

MARCH 2019

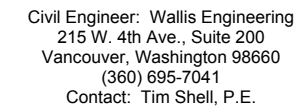
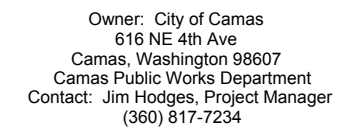


LOCATION MAP

NOT TO SCALE



PROJECT SITE MAP
NOT TO SCALE



FRANCHISE UTILITIES

NW Pipeline
Contact: Jennifer Tackett
Email: jennifer.1.tackett@williams.com
Phone: (360) 608-7220

[illegible]

COVER



PROJECT NO: 1460A DATE: 3/2019

LACAMAS CREEK SANITARY SEWER PUMP STATION IMPROVEMENTS



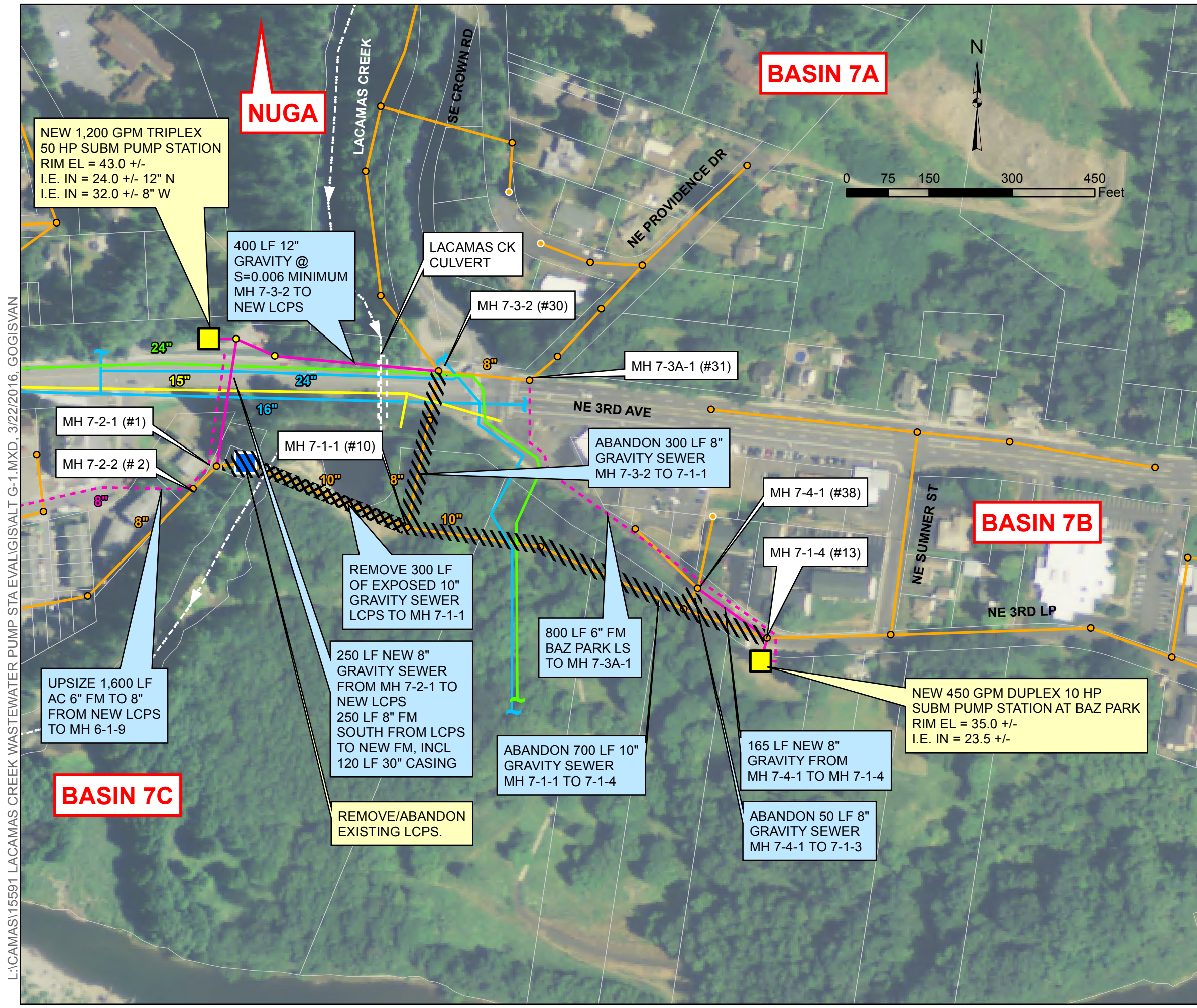
CITY PROJECT NO. S1000

DRAWING NO:

G-001

1 OF 71

PERMIT SET



LEGEND

- PARCELS
- EXISTING STRUCTURE
- NEW PUMPING FACILITIES
- ABANDON FACILITIES
- DEMOLISH FACILITIES
- SANITARY SEWER
- PROPOSED PUMP STATION SITE
- PROPOSED MANHOLE
- EXISTING PUMP STATION
- EXISTING MANHOLE
- EXISTING CLEANOUT
- PROPOSED FORCE MAIN
- PROPOSED GRAVITY MAIN
- EXISTING FORCE MAIN
- EXISTING GRAVITY MAIN
- EXISTING STEP
- OTHER UTILITIES
- EXISTING STORM DRAIN
- EXISTING WATER
- PIPING MODIFICATIONS

NOTES:

