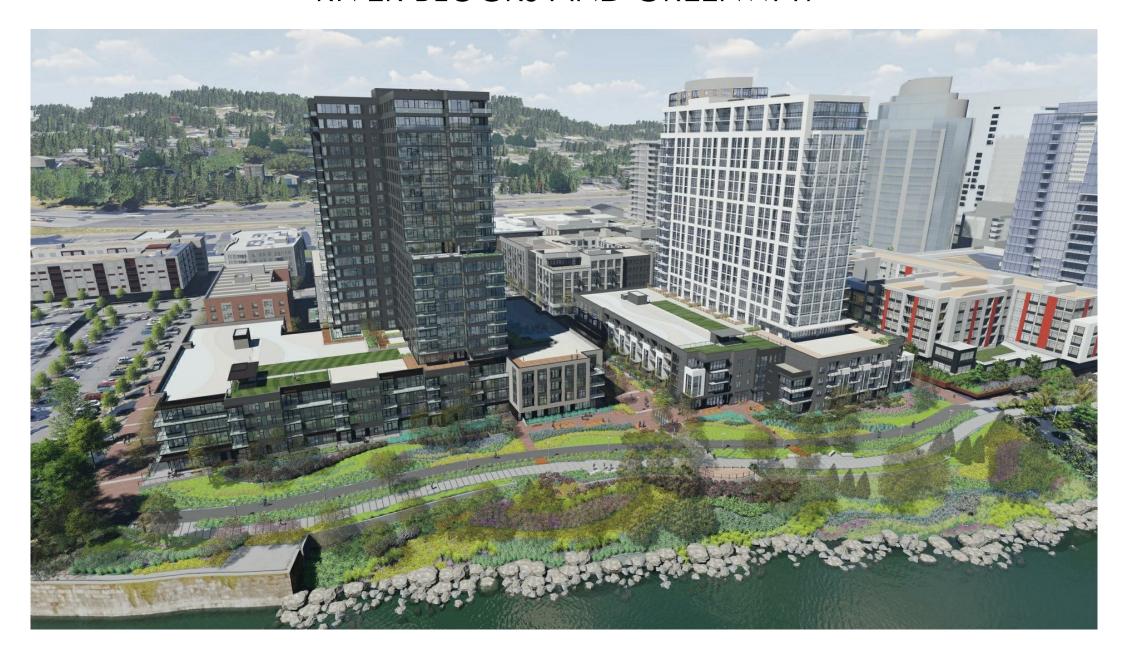
ALAMO MANHATTAN BLOCKS RIVER BLOCKS AND GREENWAY



OWNER / DEVELOPER

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RIVER BLOCKS VOLUME 1: BLOCK 41

EXHIBIT C: DESIGN DRAWINGS AND DETAILS

C 105	IRT FLOOR BLANL BLOCK 41
C.125	LB1 FLOOR PLAN - BLOCK 41
C.126	LOT FLOOR PLAN - BLOCK 41
C.127	LIGHTING PLAN - GROUND LEVEL - BLOCK 41
C.128	LO2 FLOOR PLAN - BLOCK 41
C.129	LO3 FLOOR PLAN - BLOCK 41
C.130	LO4 FLOOR PLAN - BLOCK 41
C.131	LOS FLOOR PLAN - BLOCK 41
C.132	LIGHTING PLAN - AMENITY DECK - B41
C.133	L06-20 FLOOR PLAN - BLOCK 41
C.134	L21 FLOOR PLAN - BLOCK 41
C.135	L22-23 FLOOR PLAN - BLOCK 41
C.136	ROOF PLAN - BLOCK 41
C.137	BLOCK 41 - WEST ELEVATION
C.138	BLOCK 41 - SOUTH ELEVATION
C.139	BLOCK 41 - EAST ELEVATION
C.140	BLOCK 41 - NORTH ELEVATION
C.141	BLOCK 41 - N-S BUILDING SECTION
C.142	BLOCK 41 - E-W BUILDING SECTION
C.143	BLOCK 41 - WEST ENLARGED ELEVATION
C.144	BLOCK 41 - WEST ENLARGED SECTION
C.145	BLOCK 41 - WEST ENLARGED ELEVATION
C.146	BLOCK 41 - WEST ENLARGED SECTIONS
C.147	BLOCK 41 - SOUTH ENLARGED ELEVATION
C.148	BLOCK 41 - SOUTH ENLARGED SECTIONS
C.149	BLOCK 41 - SOUTH ENLARGED ELEVATION
C.150	BLOCK 41 - SOUTH ENLARGED SECTION
C.151	BLOCK 41 - EAST ENLARGED ELEVATION
C.152	BLOCK 41 - EAST ENLARGED SECTIONS
C.153	BLOCK 41 - NORTH ENLARGED ELEVATION
C.154	BLOCK 41 - NORTH ENLARGED SECTIONS
C.155	BLOCK 41 - ENLARGED ELEVATION LEVEL 5 AMENITY
C.156	BLOCK 41 - ENLARGED SECTION LEVEL 5 AMENITY
C.157	BLOCK 41 - ENLARGED ELEVATION PENTHOUSE
C.158	BLOCK 41 - ENLARGED SECTION PENTHOUSE
C.159	BLOCK 41 - ENLARGED ELEVATION PENTHOUSE
C.160	BLOCK 41 - ENLARGED SECTION PENTHOUSE
C.161	BLOCK 41 - ADDITIONAL DETAILS
C.162	BLOCK 41 - PRODUCT DATA
C.163	BLOCK 41 - PRODUCT DATA
C.164	BLOCK 41 - MATERIAL BOARD

BLOCK 41 APPENDIX

APP.125	PERSPECTIVE OF NW CORNER - BLOCK 41
APP.126	PERSPECTIVE OF SW CORNER - BLOCK 41
APP.127	PERSPECTIVE OF SE CORNER - BLOCK 41
APP.128	PERSPECTIVE OF NE CORNER - BLOCK 41
APP.129	PERSPECTIVE ON LANE STREET LOOKING WEST - BLOCK 4
APP.130	RIVER PERSPECTIVE OF NE CORNER - BLOCK 41
APP.131	FAR DIAGRAMS - BLOCK 41
APP.132	FAR DIAGRAMS - BLOCK 41
APP.133	DIAGRAMS - GROUND FLOOR WINDOWS - BLOCK 41
APP.134	LO1 WEATHER PROTECTION - BLOCK 41
APP.135	BICYCLE PARKING EXHIBIT - BLOCK 41
APP.136	B41 - TOWER PERSPECTIVE FROM SE
APP.137	B41 - TOWER PERSPECTIVE FROM NE
APP.138	B41 - TOWER PERSPECTIVE FROM SW
APP.139	B41 - TOWER PERSPECTIVE FROM NW
APP.140	GLAZING DIAGRAMS - B41 WEST ELEVATION
APP.141	GLAZING DIAGRAMS - B41 SOUTH ELEVATION
APP.142	GLAZING DIAGRAMS - B41 EAST ELEVATION
APP.143	GLAZING DIAGRAMS - B41 NORTH ELEVATION

RIVER BLOCKS VOLUME 2: BLOCK 44

EXHIBIT C: DESIGN DRAWINGS AND DETAILS

C.170	L01 FLOOR PLAN - BLOCK 44
C.171	LIGHTING PLAN - GROUND LEVEL - B44
C.172	LO2 FLOOR PLAN - BLOCK 44
C.173	L03 FLOOR PLAN - BLOCK 44
C.174	LO4 FLOOR PLAN - BLOCK 44
C.175	LIGHTING PLAN - AMENITY DECK - B44
C.176	L05 FLOOR PLAN - BLOCK 44
C.177	L06-12 FLOOR PLAN - BLOCK 44
C.178	L13 FLOOR PLAN - BLOCK 44
C.179	L14-21 FLOOR PLAN - BLOCK 44
C.180	L22-23 FLOOR PLAN - BLOCK 44
C.181	ROOF PLAN - BLOCK 44
C.182	BLOCK 44 - WEST ELEVATION
C.183	BLOCK 44 - SOUTH ELEVATION
C.184	BLOCK 44 - EAST ELEVATION
C.185	BLOCK 44 - NORTH ELEVATION
C.186	BLOCK 44 - N-S BUILDING SECTION
C.187	BLOCK 44 - E-W BUILDING SECTION
C.188	BLOCK 44 - WEST ENLARGED ELEVATION
C.189	BLOCK 44 - WEST ENLARGED SECTIONS
C.190	BLOCK 44 - WEST ENLARGED ELEVATION
C.191	BLOCK 44 - WEST ENLARGED SECTION
C.192	BLOCK 44 - SOUTH ENLARGED ELEVATION
C.193	BLOCK 44 - SOUTH ENLARGED SECTION
C.194	BLOCK 44 - EAST ENLARGED ELEVATION
C.195	BLOCK 44 - EAST ENLARGED SECTION
C.196	BLOCK 44 - EAST ENLARGED ELEVATION
C.197	BLOCK 44 - EAST ENLARGED SECTIONS
C.198	BLOCK 44 - NORTH ENLARGED ELEVATION
C.199	BLOCK 44 - NORTH ENLARGED SECTION
C.200	BLOCK 44 - NORTH ENLARGED ELEVATION
C.201	BLOCK 44 - NORTH ENLARGED SECTION
C.202	BLOCK 44 - WEST ENLARGED ELEVATION
C.203	BLOCK 44 - WEST ENLARGED SECTION
C.204	BLOCK 44 - ENLARGED ELEVATION LEVEL 5 AMENITY
C.205	BLOCK 44 - ENLARGED SECTION LEVEL 5 AMENITY
C.206	BLOCK 44 - ENLARGED ELEVATION LEVEL 13 AMENITY
C.207	BLOCK 44 - ENLARGED SECTION LEVEL 13 AMENITY
C.208	BLOCK 44 - ENLARGED ELEVATION PENTHOUSE
C.209	BLOCK 44 - ENLARGED SECTION PENTHOUSE
C.210	BLOCK 44 - ADDITIONAL DETAILS
C.211	BLOCK 44 - PRODUCT DATA
C.212	BLOCK 44 - PRODUCT DATA
C.213	BLOCK 44 - MATERIAL BOARD
	C.171 C.172 C.173 C.174 C.175 C.177 C.178 C.177 C.178 C.179 C.180 C.181 C.182 C.183 C.184 C.185 C.184 C.185 C.186 C.187 C.192 C.193 C.191 C.192 C.193 C.194 C.195 C.196 C.197 C.198 C.197 C.198 C.197 C.198 C.200 C.201 C.202 C.203 C.204 C.205 C.205 C.206 C.207 C.208 C.209 C.210 C.211

BLOCK 44 APPENDIX

APP.170	PERSPECTIVE OF NW CORNER - BLOCK 44
APP.171	PERSPECTIVE OF SW CORNER - BLOCK 44
APP.172	PERSPECTIVE OF SE CORNER - BLOCK 44
APP.173	PERSPECTIVE OF NE CORNER - BLOCK 44
APP.174	PERSPECTIVE OF NW CORNER W/ CONTEXT - BLOCK 4
APP.175	RIVER PERSPECTIVE OF SE CORNER - BLOCK 44
APP.176	DIAGRAMS - FAR BLOCK 44
APP.177	DIAGRAMS - FAR BLOCK 44
APP.178	DIAGRAMS - GROUND FLOOR WINDOWS - BLOCK 44
APP.179	L01 WEATHER PROTECTION - BLOCK 44
APP.180	BICYCLE PARKING EXHIBIT - BLOCK 44
APP.181	B44 - TOWER PERSPECTIVE FROM SE
APP.182	B44 - TOWER PERSPECTIVE FROM NE
APP.183	B44 - TOWER PERSPECTIVE FROM NW
APP.184	B44 - TOWER PERSPECTIVE FROM SW
APP.185	SIMPLIFICATION DIAGRAM
APP.186	GLAZING DIAGRAMS - B44 WEST ELEVATION
APP.187	GLAZING DIAGRAMS - B44 SOUTH ELEVATION
APP.188	GLAZING DIAGRAMS - B44 EAST ELEVATION

APP.189 GLAZING DIAGRAMS - B44 NORTH ELEVATION

RIVER BLOCKS VOLUME 3: LANDSCAPE, CIVIL, & GREENWAY

EXHIBIT C: DESIGN DRAWINGS AND DETAILS

C.220 LANDSCAPE - RIVER BLOCKS - B41 & B44

C.222 GREENWAY / PEDESTRIAN MALL ENLARGEMENT PLAN
C.223 MATERIAL SELECTIONS FOR SITE / PEDESTRIAN MALL

LANDSCAPE

C.224	LANDSCAPE - ROOF TERRACES 41 & 44
C.226	TYPICAL PATIO SECTIONS
C.227	TYPICAL PATIO SECTIONS
C.228	LANDSCAPE - GREENWAY SECTION
C.229	LANDSCAPE - GREENWAY SECTION
C.230	LANDSCAPE - GREENWAY SECTION
C.231	LANDSCAPE - GREENWAY SECTION
C.232	LANDSCAPE - R.O.WPEDESTRIAN MALL/LIGHTING- RIVER BLOCKS- B41 & B44
C.233	LANDSCAPE - R.O.W LEVEL 5 PLANTING CHART - RIVER BLOCKS B41 & B44
C.236	PUBLIC OPEN SPACE / BONUS PLAN - B41 & B44
C.237	LANDSCAPE - LAWN EXHIBIT - B41 & B44
C.240	CONSTRUCTION DETAILS - GREENWAY
C.241	CONSTRUCTION DETAILS - GREENWAY
C.242	CONSTRUCTION DETAILS - MURAL WALL
C.243	CONSTRUCTION DETAILS - MURAL WALL
C.244	CONSTRUCTION DETAILS - MURAL WALL
L.001	LANDSCAPE - GREENWAY DEVELOPMENT PLAN- OVERALL
L.002	LANDSCAPE - GREENWAY DEVELOPMENT PLAN- SOUTH
L.003	LANDSCAPE - GREENWAY DEVELOPMENT PLAN- NORTH

CIVIL

L.004

L.005

C.250	0 NOTES AND LEGEND	
C.251	1 EXISTING CONDITIONS AND DEMOLITION PLAN	
C.252	2 TREE PROTECTION PLAN	
C.253	3 BLOCK 41 UTILITY PLAN	
C.254	4 BLOCK 44 UTILITY PLAN	
C.255	5 BLOCK 41 GRADING PLAN	
C.256	6 BLOCK 44 GRADING PLAN	
C.257	7 BLOCK 41 STORMWATER PLAN	
C.258	8 BLOCK 44 STORMWATER PLAN	
C.259	9 GREENWAY EXISTING CONDITIONS - SOUTH	
C.260	O GREENWAY EXISTING CONDITIONS - NORTH	
C.261	1 GREENWAY SITE PLAN - OVERALL	
C.262	2 GREENWAY SITE PLAN - SOUTH	
C.263	3 GREENWAY SITE PLAN - NORTH	

GREENWAY CONSTRUCTION MANAGEMENT PLAN - OVERALL GREENWAY CONSTRUCTION MANAGEMENT PLAN - SOUTH

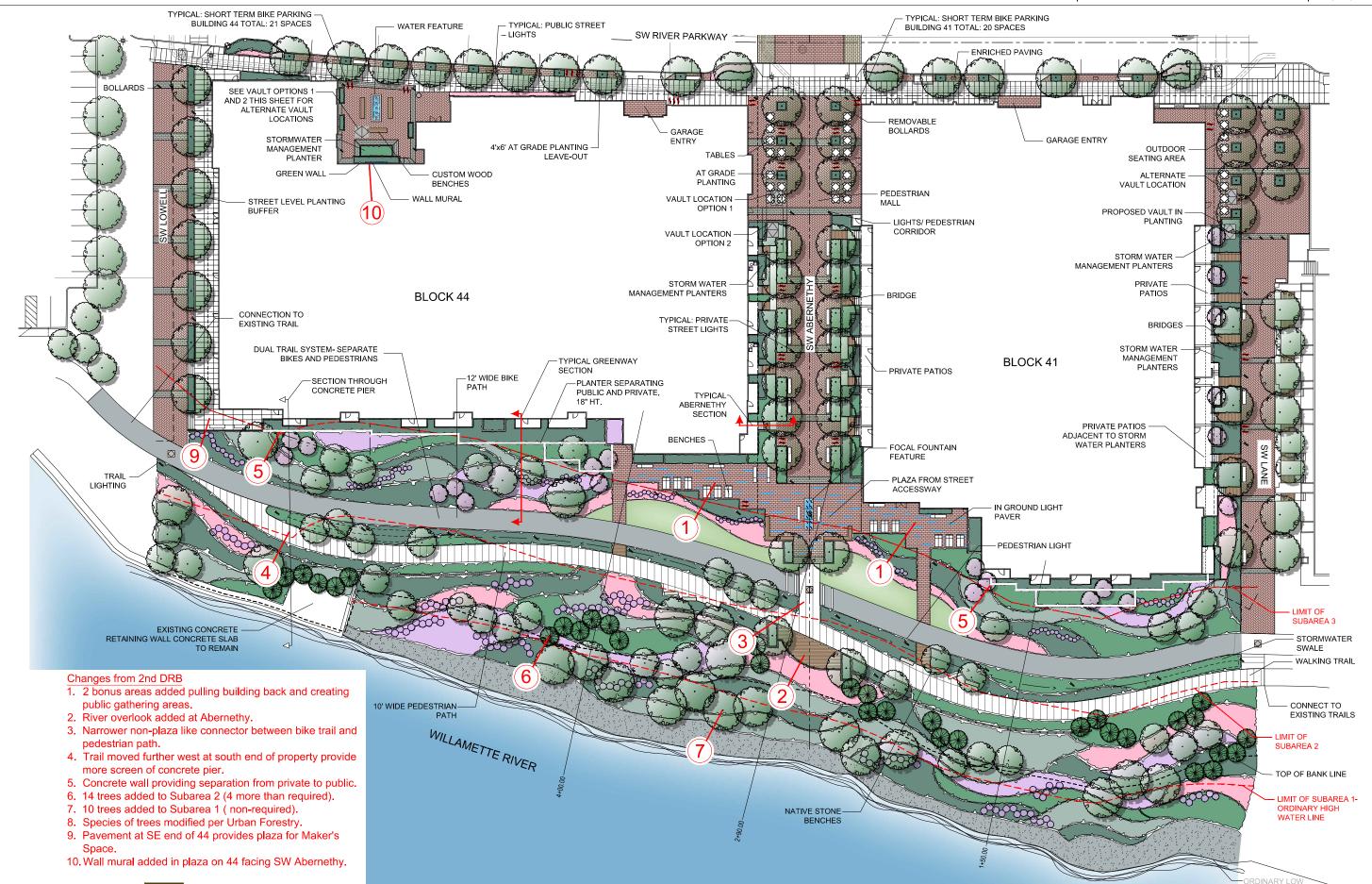
GREENWAY CONSTRUCTION MANAGEMENT PLAN - NORTH

LANDSCAPE - GREENWAY PLANTING PLAN- SOUTH

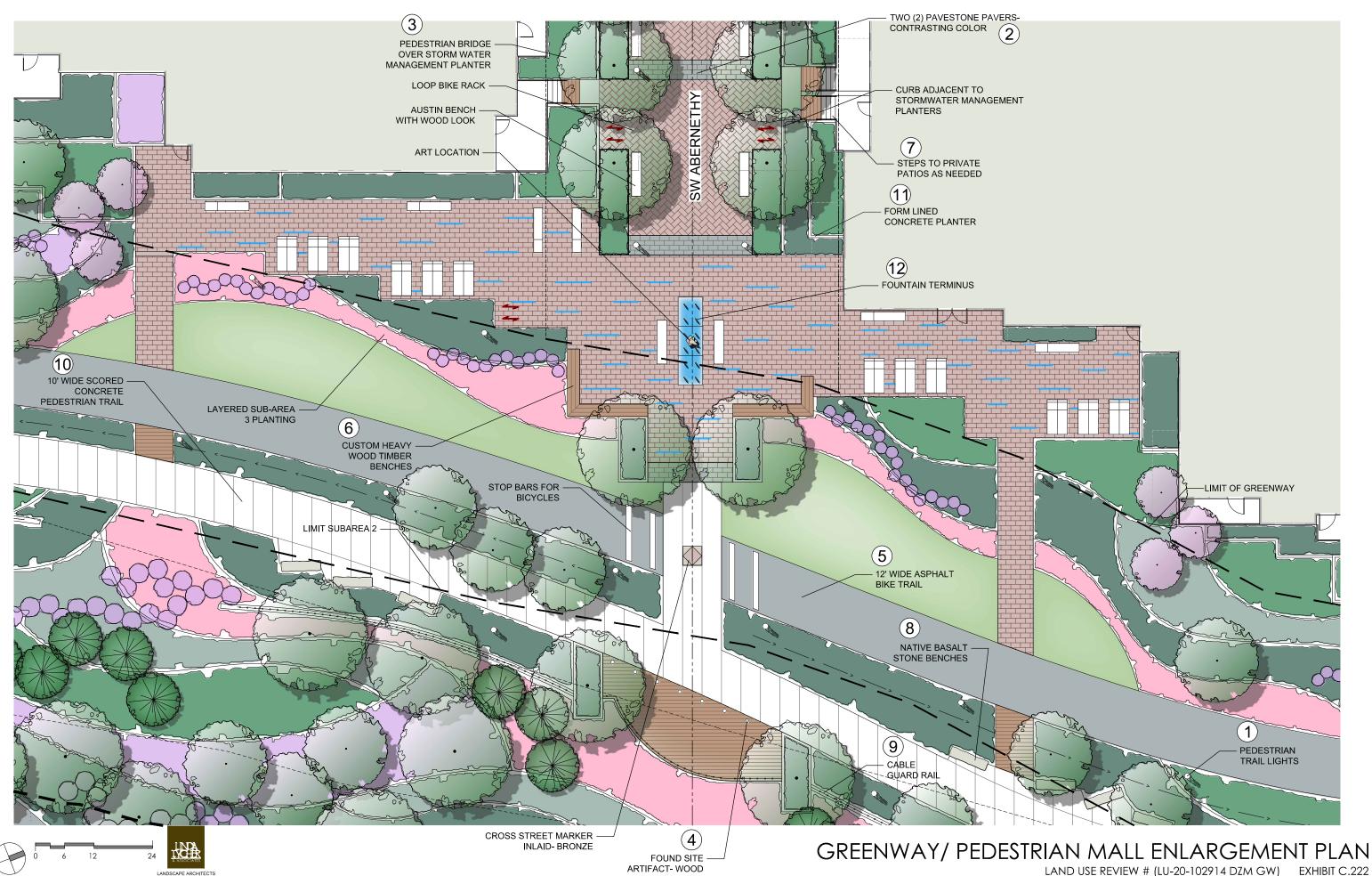
LANDSCAPE - GREENWAY PLANTING PLAN- NORTH

GENERAL APPENDIX

APP.200	AERIAL PERSPECTIVE FROM SE
APP.201	AERIAL PERSPECTIVE FROM NE
APP.202	AERIAL PERSPECTIVE FROM NW
APP.203	AERIAL PERSPECTIVE FROM SW
APP.204	SITE CONTEXT / GROUND FLOOR USES
APP.205	DIAGRAMS - TOWER SETBACK
APP.206	CONTEXT - PANORAMIC @ OSPREY
APP.207	CONTEXT - PANORAMIC @ ATWATER
APP.208	CONTEXT - PANORAMIC @ MERIWETHER
APP.209	AM BLOCKS - MODIFICATION 1 - TANDEM PARKING
APP.210	AM BLOCKS - MODIFICATION 2 - BICYCLE PARKING
APP.211	ALAMO BLOCKS - ADUSTMENT 1 - PARKING ACCESS







