Station Design Concepts
Vancouver Waterfront Station
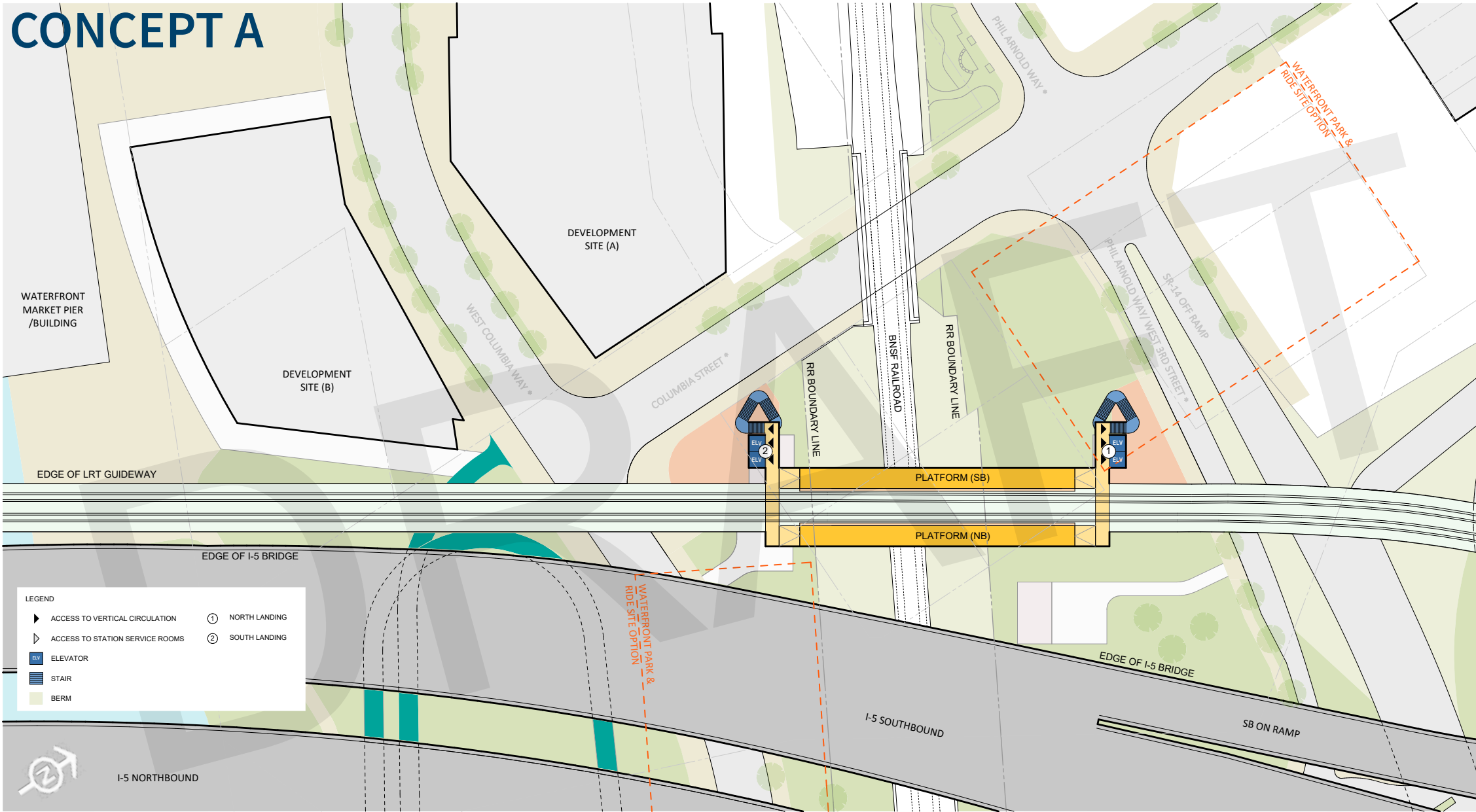
STATION CONCEPT COMPARISON

Station Concept	Platform		# of Entrances	# of Stairs	# of Elevators	Potential Station Access Location			Track Crossings	Plaza / Access Design Flexibility	Need for BNSF Coordination during:	
	Side or Center	Station Location				South of Columbia Way	Btwn Columbia & BNSF	North of BNSF			Construction	Maintenance
A	Side	Straddling BNSF	2	2	2-4	X	✓	✓	2	More	More	More
B	Center		2	2	2-4	X	✓	✓	0-2	Less	More	More
C	Side	South of BNSF	1	2	2	X	✓	X	2	More	Less	Less

