

# Exhibit A

## Project Estimate Report: Development Phase

for

### SE 174<sup>th</sup>, between SE Stark and SE Main

October 12, 2018

**Requested by:** Dana Dickman

**Prepared by:** Gary Brittle

**Location:** SE 174th Ave, between SE Stark St and SE Main St

**Description:** Sidewalk infill along the west side of SE 174th Avenue.

**Current Cross-Section:**

Varying AC roadway from 20' – 40' with no sidewalk corridor, within existing 50' to 60' right-of-way. 50' typical right-of-way.

**Proposed Cross-Section:**

22' AC roadway, within 50' to 60' right of way. Sidewalk corridor 14' with 0.5' curb, 10.5' multi-use path, and 3' furnishing zone.

**Issues:**

- Water – None identified.
- BES (storm, sanitary, water-quality facilities) – 4 sedimentation and sump systems from Stark to Main.
- Signals and Street Lighting – None identified.
- Environmental and Zoning – None identified.
- Contaminated Media – None identified.
- Right-of-Way Needs – Temporary easements are required for construction.
- Railroads (BNSF; UPRR; PTTR) – None identified.
- Parks (landscaping and irrigation) – None identified.
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified.

**Cost Estimate:**

Total Construction	\$ 1,082,000
Project Management (5%)	\$ 47,000
Design Engineering (25%)	\$ 233,000
Construction Management (15%)	\$ 140,000
Right-of-Way (Cost + 20% Contingency)	\$ 98,000
Overhead (76.07%)	\$ 320,000
Total Project Contingency	\$ 602,000


**Total Project Estimate:** \$ 2,522,000

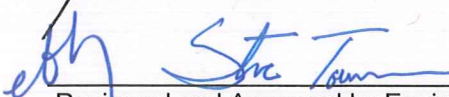
# Exhibit A

## Estimating Assumptions:

- Existing conditions are based on GIS and Google Street view.
- Based off work required for the project, PCDP Cost Estimate Template (Project >1\$M) is used. Cost Estimate Template (Project <1\$M) results in bid items above one million dollars and is assumed to not be appropriate for this project estimate.
- Assuming a consistent sidewalk corridor width of 14'. with 0.5' curb, 10.5' multi-use path, and 3' furnishing zone.
- Assumed no curb extensions.
- Assumed 75' of 12" diameter pipe required per SED/ Sump system. 3 SED/Sump systems to be installed from Division to Powell and 4 SED/Sump systems from Stark to Main. In addition, 2% of new impervious area will need to be surface stormwater facilities, per Dave Nunamaker, BES.
- Assumed approximately 7,500 sqft of TCE will be required for approximately 22 properties. High level estimate assumes \$75,000 for right-of-way phase after proportioning the size of the TCE– Original value of \$150,000 was for 15,000 sqft of TCE on 40 properties - Martin Maloney, PBOT/ ROW.
- Assumed driveways will include concrete connections for all driveways. Without proper information assumed all driveway connections to be driveway bid item for conservative estimate.
- Assumed driveways adjacent to new sidewalk and new ADA ramps will be rebuilt.
- Assumed that the ramps on SE Stark St will have to be rebuilt
- Assumed 3' furnishing zone is sufficient for street trees.
- Assume street trees to be installed every 25' per Title 11.
- Assumed TP & DT to be paid complete, lump sum rate increased to 5%.
- The years of inflation for this project is 3 years.
- The estimate contingency is 20%.
- The level of confidence for this estimate is low.

## Review & Approval:

 10/12/18  
 Reviewed by Engineer of Record Date

 10/12/18  
 Reviewed and Approved by Engineering Services Division Manager Date

## Attachments:

- Detailed estimate spreadsheet
- Site map



# Exhibit A

189288

CITY OF PORTLAND, OREGON  
BUREAU OF TRANSPORTATION  
PRELIMINARY ENGINEER'S ESTIMATE FOR PROJECTS GRATER THAN \$1M  
ODOT SRTS - SE 174TH BETWEEN SE STARK AND SE MAIN

Date: October 12, 2018

By: Gary Brittle

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SE 174TH FROM STARK TO MAIN

VALUES IN BLUE ARE PERCENT OF CONTRACT.

