HAM-50-0376 GREEN DELHI HAM-50-1903

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAM-US 50-3.76/19.03

CITY OF CINCINNATI
VILLAGE OF CLEVES
MIAMI TOWNSHIP
WHITEWATER TOWNSHIP
HAMILTON COUNTY

LOCATION MAP

LATITUDE: 39°10'11"N LONGITUDE: 84°45'28"W LATITUDE: 39°06'06"N LONGITUDE: 84°32'40"W



PORTION TO BE IMPROVED	
INTERSTATE HIGHWAY	
FEDERAL ROUTES	
STATE ROUTES	
COUNTY & TOWNSHIP ROADS	
OTHER ROADS	

DESIGN DESIGNATION

DESIGN DESIGNATION	HAM-50-0376 L/R	HAM-50-1903L
CURRENT ADT (2026)	19,500	44,000
DESIGN YEAR ADT (2038)	20,500	46,500
DESIGN HOURLY VOLUME (2038)	2,600	6000
DIRECTIONAL DISTRIBUTION	52.0%	70.0%
TRUCKS (24 HOUR B&C)	6.0%	7.0%
DESIGN SPEED	50	55
LEGAL SPEED	50	40
DESIGN FUNCTIONAL CLASSIFICATION:		
HAM-50-0376 L/R: MINOR ARTERIAL (URBAN)		
HAM-50-1903L: PRINCIPAL ARTERIAL (URBAN)		
NHS PROJECT	YES	

INDEX OF SHEETS:

HAM-50-1903L

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FEDERAL PROJECT NUMBER

E250 (741)

RAILROAD INVOLVEMENT

CENTRAL RAILROAD OF INDIANA (CIND)
CSX TRANSPORTATION

PROJECT DESCRIPTION

FIELD PAINT ALL STRUCTURAL STEEL AND REPAIR DETORIORATED STEEL AT BRIDGE HAM-50-0376L WHICH CARRIES WB US 50 OVER THE GREAT MIAMI RIVER. FIELD PAINT THE BEAM ENDS AT BRIDGE HAM-50-0376R THAT CARRIES EB US 50 OVER THE GREAT MIAMI RIVER. FIELD PAINT ALL STRUCTURAL STEEL AT BRIDGE HAM-50-1903L THAT CARRIES WB US 50 OVER THE MILL CREEK AND A RAILROAD. OTHER MINOR REHAB WORK IS ALSO TO BE INCLUDED.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.0 ACRES

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES

NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Douglas A. Gruver, P.E. District 08 Deputy Director

Pamela Boratyn
Director, Department of Transportation

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE REQUIRED

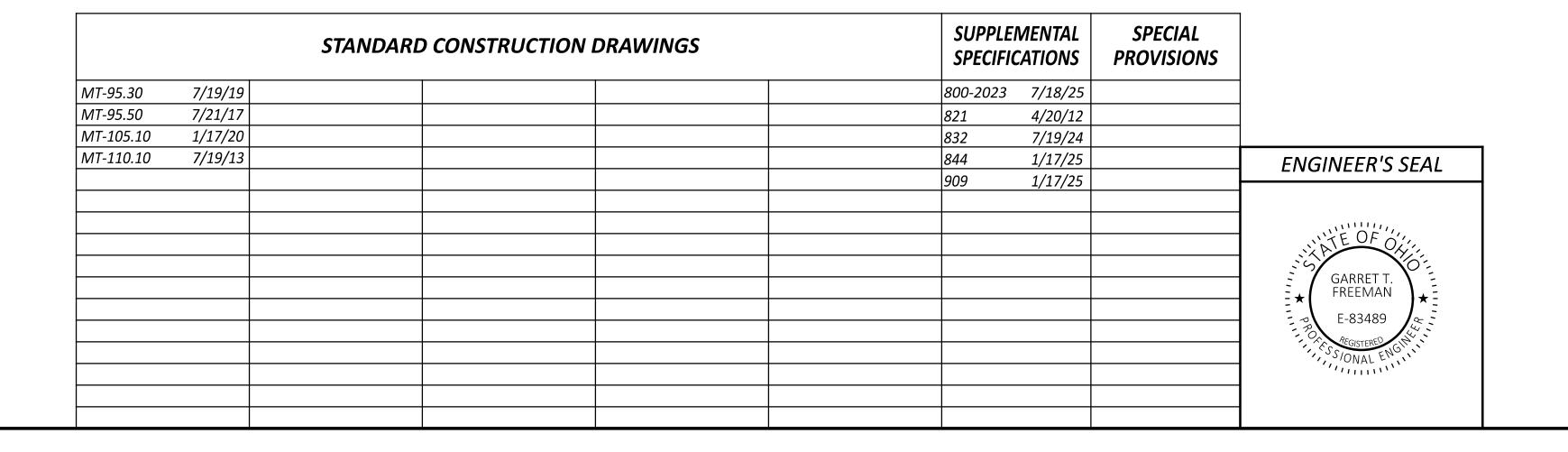
UNDERGROUND UTILITIES Contact Two Working Days

Before You Dig



OHIO811, 8-1-1, or 1-800-362-2764 (Non members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 8 ENGINEERING
505 S. STATE ROUTE 741
LEBANON, OHIO 45036





esigner **GTF**

GTF

REVIEWER

JDO 07/14/25

PROJECT ID

114515

TET TOTAL **1 52**

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR **RESPECTIVE OWNERS:**

HAM-50-0376 L/R

CHEVRON, USA 4800 FOURNACE PLACE BELLAIRE, TX 77401 (877) 596-2800

VILLAGE OF CLEVES WATERWORKS 92 E. CLEVES AVENUE CLEVES, OH 45002 (513) 941-3409

DUKE ENERGY 139 E. FOURTH ST., RM 467A CINCINNATI, OHIO 45202 (513) 287-2366

ALTAFIBER 209 W. 7TH STREET FL 1 CINCINNATI, OHIO 45202 (513) 565-2111

SPRINT 11370 ENTERPRISE PARK DR. SHARONVILLE, OH 45241 (440) 447-6163

HAM-50-1903L

SHANE ERHART DUKE ENERGY CORP. (ELECTRIC) 139 EAST 4TH ST, ROOM 467A CINCINNATI, OH 45202 PHONE: 513-508-9609

ANDY MCNICHOLS DUKE ENERGY CORP. (GAS) 139 EAST 4TH ST, ROOM 460A CINCINNATI, OH 45202 PHONE: 513-384-4731

BRECK COWAN ALTAFIBER 221 EAST 4TH STREET, BLDG 121-900 CINCINNATI, OHIO 45201 PHONE: 513-565-7187

JOHN LONGSWORTH CHARTER COMMUNICATIONS 11252 CORNELL PARK DR CINCINNATI, OH 45242 PHONE: 513-386-5235

DAN LOUIS CINCINNATI WATER WORKS 4747 SPRING GROVE AVE CINCINNATI, OH 45232 PHONE: 513-352-3723

ROB FRANKLIN METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI 1600 GEST STREET CINCINNATI, OH 45204 PHONE: 513-557-7188

ANDY CARTER CITY OF CINCINNATI TRANSPORTATION AND ENGINEERING 801 PLUM STREET, ROOM 450 CITY HALL CINCINNATI, OHIO 45202 PHONE: 513-378-6190

UTILITIES (CONTINUED)

HAM-50-1903L

PAUL BECKER COGNET PHONE: 815-557-8416

CYNTHIA MARTINEZ MCI NETWORK SERVICES, INC./ VERIZON - FIBER OPTIC 5400 DUFF DRIVE CINCINNATI, OH 45246 757-799-8038

BRUCE MILLER LUMEN TECHNOLOGIES 9490 MERIDIAN WAY WEST CHESTER, OH 45069 513-644-8943

ITS CONTACT INFORMATION

THERE ARE EXISTING ITS ASSETS NEAR THE PROJECT LIMITS. THERE ARE NO ANTICIPATED IMPACTS TO THESE FACILITIES. PRIOR TO PERFORMING ANY WORK AT THESE LOCATIONS CONTACT CENTRAL OFFICE ITS.

ODOT ITS LAB 1606 WEST BROAD STREET COLUMBUS, OHIO 43223 614-387-4113 CEN.ITS.LAB@DOT.OHIO.GOV

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201. CLEARING AND GRUBBING.

SOLE SOURCE AQUIFER

PROJECT LOCATION HAM-US-50 3.759 L / R IS LOCATED WITHIN THE GREATER MIAMI SOLE SOURCE AQUIFER. USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. REPORT ALL SPILLS OR EVENTS TO THE GREATER CINCINNATI WATER WORKS (513) 591-7700. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), CONTACT VILLAGE OF CLEVES FIRE DEPARTMENT (513) 941-3618 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL

CITY OF CINCINNATI NOTES

CONSTRUCTION NOTIFICATION:

TEN BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING THE PROJECT ENGINEER WILL NOTIFY THE CITY OF CINCINNATI LPA COORDINATOR OF THE PRECONSTRUCTION MEETING'S DATE, TIME, AND LOCATION. CONTACT CITY OF CINCINNATI, DEPARTMENT OF TRANSPORTATION AND ENGINEERING, DIRECTOR'S OFFICE, AT (513) 352-2366, ATTENTION: CHRIS KELLY AT (513) 352-3721 OR BY ÉMAÎL AT CHRIS.KELLY@CINCINNATI-OH.GOV.

PERMITS:

A CITY OF CINCINNATI DEPARTMENT OF TRANSPORTATION AND ENGINEERING (DOTE) PERMIT IS REQUIRED PRIOR TO THE ODOT CONTRACTOR COMMENCING WORK IN THE CITY OF CINCINNATI'S PUBLIC RIGHT-OF-WAY. PERMIT APPLICATIONS FOR STREET USE, STREET BARRICADE STREET OPENING, ETC. MAY BE MADE AT ROOM 425, CITY HALL, 801 PLUM STREET CINCINNATI, OHIO 45202.

CITY ISSUED PERMITS MAY REQUIRE MAJOR EVENT WORK RESTRICTIONS ON THE CONTRACTOR'S ACTIVITIES. THE CITY MAINTAINS A LIST OF KNOWN MAJOR EVENTS AT THE FOLLOWING WEBSITE:

HTTP://CINCINNATI-OH.GOV/POLICE/SPECIAL-EVENTS-REGULATIONS-AUCTIONS/EVENTPERMITS/.

THE CITY OF CINCINNATI RESTRICTS NIGHTTIME CONSTRUCTION WORK BETWEEN THE HOURS OF 11:00 P.M. AND 7:00 A.M. CITY ISSUED PERMITS WILL REQUIRE THE CONTRACTOR TO SECURE THE CITY ENGINEERS APPROVAL FOR NIGHTTIME WORK.

RAILROAD SECTION

TEMPORARY CONSTRUCTION CLEARANCE - ENSURE ALL FALSEWORK, BRACING OR FORMS HAVE A MINIMUM HORIZONTAL CLEARANCE OF 12 FEET MEASURED PERPENDICULAR TO THE CENTERLINE OF THE NEAREST TRACK AND 23 FEET MEASURED VERTICALLY FROM THE TOP OF RAIL.

ALL WASTE MATERIALS GENERATED BY THIS PROJECT, INCLUDING BUT NOT LIMITED TO WASHING WITH CLEANING SOLVENTS, BLASTING, SCRAPING, BRUSHING AND PAINTING OPERATIONS, SHALL BE THE RESPONSIBILITY OF THE PROJECT SPONSOR OR ITS CONTRACTOR AND SHALL BE CONTAINED. COLLECTED AND PROPERLY DISPOSED OF BY THE PROJECT SPONSOR OR ITS CONTRACTOR. THE PROJECT SPONSOR AND ITS CONTRACTOR AGREE TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES AND ORDINANCES AT ALL TIMES.

IF CONTRACTOR HAS THE POTENTIAL TO PENETRATE THE DECK DURING THE DECK REHABILITATION WORK, THEN CONTRACTOR WILL BE REQUIRED TO INSTALL FALSEWORK/DEMO SHIELD PROTECTION DIRECTLY OVER THE CSXT RAILROAD SPAN. THE FALSEWORK/DEMO SHIELD PROTECTION WILL BE INSTALLED PRIOR TO THE DECK BEING PENETRATED AND WILL STAY IN PLACE FOR THE DURATION OF THE CONSTRUCTION ACTIVITIES. THE FALSEWORK/DEMO SHIELD SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE TO CSX"S CONSTRUCTION SUBMISSION CRITERIA. IN ADDITION, FILTER FABRIC PROTECTION WILL BE REQUIRED TO PROTECT THE TRACK AND BALLAST DIRECTLY UNDER THE FALSEWORK/DEMO SHIELD PROTECTION.

EMERGENCY ACTION PLAN —SUBMIT AN EMERGENCY ACTION PLAN INDICATING THE LOCATION OF THE SITE, CONTACT NUMBERS, ACCESS TO THE SITE, INSTRUCTIONS FOR EMERGENCY RESPONSE AND LOCATION OF THE NEAREST HOSPITALS. THIS PLAN SHOULD COVER ALL ITEMS REQUIRED IN THE EVENT OF AN EMERGENCY AT THE SITE INCLUDING FIRE SUPPRESSION. COORDINATE THE EMERGENCY ACTION PLAN WITH THE SAFETY RELATED DISCUSSION OF THE MEANS AND METHODS SUBMISSION DISCUSSED ABOVE. THE PLAN SHOULD ALSO INCLUDE A METHOD TO PROVIDE THIS INFORMATION TO EACH PROJECT WORKER FOR EACH DAY ON SITE.

RAILROAD SECTION (CONTINUED)

BALLAST PROTECTION - CONTRACTOR SHALL INSTALL A NON-WOVEN GEOTEXTILE FABRIC BALLAST PROTECTION SYSTEM TO PREVENT CONSTRUCTION/DEMOLITION DEBRIS AND FINES FROM FOULING THE BALLAST. THE GEOTEXTILE BALLAST PROTECTION SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR TO THE SATISFACTION OF CSX'S CONSTRUCTION REPRESENTATIVE. FABRIC SHOULD EXTEND AT LEAST 15' PAST THE CONSTRUCTION LIMITS IN BOTH DIRECTIONS OF THE TRACK AND COVER ALL RAILROAD BALLAST STONE (FROM FENCE TO FENCE, INCLUDING THE AREAS BETWEEN THE TRACK).

RAILROAD PROJECT COORDINATION

THE CONTRACTOR SHALL PERFORM ONGOING COORDINATION OF THEIR DESIGN AND CONSTRUCTION ACTIVITIES WITH THE RAILROAD(S) THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL PROVIDE A CURRENT SCHEDULE ON A MONTHLY BASIS INCLUDING ANTICIPATED DATES OF THE FOLLOWING ITEMS:

- CONSTRUCTION SUBMITTALS REQUIRING RAIL REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION (PER THE RAIL AGREEMENT(S)).
- CONSTRUCTION START AND END DATES FOR WORK THAT MAY CREATE AN IMPACT TO THE RAILFACILITY/ OPERATIONS.
- ANTICIPATED DATES AND DURATION FOR FLAGGERS.
- ANY OTHER MILESTONES THAT MAY IMPACT RAIL FACILITIES OR OPERATIONS.

MEANS AND METHODS

THE CONTRACTOR SHALL DEVELOP A DETAILED SUBMISSION INDICATING THE PROGRESSION OF WORK WITH SPECIFIC TIMES WHEN TASKS WILL BE PERFORMED FOR WORK ACTIVITIES THAT ARE ON OR IN THE VICINITY OF THE RAILROAD PROPERTY. THIS SUBMISSION MAY REQUIRE A WALKTHROUGH AT WHICH TIME THE RAILROAD AND/OR THEIR REPRESENTATIVE WILL BE PRESENT. WORK WILL NOT BE PERMITTED TO COMMENCE UNTIL THE CONTRACTOR HAS PROVIDED THE RAILROADS WITH A SATISFACTORY PLAN THAT THE PROJECT WILL BE UNDERTAKEN WITHOUT SCHEDULING, PERFORMANCE, OR SAFETY RELATED ISSUES. PROVIDE A LISTING OF THE ANTICIPATED EQUIPMENT TO BE USED, THE LOCATION OF ALL EQUIPMENT TO BE USED AND ENSURE A CONTINGENCY PLAN OF ACTION IS IN PLACE SHOULD A PRIMARY PIECE OF EQUIPMENT MALFUNCTIONS. ALL WORK IN THE VICINITY OF THE RAILROAD PROPERTY THAT HAS THE POTENTIAL OF AFFECTING TRAIN OPERATIONS MUST BE SUBMITTED AND APPROVED BY THE RAILROAD PRIOR TO WORK BEING PERFORMED. THIS SUBMISSION WILL ALSO INCLUDE A DETAILED NARRATIVE DISCUSSING THE COORDINATION OF PROJECT SAFETY ISSUES BETWEEN THE CONTRACTOR AND THE RAILROAD AND/OR THEIR REPRESENTATIVE. THE NARRATIVE SHALL ADDRESS PROJECT LEVEL COORDINATION AND DAY TO DAY. SPECIFIC WORK OPERATIONS INCLUDING CRANE AND EQUIPMENT OPERATIONS, ERECTIONS PLANS AND TEMPORARY WORKS.

UP TO THIRTY (30) CALENDAR DAYS WILL BE REQUIRED TO REVIEW ALL CONSTRUCTION SUBMISSIONS. UP TO AN ADDITIONAL THIRTY (30) CALENDAR DAYS WILL BE REQUIRED TO REVIEW ANY SUBSEQUENT SUBMISSIONS RETURNED NOT APPROVED.

CONSTRUCTION SCHEDULE

SUBMIT A DETAILED CONSTRUCTION SCHEDULE FOR THE DURATION OF THE PROJECT CLEARLY INDICATING THE TIME PERIODS WHILE WORKING ON AND AROUND THE RAILROADS RIGHT-OF-WAY. AS THE WORK PROGRESSES, THIS SCHEDULE SHALL BE UPDATED MONTHLY AND RESUBMITTED AS NECESSARY TO REFLECT CHANGES IN WORK SEQUENCE, DURATION AND METHOD, ETC.

ESIGN AGENCY



NOTES

ENERAL

(7)

ESIGNER GTF

REVIEWER JDO 07/14/25 ROJECT ID

114515

ITEM 614, MAINTAINING TRAFFIC

DAY OF HOLIDAY TIME ALL LANES

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)ELECTION DAY (NOV)MEMORIAL DAYTHANKSGIVINGFOURTH OF JULY (OBSERVED)CHRISTMAS (OBSERVED)LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

OR SPECIAL EVENT MUST BE OPEN TO TRAFFIC

SUNDAY 12:00N FRIDAY THROUGH 6:00 AM MONDAY

MONDAY 12:00N FRIDAY THROUGH 6:00 AM TUESDAY

TUESDAY 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY

TUESDAY (GEN./REG. ELECTION)

5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY WEDNESDAY 12:00N TUESDAY THROUGH 6:00 AM THURSDAY THURSDAY 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY THURSDAY (THANKSGIVING ONLY)

6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY FRIDAY 12:00N THURSDAY THROUGH 6:00 AM MONDAY SATURDAY 12:00N FRIDAY THROUGH 6:00 AM MONDAY

AT THE HAM-50-1903L LCOATION, LANE/RAMP CLOSURES ARE NOT PERMITTED 2 HOURS BEFORE TO 2 HOURS AFTER ALL EVENTS AT RIVERBEND MUSIC CENTER; BALLOON GLOW, FIRE UP THE NIGHT, AND CHRISTMAS NIGHTS OF LIGHTS AT CONEY ISLAND; AND, KENTUCKY DERBY VIEWING AT BELTERRA PARK.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE C&MS TABLE 108.07-1

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL
BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE
THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR
RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK
IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED
BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF
UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE
COMMENSURATE WITH THE WORK IN PROGRESS.

TRAFFIC SHALL BE MAINTAINED AT ALL INTERSECTIONS AND DRIVES AT ALL TIMES AND SHALL BE CONTROLLED WITH FLAGGERS AND TRAFFIC CONTRAOL DEVICES AS REQUIRED AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.

SEQUENCE OF CONSTRUCTION - HAM-50-0376L

PHASE 1

- * CLOSE THE RIGHT LANE OF WESTBOUND US 50 BETWEEN COOPER AVENUE AND SR 128.
- * MAINTAIN THRU TRAFFIC IN THE LEFT LANE OF WESTBOUND US 50 AND BOTH LANES OF EASTBOUND US 50.
- * PERFORM STRUCTURAL REPAIRS IN THE RIGHT LANE OF WESTBOUND US 50.

PHASE 2

- * CLOSE THE LEFT LANE OF WESTBOUND US 50 BETWEEN COOPER AVENUE AND SR 128 AND CLOSE THE LEFT LANE OF EASTBOUND US 50 BETWEEN 1000'` WEST OF SR 128 AND 100'` EAST OF THE NORTHWEST END POST OF THE HAM-50-0376R BRIDGE.
- * MAINTAIN THRU TRAFFIC IN THE RIGHT LANE OF WESTBOUND US 50 AND EASTBOUND US 50.
- * PERFORM STRUCTURAL REPAIRS IN THE LEFT LANE OF WESTBOUND US 50.

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE LISTED CONTACTS.

THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS. INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE				
ITEM	DURATION OF	NOTICE DUE TO		
IIEIVI	CLOSURE	LISTED CONTACTS		
	>= 2 WFEKS	21 CALENDAR DAYS		
	>- 2 VVEENS	PRIOR TO CLOSURE		
RAMP & ROAD	> 12 HOURS &	14 CALENDAR DAYS		
CLOSURES	< 2 WEEKS	PRIOR TO CLOSURE		
	. 42 1101100	4 BUSINESS DAYS		
	< 12 HOURS	PRIOR TO CLOSURE		
	>= 2 WEEKS	14 CALENDAR DAYS		
LANE CLOSURES &	>- 2 VVEENS	PRIOR TO CLOSURE		
RESTRICTIONS	~ 2 M/EE//C	5 BUSINESS DAYS		
	< 2 WEEKS	PRIOR TO CLOSURE		
START OF CONSTRUCTION &		14 CALENDAR DAYS		
TRAFFIC PATTERN	N/A	PRIOR TO		
CHANGES		IMPLEMENTATION		

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

CONTACT THE FOLLOWING:
-DISTRICT PUBLIC INFORMATION OFFICER BY EMAIL AT DOT.DO8.PIO@DOT.OHIO.GOV
-DISTRICT PERMIT SECTION BY EMAIL AT DO8.PERMITS@DOT.OHIO.GOV
-CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY EMAIL AT

HAULING.PERMITS@DOT.OHIO.GOV

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS
OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE
PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED
WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS,
TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE
POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE
INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR
THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC
CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION
OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE
THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND, AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR
- "WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS
OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE
TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND
OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER: OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.
 THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY
 RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE
 AS THE OPERATIONS PROCEED IN THE LOCALIZED
 QUALIFYING WORK AREAS.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONTINUED)

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL
RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE
TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS
ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE
MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR.

THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE

SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES

AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH

RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL

HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT,

AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE

TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC
MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT
PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT
OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING
ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL
SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR
FOR ASSISTANCE 200 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE)
INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES
OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR
FOR ASSISTANCE.

HAM-50-1903L PEDESTRAIN & BICYCLE TRAFFIC

PEDESTRIAN AND BIKE TRAFFIC ON THE OHIO RIVER TRAIL, THE MULTI-USE PATH UNDER THE BRIDGE, SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR MUST IMPLEMENT SAFETY MEASURES TO PROTECT USERS AND PREVENT FALLING DEBRIS DURING CONSTRUCTION.

DESIGN AGENCY



esigner GTF Reviewer

SRK 07/14/2!

114515

TOTAL 3 52

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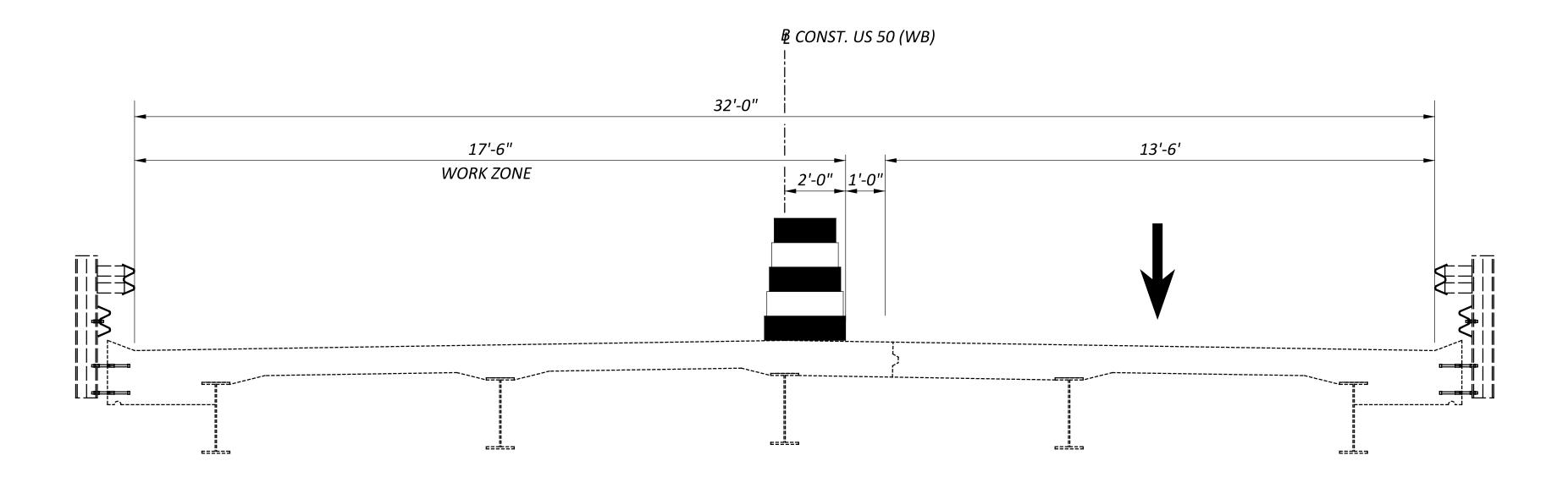
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WORK ZONE

