

SURVEY NOTES:

1. THIS MAP CORRECTLY REPRESENTS CONDITIONS AND FEATURES EXISTING AT THE TIME OF THIS SURVEY IN NOVEMBER, 2017.
2. CONVENTIONAL AND GPS SURVEY EQUIPMENT WAS USED IN THE PERFORMANCE OF THIS SURVEY. ALL EQUIPMENT IS MAINTAINED IN CONFORMANCE WITH CURRENT STATE STATUTE.
3. THIS SURVEY WAS PREPARED BY FIELD TRAVERSE AS PER WAC 332-130-090, PART C. RELATIVE ACCURACY EXCEEDS 1 FOOT IN TEN THOUSAND.
4. ALL SURFACE FEATURES AND INVERT STRUCTURE ELEVATION SHOWN HEREON WERE FIELD LOCATED AND MEASURED BY PARAMETRIX FOR THIS SURVEY. UNDERGROUND UTILITY LINES ARE BASED UPON A COMBINATION OF ASBUILT PLANS, SURFACE FEATURE MEASUREMENTS AND ONSITE UNDERGROUND UTILITY MARKINGS PERFORMED BY OTHERS.
5. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
6. BOUNDARY INFORMATION SHOWN HEREON IS BASED ON PUBLIC GIS INFORMATION PROVIDED BY THE PIERCE COUNTY. BOUNDARY LINES SHOWN ARE FOR REPRESENTATION PURPOSES ONLY AND SHOULD NOT BE USED FOR DESIGN ACTIVITIES THAT WILL RELY ON AN ACCURATE REPRESENTATION OF BOUNDARY INFORMATION.
7. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT, WHICH MAY REVEAL RESTRICTIONS OR EASEMENTS OF RECORD. ACCORDINGLY, NONE ARE SHOWN HEREON.

HORIZONTAL DATUM:

THE HORIZONTAL DATUM FOR THIS SURVEY IS NAD 83/91, WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, BASED ON THE WASHINGTON STATE REFERENCE NETWORK (WSRN) ADJUSTED TO CITY OF TACOMA SURVEY MONUMENT NO. 555 WITH A CONFIRMATION TIE TO CITY OF TACOMA SURVEY MONUMENT NO. 552.

SURVEY MONUMENT NO. 555	SURVEY MONUMENT NO. 552
NORTHING: 705,705.799	NORTHING: 704,923.149
EASTING: 1167945.472	EASTING: 1168286.477

VERTICAL DATUM:

VERTICAL DATUM FOR THIS SURVEY IS MLLW (MEAN LOW LOW WATER) PER CITY OF TACOMA PUBLIC WORKS VERTICAL DATUM CHART NGVD 29. FIELD SURVEYED ELEVATION DATA ESTABLISHED UTILIZING THE WASHINGTON STATE REFERENCE NETWORK (WSRN) ADJUSTED TO CITY OF TACOMA VERTICAL CONTROL MONUMENT NO. 2595 AND CONVERTED TO MLLW DATUM WITH A CONFIRMATION TIE TO CITY OF TACOMA VERTICAL CONTROL MONUMENT NO. 2597

VERTICAL CONTROL MONUMENT NO. 2595.
ELEV. 10.909' - NGVD 29
ELEV. 16.869 - MLLW

VERTICAL CONTROL MONUMENT NO. 2597.
ELEV. 10.047' - NGVD 29
ELEV 16.007 -MLLW

THE CONVERSION FROM NGVD 29 TO MLLW DATUM WAS REFERENCED TO NOAA TIDAL BENCHMARK "TIDAL 22" AND THE CITY OF TACOMA PUBLIC VERTICAL DATUM CONVERSION CHART (EPOCH 1883-2001).

