

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## D07 / D08 - GR-FY2025

### VARIOUS LOCATIONS ODOT DISTRICTS 7 & 8

**FEDERAL PROJECT NO.**

E240684

**RAILROAD INVOLVEMENT**

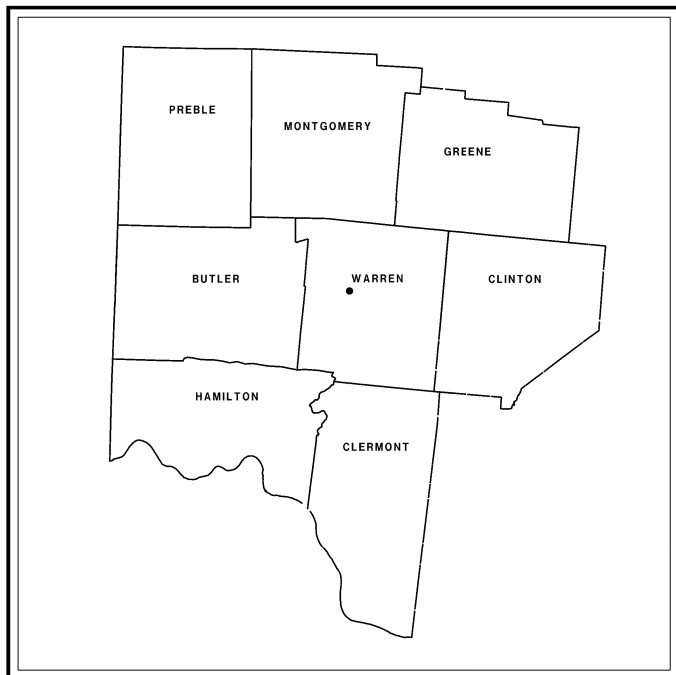
NONE

**PROJECT DESCRIPTION**

DISTRICT 8 AND MONTGOMERY COUNTY GUARDRAIL REPAIR AND UPGRADE CONTRACT FOR FISCAL YEAR 2025.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA:	3.0 ACRE
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.0 ACRE
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED) * ROUTINE MAINTENANCE PROJECT



**LOCATION MAP**

LATITUDE: 39°25'52" LONGITUDE: -84°17'03"

NOT TO SCALE



**INDEX OF SHEETS:**

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**2023 SPECIFICATIONS**

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

I HEARBY 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 WILL BE AS SET FORTH ON THE PLANS AND ESTIMATE.

*Tammy K Campbell*  
District Deputy Director

*Jack Marchbanks*  
Jack Marchbanks, PhD  
Director, Department of Transportation

TITLE SHEET

**UNDERGROUND UTILITIES**

**Contact Two Working Days  
Before You Dig**



**OHIO811.org**  
Before You Dig

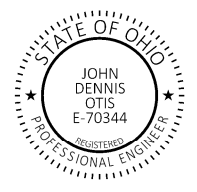
**OHIO811, 8-1-1, or 1-800-362-2764**  
(Non-members must be called directly)


PLAN PREPARED BY:  
ODOT DISTRICT 8  
ENGINEERING DEPARTMENT

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-5.1	7/15/22	RM-4.3	7/15/22	MT-95.30	7/19/19	800-2023	1/19/24
		RM-4.4	7/21/23	MT-95.31	7/21/23	809	1/19/24
MGS-1.1	7/16/21	RM-4.5	7/21/17	MT-95.32	4/19/19	821	4/20/12
MGS-2.1	1/19/18	RM-4.6	7/19/13	MT-95.45	1/17/20	832	7/21/23
MGS-3.1	1/19/18			MT-95.61	4/19/19	921	4/20/12
MGS-3.2	1/18/13	BR-1-13	1/17/14	MT-97.10	4/19/19		
MGS-4.2	7/19/13	DBR-2-73	7/19/02	MT-98.11	1/17/20		
MGS-4.3	1/18/13			MT-98.20	4/19/19		
MGS-5.2	7/15/16			MT-98.22	1/17/20		
MGS-5.3	7/15/16			MT-98.28	1/17/20		
MGS-6.1	1/19/18			MT-98.29	1/17/20		
MGS-6.2	7/19/19			MT-105.10	1/17/20		
				TC-61.30	7/19/19		

**ENGINEER'S SEAL**

ROADWAY



DESIGN AGENCY	
	
DESIGNER	JED
REVIEWER	JDO
PROJECT ID	114292
SHEET	TOTAL
1	35

D07/D08-GR-FY2025

MODEL: Sheet: PAPER: 17x11 (in.) DATE: 7/17/2024 TIME: 1:35:54 PM USER: davis4 pwc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 08\_D08\114292\00-Engineering\Roadway\Sheets\114292GT001.dgn