<u>PHASE - 2</u> SECTIONS B-B



<u>PHASE - 1</u> SECTIONS A-A

DESIGN AGENCY

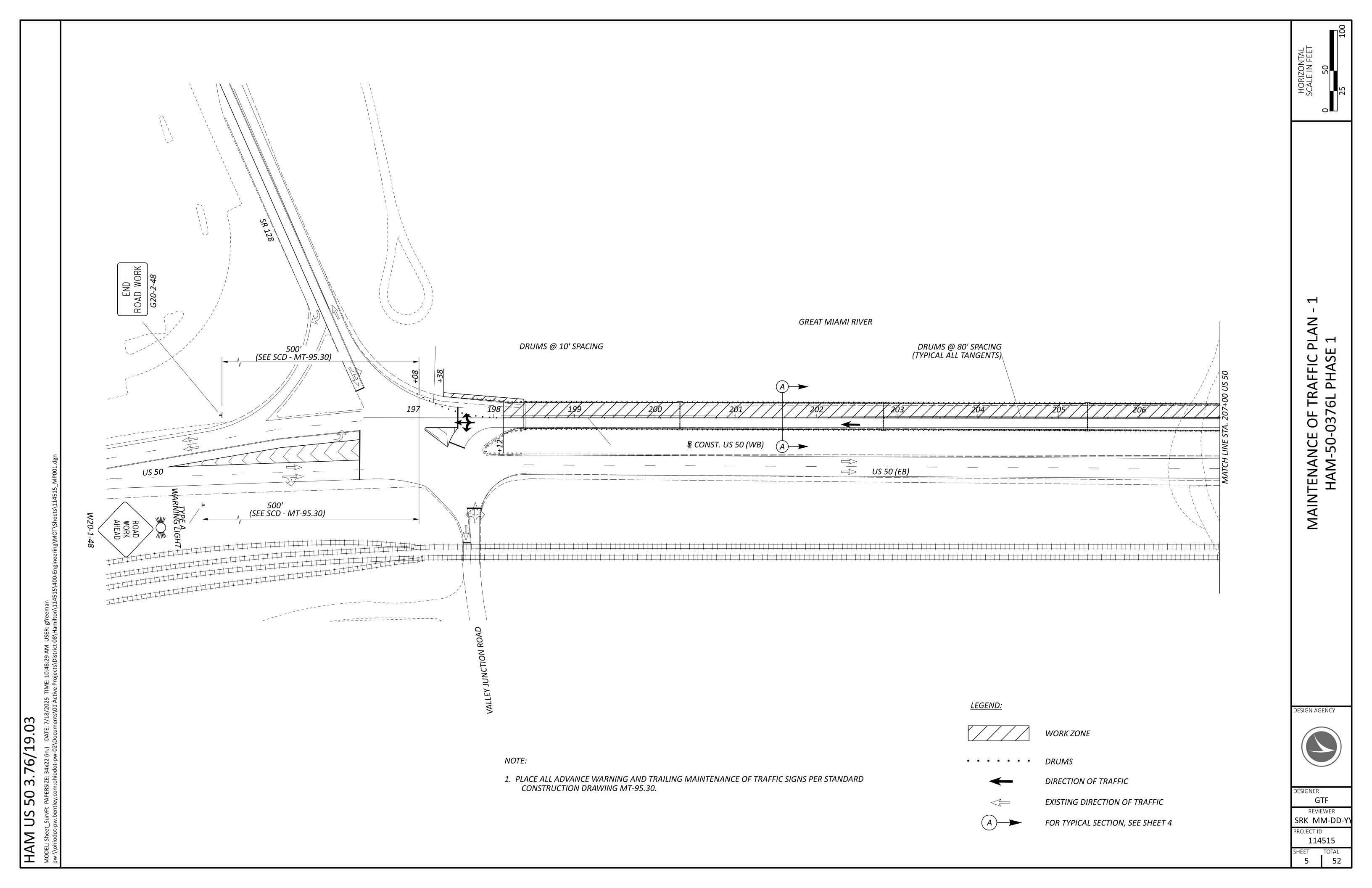


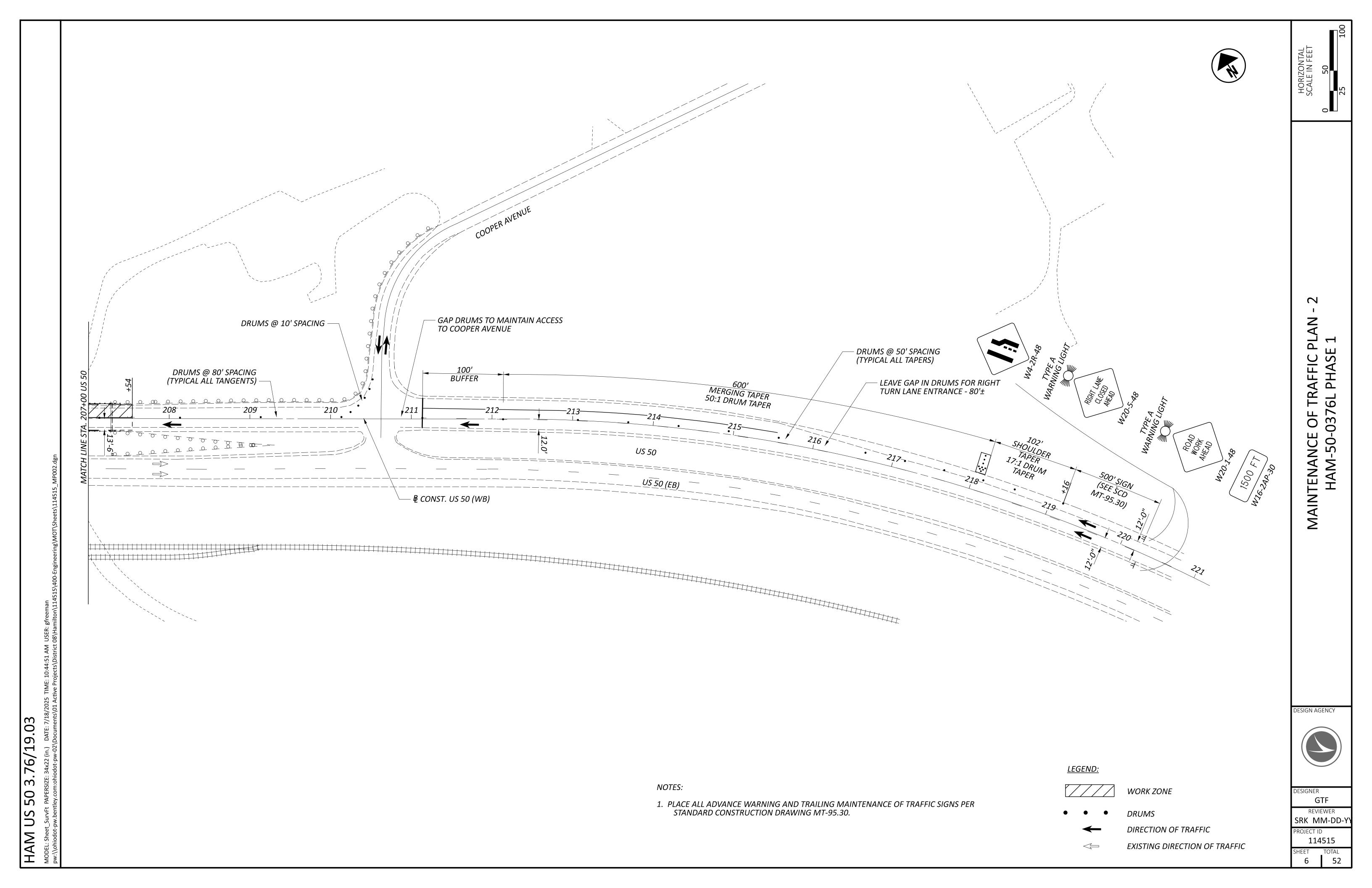
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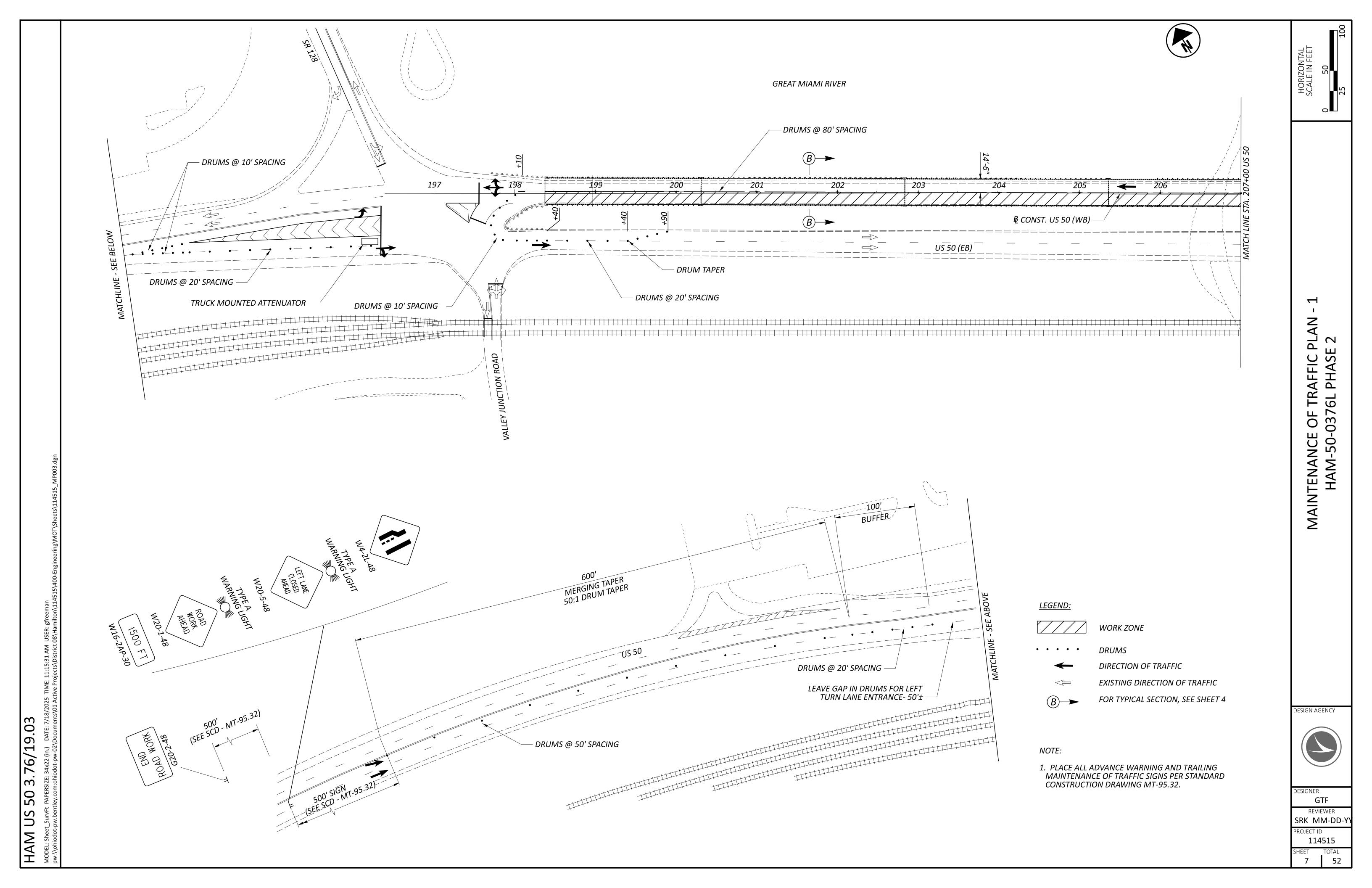
REVIEWER
SRK 07/14/25

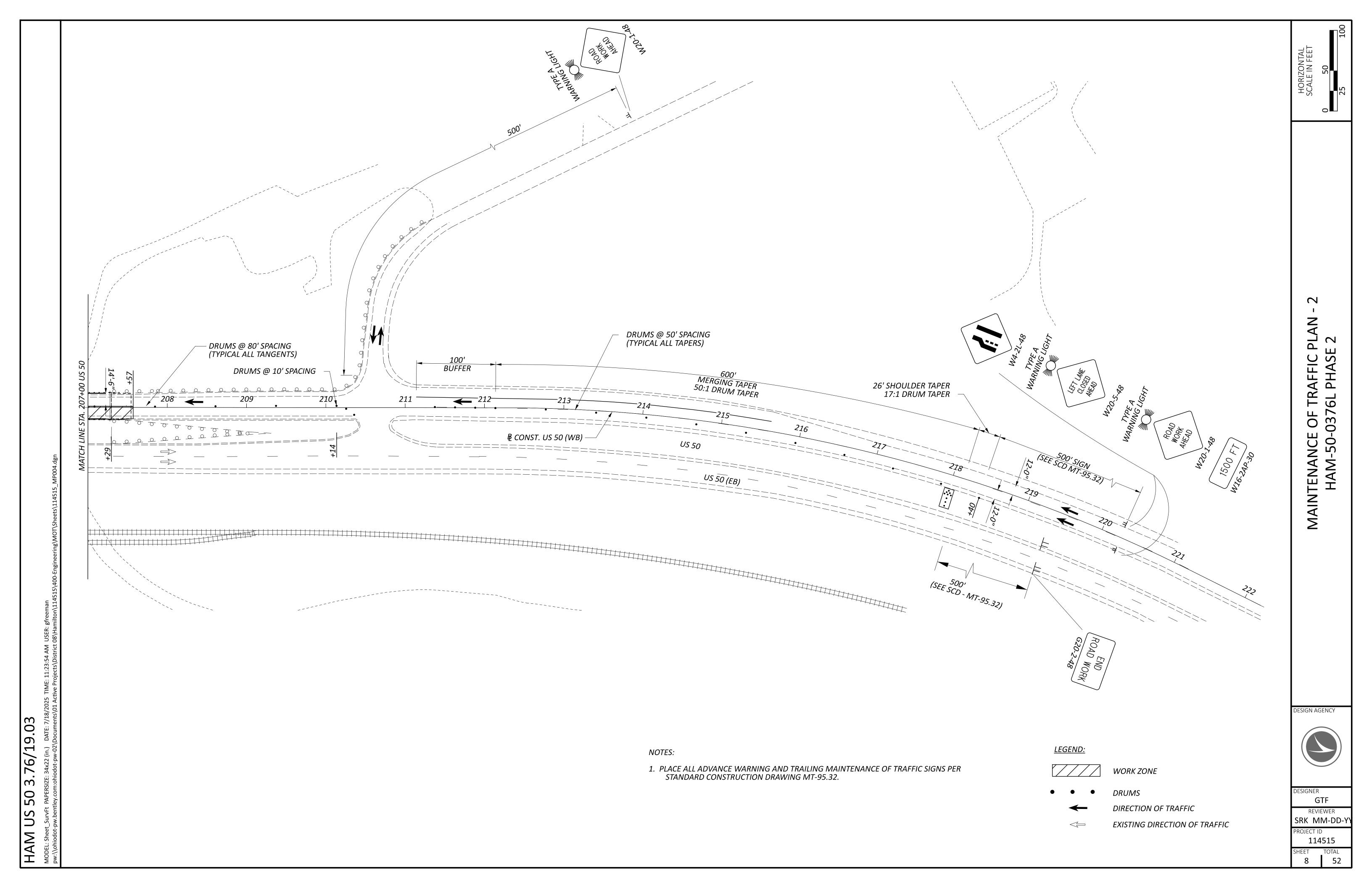
PROJECT ID

114515
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FFOLLOWING SUPPLEMENTAL SPECIFICATION:

SS 844 DATED 01-17-2025

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPOR-TATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

HS20-44, CASE II AND THE ALTERNATE MILITARY LOADING, NO FUTURE WEARING SURFACE.

DESIGN DATA (NEW MATERIAL)

STRUCTURAL STEEL - ASTM A709 GRADE 50, YIELD STRENGTH 50,000 PSI

STEEL TUBING - ASTM A500 GRADE B, YIELD STRENGTH 46,000 PSI

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

CONSTRUCTION PROCEDURES

THE CONTRACTOR SHALL SUBMIT ALL PROPOSED REMOVAL AND REPLACEMENT PROCEDURES TO THE ENGINEER FOR APPROVAL. THE PROCEDURES SHALL INCLUDE PROPOSED METHODS, ORDER OF OPERATION, AND EQUIPMENT. ALL SUBMITTALS SHALL BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO AND BE SUBMITTED A MINIMUM OF FOUR (4) WEEKS PRIOR TO INTENDED DATE FOR COMMENCEMENT OF WORK. ALL COSTS FOR THIS WORK SHALL BE INCLUDED WITH THE APPROPRIATE BID ITEMS.

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

RIVET REMOVAL PROCEDURE

THE PROCEDURE FOR RIVET REMOVAL AND PREPARATION OF THE EXISTING HOLES FOR NEW BOLTS SHALL BE AS FOLLOWS:

RIVET REMOVAL - EXISTING RIVETS SHALL BE REMOVED BY FIRST SAW CUTTING OR CHISELING HEADS OFF AND THEN REMOVING THE REMAINDER OF THE RIVET BY CHISELING OR OTHER MECHANICAL METHOD APPROVED BY THE ENGINEER. AT NO TIME SHALL THERMAL CUTTING, AIR CARBON ARC, OR GOUGING BE ALLOWED. CARE SHALL BE TAKEN TO ENSURE THAT THE REMOVAL OF THE EXISTING FASTENERS CAUSES NO DAMAGE TO THE CONNECTED ELEMENTS THAT ARE TO REMAIN. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A METHOD OF REPAIR TO THE ENGINEER FOR ANY EXISTING ELEMENTS DAMAGED DURING RIVET REMOVAL. ALL REPAIRS TO DAMAGED STEEL SHALL BE MADE AT NO ADDITIONAL COST TO THE PROJECT.

REAMING - OPEN RIVET HOLES THAT WILL RECEIVE NEW HIGH STRENGTH BOLTS SHALL BE PROPERLY SIZED TO A DIAMETER THAT IS ONE-SIXTEENTH INCH (2") LARGER THAN THE NEW BOLTS. IN THE EVENT THAT THE EXISTING RIVET HOLE IS NOT ADEQUATE TO ACCEPT THE NEW SPECIFIED BOLT, THE HOLE SHALL BE DRILLED OR REAMED AS REQUIRED TO PROVIDE A PROPER SIZED HOLE.

ITEM 513 - STRUCTURAL STEEL, MISC.: LACING BAR REPAIRS

DESCRIPTION:

THIS WORK INCLUDES ALL ACCESS, LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REPLACE LACING BARS AS SHOWN IN THE PLANS AND SHALL CONFORM TO THE REQUIREMENTS OF CMS 513 SUPPLEMENTED WITH THE FOLLOWING INFORMATION. EXISTING RIVETS ARE TO BE REMOVED PER THE RIVET REMOVAL PROCEDURE.

NO MORE THAN TWO FASTENERS (ONE LACING BAR) SHALL BE REMOVED AT ONE TIME.

THE CONTRACTOR SHALL PERFORM ALL WORK IN A MANNER THAT WILL NOT GOUGE, CUT, OR DAMAGE THE EXISTING STEEL TO REMAIN. IF EXISTING STEEL TO REMAIN IS DAMAGED DURING REMOVAL OR INSTALLATION OF THE RETROFIT, THE CONTRACTOR SHALL REPLACE THE DAMAGED AREA AT NO COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS TO FIELD VERIFY ALL MEMBER DIMENSIONS, RIVET/BOLT LAYOUTS, AND LACING BARS TO BE RETROFITTED PRIOR TO PERFORMING THE WORK.

STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. THE CONTRACTOR SHALL MAKE NECESSARY MEASUREMENTS AND PREPARE SKETCHES, DRAWINGS, TABLES, ETC. THE ENGINEER SHALL HAVE AUTHORITY AND RESPONSIBILITY FOR ENSURING THAT THE FABRICATED STEEL IS ACCEPTABLE. MILL TEST REPORTS AND SHIPPING DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INCORPORATING STEEL ITEMS INTO THE WORK, AS REQUIRED BY CMS *501.06.*

MEASUREMENT AND PAYMENT:

PAYMENT SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ACCESS NECESSARY TO COMPLETE THE REPAIRS. PAYMENT FOR CUTTING, GRINDING, DRILLING, AND BOLTING AS PART OF THE REPAIR SHALL BE CONSIDERED INCIDENTAL TO THESE ITEMS.

ANY LABOR AND/OR MATERIALS AND EQUIPMENT INCIDENTAL TO STEEL WORK NOT SPECIFICALLY PAID FOR UNDER ANY OTHER ITEM SHALL BE INCLUDED AND PAID FOR UNDER THE FOLLOWING CONTRACT ITEM (PAY ITEM):

DESCRIPTION

EACH STRUCTURAL STEEL, MISC.: LACING BAR REPAIRS

ITEM 513 - STRUCTURAL STEEL, MISC.: RIVET REPLACEMENT

DESCRIPTION:

THIS WORK INCLUDES FURNISHING ALL ACCESS, LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REPLACE RIVETS WITH HIGH STRENGTH BOLTS AS SHOWN IN THE PLANS. COMPLETED AND IN PLACE WORK SHALL CONFORM TO THE REQUIREMENTS OF CMS 513 SUPPLEMENTED WITH THE FOLLOWING ADDITIONAL INFORMATION.

THE CONTRACTOR SHALL REMOVE NO MORE THAN ONE RIVET AT ANY TIME FOLLOWING THE RIVET REMOVAL PROCEDURE.

MATERIAL:

NEW BOLTS SHALL BE GALVANIZED (PER CMS 711.02) ASTM A325 AND MATCH EXISTING RIVET SIZES. NEW MATERIAL SHALL BE CERTIFIED PER CMS 501.06.

SEQUENCE OF CONSTRUCTION:

LIMIT REMOVAL AND CONSTRUCTION OPERATIONS TO ONE GUSSET PLATE ON EITHER THE NORTH OR SOUTH TRUSS AT ANY GIVEN TIME. THIS WORK MAY OCCUR SIMULTANEOUSLY WITH STEEL REPAIRS IN OTHER SPANS.

PERFORM RIVET REPLACEMENT WITH BOLTS AS FOLLOWS:

- A. ABRASIVE BLAST AREA ENCOMPASSING GUSSET PLATE CONNECTION *IN ACCORDANCE WITH CMS 514.13.C.*
- B. REMOVE A SINGLE RIVET PER RIVET REMOVAL PROCEDURE.
- C. IN THE OPEN RIVET HOLE, INSTALL A NEW BOLT WITH SUFFICIENT GRIP LENGTH TO ACCOMMODATE ALL BEARING SURFACES.
- D. PROPERLY TENSION NEW BOLT.
- E. REPEAT "B" THROUGH "D" UNTIL ALL SPECIFIED RIVETS ARE REPLACED.
- F. THE ENGINEER SHALL INSPECT NEW BOLT TENSION WITH A CALIBRATED TORQUE WRENCH PRIOR TO FIELD PAINTING.
- G. FIELD PAINT EXPOSED STEEL PER CMS 514.

MEASUREMENT AND PAYMENT:

PAYMENT FOR SURFACE PREPARATION AND PAINTING SHALL BE INCLUDED FOR PAYMENT WITH ITEM 514.

PAYMENT SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ACCESS NECESSARY TO COMPLETE THE REPAIRS. PAYMENT FOR REAMING, GRINDING, AND BOLTING AS PART OF THE REPAIR SHALL BE CONSIDERED INCIDENTAL TO THESE ITEMS. THE UNIT "EACH" REFERS TO A SINGLE GUSSET PLATE AT A PANEL POINT LOCATION.

ANY LABOR AND/OR MATERIALS AND EQUIPMENT INCIDENTAL TO STEEL WORK NOT SPECIFICALLY PAID FOR UNDER ANY OTHER ITEM SHALL BE INCLUDED AND PAID FOR UNDER THE FOLLOWING CONTRACT ITEM (PAY ITEM):

ITEM UNIT DESCRIPTION

STRUCTURAL STEEL, MISC.: RIVET REPLACEMENT *513 EACH*

ITEM 513 - STRUCTURAL STEEL, MISC.: GUSSET/COVER PLATE HOLE

DESCRIPTION:

THIS WORK INCLUDES FURNISHING ALL ACCESS, LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REPAIR HOLES IN GUSSET PLATES WITH A NEW STEEL PLATE ADHERED TO THE EXISTING GUSSET PLATE USING A METAL POLYMER MATERIAL. COMPLETED AND IN PLACE WORK SHALL CONFORM TO THE REQUIREMENTS OF CMS 513 SUPPLEMENTED WITH THE FOLLOWING ADDITIONAL INFORMATION.

MATERIAL:

THE MATERAILS USED TO COMPLETE THE WORK SHALL BE AS FOLLOWS OR AN APPROVED EQUAL MATERIAL APPROVED BY THE ENGINEER. METAL POLYMER MATERIAL MANUFACTURER INFORMATION:

DEVCON

https://itwperformancepolymers.com/

DIAMANT MM1018

https://diamant-polymer.com

RESIMETAL

https://resimacsolutions.com/product/101-metal-repair-paste/

SEQUENCE OF CONSTRUCTION:

LIMIT REMOVAL AND CONSTRUCTION OPERATIONS TO ONE GUSSET/COVER PLATE ON EITHER THE NORTH OR SOUTH TRUSS AT ANY GIVEN TIME. THIS WORK MAY OCCUR SIMULTANEOUSLY WITH STEEL REPAIRS IN OTHER SPANS.

PERFORM RIVET REPLACEMENT WITH BOLTS AS FOLLOWS:

- A. ABRASIVE BLAST AREA ENCOMPASSING NEW STEEL PLATE CONNECTION IN ACCORDANCE WITH CMS 514.13.C.
- B. INSTALL A MINIMUM OF 1/4" THICK LAYER OF METAL POLYMER OR AS RECOMMENDED BY THE MANUFACTURER
- C. INSTALL 1/2" THICK UNCOATED STEEL PLATE CENTERED OVER THE HOLE IN THE GUSSET/ COVER PLATE.
- D. SEAL PERIMETER WITH MINIMUM 1/2"
- E. COVER TOP SURFACE WITH MINIMUM 1/16"COAT OF DEVCON/MM1018/RESIMETAL WEDGE.
- G. FIELD PAINT EXPOSED STEEL PER CMS 514.

DEVCON/MM1018/RESIMETAL WEDGE.

MEASUREMENT AND PAYMENT:

PAYMENT FOR SURFACE PREPARATION AND PAINTING SHALL BE INCLUDED FOR PAYMENT WITH ITEM 514.

PAYMENT SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ACCESS NECESSARY TO COMPLETE THE REPAIRS. THE UNIT "EACH" REFERS TO A SINGLE HOLE IN A PLATE AT THE SPECIFIED LOCATION.

ANY LABOR AND/OR MATERIALS AND EQUIPMENT INCIDENTAL TO STEEL WORK NOT SPECIFICALLY PAID FOR UNDER ANY OTHER ITEM SHALL BE INCLUDED AND PAID FOR UNDER THE FOLLOWING CONTRACT ITEM (PAY ITEM):

DESCRIPTION

STRUCTURAL STEEL, MISC.: GUSSET/COVER PLATE

HOLE REPAIRS

ESIGN AGENCY

ESIGNER GTF

REVIEWER CAH 07/14/25 ROJECT ID

114515

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER **PLAN**

THIS ITEM INCLUDES THE SURFACE PREPARATION AND COATING OF THE EXISTING STEEL MEMBERS TO REMAIN TO THE LIMITS DESCRIBED OR SHOWN IN THE PLANS. THIS WORK SHALL BEGIN AFTER THE REMOVALS UNDER ITEM 202 AND 513 ARE FINISHED AT A REPAIR LOCATION, AND BEFORE THE PLACEMENT OF THE NEW MEMBERS.

THE COLOR OF THE FINISH COAT FOR ALL STRUCTURAL STEEL IS TO MATCH THE EXISTING AND THE CONTRACTOR SHALL PROVIDE SAMPLES TO THE ENGINEER FOR APPROVAL PRIOR TO APPLICATION.

IN ADDITION TO THE AREAS SHOWN ON THE PLANS, A QUANTITY OF 500 SF HAS BEEN ADDED TO THE ESTIMATED QUANTITIES FOR PURPOSES OF ESTABLISHING A UNIT BID PRICE. THIS QUANTITY SHALL BE USED TO PAINT AREAS SUCH AS THE TRUSS CHORD MEMBERS, FLOORBEAM ENDS, LATERAL BRACING MEMBERS, ETC. AT THE DISCRETION OF THE ENGINEER.

THE REQUIREMENTS OF CMS 514 SHALL APPLY WITH THE FOLLOWING **ADDITIONS/MODIFICATIONS:**

514.13.C - ABRASIVE BLASTING (QCP #3):

PORTIONS OF THE INSIDE OF THE TRUSS MEMBERS ARE IDENTIFIED AS BEING POSSIBLY INACCESSIBLE. THE CONTRACTOR SHALL MAKE A REASONABLE EFFORT TO CLEAN STEEL SURFACES IN THESE AREAS, AND IN ALL OTHER AREAS DETERMINED BY THE ENGINEER AS BEING INACCESSIBLE, ACCORDING TO SSPC-SP 6 (COMMERCIAL BLAST CLEANING) AND AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES IN SSPC-VIS 1.

ALL OTHER ACCESSIBLE STEEL SURFACES SHALL BE BLASTED TO SSPC-SP 10 AS PER CMS 514.13.C.

IN ADDITION, THIS WORK WILL INCLUDE THE REPAIR OF PACK-RUSTED AREAS OF THE EXISTING STEEL AS DIRECTED BY THE ENGINEER. PACK RUSTED AREAS ARE DEFINED AS THOSE LOCATIONS WHERE IMPACTED RUST HAS PRODUCED A GAP BETWEEN ADJACENT STEEL PLATES MORE THAN ¼". PACK RUST SHALL BE REMOVED FROM THE JOINTS RUSTED APART MORE THAN ¼" BY CHIPPING, HAMMERING, PUNCHING, CHISELING OR BY OTHER SUITABLE MEANS, TO A DEPTH OF AT LEAST EQUAL TO THE WIDTH OF THE GAP. ALL JOINTS SHALL THEN BE VACUUMED WITH A COMMERCIAL VACUUM CLEANER HAVING A NOZZLE OPENING OF 1" TO 1½" OR AIR BLOWN SUCH THAT ALL DUST AND DEBRIS ARE REMOVED TO THE SATISFACTION OF THE ENGINEER.

514.13.D - CONTAINMENT/WASTE DISPOSAL (QCP#4):

THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONTAINMENT SYSTEMS SURROUNDING THE WORK FOR THE PURPOSE OF CONTROLLING EMISSIONS OF DUST AND DEBRIS IN ACCORDANCE WITH THE REQUIREMENTS OF CMS 514. WORKING PLATFORMS AND CONTAINMENT MATERIALS THAT ARE USED SHALL BE FIRM AND STABLE, AND PLATFORMS SHALL BE DESIGNED TO SUPPORT THE WORKERS, INSPECTORS, SPENT SURFACE PREPARATION MEDIA (E.G. ABRASIVES) AND EQUIPMENT DURING ALL PHASES OF SURFACE PREPARATION AND PAINTING. PLATFORMS, CABLES AND OTHER SUPPORTING STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND OSHA. INSPECTION ACCESS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CMS 514.10.

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT. AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN (CONTINUED)

IF THE CONTAINMENT IS PROPOSED TO BE ATTACHED TO THE STRUCTURE. THE CONTAINMENT SHALL BE ATTACHED BY BOLTING, CLAMPING OR SIMILAR MEANS. WELDING ONTO OR DRILLING INTO THE STRUCTURE IS PROHIBITED. THE CONTRACTOR SHALL PROVIDE DRAWINGS SHOWING THE CONTAINMENT SYSTEM AND INDICATING THE METHOD(S) OF SUPPORTING THE WORKING PLATFORMS AND CONTAINMENT MATERIALS.

IN THE EVENT OF SUSTAINED WINDS OF 40 MPH OR GREATER, THE CONTAINMENT SHALL BE DROPPED AND ALL MATERIALS AND EQUIPMENT SHALL BE SECURED TO AVOID OVERSTRESSING AND/OR DAMAGING THE BRIDGE STRUCTURE.

THE CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS SIGNED, SEALED, AND DATED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER IN THE EMPLOY OF THE CONTRACTOR, ASSURING THE STRUCTURAL INTEGRITY OF THE BRIDGE UNDER LIVE AND DEAD LOADS IMPOSED, INCLUDING THE DESIGN WIND LOADING. DESIGN SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE MOST CURRENT VERSION OF AASHTO'S "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" AND ODOT'S BRIDGE DESIGN MANUAL. THE CONTAINMENT SUBMITTAL SHALL INCLUDE CALCULATIONS THAT ASSURE STRUCTURAL INTEGRITY OF THE BRIDGE WHEN IT SUPPORTS THE CONTAINMENT.

THE CONTRACTOR IS NOTIFIED THAT THE EXISTING PAINT SYSTEM MAY CONTAIN LEAD, AND CMS 514.13.D.1 MAY APPLY.

514.17 COATING APPLICATION:

IN ADDITION TO THE REQUIREMENTS OF CMS 514, A STRIPE COATING OF THE PRIME COAT SHALL BE APPLIED TO ALL WELDS, CREVICES, RIVET HEADS, NUTS, BOLT HEADS, BOLT THREADS AND OTHER SURFACE IRREGULARITIES. ALSO, THE AREAS SPECIFIED UNDER THIS CONTRACT FOR SURFACE PREPARATION PER SSPC-SP 2 (HAND TOOL CLEANING) SSPC-SP 3 (POWER TOOL CLEANING) OR SSPC-SP 11 (POWER TOOL CLEANING TO BARE METAL) SHALL HAVE THE EDGES OF THE PREPARED AREAS STRIPE COATED WITH THE PRIME COAT. THE STRIPE COATING SHALL BE APPLIED TO THE SPECIFIED SURFACES BEFORE THE APPLICATION OF THE FULL PRIME COAT OVER THE SAME AREAS AND ADJACENT PREPARED SURFACES. STRIPING SHALL EXTEND A MINIMUM OF 1" FROM THE EDGES REQUIRING STRIPE COATING. THE STRIPE COATING SHALL SET TO TOUCH BEFORE APPLICATION OF THE FULL PRIME COAT OVER THE SAME AREA; HOWEVER, THE STRIPE COATING SHALL NOT BE PERMITTED TO DRY FOR A PERIOD LONG ENOUGH TO ALLOW RUSTING OF THE ADJACENT UNPRIMED STEEL SURFACES BEFORE THE FULL PRIME COAT CAN BE APPLIED TO THE AREA.

THE CONTRACTOR SHALL THOROUGHLY COAT ALL SURFACES RECEIVING A STRIPE COATING, PAYING PARTICULAR ATTENTION TO HARD-TO-REACH AREAS AND IRREGULAR SURFACES, SUCH AS LACING BARS, BOLT HEADS, LAP SPLICES, GUSSET PLATES, PINS, ETC. WHEN STRIPE COATING MULTI-PLANED SURFACE CONFIGURATIONS, SUCH AS ON NUTS AND BOLT THREADS, THE CONTRACTOR SHALL APPLY THE STRIPE COATING FROM MULTIPLE DIRECTIONS TO ENSURE COMPLETE COVERAGE OF ALL SURFACES, CREVICES, CORNERS AND SHARP EDGES.

