



# WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

## SUMMIT LAKE SUMMIT LAKE ACCESS RAMP RESTORATION TN:AXXX:12-1

### INDEX

#### SHEET NO.

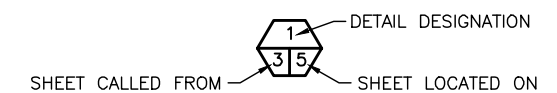
##### CIVIL

1. COVER SHEET
2. EXISTING SITE PLAN AND VICINITY MAP
3. GENERAL NOTES
4. TESC PLAN
5. TESC NOTES AND DETAILS
6. DEMOLITION PLAN
7. SITE PLAN / HORIZONTAL CONTROL
8. CULVERT PIPE PROFILE
9. CIVIL DETAILS
10. CIVIL DETAILS

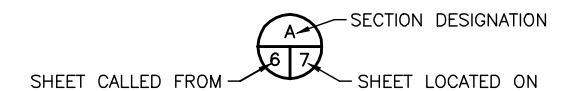
### ABBREVIATIONS

ALUM	-	ALUMINUM
L	-	ANGLE
APPROX.	-	APPROXIMATELY
BM	-	BENCH MARK
CL	-	CENTERLINE
CLR.	-	CLEARANCE
CONC	-	CONCRETE
Ø	-	DIAMETER
ELEV	-	ELEVATION
F.B.	-	FLAT BAR
F.C.	-	FISH CONDUIT
FTG	-	FOOTING
F.W.	-	FISHWAY
GALV	-	GALVANIZED
GA.	-	GAUGE
HSS	-	STRUCTURAL TUBING
ID	-	INSIDE DIAMETER
IE	-	INVERT ELEVATION
LFW	-	LOWER FISHWAY
LG	-	LONG
M.B.	-	MACHINE BOLT
MFG.	-	MANUFACTURER'S
MISC.	-	MISCELLANEOUS
MOD.	-	MODEL
OC	-	ON CENTER
OSB	-	ORIENTED STRAND BOARD
OD	-	OUTSIDE DIAMETER
PAV'T	-	ASPHALT CONCRETE PAVEMENT
PL	-	PLATE
PT	-	PRESSURE TREATED
REQ'D	-	REQUIRED
SEC.	-	SECTION
S.F.	-	SQUARE FEET
SHT.	-	SHEET
SPEC'S.	-	PROJECT SPECIFICATIONS
S.S.	-	STAINLESS STEEL
TYP	-	TYPICAL
UFW	-	UPPER FISHWAY
W.S.	-	WATER SURFACE

### SHEET SYMBOLS



#### DETAIL



#### SECTION

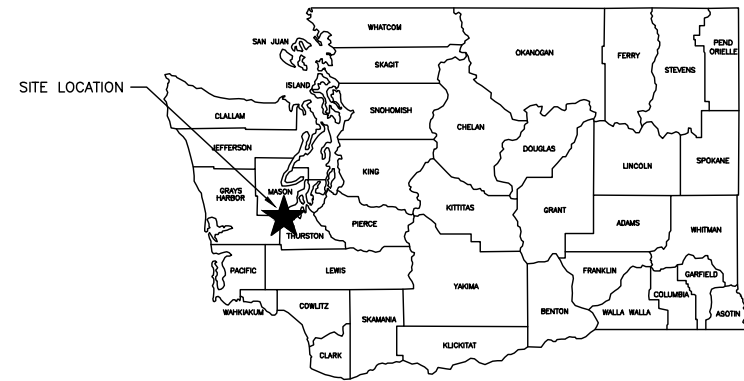


#### NOTE REFERENCE

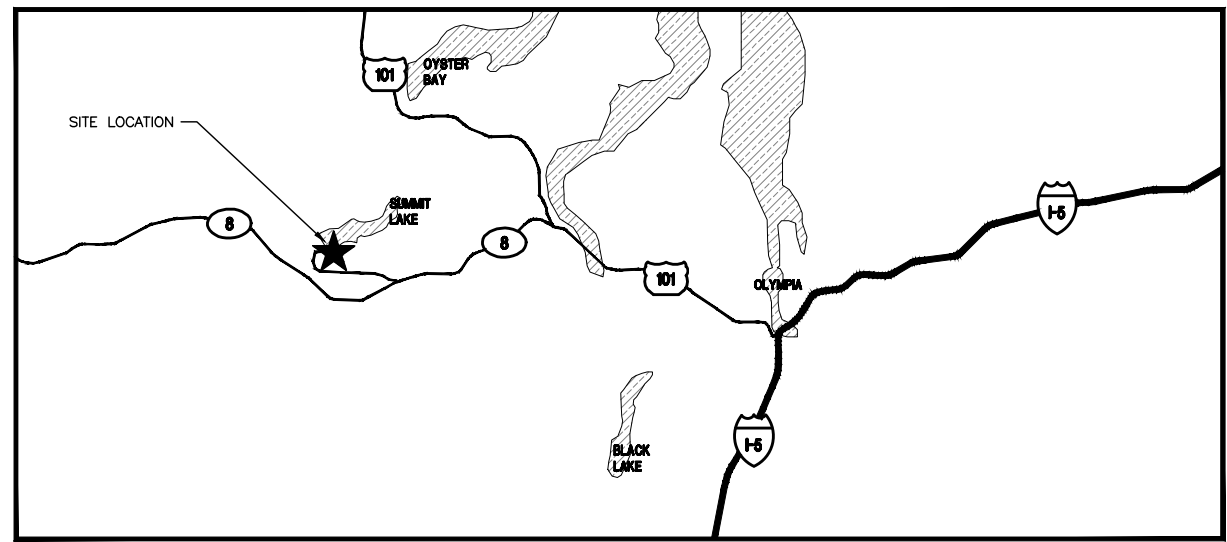
REFERENCE DESIGNATION TO NOTE  
APPEARING ON SAME SHEET OR A  
PART OR MATERIAL IN A SCHEDULE

## PRELIMINARY DESIGN

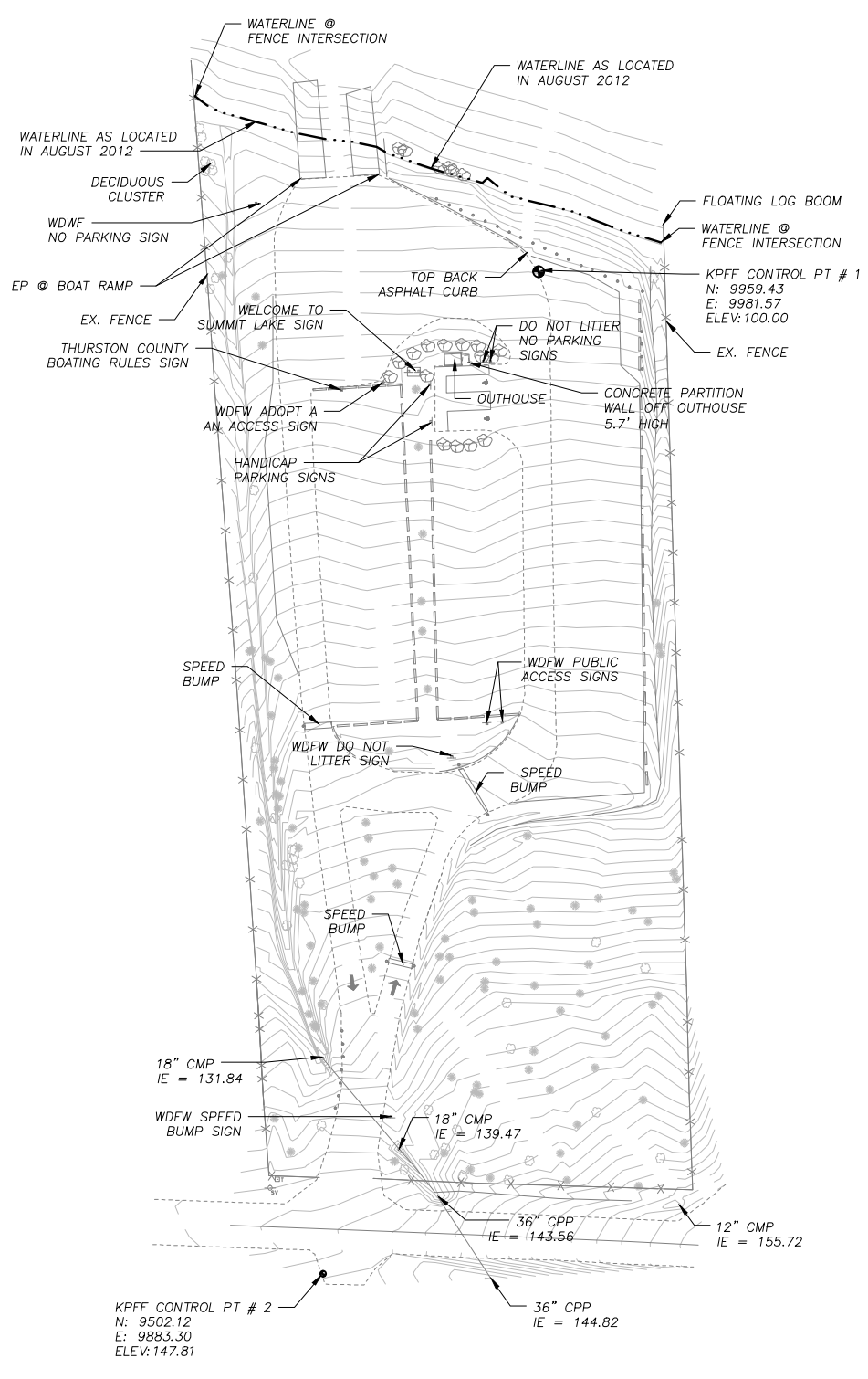
PROJECT NO. TN:AXXX:12-1	
SHEET	OF
1	1



STATE MAP  
NOT TO SCALE



VICINITY MAP  
NOT TO SCALE



EXISTING SITE PLAN  
SCALE: 1" = 40'



PRELIMINARY DESIGN

File: I:\12\112220 WDFW Access Sites\112220\_40 Summit Lake Access\Design\CAD\Axx\12x002 (Site-Vic. Map).dwg TAB:02  
 XREFS: X:\WDFW\_Templates\A-S4\12085TOP02M

**kpf** Consulting Engineers  
 2407 North 31st Street, Suite 100  
 Tacoma, Washington 98407  
 (253) 396-0150  
 Fax (253) 396-0162

WASHINGTON STATE  
 DEPARTMENT OF FISH AND WILDLIFE



SYM	DATE	REVISION DESCRIPTION	BY
		APPROVED AND RELEASED FOR CONSTRUCTION	
CHIEF ENGINEER		DATE	
PROGRAM		DATE	

0 1"  
 BAR MEASURES  
 ONE INCH ON  
 ORIGINAL DRAWINGS

DESIGNED BY MRK  
 CHECKED BY SWK  
 DRAWN BY MRK  
 DATE 10/26/2012

SUMMIT LAKE, THURSTON COUNTY  
 PUBLIC FISHING ACCESS RESTORATION  
 EXISTING SITE & VICINITY MAP

PROJECT NO.  
 TN:AXX:12-1

SHEET	OF
2	10

**GENERAL NOTES**

- BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE COUNTY, WDFW AND THE CONTRACTOR.
- A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- GRADING ACTIVITIES (SITE ALTERATION) ARE LIMITED TO THE HOURS OF 7 A.M. TO 7 P.M. MONDAY THROUGH SATURDAY AND 10 A.M. TO 5 P.M. ON SUNDAY, UNLESS OTHERWISE APPROVED WITH A WRITTEN DECISION BY THE REVIEWING AGENCY.
- IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS NECESSARY BEFORE INITIATING OFF-SITE WORK. EASEMENTS REQUIRE REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- ALL UTILITY TRENCHES AND ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95 PERCENT DENSITY, STANDARD PROCTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY. WORK IN RIGHT-OF-WAY IS NOT AUTHORIZED UNTIL A TRAFFIC CONTROL PLAN IS APPROVED BY MASON COUNTY.

