

South Coast Rail Phase 1 Update

MassDOT Board of Directors & Fiscal and Management Control Board

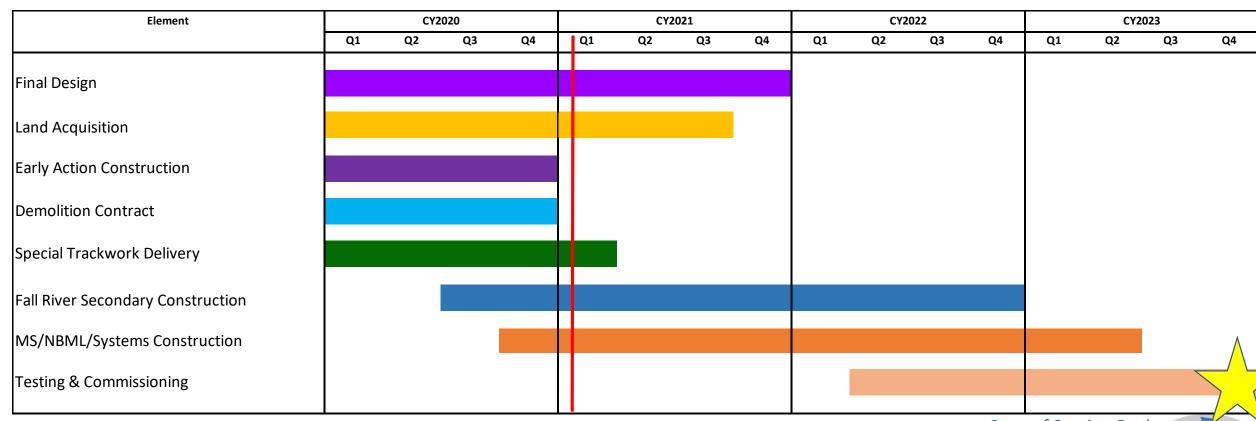
February 22, 2021

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Winter 2021 - Quarterly Update

- √ \$562M of construction work ongoing on the Fall River Secondary, Middleborough Secondary, New Bedford Main line in two contracts:
 - Fall River Secondary (K78CN03) \$158M, Skanska/D.W. White continues tree clearing, pile driving for retaining wall and installation of underground utilities. <u>13% complete</u>.
 - Middleborough Secondary/New Bedford Mainline/Signals (K78CN04) \$403M, SCR Constructors (Middlesex/Tudor Perini), mobilized at Middleborough Station and East Taunton Station; erosion control and tree clearing and grubbing is underway. 3% complete
- √ \$27.2M of construction work awarded for Route 24 bridge and traffic signals to Cardi Corporation.
- √ \$44.6M of SCR construction work completed in three early action contracts: 1) Demolition of 12 buildings (K78CN02) D. W. White Construction; 2) 46 Culverts and 3) 4 Bridges.
- ✓ VHB/HNTB progressing with design and permitting for two packages: 1) Traffic mitigation work in Middleborough, Taunton, New Bedford and Fall River (design completion 2021) and 2) New Bedford Pedestrian Bridge, (design completion 2022 CYQ1.)

Phase 1 Construction Schedule



Start of Service Goal (Late 2023)

Construction Contracts

Updated, Jan. 2021

Contract	Contractor	Estimate at Completion	Spending thru December 2020	Percentage Spent	Percentage Complete
46 Culverts*	JF White	\$19,593,756	\$17,803,439	90.9%	99%
4 Bridge	JF White	\$23,756,351	\$23,438,626	98.7%	99%
Demolition	DW White	\$1,245,000	\$1,241,231	99.7%	100%
Fall River Secondary	Skanska/DW White	\$158,500,000	\$6,783,897	4.3%	13%
MS/NBML/Systems	SCR Constructors	\$403,770,002	\$6,540,883	1.6%	3%
MassDOT Route 24/140 Interchange (SCR Participation)	Cardi Corporation	\$27,200,000	\$0	0%	0%
New Bedford Pedestrian Bridge	TBD	\$8,577,969	\$0	0%	0%
Traffic Mitigation	TBD	\$7,797,004	\$0	0%	0%
Street Paving & Signage	TBD	\$352,000	\$0	0%	0%
	Total:	\$650,752,582			*includes 1.4M spent prior to FY20

South Coast Rail Authorized Funds & Spending

		Total		MBTA		MassDOT	
Prior Years	FY19/20	\$	174.5	\$	63.5	\$	111.1
Current Year	FY21	\$	138.8	\$	120.6	\$	18.2
	FY22	\$	295.8	\$	289.0	\$	6.8
	FY23	\$	371.1	\$	364.3	\$	6.8
Future	FY24	\$	86.4	\$	79.6	\$	6.8
Years	FY25	\$	39.8	\$	33.0	\$	6.8
	FY26	\$	36.2	\$	36.2	\$	-
	Total	\$	1,142.6	\$	986.1	\$	156.5

Fall River Secondary Construction

Scope: 12.1 miles of track, 2 stations, layover facility at Weaver's Cove Fall River, 8 bridges, 10 grade crossings and 10 culverts.

