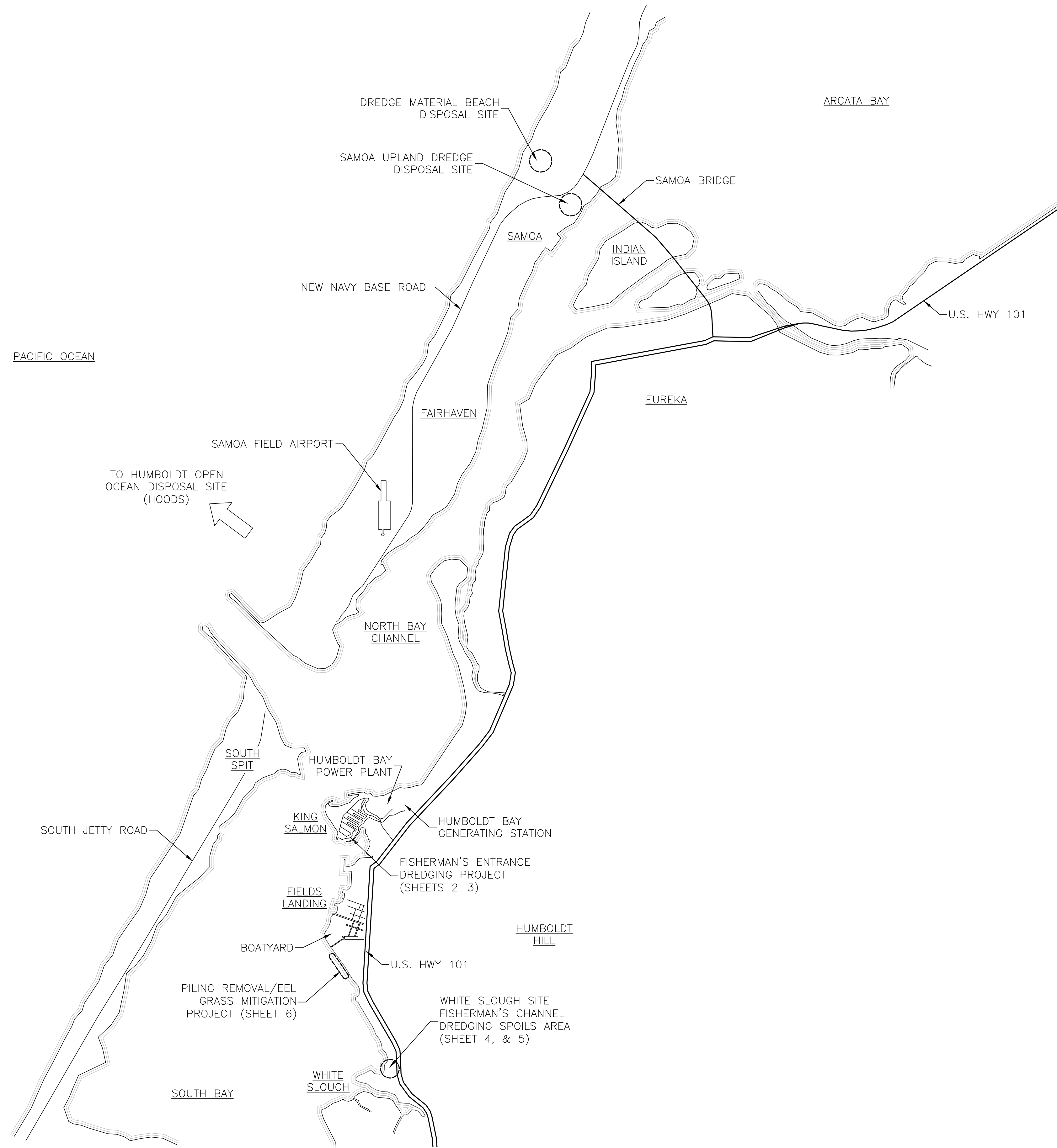
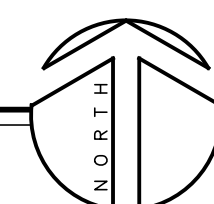


FISHERMAN'S ENTRANCE DREDGING PROJECT



HUMBOLDT BAY LOCATION MAP

SCALE: 1"=±3000'



PROJECT DESCRIPTION

1. FISHERMAN'S ENTRANCE DREDGING
2. WHITE SLOUGH DREDGING SPOILS AREA
3. EEL GRASS MITIGATION AND RESTORATION PLAN

SHEET INDEX

1. HUMBOLDT BAY LOCATION MAP
2. FISHERMAN'S ENTRANCE DREDGING AREA PLAN
3. FISHERMAN'S ENTRANCE PLAN & CROSS SECTION
4. WHITE SLOUGH PLAN & FILTRATION BERM DEWATERING DETAILS
5. WHITE SLOUGH NOTES & DETAILS
6. PILE REMOVAL/EEL GRASS MITIGATION
7. POTENTIAL STAGING/STOCKPILE LOCATIONS
8. EROSION CONTROL DETAILS.

PRELIMINARY

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REVISIONS	BY

WHITCHURCH ENGINEERING, INC.
Phone (707) 725-6926

FISHERMAN'S ENTRANCE DREDGING PROJECT
King Salmon Eureka, CA. 95503
HUMBOLDT BAY LOCATION MAP
For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA. 95503

Date	AUG 26 '16
Scale	AS NOTED
Design	JTL
Drawn	GKK
Job	PGE1609
Sheet	1

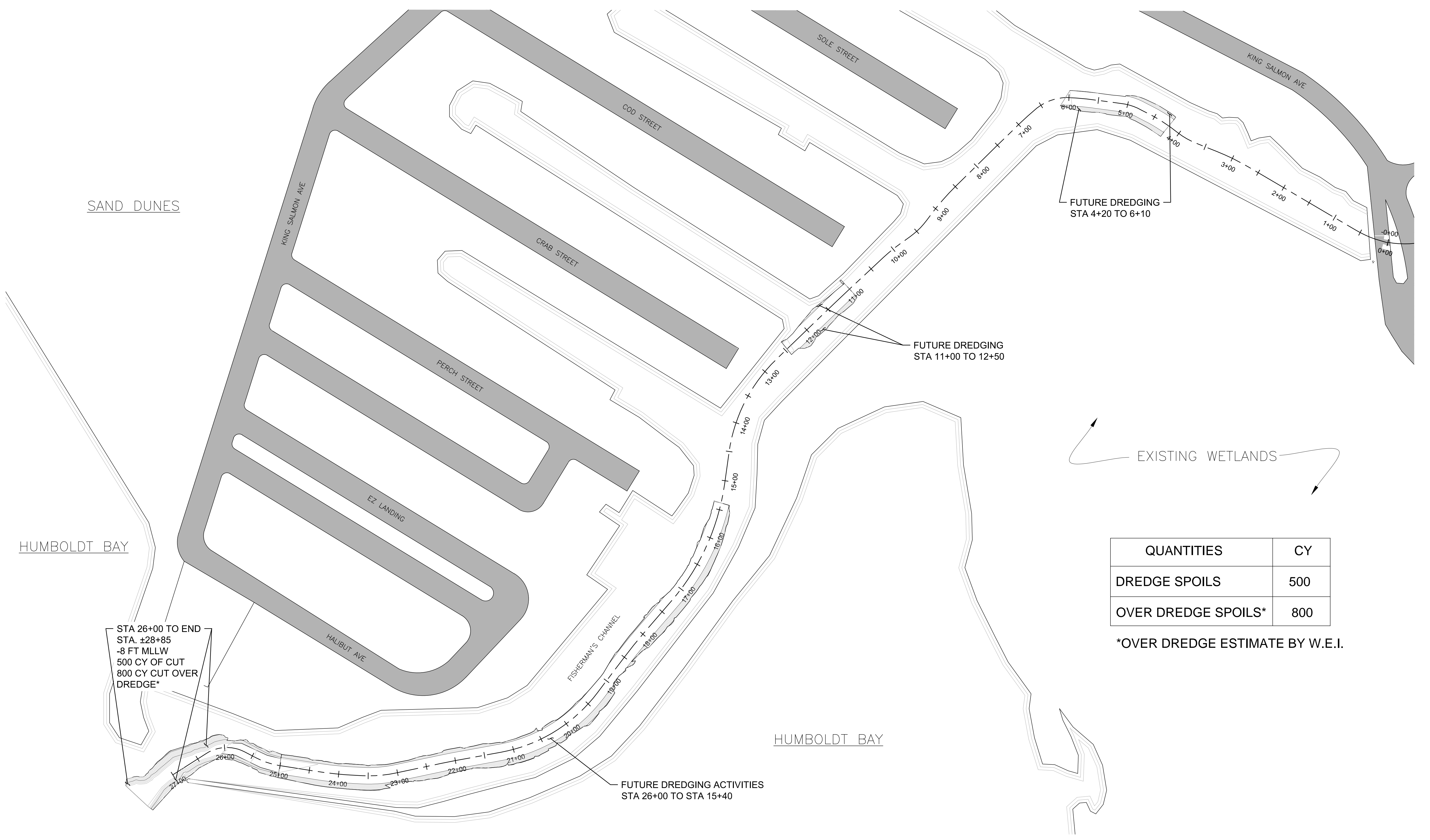
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FISHERMAN'S ENTRANCE DREDGING PROJECT
 King Salmon Eureka, CA. 95503
 FISHERMAN'S ENTRANCE DREDGING AREA PLAN
 For: Pacific Cos & Electric 1000 King Salmon Ave Eureka, CA. 95503

DATE AUG 26 '16
 SCALE AS NOTED
 DESIGN JTL
 DRAWN GKK
 JOB PGE1609
 SHEET

2



SAND DUNES

HUMBOLDT BAY

HUMBOLDT BAY

EXISTING WETLANDS

QUANTITIES	CY
DREDGE SPOILS	500
OVER DREDGE SPOILS*	800

*OVER DREDGE ESTIMATE BY W.E.I.