BOLLARD

DECORATIVE PEDESTRIAN LIGHT - SELUX RITORNO



PEDESTRIAN MALL CONCRETE PAVERS, TWO (2) CONTRASTING COLORS



WOOD BRIDGES **OVER RAIN GARDENS**



FOUND ARTIFACTS- PIER POSTS USED AS BOLLARDS





12' WIDE ASPHALT **BIKE TRAIL**



HEAVY TIMBER BENCH- MARITIME FEEL

(5)



PATIO CONNECTION TO PEDESTRIAN MALL

6

(10)



NATIVE BASALT STONE BENCH



CABLE GUARD RAIL



10' WIDE SCORED CONCRETE PEDESTRIAN TRAIL

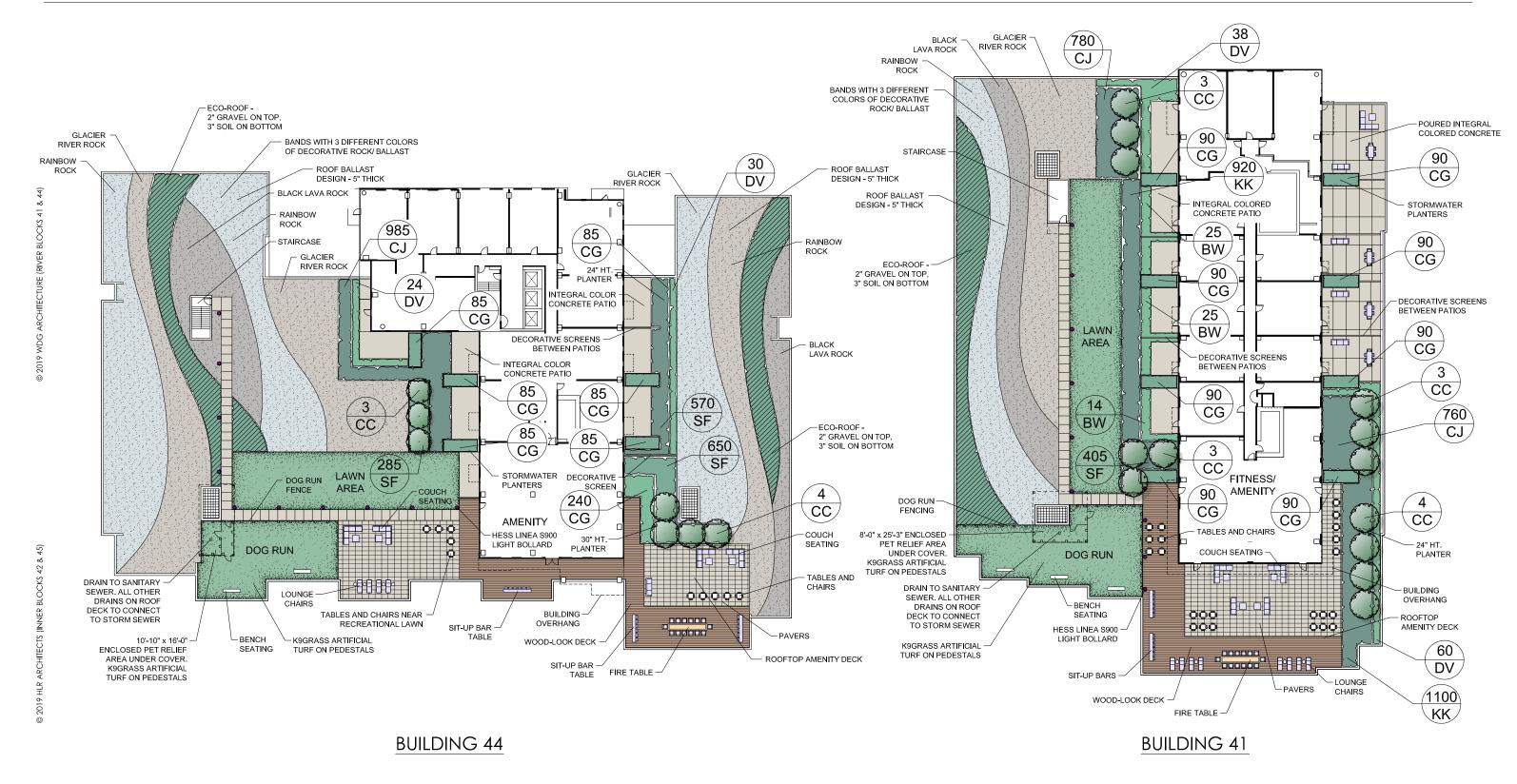


FORM LINED CONCRETE PLANTER

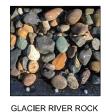


FOUNTAIN AT TERMINUS



















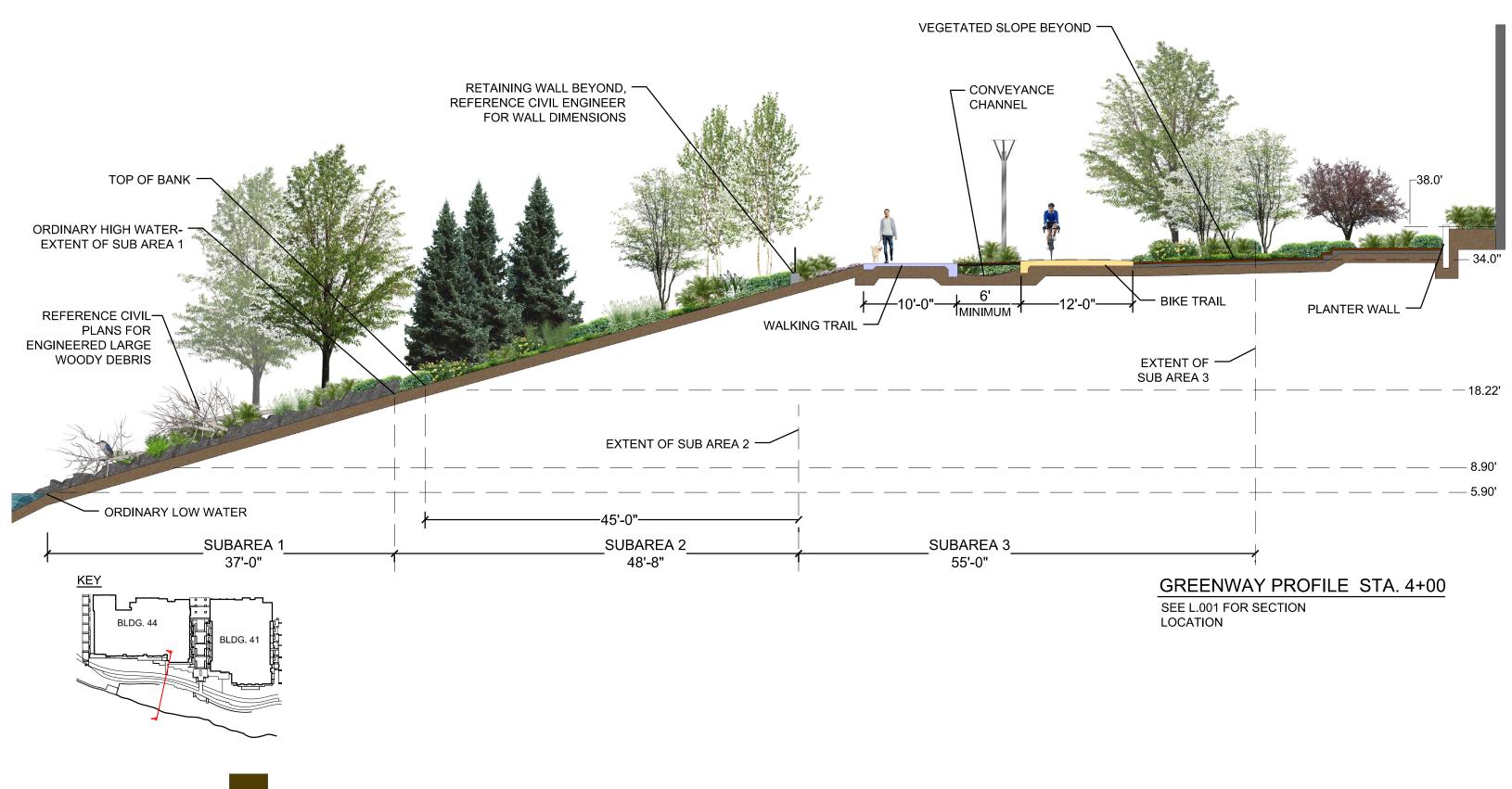


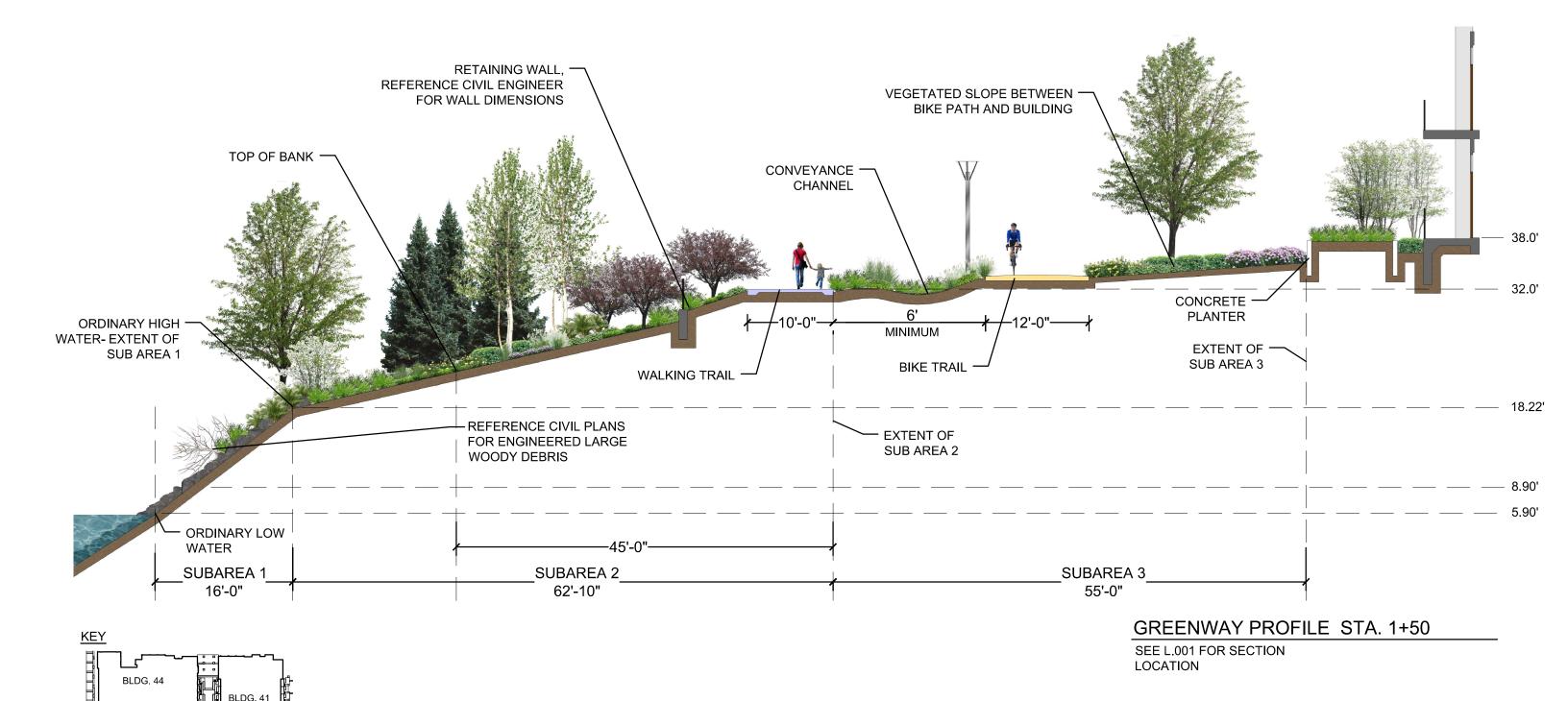




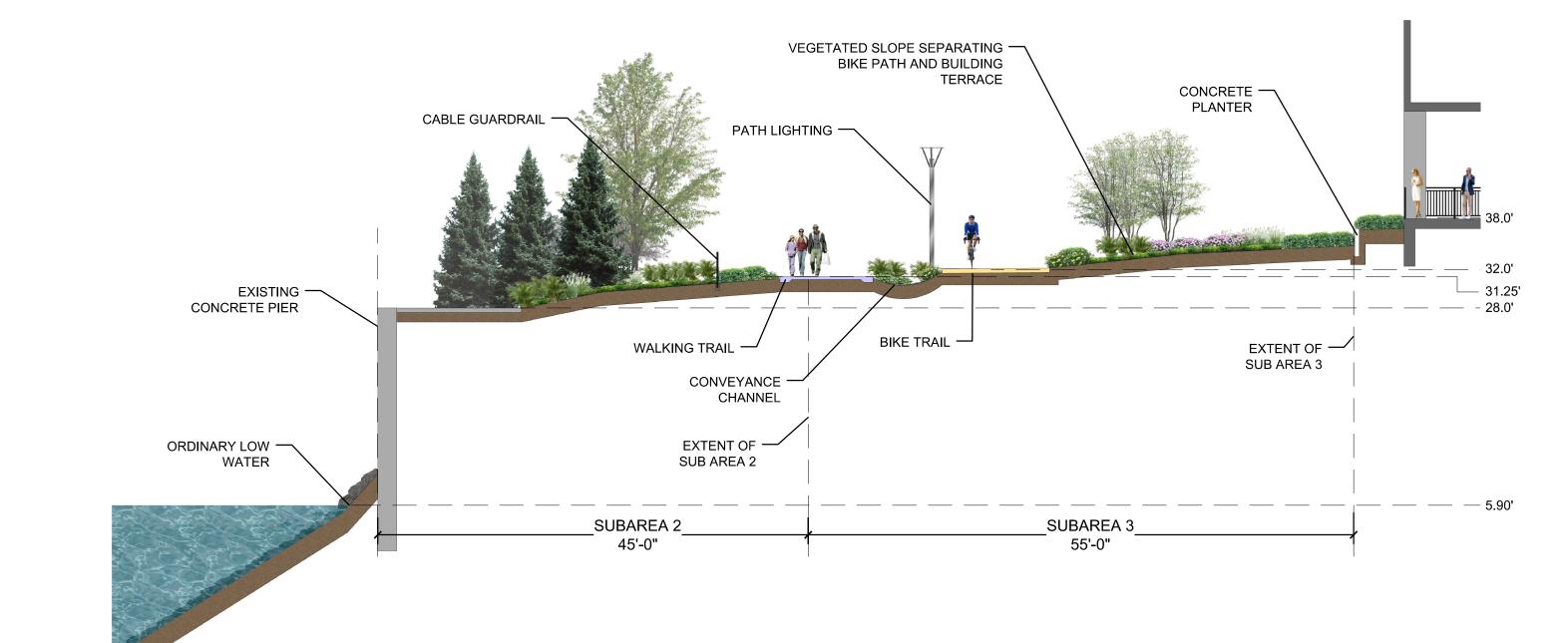






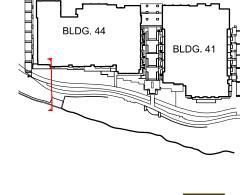






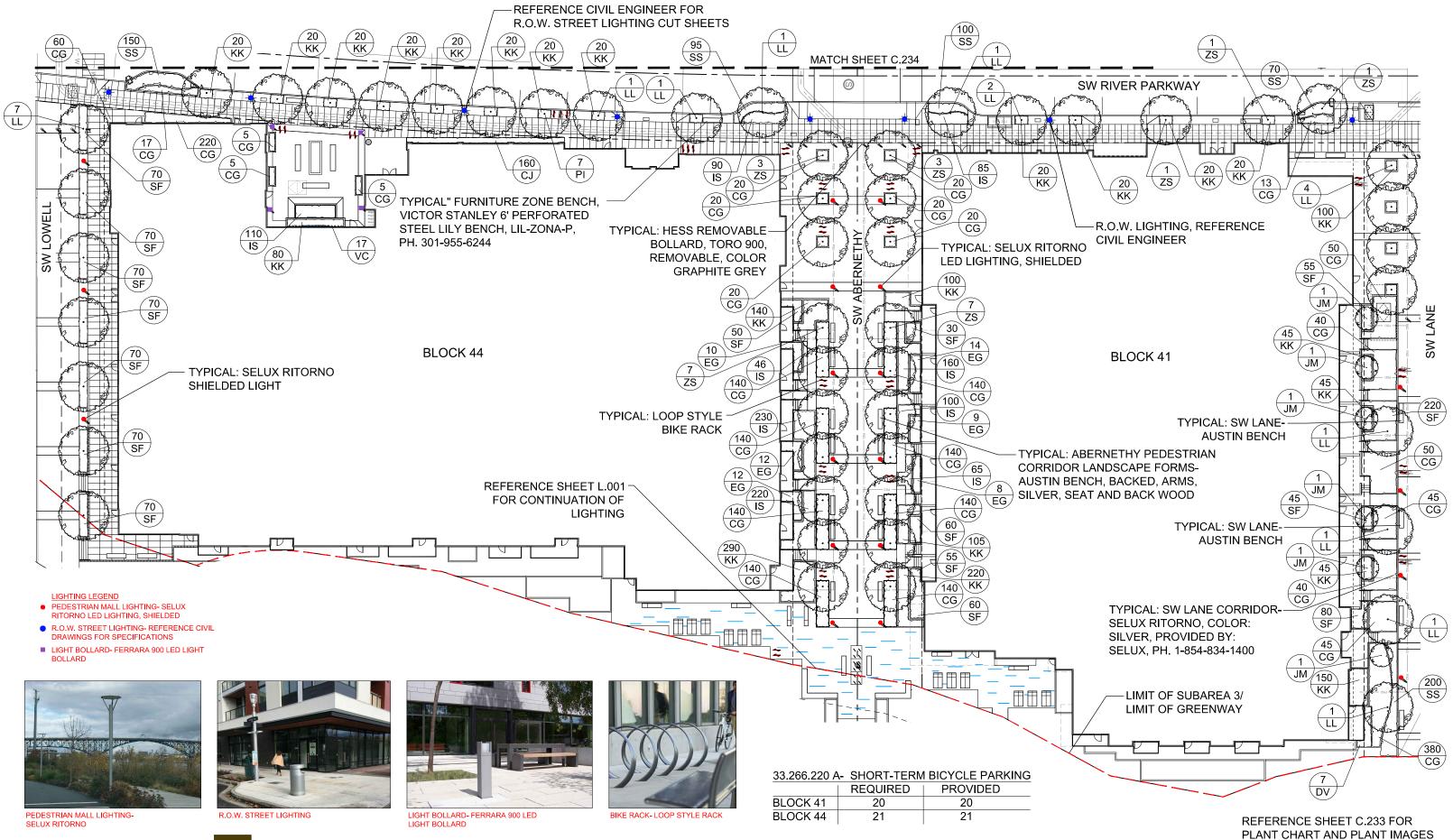
CONCRETE PIER SECTION

SEE L.001 FOR SECTION LOCATION



<u>KEY</u>





LANDSCAPE R.O.W., PEDESTRIAN MALLS, LEVEL 5 PLANT LIST IMAGES



Prunis virginiana Parrotia persica 'Canada Red'



'Vanessa'



Acer palmatum 'Emperor I'



Tilia cordata 'Greenspire'



Zelkova serrata 'Village Green'



Abelia grandiflora 'Edward Goucher'



Iris sibirica



Lavandula angustifolis Mahonia repens "Hidcote Blue"





Polystichum munitum



Viburnum davidii



Carex obnupta



Arctostaphylos uva ursi



Trachelospermum jasminoides



Parthenocissus quinquefolia

Public R.O.W. - Level 5 - Pedestrian Mall Plant List

Key	Scientific Name	Common Name	SIZE	SPACING		
	Trees					
CC	Prunus virginiana 'Canada Red'	Canada Red Chokecherry	3" cal.	Per Plan		
PΙ	Parrotia persica 'Vanessa'	Persian Ironwood 'Vanessa'	4" cal.	Per Plan		
JM	Acer palmatum 'Emperor 1'	Emperor 1 Japanese Maple	3" cal.	Per Plan		
LL	Tilia cordata 'Greenspire'	'Greenspire' Littleleaf Linden	4" cal.	Per Plan		
ZS	Zelkova serrata 'Village Green'	'Village Green' Zelkova	4" cal.	Per Plan		
	Shrubs		•			
EG	Abelia grandiflora	'Edward Goucher' Abelia	5 gal.	2'-6" o.c.		
IS	Iris sibirica	Siberian Iris	1 gal.	12" o.c.		
EL	Lavandula angustifolia	Hidcote Blue	5 gal.	2'-6" o.c.		
	'Hidcote Blue'	English Lavender				
CG	Mahonia repens	Creeping Oregon Grape	1 gal.	12" o.c.		
SF	Polystichum munitum	Sword Fern	1 gal.	12" o.c.		
DV	Viburnum davidii	David Viburnum	5 gal.	2'-6" o.c.		
	Ground Cover					
SS	Carex obnupta	Slough Sedge	1 gal.	12" o.c.		
KK	Arctostaphylos uva ursi	Kinnikinnick	1 gal.	12" o.c.		
CJ	Trachelospermum	Confederate Jasmine	1 gal.	12" o.c.		
	jasminoides					
VC	Parthenocissus quinquefolia	Virginia Creeper	1 gal.	12" o.c.		