Station Design Requirements/Constraints	
LRT System	Platform length (200') and height (75')
	Platform location constrainted by trackway/guideway geometry
	Ground-level context: 2 entrances w/ entry plaza, bus integration, bike parking, PUDO
East-West Platform Location	West edge of bridge configuration option and Block B tightly constrain East-West location
	Single Level Bridge is more constrained than Double Deck Bridge for plaza / access design
	Design for 10' offset between structures for constructiility and maintenance
BNSF	Platforms above tracks assumed to be allowable
	Needed BNSF coordination considered equal for vertical circulation construction and maint
	Needed BNSF coordination differences are specific to functional platform area (paving, she
	Exposure to BNSF fumes considered equal between location options (if an issue, similar mi
Street Level Context	Colmbia Street alignment will not change significantly , except at intersection
	Columbia Way alignment flexible east of intersection only; intersection configuration TBD
	Center platforms constrain plaza design and station access design more than side platform

PUDO = Pickup & Dopoff

CONCEPT A

LEGEND

▶ ACCESS TO VERTICAL CIRCULATION
▷ ACCESS TO STATION SERVICE ROOMS
ELV ELEVATOR
≡ STAIR
▧ BERM

① NORTH LANDING
② SOUTH LANDING

WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (A)

DEVELOPMENT SITE (B)

WEST COLUMBIA WAY

COLUMBIA STREET

PHIL ARNOLD WAY

PHIL ARNOLD WAY/ WEST 3RD STREET

SR-14 OFF RAMP

WATERFRONT PARK & RIDE SITE OPTION

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

RR BOUNDARY LINE

PLATFORM (SB)

PLATFORM (NB)

