



**ALABAMA  
PORT AUTHORITY**  
PORT OF MOBILE

**CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION  
DEMOLITION PACKAGE**

KAY IVEY, GOVERNOR OF ALABAMA  
DOUG OTTO, DIRECTOR



NOTES									<small>THIS DOCUMENT IS THE PROPERTY OF APTIM. IT MAY CONTAIN INFORMATION DESCRIBING TECHNOLOGY OWNED BY APTIM AND DEEMED TO BE COMMERCIALY SENSITIVE. IT IS TO BE USED ONLY IN CONNECTION WITH WORK BEING PERFORMED BY APTIM. REPRODUCTION IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN WORK PERFORMED BY APTIM IS FORBIDDEN EXCEPT BY EXPRESS WRITTEN PERMISSION OF APTIM. IT IS TO BE SAFEGUARDED AGAINST BOTH DELIBERATE AND INADVERTENT DISCLOSURE TO ANY THIRD PARTY.</small>	CLIENT DWG NO:		
		E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26			CHOCTAW POINT CONTAINER TERMINAL		
		D	100% DESIGN REVIEW	ECW	JEJ	RSG	09-09-25			PHASE V DOCK EXTENSION - DEMOLITION PACKAGE		
		C	95% DESIGN REVIEW	JLH	JEJ	RSG	08-08-25			PROJECT COVER SHEET		
		B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25			FOR: ALABAMA PORT AUTHORITY		
		A	30% DESIGN REVIEW	ECW	JEJ	RSG	04-11-25			PROJECT NO: 4617 DWG NO: G1 REV: E		
	REFERENCE DRAWINGS	NO.	REVISION	DRAWN	CK'D	APPD	DATE	DRAWN: ECW	CK'D: JEJ	APPD: RSG	DATE: 01-03-25	SCALE: NONE

**DEMOLITION NOTES:**

1. APTIM HAS ATTEMPTED TO PROVIDE THE CONTRACTOR WITH THE MOST CURRENT "AS BUILT" INFORMATION AS POSSIBLE REGARDING EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL EXISTING CONDITIONS AND HOW THEY AFFECT THE REQUIRED WORK PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCY NOTED BETWEEN ACTUAL CONDITIONS AND THOSE DESCRIBED BY THESE DRAWINGS SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER. NO ADDITIONAL COST ASSOCIATED WITH THE MODIFICATIONS TO THE SCOPE OF WORK REQUIRED DUE TO INACCURATE EXISTING CONDITIONS AS SHOWN BY THESE DRAWINGS WILL BE CONSIDERED UNLESS SAID CONDITIONS HAVE BEEN BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO RECEIVING BIDS.
2. THE WORK INCLUDED UNDER THIS CONTRACT SHALL CONSIST OF FURNISHING ALL LABOR, TOOLS, EQUIPMENT, MATERIAL, SERVICES, AND SUPERVISION NECESSARY FOR THE DEMOLITION, REMOVAL FROM THE SITE, AND PROPER DISPOSAL OF ALL INDICATED STRUCTURES INCLUSIVE OF BUT NOT LIMITED TO ALL PILING, CONCRETE, STEEL FRAMING, TIMBER FRAMING, AND ALL ASSOCIATED CONSTRUCTION THAT EXIST IN THE AREAS DESIGNATED FOR DEMOLITION. REMOVED MATERIALS AS DESIGNATED BY THE OWNER SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE SAFELY STORED AS DIRECTED. MATERIAL SPECIFIED TO BE DISPOSED OF SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE DISPOSED OF OFF OWNER'S PROPERTY.

CARE SHALL BE TAKEN TO AVOID DROPPING ANY REMOVED MATERIAL IN THE WATER AND ANY SUCH MATERIALS ENTERING THE WATER SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

**3. APPLICABLE CODES AND STANDARDS**

- ANSI. A10.6 (LATEST EDITION) DEMOLITION OPERATIONS-SAFETY REQUIREMENTS
- NATIONAL ASSOCIATION OF DEMOLITION CONTRACTORS DEMOLITION SAFETY MANUAL

**4. REQUIRED SUBMITTALS**

THE CONTRACTOR SHALL SUBMIT PROPOSED DEMOLITION AND REMOVAL PROCEDURES TO THE OWNER FOR APPROVAL BEFORE WORK BEGINS. THE DEMOLITION PLAN SHALL INCLUDE PROCEDURES FOR CAREFUL REMOVAL AND DISPOSITION OF ALL MATERIALS AND A DETAILED DESCRIPTION OF METHODS AND EQUIPMENT TO BE USED FOR EACH OPERATION AND OF SEQUENCE OF OPERATIONS.

**5. NOTIFICATION OF DEMOLITION AND DISPOSAL**

THE CONTRACTOR SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL HAULING AND DISPOSAL REGULATIONS, FURNISHING TIMELY NOTIFICATION OF THE DEMOLITION WORK TO FEDERAL, STATE, REGIONAL AND LOCAL AUTHORITIES AS REQUIRED.

**6. DUST AND DEBRIS CONTROL**

THE CONTRACTOR SHALL PREVENT THE SPREAD OF DUST AND DEBRIS AND AVOID THE CREATION OF A NUISANCE OR HAZARD IN THE SURROUNDING AREA. WATER SPRAY SHALL BE REQUIRED DURING DEMOLITION OPERATIONS WHEN CONDITIONS WARRANT.

**7. PROTECTION OF EXISTING STRUCTURES**

TO PROTECT PEDESTRIAN & VEHICULAR TRAFFIC IN AND AROUND THE WORK AREA, TRAFFIC BARRICADES WITH FLASHING LIGHTS SHALL BE USED AS REQUIRED. STRUCTURES, EQUIPMENT, AND OTHER ITEMS IN THE ADJACENT AREA SHALL BE PROTECTED AS REQUIRED DURING DEMOLITION AND REMOVAL WORK. ANY SUCH ITEMS DAMAGED DURING THE COURSE OF THE WORK SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, OR REPLACED. WHERE DEMOLITION AND REMOVAL WORK CAUSE HAZARDOUS CONDITIONS APPROPRIATE BARRIERS AND TEMPORARY COVERINGS SHALL BE USED AS REQUIRED.

**8. EXISTING CONSTRUCTION AND OPERATIONS**

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL NECESSARY DETAILS OF THE EXISTING CONSTRUCTION AS RELATIVE TO ITS EFFECTS ON HIS WORK. CONTRACTOR SHALL ALSO COORDINATE ALL ACTIVITIES WITH THE OWNER AND SHALL NOT INTERFERE IN ANY WAY WITH APM TERMINALS OPERATIONS.

**9. REMOVAL VERIFICATION**

AS NOTED ON DRAWINGS, IN THE AREAS WHERE PILES, RIP-RAP, AND OTHER DEBRIS ARE TO BE REMOVED IN THE AREA OF THE FUTURE DOCK CONSTRUCTION, THE CONTRACTOR SHALL PERFORM A SUBSURFACE SIDE SCAN SONAR SURVEY FOR VERIFICATION OF REMOVAL.

**10. PERMIT REQUIREMENTS**

CONTRACTOR SHALL ABIDE BY THE TERMS OF THE USACE PERMIT. THE PERMIT PLACARD SHALL BE CONSPICUOUSLY DISPLAYED AT THE CONSTRUCTION SITE.

**11. IF ARCHAEOLOGICAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, THE PROCEDURES CODIFIED AT 36 CFR 800.13(b) WILL APPLY. ARCHAEOLOGICAL MATERIALS CONSIST OF ANY ITEMS, FIFTY YEARS OLD OR OLDER, WHICH WERE MADE OR USED BY MAN. THESE ITEMS INCLUDED BUT ARE NOT LIMITED TO STONE PROJECTILE POINTS (ARROWHEADS), CERAMIC SHERDS, BRICKS, WORKED WOOD, BONE AND STONE, METAL AND GLASS OBJECTS. IF GROUND-DISTURBING WORK UNCOVERS SIGNIFICANT ARCHAEOLOGICAL MATERIALS, OR IF WORK UNCOVERS HUMAN BURIALS OR HUMAN REMAINS, ALABAMA PORT AUTHORITY WILL BE NOTIFIED IMMEDIATELY AND GROUND DISTURBING ACTIVITIES WILL IMMEDIATELY BE STOPPED WITHIN A 300-FOOT RADIUS AND THE MATERIALS PROTECTED. THE ALABAMA PORT AUTHORITY WILL INFORM THE STATE HISTORIC PRESERVATION OFFICER, CHOCTAW NATION HISTORIC PRESERVATION DEPARTMENT, AND THE MUSCOGEE (CREEK) NATION DEPARTMENT OF CULTURE AND HUMANITIES OF THE DISCOVERY OF ARCHAEOLOGICAL MATERIALS AS SOON AS POSSIBLE AND THESE PARTIES WILL BE GIVEN AN OPPORTUNITY TO PROVIDE INPUT BEFORE CONSTRUCTION RESUMES. NEITHER THE CONSTRUCTION TEAM NOR THE APPLICANT WILL DISCLOSE THIS INFORMATION TO THE PUBLIC OR THE MEDIA IN ANY MANNER, INCLUDING SOCIAL MEDIA. IF HUMAN REMAINS ARE ENCOUNTERED, THE PROVISIONS OF THE ALABAMA BURIAL ACT (CODE OF ALABAMA 1975 13A-7-23.1, AS AMENDED); ALABAMA HISTORICAL COMMISSION ADMINISTRATIVE CODE CHAPTER 460-X-10 (BURIALS) SHOULD BE FOLLOWED.**

**REFERENCE DRAWINGS:**

**McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION (1996)**

Drawing No.	Drawing Title
809-GC0 809-GC02	COVER SHEET DRAWING INDEX & GENERAL NOTES
809-GM1	CONVEYOR BELT PROFILES
809-C1 809-C2 809-C5 809-C6 809-C9 809-10	SITE PLAN MASTER SITE DRAINAGE PLAN ENLARGED SITE DRAINAGE PLAN ENLARGED SITE DRAINAGE PLAN TYPICAL STORAGE YARD CROSS SECTION DETAILS
809-S2 809-S2A	PLAN AND ELEVATION CONVEYOR "A" & "B" CONVEYOR "A" & "B" SECTIONS & DETAILS
809-F16A 809-F17 809-F18 809-F19	STACKER TIE DOWN FOUNDATION PLAN & DETAILS PILE AND MISC. DETAILS CATCH BASIN PLAN, SECTIONS, & DETAILS SUMP PUMP BASIN PLAN & SECTIONS
809-M24	SUMP PUMP BASIN MECHANICAL PLAN
809-U1 809-U2	UTILITY SITE PLAN UTILITY SITE PLAN

**GARROW'S BEND BULK TERMINAL SHORLINE REMEDIATION (1999)**

Drawing No.	Drawing Title
1164-C0 1164-C1	COVER SHEET SITE PLAN
1164-NC1 1164-NC2	PARTIAL SITE PLAN PARTIAL SITE PLAN
1164-NCR1 1164-NCR2 1164-NCR3 1164-NCR4 1164-NCR5 1164-NCR6 1164-NCR7 1164-NCR8 1164-NCR9 1164-NCR10 1164-NCR11 1164-NCR12 1164-NCR13 1164-NCR14 1164-NCR15 1164-NCR16 1164-NCR17 1164-NCR18 1164-NCR19	CROSS SECTIONS STA. 0+00 & STA. 0+50 CROSS SECTIONS STA. 1+00 & STA. 1+50 CROSS SECTIONS STA. 2+00 & STA. 2+50 CROSS SECTIONS STA. 3+00 & STA. 3+50 CROSS SECTIONS STA. 4+00 & STA. 4+50 CROSS SECTIONS STA. 5+00 & STA. 5+50 CROSS SECTIONS STA. 6+00 & STA. 6+50 CROSS SECTIONS STA. 7+00 & STA. 7+50 CROSS SECTIONS STA. 8+00 & STA. 8+50 CROSS SECTIONS STA. 9+00 & STA. 9+50 CROSS SECTIONS STA. 10+00 & STA. 10+50 CROSS SECTIONS STA. 10+98 & STA. 11+00 CROSS SECTIONS STA. 11+50 & STA. 12+50 CROSS SECTIONS STA. 12+50 & STA. 13+00 CROSS SECTIONS STA. 13+50 & STA. 14+00 CROSS SECTIONS STA. 14+50 & STA. 15+00 CROSS SECTIONS STA. 15+32 & STA. 15+50 CROSS SECTIONS STA. 16+00 & STA. 16+50 CROSS SECTIONS STA. 17+00 & STA. 17+50

**YARD 4 DRAINAGE PIT SYSTEM (2005 & 2007)**

Drawing No.	Drawing Title
ED-1-216 ED-1-332	AREA 4 SUMP PIT MODIFICATIONS-CONCRETE DETAILS YARD 4 STORMWATER PUMP REPLACE-PUMP & PIPING LAYOUT
1723-M1 1723-M2 1723-M3 1723-M5 1723-M6 1723-M7 1723-M8 1723-M9 1723-M11 1723-M12 1723-M13 1723-M14 1723-M14A 1723-M15 1723-M16 1723-M17 1723-M18	GENERAL NOTES & TYPICAL DETAILS CONVEYOR "A" PLAN & ELEVATIONS CONVEYOR "A" TAKE-UP DETAILS CONVEYOR "B" PLAN & ELEVATIONS CONVEYOR "B" TAKE-UP DETAILS CONVEYOR "B" DRIVE STRUCTURE EQUIPMENT PLAN & ELEV. CONVEYOR "B" HOOD & CHUTE DETAILS CONVEYOR "C" PLAN & ELEVATIONS CONVEYOR "C" DISCHARGE POINT PLAN & ELEVATIONS CONVEYOR "C" HOOD & CHUTE DETAILS CONVEYOR "A" EQUIPMENT SUPPORT FOUNDATION CONVEYOR "B" EQUIPMENT SUPPORT FOUNDATION CONVEYOR "C" EQUIPMENT SUPPORT FOUNDATION BARGE HAUL SYSTEM GENERAL ARRANGEMENT BARGE HAUL SYSTEM SECTIONS & DETAILS BARGE HAUL SYSTEM HYDRAULIC SCHEMATIC

1723-E1 1723-E2 1723-E3 1723-E4 1723-E4A 1723-E5 1723-E5A 1723-E6 1723-E6A	ELECTRICAL SITE PLAN ENLARGED ELECTRICAL SITE PLAN ELECTRICAL SITE PLAN SECTIONS & DETAILS NEW ELECTRICAL AC-ONE LINE DIAGRAM EXISTING ELECTRICAL AC-ONE LINE DIAGRAM NEW PANELBOARD & FEEDER SCHEDULE EXISTING PANELBOARD & FEEDER SCHEDULE NEW MCC SCHEDULE & LAYOUT EXISTING MCC SCHEDULE & LAYOUT
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**REFERENCE DRAWINGS:**

**McDUFFIE TERMINALS BARGE LOADOUT RELOCATION (2004)**

Drawing No.	Drawing Title
1723-T1 1723-T2 1723-G1 1723-G2 1723-G3 1723-G4 1723-G5 1723-G6	PROJECT TITLE SHEET INDEX OF DRAWINGS AND GENERAL NOTES NEW SITE PLAN ENLARGED SITE PLAN CONVEYOR "A" GENERAL ARRANGEMENT CONVEYOR "B" GENERAL ARRANGEMENT CONVEYOR "C" GENERAL ARRANGEMENT LOADING DOCK PLAN & SECTION
1723-CV1 1723-CV2 1723-CV3 1723-CV4 1723-CV5	FOUNDATION LOCATION PLAN PILING SCHEDULE & DETAILS PILE LOCATION PLAN PILE LOCATION PLAN PRESTRESSED PILE DETAILS
1723-C3 1723-C4 1723-C5 1723-C6 1723-C7 1723-C8 1723-C9 1723-C10 1723-C20 1723-C21 1723-C22 1723-C23 1723-C24 1723-C25 1723-C26	FOUNDATION LOCATION PLAN FOUNDATION LOCATION PLAN CONVEYOR "A" DRIVE STRUCTURE FOUNDATION DETAILS CONVEYOR "B" DRIVE STRUCTURE FOUNDATION DETAILS CONVEYOR "C" DRIVE FOUNDATION DETAILS CONVEYOR "A" & "B" TAKE-UP STRUCTURE FOUNDATION DETAILS CONVEYOR "C" BENT FOUNDATION DETAILS CONVEYOR "C" BENT FOUNDATION DETAILS DOCK & BRIDGE FOUNDATION PLAN OUTBOARD MOORING FOUNDATION PLAN DOCK FOUNDATION SECTIONS & DETAILS DOCK STRUCTURE FENDERING SYSTEM DOCK STRUCTURE FENDERING DETAILS OUTBOARD MOORING FENDERING DETAILS DOCK FOUNDATION SECTIONS AND DETAILS
1723-S5 1723-S6 1723-S7 1723-S8 1723-S9 1723-S11 1723-S11A 1723-S12 1723-S13 1723-S14 1723-S15 1723-S17 1723-S17A 1723-S18 1723-S19 1723-S20 1723-S21 1723-S22 1723-S23 1723-S23A 1723-S24 1723-S25 1723-S26 1723-S27	CONVEYOR "A" DRIVE STRUCTURE PLANS & ELEVATIONS CONVEYOR "A" DRIVE STRUCTURE PLANS & ELEVATIONS CONVEYOR "B" DRIVE STRUCTURE PLANS & ELEVATIONS CONVEYOR "A" DRIVE STRUCTURE PLANS & ELEVATIONS CONVEYOR "A" & "B" TAKE-UP STRUCTURE PLANS & ELEVATIONS CONVEYOR "C" TAKE-UP STRUCTURE PLANS & ELEVATIONS CONVEYOR "C" TAKE-UP STRUCTURE SECTIONS & DETAILS CONVEYOR "C" TAKE-UP STRUCTURE SECTIONS & DETAILS CONVEYOR "C" PLANS & ELEVATIONS CONVEYOR "C" PLANS & ELEVATIONS CONVEYOR "C" PLANS & ELEVATIONS CONVEYOR "C" TRUSS PLAN & SECTIONS CONVEYOR "C" TRUSS SECTIONS & DETAILS OPERATOR'S CAB SUPPORT STRUCTURE PLANS & ELEVATIONS OPERATOR'S CAB SUPPORT STRUCTURE SECTIONS & DETAILS CONVEYOR "C" BENT DETAILS CONVEYOR "C" MODULE DETAILS CONVEYOR "C" MODULE DETAILS CONVEYOR "B" MODULE PLAN & ELEV. CONVEYOR "B" MODULE DETAILS TYPICAL MODULE DETAILS BARGE LOADOUT DOCK DOLPHIN "A" DETAILS BARGE LOADOUT DOCK DOLPHIN "B & C" DETAILS MISCELLANEOUS STEEL DETAILS

Drawing No.	Drawing Title
886-0 886-C1	COVER SHEET GENERAL NOTES, DRAWING LIST
886-A1 886-A2	GENERAL ARRANGEMENT GANTRY TRUCK ARRANGEMENT
886-B1 886-B2 886-B3 886-B4	STACKER BOOM PLANS AND ELEVATIONS STACKER BOOM FRAMING DETAILS STACKER BOOM FRAMING DETAILS STACKER BOOM FRAMING DETAILS
886-S1 886-S2 886-S3 886-S4 886-S5 886-S6 886-S7 886-S8 886-S9 886-S10 886-S11 886-S12 886-S13	STACKER TOWER ELEVATIONS STACKER TOWER ELEVATIONS STACKER TOWER PLANS STACKER TOWER PLANS AND DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DRIVE TRUCKS S9-1 AND S9-2 STACKER TOWER DRIVE TRUCKS S10-1 AND S10-2 STACKER TOWER DRIVE TRUCKS S11-1 AND S11-4 STACKER TOWER DRIVE TRUCK EQUALIZER BEAM STANDARD STRUCTURAL DETAILS

886-T1 886-T2 886-T3 886-T4 886-T5 886-T6 886-T7 886-T8	TRIPPER ELEVATION AND PLAN TRIPPER SECTIONS TRIPPER DETAILS TRIPPER DETAILS TRIPPER DETAILS TRIPPER TRUCKS ELECTRICAL ROOM PLAN AND ELEVATION ELECTRICAL ROOM DETAILS
886-M1 886-M2 886-M3 886-M4 886-M5	STACKER TRIPPER CONVEYOR PROFILE STACKER BOOM CONVEYOR PROFILE MECHANICAL DETAILS MECHANICAL DETAILS BOOM HOIST ARRANGEMENT AND DETAILS

886-E1 886-E2 886-E3 886-E4 886-E5 886-E6 886-E7 886-E8	ELECTRICAL GENERAL ARRANGEMENT STACKER ELECTRICAL DIAGRAM ELECTRICAL CONTROL ROOM PLANS STACKER TOWER ELECTRICAL PLANS STACKER TOWER ELECTRICAL PLANS STACKER TOWER ELECTRICAL PLANS GANTRY DRIVE TRUCK ELECTRICAL PLAN ELECTRICAL CONTROL PLANS
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Drawing No.	Drawing Title
1723-E7 1723-E8 1723-E9 1723-E10 1723-E11 1723-E12 1723-E13 1723-E14 1723-E15 1723-E16 1723-E17 1723-E18 1723-E19 1723-E20 1723-E21 1723-E22 1723-E23	CONTROL CONDUCTOR SCHEDULE ELECTRICAL BUILDING LAYOUT BARGE LOADOUT OPERATORS CONTROL CAB CONVEYOR "A" CABLE TRAY LAYOUT CONVEYOR "A" ELECTRICAL LAYOUT CONVEYOR "B" CABLE TRAY LAYOUT CONVEYOR "B" ELECTRICAL LAYOUT CONVEYOR "C" CABLE TRAY PARTIAL PLAN CONVEYOR "C" CABLE TRAY PARTIAL PLAN CONVEYOR "C" PLANS & ELEVATIONS CONVEYOR "C" PARTIAL PLANS OPERATORS CAB SUPPORT STRUCTURE CABLE TRAY LAYOUT OPERATORS CAB SUPPORT STRUCTURE ELECTRICAL LAYOUT BARGE HAULING SYSTEM ELECTRICAL ARRANGEMENT OPERATORS CHAIR CONTROL CONSOLE "TS" BLDG INTERFACE SECTIONS AND DETAILS

**McDUFFIE TERMINAL 2007/08 EXPANSION PACKAGE 1 YARD 4 RECLAIM HOPPERS (2008)**

Drawing No.	Drawing Title
1876-G3 1876-G4	LOCATION PLAN HOPPER GENERAL ARRANGEMENT

**McDUFFIE TERMINAL YARD 4 STACKER (1996)**

Drawing No.	Drawing Title
886-0 886-C1	COVER SHEET GENERAL NOTES, DRAWING LIST
886-A1 886-A2	GENERAL ARRANGEMENT GANTRY TRUCK ARRANGEMENT
886-B1 886-B2 886-B3 886-B4	STACKER BOOM PLANS AND ELEVATIONS STACKER BOOM FRAMING DETAILS STACKER BOOM FRAMING DETAILS STACKER BOOM FRAMING DETAILS
886-S1 886-S2 886-S3 886-S4 886-S5 886-S6 886-S7 886-S8 886-S9 886-S10 886-S11 886-S12 886-S13	STACKER TOWER ELEVATIONS STACKER TOWER ELEVATIONS STACKER TOWER PLANS STACKER TOWER PLANS AND DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DETAILS STACKER TOWER DRIVE TRUCKS S9-1 AND S9-2 STACKER TOWER DRIVE TRUCKS S10-1 AND S10-2 STACKER TOWER DRIVE TRUCKS S11-1 AND S11-4 STACKER TOWER DRIVE TRUCK EQUALIZER BEAM STANDARD STRUCTURAL DETAILS
886-T1 886-T2 886-T3 886-T4 886-T5 886-T6 886-T7 886-T8	TRIPPER ELEVATION AND PLAN TRIPPER SECTIONS TRIPPER DETAILS TRIPPER DETAILS TRIPPER TRUCKS ELECTRICAL ROOM PLAN AND ELEVATION ELECTRICAL ROOM DETAILS
886-M1 886-M2 886-M3 886-M4 886-M5	STACKER TRIPPER CONVEYOR PROFILE STACKER BOOM CONVEYOR PROFILE MECHANICAL DETAILS MECHANICAL DETAILS BOOM HOIST ARRANGEMENT AND DETAILS
886-E1 886-E2 886-E3 886-E4 886-E5 886-E6 886-E7 886-E8	ELECTRICAL GENERAL ARRANGEMENT STACKER ELECTRICAL DIAGRAM ELECTRICAL CONTROL ROOM PLANS STACKER TOWER ELECTRICAL PLANS STACKER TOWER ELECTRICAL PLANS STACKER TOWER ELECTRICAL PLANS GANTRY DRIVE TRUCK ELECTRICAL PLAN ELECTRICAL CONTROL PLANS

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4617-G2	GENERAL NOTES & DRAWING INDEX
4617-D1	EROSION AND SEDIMENT CONTROL NOTES
4617-D2	CONSTRUCTION DETAILS 1 OF 4
4617-D3	CONSTRUCTION DETAILS 2 OF 4
4617-D4	CONSTRUCTION DETAILS 3 OF 4
4617-D5	CONSTRUCTION DETAILS 4 OF 4
4617-D6	EXISTING SITE PLAN
4617-D7	EXISTING SITE PLAN - AERIAL OVERLAY
4617-D8	DEMOLITION PLAN - EXISTING BUILDINGS
4617-D9	DEMOLITION PLAN - DRAINAGE STRUCTURES
4617-D9A	DEMOLITION PLAN
4617-D10	ENLARGED PLAN - CONVEYOR A/B DRIVE STRUCTURES
4617-D11	ELEVATIONS - TAKE UP/DRIVE STRUCTURE
4617-D12	MISC. REFERENCE SECTIONS & DETAILS
4617-D13	ENLARGED PLAN - CONVEYOR "C"
4617-D14	ENLARGED PLAN - BARGE LOADOUT
4617-D15	ELEVATION - CONVEYOR "C" AND BARGE LOADOUT
4617-D16	ENLARGED PLAN - SHORELINE SHEET PILE WALL
4617-D17	SUBSTATION BUILDING
4617-D18	SUBSTATION BUILDING-EXISTING PILE DETAILS
4617-D19	SUBSTATION EXISTING FOUNDATION PLAN & SECTIONS
4617-D20	SUBSTATION ROOF FRAMING PLAN & SECTIONS
4617-D21	SUBSTATION FLOOR PLAN, DOOR SCHEDULE, & DETAILS
4617-D22	SUBSTATION EXTERIOR ELEVATIONS & MISC. DETAILS
4617-D23	SUBSTATION ELECTRICAL BLDG LAYOUT

**NOTE: TO BE FINALIZED AT FINAL SUBMISSION**

NOTES	NO.	REVISION	DRAWN	CK'D	APPD	DATE
	E	ISSUED FOR BID	JLH	JEJ	RSR	01-14-26
	D	100% DESIGN REVIEW	ECW	JEJ	RSR	09-09-25
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**thompson**  
ENGINEERING



**APTIM**  
PORT SERVICES, LLC

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DRAWN: ECW    CK'D: JEJ    APPD: RSR    DATE: 01-03-25    SCALE: NONE



**ALABAMA**  
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PORT OF MOBILE

CLIENT DWG NO:

**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION - DEMOLITION PACKAGE**  
**GENERAL NOTES & DRAWING INDEX**

FOR: **ALABAMA PORT AUTHORITY**

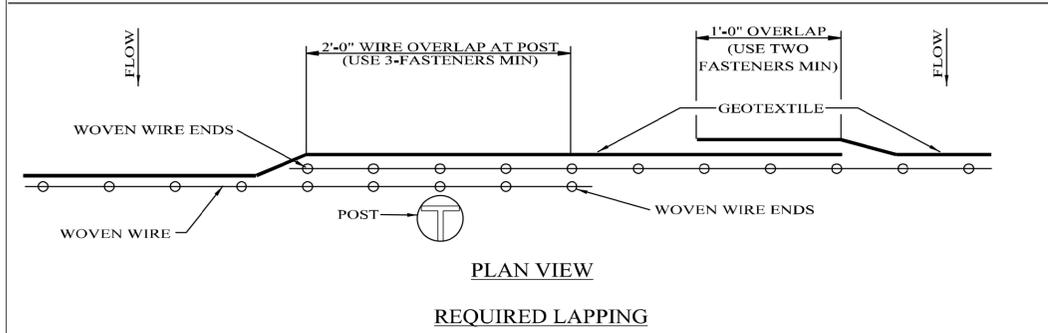
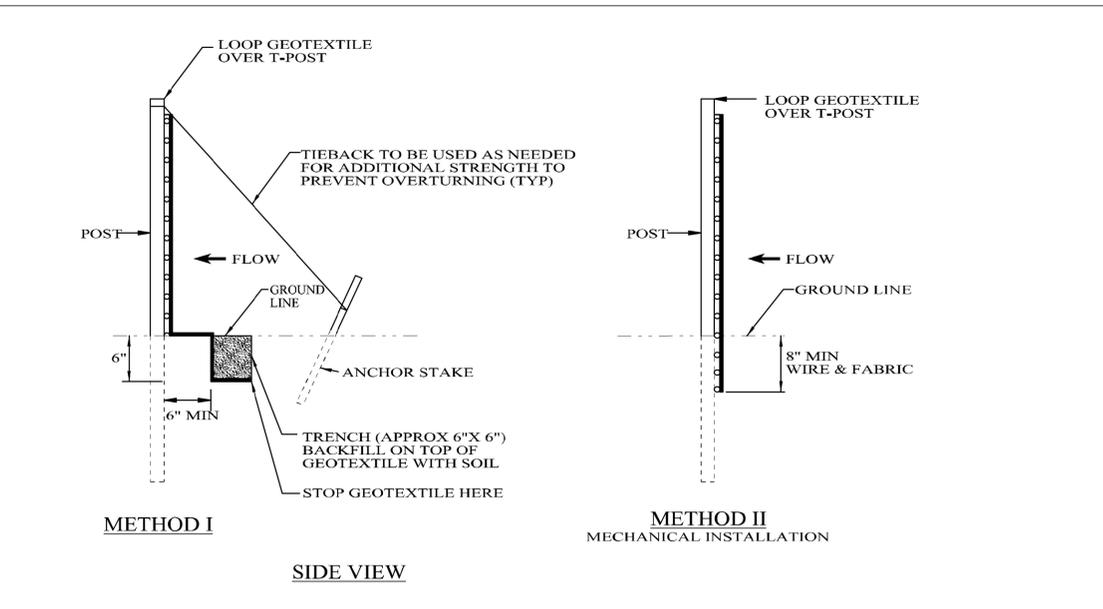
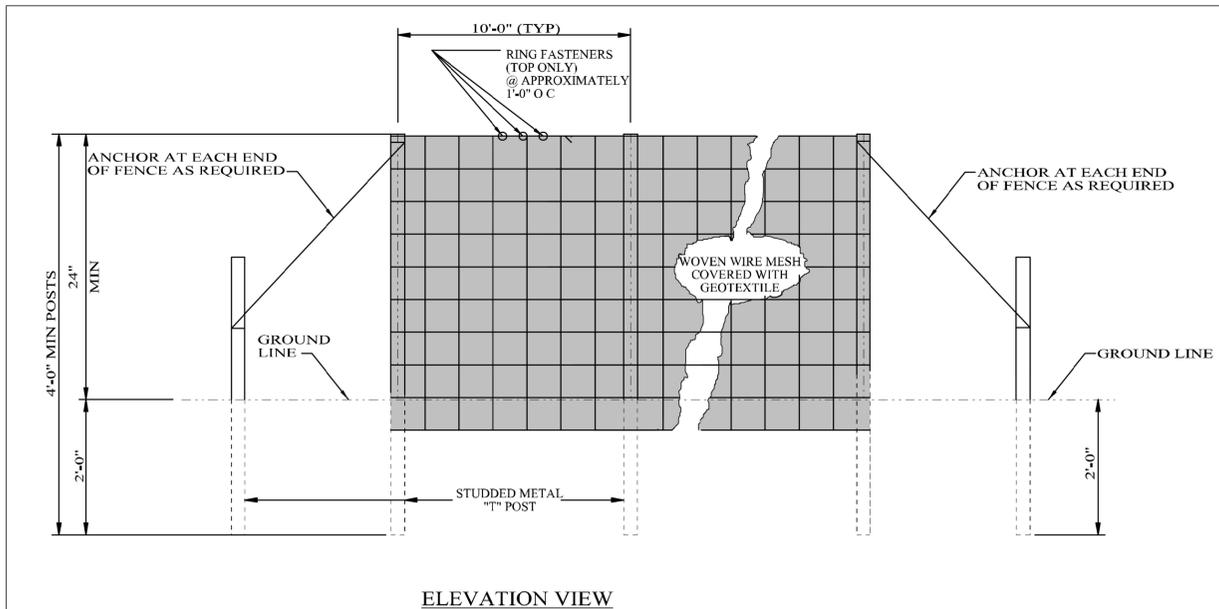
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**EROSION AND SEDIMENT CONTROL NOTES:**

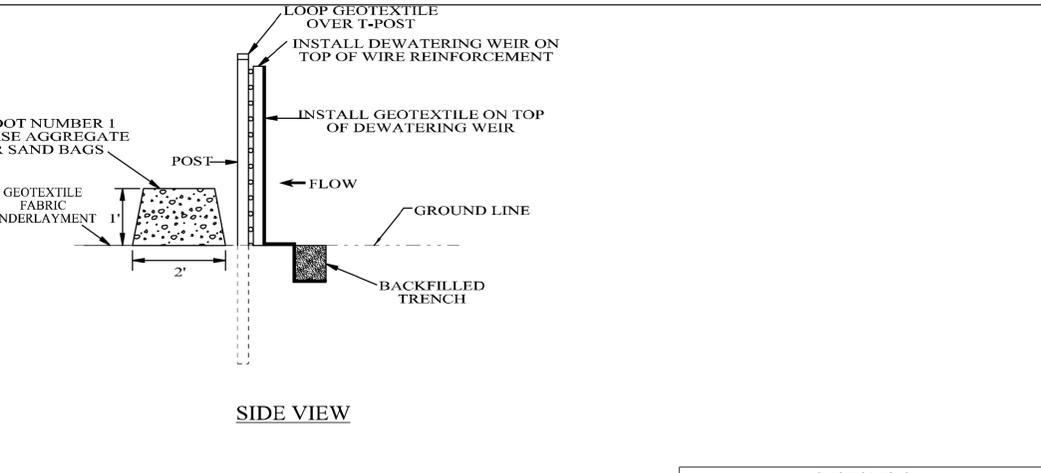
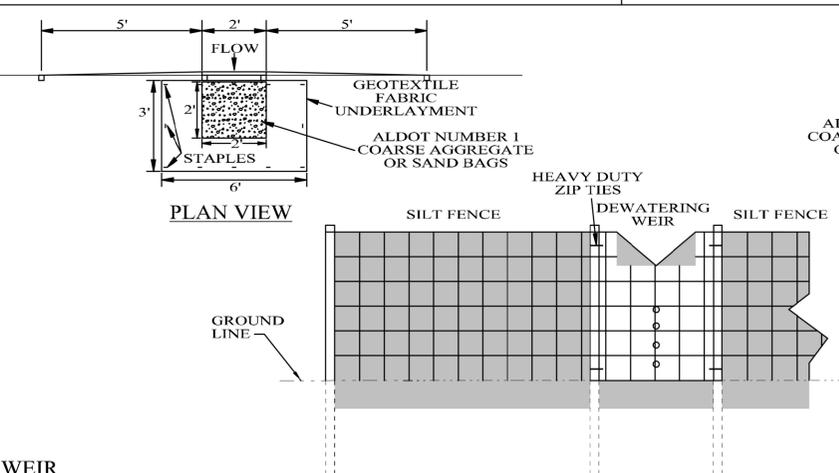
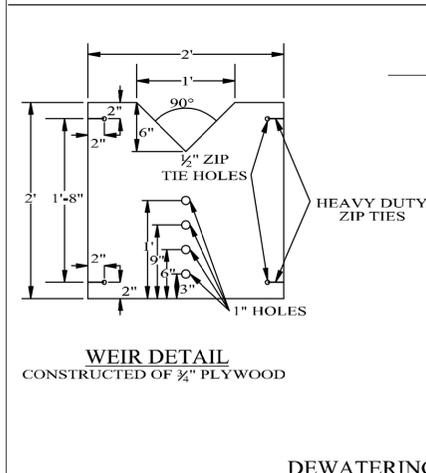
1. EROSION AND SEDIMENT CONTROL MEASURES SHOWN ARE CONSIDERED TO BE THE MINIMUM ACCEPTABLE MEASURES. THE CONTRACTOR SHALL UTILIZE "BEST MANAGEMENT PRACTICES" AS NECESSARY TO PREVENT SEDIMENT LADEN STORMWATER RUNOFF OR ERODED MATERIALS FROM LEAVING THE CONSTRUCTION SITE. THE CONTRACTOR SHALL MAINTAIN AND REPAIR EROSION CONTROL MEASURES IN AN EXPEDITIOUS MANNER AFTER EACH RAINFALL EVENT AND INSPECT THEM TWICE WEEKLY IN THE EVENT OF NO RAINFALL. BEST MANAGEMENT PRACTICES (BMPs) ARE DEFINED AS: SCHEDULES OF ACTIVITIES, PROHIBITIONS OF PRACTICES, MAINTENANCE PROCEDURES, AND OTHER MANAGEMENT PRACTICES TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF THE UNITED STATES. BMPs ALSO INCLUDE TREATMENT REQUIREMENTS, OPERATING PROCEDURES, AND PRACTICES TO CONTROL PLANT SITE RUNOFF, SPILLAGE OR LEAKS, SLUDGE OR WASTE DISPOSAL, OR DRAINAGE FROM RAW MATERIAL STORAGE. WITH REGARD TO CONSTRUCTION THESE MAY INCLUDE STRUCTURAL DEVICES OR NONSTRUCTURAL PRACTICES THAT ARE DESIGNED TO PREVENT POLLUTANTS FROM ENTERING WATER OR TO DIRECT THE FLOW OF WATER.
2. TYPE "A" SILT FENCE SHALL BE USED IN AREAS WHERE INDICATED OR AS DIRECTED BY THE ENGINEER.
3. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHALL BE ERECTED OPPOSITE ERODABLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
4. SILT FENCES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION OPERATION. SILT FENCES SHALL BE CLEANED, SILT REMOVED, AND REPAIRED AS NECESSARY AS PART OF REQUIRED BMP MAINTENANCE.
5. AFTER THE CONSTRUCTION AREA IS STABILIZED BY PAVING OR A FIRM STAND OF GRASS AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.
6. CONTRACTOR IS REQUIRED TO STABILIZE DISTURBED AREAS WITH TEMPORARY GRASS OR SOIL STABILIZER IF AREAS WILL REMAIN DISTURBED FOR 14 DAYS OR LONGER.
7. THE CONTRACTOR IS HEREBY DIRECTED TO PROVIDE SEDIMENT RUNOFF PROTECTION WHERE NECESSARY TO PREVENT SILT LADEN RUNOFF FROM ENTERING THE STREAMS NEAR THE PROPOSED PROJECT.
8. GRASS GROUND COVER SHALL BE MAINTAINED UPON COMPLETION OF CONSTRUCTION.
9. THE EROSION AND SEDIMENT CONTROL ITEMS SHOWN ON THE PLANS ARE PROVIDED AS A STARTING POINT FOR A COMPREHENSIVE SEDIMENT AND EROSION CONTROL PLAN TO BE IMPLEMENTED THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE PREPARED TO ANTICIPATE AND ADJUST BEST MANAGEMENT PRACTICES AS NECESSARY THROUGHOUT CONSTRUCTION TO RESTRICT THE AMOUNT OF SILT LADEN RUNOFF LEAVING THE PROJECT.
10. SEDIMENT & EROSION CONTROL ITEMS SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE FOLLOWING HANDBOOKS:
  - A. ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS.
  - B. EPA STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES.
  - C. EPA GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NON-POINT POLLUTION IN COASTAL WATERS.
  - D. AASHTO GUIDELINES FOR EROSION AND SEDIMENT CONTROL IN HIGHWAY CONSTRUCTION.
  - E. SOUTH ALABAMA REGIONAL PLANNING COMMISSION BEST MANAGEMENT PRACTICES FOR NON-POINT SOURCE RUNOFF CONTROL, MOBILE & BALDWIN COUNTIES, ALABAMA.
11. UNLESS OTHERWISE SET FORTH IN CONTRACT DOCUMENTS WITH THE PROJECT OWNER, WHEN AN ADEM STORMWATER DISCHARGE PERMIT (NOI) HAS BEEN OBTAINED FOR THE SITE, THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE AND MAINTAIN A WRITTEN DAILY LOG OF RAINFALL AMOUNTS AT THE SAME TIME EACH DAY. AT THE END OF EACH MONTH, THE CONTRACTOR MUST PROVIDE A COPY OF THAT MONTH'S RAINFALL RECORDS TO THE ENGINEER. THE RAIN GAUGE MUST BE INSTALLED AT THE TOP OF A POST PLACED AT LEAST 50' FROM TREES, BUILDINGS, OR OTHER OBJECTS THAT COULD IMPEDE THE FREE ENTRY OF RAINFALL INTO THE RAIN GAUGE. THE CONTRACTOR MUST NOTIFY THE ENGINEER WITHIN 8 HOURS OF RECORDING ANY DAILY RAINFALL AMOUNT EXCEEDING 0.75". THE CONTRACTOR SHALL POST THE NOI PERMIT NUMBER IN A HIGHLY VISIBLE LOCATION ON THE SITE AND MAINTAIN IT IN A LEGIBLE CONDITION UNTIL THE PROJECT IS COMPLETED AND A PERMIT TERMINATION HAS BEEN APPROVED BY ADEM. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR MUST NOTIFY THE ENGINEER IN ORDER TO INSPECT THE SITE AND APPLY FOR A TERMINATION OF THE ADEM PERMIT.
12. THE CONTRACTOR SHALL REFER TO THE "EROSION CONTROL, DITCHES, AND FLUMES" SECTION OF ALDOT SPECIAL AND STANDARD HIGHWAY DRAWINGS FOR ADDITIONAL METHODS OF EROSION AND SEDIMENT CONTROL.
13. ALL CLEARING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO LIMIT EROSION OF MATERIALS FROM THE CONSTRUCTION AREA.
14. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL INSTALL NECESSARY RETENTION BERMS, WATTLES, OR SILT FENCE TO PREVENT EROSION OF MATERIALS PRIOR TO THE NEXT SCHEDULED WORK OR PERIOD.
15. REGULAR MAINTENANCE OF EROSION CONTROL AND SILTATION FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
16. THE ENGINEER SHALL HAVE THE RIGHT TO REQUIRE INSTALLATION OF ADDITIONAL FACILITIES IF DEEMED NECESSARY TO PROTECT ADJACENT AREAS.
17. EROSION CONTROL AND SILTATION FACILITIES SHALL BE REMOVED ON AN INDIVIDUAL BASIS ONLY AFTER SPECIFIC AREAS HAVE STABILIZED.

	
	CLIENT DWG NO: <b>CHOCTAW POINT CONTAINER TERMINAL                  PHASE V DOCK EXTENSION – DEMOLITION PACKAGE</b> <b>EROSION AND SEDIMENT CONTROL NOTES</b>
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FOR: <b>ALABAMA PORT AUTHORITY</b>	
DRAWN: KR    CK'D: FEL    APPD: FEL    DATE: 4/11/25    SCALE: AS NOTED	PROJECT NO: <b>4617</b> DWG NO: <b>D1</b> REV: <b>E</b>

NOTES	NO.	REVISION	DRAWN	CK'D	APPD	DATE
	E	ISSUED FOR BID	KR	FEL	FEL	1/14/26
	D	100% DESIGN REVIEW	KR	FEL	FEL	9/09/25
	C	95% DESIGN REVIEW	KR	FEL	FEL	8/06/25
	B	60% DESIGN REVIEW	KR	FEL	FEL	5/30/25
	A	30% DESIGN REVIEW	KR	FEL	FEL	4/11/25
REFERENCE DRAWINGS	NO.					



- NOTES:
- METHOD II FENCE INSTALLATION ALSO TO INCLUDE ANCHORS AND TIEBACKS AS REQUIRED.
  - SILT FENCE SHALL BE USED IN AREAS WHERE FLOW IS LOW TO MODERATE OR AS DIRECTED BY THE ENGINEER.
  - SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHALL BE ERECTED DOWN GRADE OF ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
  - SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR ADDITIONAL BEST MANAGEMENT PRACTICES SUCH AS VEGETATED BUFFERS.
  - WHEREVER POSSIBLE SILT FENCES SHALL BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATE SEDIMENTATION.
  - FOR AREAS OF CONCENTRATED IMPOUNDMENT, T-POST SPACING SHOULD BE REDUCED TO 5 FT WITH THE INCORPORATION OF A DEWATERING WEIR.
  - THE CONTRACTOR MAY ELECT TO USE EITHER INSTALLATION METHOD I OR METHOD II.
  - METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
  - SEE ALDOT LIST II-3 FOR APPROVED SILT FENCE GEOTEXTILES.
  - THE DEWATERING WEIR AND ALL ASSOCIATED ITEMS AND LABOR SHALL BE A SUBSIDIARY OBLIGATION OF THE SILT FENCE.



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- REVISIONS:
- Revised Fence height and deleted (Type A) from the Silt Fence description on 7-13-2007 by W.W.A.
  - Revised Notes 2, 3, 4, 6 and added 8 on 8-24-2011 by J.F.T.
  - Updated Special Drawing No. from ESC-200 (SHEET 4 OF 5) to ESC-200-4 on 10-31-2016 by J.F.T. AND J.M.M.
  - Revised Elevation View and Method I view. Added new Note 6 and renumbered rest accordingly. Added dewatering weir and installation details on 9-2-2020 by D.J.V.
  - Revised Side View of Method I in upper right measurement from 6" to 6" MIN on 06-22-2022 by J.F.T.

Thompson S&E Firm: GLD	DESIGN BUREAU SPECIAL DRAWING	-SPECIFICATIONS- CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION	
DRAWN BY: 2006	DETAILS OF SILT FENCE INSTALLATION	SPECIAL DRAWING NO: ESC-200-4	INDEX NO: 66508
DATE DRAWN: 06/22/2022			



NOTES

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NO.	REVISION	DRAWN	CK'D	APPD	DATE

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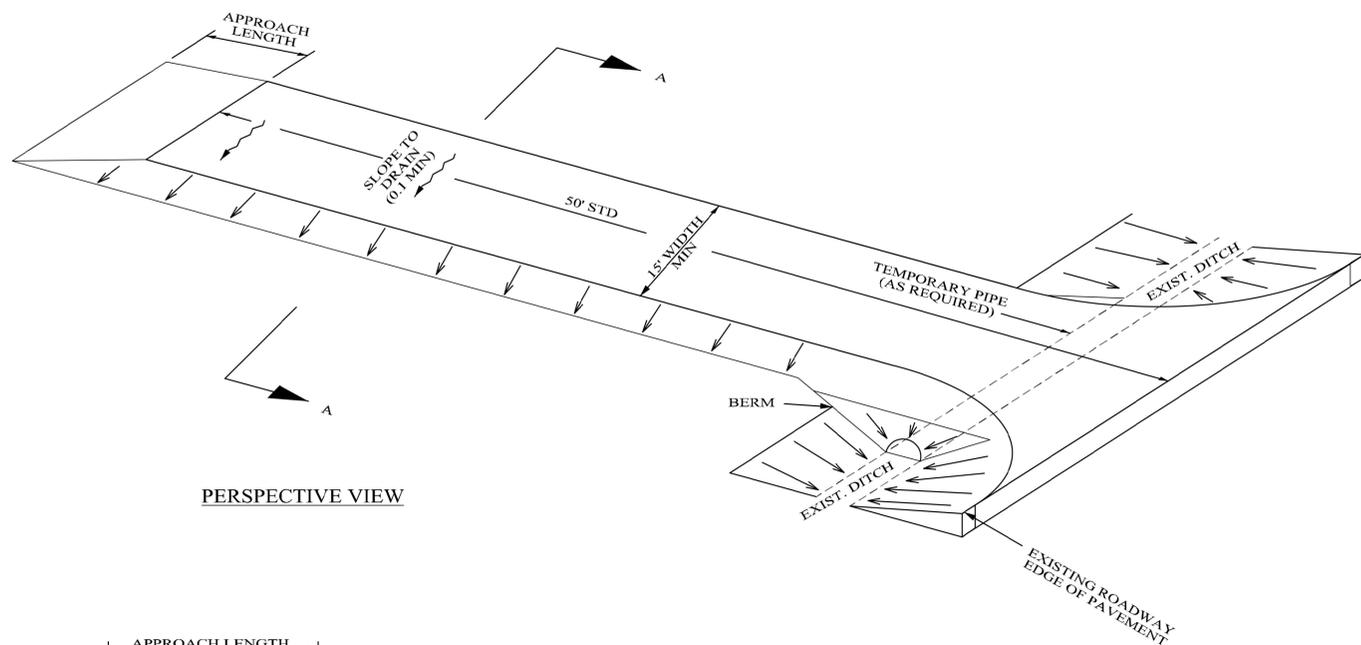
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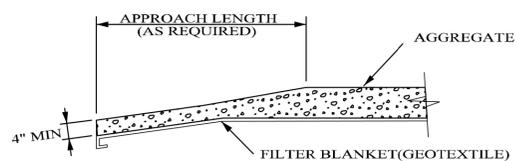
**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION - DEMOLITION PACKAGE**  
**CONSTRUCTION DETAILS 1 OF 4**

FOR: ALABAMA PORT AUTHORITY

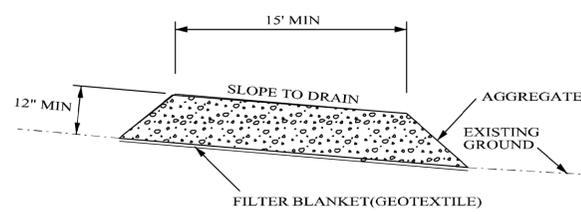
PROJECT NO: 4617 DWG NO: D2 REV: E



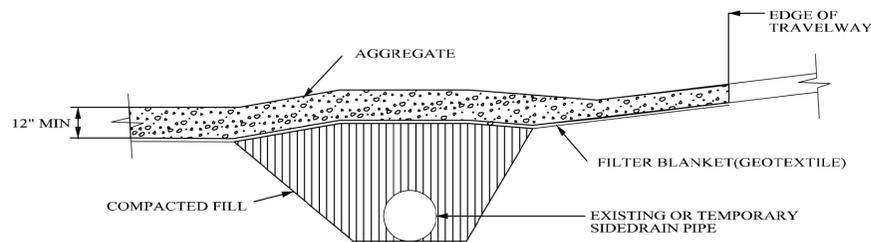
PERSPECTIVE VIEW



TRANSITION DETAIL



SECTION A-A



RURAL CONNECTION DETAIL

NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE EROSION SEDIMENT CONTROL SHEETS OR AS APPROVED BY THE ENGINEER BASED ON SAFETY, ECONOMY AND CONSTRUCTION SEQUENCE. THESE ENTRANCES ARE POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE PROJECT SHALL BE DIRECTED THRU THE STABILIZED ENTRANCE. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STABILIZED ENTRANCE.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO IT'S USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STABILIZED CONSTRUCTION ENTRANCE AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. AGGREGATES SHALL BE ALDOT SIZE #1. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE UNSUITABLE.
5. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM IT'S FUNCTION TO PREVENT OFFSITE TRACKING. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE RINSED WHEN NECESSARY TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STABILIZED ENTRANCE MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
6. THE NOMINAL SIZE OF A STANDARD STABILIZED CONSTRUCTION ENTRANCE IS 15' X 50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXITING VEHICLES WARRANT, A 30' WIDTH MAY BE USED IF APPROVED BY THE ENGINEER.



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**REVISIONS:**  
1. Changed Plan View to Perspective View & revised Note 1 on 8-24-2011 by J.F.T.

DESIGN BUREAU SPECIAL DRAWING  
DRAWN BY: D.J.W.  
DATE DRAWN: 2006  
REVISED DATE: 8-24-2011

NOT TO SCALE	--SPECIFICATIONS-- CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION	
DESIGN BUREAU SPECIAL DRAWING	SPECIAL DRAWING NO ESC-502	INDEX NO 66532
STABILIZED CONSTRUCTION ENTRANCE		



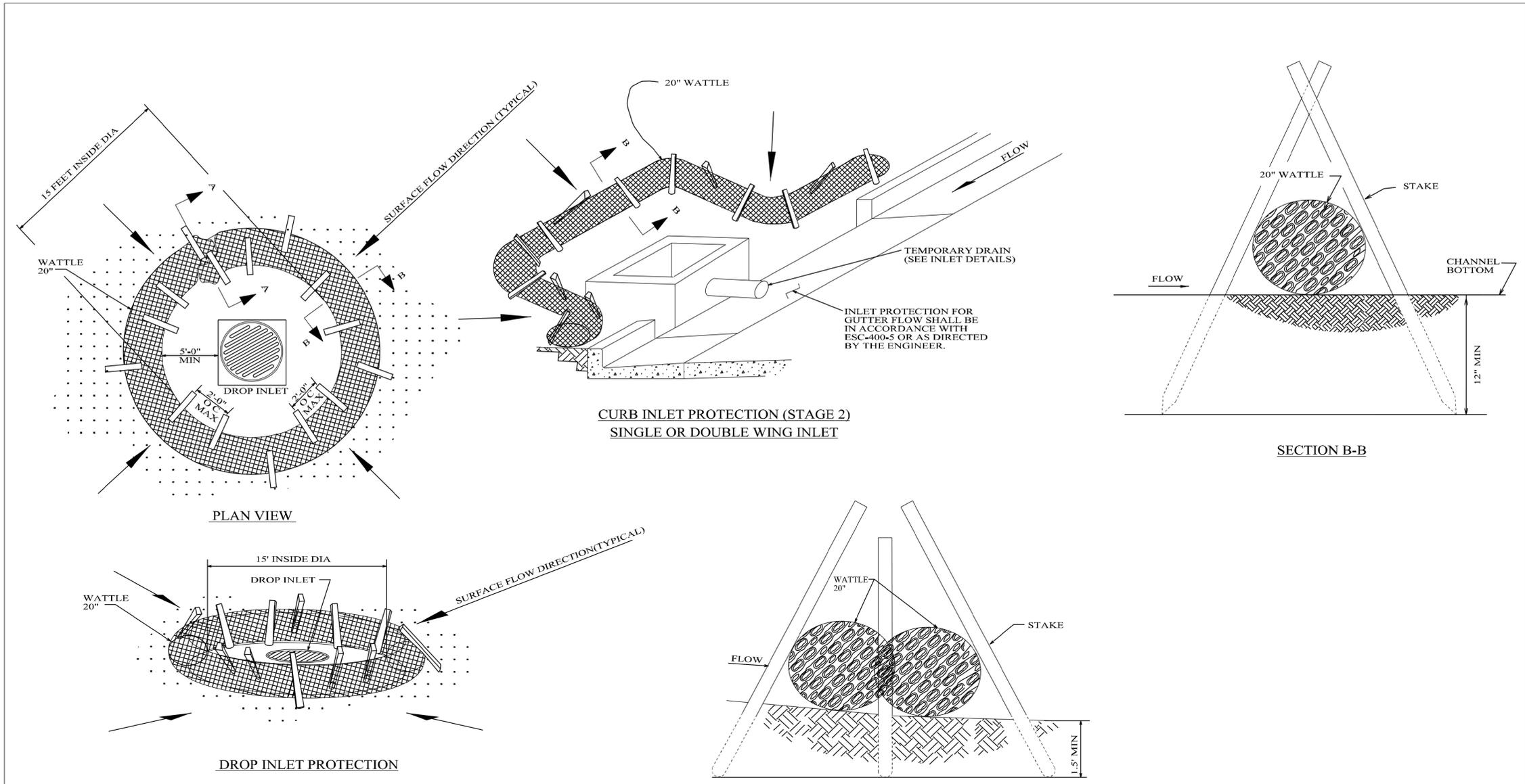
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REFERENCE DRAWINGS					

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CLIENT DWG NO:	CHOCTAW POINT CONTAINER TERMINAL PHASE V DOCK EXTENSION - DEMOLITION PACKAGE
CONSTRUCTION DETAILS 2 OF 4	FOR: ALABAMA PORT AUTHORITY
PROJECT NO: 4617	DWG NO: D3
REV: E	



- NOTES:
1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF TWO FEET.
  2. OVERLAP ENDS OF WATTLES PER MANUFACTURERS RECOMMENDATIONS (1" MIN, 3" MAX).
  3. SEE ALDOT LIST II-24 FOR APPROVED WATTLES.
  4. SILT FENCE OR SAND BAGS MAY ALSO BE USED FOR THIS APPLICATION. HAY BALES NOT ACCEPTABLE DURING THIS STAGE.

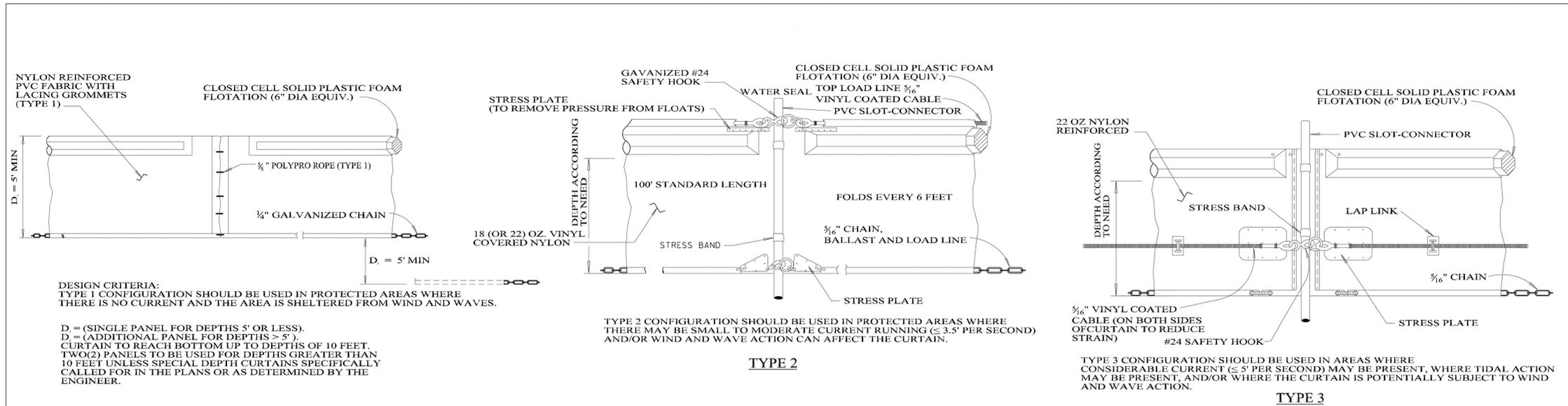
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			NOT TO SCALE	--SPECIFICATIONS-- CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION	



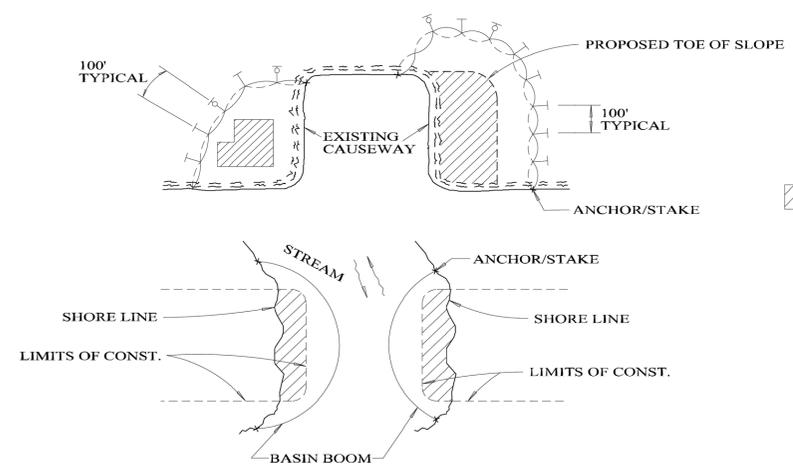
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CLIENT DWG NO: CHOCTAW POINT CONTAINER TERMINAL PHASE V DOCK EXTENSION - DEMOLITION PACKAGE CONSTRUCTION DETAILS 3 OF 4 FOR: ALABAMA PORT AUTHORITY	PROJECT NO: 4617 DWG NO: D4 REV: E
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**TYPICAL FLOATING BASIN BOOM INSTALLATION**



**FLOATING BASIN BOOM APPLICATIONS**

**LEGEND**

	DREDGE, FILL OR WORK AREA
	MOORING BOUY W/ ANCHOR
	ANCHOR

- NOTES:**
1. THE CONTRACTOR IS RESPONSIBLE FOR SELECTION OF THE APPROPRIATE TYPE OF FLOATING BASIN BOOM AND INSTALLATION METHODS BASED ON WATER BODY CONDITIONS.
  2. FLOATING BASIN BOOMS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS.
  3. FLOATING BASIN BOOMS CAN BE STAKED AND/OR ANCHORED IN STILL OR MOVING WATERS.
  4. FLOATING BASIN BOOMS ARE INTENDED TO PREVENT SEDIMENT MIGRATION WITHIN THE WATER BODY. THEY ARE NOT INTENDED TO BE INSTALLED AS THE PRIMARY SEDIMENT CONTROL METHOD, OR TO CAPTURE SEDIMENT FROM UPLAND AREAS AS A PRIMARY FUNCTION. OTHER UPLAND EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE INCORPORATED AS PROVIDED IN THE PLANS AND STANDARD DRAWINGS.
  5. FLOATING BASIN BOOM SHOWN MAY BE SIMILAR TO PROPRIETARY DESIGNS. FUNCTIONALLY EQUIVALENT DESIGNS MEETING CONTRACT REQUIREMENTS MAY ALSO BE USED.

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			NOT TO SCALE			



**NOTES**

1. REFER TO DRAWING G4 FOR TURBIDITY CURTAIN LIMITS.

REFERENCE DRAWINGS	NO.	REVISION	DRAWN	CK'D	APPD	DATE
	E	ISSUED FOR BID	KR	FEL	FEL	1/14/26
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	C	95% DESIGN REVIEW	KR	FEL	FEL	8/06/25
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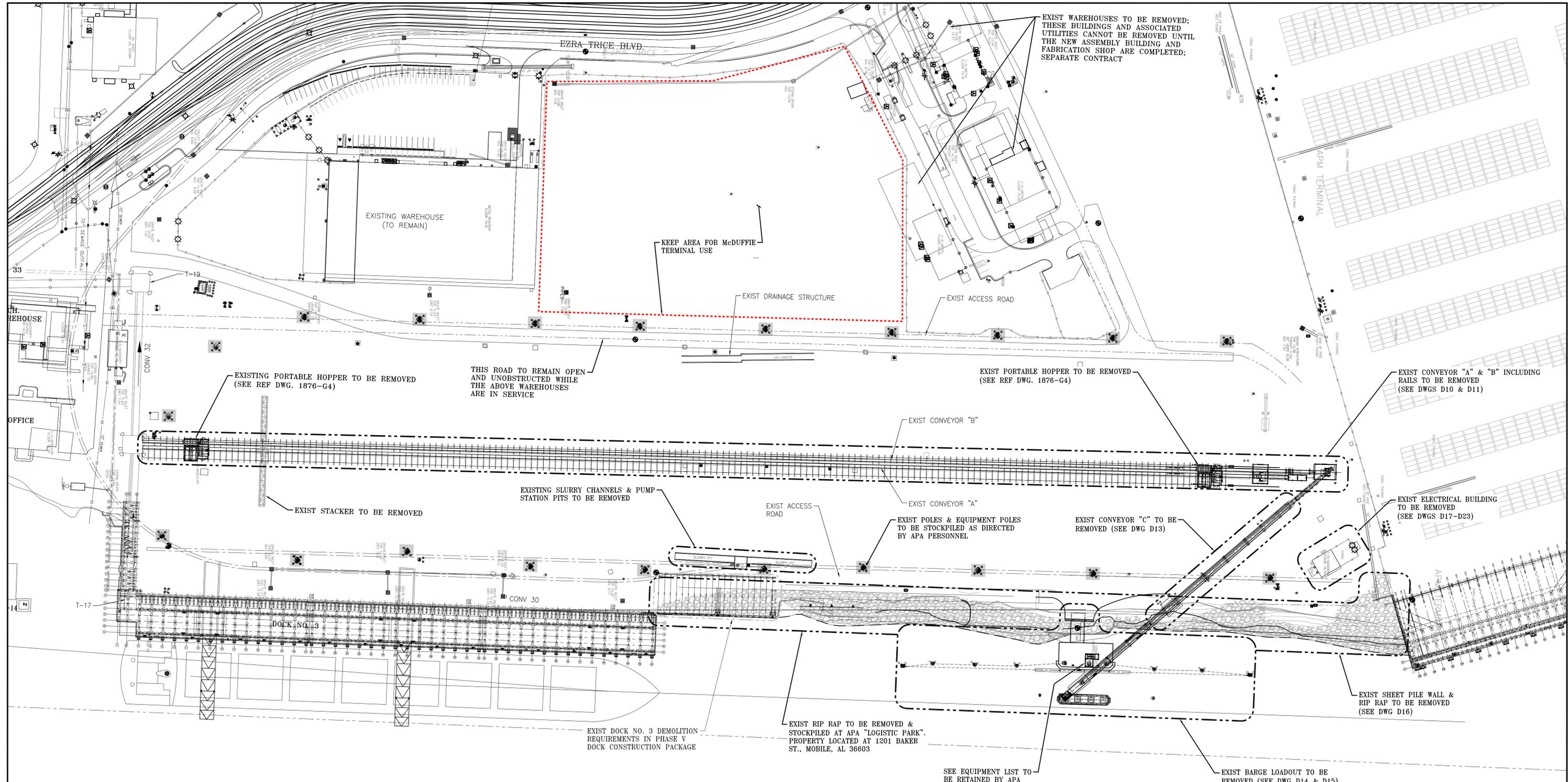
DRAWN: KR CK'D: FEL APPD: FEL DATE: 4/11/25 SCALE: AS NOTED

CLIENT DWG NO:

**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION – DEMOLITION PACKAGE**  
**CONSTRUCTION DETAILS 4 OF 4**

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617 DWG NO: D5 REV: E



- YARD 4 ADDITIONAL EQUIPMENT LIST TO BE REMOVED BY THE CONTRACTOR AND RETAINED BY APA (SUBJECT TO CHANGE):**
- (2) WINCH ASSEMBLIES ON EXISTING BARGE LOADER (WINCH, MOTOR, GEARBOX, & BRAKE).
  - (4) CABLE REEL ASSEMBLIES FROM EXISTING EQUIPMENT: 2 RAIL HOPPERS, BI-WING, & BARGE LOADER.
  - (2) MCC FROM RAIL HOPPERS: 1 ON EACH HOPPER.
  - (2) ROOFTOP AIR CONDITIONING UNITS FROM ELECTRICAL BUILDING.
  - (2) MOTORS & GEAR BOXES FROM EXISTING CONVEYOR "C".
  - TOWER STRUCTURE WITH STAIRS AT BARGE LOADER.

MOBILE RIVER  
 EXISTING SITE PLAN  
 1"=80'-0"



NOTES

- SEE DRAWING G2 FOR DEMOLITION NOTES, DRAWING INDEX, AND REFERENCE DRAWING INDEX.
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	E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26
	D	100% DESIGN REVIEW	ECW	JEJ	JLH	09-09-25
	C	95% DESIGN REVIEW	JLH	JEJ	RSG	08-08-25
	B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25
	A	30% DESIGN REVIEW	ECW	JEJ	RSG	04-11-25

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CLIENT DWG NO:

CHOCTAW POINT CONTAINER TERMINAL  
 PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
 EXISTING SITE PLAN

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617    DWG NO: D6    REV: E

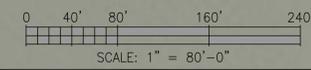


**YARD 4 ADDITIONAL EQUIPMENT LIST TO BE REMOVED BY THE CONTRACTOR AND RETAINED BY APA (SUBJECT TO CHANGE):**

- (2) WINCH ASSEMBLIES ON EXISTING BARGE LOADER (WINCH, MOTOR, GEARBOX, & BRAKE).
- (4) CABLE REEL ASSEMBLIES FROM EXISTING EQUIPMENT: 2 RAIL HOPPERS, BI-WING, & BARGE LOADER.
- (2) MCC FROM RAIL HOPPERS: 1 ON EACH HOPPER.
- (2) ROOFTOP AIR CONDITIONING UNITS FROM ELECTRICAL BUILDING.
- (2) MOTORS & GEAR BOXES FROM EXISTING CONVEYOR "C".
- TOWER STRUCTURE WITH STAIRS AT BARGE LOADER.



**EXISTING SITE PLAN - AERIAL OVERLAY**  
1"=80'-0"



NOTES
1. SEE DRAWING G2 FOR DEMOLITION NOTES, DRAWING INDEX, AND REFERENCE DRAWING INDEX.
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	A	30% DESIGN REVIEW	ECW	JEJ	RSB	04-11-25

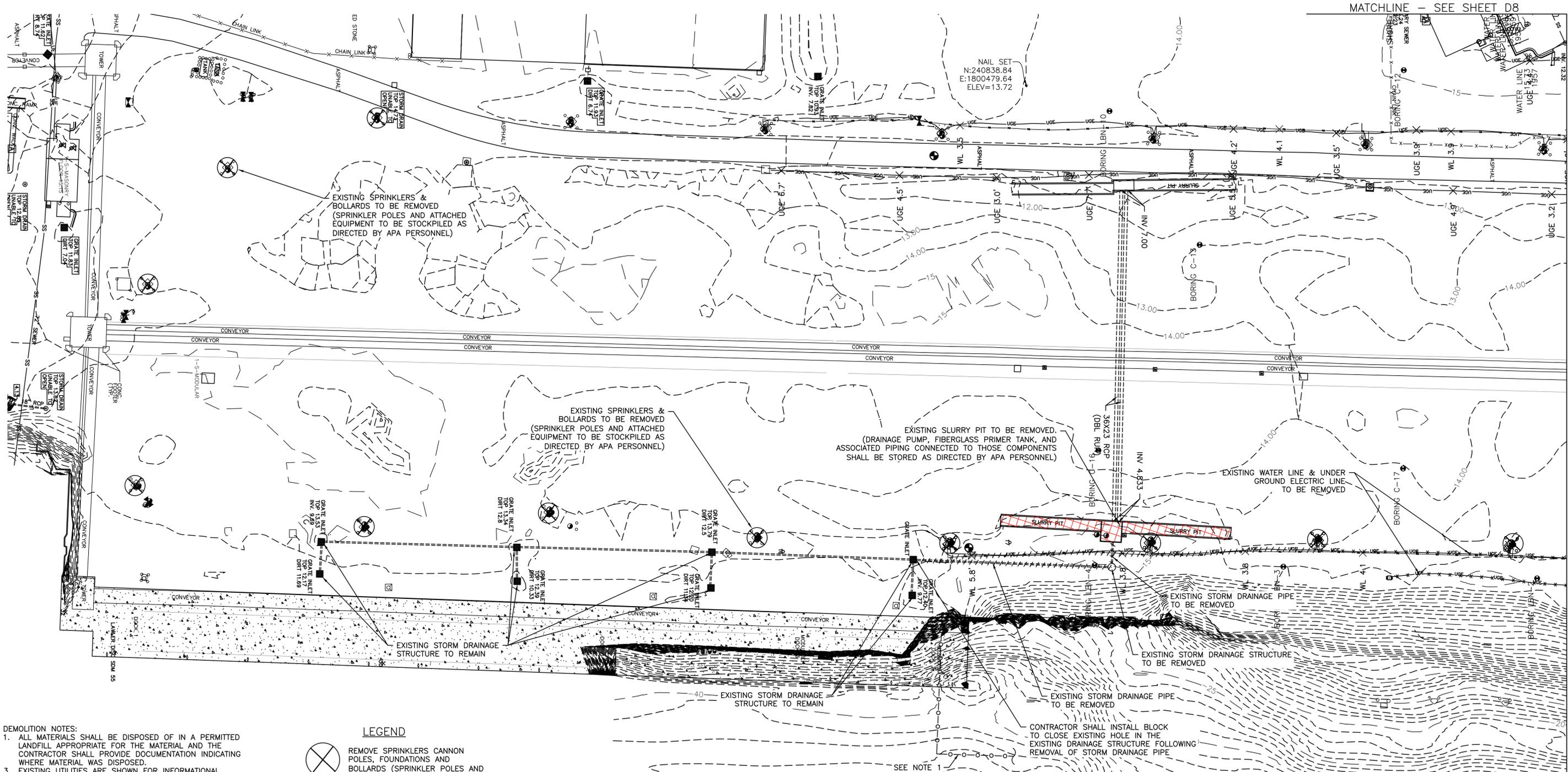


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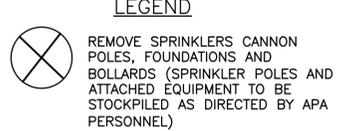
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CLIENT DWG NO:	CHOCTAW POINT CONTAINER TERMINAL
	PHASE V DOCK EXTENSION - DEMOLITION PACKAGE
	EXISTING SITE PLAN - AERIAL OVERLAY
FOR:	ALABAMA PORT AUTHORITY
PROJECT NO:	4617
DWG NO:	D7
REV:	E





- DEMOLITION NOTES:**
1. ALL MATERIALS SHALL BE DISPOSED OF IN A PERMITTED LANDFILL APPROPRIATE FOR THE MATERIAL AND THE CONTRACTOR SHALL PROVIDE DOCUMENTATION INDICATING WHERE MATERIAL WAS DISPOSED.
  3. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF THE LOCATIONS SHOWN ARE CORRECT AND TO DETERMINE IF THERE ARE ADDITIONAL UTILITY LINES THAT ARE NOT SHOWN ON THE PLANS. ALSO, ANY SAFETY MEASURES OR METHODS THAT ARE NECESSARY TO PROTECT ALL EXISTING UTILITY LINES DURING CONSTRUCTION WILL BE THE CONTRACTOR'S RESPONSIBILITY WITH NO ADDITIONAL COMPENSATION.
  4. THE CONTRACTOR SHALL CALL 811 AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES AS A RESULT OF FAILURE TO HAVE UTILITIES MARKED PRIOR TO EXCAVATION.



NOTES

1. REFER TO DRAWING G4 FOR TURBIDITY CURTAIN LIMITS.

REFERENCE DRAWINGS	NO.	REVISION	DRAWN	CK'D	APPD	DATE
	E	ISSUED FOR BID	KR	FEL	FEL	1/14/26
	D	100% DESIGN REVIEW	KR	FEL	FEL	9/09/25
	C	95% DESIGN REVIEW	KR	FEL	FEL	8/06/25
	B	60% DESIGN REVIEW	KR	FEL	FEL	5/30/25
	A	30% DESIGN REVIEW	KR	FEL	FEL	4/11/25

**thompson ENGINEERING**

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**ALABAMA PORT AUTHORITY**  
PORT OF MOBILE

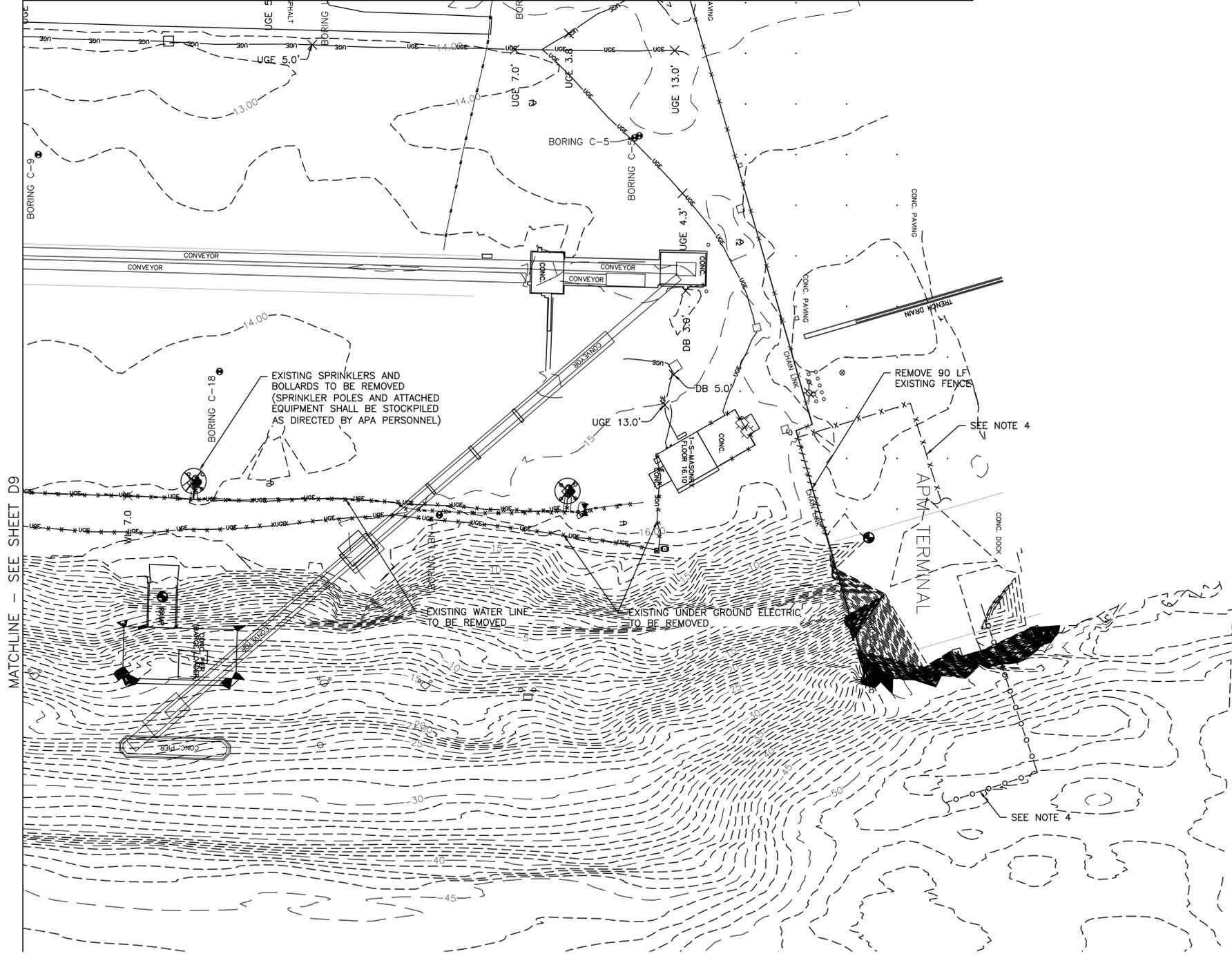
CLIENT DWG NO:

**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION - DEMOLITION PACKAGE**  
**DEMOLITION PLAN - DRAINAGE STRUCTURES**

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617 DWG NO: D9 REV: E

MATCHLINE - SEE SHEET D8



MATCHLINE - SEE SHEET D9

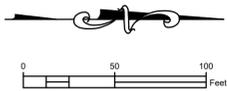
**LEGEND**



REMOVE SPRINKLERS CANNON POLES, FOUNDATIONS AND BOLLARDS (SPRINKLER POLES AND ATTACHED EQUIPMENT SHALL BE STOCKPILED AS DIRECTED BY APA PERSONNEL)

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4. REFER TO SHEET G4 FOR TURBIDITY CURTAIN LIMITS AND TEMPORARY FENCING.



**ALABAMA**  
PORT AUTHORITY  
PORT OF MOBILE

CLIENT DWG NO:



CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
DEMOLITION PLAN

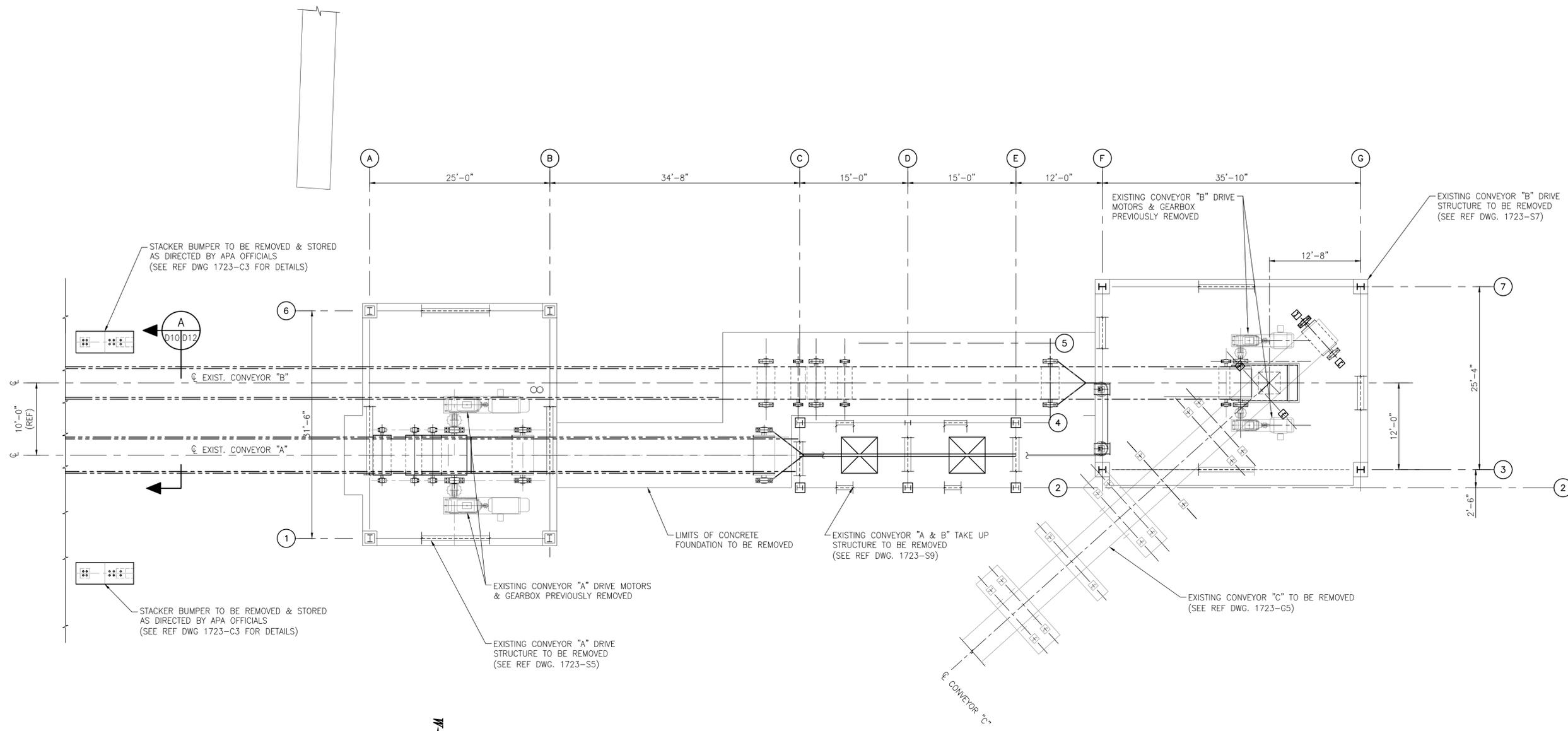
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FOR: ALABAMA PORT AUTHORITY

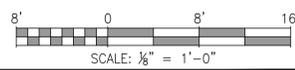
NOTES

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	A	30% DESIGN REVIEW		KR	FEL	FEL	4/11/25		
REFERENCE DRAWINGS	NO.	REVISION		DRAWN	CK'D	APPD	DATE	DRAWN: KR	CK'D: FEL
				APPD: FEL			DATE: 4/11/25	SCALE: AS NOTED	

PROJECT NO: 4617 DWG NO: D9A REV: E



**ENLARGED PLAN - CONVEYOR A/B DRIVE STRUCTURES**  
 1/8" = 1'-0"



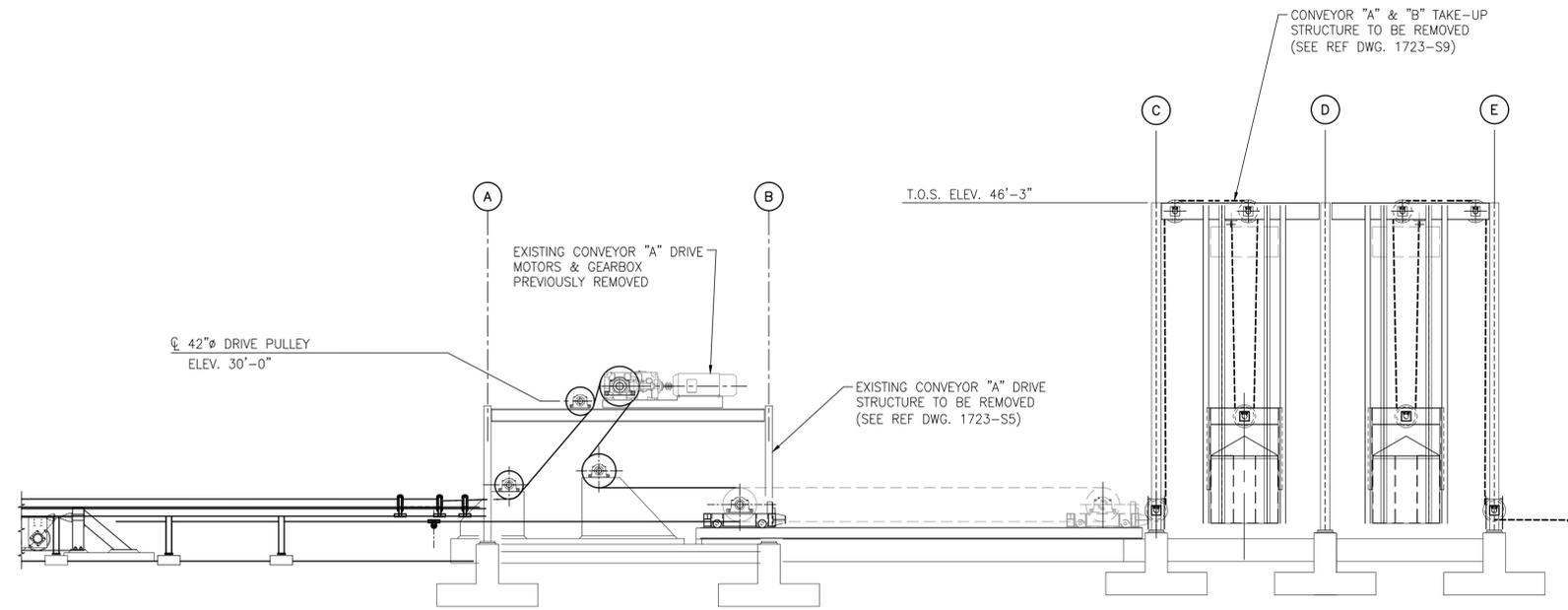
- NOTES
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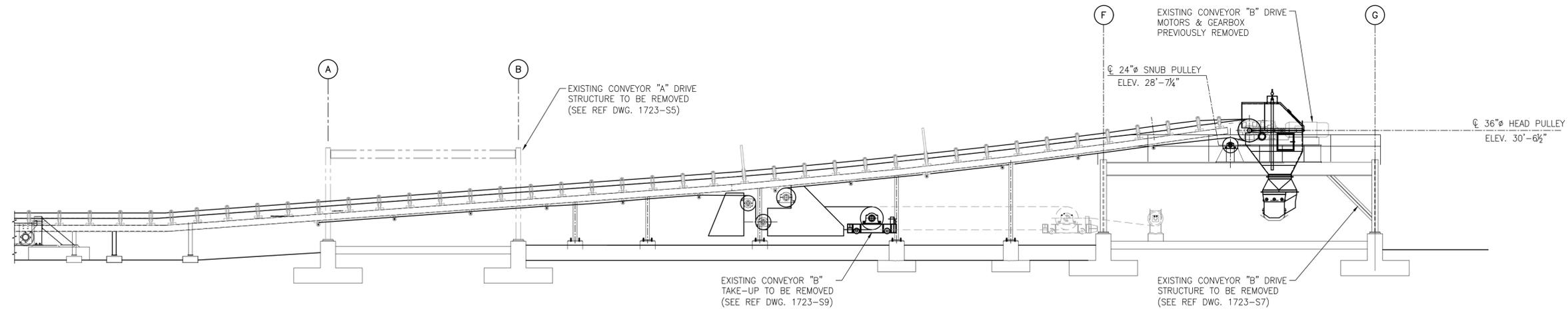
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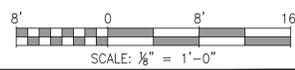
CLIENT DWG NO:	CHOCTAW POINT CONTAINER TERMINAL
	PHASE V DOCK EXTENSION - DEMOLITION PACKAGE
	ENLARGED PLAN - CONV A/B DRIVE STRUCTURES
FOR:	ALABAMA PORT AUTHORITY
PROJECT NO:	4617
DWG NO:	D10
REV:	E



**ELEVATION - CONVEYOR "A"**  
1/8"=1'-0"



**ELEVATION - CONVEYOR "B"**  
1/8"=1'-0"



NOTES

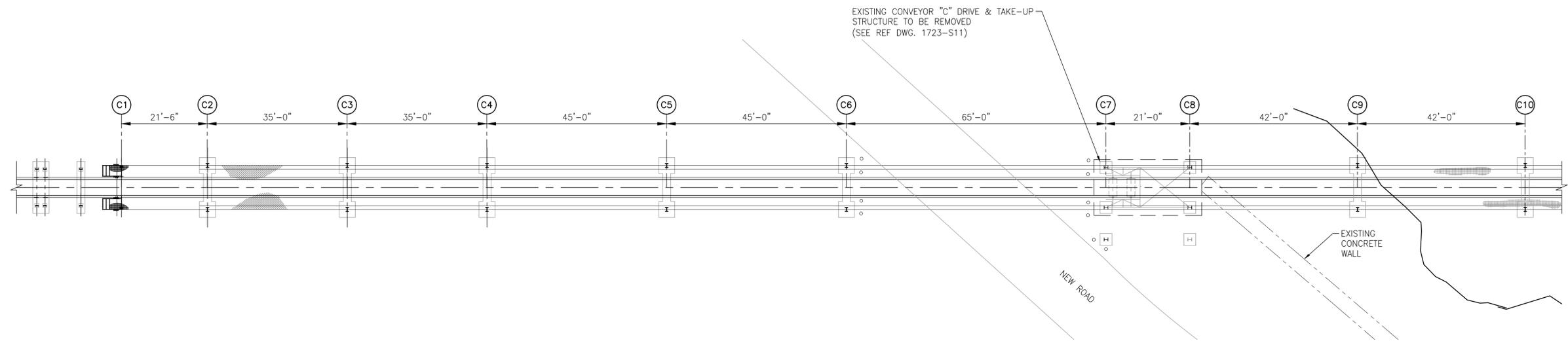
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C	95% DESIGN REVIEW	JLH	08-08-25	JLH	JEJ	RSG	08-08-25
B	60% DESIGN REVIEW	ECW	06-10-25	ECW	JEJ	RSG	06-10-25
A	30% DESIGN REVIEW	ECW	04-11-25	ECW	JEJ	RSG	04-11-25

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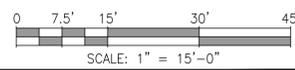
CLIENT DWG NO:  
**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION - DEMOLITION PACKAGE**  
**ELEVATIONS - TAKE UP/DRIVE STRUCTURE**  
 FOR: ALABAMA PORT AUTHORITY  
 PROJECT NO: 4617    DWG NO: D11    REV: E





**ENLARGED PLAN - CONVEYOR "C"**  
1"=15'-0"

**NOTE:** ALL LAND BASED PILES SHALL BE CUT OFF SIX (6) FEET BELOW EXISTING GRADE. EXCEPT FOR BENTS C7, C8, & C9 WHICH SHALL BE PULLED IN THEIR ENTIRETY.



**NOTES**

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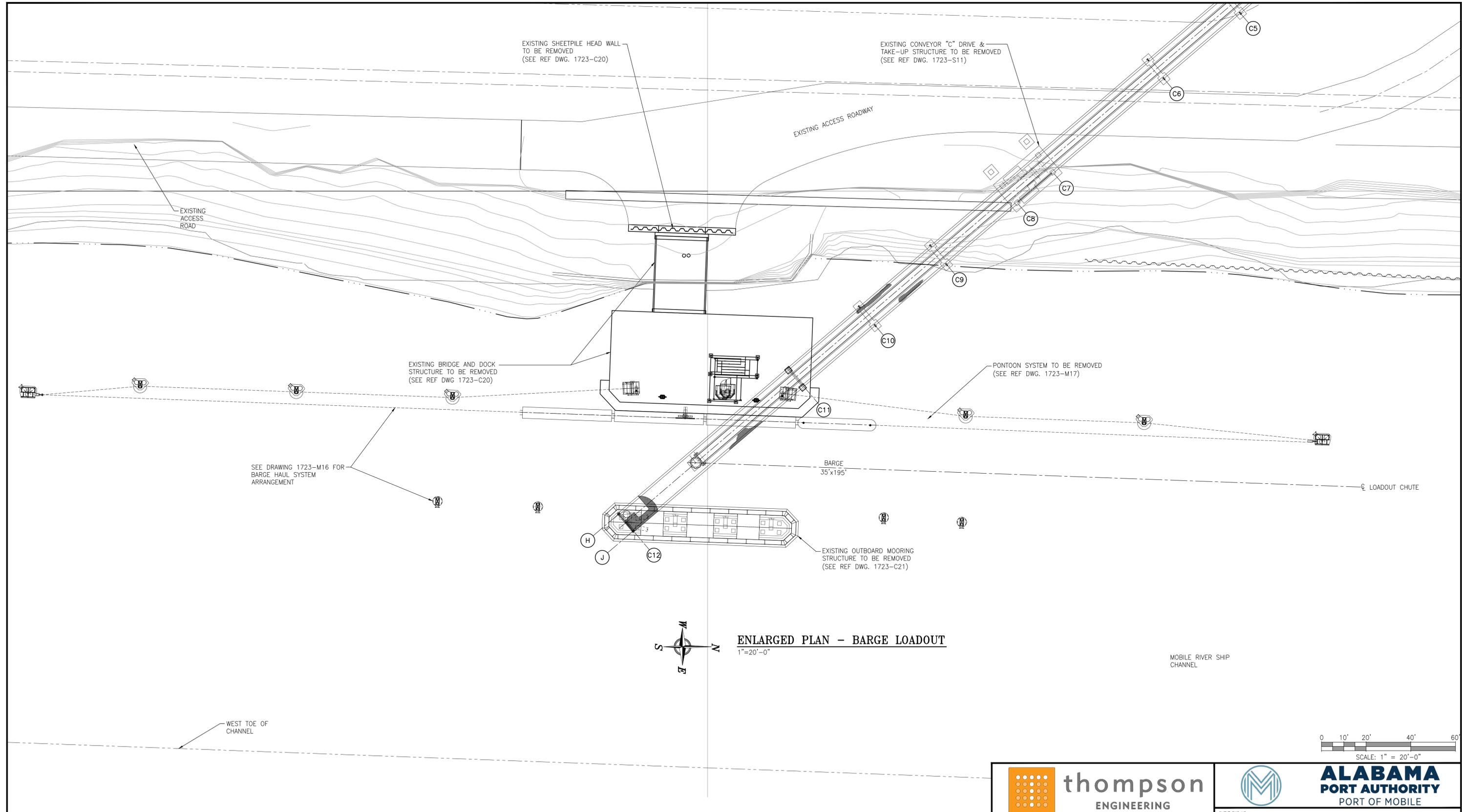
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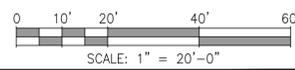
CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
ENLARGED PLAN - CONVEYOR "C"

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617 DWG NO: D13 REV: E



**ENLARGED PLAN - BARGE LOADOUT**  
1"=20'-0"



**NOTES**

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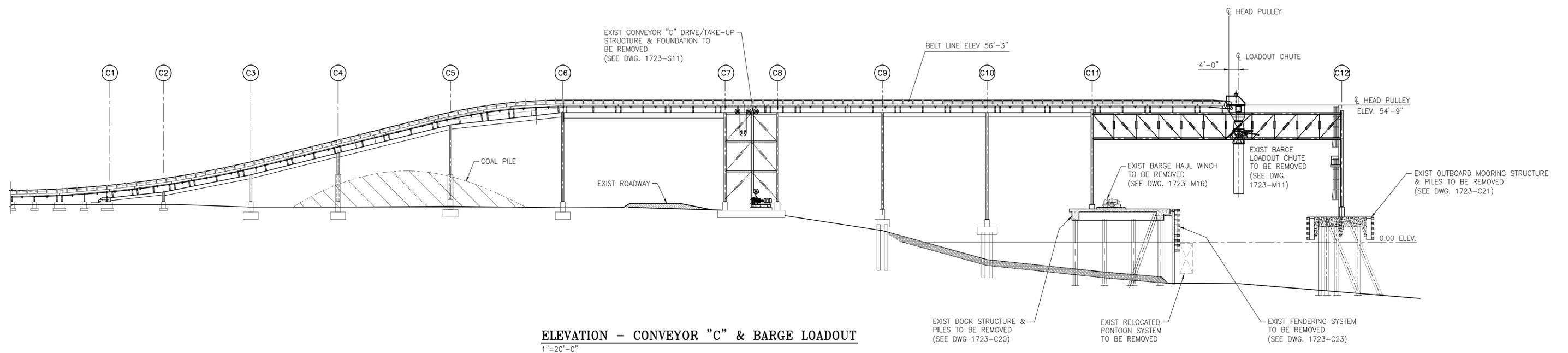
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CLIENT DWG NO:

CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
ENLARGED PLAN - BARGE LOADOUT

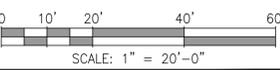
FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617    DWG NO: D14    REV: E



**ELEVATION - CONVEYOR "C" & BARGE LOADOUT**  
1"=20'-0"

NOTE: ALL WATER BASED (MARINE) PILINGS SHALL BE PULLED IN THEIR ENTIRETY INCLUDING BENT C9 AND FOUNDATIONS FOR TAKE UP TOWER AT BENTS C7 AND C8.



NOTES

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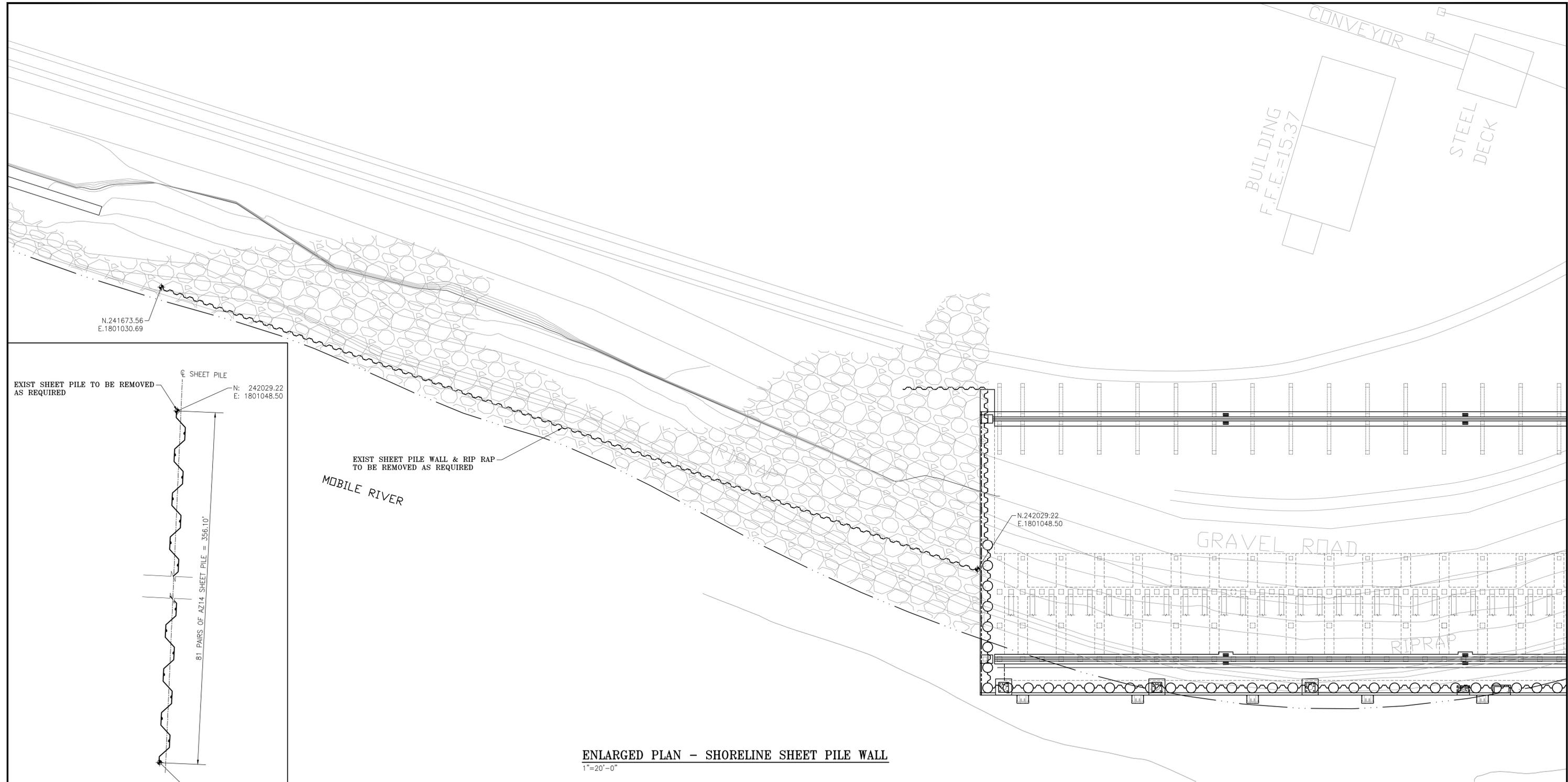
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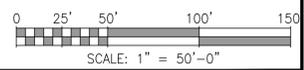
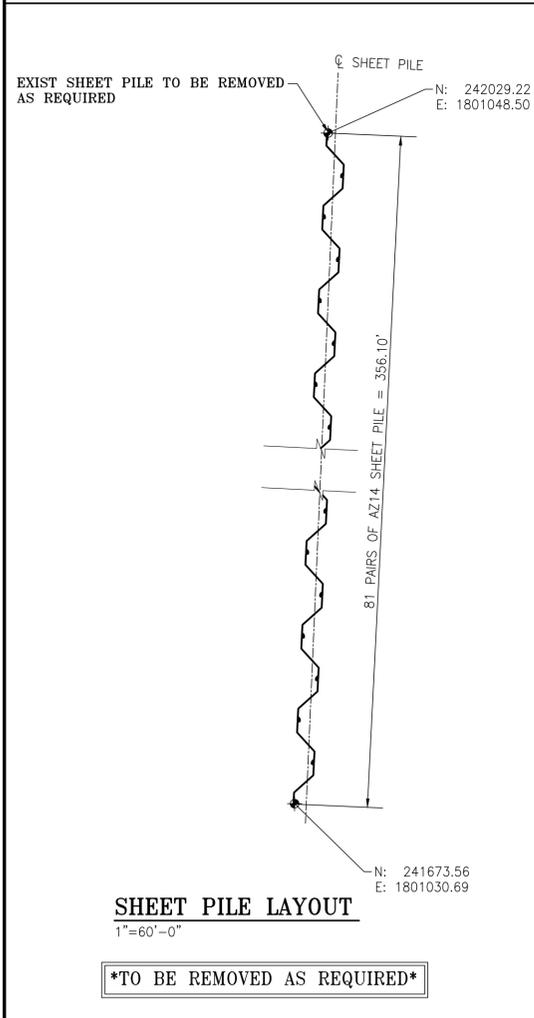
CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
ELEVATION - CONVEYOR "C" & BARGE LOADOUT

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617    DWG NO: D15    REV: E



**ENLARGED PLAN - SHORELINE SHEET PILE WALL**  
1"=20'-0"



NOTES

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E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26
D	100% DESIGN REVIEW	ECW	JEJ	RSG	09-09-25
C	95% DESIGN REVIEW	JLH	JEJ	RSG	08-08-25
B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25
A	30% DESIGN REVIEW	ECW	JEJ	RSG	04-11-25

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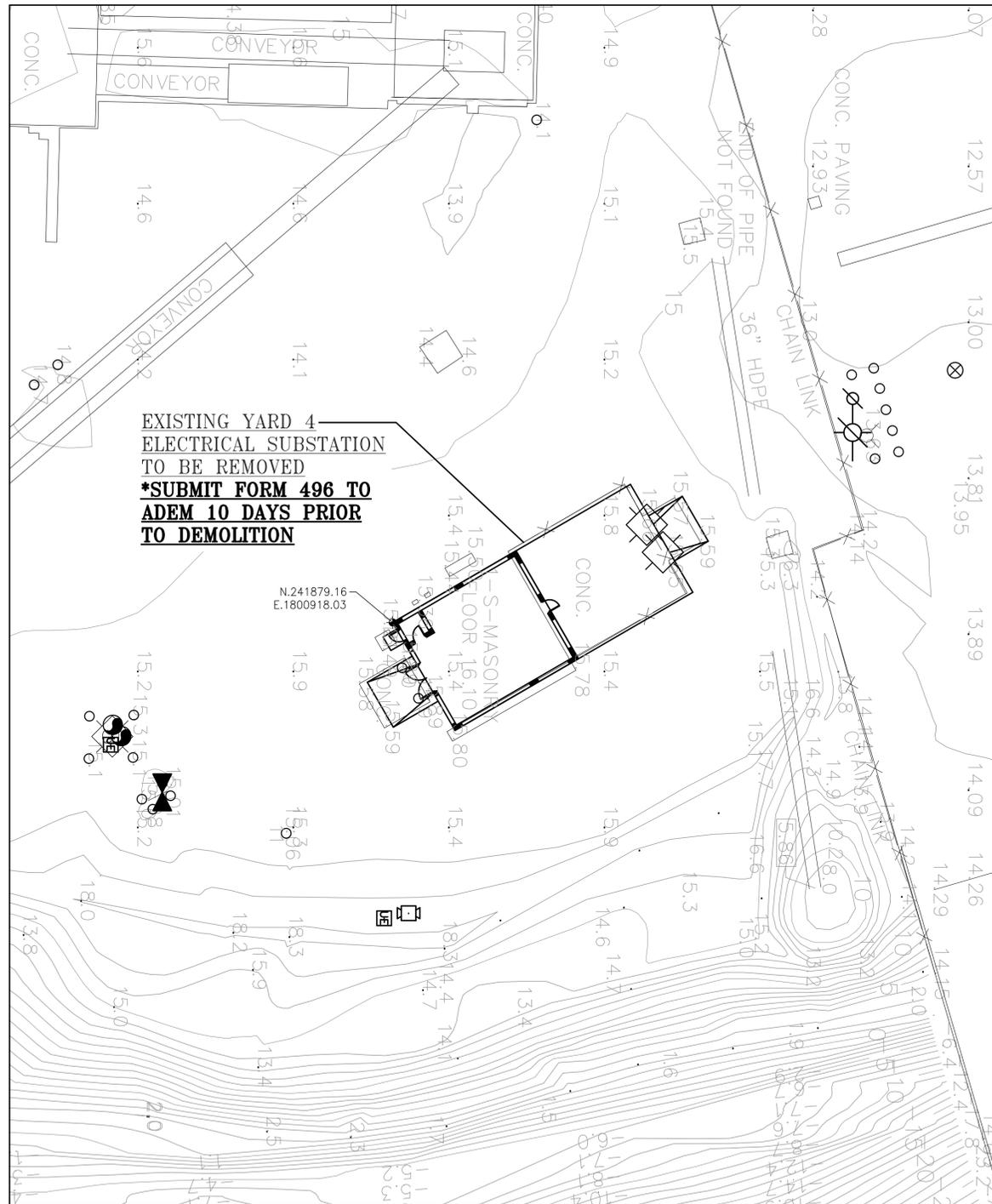
CLIENT DWG NO:  
CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
ENLARGED PLAN - SHORELINE SHEET PILE WALL  
FOR: ALABAMA PORT AUTHORITY  
PROJECT NO: 4617 DWG NO: D16 REV: E



DEMOLITION PROJECT SITE



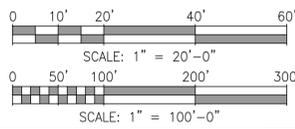
**PROJECT EXISTING LOCATION PLAN**  
1"=100'



**EXISTING YARD 4  
ELECTRICAL SUBSTATION  
TO BE REMOVED  
\*SUBMIT FORM 496 TO  
ADEM 10 DAYS PRIOR  
TO DEMOLITION**



**ENLARGED PROJECT EXISTING SITE PLAN**  
1"=20'



NOTES

	E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26			
	D	100% DESIGN REVIEW	ECW	JEJ	RSG	09-09-25			
	C	95% DESIGN REVIEW	JLH	JEJ	RSG	08-08-25			
	B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25			
	A	30% DESIGN REVIEW	ECW	JEJ	RSG	04-11-25			
REFERENCE DRAWINGS	NO.	REVISION	DRAWN	CK'D	APPD	DATE			

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DRAWN: JLH CK'D: JEJ APPD: RSG DATE: 01-03-25 SCALE: AS NOTED

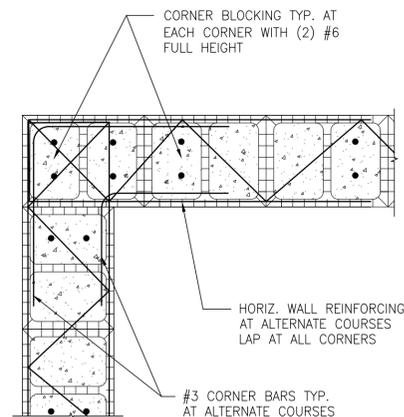
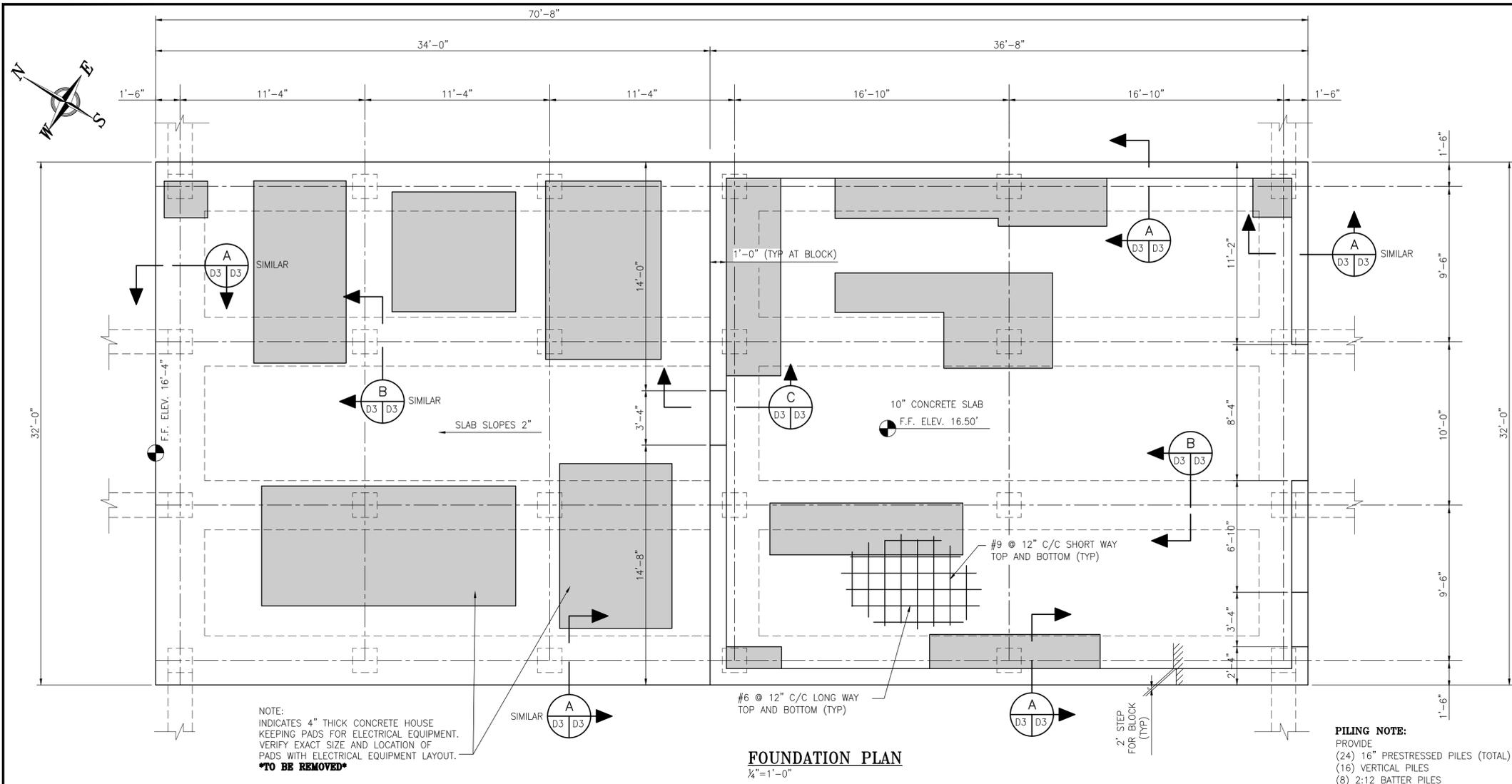
CLIENT DWG NO:

**CHOCTAW POINT CONTAINER TERMINAL  
PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
SUBSTATION BUILDING**

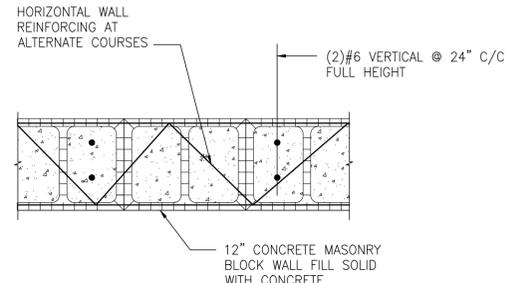
FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617 DWG NO: D17 REV: E





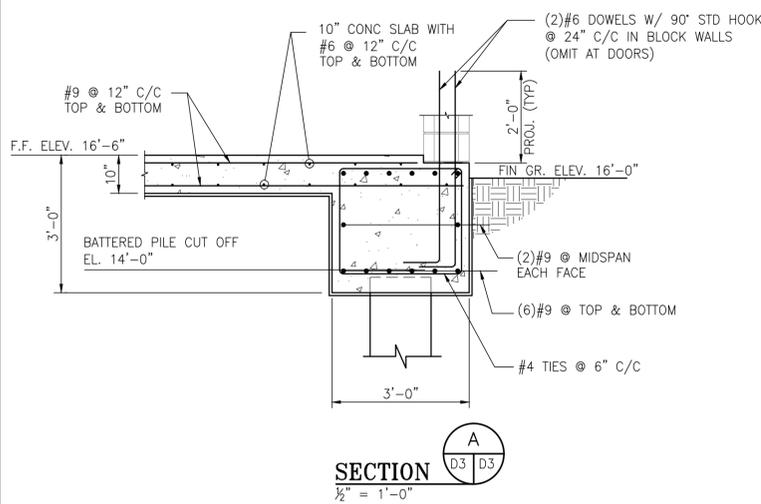
**TYPICAL CORNER DETAIL**  
1"=1'-0"



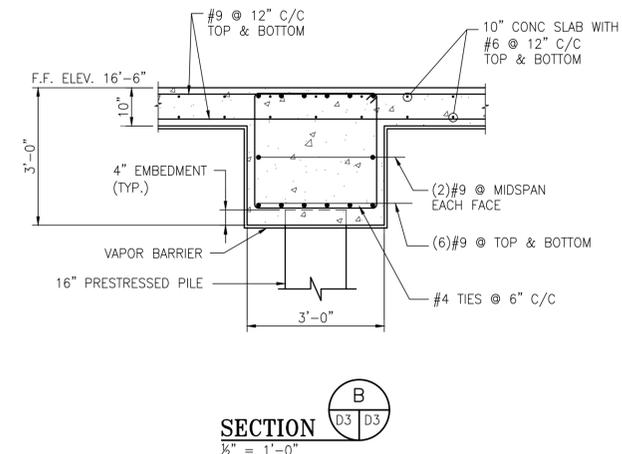
**TYPICAL WALL DETAIL**  
1"=1'-0"

NOTE:  
HORIZONTAL WALL REINFORCEMENT: FABRICATED FROM COLD-DRAWN STEEL WIRE (ASTM A82) TRUSS DESIGN (16" MAXIMUM BETWEEN WELDS) WITH DEFORMED LONGITUDINAL WIRES, IN FLAT SECTIONS 10 TO 12 FEET LONG. USE 9 GAUGE LONGITUDINAL AND CROSS WIRES FOR INTERIOR WALLS AND 3/16" LONGITUDINAL AND 9 GAUGE CROSS WIRES WITH MOISTURE DRIP FOR CAVITY WALLS. WIDTH SHALL BE ONE INCH (1") LESS THAN NOMINAL WALL WIDTH. LAP SPLICES 6" AT END OF EACH LENGTH. USE PREFAB CORNERS AT ALL CORNERS OF ALL LOCK WALL JUNCTURES.

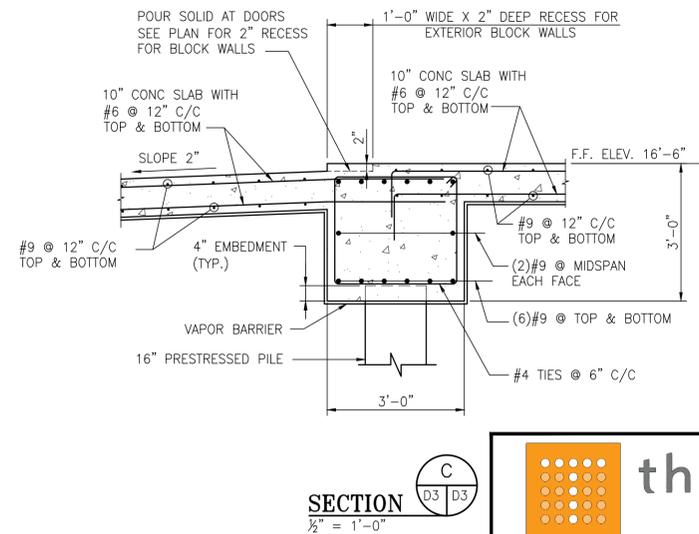
**NOTE: ALL EXISTING BUILDING FOUNDATION AND STRUCTURE TO BE REMOVED 4 FT BELOW EXISTING GRADE.**



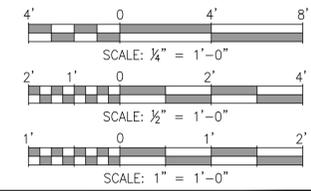
**SECTION A**  
1/2" = 1'-0"



**SECTION B**  
1/2" = 1'-0"



**SECTION C**  
1/2" = 1'-0"



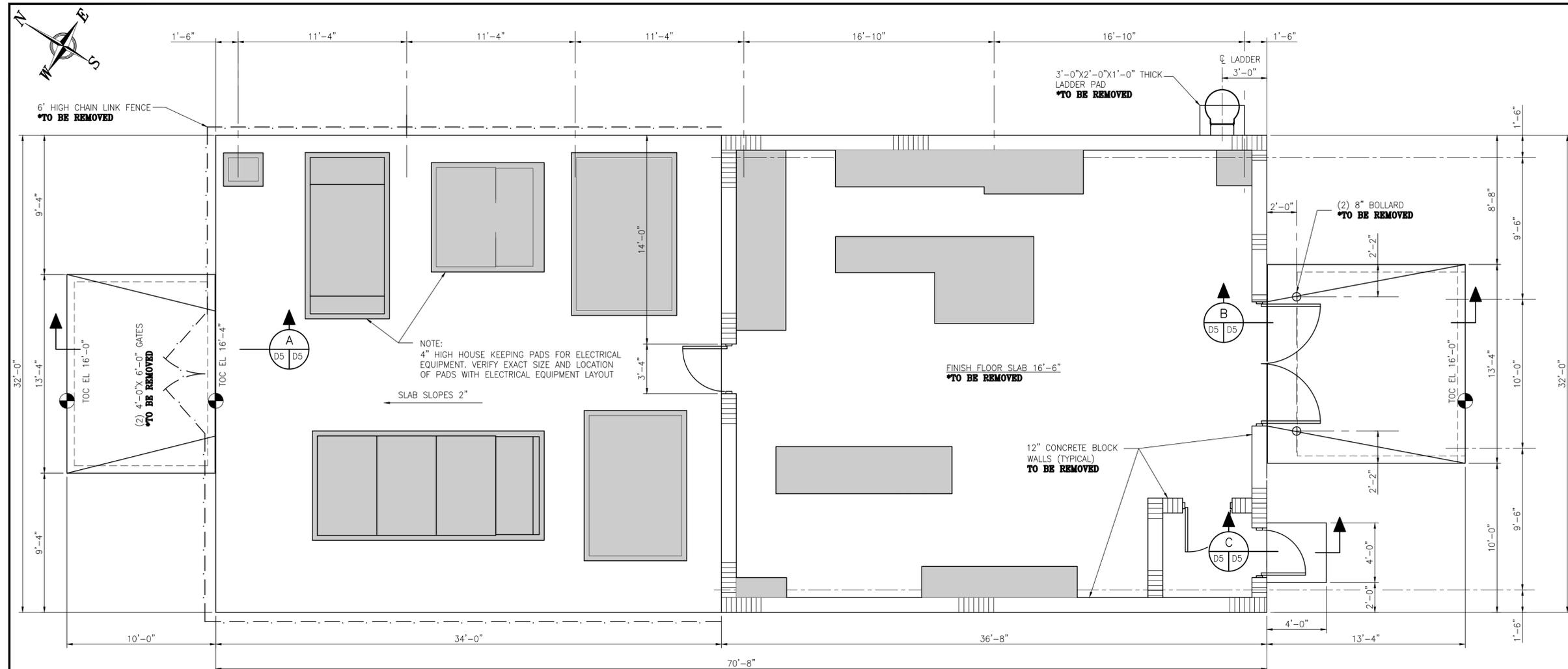
NO.	REVISION	DRAWN	CK'D	APPD	DATE
E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26
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B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25
A	30% DESIGN REVIEW	ECW	JEJ	RSG	04-11-25
3225-S1 FOUNDATION PLAN & SECTIONS / MCDUFFIE YARD 4 ELECTRICAL SUBSTATION RELOCATION (2009)					
NOTES					

**APTIM**  
PORT SERVICES, LLC

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CLIENT DWG NO:	CHOCTAW POINT CONTAINER TERMINAL
	PHASE V DOCK EXTENSION - DEMOLITION PACKAGE
	SUBSTATION EXISTING FOUNDATION PLAN & SECTIONS
FOR:	ALABAMA PORT AUTHORITY
PROJECT NO:	4617
DWG NO:	D19
REV:	E





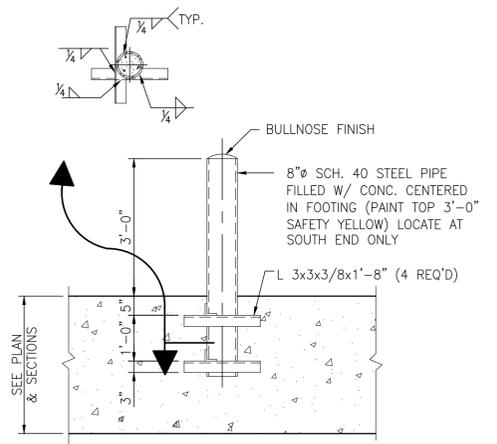
**FLOOR PLAN**  
1/4" = 1'-0"

**GENERAL NOTES**

1. PAINT: EXTERIOR AND INTERIOR CONCRETE BLOCK WALL SHALL BE PAINTED AS PER PAINT SCHEDULE WITH SURFACE PREPARATION AS OUTLINED AND SPECIFIED WITH SPECIFICATION FOR APPLICABLE COATING.
2. PAINT: GALVANIZED ROOF DECKING (BOTTOM) SHALL BE PAINTED AS PER PAINT SCHEDULE WITH SURFACE PREPARATION AS OUTLINED AND SPECIFIED WITH SPECIFICATION FOR APPLICABLE COATING.

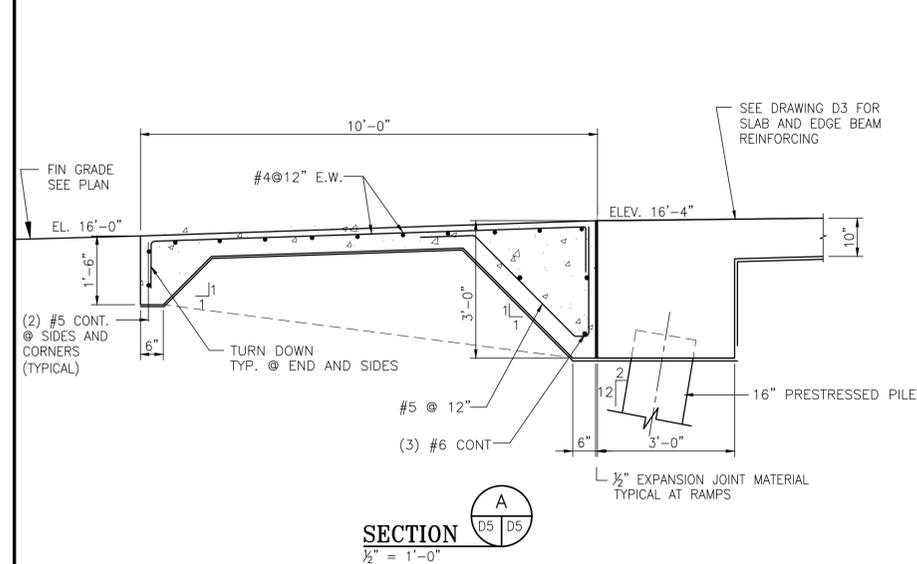
**PAINT SCHEDULE**

LOCATION	TYPE	FINISH	
VESTIBILE	FLOOR	CONC. WITH SEALER	
	WALL	CONC. BLOCK - PAINTED	BLOCK FILLER, PRIMER SEALER, AND HIGH BUILD EPOXY
	CEILING	GALV METAL DECKING	PRIMER SEALER AND HIGH BUILD EPOXY
ELECTRICAL ROOM	FLOOR	CONC. WITH SEALER	
	WALL	CONC. BLOCK - PAINTED	BLOCK FILLER, PRIMER SEALER, AND HIGH BUILD EPOXY
	CEILING	GALV METAL DECKING	PRIMER SEALER AND HIGH BUILD EPOXY

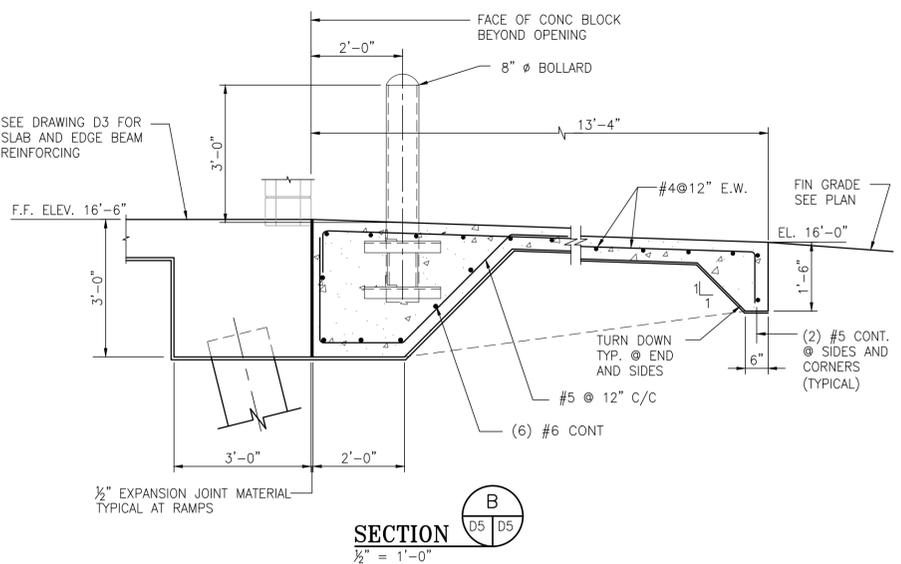


**TYPICAL BOLLARD DETAIL**  
1/2" = 1'-0"

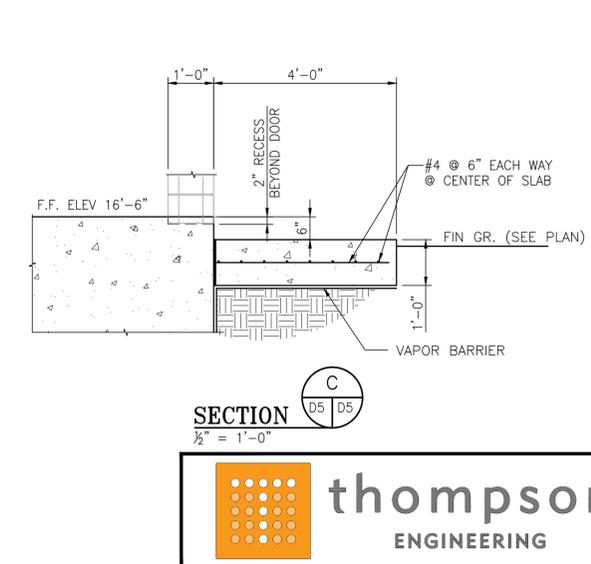
**NOTE: ALL EXISTING BUILDING STRUCTURE TO BE REMOVED.**



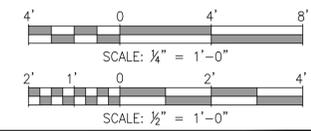
**SECTION A**  
1/2" = 1'-0"



**SECTION B**  
1/2" = 1'-0"



**SECTION C**  
1/2" = 1'-0"



NOTES

1. FIN GRADE SEE PLAN
2. (2) #5 CONT. @ SIDES AND CORNERS (TYPICAL)
3. (3) #6 CONT.
4. TURN DOWN TYP. @ END AND SIDES
5. #5 @ 12"
6. #4 @ 12" E.W.
7. 16" PRESTRESSED PILE
8. 1/2" EXPANSION JOINT MATERIAL TYPICAL AT RAMP
9. SEE DRAWING D3 FOR SLAB AND EDGE BEAM REINFORCING
10. SEE DRAWING D3 FOR SLAB AND EDGE BEAM REINFORCING
11. FIN GRADE SEE PLAN
12. (2) #5 CONT. @ SIDES AND CORNERS (TYPICAL)
13. TURN DOWN TYP. @ END AND SIDES
14. (6) #6 CONT.
15. VAPOR BARRIER
16. FIN GR. (SEE PLAN)
17. #4 @ 6" EACH WAY @ CENTER OF SLAB
18. 2" RECESS BEYOND DOOR
19. F.F. ELEV. 16'-6"
20. F.F. ELEV. 16'-6"
21. ELEV. 16'-4"
22. EL. 16'-0"
23. FIN GRADE SEE PLAN
24. 8" Ø BOLLARD
25. FACE OF CONC BLOCK BEYOND OPENING
26. 2'-0"
27. 13'-4"
28. 3'-0"
29. 3'-0"
30. 2'-0"
31. 3'-0"
32. 2'-0"
33. 1'-6"
34. 1'-6"
35. 1'-6"
36. 1'-6"
37. 10'-0"
38. 34'-0"
39. 70'-8"
40. 36'-8"
41. 13'-4"
42. 4'-0"
43. 4'-0"
44. 2'-0"
45. 2'-0"
46. 2'-0"
47. 2'-0"
48. 2'-0"
49. 2'-0"
50. 2'-0"
51. 2'-0"
52. 2'-0"
53. 2'-0"
54. 2'-0"
55. 2'-0"
56. 2'-0"
57. 2'-0"
58. 2'-0"
59. 2'-0"
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91. 2'-0"
92. 2'-0"
93. 2'-0"
94. 2'-0"
95. 2'-0"
96. 2'-0"
97. 2'-0"
98. 2'-0"
99. 2'-0"
100. 2'-0"

NO.	REVISION	DRAWN	CK'D	APPD	DATE
E	ISSUED FOR BID	JLH	JEJ	RSG	01-14-26
D	100% DESIGN REVIEW	ECW	JEJ	RSG	09-09-25
C	95% DESIGN REVIEW	JLH	JEJ	RSG	08-08-25
B	60% DESIGN REVIEW	ECW	JEJ	RSG	06-10-25
3225-S3	FLOOR PLAN, DOOR SCHEDULE & DETAILS / McDUFFIE YARD 4 ELECTRICAL SUBSTATION RELOCATION (2009)	ECW	JEJ	RSG	04-11-25

**thompson**  
ENGINEERING

**ALABAMA**  
PORT AUTHORITY  
PORT OF MOBILE

**APTIM**  
PORT SERVICES, LLC

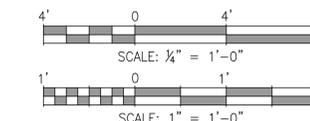
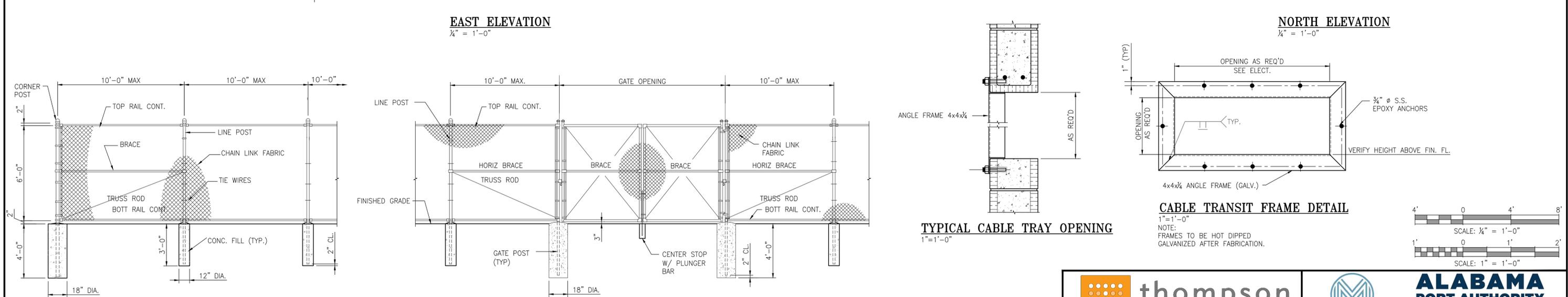
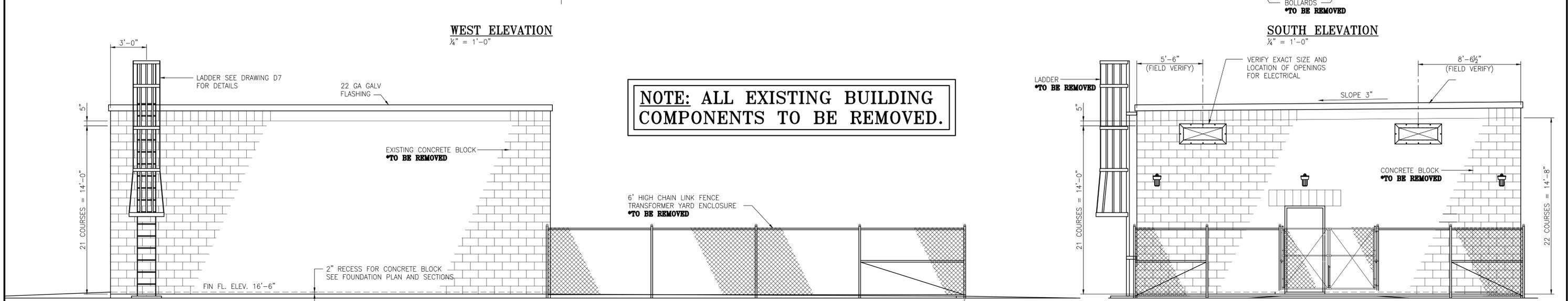
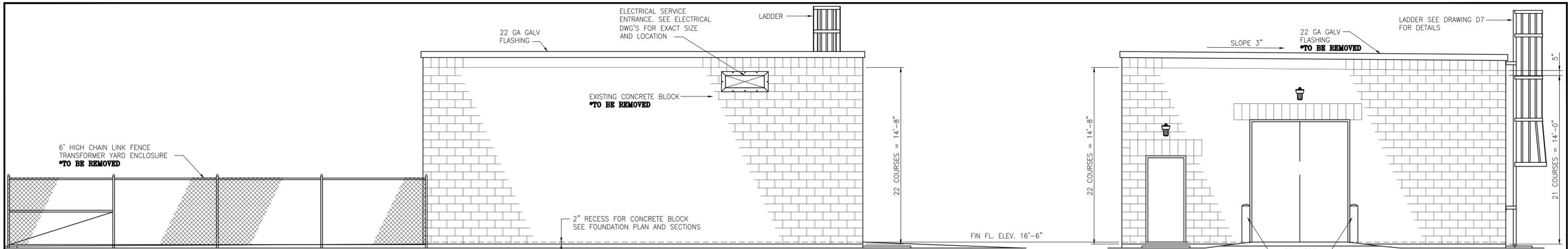
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CLIENT DWG NO:

**CHOCTAW POINT CONTAINER TERMINAL**  
**PHASE V DOCK EXTENSION - DEMOLITION PACKAGE**  
**SUBSTATION FLOOR PLAN, DOOR SCHEDULE, & DETAILS**

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617    DWG NO: D21    REV: E



**thompson ENGINEERING**

**ALABAMA PORT AUTHORITY**  
 PORT OF MOBILE

NO.	REVISION	DATE	DRAWN	CK'D	APPD
E	ISSUED FOR BID	01-14-26	JLH	JEJ	RSG
D	100% DESIGN REVIEW	09-09-25	ECW	JEJ	RSG
C	95% DESIGN REVIEW	08-08-25	JLH	JEJ	RSG
B	60% DESIGN REVIEW	06-10-25	ECW	JEJ	RSG
3225-S4	EXTERIOR ELEVATIONS & MISC DETAILS / McDUFFIE YARD 4 ELECTRICAL SUBSTATION RELOCATION (2009)	04-11-25	ECW	JEJ	RSG
NO.	REVISION	DATE	DRAWN	CK'D	APPD

**APTIM PORT SERVICES, LLC**

CHOCTAW POINT CONTAINER TERMINAL  
 PHASE V DOCK EXTENSION - DEMOLITION PACKAGE  
 SUBSTATION EXTERIOR ELEVATIONS & MISC. DETAILS

FOR: ALABAMA PORT AUTHORITY

PROJECT NO: 4617 DWG NO: D22 REV: E

DATE: 01-03-25 SCALE: AS NOTED



ALABAMA STATE DOCKS  
DEPARTMENT

MOBILE,

ALABAMA

McDUFFIE TERMINALS/  
TUSCALOOSA STEEL CORP.  
CONVEYANCE EXPANSION

FOB JAMES, JR., GOVERNOR OF ALABAMA  
JACK E. RAVAN, DIRECTOR AND C.E.O.