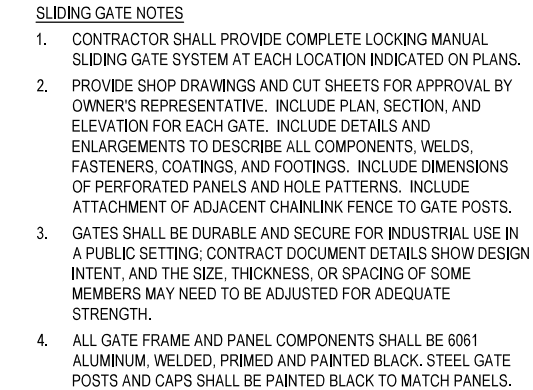
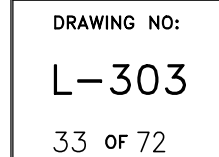
- ELEVATIONS AND LOCATIONS OF FACILITIES ARE APPROXIMATE.
 - GIS LOCATIONS HAVE BEEN ADJUSTED TO CORRESPOND APPROXIMATELY TO FIELD OBSERVATIONS AND ORTHOGRAPHY.
 - ELEVATIONS HAVE BEEN ADJUSTED TO CORRESPOND APPROXIMATELY TO NGVD 29 VERTICAL DATUM
 - MANHOLE NUMBERS FROM 1958 LID 151 PLANS ARE SHOWN IN BRACKETS
 - FEMA BASE FLOOD EL 32 +/- (NGVD29)
 - SEE FIGURE 3 FOR EXISTING FACILITIES
- ORTHO PHOTO SOURCE: 2013 NAIP

CITY OF CAMAS
LACAMAS CREEK WASTEWATER
PUMP STATION EVALUATION
FIGURE 7
MAP OF LACAMAS CREEK PS
FUTURE SITING ALTERNATIVE G-1

Gray & Osborne, Inc.
 CONSULTING ENGINEERS

L:\CAMAS\15591 LACAMAS CREEK WASTEWATER PUMP STA EVAL\GISALT G-1.MXD, 3/22/2016, GOGISVAN





SURVEY STAKING COORDINATES

PT	DESCRIPTION	NORTHING	EASTING
①	WETWELL	99057.95	1156084.22
②	VALVE VAULT	99079.27	1156067.76
③	VALVE VAULT	99072.19	1156080.84
④	FLOW METER/PIGGING VAULT	99101.27	1156065.87
⑤	FLOW METER/PIGGING VAULT	99095.48	1156054.57
⑥	EQUIPMENT SHELTER	99101.27	1156102.89
⑦	EQUIPMENT SHELTER	99078.74	1156084.23
⑧	EDGE OF PAVEMENT	99045.76	1156102.89
⑨	EDGE OF PAVEMENT	99101.27	1156033.68
⑩	EDGE OF PAVEMENT	99103.27	1156033.68
⑪	BEGINNING OF WALL	99037.85	1156104.89
⑫	END OF WALL	99037.85	1156104.89
⑬	ODOR CONTROL EQUIPMENT PAD	99070.79	1156029.47
⑭	ODOR CONTROL EQUIPMENT PAD	99063.31	1156034.48
⑮	CHEMICAL INJECTION EQUIPMENT PAD	99057.76	1156029.47
⑯	CHEMICAL INJECTION EQUIPMENT PAD	99047.76	1156039.47

