

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# LAK-US-20-19.59

PAINESVILLE TWP., PERRY TWP.,  
NORTH PERRY VILLAGE, MADISON TWP.,  
LAKE COUNTY, OHIO

**PROJECT DESCRIPTION**

MAJOR REHABILITATION OF 5.4 MILES OF NORTH RIDGE ROAD (US-20) FROM SR-2 TO TOWNLINE ROAD IN PERRY TOWNSHIP. WORK WILL INCLUDE PAVEMENT REPLACEMENT, MINOR WIDENING, CURBS, RESURFACING, SIDEWALK, DRAINAGE AND TRAFFIC SIGNAL IMPROVEMENTS.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: 55.1 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 1.0 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: 56.1 ACRES

**2023 SPECIFICATIONS**

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

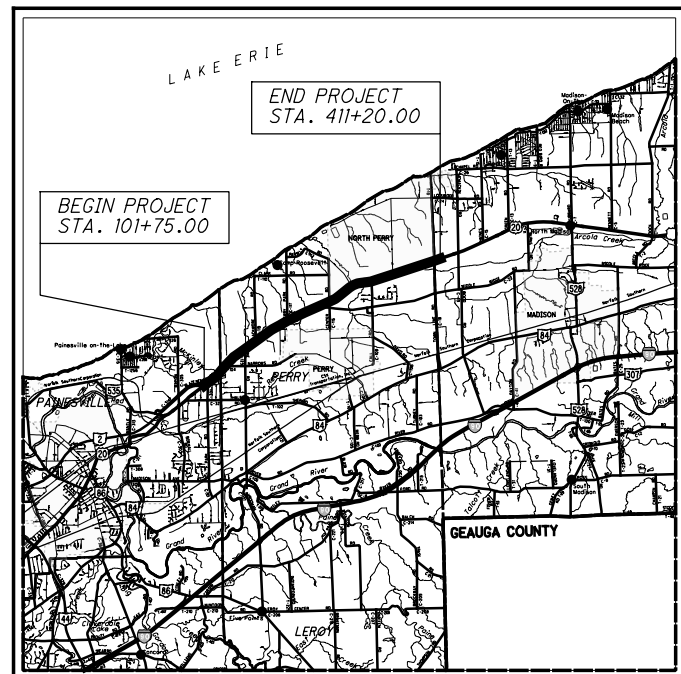
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

*John Picuri, P.E., P.S.*  
District 12 Deputy Director

*Pamela Boratyn*  
Director, Department of Transportation

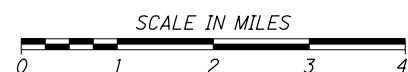
ENGINEER'S SEAL

STATE OF OHIO  
WILLIAM D. BAKER, JR.  
E-59412  
REGISTERED PROFESSIONAL ENGINEER



LOCATION MAP

LATITUDE: 41°45'58.7" LONGITUDE: 81°10'51.7"



PORTION TO BE IMPROVED

INTERSTATE HIGHWAY	—————
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

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**DESIGN DESIGNATION: LAK-US-20-19.59**

CURRENT ADT (2024)	25,200
DESIGN YEAR ADT (2048)	33,550
DESIGN HOURLY VOLUME (2048)	3,350
DIRECTIONAL DISTRIBUTION	62%
TRUCKS (24 HOUR B&C)	10%
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	YES

**DESIGN EXCEPTIONS**

NONE REQUIRED

**ADA DESIGN WAIVERS**

NONE REQUIRED



PLAN PREPARED BY:



STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS			
BP-2.1	1-21-22	CB-1	7-19-24	DM-3.1 1-18-13	MT-101.60 4-21-23	TC-41.30 4-21-23	800-2023 7-19-24	WATERWAY PERMIT 11/21/2024
BP-2.2	1-15-21	CB-2-2ABC	7-19-24	DM-4.3 1-15-16	MT-101.70 7-19-24	TC-42.20 10-18-13	821 4-20-12	
BP-3.1	1-19-24	CB-2-34	7-19-24	DM-4.4 1-15-16	MT-101.75 7-21-23	TC-51.11 1-15-16	832 7-19-24	
BP-4.1	7-19-13	CB-3	7-19-24		MT-101.90 7-17-20	TC-52.10 10-18-13	870 7-21-23	
BP-5.1	7-15-22	CB-3A	7-19-24	HW-2.1 7-15-22	MT-102.10 7-21-23	TC-52.20 1-15-21	875 1-18-19	
BP-7.1	7-19-24	CB-6	7-19-24	HW-2.2 7-20-18	MT-102.20 4-19-19	TC-61.30 7-19-24	878 1-21-22	
BP-9.1	1-18-19				MT-103.10 1-21-22	TC-65.10 1-17-14	895 4-18-14	
MGS-1.1	7-16-21	I-2	7-19-24	HL-30.11 7-21-23	MT-105.10 1-17-20	TC-65.11 1-19-24	921 7-19-24	
MGS-2.1	1-19-18	I-2A	7-19-24	HL-30.22 1-15-21		TC-71.10 4-21-23	995 7-17-15	
MGS-2.3	1-20-23			MT-095.31 7-19-19	TC-12.31 4-15-22	TC-72.20 7-21-23		
MGS-3.1	1-19-18	MH-1	7-15-22	MT-095.32 4-19-19	TC-15.116 1-19-24	TC-74.10 7-21-23		
MGS-4.2	7-19-13	MH-2	7-19-24	MT-095.41 7-21-23	TC-21.11 7-16-21	TC-83.20 7-19-24		
		MH-3	7-19-24	MT-095.50 7-21-17	TC-21.21 1-20-23	TC-84.20 1-19-24		
RM-1.1	1-20-23			MT-096.20 7-21-23	TC-22.10 4-21-23	TC-85.10 1-19-24		
RM-3.1	7-20-18	DM-1.1	7-17-20	MT-097.12 1-20-17	TC-22.20 1-17-14			
RM-4.2	7-19-24	DM-1.2	7-16-21	MT-099.20 4-19-19	TC-41.20 10-18-13			

FEDERAL PROJECT NO. E191(584)  
PID NO. 108665  
CONSTRUCTION PROJECT NO.  
RAILROAD INVOLVEMENT NONE  
LAK-US-20-19.59  
1/1088

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**GENERAL**

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

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

**GAS**  
DOMINION ENERGY OHIO  
320 SPRINGSIDE DR. SUITE 320  
AKRON, OHIO 44333  
330-664-2409

**NORTHEAST OHIO NATURAL GAS CORP.**  
8470 STATION STREET  
MENTOR, OHIO 44060  
TIM REILLY: 440-701-5100

**ELECTRIC**  
THE ILLUMINATING COMPANY  
6896 MILLER RD.  
BRECKSVILLE, OHIO 44141  
JOHN M ZASSICK: 440-596-8706

**WATER & SANITARY**  
LAKE COUNTY DEPARTMENT OF UTILITIES  
105 MAIN STREET  
PAINESVILLE, OHIO 44077  
SARAH CEROVSKI: 440-350-2652

**STORM**  
OHIO DEPARTMENT OF TRANSPORTATION  
5500 TRANSPORTATION BLVD.  
GARFIELD HEIGHTS, OHIO 94125  
216-581-2100

**COMMUNICATIONS**  
AT&T  
13630 LORAIN AVE. 2ND FLOOR  
CLEVELAND, OHIO 99111  
JAMES JANIS: 216-476-6142

**CHARTER COMMUNICATIONS (SPECTRUM)**  
7820 DIVISION DRIVE  
MENTOR, OHIO 44060  
MATT HANNAH: 216-575-8016  
EXT. 2165551105

**WINDSTREAM**  
245 N. MAIN STREET  
HUDSON, OHIO 44236  
JEFF GULYAS: 216-385-1669

**ZAYO**  
4199 KINROSS LAKES PARKWAY, SUITE 10  
RICHFIELD, OH 44286  
DAVE GALUSKA: 234-281-0025

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**EXISTING PLANS**

EXISTING PLANS ENTITLED LAK-2-16.49, LAK-20-18.72, LAK-20-22.75, LAK-20-24.99 AND CLEVELAND BUFFALO ROAD MAY BE INSPECTED IN THE ODOT DISTRICT 12 OFFICE IN GARFIELD HEIGHTS, OHIO.

**CONSTRUCTION NOISE**

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9 PM AND 7 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

**ITEM 204 - PROOF ROLLING**

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 60 HOUR.

**SURVEYING PARAMETERS**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEETS 1038-1050 OF THE PLANS FOR TABLES CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**PROJECT CONTROL**

POSITIONING METHOD: ODOT VRS  
MONUMENT TYPE: TYPE B

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD88  
GEOID: 2012B

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD83 (COORS2011)  
ELLIPSOID: GRS80  
MAP PROJECTION: LAMBERT CONFORMAL CONIC  
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE  
COMBINED SCALE FACTOR: 1.00000885  
ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

**WORK LIMITS**

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

**CLEARING AND GRUBBING, AS PER PLAN**

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS AND TRIM ANY TREES WHERE THE LIMBS HANG OVER THE TEMPORARY PAVEMENT AS IDENTIFIED BY THE ENGINEER UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	116	37	153
30"	12	6	18
48"	2	2	4
60"	1	1	1

**BENCHING OF FOUNDATION SLOPES**

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

**MONUMENT ASSEMBLIES**

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NOS. 1009 - 1021.

**DURATION OF WORK IN TEMPORARY RIGHT OF WAY**

WORK IN THE TEMPORARY RIGHT OF WAY SHALL BE LIMITED TO A MAXIMUM DURATION OF 45 CALENDAR DAYS AT THE FOLLOWING PARCELS:

- PARCEL 1 - 2495 NORTH RIDGE
- PARCEL 23 - 2709 NORTH RIDGE
- PARCEL 63 - 3292 NORTH RIDGE
- PARCEL 98 - 3850 NORTH RIDGE
- PARCEL 161 - 4683 ANTIOCH
- PARCEL 177 - 4843 NORTH RIDGE

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE.

UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE AND APPROXIMATE STATION LIMITS ARE AS FOLLOWS:

- STA 120+75 TO STA 123+10, 12" DEPTH
- STA 149+50 TO STA 150+00, 24" DEPTH
- STA 154+00 TO STA 164+50, 24" DEPTH
- STA 166+00 TO STA 168+10, 12" DEPTH
- STA 256+25 TO STA 264+75, 18" DEPTH
- STA 380+00 TO STA 384+00, 36" DEPTH

THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

THE FOLLOWING QUANTITIES FOR THE REMEDIATION OF UNSTABLE SUBGRADE HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 204 - EXCAVATION OF SUBGRADE	10,050	CY
ITEM 204 - GRANULAR MATERIAL, TYPE B	10,050	CY
ITEM 204 - GEOTEXTILE FABRIC	18,100	SY
ITEM 204 - GEOGRID	18,100	SY

**ITEM SPECIAL - PRECONSTRUCTION VIDEO DOCUMENTATION**

THIS WORK SHALL CONSIST OF FURNISHING THE DEPARTMENT A COMPLETE DIGITAL COLOR AUDIO-VIDEO RECORD OF THE SURFACE FEATURES WITHIN AND IMMEDIATELY ADJACENT (WITHIN 50 FEET) TO THE PROPOSED PROJECT AREA AS SHOWN IN THE CONTRACT DRAWINGS. THIS RECORD SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL AUDIO-VIDEO USB THUMB DRIVES, VIDEO LOGS, AND INDEXES. THE PURPOSE OF THIS COVERAGE SHALL BE TO ACCURATELY DOCUMENT THE PRECONSTRUCTION CONDITION OF THESE SURFACE FEATURES.