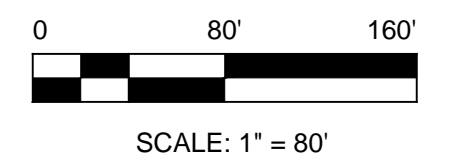
STA 26+00 TO END
 STA. ±28+85
 -8 FT MLLW
 500 CY OF CUT
 800 CY CUT OVER
 DREDGE*

FUTURE DREDGING ACTIVITIES
 STA 26+00 TO STA 15+40

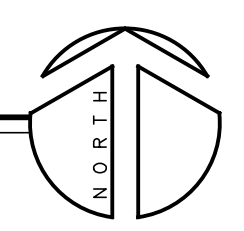
FUTURE DREDGING
 STA 11+00 TO 12+50

FUTURE DREDGING
 STA 4+20 TO 6+10

FISHERMAN'S ENTRANCE DREDGING AREA PLAN



SCALE: 1" = 80'

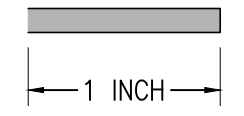


FISHERMAN'S ENTRANCE DREDGING

PRELIMINARY

NOT FOR CONSTRUCTION

DATA PROVIDED BY GHD
 JN. # 1251812002
 DATED 3/17/2015



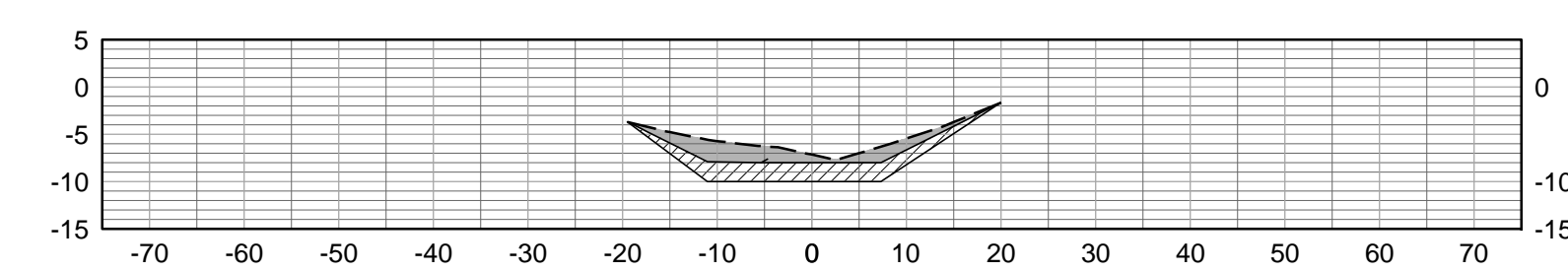
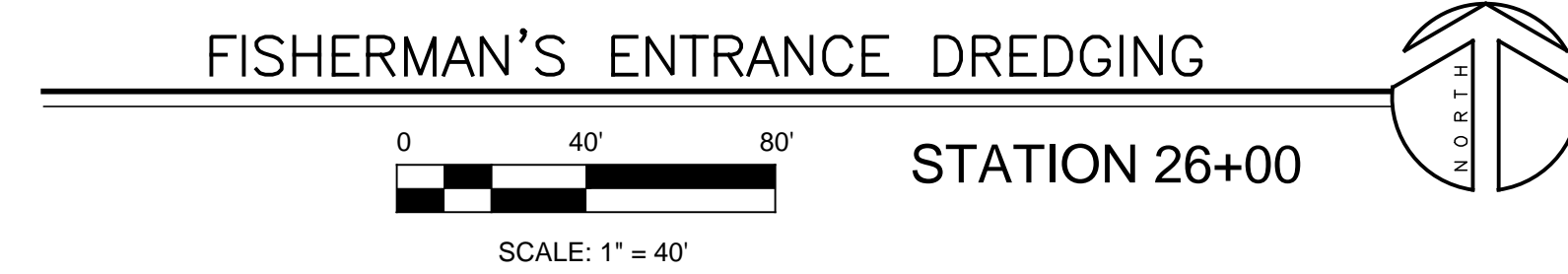
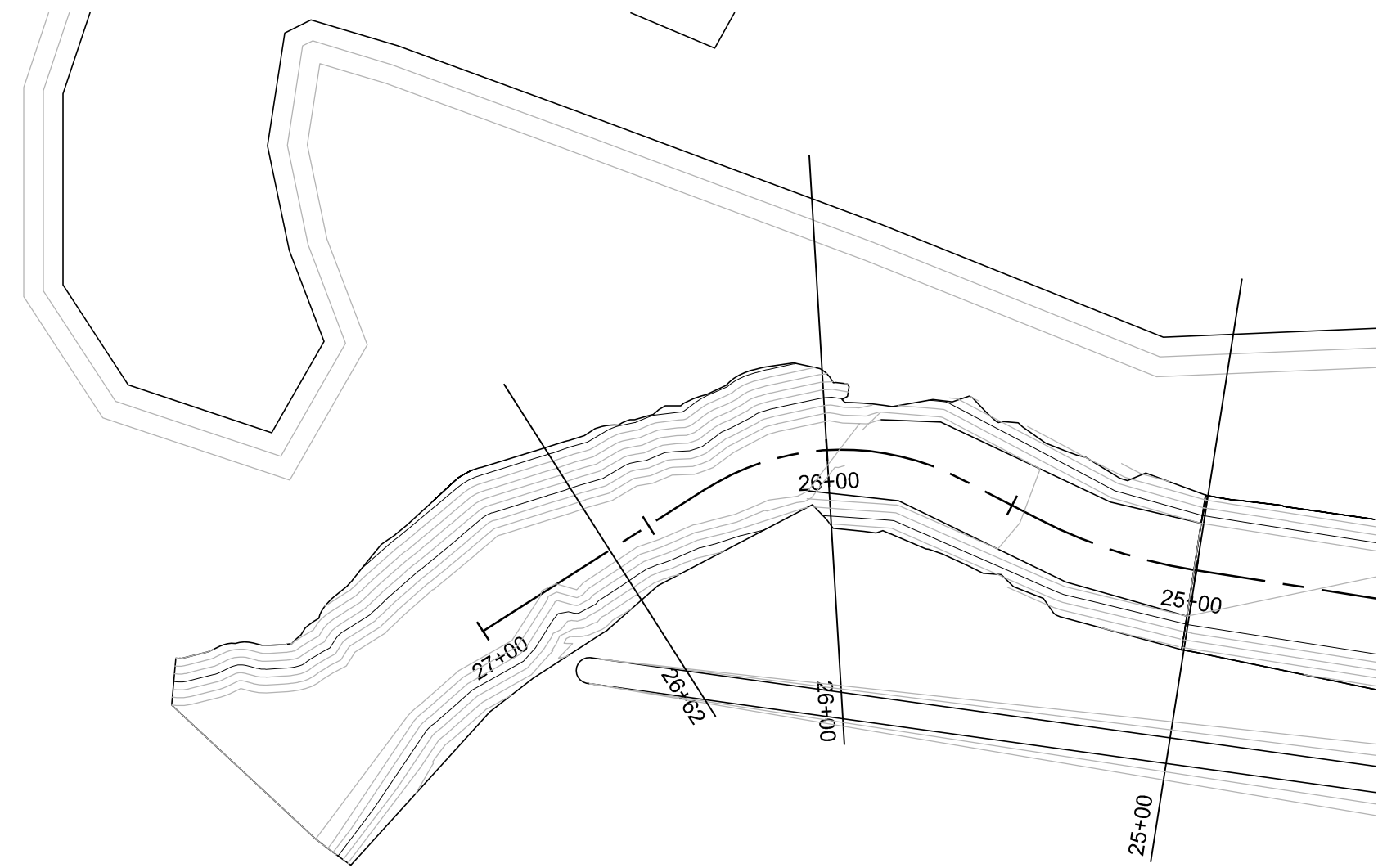
PERMIT SET
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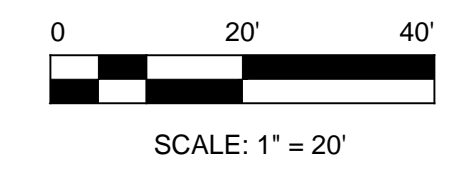
DATUM= MLLW (MEAN LOWER LOW WATER)

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REVISIONS	BY



**CROSS SECTION
STA 26+00
FISHERMAN'S ENTRANCE DREDGING**



- LEGEND
- EXISTING CHANNEL SURFACE
 - PROPOSED CHANNEL SURFACE
 - PROPOSED CHANNEL DREDGING LIMITS @ -6' MLLW
 - PROPOSED CHANNEL 2' OVER DREDGE

WHITCHURCH ENGINEERING, INC.
Phone (707) 725-6926

FISHERMAN'S ENTRANCE DREDGING PROJECT
 King Salmon Eureka, CA. 95503
FISHERMAN'S ENTRANCE PLAN & CROSS SECTION
 For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA. 95503

DATA PROVIDED BY GHD
 JN. # 1251812002
 DATED 2/25/2015

Date	AUG 26 '16
Scale	AS NOTED
Design	JTL
Drawn	GKK
Job	PGE1609
Sheet	

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PERMIT SET
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SCOPE OF WORK

TO CONSTRUCT A DEPOSITION AREA AT WHITE SLOUGH TO RECEIVE AND DEWATER DREDGING SPOILS FROM THE FISHERMAN'S CHANNEL DREDGING PROJECT. THE DESIGN SOLUTION PRESENTED HEREIN EMPLOYS A FILTRATION BERM TO DEWATER THE DREDGING MATERIAL; A SERIES OF SILT FENCES WILL ACT AS SECONDARY TREATMENT BEFORE EFFLUENT IS DISCHARGED INTO THE SURROUNDING ENVIRONMENT.

LOCATION

WHITE SLOUGH
APN: 307-052-001

DEPOSITION AREA PARAMETERS

APPROX LENGTH 500 FT
APPROX WIDTH (VARIES) 381 FT-183 FT
AERIAL FOOTPRINT 2.9 ACRES = 130000
AVAILABLE DEPTH 2.0 FT

ESTIMATED DREDGING SPOIL QUANTITIES

SEDIMENT	ENTRANCE 500 CY	FUTURE 3,600 CY
WATER	4,500 CY	32,400 CY
TOTAL	5,000 CY	36,000 CY

INITIAL SEDIMENT LEVEL WITHIN DEPOSITION AREA:
0.10 FT ABOVE EXISTING GRADE.

FINAL SEDIMENT LEVEL WITHIN DEPOSITION AREA:
0.85 FT ABOVE EXISTING GRADE.