KEY NOTES

- ① REPLACE COMMERCIAL DRIVEWAY, SEE CAMAS STANDARD DETAIL ST17, SHEET SD-502

② REMOVABLE BOLLARD (TYP 3) SEE CAMAS STD DETAIL 10 SHEET SD-502

③ REPLACE SIDEWALK AND CURB WITH COMMERCIAL DRIVEWAY WITH FULL HEIGHT CURB

④ TRAFFIC CURB, SEE CAMAS STANDARD DETAIL ST12, SHEET SD-502

⑤ SIDEWALK, SEE CAMAS STANDARD DETAIL ST18, SHEET SD-502

⑥ 4" DEPTH CSTC COMPACTED TO 90% MAX DENSITY OVER COMPACTED SUBGRADE OR FILL

⑦ 20' WIDTH ROLLING GATE WITH PERFORATED STEEL PANEL
- ⑧ REINFORCED TURF. SEE LANDSCAPE PLANS

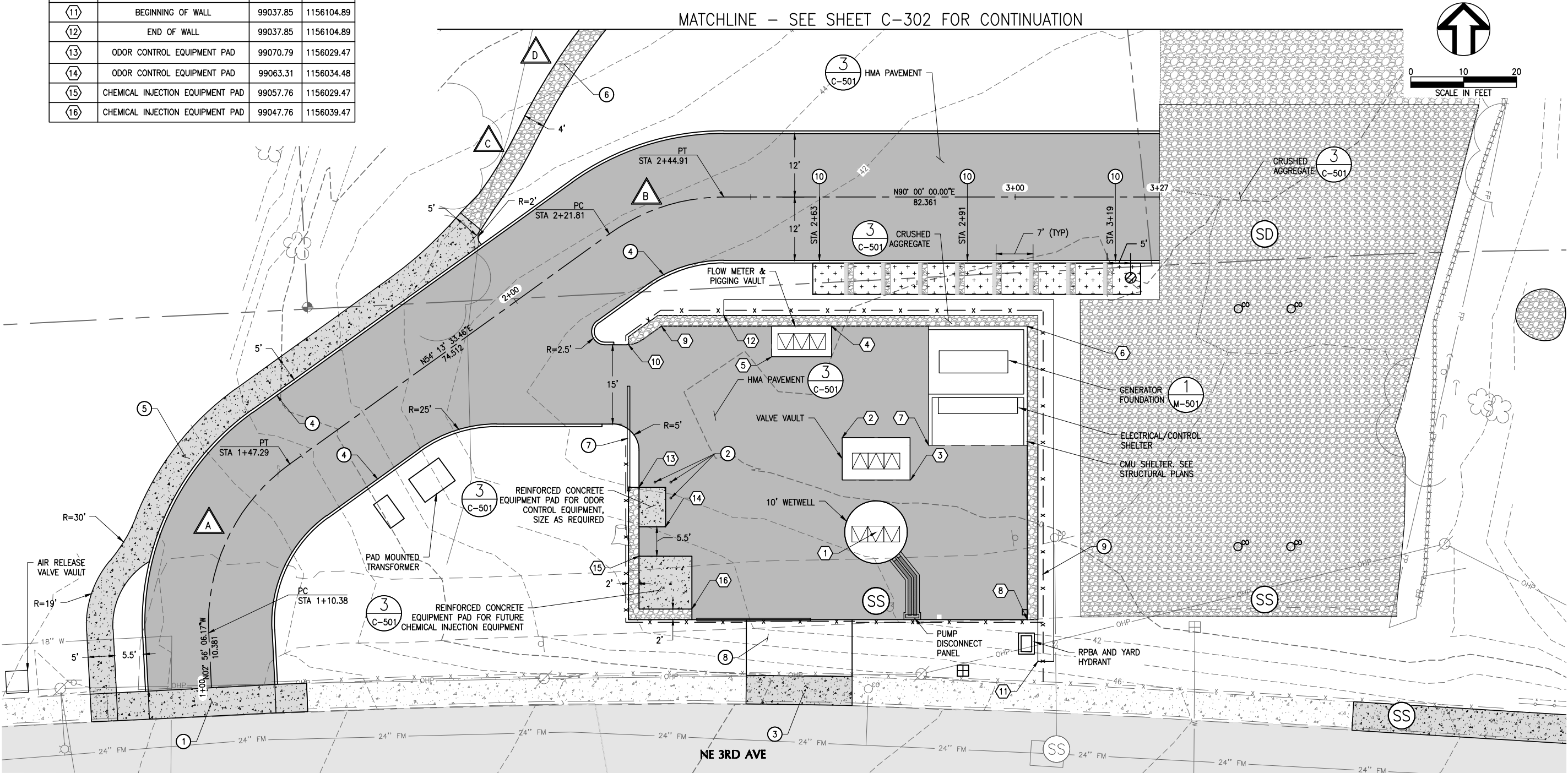
⑨ 6' TALL CHAINLINK FENCE

⑩ CURB CUT. SEE DETAIL, SJEET X.

CURVE DATA

CURVE	RADIUS	LENGTH	Δ
A	37.00'	36.91'	57°09'39"
B	37.00'	23.10'	35°46'26"
C	75.5'	13.88'	10°31'50"
D	119.50'	69.38'	35°15'55"

MATCHLINE – SEE SHEET C-302 FOR CONTINUATION



PLAN



NO.	REVISION	BY	DATE

DESIGNED BY: JW/WW

CHECKED BY: CK

DATE: 5/2019

SCALE: 1" = 10'

IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

LCPS CIVIL
SITE PLAN

wallis
engineering

380 695 7041
Vancouver, WA 98601

PROJECT NO: 1460A

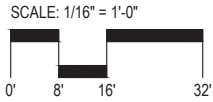
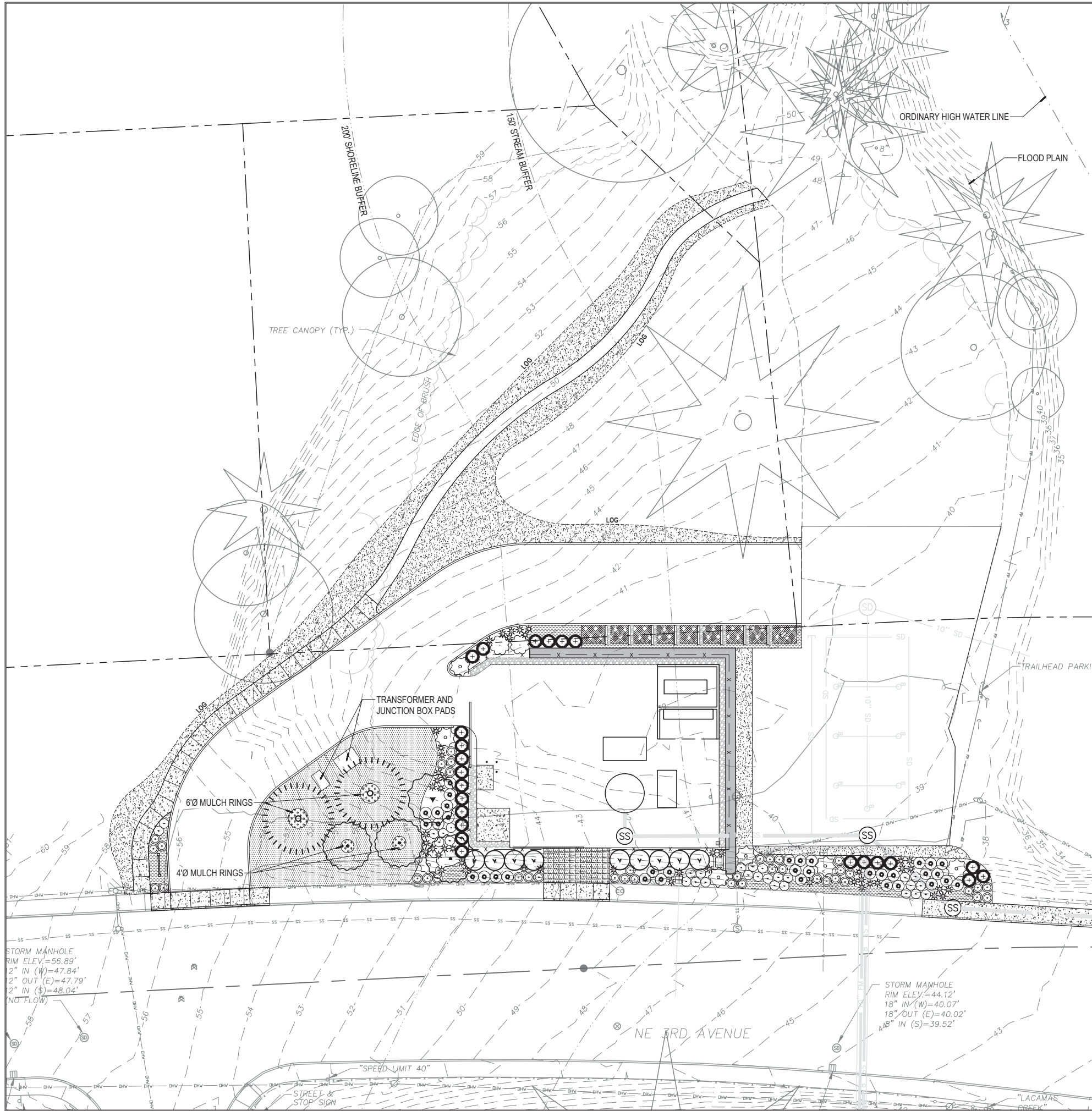
DATE: 5/2019

