HAMPDEN TOWN COUNCIL WORKSHOP
HAMPDEN MUNICIPAL BUILDING
AGENDA

MONDAY SEPTEMBER 13, 2021 6:00 P.M.

A. CALL TO ORDER

B. UNFINISHED BUSINESS

C. NEW BUSINESS

a. Council discussion on Transfer Station Committee and Staff recommendations.

b. Council discussion regarding the status of the Manning Mill and Sawyer Road Bridges.

c. Council policy directive on the ARPA (American Recovery Plan Act) funds.

D. ADJOURNMENT

Note: Council will take a five-minute recess at 8:00 p.m.

FOR THOSE THAT WISH TO PARTICIPATE IN THE REMOTE HAMPDEN TOWN COUNCIL WORKSHOP ON SEPTEMBER 13, 2021 AT 6:00 PM YOU MAY PHONE IN USING THE FOLLOWING NUMBER (FOLLOWED BY THE PIN #)

1-470-485-9541 PIN 300 917 931#

OR-

FROM A LAPTOP OR A DESKTOP, YOU MAY GO TO THIS URL: https://meet.google.com/uzv-riis-wvp?hs=122&authuser=0 AND JOIN US THAT WAY

INSTRUCTIONS ARE POSTED WITH THE AGENDA AND SEPARATELY ON THE TOWN CALENDAR AT WWW.HAMPDENMAINE.GOV

Using Google Meet to Participate in Hampden Town Council Remote Meetings

How to join:

1. Town Council members will receive an email or a Google Calendar Invite with a link to join the meeting.
2. People interested in joining will need to go to the link posted on the town events calendar at www.hampdenmaine.gov.
3. Anyone can also join for audio-only participation by calling the number provided on the town events calendar and then entering the PIN provided followed by the # symbol.

Protocols for Remote Meetings:

1. Log in or call in at least 5 minutes before scheduled start of meeting.
2. For the audio portion, use either your phone or your computer microphone, not both.
3. Mute your phone or computer mic unless speaking. Remember to un-mute if you want to speak. To mute or unmute in Google Meet, click on the little microphone icon at the bottom of the screen; note you may need to move your mouse pointer around the bottom of your screen to get the bottom bar to appear.
4. Speak up if using a computer microphone or if using the speaker function on your telephone.
5. Do not rustle papers in front of your mic unless it's muted. Please minimize background noise.
6. If you're referring to a document, identify it including page or sheet number.
7. If using the video function, have a light source in front of you if possible. Try to avoid backlighting.
8. If you want to look good, have your camera mounted at eye level or above. Look at yourself on screen to check the lighting, camera position, what's in the background, etc. In Google Meet, you can do this "video check" when you open the program before you join the meeting.
9. If you are participating by audio only, identify yourself when speaking.
10. ALL votes will be by roll call.
11. After the meeting is adjourned, click on the red phone icon on the bottom bar to leave the meeting, or (obviously) just hang up the phone if that is how you are participating.

For detailed instructions on using Google Meet, please refer to their website:

support.google.com/a/users/answer/9282720?hl=en

C-a

TOWN OF HAMPDEN

DEPARTMENT OF PUBLIC WORKS

106 WESTERN AVE.
HAMPDEN, ME 04444

TEL 862-3337 FAX 862-5067

September 9, 2021

To: Paula Scott
From: Victor J. Smith, P.E.
Subject: Transfer Station Recommendations

During the last two months we have hosted a transfer station forum and two transfer station committee meeting to discuss various improvements to the existing transfer station. We have spent considerable time and effort compiling this information and discussing it with the committee. Our recommendations from this work are as follows:

1. Metal will be able to be discarded without a demo sticker. The metal bin will move over beside the clean wood bin. The Demo bins will be shifted accordingly to allow access to the brush and metal bins whenever the Transfer Station is open.
2. Small single demo Items will be able to be discarded using some sort of pull tab or punch card Permit (Recommend $15 for 6 pull tabs/punches). We will determine what may be discarded with this permit and how many pull tabs will be required per item. The permit system will be explained to the public along with how the system works including typical item fees. A basic pull tab permit has been included but again, this might be a punchcard.
3. We recommend that permits should be available to be purchased online. We believe that we have a system that will allow them to be purchased online. Purchase receipts can be brought to the town office to pick up the actual window decals (MSW and DEMO) which will only require showing their vehicle registration. Small item DEMO permits, and Freon stickers will be able to be picked up at either the Town Office or the entrance shack with their online receipt. Stickers will not be able to be purchased (no exchange of cash) at the transfer station.
4. We propose to demo the existing Swap-Shop/Recyclables building to provide additional maneuvering room for trailers within the confines of the Transfer Station to access the various brush, metal, and demo piles.
5. We propose to move the location of the swap shop outside the gate along the access road with parking located so that people do not have to cross traffic to get into the Swap Shop. The location that was most agreeable was immediately outside the entrance shack to the transfer station. This location also would not require any permit modifications from DEP according to Melissia who is our transfer station person there. I have included a basic aerial view of this location as part of these recommendations. The final location, orientation, and parking layout has not been decided at this time.
6. We recommend that the Swap Shop be run by volunteers with minimal time required from the transfer station staff. We understand that some staff time will be required during cleanouts by volunteers, but we cannot recommend that staff time be taken to monitor