## ##### BID ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	0210	0100000A	n/a	LS	1.00	\$ 76,095.49	\$ 76,095.49
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC, COMPLETE	0225	0100000A	13	LS	1.00	\$ 38,047.74	\$ 38,047.74
20	FLAGGERS	0225	0168000T	13	HOUR	660.00	\$ 52.50	\$ 34,650.00
24	EROSION CONTROL	0280	0100000A	11	LS	1.00	\$ 7,609.55	\$ 7,609.55
31	POLLUTION CONTROL PLAN	0290	0100000A	12	LS	1.00	\$ 760.95	\$ 760.95
45	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0310	0106000A	1	LS	1.00	\$ 30,438.19	\$ 30,438.19
47	CLEARING AND GRUBBING	0320	0100000A	1	LS	1.00	\$ 19,784.83	\$ 19,784.83
51	GENERAL EXCAVATION	0330	0105000K	1	CUYD	421.00	\$ 50.00	\$ 21,050.00
74	STORMWATER PLANTERS	0415	1102000J	1	SQFT	432.60	\$ 40.00	\$ 17,304.00
82	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445	Special		FOOT	300.00	\$ 143.50	\$ 43,050.00
94	CONCRETE MANHOLES, SEDIMENTATION	0470	0113000E	1	EACH	4.00	\$ 6,000.00	\$ 24,000.00
95	CONCRETE MANHOLES, SUMP	0470			EACH	4.00	\$ 15,600.00	\$ 62,400.00
96	SUMP CAPACITY TEST	0470			EACH	4.00	\$ 1,690.00	\$ 6,760.00
98	CONCRETE INLETS, TYPE CG-2	0470	0307000E	1	EACH	8.00	\$ 2,313.00	\$ 18,504.00
156	17 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748	Special		SQYD	935.56	\$ 124.30	\$ 116,289.56
166	CONCRETE CURBS, STANDARD CURB	0759	0110000F	12	FOOT	1,320.00	\$ 37.25	\$ 49,170.00
170	CONCRETE DRIVEWAYS	0759	0126000J	12	SQFT	5,450.00	\$ 17.00	\$ 92,650.00
172	CONCRETE WALKS	0759	0128000J	12	SQFT	13,980.00	\$ 11.77	\$ 164,567.90
173	MONOLITHIC CURB AND SIDEWALKS	0759	0134000J	12	SQFT	2,200.00	\$ 19.75	\$ 43,450.00
211	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	0867	0123000E	8	EACH	0.00	\$ 354.00	\$ -
254	LAWN SEEDING	1030	0138000J	11	SQYD	438.89	\$ 11.60	\$ 5,091.11
255	TOPSOIL	1040	0101000K	11	CUYD	73.00	\$ 61.10	\$ 4,460.30
258	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040	0131000E	11	EACH	53.00	\$ 822.00	\$ 43,566.00
272	ADDITIONAL ESTABLISHMENT PERIOD	1040	1199000X	11	YEAR	1.00	\$ 13,992.00	\$ 13,992.00
TOTAL BID ITEMS								\$ 933,691.62

## ##### ANTICIPATED ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
8	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT				SQFT	389.34	\$ 20.00	\$ 7,786.80
15	BOLI FEE PAYMENT				LS	1.00	\$ 933.69	\$ 933.69
16	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)				LS	1.00	\$ 93,369.16	\$ 93,369.16

TOTAL ANTICIPATED ITEMS

\$ 102,089.65

## SCHEDULE SUMMARY

BID ITEMS	\$ 933,692
CONSTRUCTION CONTINGENCY	\$ 46,685
SUBTOTAL	\$ 980,377

# Exhibit A

189288

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
ANTICIPATED ITEMS								\$ 102,090
TOTAL CONSTRUCTION								\$ 1,082,466
PROJECT MANAGEMENT						5% of Bid Items		\$ 46,685
DESIGN ENGINEERING						25% of Bid Items		\$ 233,423
CONSTRUCTION MANAGEMENT						15% of Bid Items		\$ 140,054
SUBTOTAL								\$ 420,162
PROJECT ENGINEERING & MANAGEMENT OVERHEAD						76.07% of PM, Eng, and CM		\$ 319,617
TOTAL PROJECT ENGINEERING & MANAGEMENT								\$ 739,778
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES								\$ 75,000
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION								\$ -
RIGHT-OF-WAY CONTINGENCY						30% of Land, Improve, and Damages		\$ 22,500
TOTAL PROJECT RIGHT-OF-WAY								\$ 97,500
INFLATION RATE ON CONTRACT						Years 3	Inflation 4.5% of Construction	\$ 152,808
INFLATION RATE ON PERSONNEL						3	2.0% of Eng & Mgmt	\$ 45,280
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE							20% of Const, Eng & Mgmt, and Inflation	\$ 404,067
TOTAL PROJECT CONTINGENCY								\$ 602,155
TOTAL PROJECT ESTIMATE								\$ 2,521,899