**SURVEY NOTES:**

- BASIS OF BEARING IS ASSUMED.
- VERTICAL DATUM IS ASSUMED.
- ASSUMPTIONS ARE BASED OFF OF KPFF CONTROL PT #1 AND KPFF CONTROL POINT #2.
- BASE MAP HAS BEEN DEVELOPED FROM TOPOGRAPHIC SURVEY PERFORMED BY KPFF CONSULTING ENGINEERS IN AUGUST 2012.
- UNDERGROUND UTILITIES ARE NOT A PART OF THIS SURVEY, ONLY SURFACE FEATURE ARE SHOWN.

**UTILITY NOTES:**

- THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITIES CONDUITS AND PIPES SHOWN ON THESE PLANS ARE NOT SHOWN. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL POTHOLE OR OTHERWISE CONFIRM CONDITIONS PRIOR TO CONSTRUCTION.
- IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
- THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINE CONDUITS OR PIPELINES SHOWN AND ANY OTHER IN-SERVICE LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

**STORMWATER NOTES:**

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF SNOQUALMIE STANDARDS, WSDFW STANDARDS AND THE MOST CURRENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA).
- TEMPORARY EROSION /WATER POLLUTION PREVENTION MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH WSDOT SECTION 1-07.15, AS MODIFIED BY THE APWA SUPPLEMENT, OF THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS. SHOULD THE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES NOT PROVE ADEQUATE TO CONTROL EROSION AND SEDIMENTATION, THE APPLICANT/CONTRACTOR SHALL INSTALL ADDITIONAL FACILITIES AS NECESSARY TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
- CALL THE UNDERGROUND LOCATOR LINE (1-800-424-5555) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.
- ALL EROSION CONTROL AND STORMWATER FACILITIES SHALL BE REGULARLY INSPECTED AND MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.

**GENERAL EXCAVATION NOTES**

- THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL POTHOLE OR OTHERWISE CONFIRM CONDITIONS. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL 2 WORKING DAYS BEFORE DIGGING 1-800-424-5555.

**PRELIMINARY DESIGN**

File: I:\121112220 WDFW Access Sites\12220 40 Summit Lake Access\Design\CAD\Axx\12x003 (General Notes).dwg TAB:03 XREFS: X:\WDFW\_12x003

**kpff** Consulting Engineers  
 2407 North 31st Street, Suite 100  
 Tacoma, Washington 98407  
 (253) 396-0150  
 Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**



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

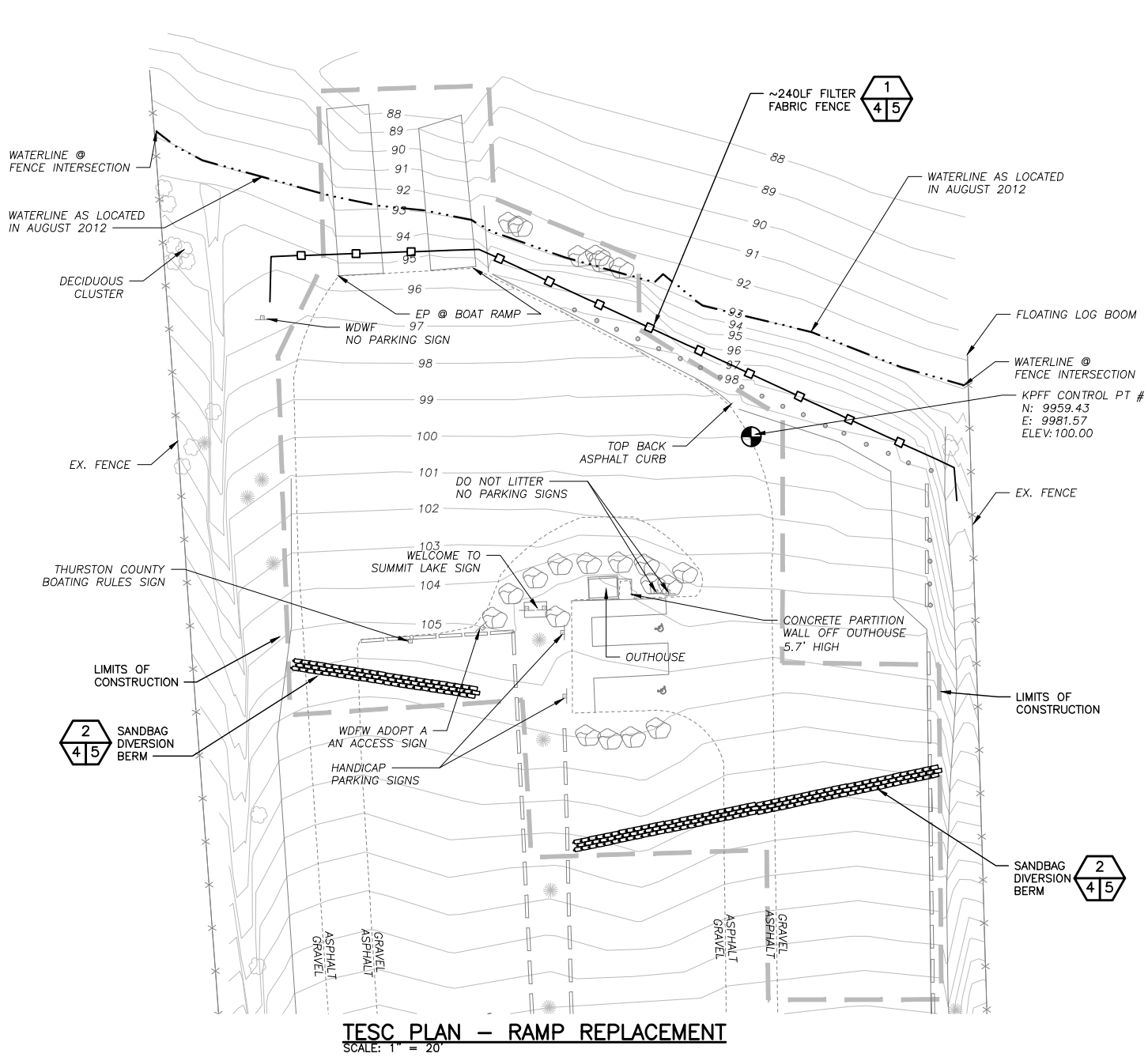
0 ——— 1"  
 BAR MEASURES  
 ONE INCH ON  
 ORIGINAL DRAWINGS

DESIGNED BY MRK  
 CHECKED BY SWK  
 DRAWN BY MRK  
 DATE 10/26/2012

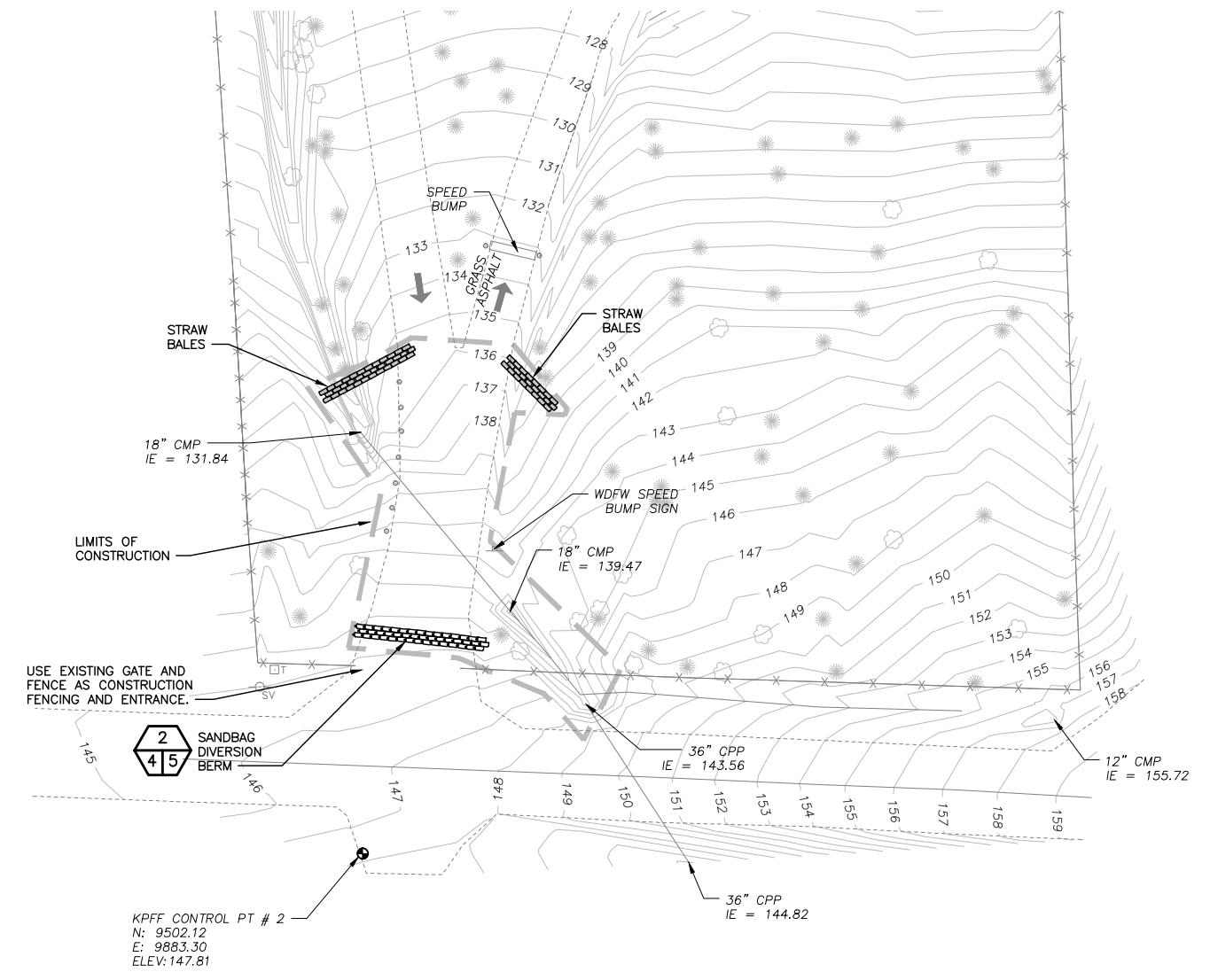
SUMMIT LAKE, THURSTON COUNTY  
**PUBLIC FISHING ACCESS RESTORATION**  
 GENERAL NOTES