MARITIME BOLLARDS

WOOD PIER POSTS

CONSTRUCTED FROM EXISTING

WOOD OVERLOOK

WITH ILLUMINATED

GUARDRAIL

PROJECT IMAGES



INSET LIGHT BANDS IN BONUS PLAZAS



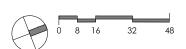
WATER FEATUERE AT TERMINUS OF ABERNETHY



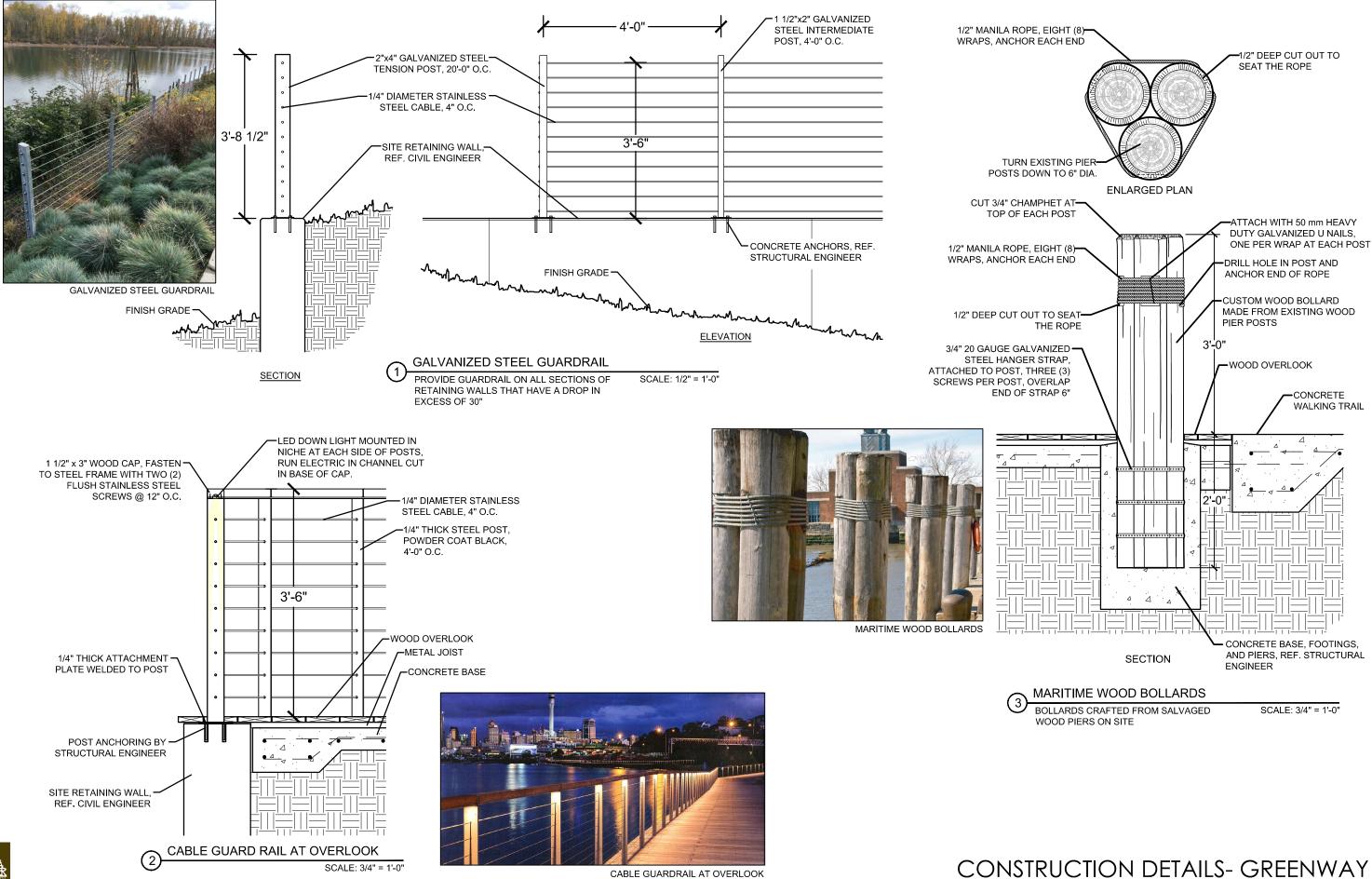
ILLUMINATED HANDRAIL ON OVERLOOK











SCULPTURAL BENCH SEATING
AT BONUS PLAZA SCALE

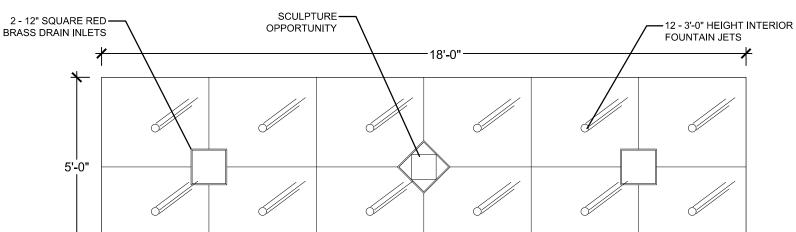
SCALE: 1/2" = 1'-0"



SCULPTURAL BENCH SEATING

STEEL CONNECTOR -PLATE SCREWED TO SOLID WOOD END 1'-2" 2"x8" IPE PLANKS THICK STEEL SPACER SOLID WOOD BASE. PLATE WELDED TO CUT FROM SINGLE -1" THICK STEEL SPACER PLATE CONNECTOR PLATE STOCK WELDED TO BOTTOM PLATE 1/4" RECESS-CUT OUT FOR -L-BRACKET 1/4" THICK L-BRACKET 2"x8" IPE PLANKS 2'-0" SCREWED TO WOOD BASE AND ANCHORED 1/2" DIA. THROUGH BOLT TO BRICK PLAZA 3"DIA. STEEL PIPE WELDED TO 1/4" THICK BOTTOM STEEL PLATE

INTERACTIVE FOUNTAIN AT TERMINUS

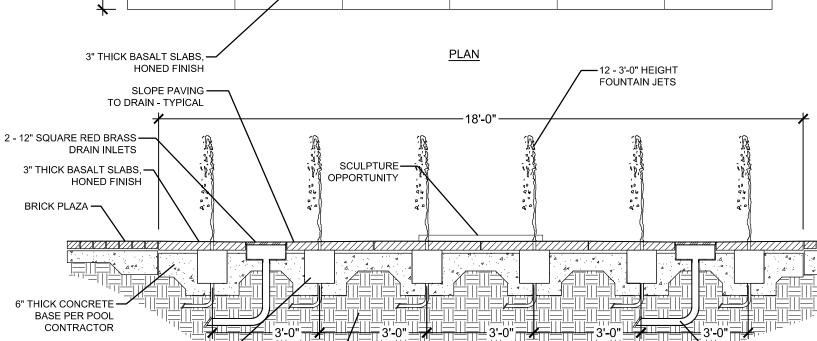






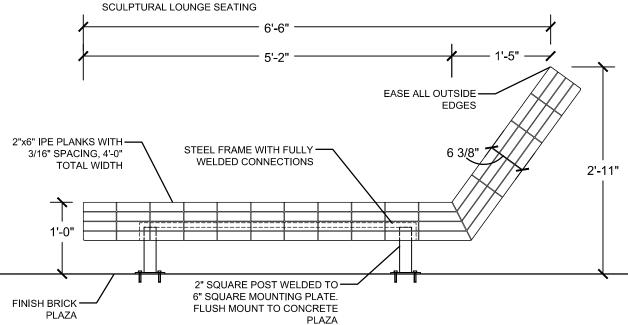
DRAIN PIPE TO

RESEVOIR - TYPICAL



COMPACTED-

SUBGRADE



INTERACTIVE FOUNTAIN DETAIL SCALE: 3/8" = 1'-0"

ELEVATION

SCULPTURAL LOUNGE SEATING
AT BONUS PLAZA SCALE: 3 SCALE: 3/4" = 1'-0"



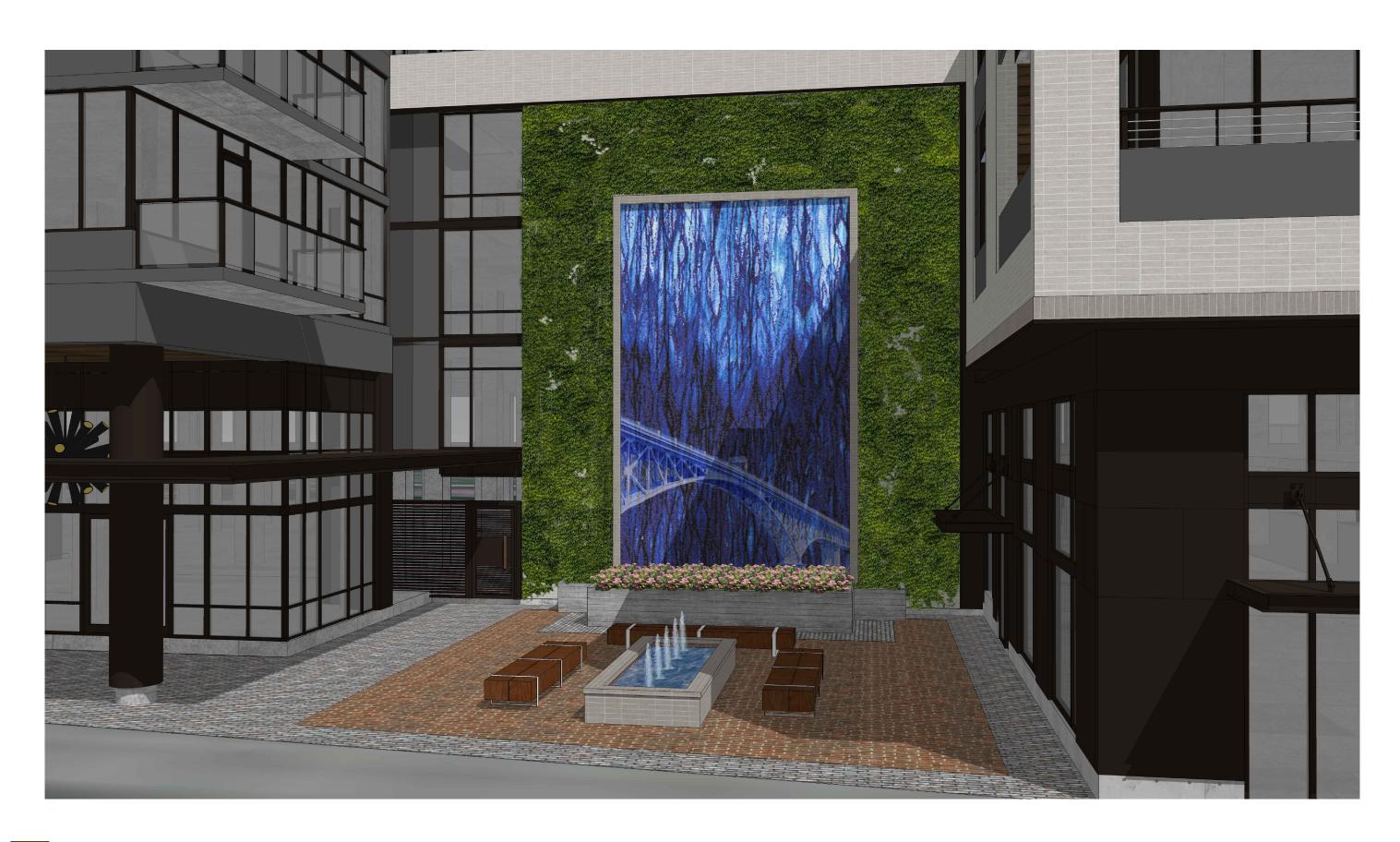
10" WIDE PVC PIPE SLEEVE HOUSING.

JETS AND LIGHTS -TYPICAL. LIGHTING

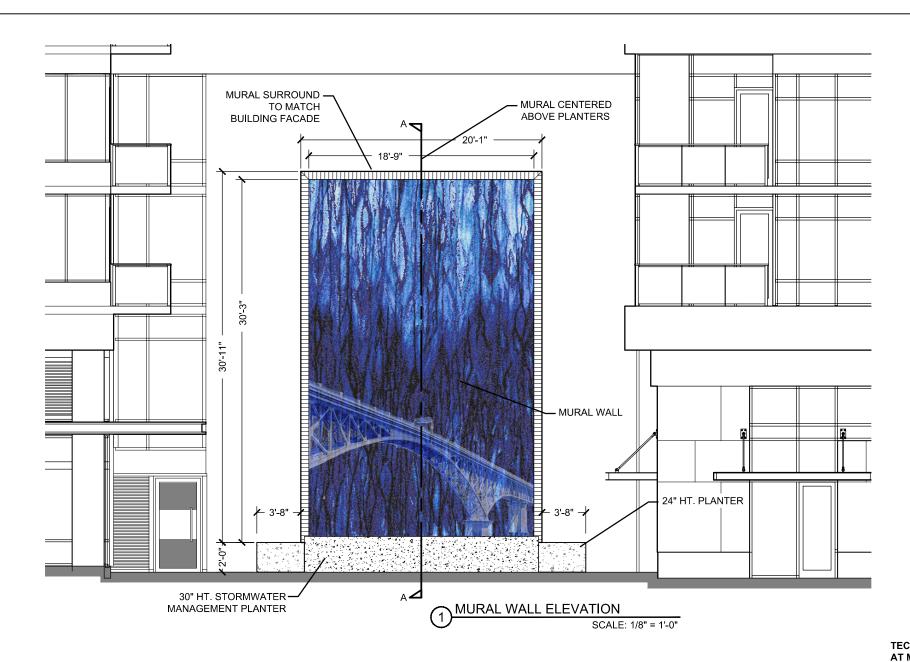
TO BE FIBER OPTIC AND PROVIDED

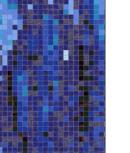
FOR EACH JET







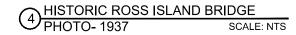


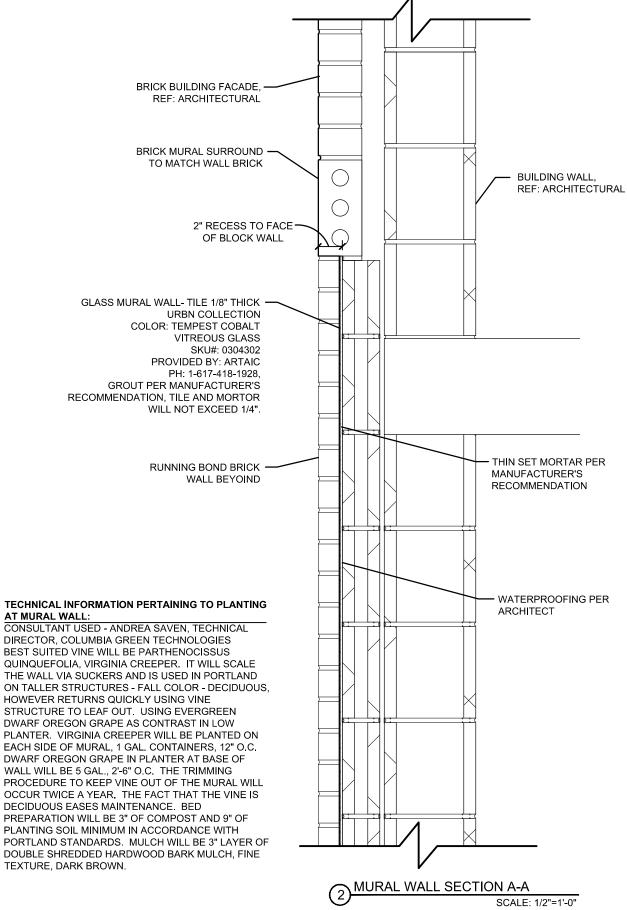


CUSTOM GLASS MURAL WALL-**URBN COLLECTION** COLOR: COBALT 3/4" VITREOUS GLASS PROVIDED BY: ARTAIC PH: 1-617-418-1928 artaic.com

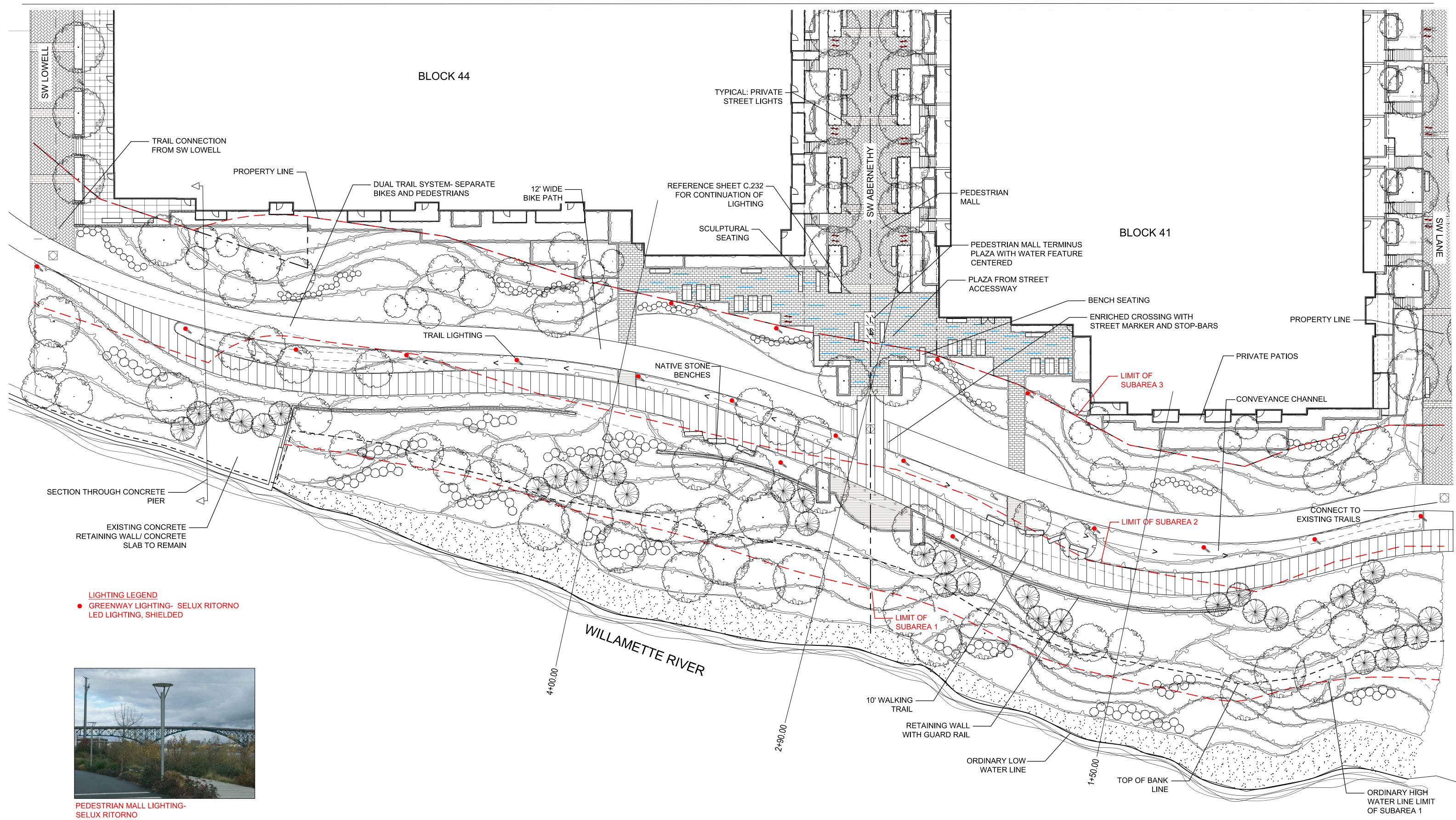


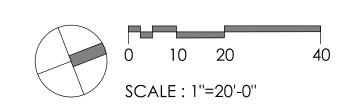




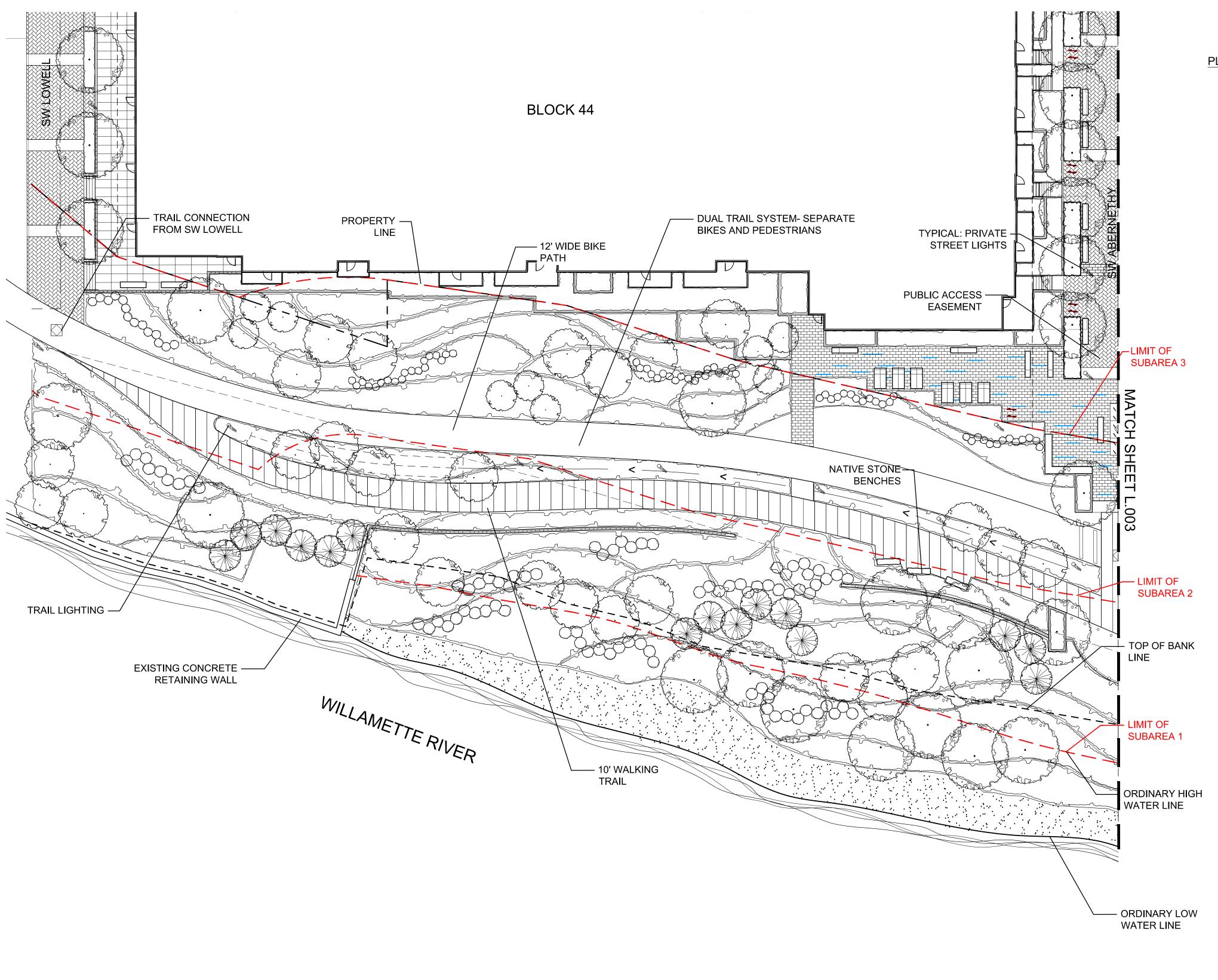












PLANTING TABULATIONS PER SECTION 33.510.253 E.5.f LANDSCAPING

Greenway Landscaping- Eighty (80) percent of the area that is not covered by buildings, trails, or other allowed non-landscaped area must be covered by shrubs or ground cover, and all trees required by this paragraph must be installed in the ground and healthy.

