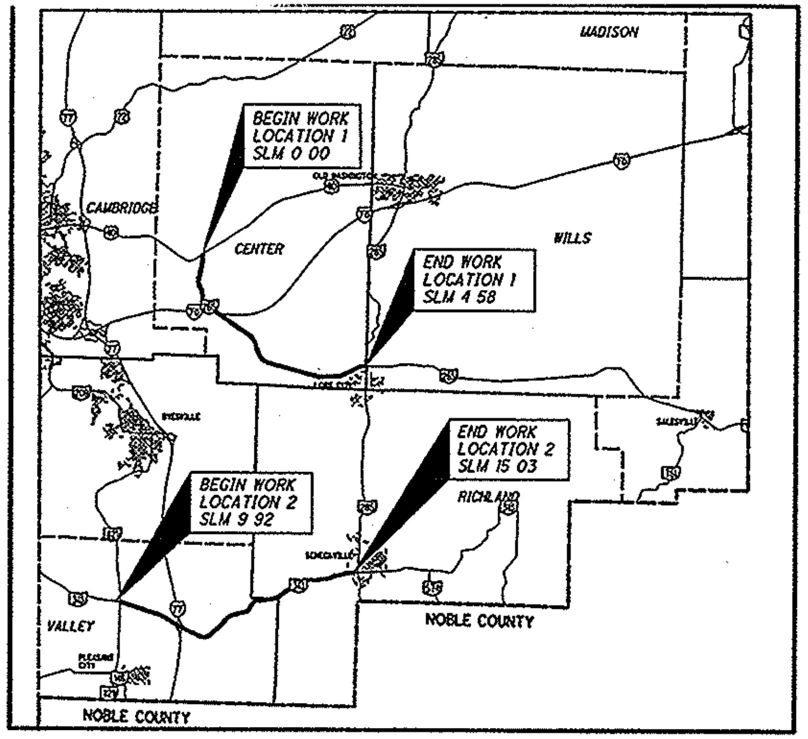


LOCATION MAP

LOCATION 1: LONG/LAT: 81°29'59" / 39°59'46"
LOCATION 2: LONG/LAT: 81°30'25" / 39°55'11"

N

PORTION TO BE IMPROVED ____________

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GUE-265-0.00
GUE-313-9.92

GUERNSEY COUNTY
CENTER, VALLEY AND RICHLAND TOWNSHIPS

PROJECT DESCRIPTION

DOUBLE CHIP AND SEAL ON S R. 265 AND A SINGLE CHIP AND SEAL WITH AN ASPHALT CONCRETE OVERLAY ON S R 313 IN GUERNSEY COUNTY.

PROJECT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

ESTIMATED CONTRACTOR EARTH DISTRUBED AREA = N/A (MAINTENANCE PROJECT)

NOTICE OF INTENT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	VILLAGE
1	GUE	265	0 00	4 58	4 58	LORE CITY
2	GUE	313	9 92	15 03	5 11	SENECAVILLE

DESIGN DESIGNATION	LOCATION 1	LOCATION 2
CURRENT ADT (2008)	2,300	3,000
DESIGN YEAR ADT (2020)	2,600	3,500
DESIGN HOURLY VOLUME (2020)	286	385
DIRECTIONAL DISTRIBUTION	50%	50%
TRUCKS (24 HOUR B&C)	3%	4%
DESIGN SPEED	55mph	55mph
LEGAL SPEED	55mph	55mph
DESIGN FUNCTIONAL CLASSIFICATION:	RMC	RMC

RMC = RURAL MAJOR COLLECTOR

INDEX OF SHEETS:

2005 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 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES

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:
OHIO DEPARTMENT OF TRANSPORTAION
DISTRICT 5 PRODUCTION OFFICE

ENGINEER'S SEAL
STATE OF OHIO
DOUGLAS N. MORGAN
E-63839
REGISTERED PROFESSIONAL ENGINEER

SIGNED Douglas N. Morgan
DATE 2/26/2008

STANDARD DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10-19-07	MT-99.20m	1/30/95	800	4-18-08
BP-4.1	7-16-04	MT-105.10	10/18/02	832	4-25-06
BP-5.1	7-28-00	MT-105.11	10/18/02	882	4-15-05
BP-7.1	1-19-07				
BP-7.2	1-19-07	TC-65.10	1/21/05		
		TC-65.11	1/21/05		
MT-97.10	9/5/06	TC-71.10	1/19/07		
MT-97.11	9/5/06	TC-73.10	1/19/01		

APPROVED Don D. Barber
DATE 3/24/2008 DISTRICT DEPUTY DIRECTOR

APPROVED James G. Beasley
DATE 3-24-08 DIRECTOR, DEPARTMENT OF TRANSPORTATION

GUE - SR-265-0.00;GUE-313-9.92
080369 PID - 79086
Dist 5 6/4/2008

G265_MTS_001.DGN 2/07/08

FEDERAL PROJECT NO E050 (448)
PID NO 79086
CONSTRUCTION PROJECT NO
RAILROAD INVOLVEMENT SUGAR CREEK REAL ESTATE INVESTMENTS, LLC.
GUE-265-0.00
GUE-313-9.92

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.

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

CONVERT THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. CONVERSIONS WILL BE APPROPRIATELY PRECISE AND REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1.

PAVING AT RAILROAD CROSSINGS

WORK THE CROWN OUT OF THE PROPOSED PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING WITHIN THE LAST 50 FEET OF PROPOSED WORK. RAISE THE EDGES OF THE NEW PAVEMENT TO MEET THE PLATFORM ELEVATION ON EITHER SIDE OF THE RAILROAD CROSSING.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CALCULATED LME | CHECKED DNM

GENERAL NOTES

GUE-265-0.00
GUE-313-9.92

ITEM 408 PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS. THE FOLLOWING QUANTITY OF PRIME COAT, AS PER PLAN SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN

LOCATION 1 - (4.58 - 0.00) = 4.58 MILES
(2(4.58 MILES X 5280' X 2')) /9 X 0.40 = 4300 GAL.
LOCATION 2 - (15.03-11.59) + (11.32-9.92) = 4.84 MILES
(2(4.84 MILES X 5280' X 2')) /9 X 0.40 = 4544 GAL.

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOCATIONS		
	1	2	
W8-H12 (NO CENTER LINE)	6	6	
W8-H12a (NO EDGE LINE)	6	6	
W8-7 (LOOSE GRAVEL W/35 MPH ADVISORY SPEED PLAQUE)	20	22	
W21-2 (FRESH TAR)	6	6	
R4-1 (DO NOT PASS)	8	11	
R4-2 (PASS WITH CARE)	9	6	
W20-1 (ROAD WORK AHEAD)	10	23	
G20-2 (END ROAD WORK)	10	23	
TOTAL CARRIED TO SHEETS 18 & 19	75	103	

ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

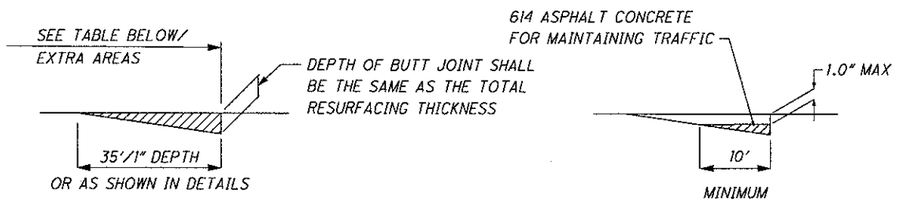
A 1" X 2" DEEP BEAD OF JOINT SEALER (AS PER 705.04) SHALL BE PLACED BETWEEN THE BRIDGE DECK AND THE ASPHALT CONCRETE PAVEMENT. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS AS SET FORTH IN THE SPECIFICATIONS, THIS ITEM SHALL INCLUDE THE FOLLOWING: THE RESTORATION OF THE LAWN AREA BETWEEN THE PROPOSED SIDEWALK AND THE EXISTING CURB; AND THE INSTALLATION OF UP TO 3" OF AN ASPHALT CONCRETE MATERIALTO RESTORE THE PARKING LOT SURFACE BEHIND THE RETAINING WALL. THE RESTORATION OF THE LAWN AREA SHALL MEET THE REQUIREMENTS OF SECTION 659 OF THE CMS. ALL EQUIPMENT, TOOLS, LABOR, MATERIALS, INCIDENTALS AND TRAFFIC CONTROL REQUIRED TO RESTORE THE LAWN AREA AND PARKING LOT SURFACE SHALL BE INLCUDED IN THE UNIT BID FOR ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT EXTRA AREAS WITH WEARING COURSE REMOVED. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY IMMEDIATELY PLACING THE PROPOSED SURFACE COURSE TO WITHIN 1.0" OF EXISTING ROADWAY SURFACE OR BY PLACING WEDGE AS SHOWN. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, UNLESS OTHERWISE SHOWN IN THE PLANS.