the Swap Shop or keep it from being overrun with excess stuff. We would also expect that Swap Shop volunteers would help locate additional Swap Shop volunteers. Our mission as Public Works employees is to maintain town infrastructure and operate the transfer station. Time spent trying to get volunteers takes away from that mission.

7. We have contacted numerous venders and we can get a 14'X36' garage type building for around $13,500 which can be directly placed on a level gravel pad. This building could not be delivered until early December.
8. We will continue to shop around for additional sources for garage buildings but at the time of this writing it appears that Hill View Mini barns will be the most sensible and economical option.
9. The Transfer Station Committee was divided on the timing of getting the Swap Shop open. Some members see a return to more stringent Covid protocols being a real possibility and think we should wait possibly until spring to purchase the building and get it open. Others are mindful of the Covid protocol possibility but recommend getting it open as soon as possible.
10. We do not have appropriate staffing to closely monitor the Swap Shop. To truly make the Swap Shop a useful part of the transfer station then volunteer staffing will be needed. The Limerick Take-it Shop has some volunteer staffing per the article Anita forwarded to me. Volunteers will be looking into all avenues to get volunteers including high school students that need community service to graduate.
11. All changes that will be made in this budget year will need to be able to be completed for under $30,000 which is what we currently have set aside in the Reserve Account for the transfer station which was earmarked for a transfer station study to recommend improvements. This money will need to be reallocated by council to be spent on these improvements. We have submitted our transfer station as a UMaine Civil Engineering Capstone project which if chosen would get us some engineering for free. At the very least it would provide a starting point for additional studies in the future.
12. We recommend changing the weekday hours on Thursday and Friday to reflect the weekend hours of 8:00AM to 4:00PM. Wednesday hours will remain 10:00Am to 6:00PM per the recommendation of the committee members and forum input.

