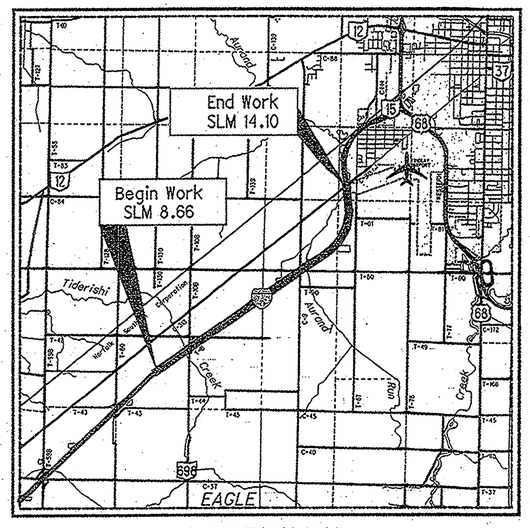


LOCATION MAP

LATITUDE: 40°59'05" LONGITUDE: 83°42'50"

SCALE IN MILES

0 1 2 3 4

N

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

DESIGN DESIGNATION

CURRENT ADT (2016)	29150
DESIGN YEAR ADT (2036)	33390
DESIGN HOURLY VOLUME (2036)	3340
DIRECTIONAL DISTRIBUTION	63%
TRUCKS (24 HOUR B&C)	27%
DESIGN SPEED	70 MPH
LEGAL SPEED	70 MPH

DESIGN FUNCTIONAL CLASSIFICATION: URBAN INTERSTATE
NHS PROJECT ..... YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
DISTRICT NO. 1
OHIO DEPARTMENT OF TRANSPORTATION
PLANNING & ENGINEERING

ENGINEERS SEAL:

STATE OF OHIO
JENNIFER GARBER
7304
PROFESSIONAL ENGINEER

SIGNED: Jennifer Garber
DATE: 3-16-15

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAN-75-8.66

EAGLE & LIBERTY TOWNSHIP
HANCOCK COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF MILLING 1 3/4" OFF 5.44 MILES OF THE EXISTING ASPHALT PAVEMENT. RESURFACE WITH 1 3/4" OF INTERMEDIATE COURSE AND 1 1/2" OF SURFACE COURSE. MILL AND PAVE 1 1/2" OF SURFACE COURSE PAVEMENT AT THE REST AREAS. THE PROJECT ALSO INCLUDES JOINT REPAIRS AND GUARDRAIL REPLACEMENT.

PROJECT EARTH DISTURBED AREA:
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A MAINTENANCE PROJECT
NOTICE OF INTENT EARTH DISTURBED AREA:

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN 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 EXCEPT FOR THE REST AREAS DESCRIBED ON SHEETS 5-6 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

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.

APPROVED Kirk Shuda
DATE 3/18/15 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray
DATE 3-31-15 DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	7/19/13	DM-4.3	7/19/13	MT-95.30	7/18/14	TC-42.10	10/18/13		
BP-2.5	7/19/13	DM-4.4	7/20/12	MT-95.50	7/19/13	TC-42.20	10/18/13		
BP-3.1	7/18/14			MT-98.20	7/18/14	TC-52.10	10/18/13		
BP-9.1	7/19/13			MT-99.20	7/19/13	TC-52.20	7/18/14		
				MT-101.90	7/18/14	TC-65.10	1/17/14		
MGS-1.1	7/19/13			MT-105.10	7/19/13	TC-65.11	7/18/14		
MGS-2.1	7/19/13								
MGS-3.1	7/18/14					TC-71.10	1/17/14		
MGS-6.1	7/19/13					TC-72.20	7/18/14		
MGS-6.2	1/18/13								
RM-4.2	6/14/14								

SUPPLEMENTAL SPECIFICATIONS

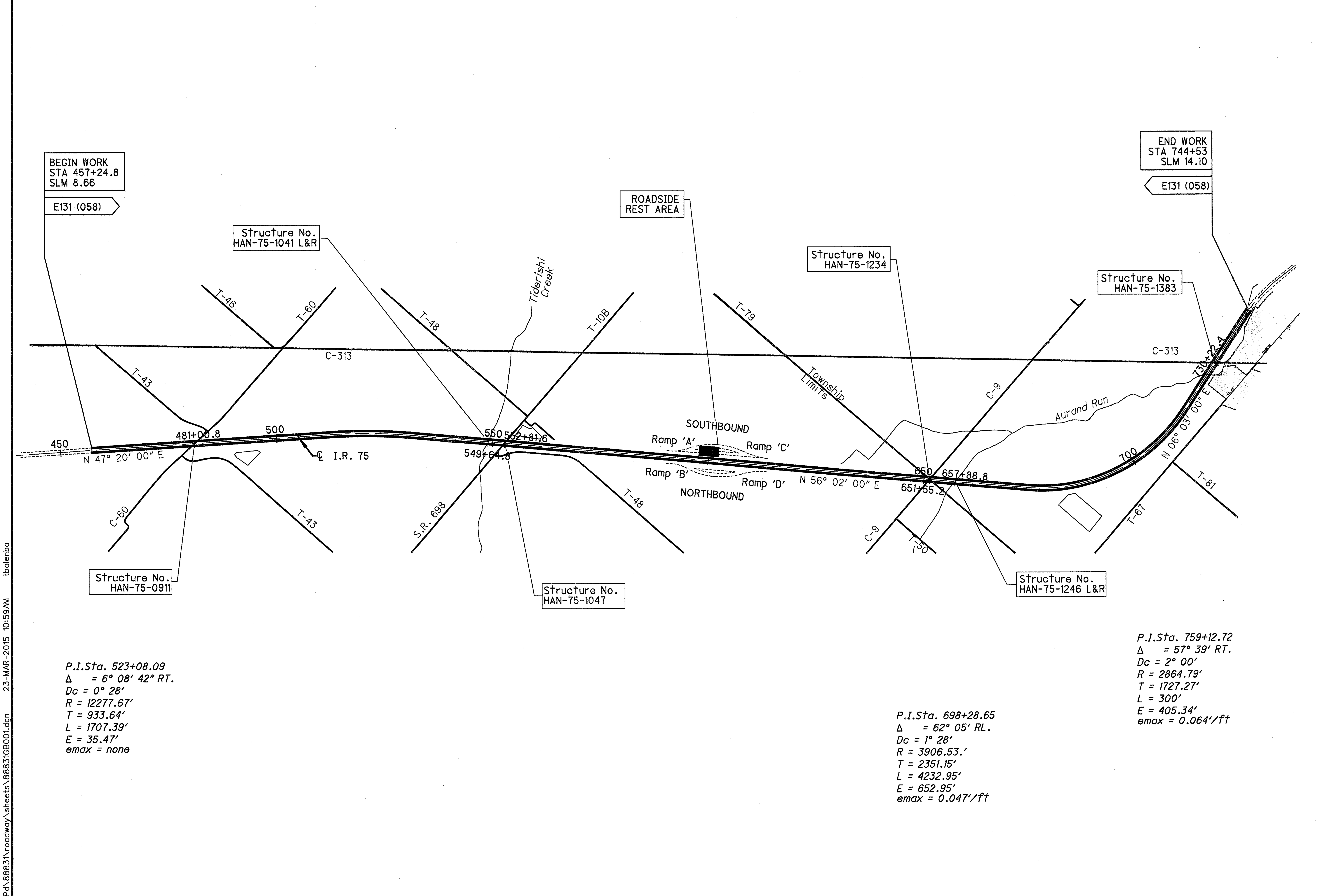
800	4/17/15
806	3/02/15
832	1/17/14
875	1/17/14

SPECIAL PROVISIONS

FEDERAL PROJECT NO.	CONSTRUCTION PROJECT NO.	PID NO.	RAILROAD INVOLVEMENT
E131 (058)		88831	NONE

HAN-75-8.66

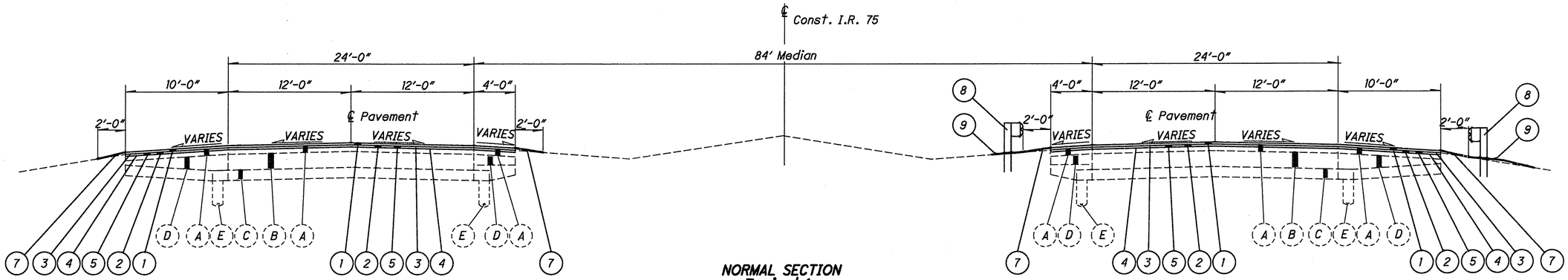
1/20


BEGIN WORK
STA 457+24.8
SLM 8.66
E131 (058)
END WORK
STA 744+53
SLM 14.10
E131 (058)
ROADSIDE
REST AREA
Structure No.
HAN-75-1041 L&R
Structure No.
HAN-75-1234
Structure No.
HAN-75-1383
Structure No.
HAN-75-0911
Structure No.
HAN-75-1047
Structure No.
HAN-75-1246 L&R
Tiderishi Creek
Aurand Run
Township Limits
C-313
T-46
T-60
T-43
T-48
T-10B
T-79
C-9
C-60
S.R. 698
T-50
T-67
T-81
450
481+00.8
500
550
552+81.6
549+64.8
650
657+88.8
651+55.2
700
730+22.4
N 47° 20′ 00″ E
℄ I.R. 75
N 56° 02′ 00″ E
N 06° 03′ 00″ E
SOUTHBOUND
NORTHBOUND
Ramp 'A'
Ramp 'B'
Ramp 'C'
Ramp 'D'
P.I.Sta. 523+08.09
Δ = 6° 08′ 42″ RT.
Dc = 0° 28′
R = 12277.67′
T = 933.64′
L = 1707.39′
E = 35.47′
emax = none
P.I.Sta. 698+28.65
Δ = 62° 05′ RL.
Dc = 1° 28′
R = 3906.53.′
T = 2351.15′
L = 4232.95′
E = 652.95′
emax = 0.047′/ft
P.I.Sta. 759+12.72
Δ = 57° 39′ RT.
Dc = 2° 00′
R = 2864.79′
T = 1727.27′
L = 300′
E = 405.34′
emax = 0.064′/ft
0 500 1000 2000
HORIZONTAL
SCALE IN FEET

I:\Pd\88831\roadway\sheets\88831GB001.dgn 23-MAR-2015 10:59AM tbolenba

SCHEMATIC PLAN

HAN-75-8.66



NORMAL SECTION
Typical 1

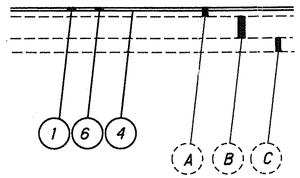
Sta 457+24.8 TO Sta 744+48 = 28723.2 ft

EXISTING LEGEND

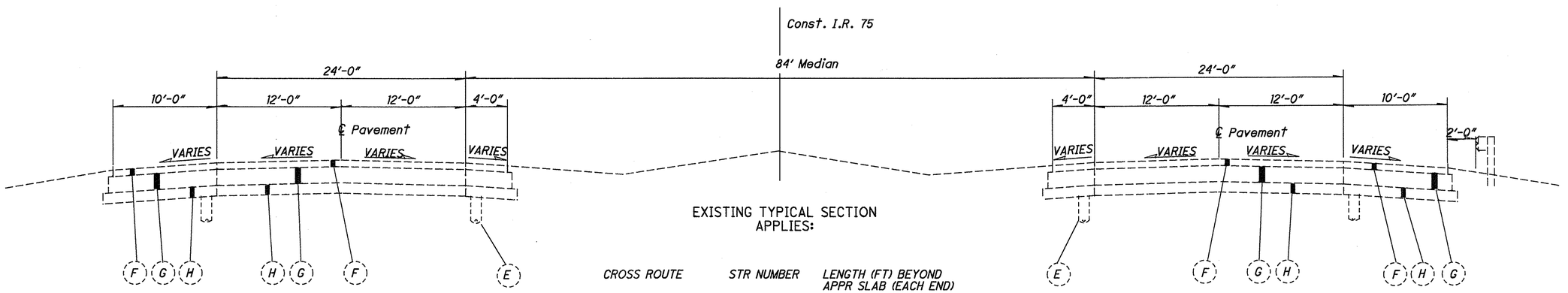
- (A) 7" +/- Asphalt Concrete
- (B) 9"+/- Reinforced Portland Cement Concrete Pavement
- (C) 6" +/- Aggregate Base
- (D) 6" +/- Bituminous Base
- (E) 6 Inch Shallow Pipe Underdrain
- (F) 3 1/2" +/- Asphalt Concrete
- (G) 11" +/- Bituminous Aggregate Base
- (H) 8" +/- Aggregate Base

PROPOSED LEGEND

1. ITEM 806 - 1 ½" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, Type A
2. ITEM 442 - 1 ¾"ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, Type A (446)
3. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
4. ITEM 407 - TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
5. ITEM 254 - 1 ¾" PAVEMENT PLANING ASPHALT CONCRETE
6. ITEM 254 - 1 ½" PAVEMENT PLANING ASPHALT CONCRETE
7. ITEM 617 - COMPACTED AGGREGATE (2" AVERAGE THICKNESS)
8. ITEM 606 - GUARDRAIL, TYPE MGS
9. ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN



NORMAL TYPICAL SECTION (RT)
APPLIES:
NORTHBOUND REST AREA
SOUTHBOUND REST AREA



EXISTING TYPICAL SECTION
APPLIES:

CROSS ROUTE	STR NUMBER	LENGTH (FT) BEYOND APPR SLAB (EACH END)
CR 60	Han-75-0911	400
Tiderish Creek	Han-75-1041	200
	Han-75-1041 to Han-75-1047	250
SR 698	Han-75-1047	300
CR 9	Han-75-1234 SB	400
	Han-75-1234 NB	600
Aurund Run	Han-75-1246	300
CR 313	Han-75-1383 SB	400
	Han-75-1383 NB	600

NORMAL SECTIONS SHOWN, BUT ALSO APPLIES TO SUPERELEVATED SECTIONS

TYPICAL SECTIONS

HAN-75-8.66

3
20

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

MAINTAINING EXISTING PAVEMENT SLOPES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE CROSS SLOPES, UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

PIPE UNDERDRAINS

ANY PIPE UNDERDRAINS BROKEN OR DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE STATE.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PREVIOUS CONSTRUCTION PLANS, PROJECT NO. HAN-25-8.90, SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 1 OFFICE. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY ON THE MAINLINE WITH A UNIFORM THICKNESS OF 3.25 INCHES AFTER PLANING 1.75 INCHES.