THE AUDIO-VIDEO DOCUMENTATION SHALL BE PERFORMED BY A RESPONSIBLE COMMERCIAL FIRM KNOWN TO BE SKILLED AND REGULARLY ENGAGED IN THE BUSINESS OF PRECONSTRUCTION DIGITAL COLOR AUDIO-VIDEO DOCUMENTATION. THE FIRM SHALL FURNISH SUCH INFORMATION AS THE DEPARTMENT DEEMS NECESSARY TO DETERMINE THE ABILITY OF THAT FIRM TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

AUDIO-VIDEO DOCUMENTATION SHALL NOT BE MADE MORE THAN 60 DAYS PRIOR TO CONSTRUCTION IN EACH PHASE OF WORK.

THE AUDIO-VIDEO SYSTEM AND THE PROCEDURES EMPLOYED IN ITS USE SHALL BE SUCH AS TO PRODUCE A FINISHED PRODUCT THAT WILL MEET PROFESSIONAL STANDARDS. THE VIDEO PORTION OF THE RECORDING SHALL BE BRIGHT, SHARP, CLEAR PICTURES WITH ACCURATE COLORS AND SHALL BE FREE FROM DISTORTION OR ANY OTHER FORM OF PICTURE IMPERFECTION. ALL VIDEO RECORDINGS SHALL BY ELECTRONIC MEANS DISPLAY ON THE SCREEN THE TIME OF DAY, THE MONTH, DAY AND YEAR OF THE RECORDING. THE TIME AND DATE INFORMATION MUST BE CONTINUOUSLY AND SIMULTANEOUSLY GENERATED WITH THE ACTUAL RECORDING. THE AUDIO PORTION OF THE RECORDING SHALL BE PERFORMED BY THE CAMERA OPERATOR DURING THE RECORDING PROCESS AND SHALL BE OF HIGH CLARITY AND FREE FROM DISTORTION.

THE RECORDINGS SHALL CONTAIN COVERAGE OF ALL VISIBLE FEATURES WITHIN THE CONSTRUCTION ZONE BEING AFFECTED BY THE WORK. THESE FEATURES SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL ROADWAYS, PAVEMENT, RETENTION PONDS, RAILROAD TRACKS, CURBS, DRIVEWAYS, SIDEWALKS, CULVERTS, HEAD-WALLS, RETAINING WALLS, LANDSCAPING, TREES, FENCES, DRAINAGE DITCHES, CREEKS, STREAMS, VISIBLE UTILITIES, STRUCTURES, AND BUILDINGS. OF PARTICULAR CONCERN SHALL BE THE CONDITION OF EXISTING VEGETATION, TERRAIN, AND STRUCTURES AND THE EXISTENCE OR NON-EXISTENCE OF ANY FAULTS, FRACTURES OR DEFECTS. PANNING, ZOOM-IN AND ZOOM OUT RATES SHALL BE SUFFICIENTLY CONTROLLED.

WRITTEN DOCUMENTATION MUST COINCIDE WITH THE INFORMATION ON THE AUDIO-VIDEO SO AS TO MAKE EASY RETRIEVAL OF LOCATIONS SOUGHT FOR AT A LATER DATE.

TWO COPIES OF THE DIGITAL COLOR AUDIO-VIDEO RECORDING SHALL BE DELIVERED TO THE DEPARTMENT ON USB THUMB DRIVES.

THE DEPARTMENT WILL MAKE PARTIAL PAYMENTS ACCORDING TO 109.09, PRORATED BY THE LENGTH OF THE WORK PHASE. VIDEO DOCUMENTATION WILL BE PAID FOR AT THE CONTRACT PRICE FOR:

ITEM SPECIAL - PRECONSTRUCTION VIDEO DOCUMENTATION, LUMP SUM

**ITEM 623 - MONUMENT ASSEMBLIES**

THE FOLLOWING SUMMARY OF SURVEY MONUMENT WORK AS SHOWN ON THE RIGHT OF WAY PLANS HAS BEEN CARRIED TO THE GENERAL SUMMARY.

SHEET NO.	STATION TO STATION		623	623
			MONUMENT ASSEMBLY, TYPE C	MONUMENT ASSEMBLY ADJUSTED TO GRADE
			EACH	EACH
		TO		
1038	95+00.00	120+00.00	4	
1039	120+00.00	159+42.94	7	
1040	159+42.94	166+00.00		1
1041	166+00.00	210+26.06	3	
1042	210+26.06	236+00.00	5	
1043	236+00.00	263+00.00		
1044	263+00.00	281+41.46	2	1
1045	281+41.46	305+68.21	2	
1046	305+68.21	327+06.55	6	
1047	327+06.55	352+00.00	2	
1048	352+00.00	378+00.00	3	
1049	378+00.00	403+00.00		
1050	403+00.00	429+00.00		1
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>			34	3

CALCULATED  
TLS  
CHECKED  
JMP

GENERAL NOTES

LAK-US-20-19.59

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**ITEM 203 - ROAD MISC.: SUPPORTING EXISTING UTILITY POLES**

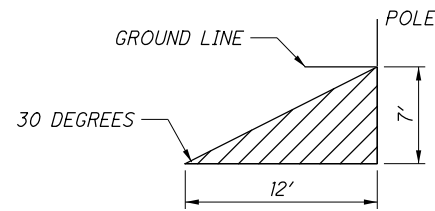
THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A QUALIFIED ELECTRICAL CONTRACTOR TO SUPPORT EXISTING UTILITY POLES WHEN EXCAVATION ACTIVITIES FOR ANY CONTRACT ITEM THAT AFFECTS THE STABILITY OF THE EXISTING UTILITY POLES. THE CONTRACTOR SHALL HAVE PREVIOUS EXPERIENCE PERFORMING THIS OPERATION WITH FIRST ENERGY AND SHALL SUBMIT A PLAN THAT INCLUDES ALL EQUIPMENT, METHODS, AND ASSOCIATED CRITERIA FOR ALL POLE HOLDING OPERATIONS FOR REVIEW BY THE MAINTAINING UTILITIES AND APPROVAL BY THE ENGINEER BEFORE WORK COMMENCES.

REGARDLESS OF THE DURATION, FREQUENCY, OR APPROVED METHOD OF SUPPORT, PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT BID PRICE PER EACH INDIVIDUAL POLE AS DESCRIBED ABOVE.

ALL EXCAVATION ACTIVITIES THAT ENCR OACH ON THE HATCHED AREA BELOW SHALL REQUIRE SUPPORT OF THE POLE PRIOR TO BEGINNING THE EXCAVATION AND UNTIL SUCH TIME AS THE HATCHED AREA HAS BEEN BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE ITEM CAUSING THE ENCR OACHMENT.

THE FOLLOWING QUANTITY IS PROVIDED TO SUPPORT EXISTING UTILITY POLES, FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 203E98600 ROADWAY, MISC.: SUPPORTING EXISTING UTILITY POLES -130- EACH



**EROSION CONTROL**

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	13,524 CU. YD.
659, SEEDING AND MULCHING, CLASS 1	121,832 SQ. YD.
659, REPAIR SEEDING AND MULCHING	6,092 SQ. YD.
659, INTER-SEEDING	6,092 SQ. YD.
659, COMMERCIAL FERTILIZER	16.99 TON
659, LIME	25.17 ACRES
659, WATER	691 M. GAL.
659, MOWING	15,350 M. SQ. FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON LIMITS IDENTIFIED AS NECESSARY IN THE CROSS-SECTIONS. ANY ADDITIONAL AREAS OUTSIDE OF THE AREAS IDENTIFIED IN THE CROSS-SECTIONS THAT ARE DISTURBED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION MUST BE RESTORED IN ACCORDANCE WITH C&MS 107.10 AND CONSIDERED INCIDENTAL TO THE WORK. NO ADDITIONAL COMPENSATION WILL BE MADE FOR THESE AREAS.

**ITEM 670 - SLOPE EROSION PROTECTION**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROTECT AND PROMOTE GROWTH OF PERMANENT SEEDED AREAS ON SLOPES STEEPER THAN 3:1 AS DIRECTED BY THE DEPARTMENT:

670, SLOPE EROSION PROTECTION	4,200 SQ. YD.
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**ENVIRONMENTAL**

**NOTIFICATION OF COMMENCEMENT**

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING A MINIMUM OF TWO WEEKS PRIOR TO COMMENCEMENT OF WORK:

PAINESVILLE TOWNSHIP	440-352-1443
PAINESVILLE TOWNSHIP FIRE	440-358-6996
RIVERSIDE LOCAL SCHOOLS	440-352-0668
PERRY TOWNSHIP	440-259-5140
PERRY JOINT FIRE DISTRICT	440-259-3251
PERRY LOCAL SCHOOLS	440-259-9200
NORTH PERRY VILLAGE	440-259-4994
NORTH PERRY VILLAGE POLICE	440-259-4994
MADISON TOWNSHIP	440-428-5128
MADISON FIRE DISTRICT	440-428-1522
MADISON TOWNSHIP POLICE	440-428-2116
MADISON LOCAL SCHOOLS	440-428-2166
LAKE COUNTY SHERIFF	
(PAINESVILLE TWP., PERRY TWP.)	440-350-5601

**ENDANGERED BAT HABITAT REMOVAL**

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

**MUSSEL SALVAGE AND RELOCATION**

THE DEPARTMENT WILL ENSURE A STATE PERMITTED MALACOLOGIST WILL COMPLETE A MUSSEL SALVAGE AND RELOCATION IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE OHIO MUSSEL SURVEY PROTOCOL PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES BELOW THE ORDINARY HIGH WATER MARK FOR RED MILL CREEK. THE DISTRICT ENVIRONMENTAL COORDINATOR WILL COORDINATE THE RESULTS OF THE MUSSEL SURVEY, SALVAGE WORK, OR BOTH WITH ODNR. THE DEPARTMENT WILL ENSURE THE MUSSEL SURVEY AND RELOCATION OCCURS, AND APPROVAL HAS BEEN RECEIVED FROM ODNR, PRIOR TO THE CONTRACTOR PERFORMING WORK BELOW THE ORDINARY HIGH WATER MARK OF RED MILL CREEK.