PROJECT NO.  
 TN:AXXX:12-1

SHEET	OF
3	10



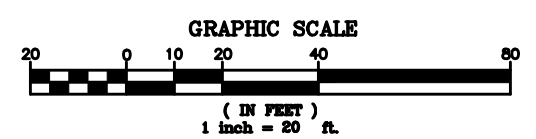
**TESC PLAN – RAMP REPLACEMENT**  
SCALE: 1" = 20'



**TESC PLAN – CULVERT REPLACEMENT**  
SCALE: 1" = 20'

**EROSION AND SEDIMENTATION CONTROL (ESC) NOTES**

1. FOR THE PURPOSES OF TEMPORARY EROSION/SEDIMENTATION CONTROL ON THIS PROJECT THE TERM "SEDIMENT" SHALL INCLUDE SOIL SEDIMENTS AS WELL AS SAWDUST, CONCRETE, AND OTHER DEBRIS OR PARTICULATE MATTER RESULTING FROM CONSTRUCTION ACTIVITIES.
2. ON-SITE EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL COMPLY WITH CONSTRUCTION STORMWATER PERMIT INCLUDING PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN AND IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. ANY PROBLEMS OCCURRING BEFORE FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR.
3. IN THE EVENT THAT EROSION OR SEDIMENTATION OCCURS ON ADJACENT PROPERTY, ALL CONSTRUCTION WORK THAT WILL AGGRAVATE THE SITUATION MUST CEASE AND THE CONTRACTOR SHALL IMMEDIATELY COMMENCE RESTORATION OR MITIGATION MEASURES. RESTORATION ACTIVITY SHALL CONTINUE UNTIL SUCH TIME AS THE PROBLEM IS RECTIFIED.
4. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE FIRST STAGE OF SITE PREPARATION.
5. SHOULD THE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES NOT PROVE ADEQUATE TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR SHALL INSTALL ADDITIONAL FACILITIES, AS NECESSARY, TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES AND/OR STORM DRAINAGE SYSTEMS.
6. IN ANY AREA WHICH HAS BEEN STRIPPED OF VEGETATION OR EXPERIENCED LAND DISTURBING ACTIVITIES, AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD EXCEEDING 48 HRS, ALL DISTURBED AREAS MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING OR APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION.
7. ALL NECESSARY FACILITIES SHALL BE MAINTAINED ON-SITE TO PREVENT DEBRIS, DUST AND MUD FROM ENTERING AND/OR ACCUMULATING IN THE PUBLIC RIGHT-OF-WAY OR SUMMIT LAKE.
8. THE ESC FACILITIES SHOWN ON THIS SHEET ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS DURING THE CONSTRUCTION PERIOD. THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT ENTER SUMMIT LAKE OR LEAVE THE SITE.
9. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY OR AS DIRECTED BY THE ENGINEER TO ENSURE THEIR CONTINUED FUNCTIONING.
10. THE ESC FACILITIES ON INACTIVE AREAS OF THE SITE SHALL BE CONTINUOUSLY MAINTAINED AND INSPECTED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A MAJOR STORM EVENT.
11. THE CONTRACTOR SHALL PROTECT STOCKPILE AND EXCAVATION AREAS FROM THE RELEASE OF SEDIMENT. STOCKPILES SHALL BE COVERED AT ALL TIMES WHILE NOT IN USE TO KEEP THE STORED MATERIAL DRY.
12. SANDBAGS, GEOTEXTILE AND/OR OTHER METHODS SHALL BE USED AROUND STOCKPILE AND EXCAVATION AREAS TO PREVENT RUNOFF OF SEDIMENTS.
13. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN UNTIL FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY CONTROLS ARE NO LONGER NEEDED, WHICHEVER IS LATER. TRAPPED SEDIMENT SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.



**PRELIMINARY DESIGN**

**kpff** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**



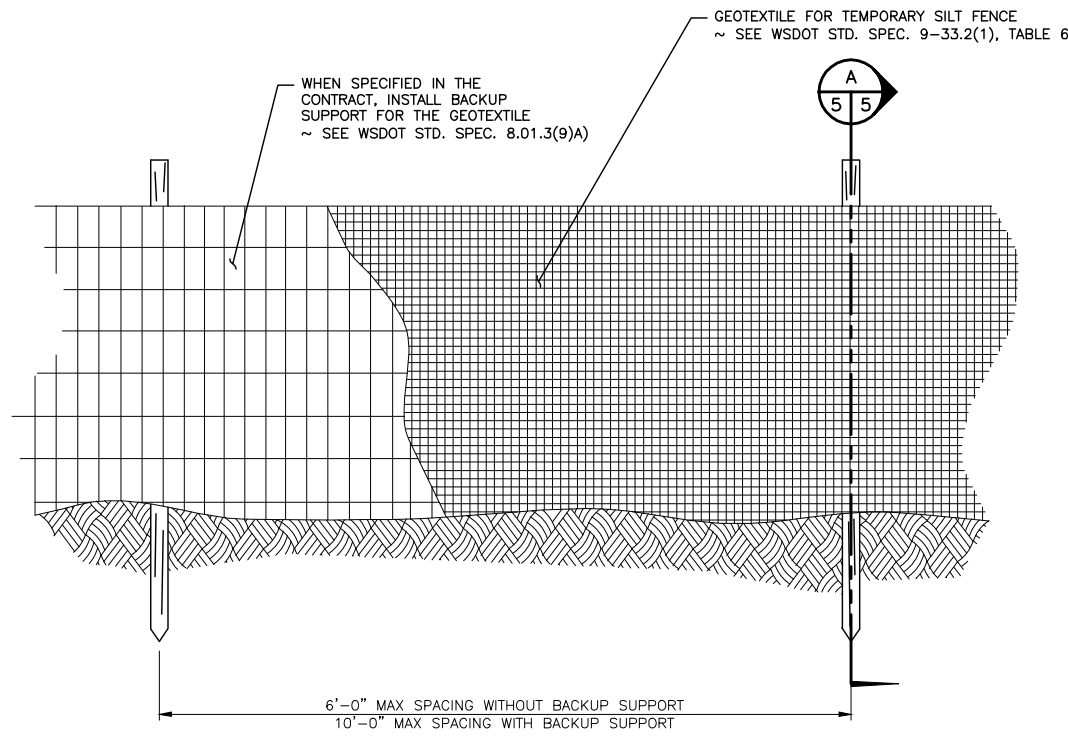
0	1"	BAR MEASURES ONE INCH ON ORIGINAL DRAWINGS
DESIGNED BY	MRK	
CHECKED BY	SWK	
DRAWN BY	MRK	
DATE	10/26/2012	
SYM	DATE	REVISION DESCRIPTION
		APPROVED AND RELEASED FOR CONSTRUCTION
CHIEF ENGINEER	DATE	
PROGRAM	DATE	

SUMMIT LAKE, THURSTON COUNTY		PROJECT NO.	TN:AXXX:12-1
PUBLIC FISHING ACCESS RESTORATION		SHEET	4
TEMPORARY EROSION & SEDIMENTATION CONTROL PLAN		OF	10

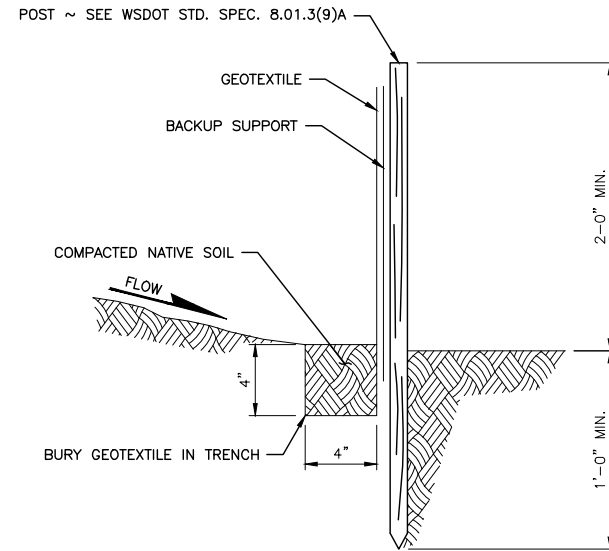
File: I:\12\112220 WDFW Access Sites\112220.40 Summit Lake Access\Design\ACAD\Axxx\12x20.04 (TESC Plan).dwg TAB:04 XREFS: X:\WDFW\T\Bldgs\X-54\12035\TOP\BIM\TXT X:\Project-Limits X-54\12035\TOP\OBM

**NOTES:**

1. MAXIMIZE DETENTION OF STORMWATER BY PLACING FENCE AS FAR AWAY FROM TOE OF SLOPE AS POSSIBLE WITHOUT ENCRANCHING ON SENSITIVE AREAS OR OUTSIDE OF THE CLEARING BOUNDARIES.
2. INSTALL SILT FENCING ALONG CONTOURS WHENEVER POSSIBLE.
3. INSTALL THE ENDS OF THE SILT FENCE TO POINT SLIGHTLY UP-SLOPE TO PREVENT SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS 8.01.3(9)A AND 8.01.3(15).