EDGE OF LRT GUIDEWAY

EDGE OF I-5 BRIDGE

EDGE OF I-5 BRIDGE

WATERFRONT PARK & RIDE SITE OPTION

I-5 SOUTHBOUND

I-5 NORTHBOUND

SB ON RAMP

0   40   80   160

CONCEPT A

LEGEND

▶ ACCESS TO VERTICAL CIRCULATION

▷ ACCESS TO STATION SERVICE ROOMS

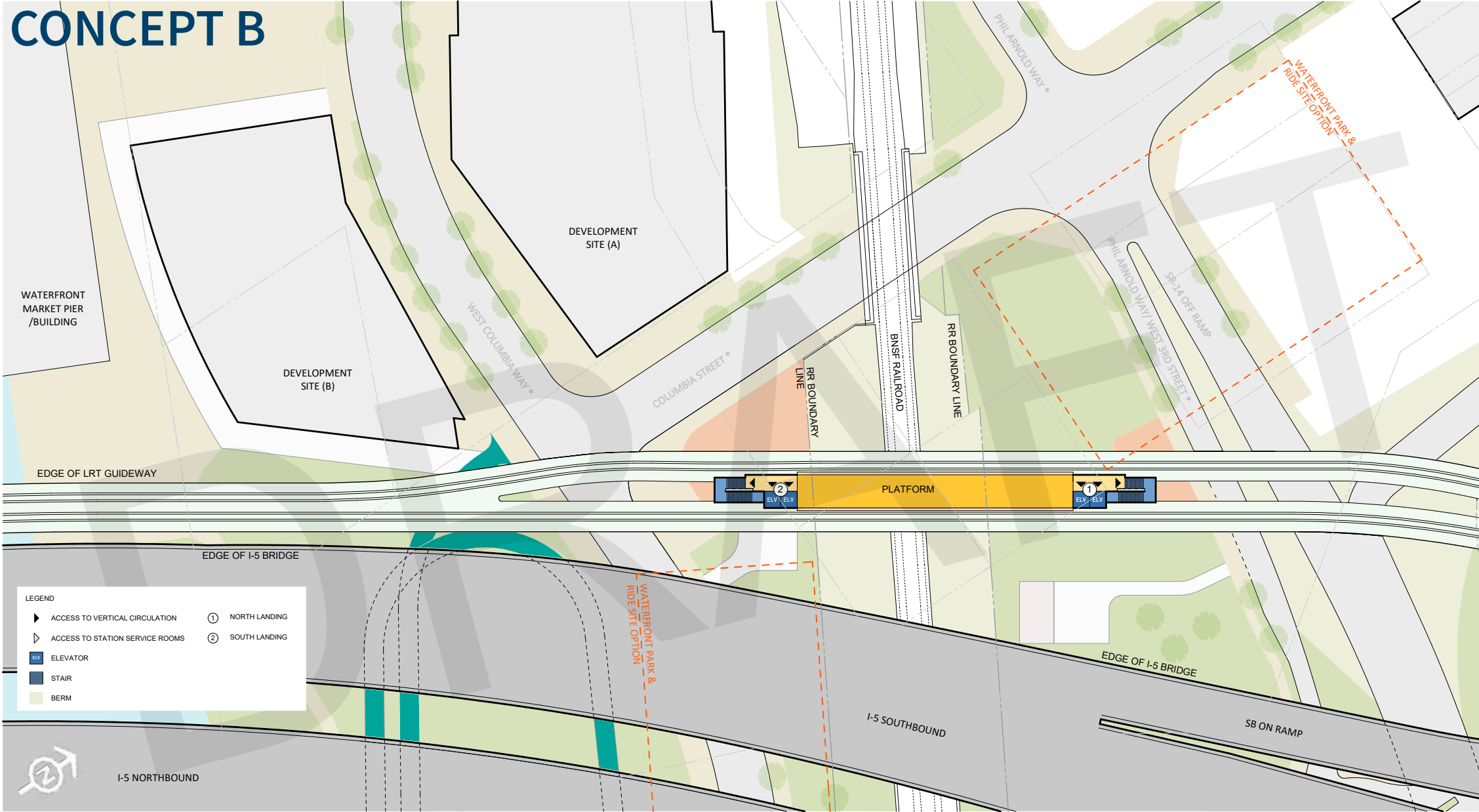ELV ELEVATOR

▦ STAIR

▨ BERM

① NORTH LANDING

② SOUTH LANDING

WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (B)

DEVELOPMENT SITE (A)

PEDESTRIAN CONNECTION/ EMERGENCY ACCESS

EDGE OF LRT GUIDEWAY ABOVE

EDGE OF I-5 BRIDGE ABOVE

SHARED USE PATH (SUP)

LANDSCAPE TBD

WATERFRONT PARK & RIDE SITE OPTION

SE COLUMBIA WAY *

WEST COLUMBIA WAY *

COLUMBIA STREET *

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

LANDSCAPE TBD

TPSS

EDGE OF I-5 BRIDGE ABOVE

UNDER BRIDGE PUBLIC AREAS AND STORMWATER TREATMENT DESIGN TBD

VFW MEMORIAL PLAZA

PHIL ARNOLD WAY *

600' to ESTHER SHORT PARK

WEST 4TH STREET

WATERFRONT PARK & RIDE SITE OPTION

SR-14 OFF RAMP

PHIL ARNOLD WAY/ WEST 3RD STREET *

WASHINGTON STREET *

ELV

ELV

ELV

① ② ③ ④

0   40   80   160

CONCEPT B

LEGEND

▶ ACCESS TO VERTICAL CIRCULATION   ① NORTH LANDING

▷ ACCESS TO STATION SERVICE ROOMS   ② SOUTH LANDING

▨ ELEVATOR

▤ STAIR

▨ BERM

WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (B)

DEVELOPMENT SITE (A)

