

STATE OF OHIO  
 DEPARTMENT OF TRANSPORTATION  
**LAK-US-20-24.99**  
 MADISON TWP.  
 LAKE COUNTY, OHIO

**PROJECT DESCRIPTION**

MAJOR REHABILITATION OF 3.06 MILES OF NORTH RIDGE ROAD (U.S. 20) FROM TOWNLINE ROAD TO HUBBARD ROAD IN MADISON TOWNSHIP. WORK WILL INCLUDE ROADWAY WIDENING, RESURFACING, SIDEWALK, DRAINAGE, AND TRAFFIC SIGNAL IMPROVEMENTS.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: 28.4 ACRES  
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 1.0 ACRES  
 NOTICE OF INTENT EARTH DISTURBED AREA: 29.4 ACRES

**2019 SPECIFICATIONS**

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

I 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.

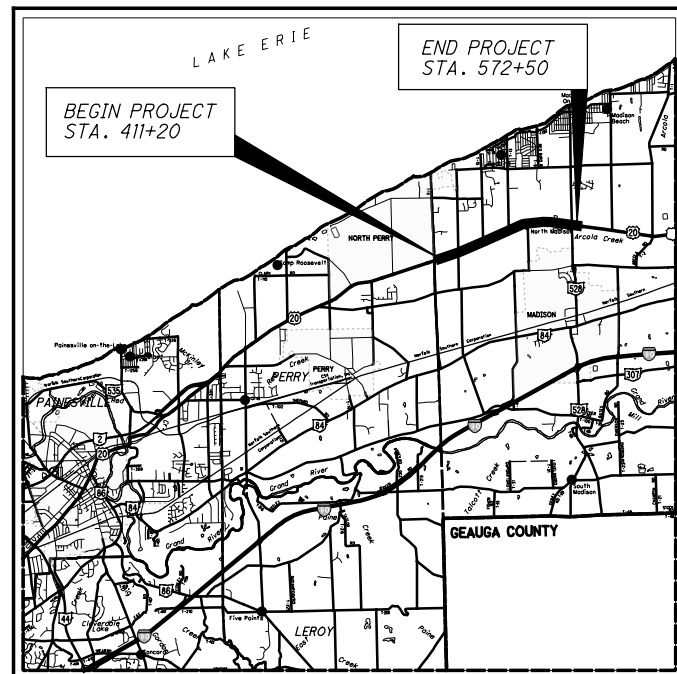
DISTRICT DEPUTY DIRECTOR

*John Picuri*  
 John Picuri, P.E., S.I.  
 12

DIRECTOR, DEPARTMENT OF TRANSPORTATION

*John M. ...*

ENGINEER'S SEAL



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

**DESIGN DESIGNATION: LAK-US-20-24.99**

CURRENT ADT (2022)	17,500
DESIGN YEAR ADT (2042)	22,300
DESIGN HOURLY VOLUME (2042)	2,230
DIRECTIONAL DISTRIBUTION	58%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	45 MPH
LEGAL SPEED	25,35,45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	YES

**DESIGN EXCEPTIONS**

NONE REQUIRED

**ADA DESIGN WAIVERS**

NONE REQUIRED



PLAN PREPARED BY:



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STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS						
BP-2.1	1-21-22	CB-1	7-16-21	HW-2.1	7-15-22	MT-101.75	7-21-23	TC-65.10	1-17-14	800	4-21-23	WATERWAY PERMIT 4/10/2023
BP-2.2	1-15-21	CB-2-2ABC	1-20-23	HW-2.2	7-20-18	MT-101.90	7-17-20	TC-65.11	7-15-22	809	1-20-23	
BP-3.1	1-21-22	CB-2-34	1-20-23			MT-102.10	7-21-23	TC-71.10	4-21-23	815	4-16-21	
BP-4.1	7-19-13	CB-3	7-16-21	HL-30.11	1-15-21	MT-102.20	4-19-19	TC-74.10	7-21-23	821	4-20-12	
BP-5.1	7-15-22	CB-3A	7-16-21	HL-30.22	1-15-21	MT-103.10	1-21-22			832	7-15-22	
BP-7.1	7-21-23	CB-6	1-21-22			MT-105.10	1-17-20	TC-81.22	7-21-23	873	4-16-21	
						TC-83.10	1-17-20			874	4-17-20	
MGS-1.1	7-16-21	MH-1	7-15-22	MT-095.31	7-19-19			TC-83.20	7-15-22	875	1-18-19	
MGS-2.1	1-19-18	MH-2	7-16-21	MT-095.41	7-21-23	TC-22.20	1-17-14	TC-84.20	10-18-13	895	4-18-14	
MGS-3.1	1-19-18	MH-3	7-21-23	MT-095.50	7-21-17			TC-85.10	10-21-22	906	10-15-10	
MGS-4.2	7-19-13			MT-097.12	1-20-17	TC-41.30	4-21-23	TC-85.20	4-21-23	909	7-21-23	
		DM-1.1	7-17-20	MT-099.20	4-19-19	TC-42.20	10-18-13			921	4-20-12	
RM-1.1	1-20-23	DM-1.2	7-16-21	MT-101.60	4-21-23	TC-52.10	10-18-13			938	1-19-18	
RM-3.1	7-20-18	DM-3.1	1-18-13	MT-101.70	4-21-23	TC-52.20	1-15-21			995	7-17-15	
RM-4.2	4-17-20	DM-4.3	1-15-16									
		DM-4.4	1-15-16									

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FEDERAL PROJECT NO.  
E190(934)

PID NO.  
109270

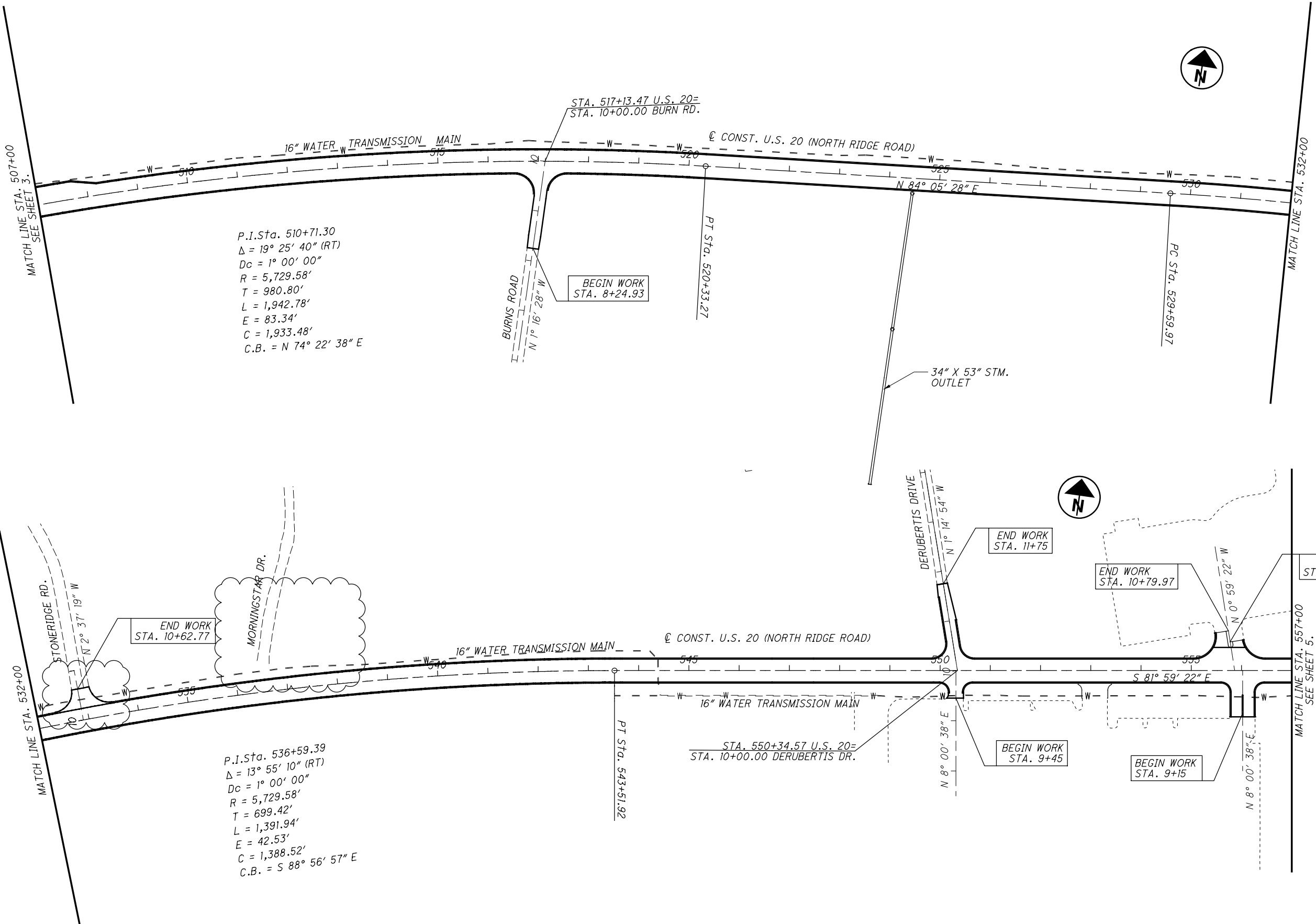
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT  
NONE

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651

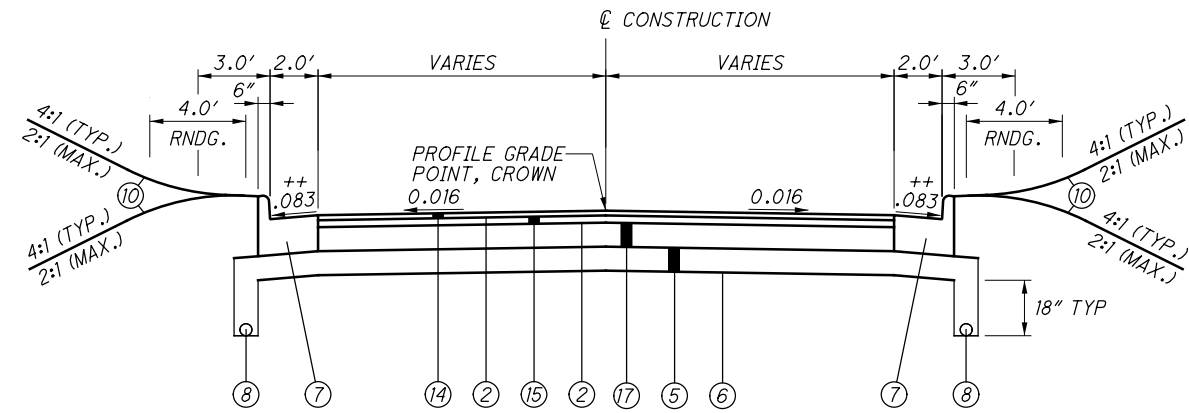
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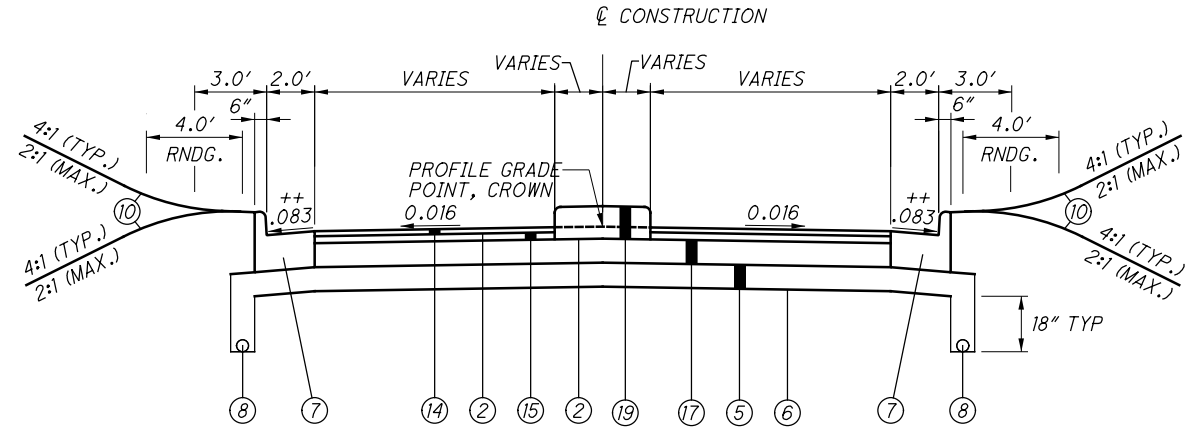
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**SCHEMATIC PLAN**  
**STA. 507+00 TO STA. 557+00**

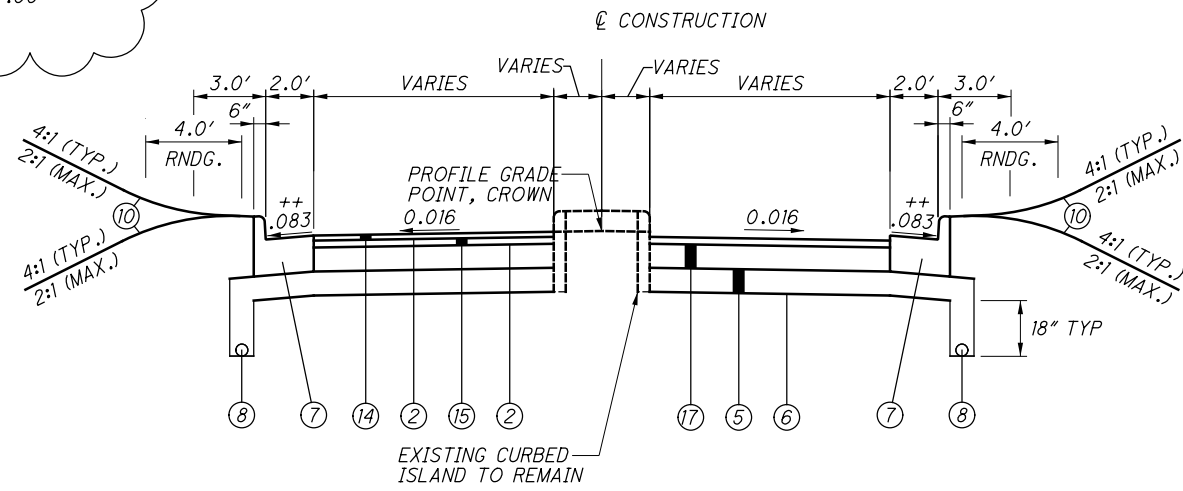
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**SOUTH DERUBERTIS RD.**  
STA. 9+45.00 TO STA. 9+77.00



**WALMART**  
STA. 10+22.77 TO STA. 10+62.77  
**SHOP AT STA. 556+02**  
STA. 9+08.00 TO STA. 9+77.00  
**SHOP AT STA. 558+31**  
STA. 9+45.00 TO STA. 9+77.00

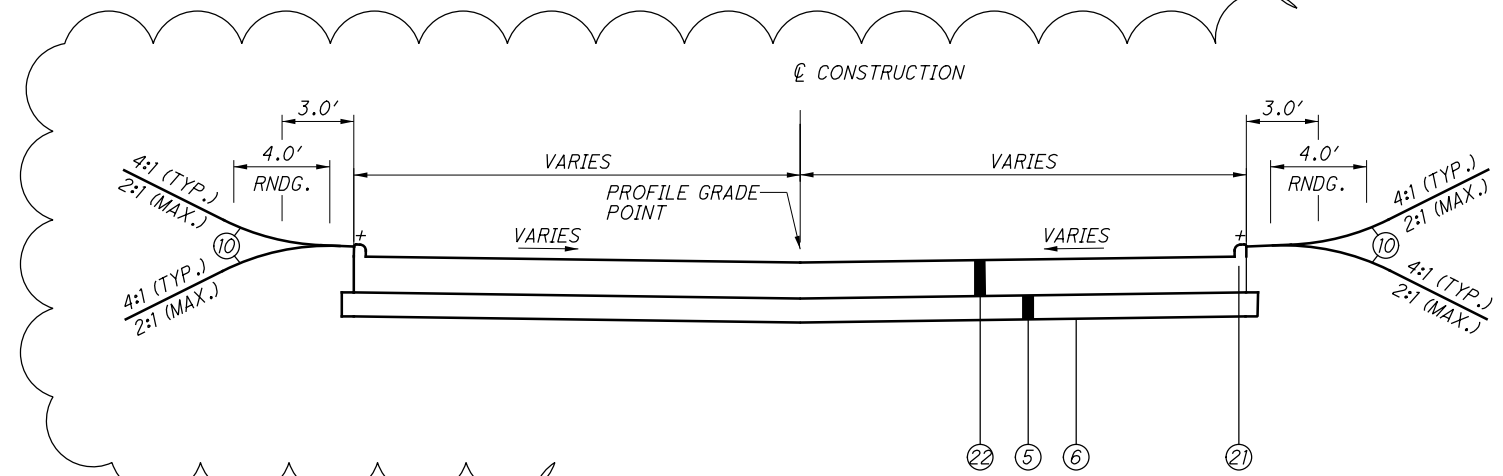


**SHOP AT STA. 556+02**  
STA. 10+23.29 TO STA. 10+79.97

++ FLATTEN GUTTER CROSS SLOPE TO 0.016 WHERE INDICATED ON THE PLANS TO MATCH EXISTING PAVEMENT

**LEGEND**

- ① ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG70-22M, AS PER PLAN
- ② ITEM 407 - NON-TRACKING TACK COAT
- ③ ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)
- ④ ITEM 301 - 6" ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22
- ⑤ ITEM 304 - 6" AGGREGATE BASE
- ⑥ ITEM 204 - SUBGRADE COMPACTION
- ⑦ ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2
- ⑧ ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
- ⑨ ITEM 606 - GUARDRAIL, TYPE MGS
- ⑩ ITEM 659 - SEEDING AND MULCHING, CLASS 1
- ⑪ ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE
- ⑫ ITEM 617 - 3" COMPACTED AGGREGATE
- ⑬ ITEM 608 - 4" CONCRETE WALK
- ⑭ ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
- ⑮ ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
- ⑯ ITEM 609 - CURB, TYPE 6
- ⑰ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22, (449)
- ⑱ ITEM 874 - LONGITUDINAL JOINT PREPARATION, AS PER PLAN
- ⑲ ITEM 609 - CONCRETE TRAFFIC ISLAND
- ⑳ ITEM 441 - 3" ASPHALT INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN
- ㉑ ITEM 609 - CURB, TYPE 2-A
- ㉒ ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS



**STONERIDGE**  
STA. 10+22.77 TO STA. 10+62.77

+ VARY CURB, TYPE 2-A HEIGHT FROM 6" TO 0" IN 10' FROM STA. 10+24.70 TO STA. 10+26.60 RT STA. 10+24.80 TO STA. 10+26.70 LT

TYPICAL SECTIONS

LAK-US-20-24.99

**WATER WORK**

**WATER WORK GENERAL**

1. ALL WATER WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 638, THE LAKE COUNTY DEPARTMENT OF UTILITIES (LCDU) RULES AND REGULATIONS, LATEST EDITION AND PLAN DETAILS. WHERE A CONFLICT BETWEEN THE SPECIFICATIONS ARISES, THE LAKE COUNTY DEPARTMENT OF UTILITIES RULES AND REGULATIONS, LATEST EDITION WILL PREVAIL. THE LAKE COUNTY DEPARTMENT OF UTILITIES RULES AND REGULATIONS CAN BE FOUND AT THE FOLLOWING WEB ADDRESS: [www.lakecountyohio.gov/utilities/rules-and-regulations/](http://www.lakecountyohio.gov/utilities/rules-and-regulations/)
2. ONLY WATER/SEWER CONTRACTORS LICENSED BY THE LAKE COUNTY BOARD OF COMMISSIONERS MAY INSTALL WATER MAINS.
3. THE CONTRACTOR SHALL NOTIFY THE LCDU AT LEAST 48 HOURS IN ADVANCE OF ANY WORK IN THEIR SYSTEMS.
4. THE LCDU SHALL PERFORM INSPECTION SERVICES. THE COST OF INSPECTION SHALL BE INCLUDED AS PART OF THIS CONSTRUCTION PROJECT AT THE CURRENT BASE RATE AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS (SEE LAKE COUNTY UTILITIES DEPARTMENT RULES AND REGULATIONS SECTION 7 FEE SCHEDULE). COSTS FOR LAKE COUNTY INSPECTION FEES AND ALL OTHER WATERWORK RELATED FEES SHALL BE INCLUDED IN THE UNIT BID PRICES FOR THE VARIOUS WATERWORK ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR LCDU FEES.
5. WATERLINE WORK SHALL NOT BEGIN UNTIL THE AREAS OF CONSTRUCTION ARE ROUGH GRADED.
6. ALL HYDRANTS SHALL BE POSITIONED SO THAT THE STEAMER NOZZLES POINT TOWARD THE ROADWAY PAVEMENT.
7. ALL BOLTS SHALL BE STAINLESS STEEL TYPE 304 OR 316. WITH ANTI-GALLING AGENT.
8. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO ODOT FOR PRELIMINARY CHECKING. ODOT SHALL FORWARD CHECKED SHOP DRAWINGS TO THE LCDU FOR FINAL CHECKING AND APPROVAL.
9. THE LCDU SHALL PROVIDE WATER FOR THE NEW WATER MAIN WITHOUT COST FOR THE INITIAL OPERATION. ALL WATER FOR FLUSHING OPERATIONS SHALL BE PAID FOR BY THE CONTRACTOR AT CURRENT RATES AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS PER 100 CUBIC FEET OF WATER USED. (SEE SECTION 7 FEE SCHEDULE)
10. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON PIPE, ANSI A21.51, THICKNESS CLASS 53, UNLESS OTHERWISE SHOWN ON THE PLANS, WITH MECHANICAL JOINTS, CEMENT LINED ANSI A 21.4. FITTINGS TO BE FULL BODY-ONLY.
11. RESTRAINED MECHANICAL JOINTS SHALL BE OF THE PIPE MANUFACTURER'S STANDARD DESIGN OR SHALL BE AS LISTED IN THE LCDU APPROVED MATERIALS LIST.
12. LCDU WILL MAKE THE NECESSARY NEW SERVICE CONNECTION TAPS ON EXISTING LCDU MAINS FOR THE CONTRACTOR AT CURRENT RATES AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS PER 8" AND GREATER TAPS WITHIN RIGHT OF WAY. (SEE SECTION 7 FEE SCHEDULE) SERVICE CONNECTIONS TO EXISTING BUILDINGS SHALL BE MADE BY THE CONTRACTOR.
13. LCDU WILL SHUT DOWN LIMITED PORTIONS OF WATER MAINS (BETWEEN 2 ADJACENT VALVES, GENERALLY SPACED AT 1200 FT TO 1500 FT) FOR PERIODS NOT TO EXCEED 8 HOURS WITHIN A 24 HOUR PERIOD. ALL WORK WITHIN ONE SHUT DOWN AREA SHALL BE COMPLETED WITHIN THAT SHUT DOWN PERIOD. COORDINATE WITH LCDU A MINIMUM OF 48 HOURS IN ADVANCE OF SUCH PLANNED WORK. LOCAL BUSINESSES AND RESIDENTS WITHIN THE SHUT DOWN LIMITS SHALL BE NOTIFIED 48 HOURS IN ADVANCE.
14. NOTHING IN THESE NOTES SHALL BE CONSTRUED TO SUPERCEDE THE FEDERAL BUY AMERICAN REQUIREMENTS AS SET FORTH IN PN 133.

**ITEM SPECIAL 1" COPPER WATER SERVICE LINE. LCDU STANDARD**

FURNISH AND INSTALL COPPER SERVICE BRANCHES, TUBING AND FITTINGS, AS NECESSARY, OR AS SHOWN IN THE CONTRACT DOCUMENTS INCLUDING THE REMOVAL OF THE EXISTING SERVICE BRANCHES AS REQUIRED ACCORDING TO THE FOLLOWING SITUATIONS.

WHERE A SERVICE BRANCH IS DISTURBED FOR LOWERING, RAISING, OR RELOCATION BETWEEN THE WATER MAIN AT THE CORPORATION STOP AND THE SERVICE STOP, REPLACE IT WITH NEW MATERIALS WITHIN THESE LIMITS UNLESS THE CONNECTIONS CAN BE MADE OUTSIDE THE LIMITS OF THE PROPOSED PAVEMENT, PAVED SHOULDER, OR CURB.

WHERE A SERVICE BRANCH IS DISTURBED FOR LOWERING, RAISING, EXTENDING, OR SHORTENING ON THE PROPERTY SIDE OF THE SERVICE STOP, REPLACE IT WITH NEW MATERIALS FROM THE EXISTING SERVICE STOP TO THE PROPOSED SERVICE STOP.

IF THE EXISTING SERVICE BRANCH ENCOUNTERED IS FOUND TO BE LEAD OR GALVANIZED PIPE, REPLACE IT FROM THE CORPORATION STOP TO THE SERVICE STOP WITH NEW MATERIAL.

THE DEPARTMENT WILL MEASURE COPPER SERVICE BRANCH BY THE NUMBER OF FEET OF EACH CONSTRUCTED.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE RELOCATION OF SERVICE BRANCHES WHICH MAY BE IN CONFLICT WITH OTHER WORK IN THE CONTRACT:

ITEM SPECIAL, 1" COPPER WATER SERVICE LINE, LCDU STANDARD 2,400 FT

**ITEM 638 METER AND CHAMBER REMOVED AND RESET. AS PER PLAN**

REMOVE EXISTING CHAMBERS. SET THE CHAMBER ON BRICK BLOCKS. DISCONNECT EXISTING METERS, AND REPLACE THEM WITH SUITABLE CONNECTIONS IF NECESSARY. RECONNECT THE METERS AT NEW LOCATIONS.

THE DEPARTMENT WILL MEASURE METER AND CHAMBER REMOVED AND RESET BY THE NUMBER OF EACH.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 638, METER AND CHAMBER REMOVED AND RESET, AS PER PLAN, 10 EACH

**ITEM SPECIAL VALVE BOX ADJUSTED TO GRADE. LCDU STANDARD  
ITEM SPECIAL SERVICE BOX ADJUSTED TO GRADE. LCDU STANDARD**

RAISE OR LOWER EXISTING VALVE BOXES AND SERVICE BOXES TO GRADE. THE CONTRACTOR MAY REUSE EXISTING VALVE BOXES AND SERVICE BOXES IF THEY ARE IN GOOD CONDITION, AS DETERMINED BY THE ENGINEER.

EXCAVATE AROUND THE VALVE BOX OR SERVICE BOX TO PERMIT THE RAISING OR LOWERING OF THE VALVE BOX OR SERVICE BOX. THE CONTRACTOR MAY ADJUST ANY SCREW-TYPE BOXES WITHOUT THE USE OF EXTENSIONS PROVIDED THAT AMPLE THREAD REMAINS ON THE BOX TO PROVIDE ADEQUATE RIGIDITY TO THE BOX. PROVIDE EXTENSION SECTIONS FOR BOXES THAT ARE NOT OF THE SCREW-TYPE AND BOXES NOT HAVING AMPLE THREAD FOR RIGIDITY TO ADJUST THE TOP TO GRADE. THE ENGINEER WILL ALLOW INSERTS OR ADAPTERS. ADEQUATELY SECURE NEW SECTIONS OF BOX STEM TO THE EXISTING STEMS. BACKFILL THE HOLE AFTER THE BOX HAS BEEN ADJUSTED TO GRADE.