EROSION CONTROL

THE QUANTITY BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR EROSION CONTROL.

ITEM 832 EROSION CONTROL = 1000 EACH

ITEM 617 - COMPACTED AGGREGATE

AN ENGINEERING QUANTITY OF 200 CU. YD. HAS BEEN INCLUDED FOR USE FOR SHOULDER STABILIZATION AT THE REST AREAS. THE MATERIAL PLACEMENT IS TO BE USED AS DETERMINED BY THE ENGINEER.

ITEMS 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING MAINLINE ASPHALT PAVEMENT AREAS OR PAVED SHOULDER AREAS OF EXISTING PAVEMENT FAILURES NOT LISTED IN THE TABLE ON SHEET 13.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS, DEPTHS, AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER SQUARE YARD OF ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 225 CY

ENVIRONMENTAL COMMITMENTS

THE ENVIRONMENTAL DOCUMENT WAS APPROVED AND CONTAINED THE FOLLOWING CONSTRUCTION RELATED ITEMS THAT THE CONTRACTOR AND PROJECT ENDINEER ARE TO ENSURE ARE CARRIED OUT. IF THEY CANNOT BE FOLLOWED, THE DISTRICT PLANNING AND ENGINEERING ADMINISTRATOR AND DISTRICT ENVIRONMENTAL COORDINATOR SHOULD BE NOTIFIED IMMEDIATELY.

1. NO WORK SHALL BE CONDUCTED OUTSIDE THE EXISTING RIGHT-OF-WAY.
2. NO WORK OR STAGING OF EQUIPMENT AND MATERIALS SHALL OCCUR WITHIN A STREAM, DITCH OR WETLAND.
3. CONSTRUCTION MATERIAL SHALL BE FULLY CONTAINED OVER ALL WATERWAYS.
4. A PROPER CONCRETE WASHOUT AREA SHALL BE PROVIDED BY THE CONTRACTOR.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 25 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT AERONAUTICAL STUDY NO. 2015-AGL-4253-OE THRU 2015-AGL-4261-OE IS BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING AN FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVAITION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-387-2346

PERSONAL PROTECTIVE EQUIPMENT (PPE)

THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF SECTIONS III AND X OF THE OHIO DEPARTMENT OF TRANSPORTATION SAFETY & HEALTH STANDARD OPERATING PROCEDURE 220-006(SP) EFFECTIVE: JUNE 1, 2009 (EXCEPT AS AMENDED BELOW) AND ALL SUBSEQUENT UPDATES POSTED AT THE FOLLOWING WEBSITE:

HTTP://WWW.DOT.STATE.OH.US/POLICY/POLICIESANDSOPS/POLICIES/220-006(SP).PDF

AMENDMENTS TO THE REQUIREMENTS OF THIS DOCUMENT ARE:
III. HEAD PROTECTION (HARD HATS)

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR APPROPRIATE HEAD PROTECTION. ALL HARD HATS MUST MEET OR EXCEED ANSI Z89.1-2003 TYPE 1 CLASS E - G REQUIREMENTS.

X. HIGH VISIBILITY SAFETY APPAREL

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR A HIGH-VISIBILITY SAFETY VEST THAT MEETS THE PERFORMANCE CLASS 2 OR CLASS 3 REQUIREMENTS OF THE ANSI/ISEA 107-2004 PUBLICATION ENTITLED "AMERICAN NATIONAL STANDARD FOR HIGH-VISIBILITY SAFETY APPAREL AND HEADWEAR."

WORKERS MAY WEAR AN ANSI CLASS II OR ANSI CLASS III APPROVED RAIN SUIT OR JACKET WITHOUT A SAFETY VEST OVER IT. HIGH-VISIBILITY T-SHIRTS, SWEATSHIRTS, OR ZIP UP HOODIES ARE NOT ACCEPTABLE. ALL WORKERS SHALL WEAR A SAFETY VEST OVER THE T-SHIRTS, SWEATSHIRTS, AND ZIP-UP HOODIES, REGARDLESS OF THEIR ANSI RATING.

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY:
EMAIL - RHONDA.PEES@DOT.STATE.OH.US
FAX - 419-222-0438

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY:
EMAIL - HAULING.PERMITS@DOT.STATE.OH.US
FAX - (614) 728-4099

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

CALCULATED TAB
CHECKED JLG

GENERAL NOTES

HAN-75-8.66

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES ON MAINLINE I.R. 75 IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614, THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS.

THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 11 FEET AT ALL TIMES ON I.R. 75. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. ANY TEMPORARY PAVEMENT REQUIRED TO MAINTAIN THE MINIMUM 11' LANE WIDTH SHALL BE INCLUDED IN THE LUMP SUM ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

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. A CLOSED LANE WITH NO FURTHER PATCHING REQUIRED AND NO PAVING/PLANING OPERATIONS SCHEDULED WITHIN FOUR (4) CALENDAR DAYS, SHALL BE OPENED FOR THE CONVENIENCE OF THE TRAVELING PUBLIC. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER, A PERSON RESPONSIBLE FOR MAINTENANCE OF TRAFFIC CONTROL DURING NON-WORK HOURS WHO SHALL BE AVAILABLE ON SITE WITHIN THIRTY (30) MINUTES AFTER NOTIFICATION.

UNLESS PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIPMENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO DIRECTLY TRANSPORT OR OPERATE ANY EQUIPMENT ACROSS THE OPEN LANES OF I.R. 75. ALSO THE CONTRACTOR WILL NOT BE PERMITTED TO UTILIZE THE EMERGENCY TURN-AROUNDS AS PART OF THE HAUL ROUTE.

ALL WORK VEHICLES LICENSED TO OPERATE ON THE HIGHWAY, INCLUDING MATERIAL TRUCKS, SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC A MINIMUM OF ONE QUARTER MILE IN BRIGHT SUNLIGHT AND SHALL BE OPERATED WITH LIGHTED HEAD AND TAIL LAMPS. THE AMBER LIGHT SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND WHILE TRAVELLING TO AND FROM THE WORK ZONE WHENEVER THE VEHICLE SPEED IS BELOW 40 MPH. VEHICLE HAZARD LAMPS DO NOT SATISFY THIS REQUIREMENT. ALL OTHER EQUIPMENT SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC A MINIMUM OF ONE QUARTER MILE IN BRIGHT SUNLIGHT. THE AMBER LIGHT SHALL BE IN OPERATION WHILE THE EQUIPMENT IS WITHIN THE WORK ZONE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL ITEMS, LABOR, EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THESE REQUIREMENTS AND DEEMED NECESSARY BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER. NO ADDITIONAL MONEY WILL BE PAID FOR ALTERNATE METHODS.

MAINTAINING TRAFFIC AT PLANED AND PAVED AREAS

THE CONTRACTOR SHALL ARRANGE OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN PAVING IS COMPLETE. NO I.R. 75 TRAFFIC SHALL BE ALLOWED TO OPERATE ON A PLANED SURFACE. ALL REQUIRED WORK ZONE PAVEMENT MARKING SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC. ALL LANE CLOSURES SHALL BE IN COMPLIANCE WITH THE HOLIDAY RESTRICTIONS AS STATED IN THESE PLANS.

COORDINATION OF CONTRACTORS

SINCE THE MAINTENANCE OF TRAFFIC AND WORK ON THIS PROJECT MAY OVERLAP OTHER PROJECTS, IT IS ESSENTIAL THAT EACH CONTRACTOR CONDUCT THEIR WORK AND COOPERATE WITH EACH OTHER IN SUCH A MANNER AS NOT TO HINDER THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY THE OTHER CONTRACTOR.

EXTRA ADVANCE WARNING SIGNS

AN EXTRA ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20-5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED WARNING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE EXTRA ADVANCE WARNING SIGN GROUPS AS SHOWN ON SCD MT-95.50 AT A DISTANCE OF 2 MILES IN ADVANCE OF THE LANE TAPERS WITH THE APPROPRIATE W16-3A DISTANCE PLATES.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

ITEM 614 - WORK ZONE MARKING SIGN = 24 EACH
ITEM 614 - WORK ZONE LANE LINE, CLASS II = 11 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS II = 22 MILE

REMOVAL OF PAVING MARKING

THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG THE WORK ZONE TO ALLOW TRAFFIC TO TRAVEL USING THE ROADWAY SHOULDER. THE CONTRACTOR SHALL ORGANIZE HIS WORK TO REQUIRE ONLY THE REMOVAL OF CONFLICTING PAVEMENT MARKINGS ALONG ONE LANE IN EACH DIRECTION OF THE ROADWAY. THE LINE TYPE MAY VARY THROUGHOUT THE ZONE. PAYMENT FOR THE REMOVAL SHALL BE PER FOOT REGARDLESS OF LINE WIDTH. PAYMENT TO REMOVE THE MARKINGS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 642 REMOVAL OF PAVEMENT MARKING.

ITEM 642 REMOVAL OF PAVEMENT MARKING 62,500 FT

ITEM 614 - REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE USED, BUT MUST BE IN GOOD CONDITION AND ARE SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE REPLACEMENT SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - REPLACEMENT SIGN = 5 EACH

ITEM 614 - REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - REPLACEMENT DRUM = 100 EACH

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF SECTION 614.03 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS THE FOLLOWING SHALL APPLY. THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EXTREME CAUTION SHALL BE USED WHERE THE CONTRACTOR'S VEHICLES AND EQUIPMENT MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. CONSTRUCTION EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY, THIRTY FEET (30') FROM THE EDGE OF THE TRAVELED HIGHWAY UNLESS BEHIND GUARDRAIL, WHEN VARIOUS OPERATIONS ARE SCHEDULED TO CONTINUE THE NEXT WORKDAY. EQUIPMENT PARKED BEHIND THE GUARDRAIL SHALL BE AT LEAST 6 FEET FROM THE FACE OF THE GUARDRAIL. NO EQUIPMENT SHALL BE PARKED BEHIND A GUARDRAIL ATTENUATOR. ON WEEKENDS OR AT OTHER TIMES OF SUSPENSION OF WORK, EQUIPMENT SHALL BE STORED AT A STORAGE AREA REMOVED FROM THE INTERSTATE RIGHT OF WAY. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY EXCEPT WHEN TRAFFIC IS MAINTAINED ON THE OUTSIDE LANES. ADEQUATE BARRELS WITH LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

ALLOWABLE LANE CLOSURES

A WAIVER TO THE PERMITTED LANE CLOSURES HAS BEEN APPROVED TO ALLOW THE CLOSURE OF ONE LANE OF TRAFFIC AT ANY TIME DURING THE COMPLETION OF THIS PROJECT.

ITEM 614 - MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS)

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
	EASTER

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

DAY OF THE WEEK	TIME ALL LANES 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
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ROADSIDE REST AREA CLOSURES

THE REST AREAS SHALL BE MAINTAINED TO TRAFFIC AT ALL TIMES EXCEPT FOR A SINGLE PERIOD NOT TO EXCEED 3 CONSECUTIVE DAYS. REST AREAS SHALL BE OPEN TO TRAFFIC FROM FRIDAY, 6:00 AM TO MONDAY, 6:00 AM.
THE CONTRACTOR SHALL PROVIDE MOTORISTS 7 DAYS ADVANCED NOTICE OF THE PLANNED REST AREA CLOSURE THROUGH THE USE OF A PORTABLE CHANGEABLE MESSAGE SIGN.
THE CONTRACTOR SHALL COVER EXISTING REST AREA GUIDE SIGNS WITH A CLOSED OVERLAY SIGN AND PROVIDE THE APPROPRIATE TRAFFIC CONTROL TO CLOSE THE REST AREA ENTRANCE & EXIT RAMPS.

LANE CLOSURES

THE CONTRACTOR SHALL PROVIDE AN ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN IN ADVANCE WARNING OF ANY LANE CLOSURES.

