

Brandon Select Board Meeting
(Bridge #114 Alternatives Presentation)
February 23, 2015
5:30 p.m.

The Brandon Select Board will meet Monday, February 23, 2015 at 5:30 p.m. at the Brandon Town Hall located at 1 Conant Square expecting to consider the items noted on this agenda. Agendas shall be posted on the community bulletin board located next to the Town Office on Center Street, on the community bulletin board located between Dave's Grocery and the Forest Dale Post Office and the bulletin board at Lake Sunapee Bank. The Select Board reserves the right to add additional items, if necessary, at the beginning of the meeting.

- 1) Call to Order
 - a) Agenda Adoption
- 2) Bridge 114 Alternatives Presentation
- 3) Adjournment

Brandon Select Board Meeting
February 23, 2015
7:00 p.m.

The Brandon Select Board will meet Monday, February 23, 2015 at 7:00 p.m. at the Brandon Town Hall located at 1 Conant Square expecting to consider the items noted on this agenda. Agendas shall be posted on the community bulletin board located next to the Town Office on Center Street, on the community bulletin board located between Dave's Grocery and the Forest Dale Post Office and the bulletin board at Lake Sunapee Bank. The Select Board reserves the right to add additional items, if necessary, at the beginning of the meeting.

- 1) Call to Order
 - a) Agenda Adoption
- 2) Consent Agenda
 - a) Select Board Meeting Minutes – February 9, 2015
- 3) Public Comments for Items not on the Agenda
- 4) Town Managers Report
- 5) PSAP Resolution
- 6) Planning Commission Appointment
- 7) Town Service Officer Appointment
- 8) Town Meeting 2015
- 9) Town Office Project
- 10) Segment 6 / Bridge 114 Project / Overflow Culvert
- 11) FEMA Projects
- 12) Fiscal
 - a) General Fund Warrant – February 23, 2015 - \$1,040,243.25
 - b) Wastewater Fund Warrant – February 23, 2015 - \$31,987.89
- 13) Executive Session - 1 VSA § 313(a)(2):
Negotiating or Securing Real Estate Purchase or Lease Options
- 14) Adjournment

**Brandon Select Board Meeting
February 9, 2015**

NOTE: These are unapproved minutes, subject to amendment and/or approval at the subsequent board meeting.

In Attendance: Ethan Swift, Dave Atherton, Devon Fuller, Doug Bailey, Seth Hopkins

Also in Attendance: Robin Bennett, Wayne Rausenberger, Kathy Rausenberger, Richard Baker, Arlen Bloodworth, Lee Kahrs, Steve Cjika, Janet Coolidge, Blaine Cliver, Anna Scheck, Chris Brickell, Doug Sawyer

1. Call to order

The meeting was called to order by Dave Atherton at 7:01PM.

a) Agenda Adoption – Motion by Devon Fuller/Seth Hopkins to adopt the agenda as presented. **The motion passed unanimously – 4 to zero.**

2. Consent Agenda

a) Select Board Meeting Minutes – January 26, 2015

Motion by Ethan Swift/Devon Fuller to approve the minutes of the January 26, 2015 Select Board meeting. **The motion passed unanimously - 4 to zero.**

3. Public Comments for Items not on the Agenda

Richard Baker requested a status of the audit report. Robin Bennett reported the audit was begun this week and the completion date is currently unknown at this point.

Kathy Rausenberger requested a status of Union Street. Robin Bennett reported the RFP is being worked on and should be completed by the end of the week. It will be submitted to the Select Board at the next regular meeting.

4. Town Manager's Report

Robin Bennett reported as of Friday \$317,020.24 or 43.87% of delinquent taxes and \$158,445.77 or 40.21% of delinquent sewer accounts have been collected. The town office will be closed Monday, February 16th in observance of Presidents' Day. The annual audit work began this week. Ms. Bennett has been working with the Municipal Public Works consultant with regard to writing the RFP's for the Union Street project and other possible items. She has also had discussions with a possible candidate for the half-time Public Works Director position. There have been a number of personnel issues and union contract negotiations and preparations. Some upcoming meetings include a Bridge 114 alternatives report presentation on February 23rd @ 5:30PM prior to the regular Select Board meeting and the annual town meeting scheduled for

March 2nd, with voting on March 3rd. The VERI community forum is scheduled for April 6th. Robin Bennett provided the Board a project tracker that provides a one-page at-a-glance format of all the town's projects that outlines the status of each project. All, with the exception of one, are public works related projects and have various degrees of grants or other funding. There are only a couple of items that require 100% town funding that are on the ballot this year. Doug Bailey questioned the status of the Wheeler Road Bridge Design replacement. Ms. Bennett reported this grant expired at the end of December and was not renewed and the town will need to reapply to VTrans with a full grant reapplication. The appropriation approved last year will be held, as this can only be used for this item. Mr. Bailey noted that at the November 10th meeting, there was indication that an extension would be given for this grant. Ms. Bennett was advised two weeks ago that the grant would not be extended and the town would have to reapply. Ms. Bennett stated conversations with the state prior to this time were positive and she was surprised that the town did not receive an extension. There was a lack of personnel available to get the RFP's out and it was not until the budget passed in September that funds were available. Ms. Bennett stated at the time the grant was approved, the Public Works Director was out on medical leave. Mr. Bailey noted concern that the approval was in March and taxpayers will question that something that was approved last year progressed slowly. It was felt that the project tracker will assist the Board in keeping a closer eye on the progress of the projects going forward. Ms. Bennett stated this was a grant received in 2009 and was extended several times at the request of the town. Mr. Bailey requested the sidewalk project for Union Street also be added to the report as the state has advanced \$60,000.00 that the town has spent and the town is now in the position of getting this finalized. Dave Atherton also suggested including when the next deadline is due for each project. Devon Fuller stated the tracker report is important as the Board was surprised at last Friday's meeting to learn there are two more projects to keep track of. Ethan Swift noted there is an urgency to fill the Public Works position as soon as possible due to the numerous public works related projects to assure that they move along as planned. Doug Sawyer questioned the best case scenario regarding the Wheeler Road Bridge project. Robin Bennett stated the grant money was for engineering and all indications are if the town applies for the grant it will get it reinstated and it will likely be favorable that the town will get the construction grant. The best case scenario is the engineering grant will be received during FY16/17, with construction the following year. Doug Bailey requested clarification of the RFP process and Robin Bennett advised it depends on the project and can be relatively simple or very complicated. It involves determining the specifics of what is needed for the project. Ethan Swift noted concern with some of the timeframes for the Union Street project as it has a deadline of 12/31/15 and there is a lot that needs to happen to make this construction season. Mr. Bailey questioned whether the Town Manager has received a copy of the town charter. Ms. Bennett stated she has received an illegible copy and is in the process of trying to locate one that is more legible.

5. DRB and Planning Commission Appointments

Dave Atherton stated it was brought to the Board's attention that two of the DRB appointments expired last summer and it is necessary to reappoint Sam Stone and Eric LaRock. Mr. Atherton has received letters from Mr. LaRock and Ms. Stone requesting to be reappointed.

Motion by Ethan Swift/Seth Hopkins to reappoint Sam Stone and Eric LaRock to the Brandon Development Review Board until June 30, 2017. **The motion passed unanimously - 4 to zero.**

6. 2015 VT Gran Fondo

Robin Bennett reported this group is seeking permission for the event to go through Brandon. Ms. Bennett has spoken with the Police Chief and there were no issues with the event last year.

Motion by Devon Fuller/Doug Bailey to approve the use of the roads in Brandon for the 2015 VT Gran Fondo. **The motion passed unanimously – 4 to zero.**

Devon Fuller suggested obtaining a copy of this group's certificate of insurance for the town's file.

7. 2015 Road Postings

Robin Bennett requested the Board's action concerning the annual list of road postings.

Motion by Devon Fuller/Doug Bailey to approve the 2015 Road Posting notice for class 1 roads, with a friendly amendment from Ethan Swift to add Class 2 and 3 roads. **The motion passed unanimously – 4 to zero.**

8. Spring Select Board Institute

Robin Bennett requested any board member wishing to attend the March 21st spring Select Board Institute advise her so that she can register them.

9. 2015 Town Meeting Preparation

Dave Atherton requested comments or concerns from the board members to make the town meeting go smoother. Doug Bailey was in favor of the narrative that Devon Fuller wrote. Mr. Bailey also suggested using one of the monetary scenarios that was provided by Sue Gage. Mr. Bailey also suggested being prepared to discuss what people's tax bills could be when removing or adding items to the current proposed budget. Currently on a \$100,000.00 home, the proposed budget equates to a \$46.00 increase in the tax bill. Devon Fuller stated the board also needs to discuss the 18 projects that are outstanding and the need for a Public Works Director to manage them. Ethan Swift suggested in assisting taxpayers in determining their tax bill, an outline of the different appropriations and what is at stake for some of them is very important. There are also several areas in the budget to outline such as how the budget reflects the change with Casella and the change of the library and senior center to appropriations. Mr. Bailey noted an increase of \$25,000.00 in a budget spread over the grand list is a very small increase for the taxpayers. The town does not have control over the school taxes and last year the education portion was 60% of the taxpayer's bill. Mr. Bailey stated the Select Board and the Budget Committee worked many hours on the proposed budget. Janet Coolidge suggested wording the changes in a positive manner. Dave Atherton thanked Mr. Fuller for developing the narrative and suggested this information be the basis for the town meeting. It was suggested to include the narrative in the

town report and have the information available at the town meeting. Devon Fuller noted part of the narrative was done by Sue Gage. Ethan Swift suggested providing a separate handout explaining the separation of the library and senior center appropriations. Doug Sawyer suggested there should be a clear explanation about the library, senior center and the Casella Waste Management. Seth Hopkins suggested having voters submit questions prior to the meeting to enable the Board to have explanations available at town meeting. Mr. Hopkins stated the Budget Committee and the Select Board could develop some commonly asked questions and answers prior to the meeting. Mr. Hopkins noted concern the town operating budget appears to be increasing more than it actually is, as the figure includes all appropriations if approved. Devon Fuller stated the taxpayers will want to know what the total tax bill will be including the town, the appropriations and the school. A suggestion was made to provide an explanation of the base town budget, the appropriations and the education tax. It was questioned why the education tax is included with the information and it was explained that people will want to know what the bottom line will be on the tax rate. It was noted the school figures will not be finalized until around June. Ethan Swift suggested the school portion be better qualified as it is good to give a ballpark figure. Mr. Swift suggested having one more meeting with the Budget Committee to develop a clear narrative of the points the Select Board would like to make. Robin Bennett suggested emailing potential questions to her for compilation and noted the insert will need to be completed soon, as the town reports will be mailed by mid-February and will be placed on the website at the same time. A Select Board/Budget Committee meeting was set for Monday, February 16th at 6PM at the town hall. Devon Fuller suggested the increase be an exact figure with no rounding. Mr. Fuller questioned if there will be any voting from the floor and Ms. Bennett advised there is currently nothing planned to be voted from the floor. Ms. Bennett questioned if there could be a straw poll done concerning Option 1. Ethan Swift stated there had also been a question about the town report being available electronically and Mr. Atherton advised he has contacted other towns regarding this item and it is the consensus that people prefer their town reports to be mailed.

10. Appointment of Zoning Administrator

Robin Bennett stated Anna Scheck is on a part-time limited basis for zoning permits and recommended she be appointed as Zoning Administrator. The bookkeeper's position has been advertised and Ms. Bennett noted there is a fair amount of work in helping with the auditors, but the town end has been completed. Dave Atherton asked if the town is waiting before making the transition 100% and Ms. Bennett advised this is reorganization and it should be able to be done, as very little has been spent in the zoning budget.

Motion by Ethan Swift/Doug Bailey to appoint Anna Scheck as the Brandon Zoning Administrator until June 30, 2018 . **The motion passed unanimously - 4 to zero.**

11. Town Office Project

Robin Bennett reported a meeting was held last week. Robert Black has developed a timeline for the project. Ms. Bennett stated she will be doing the confirmation of grant requirements this week. Blaine Cliver and Robert Black will be completing the bid documents by March 2nd for contacting potential bidders. Plans will be submitted to VTrans by February 23rd and a

mandatory on-site visit by the bidders will take place on March 9th, with post bidding negotiations to be completed by April 6th. Construction will take place April through July with a project close out by the end of July and the town offices back in the building by July-end. Dave Atherton asked how the bidding will be done and whether it will be a not-to exceed figure. Blaine Cliver stated the bidding will be based on the lowest bidder. There will be some deduct items included, in the event the bidding is over budget. Robin Bennett spoke to a contractor who expressed interest several years ago and it was suggested that it is noted the town does have the funding available. Ms. Bennett has been in contact with the CDBG regarding a grant opportunity for another project. Ms. Bennett noted there are a couple of things that need to be done before going out to bid. Blaine Cliver advised there is discussion taking place with a structural engineer regarding a couple of issues that need clarification. Robin Bennett questioned what the extent of debris there is underneath the building. Mr. Cliver reported there is one tree stump that may be 10 feet long and 2 feet in diameter and some beams. Dave Atherton stated, it is hoped this project will stay on schedule to be completed by the end of the summer. Ms. Bennett stated the team has indicated it is an aggressive schedule and it is hoped the Board recognizes that. Mr. Cliver stated under code, the rafters do not meet modern code, however, they have been there for 185 years and there is no distress. Mr. Cliver will suggest these be grandfathered. Ethan Swift suggested contacting Historic Preservation regarding this item.

12. Segment 6/Bridge 114 Projects

Robin Bennett stated there was a meeting on Friday regarding Bridge 114 that also touched on Segment 6. Ms. Bennett stated there is also the Overflow Culvert project that she is working to obtain a qualified engineer to get the project caught up with Segment 6. Ms. Bennett advised the town is working with FEMA and VTrans on this project. Ethan Swift stated this project is contingent on passing of the appropriation for the cost-share.

With regard to the Kennedy Park sewer project, Ms. Bennett has discussed with CLD the design of the Howe Block and how the sewer is going to be dealt with during Segment 6. The town needs to rethink what to do with the Kennedy Park sewer. Ms. Bennett has had a discussion with Jason from A & E on what the town should do, since whatever is done now will not be a long-term investment. Ms. Bennett is in favor of doing nothing as long as it is addressed with the overflow culvert and the sewer is brought out to Route 7. Jason has indicated he could recommend this, as long as there is a plan to address it during Segment 6. Devon Fuller stated the town will be doing engineering design and a plan will be developed to address this issue two years from now. Ms. Bennett stated there are no known existing problems and no sewage going into the river and the town will take precautions and do regular inspections to assure that this is the case. There would be a daily routine of inspecting this site, if this option is the way the town is going. Jason also recommended fixing the segment of pipe that is crushed from the manhole to the park and once this is done, it could be viewed with a camera. During the last meeting, there was discussion of doing option 3 in bringing it out to Route 7. Dave Atherton noted concern in waiting for the overflow structure that the town is not sure will happen. Ms. Bennett thinks the overflow structure is going to happen, as it is integral to other projects the town is doing. The community realizes this is on the ballot for a match and she is optimistic that this will pass. Devon Fuller stated even if the overflow is not put in, there will be a new sewer line coming down Route 7. The other piece that was discussed is the pipe that runs underneath the building

and there is no manhole on the south side of the building so there is no other side to work from. Ethan Swift stated the Kennedy Park line will connect to the new sewer line to Route 7 and as he understands it, the line that was crushed was servicing the old BHOP location. Robin Bennett stated the line services the Howe Block, but it is crushed between the park and the Watershed Tavern. Mr. Swift stated part of the issue was how to design the line to accommodate the west side of Route 7 with the overflow structure. Ms. Bennett stated because the link is the culvert project, that project will pay for the design to make it all work. Steve Cjika stated there is a problem with the flushing machine because of the size of the pipes from the old video store up through Cafe Provence. If they decide not to connect to bring out to the front, there would have to be a manhole above and below, which would then allowing for videoing. One item discussed during the Friday meeting was that the town has a responsibility to move on the waiver evaluations and there is a need to find a consultant to do that work. It is something that can be done in-house by the assessor and Ms. Bennett approached the assessor to discuss this item. She stated there could be a possibility of getting the assessor's agent to get this portion done as fast as possible, which will lower the cost with doing it in-house. She will discuss this with NEMRC tomorrow. VHB was looking at where they could assist with this item as well. There are about 90 evaluations that need to be conducted and there are 150 properties in the project. Ethan Swift stated there were several options proposed for the sewer project. With the current understanding of the issue that has been in existence since Irene; the town will continue to monitor and survey the site to assure there is no leakage from the crushed pipe. Mr. Swift volunteered to assist in this effort and he will work with the Wastewater Department staff. He stated in the interest of time and scope of work in addressing this prior to the Segment 6 project, it seems to be in the best interest to do the "do nothing" approach.

Motion by Ethan Swift/Devon Fuller to continue to monitor and survey conditions of the Kennedy Park sewer.

Devon Fuller stated the "do-nothing" approach will actually be starting the engineering and designing of the Kennedy Park sewer line to be done when the Segment 6 project is done, however, the town will continue to monitor and survey this area. Seth Hopkins questioned whether the funding will come from FEMA or Segment 6 and Ms. Bennett reported it will be from the overflow culvert grant. Robin Bennett stated in addition to the original motion, Jason from A & E stated it would be with the caveat to replace the cracked pipe in the park. Dave Atherton suggested obtaining a written report from Jason outlining what to do prior to acting on this item.

Ethan Swift withdrew the previous motion made until a formal recommendation is obtained.

Robin Bennett advised she has talked at length with Jason and is comfortable that this is the best short and long-term solution to this problem. This area will be torn up in two years and the town wants to do diligence and be responsible with the funding.

Robin Bennett reported the next step for the Bridge 114 project is the alternatives meeting that is scheduled for February 23rd and the Select Board will have to give input after that meeting on how to proceed. Ms. Bennett suggested the Board officially accept the Purpose and Needs statement for Bridge 114 that was developed by CLD for VTrans.

Motion by Ethan Swift/Doug Bailey to accept the purpose and needs statement as submitted by CLD for VTrans for Bridge 114. **The motion passed unanimously - 4 to zero.**

Doug Sawyer asked when Segment 6 will begin. Ethan Swift advised that at Friday's meeting, there was discussion that it would start during FY17, which begins July 2016. Mr. Hopkins thought it had been indicated the bidding would go out FY17 with the construction starting FY17/18. Ms. Bennett will contact VTrans to clarify the date for this project. Richard Baker stated it would be contingent upon having the right of ways completed and the project may start during FY17 outside the downtown area and during FY18 in the downtown area. Mr. Swift stated the project has to go out to bid and the contractor could dictate the process. Mr. Atherton stated the waiver evaluations are key to this project. Mr. Baker thought the meeting was very productive and encouraged the same group of people meet every couple of months.

13. FEMA Projects

Robin Bennett advised all projects except the previously discussed sewer project remain the same.

14. Fiscal

a) General Fund Warrant – February 9, 2015 - \$135,029.22

Motion by Devon Fuller/Ethan Swift to approve the General Fund warrant of February 9, 2015 in the amount of \$135,029.22. **The motion passed unanimously – 4 to zero.**

Doug Bailey questioned the Bridge 114 bills totaling \$13,000.00. Robin Bennett advised the invoices are for VHB, the project manager for this project. Ms. Bennett noted the town does get reimbursed 95% of the invoices.

c) Wastewater Fund Warrant – February 9, 2015- \$3,606.46

Motion by Devon Fuller/Ethan Swift to approve the Wastewater Fund warrant of February 9, 2015 in the amount of \$3,606.46. **The motion passed unanimously – 4 to zero.**

Ethan Swift questioned the invoice for the kit to rebuild a pump. Steve Cjika advised both Brookdale pumps were replaced; however, the pump at Champlain Street was rebuilt.

Motion by Devon Fuller/Ethan Swift to recess as the Select Board to convene as the Board of Liquor Commissioners at 8:45PM. **The motion passed unanimously – 4 to zero.**

The Select Board reconvened at 8:51PM

Motion by Devon Fuller/Seth Hopkins to enter into executive session at 8:52PM to discuss the negotiating or securing real estate purchase or lease options under the provision of Title 1

Section 213(a)(2) of the Vermont Statutes to include the Town Manager. **The motion passed unanimously – 4 to zero.**

15. Executive Session – 1V.S.A. 213(a)(2) – Negotiating or Securing real Estate Purchase or Lease Options

Motion by Devon Fuller/Ethan Swift to come out of executive session at 9:25PM. **The motion passed unanimously – 4 to zero.** There was no action required.