MOBILE

ALABAMA

REFERENCE

# D R A W I N G I N D E X

## T.S.C. CONVEYANCE EXPANSION (809)

### GENERAL

DWG. NO.	DESCRIPTION
*809-G00	COVER SHEET
**809-G02	DRAWING INDEX AND GENERAL NOTES
*809-GS1	STANDARD STRUCTURAL DETAILS
**809-GM1	CONVEYOR BELT PROFILES
*809-B1	ELECTRICAL BUILDING "TS"
*809-B2	ELECTRICAL BUILDING "TS" ELEVATION AND DETAILS
*809-B3	ELECTRICAL BUILDING "TS" ROOF FRAMING PLAN AND DETAILS
*809-C1	SITE PLAN
*809-C1A	EXISTING SITE TOPO
*809-C1B	SITE AVAILABILITY
*809-C1C	EROSION CONTROL PLAN
*809-C1D	EROSION CONTROL DETAILS
**809-C2	MASTER SITE DRAINAGE PLAN
**809-C3	SOFTY SITE PLAN
*809-C4	ENLARGED SITE DRAINAGE PLAN
**809-C5	ENLARGED SITE DRAINAGE PLAN
**809-C6	ENLARGED SITE DRAINAGE PLAN
*809-C7	SOIL BORING PLAN
*809-C8	SOIL BORING DETAILS
**809-C9	TYPICAL STORAGE YARD CROSS SECTION DETAILS
*809-C10	CROSS SECTIONS STATIONS 0+00 & 1+00
**809-C11	CROSS SECTIONS STATIONS 2+00 & 3+00
**809-C12	CROSS SECTIONS STATIONS 4+00 & 5+00
**809-C13	CROSS SECTIONS STATIONS 6+00 & 7+00
**809-C14	CROSS SECTIONS STATIONS 8+00 & 9+00
**809-C15	CROSS SECTIONS STATIONS 10+00 & 11+00
**809-C16	CROSS SECTIONS STATIONS 12+00 & 13+00
**809-C17	CROSS SECTIONS STATIONS 14+00 & 15+00
**809-C18	CROSS SECTIONS STATIONS 16+00 & 17+00
**809-C19	CROSS SECTIONS STATIONS 18+00 & 19+00
**809-C20	CROSS SECTIONS STATIONS 20+00 & 21+00
**809-C21	CROSS SECTIONS STATIONS 21+99 & 21+99
**809-C22	CROSS SECTIONS STATIONS 23+00 & 24+00
*809-C23	CROSS SECTIONS STATIONS 25+00 & 26+00
*809-C24	CROSS SECTIONS STATIONS 26+28, 27+00, 28+00 & 29+00
*809-C25	CROSS SECTIONS STATIONS 30+00, 31+00, 32+00 & 33+00
*809-C26	CROSS SECTIONS STATIONS 34+00, 35+00, 36+00, 37+00, 38+00 & 39+00
*809-C27	CROSS SECTIONS STATIONS 40+00 & 40+96
*809-C28	CROSS SECTIONS STATIONS 40+00 & 40+96

### STRUCTURAL

*809-S1	CONVEYOR "A & B" PLAN AND ELEVATIONS
*809-S2	CONVEYOR "A & B" PLAN AND ELEVATIONS
*809-S2A	CONVEYOR "A & B" SECTION & DETAILS
*809-S2B	TYPICAL TAKE UP DETAILS
*809-S3	CONVEYOR "A" DRIVE AND TAKE UP STRUCTURES
*809-S4	CONVEYOR "A" DRIVE AND TAKE UP STRUCTURE PLANS & ELEV.
*809-S5	CONVEYOR "A" DRIVE AND TAKE UP STRUCTURE DETAILS
*809-S6	CONVEYOR "B" TAIL PULLEY & PULLEY GAURD PLAN & DETAILS
*809-S7	BENTS "1, 2, 3, & 4" ELEVATIONS
*809-S8	SUPPORT BEAMS "T1, T2, T3, & T4" PLANS AND ELEVATIONS
*809-S9	TOWER "A" PLANS
*809-S10	TOWER "A" NORTH & WEST ELEVATIONS
*809-S11	TOWER "A" EAST & SOUTH ELEVATIONS
*809-S11A	TOWER "A" STAIR TOWER
*809-S12	CONVEYOR "C" PLAN AND ELEVATIONS
*809-S13	BENTS "5, 6, & 7" ELEVATIONS
*809-S13A	BENT "7A" ELEVATIONS
*809-S14	SUPPORT BEAMS "T5, T6, & T7" PLANS AND ELEVATIONS
*809-S15	SUPPORT BEAMS "T8 & T9" PLANS, ELEVATIONS, & DETAILS
*809-S16	NOT USED
*809-S17	CONVEYOR "C" DRIVE AND TAKE UP ELEVATIONS & ROOF PLAN
*809-S17A	NOT USED
*809-S18	CONVEYOR "C" DRIVE AND TAKE UP PLAN, ELEVATION, & DETAILS
*809-S19	CONVEYOR "D" PLAN AND ELEVATION
*809-S20	BENTS "8, 9, 10, & 11" ELEVATIONS
*809-S21	SUPPORT BEAMS "T10, T11, AND T12" PLAN AND ELEVATIONS
*809-S22	SUPPORT BEAMS "T13 & T14" PLANS, ELEVATIONS, & DETAILS
*809-S23	TOWER "B" PLANS
*809-S23A	TOWER "B" PLANS
*809-S23B	TOWER "B" PLANS
*809-S23C	TOWER "B" PLANS
*809-S23D	TOWER "B" PLANS
*809-S24	NOT USED
*809-S25	TOWER "B" NORTH AND WEST ELEVATIONS
*809-S25A	TOWER "B" SOUTH AND EAST ELEVATIONS
*809-S25B	NOT USED
*809-S25C	NOT USED
*809-S26	NOT USED
*809-S27	NOT USED
*809-S28	NOT USED
*809-S29	NOT USED
*809-S30	NOT USED
*809-S30A	NOT USED
*809-S31	NOT USED
*809-S32	NOT USED
*809-S33	NOT USED
*809-S33A	NOT USED
*809-S34	CONVEYOR "E" PLAN AND ELEVATION
*809-S35	BENTS "12A" AND "12B" ELEVATIONS
*809-S36	SUPPORT BEAMS "T15, T16" AND "T17" PLAN AND ELEVATION
*809-S37	TOWER "C" PLANS
*809-S38	TOWER "C" NORTH AND WEST ELEVATION
*809-S39	TOWER "C" SOUTH AND EAST ELEVATION
*809-S39A	TOWER "C" WEST ELEVATIONS
*809-S40	TYPICAL CONNECTION DETAILS
*809-S41	TYPICAL CONNECTION DETAILS
*809-S42	TYPICAL CONNECTION DETAILS
*809-S43	TYPICAL CONNECTION DETAILS
*809-S44	TYPICAL CONNECTION DETAILS
**809-S45	TYPICAL CONNECTION DETAILS

### FOUNDATION

DWG. NO.	DESCRIPTION
*809-F1	BENTS "1 & 2" FOUNDATION PLAN & DETAILS
*809-F2	TOWER "A" FOUNDATION
*809-F3	CONVEYOR "A" DRIVE AND TAKE UP STRUCTURE FOUNDATION
*809-F4	BENTS "4, 6, 7, & 7A" FOUNDATION PLAN & DETAILS
*809-F5	BENTS "8A, 12A & 12B" FOUNDATION PLAN & DETAILS
*809-F6	BENT "5" & CONVEYOR "C" DRIVE & TAKE UP STRUCTURE FOUNDATION
*809-F7	BENTS "10 & 11" FOUNDATION PLAN & DETAILS
*809-F8	TOWER "B" FOUNDATION PLAN
*809-F9	NOT USED
*809-F9A	NOT USED
*809-F10	BENT "9" FOUNDATION PLAN & DETAILS
*809-F11	BENT "9" CONCRETE DETAILS
*809-F12	NOT USED
*809-F13	BENT "3" FOUNDATION PLAN & DETAILS
*809-F14	NOT USED
*809-F15	CONVEYOR "B" TAIL PULLEY FOUNDATION
*809-F16	STACKER TIE DOWN FOUNDATION PLAN & DETAILS
*809-F16A	STACKER TIE DOWN FOUNDATION PLAN AND DETAILS
*809-F17	PILE AND MISC DETAILS
*809-F18	CATCH BASIN PLANS, SECTIONS AND DETAILS
*809-F19	SUMP PUMP BASIN PLANS AND SECTIONS

### MECHANICAL

*809-M1	CONVEYOR "A" PROFILE
*809-M2	CONVEYOR "A" TAKE-UP DETAILS
*809-M3	TOWER T-18 CHUTE MODIFICATIONS
*809-M4	TOWER "A" DIVERTER DETAILS
*809-M5	CONVEYOR "B" PROFILE
*809-M6	TOWER "A" PLANS AND ELEVATIONS
*809-M7	CONVEYOR "B" HOOD & CHUTE DETAILS
*809-M8	TOWER "A" DIVERTER DETAILS
*809-M9	CONVEYOR "C" PROFILES
*809-M10	CONVEYOR "D" PROFILE
*809-M11	TOWER "B" PLANS AND ELEVATIONS
*809-M12	TOWER "B" CHUTE AND DIVERTER GATE DETAILS
*809-M13	TOWER "B" RAIL LOADOUT SURGE HOPPER DETAILS
*809-M14	NOT USED
*809-M15	NOT USED
*809-M16	NOT USED
*809-M17	NOT USED
*809-M18	CONVEYOR "F" PROFILE
*809-M19	NOT USED
*809-M20	CHUTE AND MISC. DETAILS
*809-M21	EQUIPMENT FOUNDATION DETAILS
*809-M22	EQUIPMENT FOUNDATION DETAILS
*809-M23	NOT USED
*809-M24	SUMP PUMP BASIN MECHANICAL PLAN

### ELECTRICAL

*809-E1	GENERAL SITE ELECTRICAL PLAN
*809-E2	ELECTRICAL SITE PLAN SECTIONS AND DETAILS
*809-E3	ELECTRICAL AC ONE LINE DIAGRAM & PANEL SCHEDULES
*809-E4	ELECTRICAL BUILDING "TS" ELECTRICAL PLAN AND SCHEDULES
*809-E4A	MOTOR CONTROL CENTER SCHEDULE AND LAYOUT
*809-E5	ELECTRICAL BUILDING "TS" GROUNDING PLAN
*809-E6	ELECTRICAL BUILDING "TS" A/C SYSTEM AND DETAILS
*809-E7	ELECTRICAL BUILDING CONVEYOR "A & B" CABLE TRAY ROUTING
*809-E8	ELECTRICAL BUILDING CABLE TRAY SECTIONS AND DETAILS
*809-E9	CONVEYORS "A & B" ELECTRICAL PLAN
*809-E10	CONVEYOR "A" DRIVE STRUCTURE PLAN
*809-E11	TOWER "A" ELECTRICAL PLANS
*809-E12	CONVEYOR "C & D" ELECTRICAL PLANS
*809-E13	CONVEYOR "C" DRIVE ELECTRICAL PLANS
*809-E14	TOWER "B" ELECTRICAL PLANS
*809-E15	TOWER "B" ELECTRICAL PLANS
*809-E16	CONVEYOR "E" ELECTRICAL PLANS
*809-E17	NOT USED
*809-E18	TOWER "C" ELECTRICAL PLANS
*809-E19	RAIL AND BARGE CONTROL CAB LOACTIONS
*809-E20	NOT USED
*809-E21	RECLAIM CONVEYOR AND PUMP STATION ELECTRICAL PLAN
*809-E22	BARGE FACILITY OPERATOR'S CONTROL CAB DETAILS

### UTILITY

*809-U1	UTILITY SITE PLAN
*809-U2	UTILITY SITE PLAN
*809-U3	CONVEYOR "A" & "B" UTILITY PLAN & ELEVATION
*809-U4	CONVEYOR "C" UTILITY PLAN & ELEVATION
*809-U5	CONVEYOR "D" UTILITY PLAN & ELEVATION
*809-U6	CONVEYOR "E" UTILITY PLAN & ELEVATION
*809-U7	NOT USED

## T.S.C. BARGE LOADOUT DOCK (810)

### GENERAL

DWG. NO.	DESCRIPTION
810-C1	EXISTING TOPOGRAPHY
810-C2	NEW SITE PLAN

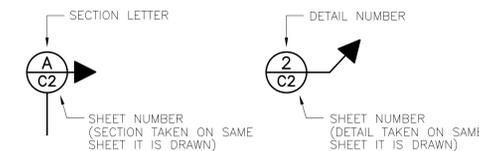
### STRUCTURAL

810-S1	GENERAL PLAN AND SECTION
810-S2	PILE PLAN AND DETAILS
810-S3	DOCK AND BRIDGE DETAILS
810-S4	CONCRETE SECTIONS AND DETAILS
810-S5	LONGITUDINAL CONCRETE SECTIONS AND DETAILS
810-S6	MAIN STRUCTURE FENDER SYSTEM
810-S6A	MAIN STRUCTURE FENDER SYSTEM DETAILS
810-S7	DOLPHIN 'A' DETAILS
810-S8	DOLPHIN 'B' DETAILS
810-S9	BARGE HAULING SYSTEM, PLAN, ELEVATION, & DETAILS

### T.S.C. STACKER (886)

*886-A1	GENERAL ARRANGEMENT
*886-A2	GANTRY TRUCK ARRANGEMENT
*886-B1	STACKER BOOM PLANS AND ELEVATIONS
*886-B2	STACKER BOOM FRAMING DETAILS
*886-B3	STACKER BOOM FRAMING DETAILS
*886-B4	STACKER BOOM FRAMING DETAILS
*886-S1	STACKER TOWER ELEVATIONS
*886-S2	STACKER TOWER ELEVATIONS
*886-S3	STACKER TOWER PLANS
*886-S4	STACKER TOWER PLANS AND DETAILS
*886-S5	STACKER TOWER DETAILS
*886-S6	STACKER TOWER DETAILS
*886-S7	STACKER TOWER DETAILS
*886-S8	STACKER TOWER DETAILS
*886-S9	STACKER TOWER DRIVE TRUCKS S9-1 AND S9-2
*886-S10	STACKER TOWER DRIVE TRUCKS S10-1 AND S10-2
*886-S11	STACKER TOWER DRIVE TRUCKS S11-1 THRU S11-4
*886-S12	STACKER TOWER DRIVE TRUCK EQUALIZER BEAM
*886-S13	STANDARD STRUCTURAL DETAILS
*886-S14	PULLEY GUARD DETAILS
*886-T1	TRIPPER ELEVATION AND PLAN
*886-T2	TRIPPER SECTIONS
*886-T3	TRIPPER DETAILS
*886-T4	TRIPPER DETAILS
*886-T5	TRIPPER DETAILS
*886-T6	TRIPPER TRUCKS
*886-T7	ELECTRICAL ROOM PLAN AND ELEVATION
*886-T8	ELECTRICAL ROOM DETAILS
*886-M1	STACKER TRIPPER CONVEYOR PROFILE
*886-M2	STACKER BOOM CONVEYOR PROFILE
*886-M3	MECHANICAL DETAILS
*886-M4	MECHANICAL DETAILS
*886-M5	BOOM HOIST ARRANGEMENT AND DETAILS
*886-M5A	FUTURE BOOM HOIST ARRANGEMENT AND DETAILS
*886-E1	ELECTRICAL GENERAL ARRANGEMENT
*886-E2	STACKER ELECTRICAL DIAGRAM
*886-E3	ELECTRICAL CONTROL ROOM PLANS
*886-E4	STACKER TOWER ELECTRICAL PLANS
*886-E5	STACKER TOWER ELECTRICAL PLANS
*886-E6	STACKER TOWER ELECTRICAL PLANS
*886-E7	GANTRY DRIVE TRUCK ELECTRICAL PLAN
*886-E8	ELECTRICAL CONTROL PLANS
*886-E9	STACKER OPERATOR'S CONTROL CAB DETAILS

\* DENOTES DRAWINGS ISSUED FOR CONSTRUCTION NOV. 15, 1996.  
BALANCE OF DRAWINGS WILL BE ISSUED DEC. 12, 1996.  
\*\* DENOTES DRAWINGS REVISED AND RE-ISSUED.



### SECTION & DETAIL SYSTEM

# G E N E R A L N O T E S

## CONVEYANCE EXPANSION/BARGE LOADOUT

### DESIGN LOADS

WIND LOAD:	110 MPH BASIC WIND SPEED
DEAD LOADS:	WEIGHT OF STRUCTURE
	WEIGHT OF EMPTY EQUIPMENT
	FLOOR - MINIMUM 30 PSF
LIVE LOADS:	WEIGHT OF OPERATING EQUIPMENT LESS WEIGHT OF EMPTY EQUIPMENT.
	LANDINGS AND STAIRS = 100 PSF
	FLOORS - GRATING = 100 PSF
	- CONCRETE = 750 PSF
	- SUSPENDED = 20 PSF

### CONCRETE

ALL CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318. REINFORCING STEEL SHALL CONFORM WITH ASTM A615, GRADE 60. THE CONTRACTOR SHALL SUBMIT A PLAN FOR CONSTRUCTION JOINT LOCATIONS TO THE ENGINEER FOR APPROVAL. MAXIMUM POUR TO BE 60 FT. IN LENGTH.

### FOUNDATIONS

FOUNDATIONS SHALL BE PLACED ON FIRM UNDISTURBED SOIL AT THE DEPTHS SHOWN ON THE DRAWINGS.

### STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE 9TH EDITION OF THE MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM A36 UNLESS OTHERWISE SHOWN. THE BURNING OF STRUCTURAL MEMBERS SHALL NOT BE ALLOWED.
- CONNECTIONS:
  - FIELD CONNECTIONS SHALL BE MADE WITH GALVANIZED ASTM A-325 HIGH STRENGTH BOLTS, BEARING TYPE CONNECTIONS WITH THREADS EXCLUDED FROM SHEAR PLANE. CONNECTIONS SHALL BE MADE WITH 3/4" DIA. BOLTS UNLESS OTHERWISE NOTED.
  - ALL SHOP CONNECTIONS SHALL BE WELDED. BEAM CONNECTIONS SHALL USE TABLE III, CASE 1 WELD A, WITH TABLE II BOLTED CONNECTIONS. WELDING SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS AND AWS D1.1 STRUCTURAL WELDING CODE USING E70XX ELECTRODES.
  - MINIMUM NUMBER OF BOLTS IN CONNECTIONS NOT OTHERWISE DETAILED.
 

DIAGONAL ANGLE BRACING	- 3	TO DEVELOP 50% OF MEMBER STRENGTH
OTHER BRACING	-	MAXIMUM NO. MEMBER WILL ACCOMMODATE.
  - ALL WELDED JOINTS SHALL BE WELDED CONTINUOUSLY. MINIMUM WELD SIZE SHALL BE 1/4" FILLET.
  - UNLESS OTHERWISE SHOWN, GRATING SHALL BE MINIMUM 1" x 3/16" BEARING BARS @ 2 1/2" CENTERS W/L SPACING, HOT DIPPED GALVANIZED. BY I.K.G. BORDEN OR APPROVED EQUAL. GRATING CLIPS SHALL BE H.D. GALVANIZED OR S.S. TO ACCOMMODATE THE W/L SPACING AND SHALL BE MFG. BY I.K.G. BORDEN OR EQUAL. FLOOR PLATE, IF REQUIRED, SHALL BE MINIMUM 1/4" STIFFENED W/ANGLE IRON 3"x3"x 1/4" @ MAXIMUM 2'-6" CENTERS.
  - SEE STANDARD DETAIL DWG. NO. G-S1 FOR DETAILS OF LADDERS, PLATFORMS, STAIRS, AND HANDRAILS NOT SHOWN. ALL STAIRS AND PLATFORMS SHALL HAVE HANDRAILS ON ALL SIDES EXCEPT AS NECESSARY FOR ACCESS AND AS OTHERWISE MAY BE NOTED.
  - ALL ANCHOR BOLTS ARE TO BE GALVANIZED.
- DETAILS:
  - HOLES FOR 3/4" BOLTS SHALL BE 13/16" DIA. UNLESS NOTED OTHERWISE.
  - BRACING MEMBERS MEETING AT A POINT SHALL HAVE THEIR GRAVITY AXIS MEETING AT ONE POINT IF PRACTICABLE. IF NOT, PROVISIONS SHALL BE MADE FOR BENDING STRESSES DUE TO ECCENTRICITY.
  - CLIP ANGLES AND GUSSET PLATES SHALL BE 3/8" THICK UNLESS OTHERWISE NOTED.
  - COLUMN BASES AND SPLICED ENDS SHALL BE MILLED OR SAW CUT TO PROVIDE FULL BEARING.
- COATINGS:
 

ALL STEEL SHALL BE GALVANIZED AS SPECIFIED CARE SHALL BE TAKEN DURING THE GALVANIZATION PROCESS TO PREVENT DISTORTION AND WARPAGE OF ALL MEMBERS. ALL UNACCEPTABLE MEMBERS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. ALL CHUTE WORK SHALL BE PAINTED AS SPECIFIED.
- BRACING:
 

ALL RECESSED DIMENSIONS (I.E. -6, -8 ETC.) ARE NOMINAL DIMENSIONS FOR MEMBER CLEARANCE ONLY. THE FABRICATOR AND DETAILER SHALL PROVIDE FOR CLEARANCE AT BOLTS, PLATES, AND ANY OTHER INTERFERENCES.

## STACKER

### STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE 9TH EDITION OF THE MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM A36 UNLESS OTHERWISE SHOWN.
- CONNECTIONS:
  - FIELD CONNECTIONS SHALL BE MADE WITH GALVANIZED ASTM A-325X HIGH STRENGTH BOLTS, BEARING TYPE CONNECTIONS WITH THREADS EXCLUDED FROM SHEAR PLANE. CONNECTIONS SHALL BE MADE WITH 3/4" DIA. BOLTS UNLESS OTHERWISE NOTED.
  - ALL SHOP CONNECTIONS SHALL BE WELDED. BEAM CONNECTIONS SHALL USE TABLE III, CASE 1 WELD A, WITH TABLE II BOLTED CONNECTIONS. WELDING SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS AND AWS D1.1 STRUCTURAL WELDING CODE USING E70XX ELECTRODES.
  - MINIMUM NUMBER OF BOLTS IN CONNECTIONS NOT OTHERWISE DETAILED.
 

DIAGONAL ANGLE BRACING	- 3	TO DEVELOP 50% OF MEMBER STRENGTH
OTHER BRACING	-	MAXIMUM NO. MEMBER WILL ACCOMMODATE.
  - ALL WELDED JOINTS SHALL BE WELDED CONTINUOUSLY (SEAL WELDED). MINIMUM WELD SIZE SHALL BE 3/16" FILLET.
  - UNLESS OTHERWISE SHOWN, GRATING SHALL BE MINIMUM 1" x 3/16" BEARING BARS @ 2~6" CENTERS W/L SPACING. HOT DIPPED GALVANIZED BY I.K.G. BORDEN OR APPROVED EQUAL. FLOOR PLATE IF REQUIRED, SHALL BE MINIMUM 1/4" STIFFENED WITH ANGLE IRON 3"x3"x1/4" @ MINIMUM 2'-6" CENTERS.
  - SEE STANDARD DETAILS DWG. NO. 886-S13 FOR DETAILS OF LADDERS, PLATFORMS, STAIRS AND HANDRAILS NOT SHOWN. ALL STAIRS AND PLATFORMS SHALL HAVE HANDRAILS ON ALL SIDES EXCEPT AS NECESSARY FOR ACCESS AND AS OTHERWISE MAY BE NOTED.
  - DETAILS:
    - HOLES FOR 3/4" BOLTS SHALL BE 13/16" DIA. AND FOR 7/8" BOLTS SHALL BE 15/16" DIA. UNLESS NOTED OTHERWISE.
    - BRACING MEMBERS MEETING AT A POINT SHALL HAVE THEIR GRAVITY AXIS MEETING AT ONE POINT IF PRACTICABLE. IF NOT, PROVISIONS SHALL BE MADE FOR BENDING STRESSES DUE TO ECCENTRICITY.
    - CLIP ANGLES AND GUSSET PLATES SHALL BE 3/8" THICK UNLESS OTHERWISE NOTED.
    - COLUMN BASES SHALL BE MILLED OR SAW CUT TO PROVIDE FULL BEARING.
  - CLEANING AND PAINTING:
 

ALL STEEL SURFACES TO BE PAINTED SHALL BE BLAST CLEANED TO NEAR-WHITE CONDITION IN ACCORDANCE WITH SSPC-SP 10-82.

ALL STEEL SURFACES, EXCEPT MACHINED ITEMS, SHALL BE PAINTED. PAINTING SYSTEM BE AS FOLLOWS:

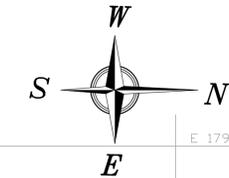
PRIME COAT - SHOP APPLIED. PRIME WITH ONE COAT OF INORGANIC ZINC WITH 3 MIL. DFT. CARBO ZINC 11 AS MANUFACTURED BY CARBOLINE, OR AN APPROVED EQUAL.

INTERMEDIATE COAT - SHOP APPLIED. ONE COAT OF EPOXY PRIMER WITH 3 TO 5 MIL. DFT. CARBOLINE 893

TOP COAT - SHOP APPLIED. TOP COAT IS ONE (1) COAT OF HIGH BUILD VINYL WITH 4 MIL. DFT. POLYCLAD 134HS AS MANUFACTURED BY CARBOLINE, OR AN APPROVED EQUAL.

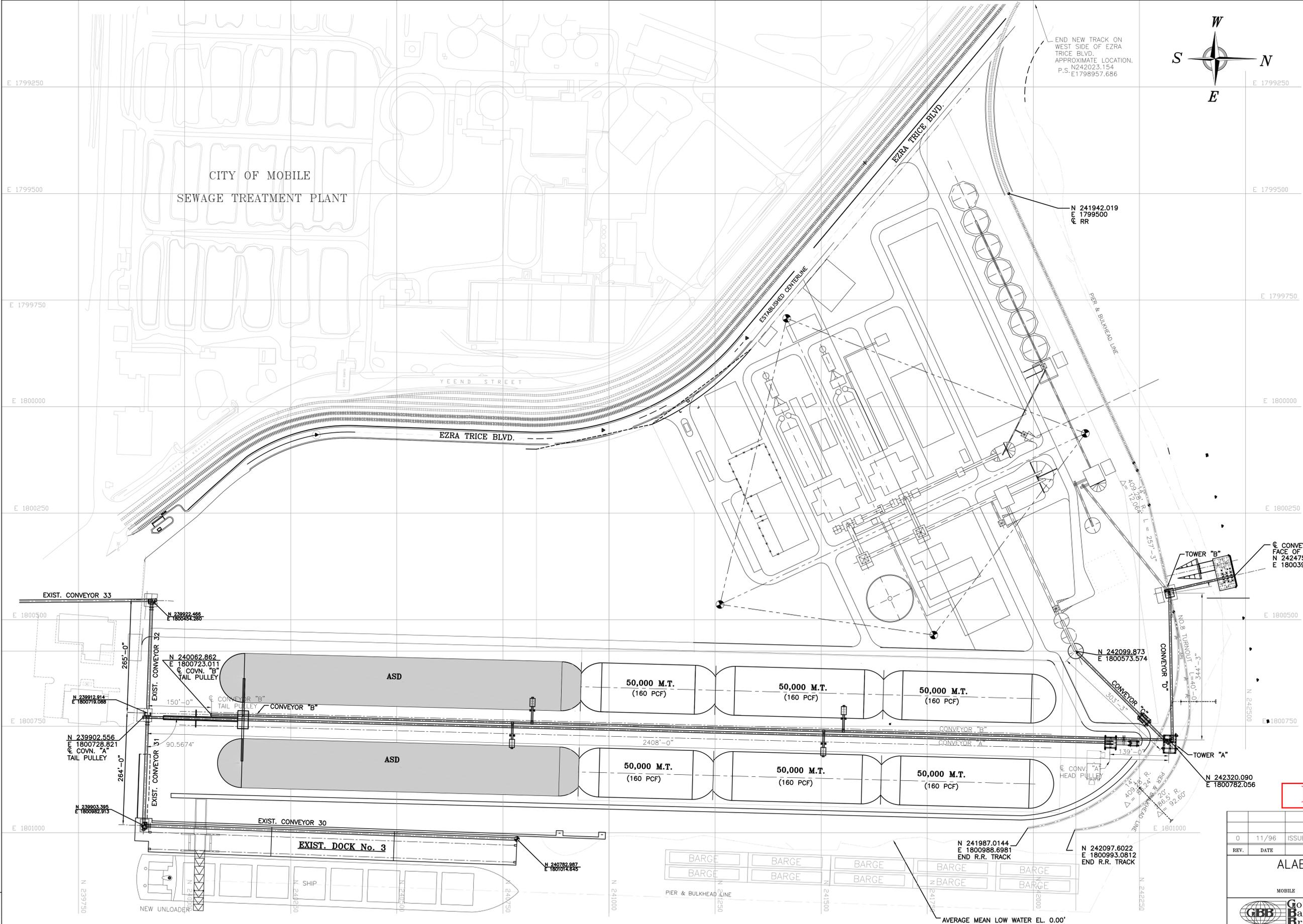
COMPONENT	COLOR
STACKER FRAME	MACHINERY GREY
TRIPPER FRAME	MACHINERY GREY





END NEW TRACK ON WEST SIDE OF EZRA TRICE BLVD.  
APPROXIMATE LOCATION.  
P.S. N242023.154  
E1798957.686

CITY OF MOBILE  
SEWAGE TREATMENT PLANT



CONVEYOR "E" AND FACE OF FENDER  
N 242475.031  
E 1800396.088

N 242320.441  
E 1800437.777  
RAIL LOADOUT HOPPER & SHED

N 242099.873  
E 1800573.574

N 242320.090  
E 1800782.056

N 241987.0144  
E 1800988.6981  
END R.R. TRACK

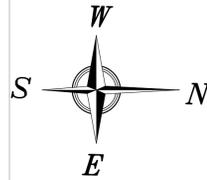
N 242097.6022  
E 1800993.0812  
END R.R. TRACK

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE ALABAMA		McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION
Gottlieb Barnett Bridges		SITE PLAN
Drawn By: JDG	Date: MAR 96	
Checked By: RSG	Date: AUG. 96	
Scale: 1"=100'	Drawing No.	<b>809-C1</b>
		0 REV.

DATUM: NAD 1983

CAD Save: 809-C1  
Plot Date: 11/13/96 5:00



DRAWING 809C-4  
DRAWING 809C-5

DRAWING 809C-6

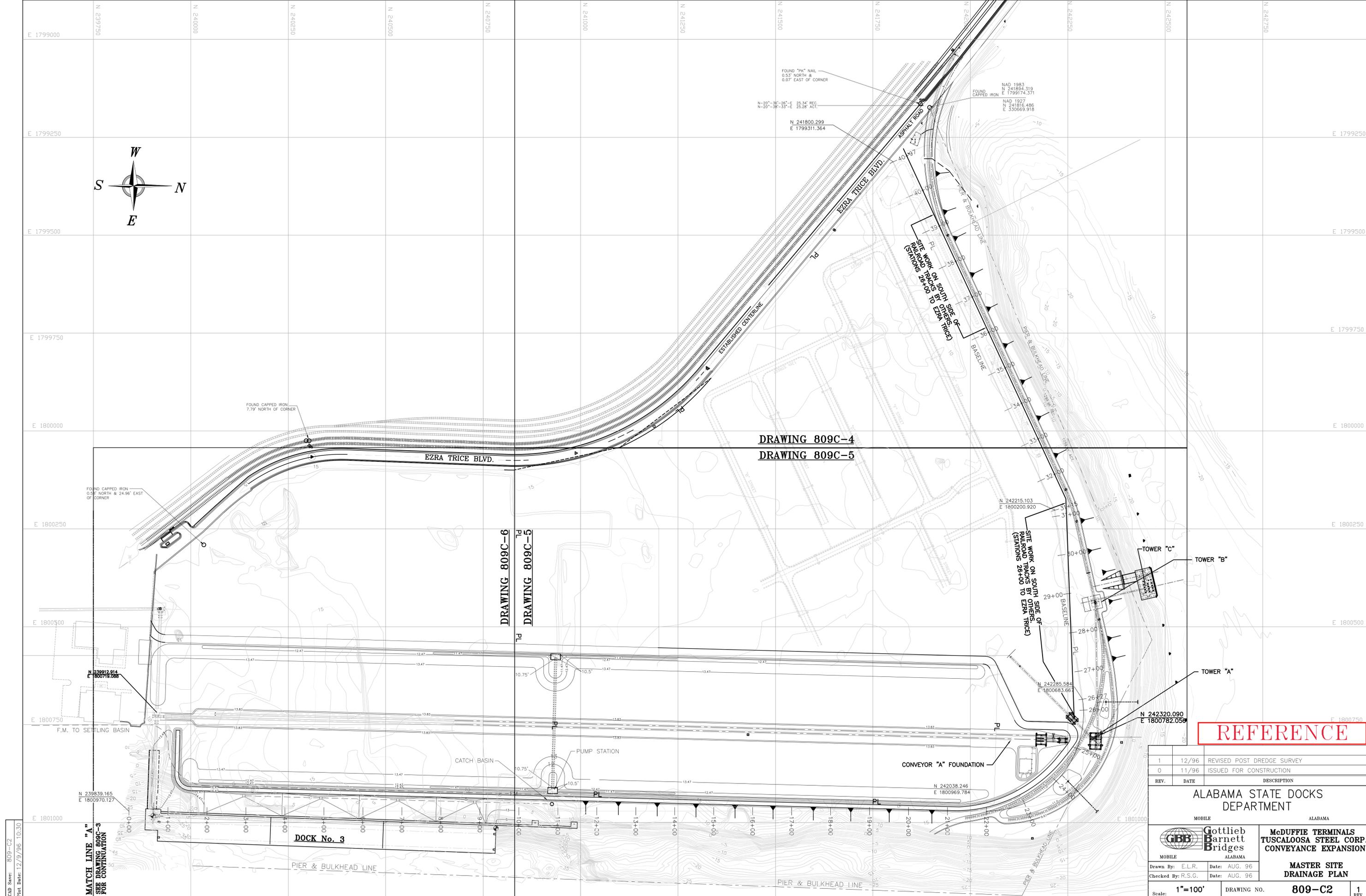
DRAWING 809C-5

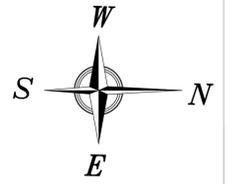
**REFERENCE**

1	12/96	REVISED POST DREDGE SURVEY
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE ALABAMA		<b>Gottlieb Barnett Bridges</b>
MOBILE ALABAMA		<b>McDUFFIE TERMINALS TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: E.L.R. Date: AUG. 96		<b>MASTER SITE DRAINAGE PLAN</b>
Checked By: R.S.G. Date: AUG. 96		
Scale: <b>1"=100'</b>		DRAWING NO. <b>809-C2</b>
DATUM: NAD 1983		1 REV.

CAD Save: 809-C2  
Plot Date: 12/9/96 10:30

MATCH LINE "A"  
SEE DRAWING 809C-3  
FOR CONTINUATION





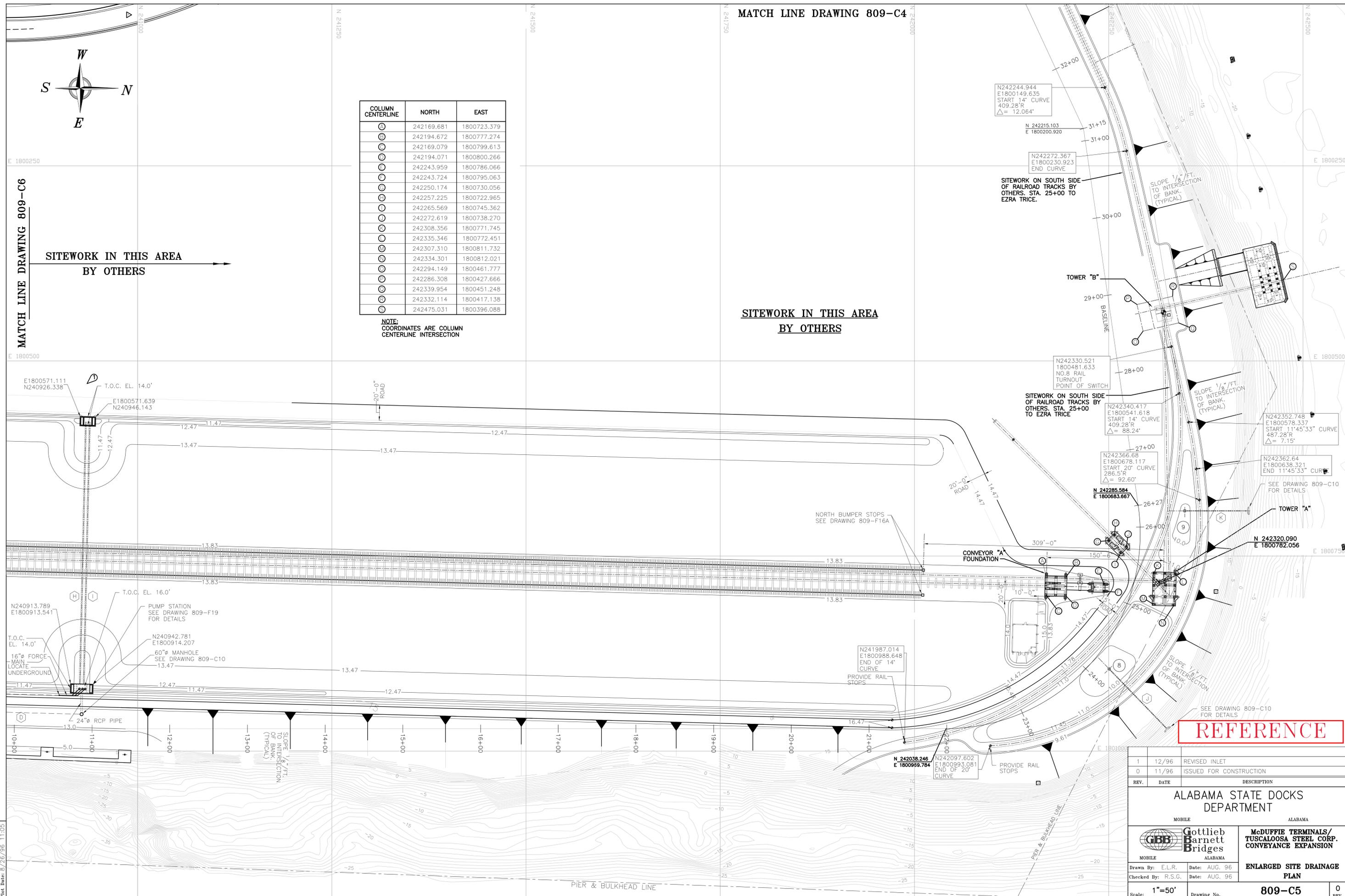
COLUMN CENTERLINE	NORTH	EAST
⊙	242169.681	1800723.379
⊙	242194.672	1800777.274
⊙	242169.079	1800799.613
⊙	242194.071	1800800.266
⊙	242243.959	1800786.066
⊙	242243.724	1800795.063
⊙	242250.174	1800730.056
⊙	242257.225	1800722.965
⊙	242265.569	1800745.362
⊙	242272.619	1800738.270
⊙	242308.356	1800771.745
⊙	242335.346	1800772.451
⊙	242307.310	1800811.732
⊙	242334.301	1800812.021
⊙	242294.149	1800461.777
⊙	242286.308	1800427.666
⊙	242339.954	1800451.248
⊙	242332.114	1800417.138
⊙	242475.031	1800396.088

NOTE:  
COORDINATES ARE COLUMN  
CENTERLINE INTERSECTION

SITWORK IN THIS AREA  
BY OTHERS

MATCH LINE DRAWING 809-C6

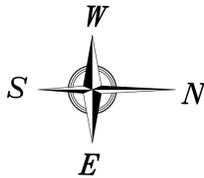
SITWORK IN THIS AREA  
BY OTHERS



REFERENCE

1	12/96	REVISED INLET
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE ALABAMA		
		<b>McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: E.L.R.    Date: AUG. 96 Checked By: R.S.G.    Date: AUG. 96		<b>ENLARGED SITE DRAINAGE PLAN</b>
Scale: 1"=50'		Drawing No. <b>809-C5</b>
		0 REV.

CAD Save: 809-C5  
Plot Date: 8/26/96 11:05



FOUND CAPPED IRON  
0.38' NORTH & 24.96' EAST  
OF CORNER

MATCH LINE "A"  
SEE DRAWING 809-C5  
FOR CONTINUATION

MATCH LINE DRAWING 809-C5

EZRA TRICE BLVD.

- NEW 30"Ø
- EXISTING 24"Ø
- EXISTING 60"Ø
- EXISTING 12"
- EXISTING 24"Ø

EXISTING 60"Ø PRECAST MANHOLE.  
CONTRACTOR SHALL FIELD VERIFY  
ALL DIMENSIONS AND ELEVATIONS  
PRIOR TO CONSTRUCTION.  
CONTRACTOR SHALL BREAK OUT  
EXISTING MANHOLE, INSTALL NEW  
30"Ø RCP AND GROUT  
ANNULAR SPACE.

TIE NEW ROAD TO EXISTING  
PAVING AND CURB.

INVERT EL. 7.9'

BUMPER STOPS  
SEE DRAWING  
809-F16A.

TIE DOWNS AND PIN POCKETS  
SEE DRAWINGS 809-F16 & 809-F16A.

T.O.R. EL. 15.55' (TYPICAL)

TIE DOWNS AND PIN POCKETS  
SEE DRAWINGS 809-F16 & 809-F16A.

12" STONE SURFACE COARSE  
IN AREA BEHIND DOCK.

16"Ø HDPE FORCED MAIN  
(MIN. 30" COVER)

**NOTE**  
SEE DRAWING 809-C10 FOR PIPE SCHEDULE  
AND STORM DRAIN INLET SCHEDULE.

N 239812.914  
E 1800719.088

N 239839.165  
E 1800970.127

239824.42N  
332478.86E  
INTERSECTION C  
CONV. NO. 30  
& CONV. NO. 31

**DOCK No. 3**

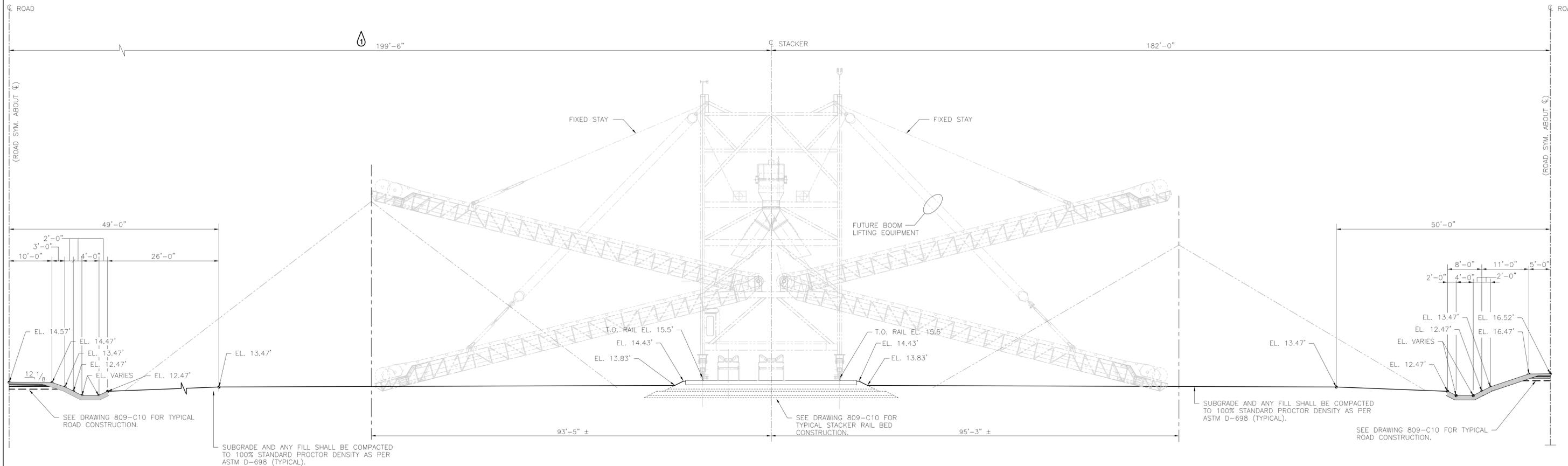
T.O.C. EL. 14.17'

PIER & BULKHEAD LINE

**REFERENCE**

1	12/96	REVISED POST DREDGE SURVEY
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
		<b>McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: E.L.R.	Date: AUG. 96	<b>ENLARGED SITE DRAINAGE PLAN</b>
Checked By: R.S.G.	Date: AUG. 96	
Scale: 1"=50'	Drawing No. <b>809-C6</b>	1 REV.

CAD Draw: 809-C6  
Plot Date: 12/11/96 9:15



**TYPICAL STORAGE YARD CROSS SECTION**  
 3/32"=1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION
1	12/96	REVISED $\phi$ DIMENSION
0	11/96	ISSUED FOR CONSTRUCTION

ALABAMA STATE DOCKS DEPARTMENT

MOBILE ALABAMA

**Gottlieb Barnett Bridges**  
MOBILE ALABAMA

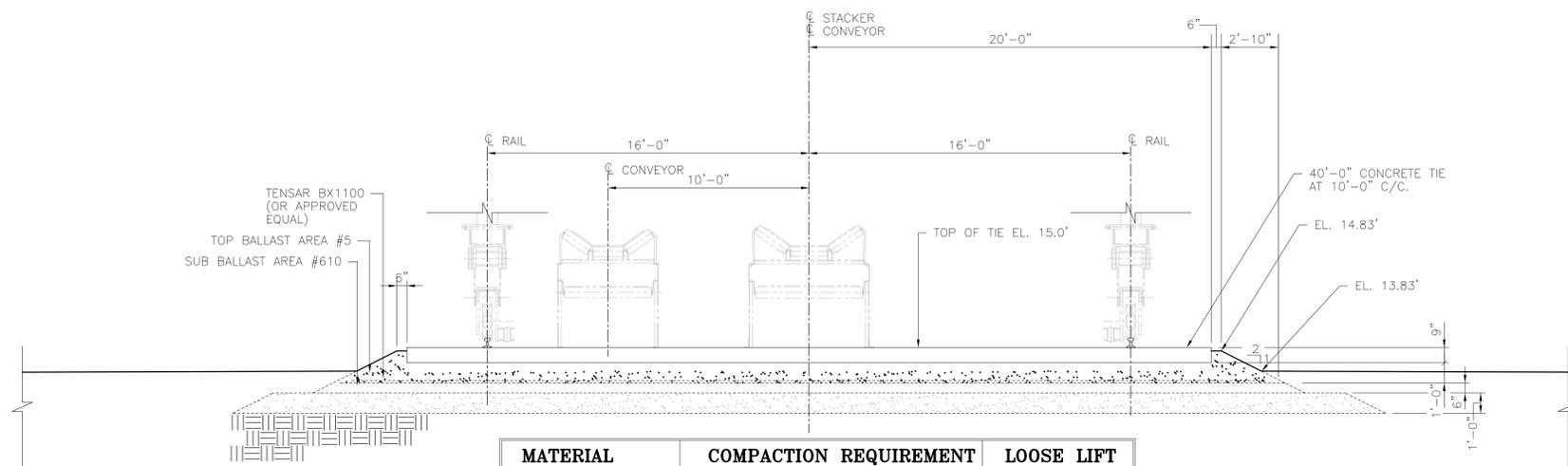
**McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION**

**TYPICAL STORAGE YARD CROSS SECTION**

Drawn By: E.L.R. Date: AUG. 96  
 Checked By: R.S.G. Date: AUG. 96

Scale: NOTED Drawing No. **809-C9** 1 REV.

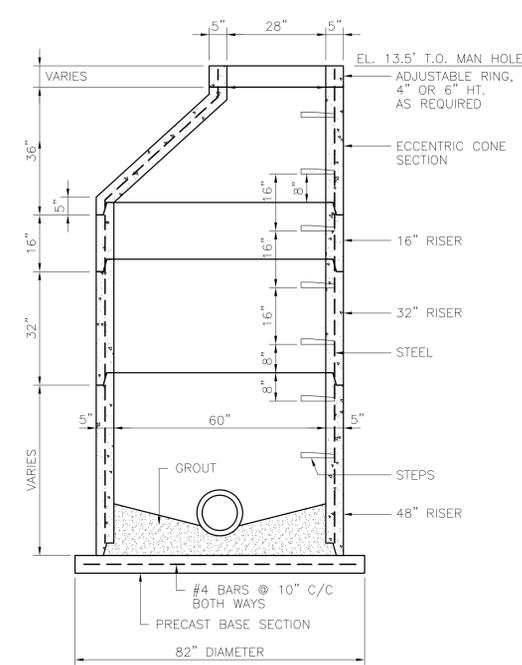
CAD Save: 809-C9  
 Plot Date: 12/10/96 10:45



MATERIAL	COMPACTION REQUIREMENT	LOOSE LIFT
TOP BALLAST	95% AASHTO T-180	8"
SUB-BALLAST	95% AASHTO T-180	6"
SAND CLAY BASE	95% AASHTO T-99	12"
PROCESSED SUBGRADE	95% AASHTO T-99	6"

**SECTION AT STACKER RAILS**

1/4"=1'-0"



**TYPICAL 60" PRECAST CONCRETE MANHOLE**

1/2"=1'-0"

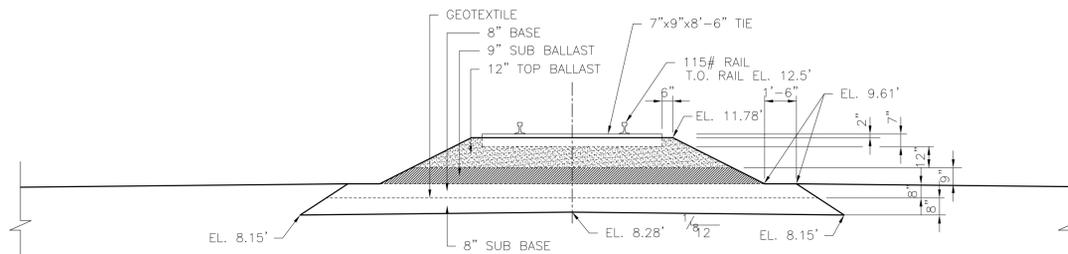
PIPE SCHEDULE			
REF.	TYPE	SIZE	SPECIFICATION
A	ROUND	12"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
B	ROUND	15"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
C	ROUND	18"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
D	ROUND	18"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
E	ROUND	30"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
F	ERCP	29x18	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
G	ERCP	22x13	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
H	ERCP	36x23	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
I	ERCP	36x23	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
J	ROUND	15"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506
K	ROUND	12"ø	RCP CLASS V (STANDARD STRENGTH) ASTM C-506

**STORM DRAIN INLET SCHEDULE**

NO.	TOP EL.	INVERT EL.		DEPTH	REMARKS
		IN	OUT		
1	13.5'	—	11.0	3.5'	TYPE "D"
2	13.5'	10.4'	10.15'	4.35'	TYPE "D"
3	13.5'	9.35'	9.10'	5.4'	TYPE "D"
4	13.5'	8.3'	8.3'	6.2'	TYPE "D"
5	12.0'	8.0'	8.0'	5.0'	TYPE "D"
6	12.0'	9.22'	8.8'	4.12'	TYPE "D"
7	12.0'	—	—	3.33'	TYPE "D"
8	9.62'	—	4.50'	6.12'	TYPE "D"
9	9.62'	—	4.35'	6.22'	TYPE "D"

**MAN HOLE SCHEDULE**

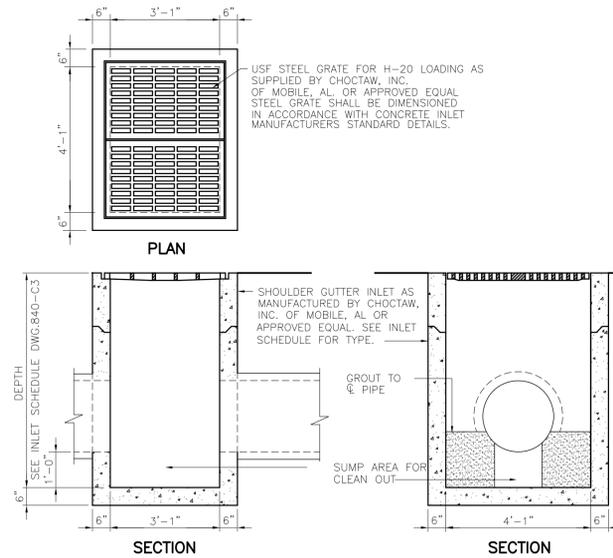
TOP EL.	INVERT EL.		DEPTH	REMARKS
	IN	OUT		
13.5'	7.5	7.0	7.5'	



SECTION COMPONENT	MATERIAL SPECIFICATIONS	MATERIAL DESCRIPTION	LOOSE LIFT THICKNESS	COMPACTION REQUIREMENT	MINIMUM COMPACTED THICKNESS
BALLAST	AREA #5	CRUSHED LIMESTONE	8"	95% AASHTO T-180	12"
SUB-BALLAST	AREA #610	CRUSHED LIMESTONE	6"	95% AASHTO T-180	9"
BASE	AHD 825.03 TYPE B	DENSE GRADED CRUSHED LIMESTONE	6"	95% AASHTO T-180 ±2% OPTIMUM MOISTURE	6"
GEOTEXTILE	AMOCO 2006, MIRAFT 600X OR EQUAL SEAMS TO BE FIELD SEWN AS PER MANUFACTURER'S SPECIFICATIONS.	MEDIUM TO HEAVY WOVEN FABRIC	—	—	—
SUB-BASE	STRUCTURAL FILL 12 TO 20% PASSING #200 SIEVE, 90% OR LES PASSING #40 SIEVE	GRANULAR FILL	6"	95% AASHTO T-99 ±2% OPTIMUM MOISTURE	8"
PROCESSED SUBGRADE	—	IN-SITU GRANULAR SOILS	—	95% AASHTO T-99 ±2% OPTIMUM MOISTURE	6"

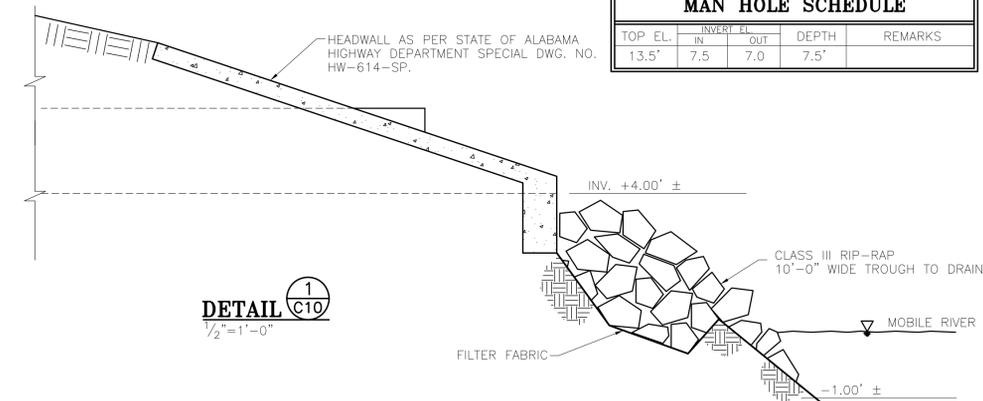
**TYPICAL RAILROAD TRACK DETAIL**

1/4"=1'-0"



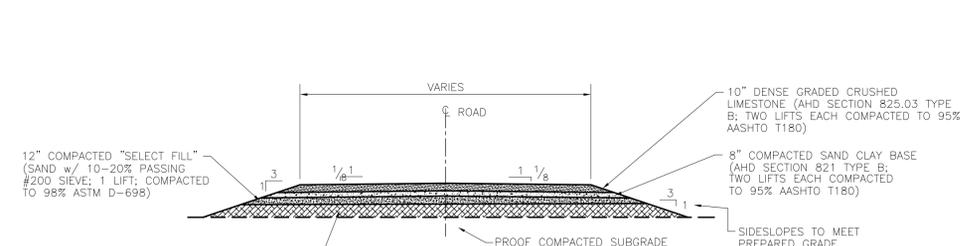
**TYPICAL INLET DETAIL TYPE "D"**

1/2"=1'-0" BY CHOCTAW



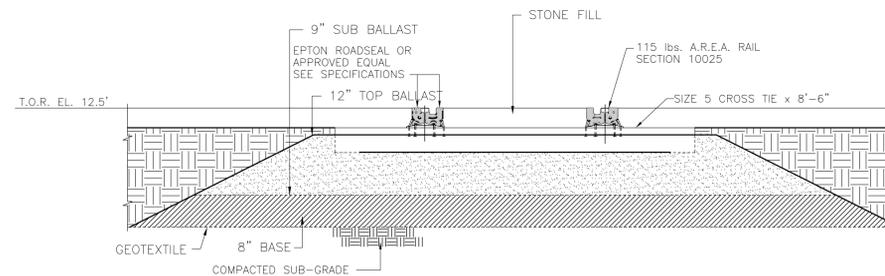
**DETAIL C10**

1/2"=1'-0"



**TYPICAL ROAD SECTION**

1/16"=1'-0"



**GRAVEL ROAD CROSSING**

1/2"=1'-0"

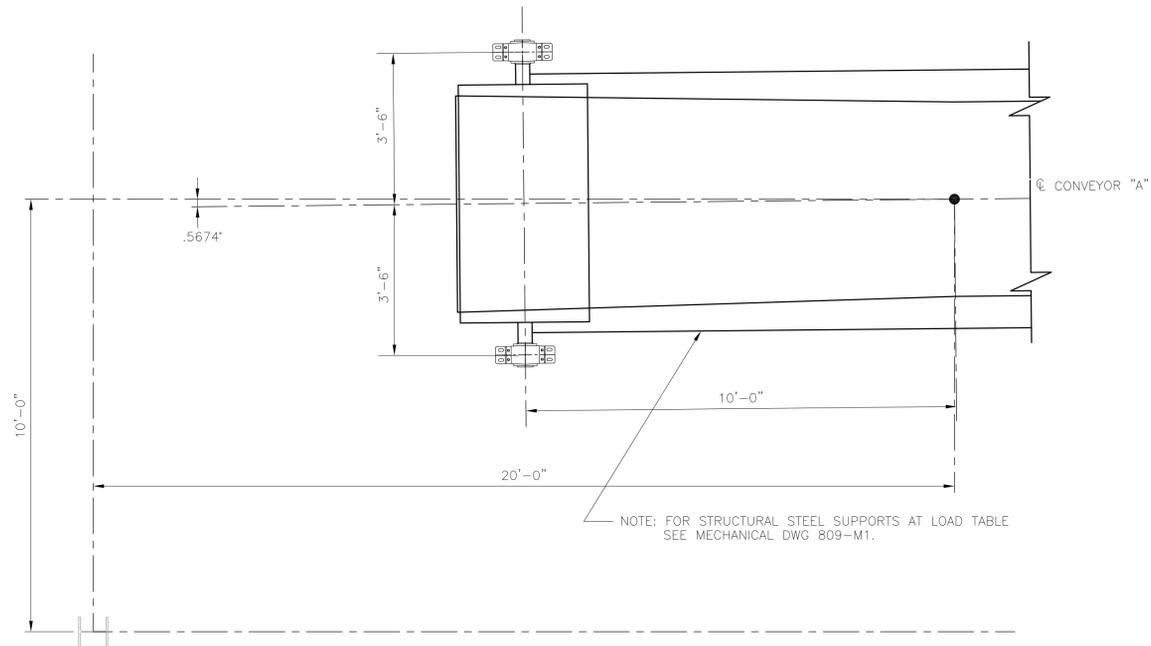
**NOTES**

- SEE SPECIFICATIONS FOR DETAILS OF REQUIRED SUBGRADE COMPACTION AND BASE MATERIAL DESCRIPTION AND COMPACTION.
- PIPE TRENCH BEDDING SHALL BE CLASS B BEDDING. BEDDING SHALL BE FINE GRANULAR FILL MATERIAL (MIN. 2").
- DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE AS DESCRIBED IN PIPE SCHEDULE.
- PIPES SHALL BE LAID TRUE TO GRADES AND ALIGNMENTS INDICATED.
- PIPES SHALL REST ON BEDDING FOR THEIR FULL LENGTH, USE OF WEDGES AND BLOCKING SHALL NOT BE PERMITTED.
- CONTRACTOR SHALL REMOVE ALL SHRUBS, BRUSH, ROOTS OVER 1 INCH IN DIAMETER TO A DEPTH OF 12". REMOVED MATERIALS SHALL BE STOCKPILED AND DISPOSED OF ACCORDING TO THE SPECIFICATIONS.

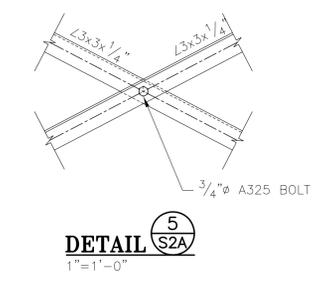
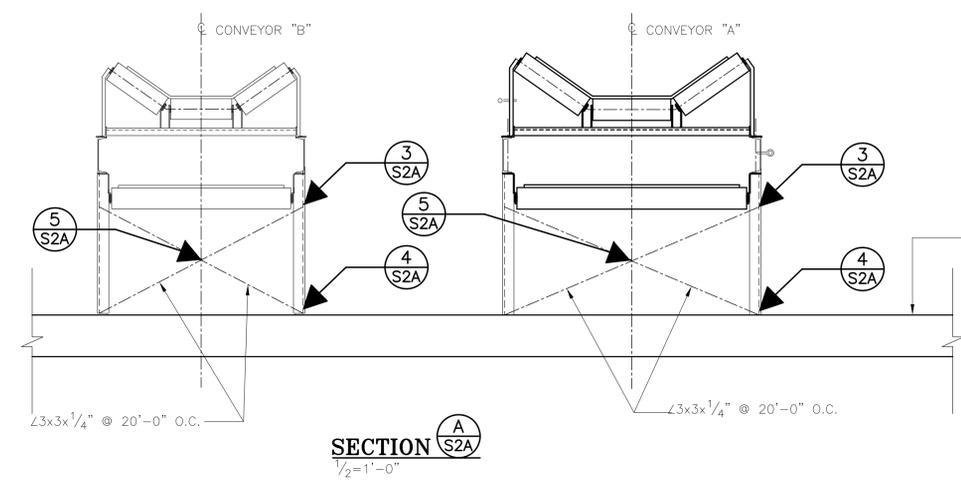
**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
MOBILE		ALABAMA
Drawn By: E.L.R.	Date: AUG. 96	<b>DETAILS</b>
Checked By: R.S.G.	Date: AUG. 96	
Scale: 1/4"=1'-0"	Drawing No. <b>809-C10</b>	0 REV.

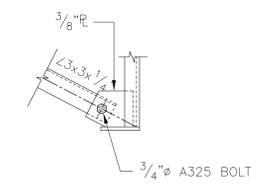




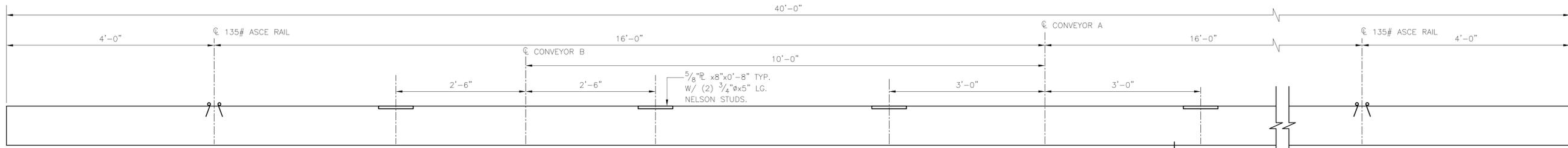
**DETAIL 1**  
S2A  
1/2"=1'-0"



**DETAIL 3**  
S2A  
1"=1'-0"

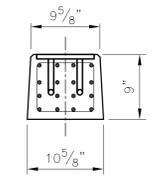


**DETAIL 4**  
S2A  
1"=1'-0"

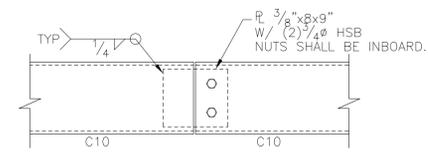
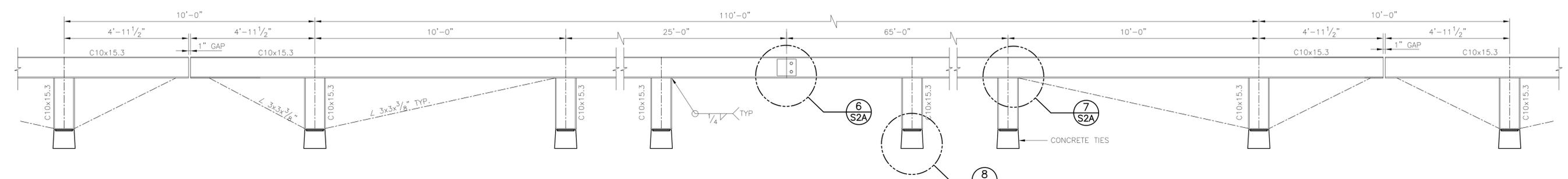


PRECAST / PRESTRESS CONCRETE TIE BY KSA OR EQUAL. (16) 3/8" 270K LOW LAX CABLES W/ 8000 PSI. CONCRETE, RAIL SEAT AND EMBEDDED PLATES AS NOTED.

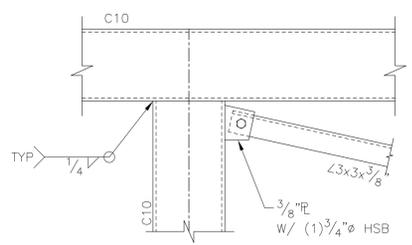
**DETAIL 2**  
S2A  
1"=1'-0"



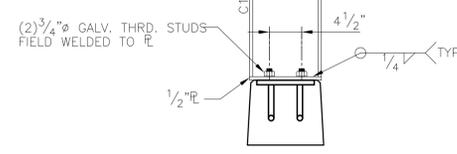
**SECTION C**  
S2A  
1"=1'-0"



**DETAIL 6**  
S2A  
1"=1'-0"



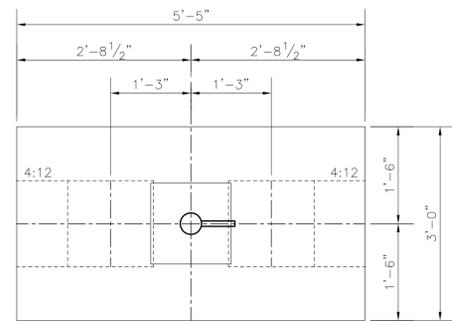
**DETAIL 7**  
S2A  
1"=1'-0"



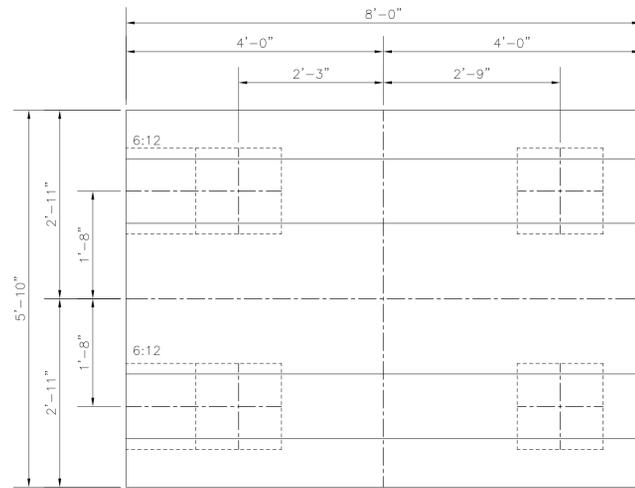
**DETAIL 8**  
S2A  
1"=1'-0"

**REFERENCE**

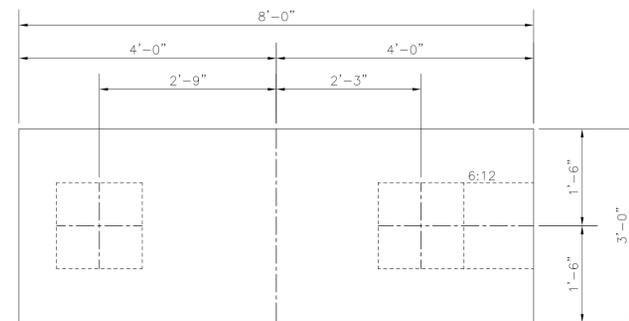
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
		<b>McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: MLM	Date: JUNE 96	<b>CONVEYOR "A" &amp; "B" SECTIONS &amp; DETAILS</b>
Checked By: GDEC	Date: AUG, 96	
Scale: NOTED	Drawing No. <b>809-S2A</b>	0 REV.



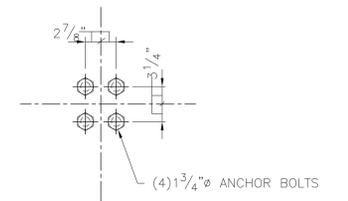
**PILE CAP PLAN**  
3/4"=1'-0"



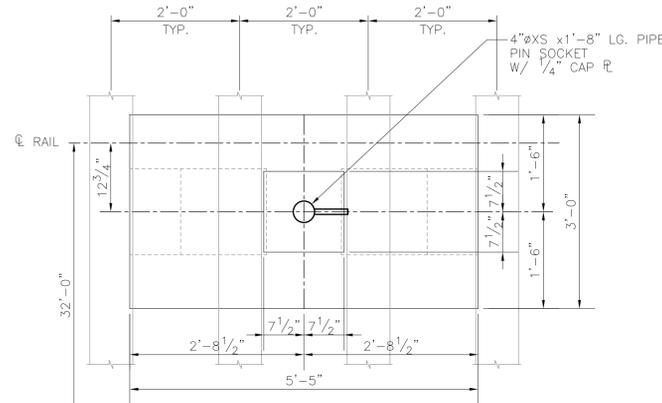
**PILE CAP PLAN**  
3/4"=1'-0"



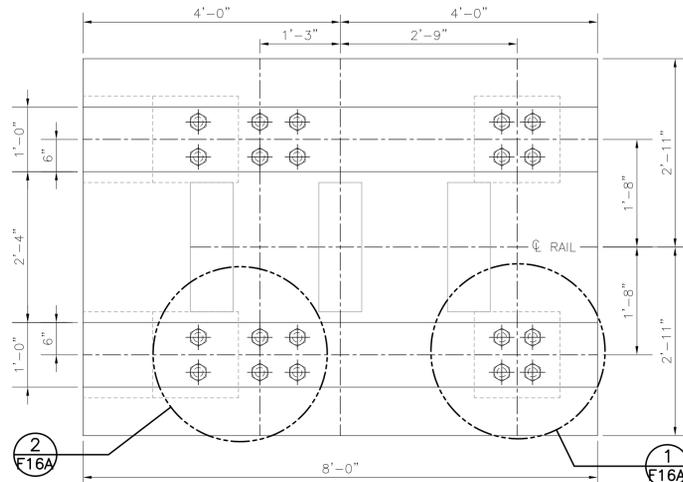
**PILE CAP PLAN**  
3/4"=1'-0"



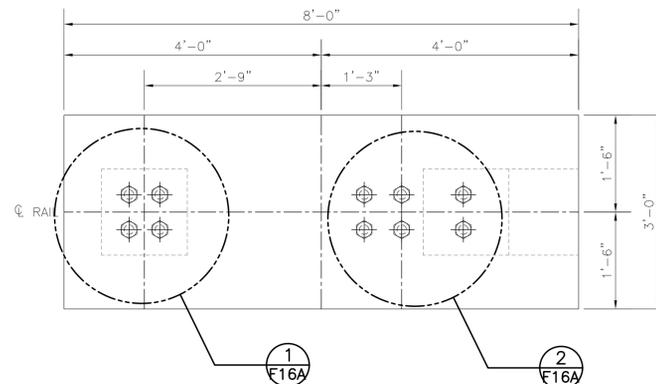
**DETAIL 1**  
3/4"=1'-0"



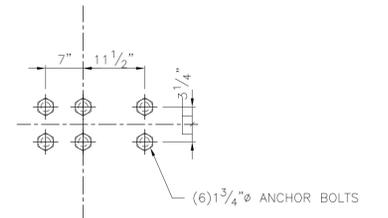
**PIN SOCKET (4)REQ'D PLAN**  
3/4"=1'-0"



**SOUTH END BUMPER STOPS (2)REQ'D PLAN**  
3/4"=1'-0"

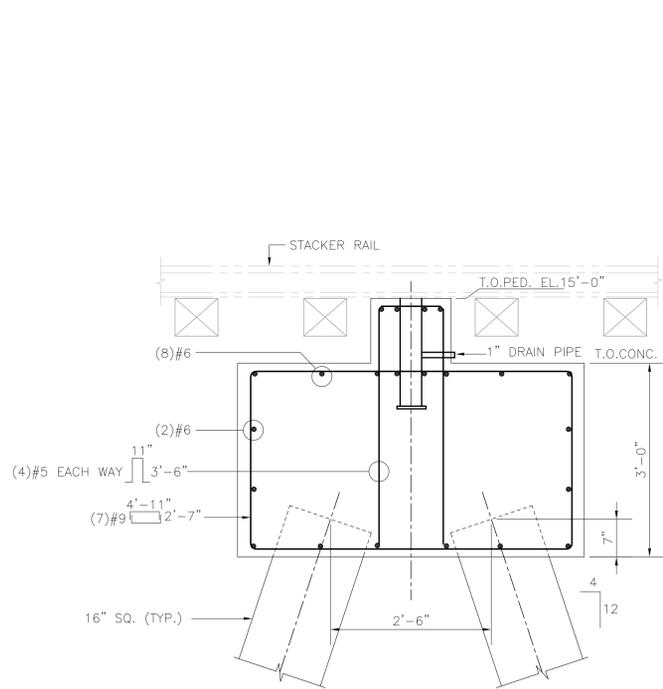


**NORTH END BUMPER STOPS (2)REQ'D PLAN**  
3/4"=1'-0"

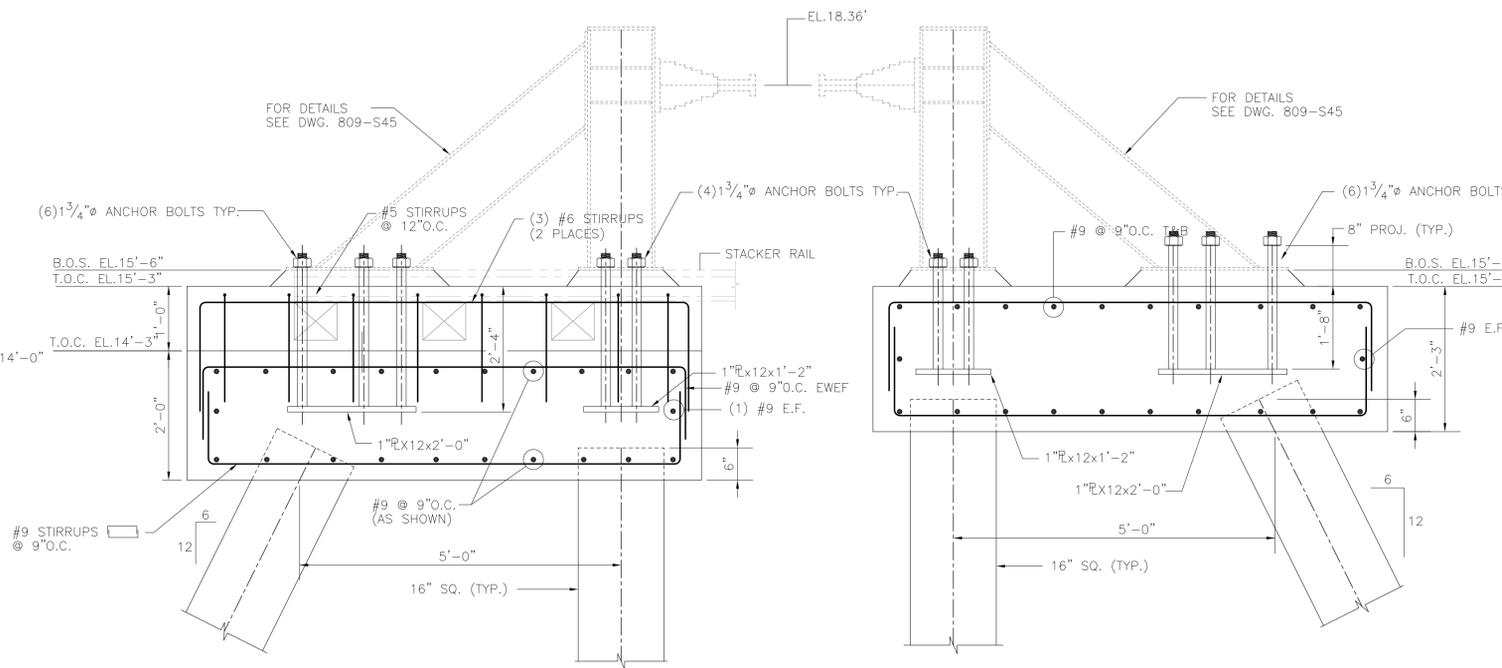


**DETAIL 2**  
3/4"=1'-0"

FOUNDATION SCHEDULE				
LOCATION	TOP PILE CAP ELEVATION	PILE CUT OFF ELEVATION	TOP OF PEDESTAL	REMARKS
PIN SOCKET	14'-0"	11'-6"	15'-0"	
S. BUMPER STOP	14'-3"	12'-9"	15'-3"	
N. BUMPER STOP	15'-3"	13'-6"		



**ELEVATION**  
3/4"=1'-0"



**ELEVATION**  
3/4"=1'-0"

**ELEVATION**  
3/4"=1'-0"

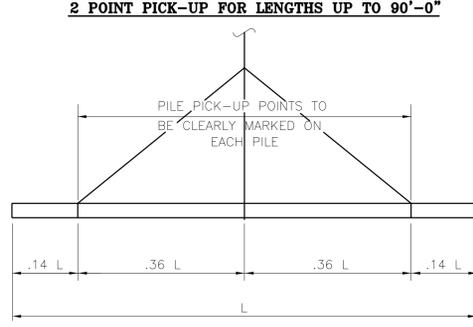
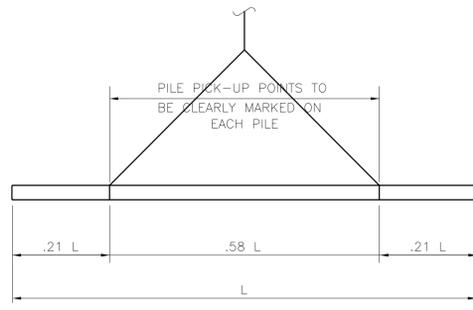
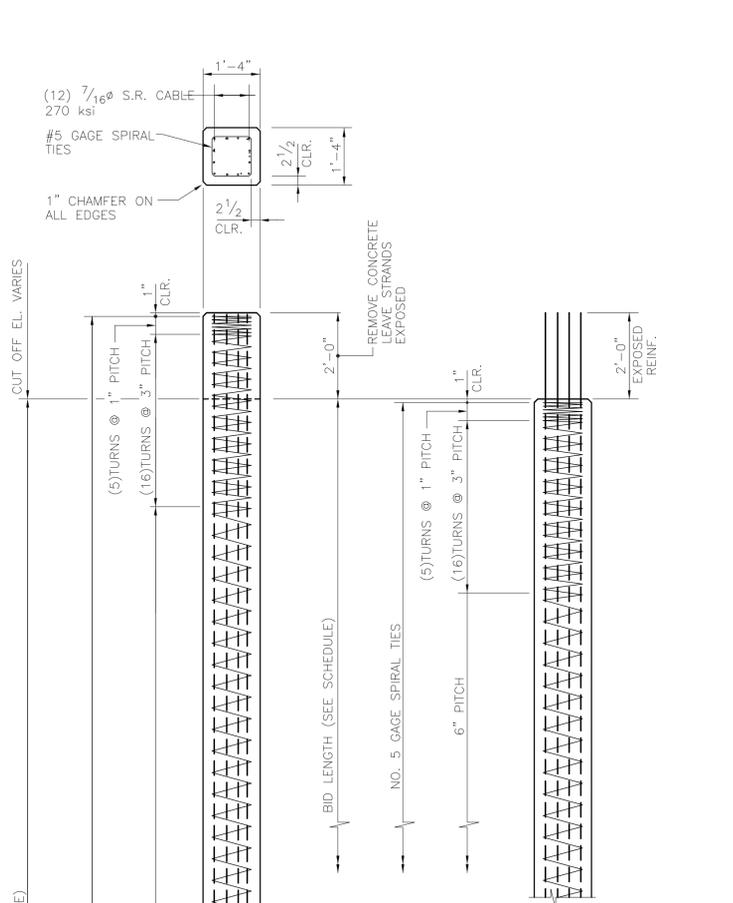
CONTRACTOR SHALL EXCAVATE IN THE AREA OF ALL FOUNDATIONS PRIOR TO ANY PILE DRIVING AND LOCATE THE HIGH VOLTAGE UNDERGROUND ELECTRIC LINES AND ALL OTHER APPURTENANCES IN THE AREA OF THE FOUNDATION. THE CONTRACTOR SHALL PROBE TO ELEVATION O.O. THE ENGINEER SHALL BE NOTIFIED ONCE ANY STRUCTURES AND POWER LINES HAVE BEEN LOCATED. SOME ADJUSTMENTS MAY BE MADE IN THE LOCATION OF PILES OR FOUNDATIONS. THE FINAL LOCATION OF THE FOUNDATIONS AND PILES WILL BE ESTABLISHED BASED ON THE FIELD CONDITIONS ENCOUNTERED. THE CONTRACTOR SHALL ALLOW FOR ADJUSTMENT OF FOUNDATION PILING, REINFORCING AND CONCRETE IN THE BID PRICE.

ALL PILES SHALL BE CAST WITH A MINIMUM OF 2'-0" OF EXPOSED STRAND EMBEDDED IN THE CONCRETE CAP.

ALL BARS SHALL HAVE A 90° HOOK AT EDGES. THE HOOK SHALL BE THE DEPTH OF THE BEAM LESS THE REQUIRED EDGES.

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE ALABAMA		<b>McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
<b>Gottlieb Barnett Bridges</b>		<b>STACKER TIE DOWN FOUNDATION PLAN &amp; DETAILS</b>
Drawn By: JMM	Date: JUNE 96	
Checked By: GDEC	Date: AUG, 96	
Scale: NOTED	Drawing No.	<b>809-F16A</b>



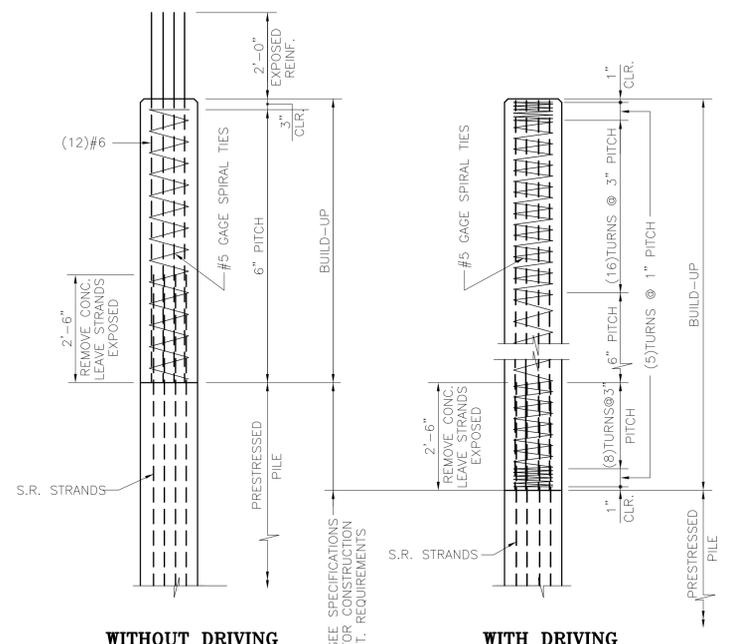
**PILE LIFTING DETAIL**  
NO SCALE

**CONCRETE PILE NOTES:**

1. PRESTRESSED PILES & PILE BUILD-UPS SHALL CONFORM TO THE REQUIREMENTS OF THE JOINT COMMITTEE OF AASHTO AND PCI FOR PRESTRESSED CONCRETE PILES UNLESS OTHERWISE NOTED OR SPECIFIED.
2. CONCRETE FOR PRESTRESSED PILES & PILE BUILD-UPS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS.
3. PRESTRESSING REINFORCEMENT SHALL CONFORM TO ASTM A416.
4. REINFORCING FOR PILE BUILD-UPS SHALL CONFORM TO ASTM A615 GRADE 60.

NOTE:  
ALTERNATE DETAIL SHOWS PILE CAST WITH STRANDS EXPOSED TO ELIMINATE REMOVING CONCRETE AFTER PILE IS DRIVEN THIS REQUIRES A SPACER TO PROTECT STRANDS DURING DRIVING.

**ALTERNATE END DETAIL**  
1/2"=1'-0"



**WITHOUT DRIVING**      **WITH DRIVING**

**16\"/>**

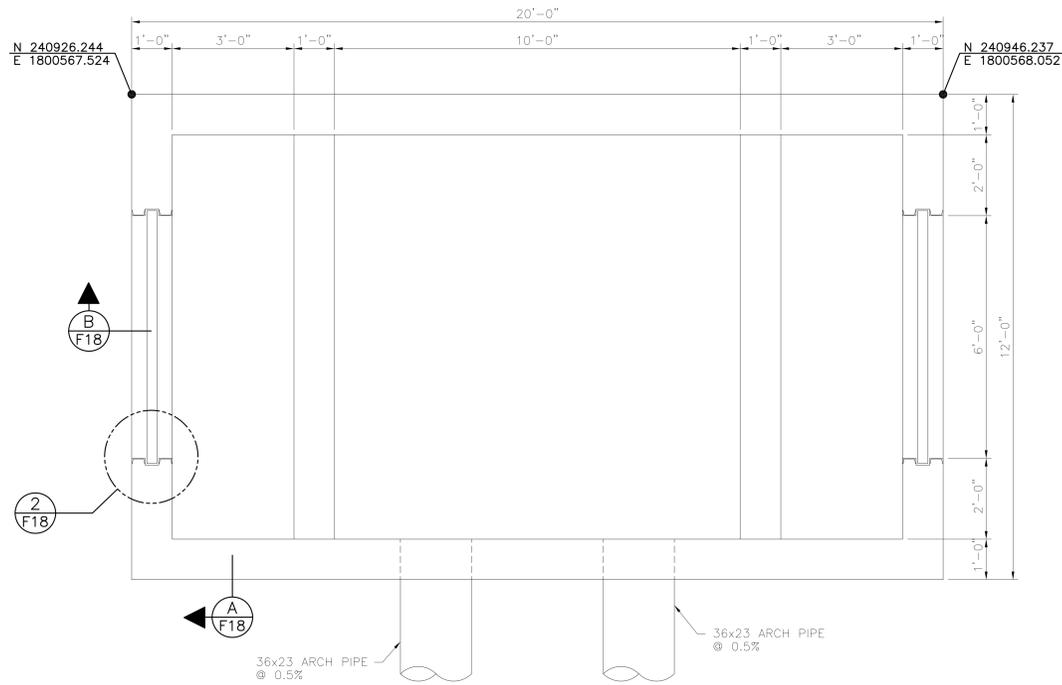
**16\"/>**

PRESTRESSED PILE SCHEDULE				
LOCATION	ORIENTATION	BID LENGTH	NUMBER OF PILES	TOTAL BID LENGTH
B1, B2, B4, B6, B7, B8A & B	3:12	76'-0"	36	2736
B10, B11, B12A, B				
B9	3:12	73'-0"	8	584
B3	PLUMB 3:12	73'-0" 76'-0"	1 4	73 304
TOWER A	PLUMB 6:12	71'-0" 80'-0"	17 8	1207 640
DRIVE & TAKE-UP CONVEYOR "A"	PLUMB 6:12 3:12	73'-0" 82'-0" 80'-0"	10 10 4	730 820 320
DRIVE & TAKE-UP CONVEYOR "C"	PLUMB 6:12	74'-0" 83'-0"	6 8	444 664
TOWER B *	PLUMB 6:12			
ELECTRICAL BLDG.	PLUMB 3:12	74'-0" 76'-0"	16 8	1184 608
CONVEYOR "B" TAIL PULLEY	PLUMB 6:12	74'-0" 83'-0"	2 2	148 166
STACKER TIE-DOWNS	PLUMB 6:12	71'-0" 80'-0"	4 8	284 640
STACKER PIN POCKETS	4:12	77'-0"	8	616
STACKER BUMPER STOPS	4:12	77'-0"	12	924
PUMP STATION & INLET STRUCTURE	PLUMB	65'-0"	16	1040
TOTAL			* 347	* 14,132

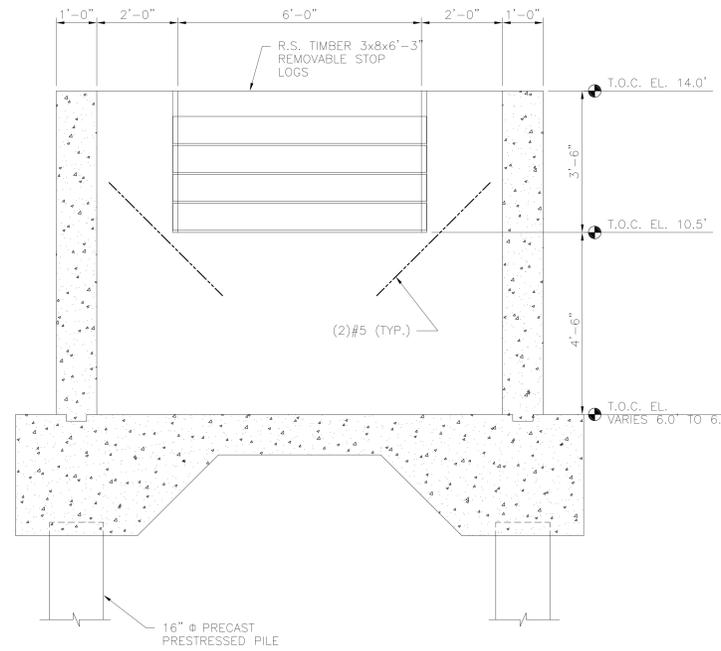
\* TOWER 'B' PILE SCHEDULE TO BE ISSUED 12/12/96.

**REFERENCE**

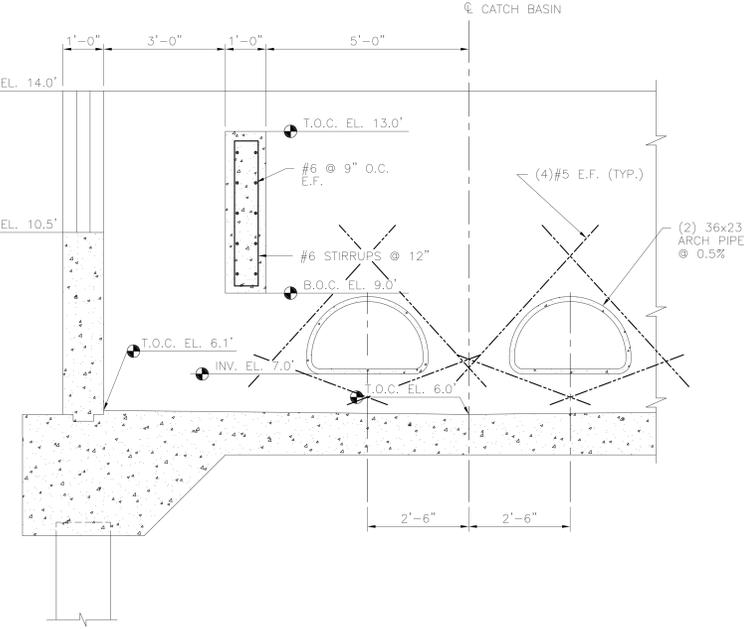
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
		<b>McDUFFIE TERMINALS TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By:	MLM	Date: JUNE 96
Checked By:	GDEC	Date: AUG 96
Scale:	<b>NOTED</b>	Drawing No. <b>809-F17</b>
		0 REV.



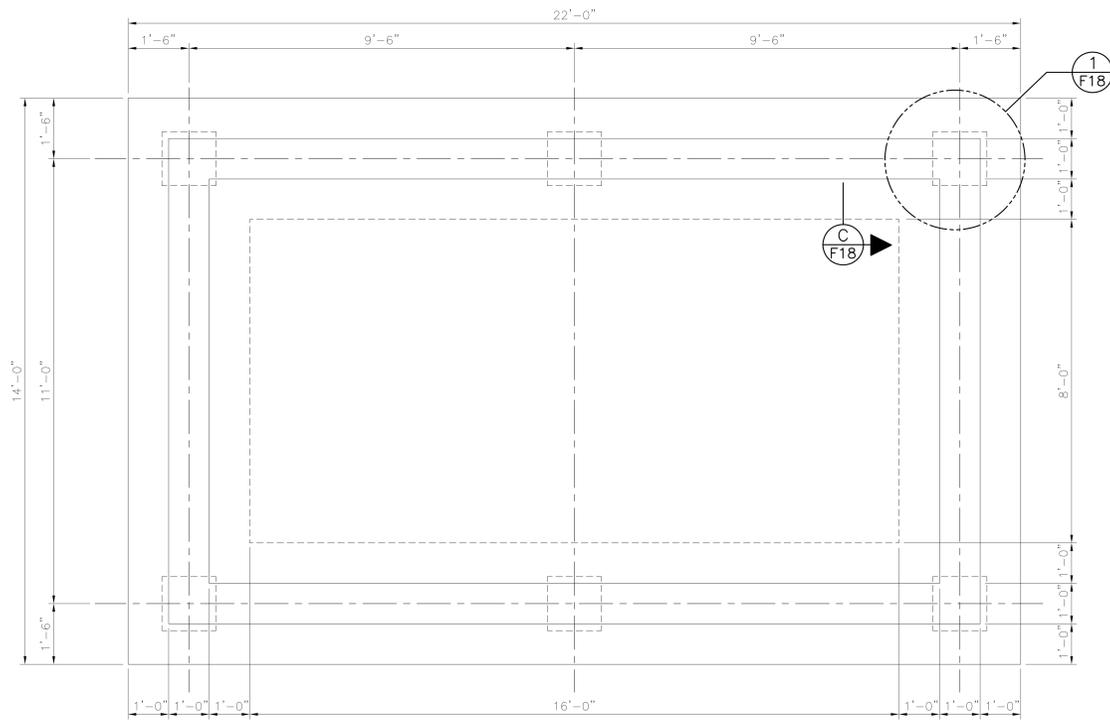
**TOP PLAN**



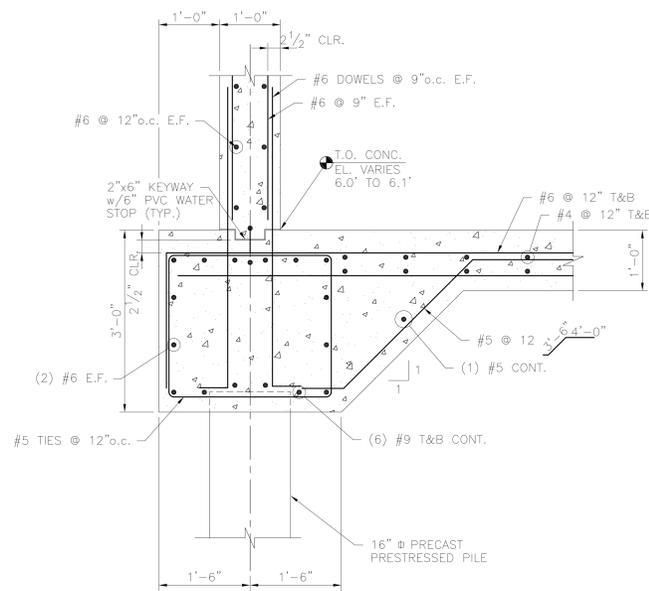
**SECTION A-F18**  
1/2" = 1'-0"



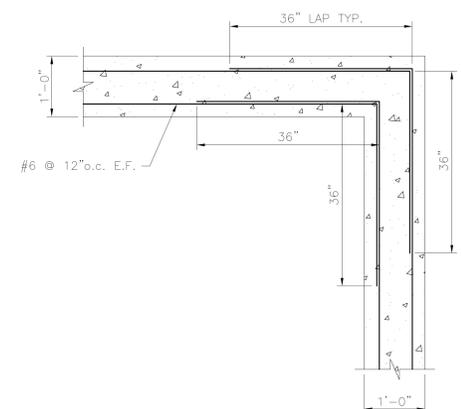
**SECTION B-F18**  
1/2" = 1'-0"



**BOTTOM PLAN**

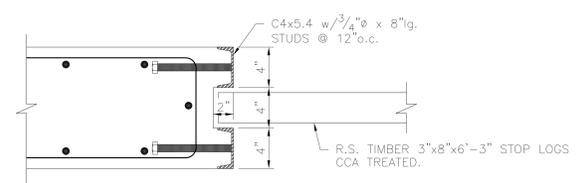


**SECTION C-F18**  
3/4" = 1'-0"



**DETAIL 1-F18**  
3/4" = 1'-0"

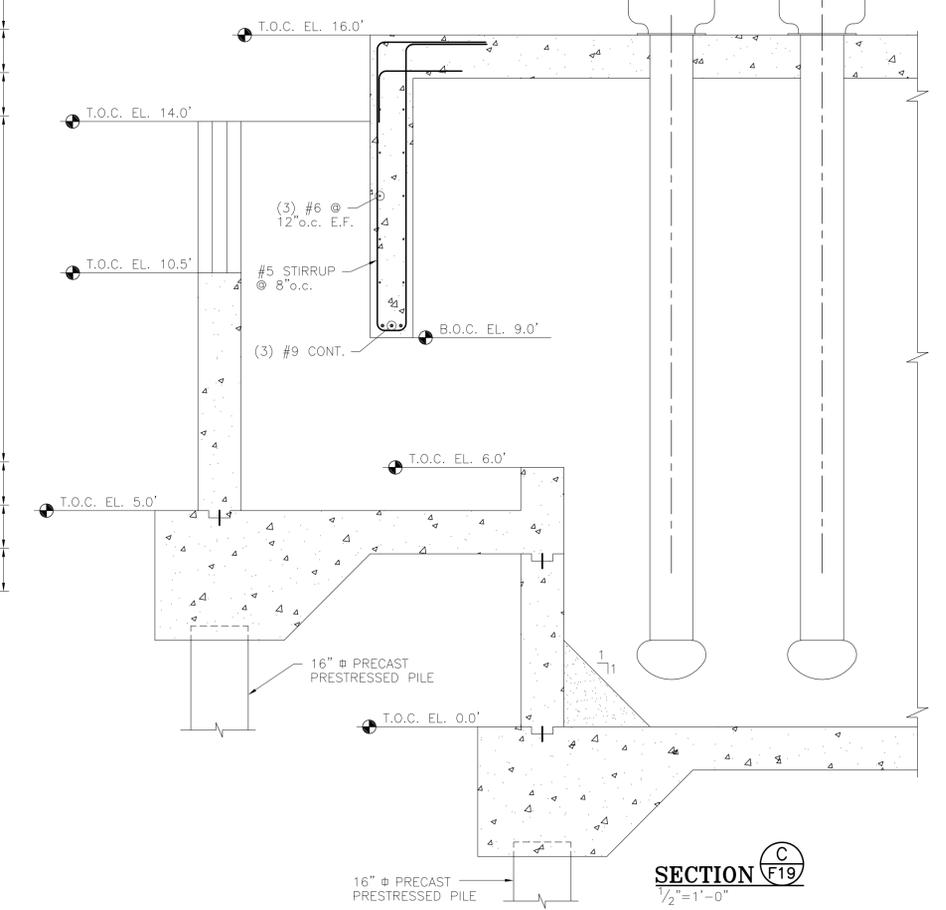
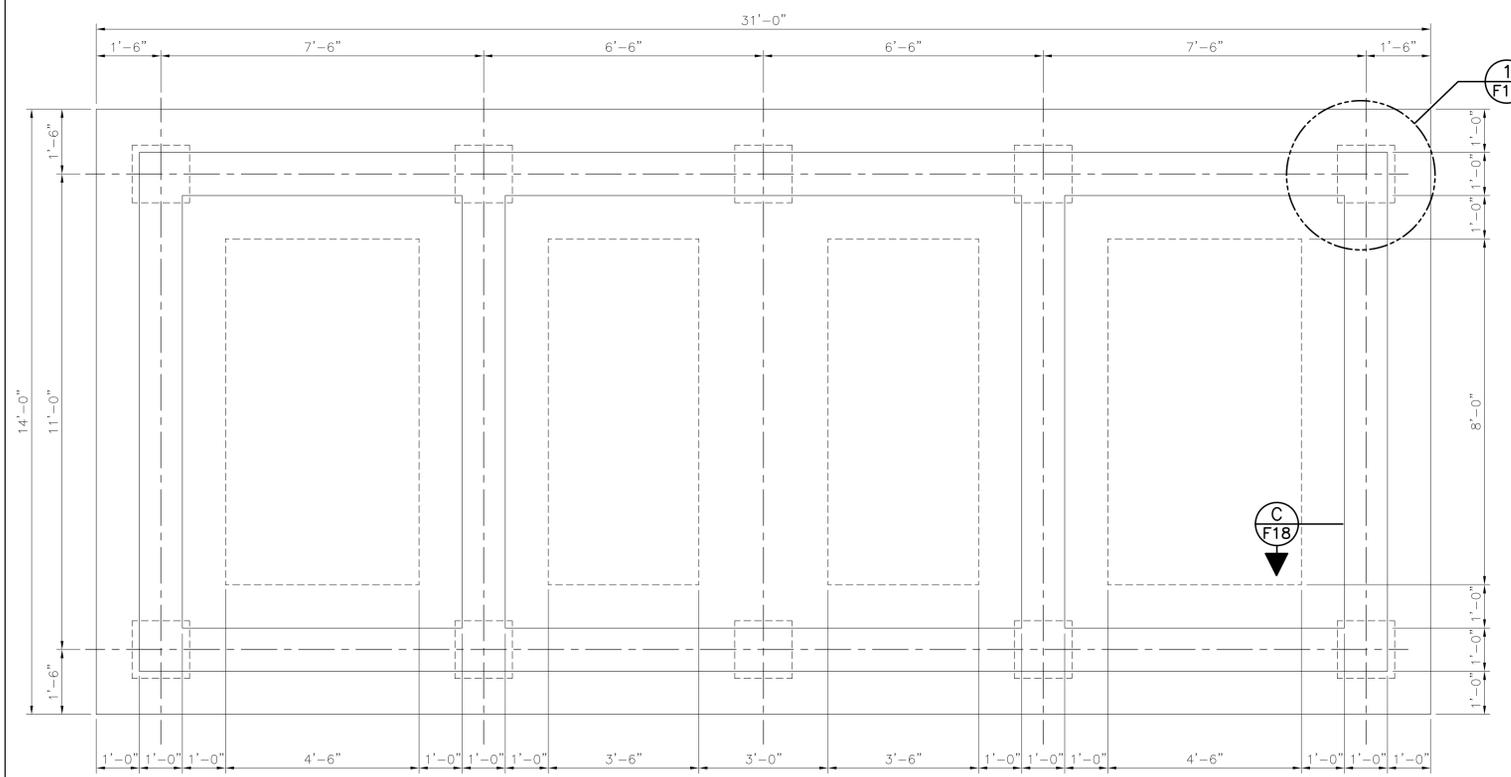
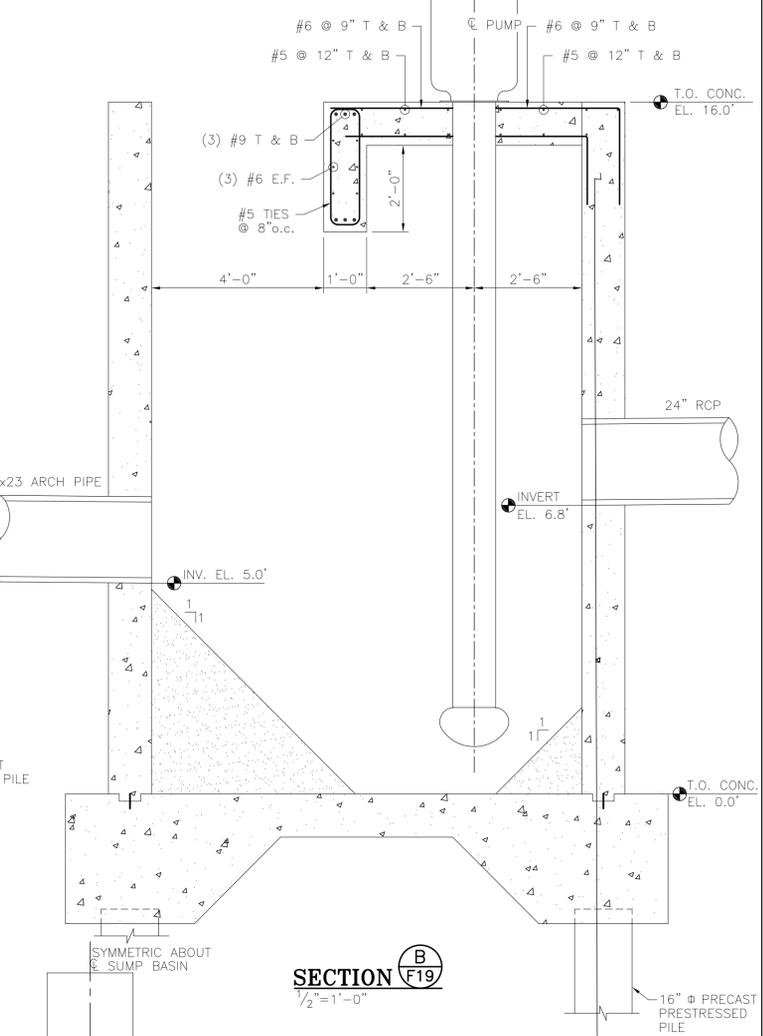
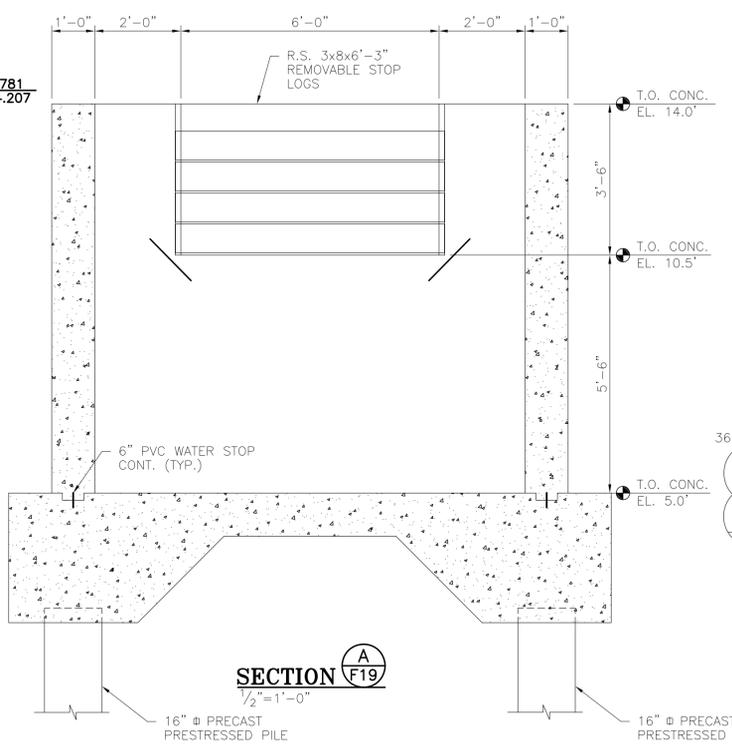
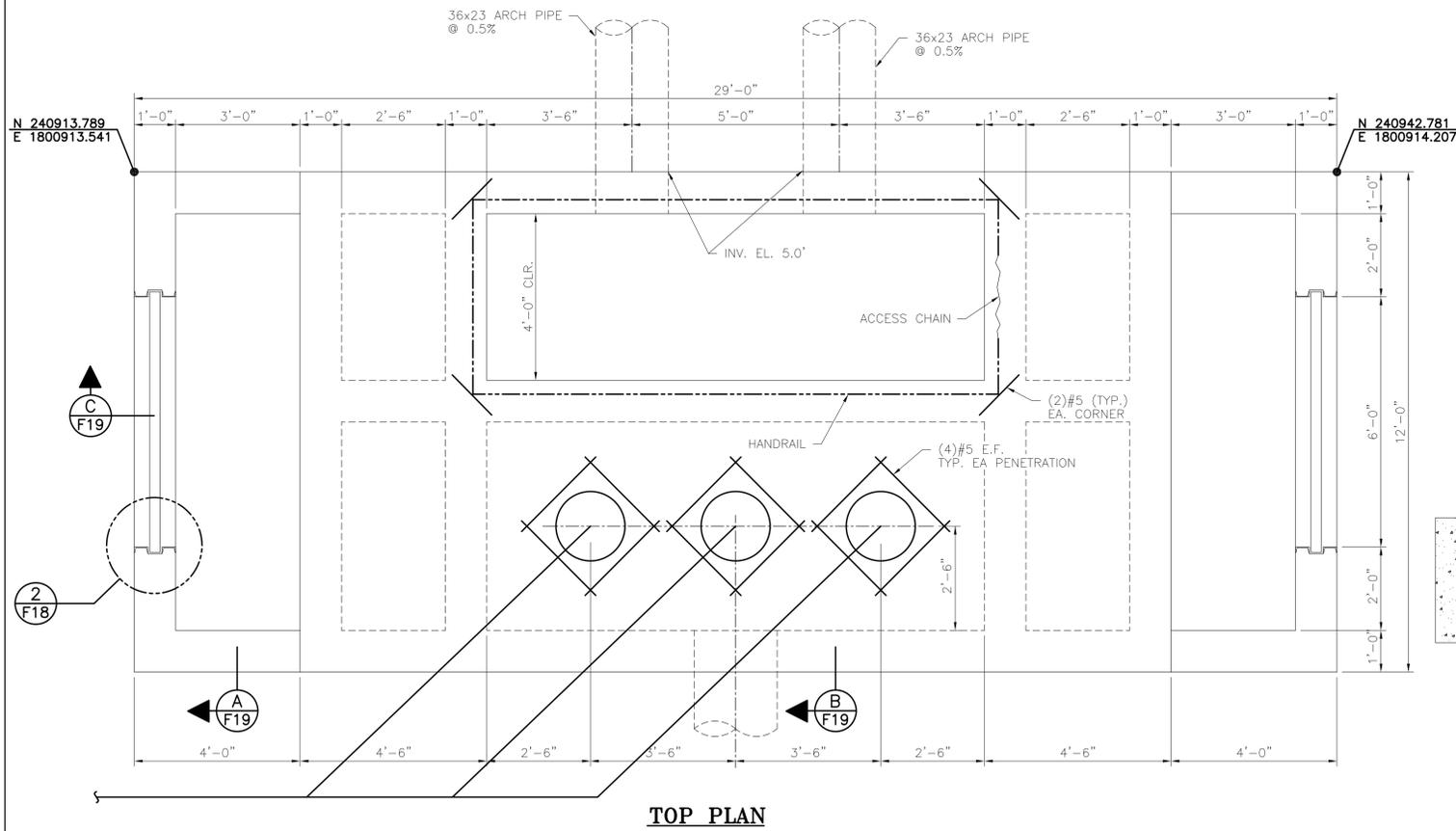
- NOTES:
1. WATER STOPS REQUIRED AT ALL JOINTS.
  2. (4) #5 E.F. SHALL BE REQUIRED AT ALL OPENINGS AND PENETRATIONS.



**DETAIL 2-F18**  
1 1/2" = 1'-0"

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
<b>Gottlieb Barnett Bridges</b>		<b>McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: A.S.W.	Date: AUG. 96	<b>CATCH BASIN PLANS, SECTIONS AND DETAILS</b>
Checked By: G.D.E.C.	Date: AUG. 96	
Scale: <b>NOTED</b>	Drawing No. <b>809-F18</b>	0 REV.



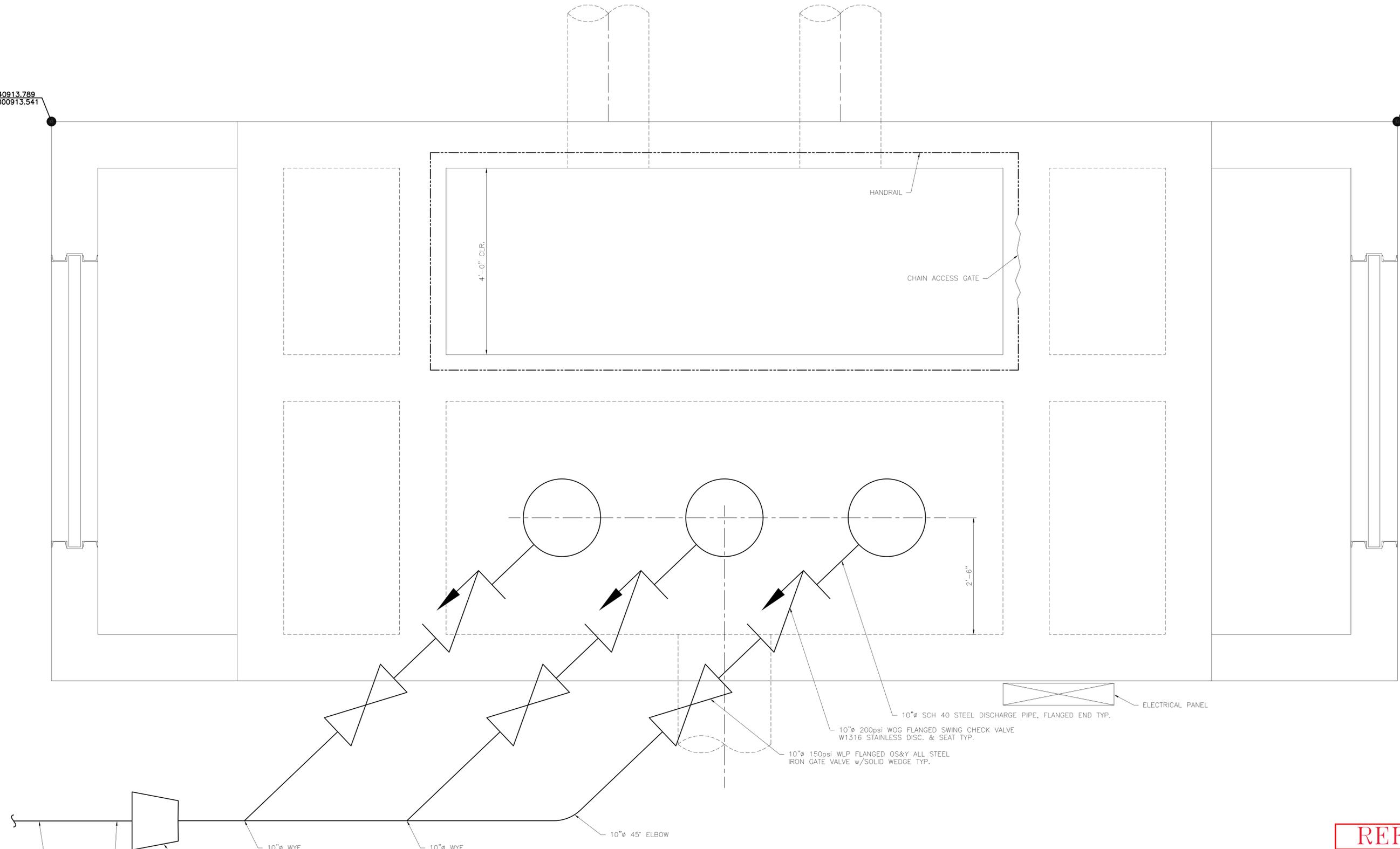
NOTE:  
FOR REBAR DETAILS SEE DWG. 809-F18  
FOR PUMP MECHANICAL ARRANGEMENT  
SEE DWG. 809-M24  
WATER STOPS REQUIRED @ ALL JOINTS.

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE ALABAMA		ALABAMA
<b>Gottlieb Barnett Bridges</b>		<b>McDUFFIE TERMINALS/TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: A.S.W.	Date: AUG. 96	<b>SUMP PUMP BASIN PLANS, SECTIONS</b>
Checked By: G.D.E.C.	Date: AUG. 96	
Scale: <b>NOTED</b>	Drawing No.	<b>809-F19</b>
		0 REV.

N 240913.789  
E 1800913.541

N 240942.781  
E 1800914.207



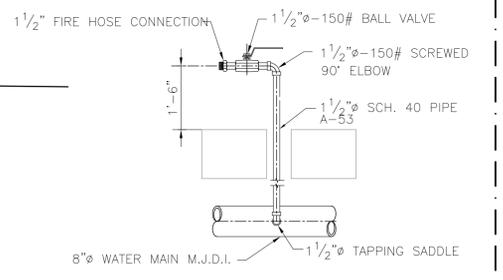
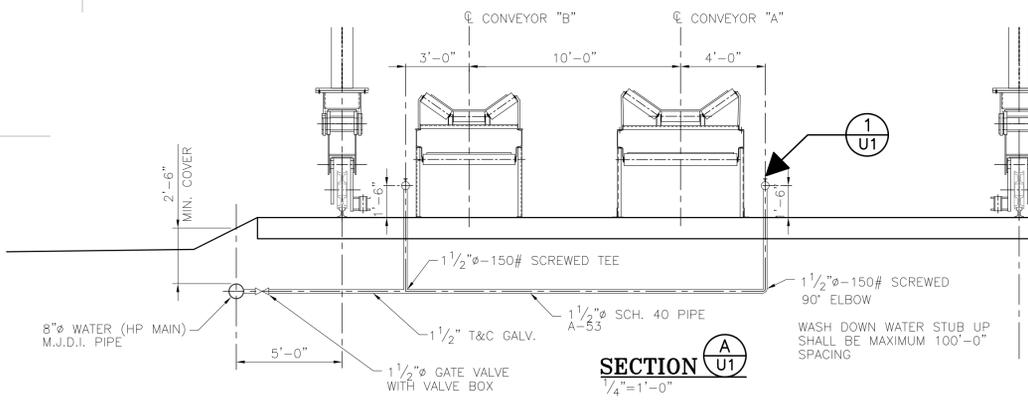
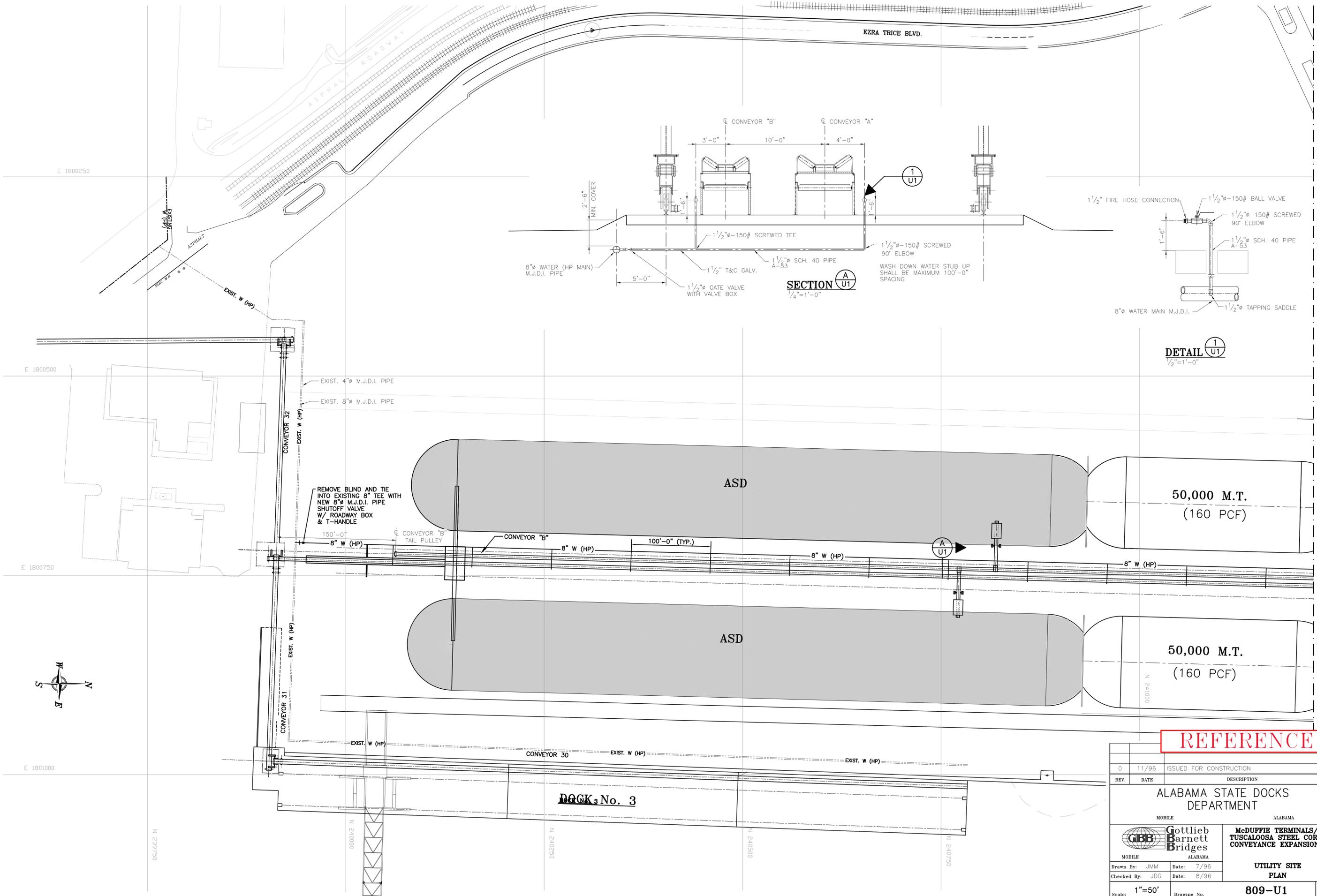
**NOTE:**  
ALL 10"Ø PIPE SHALL BE SCH 40 STEEL.  
THE CONTRACTOR SHALL SUPPLY A DETAILED SET OF SHOP DRAWINGS  
w/THE PUMPS, VALVES, FITTINGS, THRUST BLOCKS AND PIPE SUPPORTS  
FOR ALL THE EQUIPMENT FOR APPROVAL BY THE ENGINEER. THE OPERATION  
SEQUENCE AND CONTROLS SHALL BE SUBMITTED TO THE ENGINEER FOR  
APPROVAL PRIOR TO FABRICATION.  
THE CONTRACTOR, IN CONJUNCTION w/THE EQUIPMENT MFG. SHALL  
SUPPLY A COMPLETE PUMP STATION PACKAGE, PIPE AND APPURTENANCES  
AS REQUIRED TO MEET THE INTENT OF THESE DRAWING AND SPECIFICATIONS.  
SEE DWG. 809-F19 FOR SUMP BASIN DETAILS

**SUMP BASIN PLAN**  
1"=1'-0"

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE		ALABAMA
		<b>McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
Drawn By: A.S.W.	Date: AUG. 96	<b>SUMP PUMP BASIN MECHANICAL PLAN</b>
Checked By: G.D.E.C.	Date: AUG. 96	
Scale: <b>NOTED</b>	Drawing No.	<b>809-M24</b>
		0 REV.

CAD Save: 809-M24  
Plot Date: 8/28/96 3:52



REMOVE BLIND AND TIE INTO EXISTING 8\"/>

**DETAIL**  
1  
U1  
1/2"=1'-0"

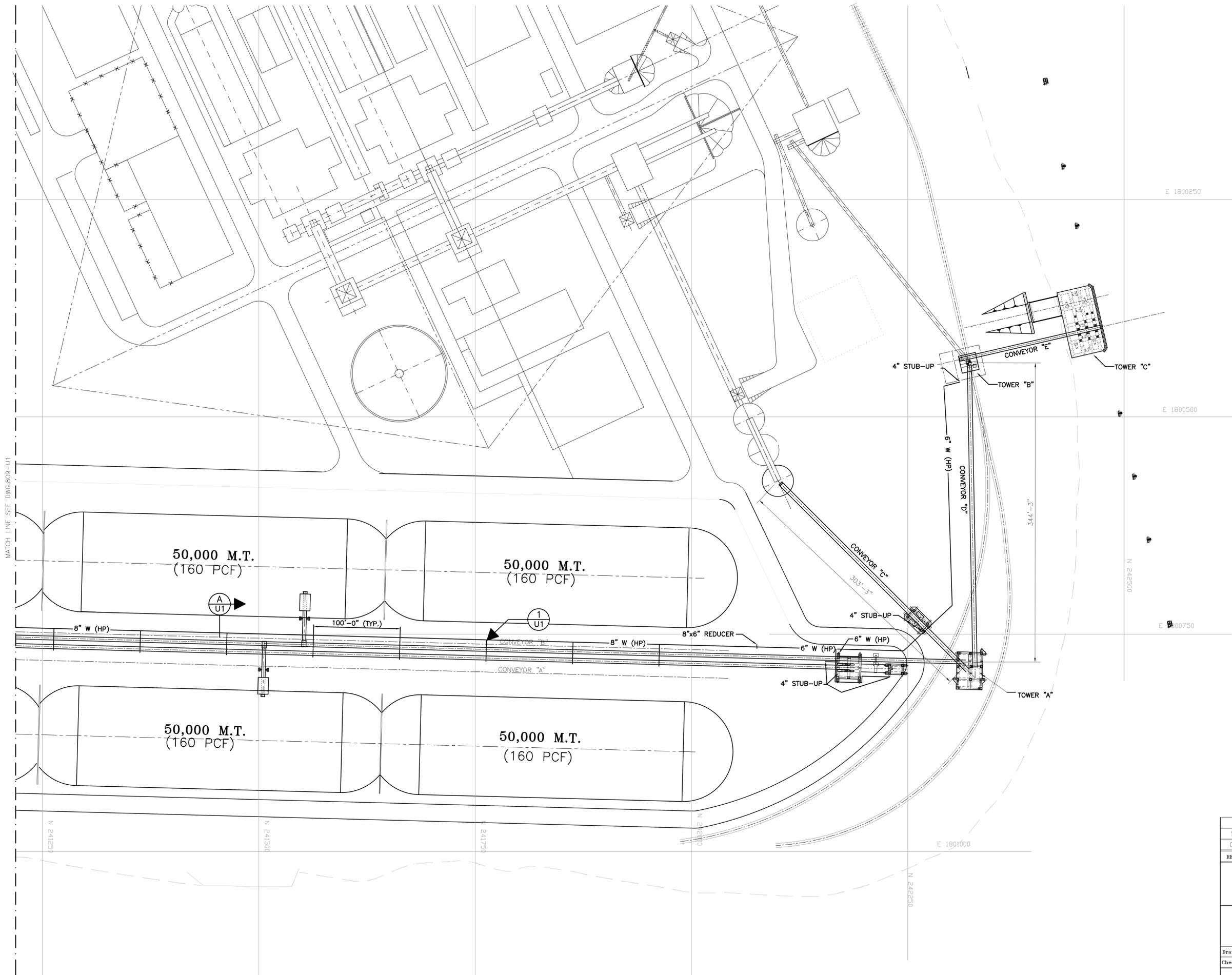
**SECTION**  
A  
U1  
1/4"=1'-0"

**REFERENCE**

0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE ALABAMA		McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION
Gottlieb Barnett Bridges		UTILITY SITE PLAN
Drawn By: JMM	Date: 7/96	<b>809-U1</b>
Checked By: JDG	Date: 8/96	
Scale: 1"=50'	Drawing No.	0 REV.

CAD Save: 809-U1  
Plot Date: 11/5/96 9:20

MATCH LINE SEE DWG. 809-U2



**REFERENCE**

1	11/96	REVISED CONVEYOR DESIGN
0	11/96	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
<small>MOBILE ALABAMA</small>		
		<b>McDUFFIE TERMINALS/ TUSCALOOSA STEEL CORP. CONVEYANCE EXPANSION</b>
<small>MOBILE ALABAMA</small>		<b>UTILITY SITE PLAN</b>
<small>Drawn By: JMM</small>	<small>Date: 7/96</small>	<b>809-U2</b>
<small>Checked By: JDC</small>	<small>Date: 8/96</small>	
<small>Scale: 1"=50'</small>	<small>Drawing No.</small>	<small>1 REV.</small>

CAD Save: 809-U2  
 Plot Date: 11/14/96 9:25

MATCH LINE SEE DWG. 809-U1

# ALABAMA STATE DOCKS DEPARTMENT

MOBILE,

ALABAMA

# GARROWS BEND BULK TERMINAL SHORELINE REMEDICATION

DON SIEGELMAN, GOVERNOR OF ALABAMA  
JACK E. RAVAN, DIRECTOR AND C.E.O.



MOBILE

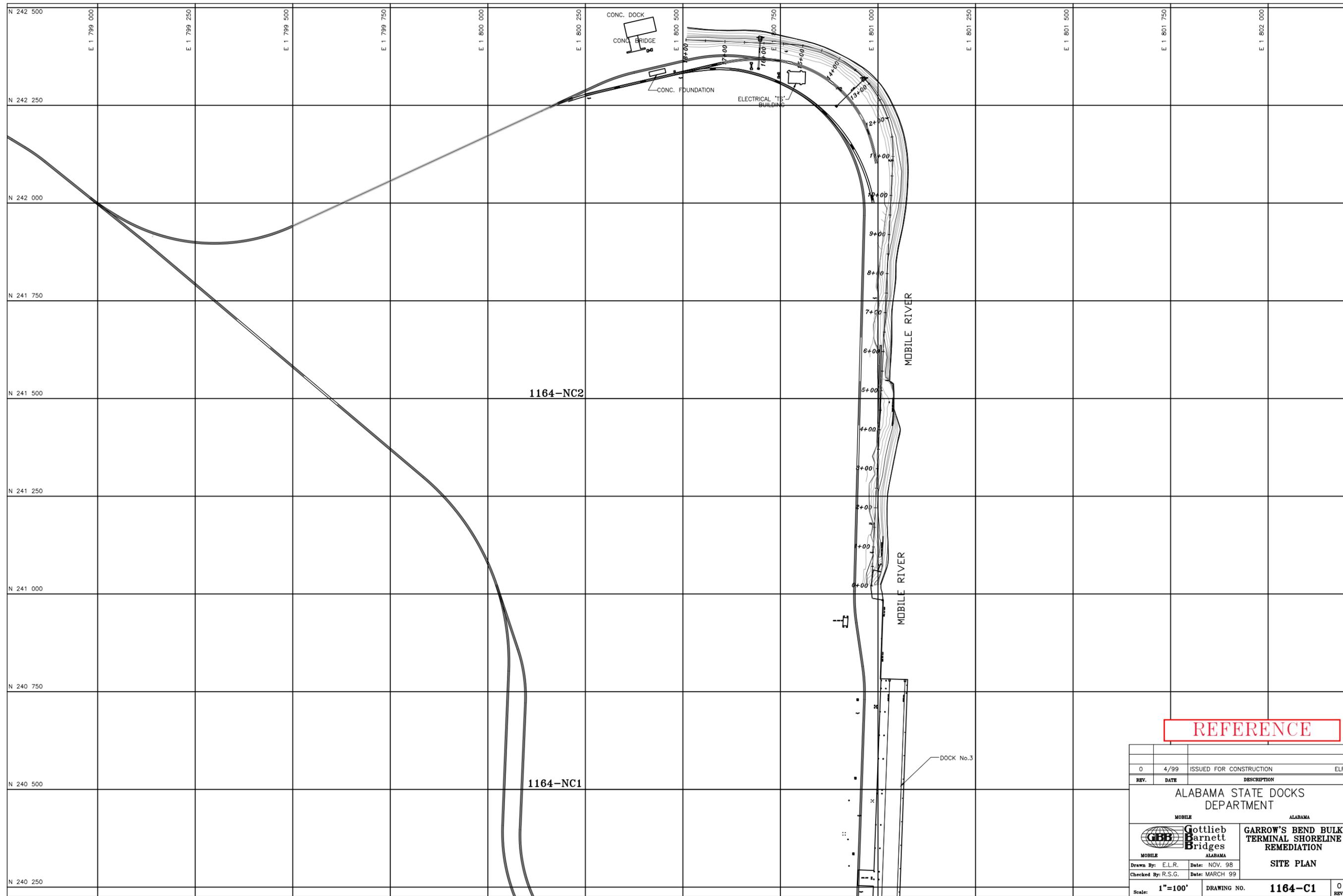
ALABAMA

## DRAWING INDEX

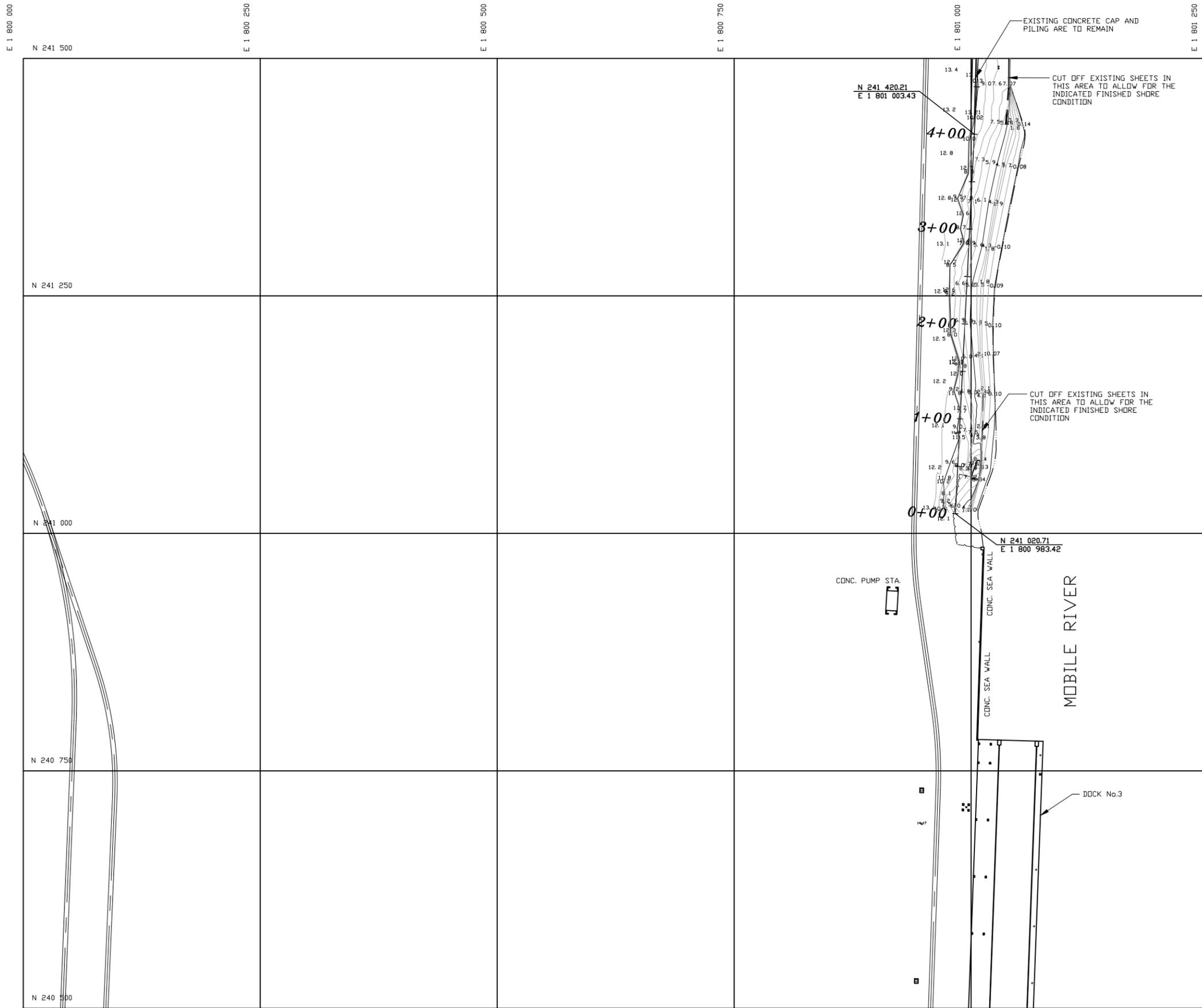
1164-C0	COVER SHEET
1164-C1	SITE PLAN
1164-NC1	PARTIAL SITE PLAN
1164-NC2	PARTIAL SITE PLAN
1164-NCR1	CROSS SECTIONS STA. 0+00 & STA. 0+50
1164-NCR2	CROSS SECTIONS STA. 1+00 & STA. 1+50
1164-NCR3	CROSS SECTIONS STA. 2+00 & STA. 2+50
1164-NCR4	CROSS SECTIONS STA. 3+00 & STA. 3+50
1164-NCR5	CROSS SECTIONS STA. 4+00 & STA. 4+50
1164-NCR6	CROSS SECTIONS STA. 5+00 & STA. 5+50
1164-NCR7	CROSS SECTIONS STA. 6+00 & STA. 6+50
1164-NCR8	CROSS SECTIONS STA. 7+00 & STA. 7+50
1164-NCR9	CROSS SECTIONS STA. 8+00 & STA. 8+50
1164-NCR10	CROSS SECTIONS STA. 9+00 & STA. 9+50
1164-NCR11	CROSS SECTIONS STA. 10+00 & STA. 10+50
1164-NCR12	CROSS SECTIONS STA. 10+98 & STA. 11+00
1164-NCR13	CROSS SECTIONS STA. 11+50 & STA. 12+00
1164-NCR14	CROSS SECTIONS STA. 12+50 & STA. 13+00
1164-NCR15	CROSS SECTIONS STA. 13+50 & STA. 14+00
1164-NCR16	CROSS SECTIONS STA. 14+50 & STA. 15+00
1164-NCR17	CROSS SECTIONS STA. 15+32 & STA. 15+50
1164-NCR18	CROSS SECTIONS STA. 16+00 & STA. 16+50
1164-NCR19	CROSS SECTIONS STA. 17+00 & STA. 17+50

Xref C:\GBB\STANDARD\SEALS\STAN-AL.dwg

REFERENCE



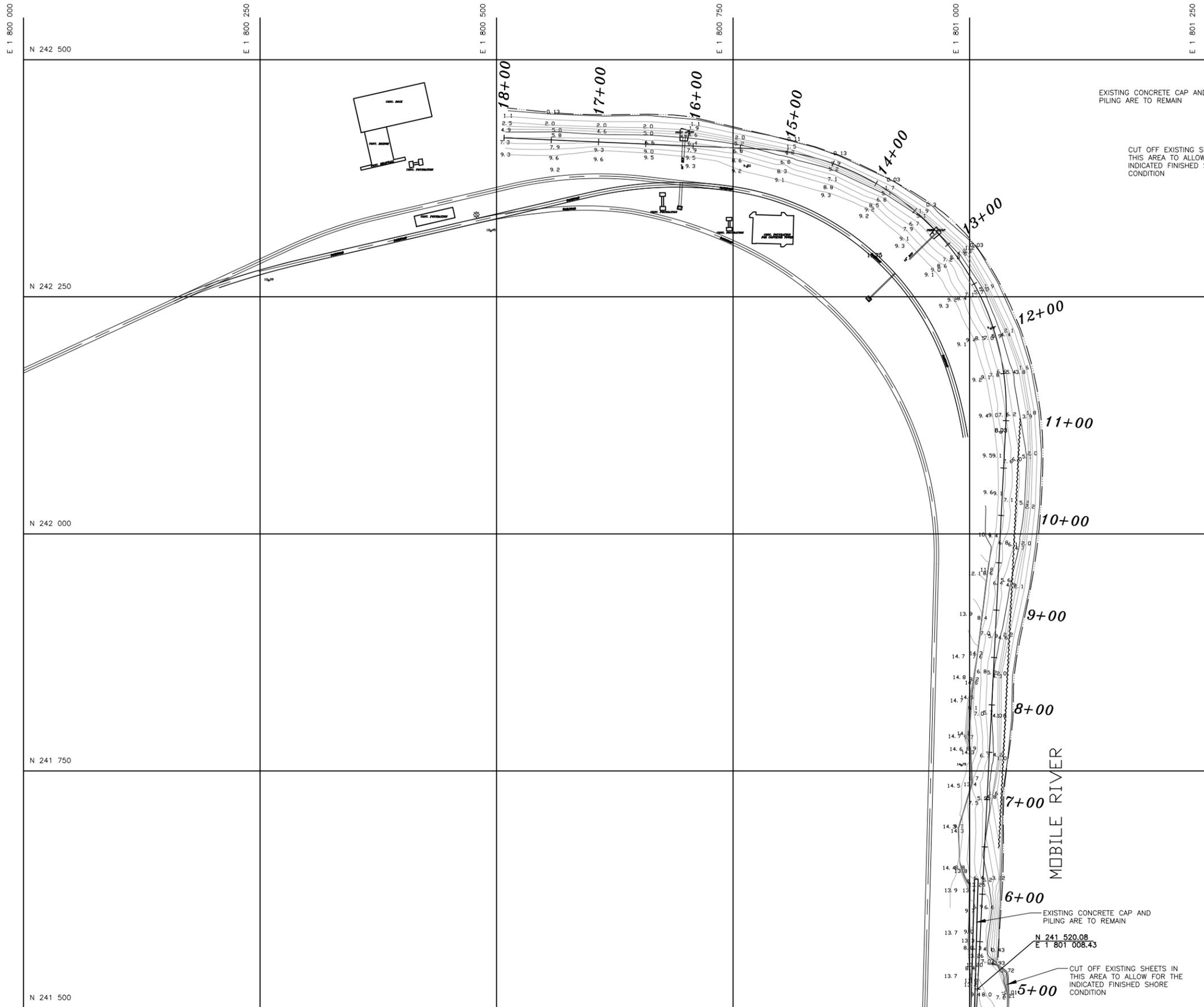
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0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE		ALABAMA	
 Gottlieb Barnett Bridges ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION	
Drawn By: E.L.R.		Date: NOV. 98	
Checked By: R.S.G.		Date: MARCH 99	
Scale: 1"=100'		DRAWING NO. 1164-C1	0 REV.



