



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT WAIKIKI TRAILHEAD SE:R205:2021-1

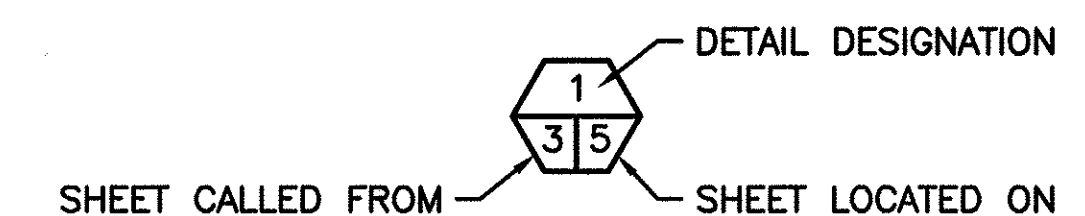
SHEET INDEX

- | # | Sheet Title |
|----|------------------------------------|
| 1 | COVER SHEET |
| 2 | VICINITY AND STATE MAPS |
| 3 | EXISTING SITE PLAN |
| 4 | EROSION CONTROL AND DEMO PLAN |
| 5 | UPPER AREA SITE PLAN |
| 6 | LOWER AREA SITE PLAN |
| 7 | PARKING LOT AREA AND DRAINAGE PLAN |
| 8 | SECTION AND DETAILS |
| 9 | STORMWATER DETAILS AND NOTES |
| 10 | PLANTING PLAN |

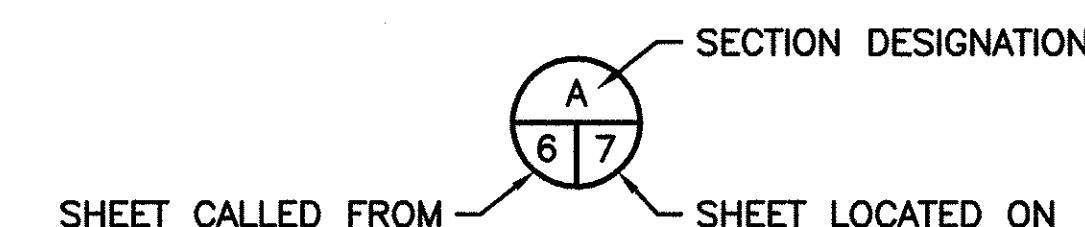
ABBREVIATIONS

ALUM	-	ALUMINUM
L	-	ANGLE
APPROX	-	APPROXIMATELY
BM	-	BENCH MARK
CB	-	CATCH BASIN
CL	-	CENTERLINE
CMP	-	CORRUGATED METAL PIPE
CLR	-	CLEARANCE
CONC	-	CONCRETE
CSBC	-	CRUSHED SURFACE BASE COURSE
CSTC	-	CRUSHED SURFACE TOP COURSE
CY	-	CUBIC YARDS
DIA, Ø	-	DIAMETER
E	-	EASTING
ELEV	-	ELEVATION
FB	-	FLAT BAR
FTG	-	FOOTING
GALV	-	GALVANIZED
ID	-	INSIDE DIAMETER
IE	-	INVERT ELEVATION
LF	-	LINEAR FEET
MFG	-	MANUFACTURER'S
MISC	-	MISCELLANEOUS
N	-	NORTHING
N.I.C	-	NOT IN CONTRACT
OC	-	ON CENTER
OD	-	OUTSIDE DIAMETER
PL	-	PLATE
REQ'D	-	REQUIRED
SEC	-	SECTION
SF	-	SQUARE FEET
SIM	-	SIMILAR
SL	-	SLOPE
SPEC'S	-	PROJECT SPECIFICATIONS
SS	-	STAINLESS STEEL
TYP	-	TYPICAL
WS	-	WATER SURFACE