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT ONE MONTH PRIOR TO ANY PLANNED WORK BELOW THE ORDINARY HIGH WATER OF RED MILL CREEK.

**ITEM SPECIAL - PETROLEUM CONTAMINATED SOILS**

STUDIES INDICATE THAT PETROLEUM CONTAMINATED SOILS WILL BE ENCOUNTERED DURING EXCAVATIONS FOR CONSTRUCTION ACTIVITIES AT:

STA 119+25 to STA 139+75	2495 NORTH RIDGE ROAD
	2481 NORTH RIDGE ROAD
	2450 NORTH RIDGE ROAD
	2500 NORTH RIDGE ROAD
	2510 NORTH RIDGE ROAD
	2501 NORTH RIDGE ROAD
STA 236+25 to STA 240+00	3497 NORTH RIDGE ROAD
STA 340+50 to STA 343+50	4569 NORTH RIDGE ROAD
	4571 NORTH RIDGE ROAD
STA 393+50 to STA 397+00	5068 NORTH RIDGE ROAD

THE CONTRACTOR SHALL MANAGE THE EXCAVATED MATERIAL AS FOLLOWS. THE ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK. ALL EXCAVATIONS AT THE AFOREMENTIONED LOCATION SHALL BE PAID FOR UNDER THE ORIGINAL PLAN BID ITEMS.

THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED MATERIAL INTO TRUCKS FOR TRANSPORT AND DISPOSAL. AS AN ALTERNATE, THE ENGINEER MAY PERMIT THE CONTRACTOR TO TEMPORARILY STOCKPILE THE EXCAVATED MATERIAL ON AN IMPERMEABLE MEMBRANE, IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE MEMBRANE SHALL BE SURROUNDED BY BALES OF STRAW TO PREVENT THE EXCAVATED MATERIAL FROM COMING IN CONTACT WITH THE UNDERLYING SOIL. AN IMPERMEABLE MEMBRANE SHALL BE PLACED OVER THE STOCKPILE TO PREVENT CONTACT WITH PRECIPITATION AND/OR SURFACE RUN-OFF.

THE EXCAVATED MATERIAL SHALL BE PROPERLY TRANSPORTED AND DISPOSED OF AS A SOLID WASTE IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TESTING, PERMITS, AND APPROVALS TO TRANSPORT AND DISPOSE OF THE MATERIAL. IF EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL DEWATER, CONTAINERIZE AND DISPOSE OF BY METHODS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS AND/OR AUTHORIZATIONS NEEDED TO STORE, TEST, TRANSPORT AND DISPOSE OF THE WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF REGULATED WATER WITH A METHOD APPROVED BY THE ENGINEER. WORK INVOLVED WITH THIS ITEM SPECIAL INCLUDES COMPLYING WITH THE HANDLING, STORAGE, AND DISPOSAL OF REGULATED AND NON-REGULATED WATER.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID PER TON AND/OR GALLON. THE BASIS FOR CONVERSION FROM TONS TO CUBIC YARDS IS 1.5 TON/CUBIC YARD. ALL EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS SHALL BE PAID FOR UNDER THE ORIGINAL PLAN BID ITEMS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

690E65016 ITEM SPECIAL - WORK INVOLVING PETROLEUM CONTAMINATED SOIL	8200 TON
690E65024 ITEM SPECIAL - WORK INVOLVING REGULATED WATER	4100 GALLON
690E65022 ITEM SPECIAL - WORK INVOLVING NON-REGULATED WATER	4100 GALLON

**DRAINAGE**

**ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT**

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

**CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES**

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES**

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF 707 AND HAVE A MINIMUM LENGTH OF 2 FEET AND A MINIMUM WALL THICKNESS OF 0.064 INCHES.

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.

A MASONRY COLLAR, AS PER STANDARD DRAWING DM-1.1, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 611 OR 522.



**CROSSINGS UTILITY LATERAL CONNECTIONS**

WATER SERVICES ARE TO BE EXPECTED AT EVERY PARCEL WITHIN THE PROJECT LIMITS. SANITARY SERVICE LATERALS ARE TO BE EXPECTED AT EVERY PARCEL BETWEEN STA 166+00 AND STA 178+50, AND BETWEEN STA 309+00 AND STA 360+00. EXACT LOCATIONS OF LATERAL SERVICES ARE UNKNOWN.

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO CROSS OVER OR UNDER AN EXISTING SEWER OR WATER LATERAL SERVICE, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR WATER LATERAL SERVICE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**ITEM 611 - CONDUIT MISC. EXISTING UTILITY LOCATION TEST HOLES**

THE CONTRACTOR SHALL CAREFULLY EXCAVATE AROUND THE EXISTING UTILITY TO VERIFY EXISTING LOCATION AND DEPTH PRIOR TO LAYING PROPOSED CONDUIT. HAND DIGGING MAY BE NECESSARY TO AVOID DAMAGE TO THE UTILITY.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID PER EACH TEST HOLE FOR THE OPERATIONS DESCRIBED ABOVE.

THE FOLLOWING QUANTITY IS PROVIDED TO EXCAVATE TEST HOLES FOR THE PURPOSE OF VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES WHOSE EXACT LOCATIONS ARE UNKNOWN, TO BE USED AS DIRECTED BY THE DEPARTMENT.

ITEM 611 CONDUIT MISC.: EXISTING UTILITY LOCATION TEST HOLES, 50 EACH

**ITEM 611 - CONDUIT MISC. SUPPORT EXISTING UTILITY POLES FOR DRAINAGE EXCAVATION**

THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A QUALIFIED ELECTRICAL CONTRACTOR TO SUPPORT EXISTING UTILITY POLES WHEN CONDUIT EXCAVATIONS WILL JEOPARDIZE THE STABILITY OF EXISTING UTILITY POLES WHICH ARE IN CLOSE PROXIMITY TO THE EXCAVATION.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID PER EACH POLE HELD AS DESCRIBED ABOVE.

THE FOLLOWING QUANTITY IS PROVIDED TO SUPPORT EXISTING UTILITY POLES FOR DRAINAGE EXCAVATION, FOR USE AS DIRECTED BY THE DEPARTMENT.

ITEM 611 CONDUIT MISC.: SUPPORT EXISTING UTILITY POLES FOR DRAINAGE EXCAVATION, 130 EACH

**ITEM 611 CATCH BASIN RECONSTRUCTED TO GRADE  
ITEM 611 MANHOLE RECONSTRUCTED TO GRADE**

THE FOLLOWING QUANTITY IS PROVIDED TO RECONSTRUCT EXISTING CATCH BASINS AND MANHOLES TO GRADE IN RESURFACING AREAS OF THE PROJECT, AS DIRECTED BY THE DEPARTMENT.

ITEM 611 CATCH BASIN RECONSTRUCTED TO GRADE, 5 EACH  
ITEM 611 MANHOLE RECONSTRUCTED TO GRADE, 5 EACH

**ITEM 611 CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN  
ITEM 611 MANHOLE ADJUSTED TO GRADE, AS PER PLAN**

ALL CASTINGS SHALL BE ADJUSTED TO THE FINISHED ROADWAY ELEVATION BY THE CONTRACTOR. THE TIME BETWEEN ADJUSTING THE THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM. NO ADJUSTING RINGS SHALL BE PERMITTED.

THE FOLLOWING QUANTITY IS PROVIDED TO ADJUST EXISTING CATCH BASINS AND MANHOLES TO GRADE IN RESURFACING AREAS OF THE PROJECT, AS DIRECTED BY THE DEPARTMENT.

ITEM 611 CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN, 45 EACH  
ITEM 611 MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 17 EACH

**ITEM 530 SPECIAL STRUCTURAL SURVEY AND MONITORING OF VIBRATION**

THIS ITEM SHALL BE USED AS DIRECTED BY THE DEPARTMENT FOR TEMPORARY SHORING WHICH MAY BE NECESSARY FOR THE INSTALLATION OF ITEM 895 - MANUFACTURED WATER QUALITY STRUCTURE AND ASSOCIATED WORK.

MONITOR GROUND VIBRATIONS CAUSED BY PILE DRIVING TO MINIMIZE THE POTENTIAL DAMAGE TO EXISTING STRUCTURES.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO ESTABLISH THE ACCEPTABLE VIBRATION LIMITS AND TO PERFORM THE VIBRATION MONITORING. USE A VIBRATION SPECIALIST THAT IS AN EXPERT IN THE INTERPRETATION OF VIBRATION DATA, AND WHO MEETS ONE OF THE FOLLOWING CRITERIA:  
1) IS A REGISTERED ENGINEER WITH AT LEAST TWO YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS, OR  
2) HAS AT LEAST FIVE YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS. DO NOT USE A VIBRATION SPECIALIST THAT IS AN EMPLOYEE OF THE CONTRACTOR.

SUBMIT A RESUME OF THE CREDENTIALS OF THE PROPOSED VIBRATION SPECIALIST AT, OR BEFORE, THE PRECONSTRUCTION MEETING. INCLUDE IN THE RESUME A LIST OF CONSTRUCTION PROJECTS ON WHICH THE VIBRATION SPECIALIST WAS RESPONSIBLY IN CHARGE OF MONITORING THE VIBRATIONS. LIST A DESCRIPTION OF THE PROJECTS, WITH DETAILS OF THE VIBRATION INTERPRETATIONS MADE ON THE PROJECT. LIST THE NAMES AND TELEPHONE NUMBERS OF PROJECT OWNERS WITH SUFFICIENT KNOWLEDGE OF THE PROJECTS TO VERIFY THE SUBMITTED INFORMATION. OBTAIN THE ENGINEER'S ACCEPTANCE OF THE VIBRATION SPECIALIST BEFORE BEGINNING ANY PILE DRIVING WORK. ALLOW 30 DAYS FOR THE REVIEW OF THIS DOCUMENTATION.

USE SEISMOGRAPHS CAPABLE OF CONTINUOUSLY RECORDING THE PEAK PARTICLE VELOCITY FOR THREE MUTUALLY PERPENDICULAR COMPONENTS OF VIBRATION, AND OF PROVIDING A PERMANENT RECORD OF THE ENTIRE VIBRATION EVENT. USE A SUFFICIENT NUMBER OF SEISMOGRAPHS TO PROVIDE REDUNDANCY IN CASE ONE DEVICE SHOULD FAIL. SUBMIT A PLAN OF THE PROPOSED SEISMOGRAPH LOCATIONS TO THE ENGINEER FOR REVIEW.