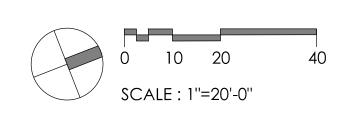
	REQUIRED	PROVIDED	
	Subarea 1 , the area beginning 3 feet above the ordinary low water		
	line to the high water line (12,801 s.f.) must meet the following requirements:		
1.	80% of the area must be covered in shrubs or ground		
	cover. 12,801 s.f. x 80%= 10,241 s.f. req. planting	10,559 s.f. planted area provided	10,966 sf
2.	Shrubs. At least 80% of the required planting must be		
	planted in shrubs; 10,241 s.f. x 80% = 8,193 s.f. req. shrubs	10,076 s.f. shrubs provided	
3.	Trees. Trees are not required, but are allowed	No trees are planted in subarea 1.	10 TREES
4.	Ground cover. All of the required landscaped area that is not	402 of ground cover provided on	
	planted with shrubs or trees must be fully covered with ground cover plants	483 s.f. ground cover provided on remaining area	890 sf
5.	Plant list. Only plants listed in the South Waterfront Greenway	All required planting within subarea 1 is	
	Subarea 1 Plant List may be planted.	from Subarea 1 Plant List.	
6.	Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years. Planting is not allowed during the summer.	All plant material will meet min. size and spacing requirements to meet coverage standards within five years.	_

Subarea 2, the area beginning at the ordinary high water and measuring 45' landward of the top of bank (31,956 s.f. - 5,784 s.f. trails = **26,172 s.f.**) must meet the following requirements:

1.	80% of the area must be covered in shrubs or ground cover. 26,172 s.f. x 80%= 20,938 s.f. req. planting 25,557 sf	26,962 s.f. planted area provided	26,370 sf
2.	Shrubs. At least 80% of the required landscaped area must be planted in shrubs. 20,938 s.f. x 80%= 16,750 s.f. req. shrubs 20,446	sf 16,260 s.f. shrubs provided	23,060 sf
3.	Trees. At least one tree must be planted for every 400 square feet of required landscaped area. 20,938 s.f./ 400 s.f. = 53 trees. 25,557 sf/ 400 sf = 63 Trees	53 trees provided	67 TREES
4.	Ground cover. All of the required landscaped area that is not planted with shrubs must be fully covered with ground cover plants	10,702 s.f. ground cover provided on remaining area.	3,310 sf
5.	Plant list. Only plants listed in the South Waterfront Greenway Subarea 2 and 3 Plant list of the Portland Plant List may be planted. At least eight different species must be planted.	All planting within subarea 2 is from Subarea 2 and 3 Plant List and eight species are provided	_
6.	Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years.	All plant material will meet min. size and spacing requirements to meet coverage standards within five years.	_

Subarea 3, the area beginning 45' landward of the top of bank to 100' landward of top of bank (36,897 s.f. - 12,833 s.f. trails = **13,470 sf** 24,064 s.f.) must meet the following requirements: 23,427 sf

		,		
	1.	80% of the area must be covered in shrubs or ground cover. 24,064 s.f. x 80%= 19,251 s.f. req. planting 18,742 sf	23,212 s.f. planted area provided	20,627 sf (excluding la
	2.	Shrubs. At least 60% of the required landscaped area must be		(excluding la
Н		planted in shrubs. At least 50% of the shrubs used to meet this requirement must be listed in the South Waterfront Greenway	·	12,447 sf
	2	Subarea 2 and 3 Plant list. 19,251 s.f. x 60%= 11,551 s.f. shrubs 11	,245 ST	
	ა.	Trees. At least 1 tree must be planted for every 1,000 s.f. of landscaped area. At least 50% of the trees used to meet this requirement must be listed in the South Waterfront Greenway	40 400 00 00000000000	27 TREES
		Subarea 2 and 3 Plant List of the Portland Plant List. 19,251 s.f. / 1,000 s.f. = 19 trees required 18,742 sf/ 1,000 sf = 19	13 trees provided	Zi inclo
	4.	Ground cover. All of the required landscaped area that is not	1003	
'		planted with shrubs must be fully covered with ground cover plants. At least 50% of the ground cover plants must be listed in the South Waterfront Greenway Subarea 2 and 3 Plant List.	9,916 s.f. groundcover provided on remaining area	8,180 sf
		Plant list. 50% of required planting must utilize the South Waterfront Greenway Subarea 2 and 3 Plant List. Plants included on the Nuisance Plants List or Required Eradication List of the Portland Plant List are prohibited.	50% of the required planting within subarea 3 is from the Subarea 2 and 3 Plant List	Э
	5.	Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years.	All plant material will meet min. size and spacing requirements to meet coverage	





standards within five years.

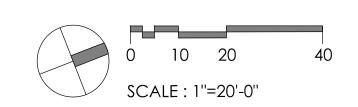
BLOCK 41 DUAL TRAIL SYSTEM- — SEPARATE BIKES AND PEDESTRIANS – NATIVE STONE LIMIT OF SUBAREA 3 BENCHES -12' WIDE BIKE the good of - TRAIL LIGHTING – RETAINING WALL WITH GUARD RAIL SUBAREA 2 - CONNECT TO EXISTING TRAILS TOP OF BANK LINE – LIMIT OF SUBAREA 1 - ORDINARY HIGH WATER LINE 10' WALKING TRAIL - ORDINARY LOW WATER LINE

GREENWAY/ SUB-AREAS 1, 2, & 3 PLANT LIST IMAGES

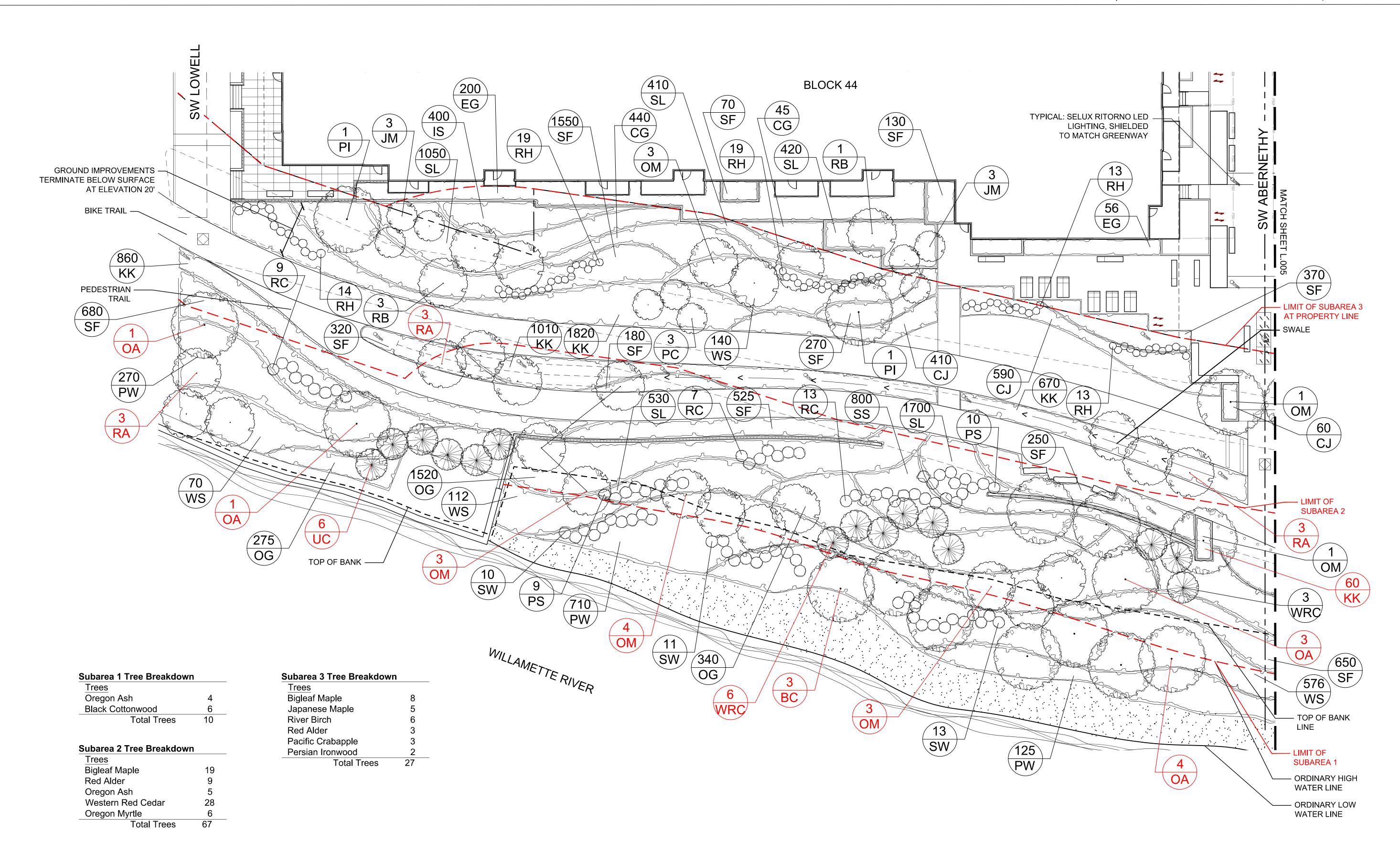


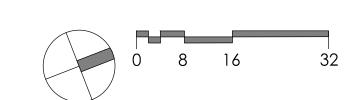
Spirea douglasii

Vancouveria hexandra

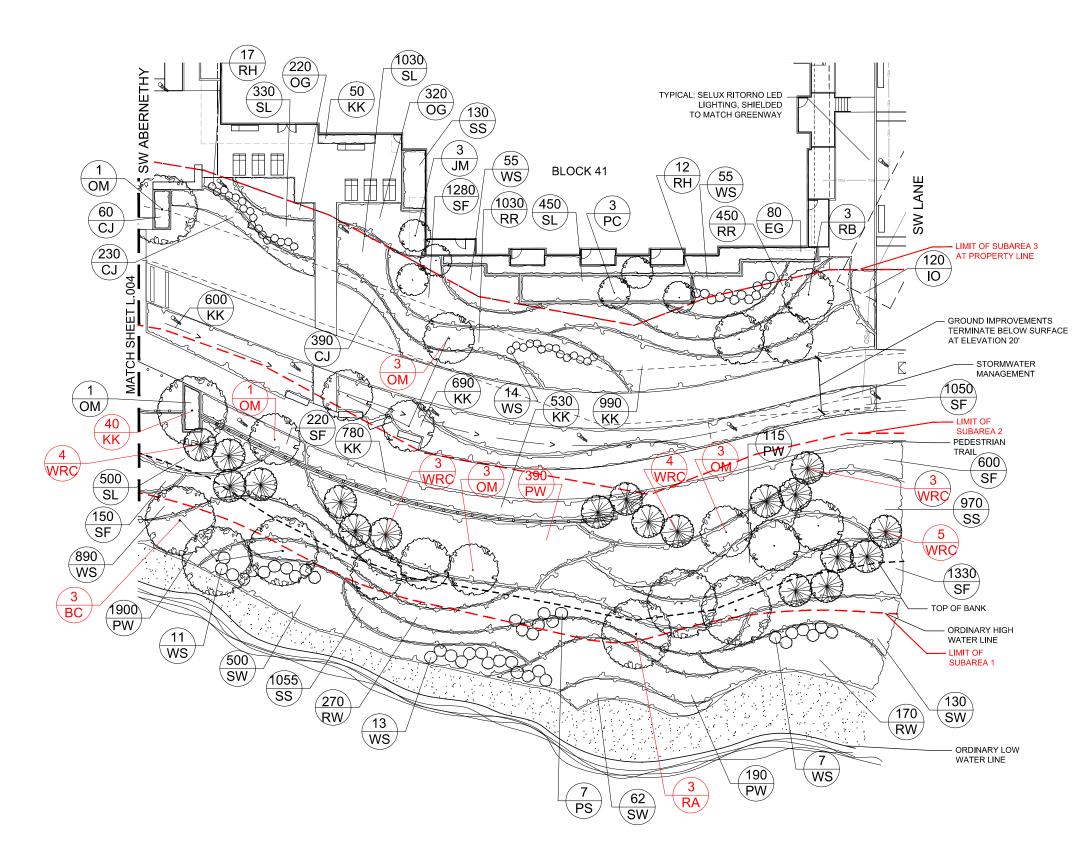












Greenway / Public Space Plant List

	Greenway / Fublic Space Flant List					
Key	Scientific Name	Common Name	SIZE	SPACING		
	Trees					
OM	Acer macrophyllum	Bigleaf Maple	4" cal.	Per Plan		
JM	Acer palmatum 'Emperor 1'	Emperor 1 Japanese Maple	3" cal.	Per Plan		
RA	Alnus Rubra	Red Alder	3" cal.	Per Plan		
RB	Betula nigra 'Cully'	'Heritage' River Birch	3" cal.	Per Plan		
OA	Fraxinus latifolia	Oregon Ash	3" cal.	Per Plan		
PC	Malus fusca	Pacific Crabapple	8'-10' ht.	Per Plan		
PI	Parrotia persica 'Vanessa'	Persian Ironwood 'Vanessa'	4" cal.	Per Plan		
SP	Picea sitchensis	Sitka Spruce	8'-10' ht.	Per Plan		
BC	Populus trichocarpa	Black Cottonwood	3" cal.	Per Plan		
CR	Sequoia sempervirens	Coast Redwood	8'-10' ht.	Per plan		
WRC		Western Red Cedar	8'-10' ht.	Per Plan		
LL	Tilia cordata 'Greenspire'	'Greenspire' Littleleaf Linden	4" cal.	Per Plan		
UC	Umbellularia californica	Oregon Myrtle	3" cal.	Per Plan		
	Shrubs					
EG	Abelia grandiflora	'Edward Goucher' Abelia	5 gal.	2'-6" o.c.		
	'Edward Goucher'					
PS	Amelanchier alnifolia	Pacific Serviceberry	5 gal.	4'-0" o.c.		
RR	Cistus species	Rockrose	1 gal.	12" o.c.		
SL	Gaultheria shallon	Salal	1 gal.	12" o.c.		
IS	Iris sibirica	Siberian Iris	1 gal.	12" o.c.		
OG	Mahonia aquifolium	Tall Oregon Grape	1 gal.	12" o.c.		
CG	Mahonia repens	Creeping Oregon Grape	5 gal.	24" o.c.		
SF	Polystichum munitum	Sword Fern	1 gal.	12" o.c.		
RH	Rhododendron 'PJM'	'PJM Elite' Rhododendron	7 gal.	3'-0" o.c.		
RC	Ribes sanguineum	Red-flowering Currant	5 gal.	2'-6" o.c.		
RW	Salix fluviatilis	Columbia River Willow	5 gal.	24" o.c.		
PW	Salix lucida	Pacific Willow	5 gal.	24" o.c.		
SW	Salix sitchensis	Sitka Willow	5 gal.	24" o.c.		
WS	Spirea douglasii	Western Spirea	5 gal.	2'-6" o.c.		
DV	Viburnum davidii	David Viburnum	5 gal.	2'-6" o.c.		
Ground Cover						
KK	Arctostaphylos uva ursi	Kinnikinnick	1 gal.	12" o.c.		
SS	Carex obnupta	Slough Sedge	1 gal.	12" o.c.		
CJ	Trachelospermum	Confederate Jasmine	1 gal.	12" o.c.		
	jasminoides	222001010 000111110	. 9~	.2 0.0.		
10	Vancouveria hexandra	White Inside-Out Flower	1 gal.	12" o.c.		

Subarea 1 Planting Breakdown

Shrubs	
Columbia River Willow	975 sf
Pacific Willow	3,742 sf
Sitka Willow	2,219 sf
Western Spirea	3,140 sf
Subtotal	10,076 sf
Ground Cover	
Slough Sedge	890 sf
Total Planting	10,966 sf

Subarea 2 Planting Breakdown		
Shrubs		
Pacific Serv	viceberry	530
Salal		2,695
Tall Oregor	n Grape	3,200
Sword Ferr	1	5,460
Red-flower	ing Currant	410
Columbia F	River Willow	1,583
Pacific Wille	ow	5,718
Sitka Willov	N	935
Western Sp	oirea	2,529
	Subtotal	23,060
Ground Co	ver	
Kinnikinnicl	k	2,205
Slough Sec	dge	1,105
	Subtotal	3,310
	Total Planting	26.370

Subarea 3 P	lanting	Breakdown

Siliubs	
'Edward Goucher' Abelia	335
Rockrose	360
Salal	3,060
Siberian Iris	60
'PJM Elite' Rhododendron	640
Tall Oregon Grape	265
Creeping Oregon Grape	610
Sword Fern	5,520
Western Spirea	1,597
Subtotal	12,447
Ground Cover	
Kinnikinnick	6,080
Confederate Jasmine	1,980
White Inside-Out Flower	120
Subtotal	8,180
Total Planting	20,627





- **GENERAL NOTES**
- 1. ERRORS AND OMISSIONS ARE THE RESPONSIBILITY OF THE "ENGINEER OF RECORD". IF ERRORS OR OMISSIONS ARE FOUND AFTER THE PERMIT HAS BEEN ISSUED, THE PERMITTEE OR ITS CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD (BRIAN A. BALLERINI OF OTAK, INC. AT 503-415-2416) TO HAVE THE CORRECTIONS MADE. ALL CHANGES WILL REQUIRE THE APPROVAL OF THE CITY ENGINEER PRIOR TO THE
- 2. THE CONTRACTOR SHALL HAVE AT ALL TIMES ON-SITE, THE APPROVED CONSTRUCTION DRAWINGS & SPECIAL SPECIFICATIONS, CITY OF PORTLAND STANDARD SPECIFICATIONS & STANDARD DRAWINGS, AND ALL OTHER APPLICABLE SPECIFICATIONS BOOKS AND MANUALS. ELECTRONIC EQUIVILENT ARE
- 3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THESE DRAWINGS AND THE APPLICABLE REQUIREMENTS OF THE 2010 EDITION OF THE CITY OF PORTLAND STANDARD CONSTRUCTION SPECIFICATIONS AND ALL REVISIONS AND SPECIAL SPECIFICATIONS.
- 4. A PRECONSTRUCTION CONFERENCE WITH CITY STAFF AND AN APPROVED TEMPORARY TRAFFIC CONTROL PLAN (ISSUED IN CONJUNCTION WITH A STREET /SIDEWALK CLOSURE PERMIT) ARE REQUIRED BEFORE COMMENCING WORK. SEE PERMIT FOR SCHEDULING A PRECONSTRUCTION CONFERENCE AND ACQUISTION OF THE TTCP.
- 5. ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM FROM BENCH MARK NO. 3754, ELEVATION = 35.449, LOCATED AT SW MOODY AVE AND SW WHITAKER ST.
- 6. ATTENTION EXCAVATORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING [503.232.1987]. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CALL CENTER. YOU MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL [811 OR 1-800-332-2344].

ENCROACHMENTS 7. STREET FURNISHINGS ARE SHOWN FOR REFERENCE ONLY. THE INSTALLATION OF ALL STREET FURNITURE INCLUDING BUT NOT LIMITED TO BENCHES, NON CITY INSTALLED BIKE RACKS, GARBAGE CANS, ELECTRICAL SYSTEMS (CONDUIT, CONDUCTORS, OUTLETS), AND PUBLIC ART, ARE NOT AUTHORIZED UNDER THIS PERMIT.

UNANTICIPATED CONTAMINATED MATERIAL

A SEPARATE REVOCABLE PERMIT IS REQUIRED

- 8. REMOVE AND DISPOSE (AT A PROPER LOCATION OR LANDFILL) ALL MATERIALS EXCAVATED FROM WORK IN THE RIGHT-OF-WAY. FOR DISPOSAL ON PRIVATE PROPERTY, SECURE A FILL PERMIT, PRIOR TO BEGINNING WORK FROM THE BUREAU OF DEVELOPMENT SERVICES (BDS). PROVIDE A COPY OF THE APPROVED FILL PERMIT TO THE STREET CONSTRUCTION INSPECTOR.
- FOR UNANTICIPATED CONTAMINATED MEDIA ENCOUNTERED, THE PERMITTEE/APPLICANT OR ITS AGENT SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE MANAGEMENT, AND DISPOSAL OF CONTAMINATED MEDIA ENCOUNTERED. THE PERMITTEE IS ALSO RESPONSIBLE FOR ALL RESULTANT DELAYS.
- THE PERMITTEE OR ITS AGENT SHALL PROVIDE THE CITY (ENGINEERING AND INSPECTION) WITH COPIES OF ALL DISPOSAL PERMITS FROM THE PERMITTED DISPOSAL FACILITY, ANALYTICAL RESULTS USED TO GAIN ACCEPTANCE OF THE CONTAMINATED MEDIA, AND DISPOSAL RECEIPTS/DAILY WEIGH SLIPS. DAILY WEIGH SLIP AMOUNTS SHALL BE CHECKED AGAINST INSPECTOR'S DAILY REPORTS. THE PERMITTEE MUST USE AN OREGON FACILITY FOR DISPOSAL OF THE CONTAMINATED MEDIA.

UTILITIES

- 9. UTILITIES SHOWN ON THESE PLANS ARE FOR INFORMATION AND COORDINATION PURPOSES ONLY AND ARE NOT AUTHORIZED FOR INSTALLATION UNDER THE PUBLIC STREET IMPROVEMENT PERMIT. PRIVATE AND PUBLIC UTILITY COMPANIES ARE REQUIRED TO SECURE SEPARATE UTILITY PERMITS FROM THE PBOT FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- 10. COORDINATION OF ALL UTILITY RELOCATES, REMOVALS, OR INSTALLATION WITHIN THE LIMITS OF WORK IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR.
- 11. STORM AND SANITARY SEWERS ARE BEING CONSTRUCTED UNDER JOB # ????, AS APPROVED BY THE BUREAU OF ENVIRONMENTAL SERVICES.
- 12. WATER MAINS AND SERVICES ARE BEING CONSTRUCTED UNDER JOB # ????, AS APPROVED BY THE WATER BUREAU.

STREET PAVEMENT

- 13. ALL MANHOLE LIDS AND VALVE BOXES SHALL BE ADJUSTED TO FINISHED STREET GRADE.
- 14. THE STREET INSPECTOR WILL MAKE THE FINAL DETERMINATION OF THE LIMITS OF PAVEMENT RESTORATION, INCLUDING SAWCUT LINES AND SKIN PATCHING. THE PERMITTEE/CONTRACTOR SHALL CONSULT WITH THE STREET INSPECTOR PRIOR TO SAWCUTTING OR DEMOLISHING OF PAVEMENT.
- 15. SAWCUTS SHALL BE STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING PAVEMENT AND NEW PAVEMENT AND ALL NEW PAVEMENT JOINTS SHALL BE SAND SEALED.
- 16. EXISTING PAVEMENT SECTION WIDTHS OF 2 FEET OR LESS BETWEEN PROPOSED SAWCUT AND EXISTING PAVEMENT EDGE (I.E. UTILITY TRENCH REPAIR), SHALL BE RESTORED PER STD. DWG. P-505.
- 17. PAVEMENT SECTION SHALL BE AS SHOWN ON THE STREET TYPICAL SECTION(S) OR MATCH EXISTING PAVEMENT IF EXISTING IS A THICKER SECTION.