MAINTENANCE OF TRAFFIC NOTES

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 REQUIREMENT OF CMS 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:

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). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH 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.

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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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 WHICH 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 = 150 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 OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A CLASS A TYPE AS SHOWN ON THE LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. The PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PCMS LOCATIONS INCLUDE PRIOR TO THE REST AREAS BEFORE AND DURING CLOSURES AND PRIOR TO ANY LANE CLOSURES. ADDITIONAL DETAILS ARE PROVIDED ON SHEET 5. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTORS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN = 8 SIGN MONTHS

ITEM 614, WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (60 MPH SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONES. THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS. THE COVER SHALL COMPLETELY OBSCURE ALL SYMBOLS AND LETTERING ON THE EXISTING SIGN.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK THAT CAUSES THE WARRANTING CONDITIONS TO OCCUR. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING REMOVAL OF THE WARRANTING CONDITIONS, OR AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY REMOVAL OF WARRANTING CONDITIONS SHALL BE GOVERNED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE.

CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT THE TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED REDUCTION IN THE OPPOSITE DIRECTION. A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF THE WARRANTING CONDITION, AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF THE LANE REDUCTION, SHIFT TAPER, OR OTHER ROADWAY OR SHOULDER RESTRICTION THAT WARRANTED THE WORK ZONE SPEED ZONE. THE SIGN SHALL BE REPEATED EVERY 1 MILE FOR 60 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH REST AREA RAMP WITHIN THE ZONE.

THE SPEED LIMIT REDUCTION SHALL BE LIMITED TO ONLY THE PORTION OF THE PROJECT AND THE WORK THAT WARRANTED THE WORK ZONE SPEED LIMIT REDUCTION.

SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1250 FEET ON MULTI-LANE HIGHWAYS.

SIGNS TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION, PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC. SHALL BE PER THE OMUTCD, WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR A DURATION OF MORE THAN 3 DAYS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

VARIABLE WORK ZONE SPEED ZONES USING DIGITAL SPEED LIMIT SIGN ASSEMBLIES SHALL NOT BE USED IN LOCATIONS WHERE A TRADITIONAL APPROVED WORK ZONE SPEED LIMIT HAS BEEN APPROVED AND/OR IMPLEMENTED.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. SPEED LIMIT SIGNING FOR THE POINT OF RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE PAID FOR AS WORK ZONE SPEED LIMIT SIGNS. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, WORK ZONE SPEED LIMIT SIGN 36 EACH
ITEM 614, SPEED ZONE AHEAD SYMBOL SIGN 4 EACH

THE FOLLOWING INFORMATION PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT:

WZSZ
APPROVED - 1-27-15
REVISION NUMBER - WZ-10104
COUNTY & ROUTE - HARDIN I.R. 75
SLM FROM TO & DIRECTION - 8.16 TO 14.60
NORTHBOUND & SOUTHBOUND
SPEED LIMIT(MPH) - 60 MPH
SPECIFIC WARRANTING CONDITIONS & FACTORS - THIS SPEED LIMIT IS ONLY TO BE IN PLACE DURING THE TIME THE ACTIVITIES OR CONDITIONS THAT WARRANTED THE REDUCTION.

SHEET NUMBER											PARTICIPATION			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5		6	8		9	12	14	20		01/IMS/PV								
																		ROADWAY	
								6471			6471			202	38000	6471	FT	GUARDRAIL REMOVED	
								213			213			202	38300	213	FT	GUARDRAIL REMOVED, BARRIER DESIGN	
								1.2			1.2			209	15051	1.2	MILE	RESHAPING UNDER GUARDRAIL, AS PER PLAN	14
								5271.25			5271.25			606	15050	5271.25	FT	GUARDRAIL, TYPE MGS	
								150			150			606	15550	150	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS	
								2			2			606	20000	2	EACH	FLARED END SECTION	
								12			12			606	26150	12	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
								3			3			606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
								21			21			606	35050	21	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
								2			2			606	60012	2	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
																		EROSION CONTROL	
1000											1000			832	30000	1000	EACH	EROSION CONTROL	
																		PAVEMENT	
225											225			253	02001	225	CY	PAVEMENT REPAIR, AS PER PLAN	4
						281947					281947			254	01000	281947	SY	PAVEMENT PLANING, ASPHALT CONCRETE	
							2220				2220			255	10161	2220	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN	12
							7425				7425			255	20000	7425	FT	FULL DEPTH PAVEMENT SAWING	
							1665				1665			255	20001	1665	FT	FULL DEPTH PAVEMENT SAWING, AS PER PLAN	12
						21704					21704			407	10000	21704	GAL	TACK COAT	
				48		17546					17594			407	14000	17594	GAL	TACK COAT FOR INTERMEDIATE COURSE	
						11404					11404			442	10100	11404	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	
200						733					933			617	10100	933	CY	COMPACTED AGGREGATE	
						114238					114238			618	40100	114238	FT	RUMBLE STRIPS, (ASPHALT CONCRETE)	
				26		10234					10260			806	00100	10260	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A	
																		TRAFFIC CONTROL	
									567		567			621	00100	567	EACH	RPM	
									567		567			621	54000	567	EACH	RAISED PAVEMENT MARKER REMOVED	
								96			96			626	00100	96	EACH	BARRIER REFLECTOR TYPE A	
									22.82		22.82			643	00104	22.82	MILE	EDGE LINE, 6"	
									10.88		10.88			643	00204	10.88	MILE	LANE LINE, 6"	
									2997		2997			643	00404	2997	FT	CHANNELIZING LINE, 12"	
									120		120			643	00600	120	FT	CROSSWALK LINE	
									336		336			643	00700	336	FT	TRANSVERSE/DIAGONAL LINE	
									5556		5556			643	01200	5556	FT	PARKING LOT STALL MARKING	
									6		6			643	01300	6	EACH	LANE ARROW	
									3024		3024			643	01510	3024	FT	DOTTED LINE, 6"	
									6		6			643	01600	6	EACH	HANDICAP SYMBOL MARKING	
																		MAINTENANCE OF TRAFFIC	
			150								150			614	11110	150	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			4								4			614	12410	4	EACH	SPEED ZONE AHEAD SYMBOL SIGN	
	24										24			614	12460	24	EACH	WORK ZONE MARKING SIGN	
			36								36			614	12470	36	EACH	WORK ZONE SPEED LIMIT SIGN	
	5										5			614	12500	5	EACH	REPLACEMENT SIGN	
	100										100			614	12600	100	EACH	REPLACEMENT DRUM	
			8								8			614	18601	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
	11										11			614	20400	11	MILE	WORK ZONE LANE LINE, CLASS II	
	22										22			614	22310	22	MILE	WORK ZONE EDGE LINE, CLASS II	
	62500										62500			642	30000	62500	FT	REMOVAL OF PAVEMENT MARKING	
																		INCIDENTALS	
	LS										LS			614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	5
											6			619	16010	6	MNTH	FIELD OFFICE, TYPE B	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	

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GENERAL SUMMARY

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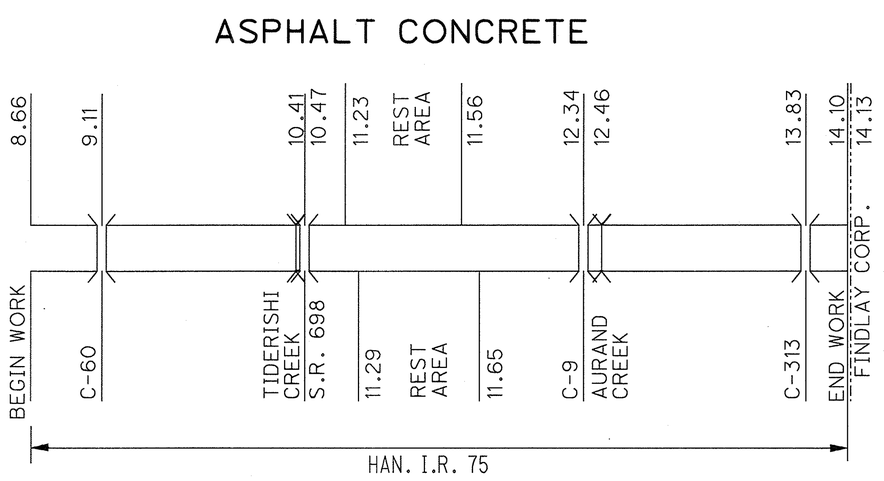

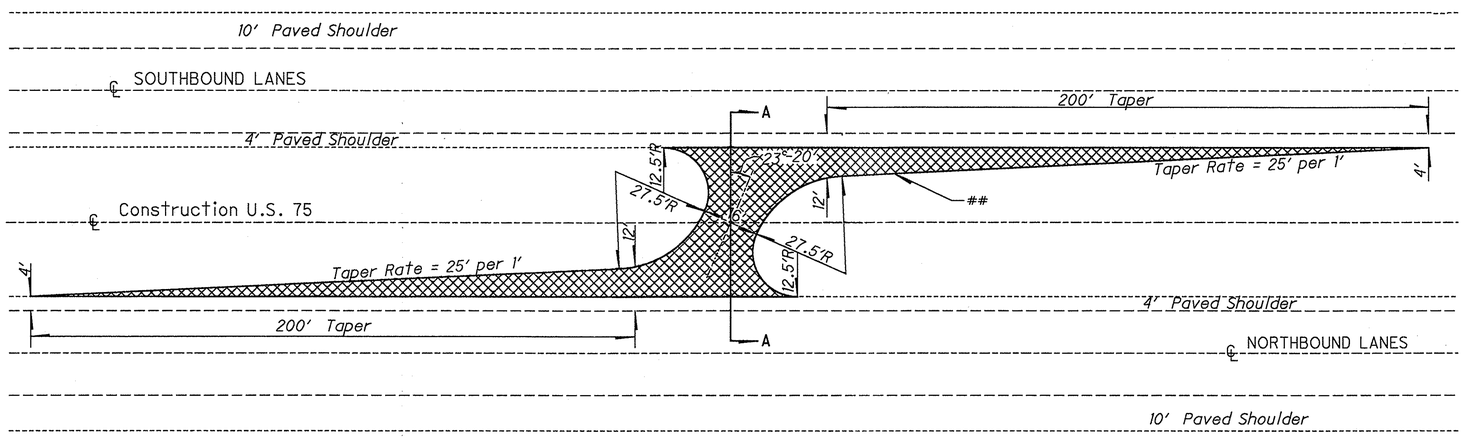

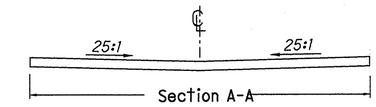

- Median Crossover Area to be Overlayed

S.L.M. 10.3 - 2850 Sq. Ft. ##
S.L.M. 14.0 - 2850 Sq. Ft. ##
Total = 5700 Sq. Ft.
- Graphically Determined Areas

ITEM 806 - 1½" Asphalt Concrete Surface Course, 12.5MM, Type A

[(5700) (1.5/12)] (/27) = 26.4 Cu. Yd.
Total = 26 Cu. Yd.

ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.

(5700) /9 X 0.075 = 48 Gal.
Total = 48 Gal.

