DECEVE MAR 07 2019 By(207)8465	TOWN OF Y 200 Main Yarmouth, Ma 2401 WWW.YARMO	n Street aine 04096	<u>: (207)846-2438</u>
	SHORELAND ZONING	PERMIT APPLICATI	on A(C
PERMIT #		E FEE AMO	
<sub>Date:</sub> 3/6/19	Zoning District MDR	4251	Ext
APPLICANT NAM	ME: Steven Johnson Main Street, Yarmouth, Mai	PHONE NO:	207-846-2401
OWNER (other than NAME: Town of V	n applicant) Yarmouth	PHONE NO:	207-846-2401
ADDRESS: 200	Main Street, Yarmouth, Ma	ine 04096 <sub>e-mail</sub> sjohns	son@yarmouth.me.us
CONTRACTOR NAME: TBD	s	PHONE NO:	TBD
MAILING ADDRESS: TBD	)	<sub>e-mail</sub> TBD	)
PROPERTY LOCATION: 111	East Elm Street		

Applicant must also include a narrative of the project including a description of all proposed construction, (E.G. Land clearing, road building, septic systems and wells – Please note: A site plan sketch is required on a separate sheet of paper no less than 11" x 17" or greater than 24"x36"

Please note: Plan set must be bound (not rolled) with a cover sheet and index.

Proposed use of project: Replacement of existing pedestrian bridge
Estimated cost of construction \$90,000
Lot area (sq. ft.) 890,366
Frontage on Road (FT) 167
SQ. FT. of lot to be covered by non-vegetated surfaces 297
Elevation above 100 YR Flood Plain 2.85
Frontage on water body (FT.) 8
Height of proposed structure Varies

Page 1 of 4

Existing use of property Municipal Park

Proposed use of property Municipal Park

- *Note:* NEXT Questions apply only to expansions of portions of existing structures that are less than the required setback.
  - A) Total building footprint area of portion of structure that is less than required setback as of 1/1/89: N/A \_\_\_\_\_\_SQ.FT.
  - B) Actual shore setback of existing structure proposed for expansion (measured as required in SOD, e.g.: Highest Annual Tide; Upland Edge of Coastal Wetland; Top of Bank (RP); Normal High Water Line of rivers and streams; as applicable): N/A
  - C) Building footprint area of expansions of portion of structure that is less that required setback from 1/1/89 to present: N/A SQ.FT.
  - D) Building footprint area of proposed expansion of portion of structure that is less than required setback: <u>N/A</u>\_\_\_\_\_SQ.FT.
  - E) % Increase of building footprint of previous and proposed expansions of portion of structure that is less than required setback since 1/1/89: % increase = ((C+D)x100)/A = N/A %
  - F) Floor Area and Market Value of Structure prior to improvements: (a) <u>Area: N/A</u> <u>Value: N/A</u>. Floor Area and Market Value of portions of Structure removed, damaged or destroyed: (b) <u>Area: N/A</u> <u>Value: N/A</u>. If the floor area or market value of (b) exceeds 50% of the area or value of (a), then the Relocation provisions of Article IV.R.5.a.(3) and (4) shall apply. Note: A value appraisal may be required or submitted in close cases where the applicant asserts that that 50% trigger and relocation assessment provision is not met. Any plan revisions after initial approvals to replace rather than renovate building components (foundations, framing, etc.) shall be required to recalculate the extent of removal, damage or destruction relative to retained structure.
  - Please provide a site plan to include lot lines, area to be cleared of trees and other vegetation; the exact position of proposed structures, including decks, porches, and out buildings with accurate setback distances form the shoreline, side and rear property lines; the location of proposed wells, septic systems, and driveways; and areas and amounts to be filled or graded. If the proposal is for the expansion of an existing structure, please distinguish between the existing structure and the proposed expansion.
  - □ Note: For all projects involving filling, grading, or other soil disturbance you must provide a soil erosion control plan describing the measures to be taken to stabilize disturbed areas before, during and after construction.
  - Draw a simple sketch showing both the existing and proposed structures with dimensions.

