

2018 NEW HAMPSHIRE HIGHWAY & BRIDGE CONSTRUCTION WORK

Acworth – This project involves the replacement of the Red List bridge (Br. No. 113/064) that carries NH 123A (Main St) over Bowers Brook and associated approach roadway improvements. The bridge is located in the South Acworth Village historic district, approx. 500 ft. east of the intersection of NH 123A w/Hill Rd and Beryl Mt Rd. The work begins on NH 123A approx. 250 ft. west of the bridge and extends easterly across the bridge approx. 570 ft. Accelerated bridge construction techniques will be utilized in an effort to reduce construction duration. The bridge will be closed and traffic detoured via NH 10 and NH 123 during bridge replacement
Completion: October 2018 **Estimated cost:** \$1,234,567.89

Amherst – The project is located at the NH 101A and NH 101 interchange and involves the reconstruction of eastbound ramps intersection to NH 101A. Work includes rock slope excavation (blasting), drainage, roadway widening and reconstruction, and paving. Traffic control will use lane closures and traffic shifts during non-peak flow.
Completion: Fall 2018 **Estimated cost:** \$1,600,000.00

Andover-Danbury – This project consists of bridge preservation work (replacement of the bridge deck pavement and membrane and partial and full depth deck repair) on the following three bridges: NH 11 over Pleasant Stream - (including expansion joint replacement); US 4 over Blackwater River - (including new coping and bridge rail); and US 4 over Northern Rail Trail - (including painting bridge). All 3 bridges will be reduced to 1 lane alternating 2-way traffic using signals and driveway assistance devices (on Pleasant Stream and Blackwater River bridges only). Pleasant Stream bridge will be reduced to one 14` traffic lane for 2 phases, Blackwater River bridge will be reduced to one 10`-4" lane for Phase 1 and one 9`-10" lane for Phase 2, and Northern Rail Trail bridge will be reduced to one 10`-6" lane for two phase. Blackwater River bridge will require an oversized load detour through Franklin and Salisbury for both phases. Additionally, the speed on NH Rt. 11 over Pleasant Stream bridge will be reduced from 50 mph to 40 mph.
Completion: October 2018 **Estimated cost:** \$1,564,424.00

Barnstead – This project consists of NH 28 improvements at the Peacham and White Oaks Road intersection. Work in 2018 will consist of paving the wearing course, striping, and final landscaping. Construction activities will require temporary lane closures and short term use of one lane, alternating two-way traffic supplemented with flaggers. Two way traffic will be maintained during non-construction hours.
Completion: June 2018 **Estimated cost:** \$3,298,056.75

Bedford – This project consists of pavement rehabilitation on NH 101/I-293 beginning at the intersection of NH 114/Boynton Street and extends easterly 2.2 miles to the nose of the ramps from NB F.E. Everett Turnpike. The work includes the ramps to Kilton Road/US 3, ramps to Meetinghouse Road/US 3, ramps to US 3, and all ramps to/from the F.E. Everett turnpike. The work also includes replacement of guardrail, adjusting drainage structures, drainage structure replacement, barrier for pier protection, and new asphaltic plug expansion joints at the bridges.

Minimal traffic impact is anticipated. This work will be done during non-peak hours or at night. Normal traffic patterns will be re-established prior to peak hour traffic volumes.

Completion: September 2018

Estimated cost: \$4,205,313.05

Bedford - Project is located on NH 101 in the Town of Bedford and consists of the widening and reconstruction of NH 101. Project consists of step box widening the existing two lane road to provide two 11` travel lanes and 4` shoulders in each direction, as well as a raised center median island with left turn lane. Two-lane, two-way traffic will be maintained during most operations. Short term use of one lane, alternating two-way traffic supplemented with flaggers may be required during limited applications. Traffic will be returned to two-way traffic during non-construction hours. Limited night work is anticipated. One lane, alternating two-way traffic and/or short duration full closures may be required for side road construction. An enhanced Smart Work Zone (SWZ) Intelligent Transportation System (ITS) has been included in the contract to provide notification of anticipated work areas and delays through the work zone.