HIGHEST OBSERVED (12/17/2012)	14.87 FT.
MEAN HIGHER HIGH WATER (MHHW)	11.80 FT.
MEAN HIGH WATER (MHW)	10.92 FT.
MEAN TIDE LEVEL (MTL)	6.89 FT.
NGVD 29	5.96 FT.
MEAN LOW WATER (MLW)	2.85 FT.
MEAN LOWER LOW WATER (MLLW)	0.00 FT.

SOURCE: NOAA, STATION ID = 9446484,
NAME = TIDAL 22, TACOMA, WASHINGTON

NGVD29 + 5.96' = MLLW ELEVATION

GENERAL NOTES:

1. THIS PROJECT INVOLVES INSTALLING STORMWATER PUMP STATIONS, HYDRODYNAMIC SEPARATORS, TREATMENT SYSTEMS, CONSTRUCTION OF CONVEYANCE FEATURES, AND ASSOCIATED PAVEMENT RECONSTRUCTION.
2. THE PROJECT CONSISTS OF THREE SITES WITHIN THE WEST SITCUM CONTAINER TERMINAL. PROJECT LOCATIONS ARE AS FOLLOWS:

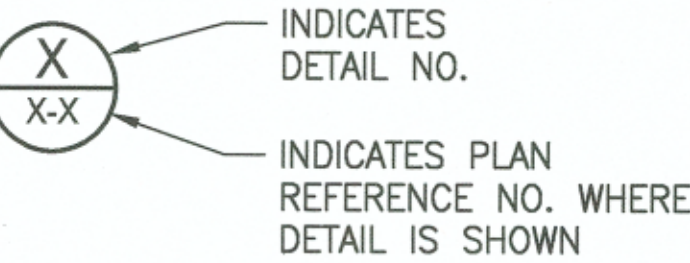
BASIN A: 1002 MILWAUKEE WY, TACOMA, WA 98421
PARCEL NO. 8950000050 & 8950000061

BASIN B: 1002 MILWAUKEE WY, TACOMA, WA 98421
PARCEL NO. 8950000061

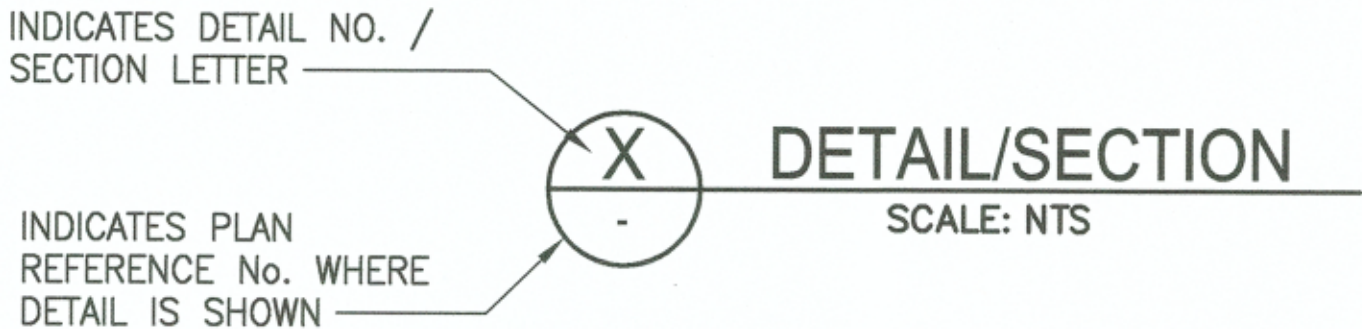
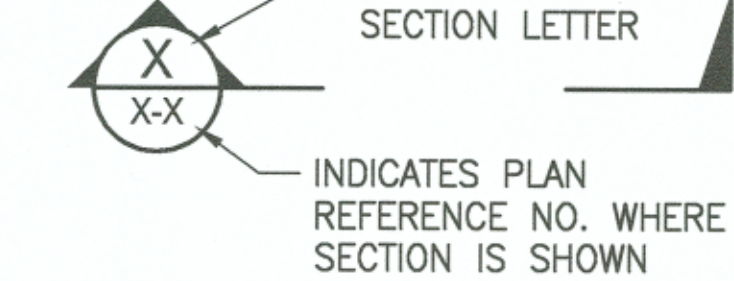
BASIN C: 1738 MILWAUKEE WAY, TACOMA, WA 98421
PARCEL NO. 8950000050 & 8950000092
3. ALL SAFETY CODES, REGULATIONS AND SPECIFICATIONS SHALL BE COMPLIED WITH FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG PERSONNEL, OR OTHER DEVICES TO PROVIDE FOR PUBLIC SAFETY.
4. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, REGULATIONS AND ALL PERMITS INCLUDING BUT NOT LIMITED TO OWNER'S GENERAL INDUSTRIAL STORMWATER PERMIT AND CITY OF TACOMA SITE DEVELOPMENT PERMIT.
5. CONTRACTOR SHALL COORDINATE WITH OWNER AND EQUIPMENT SUPPLIERS FOR DELIVERY, INSTALLATION, AND COMMISSIONING OF OWNER-SUPPLIED EQUIPMENT, INCLUDING THE PUMPING STATIONS, HYDRODYNAMIC SEPARATORS, AND INDUSTRIAL MEDIA MODULAR WETLAND TREATMENT SYSTEMS.
6. SEE MECHANICAL AND ELECTRICAL SHEETS FOR WORK SCOPE DELINEATION DETAILS.
7. PRIOR TO COMMISSIONING OF TREATMENT SYSTEMS, CONTRACTOR SHALL CLEAN EXISTING STORM DRAIN STRUCTURES UPSTREAM OF TREATMENT SYSTEMS TO END OF PIPE BY FLUSHING ONE PIPE VOLUME MINIMUM, AND IN ACCORDANCE WITH WSDOT 7-07.
8. ALL CONSTRUCTION SHALL BE COORDINATED WITH THE PORT OF TACOMA'S ENGINEER.
9. REFER TO SPECIFICATIONS SECTION 01 14 00 FOR WORK STAGING AND WORKING HOURS RESTRICTIONS.