# SHORELAND ZONING PERMIT CHECKLIST

Please note that this checklist is intended to help applicants identify major submittal components but it is the applicant's responsibility to review the SOD/RP provisions outlined in Chapter 701 of the Yarmouth Code and provide all required information as well as conform to all design components. Copies of Chapter 701 are available at the Yarmouth Town Hall or can be downloaded on the Town website which is <u>www.yarmouth.me.us</u>.

- □ Complete Shoreland Zoning Permit application including signatures of property owners and agents.
- □ Appropriate fee.
- □ Square footage of lot area within the 250' SOD
- □ Square footage and % of lot covered by non-vegetated surfaces within the SOD
- □ Square footage and % of cleared area within lot area within the SOD
- Delineation of 75' setback from upland edge of the coastal wetland
- □ Delineation of 250' SOD line from upland edge of the coastal wetland.
- Delineation of Resource Protection District
- □ Height of any proposed structures as measured between the mean original grade at the downhill side of the structure and the highest point of the structure
- □ Building elevations of any proposed structures as viewed from side and rear lot lines
- □ % Increase of expansions of portion of structure which is less than the required setback (if applicable)
- Floor Area and Market Value of Structure prior to improvements: (a) <u>Area:</u>
  <u>Value:</u> Floor Area and Market Value of portions of Structure removed, damaged or destroyed: (b) <u>Area:</u> <u>Value:</u>
- □ Elevation of lowest finished floor to 100 year flood elevation
- Evidence of submission of the application to the Maine Historic Preservation Commission (MHPC) at least twenty (20) days prior to the Planning Board meeting as required in Article IV.R.O
- □ Copy of additional permit(s) if applicable:
  - Planning Board (e.g. Subdivision, Site Plan Review)
  - Board of Appeals
  - Flood Hazard
  - Exterior plumbing permit (Approved HHE 200 Application Form)
  - Interior plumbing permit
  - DEP permit (Site Location, Natural Resources Protection Act)
  - Army Corps of Engineers Permit (e.g. Sec. 404 of Clean Waters Act)
- Please circle all habitat types, marine organisms and shoreline elements present: (Sand beach) (boulder/cobble beach) (sand flat) (mixed coarse & fines) (salt marsh)
   (ledge) (rocky shore) (mudflat) (sediment depth if known) (Bluff/bank) (Mussels) (clams) (marine worms) (rockweed) (eelgrass) (lobsters) (other\_\_\_\_\_)
- □ Signs of intertidal erosion? (Yes) (no)
- □ Energy: (protected) (semi-protected) (partially exposed) (exposed)
- □ Copy of deed
- □ Soil erosion control plan
- □ Photographs
- □ Plan view

NOTE: Applicant is advised to consult with the CEO and appropriate state and federal agencies to determine whether additional permits, approvals, and reviews are required.

# **CONDITIONS OF APPROVAL**

The property shown on this plan may be developed and used only as depicted on this approved plan. All elements and features of the plan and all representations made by the applicant concerning the development and use of the property which appear in the record of the Planning Board proceedings are conditions of approval. No change from the conditions of approval is permitted unless an amended plan is first submitted to and approved by the Planning Board.

I certify that all information given in this application is accurate. All proposed uses shall be in conformance with this application and the Town of Yarmouth Shoreland Regulations in the Zoning Ordinance. I agree to future inspections by the Code Enforcement Officer / Planning Director / Planning Board members (as applicable) at reasonable hours and with advance notice.

"I authorize appropriate staff within the Yarmouth Planning Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to collect facts pertaining to my application."