GUARDRAIL REPAIR WORK ORDER

DATE: \_\_\_\_\_ WORK ORDER: \_\_\_\_\_ PROJECT NUMBER: \_\_\_\_\_  
ROUTE: \_\_\_\_\_ COUNTY: \_\_\_\_\_  
SIDE ROAD: \_\_\_\_\_  
MILE POST: \_\_\_\_\_ AT INTERSECTION WITH: \_\_\_\_\_  
OR MILES OF: \_\_\_\_\_

REFERENCE NUMBER	DESCRIPTION	QUANTITY	UNIT

THIS WORK ORDER CONSISTS OF REPAIRING THE DAMAGED GUARDRAIL AT THE LOCATIONS SHOWN ABOVE. ALL WORK SHALL CONFORM AND ADHERE TO ALL STANDARDS AND SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION AND TO THE SPECIFICATIONS OF THIS CONTRACT.

SUBMITTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
(ODOT PROJECT SUPERVISOR)

DATE REPAIRED: \_\_\_\_\_ INITIAL: \_\_\_\_\_

NO WORK IS TO BE PERFORMED UNTIL THIS WORK ORDER IS APPROVED BY THE PROJECT SUPERVISOR.

GENERAL INFORMATION

THIS IS A "GUARDRAIL REPAIR PROJECT" FOR BUTLER, CLERMONT, CLINTON, GREENE, HAMILTON, MONTGOMERY, PREBLE, AND WARREN COUNTIES, VARIOUS ROUTES AND SECTIONS.

THE INTENT OF THIS PROJECT IS TO REPAIR OR REPLACE DAMAGED GUARDRAIL, IMPACT ATTENUATORS, BRIDGE TERMINAL ASSEMBLIES, AND OTHER ITEMS THROUGHOUT THE LISTED COUNTIES, AND TO UPGRADE EXISTING OUTDATED BARRIER COMPONENTS.

THE LOCATION AND ESTIMATED AMOUNT OF RAIL TO BE REPAIRED SHALL BE FURNISHED TO THE ENGINEER BY THE PERSON OR PERSONS DESIGNATED BY THE HIGHWAY MANAGEMENT ADMINISTRATOR.

DO NOT PERFORM ANY GUARDRAIL REPAIR WORK UNTIL RECEIVING AUTHORIZATION FROM THE ENGINEER. THIS AUTHORIZATION SHALL BE IN THE FORM OF A "GUARDRAIL REPAIR WORK ORDER". AN EXAMPLE OF THE AFOREMENTIONED WORK ORDER APPEARS ABOVE. WORK ORDERS WILL BE PROVIDED ELECTRONICALLY.

THE ENGINEER SHALL FURNISH A COMPLETED AND SIGNED "WORK ORDER" FOR EACH LOCATION OF DAMAGED GUARDRAIL BEFORE THE REPAIR WORK CAN BEGIN.

WHEN MULTIPLE ORDERS HAVE BEEN ISSUED AND REMAIN INCOMPLETE, PERFORM WORK ON THE LOCATIONS IN ORDER OF PRIORITY AS DIRECTED BY THE ENGINEER.

UPON RECEIVAL OF A WORK ORDER, THE INDICATED WORK SHALL BE COMPLETED WITHIN SIX (6) WEEKS. FAILURE TO COMPLETE THIS WORK WITHIN THE SPECIFIED TIME FRAME SHALL BE SUBJECT TO DISINCENTIVES PER THE NOTE ON SHEET 6. NO NEW WORK LOCATIONS SHALL BE INITIATED PRIOR TO THE COMPLETION OF WORK AT ANY GIVEN LOCATION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

NOTIFY THE PROJECT ENGINEER PER THE NOTIFICATION OF TRAFFIC RESTRICTIONS NOTE ON SHEET 6.

BEGIN WORK START DATE

WORK FOR THIS CONTRACT SHALL START ON OCTOBER 1, 2024.

TERM AND TERMINATION OF THE CONTRACT

IN ADDITION TO THE GENERAL PROVISIONS AS SPECIFIED IN SECTION 100 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION, IT IS STIPULATED THAT THE CONTRACT SHALL LAST NO LONGER THAN THE SPECIFIED COMPLETION DATE. UPON WRITTEN NOTICE FROM THE DIRECTOR OF TRANSPORTATION TO THE CONTRACTOR, OF NOT LESS THAN 15 CALENDER DAYS, THE DIRECTOR MAY TERMINATE THE CONTRACT AT ANYTIME.