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT. AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN (CONTINUED)

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN (CONTINUED)

514.19 CAULKING (QCP#9).

AFTER THE INTERMEDIATE COAT HAS BEEN APPLIED, THE CONTRACTOR SHALL CAULK ALL GAPS OR CREVICES GREATER THAN 1/8". THE INTERMEDIATE COAT SHALL BE FREE OF CONTAMINANTS WHEN THE CAULKING IS APPLIED.

THE CAULKING SHALL BE APPLIED EVENLY TO THE JOINTS AND GAPS. VOIDS SHALL BE COMPLETELY FILLED WITH CAULKING WHICH SHALL BE APPLIED BY TROWEL OR CAULKING GUN AND SHALL BE SPREAD SMOOTHLY USING HEAVY PRESSURE TO DISPLACE AIR BUBBLES. EXCESS MATERIAL SHALL BE REMOVED IMMEDIATELY. ALL PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND TO THE SATISFACTION OF THE ENGINEER.

MEASUREMENT AND PAYMENT:

THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE MEASURED AND PAID FOR USING THE FOLLOWING CONTRACT ITEMS (PAY ITEMS):

ITEM	UNIT	DESCRIPTION
514	SF	SURFACE PREPARATION OF EXISTING
		STRUCTURAL STEEL, AS PER PLAN
514	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL,
		PRIME COAT, AS PER PLAN
514	SF	FIELD PAINTING STRUCTURAL STEEL,
		INTERMEDIATE COAT, AS PER PLAN
514	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH
		COAT, AS PER PLAN

ITEM 202 - BRIDGE RAILING REMOVED, AS PER PLAN

DESCRIPTION:

THIS WORK CONSISTS OF REMOVAL OF THE EXISTING W-BEAM RAIL AND W-BEAM RAIL SPLASH GUARD WITHIN THE LIMITS OF THE BRIDGE. THE PROVISIONS OF ITEM 202 SHALL APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING W-BEAM REMOVAL TO PROTECT PORTIONS OF THE BRIDGE RAILING TO BE SALVAGED AND INCORPORATED INTO THE NEW STRUCTURE.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING W-BEAM RAIL AND INSTALL THE NEW W-BEAM RAIL IN A CONTINUOUS OPERATION. NO W-BEAM RAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE AND READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME AS THE ENGINEER IS ASSURED OF COMPLIANCE.

THE CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DAMAGE THE EXISTING GALVANIZED COATING ON THE PORTIONS TO REMAIN. THE CONTRACTOR SHALL REPAIR ANY DAMAGED TO THE GALVANIZED COATING PER CMS 711.02 AND TO THE ENGINEER'S SATISFACTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THIS PAYMENT ITEM.

THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE THROUGH LANE IN EACH DIRECTION OF TRAFFIC AT THE WORK OPERATION AREA AT ALL TIMES. FOR ADDITIONAL INFORMATION REGARDING THE MAINTENANCE OF TRAFFIC, REFER TO ITEM 614 ON SHEET

MEASUREMENT AND PAYMENT:

THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE PAID FOR USING THE FOLLOWING CONTRACT ITEM (PAY ITEM):

ITEM UNIT DESCRIPTION 202 BRIDGE RAILING REMOVED, AS PER PLAN

ABBREVIATIONS:

N.F. - NEAR FACE

NO./# - NUMBER

N.P.C.P.P. - NON-PERFORATED

CORRUGATED

PLASTIC PIPE

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CONTAINED IN THE LEGEND BELOW:

ABUT. - ABUTMENT O/O - OUT TO OUT P.C.P.P - PERFORATED CORRUGATED APPR. - APPROACH BTM. - BOTTOM PLASTIC PIPE P.E.J.F. - PREFORMED EXPANSION BRG. - BEARING BRGS. - BEARINGS JOINT FILLER PG - PROFILE GRADE - CENTERLINE C/C - CENTER TO CENTER PGL - PROFILE GRADE LINE PROP. - PROPOSED CIP - CAST-IN-PLACE C.J. - CONSTRUCTION JOINT PT - POINT OF TANGENCY CLR. - CLEARANCE PVC - POINT OF VERTICAL CURVATURE CMS - CONSTRUCTION AND PVI - POINT OF VERTICAL INTERSECTION MATERIAL SPECIFICATIONS PVT - POINT OF VERTICAL TANGENCY CONC. - CONCRETE R. - RADIUS CONSTR. - CONSTRUCTION R.A. - REAR ABUTMENT CONTR. - CONTRACTION RF - RIGHT FORWARD CU YD - CUBIC YARD RT. - RIGHT DIA. - DIAMETER R/W - RIGHT OF WAY E.F. - EACH FACE SAN. - SANITARY ELEV., EL. - ELEVATION SER. - SERIES EQ. - EQUAL SHT. - SHEET EX. - EXISTING S.O. - SERIES OF EXP. - EXPANSION SPA. - SPACES OR SPACING SR - STATE ROUTE F.A. - FORWARD ABUTMENT STA. - STATION F.F. - FAR FACE F.S. - FIELD SPLICE STD. - STANDARD STM. - STORM FT/FT - FOOT PER FOOT FTG. - FOOTING STR. - STRAIGHT FWD. - FORWARD TBM - TEMPORARY BENCH MARK GALV. = GALVANIZED TEMP. - TEMPORARY GEN. - GENERAL T.O.S. - TOE OF SLOPE LF - LEFT FORWARD T/PARAPET - TOE OF PARAPET T/T - TOE TO TOE LT. - LEFT MAX. - MAXIMUM TYP. - TYPICAL MIN. - MINIMUM U.G. - UNDERGROUND MISC. - MISCELLANEOUS VAR. - VARIES **MOT - MAINTENANCE OF TRAFFIC** VC - VERTICAL CURVE

VERT. - VERTICAL

W/O - WITHOUT

ESIGN AGENCY



ESIGNER GTF

REVIEWER CAH 07/14/25 ROJECT ID

굽	DO J., O, LJ.,OJ PAPERSIZE: 34x22 (in.) DATE: 8/4/2025 TIME: 7:31:58 AM PLT
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	ESTIMATED QUANTITIES - STRUCTURE No.: HAM-50-0376L (SFN: 3102521) (01/NHS FUNDING SPLIT)							
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION ABUT	PIERS	SUPER.	GEN.	SHEET
512	73500	3139	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN		3139		
513	95030	32	EACH	STRUCTURAL STEEL, MISC.: LACING BAR REPAIRS		32		
513	95030	66	EACH	STRUCTURAL STEEL, MISC.: RIVET REPLACEMENT		66		
513	95030	2	EACH	STRUCTURAL STEEL, MISC.: BEARING ANCHOR BOLT		2		
513	95030	2	EACH	STRUCTURAL STEEL, MISC.: GUSSET/COVER PLATE HOLE REPAIRS		2		
514	00051	206565	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN		206,565		
514	00057	206565	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN		206,565		
514	00061	206565	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN		206,565		
514	00067	206565	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN		206,565		
514	00504	400	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL		400		
514	10000	86	EACH	FINAL INSPECTION REPAIR		86		
519	11101	604	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN 604				
519	12304	1	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C		1		
644	00104	0.32	MILE	EDGE LINE, 6"			0.32	
644	00204	0.16	MILE	LANE LINE, 6"			0.16	
844	20000	625	EACH	GALVANIC ANODE PROTECTION		625		

				ESTIMATED QUANTITIES - STRUCTURE No.: HAM-50-0376R (SFN: 3102548) (02/NHS FUNDING SPLIT)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION ABUT.	PIERS	SUPER.	GEN.	SHEET
512	73500	2983	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN		2983		
514	00050	4157	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL		4,157		
514	00056	4157	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT		4,157		
514	00060	4157	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		4,157		
514	00066	4157	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		4,157		
514	00504	3	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL		3		
514	10000	5	EACH	FINAL INSPECTION REPAIR		5		
517	75000	897	FT	RAILING, ALUMINUM (REFERENCE BR-2-82)		897		
F40	44400		C.E.	DATCHUNG CONCRETE CERLICITURE		0.5		
519			SF	PATCHING CONCRETE STRUCTURE		96		<u> </u>
519	12304	25	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C		25		
644	00104	0.32	MILE	EDGE LINE, 6"			0.32	
644	00204	0.16	MILE	LANE LINE, 6"			0.16	

	ESTIMATED QUANTITIES - STRUCTURE No.: HAM-50-1903L (SFN: 3102807) (01/NHS FUNDING SPLIT)								
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET
512	10100	6149	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	189	2,019	3,941		
512	74000	6149	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	189	2,019	3,941		
514	00050	137916	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL		2,839	135,077		
514	00056	137916	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT		2,839	135,077		
514	00060	137916	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		2,839	135,077		
514	00066	137916	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		2,839	135,077		
514	00504	118	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL		3	115		
514	10000	27	EACH	FINAL INSPECTION REPAIR		2	25		
519	11101	467	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN			467		
844	20000	484	EACH	PATCHING CONCRETE STRUCTURE, AS PER PLAN			484		
		_							

DESIGN AGENCY



DESIGNER

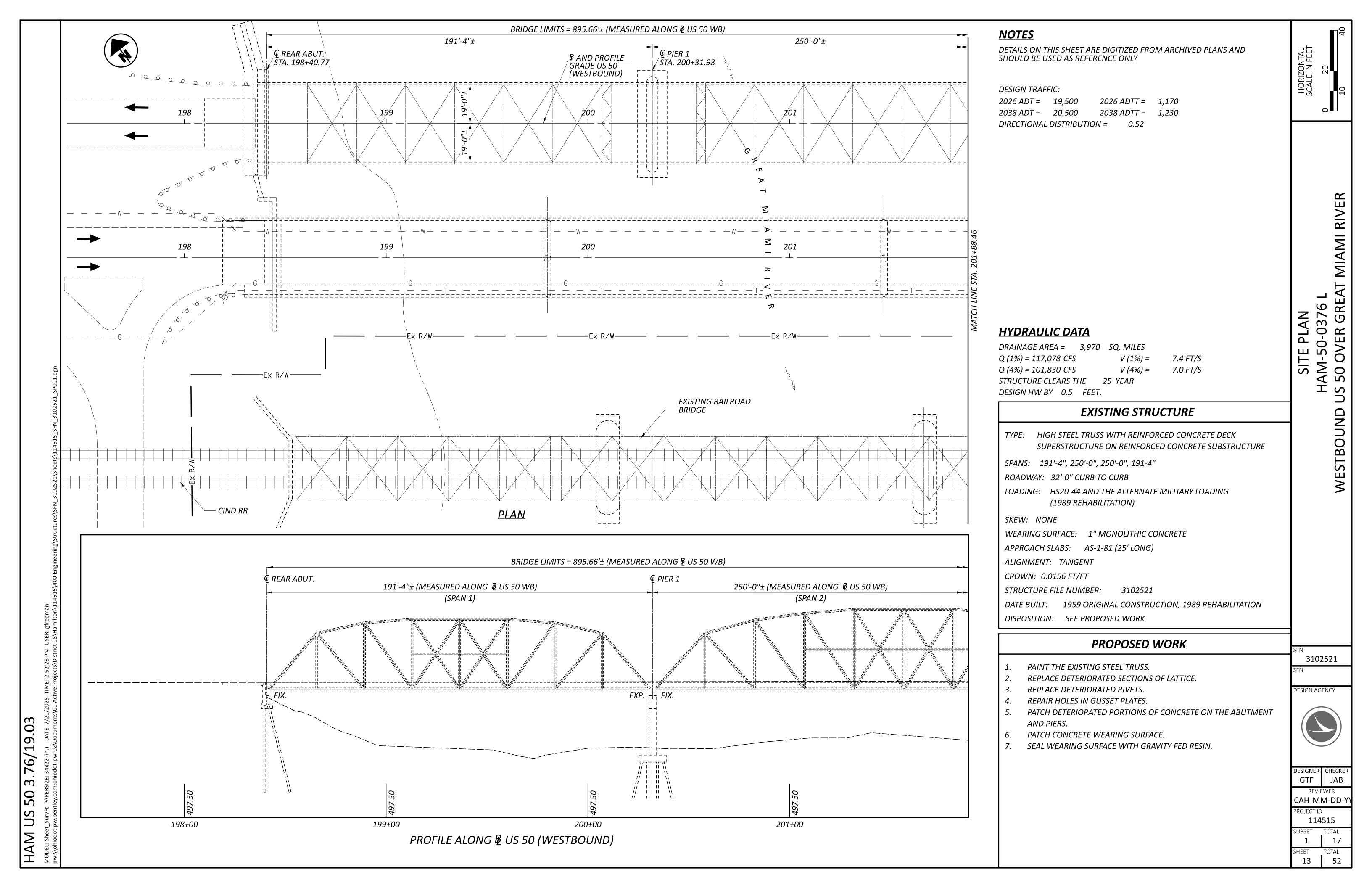
GTF

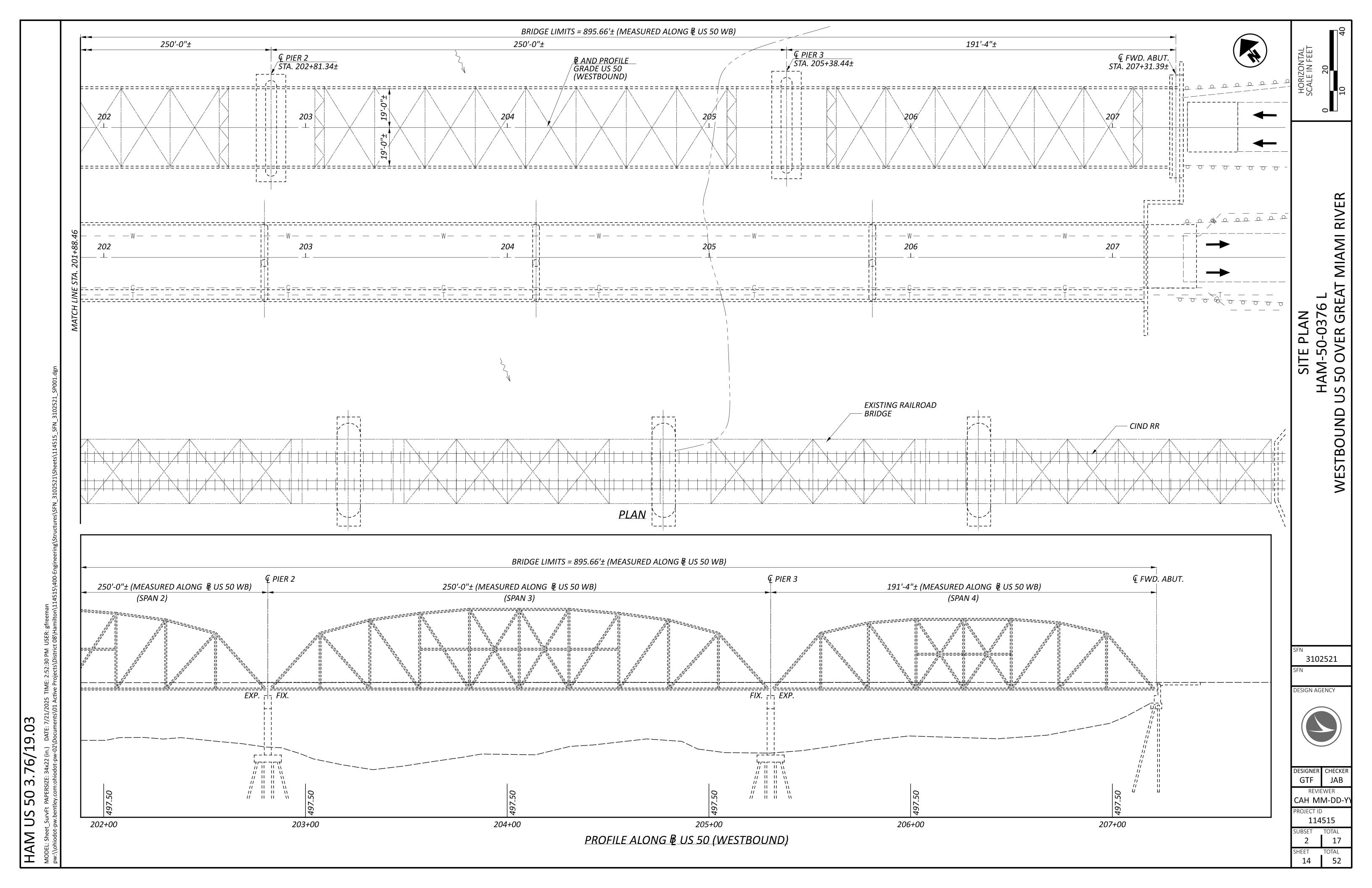
REVIEWER

CAH 7-14-25

PROJECT ID

114515
SHEET TOTAL

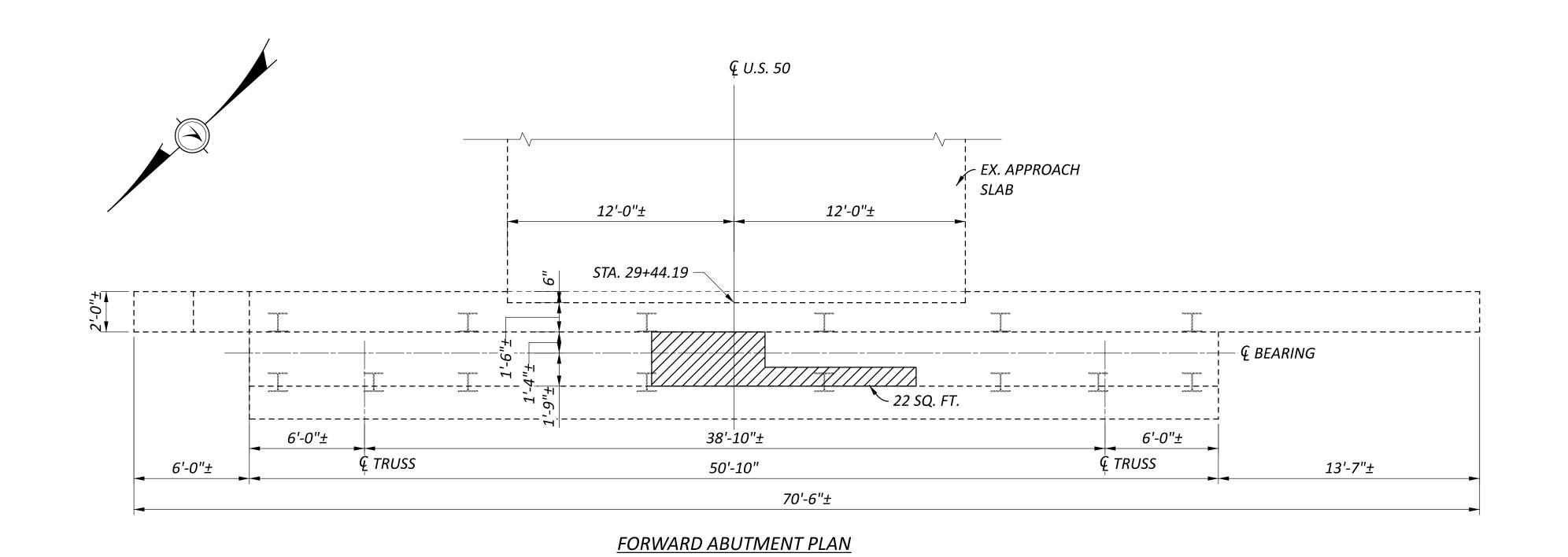


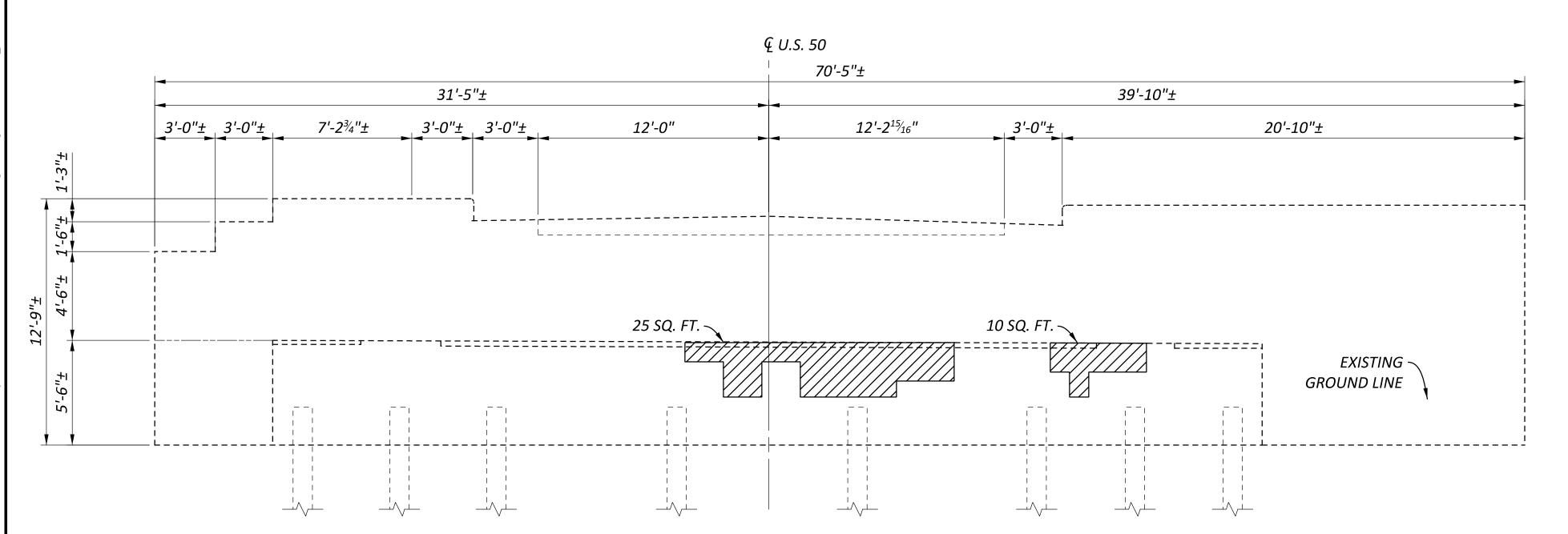




3102521

CAH 07/14/2! 114515





FORWARD ABUTMENT ELEVATION

19.0

50

SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE	MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
FWD. ABUT. PATCHING	57 SQ. FT.	1.5	86 SQ. FT.
		86 SQ. FT.	

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

<u>LEGEND</u>

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

ESTIMATED

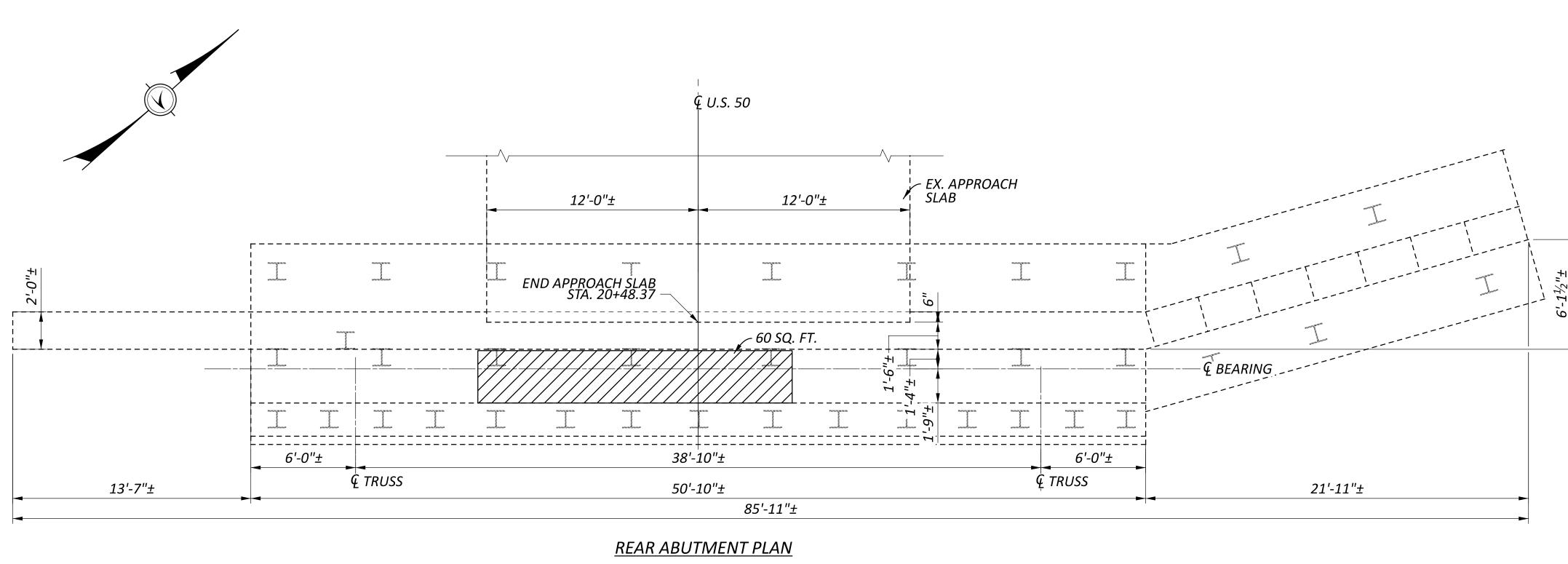
QUANTITIES

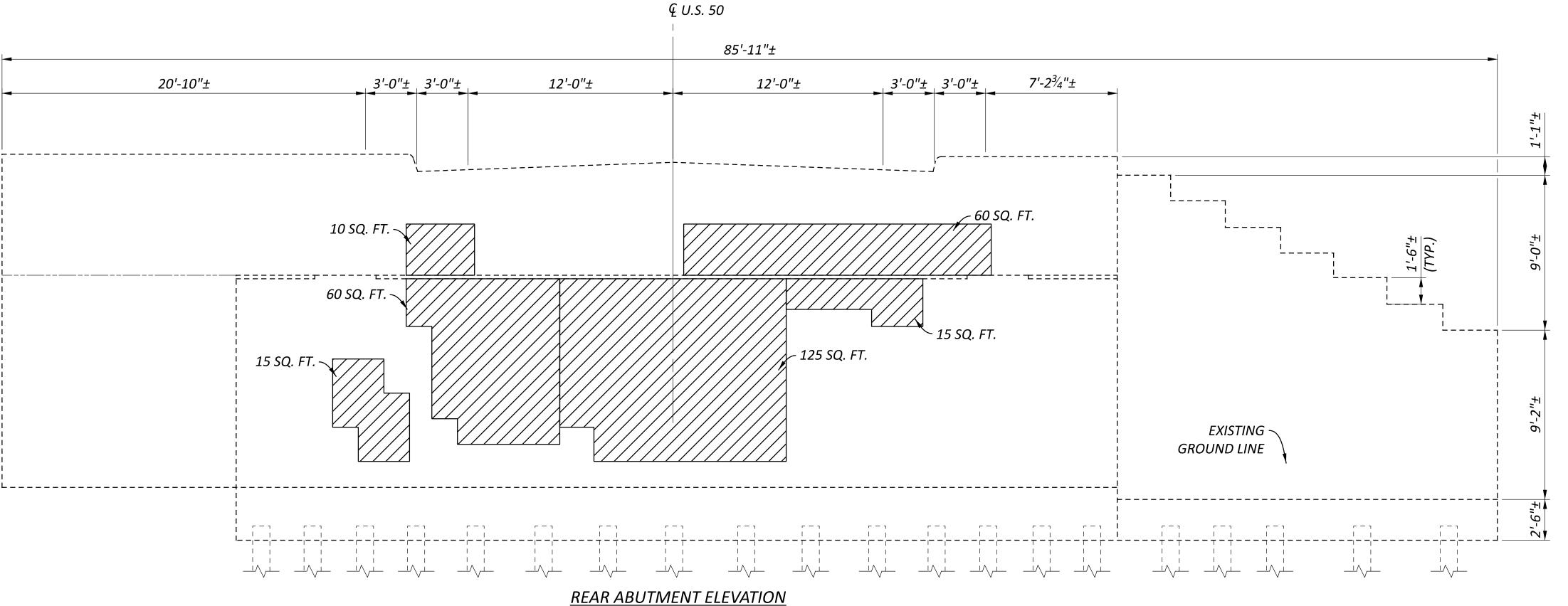
518 SQ. FT.