TOWN OF HAMPDEN MAINE

SMALL ITEM DEMO PERMIT

$15

1 Ticket: Small furniture per piece, armload of scrap lumber, etc

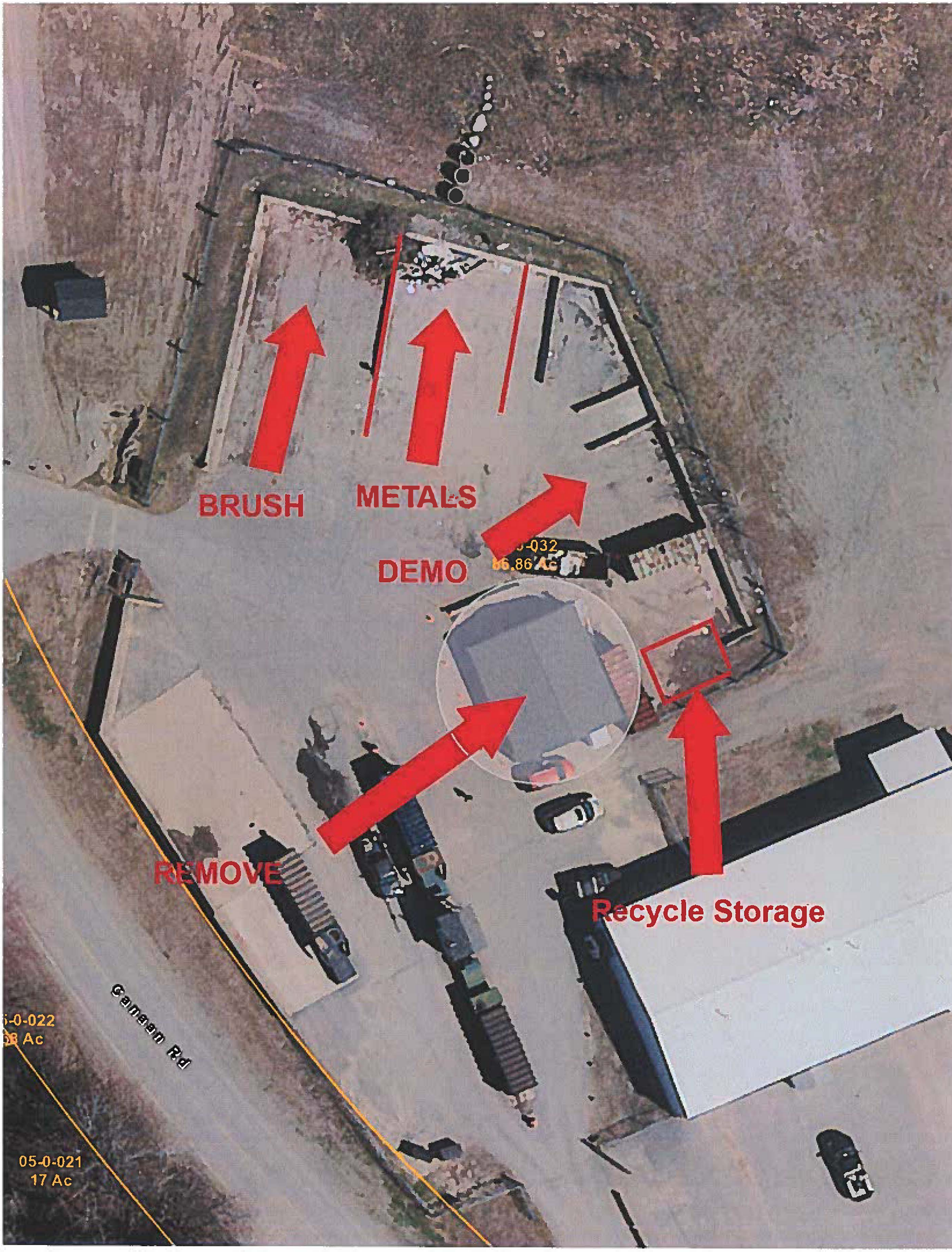
2 Tickets: Large furniture per piece, large trash can of scrap lumber, mattresses

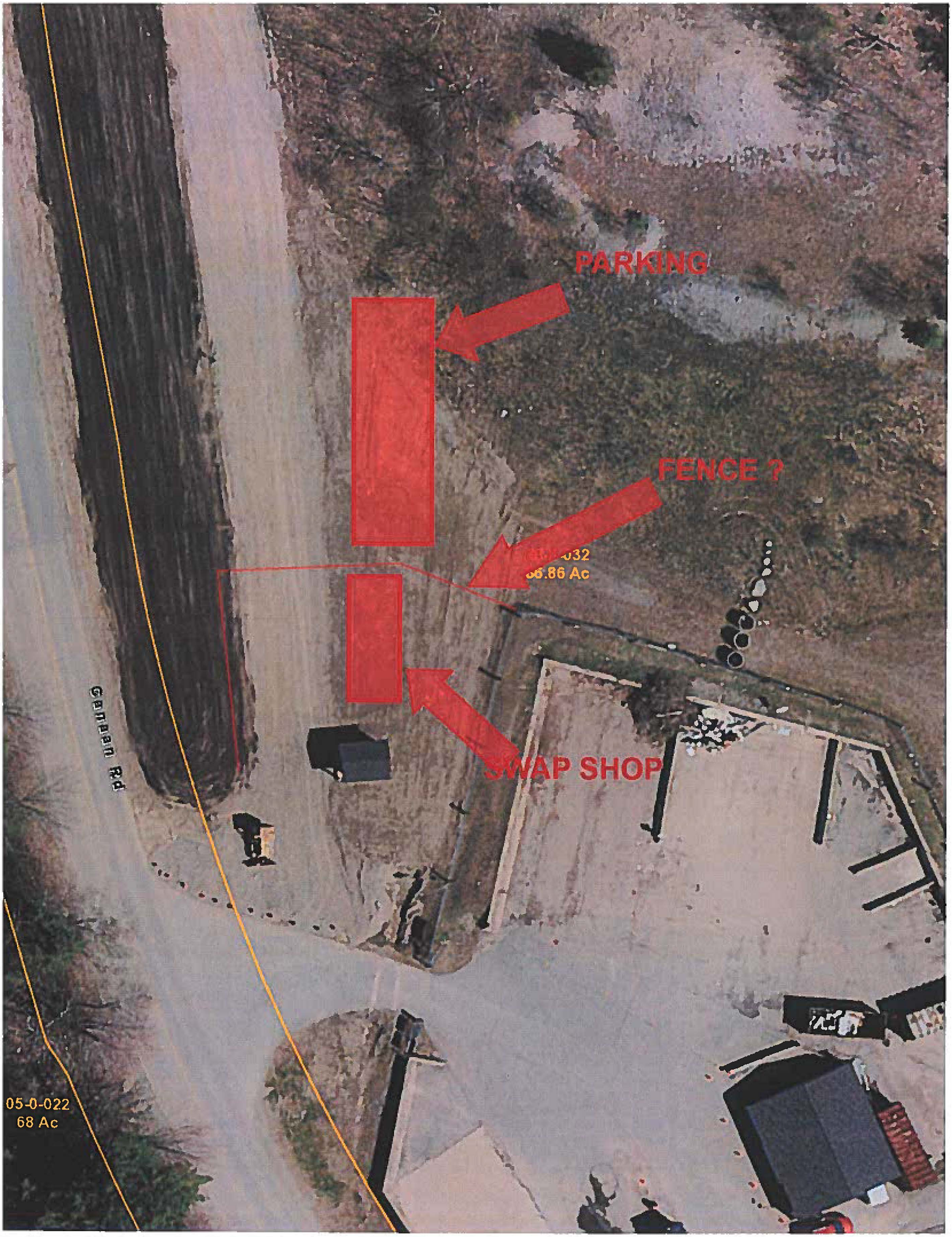
Appliances containing Freon require a Freon sticker
(available at the town office)

