

MOTION NO. M2013-50

Tunneling Contract for the Northgate Link Extension

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:	PHONE:
Capital Committee	7/11/13	Recommendation to Board	Ahmad Fazel, DECM Executive Director	206-398-5389
Board	7/25/13	Final Action	Don Davis, Executive Project Director, Northgate Link Jonathan Gabelein, Principal Construction Manager	206-370-5508 206-903-7474

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract with JCM Northlink LLC, a Joint Venture, to construct underground tunnels from the University of Washington Station to the Maple Leaf Portal for the Northgate Link Extension in the amount of \$440,321,000, with a 10% contingency of \$44,032,100, for a total authorized contract amount not to exceed \$484,353,100.

KEY FEATURES SUMMARY

- This contract includes all work necessary to provide approximately 3.4 miles of twin-bore tunnels from the University of Washington Station to the Maple Leaf Portal, just south of the Northgate Mall. The contractor will use three tunnel boring machines (TBMs) to complete the twin underground tunnels. The contract work includes installation of finishes within the tunnel including a concrete bottom slab, walkways, handrails, fire protection piping, lighting, and other finishes.
- The contract also includes 23 cross-passages connecting the twin tunnels for emergency access and excavation and ground support for underground stations at the U-District and Roosevelt neighborhoods and for the tunnel portal in the Maple Leaf neighborhood.
- It is anticipated that the Notice to Proceed for construction will be issued to the contractor in September 2013 and that the contract work will take approximately 51 months.
- This is the largest contract on the Northgate Link Extension, making up nearly half of the total construction budget.
- This work is critical to completing the project as scheduled and meeting the target date of September 2021 for the start of Revenue service for this extension.

BACKGROUND

The Northgate Link Extension is a 4.3-mile extension of light rail from the University of Washington Station north under the campus via twin-bored tunnels to an underground station in the University District (U District Station), an underground station along 12th Avenue NE between NE 65th Street and NE 67th Street (Roosevelt Station), and continuing to an elevated station east of 1st Avenue NE, spanning NE 103rd Street (Northgate Station). The Northgate Link Extension is scheduled to be complete and ready for revenue service in September 2021.

Final design of Northgate Link Extension began in October 2010. The initial construction work for building demolition and hazardous materials abatement at underground station locations began in 2012. Advance utility relocation work required to prepare the Roosevelt site for station excavation was completed in February 2013.

Under this contract, the contractor will install shoring and then excavate two underground station boxes at Roosevelt and the U-District, and the portal at the Maple Leaf neighborhood. The station

box excavations are approximately 400 feet long and average about 90 feet deep. Two TBMs will be erected in the Roosevelt Station box and launched to bore southward to the U District Station. The TBMs will arrive at the U District Station where they will be inspected, refurbished as necessary, and then launched on their final leg to the University of Washington Station. While this work is progressing a single TBM will be launched southward from the Maple Leaf Portal and will bore about 8,000 feet to the Roosevelt Station. It will be retrieved from the station box and returned to the Maple Leaf Portal, where it will be re-launched to complete the second bore to the Roosevelt station. Tunneling work will be followed by construction of 23 cross-passages to provide emergency access between the two tunnels. Finally, the tunnels will be fitted out with a flat bottom slab on which rails will be placed, emergency walkways and handrails, fire protection piping, and tunnel lighting systems. This contract is on the critical path for the Northgate Link Project and it has the longest construction duration of any Northgate Link contract at approximately 51 months.

The contract was advertised for bids in March 2013 and six bids were received. JCM Northlink LLC, a Joint Venture of Jay Dee Contractors, Inc., Frank Coluccio Construction Company, and Michels Corporation was the lowest responsive and responsible bidder. JCM's bid price was \$440,321,000. Four of the other five bids were within 6% of the low bid. The engineer's estimate for the N125 Contract was \$594,803,500.

Environmental compliance pursuant to the National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) was completed with the North Link Final Supplemental Environmental Impact Statement (EIS) issued on April 7, 2006. The FTA issued a Record of Decision for North Link in June 2006. In March 2012 Sound Transit published the SEPA Addendum to the North Link Final Supplemental Environmental Impact Statement describing design refinements and evaluating the changes in potential impacts as a result of the refinements.

FISCAL IMPACT

The 2013 TIP for the Northgate Link Extension is \$2.131 billion. Within that amount \$662,290,000 has been set aside for the N125 TBM Tunneling contract in the Construction phase. The proposed action would commit \$484,353,100 for this line item, leaving a remaining budget balance of \$177,936,900.

This action is within the adopted budget and sufficient monies remain after approval of this action to fund the remaining work in the Construction phase as contained in the current cost estimates.

Northgate Link Extension

	2013 TIP	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration	149,500	45,128		45,128	104,372
Preliminary Engineering	15,077	15,077		15,077	-
Final Design	113,123	99,700		99,700	13,423
Right of Way	148,050	93,061		93,061	54,989
Construction	1,323,500	20,960	484,353	505,313	818,187
Construction Services	112,050	83,030		83,030	29,020
Third Party Agreements	11,000	10,132		10,132	868
Vehicles	259,100	-		-	259,100
Total Current Budget	2,131,400	367,088	484,353	851,441	1,279,959

Phase Detail - Construction

N125 TBM Tunnels	662,290	-	484,353	484,353	177,937
Other Construction	661,210	20,960		20,960	640,250
Total Phase	1,323,500	20,960	484,353	505,313	818,187

Contract Detail

	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
Contract	-	-	440,321	440,321
Contingency	-	-	44,032	44,032
Total Contract Amount	-	-	484,353	484,353
Percent Contingency	0%	0%	10%	10%

Notes:

Amounts are expressed in Year of Expenditure \$000s.