Applicant SignatureSteven S. Johnson	Date 3-6-19
Agent Signature(if applicable)	Date
Code Enforcement Officer	
DATE OF APPROVAL / DENIAL OF APPLICATION	



BAKER DESIGN CONSULTANTS Civil, Marine and Structural Engineering

March 3, 2019

Maine DEP Southern Maine Regional Office 312 Canco Road Portland, ME 04103

Subject: NRPA Permit by Rule Application; East Elm Street Footbridge, 120 East Elm St, Yarmouth

Dear Regulatory Representative,

I have enclosed an NRPA Permit by Rule application and fee for the East Elm Street Footbridge Reconstruction project located in Yarmouth. The project is being submitted under Permit by Rule Section 4.

# Narrative of the Work Activity:

As shown on the drawings, the project involves removal and replacement of the existing aging footbridge. The footbridge crosses a non-tidal auxiliary channel of the Royal River. The intention is to place a new bridge superstructure on widened existing abutments with no disturbance to the sewer main that crosses at the same location or to the channel below. A detailed scope of work is shown on the drawings in Attachment E along with typical sections and details of the proposed work.

Support Documents (with page reference):

PERMIT BY RULE FORM					
	ATTACHMENT A	AGENT AUTHORIZATION	3		
	ATTACHMENT B	USGS MAP PROJECT LOCATION MAP	4		
	ATTACHMENT C	SITE PHOTOS	5		
	ATTACHMENT D	PROJECT PLANS	7		

Please contact me with any questions regarding this application.

Sincerely,

BAKER DESIGN CONSULTANTS, Inc.

Burney Baler

Barney Baker, PE - Principal Engineer

### JN: 17-29

CC: Steve Johnson, PE - Yarmouth Town Engineer

04/0 <mark>6/2017</mark>		DEPARI PERMIT B DEP Regulation, N	YRUL	E	ΝΟΤ		DN F	ORI		
<u>^</u>		P	LEASE TYP		RINTIN	BLACK INK ONLY				alf of Owner)
APPLICANT INFORMATION (Owne Name: Town of Yarmouth, Attn: 5			nson	Name		1		Design Cor		
	61 (MARCHARD) 620)	lain St.			Mailin	g Address:			ice Road	
	Yarmo				Town			reep		
	0. #8938352	04096			State			Maine 04032		
Daytime Phone #:		846-2401				me Phone #:			846-9724	
	· · ·	son@yarmou	uth.me.u	ls	Email	Address:				nconsulants.com
	-,	0/		_	INFOR	MATION			<u> </u>	
Part of a larger project? (check one):	□ Yes ■ No	After the Fact? (check one):	□ Yes ■ No			olves work belov vater? (check or		IYes INo	Name of waterbody:	Royal River Auxiliary channel
Project Town:	Yarm	outh	Project (Addres		ion 1	20 East El	m St		Map & Lot Number:	42-51
Brief Project Description:	Repla	acement of c			g foot	bridge				
Brief Directions	Headi	ng north on l	JS Hwy	1, e)	kit ont	o Main St a	nd tu	rn rigi	nt. Turn left	onto E Elm St.
PERMIT BY RULE (PBI requirements for Permit of the standards in the	R) SECT By Rule	(PBR) under DE	least one P Rules, C	): I an	n filing i	notice of my inte	ent to c	arry ou	t work which m	eets the
Sec. (2) Act. Adj. to P	rotected	Natural Res.	Sec.(1				2.1	a		Permit Extension
Sec. (3) Intake Pipes Sec. (4) Replacement	of Struc	tures				sportation Facil.	·	22	(18) Maintenano (19) Activities in	
Sec. (5) REPEALED			└ Sec. (*	13) F&	W Crea	tion/Enhance/Wa	ater	sig	nificant vernal	pool habitat
Sec. (6) Movement of		r Vegetation			provem					ocated in/on/over
Sec. (7) Outfall Pipes		n		1050	PEALE	u at Ramps			h or moderate	value inland lg bird habitat or
Sec. (9) Utility Crossi						and Dune Projec	ts			& roosting areas
NOTE: Municipal permi may be required for st Project Office for more	ream cr	ossings and for								
NOTIF		N FORMS CANN								
PBR Section are	outline	d in Chapter 3	05 and m	ay di	ffer de	epending on t	the Se	ection	you are sub	mitting under.
Attach a check for PBR Notifications										
Attach a location										
Attach Proof of Legal Name if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at http://icrs.informe.org/nei-sos-										
icrs/ICRS?MainPa										identity.
I authorize staff of the	Depart	tments of Enviro	onmental	Prote	ection,	Inland Fisheri	es&V	Vildlife	and Marine	Resources to
access the project I also understand that								he Dei	nartment unle	ass the
Department approv	ves or d	lenies the PBR	prior to th	hat da	ate.					
By signing this Notific that the applicant has										ards in the rule and
Signature of Agent or			rney J			<b>,</b>	Date		3.2019	
Applicant: Keep a copy as a record	l of perr					certified mail or	hand c	-		ant of
Environmental Protectio of the DEP's receipt of r years. Work carried ot AUGUSTA DEP 17 STATE HOUSE S' AUGUSTA, ME 0433	n at the otification It in vio TATION	appropriate reg on. No further au lation of any sta PORTLA 312 CAN	ional offic thorization	e list by Di subjec	ed bek EP will ct to er	ow. The DEP w be issued after i	<i>i</i> ill seni receipt <b>ion</b> . D	d a cop of notic P 1	y to the Town (	Office as evidence e valid for two DEP RIVE
(207)287-7688		(207)822				(207)941-4570		. (2	207)764-0477	11
OFFICE USE ONLY	Ck.i	<b>H</b>	Date			Staff Acc.		Staff Def.		After
121. <del>20</del> 20-2010						Date		Date		Photos