ESTIMATED DEPOSITION RATE

VOLUMETRIC RATES:
PER HOUR 140 CY
PER DAY (6 HRS) 840 CY

TIME TO COMPLETE MATERIAL DEPOSITION:
4.2 WORK DAYS

ESTIMATED DEWATERING RATE AT FILTRATION BERM

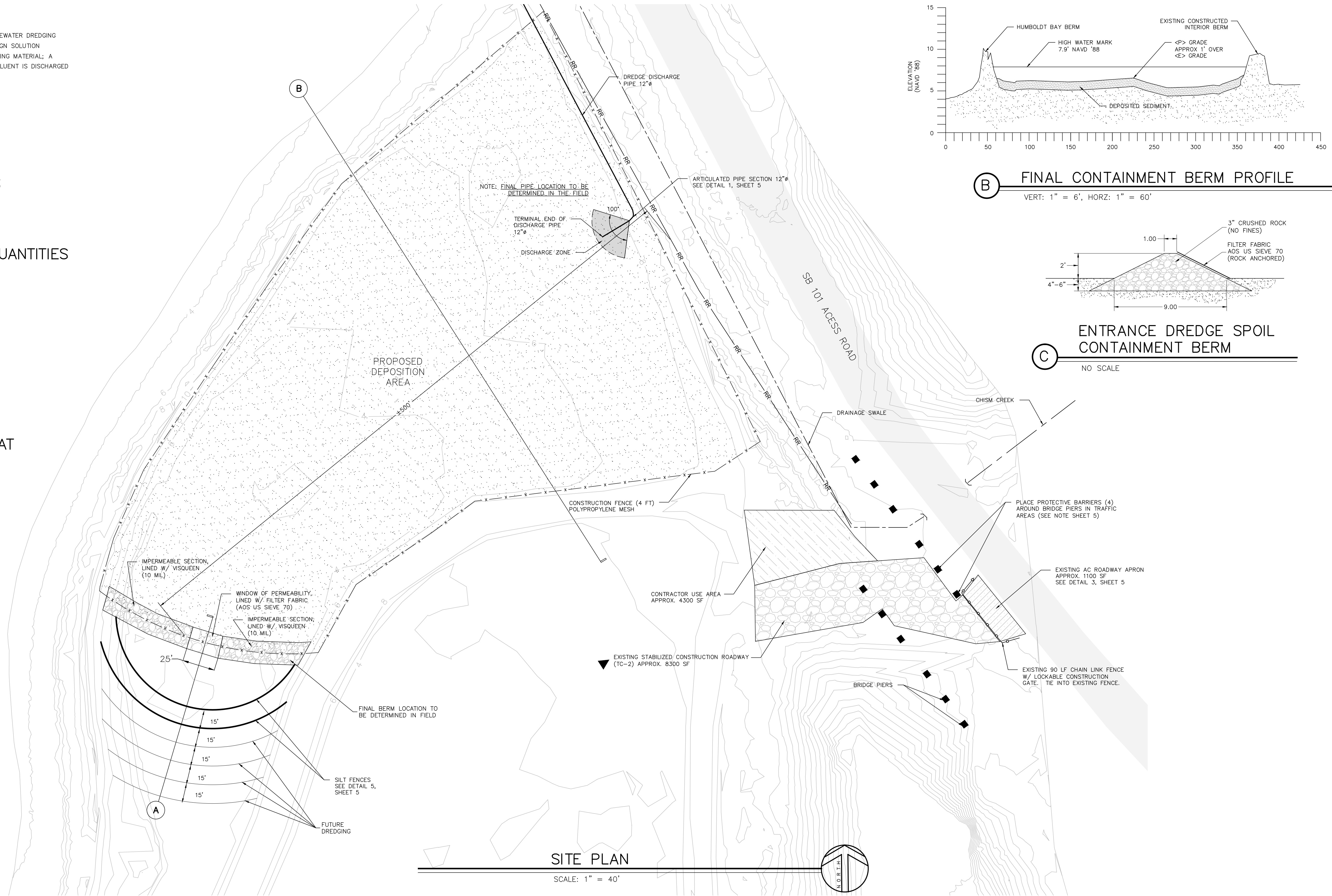
VOLUMETRIC RATES: BASED ON FILTER FABRIC FLOW RATE
PER HOUR 14.9 CY / SQ FT
PER DAY (24 HRS) 356 CY / SQ FT

ESTIMATED BILL OF MATERIALS

HDPE PIPE	40 FT
PIPE COUPLINGS	5 EA
#3 DRAINAGE ROCK	360 CY
FILTER FABRIC (AOS US SIEVE 70)	400 SQ FT
CONSTRUCTION FENCE (4 FT)	1250 FT
SILT FENCE MATERIAL WITH WIRE MESH (36 IN):	
• AOS US SIEVE 70	500 FT
• AOS US SIEVE 80	500 FT
• AOS US SIEVE 100	500 FT

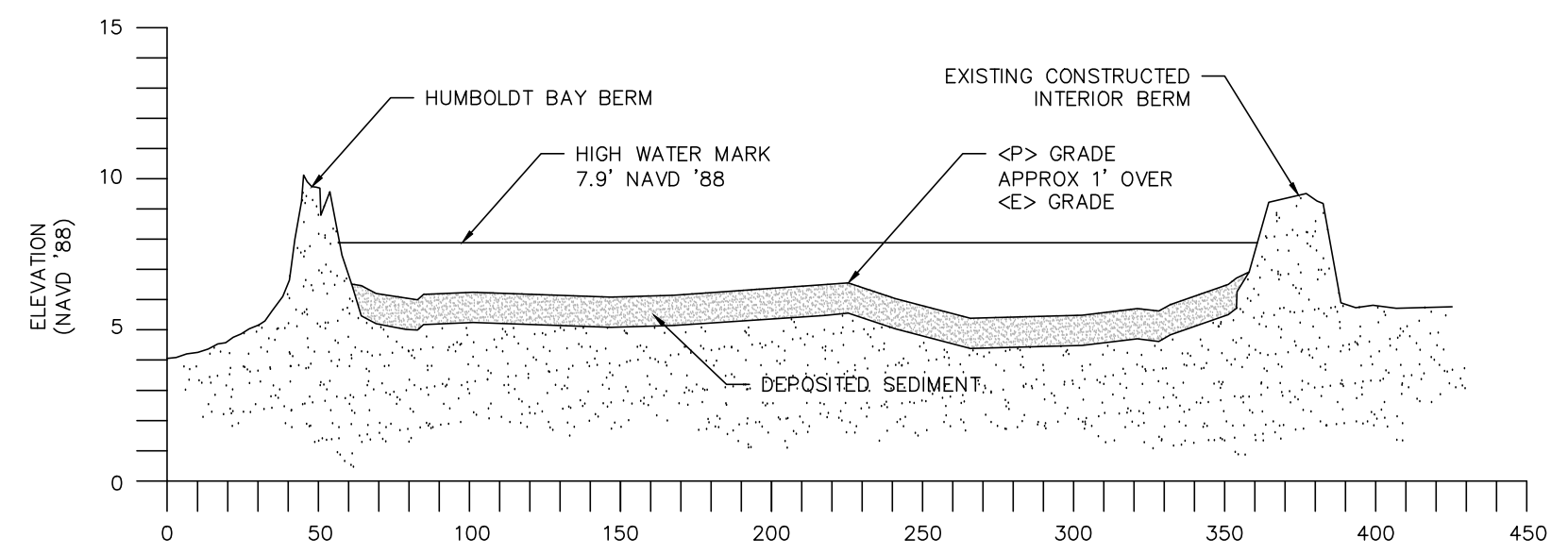
DATUM

HORIZONTAL: CALIFORNIA COORDINATE SYSTEM
ZONE 1 NAD '83
VERTICAL: NAVD '88



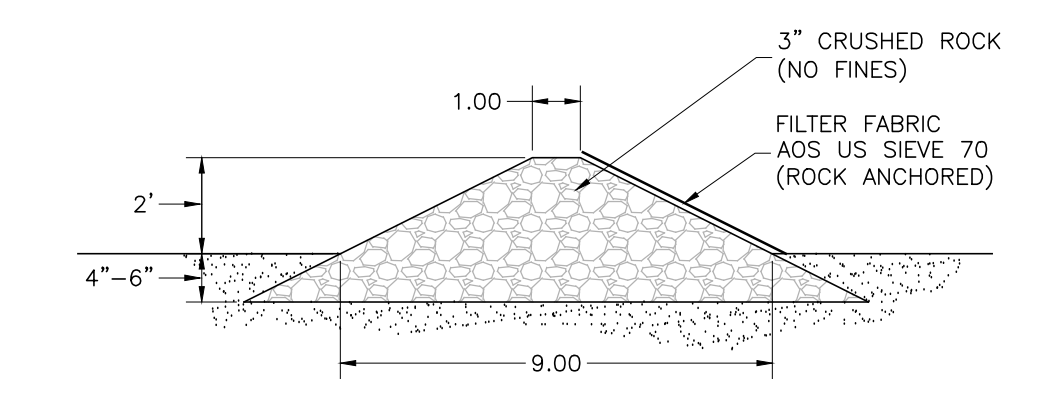
SITE PLAN

SCALE: 1" = 40'



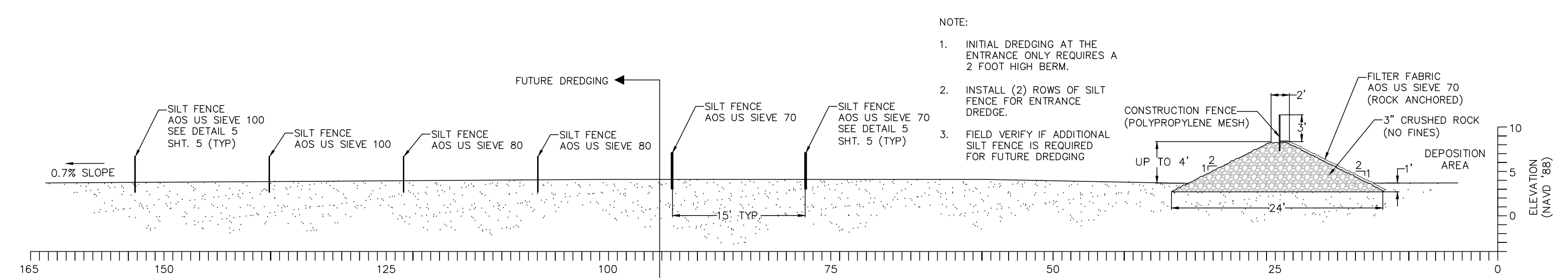
B FINAL CONTAINMENT BERM PROFILE

VERT: 1" = 6', HORZ: 1" = 60'



C ENTRANCE DREDGE SPOIL CONTAINMENT BERM

NO SCALE



FILTRATION SYSTEM DETAIL

1" = 10'

- NOTE:
- INITIAL DREDGING AT THE ENTRANCE ONLY REQUIRES A 2 FOOT HIGH BERM.
 - INSTALL (2) ROWS OF SILT FENCE FOR ENTRANCE DREDGE.
 - FIELD VERIFY IF ADDITIONAL SILT FENCE IS REQUIRED FOR FUTURE DREDGING

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REVISIONS	BY

WHITCHURCH ENGINEERING, INC.
Phone (707) 725-6926

FISHERMAN'S ENTRANCE DREDGING PROJECT
WHITE SLOUGH SITE PLAN & FILTRATION BERM DEWATERING
King Salmon Eureka, CA 95503
For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA 95503

Date	AUG 26 '16
Scale	AS NOTED
Design	JTL
Drawn	JTL
Job	PGE1609
Sheet	

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WHITE SLOUGH PROJECT AREA NOTES

OPERATIONS

- ALL GENERAL NOTES SHOWN ON SHEET GN-2 APPLY TO OPERATIONS AT THE WHITE SLOUGH PROJECT AREA EXCEPT AS NOTED BELOW.
- UNDERGROUND UTILITIES MAY BE PRESENT IN AREA. THE LOCATIONS OF UNDERGROUND UTILITIES ARE NOT SHOWN ON PLAN. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM CONSTRUCTION OPERATIONS: 48 HOURS BEFORE BEGINNING WORK. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA), AT 1-800-227-2600, TO DETERMINE LOCATIONS OF EXISTING UTILITIES.
- THERE ARE NO UTILITY SERVICES AVAILABLE AT THE WHITE SLOUGH PROJECT AREA. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING WATER AND SANITARY NEEDS. WATER MAY BE OBTAINED FROM THE HUMBOLDT BAY NATIONAL WILDLIFE REFUGE HEADQUARTERS.
- PRIOR TO INITIATING ANY WORK AT THE WHITE SLOUGH PROJECT AREA, THE CONTRACTOR SHALL INSTALL WHITE SLOUGH TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SPECIFICATIONS. THE CONTRACTOR WILL OPERATE AND MAINTAIN TRAFFIC CONTROL MEASURES DURING THE DURATION OF CONSTRUCTION PERIOD AT THE WHITE SLOUGH PROJECT AREA. TRAFFIC CONTROL MEASURES SHALL NOT BE REMOVED WITHOUT WRITTEN APPROVAL OF THE PROJECT MANAGER.
- THE CONTRACTOR SHALL COMPLETE CONSTRUCTION OF WHITE SLOUGH ENTRANCE AREA IMPROVEMENTS AND PROTECTION MEASURES (PAVED APRON, FENCE, BRIDGE PIER PROTECTION, AND STABILIZED CONSTRUCTION ROADWAY) PRIOR TO INITIATING ANY EARTHWORK OR SOIL MATERIAL DELIVERY TO THE WHITE SLOUGH PROJECT AREA.
- BRIDGE PIER PROTECTION SHALL BE PLACED AROUND ALL PIERS ADJACENT TO VEHICLE ACCESS ROAD. BRIDGE PIER PROTECTION SHALL CONSIST OF STEEL BANDED WRAPPING WITH 1" x 6" WOOD/PLYWOOD SLATS FROM GROUND SURFACE TO A HEIGHT OF EIGHT FEET.

ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL MEASURES

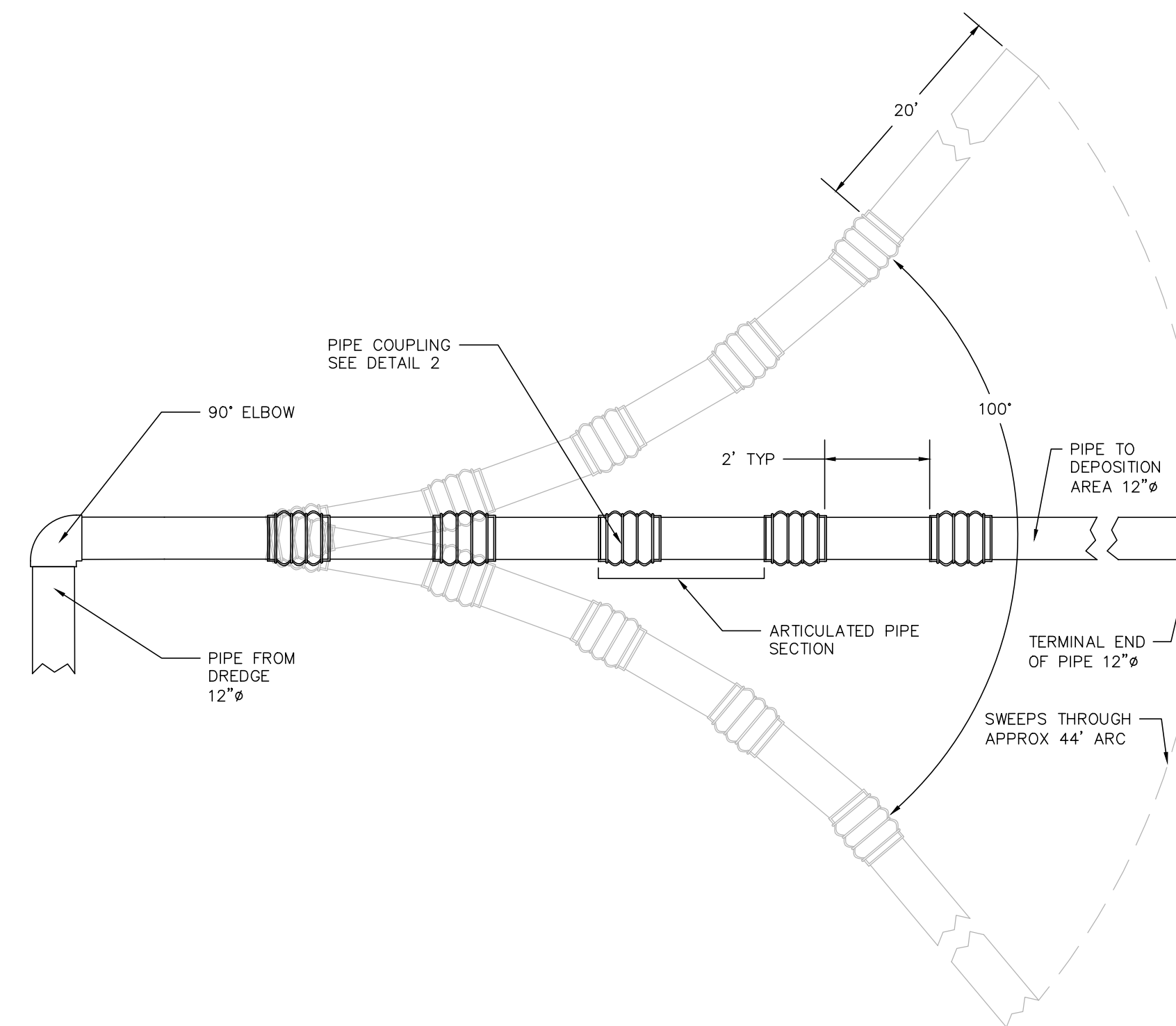
- CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING STORMWATER POLLUTION PREVENTION MEASURES AND OTHER ENVIRONMENTAL PROTECTION MEASURES AS SPECIFIED IN THE GENERAL NOTES.
- REFUELING OF EQUIPMENT USED AT THE WHITE SLOUGH PROJECT AREA SHALL TAKE PLACE OFFSITE EXCEPT FOR HEAVY EQUIPMENT OR TRACKED EQUIPMENT WHICH WOULD REQUIRE LOADING/UNLOADING. CONTRACTOR SHALL LIMIT FUELING AREAS FOR EXEMPTED EQUIPMENT TO THE PAVED ENTRANCE APRON OR THE CONTRACTOR USE AREA IDENTIFIED ON THE PLANS. CONTRACTOR SHALL IDENTIFY EXEMPTED EQUIPMENT AND WHITE SLOUGH FUELING AREAS ON SPILL PREVENTION AND RESPONSE PLAN.
- STATIONARY EQUIPMENT WILL BE POSITIONED OVER DRIP PANS.
- CONTRACTOR SHALL NOT OPERATE EQUIPMENT DIRECTLY WITHIN FLOODED TIDAL CHANNELS, SLOUGHS, OR FLOWING STREAMS. CONTRACTOR SHALL NOT PLACE FILL IN FLOODED CHANNELS OR SLOUGHS UNTIL THE PROJECT MANAGER HAS ARRANGED FOR FISH REMOVAL AND INSTALLATION OF FISH PROTECTION MEASURES.

WHITE SLOUGH PROJECT AREA GRADING AND EARTHWORK NOTES

- THE CONTRACTOR SHALL CONSTRUCT TIDAL RIDGES AS SHOWN ON THE PLANS. THE TIDAL RIDGES WILL SERVE AS CONSTRUCTION ROADS FOR MOVING EQUIPMENT AND DELIVERING MATERIALS TO CONSTRUCT THE WORK. CONTRACTOR IS RESPONSIBLE FOR EMPLOYING EQUIPMENT CAPABLE OF OPERATING ON SATURATED OR LOOSE GROUND.
- WORK MAY PROCEED ON MULTIPLE TIDAL RIDGES SIMULTANEOUSLY. CONTRACTOR SHALL PRIORITIZE TO THE EXTENT POSSIBLE COMPLETION OF TIDAL RIDGE 1 FIRST AND THEN TIDAL RIDGE 2. HAUL ROUTE 1 MAY BE COMPLETED AT THE CONTRACTOR'S CONVENIENCE TO FACILITATE EQUIPMENT MOVEMENT.
- SOIL MATERIAL SHALL BE PLACED IN LIFTS OF 8-INCHES OR LESS. THE MATERIAL DOES NOT NEED TO MEET A COMPACTION SPECIFICATION, BUT IT IS EXPECTED THAT THE MATERIAL WILL COMPACT UNDER VEHICLE TRAFFIC. THE CONTRACTOR IS RESPONSIBLE FOR PLACING THE MATERIAL TO ACCOMMODATE VEHICLE TRAFFIC AS THE TIDAL RIDGES ARE ADVANCED.
- TIDAL RIDGES SHALL BE CONSTRUCTED TO MEET THE GRADES AND LOCATIONS SHOWN ON THE PLANS. SURFACE ELEVATIONS FOR THE TOP SECTION OF COMPLETED TIDAL RIDGES SHALL BE WITHIN 0.5 FEET OF PROFILE ELEVATIONS SHOWN ON PLANS. SIDE SLOPES SHALL MEET OR EXCEED 3H:1V.
- CONTRACTOR SHOULD EXPECT NATIVE SOILS AND PLACED SOILS TO COMPACT UNDER EQUIPMENT TRAFFIC. CONTRACTOR MAY NEED TO ADD MATERIAL TO TIDAL RIDGES AND HAUL ROUTE 1 AS CONSTRUCTION PROCEEDS.
- CONTRACTOR SHOULD ANTICIPATE SOFT, SATURATED SOILS AND/OR POOR PERFORMANCE OF SOILS UNDER VEHICLE TRAFFIC AND HEAVY LOADS. REPEATED VIBRATION AND/OR HIGH LOADS MAY LEAD TO PUMPING OF THE NATIVE SOILS RESULTING IN THE SATURATION OF SURFICIAL SOILS AND LOSS OF SOIL STABILITY. CONTRACTOR SHOULD EXPECT SOFT SATURATED SUBGRADES UNDER SURFACE IMPROVEMENTS.
- SOIL MATERIALS OBTAINED FROM THE STOCKPILES WHICH THE CONTRACTOR DEEMS UNSUITABLE FOR CONSTRUCTION OF TIDAL RIDGES BECAUSE THE SOIL MATERIAL WOULD NOT SUPPORT REPETITIVE EQUIPMENT TRAFFIC MAY BE PLACED ON THE TIDAL RIDGE SIDE SLOPES OR WITHIN THE LIMITS OF DISTURBANCE INDICATED ON THE PLANS.
PROVIDED:
A. THE SURFACE ELEVATION OF PLACED SOIL LIES BELOW THE PHASE II SURFACE ELEVATION SHOWN ON THE PLAN CROSS SECTIONS.
B. THE MATERIAL IS AT LEAST 20 FEET FROM ANY OPEN WATER AREA.
C. THE MATERIAL IS GRADED INTO THE TIDAL RIDGES AND DOES NOT CREATE DEPRESSIONS THAT MAY TRAP SURFACE WATER RUNOFF.
- CONTRACTOR MAY USE SOIL MATERIAL TO CONSTRUCT TURN-OUTS AND TURN-AROUNDS TO FACILITATE EQUIPMENT MOVEMENT. THE CONTRACTOR SHALL COORDINATE LOCATION AND DIMENSIONS OF PROPOSED TURN-OUTS AND TURN-AROUNDS WITH PROJECT ENGINEER. TOP ELEVATIONS OF TURN-OUTS AND TURN-AROUNDS SHALL NOT EXCEED THE ELEVATIONS OF THE PHASE II SURFACE SHOWN ON THE PLAN CROSS SECTIONS.
- SURFACE SOIL AND APPLICATION AREAS MAY YIELD UNDER THE WEIGHT OF MEDIUM AND HEAVY-DUTY EARTH MOVING EQUIPMENT ESPECIALLY IN LOW-LYING SATURATED AREAS. THUS, CONTRACTOR MAY NEED TO CONSTRUCT A STRUCTURAL SUBGRADE USING COIR FABRIC AND/OR SUBGRADE ROCK. COIR FABRIC MAY BE PLACED AT THE CONTRACTOR'S DISCRETION. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER AND RECEIVE WRITTEN APPROVAL FROM THE PROJECT MANAGER PRIOR TO PLACING SUBGRADE ROCK.