THE DEPARTMENT WILL MEASURE VALVE BOXES AND SERVICE BOXES ADJUSTED TO GRADE SEPARATELY BY THE NUMBER OF EACH, INCLUDING ANY EXTENSION SECTIONS OF VALVE BOXES OR SERVICE BOXES REQUIRED.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL, VALVE BOX ADJUSTED TO GRADE, LCDU STANDARD, 10 EACH  
ITEM SPECIAL, SERVICE BOX ADJUSTED TO GRADE, LCDU STANDARD 20 EACH

**ITEM SPECIAL FIRE HYDRANT REMOVED FOR STORAGE. LCDU STANDARD**

WHERE EXISTING HYDRANTS ARE INDICATED FOR REMOVAL, PROVIDE ADEQUATE SUPPORT FOR THE HYDRANT BEFORE DISCONNECTING IT. STORE HYDRANTS AN SINGLE LOCATION ON SITE FOR PICK-UP BY LCDU PERSONNEL. NEW HYDRANT INSTALLATION SHALL IMMEDIATELY FOLLOW HYDRANT REMOVAL.

THE DEPARTMENT WILL MEASURE FIRE HYDRANTS REMOVED FOR STORAGE BY THE NUMBER OF EACH, INCLUDING ANY EXTENSION SECTIONS OF VALVE OR SERVICE BOXES REQUIRED.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICES AS FOLLOWS:

ITEM SPECIAL FIRE HYDRANT REMOVED FOR STORAGE, LCDU STANDARD, EACH

**ITEM SPECIAL 6" FIRE HYDRANT. LCDU STANDARD**

THIS ITEM INCLUDES EXCAVATION AND FURNISHING AND INSTALLING A NEW FIRE HYDRANT COMPLETE WITH PROPER JOINTING, BLOCKING, AND BACKFILLING AS OUTLINED BELOW, AS SHOWN IN THE PLAN DETAILS, AND ALL OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THIS ITEM OF WORK. THE WORK WILL INCLUDE ALL HYDRANT BRANCHES, GATE VALVES, AND VALVE BOXES REQUIRED TO PERFORM THE WORK.

EXCAVATE ACCORDING TO 638.04. EXCAVATE A DRAINAGE PIT 2 FEET IN DIAMETER AND 3 FEET DEEP BELOW THE HYDRANT AND FILL IT WITH GRANULAR MATERIAL. PROVIDE A 3 FOOT MINIMUM RADIUS UNOBSTRUCTED AREA AROUND ALL HYDRANTS. SET THE SIDEWALK FLANGE 2 INCHES ABOVE FINISHED GRADE. SET HYDRANTS ON SOLID CONCRETE BLOCKS ACCORDING TO 638.06.K. PROVIDE THRUST BLOCKING ACCORDING TO 638.06.L. COVER ANY HYDRANT NOT IN SERVICE WITH A BURLAP OR STURDY OPAQUE PLASTIC BAG.

CONSTRUCT HYDRANT BRANCHES USING A SECTION OF DUCTILE IRON PIPE FROM THE MAIN TO THE HYDRANT, AND INCLUDE A GATE VALVE AND VALVE BOX SET VERTICALLY AND PLACED IN THE LINE AS INDICATED. LOCATE THE VALVE ADJACENT TO THE ANCHORING TEE ON THE MAIN. PROVIDE GATE VALVE AND VALVE BOXES FOR HYDRANT BRANCHES CONFORMING TO 638.13.

AFTER HYDRANTS HAVE BEEN SET, OPEN BRANCH AND HYDRANT VALVES UNTIL WATER FLOW EXPELS ALL AIR AND DIRT.

THE DEPARTMENT WILL MEASURE 6" FIRE HYDRANT ASSEMBLIES COMPLETE BY THE NUMBER OF EACH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICES AS FOLLOWS:

ITEM SPECIAL 6" FIRE HYDRANT, LCDU STANDARD, EACH

**ITEM SPECIAL 12" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS. LCDU STANDARD**

THIS ITEM SHALL INCLUDE INSTALLATION OF WATERLINES IN ACCORDANCE WITH ITEM 638 AND THE LCDU RULES AND REGULATIONS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICES AS FOLLOWS: ITEM SPECIAL 12" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD, FEET

**SANITARY**

**SANITARY GENERAL**

1. ALL SANITARY SEWER WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 611, THE LAKE COUNTY DEPARTMENT OF UTILITIES (LCDU) RULES AND REGULATIONS, LATEST EDITION AND PLAN DETAILS. WHERE A CONFLICT BETWEEN THE SPECIFICATIONS ARISES, THE LAKE COUNTY DEPARTMENT OF UTILITIES RULES AND REGULATIONS, LATEST EDITION WILL PREVAIL. THE LAKE COUNTY DEPARTMENT OF UTILITIES RULES AND REGULATIONS CAN BE FOUND AT THE FOLLOWING WEB ADDRESS: [www.lakecountyohio.gov/utilities/rules-and-regulations/](http://www.lakecountyohio.gov/utilities/rules-and-regulations/)
2. ONLY WATER/SEWER CONTRACTORS LICENSED BY THE LAKE COUNTY BOARD OF COMMISSIONERS MAY INSTALL SANITARY SEWERS.
3. THE CONTRACTOR SHALL NOTIFY THE LCDU AT LEAST 48 HOURS IN ADVANCE OF ANY WORK IN THEIR SYSTEMS.
4. THE LCDU SHALL PERFORM INSPECTION SERVICES. THE COST OF INSPECTION SHALL BE INCLUDED AS PART OF THIS CONSTRUCTION PROJECT AT THE CURRENT BASE RATE AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS (SEE LAKE COUNTY UTILITIES DEPARTMENT RULES AND REGULATIONS SECTION 7 FEE SCHEDULE) COST FOR LAKE COUNTY INSPECTION FEE. AND OTHER FEES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR OTHER WATERLINE ITEMS.
5. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED

**ITEM 611 MANHOLE ADJUSTED TO GRADE. AS PER PLAN**

CAREFULLY REMOVE THE EXISTING COVER AND INSTALL PRECAST CONCRETE GRADE RING TO THE NEW GRADE.

ALL MANHOLES ADJUSTED TO GRADE SHALL HAVE EXTERNAL MANHOLE CHIMNEY SEALS AS LISTED IN THE LCDU SANITARY APPROVED MATERIALS LIST OF HE LAKE COUNTY UTILITIES DEPARTMENT RULES AND REGULATIONS, LATEST EDITION

ALL BRICK WORK ABOVE THE MANHOLE CONE SECTION SHALL BE REPLACED AND A CHIMNEY SEAL SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

THE DEPARTMENT WILL MEASURE MANHOLES RECONSTRUCTED OR ADJUSTED TO GRADE, BY THE NUMBER OF EACH TYPE OF STRUCTURE COMPLETE AND ACCEPTED.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

ITEM 611 MANHOLE ADJUSTED TO GRADE, AS PER PLAN, EACH

**ITEM 611 6" CONDUIT. TYPE B. 748.01. AS PER PLAN**

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 638 WATER MAINS. MATERIALS SHALL BE DUCTILE IRON PIPE, ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS.

THE PIPE AND FITTINGS SHALL HAVE MECHANICAL RESTRAINED JOINTS. ALL PIPES SHALL BE COATED WITH A BITUMINOUS MATERIAL ON THE OUTSIDE AND SHALL BE CEMENT MORTAR LINED DURING FABRICATION IN ACCORDANCE WITH AWWA C104. FITTINGS SHALL BE OF DUCTILE IRON, SHALL CONFORM TO AWWA C153, AND SHALL BE FACTORY COATED AND LINED AND HAVE JOINTS AS SPECIFIED FOR THE PIPE. MECHANICAL JOINTS SHALL BE IN ACCORDANCE WITH AWWA C111, INCORPORATING RUBBER GASKETS. ALL MATERIALS USED SHALL BE ON THE APPROVED MATERIALS LIST OF THE LCDU RULES AND REGULATIONS.

THE DEPARTMENT WILL MEASURE CONDUIT, TYPE B, 748.01, AS PER PLAN BY THE NUMBER OF FEET CONSTRUCTED.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

ITEM 611 6" CONDUIT, TYPE B, 748.01, AS PER PLAN, FEET

**TRAFFIC CONTROL**

**ITEM 621 - RAISED PAVEMENT MARKER REMOVED**

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

ITEM 621 - RAISED PAVEMENT MARKER REMOVED 700 EACH

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GENERAL NOTES

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**ITEM 614. MAINTAINING TRAFFIC**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON NORTH RIDGE ROAD (U.S. 20) BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON HAINES ROAD AND BURNS ROAD, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 25-26. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

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

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 608, TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN **61,300 SQ. FT.**

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, TYPE A LUMP

ITEM 616, WATER 50 M. GAL.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**NOTICE OF CLOSURE SIGN (SIDE ROADS)**

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED SIDE ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. (AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.)

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

**PLACEMENT OF ASPHALT CONCRETE**

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

**TRENCH FOR WIDENING**

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

**OVERNIGHT TRENCH CLOSING**

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 5 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER. THESE REQUIREMENTS APPLY TO ALL PERMANENT AND TEMPORARY PAVEMENT NOT PROTECTED BY BARRIER.

**EARTHWORK FOR MAINTAINING TRAFFIC**

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC 7,100 CU. YD.  
EMBANKMENT FOR MAINTAINING TRAFFIC 240 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED. ANY UNDERCUTS SHALL BE FILLED THE SAME DAY AS EXCAVATION.

**WORK ZONE MARKINGS (WINTER APPLICATION)**

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 C&MS 614.11. MARKINGS SHALL BE APPLIED ON ROADWAY AFFECTED BY PHASE 1 AND PHASE 2 CONSTRUCTION:

WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT 3.61 MILE  
WORK ZONE CENTER LINE, CLASS I, 642 PAINT 2.71 MILE  
WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT 1.33 MILE  
WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT 1.506 FT  
WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT 648 FT  
WORK ZONE STOP LINE, CLASS I, 642 PAINT 566 FT  
WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT 1,582 FT  
WORK ZONE ARROW, CLASS I, 642 PAINT 23 EACH

**WORK ZONE MARKINGS (PRE-FINAL APPLICATION)**

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 C&MS 614.11. MARKINGS SHALL BE APPLIED AFTER PAVEMENT PLANING AND AFTER PLACEMENT OF THE SURFACE COURSE PRIOR TO THE FINAL PAVEMENT MARKINGS BEING APPLIED:

WORK ZONE LANE LINE, CLASS III, 642 PAINT 12.38 MILE  
WORK ZONE CENTER LINE, CLASS III, 642 PAINT 8.66 MILE  
WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT 4.26 MILE  
WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT 4,032 FT  
WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT 1,676 FT  
WORK ZONE STOP LINE, CLASS III, 642 PAINT 1,338 FT  
WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT 3,390 FT  
WORK ZONE ARROW, CLASS III, 642 PAINT 62 EACH

**ITEM 614. WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**ITEM SPECIAL. WORK ZONE TRAFFIC SIGNAL**

THE ADDITION OF TEMPORARY TRAFFIC SIGNALS AND EQUIPMENT AND MODIFICATIONS TO EXISTING TRAFFIC SIGNALS AND EQUIPMENT SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR ITEM 614 WORK ZONE TRAFFIC SIGNAL AT THE FOLLOWING INTERSECTIONS:

PHASE 1: GREEN ROAD, BURNS ROAD, DERUBERTIS DRIVE, SERVICE ROADS, HUBBARD ROAD

PHASE 1A: HUBBARD ROAD  
PHASE 1B: HUBBARD ROAD

PHASE 2: GREEN ROAD, BURNS ROAD, DERUBERTIS DRIVE, SERVICE ROADS, HUBBARD ROAD

PHASE 2A: HUBBARD ROAD  
PHASE 2B: HUBBARD ROAD

PHASE 3: TOWNLINE ROAD, McMACKIN ROAD, GREEN ROAD

PHASE 4: TOWNLINE ROAD, McMACKIN ROAD, GREEN ROAD

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

ITEM 614, WORK ZONE TRAFFIC SIGNAL 20 EACH

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 500 M. GAL.

**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 TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

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 PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) 23 OF THE PLAN. 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.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 6 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

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 SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) 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 CONTRACTOR ON HIS 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, 120 SIGN MONTH (ASSUMING 5 PCMS SIGNS FOR 24 MONTHS)

CALCULATED  
EJIT  
CHECKED  
WDB

MAINTENANCE OF TRAFFIC GENERAL NOTES

LAK-US-20-24.99

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**MAINTENANCE OF TRAFFIC NARRATIVE**

PHASES SHALL BE CONSTRUCTED FROM EAST TO WEST PER THE CONSTRUCTION SEQUENCES. THE ONLY WORK PERMITTED TO OCCUR DURING THE WINTER MONTHS, BETWEEN NOVEMBER 1 AND APRIL 1, IS PRE-PHASE 1 AND TREE CLEARING.

**SEQUENCE OF CONSTRUCTION**

**UTILITY RELOCATION**

UTILITY RELOCATION (BY OTHERS) IS TO OCCUR IN 2023.

**PRE-PHASE 1:**

THE TEMPORARY PAVEMENT AND THE TEMPORARY DRAINAGE NECESSARY FOR PHASE 1 ARE TO BE CONSTRUCTED UNDER THIS PHASE.

**PHASE 1:**

THIS PHASE WILL INVOLVE FIRSTLY THE RECONSTRUCTION OF HUBBARD ROAD SOUTH OF U.S. 20 AND ITS DRAINAGE OUTLET; AND SECONDLY THE SOUTH SIDE OF U.S. 20 FROM STA. 500+40 TO STA. 572+50, INCLUDING THE DRAINAGE WORK FROM STA. 495+32 TO STA. 500+40. ONE (1) LANE OF WESTBOUND TRAFFIC AND ONE (1) LANE OF EASTBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF U.S. 20. ONE (1) LANE OF NORTHBOUND TRAFFIC AND ONE (1) LANE OF SOUTHBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF HUBBARD ROAD. HUBBARD ROAD AND ITS DRAINAGE OUTLET SHALL BE CONSTRUCTED PRIOR TO THE WORK ON U.S. 20. CONSTRUCTION OF THE INTERSECTION OF HUBBARD ROAD AND U.S. 20 SHALL BE PERFORMED ON WEEKENDS.

THERE WILL BE NO MILL AND FILL RESURFACING DURING THIS PHASE.

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE EACH SIDE STREET FOR FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 FOR EACH CALENDAR DAY THAT THE SIDE STREET REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED TIME LIMIT.

THE FOLLOWING IS A LIST OF SIDE STREETS TO BE CLOSED DURING THIS PHASE:

BURNS ROAD STA. 517+13 RT SIDE STREET

THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE TWO (2) ADJACENT SIDE STREETS AT THE SAME TIME.

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE EACH ACCESS DRIVEWAY FOR FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 FOR EACH CALENDAR DAY THAT THE DRIVEWAY REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED TIME LIMIT.

THE FOLLOWING IS A LIST OF ACCESS DRIVEWAYS TO BE CLOSED DURING THIS PHASE:

ACCESS DRIVE STA. 550+31 RT MAJOR DRIVE  
ACCESS DRIVE STA. 556+02 RT MAJOR DRIVE

THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE TWO (2) ADJACENT MAJOR DRIVEWAYS AT THE SAME TIME.

THE FOLLOWING IS A LIST OF SIDE STREETS TO BE CONSTRUCTED UTILIZING PART-WIDTH CONSTRUCTION:

HUBBARD ROAD STA. 565+71 RT  
(INCLUDING THE DRAINAGE OUTLET)

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

**PHASE 2:**

THIS PHASE WILL INVOLVE THE RECONSTRUCTION OF THE NORTH SIDE OF U.S. 20 FROM STA. 500+40 TO STA. 572+50 AND HUBBARD ROAD NORTH OF U.S. 20. ONE (1) LANE OF WESTBOUND TRAFFIC AND ONE (1) LANE OF EASTBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF U.S. 20. ONE (1) LANE OF NORTHBOUND TRAFFIC AND ONE (1) LANE OF SOUTHBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF HUBBARD ROAD. CONSTRUCTION OF THE INTERSECTION OF HUBBARD ROAD AND U.S. 20 SHALL BE PERFORMED ON WEEKENDS.

THERE WILL BE NO MILL AND FILL RESURFACING DURING THIS PHASE.

THE FOLLOWING ITEMS SHALL ALSO BE PERFORMED AT THE END OF PHASE 2 IN THE PHASE 1 / 2 WORK AREA:

- A. TRAFFIC SIGNAL AND FINAL CURB AND GUTTER WORK AT THE HUBBARD RD INTERSECTION.
- B. ALL OTHER TRAFFIC SIGNAL WORK.
- C. PERMANENT SIGNING.

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE EACH SIDE STREET FOR FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 FOR EACH CALENDAR DAY THAT THE SIDE STREET REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED TIME LIMIT.

THE FOLLOWING IS A LIST OF SIDE STREETS TO BE CLOSED DURING THIS PHASE:

~~WALMART DR. STA. 504+50 LT SIDE STREET~~

THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE TWO (2) ADJACENT SIDE STREETS AT THE SAME TIME.

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE EACH ACCESS DRIVEWAY FOR FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 FOR EACH CALENDAR DAY THAT THE DRIVEWAY REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED TIME LIMIT.

THE FOLLOWING IS A LIST OF ACCESS DRIVEWAYS TO BE CLOSED DURING THIS PHASE:

ACCESS DRIVE STA. 558+30 LT MAJOR DRIVE

THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE TWO (2) ADJACENT MAJOR DRIVEWAYS AT THE SAME TIME.

THE FOLLOWING IS A LIST OF SIDE STREETS TO BE CONSTRUCTED UTILIZING PART-WIDTH CONSTRUCTION:

~~STONEYRIDGE DR. STA. 532+95 LT~~  
~~DEWBERTIS ROAD STA. 560+35 LT~~  
HUBBARD ROAD STA. 565+71 LT

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

PHASE 2 SHALL BE COMPLETED BY OCTOBER 15, 2024.

**PRE-PHASE 3 (TO BE COMPLETED CONCURRENTLY WITH PHASE 2):**

THE TEMPORARY PAVEMENT AND TEMPORARY DRAINAGE NECESSARY FOR PHASE 3 TO BE CONSTRUCTED UNDER THIS PHASE.

THE CONTRACTOR MAY UTILIZE A LONG TERM CLOSURE OF THE WESTBOUND OUTSIDE LANE FOR A DURATION OF FOURTEEN (14) CALENDAR DAYS IN ORDER TO INSTALL THE TEMPORARY PAVEMENT. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1,500 FOR EACH CALENDAR DAY THAT THE WESTBOUND OUTSIDE LANE REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED LIMIT.

WORK SHALL NOT COMMENCE PRIOR TO APRIL 1, 2024 AND SHALL BE COMPLETED BY OCTOBER 15, 2024.

**PHASE 3:**

THIS PHASE WILL INVOLVE THE RECONSTRUCTION OF THE SOUTH SIDE OF U.S. 20 FROM STA. 411+20 TO STA. 426+00 AND FROM STA. 440+15 TO STA. 486+40. ONE (1) LANE OF WESTBOUND TRAFFIC AND ONE (1) LANE OF EASTBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF U.S. 20.

THERE WILL BE NO MILL AND FILL RESURFACING DURING THIS PHASE.

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

**PHASE 4:**

THIS PHASE WILL INVOLVE THE RECONSTRUCTION OF THE NORTH SIDE OF U.S. 20 FROM STA. 411+20 TO STA. 426+00 AND FROM STA. 440+15 TO STA. 486+40. ONE (1) LANE OF WESTBOUND TRAFFIC AND ONE (1) LANE OF EASTBOUND TRAFFIC WILL BE MAINTAINED AT ALL TIMES ALONG THIS SECTION OF U.S. 20.

AT THE END OF PHASE 4, MILL THE AREAS FROM STA. 426+00 TO STA. 440+15, FROM STA. 486+40 TO STA. 500+40, MCMACKIN ROAD AND GREEN ROAD. PLACE THE ITEM 441 INTERMEDIATE COURSE AND SURFACE COURSE IN THESE LOCATIONS WHILE MAINTAINING TRAFFIC USING SCD MT-97.12.

THE FOLLOWING ITEMS SHALL ALSO BE PERFORMED AT THE END OF PHASE 4:

- A. TRAFFIC SIGNAL WORK.
- B. PERMANENT SIGNING.

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE EACH SIDE STREET FOR FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$800 FOR EACH CALENDAR DAY THAT THE SIDE STREET REMAINS CLOSED TO TRAFFIC BEYOND THIS SPECIFIED TIME LIMIT.

THE FOLLOWING IS A LIST OF SIDE STREETS TO BE CLOSED DURING THIS PHASE:

HAINES ROAD STA. 463+33 LT SIDE STREET

THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE TWO (2) ADJACENT SIDE STREETS AT THE SAME TIME.

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

PHASE 4 SHALL BE COMPLETED BY OCTOBER 15, 2025.

PEDESTRIAN TRAFFIC SHALL BE MAINTAINED.

DISINCENTIVE TABLE			
LOCATION OF CRITICAL WORK	COMPLETION DATE	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD
BURNS ROAD STA. 517+13 RT	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
ACCESS DRIVE STA. 550+31 RT	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
ACCESS DRIVE STA. 556+02 RT	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
WALMART DRIVE STA. 504+50 LT	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
STONY RIDGE DRIVE STA. 504+50 LT	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
PHASE 2 OCTOBER 15, 2024 DAY \$5,000			
HAINES ROAD STA. 463+33	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$800
PRE-PHASE 3	FOURTEEN (14) CONSECUTIVE CALENDAR DAYS	DAY	\$1,500

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	611	611	611	614	614	614	614	614	614	615	622						
					12" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 MILE	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	PORTABLE BARRIER, UNANCHORED FT						
		<b>PRE - PHASE 1</b>	<b>TO</b>																		
EL-1	50H	498+44.60	499+00	LT				0.010													
PB-1	50H	498+44.60	499+00	LT							1	2	2							35	
P-1	50I	499+78.05	504+00	RT										389							
EL-1	50I	499+00	504+00	LT				0.095													
PB-2	50I	499+00	503+75.00	LT							1	10	10							455	
EL-1	50J	504+00	509+00	LT				0.095													
P-2	50J	504+00	504+13.60	LT										148							
SL-1	50J	504+32		LT						17											
PB-3	50J	507+30	508+55	LT							2	2	2							85	
EL-1	50K	509+00	514+00	LT				0.095													
P-3	50K	509+00	514+00	LT										667							
PB-4	50K	509+15	514+00	LT							5	9	9							275	
EL-1	50L	514+00	519+00	LT				0.095													
P-4	50L	514+00	519+00	LT										500							
PB-5	50L	514+00	519+00	LT							4	6	6							300	
EL-1	50M	519+00	524+00	LT				0.095													
P-5	50M	519+00	524+00	LT										500							
PB-6	50M	519+00	524+00	LT							2	8	8							400	
D-1	50M	523+33			10	1	1														
EL-1	50N	524+00	529+00	LT				0.095													
P-6	50N	524+00	529+00	LT										500							
PB-7	50N	524+00	529+00	LT							4	5	5							304	
D-2	50N	525+48		LT	10	1	1														
EL-1	50O	529+00	534+00	LT				0.095													
P-7	50O	529+00	534+00	LT										440							
PB-8	50O	529+00	534+00	LT							4	5	5							310	
EL-1	50P	534+00	539+00	LT				0.095													
P-8	50P	534+00	539+00	LT							4	5	5	500						320	
PB-9	50P	534+00	539+00	LT																	
EL-1	50Q	539+00	544+00	LT				0.095													
P-9	50Q	539+00	544+00	LT										500							
PB-10	50Q	539+00	544+00	LT							2	9	9							400	
EL-1	50R	544+00	549+00	LT				0.095													
P-10	50R	544+00	549+00	LT										500							
PB-11	50R	544+00	549+00	LT							2	9	9							400	
D-3		546+97		LT	10	1	1														
EL-1	50S	549+00	554+00	LT				0.095													
P-11	50S	549+00	554+00	LT							4	7	7	440							
PB-12	50S	549+00	554+00	LT																	
D-4	50S	549+47		LT	10	1	1														
D-5	50S	551+88		LT	11	1	1														
EL-1	50T	554+00	559+00	LT				0.081													
P-12	50T	554+00	559+00	LT										500							
PB-13	50T	554+00	557+75	LT							3	4	4							150	
D-6	50T	554+11		LT	10	1	1														
D-7	50T	557+17		LT		1	1														
<b>SUBTOTAL SHEET 32E</b>					61	7	7	1.133		17	38	81	81	5584	3434						

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	CALCULATED
	ARK CHECKED EJT
LAK - US - 20 - 24.99	32E 651

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	611	611	611	614	614	614	614	614	614	615	622				
					12" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 MILE	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	PORTABLE BARRIER, UNANCHORED FT				
EL-1	50U	559+00	TO	564+00				0.095											
P-13	50U	559+00		564+00										333					
PB-14	50U	559+10		563+50							4	8	8				300		
D-8	50U	562+37			3	1	1												
EL-1	50V	564+00		569+00				0.083											
P-14	50V	564+00		569+00										130					
PB-15	50V	564+10		569+00						5	7	7					190		
EL-1	50W	569+00		572+50				0.066											
P-15	50W	569+00		574+00										380					
PB-16	50W	569+00		574+00						4	8	8					300		
D-10	50W	567+07			10	1	1												
D-11	50W	571+50			8	1	1												
ELT-1	50W	572+50		574+00					0.028										
ELT-1	50X	574+00		579+00				0.095											
P-16	50X	574+00		577+06.40										138					
PB-17	50X	574+00		577+71						5	5	5					150		
ELT-1	50Y	579+00		581+59				0.049											
SUBTOTAL SHEET 32F					21	3	3	0.244	0.172		18	28	28	981					
SUBTOTALS FROM SHEET 32E					61	7	7	1.133		17	38	81	81	5584			940	3434	
TOTALS CARRIED TO GENERAL SUMMARY					82	10	10	1.38	0.17	17	56	109	109	6565			4374		

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	CALCULATED ARK CHECKED EJT
LAK-US-20-24.99	
32F 651	

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	611	614	614	614	614	614	614	614	614	614	614	614	614	614	615	622		
					12" CONDUIT, TYPE B, AS PER PLAN FT	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS I, 873 MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 6", 873 FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE 1 FT	WORK ZONE CROSSWALK LINE, CLASS I, 24", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY
			TO																			
SL-1	60	504+32		LT											14							
P-3	60	504+00	509+00	LT																		
PB-3	60	504+00	509+00	LT														4	4	4		300
CL-1	61	509+00	514+00	LT			0.095															
EL-1	61	509+00	514+00	LT					0.095													
EL-2	61	509+00	514+00	LT					0.095													
P-4	61	509+00	514+00	LT																		
PB-4	61	509+00	514+00	LT															4	4	4	310
CL-1	62	514+00	519+00	LT			0.095															
CL-2	62	8+25	9+58	RT			0.025															
EL-1	62	514+00	519+00	LT					0.095													
EL-2	62	514+00	519+00	LT					0.095													
EL-3	62	8+25	9+34	LT					0.021													
EL-4	62	8+25	9+44	RT					0.023													
SL-1	62	516+23		LT										10								
SL-2	62	517+72		LT										11								
SL-3	62	9+58		RT										15								
P-5	62	514+00	519+00	LT																		
PB-5	62	514+00	515+09.5	LT															1	2	2	90
CL-1	63	519+00	524+00	LT			0.095															
EL-1	63	519+00	524+00	LT					0.095													
EL-2	63	519+00	524+00	LT					0.095													
D-2	63	523+32	523+75	LT&RT	50																	
P-6	63	519+00	524+00	LT																		
CL-1	64	524+00	529+00	LT			0.095															
EL-1	64	524+00	529+00	LT					0.095													
EL-2	64	524+00	529+00	LT					0.095													
D-3	64	525+48	526+00	LT&RT	58																	
P-7	64	524+00	529+00	LT																		
CL-1	65	529+00	534+00	LT			0.095															
EL-1	65	529+00	534+00	LT					0.095													
EL-2	65	529+00	534+00	LT					0.095													
SL-1	65	10+42		LT										15								
P-8	65	529+00	534+00	LT																		
CL-1	66	534+00	539+00	LT			0.095															
EL-1	66	534+00	539+00	LT					0.095													
EL-2	66	534+00	539+00	LT					0.095													
P-9	66	534+00	539+00	LT																		
CL-1	67	539+00	544+00	LT			0.095															
EL-1	67	539+00	544+00	LT					0.095													
EL-2	67	539+00	544+00	LT					0.095													
P-10	67	539+00	544+00	LT																		
SUBTOTAL SHEET 34					108		0.690		1.374					65				9	10	10		700