518 SQ. FT.

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

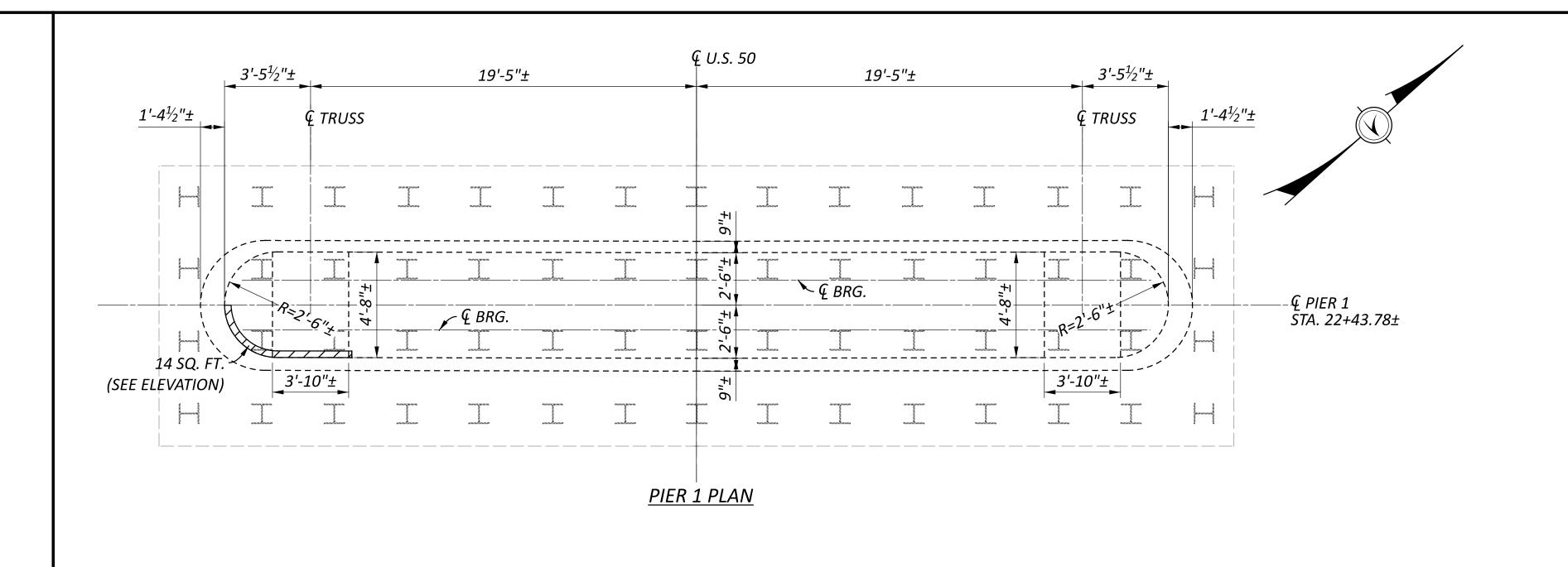




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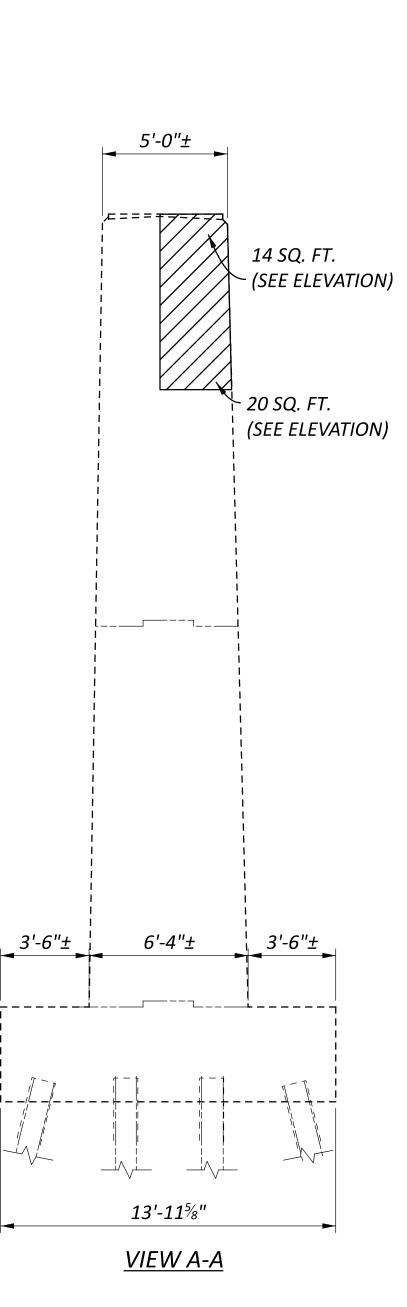
CAH 07/14/2



₡ TRUSS **₹** TRUSS 45′-9"± 22'-10¹/₂"± 22'-10¹/₂"± – 14 SQ. FT. (SEE SECT. A-A) ∕ 6 SQ. FT. .______ ========== - 160 SQ. FT. =========== (SEE SECTION Á-Á) *E CONST. JOINT* 24′-3″± 24'-3"± **PIER 1 ELEVATION**

3.76/19.03

50



SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE	MEASURED ESTIMATIN QUANTITIES FACTOR*		ESTIMATED QUANTITIES
PIER 1 PATCHING	345 SQ. FT.	1.5	518 SQ. FT.
	TOTAL PATCHING		518 SQ. FT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

<u>LEGEND</u>

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

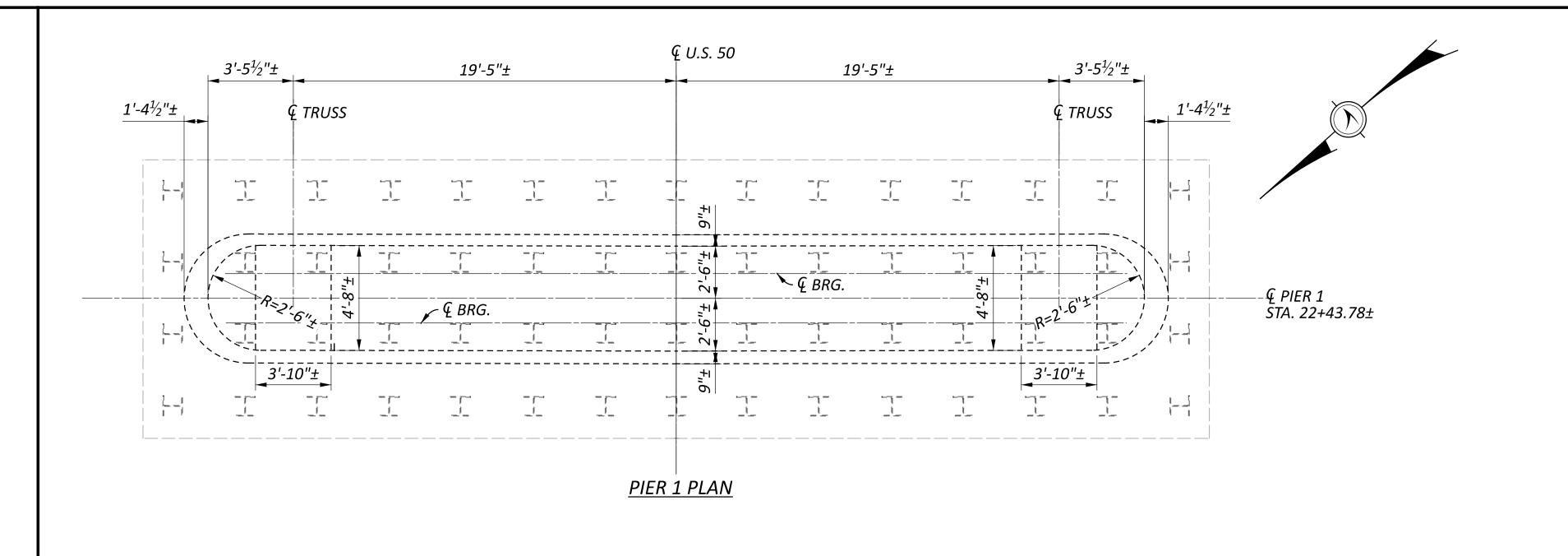
NOTES

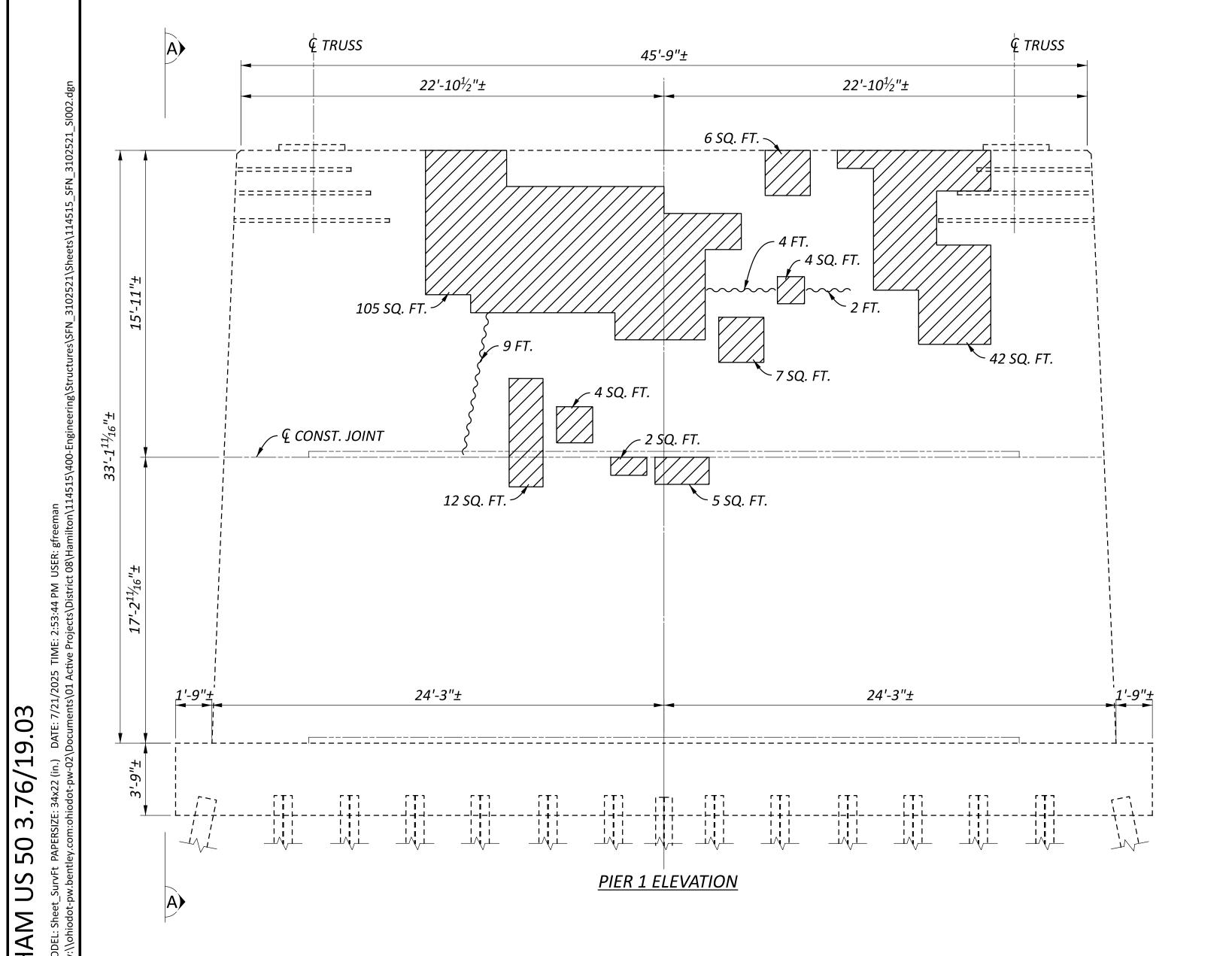
- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

3102521
DESIGN AGENCY



DESIGNER	CHECKER
GTF	ВСР
REVIE	EWER
CAH 0	7/14/25
PROJECT ID)
114	515
SUBSET	TOTAL
5	17





SUMMARY OF REPAIR AREAS PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023. EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES. **MEASURED ESTIMATING ESTIMATED** TYPE **QUANTITIES** FACTOR* **QUANTITIES** PIER 1 187 SQ. FT. 280 SQ. FT. 1.5 **PATCHING** TOTAL 280 SQ. FT. PATCHING PIER 1 **EPOXY** 23 FT. 15 FT. 1.5 ~~~ INJECTION TOTAL 23 FT. **EPOXY INJECTION**

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

LEGEND

- AREA TO BE REPAIRED WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

/c========

3'-6"±

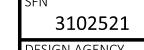
6'-4"±

13'-4"±

VIEW A-A

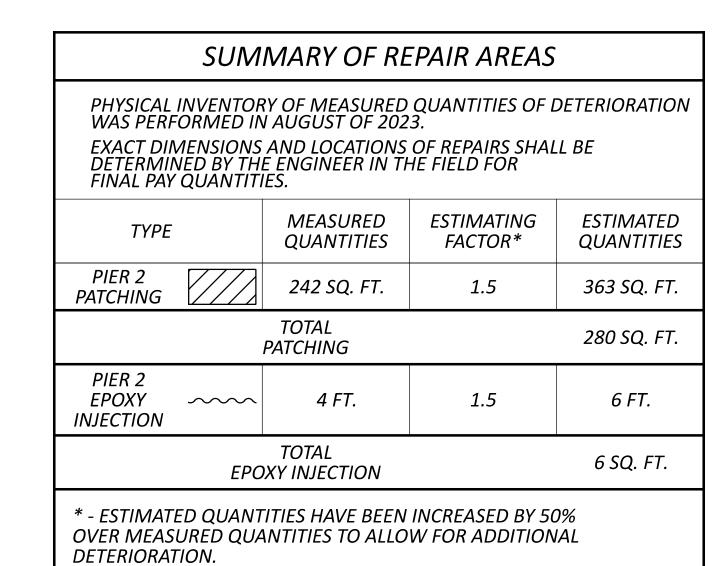
\ 3'-6"±

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.





DESIGNER	CHECKER
GTF	BCP
	EWER
CAH 0	7/14/25
PROJECT ID	
	515
114	515
114 SUBSET	515 TOTAL

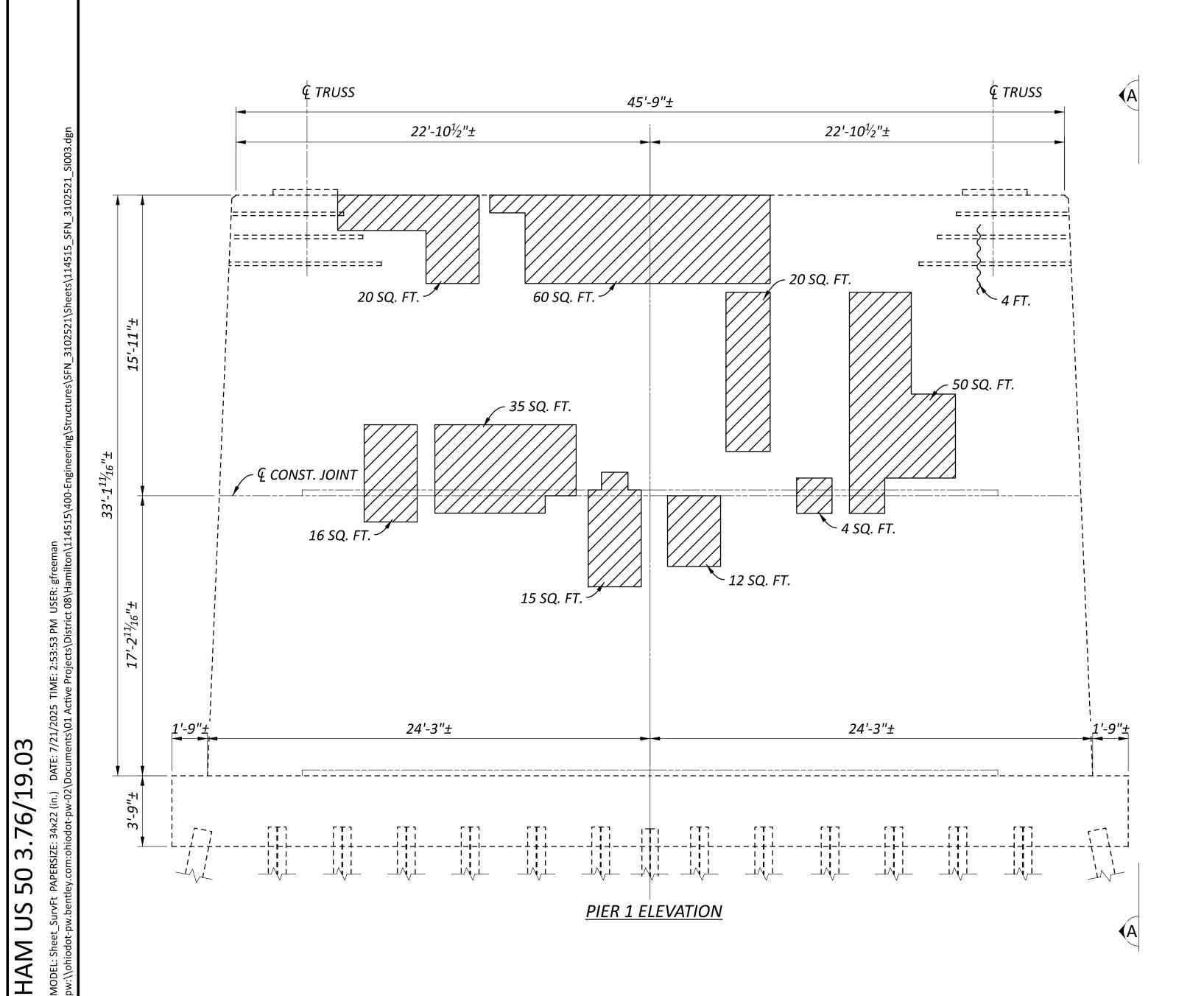


<u>LEGEND</u>

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND®GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.



€ U.S. 50

PIER 1 PLAN

19'-5"±

₹ BRG.

19'-5"±

TRUSS

1'-4¹/₂"±

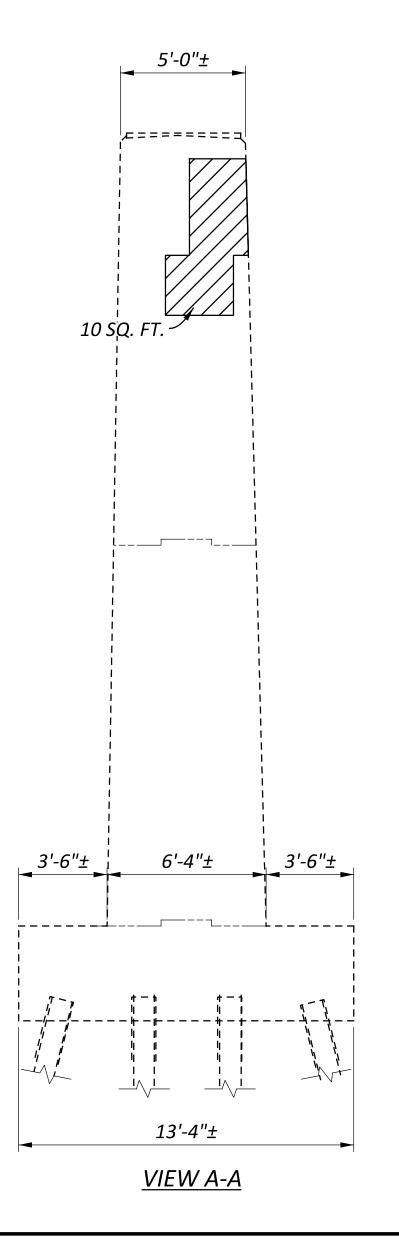
 $3'-5\frac{1}{2}"\pm$

Q TRUSS

1'-4¹/₂"±

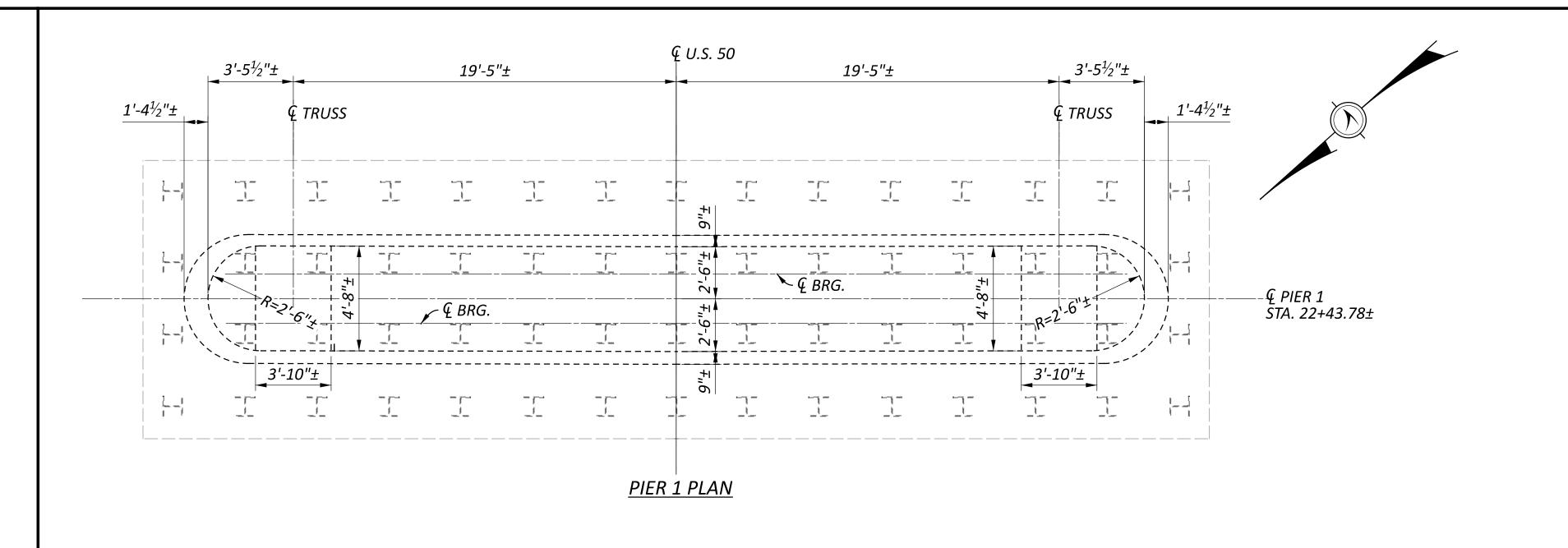
4 PIER 1

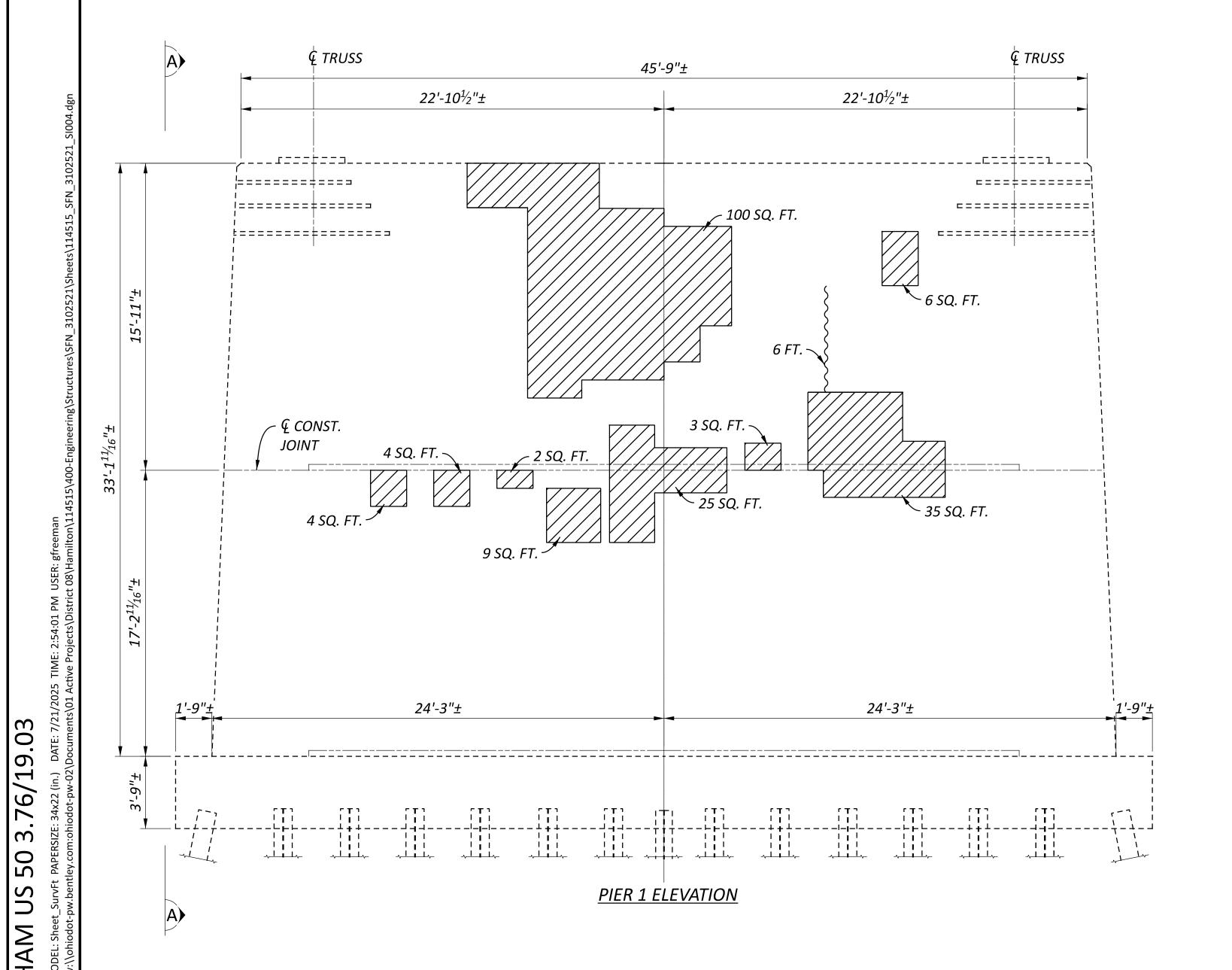
STA. 22+43.78±





DESIGNER	CHECKER
GTF	BCP
	WER 7/14/25
PROJECT ID	515
SUBSET 7	TOTAL 17
SHEET	TOTAL





SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE		MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
PIER 2 PATCHING		188 SQ. FT.	1.5	282 SQ. FT.
PIER 2 EPOXY	~~~	6 FT.	1.5	9 FT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

LEGEND

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

/c========

3'-6"±

6'-4"±

13'-4"±

<u>VIEW A-A</u>

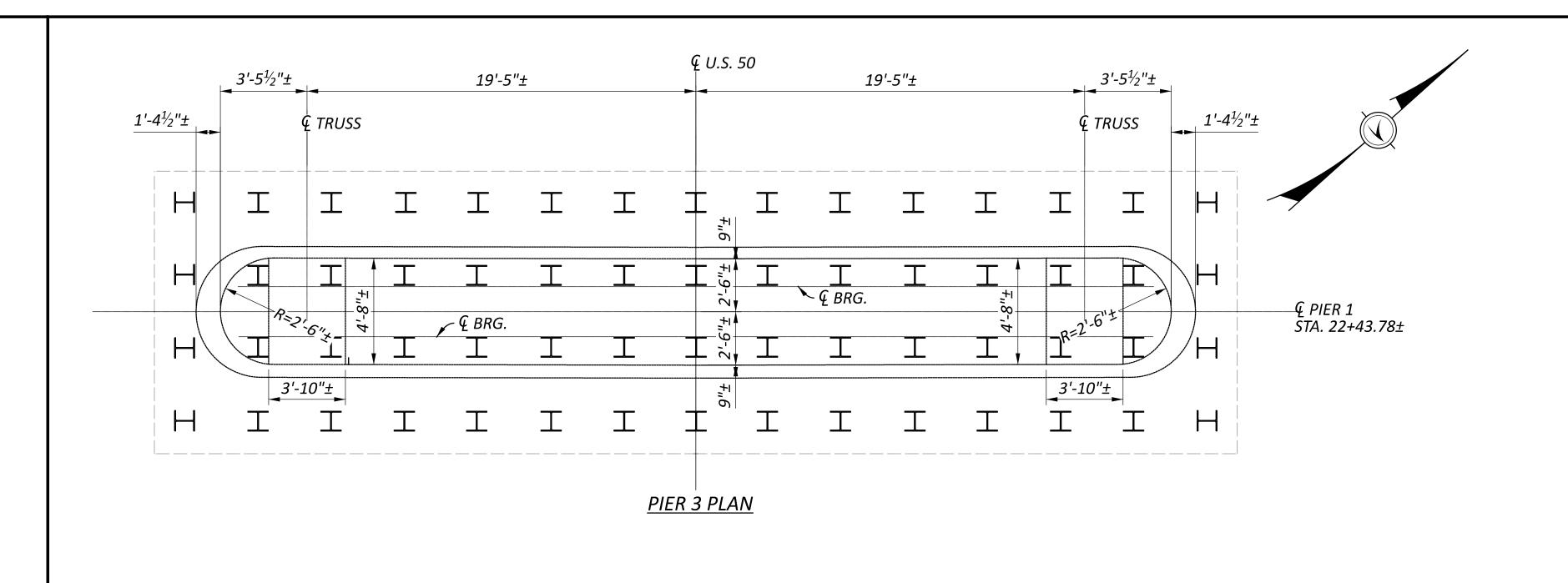
\ 3'-6"±

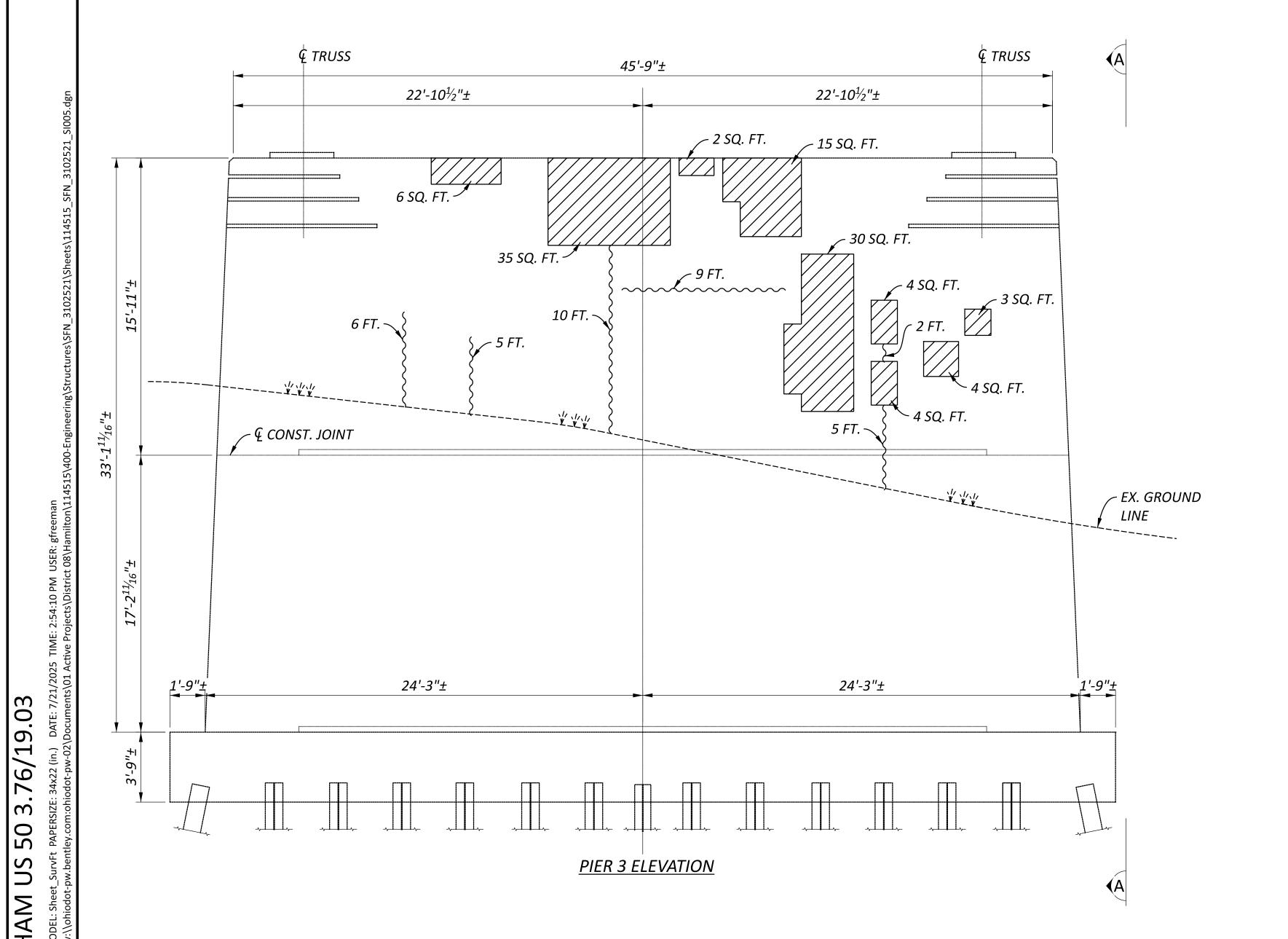
- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND®GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.