LS\* Unit Price shown is on Pound, Each, or Foot Basis as applicable

Remove \* and change unit to 1 in the Bid Form

Use 3.5% Construction Contingency for Federal-Aid Projects

# Exhibit B

## Project Estimate Report: Development Phase

for

## SE Holgate Blvd from SE 125<sup>th</sup> Ave to SE 134<sup>th</sup> Ave

October 12, 2018

**Requested by:** Dana Dickman

**Prepared by:** Gary Brittle

**Location:** SE Holgate Blvd from SE 125<sup>th</sup> Ave to SE 134<sup>th</sup> Ave.

**Description:** Sidewalk infill along the south side of the SE Holgate Blvd.

### Current Cross-Section:

Varying AC roadway from 36' – 56' with varying existing sidewalk corridor from 0' – 16' within existing 50' to 80' right-of-way.

### Proposed Cross-Section:

Varying AC roadway from 36' – 56'. Varying sidewalk corridor from 4' to 14' within 50' to 80' right-of-way. Typical sidewalk corridor 8' curb tight with 6' pedestrian through zone.

### Issues:

- Water – Fire hydrant relocation required on SE corner of SE 128<sup>th</sup> Ave.
- BES (storm, sanitary, water-quality facilities) – 5 sedimentation and sump systems to be installed, in addition 2 inlets installed per SED/ Sump system.
- Signals and Street Lighting – RRFB to be installed at SE 128<sup>th</sup> Ave.
- Environmental and Zoning – None identified.
- Contaminated Media – None identified.
- Right-of-Way Needs – None identified.
- Railroads (BNSF; UPRR; PTTR) – None identified.
- Parks (landscaping and irrigation) – None identified.
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – TriMet bus line on SE Holgate.

### Cost Estimate:

Total Construction	\$ 1,159,000
Project Management (5%)	\$ 49,000
Design Engineering (25%)	\$ 246,000
Construction Management (15%)	\$ 148,000
Right-of-Way (Cost + 20% Contingency)	\$ 46,000
Overhead (76.07%)	\$ 337,000
Total Project Contingency	\$ 642,000

**Total Project Estimate:** \$ 2,627,000

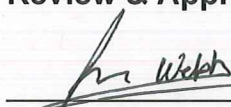


## Exhibit B

### Estimating Assumptions:

- Existing conditions are based on GIS and Google Street view.
- Based off work required for the project, PCDP Cost Estimate Template (Project >1\$M) is used. Cost Estimate Template (Project <1\$M) results in bid items above one million dollars and is assumed to not be appropriate for this project estimate.
- Assuming varying sidewalk corridor width from 4' to 12'.
- Assumed no impacts to the building in-between SE 127<sup>th</sup> Ave and SE 128<sup>th</sup> Ave that abuts the right-of-way. Proposed sidewalk will connect into the approximately 4' sidewalk in front of building.
- Assumed no curb extensions.
- Assumed 75' of 12" diameter pipe required per SED/ Sump system. Five SED/ Sump systems to be installed. In addition, 2% of new impervious area will need to be surface stormwater facilities, per Dave Nunamaker, BES.
- Assumed approximately 3,500 sqft of TCE will be required for approximately 17 properties. High level estimate assumes \$35,000 for right-of-way phase after proportioning the size of the TCE– Original value of \$150,000 was for 15,000 sqft of TCE on 40 properties - Martin Maloney, PBOT/ ROW.
- Assumed all the ramps within the project limits will need to be rebuilt to meet current ADA standards.
- Assumed all encroachment will be removed (removal of structures and obstructions increased by 25%).
- Assumed driveways adjacent to new sidewalk and new ADA ramps will be rebuilt.
- Assumed no right-of-way acquisition will be needed to install the improvements.
- Assumed a RRFB will be installed on SE 128<sup>th</sup> Ave. Approximately \$75,000 for two single poles on either side per Dan Spoelstra, PBOT/ SSL.
- Assume street trees to be installed every 25' per Title 11. Given the varying widths of sidewalk may not be able to install trees every 25' but will still need to pay mitigation fee.
- Assumed curb tight sidewalk.
- Assumed TP & DT to be paid complete, lump sum rate increased to 5%.
- The years of inflation for this project is 3 years.
- The estimate contingency is 20%.
- The level of confidence for this estimate is low.

