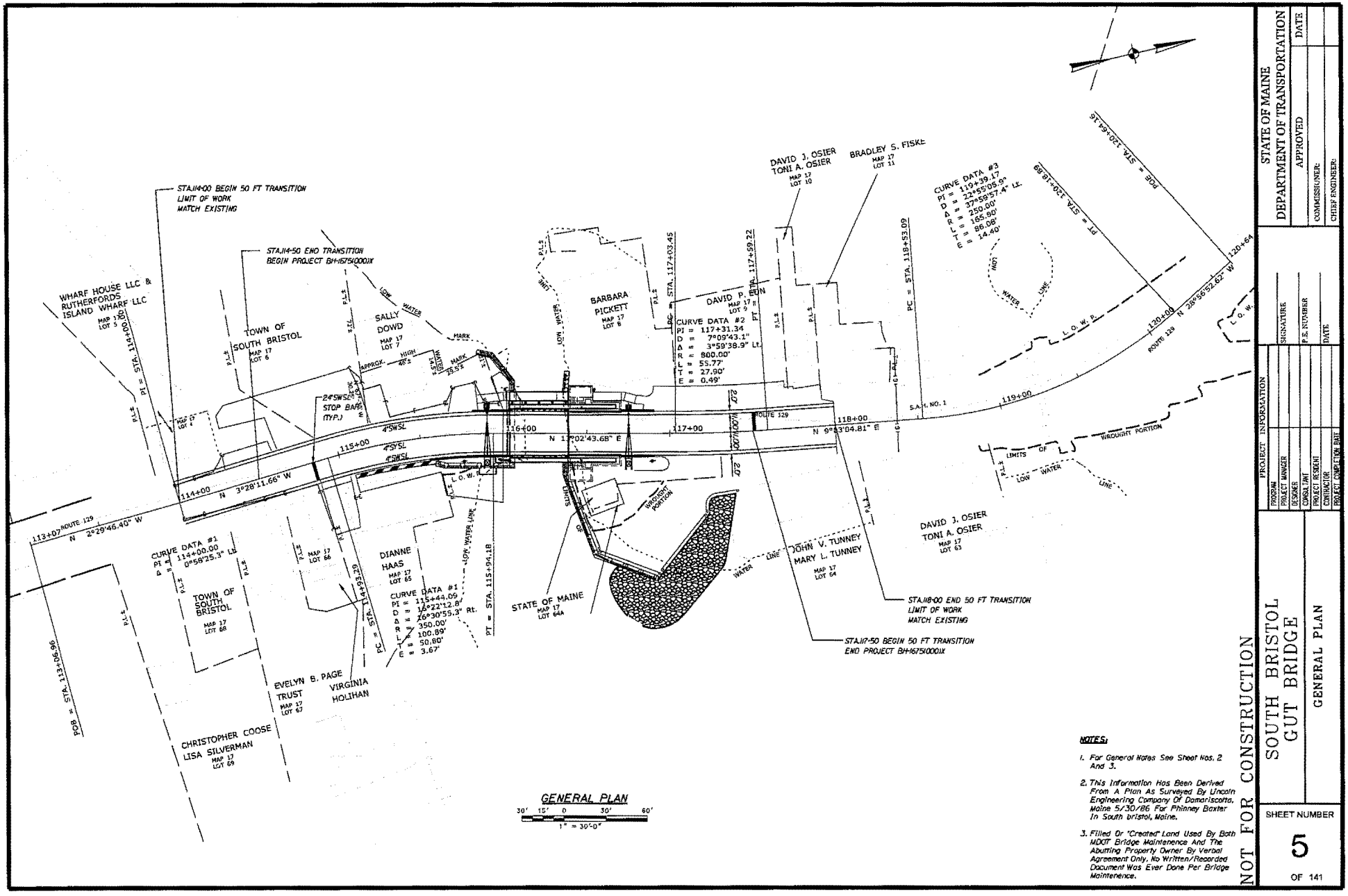
APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

SHEET NUMBER
4
OF 141

Filename: ...\004_general_notes_02.dgn Division: BRIDGE Username: common Date: 12/20/2013



GENERAL PLAN

30' 15' 0 30' 60'

1" = 30'-0"

NOTES:

1. For General Notes See Sheet Nos. 2 And 3.
2. This Information Has Been Derived From A Plan As Surveyed By Lincoln Engineering Company Of Damariscotta, Maine 5/30/86 For Phinney Baxter In South Bristol, Maine.
3. Filled Or "Created" Land Used By Both MDOT Bridge Maintenance And The Abutting Property Owner By Verbal Agreement Only. No Written/Recorded Document Was Ever Done Per Bridge Maintenance.

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

GENERAL PLAN

SHEET NUMBER
5
OF 141

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

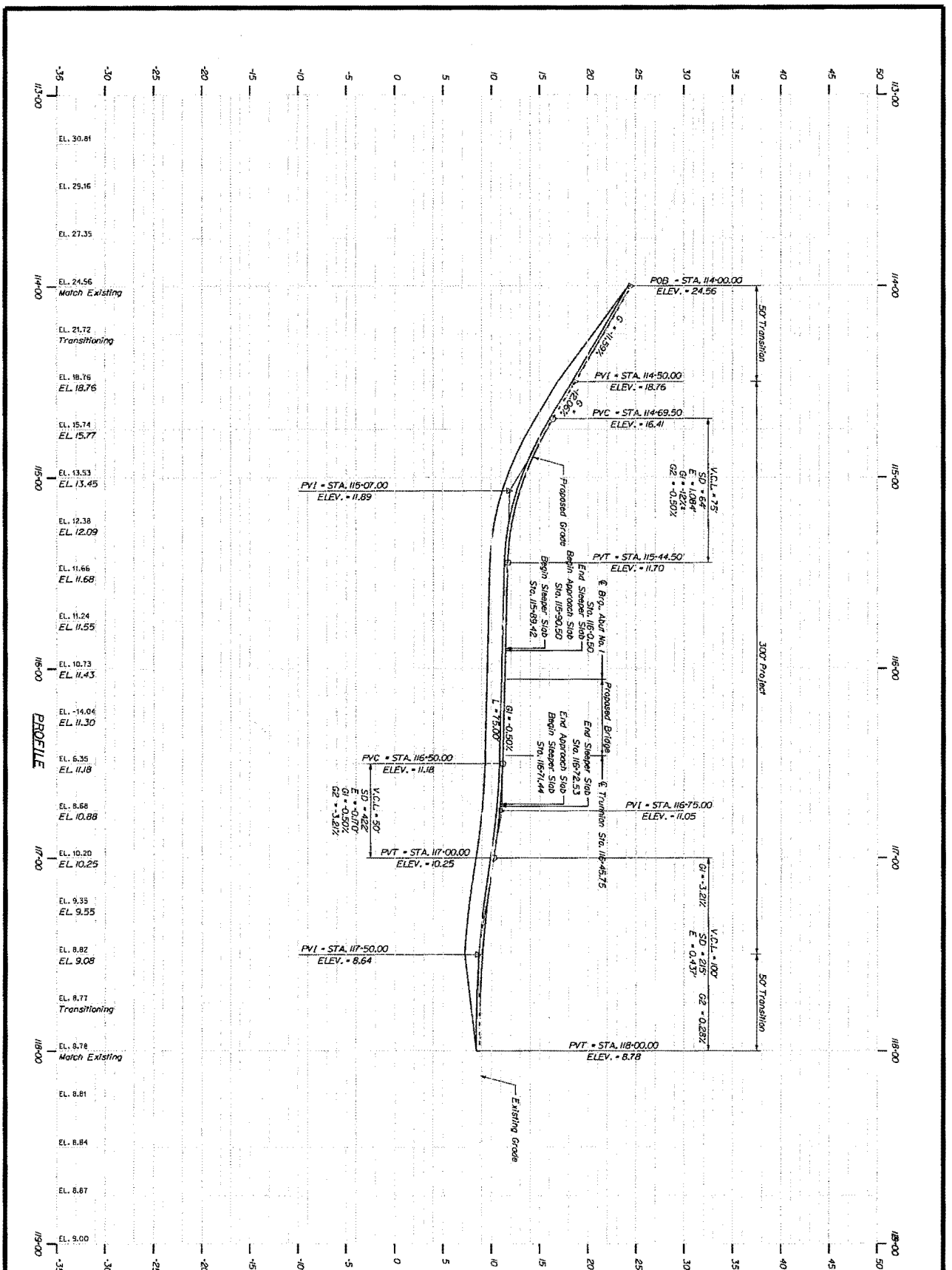
CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM		SIGNATURE	
PROJECT MANAGER			
DESIGNER		P.E. NUMBER	
CONSULTANT			
PROJECT RESIDENT		DATE	
CONTRACTOR			
PROJECT COMPLETION DATE			