**NOTES:**  
 REMOVE EXISTING DEBRIS AS  
 REQUIRED TO ACHIEVE FINISHED  
 SLOPE CONDITIONS.

REFERENCE

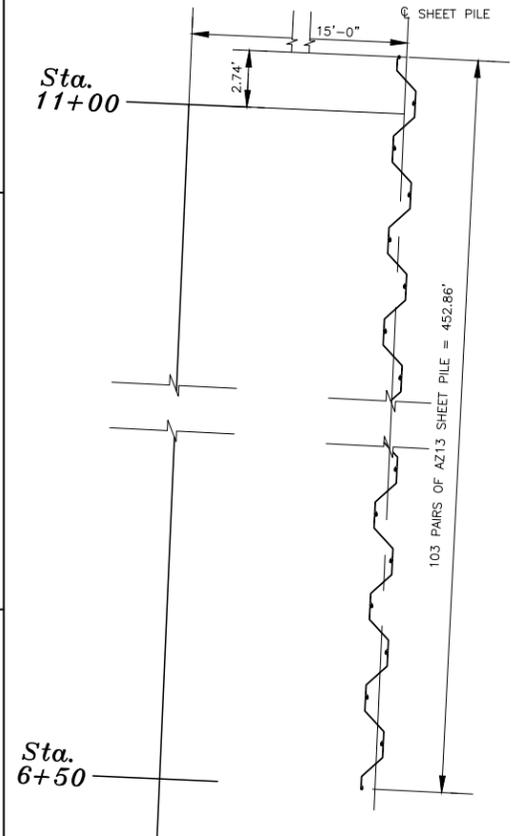
0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE		ALABAMA	
 <b>Gottlieb Barnett Bridges</b>		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDATION</b>	
MOBILE		ALABAMA	
Drawn By: JJM		Date: NOV.98	
Checked By: R.S.G.		Date: MARCH 99	
Scale: 1"=50'		DRAWING NO. <b>1164-NC1</b>	0 REV.



EXISTING CONCRETE CAP AND PILING ARE TO REMAIN

CUT OFF EXISTING SHEETS IN THIS AREA TO ALLOW FOR THE INDICATED FINISHED SHORE CONDITION

NOTES:  
REMOVE EXISTING DEBRIS AS REQUIRED TO ACHIEVE FINISHED SLOPE CONDITIONS.

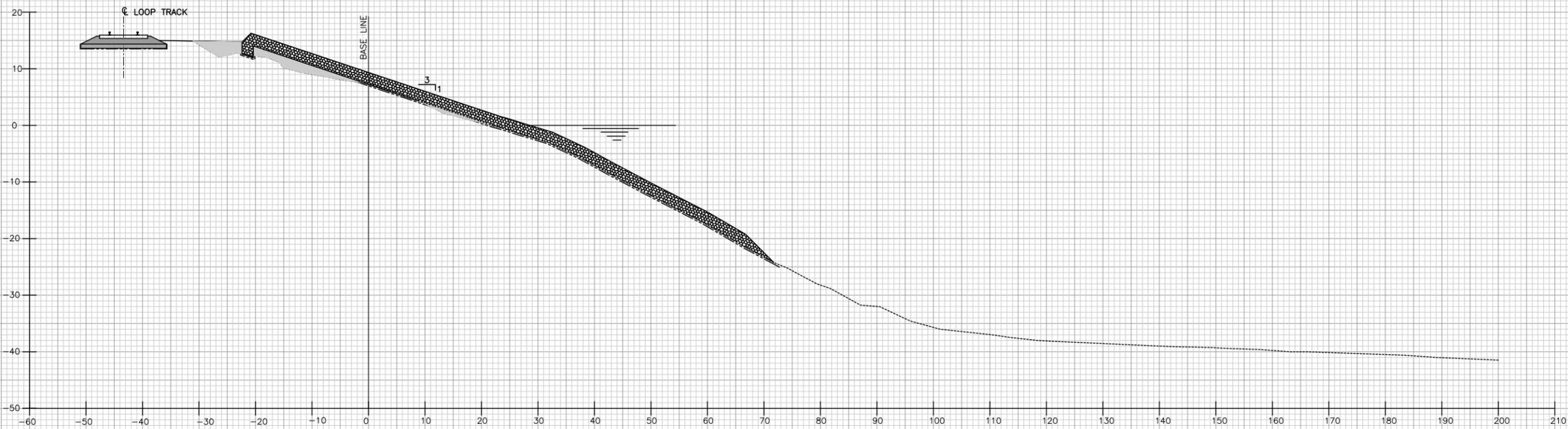


**NEW SHEET PILE LAYOUT**

1/4" = 1'-0"

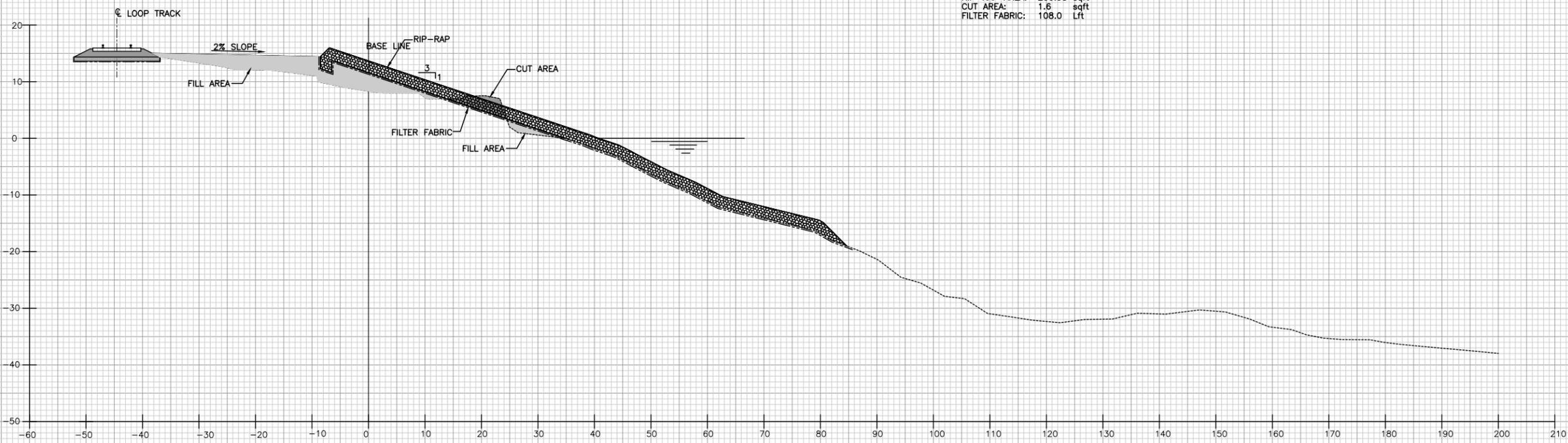
**REFERENCE**

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE		ALABAMA	
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>	
Drawn By: JJM    Date: NOV.98 Checked By: R.S.G.    Date: MARCH 99		<b>PARTIAL SITE PLAN</b>	
Scale:	1"=50'	DRAWING NO.	1164-NC2
			0 REV.



**STATION 0+00**  
 1"=10'

FILL AREA : 44.22 sqft  
 RIP-RAP AREA: 200.95 sqft  
 CUT AREA: 1.6 sqft  
 FILTER FABRIC: 108.0 Lft



**STATION 0+50**  
 1"=10'

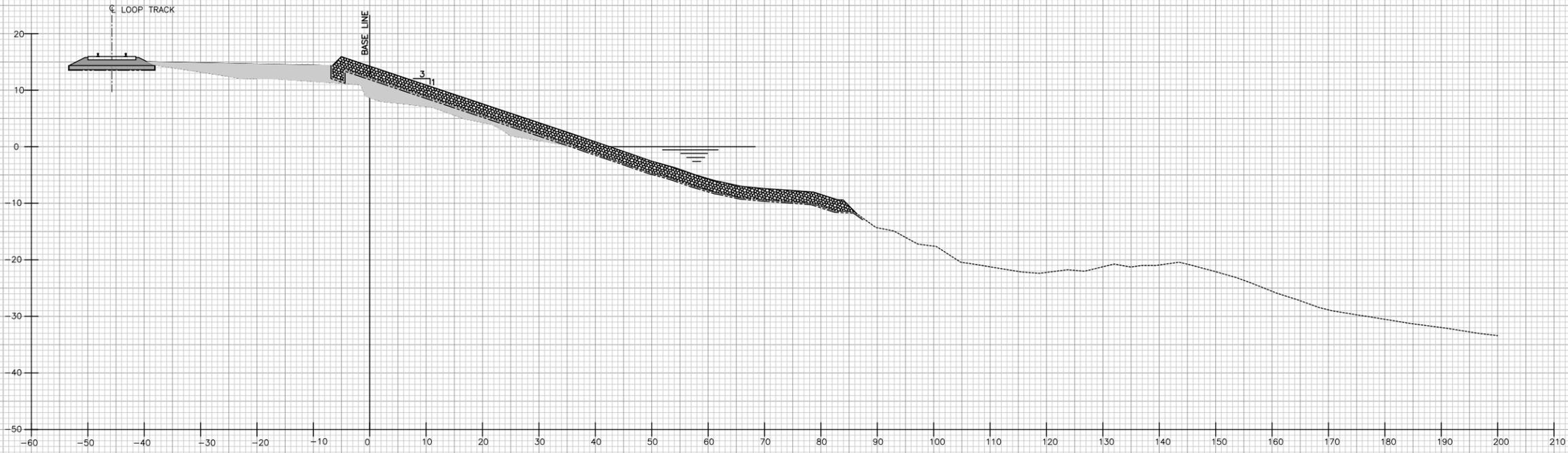
FILL AREA : 123.5 sqft  
 RIP-RAP AREA: 197.05 sqft  
 CUT AREA: 19.73 sqft  
 FILTER FABRIC: 105.0 Lft

**LEGEND**

[Pattern]	FILL AREA	[Pattern]	RIP-RAP
[Pattern]	CUT AREA	[Pattern]	GEOTEXTILE
[Pattern]	BALLAST	[Line]	FINISHED GRADE
[Pattern]	SUB-BALLAST	[Line]	EXISTING GRADE

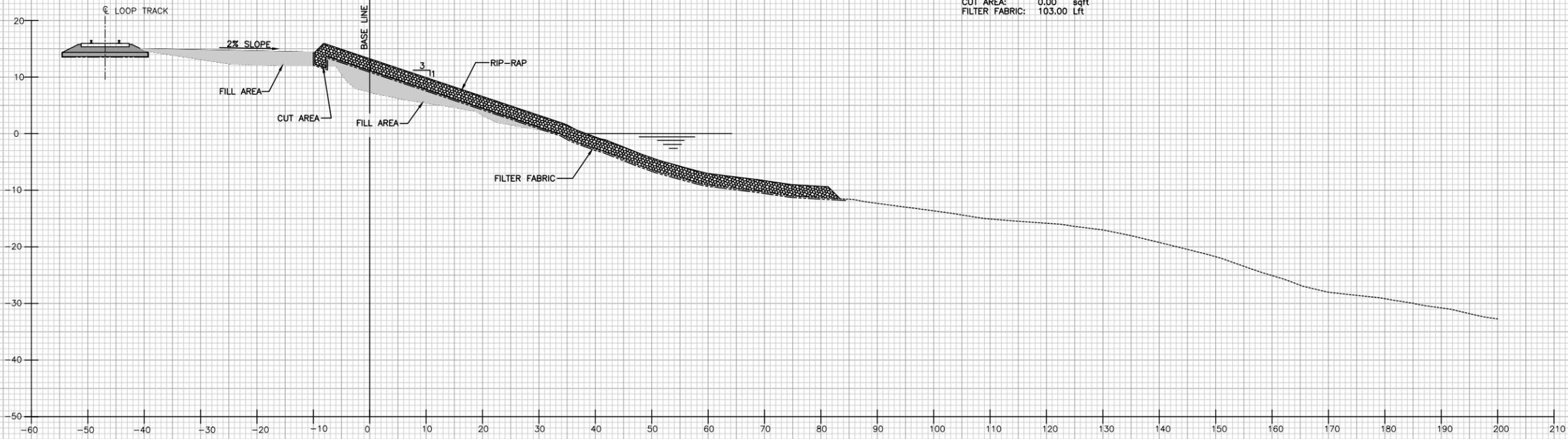
REFERENCE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE, ALABAMA		Gottlieb Barnett Bridges	
GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION		CROSS SECTIONS STA.0+00 & STA.0+50	
Drawn By:	E.L.R.	Date:	NOV. 98
Checked By:	R.S.G.	Date:	MARCH 99
Scale:	NOTED	DRAWING NO.	1164-NCR1
			0 REV.



**STATION 1+00**  
1"=10'

FILL AREA : 138.00 sqft  
 RIP-RAP AREA: 193.76 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 103.00 Lft



**STATION 1+50**  
1"=10'

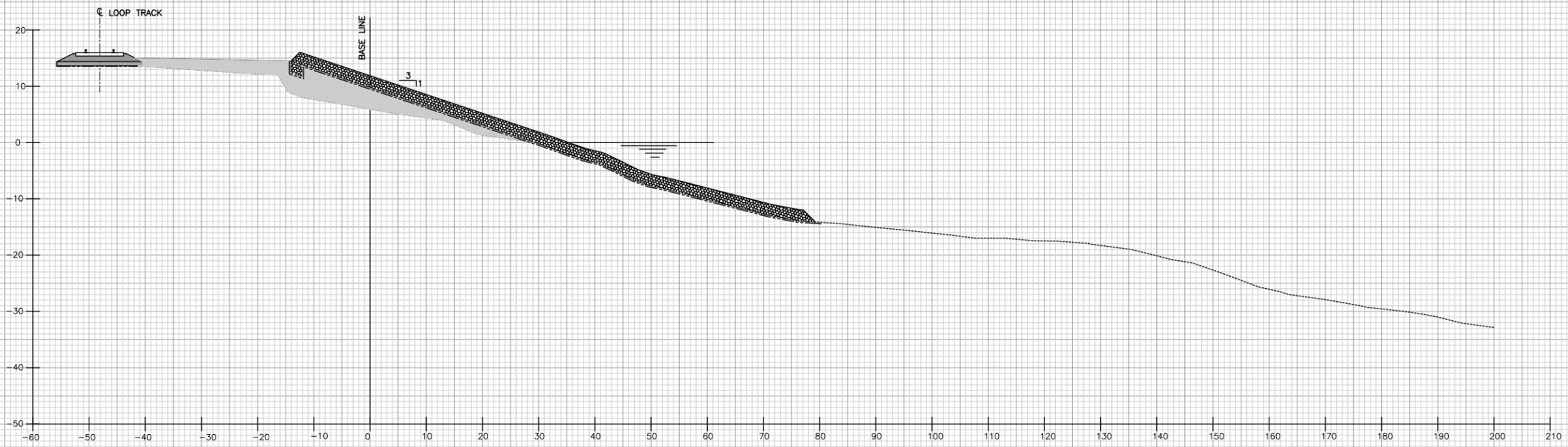
FILL AREA : 137.24 sqft  
 RIP-RAP AREA: 194.82 sqft  
 CUT AREA: 0.30 sqft  
 FILTER FABRIC: 102.9 Lft

REFERENCE

**LEGEND**

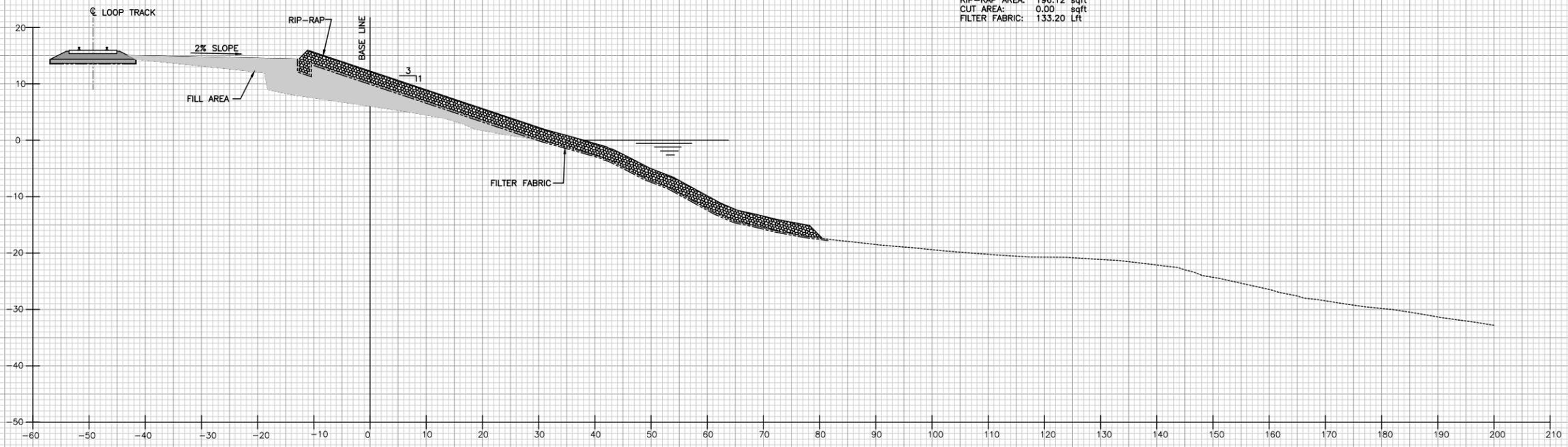
FILL AREA	RIP-RAP
CUT AREA	GEOTEXTILE
BALLAST	FINISHED GRADE
SUB-BALLAST	EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
<b>REV.</b>	<b>DATE</b>	<b>DESCRIPTION</b>	
<b>ALABAMA STATE DOCKS DEPARTMENT</b>			
<small>MOBILE, ALABAMA</small>		<small>ALABAMA</small>	
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>	
<small>Drawn By: E.L.R.</small>		<small>Date: NOV. 98</small>	
<small>Checked By: R.S.G.</small>		<small>Date: MARCH 99</small>	
<small>Scale: NOTED</small>		<small>DRAWING NO. 1164-NCR2</small>	
			<small>0 REV.</small>



**STATION 2+00**  
1"=10'

FILL AREA : 177.45 sqft  
 RIP-RAP AREA: 196.12 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 133.20 Lft



**STATION 2+50**  
1"=10'

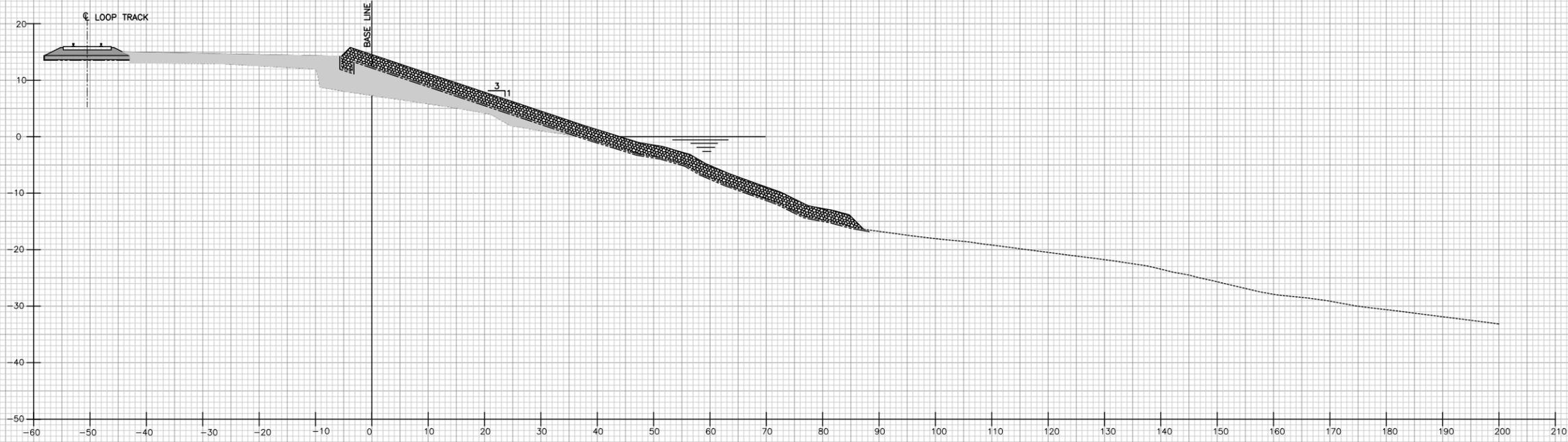
FILL AREA : 194.24 sqft  
 RIP-RAP AREA: 196.00 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 104.5 Lft

**REFERENCE**

**LEGEND**

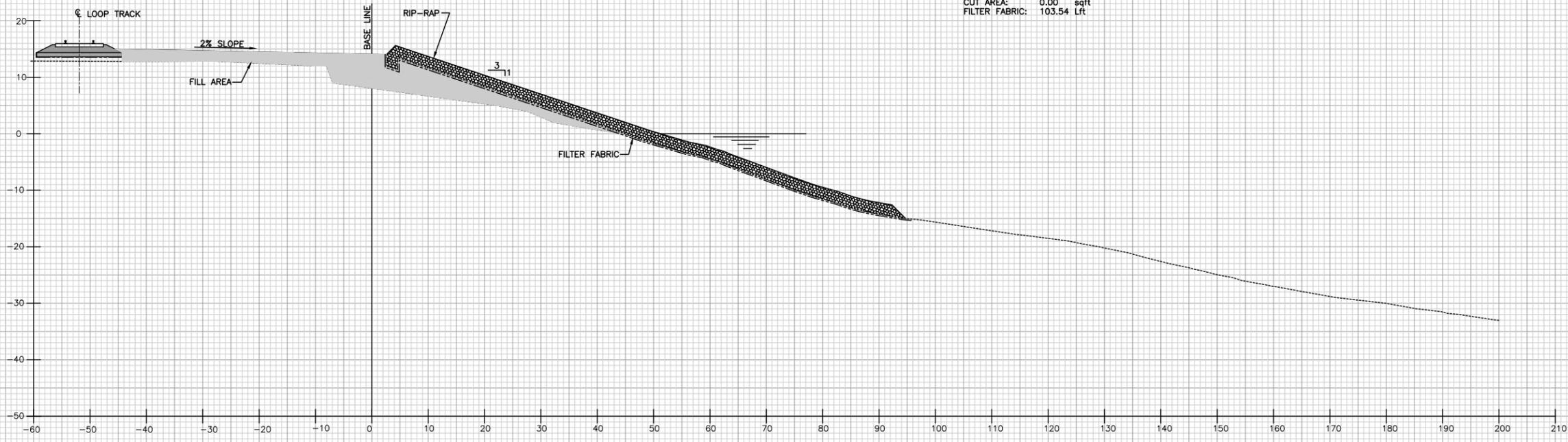
	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		Gottlieb Barnett Bridges
MOBILE, ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION
Drawn By: E.L.R. Date: NOV. 98		CROSS SECTIONS
Checked By: R.S.G. Date: MARCH 99		STA.2+00 & STA.2+50
Scale: NOTED	DRAWING NO. 1164-NCR3	0 REV.



**STATION 3+00**  
1"=10'

FILL AREA : 201.21 sqft  
 RIP-RAP AREA: 195.77 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 103.54 Lft



**STATION 3+50**  
1"=10'

FILL AREA : 250.39 sqft  
 RIP-RAP AREA: 193.69 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 102.37 Lft

REFERENCE

REV.	DATE	DESCRIPTION	ELR
0	4/99	ISSUED FOR CONSTRUCTION	ELR

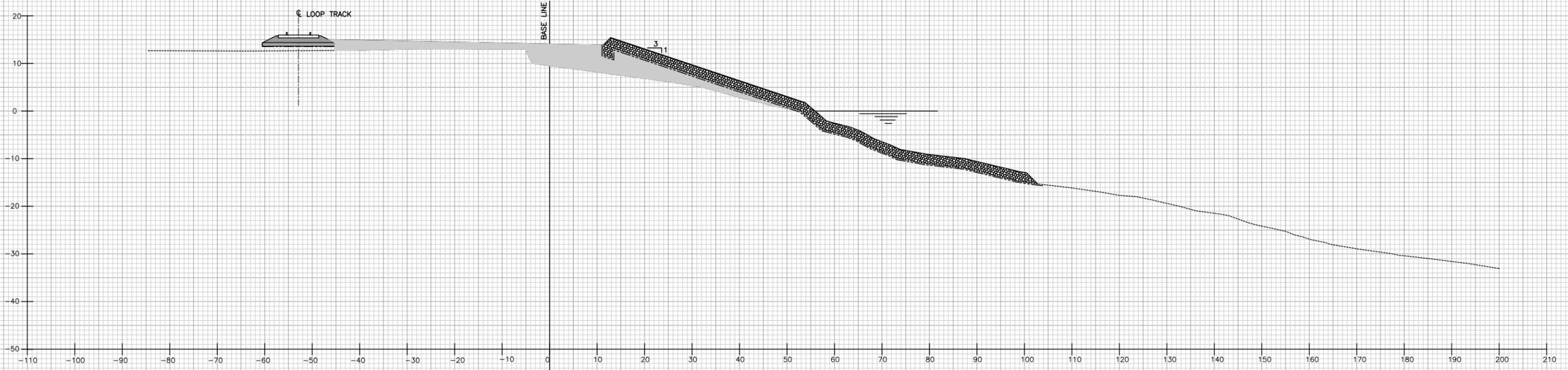
**ALABAMA STATE DOCKS DEPARTMENT**

MOBILE, ALABAMA

 <b>Gottlieb Barnett Bridges</b> MOBILE ALABAMA	<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>  <b>CROSS SECTIONS STA.3+00 &amp; STA.3+50</b>
Drawn By: E.L.R.    Date: NOV. 98 Checked By: R.S.G.    Date: MARCH 99	Scale: NOTED    DRAWING NO. <b>1164-NCR4</b> 0 REV.

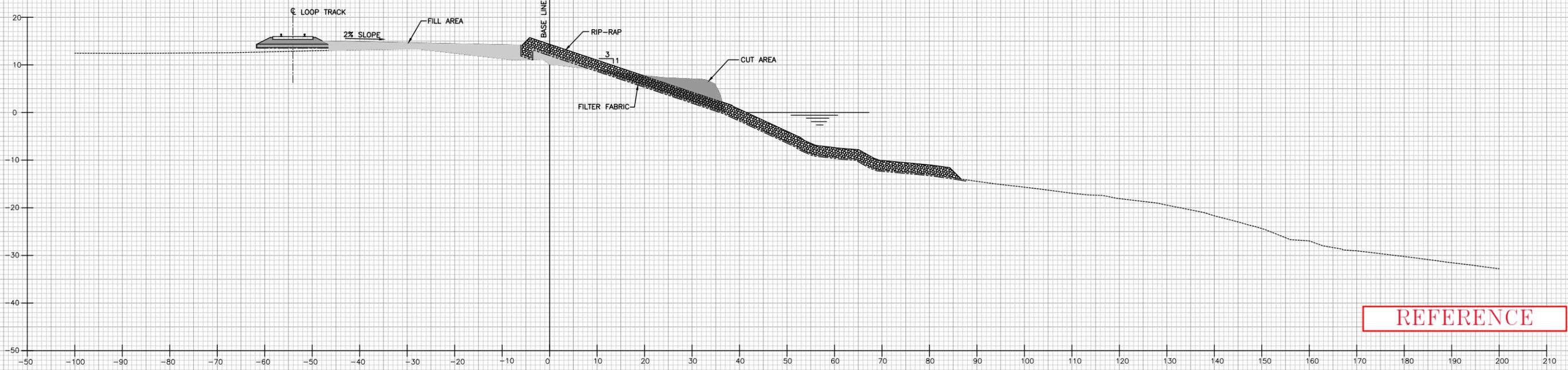
**LEGEND**

FILL AREA	RIP-RAP
CUT AREA	GEOTEXTILE
BALLAST	FINISHED GRADE
SUB-BALLAST	EXISTING GRADE



**STATION 4+00**  
1"=10'

FILL AREA : 243.00 sqft  
 RIP-RAP AREA: 194.10 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 102.61 Lft



**STATION 4+50**  
1"=10'

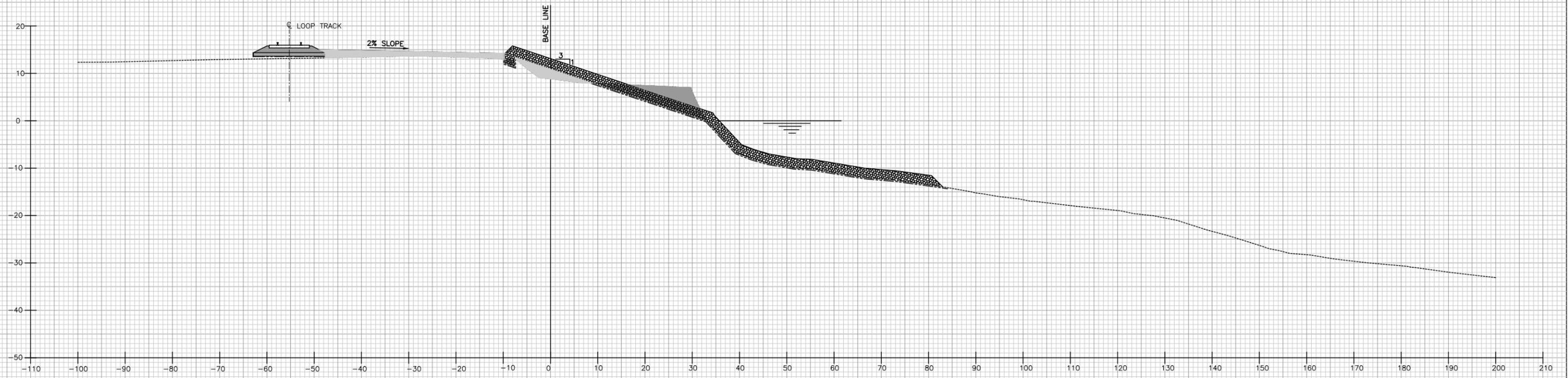
FILL AREA : 98.12 sqft  
 RIP-RAP AREA: 195.13 sqft  
 CUT AREA: 77.76 sqft  
 FILTER FABRIC: 103.15 Lft

REFERENCE

**LEGEND**

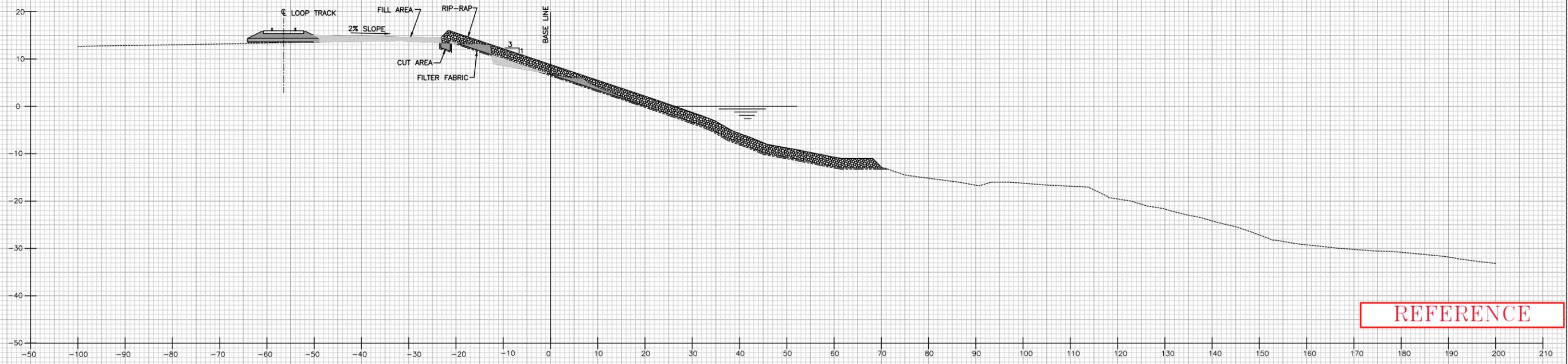
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	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
<b>ALABAMA STATE DOCKS DEPARTMENT</b>			
<small>MOBILE, ALABAMA</small>		<small>ALABAMA</small>	
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>	
<small>MOBILE, ALABAMA</small>		<b>CROSS SECTIONS STA. 4+00 &amp; STA. 4+50</b>	
<small>Drawn By: E.L.R. Date: NOV. 98</small>		<small>Checked By: R.S.G. Date: MARCH 99</small>	
<small>Scale: NOTED</small>		<small>DRAWING NO. 1164-NCR5</small>	
			<small>0 REV.</small>



**STATION 5+00**  
1"=10'

FILL AREA : 70.02 sqft  
 RIP-RAP AREA: 197.46 sqft  
 CUT AREA: 71.69 sqft  
 FILTER FABRIC: 104.30 Lft



**STATION 5+50**  
1"=10'

FILL AREA : 37.36 sqft  
 RIP-RAP AREA: 196.53 sqft  
 CUT AREA: 21.86 sqft  
 FILTER FABRIC: 103.64 Lft

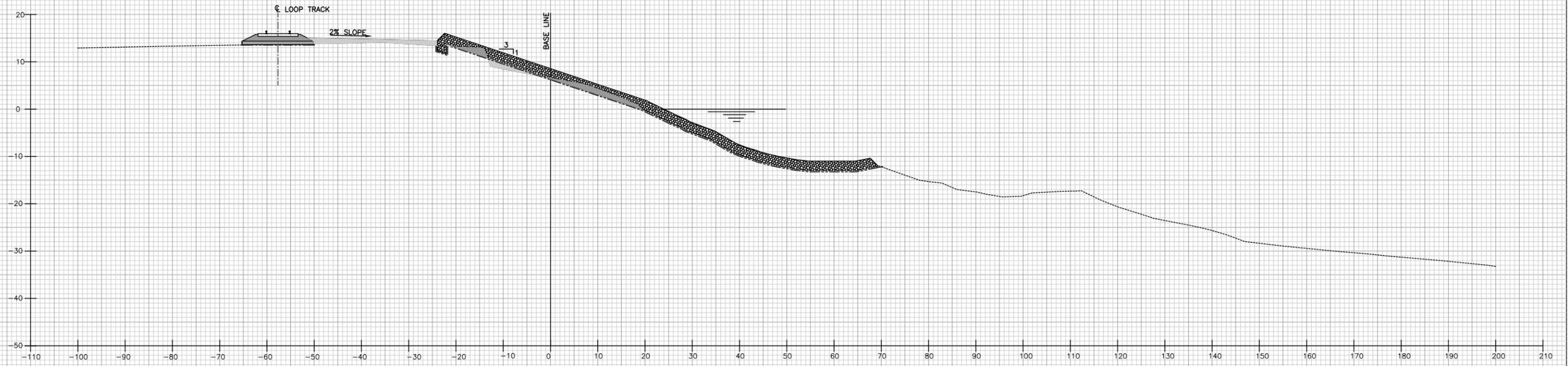
REFERENCE

**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

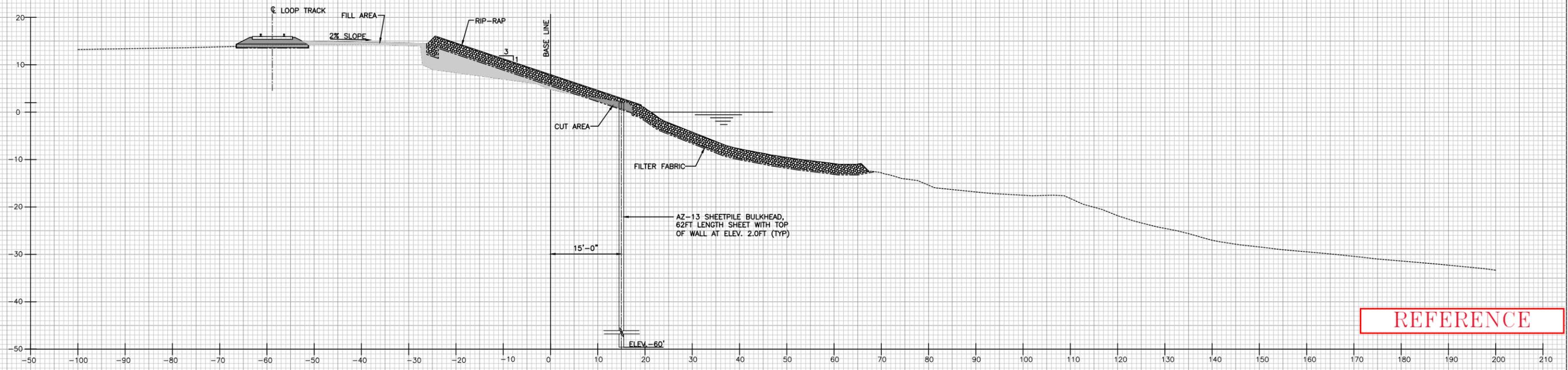
REV.	DATE	DESCRIPTION	
0	4/99	ISSUED FOR CONSTRUCTION	ELR

<b>ALABAMA STATE DOCKS DEPARTMENT</b>	
<small>MOBILE, ALABAMA</small>	<small>ALABAMA</small>
	<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>
<small>MOBILE, ALABAMA</small>	<b>CROSS SECTIONS STA.5+00 &amp; STA.5+50</b>
Drawn By: E.L.R.	Date: NOV. 98
Checked By: R.S.G.	Date: MARCH 99
Scale: NOTED	DRAWING NO. <b>1164-NCR6</b>
	0 REV.



**STATION 6+00**  
1"=10'

FILL AREA : 33.37 sqft  
 RIP-RAP AREA: 197.69 sqft  
 CUT AREA: 27.89 sqft  
 FILTER FABRIC: 104.10 Lft



**STATION 6+50**  
1"=10'

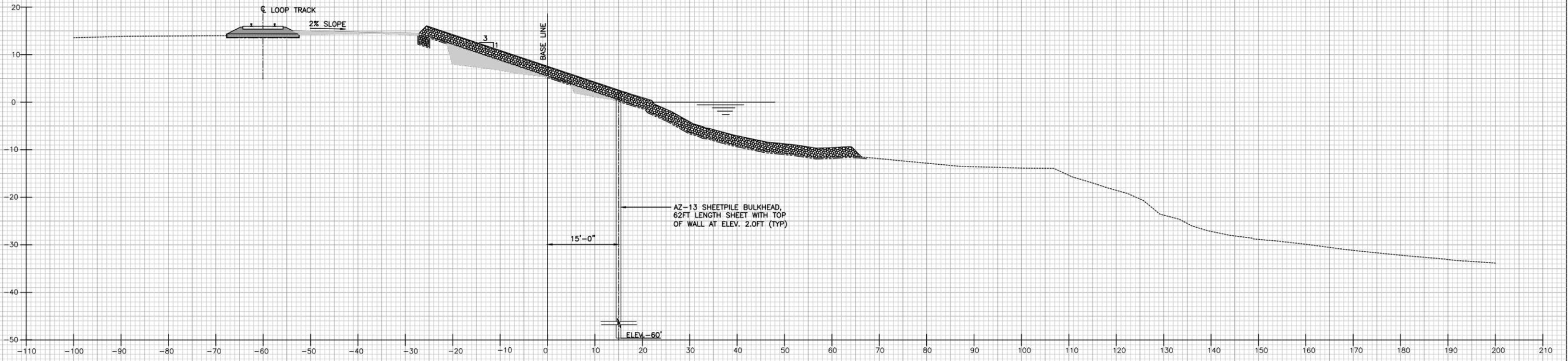
FILL AREA : 91.41 sqft  
 RIP-RAP AREA: 197.74 sqft  
 CUT AREA: 8.68 sqft  
 FILTER FABRIC: 104.18 Lft

REFERENCE

**LEGEND**

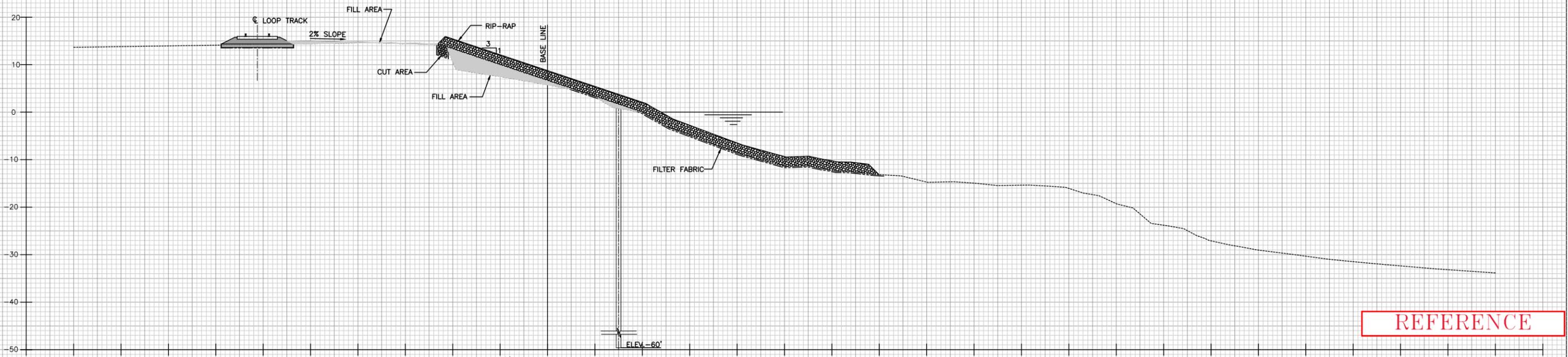
	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE, ALABAMA		Gottlieb Barnett Bridges	
MOBILE, ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION	
Drawn By: E.L.R.		Date: NOV. 98	
Checked By: R.S.G.		Date: MARCH 99	
Scale: NOTED		DRAWING NO. <b>1164-NCR7</b>	
			0 REV.



**STATION 7+00**  
1"=10'

FILL AREA : 64.56 sqft  
 RIP-RAP AREA: 196.36 sqft  
 CUT AREA: 5.46 sqft  
 FILTER FABRIC: 102.62 Lft



**STATION 7+50**  
1"=10'

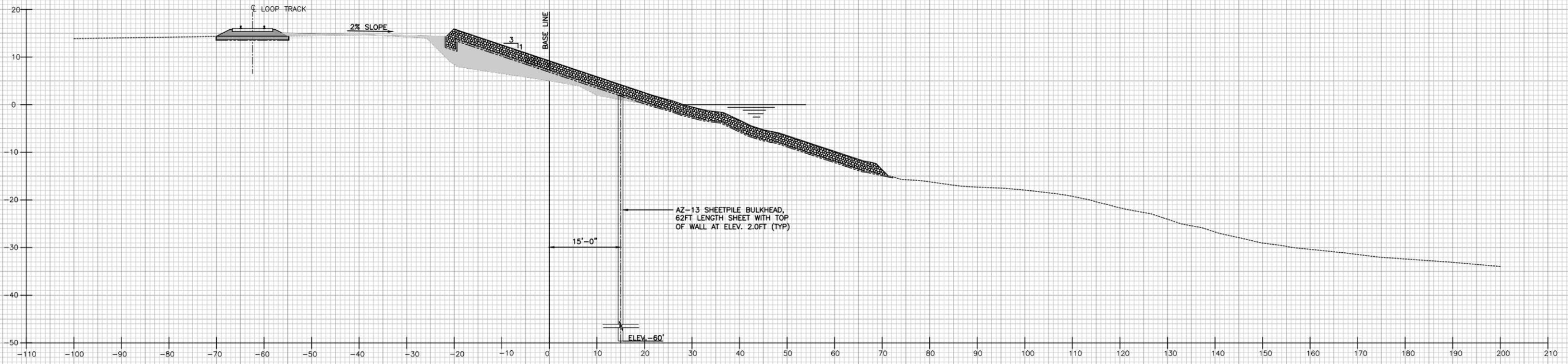
FILL AREA : 65.62 sqft  
 RIP-RAP AREA: 196.05 sqft  
 CUT AREA: 5.17 sqft  
 FILTER FABRIC: 103.48 Lft

REFERENCE

**LEGEND**

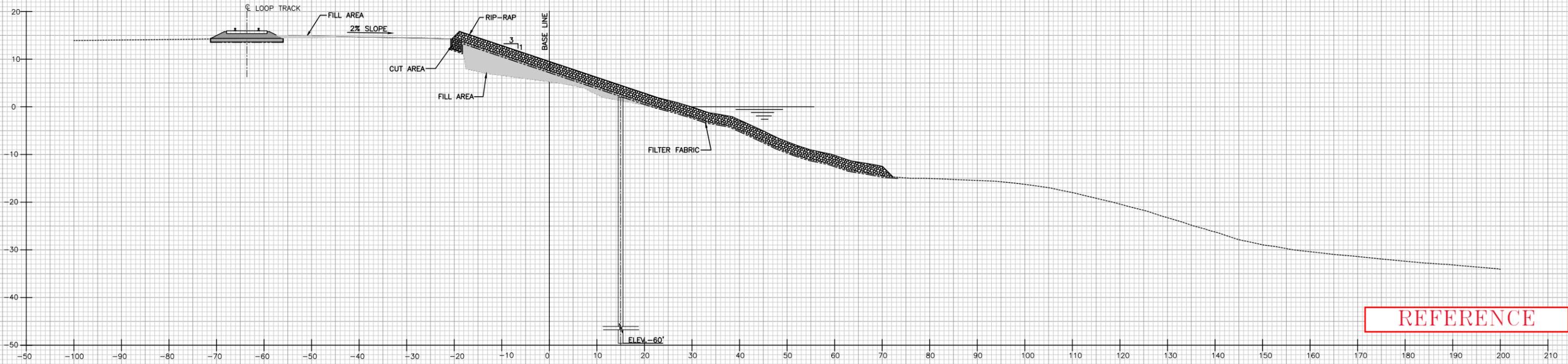
	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
<b>ALABAMA STATE DOCKS DEPARTMENT</b>			
MOBILE, ALABAMA			
MOBILE, ALABAMA		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>	
Drawn By: E.L.R. Date: NOV. 98		Checked By: R.S.G. Date: MARCH 99	
Scale: NOTED		DRAWING NO. <b>1164-NCR8</b>	
		0 REV.	



**STATION 8+00**  
1"=10'

FILL AREA : 122.55 sqft  
 RIP-RAP AREA: 195.20 sqft  
 CUT AREA: 0.00 sqft  
 FILTER FABRIC: 103.30 Lft



**STATION 8+50**  
1"=10'

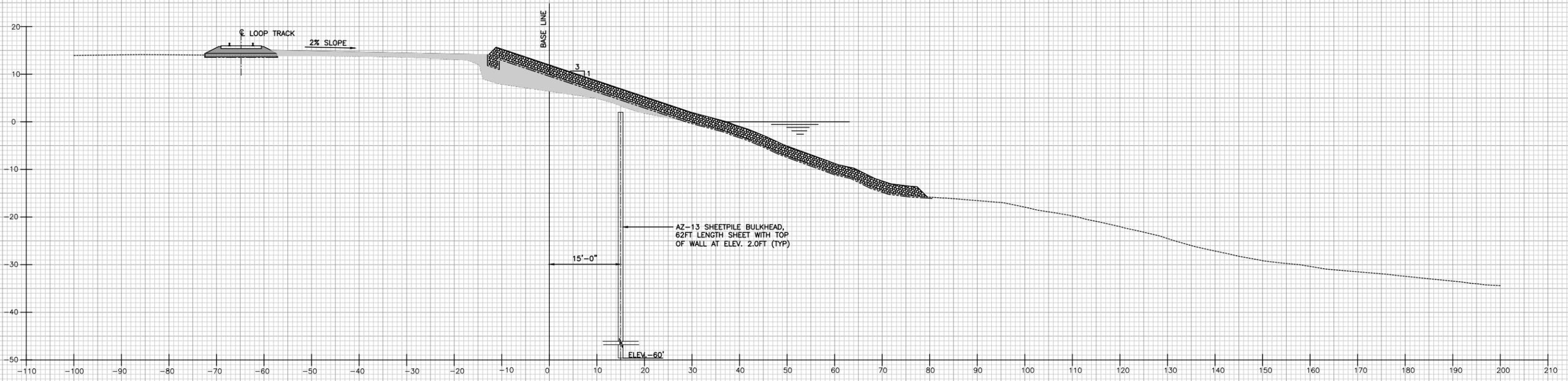
FILL AREA : 99.85 sqft  
 RIP-RAP AREA: 195.44 sqft  
 CUT AREA: 5.79 sqft  
 FILTER FABRIC: 103.19 Lft

REFERENCE

**LEGEND**

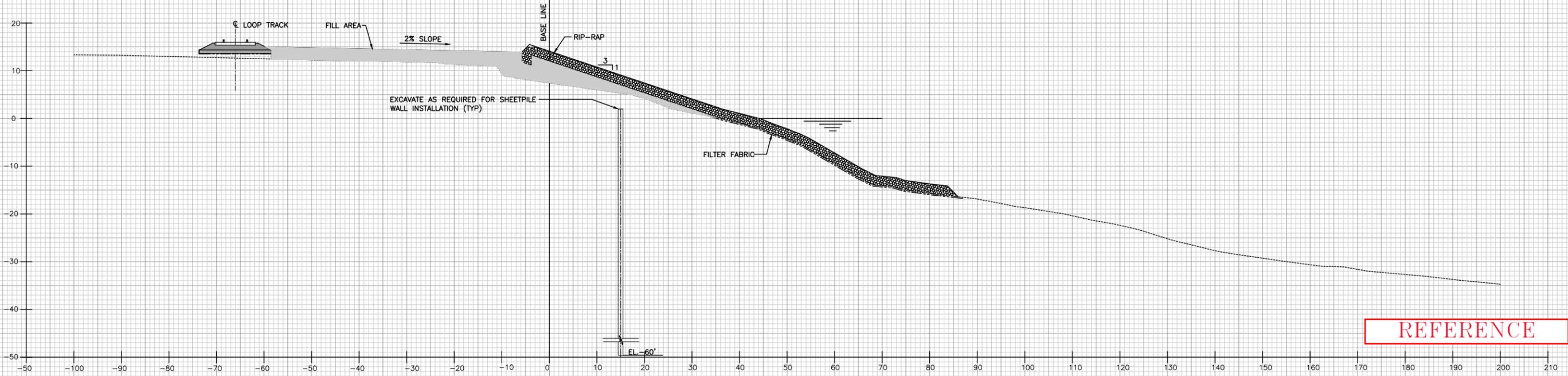
	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
<b>ALABAMA STATE DOCKS DEPARTMENT</b>			
MOBILE, ALABAMA		<b>Gottlieb Barnett Bridges</b> ALABAMA	
MOBILE		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>	
Drawn By: E.L.R.		Date: NOV. 98	
Checked By: R.S.G.		Date: MARCH 99	
Scale: NOTED		DRAWING NO. <b>1164-NCR9</b>	
		0 REV.	



**STATION 9+00**  
1"=10'

FILL AREA : 151.25 sqft  
 RIP-RAP AREA: 195.03 sqft  
 CUT AREA: 000.00 sqft  
 FILTER FABRIC: 102.96 Lft



**STATION 9+50**  
1"=10'

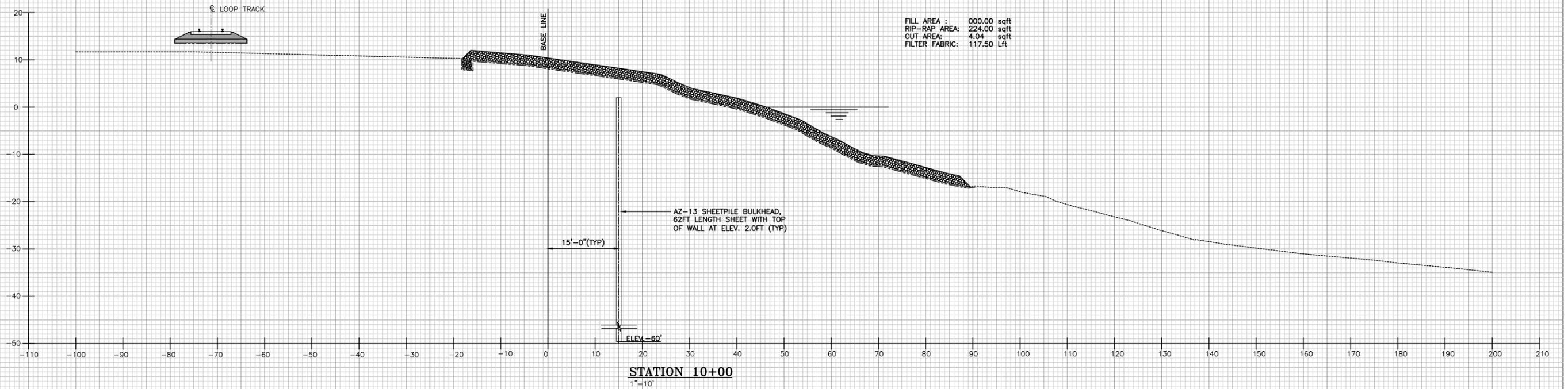
FILL AREA : 245.03 sqft  
 RIP-RAP AREA: 195.00 sqft  
 CUT AREA: 000.00 sqft  
 FILTER FABRIC: 103.00 Lft

REFERENCE

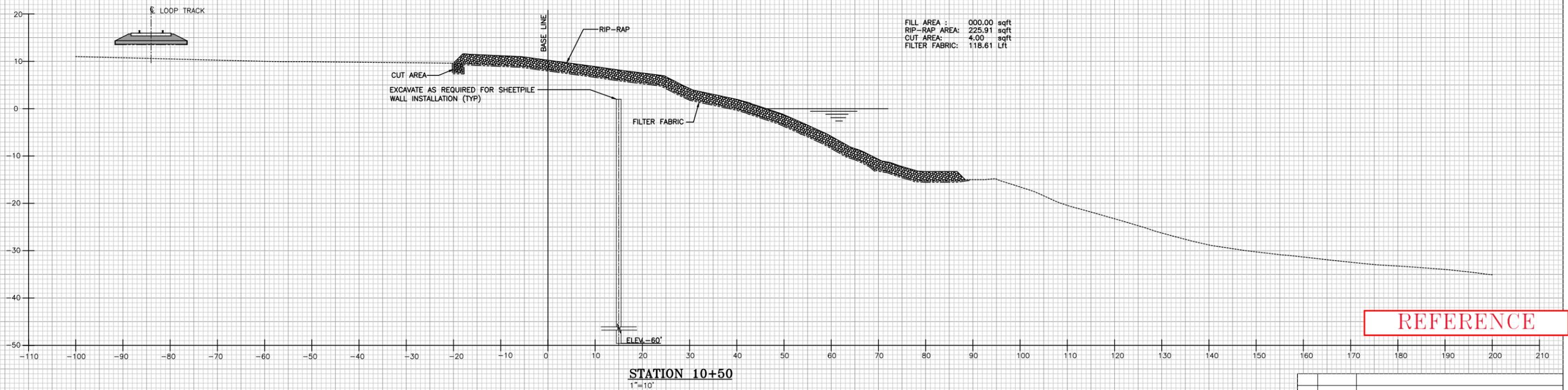
**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
MOBILE, ALABAMA		
<b>Gottlieb Barnett Bridges</b> ALABAMA		
Drawn By: E.L.R.	Date: NOV. 98	<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>  <b>CROSS SECTIONS STA.9+00 &amp; STA.9+50</b>
Checked By: R.S.G.	Date: MARCH 99	
Scale: NOTED	DRAWING NO. <b>1164-NCR10</b>	0 REV.



STATION 10+00  
1"=10'



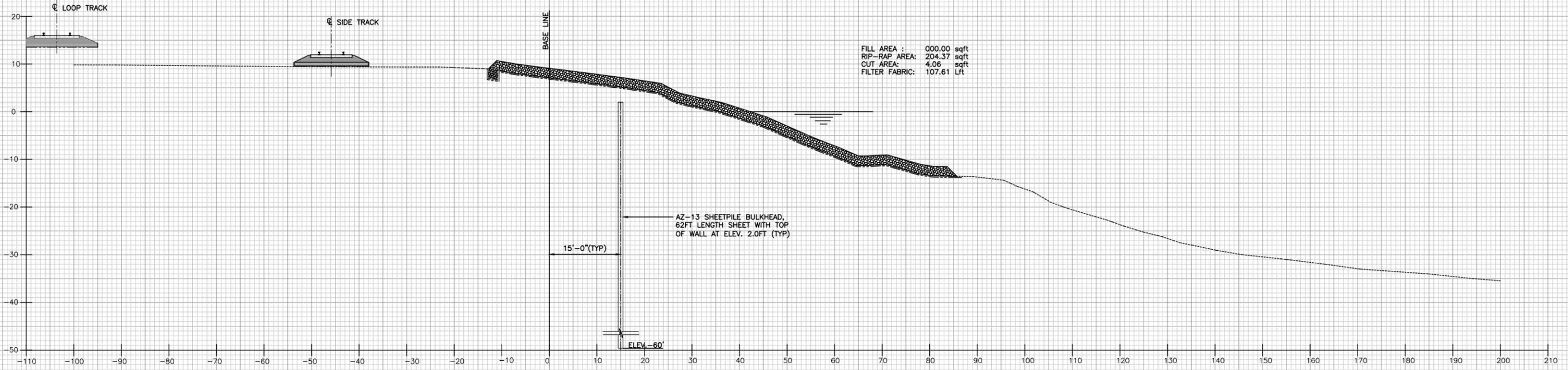
STATION 10+50  
1"=10'

REFERENCE

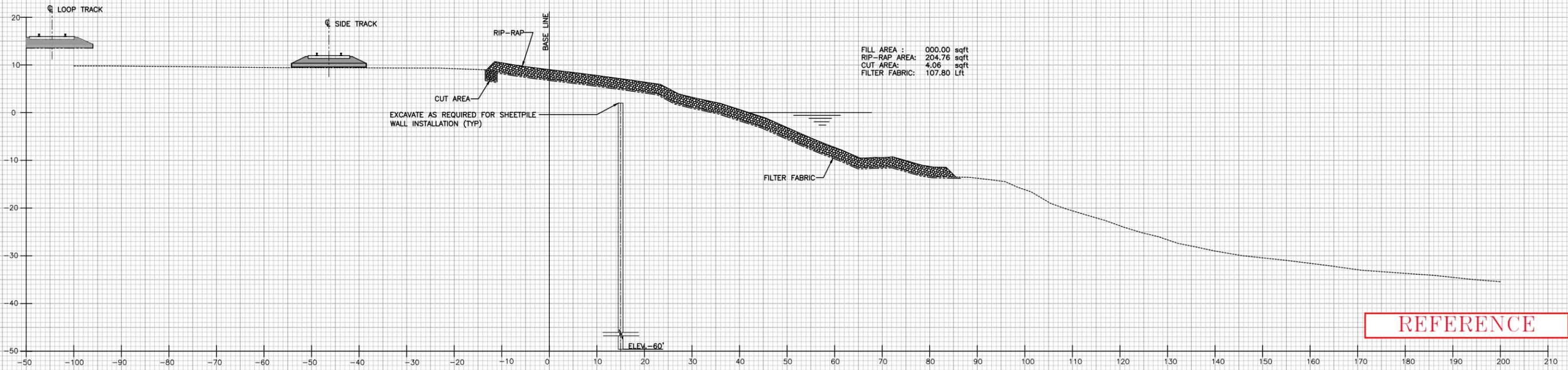
**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION
Gottlieb Barnett Bridges		CROSS SECTIONS STA10+00 & STA10+50
Drawn By: E.L.R.	Date: NOV. 98	
Checked By: R.S.G.	Date: MARCH 99	
Scale: NOTED	DRAWING NO. 1164-NCR11	0 REV.



**STATION 10+98**  
1"=10'



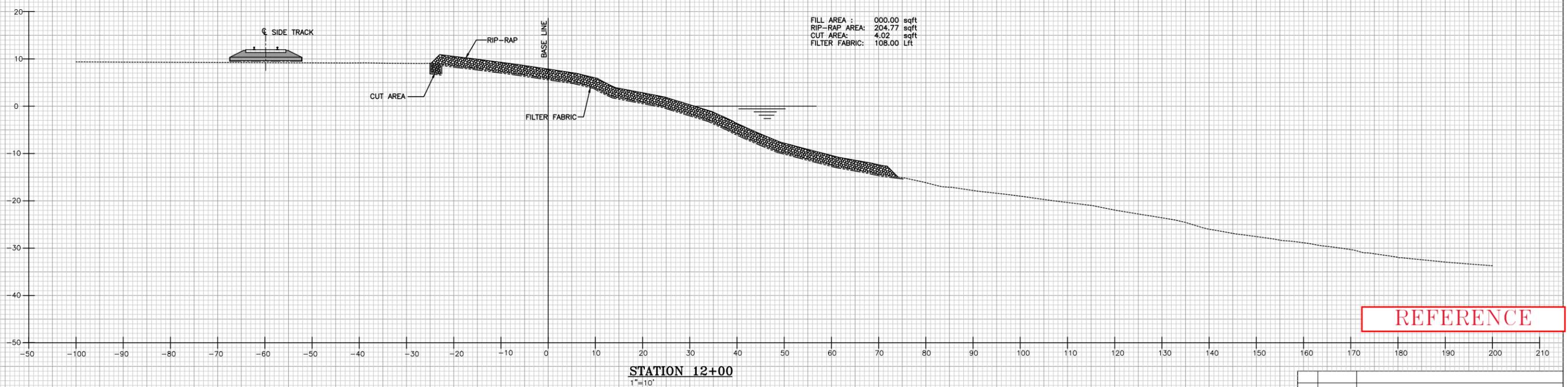
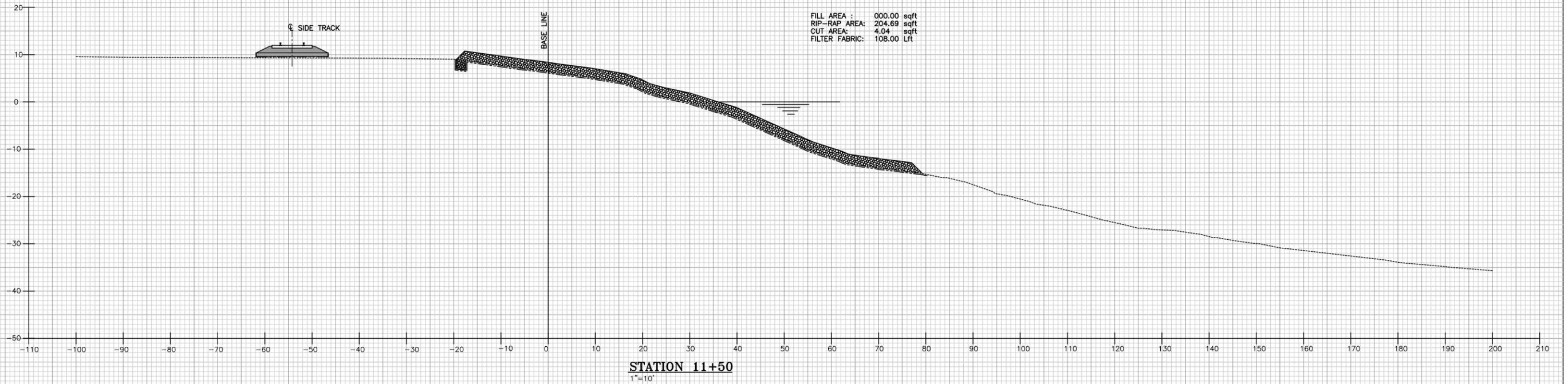
**STATION 11+00**  
1"=10'

REFERENCE

**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEKSTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
<small>MOBILE, ALABAMA</small>		
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>
<small>MOBILE, ALABAMA</small>		<b>CROSS SECTIONS</b>
<small>Drawn By: E.L.R.</small>	<small>Date: NOV. 98</small>	<b>STA.10+98 &amp; STA.12+00</b>
<small>Checked By: R.S.G.</small>	<small>Date: MARCH 99</small>	
<small>Scale: NOTED</small>	<small>DRAWING NO.</small>	<b>1164-NCR12</b>
		<small>0 REV.</small>

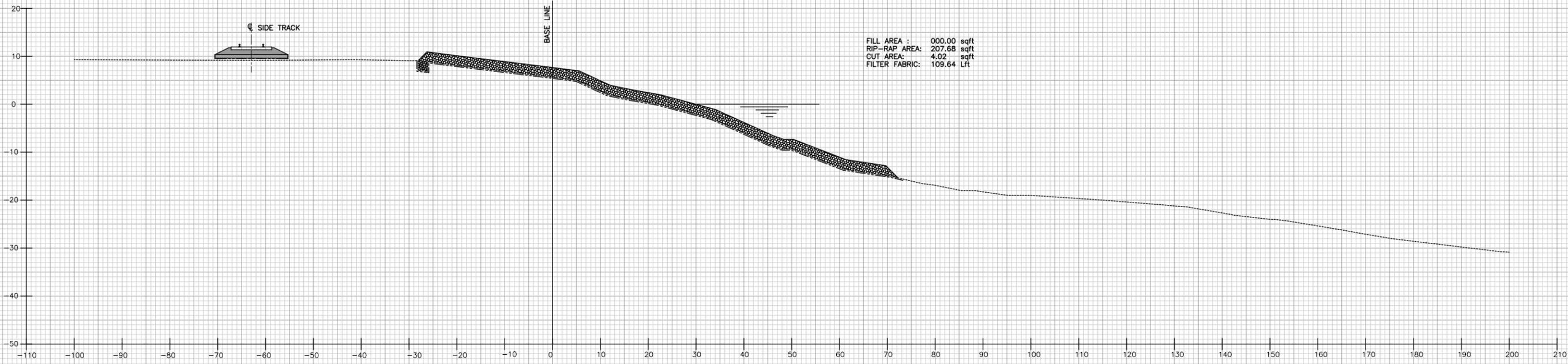


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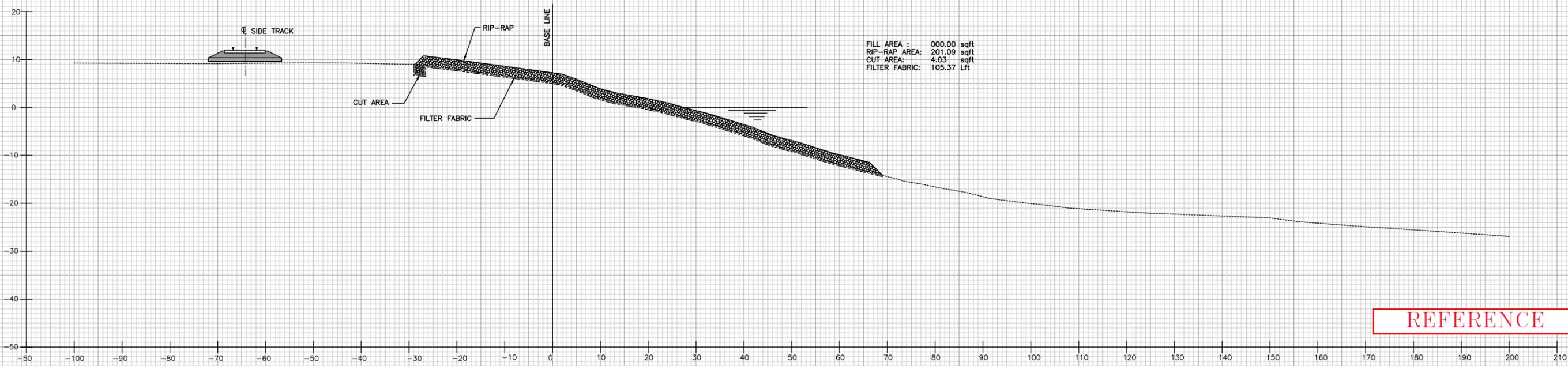
**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION	ELR
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE, ALABAMA		Gottlieb Barnett Bridges	
MOBILE, ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION	
Drawn By: E.L.R.		Date: NOV. 98	
Checked By: R.S.G.		Date: MARCH 99	
Scale: NOTED		DRAWING NO. 1164-NCR13	
		CROSS SECTIONS STA.11+50 & STA.12+00	
		0 REV.	



STATION 12+50  
1"=10'



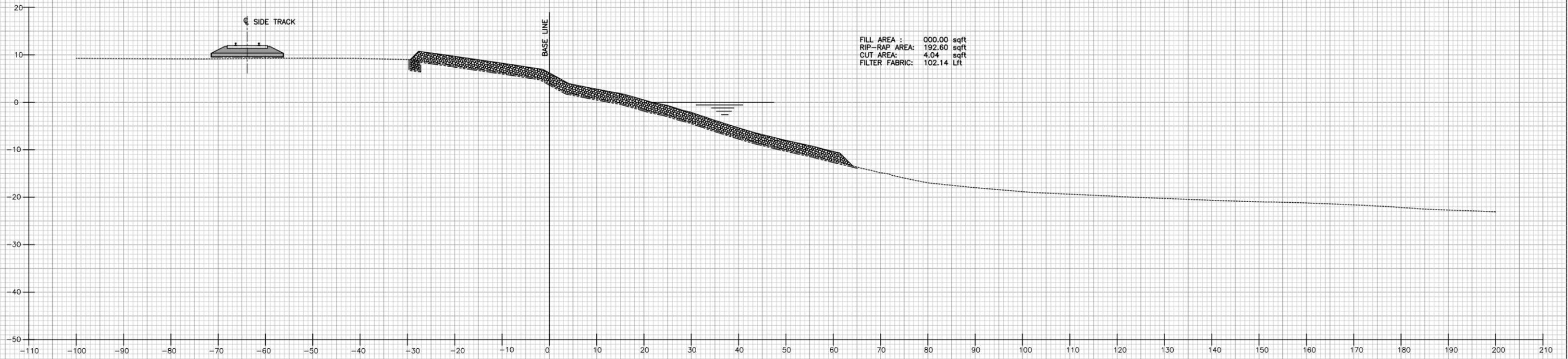
STATION 13+00  
1"=10'

REFERENCE

LEGEND

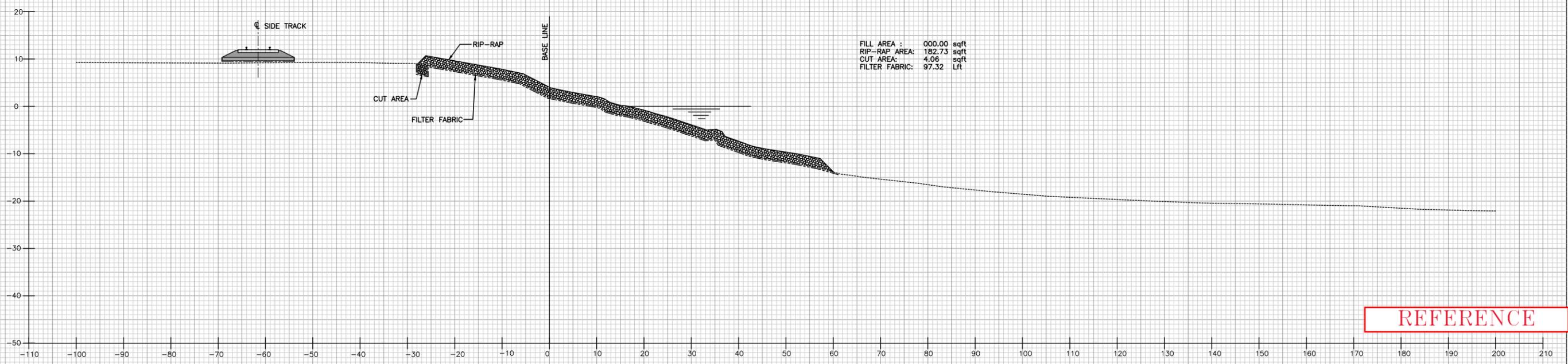
[Pattern]	FILL AREA	[Pattern]	RIP-RAP
[Pattern]	CUT AREA	[Pattern]	GEOTEXTILE
[Pattern]	BALLAST	[Pattern]	FINISHED GRADE
[Pattern]	SUB-BALLAST	[Pattern]	EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		
		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION
Drawn By: E.L.R.	Date: NOV. 98	
Checked By: R.S.G.	Date: MARCH 99	CROSS SECTIONS STA.12+50 & STA.13+00
Scale: NOTED	DRAWING NO. 1164-NCR14	0 REV.



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 192.60 sqft  
 CUT AREA: 4.04 sqft  
 FILTER FABRIC: 102.14 LF

STATION 13+50  
 1"=10'



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 182.73 sqft  
 CUT AREA: 4.06 sqft  
 FILTER FABRIC: 97.32 LF

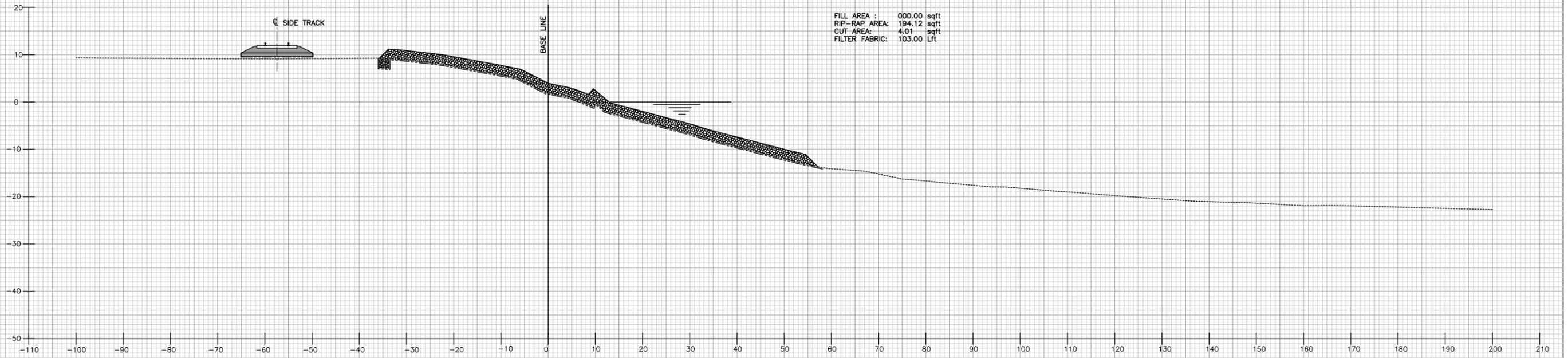
STATION 14+00  
 1"=10'

REFERENCE

**LEGEND**

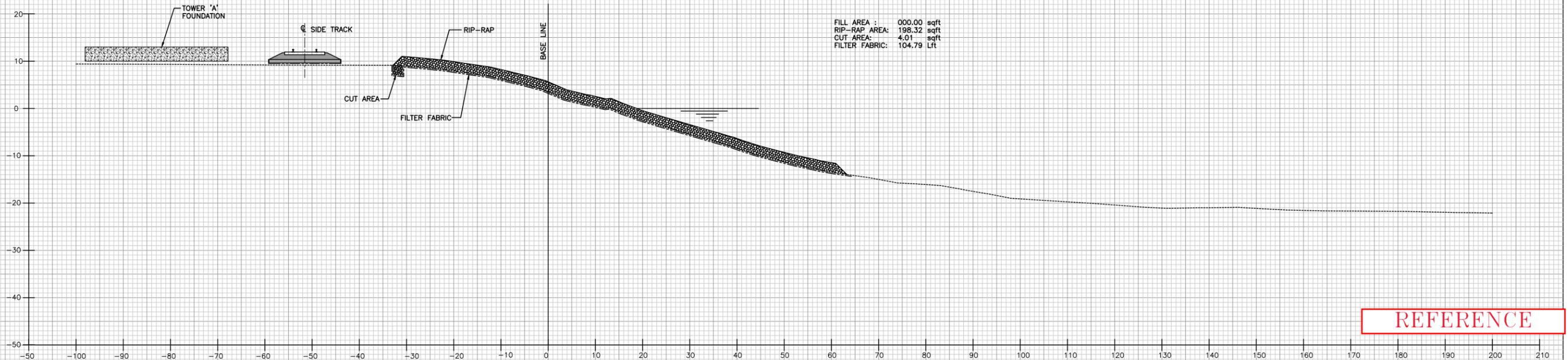
FILL AREA	RIP-RAP
CUT AREA	GEOTEXTILE
BALLAST	FINISHED GRADE
SUB-BALLAST	EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		Gottlieb Barnett Bridges
Drawn By: E.L.R. Date: NOV. 98		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION
Checked By: R.S.G. Date: MARCH 99		
Scale: NOTED		CROSS SECTIONS STA.13+50 & STA.14+00
DRAWING NO. 1164-NCR15		0 REV.



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 194.12 sqft  
 CUT AREA: 4.01 sqft  
 FILTER FABRIC: 103.00 Lft

**STATION 14+50**  
 1"=10'



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 198.32 sqft  
 CUT AREA: 4.01 sqft  
 FILTER FABRIC: 104.79 Lft

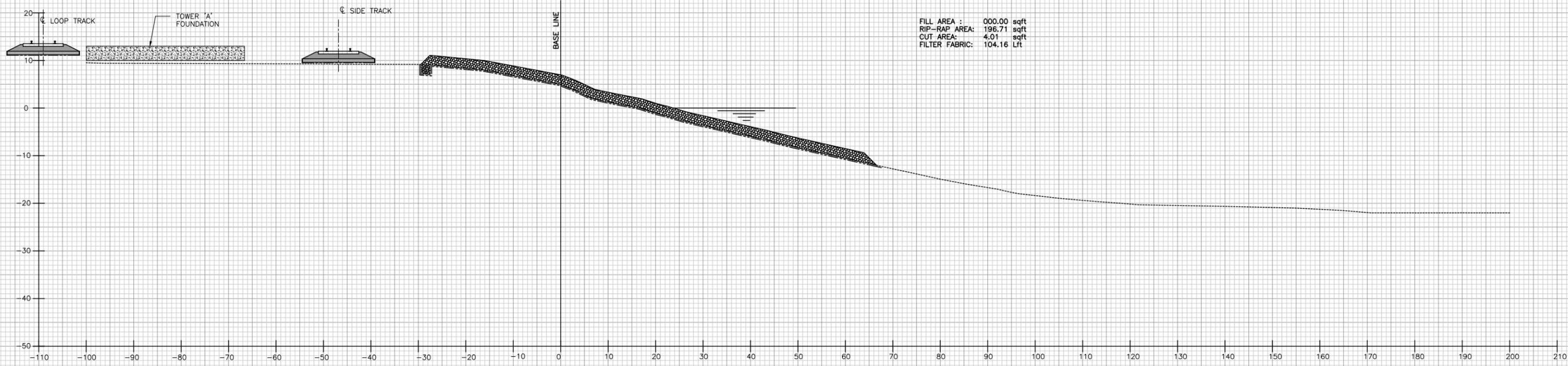
**STATION 15+00**  
 1"=10'

REFERENCE

**LEGEND**

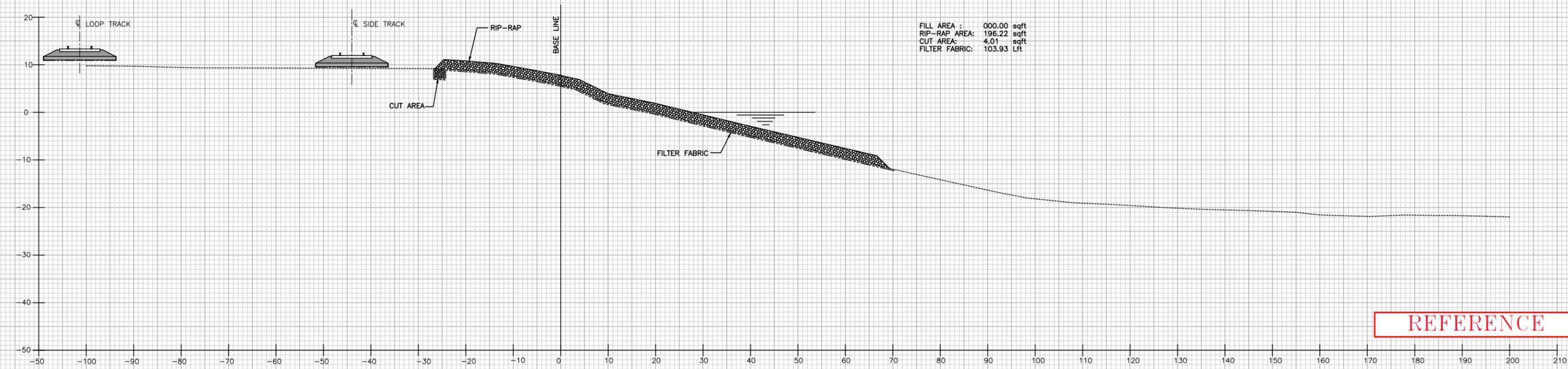
FILL AREA	RIP-RAP
CUT AREA	GEOTEXTILE
BALLAST	FINISHED GRADE
SUB-BALLAST	EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>
Drawn By: E.L.R.      Date: NOV. 98 Checked By: R.S.G.      Date: MARCH 99		<b>CROSS SECTIONS</b> <b>STA.14+50 &amp; STA.15+00</b>
Scale: NOTED	DRAWING NO.	<b>1164-NCR16</b> 0 REV.



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 196.71 sqft  
 CUT AREA: 4.01 sqft  
 FILTER FABRIC: 104.16 Lft

**STATION 15+32**  
 1"=10'



FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 196.22 sqft  
 CUT AREA: 4.01 sqft  
 FILTER FABRIC: 103.93 Lft

**STATION 15+50**  
 1"=10'

REFERENCE

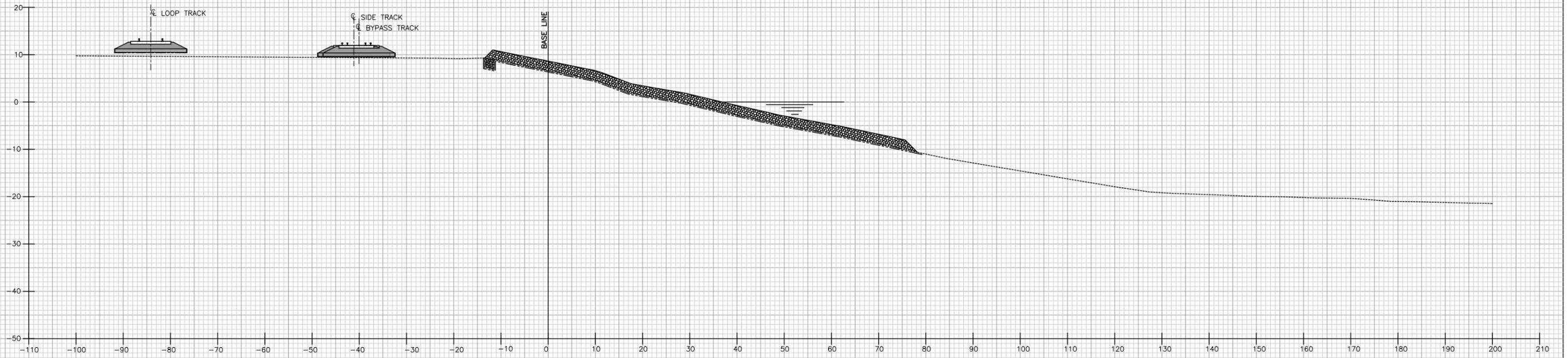
**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0		4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION	
ALABAMA STATE DOCKS DEPARTMENT			
MOBILE, ALABAMA		 <b>Gottlieb Barnett Bridges</b> ALABAMA	
Drawn By:	E.L.R.	Date:	NOV. 98
Checked By:	R.S.G.	Date:	MARCH 99
Scale:	NOTED	DRAWING NO.	1164-NCR17
			0 REV.

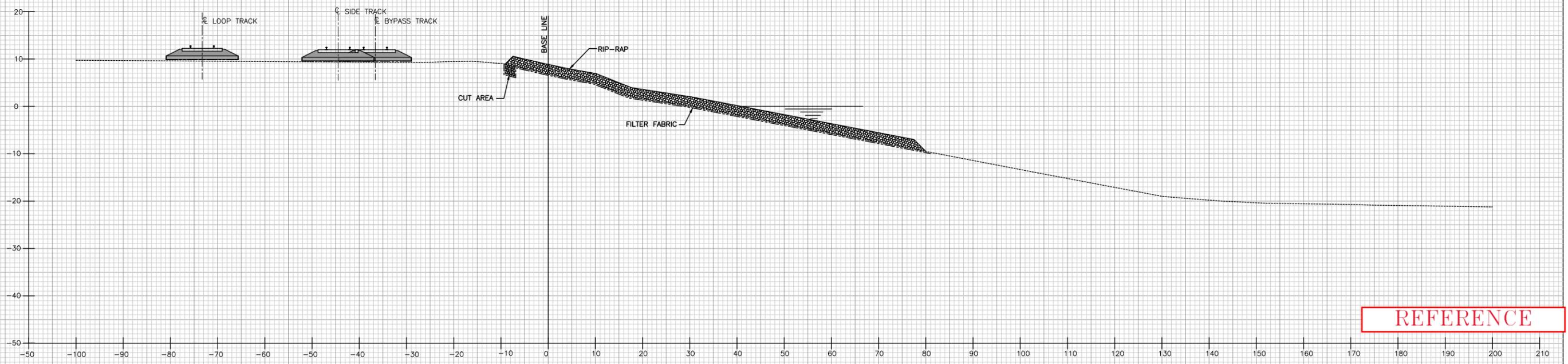
**GARROW'S BEND BULK  
 TERMINAL SHORELINE  
 REMEDIATION**

**CROSS SECTIONS  
 STA.15+32 & STA.15+50**



**STATION 16+00**  
1"=10'

FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 187.44 sqft  
 CUT AREA: 4.08 sqft  
 FILTER FABRIC: 99.43 Lft



**STATION 16+50**  
1"=10'

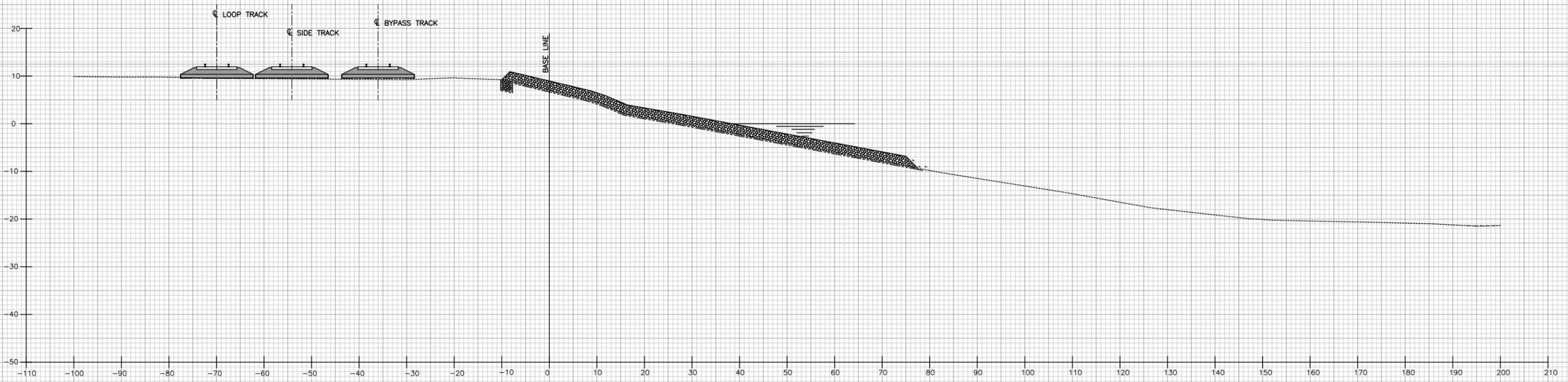
FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 182.18 sqft  
 CUT AREA: 4.12 sqft  
 FILTER FABRIC: 96.80 Lft

REFERENCE

**LEGEND**

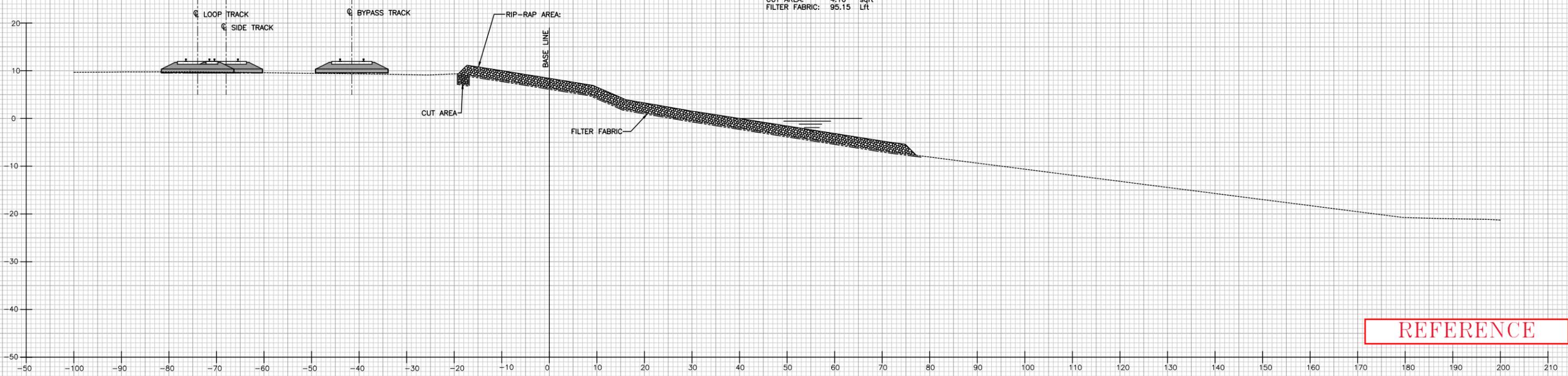
FILL AREA	RIP-RAP
CUT AREA	GEOTEXTILE
BALLAST	FINISHED GRADE
SUB-BALLAST	EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE, ALABAMA		Gottlieb Barnett Bridges
MOBILE, ALABAMA		GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION
Drawn By: E.L.R. Date: NOV. 98		CROSS SECTIONS
Checked By: R.S.G. Date: MARCH 99		STA.16+00 & STA.16+50
Scale: NOTED	DRAWING NO. 1164-NCR18	0 REV.



**STATION 17+00**  
1"=10'

FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 178.97 sqft  
 CUT AREA: 4.10 sqft  
 FILTER FABRIC: 95.15 Lft



**STATION 17+50**  
1"=10'

FILL AREA : 000.00 sqft  
 RIP-RAP AREA: 195.93 sqft  
 CUT AREA: 4.06 sqft  
 FILTER FABRIC: 103.50 Lft

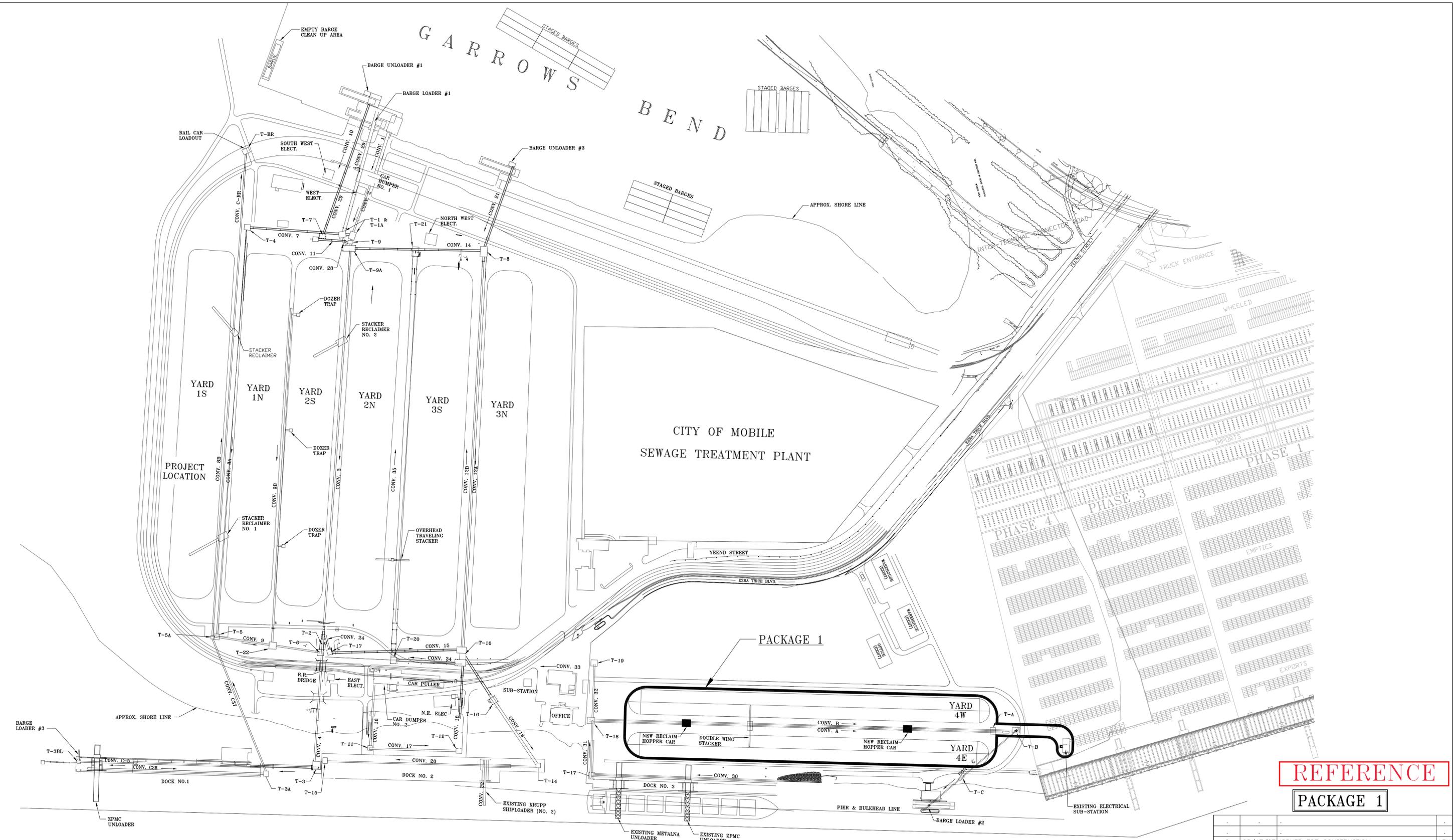
REFERENCE

**LEGEND**

	FILL AREA		RIP-RAP
	CUT AREA		GEOTEXTILE
	BALLAST		FINISHED GRADE
	SUB-BALLAST		EXISTING GRADE

0	4/99	ISSUED FOR CONSTRUCTION
<b>REV.</b>	<b>DATE</b>	<b>DESCRIPTION</b>
<b>ALABAMA STATE DOCKS DEPARTMENT</b>		
<small>MOBILE, ALABAMA</small>		<small>ALABAMA</small>
		<b>GARROW'S BEND BULK TERMINAL SHORELINE REMEDIATION</b>
<small>MOBILE ALABAMA</small>		<b>CROSS SECTIONS STA.17+00 &amp; STA.17+50</b>
<small>Drawn By:</small> E.L.R.	<small>Date:</small> NOV. 98	
<small>Checked By:</small> R.S.G.	<small>Date:</small> MARCH 99	
<small>Scale:</small> NOTED	<small>DRAWING NO.</small> 1164-NCR19	<small>0 REV.</small>

# GARROWS BEND

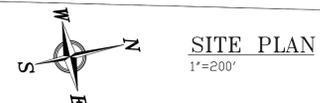


**REFERENCE**

**PACKAGE 1**

0	08/17/07	ISSUED FOR CONSTRUCTION	LRH
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
<b>Shaw Shaw GBB, LLC</b>		<b>McDUFFIE TERMINALS</b> 2007/08 EXP - PKG 1 <b>GENERAL</b>	
Drawn By: L.R.H. Date: 06/12/07 Checked By: J.E.J. Date: 06/18/07 Scale: 1"=200'		<b>LOCATION PLAN</b> Drawing No. <b>G3</b> REV. <b>0</b>	

## MOBILE SHIP CHANNEL





# ALABAMA STATE PORT AUTHORITY

## McDUFFIE TERMINAL BARGE LOADOUT RELOCATION PROJECT

BOB RILEY, GOVERNOR OF ALABAMA  
JAMES K. LYONS, DIRECTOR



Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers  
MOBILE, AL.

REFERENCE

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1723-T2	INDEX OF DRAWINGS AND GENERAL NOTES
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1723-G2	ENLARGED SITE PLAN
1723-G3	CONVEYOR "A" GENERAL ARRANGEMENT
1723-G4	CONVEYOR "B" GENERAL ARRANGEMENT
1723-G5	CONVEYOR "C" GENERAL ARRANGEMENT
1723-G6	LOADING DOCK PLAN & SECTION

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1723-D1	EXISTING DOCK & BRIDGE DEMOLITION
---------	-----------------------------------

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1723-CV2	PILENG SCHEDULE & DETAILS
1723-CV3	PILE LOCATION PLAN
1723-CV4	PILE LOCATION PLAN
1723-CV5	PRESTRESSED PILE DETAILS
1723-CV6	SOIL BORING PLAN & DETAILS

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1723-C2	CONCRETE STANDARD DETAILS
1723-C3	FOUNDATION LOCATION PLAN
1723-C4	FOUNDATION LOCATION PLAN
1723-C5	CONVEYOR "A" DRIVE STRUCTURE FOUNDATION DETAILS
1723-C6	CONVEYOR "B" DRIVE STRUCTURE FOUNDATION DETAILS
1723-C7	CONVEYOR "C" DRIVE FOUNDATION DETAILS
1723-C8	CONVEYOR "A" & "B" TAKE-UP STRUCTURE FOUNDATION DETAILS
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1723-C10	CONVEYOR "C" BENT FOUNDATION DETAILS
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1723-C20	DOCK & BRIDGE FOUNDATION PLAN
1723-C21	OUTBOARD MOORING FOUNDATION PLAN
1723-C22	DOCK FOUNDATION SECTIONS & DETAILS
1723-C23	DOCK STRUCTURE FENDERING SYSTEM
1723-C24	DOCK STRUCTURE FENDERING DETAILS
1723-C25	OUTBOARD MOORING FENDERING DETAILS
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1723-S3	STEEL STAIR STANDARDS
1723-S4	STEEL HANDRAIL DETAILS
1723-S4A	STEEL GRATING AND FENCING DETAILS
1723-S5	CONVEYOR "A" DRIVE STRUCTURE PLANS & ELEVATIONS
1723-S6	CONVEYOR "A" SECTIONS & DETAILS
1723-S7	CONVEYOR "B" DRIVE STRUCTURE PLANS & ELEVATIONS
1723-S8	CONVEYOR "B" SECTIONS & DETAILS
1723-S9	CONVEYOR "A" & "B" TAKE-UP STRUCTURE PLANS & ELEVATIONS
1723-S10	NOT USED
1723-S11	CONVEYOR "C" TAKE-UP STRUCTURE PLANS & ELEVATIONS
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1723-S19	OPERATOR'S CAB SUPPORT STRUCTURE SECTIONS & DETAILS
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1723-M3	CONVEYOR "A" TAKE-UP DETAILS
1723-M4	NOT USED
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1723-M7	CONVEYOR "B" DRIVE STRUCTURE EQUIPMENT PLAN & ELEVATIONS
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1723-M9	CONVEYOR "C" PLAN & ELEVATIONS
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1723-M14	CONVEYOR "B" EQUIPMENT SUPPORT FOUNDATION
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1723-U2	CONVEYORS "A" & "B" UTILITY PLANS & ELEVATIONS
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1723-E4A	EXISTING ELECTRICAL AC-ONE LINE DIAGRAM
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1723-E5A	EXISTING PANELBOARD & FEEDER SCHEDULE
1723-E6	NEW MCC SCHEDULE & LAYOUT
1723-E6A	EXISTING MCC SCHEDULE & LAYOUT
1723-E7	CONTROL CONDUCTOR SCHEDULE
1723-E8	ELECTRICAL BUILDING LAYOUT
1723-E9	BARGE LOADOUT OPERATORS CONTROL CAB
1723-E10	CONVEYOR "A" CABLE TRAY LAYOUT
1723-E11	CONVEYOR "A" ELECTRICAL LAYOUT
1723-E12	CONVEYOR "B" CABLE TRAY LAYOUT
1723-E13	CONVEYOR "B" ELECTRICAL LAYOUT
1723-E14	CONVEYOR "C" CABLE TRAY PARTIAL PLAN
1723-E15	CONVEYOR "C" CABLE TRAY PARTIAL PLAN
1723-E16	CONVEYOR "C" CABLE TRAY PARTIAL PLAN
1723-E17	CONVEYOR "C" PLANS & ELEVATIONS
1723-E18	CONVEYOR "C" PARTIAL PLANS
1723-E19	OPERATORS CAB SUPPORT STRUCTURE CABLE TRAY LAYOUT
1723-E20	OPERATORS CAB SUPPORT STRUCTURE ELECTRICAL LAYOUT
1723-E21	BARGE HAULING SYSTEM ELECTRICAL ARRANGEMENT
1723-E22	OPERATORS CHAIR CONTROL CONSOLE
1723-E23	'TS' BLDG INTERFACE SECTIONS AND DETAILS

### DESIGN CODES & STANDARDS

INTERNATIONAL BUILDING CODE (2000 EDITION)  
 AISC MANUAL OF STEEL CONSTRUCTION, 9TH EDITION  
 BUILDING CODE REQUIREMENTS FOR REINFORCING CONCRETE ACI-318-02  
 AMERICAN WELDING SOCIETY (AWS D1.1)  
 AMERICAN SOCIETY OF CIVIL ENGINEERS "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" - ASCE 7

### DESIGN LOADS

WIND LOAD: (STRUCTURES)	130 MPH BASIC WIND SPEED EXPOSURE CATEGORY : C IMPORTANCE FACTOR : 1.0
WIND LOAD: (BARGE)	50 MPH BASIC WIND SPEED
DEAD LOAD:	WEIGHT OF STRUCTURE WEIGHT OF EMPTY MACHINERY
LIVE LOAD:	FLOOR - 100psf DOCK - 650 psf CONVEYOR - 107 plf
BERTHING LOAD:	BERTHING VELOCITY = 0.75 FT/SEC K=1.0 MAXIMUM WEIGHT = 1500 TON LENGTH = 195 FT MAXIMUM DRAUGHT = 12 FT MAXIMUM BEAM = 35 FT

### DATUM

- 250 FT. GRID BASED ON ALABAMA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 1927 REFERENCING USCOE MONUMENT "21A-6H & 21A-6J".
- ELEVATIONS BASED ON MLW, 1929 REFERENCING NGS MONUMENT "CHOCTAW POINT - 1", ELEV 9.23 MLW.
- CHANNEL TOE FROM DATA SUPPLIED BY USCOE MOBILE AREA OFFICE.
- FLOOD ELEVATION FOR SITE IS (+) 12.0 FEET MLW.

### CONSTRUCTION SEQUENCE REQUIREMENTS

- THE SCHEDULED OUTAGE FOR THE SWITCHOVER FROM THE EXISTING BARGE LOADING STATION TO THE NEW BARGE LOADING STATION SHALL BEGIN NO LATER THAN FRIDAY, JULY 15, 2005. THE DURATION OF THE OUTAGE SHALL BE NO MORE THAN 21 CALENDAR DAYS. AND THE NEW LOAD-OUT STATION SHALL BE FULLY TESTED AND OPERATIONAL NO LATER THAN AUGUST 12, 2005.
- EXISTING CONVEYORS "A" AND "B" MUST REMAIN IN OPERATION DURING THE ENTIRE CONSTRUCTION PERIOD LEADING UP TO THE SCHEDULED OUTAGE. CONTRACTOR SHALL PROVIDE SHORING FOR THE EXISTING CONVEYORS AS REQUIRED TO ALLOW FOR CONTINUED OPERATION OF THE CONVEYORS AND FOR THE CONSTRUCTION OF THE NEW FOUNDATIONS AND STRUCTURES. THE NEW DRIVE AND TAKE-UP STRUCTURES FOR CONVEYORS "A" & "B" SHALL BE CONSTRUCTED TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO THE SCHEDULED OUTAGE.
- THE NEW DOCK STRUCTURE AND ALL OTHER NEW MARINE STRUCTURES, INCLUDING THE ASSOCIATED MECHANICAL AND ELECTRICAL INSTALLATIONS, SHALL BE COMPLETE AND TESTED TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO THE SCHEDULED OUTAGE.
- THE NEW CONVEYOR "C" SHALL BE COMPLETE AND TESTED TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO THE SCHEDULED OUTAGE.
- DEMOLITION OF THE EXISTING DOCK STRUCTURE, BRIDGE AND PILING AS INDICATED ON DRAWING D1 SHALL BEGIN AFTER THE OWNER COMPLETES THE REMOVAL OF THE STEEL STRUCTURE, CONVEYORS AND ASSOCIATED MECHANICAL AND ELECTRICAL EQUIPMENT. REMOVAL OF THESE ITEMS BY THE OWNER IS SCHEDULED TO BE COMPLETED BY SEPTEMBER 30, 2005. THE DEMOLITION WORK INDICATED ON DRAWING D1 SHALL BE PRICED AS AN ADDITIVE ALTERNATE BY THE CONTRACTOR.

### GENERAL NOTES:

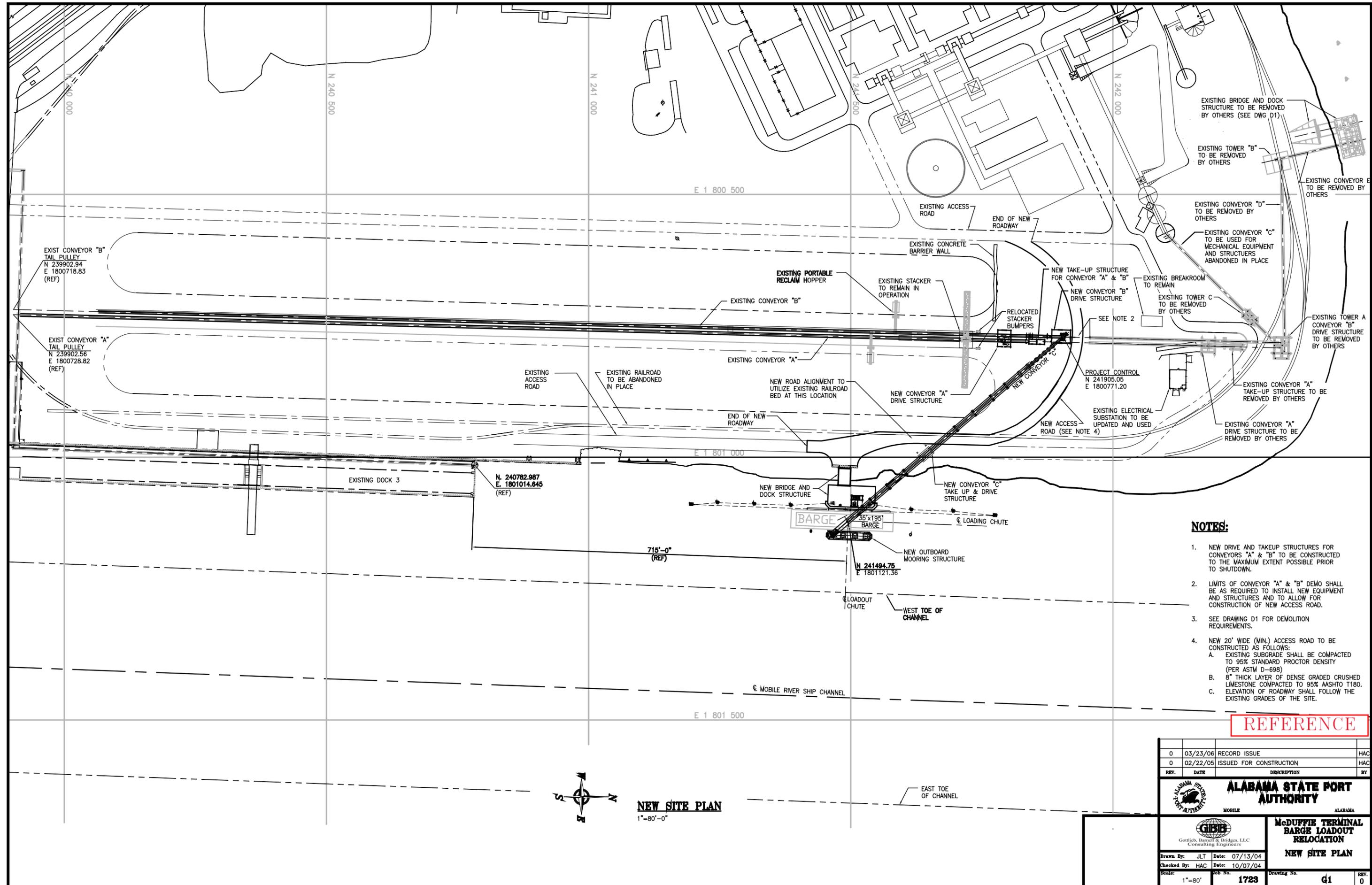
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING THE ACTUAL EXISTING CONDITIONS AND HOW THEY AFFECT THE REQUIRED WORK PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCY NOTED BETWEEN ACTUAL CONDITIONS AND THOSE DESCRIBED BY THESE DRAWINGS SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER. NO ADDITIONAL COST ASSOCIATED WITH THE MODIFICATIONS TO THE SCOPE OF WORK REQUIRED DUE TO INACCURATE EXISTING CONDITIONS AS SHOWN BY THESE DRAWINGS WILL BE CONSIDERED UNLESS SAID CONDITIONS HAVE BEEN BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO RECEIVING BIDS.
- CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE ALABAMA STATE PORT AUTHORITY.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL BUILDING CODES AND ORDINANCES.
- AT ALL TIMES, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PERSONS AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEW OF THESE CONDITIONS. THE ENGINEER'S JOB SITE REVIEW IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AN EROSION CONTROL PLAN INDICATING THE NECESSARY SILT FENCES AND HAY BALES AS REQUIRED TO PREVENT STORM WATER RUN-OFF INTO THE ADJACENT WATERWAYS DURING CONSTRUCTION.
- THE PHYSICAL ADDRESS OF THE JOB SITE IS:  
 McDUFFIE COAL TERMINAL  
 EZRA TRICE BLVD.  
 MOBILE, AL 36603

### COATING NOTES:

- ALL STEEL SURFACES NOT INDICATED TO BE HOT DIP GALVANIZED, EXCEPT FOR MACHINED ITEMS, SHALL BE SHOP PAINTED. PAINT SYSTEM SHALL BE AS FOLLOWS:  
 PRIME COAT      MOZINC-3      3 mil DFT  
 INTERMEDIATE COAT      MOPOXY HB 40AW13      5 mil DFT  
 TOP COAT      MOTHANE HS900 72AJ22      2.5 mil DFT  
 \*\*TOP COAT SHALL BE STATE DOCKS GREEN TO MATCH EXISTING PAINTED STRUCTURES
- ALL STEEL SURFACES TO BE PAINTED SHALL BE BLAST CLEANED TO NEAR-WHITE CONDITION IN ACCORDANCE WITH SSPC-SP 10.
- THE INSIDE FACES OF THE CHUTE WALLS SHALL BE PAINTED PRIOR TO INSTALLATION OF THE WEAR PLATES. WEAR PLATES ARE NOT REQUIRED TO BE PAINTED.

## REFERENCE

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b>			
MOBILE ALABAMA			
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By:	JLT	Date:	10/01/04
Checked By:	HAC	Date:	10/07/04
Scale:	NA	Job No.	1723
			Drawing No. <b>T2</b>
			REV. <b>0</b>

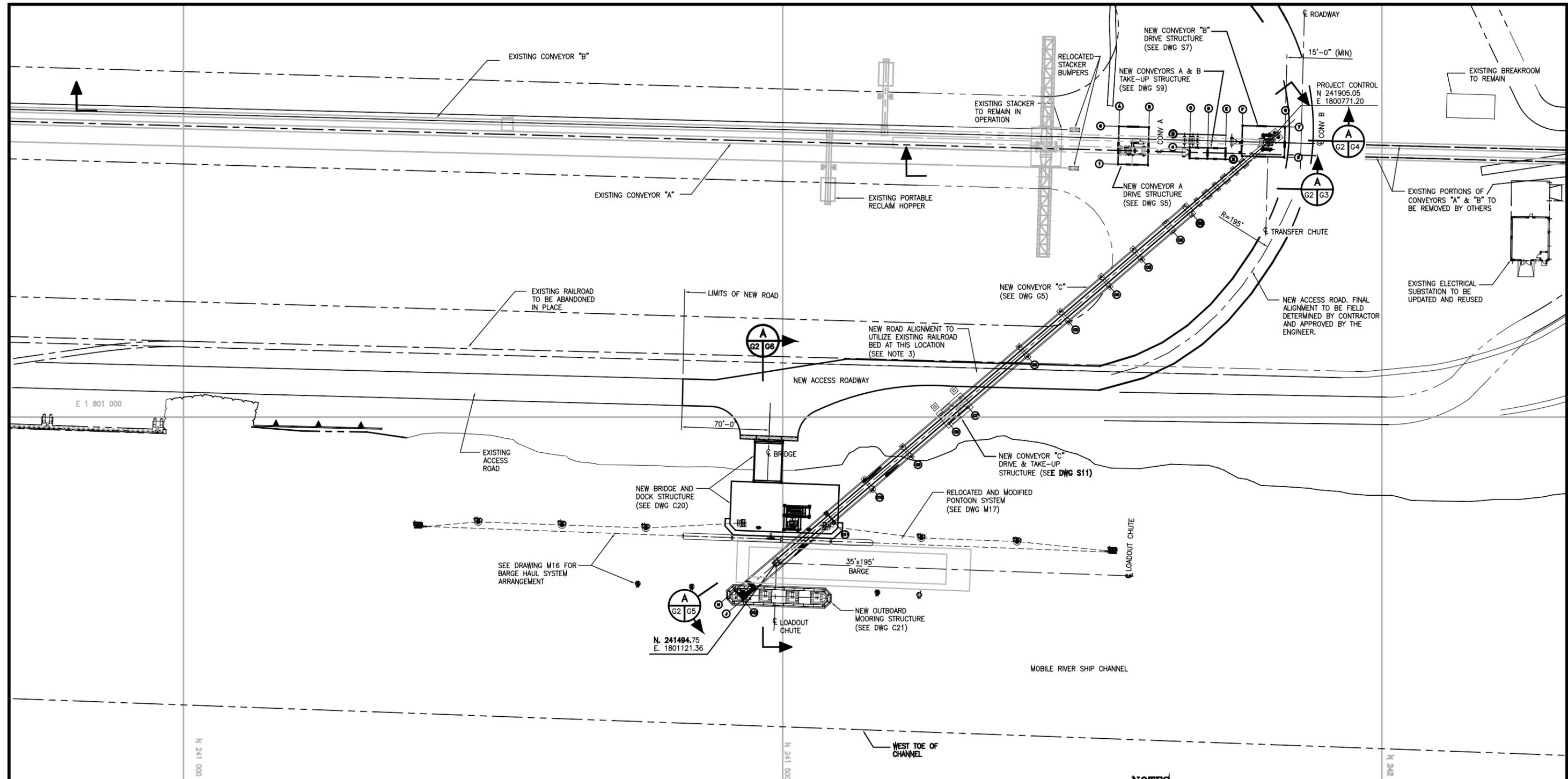


**NEW SITE PLAN**  
1"=80'-0"

- NOTES:**
1. NEW DRIVE AND TAKEUP STRUCTURES FOR CONVEYORS "A" & "B" TO BE CONSTRUCTED TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO SHUTDOWN.
  2. LIMITS OF CONVEYOR "A" & "B" DEMO SHALL BE AS REQUIRED TO INSTALL NEW EQUIPMENT AND STRUCTURES AND TO ALLOW FOR CONSTRUCTION OF NEW ACCESS ROAD.
  3. SEE DRAWING D1 FOR DEMOLITION REQUIREMENTS.
  4. NEW 20' WIDE (MIN.) ACCESS ROAD TO BE CONSTRUCTED AS FOLLOWS:
    - A. EXISTING SUBGRADE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY (PER ASTM D-698)
    - B. 8" THICK LAYER OF DENSE GRADED CRUSHED LIMESTONE COMPACTED TO 95% AASHTO T180.
    - C. ELEVATION OF ROADWAY SHALL FOLLOW THE EXISTING GRADES OF THE SITE.

**REFERENCE**

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
<b>GIBB</b> Gottlieb, Barson & Bridges, LLC Consulting Engineers			
Drawn By: JLT		Date: 07/13/04	
Checked By: HAC		Date: 10/07/04	
Scale: 1"=80'	Job No. 1723	Drawing No. G1	REV. 0



**ENLARGED GENERAL PROJECT SITE PLAN**  
1"=40'-0"

**NOTES:**

1. NEW DRIVE AND TAKEUP STRUCTURE FOR CONVEYORS "A" & "B" TO BE CONSTRUCTED TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO SHUTDOWN.
2. LIMITS OF CONVEYOR A & B DEMO SHALL BE AS REQUIRED TO INSTALL NEW EQUIPMENT AND STRUCTURES AND TO ALLOW FOR CONSTRUCTION OF NEW ACCESS ROAD.
3. AT LOCATIONS WHERE NEW ROADWAY UTILIZES EXISTING RAILROAD BED, CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING TRACK AND CROSS TIES, AND GRADE EXISTING RAILROAD BED AS REQUIRED TO ACCOMMODATE THE NEW ROADWAY REQUIREMENTS.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

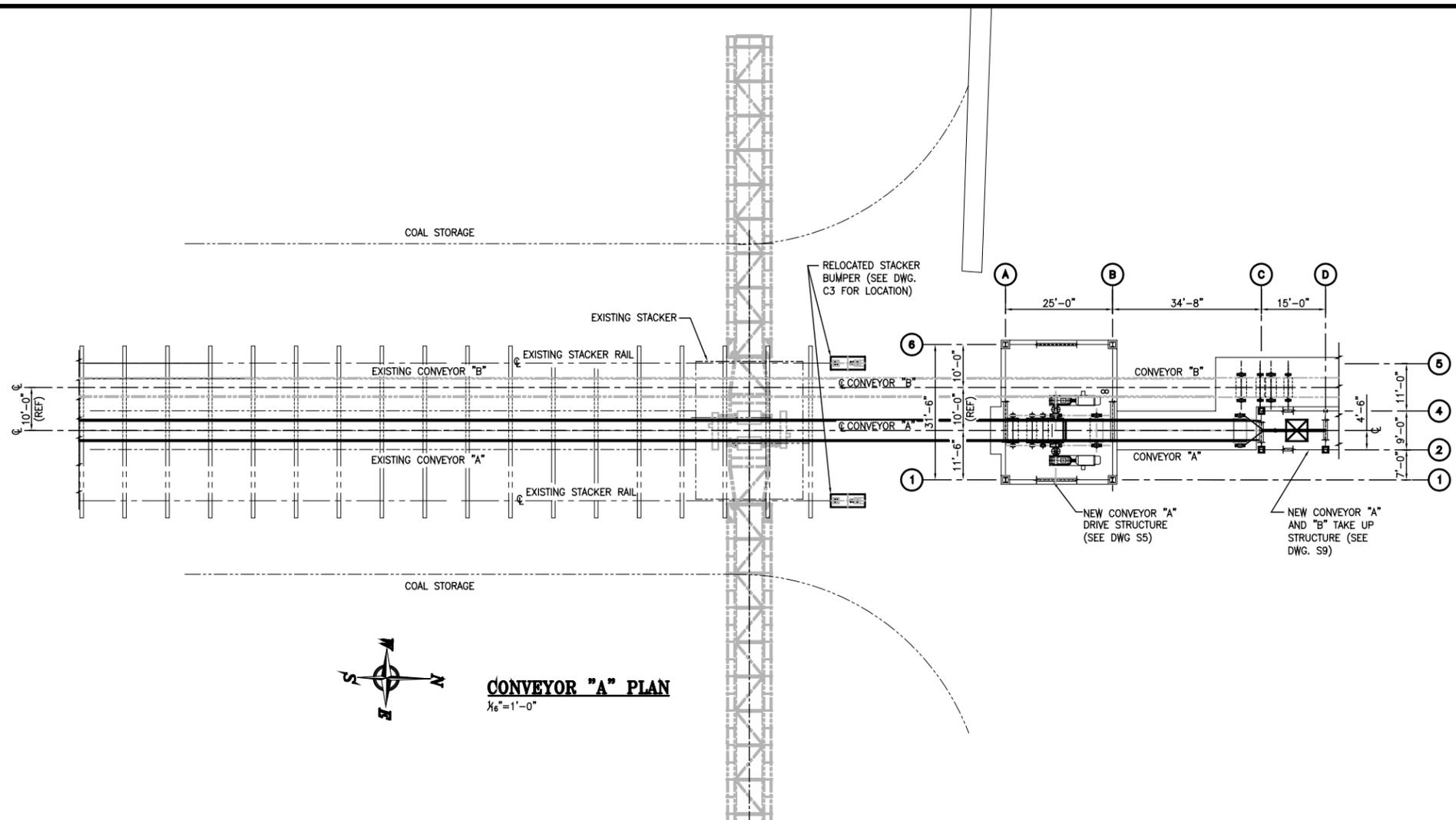
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

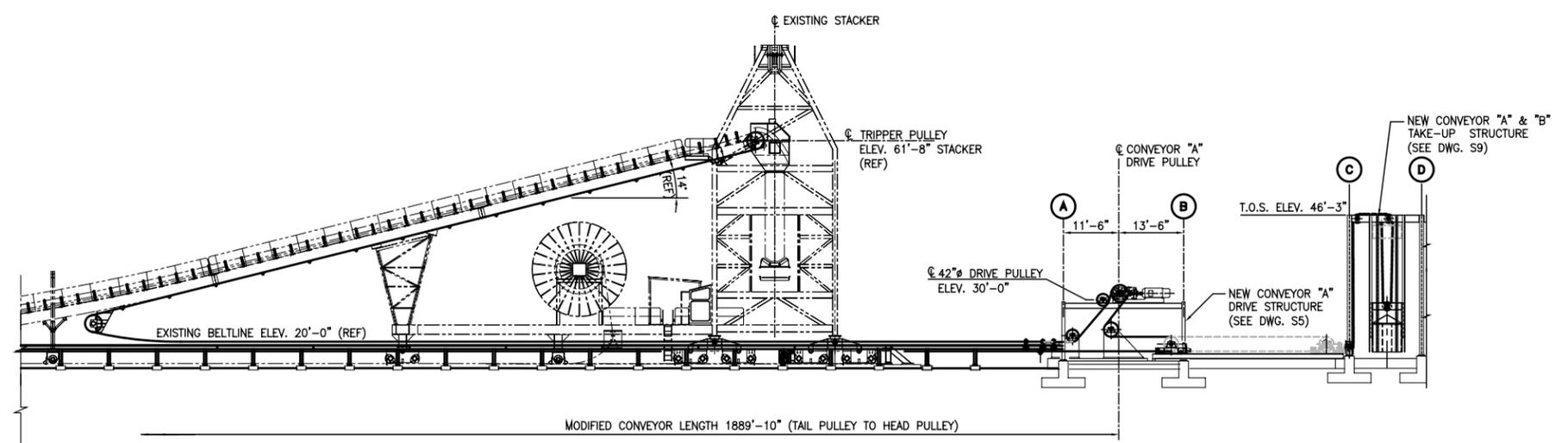
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

Drawn By: JLT Date: 10/12/04  
Checked By: HAC Date: 10/29/04  
Scale: 1"=40'-0" Job No. 1723 Drawing No. G2 REV. 0

**ENLARGED SITE PLAN**



**CONVEYOR "A" PLAN**  
 $\frac{1}{8}'' = 1' - 0''$

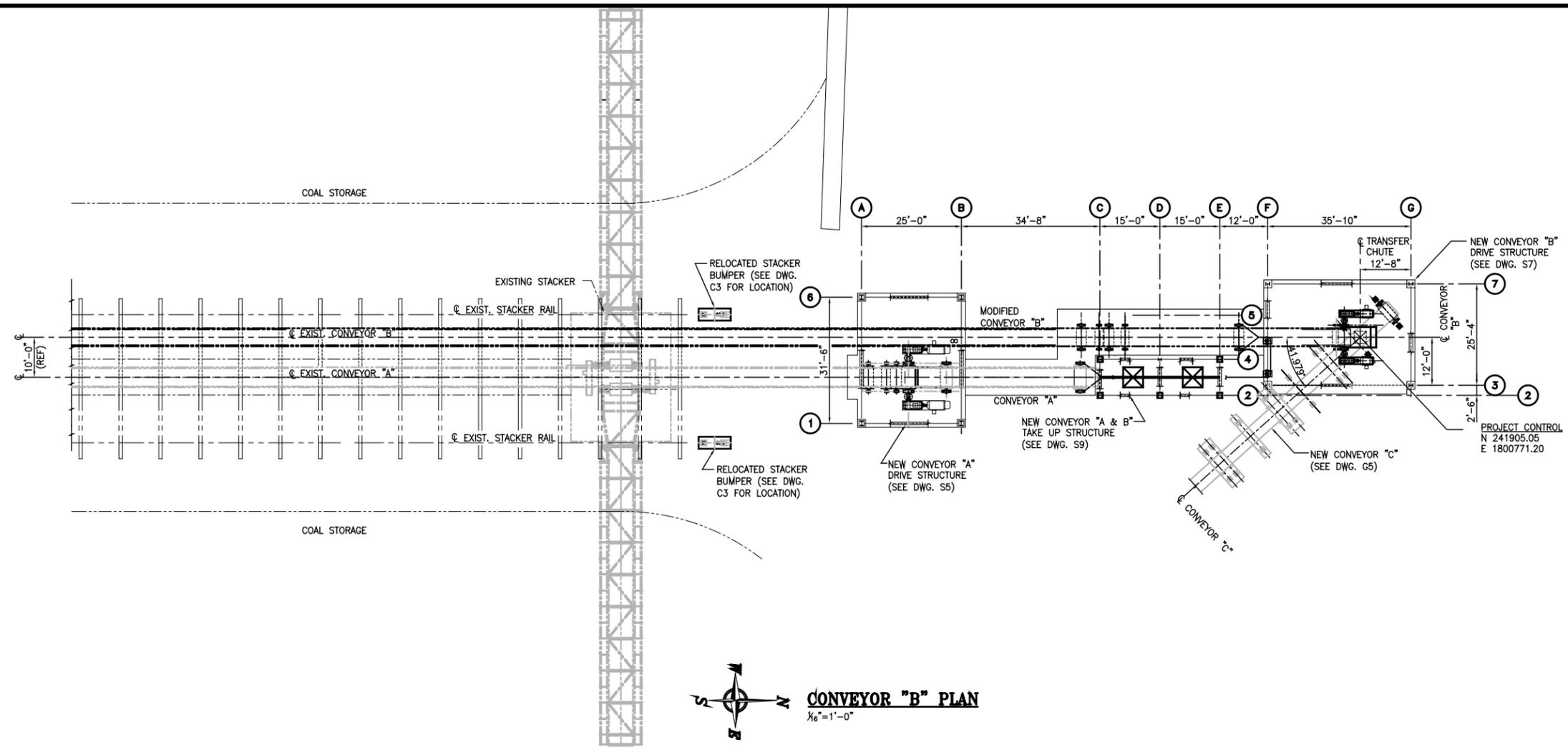


**SECTION A**  
 $\frac{1}{8}'' = 1' - 0''$

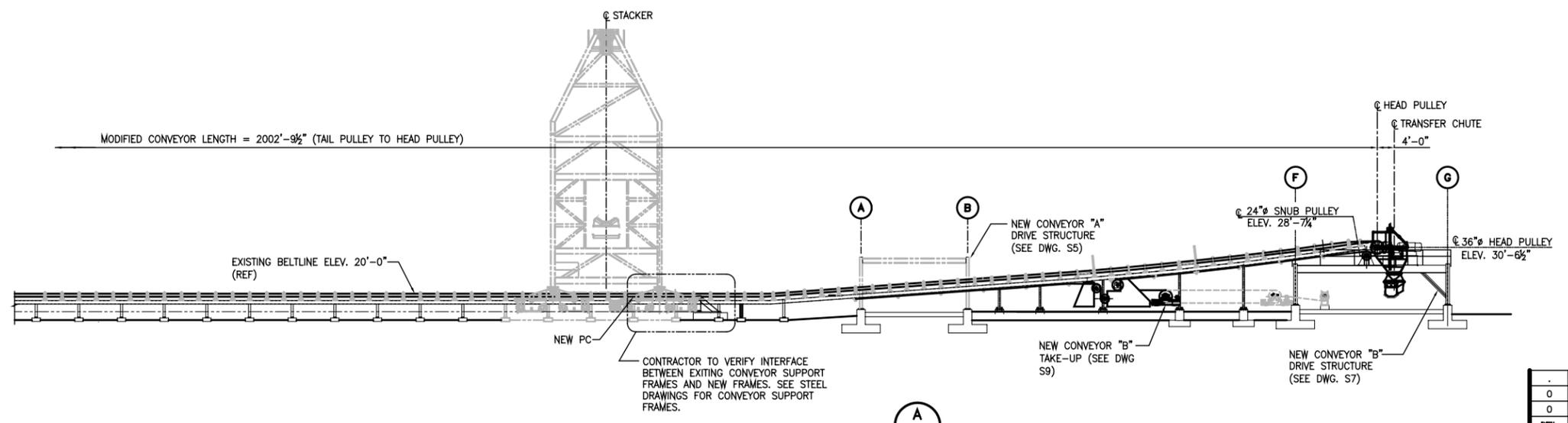
**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b>          MOBILE ALABAMA</p>	
<p><b>GIBB</b>          Gottlieb, Barnett &amp; Bridges, LLC          Consulting Engineers</p>	
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>  <b>CONVEYOR "A" GENERAL ARRANGEMENT</b></p>	
Drawn By: JLT Checked By: HAC Scale: NOTED	Date: 7/28/04 Date: 10/29/04 Job No. 1723 Drawing No. G3 REV. 1



**CONVEYOR "B" PLAN**  
 $\frac{1}{16}'' = 1'-0''$

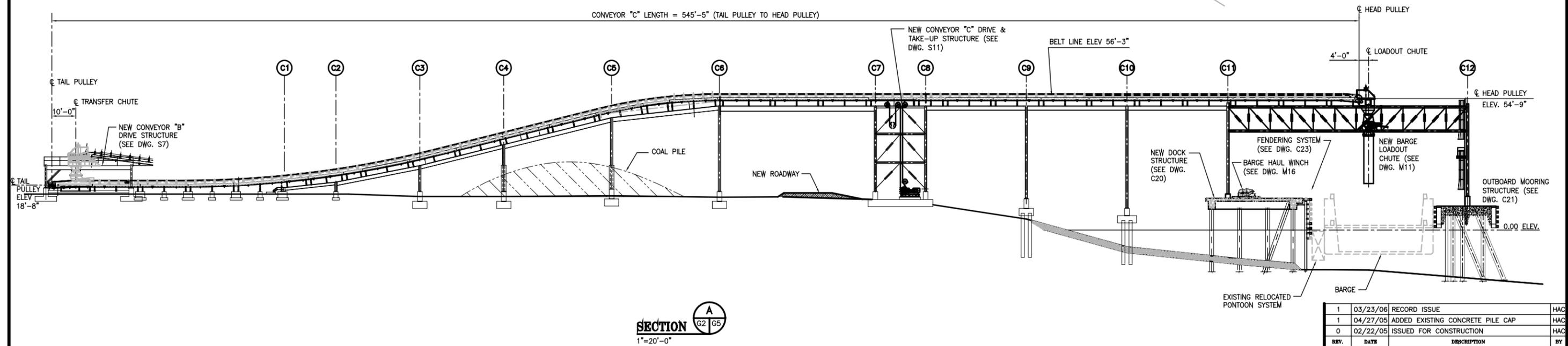
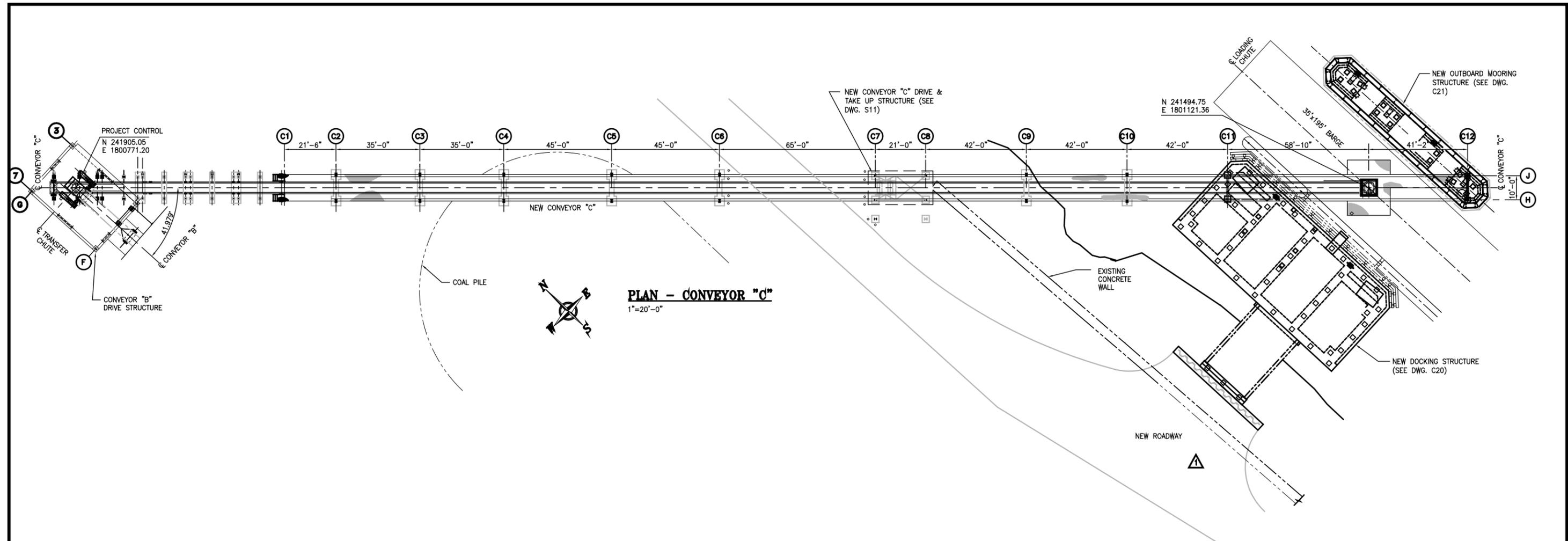


**SECTION A**  
 $\frac{1}{16}'' = 1'-0''$

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b>          MOBILE ALABAMA</p>	
<p><b>GIBB</b>          Gottlieb, Barnett &amp; Bridges, LLC          Consulting Engineers</p>	
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b></p> <p><b>CONVEYOR "B" GENERAL ARRANGEMENT</b></p>	
Drawn By: JLT Checked By: HAC Scale: 1/16" = 1'-0"	Date: 7/28/04 Date: 10/29/04 Job No. 1723 Drawing No. G4 REV. 0



REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	04/27/05	ADDED EXISTING CONCRETE PILE CAP	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

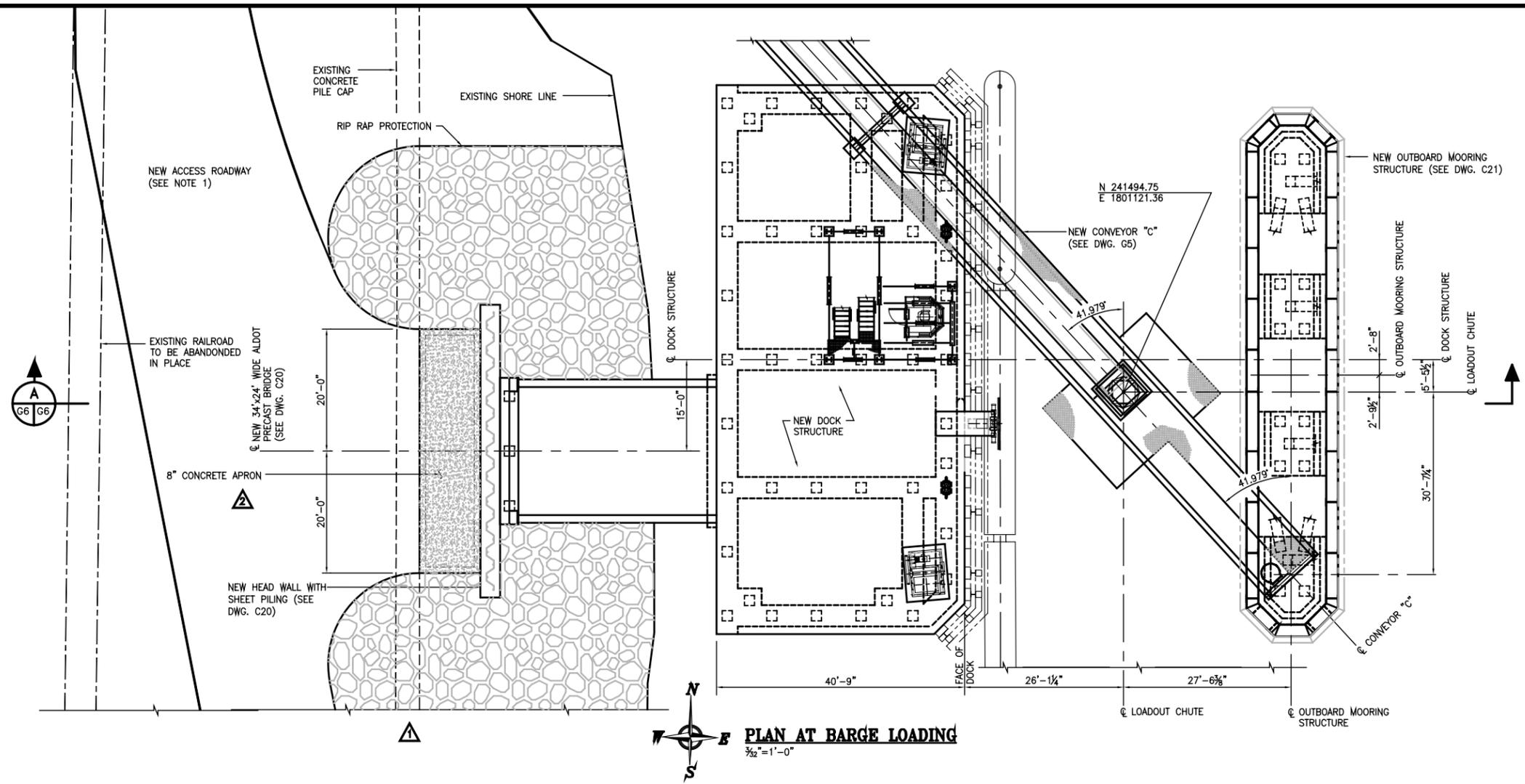
**REFERENCE**

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

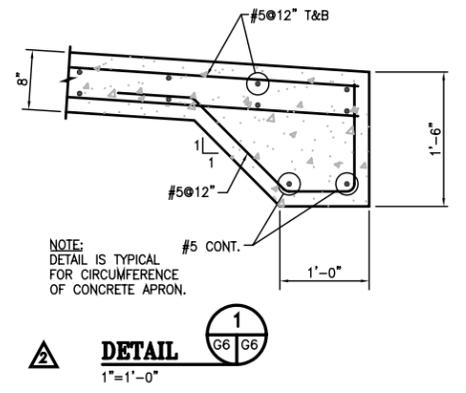
**GIBB**  
Gottlieb, Barnes & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "C" GENERAL ARRANGEMENT**

Drawn By: JLT Date: 10/12/04  
Checked By: HAC Date: 10/29/04  
Scale: 1"=20'-0" Job No. 1723 Drawing No. G5 REV. 1



**PLAN AT BARGE LOADING**  
 $\frac{3}{32}'' = 1'-0''$



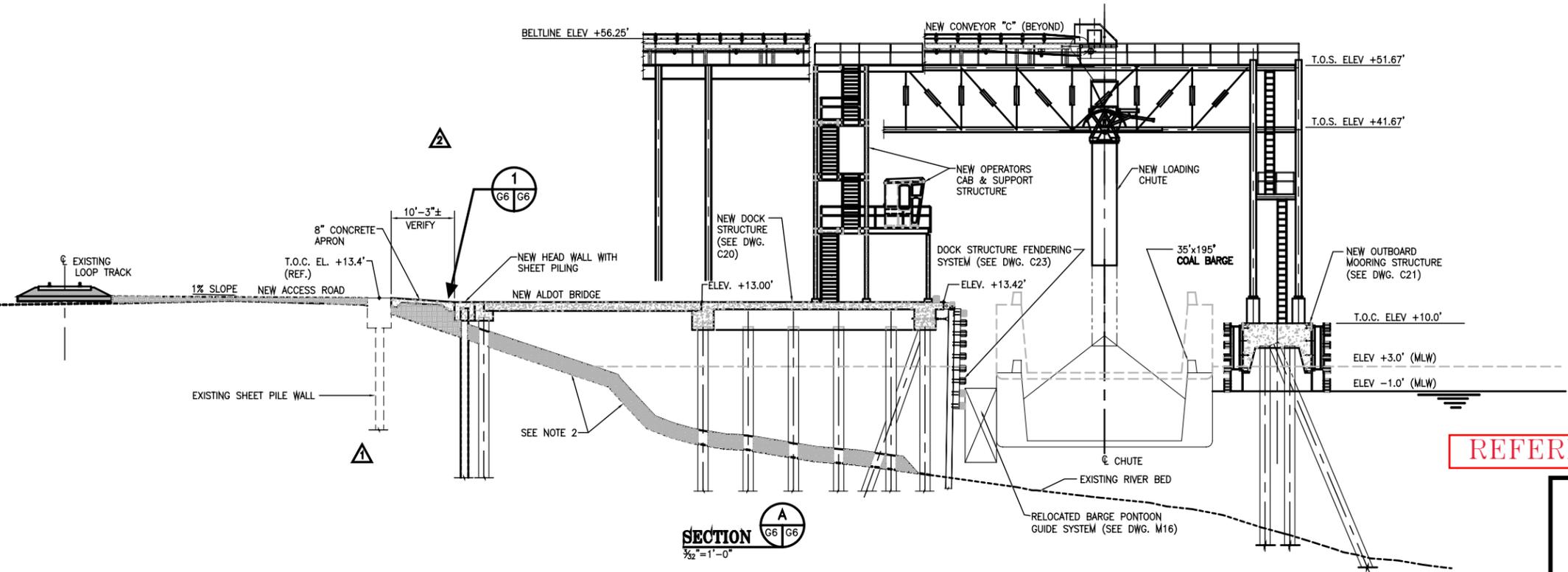
**DETAIL**  
 $1'' = 1'-0''$

- NOTES:**
1. FINAL ALIGNMENT OF ACCESS ROAD TO BE FIELD DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TYPICAL ROAD SECTION AS SHOWN ON DRAWING G1, AND IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
  2. AS RELATIVE TO THE PILING FOR ALL MARINE STRUCTURES, INCLUDING DOCK PILING, SHEET PILING, FENDER PILING AND CONVEYOR BENT PILING THAT ARE TO BE DRIVEN THROUGH THE EXISTING APPROXIMATE 2' THICK, CLASS III RIP RAP BLANKET AND THE UNDERLYING FILTER FABRIC MATERIAL, THE CONTRACTOR SHALL UTILIZE ADEQUATE MEANS (I.E. CLAMSHELL, ETC.) AS NECESSARY TO FACILITATE THE INSTALLATION AND AVOID DAMAGE TO PILING.