CURBS, SIDEWALKS, AND DRIVEWAYS

- 18. UTILITY LIDS, MANHOLE COVERS, VALVE COVERS (THAT ARE NOT SHOWN ON THESE CONSTRUCTION DRAWINGS) ARE NOT ALLOWED IN THE THROUGH PEDESTRIAN ZONE. THEY MUST BE PLACED IN THE SIDEWALK FURNISHING OR BUILDING ZONE IF THE PROPER PBOT UTILITY PERMIT HAS BEEN SECURED.
- 19. FULL HEIGHT CURBS SHALL BE CONSTRUCTED AT ALL LOCATIONS UNLESS A NEW DRIVEWAY IS CONSTRUCTED AT THE SAME TIME AS THE CURB.
- 20. ALL SIDEWALK CONTRACTION JOINTS SHALL BE PER SECTION 00759.49 "CONTRACTION JOINTS" OF THE STANDARD CONSTRUCTION SPECIFICATION AND CITY STANDARD DWG P-551.
- 21.NO FUTURE DRIVEWAYS SHALL BE CONSTRUCTED UNLESS THERE IS A BUILDING PERMIT ISSUED FOR AN ON-SITE PARKING SPACE, OR OTHER APPROVAL FROM BDS.
- 22. CONTRACTOR MAY USE CONCRETE OR ASPHALT CONCETE FROM THE PRE-APPROVED MIX DESIGNS LIST IF AVAILABLE. IF NOT, THE CONTRACTOR WILL NEED TO SUMBIT A MIX DESIGN FOR APPROVAL.
- 23.USE ONLY APPROVED DETECTABLE WARNING DEVICES FROM THE CITY'S CONSTRUCTION PRODUCTS LIST
- 24. ALL DRIVEWAYS ARE REQUIRED TO HAVE A MINIMUM OF 3 FEET OF HARD SURFACING BEHIND SIDEWALK (SEE STD DWG P-536).

STORM SEWER PIPE

- 25. THE ACCEPTABLE INLET LEAD PIPE MATERIALS ARE AS FOLLOWS:
 - C.S.P. ASTM C_14, CLASS 3 WITH CLASS 'B' BEDDING AND BACKFILL
 - HDPE D 3035 SDR 26 WITH FLEXIBLE PIPE BEDDING AND GRANULAR BACKFILL
 - PVC ASTM D 3034 SDR 35 WITH FLEXIBLE PIPE BEDDING AND GRANULAR BACKFILL. PIPE BEDDING AND BACKFILL PER STANDARD PLAN NOS. P-100 AND P-101.
 - SURFACING PER STD. DWG. P-515, P-516 AND P-517.
- 26.FOR PLUGGING OF ABANDONED SEWER PIPES, AND FILLING ABANDONED PIPES, MANHOLES, AND CATCH BASINS, SEE SECTIONS 00490.43 AND 00490.44 RESPECTIVELY OF THE STANDARD SPECIFICATION.

CATCH BASINS AND INLETS

27.ALL CATCH BASIN AND INLETS SHALL BE CAST-IN-PLACE. CONSTRUCT CAST-IN-PLACE CATCH BASINS AND INLETS ACCORDING TO SECTION 00470.

TRAFFIC AND PARKING CONTROL

- 28. THE CONTRACTOR MUST ACQUIRE AN APPROVED TEMPORARY STREET USE PERMIT (TSUP) PRIOR TO CLOSURE OF ANY STREET, SIDEWALK, TRAVEL LANE OR PARKING LANE. THE TSUP IS ACQUIRED FROM THE PERMIT CENTER LOCATED AT 1900 SW 4TH AVENUE.
- 29. THE CONTRACTOR SHALL NOT REMOVE OR COVER ANY TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, OR BARRICADES THAT ARE NOT IDENTIFIED ON THE APPROVED TEMPORARY TRAFFIC CONTROL PLAN.
- 30. THE CONTRACTOR SHALL MAINTAIN ALL NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES (INCLUDING BUT NOT LIMITED TO THE FOLLOWING - SIGNS, PAVEMENT MARKINGS, AND BARRICADES) UNTIL THE PERMANENT TRAFFIC CONTROL DEVICES ARE INSTALLED.
- 31. WHEN WORK INTERFERES WITH THE OPERATION OF A TRIMET BUS OR BUS STOP, CONTACT TRIMET AT 503-962-4949 A MINIMUM OF 14 DAYS PRIOR TO CLOSING OR DISRUPTING TRIMET'S OPERATION.
- 32.THE CONTRACTOR SHALL INSTALL OR REINSTALL ALL PERMANENT TRAFFIC CONTROL SIGNING, CURB AND PAVEMENT MARKINGS, AND BARRICADES.
- 33. THE CONTRACTOR SHALL SUBMIT MATERIALS LIST FOR APPROVAL 14 DAYS PRIOR TO INSTALLING PERMANENT TRAFFIC CONTROL SIGNING, CURB AND PAVEMENT MARKINGS, AND BARRICADES.
- 34.ALL NEW SIGN MATERIALS SHALL COMPLY WITH SECTION 2910 OF THE CITY OF PORTLAND STANDARD CONSTRUCTION SPECIFICATIONS. ALL SIGNS SHALL BE TYPE III OR IV BACKGROUND SHEETING ON ALUMINUM SIGN BLANKS. SIGN TYPES FOR EACH SIGN, AS SPECIFIED IN SECTION 2910.02, ARE NOTED IN THE
- 35.SIGNS AND SIGN POSTS REMOVED BY THE PERMITEE OR ITS AGENT SHALL BE DELIVERED TO THE BUREAU OF MAINTENANCE, ALBINA YARD. CONTACT JIM BUHLER AT 503-823-4056 TO ARRANGE A DELIVERY TIME. REMOVE ALL SIGNS, CONCRETE AND DEBRIS FROM THE POST PRIOR TO DELIVERY.
- 36. ALL CURB AND PAVEMENT MARKING MATERIALS SHALL BE ON THE CITY'S CONSTRUCTION PRODUCTS LIST (CPL) OR THE STATE'S QUALIFIED PRODUCTS LIST (QPL). ALL MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURERS APPROVED APPLICATION PROCEDURE.
- 37. ALL LONGITUDINAL LINE WORK TO BE METHOD B (NON-PROFILE) EXTRUDED THERMOPLASTIC, 120 MILS
- 38. ALL TRANSVERSE LINE WORK, LEGENDS, SYMBOLS, AND ARROWS SHALL BE TYPE "B-HS" PREFORMED THERMOPLASTIC. BIKE LANE STENCILS, GREEN BICYCLE LANE MARKINGS, AND BIKE PATH RAILROAD MARKINGS SHALL BE 90 MILS THICK. ALL OTHER TRANSVERSE PAVMENT MARKINGS SHALL BE 120-125 MILS
- 39. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY CURB OR PAVEMENT MARKINGS DAMAGED, WORN OUT OR REMOVED DUE TO CONTRACTOR'S OPERATION.
- 40.IN METERED DISTRICTS: ALL PARKING CONTROL SIGNING, METERS, POSTS AND PAVEMENT STRIPING & MARKINGS WILL BE INSTALLED BY CITY FORCES. NOTIFY PARKING CONTROL AT 503-823-7275. ALL COSTS ASSOCIATED WITH THIS WORK WILL BE CHARGED TO THE PERMIT.
- OUTSIDE METERED DISTRICTS: PARKING CONTROL SIGNING WILL BE INSTALLED BY THE CONTRACTOR. CONTACT PARKING CONTROL AT 503-823-7275 14 DAYS PRIOR TO INSTALLATION TO IDENTIFY EXACT SIGN LOCATIONS.

STREET LIGHTING

41.IF UNDERGROUND CONDUITS AND WIRES FOR STREET LIGHT INSTALLATION IS REQUIRED OR IS DESIRED. THE PERMITTEE IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, AND COORDINATION OF INSTALLATION WITH THE APPROPRIATE UTILITY.

- 42.ALL TREE REMOVAL SHALL COMPLY WITH THE FEDERAL MIGRATORY BIRD TREATY ACT. SEE THE SPECIAL PROVISIONS FOR REQUIREMENTS PRIOR TO CUTTING OF ANY TREE.
- 43.ALL GROUND DISTURBANCES NEAR TREES REQUIRES ROOT INSPECTION!! CONTACT URBAN FORESTRY (URBAN FORESTRY AT 503-823-8733: FOR ROOT INSPECTIONS PRESS 3) PRIOR TO ALL EXCAVATIONS ADJACENT TO TREES. CONSULTATION WITH THE URBAN FORESTER IS REQUIRED BEFORE CUTTING OF
- 44.FOR ALTERNATE TREE SPECIES OR ALTERNATE TREE PLANTING LOCATION APPROVAL (PRIOR TO PLANTING), CONTACT URBAN FORESTRY AT 503-823-8733: TO LEAVE A MESSAGE FOR THE TREE INSPECTOR PRESS 5.

RETAINING WALLS

- 45.THE PERMITTEE OR ITS AGENT SHALL PROVIDE QUALITY ASSURANCE FOR ALL STRUCTURES AND STRUCTURAL EMBANKMENTS BY RETAINING THE SERVICES OF A COMPETENT CERTIFIED PROFESSIONAL TO MAKE ALL FIELD INSPECTIONS, MATERIAL TESTING AND REPORTS IN ACCORDANCE WITH THE APPROVED GEOTECHNICAL REPORT, THE CITY OF PORTLAND STANDARD CONSTRUCTION SPECIFICATIONS, ODOT MANUAL OF FIELD TEST PROCEDURES, ODOT NON-FIELDED TESTED MATERIALS ACCEPTANCE GUIDE. AND ODOT CONSTRUCTION MANUAL.
- THE PERMITTEE OR ITS AGENT SHALL SUBMIT THE INSPECTION REPORTS AND TEST RESULTS TO THE BUREAU OF TRANSPORTATION. SUBMIT TO THE FOLLOWING:
- **TOOD LILES**
- BUREAU OF TRANSPORTATION
- 1120 SW 5TH AVENUE, SUITE 800
- PORTLAND, OR 97204
- FAX: 503-823-6992 EMAIL: TODD. LILES@PORTLANDOREGON.GOV

EROSION CONTROL

- 46.EROSION/SEDIMENTATION CONTROL (ESC) IS REQUIRED ON THIS PROJECT. IMPLEMENTATION OF THE ESC AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE OR IT'S AGENT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED. THE PERMITTEE OR IT'S AGENT SHALL PROVIDE INLET PROTECTION TO DOWNSTREAM INLETS FROM THE SITE PER THE EROSION CONTROL MANUAL [MARCH 2008]. CATCH BASIN AND STORM DRAIN INLET PROTECTION SHALL BE INSTALLED PER DETAIL DRAWINGS 4.3-B AND 4.3-G.
- 47.AN EROSION/SEDIMENTATION CONTROL (ESC) PLAN IS REQUIRED ON THIS PROJECT. THE IMPLEMENTATION OF THE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE OR IT'S AGENT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND THE VEGETATION/LANDSCAPING IS ESTABLISHED.
- 48. CONSTRUCTION OF ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH OAR 340-41-55 AND THE CITY OF PORTLAND EROSION CONTROL MANUAL [MARCH 2008].
- 49.APPROVAL OF THIS EROSION / SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER PROPOSED PROJECT DESIGN ELEMENTS.
- 50.THE PERMITTEE OR IT'S AGENT SHALL CLEARLY MARK WITH SURVEY FLAGGING THE CLEARING LIMITS OF THE WORK ZONE SHOWN ON THIS PLAN PRIOR TO BEGINNING EARTHWORK. DURING CONSTRUCTION, THE PERMITTEE OR IT'S AGENT SHALL MAINTAIN THE MARKED CLEARING LIMITS AND SHALL NOT DISTURB THE AREAS OUTSIDE OF THE WORK ZONE.
- 51. THE ESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION, THE PERMITTEE OR IT'S AGENT SHALL INSPECT THESE MEASURES DAILY AND UPGRADE THEM TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT LEAVE THE WORK ZONE.
- 52.INSTALL A "GRAVEL CONSTRUCTION ENTRANCE" AT EACH POINT OF ENTRY TO THE CONSTRUCTION SITE ACCORDING TO DETAIL DRAWING 4.2-A OF THE EROSION CONTROL MANUAL [MARCH 2008].

FOR GRADING PERMITS AND STRUCTURAL FILLS

- 53. THE PERMITTEE OR IT'S AGENT SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER TO MAKE ALL INSPECTIONS, TO PROVIDE MATERIAL TESTING SERVICES, AND TO CERTIFY THAT THE PLACED STRUCTURAL FILLS MEET THE EMBANKMENT SPECIFICATION RECOMMENDED IN THE GEOTECHNICAL REPORT, AND SECTION 00330 - "EARTHWORK" OF THE STANDARD CONSTRUCTION SPECIFICATION.
- 54. THE PERMITTEE OR IT'S AGENT SHALL ADHERE TO THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT PREPARED BY GEODESIGN.
- 55. SCHEDULE AN IN-FIELD PRE-EARTHWORK MEETING WITH CITY STREET CONSTRUCTION INSPECTOR (PBOT), BUREAU OF DEVELOPMENT SERVICES (BDS) REPRESENTATIVE, GEOTECHNICAL ENGINEER, AND OTHER APPROPRIATE PARTIES PRIOR TO COMMENCING WORK. NOTIFY STREET CONSTRUCTION/INSPECTION 4 CALENDAR DAYS PRIOR TO THE MEETING. [503.823.7012]
- 56.PREPARE SUBGRADE BY REMOVING ALL SURFACE VEGETATION, DEBRIS, AND TOPSOIL PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL IN A FUTURE RIGHT-OF-WAY AREA.
- 57. THE GEOTECHNICAL ENGINEER SHALL SEND TEST AND INSPECTION RESULTS TO:
- TOOD LILES, BUREAU OF TRANSPORTATION
- 1120 SW 5TH AVENUE, SUITE 800 PORTLAND, OR 97204-1971
- OR VIA EMAIL TO: TODD.LILES@PORTLANDOREGON.GOV

FOR JOINT PBOT/BES PERMITS ONLY

- 58.DISPOSE OF ALL SEWER TRENCH SPOIL MATERIAL AT A PROPER LANDFILL, OR SHALL OBTAIN A PERMIT FROM THE BUREAU OF DEVELOPMENT SERVICES BEFORE BEING DISPOSED OF ON-SITE. A COPY OF THE GRADING PERMIT AND PLAN SHALL BE PROVIDED TO THE BUREAU OF ENVIRONMENTAL SERVICES FOR CONSTRUCTION INSPECTION AT THE PRE-CONSTRUCTION MEETING. ALL WORK OUTSIDE THE PUBLIC RIGHT-OF-WAY, INCLUDING CUTS, FILLS, GRADING, AND CLEARING MAY REQUIRE PERMITS FROM THE BUREAU OF DEVELOPMENT SERVICES
- 59.FOUNDATION STABILIZATION MAY BE NECESSARY AS PER CITY OF PORTLANDS STANDARD CONSTRUCTION SPECIFICATIONS AND APPROVED BY BES.
- 60.MARK THE ENDS OF ALL STUB OUTS AND LATERALS WITH CONTINUOUS PRESSURE TREATED 2" X4" LUMBER. THE TOP 12' SHALL BE PAINTED WHITE AND STENCILED WITH BLACK "ST" FOR STORM OR PAINTED GREEN AND STENCILED BLACK "SS" FOR SANITARY, AND WITH PIPE SIZE, MATERIAL TYPE, AND PIPE DEPTH. BURY THE 2" X 4" LUMBER TO THE STUB OR LATERAL
- 61.PROPERLY SHORE AND BRACE ALL SEWER TRENCH LINES AND EXCAVATIONS TO PREVENT CAVING AS REQUIRED BY OREGON OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OR-OSHA) AND SECTION 00510 - "STRUCTURE EXCAVATION AND BACKFILL" OF THE STANDARD CONSTRUCTION
- 62. THE PERMITTEE OR IT'S AGENT SHALL BE RESPONSIBLE FOR THE OPERATIONS AND MAINTENANCE OF THE STORMWATER FACILITIES AS PRESCRIBED IN THE APPROVED "OPERATIONS & MAINTENANCE" PLAN FOR 2 YEARS AFTER ITS ACCEPTANCE BY THE CITY.

STORMWATER NARRATIVE

THE PROPOSED STORMWATER MANAGEMENT SYSTEM, DESIGNED IN ACCORDANCE WITH THE CITY OF PORTLAND'S STORMWATER MANAGEMENT MANUAL AND SEWER AND DRAINAGE FACILITIES DESIGN MANUAL, WILL INCLUDE LINED VEGETATED PLANTERS FOR WATER QUALITY TREATMENT AND A PIPED CONVEYANCE SYSTEM WHICH CONNECTS TO AN EXISTING STORM SEWER IMMEDIATELY SOUTH OF SW LOWELL STREET. VEGETATED FLOW-THROUGH PLANTERS WERE SIZED USING THE CITY'S PRESUMPTIVE APPROACH CALCULATOR (PAC) TOOL MEET POLLUTION REDUCTION REQUIREMENTS BY FILTERING STORM WATER THROUGH THE TOPSOIL MIX SPECIFIED BY BES. THE PROPOSED IMPROVEMENTS MEET THE CRITERIA FOR EXEMPTION FROM FLOW CONTROL RUNOFF, PER SECTION 1.3.4 OF THE STORMWATER MANAGEMENT MANUAL, AS THE STORM LINE DISCHARGES DIRECTLY TO THE WILLAMETTE RIVER THROUGH THE EXISTING SW LOWELL STREET OUTFALL. THE STORMWATER CONVEYANCE SYSTEM HAS BEEN SIZED TO CONVEY AND CONTAIN THE 10-YEAR, 5-MINUTE EVENT WITHOUT SURCHARGING AND THE 25-YEAR, 5-MINUTE STORM EVENT WITH AT LEAST 6 INCHES OF FREEBOARD.

LEGEND STORM DRAIN STORM DRAIN MANHOLE STORM DRAIN DRY WELL STORM DRAIN CLEAN OUT STORM DRAIN CATCH BASIN

STORM DRAIN MAIN STORM DRAIN LATERAL PRIVATE STORM LINE LIDA PLANTERS SAND FILTER

SANITARY SEWER SANITARY SEWER MANHOLE

PRIVATE SEWER LINE

STORM DRAIN DROP INLET

STORM DRAIN AREA DRAIN

SANITARY SEWER CLEAN OUT SANITARY SEWER MAIN SANITARY SEWER LATERAL —— SS ——— SS ——

☆-◇-☆

WATER

WATER VALVE м Ф WATER BLOW-OFF WATER METER (VAULT)

WATER MAIN ______w ____ WATER MAIN (BY PWB)