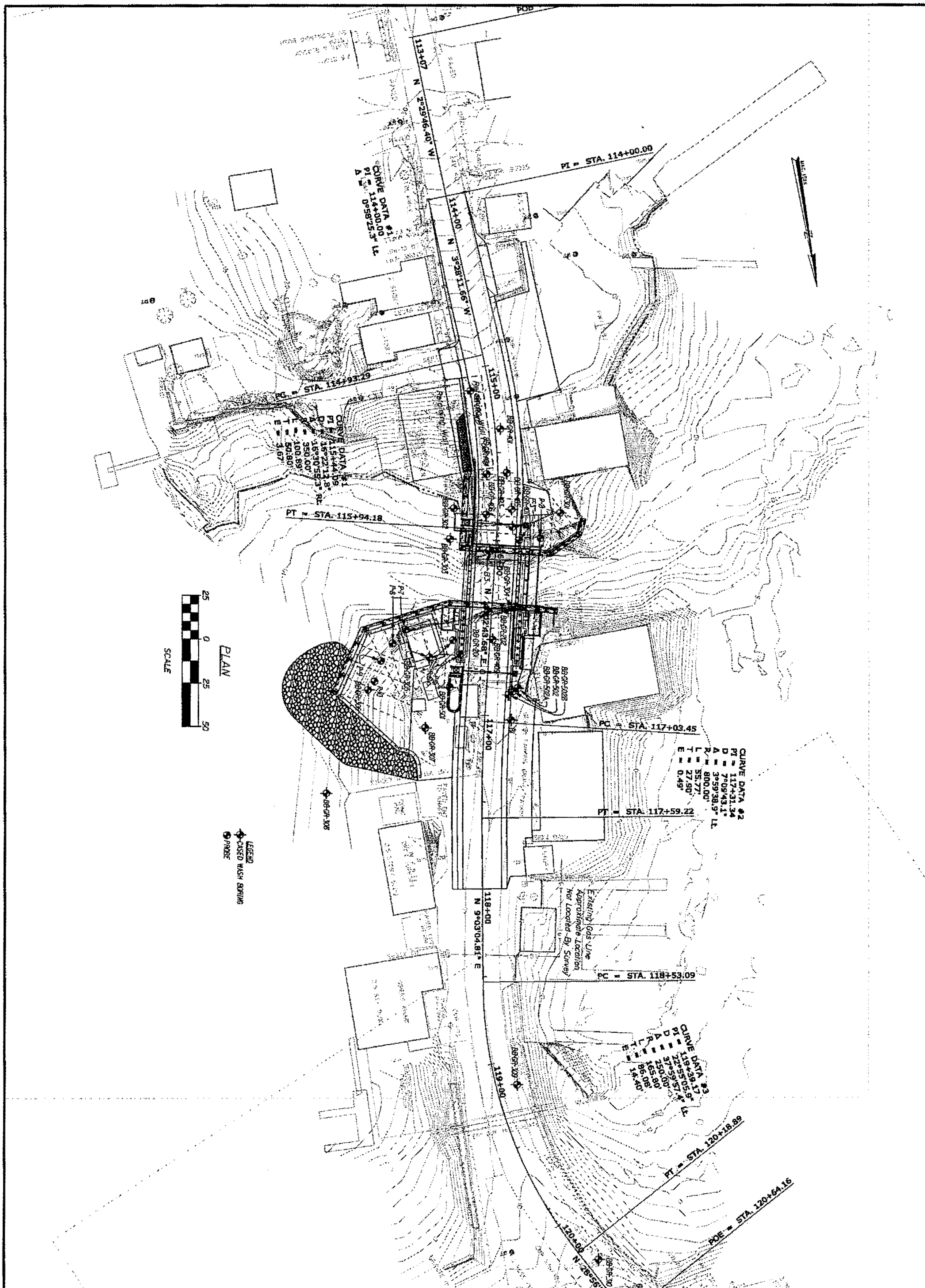
Filename: ...\40_Hwy\005_general_plan.dgn Division: BRIDGE Username: common Date:12/20/2013

Filename: ...\CADD\40_Hwy\006_profile.dgn Division: BRIDGE Username: common Date:12/20/2013



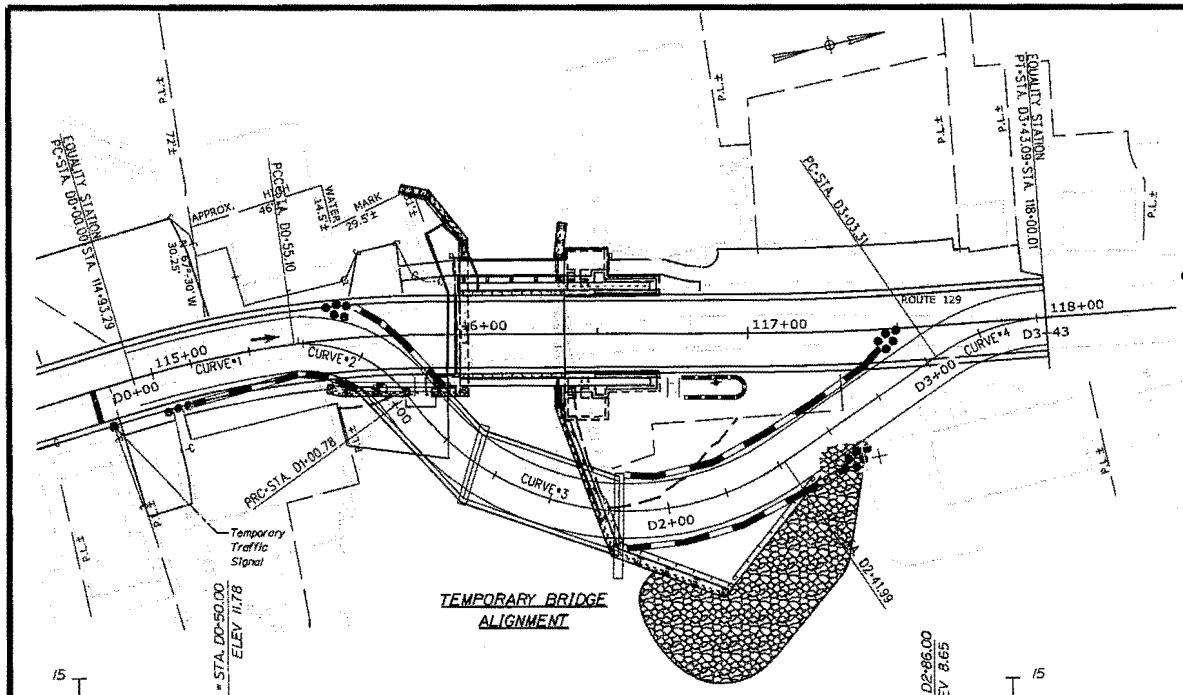
NOT FOR CONSTRUCTION

SHEET NUMBER 6 OF 141	SOUTH BRISTOL GUT BRIDGE PROFILE	PROJECT INFORMATION PROGRAM PROJECT MANAGER DESIGNER CONSULTANT PROJECT RESIDENT CONTRACTOR PROJECT COMPLETION DATE	SIGNATURE P.R. NUMBER DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION APPROVED / DATE COMMISSIONER: CHIEF ENGINEER:



GUT BRIDGE THE GUT SOUTH BRISTOL LINCOLN COUNTY					STATE OF MAINE DEPARTMENT OF TRANSPORTATION
BORING LOCATION PLAN		BY	DATE		BH-1675(000)X
	PROJ. MANAGER			SIGNATURE	BRIDGE NO. 2539
	DESIGN-DETAILED	L.KRUSINSKI / J.WHITE	JUN 2011	P.E. NUMBER	PIN 16750.00
	CHECKED-REVIEWED			DATE	BRIDGE PLANS
	DESIGN2-DETAILED2				
	DESIGN3-DETAILED3				
	REVISIONS 1				
	REVISIONS 2				
	REVISIONS 3				
	REVISIONS 4				
	FIELD CHANGES				

SHEET NUMBER 7 OF 141



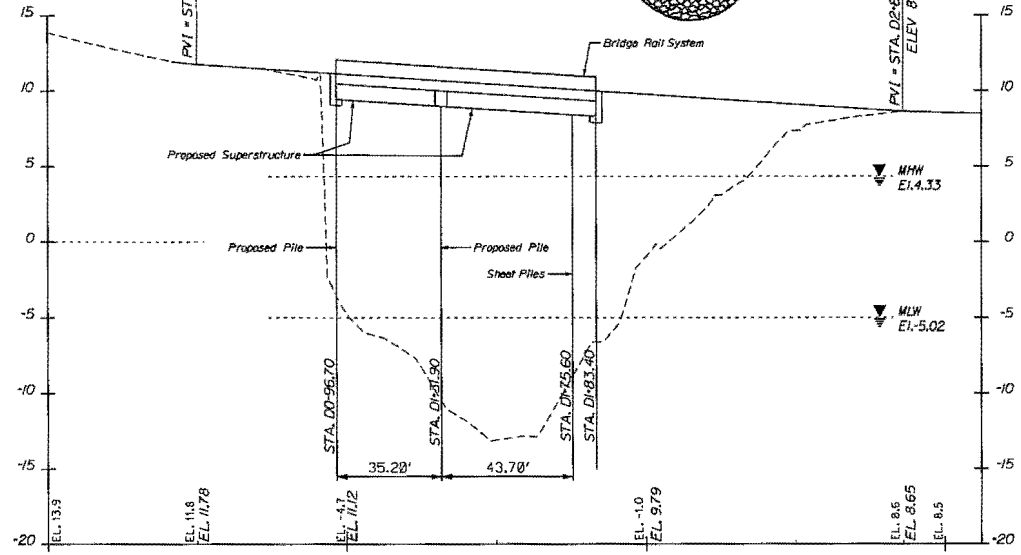
TEMPORARY BRIDGE ALIGNMENT

CURVE DATA #1
PI = 0+27.61
D = 16°22'12.80"
Δ = 9°01'12.09" Rt.
R = 350.00'
L = 55.10'
T = 27.607'
E = 1.087'

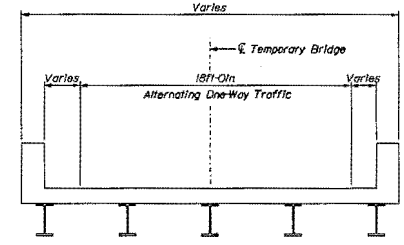
CURVE DATA #2
PI = 0+80.50
D = 136°25'06.68"
Δ = 62°19'03.64" Rt.
R = 42.00'
L = 45.681'
T = 25.395'
E = 7.081'

CURVE DATA #3
PI = 1+90.06
D = 62°57'44.62"
Δ = 88°54'28.82" Lt.
R = 91.00'
L = 141.208'
T = 89.282'
E = 36.484'

CURVE DATA #4
PI = 3+23.68
D = 76°23'39.74"
Δ = 30°23'10.41" Rt.
R = 75.00'
L = 39.775'
T = 20.367'
E = 2.716'



TEMPORARY BRIDGE PROFILE



TYPICAL TEMPORARY BRIDGE CROSS SECTION

1'-0 4' 8'
1/4" = 1'-0"

NOTES:

1. Temporary Traffic Signals for Stages 1, 2 and 2 shall be set according to MUTCD Part 4 "Highway Traffic Signals" Chapter 4G and Section 4D.20.