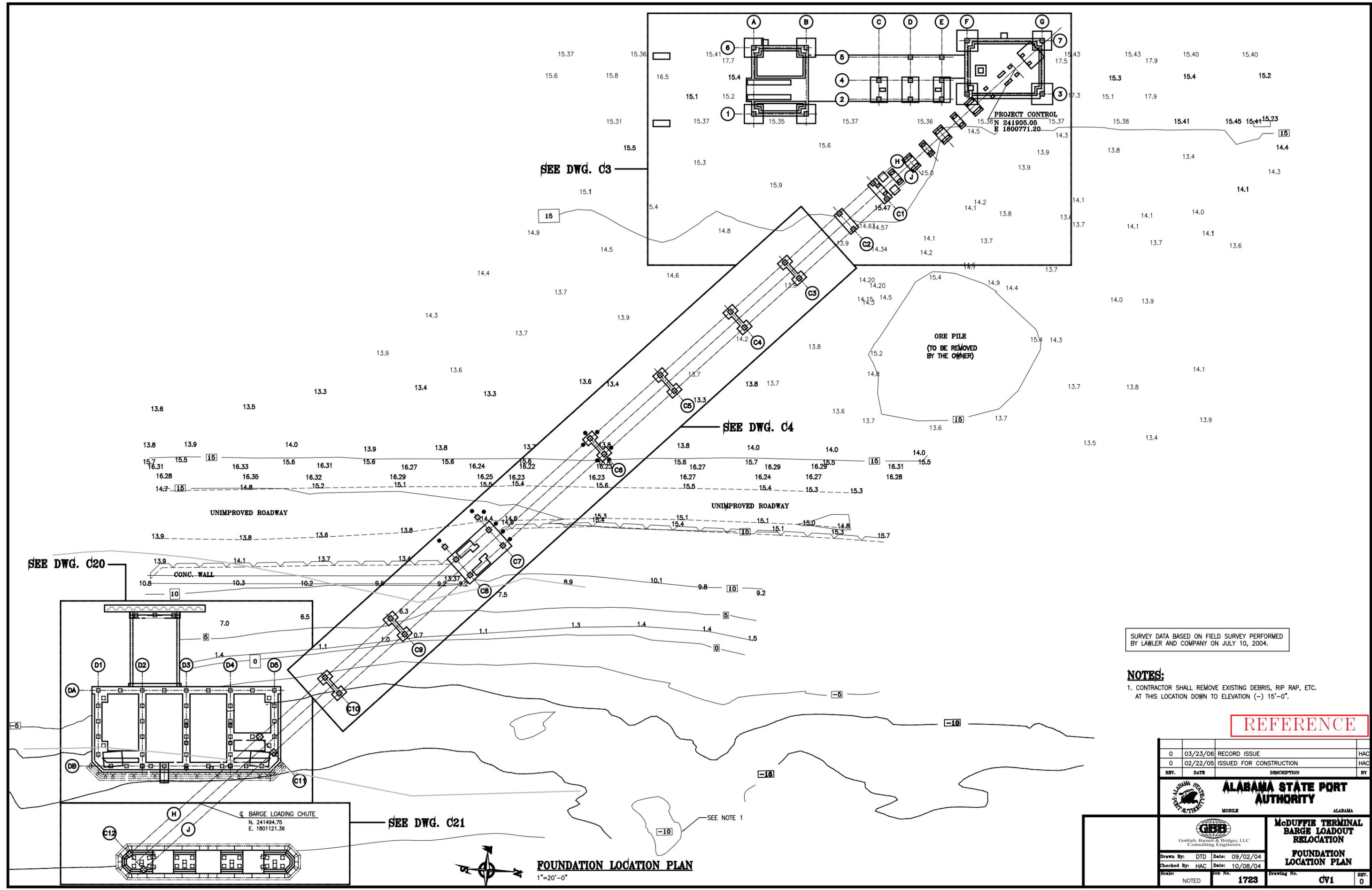
REV.	DATE	DESCRIPTION	BY
2	03/23/06	RECORD ISSUE	HAC
2	5/20/05	ADDED CONCRETE APRON	HAC
1	04/27/05	ADDED PARTIAL DEMO OF EXIST PILE CAP	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**REFERENCE**

<p><b>ALABAMA STATE PORT AUTHORITY</b></p>	
<p>Gottlieb, Barnett &amp; Bridges, LLC                  Consulting Engineers</p>	
Drawn By: JLT Checked By: HAC Scale: 3/32" = 1'-0"	Date: 10/12/04 Date: 10/08/04 Job No. 1723
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b></p> <p><b>LOADING DOCK PLAN &amp; SECTION</b></p>	
Drawing No. <b>G6</b> REV. <b>2</b>	



**SECTION**  
 $\frac{3}{32}'' = 1'-0''$



PROJECT CONTROL  
N 241905.06  
E 1800771.20

ORE PILE  
(TO BE REMOVED  
BY THE OWNER)

SURVEY DATA BASED ON FIELD SURVEY PERFORMED  
BY LAWLER AND COMPANY ON JULY 10, 2004.

- NOTES:**
- CONTRACTOR SHALL REMOVE EXISTING DEBRIS, RIP RAP, ETC. AT THIS LOCATION DOWN TO ELEVATION (-) 15'-0".

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b></p> <p>MOBILE ALABAMA</p>	
<p>Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>	
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION FOUNDATION LOCATION PLAN</b></p>	
Drawn By: DTD Checked By: HAC Scale: NOTED	Date: 09/02/04 Date: 10/08/04 Job No. 1723
Drawing No. CV1	REV. 0



**FOUNDATION LOCATION PLAN**  
1"=20'-0"

SEE NOTE 1

PRESTRESSED PILE SCHEDULE										
PILE NO.	DRAWING NO.	SIZE	BATTER		CUT OFF ELEV. (FT)	TIP ELEV. (FT)	LENGTH (FT)	DESIGN CAPACITY		REMARKS
			H	V				TENSION	COMP.	
DP1	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP2	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP3	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP4	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP5	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP6	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP7	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP8	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP9	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP10	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP11	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP12	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP13	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP14	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP15	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP16	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP17	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP18	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP19	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP20	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP21	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP22	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP23	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP24	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP25	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP26	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP27	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP28	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP29	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP30	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP31	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP32	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP33	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP34	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP35	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP36	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP37	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP38	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP39	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP40	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP41	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP42	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP43	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP44	CV4	20"	3	12	9.9	-80	92.7	80 TON	120 TON	DOCK STRUCT.
DP45	CV4	20"	-	-	9.9	-80	89.9	80 TON	120 TON	DOCK STRUCT.
DP46	CV4	20"	3	12	8.8	-80	91.5	80 TON	120 TON	BRIDGE ABUTMENT
DP47	CV4	20"	-	-	8.8	-80	88.8	80 TON	120 TON	BRIDGE ABUTMENT
DP48	CV4	20"	3	12	8.8	-80	91.5	80 TON	120 TON	BRIDGE ABUTMENT

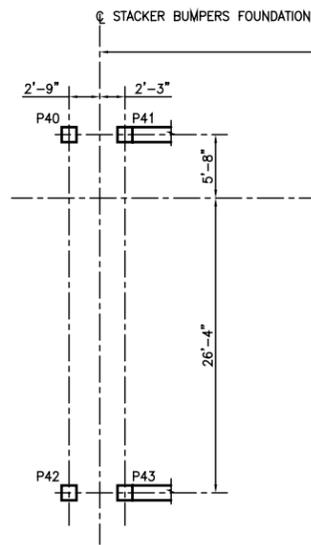
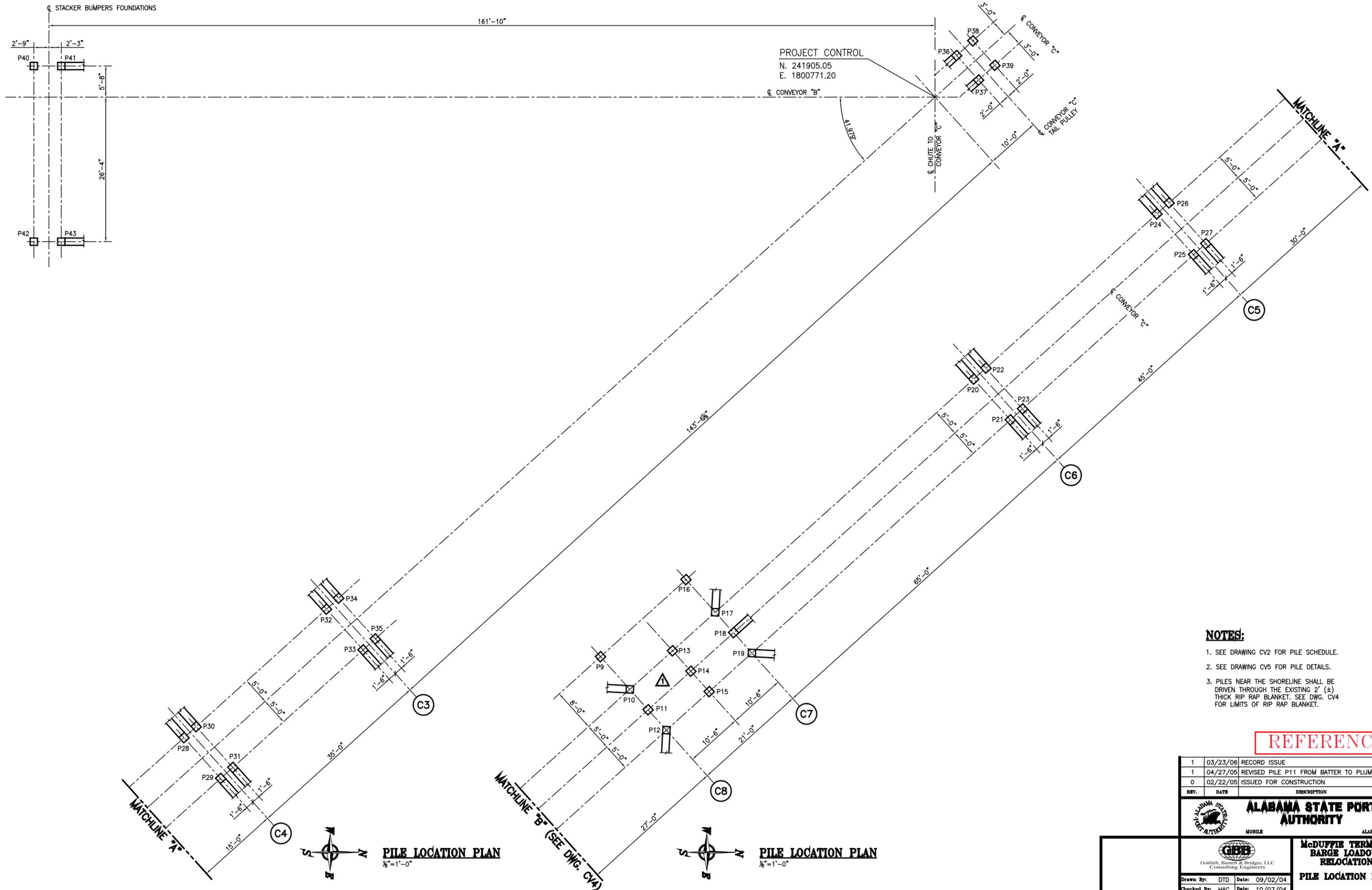
PRESTRESSED PILE SCHEDULE										
PILE NO.	DRAWING NO.	SIZE	BATTER		CUT OFF ELEV. (FT)	TIP ELEV. (FT)	LENGTH (FT)	DESIGN CAPACITY		REMARKS
			H	V				TENSION	COMP.	
OP1	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP2	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP3	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP4	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP5	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP6	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP7	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP8	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP9	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP10	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP11	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP12	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP13	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP14	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP15	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP16	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP17	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP18	CV4	20"	3	12	6.5	-80	89.2	80 TON	120 TON	OUTBOARD STRUCT.
OP19	CV4	20"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.
OP20	CV4	24"	-	-	6.5	-80	86.5	80 TON	120 TON	OUTBOARD STRUCT.

HP PILE SCHEDULE								
PILE NO.	DRAWING NO.	SIZE	BATTER		CUT OFF ELEV. (FT)	TIP ELEV. (FT)	LENGTH (FT)	REMARKS
			H	V				
HP1	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP2	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP3	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP4	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP5	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP6	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP7	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP8	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP9	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP10	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP11	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP12	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP13	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE
HP14	CV4/C23	HP12X53	1/2	12	(+) 12.33	(-) 57.67	70	FENDER PILE

PRESTRESSED PILE SCHEDULE										
PILE NO.	DRAWING NO.	SIZE	BATTER		CUT OFF ELEV. (FT)	TIP ELEV. (FT)	LENGTH (FT)	DESIGN CAPACITY		REMARKS
			H	V				TENSION	COMP.	
P1	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C10
P2	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C10
P3	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C10
P4	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C10
P5	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C9
P6	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C9
P7	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C9
P8	CV4	20"	3	12	2.5	-76	80.9	66 TON	100 TON	BENT C9
P9	CV3	16"	-	-	10.83	-19.67	30.5	37 TON	60 TON	CONV. "C" DRIVE STRUCT.
P10	CV3	16"	3	12	13.5	-25	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P11	CV3	16"	-	-	13.5	-26.2	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P12	CV3	16"	3	12	13.5	-25	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P13	CV3	16"	-	-	13.5	-25	38.5	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P14	CV3	16"	-	-	13.5	-25	38.5	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P15	CV3	16"	-	-	13.5	-25	38.5	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P16	CV3	16"	-	-	10.83	-19.67	30.5	37 TON	60 TON	CONV. "C" DRIVE STRUCT.
P17	CV3	16"	3	12	13.5	-25	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P18	CV3	16"	3	12	13.5	-25	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P19	CV3	16"	3	12	13.5	-25	39.7	50 TON	80 TON	CONV. "C" DRIVE STRUCT.
P20	CV3	16"	3	12	10.5	-25	36.6	50 TON	80 TON	BENT C6
P21	CV3	16"	3	12	10.5	-25	36.6	50 TON	80 TON	BENT C6
P22	CV3	16"	3	12	10.5	-25	36.6	50 TON	80 TON	BENT C6
P23	CV3	16"	3	12	10.5	-25	36.6	50 TON	80 TON	BENT C6
P24	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C5
P25	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C5
P26	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C5
P27	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C5
P28	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C4
P29	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C4
P30	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C4
P31	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C4
P32	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C3
P33	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C3
P34	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C3
P35	CV3	16"	3	12	10.5	-18	29.4	37 TON	60 TON	BENT C3
P36	CV3	16"	3	12	13.5	-18	32.5	37 TON	60 TON	CONV. "C" TAIL PULLEY
P37	CV3	16"	3	12	13.5	-18	32.5	37 TON	60 TON	CONV. "C" TAIL PULLEY
P38	CV3	16"	-	-	13.5	-18	31.5	37 TON	60 TON	CONV. "C" TAIL PULLEY
P39	CV3	16"	-	-	13.5	-18	31.5	37 TON	60 TON	CONV. "C" TAIL PULLEY
P40	CV3	16"	-	-	12.8	-25	37.8	50 TON	80 TON	STACKER BUMPER
P41	CV3	16"	3	12	12.8	-25	38.9	50 TON	80 TON	STACKER BUMPER
P42	CV3	16"	-	-	12.8	-25	37.8	50 TON	80 TON	STACKER BUMPER
P43	CV3	16"	3	12	12.8	-25	38.9	50 TON	80 TON	STACKER BUMPER

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	04/27/05		



- NOTES:**
1. SEE DRAWING CV2 FOR PILE SCHEDULE.
  2. SEE DRAWING CV5 FOR PILE DETAILS.
  3. PILES NEAR THE SHORELINE SHALL BE DRIVEN THROUGH THE EXISTING 2' (±) THICK RIP RAP BLANKET. SEE DWG. CV4 FOR LIMITS OF RIP RAP BLANKET.

**REFERENCE**

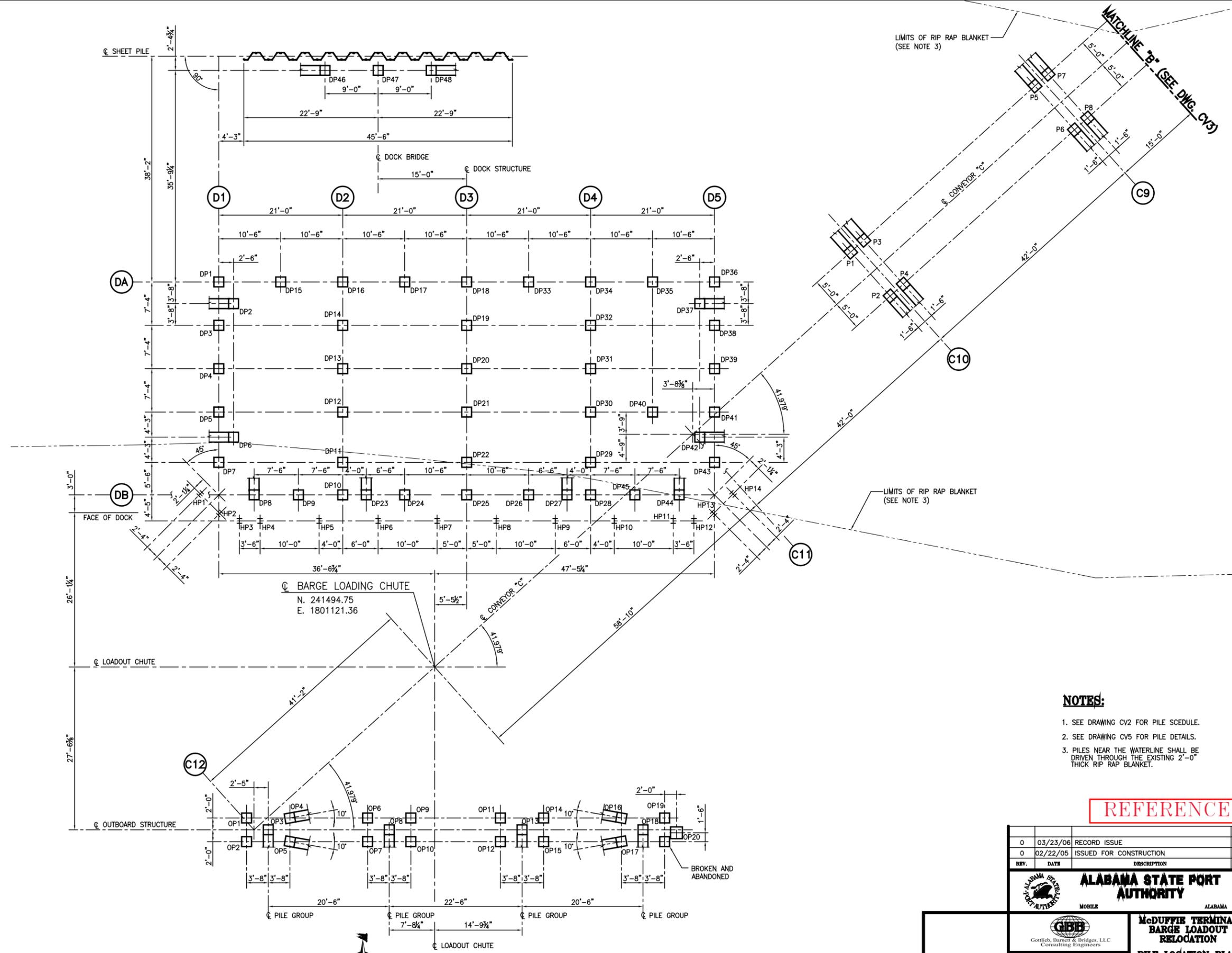
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	04/27/05	REVISED PILE P11 FROM BATTER TO PLUMB	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA</p>	
<p><b>GIBB</b> Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>	
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b></p> <p><b>PILE LOCATION PLAN</b></p>	
Drawn By: DTD Checked By: HAC Scale: NOTED	Date: 09/02/04 Date: 10/07/04 Job No. 1723 Drawing No. 0V3 REV. 1

**PILE LOCATION PLAN**  
1/8"=1'-0"

**PILE LOCATION PLAN**  
1/8"=1'-0"

MATCHLINE 'B' (SEE DWG. CV4)



- NOTES:**
- SEE DRAWING CV2 FOR PILE SCHEDULE.
  - SEE DRAWING CV5 FOR PILE DETAILS.
  - PILES NEAR THE WATERLINE SHALL BE DRIVEN THROUGH THE EXISTING 2'-0" THICK RIP RAP BLANKET.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

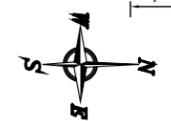
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**GIBB**  
Gottlieb, Barnet & Bridges, LLC  
Consulting Engineers

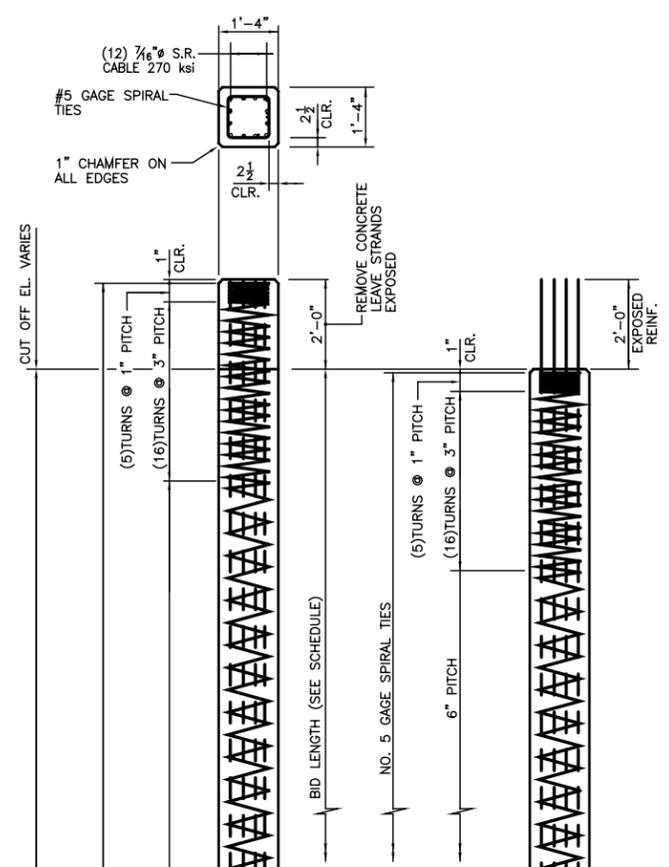
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**PILE LOCATION PLAN**

Drawn By: DTD	Date: 09/02/04	
Checked By: HAC	Date: 10/07/04	
Scale: NOTED	Job No. 1723	Drawing No. CV4

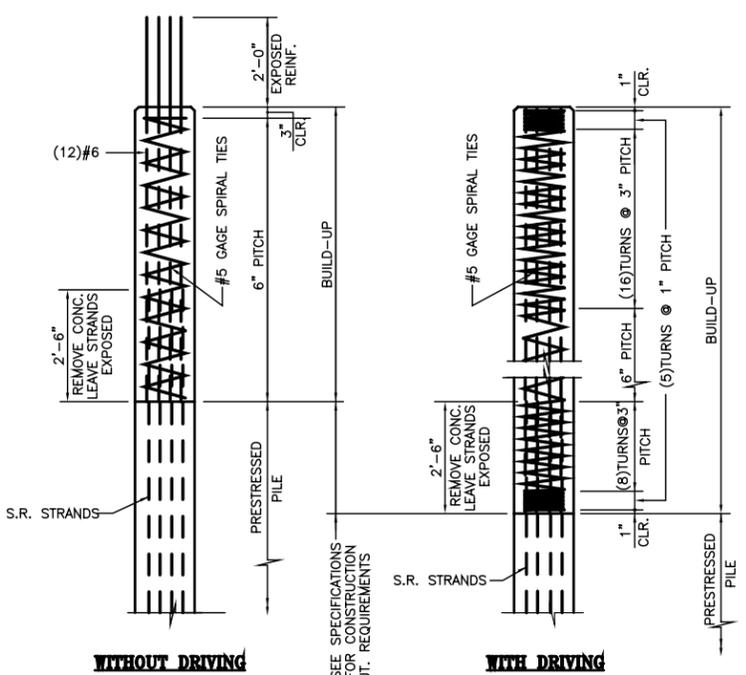


**PILE LOCATION PLAN**  
 $\frac{1}{16}'' = 1'-0''$

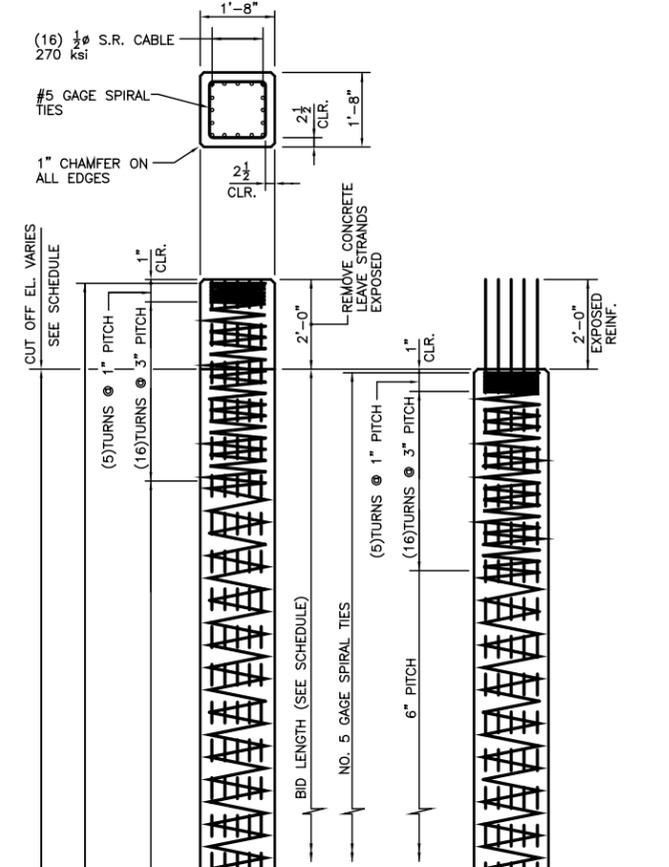


NOTE:  
ALTERNATE DETAIL SHOWS PILE CAST WITH STRANDS EXPOSED TO ELIMINATE REMOVING CONCRETE AFTER PILE IS DRIVEN THIS REQUIRES A SPACER TO PROTECT STRANDS DURING DRIVING.

**ALTERNATE END DETAIL**  
1/2" = 1'-0"

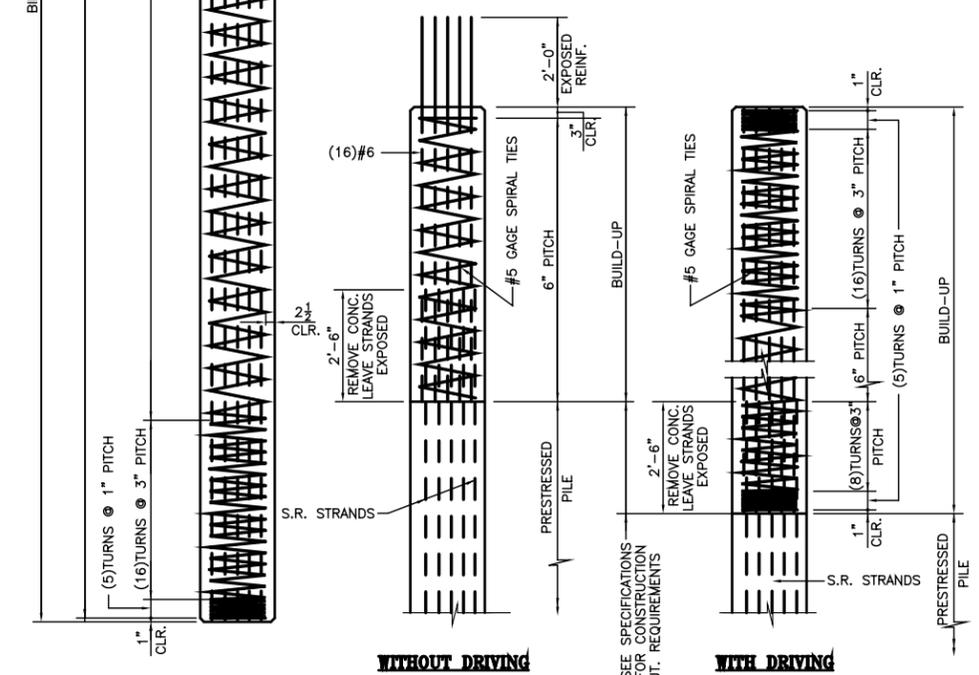


**16" PRESTRESSED PILE BUILD UP DETAIL**

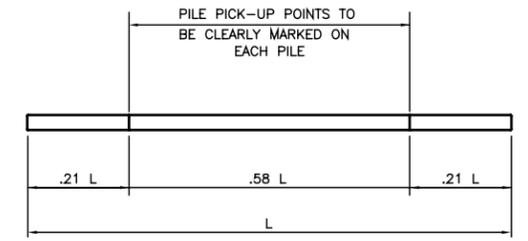


NOTE:  
ALTERNATE DETAIL SHOWS PILE CAST WITH STRANDS EXPOSED TO ELIMINATE REMOVING CONCRETE AFTER PILE IS DRIVEN THIS REQUIRES A SPACER TO PROTECT STRANDS DURING DRIVING.

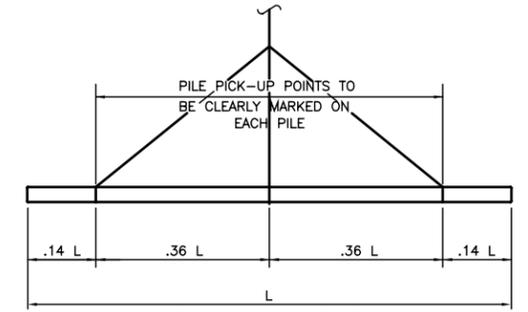
**ALTERNATE END DETAIL**  
1/2" = 1'-0"



**20" PRESTRESSED PILE BUILD UP DETAIL**



**2 POINT PICK-UP FOR LENGTHS UP TO 90'-0"**



**2 POINT PICK-UP FOR LENGTHS UP TO 90'-0"**

NOTE:  
L = LENGTH OF PILE  
**PILE LIFTING DETAIL**  
NO SCALE

**CONCRETE PILE NOTES**

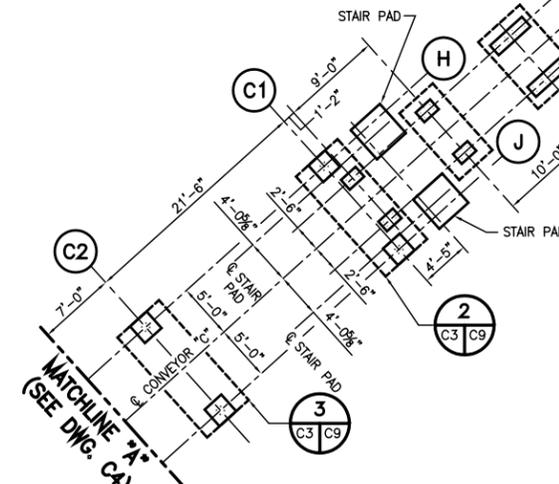
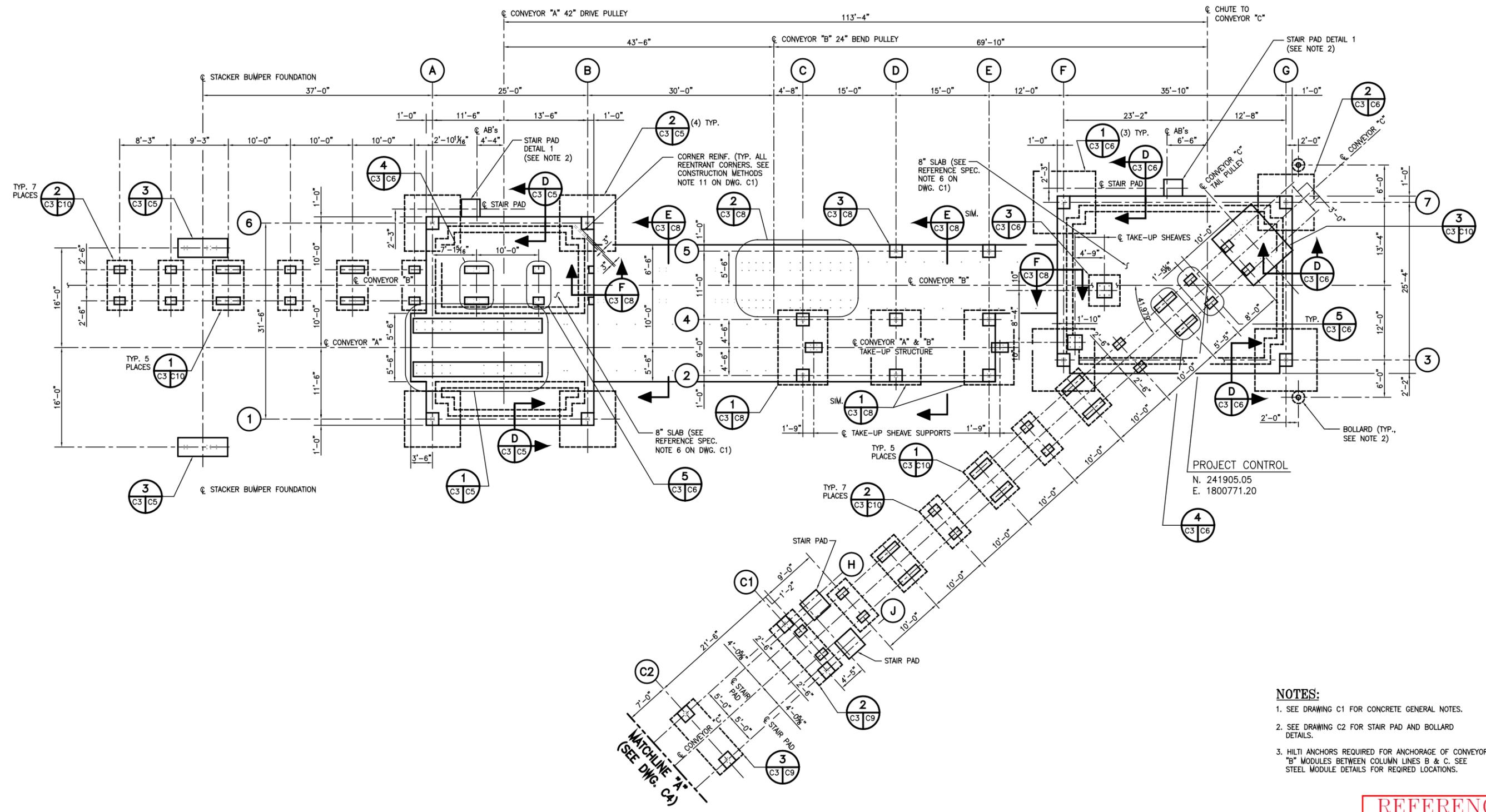
1. PRESTRESSED PILES & PILE BUILD-UPS SHALL CONFORM TO THE REQUIREMENTS OF THE JOINT COMMITTEE OF AASHTO AND PCI FOR PRESTRESSED CONCRETE PILES UNLESS OTHERWISE NOTED OR SPECIFIED.
2. CONCRETE FOR PRESTRESSED PILES & PILE BUILD-UPS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS.
3. PRESTRESSING REINFORCEMENT SHALL CONFORM TO ASTM A416.
4. REINFORCING FOR PILE BUILD-UPS SHALL CONFORM TO ASTM A615 GRADE 60.

**REFERENCE**

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<p><b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA</p>			
<p>Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>			
Drawn By:	DTD	Date:	09/02/04
Checked By:	HAC	Date:	10/08/04
Scale:	NOTED	Job No.	1723
			REV. 0

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**PRESTRESSED PILE DETAILS**

Drawing No. **CV5**



**FOUNDATION PLAN**  
1/8" = 1'-0"



- NOTES:**
- SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.
  - SEE DRAWING C2 FOR STAIR PAD AND BOLLARD DETAILS.
  - HILTI ANCHORS REQUIRED FOR ANCHORAGE OF CONVEYOR "B" MODULES BETWEEN COLUMN LINES B & C. SEE STEEL MODULE DETAILS FOR REQUIRED LOCATIONS.

**REFERENCE**

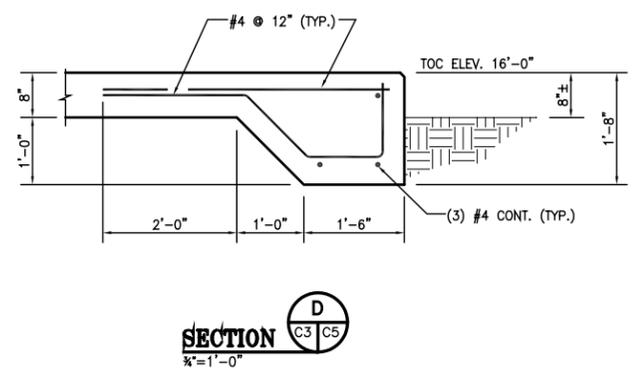
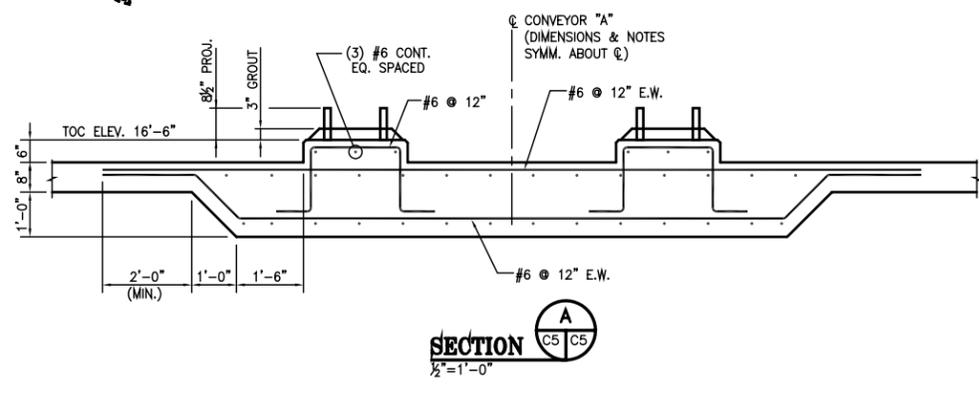
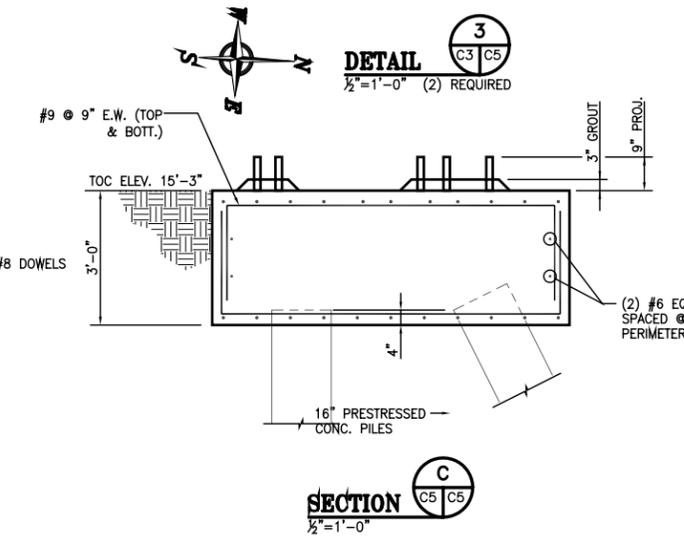
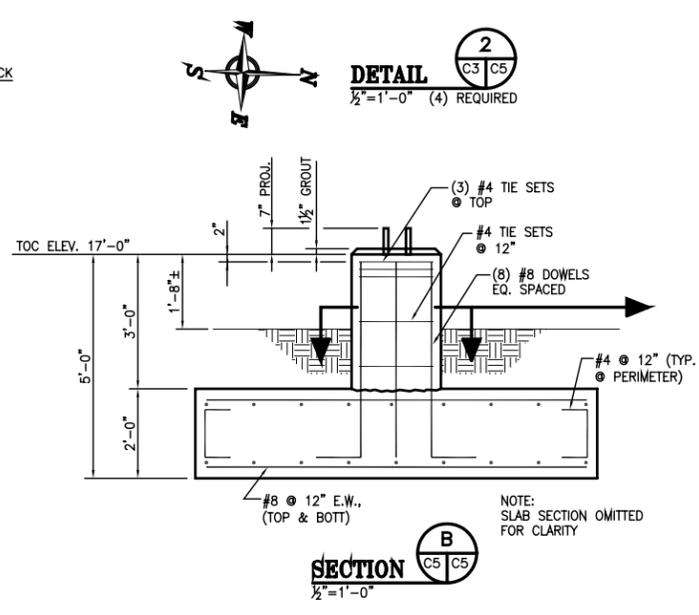
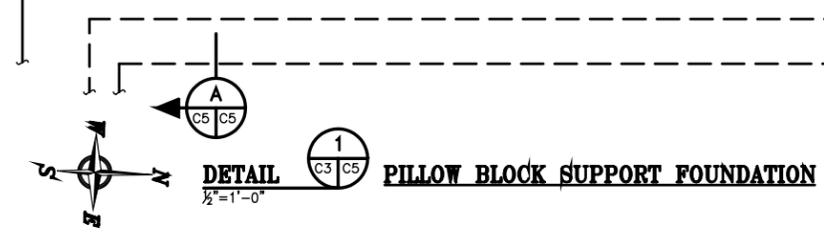
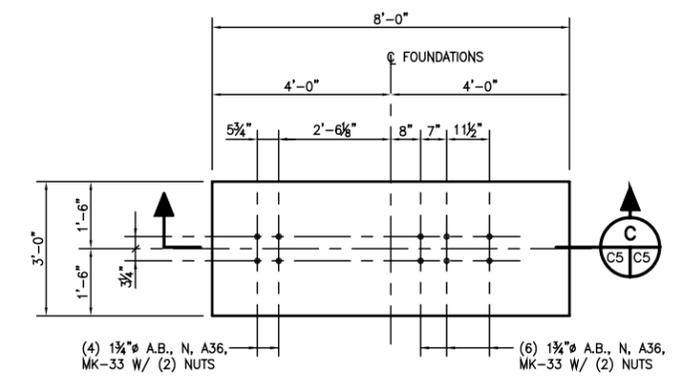
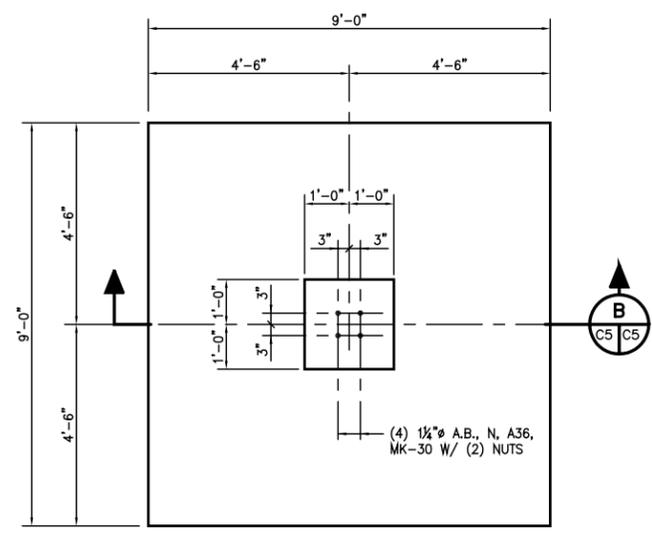
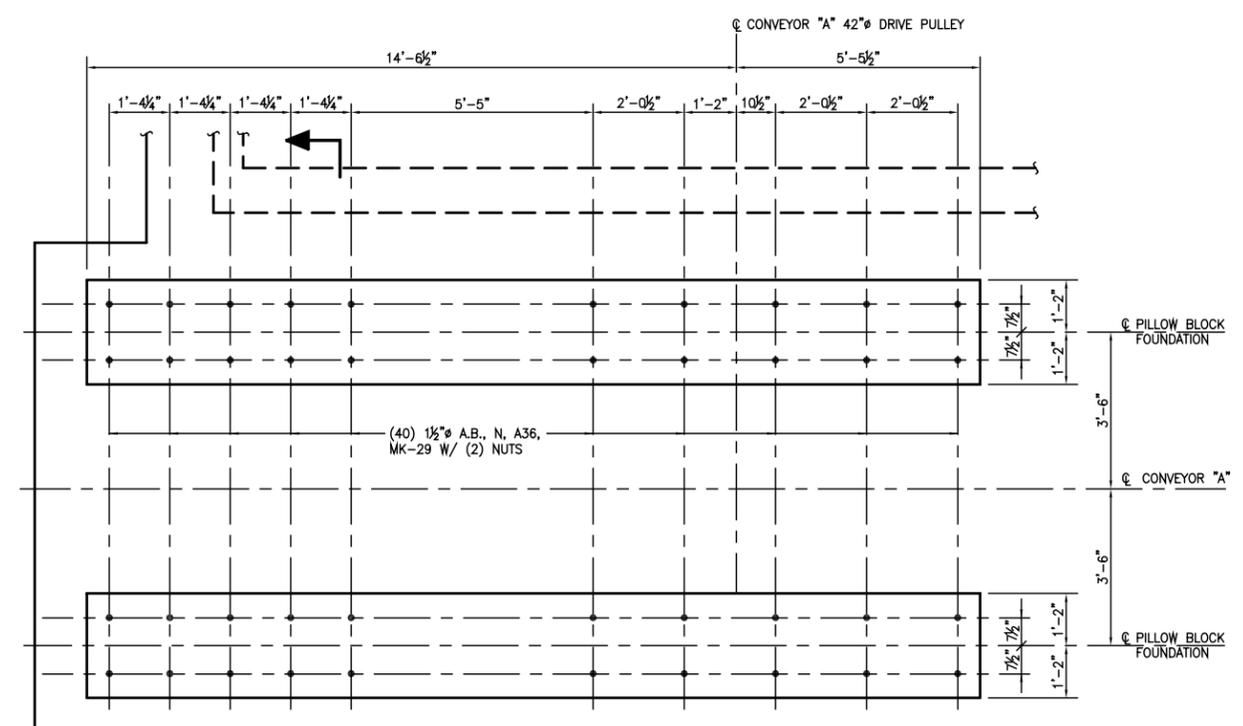
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

 <b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA		<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b> <b>FOUNDATION LOCATION PLAN</b>
GIBB Gottlieb, Barnett & Bridges, LLC Consulting Engineers		
Drawn By: DTD	Date: 09/02/04	Drawing No. <b>C3</b>
Checked By: HAC	Date: 10/08/04	
Scale: NOTED	Job No. <b>1723</b>	REV. <b>1</b>



**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

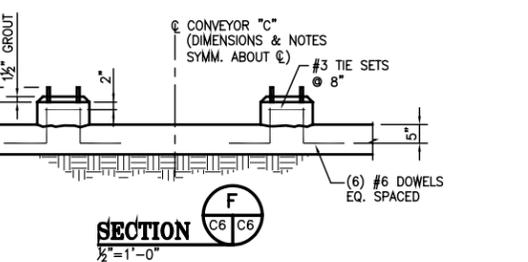
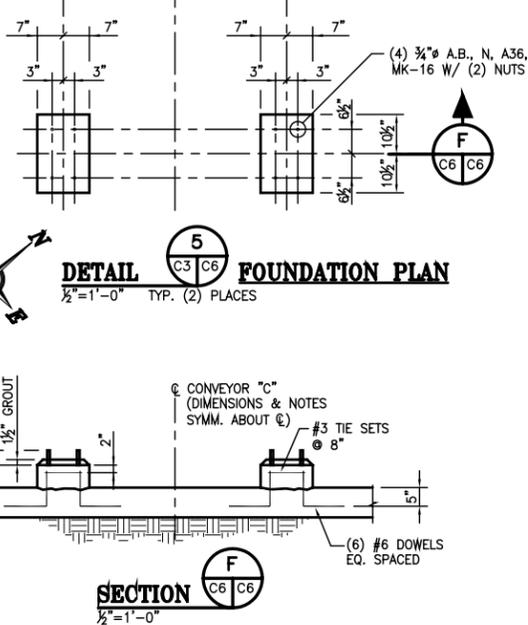
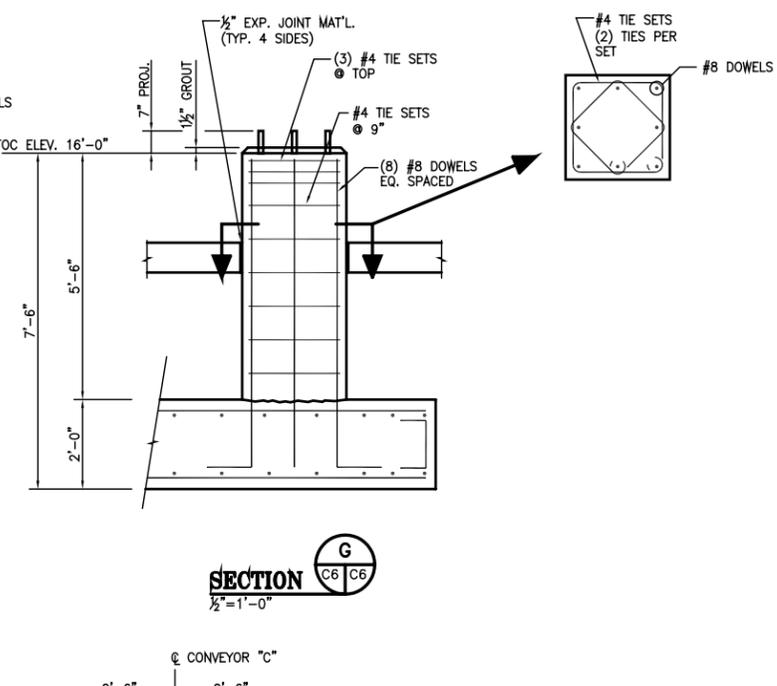
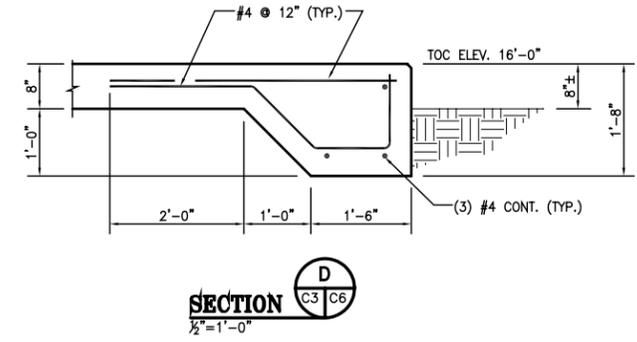
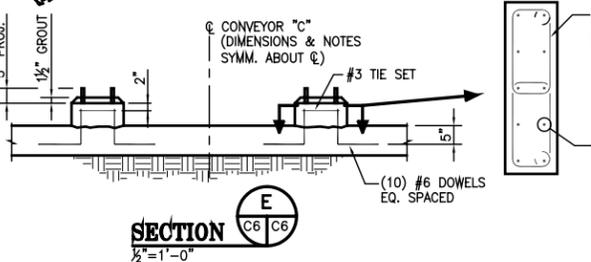
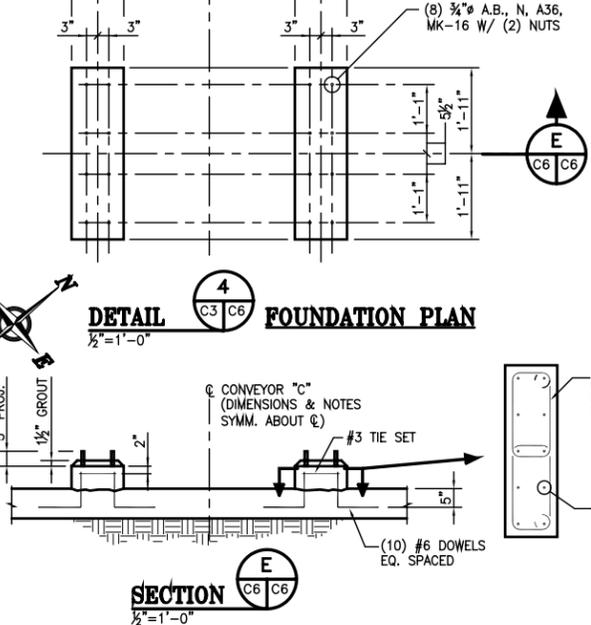
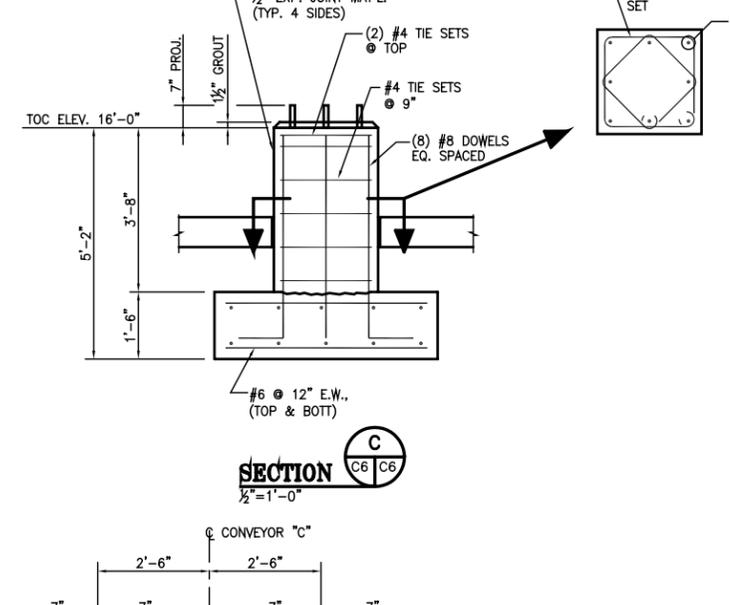
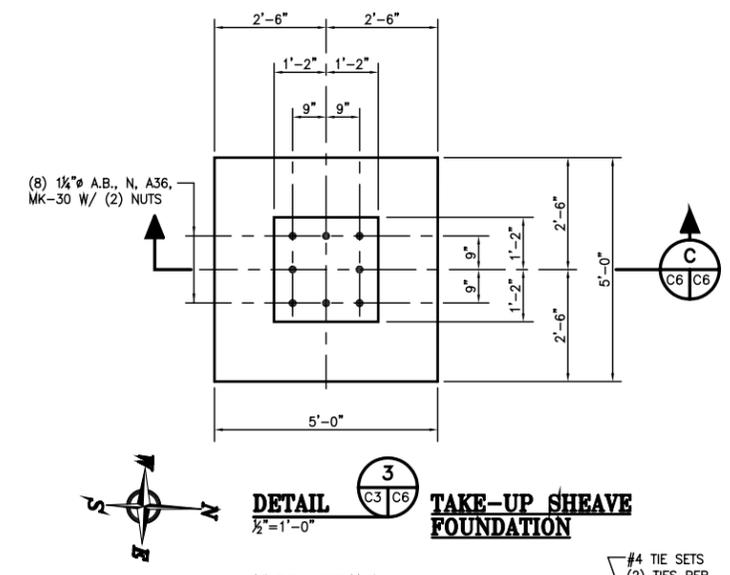
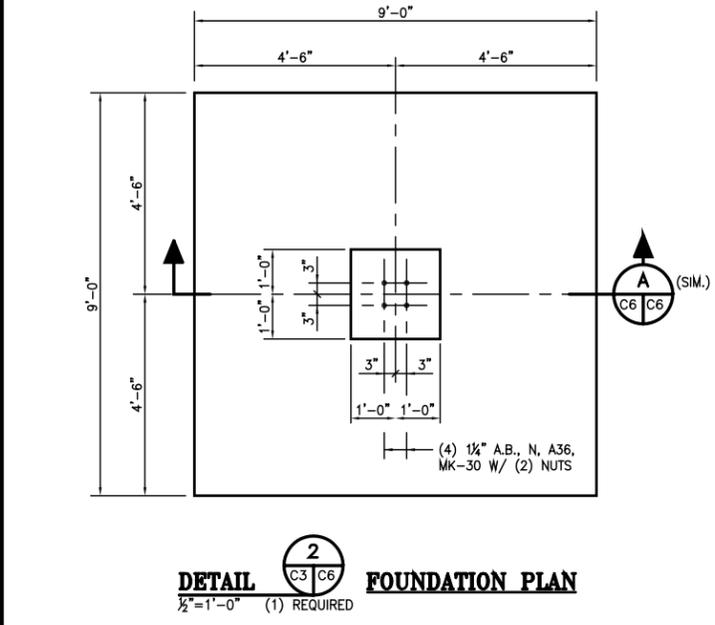
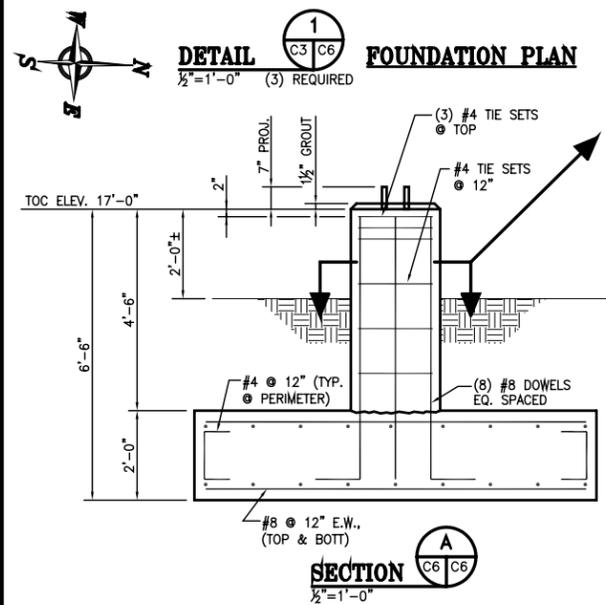
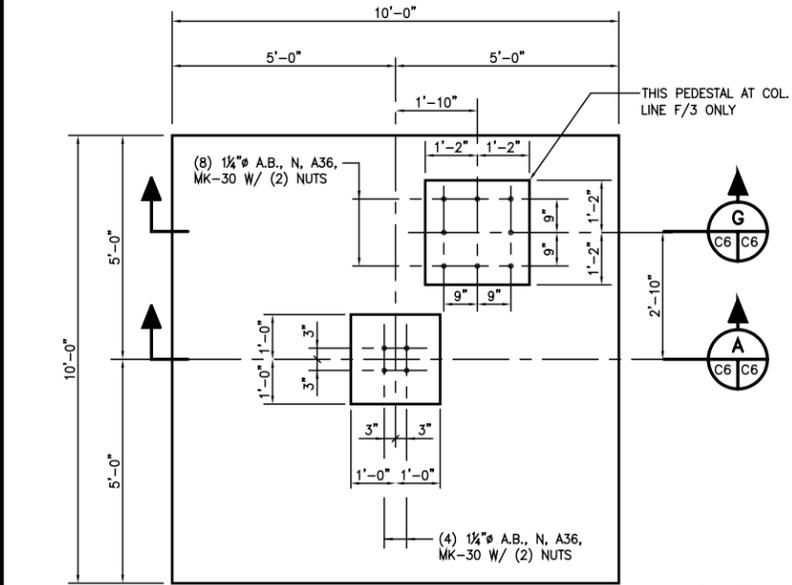
<b>ALABAMA STATE PORT AUTHORITY</b>	
MOBILE	ALABAMA
<b>GIBB</b> Gottlieb, Barnet & Bridges, LLC Consulting Engineers	
Drawn By: DTD	Date: 09/02/04
Checked By: HAC	Date: 10/07/04
Scale: NOTED	Job No. 1723

<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "A" DRIVE STRUCTURE FOUNDATION DETAILS</b>	
Drawing No. <b>C5</b>	REV. <b>0</b>

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**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

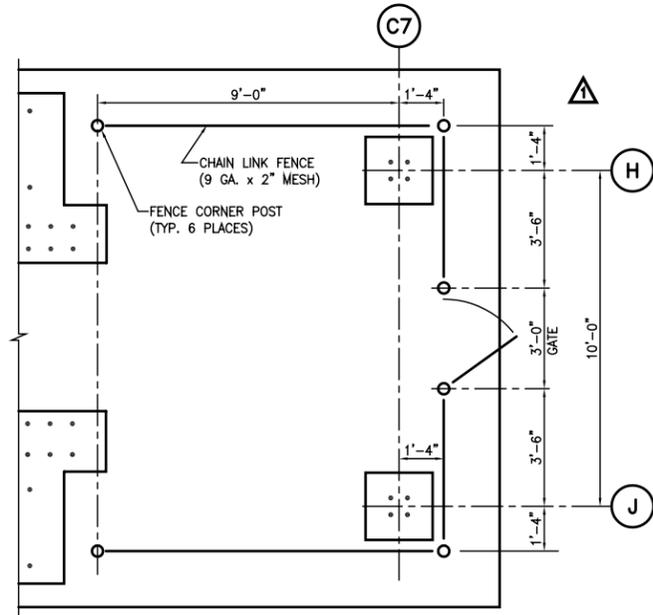
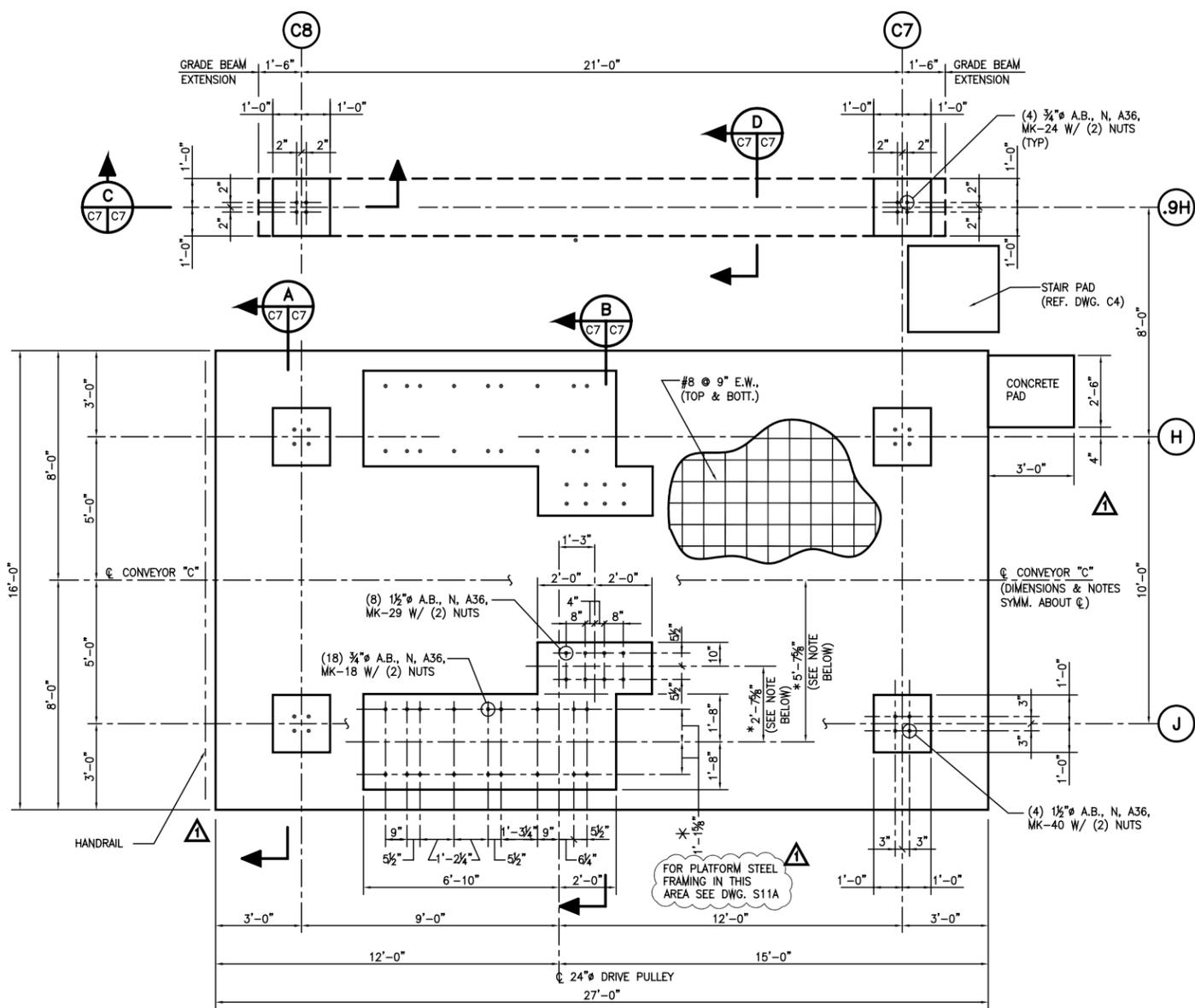
**ALABAMA STATE PORT AUTHORITY**  
MOBILE, ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

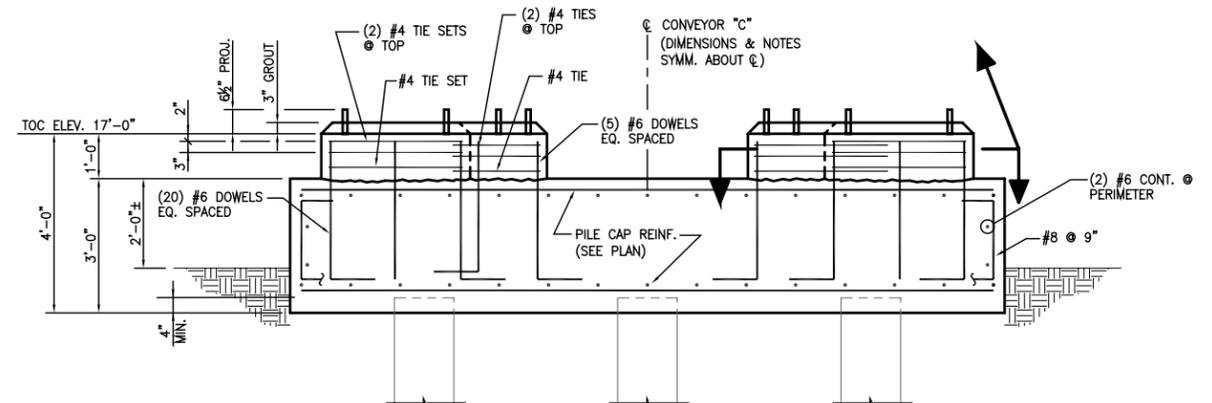
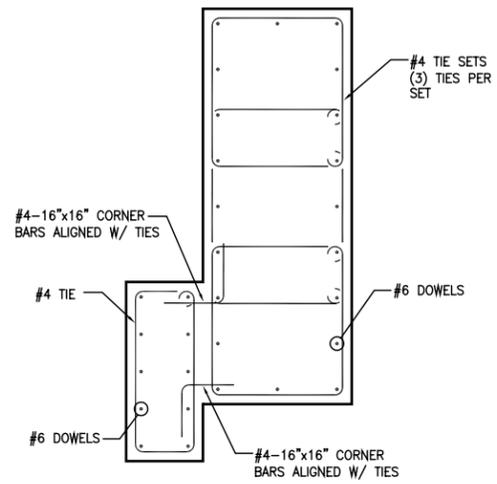
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "B" DRIVE STRUCTURE FOUNDATION DETAILS**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C6

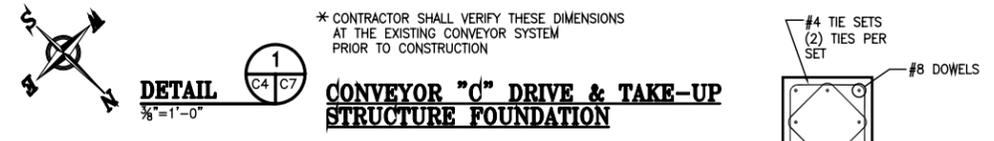
**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



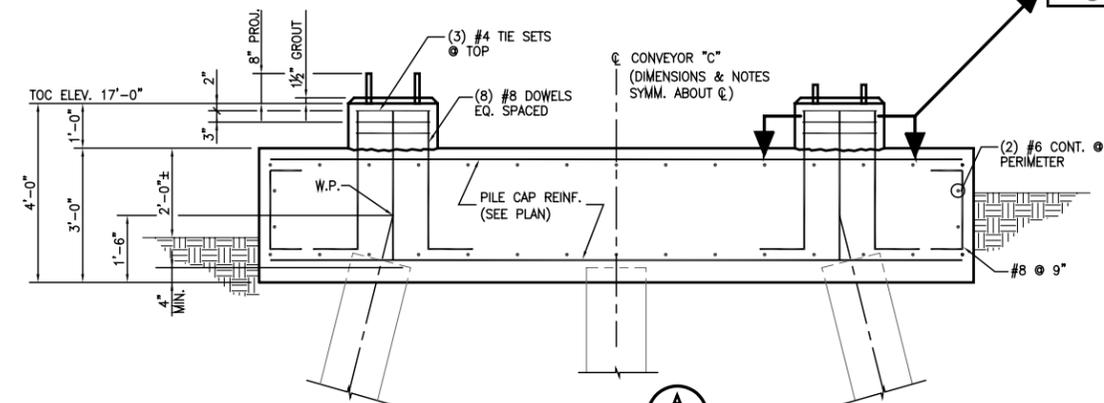
**FENCE ENCLOSURE PLAN**  
1/2"=1'-0" SEE DRAWING S4A FOR DETAILS



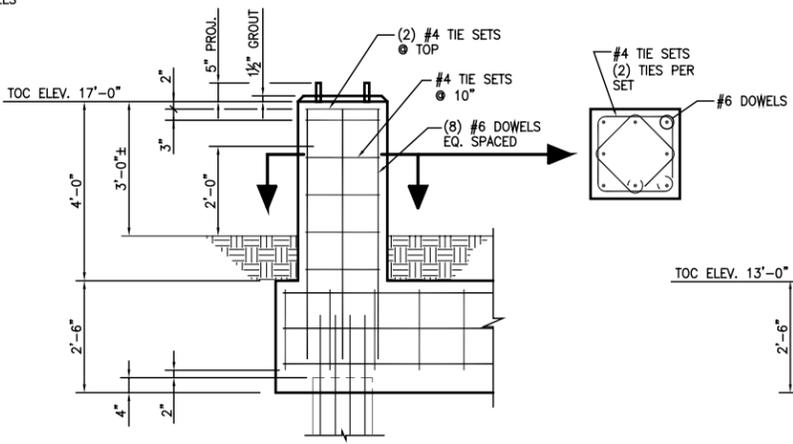
**SECTION B-C7**  
1/2"=1'-0"



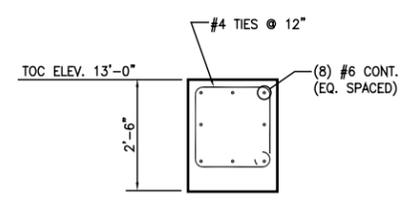
**DETAIL 1**  
1/2"=1'-0"  
**CONVEYOR "C" DRIVE & TAKE-UP STRUCTURE FOUNDATION**



**SECTION A-C7**  
1/2"=1'-0"



**SECTION C-C7**  
1/2"=1'-0" TYP. (2) PLACES



**SECTION D-C7**  
1/2"=1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	07/22/05	MOVED FENCE, ADDED STAIR PAD & HANDRAIL	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

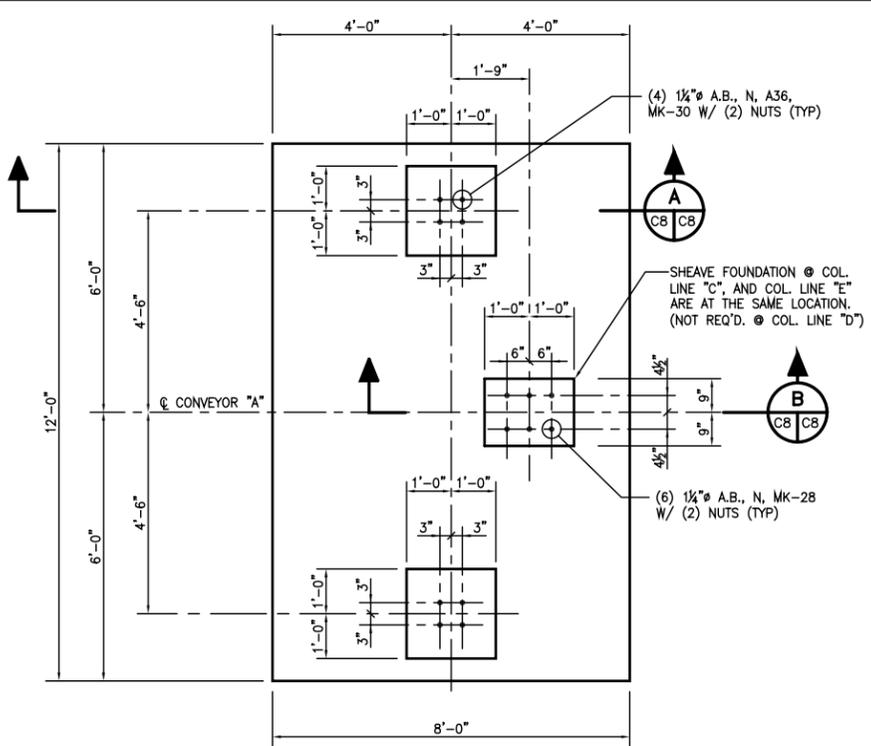
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

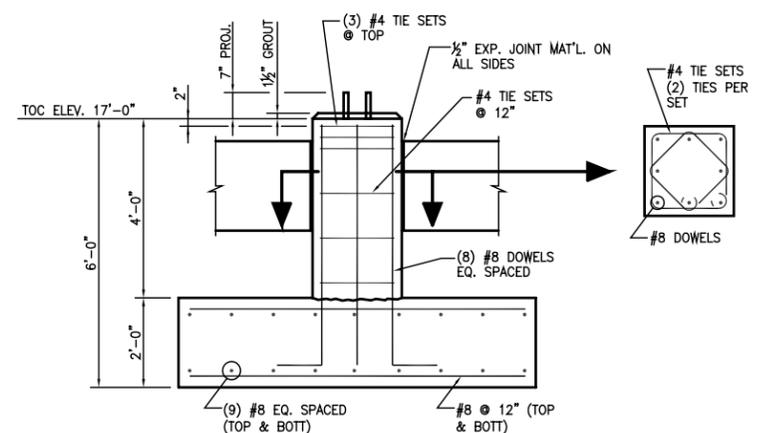
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "C" DRIVE STRUCT. FOUNDATION**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C7

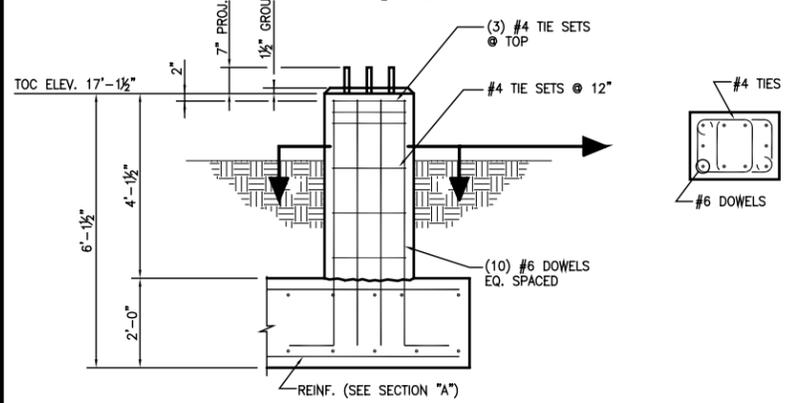
**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



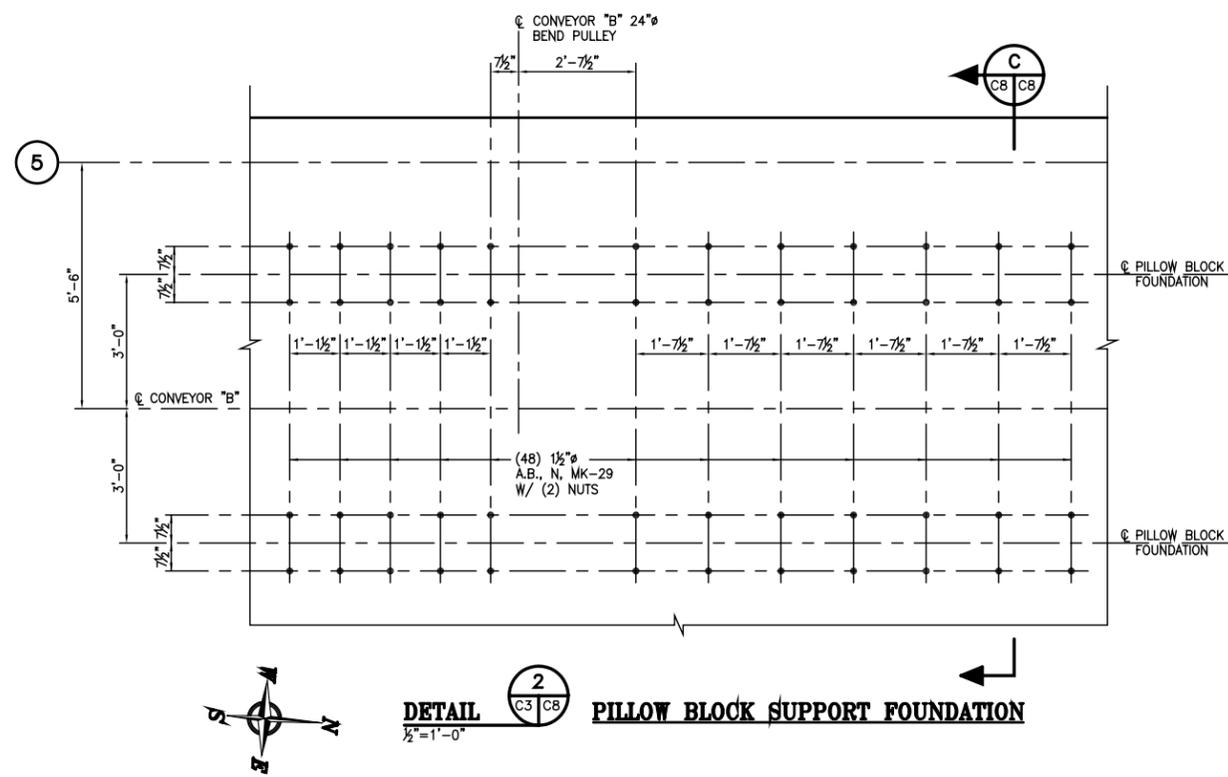
**DETAIL 1**  
C3 | C8  
1/2"=1'-0" (3) REQ'D. (SIM)  
**TAKE-UP STRUCTURE FOUNDATION**



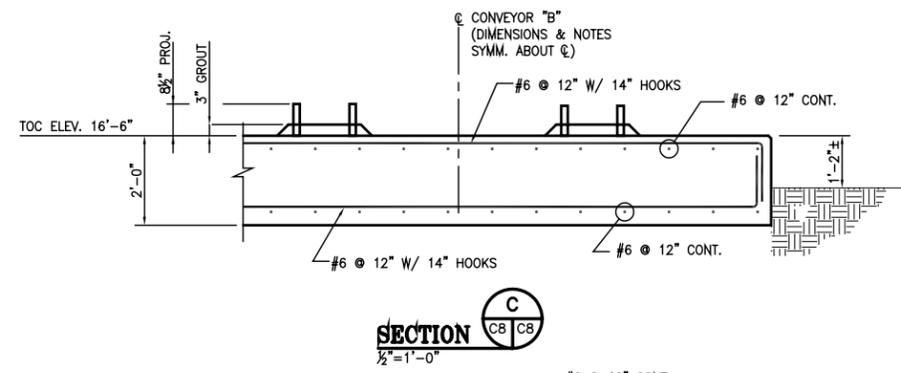
**SECTION A**  
C8 | C8  
1/2"=1'-0"



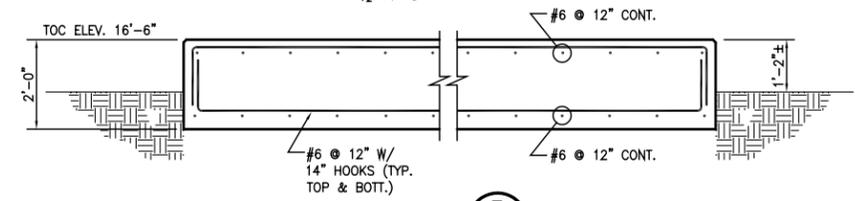
**SECTION B**  
C8 | C8  
1/2"=1'-0"



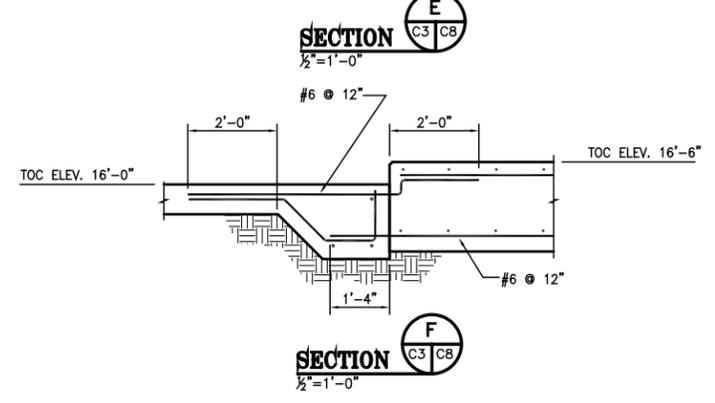
**DETAIL 2**  
C3 | C8  
1/2"=1'-0"  
**PILLOW BLOCK SUPPORT FOUNDATION**



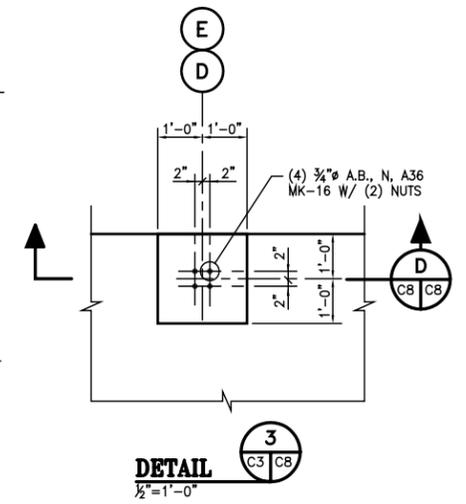
**SECTION C**  
C8 | C8  
1/2"=1'-0"



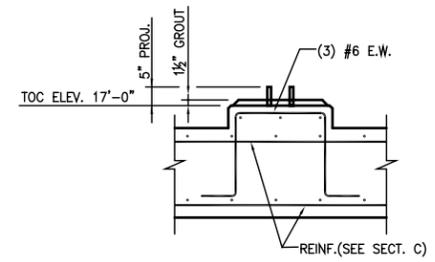
**SECTION D**  
C3 | C8  
1/2"=1'-0"



**SECTION E**  
C3 | C8  
1/2"=1'-0"



**DETAIL 3**  
C3 | C8  
1/2"=1'-0"



**SECTION D**  
C8 | C8  
1/2"=1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

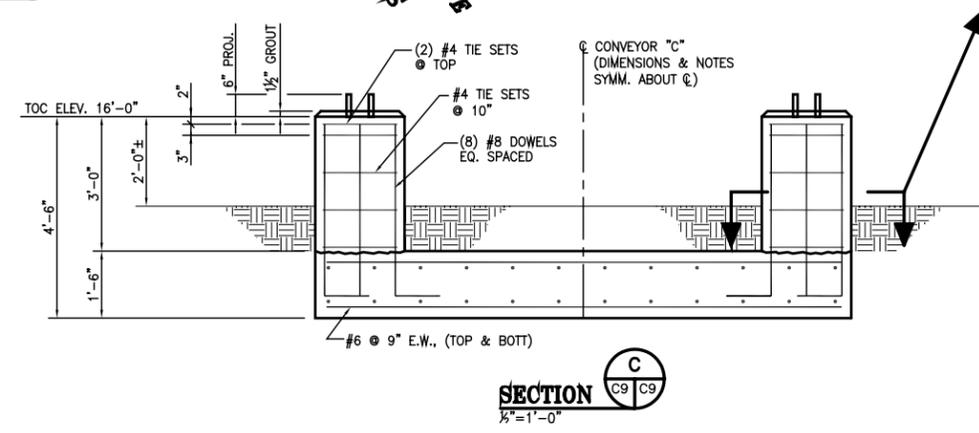
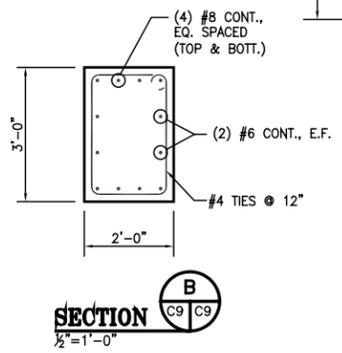
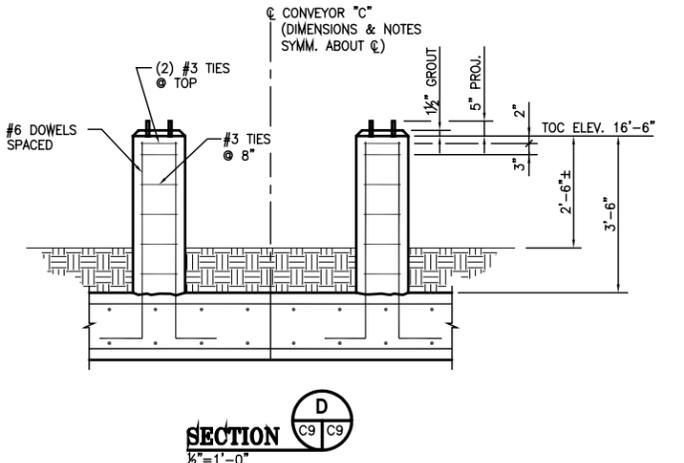
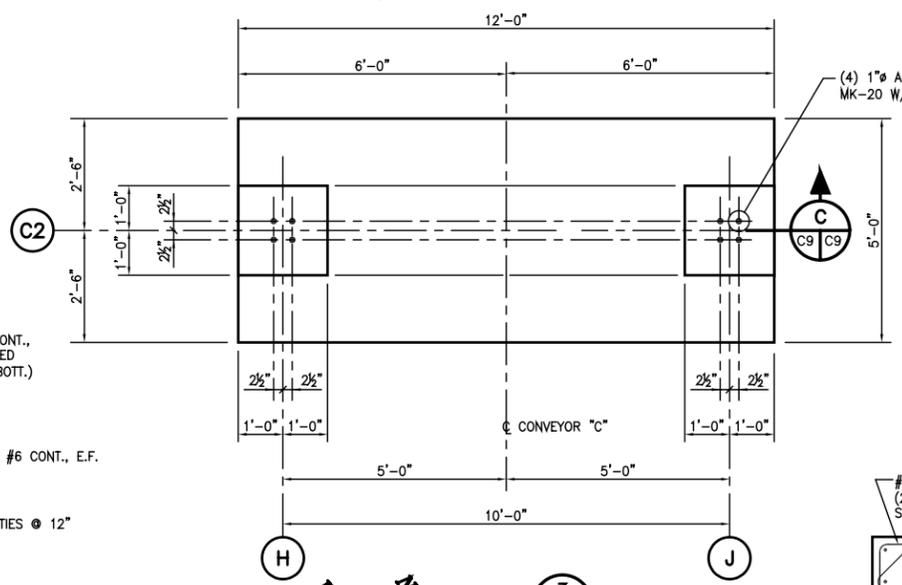
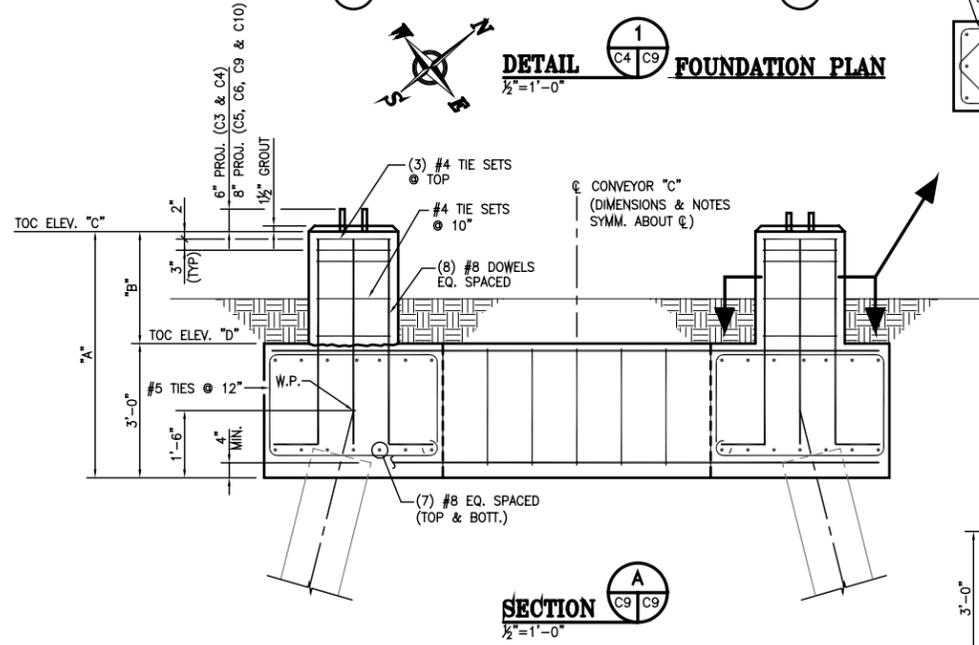
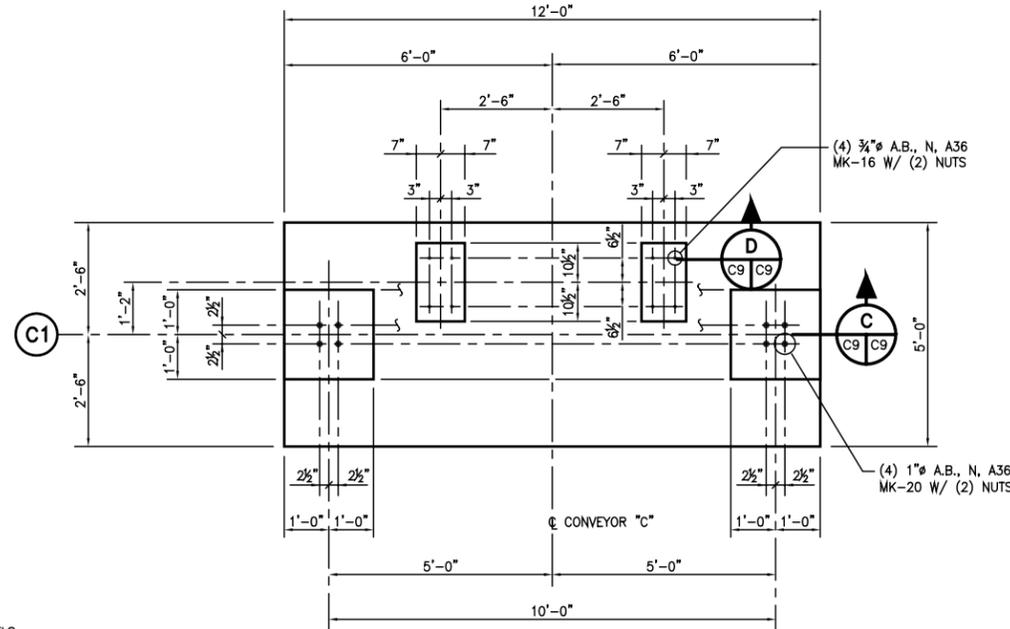
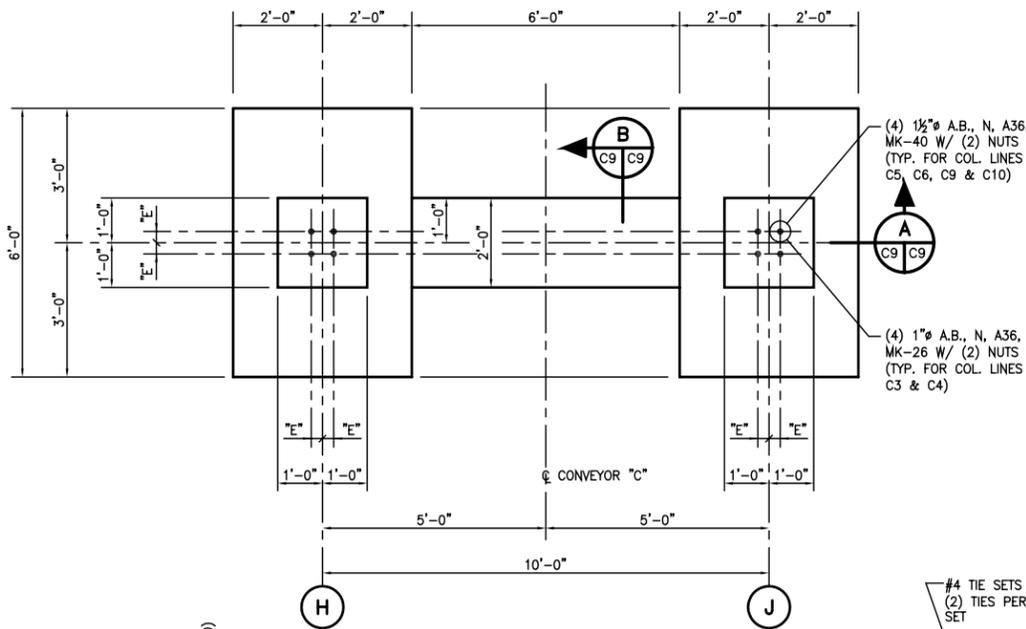
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "A" & "B" TAKE-UP STRUCTURE FOUNDATION DETAILS**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C8

**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



FOUNDATION SCHEDULE						
BENT NUMBER	DIM. "A"	DIM. "B"	TOC ELEV. "C"	TOC ELEV. "D"	DIM. "E"	REMARKS
BENT C1			SEE DETAILS THIS DRAWING			
BENT C2			SEE DETAILS THIS DRAWING			
BENT C3	6'-0"	3'-0"	16'-0"	13'-0"	2 1/2"	
BENT C4	6'-0"	3'-0"	16'-0"	13'-0"	2 1/2"	
BENT C5	6'-0"	3'-0"	16'-0"	13'-0"	3"	
BENT C6	6'-0"	3'-0"	16'-0"	13'-0"	3"	
BENT C7			SEE DETAILS ON DRAWING C7			
BENT C8			SEE DETAILS ON DRAWING C7			
BENT C9	6'-0"	3'-0"	8'-0"	5'-0"	3"	5000 PSI CONCRETE
BENT C10	6'-0"	3'-0"	8'-0"	5'-0"	3"	5000 PSI CONCRETE

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

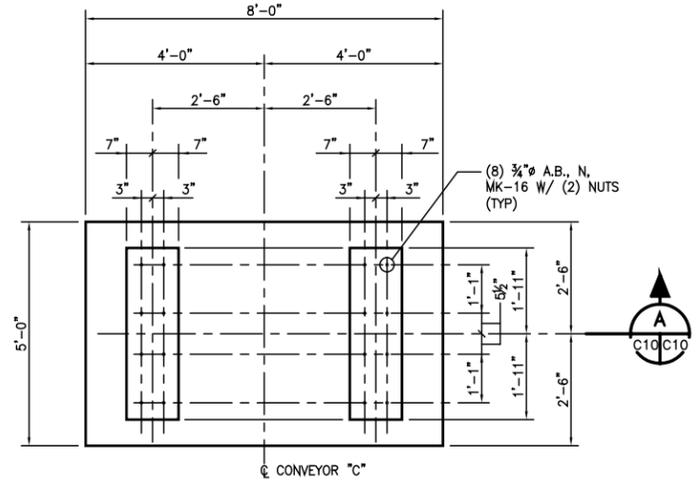
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

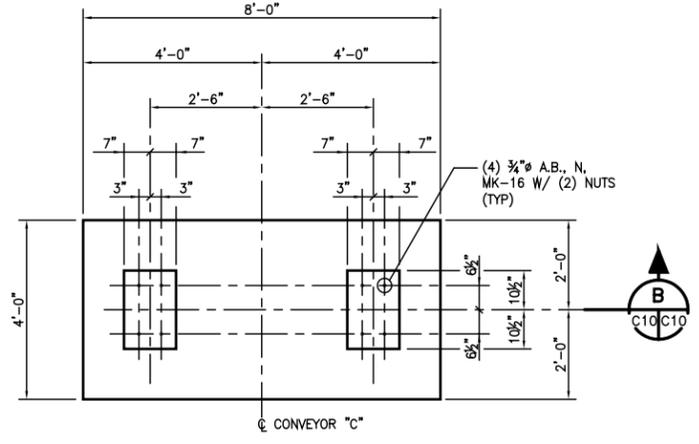
Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C9 REV. 0

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "C" BENT FOUNDATION DETAILS**

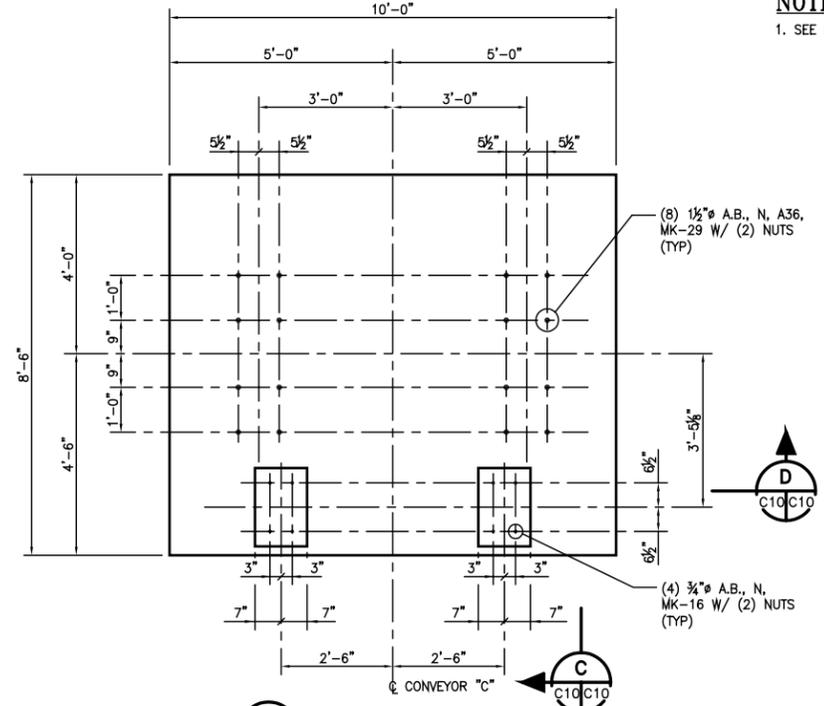
**NOTES:**  
1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.



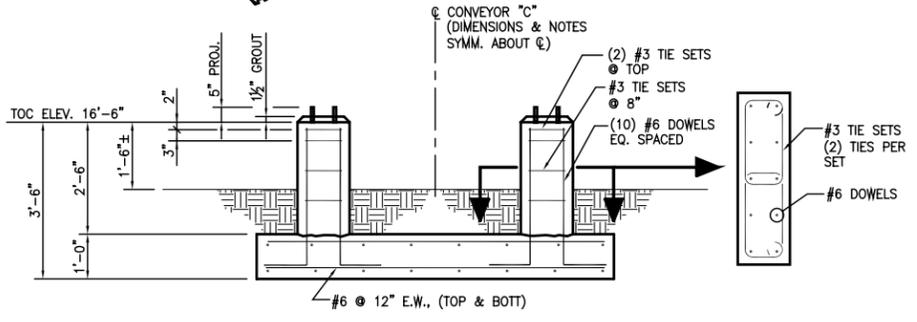
**DETAIL 1 FOUNDATION PLAN**  
C3/C10  
1/2"=1'-0" (3) REQUIRED



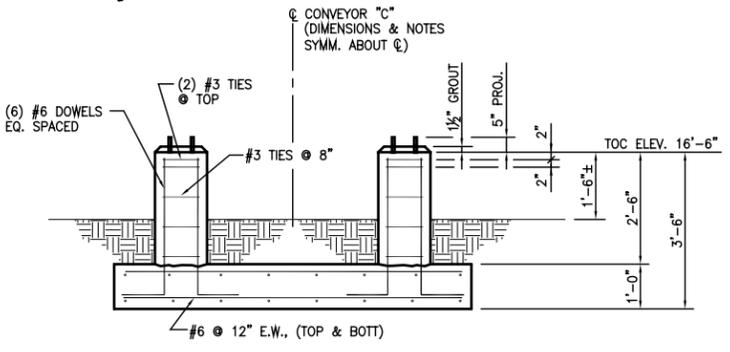
**DETAIL 2 FOUNDATION PLAN**  
C3/C10  
1/2"=1'-0" (3) REQUIRED



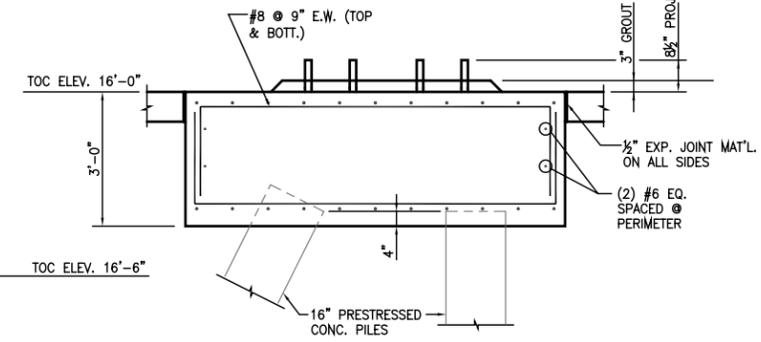
**DETAIL 3 CONVEYOR "C" TAIL PULLEY FOUNDATION**  
C3/C10  
1/2"=1'-0"



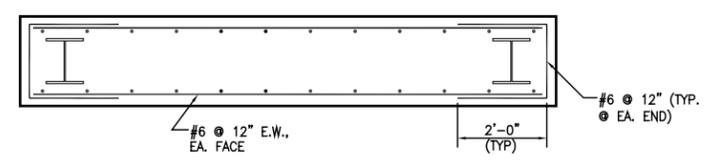
**SECTION A**  
C10/C10  
1/2"=1'-0"



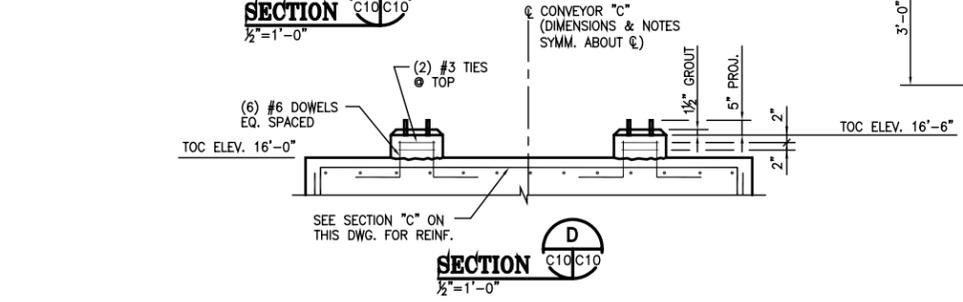
**SECTION B**  
C10/C10  
1/2"=1'-0"



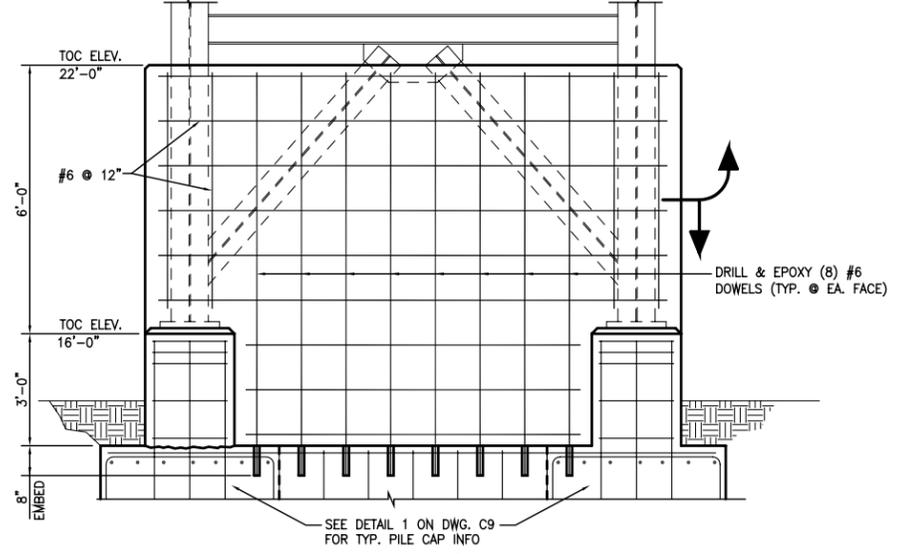
**SECTION C**  
C10/C10  
1/2"=1'-0"



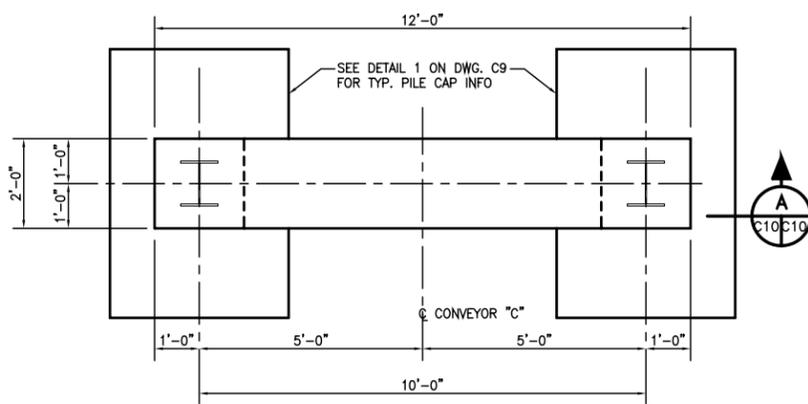
**SECTION D**  
C10/C10  
1/2"=1'-0"



**SECTION E**  
C10/C10  
1/2"=1'-0"



**SECTION F**  
C10/C10  
1/2"=1'-0"



**DETAIL 1A FOUNDATION PLAN**  
C4/C10  
1/2"=1'-0"

**REFERENCE**

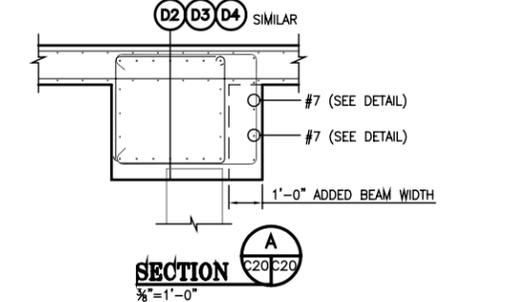
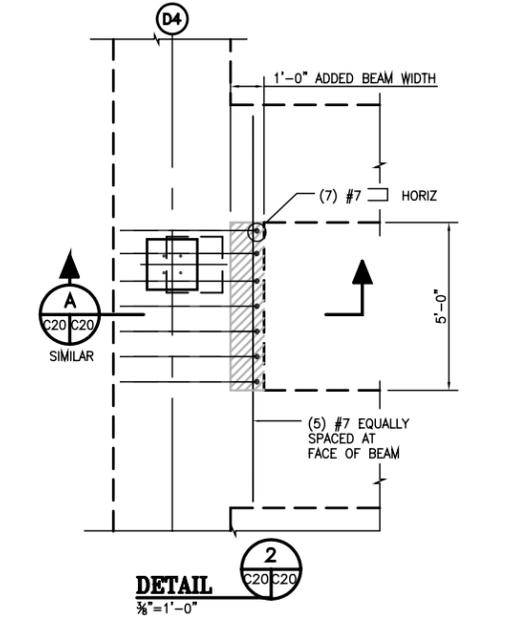
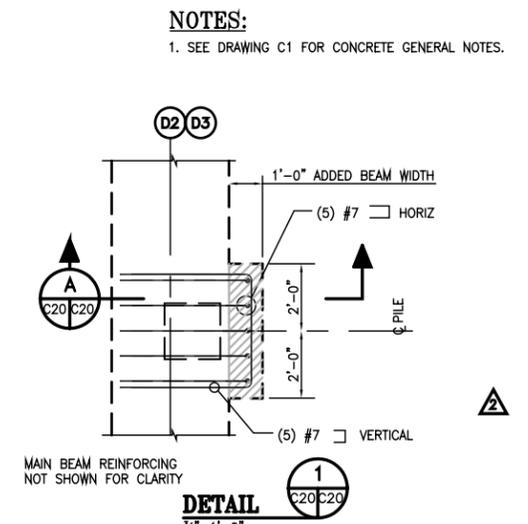
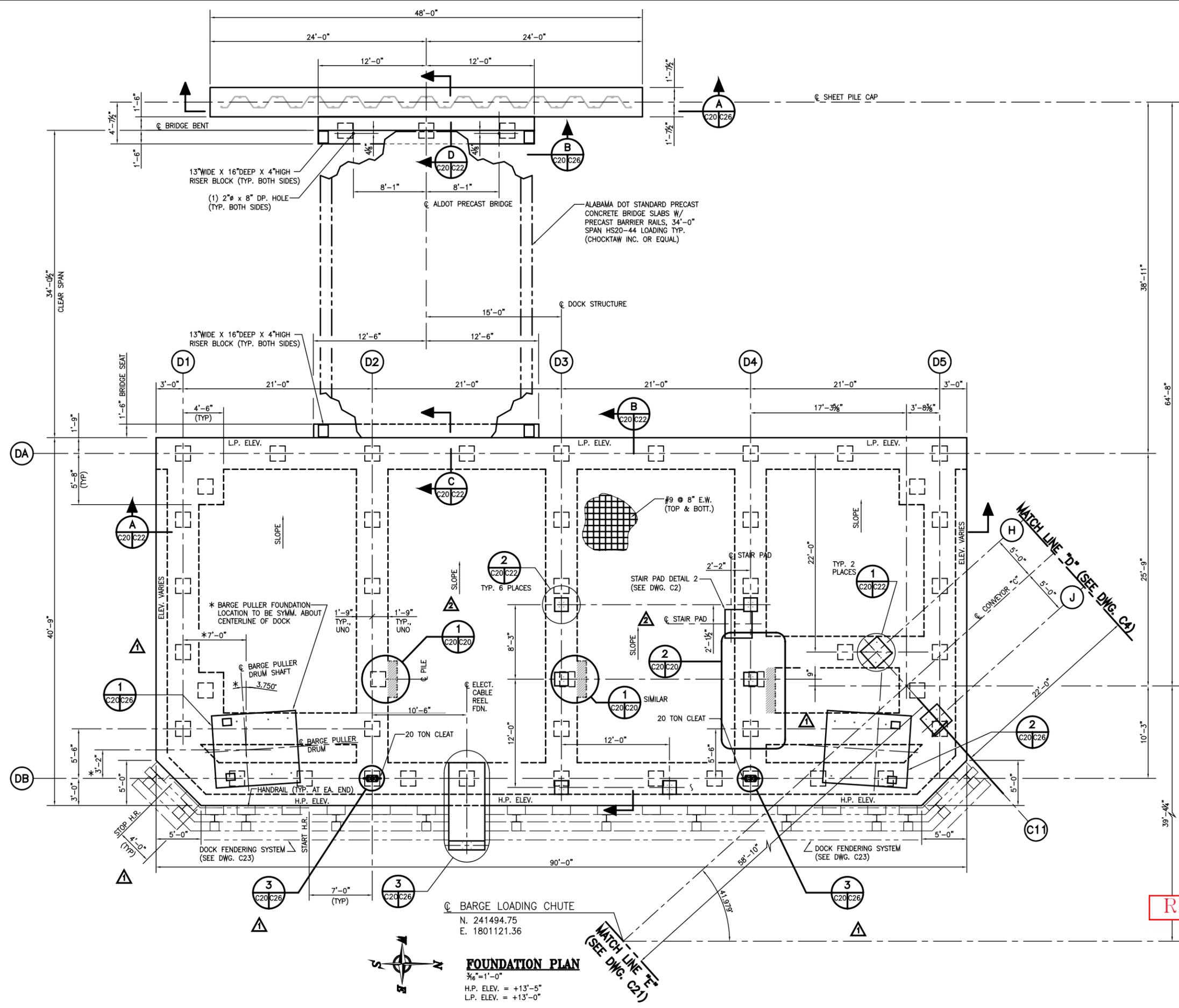
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

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MOBILE ALABAMA

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Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "C" BENT FOUNDATION DETAILS**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C10 REV. 0



**REFERENCE**

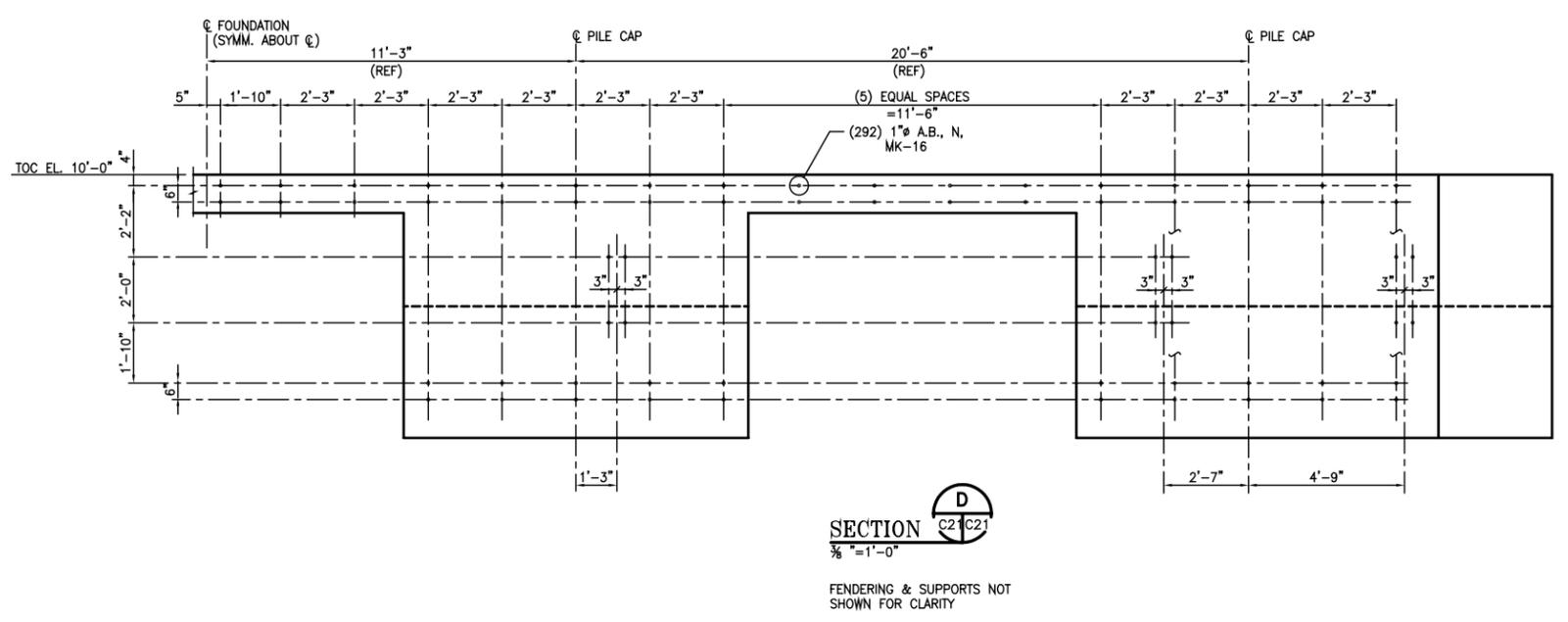
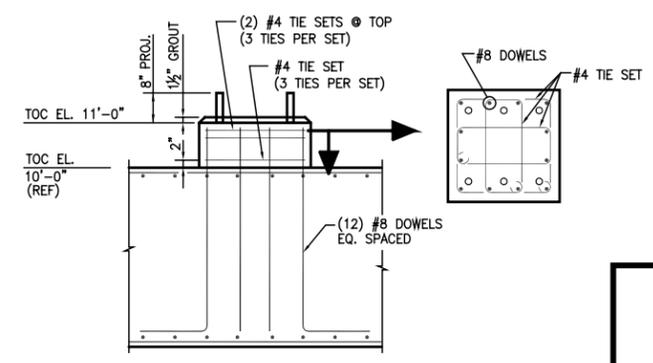
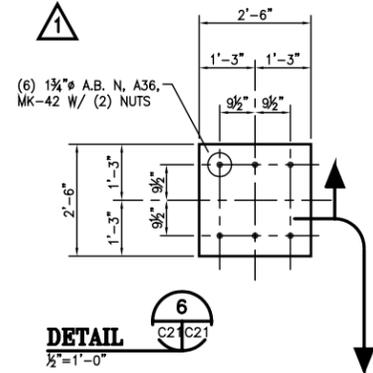
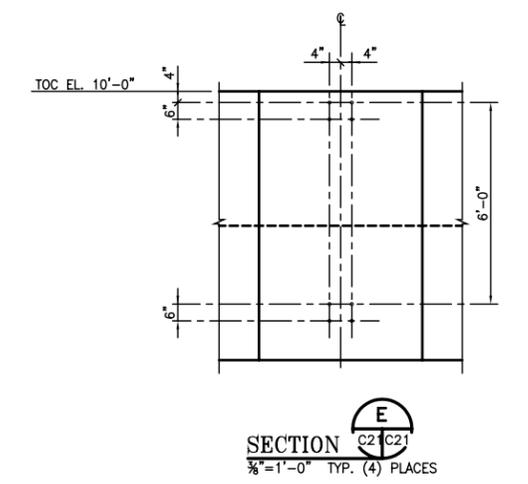
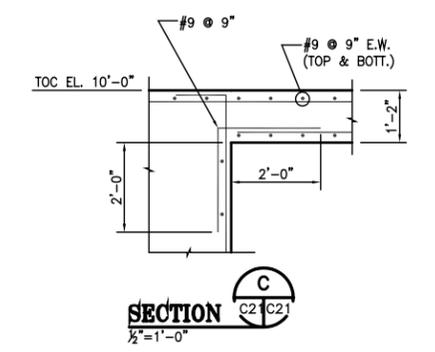
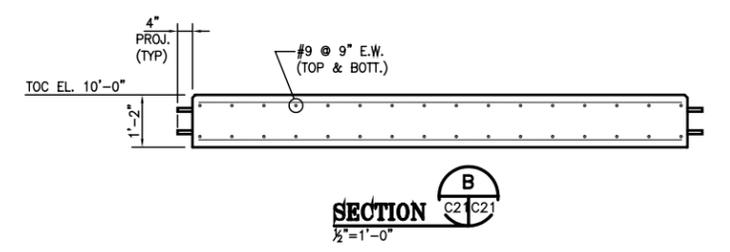
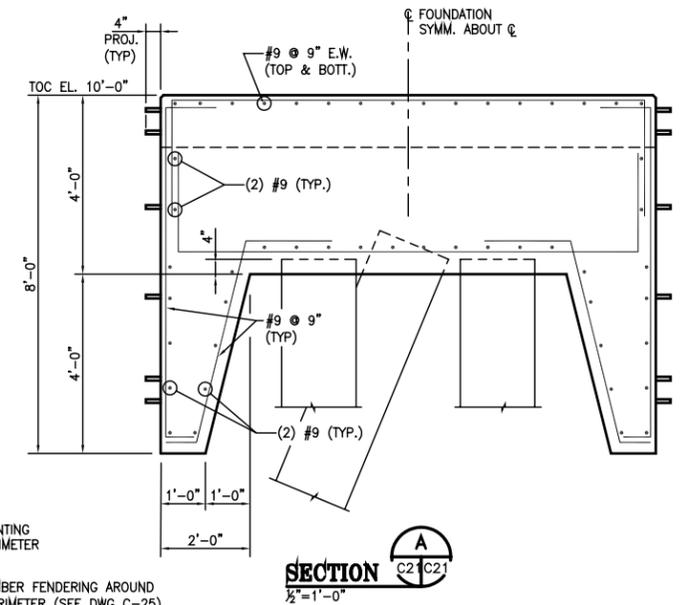
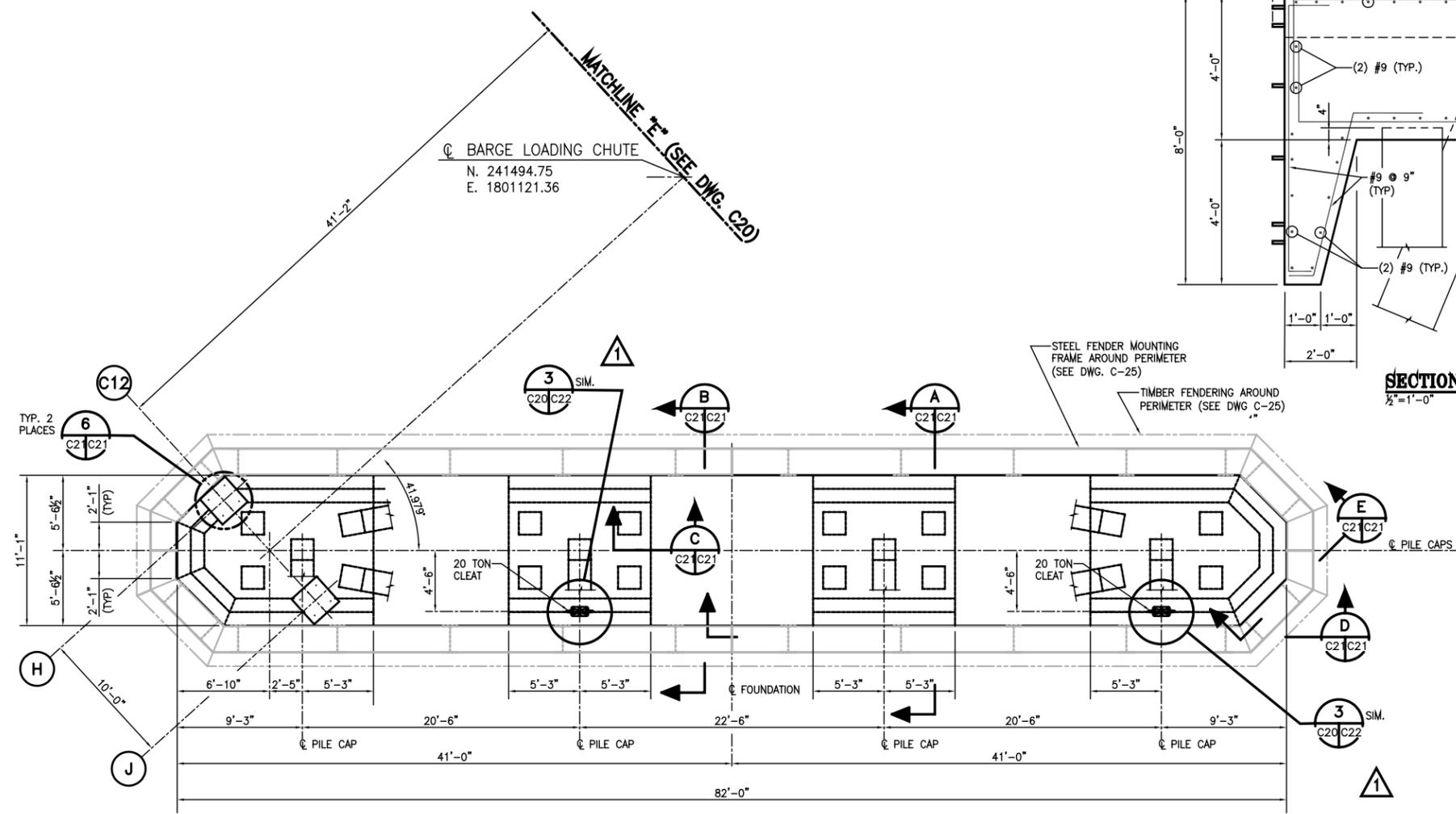
REV.	DATE	DESCRIPTION	BY
2	03/23/06	RECORD ISSUE	HAC
2	08/01/05	REVISED BEAM WIDTH AND ADDED REBAR	HAC
1	04/26/05	REVISED WINCH FDN; ADDED CLEAT DET. NO.	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
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**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION DOCK & BRIDGE FOUNDATION PLAN**

Drawn By: DTD Date: 09/02/04  
 Checked By: HAC Date: 10/07/04  
 Scale: NOTED Job No. 1723 Drawing No. C20 REV. 2



NOTES:  
 1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.

REFERENCE

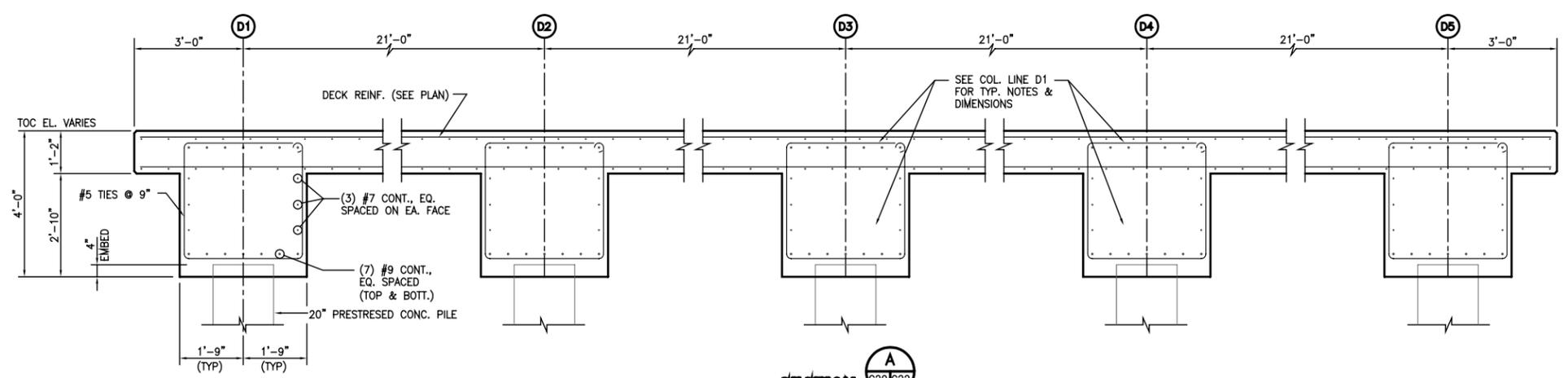
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	04/26/05	ADDED CLEAT DETAIL MARKERS	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE, ALABAMA

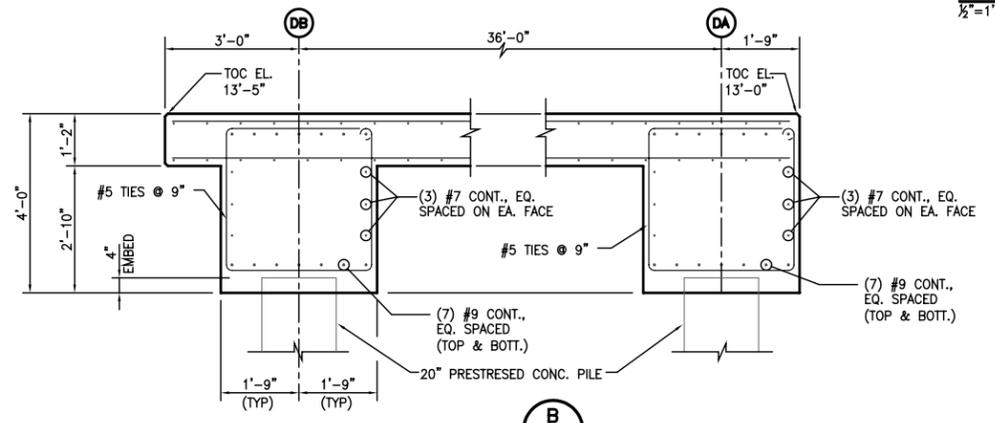
**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**OUTBOARD MOORING FOUNDATION PLAN**

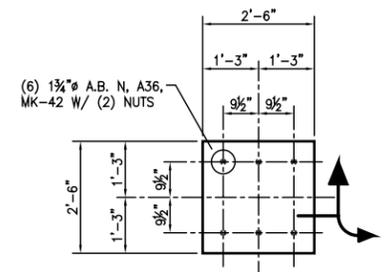
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 Checked By: HAC Date: 10/07/04  
 Scale: NOTED Job No. 1723 Drawing No. C21 REV. 1



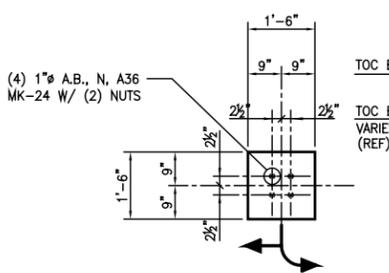
**SECTION A**  
C20 C22  
1/2"=1'-0"



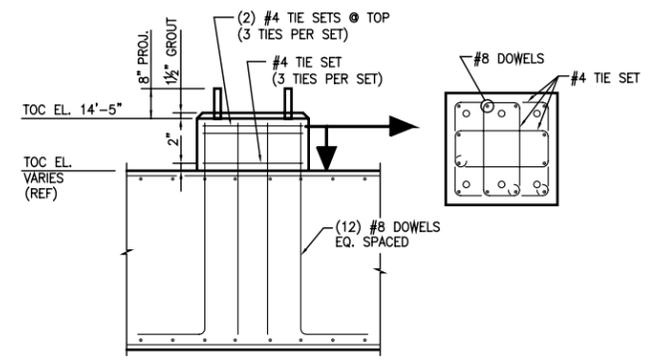
**SECTION B**  
C20 C22  
1/2"=1'-0"



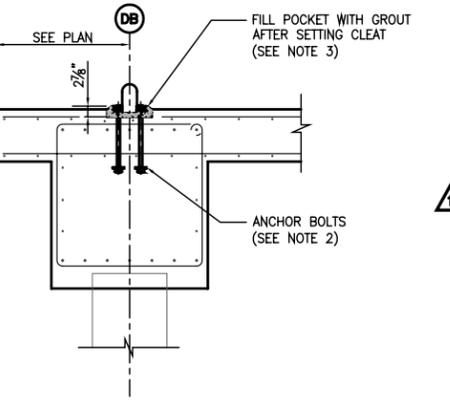
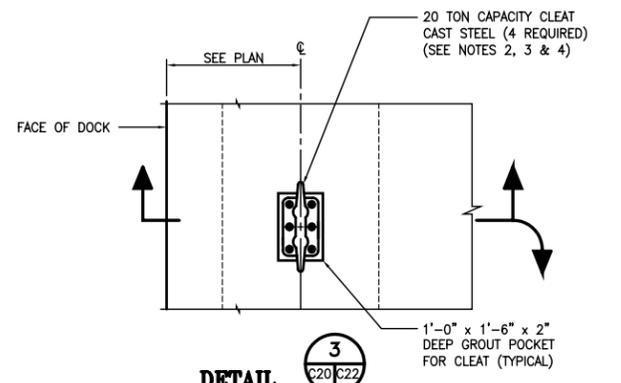
**DETAIL 1**  
C20 C22  
1/2"=1'-0"



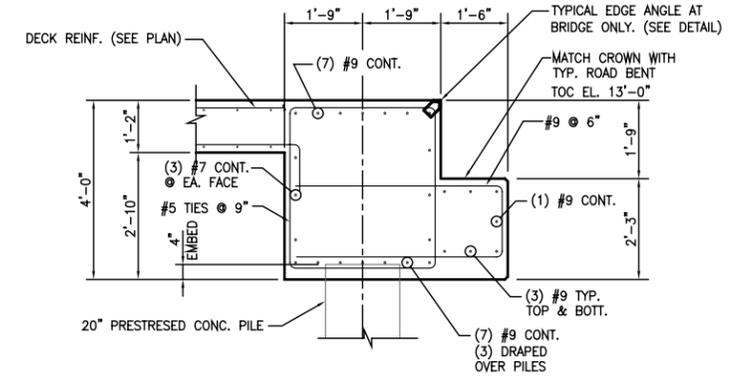
**DETAIL 2**  
C20 C22  
1/2"=1'-0"



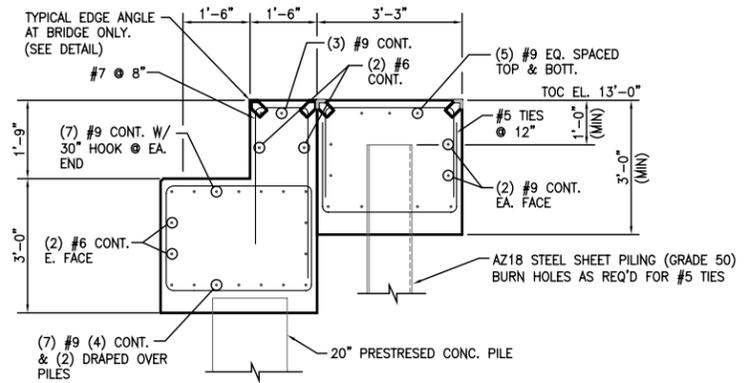
**DETAIL 3**  
C20 C22  
1/2"=1'-0"



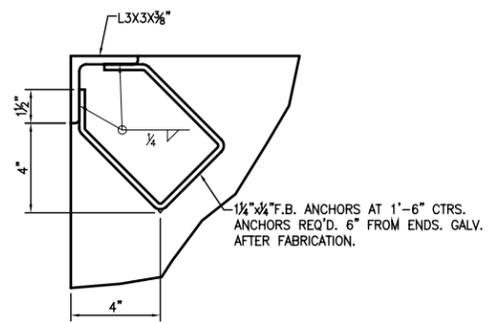
NOTE:  
CONTRACTOR TO SWALE CONCRETE AT BRIDGE TO MATCH BRIDGE SLOPE.