CALCULATED  
 ARK  
 CHECKED  
 EJT  
**MAINTENANCE OF TRAFFIC SUBSUMMARY**  
**LAK-US-20-24.99**  
 34  
 651



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REF NO.	SHEET NO.	STATION TO STATION		SIDE	611	614	614	614	614	614	614	614	614	614	614	614	614	614	614	615	622		
					12" CONDUIT, TYPE B, AS PER PLAN FT	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT MILE	WORK ZONE CENTER LINE, CLASS I, 873 MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 MILE	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT FT	WORK ZONE DOTTED LINE, CLASS I, 6", 873 FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE 1 FT	WORK ZONE CROSSWALK LINE, CLASS I, 24", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	PORTABLE BARRIER, UNANCHORED FT
CL-1	87	97+50	TO 102+50	RT			0.095																
EL-1	87	97+50	102+50	RT					0.095														
EL-2	87	97+50	102+50	RT					0.095														
P-21	87	97+50	99+41.8	RT																184			
P-22	87	100+39.1	102+50	RT																132			
SL-1	87	99+00		RT																			
SL-2	87	101+00		RT																			
DL-1	87	99+00	101+00	RT																			
DL-2	87	100+08	101+00	RT							200												
P-23	88	102+50	104+73.0	RT																			
CL-1	88	102+50	107+50	C/L			0.095														86		
EL-1	88	102+50	107+50	LT					0.095														
EL-2	88	102+50	107+50	RT					0.095														
<b>HUBBARD ROAD, PHASE 1B</b>																							
CL-1	89	96+19	96+69	C/L			0.009																
EL-1	89	96+19	96+69	LT					0.009														
EL-2	89	96+19	97+50	RT				0.024															
ELT-1	89	96+69	97+50	LT						0.015													
CLT-1	89	96+69	97+50	LT			0.015																
CL-1	90	101+00	102+50	LT			0.028																
CLT-1	90	97+50	99+50	LT				0.038															
DLT-1	90	99+50	101+00	LT								150											
EL-1	90	97+87.8	102+50	LT					0.087														
ELT-1	90	97+50	97+87.82	LT						0.007													
EL-2	90	97+50	102+50	LT & RT					0.095														
ELT-2	90	99+00	100+08	LT						0.02													
ELT-3	90	99+68	100+19	LT						0.011													
P-24	90	97+87.8	99+50.9	LT																	73		
P-25	90	100+66.6	102+50	LT																	125		
SLT-1	90	99+50		LT																			
SL-2	90	101+00		LT																			
P26	91	102+50	104+73	LT																			
CL-1	91	102+50	105+23	LT			0.052														105		
EL-1	91	102+50	105+23	LT					0.052														
EL-2	91	102+50	105+23	RT					0.052														
<b>MAJOR ACCESS DRIVES</b>																							
EL-1	92	549+76	551+03	LT					0.024														
EL-2	92	555+37	556+84	LT					0.028														
SUBTOTAL SHEET 37							0.279	0.077	0.727	0.053			292	150		30	10			705			
SUBTOTALS FROM SHEET 33						0.218	0.731		1.005		384		495		171	68		274	8	3	5	5	360
SUBTOTALS FROM SHEET 34					108		0.690		1.374							65				9	10	10	700
SUBTOTALS FROM SHEET 35					218		0.491		0.950		83					273							
SUBTOTALS FROM SHEET 36					67		0.283	0.243	0.541	0.100													705
TOTAL					393	0.22	2.47	0.32	4.60	0.15	467		787	150	171	436	10	274	10	12	15	15	1410
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					393	0.22	2.47	0.32	4.60	0.15	467		787	150	171	436	10	274	10	12	15	15	1410

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	<b>LAK-US-20-24.99</b>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CALCULATED</td> <td style="text-align: center;">ARK</td> </tr> <tr> <td style="text-align: center;">CHECKED</td> <td style="text-align: center;">EJT</td> </tr> </table>	CALCULATED	ARK	CHECKED	EJT	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">37</td> </tr> <tr> <td style="text-align: center;">651</td> </tr> </table>	37	651
CALCULATED	ARK						
CHECKED	EJT						
37							
651							

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	615	622
		TO			WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 873	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 873	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873	WORK ZONE DOTTED LINE, CLASS I, 6", 873	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE 1	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE ARROW, CLASS I, 740.06, TYPE 1	WORK ZONE IMPACT ATTENUATOR 24" WIDE HAZARD (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	PORTABLE BARRIER, UNANCHORED	
					MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	SY	FT		
CLT-1	104	514+00	519+00	RT			0.095																
ELT-1	104	514+00	519+00	RT					0.095														
SLT-1	104	516+25		RT											10								
SLT-2	104	517+70		RT											10								
PB-5	104	514+00	516+92	C/L														3	3	3		275	
CLT-1	105	519+00	524+00	RT			0.095																
ELT-1	105	519+00	524+00	RT					0.095														
CLT-1	106	524+00	529+00	RT			0.095																
ELT-1	106	524+00	529+00	RT					0.095														
CLT-1	107	529+00	534+00	RT			0.095																
CL-2	107	10+27	10+63	LT		0.0068																	
ELT-1	107	529+00	534+00	RT					0.095														
SL-1	107	10+27		LT																			
EL-1	107	532+37	532+77	LT					0.014						24								
EL-2	107	533+11	533+42	LT					0.012														
CLT-1	108	534+00	539+00	RT			0.095																
ELT-1	108	534+00	539+00	RT					0.095														
CLT-1	109	539+00	544+00	RT			0.095																
ELT-1	109	539+00	544+00	RT					0.095														
CLT-1	110	544+00	549+00	RT			0.095																
ELT-1	110	544+00	549+00	RT					0.095														
CLT-1	111	549+00	554+00	RT			0.095																
CL-2	111	10+54	11+75	LT		0.023																	
ELT-1	111	549+00	554+00	RT & LT					0.095														
SLT-1	111	549+70		RT											10								
SLT-2	111	550+97		RT											10								
SL-1	111	10+54		LT											12								
EL-1	111	549+55	549+96	LT					0.009														
EL-2	111	550+50	550+82	LT					0.008														
CLT-1	112	554+00	559+00	RT			0.095																
ELT-1	112	554+00	559+00	RT & LT					0.095														
EL-1	112	554+82	555+29	LT					0.011														
EL-2	112	556+22	556+54	LT					0.085														
SLT-1	112	554+97		RT											10								
SLT-2	112	556+69		RT											10								
SL-1	112	10+54		LT											13								
CH-1	112	10+54	10+80	LT						26													
CLT-1	113	559+00	564+00	RT			0.095																
ELT-1	113	559+00	564+00	RT					0.095														
SUBTOTAL SHEET 39							0.030	0.950	0.139	0.950	26				49	60				3	3	3	275

MAINTENANCE OF TRAFFIC SUBSUMMARY

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614																						615	622
					WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 873	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 873	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873	WORK ZONE DOTTED LINE, CLASS I, 6", 873	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE 1	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE ARROW, CLASS I, 740.06, TYPE 1	WORK ZONE IMPACT ATTENUATOR 24" WIDE HAZARD (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	PORTABLE BARRIER, UNANCHORED						
		TO			MILE	MILE	MILE	MILE	MILE	FT	FT	MILE	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	SY	FT					
EL-2	129	97+50	102+50	RT				0.095																				
ELT-2	129	564+62	565+78	LT					0.022																			
SLT-1	129	99+00		RT														10										
SL-1	129	101+00		RT														10										
CL-1	130	102+50	105+23	LT		0.052																						
EL-1	130	102+50	105+23	LT				0.052																				
EL-2	130	102+50	105+23	RT				0.052																				
<b>HUBBARD ROAD PHASE 2B</b>																												
CL-1	131	96+19	96+69	LT		0.009																						
CLT-1	131	96+69	97+50	LT			0.015																					
EL-1	131	96+19	96+69	LT				0.009																				
ELT-1	131	96+69	97+50	LT					0.015																			
EL-2	131	96+19	97+50	RT					0.025																			
CLT-1	132	97+50	99+00	LT			0.028																					
CL-1	132	101+00	102+50	LT		0.028																						
ELT-1	132	97+50	97+87.8	LT					0.007																			
EL-1	132	97+87.8	102+50	LT				0.087																				
ELT-2	132	99+95.75	101+00	LT					0.019																			
EL-2	132	101+00	102+50	RT & C/L					0.028																			
ELT-3	132	100+12.6	100+42.5	LT					0.012																			
DLT-1	132	99+00	101+00	LT									200															
DLT-2	132	99+00	100+00	LT									100															
SLT-1	132	99+00		LT														10										
SLT-2	132	101+00		LT														10										
CL-1	133	102+50	105+23	LT		0.052																						
EL-1	133	102+50	105+23	LT				0.052																				
EL-2	133	102+50	105+23	RT				0.052																				
<b>WALMART SERVICE DRIVE</b>																												
ELT-1	134	503+50	504+00	RT					0.009																			
ELT-2	134	504+70	505+70	RT					0.018																			
PB-6	134	502+55	505+95	C/L																			340					
<b>STONE RIDGE DRIVE</b>																												
CLT-1	135	532+52	532+81.5	RT			0.006																					
ELT-1	135	532+37	532+96.5	RT					0.011																			
EL-1	135	533+21	533+61	LT				0.011																				
EL-2	135	9+97	11+29	RT & LT				0.025																				
SL-1	135	11+44		LT & RT														20										
CLT-1	136	533+03.5	533+76	RT			0.014																					
ELT-1	136	532+88.5	533+61	RT					0.014																			
EL-1	136	532+16	532+63	LT				0.011																				
EL-2	136	9+97	11+29	LT & RT				0.026																				
<b>MAJOR ACCESS ROAD</b>																												
ELT-1	137	554+82	557+55	RT					0.052																			
ELT-2	137	557+95	558+40	RT					0.0085																			
ELT-3	137	557+55	558+04	LT					0.009																			
ELT-4	137	558+55	558+90	RT					0.007																			
SLT-1	137	558+00		LT														17										
SUBTOTAL SHEET 41						0.141	0.063	0.525	0.204				300		30	47							340					
TOTALS FROM SHEET 38					0.154	0.515	0.258	0.590	0.230	451				81	74	9		9	12	12			915					
TOTALS FROM SHEET 39						0.030	0.950	0.139	0.950	26					49	60		3	3	3				275				
TOTALS FROM SHEET 40					0.019	0.317	0.266	0.431	0.549	187	43	200		61	55	4	1					790						
TOTAL					0.173	1.003	1.537	1.685	1.933	664	43	500	81	214	162	13	1		12	15	15	790	1530					
TOTALS CARRIED TO GENERAL SUMMARY					0.17	1.00	1.54	1.69	1.93	664	43	500	81	214	162	13	1		12	15	15	790	1530					

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

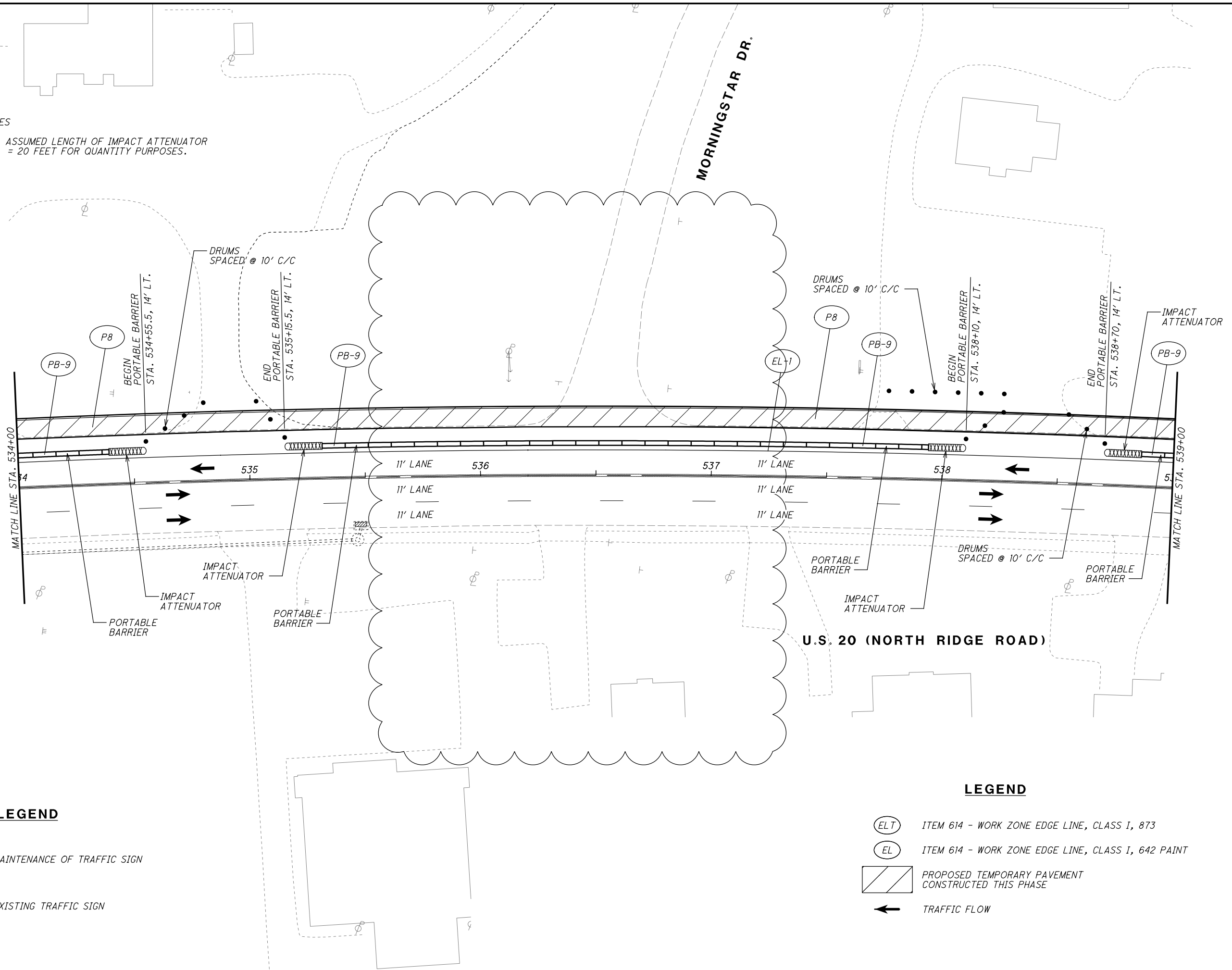
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CALCULATED  
 ARK  
 CHECKED  
 EJT



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**NOTES**



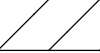

1. ASSUMED LENGTH OF IMPACT ATTENUATOR = 20 FEET FOR QUANTITY PURPOSES.



**LEGEND**

-  MAINTENANCE OF TRAFFIC SIGN
-  EXISTING TRAFFIC SIGN

**LEGEND**

-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT
-  PROPOSED TEMPORARY PAVEMENT CONSTRUCTED THIS PHASE
-  TRAFFIC FLOW

CALCULATED  
EJT  
CHECKED  
WDB

0 20 40  
HORIZONTAL  
SCALE IN FEET

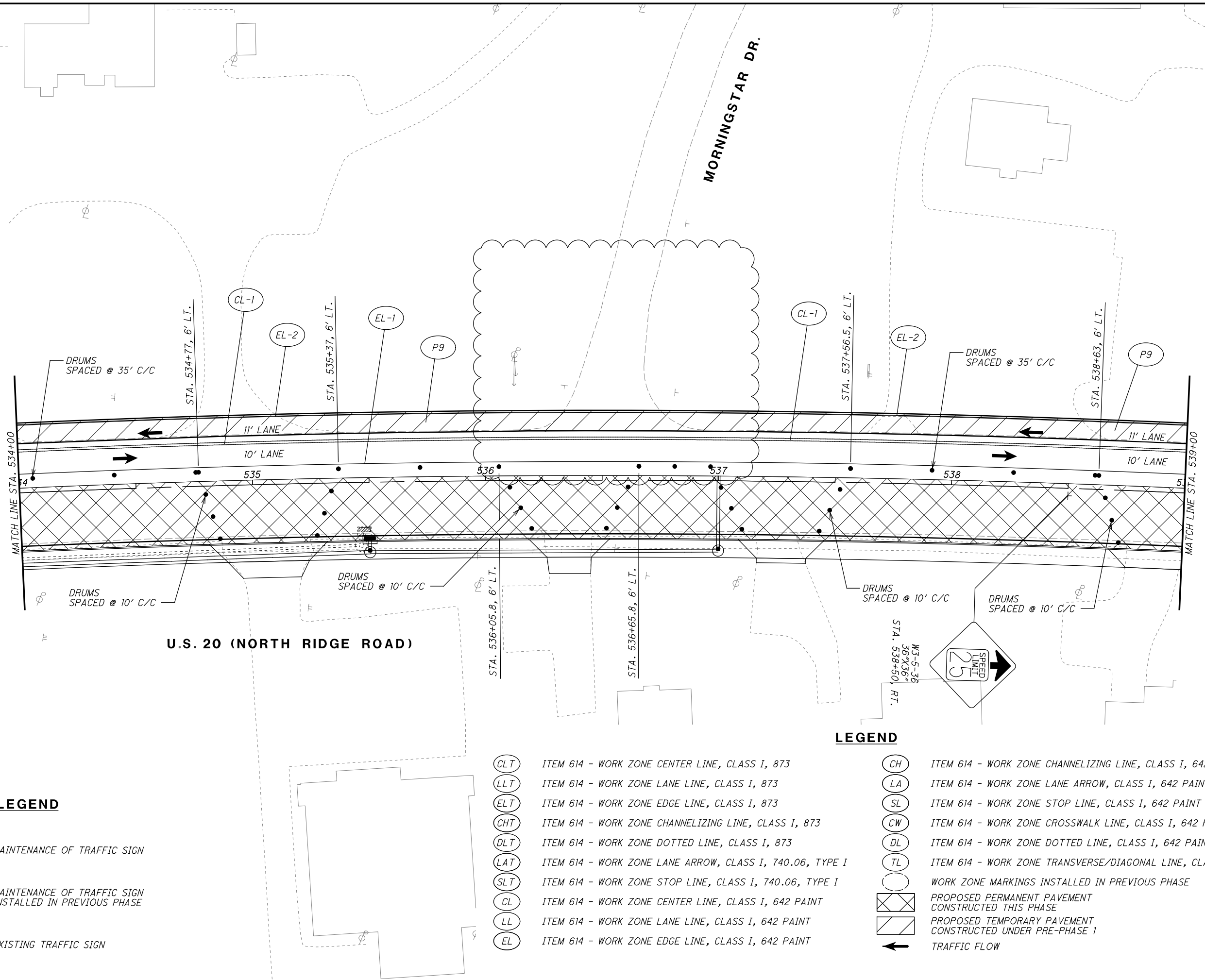


**MAINTENANCE OF TRAFFIC PLAN - PRE-PHASE 1**  
**STA. 534+00 TO STA. 539+00**




**LAK-US-20-24.99**











50P  
651

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











**LEGEND**

-  MAINTENANCE OF TRAFFIC SIGN
-  MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
-  EXISTING TRAFFIC SIGN

-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
-  PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
-  PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
-  TRAFFIC FLOW

CALCULATED  
EJT  
CHECKED  
WDB

0 10 20 40  
HORIZONTAL  
SCALE IN FEET



**MAINTENANCE OF TRAFFIC PLAN - PHASE 1**  
**STA. 534+00 TO STA. 539+00**

**LAK-US-20-24.99**



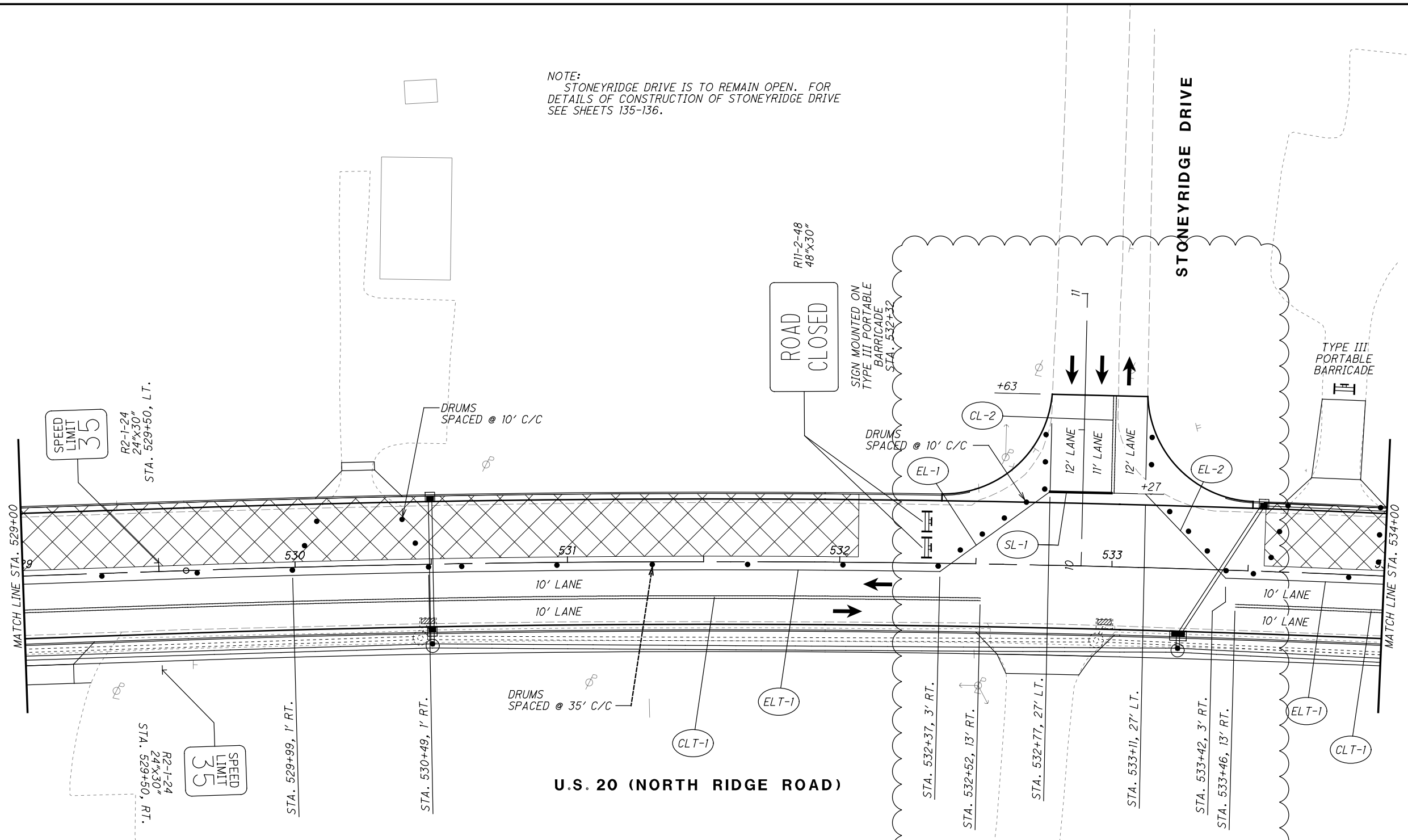
NOTE:  
 STONEYRIDGE DRIVE IS TO REMAIN OPEN. FOR  
 DETAILS OF CONSTRUCTION OF STONEYRIDGE DRIVE  
 SEE SHEETS 135-136.