### Review & Approval:

  
Reviewed by Engineer of Record

10/12/18

Date

  
Reviewed and Approved by Engineering Services Division Manager

10/12/18  
Date

### Attachments:

- Detailed estimate spreadsheet
- Site map

## Exhibit B

CITY OF PORTLAND, OREGON  
BUREAU OF TRANSPORTATION  
PRELIMINARY ENGINEER'S ESTIMATE FOR PROJECTS GRATER THAN \$1M  
ODOT SRTS - SE HOLGATE FROM 125TH TO 134TH

Date: October, 2018 By: Gary Brittle

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SE HOLGATE FROM 125TH TO 134TH

VALUES IN BLUE ARE PERCENT OF CONTRACT.

##### BID ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	0210	0100000A	n/a	LS	1.00	\$ 79,644.64	\$ 79,644.64
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC, COMPLETE	0225	0100000A	13	LS	1.00	\$ 39,822.32	\$ 39,822.32
20	FLAGGERS	0225	0168000T	13	HOURL	1,100.00	\$ 52.50	\$ 57,750.00
24	EROSION CONTROL	0280	0100000A	11	LS	1.00	\$ 7,964.46	\$ 7,964.46
31	POLLUTION CONTROL PLAN	0290	0100000A	12	LS	1.00	\$ 796.45	\$ 796.45
45	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0310	0106000A	1	LS	1.00	\$ 39,822.32	\$ 39,822.32
47	CLEARING AND GRUBBING	0320	0100000A	1	LS	1.00	\$ 20,906.72	\$ 20,906.72
51	GENERAL EXCAVATION	0330	0105000K	1	CUYD	264.00	\$ 50.00	\$ 13,200.00
74	STORMWATER PLANTERS	0415	1102000J	1	SQFT	285.00	\$ 40.00	\$ 11,400.00
82	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445	Special		FOOT	375.00	\$ 143.50	\$ 53,812.50
94	CONCRETE MANHOLES, SEDIMENTATION	0470	0113000E	1	EACH	5.00	\$ 6,000.00	\$ 30,000.00
95	CONCRETE MANHOLES, SUMP	0470			EACH	5.00	\$ 15,600.00	\$ 78,000.00
96	SUMP CAPACITY TEST	0470			EACH	5.00	\$ 1,690.00	\$ 8,450.00
98	CONCRETE INLETS, TYPE CG-2	0470	0307000E	1	EACH	10.00	\$ 2,313.00	\$ 23,130.00
156	17 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748	Special		SQYD	908.89	\$ 124.30	\$ 112,974.89
170	CONCRETE DRIVEWAYS	0759	0126000J	12	SQFT	1,330.00	\$ 17.00	\$ 22,610.00
173	MONOLITHIC CURB AND SIDEWALKS	0759	0134000J	12	SQFT	12,170.00	\$ 19.75	\$ 240,357.50
174	MONOLITHIC CURB GUTTER AND SIDEWALKS	0759	0134100J	12	SQFT	730.00	\$ 16.75	\$ 12,227.50
211	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	0867	0123000E	8	EACH	3.00	\$ 354.00	\$ 1,062.00
247	FLASHING BEACON INSTALLATION	0990			LS	1.00	\$ 75,000.00	\$ 75,000.00
258	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040	0131000E	11	EACH	52.00	\$ 822.00	\$ 42,744.00
272	ADDITIONAL ESTABLISHMENT PERIOD	1040	1199000X	11	YEAR	1.00	\$ 13,728.00	\$ 13,728.00
TOTAL BID ITEMS								\$ 985,403.30