NRPA Permit by Rule Application

# ATTACHMENT A AGENT AUTHORIZATION

Steve S. Johnson, PE – Town Engineer TOWN OF YARMOUTH 200 Main Street Yarmouth, Maine 04096

By signing below, I authorize Barney Baker, PE of Baker Design Consultants to act as agent for the purpose of permit communication on applications filed for the Elm Street Footbridge Replacement (Tax Map 42, Lot 51).

Signed: TOWN ENGINEER VARMANT Date:

# ATTACHMENT B USGS MAP PROJECT LOCATION MAP



SECTION OF USGS TOPO MAP

# ATTACHMENT C SITE PHOTOS



Aerial Photo of Site – Google Earth, 2019



View of existing pedestrian bridge, taken on 5/24/18.



View of sewer main underneath footbridge, taken 7/6/17.



View of deteriorating bridge conditions, taken 7/6/17.

# ATTACHMENT D PROJECT PLANS

The following plans are provided:

- SHEET G-1 COVER SHEET
- SHEET G-2 NOTES & SCHEDULES
- SHEET C-1 EXISTING BRIDGE PLAN & PROFILE
- SHEET C-2 PROPOSED BRIDGE PLAN & PROFILE
- SHEET S-1 TYPICAL BRIDGE SECTION
- SHEET S-2 ABUTMENT DETAILS

# EAST ELM STREET FOOTBRIDGE

# YARMOUTH, MAINE PROJECT NO. 17-29



INDEX	OF	SHEETS
Sheet no. G-1 G-2	COVE	RIPTION ERSHEET S & SCHEDULES
C-1 C-2	EXIS	is & schedules Ting Bridge Plan & Pro Posed Bridge Plan & Pr
S-1 S-2		Cal Bridge Sections Iment Details



#### GENERAL NOTES

- 1. THE CONTRACTOR SHALL BE GOVERNED BY THE CONSTRUCTION SAFETY RULES AS ADOPTED BY THE STATE BOARD OF CONSTRUCTION SAFETY AUGUSTA, MAINE
- 2. THE PROJECT IS SUBJECT TO THE SAFETY AND HEALTH REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AS PROMULGATED BY THE US DEPARTMENT OF LABOR.
- 3. REFER TO SHEET C-2 FOR LIMITS OF EXISTING BRIDGE AND CLEARING NECESSARY TO ACCOMMODATE NEW BRIDGE. REINSTATE DISTURBED SURFACES IN ACCORDANCE WITH PLANS OR AS DIRECTED BY THE TOWN OR THEIR REPRESENTATIVE AS FOLLOWS:
  - ALL PAVED AREAS DISTURBED SHALL BE REINSTATED WITH BITUMINOUS PAVEMENT IN ACCORDANCE WITH MAINE DOT STANDARDS.
  - b. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED.
- 4. THE CONTRACTOR SHALL COMPLY WITH FEDERAL, STATE AND LOCAL REGULATORY REQUIREMENTS.
- 5. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED AT A LOCATION TO BE DESIGNATED BY THE OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFFSITE.