Motion by Doug Bailey/Devon Fuller that the premature general public knowledge of the discussion of the Revolving Loan Fund contract with Sheri Sullivan will clearly place the Town of Brandon at a substantial disadvantage by disclosing its negotiation strategy. **The motion passed unanimously – 4 to zero.**

Motion by Doug Bailey/Devon Fuller to enter into executive session at 9:26PM to discuss the Town of Brandon's RLF contract with Sheri Sullivan under the provision of Title 1, Section 313(a)(1) of the Vermont Statutes with the session to include the Town Manager. **The motion passed unanimously – 4 to zero.**

16. Executive Session – 1V.S.A. 313(a)(1) – Contract

Motion by Dave Atherton/Ethan Swift to come out of executive session at 9:30PM. **The motion passed unanimously – 4 to zero.** There was no action required.

Motion by Ethan Swift/Devon Fuller that the premature general public knowledge of the pending AFSCME Contract will clearly place the Town of Brandon at a substantial disadvantage by disclosing its negotiation strategy. **The motion passed unanimously – 4 to zero.**

Motion by Ethan Swift/Devon Fuller to enter into executive session at 9:31PM to discuss the Town of Brandon's Contract with AFSCME under the provision of Title 1, Section 313(a)(1) of the Vermont Statutes with the session to include the Town Manager. **The motion passed unanimously – 4 to zero.**

17. Executive Session – 1V.S.A. 313(a)(1) – Union Contract

Motion by Devon Fuller/Seth Hopkins to come out of executive session at 9:44PM. **The motion passed unanimously – 4 to zero.** There was no action required.

Motion by Ethan Swift/Seth Hopkins to enter into executive session at 9:45PM to discuss the evaluation of the Town Manager under the provision of Title 1 Section 313(3)(a)(3) of the Vermont Statutes to include the Town Manager. **The motion passed unanimously – 4 to zero.**

18. Executive Session – 1V.S.A. 313(3)(a)(3) – Appointment of Employment or Evaluating a Public Officer or Employee

Motion by Devon Fuller/Ethan Swift to come out of executive session at 10:15PM. **The motion passed unanimously – 4 to zero.** There was no action required.

19. Adjournment

Motion by Ethan Swift/Seth Hopkins to adjourn the Select Board meeting at 10:16PM. **The motion passed unanimously - 4 to zero.**

Respectfully submitted,

Charlene Bryant
Recording Secretary

Town of Brandon

Resolution

WHEREAS, Governor Peter Shumlin has proposed the closure of the Rutland Public Safety Answering Point (PSAP, also known as State Police Dispatch) and relocation of services to Rockingham and then to Westminster, combined with the relocation of the Derby PSAP to save approx. \$1.7 million in his 2016 Fiscal Year budget;

WHEREAS, the Rutland PSAP provides emergency dispatch services for the Town of Brandon fire department, first response, and police;

WHEREAS, the Town of Brandon would not be served in the same capacity with dispatchers who have not lived and worked in the local area for many years;

WHEREAS, the loss of this institutional knowledge would cause significant delays in the rapid dispatch of our local emergency services,

WHEREAS, the potential for delays to result in more significant harm to our residents and visitors and the loss from potential property damage;

WHEREAS, the Town of Brandon cannot abide with the safety risk involved with the proposed plan or with the loss of valuable jobs and the experienced people who perform these jobs in the most stressful of all situations;

WHEREAS, the Town of Brandon is home to many recreational activities including hunting, fishing, hiking, snowmobiling, XC skiing etc. that often occur in remote areas of town;

WHEREAS, the dispatchers at the Rutland PSAP are very familiar with local landmarks, snow mobile trails, VAST trails and other locations based on many years of combined experience;

THEREFORE BE IT RESOLVED that the Town of Brandon Select Board is opposed to Governor Peter Shumlin's PSAP consolidation plan and requests that the Rutland PSAP remains in its current capacity.

Adopted on this date: _____

Signed by the Town of Brandon Selectboard:

**BULLET POINTS SURROUNDING
911 CONSOLIDATION AND CLOSURE OF PSAP'S
H. 87 (SEC. 3. 30 V.S.A. CHAPTER 87)**

- DPS is in the process of consolidating two of Vermont's VSP-PSAP's Call/Dispatch Centers. The two are Rutland and Derby. Rutland will be consolidated with Rockingham, and eventually Westminster and Derby will be consolidated with Williston.
- As DPS moves forward with the planned PSAP consolidations and Closures, along with Call Taker staff reductions, it is reasonable to anticipate increased Roll Over Calls from outside of a given PSAP 911 call catchment area. Roll Over Calls are: if one of the eight PSAPs is experiencing high call volume, or has no additional call taker to answer the 911 call; the calls will be automatically re-routed via the IP network to another PSAP in the system.
- The Bill proposes to transfer the statewide Enhanced 911 system established under 30 V.S.A. 12 chapter 87. 13 Sec. 3. 30 V.S.A. chapter 87 from the 911 Board of Directors (an autonomous, stand-alone entity), to the Commissioner of Public Safety.
 - The 911 Board of Directors is comprised of representatives of the Vermont Police Chief's Assoc., the Vermont Sheriff's Assoc., State Firefighters, State EMS and Members of the Public.
- E911 is funded by the VUSF (Vermont Universal Service Fund), which is part of the Universal Service Fund (USF). A tax on telephone service, but it is not the only service paid for through the Universal Fund.
 - By statute, the USF funds are distributed in the following order: Fund Administration, Telecommunications Relay Service, Lifeline and E-911.
- This transfer will provide DPS with the restricted Universal Tax Funds that are presently assigned to E911 by statute (approximately 4.6 million dollars [FY 2016] annually) to the DPS General Fund Budget. At which time the Commissioner will have sole, discretionary control of those funds.
 - Money from this fund will no longer be solely for the E911 infrastructure, support and operations. Out of necessity, it is believed that these funds will find way into covering the cost of long standing emergency communications and dispatching services operated and maintained by the Vermont State Police.

- There are no assurances that the Commissioner will not close and/or consolidate additional PSAP's (Municipal PSAP's) which are already well established and provide the Vermont 911 infrastructure with redundancy and geographic dispersion of resources across the state so that weather or another major event in one region or part of the state doesn't take the whole system down (which proved to be efficient and effective during Tropical Storm Irene).
- The State of Vermont pays nothing to any of the Municipal (host) PSAP's for the real estate that the PSAP operations utilize, necessary utilities, specific PSAP management, local or state (site) PSAP budgeting and incidental operating expenses that are incurred by any of the four (4) state and four (4) municipal PSAP sites.
 - All of the needed equipment is already in place, at all eight (8) of these PSAP locations, so there are no savings to be garnered in the closure of any of the four (4) municipal PSAP sites at this time.
- In a report dated 4/29/1010 entitled E-911 and Emergency Dispatch the consensus of the report authors, including now DPS Deputy Commissioner Paco Aumand, concluded that:
 - The real issue for DPS 911/Dispatch consolidation in Vermont is funding for emergency dispatch services provided by DPS. "Further consolidation could lead to lower costs for both services, but consolidation of services without an infusion of funds to adequately fund the cost of Emergency Dispatch would not by itself resolve the problem. In some respects, **it could even make the situation worse, because without enough funding to pay for Emergency Dispatch throughout the state**, additional budgetary pressure on the already strained Universal Service Fund would be created that could result in a negative impact on the E-911 call taking service."
 - "The DPS/State Police cannot continue to absorb additional towns into their Emergency Dispatch service. Three of the four PSAPs are at or very near maximum capacity. We think the better approach is to address the Emergency Dispatch funding issue at the Legislative level, either by adoption of one or more funding schemes that require all towns to pay their fair share of Emergency Dispatch services, or by the Legislature agreeing to address the funding issue on behalf of the towns."

Elaine Smith

From: Elaine Smith [esmith@townofbrandon.com]
Sent: Friday, February 06, 2015 2:46 PM
To: 'Marty'
Subject: RE: PC appointment

Hi Marty,

You don't need to do anything. I just wanted to make sure you were willing to serve another term before we had the Board appoint you.

Thanks! And have a great weekend.

Elaine

From: Marty [mailto:marty@rowerealestate.com]
Sent: Friday, February 06, 2015 2:40 PM
To: Elaine Smith
Subject: Re: PC appointment

Sure, do I need to do anything?

Marty Feldman
Owner - Agent
Rowe Real Estate
office 802-247-3449
cell 802-282-7651

On Feb 6, 2015, at 12:49 PM, "Elaine Smith" <esmith@townofbrandon.com> wrote:

Hi Marty,

Do you want to be reappointed to the Planning Commission for another term? Please let me know.

Thanks,
Elaine



VERMONT

Department for Children and Families

Economic Services Division

103 South Main Street

Waterbury, VT 05671-1201

www.dcf.state.vt.us

(fax) 802-769-2186

Agency of Human Services

MEMO TO: Chairman, Board of Selectman

FROM:  Sean P. Brown, Deputy Commissioner

DATE: February 12, 2015

SUBJECT: Town Service Officer Appointments in accordance with 33 V.S.A. §2102

The term of office of your present Town Service Officer expires on April 14, 2015. Vermont law provides for the appointment for a Town Service Officer by the Selectmen for each town on or before April 15th of each year.

The role of the Town Service Officers is helping needy Vermonters to obtain the assistance they may be eligible for through our Division such as Reach Up, 3SVT (Food assistance) and health care programs. Once you have appointed your new TSO and submitted their information to us, we will update our list of Town Service Officers.

I'd like to suggest that you give serious consideration to the following when you consider persons for this appointment:

- Does the candidate really know the people of your community?
- Is the candidate available to assist members of your community in accessing needed services?
- Can the candidate be depended upon to maintain in complete confidence (as required by law) the names of people who are receiving assistance?

To ensure continued availability of a Town Service Officer to assist needy individuals in your community, please provide the name, address, and telephone number of the person named to fill the position as soon as possible. Because the law allows an appointed town service officer to serve simultaneously for more than one town, you might consider making arrangements to share a town officer with an adjacent town. In addition, a selectman may be a town service officer and is expected to act on behalf of the town service officer in his or her absence.

Please complete the attached form even if you appoint your current Town Service Officer to a subsequent term and return it by March 31, 2015. If you do not respond by that date, the Town Service Officer currently listed for your town will remain on file in our records and may get telephone calls.

Thank you for your assistance.

/sa

Enclosure



Department for Children and Families

Economic Services Division

103 South Main Street

Waterbury, VT 05671-1201

www.dcf.state.vt.us

(fax) 802-769-2186

Agency of Human Services

TOWN SERVICE OFFICER APPOINTMENT FOR 2016

The following person has been appointed Town Service Officer in Brandon
for the period April 15, 2015, through April 14, 2016: Town/City

Name Anna Scheck

Address 49 Center St.

Brandon, VT 05733

E-mail address ascheck@townofbrandon.com

Work phone no. 802-247-3635 _____

Home phone no. 802-247-3650 _____

_____	_____
Selectboard Member	Date
_____	_____
Selectboard Member	Date
_____	_____
Selectboard Member	Date

Please return this form to the address below:

Afsar Sultana
Department for Children and Families
Economic Services Division
103 South Main Street
Waterbury, VT 05671-1201

SCOPING STUDY
FOR
BRANDON BHF 019-3(58)
BRIDGE NO. 114
US ROUTE 7 OVER NESHOBE RIVER



Prepared for:

Vermont Agency of Transportation
Structures Section
1 National Life Drive
Montpelier, VT 05633

Prepared by:



540 Commercial Street • Manchester, NH 03101
Tel: (603) 668-8223 • Fax: (603) 668-8802
cld@cldengineers.com • www.cldengineers.com
New Hampshire • Vermont • Maine

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Brandon BHF 019-3(58) Scoping Study

I. EXISTING STRUCTURE

The existing structure is a twin stone arch structure spanning the Neshobe River and carries US Route 7 through Brandon, VT. The stone arches are approximately 42'-0" long with a concrete extension that overlaps the arch structure and is supported on concrete abutments and a pier on its southern/downstream end. This concrete extension supports a 5'-0" wide concrete sidewalk slab with concrete parapet. Each arch has a span of approximately 17'-1" from spring line to spring line. The arches extend underneath US Route 7 before ending at the approximate location of the northern sidewalk. A concrete extension on the northern/upstream side consists of a pier, an exterior wall in the eastern arch barrel, and an overhead slab that extends outward from the eastern arch barrel to a ¼" joint extending diagonally from the arch-pier connection to the exterior wall extension (see Sheets 1 through 3 of the plans in Appendix A for plan and details of existing conditions). This overhead slab appears to be a concrete roadway slab that has been constructed above the arch and under Route 7. The exact limits and thickness of this slab are not known. A separate overhead concrete slab and beam structure exists north/upstream of the roadway slab joint, and the foundation of the Brandon Town Offices building that also spans the river is adjacent and to the east of this structure.

In 2011, emergency repairs were performed on the east barrel of the arch structure following extensive flooding caused by Tropical Storm Irene. These repairs consisted of repointing and pressure grouting the arch stones, including mortar injections from above the arch to fill voids, as well as repairs to the downstream stone facing of arches. However, only the first 7-feet to 10-feet of the east arch barrel were repaired.

Note: US Route 7 generally runs north/south, however, at the bridge location, it mainly runs east/west. All directions in this report assume US Route 7 runs east/west and the river runs north/south.

II. PURPOSE AND NEED STATEMENT

Purpose

The purpose of this project is the rehabilitation of the Brandon bridge No. 114 which includes a double stone arch structure, a concrete sidewalk extension with a concrete pier, abutments and wingwalls, and an approach retaining wall to provide a safe crossing on US Route 7 over the Neshobe River that is capable of:

- Conveying vehicular and pedestrian traffic,
- Extending the service life of the bridge in the most cost effective manner as this project advances through the Project Development Process.



Need

Bridge No. 114 is rated as 5 (Fair) out of 10 by Vermont Agency of Transportation bridge inspectors. This bridge is eligible for listing on the National Historic Register. Recent repairs to the arch at the downstream end have improved its condition; however numerous deficiencies still remain as outlined below.

Masonry Arch: Extensive leaking between the stones has resulted in efflorescence, algae growth, and mortar loss in areas not included in the recent repair. Voids are apparent along the entire length of the arch walls and sand is coming through between the stones of the arch indicating that the mortar loss extends the full depth of the stones. Some minor cracking and displacement of the stones is also evident. Continued mortar loss will lead to loss of stones which will create instability of the structure.

Concrete skirts were added along the base of the arches from the downstream face of the structure along three of the arch barrel walls at some point in the past. The skirt along the interior wall of the eastern arch barrel appears to have broken off 5 feet from the upstream end of the arch. Both skirts along the interior walls are deteriorated or completely washed away along what appears to be the normal waterline of the river.

Downstream Concrete: The concrete on the downstream face of the arch supporting the sidewalk is in poor condition. The concrete pier and the concrete abutments appear delaminated when sounded, and the pier is also heavily deteriorated along the waterline. In addition, reinforcement is exposed and corroded along the underside of the concrete sidewalk slab. The retaining wall/parapet directly adjacent to the downstream sidewalk in Green Park has significant concrete cracking and spalling.

Upstream Concrete: Some of the concrete upstream and adjacent to the eastern stone arch structure is showing signs of deterioration. The connections between the stone barrel arch structure and adjoining concrete elements are in need of repair. The joint between the roadway slab and the upstream/town office slab has extensive leaking, spalls and corroded reinforcement, and a large 2'-0" deep void has occurred that extends all the way to the sidewalk above, creating a hole that the Town has patched with asphalt. There is an approximately 2.5 to 3 feet deep scour hole in the riverbed just upstream of an upstream concrete pier.

III. SITE INFORMATION

US Route 7 is a Principal Arterial (National Highway System) with significant truck traffic due to the presence of a marble quarry nearby. In addition, the arches are located in downtown Brandon in the vicinity of a significant number of local shops and restaurants so access will need to be maintained to all businesses at all times.

Hydraulics

US Route 7 was overtopped during Tropical Storm Irene resulting in severe damage to the abutting roadway and properties upstream and downstream of the US Route 7 crossing. Subsequently, a hydraulic analysis of the entire reach was performed. See the



Final Hydraulics Report dated June 2013 for more information. The results of the analysis indicate that the existing structure is hydraulically adequate for the 100 year storm event; however several upstream structures constrict the flow resulting in flooding across Route 7 during large flood events. Currently, an overflow structure located upstream is being proposed under a separate contract to bypass flow downstream of the arch structure during large storm events.

Traffic

Traffic data at this site was collected by the Vermont Agency of Transportation in 2012 and have a 1.0 growth factor when projected to 2015.

TRAFFIC DATA	2015
AADT	10,300
DHV	1150
ADTT	1300
%T	12.63%
%D	60% NB

Vehicular Accident Data

Accident data provided by the Vermont Agency of Transportation (VTrans) in the segment of US 7 from VT 73 (mm 3.858) to the count location above (mm 4.1) shows 16 crashes over the 5 year period from 2008-2012, of which all but one was Property Damage Only (PDO) and 1 with an injury. This segment is ranked #161 in the state based on their Actual/Critical Ratio rates (this segment is at 1.7, the top spot is at 4.908 for comparison purposes). This segment also includes the village area, so it doesn't necessarily apply to the bridge area.

Utilities

Existing fiber optic telephone ducts run through the concrete roadway slab on top of the arches along the northern end of the arch barrels. Additional underground telephone conduit runs along the southern end of the arch barrels, but these lines are reported to be inactive and abandoned.

There is an existing sewer main running under the bridge. This main is encased in concrete and runs along the east side of the east arch. New sewer and drainage structures are proposed east and west of the bridge as part of the US Route 7 Segment 6 project. A new water line has been added west of the bridge.

A utility pole adjacent to the retaining wall in Green Park will be removed and the utility lines attached to it will be placed underground as part of the Segment 6 project. A utility pole with an overhead light attached at the southwest corner of the bridge will most likely need to be temporarily removed to not interfere with the bridge construction. This pole



could be permanently removed and replaced with an ornamental light as the utility lines will be placed underground so only overhead lighting will be needed.

Right-of-Way

Almost all of the bridge is located within either the existing US Route 7 right-of-way or Town property except for a small portion of the sidewalk structure abutment at the southwest corner. However, this area will be acquired as part of the Segment 6 project. Therefore, it is not anticipated that additional right-of-way will be required as part of this project.

Land Use Context/Bicycle and Pedestrian Facilities

The area in the vicinity of the bridge is an urban village setting. There are sidewalks on both sides of the project site. Although there are no pedestrian counts available, pedestrian activity is significant throughout the downtown area. This project will not result in a change in land-use context. The existing traffic lane widths will remain after the proposed work is complete and minimum 5'-0" width sidewalks will remain on both sides of the roadway.

We contacted John Kaplan, the VTrans Bicycle and Pedestrian Program Coordinator, who said that the existing and proposed 11-foot lanes with 4-foot shoulders should be acceptable for bicycle use. He also said there are no designated bicycle routes in this area.

There are no pedestrian or bicycle counts available in this area. If desired, counts can be performed at a later date.

Environmental and Cultural Resources

Bridge 114 is located in the Brandon Village Historic District, which was listed in the National Register of Historic Places in 1976. The twin arch bridge itself was built in 1867 and the downstream concrete extension that carries the existing sidewalk was built in 1924. Although the bridge was not included as a resource in the historic district at that time, both the twin arch structure and the downstream concrete extension are over 50 years old and are eligible for the State and National Registers of Historic Places under Criteria A and C. Therefore, replacement of the bridge will cause a major adverse effect, and the rehabilitation of the bridge may cause adverse effect depending on the proposed scope of work.

The Brandon Bridge 114 Reconnaissance-Level Historic Resource Report dated February 28, 2013 recommends that "all efforts should be made to minimize the effect of the undertaking on the historic integrity of the bridge and to avoid adverse effect. If structural deterioration can be reversed, and repair of the bridge is economically viable, then continued use should be considered. The cost of rehabilitation vs. repair should be demonstrated, and if the bridge cannot be rehabilitated, a detailed explanation must be provided. Rehabilitation would include retaining the stone arch and reinforced concrete elements of the bridge to the extent possible, with repairs limited to in-kind replacement that will preserve the current appearance of the bridge. The effect of the undertaking on



the historic buildings and structures surrounding the bridge must be considered, and these resources should be avoided.”