MAINTENANCE AND INSPECTION REQUIREMENTS

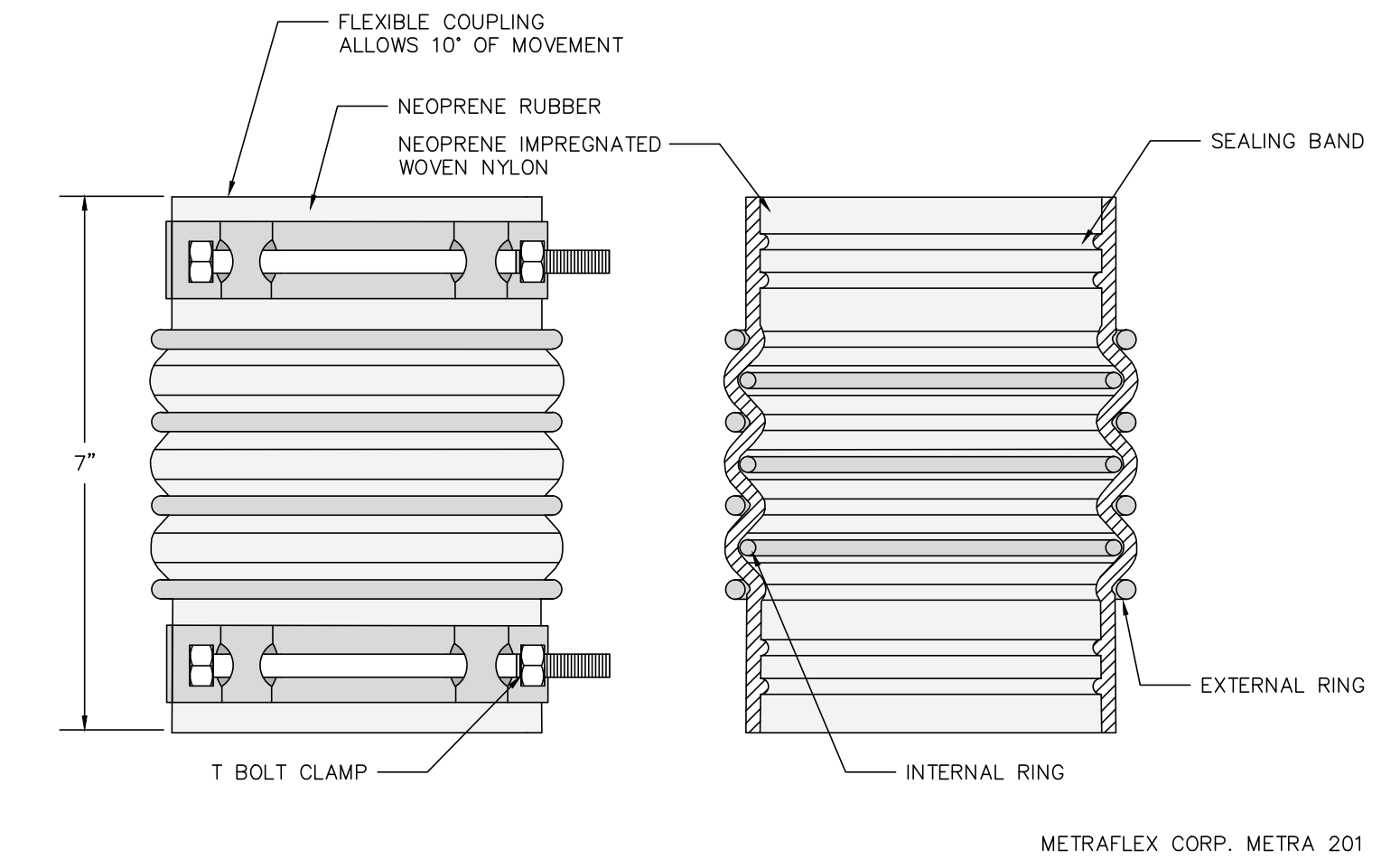
- PRIOR TO DEPOSITION OF SEDIMENT, AN EVALUATION OF EXISTING BERMS TO DETERMINE STABILITY.
- DAILY INSPECTION OF PIPE OUTFALL INTO DEPOSITION AREA TO DETERMINE IF OUTFALL MUST BE RELOCATED DUE TO ACCUMULATED SEDIMENT.
- DAILY INSPECTION OF FILTRATION BERM TO DETERMINE IF OUTFLOW IS FILTERING PROPERLY OR IF FILTER FABRIC ON WINDOW OF PERMEABILITY NEEDS REPLACEMENT.
- DAILY INSPECTION OF OUTFALL AREA FOR EROSION, PLACEMENT OF RIP RAP TO DISPERSE ENERGY MAY BE NECESSARY.
- DAILY MAINTENANCE OF SILT FENCING TO REMOVE DEPOSITED SEDIMENT.



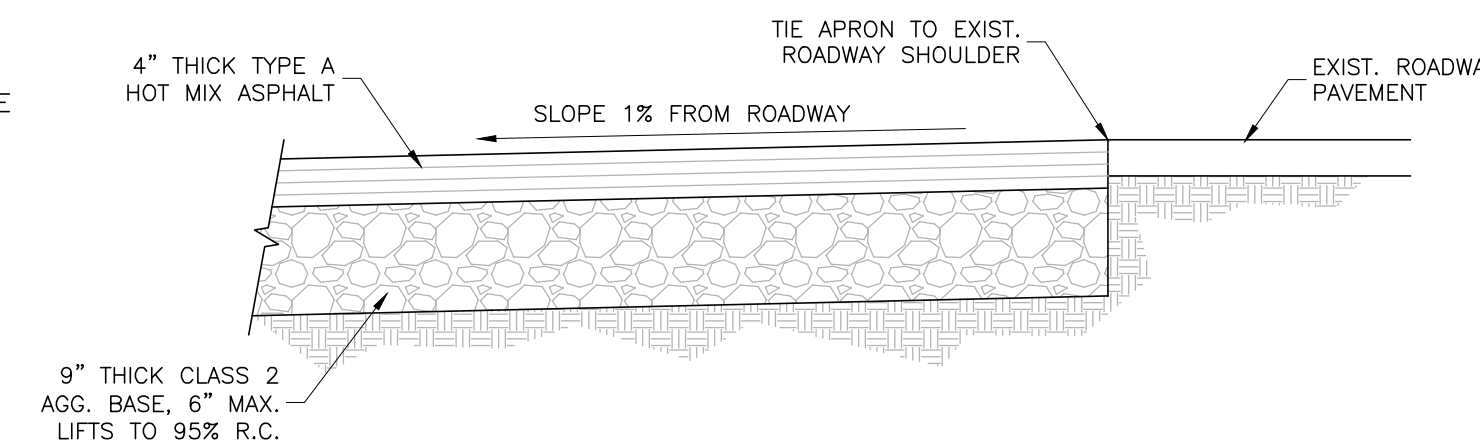
1 ARTICULATED PIPE SECTION DETAIL
NOT TO SCALE

ARTICULATED DEPOSITION PIPE NOTES:

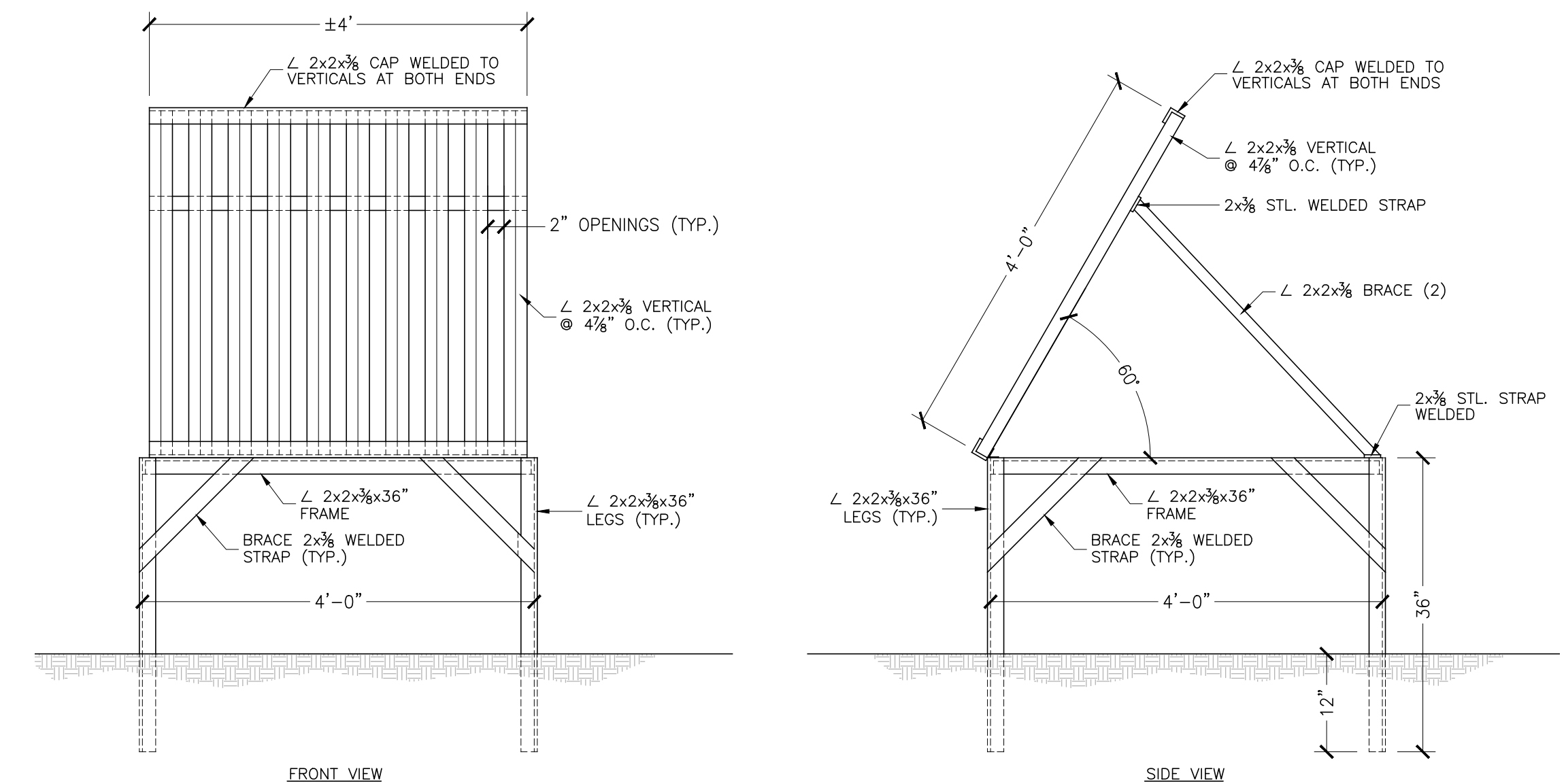
- THE CONTRACTOR SHALL INSPECT AND REPAIR (AS REQUIRED) THE ARTICULATED PIPE PRIOR TO EACH DAY OF SEDIMENT DEPOSITION.
- THE TERMINAL END OF THE ARTICULATED PIPE SECTION WILL BE MOVED AS REQUIRED TO PROMOTE UNIFORM SPOILS DEPOSITION WITHIN THE DEPOSITION AREA. AN EXCAVATOR OR OTHER APPROPRIATE PIECE OF EARTHWORK EQUIPMENT WILL BE USED TO MOVE THE ARTICULATED PIPE SECTION.
- THE DEPOSITION PIPE SHALL DISCHARGE THROUGH A BAR RACK TO REMOVE BULK DEBRIS BEFORE EFFLUENT REACHES THE FILTRATION BERM.



