

CIP Baseline at Activity Start

Capital Budget:

Phase	Costs	Details
Pre-planning:	\$142,885	All project costs prior to start of PER.
PER:	\$196,467	Professional Services costs, as well as all other PER phase costs
Design:	\$375,073	Professional Services costs, condition assessment, easements, as well as all other Design Phase costs
Pre-Construction:	\$71,442	Bid stage activities
Construction:	\$5,715,400	Includes CA/CI costs, construction contract, and all other construction phase costs
Estimated Program Cost:	\$6,501,267	
Contingency (20%):	\$1,143,080	Contingency set at 20%
Estimated Project Cost:	\$7,644,347	

Schedule:

Phase	Schedule	Details
Pre-planning start:	June 2015	5-month duration
PER start:	November 2015	8-month duration
Design start:	July 2016	21-month duration
Pre-Construction start:	April 2018	4-month duration
Construction start:	August 2018	21-month duration
Project Completion:	May 2020	

Risk Assessment and Mitigation Discussion:

Phase	Risk Assessment	Risk Mitigation Consideration
Pre-planning:	Professional Services Selection delayed from original schedule by 1 month. Likely impact to remainder of schedule.	Evaluate compressing PER or Design phase to account for lost time.
PER:		
Design:		
Pre-Construction:		
Construction:		
Project Completion:		

Draft PER

Updated Capital Budget:

Phase	Revised Costs	% Change from CIP Baseline	Details
Pre-planning:	\$0	-100%	Delta: -\$142,885. The earlier anticipated costs for this phase were reassigned under Design.
PER:	\$250,000	+27%	Delta: +\$53,533. Negotiated PER work, including Additional Services for SUE and meetings with Virginia Beach, Norfolk, and other stakeholders.
Design:	\$550,000	+47%	Delta: +\$174,927. Incorporation of additional pipe condition assessment and hydraulic modeling for alternate pipe diameters.
Pre-Construction:	\$25,000	-65%	Delta: -\$46,442. Closer estimate of costs to be expended during Construction bid and award stage.
Construction:	\$7,000,000	+20%	Delta: +\$1,284,600. Complexity of construction along the corridor and alternatives.
Estimated Program Cost:	\$7,825,000	+20%	Delta: +\$1,323,733.
Contingency (20%):	\$1,565,000	+37%	Delta: +\$421,920.
Estimated Project Cost:	\$9,393,000	+23%	Delta: +\$1,745,653.

Updated Schedule:

Phase	Revised Schedule	% Change from CIP Baseline	Details
Pre-planning start:	July 2015	0%	Delta: +1 month from baseline date.
PER start:	December 2015	0%	Delta: +1 month from baseline date. Same duration as baseline between pre-planning and PER start.
Design start:	August 2016	0%	Delta: +1 month from baseline date. Same duration as baseline for PER phase.
Pre-Construction start:	October 2017	-28%	Delta: -6 months from baseline date. Duration reduced to 15 months from baseline duration of 21 months for Design phase to reach bid ready stage.
Construction start:	February 2018	0%	Delta: -6 months from baseline date. Same duration as baseline for pre-construction phase.

Project Completion:	February 2020	+14%	Delta: -3 months from baseline date. Duration is 3 months longer than the baseline Construction phase of 21 months due to constructability issues.
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Risk Assessment and Mitigation Discussion:

Phase	Risk Assessment	Risk Mitigation Consideration
Pre-planning:	Closed out	
PER:	Several alternative routes identified in the PER that have higher projected construction costs and longer construction schedules as compared to the preliminary recommended route and pipe length.	Explore alternate construction means and methods to reduce cost.
Design:		
Pre-Construction:		
Construction:	Depending on the pipe alignment selected by HRSD, the construction could result in higher traffic disruption and therefore, limited work hours/days by either Norfolk or Virginia Beach.	Coordinate with locality traffic maintenance group to clarify expectations and collaborate on construction duration reducing opportunities.
Project Completion:		

Final PER

Updated Capital Budget:

Phase	Revised Costs	% Change from CIP Baseline	Details
Pre-planning:	\$0	-100%	Delta: -\$142,885. The earlier anticipated costs for this phase were reassigned under Design.
PER:	\$250,000	+27%	Delta: +\$53,533. Negotiated PER work including Additional Services for SUE and meetings with Virginia Beach, Norfolk, and other stakeholders.
Design:	\$550,000	+47%	Delta: +\$174,927. Incorporation of additional pipe condition assessment and hydraulic modeling for alternate pipe diameters.
Pre-Construction:	\$25,000	-65%	Delta: -\$46,442. Closer estimate of costs to be expended during Construction bid and award stage.
Construction:	\$7,200,000	+26%	Delta: +\$1,484,600. A pipe alignment selected by HRSD from PER alternatives that added more length to avoid future O&M issues.
Estimated Program Cost:	\$8,025,000	+23%	Delta: +\$1,523,733.
Contingency (15%):	\$1,203,750	+5%	Delta: +\$60,670. Contingency adjusted to 15%.
Estimated Project Cost:	\$9,228,750	+21%	Delta: +\$1,584,403.

Updated Schedule:

Phase	Revised Schedule	% Change from CIP Baseline	Details
Pre-planning start:	July 2015	0%	Delta: +1 month from baseline date.
PER start:	December 2015	0%	Delta: +1 month from baseline date. Same duration as baseline between pre-planning and PER start.
Design start:	August 2016	0%	Delta: +1 month from baseline date. Same duration as baseline for PER phase.
Pre-Construction start:	October 2017	-28%	Delta: -6 months from baseline date. Duration reduced to 15 months from baseline duration of 21 months for Design phase to reach bid ready stage.
Construction start:	February 2018	0%	Delta: -6 months from baseline date. Same duration as baseline for pre-construction phase.

Project Completion:	February 2020	+14%	Delta: -3 months from baseline date. Duration is 3 months longer than the baseline Construction phase of 21 months due to constructability concerns.
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Risk Assessment and Mitigation Discussion:

Phase	Risk Assessment	Risk Mitigation Consideration
Pre-planning:	Closed out	
PER:	Closed out	
Design:	The timing for construction of the new Outlet Mall and access road may create coordination issues and adjustments for the design phase.	
Pre-Construction:		
Construction:	The timing for construction of the new Outlet Mall and access road may create coordination issues and adjustments for the construction phase. Construction could result in higher traffic disruption and therefore limited work hours / days by either Norfolk or Virginia Beach.	Coordinate with Developer and Locality to clarify expectations and collaborate on construction duration reductions and ways to lessen anticipated disruptive construction impacts.
Project Completion:	Issues discussed above may delay project completion.	