PHIL ARNOLD WAY

PHIL ARNOLD WAY/ WEST 3RD STREET

SR-14 OFF RAMP

WATERFRONT PARK & RIDE SITE OPTION

WEST COLUMBIA WAY

COLUMBIA STREET

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

EDGE OF LRT GUIDEWAY

ELV ELV

PLATFORM

ELV ELV

EDGE OF I-5 BRIDGE

WATERFRONT PARK & RIDE SITE OPTION

EDGE OF I-5 BRIDGE

I-5 SOUTHBOUND

SB ON RAMP

I-5 NORTHBOUND

0   40   80   160

CONCEPT B

LEGEND

▶ ACCESS TO VERTICAL CIRCULATION   ① NORTH LANDING

▷ ACCESS TO STATION SERVICE ROOMS   ② SOUTH LANDING
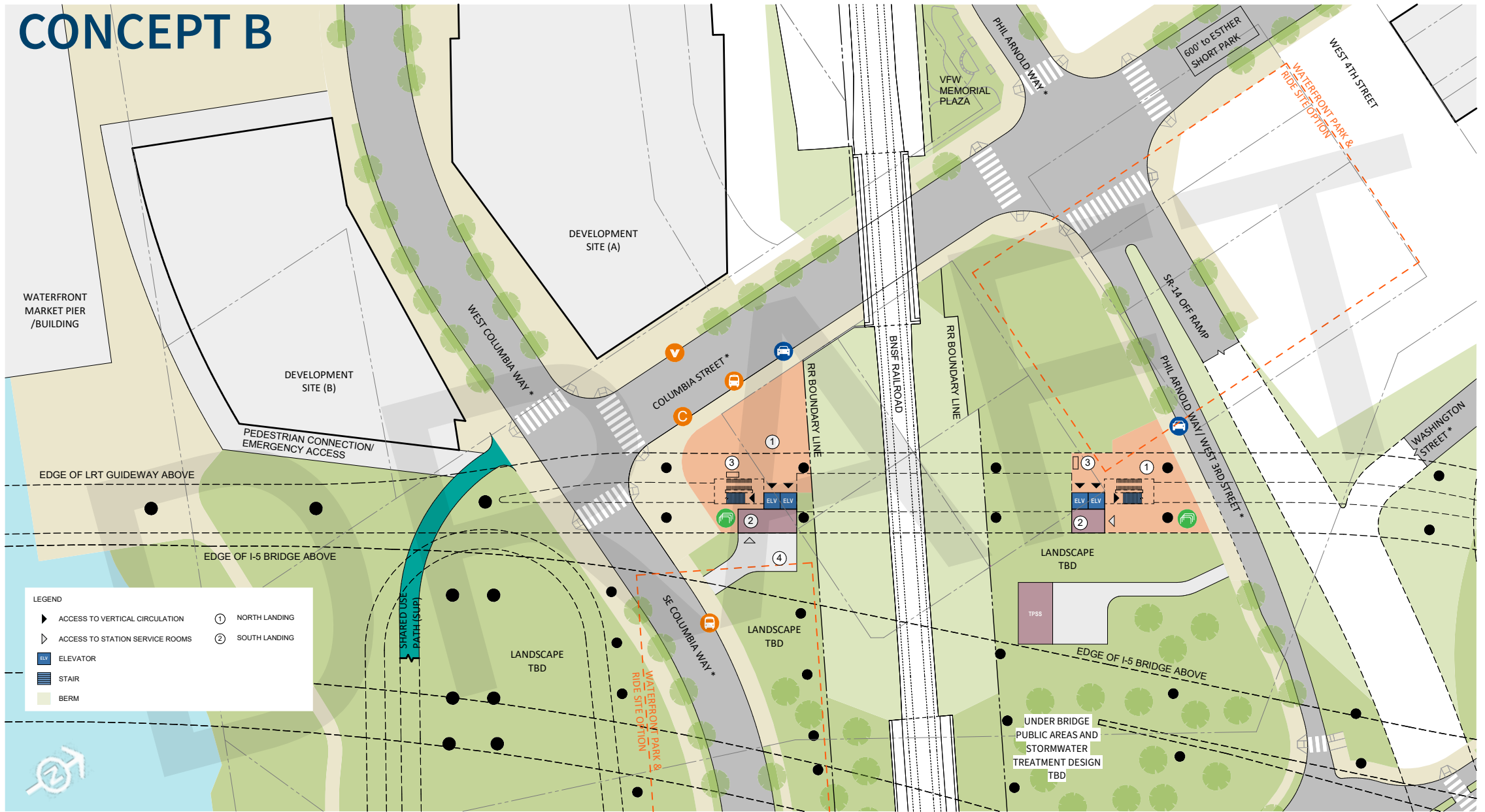
ELV ELEVATOR

▦ STAIR

▨ BERM

WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (A)

DEVELOPMENT SITE (B)

PEDESTRIAN CONNECTION/ EMERGENCY ACCESS

EDGE OF LRT GUIDEWAY ABOVE

EDGE OF I-5 BRIDGE ABOVE

WEST COLUMBIA WAY *

COLUMBIA STREET *

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

VFW MEMORIAL PLAZA

PHIL ARNOLD WAY *

600' to ESTHER SHORT PARK

WEST 4TH STREET

WATERFRONT PARK & RIDE SITE OPTION

SR-14 OFF RAMP

PHIL ARNOLD WAY / WEST 3RD STREET *

WASHINGTON STREET *

SHARED USE PATH (SUP)