LOCATION	ROUTE	DESCRIPTION	SLM	202 WEARING COURSE REMOVED SQ. YD.	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU.YD.
2	SR 313	BEGIN WORK @ SR 821	9.92	102	0.7
2	SR 313	OHIO CENTRAL RR (SUSPEND)	10.42	102	0.7
2	SR 313	OHIO CENTRAL RR (RESUME)	10.42	102	0.7
2	SR 313	BRIDGE:GUE-313-1089 (REAR APPROACH)	10.89	117	0.7
2	SR 313	BUFFALO CORP LIMIT	11.59	117	0.7
2	SR 313	END WORK @ SR 285	15.03	117	0.7
2	SR 313	TOTALS		657	4.2

CALCULATED LME | CHECKED DAM

GENERAL NOTES

GUE-265-0.00
GUE-313-9.92

G265_MGN_001.DGN 2-26-08

ITEM 202 RPM REMOVED

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR DISPOSAL BY THE CONTRACTOR. RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM 202 RPM REMOVED

LOCATION 1 - 452 EACH
LOCATION 2 - 456 EACH

RESIDENCE AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT).

THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON, AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVEWAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') BUT ONLY IF THE EXISTING ASPHALT IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M

LOCATION 2 - 24 CU.YD.

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (442), AS PER PLAN

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M

LOCATION 2 - 14 CU.YD.

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

DEPTH OF PAVEMENT PLANING SHALL BE AS DESCRIBED BELOW OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE AS DIRECTED BY THE ENGINEER. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. THIS MAY REQUIRE ADDITIONAL MILLING DEPTH DUE TO EXISTING GRADER PATCHES AND PAVEMENT REPAIR. IN NO CASE SHALL A THIN LAYER (LESS THAN OR EQUAL TO 0.5") OF AN EXISTING COURSE OF ASPHALT BE PERMITTED TO REMAIN IN PLACE. ANY ADDITIONAL PASSES WITH THE PLANING MACHINE OR VARIATIONS IN DEPTH OF THE PLANING TO MEET ALL OF THESE REQUIREMENTS IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THIS WORK, ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

LOCATION 2:
SR 313 BUFFALO:
SLM 11.06 TO SLM 11.59 - PLANE 1.25" IN DEPTH FULL WIDTH OF PAVEMENT AND CURB TO CURB WHERE APPLICABLE IN BUFFALO.

350 TONS OF THE RACP (GRINDINGS) SHALL BE DELIVERED TO THE OHIO DEPARTMENT OF TRANSPORTATION - OLD WASHINGTON OUTPOST, 63064 WINTER GREEN RD. LORE CITY, OHIO 43755. THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

QUANTITIES SHOWN ON SHEET 9 OF 20

CALCULATED LME | CHECKED DNM

GENERAL NOTES

GUE-265-0.00
GUE-313-9.92

Plan Note: Item 882 Double Chip Seal with Two Year Warranty, As Per Plan

The requirements of all language in 882 applies except as modified as follows:

In Section 882.04 Materials:
Remove the first sentence and add 'For projects with an ADT of less than 500 use RS-2 emulsified binder conforming to 702.04. For projects with an ADT of 500 or greater use CRS-2P polymer emulsified binder conforming to 702.16 Type A. For projects with multiple pavements with ADTs above and below 500 use CRS-2P polymer emulsified binder conforming to 702.16 Type A.'

Use washed limestone or dolomite meeting the gradation in 422.02 for the first course (base course) of a double chip seal and meet 703.05. Apply a washed gradation value of 1.5 max for the No. 200 sieve.

Use washed limestone or dolomite meeting the following gradation requirement for the second course (top course) of a double chip seal or first course of a single chip seal and meet 703.05.

Sieve Size	Total Percent Passing
3/8 inch (9.5 mm)	100
No. 4 (4.75 mm)	85 to 100
No. 8 (2.36 mm)	0 to 20
No. 16	0 to 5
No. 200 (75 µm)	1.5 max [1]
	[1] Washed gradation value

Submit a letter to the Engineer and (DET) containing the JMF gradation of the cover aggregate showing all sieve sizes and all individual sample results. Determine the JMF gradation by taking five samples taken from different locations of stockpiled aggregate that will not be moved except directly to the aggregate spreader immediately before starting the job. Test using a washed gradation. If the average of the five samples deviate more than ±3.0 percent passing on the No. 8 (2.36 mm) sieve, rework the stockpile, take five new samples, and determine the JMF gradation. If any of the five samples are more than 2.0 percent (washed value) for the No. 200 sieve do not use the pile. Retest a new pile, re-washed pile or re-worked pile. Include both a dry gradation value and a washed gradation value for passing the No. 200 (75 µm) sieve in the JMF.'

Apply 703.01 F. Restrictions as designated in the aggregate source group list.

In Section 882.04, A.

Replace paragraph one with 'Use equipment for binder distribution conforming to 407.03. In addition ensure that it has a computerized rate control that automatically adjusts the binder pump to the unit ground speed and has a gauge or meter in plain view for reading gallons. Use appropriate spray nozzles for the material and rate specified.'

In Section 882.04, B Construction, 3. Binder Application:

For single chip seal, apply the binder at a minimum rate of 0.37 gallon per square yard (1.68 L/m^2). For double chip seal, apply the binder at a minimum rate of 0.35 gallon per square yard

(Continued)

(1.68 L/m^2) for the first course (base course) and 0.38 gallon per square yard (1.68 L/m^2) for the second course (top course).
Adjust the binder application rate to prevent excessive bleeding while maintaining proper cover aggregate embedment. Add: Reheat the binder at a rate of no more than 25 F per hour, when polymer binder is allowed to cool below 150 F.

In Section 882.04, B Construction, 3. Cover Aggregate Application:
Add at the end of paragraph one 'Do not over apply cover aggregate with the intent on relying on vacuum and broom sweeping to pick up all excess. Stop work if nuisance (to the public) amounts of aggregate occur. If work is stopped re-calibrate the aggregate spreader and re-verify the aggregate spread rate determining a new application rate and apply cover aggregate at the new rate.'

To Section 882.04, B Construction, 5. Test Strip:
Add 'Do not over apply cover aggregate with the intent of relying on vacuum and broom sweeping to pick up all excess. Stop work if nuisance (to the public) amounts of aggregate occur. If work is stopped re-calibrate the aggregate spreader and re-verify the aggregate spread rate determining a new application rate and apply cover aggregate at the new rate.'

To Section 882.04, B Construction, 6. Construction Operation add:
The Contractor is responsible for claims of damage to vehicles until the pavement and shoulders receive a final sweeping immediately before application of permanent pavement markings or a fog seal, if a fog seal is required Protect RPMs left in place for a single chip seal. Remove RPMs and replace for a double chip seal.

To Section 882.04, C. Quality Control, 1. General:

Add 'The Department can obtain samples of materials at any time. Aggregate samples can be taken from sources, on hand stockpiles or the aggregate spreader box. Work can be stopped and materials can be rejected on the basis of poor Department test results.'

To Section 882.04, C. Quality Control, 3. Coarse Aggregate:
Add to paragraph one 'Sample and test one sample taken from the aggregate spreader box at production start and sample and test one sample taken from the aggregate spreader box randomly during the day, minimum. Include additional testing when directed to sample and test by the Engineer.' Add 'Use washed gradations for determining the No. 200 sieve. The contractor may use additional tests. These may include dry gradations for control purposes but acceptance of on hand aggregate is based on washed gradations only.' Add 'Reject and do not use aggregate creating nuisance (to the public) dusting on the project.' Apply a revised washed gradation upper limit of 2.0% for the No. 200 sieve.

To Section 882.04, C. Quality Control, 4. Documentation:
Change frequency in item 'g' to 'Sample and test one sample taken from the aggregate spreader box at production start and sample and test one sample taken randomly from the aggregate spreader box during the day, minimum. Include additional test results when directed to sample and test by the Engineer.'

CALCULATED LME | CHECKED DNM

GENERAL NOTES

GUE-265-0.00
GUE-313-9.92

G265_MGN_001.DGN 1-17-08

Fog Seal

On this project, fog seal the top course of the Double Chip Seal in Location 1 at the limits described in the plans.

Fog seal after sweeping and before placement of permanent pavement markings. Use 702.04 SS-1h binder diluted 1:1. Construct a 100 ft (30 m) test strip. Apply 0.07 to 0.18 gal per sy (0.3 to 0.8 l per sq m), diluted. Review the application of binder and adjust the application rate. Apply fog seal to minimize the amount of overspray. Overlap the fog seal at the pavement crown/ centerline 6 in (0.15m) into both lanes. Do not allow traffic on the fog seal until it has cured. Apply latex markings after cure. Apply epoxy or thermoplastic markings after two weeks.
All materials, equipment, labor, tools, traffic control and incidentals necessary to perform the Fog Seal as described above shall be included for payment with Item 882 Double Chip Seal with Two Year Warranty, As Per Plan

Plan Note:
Item 422 Single Chip Seal With Polymer Binder, As Per Plan

The requirements of all language in 422 applies except as modified as follows:

In Section 422.02 Materials:
Remove the first sentence and add 'For projects with an ADT of less than 500 use RS-2 emulsified binder conforming to 702.04. For projects with an ADT of 500 or greater use CRS-2P polymer emulsified binder conforming to 702.16 Type A. For projects with multiple pavements with ADTs above and below 500 use CRS-2P polymer emulsified binder conforming to 702.16 Type A.'