#### PROJECT COORDINATION

- 1. ELM STREET IS AN ACTIVE CROSS TOWN CONNECTOR FOR VEHICLES, BICYCLES AND PEDESTRIANS. THE BRIDGE IS ALSO ADJACENT TO PUBLIC FACILITIES THAT INCLUDE THE ROYAL RIVER PARK AND THE YARMOUTH HISTORICAL SOCIETY. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A MAINTENANCE OF TRAFFIC CONTROL PLAN (TCP) IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) THAT SHALL INCLUDE PROVISIONS (FLAGGERS, SIGNAGE, NOTIFICATIONS, ETC.) FOR:
  - a. VEHICLE ACCESS ON ELM STREET THROUGHOUT THE PROJECT WITH THE UNDERSTANDING THAT TEMPORARY LANE CLOSURE MAY BE REQUIRED WHEN THE NEW BRIDGE IS LIFTED INTO POSITION.
  - b. AN ALTERNATE ROUTE FOR PEDESTRIAN TRAFFIC WHEN THE PEDESTRIAN BRIDGE IS NOT AVAILABLE IN ACCORDANCE WITH THE CHAPTER 6D. PEDESTRIAN AND WORKER SAFETY OF THE MUTCD MANUA
  - c. AN ALTERNATE ROUTE FOR BICYCLES DURING CONSTRUCTION ACTIVITY
- 2. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WORK ACTIVITY WITH THE FOLLOWING TOWN STAFF, DEPARTMENT OR DESIGNATED REPRESENTATIVE.
  - a. TOWN ENGINEER (207) 848-2401 WILL BE THE PRIMARY CONTACT FOR ALL PROJECT SUBMITTALS INCLUDING SCHEDULING AND UPDATES FOR SITE ACTIVITY.
  - b. YARMOUTH SEWER DISTRICT (207) 846-2415 FOR PROTECTION OF AND ALL WORK ACTIVITY IN THE VICINITY OF THE SEWER MAIN AND PROTECTION OF THAT CROSSES AT THE BRIDGE LOCATION.
  - c. YARMOUTH PUBLIC SAFETY (207) 846-3333 FOR ALL ITEMS ASSOCIATED WITH TRAFFIC CONTROL AND ROAD CLOSURE ITEMS.
- 3. THE CONTRACTOR SHALL SCHEDULE A MEETING WITH CENTRAL MAINE POWER TO REVIEW WORK ACTIVITY UNDER AND ADJACENT TO THE OVERHEAD POWER LINE ON THE PROJECT STE AND TO DETERMINE WORK PROTOCOL AND TEMPORARY MEASURES NEEDED TO ADDRESS SITE SAFETY DURING CONSTRUCTION.

#### UTILITY NOTES

- 1. NO DISRUPTION TO THE EXISTING UTILITIES ADJACENT THE PROJECT SITE SHALL BE ALLOWED DURING DEMOLITION OR CONSTRUCTION ACTIVITIES.
- 2. ANY TEMPORARY ELECTRIC SERVICE, IF REQUIRED DURING THE DURATION OF CONSTRUCTION, IS THE RESPONSIBILITY OF THE CONTRACTOR
- 3. THE CONTRACTOR SHALL NOT MAKE ANY OPENING OR EXCAVATION WITHIN THE PROJECT AREA UNTIL CONTACT HAS BEEN MADE WITH 'DIG SAFE' AND ALL UTILITIES TO LOCATE ANY EXISTING POWER, TELEPHONE, CABLE TV, WATER OR OTHER UNDERGROUND SERVICES.
- 4. THE UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND ARE PROVIDED AS A GUIDE TO THE CONTRACTOR. NO GUARANTEE IS MADE THAT UTILITIES WILL BE ENCOUNTERED WHERE SHOWN OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS IN THE FIELD AND BE RESPONSIBLE FOR REPAIR OF UTILITIES DISTURBED DURING CONSTRUCTION.