SE COLUMBIA WAY *

WATERFRONT PARK & RIDE SITE OPTION

LANDSCAPE TBD

LANDSCAPE TBD

LANDSCAPE TBD

TPSS

EDGE OF I-5 BRIDGE ABOVE

UNDER BRIDGE PUBLIC AREAS AND STORMWATER TREATMENT DESIGN TBD

0   40   80   160

31

CONCEPT C

LEGEND

▶ ACCESS TO VERTICAL CIRCULATION

▷ ACCESS TO STATION SERVICE ROOMS

▣ ELV ELEVATOR
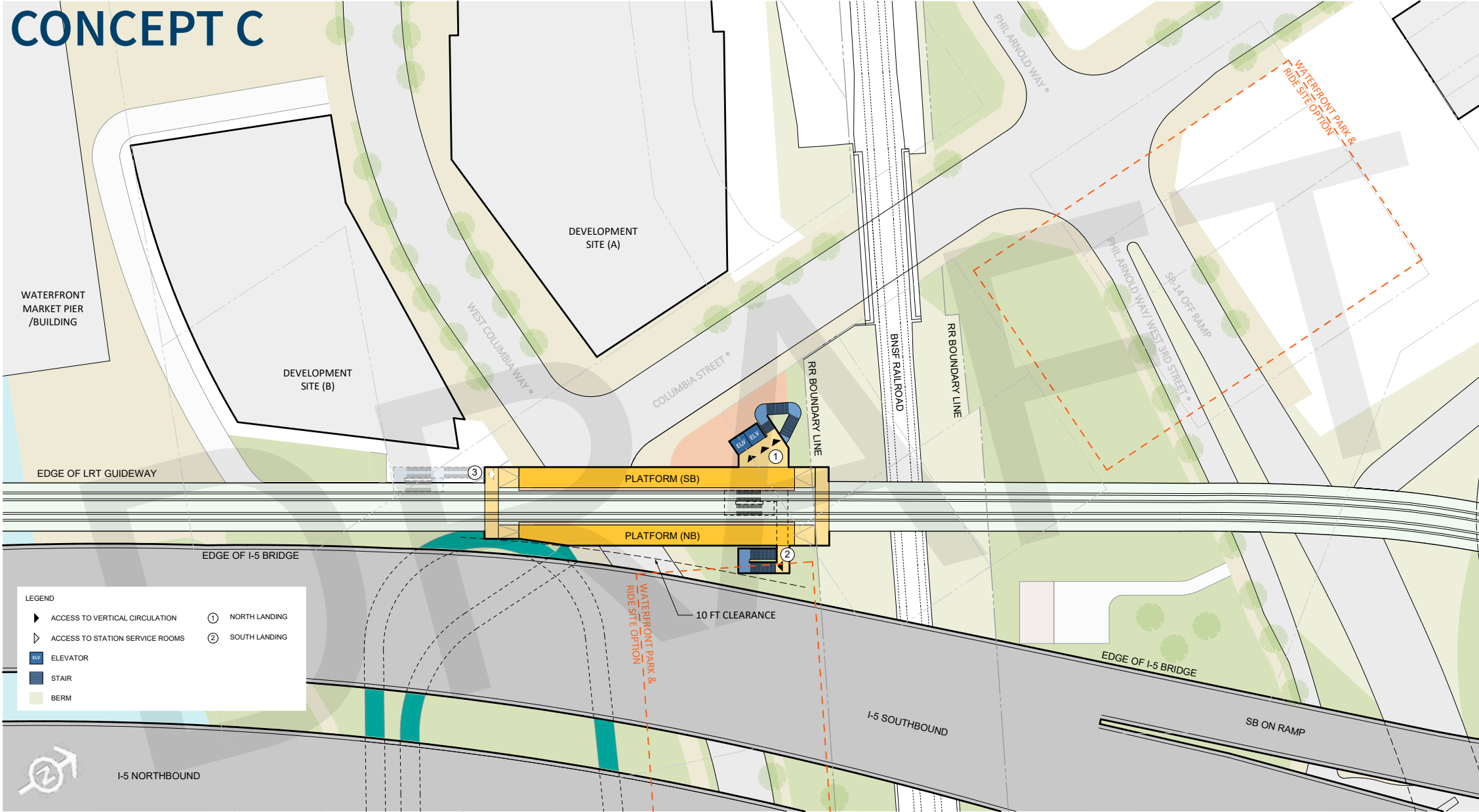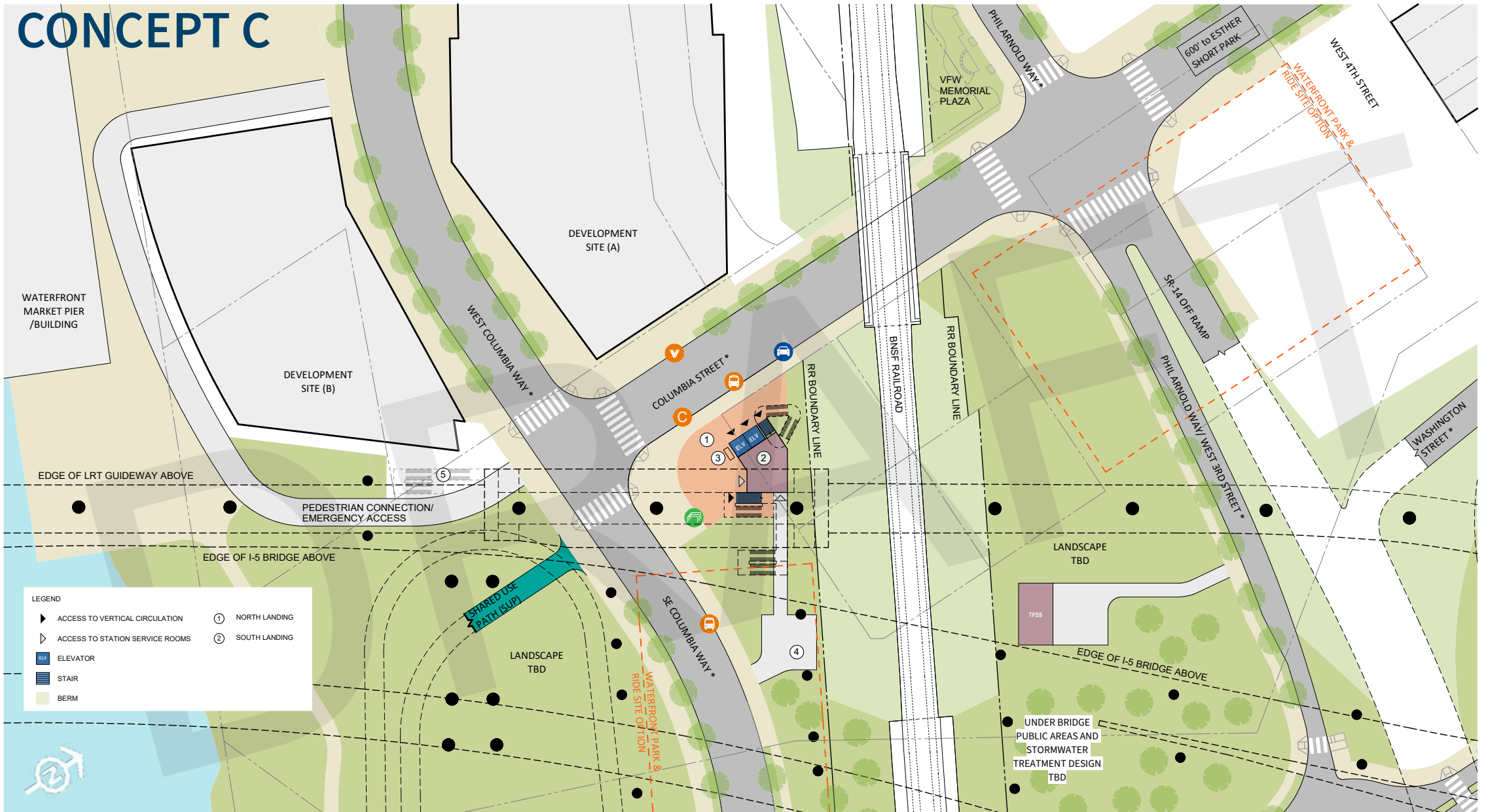
▤ STAIR