Completion: September 2019

Estimated cost: \$15,834,005.75

Bedford - This project will remove the bridge carrying NH 114 over Bowman Brook from the State`s Red List. The proposed rehabilitation construction will remove approx. 15` of pipe from each end, headwalls and scour protection will be constructed at the inlet and outlet and remaining pipe will be rehabilitated with centrifugally cast concrete line. Traffic impacts should be limited to shoulder closures on both sides of Rte. 114 for construction access. Any required lane closures will be performed at night.

Completion: October 2018

Estimated cost: \$865,568.00

Berlin – This project involves placement of a gateway sign, an interpretive sign, benches, historical district street signs, landscaping, and construction of a playground area on a recently completed section of Green Street. There will be limited one lane alternating two-way alternating traffic during construction.

Completion: June 2018

Estimated cost: \$228,579.00

Bow-Hopkinton – This project involves pavement rehabilitation of 8.2 miles on I-89 from Exit 1 to Exit 5 (including the ramps). Work includes rehab of 2 adjacent shared used paths. I-89 work includes cold planing, full width crack sealing, and Bonded Wearing Course pavement on the traveled lanes. I-89 mainline shoulders will receive fog seal and cover aggregate. Shared use path work includes reconstruction of wide cracks and sinkholes, followed by a pavement overlay. Crack sealing, cold planing and paving operations on I-89 will be completed at night with lane closures. Short-term lane, shoulder, and ramp closures associated with non-paving activities will be allowed during off peak daytime hours. Ramp closures, for cold planing and paving will only be allowed to occur one at a time, at night, and will have signed detours. Crack sealing on other ramps will be done half at a time, during low volume periods. Shared use paths will be temporarily closed during construction activity, but re-opened for use during non-construction periods.

Completion: July 2018

Estimated cost: \$4,059,045.68

Canterbury-Northfield – This project consists of pavement rehabilitation along I-93 from north of Exit 18 and extends northerly for approximately 5.8 miles to south of Exit 19 and includes the

Exit 19 and Exit 23 ramps and NB rest area. Pavement work includes cold planning and spot inlays in the travel lane, traveled way bonded wearing course, and median crossover overlays. At the NB rest area, work efforts will include pavement replacement for on/off ramps and overlay of parking areas. Ancillary work includes rock scaling, guardrail replacement and pier protection, minor drainage rehab, ADA ramp replacement, as well as traffic study and ITS equipment. Traffic impacts are anticipated as daily lane closures during off-peak hours will be required for crack-sealing, spot inlays, guardrail, drainage, and rock scaling work. The bonded wearing course work will be done at night to minimize the impacts to traffic. NB rest area will be closed during pavement removal and placement on the ramps, and the parking area overlays will be completed by restricting parking in work areas.

Completion: September 2018

Estimated cost: \$5,056,832.50

Claremont – This project is located at the NH 11/103 intersection with Bowen Street and is intended to improve access management at existing signalized intersection. Work to include new drive location, curb and sidewalk work, and signal adjustments. Traffic control will involve lane closures and lane shifts during off-peak hours.

Completion: Spring 2019

Estimated cost: \$344,000.00

Conway – Work in 2018 consists of painting the NH 16 bridge over the Saco River. Northbound NH 16 traffic will be detoured from March 19, 2018 to April 27, 2018 via NH 113 and NH 302.

Completion: May 2019

Estimated cost: \$2,836,393.60

Conway – The project involves pavement preservation on US 302/NH 16, from approximately 340 ft. south of the NH 16/US 302 intersection, northerly 4.6 miles, to a pavement joint just south of the Bartlett/Conway Town Line. Pavement work includes a full width 1.5" High Strength inlay from the south limit to approx. 400 ft. north of the Mountain Valley Blvd intersection (1,675 LF), and micro milling, crack sealing and a 3/4" bonded wearing course inlay, full width, for the remaining length (4.3 miles). Incidental work includes repair and/or resetting of drainage structures. Lane and shoulder closures will be required. Due to anticipated traffic volumes, majority of work will be done at night. Isolated daytime lane and shoulder closures may be allowed for some work operations such as repair of drainage structures, milling and crack sealing. Roadway will be returned to normal operation during non-work hours. In the area of the proposed bonded wearing course, traffic will be maintained on a "micro-milled" surface for approximately 1 month to allow for crack sealing and a 14 day cure time for the crack sealant.