LACAMAS CREEK
SANITARY SEWER
PUMP STATION
IMPROVEMENTS

City of
Camas
WASHINGTON

CITY PROJECT NO. S1000

DRAWING NO:
C-301
26 OF 73



GreenWorks, P.C.
Landscape Architecture
Environmental Design
24 NW 2nd Avenue, Suite 100
Portland, Oregon 97209
Ph: 503.222.5612 / F: 503.222.2281
Email: info@greenworkspc.com

**NOTE: QUANTITIES LISTED ARE
TOTAL FOR BOTH LACAMAS
AND BAZ PARKS**

PLANTING LEGEND

L-703

-
- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING CONIFER TREE TO REMAIN

	BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY.
	CORNUS NUTTALLI X FLORIDA	EDDIE'S WHITE WONDER DOGWOOD	2", CAL. B&B	15' O.C.	2
	RHAMNUS PURSHIANA	CASCARA	2" CAL. B&B	15' O.C.	4
	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	4-6" CAL., B&B	25' O.C.	2

L-703

	BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY.
	GAULTHERIA SHALLON	SALAL	1 GAL. CONT.	3' O.C.	42
	OSMANTHUS DELAVAYI	DELAVAY OSMANTHUS	5 GAL. CONT.	6' O.C.	19
	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL. CONT.	30" O.C.	79
	RIBES SANGUINEUM	RED-FLOWERING CURRANT	5 GAL. CONT.	6' O.C.	11
	SPIRAEA BETULIFOLIA	WHITE SPIRAEA	1 GAL. CONT.	3' O.C.	60
	SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL. CONT.	42" O.C.	35
	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	5 GAL. CONT.	4' O.C.	25
	VIBURNUM TINUS 'COMPACTUM'	SPRING BOUQUET VIBURNUM	5 GAL. CONT.	5' O.C.	11

	MAHONIA REPENS	CREeping OREGON GRAPE	1 GAL. CONT.	24" O.C.	142
	RAIN GARDEN PLANTING:				
	CAREX Densa	DENSE SEDGE	4" POT	18" O.C.	28
	DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS	4" POT	12" O.C.	96
	IRIS TENAX	OREGON IRIS	4" POT	12" O.C.	64
	JUNCUS PATENS	SPREADING RUSH	4" POT	18" O.C.	43

PLANT RAIN GARDEN SPECIES IN RANDOM CLUMPS OF 5-9 PLANTS EACH.

	IRRIGATED LAWN
	IRRIGATED LAWN W/ REINFORCED TURF
	NON-IRRIGATED ROUGH LAWN - SEED AREAS DISTURBED BY CONSTRUCTION
	BARK MULCH ONLY

3
L-303

-----LOG----- APPROXIMATE LIMIT OF GRADING/SITE DISTURBANCE

NOTE:
SEE L-402 FOR PLANTING NOTES.

NOT FOR CONSTRUCTION

[illegible]

LCPS PLANTING PLAN

wallis  **engineering**
215 W 4th Street, Suite 200
Vancouver, WA 98660
360.695.7041