▨ BERM

① NORTH LANDING

② SOUTH LANDING

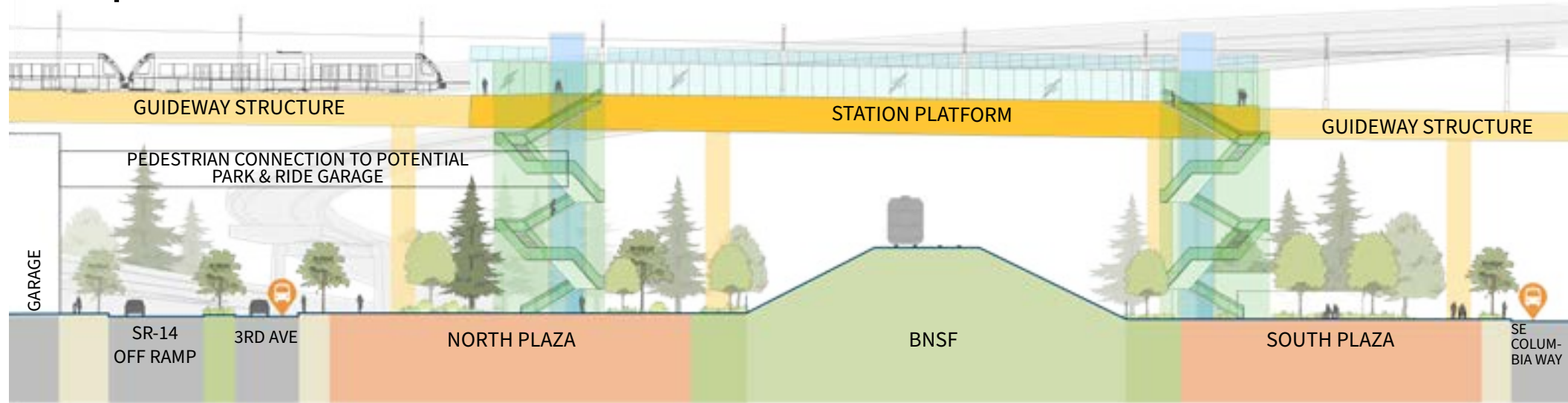WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (A)

DEVELOPMENT SITE (B)

WEST COLUMBIA WAY

COLUMBIA STREET

PHIL ARNOLD WAY

PHIL ARNOLD WAY / WEST 3RD STREET

SR-14 OFF RAMP

WATERFRONT PARK & RIDE SITE OPTION

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

EDGE OF LRT GUIDEWAY

PLATFORM (SB)

PLATFORM (NB)

EDGE OF I-5 BRIDGE

WATERFRONT PARK & RIDE SITE OPTION

10 FT CLEARANCE

EDGE OF I-5 BRIDGE

I-5 SOUTHBOUND

SB ON RAMP

I-5 NORTHBOUND

0   40   80   160

CONCEPT C

LEGEND

▶	ACCESS TO VERTICAL CIRCULATION
▷	ACCESS TO STATION SERVICE ROOMS
ELV	ELEVATOR
▤	STAIR
▨	BERM

① NORTH LANDING
② SOUTH LANDING

WATERFRONT MARKET PIER /BUILDING

DEVELOPMENT SITE (A)

DEVELOPMENT SITE (B)

WEST COLUMBIA WAY *

COLUMBIA STREET *

RR BOUNDARY LINE

BNSF RAILROAD

RR BOUNDARY LINE

VFW MEMORIAL PLAZA

PHIL ARNOLD WAY *

600' to ESTHER SHORT PARK

WEST 4TH STREET

WATERFRONT PARK & RIDE SITE OPTION

SR-14 OFF RAMP

PHIL ARNOLD WAY/ WEST 3RD STREET *

WASHINGTON STREET *

EDGE OF LRT GUIDEWAY ABOVE

PEDESTRIAN CONNECTION/ EMERGENCY ACCESS

EDGE OF I-5 BRIDGE ABOVE

SHARED USE PATH (SUP)