Design Criteria

US Route 7 is classified as a Principal Arterial (National Highway System).

Existing Bridge:

Speed = 25 mph (posted).

Lane/Shoulder Width on bridge = 11'-0" lanes with tapering shoulders (4'-0" min.).

Lane/Shoulder Width off bridge = 11'-0" lanes with variable shoulders (4'-0" min.) adjacent to parallel and pull-in on-street parking stalls (east of bridge)

Sidewalk = 5'-0"

Banking = 2%.

The bridge is located completely within a long horizontal curve with a 374' radius. This curve, with the 2% banking, is adequate for speeds of 30 mph based on AASHTO criteria for minimum radii and superelevation for low-speed urban streets.

The existing vertical alignment generally slopes down from east to the west toward the river with a slight sag vertical curve directly to the east of the bridge transitioning to a crest vertical curve with PVC near the beginning of bridge. Most of the bridge is located on the crest curve. The crest curve has a K value of 11 which is adequate for speeds of 25 mph based on AASHTO criteria.

New Bridge:

The design standards for this project are the latest Vermont Agency of Transportation State Standards (VSS), AASHTO Green Book and the AASHTO Roadside Design Guide.

Design Speed = 30 mph.

Lane/Shoulder Width on bridge = 11'-0" lanes with tapering shoulders (4'-0" min.).

Lane/Shoulder Width off bridge = 11'-0" lanes with variable shoulders (4'-0" min.) adjacent to parallel and pull-in on-street parking stalls (south of bridge)

Sidewalk = 5'-0"

Banking = 2%.

Design Live Load = HS-25 (the arch and stone analysis can only be done using Allowable Stress Design)

Hydraulic Requirement = The low chord of the sidewalk extension structure shall not extend below the peak of the arch, approximate El. 125.6.

The proposed horizontal and vertical alignments were designed to match existing conditions at the bridge with similar radii and K values.

Since the bridge is located in the very center of historic Brandon Village with on-street parking and sidewalks directly adjacent to store fronts, increases to roadway/shoulder



width and significant improvements to the vertical alignment are not viable and are not required to meet minimum requirements in AASHTO based on the design speed. However, as discussed in Section V, minor improvements to the profile to improve drainage across the bridge may be possible.

IV. MAINTENANCE OF TRAFFIC

As previously noted, US Route 7 through the project area is a principal arterial with significant traffic volumes. Therefore, maintenance of traffic during bridge construction is an important consideration. Different alternatives discussed in the next section will have different traffic control requirements. Below is a general discussion of those traffic control options.

Detour Traffic

Closing the bridge and detouring traffic around the site is most cost effective method and will result in the quickest overall construction time. However, potential regional detour routes, especially for truck traffic, are long and not ideal. Local routes through town are possible for smaller vehicles.

If a detour route is used, there could be permitting issues. In an e-mail from Bill Burke, VTrans 250 Coordinator, to Tom Schmelzenbach, former Brandon DPW Director, dated 10/6/10, Bill states "In the event that a new and heretofore unanticipated traffic bypass plan was necessary to get the bridge project done, then that would require an Act 250 amendment. I would have to consider any similar consequences in making my determination." Amending the Act 250 permit can be a long process which could potentially delay the project.

Temporary Bridge

A temporary bridge is not feasible for this project due to the structure's location in downtown Brandon.

Phased Construction

Phased construction involves performing bridge work on a portion of the bridge at a time while traffic is relocated to the portion of the bridge not under construction. Two-way traffic phasing keeps one lane of traffic going in each direction during construction. The traffic lanes widths would need to be reduced to allow room to construct a portion of the bridge. At its narrowest point, the existing bridge is only approximately 36 feet wide from sidewalk to sidewalk. Two temporary reduced lanes would need to be 24 feet wide plus an additional 2-foot width for concrete barriers and depending on the alternative, additional room for earth support sheeting would also be needed. This would only leave 10 feet or less of room for construction, which is not enough room to complete the bridge in phases.

One-way alternating traffic requires one 13-foot wide temporary lane, which even with barriers and earth support, leaves enough work area per phase to complete construction.



Unfortunately this means traffic would need to be stopped in one direction while the other single lane of traffic from the other direction goes through the site. For most alternatives presented, the nature of the bridge construction would require that alternating traffic be utilized night and day with a temporary signal in place. Calculating the backups with one-way alternating traffic is not currently in our scope of work; however, we anticipate traffic backups and delays to be fairly significant due to the volume of traffic and high percentage of truck traffic.

V. ALTERNATIVES – ARCH REHABILITATION

Bridge Replacement

As significant flooding periodically occurs along this stretch of the Neshobe River, replacing the bridge in order to improve the hydraulic capacity was explored. As previously noted, CLD performed a detailed hydrologic and hydraulic analysis and found that the existing bridge is capable of passing the 100 year storm. Please refer to the “Final Hydraulic Report, US Route 7 over the Neshobe River” dated June 2013 by CLD Consulting Engineers, Inc.

Therefore, as it was determined that the bridge is not the cause of the flooding and its hydraulic capacity is adequate, replacement of the bridge is no longer considered an alternative.

Alternative A: No Action

The “no action” alternative would involve leaving the twin arch structure as-is, and allowing the State to continue to inspect the bridge and the Town to repair the structure as needed.

Maintenance of Traffic: This alternative would require no maintenance of traffic.

Advantages: This alternative would have minimal immediate costs which consist of the cost of the engineering study.

Disadvantages: This alternative will inevitably result in a reduced load rating of the bridge due to the ongoing deterioration of the stone arches. As water and sand continue to seep through the stones in the arch, some of the stones will dislodge and begin to undermine the structural stability of the arches.

Conclusion: This alternative is not recommended since it does not address the purpose and need of the project. No cost estimate has been provided for this alternative since there are no immediate costs.

Alternative B: Arch Repairs

CLD considered an alternative that repairs the main issues with the existing structure as detailed in Section II: Purpose and Need Statement with the goal of returning it as closely to its original condition as possible while still minimizing costs. This alternative also



minimizes excavation of the roadway and impact to traffic compared to the other alternatives. The proposed repairs include the following 8 items.

1. Replace Concrete Skirt – The concrete skirt constructed along the length of the interior wall of both arch barrels would be removed due to their deteriorated state and replaced in-kind. Although it appears that there is no significant stone deterioration below the water line where the skirt has worn away, a new concrete skirt will extend the life of the stones.
2. Repointing and Mortar Injections/Pressure Grouting – Repointing and mortar injections/pressure grouting of the masonry arch stone joints are required to preserve the stone stability and prevent soil loss. The mortar should be softer than the stones to allow any future water infiltration to drain through the mortar and prevent damage to the stones. Mortar injections from below the arch are needed to fill the deep voids found between the stones. Consideration could also be given to injecting mortar into voids from above as was done in the 2011 emergency repairs. Ground penetrating radar (GPR) may be able to locate voids in the soil prior to drilling and grouting.
3. Stone Masonry Facing – The capstones at the downstream structure outlet have some cracks and will require some minor repairs.
4. Repair Upstream Exterior Concrete Wall, Pier, and Slab Joint - Delaminations and reinforcement corrosion on the wall and pier extensions would be patched and repaired. In addition, a void exists between the roadway concrete slab extension over the arch and the upstream concrete slab. The joint would be repaired from above and below, and a new concrete sidewalk (proposed for as part of the Brandon Segment 6 Project) would be built in conjunction with the arch repairs and would overlap the majority of the damaged joint. Please refer to Proposed Sidewalk at Section C-C Detail on Sheet 2 of the plans in Appendix A.
5. Scour Protection – Type III Stone Fill would be installed as scour protection inside both barrels of the structure along the interior wall and at the scour hole found just upstream of the upstream concrete pier.
6. Weepholes – Weepholes would be drilled through the arch walls from the interior of the arch at the approximate elevation of the springlines or lower to allow groundwater and surface drainage out of the soil and prevent it from seeping through the stones and mortar. While no drainage material or pipes could be placed behind the arch walls, the weepholes will provide some outlet for the groundwater.

French drains were initially considered to be placed along the back of the arch walls along the springlines or lower to facilitate water flow either to the weepholes or to an outlet through the downstream wingwall into the Neshobe River. However, in order to install the drains, most of the fill over the arch would need to be excavated. This extensive excavation would require phased construction utilizing one-way alternating traffic and the earth support structures would be needed to support the fill under the traffic. Supporting fill on top of a curved arch structure is difficult to do and is therefore costly and will increase overall construction duration. Therefore, French drains are not recommended for this alternative due to the significant impacts to cost, traffic maintenance, and construction duration.



7. Repair/Replace, Membrane, and Widen Concrete Slab – As previously discussed there is a concrete slab underneath the roadway. Currently the limits, depth and condition of the slab are unknown. During the emergency repairs, no slab was encountered during drilling within 10 feet of the southern sidewalk. It appears that the worst joint loss is within the 10 to 12 feet of the south end of the bridge, where there is apparently no roadway slab. The slab provides protection from surface water intrusion through the arch. For this alternative, we recommend keeping the slab (presuming it is in good condition), and either widening it to the south sidewalk or any other areas where it does not currently exist or completely replacing it if it is found to be in poor condition. The slab may also provide structural benefits to the stone arch. The slab might dissipate concentrated wheel loads on the arch effectively spreading out the load. This may be especially important at the crown of the arch where the fill is only approximately 18 inches deep.

We also recommend that a water repellent membrane be placed on the existing or new roadway slab to protect the slab from deicing salts.

Cores need to be taken early in the design phase to determine the condition and limits of the slab. GPR should also be used to determine the slabs limits, thickness, and depth below the pavement. It is our understanding that during the recent construction of the water main near the west end of the bridge, a depth of approximately 12 inches of pavement was discovered.

If the slab is in poor condition and needs to be replaced, care will need to be taken while removing it. To prevent damage to the arch stones and to minimize vibrations and prevent destabilizing the arch, no hammers or water cutting would be allowed during removal operations. The slab would need to be saw cut and large sections lifted out. The existing 50.5-inch wide section containing the fiber optic ducts would remain in-place and extreme care should be taken to prevent any damage to the ducts.

8. Steepen Roadway Profile over the Bridge

Getting surface water to shed off the roadway and away from the bridge will also reduce water intrusion through the arch. CLD took a cursory look at the existing roadway profile over the bridge and it may be possible to steepen the grade. The existing roadway grade at the bridge is nearly flat (0.19%) Lowering the grade of the road at the western end of the bridge would be needed and could be accomplished if the pavement at this end is thick enough to be planed down.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Maintenance of Traffic: All rehabilitation recommendations discussed above can be performed below the bridge except for Nos. 7 and 8. No. 8 will be included as part of the Segment 6 work so would follow the traffic control sequences established for that project.

If the existing roadway slab is in good condition, minimal excavation will be required over the width of the road. However, adding new membrane will require continuous (day and night with a temporary traffic signal) one-way alternating traffic for approximately 4

weeks. If the slab needs to be replaced in its entirety, continuous one-way alternating traffic will be needed for approximately 2 months. It may be possible to widen the slab by 10 to 12 feet to the south curb while maintaining two lanes of traffic at all times using narrower lane widths.

Advantages: These repairs will address some of the water infiltration issues that have compromised the structural integrity of the existing bridge and will repair all current deficiencies.

Disadvantages: Although this alternative repairs the existing damage to the structure and solves some water infiltration issues, it does not limit ground water infiltration as well as the next alternatives discussed thus does not extend the bridge's service life as well as the other alternatives.

Water infiltration near the bridge may be increased as the Segment 6 project proposes to remove the existing concrete slabs outside of the bridge limits. This may increase groundwater flow in the bridge area. If groundwater is not fully addressed, over time the stone masonry and joint material will begin to deteriorate again, resulting in a continuation of the current issues with the structure.

Conclusion: This alternative would satisfy the project purpose and need in that the rehabilitation would restore the structure to its previous condition capable of carrying the current traffic and pedestrian loads safely over the structure with the minimum cost possible while still maintaining the historic character of the existing structures. However, CLD does not recommend this alternative as it does not address the water infiltration concerns as well as other alternatives, which could increase the frequency of future repairs.

Alternative C: Arch Repair with Concrete Saddle

In an effort to address the long term water infiltration concerns not addressed by Alternative B above, CLD considered a cast-in-place concrete saddle alternative. This alternative would place concrete over the arch structure to completely remove any water infiltration issues, current and future. An analysis of the arch with the extra load from the concrete saddle was performed to determine if the structure has sufficient strength to accommodate the additional weight. This analysis shows that the structure can support the concrete saddle on top of the arch. Assumed values for the stone and mortar have been used. Samples of the existing mortar and stone should be taken to determine their actual strengths.

This alternative would still include the same repairs as noted in Alternative B, except #7, Repair/Replace, Membrane, and Widen Concrete Slab. Repairing, widening, and membranizing the concrete slab over the arch is not required as the concrete saddle will prevent water infiltration.

Constructability issues discussed with the construction of French drains are similar for this alternative. All of the fill soils above the arch would need to be excavated out in order to place the concrete above the stones. This would require complicated and



potentially expensive earth shoring methods. This alternative would also require the removal of the existing roadway slab even if it is in good condition. However, as the fill excavation will occur for this alternative anyway, French drains could also be installed to relieve the buildup of groundwater outside of the concrete saddle.

Prior to removing any backfill over the structure, repointing and patching inside of the arch will need to be completed, and the structure will need to be braced from below. Bracing operations will be costly, but are essential, as the removal of the backfill material could make the arch unstable. Excavation and concrete placing would need to occur concurrently in equal lifts on the sides of the arches in order to avoid unbalanced loading which could destabilize the arches.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Maintenance of Traffic: This alternative will require continuous (day and night with a temporary traffic signal) one-way alternating traffic for approximately 4 months.

Advantages: The concrete saddle would prevent the majority of all groundwater infiltration to the arches and will repair all current deficiencies with the twin arch structure. The concrete saddle should provide a less porous barrier than the soil remediation alternative discussed next.

Disadvantages: The disruption to traffic and costs of this alternative are considerable.

Conclusion: This alternative would satisfy the project purpose and need in that the rehabilitation would restore the structure to its previous condition, be capable of carrying the current traffic and pedestrian loads safely over the structure, and extend the lifespan of the bridge by better limiting water infiltration while still maintaining the historic character of the existing structure. However, the cost of the saddle would be quite high, and disruption of traffic would be for a long duration, CLD does not recommend this alternative.

Alternative D: Arch Repair with Soil Remediation

Another alternative to reduce water infiltration that was evaluated is soil remediation. This alternative would involve pressure injecting a chemical or cementitious grout into the arch fill which would stabilize weak soils, seal seepage, and provides a low permeability grout curtain. Four different types of grouts/techniques could be utilized depending on the subsurface conditions at the project location.

Conventional Cement Grout (displacement with some permeation)

- microfine cementitious grout would have an approximate unit weight of the soil mass of 130 to 145 pcf
- technique would be to probe grout or curtain grout
- grouting success would be very dependent on the competency of the grouting contractor
- this grout/technique is probably the least expensive to implement



Chemical Grout (permeation)

- chemical grout (hydrophobic polyurethane) would have an approximate unit weight of the soil mass of 110 to 125 pcf and is the lightest of the grouts
- technique would be to probe grout or tube-a-manchette grout (packers are placed in the grout pipe to direct the grout into specific areas)
- this grout/technique is probably the most expensive to implement

Permeation Grouting (permeation)

- can only be used if the soil matrix has less than 3-4 % fines
- permeation cement grout would have an approximate unit weight of the soil mass of 135 to 150 pcf
- need to drill and grout in increments of primary, secondary, tertiary holes
- may need specialty equipment, mobilization could be high
- the grout/technique is expensive (mid-range) but less than chemical grouting

Jet Grouting (replacement)

- jet grout would have an approximate unit weight of the soil mass of 120 to 130 pcf
- pressurized to completely erode soil and replace with cement-grout
- need to make sure there are no paths to the surface where pressured grout will escape
- mobilization cost can be high
- the grout/technique is expensive (mid-range) but less than chemical grouting

With any of the grout type/techniques it will be necessary to repoint and mortar any cracks or joints prior to grouting.

Although these grouting techniques are well established, most of the cases we found of this method being used for arch bridges were in the United Kingdom. From our research we noted that the most common type was cement based grout for repair and strengthening. Polymer-based grouts have a wide range of viscosity offered to penetrate into narrow cracks, as well as excellent bonding properties, but polymer-based grouts should be used with caution due to the incompatibility with common old arch bridge materials. Cement based grouts are made of well-known characteristics and more or less similar to what the original arch masonry was made of, but have low penetrability into narrow cracks or voids (≤ 2 to 3 mm).

Until the subsurface conditions are known, the best alternative will not become evident. Also unit weights of the grouted mass will not be known until the existing soil conditions are known, which is why some estimates (ranges) of approximate unit weights have been given. Therefore, in the next design phase sampling of the existing soils will be needed to determine the best grouting option. GPR is also needed to determine the locations where previous grout was placed as part of the emergency repairs. GPR will also help to target the soil sampling locations.

All of the grouting techniques would be performed by drilling down through the roadway slab and into the arch fill. Thus, excavation of the arch soils is not needed which will reduce costs and reduce traffic control complications.

The grouting options will provide a barrier against water intrusion; however, the barrier may not be as non-porous as the solid concrete of the saddle alternative. Also, ground water could be trapped behind the grouted barrier. French drains would drain this water effectively but they would require extensive excavation thus negating one of the advantages of this alternative. Weepholes could be drilled through the arch and the grouted soil to relieve water build-up but would not be as effective as French drains.

Similar to the concrete saddle alternative, bracing would be required prior to the injection process to secure the arch, and a tarp or other material would be required below the arches to prevent any grout that seeps through the voids in the masonry from entering the Neshobe River. The grout is not environmentally friendly. Extreme care to ensure it does not enter the river would be required. Also, the injections may need to be temporarily suspended if the grout emerges from a weak point to allow the grout to cure. As the grout would take the path of least resistance, the cured grout would then force further injections to take alternative paths, infiltrate the soil, and fill any voids. It will be necessary to core through the concrete slab over the arches if it is encountered in any area where injections are required. The fiber optic ducts will need to be avoided.

An analysis of the arch with the extra load from the grouting (150 pci) was performed to determine if the structure has sufficient strength to accommodate the additional weight. This analysis shows that the structure can support the additional on top of the arch. Assumed values for the stone and mortar were used. Samples of the existing mortar and stone should be taken to determine their actual strengths.

This alternative would still have all of the same repairs as noted in Alternative B in addition to the soil remediation. CLD feels the addition of the concrete slab will provide additional protection against groundwater infiltration in conjunction with the soil remediation.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Maintenance of Traffic: Drilling into the ground to grout the soil may require continuous (day and night with a temporary traffic signal) one-way alternating traffic. Although the drilling and injection of the grout can be a quick process and the equipment is small enough where it could be moved off the bridge at the end of each work day, the grout will need time to reach its design strength. This may not be an issue where the concrete roadway slabs exist or if high early strength grout is used in which case two-way traffic could be restored after work hours.

Assuming high early strength grout is not used, if the roadway slab needs to be replaced, continuous one-way alternating traffic will be needed for approximately 2.5 months. If the slab does not need to be replaced continuous one-way alternating traffic will be needed for approximately 1.5 months.

Advantages: This alternative would prevent the majority of all groundwater infiltration to the arches and will repair all current deficiencies with the bridge. No excavation of the



fill material is needed and assuming the roadway slab does not need to be replaced, maintenance of traffic is far less impactful than Alternative C. This alternative is also more cost effective than Alternative C if the roadway slab does not need to be replaced. If the roadway slab does need to be replaced, the concrete saddle option is less expensive.

Disadvantages: This alternative may not provide as non-porous a barrier as Alternative C, and drainage from behind the barrier may not be as effective. This is somewhat specialized construction that most local contractors may not be able to perform.

Conclusion: This alternative would satisfy the project purpose and need in that the rehabilitation would restore the structure to its previous condition, be capable of carrying the current traffic and pedestrian loads safely over the structure, and water infiltration issues would be better addressed by the soil remediation as compared to Alternative B, while still maintaining the historic character of the existing structure. CLD recommends this alternative as it provides a good barrier against groundwater intrusion, is cost effective, and creates less traffic disturbance than Alternative C.