Remove and replace paragraph two with 'For cover aggregate material, use washed limestone or dolomite meeting 703.05 and the required gradation except apply a washed gradation value of 1.5 max for the No. 200 sieve. Submit a letter to the Engineer and (DET) containing the JMF gradation of the cover aggregate showing all sieve sizes and all individual sample results. Determine the JMF gradation by taking five samples taken from different locations of stockpiled aggregate that will not be moved except directly to the aggregate spreader immediately before starting the job. If the average of the five samples deviate more than ±3.0 percent passing on the No. 8 (2.36 mm) sieve, rework the stockpile, take five new samples, and determine the JMF gradation. If any of the five samples are more than 2.0 percent for the No. 200 sieve do not use the pile. Retest a new pile, re-washed pile or re-worked pile. Include both a dry gradation value and a washed gradation value for passing the No. 200 (75 μm) sieve in the JMF.'

Apply 703.01 F. Restrictions as designated in the aggregate source group list.

In Section 422.03 Equipment
Replace paragraph two with 'Use equipment for binder distribution conforming to 407.03. In addition ensure that it has a computerized rate control that automatically adjusts the binder pump to the unit ground speed and has a gauge or meter in plain view for reading gallons. Use appropriate spray nozzles for the material and rate specified.'

In section 422.05 Test Strip:
Add to paragraph one after sentence three 'Calibrate the aggregate spreader and verify the application rate with a one square yard piece of cardboard or other material to collect and weight the aggregate. Do not over apply cover aggregate relying on vacuum and broom sweeping to pick up all excess. Nuisance (to the public) amounts of aggregate will result in work stoppage. If work is stopped by the Engineer recalibrate the aggregate spreader determining a new application rate and apply cover aggregate at the new rate.'

In section 422.08 Cover Aggregate Application:
Add as the first sentence 'Verify the application rate with a one square yard piece of cardboard or other material to collect and weight the aggregate before placing binder. Adjust if necessary and re-verify. Record final results and inform the Engineer.' Add to paragraph one after sentence one 'Do not over apply cover aggregate with intent on

Item 422 Single Chip Seal With Polymer Binder, As Per Plan (Continued)

relying on vacuum and broom sweeping to pick up all excess. Nuisance (to the public) amounts of aggregate will result in work stoppage. If work is stopped by the Engineer re-calibrate the aggregate spreader and re-verify the aggregate spread rate determining a new application rate and apply cover aggregate at the new rate.'

In Section 422.09 Construction Operation:
Establish stations at 1000-foot (300 m) intervals on the entire project before placing materials. Clearly identify and maintain the stations until project completion.

Keep the binder distributor, aggregate spreader, and rollers as close to each other as possible. Do not allow the polymer binder distributor to be more than 150 feet (45 m) ahead of the aggregate spreader.

Perform rolling immediately after placing the aggregate, but before the polymer binder sets up. Do not leave aggregate unrolled for more than 5 minutes. Perform a minimum of two complete roller passes over the aggregate. A single complete pass is forward and backward over the same path. For each new pass, overlap the previous pass by about one-half the width of the roller. Use a minimum of three rollers, and roll in a longitudinal direction at a speed not greater than 5 miles per hour (8 km/h). Do not operate rollers at speeds that cause pick-up or dislodging of aggregate particles.

After the binder sets enough to retain aggregate but within 4 hours, sweep the pavement using a power broom or pickup sweeper as needed to remove all loose aggregate. If the Contractor cannot sweep the pavement within the 4-hour period due to problems associated with the binder, breaking, humidity, or other unknown, the Engineer may suspend the operation until the problem is resolved or more suitable conditions are obtained to maintain the 4-hour time frame for sweeping. Perform additional sweepings as needed to prevent loose stone problems. Extend sweeping 1 foot (0.3 m) beyond the edge of pavement to help prevent migration of loose aggregate back onto the pavement. Do not re-use aggregate in a chip seal that is swept from the pavement or that is already loose off the pavement edge.

The Contractor is responsible for claims of damage to vehicles until the pavement and shoulders receive a final sweeping immediately before application of permanent pavement markings or a fog seal, if a fog seal is required

For double chip seal, allow the first course to set at least 4 hours before placing the second course of chip seal. Before placing the second course, ensure that the first course is cured, swept, and capable of withstanding construction traffic without damage. Correct damage to the underlying chip seal before placing the final chip seal.

Place the longitudinal construction joint on a lane line or as directed by the Engineer. For double chip seal, place the longitudinal construction joint for the first course 6 inches (150 mm) off the centerline and place the second course so the longitudinal joint is at the centerline.

Before opening to traffic, post the roadway with "Loose Stone" signs and a "35 mph" speed plaque mounted below the sign. Ensure that signs conform to Item 614. Place

(Continued)

these signs at a maximum of 0.5-mile (0.8 km) intervals. Remove the signs as directed by the Engineer.

On two-lane roads or pavements where traffic is maintained on a chip seal constructed that workday, a traffic control pilot vehicle operated at no more than 25 miles per hour (40 km/h) is required in the immediate work area.

Protect all utility castings, monument boxes, and other similar items using tarpaper or other approved material. Protect RPMs left in place for a single chip seal. Remove RPMs and replace for a double chip seal. Remove protection before sweeping and opening to traffic.

In Section 422.10 Quality Control:
A. General. Remove 'The DET can obtain samples of materials at any time.' and replace with 'The Department can obtain samples of materials at any time. Aggregate samples can be taken from sources, on hand stockpiles or the aggregate spreader box. Work can be stopped and materials can be rejected on the basis of poor Department test results.'

C. Coarse Aggregate. Add 'Sample and test one sample taken from the aggregate spreader box at production start and sample and test one sample taken from the aggregate spreader box randomly during the day, minimum. Include additional testing when directed to sample and test by the Engineer.' Remove ' If problems persist with dry gradations results, perform washed gradations.' Add 'Use washed gradations for determining the No. 200 sieve'. Add 'Reject and do not use aggregate creating nuisance (to the public) dusting on the project.' In addition apply a revised washed gradation upper limit of 2.0% for the No. 200 sieve.

D. Documentation. No. 7:
Change frequency to 'Sample and test one sample taken from the aggregate spreader box at production start and sample and test one sample taken randomly from the aggregate spreader box during the day, minimum. Include additional test results when directed to sample and test by the Engineer.'

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-265-0.00
GUE-313-9.92

G265_MGN_001.DGN 1-17-08

ROADWAY BRIDGE DEDUCTIONS

(APPROACH SLABS ADDED TO LENGTH WHERE APPLICABLE)

LOCATION 1:

GUE-265-0108: (15'+143'+15') X 20' / 9 = 384.4 SQ.YD.
GUE-265-0215: (25'+94'+25') X 20' / 9 = 320.0 SQ.YD.

TOTAL CARRIED TO SHEET 9 = 704.4 SQ.YD.

LOCATION 2:

GUE-313-1089: (15'+198'+15') X 24' / 9 = 608.0 SQ.YD.
GUE-313-1255: 33' X 20' / 9 = 73.3 SQ.YD.

TOTAL CARRIED TO SHEET 9 = 681.3 SQ.YD.

PAVED SHOULDER BRIDGE DEDUCTIONS

(APPROACH SLABS ADDED TO LENGTH WHERE APPLICABLE)

LOCATION 1:

NA

LOCATION 2:

GUE-313-12.55: 33' X 4' / 9 = 14.7 SQ. YD.

TOTAL CARRIED TO SHEET 10 = 14.7 SQ.YD.

AGGREGATE SHOULDER BRIDGE DEDUCTIONS

(APPROACH SLABS ADDED TO LENGTH WHERE APPLICABLE)

LOCATION 1:

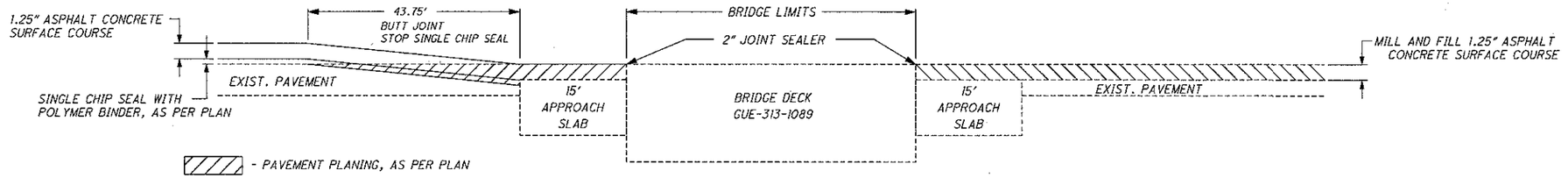
GUE-265-0108: (15'+143'+15') X 4' / 9 = 76.9 SQ.YD.
GUE-265-0215: (25'+94') X 4' / 9 = 52.9 SQ.YD.

TOTAL CARRIED TO SHEET 10 = 129.8 SQ.YD.

LOCATION 2:

GUE-313-1089: 198' X 4' / 9 = 88.0 SQ.YD.
GUE-313-12.55: 33' X 4' / 9 = 14.7 SQ. YD.

TOTAL CARRIED TO SHEET 10 = 102.7 SQ.YD.