DESIGNER	CHECKER
GTF	ВСР
REVIE	EWER
CAH 0	7/14/25
PROJECT ID)
114	515
SUBSET	TOTAL
8	17
SHEET	TOTAL





SUMMARY OF REPAIR AREAS PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023. EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES. **MEASURED ESTIMATING ESTIMATED** TYPE FACTOR* **QUANTITIES QUANTITIES** PIER 2 103 SQ. FT. 155 SQ. FT. 1.5 **PATCHING** PIER 2 **EPOXY** 37 FT. 1.5 56 FT. ~~~ INJECTION * - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION. **LEGEND**

- AREA TO BE REPAIRED WITH ITEM 519 PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

5′-0″±

3'-6"±

6'-4"±

13'-4"±

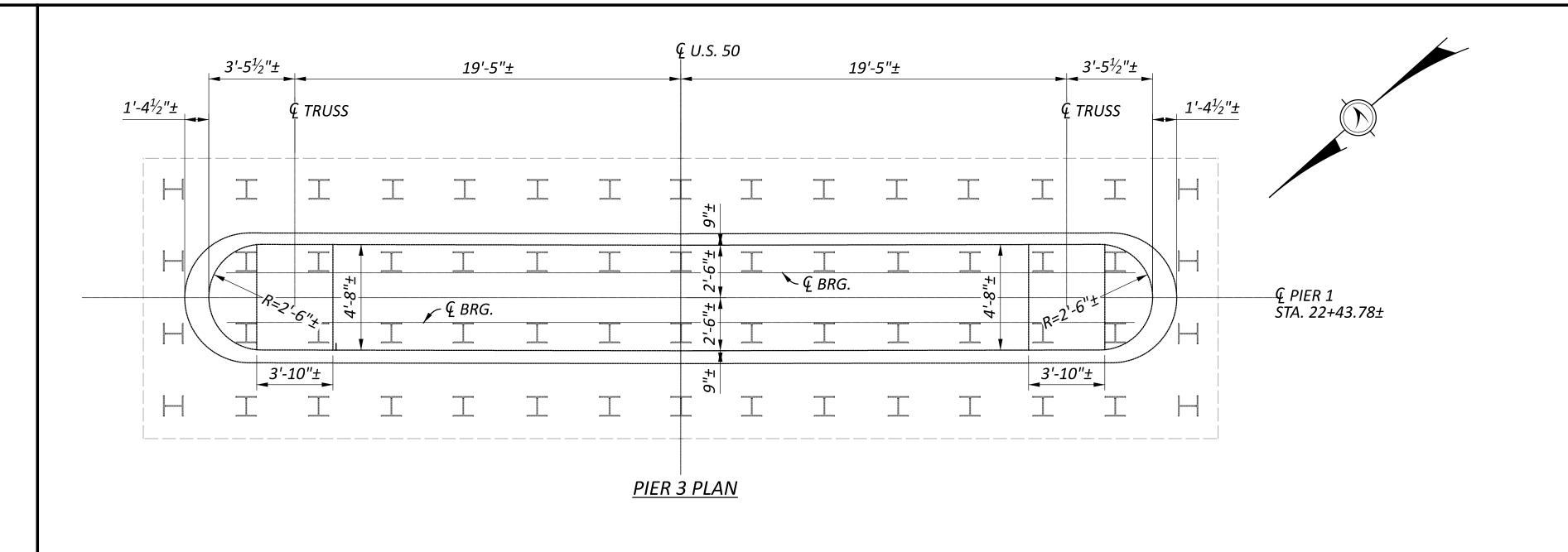
VIEW A-A

3'-6"±

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.



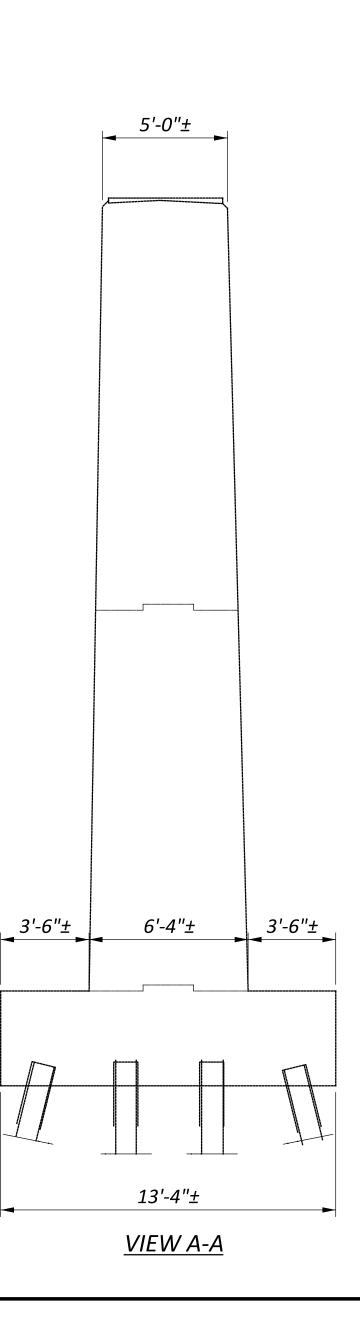
DESIGNER GTF	CHECKER BCP
	7/14/25
PROJECT ID	
	515



₡ TRUSS **₹** TRUSS 45′-9″± 22'-10¹/₂"± 22'-10¹/₂"± 4 SQ. FT. *←* 60 SQ. FT. \ 12 SQ. FT. ~ 2 FT. 35 SQ. FT. ∕ 6 FT. 12 SQ. FT. √ ∕ EX. GROUND ∕ € CONST. ∼ 80 SQ. FT. 5 FT. 🥄 LINE JOINT 24'-3"± 24′-3″± 1'-9"± 1'-9"+ **PIER 3 ELEVATION**

3.76/19.03

50



SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST OF 2023.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE		MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
PIER 3 PATCHING		260 SQ. FT.	1.5	390 SQ. FT.
PIER 3 EPOXY INJECTION	~~~	19 FT.	1.5	29 FT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

LEGEND

- AREA TO BE REPAIRED WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.



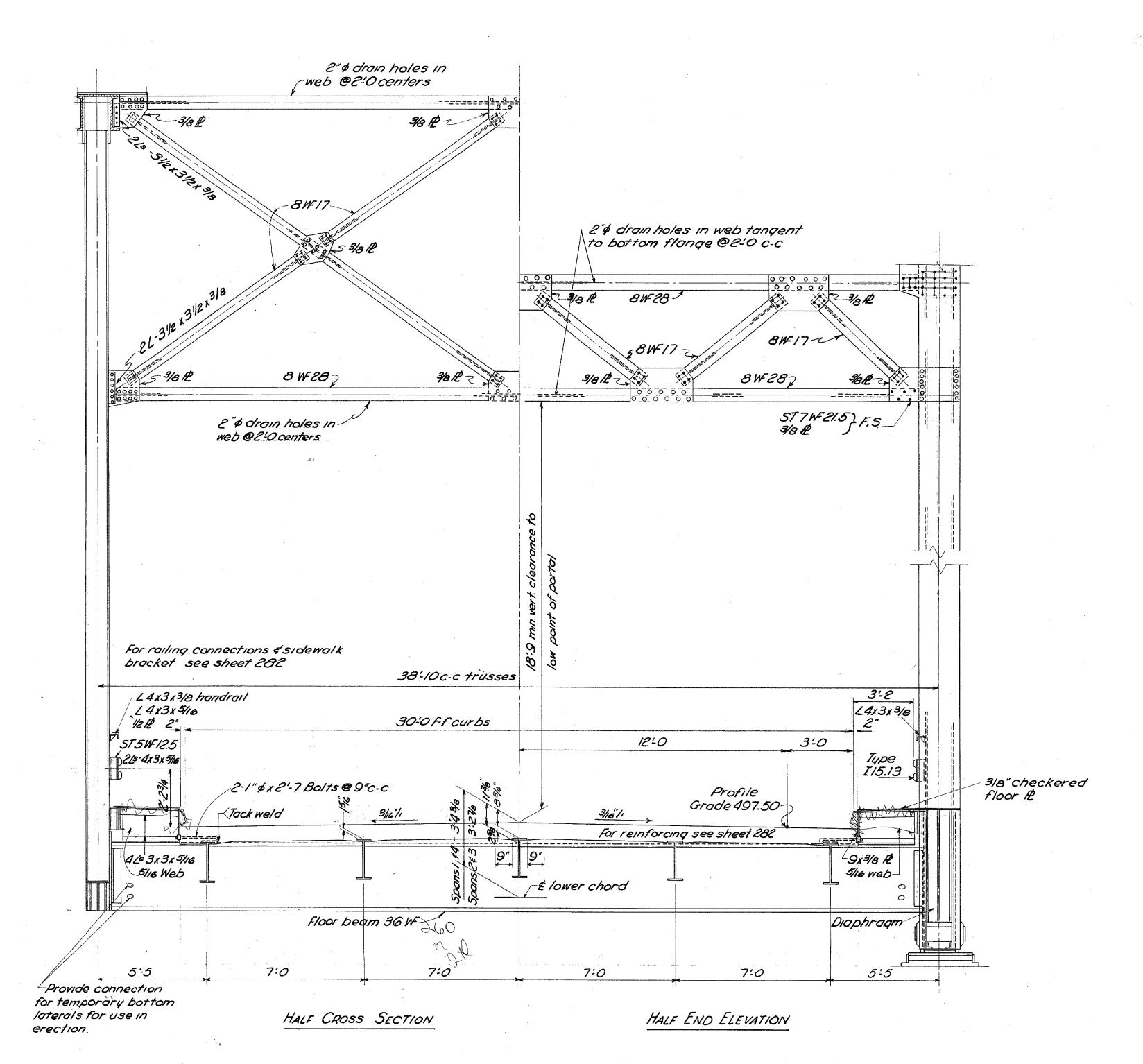


DESIGNER	
GTF	ВСР
	IEWER
CAH ()7/14/25
	_
PROJECT I	4 515
	_
114	4515
114 SUBSET	4515 TOTAL

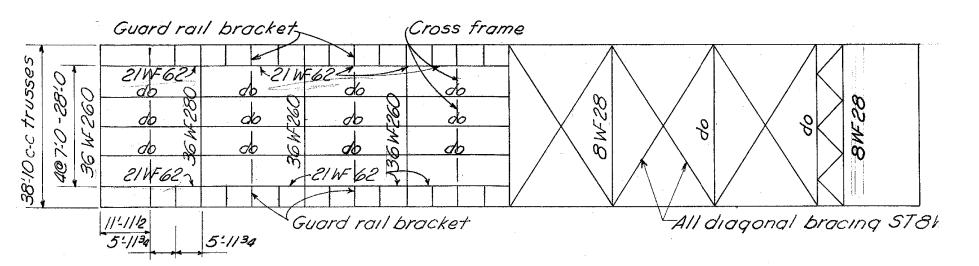
3.76/19.03 50 HAM US

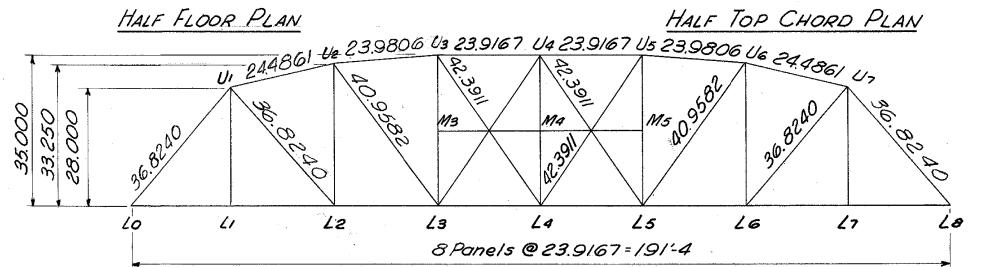
NOTES

- DETAILS ON THIS SHEET ARE FROM ARCHIVED PLANS AND SHOULD BE USED FOR REFERENCE ONLY.
- 2) SEE SHEET __ FOR PAINTING QUANTITY CALCULATIONS.

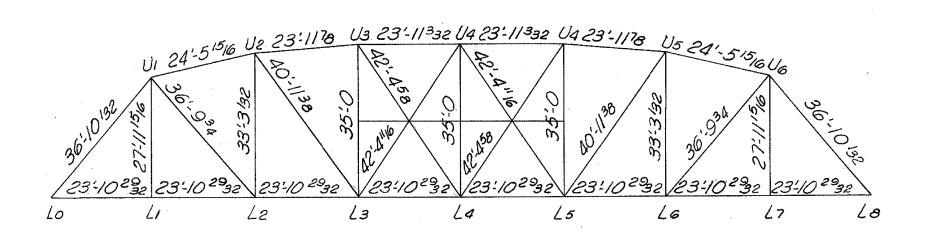


SPANS 1 \$ 4





ELEVATION



FABRICATED LENGTHS

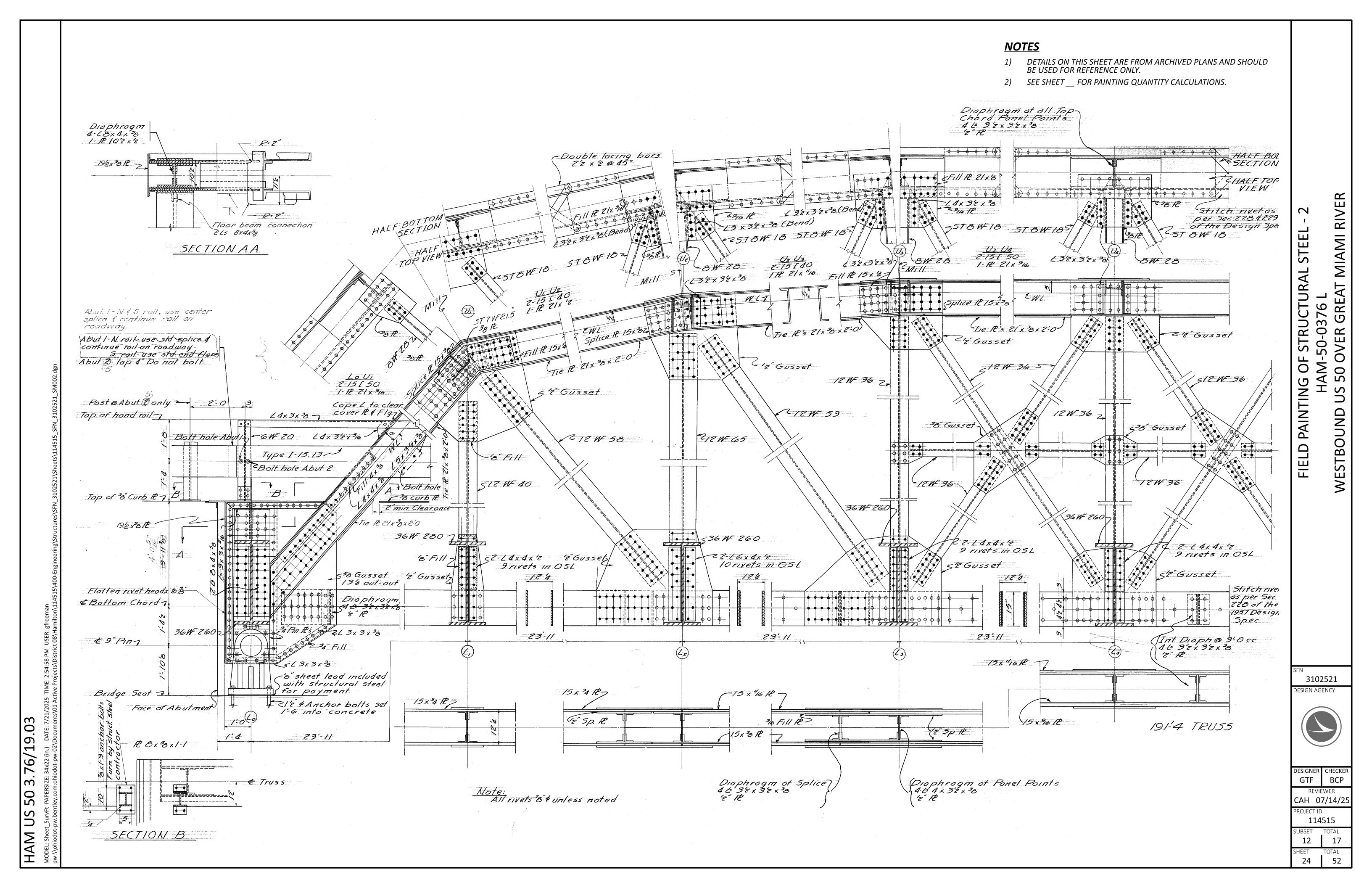
3102521

ESIGN AGENCY



DESIGNER	CHECKER	
GTF	ВСР	
	EWER	
	7/14/25	
PROJECT ID 114515		
SUBSET	TOTAL	
11	17	
SHEET	TOTAL	
23	52	

TYPICAL FOR ALL SPANS



FIELD PAINTING OF STRUCTURAL STEEL - 3 HAM-50-0376 L WESTBOUND US 50 OVER GREAT MIAMI RIVER

SFN
3102521
DESIGN AGENCY



DESIGNER | CHECKER | BCP |

REVIEWER |

CAH | 07/14/25 |

PROJECT ID | 114515 |

SUBSET | TOTAL |

13 | 17

FIELD PAINTING OF STRUCTURAL STEEL - 4
HAM-50-0376 L
WESTBOUND US 50 OVER GREAT MIAMI RIVER

SFN
3102521
DESIGN AGENCY



DESIGNER CHECKER

GTF BCP

REVIEWER

CAH 07/14/25

PROJECT ID

114515

SUBSET TOTAL

14 17

19'-5" to £ -L-4x3x 3/16 & 12th Hond Roil L-1x3x3/8 375WF12.5-1 263 4x3x 5/16 Bulb L-Tx3/ex21.1 Curb 10E 15.3-265 4x3x 3/16. 515W12.5--465 3x3x 3/16 -4×1/6×10" R R 13"x 3/8" x 1'-5/2"-LAXAX/EUNless noted 36 W 280 SECTION AT FLOOR BEAM

NOTES

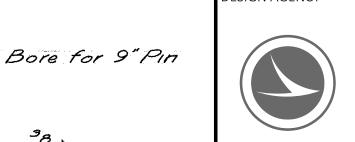
- DETAILS ON THIS SHEET ARE FROM ARCHIVED PLANS AND SHOULD BE USED FOR REFERENCE ONLY.
- SEE SHEET ___ FOR PAINTING QUANTITY CALCULATIONS.

GREAT MIAMI RIVER STEEL NG OF STRUCTURAL HAM-50-0376 L **50 OVER** FIELD PAINTING OF WESTBOUND



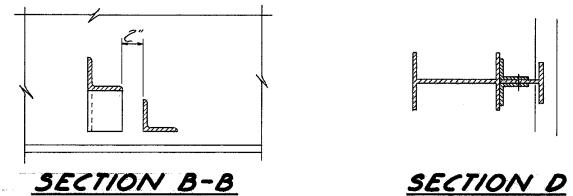
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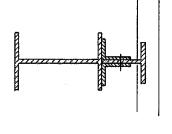
3102521 ESIGN AGENCY

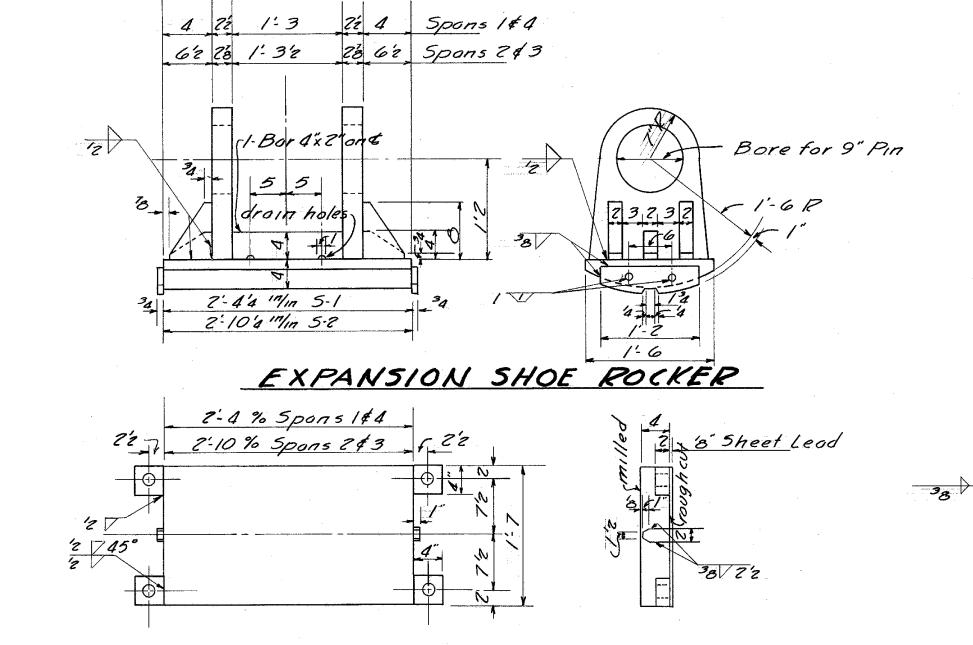


DESIGNER CHECKER GTF BCP REVIEWER CAH 07/14/25 114515 15 17

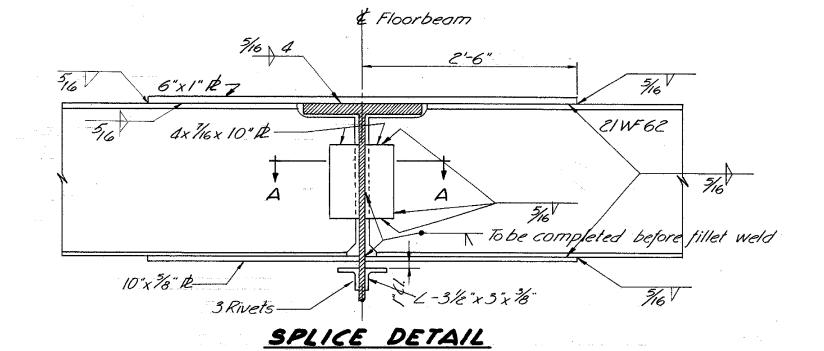
27 52











3.76/19.03

50

FIXED SHOES All edges are to be square and true

's Sheet Lead

la Spans 1#4

Spons 144 Spons 2#3

2'-24 2.74

2'10

5 76 1-3 125 Spansl 4

63 28 1'3'2 78 63 Spons 2\$3

SWAY BRACING					
MEMBER	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
HORIZONTAL	W8x28	2	3.4	37.0	251.6
DIACONAL	14/0×17	1	3.0	22.5	126.5
DIAGONAL	W8x17	2	3.0	11.5	136.5
				TOTAL PER BRACE	388
				NO. OF BRACES (EA.)	24
				TOTAL + 10%	10246

PONTAL DIVACTIVO			DEDUKATED		CUDEACE ADEA
MEMBER	SIZE	QUANTITY	PENIIVIETEN /ET)	LENGTH (FT)	(SQ FT)
HORIZONTAL	W8x28	2	3.4	37.0	251.6
DIAGONAL	W8x17	4	3.0	8.5	150.0
DIAGONAL	VVOX17	2	3.0	8.0	150.0
				TOTAL PER BRACE	402
				NO. OF BRACES (EA.)	8
				TOTAL + 10%	3534

I ATEDAL BRACING

<u>LATERAL BRACING</u>			DEDUARTED		CUDEACE ADEA
MEMBER	SIZE	QUANTITY	PERIIVIETER /ET)	LENGTH (FT)	SURFACE AREA
DIAGONAL	ST8 x WF18	2	3.0	22.5	269.4
	310 X VVF10	1	3.0	44.9	
				TOTAL PER LATERAL	269
				NO. OF LATERAL (EA.)	28
				TOTAL + 10%	8298

TRUSS (SPAN 1 OR 4)

MEMBER	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
	2 C15x50 1	2	6.9	36.8	4520.6
TOD CHORD		2	6.9	24.5	
TOP CHORD		2	6.9	24.0	
		2	6.9	23.9	1528.6
TOP CHORD DIAPHRAGM @ PANEL PTS.	4 L-4 x 3½ x ¾ ½ ?	7	3.1	-	
BOTTOM CHORD	2 15 x ³ / ₄	16	2.6	23.9	
BOT. CHORD INT. DIAPHRAGM	4 L-3 x 3½ x ¾ ½ ?	48	2.9	-	1213.1
BOT. CHORD DIAPHRAGM @ SPLICE	4 L-3 x 3½ x ¾ ½ ?	16	2.9	-	
BOT. CHORD DIAPHRAGM @ PANEL PTS.	4 L-4 x 3½ x 3/8 ½ ?	7	3.1	-	
HORIZONTAL	W12x36	4	4.2	12.0	198.6
	W12x36	3	4.2	35.0	1077.4
VERTICAL	W12x40	2	4.5	28.0	
	W12x65	2	5.9	33.3	
DIAGONAL	W12x36	2	4.2	42.4	1512.0
	W12x36	4	4.2	21.2	
	W12x53	2	5.2	41.0	1512.0
	W12x58	2	5.2	36.8	
				TOTAL PER TRUSS	5530
				NO. OF TRUSSES (EA.)	4
				, ,	

TOTAL + 10%

24331

TRUSS (SPAN 2 OR 3)

MEMBER	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
	2 C18x51.9 1	2	7.7	37.5	21575
TOR CHORD		2	7.7	25.9	
TOP CHORD		2	7.7	25.3	
		4	7.7	25.0	2157.5
TOP CHORD DIAPHRAGM @ PANEL PTS.	4 L-4 x 3½ x 3/8 ½ ?	9	3.1	-	
BOTTOM CHORD	2 PLY 2 18 x 3/4	20	3.3	25.0	
BOT. CHORD INT. DIAPHRAGM	4 L-3 x 3½ x 3% ½ ?	60	2.9	-	1886.5
BOT. CHORD DIAPHRAGM @ SPLICE	4 L-3 x 3½ x 3% ½ ?	20	2.9	-	
BOT. CHORD DIAPHRAGM @ PANEL PTS.	4 L-4 x 3½ x 3% ½ ?	9	3.1	-	
HORIZONTAL	W12x36	8	4.2	12.5	415.1
	W12x36	5	4.2	40.0	1488.4
VERTICAL	W12x40	2	4.5	28.0	
	W12x65	2	5.9	34.7	
DIAGONAL	W12x36	2	4.2	47.2	_
	W12x36	4	4.2	23.6	
	W12x45	2	4.5	46.0	2084.2
	W12x53	2	5.2	42.7	
	W12x65	2	5.9	37.5	
				TOTAL PER TRUSS	8032
				NO. OF TRUSSES (EA.)	4

FLOOR (SPAN 1 OR 2)

MEMBER	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
	W36x260	7	11.3	37.8	3837.6
FLOOR BEAM	W36x280	2	11.3	37.8	
STRINGER	W21x62	40	6.1	23.9	5806.7
CROSSFRAME	<i>L-3x3x</i> 15/16	7	1.0	21.2	143.5
				TOTAL PER SPAN	56735
				NO. OF SPAN (EA.)	2
				TOTAL + 10%	124817