VI. ALTERNATIVES – SIDEWALK REHABILITATION/REPLACEMENT

Below are discussions of alternatives for rehabilitation and replacement of the existing downstream sidewalk structure. When rehabilitating a structure, it is important to bring the structure up to modern load capacity and safety standards when possible. When replacing a structure, the new structure should meet all current standards. Below is a discussion about upgrading the existing bridge rail or replacement rails to meet current safety standards.

Upgrading to Current Bridge Rail Standards: AASHTO and VTrans safety requirements require an approach rail (which is a transition rail between stiff bridge rail and flexible guardrail) be attached to the ends of the bridge rails. A guard rail and/or a crash tested rail end treatment is then attached to the end of the approach rail. The bridge rail and approach rails themselves must also be federally crash-tested and approved railing systems. The existing bridge rail can be replaced with a crash-tested concrete bridge rail that looks similar to the existing rail.

The existing concrete bridge rail does not have approach rails or end treatments. There is a metal hand rail at the west end. The existing concrete rail essentially has blunt ends which are safety concerns as drivers could directly strike the end of the rail.

Safety standards dictate that approach rails and end terminal be added to both ends of the existing (if rehabilitated) or new bridge rail unless the rails are outside of the roadway clear zones. Box Beam approach rails that are used with a historic type concrete bridge rail are a minimum of 34 feet long. Box Beam end terminals vary in length depending on the location and design speeds but are a minimum 13.8 feet long. Galvanized beam guardrail approach rails that are used with a historic type concrete bridge rail are a minimum of 11.5 feet long with a minimum 12.5-foot long end terminal. For each alternative below we have included some discussion of the approach rail and end treatment options and issues.



Alternative A: No Action

The "no action" alternative would involve leaving the downstream concrete extension of the stone arch structure as-is, and allowing the State to continue to inspect the bridge and the Town to repair the structure as needed.

Advantages: This alternative would have minimal immediate costs which consist of the cost of the engineering study.

Disadvantages: This alternative will inevitably result in the continued deterioration of the concrete structure. Eventually, the sidewalk will become unsafe and will need to be closed.

Maintenance of Traffic: This alternative would require no maintenance of traffic.

Conclusion: This alternative is not recommended since it does not address the purpose and need of the project. No cost estimate has been provided for this alternative since there are no immediate costs.

Alternative B: Rehabilitation

This alternative involves leaving the existing structure in place but performing extensive repairs to the concrete pier, sidewalk, parapet, and retaining wall/wingwall (in Green Park). This alternative would require the contractor to sound areas of the pier and remove and repair any areas that sound hollow/delaminated. The composition of the existing sidewalk is unknown. The sidewalk structure appears to be constructed with the use of railroad rails encased in concrete. The end of a rail has been exposed at one end leading to this theory of its make-up. As the make-up of this structural member is not fully understood, it is difficult to prescribe a fix for it. All concrete cracks and holes in the parapet, sidewalk, and retaining wall would need to be inspected and repaired to ensure all deteriorated portions of the structure have been addressed.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Approach Rail/End Terminals: CLD is of the opinion that an approach rail and end terminal are not needed at the east end of the rehabilitated existing concrete bridge rail as the rail is outside of the clear zone. The clear zone at this location is essentially at the face of curb. At the west end, the concrete bridge rail could be extended until it almost abuts the building at the southwest corner. We believe this would be an acceptable configuration instead of placing approach rail in front of the building. Please refer to Sheet 4 for Bridge Plan of Alternative C-2 in Appendix A, which shows a similar approach rail configuration.

Maintenance of Traffic: Repairs to the existing sidewalk structure could be performed with almost no impact to vehicular traffic. The sidewalk would most likely need to be closed during construction and pedestrian traffic would need to cross to the other side of



the street. However, the traffic control necessary for the arch repair alternative selected may dictate the traffic control to be used.

Advantages: This alternative would ensure the historic value of the structure is maintained.

Disadvantages: Due to the extent of the sidewalk extension structure's deterioration, the repairs will be costly and will likely not substantially increase its life span. An estimate for the repairs has been provided in the Evaluation Matrix but is extremely approximate. Once the contractor gets in the field and inspects the structure, it is very likely these costs would increase as additional deterioration is uncovered. In addition, the sidewalk was likely not designed for current traffic loads, so if a vehicle inadvertently drives onto the sidewalk, the structure could be significantly damaged.

Conclusion: This alternative would address the deterioration of the structure and accommodate pedestrian traffic. However, as the sidewalk was built early in the 20th century, it was never designed for current design loads and would not meet those standards with this proposed rehabilitation. In addition, although this alternative repairs the damage to the existing structure, it does not significantly extend the life of the structure as the deterioration is extensive and the patching would not provide the same life span as a new structure. Therefore, it does not satisfy the project's purpose and need. CLD does not recommend this alternative.

Alternative C-1: In-Kind Replacement (Two-Span)

This alternative consists of removing the existing sidewalk extension; sidewalk, parapet, retaining wall/wingwall, and pier; and replacing them in-kind. The existing abutments appear to be in good condition and could remain in place except for minor patching and any repairs needed at the top to accommodate the replacement structure.

The new sidewalk extension would be a two-span precast pre-stressed concrete slab bridge with concrete deck. Although this is not the same structure type as the existing, it will look identical but meet current AASHTO traffic live loads. An analysis of a precast pre-stressed concrete voided slab structure determined that a 15-inch slab with 1-inch sacrificial surface is required which matches the depth of the existing sidewalk slab. It should be noted that the edge of the stone arches are not parallel to the sidewalk, therefore the sidewalk overlaps the top of the arch by an amount that varies along its length. Please refer to Sheet 8 for Alternative C-1 Section.

A new concrete bridge rail replicating the look of the existing rail would be constructed along the back edge of the new sidewalk beams.

This alternative would require cast-in-place concrete pier construction, which increases the construction time and costs, thus making this alternative more expensive than the new single-span structures proposed in Alternatives C-2, and E below.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.



Approach Rail/End Terminals: Similar to the previous alternative, CLD is of the opinion that an approach rail and end terminal are not needed at the east end of the bridge rail as the rail is outside of the clear zone. At the west end, the concrete bridge rail could be extended until it almost abuts the building at the southwest corner. Please refer to Sheet 4 for Bridge Plan of Alternative C-2 in Appendix A, which shows a similar approach rail configuration.

Maintenance of Traffic: Two-way traffic can be maintained for the duration of this sidewalk structure reconstruction. However, reduced lane widths will be needed to allow access to the sidewalk structure for demolition and replacement. Some day-time lane closures may be needed by the contractor for some construction efforts such as beam installation. However, the traffic control necessary for the arch repair alternative selected may dictate the traffic control to be used.

Advantages: This alternative maintains the historic aesthetics of the sidewalk extension. This alternative also keeps the sidewalk in front of the bridge rail, which greatly reduces visual impacts and inconveniences for pedestrians. This issue will be discussed more in Alternative E.

Disadvantages: This alternative is less cost effective than other alternatives. Also, keeping the pier and the same existing sidewalk slab depth does not improve views of the stone arch. Improving views of the stone arch was noted as being important during the Local Concerns Meeting.

Conclusion: This alternative would carry vehicular and pedestrian loads, would maintain the historic integrity of the existing structure, and would extend its life, but it is not as cost effective as other alternatives. CLD does not recommend this alternative due to cost and construction duration.

Alternative C-2: In-Kind Replacement (Single Span)

This alternative is similar to Alternative C-1 except the pier is not reconstructed. However, not rebuilding the pier increases the span length so the concrete beams need to be deeper.

An analysis of a precast pre-stressed concrete voided slab structure determined that an 18-inch slab with 1-inch sacrificial surface was required to satisfy current AASHTO live loads and carry the weight of the cast-in-place concrete bridge rail. This total structure depth exceeds the existing sidewalk structure depth by 3 inches, but the beams can be raised up instead of dropping the bottom of the beam and further obscuring the view of the stone arches. Raising the beam up will increase the curb reveal by approximately 3 inches but the sidewalk off the bridge can be tapered down to match the existing sidewalk elevations. Please refer to Sheet 8 for Alternative C-2 section in Appendix A.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.



Approach Rail/End Terminals: Same as C-1. Please refer to Sheet 4 for Bridge Plan of Alternative C-2 in Appendix A, which shows the proposed approach rail layout.

Maintenance of Traffic: Same as C-1.

Advantages: One advantage as compared to Alternative C-1 is that the concrete pier in the river does not need to be reconstructed, saving time and cost. In addition, the permanent removal of this pier will improve the view of the historic twin arch structure. Similar to C-1, this alternative also keeps the sidewalk in front of the bridge rail, which greatly reduces visual impacts and inconveniences for pedestrians.

Disadvantages: Does not fully expose the arch stone as compared to Alternative D below.

Conclusion: This alternative would satisfy the project purpose and need in that a new pedestrian bridge would completely remove all issues with the existing structure and convey pedestrian and vehicular traffic safely. This alternative is less cost effective than the single span alternatives (Alternative B) discussed below, but maintains the historical integrity of downstream sidewalk extension while also improving views of the existing stone arch structure by eliminating the pier. It also eliminates issues with the guardrail being in front of the sidewalk, which is a significant disadvantage of the single span alternatives. CLD recommends this alternative.

Alternative D: Arch Extension

This alternative consists of removing the existing sidewalk extension; sidewalk, parapet, retaining wall/wingwall, pier, and abutments; and extending the existing twin stone arch structure downstream to the limits of the existing sidewalk structure. The existing structure would need to be completely repointed and braced to ensure its structural integrity is maintained as the downstream end is deconstructed. The downstream outer ring stones and spandrel wall stones would need to be carefully removed one piece at a time and reconstructed at the new outlet of the structure once the extension is completed. New footings would need to be constructed, and care would be required to ensure the concrete encased sewer line in the east barrel is not damaged.

The stone arch widening is costly and time consuming due to the specialized skills required to construct stone masonry structures. New stone matching the look of the existing stones would need to be found in order to build the extension. It is our understanding that the existing stones were locally quarried and similar stone is still available.

A new sidewalk and concrete bridge would be constructed over the arch extension at the same alignment as the existing sidewalk. The bridge rail could be faced with stone veneer to replicate the look of the original bridge.

In conjunction with the repair alternatives, we would recommend the roadway slab be extended over the new arch area in order to reduce surface water infiltration and spread out live loads.



Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Approach Rail/End Terminals: Similar to the previous alternatives, CLD is of the opinion that an approach rail and end terminal are not needed at the east end of the bridge rail as the rail is outside of the clear zone. At the west end the concrete bridge rail could be extended until it almost abuts the building at the southwest corner. Please refer to Sheet 4 for Bridge Plan of Alternative C-2 in Appendix A, which shows the proposed rail layout.

Maintenance of Traffic: Similar to the other replacement alternatives, two-way traffic can be maintained for the duration of this construction, but will require reduced lane widths. However, the traffic control necessary for the arch repair alternative selected may dictate the traffic control to be used.

Advantages: This extension would restore the historic aspects of the original twin arch structure prior to the construction of the sidewalk structure. It would eliminate the need for a separate sidewalk structure and remove all miscellaneous substructure elements such as the existing pier and abutments. This alternative also keeps the sidewalk in front of the bridge rail, which greatly reduces visual impacts and inconveniences for pedestrians.

Disadvantages: The main disadvantages to this alternative are cost and long construction duration.

Conclusion: This alternative would carry vehicular and pedestrian loads, would maintain the historic integrity of the existing structure, and would extend the life of the sidewalk, but it is not as cost effective as other alternatives. CLD does not recommend this alternative due to its high cost.

Alternative E: Separate Single-Span Pedestrian Bridge

This alternative involves removing the existing sidewalk extension; sidewalk, parapet, retaining wall/wingwall and pier; and constructing a new single-span pedestrian bridge utilizing the existing abutments and a new retaining wall/wingwall. The sidewalk (and thus bridge) would be slightly offset from its existing location to provide sufficient room between the two structures for inspection access but would still fit on the existing sidewalk structure abutments.

Two structure types were evaluated for this alternative; a prefabricated steel truss bridge with timber deck and a precast pre-stressed concrete slab bridge.

Prefabricated Steel Truss Bridge: This option is a pre-engineered structure that carries the sidewalk between the two steel trusses that also act as railings. The span is small enough where the structure would arrive in one piece and could be installed in one day. The sidewalk decking over the structure can be comprised of either treated timber planks that come installed prior to the structure being set in place or cast-in-place concrete which is constructed after the structure has been set in place. This structure comes in a variety of coatings that can be colored to match other steel railings or barriers in the area. It also

has a very small structure depth below the sidewalk, approximately 6 inches, which would improve the visibility of the existing arches below. However, the majority of the truss is above the deck which would greatly change the aesthetics at this location. Please see Sheet 8 for Alternative E – Separate Single Span Pedestrian Bridge Prefabricated Steel Section in Appendix A.

Concrete Structure: An analysis of a precast pre-stressed concrete slab structure determined that a 12-inch slab with 1-inch sacrificial surface was required to satisfy current AASHTO pedestrian live loads and the Vermont Agency of Transportation (VTrans) design snow removal vehicle. This structure would have ornamental pedestrian rail that could be made to look similar to existing pedestrian railing in the vicinity of the project. The structure depth of this alternative is less than the existing structure depth by approximately 4 inches, which would improve the visibility of the existing arches below. Please see Sheet 8 for Alternative E – Separate Single Span Pedestrian Bridge Precast Prestressed Concrete Slab Section in Appendix A.

Please refer to the Evaluation Matrix for the costs and construction durations for this alternative.

Approach Rail/End Terminals: A new cast-in-place concrete vehicular bridge rail would be constructed above the end of the twin arch structure between the new pedestrian bridge and the roadway. The new bridge rail would now be directly adjacent to the roadway shoulder.

In this case, an approach rail and a guardrail end terminal would be required on both bridge approaches at the ends of the new bridge rail because both ends are adjacent to the roadway clear zones. This creates considerable issues for pedestrian access and aesthetics.

Two guardrail/approach rail options have been considered; box beam guardrail to match the rail being proposed at the Briggs Lane Wall just west of the project location (Sheet 6 in Appendix A) and steel beam guardrail (Sheet 5 in Appendix A). As shown in the plans, the box beam guardrail has a flared piece that would protrude into the sidewalk behind it, making the box beam guardrail an inadequate option. Steel beam guardrail would need to be added and extended beyond what is required to get past the buildings so the sidewalks could be shifted back and around the steel beam end terminal. Also, the face of the guardrail would be right at the edge of the minimum shoulder width along the west approach, and intruding slightly into the minimum shoulder at the southwest corner of the structure, causing drivers to feel constricted. In addition, pedestrians utilizing the new bridge would be required to walk all the way around the end of the guardrail to access the road. The crosswalk at West Seminary Street would also need to shift west towards Briggs Lane.

There is a railing system that has been used in Massachusetts where the end of the concrete bridge rail simply tapers down to the ground providing a sloped end instead of a blunt end. There is no approach rail or end terminal attached to the end of this rail. See Sheet 7 in Appendix A. This would greatly reduce the amount of rail and improve



aesthetics compared to the other alternatives. However, safety is still questionable as a vehicle could ride up the bridge rail during a collision. Due to this safety issue, we do not recommend this rail type. If the Town would still like to pursue this rail, a design exception would most likely need to be granted by VTrans.

Maintenance of Traffic: Two-way traffic can be maintained for the duration of the construction of the new bridge; however, reduced lane widths will be needed to allow access. Some day-time closures may be needed by the contractor for some construction efforts such as the pedestrian bridge installation. However, the traffic control necessary for the repair alternative selected may control.

Advantages: The main advantage of this alternative is that it improves visibility of the arch stone by removing the center pier similar to Alternative C-2. In addition, because it is completely separated from the twin arch structure, it does not need to be designed for vehicular live load, which decreases the required structure depth less than existing. A smaller structure depth provides better views of the historic arch structure behind it.

Disadvantages: The main disadvantage of this alternative is the need for guardrail, approach rail, and end terminals at both sides of the bridge, which causes issues for pedestrians and result in aesthetic issues. The need for the excessive rail is due to the fact that the approach sidewalks would be behind the guardrail and need to transition back to their original location in front of the guardrail.

Conclusion: This alternative would satisfy the project purpose and need in that a new pedestrian bridge would completely remove all issues with the existing structure and convey pedestrian and vehicular traffic safely. CLD does not recommend this alternative as the sidewalk transition from behind the railing is not ideal, and other alternatives presented in this report also meet the purpose and need but do not have this disadvantage.

VII. RETAINING WALL AT GREEN PARK

All of the sidewalk alternatives noted above except Alternatives A and B will include replacement of the retaining wall/wing wall that is directly adjacent to the east sidewalk structure abutment. We recommend replacing the wall in its entirety due to its poor condition as opposed to attempting to rehabilitate it.

The existing retaining wall also supports the existing bridge parapet. Therefore the new wall will also have the new concrete bridge rail above it. There are two options for constructing the wall and bridge rail:

- A conventional cast-in-place concrete cantilever wall with the concrete bridge rail attached directly to the top of the wall.
- A Mechanically Stabilized Earth wall (MSE) with the bridge rail supported on a cast-in-place moment slab above the wall.

The MSE wall is typically more cost effective than conventional cast-in-place concrete wall but the additional cost of the moment slab makes the two types similar in cost. The total cost to remove and replace the existing retaining wall is approximately \$74,000 including the bridge rail. It is possible to let the contractor decide which wall type to use in order to ensure the lowest cost wall is provided.

Both wall options can be built while maintaining two-way traffic in narrower temporary lanes similar to the sidewalk replacement alternatives.

VIII. COST ESTIMATES

The following cost estimates presented in the Evaluation Matrix are preliminary and were prepared using applicable reference material and CLD's best engineering judgment. The estimates will be subject to change as the design is updated and refined. They are considered reliable for the purposes of planning and decision-making.

The breakdown of costs for each alternative given on the Evaluation Matrix includes roadway, structure, traffic and safety, mobilization/demobilization costs, and Right-of-Way acquisition costs. The items included in each of these sections are defined below.

Roadway covers the cost of rebuilding the existing road, signs, drainage, and new approach rail within the project limits.

Structure includes the costs of the repair or replacement of the bridge/arch or portions of the bridge/arch structure.

Traffic and Safety includes the cost of traffic control items such as signage, barrier, changeable portable message signs, officers, and flaggers.

Mobilization/Demobilization includes the costs of preparatory work and operations for the project, for the establishment and removal of the contractor's field office, buildings, etc., and any other costs incurred prior to beginning work and upon completion of the Contract items. It also includes project cleanup, establishment of vegetation, and the completion of all work not associated with a specific pay item.

Right-of-Way Acquisition is not anticipated on this project. Right-of-Way acquisition generally includes the cost associated with acquiring the necessary land and/or rights for construction of the project. These costs are extremely variable and will be unknown until the acquisition process commences.



IX. CONCLUSION

Based on the review of cost, constructability, construction duration, historic impacts and aesthetics, CLD recommends the following:

- Arch Repairs with Soil Remediation
- Single Span In-kind Sidewalk Replacement
- Replacement of Retaining Wall/Wing Wall at Green Park

X. NEXT STEPS

Before we can proceed with developing construction plans, some items still need to be evaluated:

1. Determine the limits, thickness, depth, and condition of the roadway slab: CLD proposes that GPR and cores/probes be used to at the next design phase. Core samples of the slab would be tested for compressive strength and chloride content.
2. Determine the soil conditions at the bridge to decide on the most appropriate soil remediation type: Cores samples of the soil taken while examining the roadway slab would be evaluated to determine their composition.
3. Use GPR to located voids and emergency repair grouting: This will help the contractor know where to focus grouting efforts.
4. One-way alternating traffic and detour routes should be further evaluated. The effect these maintenance of traffic options will have on the Act 250 permit should also be determined.
5. Queue lengths for one-way alternating traffic need to be developed to determine the viability of this option. Traffic counts of turning movements on West Seminary are needed to evaluate queue lengths and design the temporary signal timing.