**SECTION C**  
C20 C22  
1/2"=1'-0"



**SECTION D**  
C20 C22  
1/2"=1'-0"



**EDGE ANGLE DETAIL**  
3"=1'-0"

- NOTES:**
- SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.
  - ANCHOR BOLTS SHALL BE HELD IN PLACE WITH TEMPLATES THAT MATCH CLEAT MANUFACTURERS BOLT PATTERN. TEMPLATES SHALL ENSURE PROPER LOCATION OF BOLTS DURING PLACEMENT OF CONCRETE.
  - CLEATS SHALL BE LEVELED USING LEVELING NUTS ON EXPOSED BOLTS AND SECURED TO BOLTS USING ADDITIONAL NUTS AND WASHERS WITHIN CLEAT BASE. NUTS SHALL BE HAND TIGHT BEFORE GROUTING OF BASE. AFTER GROUTING HAS CURED FOR SEVEN DAYS NUTS SHALL BE TIGHTENED TO SNUG CONDITION. AREAS AROUND NUTS IN CLEAT BASE SHALL BE FILLED WITH HOT POURED ZINC SO AS TO PREVENT STANDING WATER. TO PREVENT DAMAGE TO VESSEL MOORING LINES, NO SHARP EDGES AROUND BOLTING AREA SHALL EXIST AFTER INSTALLATION.
  - CLEAT SHALL BE PAINTED IN ACCORDANCE WITH WITH COATING NOTES ON DRAWING T2. FINAL FINISH COLOR OF CLEAT SHALL BE SAFETY YELLOW.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
2	03/23/06	RECORD ISSUE	HAC
1	04/26/05	ADDED DETAIL 3 AND NOTES 2 THRU 4	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

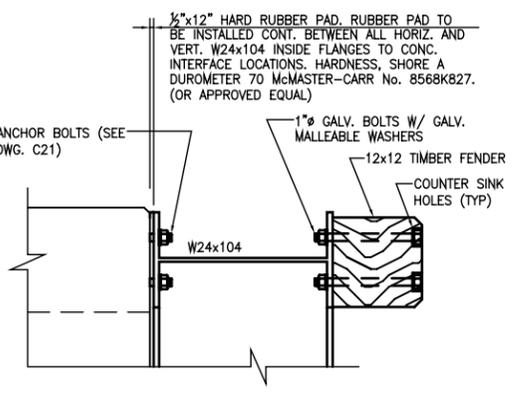
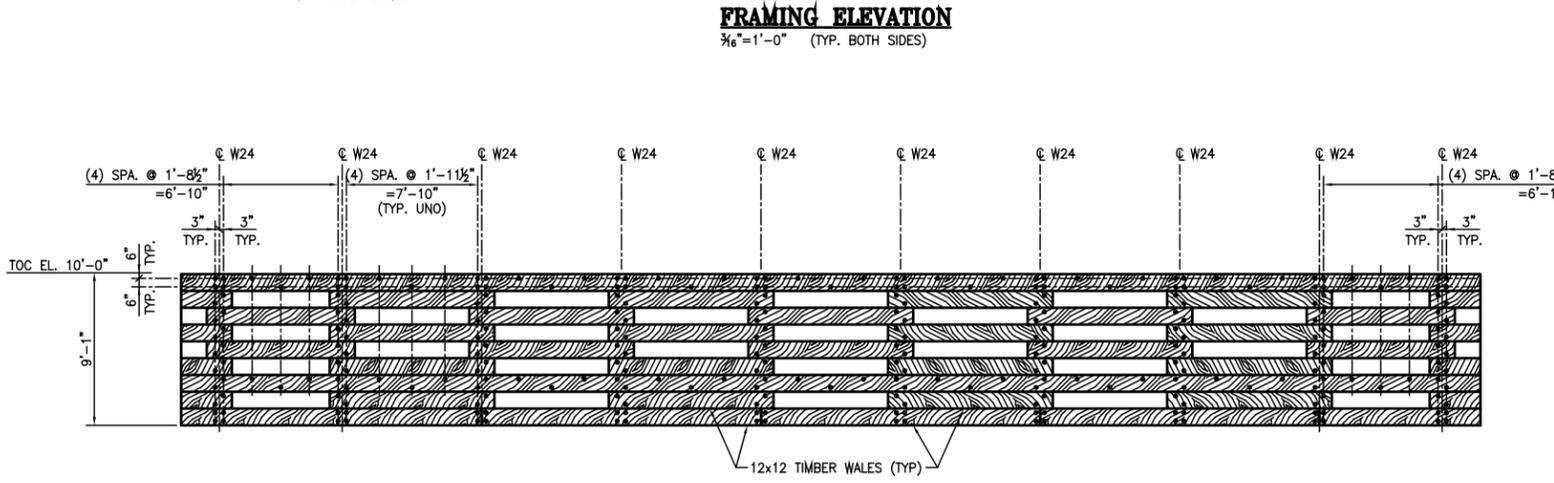
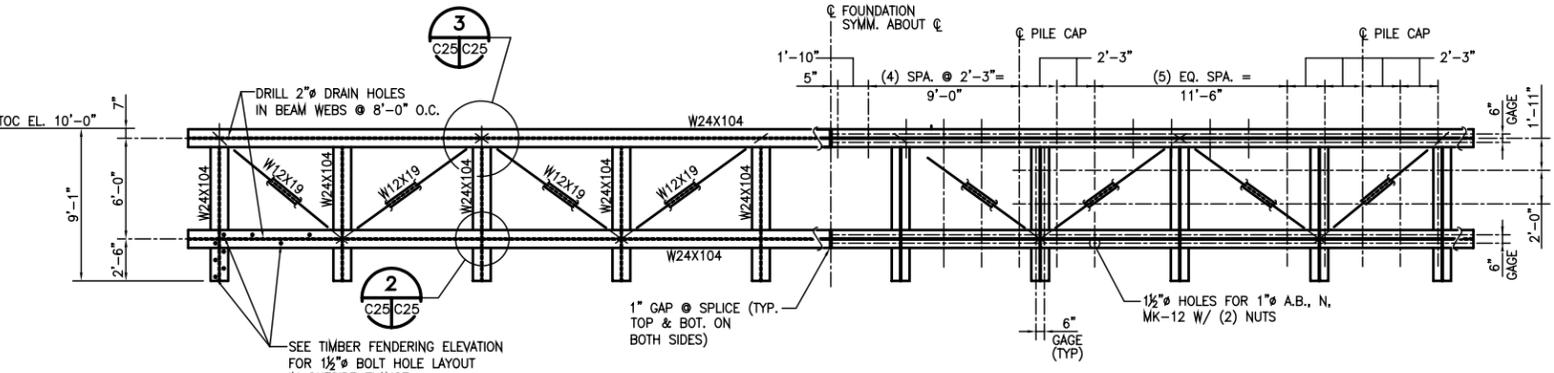
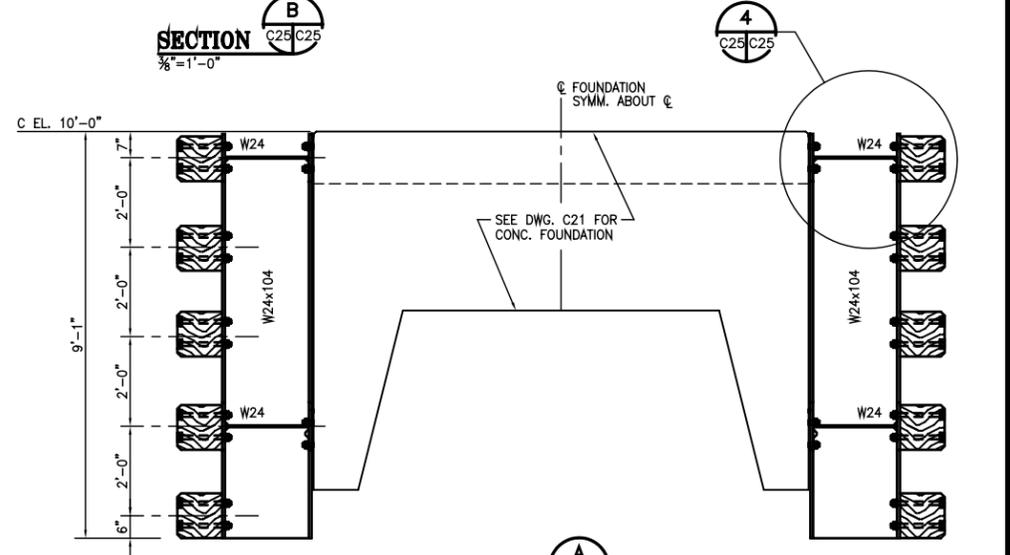
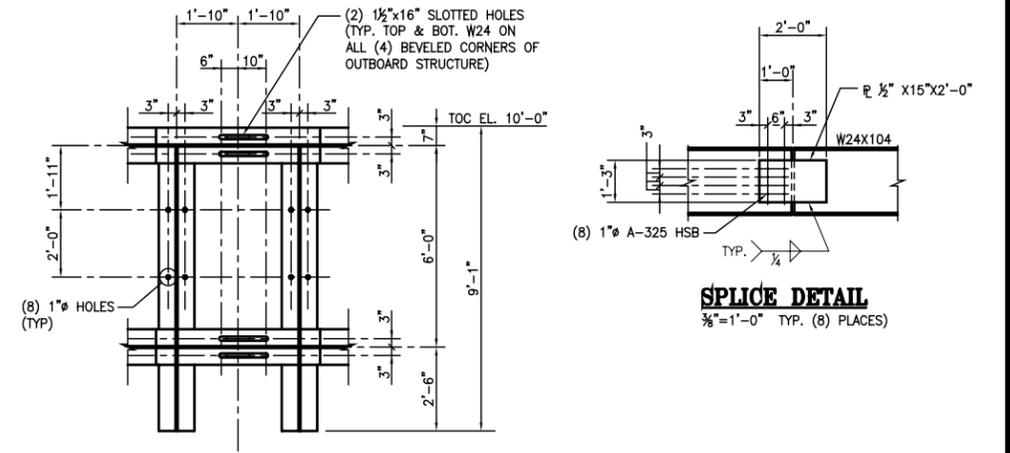
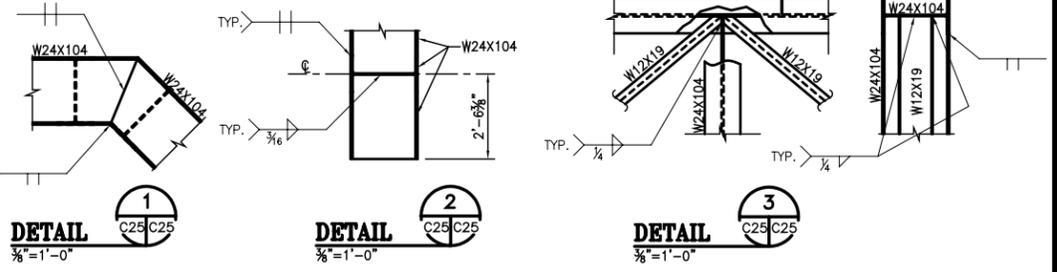
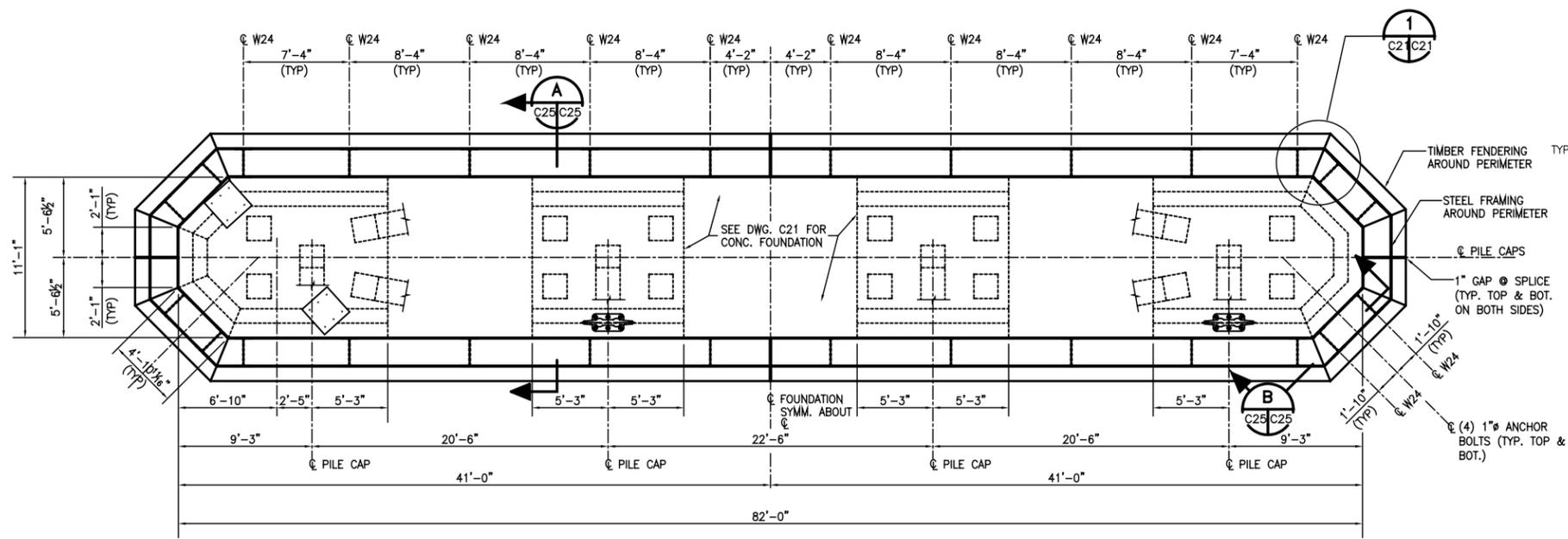
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**DOCK FOUNDATION SECTIONS & DETAILS**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C22 REV. 2







NOTES:  
FOR FENDERING SYSTEM REQUIREMENTS SEE  
REFERENCE SPECIFICATION 06130.

**REFERENCE**

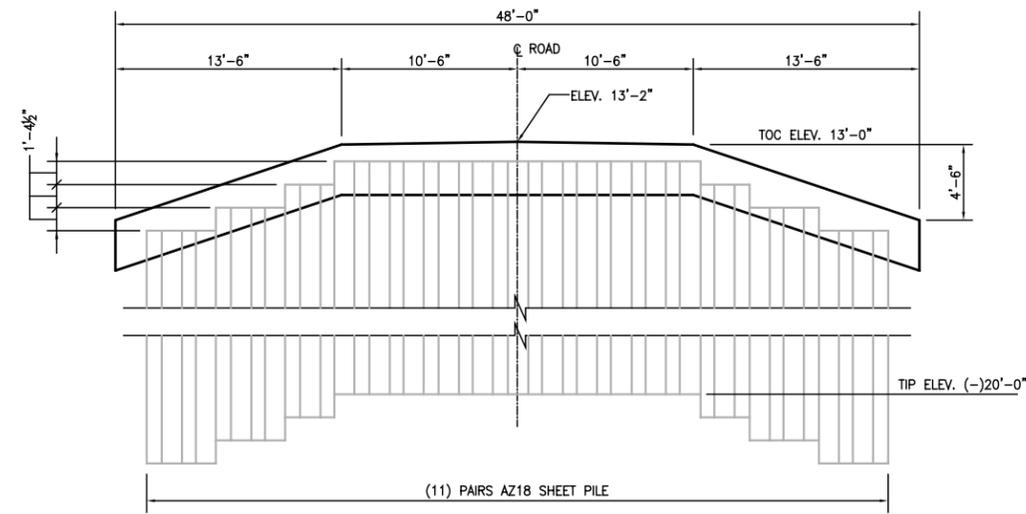
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE, ALABAMA

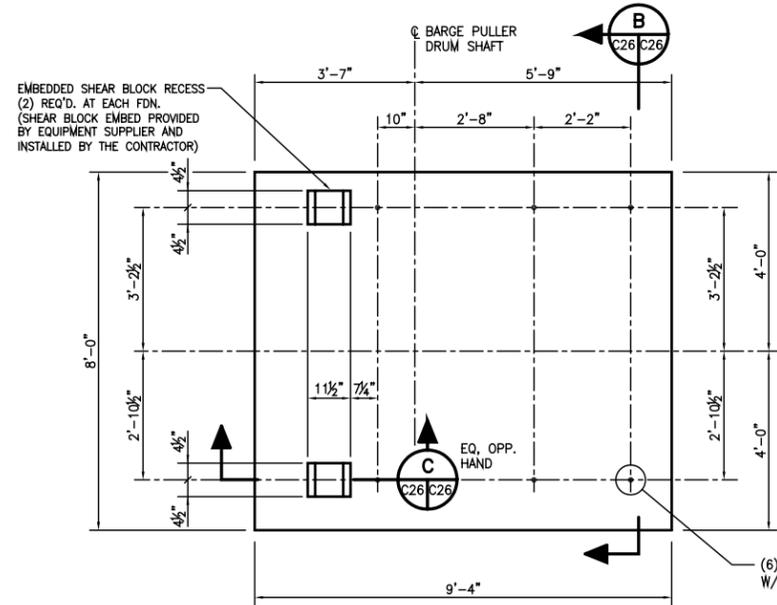
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**OUTBOARD MOORING FENDERING DETAILS**

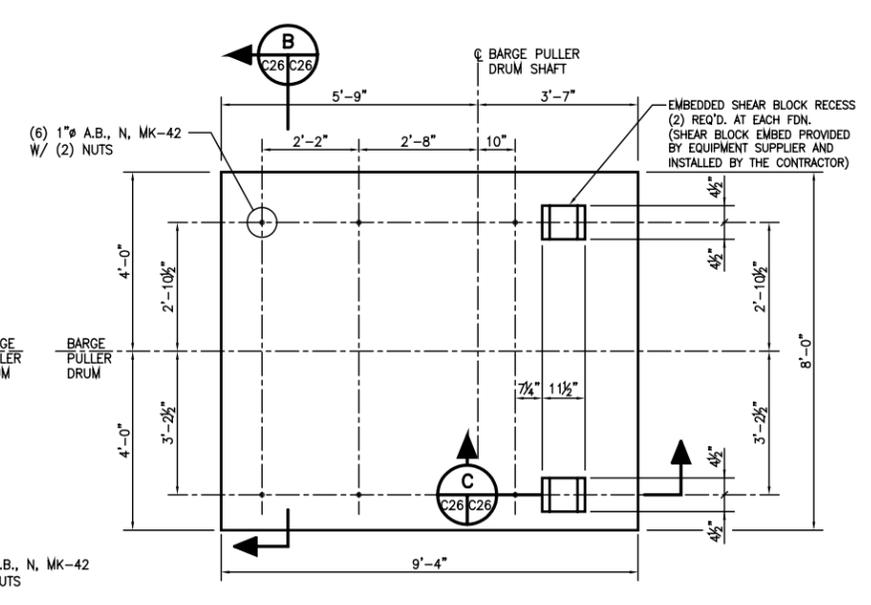
Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C25 REV. 0



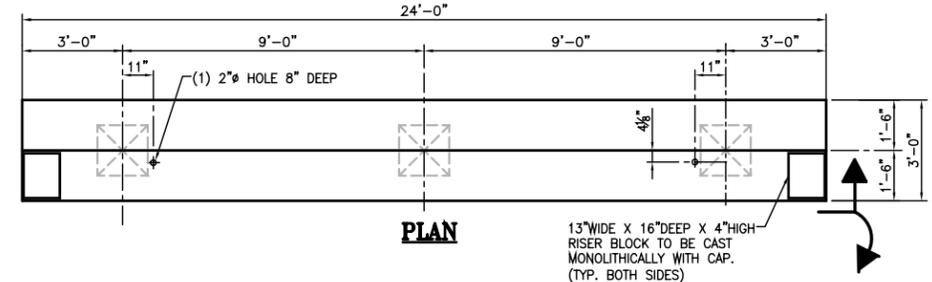
**SECTION A**  
C20 C26  
1/2"=1'-0"



**DETAIL 1**  
C20 C26  
1/2"=1'-0" **BARGE PULLER FOUNDATION PLAN**

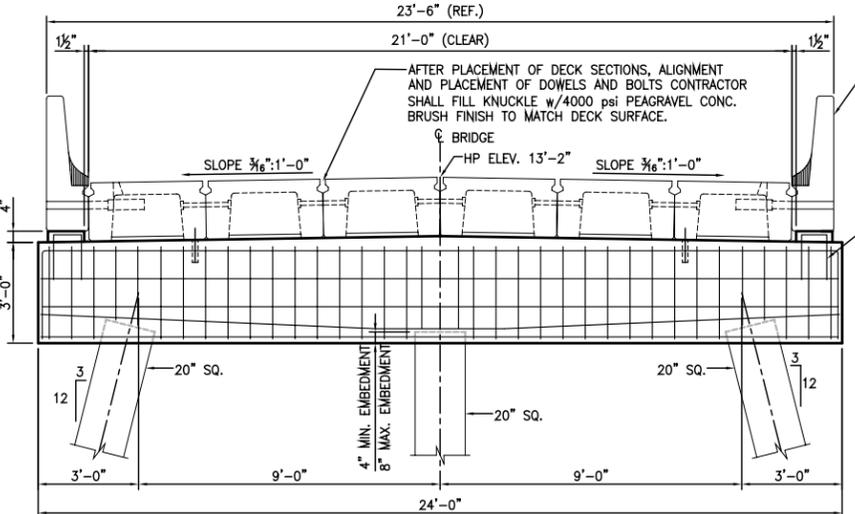


**DETAIL 2**  
C20 C26  
1/2"=1'-0" **BARGE PULLER FOUNDATION PLAN**

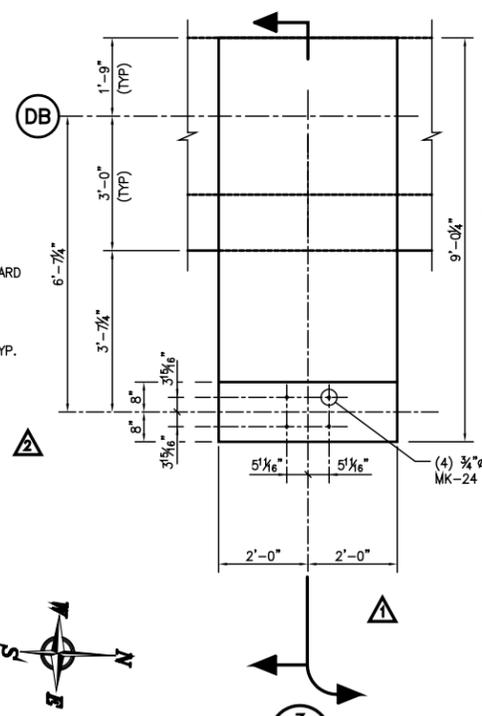


**PLAN**

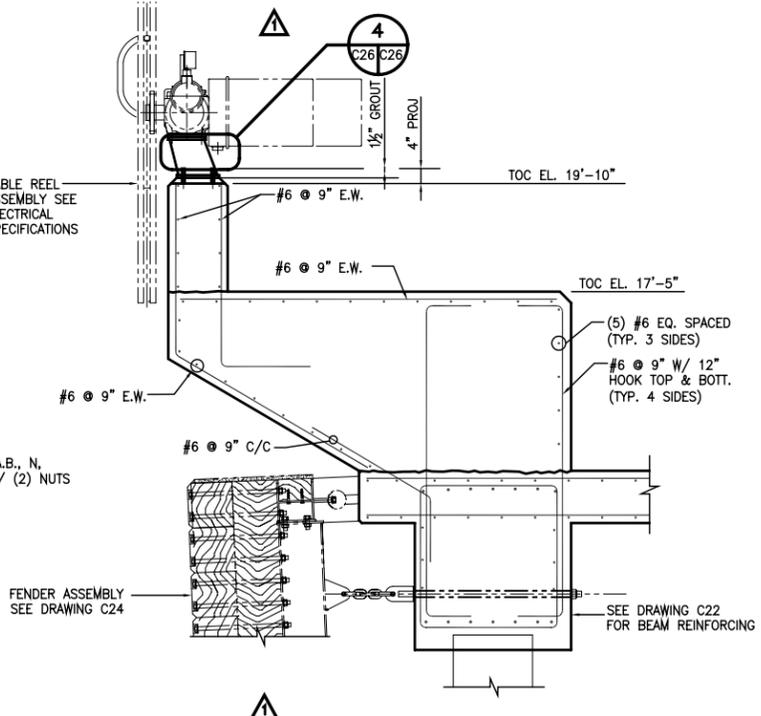
13" WIDE X 16" DEEP X 4" HIGH RISER BLOCK TO BE CAST MONOLITHICALLY WITH CAP. (TYP. BOTH SIDES)



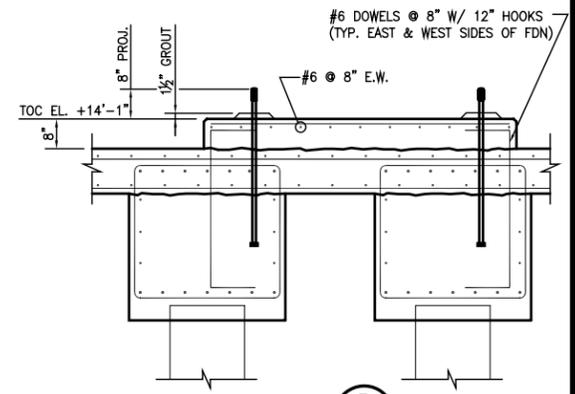
**SECTION B**  
C20 C26  
1/2"=1'-0"



**DETAIL 3**  
C20 C26  
1/2"=1'-0" **CABLE REEL FOUNDATION PLAN**



**SECTION C**  
C26 C26  
SCALE: 1"=1'-0"



**SECTION B**  
C26 C26  
1/2"=1'-0"

- NOTES:**
- SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.
  - COORDINATE CONCRETE WORK WITH PIPING, ELECTRICAL, AND MECHANICAL WORK PRIOR TO PLACING CONCRETE. EQUIPMENT ATTACHMENT DETAILS AND BOLTING REQUIREMENTS INDICATED ON THE DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY INTERFACE BETWEEN ALL EQUIPMENT AND CONCRETE FOUNDATIONS PRIOR TO PLACEMENT OF CONCRETE. ANY DISCREPANCIES BETWEEN THE DETAILS INDICATED ON THE DRAWINGS AND THE ACTUAL REQUIRED INTERFACE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. ANY REWORK REQUIRED DUE TO INADEQUATE COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
3	03/23/06	RECORD ISSUE	HAC
2	08/01/05	REVISED CABLE REEL FND & ADDED DET 4	HAC
1	4/26/05	REVISED FDN'S FOR WINCHES AND CABLE REEL	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

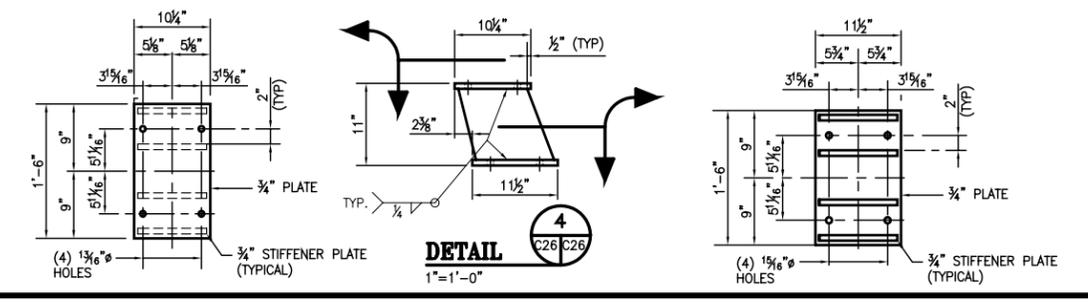
**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnet & Bridges, LLC  
Consulting Engineers

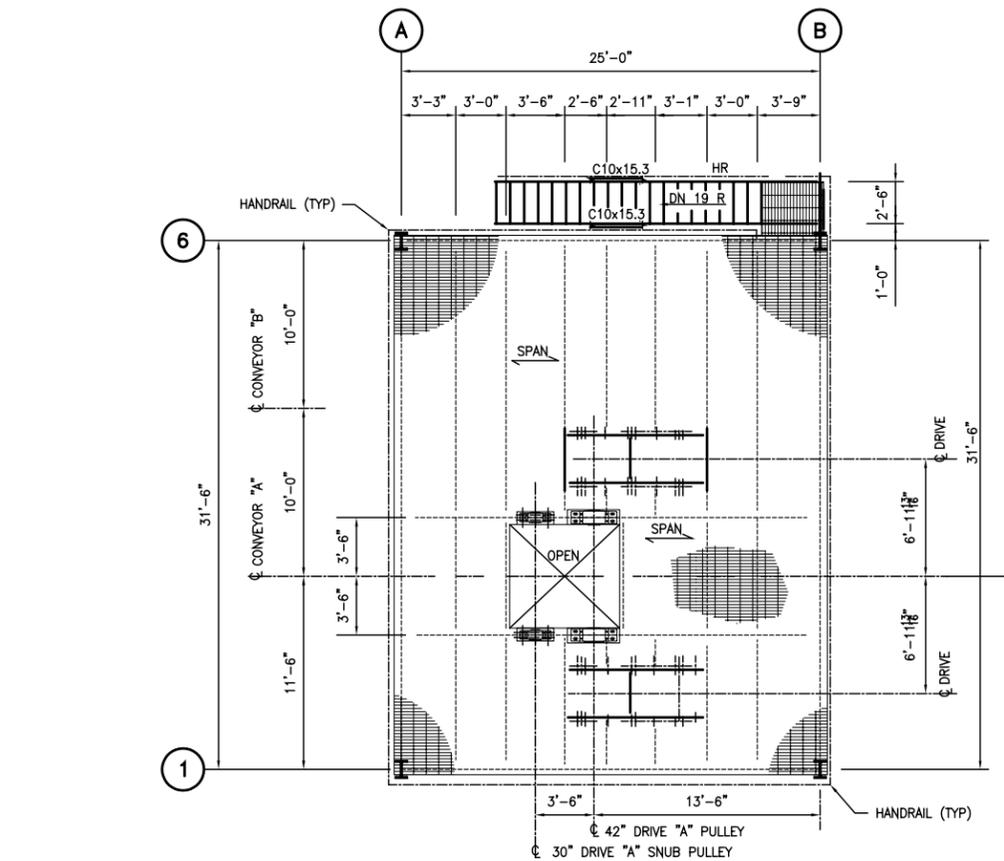
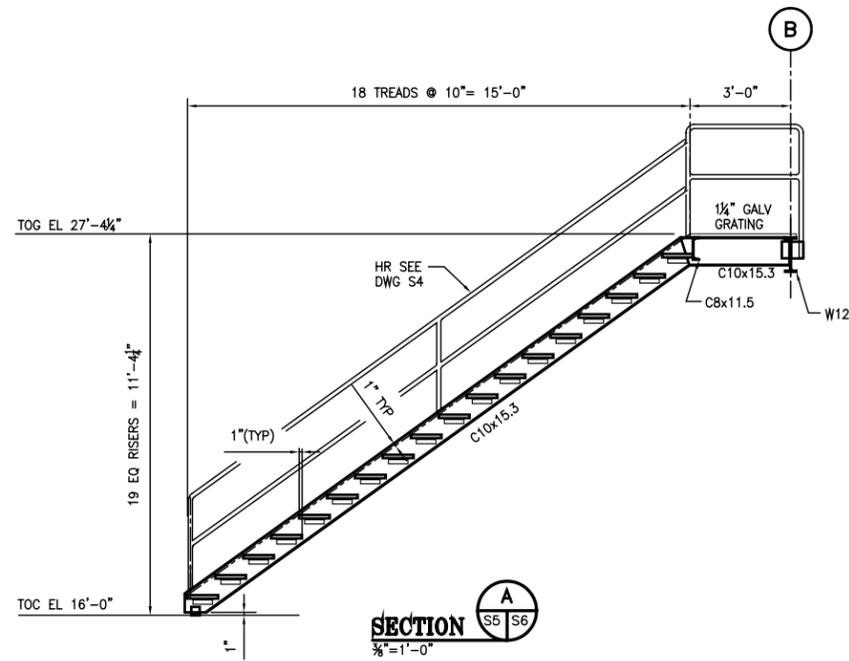
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION DOCK FOUNDATION SECTIONS & DETAILS**

Drawn By: DTD Date: 09/02/04  
Checked By: HAC Date: 10/07/04  
Scale: NOTED Job No. 1723 Drawing No. C26 REV. 2



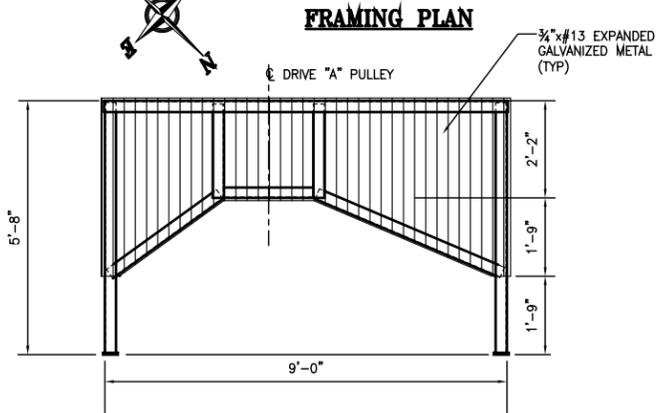
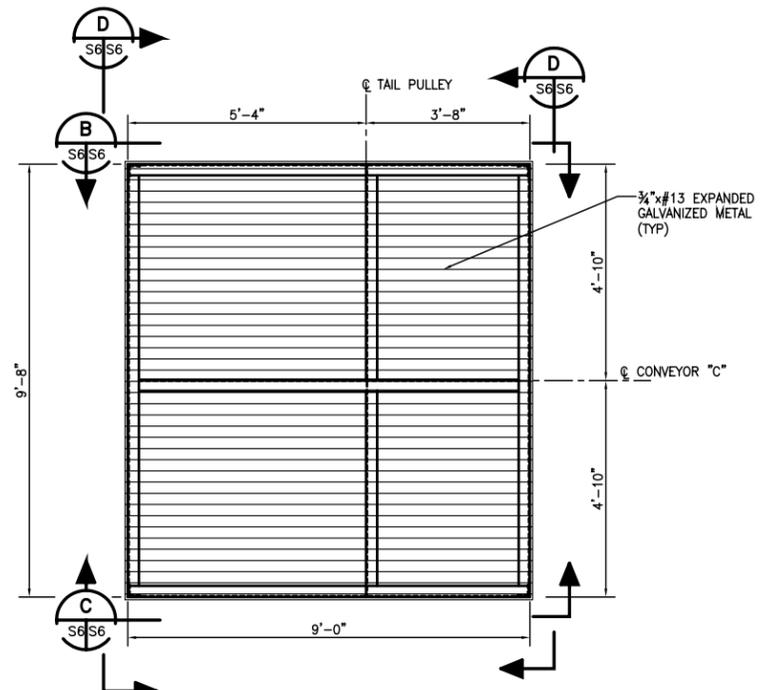
**DETAIL 4**  
C26 C26  
1"=1'-0"





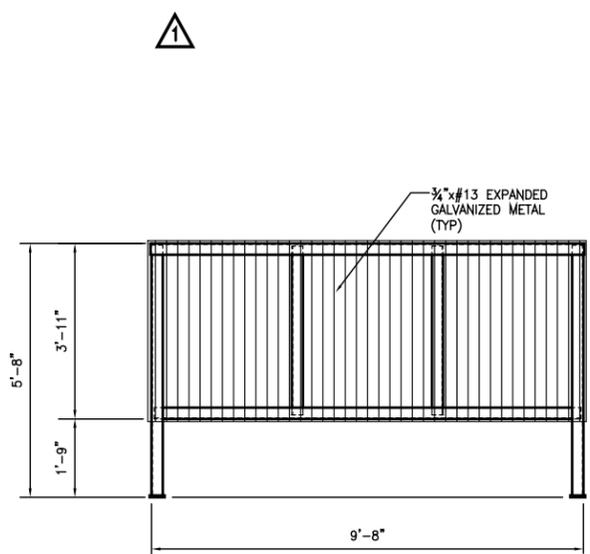
**GRATING PLAN @ TOG ELEV. 27'-4 1/4"**  
 3/8"=1'-0" (FOR FRAMING PLAN SEE DWG. S5)

NOTE:  
 GRATING OPENINGS TO BE ESTABLISHED BY THE CONTRACTOR  
 BASED ON THE ACTUAL EQUIPMENT DIMENSIONS AND THE  
 REQUIREMENTS OF DRAWING S4A.

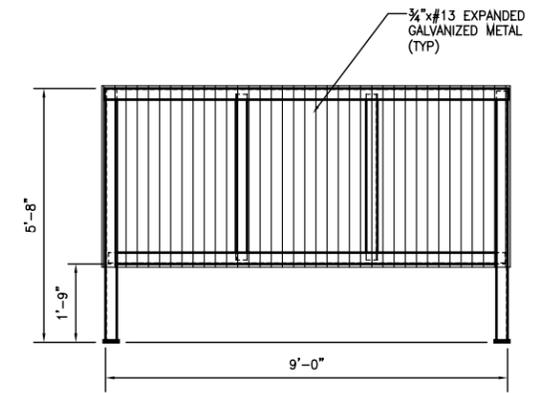


**SECTION B**  
 S6 S6

**CONVEYOR "A" DRIVE PULLEY GUARD**  
 1/2"=1'-0" (ALL WELDED FRAME, STEEL MEMBERS - L3x3x1/4, UNO)



**SECTION C**  
 S6 S6



**SECTION D**  
 S6 S6

**NOTES:**  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

**REFERENCE**

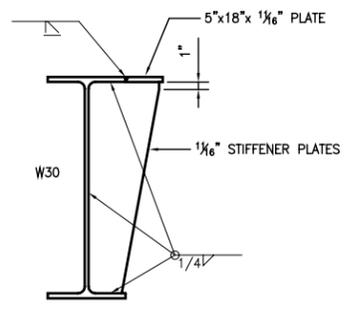
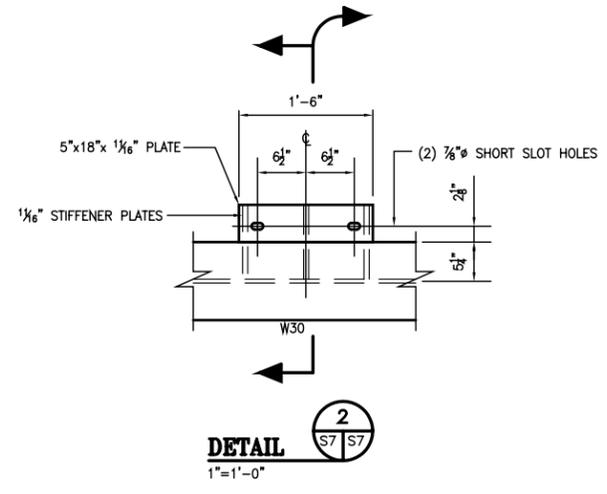
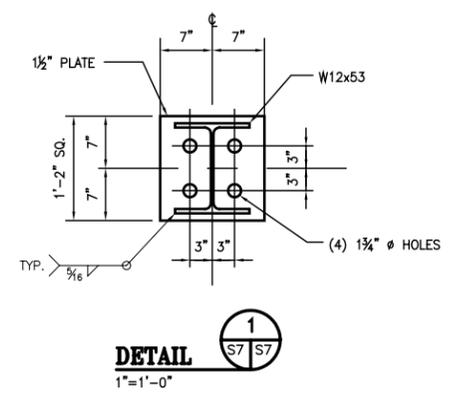
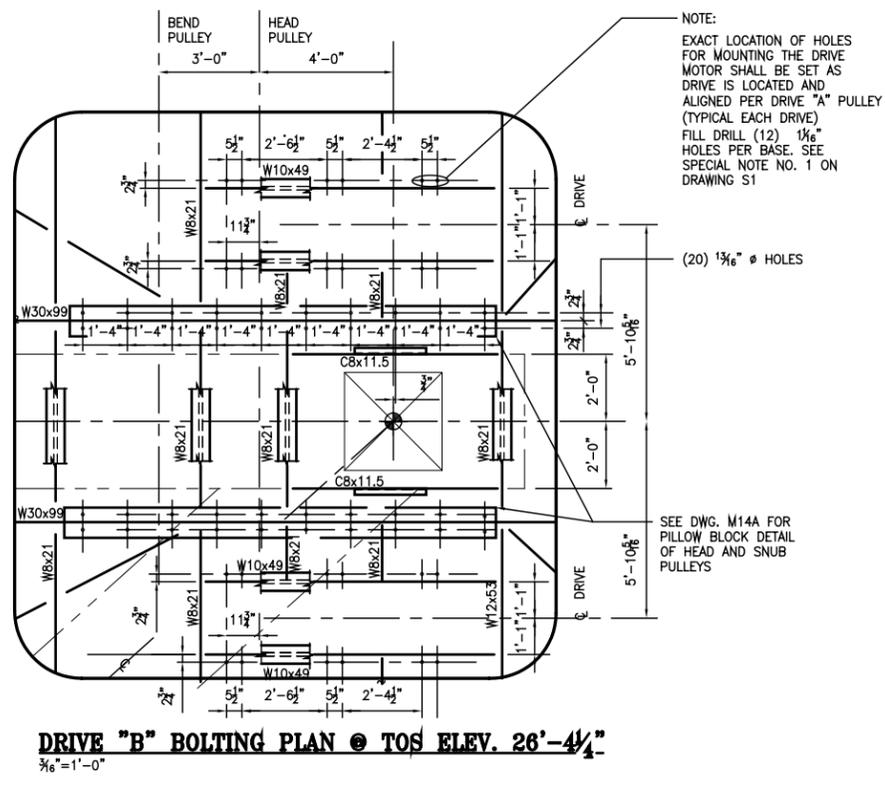
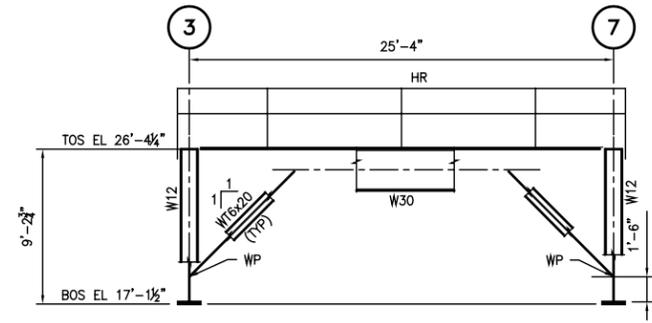
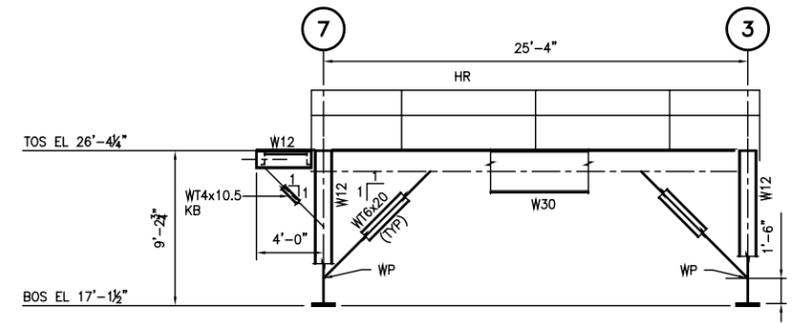
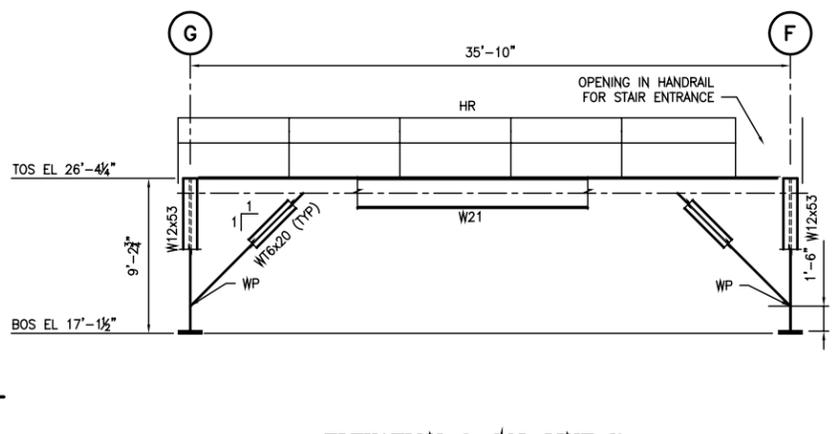
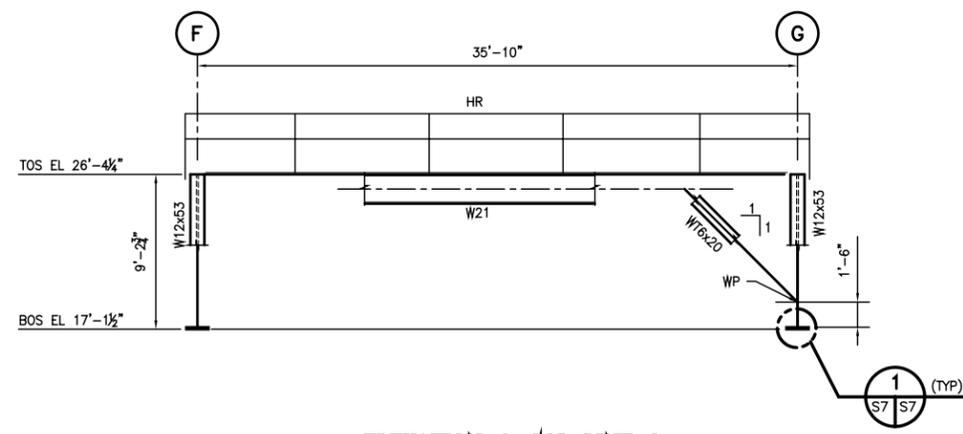
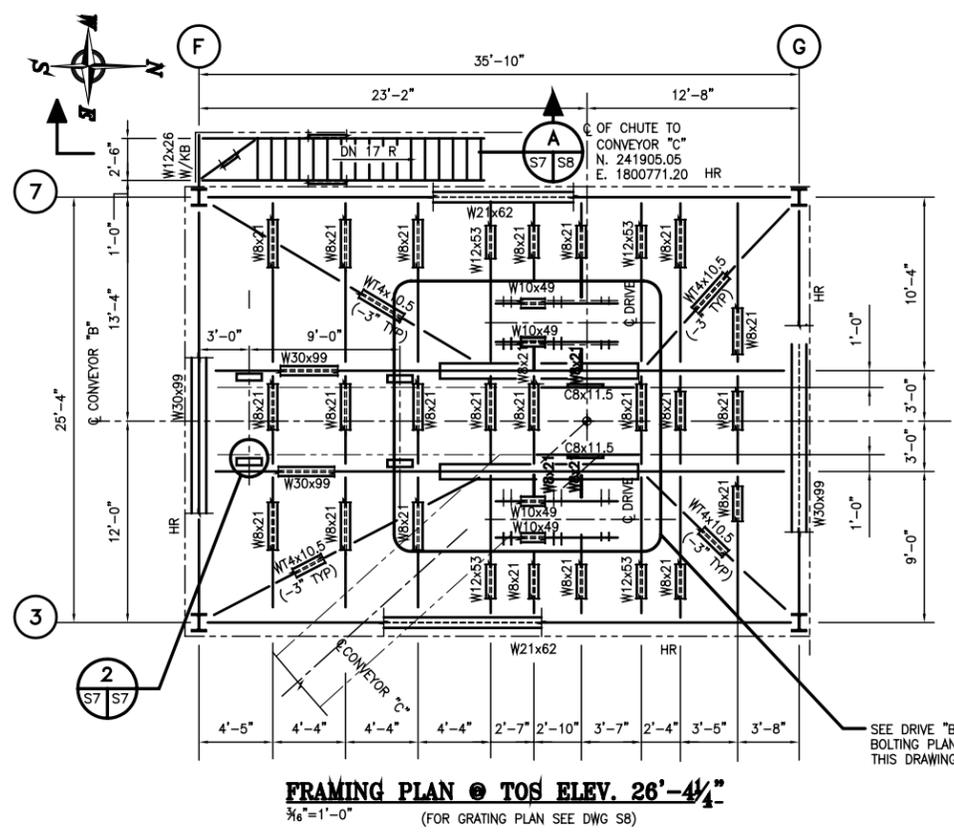
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "A" SECTIONS & DETAILS**

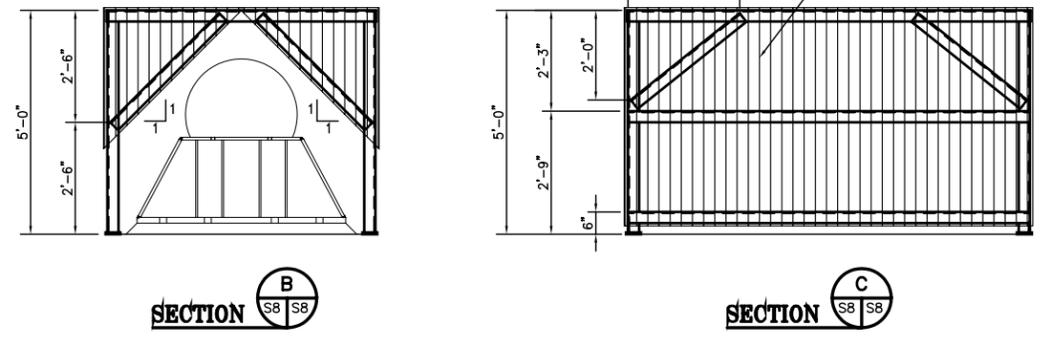
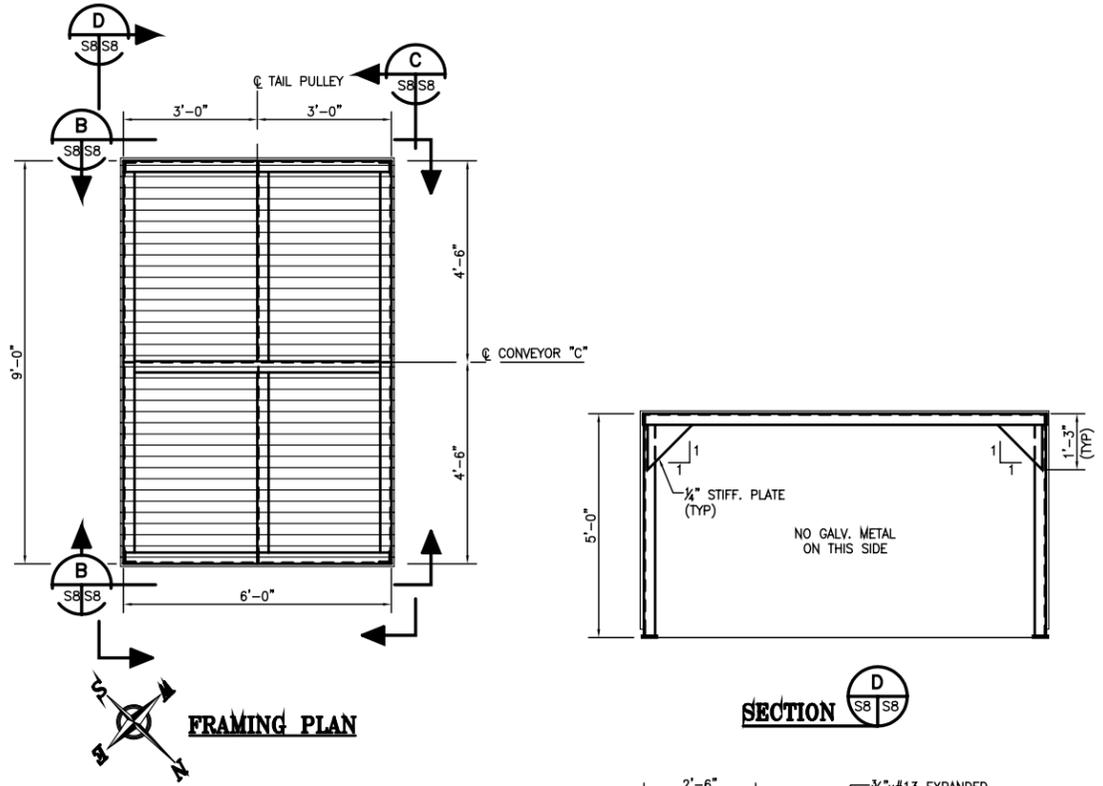
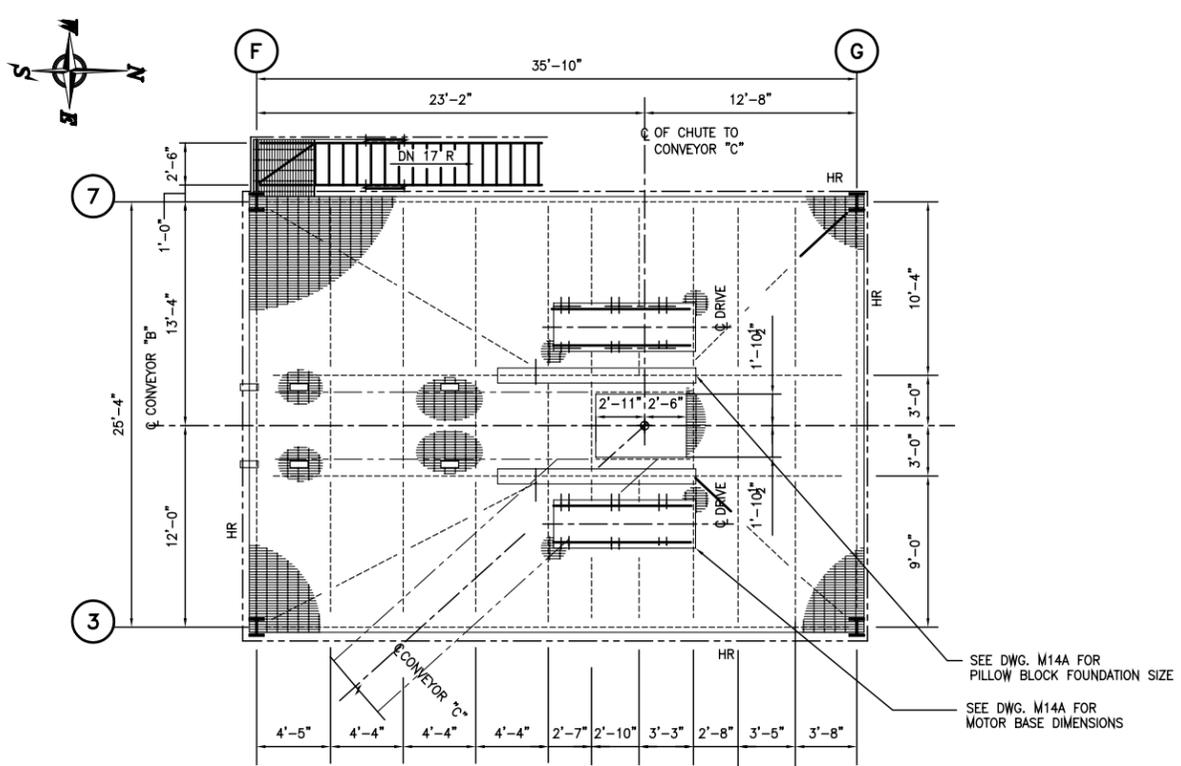
Drawn By: JLT Date: 07/27/04  
 Checked By: HAC Date: 10/07/04  
 Scale: AS SHOWN Job No. 1723 Drawing No. S6 REV. 1



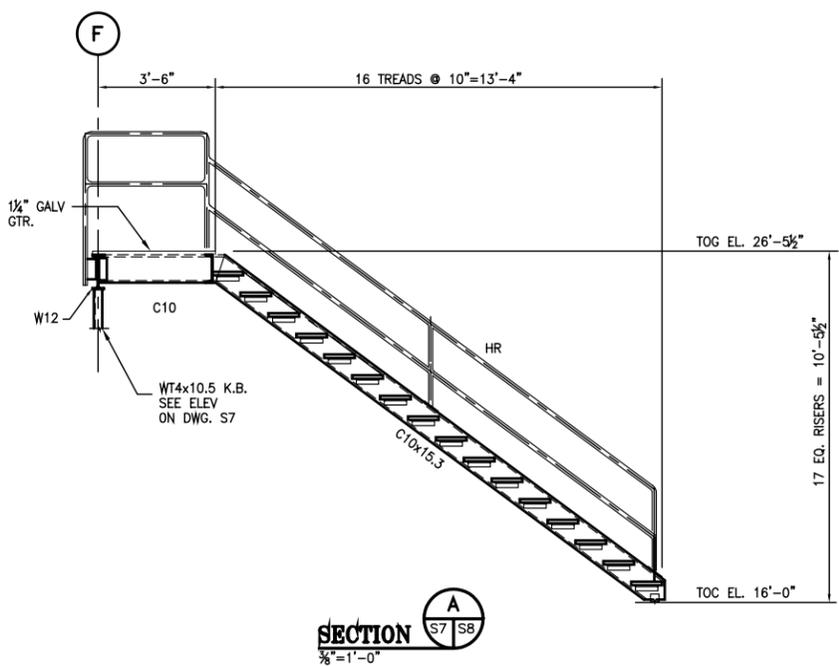
NOTES:  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

REFERENCE

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By:	JLT	Date:	07/27/04
Checked By:	HAC	Date:	10/07/04
Scale:	AS SHOWN	Job No.:	1723
<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "B" DRIVE STRUCTURE PLANS &amp; ELEVATIONS</b>			Drawing No. <b>S7</b> REV. <b>0</b>



CONVEYOR "C" TAIL PULLEY GUARD  
 1/2"=1'-0" (ALL WELDED FRAME, STEEL MEMBERS - L3x3 3/4, UNO)

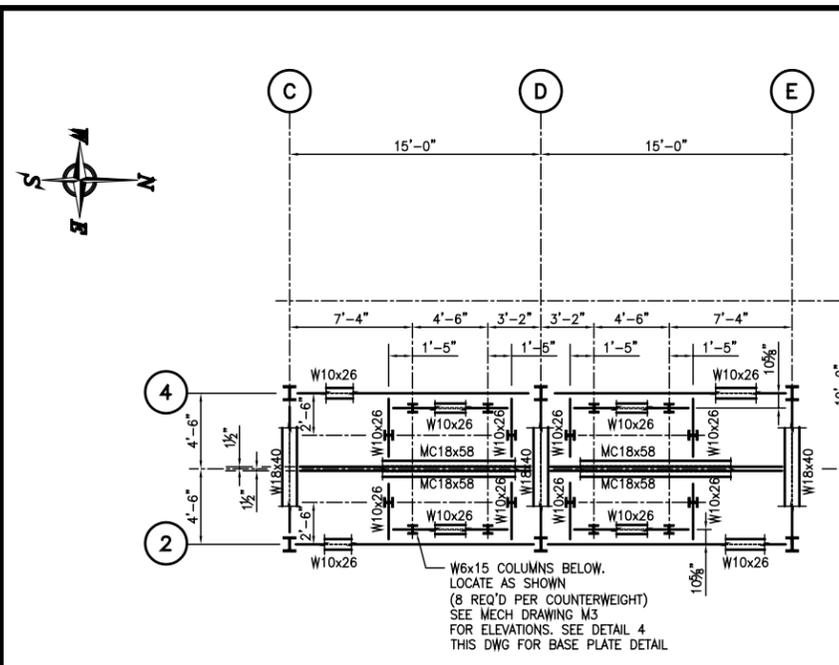


NOTES:  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

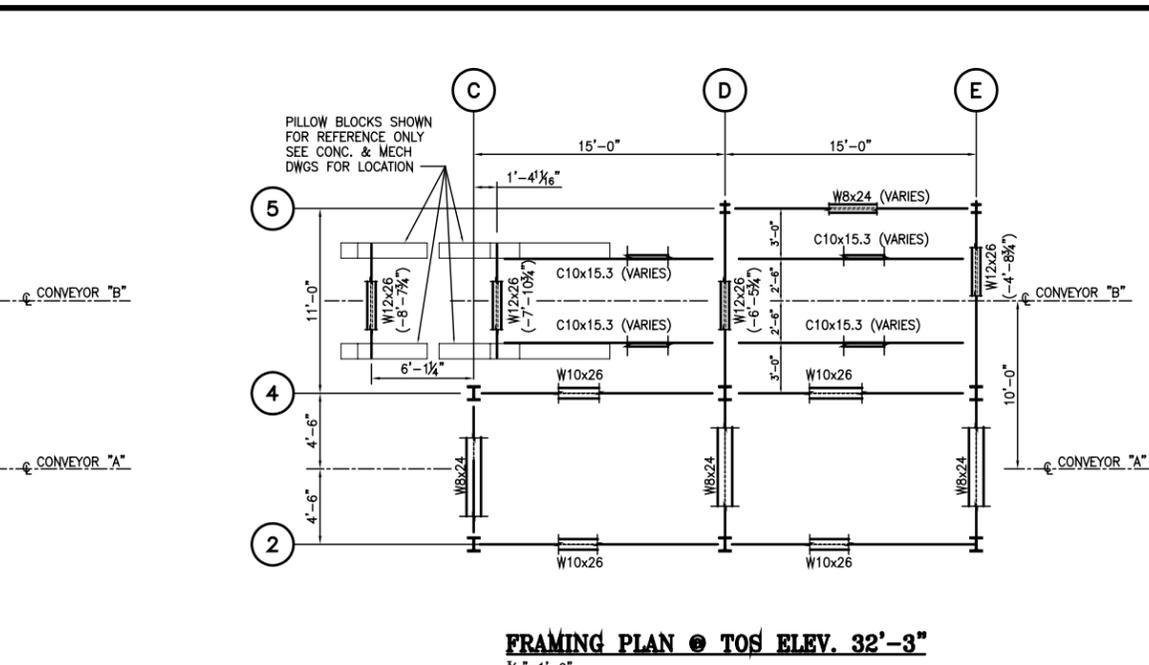
REFERENCE

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By:	JLT	Date:	07/27/04
Checked By:	HAC	Date:	10/07/04
Scale:	AS SHOWN	Job No.:	1723
Drawing No.:			S8
REV.			0

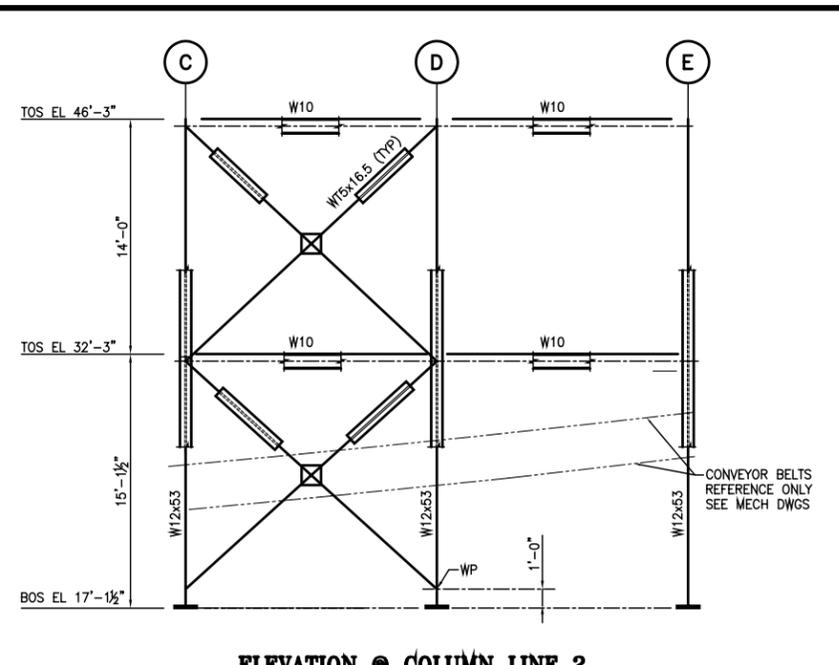
McDUFFIE TERMINAL  
 BARGE LOADOUT  
 RELOCATION  
 CONVEYOR "B"  
 SECTIONS & DETAILS



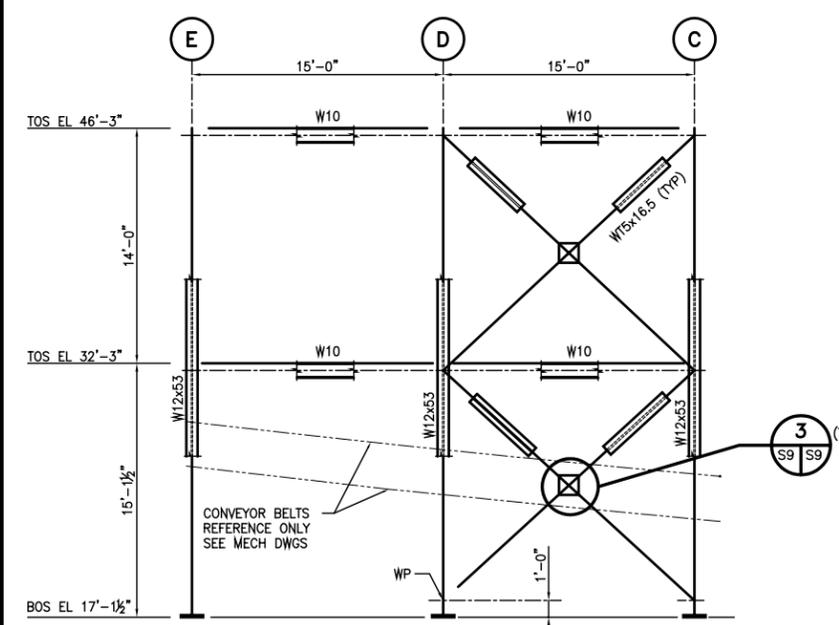
**FRAMING PLAN @ TOS ELEV. 46'-3"**  
 3/16" = 1'-0"



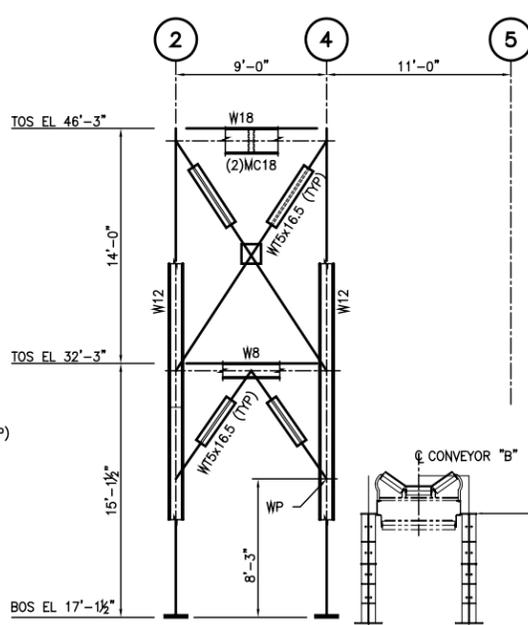
**FRAMING PLAN @ TOS ELEV. 32'-3"**  
 3/16" = 1'-0"



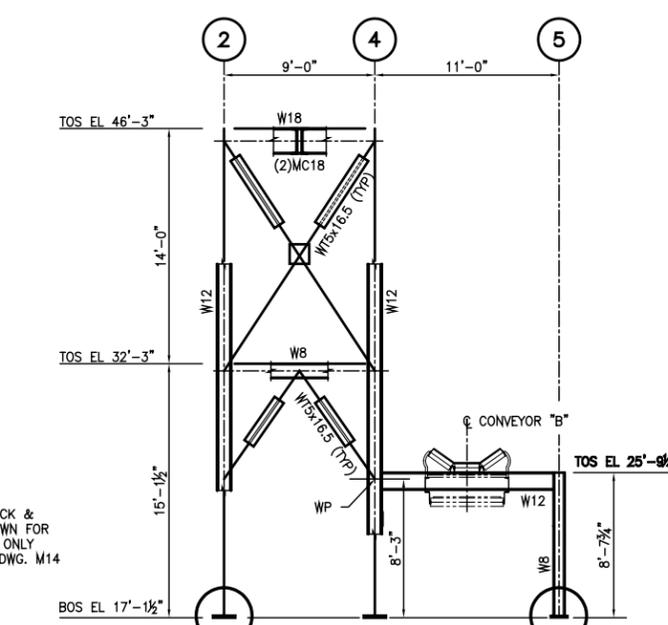
**ELEVATION @ COLUMN LINE 2**  
 3/16" = 1'-0" (LOOKING WEST)



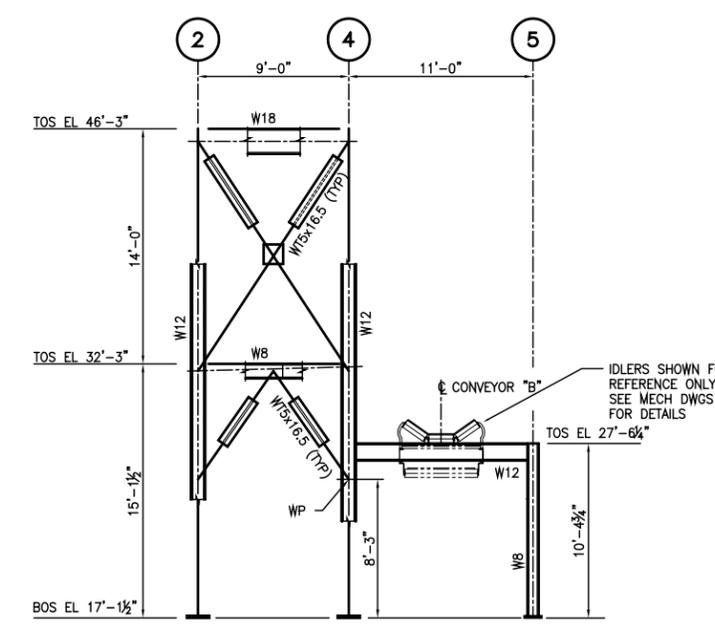
**ELEVATION @ COLUMN LINE 4**  
 3/16" = 1'-0" (LOOKING EAST)



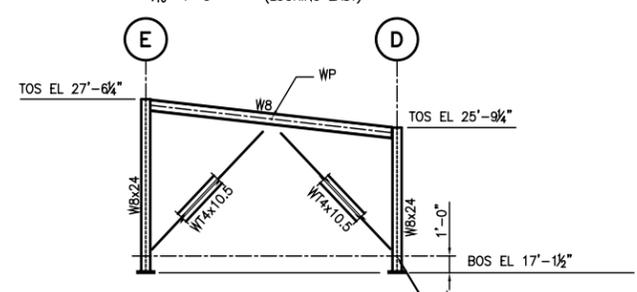
**ELEVATION @ COLUMN LINE C**  
 3/16" = 1'-0" (LOOKING SOUTH)



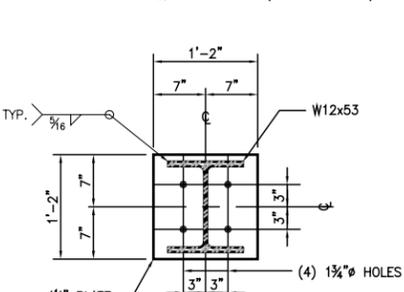
**ELEVATION @ COLUMN LINE D**  
 3/16" = 1'-0" (LOOKING SOUTH)



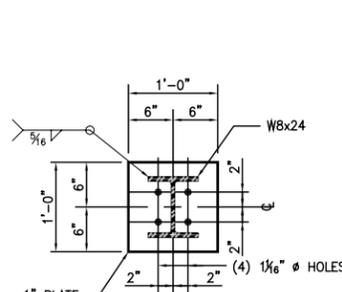
**ELEVATION @ COLUMN LINE E**  
 3/16" = 1'-0" (LOOKING SOUTH)



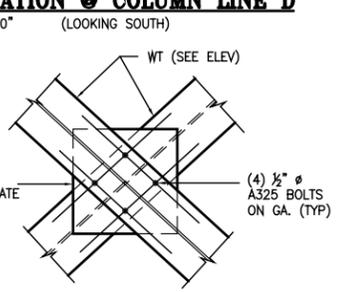
**ELEVATION @ COLUMN LINE 5**  
 3/16" = 1'-0"



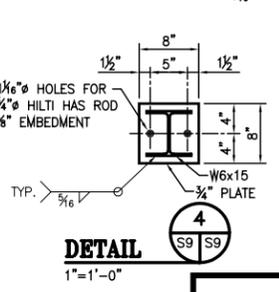
**DETAIL 1**  
 1" = 1'-0"



**DETAIL 2**  
 1" = 1'-0"



**DETAIL 3**  
 1" = 1'-0"



**DETAIL 4**  
 1" = 1'-0"

**NOTES:**  
 1. SEE DRAWING C1 FOR CONCRETE GENERAL NOTES.

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

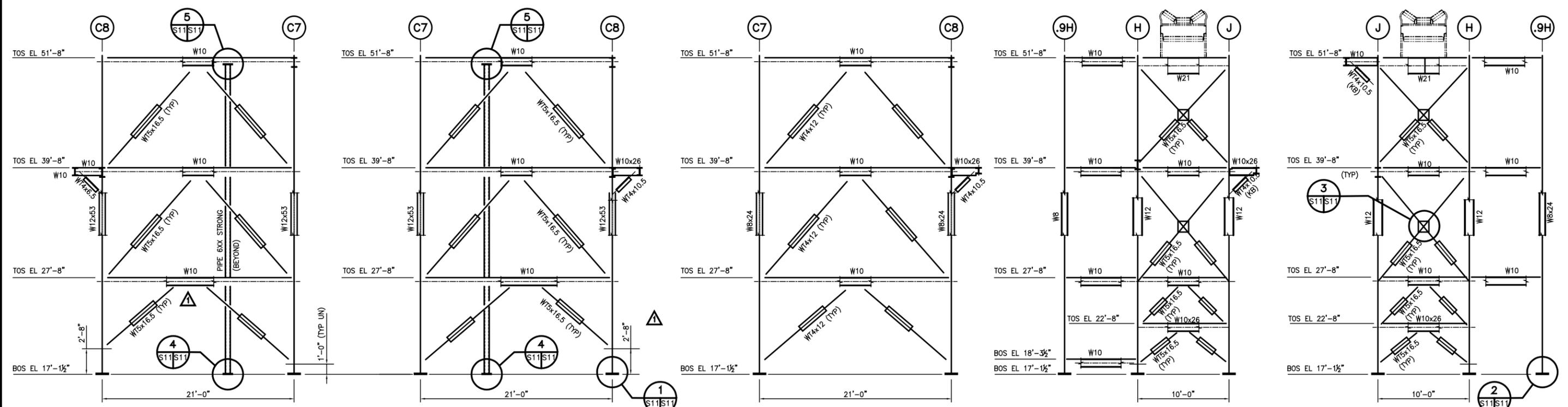
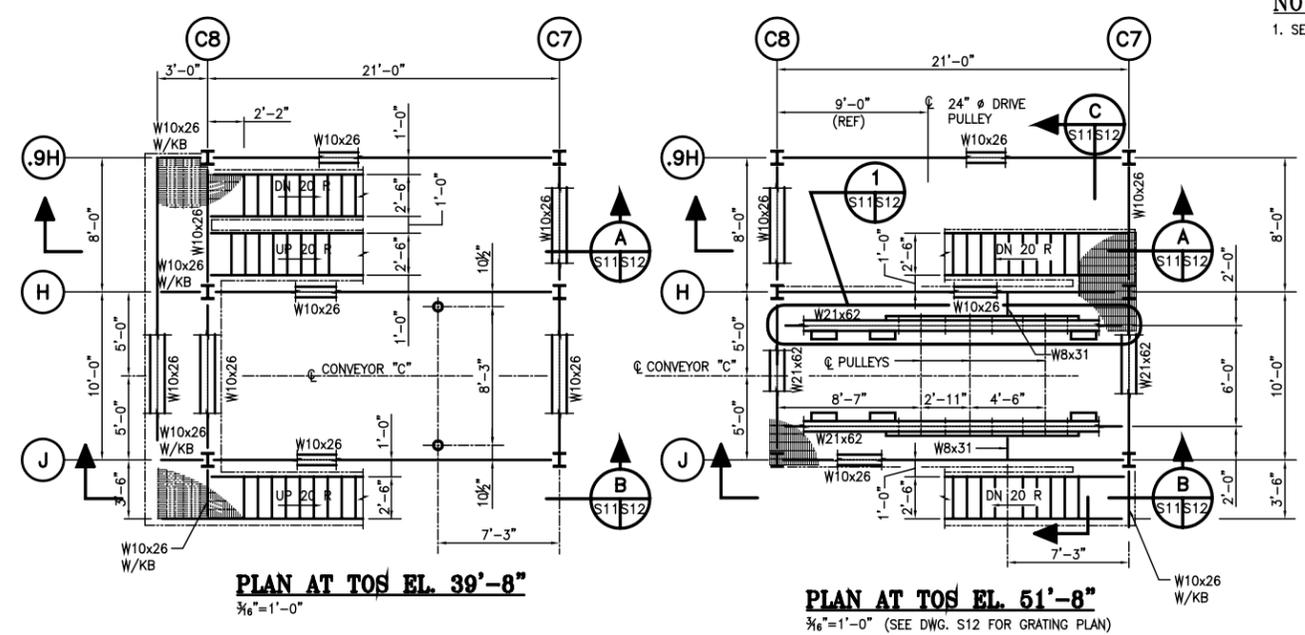
**CONVEYOR "A" & "B" TAKE-UP STRUCTURE PLANS AND ELEVATIONS**

Drawn By: JLT Date: 08/20/04  
 Checked By: HAC Date: 10/07/04  
 Scale: 3/16" = 1'-0" Job No. 1723 Drawing No. S9

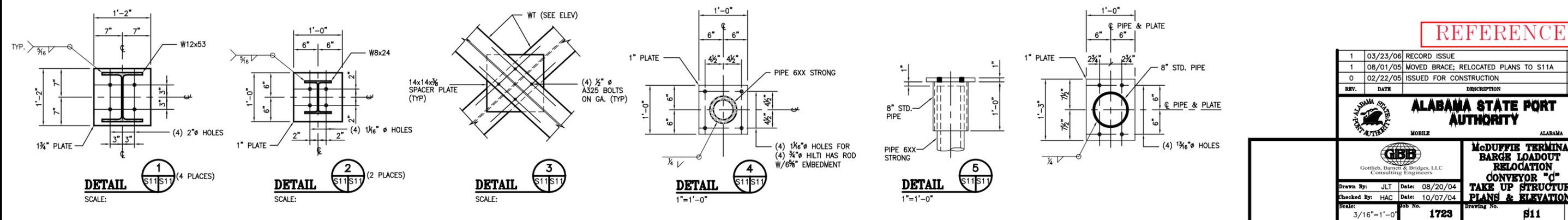
**REFERENCE**

**NOTES:**  
1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

SEE DRAWING S11A FOR ENLARGED PLANS OF STAIRS AT ELEVATIONS 18'-3 1/2" & 27'-8"



**ELEVATION @ COLUMN LINE J** 3/16"=1'-0"  
**ELEVATION @ COLUMN LINE H** 3/16"=1'-0"  
**ELEVATION @ COLUMN LINE .9H** 3/16"=1'-0"  
**ELEVATION @ COLUMN LINE C8** 3/16"=1'-0"  
**ELEVATION @ COLUMN LINE C7** 3/16"=1'-0"



**DETAIL 1** (4 PLACES) SCALE: 1"=1'-0"  
**DETAIL 2** (2 PLACES) SCALE: 1"=1'-0"  
**DETAIL 3** SCALE: 1"=1'-0"  
**DETAIL 4** SCALE: 1"=1'-0"  
**DETAIL 5** SCALE: 1"=1'-0"

**REFERENCE**

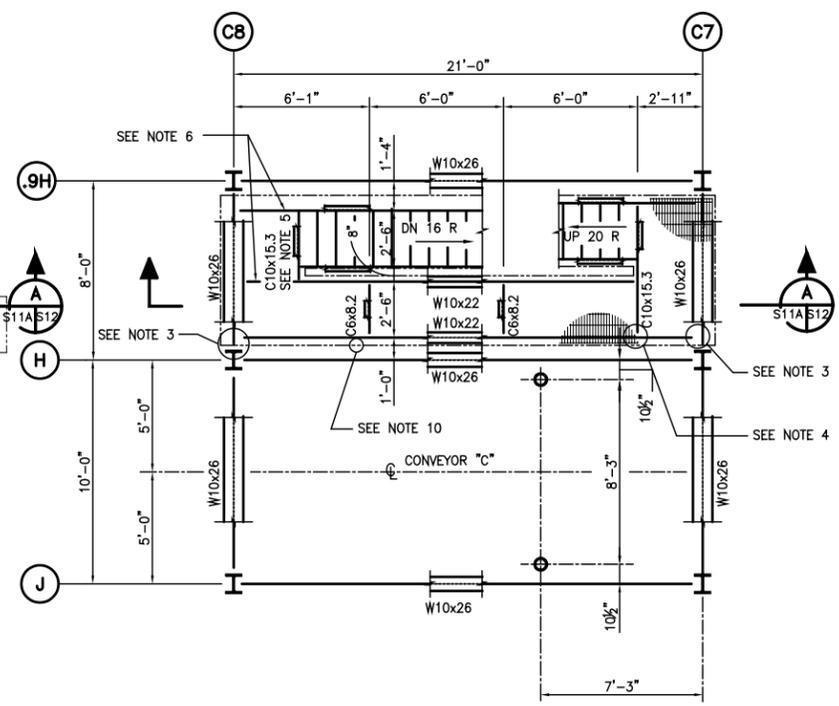
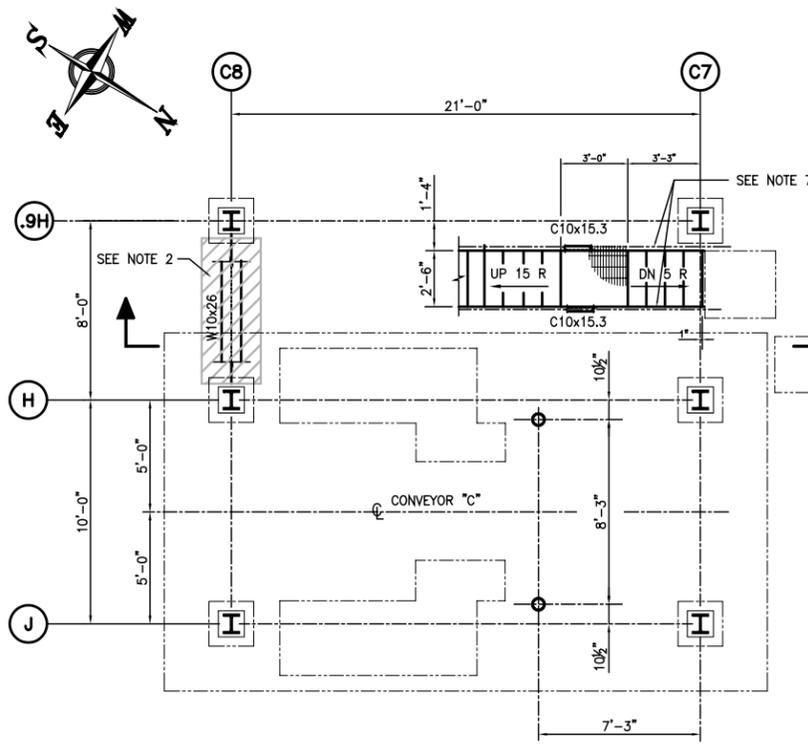
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	08/01/05	MOVED BRACE; RELOCATED PLANS TO S11A	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE, ALABAMA

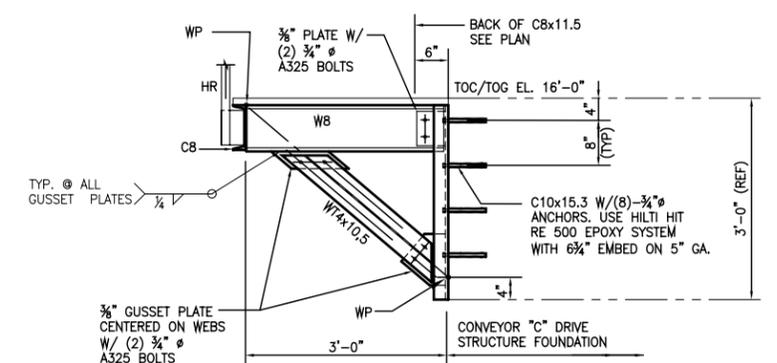
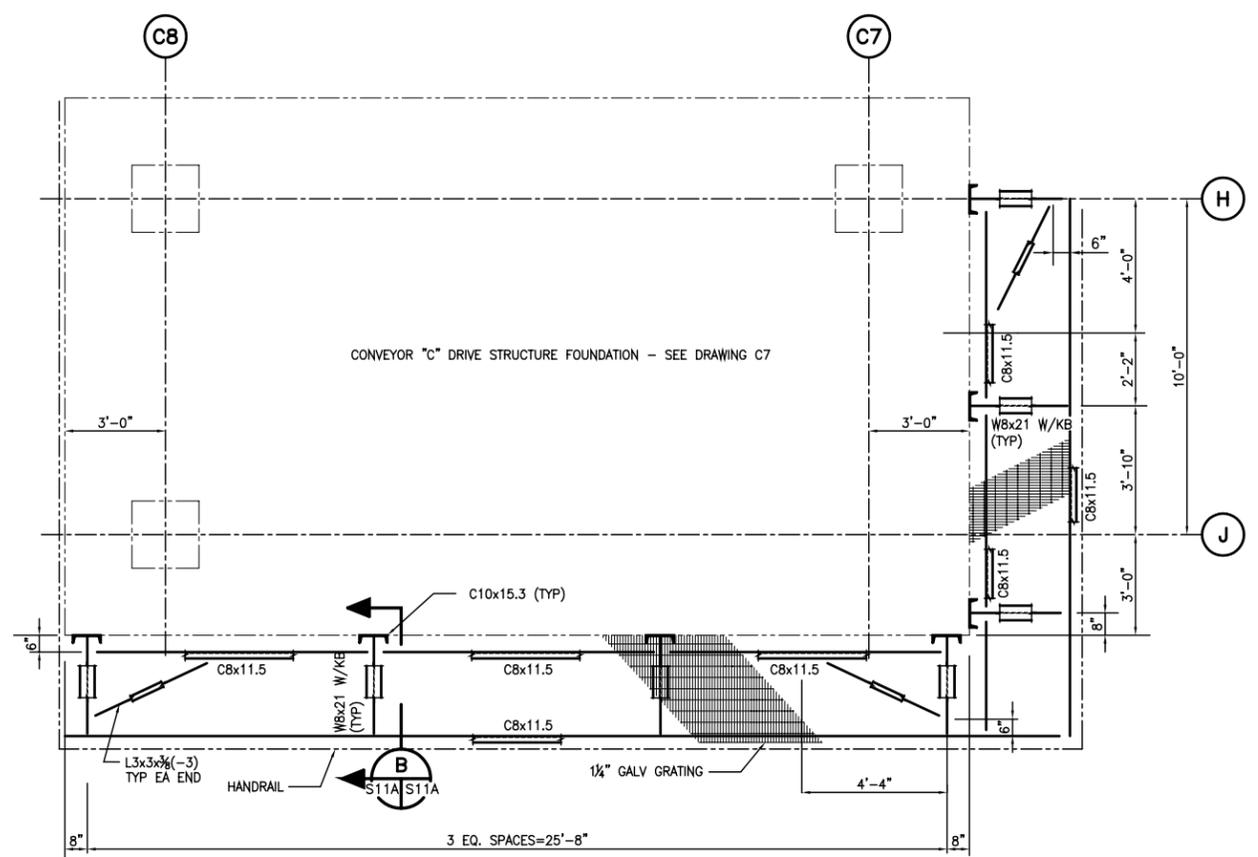
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "C" TAKE UP STRUCTURE PLANS & ELEVATIONS**

Drawn By: JLT Date: 08/20/04  
 Checked By: HAC Date: 10/07/04  
 Scale: 3/16"=1'-0" Job No. 1723 Drawing No. S11



- NOTES:**
- SEE DRAWING S1 FOR STEEL GENERAL NOTES.
  - DEMO W10x26.
  - W10x22 CONNECTION TO W10x26 SHALL BE (2) 3/4" Ø A325 BOLTS W/ 4x3 1/2" x 3/8" ANGLE CLIP. FIELD DRILL W10x26.
  - FIELD DRILL W10x22 FOR C10 CONNECTION.
  - USE DROPAGE FROM MODIFIED 1019S TO FABRICATE C10.
  - MODIFIED AND RELOCATED 1021S & 1022S.
  - MODIFIED AND RELOCATED 1019S & 1020S.
  - GRIND ALL FIELD CUT EDGES SMOOTH AND FREE OF SPURS.
  - REPAIR ALL DAMAGED GALVANIZING.
  - REWORK EXISTING HANDRAIL WITH NEW HANDRAIL AS REQUIRED.



**REFERENCE**

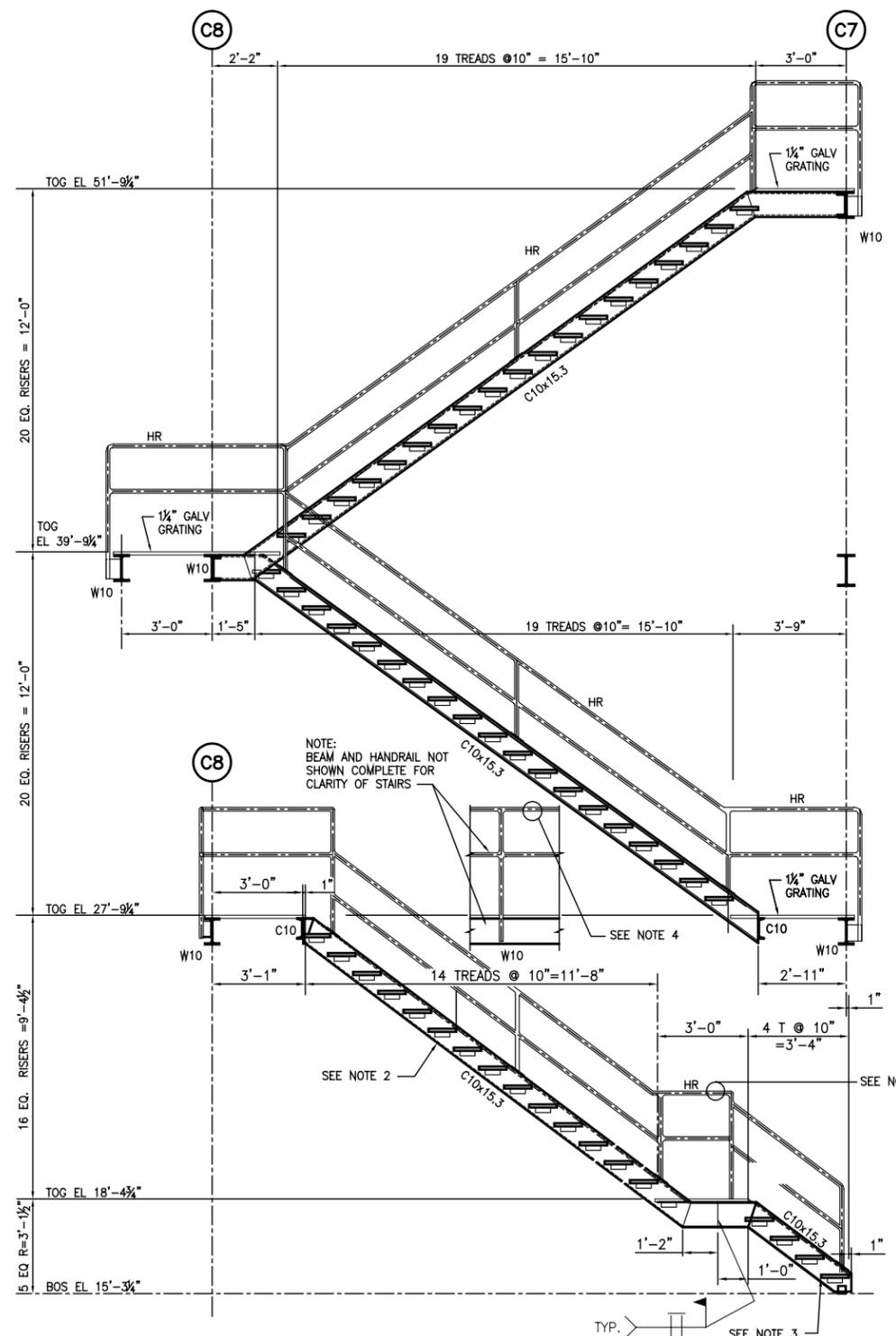
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	08/01/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "C" TAKE-UP STRUCTURE SECTIONS & DETAILS**

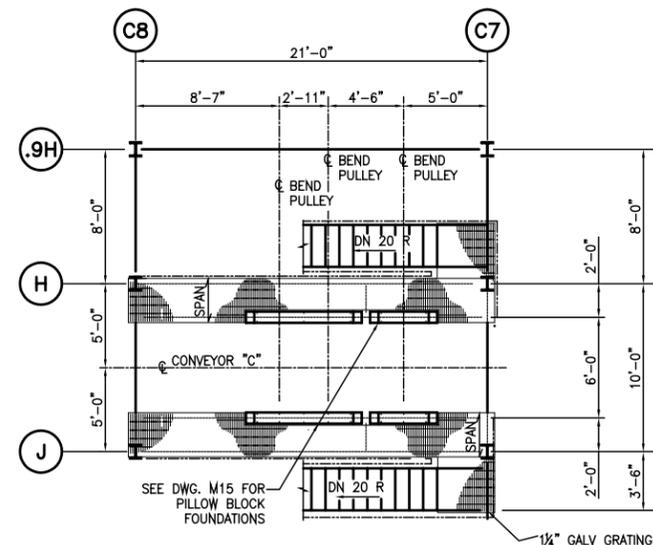
Drawn By: J.L.T. Date: 07/29/05  
Checked By: J.E.J. Date: 07/29/05  
Scale: AS SHOWN Job No. 1723 Drawing No. S11A REV. 0



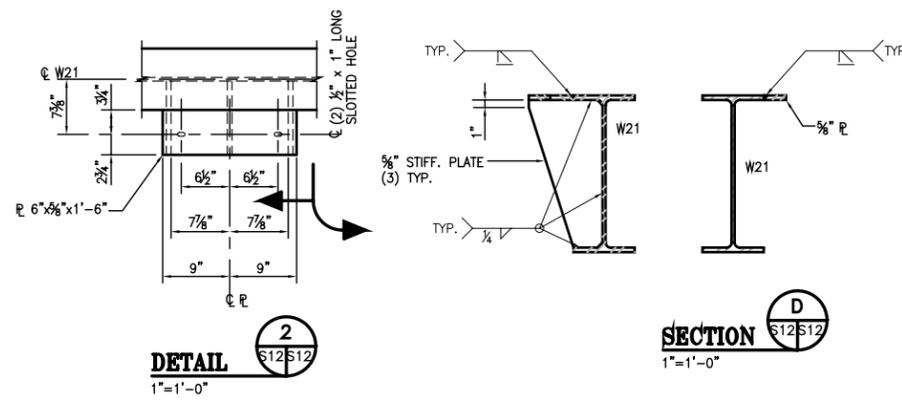
NOTE: BEAM AND HANDRAIL NOT SHOWN COMPLETE FOR CLARITY OF STAIRS

SEE NOTE 3

**SECTION A**  
S11A 2  
3/8" = 1'-0"

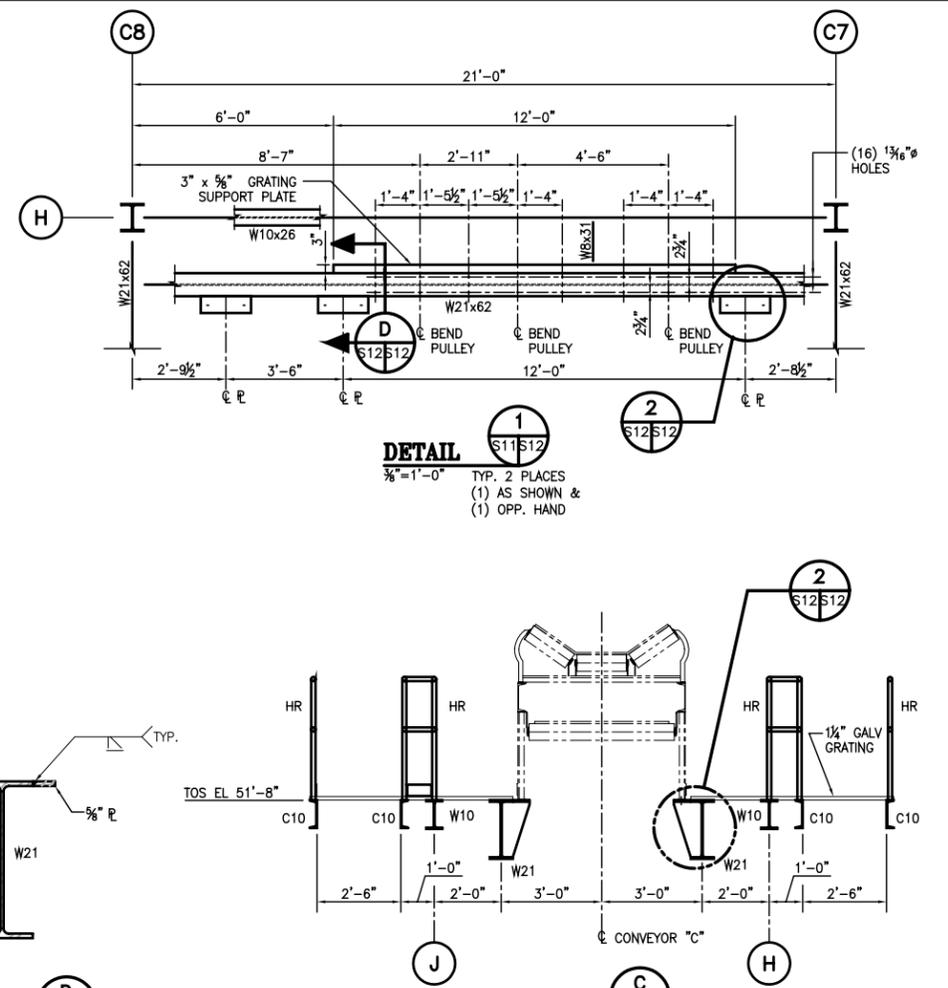


**GRATING PLAN AT TOG EL. 51'-9 1/4"**  
3/8" = 1'-0" (SEE DWG. S11 FOR FRAMING PLAN)



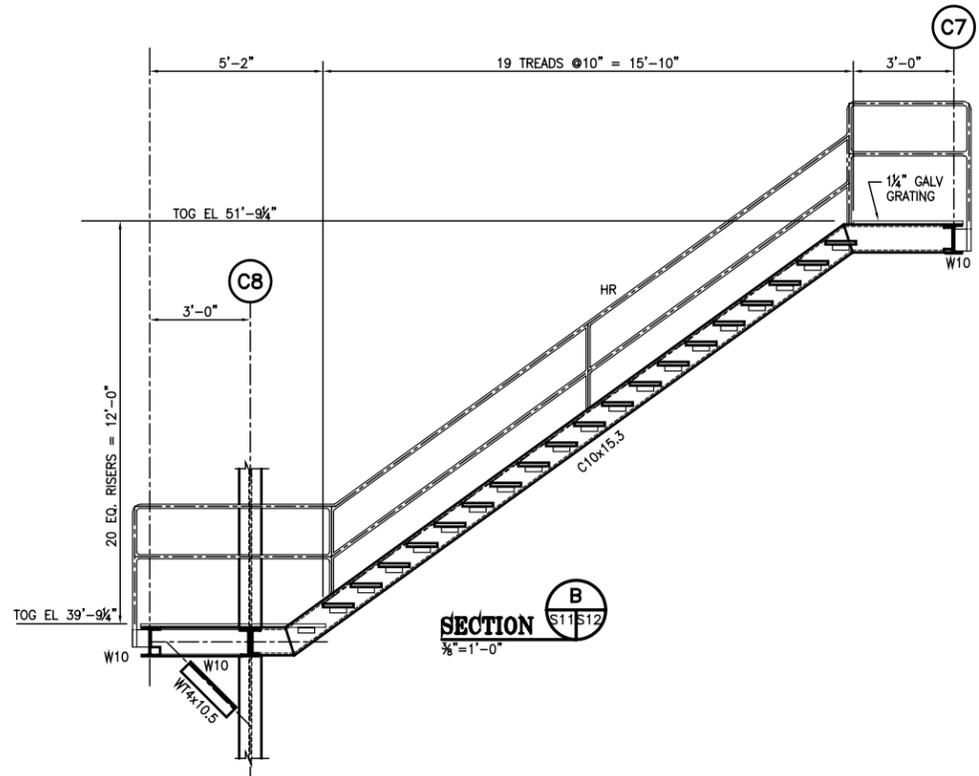
**DETAIL 2**  
S12 S12  
1" = 1'-0"

**SECTION D**  
S12 S12  
1" = 1'-0"



**DETAIL 1**  
S11 S12  
3/8" = 1'-0" TYP. 2 PLACES  
(1) AS SHOWN &  
(1) OPP. HAND

**SECTION C**  
S11 S12  
3/8" = 1'-0"



**SECTION B**  
S11 S12  
3/8" = 1'-0"

- NOTES:**
- SEE DRAWING S1 FOR STEEL GENERAL NOTES.
  - MODIFIED AND RELOCATED 1021S & 1022S.
  - MODIFIED AND RELOCATED 1019S & 1020S.
  - REWORK EXISTING HANDRAIL WITH NEW HANDRAIL AS REQUIRED.

**REFERENCE**

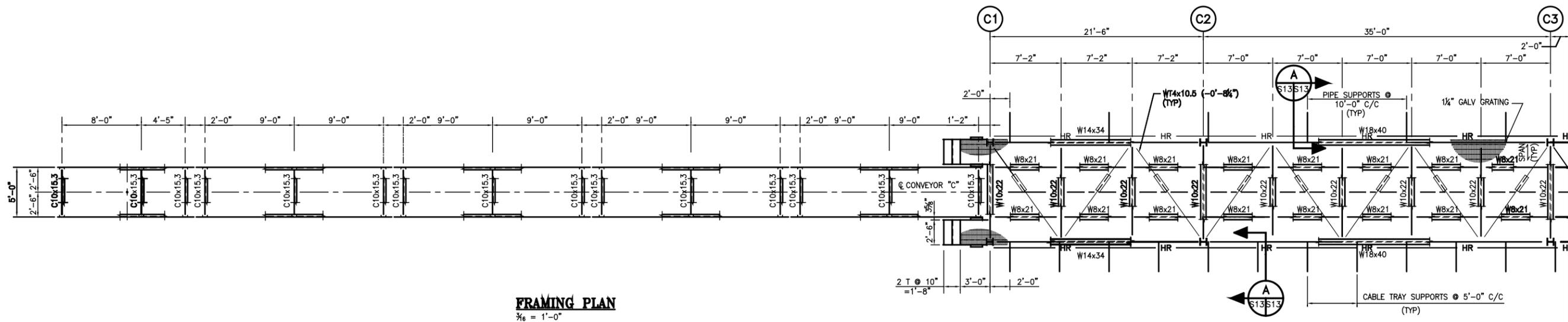
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	08/01/05	REVISED STAIRS	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

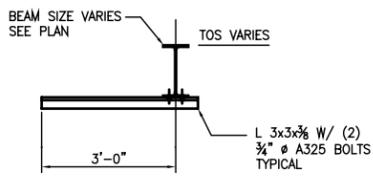
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "C" TAKE-UP STRUCTURE SECTIONS & DETAILS**

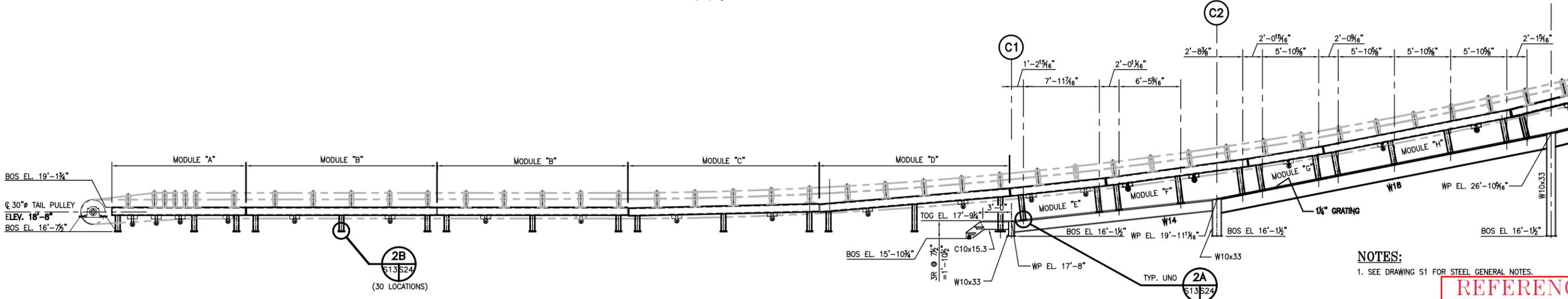
Drawn By: JLT Date: 08/20/04  
Checked By: HAC Date: 10/07/04  
Scale: AS SHOWN Job No. 1723 Drawing No. S12 REV. 1



**FRAMING PLAN**  
3/8" = 1'-0"



**SECTION A**  
1" = 1'-0"



**ELEVATION**  
3/8" = 1'-0"

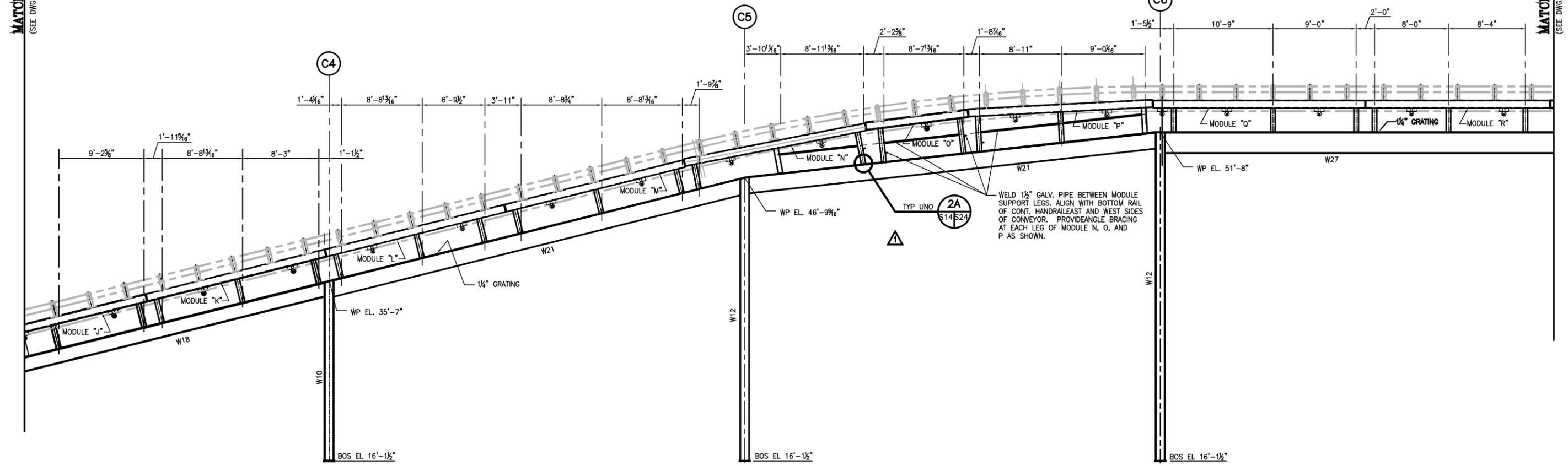
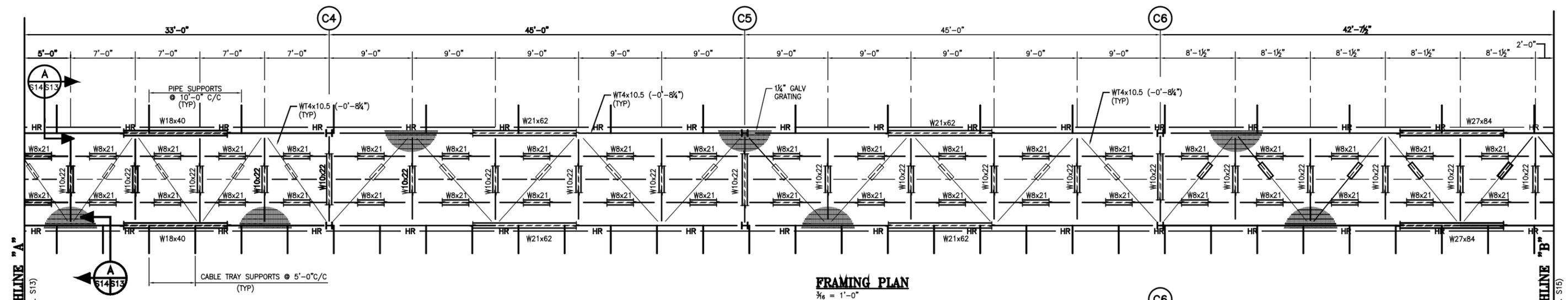
**NOTES:**  
1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

**REFERENCE**

0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
 <b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
 Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By: JLT Date: 07/27/04 Checked By: HAC Date: 10/07/04 Scale: 3/16" = 1'-0"		Job No. <b>1723</b> Drawing No. <b>S13</b> REV. <b>0</b>	

MATCHLINE "A"  
(SEE DWG. S14)

C3

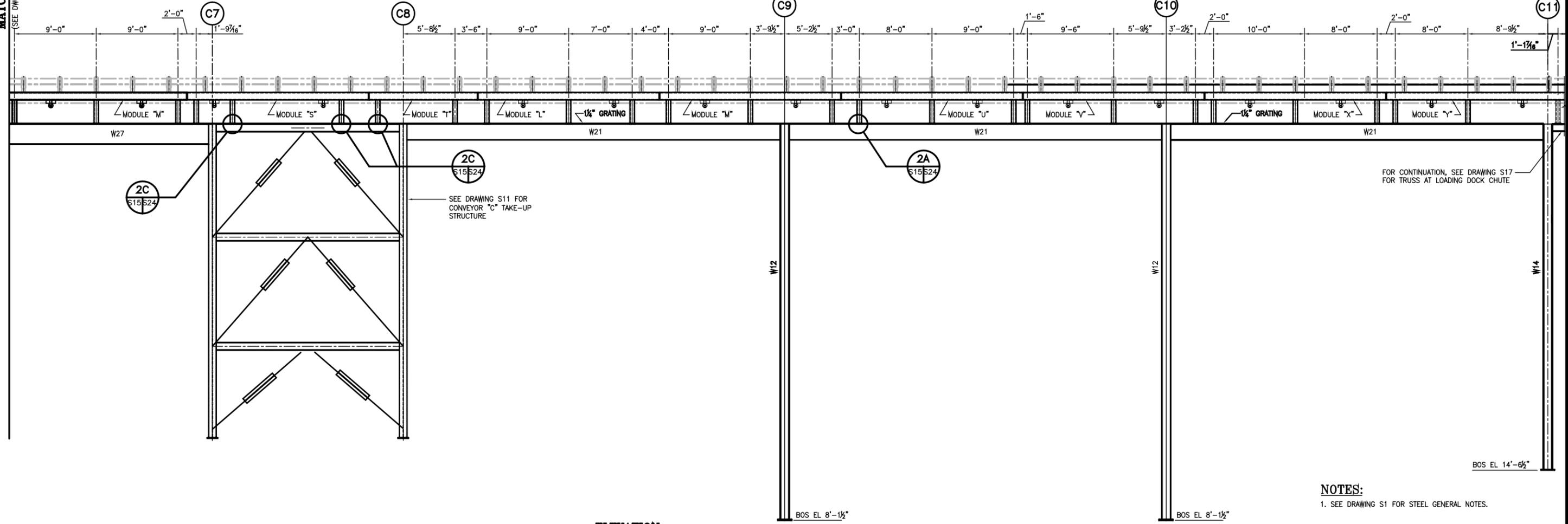
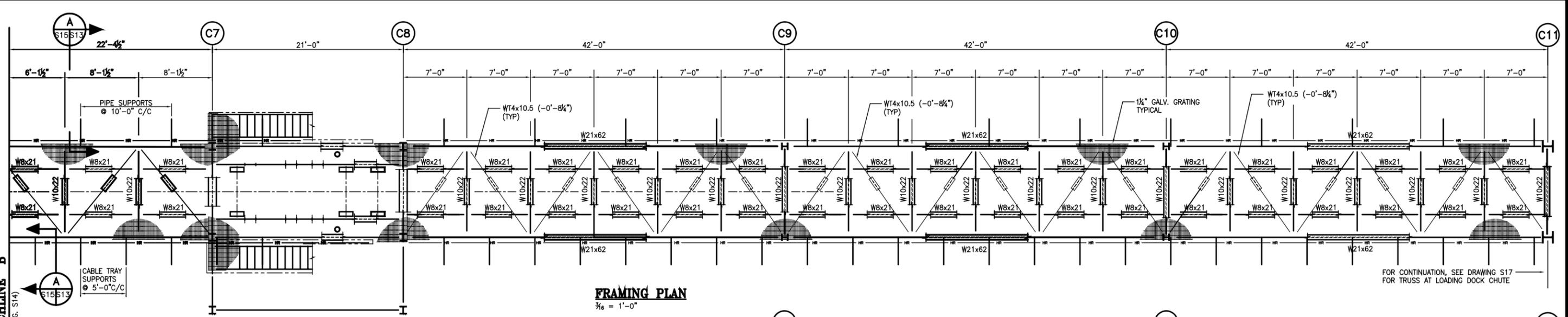


**NOTES:**  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

**REFERENCE**

1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By: JLT Date: 07/27/04 Checked By: HAC Date: 10/07/04 Scale: 3/16" = 1'-0"		Job No. <b>1723</b> Drawing No. <b>S14</b> REV. <b>1</b>	

**McDUFFIE TERMINAL  
 BARGE LOADOUT  
 RELOCATION  
 CONVEYOR "C"  
 PLANS & ELEVATIONS**



**NOTES:**  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

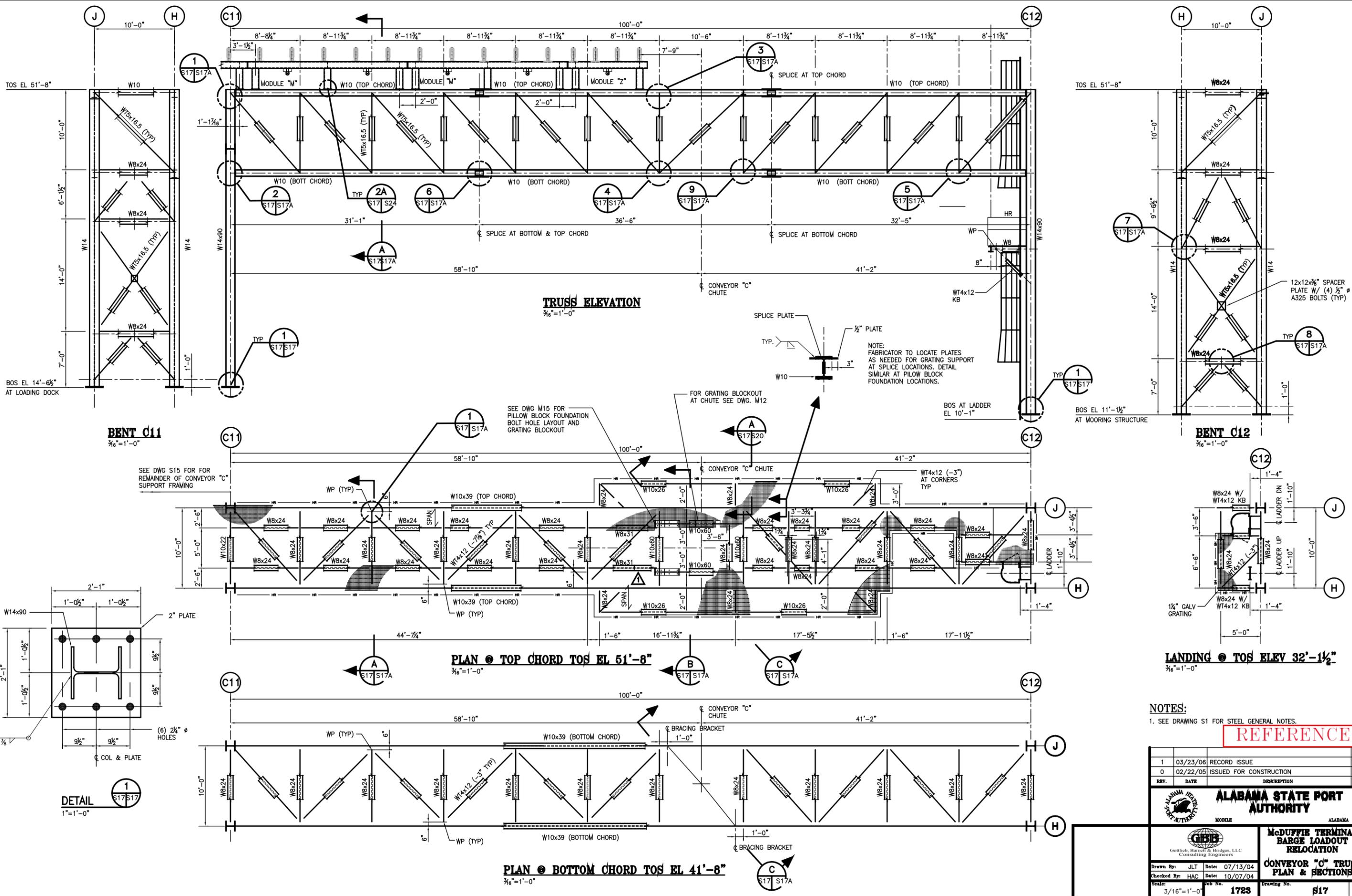
**REFERENCE**

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "C" PLAN & ELEVATIONS**

Drawn By: JLT Date: 07/27/04  
 Checked By: HAC Date: 10/07/04  
 Scale: 3/16" = 1'-0" Job No. 1723 Drawing No. S15 REV. 0



REV.	DATE	DESCRIPTION	BY
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0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

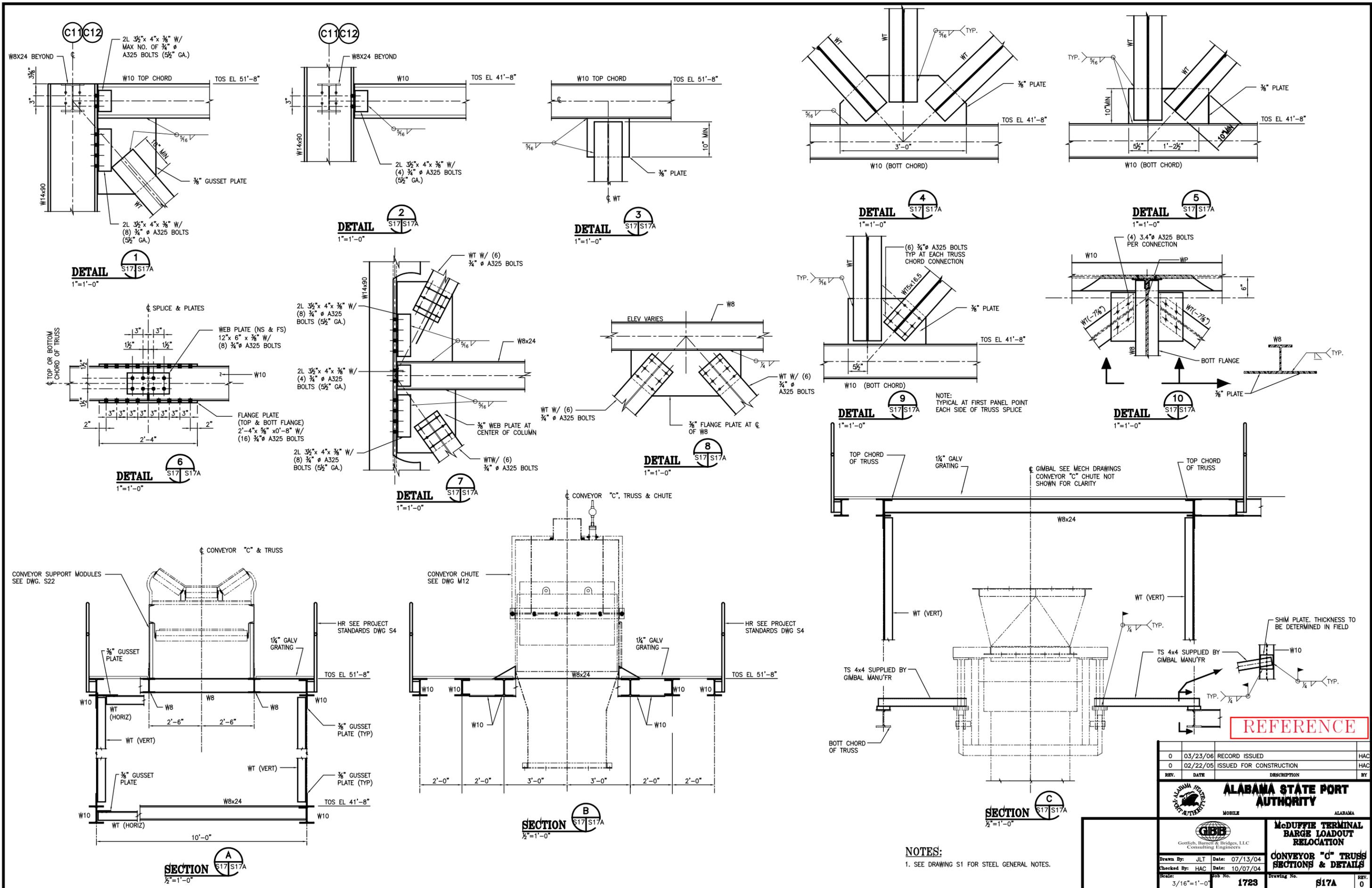
**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

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 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

Drawn By: JLT	Date: 07/13/04	<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b> <b>CONVEYOR "C" TRUSS PLAN &amp; SECTIONS</b>
Checked By: HAC	Date: 10/07/04	
Scale: 3/16"=1'-0"	Job No. 1723	

Drawing No. S17	REV. 1
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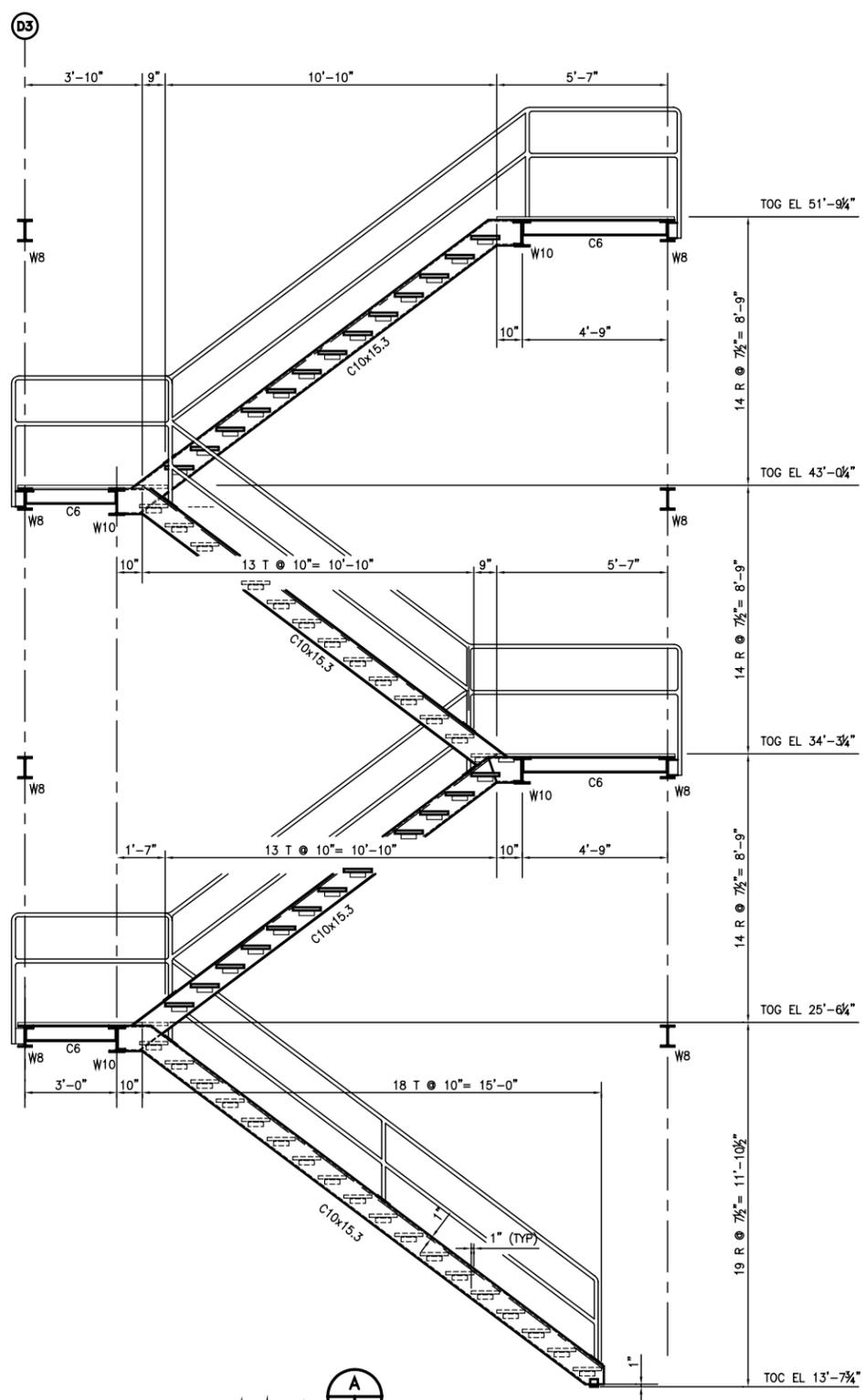


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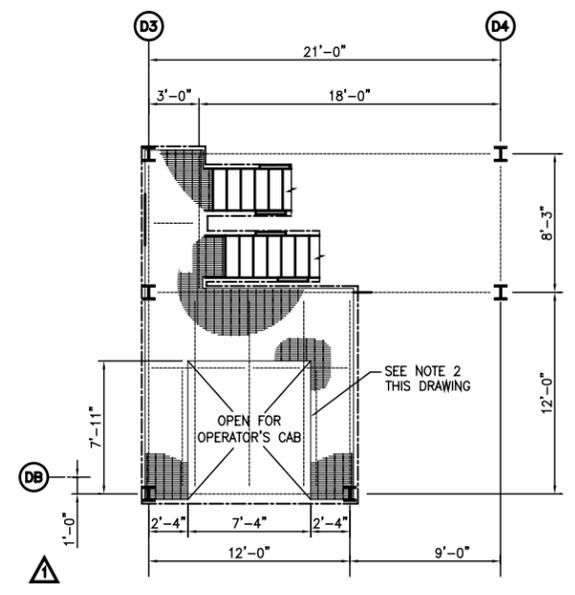
  

	<b>ALABAMA STATE PORT AUTHORITY</b>	
	MOBILE	ALABAMA
	<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>	
	<b>CONVEYOR "C" TRUSS SECTIONS &amp; DETAILS</b>	
Drawn By: JLT Checked By: HAC Scale: 3/16"=1'-0"	Date: 07/13/04 Date: 10/07/04 Job No. 1723	Drawing No. S17A REV. 0





**SECTION A**  
 518519  
 3/8" = 1'-0"



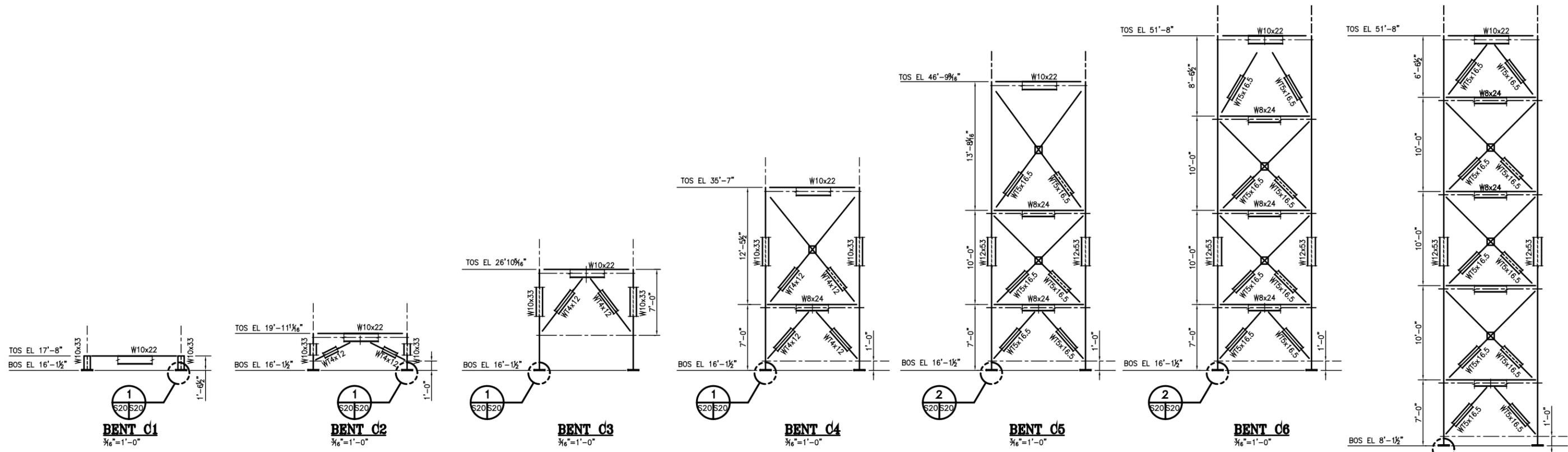
**GRATING PLAN @ TOG 25'-6 1/4"**  
 3/8" = 1'-0"

- NOTES:**
- SEE DRAWING S1 FOR STEEL GENERAL NOTES.
  - GRATING SUPPLIER TO COORDINATE GRATING CUTOUTS WITH OPERATORS CAB MANUFACTURER. TOE BANDING TO BE SUPPLIED ON (3) SIDES OF CAB EXCEPT AT DOOR LOCATION.

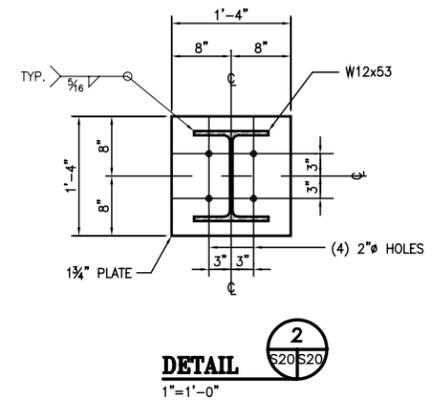
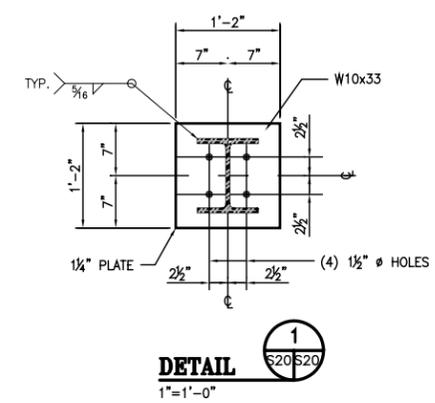
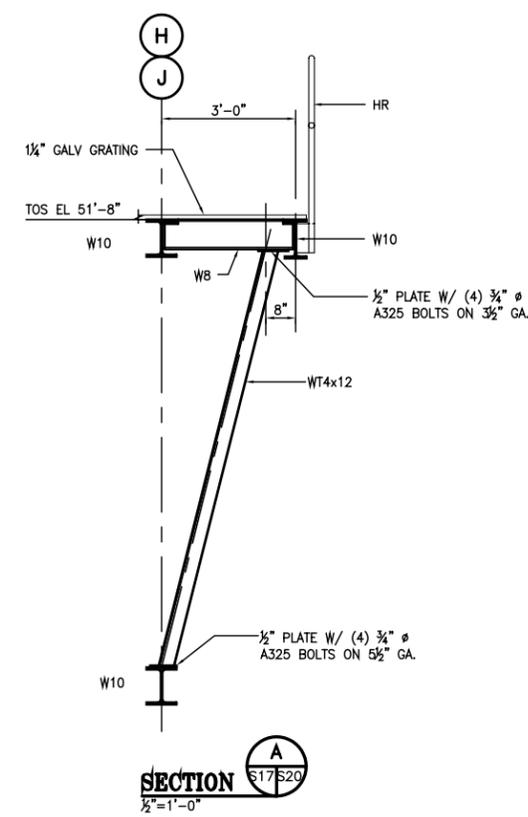
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REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	03/24/05	REVISED GRATING CUT-OUT AND COLUMN LINE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b></p> <p>MOBILE ALABAMA</p>	
<p>Gottlieb, Barnett &amp; Bridges, LLC                  Consulting Engineers</p>	
Drawn By: JLT Checked By: HAC Scale: 3/8" = 1'-0"	Date: 07/13/04 Date: 10/07/04 Job No. 1723
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION OPERATOR'S CAB SUPPORT STRUCTURE SECTIONS &amp; DETAILS</b></p>	
Drawing No. <b>S19</b> REV. <b>1</b>	



**CONVEYOR "C" BENT ELEVATIONS**  
 $\frac{3}{16}''=1'-0''$



**NOTES:**  
 1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**

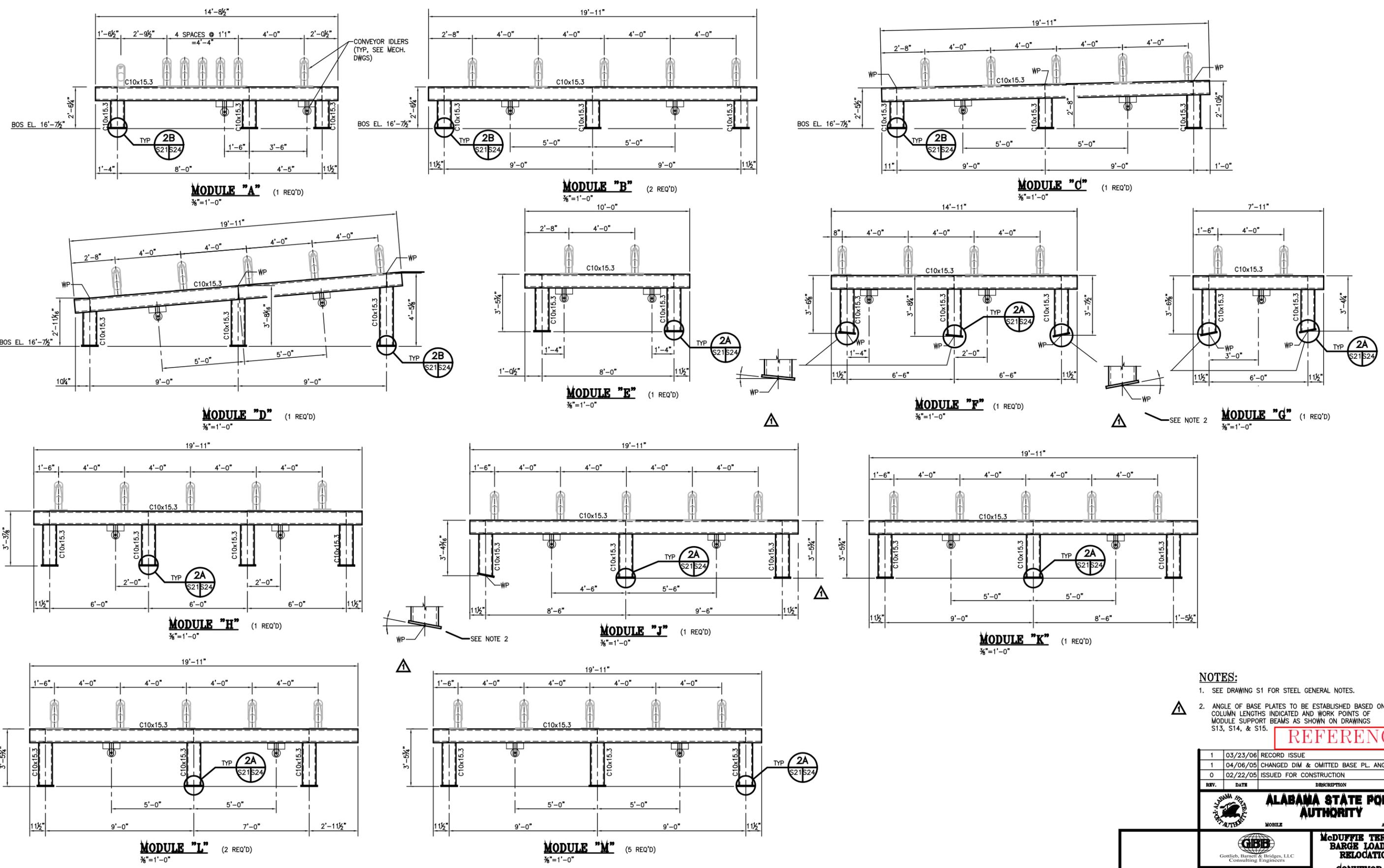
**ALABAMA**

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**CONVEYOR "C" BENT DETAILS**

<b>Drawn By:</b> JLT	<b>Date:</b> 10/1/04
<b>Checked By:</b> HAC	<b>Date:</b> 10/08/04
<b>Scale:</b> AS SHOWN	<b>Job No.:</b> 1723

**Drawing No. S20**



- NOTES:**
- SEE DRAWING S1 FOR STEEL GENERAL NOTES.
  - ANGLE OF BASE PLATES TO BE ESTABLISHED BASED ON COLUMN LENGTHS INDICATED AND WORK POINTS OF MODULE SUPPORT BEAMS AS SHOWN ON DRAWINGS S13, S14, & S15.