NO HAZARDOUS WASTES ACCEPTED

TICKETS VALID ONLY WITH A CURRENT MSW STICKER

Ticket	Ticket	Ticket	Ticket	Ticket	Ticket
1	**1**	**1**	**1**	**1**	**1**


BRUSH
METALS
DEMO
REMOVE
Recycle Storage
86.86 Ac
Canaan Rd
05-0-021
17 Ac


PARKING
FENCE ?
SWAP SHOP
Canaan Rd
05-0-022
68 Ac

C-D

TOWN OF HAMPDEN

DEPARTMENT OF PUBLIC WORKS
106 WESTERN AVE.
HAMPDEN, ME 04444

TEL 862-3337 FAX 862-5067

September 9, 2021

To: Paula Scott
From: Victor J. Smith, P.E.
Subject: Recommendation for Repairs for the Manning Mill Bridge and Sawyer Road Bridge based on TYLin Recommendations

On August 30th, we met virtually with Benjamin Toothaker from TYLin concerning his findings on the Sawyer Road and Manning Mill bridges. They were asked to provide preliminary construction cost estimates and repair/replacement strategies for these bridges before completing design work to be put out to bid for construction. Based on this meeting I am making the following recommendations.

Manning Mill

We bonded $150k for the work on Manning Mill bridge based on an assessment from Woodard and Curran in 2017. I have included the Woodard and Curran assessment and cost breakdown as part of this memo. Luckily the previous director recommended increasing these numbers for bonding purposes as you will see.

The assessment by TYLin listed three critical items to address on this bridge. The deficiencies that I recommend correcting are 1) Scour/Undermining at Pier, 2) Steel Protective Coating Failure, and 3) Steel Section Loss which were all addressed as critical items to repair. Correcting these three deficiencies will allow us to at least maintain the current load rating of the bridge (currently 15 ton) or possibly increase the load rating. We were told and I confirmed it through TYLin that if number 3 was omitted from this current construction phase that there would be a good chance that the load rating of the bridge could be reduced further because of the severity of the section loss found on the girder flanges. A further reduction in the load rating could jeopardize the delivery of fuel oil or access by certain emergency vehicles.

The total construction cost for these improvements was estimated to be $307,000 which included traffic control, mobilization, and contingency. This was an initial estimate based on TYLin's preliminary work. This number will be refined further as the design gets closer to the final stages. As we get closer to bidding this project we can also refine the traffic control needs and may be able to reduce those costs. We also need to add to this cost $36,000 which is ½ of the bridge design contract for the combined bridge projects for a total cost for these improvements of $343,000.

Sawyer Road

We bonded $300k for the replacement of the Sawyer Road bridge based on an assessment by Woodard and Curran in 2017 like what they did for Manning Mill. Once again the previous director recommended increasing the estimate for bonding purposes.

TYLin provided an estimate to replace the bridge based on current MaineDEP stream crossing guidelines. The estimated cost to replace the existing structure with a new bridge is $507,000. I do not recommend replacing the existing aluminum plate arch structure.