BRIDGE DECK DATA														
									407	448 ASPHALT CONCRETE		442	882	516
LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH (BRIDGE DECK)	BRIDGE DECK AREA	LENGTH (APPROACH SLAB)	WIDTH (APPROACH SLAB)	APPROACH SLAB AREA	DESCRIPTION	TACK COAT @ 0.075 GAL./SQ.YD.	DEPTH	SURFACE COURSE, TYPE 1, PG 70-22M	SINGLE CHIP SEAL WITH POLYMER BINDER, AS PER PLAN	DOUBLE CHIP SEAL WITH TWO YEAR WARRANTY, AS PER PLAN	2" DEEP JOINT SEALER, AS PER PLAN
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		GAL.	INCHES	CU.YD.	SQ.YD.	SQ. YD.	FT
1	GUE-265-0108	143	30	476.7	15	30	50.0	EXCLUDE BRIDGE DECK AND APPROACH SLABS						
1	GUE-265-0215	94	32	334.3	25	32	88.9	EXCLUDE BRIDGE DECK AND REAR APPROACH SLAB						
								FORWARD APPROACH SLAB SAME AS ROADWAY					88.9	
	TOTALS CARRIED TO SHEET 18												**88.9**	
2	GUE-313-1089	198	32	704.0	15	24	40.0	BUTT JOINT AT BRIDGE DECK	6.0	1.25	2.8			48.0
2	GUE-313-1255	33	30	110.0	NA	NA	NA	SAME AS ROADWAY	8.3	1.25	3.8	110.0		
	TOTALS CARRIED TO SHEET 19								**14.3**		**6.6**	**110.0**		**48.0**

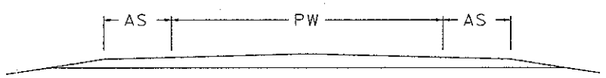
CALCULATED LME CHECKED DNM

BRIDGE DECK TREATMENT DATA

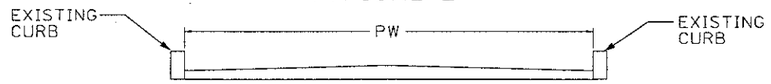
GUE-265-0.00
GUE-313-9.92

G265_MBT_001.dgn 2-26-08

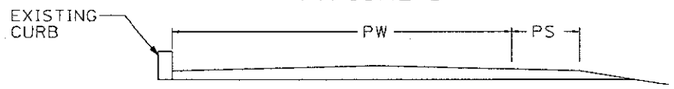
TYPICAL 1



TYPICAL 2



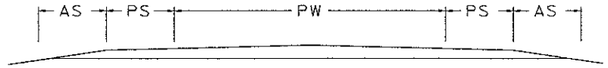
TYPICAL 3



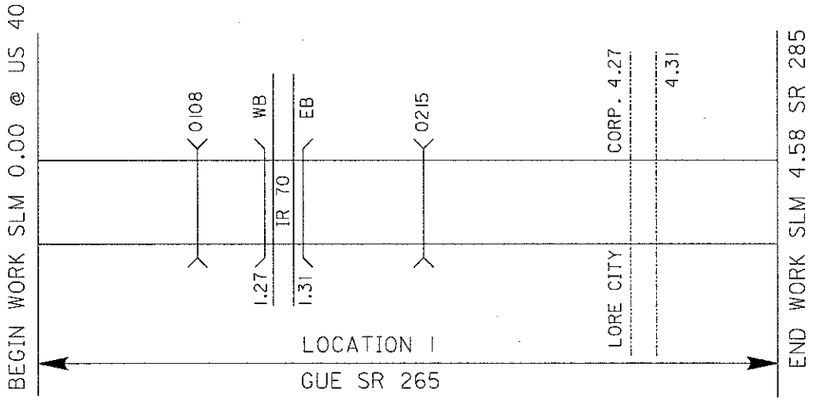
LEGEND

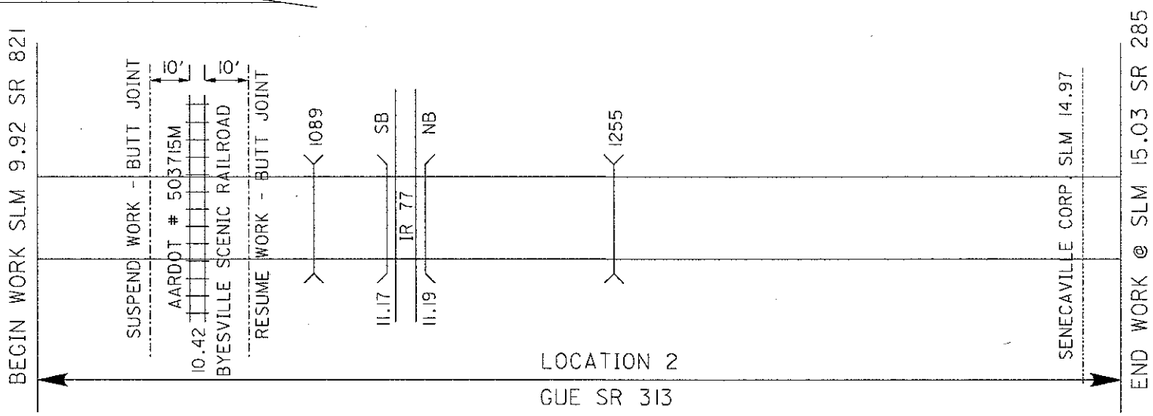
PW = PAVEMENT WIDTH
PS = PAVED SHOULDER WIDTH
AS = AGGREGATE SHOULDER WIDTH

TYPICAL 4



* - INCLUDES ONE APPLICATION FOR EACH CHIP AND SEAL THEREFORE, QUANTITIES ARE DOUBLED.





PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT	END LOG POINT	LENGTH MILES	LENGTH LIN. FT.	PAVEMENT WIDTH (FEET)	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA SQ. YD.	254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1 1/4") SQ. YD.		407 TACK COAT @ 0.075 GAL./S.Y. GAL.		422 SINGLE CHIP SEAL WITH POLYMER BINDER, AS PER PLAN SQ. YD.	882 DOUBLE CHIP SEAL WITH TWO YEAR WARRANTY, AS PER PLAN SQ. YD.		448 DEPTH INCHES	448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M CU. YD.		614 WORK ZONE CENTER LINE, CLASS I MILE
1	GUE.	SR 265	0.00	4.58	4.58	24,182.40	20.0	1	448	53,738.7						53,738.7				*	9.16
DEDUCT FOR BRIDGES FROM SHEET 8										(704.4)						(704.4)				*	(0.11)
LOCATION 1 TOTALS CARRIED TO SUB-SUMMARY SHEET 18										**53,034.3**						**53,034.3**					**9.05**
2	GUE	SR 313	9.92	10.89	0.97	5,121.60	21.0	1	448	11,950.4			896.3		11,950.4			1.25	415.0		0.97
2	GUE	SR 313	10.89	11.32	0.43	2,270.40	24.0	1	448	6,054.4	3,660.8		454.1					1.25	210.3		0.43
2	GUE	SR 313	11.32	11.55	0.23	1,214.40	40.0	2	448	5,397.3	5,397.3		404.8					1.25	187.5		0.23
2	GUE	SR 313	11.55	11.59	0.04	211.20	32.0	3	448	750.9	750.9		56.4					1.25	26.1		0.04
2	GUE	SR 313	11.59	12.46	0.87	4,593.60	24.0	4	448	12,249.6			918.8		12,249.6			1.25	425.4		0.87
2	GUE	SR 313	12.46	15.03	2.57	13,569.60	20.0	4	448	30,154.7			2,261.7		30,154.7			1.25	1,047.1		2.57
DEDUCT FOR BRIDGES FROM SHEET 8										(681.3)					(681.3)			1.25	(23.7)		(0.04)
LOCATION 2 TOTALS CARRIED TO SUB-SUMMARY SHEET 19										**65,876.0**	**9,809.0**		**4,992.1**		**53,673.4**				**2,287.7**		**5.07**

CALCULATED LME CHECKED DNM

PAVEMENT DATA

GUE-265-0.00
GUE-313-9.92

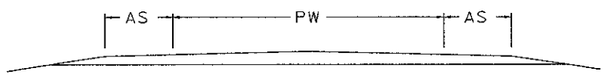
9
20

2-26-08

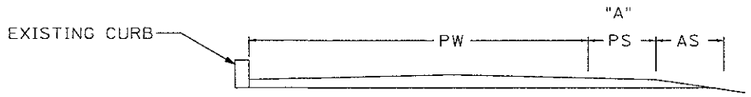
G265_MAC_001.DGN

CALCULATED LME
CHECKED DNM

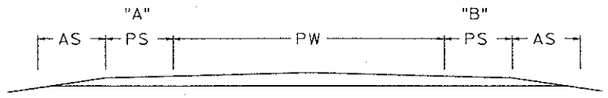
TYPICAL 1



TYPICAL 3



TYPICAL 4



LEGEND
PW = PAVEMENT WIDTH
PS = PAVED SHOULDER WIDTH
AS = AGGREGATE SHOULDER WIDTH

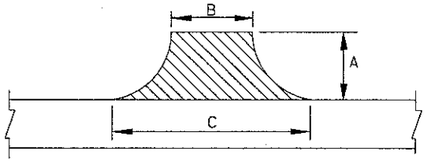
SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT	END LOG POINT	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)				SHOULDER AREA	407	422	448		617	
					MILES	LIN. FT.		A	B	C	D	SQ. YD.	TACK COAT @ 0.075 GAL./S.Y. GAL.	SINGLE CHIP SEAL WITH POLYMER BINDER, AS PER PLAN CU. YD.	DEPTH INCHES	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M CU. YD.	DEPTH IN.	COMPACTED AGGREGATE, AS PER PLAN (2' AVERAGE WIDTH) CU. YD.
1	GUE	SR 265	0.00	4.58	4.58	24,182.40	1										1.5	447.9
DEDUCT FOR BRIDGES FROM SHEET 8												(129.8)					1.5	(5.5)
LOCATION 1 TOTALS CARRIED TO SUB-SUMMARY SHEET 18																		**442.4**
2	GUE.	SR 313	9.92	10.89	0.97	5,121.60	1										1.5	94.9
2	GUE.	SR 313	11.55	11.59	0.04	211.20	3	2				46.9	3.6		1.25	1.7	1.5	2.0
2	GUE.	SR 313	11.59	15.03	3.44	18,163.20	4	2	2			8,072.5	605.5	8,072.5	1.25	280.3	1.5	336.4
DEDUCT FOR BRIDGES FROM SHEET 8 (PAVED)												(14.7)	(1.2)	(14.7)	1.25	(0.6)		
DEDUCT FOR BRIDGES FROM SHEET 8 (AGGREGATE)												(102.7)					1.5	(4.3)
LOCATION 2 TOTALS CARRIED TO SUB-SUMMARY SHEET 19													**607.9**	**8,057.8**		**281.4**		**429.0**