FIRE HYDRANT FIRE DEPT. CONNECTION POST INDICATOR VALVE

DOUBLE CHECK VALVE FIRE WATER MAIN ——FW ———FW ——

ELECTRIC

UTILITY POLE WITH LIGHT

ELECTRIC JUNCTION BOX UTILITY POLE & GUY

ELECTRIC LINE UNDERGROUND UTILITY TRENCH

NATURAL GAS GAS VALVE **GAS BLOW OFF**

GAS METER GAS LINE **TELEPHONE**

> TELEPHONE MANHOLE TELEPHONE RISER TELEPHONE POLE

UNDERGROUND TELEPHONE **OVERHEAD LINES**

CABLE TV / COMM CABLE RISER

> UNDERGROUND CABLE TV UNDERGROUND COMM

> > STREET LIGHTING

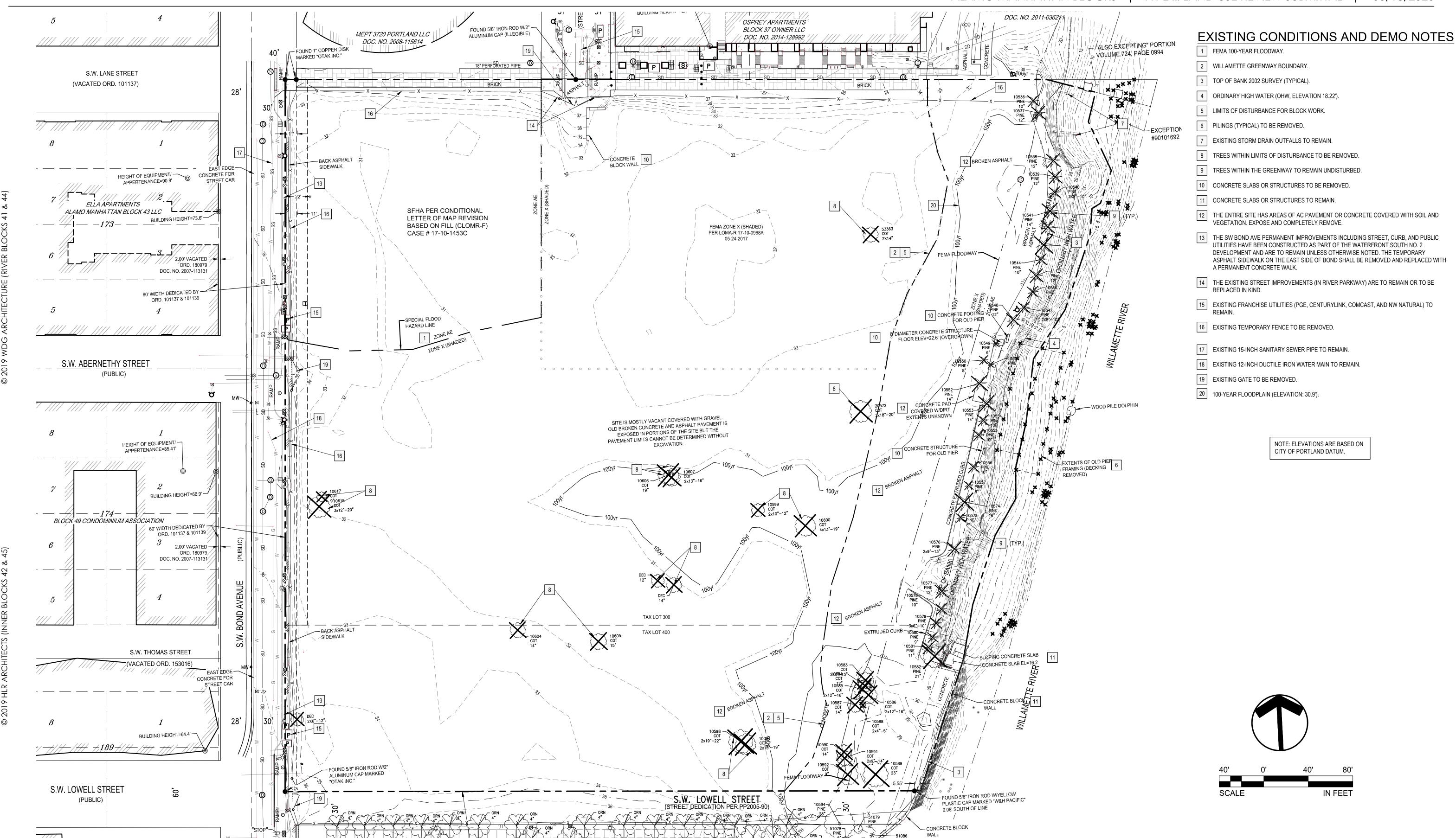
STREET LIGHT POLE STREET LIGHT JUNCTION BOX

STREET LIGHT CONTROLLER \boxtimes UNDERGROUND CONDUIT 100-YR FLOOD PLAIN _____ 100yr _____

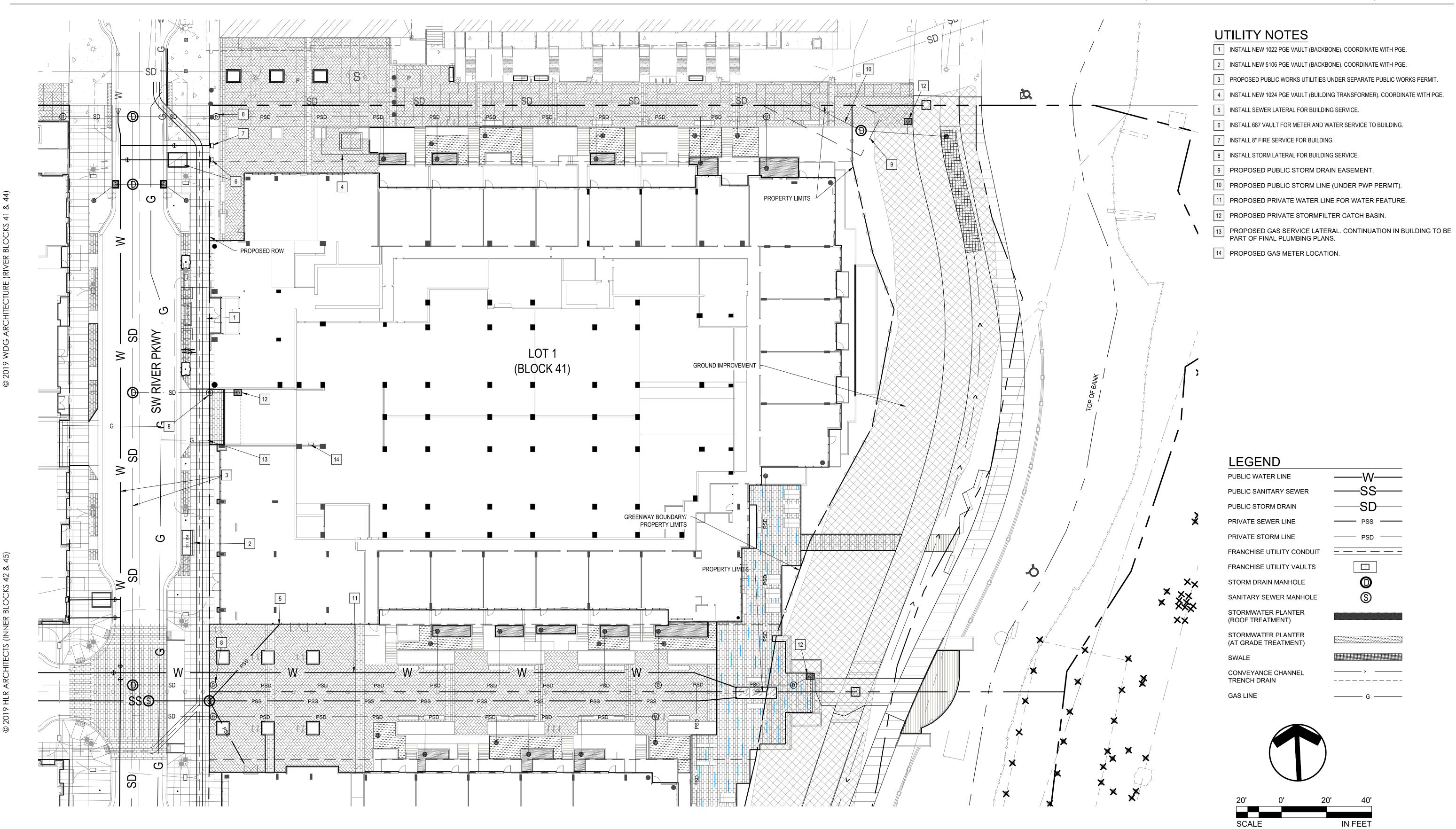
LAND USE REVIEW# (LU 20-102914 DZM GW) EXHIBIT C.250

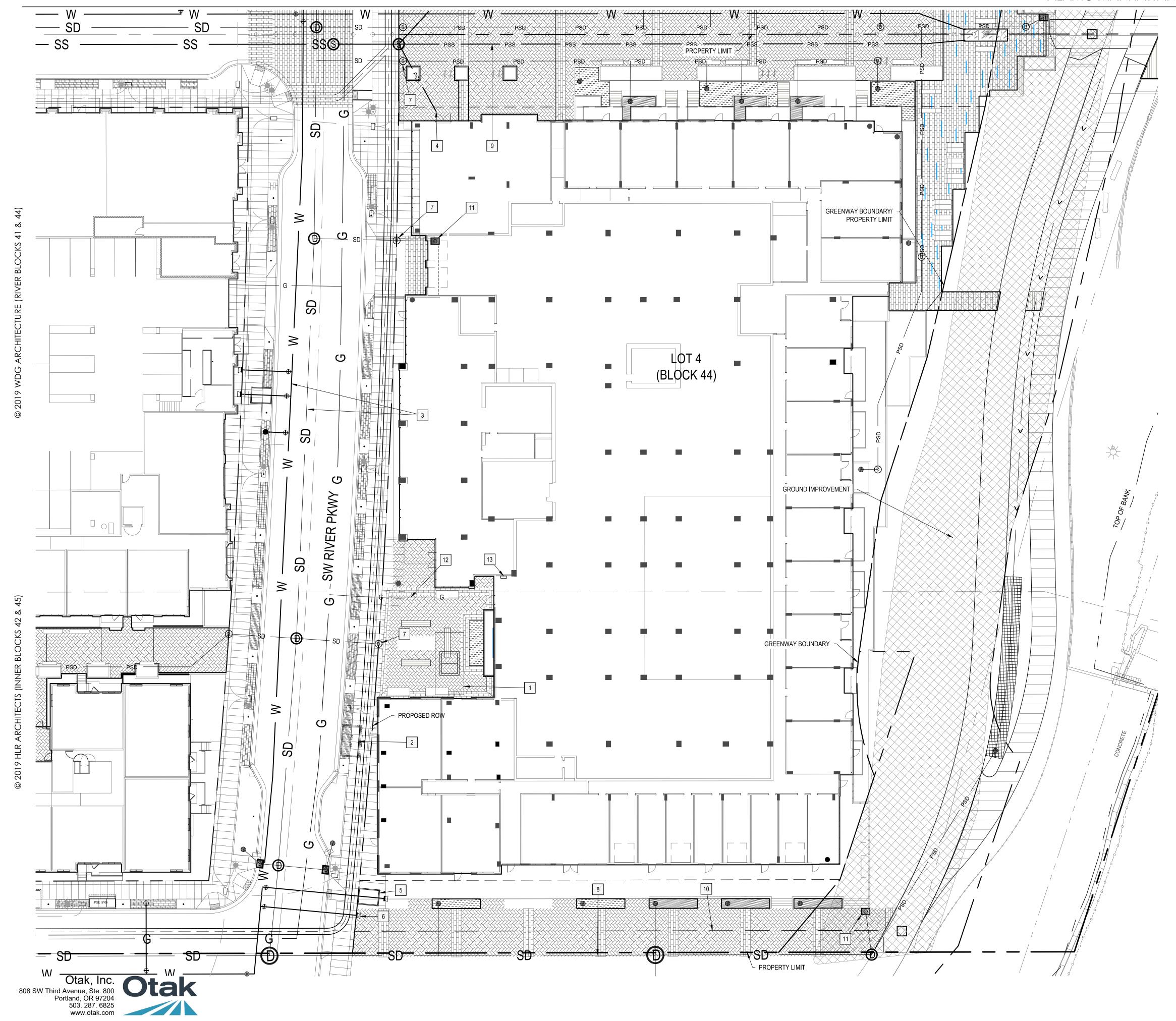
NOTES AND LEGEND





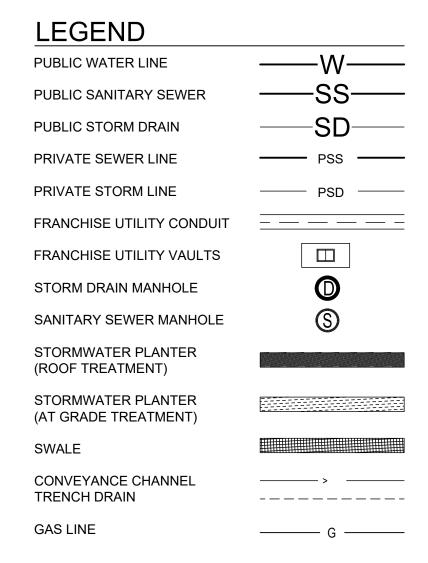


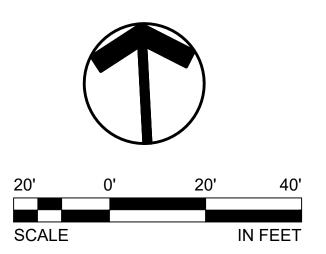


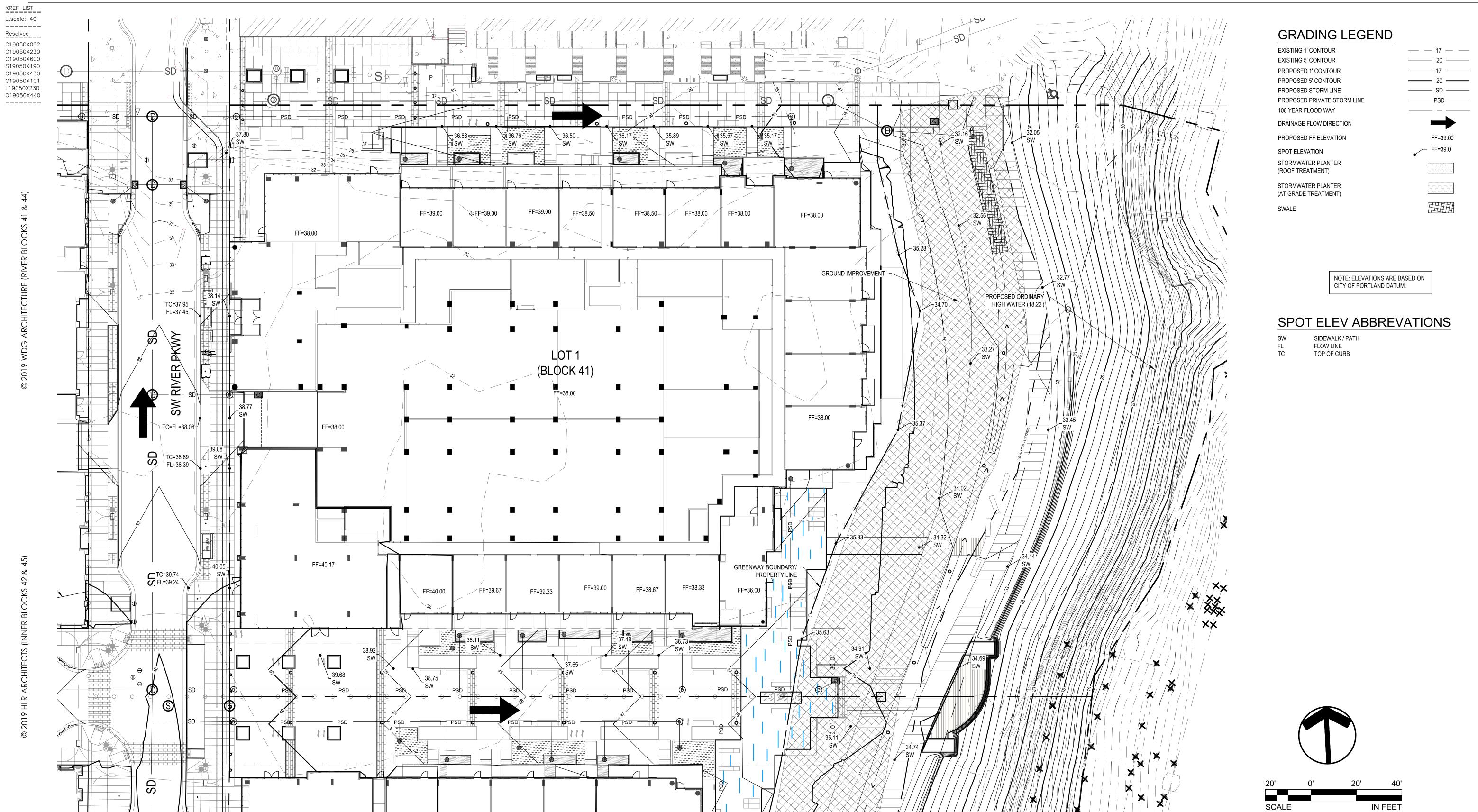


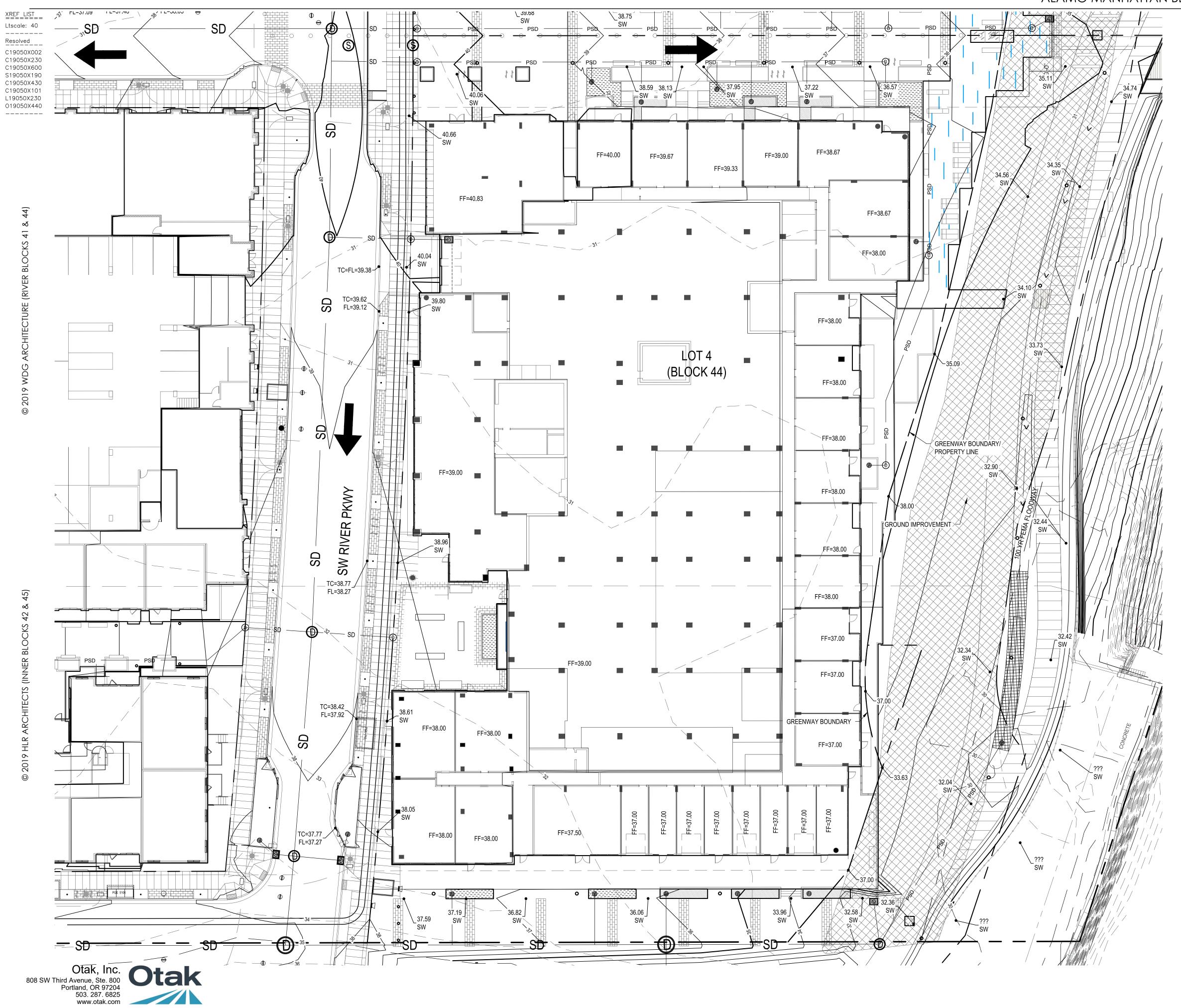
UTILITY NOTES

- 1 INSTALL NEW 1024 PGE VAULT (BUILDING TRANSFORMER). COORDINATE WITH PGE.
- 2 INSTALL NEW 712 PGE VAULT (BACKBONE). COORDINATE WITH PGE.
- 3 PROPOSED PUBLIC WORKS IMPROVEMENTS UNDER SEPARATE PUBLIC WORKS PERMIT.
- 4 INSTALL SEWER LATERAL FOR BUILDING SERVICE.
- 5 INSTALL 687 VAULT FOR METER AND WATER SERVICE TO BUILDING.
- 6 INSTALL 8" FIRE SERVICE FOR BUILDING.
- 7 INSTALL STORM LATERAL FOR BUILDING SERVICE.
- 8 PROPOSED PUBLIC STORM LINE (UNDER PWP PERMIT).
- 9 PROPOSED PRIVATE SANITARY SEWER FOR WATER FEATURE.
- 10 PROPOSED PUBLIC STORM DRAIN EASEMENT.
- 11 PROPOSED PRIVATE STORMFILTER CATCH BASIIN.
- PROPOSED GAS SERVICE LATERAL. CONTINUATION IN BUILDING TO BE PART OF FINAL PLUMBING PLANS.
- 13 PROPOSED GAS METER LOCATION.









GRADING LEGEND

EXISTING 1' CONTOUR

EXISTING 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED STORM LINE

PROPOSED PRIVATE STORM LINE

100 YEAR FLOOD WAY

DRAINAGE FLOW DIRECTION

PROPOSED FF ELEVATION

SPOT ELEVATION

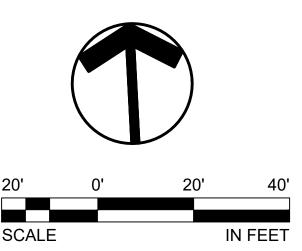
STORMWATER PLANTER
(ROOF TREATMENT)

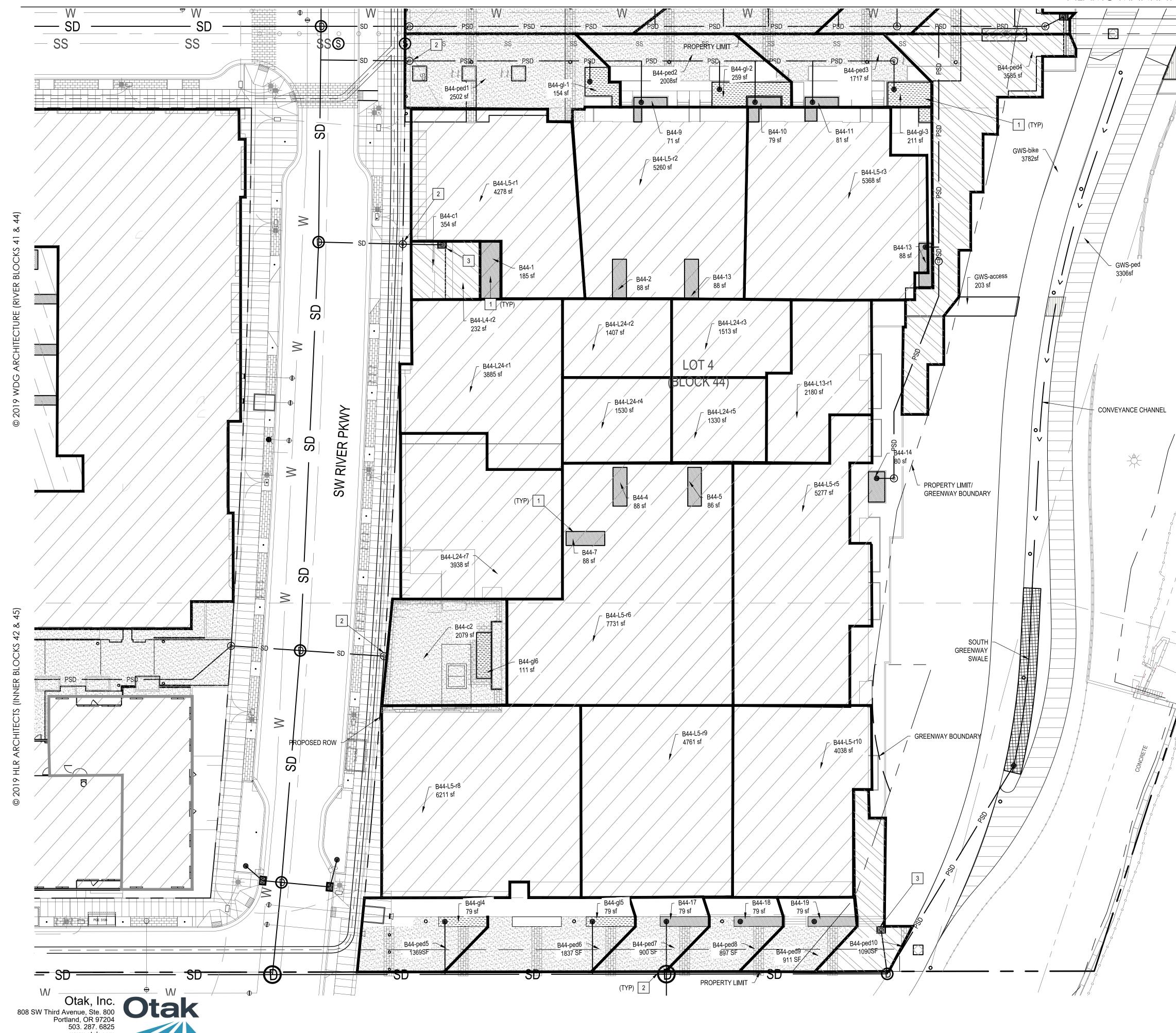
SWALE

NOTE: ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM.

SPOT ELEV ABBREVATIONS

SW SIDEWALK / PATH FL FLOW LINE TC TOP OF CURB





STORMWATER NOTES

- 1 PROPOSED PRIVATE STORMWATER PLANTER.
- 2 PROPOSED STORMWATER LATERAL CONNECTION.
- 3 PROPOSED STORMFILTER CATCH BASIN.

STORMWATER NARRATIVE

THE PROPOSED STORMWATER MANAGEMENT SYSTEM, DESIGNED IN ACCORDANCE WITH THE CITY OF PORTLAND'S STORMWATER MANAGEMENT MANUAL AND SEWER AND DRAINAGE FACILITIES DESIGN MANUAL, WILL INCLUDE LINED VEGETATED PLANTERS FOR WATER QUALITY TREATMENT AND A PIPED CONVEYANCE SYSTEM WHICH CONNECTS TO AN EXISTING STORM SEWER IMMEDIATELY SOUTH OF SW LOWELL STREET. VEGETATED FLOW-THROUGH PLANTERS WERE SIZED USING THE CITY'S PRESUMPTIVE APPROACH CALCULATOR (PAC) TOOL MEET POLLUTION REDUCTION REQUIREMENTS BY FILTERING STORM WATER THROUGH THE TOPSOIL MIX SPECIFIED BY BES. THE PROPOSED IMPROVEMENTS MEET THE CRITERIA FOR EXEMPTION FROM FLOW CONTROL RUNOFF, PER SECTION 1.3.4 OF THE STORMWATER MANAGEMENT MANUAL, AS THE STORM LINE DISCHARGES DIRECTLY TO THE WILLAMETTE RIVER THROUGH THE EXISTING SW LOWELL STREET OUTFALL. THE STORMWATER CONVEYANCE SYSTEM HAS BEEN SIZED TO CONVEY AND CONTAIN THE 10-YEAR, 5-MINUTE EVENT WITHOUT SURCHARGING AND THE 25-YEAR, 5-MINUTE STORM EVENT WITH AT LEAST 6 INCHES OF FREEBOARD.