Budget: Contract Awarded: \$159M to Skanska/DW White.

Activities Underway:

- Adam's Lane to Beechwood installation of sheet pile walls
- Delivery of 5,000 new ties and rail material.
- Fabrication of critical materials for the ROW.
- Drainage, site prep and utility work at Weaver's Cove
- Fall River Depot Station and Freetown Station: underground utility prep work, site clearing and grubbing.
- 507 engineering submittals received from the Contractor
- Look ahead: Culvert work to start next quarter
- Look ahead: Foundation work at Fall Depot Station

Activities Completed:

- Relocation of existing overhead power lines at Weaver's Cove
- 13,380 linear feet of clearing and grubbing on ROW
- 8,920 linear feet of erosion control installed on ROW
- 1,168 linear feet of sheet pile walls installed.
- Soldier Pile wall prep work Freetown Station
- Fall River Depot site clearing and grubbing.



Middleborough Secondary/New Bedford Main Line Construction

Scope:

- 24.1 miles of track
- 4 new stations
- Layover facility in New Bedford
- 18 grade crossings
- 11 culverts
- Systems and infrastructure

Budget:

- Contract Awarded: \$403M
- Contractor: SCR Constructors (Middlesex/Tudor Perini)
- NTP Phase II was issued to SCR Constructors (Middlesex/Tutor Perini) on December 14, 2020.

Activities Underway:

- Clearing and Grubbing along the Middleborough Secondary
- Culvert Work Planning
- Survey crews from Taunton towards New Bedford
- Submittals and RFIs are coming in
- New Bedford baseline schedule, pending final approval.
- SCR Constructors are also proceeding with submittals of QA Plan, Environmental Management Plan, and other priority submittals.



South Coast Rail Signals/PTC/Communication

Scope:

- Signals
- Communication and PTC
- Rail Activation Plan & Testing
- Milestone PTC Preliminary Design Scheduled June 27, 2021

Budget:

 Signal, Communication and PTC for both the Fall River and the MB/NB line is within the contract awarded to SCR Constructors (Middlesex/Tudor Perini). Sub-Contractor: Fischbach and Moore

Activities Underway:

- Preliminary Signal Design Approved and Final Design on Schedule Next Contract Milestone – PTC Preliminary Design Scheduled June 27, 2021
- Long Lead Signal Hardware approved: Signal Processors, Switch Machines, Highway Grade Crossing Warning Gates and Flashers, Signal Foundation and Signal Houses and Cases

Rail Activation Plan:

- The rail activation program will verify system readiness for revenue service operation, and compliance with contract requirements by conducting a systematic series of tests and drills.
- Provides a framework for identifying the rail activation organization and defining roles and responsibilities for transitioning into revenue service.

Coach Procurement & Locomotive Overhaul

Coach Procurement:

- SCR 16 bi-level coaches Hyundai Rotem
- SCR budget: \$69,037,292
- Car-body and sub-assemblies in process, material deliveries on schedule and truck frame assembly in process for pilot coaches
- Outfitting of first Pilot Coaches to begin in February 2021. Pilot Coaches arriving Spring 2022.

Locomotive Overhaul:

- Units are being overhauled to meet SCR fleet needs.
 Work involves removal and rebuild of all components, painting and body overhaul.
- New systems include: 26L pneumatic braking system, piping and air tanks, QES III control, LED lighting components, switching steps, and rear track receiver bars and lights

PTC Installation - Mass Coastal Locomotives:

- MBTA to enter agreement with Mass Coastal to install PTC equipment on up to 6 locomotives.
- AECOM to develop scope, specifications and contract development.
- SCR Budget: \$3,000,000
- Allows freight line to operate on PTC equipped lines

Freight train changes to accommodate passenger trains:

- SCR will be converting existing siding into passenger track
- MBTA to add two tracks in Middleborough Freight Yard, for use of freight lines, including CSX.