PROJECT NO: 1460A DATE: 5/2019

LACAMAS CREEK SANITARY SEWER PUMP STATION IMPROVEMENTS

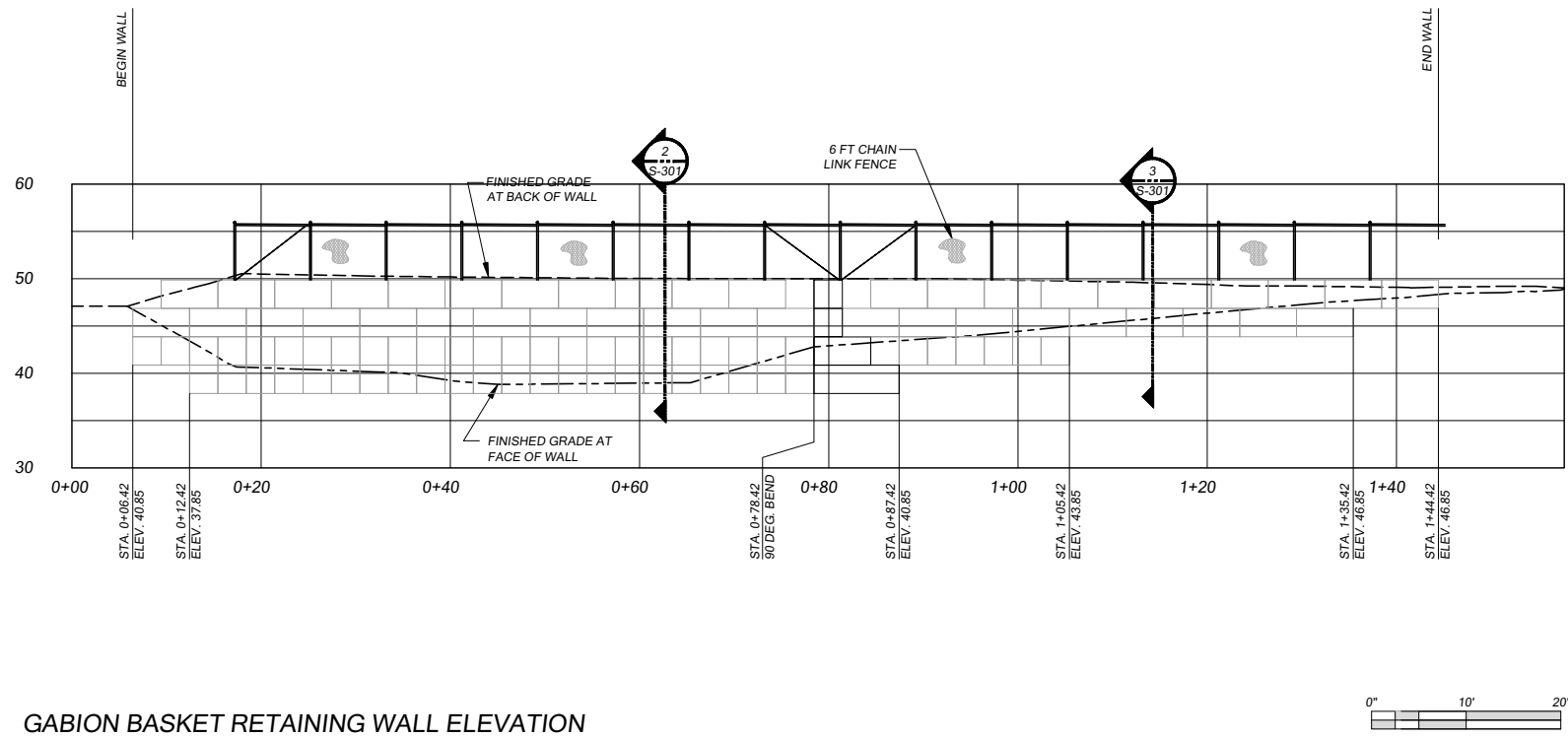


CITY PROJECT NO. S1000

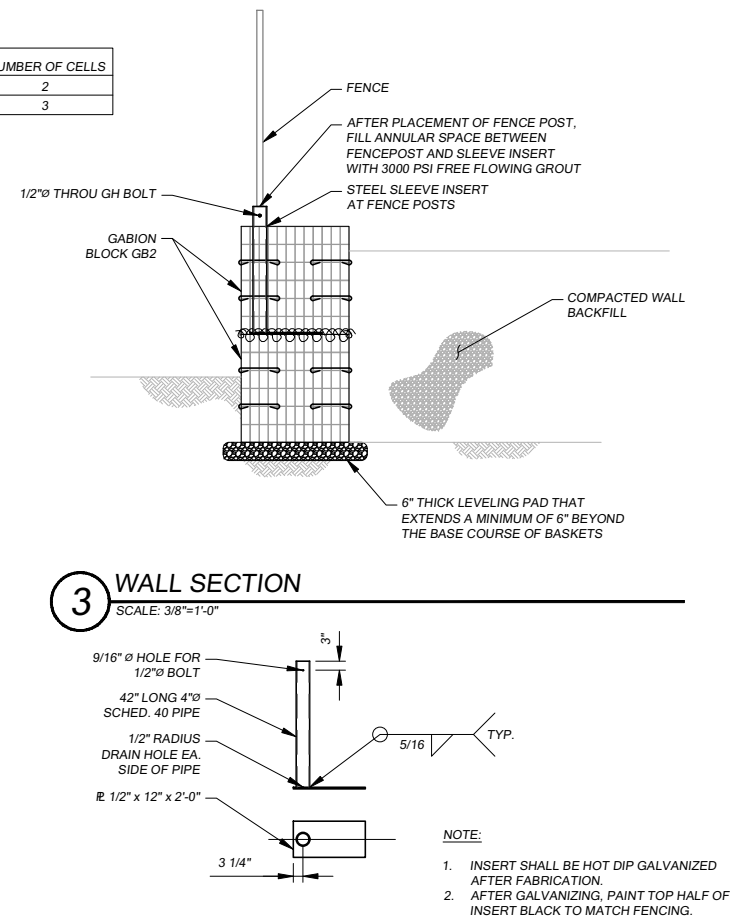
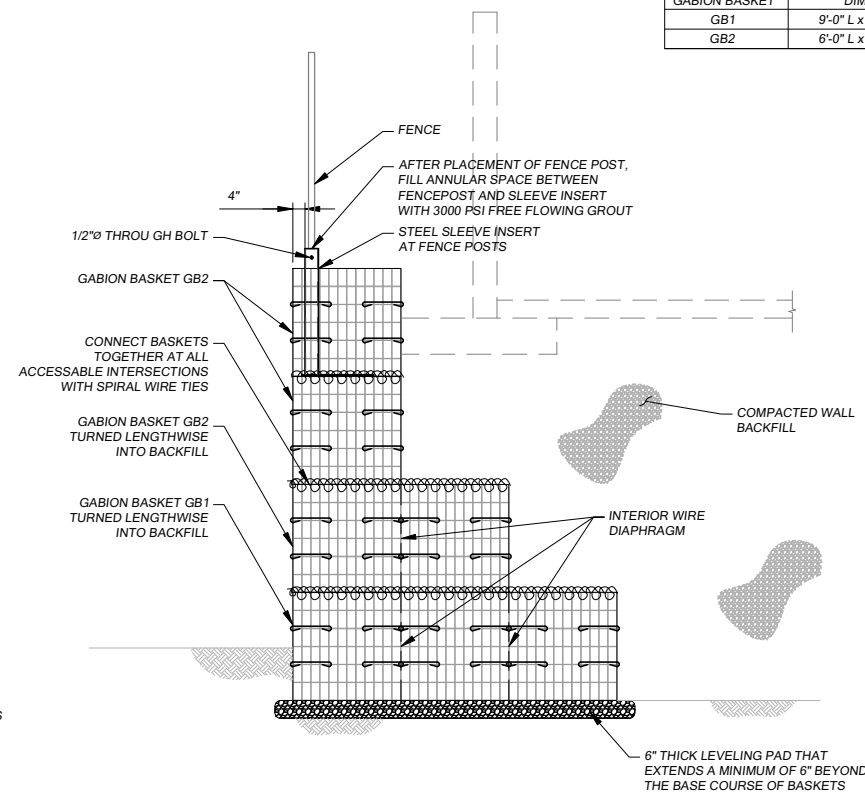
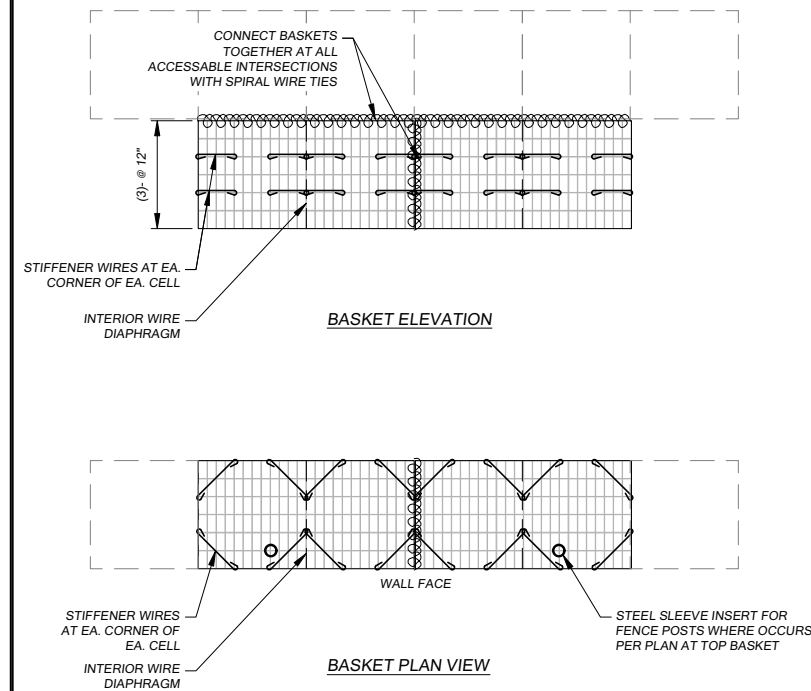
DRAWING NO:

L-302

32 OF 72



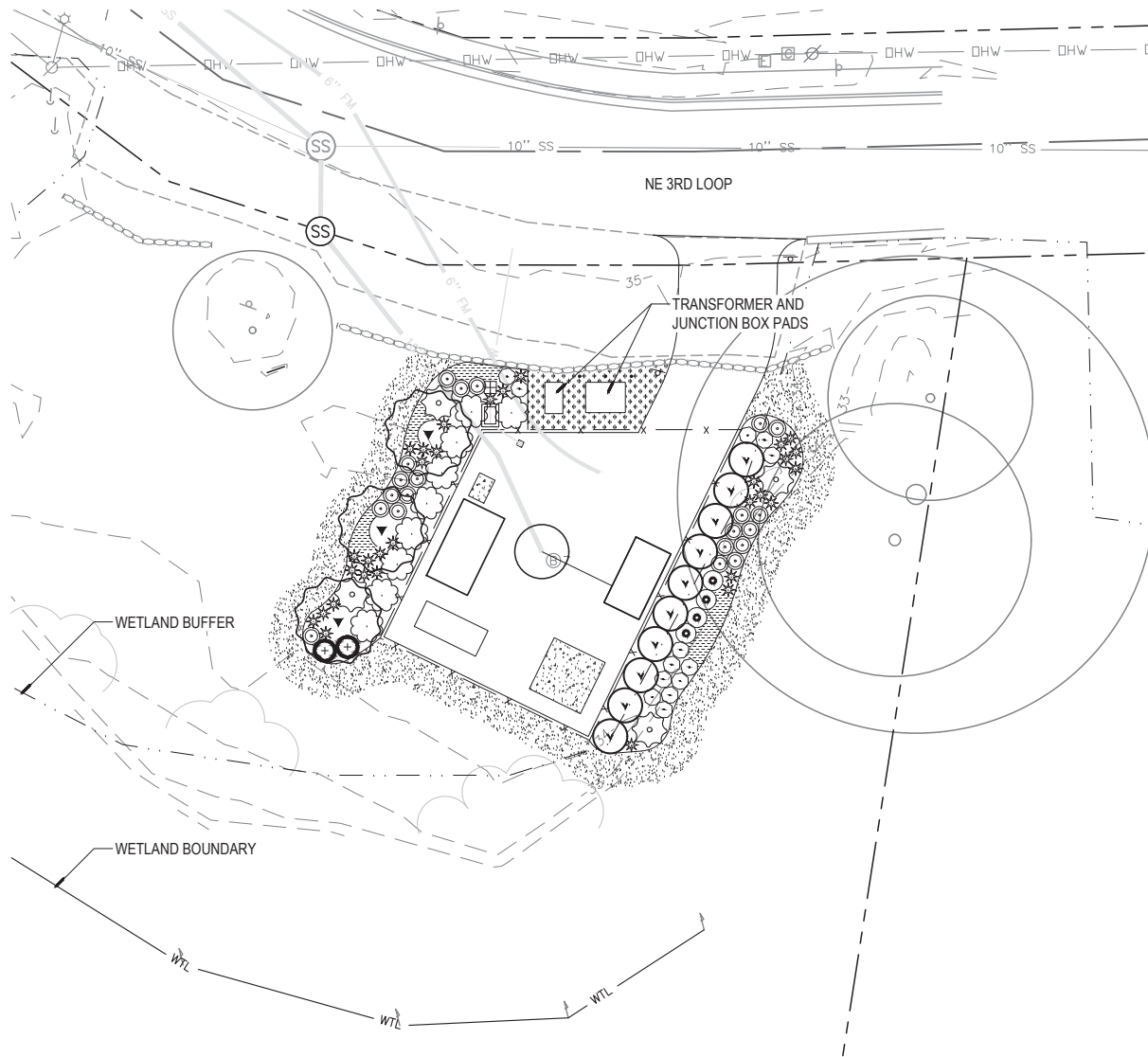
GABION BASKET	DIMENSIONS	NUMBER OF CELLS
GB1	9'-0" L x 3'-0" H x 3'-0" D	2
GB2	6'-0" L x 3'-0" H x 3'-0" D	3