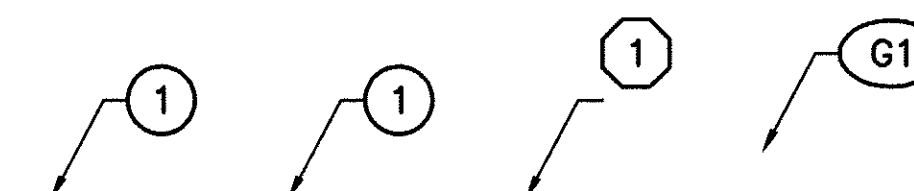
SHEET SYMBOLS



DETAIL



SECTION



NOTE REFERENCE

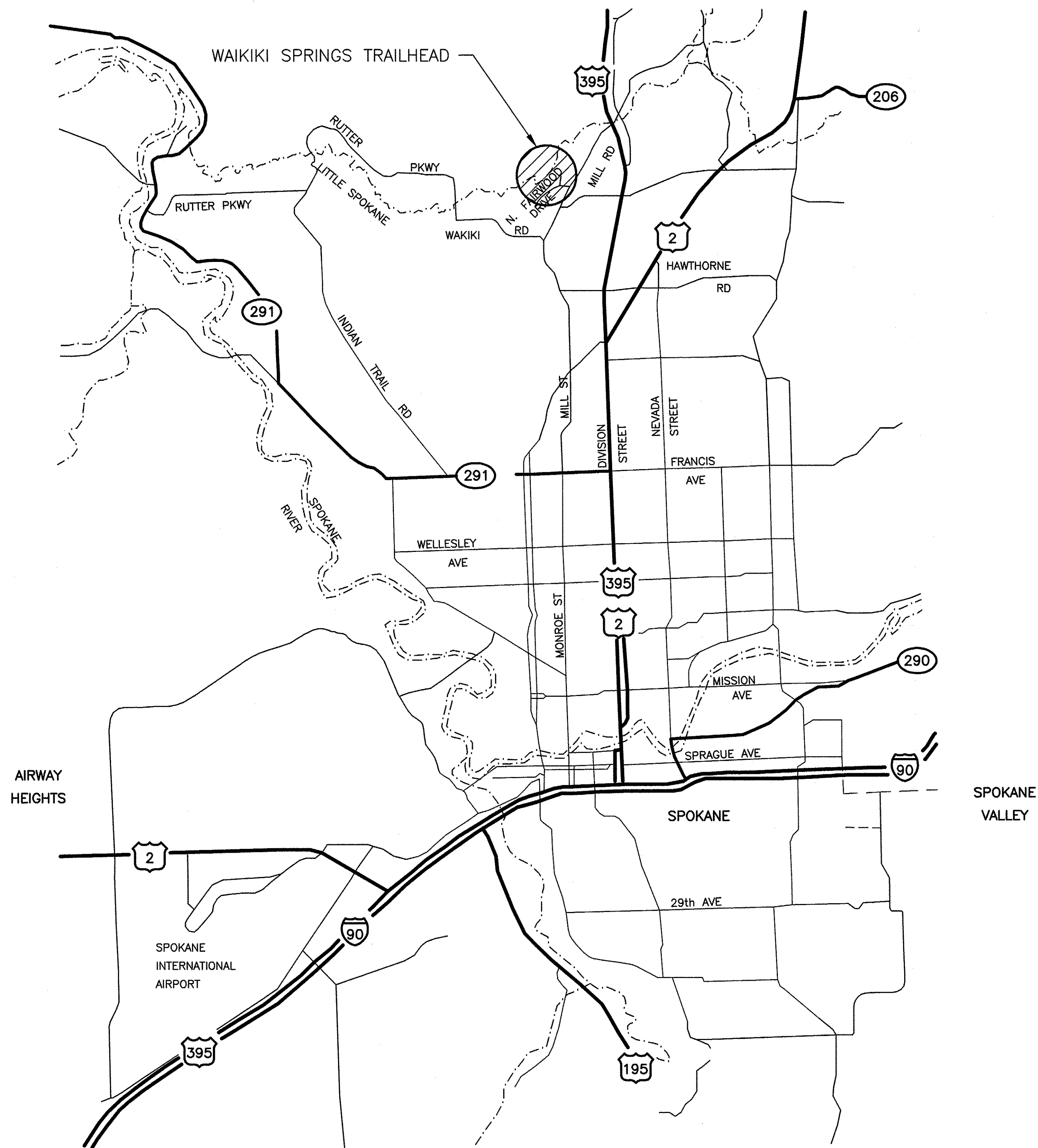
REFERENCE DESIGNATION TO A
NOTE, A PART, OR MATERIAL IN A
SCHEDULE/TABLE



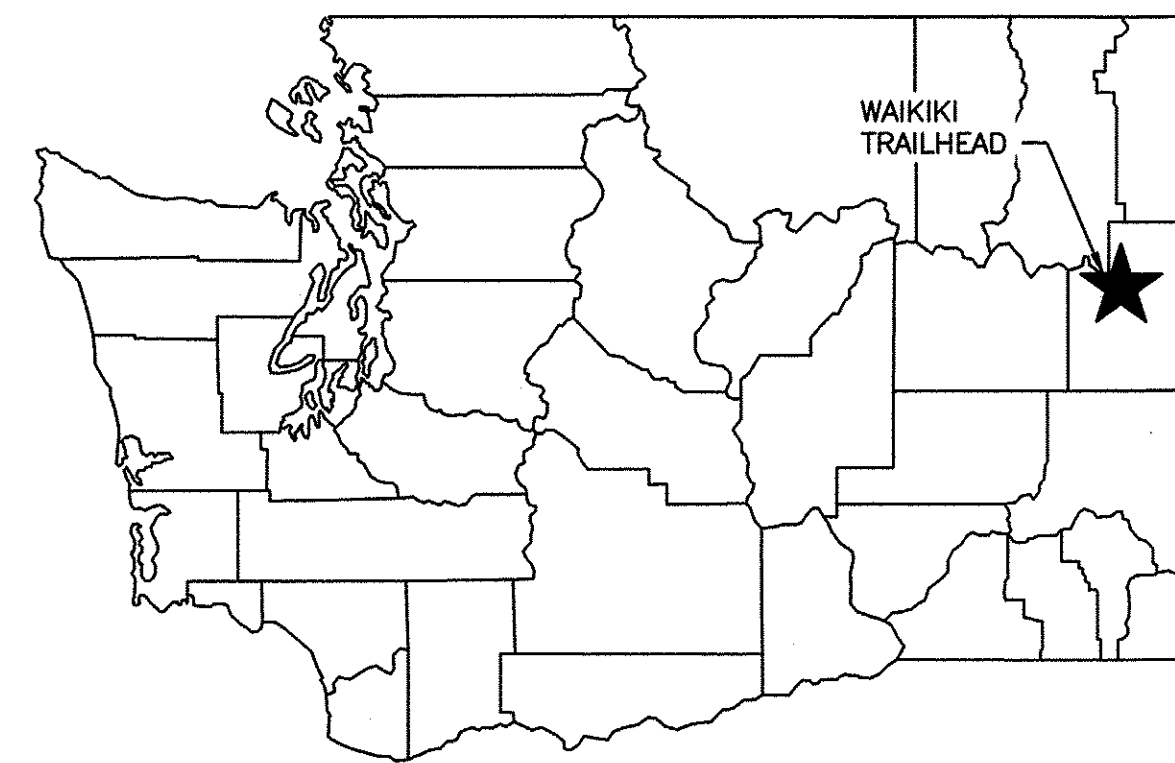
KNOW WHAT'S BELOW
CALL BEFORE YOU DIG

PROJECT NO.
SE:R205:2021-1

SHEET	OF
1	10

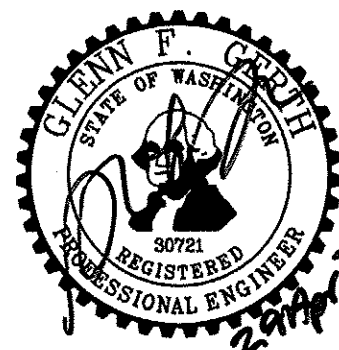


VICINITY MAP
NOT TO SCALE



STATE MAP
NOT TO SCALE

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER	<i>[Signature]</i>	DATE: 29 Apr 21	
PROGRAM		DATE:	

DESIGNED BY J. HANSEN
CHECKED BY N. WHITE
DRAWN BY D. HENNING
DATE 04/29/2021

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

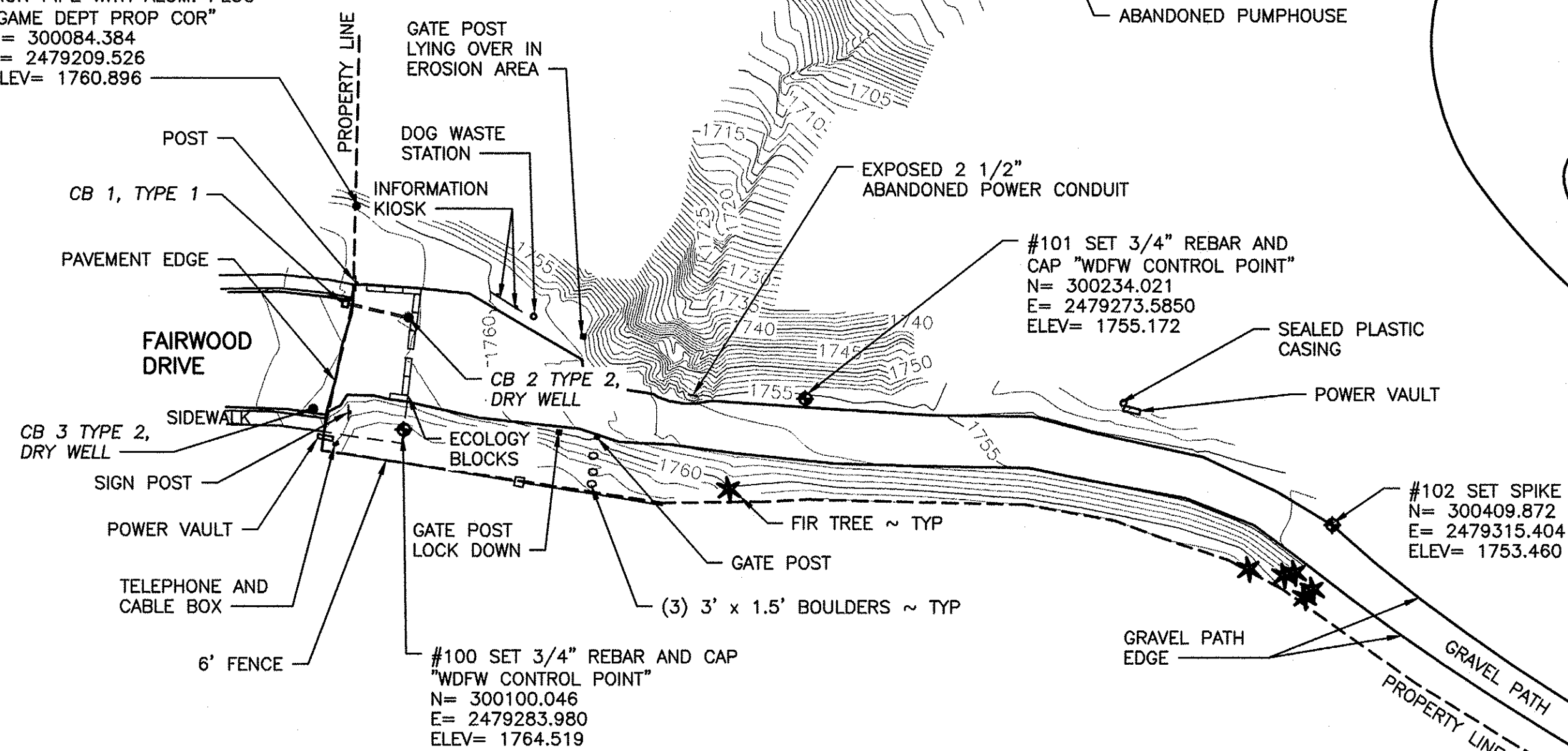
WAIKIKI TRAILHEAD
VICINITY AND STATE MAPS

PROJECT NO.
SE:R205:2021-1

SHEET OF
2 10



3000 FOUND 1 1/2"
IRON PIPE WITH ALUM. PLUG
"GAME DEPT PROP COR"
N= 300084.384
E= 2479209.526
ELEV= 1760.896

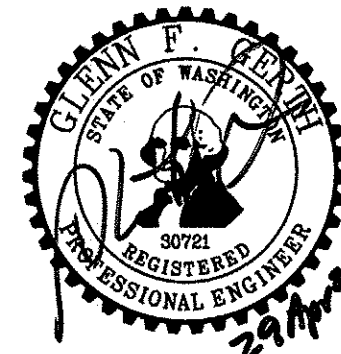


EXISTING SITE PLAN

SCALE: 1" = 40'



WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER			DATE: 29 Apr 21
PROGRAM			DATE: 04/29/2021

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

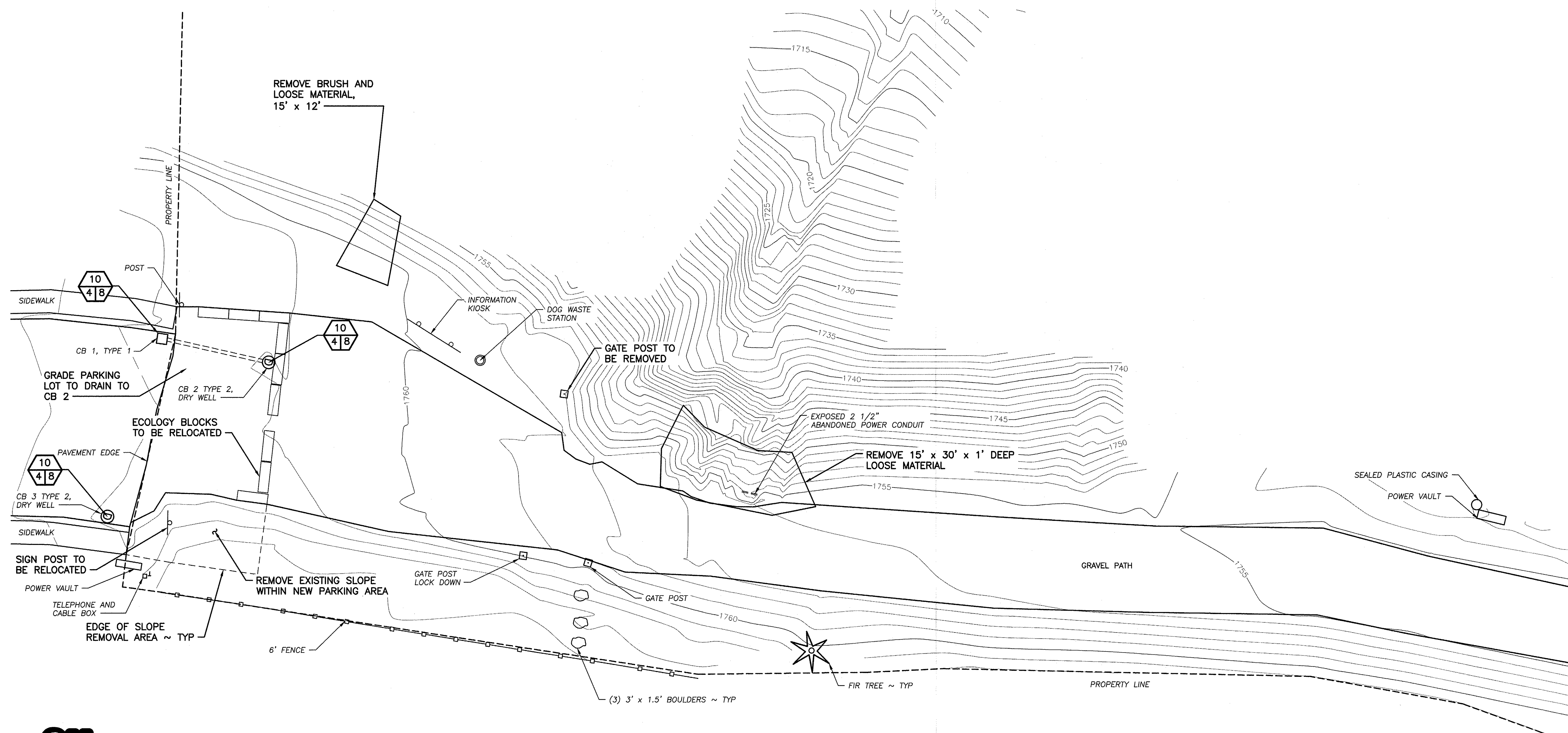
WAIKIKI TRAILHEAD
EXISTING SITE PLAN

PROJECT NO.
SE:R205:2021-1

SHEET	OF
3	10



NOTE:
PROTECT ALL EXISTING TREES AND MINIMIZE
DISTURBANCE OF OTHER VEGETATION TO REMAIN.