CALCULATED  
 EJT  
 CHECKED  
 WDB

0 10 20 40  
 HORIZONTAL  
 SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - PHASE 2**  
**STA. 529+00 TO STA. 534+00**

**LAK-US-20-24.99**



**LEGEND**

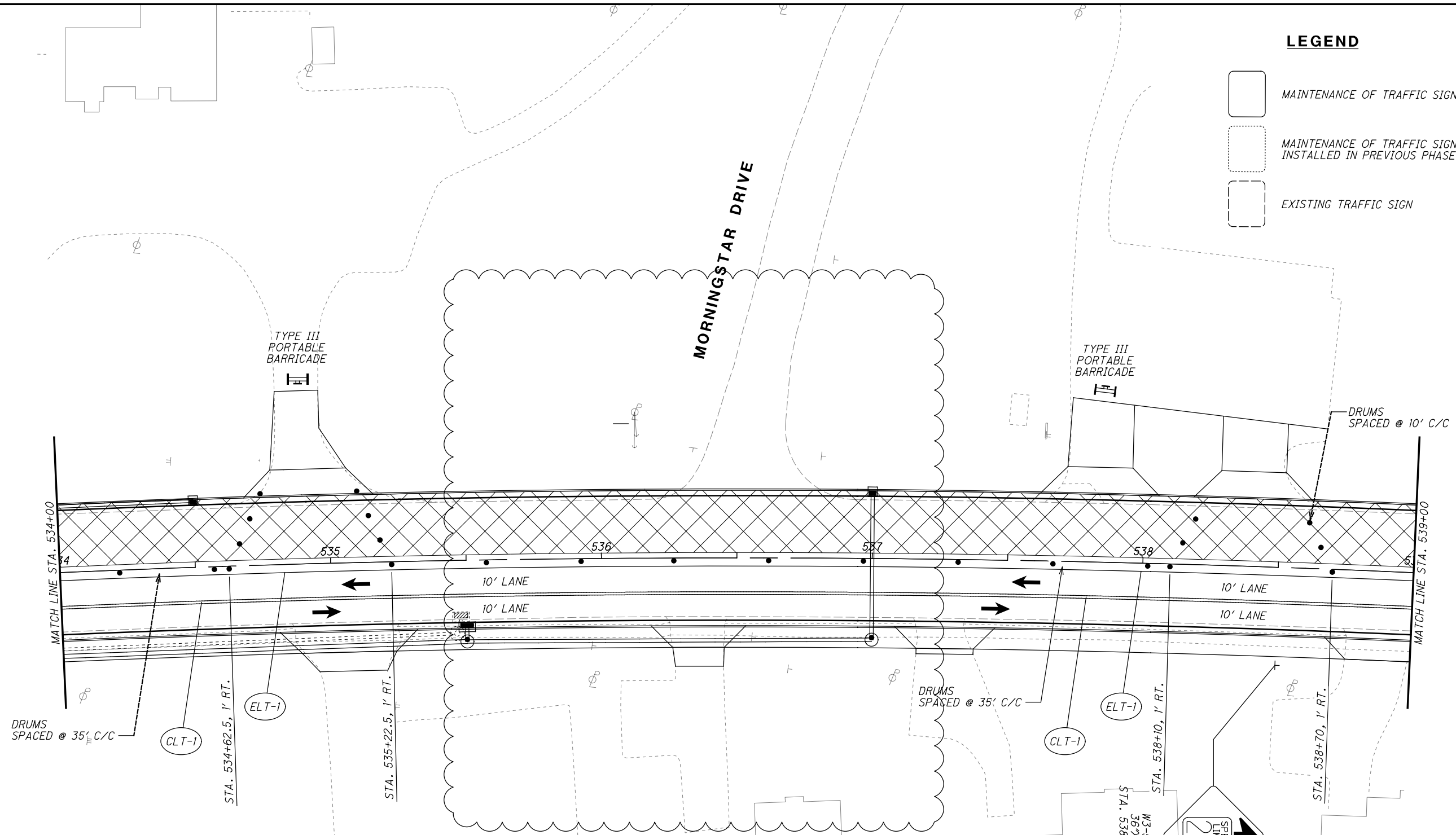
- |       |  |      |   |
|-------|--|------|---|
| (CLT) | ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873           | (CH) | ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT        |
| (LLT) | ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873             | (LA) | ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT               |
| (ELT) | ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873             | (SL) | ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT                |
| (CHT) | ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873     | (CW) | ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT           |
| (DLT) | ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873           | (DL) | ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT              |
| (LAT) | ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I | (TL) | ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT |
| (SLT) | ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I  | ( )  | WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE                    |
| (CL)  | ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT     | (X)  | PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE                |
| (LL)  | ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT       | (/)  | PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE 1         |
| (EL)  | ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT       | (→)  | TRAFFIC FLOW  |

**LEGEND**

- ( ) MAINTENANCE OF TRAFFIC SIGN
- ( ) MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
- ( ) EXISTING TRAFFIC SIGN

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**LEGEND**

- MAINTENANCE OF TRAFFIC SIGN
- MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
- EXISTING TRAFFIC SIGN

0 20 40  
HORIZONTAL SCALE IN FEET

CALCULATED EJT  
CHECKED WDB

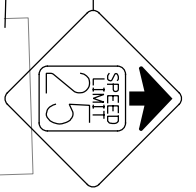
**MAINTENANCE OF TRAFFIC PLAN - PHASE 2**  
**STA. 534+00 TO STA. 539+00**

**LEGEND**

- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
- WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
- PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
- PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE 1
- TRAFFIC FLOW

- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

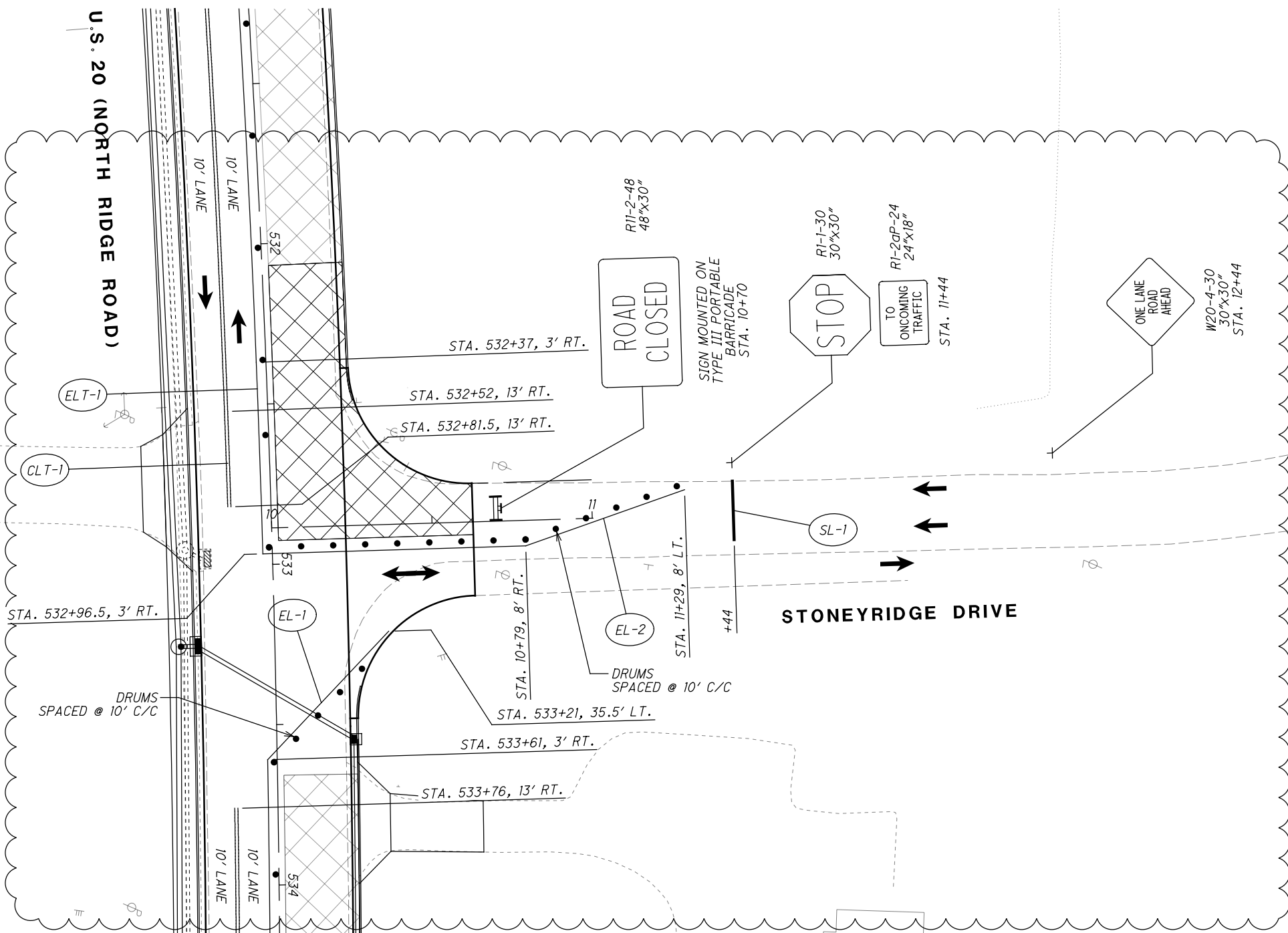
**U.S. 20 (NORTH RIDGE ROAD)**



**LAK-US-20-24.99**

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U.S. 20 (NORTH RIDGE ROAD)



**LEGEND**

- MAINTENANCE OF TRAFFIC SIGN
- MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
- EXISTING TRAFFIC SIGN

- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
- ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
- WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
- PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
- PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
- TRAFFIC FLOW

CALCULATED  
EJT  
CHECKED  
WDB

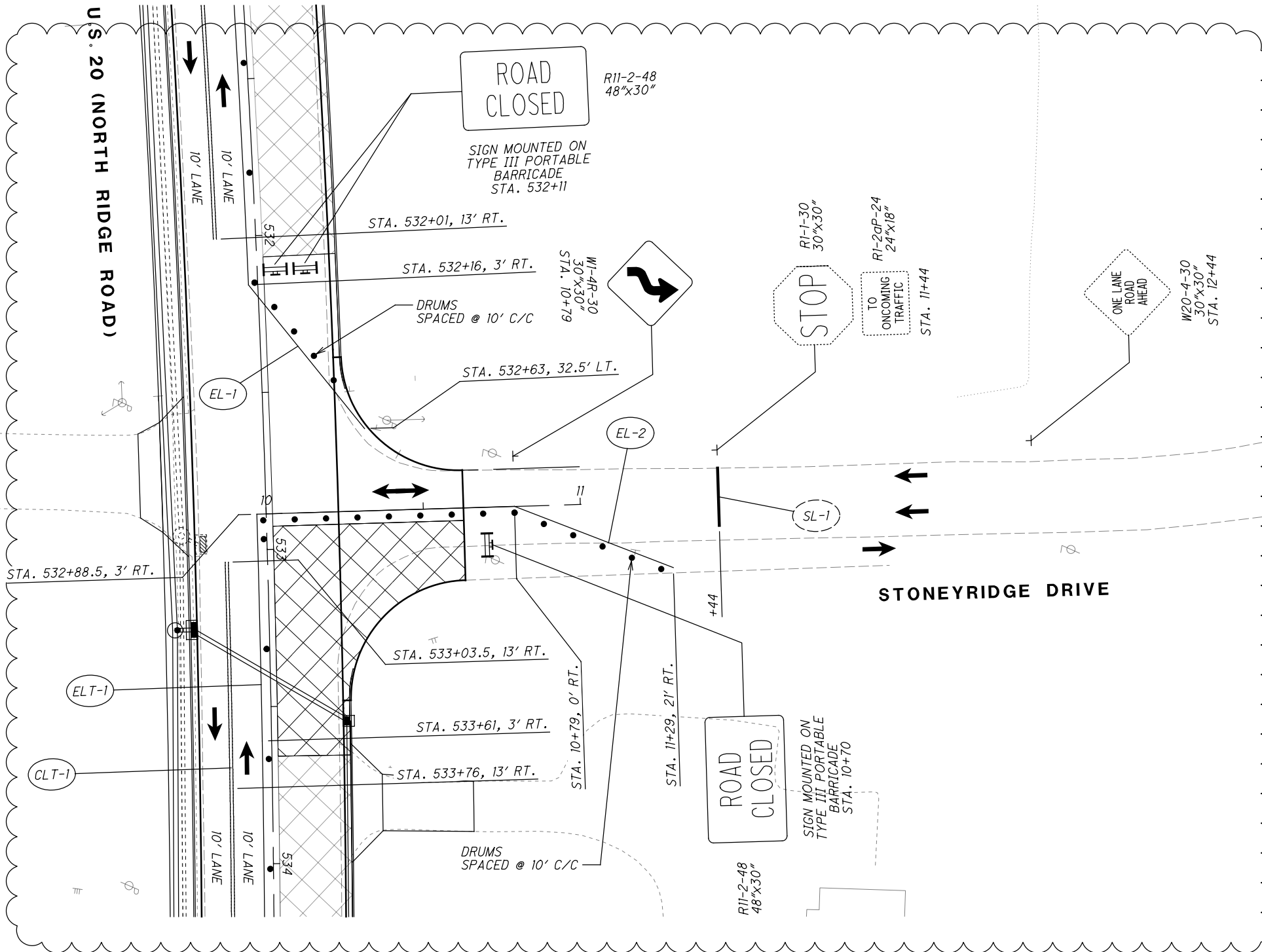
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SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - PHASE 2**  
**STONEYRIDGE DRIVE**




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U.S. 20 (NORTH RIDGE ROAD)













**LEGEND**

-  MAINTENANCE OF TRAFFIC SIGN
-  MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
-  EXISTING TRAFFIC SIGN

-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
-  PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
-  PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
-  TRAFFIC FLOW



MAINTENANCE OF TRAFFIC PLAN - PHASE 2  
STONEYRIDGE DRIVE

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136  
651

CALCULATED	EJT
CHECKED	WDB

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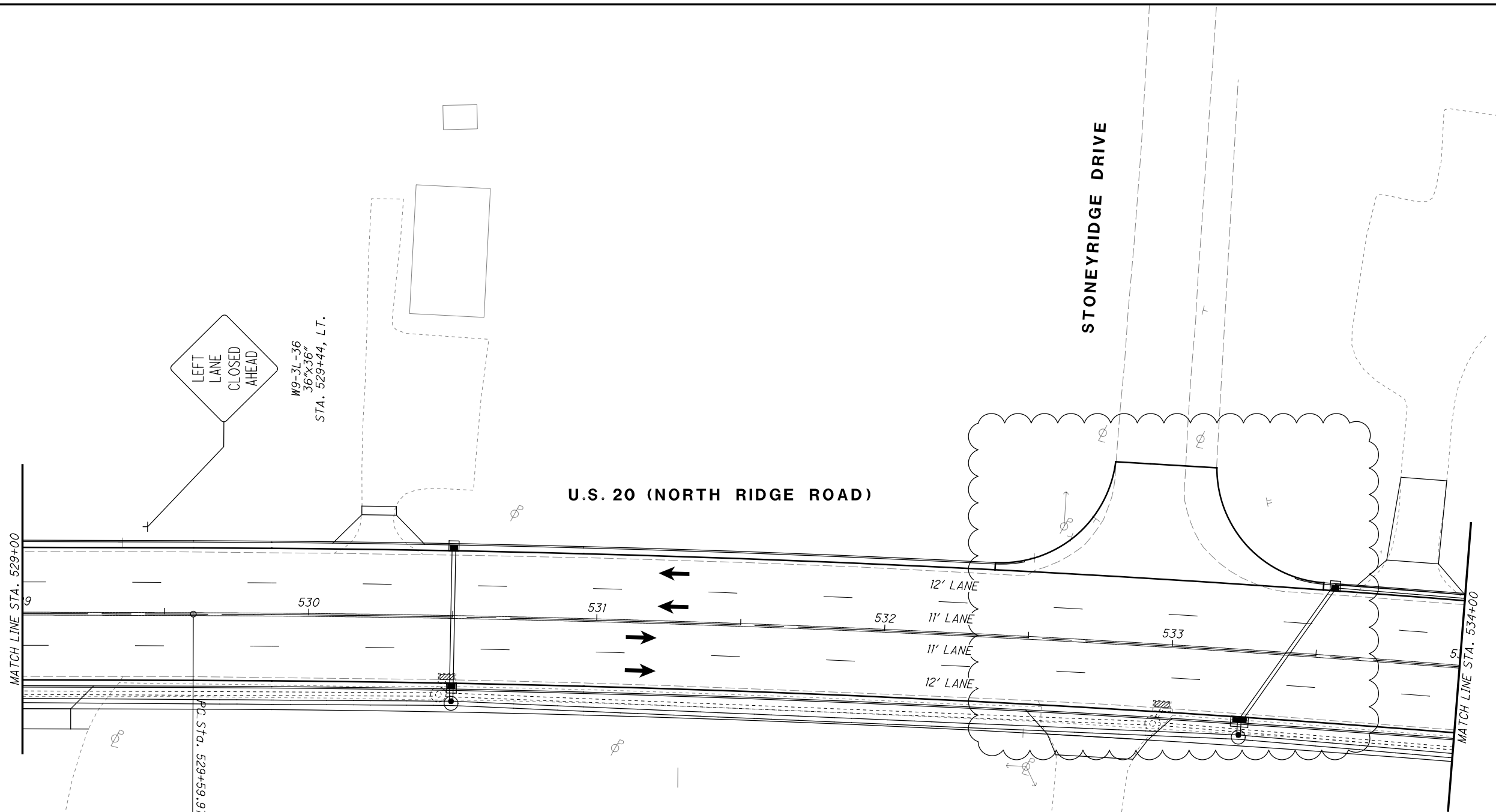
	MAINTENANCE OF TRAFFIC SIGN
	MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
	EXISTING TRAFFIC SIGN

**LEGEND**

	ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
	ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
	ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
	ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
	ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
	ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
	ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
	ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

	ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
	ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
	WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
	PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
	PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
	TRAFFIC FLOW



CALCULATED  
EJT  
CHECKED  
WDB

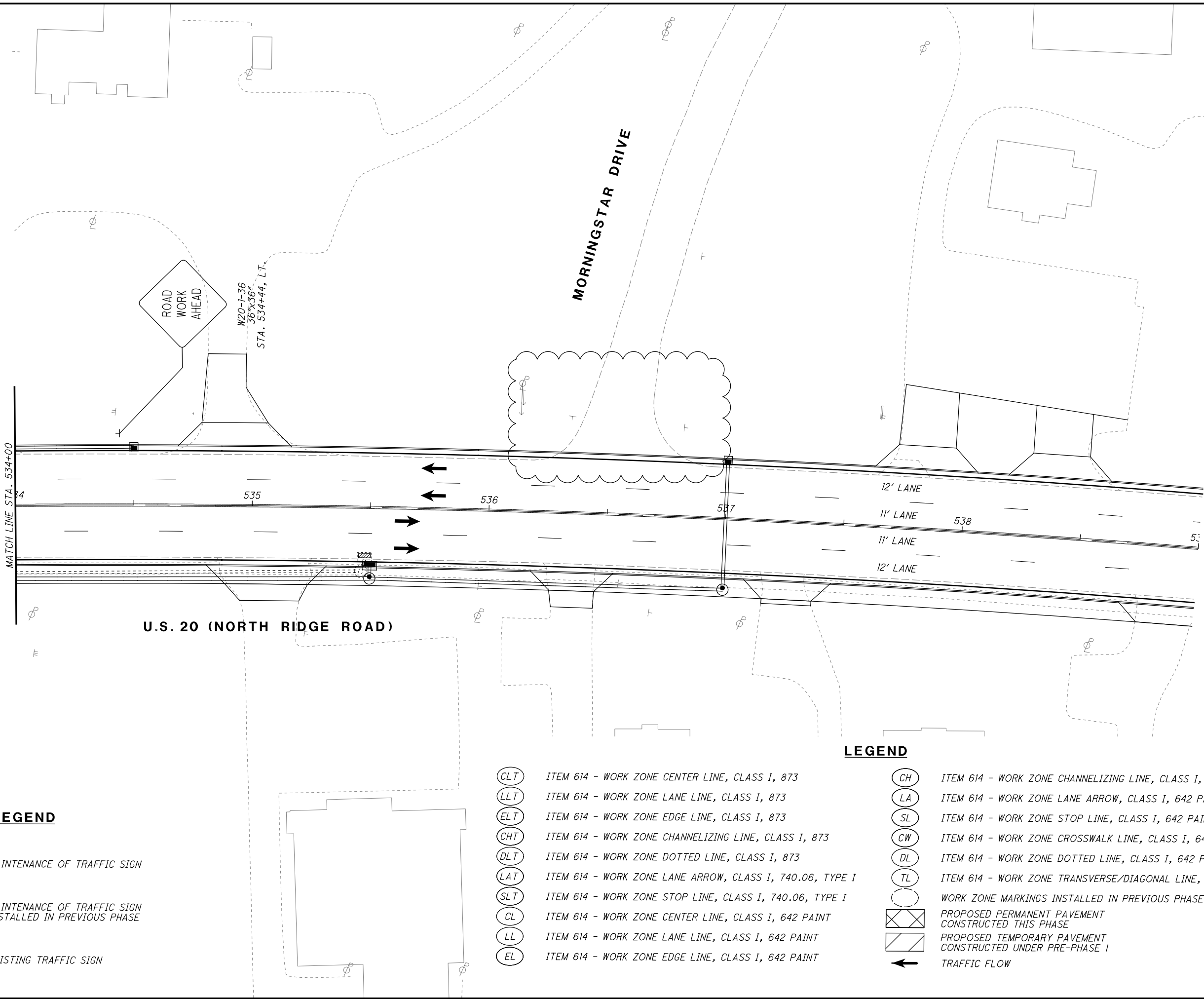
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HORIZONTAL  
SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - PHASE 3**  
**STA. 529+00 TO STA. 534+00**




**LAK-US-20-24.99**













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



**LEGEND**

-  MAINTENANCE OF TRAFFIC SIGN
-  MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
-  EXISTING TRAFFIC SIGN

-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
-  PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
-  PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
-  TRAFFIC FLOW






CALCULATED  
EJT  
CHECKED  
WDB

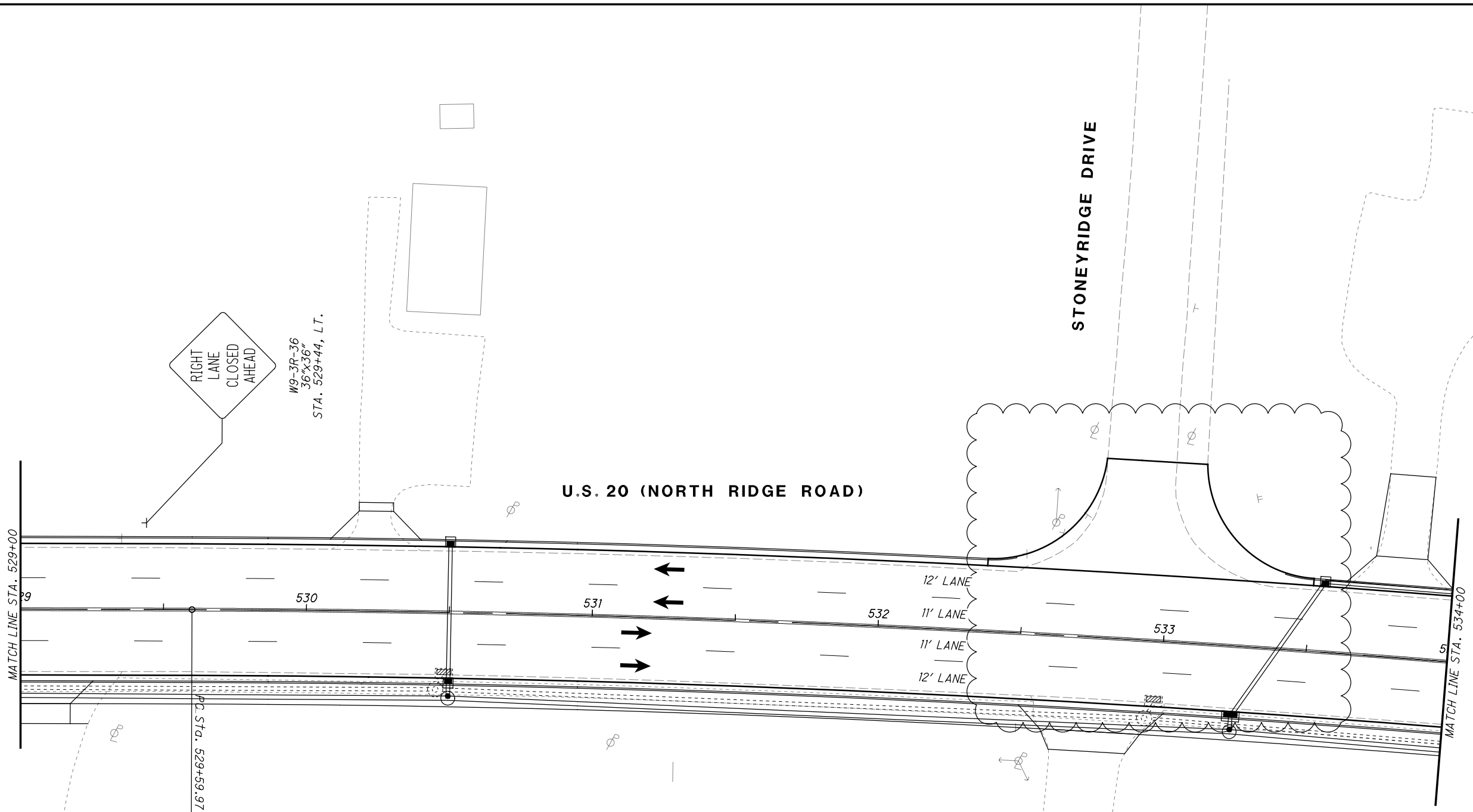
**MAINTENANCE OF TRAFFIC PLAN - PHASE 3  
STA. 534+00 TO STA. 539+00**

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171  
651











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- LEGEND**
-  MAINTENANCE OF TRAFFIC SIGN
  -  MAINTENANCE OF TRAFFIC SIGN  
INSTALLED IN PREVIOUS PHASE
  -  EXISTING TRAFFIC SIGN













U.S. 20 (NORTH RIDGE ROAD)

STONE RIDGE DRIVE

- LEGEND**
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
  -  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
  -  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
  -  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
  -  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
  -  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
  -  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
  -  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
  -  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
  -  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
-  PROPOSED PERMANENT PAVEMENT  
CONSTRUCTED THIS PHASE
-  PROPOSED TEMPORARY PAVEMENT  
CONSTRUCTED UNDER PRE-PHASE I
-  TRAFFIC FLOW

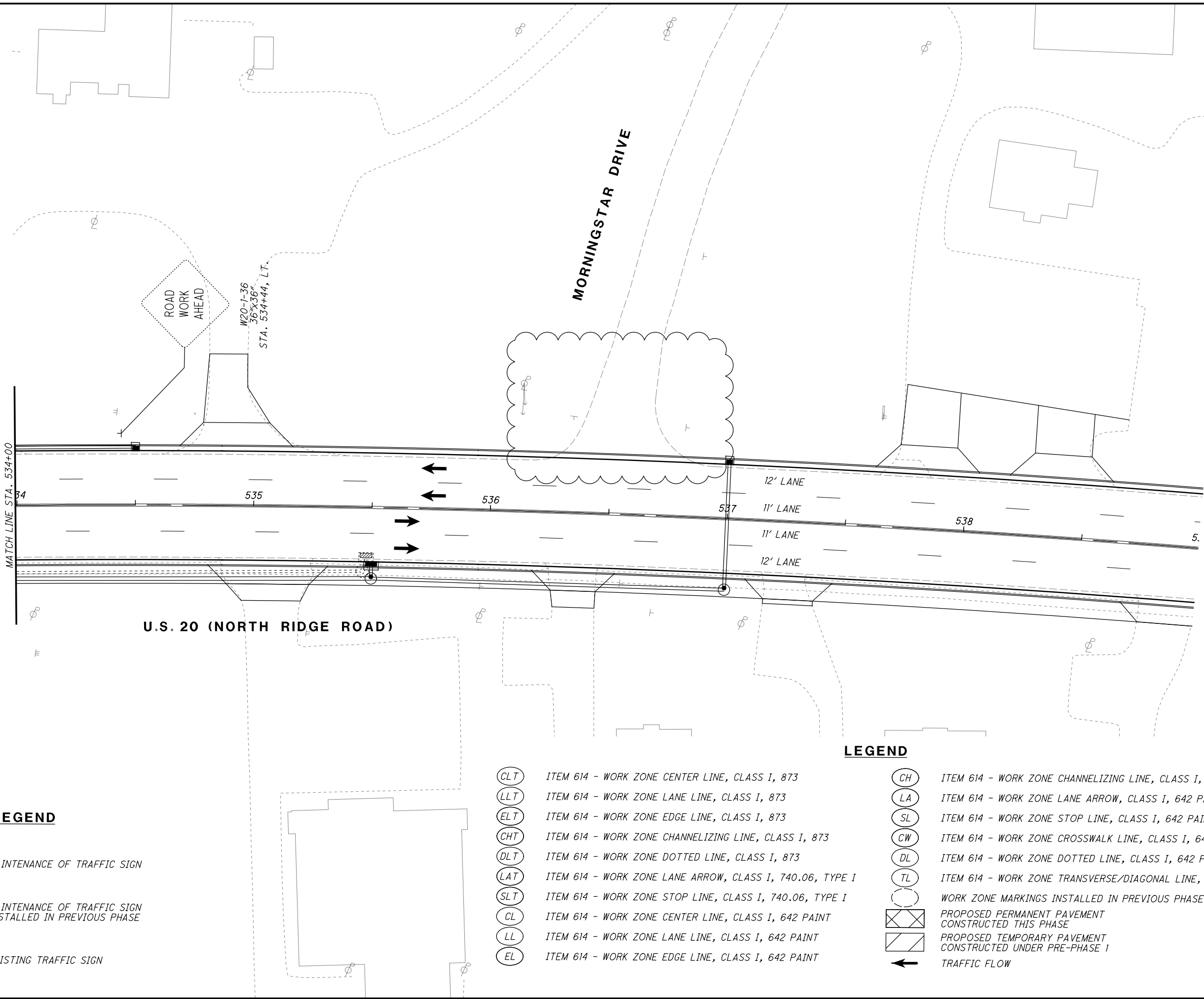


CALCULATED  
EJT  
CHECKED  
WDB




**MAINTENANCE OF TRAFFIC PLAN - PHASE 4**  
**STA. 529+00 TO STA. 534+00**











**LAK-US-20-24.99**

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











**LEGEND**

-  MAINTENANCE OF TRAFFIC SIGN
-  MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
-  EXISTING TRAFFIC SIGN

-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT

**LEGEND**

-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
-  PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
-  PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE I
-  TRAFFIC FLOW

CALCULATED  
EJT  
CHECKED  
WDB

0 20 40  
HORIZONTAL  
SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - PHASE 4  
STA. 534+00 TO STA. 539+00**