TyLin also provided a list of the needed repairs that would keep the bridge functional for many years to come. The three deficiencies that TYLin recommends repairing immediately are 1) Improper Guardrail Height, 2) Bouncing/Buckling in the Bottom Plate, and 3) Water Flowing under the Culvert Bottom. The estimated cost to repair these three deficiencies would be $183,000 which includes traffic control, mobilization, and contingency. I do believe that we can possibly decrease the traffic control costs by going to a road closure, but this can be refined as the design progresses. We also need to add to this the other $36,000 for design for a total of $219,000 to make the necessary repairs to the Sawyer Road bridge that are required to keep the bridge functional.

In our meeting we did discuss the final deficiency of the bridge which is the rotation of the wingwalls. It is TYLin's opinion that this deficiency had a high importance but in their opinion the wingwall movement most likely occurred early on during the lifespan of the bridge and does not appear to be moving now. TyLin and I both believe that this repair is not required at this time since a wingwall failure would not be a catastrophic failure which could jeopardize human life. A wingwall failure would most likely not be an instantaneous failure that would occur without warning.

I do recommend that we place survey points on the four wingwalls and have them monitored over the next few years to see if there is additional movement. This would be a small yearly expense that would help provide warning that a failure may be occurring. TYLin will also put together a preliminary design so that if a repair is required in the future we will be able to get bid documents out and get the repair completed in a timely manner.

SUMMARY

The recommended repairs for the Sawyer Road bridge are 1) reset new guardrail, 2) fill the voids surrounding the existing aluminum plate arch, and 3) cut off the water flow under the bottom plate to prevent future material loss under the plate.

Monitor the aluminum wingwalls for movement over the next few years,

The Sawyer Road bridge can be repaired for $219,000 which is less than the bonded amount of $300,000.

The remaining bond money for the Sawyer Road Bridge should be used to help make up the deficiency in funds for the Manning Mill Bridge. Additional funding in FY23 is going to be required based upon our bridge bonding amounts.

The current load rating on the Manning Mill bridge is not sufficient for existing fire trucks or any of Public Works larger plow trucks.

We need to spend $307,000 to maintain the existing load rating on the Manning Mill bridge.

I am still working with TYLin to determine whether these repairs will increase the load rating of the bridge.

FINAL THOUGHTS

The information that I have at this time shows that corners were most likely cut during the design and construction of the Manning Mill bridge in 1996. It also appears that maintenance efforts were put off after being told of potential issues with the bridge.

I am asking for direction to determine the level of effort that we should undertake to bring it up to a minimum load rating and what that load rating should be.

Hampden Bridges
Manning Mill Bridge

Deficiency	Urgency	Proposed Fix	Cost	Anticipated Construction Duration	
Scour/Undermining at Pier	Critical	Brace existing pier, remove loose material to ledge, install grout bags between bottom of footing and ledge	$ 30,000.00	Four Weeks	Requires ir pier. Vehic
Steel Protective Coating Failure	Critical	Blast & Paint Existing steel	$110,000.00	Four Weeks	Vehicle s
Steel Section Loss	Critical	Install field-bolted cover plates to all bottom flanges	$100,000.00	Four Weeks	Vehicle traffi require c
Bearing corrosion and loss of function	High-Moderate	Replace steel bearings with elastomeric bearings	$ 15,000.00	Two Weeks	Requires ter are being re
Bridge Railing does not meet current standards	Moderate	Install modern railing	$ 90,000.00	Two Weeks	Requires ter replaced. P with escort
Tar paper membrane degradation	Low-Moderate	Replace tar paper membrane with sheet waterproofing membrane	$ 10,000.00	One week	Requires te wearing sur while new
Side slope erosion	Moderate	Install slope stabilization	$ 5,000.00	Two weeks	Limited by
Approach railing does note meet current standards	Moderate	Install w-beam guardrail and bridge transition	$ 30,000.00	Two Weeks	Vehicle

Additional Costs	
Maintenance of Traffic	Approx. $1000/week assumed
Mobilization	Approx. 10% of construction cost
Miscellaneous/Contingency	20% of construction & MOT cost

Hampden Bridges
Sawyer Road Repair

Deficiency	Urgency	Proposed Fix	Cost	Anticipated Construction Duration	Impacts
Improper Guardrail Height	High	Replace guardrail	$ 15,000.00	One week	Traffic reduced to alternat flaggers
Bouncing/buckling in bottom plate	High	Fill voids outside culvert with pumped grout	$ 55,000.00	One month	Traffic reduced to alternat flaggers
Water flowing under culvert	High	Install sheet-pile cut-off walls	$ 60,000.00	Two weeks	Traffic reduced to alternat flaggers
Wingwalls rotating and bowing	High	Restrain existing wingwalls with soil anchors	$125,000.00	Two weeks	Traffic reduced to alternat flaggers