EVALUATION MATRIX - ARCH REPAIRS

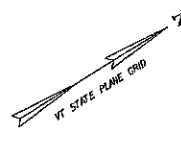
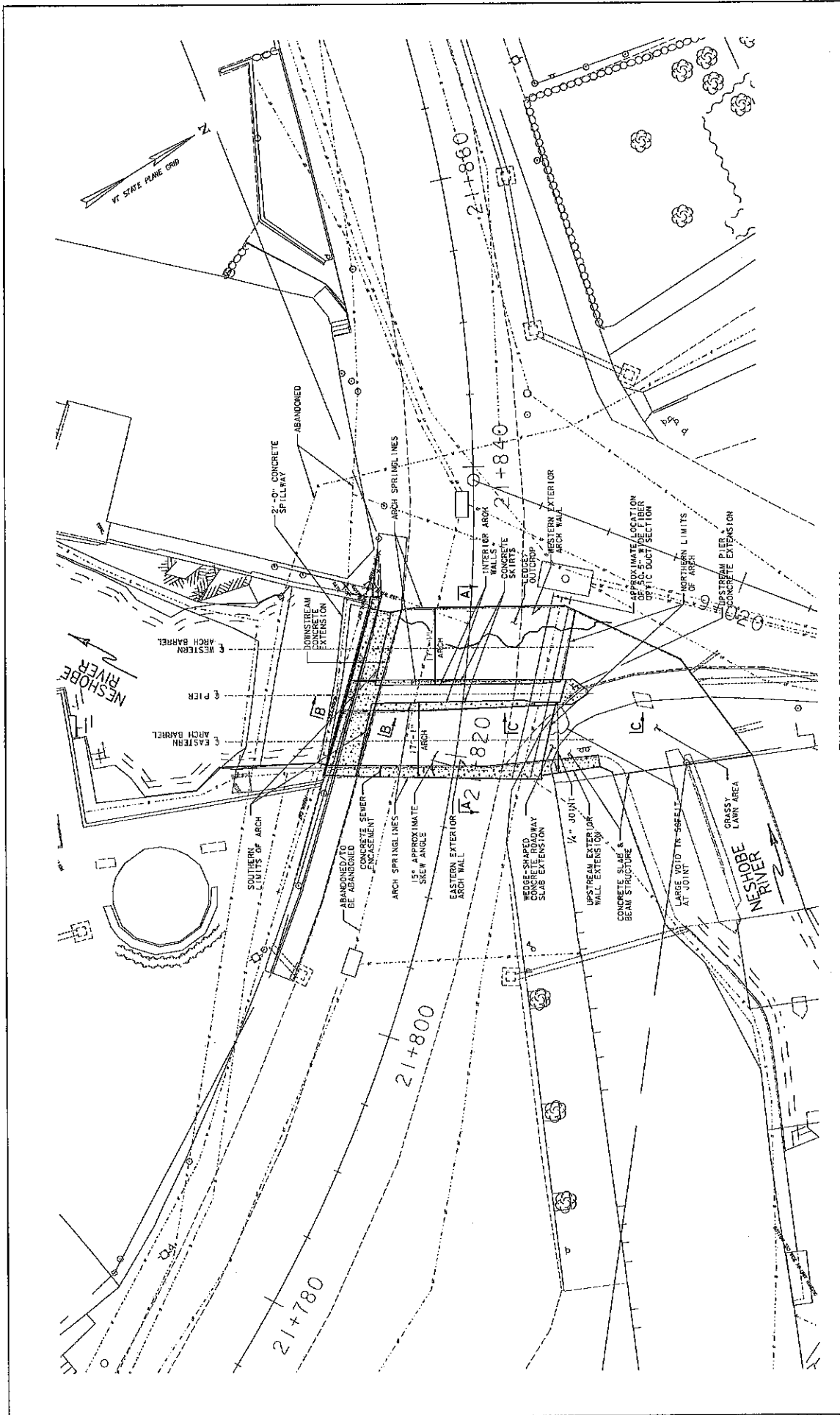
COST ¹	ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D	
	NO ACTION		ARCH REPAIRS ALONE		ARCH REPAIRS WITH CONCRETE SADDLE		ARCH REPAIRS WITH SOIL REMEDIATION	
	Full Slab Placement	12-Foot Slab Widening	Full Slab Placement	12-Foot Slab Widening	No Slab	Full Slab Placement	12-Foot Slab Widening	
Bridge Cost	\$0	\$491,000.00	\$0	\$449,000.00	\$0	\$596,000.00	\$0	\$664,000.00
Removal of Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roadway	\$0	\$59,000.00	\$0	\$53,000.00	\$71,000.00	\$0	\$76,000.00	\$70,000.00
Maintenance of Traffic	\$0	\$45,000.00	\$0	\$30,000.00	\$60,000.00	\$0	\$45,000.00	\$30,000.00
Construction Costs	\$0	\$595,000.00	\$0	\$532,000.00	\$727,000.00	\$0	\$785,000.00	\$722,000.00
Construction Engineering + Contingencies (30%)	\$0	\$178,500.00	\$0	\$159,600.00	\$218,100.00	\$0	\$235,500.00	\$216,600.00
Total Construction Costs w/CEC	\$0	\$773,500.00	\$0	\$691,600.00	\$945,100.00	\$0	\$1,020,500.00	\$938,600.00
Preliminary Engineering ² (25%)	\$0	\$148,800.00	\$0	\$133,000.00	\$181,800.00	\$0	\$196,900.00	\$180,500.00
Right of Way	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Project Costs	\$0	\$922,300.00	\$0	\$824,600.00	\$1,126,900.00	\$0	\$1,216,800.00	\$1,119,100.00
SCHEDULING	N/A	4 months	N/A	3 months	6 months	4.5 months	3.5 months	
Project Development Duration ³	N/A	2 months	N/A	1 month	4 months	2.5 months	1.5 months	
Construction Duration	N/A	30' (min.)	N/A	30' (min.)	30' (min.)	30' (min.)	30' (min.)	
One-Way Alternating Traffic	30' (min.)	4-11-11-4 (min.)	30' (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	
Typical Section - Roadway (feet)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	4-11-11-4 (min.)	
Typical Section - Bridge (feet)								
Geometric Design Criteria								
Traffic Safety	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
Alignment Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
Bicycle Access	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
Hydraulic Performance	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
Pedestrian Access	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
Utility	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
IMPACTS								
Agricultural								
Archaeological								
Historic Structures, Sites, & Districts								
Hazardous Materials								
Floodplain/Foodway								
Fish & Wildlife								
Rare, Threatened, & Endangered Species								
Public Lands - 4(f) Resources								
LWCF - Section 6(f)								
Noise								
Wetlands								
LOCAL AND REGIONAL								
Addresses Concerns								
Community Character								
Economic Impacts								
Conformance to Regional Impact Plan								
Satisfies Purpose & Need Statements								
PERMITS								
Act 240								
401 Water Quality Certification								
404 US Army COB Permit								
Stream Alteration								
Conditional Use Determination								
Stormwater Discharge								
Lakes & Ponds								
T & E Species								
SHPO								
OTHER								
NEPA Categorical Exclusion	No	No	No	No	No	No	No	
ROW Acquisition	No	No	No	No	No	No	No	
Road Closure	<10 years	50 years	<10 years	50 years	50 years	50 years	50 years	
Design Life								

¹ Costs are estimates only, used for comparison purposes.
² Preliminary Engineering Costs are estimated starting from the end of the Project Definition Phase.
³ Project Development Durations start from the end of the Project Definition Phase.

EVALUATION MATRIX - SIDEWALK STRUCTURE REHABILITATION/REPLACEMENT

	ALTERNATIVE A NO ACTION	ALTERNATIVE B REHABILITATION	ALTERNATIVE C-1 IN-KIND REPLACEMENT		ALTERNATIVE C-2 SINGLE SPAN		ALTERNATIVE D ARCH EXTENSION		ALTERNATIVE E SEPARATE PEDESTRIAN BRIDGE	
			PRESTRESSED PRECAST CONCRETE SLABS	PRESTRESSED PRECAST CONCRETE VOIDED SLABS	PRESTRESSED PRECAST CONCRETE SLABS	PRESTRESSED PRECAST CONCRETE VOIDED SLABS	STEEL PREFABRICATED STRUCTURE	PRESTRESSED PRECAST CONCRETE SLABS		
COST ¹	Bridge Cost	\$ 175,000.00	\$ 208,000.00	\$ 182,000.00	\$ 334,000.00	\$ 120,000.00	\$ 140,000.00			
	Removal of Structure	\$ 0	\$ 21,000.00	\$ 21,000.00	\$ 29,000.00	\$ 21,000.00	\$ 21,000.00			
	Roadway	\$ 0	\$ 18,000.00	\$ 24,000.00	\$ 39,000.00	\$ 20,000.00	\$ 22,000.00			
	Maintenance of Traffic	\$ 0	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00			
	Construction Costs	\$ 0	\$ 198,000.00	\$ 258,000.00	\$ 427,000.00	\$ 166,000.00	\$ 188,000.00			
	Construction Engineering + Contingencies (40%)	\$ 0	\$ 59,400.00	\$ 77,400.00	\$ 128,100.00	\$ 49,800.00	\$ 56,400.00			
	Total Construction Costs w CBE	\$ 0	\$ 257,400.00	\$ 335,400.00	\$ 555,100.00	\$ 215,800.00	\$ 244,400.00			
	Preliminary Engineering (25%)	\$ 0	\$ 49,500.00	\$ 64,500.00	\$ 106,800.00	\$ 41,500.00	\$ 47,000.00			
	Right of Way	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0			
	Total Project Costs	\$ 0	\$ 306,900.00	\$ 399,900.00	\$ 661,900.00	\$ 257,300.00	\$ 291,400.00			
SCHEDULING	Project Development Duration ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Construction Duration ⁴	N/A	1 month	2.5 months	4 months	2 months	2 months	2 months	2 months	
	Reduced Lane Duration	N/A	1 month	2.5 months	4 months	2 months	2 months	2 months	2 months	
	Typical Section - Roadway Sidewalk (feet)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	5'-0" (min.)	
	Typical Section - Bridge Sidewalk (feet)	5'-0"	5'-0"	6'-9"	5'-0"	6'-9"	5'-0"	5'-8"	5'-8"	
	Geometric Design Criteria									
	Traffic Safety	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
	Alignment Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
	Skyside Access	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
	Hydraulic Performance	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
IMPACTS	Pedestrian Access	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
	Utility	No Change	No Change	No Change	No Change	No Change	No Change	No Change	No Change	
	Agricultural									
	Archaeological									
	Historic Structures, Sites, & Districts									
	Hazardous Materials									
	Floodplain/Foodway									
	Fish & Wildlife									
	Rare, Threatened & Endangered Species									
	Public Lands - 4(f) Resources									
LWCF - Section 6(f)										
LOCAL AND REGIONAL	Noise									
	Wetlands									
	Addresses Concerns									
	Community Character									
	Economic Impacts									
	Conformance to Regional Impact Plan									
	Statutes Purpose & Need Statements									
	Act 250									
	401 Water Quality Certification									
	404 US Army COE Permit									
PERMITS	Stream Alteration									
	Conditional Use Determination									
	Stormwater Discharge									
	Lakes & Ponds									
	T & E Species									
	SEPO									
	NEPA Categorical Exclusion									
	ROW Acquisition									
	Road Closure									
	Design Life	<10 years	25 years	80 years	80 years	80 years	80 years	80 years	80 years	

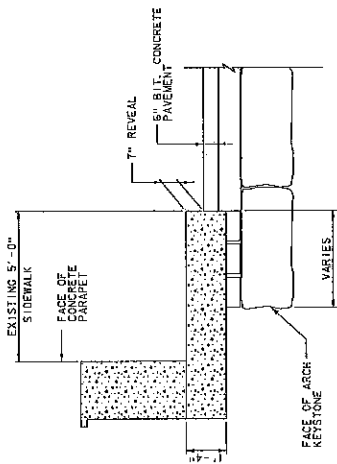
¹ Costs are estimates only, used for comparison purposes.
² Preliminary Engineering Costs are estimated starting from the end of the Project Definition Phase.
³ Project Development Durations start from the end of the Project Definition Phase.
⁴ Construction duration is time to complete the sidewalk structure work alone and is not necessarily additive to the repair durations.



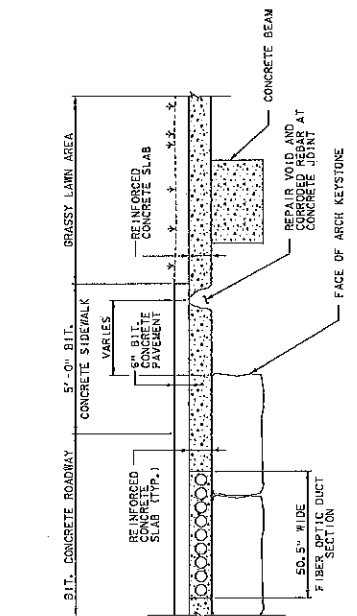
PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3(58)
 FILE NAME: I068/008/02-1700-100-001
 PLOT DATE: 2/6/2005
 PROJECT LEADER: M. SMITH
 DRAWN BY: J. BYATT
 DESIGNED BY: S. BEAUMONT
 CHECKED BY: J. BYATT
 SHEET 1 OF 8
 EXISTING CONDITIONS PLAN



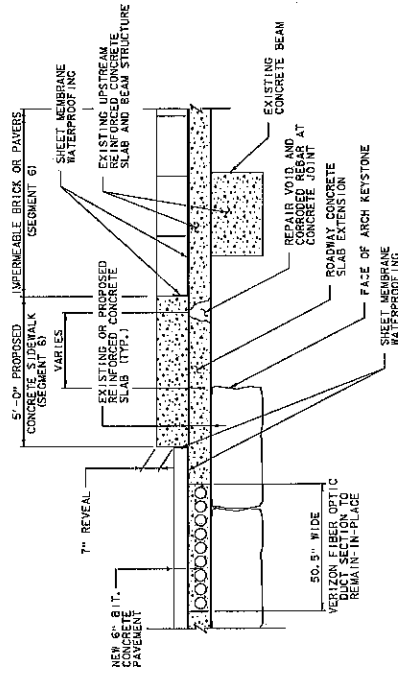
EXISTING CONDITIONS PLAN



EXISTING
SECTION B-B
1/2" = 1'-0"



EXISTING
SECTION C-C
1/2" = 1'-0"

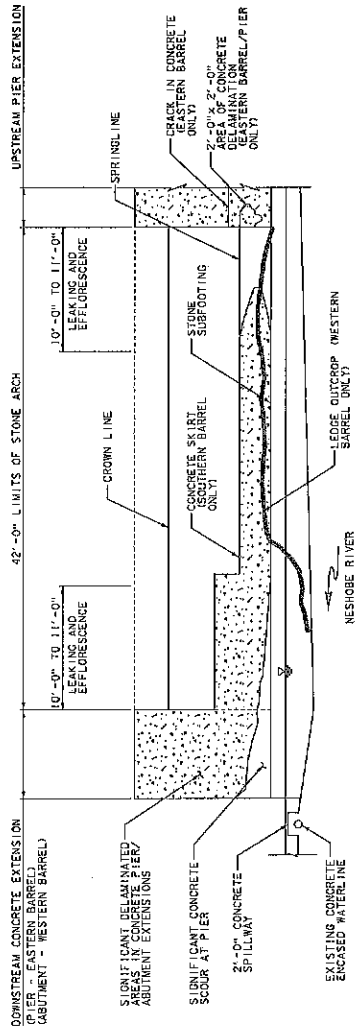


PROPOSED SIDEWALK
AT SECTION C-C
1/2" = 1'-0"

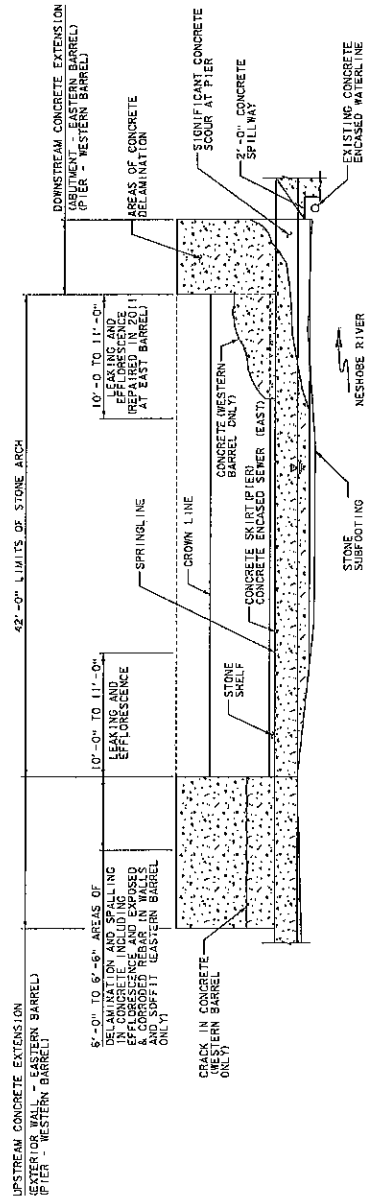
NOTE: SEE SHEET 1 FOR SECTION LOCATIONS.

PROJECT NAME: BRANDON
PROJECT NUMBER: BHF 019-3(G8)
FILE NAME: BIDS/C&M/19-PT5ub.dgn
PLOT DATE: 2/6/2015
PROJECT LEADER: J. BYATT
DRAWN BY: M. SMITH
DESIGNED BY: J. BYATT
CHECKED BY: S. SEQUOIA
SHEET 2 OF 8
TYPICAL SECTIONS 1

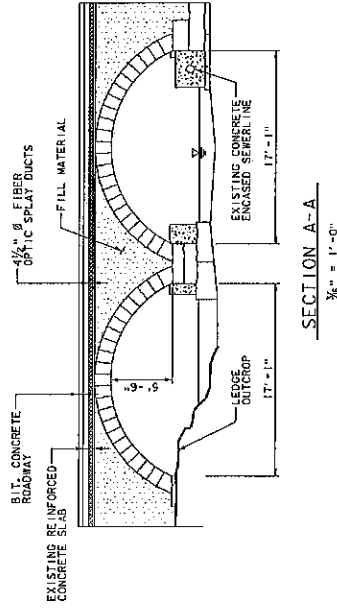
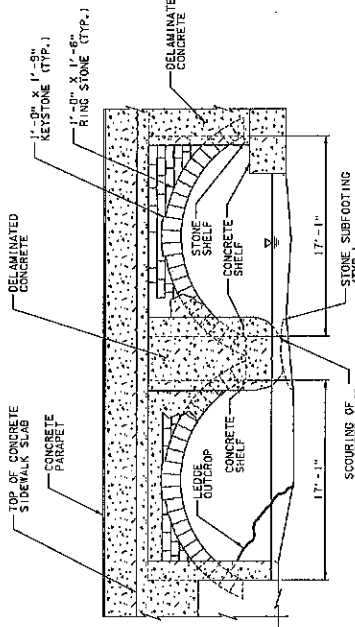




WESTERN ARCH WALL ELEVATION
(EASTERN PIER FACE SHOWN, WESTERN ABOUT. SIMILAR)
3/8" = 1'-0"



EASTERN ARCH WALL ELEVATION
(WESTERN PIER FACE SHOWN, EASTERN ABOUT. SIMILAR)
3/8" = 1'-0"

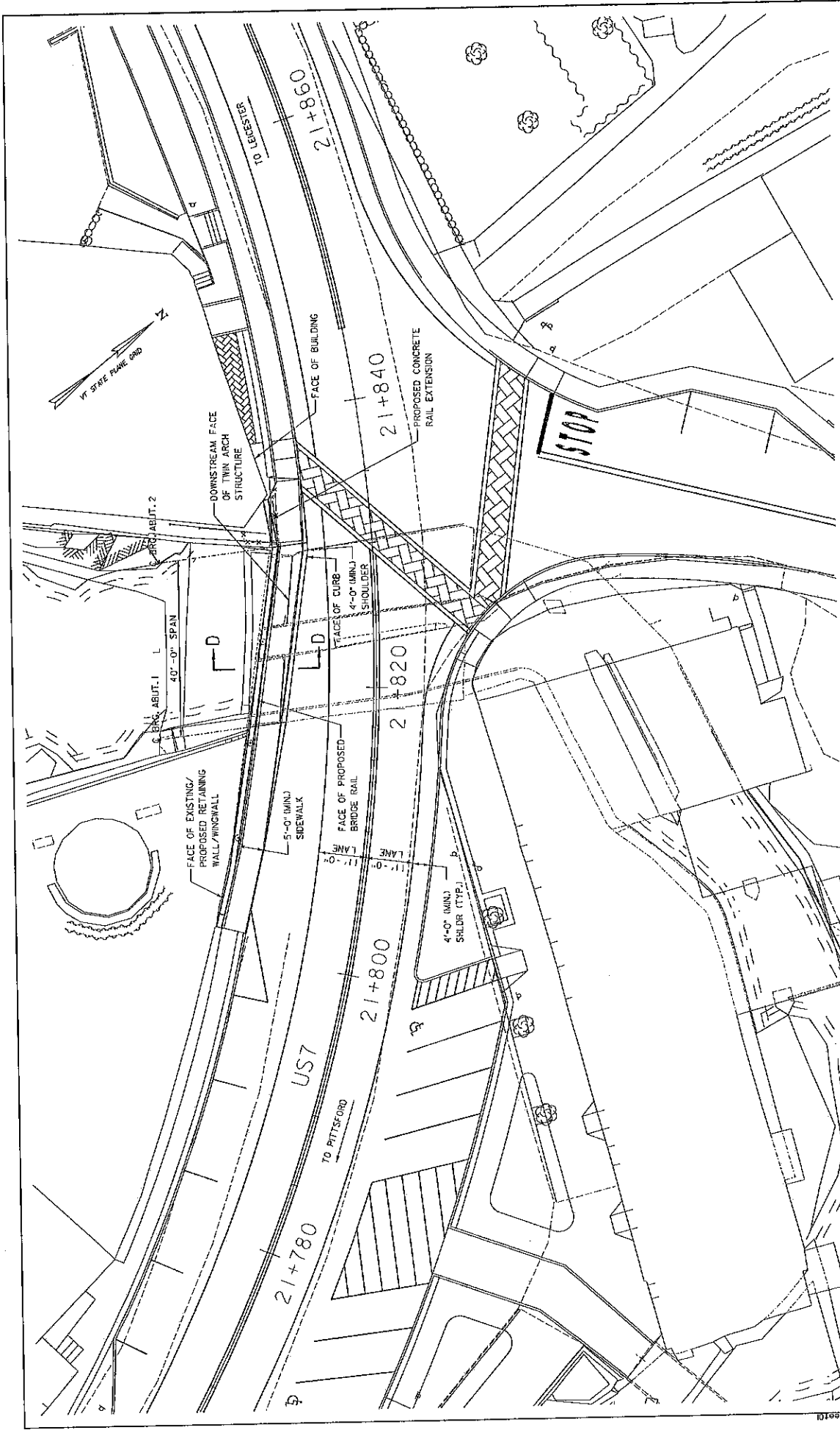


NOTE: SEE SHEET 1 FOR SECTION LOCATION.