**REFERENCE**

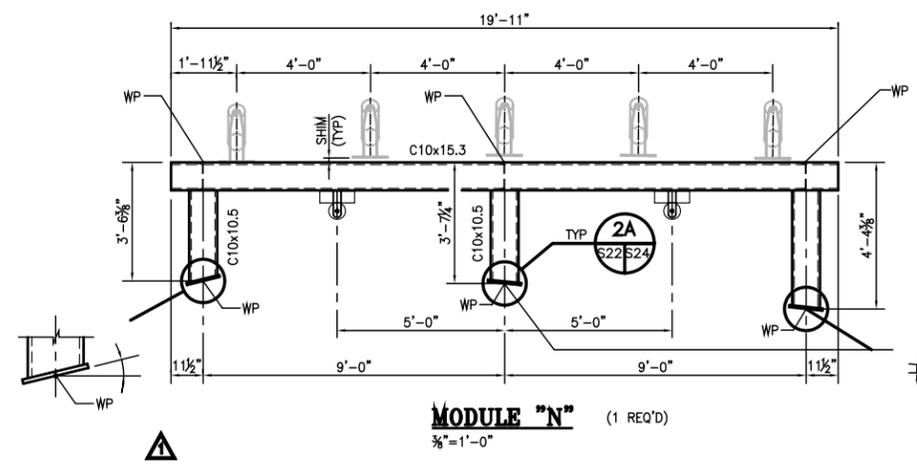
REV.	DATE	DESCRIPTION	BY
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0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

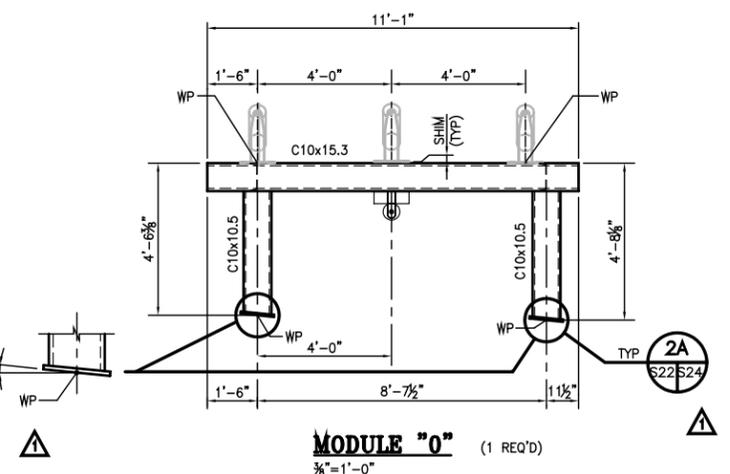
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "c" MODULE DETAILS**

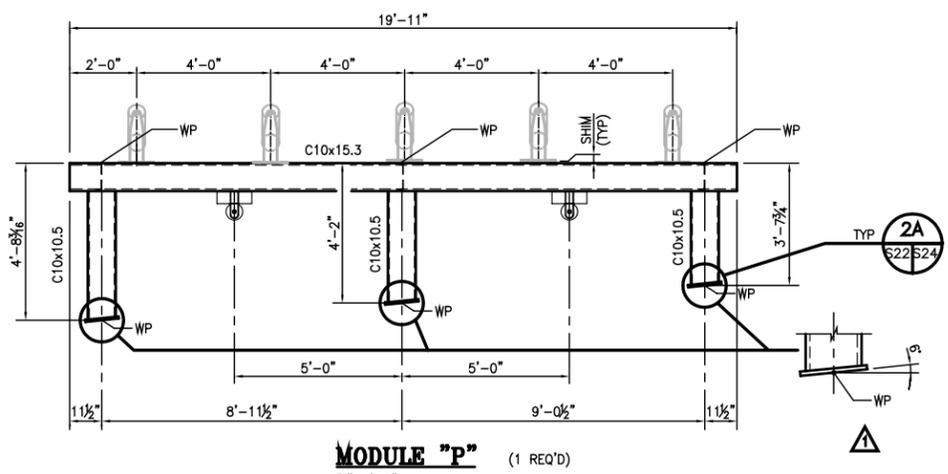
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Checked By: HAC Date: 10/08/04  
Scale: AS SHOWN Job No. 1723 Drawing No. S21 REV. 1



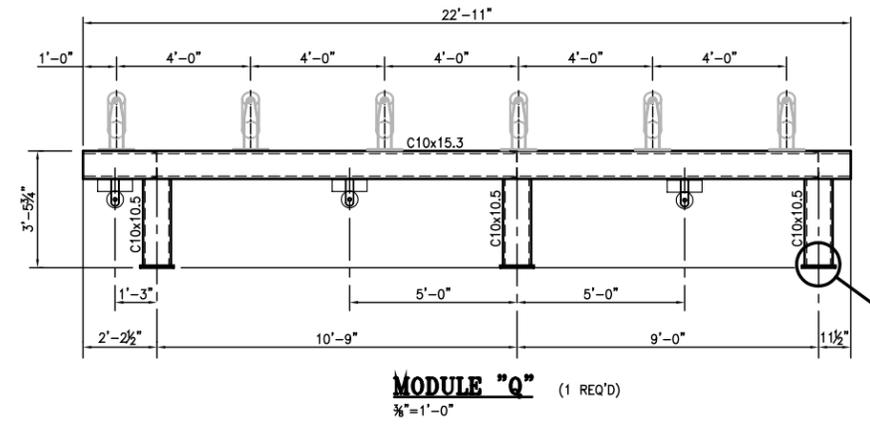
**MODULE "N"** (1 REQ'D)  
3/8"=1'-0"



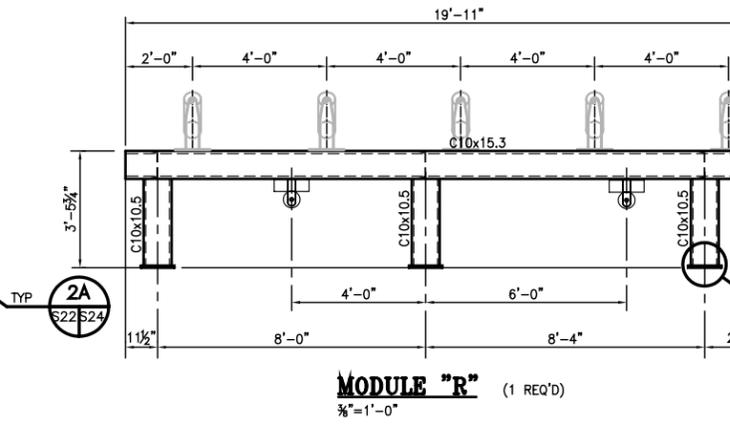
**MODULE "O"** (1 REQ'D)  
3/8"=1'-0"



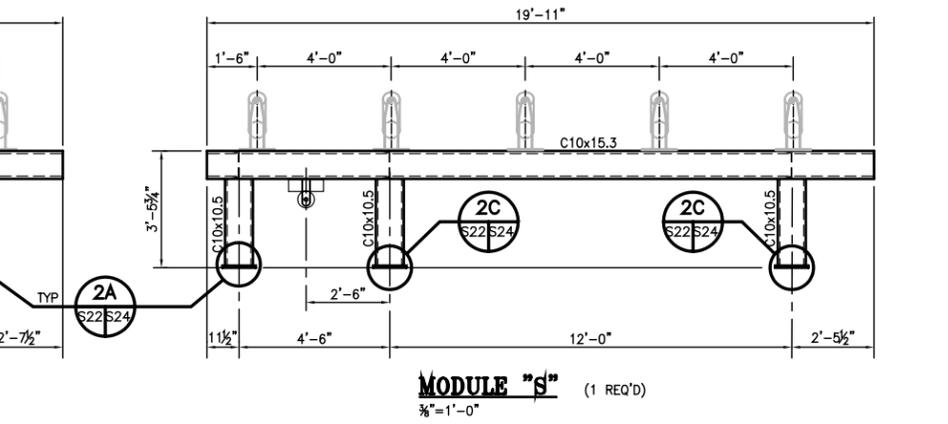
**MODULE "P"** (1 REQ'D)  
3/8"=1'-0"



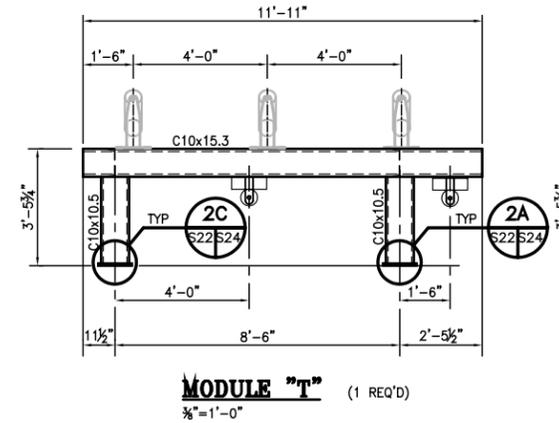
**MODULE "Q"** (1 REQ'D)  
3/8"=1'-0"



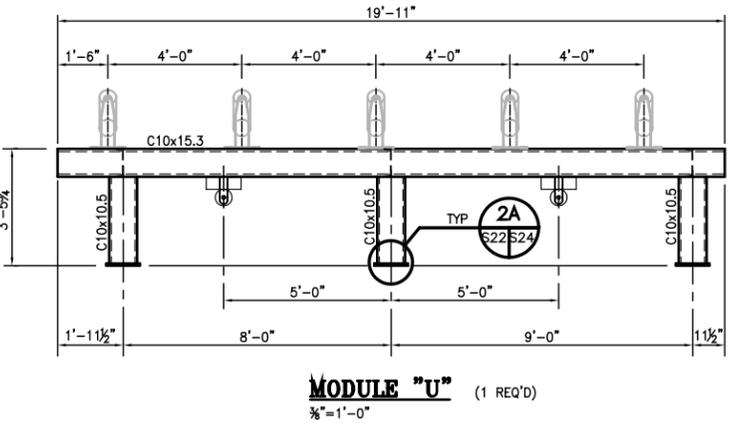
**MODULE "R"** (1 REQ'D)  
3/8"=1'-0"



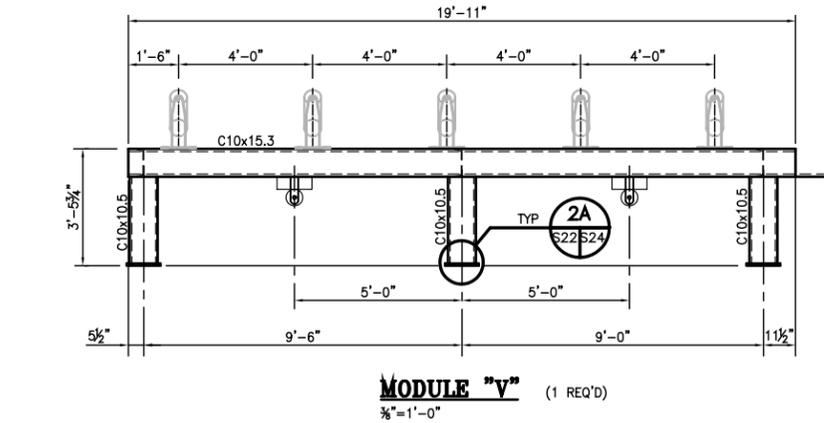
**MODULE "S"** (1 REQ'D)  
3/8"=1'-0"



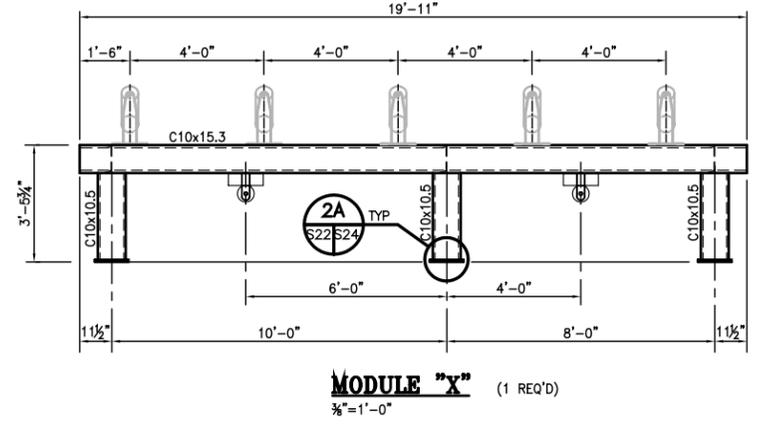
**MODULE "T"** (1 REQ'D)  
3/8"=1'-0"



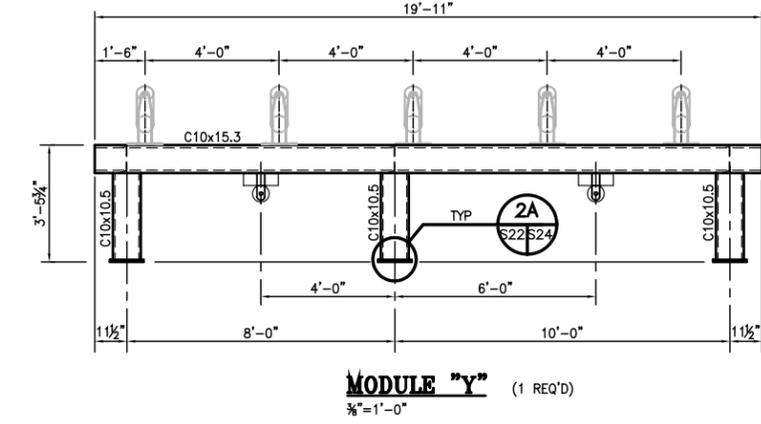
**MODULE "U"** (1 REQ'D)  
3/8"=1'-0"



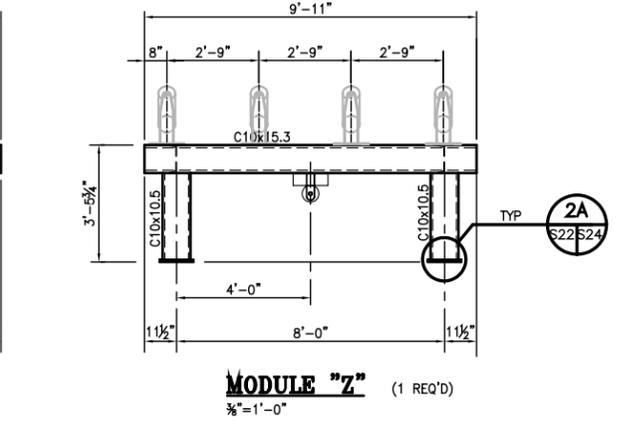
**MODULE "V"** (1 REQ'D)  
3/8"=1'-0"



**MODULE "X"** (1 REQ'D)  
3/8"=1'-0"



**MODULE "Y"** (1 REQ'D)  
3/8"=1'-0"



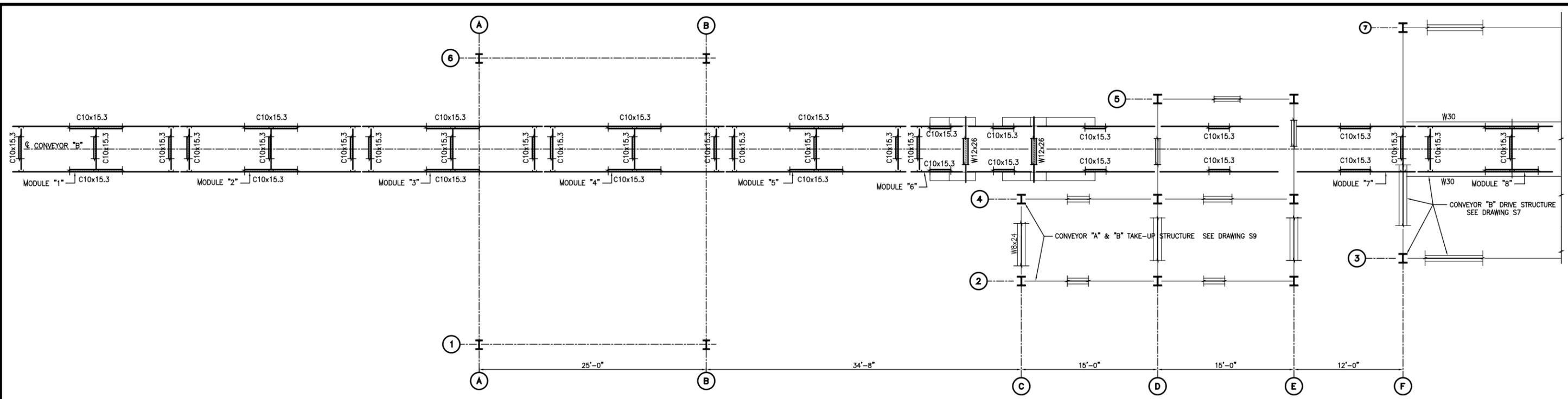
**MODULE "Z"** (1 REQ'D)  
3/8"=1'-0"

- NOTES:**
- SEE DRAWING S1 FOR STEEL GENERAL NOTES.
  - ANGLE OF BASE PLATES TO BE ESTABLISHED BASED ON COLUMN LENGTHS INDICATED AND WORK POINTS OF MODULE SUPPORT BEAMS AS SHOWN ON DRAWINGS S13, S14, & S15.

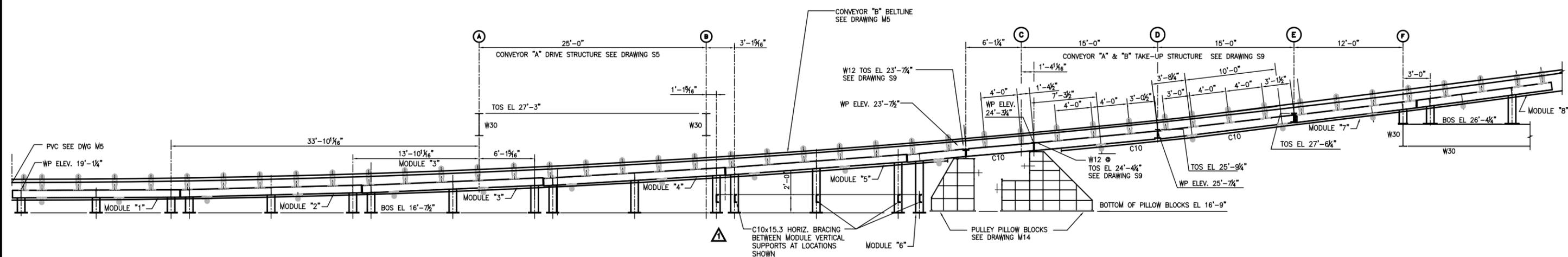
**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
1	04/06/05	OMITTED BASE PL. ANGLE	JLT
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<p><b>ALABAMA STATE PORT AUTHORITY</b></p>	
<p>Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>	<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b></p> <p><b>CONVEYOR "c" MODULE DETAILS</b></p>
Drawn By: JLT Date: 10/1/04 Checked By: HAC Date: 10/08/04 Scale: AS SHOWN Job No. 1723	Drawing No. S22 REV. 1



**CONVEYOR "B" MODULE PLAN**  
 $\frac{3}{16}'' = 1'-0''$



**CONVEYOR "B" MODULE ELEVATION**  
 $\frac{3}{16}'' = 1'-0''$

**REFERENCE**

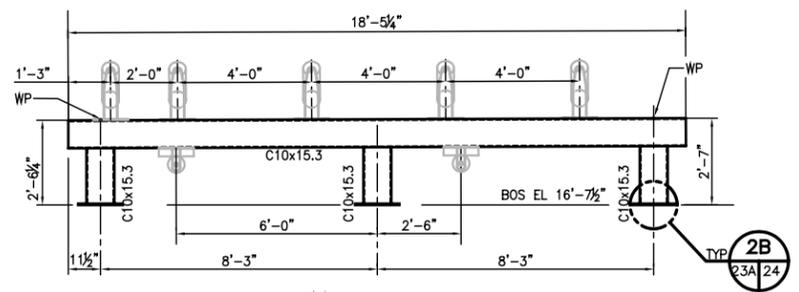
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

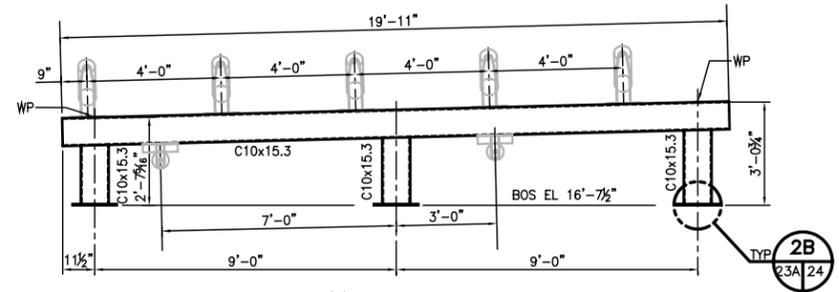
**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "B" MODULE PLAN & ELEV**

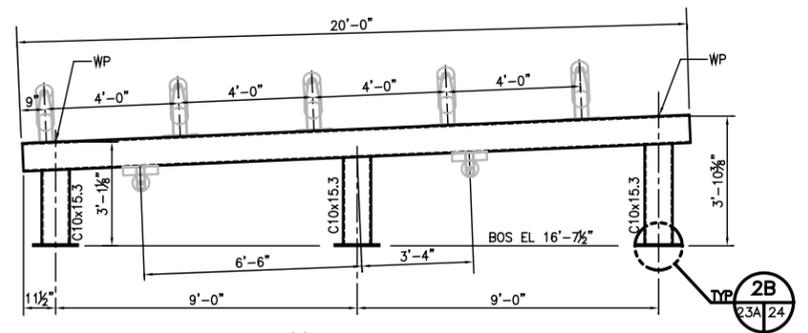
Drawn By: JLT	Date: 10/1/04
Checked By: HAC	Date: 11/29/04
Scale: AS SHOWN	Job No. 1723
Drawing No. S23	REV. 1



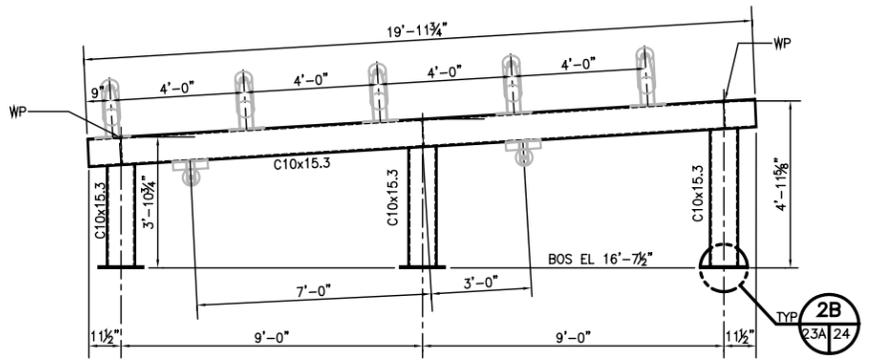
**MODULE "1"**  
3/8"=1'-0"



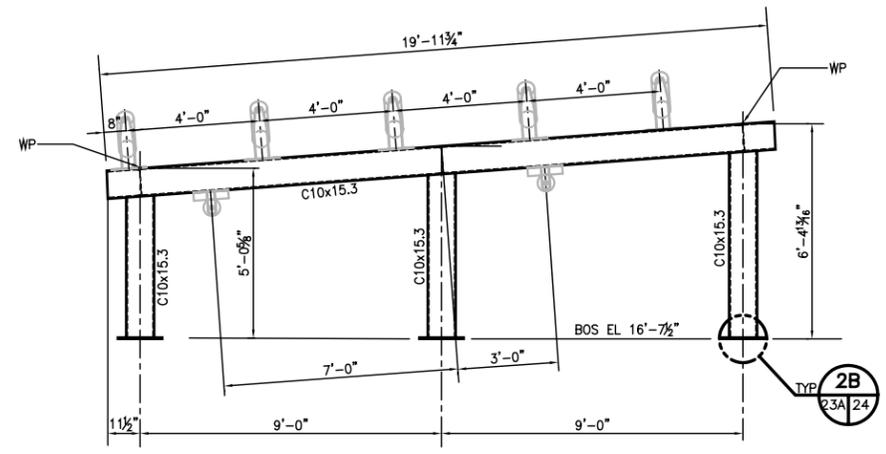
**MODULE "2"**  
3/8"=1'-0"



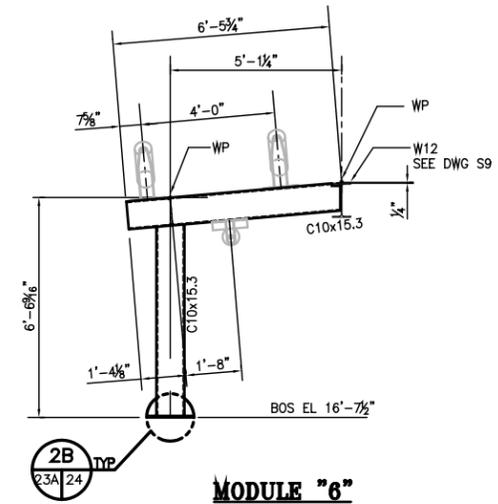
**MODULE "3"**  
3/8"=1'-0"



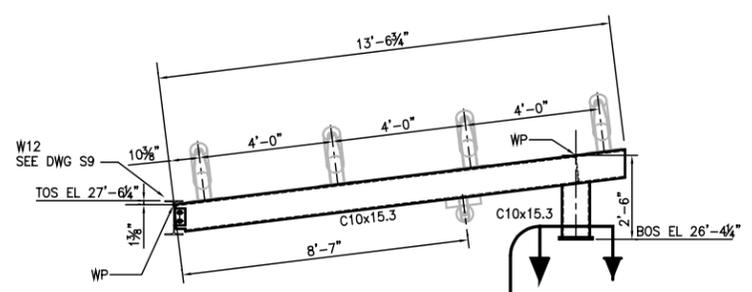
**MODULE "4"**  
3/8"=1'-0"



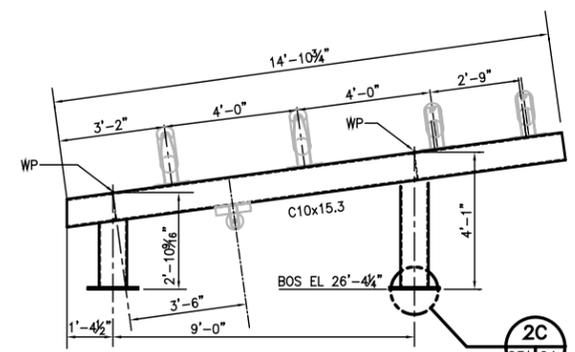
**MODULE "5"**  
3/8"=1'-0"



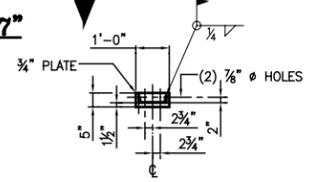
**MODULE "6"**  
3/8"=1'-0"



**MODULE "7"**  
3/8"=1'-0"



**MODULE "8"**  
3/8"=1'-0"



**NOTES:**  
1. SEE DRAWING S1 FOR STEEL GENERAL NOTES.

**REFERENCE**

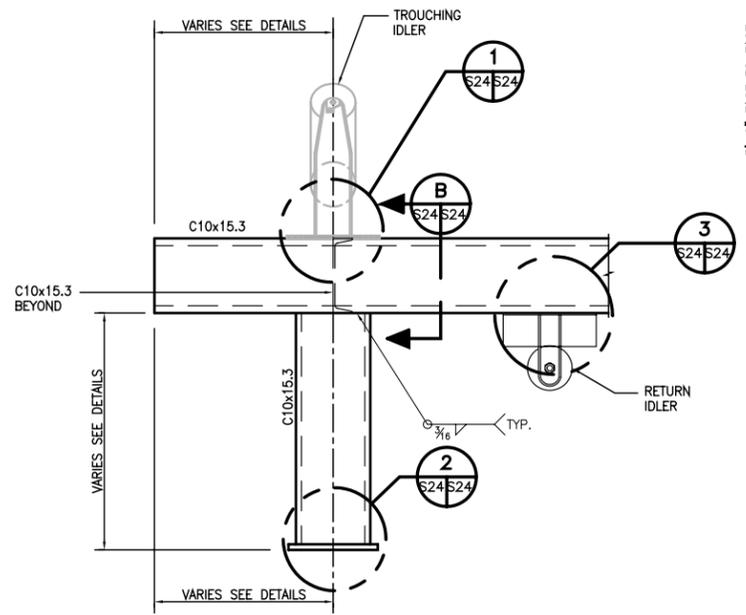
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0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

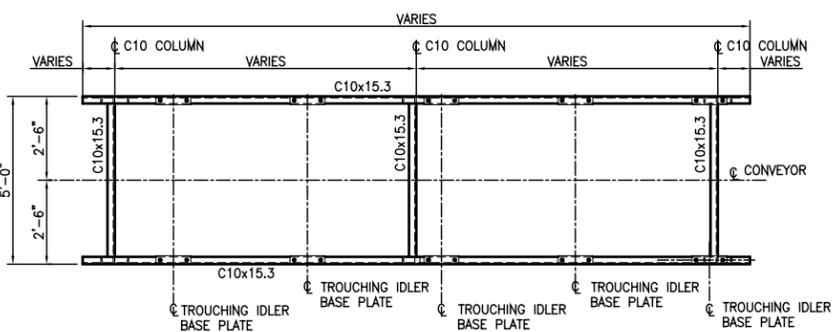
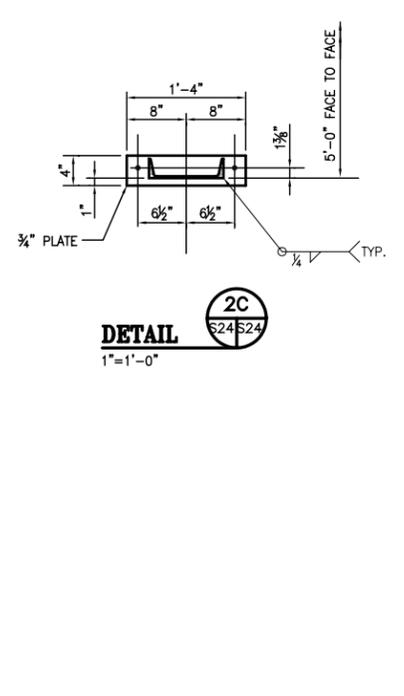
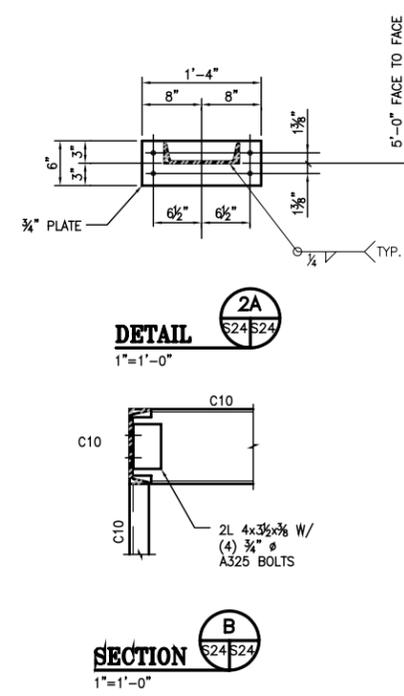
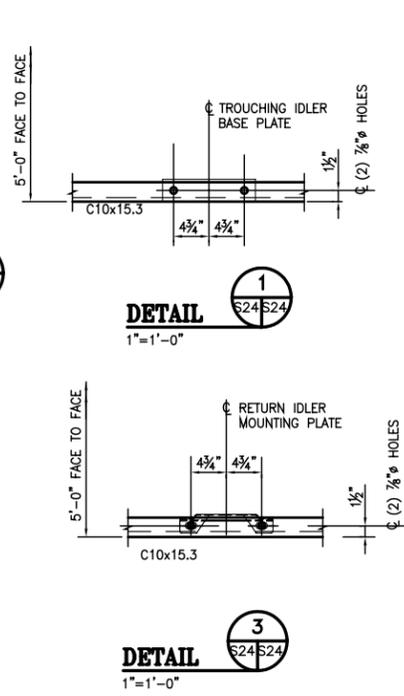
**GIBB**  
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Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "B" MODULE DETAILS**

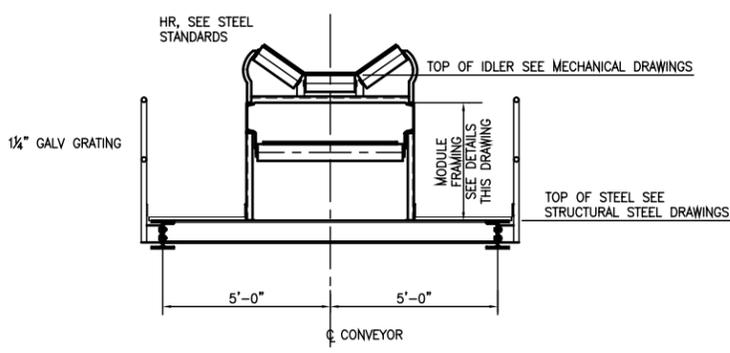
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Checked By: HAC Date: 11/29/04  
Scale: AS SHOWN Job No. 1723 Drawing No. S23A REV. 0



**TYPICAL MODULE SUPPORT CONNECTIONS**  
1"=1'-0"



**TYPICAL MODULE PLAN**  
3/8"=1'-0"



**TYPICAL SECTION @ CONVEYOR SUPPORT**  
3/8"=1'-0"

NOTE: SHIMS WILL BE REQUIRED AT SOME IDLER LOCATIONS COORDINATE THICKNESS AND NUMBER REQUIRED TO MAINTAIN PROPER CONVEYOR BELT ELEVATIONS.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
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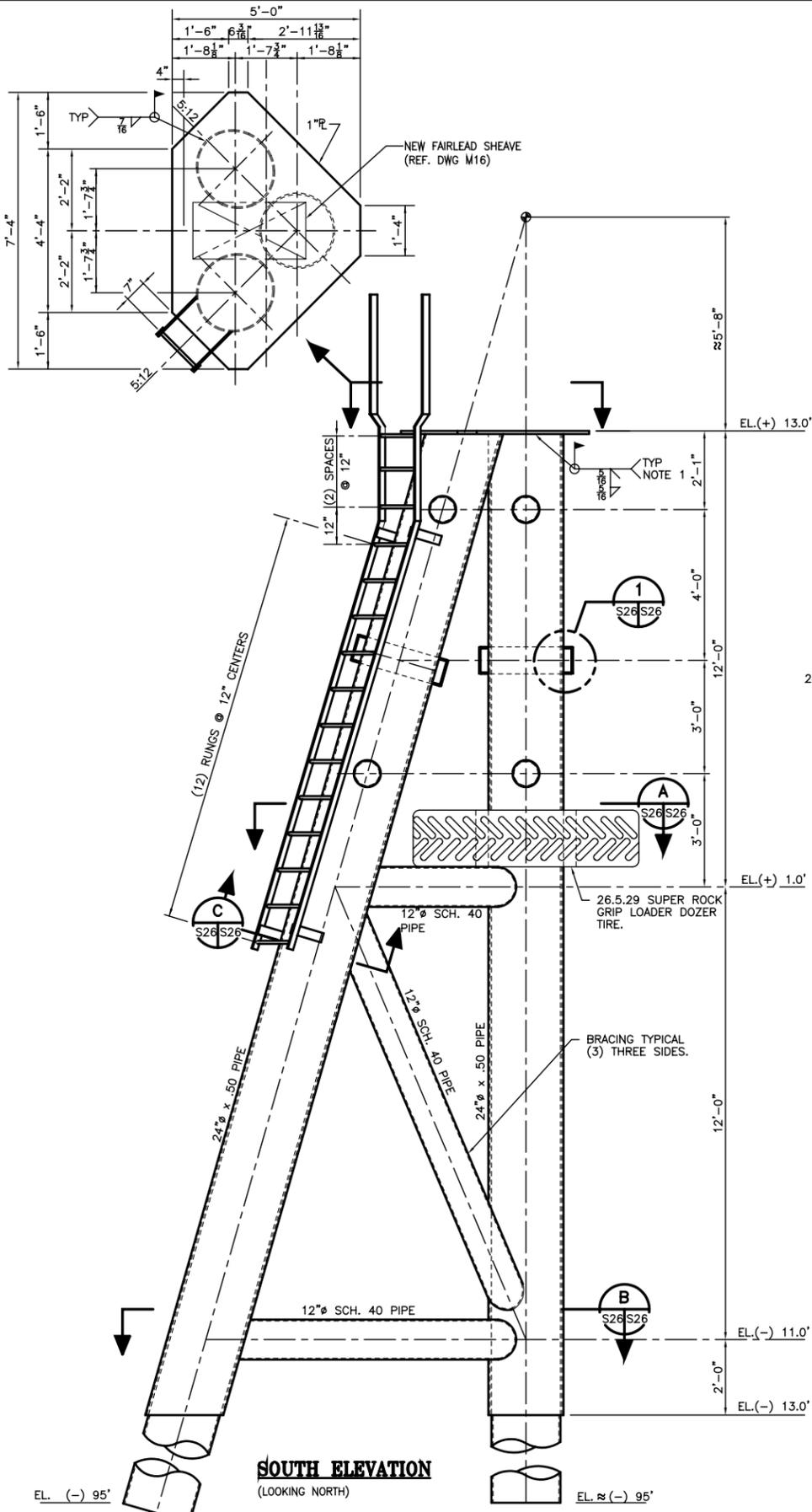
**GIBB**  
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**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**TYPICAL MODULE DETAILS**

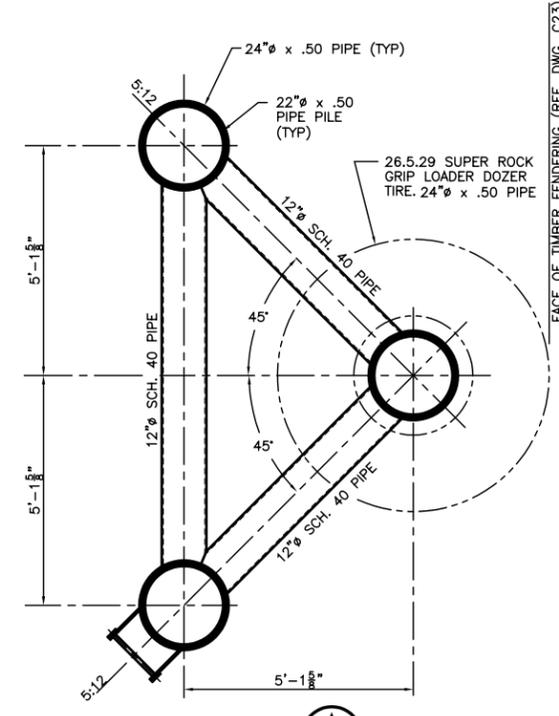
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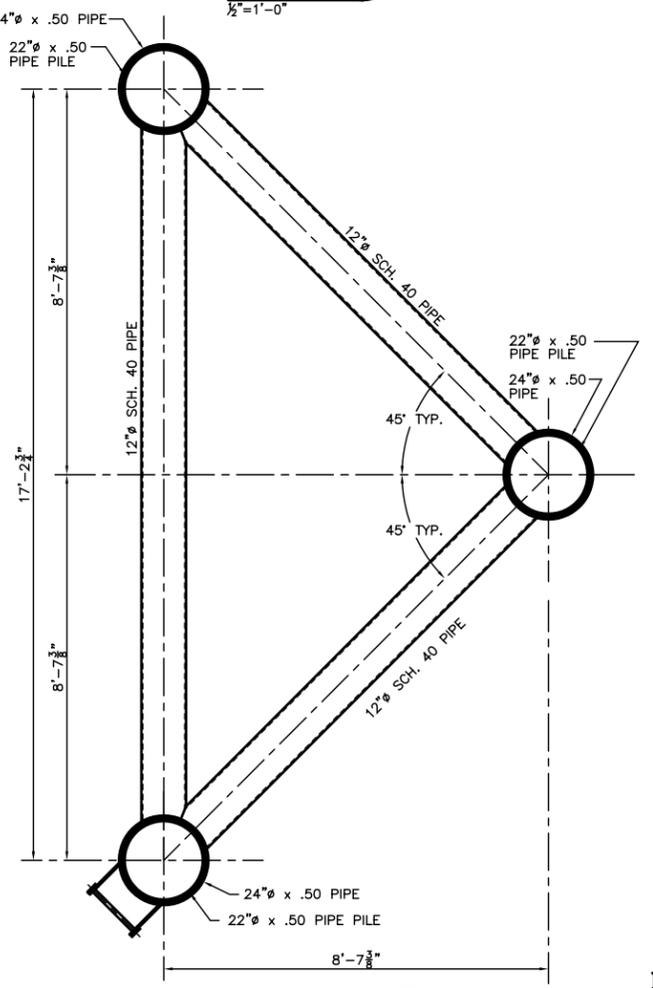


**SOUTH ELEVATION**  
(LOOKING NORTH)

**DOLPHIN "B" DETAIL**  
1/2"=1'-0" (5) REQUIRED

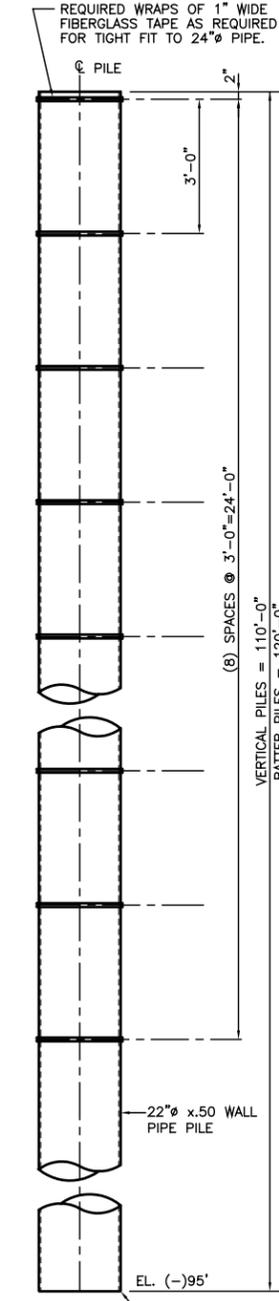


**SECTION A**  
1/2"=1'-0"

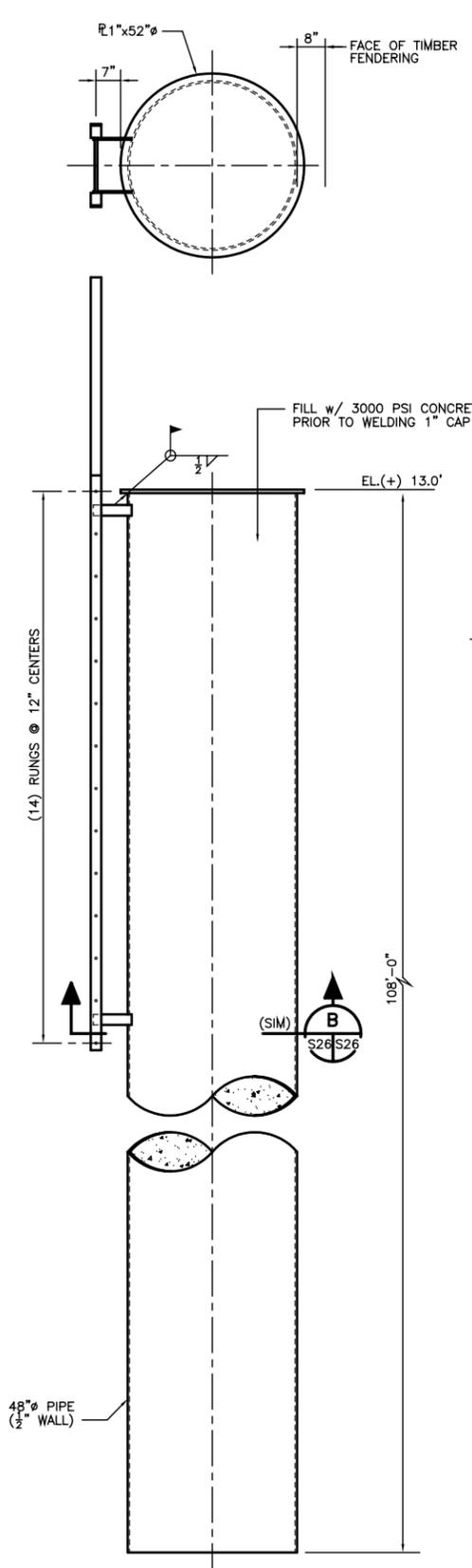


**SECTION B**  
1/2"=1'-0"

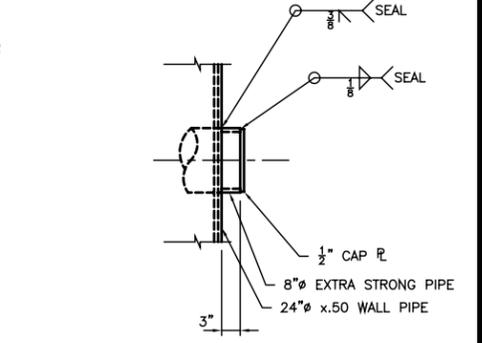
FACE OF TIMBER FENDERING (REF. DWG. C23)



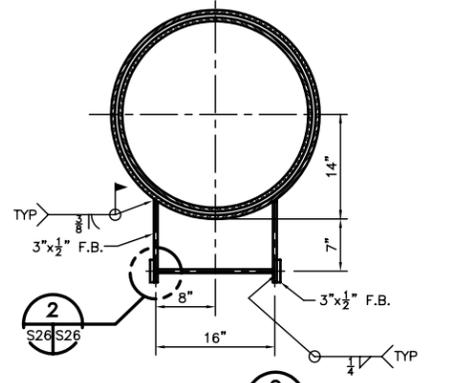
**PIPE PILE DETAIL**  
1/2"=1'-0"



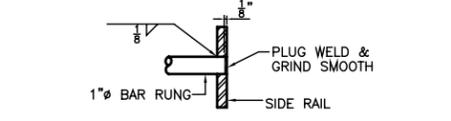
**DOLPHIN "C" DETAIL**  
1/2"=1'-0" (2) REQUIRED



**DETAIL 1**  
1"=1'-0"



**SECTION C**  
1"=1'-0"



**RUNG DETAIL 2**  
3"=1'-0"

**NOTES:**

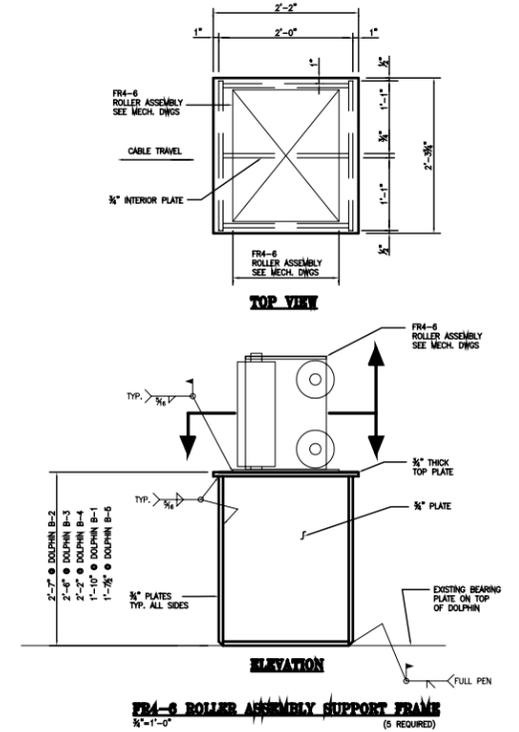
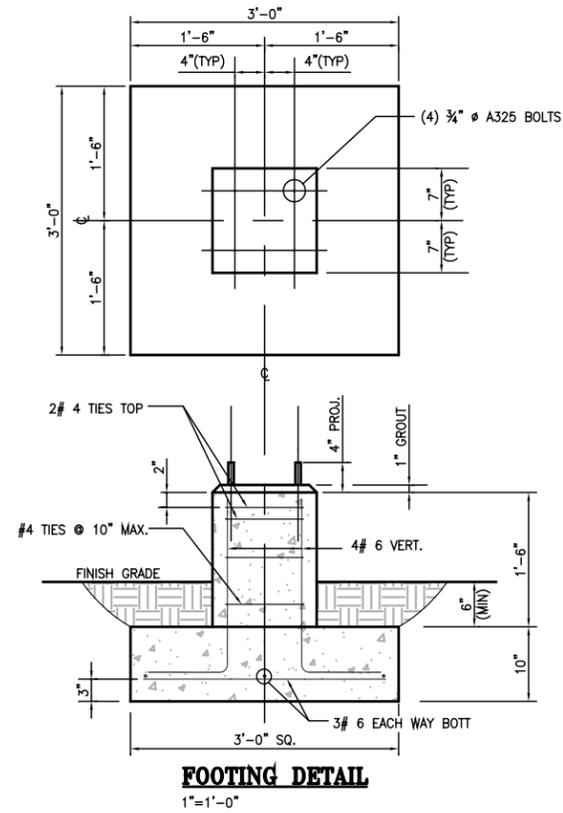
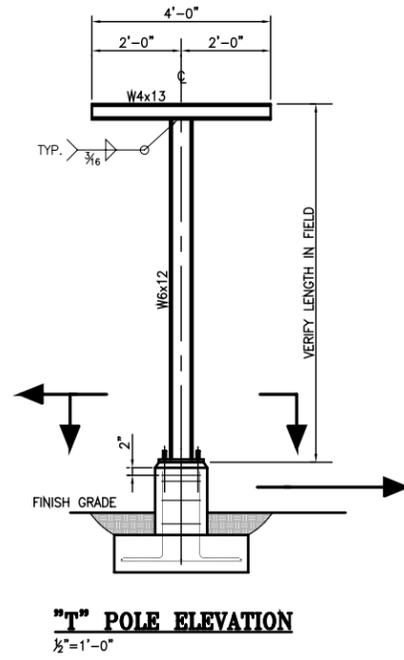
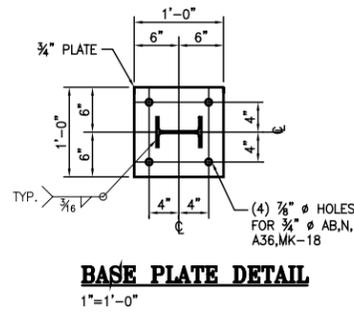
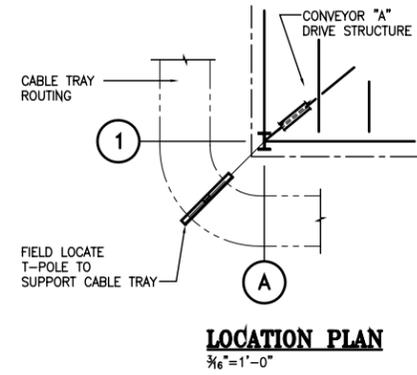
- DOLPHINS SHALL BE COMPLETELY FABRICATED (LESS PILES AND CAP PLATES) PRIOR TO INSTALLATION. THEY SHALL BE ACCURATELY LOCATED AS SHOWN AND HELD IN THIS POSITION WHILE SERVING AS A TEMPLATE TO DRIVE THE PIPE PILES. AFTER DRIVING, THE PILES SHALL BE PINNED TO THE DOLPHIN AS SHOWN.
- FILL DRIVEN PIPE PILES WITH CONCRETE PRIOR TO WELDING CAP PLATE IN PLACE.
- CONTRACTOR SHALL PROVIDE PROTECTIVE COATING ON ALL DOLPHINS AND PILES PER REFERENCE SPECIFICATION NO. 02456.
- SEE DWG. M16 FOR DOLPHIN LOCATIONS.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

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MOBILE	ALABAMA
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: DTD	Date: 09/02/04
Checked By: HAC	Date: 10/07/04
Scale: NOTED	Job No. 1723
	Drawing No. S26
	REV. 0



**REFERENCE**

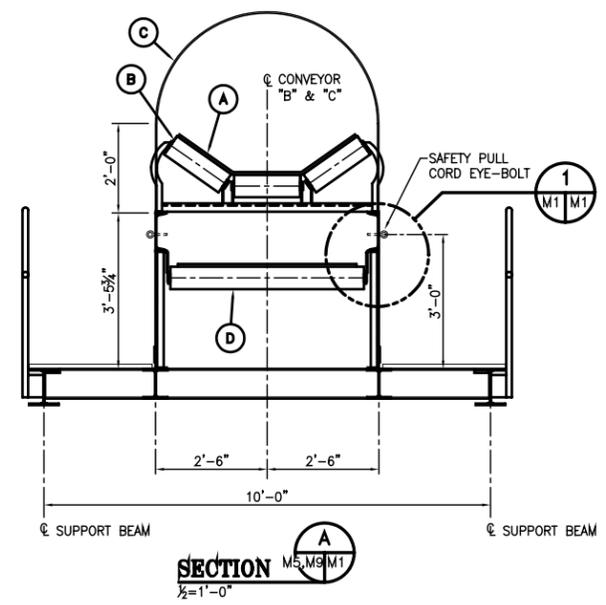
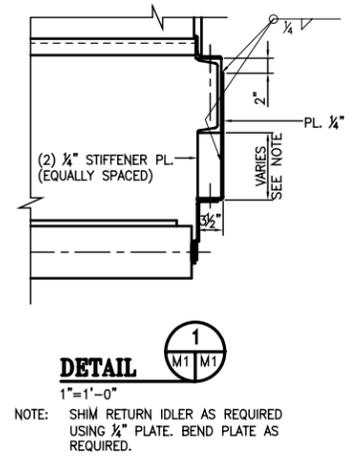
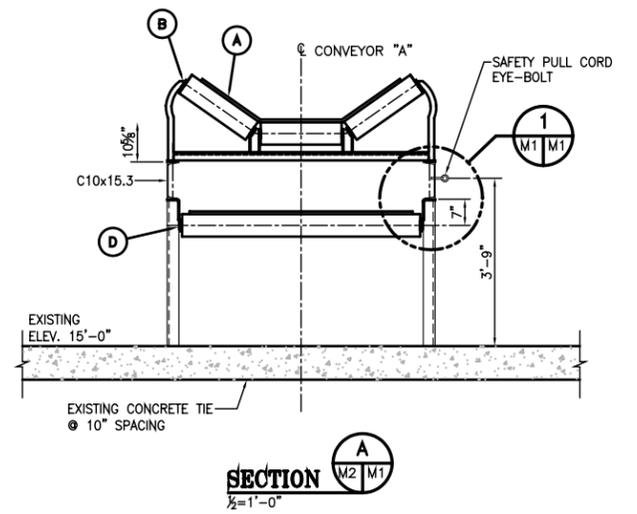
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0	03/23/06	RECORD ISSUE	HAC

**ALABAMA STATE PORT AUTHORITY**  
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**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**MISCELLANEOUS STEEL DETAILS**

Drawn By: JLT Date: 03/13/06  
Checked By: HAC Date: 03/13/06  
Scale: AS SHOWN Job No. 1723 Drawing No. S27 REV. 0



ITEM NUMBER	CROSS REFERENCE	"A"	"B"	"C"	"D"	"E"	"F"
CONVEYOR A - DWG. M2		21	17	-	19	23	22
CONVEYOR B - DWG. M5		23	19	27	21	25	24
CONVEYOR C - DWG. M9		27	23	31	25	29	28

**MECHANICAL NOTES**

**GENERAL**

- WORKMANSHIP**  
ALL WORK SHALL BE PERFORMED IN A THOROUGH WORKMANLIKE MANNER AND SHALL FOLLOW CURRENT PRACTICE FOR THE MANUFACTURE OF HIGH GRADE MACHINERY AND EQUIPMENT.  
  
ALL WORK SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY AWS D1.1, "STRUCTURAL WELDING CODE" AND THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATION FOR STRUCTURAL STEEL FOR BUILDINGS" INCLUDING APPLICABLE SECTIONS OF BOTH FOR DYNAMICALLY LOADED STRUCTURES.
- MATERIALS**  
ALL MATERIAL SHALL BE NEW AND UNUSED.  
  
ALL MATERIALS FOR STRUCTURAL MEMBERS SHALL BE TRACEABLE; UPON REQUEST, MILL TEST CERTIFICATES AND OTHER REQUIRED TEST RESULTS SHALL BE PROVIDED TO OWNER IN AN ACCEPTABLE FASHION.  
  
ALL MATERIALS FOR STRUCTURAL MEMBERS UNLESS OTHERWISE SHOWN SHALL CONFORM TO ASTM A36 OR OWNER APPROVED EQUIVALENT AND SHALL BE HOT-DIP GALVANIZED, UNLESS NOTED OTHERWISE. ALL DAMAGED HOT-DIP GALVANIZED AREAS SHALL BE COATED WITH ZRC COLD GALVANIZING COMPOUND OR EQUAL. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- WELDING**  
ALL WELDING AND WELD JOINTS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF AMERICAN WELDING SOCIETY AWS D1.1 (OR OWNER APPROVED EQUIVALENT). ALL WELDERS, WELDING OPERATORS AND TACKERS SHALL HAVE CURRENT CERTIFICATION FOR THE MATERIALS, PROCESSES, AND TYPES OF WELDING PERFORMED. CERTIFICATION OF QUALIFICATIONS OF EACH INDIVIDUAL WELDER, TACKER, AND WELDING OPERATOR, AND EACH PROCEDURE SHALL BE FURNISHED TO OWNER UPON REQUEST. WELDS INSTALLED USING UNQUALIFIED PROCEDURES OR WELDING PERFORMED BY NON-QUALIFIED WELDERS SHALL BE SUBJECT TO REMOVAL AT THE CONTRACTOR'S EXPENSE SUBJECT TO THE DISCRETION OF OWNER.  
  
ALL WELDING SHALL BE CONTINUOUS AND PROVIDE SEALING AGAINST ENTRANCE OF MOISTURE INTO WELD JOINTS. ALL WELDS NOT SHOWN SHALL BE 3/16 IN. FILLET WELDS UNLESS REQUIRED OTHERWISE BY APPLICABLE CODES.
- INSPECTION**  
QUALITY CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL BE CAPABLE OF PERFORMING ALL NECESSARY INSPECTIONS. THE CONTRACTOR'S INSPECTION REPORTS SHALL BE FURNISHED TO OWNER UPON REQUEST.  
  
WELD INSPECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL UPON REQUEST.  
  
ALL VISUAL AND NON-DESTRUCTIVE WELD INSPECTIONS SHALL BE PERFORMED BY QUALIFIED INSPECTORS AND IN ACCORDANCE WITH AWS D1.1 (OR OWNER APPROVED EQUIVALENT), INCLUDING APPLICABLE SECTIONS FOR DYNAMICALLY LOADED STRUCTURES.
- ANY DISCREPANCIES BETWEEN THE INFORMATION OR DIMENSIONS INDICATED ON THIS DRAWING AND THE ACTUAL INFORMATION OR DIMENSIONS OF EXISTING EQUIPMENT SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO STARTING THE WORK.

**DWG'S. M2, M5 & M9 (CONT)**

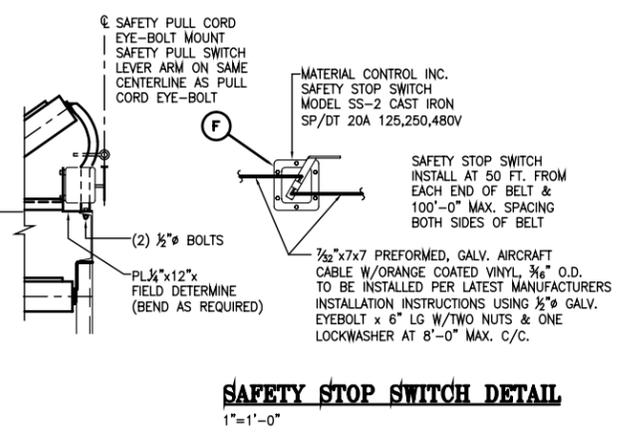
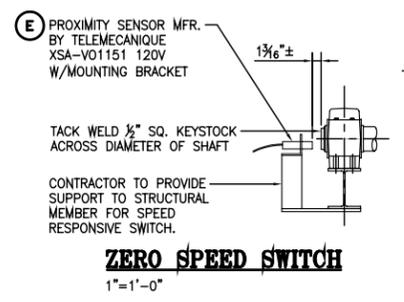
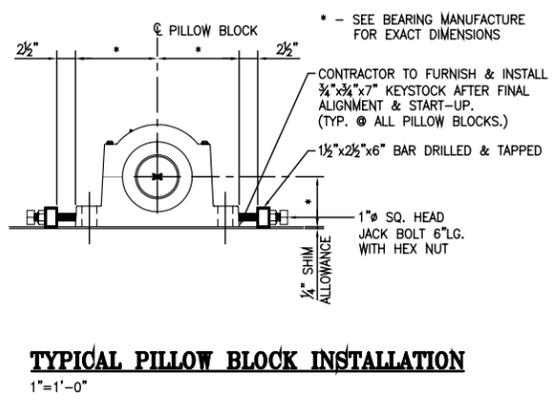
- FOR ALL CONVEYORS, TOP OF TAIL PULLEY ELEVATION IS 1" BELOW BELTLINE ELEVATION FOR DRAINAGE.
- CONTRACTOR SHALL PROVIDE REMOVABLE PROTECTIVE GUARDS AT BELT AND PULLEY LOCATIONS ACCESSIBLE BY PERSONNEL, INCLUDING THE TAIL PULLEY OF CONVEYOR "C".
- ALL EXISTING MECHANICAL EQUIPMENT COMPONENTS NOT INDICATED TO BE RELOCATED AND/OR RE-USED SHALL BE CAREFULLY REMOVED AND PROVIDED TO THE OWNER FOR RE-USE AS SPARE PARTS.

**DWG'S. M6 & M12**

- DISCHARGE CHUTES SHALL BE CONSTRUCTED OF 1/4" PLATE AND LINED AS PER THESE CONTRACT DRAWINGS.
- LINER PLATE FOR THE NEW CHUTES SHALL BE TRI-BRAZE PLATE AS MANUFACTURED BY TRI-COM METALS, AND SHALL BE FURNISHED AND INSTALLED IN THE THICKNESS AND LOCATIONS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL DRILL OR PUNCH 1" HOLES @ 12" MAXIMUM CENTERS EACH WAY IN THE CHUTE PLATES FOR WELDING ATTACHMENT TO THE LINER PLATE. WELDS IN HOLES SHALL BE 3/16" FILLET WELD AROUND THE FULL INTERIOR CIRCUMFERENCE OF THE HOLE.

**DWG'S. M2, M5 & M9**

- ALL REFURBISHED SHAFTS SHALL BE FURNISHED AND INSTALLED IN PULLEY BY PULLEY MANUFACTURER.
- MOTORS, REDUCERS AND H.S. COUPLINGS SHALL BE RELOCATED, INSTALLED, SHIMMED AND ALIGNED ON STRUCTURAL STEEL BED PLATE. CONTRACTOR SHALL VERIFY PROPER ALIGNMENT (+.011") OF COMPLETE DRIVE SYSTEM UPON INSTALLATION. CONTRACTOR SHALL RE-ALIGN DRIVE SYSTEM, INCLUDING PULLEYS, AFTER A 30 DAY RUN-IN PERIOD AND AFTER THE FIRST VIBRATION TEST IF A PROBLEM IS DUE TO MIS-ALIGNMENT.
- BEARING ADJACENT TO DRIVE TO BE NON-EXPANSION WITH STABILIZING RING. OPPOSITE BEARING TO BE EXPANSION TYPE.
- FOR ALL CONVEYOR SHAFTS BEARING CENTERS SHALL BE 84 INCHES (CONVEYOR "A") & 72 INCHES (CONVEYORS "B"&"C")
- ALL SHAFT ENDS SHALL HAVE 1/4"X45° CHAMFER. FILE AFTER TURNING.
- ALL SHAFTS SHALL EXTEND A MIN. 1/2" TO A MAX. 1/2" BEYOND BEARING HOUSING UNLESS NOTED OTHERWISE.
- ALL BOLTS, CAP SCREWS AND NUTS FOR MACHINERY ASSEMBLY SHALL BE SAE GRADE 5 UNLESS NOTED OTHERWISE.
- ALL REFURBISHED PULLEY ASSEMBLIES WITH LAGGING TO BE SHIPPED TO JOB SITE WITH PROTECTIVE METAL WRAPPER. ALL SHAFTING TO HAVE EXPOSED ENDS COATED & WRAPPED TO PROTECT SHAFT FROM DAMAGE.
- PRIOR TO MOUNTING ALL PULLEYS, CONTRACTOR SHALL RE-TORQUE ALL BOLTS ON PULLEY HUBS PER MANUFACTURERS SPECIFICATION. CONTRACTOR SHALL RE-TORQUE ALL BOLTS ON PULLEY HUBS AFTER A 30 DAY RUN-IN PERIOD AS PER MANUFACTURERS SPECIFICATION.
- EXISTING BELTS FOR CONVEYORS "A" & "B" SHALL BE CUT AT AN EXISTING SPLICE AND EXCESS LENGTH REMOVED TO ACCOMMODATE THE NEW LENGTHS OF CONVEYOR "A" & "B". THE CONVEYOR BELT FOR NEW CONVEYOR "C" SHALL BE MADE BY UTILIZING THE EXISTING BELT FROM EXISTING CONVEYORS "C", "D" AND/OR "E". THE BELT FROM EXISTING CONVEYORS "D" AND "E" WILL NOT BE AVAILABLE FOR REUSE UNTIL THE OUTAGE. ALL BELT SPLICES SHALL BE VULCANIZED.
- EXISTING BELT LENGTHS NOTED IN BILL OF MATERIALS ARE FINISHED, IN PLACE LENGTHS. CONTRACTOR SHALL FURNISH ADEQUATE BELTING TO ACCOMMODATE VULCANIZED FIELD SPLICES AS REQUIRED, INCLUDING THE TAIL PULLEY OF CONVEYOR "C".



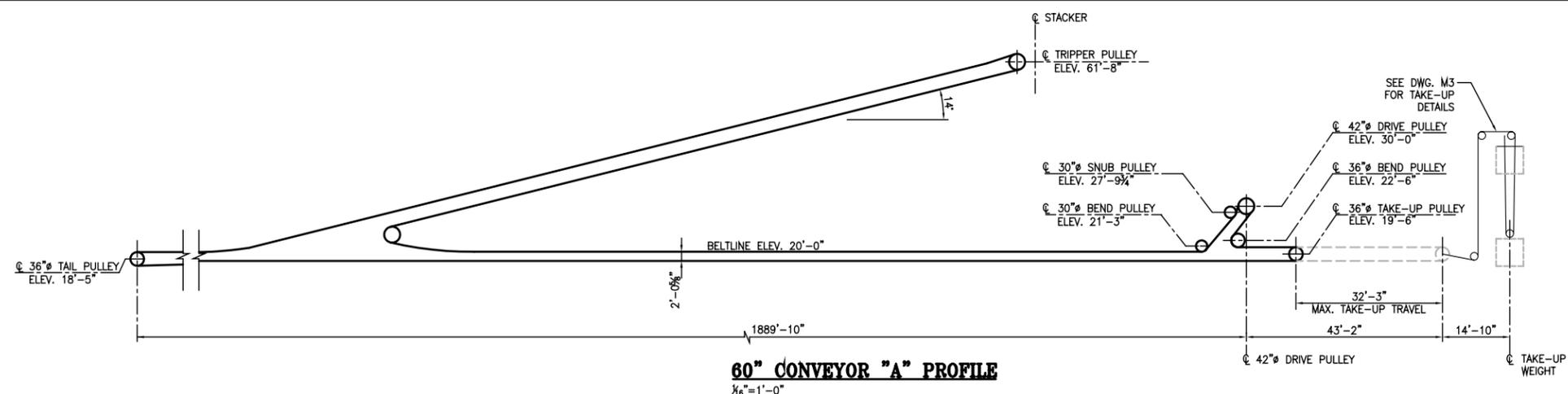
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REV.	DATE	DESCRIPTION	BY
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0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

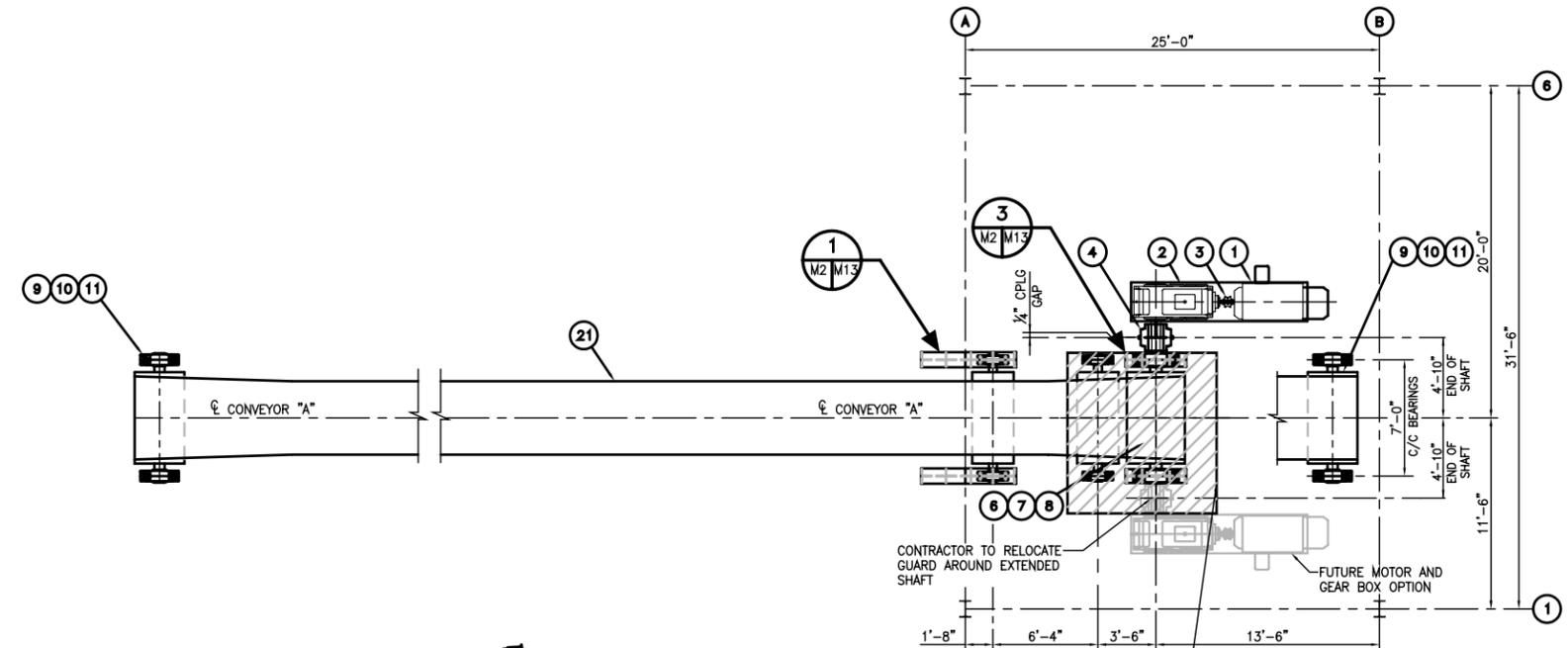
  

<b>ALABAMA STATE PORT AUTHORITY</b>	
MOBILE	ALABAMA
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: L.R.M.	Date: 9/1/04
Checked By: B.P.N.	Date: 10/07/04
Scale: NOTED	Job No. M1723
<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>	
<b>GENERAL NOTES &amp; TYPICAL DETAILS</b>	
Drawing No. M1	REV. 0

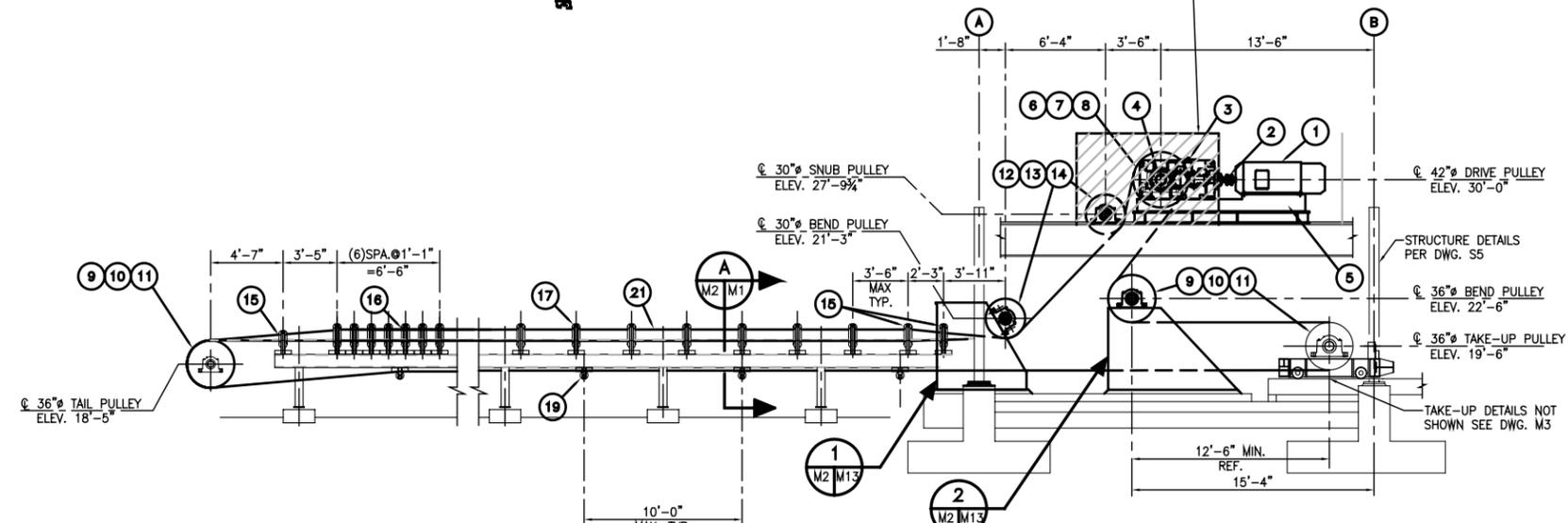
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**60" CONVEYOR "A" PROFILE**  
 $\frac{3}{16}''=1'-0''$



**PARTIAL PLAN - CONVEYOR "A"**  
 $\frac{3}{16}''=1'-0''$



**PARTIAL ELEVATION - CONVEYOR "A"**  
 $\frac{3}{16}''=1'-0''$

EXISTING EQUIPMENT LIST					
ITEM NO.	NO. REQ.	DESCRIPTION	MFR.	STATUS	REMARKS
<b>DRIVE</b>					
1	1	MOTOR - 350 H.P., 480V, 3 PHASE, HERTZ, 1750 RPM, T.E.F.C.	U.S. ELECTRIC	RELOCATED	MODEL H14447, FRAME 449, INSUL. CLASS F SERIAL NO. A04A0290857R-1
2	1	REDUCER - PARAMAX 8 RIGHT ANGLE REDUCER, TRIPLE REDUCTION, PX8090R3-RL/LR-40 OUTPUT 45 RPM, BACKSTOP, FAN	SUMITOMO	RELOCATED	SERIAL NO. A658563
3	1	HS COUPLING - TYPE T10, SIZE 1080T WITH COUPLING GUARD	FALK	RELOCATED	
4	1	LS COUPLING - TYPE T10, SIZE 1180T WITH COUPLING GUARD	FALK	RELOCATED	
5	1	HEAVY DUTY BASE PLATE	SUMITOMO	RELOCATED	
<b>DRIVE PULLEY</b>					
6	1	SHAFT- 8.661" $\phi$ , AISI 4140 STEEL	JLV, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
7	1	PULLEY-42" $\phi$ x 66" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED	$\frac{1}{2}$ " CROWNED DIAMOND GROOVED BAKED-ON LAGGING
8	2	PILLOW BLOCKS- $7\frac{1}{2}$ " $\phi$ - SAF 22544	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>TAIL/TAKE-UP/TAKE-UP BEND PULLEY</b>					
9	3	SHAFT- $7\frac{1}{2}$ " $\phi$ , AISI C1045 STEEL	JLV, NORTH AMERICAN	RELOCATED EXCL. TAIL	BIKON LOCKING HUB
10	3	PULLEY- 36" $\phi$ x 66" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED EXCL. TAIL	$\frac{1}{2}$ " CROWNED SMOOTH BAKED-ON LAGGING
11	6	PILLOW BLOCKS- $6\frac{1}{2}$ " $\phi$ - SAF 22538	SKF	RELOCATED EXCL. TAIL	ONE EXPANSION & ONE NON-EXPANSION
<b>BEND/SNUB PULLEY</b>					
12	2	SHAFT- $6\frac{1}{2}$ " $\phi$ , AISI C1045 STEEL	JLV, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
13	2	PULLEY- 30" $\phi$ x 66" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED	$\frac{1}{2}$ " CROWNED SMOOTH BAKED-ON LAGGING
14	4	PILLOW BLOCKS- $5\frac{1}{2}$ " $\phi$ - SAF 22532	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>IDLERS</b>					
15	3	TRANSITION TROUGHING IDLER-60" B.W., 6" $\phi$ ROLL	CONTINENTAL	REMAIN	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX659-60S
16	7	35" IMPACT TROUGHING IDLER - 60" B.W.	CONTINENTAL	REMAIN	INSTALL AS SHOWN, SDX-PLUS, NO. 73AK4233-60
17	624	35" TROUGHING IDLER - 60" B.W., 6" $\phi$ ROLL	CONTINENTAL	QTY. REDUCED	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX630-60G
18	21	35" SELF-ALIGNING TROUGHING IDLER - 72" B.W., 6" $\phi$ ROLL	CONTINENTAL	QTY. REDUCED	INSTALL @ MAXIMUM 100'-0" CTRS. SDX-PLUS, NO. 73ASDX610-60G
19	201	RETURN IDLERS - 60" B.W., 6" $\phi$ ROLL	CONTINENTAL	QTY. REDUCED	INSTALL @ MAX. 10'-0" CTRS., NO. 73ASDX632-60G
20	18	RETURN TRAINING IDLERS - 60" B.W., 6" $\phi$ ROLL	CONTINENTAL	QTY. REDUCED	INSTALL @ MAX. 100'-0" CTRS., NO. 73ASDX619-60G
21	4973 LF	BELT-60"B.W. PLYLON-PLUS 1000, 4 PLY	GOOD YEAR	QTY. REDUCED	TOP COVER $\frac{1}{4}$ ", BTM. COVER $\frac{3}{32}$ ", STYLE "BII"
22	44	SAFETY STOP SWITCH W/PULL CABLES	MATERIAL CONTROL INC.	QTY. REDUCED	SS-2 CAST IRON, INSTALL @ MAX. 100' CTRS.
23	1	PROXIMITY SENSOR XSA W/MOUNTING BRACKET	TELEMECANIQUE	NEW	XSA-V01151 120V
24	3	HYDRAULIC SELF-ALIGN RETURN IDLER ASSEMBLY 60" B.W., 3-6" $\phi$ ROLL	HEWITT - ROBBINS	RELOCATED (CONV. "A")	"HYDRA-POWER", EQUALLY SPACED ON RETURN RUN LOCATE 100' FROM ITEM 20

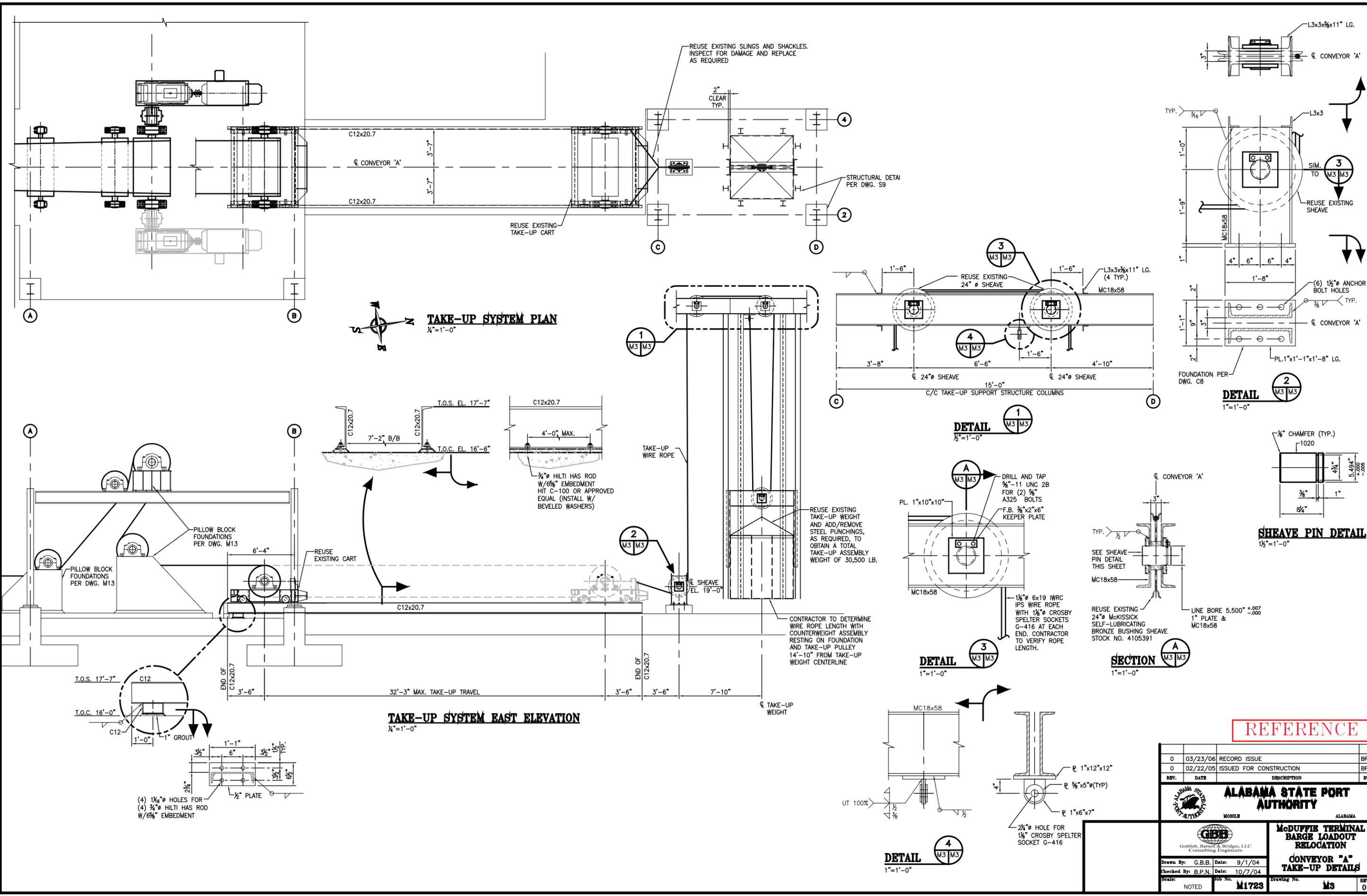
SEE SHEET M1 FOR NOTES AND TYPICAL DETAILS

**REFERENCE**

0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN
REV.	DATE	DESCRIPTION	BY
 <b>ALABAMA STATE PORT AUTHORITY</b>			
 Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>			
<b>CONVEYOR "A" PLAN &amp; ELEVATIONS</b>			
Drawn By:	D.T.D.	Date:	7/28/04
Checked By:	B.P.N.	Date:	10/7/04
Scale:	NOTED	Job No.:	M1723
		Drawing No.:	M2
		REV.	0

**CONVEYOR DATA:**

MATERIAL DENSITY	- 55 PCF COAL
BELT WIDTH	- 60 INCHES
BELT SPEED (DESIGN)	- 500 FPM
CAPACITY	- 2563 STPH
TIGHT SIDE TENSION (T <sub>1</sub> )	- 25,102 LB.
SLACK SIDE TENSION (T <sub>2</sub> )	- 7,172 LB.
TAIL TENSION (T <sub>T</sub> )	- 7,622 LB.
TAKE-UP WEIGHT	- 30,500 LB.



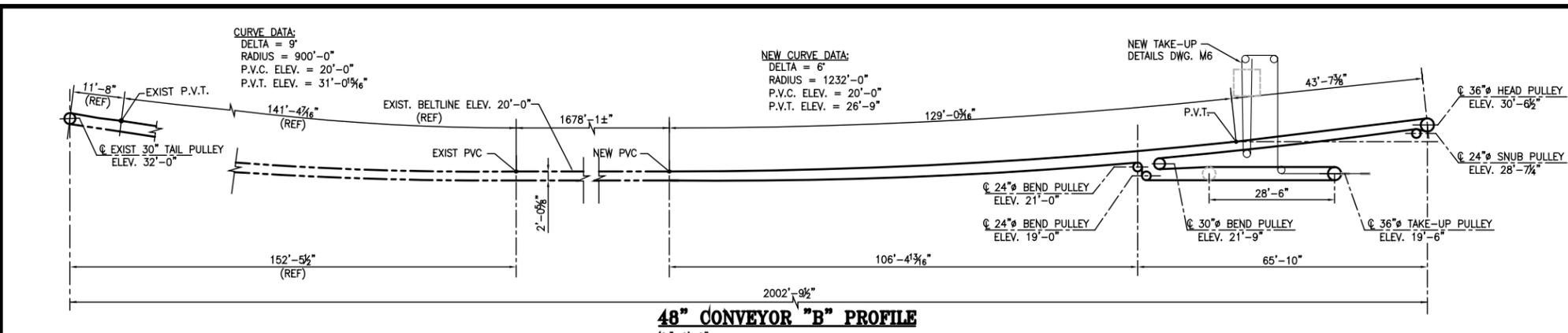
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0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

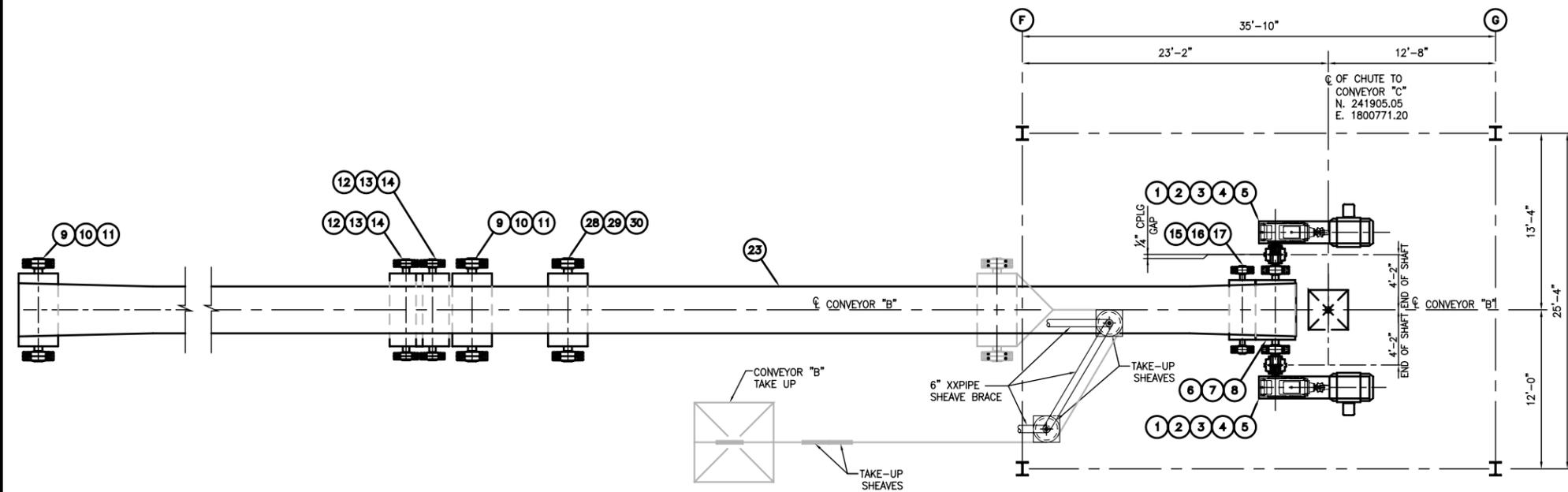
<b>ALABAMA STATE PORT AUTHORITY</b>	
MOBILE	ALABAMA
 Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: G.B.B. Date: 9/1/04 Checked By: B.P.N. Date: 10/7/04 Scale: NOTED	Job No. <b>M1723</b> Drawing No. <b>M3</b> Rev. <b>0</b>

**McDUFFIE TERMINAL  
 BARGE LOADOUT  
 RELOCATION  
 CONVEYOR "A"  
 TAKE-UP DETAILS**

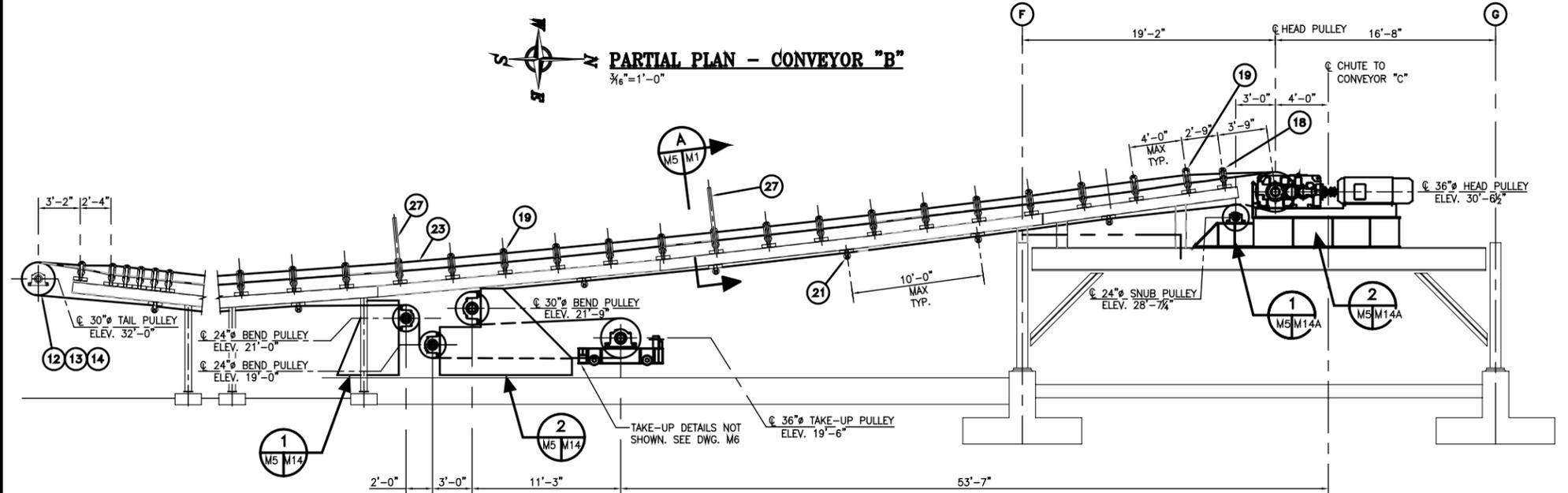
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**48" CONVEYOR "B" PROFILE**  
 $\frac{1}{16}'' = 1'-0''$



**PARTIAL PLAN - CONVEYOR "B"**  
 $\frac{3}{16}'' = 1'-0''$



**PARTIAL ELEVATION - CONVEYOR "B"**  
 $\frac{3}{16}'' = 1'-0''$

**EXISTING EQUIPMENT LIST**

ITEM NO.	NO. REQ.	DESCRIPTION	MFR.	STATUS	REMARKS
<b>DRIVE</b>					
1	2	MOTOR - 200 H.P., 230/460V, 3 PHASE, 60 HERTZ, 1750 RPM, T.E.F.C.	SIEMENS	RELOCATED	MODEL 70288, FRAME 447T TE S/N'S A03A013R215R-3 & A03A013R215R-1 SERIAL NOS. - A658852 & A658561
2	2	REDUCER - PARAMAX 8 RIGHT ANGLE REDUCER, TRIPLE REDUCTION, PX8075R3-RL/LR-35.5, OUTPUT 51 RPM, BACKSTOP, FAN	SUMITOMO	RELOCATED	REDUCER RATIO PREVIOUSLY MODIFIED FROM ORIGINAL 35.5:1 TO 20:1
3	2	HS COUPLING- TYPE T10, SIZE 1090T W/ COUPLING GUARD	FALK	RELOCATED	
4	2	LS COUPLING- TYPE T10, SIZE 1160T W/ COUPLING GUARD	FALK	RELOCATED	
5		HEAVY DUTY BASEPLATE	SUMITOMO	RELOCATED	
<b>DRIVE PULLEY</b>					
6	1	SHAFT- 7.087", AISI 4140 STEEL	JLV, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
7	1	PULLEY-36" x 54" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
8	2	PILLOW BLOCKS- 5 1/2" - SAF 22534	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>TAIL/TAKE-UP BEND PULLEY</b>					
9	2	SHAFT- 6 1/4" AISI C1045 STEEL	JLV, NORTH AMERICAN	TAIL REMAINS TAKE-UP RELOCATED AS BEND	BIKON LOCKING HUB
10	2	PULLEY- 30" x 54" STRAIGHT FACE	JLV, NORTH AMERICAN	TAIL REMAINS TAKE-UP RELOCATED AS BEND	1/2" CROWNED SMOOTH BAKED-ON LAGGING
11	4	PILLOW BLOCKS- 5 1/2" - SAF 22532	SKF	TAIL REMAINS TAKE-UP RELOCATED AS BEND	ONE EXPANSION & ONE NON-EXPANSION
12	2	SHAFT- 5 1/2" AISI C1045 STEEL	JLV, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
13	2	PULLEY- 24" x 54" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
14	4	PILLOW BLOCKS- 4 1/2" - SAF 22528	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>BEND/SNUB PULLEY</b>					
15	1	SHAFT- 4 1/4" AISI C1045 STEEL	JLV, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
16	1	PULLEY- 24" x 54" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
17	2	PILLOW BLOCKS- 3 1/2" - SAF 22522	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>IDLERS</b>					
18	2	20" TROUGHING IDLER - 48" B.W., 6" ROLL	CONTINENTAL	RELOCATED	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX601-48G
19	539	35" TROUGHING IDLER - 48" B.W., 6" ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX630-48G
20	22	35" SELF-ALIGNING TROUGHING IDLER - 48" B.W., 6" ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAXIMUM 100'-0" CTRS. SDX-PLUS, NO. 73ASDX632-48G
21	197	RETURN IDLERS - 48" B.W., 6" ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAX. 10'-0" CTRS., NO. 73ASDX610-48G
22	18	RETURN TRAINING IDLERS - 48" B.W., 6" ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAX. 100'-0" CTRS., NO. 73ASDX619-48G
23	4100 LF	BELT-48"B.W. PLYLON PLUS 750, 3 PLY	GOODYEAR MATERIAL CONTROL, INC.	QUANTITY REDUCED	TOP COVER 1/4", BTM. COVER , STYLE "BII" 1/2"
24	44	SAFETY STOP SWITCH W/PULL CABLES		NEW	SS-2 CAST IRON, INSTALL @ MAX. 100' CTRS.
25	1	PROXIMITY SENSOR XSA W/MOUNTING BRACKET	TELEMECHANIQUE	NEW	XSA-V01151 120V
26	3	HYDRAULIC SELF-ALIGN RETURN IDLER ASSEMBLY 48" B.W., 6" ROLL	HEWITT-ROBINS	NEW	"HYDRA-POWER", EQUALLY SPACED ON RETURN RUN LOCATE 100' FROM ITEM 22
27	4	WIND HOOPS - 3"x 3/8" F.B.		QUANTITY REDUCED	INSTALL AT 50'-0" MAX. CTRS.

**NEW EQUIPMENT LIST**

ITEM NO.	NO. REQ.	DESCRIPTION	MFR.	STATUS	REMARKS
28	1	SHAFT- 7.087", AISI 4140 STEEL	JLV, NORTH AMERICAN	RELOCATED (CONV. "D")	BIKON LOCKING HUB
29	1	PULLEY-36" x 54" STRAIGHT FACE	JLV, NORTH AMERICAN	RELOCATED (CONV. "D")	1/2" CROWNED SMOOTH BAKED-ON LAGGING
30	2	PILLOW BLOCKS- 5 1/2" - SAF 22534	SKF	RELOCATED (CONV. "D")	ONE EXPANSION & ONE NON-EXPANSION

SEE SHEET M1 FOR NOTES AND TYPICAL DETAILS

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

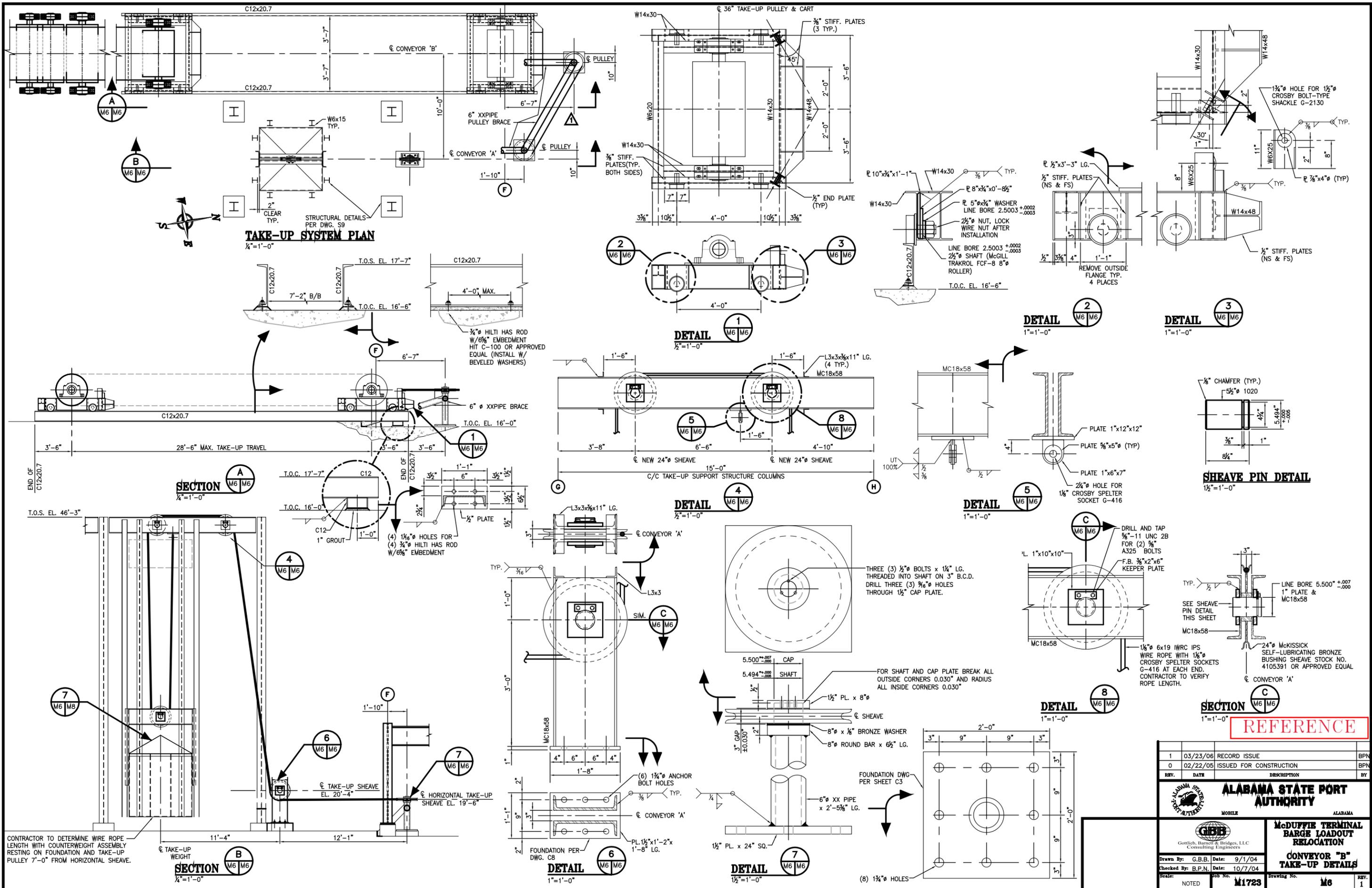
**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR "B" PLAN & ELEVATIONS**

Drawn By: D.T.D. Date: 7/28/04  
 Checked By: B.P.N. Date: 10/7/04  
 Scale: NOTED Job No. M1723 Drawing No. M5 Rev. 1

**CONVEYOR DESIGN DATA:**

MATERIAL WEIGHT	- 55 PCF COAL
BELT WIDTH	- 48 INCHES
BELT SPEED	- 824 FPM
CAPACITY	- 2,650 STPH
TIGHT SIDE TENSION (T <sub>1</sub> )	- 14,219 LB.
SLACK SIDE TENSION (T <sub>2</sub> )	- 4,072 LB.
TAIL TENSION (T <sub>3</sub> )	- 4,422 LB.
TAKE-UP WEIGHT	- 17,688 LB.



CONTRACTOR TO DETERMINE WIRE ROPE LENGTH WITH COUNTERWEIGHT ASSEMBLY RESTING ON FOUNDATION AND TAKE-UP PULLEY 7'-0" FROM HORIZONTAL SHEAVE.

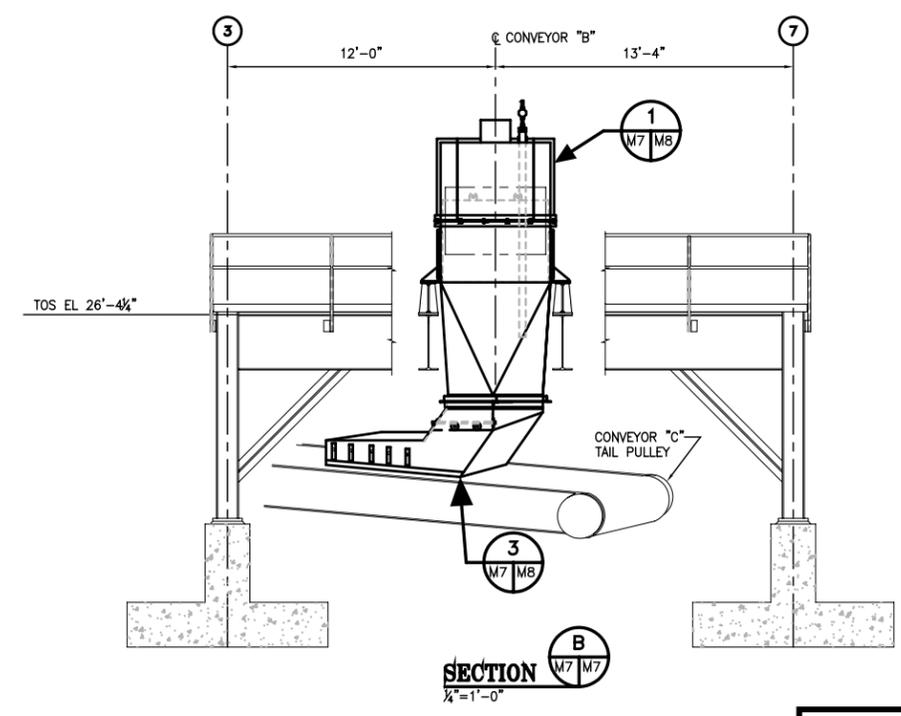
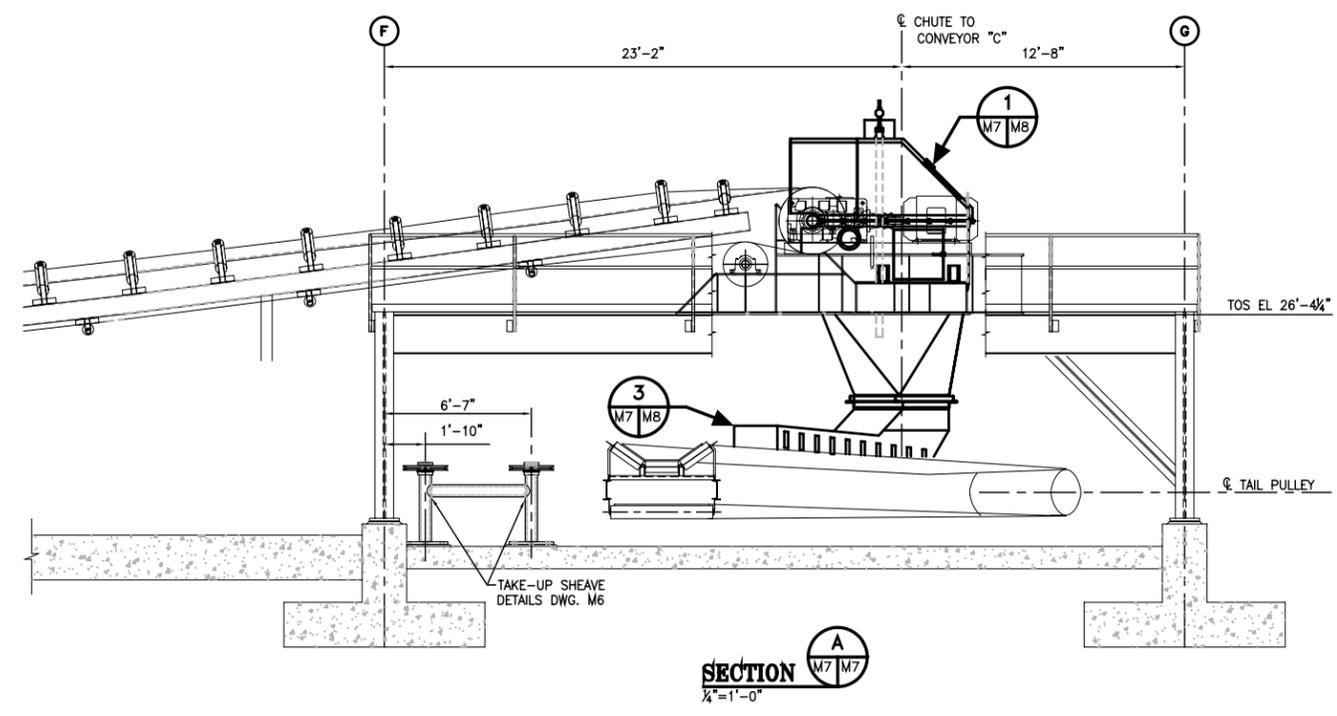
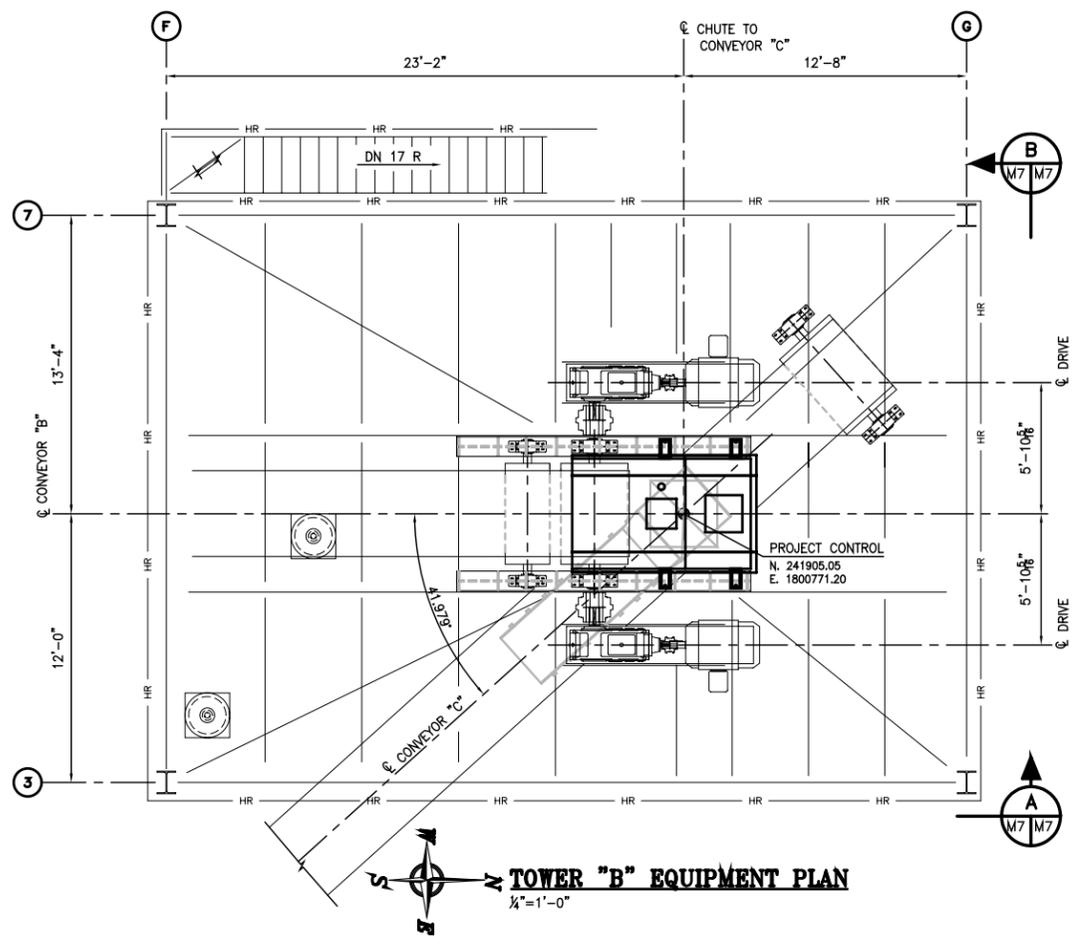
FOUNDATION PER DWG. C8

FOR SHAFT AND CAP PLATE BREAK ALL OUTSIDE CORNERS 0.030" AND RADIUS ALL INSIDE CORNERS 0.030"

DRILL AND TAP  $\frac{5}{16}''$ -11 UNC 2B FOR (2)  $\frac{5}{16}''$  A325 BOLTS  
 F.B.  $\frac{3}{8}'' \times 2'' \times 6''$  KEEPER PLATE  
 SEE SHEAVE PIN DETAIL THIS SHEET  
 MC18x58  
 1" PLATE & MC18x58  
 24" McKISSICK SELF-LUBRICATING BRONZE BUSHING SHEAVE STOCK NO. 4105391 OR APPROVED EQUAL  
 CONVEYOR 'A'

FOUNDATION DWG PER SHEET C3

(8)  $\frac{1}{4}''$  HOLES

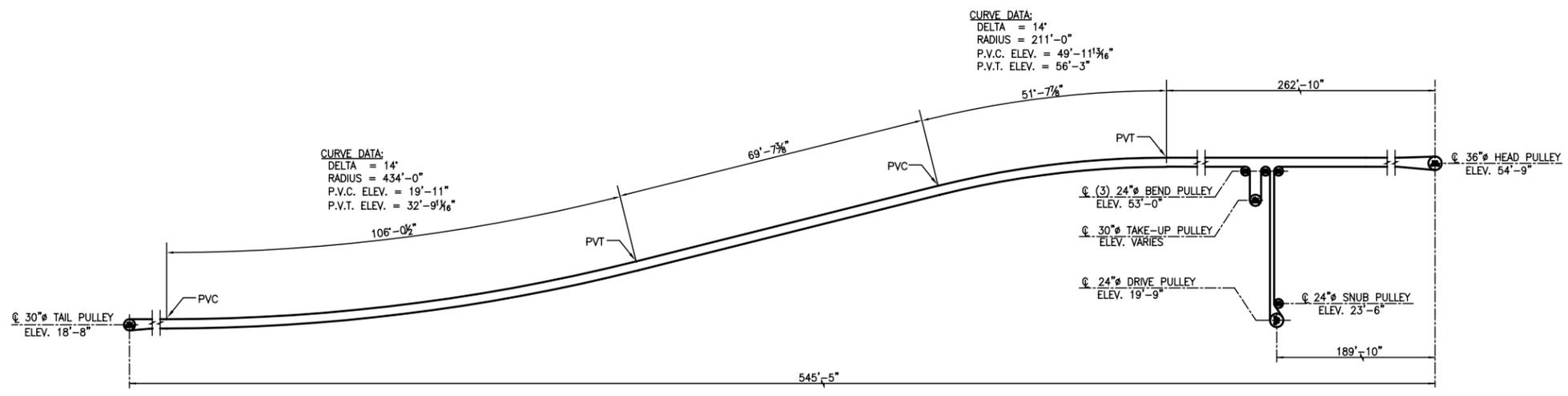


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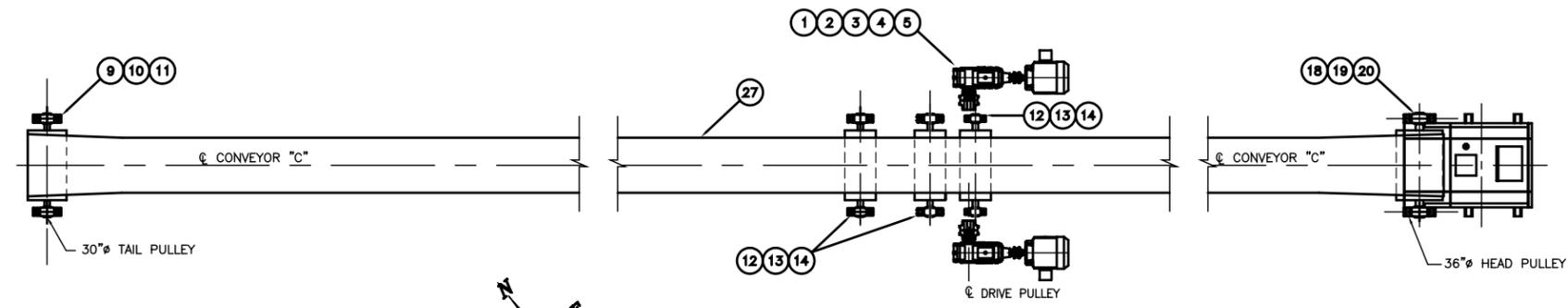
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0	02/22/05	ISSUED FOR CONSTRUCTION	BPN
REV.	DATE	DESCRIPTION	BY
<b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA			
Gottlieb, Barnett & Bridges, LLC Consulting Engineers		<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b> <b>CONVEYOR "B" DRIVE STRUCTURE EQUIPMENT PLAN &amp; ELEVATIONS</b>	
Drawn By:	G.B.B.	Date:	10/7/04
Checked By:	B.P.N.	Date:	10/7/04
Scale:	NOTED	Job No.:	M1723
		Drawing No.:	M7
		REV.	0



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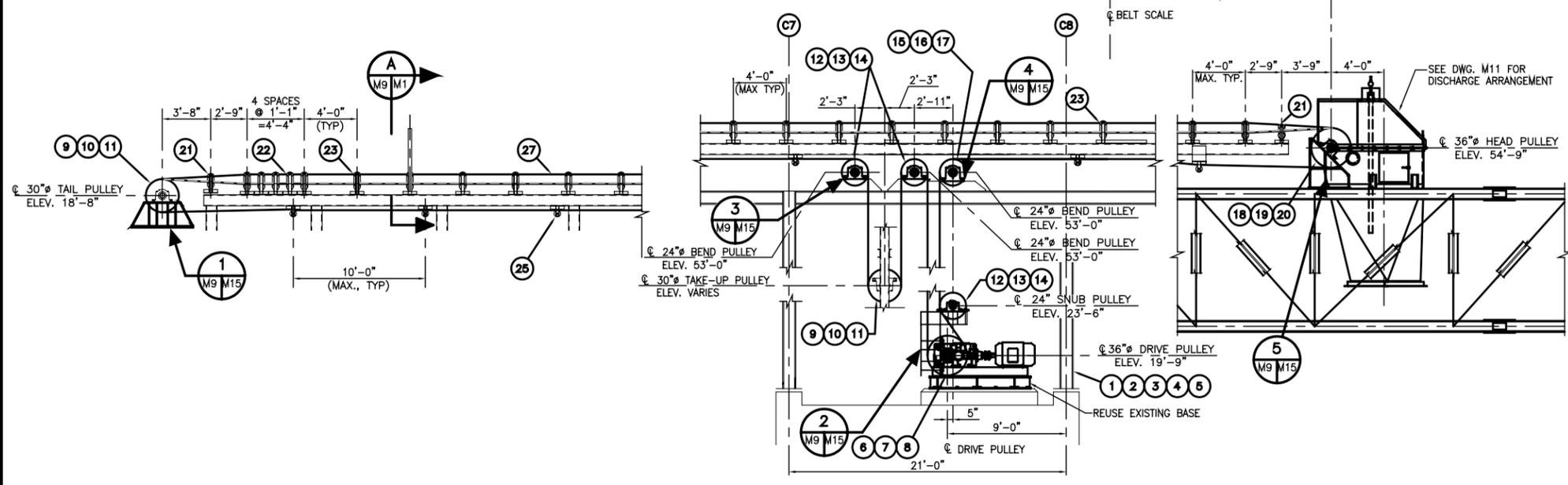


**48" CONVEYOR "C" PROFILE**  
 $\frac{3}{16}" = 1'-0"$



**PARTIAL PLAN - CONVEYOR "C"**  
 $\frac{3}{16}" = 1'-0"$

CONTRACTOR SHALL FIELD FIT BELT SCALE TO MAINTAIN 4'-0" MAX. IDLER SPACING AND AVOID ANY STRUCTURAL OBSTRUCTIONS.



**PARTIAL ELEVATION - CONVEYOR "C"**  
 $\frac{3}{16}" = 1'-0"$

**EXISTING EQUIPMENT LIST**

ITEM NO.	NO. REQ.	DESCRIPTION	MFR.	STATUS	REMARKS
<b>DRIVE</b>					
1	2	MOTOR - 125 H.P., 230/460V, 3 PHASE, 60 HERTZ, 1750 RPM, T.E.F.C.	SIEMENS	RELOCATED	FRAME SIZE - 445T, INSUL CLASS F S/N'S - RA03-A0620085-GT-01 RA03-A0620085-GT-02
2	2	REDUCER - PARAMAX 8 RIGHT ANGLE REDUCER, TRIPLE REDUCTION, PX8065R3-RL/LR-35.5 OUTPUT 51 RPM, BACKSTOP, FAN	SUMITOMO	RELOCATED/MODIFIED	SERIAL NOS. A658604 & A658850 REDUCER RATIO MODIFIED TO 20:1 (BY CONTRACTOR)
3	2	HS COUPLING- TYPE T10, SIZE 1090T W/ COUPLING GUARD	FALK	RELOCATED	
4	2	LS COUPLING- TYPE T10, SIZE 1140T W/ COUPLING GUARD	FALK	RELOCATED	
5		HEAVY DUTY BASEPLATE	SUMITOMO	RELOCATED	
<b>DRIVE PULLEY</b>					
6	1	SHAFT- 6.299"φ, AISI 4140 STEEL	JLY, NORTH AMERICAN	RELOCATED EXCL. TAIL	BIKON LOCKING HUB
7	1	PULLEY- 36"φ x 54" STRAIGHT FACE	JLY, NORTH AMERICAN	RELOCATED EXCL. TAIL	1/2" CROWNED SMOOTH BAKED-ON LAGGING
8	2	PILLOW BLOCKS- 4 5/8"φ - SAF 22528	SKF	RELOCATED EXCL. TAIL	ONE EXPANSION & ONE NON-EXPANSION
<b>TAIL/TAKE-UP PULLEY</b>					
9	2	SHAFT- 5 7/8"φ, AISI C1045 STEEL	JLY, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
10	2	PULLEY- 30"φ x 54" STRAIGHT FACE	JLY, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
11	4	PILLOW BLOCKS- 4 3/8"φ - SAF 22526	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>TAKE-UP BEND/SNUB PULLEY</b>					
12	3	SHAFT- 4 1/8"φ, AISI C1045 STEEL	JLY, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
13	3	PULLEY- 24"φ x 54" STRAIGHT FACE	JLY, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
14	6	PILLOW BLOCKS- 3 1/8"φ - SAF 22522	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>DRIVE BEND PULLEY</b>					
15	1	SHAFT- 7.087"φ, AISI C1045 STEEL	JLY, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
16	1	PULLEY- 24"φ x 54" STRAIGHT FACE	JLY, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
17	2	PILLOW BLOCKS- 5 1/8"φ - SAF 22534	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>HEAD PULLEY</b>					
18	1	SHAFT- 7.087"φ, AISI C1045 STEEL	JLY, NORTH AMERICAN	RELOCATED	BIKON LOCKING HUB
19	1	PULLEY- 36"φ x 54" STRAIGHT FACE	JLY, NORTH AMERICAN	RELOCATED	1/2" CROWNED SMOOTH BAKED-ON LAGGING
20	2	PILLOW BLOCKS- 5 1/8"φ - SAF 22534	SKF	RELOCATED	ONE EXPANSION & ONE NON-EXPANSION
<b>IDLERS</b>					
21	2	20' TROUGHING IDLER - 48" B.W., 6"φ ROLL	CONTINENTAL	RELOCATED	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX601-48G
22	5	35' IMPACT TROUGHING IDLER - 48" B.W.	CONTINENTAL	RELOCATED	INSTALL AS SHOWN, SDX-PLUS, NO. 73AK4233-48
23	136	35' TROUGHING IDLER - 48" B.W., 6"φ ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL AS SHOWN, SDX-PLUS, NO. 73ASDX630-48G
24	5	35' SELF-ALIGNING TROUGHING IDLER - 48" B.W., 6"φ ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAXIMUM 100'-0" CTRS. SDX-PLUS, NO. 73ASDX632-48G
25	55	RETURN IDLERS - 48" B.W., 6"φ ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAX. 10'-0" CTRS., NO. 73ASDX610-48G
26	5	RETURN TRAINING IDLERS - 48" B.W., 6"φ ROLL	CONTINENTAL	QUANTITY REDUCED	INSTALL @ MAX. 100'-0" CTRS., NO. 73ASDX619-48G
27	1200 LF	BELT-48"B.W. PLYLON PLUS 750, 3 PLY	GOODYEAR MATERIAL CONTROL, INC.	QUANTITY REDUCED	TOP COVER 1/2", BTM. COVER 1/2" STYLE "BI" 3/2"
28	5	SAFETY STOP SWITCH W/PULL CABLES		NEW	SS-2 CAST IRON, INSTALL @ MAX. 100' CTRS.
29	1	PROXIMITY SENSOR XSA W/MOUNTING BRACKET	TELEMECHANIQUE	NEW	XSA-V01151 120V
30	3	HYDRAULIC SELF-ALIGN RETURN IDLER ASSEMBLY 48" B.W., 6"φ ROLL	HEWITT-ROBINS	NEW	"HYDRA-POWER", EQUALLY SPACED ON RETURN RUN LOCATE 100' FROM ITEM 22
31	7	WIND HOOPS - 3"x 3/8" F.B.		NEW	INSTALL AT 50'-0" MAX. CTRS.
32	1	35' MULTI-IDLER SCALE - 48" B.W., 6"φ ROLL	MILLTRONICS	NEW	INSTALL AT MID-SPAN BETWEEN DRIVE AND LOADING CHUTE, MODEL MM

SEE SHEET M1 FOR NOTES AND TYPICAL DETAILS

**REFERENCE**

0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN
REV.	DATE	DESCRIPTION	BY

**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

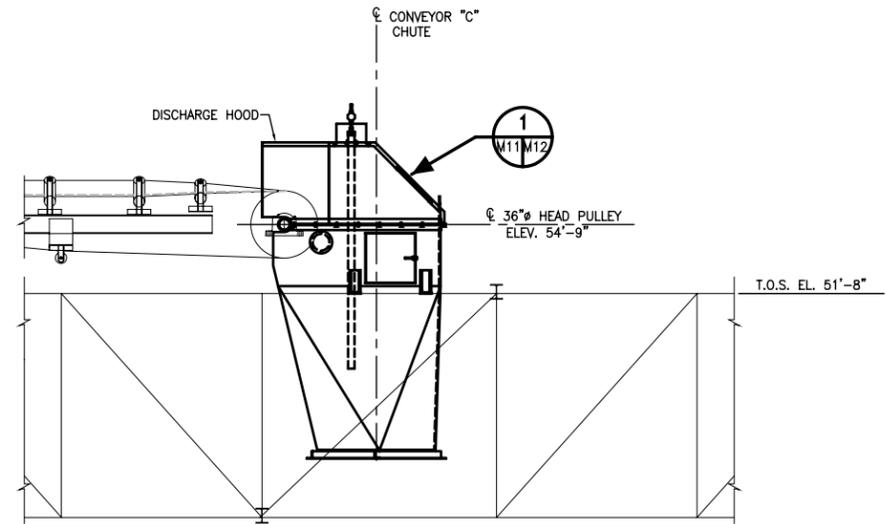
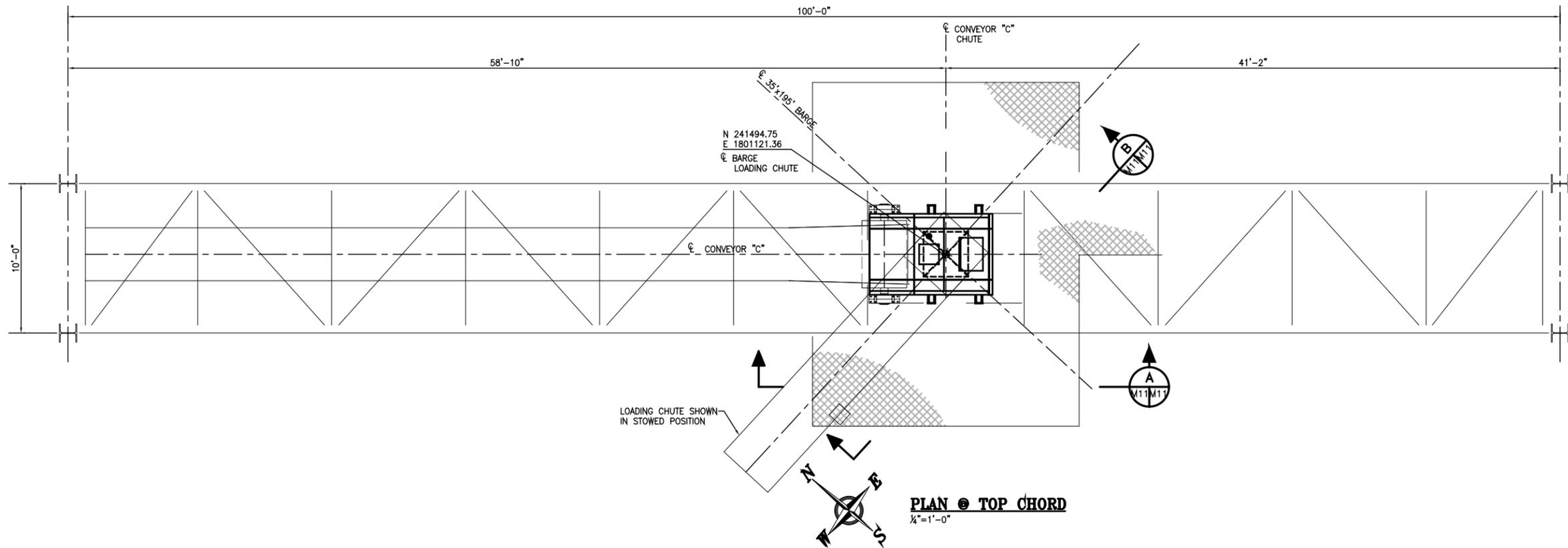
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**CONVEYOR "C" PLAN & ELEVATIONS**

Drawn By: D.T.D. Date: 8/23/04  
 Checked By: B.P.N. Date: 10/7/04  
 Scale: NOTED Job No. **M1723** Drawing No. **M9** REV. **0**

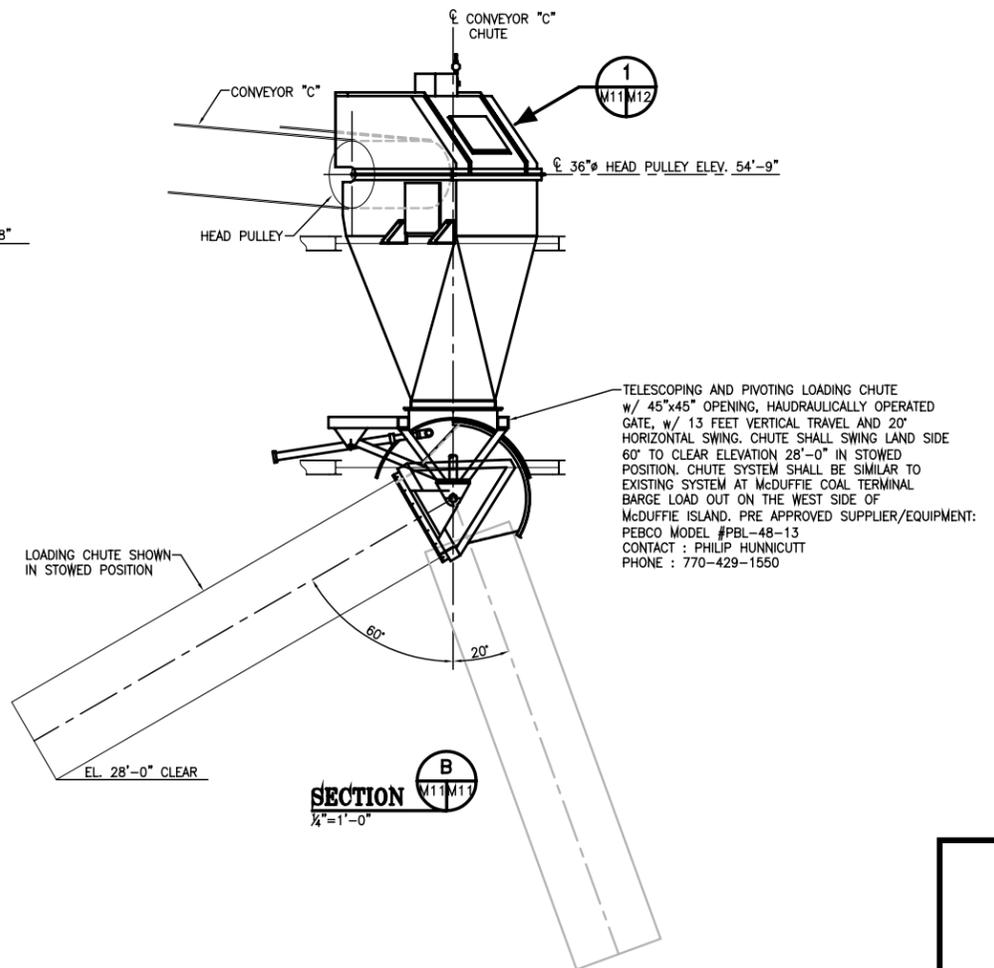
**CONVEYOR "C" DATA:**

MATERIAL DENSITY	- 55 PCF COAL
BELT WIDTH	- 48 INCHES
BELT SPEED (DESIGN)	- 824 FPM
CAPACITY	- 2,563 STPH
TIGHT SIDE TENSION (T <sub>1</sub> )	- 12,612 LB.
SLACK SIDE TENSION (T <sub>2</sub> )	- 4,072 LB.
TAIL TENSION (T <sub>3</sub> )	- 4,422 LB.
TAKE-UP WEIGHT	- 8,844 LB.



NOTE:  
CONVEYOR "c" LOADING CHUTE NOT SHOWN FOR CLARITY

**SECTION A**  
1/4"=1'-0"



**SECTION B**  
1/4"=1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnet & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**CONVEYOR "c" DISCHARGE POINT PLAN & ELEVATIONS**

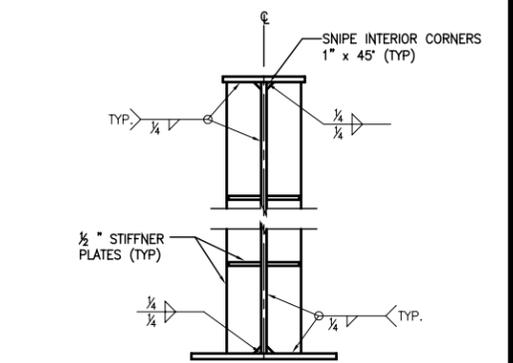
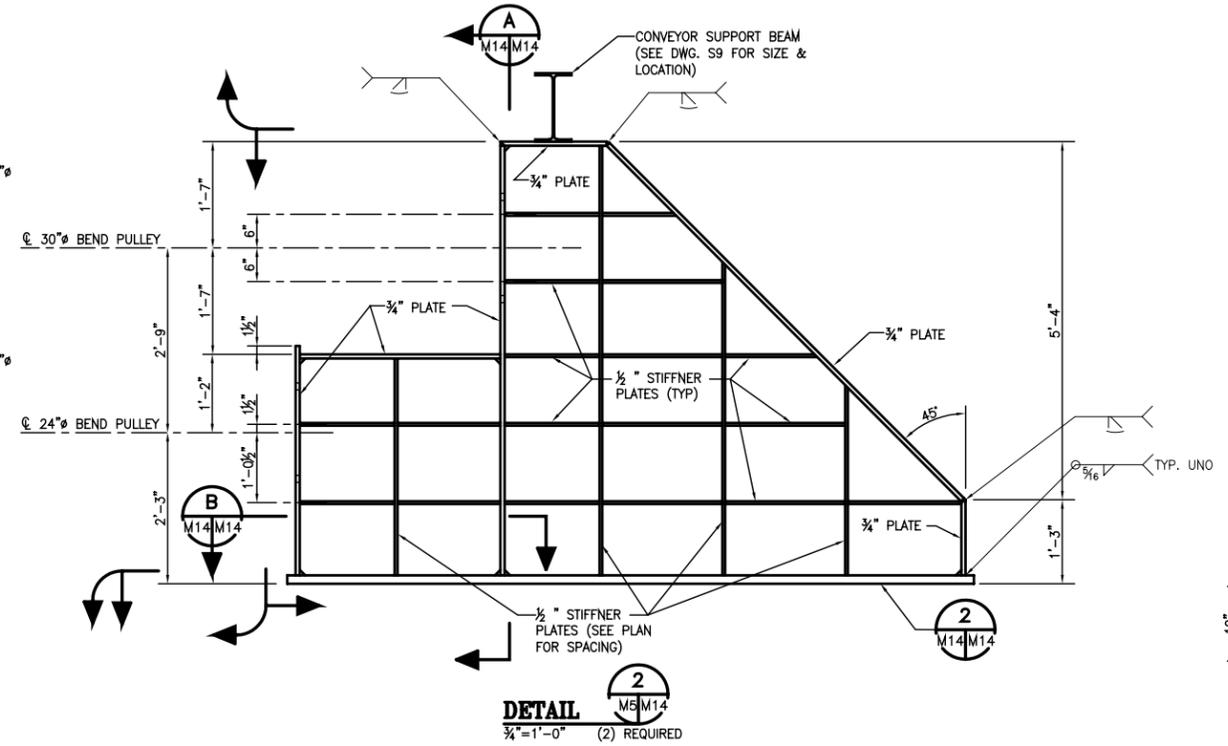
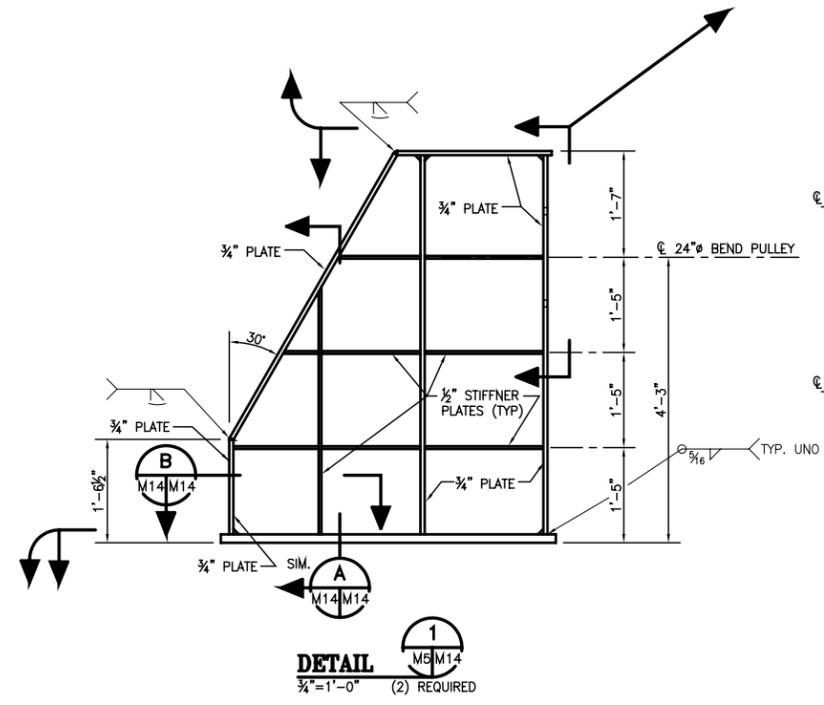
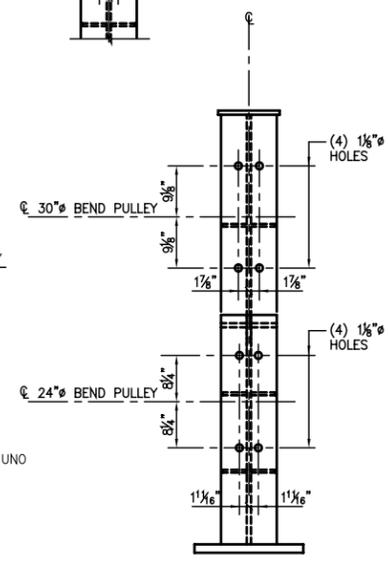
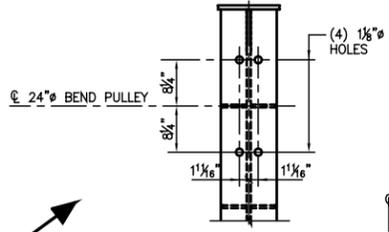
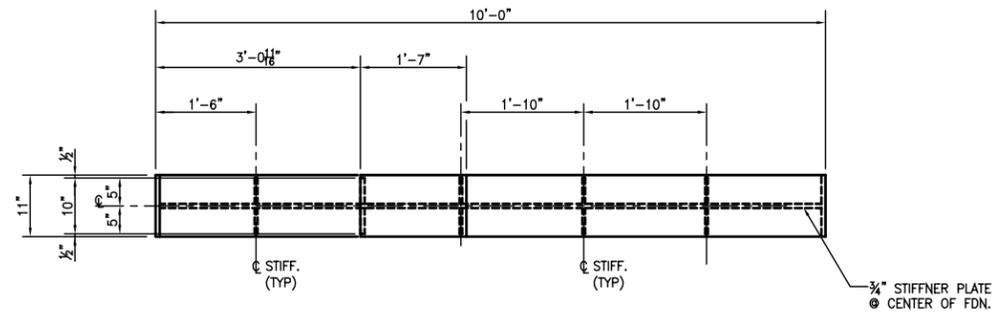
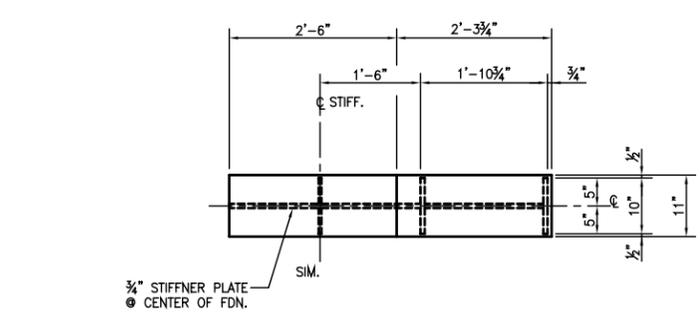
Drawn By: L.R.M. Date: 10/7/04  
Checked By: B.P.N. Date: 10/07/04  
Scale: 3/16"=1'-0" Job No. **M1723** Drawing No. **M11** REV. **0**



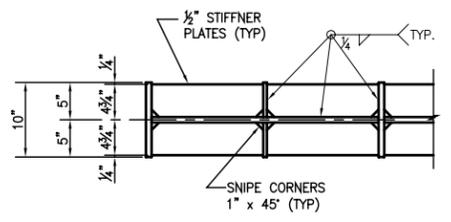


**GENERAL NOTES:**

1. ALL STEEL PLATE SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE 9TH EDITION OF THE MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. ALL STEEL PLATE SHALL CONFORM TO ASTM A36 AND BE HOT-DIP GALVANIZED.