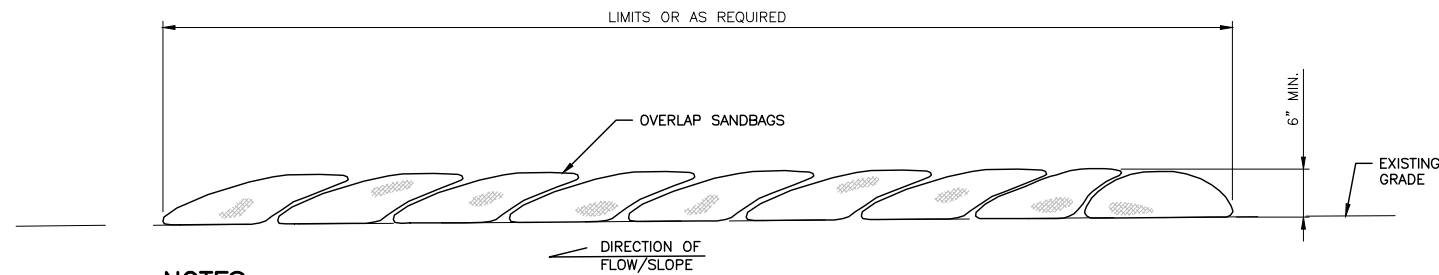


**ELEVATION VIEW**



**SECTION A**

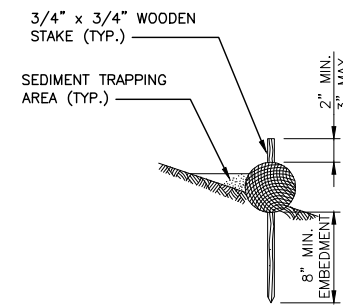
**SILT FENCE DETAIL**  
SCALE: NTS



**NOTES:**

1. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL AND SAND, LAYERED AND PACKED TIGHTLY.
2. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT.

**SANDBAG DIVERSION BERM DETAIL**  
SCALE: NTS



**ELEVATION VIEW**

**STRAW WATTLES DETAIL**  
SCALE: NTS

**PRELIMINARY DESIGN**

File: I:\12112220 WDFW Access Sites\12220.40 Summit Lake Access\Design\CAD\Drawings\2008 (TESC Notes and Details).dwg TAB:05  
User: mjlak  
Date: 10/26/2012 10:58:11 AM  
XREFS: X:\WDFW\_Templates

**kpf** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**

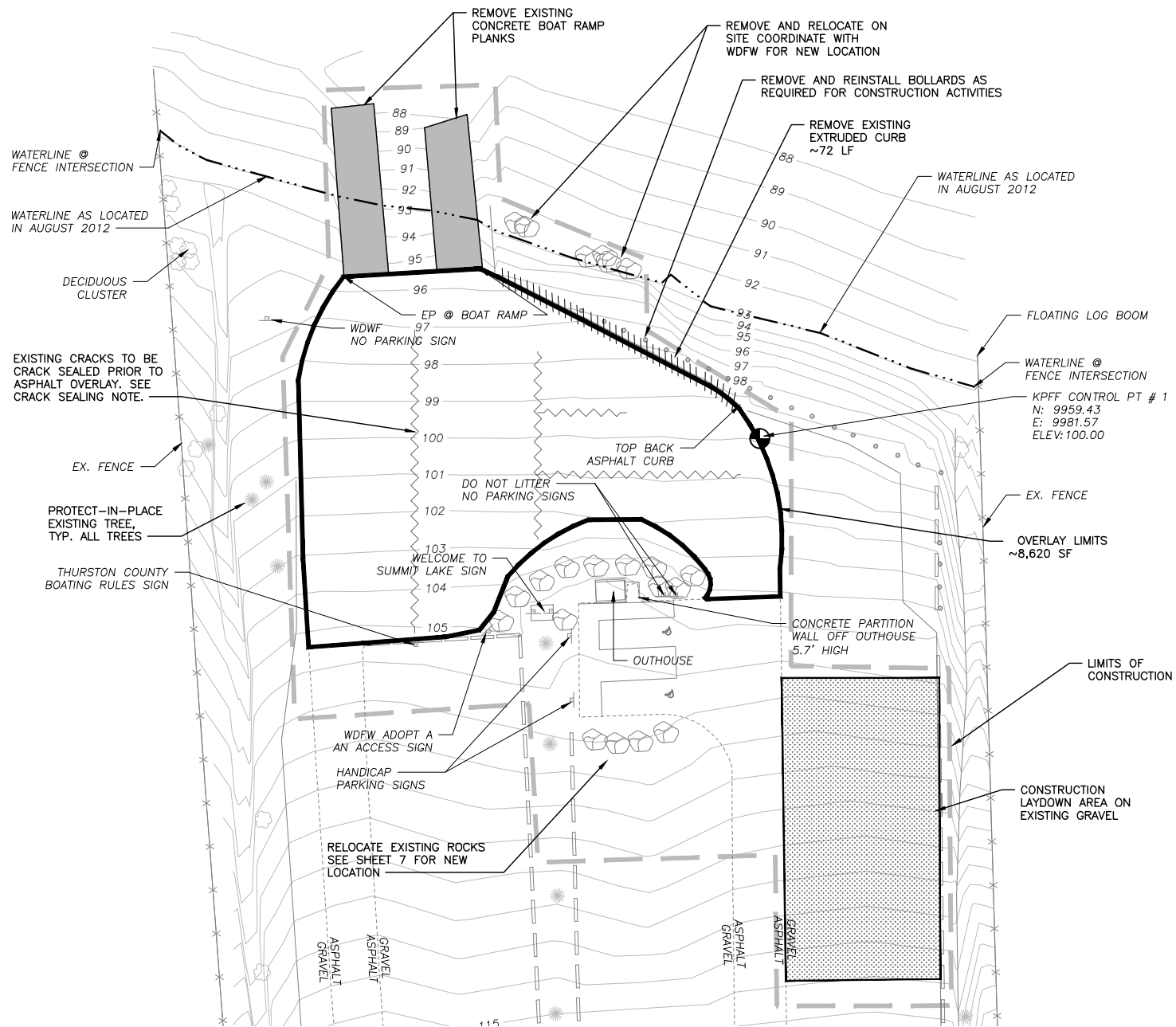


SYM	DATE	REVISION DESCRIPTION	BY
		APPROVED AND RELEASED FOR CONSTRUCTION	
CHIEF ENGINEER .....		DATE: .....	
PROGRAM .....		DATE: 10/26/2012	

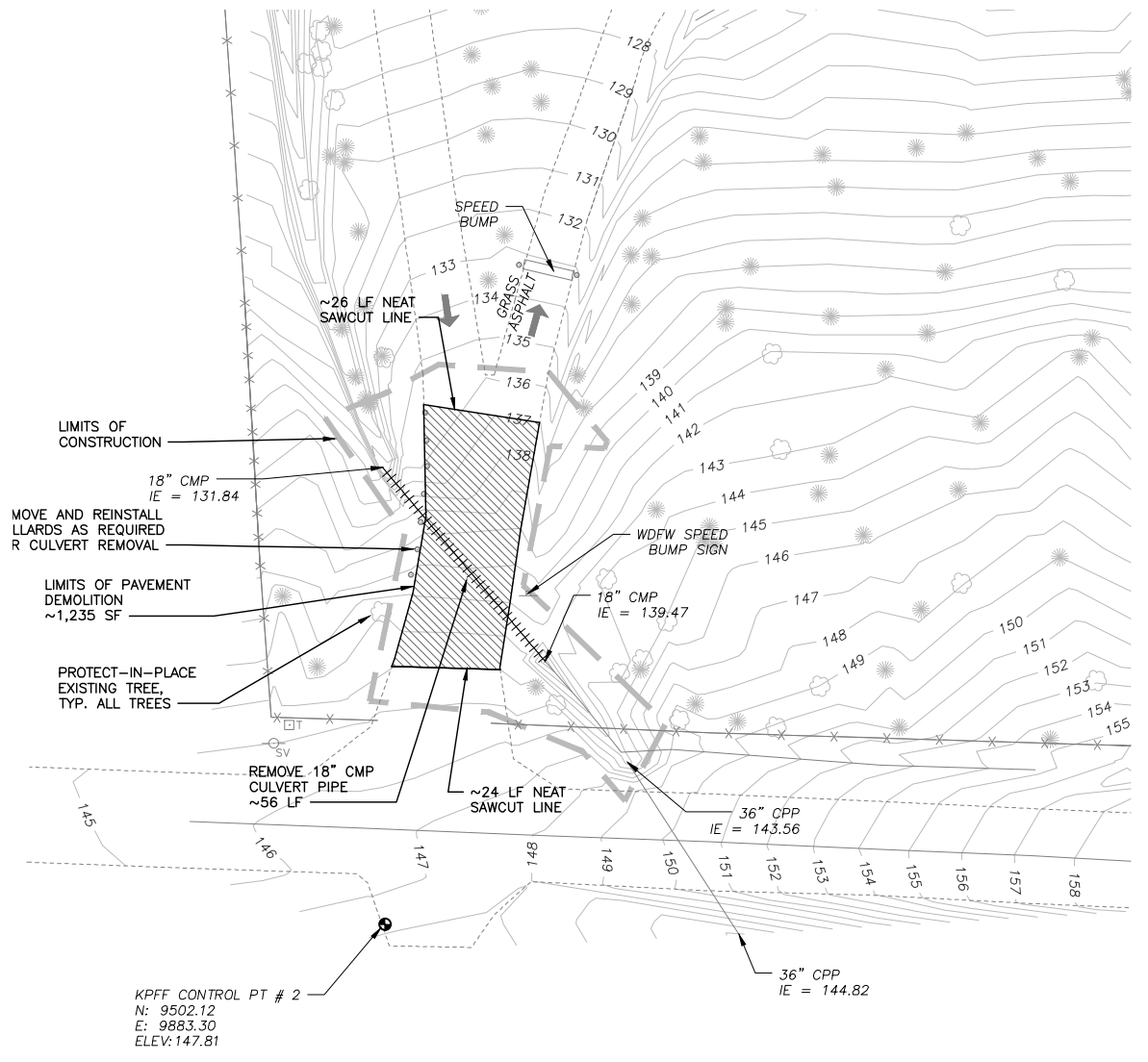
DESIGNED BY	MRK
CHECKED BY	SWK
DRAWN BY	MRK
DATE	10/26/2012

SUMMIT LAKE, THURSTON COUNTY	
PUBLIC FISHING ACCESS RESTORATION	
TEMPORARY EROSION & SEDIMENTATION CONTROL-NOTES & DETAILS	

PROJECT NO.	TN:AXX:12-1
SHEET	OF
5	10



**DEMOLITION PLAN - RAMP REPLACEMENT**  
SCALE: 1" = 20'



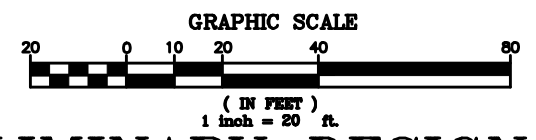
**DEMOLITION PLAN - CULVERT REPLACEMENT**  
SCALE: 1" = 20'

**CRACK SEALING NOTE:**

1. CRACKS SHALL BE SEALED AND FULLY CURED PRIOR TO ASPHALT OVERLAY.
2. CONTRACTOR SHALL SEAL CRACKS AS IDENTIFIED ON THE PLANS AND ANY CRACKS WIDER THAN 1/4" WITHIN THE LIMITS OF ASPHALT OVERLAY AREA.
3. CRACK SEALING SHALL BE PER WSDOT SPECIFICATION 5-04.2(5)C-CRACK SEALING.