#### EROSION CONTROL NOTES

- 1. APPLICATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES FOR THE PROJECT SHALL BE IN ACCORDANCE WITH PROCEDURES AND SPECIFICATIONS OF THE CURRENT MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION; BEST MANAGEMENT PRACTICES.
- 2. SILTATION FENCE SHALL BE INSTALLED BEFORE ANY EXCAVATION TAKES PLACE.
- 3. INSTALL EROSION CONTROL MESH ON ALL PROPOSED SLOPES 2:1 OR STEEPER, UNLESS SHOWN OR NOTED OTHERWISE.
- 4. ALL EROSION CONTROL MEASURES, SEEDING AND MULCHING SHALL BE INSPECTED WEEKLY, AFTER RAINSTORMS AND DURING RUNOFF EVENTS. ALL MEASURES SHALL BE REPAIRED OR REPLACED WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DAMAGE
- 5. SEEDED AND MULCHED AREAS SHALL BE MAINTAINED UNTIL FINAL ACCEPTANCE OF THE WORK
- 6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF GRADING OPERATIONS AND ESTABLISHMENT OF ACCEPTABLE GROUND COVER.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES DURING CONSTRUCTION.

#### DEMOLITION NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF ALL MATERIALS FROM THE EXISTING BRIDGE, INCLUDING, BUT NOT LIMITED TO: TIMBER SUPERSTRUCTURE, TIMBER PIERS, STEEL HARDWARE
- 2. DISPOSAL SHALL BE AT AN APPROVED FACILITY. TREATED LUMBER SHALL BE DISPOSED OF IN COMPLIANCE WITH MAINE DEP REQUIREMENTS.

#### BRIDGE SPECIFICATIONS

- 1. AASHTO LRFD GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES.
- 2. AASHTO LRED BRIDGE DESIGN SPECIFICATIONS.
- 3. MAINE DOT BRIDGE DESIGN GUIDE.

#### DESIGN LOADING

- 1. VEHICLE LOAD: AASHTO H-5 (NO DYNAMIC ALLOWANCE HAS BEEN INCLUDED)
- 2 PEDESTRIAN LOAD 90PSE UNIFORM

#### STRUCTURAL NOTES

- CAST-IN-PLACE CONCRETE
- 1. MIX DESIGN:
- a. MDOT CLASS A: F'c = 4,350 PSI
- 2. MINIMUM COVER TO REINFORCEMENT = 3"
- 3. REINFORCING STEEL:
- a. ASTM A615 GRADE 60; F<sub>Y</sub> = 60,000 PSI
- 4. PROVIDE SIKAGARD 670W CLEAR OR EQUIV. PROTECTIVE COATING TO CONCRETE SURFACES PER THE LIMITS SHOWN ON SHEET S-3.

#### PRE-ENGINEERED TRUSS BRIDGE

- 1. ALL METAL ITEMS TO BE A36 STEEL, HOT-DIP GALVANIZED AFTER FABRICATION UNLESS OTHERWISE NOTED.
- 2. ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
  - 3. BRIDGE BEARINGS SHALL BE FIXED ON ONE ABUTMENT AND DESIGNED TO ACCOMMODATE LINEAR EXPANSION AND CONSTRUCTION AT THE OTHER ABUTMENT

#### MISCELLANEOUS METALS AND FASTENERS

- 4. ALL METAL ITEMS TO BE A36 STEEL, HOT-DIP GALVANIZED AFTER FABRICATION UNLESS OTHERWISE NOTED.
- 5. ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
- 6. ALL BOLTS SHALL CONFORM TO ASTM A-307. MINIMUM SIZE SHALL BE 1/4" DIA UNLESS OTHERWISE NOTED. ALL BOLTS TO BE HEAVY HEX UNLESS OTHERWISE NOTED.