SHOULDER DATA

GUE-265-0.00
GUE-313-9.92

2-26-08
G265_MPS_001.DGN



INTERSECTIONS

$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$

EXTRA AREA

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DETAIL DIMENSION A FT.	B FT.	C FT.	AREA SQ. YD.	202 WEARING COURSE REMOVED SQ. YD.		407 TACK COAT @0.075 GAL./ SQ. YD. GAL.		448 DEPTH IN.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M CU. YD.
2	GUE.	SR 313	LT.	TWP. RD. 3285 - ELM ST.	15	10	23	27.5			2.1		1.5	1.2
2	GUE.	SR 313	LT.	TWP. RD. 3286 - REDWOOD ST.	17	11	26	35.0			2.7		1.5	1.5
2	GUE.	SR 313	LT.	TWP. RD. 3283 - WALNUT ST.	17	12	34	43.5			3.3		1.5	1.9
2	GUE.	SR 313	RT.	TWP. RD. 237 - LINWOOD RD.	34	19	63	154.9			11.7		1.5	6.5
2	GUE.	SR 313	RT.	TWP. RD. 3282 - MCFAYDEN ST.	40	17	59	168.9			12.7		1.5	7.1
2	GUE.	SR 313	LT.	TWP. RD. 3281 - SAULTZ RD.	15	35	39	61.7			4.7		1.5	2.6
2	GUE.	SR 313	LT.	TWP. RD. 5209 - NIXON	31	21	65	148.2			11.2		1.5	6.2
2	GUE.	SR 313	LT.	TWP. 5203 - ASPEN ST.	34	23	74	183.3			13.8		1.5	7.7
2	GUE.	SR 313	LT.	TWP. RD. 2506 - SECOND ST.	25	12	31	59.8			4.5		1.5	2.5
2	GUE.	SR 313	RT.	CO. RD. 52 - PLEASANT RD.	25	14	40	75.0			5.7		1.5	3.2
2	GUE.	SR 313	RT.	S.W. RAMP IR 77	4	152		67.6	67.6		5.1		1.5	2.9
2	GUE.	SR 313	LT.	N.W. RAMP IR 77	4	158		70.3	70.3		5.3		1.5	3.0
2	GUE.	SR 313	RT.	S.E. RAMP IR 77	4	135		60.0	60.0		4.5		1.5	2.5
2	GUE.	SR 313	LT.	N.E. RAMP IR 77	4	174		77.4	77.4		5.9		1.5	3.3
2	GUE.	SR 313	LT.	CO. RD. 35 - VOCATIONAL RD.	45	22	92	285.0	285.0		21.4		1.5	11.9
2	GUE.	SR 313	RT.	ARBOR ST.	30	28	60	146.7	146.7		11.1		1.5	6.2
2	GUE.	SR 313	LT.	TWP. RD. 5211 - BARBERRY ST.	NO WORK-CONCRETE APPROACH									
2	GUE.	SR 313	RT.	VFW DR.	10	10	14	13.4	13.4		1.1		1.5	0.6
2	GUE.	SR 313	LT.	TWP. RD. 5212 - CEDAR ST.	10	16	16	17.8	17.8		1.4		1.5	0.8
2	GUE.	SR 313	LT.	TWP. RD. 5213 - DOVER ST.	10	12	12	13.4	13.4		1.1		1.5	0.6
2	GUE.	SR 313	RT.	TWP. RD. 5215 - EDISON RD.	15	10	14	20.0	20.0		1.5		1.5	0.9
2	GUE.	SR 313	RT.	TWP. RD. 2501 - SHULTZ RD.	25	22	50	100.0	100.0		7.5		1.5	4.2
2	GUE.	SR 313	LT.	TWP. RD. 5230 - GROVE	10	12	12	13.4	13.4		1.1		1.5	0.6
2	GUE.	SR 313	LT.	TWP. RD. 253 - SALTZBURG RD.	55	24	128	464.5			34.9		1.5	19.4
2	GUE.	SR 313	RT.	CO. RD. 25 - WALHOUNDING RD.	65	21	90	400.9			30.1		1.5	16.8
2	GUE.	SR 313	LT.	TWP. RD. 253 - SALTZBURG RD.	55	24	128	464.5			34.9		1.5	19.4
2	GUE.	SR 313	LT.	TWP. RD. 549 - SOGGY RUN RD.	38	17	69	181.6			13.7		1.5	7.6
2	GUE.	SR 313	LT.	TWP. RD. 5278 - JUMP UP LN.	30	15	66	135.0			10.2		1.5	5.7
2	GUE.	SR 313	RT.	TWP. RD. 5286 - LEATHERWOOD CR.	38	17	69	181.6			13.7		1.5	7.6
2	GUE.	SR 313	RT.	TWP. RD. 5288 - HOOLET LN.	30	15	66	135.0			10.2		1.5	5.7
2	GUE.	SR 313	LT.	TWP. RD. 2577 - SINGLETON RD.	40	17	80	215.6			16.2		1.5	9.0
LOCATION 2 TOTALS CARRIED TO SUB-SUMMARY SHEET 19									885.0		303.3			169.1

CALCULATED LME
CHECKED DNM

EXTRA AREA DATA

GUE-265-0.00
GUE-313-9.92

11
20

I-31-08

G265_MEA_001.dgn

642 CENTER LINE, TYPE 1

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	CENTER LINES QUANTITIES TOTAL MILES	CENTER LINES QUANTITIES EQUIVALENT SOLID LINE					TOTAL CENTER LINE MILES	REMARKS
1	GUE	265	0.00	4.58	4.58	4.172					4.58	US 40 TO SR 285
2	GUE	313	9.92	15.03	5.11	8.696					5.11	SR 821 TO SR 285

TOTALS CARRIED TO LOCATION SUB-SUMMARY SHEETS 18 & 19

642 EDGE LINE, TYPE 1

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	WHITE EDGE LINE HIGHWAY	WHITE EDGE LINE RAMP	WHITE EDGE LINE TOTAL MILES	YELLOW EDGE LINE HIGHWAY	YELLOW EDGE LINE RAMP	YELLOW EDGE LINE TOTAL MILES				TOTAL EDGE LINE MILES	REMARKS
1	GUE	265	0.00	4.58	9.16		9.16							9.16	US 40 TO SR 285
2	GUE	313	9.92	11.39	2.94		2.94							2.94	SR 821 TO VOCATIONAL DR. IN BUFFALO
2	GUE	313	11.59	15.03	6.88		6.88							6.88	SHULTZ RD. IN BUFFALO TO SR 285
2	GUE	313	TOTALS				9.82							9.82	