Additional Costs	
Maintenance of Traffic	Approx. $2000/week assumed
Mobilization	Approx. 10% of construction cost
Miscellaneous/Contingency	20% of construction & MOT cost

Hampden Bridges
Sawyer Road Replace

Item	Cost	Anticipated Construction Duration
Excavate for new substructures	$ 30,000.00	1 week
Place new substructures and sidewalls/wingwalls	$ 88,000.00	2 weeks
Remove existing structure and excavate to place new stream bottom	$ 15,000.00	2 weeks
Place new material in stream	$ 6,000.00	1 week
Install new culvert	$175,000.00	1 week
Backfill around new culvert	$ 14,000.00	1 week
Repave site	$ 21,000.00	1 week
Install new guardrail	$ 15,000.00	1 week

Additional Costs		
Maintenance of Traffic	$ 15,000.00	Approx. $1000/week assumed
Mobilization	$ 37,000.00	10% of construction cost
Miscellaneous/Contingency	$ 91,000.00	25% of construction & MOT cost

Total: $507,000.00

COMMITMENT & INTEGRITY DRIVE RESULTS

One Merchants Plaza | Suite 501
Bangor, Maine 04401
www.woodardcurran.com

T 800.564.2333
T 207.945.5105
F 207.945.5492

WOODARD &CURRAN

March 30, 2017

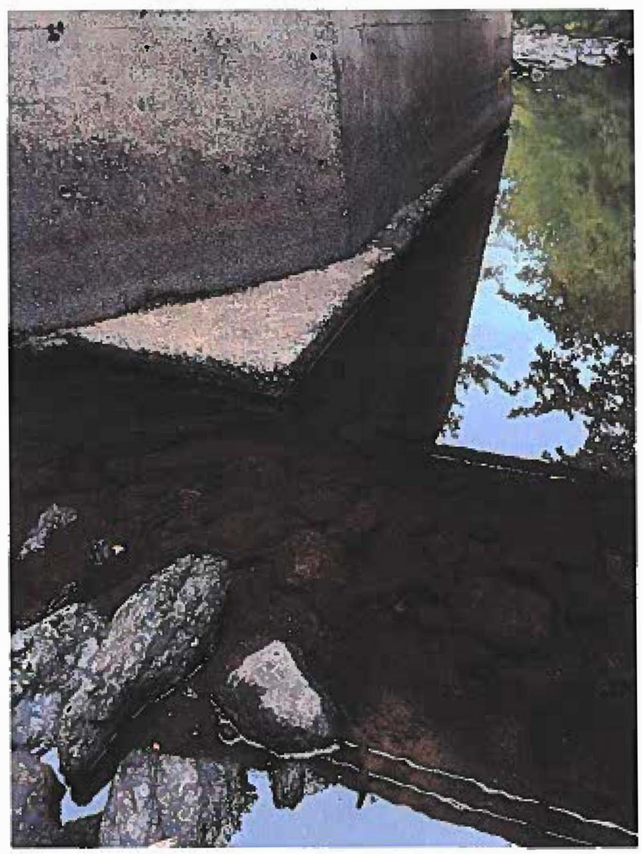
Sean Currier, Public Works Director
Town of Hampden, Maine
106 Western Avenue
Hampden, ME 04444

Re: Manning & Sawyer Bridges Maintenance

Dear Sean:

Thanks for forwarding a copy of the Manning & Sawyer Bridge Inspection Report completed by the MDOT and provided to you by Benjamin Foster, P.E. As you know, we met onsite with Ben to discuss their assessment and to observe the conditions that concern the MDOT.