2. The structural design of the temporary detour is the responsibility of the Contractor. The profile shown is for illustrative purposes only.

NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED | DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION

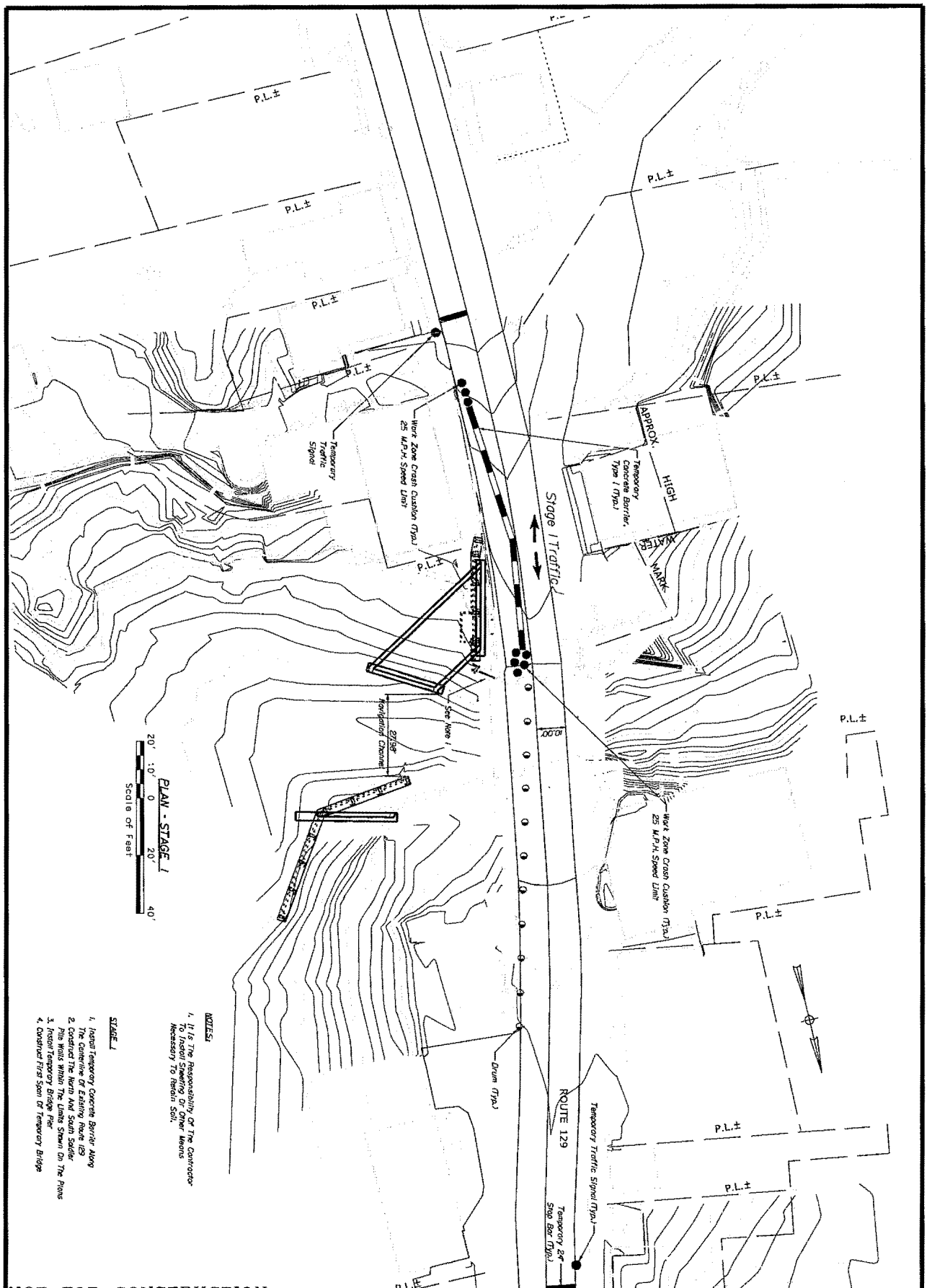
PROGRAM		SIGNATURE
PROJECT MANAGER		
DESIGNER		P.E. NUMBER
CONSULTANT		
PROJECT RESIDENT		DATE
CONTRACTOR		
PROJECT DESCRIPTION (MIS)		

SOUTH BRISTOL
GUT BRIDGE

TEMPORARY BRIDGE DETAILS

SHEET NUMBER
27
OF 141

Filename: ...\027_TEMPORARY_BRIDGE_PLAN_AND_PROFILE.dgn Division: BRIDGE Username: common Date:12/20/2013



NOTES:

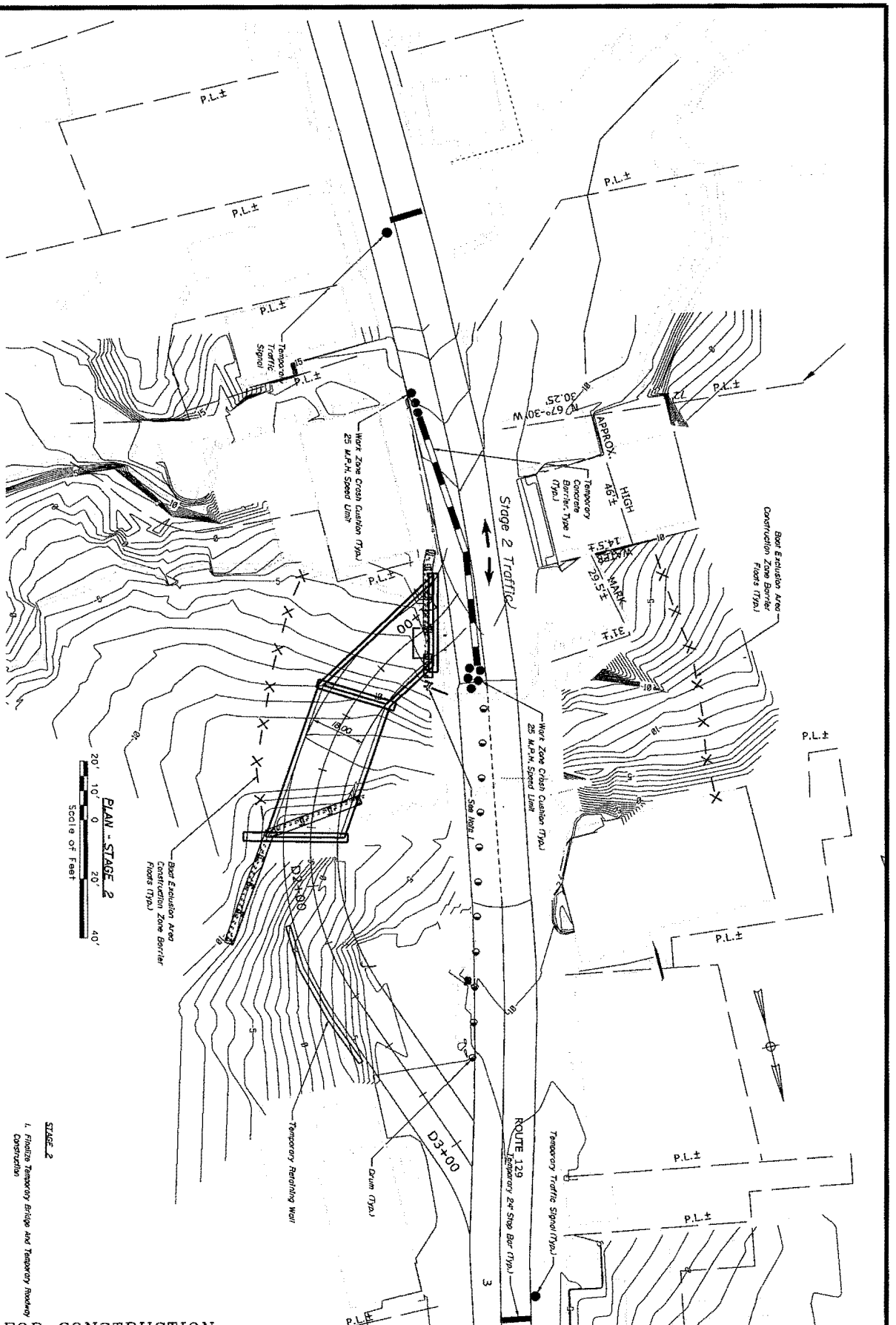
1. It Is The Responsibility Of The Contractor To Install Sheeting Or Other Means Necessary To Retain Soil.