TOTALS CARRIED TO LOCATION SUB-SUMMARY SHEETS 18 & 19

CALCULATED LME
CHECKED DNM

EDGE/CENTER LINE SUB-SUMMARY

GUE-265-0.00
GUE-313-9.92

1-15-08

G265_TCL_001.dgn

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	TRANSEVERSE LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT				LANE ARROWS				RAILROAD MARKING SYMBOL	REMARKS
									ONLY		SCHOOL		COMBINATION		TURN			
					WHITE	YELLOW			72"	96"	72"	96"	LT./TH.	RT./TH.	LT.	RT.		
					FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
2	GUE.	SR 313	ON SR 313 @ SR 821	CL			14											PLACE AS DIRECTED
2	GUE.	SR 313	TWP. RD. 3285 - ELM ST.	LT.			9											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 3286 - REDWOOD ST.	LT.			9											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 3283 - WALNUT ST.	LT.			14											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	ON SR 313 @ SLM 10.22	CL				40										PLACE AS DIRECTED
2	GUE.	SR 313	TWP. RD. 237 - LINWOOD RD.	RT.			13											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 3282 - MCFAYDEN ST.	RT.			8											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 3281 - SAULTZ RD.	LT.			8											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	ON SR 313 @ SLM 10.42	CL													2	PLACE AS DIRECTED
2	GUE.	SR 313	TWP. RD. 5209 - NIXON	LT.			10											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	TWP. 5203 - ASPEN ST.	LT.			NONE											
2	GUE.	SR 313	TWP. RD. 2506 - SECOND ST.	LT.			NONE											
2	GUE.	SR 313	CO. RD. 52 - PLEASANT RD.	RT.			25											PLACE 16' FROM SR 313 CL
2	GUE.	SR 313	S.W. RAMPTO IR 77	RT.			NONE											
2	GUE.	SR 313	N.W. RAMP FROM IR 77	LT.			NONE											
2	GUE.	SR 313	S.E. RAMP FROM IR 77	RT.			NONE											
2	GUE.	SR 313	N.E. RAMP TO IR 77	LT.			NONE											
2	GUE.	SR 313	CO. RD. 35 - VOCATIONAL RD.	LT.			38											PLACE 17' FROM SR 313 CL
2	GUE.	SR 313	ARBOR ST.	RT.			15											PLACE 17' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 5211 - BARBERRY ST.	LT.			NONE											
2	GUE.	SR 313	VFW DR.	RT.			NONE											
2	GUE.	SR 313	TWP. RD. 5212 - CEDAR ST.	LT.			NONE											
2	GUE.	SR 313	TWP. RD. 5213 - DOVER ST.	LT.			NONE											
2	GUE.	SR 313	TWP. RD. 5215 - EDISON RD.	RT.			NONE											
2	GUE.	SR 313	TWP. RD. 2501 - SHULTZ RD.	RT.			17											PLACE 23' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 5230 - GROVE	LT.			NONE											
2	GUE.	SR 313	TWP. RD. 253 - SALTZBURG RD.	LT.			26											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	CO. RD. 25 - WALHOUNDING RD.	RT.			45											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 253 - SALTZBURG RD.	LT.			46											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 549 - SOGGY RUN RD.	LT.			24											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 5278 - JUMP UP LN.	LT.			24											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 5286 - LEATHERWOOD CR.	RT.			15											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 5288 - HOOLET LN.	RT.			18											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	TWP. RD. 2577 - SINGLETON RD.	LT.			26											PLACE 20' FROM SR 313 CL
2	GUE.	SR 313	ON SR 313 @ SR 285	CL			14											
LOCATION 2 TOTALS CARRIED TO SUB-SUMMARY SHEET 19							418	40									2	

CALCULATED LME
CHECKED DNM

AUXILARY MARKING DATA

GUE-265-0.00
GUE-313-9.92

I-14-08

0265_MAS_001.dgn

DETAIL	SEE STANDARD DRAWING TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTILANE DIVIDED HIGHWAY
4	4-LANE DIVIDED TO 2-LANE TRANSITION

DETAIL	SEE STARNDARD DRAWING TC-65.11
5	4-LANE UNDIVIDED TO 2-LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH

DETAIL	SEE STANDARD DRAWING TC-65.11
9	TWO WAY LEFT TURN LANE
10	APPROACH W/LEFT TURN LANE
11	HORIZONTAL CURVE 40' (NOTE 6)
12	HORIZONTAL CURVE 20' (NOTE 6)
GAP	CENTERLINE AT 80' TYP.

NOTE: DETAIL 12 REQUIRES 12 RPM'S AT 40' SPACING ON BOTH SIDES OF THE 20' SPACING. THEREFORE 24 ADDITIONAL RPM'S HAVE BEEN PROVIDED FOR EITHER SIDE OF THE 20' SPACING, WHERE DISTANCE ALLOWS, IN ORDER TO REDUCE THE SPACING FROM 80' TO 40'.

RPM LOCATION SUB-SUMMARY

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621 RPM	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
					MILES	LIN.FT.		EACH	ONE-WAY WHITE	ONE-WAY YELLOW	TWO-WAY YELLOW YELLOW	TWO-WAY WHITE RED	TWO-WAY YELLOW RED	
1	GUE	SR 265	0.00	0.50	0.50	2,640	GAP/7	49	16		33			STOP AT US 40
1	GUE	SR 265	0.50	0.59	0.09	476	11	12			12			PC 0.50 PT 0.59, L=475 FT, 7 DEGREES
1	GUE	SR 265	0.59	0.66	0.07	370	GAP	5			5			
1	GUE	SR 265	0.66	0.69	0.03	159	11	4			4			PC 0.66 PT 0.69, L=158 FT, 8 DEGREES
1	GUE	SR 265	0.69	0.80	0.11	581	GAP	8			8			
1	GUE	SR 265	0.80	1.07	0.27	1,426	12	48			48			PC 089 PT 0.98, L=475 FT, 11 DEGREES
1	GUE	SR 265	1.07	4.58	3.51	18,533	GAP	248	16		232			STOP AT SR 285
LOCATION 1 TOTAL CARRIED TO SUB-SUMMARY SHEET 18								**374**						
2	GUE	SR 313	9.92	12.58	2.66	14,045	GAP/7	192	16		176			STOP AT SR 821
2	GUE	SR 313	12.58	12.82	0.24	1,267	12	40			40			PC 12.67 PT 12.73, L=317 FT, 13 DEGREES
2	GUE	SR 313	12.82	12.87	0.05	264	GAP	4			4			
2	GUE	SR 313	12.87	13.11	0.24	1,267	12	40			40			PC 12.96 PT 13.02, L=317 FT, 16 DEGREES
2	GUE	SR 313	13.11	13.30	0.19	1,003	GAP	13			13			
2	GUE	SR 313	13.30	13.37	0.07	370	11	10			10			PC 13.30 PT 13.37, L=370 FT, 6 DEGREES
2	GUE	SR 313	13.37	13.59	0.22	1,162	GAP	15			15			
2	GUE	SR 313	13.59	13.62	0.03	158	11	4			4			PC 13.59 PT 13.62, L=158 FT, 6 DEGREES
2	GUE	SR 313	13.62	13.93	0.31	1,637	GAP	21			21			
2	GUE	SR 313	13.93	14.20	0.27	1,426	12	48			48			PC 14.02 PT 14.11, L=475 FT, 12 DEGREES
2	GUE	SR 313	14.20	15.03	0.83	4,382	GAP/7	71	16		55			STOP AT SR 285
LOCATION 2 TOTAL CARRIED TO SUB-SUMMARY SHEET 19								**458**						