NOTE:

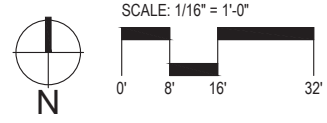
1. INSERT SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. AFTER GALVANIZING, PAINT TOP HALF OF INSERT BLACK TO MATCH FENCING.





PLANTING NOTES

1. CONTRACTOR SHALL PROVIDE PLANTING SOIL, SOIL AMENDMENTS, AND MULCH TO THE COMPOSITION AND DEPTHS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
2. WITHIN RAIN GARDEN PLANTING AREA, PROVIDE 18" DEPTH BIORETENTION SOIL MEDIA AND ROCK MULCH.
3. WITHIN SHRUB PLANTING AREAS, PROVIDE 12" DEPTH AMENDED PLANTING SOIL, AND BARK MULCH.
4. ALL PLANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS PROVIDED AS PART OF THE CONTRACT DOCUMENTS.
5. QUANTITIES ARE LISTED FOR THE CONTRACTOR'S CONVENIENCE ONLY. ALL COUNTS MUST BE VERIFIED BY THE CONTRACTOR. IN THE CASE OF A DISCREPANCY BETWEEN THE LEGEND AND THE PLAN, PLANTS INDICATED ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN THE LEGEND.
6. UTILITY LOCATIONS SHOWN ON PLANS MAY DIFFER FROM FIELD CONDITIONS. CONTRACTOR TO FIELD VERIFY ALL UTILITIES BEFORE INSTALLATION. CONFLICTS BETWEEN ANY EXISTING AND PROPOSED UTILITIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IMMEDIATELY.



GreenWorks, P.C.
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Email: info@greenworkspc.com

GREENWORKS PROJECT NO:
118060.2

PLANTING LEGEND

**NOTE: QUANTITIES LISTED ARE
TOTAL FOR BOTH LACAMAS
AND BAZ PARKS**

TREES



— EXISTING DECIDUOUS TREE TO REMAIN

— EXISTING CONIFER TREE TO REMAIN

BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY.
CORNUS NUTTALLI X FLORIDA	EDDIE'S WHITE WONDER DOGWOOD	2", CAL, B&B	15' O.C.	2
RHAMNUS PURSHIANA	CASCARA	2" CAL, B&B	15' O.C.	4
PSEUDOTSUGA MENZIESII	DOUGLAS FIR	4-6" CAL., B&B	25' O.C.	2

SHRUBS / GROUNDCOVERS

	BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY.
	GAULTHERIA SHALLON	SALAL	1 GAL. CONT.	3' O.C.	42
	OSMANTHUS DELAVAYI	DELAVAY OSMANTHUS	5 GAL. CONT.	6' O.C.	19
	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL. CONT.	30" O.C.	79
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	SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL. CONT.	42" O.C.	35
	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	5 GAL. CONT.	4' O.C.	25
	VIBURNUM TINUS 'COMPACTUM'	SPRING BOUQUET VIBURNUM	5 GAL. CONT.	5' O.C.	11

	MAHONIA REPENS	CREEPING OREGON GRAPE	1 GAL. CONT.	24" O.C.	142
	NON-IRRIGATED ROUGH LAWN - SEED AREAS DISTURBED BY CONSTRUCTION				
	BARK MULCH ONLY				

BPPS PLANTING PLAN

LACAMAS CREEK
SANITARY SEWER
PUMP STATION
IMPROVEMENTS



CITY PROJECT NO. S1000

NOT FOR
CONSTRUCTION

[illegible]