ALL CRACKS AND JOINTS 1/4" AND GREATER IN WIDTH SHALL BE CLEANED WITH A CHIPPING HAMMER, STIFF BRISTLED BROOM AND COMPRESSED AIR TO REMOVE ALL DIRT, DEBRIS AND LOOSE PAVEMENT MATERIAL; AND THEN SHALL BE FILLED COMPLETELY WITH SAND SLURRY.

THE SAND SLURRY SHALL CONSIST OF APPROXIMATELY 20 PERCENT CSS-1 EMULSIFIED ASPHALT, APPROXIMATELY 2 PERCENT PORTLAND CEMENT, WATER (IF REQUIRED), AND THE REMAINDER CLEAN NO. 4-0 PAVING SAND. THE COMPONENTS SHALL BE THOROUGHLY MIXED AND THEN POURED INTO THE CRACKS AND JOINTS UNTIL FULL. THE FOLLOWING DAY, ANY CRACKS OR JOINTS THAT ARE NOT THAT ARE NOT COMPLETELY FILLED SHALL BE TOPPED OFF WITH ADDITIONAL SAND SLURRY. AFTER THE SAND SLURRY IS PLACED, THE FILLER SHALL BE STRUCK OFF FLUSH WITH THE EXISTING PAVEMENT SURFACE AND ALLOWED TO CURE. THE HMA OVERLAY SHALL NOT BE PLACED UNTIL THE SLURRY HAS FULLY CURED.



**PRELIMINARY DESIGN**

**kpff** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**

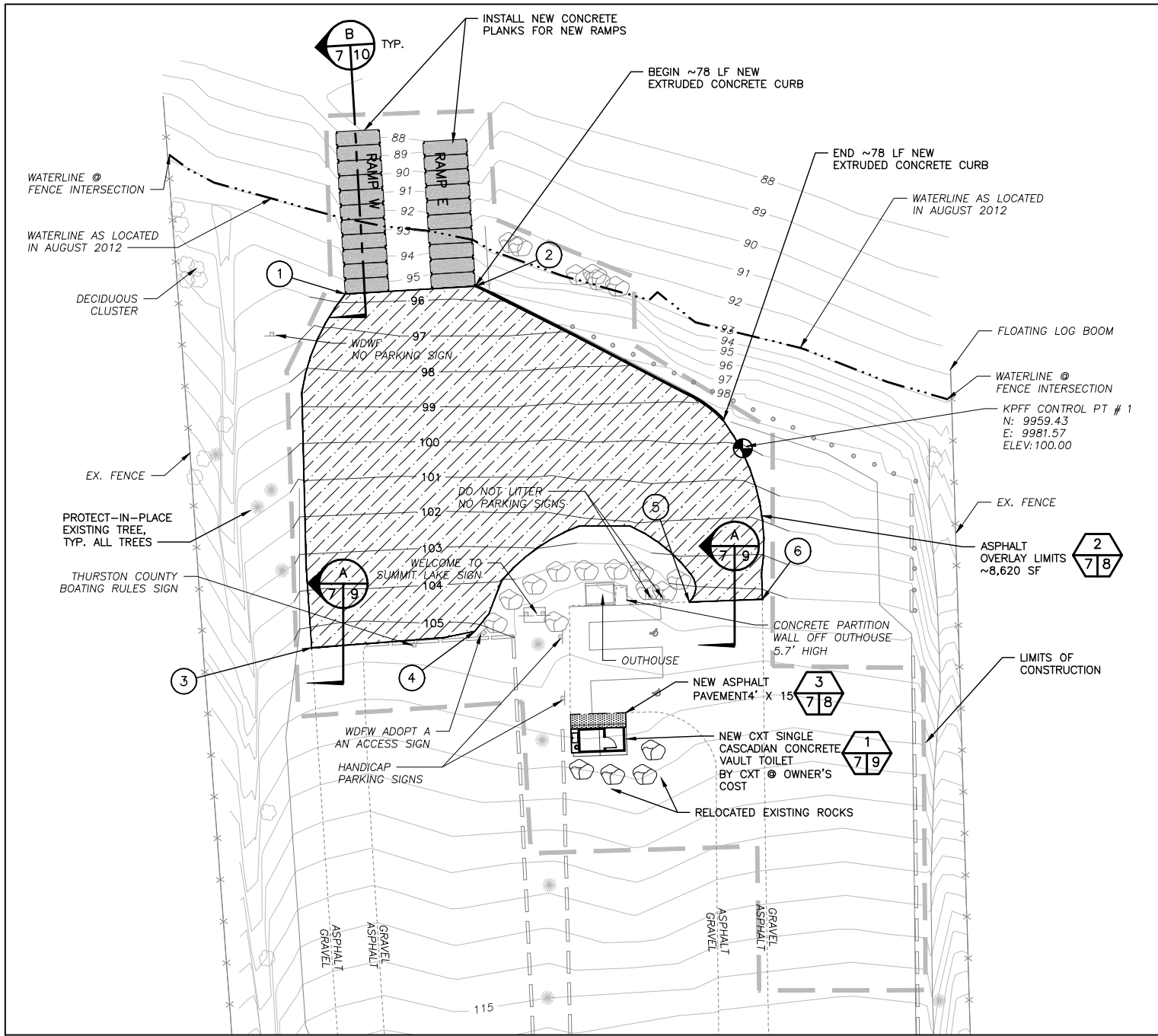


0	1"	BAR MEASURES ONE INCH ON ORIGINAL DRAWINGS
DESIGNED BY	MRK	
CHECKED BY	SWK	
DRAWN BY	MRK	
DATE	10/26/2012	
SYMBOL	DATE	REVISION DESCRIPTION
		APPROVED AND RELEASED FOR CONSTRUCTION
CHIEF ENGINEER	DATE	
PROGRAM	DATE	

SUMMIT LAKE, THURSTON COUNTY  
**PUBLIC FISHING ACCESS RESTORATION**  
DEMOLITION PLAN

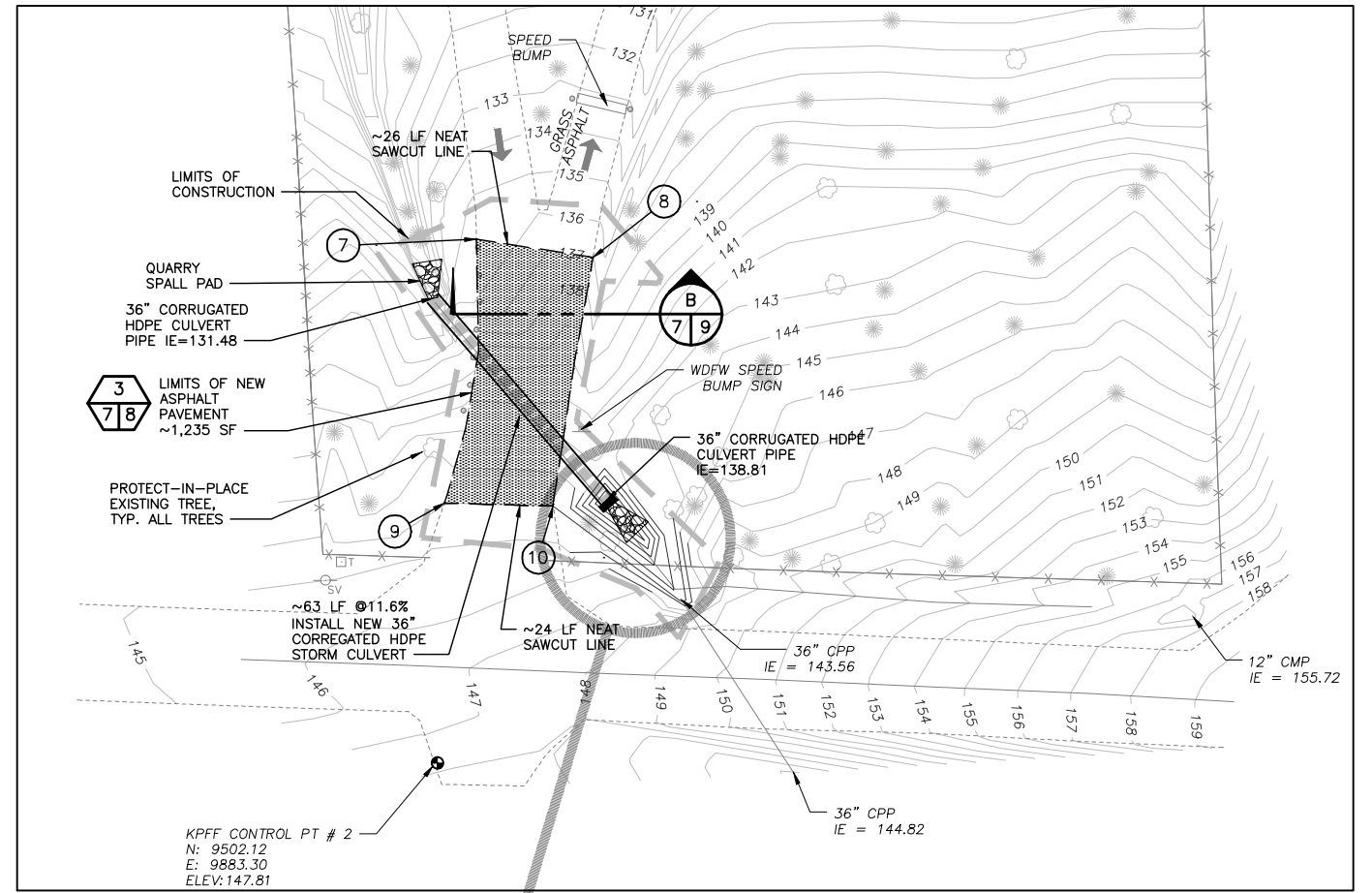
PROJECT NO.  
TN:AXXX:12-1  
SHEET  
6  
OF  
10