LEGEND

BUILDING IMPERVIOUS AREA

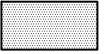
(TO STORMFILTER)



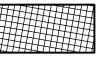
BUILDING ROOF IMPERVIOUS AREA (TO PLANTER)



PRIVATE STORMWATER PLANTER (ROOF TREATMENT)



PROPOSED SWALE



PED PATH IMPERVIOUS AREA (TO AT GRADE TREATMENT)

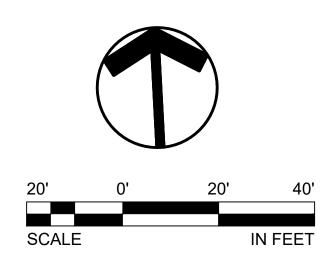


COURTYARD IMPERVIOUS AREA (TO PLANTER)



STORMWATER PLANTER (AT GRADE TREATMENT)





1 FEMA 100-YEAR FLOODWAY.

2 WILLAMETTE GREENWAY BOUNDARY.

3 TOP OF BANK (2002 LINE).

4 ORDINARY HIGH WATER (OHW, ELEVATION 18.22'). 5 ORDINARY LOW WATER (OLW, ELEVATION 5.90')

6 EXISTING TEMPORARY FENCE TO BE REMOVED.

7 EXISTING STORM DRAIN STRUCTURE/PIPE TO BE REMOVED.

8 TREES TO BE REMOVED PER LAND DIVISION APPROVAL.

9 EXISTING WATER HYDRANT TO BE REMOVED.

EXISTING CONCRETE PIER, MONOLITHIC WALL, AND ADJACENT CONCRETE SLABS TO REMAIN.

11 EXISTING CONCRETE SLABS OR STRUCTURES TO BE REMOVED.

THE ENTIRE SITE HAS AREAS OF AC PAVEMENT OR CONCRETE COVERED WITH SOIL AND VEGETATION. EXPOSE AND COMPLETELY REMOVE.

REMOVE EXISTING WOOD PIER AND DECKING. REMOVE PIERS IN THEIR ENTIRETY UNLESS DEEMED HISTORICALLY SIGNIFICANT BY ARCHAEOLOGICAL STUDY.

14 EXISTING WOOD PILING TO BE REMOVED.

LEGEND 2' CONTOUR 10' CONTOUR ORDINARY HIGH WATER (OHW, ELEV 18.22') TOP OF BANK (2002 LINE) DRAINAGE FLOW ARROW EXISTING TREE

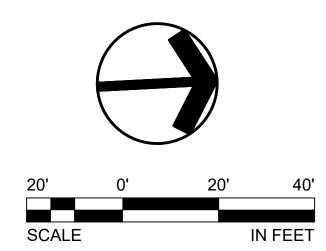
100-YEAR FLOODPLAIN (ELEV 30.9')

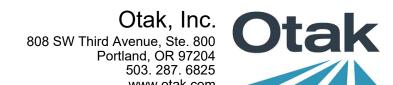
TOTAL TREE DBH REMOVED (WITHIN GREENWAY TRACT) COTTONWOOD: 243" DBH PINE: 350" DBH

NOTE: ALL EXISTING TREES WITHIN GREENWAY TRACT TO BE REMOVED.

NOTE: ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM.

ZONING NOTE: SUBJECT SITE LIES ENTIRELY WITHIN COP ZONE CX dg.





EXTENTS OF WOODEN PIER - FRAMING (W/PARTIAL DECKING)

14 (TYP.)

EXISTING CONDITIONS AND DEMO NOTES

1 FEMA 100-YEAR FLOODWAY.

2 WILLAMETTE GREENWAY BOUNDARY.

3 TOP OF BANK (2002 LINE).

4 ORDINARY HIGH WATER (OHW, ELEVATION 18.22').

5 ORDINARY LOW WATER (OLW, ELEVATION 5.90')

6 EXISTING TEMPORARY FENCE TO BE REMOVED.

7 EXISTING STORM DRAIN STRUCTURE/PIPE TO BE REMOVED.

8 TREES TO BE REMOVED PER LAND DIVISION APPROVAL.

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EXISTING CONCRETE PIER, MONOLITHIC WALL, AND ADJACENT CONCRETE SLABS TO REMAIN.

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THE ENTIRE SITE HAS AREAS OF AC PAVEMENT OR CONCRETE COVERED WITH SOIL AND VEGETATION. EXPOSE AND COMPLETELY REMOVE.

REMOVE EXISTING WOOD PIER AND DECKING. REMOVE PIERS IN THEIR ENTIRETY UNLESS DEEMED HISTORICALLY SIGNIFICANT BY ARCHAEOLOGICAL STUDY.

14 EXISTING WOOD PILING TO BE REMOVED.

LEGEND

2' CONTOUR 10' CONTOUR

ORDINARY HIGH WATER (OHW, ELEV 18.22') TOP OF BANK (2002 LINE)

EXISTING TREE

DRAINAGE FLOW ARROW

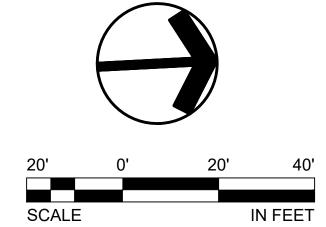
100-YEAR FLOODPLAIN (ELEV 30.9')

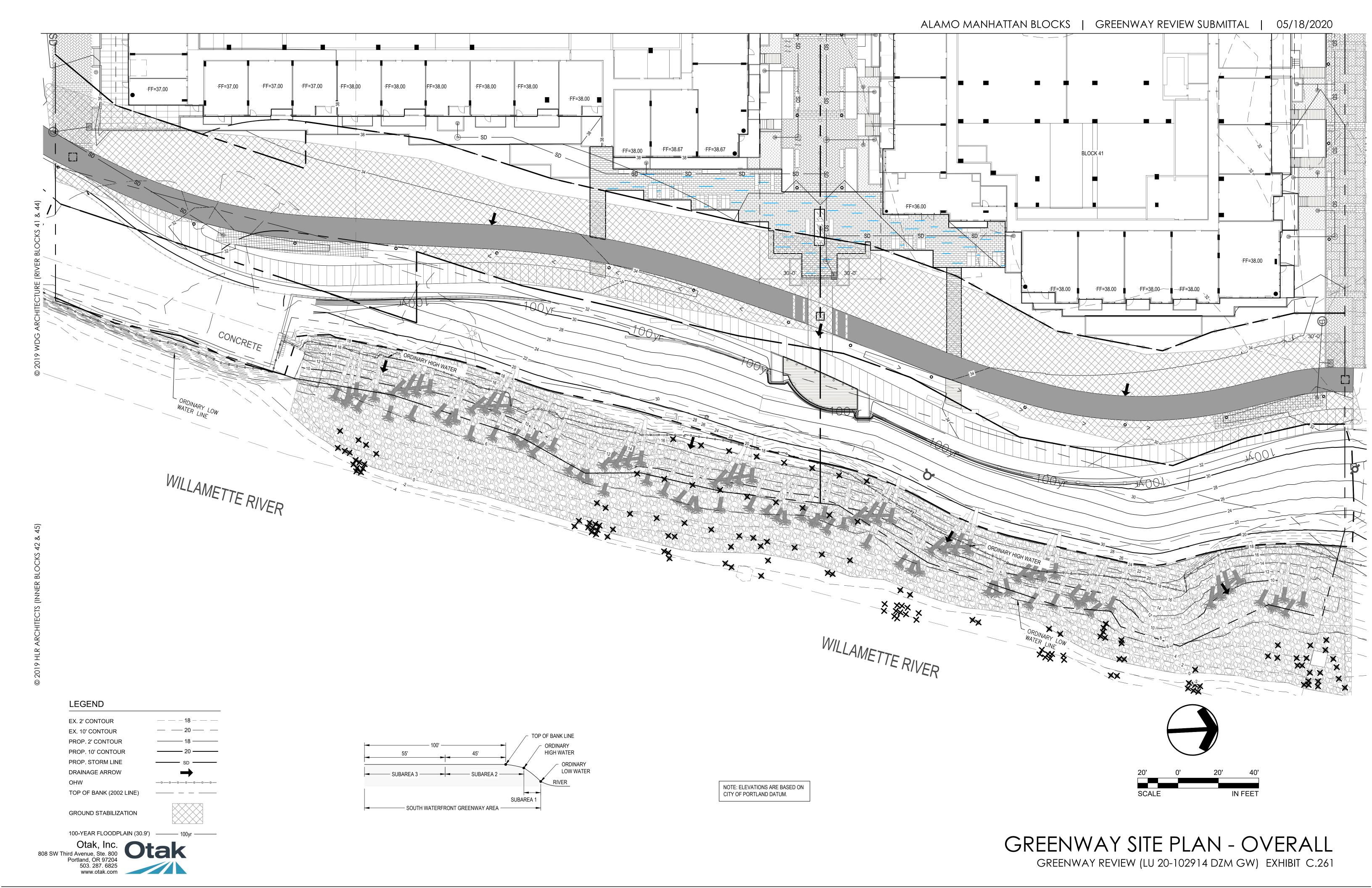
NOTE: ALL EXISTING TREES WITHIN GREENWAY TRACT TO BE REMOVED.

TOTAL TREE DBH REMOVED (WITHIN GREENWAY TRACT) COTTONWOOD: 243" DBH PINE: 350" DBH

NOTE: ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM.

ZONING NOTE: SUBJECT SITE LIES ENTIRELY WITHIN COP ZONE CX dg.





SITE NOTES

1 FEMA 100-YR FLOODWAY

2 WILLAMETTE GREENWAY BOUNDARY

3 TOP OF BANK (2002 LINE)

4 ORDINARY HIGH WATER (OHW, ELEVATION 18.22')

5 ORDINARY LOW WATER (OLW, ELEVATION 5.90')

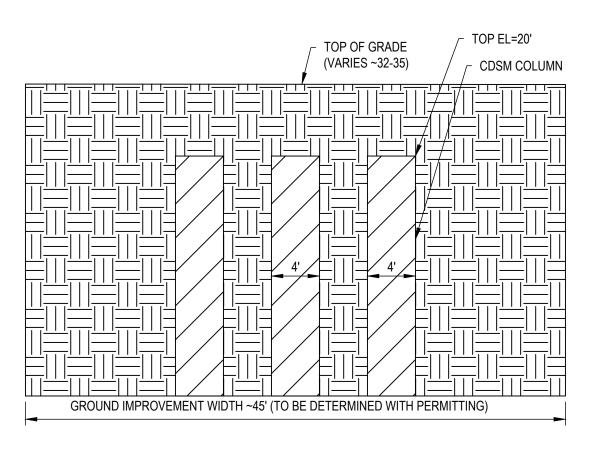
6 SIDEWALK

8 STORM WATER QUALITY FEATURE (SWALE)

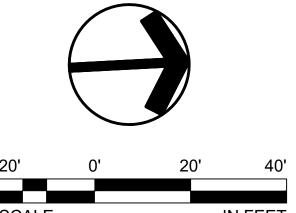
9 RETAINING WALL WITH GUARDRAIL

11 WOODY DEBRIS AND RIP RAP. SEE BANK STABILIZATION PLAN FOR DETAILS.

12 STORM CONNECTION FROM SWALE TO PUBLIC STORM MANHOLE



SECTION A-A' - GROUND STABILIZATION SECTION



GREENWAY SITE PLAN - SOUTH GREENWAY REVIEW (LU 20-102914 DZM GW) EXHIBIT C.262



100-YEAR FLOODPLAIN (30.9') — 100yr —

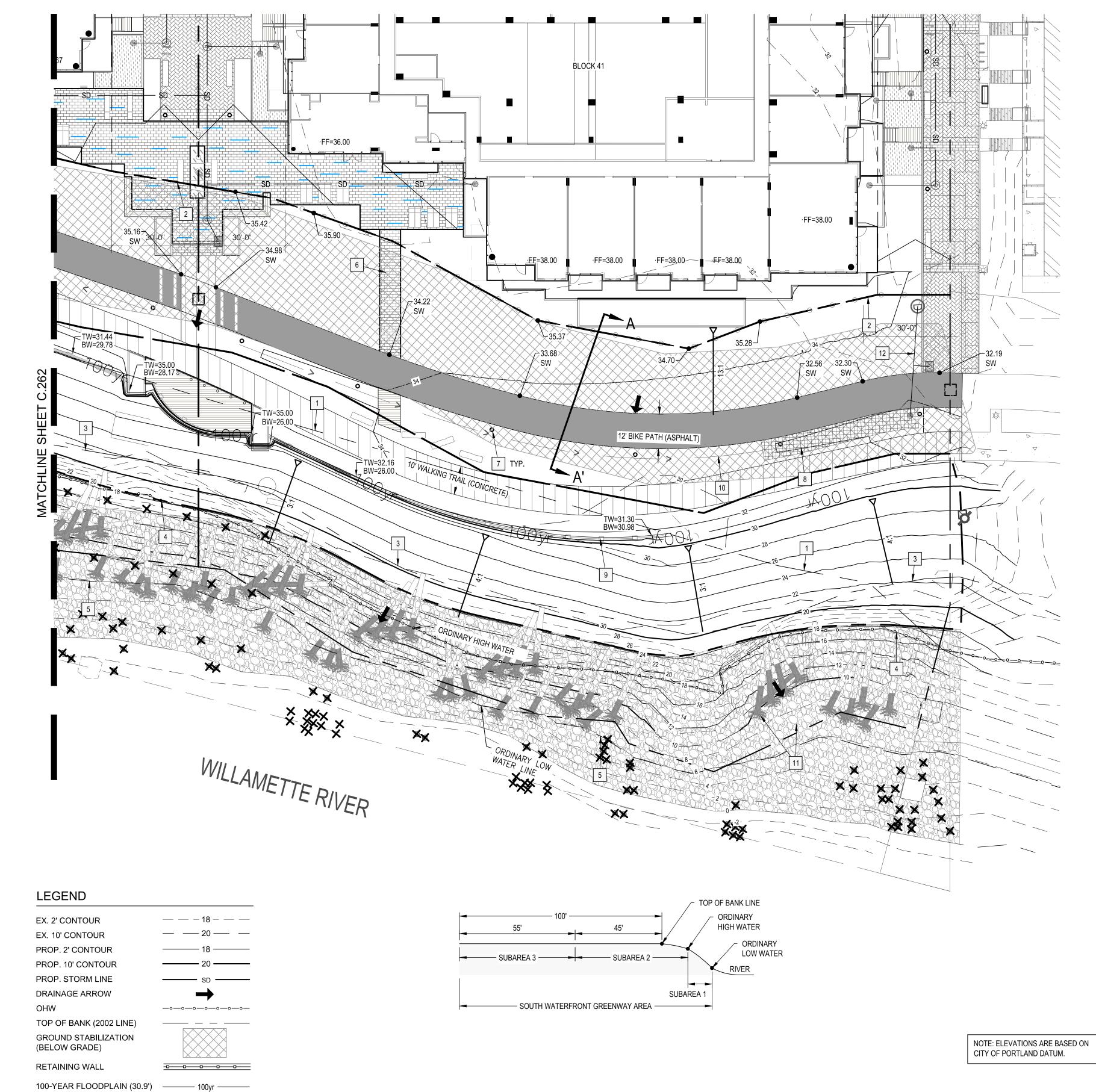
0 0 0 0

RETAINING WALL

7 TRAIL LIGHTING

10 CONVEYANCE CHANNEL

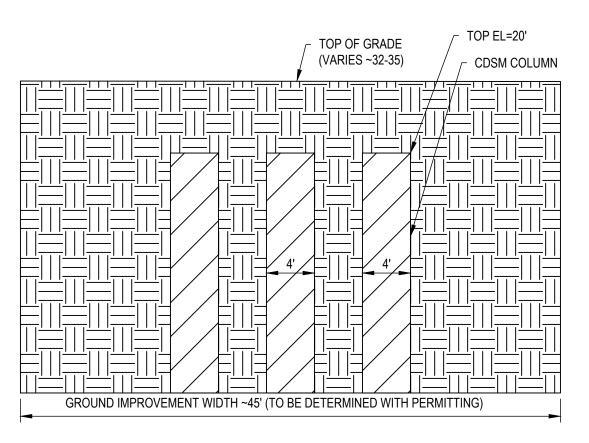
Otak, Inc.
808 SW Third Avenue, Ste. 800
Portland, OR 97204
503. 287. 6825



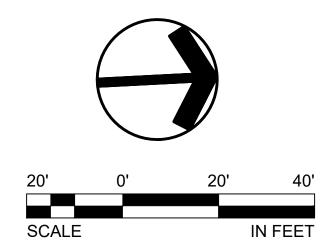
SITE NOTES

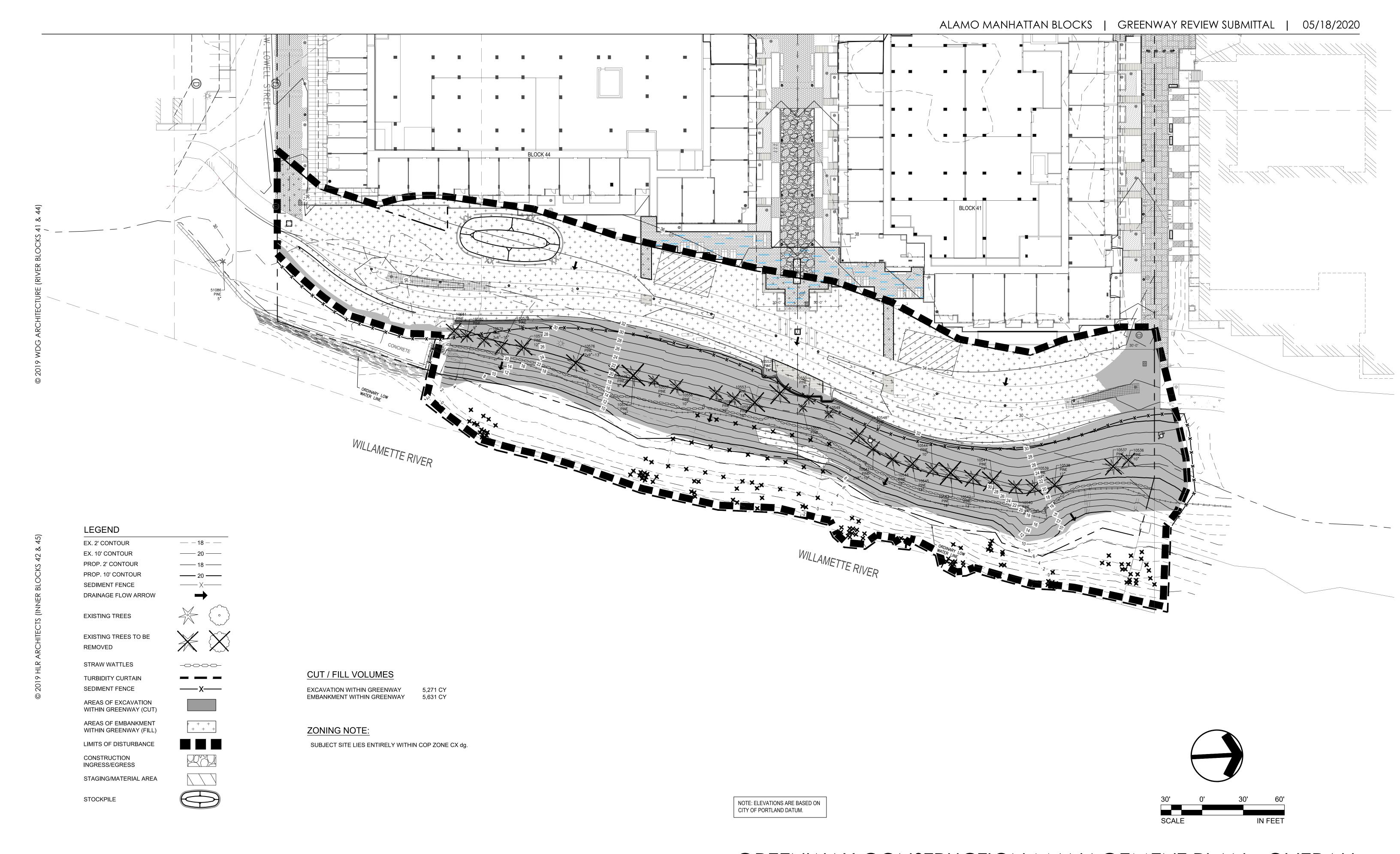
- 1 FEMA 100-YR FLOODWAY
- 2 WILLAMETTE GREENWAY BOUNDARY
- 3 TOP OF BANK (2002 LINE)
- 4 ORDINARY HIGH WATER (OHW, ELEVATION 18.22')
- 5 ORDINARY LOW WATER (OLW, ELEVATION 5.90')
- 6 SIDEWALK
- 7 TRAIL LIGHTING
- 8 STORM WATER QUALITY FEATURE (SWALE)
- 9 RETAINING WALL WITH GUARDRAIL
- 10 CONVEYANCE CHANNEL
- 11 WOODY DEBRIS AND RIP RAP. SEE BANK STABILIZATION PLAN FOR DETAILS.
- 12 STORM CONNECTION FROM SWALE TO PUBLIC STORM MANHOLE.