2 PIPE COUPLING DETAIL
NOT TO SCALE



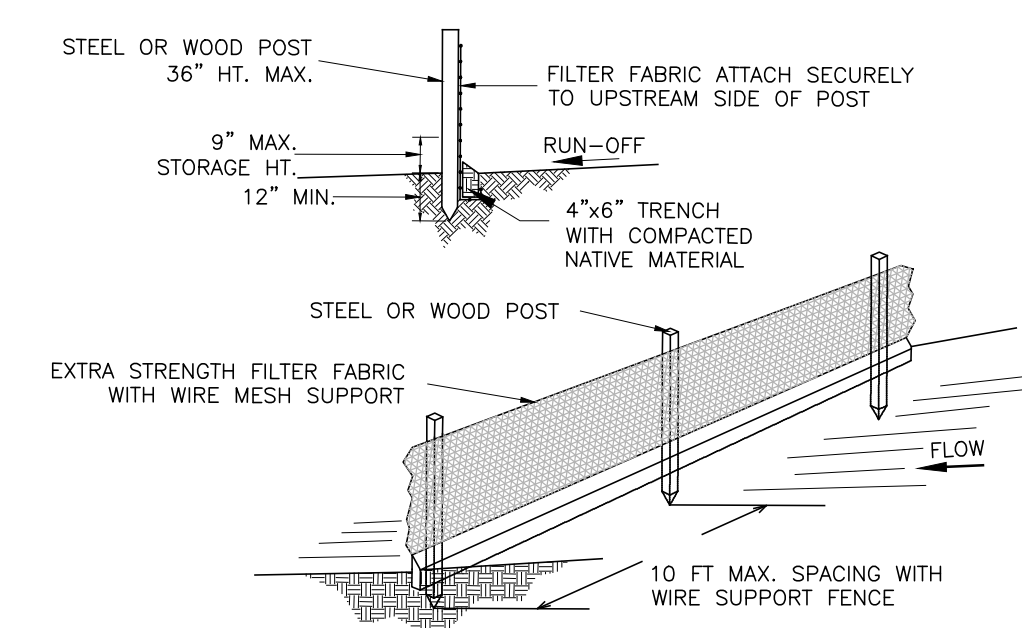
3 ROADWAY APRON DETAIL
NOT TO SCALE



4 TRASH RACK DETAIL
NOT TO SCALE

SILT FENCE NOTES:

- THE CONTRACTOR SHALL INSPECT AND REPAIR FENCE AFTER EACH DAY OF SEDIMENT DEPOSITION AND REMOVE SEDIMENT WHEN NECESSARY.
- REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
- SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMUM PONDING EFFICIENCY.
- WOOD STAKES SHOULD BE COMMERCIAL QUALITY LUMBER OF THE SIZE AND SHAPE SHOWN ON THE PLANS. EACH STAKE SHOULD BE FREE FROM DECAY, SPLITS OR CRACKS LONGER THAN THE THICKNESS OF THE STAKE OR OTHER DEFECTS THAT WOULD WEAKEN THE STAKES AND CAUSE THE STAKES TO BE STRUCTURALLY UNSUITABLE.
- SILT FENCE SHALL BE LEFT IN PLACE, INSPECTED, AND MAINTAINED UNTIL THE UPSTREAM AREA IS PERMANENTLY STABILIZED.
- SEDIMENT THAT ACCUMULATES IN THE SILT FENCE MUST BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN EFFECTIVENESS. SEDIMENT SHOULD BE REMOVED WHEN SEDIMENT ACCUMULATION REACHED ON THIRD OF THE BARRIER HEIGHT. SEDIMENT REMOVED DURING MAINTENANCE MAY BE STOCKPILED AND PLACED WITHIN THE DEPOSITION AREA.
- SILT FENCE FABRIC SHOULD BE WOVEN POLYPROPYLENE WITH A MINIMUM WIDTH OF 36" AND A MINIMUM TENSILE STRENGTH OF 100 LB FORCE. THE FABRIC SHOULD CONFORM TO THE REQUIREMENTS IN ASTM DESIGNATION D4632 AND SHOULD HAVE AN INTEGRAL REINFORCEMENT LAYER. THE REINFORCEMENT LAYER SHOULD BE POLYPROPYLENE, OR EQUIVALENT, NET PROVIDED BY THE MANUFACTURER. THE PERMITIVITY OF THE FABRIC SHOULD BE BETWEEN 0.1 SEC AND 0.15 SEC IN CONFORMANCE WITH THE REQUIREMENTS IN THE ASTM DESIGNATION D4491.



5 SILT FENCE DETAIL
NOT TO SCALE

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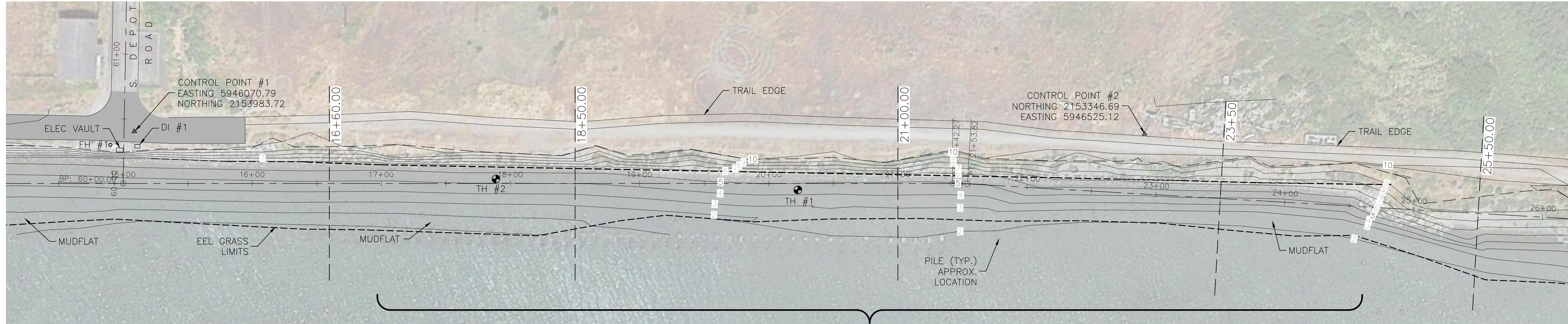
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REVISIONS	BY

WHITCHURCH ENGINEERING, INC.
610 9th Street Fortuna, California 95540
Phone (707) 725-6926

FISHERMAN'S ENTRANCE DREDGING PROJECT
WHITE SLOUGH NOTES AND DETAILS
King Salmon, Eureka, CA 95503
For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA 95503

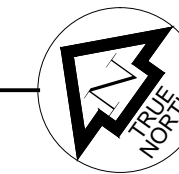
Date	AUG 26 '16
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Drawn	JTL
Job	PGE1609
Sheet	5



APPROX. EXTENTS OF PILE REMOVAL (±500)
STA. ±17+00 TO STA. ±24+50

SITE PLAN STA. 14+50 TO STA. 25+50

SCALE: 1" = 40'



REVISIONS	BY

WHITCHURCH ENGINEERING, INC.
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FISHERMAN'S ENTRANCE DREDGING PROJECT
King Salmon, Eureka, CA 95503
PILE REMOVAL/EEL GRASS MITIGATION
For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA 95503