File: I:\12112220 WDFW Access Sites\12220-40 Summit Lake Access\Design\ACAD\Axxx12xc006 (Demo Plan).dwg TAB:06 XREFS: X:\WDFW\_Templates\X-5412035TOPOBM.TXT X:\Project-Limits X-5412035TOPOBM

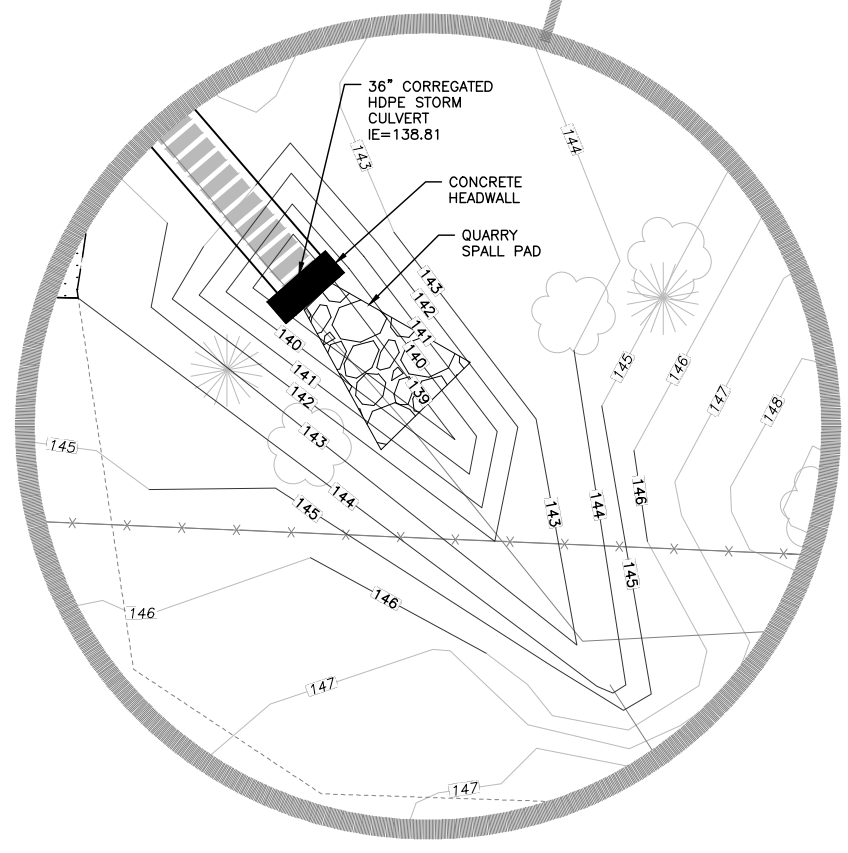


**SITE PLAN - RAMP REPLACEMENT**  
SCALE: 1" = 20'

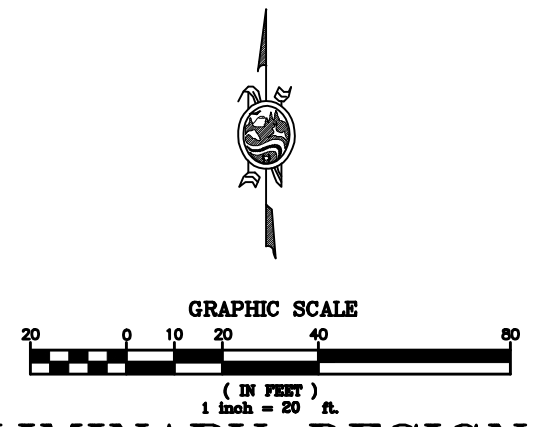
PAVEMENT/OVERLAY LIMITS		
POINT	NORTHING	EASTING
1	1001.73	9872.83
2	1003.82	9908.45
3	9904.90	9863.66
4	9908.27	9909.39
5	9917.44	9966.99
6	9918.14	9986.96
7	9614.79	9891.66
8	9610.84	9916.76
9	9558.02	9884.79
10	9557.35	9908.20



**SITE PLAN - CULVERT REPLACEMENT**  
SCALE: 1" = 20'



**PARTIAL PLAN - CULVERT GRADING**  
SCALE: 1" = 5'



**PRELIMINARY DESIGN**

File: I:\12112220 WDFW Access Sites\12220.40 Summit Lake Access\Design\ACAD\Axxx12x007 (Site Plan).dwg TAB:07  
 XREFS: X:\WDFW\_Templates\X-5412035TOPDM-TXT X:\Project-Limits X-5412035TOPDOB

**kpff** Consulting Engineers  
 2407 North 31st Street, Suite 100  
 Tacoma, Washington 98407  
 (253) 396-0150  
 Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**

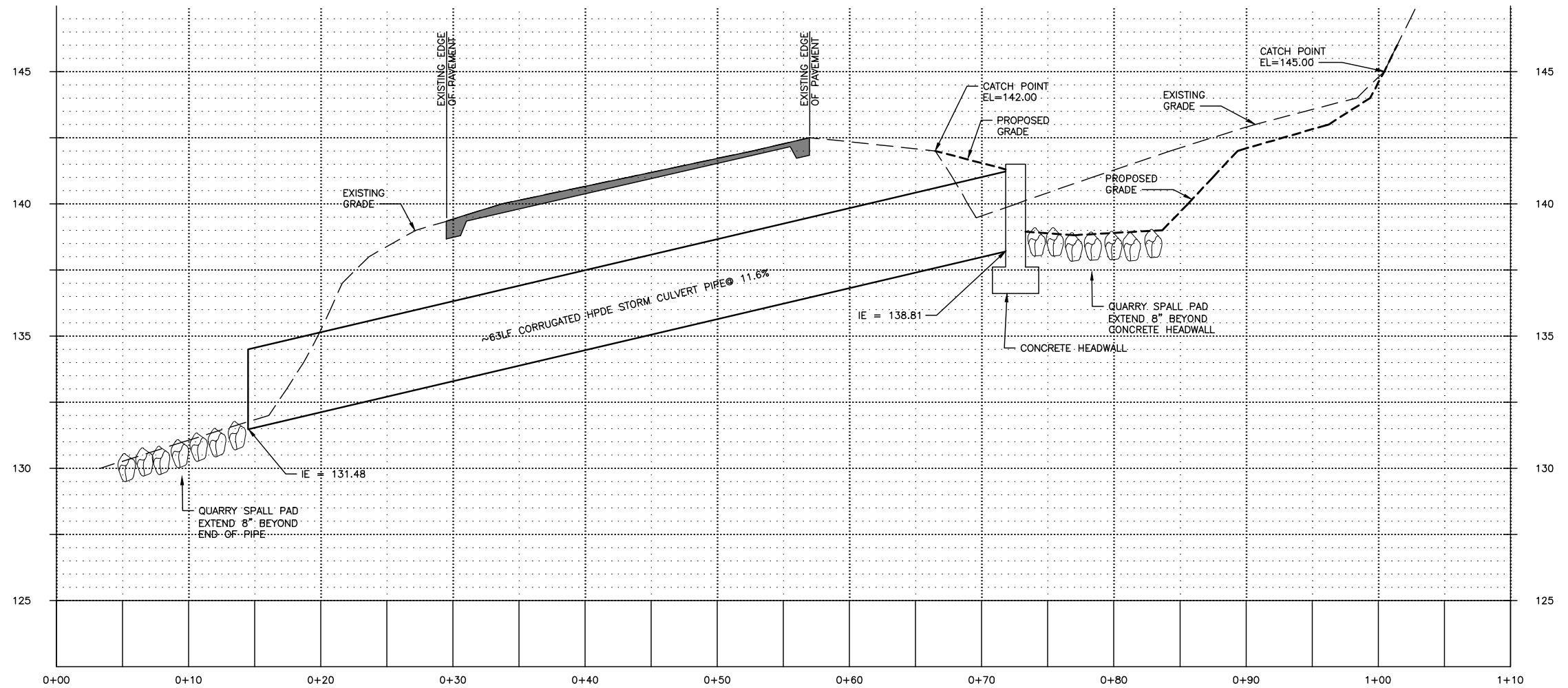


SYM	DATE	REVISION DESCRIPTION	BY
		APPROVED AND RELEASED FOR CONSTRUCTION	
CHIEF ENGINEER	DATE:		
PROGRAM	DATE:		

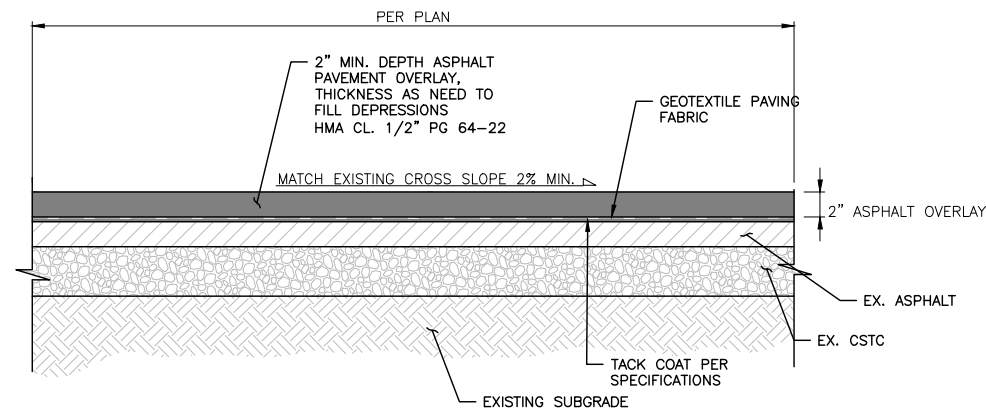
0 — 1"  
 BAR MEASURES ONE INCH ON ORIGINAL DRAWINGS  
 DESIGNED BY: MRK  
 CHECKED BY: SWK  
 DRAWN BY: MRK  
 DATE: 10/26/2012