LANDSCAPE TBD

SE COLUMBIA WAY *

WATERFRONT PARK & RIDE SITE OPTION

LANDSCAPE TBD

TPSS

EDGE OF I-5 BRIDGE ABOVE

UNDER BRIDGE PUBLIC AREAS AND STORMWATER TREATMENT DESIGN TBD

0   40   80   160

33

Concepts A & B

GUIDEWAY STRUCTURE

STATION PLATFORM

GUIDEWAY STRUCTURE

PEDESTRIAN CONNECTION TO POTENTIAL
PARK & RIDE GARAGE

GARAGE

SR-14
OFF RAMP

3RD AVE

NORTH PLAZA

BNSF

SOUTH PLAZA

SE COLUM-
BIA WAY

Concept C

GUIDEWAY STRUCTURE
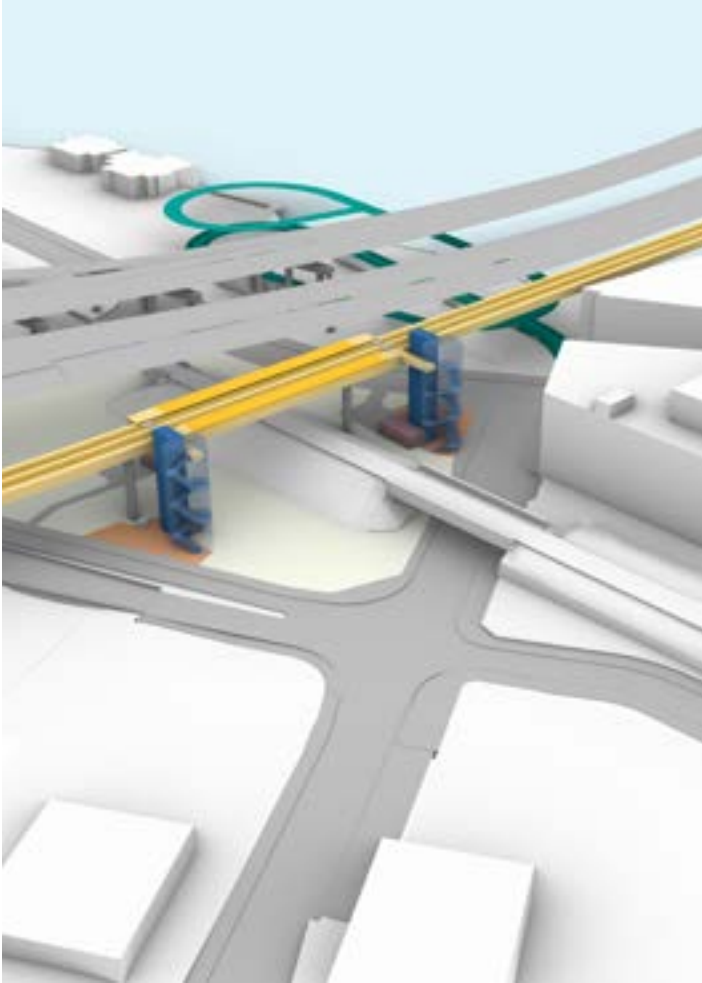
STATION PLATFORM
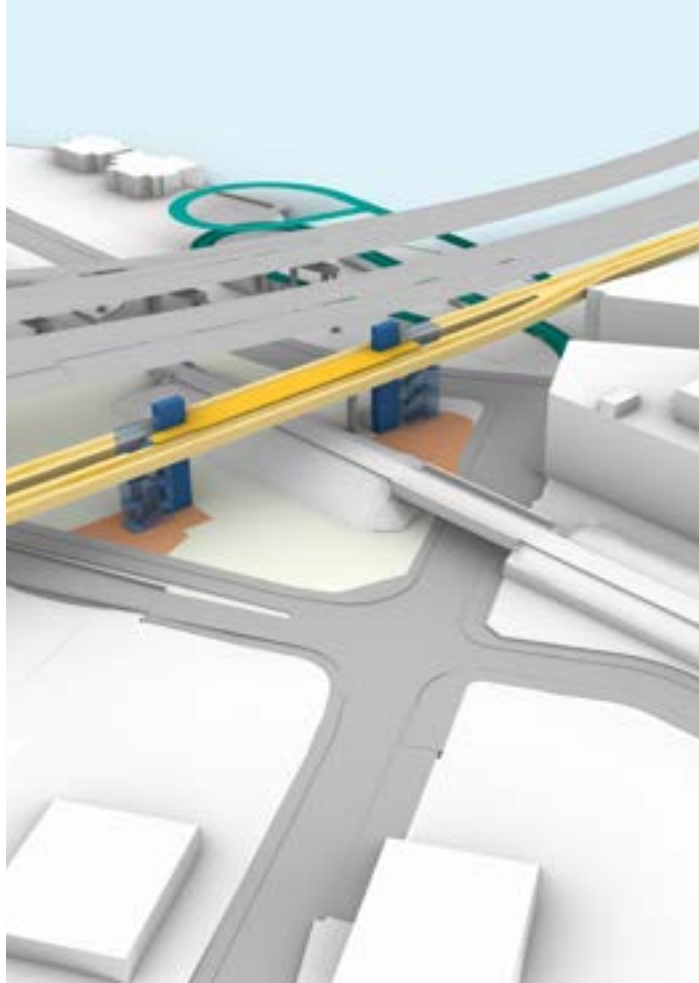
BNSF

SOUTH PLAZA

SE COLUMBIA
WAY

WATERFRONT OPEN SPACE

3D VIEWS

Concept A

Concept B

Concept C