10. ALL INDICATED SCALES IN DRAWINGS ARE APPROXIMATE AND DIMENSIONS SHOWN TAKE PRECEDENCE OVER SCALED DISTANCES. CONTRACTOR SHALL VERIFY DIMENSIONS AND QUANTITIES
11. EXISTING FEATURES WERE DETERMINED BY FIELD SURVEYS PERFORMED IN JULY OF 2016 BY OTHERS AND BY PARAMETRIX IN 2017.
12. EXISTING UTILITY INFORMATION SHOWN ON THESE DRAWINGS WAS COMPILED FROM THE ABOVE-MENTIONED FIELD SURVEYS AND PLANS PROVIDED BY THE PORT OF TACOMA AND LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.
13. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING AND VERIFY EXISTING UTILITY LOCATIONS, AS WELL AS CALL AND ARRANGE FOR AN INDEPENDENT LOCATE CONTRACTOR TO PROVIDE UTILITY LOCATES ON THE CONSTRUCTION SITES. THE CONTRACTOR SHALL ALSO WALK THE SITES WITH THE ENGINEER AND PORT PERSONNEL TO REVIEW EXACT LOCATION OF PROPOSED TREATMENT SYSTEMS AND TIE-IN LOCATIONS TO EXISTING CONVEYANCE SYSTEMS.
14. ALL TRACK, PAVEMENT, EXCAVATIONS MATERIALS NOT REQUIRED FOR NEW WORK, AND OTHER MISCELLANEOUS ITEMS DESIGNATED FOR REMOVAL SHALL BE DISPOSED OF OFF OF PORT PROPERTY IN ACCORDANCE WITH ALL PROJECT SPECIFICATION, APPLICABLE LOCAL, STATE , AND FEDERAL LAWS AND REGULATIONS.
15. MATERIAL STOCKPILES SHALL BE LOCATED AS SHOWN ON THE DRAWINGS.
16. FOR ALL PROJECT EXCAVATIONS, CONTRACTOR SHALL DEWATER AS NECESSARY FOR DRY PLACEMENT OF NEW MATERIALS AND SHORE EXCAVATIONS IN ACCORDANCE WITH OSHA OR WISHA REQUIREMENTS AS APPLICABLE. REFER TO SPEC SECTION 31 23 19 AND 31 23 33.
17. CONTRACTOR TO RESTORE ALL AREAS AFFECTED BY WORK AND OPERATIONS. UPON COMPLETION OF A WORK AREA, THE CONTRACTOR SHALL THOROUGHLY CLEAN AND BROOM SWEEP THE AREA PRIOR TO MOVING TO NEXT WORK AREA.
18. REFERENCE DOCUMENTS INCLUDING GEOTECHNICAL REPORT BY HWA AND AS-BUILT DRAWINGS AVAILABLE FOR REVIEW AT PORT OF TACOMA OFFICE.
19. CONTRACTOR SHALL EXPOSE, VERIFY, CONNECT, AND MATCH EXISTING UTILITIES IN CONFORMANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
20. PRIOR TO EXCAVATING FOR CONSTRUCTION, CONTRACTOR SHALL POTHOLE TO LOCATE ALL EXISTING UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION. CONTRACTOR SHALL COORDINATE POTHOLING WITH OWNER AND PROVIDE MIN 48 HOURS WRITTEN NOTICE POTHOLE LOCATIONS IDENTIFIED.