**SUMMIT LAKE, THURSTON COUNTY**  
**PUBLIC FISHING ACCESS RESTORATION**  
 SITE PLAN

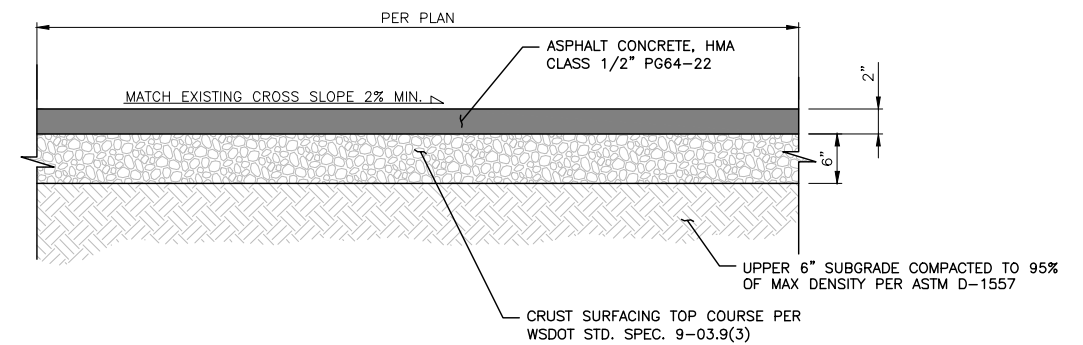
PROJECT NO. TN:AXXX:12-1  
 SHEET 7 OF 10



**PROFILE - 36" CULVERT PIPE**  
SCALE: 1" = 5' H, 1" = 2.5' V



**ASPHALT OVERLAY DETAIL** 2  
7/8  
SCALE: NTS



**ASPHALT PAVING DETAIL** 3  
7/8  
SCALE: NTS

**PRELIMINARY DESIGN**

File: I:\121112220 WDFW Access Sites\12220.40 Summit Lake Access\Design\CAD\Axx\12x008 (Culvert Profile & Details).dwg TAB:08  
User: mjlak  
Date: 10/26/2012 10:58:11 AM  
XREFS: X:\WDFW\_Templates

**kpf** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**



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

0 1"  
BAR MEASURES  
ONE INCH ON  
ORIGINAL DRAWINGS

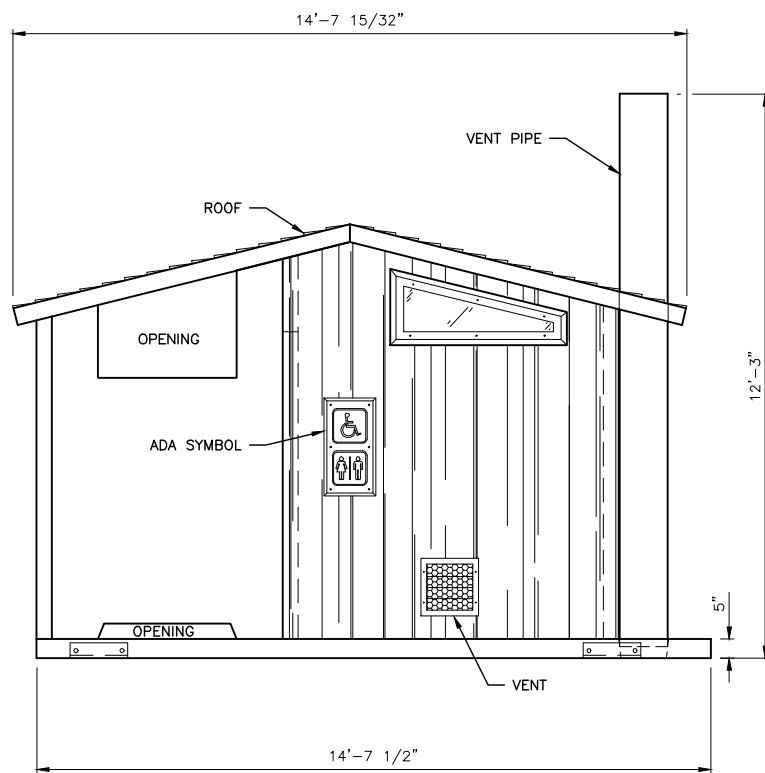
DESIGNED BY MRK  
CHECKED BY SWK  
DRAWN BY MRK  
DATE 10/26/2012

SUMMIT LAKE, THURSTON COUNTY  
**PUBLIC FISHING ACCESS RESTORATION**  
CULVERT PROFILE

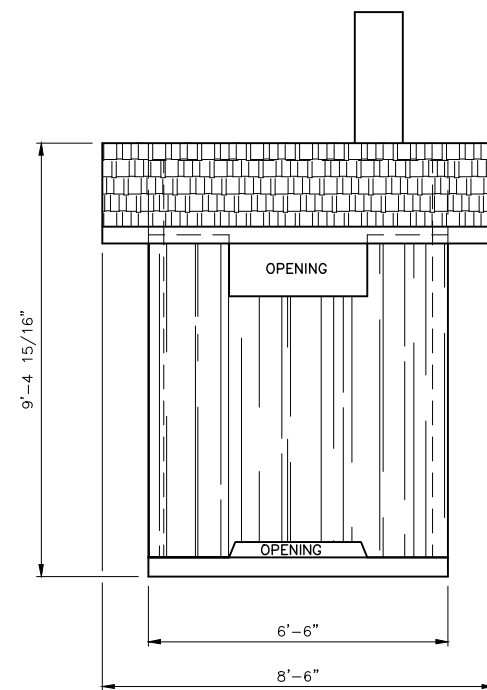
PROJECT NO.  
TN:AXX:12-1

SHEET 8 OF 10

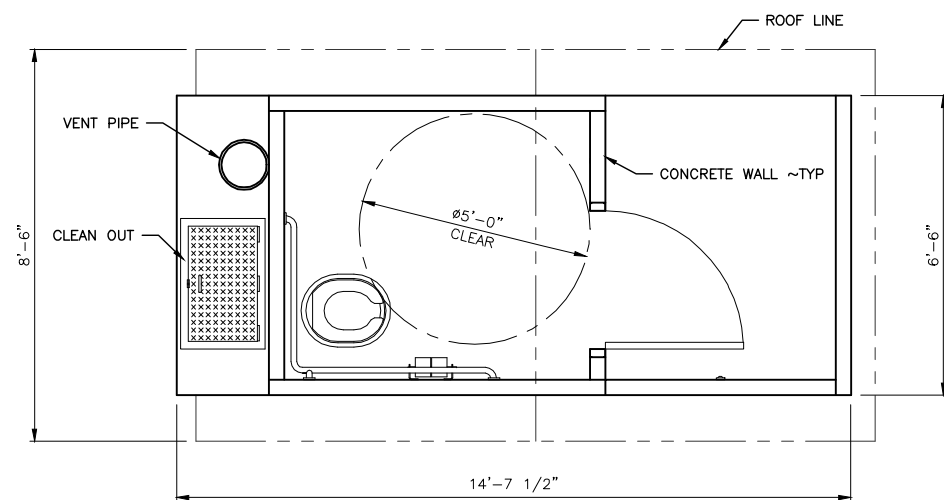




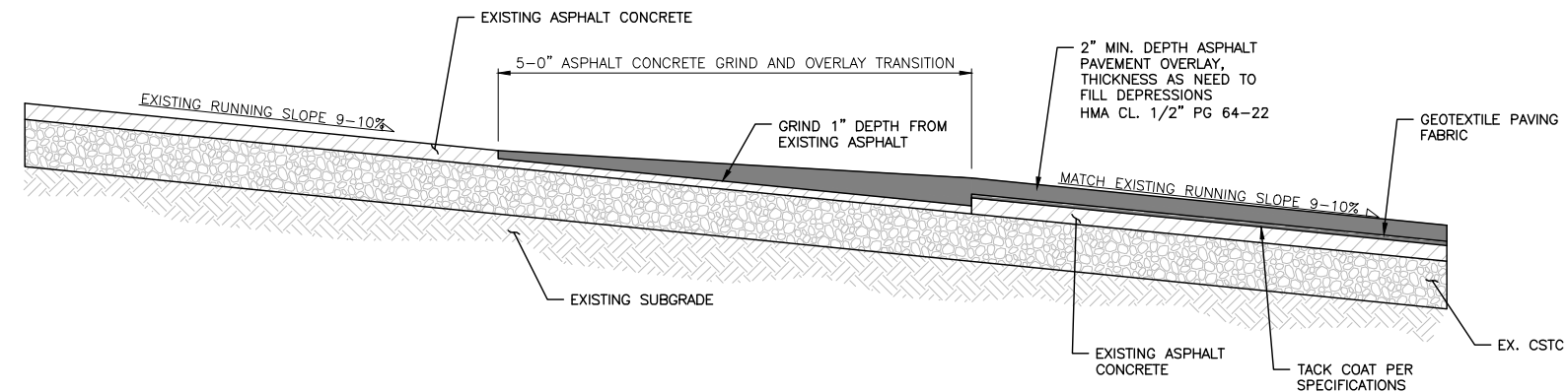
**FRONT ELEVATION**  
NOT TO SCALE



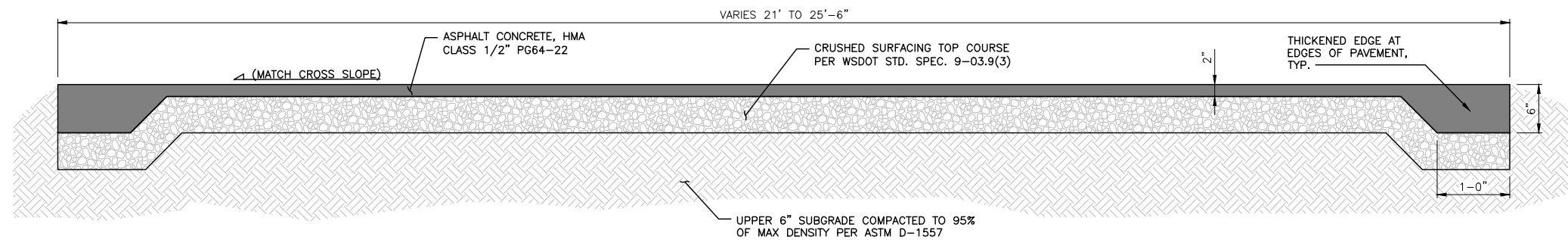
**SIDE ELEVATION**  
NOT TO SCALE



**CTX VAULT TOILET PLAN** 1  
NOT TO SCALE 7/9



**ASPHALT OVERLAY TRANSITION** A  
N.T.S. 7/9



**ASPHALT PAVING ROADWAY SECTION** B  
N.T.S. 7/9

**PRELIMINARY DESIGN**

File: I:\12112220 WDFW Access Sites\12220.40 Summit Lake Access\Design\CAD\Axx\12x009 (Civil Details).dwg TAB:09  
User: mjlak  
Date: 10/26/2012 10:26:12 AM  
XREFS: X:\WDFW\_Templates