THE VIBRATION SPECIALIST SHALL PERFORM THE FOLLOWING:

1. MEASURE THE AMBIENT GROUND VIBRATIONS NEAR EXISTING STRUCTURES BEFORE PILE DRIVING BEGINS.
2. ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO EXISTING STRUCTURES AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE DRIVING PILES NEAR EXISTING STRUCTURES.
3. MONITOR GROUND VIBRATIONS DURING PILE DRIVING.
4. IMMEDIATELY INFORM THE CONTRACTOR AND ENGINEER IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED.
5. FURNISH THE DATA RECORDED AND INCLUDE THE FOLLOWING:
  - A. IDENTIFICATION OF SEISMOGRAPH.
  - B. DISTANCE AND DIRECTION OF SEISMOGRAPH FROM PILE DRIVING.
  - C. START TIME AND DURATION OF PILE DRIVING.
  - D. LIST OF PILES DRIVEN DURING EACH MONITORING INTERVAL.

IMMEDIATELY SUSPEND ALL PILE DRIVING IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES, SUCH AS PREBORED HOLES, TO REDUCE THE VIBRATIONS.

SUBMIT THREE COPIES OF THE FINAL REPORT WHICH CONTAINS ALL MEASUREMENTS, INTERPRETATIONS, AND RECOMMENDATIONS TO THE ENGINEER.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM 530 SPECIAL STRUCTURAL SURVEY AND MONITORING OF VIBRATION THE DEPARTMENT WILL PAY THE FINAL TWENTY PERCENT AFTER THE ENGINEER RECEIVES THE FINAL REPORT.

THE DEPARTMENT WILL PAY ACCORDING TO C&MS 109.05 FOR ALTERNATIVE CONSTRUCTION PROCEDURES THAT THE ENGINEER DETERMINES ARE NECESSARY TO REDUCE VIBRATIONS

**ITEM SPECIAL - STRUCTURE MISC. PRECONSTRUCTION CONDITION SURVEY**

THIS ITEM SHALL BE USED AS DIRECTED BY THE DEPARTMENT FOR TEMPORARY SHORING WHICH MAY BE NECESSARY FOR THE INSTALLATION OF ITEM 895 - MANUFACTURED WATER QUALITY STRUCTURE AND ASSOCIATED WORK.

BEFORE PILE DRIVING BEGINS, CONDUCT A CONDITION SURVEY OF ALL EXISTING BUILDINGS, STRUCTURES, AND UTILITIES WITHIN 200-FT OF THE PILE DRIVING WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE BUILDINGS, STRUCTURES, OR UTILITIES PRIOR TO PILE DRIVING, SO THAT CLAIMS OF DAMAGE CAUSED BY THE PILE DRIVING CAN BE VERIFIED.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO PERFORM OR SUPERVISE THE CONDITION SURVEY. USE A VIBRATION SPECIALIST THAT MEETS THE QUALIFICATION REQUIREMENTS FOR VIBRATION MONITORING.

RECORD THE CONDITION OF EXISTING STRUCTURES AND BUILDING MATERIALS, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. INSPECT INTERIOR WALLS, CEILINGS, AND FLOORS THAT ARE ACCESSIBLE. INSPECT THE EXTERIOR OF THE BUILDING THAT IS VISIBLE FROM GROUND LEVEL. ALSO RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS, OR OCCUPANTS, FAIL TO ALLOW ACCESS TO THE PROPERTY FOR THE PRECONSTRUCTION CONDITION SURVEY, SEND A CERTIFIED LETTER TO THE OWNER OR OCCUPANT. DOCUMENT THE NOTIFICATION EFFORT AND THE CERTIFIED LETTER IN THE REPORT.

SUBMIT THREE COPIES OF THE REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE BUILDINGS, STRUCTURES, AND UTILITIES, AND THAT IDENTIFIES AREAS OF CONCERN.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL STRUCTURE MISC.: PRECONSTRUCTION CONDITION SURVEY.

**SUPPORT AND UNDERCUT OF UNSTABLE EXCAVATIONS**

WHEN EXCAVATING FOR CONDUIT AND STRUCTURE INSTALLATION, UNSTABLE SOILS ARE TO BE EXPECTED. THE CONTRACTOR IS ADVISED THAT THE SOILS FOR THE DEPTH OF EXCAVATION ARE EXPECTED TO BE SATURATED AND SANDY, WITH MOISTURE CONTENTS EXCEEDING 12% IN MOST AREAS OF THE PROJECT.

ALL ADDITIONAL COSTS FOR LABOR, EQUIPMENT, AND MATERIALS NECESSARY FOR PROPERLY BRACING THE UNSTABLE EXCAVATION FROM CAVE-IN AND DEWATERING SHALL BE INCLUDED IN THE UNIT PRICES FOR THE VARIOUS DRAINAGE ITEMS. FOR AREAS OUTSIDE A DISTANCE OF 200 FEET UP/DOWN STATION FROM SOIL BORINGS CONTAINING SUPERIOR INFORMATION, THE WATER TABLE SHALL BE ASSUMED TO BE AT A DEPTH OF 10 FEET FOR BIDDING PURPOSES.

IT IS EXPECTED THAT REMOVAL OF UNSUITABLE MATERIAL WILL BE NECESSARY IN ACCORDANCE WITH C&MS 611.05. THE FOLLOWING CONTINGENCY QUANTITIES ARE PROVIDED FOR EXCAVATING AND REPLACING THE UNSUITABLE MATERIAL UNDER THE BEDDING DEEMED UNSUITABLE BY THE ENGINEER:

ITEM 203E10001 EXCAVATION, AS PER PLAN 5,000 CY  
ITEM 204E50000 GEOTEXTILE FABRIC 11,200 SY  
ITEM 203E35130 GRANULAR MATERIAL, TYPE D 5,000 CY

**REMOVAL OF ABANDONED UTILITY PIPES AND CONDUITS**

REMOVE ALL CONFLICTING ABANDONED SMALL DIAMETER (6-INCH ID AND UNDER) UTILITY CONDUITS (INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, TELECOMMUNICATIONS, ETC.) ENCOUNTERED DURING THE PERFORMANCE OR INSTALLATION OF OTHER PAY ITEMS OF WORK IN THIS CONTRACT IN ACCORDANCE WITH ITEM 202. THIS WORK IS INCIDENTAL TO THE PERFORMANCE OF SAID PAY ITEMS. NO ADDITIONAL PAYMENT WILL BE MADE.

**ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (FOR PROPOSED CULVERT AT STA. 253+86)**

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE TO SUPPORT THE SIDES OF THE EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP PRICE FOR COFFERDAMS AND EXCAVATION BRACING. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

THIS WORK SHALL CONSIST OF TEMPORARY SHEET PILING TO BE INSTALLED TO CONSTRUCT THE NEW CULVERT AT STA. 253+86 TO APPROXIMATE LIMITS SHOWN ON SHEET 83 OF 1253. THE WORK SHALL BE IN ACCORDANCE WITH ITEM 503, EXCEPT THAT STEEL SHEET PILING SATISFYING THE MAXIMUM SECTION DEPTH, THE MINIMUM SECTION AND MATERIAL PROPERTIES LISTED BELOW SHALL BE USED. CULVERT DETAIL SHEET 862 OF 1253 FOR THE CULVERT SECTION

MAXIMUM SECTION DEPTH: NO MAXIMUM  
MINIMUM SECTION MODULUS: 60.7 CU. IN./FT.  
STRUCTURAL STEEL: A572  
MINIMUM YIELD STRENGTH: 50,000 PSI

THE DEPTH OF EXCAVATION AT THE PROPOSED CULVERT SHALL BE 19' MAXIMUM WITH A 2'-0" LIVE LOAD SURCHARGE AND WILL REQUIRE THE USE OF TEMPORARY SHORING. IF IT IS NOT REMOVED, ALL SHEETING SHALL BE CUT TO 1 FT. BELOW PROPOSED APPROACH ROADWAY SUBBASE (ITEM 304) ELEVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SAFE TEMPORARY CUT SLOPES AND ANY DEWATERING AS NOTED IN ITEM 503.

TEMPORARY SHEETING TABLE					
SHEETING	APPROX. STA.		ELEVATIONS		LENGTH
	BEGIN	END	TOP	BOTTOM	
BACK	253+44.5	254+03.5±	678.0	626.0	52'
*OVER EX. BOX	254+03.5±	254+11.5±	678.0	664.0	14'
AHEAD	254+11.5±	254+28.0±	678.0	626.0	52'

\*-WELD WALERS ON EXPOSED SIDE OF THIS 8' LONG PART OF WALL

DO NOT DRIVE SHEET PILING THROUGH AN EXISTING BOX CULVERT AT STA. 254+07.5. CONSEQUENTLY, AN 8'-0"± LENGTH OF WALL ABOVE THE EXISTING BOX SHALL BE STIFFENED WITH WALERS WELDED TO THE EXPOSED FACE OF THE SHEET PILING. INSTALL FOUR (4) W6X25 X 12'-0" LONG WALERS AS THE EXCAVATION DEEPENS ABOVE THE EXISTING BOX CULVERT. FLAME CUT A HOLE THROUGH THE SHEET PILING TO PASS A PROPOSED 66" STORM CONDUIT.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS TO COMPLETE THE WORK DESCRIBED ABOVE IS INCLUDED UNDER THE CONTRACT "LUMP SUM" PRICE BID FOR ITEM 503 COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

CALCULATED  
TLS  
CHECKED  
JMP

GENERAL NOTES

LAK-US-20-19.59

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**EXISTING SUBSURFACE DRAINAGE**

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 605 - AGGREGATE DRAINS 200 FT.  
 ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 500 FT.  
 ITEM 611 - 6" CONDUIT, TYPE F 50 FT.

**DRAINAGE DISCHARGE CONTINUANCE**

FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT OR SWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN ACCORDANCE WITH SCD DM-3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING, OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611, INSPECTION WELL.

FURNISH A DRILLED HOLE OR A CURB SECTION WITH A HOLE WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING, OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE - FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE - FOR DRAINAGE DISCHARGE CONTINUANCE.

DOCUMENTATION: THE CONTRACTOR SHALL FURNISH WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE DISTRICT R/W PERMIT OFFICE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, PID, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE R/W, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE WAS LOCATED, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE - FOR DRAINAGE DISCHARGE CONTINUANCE.

CONDUIT MATERIAL TYPES THE FOLLOWING CONDUIT MATERIAL TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, AND 707.52 SDR35.

PAY ITEMS: EACH OF THE PAY ITEMS LISTED BELOW FOR CONDUIT MISCELLANEOUS TYPES B AND C FOR DRAINAGE DISCHARGE CONTINUANCE INCLUDE CONDUIT SIZES 2 INCH TO 12 INCH. THERE IS NO COST DIFFERENTIATION FOR SIZE IN THESE PAY ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE DRAINAGE DISCHARGE CONTINUANCE:

ITEM 611, INSPECTION WELL 10 EACH  
 ITEM 611, CONDUIT, MISC TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE 500 FEET  
 ITEM 611, CONDUIT, MISC TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE 500 FEET

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

**ITEM SPECIAL - MISCELLANEOUS METAL**

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL 10,000 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

**ITEM 611 INLET, SIDE DITCH**

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO ADDRESS LOW AREAS INADVERTENTLY CREATED WITHIN THE PROJECT LIMITS, AS DIRECTED BY THE DEPARTMENT.