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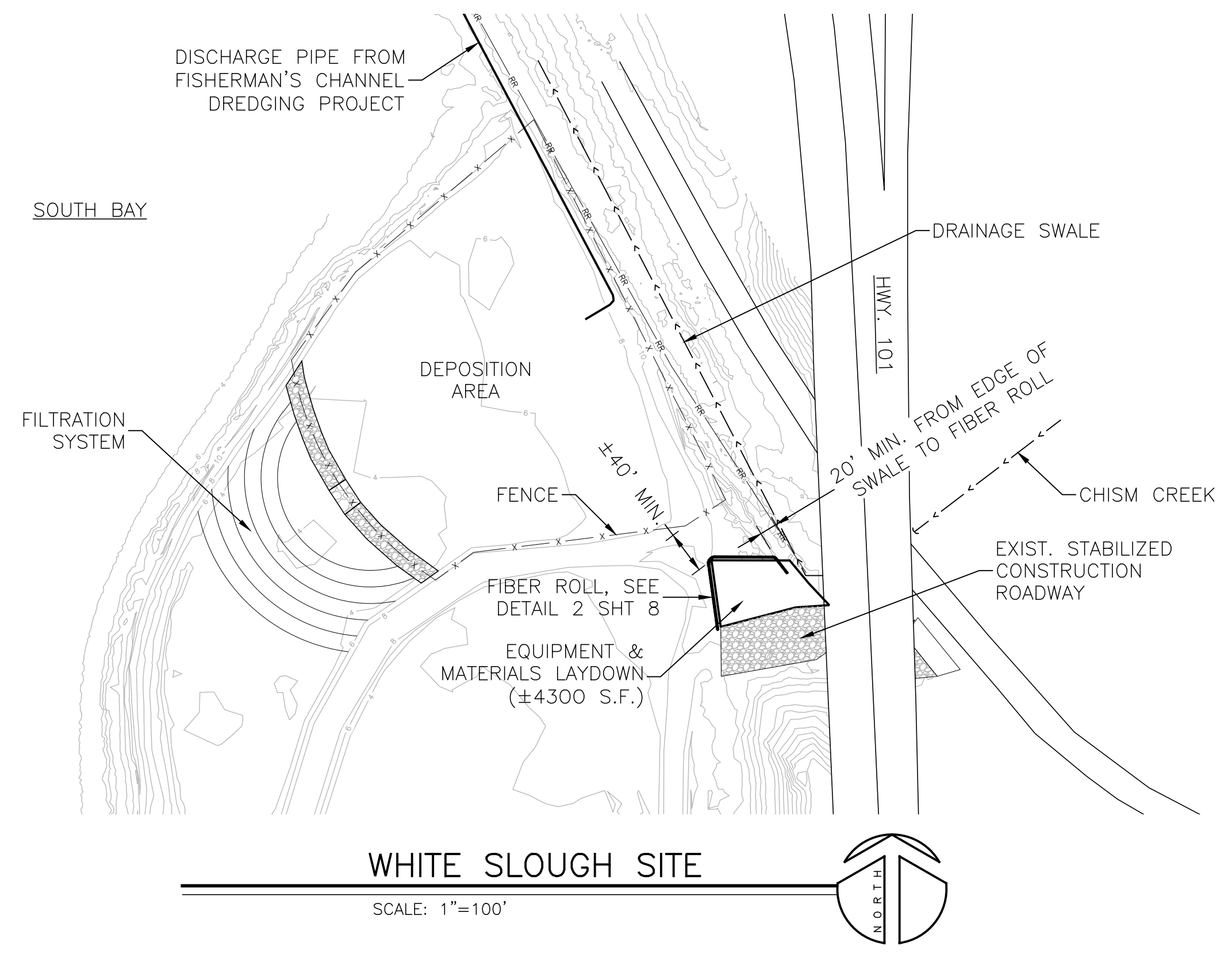
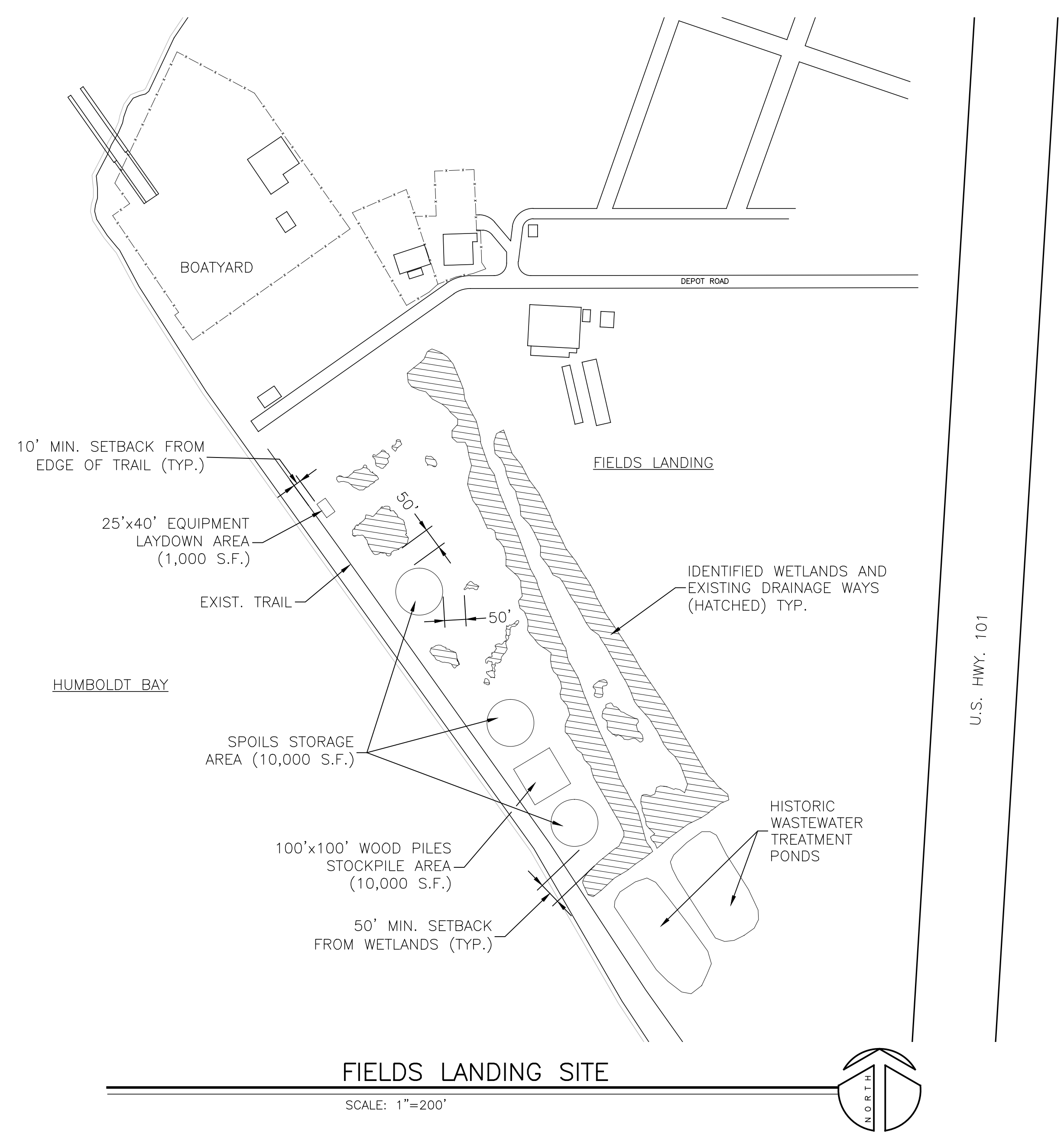
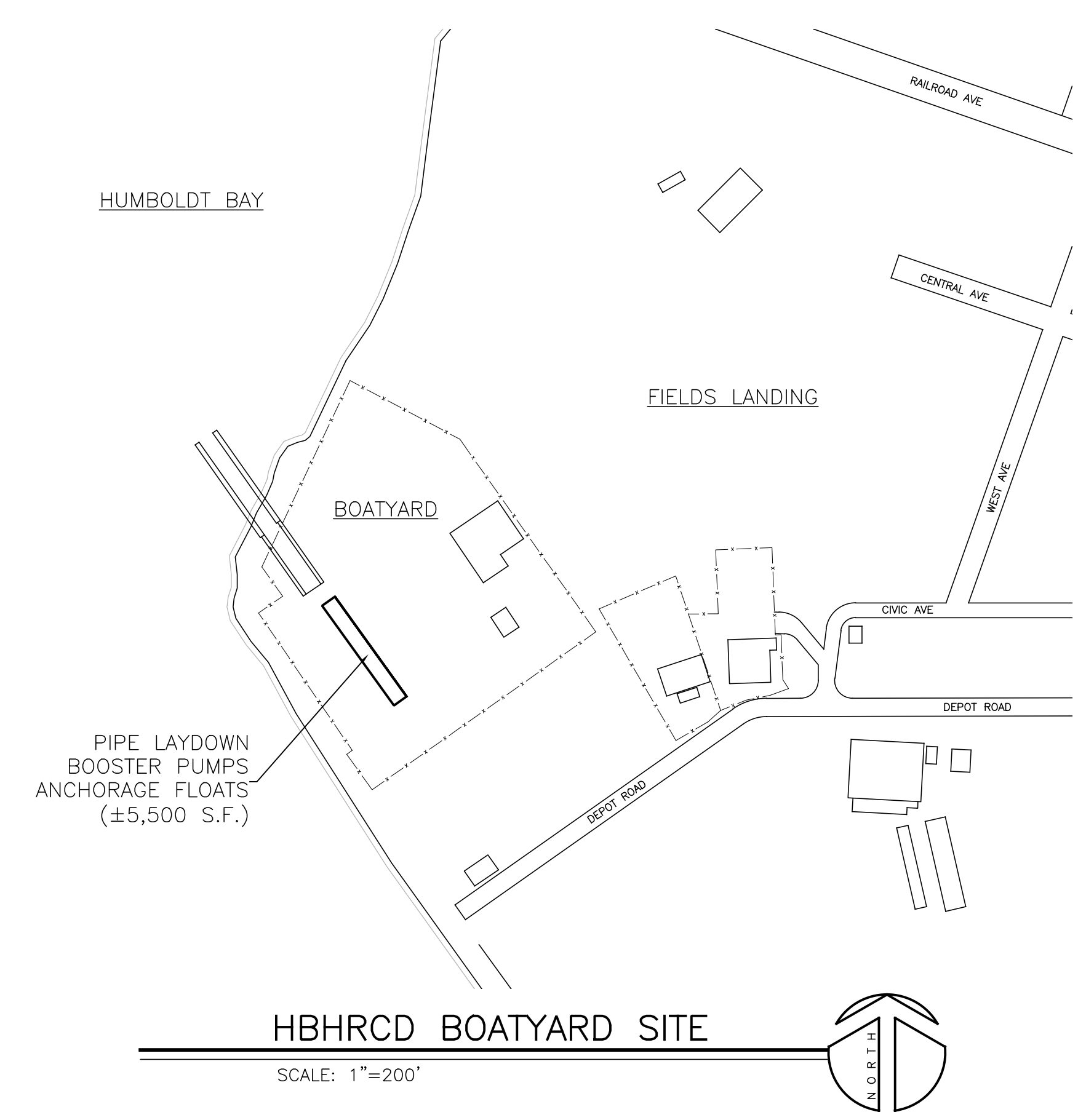
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FISHERMAN'S ENTRANCE DREDGING PROJECT
POTENTIAL STAGING/STOCKPILE LOCATIONS

Date AUG 26 '16
 Scale AS NOTED
 Design JTL
 Drawn GKK
 Job PGE1609
 Sheet



GENERAL NOTES:

1. BOATYARD LAYDOWN AREA TO BE SURROUNDED BY FIBER ROLLS ANCHORED WITH SAND BAGS.
2. EQUIPMENT LAYDOWN AREA AT FIELDS LANDING SITE TO BE LOCATED A MINIMUM OF 20 FEET FROM IDENTIFIED WETLANDS.
3. FIELDS LANDING SPOILS STORAGE AREAS TO BE LOCATED A MINIMUM OF 50 FEET FROM IDENTIFIED WETLANDS.
4. SPOILS STORAGE AREAS TO BE PROTECTED BY FIBER ROLLS ON ALL SIDES PER DETAIL 2, SHT. 8.
5. SPOILS STORAGE AREAS TO BE COVERED PER DETAIL 1, SHT. 8.
6. WOOD PILE STORAGE AREA TO BE LOCATED A MINIMUM OF 50' FROM IDENTIFIED WETLANDS.
7. WOOD PILE STOCKPILE AREA TO BE PROTECTED BY FIBER ROLLS.

PILING NOTES:

1. ±500 PILES TO BE REMOVED
2. ESTIMATED SIZE: 16"Øx40' LONG
3. PILES ARE NOT CONSIDERED HAZARDOUS WASTE ACCORDING TO TITLE 22, CHAPTER 11 AND ARTICLE 3 PER TREATED PILING SAMPLING AND ANALYSIS REPORT OF FINDINGS BY SHN, MARCH 2009, REF:008221.

PRELIMINARY NOT FOR CONSTRUCTION

1 INCH
 THESE PLANS ARE ORIGINALLY PRINTED ON 24"x36" PAPER.

This drawing or drawing set shall not be used for construction unless a jurisdictional stamp (County, City, State, Federal) has been issued on the drawing, stating "FOR PERMIT" or similar verbiage, a wet signed professional engineer's stamp, and permit documents have been issued for the project.