Quantities carried to General Summary, Sheet 7

MEDIAN CROSSOVERS for ASPHALT SURFACE COURSE

S.L.M. 10.3
S.L.M. 14.0

CALCULATED TAB
CHECKED JLG

MAINLINE PAVEMENT CALCULATIONS

HAN-75-8.66

8
20

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PART	LOCATION	LOG POINT		LENGTH		PAVEMENT WIDTH	PAVEMENT AREA	TYPICAL / TRANSITION DETAILS	PAVEMENT DATA													
									407			254				PROPOSED PAVEMENT					617	618
																ASPHALT CONCRETE						
																442		806				
									TACK COAT	TACK COAT FOR INTERMEDIATE COURSE		PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" AVG.	PAVEMENT PLANING, ASPHALT CONCRETE, 1 3/4" AVG.	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE		THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A		COMPACTED AGGREGATE, TYPE A, 2 @ 2 FT, 2" AVG. THICKNESS	RUMBLE STRIPS ASPHALT CONCRETE
		FROM	TO	MILES $	FEET	FEET	SQ YD		GAL	GAL		SY	SY	SY			CY		CY		CY	FEET
N.B	IR 75	8.66	9.067	0.407	2148.96	38	9073.4	1	680.5	680.5			9073.4			1.75	441.07	1.50	378.06		26.5	4297.92
S.B.	IR 75	8.66	9.067	0.407	2148.96	38	9073.4	1	680.5	680.5			9073.4			1.75	441.07	1.50	378.06		26.5	4297.92
N.B	HAN-0911	9.067	9.186	0.119	628.32	38	2652.9	OT1	199.0	199.0			2652.9			1.75	128.96	1.50	110.54		7.8	1256.64
S.B.	HAN-0911	9.067	9.186	0.119	628.32	38	2652.9	OT1	199.0	199.0			2652.9			1.75	128.96	1.50	110.54		7.8	1256.64
N.B	IR 75	9.186	10.408	1.222	6452.16	38	27242.5	1	2043.2	2043.2			27242.5			1.75	1324.29	1.50	1135.10		79.7	12904.32
S.B.	IR 75	9.186	10.408	1.222	6452.16	38	27242.5	1	2043.2	2043.2			27242.5			1.75	1324.29	1.50	1135.10		79.7	12904.32
N.B	HAN-1041 & 1047	10.408	10.433	0.025	132	14	77.8	MT/MO													1.6	
S.B.	HAN-1041 & 1047	10.408	10.433	0.025	132	14	77.8	MT/MO													1.6	
N.B	IR 75	10.433	12.297	1.864	9841.92	38	41554.8	1	3116.6	3116.6			41554.8			1.75	2020.02	1.50	1731.45		121.5	19683.84
S.B.	IR 75	10.433	12.297	1.864	9841.92	38	41554.8	1	3116.6	3116.6			41554.8			1.75	2020.02	1.50	1731.45		121.5	19683.84
N.B	HAN-1234	12.297	12.369	0.072	380.16	38	1605.1	OT	120.4	120.4			1605.1			1.75	78.03	1.50	66.88		4.7	760.32
S.B.	HAN-1234	12.297	12.369	0.072	380.16	38	1605.1	OT	120.4	120.4			1605.1			1.75	78.03	1.50	66.88		4.7	760.32
N.B	IR 75	12.369	12.468	0.099	522.72	38	2207.0	1	165.5	165.5			2207.0			1.75	107.29	1.50	91.96		6.5	1045.44
S.B.	IR 75	12.369	12.468	0.099	522.72	38	2207.0	1	165.5	165.5			2207.0			1.75	107.29	1.50	91.96		6.5	1045.44
N.B	HAN-1246	12.468	12.474	0.006	31.68	14	77.8	MT													1.6	
S.B.	HAN-1246	12.468	12.474	0.006	31.68	14	77.8	MT													1.6	
N.B	IR 75	12.474	13.787	1.313	6932.64	38	29271.1	1	2195.3	2195.3			29271.1			1.75	1422.90	1.50	1219.63		85.6	13865.28
S.B.	IR 75	12.474	13.787	1.313	6932.64	38	29271.1	1	2195.3	2195.3			29271.1			1.75	1422.90	1.50	1219.63		85.6	13865.28
N.B	HAN-1383	13.787	13.902	0.115	607.2	38	2563.7	OT	192.3	192.3			2563.7			1.75	124.63	1.50	106.82		7.5	1214.4
S.B.	HAN-1383	13.787	13.902	0.115	607.2	38	2563.7	OT	192.3	192.3			2563.7			1.75	124.63	1.50	106.82		7.5	1214.4
N.B	IR 75	13.902	14.1	0.198	1045.44	38	4414.1	1	331.1	331.1			4414.1			1.75	214.57	1.50	183.92		12.9	2090.88
S.B.	IR 75	13.902	14.1	0.198	1045.44	38	4414.1	1	331.1	331.1			4414.1			1.75	214.57	1.50	183.92		12.9	2090.88
N.B	REST AREA						16051.0	RT	1203.8			16051.0						1.50	74.31			
	ENTANCE RAMP						2680.0	RA	201.0	201.0			2680.0			1.75	14.48	1.50	12.41		4.1	
	EXIT RAMP						1251.0	RA	93.8	93.8			1251.0			1.75	6.76	1.50	5.79		6.8	
S.B.	REST AREA						16051.0	RT	1203.8			16051.0						1.50	74.31			
	ENTANCE RAMP						1251.0	RA	93.8	93.8			1251.0			1.75	6.76	1.50	5.79		4.1	
	EXIT RAMP						2680.0	RA	201.0	201.0			2680.0			1.75	14.48	1.50	12.41		6.8	
	PAVEMENT CORRECTIONS FOR TRANSITIONS FROM SHEET 10								619.0	-1131.0		7351	-7435.4	# 8333.2			-362.00					
												39453	234160.5	# 8333.2								
	TOTALS CARRIED GENERAL SUMMARY SHT 7			10.88	57446.4		281444.4		21704	17546		281947					11404		10234		733	114238

TYPICAL 1 - SEE SHT 3
TRANSITION DETAIL OT - SEE SHT 11
TRANSITION DETAIL MT - SEE SHT 10
TRANSITION DETAIL MO - SEE SHT 11
TYPICAL RT - SEE SHT 3
TRANSITION DETAIL RA - SEE SHT 10

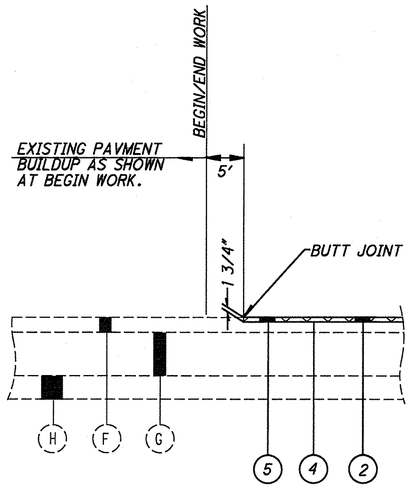
- FOR VARIABLE DEPTH PAVEMENT DETAILS, SEE SHEETS 10-11.

$ - ROUNDED TO THE NEAREST THOUSANDTH OF A MILE

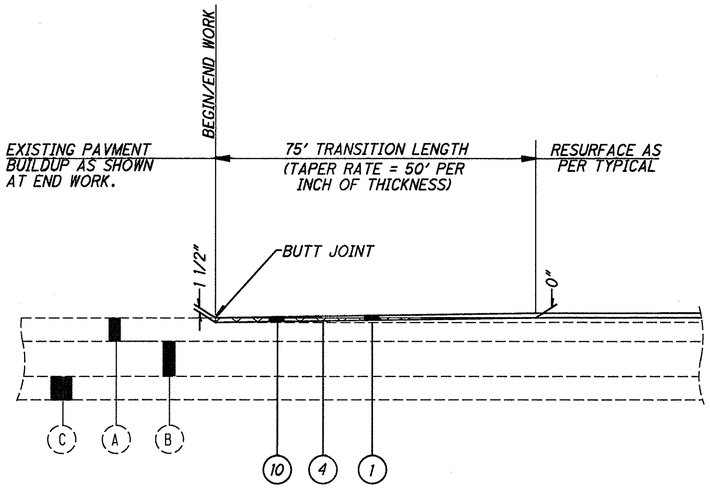
CALCULATED TAB
CHECKED JLG

PAVEMENT CALCULATIONS

HAN-75-8.66



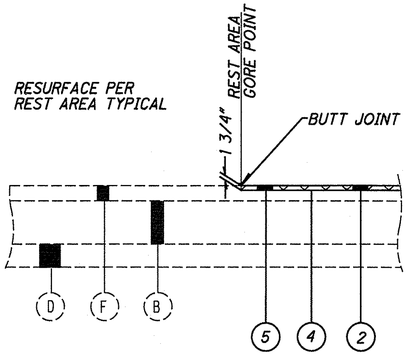
INTERMEDIATE COURSE



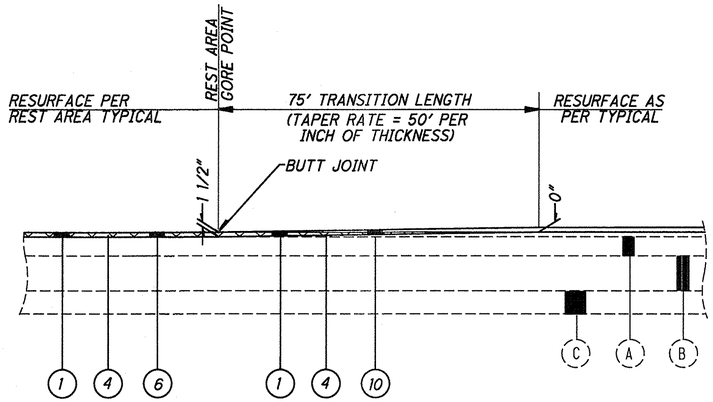
SURFACE COURSE

BEGIN AND END TRANSITION (BE):

BEGIN/END WORK



INTERMEDIATE COURSE



SURFACE COURSE

REST AREA RAMP TRANSITION (RT):

REST AREA RAMPS

PROPOSED LEGEND

(1) *ITEM 806 - 1 ½"ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A*

(2) *ITEM 442 - 1 ¾"ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A, (446)*

(3) *ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.*

(4) *ITEM 407 - TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.*

(5) *ITEM 254 - 1 3/4" PAVEMENT PLANING ASPHALT CONCRETE*

(6) *ITEM 254 - 1 1/2" PAVEMENT PLANING ASPHALT CONCRETE*

(10) *ITEM 254 - PAVEMENT PLANING ASPHALT CONCRETE VARIABLE DEPTH (1½" TO 0")*

EXISTING LEGEND

(A) 7" +/- ASPHALT CONCRETE

(B) 9"+/- REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

(C) 6" +/- AGGREGATE BASE

(F) 3 1/2" +/- ASPHALT CONCRETE

(G) 11" +/- BITUMINOUS AGGREGATE BASE

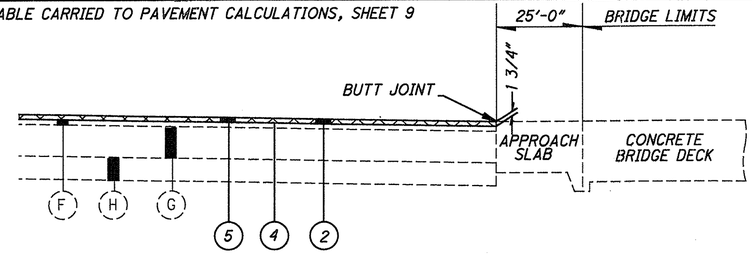
(H) 8" +/- AGGREGATE BASE

PAVEMENT PLANING

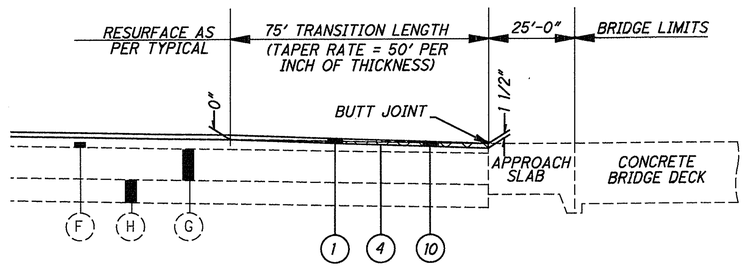
PAVEMENT CORRECTIONS FOR TRANSITIONS

PART	LOCATION	TYPICAL	407 TACK COAT	407 TACK COAT FOR INTERMEDIATE COURSE	PROPOSED PAVEMENT 442 ASPHALT CONCRETE THICKNESS	PROPOSED PAVEMENT 442 ASPHALT CONCRETE INTERMEDIATE COURSE, (19MM, TYPE A (446)	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" AVG.	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1 3/4" AVG.	254 PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE
			GAL	GAL	INCHES	CU. YD.	SQ. YD.	SQ. YD.	SQ. YD.
N.B	IR 75	BE	22.2	-23.8	1.75	-1.03		-21.1	316.67
S.B.	IR 75	BE	22.2	-23.8	1.75	-1.03		-21.1	316.67
N.B	HAN-0911	OT	47.5	-104.2	1.75	-36.73	755.78	-755.8	633.33
S.B.	HAN-0911	OT	47.5	-104.2	1.75	-36.73	755.78	-755.8	633.33
N.B	HAN-1041 & 1047	MT/MO	47.5	-138.9	1.75	-74.61	1534.78	-1534.8	633.33
S.B.	HAN-1041 & 1047	MT/MO	47.5	-152.2	1.75	-82.40	1678.33	-1678.3	633.33
N.B	HAN-1234	OT	47.5	-96.6	1.75	-31.81	654.44	-654.4	633.33
S.B.	HAN-1234	OT	47.5	-96.6	1.75	-31.81	654.44	-654.4	633.33
N.B	HAN-1246	MT	47.5	-47.5					633.33
S.B.	HAN-1246	MT	47.5	-47.5					633.33
N.B	HAN-1383	OT	47.5	-96.9	1.75	-32.02	658.7	-658.7	633.33
S.B.	HAN-1383	OT	47.5	-96.9	1.75	-32.02	658.7	-658.7	633.33
N.B	IR 75	BE	22.2	-23.8	1.75	-1.03		-21.2	316.67
S.B.	IR 75	BE	22.2	-23.8	1.75	-1.03		-21.1	316.67
N.B	REST AREA								
	ENTANCE RAMP	RA	13.8	-13.8					183.3
	EXIT RAMP	RA	13.8	-13.8					183.3
S.B.	REST AREA								
	ENTANCE RAMP	RA	13.8	-13.8					183.3
	EXIT RAMP	RA	13.8	-13.8					183.3
	TOTALS		619	-1131	-362		7351.0	-7435.4	8333.2
							8249		

TABLE CARRIED TO PAVEMENT CALCULATIONS, SHEET 9



INTERMEDIATE COURSE



SURFACE COURSE

MAINLINE BRIDGE TRANSITION (MT):

DETAIL APPLIES AT:

HAN-75-1041 LT. & RT. (SOUTH END ONLY)
HAN-75-1246 LT. & RT. (NORTH & SOUTH END)