TOTAL + 10%

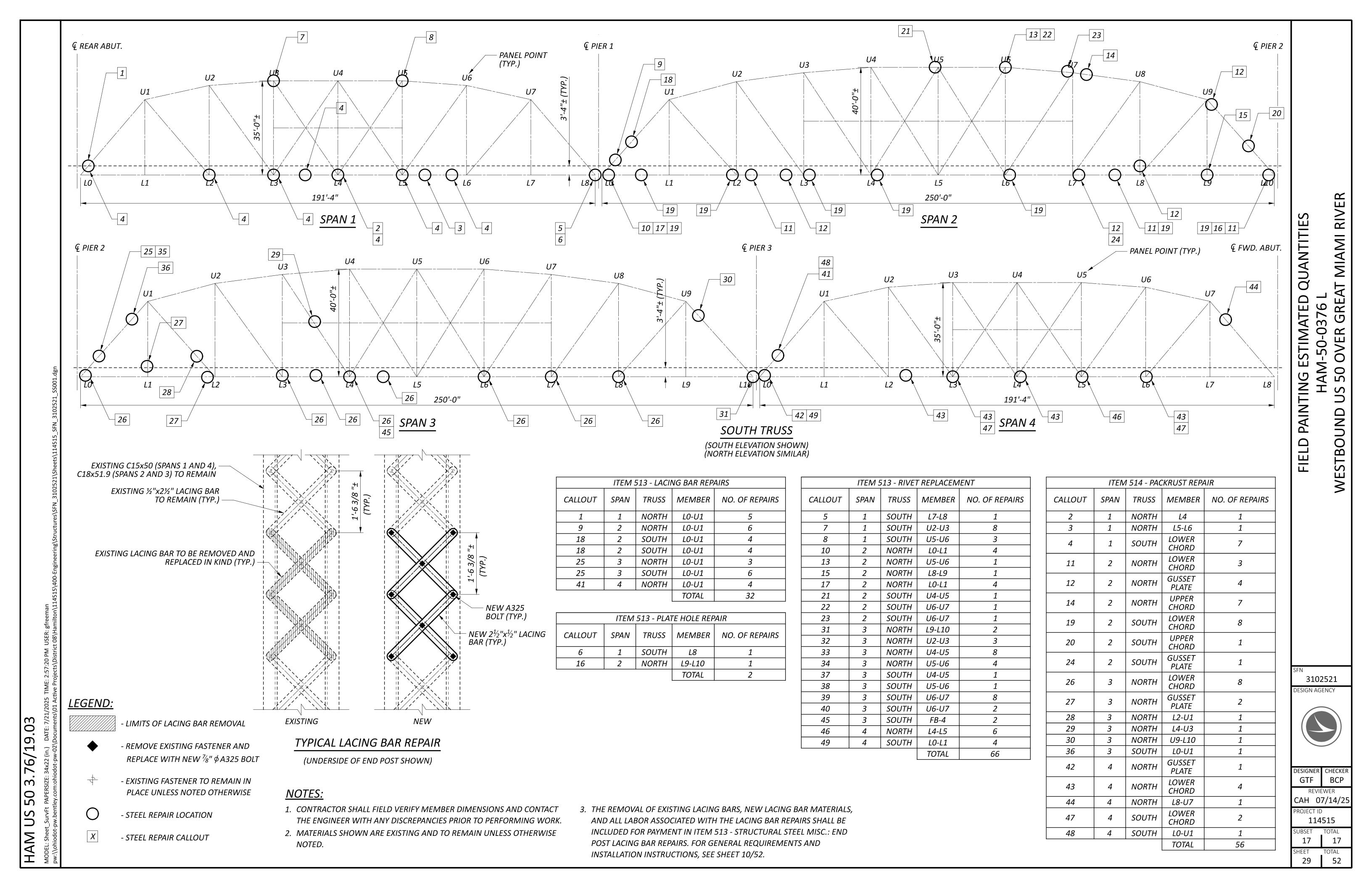
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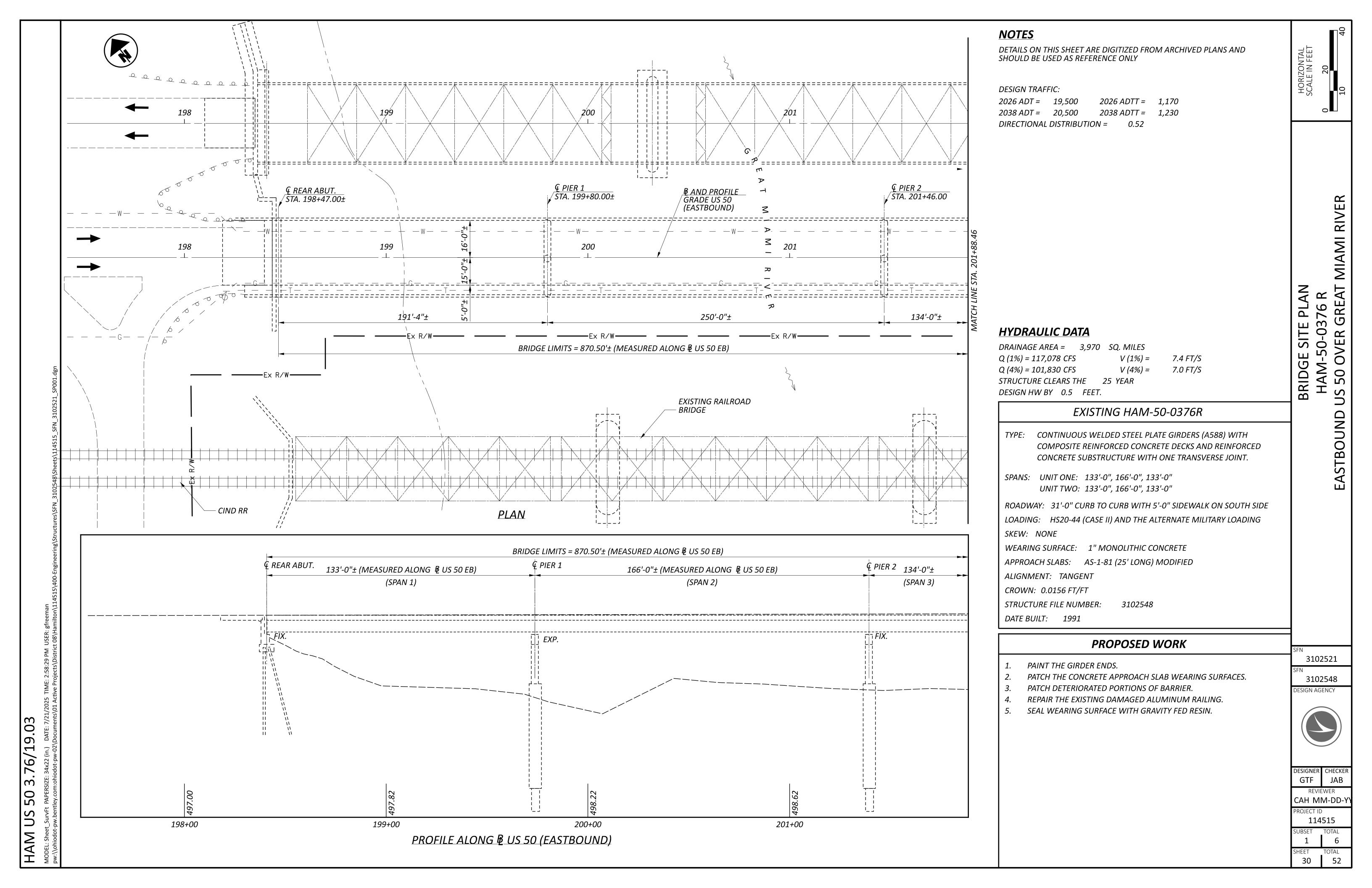
FLOOR (SPAN 2 OR 3)

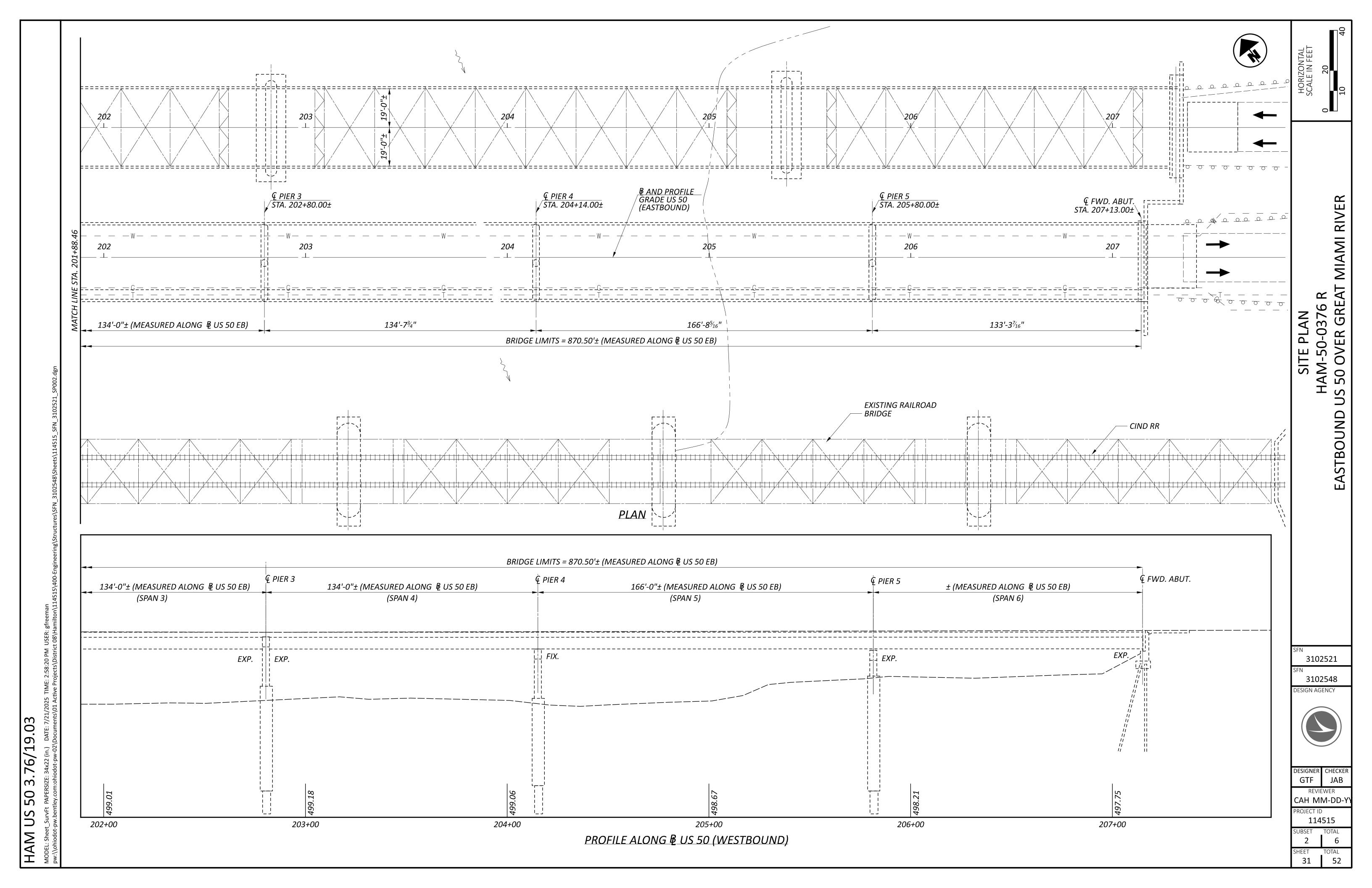
MEMBER	SIZE	QUANTITY	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
FLOOR BEAM	W36x280	9	11.3	37.8	4710.6
	W36x300	2	11.4	37.8	
STRINGER	W21x62	50	6.1	23.9	7258.3
CROSSFRAME	<i>L-3x3x</i> 15/16	9	1.0	21.2	184.5
				TOTAL PER SPAN	203496
				NO. OF SPAN (EA.)	2
				TOTAL + 10%	447691

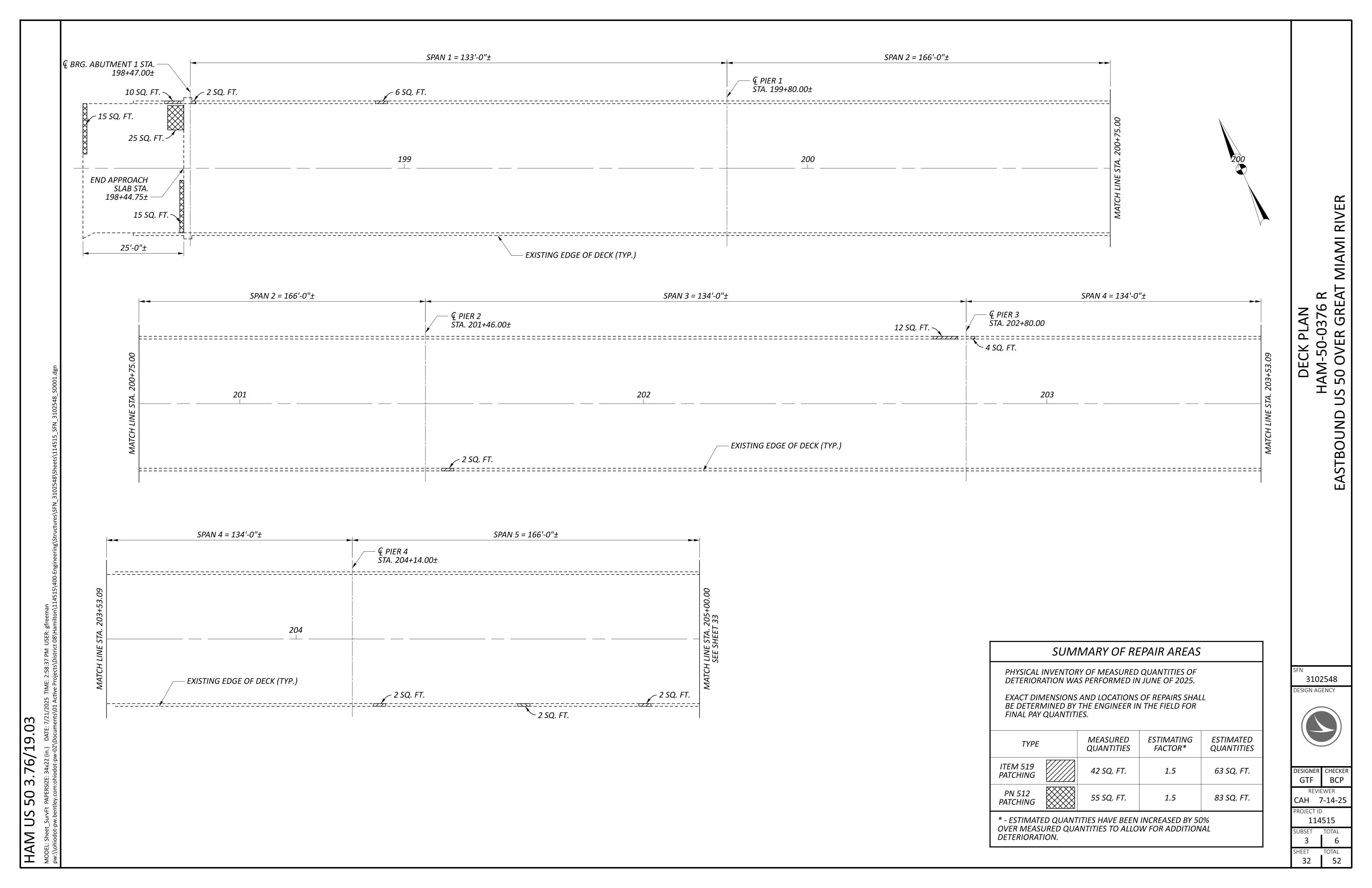


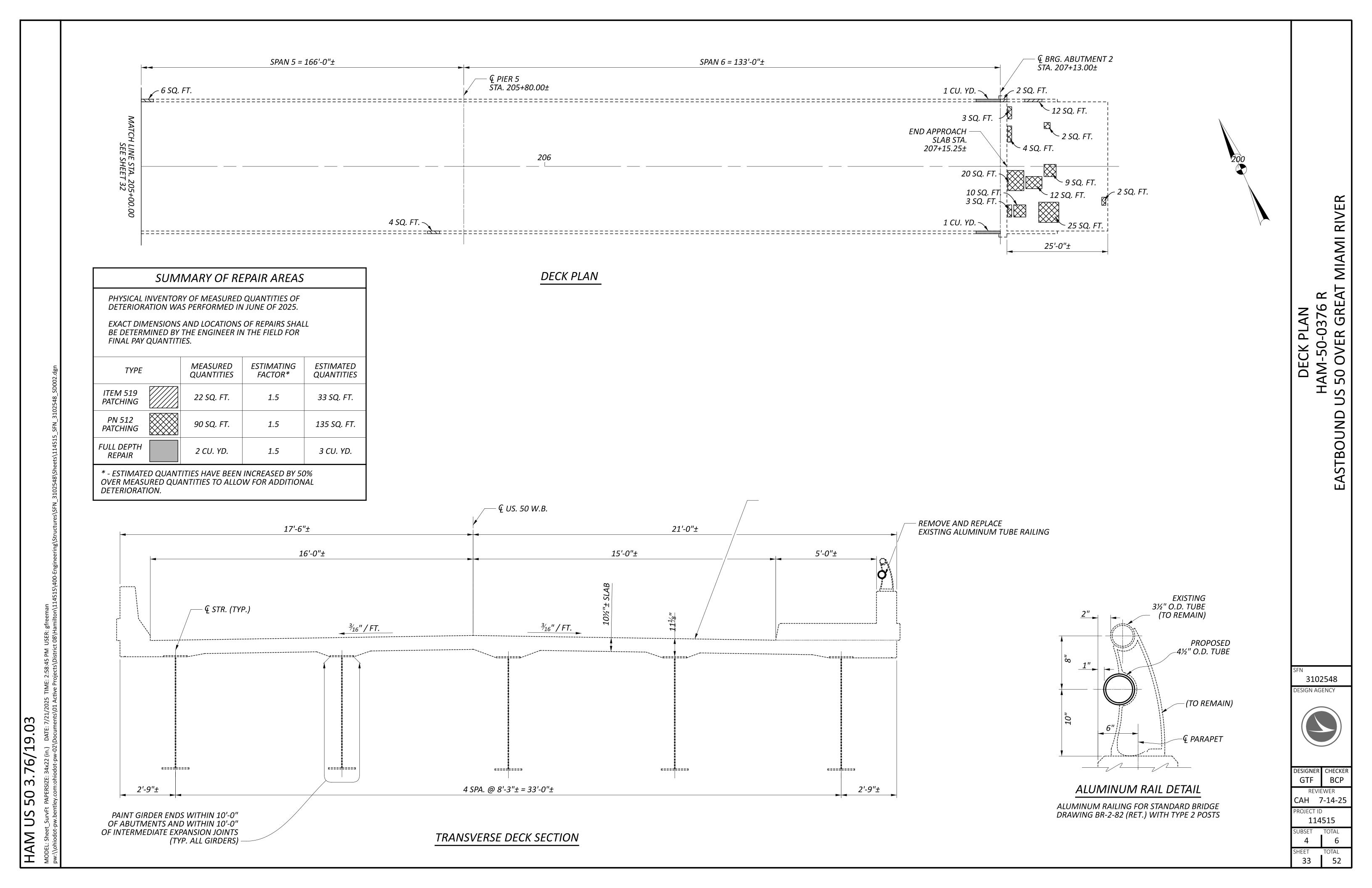
DESIGNER GTF	CHECKER BCP
	WER 7/14/25
PROJECT ID	515
SUBSET 16	TOTAL 17
SHEET 28	TOTAL 52

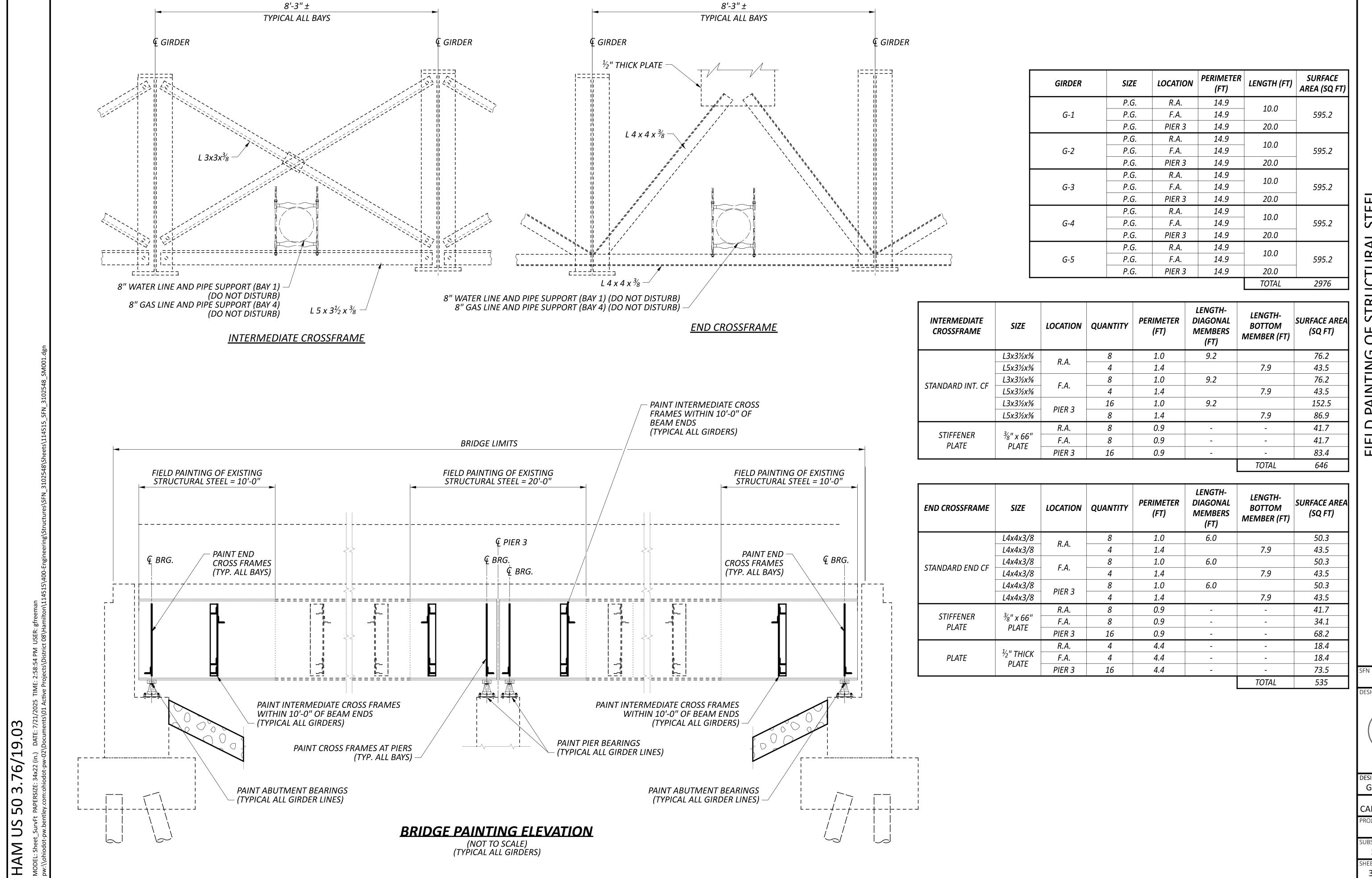










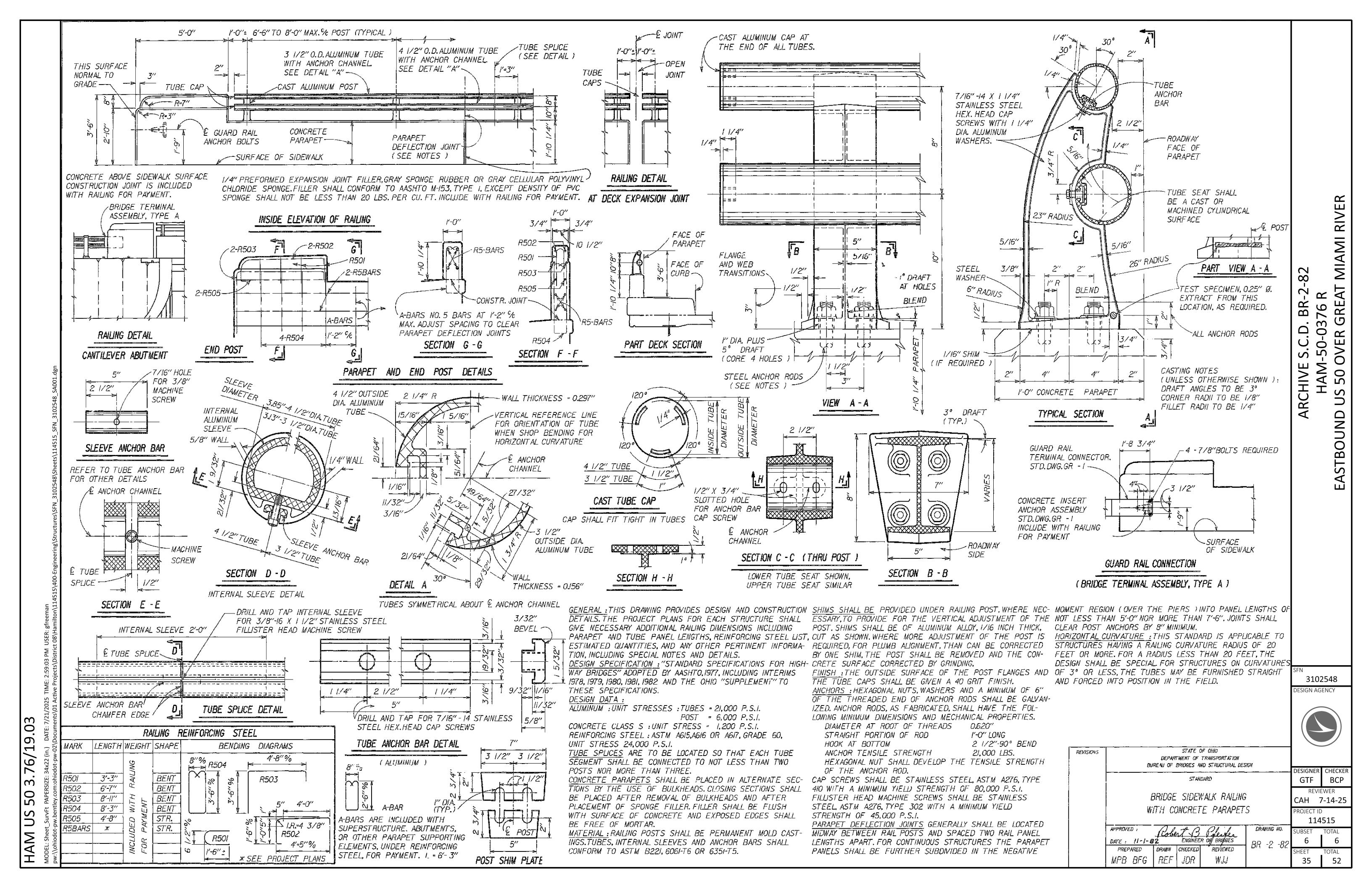


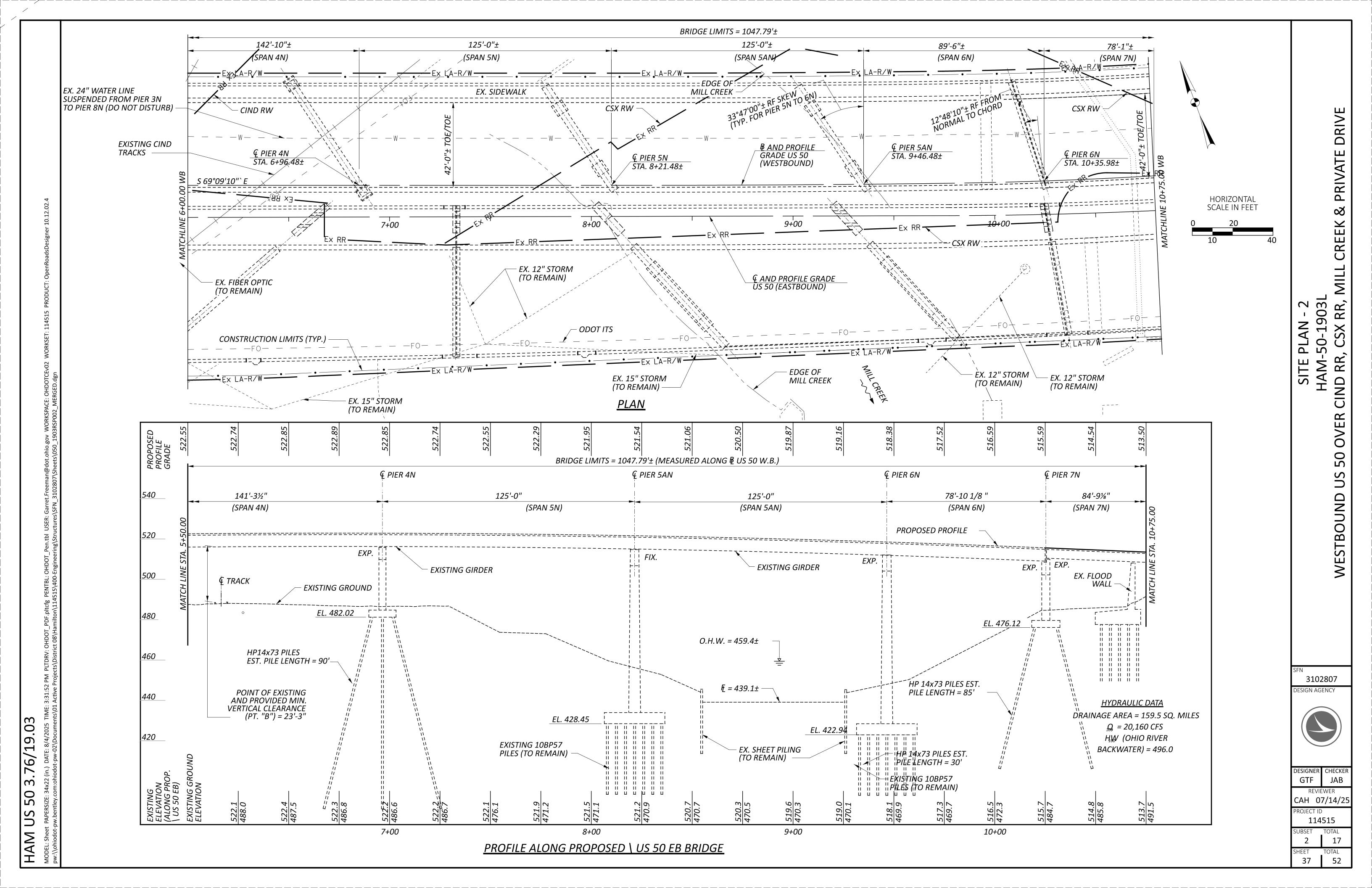
FIELD PAINTING OF STRUCTURAL STEEL
HAM-50-0376 R
EASTBOUND US 50 OVER GREAT MIAMI RIVER

SFN
3102548
DESIGN AGENCY



DESIGNER	CHECKER			
GTF	ВСР			
REVIE	EWER			
CAH 7-	14-2025			
PROJECT ID				
114515				
SUBSET	TOTAL			
5	6			





DRIV N WESTBOUN

DESIGNER CHECKER GTF JAB REVIEWER CAH 07/14/2! 114515

9.0

/9/

3.