Completion: June 2018

Estimated cost: \$1,891,838.00

Cornish – Project covers the reconstruction of 3,700 linear feet of Saint-Gaudens Rd from NH Rt. 12A to the Saint-Gaudens National Historic Site Visitor Center in Cornish. The project work includes removal of the existing pavement structure, new asphalt binder and wearing pavement and aggregate base placement, earthwork, minor drainage improvements, and several culvert replacements. Additionally, replacement of the existing cable guardrail with new steel backed wood guardrail, along the left side of the road, is proposed. The roadway will be temporarily closed to the public during construction activities. A detour route will be established for the Saint-Gaudens National Historic Site Visitor Center access and local traffic patterns.

Completion: June 2018

Estimated cost: \$638,787.50

Derry – This project is part of the Salem-Manchester I-93 corridor widening that involves the reconstruction of Exit 4. It includes roadway reconstruction on the northbound and southbound I-93, starting near the Kendall Pond Road crossing and ending near Ash Street in Derry, and the reconstruction of NH Route 102 approaches to the I-93 Exit 4 interchange. State Police rolling road blocks will be utilized on the interstate for ledge blasting operations. Lane closures will only be allowed at night. Truck crossings and alternating one-way traffic can be anticipated on the local road crossings. On NH 102, two lanes of traffic will be maintained during daylight hours, with lane closures allowed during off-peak traffic hours at night.

Completion: August 2019

Estimated cost: \$62.3 million

Derry to Londonderry - This project is part of the Salem-Manchester I-93 corridor widening between Exit 4 and Exit 5. It involves roadway reconstruction on the northbound and southbound I-93, starting near Ash Street in Derry and ending near Stonehenge Road crossing in Londonderry. State Police rolling road blocks will be utilized on the interstate for ledge blasting operations. Lane closures will only be allowed at night. Truck crossings and alternating one-way traffic can be anticipated on the local road crossings.

Completion: August 2019

Estimated cost: \$34.2 million

Durham-Newmarket – This project is located on NH 108 and includes pavement rehabilitation (reclaim, partial box reconstruction and cold plane with inlay), upgrades to guardrail and drainage features, as well as sidewalk construction and the relocation/reconstruction of stonewalls. The project also includes sewer main relocation as well as significant overhead utility relocations along NH 108. This project will be constructed utilizing daily 1-lane, alternating 2-way traffic with the use of flaggers during off peak hours Monday thru Friday. Two-way traffic will be maintained during non-work hours on NH Rt. 108. Work on Saturdays and night work may be allowed with approval of the Engineer.

Completion: Spring 2019

Estimated cost: \$5,489,879.35

East Kingston – This project involves the rehabilitation of the NH 107A bridge over Pan Am Railway and a residential drive. The work begins on NH 107A approximately 250 feet south of the bridge and extends northerly across the bridge approximately 800 ft. The bridge will be closed and traffic detoured via NH 108 and NH 107 during bridge superstructure removal and replacement operations for a period not to exceed 21 calendar days. There will be periods of alternating one-way traffic for other construction operations outside of the closure period.

Completion: September 2018

Estimated cost: \$1,599,934.30

Farmington – The project area is located in the Town of Farmington, just east of the town center. The work includes the complete removal and replacement of the existing NH 153 bridge over the Cocheco River. Work in 2018 will consist of removing the temporary bridge, paving the wearing course and landscaping. There will be periods of alternating one-way traffic during certain construction operations on NH 153.

Completion: June 2018

Estimated cost: \$2,063,478.80

Grantham-Enfield – This project involves pavement rehabilitation of 7.2 miles on I-89 from Exit 13 to Exit 15. The work also includes replacing existing median underdrain, asphalt sluice

drains and slope drains, filling in sinkholes, and rock scaling. Speed limit on I-89 will be reduced to 55 mph in the area of the lane shift at Exit 15. Daily lane closures will be utilized to complete the paving work. Ramps at Exit 14 and 15 will be closed at night, one at a time, to accomplish the ramp work. Traffic will be detoured to the adjacent exit ramps to turnaround.

Completion: June 2018

Estimated cost: \$3,371,025.10

Hampton Falls-Hampton – This project replaces the existing I-95 bridge over the Taylor River. Temporary lane closures will be allowed for specific median access, cold-planing, paving and pavement marking operations.