CALCULATED JLG
CHECKED TAB

TRANSITION DETAILS

HAN-75-8.66

10
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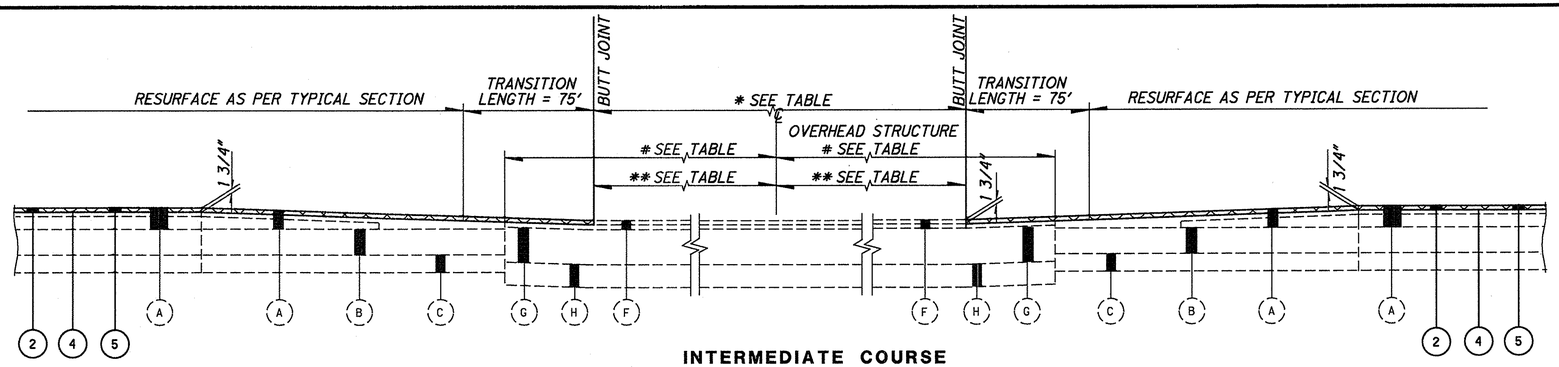
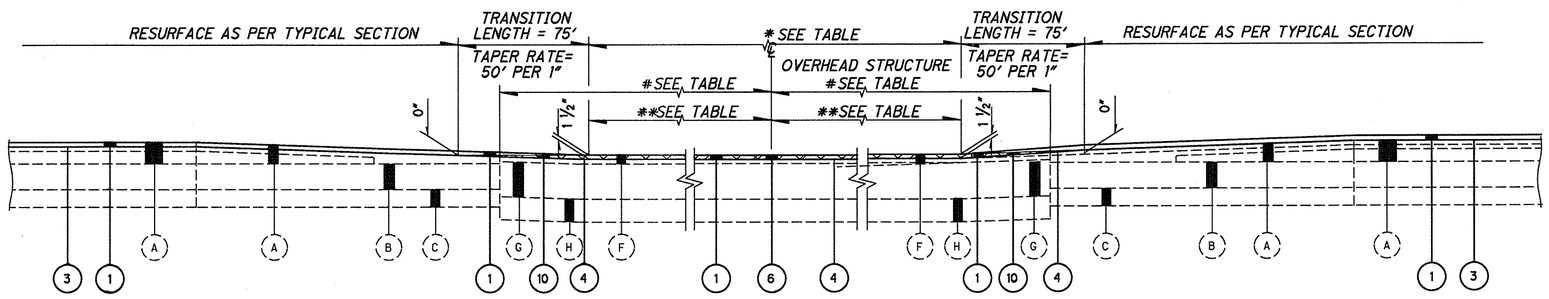


INTERMEDIATE COURSE

STRUCTURE	*	**	#
HAN-75-0911 Lt. & Rt.	179'	89.5'	200'
HAN-75-1234 Rt.	155'	77.5'	300'
HAN-75-1234 Lt.	155'	77.5'	200'
HAN-75-1383 Rt.	156'	78.0'	300'
HAN-75-1383 Lt.	156'	78.0'	200'

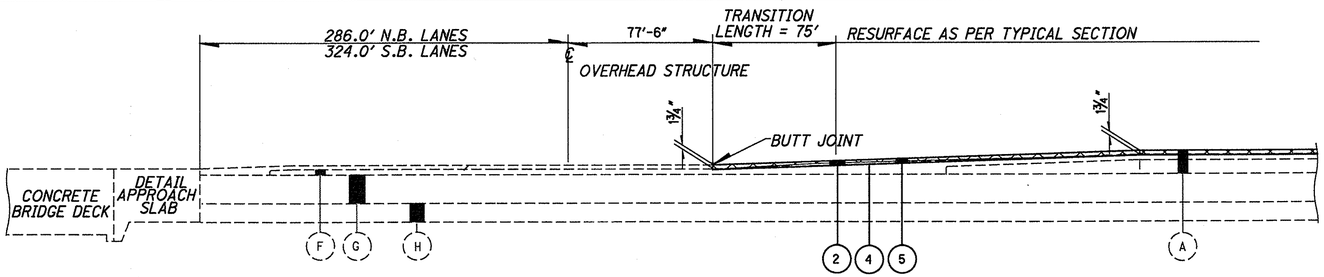


SURFACE COURSE

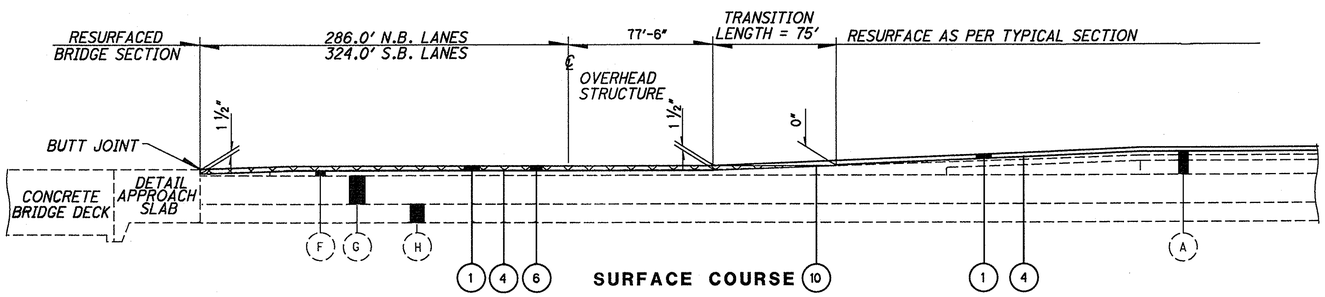
OVERHEAD TRANSITION (OT):

DETAIL APPLIES AT:

HAN-75-0911 LT. & RT. (NORTH & SOUTH END)
HAN-75-1234 LT. & RT. (NORTH & SOUTH END)
HAN-75-1383 LT. & RT. (NORTH & SOUTH END)



INTERMEDIATE COURSE



MAINLINE BRIDGE AND OVERHEAD TRANSITION (MO):

DETAIL APPLIES AT:

HAN-75-1041/1047 LT. & RT. (NORTH END ONLY)

EXISTING LEGEND

- (A) 7" +/- ASPHALT CONCRETE
- (B) 9"+/- REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (C) 6" +/- AGGREGATE BASE
- (F) 3 1/2" +/- ASPHALT CONCRETE
- (G) 11" +/- BITUMINOUS AGGREGATE BASE
- (H) 8" +/- AGGREGATE BASE

PROPOSED LEGEND

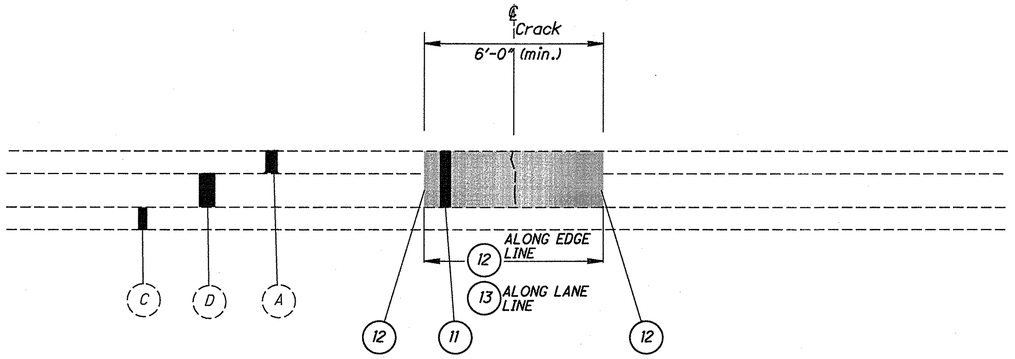
1. ITEM 806 - 1 ½" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A
2. ITEM 442 - 1 ¾" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446)
3. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
4. ITEM 407 - TACK COAT APPLIED AT A RATE OF 0.075 GAL/SQ. YD.
5. ITEM 254 - 1 3/4" PAVEMENT PLANING ASPHALT CONCRETE
6. ITEM 254 - 1 1/2" PAVEMENT PLANING ASPHALT CONCRETE
10. ITEM 254 - PAVEMENT PLANING ASPHALT CONCRETE VARIABLE DEPTH (1 ½" TO 0")

CALCULATED JLG
CHECKED TAB

TRANSITION DETAILS

HAN-75-8.66

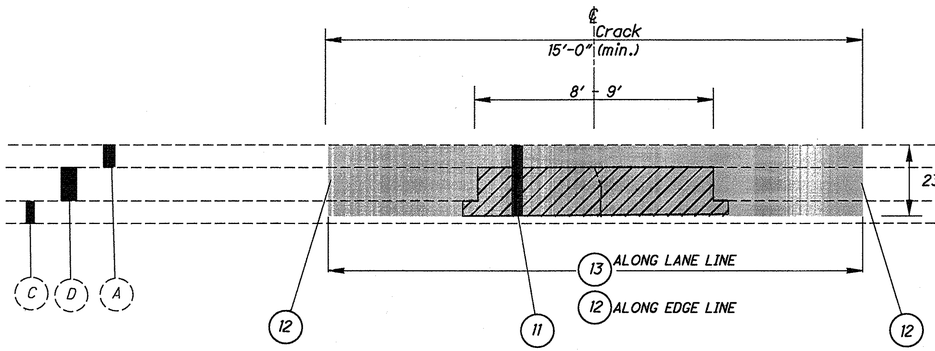
11
20



Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan
TYPE 1

Old Joint Repair, using concrete.

New Joint Repair



Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan
TYPE 2

EXISTING LEGEND

- (A) 7 3/4" ± Asphalt Concrete
- (C) Subbase (Variable Th.)
- (D) 9"± Reinforced Concrete Pavement

PROPOSED LEGEND

- (11) ITEM 255 Full Depth Rigid Pavement Removal and Rigid Replacement, As Per Plan
- (12) ITEM 255 Full Depth Pavement Sawing
- (13) ITEM 255 Full Depth Pavement Sawing, As Per Plan

Item 255 - Full Depth Pavement Sawing, As Per Plan

This item shall consist of sawing thru the existing pavement and existing concrete patch. This item is only to be utilized for the longitudinal cut along the lane line. Additional cuts to the slab will not be compensated. Due to the depth of the required cut, a saw with a larger diameter blade shall be required. All additional costs associated with the larger diameter saw, the adjustments to the work zone to accommodate the larger saw and any other additional costs shall be included in the per foot cost of Item 255 Full Depth Pavement Sawing, As Per Plan.

Pavement Repair Operations:

Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan

Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan shall follow the specification for the 255 Item except for CMS 255.01 description. Place, consolidate, finish and cure new concrete Class QC MS to the level of the existing concrete pavement. Use Item 301 Asphalt Concrete Base as the remaining replacement material. The Item 301 material and its placement shall be incidental to Item 255, Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan.

Pavement repairs are to be made prior to planing at the locations shown in the plans on sheet 13. Perform an Item 255 Full Depth Saw Cut or Item 255 Full Depth Saw Cut, As Per Plan and complete the repair as per Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan, as detailed in these plans.

At the contractor's option, Item 304 Aggregate Base may be placed in the void left by the removal of the old concrete joint repair up to the original subbase elevation in lieu of Class QC MS Concrete. The Item 304 material, its placement, and compaction shall be incidental to Item 255, Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan.

Estimated Pavement Repair Dimensions

Estimated length of Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan = 12 feet

Estimated Number of Pavement Repairs

Estimated Number of Cracks or Joints to be repaired with Item 255 Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan

Type 1	= 215 Each
Type 2	= 25 Each

Estimated Pavement Repair Quantities

		Patch Type	
Item 255	Full Depth Pavement Removal and Rigid Replacement, Class QC MS, As Per Plan	Type 1	= (215)(12)(6)(1/9) = 1720 SY
		Type 2	= (25)(12)(15)(1/9) = 500 SY
			Total = 2220 SY
Item 255	Full Depth Pavement Sawing	Type 1	= (215)(12+12+6) = 6450 FT
		Type 2	= (25)(12+12+15) = 975 FT
			Total = 7425 FT
Item 255	Full Depth Pavement Sawing, As Per Plan	Type 1	= (215)(6) = 1290 FT
		Type 2	= (25)(15) = 375 FT
			Total = 1665 FT

Quantities carried to General Summary, Sheet 7.