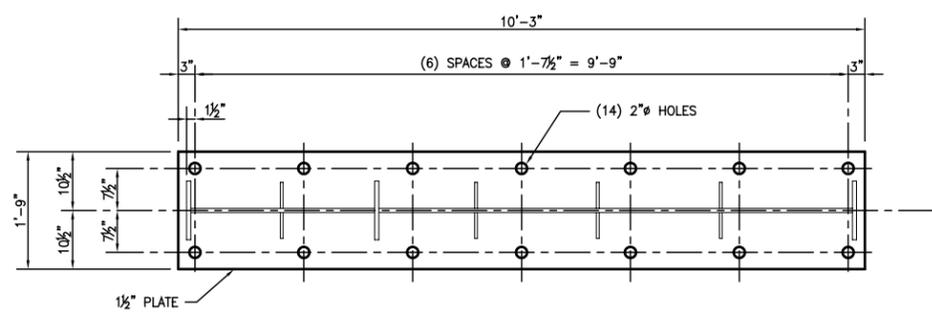
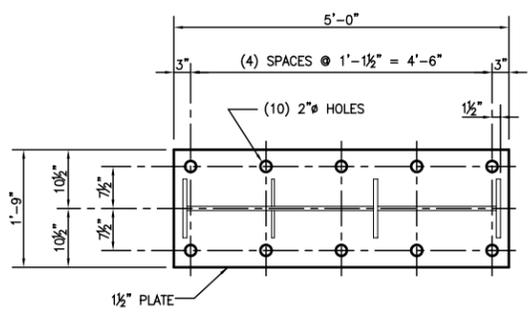
**SECTION A**  
M14M14  
1"=1'-0"



**SECTION B**  
M14M14  
1"=1'-0"

**DETAIL 1**  
M5M14  
3/4"=1'-0" (2) REQUIRED

**DETAIL 2**  
M5M14  
3/4"=1'-0" (2) REQUIRED



**REFERENCE**

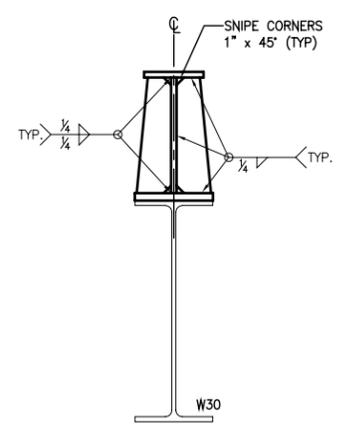
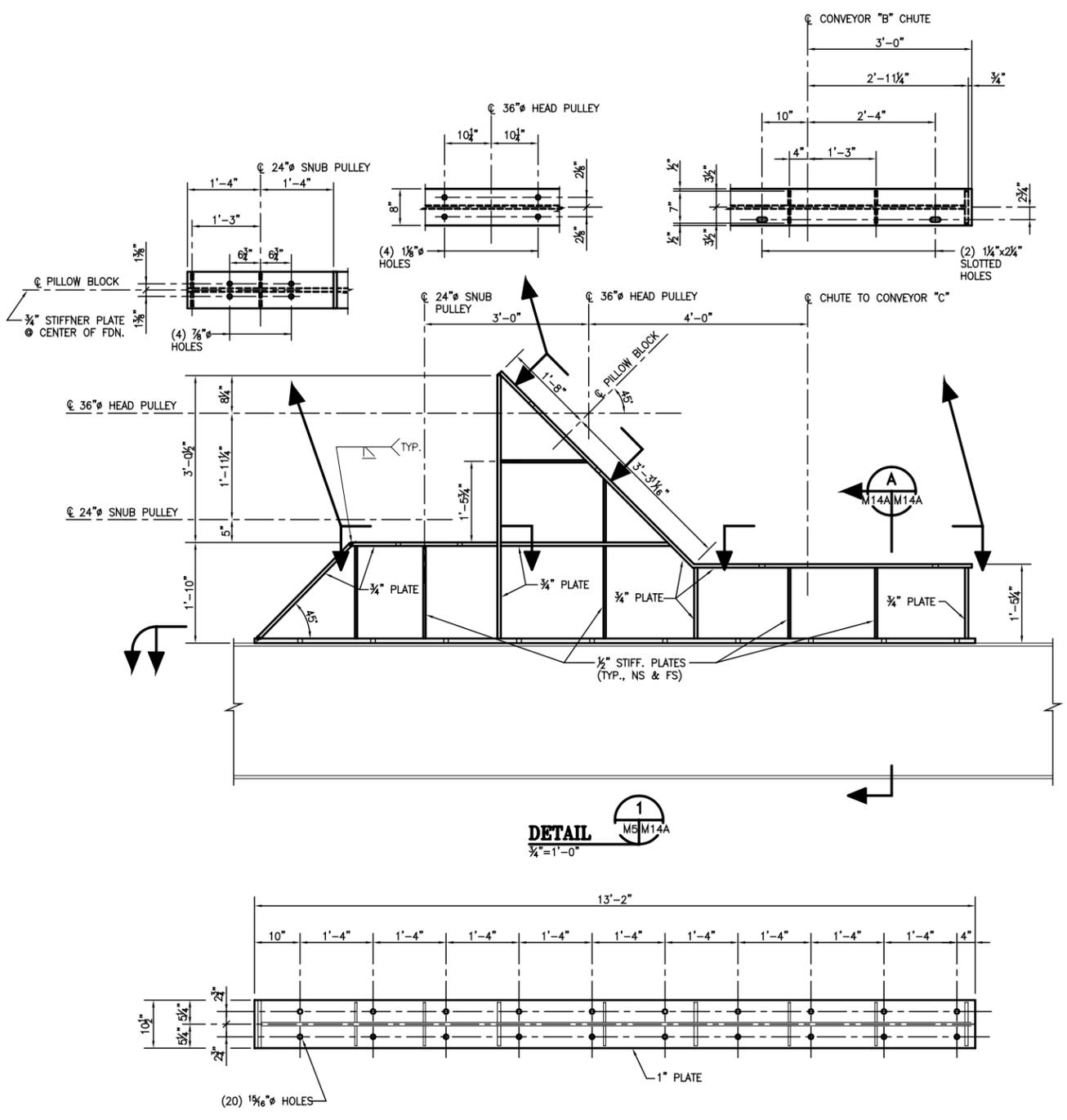
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

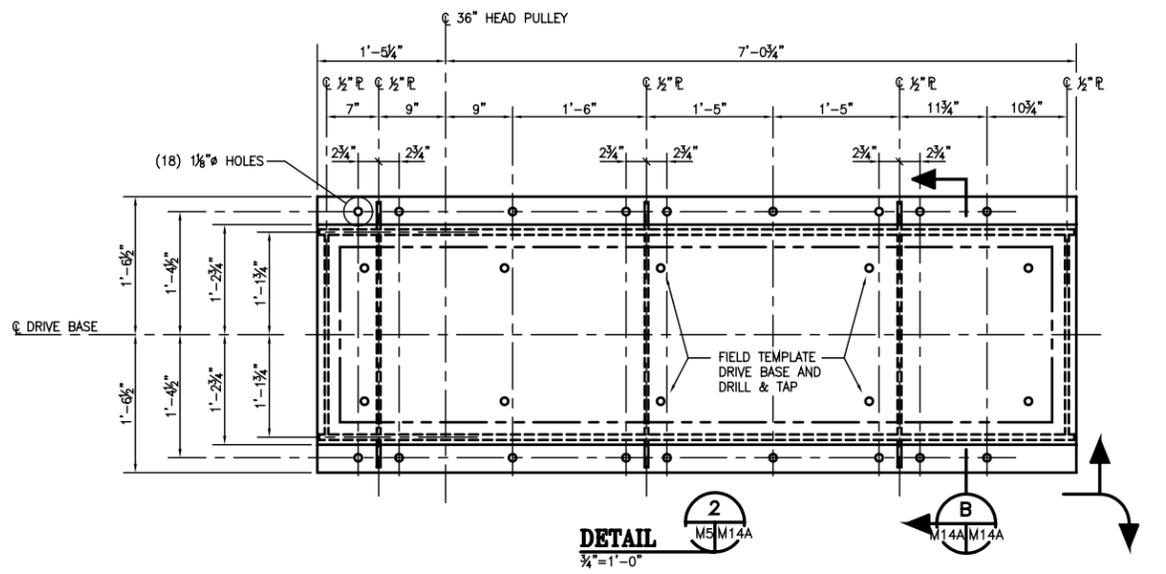
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "B" EQUIP. SUPPORT FOUNDATION**

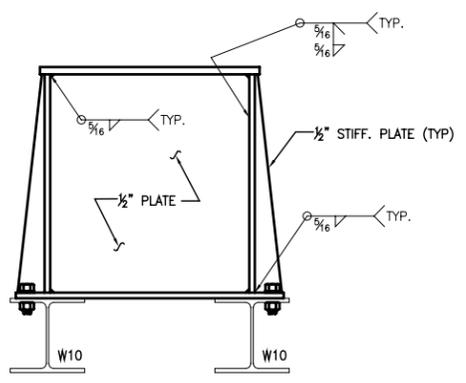
Drawn By: D.T.D. Date: 8/31/04  
Checked By: H.A.C. Date: 10/29/04  
Scale: AS NOTED Job No. M1723 Drawing No. M14 REV. 0



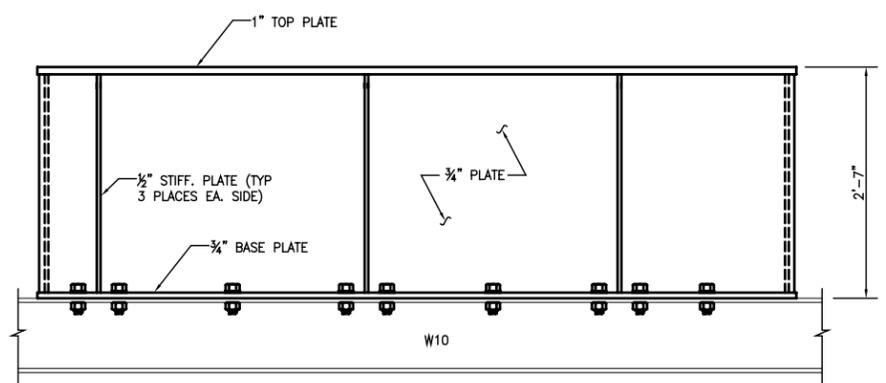
SECTION A  
M14A/M14A  
1"=1'-0"



DETAIL 2  
M5/M14A  
3/4"=1'-0"



SECTION B  
M14A/M14A  
1"=1'-0"



DETAIL 1  
M5/M14A  
3/4"=1'-0"

**GENERAL NOTES:**

1. ALL STEEL PLATE SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE 9TH EDITION OF THE MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. ALL STEEL PLATE SHALL CONFORM TO ASTM A36 AND BE HOT-DIP GALVANIZED.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

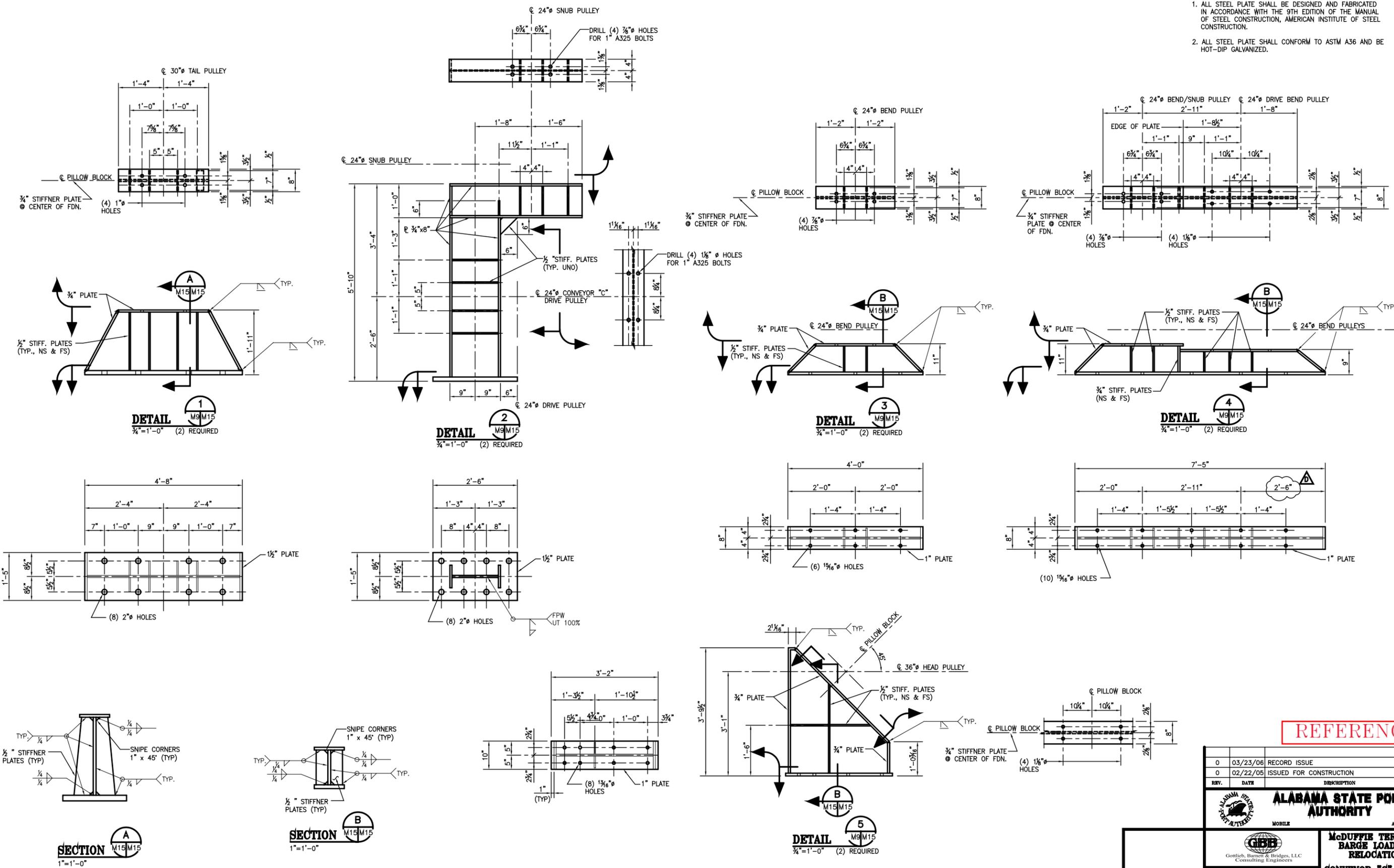
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "B" EQUIP. SUPPORT FOUNDATION**

Drawn By: D.T.D. Date: 8/31/04  
Checked By: H.A.C. Date: 10/07/04  
Scale: AS NOTED Job No. M1723 Drawing No. M14A REV. 0

**GENERAL NOTES:**

1. ALL STEEL PLATE SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE 9TH EDITION OF THE MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. ALL STEEL PLATE SHALL CONFORM TO ASTM A36 AND BE HOT-DIP GALVANIZED.

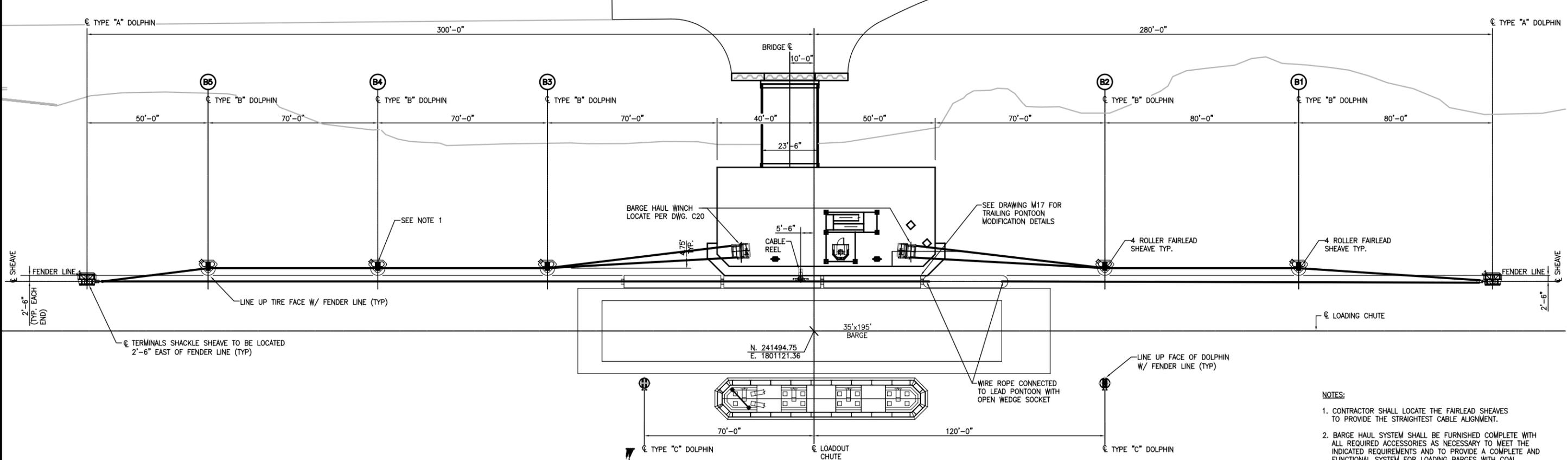
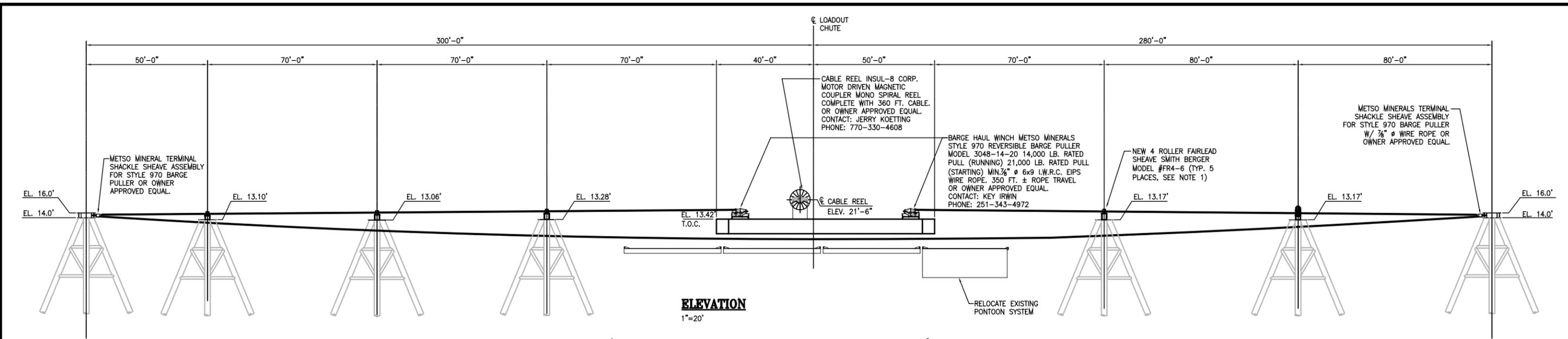


**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

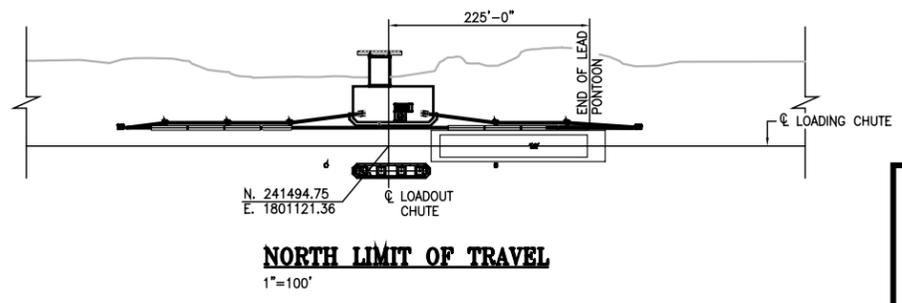
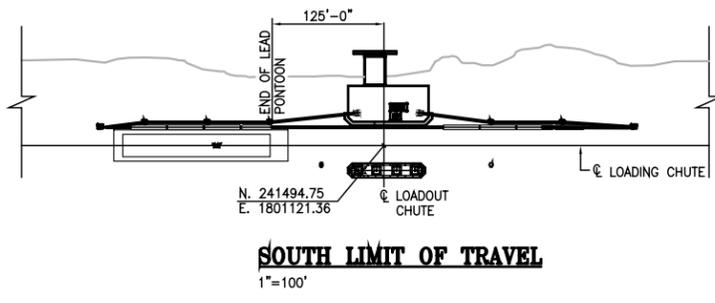
<b>ALABAMA STATE PORT AUTHORITY</b>	
MOBILE	ALABAMA
<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: D.T.D.	Date: 8/31/04
Checked By: H.A.C.	Date: 10/07/04
Scale: AS NOTED	Job No. <b>M1723</b>
<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>	
<b>CONVEYOR "C" EQUIP. SUPPORT FOUNDATION</b>	
Drawing No. <b>M15</b>	REV. <b>0</b>

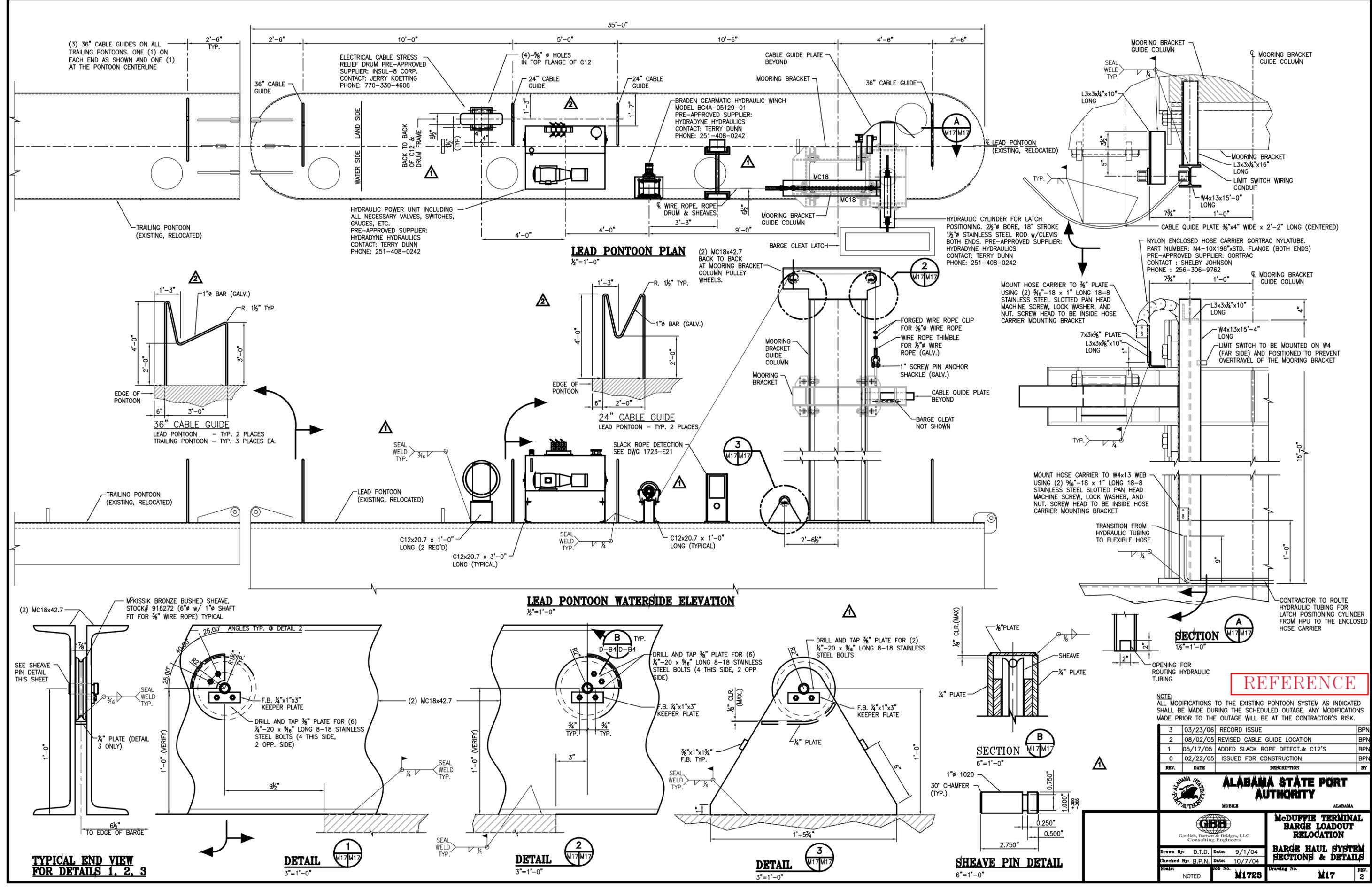


- NOTES:**
- CONTRACTOR SHALL LOCATE THE FAIRLEAD SHEAVES TO PROVIDE THE STRAIGHTEST CABLE ALIGNMENT.
  - BARGE HAUL SYSTEM SHALL BE FURNISHED COMPLETE WITH ALL REQUIRED ACCESSORIES AS NECESSARY TO MEET THE INDICATED REQUIREMENTS AND TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM FOR LOADING BARGES WITH COAL.

**REFERENCE**

1	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN
REV.	DATE	DESCRIPTION	BY
<p><b>ALABAMA STATE PORT AUTHORITY</b></p> <p>MOBILE ALABAMA</p>			
<p><b>GIBB</b> Gottlieb, Barnet &amp; Bridges, LLC Consulting Engineers</p>			
Drawn By: L.R.M. Date: 9/22/04 Checked By: B.P.N. Date: 10/7/04 Scale: NOTED		Job No. <b>M1723</b> Drawing No. <b>M16</b> REV. <b>1</b>	





**REFERENCE**

NOTE: ALL MODIFICATIONS TO THE EXISTING PONTOON SYSTEM AS INDICATED SHALL BE MADE DURING THE SCHEDULED OUTAGE. ANY MODIFICATIONS MADE PRIOR TO THE OUTAGE WILL BE AT THE CONTRACTOR'S RISK.

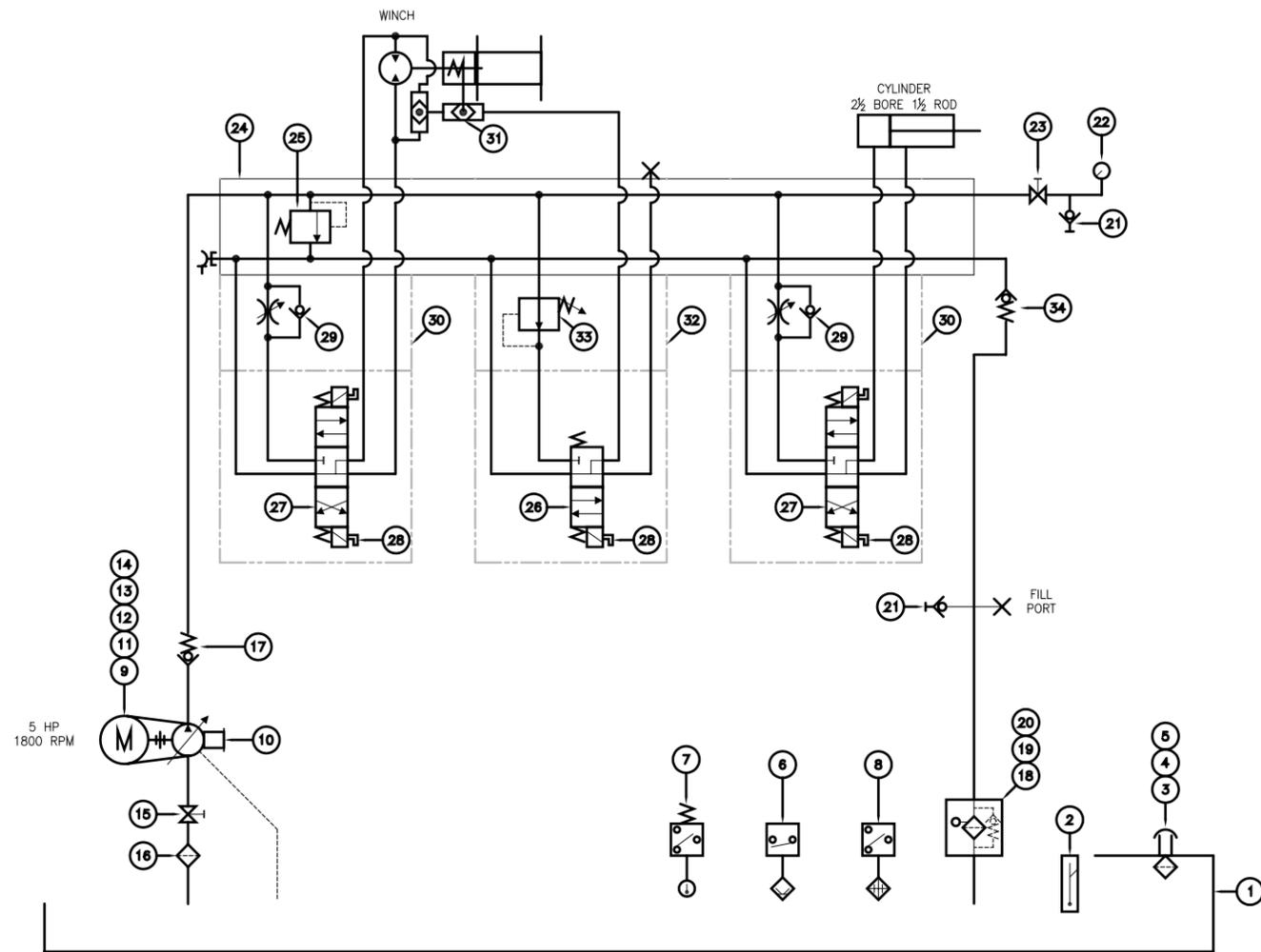
REV.	DATE	DESCRIPTION	BY
3	03/23/06	RECORD ISSUE	BPN
2	08/02/05	REVISED CABLE GUIDE LOCATION	BPN
1	05/17/05	ADDED SLACK ROPE DETECT. & C12'S	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**BARGE HAUL SYSTEM SECTIONS & DETAILS**

Drawn By: D.T.D. Date: 9/1/04  
 Checked By: B.P.N. Date: 10/7/04  
 Scale: NOTED Job No. M1723 Drawing No. M17 REV. 2



**BARGE HAUL HYDRAULIC POWER UNIT SCHEMATIC**

**GBB PONTON BARGE HPU APPLICATION**

ITEM	POWER UNIT - 5HP - PV6	QTY.
1	RESERVOIR	1
2	SIGHT GAGE - LUBE DEVICES	1
3	BREATHER - ZINGA	1
4	ADAPTER - ZINGA	1
5	FILLER STRAINER - ZINGA	1
6	LEVEL SWITCH, MURPHY	1
7	TEMP SWITCH, PDI	1
8	RESERVOIR HTR, VESCOR	1
9	ELECTRIC MOTOR - TEFC	1
10	PUMP - DENISON	1
11	BELL HOUSING - VESCOR	1
12	COUPLING HUB - REULAND	1
13	COUPLING HUB - REULAND	1
14	COUPLING INSERT	1
15	SUCTION VALVE CRANE FIG. 9202	1
16	SUCTION STRAINER, ZINGA	1
17	CHECK VALVE, SNAP-TITE	1
18	RETURN FILTER, ZINGA	1
19	FILTER INDICATOR	1
20	SPARE ELEMENT	2
21	TEST POINTS (2)	2
22	PRESSURE GAUGE - ZINGA	1
23	GAUGE COCK - SUN	1
24	THREE STATION, DO3 WIDE SPACING, T-10A	1
25	RELIEF CART, T-10A	1
26	DO3 4-WAY, TWO POSITION, SPRING OFF, OPEN CTR.	1
27	DO3 4-WAY, THREE POSITION, OPEN CTR.	2
28	DIN CORD	6
29	6 GPM PC FLOW CONTROL CART.	2
30	DO3 STACK SINGLE P PORT FLOW CONTROL, 6 GPM	2
31	SHUTTLE VALVE	1
32	DO3 SINGLE STACK "P" PORT PRESS REDUCING	1
33	PRESSURE REDUCING CART 60-800 PSI	1
34	CHECK VALVE, 65 PSI SNAP-TITE	1

**REFERENCE**

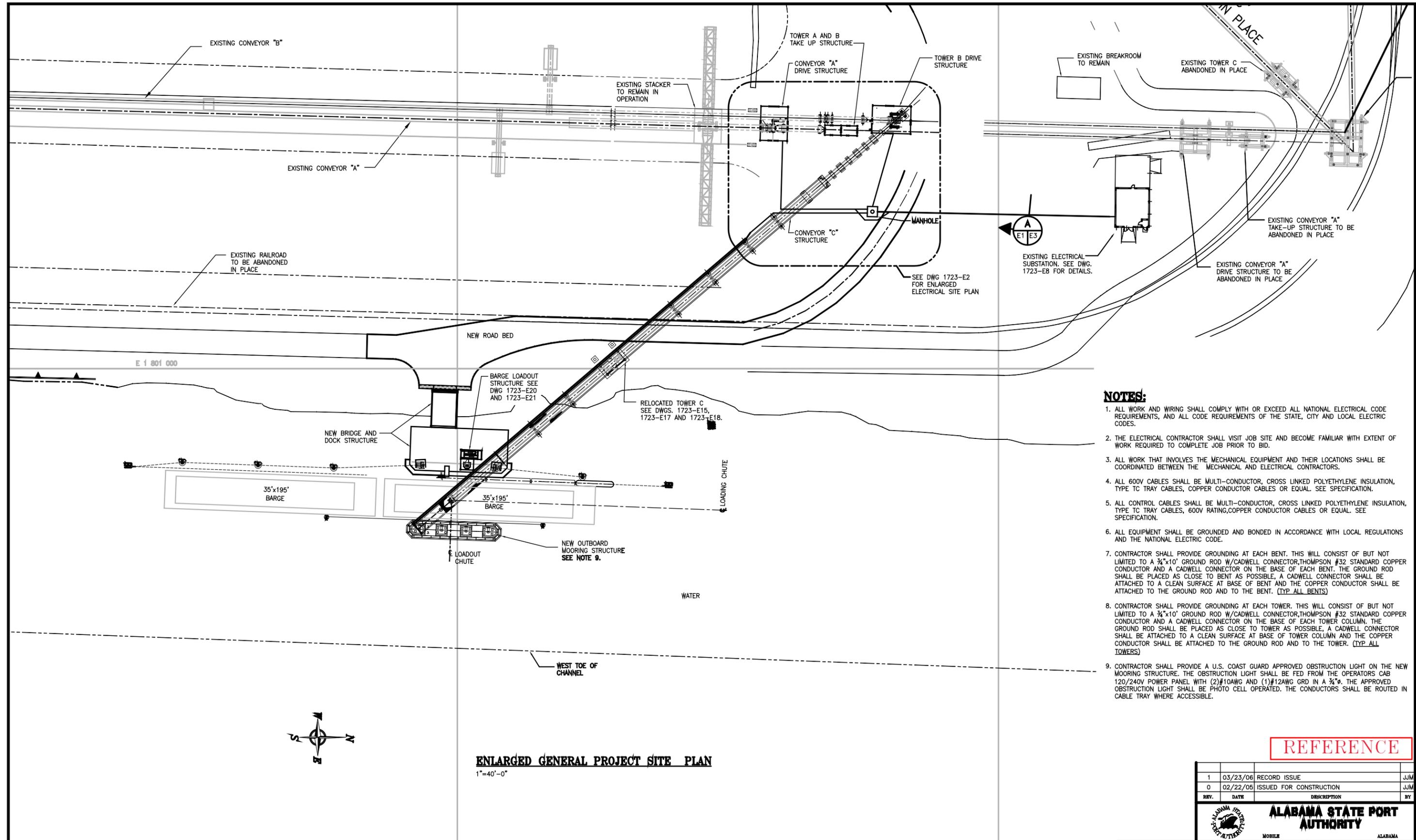
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BPN
0	02/22/05	ISSUED FOR CONSTRUCTION	BPN

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

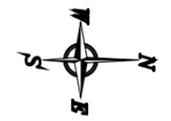
**BARGE HAUL SYSTEM HYDRAULIC SCHEMATIC**

Drawn By: D.T.D. Date: 9/1/04  
Checked By: B.P.N. Date: 10/7/04  
Scale: NOTED Job No. M1723 Drawing No. M18 REV. 0



- NOTES:**
1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
  2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
  3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
  4. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
  5. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
  6. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
  7. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH BENT. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH BENT. THE GROUND ROD SHALL BE PLACED AS CLOSE TO BENT AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF BENT AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE BENT. (TYP ALL BENTS)
  8. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP ALL TOWERS)
  9. CONTRACTOR SHALL PROVIDE A U.S. COAST GUARD APPROVED OBSTRUCTION LIGHT ON THE NEW MOORING STRUCTURE. THE OBSTRUCTION LIGHT SHALL BE FED FROM THE OPERATORS CAB 120/240V POWER PANEL WITH (2)#10AWG AND (1)#12AWG GRO IN A 3/4"Ø. THE APPROVED OBSTRUCTION LIGHT SHALL BE PHOTO CELL OPERATED. THE CONDUCTORS SHALL BE ROUTED IN CABLE TRAY WHERE ACCESSIBLE.

**ENLARGED GENERAL PROJECT SITE PLAN**  
1"=40'-0"



**REFERENCE**

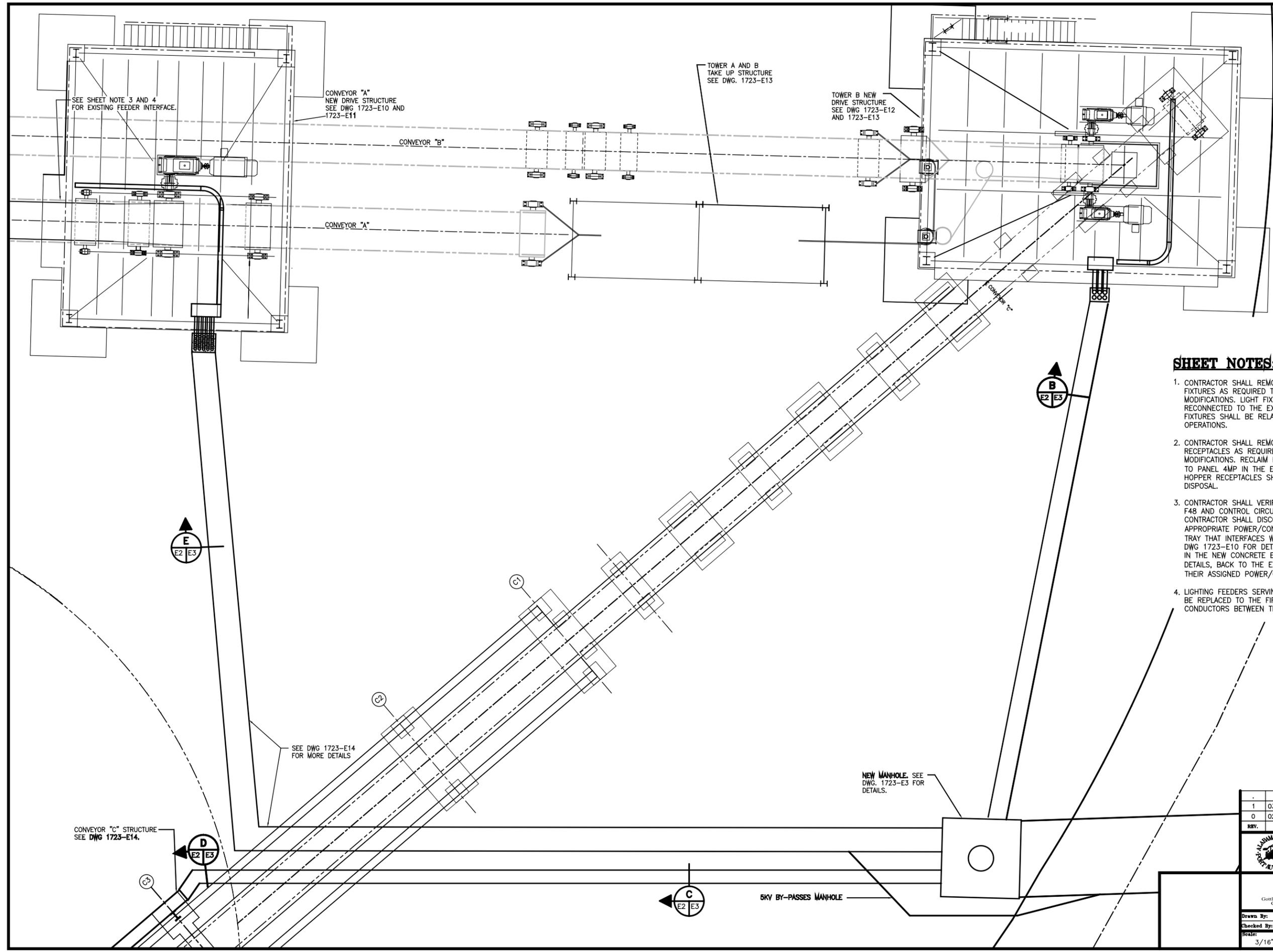
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnet & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION ELECTRICAL SITE PLAN**

Drawn By: JJM Date: 10/12/04  
Checked By: BWH Date: 10/12/04  
Scale: 1"=40' Job No. 1723 Drawing No. E1 REV. 1

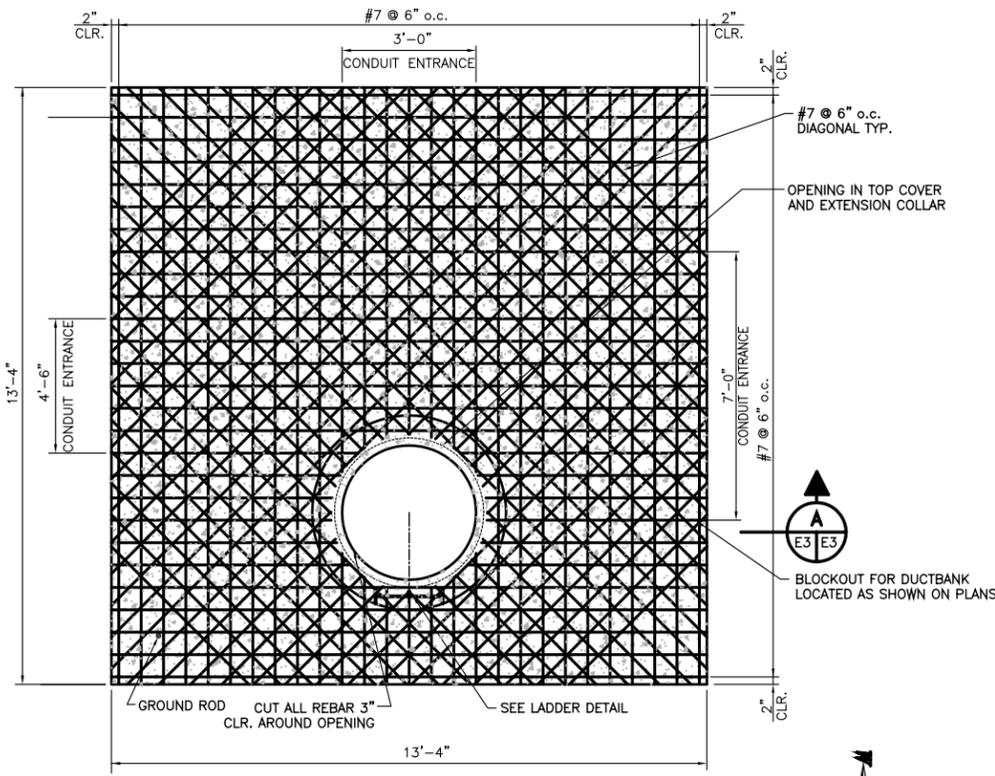


**SHEET NOTES:**

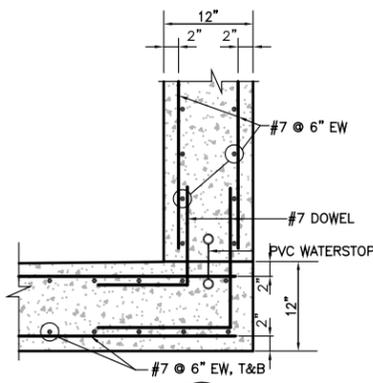
1. CONTRACTOR SHALL REMOVE CONVEYOR 'A' AND 'B' YARD LIGHTING FIXTURES AS REQUIRED TO ALLOW FOR DRIVE STRUCTURE MODIFICATIONS. LIGHT FIXTURES, NOT REMOVED, SHALL BE RECONNECTED TO THE EXISTING CIRCUIT AND TESTED. ALL YARD LIGHT FIXTURES SHALL BE RELAMPED AND REBALLASTED AS REQUIRED FOR OPERATIONS.
2. CONTRACTOR SHALL REMOVE CONVEYOR 'A' AND 'B' RECLAIM HOPPER RECEPTACLES AS REQUIRED TO ALLOW FOR DRIVE STRUCTURE MODIFICATIONS. RECLAIM HOPPER RECEPTACLES SHALL BE RECONNECTED TO PANEL 4MP IN THE ELECTRICAL "TS" BUILDING. REMOVED RECLAIM HOPPER RECEPTACLES SHALL BE GIVEN TO ASPA PERSONNEL FOR DISPOSAL.
3. CONTRACTOR SHALL VERIFY THE LENGTH OF FEEDERS F30, F35 THRU F48 AND CONTROL CIRCUITS C69, C74 AND C76 PRIOR TO BID. CONTRACTOR SHALL DISCONNECT THE CONDUCTORS FROM THEIR APPROPRIATE POWER/CONTROL SOURCE AND PULL BACK TO THE CABLE TRAY THAT INTERFACES WITH CONVEYOR 'A' NEW DRIVE STRUCTURE, SEE DWG 1723-E10 FOR DETAILS. THE CONDUCTORS SHALL BE REINSTALLED IN THE NEW CONCRETE ENCASED DUCTBANK, SEE DWG 1723-E2 FOR DETAILS, BACK TO THE EXISTING 'TS' BUILDING AND RECONNECTED TO THEIR ASSIGNED POWER/CONTROL SOURCE.
4. LIGHTING FEEDERS SERVING CONVEYOR 'A' AND CONVEYOR 'B' SHALL BE REPLACED TO THE FIRST LIGHT FIXTURE. THE REMAINING CONDUCTORS BETWEEN THE LIGHT FIXTURES SHALL REMAIN AS-IS.

**REFERENCE**

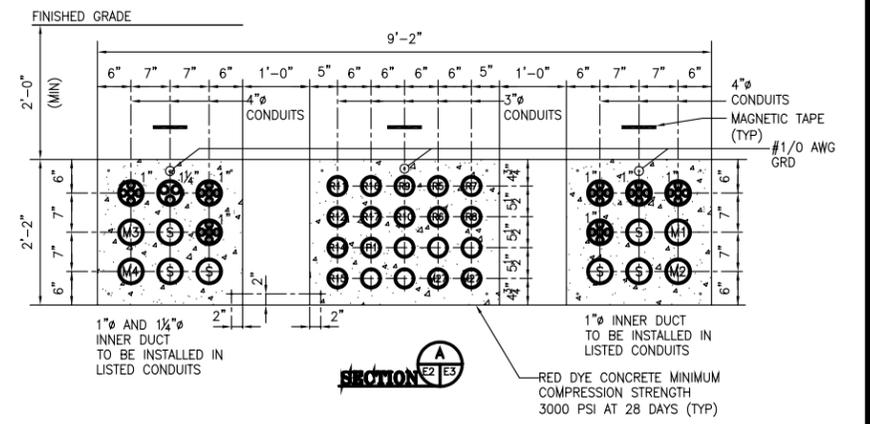
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0	02/22/05	ISSUED FOR CONSTRUCTION	JJM
REV.	DATE	DESCRIPTION	BY
 <b>ALABAMA STATE PORT AUTHORITY</b>			
 GIBB Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By: JJM Checked By: BWH Scale: 3/16" = 1'-0"		Date: 08/10/04 Date: 10/07/04 Job No. 1723	
McDUFFIE TERMINAL BARGE LOADOUT RELOCATION <b>ENLARGED ELECTRICAL                  SITE PLAN</b>			Drawing No. E2 REV. 1



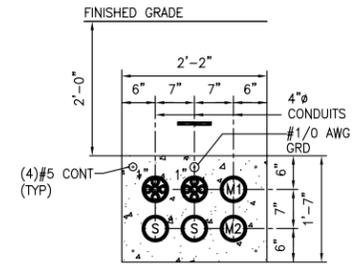
**MANHOLE DETAIL**  
1/4"=1'-0"



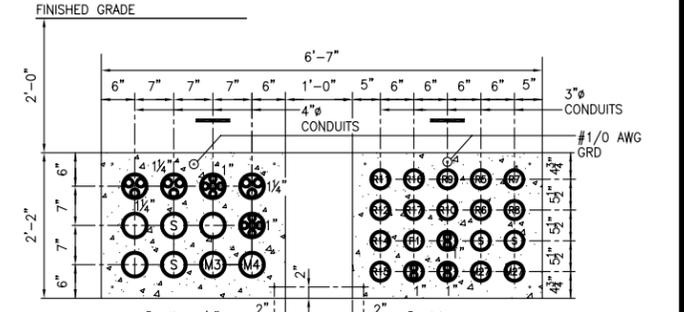
**DETAIL 1**  
1/2"=1'-0"



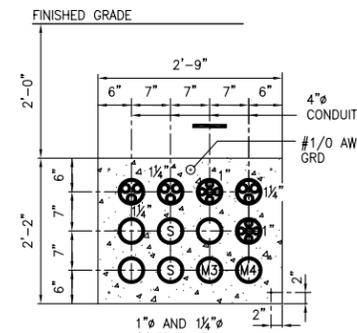
**SECTION A**  
E2 E3



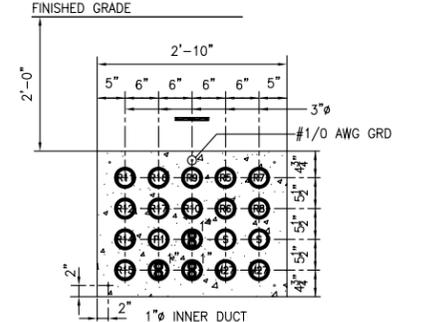
**SECTION B**  
E2 E3



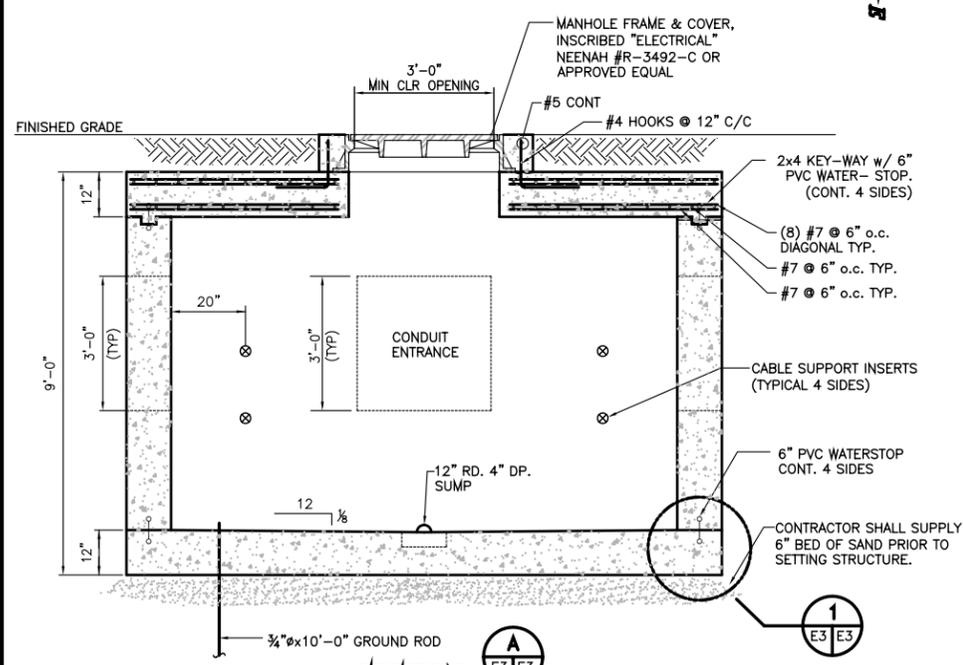
**SECTION C**  
E2 E3



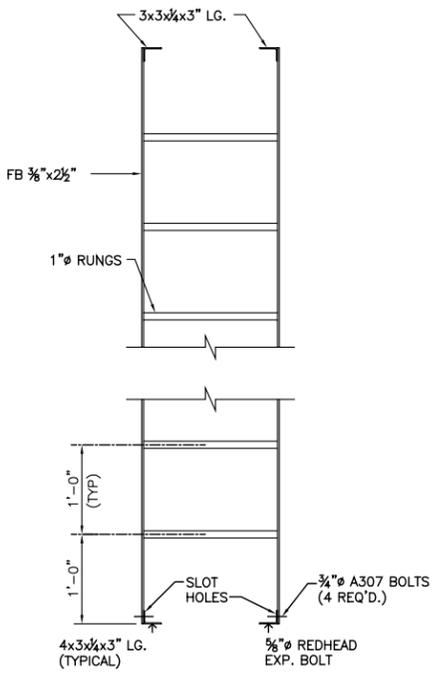
**SECTION D**  
E2 E3 E4 E5



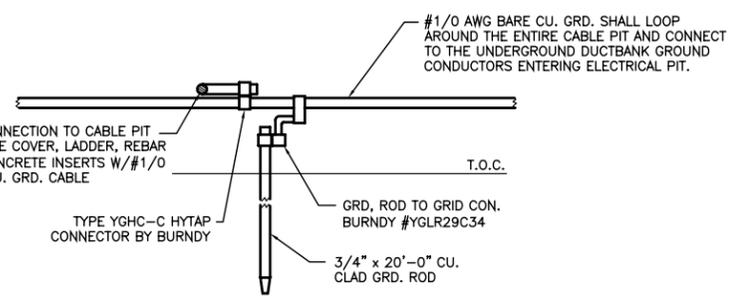
**SECTION E**  
E2 E3 E4 E5



**SECTION 1**  
1/4"=1'-0"



**LADDER DETAIL**  
1"=1'-0"



**GROUND ROD CONNECTION DETAIL**

**MANHOLE NOTE:**  
CONTRACTOR SHALL, AS AN OPTION, PROVIDE A PRECAST CONCRETE MANHOLE. THE PRECAST MANHOLE SHALL BE MADE BY AMERICAN INDUSTRIAL PRECAST PRODUCT INC. OR EQUAL. THE MANHOLE SHALL BE #887 PRECAST POWER MANHOLE, OR EQUAL, 11'-4"x11'-4"x 8' I.D. WITH CABLE RACK HARDWARE AND PULLING EYES.

CONTRACTOR SHALL INSTALL A GROUND LOOP SYSTEM IN THE MANHOLE AND CONNECT MANHOLE INSERTS, PULL RINGS AND REBAR TO THE GROUND LOOP SYSTEM. GROUND LOOP SYSTEM SHALL BE #1/0AWG BARE CONDUCTOR CONNECTED TO THE GROUND ROD. (SEE GROUND ROD CONNECTION DETAIL)

TYP CONNECTION TO CABLE PIT  
MANHOLE COVER, LADDER, REBAR  
AND CONCRETE INSERTS W/#1/0  
BARE CU. GRD. CABLE

TYPE YGHC-C HYTAP  
CONNECTOR BY BURNDY

GRD. ROD TO GRID CON.  
BURNDY #YGLR29C34

3/4" x 20'-0" CU.  
CLAD GRD. ROD

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

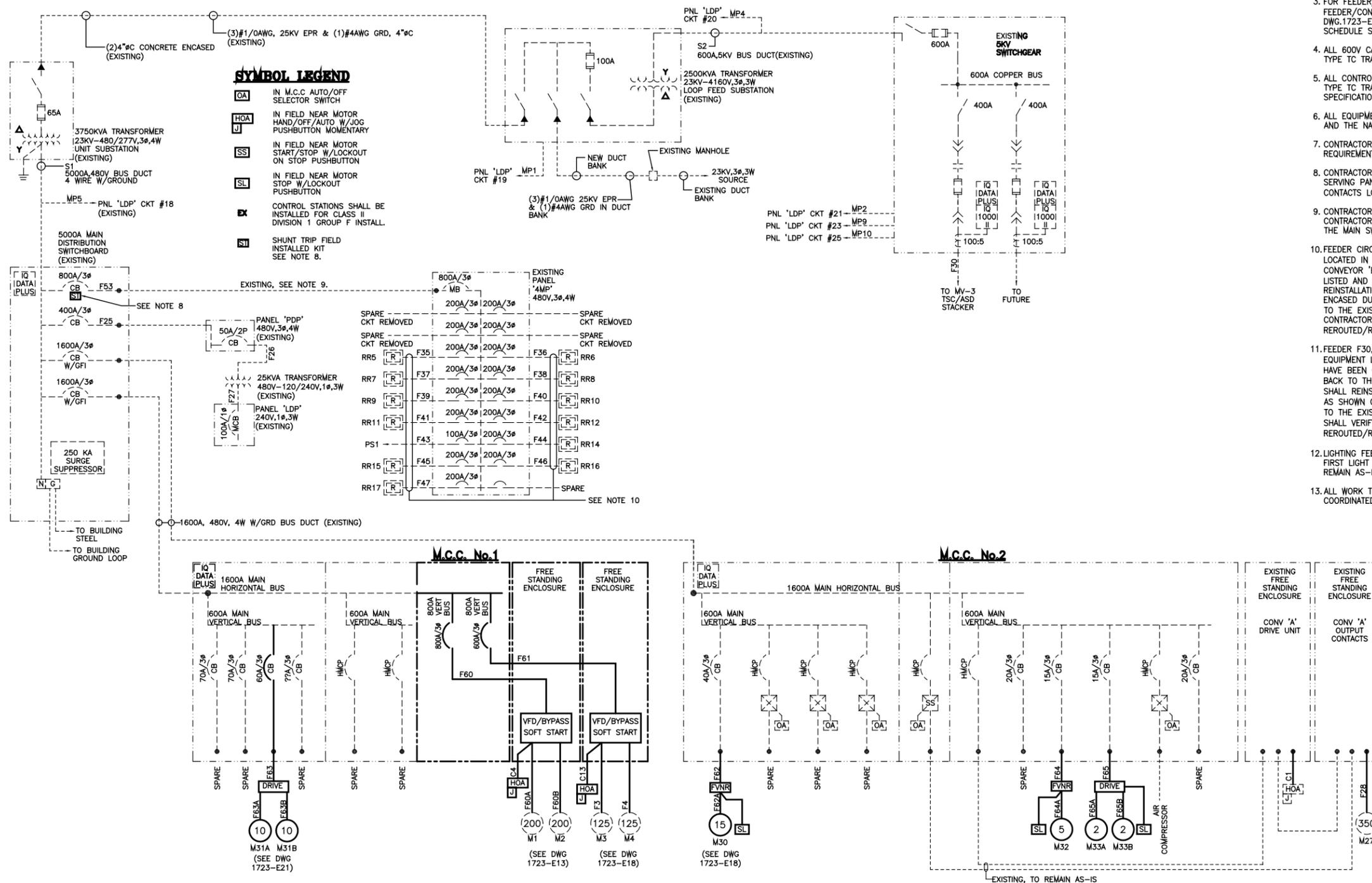
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**ELECTRICAL SITE PLAN SECTIONS AND DETAILS**

Drawn By: JJM	Date: 07/27/04	Drawing No. <b>E3</b>	REV. <b>0</b>
Checked By: BWH	Date: 10/08/04		
Scale: NOTED	Job No. <b>1723</b>		



**SYMBOL LEGEND**

- OA** IN M.C.C. AUTO/OFF SELECTOR SWITCH
- HOA** IN FIELD NEAR MOTOR HAND/OFF/AUTO W/JOG PUSHBUTTON MOMENTARY
- SS** IN FIELD NEAR MOTOR START/STOP W/LOCKOUT ON STOP PUSHBUTTON
- SL** IN FIELD NEAR MOTOR STOP W/LOCKOUT PUSHBUTTON
- EX** CONTROL STATIONS SHALL BE INSTALLED FOR CLASS II DIVISION 1 GROUP F INSTALL.
- SH** SHUNT TRIP FIELD INSTALLED KIT SEE NOTE 8.

**NOTES:**

1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
4. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
5. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
7. CONTRACTOR SHALL VERIFY ALL CONTROL REQUIREMENTS PRIOR TO BID. ALL CONTROL REQUIREMENTS SHALL BE AS REQUIRED BY ASPA PERMITS.
8. CONTRACTOR SHALL FURNISH AND INSTALL SHUNT TRIP FIELD KIT FOR THE 800A BREAKER SERVING PANEL 4MP. SHUNT TRIP SHALL BE CONNECTED TO A NORMALLY OPEN SET OF CONTACTS LOCATED IN THE NEW CONVEYOR 'B' DRIVE CABINET.
9. CONTRACTOR SHALL DISCONNECT PANEL 4MP FEEDER, F53, FROM THE EXISTING MCC No.1. CONTRACTOR SHALL REINSTALL FEEDER F53 AND CONNECT TO THE 800A CIRCUIT BREAKER IN THE MAIN SWITCHBOARD WITH THE NEW FIELD INSTALLED SHUNT TRIP DEVICE.
10. FEEDER CIRCUITS F35 THROUGH F47 ARE ROUTED TO THE RECLAIM HOPPER RECEPTACLES LOCATED IN THE COAL STORAGE YARD. CONTRACTOR SHALL, AFTER CONVEYOR 'A' AND CONVEYOR 'B' STRUCTURE HAVE BEEN CONSTRUCTED, DISCONNECT THE FEEDER CIRCUITS LISTED AND PULL BACK TO THE NEW CONVEYOR 'A' STRUCTURE AND STORE FOR REINSTALLATION. CONTRACTOR SHALL REINSTALL THE FEEDER CIRCUITS IN THE NEW CONCRETE ENCASED DUCTBANK AS SHOWN ON DWG 1723-E3. CONTRACTOR SHALL ROUTE THE FEEDERS TO THE EXISTING 'TS' BUILDING AND RECONNECT TO THE ASSOCIATED CIRCUIT BREAKER. CONTRACTOR SHALL VERIFY THE LENGTH OF ALL EXISTING FEEDER CIRCUITS TO BE REROUTED/REINSTALLED TO THE 'TS' ELECTRICAL BUILDING PRIOR TO BID.
11. FEEDER F30, F48 AND CONTROL CIRCUITS C69, C74 AND C76 ARE ROUTED TO EXISTING EQUIPMENT LOCATED IN THE COAL YARD. AFTER CONVEYOR 'A' AND CONVEYOR 'B' STRUCTURE HAVE BEEN CONSTRUCTED, DISCONNECT THE FEEDER/CONTROL CIRCUITS LISTED AND PULL BACK TO THE NEW CONVEYOR 'A' STRUCTURE AND STORE FOR REINSTALLATION. CONTRACTOR SHALL REINSTALL THE FEEDER/CONTROL CIRCUITS IN THE NEW CONCRETE ENCASED DUCTBANK AS SHOWN ON DWG 1723-E3. CONTRACTOR SHALL ROUTE THE FEEDER/CONTROL CONDUCTORS TO THE EXISTING 'TS' BUILDING AND RECONNECT THE ASSIGNED COMPONENT. CONTRACTOR SHALL VERIFY THE LENGTH OF ALL EXISTING FEEDER/CONTROL CIRCUITS TO BE REROUTED/REINSTALLED TO THE 'TS' ELECTRICAL BUILDING PRIOR TO BID.
12. LIGHTING FEEDERS SERVING CONVEYOR 'A' AND CONVEYOR 'B' SHALL BE REPLACED TO THE FIRST LIGHT FIXTURE. THE REMAINING CONDUCTORS BETWEEN THE LIGHT FIXTURES SHALL REMAIN AS-IS.
13. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.

- MOTOR LIST**
- M1 - CONVEYOR 'B' MOTOR 1
  - M2 - CONVEYOR 'B' MOTOR 2
  - M3 - CONVEYOR 'C' MOTOR 1
  - M4 - CONVEYOR 'C' MOTOR 2
  - M27 - CONVEYOR 'A' MOTOR
  - M30 - BARGE LOADOUT CHUTE HYDRAULIC UNIT
  - M31A - BARGE POSITION WINCH MOTOR 1
  - M31B - BARGE POSITION WINCH MOTOR 2
  - M32 - BARGE LATCH HYDRAULIC UNIT
  - M33A - CABLE REEL MOTOR 1
  - M33B - CABLE REEL MOTOR 2

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**

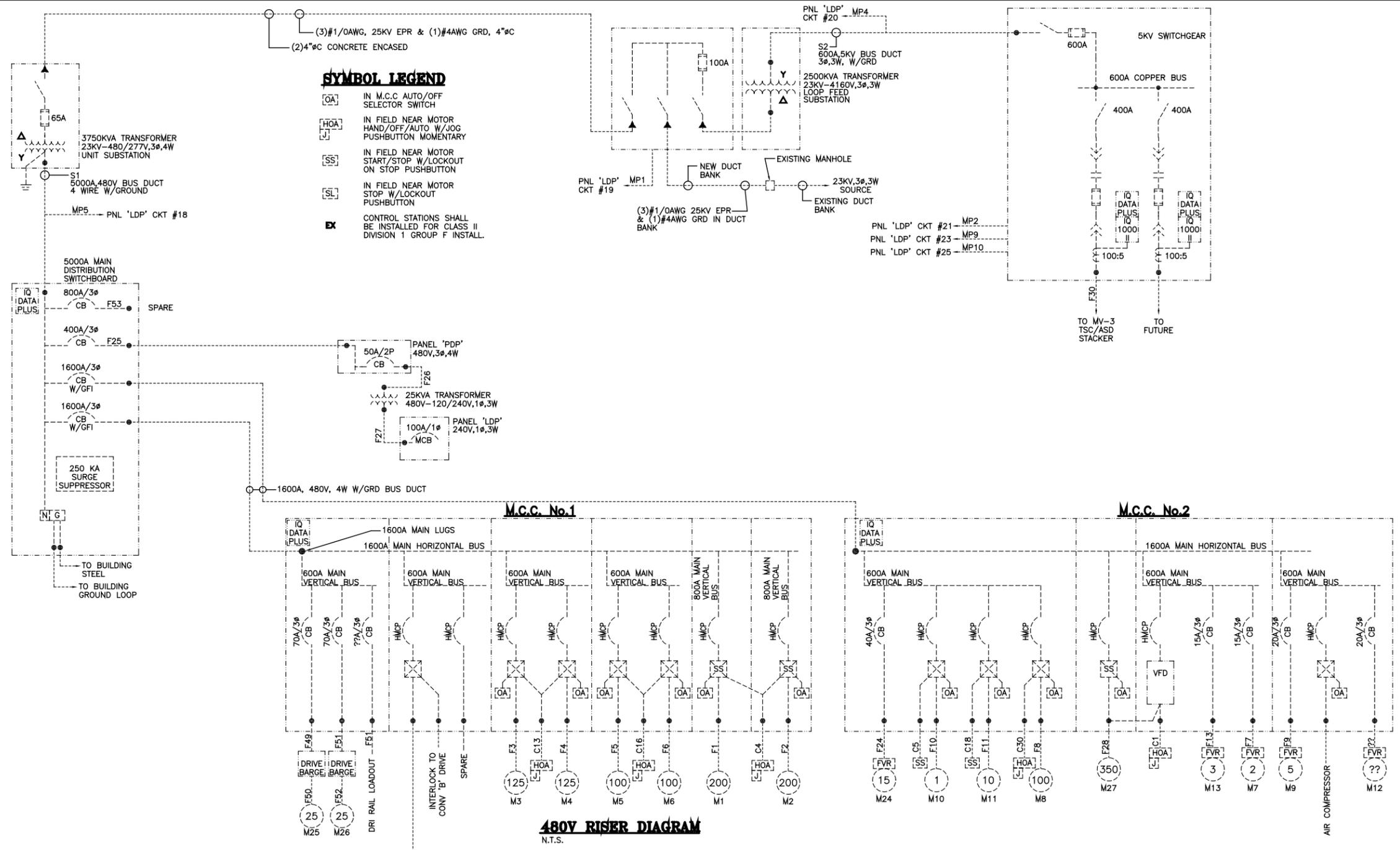
MOBILE ALABAMA

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**NEW ELECT AC-ONE LINE DIAGRAM**

Drawn By: JJM Date: 8/24/04  
 Checked By: BWH Date: 10/08/04  
 Scale: N.T.S. Job No. 1723 Drawing No. E4 REV. 0

**480V RISER DIAGRAM**  
N.T.S.



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### PANEL SCHEDULE

PANEL: "4MP" VOLTAGE RATING: 600 AMPERE RATING: 800 PHASE: 3 $\phi$  NO. WIRES: 4 MANU.: SQ-'D'  
 MAIN: 800A M.B. VOLTS: 277/480 FEEDER SOURCE: BUS TAP TYPE: I-LINE MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE			BKR TRIP #	BKR	A	B	C	BKR TRIP #	BKR	VA PER PHASE			DESCRIPTION	CKT
		1	2	3								1	2	3		
1	SPARE													SPARE	2	
3	SPARE													SPARE	4	
5	RECLAIMER RECEPTACLE 'RR5'	34.4	34.4	34.4	200	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR6'	6		
7	RECLAIMER RECEPTACLE 'RR7'	34.4	34.4	34.4	200	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR8'	8		
9	RECLAIMER RECEPTACLE 'RR9'				200	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR10'	10		
11	RECLAIMER RECEPTACLE 'RR11'				200	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR12'	12		
13	PUMP STATION CONTROL PANEL	17.4	17.4	17.4	100	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR14'	14		
15	RECLAIMER RECEPTACLE 'RR13'				200	10	11	12	200	10	11	12	RECLAIMER RECEPTACLE 'RR16'	16		
17	RECLAIMER RECEPTACLE 'RR15'				200	10	11	12	200	10	11	12	**	18		
VA LOAD		86.2	86.2	86.2									68.8	68.8	68.8	VA LOAD
TOTAL KVA		465			TOTAL AMPS			559								

\*\* ONLY (4) RECLAIMER CIRCUITS AND PUMP STATION CONTROL PANEL SHALL BE ACTIVE AT ANY ONE TIME. THIS IS THE MAX. REQUIREMENT ON THIS PANEL.

### PANEL SCHEDULE

PANEL: "PDP" VOLTAGE RATING: 600 AMPERE RATING: 400 PHASE: 3 $\phi$  NO. WIRES: 4 MANU.: SQ-'D'  
 MAIN: M.L.O. VOLTS: 277/480 FEEDER SOURCE: M.C.C. TYPE: NEHB MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE			BKR TRIP #	BKR	A	B	C	BKR TRIP #	BKR	VA PER PHASE			DESCRIPTION	CKT
		1	2	3								1	2	3		
1	CONV.'A' LTGS	1400	1400	1400	20	3	1	2	3	20	3	1	2	ELECTRICAL ROOM A/C UNIT	2	
3	CONV.'B' LTGS	1400	1400	1400	20	9	1	2	3	20	9	1	2	SPARE LTG	4	
5	CONV.'C' LTGS	1840	1840	1840	20	9	1	2	3	20	9	1	2	CONV.'A' & 'B' TAKEUP TOWER FLDLTGS	6	
7	BARGE DOCK FLDLTGS	2470	2470	2470	20	11	1	2	3	20	11	1	2	BARGE LOADOUT STRUCTURE LTGS	8	
9	CONV.'C' DRIVE STRUCT LTGS	525	525	525	20	19	1	2	3	20	19	1	2	STACKER REEL CABLE DRUM PIT SUMP PUMP 1HP	10	
11	CONV.'C' DRIVE STRUCT FLDLTGS	450	450	450	20	23	1	2	3	20	23	1	2	SPARE	12	
13	SPARE				20	27	1	2	3	20	27	1	2	SPARE	14	
15	CONV.'B' DRIVE LTGS	790	790	790	20	29	1	2	3	20	29	1	2	BARGE CONTROL CAB XFMR	16	
17	CONV.'A' DRIVE LTGS	790	790	790	20	33	1	2	3	20	33	1	2	SPARE	18	
19	SPARE				20	37	1	2	3	20	37	1	2	SPARE	20	
21	SPACE				41	41	1	2	3	41	41	1	2	480-120/240V, 1 $\phi$ , 3W 25KVA TRANSFORMER	20	
VA LOAD		6,585	6,950	5,795									12,100	20,693	17,243	VA LOAD
TOTAL VA		69,316			TOTAL AMPS			83.5								

### PANEL SCHEDULE

PANEL: "LDP" VOLTAGE RATING: 240 AMPERE RATING: 225 PHASE: 1 $\phi$  NO. WIRES: 3 MANU.: SQ-'D'  
 MAIN: 150A M.B. VOLTS: 240/120 FEEDER SOURCE: "PDP" TYPE: NQOD MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE			BKR TRIP #	BKR	A	B	C	BKR TRIP #	BKR	VA PER PHASE			DESCRIPTION	CKT
		1	2	3								1	2	3		
1	BLDG 'TS' INSIDE LIGHTING	1140	1140	1140	20	1	1	2	3	20	1	1	2	BLDG 'TS' RECEPTACLES	2	
3	BLDG 'TS' INSIDE LIGHTING	855	855	855	20	3	1	2	3	20	3	1	2	BLDG 'TS' RECEPTACLES	4	
5	BLDG 'TS' WEST OUTSIDE LIGHTING	510	510	510	20	5	1	2	3	20	5	1	2	BLDG EXTERIOR RECEPTACLES	6	
7	BLDG 'TS' EAST OUTSIDE LIGHTING	340	340	340	20	7	1	2	3	20	7	1	2	SPARE	8	
9	BLDG 'TS' EXTERIOR LGT P.E. CELL	100	100	100	20	9	1	2	3	20	9	1	2	CONV.'C' DRIVE STRUCT RECEPT	10	
11	SPARE				20	11	1	2	3	20	11	1	2	CONV.'B' DRIVE STRUCT RECEPT	12	
13	PLC PANEL UTILITY	1000	1000	1000	20	13	1	2	3	20	13	1	2	CONV.'A' DRIVE STRUCT RECEPT	14	
15	SPARE				20	15	1	2	3	20	15	1	2	SPARE	16	
17	SPARE				20	17	1	2	3	20	17	1	2	480V BUS DUCT HEATER	18	
19	5KV SW.GR.SUB-UNIT CONTROL PWR	500	500	500	20	19	1	2	3	20	19	1	2	5KV BUS DUCT HEATER	20	
21	5KV SW. GEAR HEATER	800	800	800	20	21	1	2	3	20	21	1	2	SPARE	22	
23	5KV SW. GEAR CONTROL	500	500	500	20	23	1	2	3	20	23	1	2	SPARE	24	
25	5KV SW. GEAR CONTROL	500	500	500	20	25	1	2	3	20	25	1	2	SPARE	26	
27	SPARE				20	27	1	2	3	20	27	1	2	SPARE	28	
29	SPARE				20	29	1	2	3	20	29	1	2	SPARE	30	
31	SPARE				20	31	1	2	3	20	31	1	2	BLDG 'TS' CONTROL RM LTGS	32	
33	SPACE				41	41	1	2	3	41	41	1	2	BLDG 'TS' CONTROL RM RECEPTACLES	32	
VA LOAD		4,550	4,495										4,100	3,394	VA LOAD	
TOTAL VA		14,539			TOTAL AMPS			60.6								

### RECEPTACLES FEEDER SCHEDULE

CIRCUIT	FEEDER REFERENCE	FEEDER SIZE **	GROUND SIZE	NEW/EXISTING
LDP-16	RP1	(2)#10AWG	(1)#12AWG	NEW
.	RP2 (NOT USED)	.	.	REMOVED
LDP-10	RP3	(2)#10AWG	(1)#12AWG	NEW
LDP-12	RP4	(2)#8AWG	(1)#10AWG	NEW
.	RP5	NOT USED	.	.
.	RP6 (NOT USED)	.	.	REMOVED

CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL RECEPTACLE CONDUITS SHALL BE 3/4" UNLESS NOTED.  
 \*\* CONTRACTOR SHALL ROUTE RECEPTACLE FEEDER CONDUCTORS TO THE FIRST RECEPTACLE OR JUNCTION BOX AND FROM THERE ROUTE (2)#10AWG & (1)#12AWG TO THE REST OF THE RECEPTACLES ON THE CIRCUIT.

### FEEDER/CONDUIT SCHEDULE

FEEDER REFERENCE	FEEDER SIZE	GROUND SIZE	*	FROM	TO	**
F1 - F2	NOT USED	.	.	.	.	A
F3	(3)#3/0AWG	(1)#4AWG	2"	VFD	MTR M3	N
F4	(3)#3/0AWG	(1)#4AWG	2"	VFD	MTR M4	N
F5 - F24	NOT USED	.	.	.	.	A
F25	(3)#500MCM, (1)250MCM NEUT	(1)#3AWG	3"	SWBD	PNL PDP	E
F26	(3)#6AWG	(1)#10AWG	3/4"	PNL PDP	25KVA XFMR	E
F27	(4)#2AWG	(1)#8AWG	1 1/4"	25KVA XFMR	PNL LDP	E
F28	(2)#350MCM/0	(1)#1/0AWG	(2) 3"	VFD	MTR M27	N
F29	NOT USED	.	.	.	.	A
F30	(3)#1AWG (5KV)	(1)#4AWG	2"	5KV SWGR	STACKER PIT	R
F31 - F34	NOT USED	.	.	.	.	A
F35	(3)#4/0AWG	(1)#6AWG	2 1/2"	PNL 4MP	RR5	R
F36	(3)#4/0AWG	(1)#6AWG	2 1/2"	PNL 4MP	RR6	R
F37	(3)#4/0AWG	(1)#6AWG	2 1/2"	PNL 4MP	RR7	R
F38	(3)#4/0AWG	(1)#6AWG	2 1/2"	PNL 4MP	RR8	R
F39	(3)250MCM	(1)#6AWG	3"	PNL 4MP	RR9	R
F40	(3)250MCM	(1)#6AWG	3"	PNL 4MP	RR10	R
F41	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR11	R
F42	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR12	R
F43	(3)#2/0AWG	(1)#8AWG	2"	PNL 4MP	PS1	R
F44	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR14	R
F45	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR15	R
F46	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR16	R
F47	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR17	R
F48	(3)#10AWG	(1)#12AWG	1"	PNL PDP	PIT PUMP	R
F49 - F52	NOT USED	.	.	.	.	A
F53	(2)500 MCM/0, 250MCM NEUT	(1)#1/0AWG	(2) 3"	SWBD	PNL 4MP	E
F54 - F59	NOT USED	.	.	.	.	A
F60	(2)250MCM/0	(2)#4AWG	4"	MCC BRKR	VFD	N
F60A	(3)250MCM	(1)#2AWG	2"	VFD	MTR M1	N
F60B	(3)250MCM	(1)#2AWG	2"	VFD	MTR M2	N
F61	(3)350MCM	(1)#3AWG	3"	MCC BRKR	VFD	N
F62	(3)#4AWG	(1)#8AWG	1"	MCC BRKR	FYNR CHUTE	N
F62A	(3)#4AWG	(1)#8AWG	1"	MCC FYNR	MTR M30	N
F63	(3)#4AWG	(1)#8AWG	1 1/4"	MCC BRKR	VFD	N
F63A	(3)#12AWG	(1)#12AWG	3/4"	VFD WINCH	MTR M31A	N
F63B	(3)#12AWG	(1)#12AWG	3/4"	VFD WINCH	MTR M31B	N
F64	(3)#8AWG	(1)#8AWG	3/4"	MCC BRKR	M32 FYNR	N
F64A	(3)#10AWG	(1)#12AWG	3/4"	M32 FYNR	MTR M32	N
F65	(3)#10AWG	(1)#12AWG	3/4"	MCC BRKR	VFD WINCH	N
F65A	(3)#12AWG	(1)#12AWG	3/4"	VFD	MTR M33A	N
F65B	(3)#12AWG	(1)#12AWG	3/4"	VFD	MTR M33B	N

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. (TYP)  
 \*\* FEEDER LISTED FOR NEW (N), ABANDON IN PLACE (A), EXISTING REUSE AS-IS (E) OR REUSE (R). FEEDERS LISTED FOR REUSE SHALL BE UNINSTALLED FROM THE SOURCE AND PULLED BACK FOR REINSTALLATION AS SHOWN ON THE DRAWINGS. (TYP)

### MISC POWER FEEDER SCHEDULE

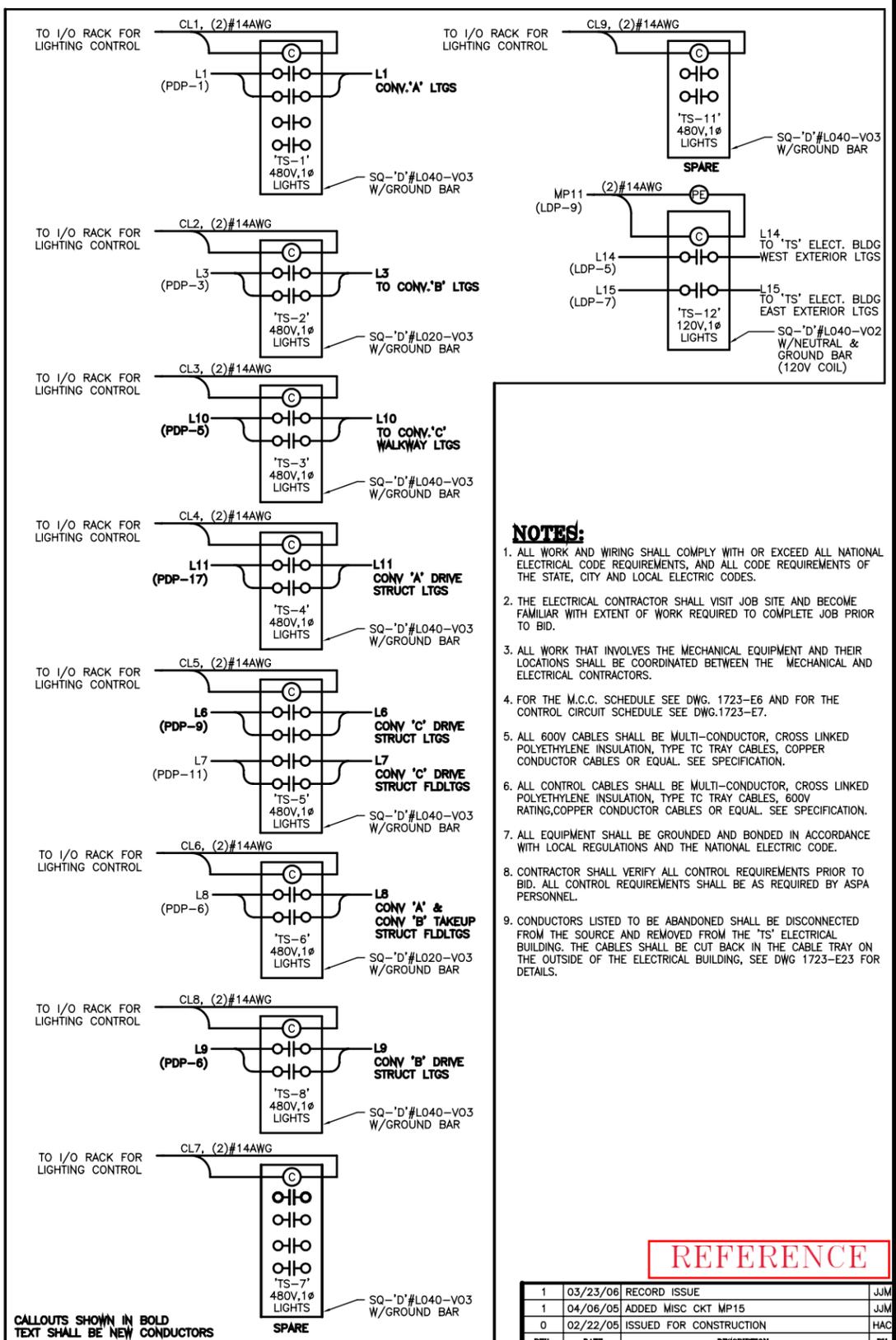
CIRCUIT	FEEDER REFERENCE	FEEDER SIZE	GROUND SIZE	*	**
LDP-19	MP1	(2)#12AWG	(1)#12AWG	.	E
LDP-21	MP2	(2)#12AWG	(1)#12AWG	.	E
.	MP3 (NOT USED)	.	.	.	A
LDP-20	MP4	(2)#12AWG	(1)#12AWG	.	E
LDP-18	MP5	(2)#12AWG	(1)#12AWG	.	E
LDP-13	MP6	(2)#12AWG	(1)#12AWG	.	E
.	MP7 (NOT USED)	.	.	.	A
.	MP8 (NOT USED)	.	.	.	A
LDP-23	MP9	(2)#12AWG	(1)#12AWG	.	E
LDP-25	MP10	(2)#12AWG	(1)#12AWG	.	E
LDP-9	MP11	(2)14AWG	(1)14AWG	.	E
PDP-2	MP12	(3)#10AWG	(1)#12AWG	.	E
.	MP13 (NOT USED)	.	.	.	E
PDP-16	MP14	(2)#4AWG	(1)#8AWG	1"	N
BDP-12	MP15	(2)#12AWG	(1)#12AWG	.	A
.	MP16 (NOT USED)	.	.	.	A
.	MP17 (NOT USED)	.	.	.	A

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL CONDUITS SHALL BE 3/4" UNLESS NOTED.  
 \*\* SEE ABOVE DEFINITION  
 \*\*\* SEE DRAWING 1723-E21 FOR OPERATOR'S CAB 120/240V PANELBOARD, "BDP", SCHEDULE.

### LIGHTING FEEDER SCHEDULE

CIRCUIT	FEEDER REFERENCE	FEEDER SIZE **	GROUND SIZE	*	**
PDP-1	L1	(2)#10AWG	(1)#12AWG	.	N
.	L2 (NOT USED)	.	.	.	A
PDP-3	L3	(2)#10AWG	(1)#12AWG	.	N
.	L4 (NOT USED)	.	.	.	A
PDP-7	L5 (**)	(2)#10AWG	(1)#12AWG	.	N
PDP-9	L6	(2)#10AWG	(1)#12AWG	.	N
PDP-11	L7	(2)#10AWG	(1)#12AWG	.	N
PDP-6	L8	(2)#10AWG	(1)#12AWG	.	N
PDP-15	L9	(2)#10AWG	(1)#12AWG	.	N
PDP-5	L10	(2)#10AWG	(1)#12AWG	.	N
PDP-17	L11	(2)#10AWG	(1)#12AWG	.	N
.	L12 (NOT USED)	.	.	.	N
PDP-8	L13 (**)	(2)#10AWG	(1)#12AWG	.	N
LDP-5	L14	(2)#12AWG	(1)#12AWG	.	E
LDP-7	L15	(2)#12AWG	(1)#12AWG	.	E

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL LIGHTING CONDUITS SHALL BE 3/4" UNLESS NOTED.  
 \*\* ROUTE LIGHTING FEEDER TO OPERATOR'S CAB LIGHTING CONTROL PANEL AND CONNECT TO THE LIGHTING CONTRACTOR LISTED  
 \*\*\* SEE ABOVE DEFINITION



### 'TS' BUILDING LIGHTING CONTROL RISER

CALLOUTS SHOWN IN BOLD TEXT SHALL BE NEW CONDUCTORS

NOTE:  
 CONTRACTOR SHALL INSTALL APPROPRIATE NUMBER & SIZE OF NEUTRAL CONDUCTOR AND GROUND CONDUCTOR TO SAFELY OPERATE LIGHTING SYSTEM.  
 CONTRACTOR SHALL REUSE THE EXISTING LIGHTING CONTRACTORS AS SHOWN. LIGHTING CONTRACTORS LISTED AS SPARE SHALL BE LEFT FOR FUTURE INSTALLATION OF LIGHTING CIRCUITS.

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	JJM
1	04/06/05	ADDED MISC CKT MP15	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

ALABAMA STATE PORT AUTHORITY

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**NEW PANELBOARD & FEEDER SCHEDULE**

Drawn By: JJM	Date: 8/24/04
Checked By: BWH	Date: 10/08/04
Scale: N.T.S.	Job No. 1723
Drawing No. E5	REV. 1

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### PANEL SCHEDULE

PANEL: "4MP" VOLTAGE RATING: 600 AMPERE RATING: 800 PHASE: 3Ø NO. WIRES: 4 MANU.: SQ-'D'  
 MAIN: 800A M.B. VOLTS: 277/480 FEEDER SOURCE: BUS TAP TYPE: I-LINE MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE			KVA PER PHASE			DESCRIPTION	CKT
		1	2	3	1	2	3		
1	RECLAIMER RECEPTACLE 'RR1'	34.4	34.4	34.4	200	200	200	RECLAIMER RECEPTACLE 'RR2'	2
3	RECLAIMER RECEPTACLE 'RR3'	34.4	34.4	34.4	200	200	200	RECLAIMER RECEPTACLE 'RR4'	4
5	RECLAIMER RECEPTACLE 'RR5'				200	200	200	RECLAIMER RECEPTACLE 'RR6'	6
7	RECLAIMER RECEPTACLE 'RR7'				200	200	200	RECLAIMER RECEPTACLE 'RR8'	8
9	RECLAIMER RECEPTACLE 'RR9'				200	200	200	RECLAIMER RECEPTACLE 'RR10'	10
11	RECLAIMER RECEPTACLE 'RR11'				200	200	200	RECLAIMER RECEPTACLE 'RR12'	12
13	PUMP STATION CONTROL PANEL	17.4	17.4	17.4	200	200	200	RECLAIMER RECEPTACLE 'RR14'	14
15	RECLAIMER RECEPTACLE 'RR13'				200	200	200	RECLAIMER RECEPTACLE 'RR16'	16
17	RECLAIMER RECEPTACLE 'RR15'				200	200	200	**	18
VA LOAD		86.2	86.2	86.2				VA LOAD	
TOTAL KVA		465			TOTAL AMPS				
		**			**				

\*\* ONLY (4) RECLAIMER CIRCUITS AND PUMP STATION CONTROL PANEL SHALL BE ACTIVE AT ANY ONE TIME. THIS IS THE MAX. REQUIREMENT ON THIS PANEL.

### PANEL SCHEDULE

PANEL: "PDP" VOLTAGE RATING: 600 AMPERE RATING: 400 PHASE: 3Ø NO. WIRES: 4 MANU.: SQ-'D'  
 MAIN: M.L.O. VOLTS: 277/480 FEEDER SOURCE: M.C.C. TYPE: NEHB MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE			KVA PER PHASE			DESCRIPTION	CKT
		1	2	3	1	2	3		
1	CONV.'A' DRIVE STRUCT LTG	450	450	450	20	20	20	ELECTRICAL ROOM A/C UNIT	2
3	CONV.'B' TOWER 'A' LTG	3515	3515	3515	20	20	20	CONV.'A' DRIVE STRUCT FLDGTS	4
5	CONV.'C' DRIVE STRUCT LTG	1045	1045	1045	20	20	20	TOWER 'B' FLOODLIGHTS	6
7	CONV 'D' TOWER 'B' LTG	2470	2470	2470	20	20	20	TOWER 'C' FLOODLIGHTS	8
9	TOWER 'B' LTG	2185	2185	2185	20	20	20	STACKER REEL CABLE DRUM PIT SUMP PUMP 1HP	10
11	BARGE DRIVE UNIT No.1 BRAKE CONTROL POWER	3000	3000	3000	20	20	20	SPARE	12
13	BARGE DRIVE UNIT No.2 BRAKE CONTROL POWER	3000	3000	3000	20	20	20	RAIL CONTROL CAB XFMR	14
15	SPARE				20	20	20	BARGE CONTROL CAB XFMR	16
17	CONV.'E' TOWER 'C' LTG	2325	2325	2325	20	20	20	SPARE	18
19	TOWER 'C' STAIRWELL LTGS	1355	1355	1355	20	20	20	25KVA TRANSFORMER	20
21	SPACE				20	20	20	VA LOAD	
VA LOAD		12,975	13,645	12,070				VA LOAD	
TOTAL VA		91,488			TOTAL AMPS			110.5	
		NEUT			GRD.				

### PANEL SCHEDULE

PANEL: "LDP" VOLTAGE RATING: 240 AMPERE RATING: 225 PHASE: 1Ø NO. WIRES: 3 MANU.: SQ-'D'  
 MAIN: 150A M.B. VOLTS: 240/120 FEEDER SOURCE: "PDP" TYPE: NOOD MOUNTING: SURFACE LOCATION: S. WALL

CKT	DESCRIPTION	VA PER PHASE		KVA PER PHASE		DESCRIPTION	CKT
		1	2	1	2		
1	BLDG 'TS' INSIDE LIGHTING	1140	1140	500	500	BLDG 'TS' RECEPTACLES	2
3	BLDG 'TS' INSIDE LIGHTING	855	855	500	500	BLDG 'TS' RECEPTACLES	4
5	BLDG 'TS' WEST OUTSIDE LIGHTING	510	510	500	500	BLDG EXTERIOR RECEPTACLES	6
7	BLDG 'TS' EAST OUTSIDE LIGHTING	340	340	500	500	TOWER 'A' RECEPTACLES	8
9	BLDG 'TS' EXTERIOR LGT P.E. CELL	100	100	500	500	CONV. 'C' DRIVE STRUCT RECEPT	10
11	BARGE MTRS ENCODER PWR	500	500	500	500	TOWER 'B' RECEPTACLES	12
13	PLC PANEL UTILITY	1000	1000	600	600	BARGE DRIVE INTERFACE CONTROL PWR	14
15	TO T/S CONVEYOR RELAYS	500	500	500	500	CONV. 'A' DRIVE STRUCT RECEPT	16
17	BARGE LOAD BELT SCALE	500	500	800	800	480V BUS DUCT HEATER	18
19	5KV SW.GR.SUB-UNIT CONTROL PWR	500	500	800	800	5KV BUS DUCT HEATER	20
21	5KV SW. GEAR HEATER	800	800	750	750	T.S. PLC I/O MODULE	22
23	5KV SW. GEAR CONTROL	500	500	750	750	SPARE	24
25	5KV SW. GEAR CONTROL	500	500			SPARE	26
27	SPARE					SPARE	28
29	SPARE					TOWER 'C' RECEPTACLE	30
31	T.S. PLC PROCESSOR PWR SPLY	1000	1000	294	294	BLDG 'TS' CONTROL RM LTGS	32
33	SPACE					BLDG 'TS' CONTROL RM RECEPTACLES	
VA LOAD		5,050	4,995	5,950	4,644	VA LOAD	
TOTAL VA		20,639		TOTAL AMPS		86.0	
		NEUT		GRD.			

### RECEPTACLES FEEDER SCHEDULE

CIRCUIT	FEEDER REFERENCE	FEEDER SIZE **	GROUND SIZE	CONDUIT *
LDP-16	RP1	(2)#10AWG	(1)#12AWG	
LDP-8	RP2	(2)#10AWG	(1)#12AWG	
LDP-10	RP3	(2)#10AWG	(1)#12AWG	
LDP-12	RP4	(2)#8AWG	(1)#10AWG	
	RP5	NOT USED		
LDP-28	RP6	(2)#8AWG	(1)#10AWG	

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL RECEPTACLE CONDUITS SHALL BE 3/4", UNLESS NOTED.  
 \*\* CONTRACTOR SHALL ROUTE RECEPTACLE FEEDER CONDUCTORS TO THE FIRST RECEPTACLE OR JUNCTION BOX AND FROM THERE ROUTE (2)#10AWG & (1)#12AWG TO THE REST OF THE RECEPTACLES ON THE CIRCUIT.

### FEEDER/CONDUIT SCHEDULE

FEEDER REFERENCE	FEEDER SIZE	GROUND SIZE	CONDUIT **	FROM	TO
F1	(3)#350MCM	(1)#3AWG	2 1/2"	MCC	MTR M1
F2	(3)#350MCM	(1)#3AWG	2 1/2"	MCC	MTR M2
F3	(3)#3/OAWG	(1)#4AWG	2"	MCC	MTR M3
F4	(3)#3/OAWG	(1)#4AWG	2"	MCC	MTR M4
F5	(3)#3/OAWG	(1)#4AWG	2"	MCC	MTR M5
F6	(3)#3/OAWG	(1)#4AWG	2"	MCC	MTR M6
F7	(3)#10AWG	(1)#12AWG	3/4"	MCC	MTR M7
F8	(3)#250MCM	(1)#6AWG	2"	MCC	MTR M8
F9	(3)#8AWG	(1)#12AWG	3/4"	MCC	MTR M9
F10	(3)#10AWG	(1)#10AWG	3/4"	MCC	MTR M10
F11	(3)#10AWG	(1)#12AWG	3/4"	MCC	MTR M11
F12	NOT USED				
F13	(3)#10AWG	(1)#12AWG	3/4"	MCC	MTR M13
F14 - F23	NOT USED				
F24	(3)#2AWG	(1)#8 AWG	1 1/2"	MCC	MTR M24
F25	(3)#500MCM (1)250MCM NEUT	(1)#3AWG	3"	SWBD	PNL PDP
F26	(3)#6AWG	(1)#10AWG	3/4"	PNL PDP	25KVA XFMR
F27	(4)#2AWG	(1)#8AWG	1 1/4"	25KVA XFMR	PNL LDP
F28	(2)350MCM/Ø	(1)#1/OAWG	(2) 3"	VFD	M27
F29	NOT USED				
F30	(3)#1AWG (5KV)	(1)#4AWG	2"	5KV SWGR	STACKER PIT
F31	(3)#1/OAWG	(1)#6AWG	2"	PNL 4MP	RR1
F32	(3)#1/OAWG	(1)#6AWG	2"	PNL 4MP	RR2
F33	(3)#2/OAWG	(1)#6AWG	2"	PNL 4MP	RR3
F34	(3)#2/OAWG	(1)#6AWG	2"	PNL 4MP	RR4
F35	(3)#4/OAWG	(1)#6AWG	2 1/2"	PNL 4MP	RR5
F36	(3)#4/OAWG	(1)#6AWG	2 1/2"	PNL 4MP	RR6
F37	(3)#4/OAWG	(1)#6AWG	2 1/2"	PNL 4MP	RR7
F38	(3)#4/OAWG	(1)#6AWG	2 1/2"	PNL 4MP	RR8
F39	(3)250MCM	(1)#6AWG	3"	PNL 4MP	RR9
F40	(3)250MCM	(1)#6AWG	3"	PNL 4MP	RR10
F41	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR11
F42	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR12
F43	(3)#2/OAWG	(1)#8AWG	2"	PNL 4MP	PS1
F44	(3)#350MCM	(1)#6AWG	3"	PNL 4MP	RR14
F45	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR15
F46	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR16
F47	(3)350MCM	(1)#6AWG	3"	PNL 4MP	RR17
F48	(3)#10AWG	(1)#12AWG	1"	MCC	PIT PUMP
F49	(3)#4AWG	(1)#8AWG	1"	MCC	VFD
F50	(3)#4AWG	(1)#8AWG	1"	VFD	MTR M25
F51	(3)#4AWG	(1)#8AWG	1"	MCC	VFD
F52	(3)#4AWG	(1)#8AWG	1"	VFD	MTR M26
F53	(2)500 MCM/Ø 250MCM NEUT	(1)#1/OAWG	(2) 3"	NOT USED	NOT USED

\*\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE.

### MISC POWER FEEDER SCHEDULE

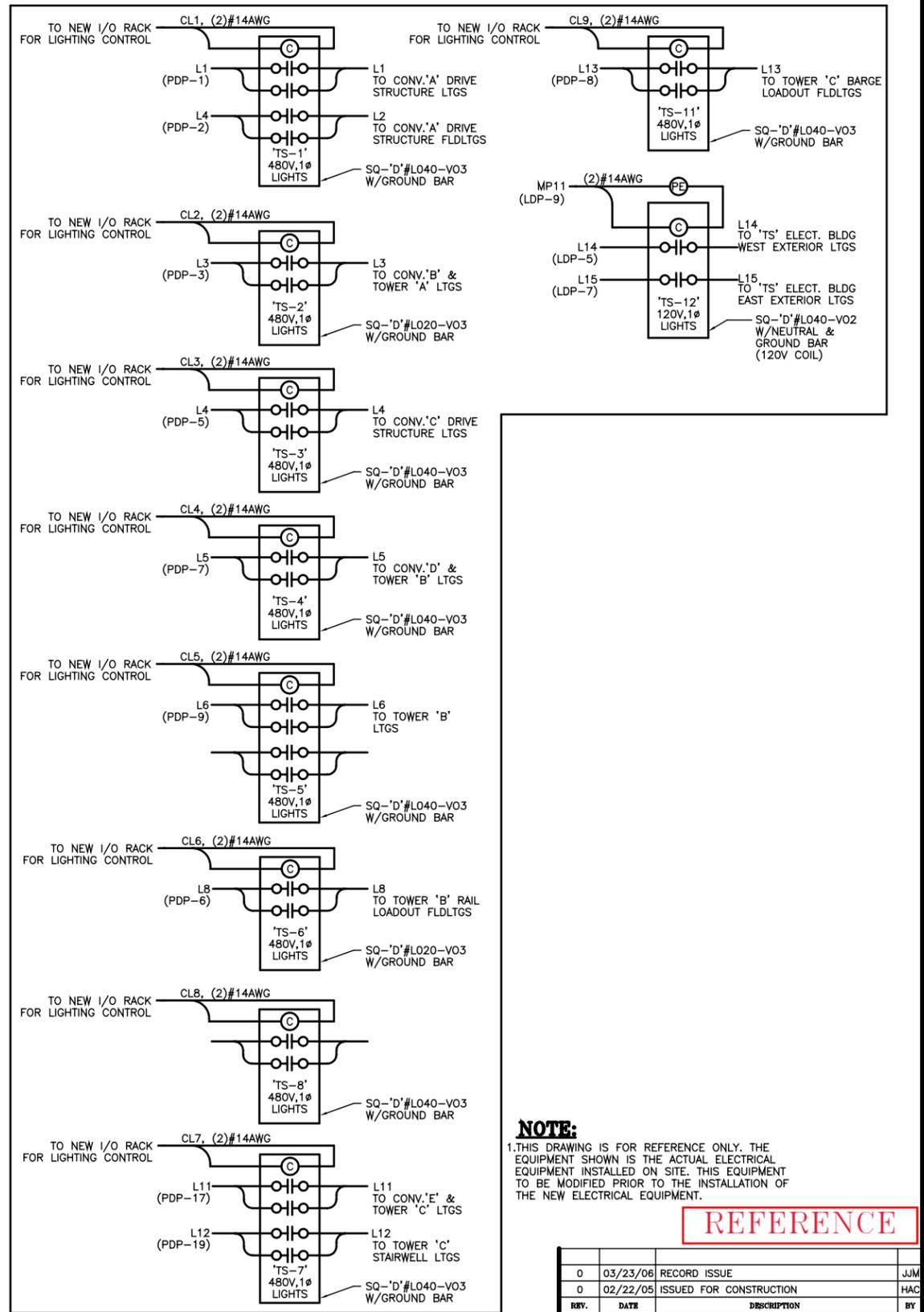
CIRCUIT	FEEDER REFERENCE	FEEDER SIZE	GROUND SIZE	CONDUIT *
LDP-19	MP1	(2)#12AWG	(1)#12AWG	
LDP-21	MP2	(2)#12AWG	(1)#12AWG	
LDP-15	MP3	(2)#12AWG	(1)#12AWG	
LDP-20	MP4	(2)#12AWG	(1)#12AWG	
LDP-18	MP5	(2)#12AWG	(1)#12AWG	
LDP-13	MP6	(2)#12AWG	(1)#12AWG	
LDP-31	MP7	(2)#12AWG	(1)#12AWG	
LDP-28	MP8	(2)#12AWG	(1)#12AWG	
LDP-23	MP9	(2)#12AWG	(1)#12AWG	
LDP-25	MP10	(2)#12AWG	(1)#12AWG	
LDP-9	MP11	(2)14AWG	(1)#14AWG	
PDP-2	MP12	(3)#10AWG	(1)#12AWG	
PDP-14	MP13	(2)#6AWG	(1)#10AWG	1"
PDP-16	MP14	(2)#3AWG	(1)#8AWG	1"
LDP-17	MP15	(2)#12AWG	(1)#12AWG	
LDP-11	MP16	(2)#8AWG	(1)#10AWG	
LDP-22	MP17	(2)#12AWG	(1)#12AWG	

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL CONDUITS SHALL BE 3/4", UNLESS NOTED.

### LIGHTING FEEDER SCHEDULE

CIRCUIT	FEEDER REFERENCE	FEEDER SIZE **	GROUND SIZE	CONDUIT *
PDP-1	L1	(2)#10AWG	(1)#12AWG	
PDP-4	L2	(2)#10AWG	(1)#12AWG	
PDP-3	L3	(2)#10AWG	(1)#12AWG	
PDP-5	L4	(2)#10AWG	(1)#12AWG	
PDP-7	L5	(2)#10AWG	(1)#12AWG	
PDP-9	L6	(2)#8AWG	(1)#10AWG	
PDP-11	L7	(2)#8AWG	(1)#10AWG	
PDP-6	L8	(2)#8AWG	(1)#10AWG	
	L9	NOT USED		
	L10	NOT USED		
PDP-17	L11	(2)#8AWG	(1)#10AWG	
PDP-19	L12	(2)#8AWG	(1)#10AWG	
PDP-8	L13	(2)#6AWG	(1)#10AWG	
LDP-5	L14	(2)#12AWG	(1)#12AWG	
LDP-7	L15	(2)#12AWG	(1)#12AWG	

\* CONDUIT SIZE APPLIES WHERE CABLES ARE ROUTED FROM THE CABLE TRAY TO THE DEVICE. ALL LIGHTING CONDUITS SHALL BE 3/4", UNLESS NOTED.  
 \*\* CONTRACTOR SHALL ROUTE LIGHTING FEEDER CONDUCTORS THRU THE LIGHTING CONTACTOR ENCLOSURE (SEE DWG.809-E6) AND THAN TO THE FIRST LIGHTING FIXTURE OR JUNCTION BOX AND FROM THERE ROUTE (2)#10AWG & (1)#12AWG TO THE REST OF THE FIXTURES ON THE CIRCUIT.



**'TS' BUILDING LIGHTING CONTROL RISER**  
N.T.S.

**NOTE:**  
 1. THIS DRAWING IS FOR REFERENCE ONLY. THE EQUIPMENT SHOWN IS THE ACTUAL ELECTRICAL EQUIPMENT INSTALLED ON SITE. THIS EQUIPMENT TO BE MODIFIED PRIOR TO THE INSTALLATION OF THE NEW ELECTRICAL EQUIPMENT.

REFERENCE

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**EXIST PANELBOARD & FEEDER SCHEDULE**

Drawn By: JJM	Date: 8/24/04
Checked By: BWH	Date: 10/08/04
Scale: N.T.S.	Job No. 1723
Drawing No. E5A	REV. 0





### EXISTING CONTROL CIRCUIT SCHEDULE

CONTROL REFERENCE	CONDUCTOR SIZE & QUANTITY	GROUND SIZE	FROM DEVICE	TO DEVICE	CONDUIT
C1	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'A' HAND/OFF/AUTO W/JOG STATION	
C2	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'A' SAFTEY PULL STOP	*
C3	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' TILT SWITCH	
C4	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' HAND/OFF/AUTO W/JOG STATION	
C5	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	TOWER 'A' DEVERTER GATE HYD.PWR.PACK (TANK LEVEL LOW)	
C6	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	TOWER 'A' DEVERTER GATE HYD.PWR.PACK (SS)	
C7	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	TOWER 'A' DEVERTER GATE LIMIT SWITCH (CONV.'D')	
C8	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	TOWER 'A' DEVERTER GATE LIMIT SWITCH (CONV.'C')	
C9	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'D' ZERO SPEED SWITCH	
C10	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' ZERO SPEED SWITCH	
C11	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' SAFTEY PULL SWITCH	
C12	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' SAFTEY PULL SWITCH	
C13	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' HAND/OFF/AUTO W/JOG STATION	
C14	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'D' SAFTEY PULL SWITCH	
C15	(2)#12AWG	(1)#12AWG	RAIL LOAD CAB	CONVEYOR 'D' TILT SWITCH	
C16	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'D' HAND/OFF/AUTO W/JOG STATION	
C17	(4)#12AWG	(1)#12AWG	RAIL LOAD CAB	TOWER 'B' DEVERTER GATE LIMIT SWITCHES	
C18	(4)#12AWG	(1)#12AWG	M.C.C (6H)	TOWER 'B' DEVERTER GATE HYD.PWR.PACK (SS)	
C19	(6)#12AWG	(1)#12AWG	RAIL LOAD CAB	TSC INTERFACE JUNCTION BOX TOWER 'B'	
C20	(6)#12AWG	(1)#12AWG	RAIL LOAD CAB	SURGE BIN HIGH LEVEL TILT SWITCHES (3)	
C21	(4)#12AWG	(1)#12AWG	RAIL LOAD CAB	SURGE BIN SLIDE GATE OPEN/CLOSE SOLANOID VALVE	
C22	(4)#12AWG	(1)#12AWG	RAIL LOAD CAB	SURGE BIN SLIDE GATE LIMIT SWITCHES INDICATION	
C23	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	TSC TOWER 'B' TILT SWITCH INTERFACE	
C24	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' TILT SWITCH	
C25	NOT USED	.	.	.	
C26	NOT USED	.	.	.	
C27	(2)#12AWG	(1)#12AWG	RAIL LOAD CAB	CONVEYOR 'E' ZERO SPEED SWITCH	
C28	(2)#12AWG	(1)#12AWG	BARGE LOAD CAB	CONVEYOR 'E' TILT SWITCH	
C29	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'E' SAFTEY PULL SWITCH	
C30	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'E' HAND/OFF/AUTO W/JOG STATION	
C31	NOT USED	.	.	.	
C32	NOT USED	.	.	.	
C33 **	(8)#12AWG	(1)#12AWG	MOTOR M9 MJB	BARGE LOADOUT OPERATOR CONTROL CAB	
C34 **	(8)#12AWG	(1)#12AWG	MOTOR M24 MJB	BARGE LOADOUT OPERATOR CONTROL CAB	
C35	(2)20/C 12AWG	(2)#12AWG	RAIL LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C36	(8)#12AWG	(1)#12AWG	MTR M13 J.B.	RAIL LOADOUT CONTROL CAB	
C37	(2)20/C 12AWG	(2)#12AWG	BARGE LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C38	(2)COAX CABLE BELDEN#1223A		RAIL LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C39	6 TWISTED PRS 16AWG,SHLD		RAIL LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C40	(2)COAX CABLE BELDEN#1223A		BARGE LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C41	6 TWISTED PRS 16AWG,SHLD	(1)#12AWG	BARGE LOAD OPER. CNTRL.CAB.	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)	
C42	(4)#12AWG	(1)#12AWG	BARGE POSITION DRIVE UNIT No.1	BARGE POSITIONING MOTOR M25	
C43	(4)#12AWG	(1)#12AWG	BARGE POSITION DRIVE UNIT No.2	BARGE POSITIONING MOTOR M26	
C44	(2)#10AWG	(1)#12AWG	DRIVE UNIT No.1	BARGE POSITIONING MOTOR M25 BLOWER	
C45	(2)#12AWG	(1)#12AWG	DRIVE UNIT No.2	BARGE POSITIONING MOTOR M26 BLOWER	
C46	(2)#12AWG	(1)#12AWG	PANEL "LDP" CKT 14	BARGE POSITION DRIVE UNIT No.1 & No.2	
C47	(2)#12AWG	(1)#12AWG	PANEL "PDP" CKT 11	BARGE POSITION DRIVE UNIT No.1	
C48	(2)#12AWG	(1)#12AWG	PANEL "PDP" CKT 13	BARGE POSITION DRIVE UNIT No.2	
C49	NOT USED	.	.	.	
C50	NOT USED	.	.	.	
C51	NOT USED	.	.	.	
C52	(2)#12AWG	(1)#12AWG	RAIL LOAD CAB	TOWER 'B' DEVERTER GATE HYD.PWR.PACK (TANK LEVEL LOW)	
C53	(2)#10AWG	(1)#12AWG	DRIVE UNIT No.1	BARGE POSITIONER MOTOR BRAKE POWER CONTROL (M25)	
C54	(2)#10AWG	(1)#12AWG	DRIVE UNIT No.1	BARGE POSITIONER MOTOR BRAKE HEATER POWER CONTROL (M25)	
C55	(2)#10AWG	(1)#12AWG	DRIVE UNIT No.2	BARGE POSITIONER MOTOR BRAKE POWER CONTROL (M26)	
C56	(2)#10AWG	(1)#12AWG	DRIVE UNIT No.2	BARGE POSITIONER MOTOR BRAKE HEATER POWER CONTROL (M26)	
C56	(2)#14AWG	(1)#14AWG	RAIL LOAD CAB JB	RAIL LOAD SPOUT FOR SLIDE GATE TRANSDUCER	
C57	#16AWG TRAD SHLD		RAIL LOAD CAB JB	RAIL LOAD SPOUT FOR SLIDE GATE TRANSDUCER	
C58	BELDON#9513	.	BELT SCALE PNL	BELT SCALE JUNCTION BOX (LOAD CELLS)	
C59	BELDON#8770	.	BELT SCALE PNL	BELT SCALE SPEED SENSOR	
C60-C67	NOT USED	.	.	.	
C68	NOT USED	.	.	.	
C69	(7)#12AWG	(1)#12AWG	M.C.C (CTS)	PUMP STATION CONTROL PANEL	
C70	(2)BELDON#1075A		P.L.C. CABINET	DRIVE 'A' CABINET (ANALOG SIGNAL)	
C71	(2)7/C #12AWG W/GRD		P.L.C. CABINET	DRIVE 'A' CABINET (24VDC MONITORING/STATUS)	
C72	(2)#14AW	(1)#14AWG	P.L.C. CABINET	ALARM HORN ON T.S. BLDG	
C73	(1)14/C #12AWG W/GRD		P.L.C. CABINET	C.T.S. SECTION FOR 120V POWER	
C74	(2)#12AWG	(1)#12AWG	M.C.C (CTS)	STACKER CABLE ANCHOR PIT SUMP PUMP CONTROLLER	
C75	NOT USED	.	.	.	
C76	#12AWG SHLD TWISTED PAIR		M.C.C (CTS)	STACKER CABLE JUNCTION BOX SEE DWG.809-E2, CABLE DRUMMIT, NOTE 4	

### REVISED CONTROL CIRCUIT SCHEDULE

CONTROL REFERENCE	CONDUCTOR SIZE & QUANTITY	GROUND SIZE	FROM DEVICE	TO DEVICE	*	**
C1	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'A' HAND/OFF/AUTO W/JOG STATION		N
C2	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'A' SAFTEY PULL STOP		N
C3	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' TILT SWITCH		N
C4	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' HAND/OFF/AUTO W/JOG STATION		N
C5 - C9	REMOVED	.	.	.		A
C10	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' ZERO SPEED SWITCH		N
C11	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'B' SAFTEY PULL SWITCH		N
C12	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' SAFTEY PULL SWITCH		N
C13	(4)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' HAND/OFF/AUTO W/JOG STATION		N
C14 - C23	REMOVED	.	.	.		A
C24	(2)#12AWG	(1)#12AWG	P.L.C. CABINET	CONVEYOR 'C' TILT SWITCH		N
C25 - C26	NOT USED	.	.	.		.
C27 - C30	REMOVED	.	.	.		A
C31 - C32	NOT USED	.	.	.		.
C33 - C36	REMOVED	.	.	.		A
C37 - C41	REMOVED	.	.	.		A
C42 - C48	REMOVED	.	.	.		A
C49 - C51	NOT USED	.	.	.		.
C52 - C57	REMOVED	.	.	.		A
C58	BELDON#9513	.	BELT SCALE PNL	BELT SCALE JUNCTION BOX (LOAD CELLS)		N
C59	BELDON#8770	.	BELT SCALE PNL	BELT SCALE SPEED SENSOR		N
C60-C67	NOT USED	.	.	.		.
C68	NOT USED	.	.	.		.
C69	(7)#12AWG	(1)#12AWG	M.C.C (CTS)	PUMP STATION CONTROL PANEL		R
C70	(2)BELDON#1075A		P.L.C. CABINET	DRIVE 'A' CABINET (ANALOG SIGNAL)		E
C71	(2)7/C #12AWG W/GRD		P.L.C. CABINET	DRIVE 'A' CABINET (24VDC MONITORING/STATUS)		E
C72	(2)#14AW	(1)#14AWG	P.L.C. CABINET	ALARM HORN ON T.S. BLDG		E
C73	(1)14/C #12AWG W/GRD		P.L.C. CABINET	C.T.S. SECTION FOR 120V POWER		E
C74	(2)#12AWG	(1)#12AWG	M.C.C (CTS)	STACKER CABLE ANCHOR PIT SUMP PUMP CONTROLLER		R
C75	NOT USED	.	.	.		.
C76	#12AWG SHLD TWISTED PAIR		M.C.C (CTS)	STACKER CABLE JUNCTION BOX		R
C77 - C79	NOT USED	.	.	.		.
C80	NOT USED	.	.	.		.
C81	(2)#12AWG		BARGE WINCH MAIN CONTROL PANEL	SOUTH BARGE WINCH MOTOR BRAKE		N
C82	(1)#12AWG W/100% SHLD		BARGE WINCH MAIN CONTROL PANEL	SOUTH BARGE WINCH MOTOR ENCODER		N
C83	(3)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	SOUTH BARGE WINCH MOTOR TRAVEL LIMITS		N
C84	(12)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	SOUTH BARGE WINCH MOTOR MAINTENANCE STATION		N
C85	(4)#12AWG	(1)#12AWG	CABLE REEL CONTROL PANEL	END OF TRAVEL CAM LIMIT SWITCH IN CABLE REEL		N
C86	(2)#12AWG		BARGE WINCH MAIN CONTROL PANEL	NORTH BARGE WINCH MOTOR BRAKE		N
C87	(10)#12AWG W/100% SHLD		BARGE WINCH MAIN CONTROL PANEL	NORTH BARGE WINCH MOTOR ENCODER		N
C88	(3)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	NORTH BARGE WINCH MOTOR TRAVEL LIMITS		N
C89	(12)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	NORTH BARGE WINCH MOTOR MAINTENANCE STATION		N
C90	(4)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	BARGE POSITION WARNING BEACON		N
C91	(2)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	BARGE POSITION MAIN OPERATOR CONTROL STATION		N
C92	(6)#12AWG	(1)#12AWG	BARGE WINCH MAIN CONTROL PANEL	BARGE POSITION SYSTEM CABLE REEL MOTOR STARTER		N
C93	(2)BELDON#1075A		P.L.C. CABINET	DRIVE 'B' CABINET (ANALOG SIGNAL)		N
C94	(2)7/C #12AWG W/GRD		P.L.C. CABINET	DRIVE 'B' CABINET (24VDC MONITORING/STATUS)		N
C95	(2)BELDON#1075A		P.L.C. CABINET	DRIVE 'C' CABINET (ANALOG SIGNAL)		N
C96	(2)7/C #12AWG W/GRD		P.L.C. CABINET	DRIVE 'C' CABINET (24VDC MONITORING/STATUS)		N
C97	(4)#12AWG	(1)#12AWG	OPERATORS CAB LTG CONTROL PANEL	BARGE LOADOUT STRUCTURE LTG SWITCH ELEV. 14'-6 1/2"		N
C98	(4)#12AWG	(1)#12AWG	OPERATORS CAB LTG CONTROL PANEL	BARGE LOADOUT STRUCTURE LTG SWITCH ELEV. 51'-8"		N
C99	(20)#12AWG		OPERATORS CAB CONTROL CABINET	BARGE LOADOUT CHUTE HYD SYSTEM SOLENOID VALVES AND POSITION LIMIT SWITCHES		N
C100	(1)6-CORE FIBER OPTIC MULTI-MODE CABLE	N/A	OPERATOR'S CAB CONTROL CABINET	NEAR PLC/RADIO CABINET (COIL 20' NEAR PLC/RADIO CABINET LOCATION FOR FUTURE TERMINATION)		N
C101	(12)#12AWG	(1)#12AWG	OPERATORS CAB CONTROL CABINET	BARGE LATCH HYD SYSTEM MOTOR STARTER		N
C102	(4)#12AWG	(1)#12AWG	OPERATORS CAB CONTROL CABINET	BARGE LATCH SLACK ROPE SYSTEM J-BOX		N
C103	(3)#12AWG	(1)#12AWG	PNL BDP CKT 12	SLACK ROPE SYSTEM CONNECTION BOX		N
C104	(12)#12AWG		OPERATORS CAB CONTROL CABINET	ELECTRICAL BUILDING 'TS' PLC PANEL		N
C105	(7)#12AWG		OPERATORS CAB CONTROL CABINET	BARGE LOADOUT CHUTE HYD MOTOR STARTER		N

\* CONDUIT SIZES SHALL MEET THE REQUIREMENTS OF NEC. MINIMUM CONDUIT SIZES SHALL BE 3/8"(TYP)  
 \*\* FEEDER LISTED FOR NEW (N), ABANDON IN PLACE (A), EXISTING REUSE AS-IS (E) OR REUSE (R). FEEDERS LISTED FOR REUSE SHALL BE UNINSTALLED FROM THE SOURCE AND PULLED BACK FOR REINSTALLATION AS SHOWN ON THE DRAWINGS. (TYP)

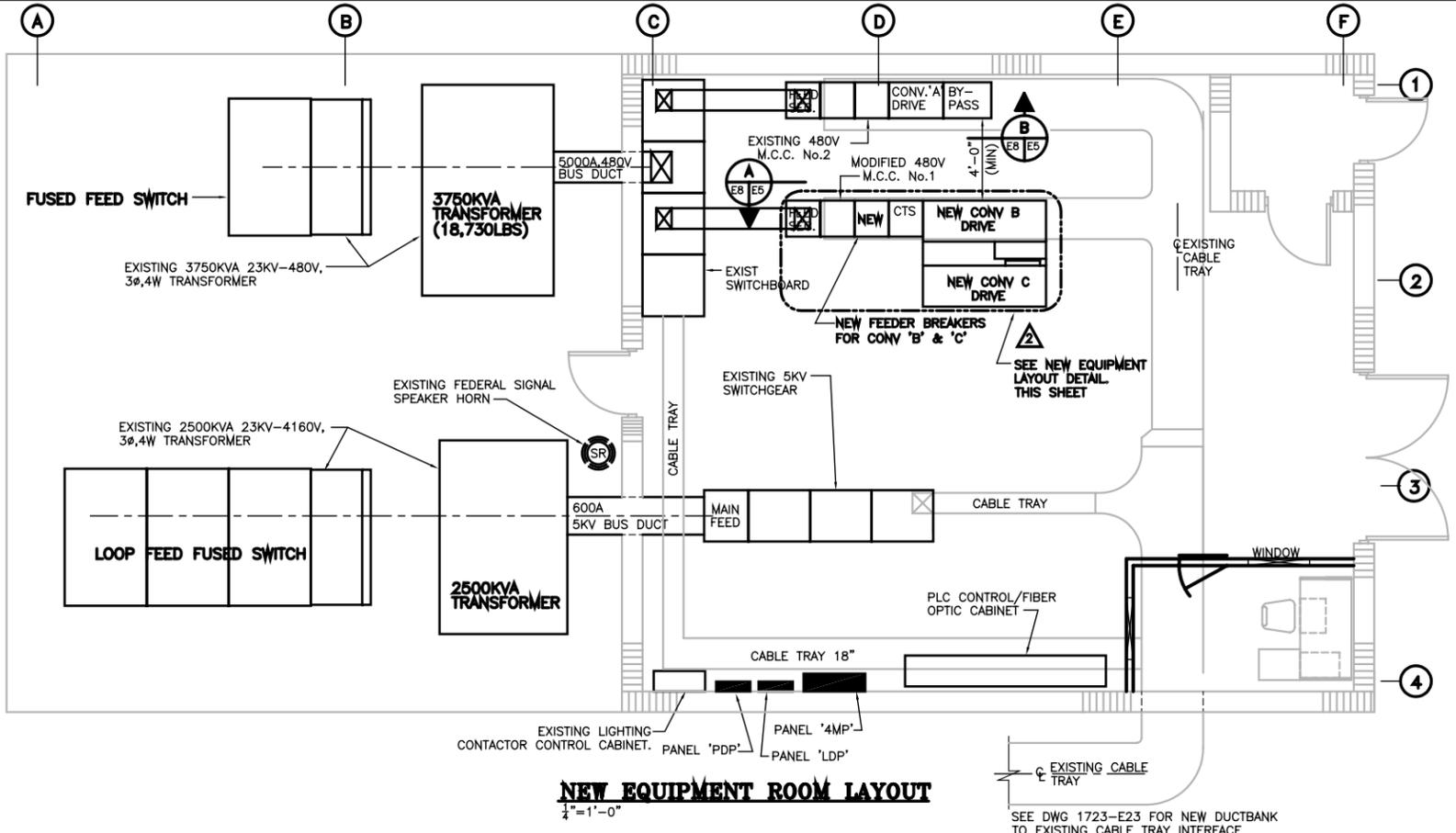
#### NOTE:

- ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- FOR THE FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER SCHEDULE, RECEPTACLE FEEDER SCHEDULE, MISC. POWER FEEDER SCHEDULE AND THE AC-ONE LINE DIAGRAM. SEE DWG.1723-E5.
- THE CONTRACTOR SHALL INTERFACE WITH THE OWNER PERSONNEL PRIOR TO INSTALLATION OF ANY CONTROL DEVICES AND/OR SYSTEMS.
- THE CONTRACTOR SHALL ROUTE LISTED CONTROL CONDUCTORS, M.C.C.(CTS), TO THE CONTROL TERMINATION SECTION (CTS) AND TERMINATE ON TERMINAL BLOCKS (UNLESS NOTED).
- THE CONTRACTOR SHALL PROVIDE A DETAILED CONDUCTOR TERMINATION SCHEDULE TO THE OWNER APPROVED SYSTEMS CONTROL CONTRACTOR PRIOR TO THE INSTALLATION OF THE CONTROL CONDUCTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL INTERFACE. CONTRACTOR SHALL VERIFY WITH OWNER PERSONNEL PRIOR TO INSTALLATION AND CONNECTION OF ALL CONTROL SYSTEM CONDUCTORS AND COMPONENTS.
- CIRCUITS C69, C74 AND C76 ARE ROUTED TO DEVICES LOCATED IN THE COAL STORAGE YARD. CONTRACTOR SHALL, AFTER CONVEYOR 'A' AND CONVEYOR 'B' STRUCTURE HAVE BEEN CONSTRUCTED, DISCONNECT THE CIRCUITS LISTED AND PULL BACK TO THE NEW CONVEYOR 'A' STRUCTURE AND STORE FOR REINSTALLATION. CONTRACTOR SHALL REINSTALL THE CIRCUITS IN THE NEW CONCRETE ENGAGED DUCTBANK AS SHOWN ON DWG 1723-E3. CONTRACTOR SHALL ROUTE THE CIRCUITS TO THE EXISTING PLC AND MCC. CONTRACTOR SHALL RECONNECT THE CIRCUITS TO THE ASSOCIATED CONTROL DEVICE. CONTRACTOR SHALL VERIFY THE LENGTH OF ALL EXISTING CIRCUITS TO BE REROUTED/REINSTALLED TO THE 'TS' ELECTRICAL BUILDING PRIOR TO BID.
- CIRCUITS TO BE ABANDONED IN PLACE SHALL BE DISCONNECTED FROM THE DEVICE AND REMOVED FROM THE ELECTRICAL 'TS' BUILDING. THE CIRCUITS SHALL BE CUT IN THE CABLE TRAY OUTSIDE THE ELECTRICAL 'TS' BUILDING. SEE DWG 1723-E23 FOR LOCATION IN CABLE TRAY FOR CIRCUITS TO BE ABANDONED IN.
- FIBER OPTIC CABLE WILL BE INSTALLED BY THE CONTRACTOR AND LEFT IN A MANNER THAT WILL PROTECT THE CABLE FROM DAMAGE FOR FUTURE USE. ALL REMAINING FIBER OPTIC INSTALLATION, INCLUDING CONNECTORS, WILL BE PERFORMED BY OTHERS.

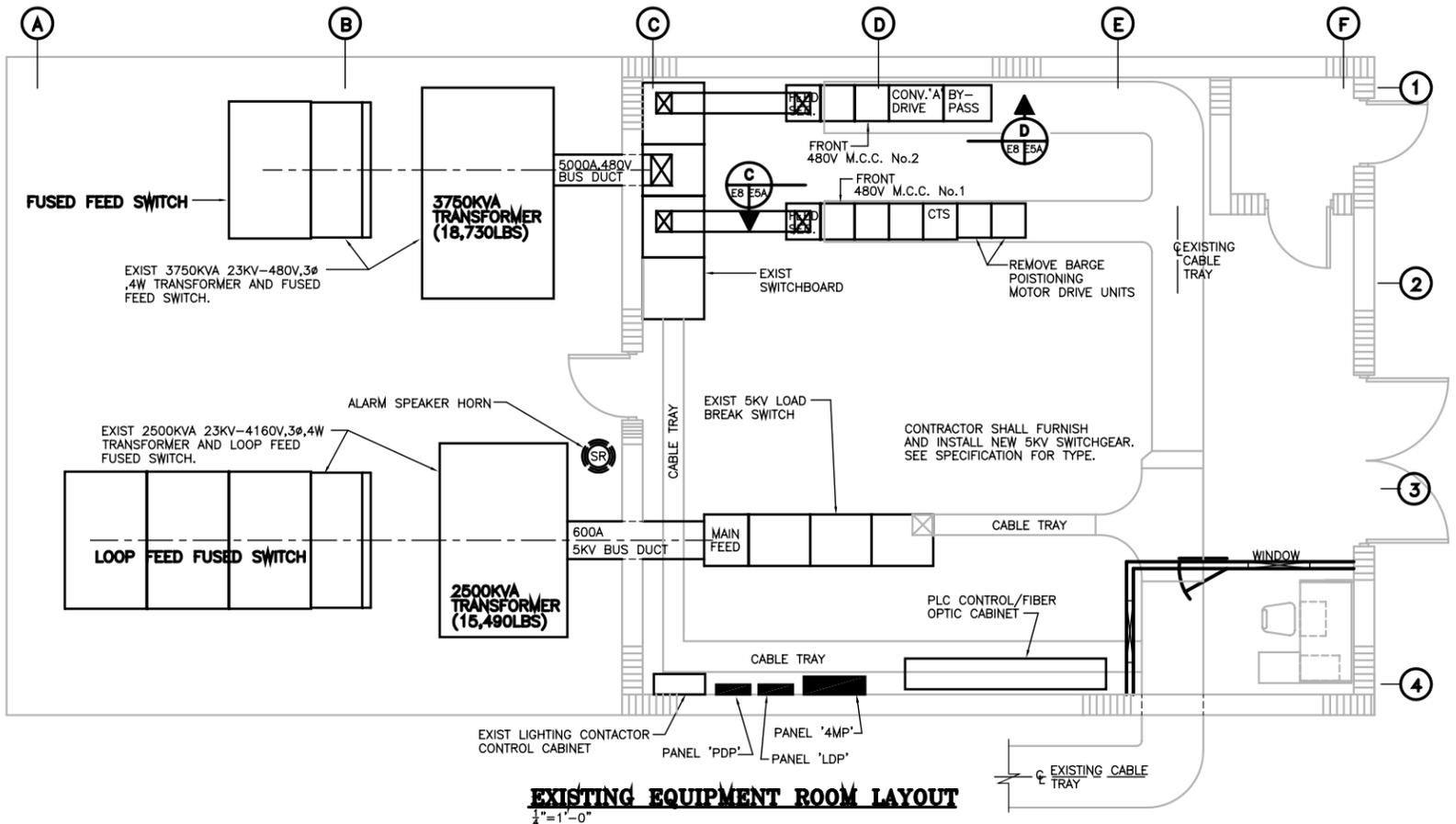
### REFERENCE

REV.	DATE	DESCRIPTION	BY
4	03/23/06	RECORD ISSUE	JJM
3	8/17/05	DEL CKTS C70,C71,C91,C93,C94,C95,C96. ADD CKT C104 & REV C99.	JJM
2	05/31/05	ADDED CKT C104	JJM
1	05/17/05	ADDED CKTS C101,C012 & C103	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

 <b>ALABAMA STATE PORT AUTHORITY</b>		 Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: JJM Checked By: BWH Scale: N.T.S.	Date: 8/24/04 Date: 10/08/04 Job No. 1723	MOBILE ALABAMA <b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b> <b>CONTROL CONDUCTOR SCHEDULE</b>	Drawing No. E7 REV. 2

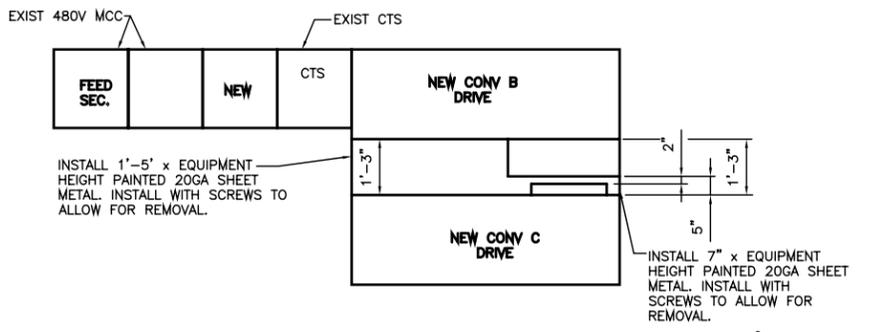


**NEW EQUIPMENT ROOM LAYOUT**  
1/4"=1'-0"



**EXISTING EQUIPMENT ROOM LAYOUT**  
1/4"=1'-0"

- ### ELECTRICAL NOTES
1. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
  2. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
  3. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
  4. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
  5. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
  6. FOR THE ELECTRICAL AC ONE-LINE DIAGRAM SEE DWG.1723-E4.
  7. FOR THE FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER SCHEDULE, RECEPTACLE FEEDER SCHEDULE AND THE MISC. POWER FEEDER SCHEDULE SEE DWG.1723-E5.
  8. FOR THE M.C.C. SCHEDULE SEE DWG 1723-E6.
  9. FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
  10. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
  12. RECEPTACLE AND LIGHTING CIRCUITRY SHOWN WITH INDIVIDUAL HOME RUNS PER CIRCUIT IS DIAGRAMMATIC ONLY. GROUPING OF THREE CIRCUITS PER HOME RUN WITH A COMMON NEUTRAL FOR LIGHTING AND MISCELLANEOUS RECEPTACLE CIRCUITS IS PERMISSIBLE WITH 3 PHASE PANELS ONLY.
  13. THE CONTRACTOR SHALL INTERFACE WITH THE OWNER APPROVED SYSTEMS CONTROLS CONTRACTOR PRIOR TO INSTALLATION OF ANY CONTROL DEVICES AND/OR SYSTEMS.
  14. CONTRACTOR SHALL VERIFY ALL CONTROL AND POWER REQUIREMENTS FOR THE CABLE REEL, BARGE LATCH HYD SYSTEM, BARGE LOADOUT CHUTE HYD SYSTEM AND THE BARGE HAUL WINCH SYSTEM PRIOR TO INSTALLATION OF ANY CONTROL AND/OR POWER CONDUCTORS. THE CONTROL AND POWER REQUIREMENTS SHALL BE VERIFIED AT TIME OF PROCUREMENT.
  15. ELECTRICAL EQUIPMENT LAYOUT IN THE ELECTRICAL 'TS' BUILDING IS BASED ON CUTLER HAMMER MCC AND DRIVE EQUIPMENT. CONTRACTOR SHALL VERIFY DIMENSIONS OF ALL EQUIPMENT TO BE INSTALLED PRIOR TO PROCUREMENT.
  16. CONTROL INTERFACE OF ALL NEW EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY WITH THE OWNER PERSONNEL THE CONTROL SEQUENCE PRIOR TO INSTALLATION.
  17. CONTROL AND FEEDER CIRCUITS TO BE ABANDONED IN PLACE SHALL BE DISCONNECTED FROM THE DEVICE AND REMOVED FROM THE ELECTRICAL 'TS' BUILDING. THE CIRCUITS SHALL BE CUT IN THE CABLE TRAY OUTSIDE THE ELECTRICAL 'TS' BUILDING. SEE DWG 1723-E23 FOR LOCATION IN CABLE TRAY FOR CONTROL AND FEEDER CIRCUITS TO BE ABANDONED IN.
  18. CONTRACTOR SHALL FURNISH AND INSTALL ETHERNET WITH INDUSTRIAL PROTOCOL IN THE EXISTING CONVEYOR 'A' DRIVE USING A RJ-45 STYLE CONNECTOR.



**NEW EQUIPMENT LAYOUT DETAIL**  
SCALE 1/2"=1'-0"

REFERENCE

REV.	DATE	DESCRIPTION	BY
2	03/23/06	RECORD ISSUE	JJM
2	09/19/05	ADDED EQUIPMENT DETAIL	JJM
1	05/17/05	ADDED NOTE 18.	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC



**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

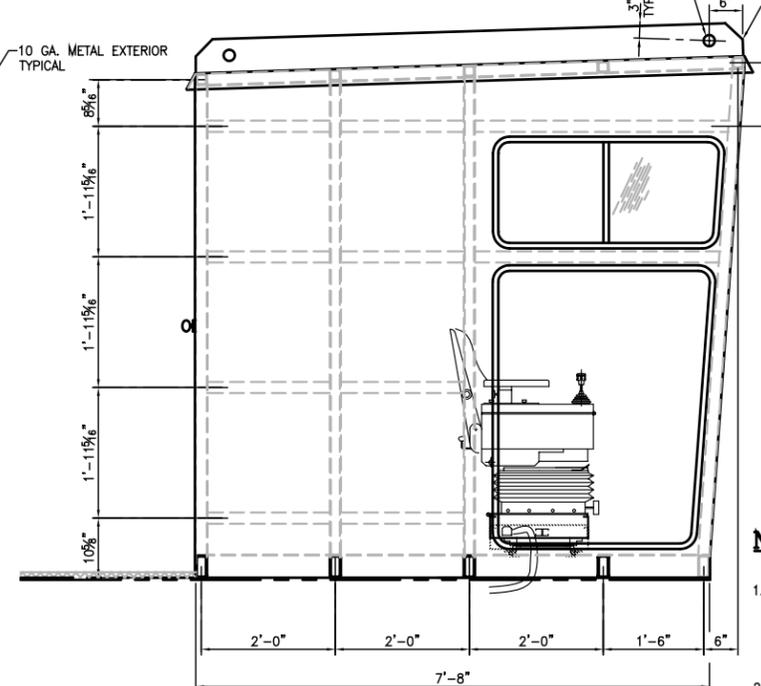
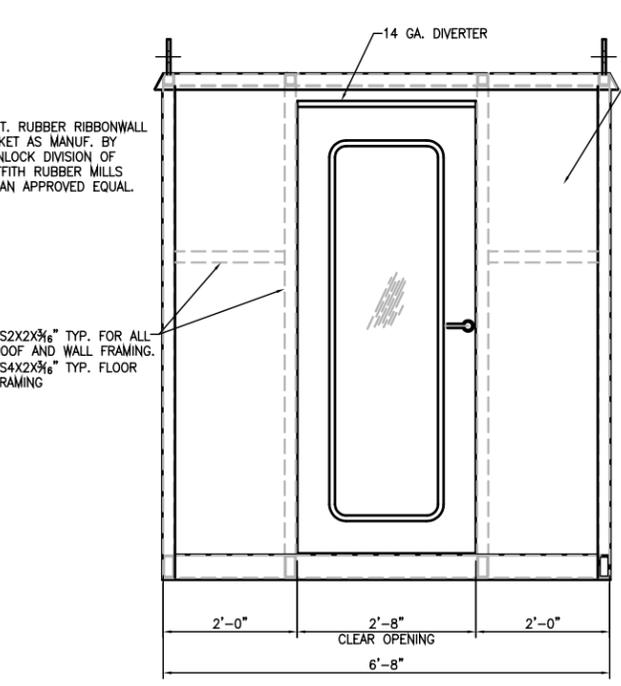
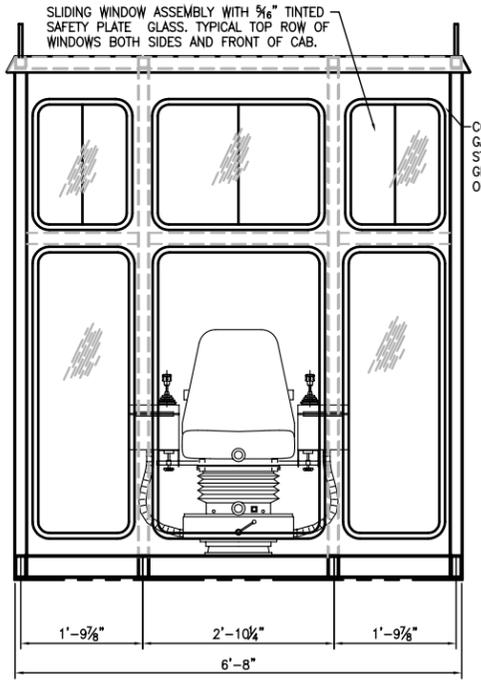
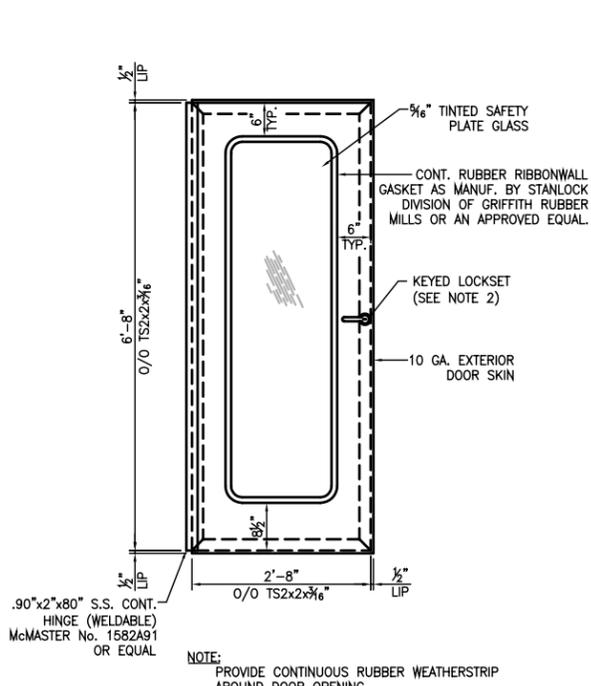
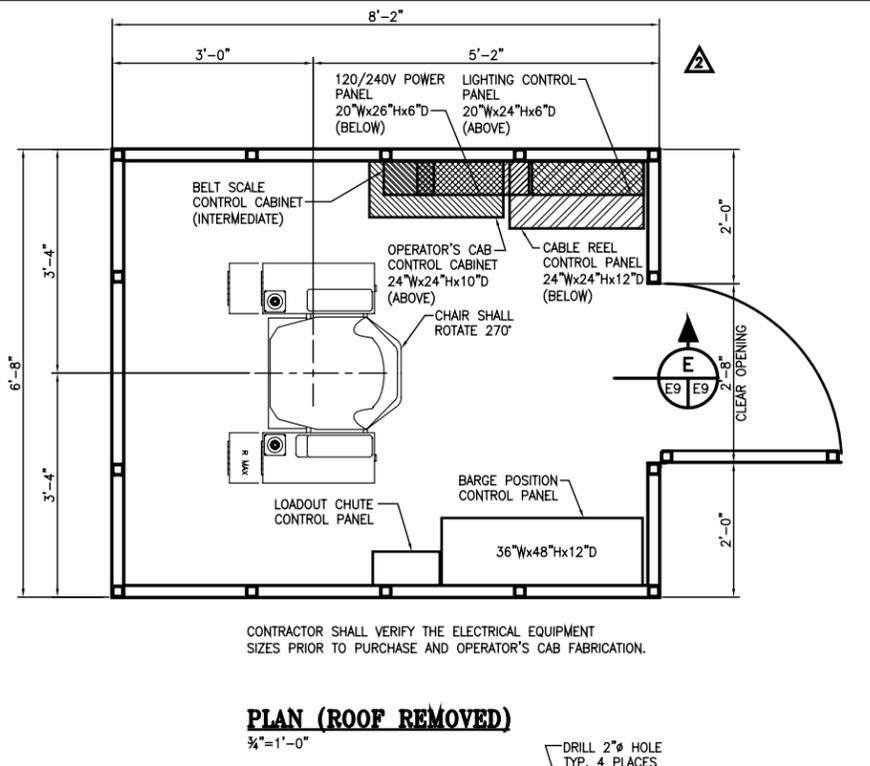
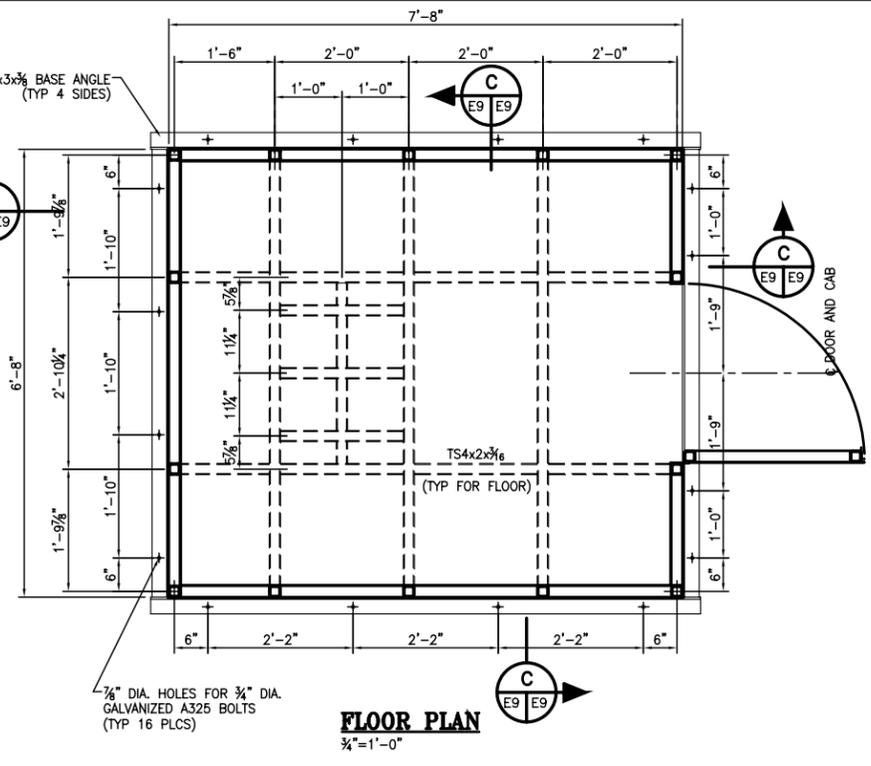
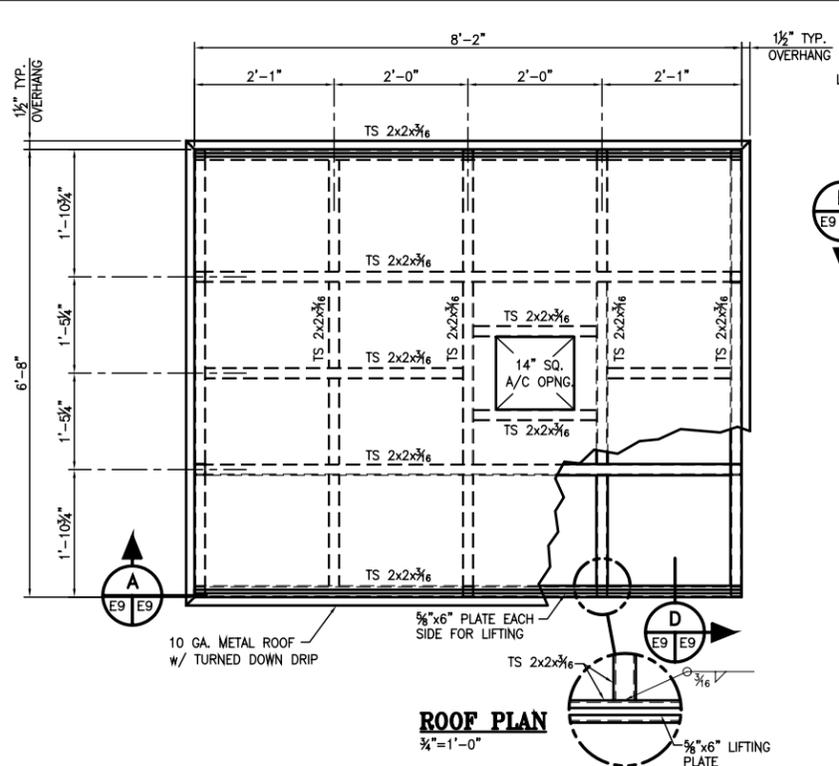


Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

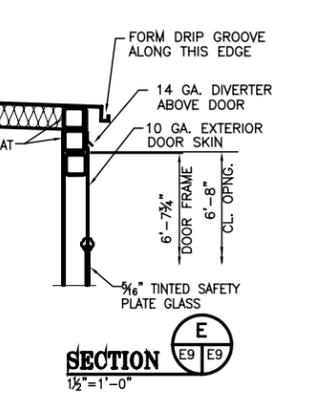
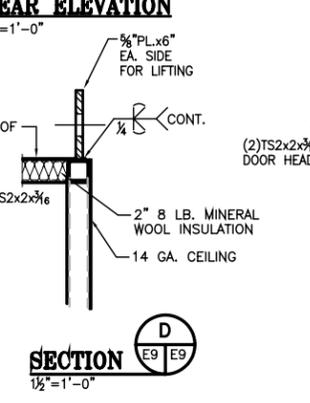
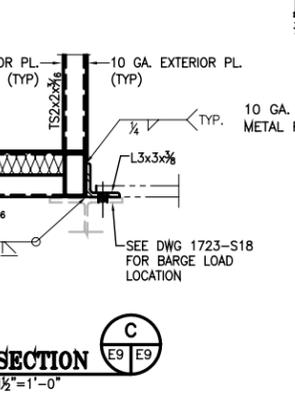
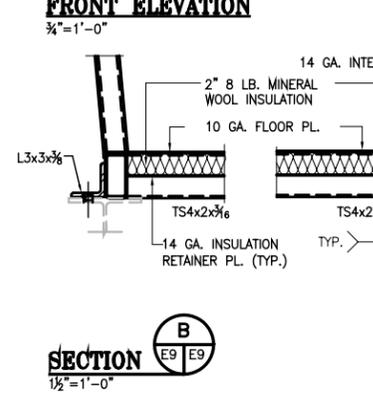
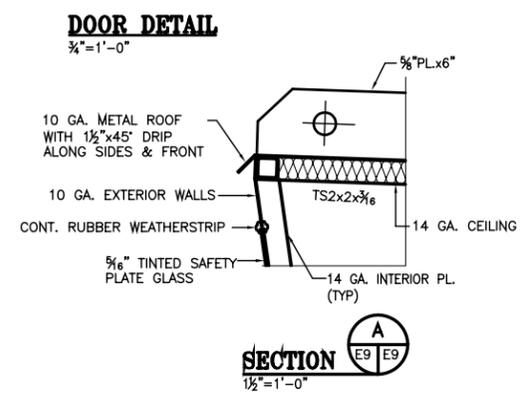
**McDUFFIE TERMINAL  
BARGE LOADOUT  
RELOCATION**

**ELECTRICAL BUILDING  
LAYOUT**

Drawn By: JJM	Date: 8/24/04
Checked By: BWH	Date: 10/08/04
Scale: NOTED	Job No. 1723
Drawing No. E8	REV. 2



- NOTES:**
- ALL INTERIOR AND EXTERIOR STEEL SURFACES OF THE CAB SHALL BE PAINTED AS INDICATED ON THE COATING NOTES ON DRAWING T2. TOP COAT COLOR FOR OPERATOR'S CAB SHALL BE BLP MOBILE PAINTS "BONE WHITE".
  - DOOR LOCKSET SHALL BE CL3300 SERIES EXTRA HEAVY DUTY CYLINDRICAL LEVER LOCKSETS AS MANUFACTURED BY CORBIN RUSSWIN ARCHITECTURAL HARDWARE, OR ENGINEER APPROVED EQUAL.