**LAK-US-20-24.99**

209  
651

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SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
16	17	18	19		225	226	229		233	236	240	425	01/NHS/04	EXT	TOTAL				
<b>ROADWAY</b>																			
LS													LS	201	11000	LS	CLEARING AND GRUBBING		
					2								2	202	20010	2	EACH	HEADWALL REMOVED	
						63,507				72,685		11,619	84,304	202	23001	84,304	SY	PAVEMENT REMOVED, AS PER PLAN	
					40								63,507	202	30000	63,507	SF	WALK REMOVED	
					75								40	202	30700	40	FT	CONCRETE BARRIER REMOVED	
													75	202	30800	75	SY	TRAFFIC ISLAND REMOVED	
						68				1,818			1,886	202	32000	1,886	FT	CURB REMOVED	
					12,980								12,980	202	35100	12,980	FT	PIPE REMOVED, 24" AND UNDER	
					834								834	202	35200	834	FT	PIPE REMOVED, OVER 24"	
					592								592	202	38000	592	FT	GUARDRAIL REMOVED	
					29								29	202	53100	29	EACH	MAILBOX REMOVED	
					54								54	202	58000	54	EACH	MANHOLE REMOVED	
					84								84	202	58300	84	EACH	CATCH BASIN OR INLET REMOVED	
					1								1	202	60010	1	EACH	MONUMENT ASSEMBLY REMOVED	
					255								255	SPECIAL	20270000	255	FT	FILL AND PLUG EXISTING CONDUIT, 12"	
													1,300	SPECIAL	20270110	1,300	FT	PIPE CLEANOUT, 24" AND UNDER	
			1,300										750	SPECIAL	20270120	750	FT	PIPE CLEANOUT, 27" TO 48"	
			750										2,110	202	75000	2,110	FT	FENCE REMOVED	
					2,110														
					1								1	202	98100	1	EACH	REMOVAL MISC.: SHED	
					33								33	202	98100	33	EACH	REMOVAL MISC.: BUSINESS SIGN	
					23								23	202	98100	23	EACH	REMOVAL MISC.: BOULDER	
					8								8	202	98100	8	EACH	REMOVAL MISC.: LIGHT POLE	
									12,514	372		677	13,563	203	10000	13,563	CY	EXCAVATION	
									1,455				3,853	203	20000	3,853	CY	EMBANKMENT	
										87,063		8,670	95,733	204	10000	95,733	SY	SUBGRADE COMPACTION	
1,600													1,600	204	13000	1,600	CY	EXCAVATION OF SUBGRADE	
1,600													1,600	204	30010	1,600	CY	GRANULAR MATERIAL, TYPE B	
													30	204	45000	30	HOUR	PROOF ROLLING	
													3,200	204	50000	3,200	SY	GEOTEXTILE FABRIC	
													3,200	204	51000	3,200	SY	GEOGRID	
													200	606	15050	200	FT	GUARDRAIL, TYPE MGS	
													3	606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
						93,608							93,608	608	10000	93,608	SF	4" CONCRETE WALK	
						2,399							2,399	608	52000	2,399	SF	CURB RAMP	
													20	623	38500	20	EACH	MONUMENT ASSEMBLY, TYPE C	
													29	SPECIAL	69050000	29	EACH	MAILBOX SUPPORT	
													3,800	SPECIAL	69065016	3,800	TON	WORK INVOLVING PETROLEUM CONTAMINATED SOIL	
													1,900	SPECIAL	69065022	1,900	GAL	WORK INVOLVING NON-REGULATED WATER	
													1,900	SPECIAL	69065024	1,900	GAL	WORK INVOLVING REGULATED WATER	
																		<b>EROSION CONTROL</b>	
													6	601	32204	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
													2	659	00100	2	EACH	SOIL ANALYSIS TEST	
													7,161	659	00300	7,161	CY	TOPSOIL	
													64,508	659	00500	64,508	SY	SEEDING AND MULCHING, CLASS 1	
													3,226	659	14000	3,226	SY	REPAIR SEEDING AND MULCHING	
													3,226	659	15000	3,226	SY	INTER-SEEDING	
													9	659	20000	9	TON	COMMERCIAL FERTILIZER	
													13.33	659	31000	13.33	ACRE	LIME	
													367	659	35000	367	MGAL	WATER	
													LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
													LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
													LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
													270,000	832	30000	270,000	EACH	EROSION CONTROL	

**GENERAL SUMMARY**

**LAK-US-20-24.99**

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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
18	19	225	229	231	236	425	01/NHS/04	EXT	TOTAL			NO.					
			1.5				1.5	602	20000	1.5	CY	<b>DRAINAGE</b> CONCRETE MASONRY					
500				712 25,893			1,212 25,893	605	13410	1,212 25,893	FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC					
450							450	605	31100	450	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC					
							450	605	31100	450	FT	AGGREGATE DRAINS					
50				1,522			1,572	611	00510	1,572	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS					
			55				55	611	04400	55	FT	12" CONDUIT, TYPE B					
	500		5				505	611	04600	505	FT	12" CONDUIT, TYPE C					
			5,006 895				5,006 895	611	05900	5,006 895	FT	15" CONDUIT, TYPE B					
							5,006 895	611	06100	5,006 895	FT	15" CONDUIT, TYPE C					
			2,310				2,310	611	07400	2,310	FT	18" CONDUIT, TYPE B					
			1,768				1,768	611	07600	1,768	FT	18" CONDUIT, TYPE C					
			1,570				1,570	611	10400	1,570	FT	24" CONDUIT, TYPE B					
			1,098				1,098	611	10600	1,098	FT	24" CONDUIT, TYPE C					
			150				150	611	13400	150	FT	30" CONDUIT, TYPE B					
			751				751	611	13600	751	FT	30" CONDUIT, TYPE C					
			1,900				1,900	611	16400	1,900	FT	36" CONDUIT, TYPE B					
			522				522	611	16600	522	FT	36" CONDUIT, TYPE C					
			720				720	611	19400	720	FT	42" CONDUIT, TYPE B					
			585				585	611	52902	585	FT	34" X 53" CONDUIT, TYPE B, 706.04					
	500						500	611	97400	500	FT	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	19				
	500						500	611	97400	500	FT	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	19				
			40				40	611	98150	40	EACH	CATCH BASIN, NO. 3					
			62				62	611	98180	62	EACH	CATCH BASIN, NO. 3A					
			6				6	611	98370	6	EACH	CATCH BASIN, NO. 6					
			1				1	611	98504	1	EACH	CATCH BASIN, NO. 2-2C					
			2				2	611	98510	2	EACH	CATCH BASIN, NO. 2-3					
27							27	611	98631	27	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	18				
	5						5	611	98634	5	EACH	CATCH BASIN RECONSTRUCTED TO GRADE					
	5						5	611	98700	5	EACH	INLET, SIDE DITCH					
			74				74	611	99574	74	EACH	MANHOLE, NO. 3					
			1				1	611	99586	1	EACH	MANHOLE, NO. 3 WITH 108" BASE I.D. AND 12" WEIR					
	10						10	611	99720	10	EACH	INSPECTION WELL					
	10,000						10,000	SPECIAL	61199820	10,000	LB	MISCELLANEOUS METAL	19				
			1				1	895	10040	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4					
												<b>PAVEMENT</b>					
	900						900	251	01000	900	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)					
			1,166 22,861			3,534	4,700 22,861	252	01500	4,700 22,861	FT	FULL DEPTH PAVEMENT SAWING					
								254	01000		SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3")					
	110		468 11,934				578 11,934	301	56000	578 11,934	CY	ASPHALT CONCRETE BASE, PG64-22, (449)					
								301	56001		CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22	19				
						259	259	301	56100	259	CY	ASPHALT CONCRETE BASE, PG64-22, (449), (DRIVEWAYS)					
	110		14,271			236	14,617	304	20000	14,617	CY	AGGREGATE BASE					
			11,665			116	11,781	407	20000	11,781	GAL	NON-TRACKING TACK COAT					
			7,832				7,832	441	00100	7,832	CY	ANTI-SEGREGATION EQUIPMENT					
			3,254				3,254	441	10101	3,254	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M	19				
			4,580				4,580	441	10200	4,580	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)					
			124				124	441	70000	124	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22					
			173				173	441	70300	173	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)					
						67	67	441	70500	67	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)					
							9	441	70801	9	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	17				
	130						1,095	452	10050	1,095	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS					
	920						6,080	452	12050	6,080	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS					

**GENERAL SUMMARY**

**LAK-US-20-24.99**



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SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED	EJTB	CHECKED	WDB
19	20		226	233	236	425		478	492		539	01/NHS/04		EXT	TOTAL							
<b>PAVEMENT (CONT.)</b>																						
					27,157							27,157	609	12000	27,157	FT	COMBINATION CURB AND GUTTER, TYPE 2					
			33		20							53	609	14000	53	FT	CURB, TYPE 2-A					
80			35		1,867	134						2,116	609	26000	2,116	FT	CURB, TYPE 6					
					86							86	609	54000	86	SY	6" CONCRETE TRAFFIC ISLAND					
					54							54	617	10100	54	CY	COMPACTED AGGREGATE					
					18,145							18,145	874	20001	18,145	FT	LONGITUDINAL JOINT PREPARATION, AS PER PLAN				19	
<b>WATER WORK</b>																						
	10											10	638	11101	10	EACH	METER AND CHAMBER REMOVED AND RESET, AS PER PLAN				20	
								22				22	SPECIAL	63820176	22	FT	12" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD				20	
	10							4				14	SPECIAL	63820500	14	EACH	VALVE BOX ADJUSTED TO GRADE, LCDU STANDARD				20	
								2				2	SPECIAL	63820750	2	EACH	6" FIRE HYDRANT, LCDU STANDARD				20	
								2				2	SPECIAL	63820752	2	EACH	FIRE HYDRANT REMOVED FOR STORAGE, LCDU STANDARD				20	
	2,400											2,400	SPECIAL	63820770	2,400	FT	1" COPPER WATER SERVICE LINE, LCDU STANDARD				20	
	20											20	SPECIAL	63820902	20	EACH	SERVICE BOX ADJUSTED TO GRADE, LCDU STANDARD				20	
<b>SANITARY SEWER</b>																						
								56				56	611	00901	56	FT	6" CONDUIT, TYPE B, AS PER PLAN ,748.01				20	
								10				10	611	99655	10	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN				20	
<b>TRAFFIC CONTROL</b>																						
	700								758			758	621	00100	758	EACH	RPM					
												700	621	54000	700	EACH	RAISED PAVEMENT MARKER REMOVED					
				4								4	626	00110	4	EACH	BARRIER REFLECTOR, TYPE 2(BIDIRECTIONAL)					
												259	630	02100	259	FT	GROUND MOUNTED SUPPORT, NO. 2 POST					
												1,860	630	03100	1,860	FT	GROUND MOUNTED SUPPORT, NO. 3 POST					
												27	630	08600	27	EACH	SIGN POST REFLECTOR					
												12	630	75000	12	EACH	SIGN ATTACHMENT ASSEMBLY					
												8	630	79500	8	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED					
												1,106.9	630	80100	1,106.9	SF	SIGN, FLAT SHEET					
												109	630	84900	109	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL					
												8	630	85100	8	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION					
												98	630	86002	98	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL					
												20	630	87500	20	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL					
												4	630	87520	4	EACH	REMOVAL OF POLE MOUNTED SIGN AND REERECTION					
								0.57				0.57	642	00204	0.57	MILE	LANE LINE, 6", TYPE 1					
								0.57				0.57	642	00300	0.57	MILE	CENTER LINE, TYPE 1					
								539				539	642	00404	539	FT	CHANNELIZING LINE, 12", TYPE 1					
								136				136	642	00500	136	FT	STOP LINE, TYPE 1					
								620				620	642	00620	620	FT	CROSSWALK LINE, 12", TYPE 1					
								201				201	642	00700	201	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1					
								14				14	642	01300	14	EACH	LANE ARROW, TYPE 1					
								2.01				2.01	646	10010	2.01	MILE	EDGE LINE, 6"					
								6.19				6.19	646	10110	6.19	MILE	LANE LINE, 6"					
								4.32				4.32	646	10200	4.32	MILE	CENTER LINE					
								2,264				2,264	646	10310	2,264	FT	CHANNELIZING LINE, 12"					
								691				691	646	10400	691	FT	STOP LINE					
								1,095				1,095	646	10510	1,095	FT	CROSSWALK LINE, 12"					
								756				756	646	10600	756	FT	TRANSVERSE/DIAGONAL LINE					
								38				38	646	20300	38	EACH	LANE ARROW					

**GENERAL SUMMARY**

**LAK-US-20-24.99**

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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED	EJTB	CHECKED	WDB	
16	21	22	23		32F	37	41	46	46A	50		01/NHS/04	EXT	TOTAL								
								325					325	606	15051	325	FT	<b>MAINTENANCE OF TRAFFIC</b>				23
								1					1	606	26151	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)				23
								1					1	606	26551	1	EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN				23
	61,300											61,300	608	21201	61,300	SF	TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN				26	
					82	393		734				1,209	611	04401	1,209	FT	12" CONDUIT, TYPE B, AS PER PLAN				23, 25	
					10			24				34	611	98371	34	EACH	CATCH BASIN, NO. 6, AS PER PLAN				23, 25	
					10			25				35	611	98635	35	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN				23, 25	
								10				10	611	99654	10	EACH	MANHOLE ADJUSTED TO GRADE					
		1,000										1,000	614	11110	1,000	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE					
	20				56	12	12	32		36		20	SPECIAL	61411300	20	EACH	WORK ZONE TRAFFIC SIGNAL				21	
			LS									148	614	12384	148	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)					
												LS	614	12420	LS		DETOUR SIGNING					
					109	15	15	83		63		285	614	13310	285	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)					
								10				10	614	13312	10	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)					
					109	15	15	88		63		290	614	13360	290	EACH	OBJECT MARKER, TWO WAY					
	120											120	614	18601	120	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN				21	
	3.61					0.22	0.17	0.32	0.02	0.14		4.48	614	20100	4.48	MILE	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT					
									0.05			0.05	614	20356	0.05	MILE	WORK ZONE LANE LINE, CLASS I, 6", 873					
	12.38											12.38	614	20550	12.38	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT					
	2.71					2.47	1	2.48	0.04	1.3		10	614	21100	10	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT					
						0.32	1.54		0.3	1.2		3.36	614	21350	3.36	MILE	WORK ZONE CENTER LINE, CLASS I, 873					
	8.66											8.66	614	21550	8.66	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT					
	1.33				1.38	4.6	1.69	4.01	0.04	3.14		16.19	614	22110	16.19	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT					
					0.17	0.15	1.93		0.05	1.44		3.74	614	22326	3.74	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873					
	4.26											4.26	614	22360	4.26	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT					
	1,506					467	664	1,344		1,395		5,376	614	23200	5,376	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT					
							43			225		268	614	23130	268	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873					
	4,032											4,032	614	23680	4,032	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT					
						150			540			690	614	24122	690	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 873					
						787	500	450				1,737	614	24200	1,737	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT					
	648					171	81	501		471		1,872	614	25200	1,872	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT					
	1,676				17							1,693	614	25620	1,693	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT					
	566					436	214	266		178		1,660	614	26200	1,660	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT					
						10	162			12		184	614	26400	184	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I					
	1,338											1,338	614	26610	1,338	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT					
	1,582					274		1,016				2,872	614	27050	2,872	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT					
	3,390											3,390	614	27250	3,390	FT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT					
	23					10	13	26		28		100	614	30200	100	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT					
							1			3		4	614	30400	4	EACH	WORK ZONE ARROW, CLASS I, 740.06, TYPE I					
	62											62	614	30650	62	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT					
		65										65	614	40051	65	EACH	BUSINESS ENTRANCE SIGN, AS PER PLAN				22	
	LS											LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC					
					6,565	1,410	790	8,647				17,412	615	20001	17,412	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN				23	
	550											550	616	10000	550	MGAL	WATER					
					4,374	1,060	1,530	6,179		4,713		17,856	622	41100	17,856	FT	PORTABLE BARRIER, UNANCHORED					
												250,000	SPECIAL	69098000	250,000	EACH	REIMBURSEMENT FOR MOT ITEMS PERMANENTLY DAMAGED BY TRAFFIC				23	
																	<b>INCIDENTALS</b>					
												97,500	100	51100	97,500	EACH	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION BOARD					
	LS											LS	108	10000	LS		CPM PROGRESS SCHEDULE					
												LS	614	11000	LS		MAINTAINING TRAFFIC					
												24	619	16021	24	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN				20A	
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING					
												LS	624	10000	LS		MOBILIZATION					
LS												LS	SPECIAL	69098400	LS		PRECONSTRUCTION VIDEO DOCUMENTATION				16	

**GENERAL SUMMARY**

**LAK-US-20-24.99**

SHEET NO.	REFERENCE NO.	STATION		SIDE	CFN	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	895
		FROM	TO			ROCK CHANNEL PROTECTION, TYPE C W/ GEOTEXTILE FABRIC	CONCRETE MASONARY	12" CONDUIT, TYPE B	12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	30" CONDUIT, TYPE B	30" CONDUIT, TYPE C	36" CONDUIT, TYPE B	36" CONDUIT, TYPE C	42" CONDUIT, TYPE B	34"x 53" CONDUIT, TYPE B	CATCH BASIN-2-2C	CATCH BASIN-2-3	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 6	MANHOLE, NO. 3	MANHOLE, NO. 3 W/108" BASE I.D. & 12" WEIR	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4
						CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
256	D138	NOT USED																											
258	D54	495+32.00	496+74.00	RT						5																			
258	D55	496+74.00	498+20.00	RT							5																		
258	D56	498+20.00	499+62.00	RT								5																	
258	D140	NOT USED																											
259	D57	499+62.00	501+62.00	RT							5																		
259	D58	501+62.00	502+44.00	RT																									
259	D59	503+50.00		RT & LT	1990703						59																		
260	D60	503+50.00	506+62.00	RT																									
260	D61	506+62.00		RT & LT	1990704																								
260	D62	560+62.00	509+00.00	RT																									
261	D63	509+00.00	509+30.00	RT & LT	1990671/1990756						186																		
261	D64	509+00.00	512+00.00	RT																									
261	D65	512+00.00	513+75.00	RT																									
261	D66	513+75.00		RT	1990707																								
262	D67	513+75.00	514+50.00	RT																									
262	D68	514+50.00		RT							7																		
262	D69	514+50.00	515+50.00	RT																									
262	D70	515+50.00		RT & LT	1990672																								
262	D71	515+50.00	517+25.00	RT																									
262	D72	517+25.00		RT & LT	1990708																								
262	D73	517+25.00	518+75.00	RT																									
262	D74	518+75.00		RT & LT	1990674																								
263	D75	518+75.00	520+50.00	RT																									
263	D76	520+50.00		RT & LT	1990676																								
263	D77	520+50.00	522+50.00	RT																									
263	D78	522+50.00		RT & LT	1990713																								
263	D79	522+50.00	523+80.00	RT																									
263	D80	523+75.00	523+80.00	RT & LT	1990739																								
264	D134	523+80.00	524+47.00	RT																									
264	D135	524+47.00	526+00.00	RT																									
264	D136	526+00.00		RT & LT	1990731																								
264	D81	526+00.00	528+50.00	RT																									
264	D82	525+45.00	526+00.00	LT																									
264	D83	528+50.00	528+95.00	RT & LT	1990759								55																
265	D84	528+50.00	530+50.00	RT																									
265	D85	530+50.00		RT & LT	1990746																								
265	D86	530+50.00	533+25.00	RT																									
265	D87	533+25.00	534+50.00	RT & LT	1990760/1990762																								
265	D88	533+25.00	535+50.00	RT																									
266	D89	535+50.00		RT																									
266	D90	535+50.00	537+00.00	RT																									
266	D91	537+00.00		RT & LT	1990748																								
267	D92	540+00.00		RT & LT	1990749																								
267	D93	540+00.00	542+25.00	RT																									
267	D94	542+25.00		RT & LT	1990787																								
267	D95	542+25.00	544+00.00	RT																									
267	D96	544+00.00		RT & LT	1990788																								
268	D97	544+00.00	546+50.00	RT																									
268	D98	546+50.00	548+50.00	RT																									
268	D99	546+50.00		RT & LT	1990789																								
268	D100	548+50.00	550+00.00	RT																									
269	D101	550+00.00	10+54.00	RT & LT	1990776																								
269	D102	550+00.00	551+87.00	RT																									
269	D103	551+87.00		RT & LT	1990777																								
269	D104	551+87.00	554+52.00	RT																									
<b>TOTALS CARRIED TO SHEET 229</b>								55					2054	265	927	524	452	147											

CALCULATED CWH	CHECKED JMP
<b>DRAINAGE SUBSUMMARY</b>	
<b>LAK-US-20-24.99</b>	
228	651

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SHEET NO.	REFERENCE NO.	STATION		SIDE	CFN	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	895			
		FROM	TO			ROCK CHANNEL PROTECTION, TYPE C W/ GEOTEXTILE FABRIC	CONCRETE MASONARY	12" CONDUIT, TYPE B	12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	30" CONDUIT, TYPE B	30" CONDUIT, TYPE C	36" CONDUIT, TYPE B	36" CONDUIT, TYPE C	42" CONDUIT, TYPE B	34"x 53" CONDUIT, TYPE B, 706.02	CATCH BASIN-2-2C	CATCH BASIN-2-3	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 6	MANHOLE, NO. 3	MANHOLE, NO. 3 W/108" BASE I.D. & 12" WEIR	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4	
						CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA		
270	D105	554+50.00		RT & LT	1990778				55						8							1	1		1					
270	D106	554+50.00	555+76.00	RT									125																	
270	D107	554+50.00		RT & LT																		1								
270	D108	556+18.00	0+28.50	RT & LT	1990779				67														1		1					
270	D109	556+18.00	556+28.00	RT								10										1								
270	D110	556+28.00	558+77.00	RT					249																					
270	D111	558+77.00	558+88.00	RT	1990780				61														1		1					
271	D112	562+50.00		RT & LT	1990781/1990791				59														2		1					
271	D113	562+50.00	564+96.00	RT	1990790				246																					
272	D114	564+96.00		RT & LT	1990782/1990792				60														1		1	1				
272	D115	564+96.00	567+75.00	RT	1990793/1990794				67		209														1					
272	D116	567+75.00		RT & LT	1990783/1990795				60														1	1	1					
272	D117	567+75.00	569+28.00	RT	1990784						154																			
273	D118	569+28.00		RT & LT	1990796/1990797				58														2		1					
273	D119	569+28.00	571+50.00	RT	1990798				221																					
273	D120	571+50.00		RT & LT	1990785/1990800				48														1	1	1					
470	D121	444+29.00	444+38.00	RT											40											1	1			
470	D122	443+79.00	444+30.00	RT											74						1									
470	D123	443+77.00	443+79.00	RT		3.3	0.4								120															
471	D124	476+00.00	477+35.00	LT		2.3												380												
262	D125	516+88.00	517+21.00	RT					33														1							
472	D126	524+23.00	524+47.00	RT																					1					
472	D127	523+96.00	524+23.00	RT			0.7																							
280	D129	93+30.00	93+03.00	LT			0.4								74															
280	D130	93+03.00		LT	1990849										17							1								
280	D131	93+03.00	95+30.00	LT	1990848										227										1					
280	D132	95+30.00	99+78.00	LT	1990847										227										1					
281	D133	97+57.00	99+78.00	LT	1990846										221										1					
278	D134	10+54.00							28																1					
TOTALS THIS SHEET						6	1.5			1312		414	125	766	242			380		585		2	8	8	2	13	1	1		
TOTALS FROM SHEET 227									5	1640	630	969	1119	352	709	150	751						12	33	2	30				
TOTALS FROM SHEET 228								55		2054	265	927	524	452	147			1900	142	720		1		20	21	2	31			
TOTALS CARRIED TO GENERAL SUMMARY						6	1.5	55	5	5006	895	2310	1768	1570	1098	150	751	1900	522	720		585	1	2	40	62	6	74	1	1

<b>DRAINAGE SUBSUMMARY</b>	CALCULATED	
	CHECKED	
<b>LAK-US-20-24.99</b>		229
		651

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SHEET NO.	REFERENCE NO.	STATION		605	605	611	BENDS AND BRANCHES FOR INFORMATION ONLY				
				6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	6" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLET	6" - 45 DEG. BEND	6" - 90 DEG. BEND	6" X 6" TEE	6" X 6" WYE	6" X 6" CROSS
		FROM	TO	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
241	UD-1	NOT USED									
241	UD-2	410+70.84	412+00.00	119.2		10.0					
241	UD-3	410+70.95	412+00.00	119.1		10.0					
241	UD-4	412+00.00	413+75.00	165.0		10.0					
241	UD-5	412+00.00	415+50.00	340.0		10.0					
241	UD-6	413+75.00	415+50.00	165.0		10.0					
242	UD-7	415+50.00	418+04.00	244.0		10.0					
242	UD-8	415+50.00	418+04.00	244.0		10.0					
242	UD-9	418+04.00	420+40.00	226.0		10.0					
242	UD-10	418+04.00	420+40.00	226.0		10.0					
243	UD-11	420+40.00	423+00.00	250.0		10.0					
243	UD-12	420+40.00	421+75.00	125.0		10.0					
243	UD-13	421+75.00	423+00.00	115.0		10.0					
243	UD-14	423+00.00	425+27.50	217.5		10.0					
243	UD-15	423+00.00	425+27.50	217.5		10.0					
244	UD-16	425+27.50	426+00.00	62.5		10.0					
244	UD-17	425+27.50	426+00.00	62.5		10.0					
247	UD-18	439+65.00	442+10.00	235.0		10.0					
247	UD-19	439+65.00	442+10.00	235.0		10.0					
247	UD-20	442+10.00	444+38.00	218.0		10.0					
247	UD-21	442+10.00	444+38.00	218.0		10.0					
248	UD-22	444+38.00	446+17.00	169.0		10.0					
248	UD-23	444+38.00	446+17.00	169.0		10.0					
248	UD-24	446+17.00	449+00.00	273.0		10.0					
248	UD-25	446+17.00	449+00.00	273.0		10.0					
249	UD-26	449+00.00	451+40.00	230.0		10.0					
249	UD-27	449+00.00	451+40.00	230.0		10.0					
249	UD-28	451+40.00	454+50.00	300.0		10.0					
249	UD-29	451+40.00	454+50.00	300.0		10.0					
250	UD-30	454+50.00	457+00.00	240.0		10.0					
250	UD-31	454+50.00	457+00.00	240.0		10.0					
250	UD-32	457+00.00	459+50.00	240.0		10.0					
250	UD-33	457+00.00	459+50.00	240.0		10.0					
251	UD-34	459+50.00	462+90.00	330.0		10.0					
251	UD-35	459+50.00	462+90.00	330.0		10.0					
251	UD-36	462+90.00	463+55.93		92.1	10.0					
251	UD-37	463+83.55	465+00.00	143.0		10.0					
251	UD-38	462+90.00	465+00.00	200.0		10.0					
252	UD-39	465+00.00	467+59.00	249.0		10.0					
252	UD-40	465+00.00	467+59.00	249.0		10.0					
252	UD-41	467+59.00	468+75.00	106.0		10.0					
252	UD-42	467+59.00	468+75.00	106.0		10.0					
252	UD-43	468+75.00	470+00.00	115.0		10.0					
252	UD-44	468+75.00	470+00.00	115.0		10.0					
253	UD-45	470+00.00	472+50.00	240.0		10.0					
253	UD-46	470+00.00	472+50.00	240.0		10.0					
253	UD-47	472+50.00	475+10.00	250.0		10.0					
253	UD-48	472+50.00	475+10.00	250.0		10.0					
254	UD-49	475+10.00	477+50.00	230.0		10.0					
254	UD-50	475+10.00	477+50.00	230.0		10.0					
254	UD-51	477+50.00	479+00.00	140.0		10.0					
254	UD-52	477+50.00	479+00.00	140.0		10.0					
255	UD-53	479+00.00	481+00.00	190.0		10.0					
255	UD-54	479+00.00	481+00.00	190.0		10.0					
255	UD-55	481+00.00	483+50.00	240.0		10.0					
255	UD-56	481+00.00	482+25.00	115.0		10.0					
255	UD-57	482+25.00	483+50.00	115.0		10.0					
255	UD-58	483+50.00	486+40.00	280.0		10.0					
255	UD-59	483+50.00	486+40.00	280.0		10.0					
259	UD-60	500+40.00	501+25.00		85.0						