PERSONNEL

MAINTAIN A MINIMUM FOUR (4) PERSON CREW OF QUALIFIED PERSONNEL AND EQUIPMENT, DURING NORMAL WORKING HOURS, TO PERFORM THE WORK FOR THE DURATION OF THE CONTRACT, UNLESS OTHERWISE REQUIRED BY THE ENGINEER.

PUBLIC SAFETY

BEFORE WORK BEGINS, SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. PLACE OR REPLACE NECESSARY TRAFFIC CONTROL DEVICES TO MAINTAIN TRAVELED PAVEMENT SAFELY.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE, AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE AND READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF COMPLIANCE.

GUARDRAIL POST AND GUARD POST HOLES

ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS OR GUARD POSTS SHALL BE FILLED WITH GRANULAR MATERIAL, EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION OR EXCESS MATERIAL FROM BERM RESHAPING. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE GUARDRAIL ITEM.

MATERIAL ON HAND

AT ALL TIMES, MAINTAIN ON HAND, AND HAVE IN STOCK, GUARDRAIL MATERIAL\* SUFFICIENT TO COMPLETE 25% OF THE INCOMPLETE CONTRACT BID ITEMS, UP TO THE TIME THAT 75% OF THE WORK IS COMPLETED. AT THIS TIME, STOCK SUFFICIENT MATERIALS\* TO COMPLETE THE PROJECT AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL BE RECEIVED FOR THESE MATERIALS\* IN ACCORDANCE WITH CMS SECTION 109.10, PAYMENT FOR DELIVERED MATERIALS. ODOT SHALL PURCHASE ALL SURPLUS GUARDRAIL MATERIAL\* PURCHASED BY THE CONTRACTOR AND NOT USED ON THIS PROJECT.

\*MATERIALS: GALVANIZED BEAM RAIL, STEEL POST, WOOD POST, SPACER BLOCKS, FLARED END SECTIONS, TERMINAL CONNECTORS, NUTS BOLTS AND WASHERS AS SHOWN IN PLAN INSERT SHEETS GR-1.1, GR-2.1, GR-2.2, GR-2.4, GR-3.1, GR-3.2, GR-3.3, GR-3.4, GR-3.5, GR-3.6, GR-4.2, AND GR-4.5 AS WELL AS THOSE IN ALL MGS STANDARD DRAWINGS.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

CURVED RAILING

CURVED RAIL ELEMENTS, WHERE CALLED FOR IN A RUN, SHALL BE INCLUDED IN THE TOTAL LENGTH OF RUN SHOWN IN THE GUARDRAIL OR GUARDRAIL REBUILT ITEMS. CURVED RAIL ELEMENT TOTAL SHALL BE INCLUDED WITH THE GUARDRAIL OR GUARDRAIL REBUILT TOTALS ON THE GENERAL SUMMARY SHEET.

ITEM 202 GUARDRAIL REMOVED

ANY SECTION OF GUARDRAIL OR POST AND ASSOCIATED HARDWARE DEEMED RE-USABLE BY THE ENGINEER MAY BE RE-USED. GUARDRAIL, POSTS, AND MISCELLANEOUS HARDWARE DESIGNATED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF PROPERLY.

PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 202 GUARDRAIL REMOVED. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
202 FT GUARDRAIL REMOVED

ITEM 202 GUARDRAIL POST REMOVED

THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING GUARDRAIL POSTS. EXISTING GUARDRAIL AND ASSOCIATED HARDWARE SHALL BE DETACHED FROM THE POST PRIOR TO REMOVAL, AND RE-USED IF DEEMED RE-USABLE BY THE ENGINEER.

PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 202 GUARDRAIL POST REMOVED. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
202 EACH GUARDRAIL POST REMOVED

ITEM 202 ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POSTS AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASEMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE WORK AS INDICATED ABOVE. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
202 EACH ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

ITEM 606 GUARDRAIL EXCAVATED MATERIAL

ALL MATERIAL EXCAVATED FOR POST HOLES OR CONCRETE ANCHORS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH 503.07 OF THE SPECIFICATIONS, AND AREA RESTORED TO A NEAT CONDITION SATISFACTORY TO THE ENGINEER. THE COST OF THIS WORK IS TO BE INCLUDED IN THE APPROPRIATE GUARDRAIL BID ITEM. THE LOCATIONS OF GUARDRAIL RUNS ARE SUBJECT TO ADJUSTMENTS TO ASSURE THAT THE PLANNED INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

ITEM 606 GUARDRAIL POST

THIS ITEM INCLUDES THE COST OF ALL LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS TO INSTALL A GUARDRAIL POST IN ACCORDANCE WITH ALL SPECIFICATIONS, PLAN INSERT SHEETS, OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
606 EACH GUARDRAIL POST