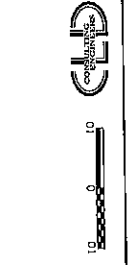
PROJECT NAME: BRANDON
PROJECT NUMBER: BHF 019-3(G8)

FILE NAME: 1108/000/12-17500-007
PROJECT LEADER: J. BYATT
DESIGNED BY: S. BEAUMONT
CHECKED BY: J. BYATT
SHEET 3 OF 8



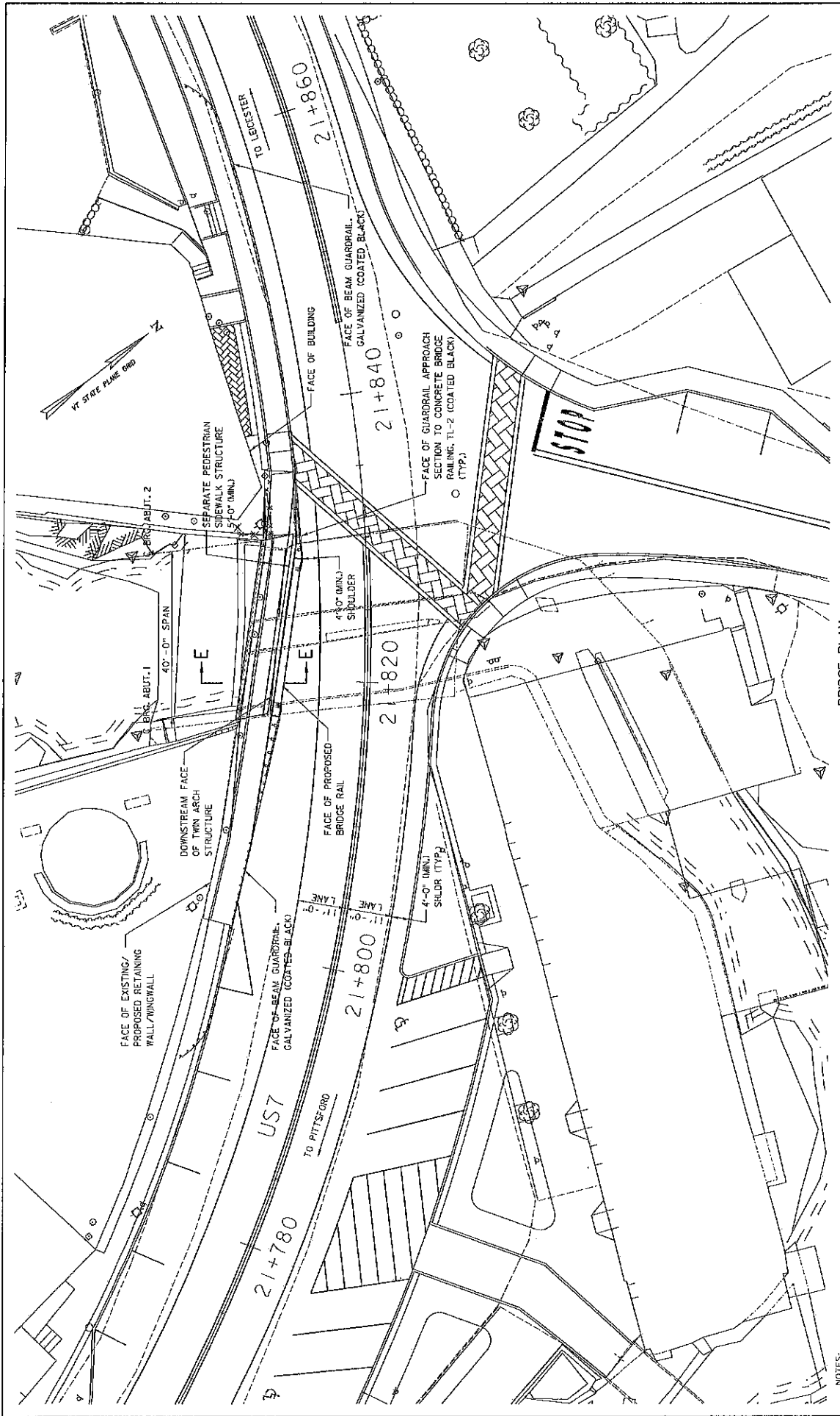


PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3(68)
 FILE NAME: J0808/000/019-3(68)g
 DRAWN BY: M. SMITH
 DESIGNED BY: J. BYATT
 CHECKED BY: S. BEAUMONT
 ALTERNATIVE: C-2 PLAN
 SHEET 4 OF 8



BRIDGE PLAN
 (ALT. C-2 - IN-KIND REPLACEMENT (SINGLE SPAN SHOWN, ALTS. B, C-1, AND D SIMILAR))

NOTES:
 1. PROPOSED SEGMENT 6 ROADWAY IMPROVEMENTS SHOWN.
 2. SEE SHEET 8 FOR SECTION D-D.

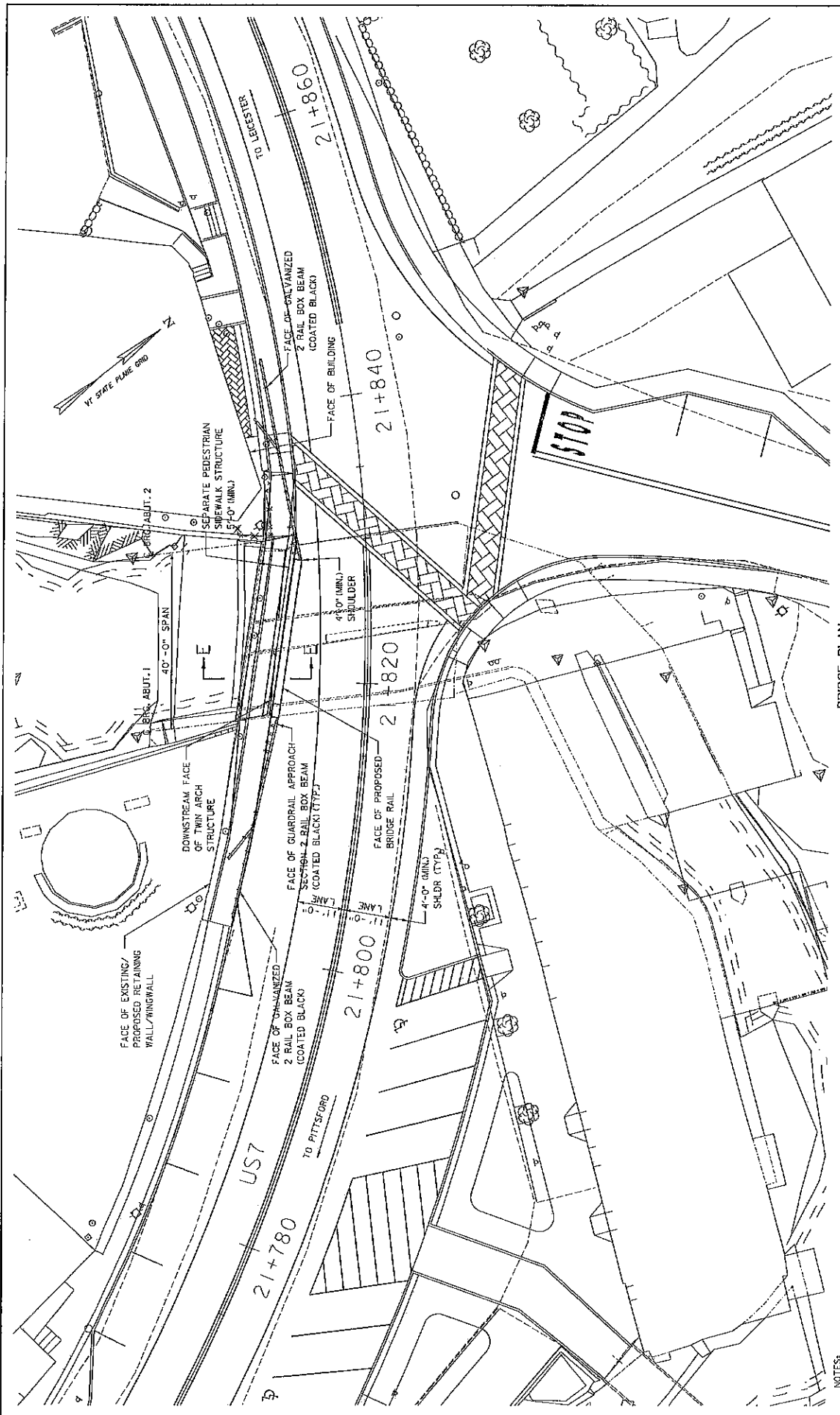


PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3(58)
 FILE NAME: I068/cas/12-1708-r012.2.dgn
 PLOT DATE: 2/6/2015
 PROJECT LEADER: J. BYATT
 DRAWN BY: M. SMITH
 DESIGNED BY: S. BEAUMONT
 CHECKED BY: J. BYATT
 ALTERNATIVE E WITH BEAM GUARDRAIL PLAN SHEET 5 OF 8

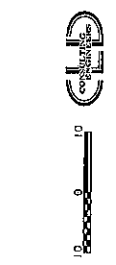


BRIDGE PLAN
 ALT. E - SEPARATE SINGLE SPAN PEDESTRIAN BRIDGE
 WITH BEAM GUARDRAIL

- NOTES:
1. PROPOSED SEGMENT 6 ROADWAY IMPROVEMENTS SHOWN.
 2. SEE SHEET 8 FOR SECTION E-E.

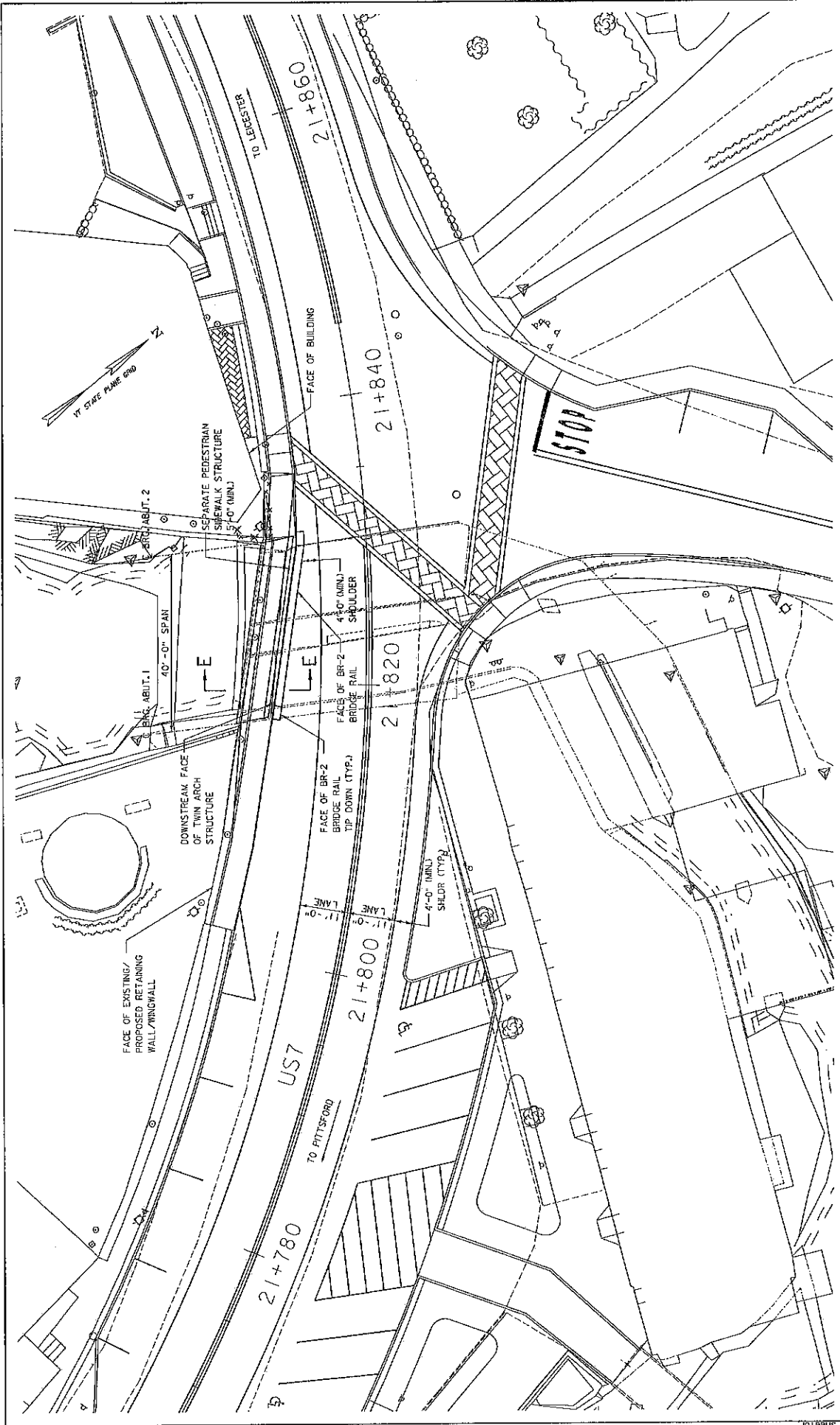


PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3158
 FILE NAME: US08 (6/24/17) 019-3158.dgn
 PROJECT LEADER: J. BYATT
 DESIGNED BY: S. BEAUMONT
 ALTERNATIVE E WITH BOX BEAM RAIL PLAN SHEET 6 OF 8

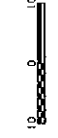


BRIDGE PLAN
 ALT. E - SEPARATE SINGLE SPAN PEDESTRIAN BRIDGE
 WITH BOX BEAM RAIL

NOTES:
 1. PROPOSED SEGMENT 6 ROADWAY IMPROVEMENTS SHOWN.
 2. SEE SHEET 8 FOR SECTION E-E.

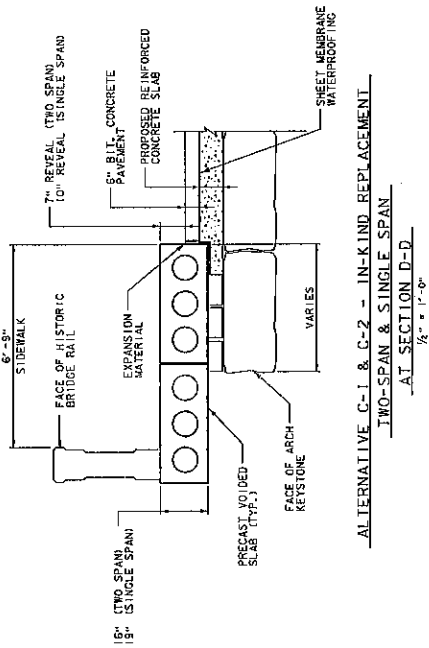


PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3(58)
 FILE NAME: F:\068\cos\72-117\br-r012.3.dgn
 PLOT DATE: 2/9/2005
 PROJECT LEADER: J. BYATT
 DRAWN BY: M. SMITH
 DESIGNED BY: S. SEQUENT
 ALTERNATIVE E WITH BR-2 RAIL PLAN
 SHEET 7 OF 8

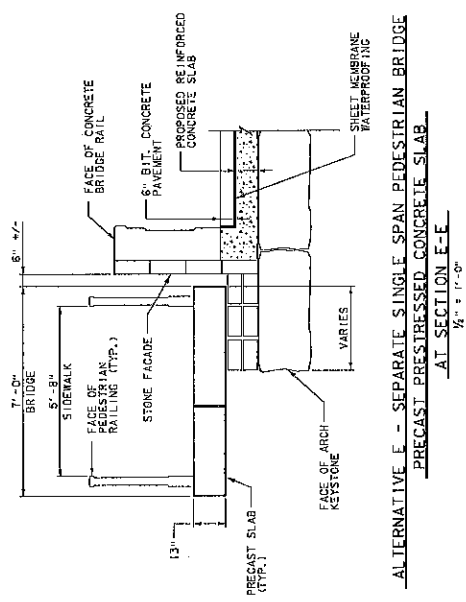


BRIDGE PLAN
 ALT E - SEPARATE SINGLE SPAN PEDESTRIAN BRIDGE WITH BR-2 BRIDGE RAIL

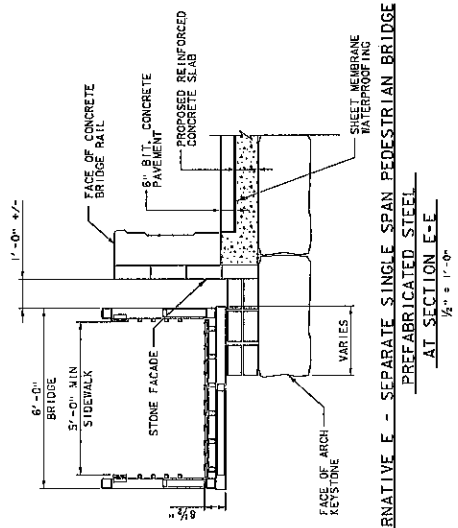
- NOTES:
1. PROPOSED SEGMENT 6 ROADWAY IMPROVEMENTS SHOWN.
 2. SEE SHEET 8 FOR SECTION E-E.