ITEM 611 INLET, SIDE DITCH 5 EACH  
 ITEM 611 12" CONDUIT, TYPE C 500 FEET

**ITEM 611 12" CONDUIT, AS PER PLAN, 748.01 OR 748.06**

THE FOLLOWING CONDUIT TYPES SHALL BE PROVIDED FOR THIS ITEM OF WORK.

748.01 - PROVIDE ANSI CLASS 52 WITH PUSH-ON JOINTS CONFORMING TO 638.07.  
 748.06 - PROVIDE STANDARD THICKNESS GALVANIZED STEEL CASING WITH FULL-CIRCUMFERENCE WELDED JOINTS CONFORMING TO 513.21.

**ITEM SPECIAL - PIPE CLEANOUT**

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

SPECIAL, PIPE CLEANOUT, 24" AND UNDER 4400 FT.  
 SPECIAL, PIPE CLEANOUT, 27" TO 48" 225 FT.

**TEMPORARY DRAINAGE ITEMS**

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

**WATER QUALITY**

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**MANUFACTURED WATER QUALITY STRUCTURE**

THIS PLAN UTILIZES MANUFACTURED WATER QUALITY STRUCTURES FOR WATER QUALITY TREATMENT. AREAS HAVE BEEN SHOWN IN THE PLANS FOR PLACEMENT OF AN OFF-LINE SYSTEM. PAYMENT FOR THESE DEVICES SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR ITEM 895, MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4.

**PAVEMENT**

**PART-WIDTH CONSTRUCTION**

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

**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS**

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449) 200 CU. YDS.  
 ITEM 304 - AGGREGATE BASE 200 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 AND 304 THICKNESS OF 6 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

**PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS**

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22, (449) 30 CU. YDS.  
 ITEM 304 - AGGREGATE BASE 30 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 AND 304 THICKNESS OF 6 INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

**ITEM 874 - LONGITUDINAL JOINT PREPARATION, AS PER PLAN**

METHOD ONE SHALL BE USED TO COMPLETE THIS WORK.

A MINIMUM OF 12 INCHES WIDTH FROM THE FIRST PASS OF THE ENTIRE LENGTH OF ASPHALT CONCRETE SURFACE COURSE SHALL BE REMOVED.

INCLUDE THE COST OF FURNISHING, PLACING AND REMOVING 12 INCHES WIDTH OF ASPHALT SURFACE COURSE, AND FURNISHING AND PLACING SS 875 LONGITUDINAL JOINT ADHESIVE IN THE CONTRACT UNIT PRICE FOR LONGITUDINAL JOINT PREPARATION.

**ITEM 202 - PAVEMENT REMOVED, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE REMOVAL OF ALL INTEGRAL CURB AND ALL TYPES OF EXISTING PAVEMENT, INCLUDING ASPHALT, CONCRETE AND BRICK.

THIS ITEM SHALL ALSO INCLUDE FULL DEPTH PAVEMENT SAWING AT LOCATIONS WHERE ADJACENT RIGID AND FLEXIBLE PAVEMENT IS TO REMAIN.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)**

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PARTIAL DEPTH PAVEMENT REPAIR:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441) 1400 SY.

REMOVAL DEPTH SHALL BE 3 INCHES OR AS DIRECTED BY THE ENGINEER.

**ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A (446), AS PER PLAN, PG76-22M**

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. AT LEAST 50% OF THE FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO ACBFS OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE, DO NOT EXCEED 63 IN PRODUCTION.

WHEN ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2%. IF ACBFS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF CMS 442.

**ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 mm, TYPE A (446), AS PER PLAN**

ON THIS PROJECT SUPPLY A 19 mm INTERMEDIATE COURSE MEETING THE REQUIREMENTS OF 442 EXCEPT AS MODIFIED BELOW.

MODIFY TABLE 442.02-2 AS FOLLOWS:

SIEVE SIZE	9.5 mm mix	12.5 mm mix	19 mm mix
	TOTAL PERCENT PASSING		
1 1/2 inch (38 mm)	-	-	100
3/4 inch (19 mm)	-	100	95 to 100
1/2 inch (12.5 mm)	100	95 to 100	90 to 100
3/8 inch (9.5 mm)	90 to 100	96 max	96 max
No. 4 (4.75 mm)	70 max	52 to 65	60 max
No. 8 (2.36 mm)	34 to 52	34 to 45	34 to 45
No. 200 (75 µm)	2 to 8	2 to 8	2 to 8

MODIFY TABLE 442.02-3 AS FOLLOWS: APPLY 14.0 FOR A VMA (PERCENT MINIMUM) FOR A 19 mm MIX. APPLY 5.3 PERCENT FOR THE MINIMUM TOTAL ASPHALT BINDER CONTENT FOR A 19 mm MIX.

MODIFY THE 442 INTERMEDIATE COURSE REQUIREMENTS OF TABLES 401.04-1 AND 401.04-2 AS FOLLOWS: APPLY 3.5 PERCENT FOR THE TOTAL VIRGIN ASPHALT BINDER CONTENT, MINIMUM.

USE A PG64-22 IF USING 25 PERCENT OR LESS RAP. USE PG64-28 IF USING GREATER THAN 25 PERCENT RAP.

**ITEM 301 - ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22**

FOR THE PLACEMENT OF 301 ASPHALT BASE, USE ANTI-SEGREGATION EQUIPMENT CONFORMING TO THE REQUIREMENTS OF 401.03.C EXCLUDING THE USE OF REMIXING PAVERS. ALL COSTS ASSOCIATED WITH THIS PROVISION SHALL BE INCIDENTAL TO ITEM 301 - ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22.

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**GENERAL NOTES**

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**PAVEMENT**

**ADDITIONAL DRIVEWAY QUANTITIES**

CHANGES IN EXISTING CONDITIONS AND DEVELOPMENT MAY OCCUR WITHIN THE PROJECT LIMITS OVER THE LIFE OF THIS PROJECT. THE FOLLOWING ADDITIONAL DRIVEWAY PAVEMENT QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE DEPARTMENT:

ITEM 202, PAVEMENT REMOVED, AS PER PLAN 500 SY

ITEM 203, EXCAVATION 115 CY

ITEM 204, SUBGRADE COMPACTION 500 SY

ITEM 452, 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS 250 SY

ITEM 452, 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS 250 SY

**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 SUPERSEDE THE FEDERAL BUY AMERICAN REQUIREMENTS AS SET FORTH IN PN 133.

**ITEM SPECIAL 1", 1-1/2", AND 2" 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 OR SERVICE BOXES, AS REQUIRED ACCORDING TO THE FOLLOWING SITUATIONS.

TAPPING SADDLES, CORPORATION STOPS, SERVICE STOPS, AND SERVICE BOXES, IF REQUIRED, ARE SEPARATE FROM THIS ITEM:

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 3,500 FT  
ITEM SPECIAL, 1-1/2" COPPER WATER SERVICE LINE, LCDU STANDARD 100 FT  
ITEM SPECIAL, 2" COPPER WATER SERVICE LINE, LCDU STANDARD 100 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 - 4" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD**

**ITEM SPECIAL - 6" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD**

**ITEM SPECIAL - 8" 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 4" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD, FEET, ITEM SPECIAL 6" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD, FEET, AND ITEM SPECIAL 8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD, FEET

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

ITEM SPECIAL, 4" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD 50 FT  
ITEM SPECIAL, 6" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD 50 FT  
ITEM SPECIAL, 8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD 50 FT

**ITEM 618 - RUMBLESTRIPS, SHOULDER (ASPHALT CONCRETE)**

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING RUMBLE STRIPS IN THE SHOULDER AREA.

RAMP A, STA. 887+00 TO 888+12 RT  
RAMP B, STA. 891+00 TO 892+35 LT

ITEM 618 - RUMBLESTRIPS, SHOULDER (ASPHALT CONCRETE) 250 FT.

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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 NARROWS ROAD, BLACKMORE ROAD, PERRY PARK ROAD, PARMLY ROAD, RED MILL VALLEY ROAD, CALL ROAD AND ANTIOCH ROAD, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 34-40. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$300 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 AND THE QUANTITIES IN THE TABLE BELOW 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 **2,000 SF**

ITEM 615 ROADS FOR MAINTAINING TRAFFIC LUMP SUM

ITEM 616, WATER **100 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**

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED SIDE STREET 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.

**DROP-OFFS IN WORKZONES**

AT ALL TIMES AND FOR ALL SPEED LIMITS, THE WORK SHALL CONFORM TO THE REQUIREMENTS OF MT-101.90, CONDITION II. FOR AREAS WHERE THE SPEED LIMIT IS LESS THAN 45 MPH, A 3:1 FORESLOPE SHALL BE MAINTAINED BY THE CONTRACTOR UTILIZING MATERIAL THAT CONFORMS TO ITEM 410 OR ITEM 304.

THE COST FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

**EARTHWORK FOR MAINTAINING TRAFFIC**

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

EXCAVATION FOR MAINTAINING TRAFFIC **19204 CU. YD.**  
EMBANKMENT FOR MAINTAINING TRAFFIC **2681 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 UNDERCUT SHALL BE FILLED THE SAME DAY AS THE EXCAVATION.

AREAS THAT ARE EXCAVATED FOR THE INSTALLATION OF TEMPORARY PAVEMENT SHALL BE COMPENSATED UNDER THE LUMP SUM ITEM FOR ROADS FOR MAINTAINING TRAFFIC. NO SEPARATE PAYMENT WILL BE MADE FOR THE EXCAVATION OF THESE AREAS UNDER ITEM 203 - 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, PHASE 2, PHASE 3 AND PHASE 4 CONSTRUCTION:

WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT **11.18 MILE**  
WORK ZONE CENTER LINE, CLASS I, 6", 642 PAINT **6.62 MILE**  
WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT **1.28 MILE**  
WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT **3156 FT**  
WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT **742 FT**  
WORK ZONE STOP LINE, CLASS I, 642 PAINT **693 FT**  
WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT **2665 FT**  
WORK ZONE ARROW, CLASS I, 642 PAINT **22 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, 6", 642 PAINT **21.26 MILE**  
WORK ZONE CENTER LINE, CLASS III, 6", 642 PAINT **12.78 MILE**  
WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT **5.06 MILE**  
WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT **8926 FT**  
WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT **1600 FT**  
WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT **1142 FT**  
WORK ZONE STOP LINE, CLASS III, 642 PAINT **1144 FT**  
WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT **4068 FT**  
WORK ZONE ARROW, CLASS III, 642 PAINT **120 EACH**  
WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT **24 SF**  
CHEVRON MARKING, TYPE I **450 FEET**

**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: CENTER ROAD, TOWNLINE ROAD

PHASE 2: CENTER ROAD, TOWNLINE ROAD

PHASE 5: LANE ROAD

PHASE 6: LANE ROAD

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

ITEM 614, WORK ZONE TRAFFIC SIGNAL **24 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 **1000 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.