DETAIL AND SECTION DESIGNATIONS

DETAIL CALLOUT:



SECTION CUT:



ABBREVIATIONS:

AC	ASPHALT CONCRETE
APPROX	APPROXIMATE
ASPH	ASPHALT
AVE	AVENUE
BLDG	BUILDING
BM	BENCH MARK
BMP	BEST MANAGEMENT PRACTICE
CB	CATCH BASIN
CF	CUBIC FEET
CFS	CUBIC FEET PER SECOND
CL OR C	CENTERLINE
CLF	CHAINLINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
CSBC	CRUSHED SURFACING BASE
	COURSE
CSTC	CRUSHED SURFACING TOP
	COURSE
CU	CUBIC
CULV	CULVERT
CY	CUBIC YARDS
DEMO	DEMOLISH
DI	DUCTILE IRON
DIA	DIAMETER
DIMS	DIMENSIONS
DIP	DUCTILE IRON PIPE
DWG	DRAWING
E	EAST/EASTING
EA	EACH
ECO	ECOLOGY
EL/ELEV	ELEVATION
ESCP	EROSION AND SEDIMENTATION
	CONTROL PLAN
EX/EXIST	EXISTING
FH	FIRE HYDRANT
FL	FLANGE
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FEET, FOOT
FWHCA	FISH AND WILDLIFE HABITAT
	CONSERVATION AREAS

G	GAS
GIS	GEOGRAPHIC INFORMATION
	SYSTEM
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HDS	HYDRODYNAMIC SEPARATOR
HGL	HYDRAULIC GRADE LINE
HP	HORSE POWER
ID	IDENTIFICATION
IE	INVERT ELEVATION
L	LENGTH
LF	LINEAR FEET/FOOT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MWS	MODULAR WETLAND SYSTEM
N	NORTH/NORTHING
N.T.S.	NOT TO SCALE
NE	NORTHEAST
NO.	NUMBER
NW	NORTHWEST
OWS	OIL/WATER SEPARATOR
P	POWER
P/S	PUMP STATION
P&ID	PROCESS AND INSTRUMENTATION
	DIAGRAM
PCC	PORTLAND CEMENT CONCRETE
PFD	PROCESS FLOW DIAGRAM
P.I.P.	PROTECT IN PLACE
PLC	PROGRAMMABLE LOGIC
	CONTROLLER
PMX	PARAMETRIX
PVC	POLYVINYL CHLORIDE
R	RADIUS/RIVER
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY

S	SOUTH
SD	STORM DRAIN
SDE	STORM DRAIN EFFLUENT
SDFM	STORM DRAIN FORCE MAIN
SDMH	STORM DRAIN MANHOLE
SQ	SQUARE
SS	SANITARY SEWER
SSD	SCREENED STORM DRAIN
SSMH	SANITARY SEWER MANHOLE
SST	STAINLESS STEEL
ST	STREET
STBY	STAND BY
STD	STANDARD
T	TELEPHONE
TDH	TOTAL DYNAMIC HEAD
TESC	TEMPORARY EROSION AND
	SEDIMENTATION CONTROL
	TREATMENT
TMNT	TOP OF CONCRETE
TOC	TOP OF STRUCTURE
TOS	TREATED STORM DRAIN
TSD	TYPICAL
TYP	VOLT
V	WATER/WATT/WEST
W	WITH
W/	WATERWAY
W/W	YARD
YD	

LEGEND:

EXISTING

	SIGN
	MAIL BOX
	MANHOLE SEWER
	MANHOLE STORM
	CATCH BASIN
	AREA DRAIN
	POWER JUNCTION BOX
	POWER PANEL
	TELEPHONE HAND HOLE
	TELEPHONE RISER
	GATE POST/BOLLARD
	FIRE HYDRANT
	WATER VAULT
	WATER VALVE
	WATER BLOW OFF VALVE
	MONITORING WELL
	POWER POLE WITH DROP LINE
	POWER POLE WITH DROP LINE, TRANSFORMER
	POWER POLE WITH TRANSFORMER
	POWER POLE HIGH TENSION
	POWER JUNCTION BOX
	POWER POLE WITH LIGHT AND DROP LINE
	COMMUNICATION LOCATES
	POWER LOCATES
	STORM LINE
	WATER LOCATES
	CHAIN LINK FENCE

PROPOSED

	NEW FENCE
	NEW CURBING
	SAWCUT
	SILT FENCE
	ECOLOGY BLOCK WALL
	NEW CONCRETE SEDIMENT TRAP STRUCTURE
	CLEARING AND GRUBBING LIMITS
	OHW
	SHORELINE 200' BUFFER
	BASIN BOUNDARY
	PARCEL BOUNDARY
	PROPERTY LINE
	CHECK DAMS
	INLET GRAVEL AND WIRE MESH FILTER CATCH BASIN PROTECTION
	POINT IDENTIFIER
	EQUIPMENT DESIGNATION

6583

G02

SH 02 OF 47

WEST SITCUM

STORMWATER TREATMENT

LEGEND, ABBREVIATIONS, AND GENERAL NOTES

APPROVED:

DIRECTOR

ENG. DATE

5-16-18

PRINTED BY:

anderbru

May 16, 2018

PORT ADDRESS:

ONE SITCUM PLAZA

TACOMA, WA 98401-1837

TOWNSHIP:

21N

RANGE:

3E

SECTIONS:

33 & 34

DAT-HRZ:

WA83-S

VERT:

MLLW

PARCEL:

SEE G02

DRAWING SCALE:

AS NOTED

CON/CONS:

070664

M. ID:

201024.01

PHASE:

BID SET

Port of Tacoma

ENGINEERING PLANNING ENVIRONMENTAL SCIENCES

50 WASHINGTON AVENUE, SUITE 900

BREMERSTON, WA 98337

P 360.377.0014

WWW.PARAMETRIX.COM

PARAMETRIX

5000 1ST AVE, SUITE 200

SEASIDE, WA 98138

DATE:

5/16/18

APPR:

SW

BY:

CIS

REVISION:

ADDENDUM 4

MAY 16, 2018