CALCULATED SAB CHECKED LME

RPM LOCATION SUB-SUMMARY

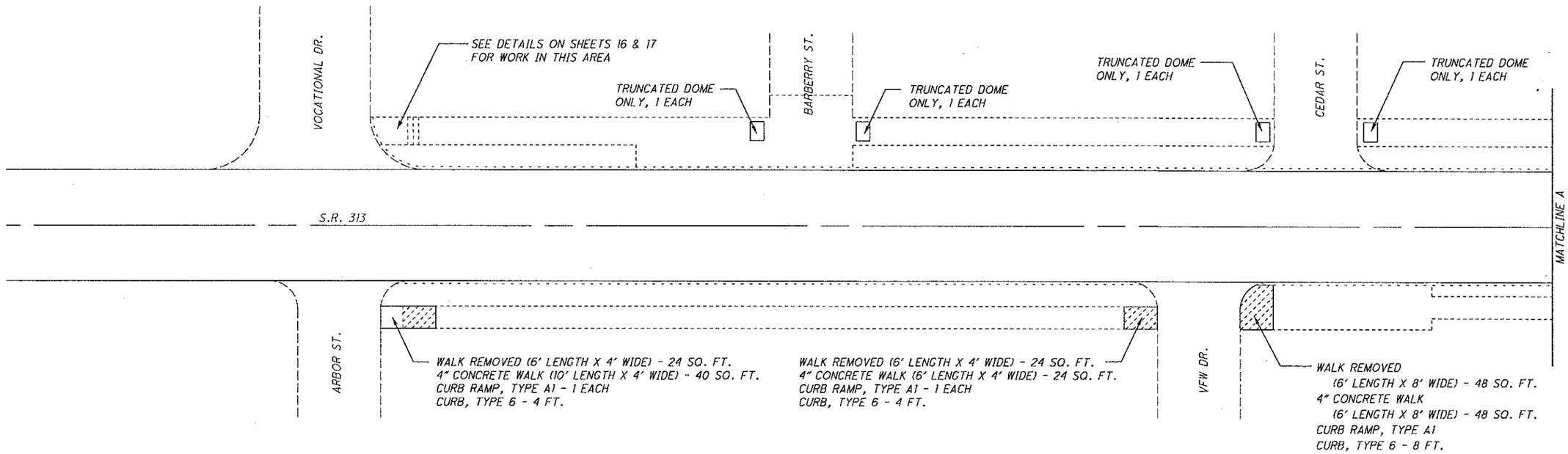
GUE-265-0.00
GUE-313-9.92

C265_TRM_0001.dgn 1-31-08

* DRAWING NOT TO SCALE

▨ - PORTION OF EXISTING WALK REMOVED

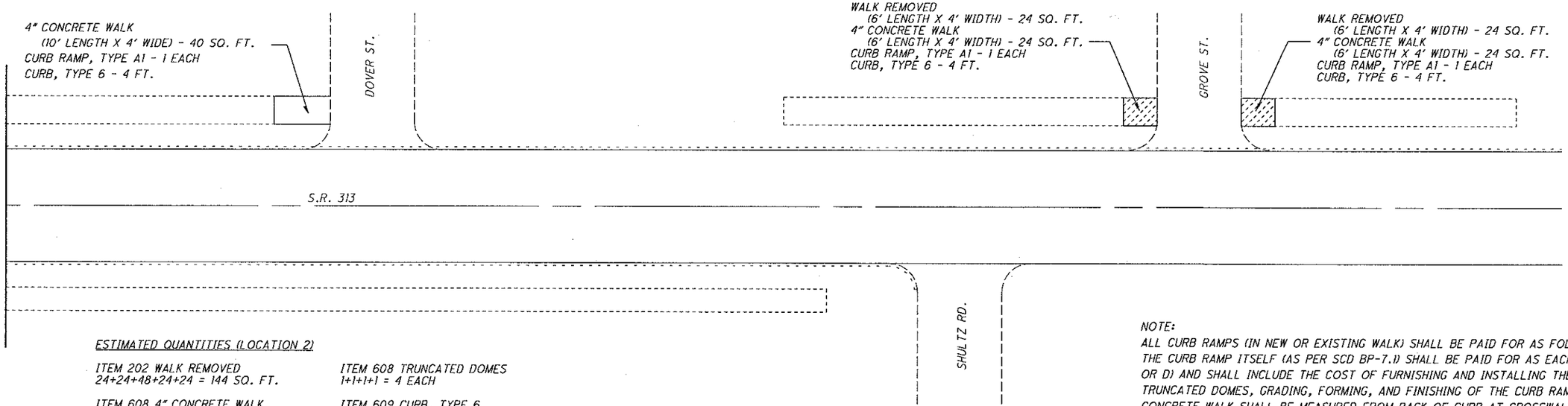
S.R. 313 BUFFALO



* DRAWING NOT TO SCALE

▨ - PORTION OF EXISTING WALK REMOVED

S.R. 313 BUFFALO



ESTIMATED QUANTITIES (LOCATION 2)

ITEM 202 WALK REMOVED
24+24+48+24+24 = 144 SQ. FT.

ITEM 608 4" CONCRETE WALK
40+24+48+40+24+24 = 200 SQ. FT.

ITEM 608 CURB RAMP, TYPE A1
1+1+1+1+1+1 = 6 EACH

ITEM 608 TRUNCATED DOMES
1+1+1+1 = 4 EACH

ITEM 609 CURB, TYPE 6
4+4+8+4+4+4 = 28 FT.

QUANTITIES CARRIED TO THE LOCATION 2 SUB-SUMMARY SHEET 19.

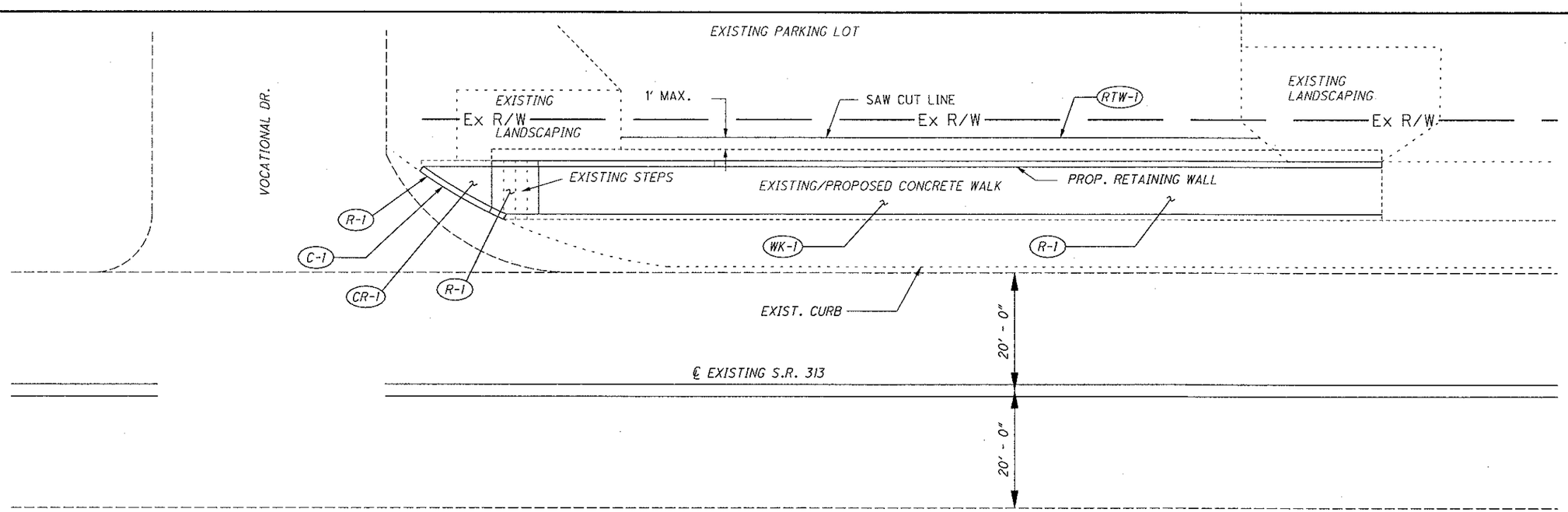
NOTE:
ALL CURB RAMPS (IN NEW OR EXISTING WALK) SHALL BE PAID FOR AS FOLLOWS: THE CURB RAMP ITSELF (AS PER SCD BP-7.1) SHALL BE PAID FOR AS EACH (A1, A2, OR D) AND SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE TRUNCATED DOMES, GRADING, FORMING, AND FINISHING OF THE CURB RAMP AREA. CONCRETE WALK SHALL BE MEASURED FROM BACK OF CURB AT CROSSWALK, THROUGH THE CURB RAMP, TO WHERE IT TIES INTO EXISTING WALK. CURB SHALL BE MEASURED THROUGH THE CURB RAMP.

C265_DET_001.dgn 2-6-08

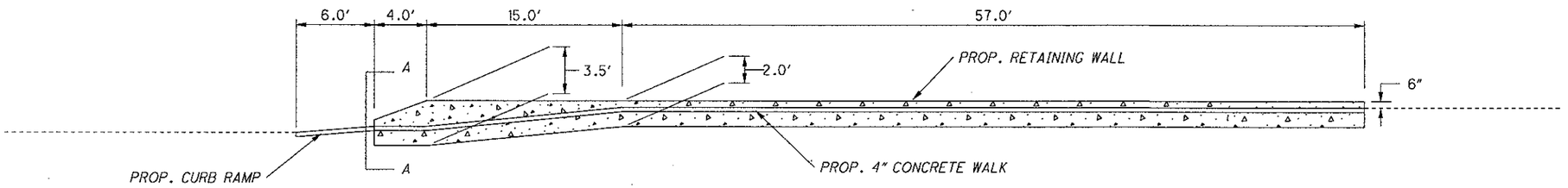
CALCULATED LME CHECKED DNM

CURB RAMP DETAIL SHEET

GUE-265-0.00
GUE-313-9.92



PLAN VIEW



PROFILE OF RETAINING WALL

QUANTITIES

LOCATION	REFERENCE	COUNTY	ROUTE	SIDE	202			503	511	608		
					CURB REMOVED	STEPS REMOVED	WALK REMOVED	UNCLASSIFIED EXCAVATION, AS PER PLAN	CLASS C CONCRETE	CURB, TYPE 6	4" CONCRETE WALK	CURB RAMP, TYPE A1
					FT.	FT.	SQ. FT.	LUMP	CU. YD.	FT.	SQ. FT.	EACH
2	R-1	GUE.	SR 313	LT.	9							
2	R-2	GUE.	SR 313	LT.		4						
2	R-3	GUE.	SR 313	LT.			382.0					
2	RTW-1	GUE.	SR 313	LT.				LUMP	6.1			
2	WK-1	GUE.	SR 313	LT.						9		
2	C-1	GUE.	SR 313	LT.							328.0	
2	CR-1	GUE.	SR 313	LT.								1
TOTALS CARRIED TO SUB-SUMMARY SHEET 19					9	4	382.0	LUMP	6.1	9	328.0	1