**ITEM 625 PULL BOX REMOVED AND REPLACED, AS PER PLAN**

THIS ITEM WILL INCLUDE THE REMOVAL AND REPLACEMENT OF PULL BOXES THAT ARE LOCATED WITHIN TEMPORARY PAVEMENT THAT CONTAIN PERMANENT WIRES WHICH ARE NOT INTENDED TO BE REMOVED. WHEN THE PULL BOX IS REMOVED, THE PERMANENT WIRES SHALL BE COVERED WITH SAND AND PLATED TO PROTECT THE WIRES DURING CONSTRUCTION. WHEN THE TEMPORARY PAVEMENT IS REMOVED, A NEW PULL BOX MATCHING THE ORIGINAL SIZE SHALL BE INSTALLED TO THE FINAL GRADE AT THE SAME LOCATION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE TEMPORARY REMOVAL OF PULL BOXES:

ITEM 625, PULL BOX REMOVED AND REPLACED, AS PER PLAN, **10 EACH**

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 30 OF THE PLANS. 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 **180 SIGN MONTH**  
(ASSUMING 5 PCMS SIGNS FOR 36 MONTHS)

CALCULATED  
JDC  
CHECKED  
EJT

MAINTENANCE OF TRAFFIC GENERAL NOTES

LAK-US-20-19.59

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**MAINTAINING DRIVEWAY ACCESS**

COMMERCIAL AND HANDICAP PROPERTIES: ACCESS TO ALL COMMERCIAL AND HANDICAP PROPERTY SHALL BE MAINTAINED AT ALL TIMES, AS FOLLOWS:

FOR PROPERTIES WITH MULTIPLE DRIVEWAYS: DRIVEWAY CONSTRUCTION WILL BE SCHEDULED SO THAT AT LEAST ONE ACCESS DRIVEWAY IS OPEN AND CLEAR WHILE THE OTHER DRIVEWAY(S) ARE BEING CONSTRUCTED.

FOR PROPERTIES WITH ONLY ONE ACCESS AND PROPERTIES WITH ONE WAY DIRECTIONAL DRIVEWAYS: DRIVEWAY CONSTRUCTION SHALL BE SCHEDULED OUTSIDE OF NORMAL BUSINESS HOURS. IF THE PROPERTY CANNOT BE WITHOUT ACCESS TEMPORARILY (SUCH AS OUTSIDE OF NORMAL BUSINESS HOURS OR OVER THE WEEKEND), ACCESS TO THE PROPERTY SHALL BE MAINTAINED AS FOLLOWS:

THE PAVEMENT IN FRONT OF THE DRIVEWAY SHALL BE REMOVED AND TRAFFIC COMPACTED SURFACE FURNISHED, INSTALLED, AND COMPACTED ON TOP OF THE EXPOSED SUBGRADE. THIS WORK SHALL BE PERFORMED IN ONE OPERATION SO THAT THE DISRUPTION TO THE PROPERTY IS KEPT AT AN ABSOLUTE MINIMUM. THE CONTRACTOR WILL MAINTAIN THE RAMP AND REPLACE MATERIAL AS NECESSARY.

THE INSTALLATION OF THE PROPOSED DRIVEWAY AND THE CONCRETE PAVEMENT IN FRONT OF THE DRIVEWAY SHALL BE PERFORMED AS ONE OPERATION UNLESS APPROVED BY THE ENGINEER IN ORDER TO MINIMIZE THE DURATION OF A REQUIRED OUTAGE. IF THE DRIVEWAY IS MORE THAN 20 FEET WIDE, CONSTRUCTION ON THE DRIVEWAY AND PAVEMENT SHALL BE IN TWO (2) PHASES, WITH ONE HALF OF THE DRIVE REMAINING OPEN WHILE THE OTHER HALF IS CLOSED AND BEING CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE ACCESS IMMEDIATELY AFTER ANY MINIMUM REQUIRED TIME TO PERFORM DRIVEWAY RECONSTRUCTION WORK. THE CONTRACTOR SHALL ALSO PROVIDE ACCESS TO THE PROPERTY DURING THE CURE PERIOD.

IN LOCATIONS WHERE A DRIVEWAY TO A PARKING LOT IS CLOSED TO TRAFFIC, THE DRIVE SHALL HAVE PROPER PROTECTION, SUCH AS SIGNS, FENCING, BARRICADES, AND DRUMS, PLACED AND MAINTAINED AROUND IT.

WHERE DIRECTED BY THE ENGINEER, ONE (1) BUSINESS ENTRANCE SIGN (M4-H15) SIGN SHALL BE PROVIDED, INSTALLED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR AT AFFECTED COMMERCIAL DRIVEWAYS. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETROREFLECTIVE SHEETING AND BE MOUNTED ON TWO #3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING MT-105.10. THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND, EXCEPT THAT THE ACTUAL BUSINESS NAME SHALL BE SUBSTITUTED FOR THE WORD "BUSINESS."

RESIDENTIAL PROPERTIES: THE CONTRACTOR SHALL MAKE REASONABLE PROVISIONS TO ALLOW RESIDENTIAL ACCESS AT ALL TIME OR OTHERWISE ALLOW RESIDENTS TO PARK SAFELY WITHIN THE PROJECT LIMITS WHEN ACCESS IS NOT POSSIBLE. THE MAXIMUM OUT OF SERVICE TIME FOR ANY RESIDENTIAL DRIVE SHALL BE ONE (1) DAY. RESIDENTIAL ACCESS SHALL BE MAINTAINED USING THE FOLLOWING PROCEDURES, AS DIRECTED BY THE ENGINEER:

AFTER THE EXISTING PAVEMENT AND CURB HAVE BEEN REMOVED, THE CONTRACTOR SHALL IMMEDIATELY MAINTAIN VEHICULAR ACCESS TO THE DRIVEWAY USING ITEM 410, TRAFFIC COMPACTED SURFACE, BETWEEN THE PAVEMENT AND THE DRIVEWAY. STEEL PLATES MAY ALSO BE USED.

WHILE THE CONCRETE PAVEMENT AND CURB IS BEING INSTALLED AND IS CURING, THE CONTRACTOR SHALL PROVIDE PARKING AREAS SAFELY WITHIN THE PROJECT WORK LIMITS OR ALONG ADJACENT SIDE STREETS. DURING THIS TIME, THE EXISTING SIDEWALKS BETWEEN THE SIDE STREETS SHALL REMAIN IN SERVICE FOR ACCESS FROM THE PARKING AREA TO THE PROPERTY.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN, FOR THE APPROVAL OF THE ENGINEER, WHICH OUTLINES HIS/HER STRATEGY FOR THE MAINTENANCE OF SAFE ACCESS TO COMMERCIAL, HANDICAP AND RESIDENTIAL PROPERTY AND/OR FOR ALLOWING RESIDENTS TO PARK SAFELY WITHIN THE PROJECT LIMITS WHEN ACCESS IS NOT POSSIBLE.

THE PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN COMMERCIAL, HANDICAP AND RESIDENTIAL ACCESS AND/OR SAFE PARKING AREAS FOR RESIDENTS, INCLUDING TRAFFIC COMPACTED SURFACE AND ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC; EXCEPT FOR THE SEPARATELY ESTIMATED ITEMS/QUANTITIES ADDITIONALLY PROVIDED IN THE PLANS FOR MAINTAINING TRAFFIC (ACCESS).

**EXISTING SIGNS**

IN ANY PHASE, WHEN A MAINTENANCE OF TRAFFIC SIGN CONTRADICTS AN EXISTING SIGN, THE EXISTING SIGN SHALL BE COVERED. ALL OTHER SIGNS SHALL BE MAINTAINED DURING CONSTRUCTION AND RELOCATED NEARBY IF NECESSARY.

**LAKETRAN BUS STOPS**

LAKETRAN BUS STOPS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. EXISTING BUS STOP SIGNS SHALL BE MOVED TO A NEARBY LOCATION IF NECESSARY. ALL BUS STOP SIGNS SHALL BE MAINTAINED AND RELOCATED AS NECESSARY.

**MAIL BOXES**

MAIL BOXES SHALL BE CAREFULLY RELOCATED AS NECESSARY BY THE CONTRACTOR DURING CONSTRUCTION SO THAT THEY ARE ACCESSIBLE TO MAIL DELIVERY TRUCKS. ANY DAMAGE TO THE MAILBOX SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGED MAILBOXES SHALL BE REPLACED BY THE CONTRACTOR IN KIND.

**ITEM 611 CATCH BASIN. NO. 6. AS PER PLAN**

THE CATCH BASIN SHALL BE AS PER ITEM 611, EXCEPT THAT THE GRATE SHALL BE WELDED TO THE FRAME WHEN CALLED FOR IN THE PLANS. THE CATCH BASIN SHALL BE TEMPORARILY USED DURING PHASES 1, 3, AND 5 AND REMOVED IN PHASES 2, 4, AND 6. THE CATCH BASINS CAN BE USED ELSEWHERE IN THE PROJECT FOR MAINTENANCE OF TRAFFIC IF APPLICABLE. ANY CATCH BASINS LEFT OVER AFTER COMPLETION OF THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

THE REQUIREMENTS OF 611.04.D AND 611.14 DO NOT APPLY TO DRAINAGE STRUCTURES USED FOR MAINTENANCE OF TRAFFIC.

**ITEM 611 12" CONDUIT. TYPE B. AS PER PLAN  
ITEM 611 15" CONDUIT. TYPE B. AS PER PLAN  
ITEM 611 24" CONDUIT. TYPE B. AS PER PLAN**

THIS ITEM INCLUDES THE REMOVAL OF THE CONDUIT, OR ABANDONMENT OF THE CONDUIT IF THE CONDUIT HAS BEEN PLACED UNDER PERMANENT PAVEMENT, AFTER THE MAINTENANCE OF TRAFFIC PHASE IN WHICH IT IS USED HAS BEEN COMPLETED. THE ABANDONED CONDUIT SHALL BE FILLED AND PLUGGED AS PER THE ITEM SPECIAL-FILL AND PLUG EXISTING CONDUIT NOTE SHOWN ON SHEET 24.

THE REQUIREMENTS OF 611.04.D, 611.12 AND 611.13 DO NOT APPLY TO CONDUIT USED FOR MAINTENANCE OF TRAFFIC.

**ITEM 611 CATCH BASIN RECONSTRUCTED TO GRADE. AS PER PLAN  
ITEM 611 INLET RECONSTRUCTED TO GRADE. AS PER PLAN**

WHEN RECONSTRUCTING CATCH BASINS AND INLETS TO GRADE FOR THE PURPOSE OF MAINTAINING TRAFFIC, FOLLOW THE PROCEDURE BELOW.