50

NS

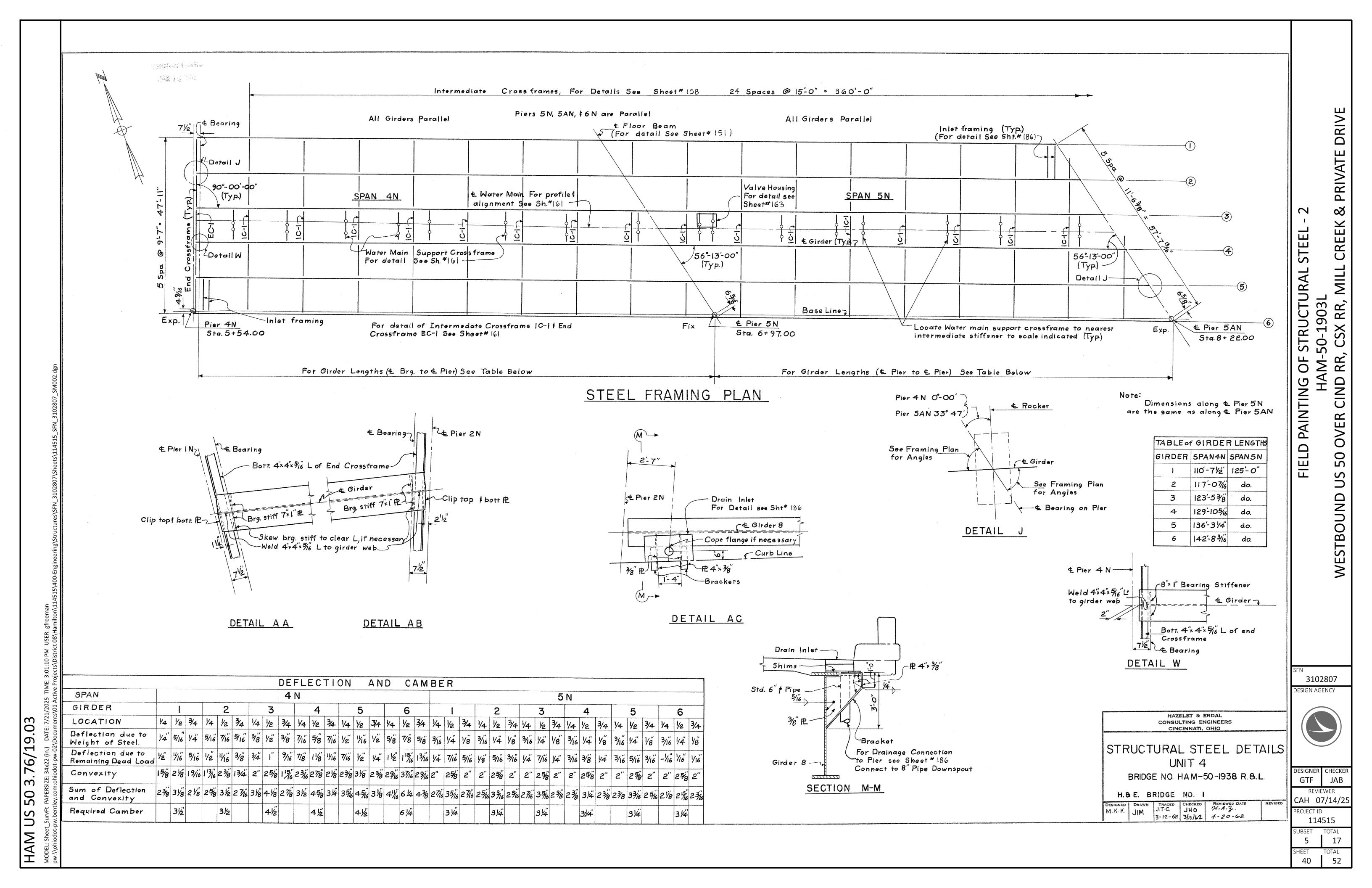
HAM

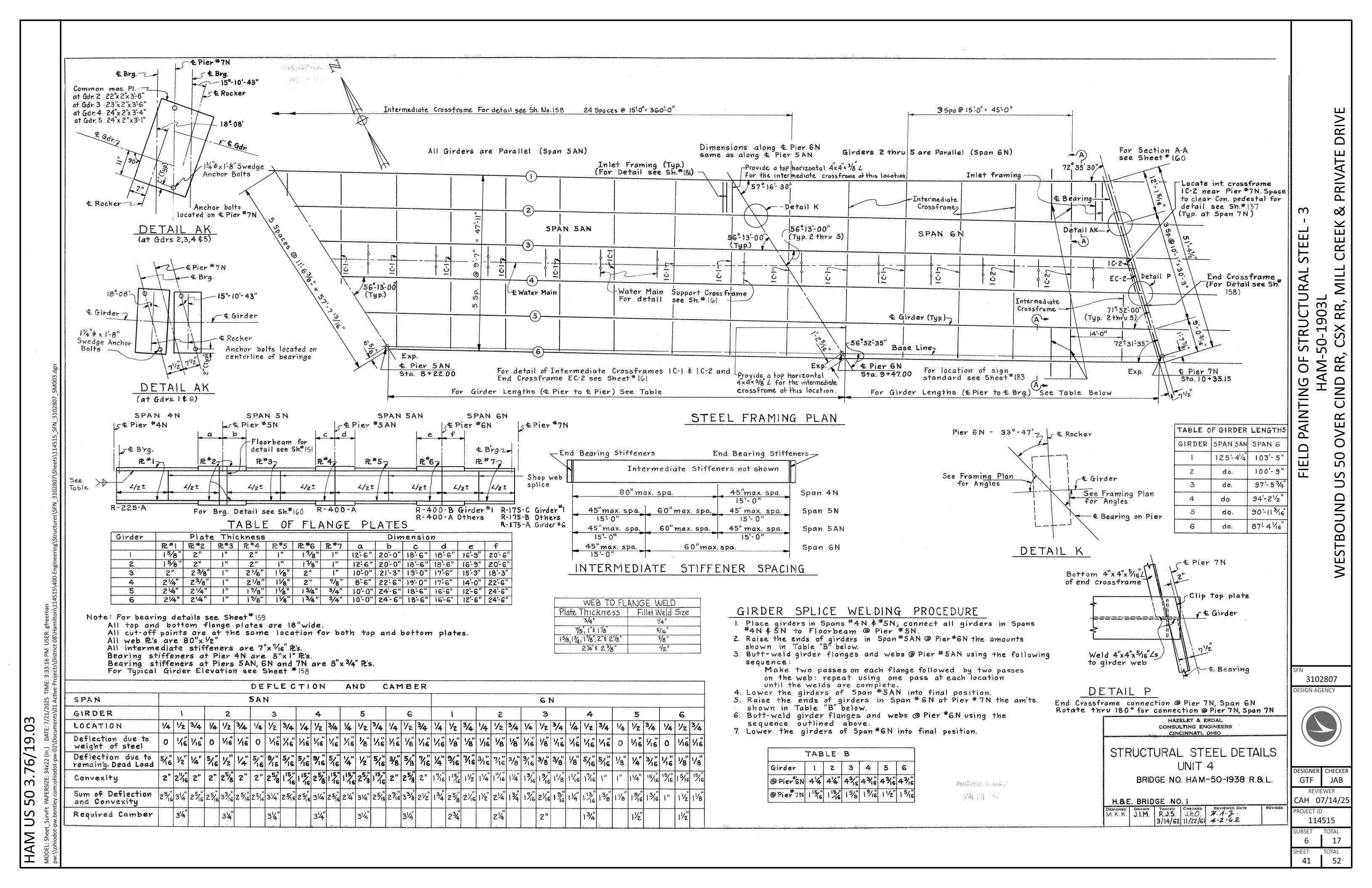
DRIVE **PRIVATE** Ø CREEK RR, CSX RR CIND OVER 50 WESTBOUN

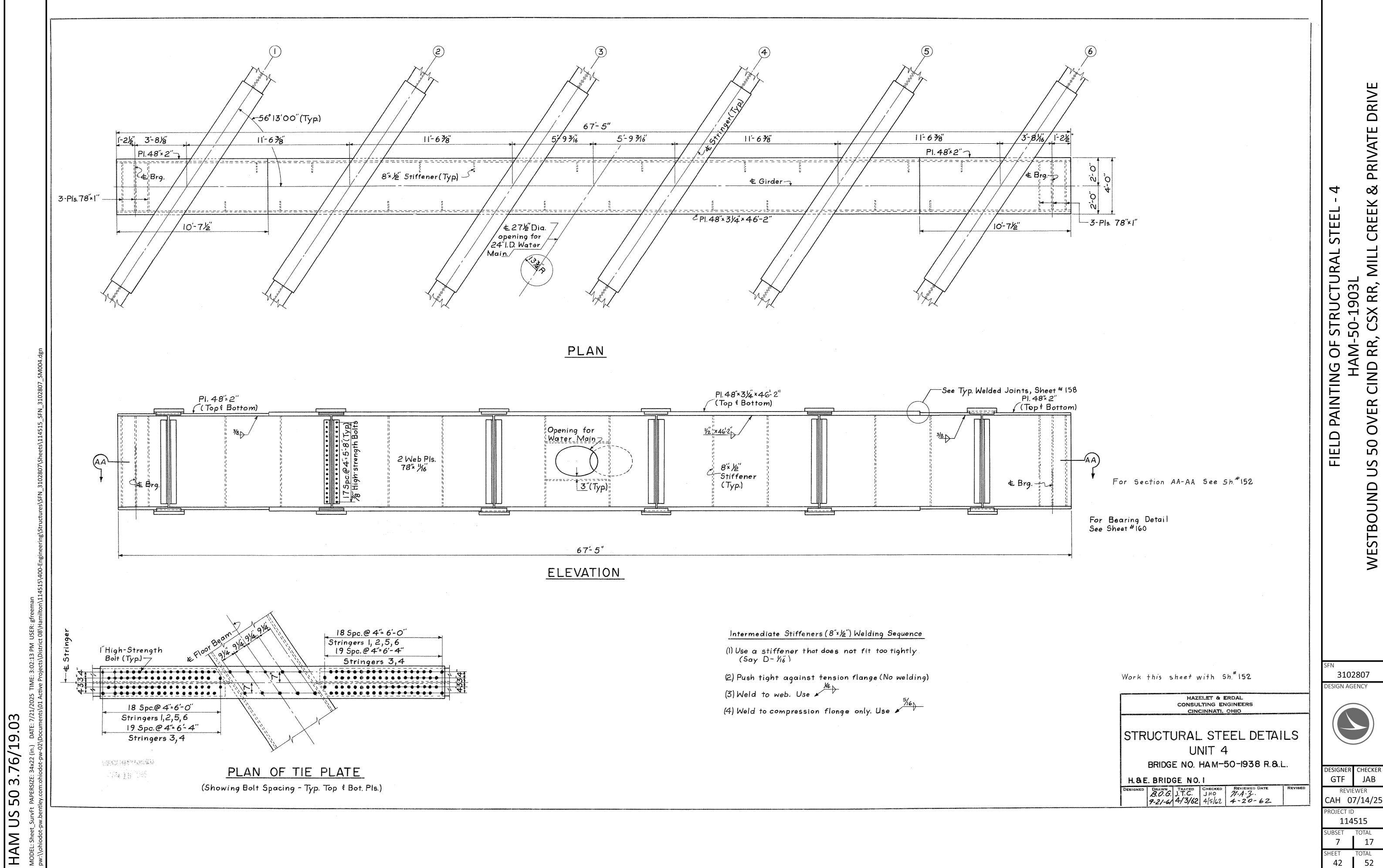
3102807 ESIGN AGENCY



ESIGNER CHECKER GTF JAB REVIEWER CAH 07/14/2! 114515 UBSET TOTAL 17 39 52







DRIVE **PRIVATE** CREEK CIND RR, OVER 50 US WESTBOUN

DESIGNER CHECKER GTF JAB CAH 07/14/25

DETAIL AL

50

NS

HAM

- 24 TY 15 F

SECTION AC-AC

DRIVE **PRIVATE** ∞ CREEK STEEL : STRUCTURAL : -50-1903L MILL CSX RR, CIND RR, FIELD PAINTING OF HAM OVER 50 NS WESTBOUN

SFN
3102807
DESIGN AGENCY



DESIGNER CHECKER
GTF JAB

REVIEWER
CAH 07/14/25

PROJECT ID
114515

SUBSET TOTAL
8 17

43 52

H. & E. BRIDGE NO. 1

Drawn Traced Checked Reviewed Date B.O.G. J.T.C JHO N.A.Z. 9-22-61 4/9/62 4/12/62 4-20-62

DRIVE

PRIVATE

Ø

CREEK

RR,

CSX

RR

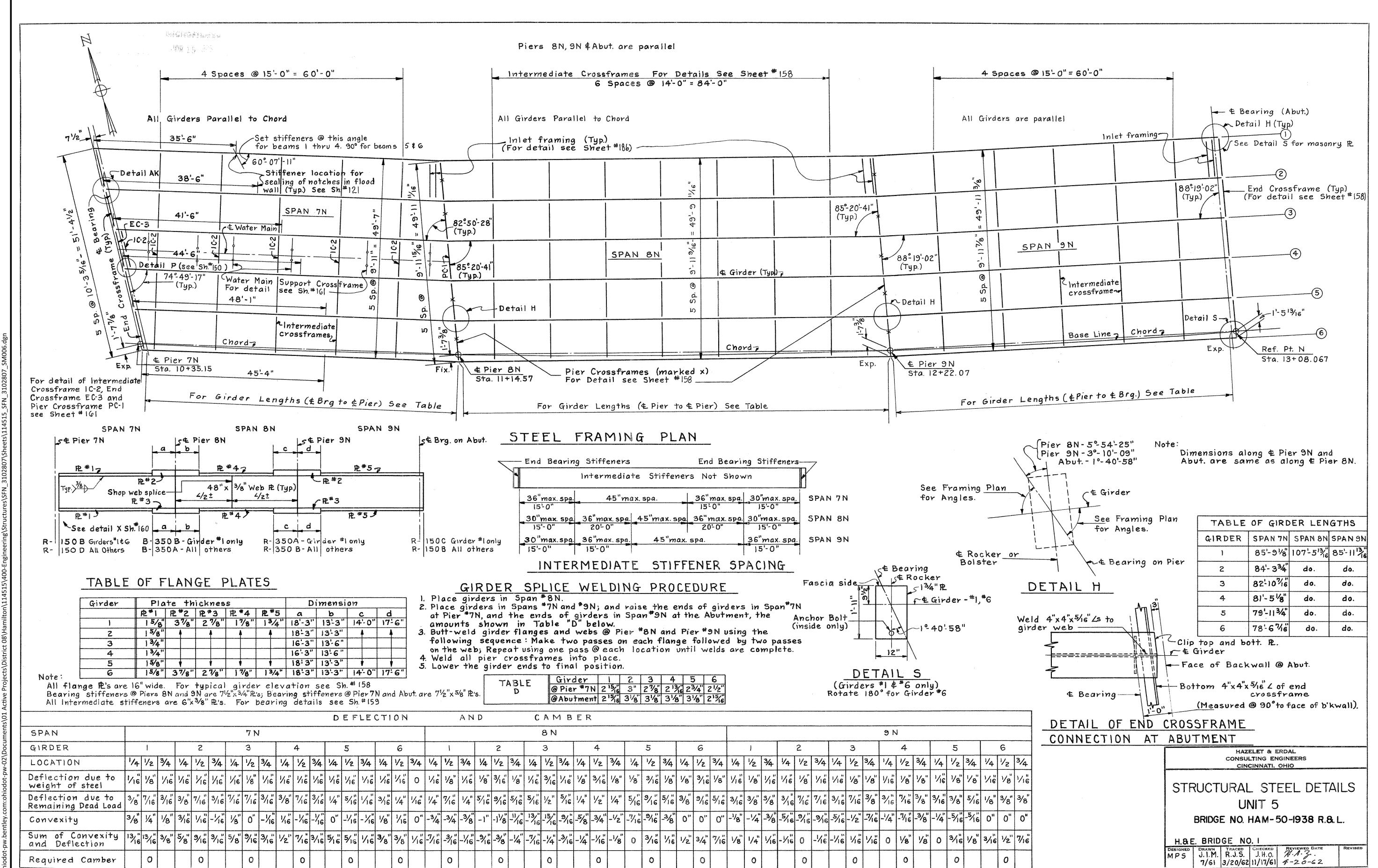
CIND

OVER

50

US

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9.0

/9/

3

50

REVIEWER CAH 07/14/2! PROJECT ID 114515 9 17

44

G-1 P.G. SPAN 1N 13.3 102.6 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 103.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 8N 12.4 107.5 P.		GIRDER	SIZE	LOCATION	PERIMETER	LENGTH	SURFACE
G-1 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 110.6 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 103.4 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 7N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 125.0 P.G.					(FT)	(FT)	AREA (SQ I
G-1 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 110.6 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 103.4 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 8N 12.4 107.5							
G-1 P.G. SPAN 4N 18.0 110.6 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 103.4 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9							
G-1 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5AN 17.9 125.4 P.G. SPAN 6N 17.9 103.4 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.5 P.G. SPAN 1N 13.3 97.5 P.G. SPAN 1N 12.4 82.9 P.G. SPAN 1N 12.4 82.9 P.G. SPAN 1N 12.4 82.9 P.G. SPAN 1N 13.3 94.4							
G-1 P.G. SPAN 5AN 17.9 125.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 8N 12.4 84.3 P.G. SPAN 8N 12.4 84.3 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 12.4 86.0 P.G. SPAN 1N 12.4 86.0 P.G. SPAN 1N 12.4 82.9 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 1N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 4N 18.1 129.9							
P.G. SPAN 6N 17.9 103.4 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 7N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9		G-1					16304
G-2 P.G. SPAN 7N 12.4 85.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 94.4							
G-2 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 99.8 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1N 13.3 94.4							
P.G. SPAN9N 12.4 86.0							
G-2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN9N	12.4	86.0	
G-2 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 13.3 15.6 101.3 P.G. SPAN 1N 15.6 100.8 P.G. SPAN 1N 15.6 101.3 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN 1N	13.3	99.8	
G-2 P.G. SPAN 4N 18.0 117.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5AN 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 15.6 100.8 P.G. SPAN 1N 15.6 101.3 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN 2N	15.6	100.8	
G-2 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5AN 17.9 100.8 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN 3N	15.6	101.3	
G-2 P.G. SPAN 5AN 17.9 125.4 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 7N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5AN 17.9 125.0 P.G. SPAN 5AN 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN 4N	18.0	117.0	
P.G. SPAN 5AN 17.9 125.4 P.G. SPAN 6N 17.9 100.8 P.G. SPAN 7N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 4N 18.1 129.9		6.2	P.G.	SPAN 5N	17.9	125.0	16217
P.G. SPAN 7N 12.4 84.3 P.G. SPAN 8N 12.4 107.5 P.G. SPAN9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 7N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9		0-2	P.G.	SPAN 5AN	17.9	125.4	10517
P.G. SPAN 8N 12.4 107.5 P.G. SPAN9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 4N 18.1 129.9			P.G.	SPAN 6N	17.9	100.8	
P.G. SPAN9N 12.4 86.0 P.G. SPAN 1N 13.3 97.2 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 123.4 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 97.5 P.G. SPAN 7N 12.4 82.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9							
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P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 94.4 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 129.9	I						
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P.G. SPAN 5AN 17.9 125.4	\SFN_		P.G.	SPAN 5N	17.9	125.0	46007
P.G. SPAN 6N 17.9 94.2 P.G. SPAN 7N 12.4 81.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 92.3 P.G. SPAN 1N 15.6 101.3 P.G. SPAN 4N 18.1 136.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 90.9 P.G. SPAN 8N 12.4 80.0 P.G. SPAN 9N 12.4 80.0 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1N 13.3 90.1 P.G. SPAN 1N 13.3 90.1 P.G. SPAN 1N 13.3 90.1 P.G. SPAN 1N 12.4 86.0 P.G. SPAN 1N 12.4 78.5 P.G. SPAN 8N 12.4 107.5	tures	G-4	P.G.	SPAN 5AN	17.9	125.4	16337
P.G. SPAN 7N 12.4 81.4 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 86.0 P.G. SPAN 1 13.3 92.3 P.G. SPAN 1 13.3 92.3 P.G. SPAN 1 13.3 92.3 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 136.3 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 5N 17.9 90.9 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0 P.G. SPAN 1 13.3 90.1	\Struc		P.G.	SPAN 6N	17.9	94.2	
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P.G. SPAN 1N 13.3 90.1 P.G. SPAN 2N 15.6 100.8 P.G. SPAN 3N 15.6 101.3 P.G. SPAN 4N 18.1 142.8 P.G. SPAN 5N 17.9 125.0 P.G. SPAN 5N 17.9 125.4 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 6N 17.9 125.4 P.G. SPAN 8N 12.4 78.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0	TIMI tive P						
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P.G. SPAN 6N 17.9 87.3 P.G. SPAN 7N 12.4 78.5 P.G. SPAN 8N 12.4 107.5 P.G. SPAN 9N 12.4 86.0	ERSIZE ɔm:oh	G-6					16353
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P.G. SPAN 8N 12.4 107.5 P.G. SPAN9N 12.4 86.0	urvFt :.bent						
P.G. SPAN9N 12.4 86.0	eet_Si ot-pw						
MODE	L: She thiodo						
	40DE		1	1	1		

GIRDER	SIZE	LOCATION	PERIMETER (FT)	LENGTH (FT)	SURFACE AREA (SQ FT)
	P.G.	SPAN 1N	13.3	87.9	
	P.G.	SPAN 2N	15.6	100.9	
	P.G.	SPAN 3N	15.6	30.0	
	P.G.	SPAN 4N			
6.7	P.G.	SPAN 5N			2244
G-7	P.G.	SPAN 5AN			3211
	P.G.	SPAN 6N			
	P.G.	SPAN 7N			
	P.G.	SPAN 8N			
	P.G.	SPAN9N			
	P.G.	SPAN 1N	13.3	86.1	
	P.G.	SPAN 2N	15.6	101.1	
	P.G.	SPAN 3N	15.6	101.4	
	P.G.	SPAN 4N			
	P.G.	SPAN 5N			4204
G-8	P.G.	SPAN 5AN			4304
	P.G.	SPAN 6N			
	P.G.	SPAN 7N			
	P.G.	SPAN 8N			
	P.G.	SPAN9N			
	ACE AREA:	97994			
_			TO	TAL + 12%:	109753

			FLOOR BEAM			
PART	LENGTH	WIDTH	HEIGHT	AREA	NUMBER	AREA
OUTSIDE AREA	67.417	4	6.667	1221.9	1	1221.9
INSIDE AREA	66.750	3.333	6.5	1133.6	1	1133.6
STIFFENER PLATES (8"x1/2")	0.667	0.042	6.5	8.7	20	173.3
STIFFENER PLATES (5"x1/2")	3.844	0.042	0.417	3.2	2	6.4
STIFFENER PLATES (4"x3/8")	3	0.333	0.031	1.0	12	12.0
END PLATES	4	0.057	6.5	44.9	6	269.2
COVER PLATE	2	0.031	2.833	11.3	2	22.7
					TOTAL	2839.0

|--|

3102807
DESIGN AGENCY



DESIGNER	CHECKE
JAB	GTF
REVIE	WER
CAH 0	7/14/2
PROJECT ID	ı
114	515
SUBSET	TOTAL

SUBSET TOTAL

10
17
SHEET TOTAL
45
52

				INTERMEDIAT	E CROSSFRAMES (4'	'x4"x3/8"L)	
LOCA	ATION	BAY	LENGTH OF INTERMEDIATE CROSSFRAME MEMBERS (ft)	NUMBER OF INTERMEDIATE CROSSFRAMES		TOTAL SURFACE AREA OF CROSSFRAMES IN SPAN (SQ FT)	COMMENTS
		1	33.036	6	264		
		2	30.786	6	246		
		3	30.786	6	246		
SPA	N 1N	4	25.743	6	206	1556	
		5	25.743	6	206		
		6	25.743	6	206		
		7	22.717	6	182		
		1	28.946	6	232		
		2	27.486	6	220		
CDA	A. 2A.	3	27.486	6	220	1.106	
SPA	N 2N	4	27.486	6	220	1496	
		5	27.486	6	220		
		6 7	24.068 24.068	6	193		
		7	30.422	6 6	193 243		
		2	27.486	6	220		
		3	27.480	0	0		WATER MAIN
		4	27.486	6	220		WAILN WAIN
SPA	N 3N	_	27.486	6	220	1085	
		6	16.385	1	22		BEFORE SUPPORT DIAPHRAI
		6	25.906	4	138		AFTER SUPPORT DIAPHRAN
		7	16.385	1	22		70 720 3017 300 200 200 1000
		1	33.096	7	309		
		2	33.096	7	309		
SPA	N 4N			,	0	1368	WATER MAIN
		4	33.096	8	353		
		5	33.096	9	397		
		1	32.096	9	385		
		2	32.096	8	342		
SPA	N 5N	3			0	1412	WATER MAIN
		4	32.096	8	342		
		5	32.096	8	342		
		1	32.096	8	342		
		2	32.096	8	342		
SPAI	V <i>5AN</i>	3			0	1369	WATER MAIN
		4	32.096	8	342		
		5	32.096	8	342		
		1	35.485	6	284		
		2	32.096	6	257		
SPA	N 6N	3			0	1048	WATER MAIN
		4	32.096	6	257		
		5	31.346	6	251		
		1	30.792	5	205		
		2	30.792	5	205		
SPA	N 7N	3		_	0	821	WATER MAIN
		4	30.792	5	205		
		5	30.792	5	205		
		1	30.792	7	287		
		2	30.792	7	287		
SPA	N 8N	3	30.792	7	287	1437	
			30.792	7	287		
		5	30.792	7	287		
		1	30.792	5	205		
CD4	N ON	2	30.792	5	205	1026	
SPA	N 9N	3	30.792	5	205	1026	
	4	30.792 30.792	5 5	205 205			
		5		<u>-</u>	. // 1_		

			WATER MA	AIN CROSSFRAN	MES (BAY 3)	T	T
LOCATION	CROSSFRAME TYPE	CROSSFRAME SIZE	PERIMETER OF CROSSFRAME (ft)		NUMBER OF CROSSFRAMES	CROSSERAMES IN	TOTAL SURFACE AREA OF CROSSFRAMES IN SPAN (SQ FT)
	10.4	4"x4"x3/8"L	1.333	21.176	7	198	
CDAN ON	IC-1	6"x4"x1/2"L	1.667	8.130	7	95	254
SPAN 3N	50.4	18C42.7	4.109	8.130	1	33	351
	EC-1	4"x4"x3/8"L	1.333	19.067	1	25	
	10.4	4"x4"x3/8"L	1.333	25.013	8	267	
60444 444	IC-1	6"x4"x1/2"L	1.667	9.375	8	125	464
SPAN 4N	50.4	18C42.7	4.109	9.375	1	39	461
	EC-1	4"x4"x3/8"L	1.333	23.006	1	31	
CDANIEN	10.1	4"x4"x3/8"L	1.333	25.013	8	267	392
SPAN 5N	IC-1	6"x4"x1/2"L	1.667	9.375	8	125	
CDANIEANI	10.1	4"x4"x3/8"L	1.333	25.013	9	300	441
SPAN 5AN	IC-1	6"x4"x1/2"L	1.667	9.375	9	141	
	16.1	4"x4"x3/8"L	1.333	25.013	3	100	
	IC-1	6"x4"x1/2"L	1.667	9.375	3	47	
	16.2	4"x4"x3/8"L	1.333	25.013	3	100	
SPAN 6N	IC-2	6"x4"x1/2"L	1.667	9.375	3	47	343
		4"x4"x3/8"L	1.333	3.536	1	5	
	EC-2	6"x4"x1/2"L	1.667	7.302	1	12	
		10C15.3	3.462	9.375	1	32	
	16.3	4"x4"x3/8"L	1.333	21.966	6	176	
	IC-2	6"x4"x1/2"L	1.667	9.802	6	98	
CDAN ZN	DC 1	4"x4"x1/2"L	1.333	21.966	1	29	200
SPAN 7N	PC-1	6"x4"x1/2"L	1.667	9.802	1	16	368
	50.3	4"x4"x5/16"L	1.333	10.916	1	15	
	EC-3	10C15.3	3.462	9.802	1	34	
						TOTAL	2356

		PIER A	ND END CROSSFR	AMES (BAY 3)		
LOCATION	BAY	CROSSFRAME TYPE	LENGTH OF CROSSFRAME MEMBERS (ft)	NUMBER OF CROSSFRAMES	SURFACE AREA OF CROSSFRAMES IN BAY (SQ FT)	TOTAL SURFACE AREA OF CROSSFRAMES IN SPAN (SQ FT)
	1	END	23.687	2	63	
	2, 3	END	23.317	4	124	
SPAN 1N	4, 5, 6	END	19.225	6	154	387
	7 (PIER 1N)	END	19.202	1	26	
	7 (PIER 2N)	END	15.182	1	20	
CDANIONI	1, 2, 3, 4, 5	END	21.205	5	141	201
SPAN 2N	6, 7	END	22.281	2	59	201
	1	END	22.936	1	31	
SPAN 3N	2, 4, 5	END	21.164	3	85	137
	6	END	16.387	1	22	
SPAN 4N	1, 2, 4, 5	END	25.006	4	133	133
	1	END	29.157	1	39	
SPAN 6N	2, 4	END	25.829	2	69	140
	5	END	24.171	1	32	
SPAN 7N	1, 2, 4, 5	END	22.424	4	120	120
PIER 8N	1, 2, 4, 5	PIER	40.535	4	216	216
PIER 9N	1, 2, 3, 4, 5	PIER	40.535	5	270	270
SPAN 9N	1, 2, 3, 4, 5	END	21.950	5	146	146
	1	1		,	TOTAL	1751

3102807 DESIGN AGENCY



DESIGNER	CHECKER
JAB	GTF
REVIE	WER
CAH 0	7/14/25
PROJECT ID	١
114	515
	JAB REVIE CAH 0

ROJECT ID

114515

JBSET TOTAL

11 17

REAR ABUTMENT PLAN

C

REAR ABUTMENT PLAN

REAR ABUTMENT ELEVATION

UIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)

SECTION A-A

ABUTMENT SEALING LIMITS

TY-RTE-SECTION

LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)

<u>SECTION B-B</u> <u>WINGWALL SEALING LIMITS</u>

SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN JUNE OF 2025.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE	MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
REAR ABUT. PATCHING	4 SQ. FT.	1.5	6 SQ. FT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

<u>LEGEND</u>

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. SEAL ENTIRE EXPOSED SURFACE AREA OF ABUTMENT AND WING WALLS, EXCEPT FOR TOP HORIZONTAL SURFACE OF CAP, WITH EPOXY-URETHANE. SEE TYPICAL SEALING DETAILS.

3102807

DESIGNER CHECKER

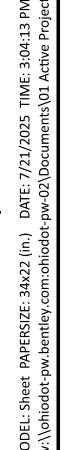
GTF JAB

REVIEWER

CAH 7-14-25

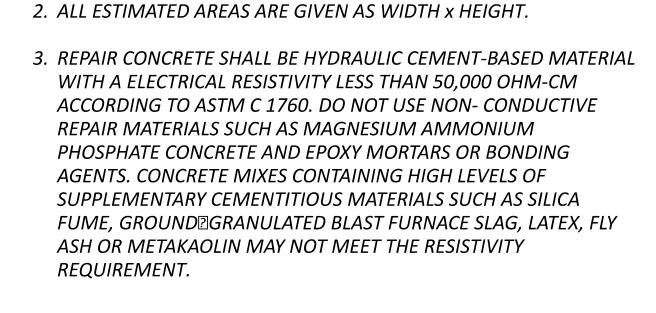
114515

ESIGN AGENCY



NOTES

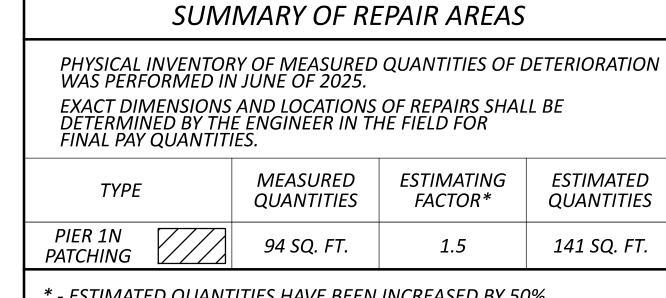
1. ALL DIMENSIONS ARE ±.



4. SEAL ENTIRE EXPOSED SURFACE AREA OF ABUTMENT AND WING WALLS, EXCEPT FOR TOP HORIZONTAL SURFACE OF CAP, WITH

EPOXY-URETHANE. SEE TYPICAL SEALING DETAILS.