CALCULATED TAB CHECKED JLG

MISCELLANEOUS PAVEMENT DETAILS

HAN-75-8.66

12 20

TYPE 1				
Direction (NB)	Joint Number	Joint ID Number	Latitude	Longitude
NB	2	2P	40.957901	-83.75609
NB	3	3P	40.959288	-83.75422
NB	4	4P	40.959405	-83.75407
NB	5	5P	40.959524	-83.75392
NB	6	6P	40.960227	-83.75298
NB	8	8D	40.961566	-83.75117
NB	9	9P	40.96172	-83.75097
NB	10	10D	40.962294	-83.75021
NB	10	10P	40.962294	-83.75021
NB	11	11P	40.962755	-83.74957
NB	12	12D	40.964141	-83.74771
NB	12	12P	40.964141	-83.74771
NB	13	13P	40.966342	-83.74476
NB	14	14D	40.966452	-83.74461
NB	15	15D	40.966806	-83.74415
NB	16	16P	40.966923	-83.74399
NB	17	17D	40.96754	-83.74314
NB	17	17P	40.96754	-83.74314
NB	18	18D	40.968869	-83.74136
NB	18	18P	40.968869	-83.74136
NB	19	19P	40.969215	-83.7409
NB	20	20D	40.970147	-83.73965
NB	20	20P	40.970147	-83.73965
NB	21	21D	40.970606	-83.73903
NB	21	21P	40.970606	-83.73903
NB	22	22D	40.971183	-83.73826
NB	22	22P	40.971183	-83.73826
NB	23	23D	40.971301	-83.73809
NB	25	25D	40.972712	-83.736
NB	25	25P	40.972712	-83.736
NB	26	26P	40.973539	-83.73462
NB	27	27D	40.973929	-83.73395
NB	27	27P	40.973929	-83.73395
NB	28	28D	40.974507	-83.73289
NB	28	28P	40.974507	-83.73289
NB	29	29D	40.974705	-83.73253
NB	29	29P	40.974705	-83.73253
NB	30	30P	40.975085	-83.73184
NB	31	31D	40.978834	-83.72497
NB	31	31P	40.978834	-83.72497
NB	32	32D	40.978924	-83.7248
NB	32	32P	40.978924	-83.7248
NB	33	33P	40.97931	-83.7241
NB	34	34D	40.980181	-83.72251
NB	34	34P	40.980181	-83.72251
NB	35	35D	40.980566	-83.7218
NB	35	35P	40.980566	-83.7218
NB	36	36P	40.98085	-83.72128
NB	37	37D	40.981145	-83.72075
NB	37	37P	40.981145	-83.72075
NB	38	38P	40.982006	-83.71917
NB	39	39D	40.982302	-83.71863
NB	40	40P	40.982589	-83.71811
NB	41	41D	40.983152	-83.71702
NB	41	41P	40.983152	-83.71702
NB	42	42P	40.983694	-83.71594
NB	43	43P	40.984913	-83.71386
NB	44	44P	40.985291	-83.71316
NB	45	45P	40.986058	-83.71175
NB	46	46D	40.987322	-83.70946
NB	46	46P	40.987322	-83.70946

Direction (NB)	Joint Number	Joint ID Number	Latitude	Longitude
NB	47	47P	40.987422	-83.70928
NB	48	48D	40.987515	-83.7091
NB	50	50P	40.989713	-83.70507
NB	51	51P	40.990389	-83.70384
NB	52	52D	40.990768	-83.70314
NB	53	53P	40.990964	-83.70278
NB	54	54P	40.991451	-83.7019
NB	55	55D	40.991831	-83.70119
NB	55	55P	40.991831	-83.70119
NB	56	56D	40.992888	-83.69925
NB	56	56P	40.992888	-83.69925
NB	57	57D	40.993662	-83.69783
NB	57	57P	40.993662	-83.69783
NB	58	58P	40.995346	-83.69477
NB	59	59P	40.995531	-83.69442
NB	60	60P	40.995928	-83.69369
NB	61	61P	40.9974	-83.69104
NB	62	62P	40.998536	-83.68945
NB	63	63P	41.000703	-83.68743
NB	64	64D	41.002549	-83.68639
NB	64	64P	41.002549	-83.68639
NB	65	65D	41.003831	-83.68595
NB	65	65P	41.003831	-83.68595
NB	66	66P	41.003974	-83.68592
NB	67	67D	41.004814	-83.68577
NB	67	67P	41.004814	-83.68577
NB	68	68P	41.006807	-83.68575
NB	69	69P	41.007803	-83.68592
NB	71	71P	41.009094	-83.68615
NB	72	72D	41.01163	-83.68662
NB	72	72P	41.01163	-83.68662
NB	73	73P	41.01244	-83.68677
NB	74	74D	41.015065	-83.68722
NB	74	74P	41.015065	-83.68722
NB	75	75P	41.015724	-83.68724
Direction (SB)	Joint Number	Joint ID Number	Latitude	Longitude
SB	78	78P	41.013944	-83.68759
SB	79	79P	41.013115	-83.68744
SB	81	81P	41.012633	-83.68735
SB	82	82P	41.011495	-83.68714
SB	83	83D	41.011344	-83.68712
SB	83	83P	41.011344	-83.68712
SB	87	87P	41.009752	-83.68683
SB	88	88P	41.00942	-83.68677
SB	89	89P	41.009262	-83.68674
SB	90	90D	41.008779	-83.68666
SB	90	90P	41.008779	-83.68666
SB	91	91P	41.008613	-83.68663
SB	92	92P	41.00763	-83.68645
SB	93	93P	41.007142	-83.68637
SB	94	94P	41.006802	-83.68633
SB	95	95P	41.00632	-83.68628
SB	96	96D	41.005337	-83.68629
SB	97	97P	41.00518	-83.6863
SB	98	98D	41.005019	-83.68632
SB	99	99P	41.004696	-83.68636
SB	101	101P	41.004053	-83.68648
SB	102	102P	41.003727	-83.68657
SB	103	103P	41.003592	-83.68661
SB	104	104P	41.003247	-83.68671
SB	105	105P	41.002779	-83.68689

Direction (SB)	Joint Number	Joint ID Number	Latitude	Longitude
SB	106	106P	41.002161	-83.68717
SB	107	107P	41.001855	-83.68733
SB	108	108P	41.001707	-83.68742
SB	109	109P	41.000409	-83.68831
SB	110	110P	41.000276	-83.68842
SB	111	111D	41.000137	-83.68854
SB	111	111P	41.000137	-83.68854
SB	112	112D	40.999731	-83.6889
SB	112	112P	40.999731	-83.6889
SB	113	113D	40.999469	-83.68916
SB	113	113P	40.999469	-83.68916
SB	114	114P	40.998722	-83.69
SB	115	115P	40.9986	-83.69015
SB	116	116P	40.99837	-83.69046
SB	117	117P	40.998034	-83.69092
SB	118	118D	40.997829	-83.69125
SB	119	119P	40.997522	-83.69176
SB	120	120P	40.997422	-83.69193
SB	121	121P	40.996932	-83.6928
SB	122	122P	40.996742	-83.69315
SB	123	123P	40.996549	-83.69351
SB	124	124P	40.996356	-83.69386
SB	125	125P	40.996064	-83.69439
SB	126	126P	40.994352	-83.69751
SB	127	127D	40.994101	-83.69797
SB	129	129P	40.993044	-83.69992
SB	130	130P	40.992368	-83.70116
SB	131	131P	40.991797	-83.70221
SB	132	132P	40.991603	-83.70256
SB	133	133P	40.99141	-83.70292
SB	134	134D	40.990929	-83.7038
SB	134	134P	40.990929	-83.7038
SB	135	135P	40.990831	-83.70398
SB	136	136P	40.990737	-83.70415
SB	137	137P	40.990545	-83.70451
SB	138	138P	40.990345	-83.70486
SB	139	139P	40.989959	-83.70557
SB	140	140P	40.989768	-83.70592
SB	141	141D	40.989677	-83.70609
SB	141	141P	40.989677	-83.70609
SB	142	142D	40.989193	-83.70698
SB	142	142P	40.989193	-83.70698
SB	143	143P	40.989006	-83.70734
SB	144	144P	40.988727	-83.70787
SB	145	145P	40.988463	-83.70843
SB	147	147P	40.987753	-83.70966
SB	148	148D	40.987341	-83.7104
SB	149	149P	40.987173	-83.71071
SB	150	150P	40.986399	-83.71213
SB	151	151P	40.985927	-83.713
SB	152	152P	40.985641	-83.71353
SB	153	153P	40.985445	-83.71389
SB	154	154P	40.984868	-83.71495
SB	156	156P	40.984	-83.71651
SB	157	157P	40.983905	-83.71669
SB	158	158P	40.98334	-83.7178
SB	159	159D	40.981665	-83.72081
SB	160	160P	40.981594	-83.72094
SB	161	161P	40.981298	-83.72146
SB	162	162P	40.980433	-83.72305
SB	163	163P	40.980243	-83.72341
SB	164	164P	40.979957	-83.72394

Direction (SB)	Joint Number	Joint ID Number	Latitude	Longitude
SB	165	165P	40.979763	-83.72429
SB	166	166D	40.979668	-83.72447
SB	166	166P	40.979668	-83.72447
SB	167	167D	40.978992	-83.7257
SB	167	167P	40.978992	-83.7257
SB	168	168P	40.978503	-83.72659
SB	169	169D	40.976547	-83.73016
SB	169	169P	40.976547	-83.73016
SB	170	170D	40.97646	-83.73033
SB	171	171P	40.975113	-83.7328
SB	172	172P	40.974913	-83.73316
SB	173	173P	40.974427	-83.73404
SB	174	174P	40.974241	-83.73439
SB	175	175P	40.973438	-83.73577
SB	176	176P	40.973013	-83.73643
SB	177	177P	40.972582	-83.7371
SB	178	178P	40.972364	-83.73742
SB	179	179P	40.970884	-83.73949
SB	180	180P	40.970536	-83.73995
SB	181	181P	40.970075	-83.74057
SB	182	182P	40.968569	-83.7426
SB	183	183P	40.968334	-83.74292
SB	184	184P	40.966584	-83.74527
SB	185	185D	40.966475	-83.74541
SB	186	186D	40.964746	-83.74774
SB	187	187P	40.963584	-83.74929
SB	188	188P	40.962785	-83.75037
SB	189	189D	40.962645	-83.75056
SB	190	190P	40.961854	-83.75161
SB	191	191D	40.961764	-83.75173
SB	193	193P	40.960475	-83.75347
SB	194	194D	40.960416	-83.75355

Type 2				
Direction (NB/SB)	Joint Number	Joint ID Number	Latitude	Longitude
NB	1	1D	40.9578	-83.75627
NB	1	1P	40.9578	-83.75627
NB	7	7D	40.961	-83.75191
NB	7	7P	40.961	-83.75191
NB	24	24D	40.9727	-83.73605
NB	24	24P	40.9727	-83.73605
NB	49	49D	40.9886	-83.707
NB	70	70D	41.0083	-83.68601
NB	70	70P	41.0083	-83.68601
SB	76	76P	41.0144	-83.68767
SB	77	77P	41.0141	-83.68761
SB	80	80P	41.013	-83.68741
SB	84	84P	41.0102	-83.68692
SB	85	85D	41.0101	-83.6869
SB	85	85P	41.0101	-83.6869
SB	86	86D	41.0099	-83.68686
SB	100	100P	41.0041	-83.68646
SB	126	126D	40.9944	-83.69751
SB	127	127P	40.9941	-83.69797
SB	128	128P	40.9934	-83.69922
SB	146	146P	40.9884	-83.70862
SB	155	155D	40.9848	-83.71513
SB	168	168D	40.9785	-83.72659
SB	186	186P	40.9647	-83.74774
SB	192	192D	40.9606	-83.75331

P - PASSING LANE
D - DRIVING LANE

CALCULATED ALF
CHECKED TAB

PAVEMENT JOINT REPAIR TYPE 1 & TYPE 2

HAN-75-8.66

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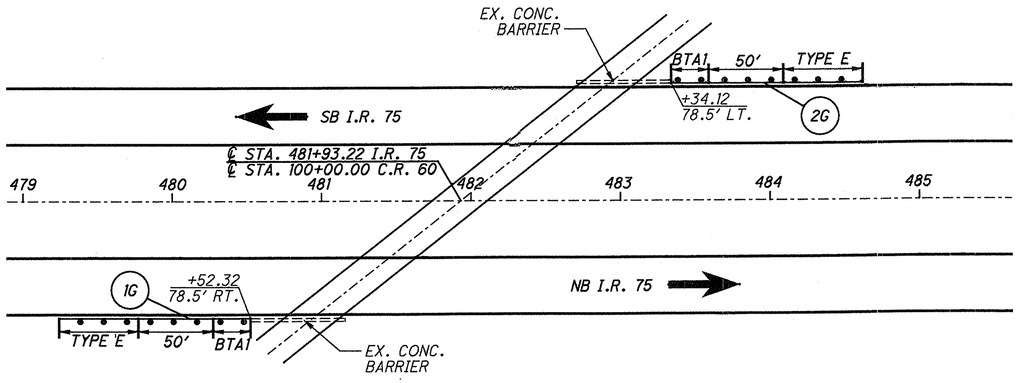
GUARDRAIL