Know what's below.
Call before you dig.

EROSION CONTROL AND DEMO PLAN

SCALE: 1" = 10'



WASHINGTON DEPARTMENT OF
FISH & WILDLIFE

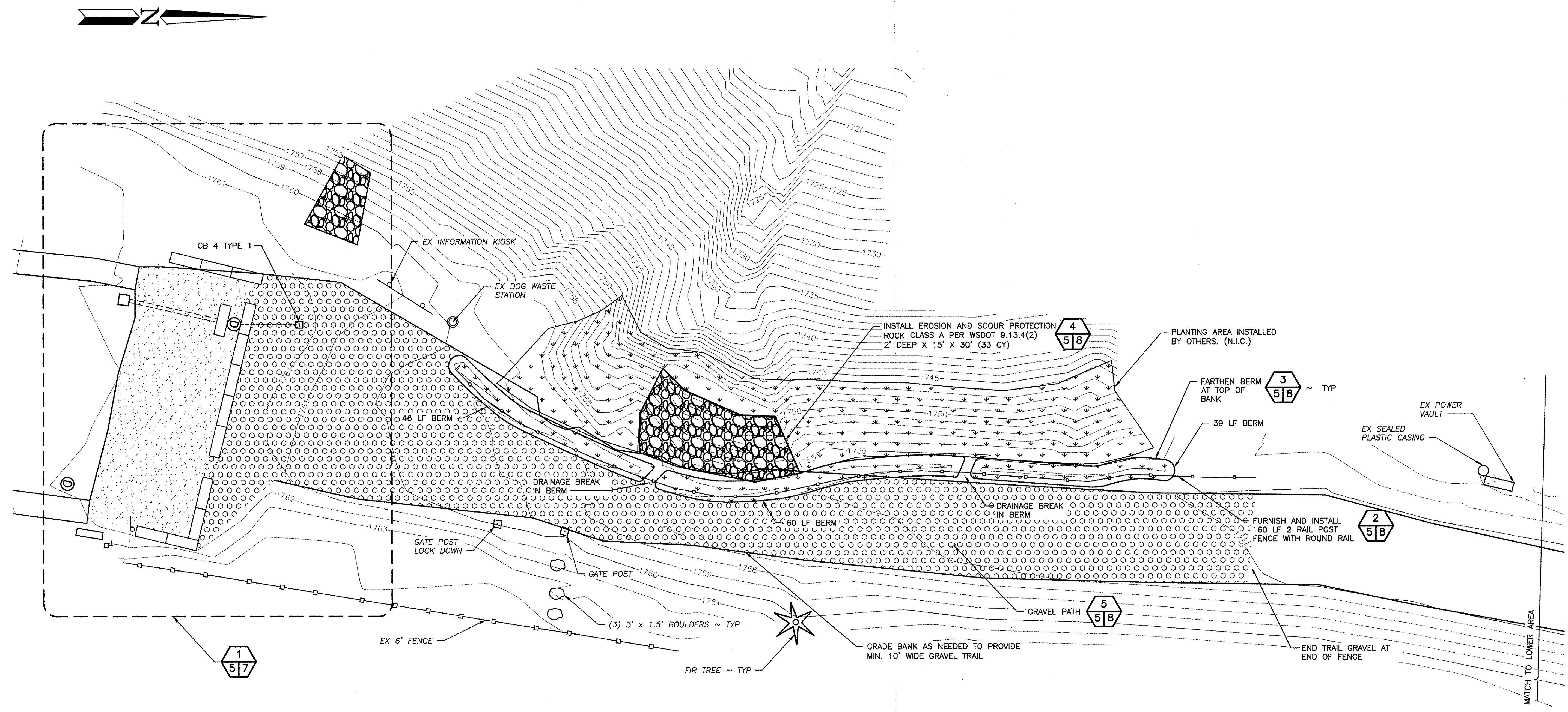


SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER	<i>[Signature]</i>	DATE: 29 Apr 21	
PROGRAM		DATE: 04/29/2021	

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT	
WAIKIKI TRAILHEAD	
EROSION CONTROL AND DEMO PLAN	

PROJECT NO. SE:R205:2021-1	
SHEET 4	OF 10

NOTE:
 SITE LAYOUT WILL BE REVIEWED DURING PRE-CONSTRUCTION MEETING.
 CONTRACTOR RESPONSIBLE FOR ALL FIELD STAKING. ENGINEER SHALL
 APPROVE PRIOR TO CONSTRUCTION.

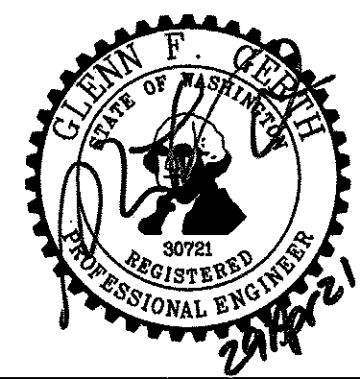


UPPER AREA SITE PLAN
 SCALE: 1" = 10'

0 2 6 10 20
 1"=10' 22x34
 1"=20' 11x17

- LEGEND
- PARKING LOT
 - PATH GRAVEL
 - EROSION AND SCOUR PROTECTION
 - PLANTING AREA
 - RAIL FENCE

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER	DATE: 29 Apr 21	DESIGNED BY J. HANSEN	CHECKED BY N. WHITE
PROGRAM	DATE: 04/29/2021	DRAWN BY D. HENNING	

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

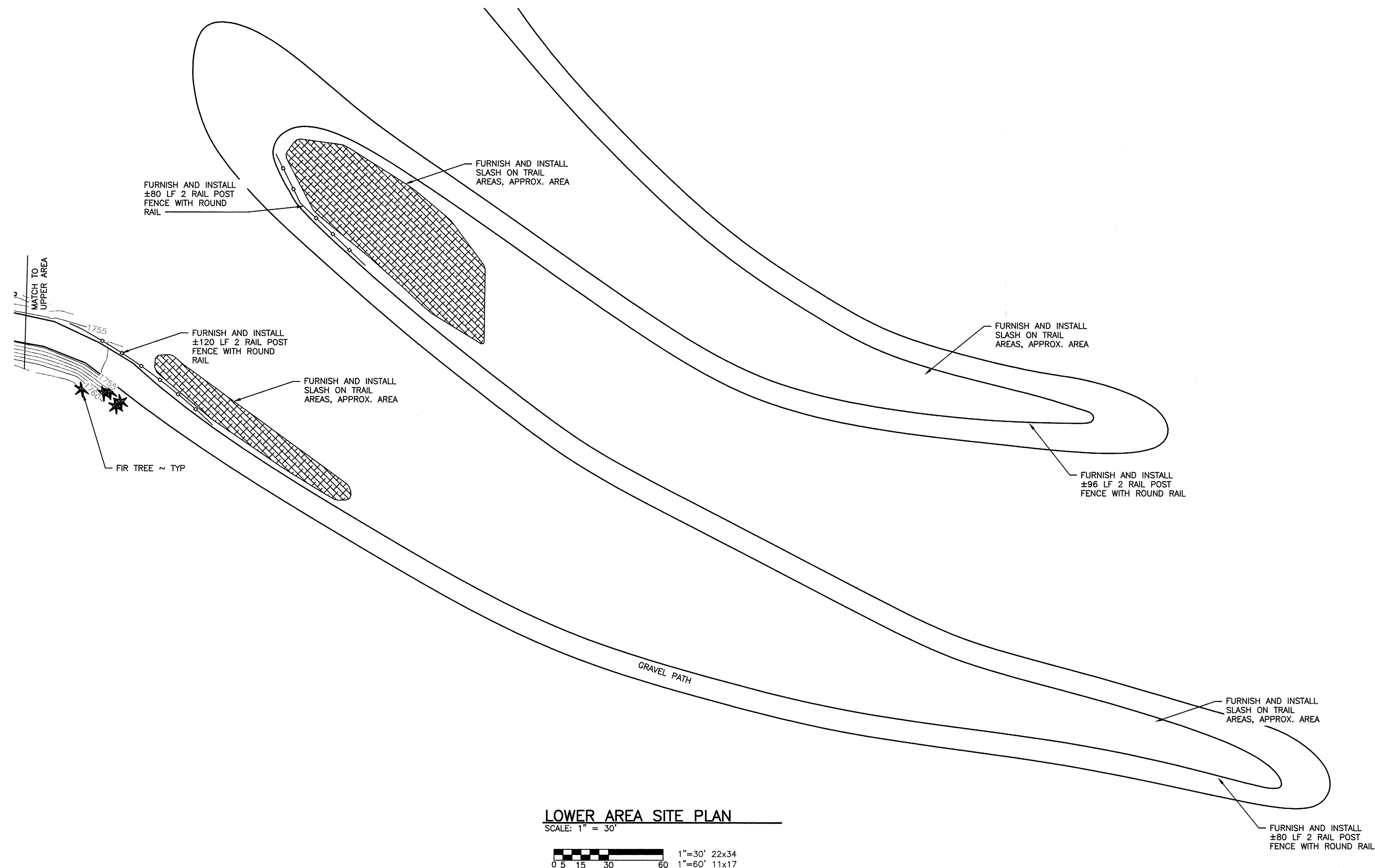
WAIKIKI TRAILHEAD
 UPPER AREA SITE PLAN

PROJECT NO.
 SE:R205:2021-1

SHEET 5 OF 10



- NOTES:
1. LAYOUT OF FENCE LOCATION WILL BE LOCATED IN FIELD AND APPROVED BY ENGINEER.
 2. SLASH WILL BE PLACED LOOSELY ACROSS ROGUE TRAILS. (20 CY OF IMPORT SLASH PLUS IN SITE SLASH)



LOWER AREA SITE PLAN

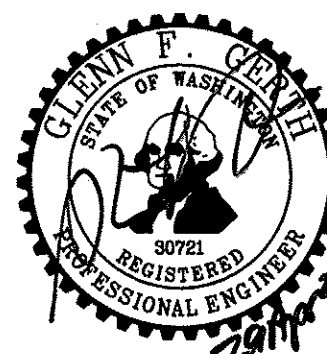
SCALE: 1" = 30'