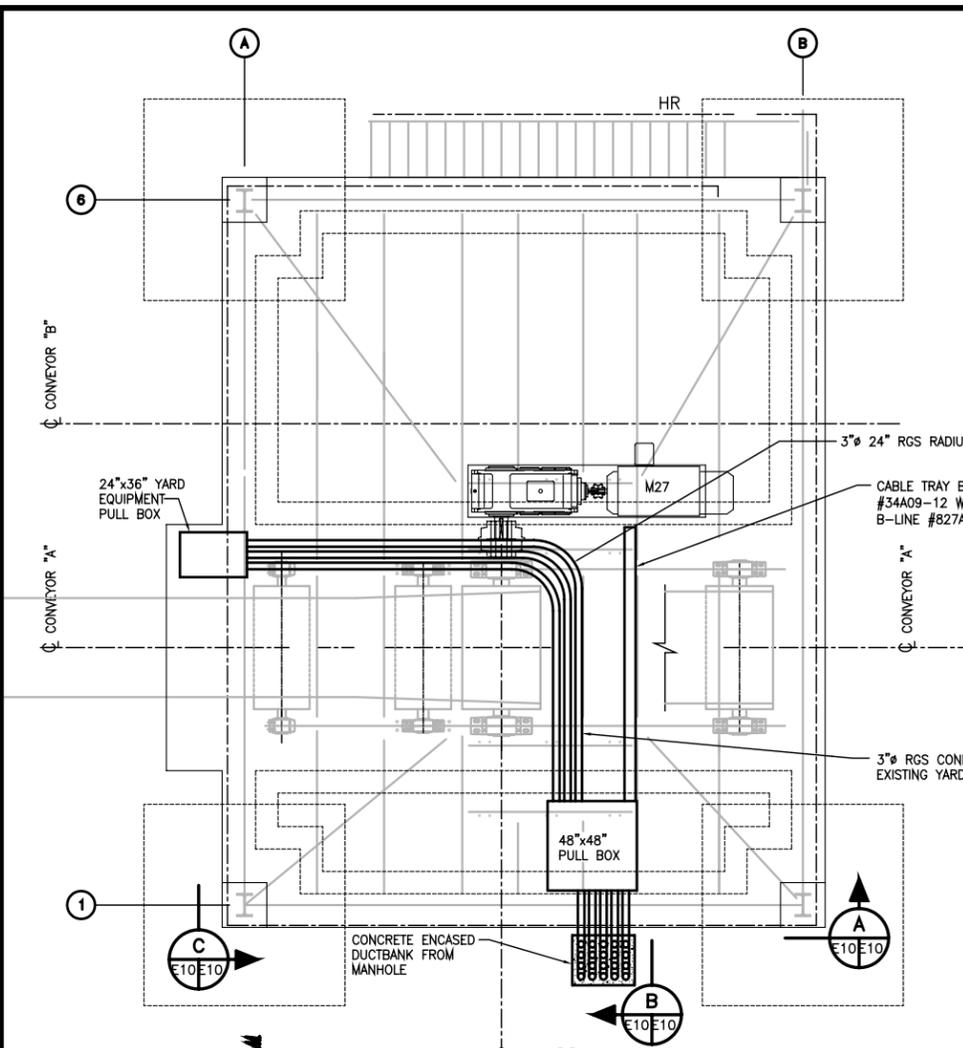


**REFERENCE**

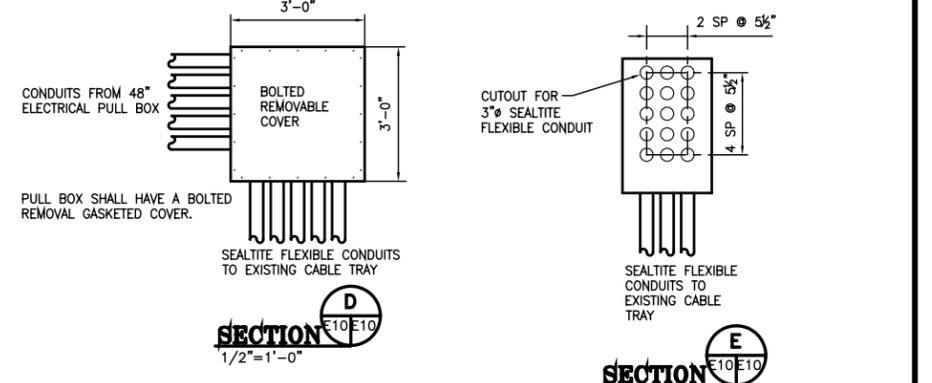
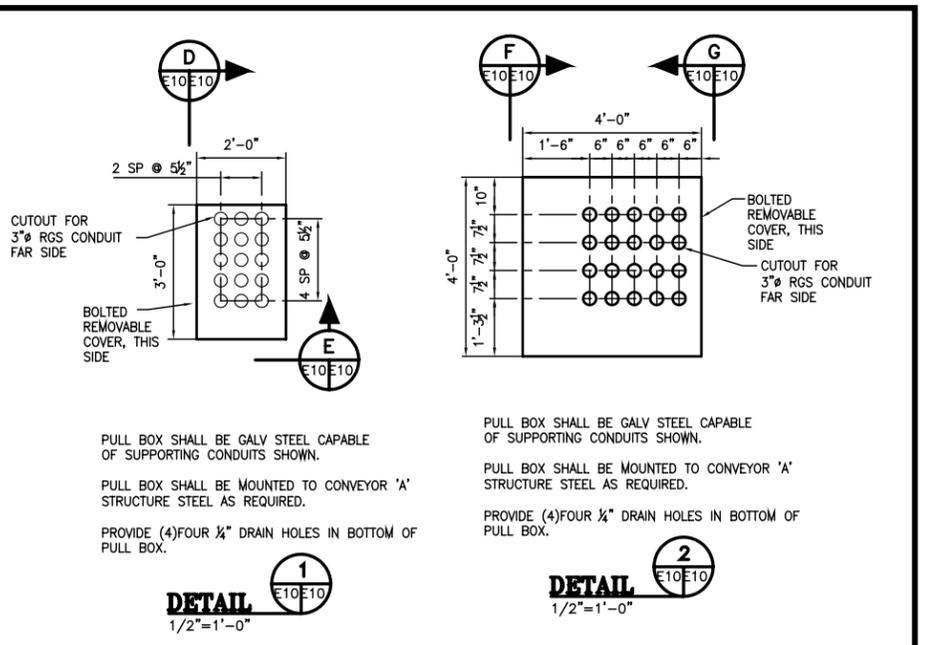
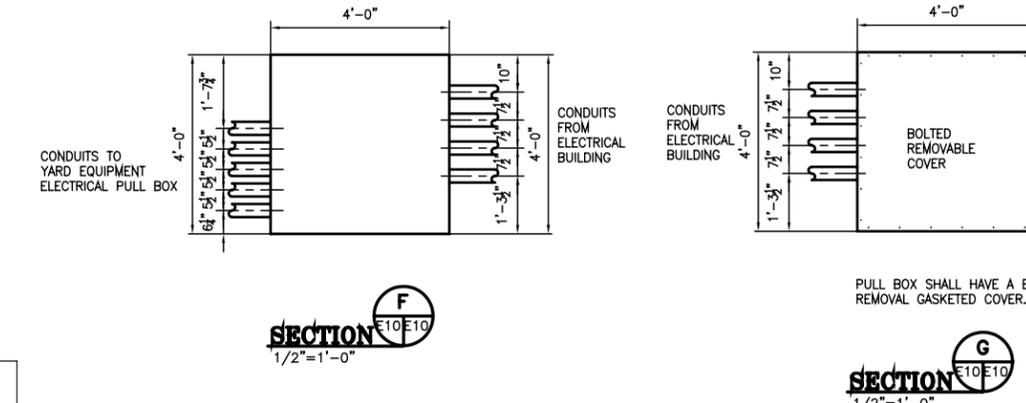
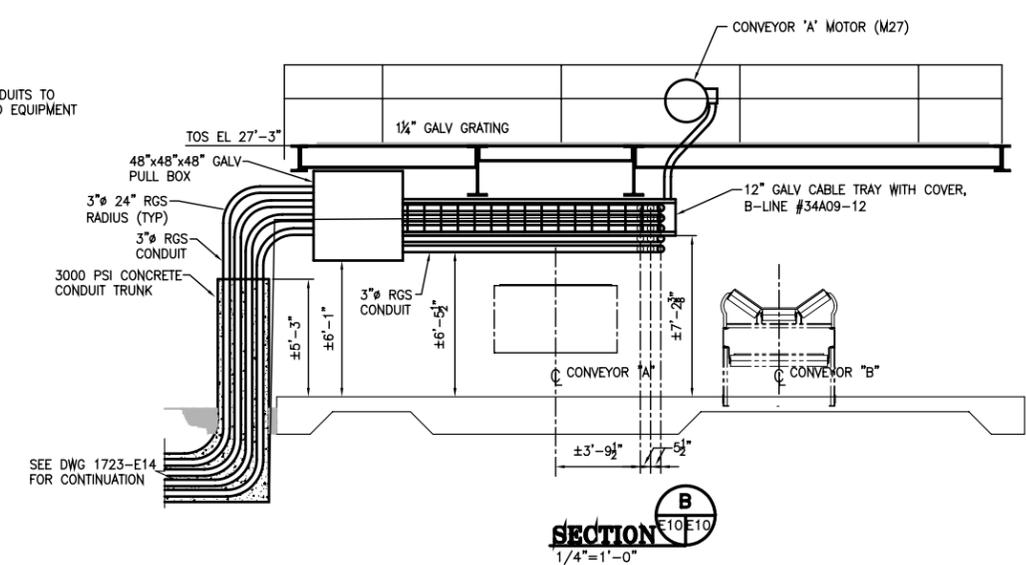
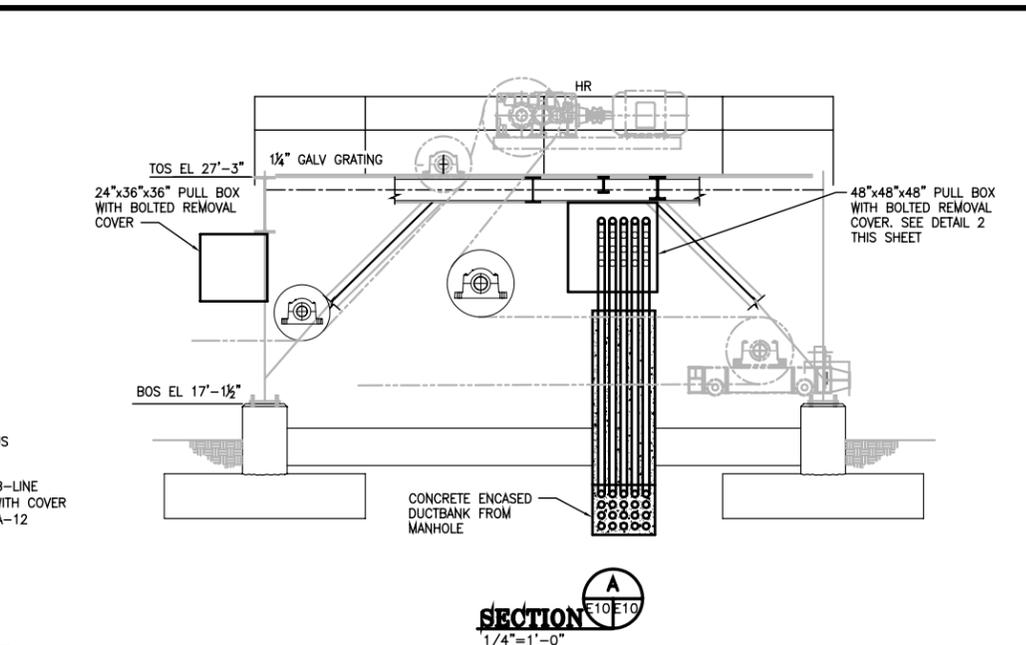
REV.	DATE	DESCRIPTION	BY
2	03/23/06	RECORD ISSUE	JJM
2	05/17/05	REVISED ELECT EQUIP ARRANGEMENT	JJM
1	03/24/05	GENERAL REVISIONS AND CLARIFICATIONS	HAC
0	02/22/05	ISSUED FOR CONSTRUCTION	HAC

<b>ALABAMA STATE PORT AUTHORITY</b>	
MOBILE	ALABAMA
 Gottlieb, Barnett & Bridges, LLC Consulting Engineers	
Drawn By: JJM	Date: 8/24/04
Checked By: BWH	Date: 10/08/04
Scale: N.T.S.	Job No. 1723
<b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b>	
<b>BARGE LOADOUT OPERATOR'S CAB</b>	
Drawing No. <b>E9</b>	REV. <b>2</b>



**CONVEYOR 'A' STRUCTURE**  
SCALE: 1/4"=1'-0"



**SHEET NOTES:**

1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
5. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP ALL TOWERS)
6. CONTRACTOR SHALL MODIFY THE EXISTING CABLE TRAY MOUNTED ON CONVEYOR "B" FOR THE INSTALLATION OF CONVEYOR "A" DRIVE STRUCTURE.
7. CABLE TRAY SHALL BE INSTALLED AS REQUIRED BY "NEMA VE 1-1998-METALLIC CABLE TRAY" AND "NEMA VE 2-2000-CABLE TRAY INSTALLATION GUIDELINES".
8. CONTRACTOR SHALL FURNISH AND INSTALL COVERS, GROUNDING JUMPERS, END PLATES, VOLTAGE DIVIDERS, BENDS AND SUPPORT BRACKETS FOR ALL CABLE TRAY INSTALLATIONS.

**REFERENCE**

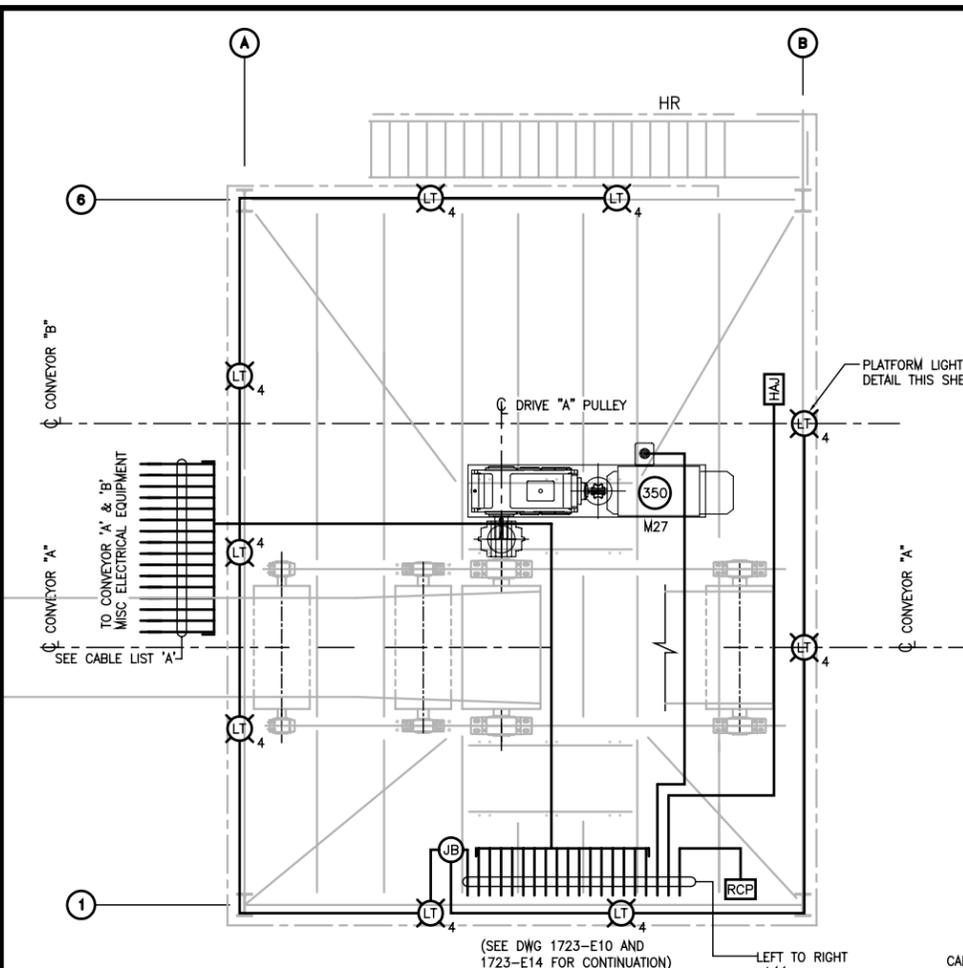
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0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR "A" CABLE TRAY LAYOUT**

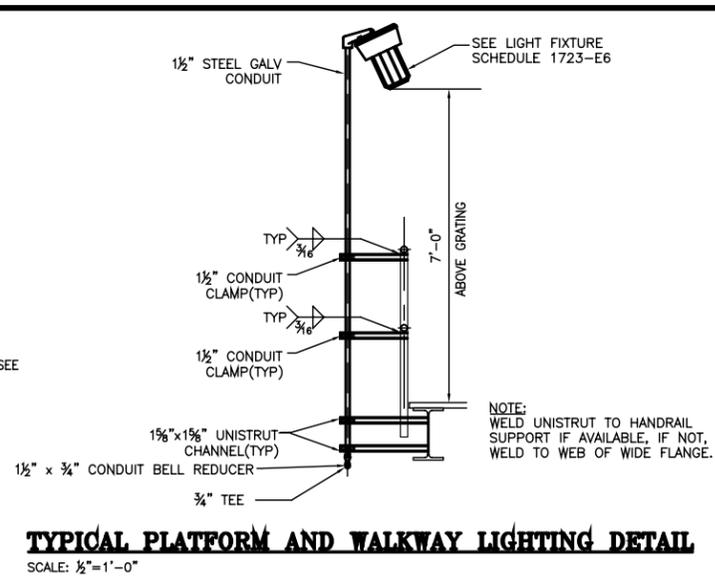
Drawn By: JJM Date: 10/29/04  
Checked By: BWH Date: 10/29/04  
Scale: 1/4"=1'-0" Job No. 1723 Drawing No. E10 REV. 0



**CONVEYOR 'A' STRUCTURE**  
SCALE: 1/4"=1'-0"

- LEFT TO RIGHT
- L11
  - F35 (RR5)
  - F36 (RR6)
  - F37 (RR7)
  - F38 (RR8)
  - F39 (RR9)
  - F40 (RR10)
  - F41 (RR11)
  - F42 (RR12)
  - F43 (PSI)
  - F44 (RR14)
  - F45 (RR15)
  - F46 (RR16)
  - F47 (RR17)
  - C69
  - C74
  - C76
  - C2
  - F28 (M1)
  - C1
  - RP1

- CABLE LIST 'A'
- F35 (RR5)
  - F36 (RR6)
  - F37 (RR7)
  - F38 (RR8)
  - F39 (RR9)
  - F40 (RR10)
  - F41 (RR11)
  - F42 (RR12)
  - F43 (PSI)
  - F44 (RR14)
  - F45 (RR15)
  - F46 (RR16)
  - F47 (RR17)
  - C69
  - C74
  - C76
  - C2



**SHEET NOTES:**

1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
5. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
7. ALL EQUIPMENT SHALL BE GROUNDING AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
8. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH BENT. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO BENT AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF BENT AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE BENT. (TYP ALL BENTS)
9. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP ALL TOWERS)
10. CONTRACTOR SHALL MODIFY THE STACKER 5KV FEED CONDUIT TO ALLOW FOR THE MODIFICATION/INSTALLATION OF CONVEYOR 'A' DRIVE STRUCTURE. CONTRACTOR SHALL ROUTE A NEW 5KV STACKER FEED CONDUIT FROM THE ELECTRICAL BUILDING 'TS' TO THE MODIFIED 5KV STACKER FEED CONDUIT. THE NEW 5KV STACKER FEED CONDUIT SHALL BE RGM FROM THE ELECTRICAL BUILDING TO THE MODIFIED 5KV STACKER FEED CONDUIT. CONTRACTOR, MAY, INSTALL THE 5KV STACKER FEED CONDUIT IN A CONCRETE ENCASED DUCTBANK BUT CANNOT ROUTE THROUGH THE NEW MANHOLE WITHOUT ISOLATING FROM THE LOW VOLTAGE AND CONTROL CONDUCTORS. 5KV STACKER FEED, F30, SHALL BE RE-ROUTED IN THE CONDUIT.
11. CABLE ROUTING IS DIAGRAMMATIC FOR CLARITY. CABLE ROUTING SHALL USE CABLE TRAY WHERE POSSIBLE AND RGS CONDUIT IN ALL OTHER LOCATIONS. CABLE INSTALLATION SHOULD FOLLOW SEGREGATION AS REQUIRED TO ELIMINATE NOISE IN CONTROL WIRING.

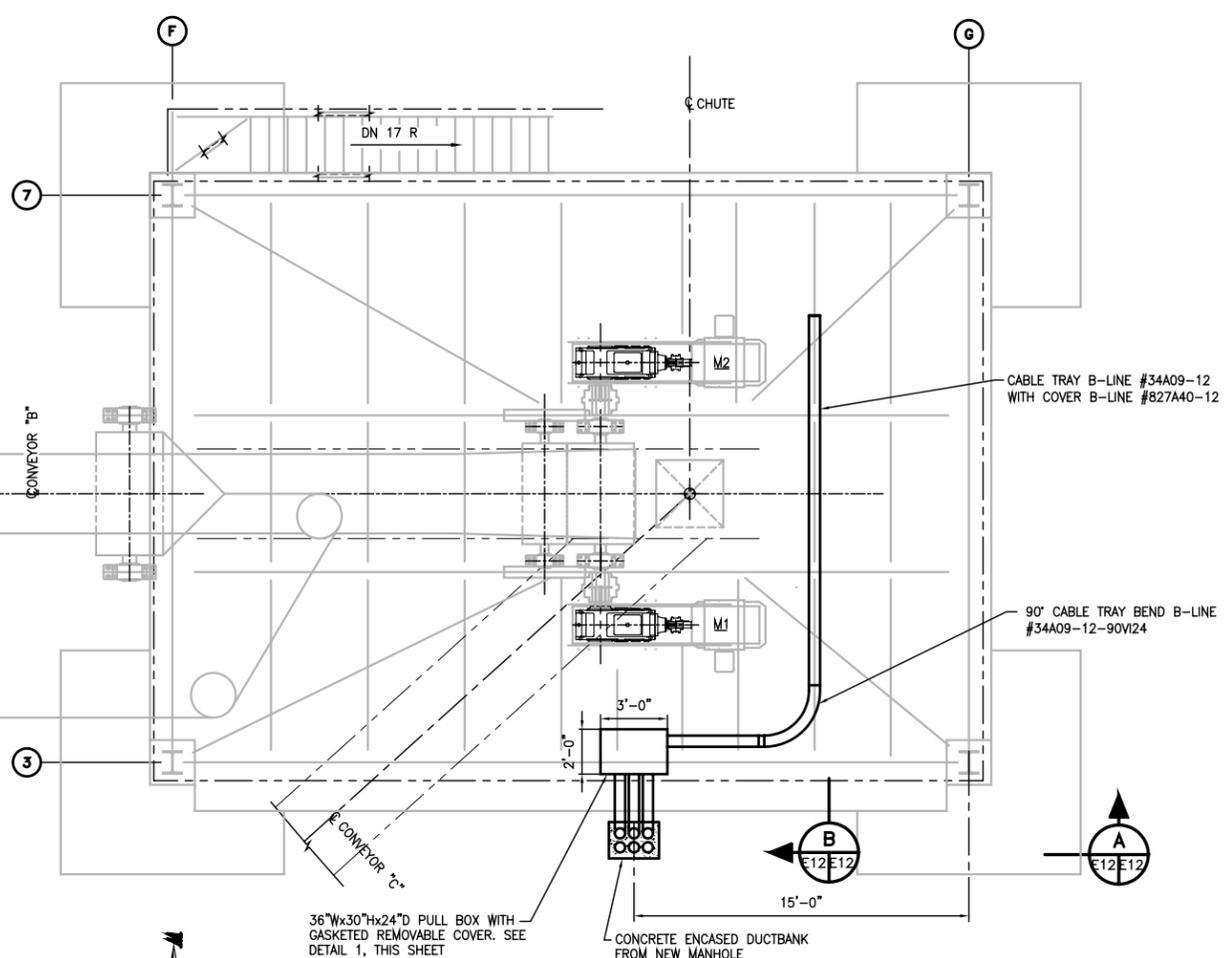
**SYMBOL LEGEND**

- 5-LT HANDRAIL MTD SEE LIGHT FIXTURE SCHEDULE 1723-E6
- JB JUNCTION BOX WATERTIGHT
- 150 ELECT MOTOR H.P. SHOWN
- RCP RECEPTACLE SURFACE MTD WATERTIGHT
- HAJ HAND/OFF/AUTO SELECTOR SWITCH W/ JOG PUSHBUTTON WATERTIGHT STOP PUSHBUTTON W/LOCKOUT

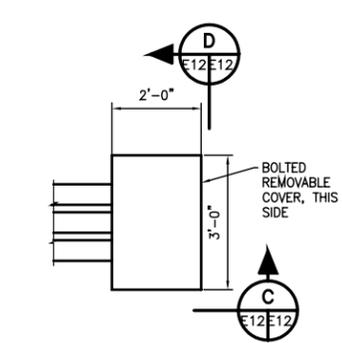
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0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM
REV.	DATE	DESCRIPTION	BY
<p><b>ALABAMA STATE PORT AUTHORITY</b> MOBILE ALABAMA</p>			
<p><b>GIBB</b> Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>			
Drawn By:	JJM	Date:	10/29/04
Checked By:	BWH	Date:	10/29/04
Scale:	NOTED	Job No.	1723
			Drawing No.
			<b>E11</b>
			REV. <b>0</b>

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION CONVEYOR 'A' ELECTRICAL LAYOUT**

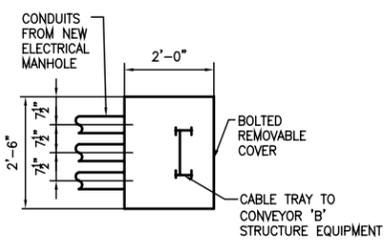


**CONVEYOR 'B' DRIVE STRUCTURE**  
SCALE: 3/4"=1'-0"



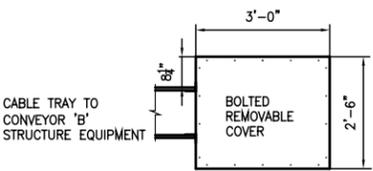
PULL BOX SHALL BE GALV STEEL CAPABLE OF SUPPORTING CONDUITS SHOWN.  
PULL BOX SHALL BE MOUNTED TO CONVEYOR 'A' STRUCTURE STEEL AS REQUIRED.  
PROVIDE (4)FOUR 1/4" DRAIN HOLES IN BOTTOM OF PULL BOX.

**DETAIL 1**  
1/2"=1'-0"

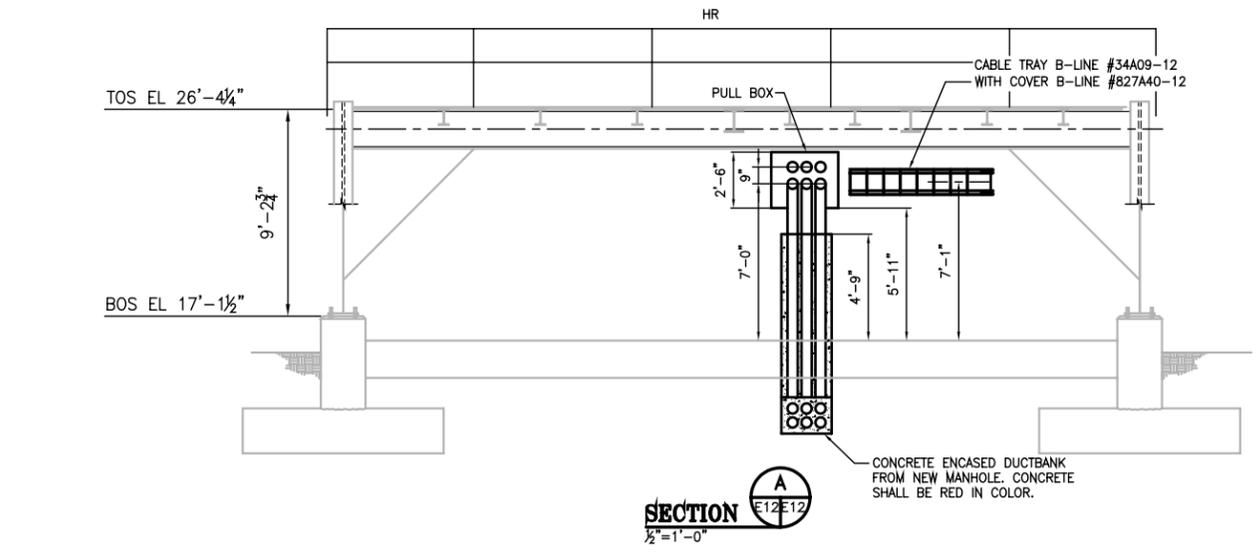


PULL BOX SHALL HAVE A BOLTED REMOVAL GASKETED COVER.

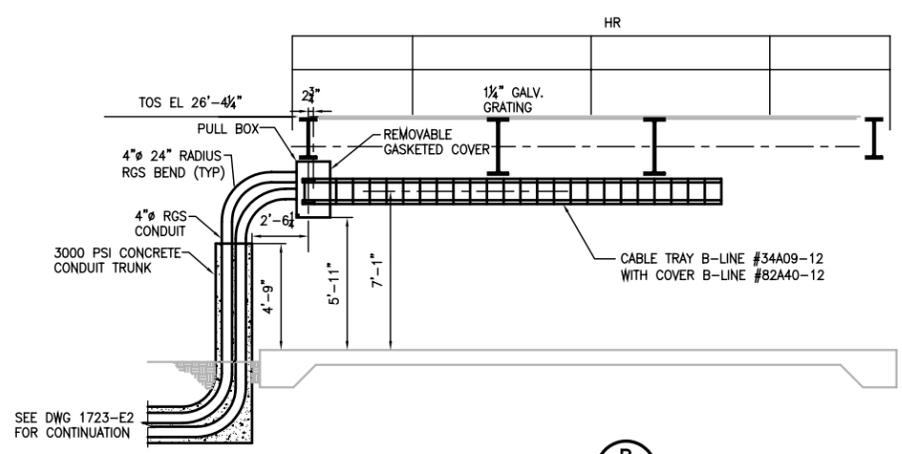
**SECTION C**  
1/2"=1'-0"



**SECTION D**  
1/2"=1'-0"



**SECTION A**  
1/2"=1'-0"



**SECTION B**  
1/2"=1'-0"

CONTRACTOR SHALL SUPPORT CABLE TRAY AND PULL BOX FROM CONVEYOR 'B' SUPPORT STRUCTURE.

**SHEET NOTES:**

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- THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
- ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
- ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- CONTRACTOR SHALL PROVIDE GROUNDING AT EACH BENT. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH BENT. THE GROUND ROD SHALL BE PLACED AS CLOSE TO BENT AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF BENT AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE BENT. (TYP ALL BENTS)
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- CABLE TRAY SHALL BE INSTALLED AS REQUIRED BY "NEMA VE 1-1998-METALLIC CABLE TRAY" AND "NEMA VE 2-2000-CABLE TRAY INSTALLATION GUIDELINES".
- CONTRACTOR SHALL FURNISH AND INSTALL COVERS, GROUNDING JUMPERS, END PLATES, VOLTAGE DIVIDERS, BENDS AND SUPPORT BRACKETS FOR ALL CABLE TRAY INSTALLATIONS.

**REFERENCE**

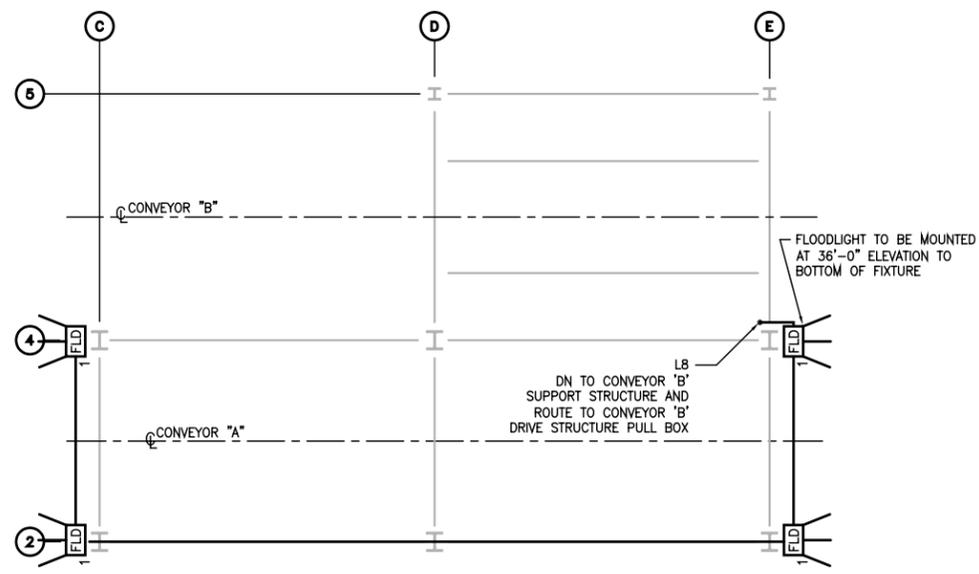
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**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR 'B' CABLE TRAY LAYOUT**

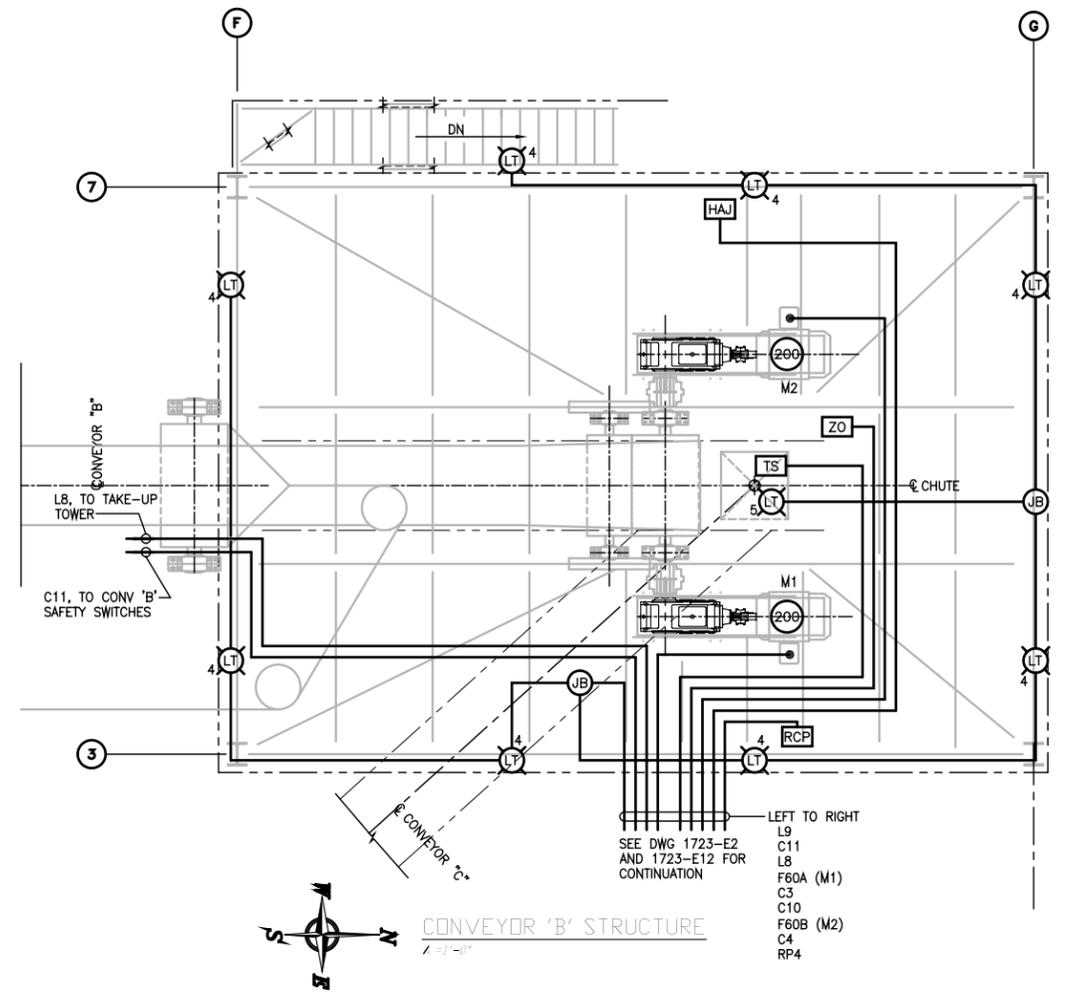
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Checked By: BWH Date: 10/29/04  
Scale: 1/4"=1'-0" Job No. 1723 Drawing No. E12 REV. 0



**CONVEYOR 'A' & 'B' TAKE-UP TOWER**  
SCALE: 1/4"=1'-0"

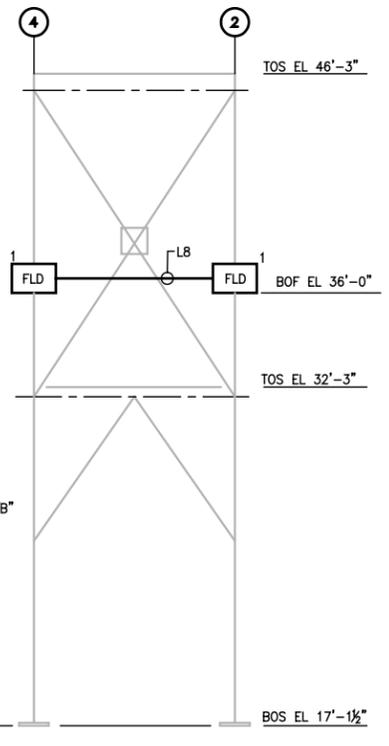
**SYMBOL LEGEND**

- 5 (LT) LIGHT FIXTURE SEE LIGHT FIXTURE SCHEDULE 1723-E6
- (ZO) ZERO SPEED SENSOR
- (JB) JUNCTION BOX WATERTIGHT
- (TS) TILT/PLUG CHUTE SWITCH
- (M) ELECT MOTOR H.P. SHOWN
- (RCP) RECEPTACLE SURFACE MTD WATERTIGHT
- (HAJ) HAND/OFF/AUTO SELECTOR SWITCH W/ JOG PUSHBUTTON, WATERTIGHT
- 1 (FLD) FLOODLIGHT, SEE LIGHT FIXTURE SCHEDULE 1723-E6

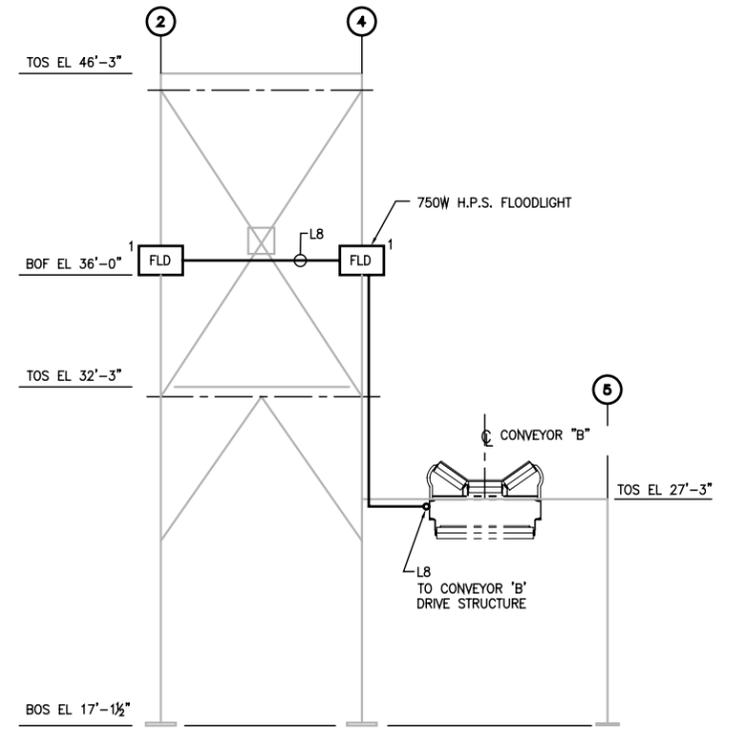


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3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
5. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
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**ELEVATION @ COLUMN LINE C**  
SCALE: 1/4"=1'-0"



**ELEVATION @ COLUMN LINE E**  
SCALE: 1/4"=1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
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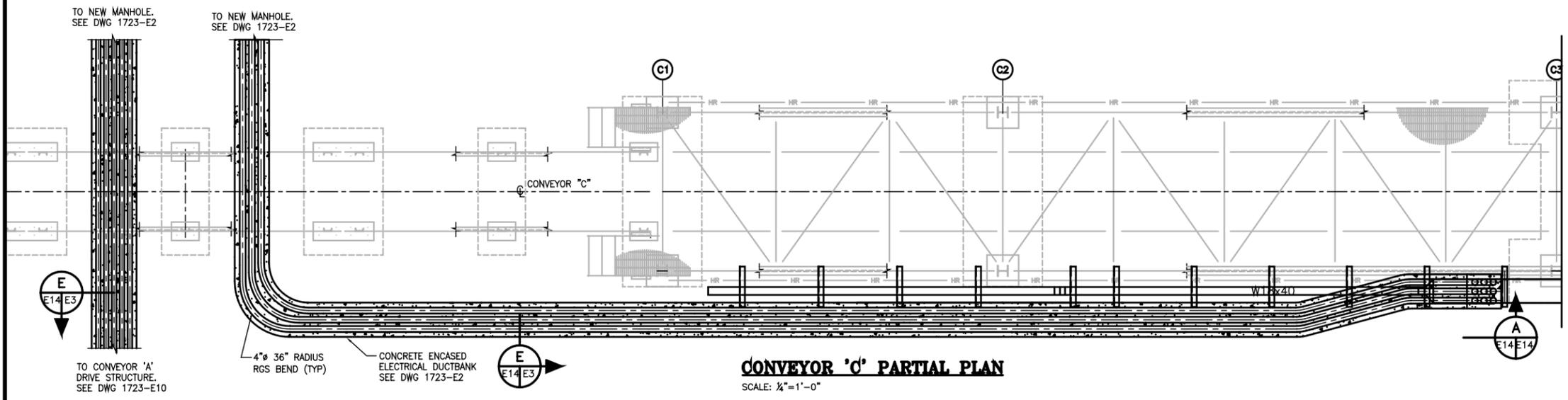
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

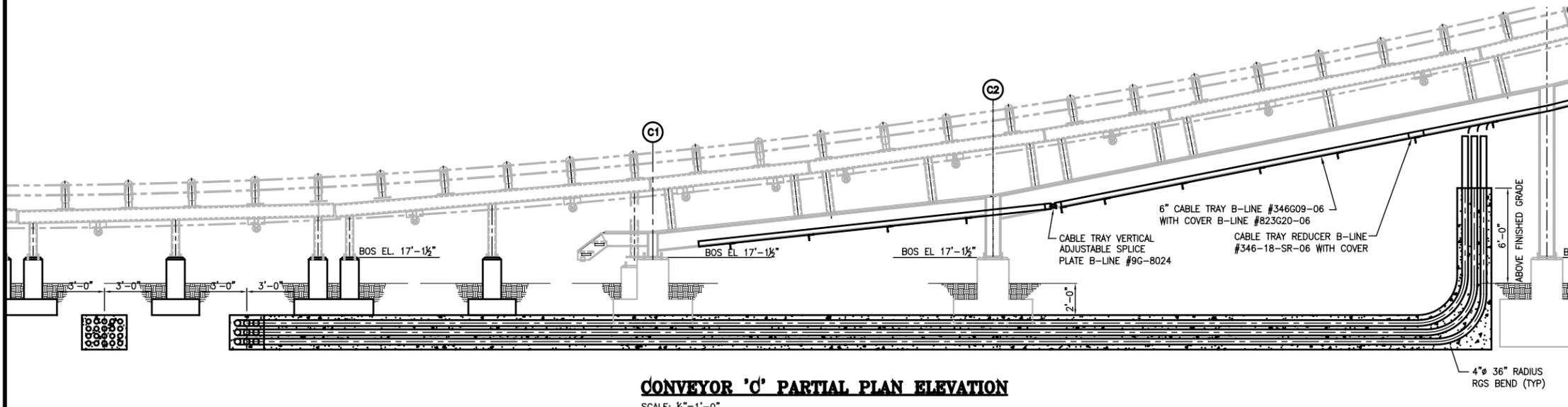
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**CONVEYOR "B" ELECTRICAL LAYOUT**

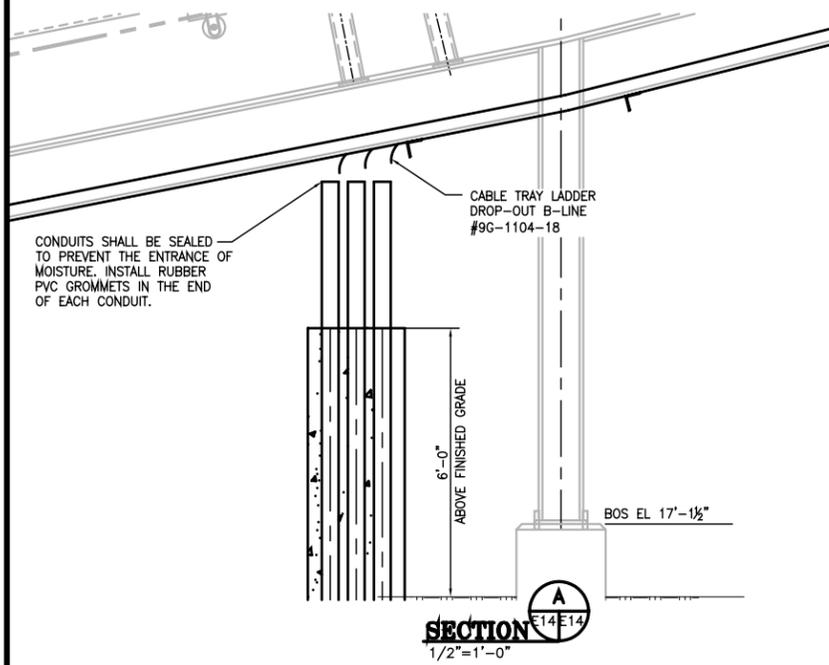
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Checked By: BWH Date: 10/29/04  
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**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 1/4"=1'-0"



**CONVEYOR 'C' PARTIAL PLAN ELEVATION**  
SCALE: 1/4"=1'-0"



**SECTION**  
1/2"=1'-0"

MATCH LINE 'A-A' CONT ON DWG 1723-E15

**PROJECT NOTES:**

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7. CONTRACTOR SHALL FURNISH AND INSTALL COVERS, GROUNDING JUMPERS, END PLATES, VOLTAGE DIVIDERS, BENDS AND SUPPORT BRACKETS FOR ALL CABLE TRAY INSTALLATIONS.

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**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

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Drawn By: JJM Date: 10/29/04

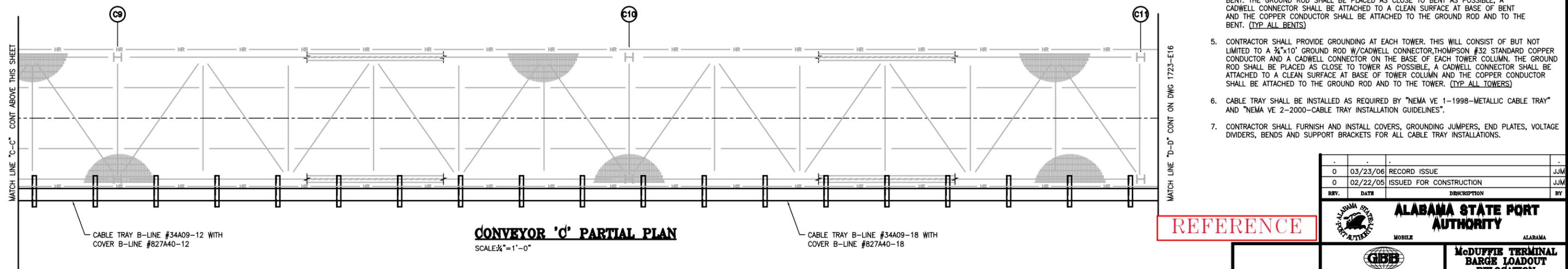
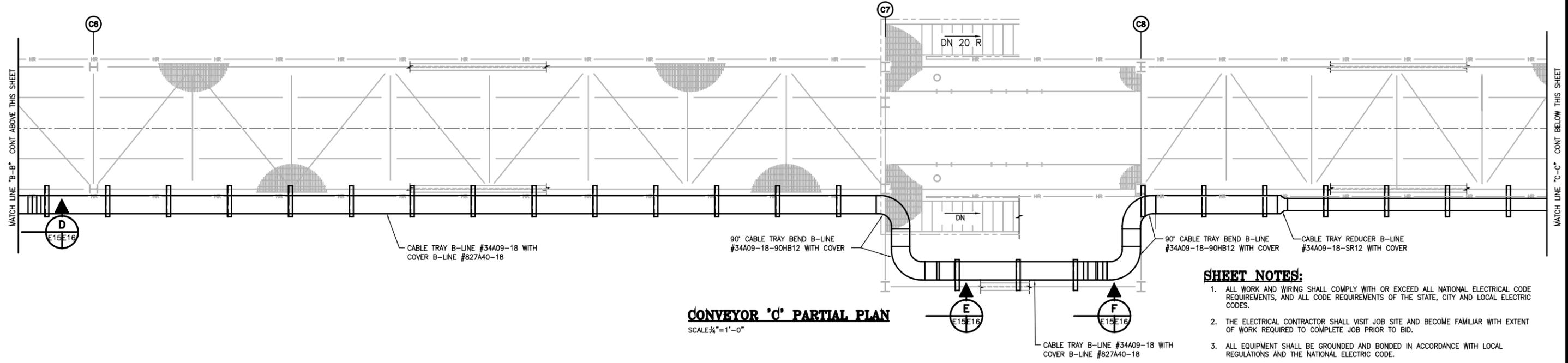
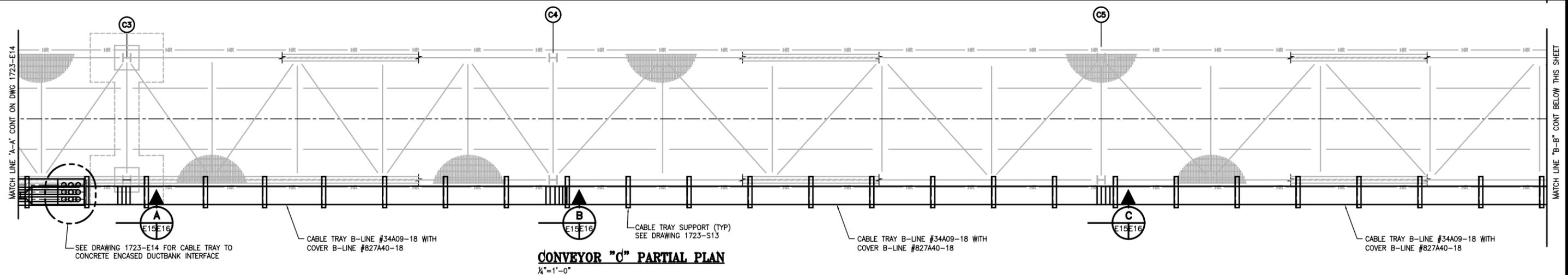
Checked By: BWH Date: 10/29/04

Scale: 1/4"=1'-0" Job No. 1723

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**CONVEYOR 'C' CABLE TRAY PARTIAL PLAN**

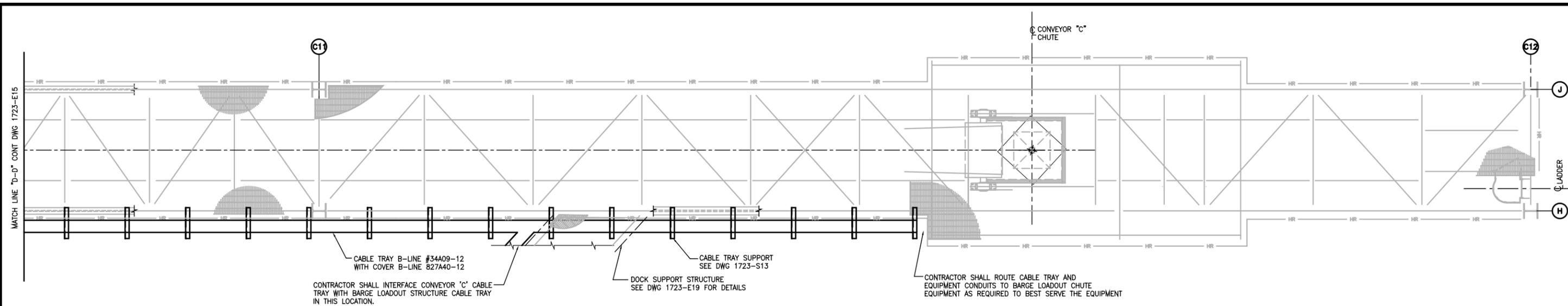
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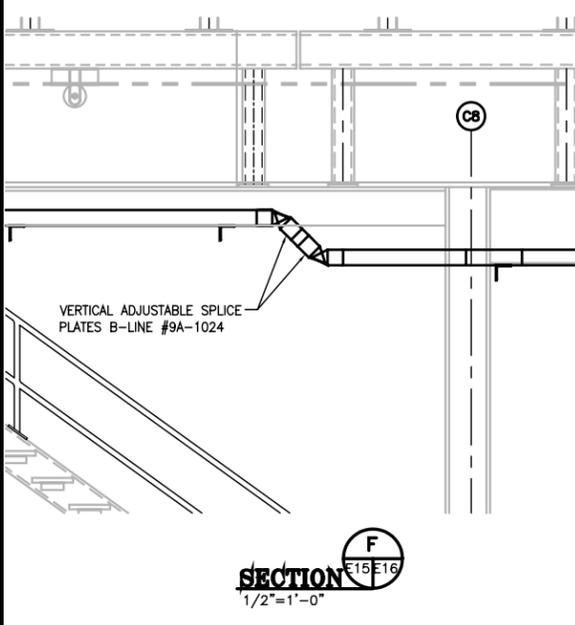
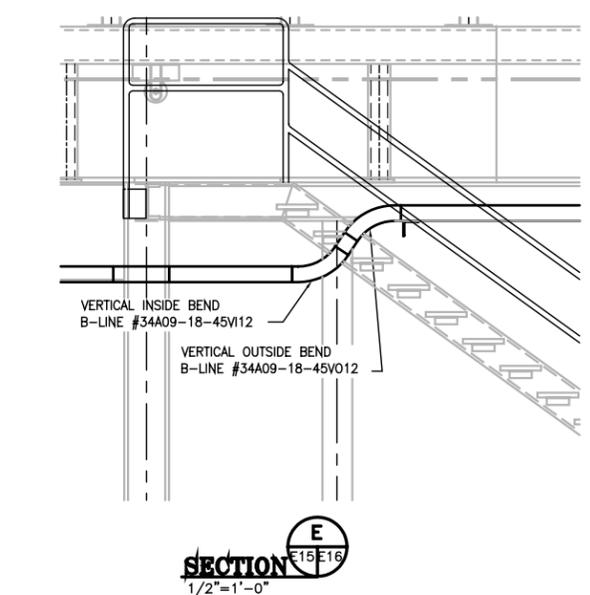
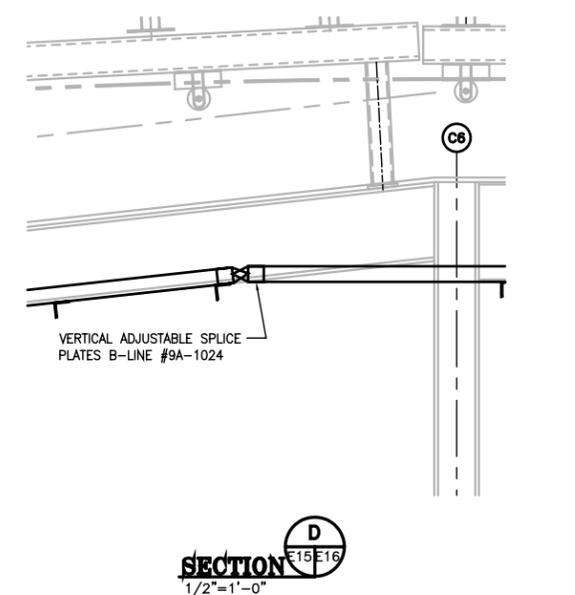
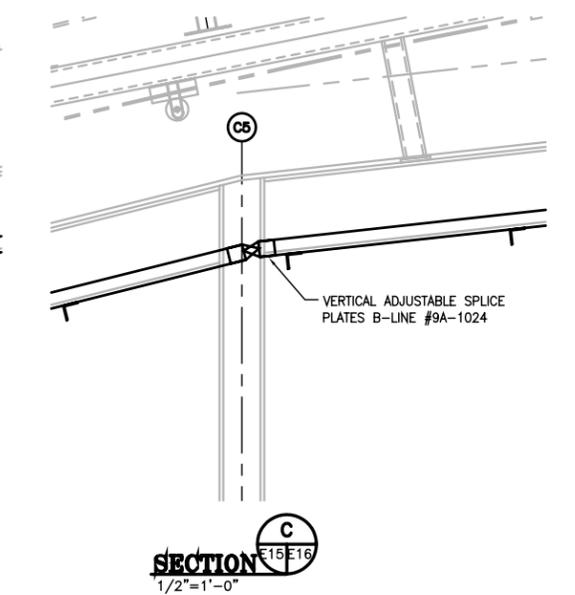
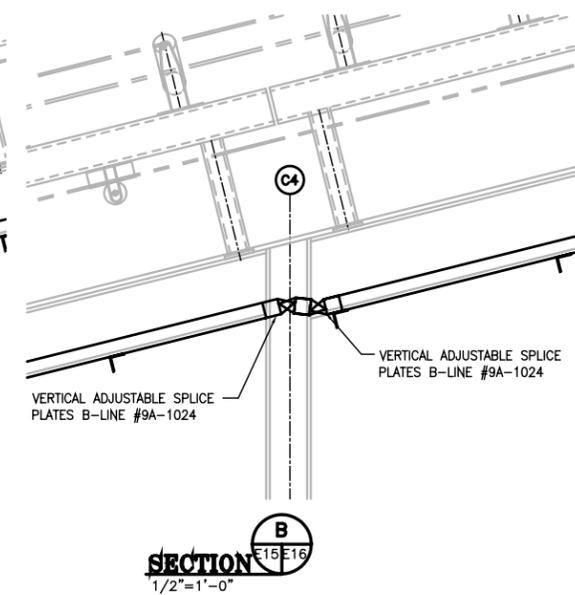
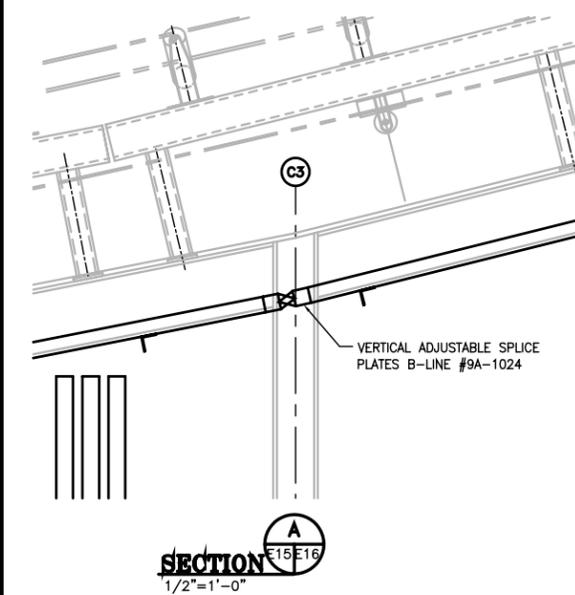
- SHEET NOTES:**
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<b>GIBB</b> Gottlieb, Barnett & Bridges, LLC Consulting Engineers			
Drawn By:	JJM	Date:	10/29/04
Checked By:	BWH	Date:	10/29/04
Scale:	1/4"=1'-0"	Job No.:	1723
			Drawing No. <b>E15</b>
			REV. <b>0</b>



**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 3/4"=1'-0"



**SHEET NOTES:**

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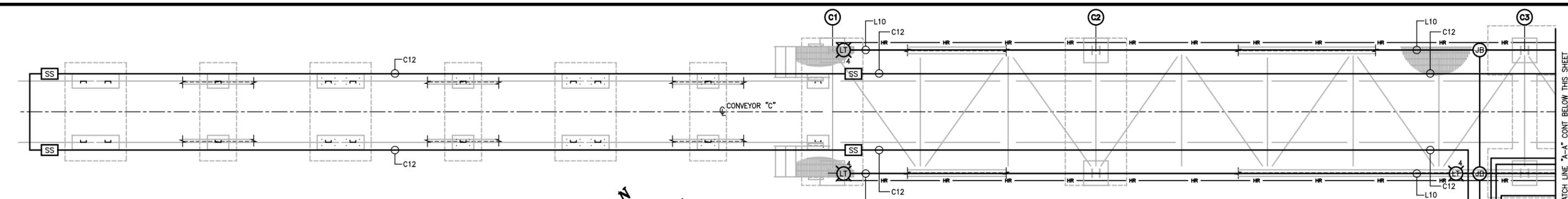
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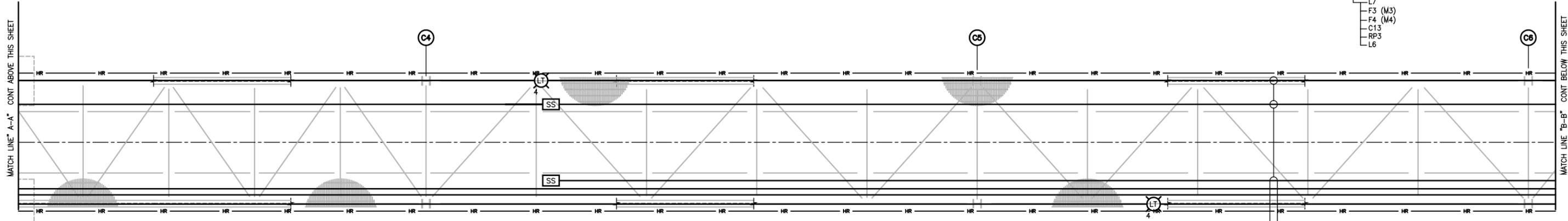
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR 'C' CABLE TRAY PARTIAL PLAN**

Drawn By: JJM Date: 10/29/04  
Checked By: BWH Date: 10/29/04  
Scale: NOTED Job No. 1723 Drawing No. E16 REV. 0



**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 1/4"=1'-0"

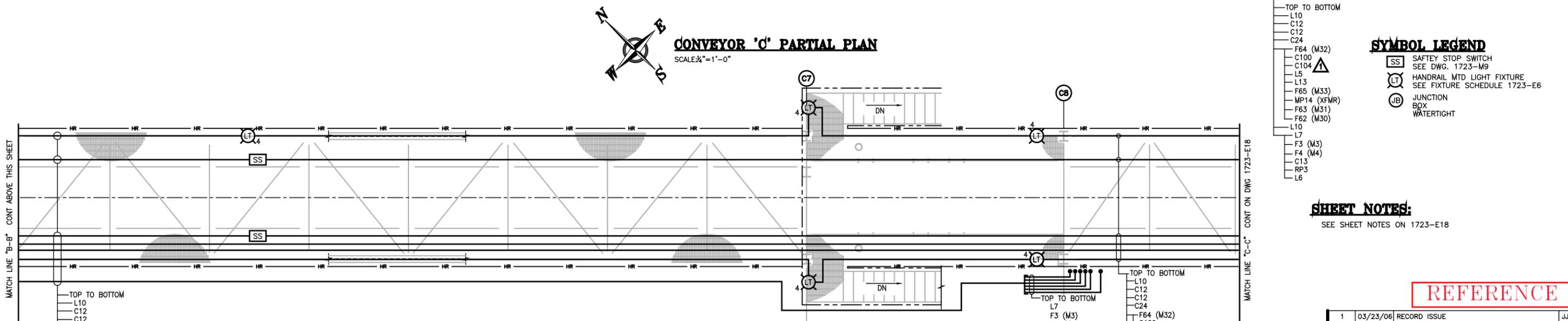
- LEFT TO RIGHT  
 C12  
 L10  
 C24  
 F64 (M32)  
 C100  
 C104  
 L5  
 L13  
 F65 (M33)  
 MP14 (XFMR)  
 F63 (M31)  
 F62 (M30)  
 L7  
 F3 (M3)  
 F4 (M4)  
 C13  
 RP3  
 L6
- DOWN TO DUCTBANK  
 SEE DWG 1723-E14  
 FOR DUCTBANK DETAILS  
 AND LOCATION



**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 1/4"=1'-0"

- TOP TO BOTTOM  
 L10  
 C12  
 C12  
 C24  
 F64 (M32)  
 C100  
 C104  
 L5  
 L13  
 F65 (M33)  
 MP14 (XFMR)  
 F63 (M31)  
 F62 (M30)  
 L7  
 F3 (M3)  
 F4 (M4)  
 C13  
 RP3  
 L6
- SYMBOL LEGEND**
- SS SAFETY STOP SWITCH  
SEE DWG. 1723-M9
  - LT HANDRAIL MTD LIGHT FIXTURE  
SEE FIXTURE SCHEDULE 1723-E6
  - JB JUNCTION BOX  
WATERTIGHT

**SHEET NOTES:**  
 SEE SHEET NOTES ON 1723-E18



**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 1/4"=1'-0"

- TOP TO BOTTOM  
 L10  
 C12  
 C12  
 C24  
 F64 (M32)  
 C100  
 C104  
 L5  
 L13  
 F65 (M33)  
 MP14 (XFMR)  
 F63 (M31)  
 F62 (M30)  
 L7  
 F3 (M3)  
 F4 (M4)  
 C13  
 RP3  
 L6

- TOP TO BOTTOM  
 L7  
 F3 (M3)  
 F4 (M4)  
 C13  
 RP3  
 L6

- TOP TO BOTTOM  
 L10  
 C12  
 C12  
 C24  
 F64 (M32)  
 C100  
 C104  
 L5  
 L13  
 F65 (M33)  
 MP14 (XFMR)  
 F63 (M31)  
 F62 (M30)  
 L10

**REFERENCE**

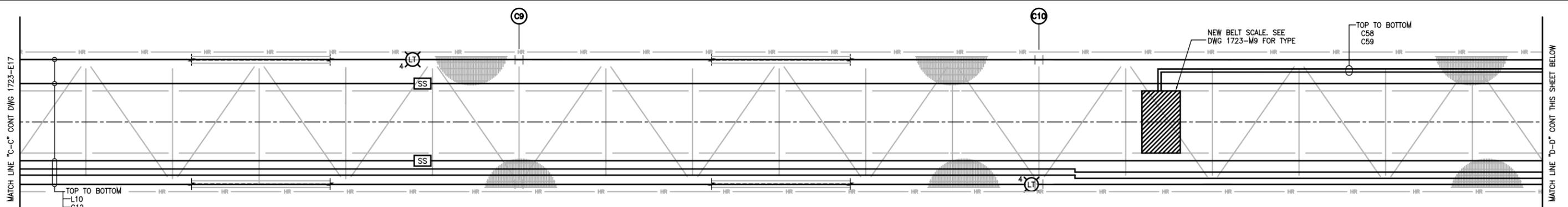
REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	JJM
1	05/31/05	ADDED CONTROL CKT C104	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

**ALABAMA STATE PORT AUTHORITY**  
 MOBILE ALABAMA

**GIBB**  
 Gottlieb, Barnett & Bridges, LLC  
 Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR 'C' PLANS & ELEVATIONS**

Drawn By: JJM Date: 10/29/04  
 Checked By: BWH Date: 10/29/04  
 Scale: 1/4"=1'-0" Job No. 1723 Drawing No. E17 REV. 1



**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 3/4"=1'-0"

**SYMBOL LEGEND**

- SS SAFETY STOP SWITCH SEE DWG. 1723-M9
- 5 LT HANDRAIL MTD LIGHT FIXTURE SEE FIXTURE SCHEDULE 1723-E6
- JB JUNCTION BOX WATERTIGHT
- TS TILT/PLUG CHUTE SWITCH SEE DETAIL 4, DWG 1723-M12
- 150 ELECT MOTOR H.P. SHOWN
- SV SOLENOID VALVE
- LS LIMIT SWITCH
- RCP RECEPTACLE SURFACE MTD WATERTIGHT
- H/AJ HAND/OFF/AUTO SELECTOR SWITCH WITH JOG PUSHBUTTON, WATERTIGHT
- FLD FLOODLIGHT, SEE LIGHT FIXTURE FOR TYPE. TYPE LISTED

- TOP TO BOTTOM
- L10
  - C12
  - C12
  - C24
  - F64 (M32)
  - C100
  - C104
  - L5
  - L13
  - F65 (M33)
  - MP14 (XFMR)
  - F63 (M31)
  - F62 (M30)
  - L10

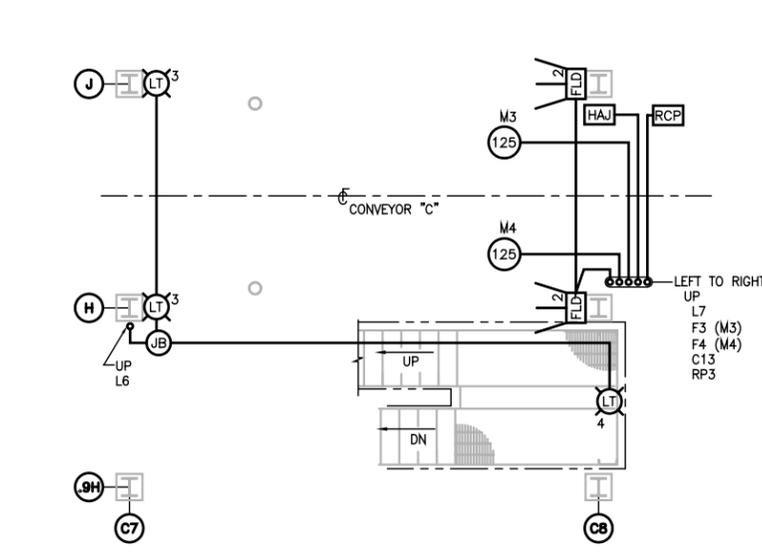
- LEFT TO RIGHT
- F64 (M32)
  - C100
  - C104
  - L5
  - L13
  - F65 (M33)
  - MP14 (10KVA XFMR)
  - F63 (M31)
  - F62 (M30)
  - C58
  - C59
  - C99
  - F62A (M30)

- TOP TO BOTTOM
- L10
  - C12
  - C12
  - C24
  - C99
  - F62A (M30)
  - L10

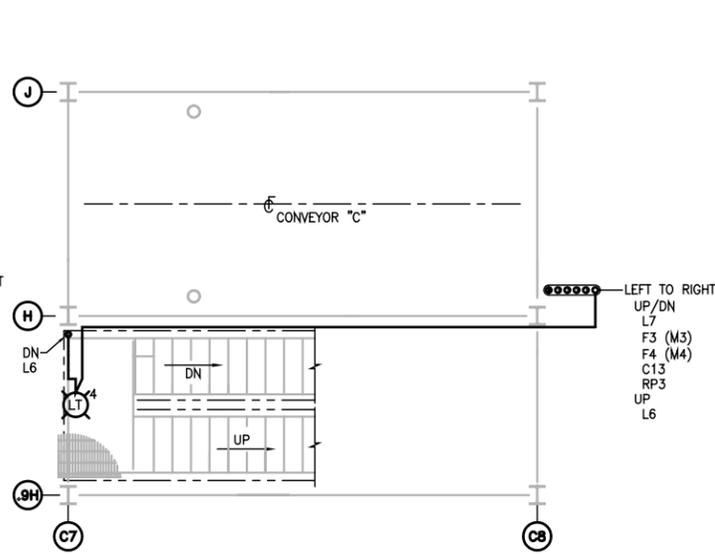
**CONVEYOR 'C' PARTIAL PLAN**  
SCALE: 3/4"=1'-0"

**SHEET NOTES:**

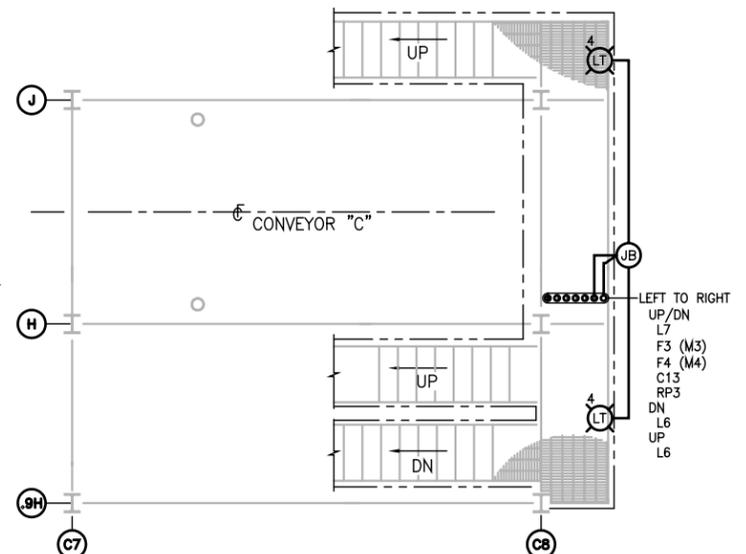
1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
5. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
7. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
8. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH BENT. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10" GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH BENT. THE GROUND ROD SHALL BE PLACED AS CLOSE TO BENT AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF BENT AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE BENT. (TYP ALL BENTS)
9. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10" GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP ALL TOWERS)
10. CABLE ROUTING IS DIAGRAMMATIC FOR CLARITY. CABLE ROUTING SHALL USE CABLE TRAY WHERE POSSIBLE AND RGS CONDUIT IN ALL OTHER LOCATIONS. CABLE INSTALLATION SHOULD FOLLOW SEGREGATION AS REQUIRED TO ELIMINATE NOISE IN CONTROL WIRING.



**CONVEYOR 'C' DRIVE STRUCTURE ELEV. 17'-1 1/2" PLAN**  
SCALE: 3/4"=1'-0"



**CONVEYOR 'C' DRIVE STRUCTURE ELEV. 27'-8" PLAN**  
SCALE: 3/4"=1'-0"



**CONVEYOR 'C' DRIVE STRUCTURE ELEV. 39'-8" PLAN**  
SCALE: 3/4"=1'-0"

REV.	DATE	DESCRIPTION	BY
1	03/23/06	RECORD ISSUE	JJM
1	05/31/05	ADDED CONTROL CKT C104	JJM
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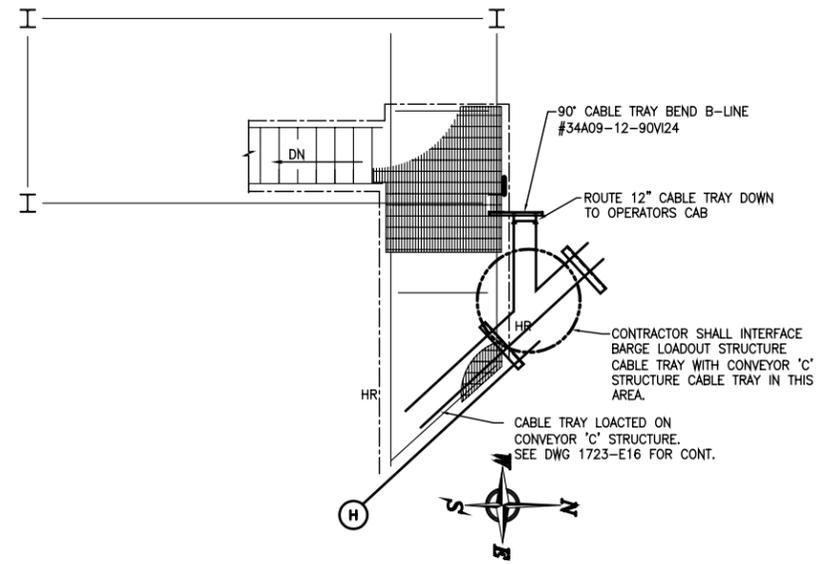
**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

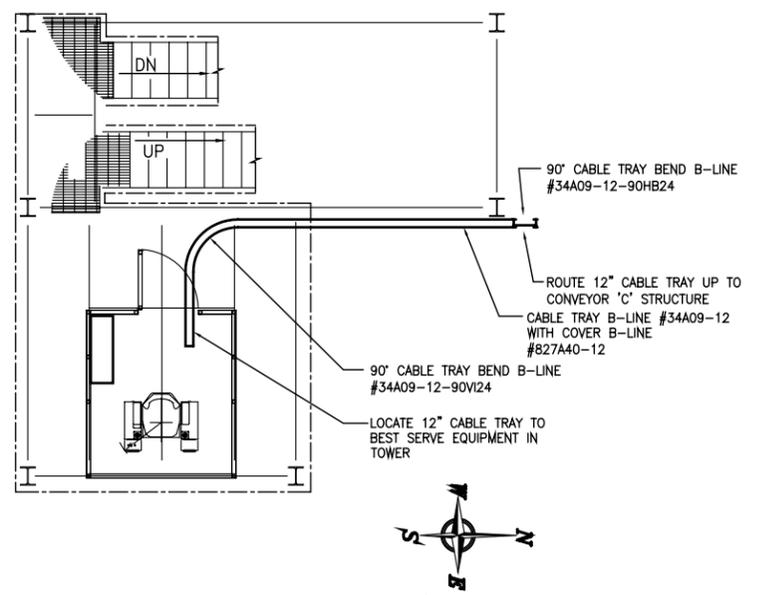
**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**CONVEYOR 'C' PARTIAL PLANS**

Drawn By: JJM Date: 10/29/04  
Checked By: BWH Date: 10/29/04  
Scale: NOTED Job No. 1723 Drawing No. E18

**REFERENCE**



**OPERATORS CAB STRUCTURE EL. 58'-8"**  
SCALE: 3/4" = 1'-0"



**OPERATORS CAB STRUCTURE EL. 25'-5"**  
SCALE: 3/4" = 1'-0"

**SHEET NOTES:**

1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-ES. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
5. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
7. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
8. CONTRACTOR SHALL PROVIDE GROUNDED AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP. ALL TOWERS)
9. CONTRACTOR SHALL VERIFY ALL CABLE TRAY COMPONENTS PRIOR TO PROCUREMENT. CABLE TRAYS LISTED ON DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR CAN SUBMIT AN 'OR EQUAL' TO THE CABLE TRAY SHOWN. CONTRACTOR SHALL SUBMIT ALL CABLE TRAY COMPONENTS FOR APPROVAL.
10. CABLE TRAY SHALL BE INSTALLED AS REQUIRED BY "NEMA VE 1-1998-METALLIC CABLE TRAY" AND "NEMA VE 2-2000-CABLE TRAY INSTALLATION GUIDELINES".
11. CONTRACTOR SHALL FURNISH AND INSTALL COVERS, GROUNDED JUMPERS, END PLATES, VOLTAGE DIVIDERS, BENDS AND SUPPORT BRACKETS FOR ALL CABLE TRAY INSTALLATIONS.

**REFERENCE**

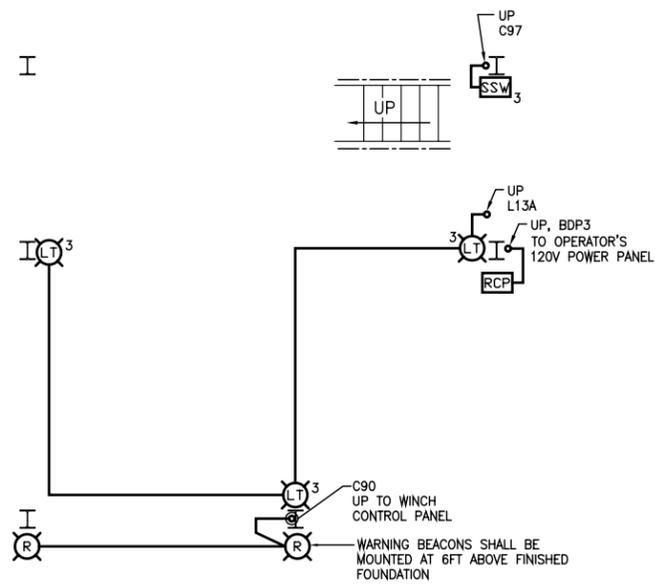
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	BWH
0	02/22/05	ISSUED FOR CONSTRUCTION	BWH

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

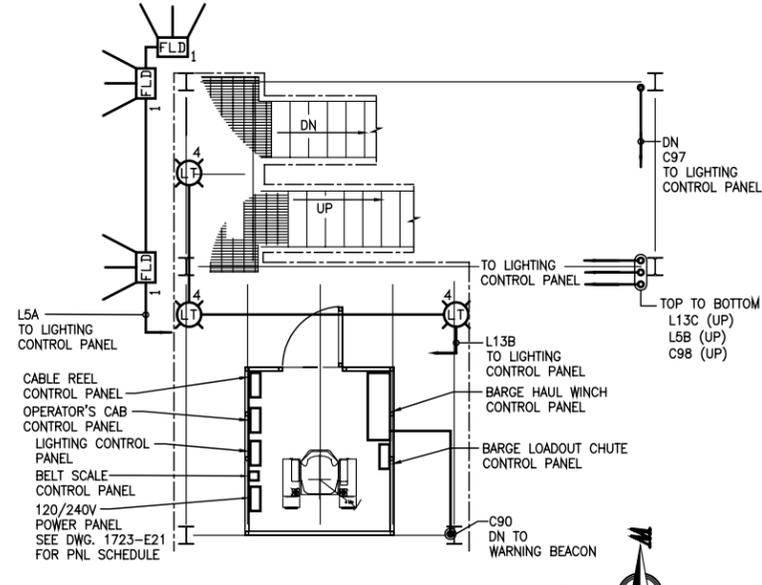
**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION OPERATOR'S CAB SUPPORT STRUCTURE CABLE TRAY LAYOUT**

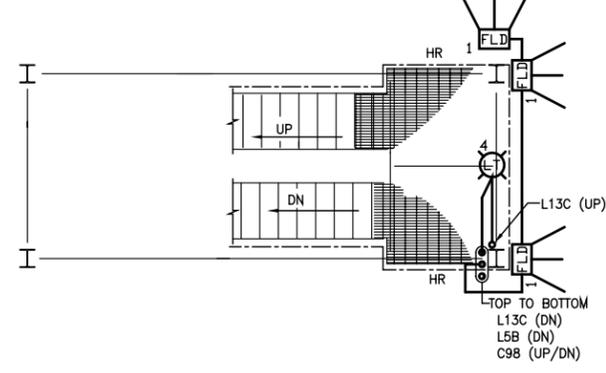
Drawn By: JJM Date: 07/13/04  
Checked By: BWH Date: 10/07/04  
Scale: 1/4" = 1'-0" Job No. 1723 Drawing No. E19 REV. 0



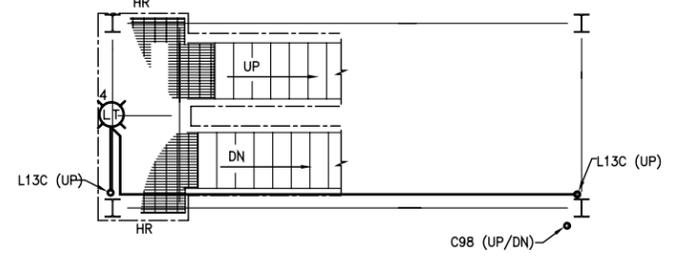
**PLAN @ ELEVATION 14'-6 1/2"**  
SCALE: 3/4" = 1'-0"



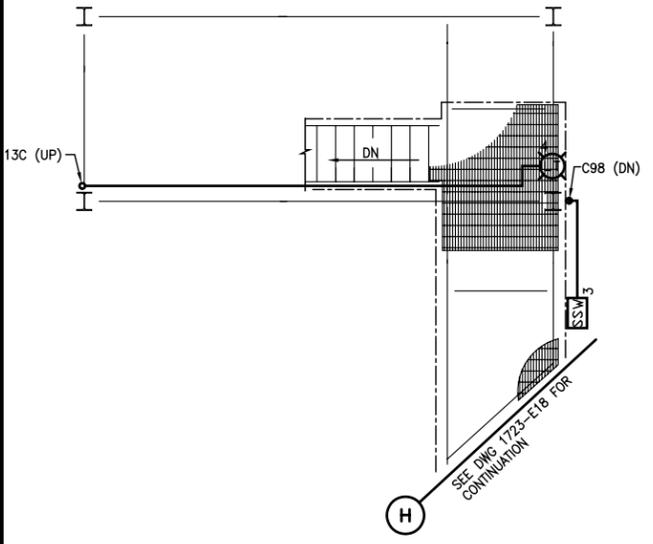
**PLAN @ ELEVATION 25'-5"**  
SCALE: 3/4" = 1'-0"



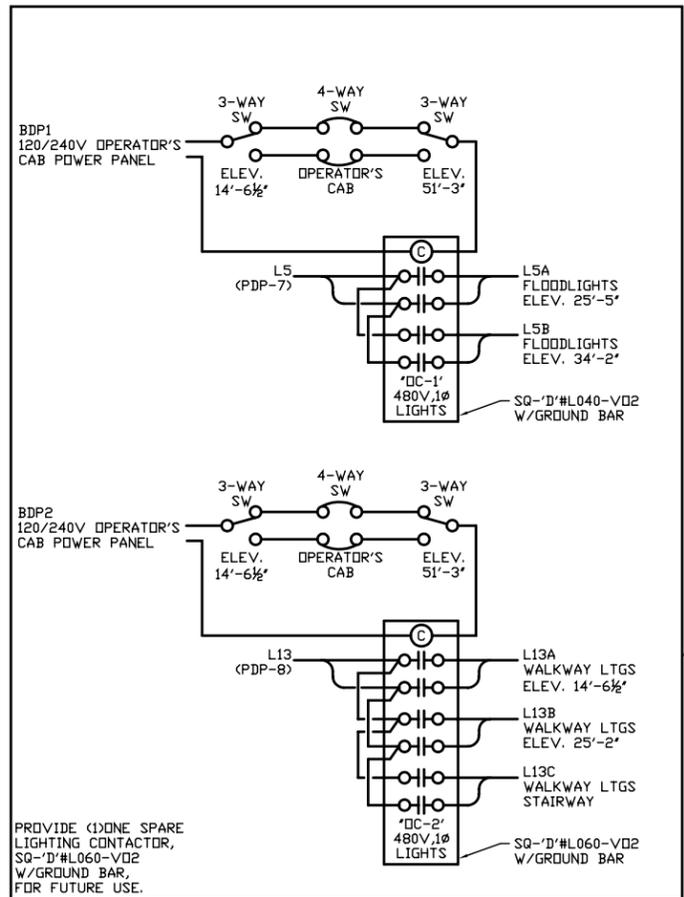
**PLAN @ ELEVATION 34'-2"**  
SCALE: 3/4" = 1'-0"



**PLAN @ ELEVATION 42'-11"**  
SCALE: 3/4" = 1'-0"



**PLAN @ ELEVATION 51'-8"**  
SCALE: 3/4" = 1'-0"



**LIGHTING CONTROL PANEL**

**SYMBOL LEGEND**

- 1 HANDRAIL MTD LIGHT FIXTURE SEE DWG 1723-E6, FIXTURE SCHEDULE
- ZERO SPEED SENSOR
- JUNCTION BOX WATERTIGHT
- RECEPTACLE SURFACE MTD WATERTIGHT
- 3 (2) 3-WAY 15A LIGHT SWITCHES IN WATERTIGHT ENCLOSURE
- 1 FLOODLIGHT, SEE DWG 1723-E6 FOR LIGHT FIXTURE SCHEDULE
- WARNING BEACON FEDERAL SIGNAL #371DST, 120V

**SHEET NOTES:**

1. ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
3. ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
4. FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
5. ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
6. ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
7. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
8. CONTRACTOR SHALL PROVIDE GROUNDING AT EACH TOWER. THIS WILL CONSIST OF BUT NOT LIMITED TO A 3/4"x10' GROUND ROD W/CADWELL CONNECTOR, THOMPSON #32 STANDARD COPPER CONDUCTOR AND A CADWELL CONNECTOR ON THE BASE OF EACH TOWER COLUMN. THE GROUND ROD SHALL BE PLACED AS CLOSE TO TOWER AS POSSIBLE, A CADWELL CONNECTOR SHALL BE ATTACHED TO A CLEAN SURFACE AT BASE OF TOWER COLUMN AND THE COPPER CONDUCTOR SHALL BE ATTACHED TO THE GROUND ROD AND TO THE TOWER. (TYP ALL TOWERS)
9. CABLE ROUTING IS DIAGRAMMATIC FOR CLARITY. CABLE ROUTING SHALL USE CABLE TRAY WHERE POSSIBLE AND RGS CONDUIT IN ALL OTHER LOCATIONS. CABLE INSTALLATION SHOULD FOLLOW SEGREGATION AS REQUIRED TO ELIMINATE NOISE IN CONTROL WIRING.

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

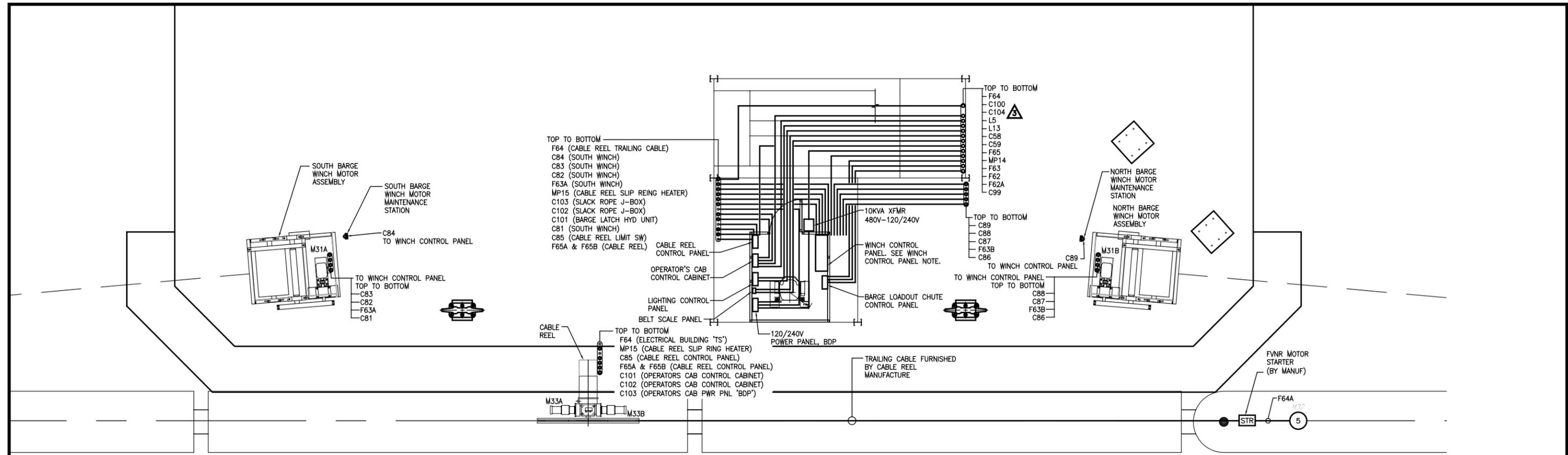
**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

Drawn By: JJM Date: 10/29/04  
Checked By: BWH Date: 10/29/04  
Scale: NOTED Job No. 1723 Drawing No. E20 REV. 0

**McDUFFIE TERMINAL  
BARGE LOADOUT  
RELOCATION  
OPERATOR'S CAB  
SUPPORT STRUCTURE  
ELECTRICAL LAYOUT**



**BARGE HAUL SYSTEM PLAN**  
SCALE: 1/4" = 1'-0"

**WINCH CONTROL PANEL NOTE:**

WINCH CONTROL PANEL SHALL BE FURNISHED WITH A TIMER RELAY TO ASSIST IN THE ACTIVATION OF THE CABLE REEL DRIVE. THE CABLE REEL SHALL BE ACTIVATED PRIOR TO THE WINCH MOTORS TO ENSURE THE TRAILING CABLE SLACK IS TAKEN UP.

**BELT SCALE PANEL NOTE:**

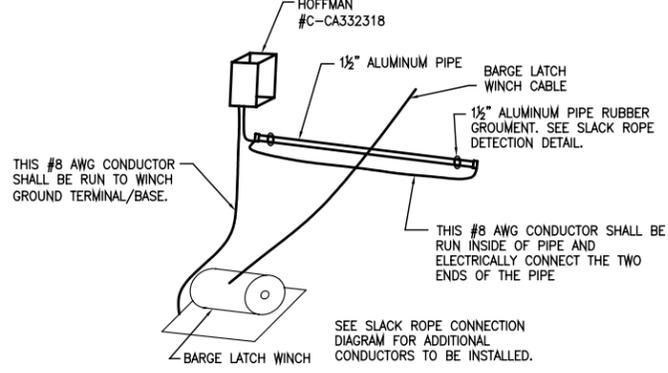
BELT SCALE PANEL SHALL INSTALLED IN THE NEW OPERATORS CAB. THE LOCATION OF THE BELT SCALE PANEL SHALL BE AS REQUESTED BY ASPA PERSONNEL. THE POWER REQUIREMENTS SHALL BE FED FROM THE OPERATORS CAB 240/120V POWER PANEL. ALL POWER AND CONTROL TERMINATION'S SHALL MATCH THE EXISTING INSTALLATION.

**OPERATOR'S CAB ARRANGEMENT NOTE:**

SEE DWG 1723-E9 FOR OPERATOR'S CAB ARRANGEMENT. EQUIPMENT SHOWN IN OPERATOR'S CAB IS DIAGRAMMATIC. CONTRACTOR SHALL VERIFY THE SIZE OF ELECTRICAL EQUIPMENT TO BE INSTALLED IN OPERATOR'S CAB PRIOR TO PURCHASE. CONTRACTOR SHALL SUBMIT ELECTRICAL EQUIPMENT CUT SHEETS PRIOR TO PURCHASE.

**BARGE LATCH SLACK ROPE INDICATION NOTE:**

CONTRACTOR SHALL FURNISH AND INSTALL (1) HOFFMAN ENCLOSURE (#C-CA332318 W/PANEL #C-CAP3323), (1) CUTLER HAMMER RESISTANCE SENSING RELAY (#13535H113-2), 1/2" SCH 80 ALUMINUM CONDUIT AND #8 AWG INSULATED WIRE. CONTRACTOR SHALL INSTALL CONDUIT/ENCLOSURE SUPPORT ON PONTOON AS SHOWN ON DWG 1723-M17. SEE THE SLACK ROPE DETECTION CONNECTION DIAGRAM FOR ADDITIONAL CONDUCTOR TERMINATIONS. CONTRACTOR SHALL SUBMIT ELECTRICAL DATA SHEETS ON ALL ELECTRICAL DEVICES/EQUIPMENT TO BE INSTALLED.



**SLACK ROPE DETECTION OVERVIEW**  
SCALE: 1/4" = 1'-0"

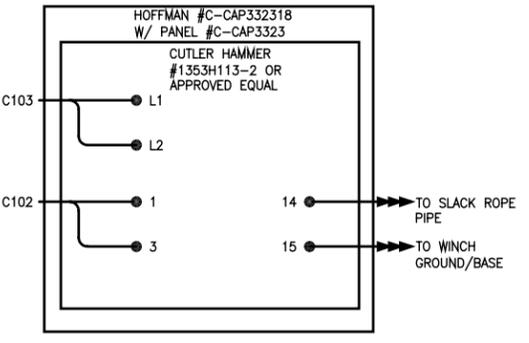
**SHEET NOTES:**

- ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
- THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
- ALL WORK THAT INVOLVES THE MECHANICAL EQUIPMENT AND THEIR LOCATIONS SHALL BE COORDINATED BETWEEN THE MECHANICAL AND ELECTRICAL CONTRACTORS.
- FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
- ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- CONTRACTOR SHALL VERIFY ALL CONTROL AND POWER REQUIREMENTS FOR THE CABLE REEL, BARGE LATCH HYD SYSTEM, BARGE LOADOUT CHUTE HYD SYSTEM AND THE BARGE HAUL WINCH SYSTEM PRIOR TO INSTALLATION OF ANY CONTROL AND/OR POWER CONDUCTORS. THE CONTROL AND POWER REQUIREMENTS SHALL BE VERIFIED AT TIME OF PURCHASE.
- ALL CONDUITS INSTALLED IN THE DOCK FOUNDATION SHALL BE 1" MINIMUM. CONTRACTOR SHALL VERIFY ALL CONDUIT SIZES AT TIME OF EQUIPMENT PURCHASE.
- CABLE ROUTING IS DIAGRAMMATIC FOR CLARITY. CABLE ROUTING SHALL USE CABLE TRAY WHERE POSSIBLE AND RGS CONDUIT IN ALL OTHER LOCATIONS. CABLE INSTALLATION SHOULD FOLLOW SEGREGATION AS REQUIRED TO ELIMINATE NOISE IN CONTROL WIRING.
- CONTRACTOR RESPONSIBLE FOR ALL CONTROL AND POWER CABLE TERMINATION'S CONTRACTOR SHALL VERIFY POWER AND CONTROL REQUIREMENTS PRIOR TO INSTALLATION AND TERMINATION OF CONDUCTORS.

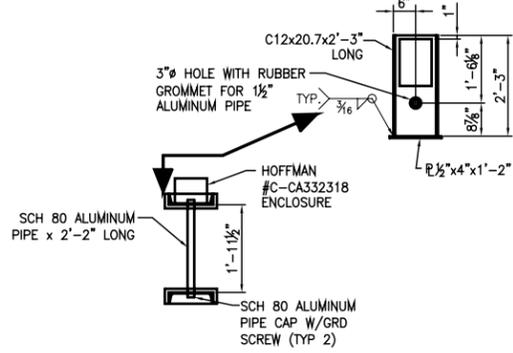
**PANEL SCHEDULE**

PANEL: BDP VOLTAGE RATING: 240 AMPERE RATING: 100 PHASE: 1Ø NO. WIRES: 3 MANU.: SQ-'D'  
 MAIN: 70A M.B. VOLTS: 240/120 FEEDER SOURCE: 10KVA XFMR TYPE: NQOD MOUNTING: SURFACE LOCATION: OPER CAB

CKT	DESCRIPTION	VA PER		TRIP	BKR	A	B	POL	TRIP	VA PER		DESCRIPTION	CKT
		1	2							1	2		
1	FLDTG CONTROL CONTACT	100	20	1					2	20	100	TOWER LTG CONTROL CONTACT	2
3	ELEV 14'-6.5" RECEPT	500	20	3					4	20	100	CAB LIGHTING	4
5	SPARE								6	20	500	OPER CAB RECEPT	6
7	WARNING BEACON	100	20	7					8	20	600	OPER CAB A/C SYSTEM	8
9	OPERATOR CAB CONTROL PNL	500	20	9					10	600		CABLE REEL SLIP RING HEATER	10
11	OPER CAB RECEPT	500	20	11					12	20	150	SLACK ROPE DETECTION POWER	12
13	SPARE								14	20	100	SPARE	14
15	SPARE								16	20	100	SPARE	16
17	SPARE								18	20		SPARE	18
19	SPARE								20	20		SPARE	20
VA LOAD		600	1100							1200	850	VA LOAD	
TOTAL VA		3750		TOTAL AMPS		15.6							



**SLACK ROPE CONNECTION DIAGRAM**  
SCALE: N.T.S.



**SLACK ROPE DETECTION DETAIL**  
SCALE: 1/4" = 1'-0"

**REFERENCE**

REV.	DATE	DESCRIPTION	BY
3	03/23/06	RECORD ISSUE	JJM
3	05/31/05	ADDED CONTROL CKT C104	JJM
2	05/17/05	ADDED SLACK ROPE SYTEM	JJM
1	04/06/05	ADDED MP15, CKT BDP12 TO CABLE REEL	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

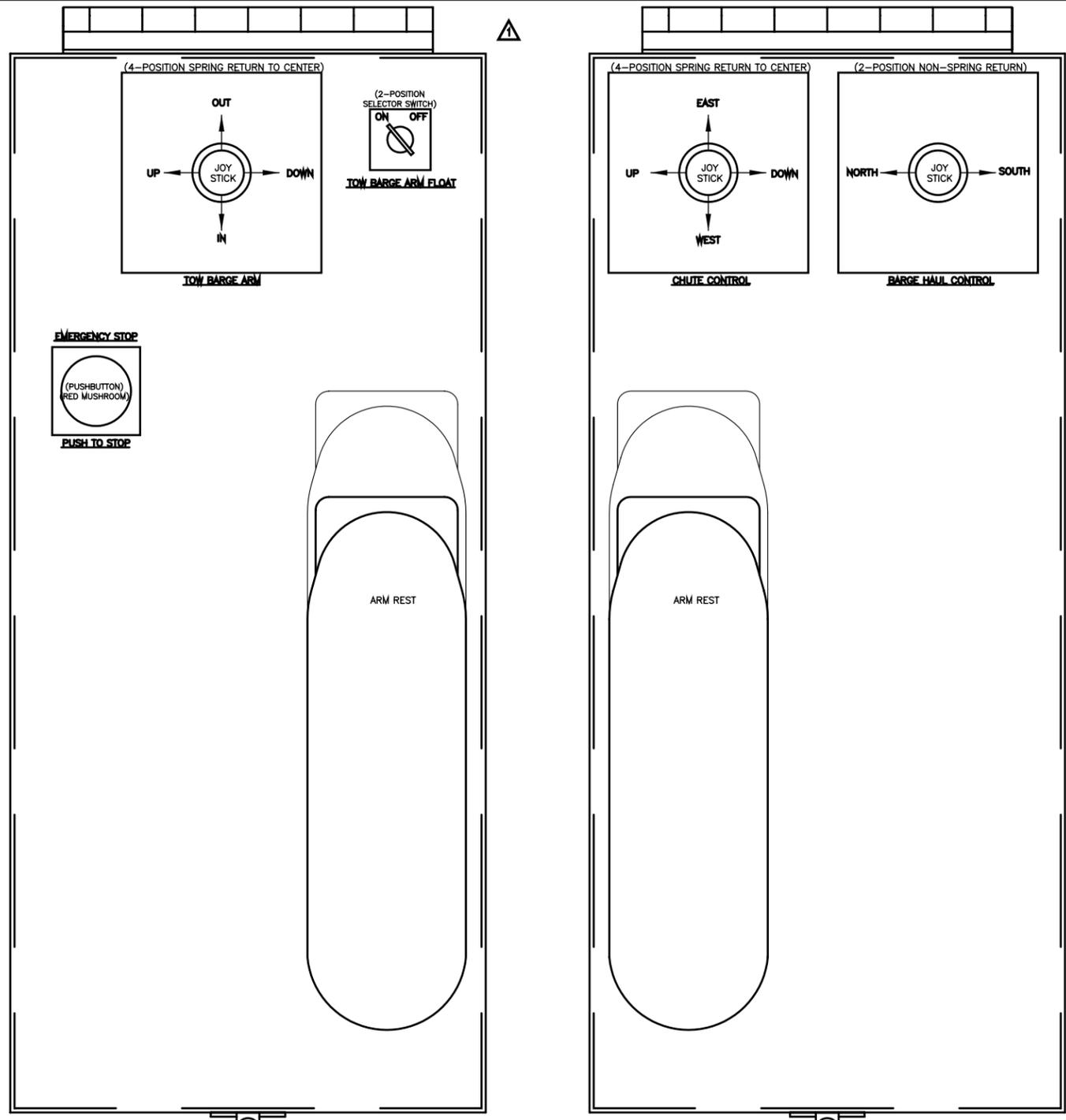
**ALABAMA STATE PORT AUTHORITY**

MOBILE ALABAMA

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**

**BARGE HAULING SYSTEM ELECTRICAL ARRANGEMENT**

Drawn By: JJM Date: 9/29/04  
 Checked By: BWH Date: 10/29/04  
 Scale: NOTED Job No. M1723 Drawing No. E21 REV. 3



**OPERATORS CHAIR CONSOLE LAYOUT**  
SCALE: N.T.S.

- CONSOLE LAYOUT NOTES:**
- CONTRACTOR SHALL PROVIDE AND INSTALL (1) ONE J.R. MERRITT OPERATORS CHAIR #LCR-100 OR ENGINEER APPROVED EQUAL. THE OPERATORS CHAIR CONSOLE LAYOUT SHALL BE APPROVED BY ASPA PERSONNEL AND ASPA CONTROL CONTRACTOR, JAC AUTOMATED CONTROLS, PRIOR TO PURCHASE.
  - CONTRACTOR SHALL INTERFACE WITH THE HYDRAULIC CHUTE MANUFACTURER, BARGE POSITION WINCH MANUFACTURER, HYDRAULIC BARGE LATCH MANUFACTURER AND SUPPLY THE CONTROLS FOR EACH OPERATION AS REQUIRED BY THE APPROPRIATE MANUFACTURER AND INTERFACE WITH ASPA CONTROL CONTRACTOR, JAC AUTOMATED CONTROLS.
  - CONTRACTOR SHALL DELIVER THE BARGE WINCH POSITION MAIN OPERATORS STATION TO J.R. MERRITT FOR THE INSTALLATION OF THE CONTROLS INTO THE OPERATORS CHAIR CONSOLE.

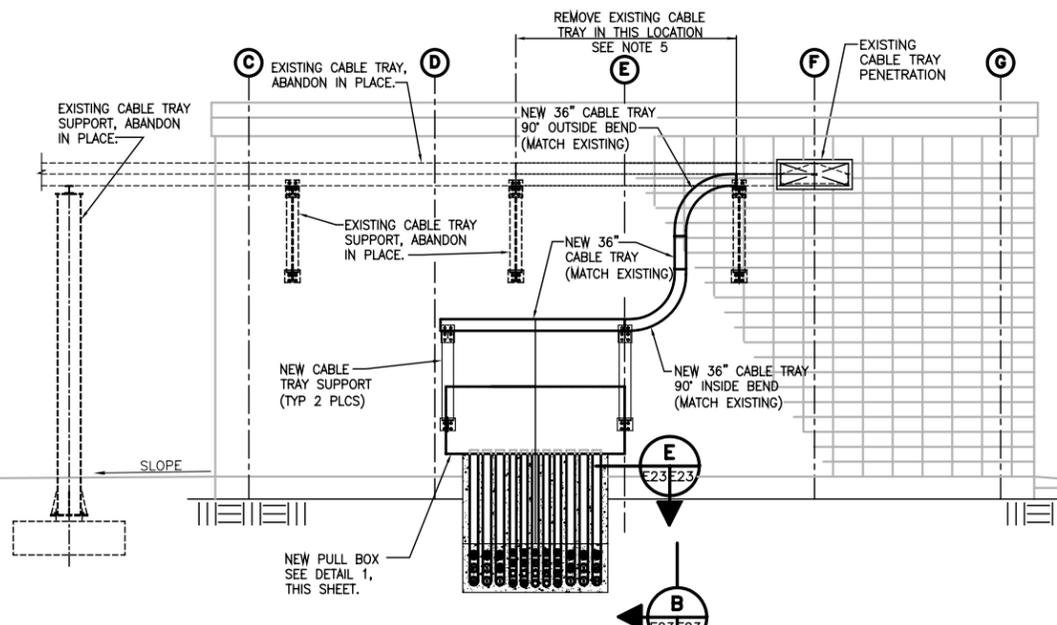
**SHEET NOTES:**

- THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
- ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
- ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- ALL 600V CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, TYPE TC TRAY CABLES, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- ALL CONTROL CABLES SHALL BE MULTI-CONDUCTOR, CROSS LINKED POLYETHYLENE INSULATION, 600V RATING, COPPER CONDUCTOR CABLES OR EQUAL. SEE SPECIFICATION.
- FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
- THE CONTRACTOR SHALL INTERFACE WITH THE OWNER APPROVED SYSTEMS CONTROLS CONTRACTOR, JAC AUTOMATED CONTROLS, PRIOR TO INSTALLATION OF ANY CONTROL DEVICES AND/OR SYSTEMS.
- CONTRACTOR SHALL VERIFY ALL CONTROL AND POWER REQUIREMENTS FOR THE CABLE REEL, BARGE LATCH HYD SYSTEM, BARGE LOADOUT CHUTE HYD SYSTEM AND THE BARGE HAUL WINCH SYSTEM PRIOR TO INSTALLATION OF ANY CONTROL AND/OR POWER CONDUCTORS. THE CONTROL AND POWER REQUIREMENTS SHALL BE VERIFIED AT TIME OF PROCUREMENT.
- CONTROL INTERFACE OF ALL NEW EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY WITH THE OWNER PERSONNEL THE CONTROL SEQUENCE PRIOR TO INSTALLATION.

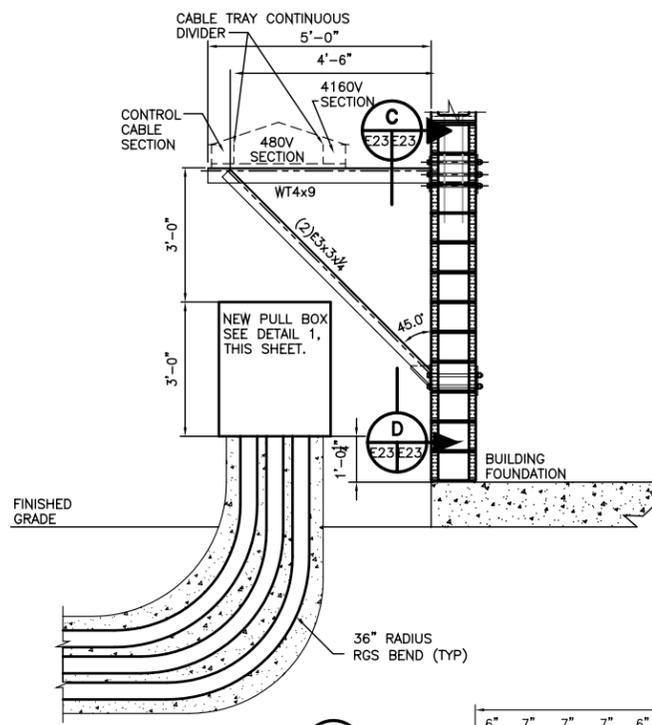
**REFERENCE**

REV.	DATE	DESCRIPTION	BY
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1	04/06/05	REVISED CONSOLE LAYOUT	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

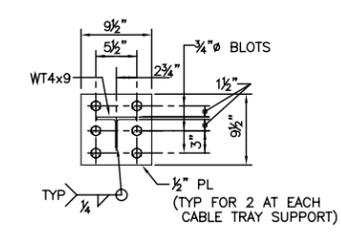
<p><b>ALABAMA STATE PORT AUTHORITY</b></p>	
<p>Gottlieb, Barnett &amp; Bridges, LLC Consulting Engineers</p>	
<p><b>McDUFFIE TERMINAL BARGE LOADOUT RELOCATION</b></p> <p><b>OPERATORS CHAIR CONTROL CONSOLE</b></p>	
Drawn By: JJM Checked By: BWH Scale: NOTED	Date: 07/27/04 Date: 10/08/04 Job No. 1723 Drawing No. E22 REV. 1



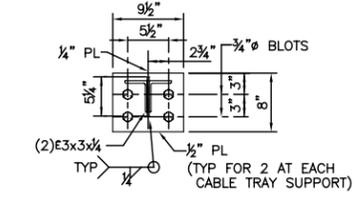
**SECTION A**  
E1 E23  
1/4"=1'-0"



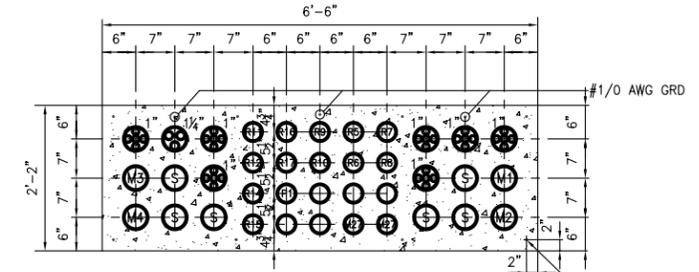
**SECTION B**  
E23 E23  
1/2"=1'-0"



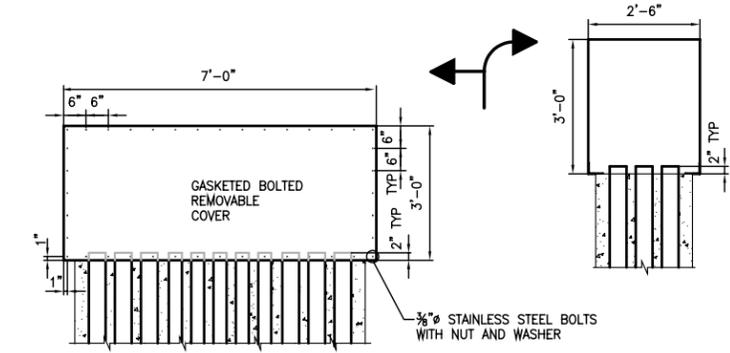
**SECTION C**  
E23 E23  
1/2"=1'-0"



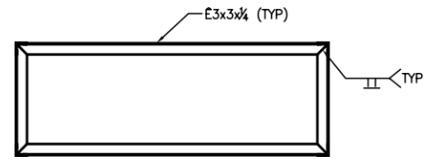
**SECTION D**  
E23 E23  
1/2"=1'-0"



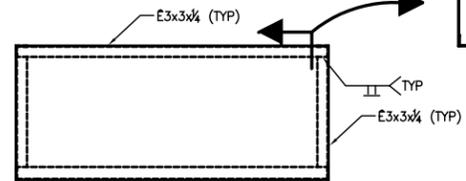
**SECTION E**  
E23 E23  
3/4"=1'-0"



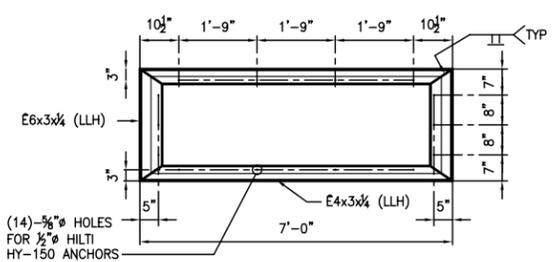
**DETAIL 1**  
E23 E23  
1/2"=1'-0"  
SEE PULL BOX FRAMING PLAN FOR DETAILS



**PLAN - TOP FRAME**  
SCALE: 1/2"=1'-0"



**ELEVATION**  
SCALE: 1/2"=1'-0"



**PLAN - BOTTOM FRAME**  
SCALE: 1/2"=1'-0"

**PULL BOX FRAMING PLAN**

**SHEET NOTES:**

- ALL WORK AND WIRING SHALL COMPLY WITH OR EXCEED ALL NATIONAL ELECTRICAL CODE REQUIREMENTS, AND ALL CODE REQUIREMENTS OF THE STATE, CITY AND LOCAL ELECTRIC CODES.
- THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXTENT OF WORK REQUIRED TO COMPLETE JOB PRIOR TO BID.
- FOR FEEDER/CONDUIT SCHEDULE, LIGHTING FEEDER/CONDUIT SCHEDULE, RECEPTACLE FEEDER/CONDUIT SCHEDULE AND THE MISC. POWER FEEDER/CONDUIT SCHEDULE SEE DWG.1723-E5. FOR THE M.C.C. SCHEDULE SEE DWG. 1723-E6 AND FOR THE CONTROL CIRCUIT SCHEDULE SEE DWG.1723-E7.
- ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- CONTRACTOR SHALL REMOVE CABLE TRAY IN THIS AREA. EXISTING CONDUCTORS MARKED "TO BE ABANDONED" IN THE FEEDER AND CONTROL SCHEDULES SHALL BE REMOVED FROM ALL ELECTRICAL "TS" BUILDING ELECTRICAL DEVICES AND PULLED BACK TO THIS LOCATION AND CUT.
- CABLE TRAY SHALL BE INSTALLED AS REQUIRED BY "NEMA VE 1-1998-METALLIC CABLE TRAY" AND "NEMA VE 2-2000-CABLE TRAY INSTALLATION GUIDELINES".
- CONTRACTOR SHALL FURNISH AND INSTALL COVERS, GROUNDING JUMPERS, END PLATES, VOLTAGE DIVIDERS, BENDS AND SUPPORT BRACKETS FOR ALL CABLE TRAY INSTALLATIONS.

**REFERENCE**

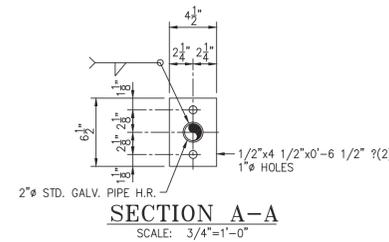
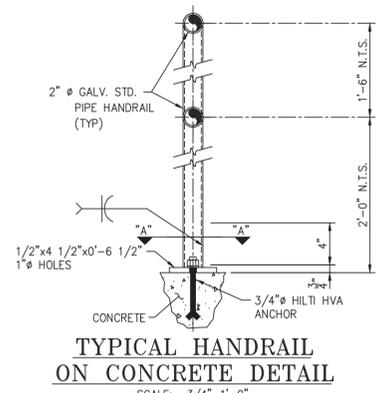
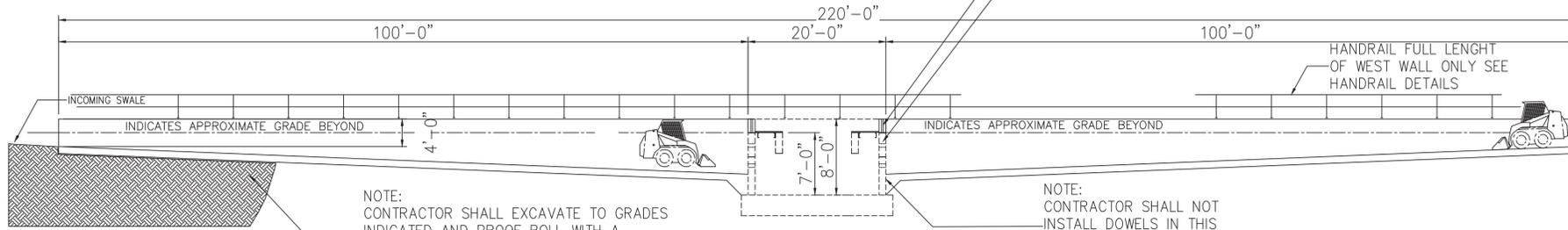
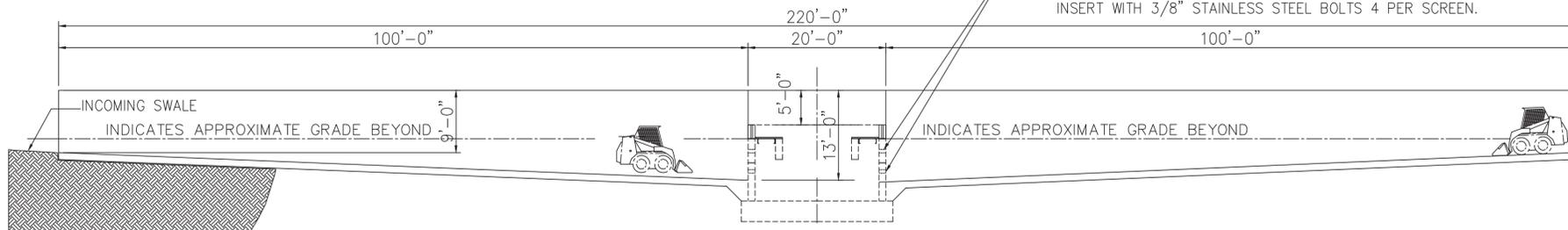
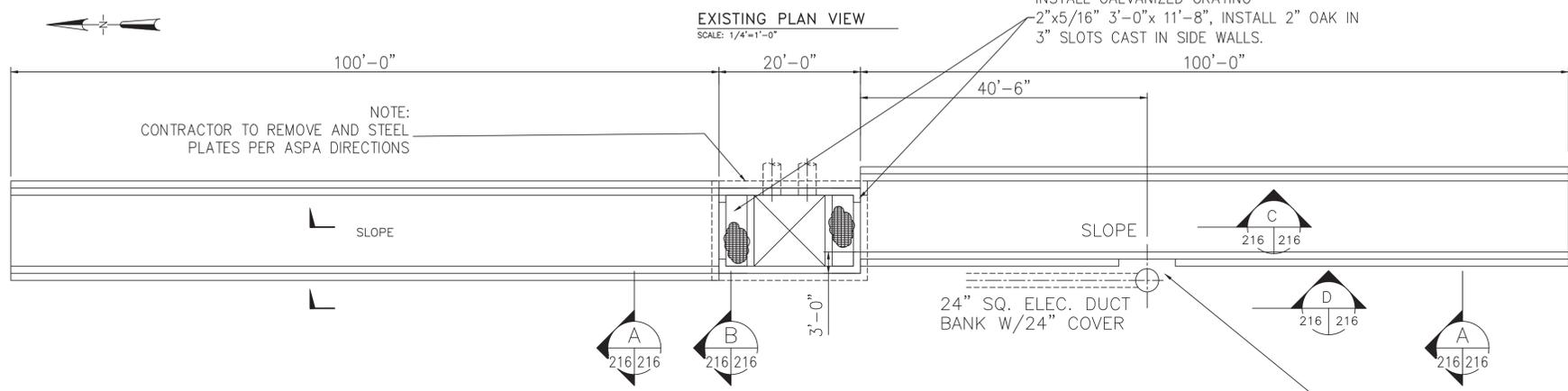
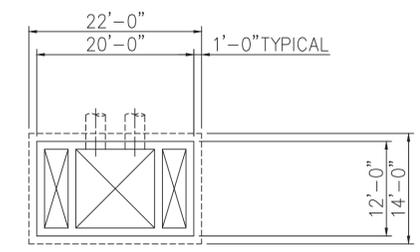
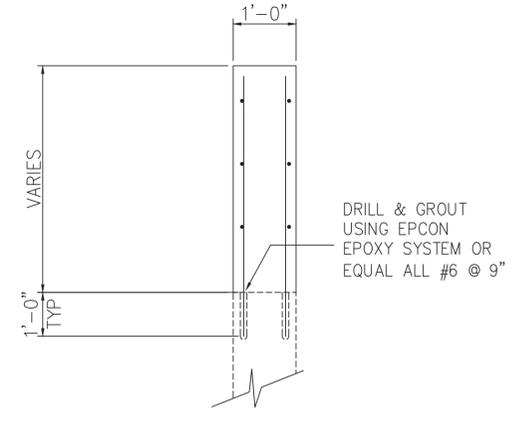
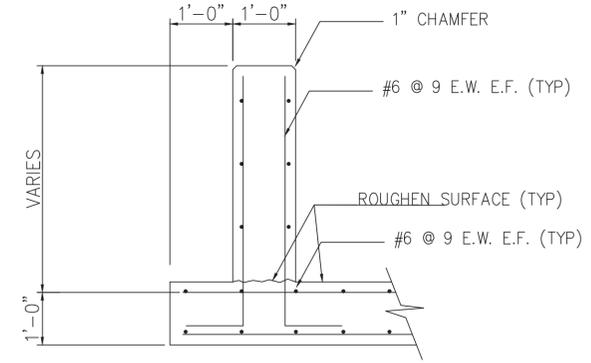
REV.	DATE	DESCRIPTION	BY
0	03/23/06	RECORD ISSUE	JJM
0	02/22/05	ISSUED FOR CONSTRUCTION	JJM

**ALABAMA STATE PORT AUTHORITY**  
MOBILE ALABAMA

**GIBB**  
Gottlieb, Barnett & Bridges, LLC  
Consulting Engineers

**McDUFFIE TERMINAL BARGE LOADOUT RELOCATION**  
**'TS' BLDG INTERFACE SECTIONS AND DETAILS**

Drawn By: JJM	Date: 07/27/04
Checked By: BWH	Date: 10/08/04
Scale: NOTED	Job No. 1723
Drawing No. E23	REV. 0



NOTE:  
CONTRACTOR TO REMOVE AND STEEL  
PLATES PER ASPA DIRECTIONS

INSTALL GALVANIZED GRATING  
2"x5/16" 3'-0"x 11'-8", INSTALL 2" OAK IN  
3" SLOTS CAST IN SIDE WALLS.

24" SQ. ELEC. DUCT  
BANK W/24" COVER

NOTE:  
CONTRACTOR TO CORE DRILL 5-LOWER-6" DIAMETER  
DRAIN HOLES IN EXISTING WALL AND INSTALL  
5-UPPER-6" DIAMETER HOLES IN NEW CLOSURE WALL  
ALL DRAIN HOLES TO BE COVERED WITH 1"x1"  
STAINLESS STEEL MESH BOLTED TO WALL USING  
INSERT WITH 3/8" STAINLESS STEEL BOLTS 4 PER SCREEN.

NOTE:  
CONTRACTOR SHALL EXCAVATE AND EXPOSE  
ELEC. MANHOLE AND DUCTBANK FIRST PIT  
MAY SHIFT TO THE EAST AS MUCH AS  
36" COST TO BE INCLUDED IN BID.

NOTE:  
CONTRACTOR TO EXTEND WALL AND INSTALL  
SLOTS TO RECEIVE OAK BOARDS. INSTALL C8X11.5 &  
2"x5/16"x3'-6"x8'-0" GRATING TO ACCESS BOARDS (TYP)

NOTE:  
CONTRACTOR TO REMOVE WOOD BOARDS  
DRILL AND EPOXY IN #6 DOWELS INTO  
EXISTING WALL AT 12" O.C. EA. FACE AND  
POUR CLOSURE WALL (TYP. EA. SIDE OF PIT)

NOTE:  
CONTRACTOR SHALL EXCAVATE TO GRADES  
INDICATED AND PROOF ROLL WITH A  
LOADED 2-AXLE DUMP TRUCK. ASPA  
WILL OBSERVE AND ACCEPT OR REQUIRE  
FURTHER EXCAVATION AND PLACEMENT OF  
STRUCTURAL FILL BASED ON SCHEDULE OF  
PRICES SUBMITTED WITH BIDS.

NOTE:  
CONTRACTOR SHALL NOT  
INSTALL DOWELS IN THIS  
FACE OF EXISTING PIT  
(TYPICAL)

HANDRAIL FULL LENGTH  
OF WEST WALL ONLY SEE  
HANDRAIL DETAILS

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	APPROVED BY

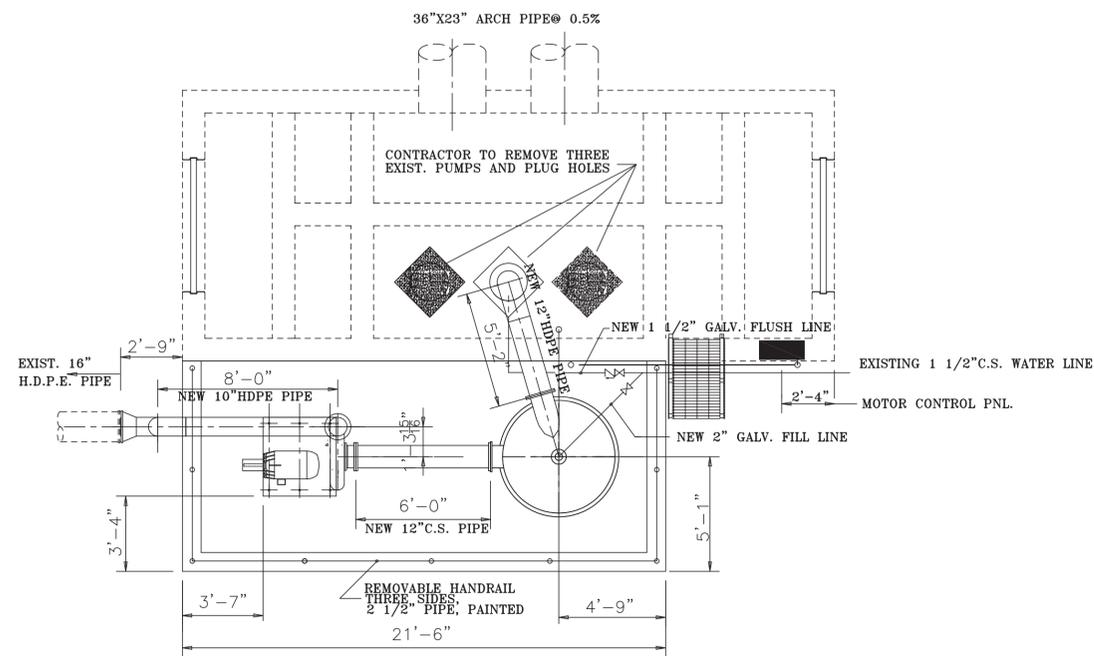
CONSULTANT:

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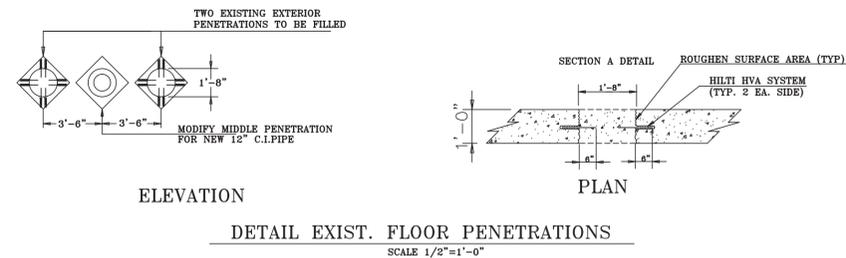
THE  
MCDUFFIE ISLAND COAL TERMINAL  
AREA 4 SUMP PIT MODIFICATIONS  
CONCRETE DETAILS

DRAWN:	J.M.P.	CHECKED:		APPROVED:	
DATE:	4/11/05	SCALE:			
DRAWING NUMBER:	ED-1-216	REVISION:	A		

REFERENCE

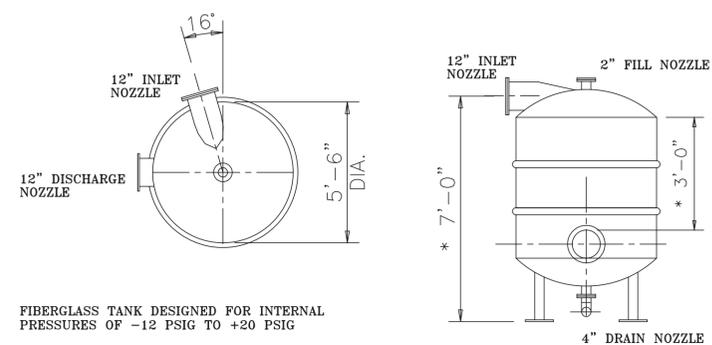


PLAN VIEW

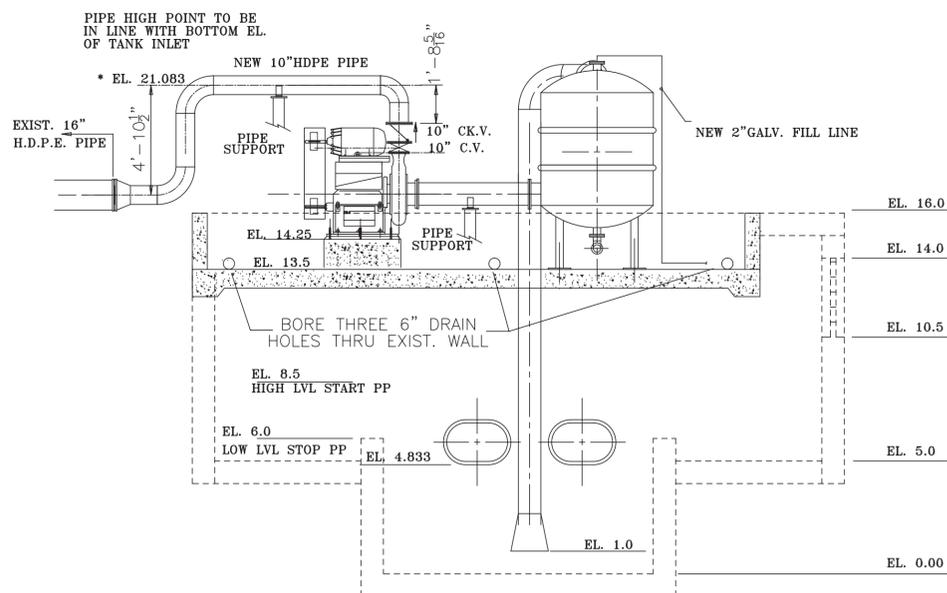


DETAIL EXIST. FLOOR PENETRATIONS

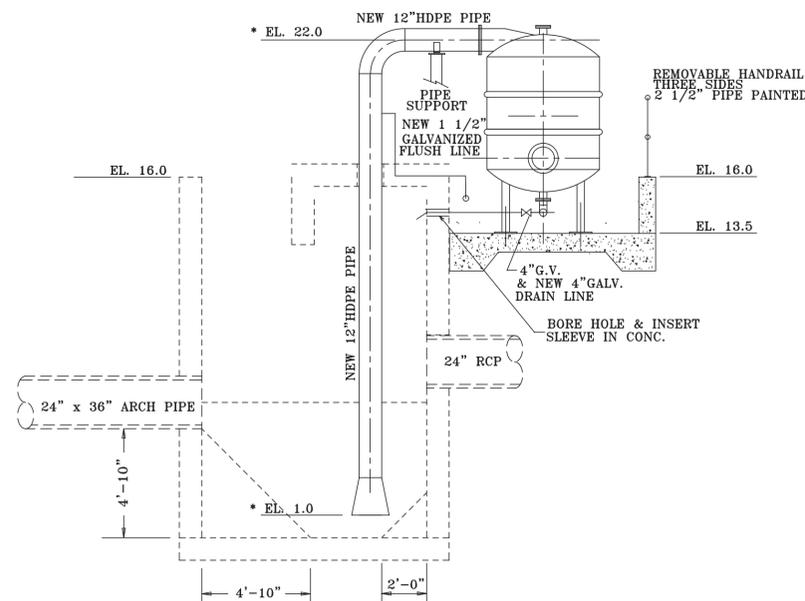
SCALE 1/2"=1'-0"



PRIMER TANK DETAILS



ELEVATION



SIDE ELEVATION

GENERAL NOTES:

1. ALL DIMENSIONS SHOWN FOR NEW PIPING AND EQUIPMENT ARE APPROXIMATE AND SHOWN FOR BIDDING PURPOSES ONLY. EXCEPT WHERE INDICATED BY AN \*. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BASED ON ACTUAL EQUIPMENT.
2. THE CONTRACTOR SHALL PROVIDE ALL PIPE SUPPORTS AS REQUIRED FOR THE NEW PIPE INSTALLATIONS.

A	8/8/07	T.A.	ISSUED FOR REVIEW		
REV NO.	DATE	BY	REVISION		
<b>ALABAMA STATE DOCKS</b> MOBILE, ALABAMA					
<b>McDUFFIE FACILITY</b> <b>YARD 4 STORMWATER PUMP REPLACE.</b> <b>PUMP &amp; PIPING LAYOUT</b>					
DWG BY:	DATE:	REVISIONS	SCALE:	AS SHOWN	
RLB	8/8/07	BY: DATE: BY: DATE: BY: DATE:			
CHKD. BY:	DATE:	DRAWING NO.:	ED-1-332		
T.A.	8/8/07				

REFERENCE