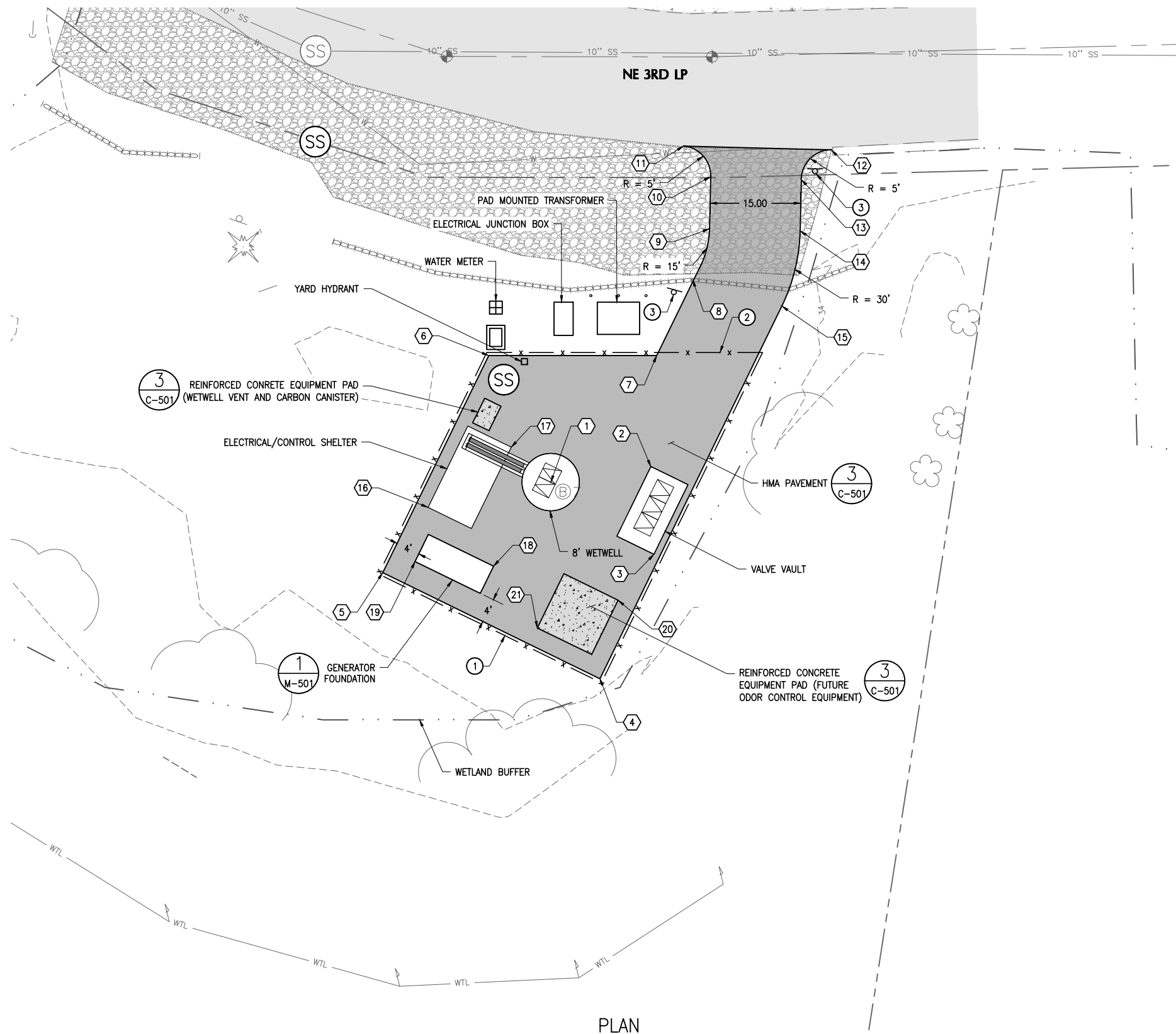
wallis  **engineering**
215 W 4th Street Suite 200

PROJECT NO: 1460A DATE: 5/2019

DRAWING NO:

L-402

50 OF 72



NE 3RD LP

5

49"

10''

103

(S)

2

AD MOUNTED TRANSFORMER

ELECTRICAL JUNCTION BOX 7

WATER METER

YARD HYDRANT

VALVE VALUET

— REINFORCED CONCRETE
EQUIPMENT PAD (FUTURE
ODOR CONTROL EQUIPMEN

WETLAND BUFFS

—

7.

— W

WT

WT1

PLAN



SCALE IN FEET

KEY NOTES

- ① INSTALL 6' TALL BLACK PVC COATED CHAINLINK FENCE. POST TO BE PLACED AGAINST THE EDGE OF PAVEMENT.
- ② INSTALL 6' TALL, 18' WIDE PVC COATED DRAIN LINK SLIDING GATE.
- ③ INSTALL "NO PARKING" SIGN

SURVEY STAKING COORDINATES

PT	DESCRIPTION	NORTHING	EASTING
①	WETWELL	98436.66	1157124.37
②	VALVE VAULT	98439.25	1157140.93
③	VALVE VAULT	98424.72	1157141.45
④	EDGE OF PAVEMENT	98404.14	1157132.53
⑤	EDGE OF PAVEMENT	98421.68	1157096.57
⑥	EDGE OF PAVEMENT	98457.63	1157114.11
⑦	EDGE OF PAVEMENT	98457.63	1157141.92
⑧	EDGE OF PAVEMENT	98470.16	1157147.87
⑨	EDGE OF PAVEMENT	98478.62	1157150.64
⑩	EDGE OF PAVEMENT	98487.24	1157150.84
⑪	EDGE OF PAVEMENT	98492.30	1157146.35
⑫	EDGE OF PAVEMENT	98491.67	1157170.81
⑬	EDGE OF PAVEMENT	98486.78	1157165.83
⑭	EDGE OF PAVEMENT	98478.28	1157165.63
⑮	EDGE OF PAVEMENT	98465.82	1157162.61
⑯	EQUIPMENT SHELTER	98432.49	1157104.07
⑰	EQUIPMENT SHELTER	98442.46	1157117.84
⑱	GENERATOR FOUNDATION	98422.75	1157114.90
⑲	GENERATOR FOUNDATION	98423.52	1157101.92
⑳	ODOR CONTROL EQUIPMENT PAD	98417.14	1157135.53
㉑	ODOR CONTROL EQUIPMENT PAD	98412.54	1157122.16



NO.	REVISION	BT	DATE
ONE INCH 0" 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY DESIGNED BY: JW/JWW DRAWN BY: CK RVA: XX			

BPPS CIVIL
SITE PLAN



PROJECT NO: 1460A DATE: 5/2019

LACAMAS CREEK SANITARY SEWER PUMP STATION IMPROVEMENTS



CITY PROJECT NO. S1000

DRAWING NO:

C-401