Manning Bridge MDOT #3366

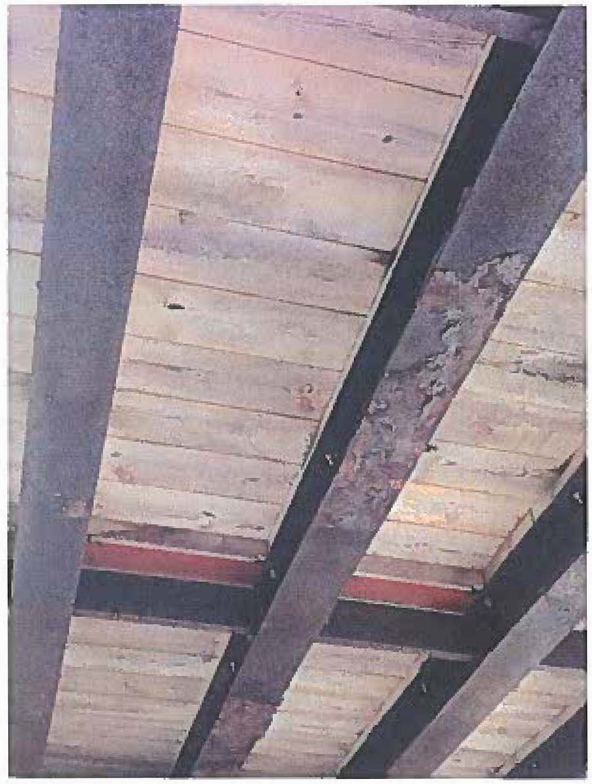


We observed the undermining that has occurred, primarily on the upstream and center channel side of the center pier foundation. It appears a portion of the pier foundation may be constructed directly on bedrock but there is no question that some granular soil has eroded.

The Repair: MDOT has suggested a pumped grout repair to fill the void which seems reasonable. This would involve waiting until the stream flow is at its lowest during the late summer or fall and using grout bags, placed by divers, to control the flow of grout beneath the foundation. We suggest using qualified contractors that have provided this work with the MDOT in the past. A budget of $10,000 should be anticipated (items 10-13 on attached opinion of cost).

The Inspection report also sights delamination of the steel girders. Based on observations, it appears the rust and scale is primarily surface deterioration and not yet affecting the structural integrity of the steel members. Based on what we can see, it's apparent that there is probably rust and scale on the tops of the girders like what we can see on the exposed bottom.

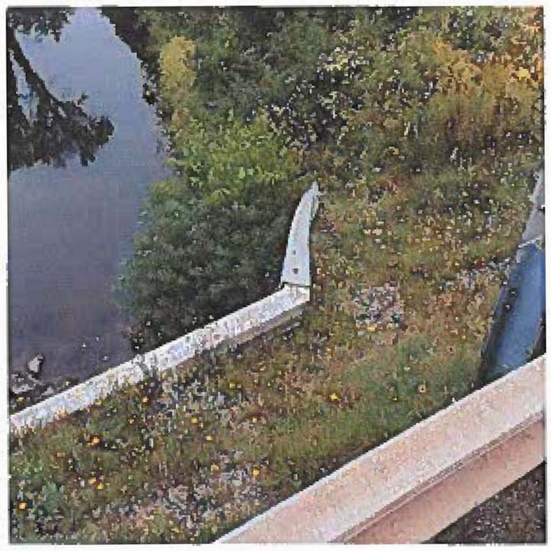
The Repair: Removal of the wood deck, sand blasting the steel (including recovery of the blast media), recoating the steel framing and reinstalling the deck would be required. For the purposes of this budget estimate, we have assumed composite deck material may be used when the bridge is re-decked. This repair should get the bridge to a condition that would require little or no maintenance for 20-25 years. The budget for sandblasting, recoating and deck replacement would be approximately $43,500



Summary: The total budget for the repairs at the Manning Bridge with contingency and design/admin would be approximately $67,000. As noted in the letter from Ben Foster of MDOT, there is little funding available from the State for bridges of this nature so it is unlikely that matching funds would be available now. Once the Town is ready to move forward with repairs, a request should be forwarded to MDOT well in advance to gauge their ability to provide financial assistance.

Sawyer Bridge MDOT #0863

The inspection report identifies failure of the SE and NE wing walls. We observed several areas on each wall where movement has occurred and damaged the aluminum structure. These initial failures are allowing bowing of the wing walls which in turn allows some settlement of the road.



The report also indicates that there is water flowing beneath the floor plates of the "culvert" section. During our site visit, the flow in the stream was quite low and we could walk onto the bottom plates and confirm the MDOT's assessment. Water can flow below the plates leading to erosion and a trampoline effect that likely contributes to the damage of the wing walls.

The Repair: During our site walk, Ben indicated that he felt the damage was significant but he also agreed that annual monitoring with additional site visits following large storm would allow the Town and MDOT to understand the timeline for repairs/replacement much better.