##### ANTICIPATED ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
2	RELOCATE WATER FACILITIES - FIRE HYDRANT				EACH	1.00	\$ 20,000.00	\$ 20,000.00
8	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT				SQFT	256.50	\$ 20.00	\$ 5,130.00
15	BOLI FEE PAYMENT				LS	1.00	\$ 985.40	\$ 985.40
16	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)				LS	1.00	\$ 98,540.33	\$ 98,540.33

TOTAL ANTICIPATED ITEMS \$ 124,655.73

SCHEDULE SUMMARY

BID ITEMS	\$ 985,403
CONSTRUCTION CONTINGENCY	\$ 49,270
SUBTOTAL	\$ 1,034,673
ANTICIPATED ITEMS	\$ 124,656



## Exhibit B

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
TOTAL CONSTRUCTION								\$ 1,159,329
PROJECT MANAGEMENT						5% of Bid Items	\$	49,270
DESIGN ENGINEERING						25% of Bid Items	\$	246,351
CONSTRUCTION MANAGEMENT						15% of Bid Items	\$	147,810
SUBTOTAL								\$ 443,431
PROJECT ENGINEERING & MANAGEMENT OVERHEAD						76.07% of PM, Eng. and CM	\$	337,318
TOTAL PROJECT ENGINEERING & MANAGEMENT								\$ 780,749
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES								\$ 35,000
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION								\$ -
RIGHT-OF-WAY CONTINGENCY						30% of Land, Improve, and Damages	\$	10,500
TOTAL PROJECT RIGHT-OF-WAY								\$ 45,500
INFLATION RATE ON CONTRACT						Years 3	Inflation 4.5% of Construction	\$ 163,658
INFLATION RATE ON PERSONNEL						3	2.0% of Eng & Mgmt	\$ 47,788
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE							20% of Const, Eng & Mgmt, and Inflation	\$ 430,305
TOTAL PROJECT CONTINGENCY								\$ 641,751
TOTAL PROJECT ESTIMATE								\$ 2,627,329

LS\* Unit Price shown is on Pound, Each, or Foot Basis as applicable

Remove \* and change unit to 1 in the Bid Form

Use 3.5% Construction Contingency for Federal-Aid Projects



# Exhibit C

## Project Estimate Report: Development Phase

for

### NE Shaver St from 105<sup>th</sup> Ave to 115<sup>th</sup> Ave

October 12, 2018

**Requested by:** Dana Dickman

**Prepared by:** Michael Goins

**Location:** NE Shaver Street: NE 105<sup>th</sup> Avenue to NE 115<sup>th</sup> Avenue

**Description:** 2700 LF of pavement widening and sidewalk corridor improvements.

#### Current Cross-Section:

**NE 105<sup>th</sup> Ave to 112<sup>th</sup> Ave:** 22 ft roadway, no curbs or sidewalks within 60' right-of-way.  
**NE 112<sup>th</sup> Ave to 115<sup>th</sup> Ave:** 32 ft roadway, curb on both sides of street within 60' right-of-way.

#### Proposed Cross-Section:

**NE 105<sup>th</sup> Ave to 112<sup>th</sup> Ave:** 6 ft south sidewalk, 4 ft south planter strip, 6" south curb, 32 ft roadway within 60' right-of-way.  
**NE 112<sup>th</sup> Ave to 115<sup>th</sup> Ave:** 6 ft south sidewalk, 4 ft south planter strip, 6" south curb, 32 ft roadway, 6" north curb within 60' right-of-way.

#### Issues:

- Water – 6 hydrants will need to be adjusted or relocated
- BES (storm, sanitary, water-quality facilities) – 3 sedimentation and sump systems to be installed, in addition 2 inlets installed per SED/Sump system.
- Signals and Street Lighting – None identified
- Environmental and Zoning – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – None identified
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – Bus line 22 operates on this section of NE Shaver street. Also, this project is part of a Safe Routes to Schools (SRTS).