- CAREFULLY REMOVE AND CLEAN THE EXISTING CASTINGS.
- REMOVE EXISTING WALLS OF CATCH BASINS AND INLETS BELOW THE GRATES TO THE DEPTH NECESSARY FOR PLACEMENT OF TEMPORARY PAVEMENT, OR ANY POINTS OF WALL FAILURE.
- INSTALL A 1-1/4 INCH MINIMUM STEEL ROAD PLATE AS SHOWN IN THE TEMPORARY DRAINAGE DETAIL.
- WHERE EXISTING BASINS WILL NOT BE REMOVED IN A LATER PHASE OF THE CONTRACT, REMOVE THE ROAD PLATE AND USING THE SALVAGED CASTING, RECONSTRUCT THE STRUCTURE TO THE ORIGINAL PLAN GRADE, CONFORMING AS NEARLY AS PRACTICABLE TO THE EXISTING DIMENSION AND TYPE OF CONSTRUCTION.

**ITEM 606 - GUARDRAIL. TYPE MGS. AS PER PLAN  
ITEM 606 - ANCHOR ASSEMBLY. MGS TYPE E. AS PER PLAN (MASH 2016)  
ITEM 606 - ANCHOR ASSEMBLY. MGS TYPE T. AS PER PLAN**

GUARDRAIL AND ANCHOR ASSEMBLIES INSTALLED FOR MAINTAINING TRAFFIC SHALL BE REMOVED AND DISPOSED OF AFTER COMPLETION OF THE PHASE IN WHICH THEY WERE CONSTRUCTED AND USED.

**ITEM 614 - DETOUR SIGNING.**

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE ODOT SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01.

DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - DETOUR SIGNING LUMP SUM

**ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC. CLASS A. AS PER PLAN**

ANY ASPHALT OR CONCRETE CURBS THAT ARE CONSTRUCTED ON TOP OF THE TEMPORARY PAVEMENT OR INTEGRAL TO THE TEMPORARY PAVEMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

ANTI-SEGREGATION IS NOT REQUIRED FOR ITEM 302 USED IN THE FLEXIBLE PAVEMENT OPTION.

FOR PRE-PHASE INSTALLATION OF THE TEMPORARY PAVEMENT AND DRAINAGE, THE CONTRACTOR SHALL ENSURE THAT THE DROP-OFF COMPLIES WITH MT 101.90, CONDITION II AT THE END OF EACH WORK DAY. ALTERNATIVELY, THE CONTRACTOR MAY INSTALL A 3:1 FORESLOPE UTILIZING MATERIAL THAT CONFORMS TO ITEM 304. THIS FORESLOPE MATERIAL IS PERMITTED TO BE INCORPORATED INTO THE 304 LAYER FOR ITEM 615 IF THE CONTRACTOR CHOOSES THE ASPHALT OPTION.

ADJUSTMENT OF VALVE BOXES, SERVICE BOXES, MANHOLE CASTINGS, INLETS, PULL BOXES, SIGNAGE, AND ANY OTHER ITEM IDENTIFIED TO BE IN CONFLICT FOR THE PLACEMENT OF THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO THIS WORK.

**690E98000 - ITEM SPECIAL - REIMBURSEMENT FOR MOT ITEMS PERMANENTLY DAMAGED BY TRAFFIC**

THIS ITEM OF WORK PROVIDES A FIXED UNIT COST OF 18 PER EACH FOR THE REPAIR OR REPLACEMENT OF PERMANENTLY DAMAGED TEMPORARY MAINTENANCE OF TRAFFIC ITEMS ELIGIBLE UNDER C&MS 614.16.C AND C&MS 107.15.

IF THE ENGINEER DETERMINES THAT THE REQUIREMENTS OF C&MS 614.16.C AND C&MS 107.15 HAVE BEEN MET, THE DEPARTMENT WILL REIMBURSE THE CONTRACTOR UPON RECEIPT AND ACCEPTANCE OF THE COSTS IN ACCORDANCE WITH C&MS 109.05. THE PAYMENT DUE WILL BE DEDUCTED FROM ITEM SPECIAL - REIMBURSEMENT FOR MOT ITEMS PERMANENTLY DAMAGED BY TRAFFIC. C&MS TABLE 104.02-2 DOES NOT APPLY TO REDUCTIONS IN THIS CONTRACT ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THIS ITEM OF WORK:

ITEM SPECIAL - REIMBURSEMENT FOR MOT ITEMS PERMANENTLY DAMAGED BY TRAFFIC 250,000 EACH

**ITEM 614. REPLACEMENT DRUM**

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

THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614 MAINTAINING TRAFFIC.

**ITEM 614. MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)**

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

- NEW YEAR'S (OBSERVED)
- MEMORIAL DAY
- FOURTH OF JULY (OBSERVED)
- LABOR DAY
- GENERAL/REGULAR ELECTION DAY (NOV)
- THANKSGIVING
- CHRISTMAS (OBSERVED)

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

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY (GEN./REG. ELECTION) 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY (THANKSGIVING ONLY) 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

**ITEM SPECIAL. WORK ZONE TRAFFIC SIGNAL. TYPE 1**

INSTALL OVERHEAD MOUNTED TEMPORARY WORK ZONE TRAFFIC SIGNALS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-96.20 AND THE PLANS.

PAYMENT FOR WORK ZONE TRAFFIC SIGNALS SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR EACH COMPLETE ITEM SPECIAL - WORK ZONE TRAFFIC SIGNAL

THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PHASE 1 TEMPORARY SIGNAL AT STA 301+06.

SPECIAL, WORK ZONE TRAFFIC SIGNAL, TYPE 1, 1 EACH

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MAINTENANCE OF TRAFFIC GENERAL NOTES  
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622			
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	24" CONDUIT, TYPE B, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6" 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6" 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED	
PHASE 1				FT	EACH	EACH	FT	EACH	EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT		
LA-1	105	278+90	RT																										
LA-2	105	278+90	LT																										
LA-3	105	281+11	LT																										
LA-4	105	281+55	LT																										
LA-5	105	281+99	LT																										
TL-1	105	282+35	LT				283+50														56								
CL-1	106	283+50	LT				286+00					0.047																	
CL-2	106	283+50	LT				288+50				0.095																		
EL-1	106	283+50	LT				288+50						0.095																
EL-2	106	283+50	LT				288+50						0.095																
TL-1	106	283+50	LT				286+00																						
PB-2	106	285+00	RT & LT				288+50																						
P1	106	283+50	LT				288+50																		1				
D1	106	286+01	LT				6	1	1																	4	4	350	
D2	106	286+83	LT				7	1	1																				
D3	106	287+61	LT				6	1	1																				
CL-1	107	288+50	LT				293+50					0.095																	
EL-1	107	288+50	LT				293+50							0.095															
EL-2	107	288+50	LT				293+50						0.095																
PB-3	107	288+50	LT				293+50																			2			
P2	107	288+50	LT				293+50																				800		
D4	107	289+79	LT				12	1	1																				
D5	107	292+48	LT				12	1	1																				
CL-1	108	293+50	LT				298+50					0.095																	
EL-1	108	293+50	LT				298+50							0.095															
EL-2	108	293+50	LT				298+50						0.095																
PB-4	108	293+50	LT				298+50																			4			
P3	108	293+50	LT				298+50																					780	
D6	108	295+14	LT				13	1	1																				
D7	108	297+97	LT				13	1	1																				
CL-1	109	298+50	LT				303+50					0.095																	
EL-1	109	298+50	LT				303+50							0.095															
EL-2	109	298+50	LT				303+50						0.095																
PB-5	109	298+50	LT				303+50																			3			
P4	109	298+50	LT				303+50																					765	
D8	109	300+98	LT				12	1	1																				
SL-1	109	300+20	LT																									8	
SL-2	109	302+13	LT																									11	
CL-1	110	303+50	LT				308+50					0.095																	
EL-1	110	303+50	LT				308+50							0.095															
EL-2	110	303+50	LT				308+50						0.095																
PB-6	110	303+50	LT				308+50																				5		
P5	110	303+50	LT				308+50																					800	
D9	110	303+67	LT				12	1	1																				
D10	110	303+92	RT																										
CL-1	111	308+50	LT				309+72					0.095																	
EL-1	111	308+50	LT				309+80							0.095															
EL-2	111	308+50	LT				313+50						0.095																
SL-1	111	10+43	LT																									11	
SL-2	111	10+85	LT																									10	
SL-3	111	10+39	LT																									8	
GR-1	111	310+25	LT				313+50																						
				300		1																							
<b>SUBTOTAL SHEET 46</b>				300		1	93	9	9	34			0.620		1.140							89	48	5	15	3620	19	19	1621

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

CALCULATED	EJT
ARK	EJT
CHECKED	EJT

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	606	606	606	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622		
					GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	24" CONDUIT, TYPE B, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED
PHASE 1					FT	EACH	EACH	FT	EACH	EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT
PB-7	111	308+50	313+50	LT																				2		5	5	418	
P6	111	308+50	313+50	LT																				670					
CL-1	112	313+50	318+50	LT							0.095																		
EL-1	112	313+50	318+50	LT								0.095																	
EL-2	112	313+50	318+50	LT								0.095																	
SL-1	112	10+61		LT																13									
PB-8	112	313+50	318+50	LT																					5	5	500		
P7	112	313+50	318+50	LT																					715				
GR-2	112	313+50	318+25	LT	450		1																						
CL-1	113	318+50	323+50	LT							0.095																		
EL-1	113	318+50	323+50	LT								0.095																	
EL-2	113	318+50	323+50	LT								0.095																	
PB-9	113	318+50	323+50	LT																					5	5	468		
P8	113	318+50	323+50	LT																					750				
D11	113	323+00		LT				13	1	1																			
CL-1	114	323+50	328+50	LT							0.095																		
EL-1	114	323+50	328+50	LT								0.095																	
EL-2	114	323+50	328+50	LT								0.095																	
PB-10	114	323+50	328+50	LT																				2	5	5	440		
P9	114	323+50	328+50	LT																					800				
D12	114	325+53		LT				13	1	1																			
CL-1	115	328+50	330+50	LT							0.095																		
CL-2	115	8+25	9+81	RT							0.030																		
EL-1	115	328+50	333+50	LT								0.095																	
EL-2	115	328+50	333+50	LT								0.095																	
SL-1	115	332+88		RT																12									
PB-11	115	328+50	333+50	LT																			4	4	4	4	309		
P10	115	328+50	333+50	LT																					800				
D13	115	331+04		LT				13	1	1																			
CL-1	116	333+50	339+00	LT							0.104																		
EL-1	116	333+50	339+00	LT								0.104																	
EL-2	116	333+50	339+00	LT								0.104																	
PB-12	116	333+50	339+00	LT																			4	4	4	4	261		
P11	116	333+50	339+00	LT																					800				
D14	116	334+05		LT				13	1	1																			
D15	116	337+02		LT				13	1	1																			
CL-1	117	339+00	344+00	LT							0.095																		
EL-1	117	339+00	344+00	LT								0.095																	
EL-2	117	339+00	344+00	LT								0.095																	
PB-13	117	339+00	344+00	LT																			4	4	4	4	326		
P12	117	339+00	344+00	LT																					800				
D16	117	340+00		LT				13	1	1																			
D17	117	343+00		LT				13	1	1																			
CL-1	118	344+00	349+00	LT							0.095																		
EL-1	118	344+00	349+00	LT								0.095																	
EL-2	118	344+00	349+00	LT								0.095																	
PB-14	118	344+00	349+00	LT																			4	4	4	4	316		
P13	118	344+00	349+00	LT																					800				
D18	118	345+50		LT				13	1	1																			
D19	118	348+00		LT				13	1	1																			