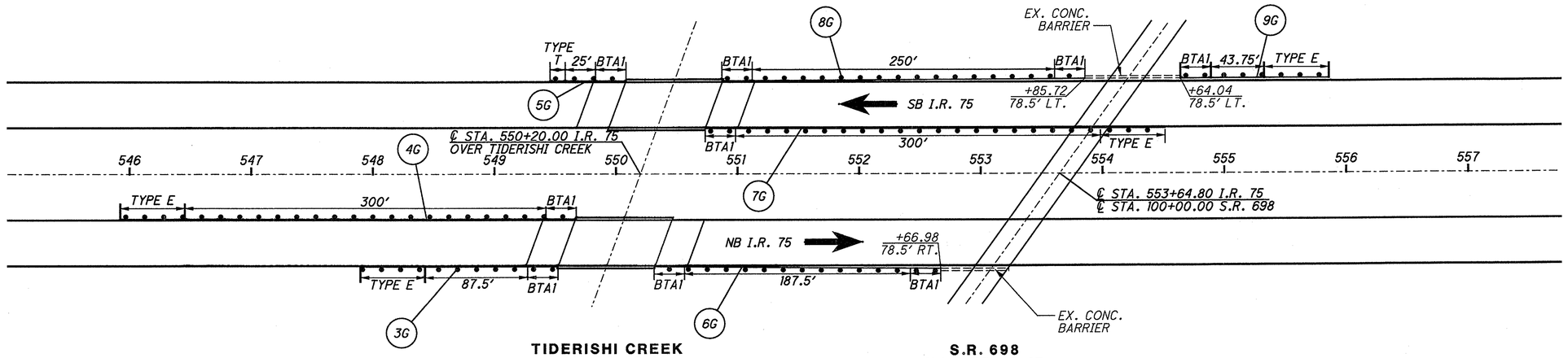
REFERENCE	PAGE	LOCATION	202 GUARDRAIL REMOVED (FT)	202 GUARDRAIL REMOVED, BARRIER DESIGN (FT)	209 RESHAPING UNDER GUARDRAIL, AS PER PLAN (MI)	606 GUARDRAIL, TYPE MGS (FT)	606 GUARDRAIL, BARRIER DESIGN, TYPE MGS (FT)	606 FLARED END SECTION (EACH)	606 ANCHOR ASSEMBLY, MGS TYPE E (EACH)	606 ANCHOR ASSEMBLY, MGS TYPE T (EACH)	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (EACH)	606 IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL) (EACH)	626 BARRIER REFLECTORS, TYPE A (EACH)
1G	14	HAN-0911	125		0.02	50			1		1		3
2G	14	HAN-0911	125		0.02	50			1		1		3
3G	14	HAN-1041	162.5		0.03	87.5			1		1		3
4G	14	HAN-1041	375		0.07	300			1		1		5
5G	14	HAN-1041	62.5		0.01	25				1	1		3
6G	14	HAN-1041&1047	237.5		0.04	187.5					2		4
7G	14	HAN-1041	375		0.07	300			1		1		5
8G	14	HAN-1041&1047	300		0.06	250					2		4
9G	14	HAN-1047	118.8		0.02	43.75			1		1		3
10G	15	HAN-1234	112.5		0.02	37.5			1		1		3
11G	15	HAN-1234&1246	540		0.1	490					2		7
12G	15	HAN-1246	237.5		0.04	162.5			1		1		4
13G	15	HAN-1246	175	106.5	0.03	150	75	1			1	1	3
14G	15	HAN-1246	87.5		0.02	50				1	1		3
15G	15	HAN-1246	175	106.5	0.03	150	75	1			1	1	3
16G	15	HAN-1246	250		0.05	137.5			1		1		4
17G	15	HAN-1383	87.5		0.02	12.5			1		1		3
18G	15	HAN-1383	2013		0.38	1937.5			1		1		22
19G	15	SLM 13.99	912.5		0.17	850			1	1			11
TOTALS CARRIED TO GENERAL SUMMARY SHEET 7			6471	213	1.20	5271.25	150	2	12	3	21	2	96

ITEM 209 RESHAPING UNDER GUARDRAIL, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 209.05, THE CONTRACTOR SHALL ENSURE THAT THE GRADING MEETS THE REQUIREMENTS FOR MGS GUARDRAIL AS SHOWN ON MGS-1.1. IN ADDITION, THE GRADING WITHIN THE MEDIAN FOR GUARDRAIL RUNS 13G AND 15G SHALL BE IN COMPLIANCE WITH STANDARD CONSTRUCTION DRAWING MGS 6.1. PAYMENT FOR ALL NECESSARY EMBANKMENT, EXCAVATION, ADDITIONAL COMPACTED AGGREGATE, TOPSOIL, SEEDING, FERTILIZER, AND WATER ARE TO BE INCLUDED FOR PAYMENT AS PART OF THIS ITEM.



C.R. 60
HAN-75-9.11



TIDERISHI CREEK
HAN-75-10.41

S.R. 698
HAN-75-10.47

BTA1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1

CALCULATED JLG
CHECKED TAB

GUARDRAIL CALCULATIONS AND DETAILS

GUARDRAIL

HAN-75-8.66

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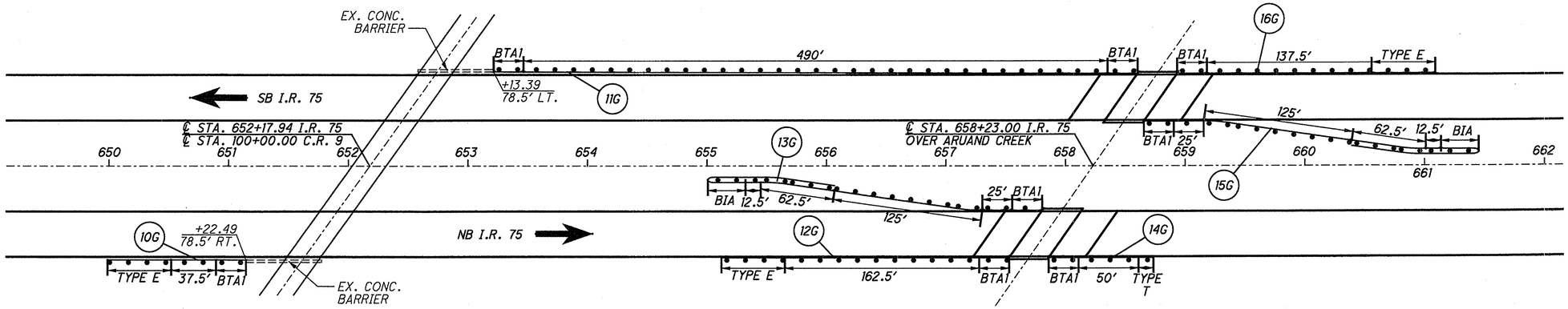
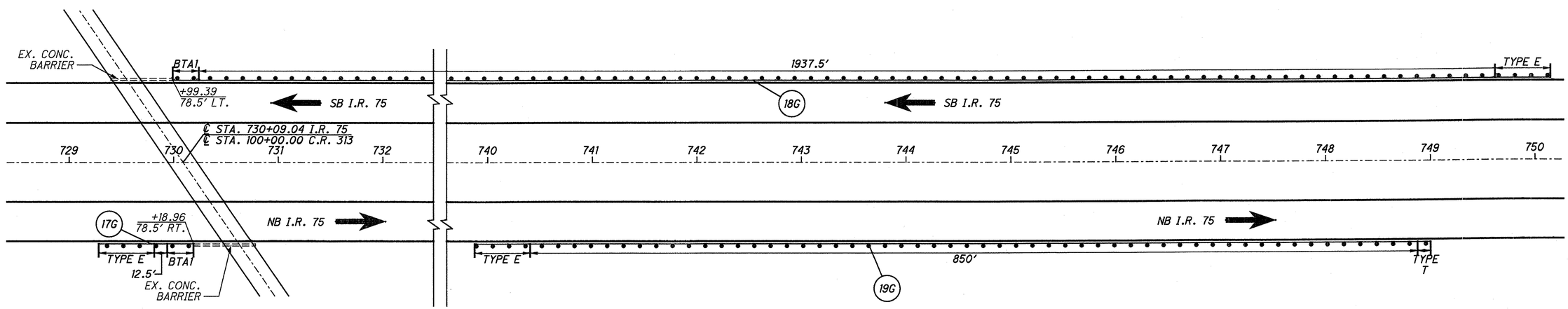


C.R. 9
HAN-75-12.34

AURAND CREEK
HAN-75-12.46

BTA1 - BRIDGE TERMINAL ASSEMBLY, TYPE 1

BIA - BI-DIRECTIONAL IMPACT ATTENUATOR



C.R. 313
HAN-75-13.83

CALCULATED JLG
CHECKED TAB

GUARDRAIL DETAILS

HAN-75-8.66

15
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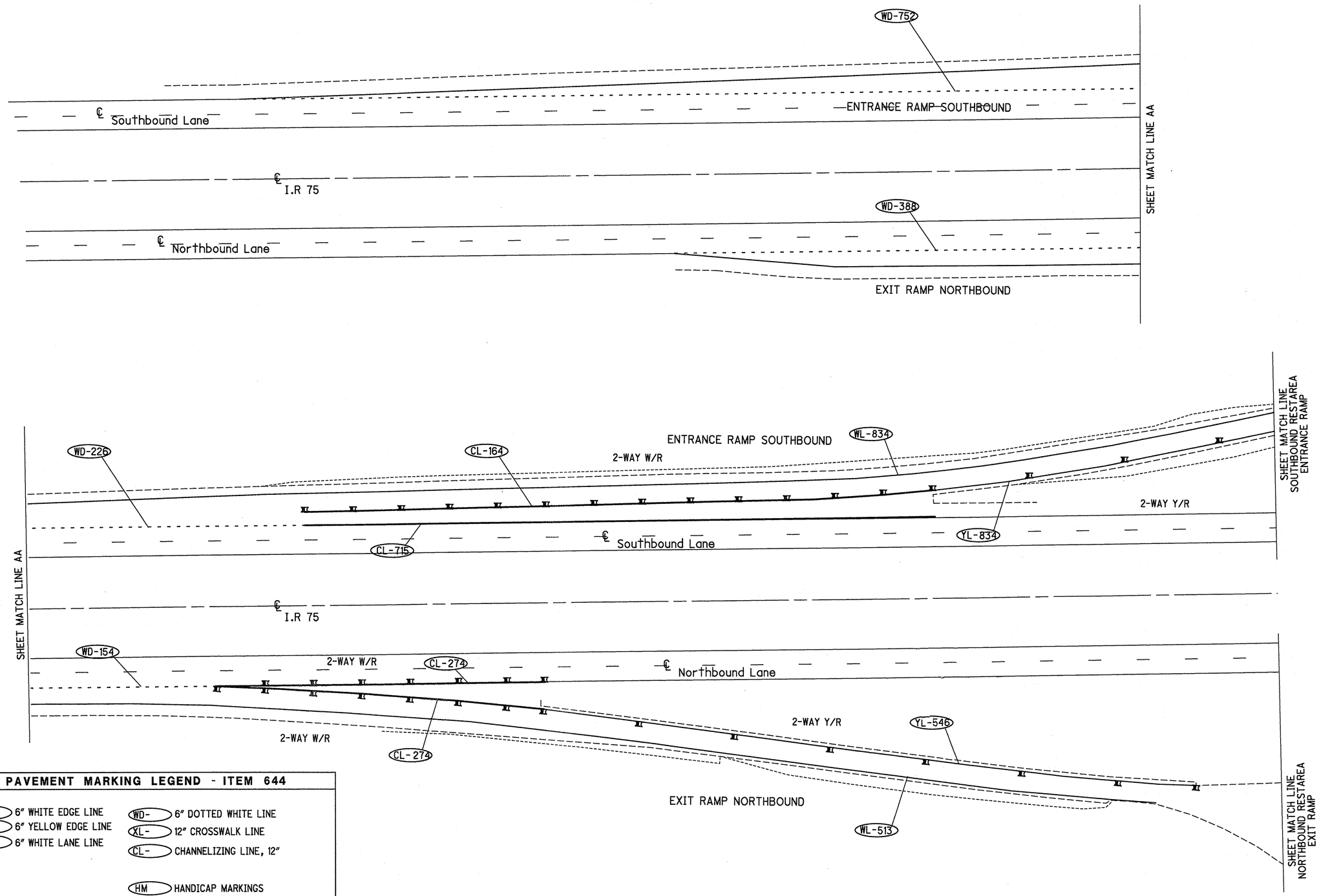

PAVEMENT MARKING LEGEND - ITEM 644

WL- 6" WHITE EDGE LINE	WD- 6" DOTTED WHITE LINE
YL- 6" YELLOW EDGE LINE	XL- 12" CROSSWALK LINE
LL- 6" WHITE LANE LINE	CL- CHANNELIZING LINE, 12"
	HM HANDICAP MARKINGS
	LA- LANE ARROW
RPM's	PMW PARKING LOT MARKINGS WHITE, 4"
1-WAY	PMB PARKING LOT MARKINGS BLUE, 4"
2-WAY	

TRAFFIC CONTROL
ROADSIDE REST AREA

HAN-75-8.66

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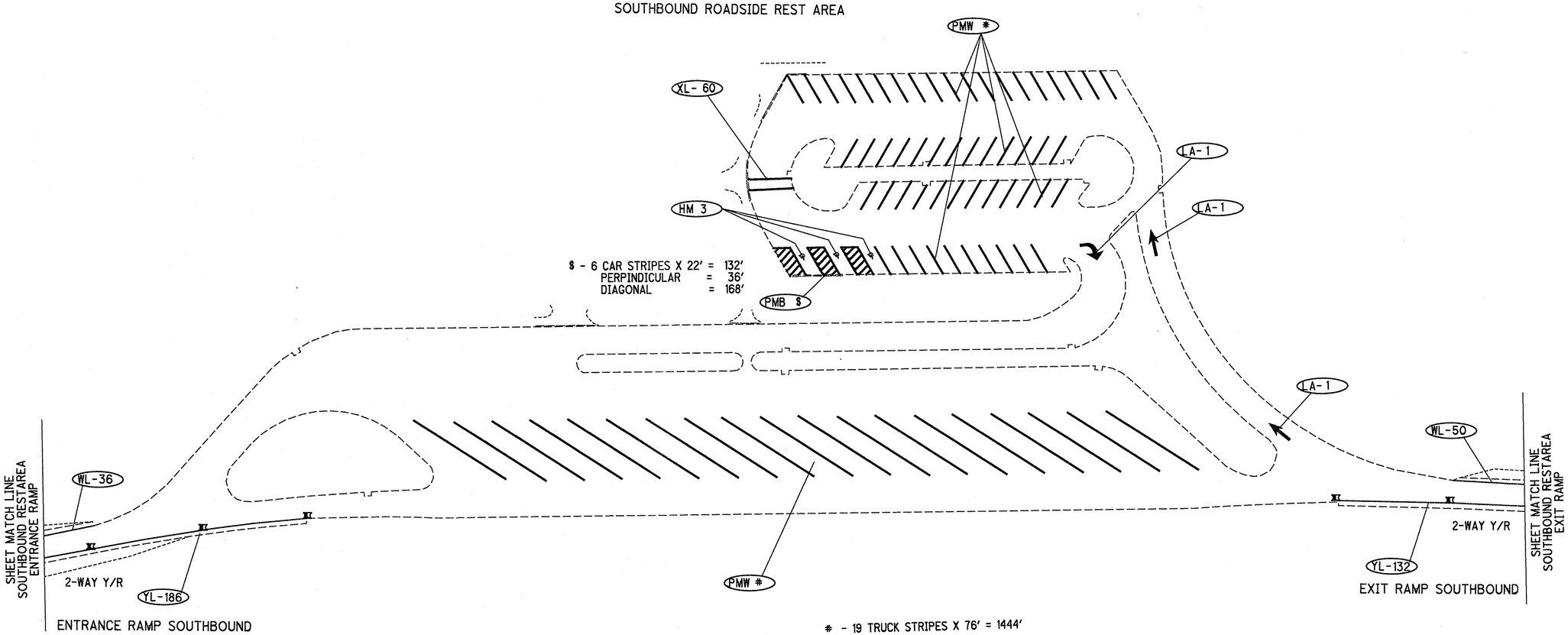
20