SEE SHEETS C2.0 - C3.0 FOR PRELIMINARY BANK STABILIZATION PLANS AND CROSS-SECTIONS

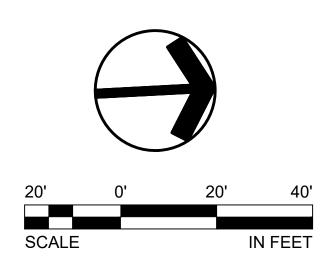


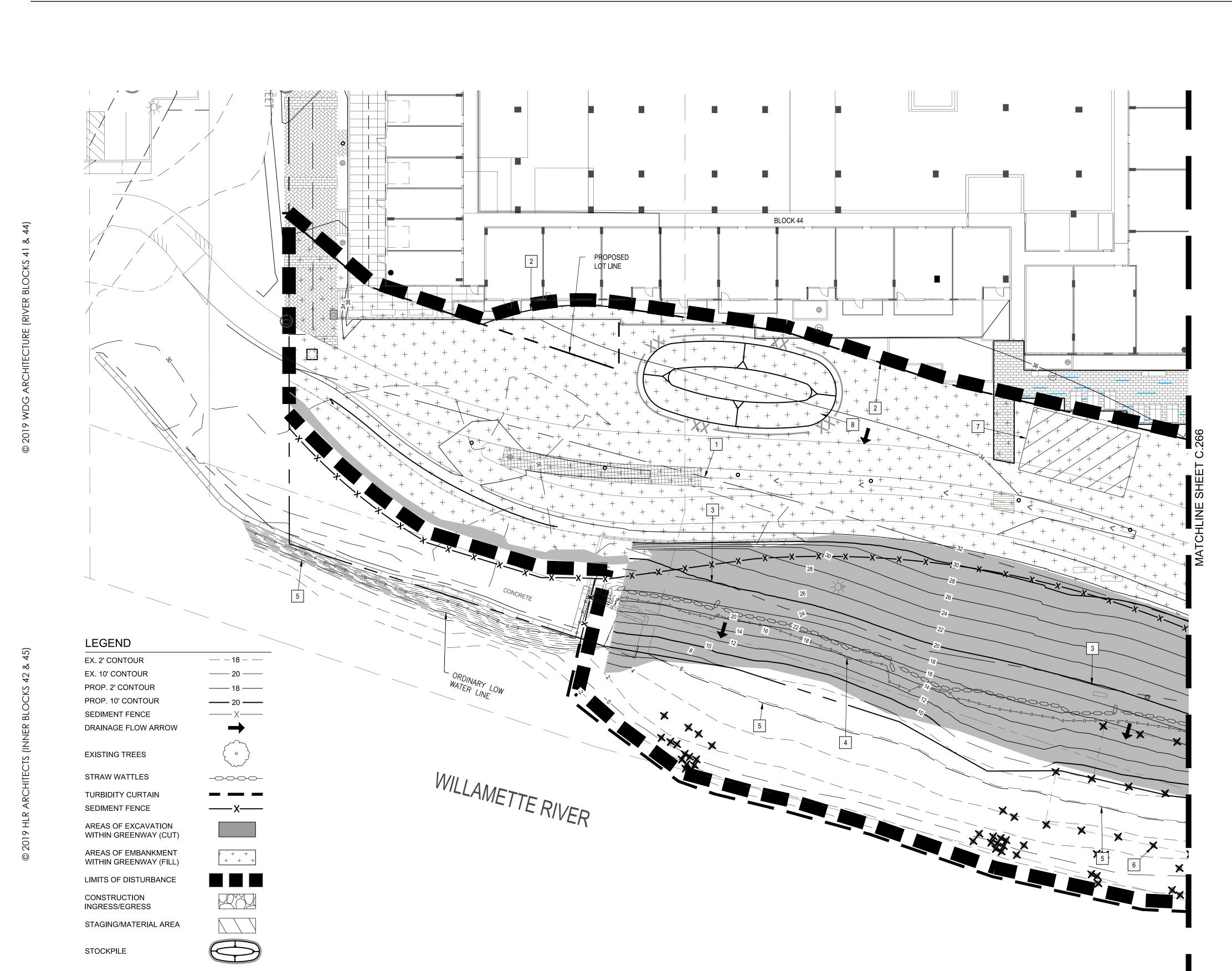
SECTION A-A' - GROUND STABILIZATION SECTION





NOTE: ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM.

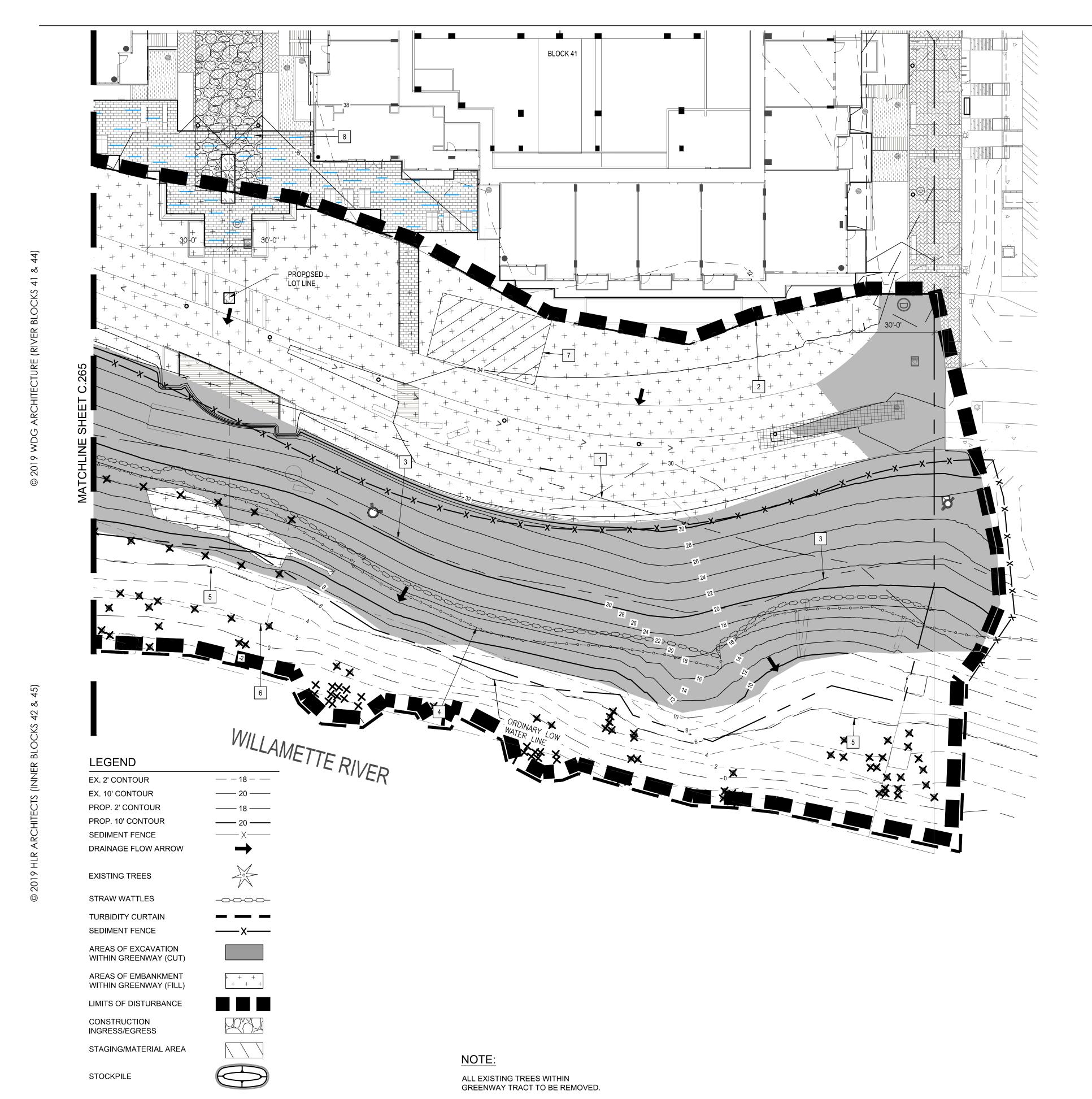




NOTE:

ALL EXISTING TREES WITHIN GREENWAY TRACT TO BE REMOVED.





CONSTRUCTION MANAGEMENT NOTES

1 FEMA 100-YEAR FLOODWAY

2 WILLAMETTE GREENWAY BOUNDARY

3 TOP OF BANK 2002 LINE (TYPICAL)

4 ORDINARY HIGH WATER (OHW, ELEVATION 18.22')

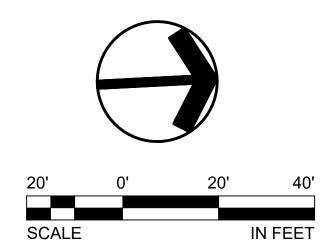
5 ORDINARY LOW WATER (OLW, ELEVATION 5.90')

REMOVE EXISTING WOOD PIER AND DECKING. REMOVE PIERS IN THEIR ENTIRETY UNLESS DEEMED HISTORICALLY SIGNIFICANT BY ARCHAEOLOGICAL STUDY.

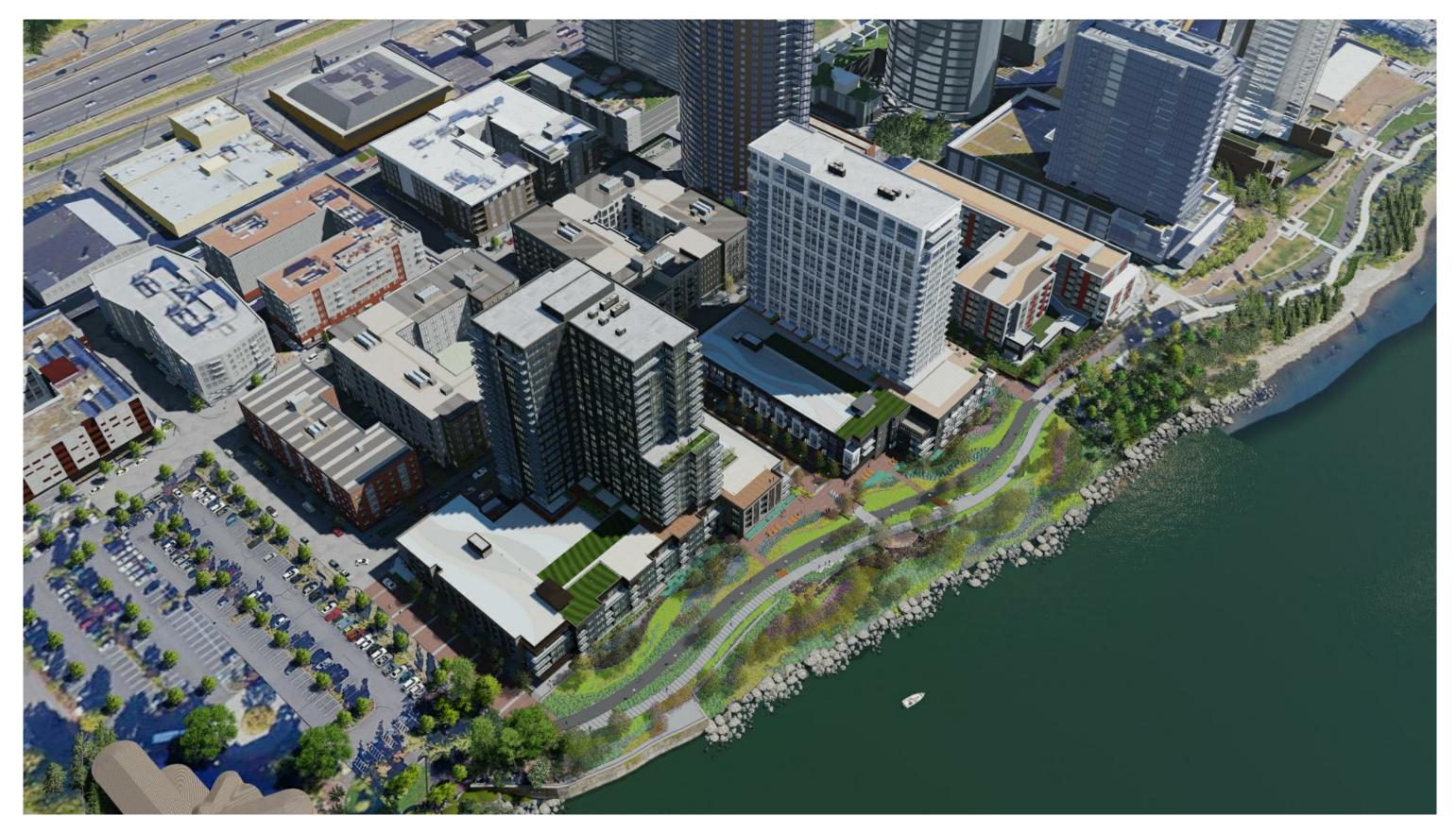
7 PROPOSED STAGING/MATERIAL AREA

8 PROPOSED CONSTRUCTION INGRESS/EGRESS

NOTE: ELEVATIONS ARE BASED ON CITY OF PORTLAND DATUM.



GREENWAY CONSTRUCTION MANAGEMENT PLAN - NORTH GREENWAY REVIEW (LU 20-102914 DZM GW) EXHIBIT C.266











LIVE / WORK COMMERCIAL PARKING LOBBY AMENITY SERVICE MAKER SPACE

RESIDENTIAL

GROUND FLOOR ACTIVE USES (33.510.225)

THIS STANDARD MUST BE MET ALONG AT LEAST 50% OF THE GROUND FLOOR OF WALLS THAT FRONT ONTO A SIDEWALK, PLAZA, OR OTHER PUBLIC OPEN SPACE.

- 1. DISTANCE FROM FINISHED FLOOR TO BOTTOM OF STRUCTURE MUST BE AT LEAST 12 FEET.
- 2. THE AREA MUST BE AT LEAST 25 FT. DEEP.
- 3. ACTIVE USES INCLUDE BUT ARE NOT LIMITED TO: LOBBIES COMMERCIAL, RESIDENTIAL, AND OFFICE.

ACTIVE USE FACADE

COMPLIANT WITH REQUIRED 25' DEPTH

COMPLIANT WITH REQUIRED 12' CLEAR HEIGHT



Ardea (No Setback)



John Ross (No Setback)



Meriwether (No Setback)



✓ No Setback

└─ No Setback

Mirabella (No Setback)



Rood Family Pavilion (No Setback)



No Setback No Setback No Setback No Setback No Setback RIVER PKWY

River Pkwy View Cooridor



DIAGRAMS - TOWER SETBACK LAND USE REVIEW # (LU-20-102914 DZM GW) EXHIBIT APP.205













TANDEM PARKING

(33.266.130.F.1.a)

All parking areas, except stacked parking areas, must be designed so that a vehicle may enter or exit without having to move another vehicle.

PROPOSAL

We propose to use selected parking bays in the private garages for these blocks as tandem stalls, in that the front stall does not have access to the drive aisle without moving the vehicle behind it adjacent to the aisle. See Parking Plans.

APPROVAL CRITERIA

A. Granting the adjustment will equally or better meet the purpose of the regulation to be modified

Tandem stalls support the applicable guidelines in that they allow for greater vehicle density to be parked in smaller amount of developed footprint while also relieving pressure from surface/street, or above grade structured parking that might otherwise be necessary.

B. The proposal will be consistent with purpose of the standard for which a modification is requested

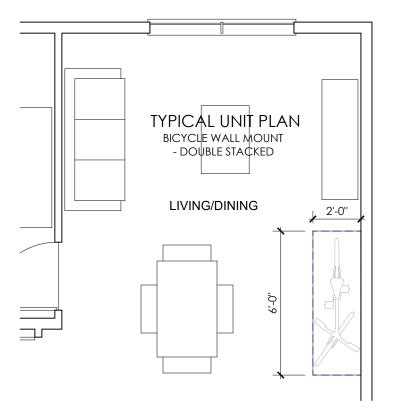
The design of Tandem stalls coincides with sustainable development, particularly for projects within dense urban cores because it is efficient and sensible use of space and land.

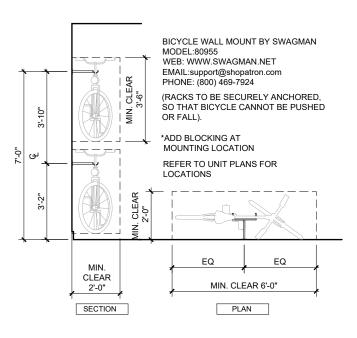
a. Additionally, it should be considered that these Tandem stalls are for use on a private residential project and each pair of stalls is only intended and practical to be leased "in tandem" to the same unit tenants. Consequently, the tenants of that unit and the tandem stalls are effectively each other's full-time attendants and the use of the stalls is not impacted in a substantial manner. The number of Tandem stalls will be significantly less than the 2-bedroom and 1-bedroom unit count and so the buildings easily support "in tandem" use.

										=
	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	ASSIGNED	16'-0"
	TWO-WAY DRIVE									
†	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	8'-6" TYPICAL	†
<u>†</u>	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	8'-6" TYPICAL TANDEM ASSIGNED	16'-0"

TANDEM PARKING

DOUBLE-SIDED BIKE RACK SINGLE-SIDED BIKE RACK SSULT-B4-DOUBLESIDED SSULT-B4-SINGLESIDED





LONG - TERM TYPICAL BIKE ROOM RACK

LONG - TERM TYPICAL TENANT UNIT RACK

BICYCLE PARKING STANDARDS

(33.266.220.c.3.b.)

- ...3. Bicycle racks. The Portland Bureau of Transportation maintains a handbook of racks and siting guidelines that meet the standards of this paragraph. Required bicycle parking may be provided in floor, wall, or ceiling racks. Where required bicycle parking is provided in racks, the racks must meet the following standards:
- a. The bicycle frame and one wheel can be locked to the rack with a high security, U-shaped shackle lock if both wheels are left on the bicycle;
- b. A space 2 feet by 6 feet must be provided for each required bicycle parking space, so that a bicycle six feet long can be securely held with its frame supported so that the bicycle cannot be pushed or fall in a manner that will damage the wheels or components. See Figure 266-11; and
- c. The rack must be securely anchored.

PROPOSAL

For the long-term parking provided in the garage, we are proposing to use a vertical rack system with staggered rack heights (Dero ultra space saver vertical racks). This rack model is listed under the City of Portland Bike Parking Guide as pre-approved model that provide 2 points of contact with the bike wheel and frame, allow use of a U-lock through the rack, the wheel, and the frame, and may be used by bikes with mounted fenders without damaging fenders. The proposal includes the recommended 60" access aisles width, with the racks anchored to the structural slab of the garage. The City of Portland Bicycle rack handbook indicates that these racks must be used with a 24" per bike spacing, but the manufacturer suggests that 18" spacing is adequate. We request a modification to allow the vertical storage racks to be staggered on the wall at an 18" OC spacing, as per manufacturer's recommendation.

For the long-term parking provided in the units, we are proposing a wall rack system that is excluded from the 2 points of contact with the bike wheel and frame and the use of a U-lock through the rack, the wheel, and the frame. This type of long-term bike storage is already in a secured private space so security for the rack is no longer necessary.

APPROVAL CRITERIA

A. Granting the adjustment will equally or better meet the purpose of the regulation to be modified

The proposed solution meets the intent of providing sufficient space, access and security. This spacing has been approved elsewhere by the City of Portland, and even at 18" there is adequate room for access to locks. These racks are proposed to be used for long-term storage in a central controlled-access bike storage room intended for use by residents and tenants. Because these racks will be used by residents and tenants, it can be assumed that they will have some familiarity with the rack systems and therefore the more generous 24" spacing required by the City of Portland guidelines is not required, and the manufacturer recommended 18" spacing is sufficient. We intend to maintain the 24" x 72" required footprint for short term bike parking available to the public.

B. The proposal will be consistent with purpose of the standard for which a modification is requested

The proposed design for the bicycle parking is consistent with intent of the zoning code desire to provide safe and accessible bicycle parking for its long-term bike riders. The primary design strategy is to create long term bicycle parking rooms that are easily accessible, usable and safe for our tenants and occupants. The rooms have been located in a variety of locations for convenient access from the garage and from units at floors above and are located in locked rooms to keep the tenants and their equipment safe. The rack system proposed is easy to use and will help keep tenants' bicycles organized and safe.

a. The proposal meets the intent of the zoning code.

PARKING ACCESS

(33.510.267.F.6.b.)

...b. Parking access on other streets. New motor vehicle access to any parking area or structure is not allowed on the streets shown on Map 510-9.

Map 510-9 shows that access on SW River Parkway is only granted under adjustments procedures.

PROPOSAL

For this development, we propose to locate along SW River Parkway all the parking access points for the 4 blocks. Due to the constrains on other streets surrounding the proposed buildings, SW River Parkway is the only street that provides adequate parking access.

On Block 41 and Block 44, SW River parkway is the only street that provides frontage for those building, all other streets are pedestrian access only or designs with active uses that will not work with parking access.

It's a similar case for Block 42 and Block 45, SW Lane is a pedestrian accessway, SW Abernethy is the main active street, SW Lowell is all residential, leaving SW River Parkway as the only possible option for the parking access.

APPROVAL CRITERIA

A. Granting the adjustment will equally or better meet the purpose of the regulation to be modified.

Moving the parking access to SW River Parkway on this case will equal the purpose of the regulation since these buildings sit on dense urban environment. Parking access on busy streets is common on this type of neighborhoods and by locating the access points away from the middle streets in the four blocks, the pedestrian links through the blocks is preserved better.

A study on turning lanes and access to gates on the parking access was provided to BPOT where it shows that impact to pedestrian and vehicular traffic is minimal on SW Parkway.

B. If in a residential, Cl1, or IR zone, the proposal will not significantly detract from the livability or appearance of the residential area, or if in an OS, C, E, I, or Cl2 zone, the proposal will be consistent with the classifications of the adjacent streets and the desired character of the area.

Criteria does not apply.

C. If more than one adjustment is being requested, the cumulative effect of the adjustments results in a project which is still consistent with the overall purpose of the zone.

Only one adjustment is being requested.

D. City-designated scenic resources and historic resources are preserved.

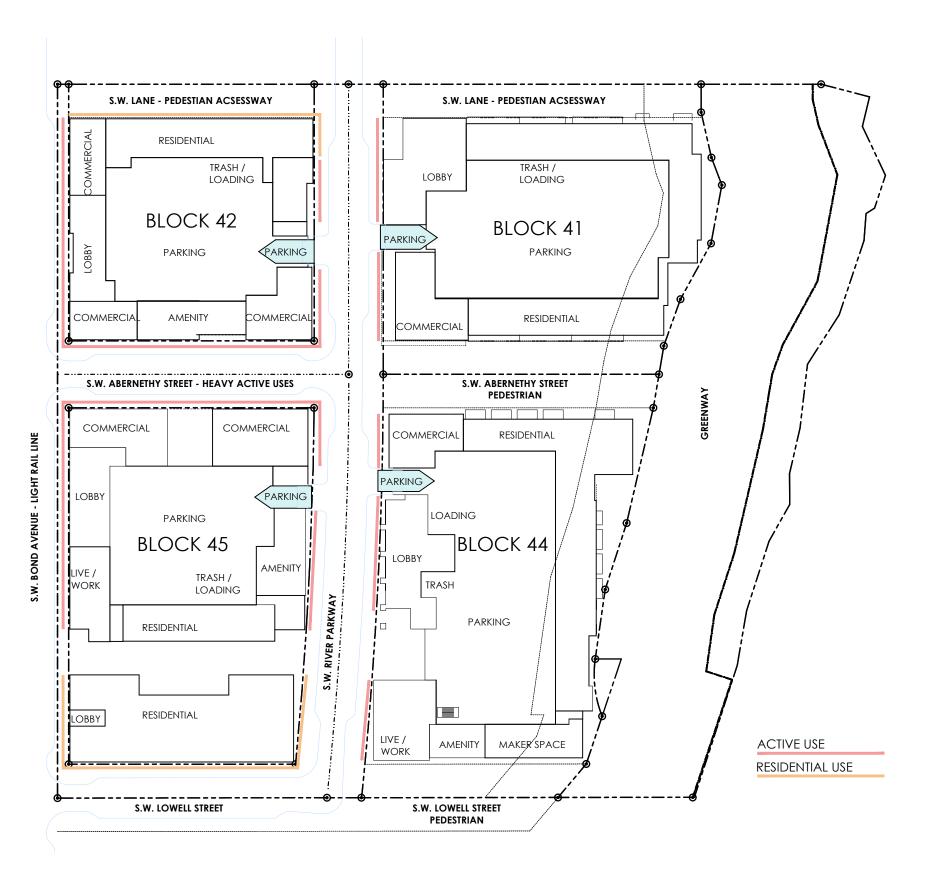
Criteria does not apply.

E. Any impacts resulting from the adjustment are mitigated to the extent practical; and

See response on criteria A.

F. If in an environmental zone, the proposal has a few significant detrimental environmental impacts on the resource and resource values as is practicable;

Criteria does not apply.



PARKING ACCESS