TOTALS CARRIED TO COLUMN 2 11781 177 580

SHEET NO.	REFERENCE NO.	STATION		605	605	611	BENDS AND BRANCHES FOR INFORMATION ONLY				
				6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	6" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLET	6" - 45 DEG. BEND	6" - 90 DEG. BEND	6" X 6" TEE	6" X 6" WYE	6" X 6" CROSS
		FROM	TO	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
259	UD-61	500+40.00	501+25.00		85.0						
259	UD-62	501+25.00	503+50.00	225.0		24.0		1			
259	UD-63	501+25.00	503+50.00	215.0		10.0					
259	UD-64	503+50.00	506+62.00	312.0		24.0		1			
259	UD-65	503+50.00	506+62.00	302.0		10.0					
260	UD-66	506+62.00	509+13.72	251.7		24.0		1			
260	UD-67	506+62.00	509+00.00	228.0		10.0					
261	UD-68	509+00.00	512+00.00	300.0		31.0		1			
261	UD-69	509+00.00	512+00.00	290.0		10.0					
261	UD-70	512+00.00	513+75.00	175.0		24.0		1			
261	UD-71	512+00.00	514+50.00	240.0		10.0					
261	UD-72	513+75.00	518+75.00	500.0		24.0		1			
262	UD-73	514+50.00	516+87.85	233.3		10.0					
262	UD-74	517+09.81	517+37.13	33.8		10.0					
262	UD-75	517+37.13	518+75.00	127.9		10.0					
262	UD-76	518+75.00	520+50.00	175.0		24.0		1			
262	UD-77	518+75.00	520+50.00	165.0		10.0					
263	UD-78	520+50.00	522+50.00	190.0		10.0					
263	UD-79	520+50.00	522+50.00	190.0		10.0					
263	UD-80	522+50.00	523+75.00	115.0		10.0					
263	UD-81	522+50.00	523+75.00	115.0		10.0					
263	UD-82	523+75.00	526+00.00	215.0		10.0					
263	UD-83	523+75.00	526+00.00	215.0		10.0					
264	UD-84	526+00.00	528+95.00	285.0		10.0					
264	UD-85	526+00.00	528+50.00	240.0		10.0					
264	UD-86	528+50.00	530+50.00	175.0		33.0		1			
264	UD-87	528+50.00	530+50.00	190.0		10.0					
265	UD-88	530+50.00	533+25.00	275.0		24.0		1			
265	UD-89	530+50.00	533+25.00	265.0		10.0					
265	UD-90	NOT USED									
265	UD-91	533+25.00	535+50.00	225.0		24.0		1			
265	UD-92	533+25.00	535+50.00	215.0		10.0					
266	UD-93	535+50.00	538+00.00	264.0		10.0		1			
266	UD-94	535+50.00	538+00.00	240.0		24.0					
266	UD-95	NOT USED									
266	UD-96	538+00.00	540+00.00	200.0		24.0		1			
266	UD-97	538+00.00	540+00.00	190.0		10.0					
267	UD-98	540+00.00	542+25.00	225.0		24.0		1			
267	UD-99	540+00.00	542+25.00	215.0		10.0					
267	UD-100	542+25.00	544+00.00	175.0		24.0		1			
267	UD-101	542+25.00	544+00.00	165.0		10.0					
268	UD-102	544+00.00	546+50.00	240.0		10.0					
268	UD-103	544+00.00	546+50.00	240.0		10.0					
268	UD-104	546+50.00	550+11.68	359.4		10.0					
268	UD-105	546+50.00	550+03.00	343.0		10.0					
269	UD-106	550+03.00	550+14.99	9.7		10.0					
269	UD-107	10+54.00	11+50.00	86.0		10.0					
269	UD-108	10+54.00	11+00.00	36.0		10.0					
269	UD-109	550+36.94	550+49.87	13.8		10.0					
269	UD-110	550+49.87	551+87.00	128.7		10.0					
269	UD-111	550+47.99	551+87.00	136.3		10.0					
269	UD-112	551+87.00	554+50.00	253.0		10.0					
269	UD-113	551+87.00	554+50.00	253.0		10.0					

TOTALS COLUMN 2 10456 85 712

TOTALS FROM COLUMN 1 11781 177 580

TOTALS CARRIED TO SHEET 231 22238 262 1292

CALCULATED CWH CHECKED JMP  
 UNDERDRAIN SUBSUMMARY  
 LAK-US-20-24.99  
 230  
 651

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SHEET NO.	REFERENCE NO.	STATION		605	605	611	BENDS AND BRANCHES FOR INFORMATION ONLY				
				6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT	6" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLET FT	6" - 45 DEG. BEND	6" - 90 DEG. BEND	6" X 6" TEE	6" X 6" WYE	6" X 6" CROSS
							EACH	EACH	EACH	EACH	EACH
270	UD-114	554+50.00	555+45.48	114.0		10.0					
270	UD-115	554+50.00	555+76.66	112.5		10.0					
270	UD-116	555+75.71	555+76.66	35.7		10.0					
270	UD-117	556+06.01	556+28.13	30.5		10.0					
270	UD-118	556+27.17	556+28.71	37.7		10.0					
270	UD-119	556+27.17	558+07.40	199.6		10.0					
270	UD-120	556+27.17	559+50.00	316.3		10.0					
270	UD-121	NOT USED									
270	UD-122	558+88.00	559+50.00	49.4		10.0					
271	UD-123	559+50.00	562+50.00	290.0		10.0					
271	UD-124	559+50.00	562+50.00	290.0		10.0					
271	UD-125	562+50.00	564+96.00	236.0		10.0					
271	UD-126	562+50.00	564+96.00	236.0		10.0					
272	UD-127	564+96.00	565+33.14		81.9	10.0					
272	UD-128	564+96.00	565+70.62		139.1	10.0					
272	UD-129	565+80.28	567+75.00		229.1	10.0					
272	UD-130	566+14.24	567+75.00	227.7		10.0					
272	UD-131	567+75.00	569+28.65	143.7		10.0					
272	UD-132	567+75.00	569+28.65	143.7		10.0					
273	UD-133	569+28.65	571+50.00	211.3		10.0					
273	UD-134	569+28.65	571+50.00	211.3		10.0					
273	UD-135	571+50.00	573+75.00	215.0		10.0					
273	UD-136	571+50.00	572+50.00	90.0		10.0					
274	UD-137	573+75.00	576+50.00	265.0		10.0					
TOTALS CARRIED TO COLUMN 2				3456	450	230					

SHEET NO.	REFERENCE NO.	STATION		605	605	611	BENDS AND BRANCHES FOR INFORMATION ONLY				
				6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC FY	6" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLET FT	6" - 45 DEG. BEND	6" - 90 DEG. BEND	6" X 6" TEE	6" X 6" WYE	6" X 6" CROSS
							EACH	EACH	EACH	EACH	EACH
TOTALS COLUMN 2											
TOTALS COLUMN 1				3456	450	230					
TOTALS SHEET 230				22238	262	1292					
TOTALS CARRIED TO GENERAL SUMMARY				25693	712	1522					

CALCULATED  
CWH  
CHECKED  
JMP

**UNDERDRAIN SUBSUMMARY**







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STATION		SIDE	LENGTH	AVERAGE WIDTH	CALCULATED SURFACE AREA	CADD GENERATED SURFACE AREA	202	202	203	204	252	254	301	301	304	407	441	441	441	441	441	609	609	609	617	874	609	452			
FROM	TO						PAVEMENT REMOVED, AS PER PLAN	CURB REMOVED	EXCAVATION	SUBGRADE COMPACTION	FULL DEPTH PAVEMENT SAWING	3" PAVEMENT PLANING, ASPHALT CONCRETE	6" ASPHALT CONCRETE BASE, PG64-22, (449)	6" ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	ANTI-SEGREGATION EQUIPMENT	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	CONCRETE TRAFFIC ISLAND	COMPACTED AGGREGATE	LONGITUDINAL JOINT PREPARATION, AS PER PLAN	CURB, TYPE 2-A	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS			
FT	FT	SF	SF	SY	FT	CY	SY	FT	SY	CY	CY	CY	CY	CY	CY	CY	CY	CY	CY	CY	FT	FT	SY	CY	FT	FT	SY	FT	SY		
MCMACKIN																															
10+27.20	10+75.75	L/R	48.55		1766.8							196.3			23.6																
9+20.95	9+64.92	L/R	43.97		1531.4							170.2			20.4																
HAINES																															
10+26.62	10+92.79	L/R	66.17		2630.2	292.2			321.7			48.7		60.1	35.1																
10+92.79	11+50.00	L/R	57.21		1249.5	138.8			164.3	20		23.8		24.2	16.7																
GREEN																															
10+33.66	11+03.83	L/R	70.17		3659.4							406.6			48.8																
WALMART																															
10+34.74	10+94.59	L/R	59.85		2800.6	311.2			69.5	337.8	24			51.9	64.8	37.3															
BURNS																															
8+24.93	9+33.02	L/R	108.09		2606.5	289.6				337.7	23			49.6	50.3	34.8															
9+33.02	9+76.54	L/R	43.52		1734.1	192.7				212.0				32.1	40.3	23.1															
STONERIDGE																															
10+22.77	10+62.77	L/R	40.00		2102.3	183.0			52.2	251.4	35			38.9																	
DERUBERTIS																															
10+23.30	11+00.00	L/R	76.7		2250.8	250.1				284.2				41.7	53.3	30.0															
11+00.00	11+50.00	L/R	50.0		1202.4	133.6				155.8				22.6	26.0	16.0															
11+50.00	11+75.00	L/R	25.0		559.9	62.2				73.3	21			10.7	13.6	7.5															
SOUTH DERUBERTIS																															
9+45.00	9+55.50	R	10.5		322.5	35.8			8.0	40.5	37			6.1	6.2	4.3															
9+55.50	9+77.00	R	21.5		730.68	81.2			18.1	90.7				13.5	17.8	9.7															
SHOP STA 556+02																															
10+23.29	10+79.97	L	56.68		3371.52	374.6			83.7	399.8	41			62.4	71.1	45.0															
9+08.00	9+77.00	R	69.00		3737.94	415.3			92.8	446.0	46			69.2	79.1	49.8															
SHOP 558+31																															
9+23.17	9+66.10	L	42.93		1892.28	210.3			47.0	229.3	30			35.0	41.5	25.2															
HUBBARD																															
90+00.00	91+80.90	L/R	180.90	44.00	7959.6							884.4			106.1	30.7															
92+55.20	92+96.00	L/R	40.80	52.00	2121.6							235.7			28.3	8.2															
92+96.00	96+00.00	L	304.0	14.50	4408.0	489.8			624.9	319				85.4	84.9	58.8	17.0														
96+00.00	99+00.00	L	300.0	16.25	4875.0	541.7			675.0	300				94.0	93.5	65.0	18.8														
92+96.00	97+20.00	R	424.0	26.00	11024.0							1224.9			147.0	42.5															
97+20.00	99+00.00	R	180.0	18.00	3240.0							360.0			43.2	12.5															
99+00.00	99+71.43	L/R	71.43		3559.2	395.5				427.2				65.9	78.2	47.5	13.7														
100+29.13	101+00.00	L/R	70.87		3684.7	409.4				440.9				68.2	80.7	49.1	14.2														
101+00.00	102+50.00	L/R	150.00	36.00	5400.0							600.0			72.0	20.8															
102+50.00	104+50.00	L/R	200.00	30.00	6000.0							666.7			80.0	23.2															
104+50.00	104+75.00	L/R	25.00	24.00	600.0							66.7			8.0	2.3															
							4807.0		371.3	5512.5	896.0	4811.5	467.3	313.5	924.5	1132.3	203.9	123.6	313.5	173.0	517.4	1588.0	96.0	69.4	53.3	1343.0	20.0	233.6			
TOTALS THIS SHEET							4807		372	5513	896	4812	468	314	925	1133	204	124	314	173	518	1588	96	70	54	1343	20	234			
TOTALS FROM SHEET 234							33926	1681		41094	123	8437		5863	6726	5234	1516			2120		3635	12603	1676				16802			
TOTALS FROM SHEET 235							33815	137		40456	147	9612		5757	6620	5298	1534			2146		3679	12966	95	16						
TOTALS CARRIED TO GENERAL SUMMARY							72548	1818	372	87063	1166	22861	468	11934	14271	11665	3254	124	4580	173	7832	27157	1867	86	54	18145	20	234			

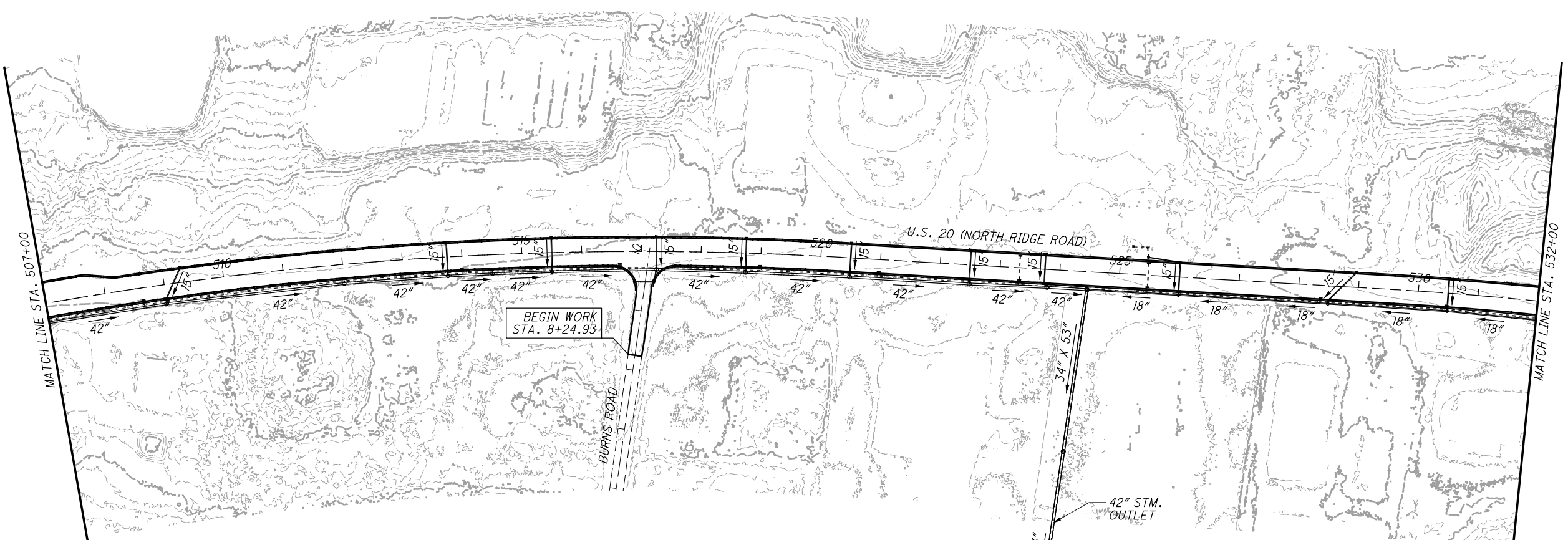
PAVEMENT CALCULATIONS

LAK-US-20-24.99

JMP  
CHECKED  
WDB

236  
651

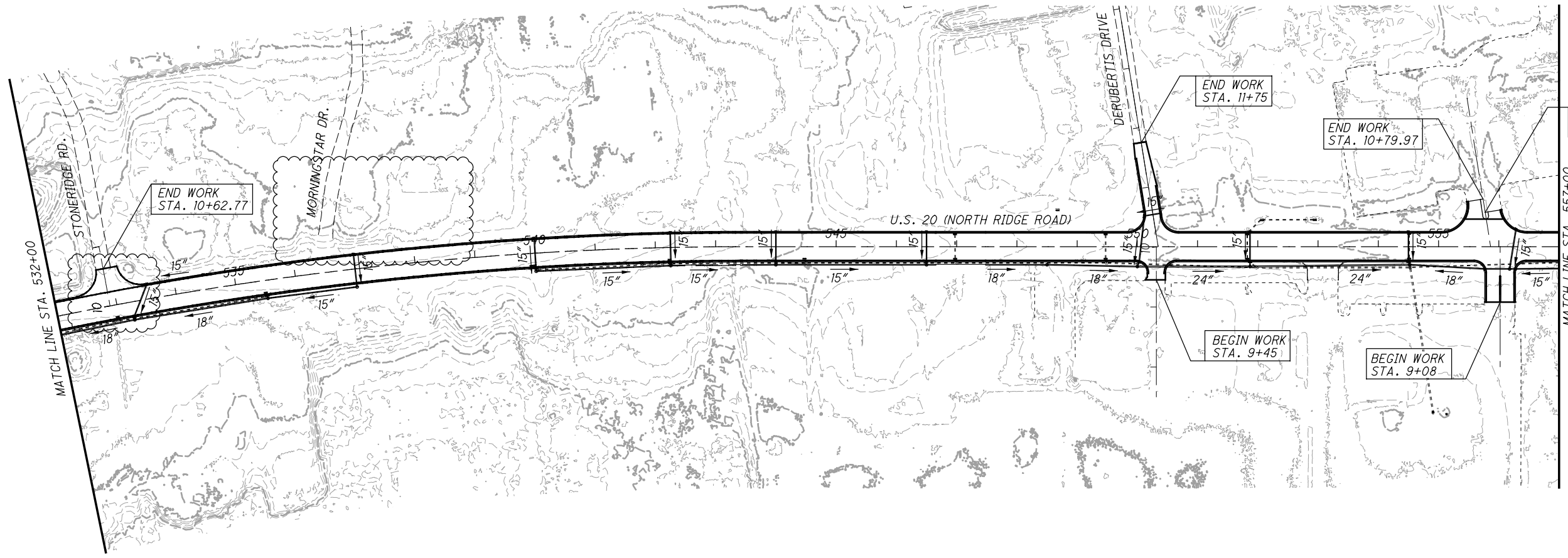
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CALCULATED	PSL
CHECKED	JMP

**PROJECT SITE PLAN**  
**STA. 507+00 TO STA. 557+00**

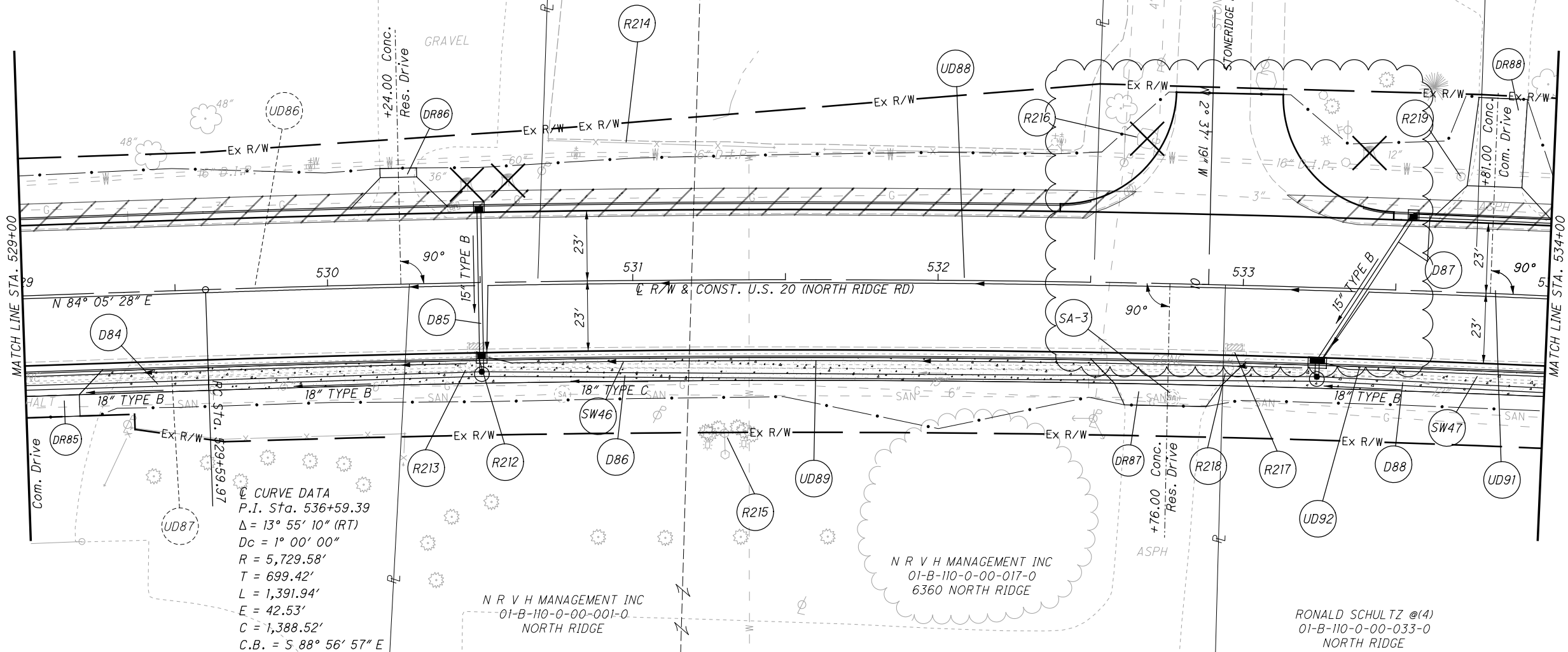
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JAMES PLACE PROPERTIES INC  
01-B-110-0-00-037-0  
6337 NORTH RIDGE

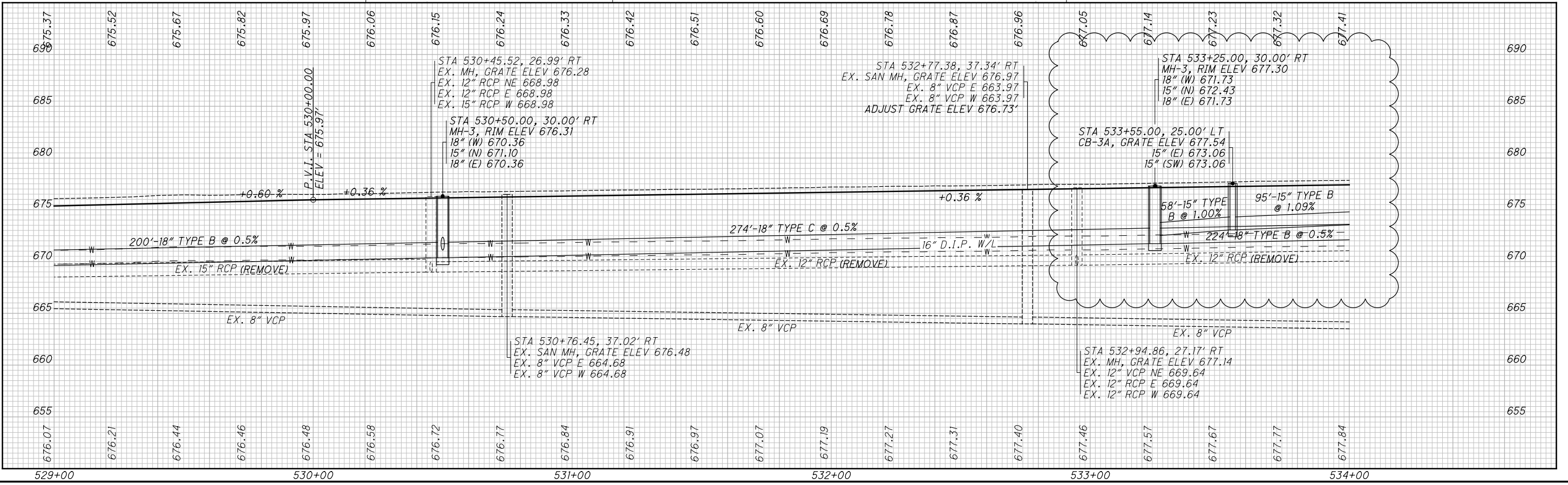
MADISON BOARD OF TRUSTEES CEMETERIES  
01-B-110-0-00-007-0  
NORTH RIDGE

JAMES PLACE PROPERTIES INC  
01-B-110-0-00-035-0  
NORTH RIDGE



CURVE DATA  
 P.I. Sta. 536+59.39  
 $\Delta = 13^\circ 55' 10''$  (RT)  
 $D_c = 1^\circ 00' 00''$   
 $R = 5,729.58'$   
 $T = 699.42'$   
 $L = 1,391.94'$   
 $E = 42.53'$   
 $C = 1,388.52'$   
 $C.B. = S 88^\circ 56' 57'' E$