7. ANCHOR BOLTS SHALL CONFORM TO ASTM F-1554 AND SHALL BE GRADE 36. TIMBER STRUCTURAL MEMBERS

- 1. REFER TO TIMBER SCHEDULE ON SHEET C-4.
- 2. ALL EXPOSED EDGES SHALL BE PLANED OR SANDED TO PROVIDE SMOOTH SURFACE FREE OF ROUGH EDGES OR DEFECTS.
- 3. ALL EXPOSED FASTENERS SHALL BE COUNTERSUNK ON WALKING SURFACE, AND PEDESTRIAN HANDRAIL

#### SURVEY & DATUM NOTES

- . BASE SURVEY, TOPOGRAPHY, SITE DATUM CONTROL, AND PROJECT BENCHMARKS ARE FROM A FIELD SURVEY WITH DOCUMENTING PLAN ENTITLED "PLAN OF FORGE STREAM BRIDGE, NO. FB24/SDR24" BY ROYAL RIVER SURVEY COMPANY, DATED 12/14/2000.
- 2. ALL TOPOGRAPHIC INFORMATION PROVIDED IS REFERENCED TO NAVD88 VERTICAL DATUM UNLESS OTHERWISE NOTED

PROJECT ELEVATIONS					
WATER ELEVATION	NAVD88 (ft)	Notes			
0.2% Annual Chance(500-yr)	77.6	BASED ON FEMA			
1% Annual Chance (100-yr)	76.4	2018 FIS 23005CV003A, FOR			
2% Annual Chance (50-yr)	75.4	ROYAL RIVER			
10% Annual Chance (10-yr)	74.0	(DOWNSTREAM), TRANSECT J			













«:\17\17-29 east eIm street ped bridge repair, yarmouth\cad\17-29 east eIm st.yarmouth civil 3d.dwg 3/4/201





DATE JANUARY 2019 CONTRACT NO. 17-29

SHEET NO. REV S-1

D



BEARINGS BY BRIDGE MANUFACTURER

> BRIDGE SEAT ELEVATION TO BE CONFIRMED WITH BRIDGE MANUFACTURER

NO. 4 DOWELS SET IN EXISTING ABUTMENT FOUNDATION AT 18" CTRS EACH WAY SET IN EPOXY GROUT

EXISTING FOOTING/ BRIDGE SEAT. REFER TO NOTE 4.

> NOTES: 1. REFER TO STRUCTURAL NOTES ON SHEET G-2.

- 2. ABUTMENT CONCRETE DIMENSIONS AND SEAT ELEVATION MAY BE ADJUSTED TO ACCOMMODATE CLEARANCE REQUIREMENTS FOR BRIDGE BOTTOM CHORD AND BERINGS AT NO COST TO THE TOWN. SIDEWALK APPROACH AND BRIDGE DECK ELEVATIONS MAY NOT BE CHANGED.
- 3. CONTRACTOR TO PROVIDE 4-INCH UNDERDRAIN AND WEEP HOLES BEHIND EACH ABUTMENT TO CONTROL DRAINAGE. DETAIL TO BE CONFIRMED WITH ENGINEER AFTER INSPECTION OF FIELD CONDITIONS.
- 4. EXISTING CONCRETE ABUTMENT MAY BE RETAINED TO AVOID IMPACTING EXISTING SEWER MAIN. ABRADE, CLEAN AND SCARIFY TO SOUND SUBSTRATE. PRIOR TO PLACEMENT OF NEW CONCRETE.APPLY NEAT CEMENT AND WATER TO SURFACE TO PROVIDE A BOND WITH THE NEW CONCRETE.