STAGE I

1. Install Temporary Concrete Barrier Along The Centerline Of Existing Route 129
2. Construct The North And South Saddle Pits Walls Within The Limits Shown On The Plans
3. Install Temporary Bridge Pier
4. Construct First Span Of Temporary Bridge

NOT FOR CONSTRUCTION

SHEET NUMBER	SOUTH BRISTOL GUT BRIDGE	PROJECT INFORMATION		STATE OF MAINE DEPARTMENT OF TRANSPORTATION
28 OF 141	BRIDGE STAGING PLANS I	PROGRAM		APPROVED / DATE
		PROJECT MANAGER	SIGNATURE	COMMISSIONER:
		DESIGNER		CHIEF ENGINEER:
		CONSULTANT	P.E. NUMBER	
		PROJECT RESIDENT		
		CONTRACTOR	DATE	
		PROJECT COMPLETION DATE		

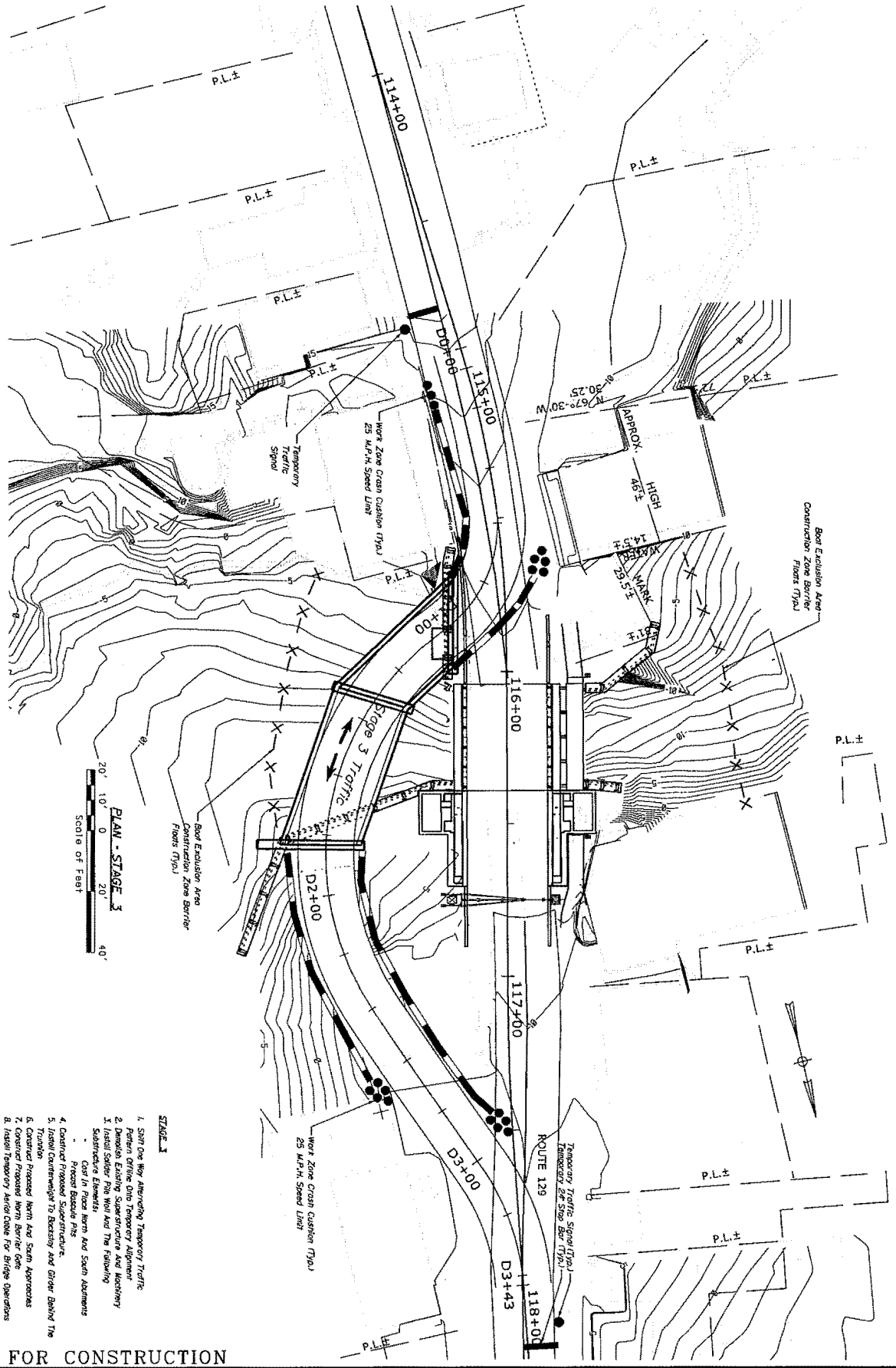


NOT FOR CONSTRUCTION

SHEET NUMBER 29 OF 141	SOUTH BRISTOL GUT BRIDGE BRIDGE STAGING PLANS II	PROJECT INFORMATION PROGRAM PROJECT MANAGER DESIGNER CONSULTANT PROJECT RESIDENT CONTRACTOR PROJECT COMPLETION DATE	SIGNATURE P.E. NUMBER DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED	DATE
COMMISSIONER:	
CHIEF ENGINEER:	



STAGE 3

1. Shift One Way Alternating Temporary Traffic Pattern Offline Onto Temporary Alignment
2. Demolish Existing Superstructure And Machinery Substructure Elements
3. Install Soldier Pile Wall And The Following
   - Cast In Place North And South Abutments
   - Precast Backsite Pits
4. Construct Proposed Superstructure.
5. Install Counterweight To Backstay And Girder Behind The Trunnion
6. Construct Proposed North And South Approaches
7. Construct Proposed North Barrier Gate
8. Install Temporary Aerial Cable For Bridge Operations
9. Install Proposed Machinery And Pit Access
10. Install North Traffic Signal.

NOT FOR CONSTRUCTION

SHEET NUMBER 30 OF 141

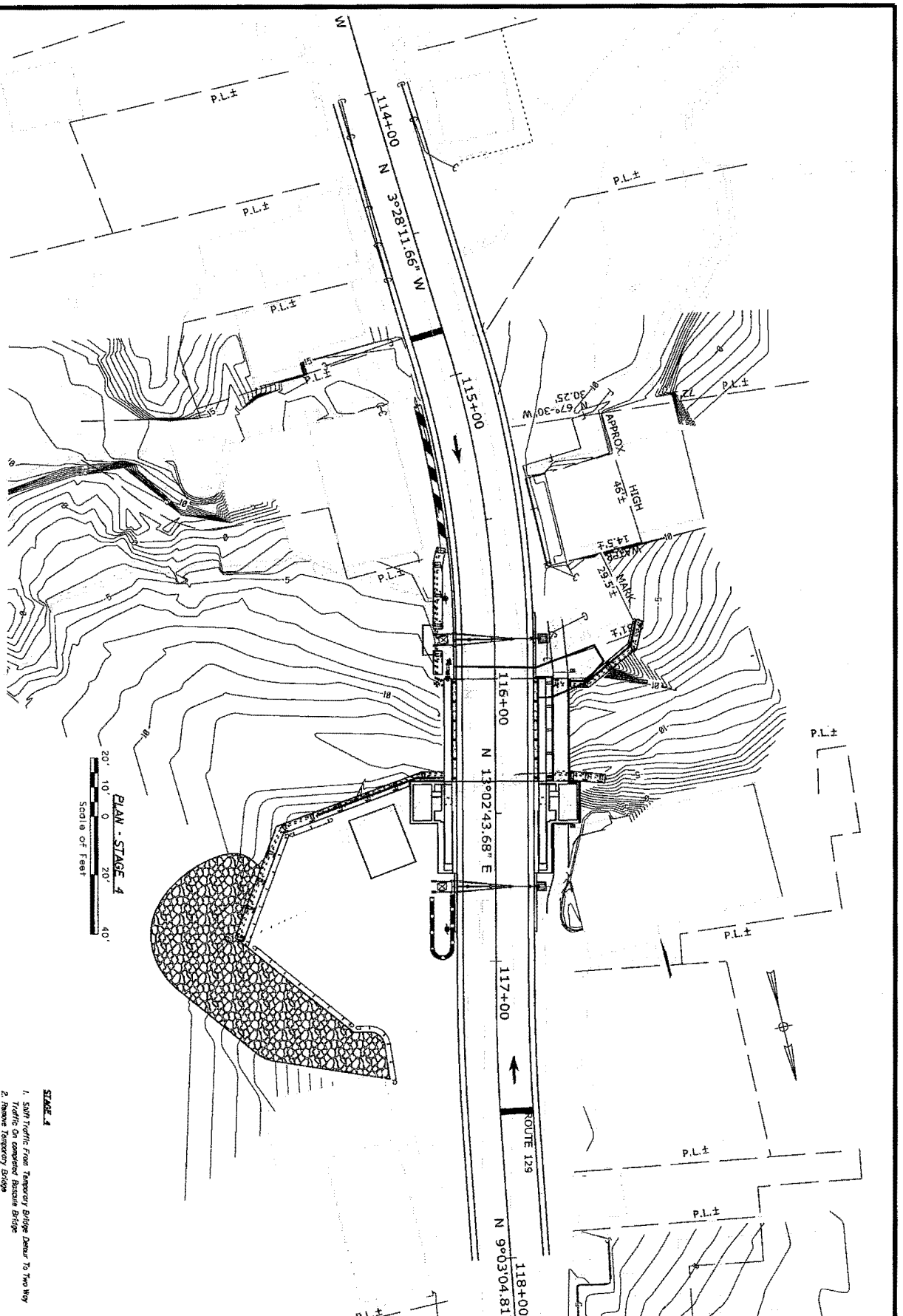
SOUTH BRISTOL
GUT BRIDGE

BRIDGE STAGING PLANS III

PROJECT INFORMATION		
PROGRAM		
PROJECT MANAGER		SIGNATURE
DESIGNER		
CONSULTANT		P.E. NUMBER
PROJECT RESIDENT		
CONTRACTOR		DATE
PROJECT COMPLETION DATE		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED	DATE
COMMISSIONER:	
CHIEF ENGINEER:	