ALTERNATIVE C-1 & C-2 - IN-KIND REPLACEMENT
 TWO-SPAN & SINGLE SPAN
 AT SECTION D-D
 1/4" = 1'-0"



ALTERNATIVE E - SEPARATE SINGLE SPAN PEDESTRIAN BRIDGE
 PRECAST PRESTRESSED CONCRETE SLAB
 AT SECTION E-E
 1/4" = 1'-0"



ALTERNATIVE E - SEPARATE SINGLE SPAN PEDESTRIAN BRIDGE
 PREFABRICATED STEEL
 AT SECTION E-E
 1/4" = 1'-0"



PROJECT NAME: BRANDON
 PROJECT NUMBER: BHF 019-3(G8)
 FILE NAME: B08B/006/18-IT/STC-001
 PROJECT LEADER: J. BYATT
 DESIGNED BY: N. CARON
 TYPICAL SECTIONS 2

PLOT DATE: 2/6/2015
 DRAWN BY: M. SMITH
 CHECKED BY: J. BYATT
 SHEET 8 OF 8



802-247-3635—

Town Office Location: 2417 Franklin Street

REQUEST FOR PROPOSAL

Department of Public Works-Highway Division

INVITATION TO BID UNION STREET ROAD REHABILITATION

1. Project Description

1.1)

The Town of Brandon is requesting bids from qualified contractors to perform roadway excavation for road base removal and replacement with geo-textile road fabric and suitable road base material. Road base will be compacted and graded to a finish grade acceptable for paving. The road rehabilitation also includes the replacement of culverts, ditching, and landscaping per the Scope of Work provided in this bid. The contractor may refer to the Scope or Work for more specific project details. The project is partially funded by Vermont Agency of Transportation Grants. The contractor will also include all project paving for this bid. The Town will be seeking one contractor to complete the work requirements for all project components.

1.2

The Pre-Bid Meeting will be held on (Meeting Date) at (Location). While this meeting is not mandatory, all bidders are strongly encouraged to attend this meeting. The meeting is being held to answer contractor's question and provide more specific project details.

2. Bidding Qualifications required

2.1

All Contractors responding to this Invitation to Bid must demonstrate the following qualifications to be considered eligible to participate in this bid:

1. Provide a statement that all employees/workers have up to date licensing, training, or certifications that are required to perform their job duties relating to this project
2. Provide proof of insurance to include Commercial Liability, Auto/Liability, and Workmen's Compensation
3. Provide three references for similar projects completed. The town may choose to waive this requirement.
4. Demonstrate/provide that you have the ability to complete the project within (?-Project deadline??)
5. Provide a statement that you will provide site management that complies with Vermont Laws.

3. Major Project Components

3.1

The project has four major components with two of those components receiving grant funding. The contractor must be able to manage and record the work process in way that provides the town with accurate documentation for grant reporting:

1. Class Two Roadway Grant -Component #1 of this project encompasses the road re-construction that involves excavation of existing asphalt and road base, installation of road fabric, installation of 3" stone, and gravel road base. All ditching and landscape restoration adjoining the road base replacement will be part of this Class Two Roadway Grant. This is approximately a .5 mile section of road. The contractor will need to manage cost and billing separately for grant reporting purposes. All work slips and invoices shall be marked as Item 1, Road Project.
2. Structures Grant -Component #2 of this project is located within the borders of the above mentioned .5 mile stretch of road rehabilitation. This component is a 4 foot-diameter culvert that is funded by VAOT Structures Grant. The contractor will need to take care that project materials, labor, and equipment are

recorded and billed separately for this culvert even though it is located within the borders of component #1. All work slips and invoices shall be marked as Item 2-Grant Culvert.

3. Town Culverts-Component #3 is located outside of the borders of the Road Rehabilitation Project. Component #3 is at a separate location on Union Street where three town culverts are in need of replacement. This is not a grant funded project but will require that billing information be separated and reported as one separate project. The three culverts are grouped in close visual proximity and all work performed relating to the three culverts will be viewed as one project for recording and billing purposes. All work slips and invoices will be marked as Item 3-Town Culverts. Please note that **Paving, just for this area should be recorded under Item 3-Town Culverts.**
4. Paving-Component # 4 (billed under component #1) is for base and finish paving work done within the borders of Component #1 Road Rehabilitation. The work should be recorded as Item-1, Road Project

4. Scope of work details/requirements-Component No.1, Road Rehabilitation

GENERAL NOTE:

The contractor will be responsible for maintaining road centerline and edges. Offset stakes shall be set prior to construction to accommodate proper road base placement.

4.1

Asphalt Removal-The contractor will excavate and remove existing asphalt to be properly recycled. The existing layer of asphalt is 4 inches on average.

4.2

Excavation-The contractor will excavate the road and shoulder area to the following minimum measurements: Excavate to a depth of 2 feet below the existing asphalt surface elevation and to a width of 24 feet (12 feet to either side of the existing centerline). The approximate project length is 2,550 feet and will be marked at both ends prior to the pre-bid conference.

4.3

Hauling of Excess Material-The excess material will be hauled to an offsite location for disposal. The contractor will be responsible for the disposal of excess material. The contractor may store clean material onsite to use for shoulder, sub-grade leveling or haul to a storage site nearby. The town may provide locations for storing reusable material (to be determined).

4.4

Sub-grading & Debris-An evenly graded subgrade will be established under the road, free of debris, and any objects that may cause penetration of road fabric. The grade will be slightly crowned in the center. The road fabric will be placed when grading and debris removal is satisfactory. If absolutely necessary, bedding material will be used in difficult to grade locations. The contractor may acquire bedding material from the town highway department utilizing the town loader for loading trucks.

4.5

Road Fabric -Woven Road Fabric will be placed in the properly graded area and rolled out by hand over the properly prepared subgrade. Care will be taken to align fabric with edges of the excavation. The end and middle seams will have a minimum of 3 feet of material overlap. The contractor will use heavy duty geotextile fabric specifically designed for road base construction.

4.6

Special Care of Fabric-The contractor will take special care to assure there are **no breaches/tears** in the road fabric before or during the installation. The placement of material should be performed in no less than 8-inch lifts. Light weight spreading equipment may be necessary to prevent damage. The contractor is responsible for repairing any breach/tear that occurs.

4.7

Wet Conditions-Extreme wet weather may cause project delays if saturated soils are unable to support loaded trucks and heavy equipment during road base placement.

4.8

Road Base Installation-The **first layer of Road Base** will consist of **3 inch minus clean crushed stone**. The first layer will be carefully placed over the road fabric at a thickness 16 inches. If conditions support installation with a lightweight bulldozer, the initial layer shall be 8 to 12 inches. The installation of 3 inch stone can be performed in one or two lifts. Compaction of this lift will be performed by roller or dozer depending on sub-soil conditions. A roller will be on site and available for this stage of work.

The **second layer of Road Base** will consist of **1 ½ inch crushed graded gravel meeting the VAOT specification for road base gravel (704.05)**. This top layer will be a 6 inch layer after compaction in place at finish grade. Compaction will be performed by vibratory roller.

4. Scope or Work (section 4 continued)

4.8

Culverts-There are several culverts within the borders of the Road Rehabilitation area. For purposes of this bid, the town would like the contractor to **submit a per foot price for installing culverts. The two sizes requested are 18 and 24 inch diameter. The culvert type is HDPE plastic.** The average length is 40 feet per crossing. The pricing will be based on installations with the road closed. The contractor will follow pipe manufacturer's recommendations for material bedding and compaction. See sections 5.3, 5.4, .5.5, and 5.6 of this bid document for additional detail on culvert installation. All culverts will be installed prior to fabric and road base installation

4.9

Road Shoulder and Rough Grade-Upon completion of road base installation, culvert replacement, and any required ditching, rough grading of non-gravel area will be completed prior to paving. Using existing/salvaged fill or additional hauled in material, the contractor will rough grade all remaining disturbed areas in the work-zone. The slope adjoining the gravel road shoulders will be filled/graded and lightly compacted (with excavator or dozer as filling). The shoulder will be filled to a grade near equal (plus/minus 3 inches approximately) to the gravel base finish grade.

4.10

Mulching and Seeding-All exposed soil areas will be mulched and seeded upon completion of rough grading. The contractor cannot leave soil exposed for extended time periods without mulching and seeding.

4.11

Erosion Fencing-Any soil materials store in the flood plain portion of this road project will be protected by erosion fencing.

4.12

Guardrail-There is an existing guardrail in the project that may have to be reset. It will be the contractor's responsibility to inspect the guardrail before bidding and determine if the guardrail can be stabilized during construction or if resetting of post will be required.

4.13

Ditching and Tree Removal-Field Data for these two items is not complete at the time of bidding. There is some ditching and tree removal involved in the project. Information will be supplied in an addendum distributed at the pre-bid conference if weather permits completion of fieldwork before that time. In the absence of an addendum, the bid will proceed without consideration of these items and the contractor will provide pricing at a later date.

5. Scope of Work details/requirements-Component NO. 2, Grant Funded 4 foot Culvert

5.1

Component NO. 2 pertains to the removal of a 53 foot length of 4 foot diameter corrugated metal culvert w/concrete headwall and replacing it with 60 feet of 4 foot diameter High Density Poly Ethylene (HDPE) culvert with Rip-Rapped intake and discharge ends.

5.2

The road may be closed to accommodate the replacement of this culvert. The town would like to limit the closing to one day if possible.

5.3

The contractor will be responsible for removing the existing culvert/headwall and properly disposing of all debris and excess soils. Asphalt should be saw or wheel cut prior to construction and excavated asphalt shall be properly

recycled. The excavation shall be properly sloped to meet OSHA requirements for an excavation of 5 feet or more in depth. Most material will not be reused. Only clean sandy or gravel material will be used around the main body of the culvert. Any heavy soils will only be used at the ends of the culvert beyond the gravel road shoulder.

5.4

The installation of the new HDPE plastic culvert will follow manufacturer's recommendation which specifically request suitable bedding material, such as gravel, be used as a bedding under and around the culvert. Installation of backfilling material will be accomplished in limited thickness lifts. The lift will be determined by the compaction equipment chosen by the contractor. (By example: A jumping jack is approximately an 8 inch lift. A heavy duty plate compactor can range from 12 to 24 inch lifts). The project manager will approve lift heights upon inspection of tamping equipment.

5.5

Bedding will be installed, as needed, to establish culvert grade before installing pipe. The pipe should be carefully inspected prior to installation. Any holes or cracks shall be considered an unacceptable defect. After inspection, the pipe will be installed and properly aligned on grade. It may be necessary to hold the pipe down in place during initial backfill and tamping lifts. The contractor will be responsible for keeping the pipe intact and of free of defects during installation.

5.6

The Culvert will be backfilled in compacted lifts up to a grade consistent with existing road asphalt before opening to traffic. No paving will be required upon completion as the paving for this culvert is part of the Class II road rehabilitation.

5.7

The culvert intake and outflow ends will be armored with RIP RAP to prevent erosion. The RIP RAP excavation will be fabric lined prior to installing Stone. All exposed soils will be graded, mulched, and seeded.

6. Scope of Work details/requirements-Component NO. 3, Town Culverts

6.1

Component NO. 3 pertains to the replacement of three town culverts that are located on Union Street but outside of the Road Rehabilitation project borders (southeast of the main project). The three new culverts will be 18" diameter x 40 feet long HDPE plastic. All three culverts are located in an approximately 200 foot flat stretch of road approximately 1 plus miles southeast of the main project. The town will clearly mark this location and culverts prior to the pre-bid conference.

6.2

The Contractor will be permitted to close the road for installation only. Clean-up work will be performed with one lane open. Asphalt will be saw or wheel cut prior to excavation. Excavations will adhere to OSHA sloping for ditches of 5 feet or more in depth. The contractor will haul away excess materials and debris. The contractor shall assure that excavated asphalt is properly recycled.

6.3

Please refer to sections 5.3, 5.4, 5.5, and 5.6 of this bid document for additional detail on culvert installation.

6.4

Bedding material can be acquired at the town garage and loaded by the town's loader. The contractor will be responsible for disposal of all debris and excess fill material. All exposed soil areas will be graded mulched and seeded upon completion.

6.5 Excavated asphalt pavement will be replaced in two lifts consisting of 2.5 inch base and 1.5 inch surface wearing course. Pavement will be compacted with approved equipment.

7. Scope of Work details/requirements-Component NO.4 Paving

7.1

Component NO. 4 pertains to base and surface **Asphalt Pavement Construction** in the **Road Rehabilitation** area **detailed in section 4** of this bid document. The pavement construction consists of applying 2.5 inch asphalt base layer and 1.5 inch asphalt surface layer to the newly constructed road base. **PLEASE NOTE:** The pavement edge will be tapered to meet VTrans specifications for an "Asphalt Paving **Safety Edge**".

7.2

The contractor must provide adequate documentation to have all **asphalt paving materials** approved by the town of Brandon. The contractor will provide the town with certification that the surface and base asphalt materials are consistent with specifications contained in the VTrans 2011 Standard Specifications for Construction or provide a certification that the specified mix will perform similarly despite any specification variances. Documentation will provide mix specifications in detail. The paving contractor will provide the town of Brandon with references on request.

7.3

The contractor will **have adequate equipment** to assure that the paving process is continuous and the paver is not stopping while waiting for aggregate deliveries. The contractor will have adequate equipment in good repair to avoid delays in the paving process. Paving is a time sensitive process and the town will not be responsible for overage cost or material defects relating to delays caused by the contractor.

7.4

The contractor shall maintain two rollers of adequate size during the base and surface paving process. Proper **compaction of the pavement** is a necessity to assure quality is achieved. The compaction must occur before pavement cools/sets. Compaction will be monitored by the project manager to assure that material temperatures and compaction patterns are maintained to achieve good results. Asphalt being transferred from truck to paver shall have a minimum temperature of 250 degrees Fahrenheit. See VTrans 2011 Standard Specifications for Construction for roller recommendations.

7.5

Application of Asphalt Pavement can only be permitted during acceptable weather conditions. The temperature minimum will be approximately 40 degrees Fahrenheit in the shade and rising. **The weather conditions** and report must indicate reasonably dry conditions. Rain delays are not a basis for additional charges to the town. The contractor and project manager will work closely to assure that work can continue with minimal interruption.

7.5

The contractor will submit a paving plan that is acceptable to the project manager. The plan will provide for safe traffic flow and protection of pavement joints. Much of the plan revolves around the question of how far the town accepts a single lane to be paved before pulling the next lane forward. The town prefers to have both lanes even at the end of a day.

7.6

Asphalt Emulsion will be applied to properly join asphalt layers and joints. The contractor will adhere to VTrans 2011 Standard Specifications for Construction for applying emulsion.

7.7

All Joints will be performed to avoid overlaps on the top course. The town will request that the contractor provide details to the project manager on joint construction prior to paving. The contractor will take proper care to maintain joint integrity throughout the paving process.

7.8

Existing driveways will be grade matched at preconstruction grades. The current road grade will be maintained so that the new pavement finish grade is reasonably matching the grade of the road prior to construction. This is critical where the road borders residential properties. Any Blacktop Driveways to be disturbed by construction will be saw cut prior to excavation. The contractor will pave to the cutline of any disturbed blacktop drives. The cutline maintenance is the responsibility of the contractor. Driveways shall be kept passable except in unavoidable construction that must occur adjacent drive areas.

7.9

Rough Grading and Shouldering will follow the completion of new pavement construction. The contractor will place a 2 foot width of aggregate shoulder material along all exposed edges of new pavement. The aggregate

place will meet VTrans **Aggregate requirements** in section **704.12 of the 2011 standard specifications for construction**. All shoulders will be compacted with motorized drum roller wherever practical and tamping by powered hand equipment will be acceptable in areas that do not accommodate the motorized drum roller. Proper care is required to avoid breaking of asphalt. Any loose aggregate will be swept from the road surface prior to rolling the shoulder aggregate. The contractor will also provide shouldering to match any existing gravel driveway grades.

7.10

Finish Grading along the shoulder and project clean-up will proceed as soon as practical. The use of heavy trucks and equipment will be minimized as needed to protect new pavement. Extreme hot weather may limit daily hours of work in some instances where trucks and heavy equipment are required to work from the new blacktop. These minor adjustments should not delay the project.

8. Scope of Work details/requirements-Project Finish Grading and Clean-up

8.1

The contractor is responsible for finishing grading, mulching, and seeding of soil areas bordering pavement along road shoulders, in culvert construction and ditching areas, and along the areas where the construction borders meet landowner properties. The contractor will restore all vegetated areas, driveway aprons, and damaged property such as mailboxes, and fences, or other items noted during construction.

8.2

Seed in non-residential areas may be applied on salvaged existing soils as long as vegetation is successful within 15 days. Conservation seed mixes are also acceptable in non-residential areas. Sandy loam topsoil is preferred in construction areas that border residential properties. Seed mixes in residential areas should also be specific for urban areas. Generally, it is the contractor's responsibility to restore vegetation that is of similar type and quality of that prior to construction.

8.3

The contractor will use good judgment to restore vegetation on slopes. Landscape netting/mats will be placed at the contractor's discretion but will be required if the vegetation fails due to erosion. The project manager may require matting in some areas.

8.4 Fertilizer can be helpful or detrimental depending on water availability. Since the contractor is responsible for establishing vegetation, the use of fertilizer will be at the contractor's discretion.

8.5

The town reserves the right to withhold a reasonable fee amount until vegetated areas are least 70% restored.

9. General Provisions

9.1

The Contractor will meet all requirements of the most recent edition and updates of the federal "Manual of Uniform Traffic Control Devices" (MUTCD). Proper flagging and signage are a critical component of this project.

9.2

The Contractor will adhere to the VTrans 2011 Standard Specifications for Construction in providing construction materials and procedures for this project. See Web-page: <http://vtransestimating.vermont.gov/>

9.3

The Contractor will reference industry standards established by the American Asphalt Institute as they apply to proper temperatures/methods for delivering, placing, and compacting Asphalt pavement.

9.4

The Contractor will be liable for damage to town infrastructure and residential property incurred by the contractor during construction.

9.5

The Contractor will notify the town one week in advance of intention to begin construction and will be solely responsible for calling Vermont Dig-safe and local utility entities prior to excavation. The contractor will be responsible for repairing any damaged utilities.

9.6

The Contractor is responsible for meeting all safety requirements for workers/others who are in or passing through the work zone.

9.7

The Contractor will give 10 day notice for planned road closings and follow established town procedures when closing any road.

9.8

The Contractor will give notice of any work stoppages. The project is expected to continue until completion unless the contractor provides just cause for stopping construction.

9.9

The Contractor must verify any quantities or measurements supplied in the bid documents by performing field checks. The town will assist the contractor in verification by providing a site tour and pre-bid conference.

9.10

The Contractor is expected to work within the town Right-of-Way and will not use areas outside of the ROW without permission of the town and/or landowner.

9.11

The Contractor will provide material slips to the project manager weekly. Gravel and Paving slips for road reconstruction are required weekly during construction.

10. Instructions to bidders

10.1

Bid Award-The town reserves the right to reject any and all bids in part or in whole. The contract will be awarded to the lowest **responsible bid**. A responsible bidder is one that meets all specifications, provides proper references, demonstrates the ability to do the requested work at a high standard, and can meet all project goals/deadlines. The contract is awarded to serve the best interest of the Town of Brandon.

10.2

Project Deadline-All contractors shall be warned that this project will have firm deadline and that penalties will be assessed, per the contract agreement, each day that the contract extends beyond the deadline. The projected deadline at the time of bid is (deadline date).

10.3

Pre-Bid Conference-Some project details are incomplete at the time of bid. All contractors are strongly encouraged to attend the pre-bid conference to address all questions relating to bid documents and project construction.

10.4

Bid Comparisons-For bids to be properly evaluated, please be sure to supply all documentation requested and use the bid-submittal form to provide your lump sum and per unit prices. The town reserves the right to reject any incomplete bid and especially if all requested pricing is not included.

10.5

Bid Questions-Please direct all bid questions to DAVID ANTONE, Municipal Public Works Consulting, LLC at the following: email, roadtech005@gmail.com or phone, 802-355-8215. The project questions period closes 24 hours prior to the bid opening.

SPECIAL NOTE:

Please be sure to use the bid form supplied on the next page. You may copy or type extra forms if needed. This form is important to properly evaluate bids.

10.6

All bids will be sealed and mail to:

Town insert info here

Emailed or Faxed bids will not be accepted.

10.7

The bid opening will be held _____ AM on _____ at the _____. All bidders are welcome to attend.

THIS PAGE MUST BE SUBMITTED AS PART OF YOUR BID:

Contractors Bid Price Submittal
Union Street Road Reconstruction
Town of Brandon

Submitted by:

Contractor _____ Contact Person _____

Address: _____

E-mail: _____ Phone: _____

Description: _____ Lump Sum Prices:

Component # 1-Class Two Roadway Grant (Road Rehabilitation)

Component # 2-Structures Grant (4' diameter culvert)

Component # 4-Paving (Paving for the Class Two Roadway Grant)

TOTAL LUMP SUM FOR COMPONENTS # 1, 2, and 4, = _____

Component # 3-Town Culverts-(separate location on Union St.)