LEGEND

- APPROX SLASH AREA
- RAIL FENCE

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE

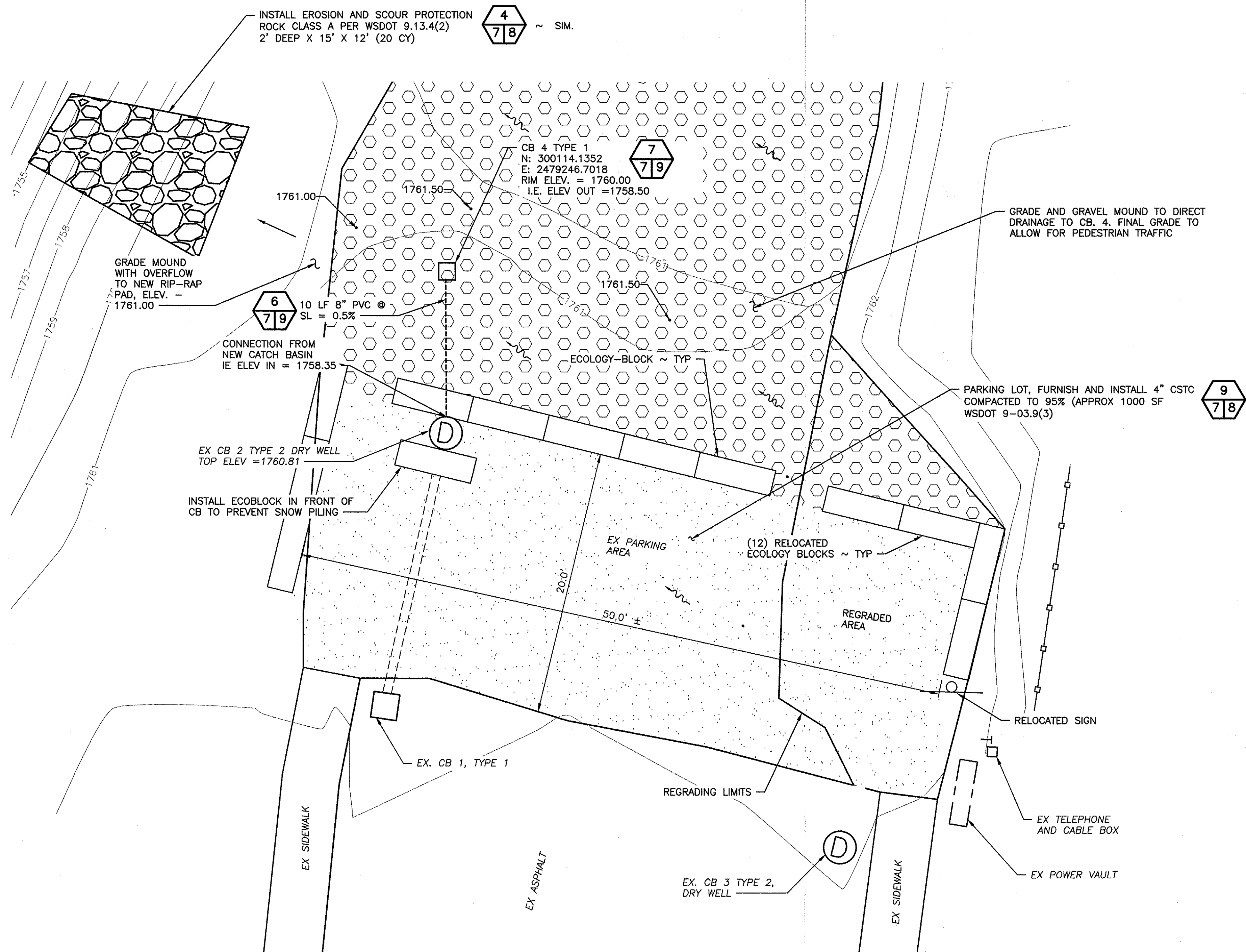


SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER	DATE: 20Apr21	DESIGNED BY J. HANSEN	CHECKED BY N. WHITE
PROGRAM	DATE: 04/29/2021	DRAWN BY D. HENNING	

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

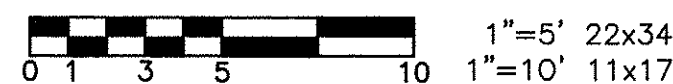
WAIKIKI TRAILHEAD
LOWER AREA SITE PLAN

PROJECT NO. SE:R205:2021-1	
SHEET 6	OF 10



PARKING LOT AREA AND DRAINAGE PLAN

SCALE: 1" = 5'



LEGEND

- PARKING LOT
- PATH GRAVEL
- EROSION AND SCOUR PROTECTION
- RUN OFF DIRECTION

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER	<i>[Signature]</i>	DATE: 2/29/21	
PROGRAM		DATE: 04/29/2021	