Board Approvals = Committed To-Date + Contingency, and includes pending Board actions.

Project Budget is located on page 27 of the 2013 Transit Improvement Plan (TIP).

SMALL BUSINESS PARTICIPATION

Small Business and DBE Goals

Sound Transit Goal:

Small Business: 8%

DBE: 4%

Commitment:

Small Business: 8.06%

DBE: 4.77%

Subconsultant/Subcontractor	Business Type	% of Work	Amount
Grady Excavating	Small Business	3.29%	\$14,500,000
Sundance Electric	DBE	2.50%	\$11,000,000
JP Francis & Associates	DBE	2.27%	\$10,000,000
Total		8.06%	\$35,500,000

EQUAL EMPLOYMENT WORKFORCE PROFILE

3,977 employees; 8% women; 10% minorities.

APPRENTICE UTILIZATION COMMITMENT

Apprentice utilization goal: 20%

PUBLIC INVOLVEMENT

Several public meetings have been held in the Roosevelt neighborhood to discuss the design and construction impacts of the Northgate Link Extension. The most recent meeting, held at Roosevelt High School on January 29, 2013, provided a forum for discussion of anticipated construction impacts related specifically to this contract. Approximately 70 residents from the neighborhood attended the meeting and staff responded to their questions and concerns.

TIME CONSTRAINTS

This contract is on the critical path for the Northgate Link Extension, as the tunneling work must be completed before any significant work can be done on the station finishes, track installation or systems work. Any delay to this contract could impact the start of revenue service, scheduled for September 2021.

PRIOR BOARD/COMMITTEE ACTIONS

Not applicable to this action.

ENVIRONMENTAL REVIEW

JI 6/20/2013

LEGAL REVIEW

LA 5 July 2013

MOTION NO. M2013-50

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with JCM Northlink LLC, a Joint Venture, to construct underground tunnels from the University of Washington Station to the Maple Leaf Portal for the Northgate Link Extension in the amount of \$440,321,000, with a 5% contingency of \$22,016,050, for a total authorized contract amount not to exceed \$462,337,050.

BACKGROUND:

The Northgate Link Extension is a 4.3-mile extension of light rail from the University of Washington Station north under the campus via twin-bored tunnels to an underground station in the University District (U District Station), an underground station along 12th Avenue NE between NE 65th Street and NE 67th Street (Roosevelt Station), and continuing to an elevated station east of 1st Avenue NE, spanning NE 103rd Street (Northgate Station). The Northgate Link Extension is scheduled to be complete and ready for revenue service in September 2021.

Final design of Northgate Link Extension began in October 2010. The initial construction work for building demolition and hazardous materials abatement at underground station locations began in 2012. Advance utility relocation work required to prepare the Roosevelt site for station excavation was completed in February 2013.

Under this contract, the contractor will install shoring and then excavate two underground station boxes at Roosevelt and the U-District, and the portal at the Maple Leaf neighborhood. The station box excavations are approximately 400 feet long and average about 90 feet deep. Two tunnel boring machines (TBMs) will be erected in the Roosevelt Station box and launched to bore southward to the U District Station. The TBMs will arrive at the U District Station where they will be inspected, refurbished as necessary, and then launched on their final leg to the University of Washington Station. While this work is progressing a single TBM will be launched southward from the Maple Leaf Portal and will bore about 8,000 feet to the Roosevelt Station. It will be retrieved from the station box and returned to the Maple Leaf Portal, where it will be re-launched to complete the second bore to the Roosevelt station. Tunneling work will be followed by construction of 23 cross-passages to provide emergency access between the two tunnels. Finally, the tunnels will be fitted out with a flat bottom slab on which rails will be placed, emergency walkways and handrails, fire protection piping, and tunnel lighting systems. This contract is on the critical path for the Northgate Link Project and it has the longest construction duration of any Northgate Link contract at approximately 51 months.

The contract was advertised for bids in March 2013 and six bids were received. JCM Northlink LLC, a Joint Venture of Jay Dee Contractors, Inc., Frank Coluccio Construction Company, and Michels Corporation was the lowest responsive and responsible bidder. JCM's bid price was \$440,321,000. Four of the other five bids were within 6% of the low bid. The engineer's estimate for the N125 Contract was \$594,803,500.

Environmental compliance pursuant to the National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) was completed with the North Link Final Supplemental Environmental Impact Statement (EIS) issued on April 7, 2006. The FTA issued a Record of Decision for North Link in June 2006. In March 2012 Sound Transit published the SEPA Addendum to the North Link Final Supplemental Environmental Impact Statement describing design refinements and evaluating the changes in potential impacts as a result of the refinements.

MOTION:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with JCM Northlink LLC, a Joint Venture, to construct underground tunnels from the University of Washington Station to the Maple Leaf Portal for the Northgate Link Extension in the amount of \$440,321,000, with a 5% contingency of \$22,016,050, for a total authorized contract amount not to exceed \$462,337,050.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on July 25, 2013.



Pat McCarthy
Board Chair

ATTEST:



Marcia Walker
Board Administrator