PAVEMENT MARKING LEGEND - ITEM 644

WL- 6" WHITE EDGE LINE	WD- 6" DOTTED WHITE LINE
YL- 6" YELLOW EDGE LINE	XL- 12" CROSSWALK LINE
LL- 6" WHITE LANE LINE	CL- CHANNELIZING LINE, 12"
	HM HANDICAP MARKINGS
	LA- LANE ARROW
RPM's	
⌶ 1-WAY	PMW PARKING LOT MARKINGS WHITE, 4"
⌶⌶ 2-WAY	PMB PARKING LOT MARKINGS BLUE, 4"

* - 53 CAR STRIPES X 22' = 1166'

SOUTHBOUND ROADSIDE REST AREA



≠ - 19 TRUCK STRIPES X 76' = 1444'

TRAFFIC CONTROL
SOUTHBOUND ROADSIDE RESTAREA

HAN-75-8.66

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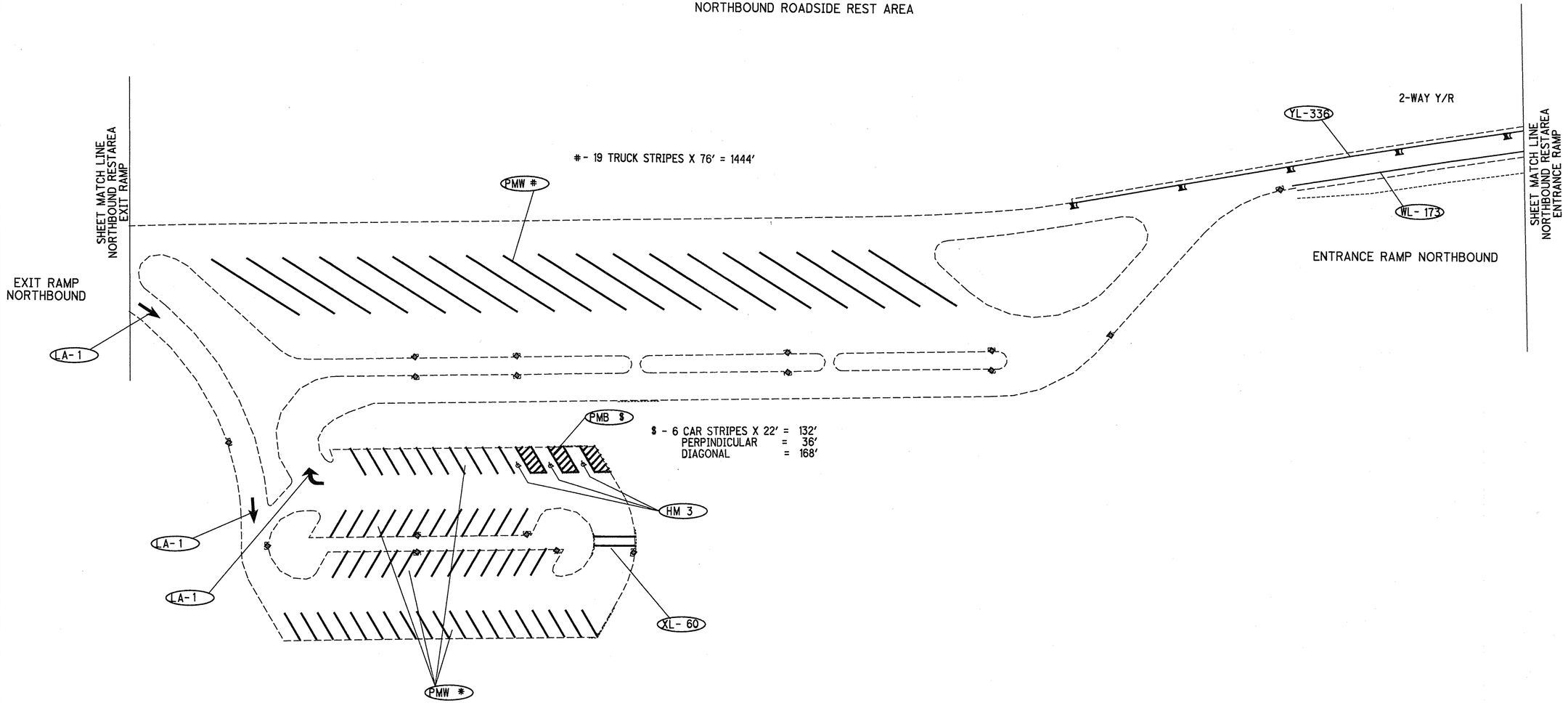
NORTHBOUND ROADSIDE REST AREA



PAVEMENT MARKING LEGEND - ITEM 644

WL- 6" WHITE EDGE LINE	WD- 6" DOTTED WHITE LINE
YL- 6" YELLOW EDGE LINE	XL- 12" CROSSWALK LINE
LL- 6" WHITE LANE LINE	CL- CHANNELIZING LINE, 12"
	HM HANDICAP MARKINGS
	LA- LANE ARROW
RPM's	PMW PARKING LOT MARKINGS WHITE, 4"
1-WAY	PMB PARKING LOT MARKINGS BLUE, 4"
2-WAY	

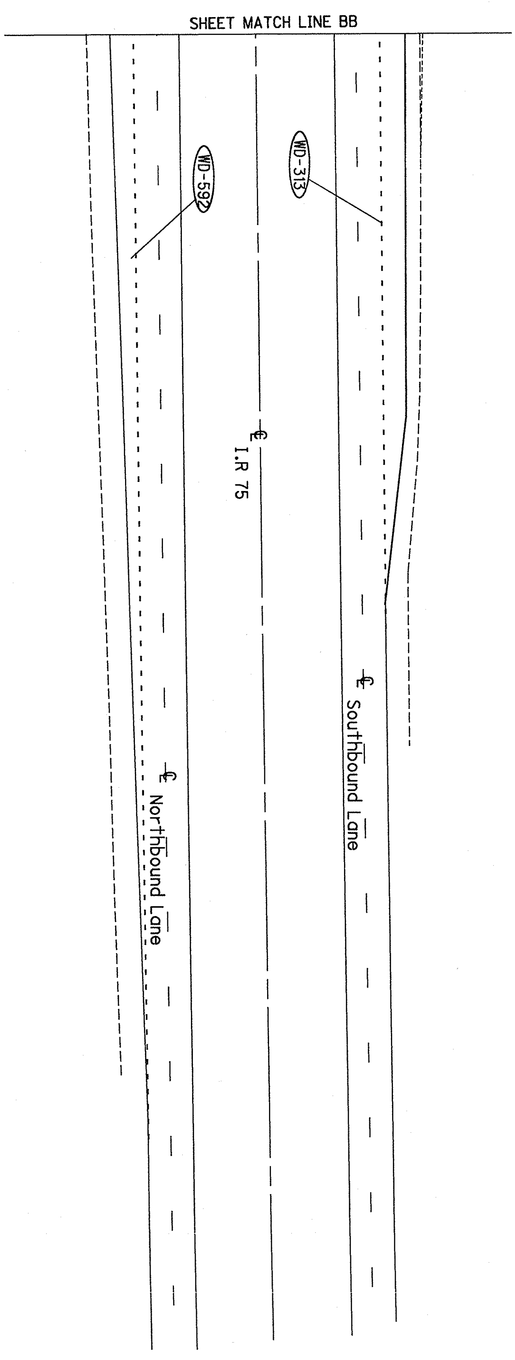
TRAFFIC CONTROL
NORTHBOUND ROADSIDE RESTAREA

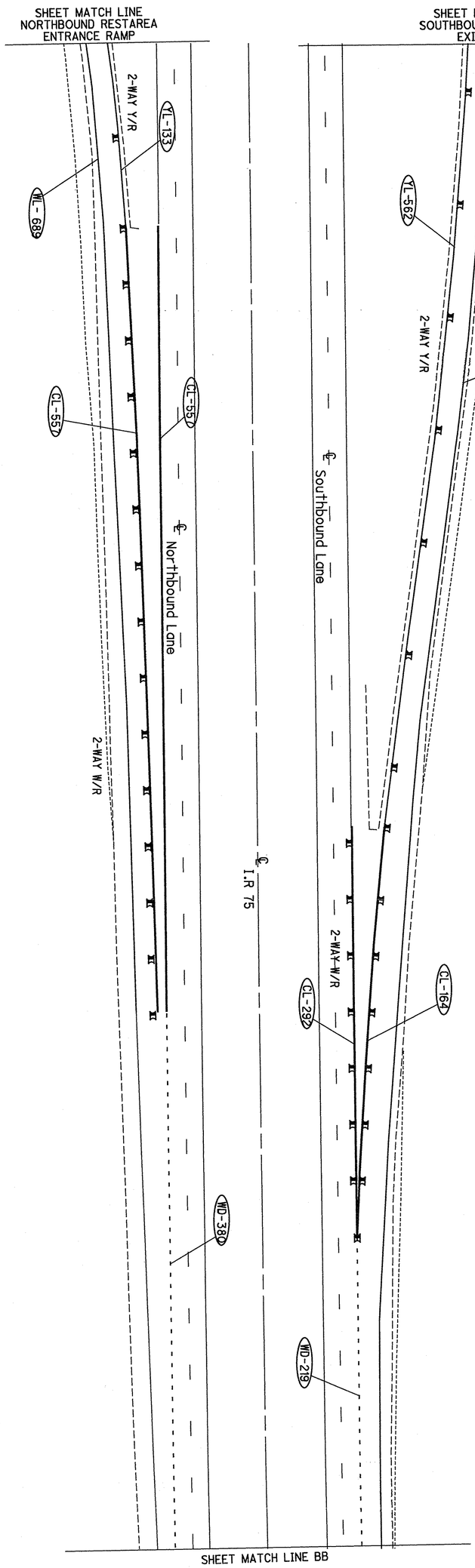
HAN-75-8.66

PAVEMENT MARKING LEGEND - ITEM 644

- WL- 6" WHITE EDGE LINE
- YL- 6" YELLOW EDGE LINE
- LL- 6" WHITE LANE LINE
- WD- 6" DOTTED WHITE LINE
- XL- 12" CROSSWALK LINE
- CL- CHANNELIZING LINE, 12"
- HM HANDICAP MARKINGS
- LA- LANE ARROW
- PMW PARKING LOT MARKINGS WHITE, 4"
- PMB PARKING LOT MARKINGS BLUE, 4"

RPM's
- 1-WAY
- 2-WAY





SHEET OR LOCATION	STATION		621			643												
			RPM		RAISED PAVEMENT MARKER REMOVED	EDGE LINE, 6"		LANE LINE, 6"		CHANNELIZING LINE, 12"	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE	PARKING LOT STALL MARKING		LANE ARROW		DOTTED LINE, 6"	HANDICAP SYMBOL MARKING
			2-WAY W/R	2-WAY Y/R		WHITE	YELLOW					BLUE	WHITE	BLUE	THRU ARROW	RT. TURN		
NO.	FROM	TO	EACH	EACH	EACH	MILE		MILE		FT	FT	FT	FT		EACH	EACH	FT	EACH
I.R. 75	Southbound																	
	SLM 8.66	SLM 14.1	240		240	5.44	5.44	5.44										
I.R. 75	Northbound																	
	SLM 8.66	SLM 14.1	240		240	5.44	5.44	5.44										
(TC) 16			29	10	39	0.26	0.26			1427							1510	
(TC) 17				5	5	0.02	0.06				60	168	2610	168	2	1		3
(TC) 18				5	5	0.03	0.06				60	168	2610	168	2	1		3
(TC) 19			30	8	38	0.24	0.13			1570							1514	
			539	28		11.43	11.39						5220	336	4	2		
TOTALS CARRIED TO GENERAL SUMMARY, SHEET 7			567		567	22.82		10.88		2997	120	336	5556		6		3024	6

CALCULATED TAB
CHECKED JLG

TRAFFIC CONTROL SUB-SUMMARY

HAN-75-8.66

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