Completion: June 2018

Estimated cost: \$11,798,426.89

Hampton-Portsmouth – This project consists of resurfacing approximately 7.3 miles of US 1 from Lamson Lane in Hampton to Peverly Hill Road in Portsmouth. Daily lane closures will be allowed during non-peak hours for guardrail, drainage, and traffic signal work. The milling and paving work, as well as the pavement markings will be done at night to minimize the impacts to traffic.

Completion: June 2019

Estimated cost: \$4,707,073.00

Harts Location- Carroll – This project involves rehab of the US 302 culvert in Crawford Notch. The culvert rehab will take about 3 months in the summer of 2018, and will involve occasional lane closures for delivery of materials and equipment. Rock scaling operations will require closure of the northbound US 302 travel lane and the placement of concrete barrier and temporary signals for about 1 month in the spring of 2018

Completion: October 2018

Estimated cost: \$1,783,089.00

Haverhill – Replacement of structurally deficient bridge carrying Mill St. over the NHRR (abandoned - Ammonoosuc Rail Trail). Project consists of removing the existing bridge and constructing a new 24 foot single span concrete arch bridge on the same horizontal alignment. Bridge will be closed during construction.

Completion: October 2018

Estimated cost: \$1,176,845.50

Hopkinton-Warner – Project involves pavement preservation on I-89 beginning south of Exit 7 and extending northerly to just south of Exit 8, and includes all ramps at Exit 7. The NB barrel extends from MM 13.6 to MM 16.6 and the SB barrel spans from MM 13.5 to MM 16.6. The mainline work involves crack sealing, micro milling, and bonded wearing course (BWC) overlay in the travel way and fog seal along the shoulders. Exit 7 ramps will receive full width crack sealing and BWC overlay. Daytime lane closures will be utilized for mainline paving operations. Ramps will be closed at night, one at a time, for resurfacing activities with signed detours.

Completion: September 2018

Estimated cost: \$1,693,155.00

Lancaster-Shelburne – This project involves the replacement of approximately 24,000 ft. of cable and beam guardrail and five "F" terminal units, with the construction of approximately 25,000 feet of new beam guardrail and new terminal units. The cable guardrail and "F" terminal units are located along US Route 2 from MM 3.6 in Lancaster to MM 30.8 in Shelburne. One-lane, alternating 2-way traffic will be permitted during construction with the use of flaggers and/or uniformed officers.

Completion: September 2018

Estimated cost: \$1,103,572.75

Lebanon – Project located on I-89 from just north of Exit 17 to just south of Exit 20, the major work includes pavement and drainage rehab, rock scaling, guardrail replacement and median barrier installation. Bridge work involves joint replacement and repair of concrete substructures on the Heater Road bridges and deck repair on the Poverty Lane Bridge. Additional work includes pavement rehab on Exit 18 SB on ramp, the NB Weigh Station, and the SB Rest Area/Weigh Station; as well as the selective clearing of pines in 3 median locations. Daytime I-89 lane closures during off-peak hours will be utilized for drainage, rock scaling, and guardrail work. Night time I-89 lane closures will be utilized for cold-planing, paving and joint work on Heater Road bridges. Exit 18 SB on ramp closure for cold-planing and paving will occur at night and will have a signed detour. Substructure work on the Heater Road bridges will require daytime lane closures on Heater Rd, using one lane, alternating two-way traffic control.

Completion: August 2019

Estimated cost: \$14,991,914.27

Londonderry-Manchester – This project is part of the Salem-Manchester I-93 corridor widening between Exit 5 and I-293 Split. It involves roadway reconstruction on northbound and southbound I-93, starting north of Exit 5 in Londonderry and ending near Island Pond Road in Manchester. State Police rolling road blocks will be utilized on I-93 for ledge blasting operations. Lane closures will only be allowed at night. Truck crossings and alternating one-way traffic can be anticipated on the local road crossings.

Completion: October 2019

Estimated cost: \$45,900,000.00

Loudon – This project proposes rehabilitation of two bridges carrying Rte. 106 over the Soucook River near Wales Bridge Road and NH 129. Work includes replacement of the bridge deck pavement and membrane, partial and full depth deck repair, replacement of expansion joints at the abutments and painting the last ten feet of the ends of the girders. Beginning spring 2018 road width will be reduced for two phases and two separate lanes in a third phase thus limiting wide loads. The road will be restored to full use for the NASCAR Race week.