STAGE 4

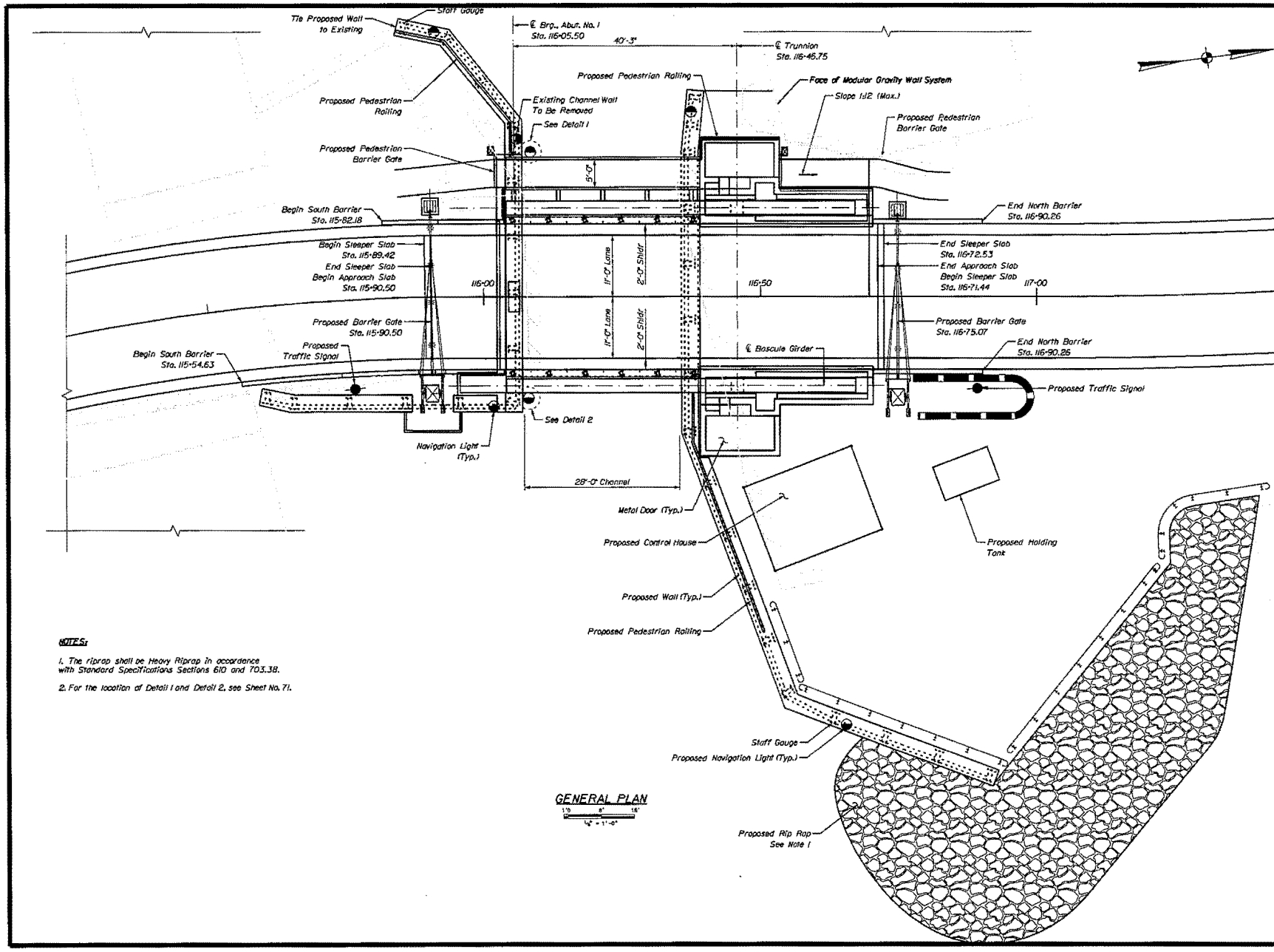
1. Shift Traffic From Temporary Bridge Detour To Two Way Traffic On completed Bascule Bridge
2. Remove Temporary Bridge
3. Construct South Berrito Gate And Install Span Lock.
4. Construct Control House.
5. Install South Traffic Signal.

NOT FOR CONSTRUCTION

SHEET NUMBER 31 OF 141	SOUTH BRISTOL GUT BRIDGE BRIDGE STAGING PLANS IV	PROJECT INFORMATION PROGRAM PROJECT MANAGER DESIGNER CONSULTANT PROJECT RESIDENT CONTRACTOR PROJECT COMPLETION DATE	SIGNATURE P.E. NUMBER DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED	DATE
COMMISSIONER:	
CHIEF ENGINEER:	



GENERAL PLAN

1/8" = 1'-0"

NOTES:

1. The riprap shall be Heavy Riprap in accordance with Standard Specifications Sections 610 and 703.38.
2. For the location of Detail 1 and Detail 2, see Sheet No. 71.

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

GENERAL BRIDGE PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION

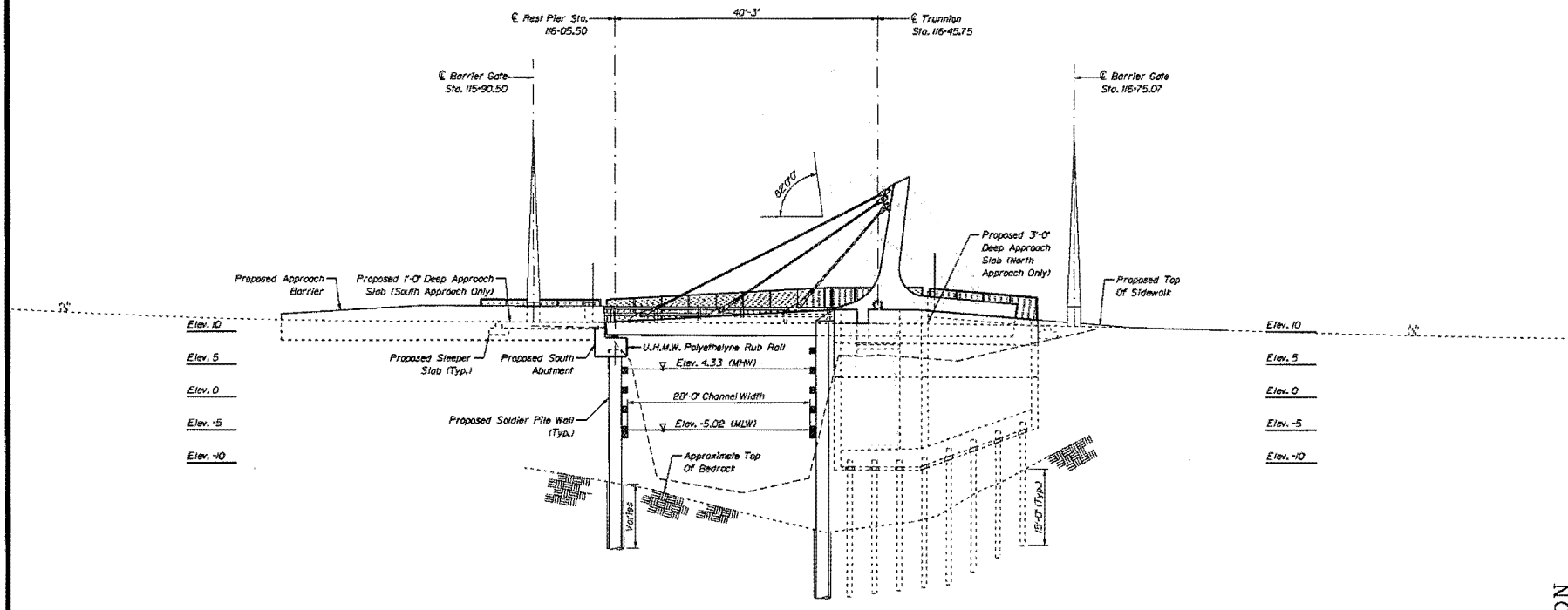
PROGRAM		
PROJECT MANAGER		SIGNATURE
DESIGNER		
CONSULTANT		P.E. NUMBER
PROJECT ENGINEER		
CONTRACTOR		DATE
PROJECT COMPLETION DATE		

SHEET NUMBER

32

OF 141

Filename: ...\10_Str\032_bridge_plan.dgn Division: BRIDGE Username: cranman Date:12/20/2013



GENERAL ELEVATION

1'0 6' 15'

1/8" = 1'-0"

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

GENERAL BRIDGE ELEVATION

SHEET NUMBER 33 OF 141

PROJECT INFORMATION

PROGRAM		
PROJECT MANAGER		
DESIGNER		
CONSULTANT	P.E. NUMBER	
PROJECT RESIDENT		
CONTRACTOR		DATE
FIRST CONSTRUCTION DATE		