TOTAL LUMP SUM FOR COMPONENT # 3 = _____

TOTAL LUMP SUM BID PRICE FOR ALL COMPONENTS= _____
=====

CULVERT UNIT PRICING:

Refer to Sections 5.3, 5.4, 5.5, and 5.6, of this document for culvert installation details>

1) Price per foot to install **18 inch diameter HDPE culvert** at an average depth of 4 feet and an average length of 40 feet:

Price per foot installed and rough graded= _____

2) Using the same length and depth as above. Provide a price per foot to install **24 inch HDPE culvert**:

Price per foot installed and rough graded= _____

THIS PAGE MUST BE SUBMITTED AS PART OF YOUR BID:

Contractors Bid Quantities
Union Street Road Reconstruction
Town of Brandon

All Bidders Please Provide the Following Quantity Estimates:

1. Tons of Asphalt for Component # 4 = _____ base & surface
2. Cubic Yards of 3" stone for road base _____
3. Cubic Yards of 1.5 inch road base gravel for road construction _____

Providing of this information will assist the town in evaluating contractor bids. Please also submit any documentation that you have available relating to material specified. Additional time will be allotted for material specifications if needed.

Submitted to the Town of Brandon by:

Contractor Representative _____

02/20/15
03:48 pm

TOWN OF BRANDON Accounts Payable
Check Warrant Report # Current Prior Next FY Invoices For Fund (10 General Fund)
For Check Acct 01 (10 General Fund) All check #s 02/18/15 To 02/23/15

Page 1 of 4
Anna

Vendor	Invoice Date	Invoice Description	Invoice Number	Account	Amount Paid	Check Number	Check Date
100630	02/18/15	Town Report Mailing T/R 2015		10-5-10-30511 Town Report	729.56	40089	02/18/15
100598	01/31/15	Highway Supplies 468882		10-5-15-43190 Bldg Maintenance	10.99	40093	02/23/15
100598	02/19/15	PD supplies 468892-927		10-5-14-43150 PD Bldg. Maintenance	39.92	40093	02/23/15
100598	01/31/15	Recreation Supplies JAN 31 -15		10-5-18-40050 Youth Basketball	6.13	40094	02/23/15
100598	01/31/15	Recreation Supplies JAN 31 -15		10-5-18-60060 Ice Skating	219.20	40094	02/23/15
100190	02/18/15	bar 329-0092		10-5-15-41110 New Equipment-Misc. Tools	40.99	40096	02/23/15
100280	02/09/15	20 lb propane cylinder 488548/3		10-5-15-43190 Bldg Maintenance	48.98	40097	02/23/15
100280	02/18/15	kerosene heater 488839/3		10-5-15-41110 New Equipment-Misc. Tools	249.99	40097	02/23/15
200218	01/31/15	Rec Dept advertiising B11783		10-5-18-50010 NIA Dance Class	108.50	40098	02/23/15
200218	01/31/15	Rec Dept advertiising B11783		10-5-18-60040 Winter Carnival	108.50	40098	02/23/15
100315	02/18/15	quarterly education tax FEB2015		10-2-00-02137 Property Tax School Share	525641.47	40099	02/23/15
310390	02/13/15	programed changes 10913		10-5-14-43150 PD Bldg. Maintenance	65.00	40100	02/23/15
100198	01/28/15	salt 2902116799		10-5-15-47110 Road Salt	1715.77	40101	02/23/15
100198	02/04/15	salt 2902132593		10-5-15-47110 Road Salt	1716.53	40101	02/23/15
100198	02/09/15	salt 2902142809		10-5-15-47110 Road Salt	1720.33	40101	02/23/15
100198	02/10/15	salt 2902146078		10-5-15-47110 Road Salt	1635.95	40101	02/23/15
100198	02/11/15	salt 2902149273		10-5-15-47110 Road Salt	1759.10	40101	02/23/15
301043	01/27/15	conveyor bearings 4460766		10-5-15-41160 HW Maint. Supplies-Vehicl	128.67	40103	02/23/15
101007	02/12/15	lift arm & pins for plow 46286		10-5-15-41160 HW Maint. Supplies-Vehicl	159.21	40105	02/23/15
100860	01/31/15	FD Mobile Home Park 27300 CTP		10-5-10-21110 Legal Services	507.50	40106	02/23/15
300492	02/04/15	plow bolts and screws VTRUT75694		10-5-15-41160 HW Maint. Supplies-Vehicl	75.26	40107	02/23/15
100925	02/17/15	uniforms 11211		10-5-15-10320 Clothing Allowance	39.25	40109	02/23/15
100925	02/03/15	uniforms 8314		10-5-15-10320 Clothing Allowance	39.25	40109	02/23/15
100925	02/10/15	uniforms 9661		10-5-15-10320 Clothing Allowance	39.25	40109	02/23/15
300029	02/09/15	repair body damage CHCB3922		10-5-14-41180 PD Vehicle Maintenance	1021.27	40110	02/23/15

Vendor	Invoice Date	Invoice Description	Account	Amount Paid	Check Number	Check Date
100650	01/28/15	GALLS, AN ARAMARK COMPANY case 003048216	10-5-14-30120 Professional Supplies	26.34	40112	02/23/15
100650	01/28/15	GALLS, AN ARAMARK COMPANY cases 003048225	10-5-14-30120 Professional Supplies	57.00	40112	02/23/15
310128	02/09/15	GLENN L. POUND CPA Dec 15, 2014 - Feb 9 2015 FEB2015	10-5-10-22110 Auditors	2071.25	40113	02/23/15
300974	02/11/15	GRAPH-X INCORPORATED shirts 3248	10-5-18-40050 Youth Basketball	360.00	40115	02/23/15
300974	01/01/15	GRAPH-X INCORPORATED shirts 3249	10-5-18-40050 Youth Basketball	104.00	40115	02/23/15
100725	02/04/15	GREEN MOUNTAIN GARAGE v-belt 064771	10-5-15-41160 HW Maint. Supplies-Vehicl	10.88	40116	02/23/15
100725	02/04/15	GREEN MOUNTAIN GARAGE antifreeze 064803	10-5-15-41160 HW Maint. Supplies-Vehicl	15.99	40116	02/23/15
100725	02/12/15	GREEN MOUNTAIN GARAGE inspection of trk #3 065169	10-5-15-41160 HW Maint. Supplies-Vehicl	30.00	40116	02/23/15
100725	02/13/15	GREEN MOUNTAIN GARAGE bulb 065238	10-5-15-41160 HW Maint. Supplies-Vehicl	9.44	40116	02/23/15
310233	02/19/15	GREEN MOUNTAIN POWER February electric FEB2015	10-5-22-42130 Bldgs & Grounds Electric	652.09	40117	02/23/15
310233	02/19/15	GREEN MOUNTAIN POWER February electric FEB2015	10-5-15-45110 Street Lights	3223.77	40117	02/23/15
310233	02/19/15	GREEN MOUNTAIN POWER February electric FEB2015	10-5-15-42130 Electric - Town Barn	299.32	40117	02/23/15
310233	02/19/15	GREEN MOUNTAIN POWER February electric FEB2015	10-5-14-42130 PD Electric charges	241.07	40117	02/23/15
100810	02/13/15	IBF SOLUTIONS, INC checks 49809	10-5-10-30110 Office Supplies	343.88	40119	02/23/15
310314	02/07/15	INTERSTATE ALL BATTERY CE battery for grease gun 910602000167	10-5-15-41110 New Equipment-Misc. Tools	89.30	40120	02/23/15
100574	02/10/15	MAC STEEL CO steel to repair trk #4 223145	10-5-15-41160 HW Maint. Supplies-Vehicl	59.40	40121	02/23/15
100971	02/09/15	MALLORY'S AUTOMOTIVE INC maint/repairs 9173	10-5-14-41180 PD Vehicle Maintenance	111.97	40122	02/23/15
100149	01/30/15	MODERN CLEANERS & TAILORS uniform maint JAN2015	10-5-14-10320 Clothing Allowance	49.00	40125	02/23/15
310489	02/19/15	MUNICIPAL PUBLIC WORKS CO Consulting Services P/W REQ. #1	10-5-15-20240 Contractors	735.43	40126	02/23/15
100788	02/13/15	NEW ENGLAND MUNICEPAL RES CAMA Seminar 33956	10-5-11-22140 Property Assessor	125.00	40127	02/23/15
100910	02/10/15	NOBLE ACE HARDWARE RUTLAN batteries & bulbs 026099/1	10-5-15-41110 New Equipment-Misc. Tools	99.46	40128	02/23/15
100691	02/18/15	OTTER VALLEY UNION HIGH S quarterly education tax FEB2015	10-2-00-02137 Property Tax School Share	425229.48	40129	02/23/15
100256	01/26/15	OVERHEAD DOOR COMPANY OF replace section of door 10036	10-5-15-43190 Bldg Maintenance	675.00	40130	02/23/15
300635	01/06/15	POWERPLAN relay for backhoe 1186982	10-5-15-41160 HW Maint. Supplies-Vehicl	59.09	40131	02/23/15
310488	02/19/15	PRIMMER PIPER EGGLESTON & Attorney Fees Charter 125380 JPG	10-5-10-21110 Legal Services	125.00	40132	02/23/15

02/20/15
03:48 pm

TOWN OF BRANDON Accounts Payable
Check Warrant Report # Current Prior Next FY Invoices For Fund (10 General Fund)
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Vendor	Invoice Date	Invoice Description	Account	Amount Paid	Check Number	Check Date
300502	ROUSE TIRE SALES INC	01/26/15 tire for F-550	10-5-15-41170	199.00	40134	02/23/15
		10178550	HW Tires - Vehicles			
300502	ROUSE TIRE SALES INC	02/17/15 flat repair for backhoe	10-5-15-41170	43.00	40134	02/23/15
		10179362	HW Tires - Vehicles			
100005	RUTLAND COUNTY SOLID WAST	01/31/15 Jan 2015 Recyc.	10-5-22-75120	282.01	40136	02/23/15
		21411	Solid Waste Disposal			
100005	RUTLAND COUNTY SOLID WAST	01/31/15 January Surcharge 15	10-5-22-75120	569.00	40136	02/23/15
		21416	Solid Waste Disposal			
300528	RUTLAND RECREATION & PARK	02/20/15 5th/6th Boys Soccer	10-5-18-40000	540.00	40137	02/23/15
		FEB2015B	Youth Soccer			
300528	RUTLAND RECREATION & PARK	02/20/15 5th/6th Girls Soccer	10-5-18-40000	540.00	40137	02/23/15
		FEB2015G	Youth Soccer			
301003	SALEM FARM SUPPLY, INC	02/13/15 repairs to skidsteer	10-5-15-41160	150.39	40138	02/23/15
		WI30711	HW Maint. Supplies-Vehicl			
301003	SALEM FARM SUPPLY, INC	02/13/15 repairs to skidsteer	10-5-15-41180	672.00	40138	02/23/15
		WI30711	HW Outside Maint. - Vehic			
100984	SCHWAAB INC	01/20/15 replacement stamp pads	10-5-10-30110	79.48	40139	02/23/15
		E29057	Office Supplies			
330348	VERIZON WIRELESS	01/22/15	10-5-14-20233	160.04	40141	02/23/15
		9739351319	MDT/Aircards			
300024	VERMONT DIGITAL	02/04/15 toner for copier	10-5-10-30110	158.00	40142	02/23/15
		245M	Office Supplies			
300877	VERMONT PEST CONTROL	02/13/15 February Service	10-5-22-43180	85.00	40144	02/23/15
		C535	Maint. Supplies Bldgs.			
300194	VERMONT POLICE ACADEMY	01/21/15 NCIC/VCIC training	10-5-14-10340	19.50	40145	02/23/15
		150110789	Professional Development			
300194	VERMONT POLICE ACADEMY	02/11/15 Chiefs Meeting	10-5-14-10340	10.50	40145	02/23/15
		150210843	Professional Development			
200284	VMCTA	02/19/15 Clerk/Treasurer training	10-5-13-30120	25.00	40146	02/23/15
		050615	Professional Supplies			
310046	W.B. MASON CO INC	01/30/15 envelopes/index dividers	10-5-10-30110	37.77	40147	02/23/15
		I23408349	Office Supplies			
310046	W.B. MASON CO INC	02/03/15 appointment book	10-5-10-30110	15.99	40147	02/23/15
		I23470765	Office Supplies			
310046	W.B. MASON CO INC	02/06/15 paper, highlighters	10-5-10-30110	89.37	40147	02/23/15
		I23561351	Office Supplies			
301026	WATCHGUARD VIDEO	02/02/15 holsters for microphones	10-5-14-30120	52.00	40148	02/23/15
		INV0003424	Professional Supplies			
330427	WINNING IMAGE GRAPHIX	01/29/15 Name Plate Hopkins	10-5-10-10100	13.50	40149	02/23/15
		8499	Select Board Various			
100255	BRANDON FIRE DISTRICT #1	02/18/15 appropriation	10-2-00-02136	58607.75	40150	02/20/15
		FEB2015	Fire District Payable			
200263	ALDRICH & ELLIOTT, PC	02/20/15 FEMA Cobb Hill	10-5-35-20120	1848.50	40152	02/23/15
		75401 #2	Engineering-Storm			

02/20/15
03:48 pm

TOWN OF BRANDON Accounts Payable
Check Warrant Report # Current Prior Next FY Invoices For Fund (10 General Fund)
For Check Acct 01(10 General Fund) All check #s 02/18/15 To 02/23/15

Vendor	Invoice Date	Invoice Description Invoice Number	Account	Amount Paid	Check Number	Check Date
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Report Total

1036827.53
=====

FUND 59

3415.72

1040243.25
Selectboard

To the Treasurer of TOWN OF BRANDON, We Hereby certify that there is due to the several persons whose names are listed hereon the sum against each name and that there are good and sufficient vouchers supporting the payments aggregating \$ *1,036,827.53
Let this be your order for the payments of these amounts.

02/20/15

TOWN OF BRANDON Accounts Payable

03:48 pm

Check Warrant Report # Current Prior Next FY Invoices For Fund (Town Office Project)

Anna

For Check Acct 01(10 General Fund) All check #s 02/18/15 To 02/23/15

Vendor	Invoice Date	Invoice Description Invoice Number	Account	Amount Paid	Check Number	Check Date
310180	02/01/15	CHILDS ENGINEERING LLC Town Office Struct. Serv. 1213-3	57-5-00-20120 Town Office Engineering	1315.72	40102	02/23/15
330461	02/18/15	MARKOWSKI, GREG March rent FEB2015	57-5-00-04320 Lease Payments	2100.00	40123	02/23/15
Report Total				3415.72		

Selectboard

To the Treasurer of TOWN OF BRANDON, We Hereby certify that there is due to the several persons whose names are listed hereon the sum against each name and that there are good and sufficient vouchers supporting the payments aggregating \$ *****3,415.72
Let this be your order for the payments of these amounts.

02/20/15
03:34 pm

TOWN OF BRANDON Accounts Payable

Check Warrant Report # Current Prior Next FY Invoices For Fund (20 Sewer Fund)
For Check Acct 01(10 General Fund) All check #s 02/18/15 To 02/23/15 & Fund 20

Anna

Vendor	Invoice Date	Invoice Description Invoice Number	Account	Amount Paid	Check Number	Check Date
310487	02/02/15	cold weather bacteria 316	20-5-55-50150 Other Chemicals	1243.75	40090	02/23/15
200263	02/03/15	FEMA Engineering 75401	20-5-35-20120 Engineering - Storm	717.57	40151	02/23/15
		Kennedy Park Sewer \$717.57				
		Cobb Hill \$1848.50				
100015	02/12/15	chlorzine 11150442601	20-5-55-50120 Chlorine	523.05	40092	02/23/15
100015	02/13/15	chlorine 11150445401	20-5-55-50120 Chlorine	523.05	40092	02/23/15
100598	01/31/15	WW Supplies WW JAN 15	20-5-55-43160 Maint. Supplies - General	40.97	40095	02/23/15
100280	02/10/15	plug & cap 488576/3	20-5-55-43160 Maint. Supplies - General	9.48	40097	02/23/15
100280	02/15/15	utility heater 488743/3	20-5-55-43160 Maint. Supplies - General	36.99	40097	02/23/15
100280	02/18/15	plug for meter 488825/3	20-5-55-43160 Maint. Supplies - General	1.79	40097	02/23/15
100280	02/19/15	utility heaters 488887/3	20-5-55-42140 Maint. Supplies - Bldgs	73.98	40097	02/23/15
300466	02/16/15	pumped MH, unplugged line 22333	20-5-55-51310 Collection Systems	1300.00	40104	02/23/15
100615	01/07/15	balance 9596893	20-5-55-41110 New Equipment-Misc Tools	1114.30	40108	02/23/15
100615	01/09/15	buffer/filters/mesh 9753537	20-5-55-30120 Professional Supplies	173.91	40108	02/23/15
100925	02/17/15	uniforms 11210	20-5-55-10320 Clothing Allowance	18.57	40109	02/23/15
100925	02/10/15	uniforms 9660	20-5-55-10320 Clothing Allowance	18.57	40109	02/23/15
310426	02/13/15	propane 27891	20-5-55-42110 LP Gas - Bldgs	492.35	40111	02/23/15
100361	02/06/15	pump house heater 9659529391	20-5-55-51230 Outside Equip. - Pump St.	193.50	40114	02/23/15
100361	02/06/15	pump house heater 9659963590	20-5-55-51230 Outside Equip. - Pump St.	193.50	40114	02/23/15
100725	02/10/15	oil for generator 065049	20-5-55-43160 Maint. Supplies - General	9.99	40116	02/23/15
310233	02/19/15	February electric WWFEB2015	20-5-55-42130 Electric	4851.96	40117	02/23/15
300600	02/19/15	sodium aluminate 95966	20-5-55-50150 Other Chemicals	5128.05	40118	02/23/15
300600	02/19/15	sodium bisulfite 95968	20-5-55-50140 Sodium Meta Bisulfite	1870.26	40118	02/23/15
310322	02/11/15	trucking January sludge 0166	20-5-55-50160 Sludge Disposal	1930.50	40124	02/23/15
200179	02/02/15	grease emulsifier 42280	20-5-55-51310 Collection Systems	185.00	40133	02/23/15
300375	02/12/15	processing January sludge 13688SLUDG	20-5-55-50160 Sludge Disposal	4095.00	40135	02/23/15

02/20/15
03:34 pm

TOWN OF BRANDON Accounts Payable
Check Warrant Report # Current Prior Next FY Invoices For Fund (20 Sewer Fund)
For Check Acct 01(10 General Fund) All check #s 02/18/15 To 02/23/15 & Fund 20

Vendor		Invoice Date	Invoice Description Invoice Number	Account	Amount Paid	Check Number	Check Date
310483	TERRACON	02/12/15	chemical storage tank 45813	20-5-55-51310 Collection Systems	4824.00	40140	02/23/15
310285	VERMONT HEATING & VENTILA	02/06/15	repair of boiler 48708	20-5-55-42150 Outside Maint. - Bldgs	776.00	40143	02/23/15
310285	VERMONT HEATING & VENTILA	02/06/15	repair of boiler 48708	20-5-55-42140 Maint. Supplies - Bldgs	1641.80	40143	02/23/15
Report Total					31987.89		

Selectboard

To the Treasurer of TOWN OF BRANDON, We Hereby certify that there is due to the several persons whose names are listed hereon the sum against each name and that there are good and sufficient vouchers supporting the payments aggregating \$ ****31,987.89
Let this be your order for the payments of these amounts.

**Special Brandon Select Board Meeting
February 24, 2015
7:00 p.m.**

**This is a Joint Meeting to include the following Boards:
Planning Commission
Development Review Board
Economic Development Committee**

The Brandon Select Board will meet Tuesday, February 24, 2015 at 7:00 p.m. at the Brandon Town Hall located at 1 Conant Square expecting to consider the items noted on this agenda. Agendas shall be posted on the community bulletin board in the front window of the Town Office at 49 Center Street, on the community bulletin board located between Dave's Grocery and the Forest Dale Post Office and the bulletin board at Lake Sunapee Bank. The Select Board reserves the right to add additional items, if necessary, at the beginning of the meeting.

- 1) Call to Order**
 - a) Agenda Adoption**
- 2) Town Wide Business Meeting**
- 3) Adjournment**