Completion: October 2018

Estimated cost: \$1,598,072.71

Meredith – This project will improve the signals and layout at the intersection of US 3 and NH 25, construct a pedestrian hybrid beacon midblock crossing at the docks, install emergency signal at the Meredith Fire Station, improve the layout of Pleasant St. intersection and perform partial and/or full depth repairs to the US 3 and NH 25 bridge over the inlet to Lake Winnepesaukee. The project begins at the intersection of Oak St. on US 3 and extends 700 ft. north of US 3/NH 25 intersection, 100 ft. east of Pleasant St./Winnepesaukee St. intersection on NH 25, and 140 ft. on Pleasant St. This project includes phased construction over multiple construction seasons while suspending work during the peak tourist season and during winter shutdown. Traffic impacts are anticipated to be limited to temporary lane shifts and short term 1-lane alternating 2-way traffic during work hours.

Completion: November 2018

Estimated cost: \$2,581,586.50

Newington-Dover - The project involves widening and reconstruction of the Spaulding Turnpike (NH Route 16) in Newington and Dover. The completion of this project will provide the final roadway match to the new Little Bay Bridges (LBB). Two lanes in each direction will

be maintained along the Spaulding Turnpike with the following exception; temporary, single lane (night) closures will be allowed for specific cold-planing, paving and pavement marking operations. Lane closures will be discontinued whenever the CA determines that the backups may contribute to either unsafe conditions or result in excessive delays for the traveling public.

Completion: October 2020

Estimated cost: \$67,165,415.35

Northfield-Tilton – Rehabilitation of the Red Listed bridges that carry I-93 NB and SB over Winnepesaukee River, NHRR and a recreation trail. Temporary diversions for traffic on I-93 will be constructed within the I-93 median to facilitate the work. The recreation trail may be closed during work hours for a single period not to exceed 8 weeks for operations involving construction of site access, installation of the scour countermeasures, and restoration of disturbed areas. Short term closures of the recreation trail, with the use of flaggers may be necessary during construction operations involving overhead work.

Completion: June 2019

Estimated cost: \$8,504,979.69

Portsmouth – This project will replace the Stark Street Bridge and Woodbury Avenue Bridge over US 1 Bypass. The Stark Street Bridge will be closed to traffic in 2018 and Woodbury Ave Bridge will be closed in 2019. Signed detours will be implemented to guide motorists around the bridge closures. Two lanes of travel NB and SB will be maintained on US 1 Bypass whenever possible, temporary lane or shoulder closures will be permitted during off-peak hours for work operations along US 1 Bypass. One lane in each direction will remain open to traffic at all times during construction of US 1 Bypass. Alternating 1-lane, 2-way traffic configuration will be required for work on Submarine Way.

Completion: November 2019

Estimated cost: \$7,950,099.25

Rochester – This project consists of replacing a metal culvert that carries an unnamed stream under Route 11, approx. 1.5 mi. west of the Spaulding Turnpike, just east of the Tractor Supply Store. During the daytime, two-way traffic will be maintained, with a minimum of 2-11` travel lanes. There will be alternating one way traffic during some night work.

Completion: August 2018

Estimated cost: \$356,656.00

Roxbury – Sullivan – This project along NH 9 begins near the Granite Gorge Ski Area in Roxbury and continues easterly for approx. 2.1 miles to the Centre St. intersection in Sullivan. Limits of work also include Houghton Ledge Rd., Valley Rd., and Centre St. The work includes full box reconstruction, a minimum 4-ft shoulder width throughout the length of the project, full box reconstruction, superrelation improvements, drainage improvements and realignment of Houghton Ledge Rd. due to impacts from the NH engineering cut slope. Bridge work includes replacement of the NH 9 Bridge over Otter Brook, rehab of the Centre St. Bridge over Otter Brook, replacement of membrane on the NH 9 concrete slab bridge over Hubbard Brook. NH 9 roadway work will utilize an alternating 1-lane, 2-way traffic configuration with flaggers throughout the duration of work. During the NH 9 Otter Brook Bridge Replacement, a regional truck detour via US 202/NH 101 and a 2-way traffic diversion for all other traffic via Centre St./Valley Rd. will be set up for the 2019 construction season. The NH 9 Hubbard Brook Bridge rehab will be completed in 2019, while the regional truck detour is in place, utilizing an alternating 1-lane, 2-way traffic configuration with temporary signals. The Centre St./Otter

Brook Bridge Rehab in 2020 will involve a full closure of Center St. with a 2-way traffic detour via Valley Rd. to NH 9.