#### Cost Estimate:

Total Construction	\$ 1,162,000
Project Management (5%)	\$ 45,000
Design Engineering (25%)	\$ 225,000
Construction Management (15%)	\$ 135,000
Right-of-Way (Cost + 20% Contingency)	\$ 0
Overhead (76.07%)	\$ 308,000
Total Project Contingency	\$ 624,000

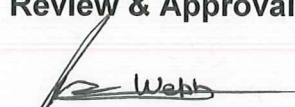
**Total Project Estimate: \$ 2,500,000**

# Exhibit C

## Estimating Assumptions:

- Existing conditions are based on GIS and Google Street view.
- Assumed 75' of 12" diameter pipe required per SED/ Sump system. Three SED/ Sump systems to be installed. In addition, 2% of new impervious area will need to be surface stormwater facilities, per Dave Nunamaker, BES.
- Assumed no right-of-way acquisition will be needed to install the improvements.
- Assume street trees to be installed every 25' per Title 11.
- There is significant encroachments into the right of way throughout the entirety of the project limits. Removal of structures and obstructions was increased to 6% cost to accommodate this.
- Assume that building new sidewalk at the southwest corner of NE Shaver and NE 115<sup>th</sup> will trigger the ramp at the northeast and southeast corners to be brought up to current ADA standards and will require reconstruction.
- Assume no bus pads required due to low rider volume on bus line 22 (23 riders/vehicle hour on weekdays).
- Assume crosswalk at south crossing of NE 105<sup>th</sup> Ave. Additional crossing is desired at 112<sup>th</sup> but traffic recommends looking at 114<sup>th</sup> or 115<sup>th</sup>; assume consultation with TriMet is required and possible adjustment of bus stops. These have not been accounted for in the quantities or estimate costs.
- Assumed TP & DT to be paid complete, lump sum rate increased to 5%.
- The years of inflation for this project is 3 years.
- The estimate contingency is 20%.
- The level of confidence for this estimate is low.

## Review & Approval:

 10/12/18  
 Reviewed by Engineer of Record Date

 10/12/18  
 Reviewed and Approved by Engineering Services Division Manager Date

## Attachments:

- Detailed estimate spreadsheet
- Site map



## Exhibit C

CITY OF PORTLAND, OREGON  
BUREAU OF TRANSPORTATION  
PRELIMINARY ENGINEER'S ESTIMATE FOR PROJECTS >\$1M  
NE Shaver St from 105th Ave to 115th Ave Date: October 12, 2018

By: Michael Goins

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE Shaver St FROM NE 105th Ave to NE 115th Ave

VALUES IN BLUE ARE PERCENT OF CONTRACT.