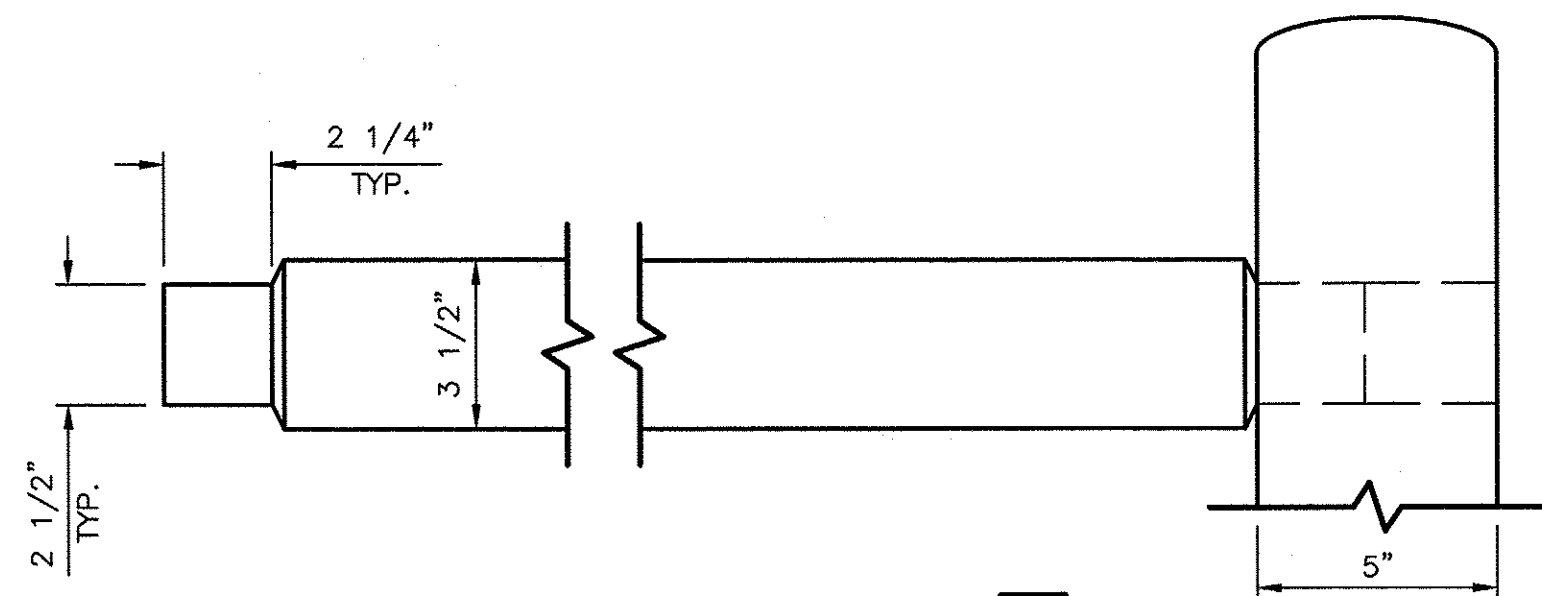
DESIGNED BY J. HANSEN
CHECKED BY N. WHITE
DRAWN BY D. HENNING
DATE 04/29/2021

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

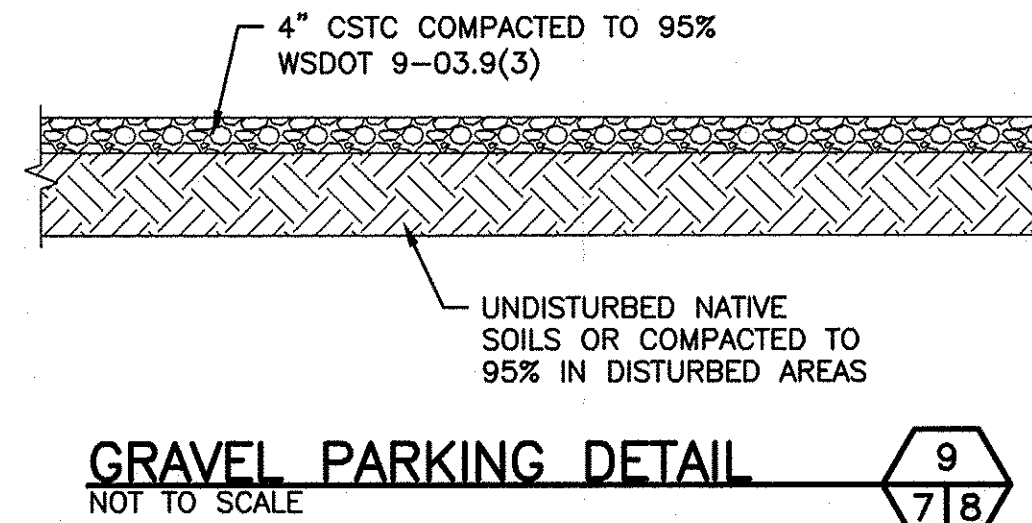
WAIKIKI TRAILHEAD
PARKING LOT AREA AND DRAINAGE PLAN

PROJECT NO.
SE:R205:2021-1

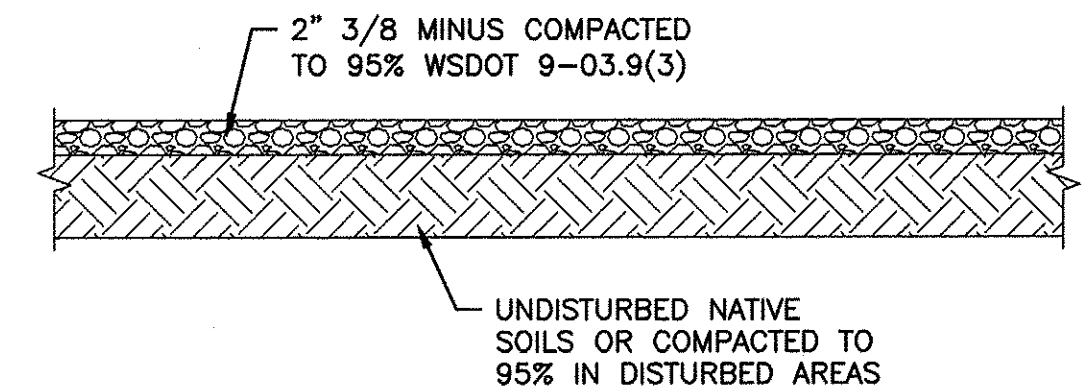
SHEET
7
OF
10



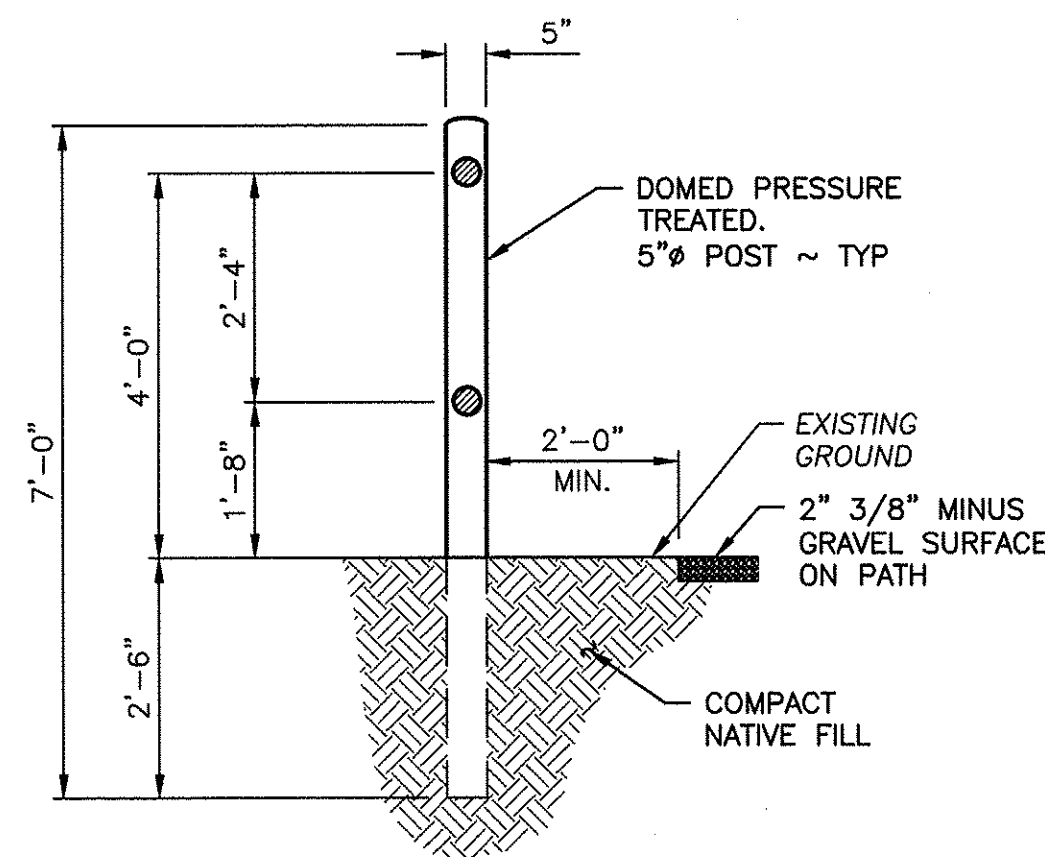
RAIL DETAIL
SCALE: 3\"/>



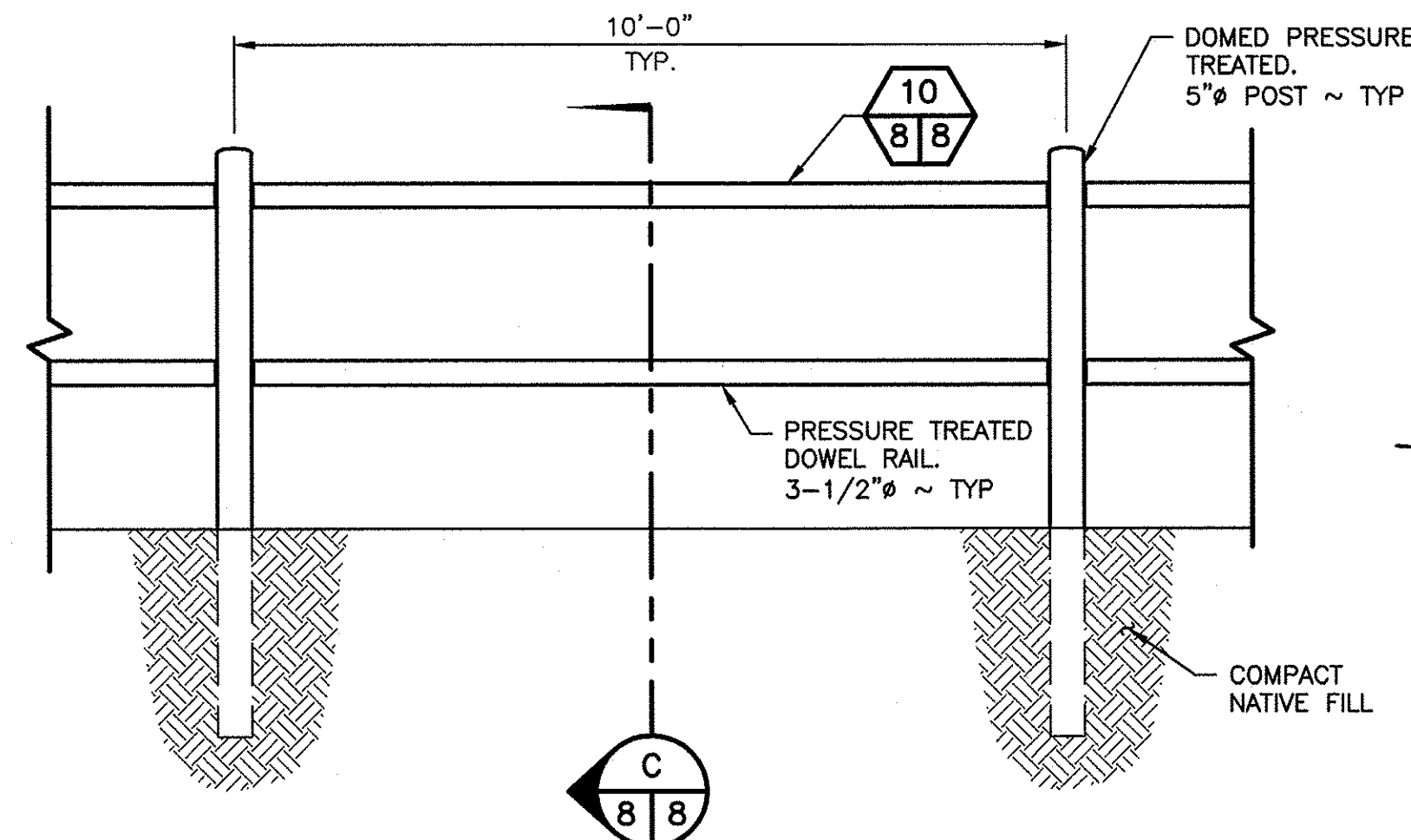
GRAVEL PARKING DETAIL
NOT TO SCALE



GRAVEL PATH DETAIL
NOT TO SCALE



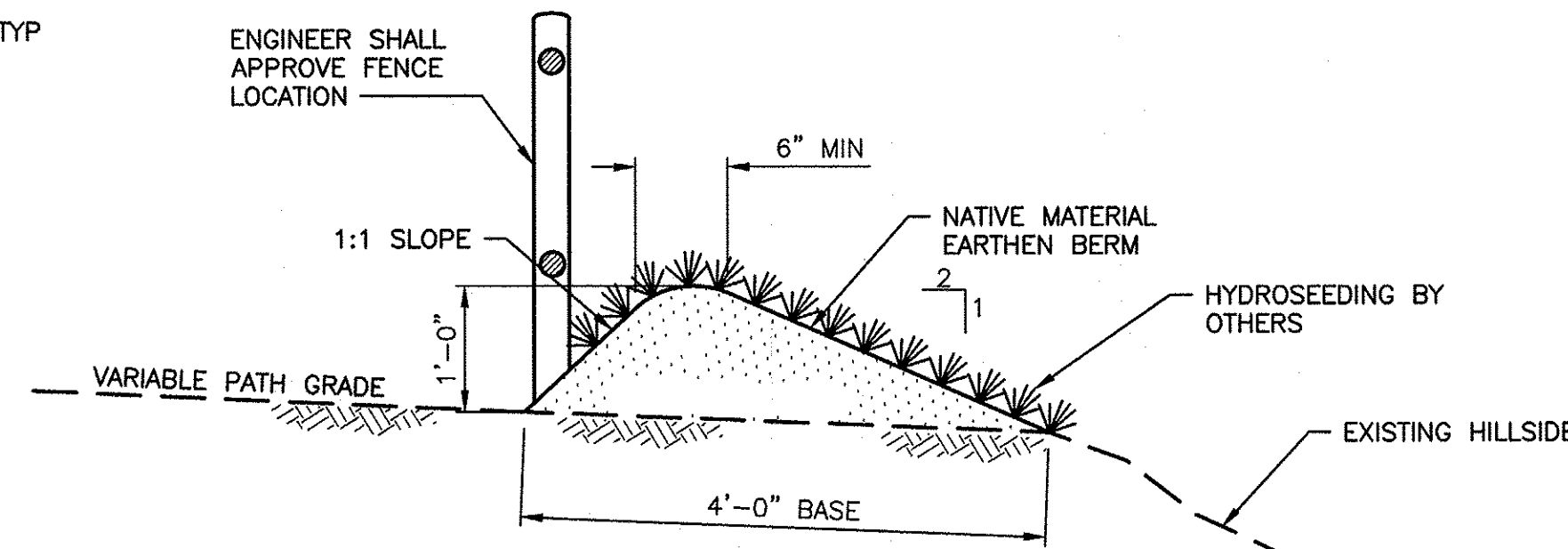
SECTION
SCALE: 1/2\"/>



WOODEN RAIL FENCE
SCALE: 1/2\"/>

NOTES:

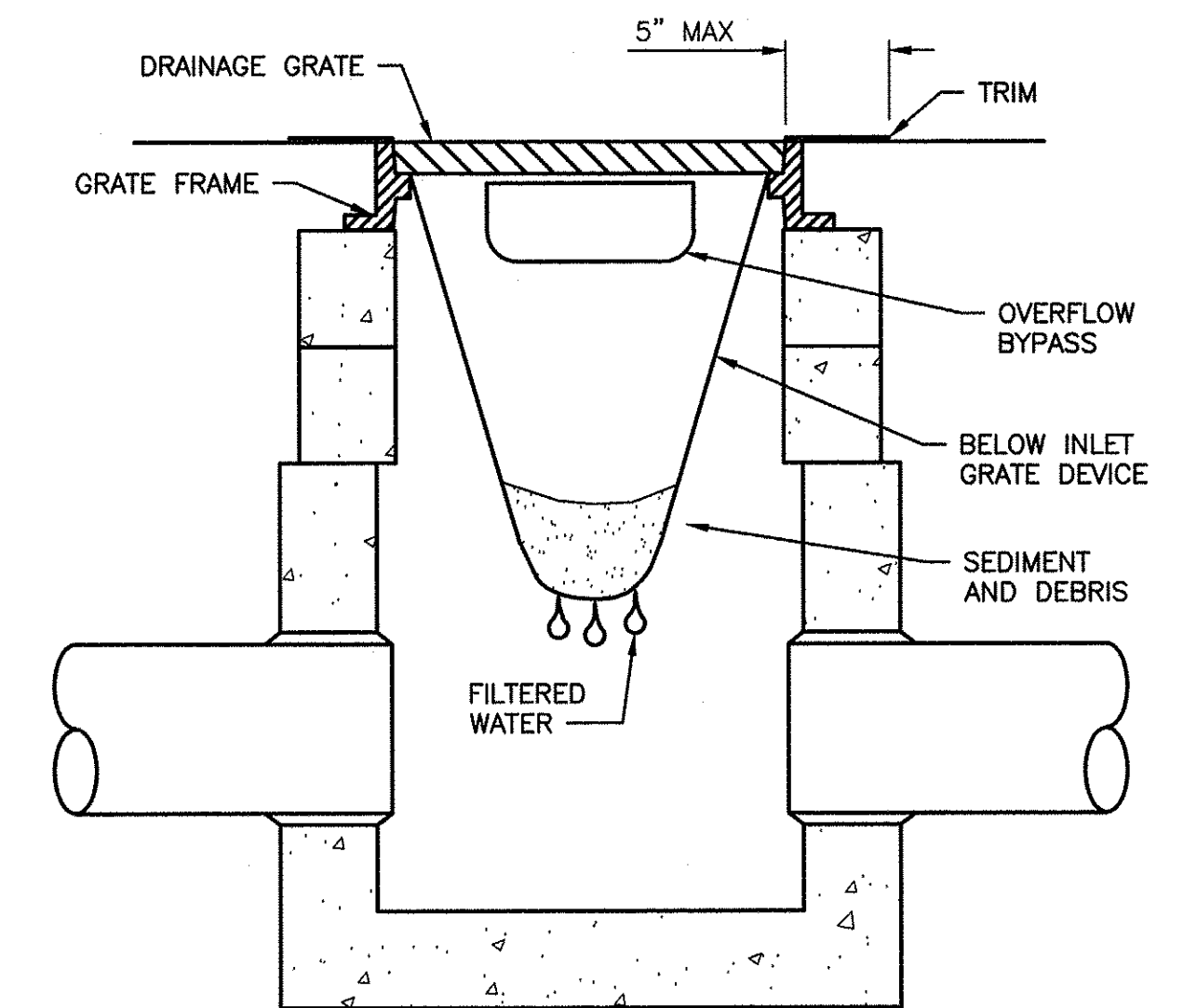
1. ALL POSTS & RAILS SHALL BE PRESSURE TREATED (CCA TYPE 2 PRESERVATIVE AT 0.4 LB/CU FT RETENTION MIN.)
2. USE 20d GALVANIZED NAILS MINIMUM, AT BRACING.
3. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. POST SIZE AND LENGTH MAY VARY BY MANUFACTURER.



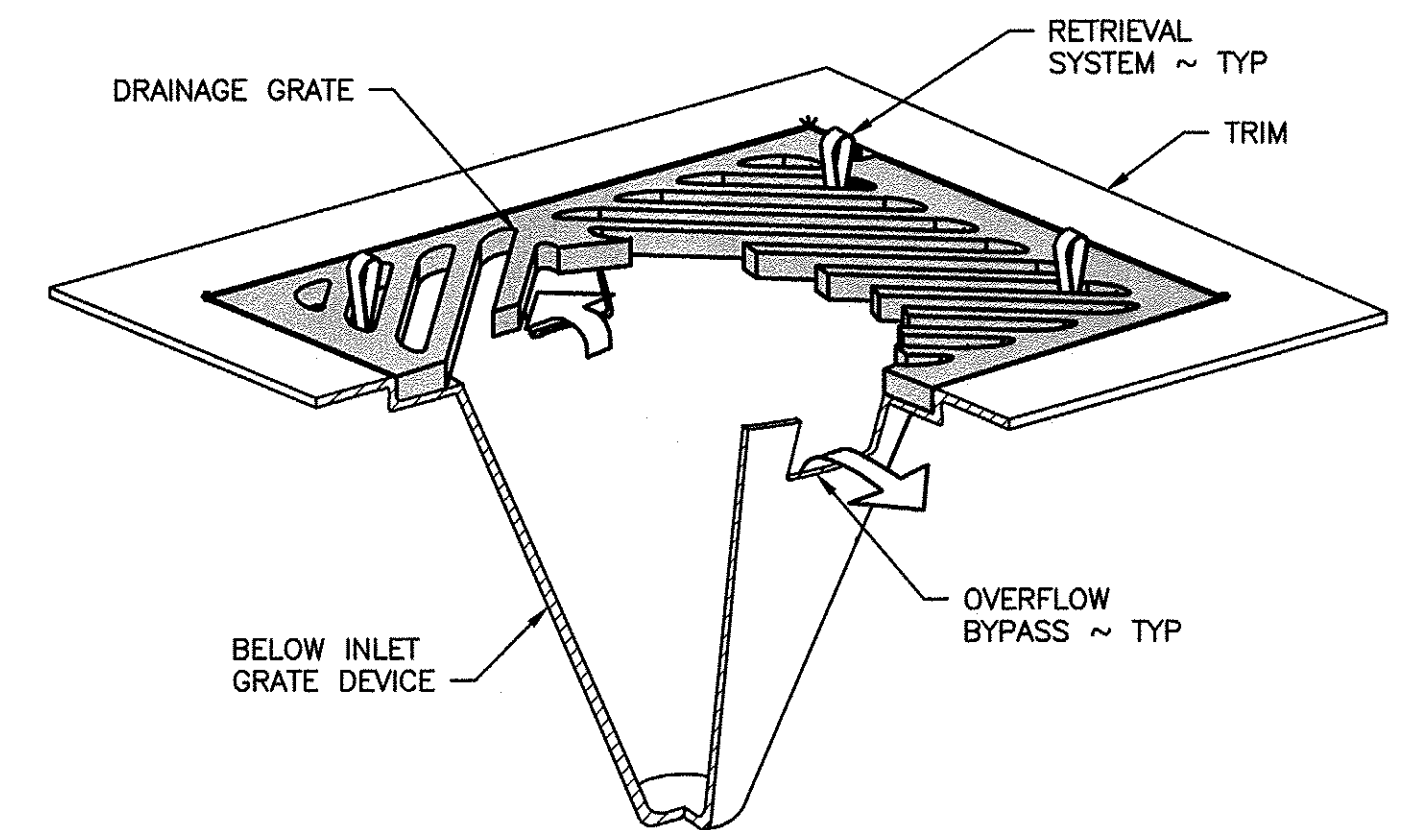
EARTHEN BERM DETAIL
SCALE: 1/2\"/>

NOTES:

1. BERM SHALL HAVE A HEIGHT OF 1'-0\"/>
2. BERMS SHALL BE USED TO INTERCEPT AND DIVERT DRAINAGE TO DESIGNED OUTLETS.
3. BERMS SHALL HAVE FREE FLOWING DESIGNATED OUTLETS 1' WIDE WHERE SHOWN ON SHEET 5.



SECTION

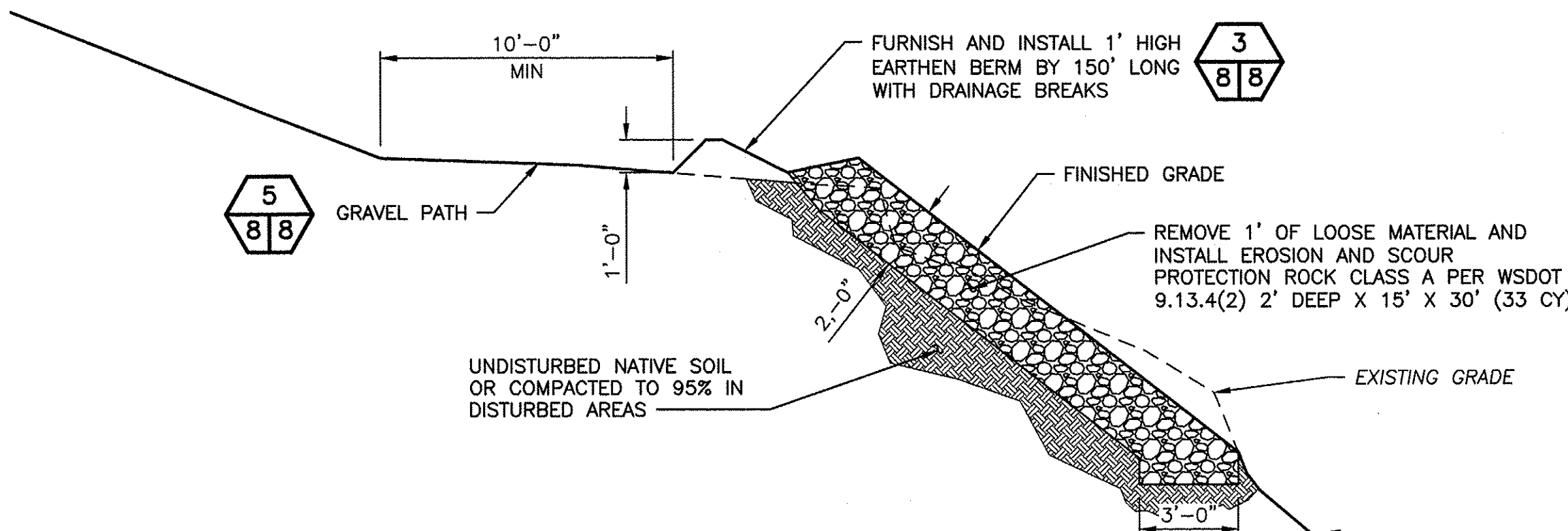


ISOMETRIC

CATCH BASIN SEDIMENT INSERT
NOT TO SCALE

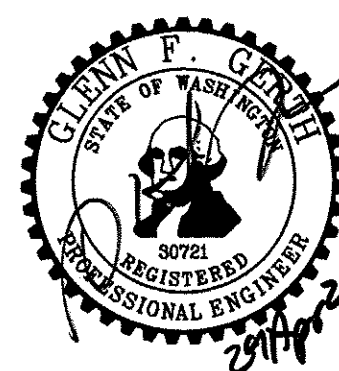
NOTES:

1. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
2. THE BIGD SHALL HAVE A BUILT-IN HIGH FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
3. THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD WSDOT SPECIFICATION 8-01.3(15).