ITEM 606 GUARDRAIL, TYPE 5 VARIOUS

THIS ITEM SHALL INCLUDE ALL WORK, MATERIAL, AND EQUIPMENT NECESSARY TO CONSTRUCT THE FOLLOWING GUARDRAIL TYPES IN ACCORDANCE WITH THE PLAN INSERT SHEETS OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
606 FT GUARDRAIL, TYPE 5  
606 FT GUARDRAIL, BARRIER DESIGN TYPE 5

ITEM 606 GUARDRAIL, MISC.: TYPE 5 REBUILT USING STEEL OR WOOD POST

THIS ITEM SHALL FOLLOW THE REQUIREMENTS OF CMS ITEM 606 AND SHALL INCLUDE ALL WORK NECESSARY TO REMOVE AND REPLACE DAMAGED GUARDRAIL, POSTS, AND/OR ASSOCIATED HARDWARE WITHIN THE LENGTH DESIGNATED FOR REPAIR AND ALL WORK NECESSARY TO RESET AND ALIGN POST AND GUARDRAIL DEEMED "FIT" FOR RE-USE BY THE ENGINEER. ADJUSTMENTS OF ADJACENT RAIL OUTSIDE THE LIMITS DESIGNATED FOR REPLACEMENT, IF NECESSARY, IN ORDER TO RE-ESTABLISH SPACING, WILL BE CONSIDERED INCIDENTAL TO THIS ITEM. SECTIONS TO BE REPLACED WILL BE DESIGNATED BY THE ENGINEER FROM CENTER OF POST TO CENTER OF POST.

MATERIALS SHALL BE NEW OR USEABLE SALVAGE UNDER THE REMOVAL ITEMS OF THIS CONTRACT. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM UNIT DESCRIPTION  
606 FT GUARDRAIL, MISC.: TYPE 5 REBUILT USING STEEL POST  
606 FT GUARDRAIL, MISC.: TYPE 5 REBUILT USING WOOD POST

DESIGN AGENCY



DESIGNER

JED

REVIEWER

JDO

PROJECT ID

114292

SHEET TOTAL

2 35










SHEET NUM.				PART			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
3	4	5	8	01/SAF/21	02/SAF/21	03/SAE/21							
											ROAWAY (CONTINUED)		
					7,000	400	606	98000	7,400	FT	GUARDRAIL, MISC.:TYPE 5 REBUILT USING WOOD POST	2	
	45				35	10	606	98100	45	EACH	GUARDRAIL, MISC.:URGENT REPAIR	3	
							SPECIAL	69098000	2	EACH	MISC.: CONCRETE BARRIER END SECTION	5	
						20	SPECIAL	69098700	20	CY	MISC.: CLASS OC1, CONCRETE BARRIER REPAIR	5	
						10	SPECIAL	69098700	10	CY	MISC.: CLASS OC2, SUPERSTRUCTURE BARRIER REPAIR	5	
											<b>PAVEMENT</b>		
					36	18	609	23001	54	FT	COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN	3	
					25	15	609	24510	40	FT	CURB, TYPE 4-C		
											<b>LIGHTING</b>		
						1	625	14400	1	EACH	LIGHT POLE FOUNDATION REPAIR		
											<b>TRAFFIC CONTROL</b>		
		131			100	25	6	626	00110	131	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	4
											<b>MISCELLANEOUS STRUCTURE</b>		
					25	25	517	72205	50	FT	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 1 STEEL POSTS), AS PER PLAN	4	
					25	25	517	72307	50	FT	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS), AS PER PLAN	4	
											<b>MAINTENANCE OF TRAFFIC</b>		
				75	50	25	614	11110	75	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
					150	5	614	13600	155	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A TWO LANE HIGHWAY		
					10	5	614	13700	15	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A FOUR LANE UNDIVIDED HIGHWAY		
					40	10	614	13800	50	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A 4 LANE OR GREATER DIVIDED HIGHWAY		
					15		614	13800	15	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A 4 LANE OR GREATER DIVIDED HIGHWAY(CITY OF CINCINNATI)		
					325	10	614	13900	335	EACH	MAINTENANCE OF TRAFFIC FOR SHOULDER CLOSURE		
					80		614	13900	80	EACH	MAINTENANCE OF TRAFFIC FOR SHOULDER CLOSURE(CITY OF CINCINNATI)		
											<b>INCIDENTALS</b>		
					425	40	624	15000	465	EACH	MOBILIZATION		

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER: JED  
 REVIEWER: JDO  
 PROJECT ID: 114292  
 SHEET: 9 TOTAL: 35