SIGNATURE

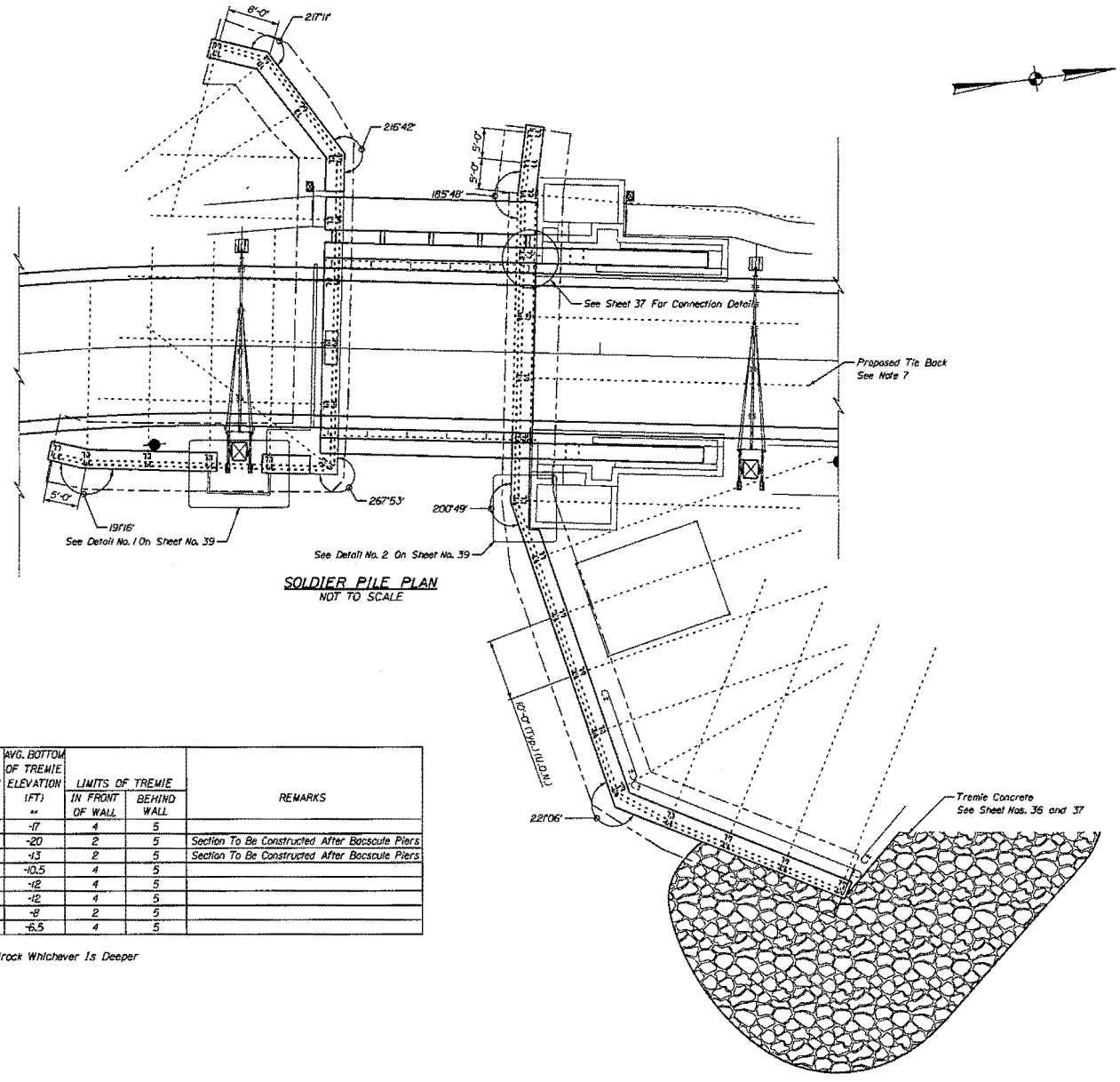
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED DATE

COMMISSIONER:

CHIEF ENGINEER:

Filename: ...\10_Str\033_bridge_elev.dgn Division: BRIDGE Username: cameron Date: 12/20/2013



SOLDIER PILE PLAN
NOT TO SCALE

NOTES:

1. Construct Permanent Anchored Wall System (Soldier Pile And Lagging Wall With Tiebacks) At The Limits Shown On This Sheet.
2. Construct Permanent Anchored Wall System In Accordance With The Project Specifications And The Contract Drawings.
3. Construction of Permanent Anchored Wall System Shall Be Coordinated With The General Construction Sequence Of Bridge Construction And In Compliance With Project Environmental Permits And/Or Restrictions.
4. Excavation Or Opening-Up Of The Entire Area Designated For The Permanent Anchored Wall System at once is not permitted.
5. Temporary Cofferdams Are Anticipated To Facilitate Construction Of The Permanent Anchored Wall System.
6. Exercise Caution During Permanent Anchored Wall System Construction To Prevent Undermining The Foundations Supporting Existing Adjacent Structures.
7. For Tie Back Details, See Sheet No. 38.

ABUTMENT	SECTION (See Sheet 37)	BEGIN LOCATION / LIMITS		END LOCATION / LIMITS		TOP OF TREMIE ELEVATION (FT)	AVG. BOTTOM OF TREMIE ELEVATION (FT) **	LIMITS OF TREMIE		REMARKS
		Station	Offset	Station	Offset			IN FRONT OF WALL	BEHIND WALL	
North	1	116+91.45	85.65	116+40.66	33.28	-10	-17	4	5	
	2	116+40.66	33.28	116+37.18	-15.88	-12.5	-20	2	5	Section To Be Constructed After Bacscule Piers
	3	116+37.18	-15.88	116+37.18	-25.88	-11.5	-13	2	5	Section To Be Constructed After Bacscule Piers
	4	116+37.18	-25.88	116+38.18	-35.73	-10	-10.5	4	5	
South	1	115+59.22	16.35	115+85.33	18.88	-5	-12	4	5	
	2	115+85.33	18.88	116+05.22	18.86	-6	-12	4	5	
	3	116+05.22	18.86	116+05.45	-20.81	-8	-8	2	5	
	4	116+05.45	-20.81	115+86.63	-48.22	-6	-6.5	4	5	

** Excavate To The Elevation Shown Or To The Top Of Bedrock Whichever Is Deeper

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE
PERMANENT ANCHORED WALL
LIMITS

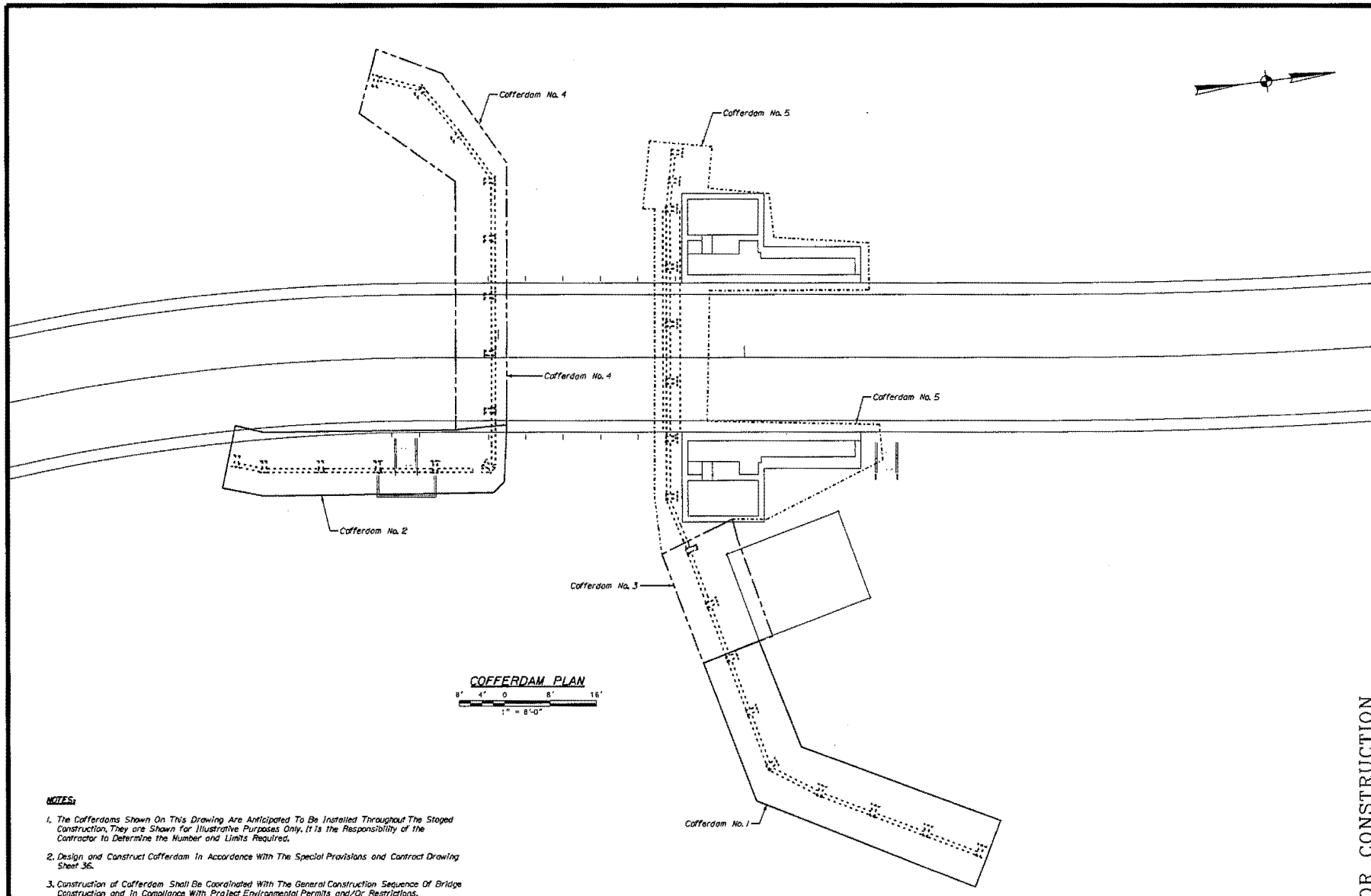
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER:
CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM		SIGNATURE
PROJECT MANAGER		
DESIGNER		P.E. NUMBER
CONSULTANT		
PROJECT RESIDENT		
CONTRACTOR		DATE
PROJECT COMPLETION DATE		

SHEET NUMBER
34
OF 141

Filename: ...\034_soldier_pile_plan.dgn Division: BRIDGE Username: common Date: 12/20/2013



COFFERDAM PLAN

8' 4' 0 8' 16'

1" = 8'-0"

NOTES:

1. The Cofferdams Shown On This Drawing Are Anticipated To Be Installed Throughout The Staged Construction, They are Shown for Illustrative Purposes Only. It Is the Responsibility of the Contractor to Determine the Number and Limits Required.
2. Design and Construct Cofferdam In Accordance With The Special Provisions and Contract Drawing Sheet 36.
3. Construction of Cofferdam Shall Be Coordinated With The General Construction Sequence Of Bridge Construction and In Compliance With Project Environmental Permits and/Or Restrictions.
4. Exercise Caution During Cofferdam Installation To Prevent Undermining the Foundations Supporting Existing Adjacent Structures.