The issues with this bridge can be traced back to the original construction. A bridge of this type should have included a cut off plate that would have been installed on the bottom side of the floor plates perpendicular to the flow of the stream. Its purpose would have been to ensure the stream could not flow beneath the plates and erode the soils. The absence of that plate has led to voids beneath the aluminum floor plates. We discussed the possibility of stabilizing the situation by adding a concrete throat to the culvert or pumping a grout mixture into the voids. This however is not possible because concrete would be corrosive to the existing aluminum. Ultimately, any repairs we've considered to stabilize the floor and walls would be complex and expensive. We suggest continuing to monitor the condition of the bridge and if the damage continues, full replacement may eventually be necessary.

Summary: The cost of removal of the aluminum culvert and wing walls and replacement of both with concrete box culverts and wing walls respectively would be approximately $150,000 or more, based on today's construction cost and a general concept for replacement. It's important to note that this is a more complex replacement and without full design, it is more difficult to ensure the costs are on target. We recommend completing a preliminary design phase and coordination with the MDOT and MDEP on this project so that a more accurate estimate can be prepared before the Town considers replacement. We also suggest using an inflation of at least 3% per year for every year beyond the 2017 construction season for budgeting purposes.

We will inspect the bridge with the Town later this year to determine whether the bridge is getting noticeably worse. MDOT should be providing annual reports as well that should help establish a timeframe for replacement/repair.

Sincerely,

WOODARD & CURRAN

James D. Wilson, P.E.
Senior Principal

JDW/eap

Enclosure

PN: 213357.00

WOODARD &CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS
One Merchants Plaza | Suite 501
Bangor, Maine 04401
T 800 564 2333
T 207 945 5105
F 207 945 5492

TOWN OF HAMPDEN, ME
MANNING BRIDGE (#3366) MAINTENANCE
PROJECT NO. 213357.00 PHASE 013
OPINION OF PROBABLE COST
March 30, 2017

No.	Description	Unit	Unit Price	Quantity	Total
1	Mobilization/demobilization	LS	$2,000	1	$2,000.00
2	General Condition (bonds & insurance)	LS	$1,400	1	$1,400.00
3	Remove existing wear surface & deck	SF	$1	1,024	$1,024.00
4	Disposal	Allowance	$1,000	1	$1,000.00
5	Sandblast existing structural steel	LF	$10	480	$4,800.00
6	Paint existing structural steel	LF	$5	480	$2,400.00
7	Provide and install composite deck	SY	$150	115	$17,250.00
8	Provide & install sheet membrane waterproofing	SY	$21	115	$2,415.00
9	Provide & install bit. wear surface (3" thickness)	Ton	$450	25	$11,250.00
10	Prep stream bottom for grout beneath pier (diver)	MH	$250	8	$2,000.00
11	Provide & install pumped grout support of pier	CY	$750	8	$6,000.00
12	Sed & erosion control	LS	$1,000	1	$1,000.00
13	Traffic control/barriers	LS	$1,000	1	$1,000.00
				CONSTRUCTION SUBTOTAL	$53,539
				CONTINGENCY (15%)	$8,031
				DESIGN & CONSTRUCTION ADMIN	$5,354
				TOTAL	$66,924

WOODARD &CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

One Merchants Plaza | Suite 501
Bangor, Maine 04401

T 800.564.2333
T 207.945.5105
F 207.945.5492

TOWN OF HAMPDEN, ME
SAWYER BRIDGE (#0863) MAINTENANCE
PROJECT NO. 213357.00 PHASE 013
OPINION OF PROBABLE COST
March 30, 2017

No	Description	Unit	Unit Price	Quantity	Total
1	Mobilization/demobilization	LS	$5,000	1	$5,000.00
2	General Condition (bonds & insurance)	LS	$3,000	1	$3,000.00
3	Remove existing wear surface & deck	SF	$1	1,500	$1,500.00
4	Soil excvation	CY	$10	250	$2,500.00
5	Remove existing metal culvert & walls	LS	$8,000	1	$8,000.00
6	Modular block retaining wall system	CY	$350	40	$14,000.00
7	Disposal	Allowance	$3,500	1	$3,500.00
8	Precast box culverts (3)	LF	$500	100	$50,000.00
9	Backfill & compaction (native soils)	CY	$10	125	$1,250.00
10	Base & subbase aggregate	CY	$40	125	$5,000.00
11	New guard rail	LF	$21	100	$2,100.00
12	Provide & install bit. wear surfacen (3" thickness)	Ton	$450	30	$13,500.00
13	Sed & erosion control	LS	$3,000	1	$3,000.00
14	Traffic control/barriers	LS	$3,000	1	$3,000.00
				CONSTRUCTION SUBTOTAL	$115,350
				CONTINGENCY (15%)	$17,303
				DESIGN & CONSTRUCTION ADMIN	$17,303
				TOTAL	$149,956