**kpf** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**



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

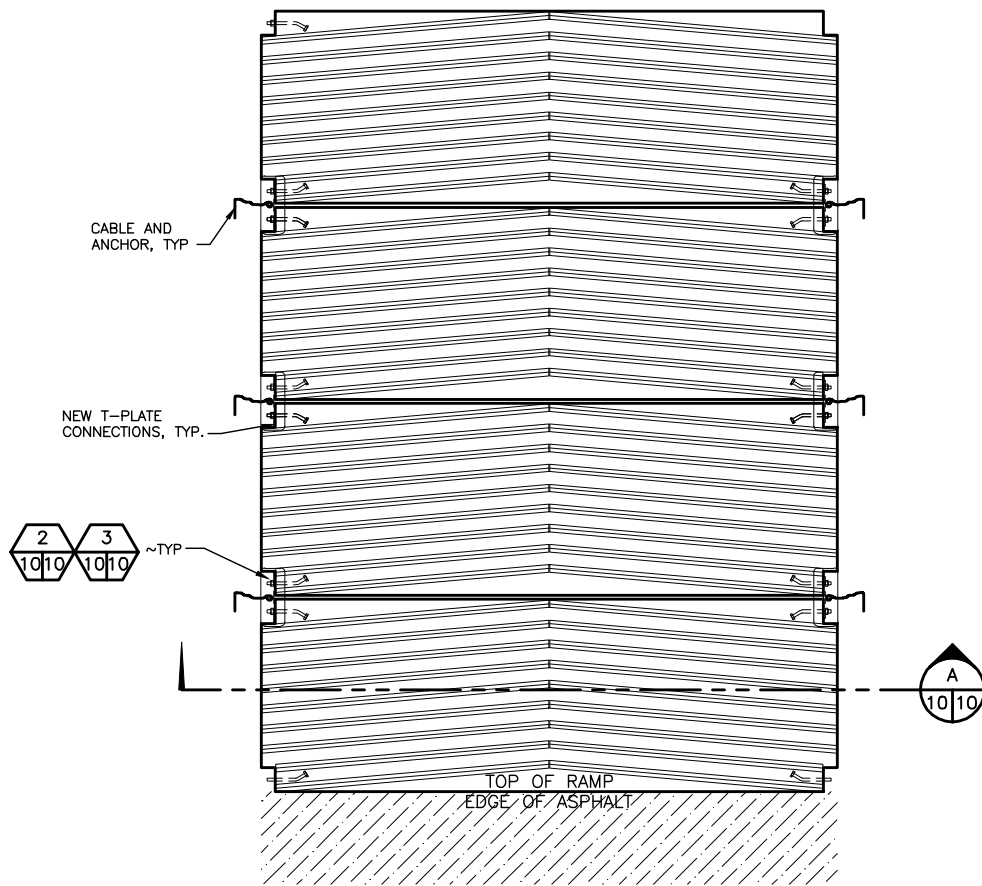
0 1"  
BAR MEASURES  
ONE INCH ON  
ORIGINAL DRAWINGS

DESIGNED BY MRK  
CHECKED BY SWK  
DRAWN BY MRK  
DATE 10/26/2012

SUMMIT LAKE, THURSTON COUNTY  
**PUBLIC FISHING ACCESS RESTORATION**  
CIVIL DETAILS

PROJECT NO.  
TN:AXX:12-1

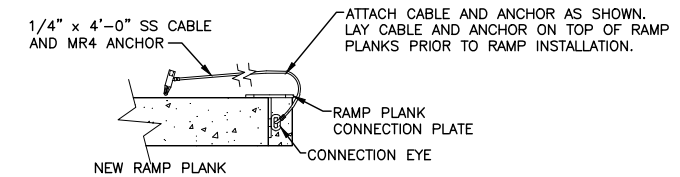
SHEET	OF
9	10



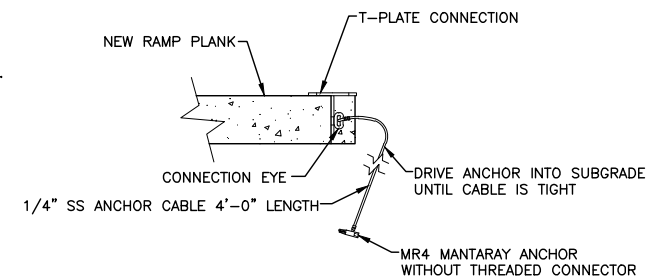
RAMP INSTALLATION PLAN VIEW  
N.T.S. 1  
7/10

**RAMP INSTALLATION NOTES:**

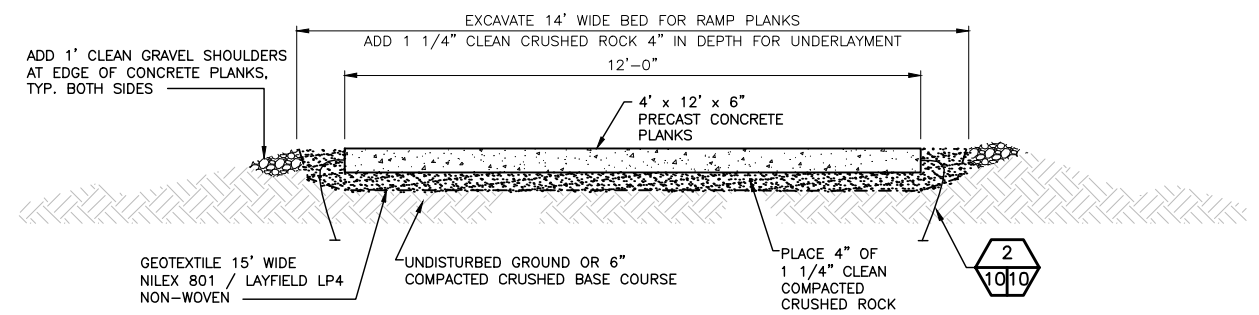
1. EXCAVATE RAMP PROFILE TO SUBRAGE ELEVATIONS. TYPICAL RAMP SLOPE SHALL BE BETWEEN 12% AND 15% AS SHOWN IN PROFILE.
2. INSTALL GEOTEXTILE.
3. PLACE 4" OF 1 1/4" CLEAN COMPACTED CRUSHED ROCK.
4. CONNECT ANCHORS TO CONNECTION PLATES TO CREATE CONNECTION PLATE ASSEMBLY.
5. PLACE STEEL BAR ON CRUSHED ROCK FOR TEMPORARY GUIDE TRACK.
6. LAY FIRST TWO PLANKS AT WATER'S EDGE AND FASTEN TOGETHER WITH CONNECTION PLATE ASSEMBLY.
7. PUSH PLATES INTO WATER. CONNECT SUBSEQUENT PLANKS AND CONTINUE TO PUSH RAMP UNTIL FINAL END IS REACHED.
8. ASSEMBLE REMAINING PLANKS ABOVE WATER.
9. DRIVE ANCHORS THROUGH SUBGRADE.



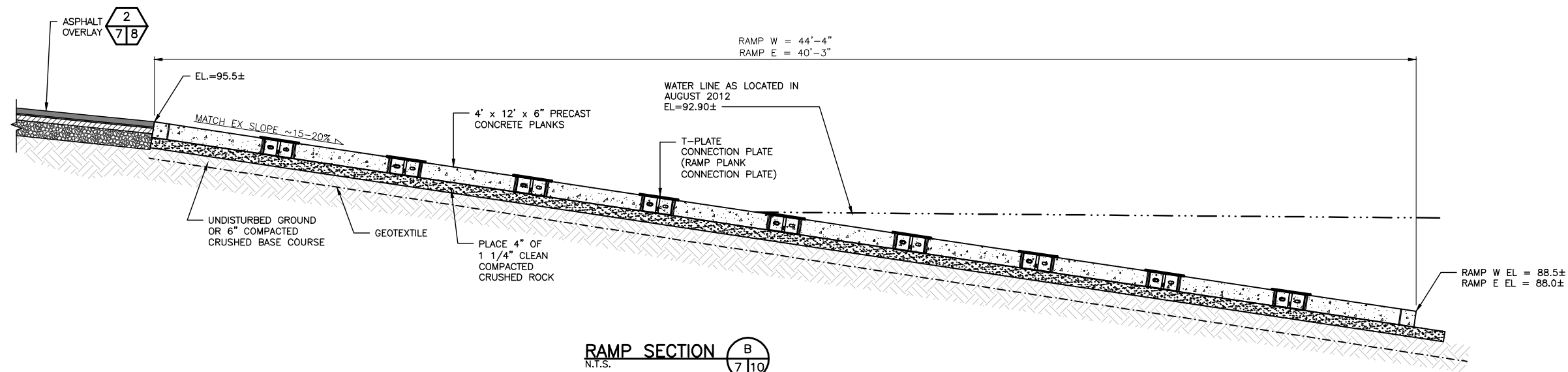
CABLE INSTALLATION DETAIL  
N.T.S. 2  
10/10



ANCHORING DETAIL  
N.T.S. 3  
10/10



RAMP PLANK  
N.T.S. A  
10/10



RAMP SECTION  
N.T.S. B  
7/10

**PRELIMINARY DESIGN**

File: I:\12\112220 WDFW Access Sites\112220.40 Summit Lake Access\Design\ACAD\Axx\12x010 (Civil Details).dwg TAB:10 XREFS: X:\WDFW\_Templates

**kpff** Consulting Engineers  
2407 North 31st Street, Suite 100  
Tacoma, Washington 98407  
(253) 396-0150  
Fax (253) 396-0162

**WASHINGTON STATE**  
**DEPARTMENT OF FISH AND WILDLIFE**



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

0 1"  
BAR MEASURES  
ONE INCH ON  
ORIGINAL DRAWINGS

DESIGNED BY MRK  
CHECKED BY SWK  
DRAWN BY MRK  
DATE 10/26/2012

SUMMIT LAKE, THURSTON COUNTY  
**PUBLIC FISHING ACCESS RESTORATION**  
CIVIL DETAILS

PROJECT NO.  
TN:AXXX:12-1

SHEET OF  
**10 10**