TEMPORARY PAVEMENT



PLAN AND PROFILE U.S. 20  
STA. 529+00 TO STA. 534+00

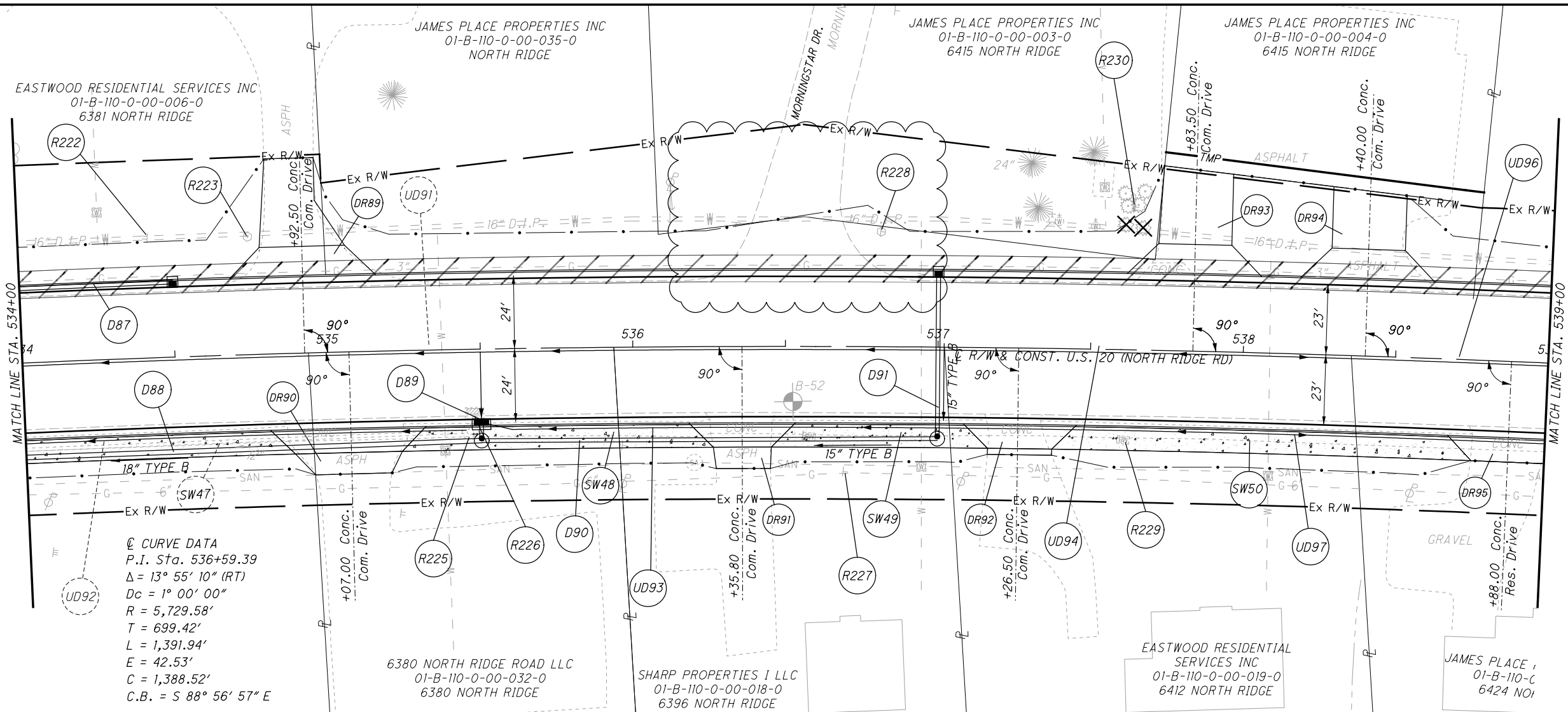
LAK-US-20-24.99

265  
651

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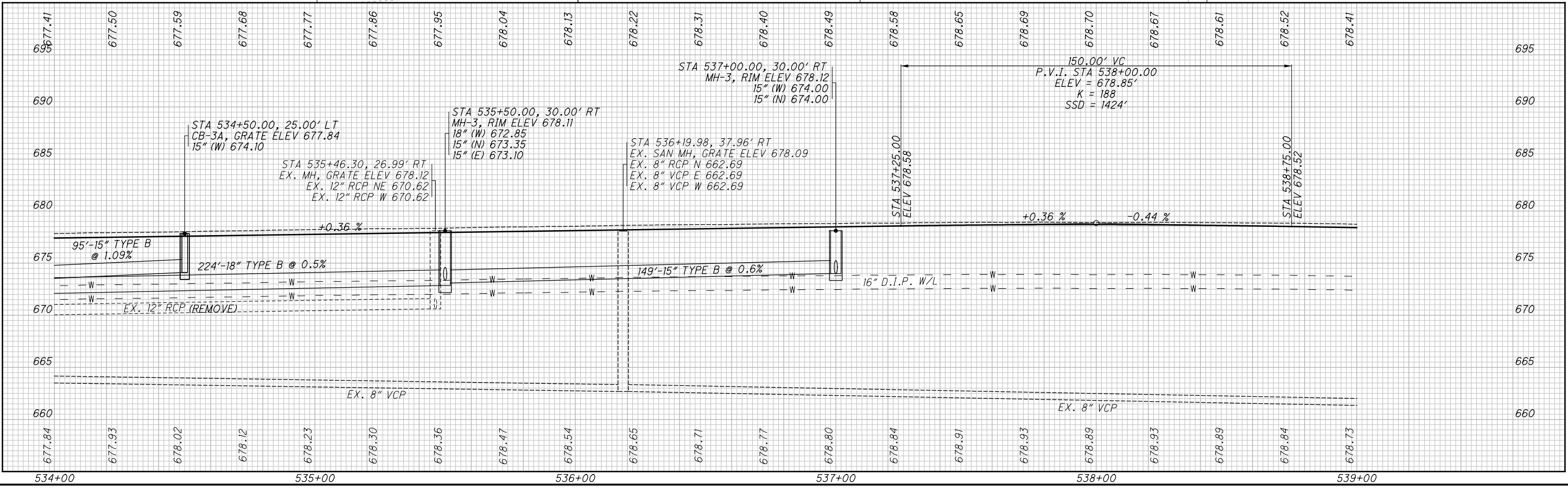


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**⊙ CURVE DATA**  
 P.I. Sta. 536+59.39  
 $\Delta = 13^\circ 55' 10''$  (RT)  
 $Dc = 1^\circ 00' 00''$   
 $R = 5,729.58'$   
 $T = 699.42'$   
 $L = 1,391.94'$   
 $E = 42.53'$   
 $C = 1,388.52'$   
 $C.B. = S 88^\circ 56' 57'' E$

TEMPORARY PAVEMENT



CALCULATED JWP  
 CHECKED WDB

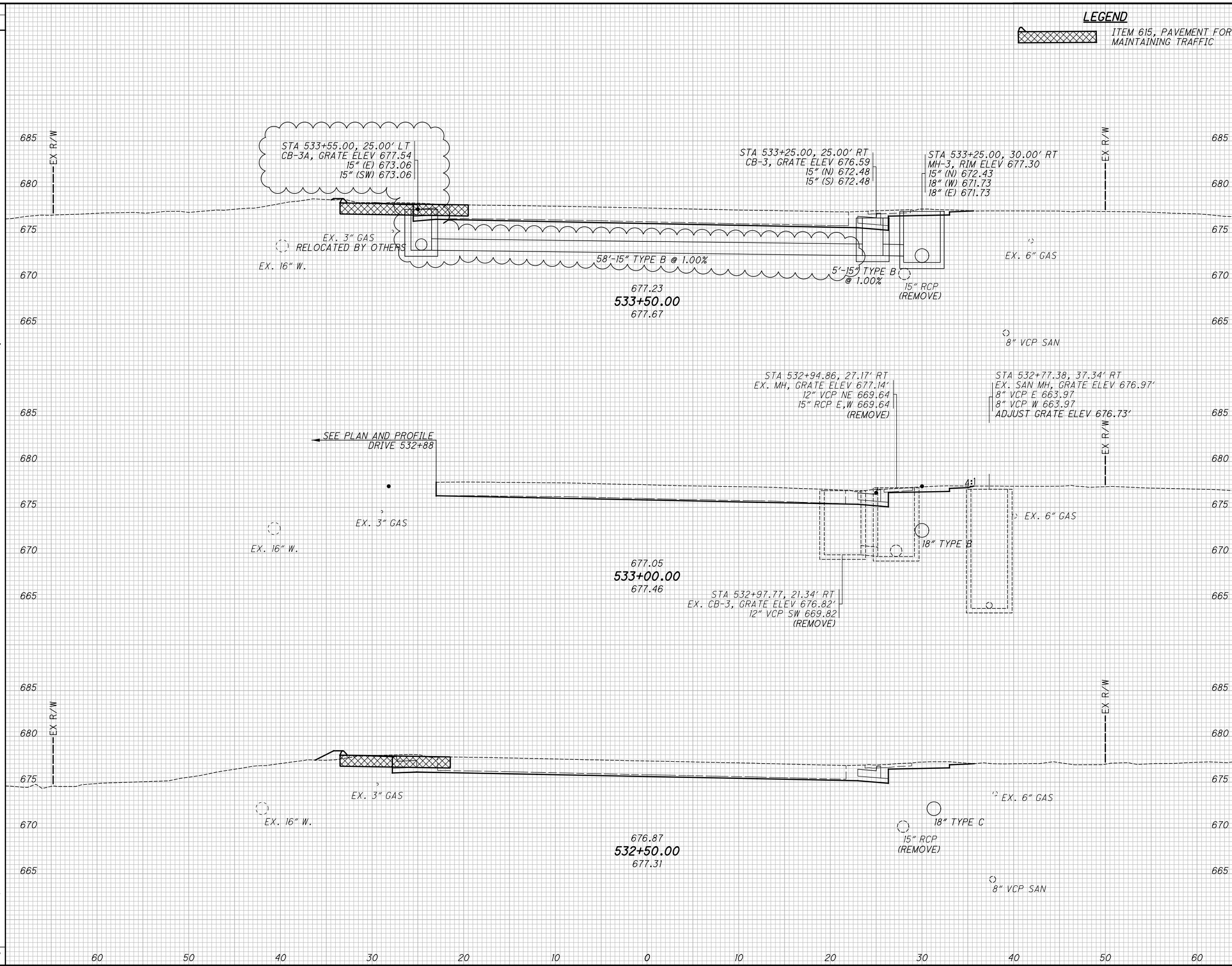
**PLAN AND PROFILE U.S. 20**  
**STA. 534+00 TO STA. 539+00**

**LAK-US-20-24.99**

266  
 651

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SEEDING	
END WIDTH	SO. YDS.
694	56
694	203
694	17
694	197
694	54
694	294



END AREA	VOLUME	CALCULATED	CHECKED	JMP
27	0			
16	0			
42	0			
29	0			
57	1			
139	1			

**CROSS SECTIONS - U.S. 20**  
**STA. 532+50.00 TO STA. 533+50.00**

**LAK-US-20-24.99**

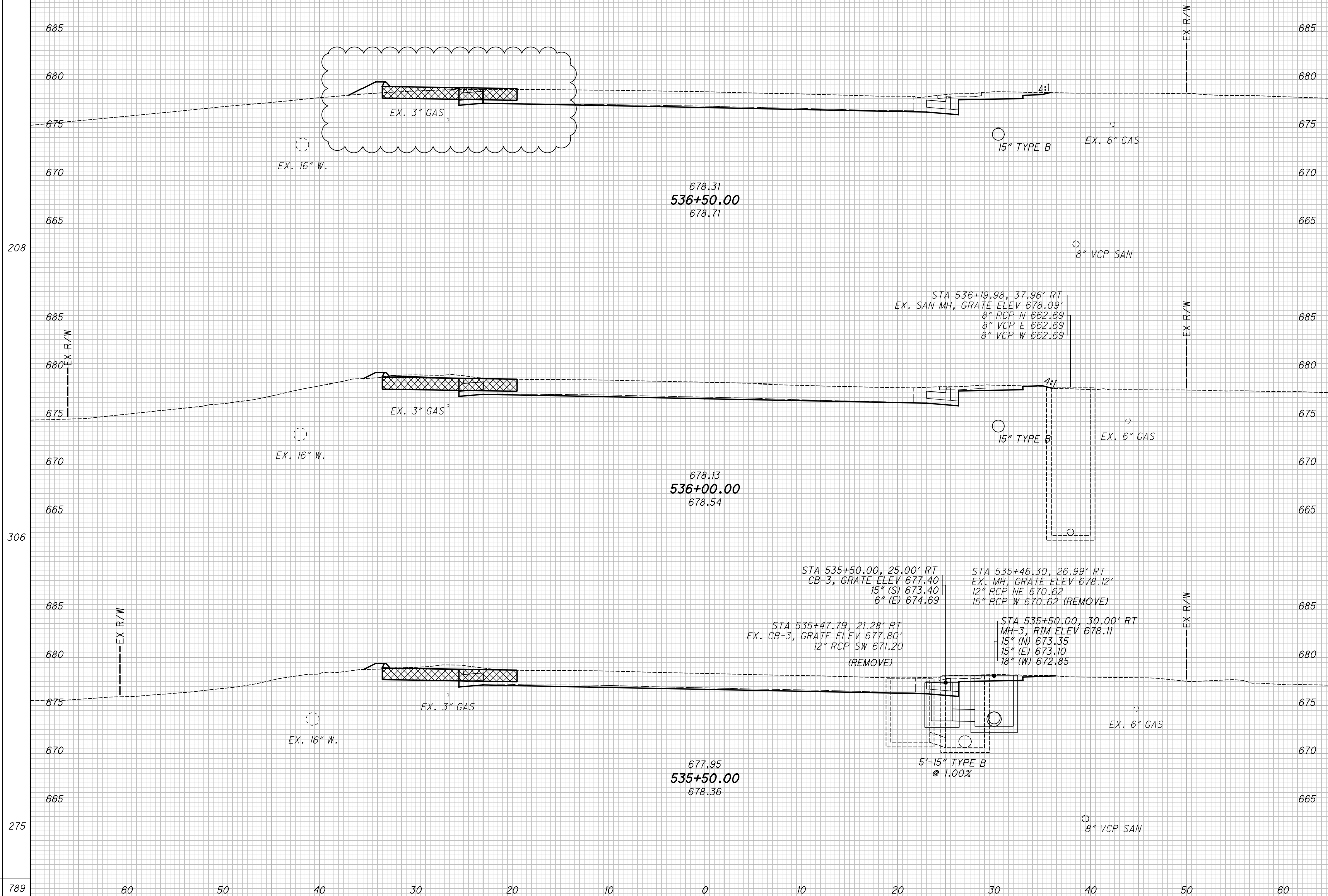
367  
651

H:\2018\180743\000\ProjectData\09270\_LAK\_20\_EAST\Design\Roadway\Sheets\09270\_XS005.dgn XS\_SHEET\_temporary\_model\_name\_25 1/11/2024 8:28:36 AM somogyi

SEEDING	END AREA		VOLUME		CALCULATED	CHECKED	JMP
	CUT	FILL	CUT	FILL			
17	16	0	37	0			
208	24	0	47	0			
58	27	0	48	0			
306			132	0			
52							
275							
789							

**LEGEND**

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC



**CROSS SECTIONS - U.S. 20**  
**STA. 535+50.00 TO STA. 536+50.00**

**LAK-US-20-24.99**

369  
651

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SEEDING	END SO.	
	WIDTH	YDS.
54	60	60
297	50	50
53	60	60
311	50	50
59	60	60
211	50	50
819	60	60

**LEGEND**

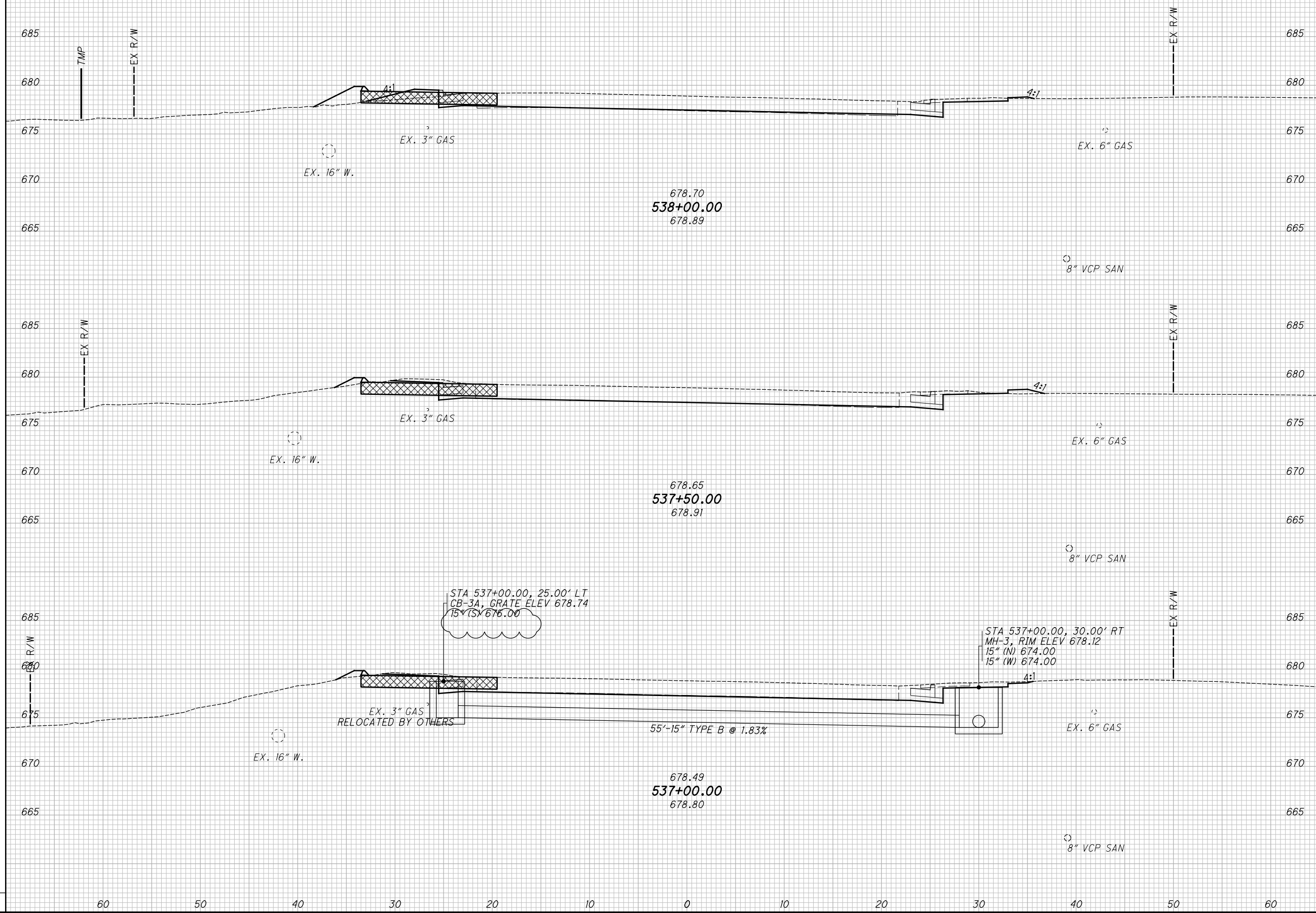
ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC

END AREA	VOLUME		CALCULATED	CHECKED	JMP
	CUT	FILL			
13	5	26	6		
15	1	31	1		
19	0	32	0		
		89	7		

**CROSS SECTIONS - U.S. 20**  
**STA. 537+00.00 TO STA. 538+00.00**

**LAK-US-20-24.99**

370  
651





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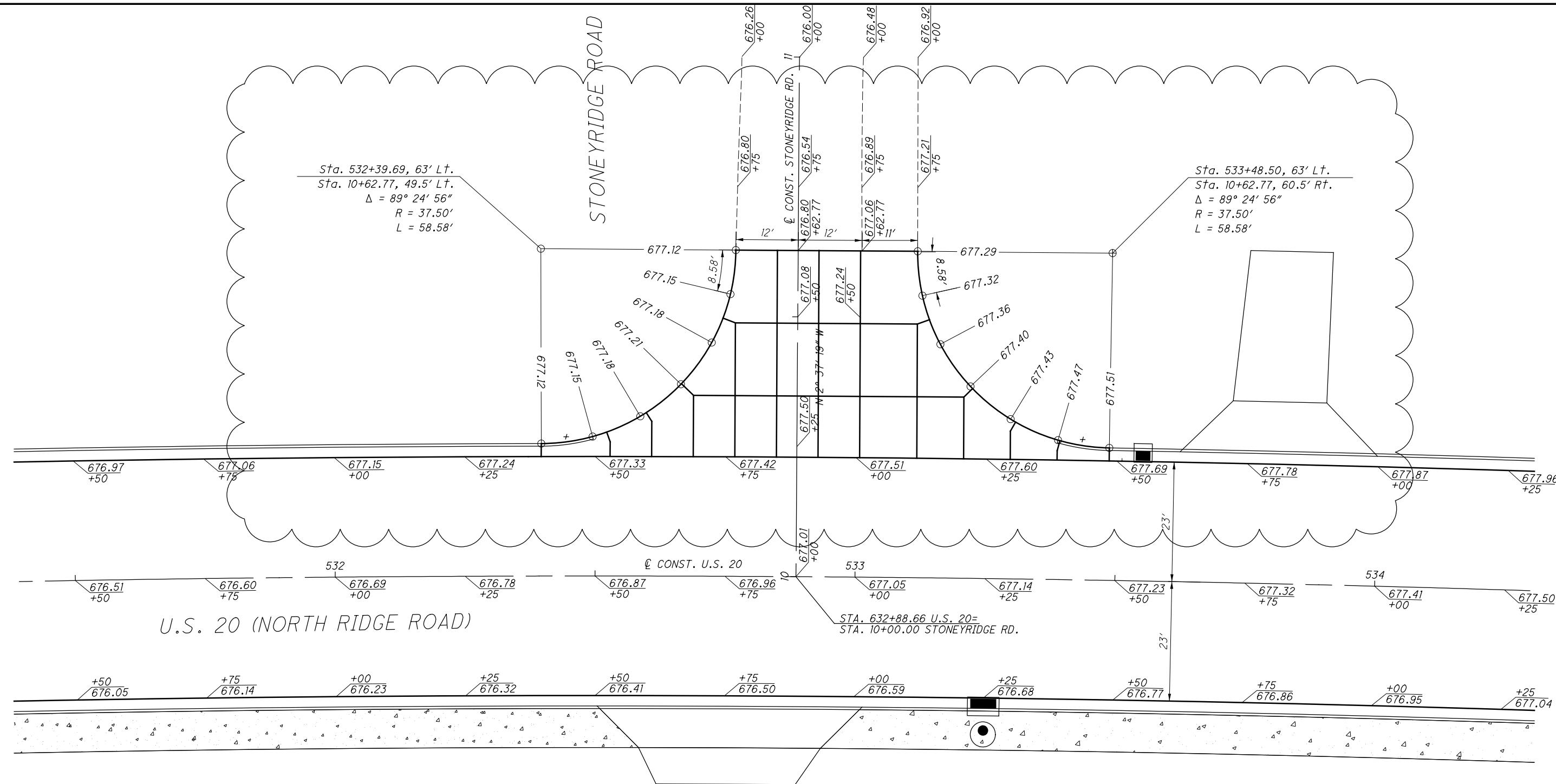
CALCULATED  
JMP  
CHECKED  
WDB

0 5 10  
HORIZONTAL  
SCALE IN FEET

INTERSECTION DETAIL  
U.S. 20 AND STONEYRIDGE ROAD

LAK-US-20-24.99

416  
651



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REF NO.	SHEET NO.	STATION TO STATION			SIDE	621	642	642	642	642	642	642	642	646	646	646	646	646	646	646	646	
						RPM	CENTER LINE, TYPE 1	LANE LINE, 6", TYPE 1	STOP LINE, TYPE 1	CROSSWALK LINE, 12", TYPE 1	CHANNELIZING LINE, 12", TYPE 1	TRANSVERSE/DIAGONAL LINE, TYPE 1	LANE ARROW, TYPE 1	CENTER LINE	EDGE LINE, 6"	LANE LINE, 6"	STOP LINE	CROSSWALK LINE, 12"	CHANNELIZING LINE, 12"	TRANSVERSE/DIAGONAL LINE	LANE ARROW	
						EACH	MILE	MILE	FT	FT	FT	FT	EACH	MILE	MILE	MILE	FT	FT	FT	FT	EACH	
CL-1	515	504+00	TO	509+00	C/L	6								0.095								
CH-1	515	504+22	TO	507+46	LT	7													324			
CH-2	515	504+22	TO	504+40	LT														18			
CH-3	515	504+68	TO	505+06	LT														38			
LL-1	515	504+00	TO	509+00	LT	7									0.095							
LL-2	515	504+00	TO	509+00	RT	7									0.095							
LA-1	515	505+28			LT																	
LA-2	515	505+94			LT																	
LA-3	515	506+60			LT																	
LA-4	515	507+26			LT																	
SL-1	515	504+27	TO	504+37	LT												13					
TL-1	515	504+22	TO	505+06	LT														89			
CL-1	516	509+00	TO	514+00	C/L	6								0.095								
LL-1	516	509+00	TO	514+00	LT	6									0.095							
LL-2	516	509+00	TO	514+00	RT	6									0.095							
CL-1	517	514+00	TO	516+45	C/L	6								0.095								
CL-2	517	8+25	TO	10+00	RT	2								0.034								
CW-1	517	516+71	TO	517+39	RT													127				
LL-1	517	514+00	TO	519+00	LT	4									0.095							
LL-2	517	514+00	TO	519+00	RT	4									0.095							
SL-1	517	516+45			RT												23					
SL-2	517	518+05			LT												23					
SL-3	517	9+57			RT												16					
EL-1	517	8+25	TO	9+34	LT										0.021							
EL-2	517	8+25	TO	9+57	RT	3									0.025							
CL-1	518	519+00	TO	524+00	C/L	6								0.095								
LL-1	518	519+00	TO	524+00	LT	7									0.095							
LL-2	518	519+00	TO	524+00	RT	7									0.095							
CL-1	519	524+00	TO	529+00	C/L	6								0.095								
LL-1	519	524+00	TO	529+00	LT	6									0.095							
LL-2	519	524+00	TO	529+00	RT	6									0.095							
CL-1	520	529+00	TO	532+48	C/L	6								0.095								
LL-1	520	529+00	TO	532+48	LT	5									0.095							
LL-2	520	529+00	TO	534+00	RT	6									0.095							
SL-1	520	532+70	TO	532+90	LT												45					
CH-1	520	10+29	TO	10+63	LT														23			
CL-2	520	10+29	TO	10+63	LT									0.004								
LA-1	520	10+39			LT																1	
LA-2	520	10+39			LT																1	
CL-1	521	534+00	TO	539+00	C/L	6								0.095								
LL-1	521	534+00	TO	539+00	LT	6									0.095							
LL-2	521	534+00	TO	539+00	RT	6									0.095							
CL-1	522	539+00	TO	544+00	C/L	6								0.095								
LL-1	522	539+00	TO	544+00	LT	6									0.095							
LL-2	522	539+00	TO	544+00	RT	6									0.095							
SUBTOTAL SHEET 489						155								0.798	0.046	1.520	120	127	403	89	2	