DRAWING NOT TO SCALE

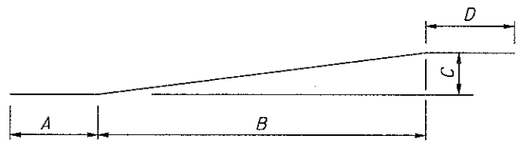
CALCULATED LME CHECKED DNM

CURB RAMP DETAIL SHEET

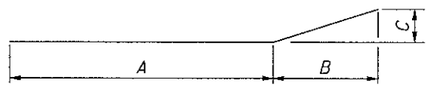
GUE-265-0.00
GUE-313-9.92

G265_DET_002.dgn 1-17-08

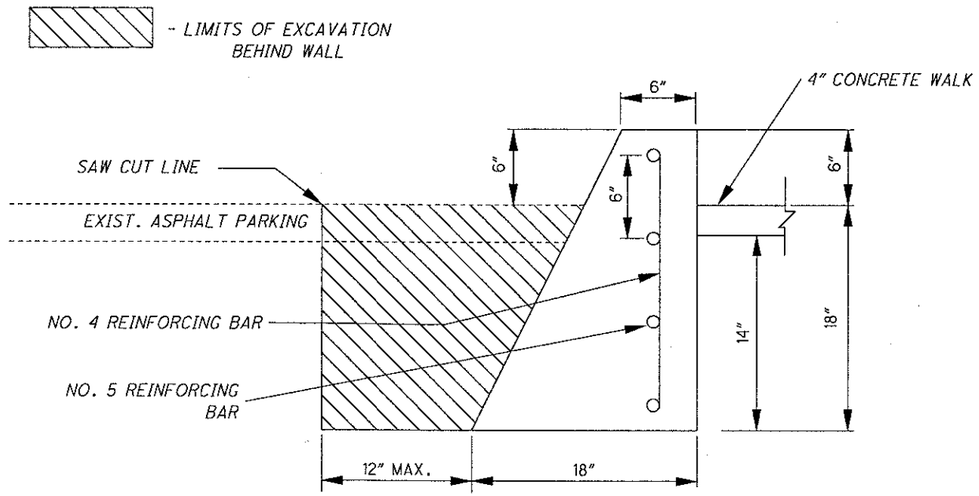
BAR MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	BAR TYPE DIMENSIONS				INC.
					A	B	C	D	
W401	12	1'- 8"	13.4	STR.					
	1	2'- 2"							
W402	SERIES OF	TO	5.3	STR.					6"
	3	3'- 2"							
W501	8	30'- 0"	250.4	STR.					
W502	4	22'- 0"	91.8	1	3'- 10"	15'- 0"	1'- 6"	3'- 3"	
W503	1	23'- 8"	24.7	2	18'- 3"	3'- 10"	1'- 5"		
W504	1	12'- 7"	13.2	2	10'- 1"	2'- 6"	0'- 3"		
W505	1	6'- 0"	6.3	STR.					
ITEM 509 EPOXY COATED REINFORCING			405.1	TOTAL CARRIED TO SUB-SUMMARY SHEET 19					



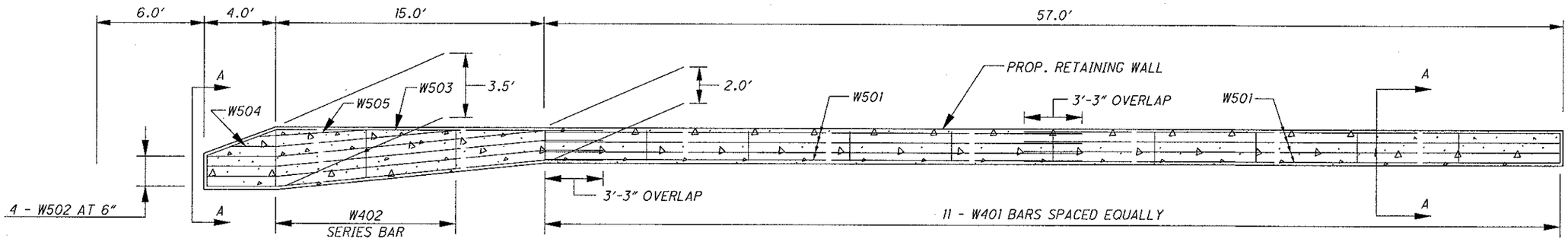
TYPE-1



TYPE-2



SECTION A-A



PROFILE VIEW

MINIMUM 2" CLEARANCE

DRAWING NOT TO SCALE

CALCULATED LME CHECKED DNM

CURB RAMP DETAIL SHEET

GUE-265-0.00
GUE-313-9.92

G265_DET_003.dgn 1-31-08

LOCATION 1 SHEET TOTALS									ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	8	9	10	12	14								
	452								202	54000	452	EACH	RAISED PAVEMENT MARKER REMOVED	
4,300									408	10001	4,300	GAL.	PRIME COAT, AS PER PLAN	3
75									614	12460	75	EACH	WORK ZONE MARKING SIGN	
			9.05						614	21000	9.05	MILE	WORK ZONE CENTER LINE, CLASS I	
				443					617	10101	443	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN	2
						374			621	00100	374	EACH	RPM	
					9.16				642	00100	9.16	MILE	EDGE LINE, TYPE 1	
					4.58				642	00300	4.58	MILE	CENTER LINE, TYPE 1	
		89	53,035						882	20001	53,124	SQ.YD.	DOUBLE CHIP SEAL WITH TWO YEAR WARRANTY, AS PER PLAN	5

CALCULATED LME
CHECKED DNM

LOCATION 1 SUB-SUMMARY

GUE-265-0.00
GUE-313-9.92

G265_MLS_001.dgn 2-6-08

LOCATION 2 SHEET TOTALS												ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	8	9	10	11	12	13	14	15	16	17						
657					885							202	23500	1,542	SQ.YD.	WEARING COURSE REMOVED	
									144	382		202	30000	526	SQ.FT.	WALK REMOVED	
										4		202	30200	4	FT.	STEPS REMOVED	
										9		202	32000	9	FT.	CURB REMOVED	
	456											202	54000	456	EACH	RAISED PAVEMENT MARKER REMOVED	
			9,809									254	01001	9,809	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	4
		15	4,993	608	304							407	10000	5,920	GAL.	TACK COAT	
4,544												408	10001	4,544	GAL.	PRIME COAT, AS PER PLAN	3
		110	53,674	8,058								422	10001	61,842	SQ.YD.	SINGLE CHIP SEAL WITH POLYMER BINDER, AS PER PLAN	6,7
	38	7	2,288	282	170							448	46904	2,785	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	
										LUMP		503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	3
											406	509	10000	406	LB	EPOXY COATED REINFORCING STEEL	
										7		511	46200	7	CU. YD.	CLASS C CONCRETE	
		48										516	31011	48	FT.	2" DEEP JOINT SEALER, AS PER PLAN	3
									200	328		608	10000	528	SQ.FT.	4" CONCRETE WALK	
									6	1		608	52110	7	EACH	CURB RAMP, TYPE A1	
									4			608	53000	4	EACH	TRUNCATED DOMES	
									28	9		609	26000	37	FT.	CURB, TYPE 6	
103												614	12460	103	EACH	WORK ZONE MARKING SIGN	
5												614	13000	5	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			5.07									614	21000	5.07	MILE	WORK ZONE CENTER LINE, CLASS I	
				429								617	10101	429	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN	2
								458				621	00100	458	EACH	RPM	
						9.82						642	00100	9.82	MILE	EDGE LINE, TYPE 1	
						5.11						642	00300	5.11	MILE	CENTER LINE, TYPE 1	
							418					644	00500	418	FT.	STOP LINE	
							40					644	00600	40	FT.	CROSSWALK LINE	
							2					644	01000	2	EACH	RAILROAD SYMBOL MARKING	

CALCULATED LME
CHECKED DNM

LOCATION 2 SUB-SUMMARY

GUE-265-0.00
GUE-313-9.92

2-26-08

S265_MLS_002.dgn

LOCATION 1	LOCATION 2	ITEM	ITEM EXTENSION NUMBER	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
SHEET 18	SHEET 19						
	1,542	202	23500	1,542	SQ.YD.	WEARING COURSE REMOVED	
	526	202	30000	526	SQ.FT.	WALK REMOVED	
	4	202	30200	4	FT.	STEPS REMOVED	
	9	202	32000	9	FT	CURB REMOVED	
452	456	202	54000	908	EACH	RAISED PAVEMENT MARKER REMOVED	
	9,809	254	01001	9,809	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	4
	5,920	407	10000	5,920	GAL.	TACK COAT	
4,300	4,544	408	10001	8,844	GAL.	PRIME COAT, AS PER PLAN	3
	61,842	422	10001	61,842	SQ.YD.	SINGLE CHIP SEAL WITH POLYMER BINDER, AS PER PLAN	6,7
	2,785	448	46904	2,785	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	
	LUMP	503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	3
	406	509	10000	406	LB	EPOXY COATED REINFORCING STEEL	
	7	511	46200	7	CU. YD.	CLASS C CONCRETE	
	48	516	31011	48	FT.	2" DEEP JOINT SEALER, AS PER PLAN	3
	528	608	10000	528	SQ.FT.	4" CONCRETE WALK	
	7	608	52110	7	EACH	CURB RAMP, TYPE A1	
	4	608	53000	4	EACH	TRUNCATED DOMES	
	37	609	26000	37	FT.	CURB, TYPE 6	
75	103	614	12460	178	EACH	WORK ZONE MARKING SIGN	
	5	614	13000	5	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
9.05	5.07	614	21000	14.12	MILE	WORK ZONE CENTER LINE, CLASS I	
443	429	617	10101	872	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN	2
374	458	621	00100	832	EACH	RPM	
9.16	9.82	642	00100	18.98	MILE	EDGE LINE, TYPE 1	
4.58	5.11	642	00300	9.69	MILE	CENTER LINE, TYPE 1	
	418	644	00500	418	FT.	STOP LINE	
	40	644	00600	40	FT.	CROSSWALK LINE	
	2	644	01000	2	EACH	RAILROAD SYMBOL MARKING	
53,124		882	20001	53,124	SQ.YD.	DOUBLE CHIP SEAL WITH TWO YEAR WARRANTY, AS PER PLAN	5
		614	11000	LUMP		MAINTAINING TRAFFIC	
		619	16000	1	MONTH	FIELD OFFICE, TYPE A	
		623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
		624	10000	LUMP		MOBILIZATION	

CALCULATED LME
CHECKED DNM

GENERAL SUMMARY

GUE-265-0.00
GUE-313-9.92

3265_MGS_001.dgn 2-26-08