SCR Design Phase Projects

Traffic Mitigation

- Traffic signals and mitigation work in Taunton, Middleborough, Fall River
- Engineer: VHB/HNTB
- Plans, specification and estimates, 9/21.
- Award of contract, expected Dec 2021.
- Work to coordinate with the decommissioning of West Clark Street Grade Crossing in the late summer of 2022

Pedestrian Bridge

- New Bedford Pedestrian Bridge in active design.
- Engineer: VHB/HNTB
- Elevators and canopy required to meet MBTA Accessibility policy.
- The Contract will be advertised in spring of 2022
- Final Completion spring of 2023
- Current estimate: \$9 \$13M

Full Build

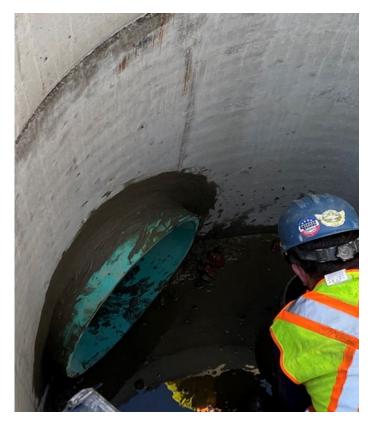
- Design to start in 2022.
- Engineer: VHB/HNTB JV
- Scope connect South Coast Rail to the Stoughton Line.



South Coast Rail Project Website: www.mass.gov/southcoastrail



S/DWW installed drainage piping & structures (Weaver's Cove)



S/DWW sealing pipe penetrations & installing inverts in structures (Mother Brook Sewer)



Cook Forest Products clearing south of Fall River Country Club

Appendix



South Coast Rail Construction Completion

Early Action Culverts

- Substantial Completion (Contract Closeout)
- MassDOT Contract: 106341 – JF White (\$19.6M*)
- 46 Culverts
- Working on punch list items
- Wetland replication areas in the Spring

Early Action 4 Bridges

- Substantial Completion (November 2020)
- MassDOT Contract: 609200 - JF White (\$23.8M*)
- Working on punch list items
- Designer compiling the final inspection and rating reports

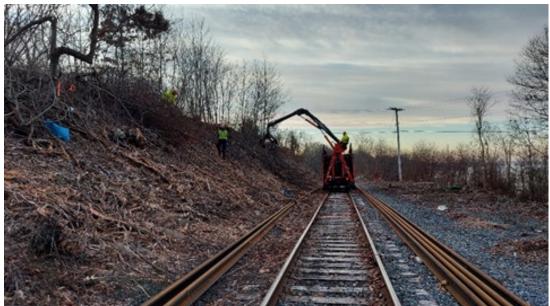
Early Action Demolition

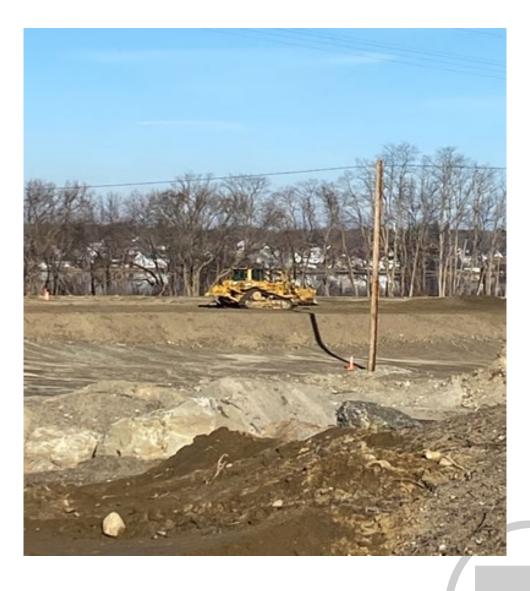
- Substantial Completion (October 9, 2020)
- Project is projected to be 490K under budget
- K78CN02 DW White (\$1.2M*)
- Demolition of 12 structures at ten locations
- MBTA is writing up final construction reports
- Contractor is finalizing asbuild documents

Fall River Secondary (K78CN03)

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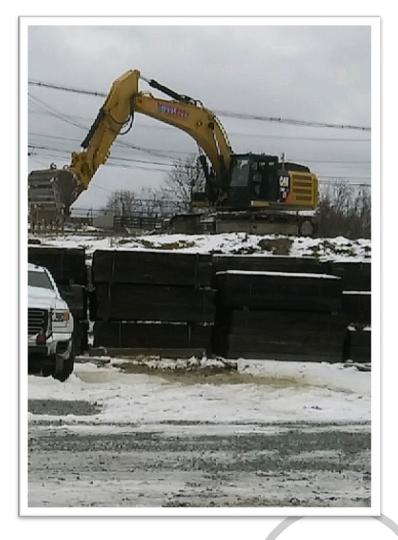












Middleborough Secondary/New Bedford Mainline/Signals (K78CN04)