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

PERMANENT ANCHORED WALL
COFFERDAM LAYOUT

PROJECT INFORMATION

PROGRAM		SIGNATURE
PROJECT MANAGER		
DESIGNER		P.E. NUMBER
CONSULTANT		
PROJECT RESIDENT		
CONTRACTOR		DATE
PROJECT COMPLETION DATE		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

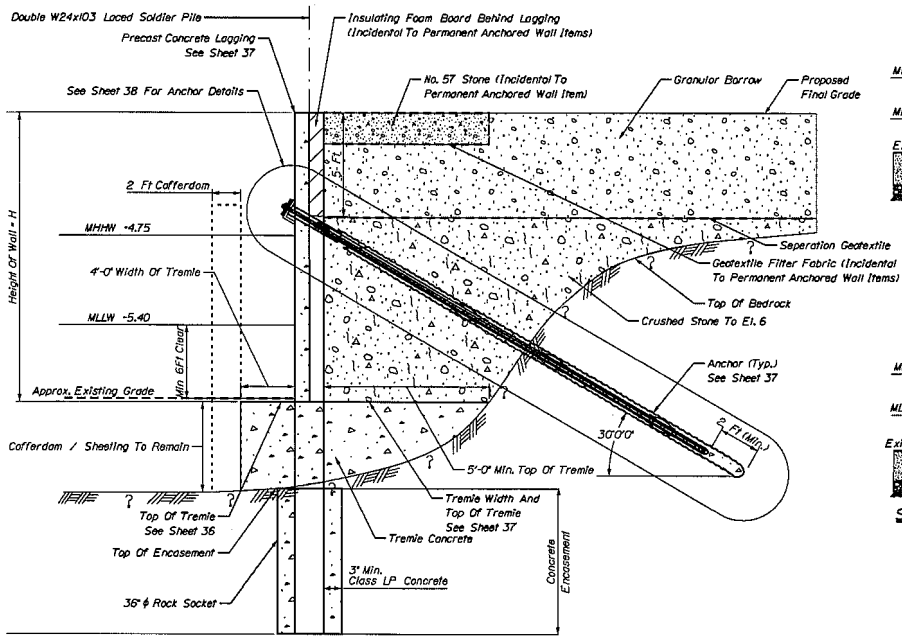
APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

SHEET NUMBER
35
OF 141

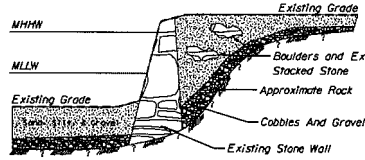
Filename: ...\10_Str\035_cofferdam_plan.dgn Division: BRIDGE Username: cannon Date: 12/20/2013



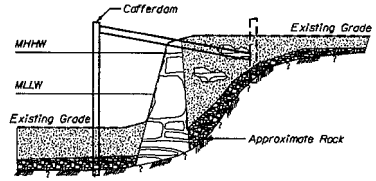
TYPICAL SECTION
(N.T.S)

*** See Sheet 37 For Permanent Anchored Wall Elements Details

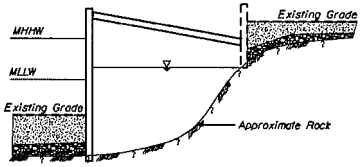
CONCEPTUAL CONSTRUCTION SEQUENCE



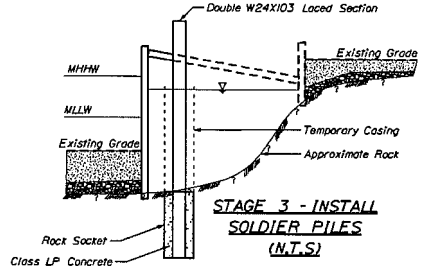
STAGE 0 - EXISTING CONDITION
(N.T.S)



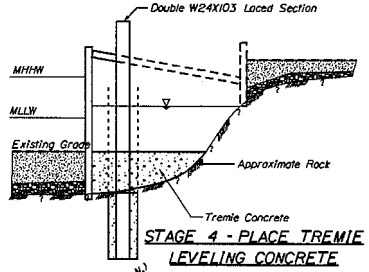
STAGE 1 - INSTALL TEMPORARY COFFERDAM
(N.T.S)



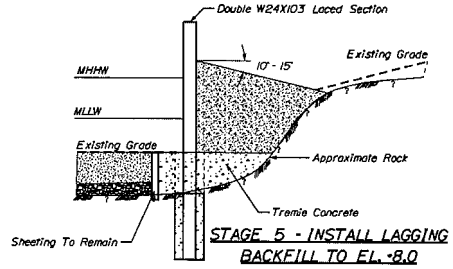
STAGE 2 - WET EXCAVATE TO BEDROCK
(N.T.S)



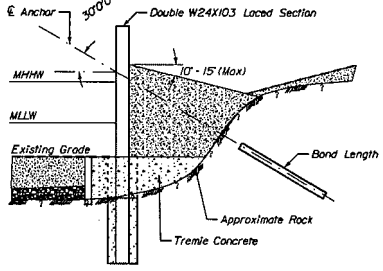
STAGE 3 - INSTALL SOLDIER PILES
(N.T.S)



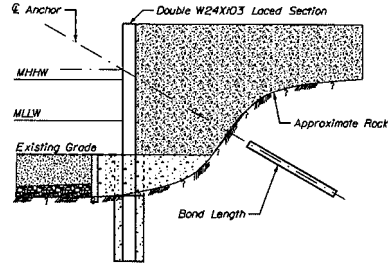
STAGE 4 - PLACE TREMIE LEVELING CONCRETE
(N.T.S)



STAGE 5 - INSTALL LAGGING BACKFILL TO EL. -8.0
(N.T.S)



STAGE 6 - INSTALL AND TEST ANCHORS
(N.T.S)



STAGE 7 - BACKFILL TO FINAL GRADE
(N.T.S)

CONSTRUCTION SEQUENCE:

1. Install Temporary Cofferdam As Per Approved Working Drawings.
2. Remove Overburden Material To The Top Of Bedrock And To The Limits Shown On Drawing Sheet No. 36.
3. Use A Temporary Casing To Install Soldier Pile Per Sheet Nos. 36-38.
4. Place Tremie Concrete To The Elevation And The Limits Shown On Sheet Nos. 34 And 36.
5. Cut Temporary Casing To Top Of Tremie Concrete And Install Precast Concete Lagging To Final Elevation.
6. Backfill Behind Lagging To Elevation -8.0 & Maintain A Backslope Of 10 to 15 Degrees And Install Rock Anchors As Per Sheet No. 38.
7. Backfill Behind Remaining Portion Of Logging To The Final Elevation.

NOTES:

1. For Details On Permanent Anchored Wall, See Sheet Nos 34-39.
2. Revision To The Above Shown Construction Staging Of The Permanent Anchored Wall System Is Permitted.
3. Permanent Anchored Wall Construction Staging Is Subject To Engineer Review and Approval.
4. Temporary Cofferdam Shall Be Designed By The Contractor And Submitted To The Engineer For Review And Approval.
5. After The Construction Of The Permanent Anchored Wall System, The Temporary Sheet Shall Be Cutoff To 2 Feet Below Mudline And Abandoned.

NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER:
CHIEF ENGINEER:

PROJECT INFORMATION

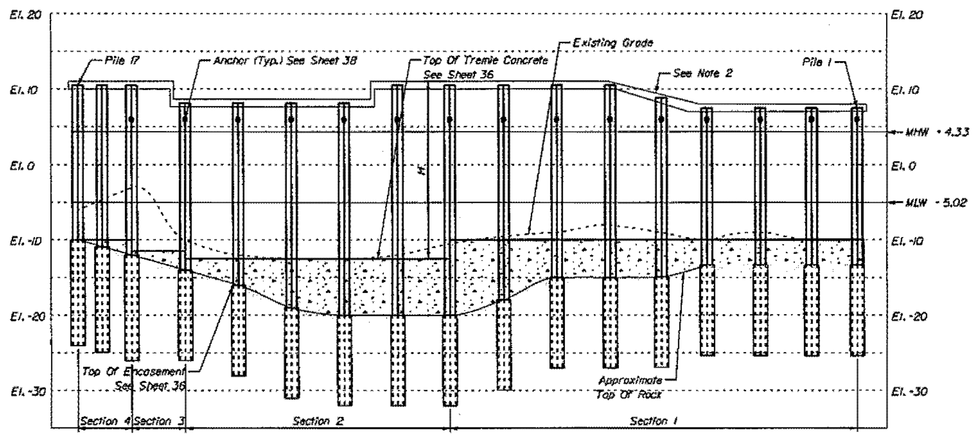
		SIGNATURE	
PROGRAM			
PROJECT MANAGER			
DESIGNER		P.E. NUMBER	
CORRECTIAT			
PROJECT RESIDENT			
CONTRACTOR		DATE	
PROJECT COMPLETION DATE			