5 SQ. FT.



2 SQ. FT.

- GROUND LINE

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

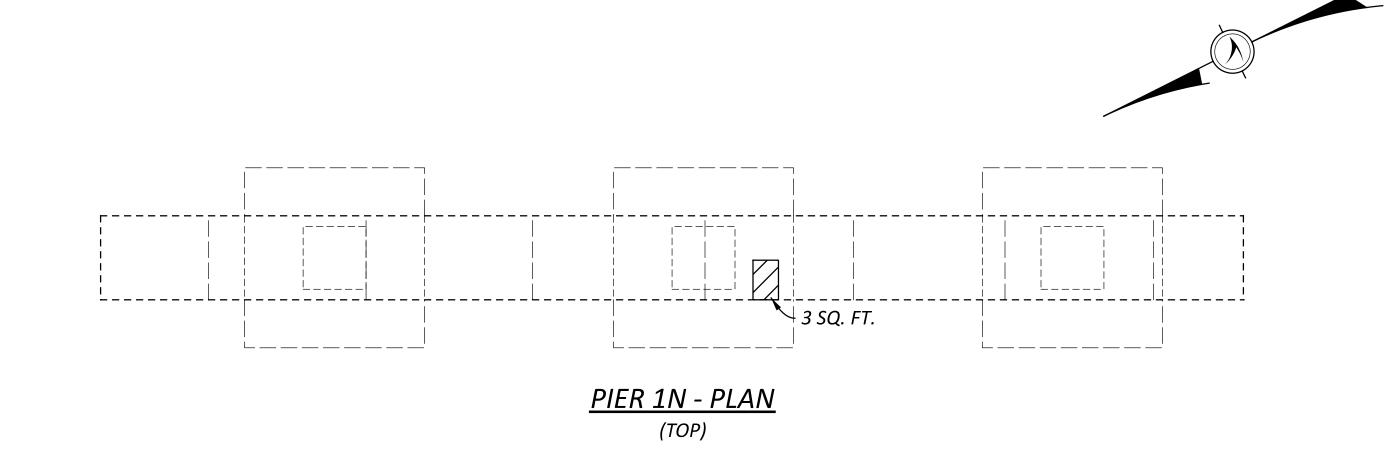
LEGEND

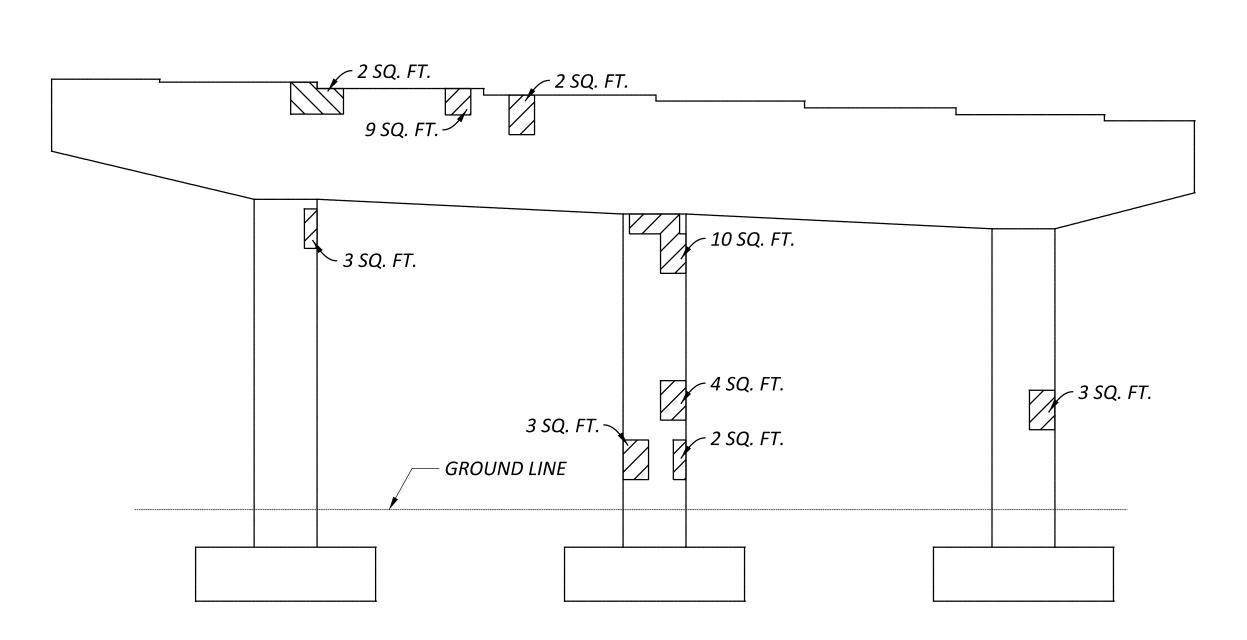
4 SQ. FT.

PIER 1N - EAST ELEVATION

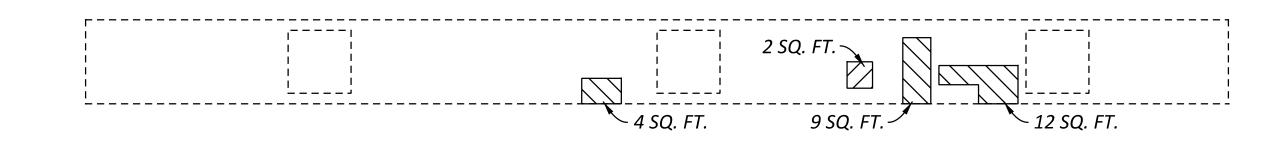
(LOOKING WEST)

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN









PIER 1N - PLAN (BOTTOM)



 Γ_B

2 SQ. FT. 2 SQ. FT. GROUND LINE -GROUND LINE SECTION A-A **SECTION B-B**

PIER 2N - WEST ELEVATION (LOOKING EAST) 15 SQ. FT. 3 SQ. FT. 5 SQ. FT. 2 SQ. FT. 5 SQ. FT. GROUND LINE -

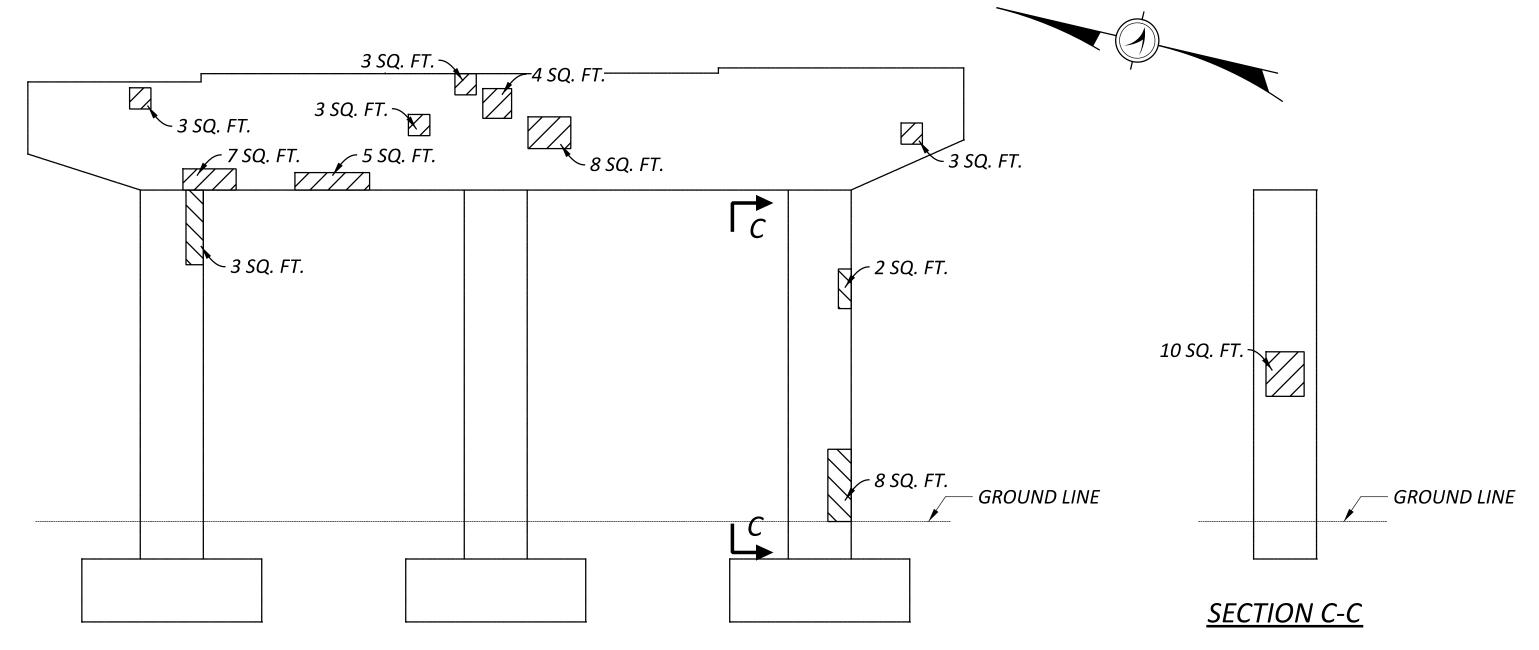
GROUND LINE -

.76/19.03

3

50

3 SQ. FT.



PIER 3N - WEST ELEVATION

(LOOKING EAST)

PIER 3N - EAST ELEVATION (LOOKING WEST)

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

MEASURED

QUANTITIES

7 SQ. FT.

92 SQ. FT.

SUMMARY OF REPAIR AREAS

ESTIMATING

FACTOR*

1.5

1.5

1.5

LEGEND

TYPE

PIER 2N

PATCHING

PATCHING

PIER 3N

PATCHING

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

	ı	
	2 SQ. FT. ~	
<u> </u>		7

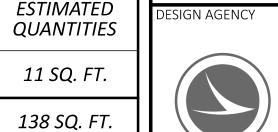
PIER 3N - PLAN (BOTTOM)

4 SQ. FT. ~

4. SEAL ENTIRE EXPOSED SURFACE AREA OF ABUTMENT AND WING WALLS, EXCEPT FOR TOP

HORIZONTAL SURFACE OF CAP, WITH EPOXY-URETHANE. SEE TYPICAL SEALING DETAILS.

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN JUNE OF 2025. EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES. **ESTIMATED**



DESIGNER	CHECKER
GTF	JAB
REVIE	WER
CAH 7	7-14-25
PROJECT ID)
11/	515
114	515
SUBSET	TOTAL

49 52

SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN JUNE OF 2025.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE		MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
PIER 4N PATCHING		7 SQ. FT.	1.5	11 SQ. FT.
PIER 7N PATCHING		55 SQ. FT.	1.5	83 SQ. FT.
SS844 PATCHING			1.5	

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

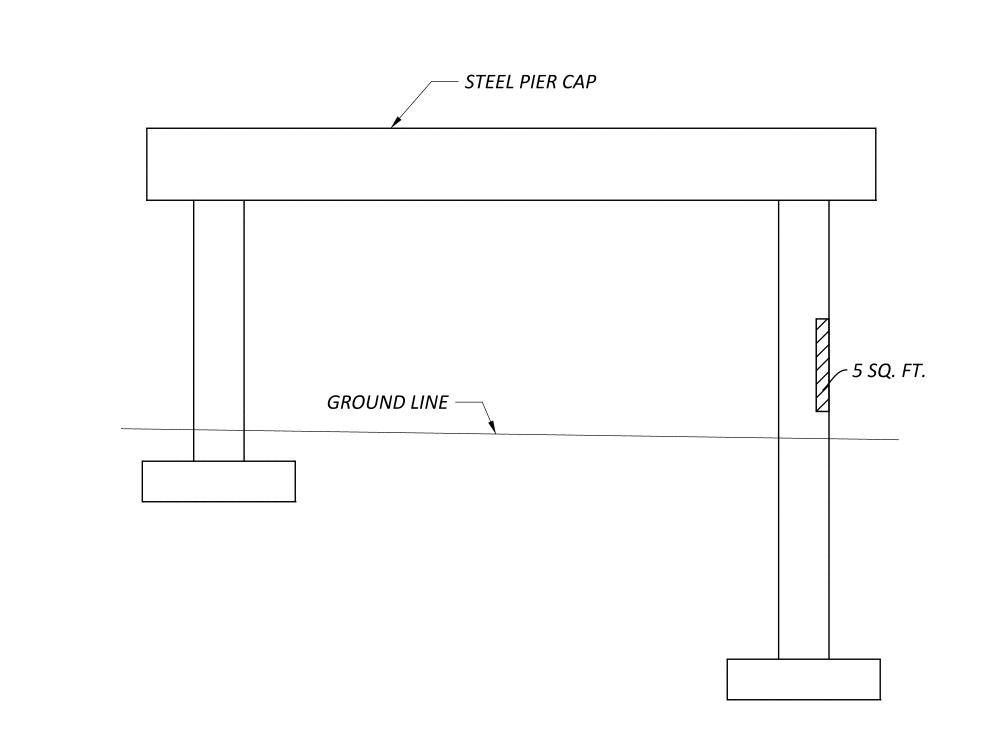
<u>LEGEND</u>

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

4. SEAL ENTIRE EXPOSED SURFACE AREA OF ABUTMENT AND WING WALLS, EXCEPT FOR TOP HORIZONTAL SURFACE OF CAP, WITH EPOXY-URETHANE. SEE TYPICAL SEALING DETAILS.



PIER 4N - WEST ELEVATION (LOOKING EAST)

- STEEL PIER CAP

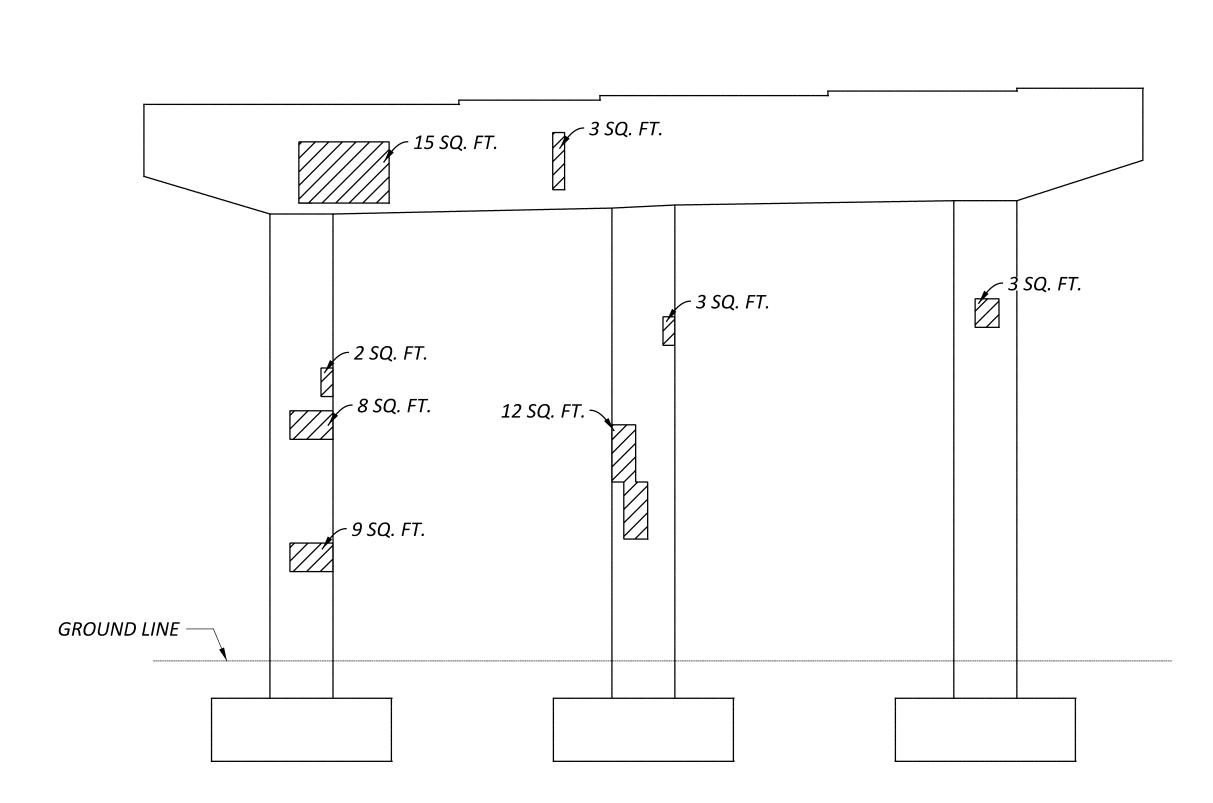
GROUND LINE -

2 SQ. FT.

3.76/19.03

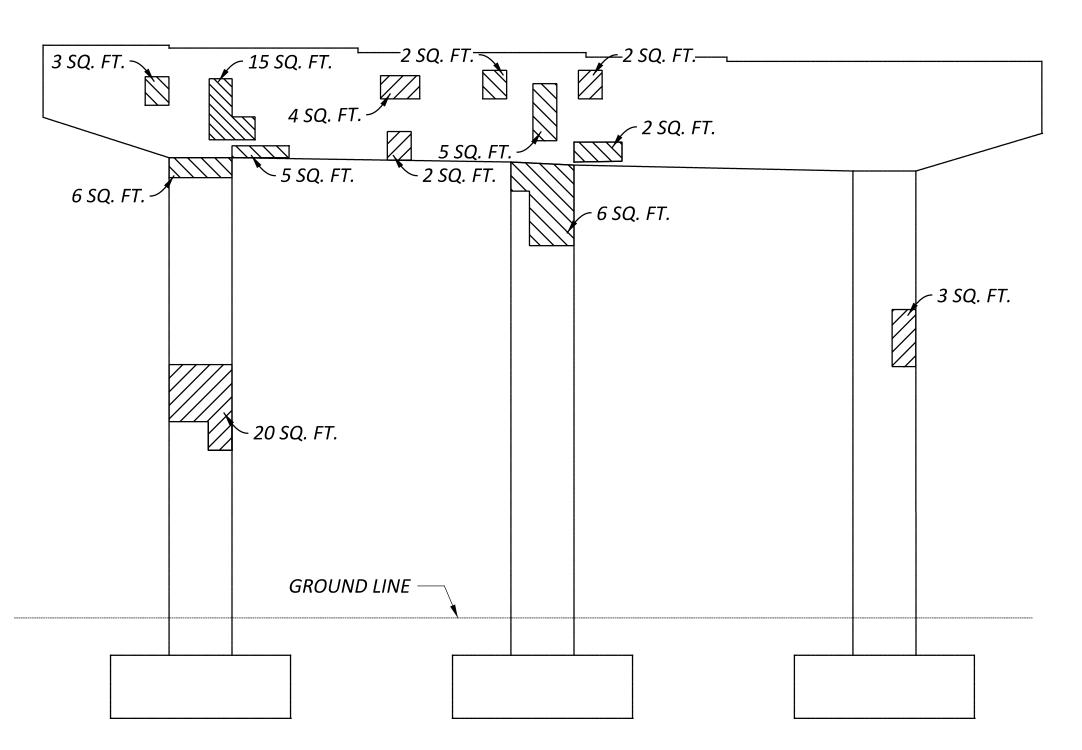
50

<u>PIER 4N - EAST ELEVATION</u> (LOOKING WEST)



PIER 7N - WEST ELEVATION

(LOOKING EAST)

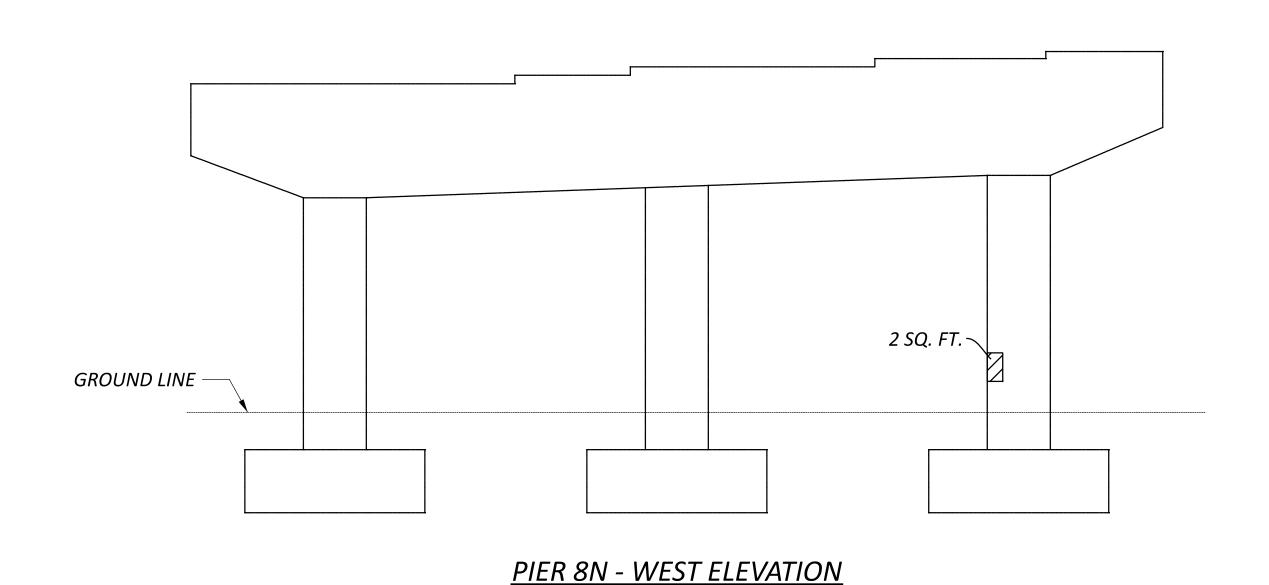


PIER 7N - EAST ELEVATION (LOOKING WEST)

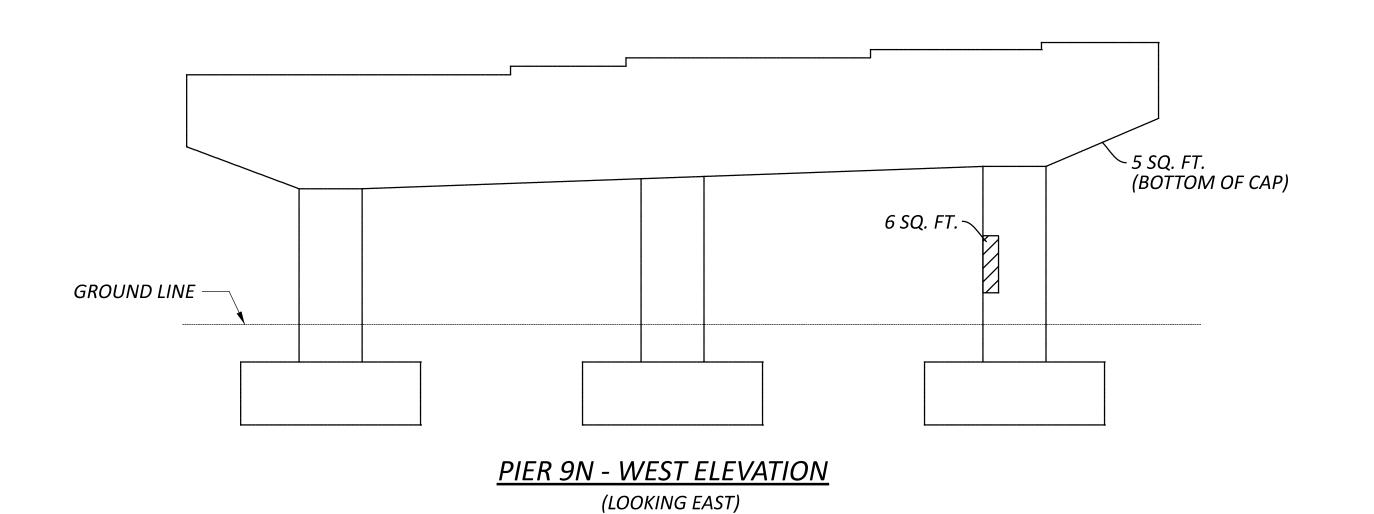
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GTF JAB REVIEWER CAH 7-14-25 114515



(LOOKING EAST)



SUMMARY OF REPAIR AREAS						
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN JUNE OF 2025. EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.						
TYPE	MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES			
PIER 8N PATCHING	2 SQ. FT.	1.5	3 SQ. FT.			
PIER 9N PATCHING	11 SQ. FT.	1.5	18 SQ. FT.			
SS 844 PATCHING		1.5				

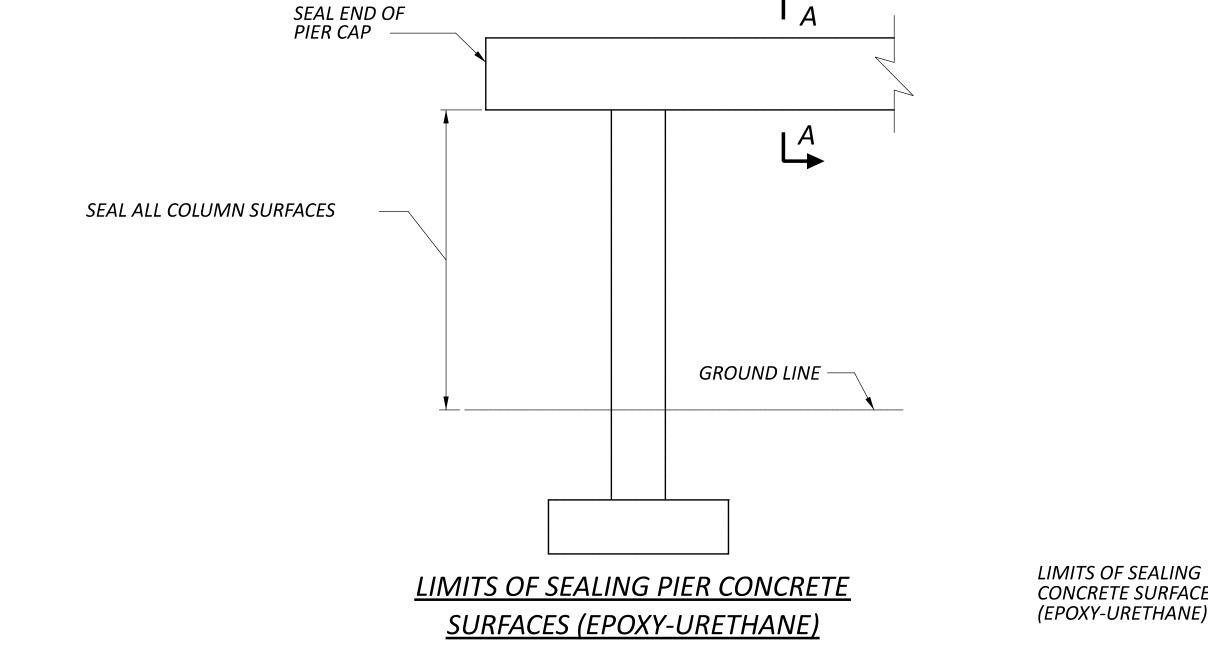
OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

LEGEND

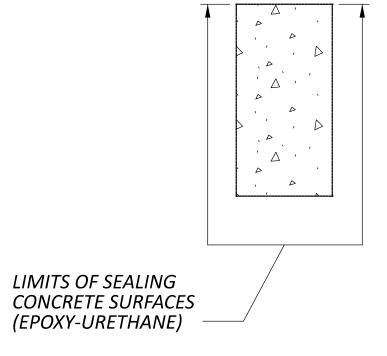
- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.
- 4. SEAL ENTIRE EXPOSED SURFACE AREA OF ABUTMENT AND WING WALLS, EXCEPT FOR TOP HORIZONTAL SURFACE OF CAP, WITH EPOXY-URETHANE. SEE TYPICAL SEALING DETAILS.



(TYPICAL ALL PIERS EXCEPT PIER 4N CAP)



SECTION A-A

3.76/19.03 50

3102807 ESIGN AGENCY GTF JAB REVIEWER CAH 7-14-25 PROJECT ID 114515

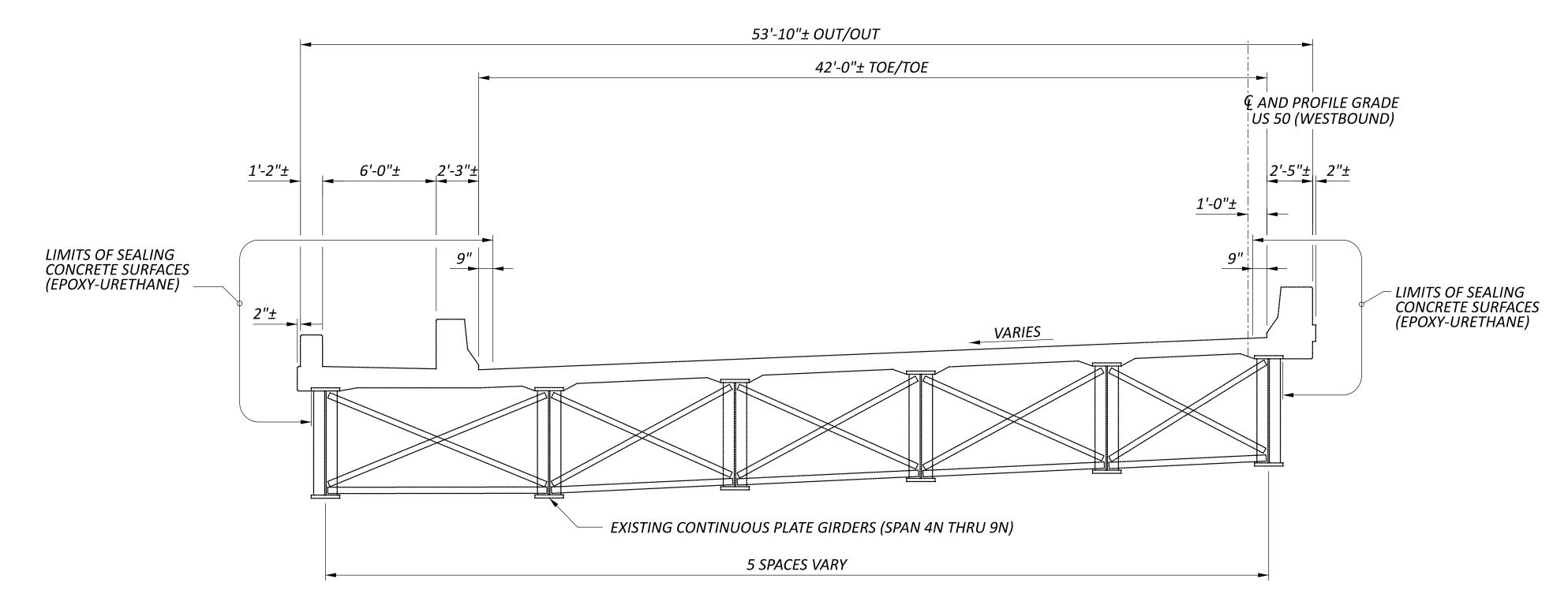
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52 52

FORWARD ABUTMENT PLAN

_ 3 SQ. FT. _ 4 SQ. FT. 15 SQ. FT. 10 SQ. FT. GROUND LINE -

FORWARD ABUTMENT ELEVATION



-SECTION

-RTE

PROPOSED TRANSVERSE SECTION

(WESTBOUND STA. 5+70± TO STA. 13+10±, LOOKING EAST)

SUMMARY OF REPAIR AREAS

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN JUNE OF 2025.

EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

TYPE	MEASURED QUANTITIES	ESTIMATING FACTOR*	ESTIMATED QUANTITIES
FOR. ABUT. PATCHING	37 SQ. FT.	1.5	56 SQ. FT.

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

LEGEND

- AREA TO BE REPAIRED WITH ITEM 519 -PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

- 1. ALL DIMENSIONS ARE ±.
- 2. ALL ESTIMATED AREAS ARE GIVEN AS WIDTH x HEIGHT.
- 3. REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH A ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND@GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.
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