**PAVEMENT MARKING SUBSUMMARY**

**LAK-US-20-24.99**

CALCULATED  
ARK  
CHECKED  
EJT

489  
651

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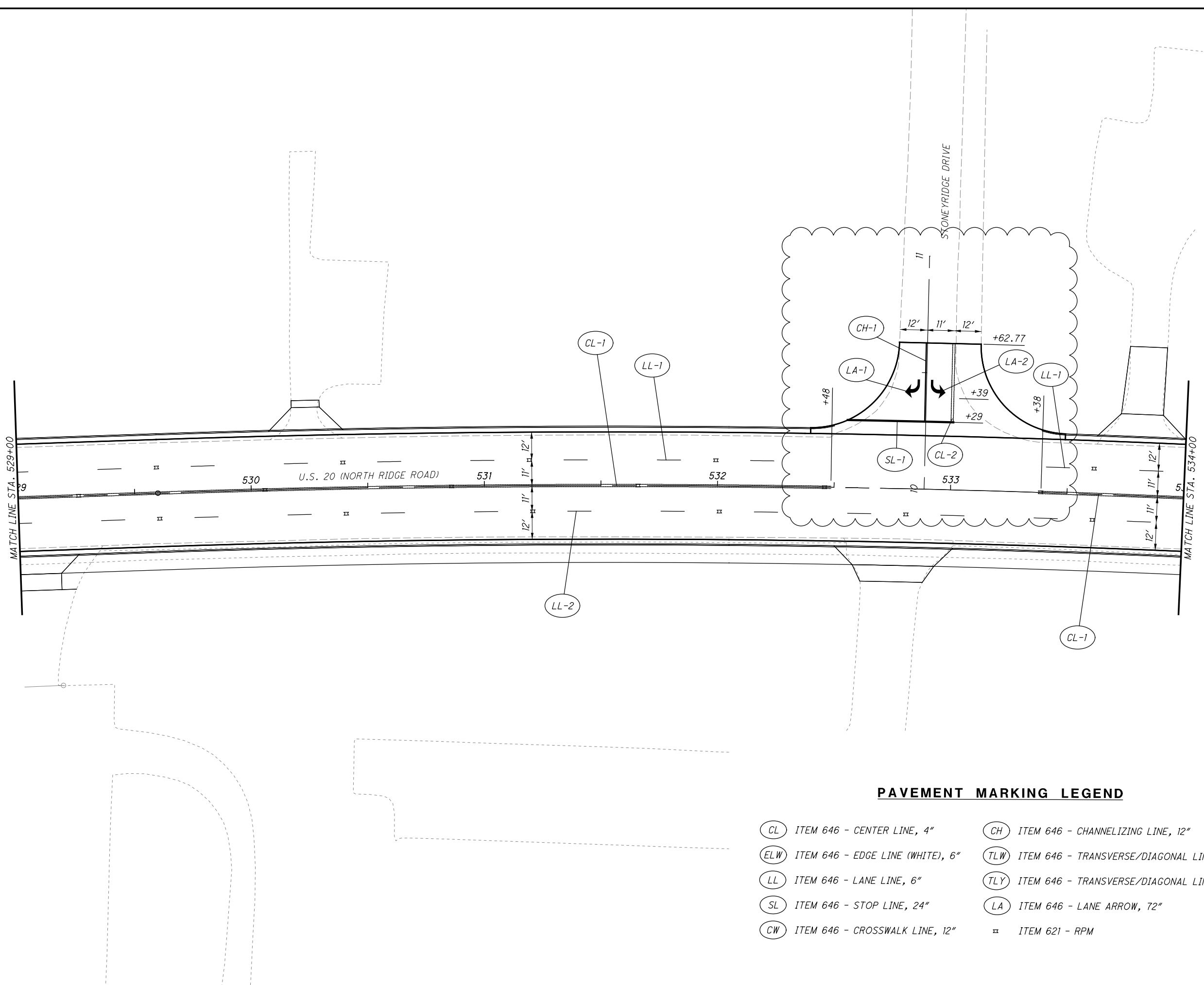
REF NO.	SHEET NO.	STATION TO STATION			SIDE	621	642	642	642	642	642	642	642	646	646	646	646	646	646	646	646			
						RPM	CENTER LINE, TYPE 1	LANE LINE, 6", TYPE 1	STOP LINE, TYPE 1	CROSSWALK LINE, 12", TYPE 1	CHANNELIZING LINE, 12", TYPE 1	TRANSVERSE/DIAGONAL LINE, TYPE 1	LANE ARROW, TYPE 1	CENTER LINE	EDGE LINE, 6"	LANE LINE, 6"	STOP LINE	CROSSWALK LINE, 12"	CHANNELIZING LINE, 12"	TRANSVERSE/DIAGONAL LINE	LANE ARROW			
					EACH	MILE	MILE	FT	FT	FT	FT	EACH	MILE	MILE	MILE	FT	FT	FT	FT	EACH				
CL-1	529	101+50	TO	105+00	C/L	5							0.066											
CL-2	529	102+25	TO	104+50	LT	4							0.043											
CL-3	529	105+00	TO	105+86	C/L	1							0.016											
CH-1	529	101+50	TO	102+00	LT	1											50							
EL-1	529	101+50	TO	105+00	RT									0.066										
EL-2	529	101+50	TO	105+00	LT	9								0.066										
EL-3	529	105+00	TO	105+86	RT									0.016										
EL-4	529	105+00	TO	105+86	LT	1								0.016										
LA-1	529	101+83			LT															1				
TL-2	529	102+25	TO	104+50	LT													59						
CL-1	530	569+00	TO	574+00	C/L	4							0.095											
CL-2	530	569+00	TO	572+50	RT	4							0.066											
LL-1	530	569+00	TO	574+00	LT	5									0.095									
LL-2	530	569+00	TO	574+00	RT	5									0.095									
TL-1	530	569+00	TO	572+50	RT													64						
CL-1	531	574+00	TO	579+00	C/L								0.095											
LL-1	531	574+00	TO	579+00	LT										0.095									
LL-2	531	574+00	TO	579+00	RT										0.095									
CL-1	532	579+00	TO	583+49	C/L								0.085											
LL-1	532	579+00	TO	583+49	LT										0.085									
LL-2	532	579+00	TO	583+49	RT										0.085									
TOTALS FROM SHEET 492														0.466	0.164	0.550			50	123		1		
TOTALS FROM SHEET 485						30	0.571	0.568	136	620	539	201	14	0.160		0.296								
TOTALS FROM SHEET 486						142								0.682	0.614	0.786	89	113	435	190			8	
TOTALS FROM SHEET 487						176								0.940	0.116	1.710	14		85					
TOTALS FROM SHEET 488						108								0.395	0.675	0.380	93	275	86			13		
TOTALS FROM SHEET 489						155								0.798	0.046	1.520	120	127	403	89			2	
TOTALS FROM SHEET 490						81								0.501	0.019	0.760	234	746	85			5		
TOTALS FROM SHEET 491						66								0.380	0.380	0.190	141	434	445	98			9	
TOTAL						758	0.571	0.568	136	620	539	201	14	4.321	2.014	6.192	691	1695	2264	756			38	
TOTALS CARRIED TO GENERAL SUMMARY						758	0.57	0.57	136	620	539	201	14	4.32	2.01	6.19	691	1695	2264	756			38	

**PAVEMENT MARKING SUBSUMMARY**

**LAK-US-20-24.99**

CALCULATED  
ARK  
CHECKED  
EJT

492  
651



**PAVEMENT MARKING LEGEND**

- |  |   |
|--|---|
| (CL) ITEM 646 - CENTER LINE, 4"        | (CH) ITEM 646 - CHANNELIZING LINE, 12"                  |
| (ELW) ITEM 646 - EDGE LINE (WHITE), 6" | (TLW) ITEM 646 - TRANSVERSE/DIAGONAL LINE (WHITE), 24"  |
| (LL) ITEM 646 - LANE LINE, 6"          | (TLY) ITEM 646 - TRANSVERSE/DIAGONAL LINE (YELLOW), 24" |
| (SL) ITEM 646 - STOP LINE, 24"         | (LA) ITEM 646 - LANE ARROW, 72"                         |
| (CW) ITEM 646 - CROSSWALK LINE, 12"    | ▬ ITEM 621 - RPM  |

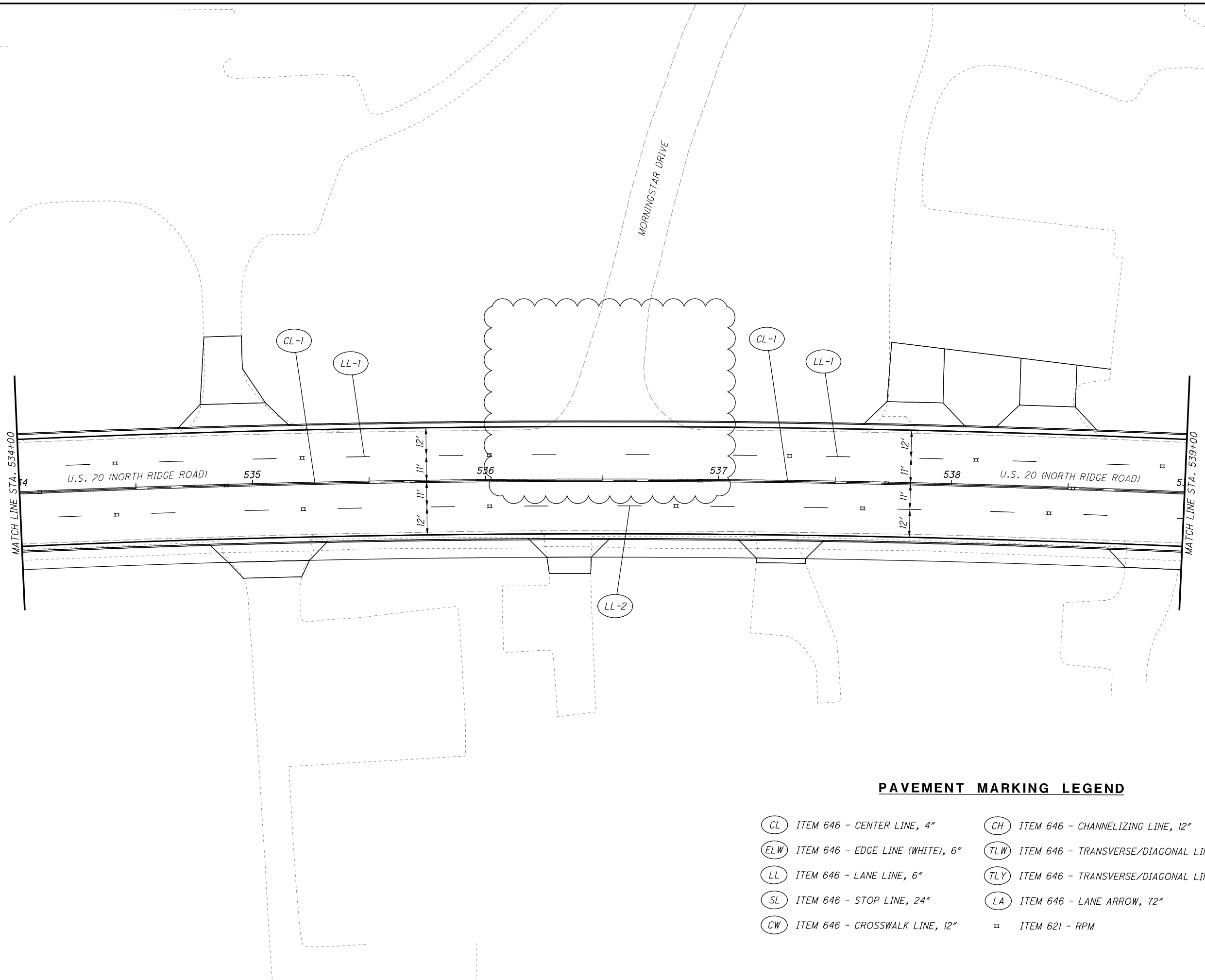


CALCULATED  
JDC  
CHECKED  
EJT

**PAVEMENT MARKING PLAN  
STA. 529+00 TO STA. 534+00**

**LAK-US-20-24.99**

520  
651



**PAVEMENT MARKING LEGEND**

- |  |   |
|--|---|
| (CL) ITEM 646 - CENTER LINE, 4"        | (CH) ITEM 646 - CHANNELIZING LINE, 12"                  |
| (ELW) ITEM 646 - EDGE LINE (WHITE), 6" | (TLW) ITEM 646 - TRANSVERSE/DIAGONAL LINE (WHITE), 24"  |
| (LL) ITEM 646 - LANE LINE, 6"          | (TLY) ITEM 646 - TRANSVERSE/DIAGONAL LINE (YELLOW), 24" |
| (SL) ITEM 646 - STOP LINE, 24"         | (LA) ITEM 646 - LANE ARROW, 72"                         |
| (CW) ITEM 646 - CROSSWALK LINE, 12"    | ▣ ITEM 621 - RPM  |

CALCULATED JDC  
CHECKED EJT

0 10 20 40  
HORIZONTAL SCALE IN FEET

**PAVEMENT MARKING PLAN**  
**STA. 534+00 TO STA. 539+00**

**LAK-US-20-24.99**

521  
651

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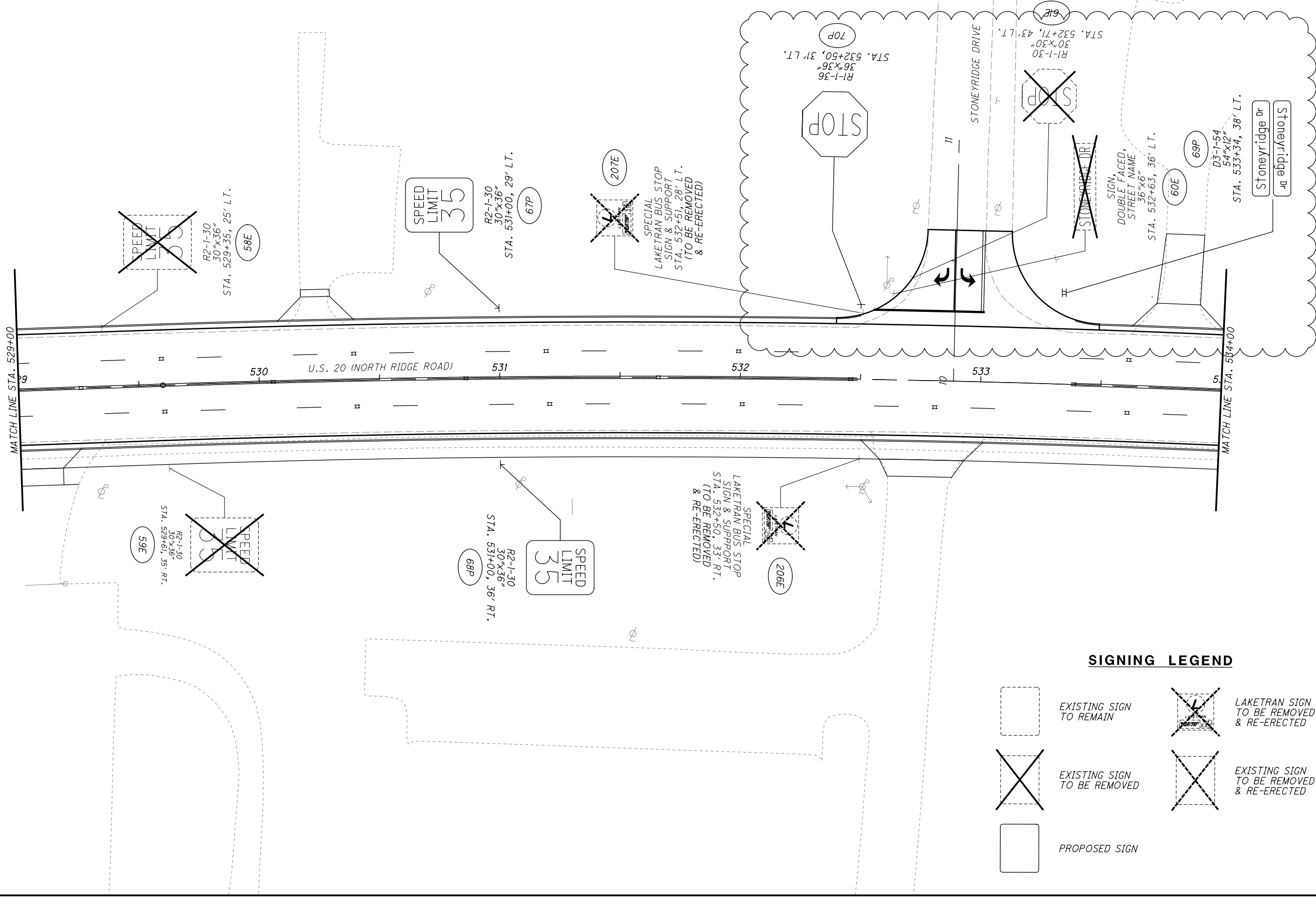
REF NO.	SHEET NO.	STATION TO STATION	SIDE	SIGN CODE	SIGN SIZE	630	630			630	630	630	630	630	630	630	630	630	630	630							
						GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST			SIGN POST REFLECTOR	SIGN ATTACHMENT ASSEMBLY, MAST ARM	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	REMOVAL OF POLE MOUNTED SIGN AND REERECTION									
						FT	FT			EACH	EACH	EACH	SF	EACH	EACH	EACH	EACH	EACH	EACH	EACH							
55P	560	509+50, 36' RT	RT	W3-3-36	36" X 36"		13.5			1			9														
56P	560	512+00, 29' LT	LT	R2-1-30	30" X 36"		13.5						7.5														
57P	560	512+00, 36' RT	RT	R2-1-30	30" X 36"		13.5						7.5														
58P	560	512+50, 38' RT	RT	D3-2-78	78" X 36"		13.5, 13.5						19.5														
59P	560	512+74, 29' LT	LT	D10-H8-12	12" X 12"	12							1														
60P	560	512+74, 35' RT	RT	D10-H8-12	12" X 12"	12							1														
55E	561	517+42, 39' RT	RT	D3-1-36	36" X 9"																						
56E	561	9+41, 38' RT	RT	I-8-24	24" X 30"									1	1												
56E	561	9+41, 38' RT	RT	I-H12-24	24" X 6"									1													
56E	561	9+41, 38' RT	RT	I-8-24	24" X 30"									1													
56E	561	9+41, 38' RT	RT	I-H12-24	24" X 6"									1													
57E	561	9+59, 26' RT	RT	R10-6-24	24" X 36"									1	1												
61P	561	516+80, LT	LT	D3-1-58	58" X 24"						2		9.67														
62P	561	517+50, RT	RT	D3-1-58	58" X 24"						2		9.67														
63P	561	9+43, 38' RT	RT	I-8-24	24" X 24"		13.75, 13.75						4														
63P	561	9+43, 38' RT	RT	M6-1-21	21" X 15"								2.19														
63P	561	9+43, 38' RT	RT	I-8-24	24" X 24"								4														
63P	561	9+43, 38' RT	RT	M6-1-21	21" X 15"								2.19														
64P	561	9+60, 23' RT	RT	R10-H6bL-24	24" X 36"		13.5						6														
204E	561	515+92, 40' RT	RT	SPECIAL	12"X12"	12						1												1			
65P	562	521+50, 31' LT	LT	D3-2-78	78" X 36"		13.5, 13.5						19.5														
205E	562	520+22, 39' RT	RT	SPECIAL	12"X12"							1													1		
66P	563	524+50, 30' LT	LT	W3-3-36	36" X 36"		13.5			1			9														
58E	564	529+35, 25' LT	LT	R2-1-30	30" X 36"									1	1												
59E	564	529+61, 35' RT	RT	R2-1-30	30" X 36"									1	1												
60E	564	532+63, 36' LT	LT	D3-1-48	48" X 9"									1	1												
61E	564	532+71, 43' LT	LT	R1-1-30	30" X 30"									1	1												
67P	564	531+00, 29' LT	LT	R2-1-30	30" X 36"		13.5						7.5														
68P	564	531+00, 36' RT	RT	R2-1-30	30" X 36"		13.5						7.5														
69P	564	533+34, 38' LT	LT	D3-1-54	54" X 12"		11.5, 11.5						4.5														
69P	564	533+34, 38' LT	LT	D3-1-54	54" X 12"								4.5														
70P	564	532+50, 31' LT	LT	R1-1-36	36" X 36"		13.5			1			9														
206E	564	532+50, 33' RT	RT	SPECIAL	12"X12"	12																		1			
207E	564	532+51, 28' LT	LT	SPECIAL	12"X12"	12																		1			
62E	565	535+96, 32' RT	RT	R2-1-30	30" X 36"									1	1												
63E	565	536+34, 41' LT	LT	R1-1-30	30" X 30"									1	1												
64E	565	536+81, 38' LT	LT	D3-1-48	48" X 9"									1	1												
71P		NOT USED																									
71P		NOT USED																									
72P		NOT USED																									
73P	565	538+40, 36' RT	RT	W3-5-36	36" X 36"		13.5						9														
65E	566	539+33, 32' RT	RT	W3-5-36	36" X 36"									1	1												
66E	566	541+85, 31' LT	LT	W11-2-36	36" X 36"									1	1												
67E	566	542+01, 33' RT	RT	R2-1-30	30" X 36"									1	1												
68E	566	543+36, 48' RT	RT	SPECIAL-24	24" X 12"									1	1												
68E	566	543+36, 48' RT	RT	R5-1-30	30" X 30"									1													
69E	566	543+47, 29' LT	LT	R2-1-30	30" X 36"									1	1												
70E	566	543+68, 45' RT	RT	SPECIAL-24	24" X 12"									1	1												
70E	566	543+68, 45' RT	RT	R5-1-30	30" X 30"									1													
SUBTOTAL SHEET 536						59.0	226.0			4	4	2	153.8	20	15	2	1	2									

<b>SIGNING SUBSUMMARY</b>	<b>LAK-US-20-24.99</b>
CALCULATED ARK CHECKED EJT	536 651



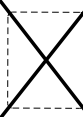
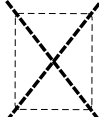

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	SIGN CODE	SIGN SIZE	630	630			630	630	630	630	630	630	630	630	630						
						GROUND MOUNTED SUPPORT, NO. 2 POST FT	GROUND MOUNTED SUPPORT, NO. 3 POST FT			SIGN POST REFLECTOR EACH	SIGN ATTACHMENT ASSEMBLY, MAST ARM EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED EACH	SIGN, FLAT SHEET SF		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL EACH	REMOVAL OF POLE MOUNTED SIGN AND REERECTION EACH					
104E	572	92+52, 28' RT	RT	R2-1-30	30" X 36"										1	1								
105E	572	94+51, 27' LT	LT	R2-1-30	30" X 36"																	1		
106E	572	96+96, 28' RT	LT	R2-1-30	30" X 36"																	1		
107E	572	97+21, 25' LT	LT	R3-H8bh-36	36" X 30"										1	1								
108E	572	97+21, 33' LT	LT	M2-1-21	21" X 15"																	1		
108E	572	97+21, 33' LT	LT	M1-4-24-2	24" X 24"																	1		
124P	572	89+85, 28' RT	RT	M2-1-21	21" X 15"		13.83						2.19											
124P	572	89+85, 28' RT	RT	M1-4-24-2	24" X 24"								4											
125P	572	91+85, 28' RT	RT	W3-3-36	36" X 36"					1			9											
126P	572	92+36, 25' LT	RT	R2-1-30	30" X 36"		13.5						7.5											
127P	572	93+10, 25' LT	LT	R2-1-30	30" X 36"		13.5						7.5											
128P	572	97+60, 25' RT	RT	R3-H8bh-36	36" X 30"		13						7.5											
129P	572	98+00, 25' LT	LT	R2-1-30	30" X 36"		13.5						7.5											
109E	573	104+49, 18' LT	LT	R3-H8bh-36	36" X 30"									1	1									
110E	573	106+81, 19' LT	LT	W3-3-36	36" X 36"									1	1									
130P	573	101+75, 22' RT	RT	R2-1-30	30" X 36"		13.5						7.5											
131P	573	102+05, 25' LT	LT	R3-H8bh-36	36" X 30"		13						7.5											
132P	573	106+50, 20' LT	LT	W3-3-36	36" X 36"		13.5			1			9											
133P	573	108+50, 20' LT	LT	M2-1-21	21" X 15"		13.83						2.19											
133P	573	108+50, 20' LT	LT	M1-4-24-2	24" X 24"								4											
134P	573	108+50, 20' LT	LT	M2-1-21	21" X 15"		13.83						2.19											
134P	573	108+50, 20' LT	LT	M1-5-30-3	30" X 24"								5											
TOTALS FROM SHEET 539							148.5			2			82.6		4	4			4					
TOTALS FROM SHEET 533						24.0	335.2			6		3	186.0		19	17	4		3	1				
TOTALS FROM SHEET 534						24.0	259.1			8			133.8		21	18			1					
TOTALS FROM SHEET 535						39.0	264.6			3			153.8		18	20			2					
TOTALS FROM SHEET 536						59.0	226.0			4	4	2	153.8		20	15	2		1	2				
TOTALS FROM SHEET 537						89.0	305.3			1	4	1	210.4		15	16	2		7	1				
TOTALS FROM SHEET 538						24.0	320.7			3	4	2	186.5		12	8			2					
SUBTOTAL						259.0	1859.4			27	12	8	1106.9		109	98	8		20	4				
TOTALS CARRIED TO GENERAL SUMMARY						259	1860			27	12	8	1106.9		109	98	8		20	4				

<b>SIGNING SUBSUMMARY</b>	CALCULATED ARK CHECKED EJT
<b>LAK-US-20-24.99</b>	539 651



**SIGNING LEGEND**

- |   |                             |   |  |
|---|-----------------------------|---|--|
|  | EXISTING SIGN TO REMAIN     |  | LAKETRAN SIGN TO BE REMOVED & RE-ERECTED |
|  | EXISTING SIGN TO BE REMOVED |  | EXISTING SIGN TO BE REMOVED & RE-ERECTED |
|  | PROPOSED SIGN               |   |  |

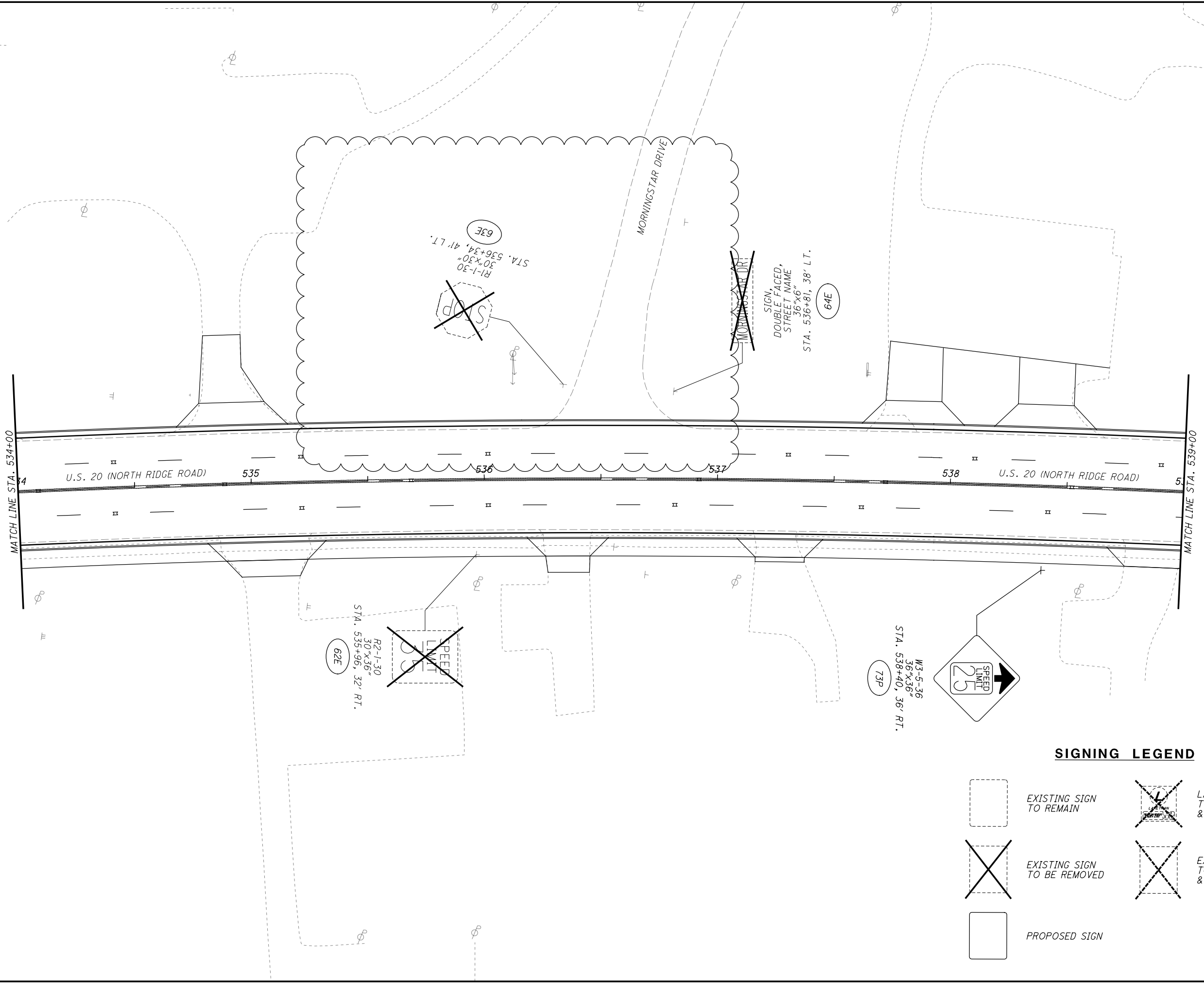
CALCULATED JDC CHECKED EJT

0 20 40  
HORIZONTAL SCALE IN FEET








**SIGNING PLAN**  
**STA. 529+00 TO STA. 534+00**





**SIGNING LEGEND**

	EXISTING SIGN TO REMAIN		LAKETRAN SIGN TO BE REMOVED & RE-ERECTED
	EXISTING SIGN TO BE REMOVED		EXISTING SIGN TO BE REMOVED & RE-ERECTED
	PROPOSED SIGN		

CALCULATED  
JDC  
CHECKED  
EJT

0 20 40  
10  
HORIZONTAL  
SCALE IN FEET



**SIGNING PLAN**  
**STA. 534+00 TO STA. 539+00**