## ##### BID ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	0210	0100000A	n/a	LS	1.00	\$ 72,208.53	\$ 72,208.53
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	0225	0100000A	13	LS	1.00	\$ 36,104.26	\$ 36,104.26
20	FLAGGERS	0225	0168000T	13	HOUR	1,050.00	\$ 52.50	\$ 55,125.00
24	EROSION CONTROL	0280	0100000A	11	LS	1.00	\$ 7,220.85	\$ 7,220.85
31	POLLUTION CONTROL PLAN	0290	0100000A	12	LS	1.00	\$ 722.09	\$ 722.09
45	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0310	0106000A	1	LS	1.00	\$ 43,325.12	\$ 43,325.12
47	CLEARING AND GRUBBING	0320	0100000A	1	LS	1.00	\$ 19,135.26	\$ 19,135.26
51	GENERAL EXCAVATION	0330	0105000K	1	CUYD	843.00	\$ 50.00	\$ 42,150.00
55	12 INCH SUBGRADE STABILIZATION	0331	0106000J	1	SQYD	203.30	\$ 34.50	\$ 7,013.85
60	SUBGRADE GEOTEXTILE	0350	0105000J	1	SQYD	2,033.00	\$ 1.30	\$ 2,642.90
74	STORMWATER PLANTERS	0415	1102000J	1	SQFT	291.00	\$ 40.00	\$ 11,640.00
82	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445	Special		FOOT	225.00	\$ 143.50	\$ 32,287.50
94	CONCRETE MANHOLES, SEDIMENTATION	0470	0113000E	1	EACH	3.00	\$ 6,000.00	\$ 18,000.00
95	CONCRETE MANHOLES, SUMP	0470			EACH	3.00	\$ 15,600.00	\$ 46,800.00
96	SUMP CAPACITY TEST	0470			EACH	3.00	\$ 1,690.00	\$ 5,070.00
98	CONCRETE INLETS, TYPE CG-2	0470	0307000E	1	EACH	6.00	\$ 2,313.00	\$ 13,878.00
146	AGGREGATE BASE, 4 INCHES THICK	0640			SQYD	1,486.84	\$ 10.00	\$ 14,868.39
147	AGGREGATE BASE, 6 INCHES THICK	0640			SQYD	0.00	\$ 11.60	\$ -
148	AGGREGATE BASE, 8 INCHES THICK	0640			SQYD	2,033.00	\$ 13.10	\$ 26,632.30
151	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	0744	0302000M	6	TON	1,068.00	\$ 110.00	\$ 117,480.00
158	ASPHALT CONNECTIONS	0749	Special		SQFT	1,519.85	\$ 7.70	\$ 11,702.85
165	CONCRETE CURBS, CURB AND GUTTER	0759	0103000F	12	FOOT	1,741.00	\$ 25.00	\$ 43,525.00
166	CONCRETE CURBS, STANDARD CURB	0759	0110000F	12	FOOT	0.00	\$ 33.00	\$ -
170	CONCRETE DRIVEWAYS	0759	0126000J	12	SQFT	5,322.58	\$ 12.90	\$ 68,661.28
172	CONCRETE WALKS	0759	0128000J	12	SQFT	8,058.97	\$ 8.10	\$ 65,277.66
173	MONOLITHIC CURB AND SIDEWALKS	0759	0134000J	12	SQFT	1,154.58	\$ 18.20	\$ 21,013.36
253	LAWN SEEDING	1030	0138000J	11	SQYD	959.00	\$ 11.60	\$ 11,124.40
254	TOPSOIL	1040	0101000K	11	CUYD	368.00	\$ 61.10	\$ 22,484.80
257	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040	0131000E	11	EACH	78.00	\$ 822.00	\$ 64,116.00
271	ADDITIONAL ESTABLISHMENT PERIOD	1040	1199000X	11	YEAR	1.00	\$ 20,592.00	\$ 20,592.00
TOTAL BID ITEMS								\$ 900,801.40

## ##### ANTICIPATED ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	REFERENCE	NUMBER	OF	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
2	RELOCATE WATER FACILITIES - FIRE HYDRANT				EACH	6.00	\$ 20,000.00	\$ 120,000.00
8	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT				SQFT	261.90	\$ 20.00	\$ 5,238.00
15	BOLI FEE PAYMENT				LS	1.00	\$ 900.80	\$ 900.80
16	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)				LS	1.00	\$ 90,080.14	\$ 90,080.14

TOTAL ANTICIPATED ITEMS

\$ 216,218.94

## SCHEDULE SUMMARY

BID ITEMS	\$ 900,801
CONSTRUCTION CONTINGENCY	\$ 45,040
SUBTOTAL	\$ 945,841
ANTICIPATED ITEMS	\$ 216,219



## Exhibit C

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
<b>TOTAL CONSTRUCTION</b>								\$ 1,162,060
	PROJECT MANAGEMENT					5% of Bid Items	\$	45,040
	DESIGN ENGINEERING					25% of Bid Items	\$	225,200
	CONSTRUCTION MANAGEMENT					15% of Bid Items	\$	135,120
	SUBTOTAL						\$	405,360
	PROJECT ENGINEERING & MANAGEMENT OVERHEAD					76.07% of PM, Eng, and CM	\$	308,357
<b>TOTAL PROJECT ENGINEERING &amp; MANAGEMENT</b>								\$ 713,717
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES						\$	-
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION						\$	-
	RIGHT-OF-WAY CONTINGENCY					30% of Land, Improve, and Damages	\$	-
<b>TOTAL PROJECT RIGHT-OF-WAY</b>								\$ -
					Years	Inflation		
	INFLATION RATE ON CONTRACT				3	4.5% of Construction	\$	164,044
	INFLATION RATE ON PERSONNEL				3	2.0% of Eng & Mgmt	\$	43,685
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE					20% of Const, Eng & Mgmt, and Inflation	\$	416,701
<b>TOTAL PROJECT CONTINGENCY</b>								\$ 624,430
<b>TOTAL PROJECT ESTIMATE</b>								\$ 2,500,208

LS\* Unit Price shown is on Pound, Each, or Foot Basis as applicable

Remove \* and change unit to 1 in the Bid Form