Completion: July 2020

Estimated cost: \$13,451,513.85

Stewartstown, NH-Canaan, VT – This project consists of bridge rehabilitation work on Bridge Street (NH) and River Road (VT) over the Connecticut River between the towns of Stewartstown NH and Canaan VT. The work begins at the intersection of Bridge St and US Route 3 in Stewartstown and continues north approximately 1,100 feet across the bridge to the intersection with VT Route 253. Bridge work consists of replacement of the bridge deck (light weight, bare deck); replacing select existing steel superstructure components and painting the entire superstructure. Bridge will be closed for construction (2 construction seasons). Work will be allowed between the hours of 7am and 7 pm. No work on Sundays or Holidays.

Completion: October 2018

Estimated cost: \$4,637,467.45

Sunapee – This project consists of bridge preservation work on the following 4 bridges: NH Route 11 over the Sugar River (Village Bridge), NH Route 11 over the Sugar River at Riverside Drive, and the two bridges over the Sugar River at the NH Route 11 and NH 103 intersection. Traffic control at the NH 11/103 interchange bridges will involve diverting one lane to the adjacent bridge (patterns change with phasing) and using temporary slip ramps. The other 2 bridges will be reduced to one-lane alternating 2-way traffic using temporary traffic signals.

Completion: October 2018

Estimated cost: \$1,777,558.15

Tamworth – This project involves the replacement of the NH 113 bridge over Bear Camp River and associated approach roadway improvements. The work begins at the intersection of the old NH 25 and NH 113, and extends northerly across the bridge for approximately 260 ft. Accelerated bridge construction (ABC) techniques will be utilized in an effort to reduce construction duration. The bridge will be closed for 28 days and traffic detoured onto NH 25, and NH 16. The closure will take place after the July 4th holiday, and ABC construction techniques will be utilized in an effort to limit construction duration. One-lane alternating 2-way traffic patterns will also be needed during the construction of the bridge copings and for approach roadway paving operations.

Completion: November 2018

Estimated cost: \$2,499,718.00

Thornton-Woodstock – The project consists of pavement and bridge rehab along I-93 from MM 88.2 and extending northerly for 7.2 miles to MM 95.4. Pavement work includes cold recycling of the left lane and shoulder, full width leveling course, and full width 1.5" overlay. Frequent long-term lane closures on I-93 will be required for cold-planing, inlay, leveling and overlay work. Speed reductions are proposed during work hours and for work zones with concrete barrier and overnight lane closures. Length of lane closures will be limited to 2.5 miles.

Completion: October 2018

Estimated cost: \$9,916,163.25

Walpole-Charlestown – This project will reconstruct and widen NH 12 from the intersection of Main St., in North Walpole extending north approximately 2.75 miles to the intersection of NH 12A in Charlestown. The work includes full box reconstruction to widen the roadway towards the Connecticut River that will provide 11 ft. lanes and 4 to 5 foot wide shoulders. The proposed Connecticut River bank treatment includes an armored slope with reestablished vegetation,

including local plant species. Other work includes upgraded drainage and storm water management, substantial utility relocation and guardrail installation. Traffic impacts are expected to be predominantly daily lane closures requiring 1-lane alternating 2-way traffic patterns with a return to 2-lane, 2-way traffic patterns during non-work hours. Use of longer terms 1-lane alternating 2-way traffic with temporary signals may be required to install deep and large drainage structures during Season 1. Use of longer term 1-lane alternating 2-way traffic with temporary signals may be required to complete some of the proposed roadwork during Season 2.

Completion: August 2020

Estimated cost: \$14,752,626.75

Windham-Derry – This project is part of the Salem-Manchester I-93 corridor widening between Exit 3 and Exit 4. It involves roadway reconstruction on I-93 northbound and southbound, starting at the Weigh Stations in Windham and ending near the Kendall Pond Road crossing in Derry. State Police rolling road blocks will be utilized on the interstate for ledge blasting operations. Lane closures will only be allowed at night. Truck crossings and alternating one-way traffic can be anticipated on the local road crossings.

Completion: October 2019

Estimated cost: \$49,400,000.00