REVISIONS	BY

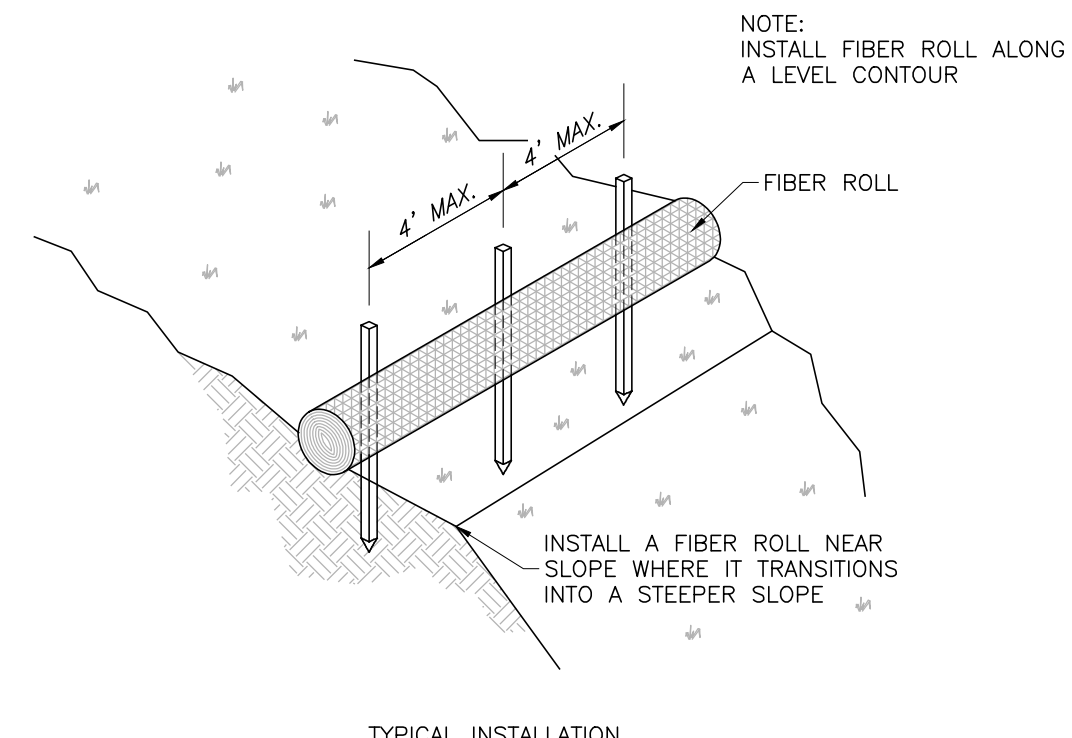
WHITCHURCH ENGINEERING, INC.
 Phone (707) 725-6926

FISHERMAN'S ENTRANCE DREDGING PROJECT
 King Salmon Eureka, CA. 95503
EROSION CONTROL DETAILS
 For: Pacific Gas & Electric 1000 King Salmon Ave Eureka, CA. 95503

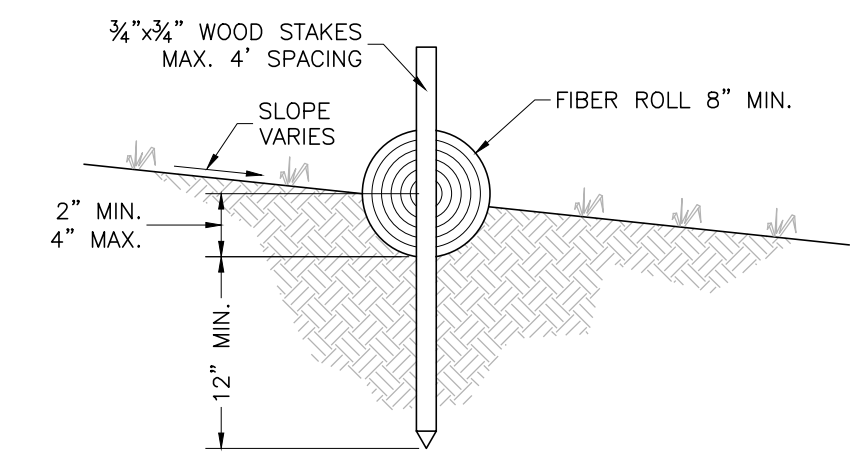
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EROSION CONTROL NOTES

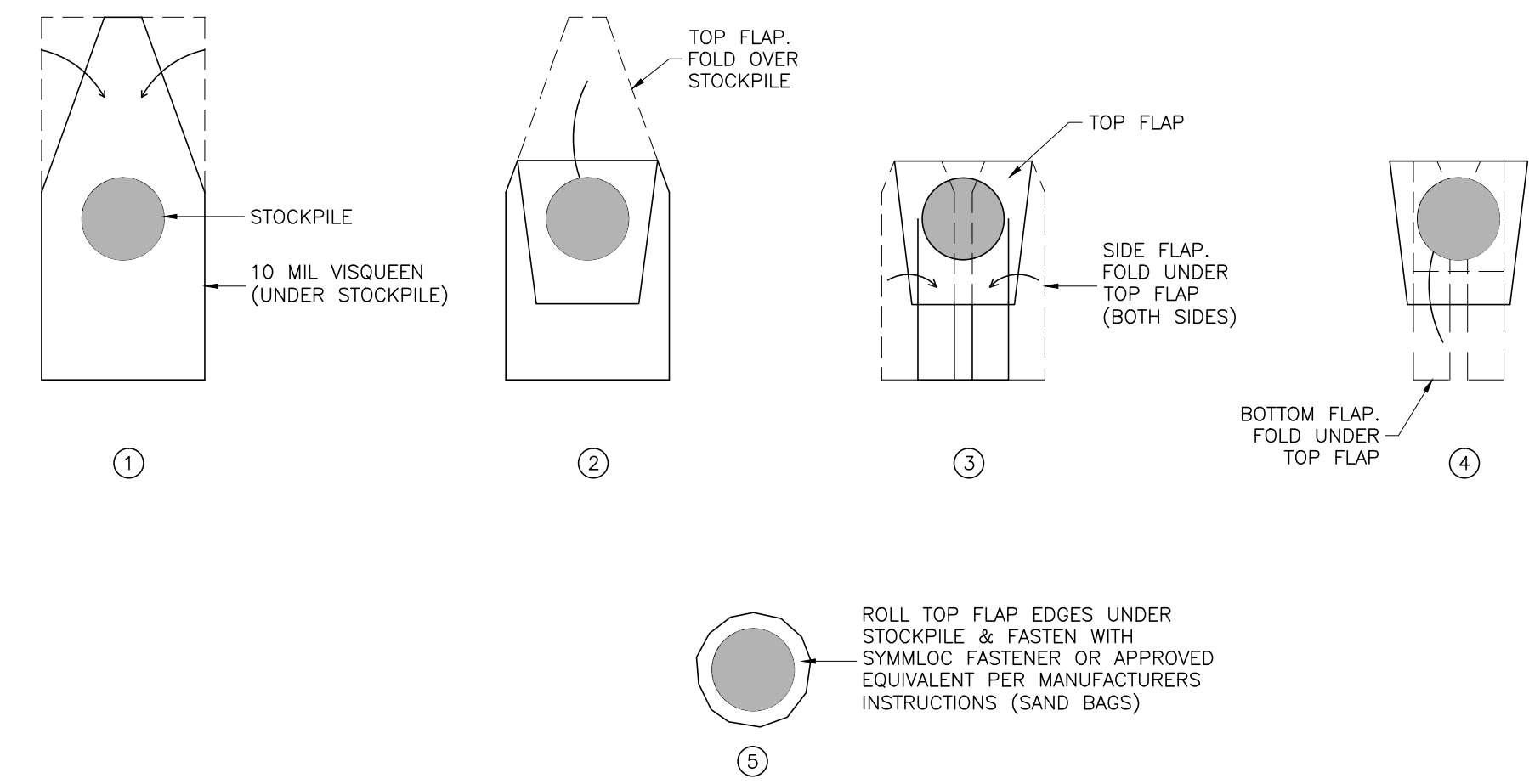
- A. GENERAL
- THIS PLAN WAS PREPARED BY A QUALIFIED ENGINEER FROM WHITCHURCH ENGINEERING, INC WHO HAS TRAINING AND EXPERIENCE TO HAVE EXPERT KNOWLEDGE OF EROSION AND SEDIMENT CONTROL METHODS.
 - THE SOURCE OF THE BMP'S USED IN THIS PLAN PREPARATION ARE FROM CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK AND STATE WATER RESOURCES CONTROL BOARD BEST MANAGEMENT PRACTICE CONSTRUCTION HANDBOOK.
 - THE IMPLEMENTATION OF BMP'S WILL OCCUR WITH THE ONSET OF CONSTRUCTION, IMMEDIATELY AFTER SOIL IS DISTURBED AT SITE, AS SHOWN ON SITE MAP.
 - A REPRESENTATIVE FROM WHITCHURCH ENGINEERING, INC SHALL INSPECT EROSION CONTROL MEASURES AFTER A SIGNIFICANT RAIN EVENT. A LETTER FOR EACH INSPECTION SHALL BE SUBMITTED TO THE JOB FILE. THE EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER AS NECESSARY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- B. WATER COURSES
- EXISTING AND PROPOSED DRAINAGE PATTERNS, CHANNELS AND FACILITIES ARE SHOWN ON ATTACHED PLAN.
 - CHANGES IN FLOW QUANTITIES AND VELOCITIES ARE NEGLIGIBLE; EXISTING SLOPES AND DRAINAGE CHANNELS ARE TO REMAIN UNALTERED. SURFACE WATER FLOW IS BY SHEET FLOW. SLOPE PROTECTION MEASURES SHALL CONSIST OF APPLYING A PROTECTIVE LAYER OF STRAW OR ANOTHER SUITABLE MATERIAL TO SOIL SURFACE AREA.
 - TEMPORARY SLOPE STABILIZATION MEASURES SHALL CONSIST OF MULCHING WITH PROTECTIVE COVERINGS. APPLICATION OF THIS MEASURE SHALL COMMENCE WITH START OF CONSTRUCTION.
 - EXISTING GRASS VEGETATED FIELD AREA WILL SERVE TO REDUCE DRAINAGE FLOW VELOCITIES.
 - A TEMPORARY SEDIMENT DETENTION BASIN IS NOT NECESSARY FOR THIS PROJECT.
 - ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
- C. DISPOSAL OF EXCAVATED MATERIALS
- EXCAVATED MATERIALS SHALL STOCKPILED ON SITE FOR REUSE, EXCESS SOILS WILL BE HAULED OFFSITE AT THE END OF PROJECT.
- D. DUST CONTROL
- EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT THE FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFIRM DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTORS ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCES. DUST CONTROL WILL BE DONE ON A DAILY BASIS.
- E. REMOVAL OF VEGETATION AND REVEGETATION
- VEGETATION REMOVAL IS TO BE LIMITED TO AREA DIRECTLY UNDER PROPOSED CONSTRUCTION.
- F. FINAL REPORTS AND NOTIFICATION OF COMPLETION
- UPON COMPLETION OF THE PERMITTED ROUGH GRADING WORK AND AT THE FINAL COMPLETION OF THE WORK, A SET OF REPORTS, DRAWINGS AND SUPPLEMENTS THERETO ARE REQUIRED FOR ENGINEERED GRADING, OR WHEN PROFESSIONAL INSPECTION IS PERFORMED FOR REGULAR GRADING, AS APPLICABLE.
 - THE BUILDING OFFICIAL SHALL BE NOTIFIED WHEN THE GRADING OPERATION IS READY FOR FINAL INSPECTION AFTER ALL WORK AND ALL EROSION-CONTROL MEASURES HAVE BEEN COMPLETED IN ACCORDANCE WITH THE FINAL APPROVED GRADING PLAN, AND THE REQUIRED REPORTS HAVE BEEN SUBMITTED.



TYPICAL INSTALLATION



ENTRENCHMENT DETAIL



1 BURRITO WRAP STOCKPILE DETAIL
NO SCALE

2 FIBER ROLL DETAIL
NO SCALE

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