EROSION PROTECTION SECTION
NOT TO SCALE

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER		DATE: 2/14/2021	
PROGRAM		DATE: 04/29/2021	

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

WAIKIKI TRAILHEAD
SECTION AND DETAILS

PROJECT NO.

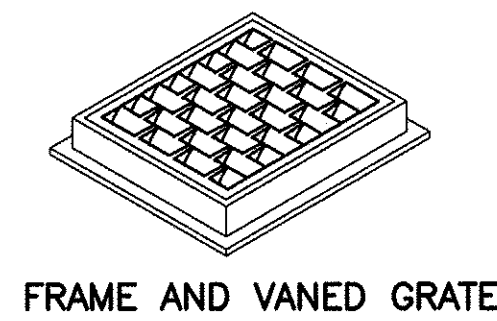
SE:R205:2021-1

SHEET

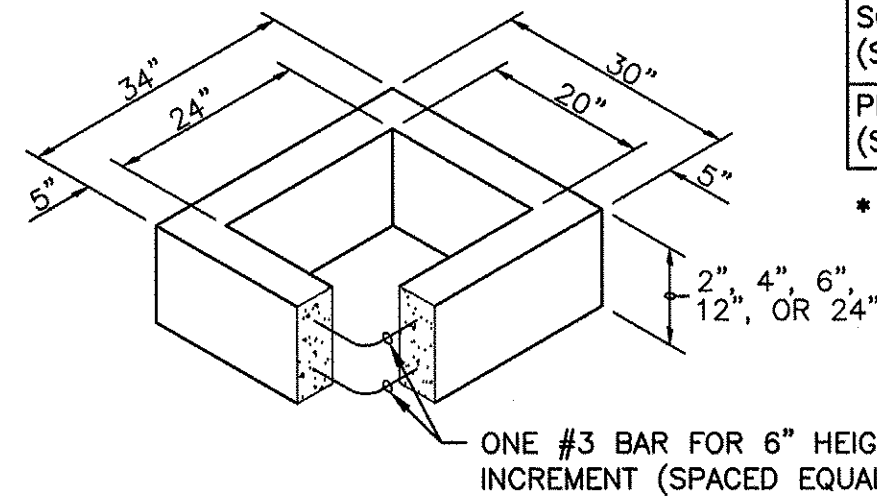
8

OF

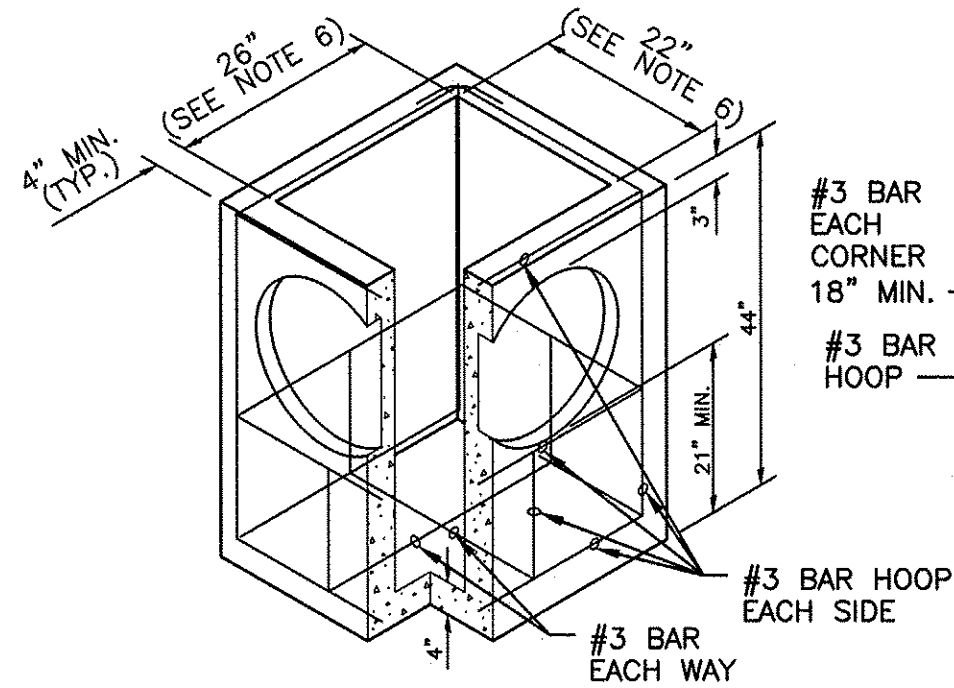
10



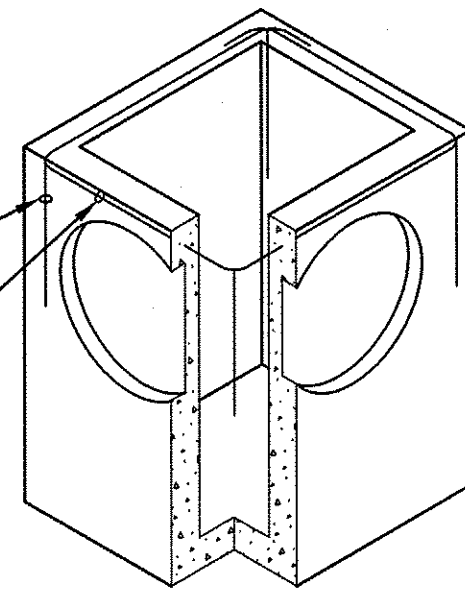
FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



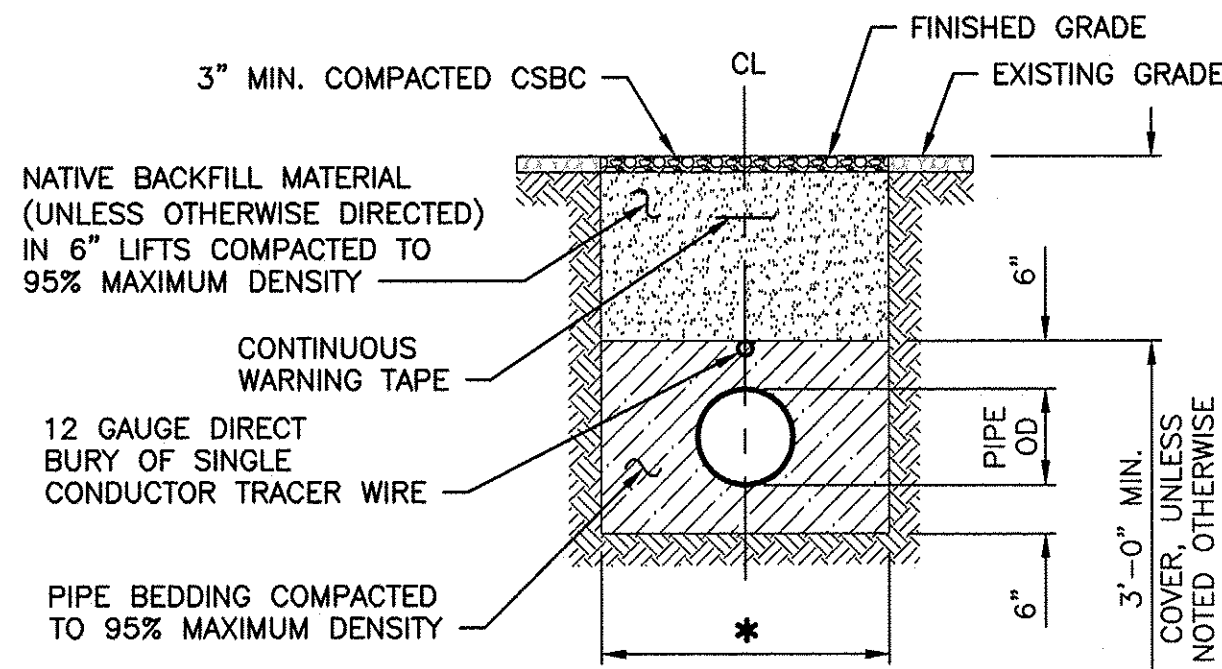
PRECAST BASE SECTION



(SEE NOTE 1)
ALTERNATIVE PRECAST
BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAX INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP* (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

* CORRUGATED POLYETHYLENE STORM SEWER PIPE



PIPE TRENCH UNDER
EXISTING GRAVEL AREAS
NOT TO SCALE



* TRENCH WIDTH DIMENSIONS FOR PIPES LESS THAN 18 INCHES ARE OUTSIDE DIAMETER (OD) PLUS 12" AND FOR PIPES GREATER THAN OR EQUAL TO 18 INCHES ARE OUTSIDE DIAMETER (OD) PLUS 24"

WSDOT CATCH BASIN TYPE 1
NOT TO SCALE



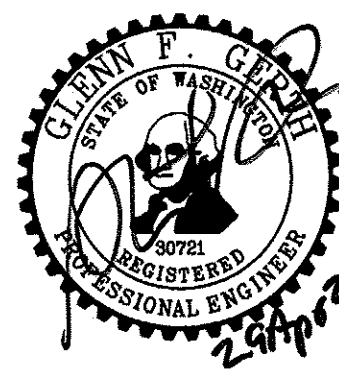
NOTES:

- AS ACCEPTABLE ALTERNATIVES TO THE REBAR SHOWN IN THE PRECAST BASE SECTION, FIBERS (PLACED ACCORDING TO THE STANDARD SPECIFICATIONS), OR WIRE MESH HAVING A MINIMUM AREA OF 0.12 SQUARE INCHES PER FOOT SHALL BE USED WITH THE MINIMUM REQUIRED REBAR SHOWN IN THE ALTERNATIVE PRECAST BASE SECTION. WIRE MESH SHALL NOT BE PLACED IN THE KNOCKOUTS.
- THE KNOCKOUT DIAMETER SHALL NOT BE GREATER THAN 20". KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM. PROVIDE A 1.5" MINIMUM GAP BETWEEN THE KNOCKOUT WALL AND THE OUTSIDE OF THE PIPE. AFTER THE PIPE IS INSTALLED, FILL THE GAP WITH JOINT MORTAR IN ACCORDANCE WITH STANDARD SPECIFICATION 9-04.3.
- THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE LOWEST PIPE INVERT SHALL BE 5'.
- THE FRAME AND GRATE MAY BE INSTALLED WITH THE FLANGE DOWN, OR INTEGRALLY CAST INTO THE ADJUSTMENT SECTION WITH FLANGE UP.
- THE PRECAST BASE SECTION MAY HAVE A ROUNDED FLOOR, AND THE WALLS MAY BE SLOPED AT A RATE OF 1:24 OR STEEPER.
- THE OPENING SHALL BE MEASURED AT THE TOP OF THE PRECAST BASE SECTION.
- ALL PICKUP HOLES SHALL BE GROUTED FULL AFTER THE BASIN HAS BEEN PLACED.