SOUTH BRISTOL
GUT BRIDGE

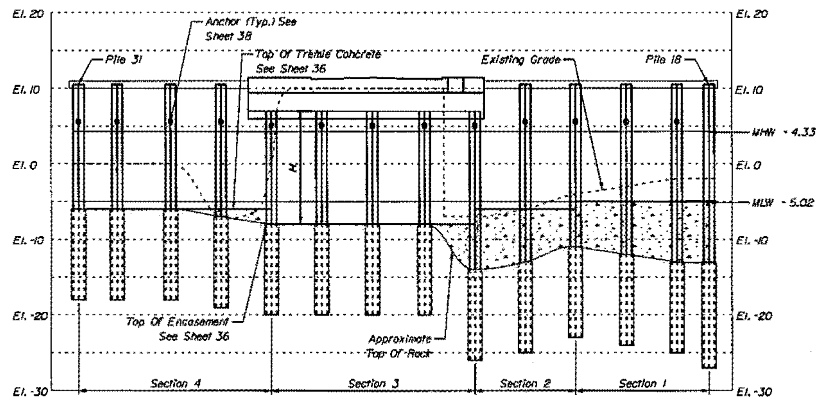
PERMANENT ANCHORED WALL
SECTION AND PROPOSED STAGING

SHEET NUMBER
36
OF 141

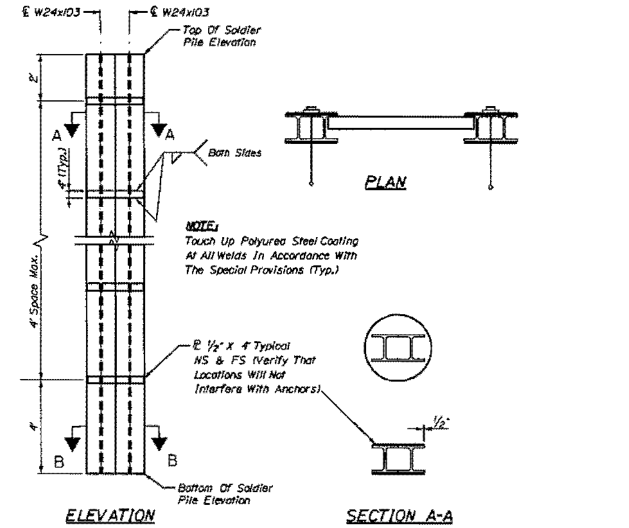
Filename: ...\036_soldier_pile_staging.dgn Division: BRIDGE Username: common Date:12/20/2013



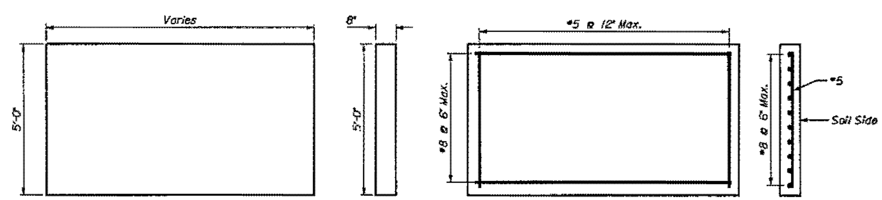
NORTH ABUTMENT DEVELOPED ELEVATION
VIEW NORTH
N.T.S



SOUTH ABUTMENT DEVELOPED ELEVATION
VIEW NORTH
N.T.S



TYPICAL SOLDIER PILE LACING DETAILS
(SOLDIER PILE WALL)
N.T.S.



SOLDIER PILE LAGGING DETAILS
N.T.S.

DESIGN SPECIFICATIONS:

1. AASHTO LRFD Bridge Design Specification For Service And Strength Limit States.
2. Post Tensioning Institute "Recommendations For Prestressed Rock And Soil Anchors" Latest Edition.

CONSTRUCTION SPECIFICATIONS:

1. Latest Edition Of MaineDOT Standard Specification For Road And Bridge Construction, As Modified By The Special Provisions.
2. Post Tensioning Institute "Recommendations For Prestressed Rock And Soil Anchors" Latest Edition.

NOTES:

1. Refer To Sheet 34 For Wall Section Limit Stations.
2. Soldier Pile Wall Pile Cap Requires A Minimum 6" Embedment Of The Soldier Pile And A Minimum Of 3" Of Cover At The Top.

Filename: ...\037_soldier_pile_elev.dgn
Division: BRIDGE
Username: common
Date:12/20/2013

NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

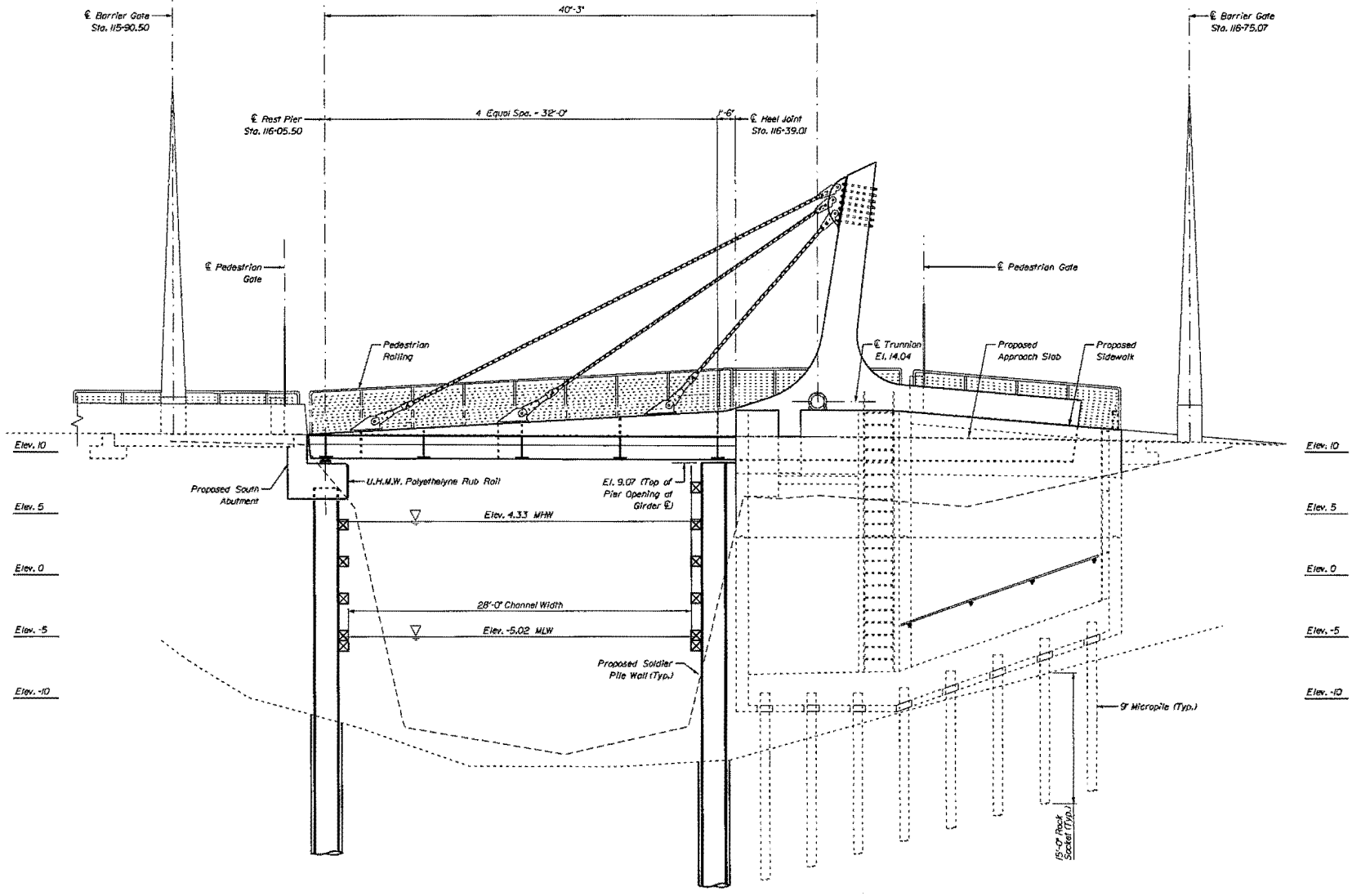
APPROVED	DATE
COMMISSIONER:	
CHIEF ENGINEER:	

PROJECT INFORMATION	SIGNATURE	P.E. NUMBER	DATE
PROGRAM			
PROJECT MANAGER			
DESIGNER			
CONSULTANT			
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

SOUTH BRISTOL
GUT BRIDGE

PERMANENT ANCHORED WALL
ELEVATION AND PROPOSED STAGING

SHEET NUMBER
37
OF 141



LONGITUDINAL SECTION (WEST BASCULE GIRDER)

1'0 4' 8'

1/4" = 1'-0"

NOT FOR CONSTRUCTION

SOUTH BRISTOL
GUT BRIDGE

BASCULE SPAN
LONGITUDINAL SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE

COMMISSIONER:

CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM		SIGNATURE
PROJECT MANAGER		
DESIGNER		P.E. NUMBER
CONSULTANT		
PROJECT RESIDENT		
CONTRACTOR		DATE
PROJECT COMPLETION DATE		

SHEET NUMBER

59

OF 141

Filename: ...\059_bascule_span_long_section.dgn Division: BRIDGE Username: common Date: 12/20/2013