CIVIL GENERAL NOTES:

- THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL DEBRIS FROM DEMOLITION AT CONTRACTORS EXPENSE UNLESS NOTED OTHERWISE.
- ALL STRUCTURE COORDINATES ARE TO OUTSIDE CORNER OF COLUMN OR STRUCTURE UNLESS NOTED OR SHOWN OTHERWISE.
- THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS OLD GUNITE, PIPING, ROCK RUBBLE ETC... AT AN APPROVED LANDFILL OR, OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
- GRADING POINTS ARE INTENDED TO GENERALLY LOCATE THE GRADE. WORK POINTS ARE INTENDED TO LOCATE STRUCTURES, PIPELINES, EQUIPMENT, AND OTHER PHYSICAL FEATURES. THE GRADING AND EXCAVATION GRADE POINTS SHOWN REPRESENT THE MINIMUM REQUIREMENTS. GRADING POINTS MAY BE ADJUSTED WITH THE APPROVAL OF THE WDW REPRESENTATIVE IN THE FIELD. WORK POINTS SHALL ONLY BE ADJUSTED UPON WRITTEN APPROVAL OF THE ENGINEER. ADDITIONAL EXCAVATION MAY BE REQUIRED TO SUIT THE CONTRACTOR'S MEANS AND METHODS TO COMPLETE THE WORK. SUCH ADDITIONAL EXCAVATIONS SHALL BE CONSIDERED INCIDENTAL AND INCORPORATED INTO THE BID PRICE.
- ALL GRAVEL PAVING AND SURFACING SHALL OCCUR AFTER ALL CONSTRUCTION IS COMPLETE. ANY GRAVEL PAVING OR SURFACING THAT OCCURS PRIOR TO COMPLETION OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
- SLOPE GRADE UNIFORMLY BETWEEN ELEVATIONS SHOWN.
- PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY EXISTING UNDERGROUND FACILITIES, INCLUDING ALL WATER, SEWER, STORM DRAIN, GAS, PETROLEUM PRODUCTS, OR OTHER PIPELINES; ALL BURIED ELECTRIC POWER, COMMUNICATIONS, OR TELEVISION CABLES; ALL TRAFFIC SIGNAL AND STREET LIGHTING FACILITIES; AND ALL ROADWAY, STATE HIGHWAY, AND RAILROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE AUTHORITIES REPRESENTING THE OWNERS OR AGENCIES RESPONSIBLE FOR SUCH FACILITIES NOT LESS THAN 3 DAYS NOR MORE THAN 7 DAYS PRIOR TO EXCAVATION SO THAT A REPRESENTATIVE OF SAID OWNERS OR AGENCIES CAN BE PRESENT DURING SUCH WORK IF THEY SO DESIRE. IN THE CASE OF THE UNDERGROUND UTILITY SERVICE ALERT CENTER, THIS NOTICE WILL GIVE THEM TIME TO MARK THE LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL OR LOCAL UNDERGROUND SERVICE ALERT COMPANY AT LEAST 3 DAYS, BUT NO MORE THAN 7 DAYS, PRIOR TO SUCH EXCAVATION.
- SEE SPECIFICATIONS FOR STRIPPING REQUIREMENTS.
- STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED.
- ALL PIPE TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH DETAIL C601 FOR FLEXIBLE PIPE. THE PIPING SHOWN ON THESE PLANS SHALL BE RESTRAINED JOINT DESIGN AT ALL SLEEVE TYPE COUPLINGS, UNLESS NOTED OTHERWISE.
- PIPE DIAMETERS SHOWN ON THE DRAWINGS FOR STEEL PIPE ARE NOMINAL DIAMETERS. SEE SPECIFICATIONS FOR DETERMINATION OF INSIDE DIAMETERS.
- ALL PIPE STATIONING IS RELATIVE TO EACH PIPE. STATIONING REPRESENTS THE HORIZONTAL LENGTH OF PIPE. IT DOES NOT REFLECT THE PIPE LENGTH.
- ALL WALL PENETRATIONS SHALL BE M-112, UNLESS NOTED OTHERWISE.
- ALL CONNECTIONS, MODIFICATION, FABRICATIONS TO EXISTING PIPES, STRUCTURES, FEATURES SHALL BE FIELD VERIFIED.

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER		DATE: 2/24/21	
PROGRAM		DATE:	

DESIGNED BY J. HANSEN
CHECKED BY N. WHITE
DRAWN BY D. HENNING
DATE 04/29/2021

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

WAIKIKI TRAILHEAD
STORMWATER DETAILS AND NOTES

PROJECT NO.

SE:R205:2021-1

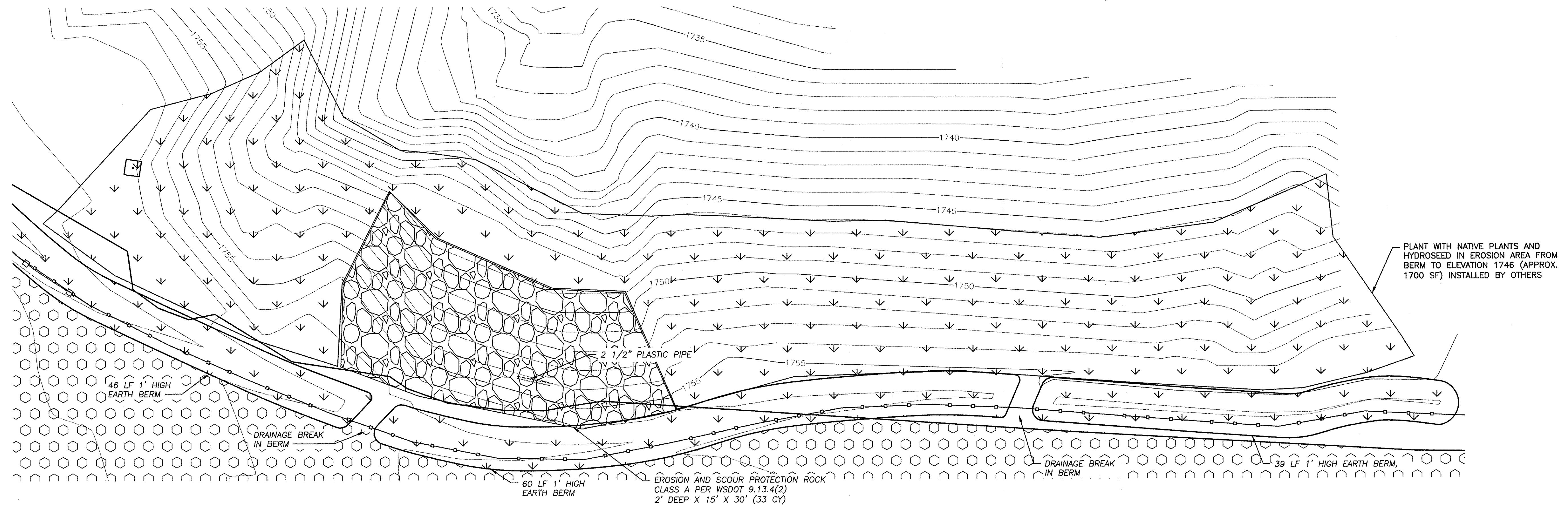
SHEET OF

9 10



NOTES:

1. PLANTING AND HYDROSEEDING BY OTHERS
2. PLANTS WILL BE NATIVE MIX OF SNOW BERRY, MOCK ORANGE, OREGON GRAPE, HAWTHORN, AND WILD ROSE (AS AVAILABLE)
3. PLANT DURING DORMANT SEASON.
4. SEED DURING GROWTH SEASON.



PLANTING PLAN

SCALE: 1" = 5'

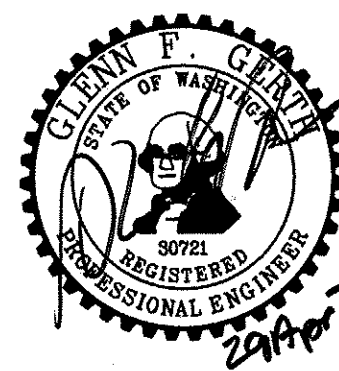


NOT IN CONTRACT

LEGEND

- PARKING LOT
- PATH GRAVEL
- EROSION AND SCOUR PROTECTION
- PLANTING AREA
- RAIL FENCE

WASHINGTON DEPARTMENT OF
FISH & WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
APPROVED AND RELEASED FOR CONSTRUCTION			
CHIEF ENGINEER		DATE: 29 Apr 21	
PROGRAM		DATE:	

DESIGNED BY J. HANSEN
CHECKED BY N. WHITE
DRAWN BY D. HENNING
DATE 04/29/2021

SWANSON LAKES WLA-WAIKIKI SPRINGS UNIT

WAIKIKI TRAILHEAD
PLANTING PLAN
FOR REFERENCE ONLY

PROJECT NO.
SE:R205:2021-1

SHEET OF
10 10