SUBTOTAL SHEET 47

450 1 117 9 9 0.700 1.350 25 20 6135 36 36 3038

MAINTENANCE OF TRAFFIC SUBSUMMARY LAK-US-20-19.59

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ARK  
CHECKED  
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	ITEM DESCRIPTION																				CALCULATED	ARK	CHECKED	EJT							
				606	606	606	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614					615	614	614	622			
		PHASE 1		FT	EACH	EACH	FT	EACH	EACH	FT		MI	MI	MI	MI	MI	MI	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
CL-1	119	349+00	354+00	LT										0.095																				
EL-1	119	349+00	354+00	LT											0.095																			
EL-2	119	349+00	354+00	LT											0.095																			
PB-15	119	349+00	354+00	LT																					2			5		5		408		
P14	119	349+00	354+00	LT																								800						
D20	119	350+50		LT			13		1		1																							
D21	119	353+00		LT			13		1		1																							
CL-1	120	354+00	359+00	LT										0.095																				
EL-1	120	354+00	357+55	LT												0.095																		
EL-2	120	354+00	359+00	LT											0.095																			
SL-1	120	10+56		LT																	24													
PB-16	120	354+00	359+00	LT																					5			3		3		301		
P15	120	354+00	359+00	LT																								650						
D22	120	355+51		LT			13		1		1																							
CL-1	121	359+00	364+00	LT										0.095																				
EL-1	121	359+00	364+00	LT												0.095																		
EL-2	121	359+00	364+00	LT												0.095																		
PB-17	121	359+00	364+00	LT																					3			4		4		372		
P16	121	359+00	364+00	LT																								810						
D23	121	360+50		LT			13		1		1																							
D24	121	363+28		LT			13		1		1																							
CL-1	122	364+00	369+00	LT										0.095																				
EL-1	122	364+00	369+00	LT												0.095																		
EL-2	122	364+00	369+00	LT												0.095																		
PB-18	122	364+00	369+00	LT																					8			3		3		190		
P17	122	364+00	369+00	LT																								800						
D25	122	365+49		LT			13		1		1																							
D26	122	367+78		LT			13		1		1																							
CL-1	123	369+00	374+00	LT										0.095																				
EL-1	123	369+00	374+00	LT													0.095																	
EL-2	123	369+00	374+00	LT													0.095																	
PB-19	123	369+00	374+00	LT																					2			5		5		408		
P18	123	369+00	374+00	LT																								800						
D27	123	370+50		LT			13		1		1																							
CL-1	124	374+00	379+00	LT										0.095																				
EL-1	124	374+00	379+00	LT													0.095																	
EL-2	124	374+00	379+00	LT													0.095																	
PB-20	124	374+00	379+00	LT																					2			4		4		408		
P19	124	374+00	379+00	LT																								800						
D28	124	375+48		LT			13		1		1																							
D29	124	378+51		LT			13		1		1																							
CL-1	125	379+00	384+00	LT										0.095																				
EL-1	125	379+00	384+00	LT													0.095																	
EL-2	125	379+00	384+00	LT													0.095																	
PB-21	125	379+00	384+00	LT																					5			3		3		290		
P20	125	379+00	384+00	LT																								800						
D30	125	381+24		LT			13		1		1																							
D31	125	383+44		LT			13		1		1																							
SUBTOTAL SHEET 48							156		12		12			0.670		1.330									24			27	5460	27	27	2377		

**MAINTENANCE OF TRAFFIC SUBSUMMARY**  
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622			
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	24" CONDUIT, TYPE B, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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, 6", 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	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 CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED				
PHASE 1				FT	EACH	EACH	FT	EACH	EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT				
CL-1	126	384+00	389+00	LT									0.095																			
EL-1	126	384+00	389+00	LT										0.095																		
EL-2	126	384+00	389+00	LT										0.095																		
PB-22	126	384+00	389+00	LT																					6		3	3	226			
P21	126	384+00	389+00	LT																						800						
D32	126	385+98		LT			13	1	1																							
D33	126	388+50		LT			13	1	1																							
GR3	126	384+00	387+00	LT	262.5	1	1																									
CL-1	127	389+00	394+00	LT									0.095																			
EL-1	127	389+00	394+00	LT										0.095																		
EL-2	127	389+00	394+00	LT										0.095																		
PB-23	127	389+00	394+00	LT																					5		3	3	240			
P22	127	389+00	394+00	LT																						800						
D34	127	391+25		LT			14	1	1																							
CL-1	128	394+00	399+00	LT									0.095																			
EL-1	128	394+00	399+00	LT										0.095																		
EL-2	128	394+00	399+00	LT										0.095																		
PB-24	128	394+00	397+40	LT																					3		3	3	228			
P23	128	394+00	399+00	LT																						800						
D35	128	396+99		LT			14	1																								
D36	128	398+37		LT			9	1																								
CL-1	129	399+00	404+00	LT									0.095																			
CL-2	129	399+90	403+05	LT									0.060																			
EL-1	129	399+00	404+00	LT										0.095																		
EL-2	129	399+00	404+00	RT & LT										0.095																		
LL-1	129	403+80	404+00	RT							0.004																					
CH-1	129	403+80	404+00	LT													20															
TL-1	129	399+90	403+05	RT & LT														95														
LA-1	129	403+92		LT																					1							
PB-25	129	399+00	400+30	RT & LT																					2		2	2	130			
P24	129	399+00	402+72	LT																						305						
D37	129	399+90		LT			10	1	1																							
D38	129	400+91		LT			7	1	1																							
D39	129	402+00		LT			5	1	1																							
CL-1	130	404+00	404+90	LT									0.095																			
CL-2	130	407+70	409+00	LT									0.025																			
EL-1	130	404+00	409+00	LT										0.095																		
EL-2	130	404+00	409+00	RT										0.095																		
LL-1	130	404+00	409+00	LT							0.095																					
CH-1	130	404+00	404+90	LT													90															
CH-2	130	406+60	407+45	LT												85																
LA-1	130	404+36		LT																												
LA-2	130	404+80		LT																												
LA-3	130	406+70		LT																												
LA-4	130	407+20		LT																												
SL-1	130	404+90		RT & LT																												
SL-2	130	406+60		RT & LT																												
SL-3	130	10+55		LT																												
SL-4	130	9+45		RT																												
SUBTOTAL SHEET 49					263	1	1	85	8	6		0.100		0.560		0.950		195						95	111		5	16	2705	11	11	824

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED  
ARK  
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REF NO.	SHEET NO.	STATION TO STATION		SIDE	606	606	606	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622				
					GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	24" CONDUIT, TYPE B, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6" 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6" 873	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, 6" 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6" 642 PAINT	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 CROSSWALK LINE, CLASS I, 12" 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED				
					FT	EACH	EACH	FT	EACH	EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT		
<b>PHASE 1</b>																																	
CL-1	131	409+00		411+20																													
CLT-1	131	411+20		411+82										0.042																			
CL-2	131	409+00		411+20										0.042																			
CLT-2	131	411+20		414+00										0.053																			
EL-1	131	409+00		411+20											0.042																		
ELT-1	131	411+20		411+60												0.008																	
EL-2	131	409+00		411+15										0.041																			
LL-1	131	409+00		411+20								0.042																					
LLT-1	131	411+20		411+82									0.012																				
CLT-1	132	414+00		419+00										0.095																			
DLT-1	132	414+35		419+00																	465												
CLT-1	133	419+00		419+75										0.014																			
DLT-1	133	419+00		419+75																	75												
<b>CALL ROAD</b>																																	
CL-1	142	332+08		333+18										0.021																			
EL-1	142	332+23		333+33											0.021																		
PB-30	142	331+98		334+28																							2	2	230				
<b>SUBTOTAL SHEET 50</b>																																	
												0.042	0.012	0.105	0.174	0.104	0.008				540							2	2	230			
<b>SUBTOTALS FROM SHEET 45</b>												0.230		0.570		0.650		699	450		104	121	623	8									
<b>SUBTOTALS FROM SHEET 46</b>					300	1	93	9	9	34			0.620		1.140					89	48		5	15	3620	19	19	1621					
<b>SUBTOTALS FROM SHEET 47</b>					450	1	117	9	9				0.700		1.350							25		20	6135	36	36	3038					
<b>SUBTOTALS FROM SHEET 48</b>							156	12	12				0.670		1.330							24		27	5460	27	27	2377					
<b>SUBTOTALS FROM SHEET 49</b>					263	1	1	85	8	6		0.100		0.560		0.950		195		95	111		5	16	2705	11	11	824					
<b>TOTAL</b>					1013	1	3	451	38	34		0.372	0.012	3.225	0.174	5.524	0.008	894	450	540	288	329	623	18	78	17920	95	95	8090				
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					1013	1	3	451	38	34		0.37	0.01	3.23	0.17	5.52	0.01	894	450	540	288	329	623	18	78	17920	95	95	8090				

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	CALCULATED	50
	ARK CHECKED	1088

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614																622	CALCULATED ARK CHECKED EJT
					WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 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 TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT		WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)		
PHASE 2					MILE	MILE	MILE	MILE	MILE	FT			FT	FT	FT	FT	EACH		EACH	EACH	EACH	FT
CL-2	147	260+40	263+50	RT		0.059																
CL-3	148	263+50	268+50	C/L		0.095																
CL-2	149	268+50	273+50	RT		0.095																
CL-3	149	271+90	273+50	RT		0.030																
EL-2	149	270+80	273+50	RT				0.051														
EL-3	149	270+80	273+50	LT				0.030														
LL-2	149	271+90	273+50	LT	0.051																	
CL-1	150	273+50	278+50	RT		0.095																
CL-2	150	273+50	275+80	RT		0.044																
EL-1	150	273+50	278+50	LT				0.095														
EL-2	150	273+50	278+50	RT				0.095														
LL-1	150	273+50	278+50	LT	0.095																	
CH-1	150	276+05	278+50	RT						245												
LA-1	150	276+26		RT																	1	
LA-2	150	276+92		RT																	1	
LA-3	150	277+58		RT																	1	
LA-4	150	278+24		RT																	1	
CL-1	151	278+50	279+00	RT		0.010																
CL-2	151	282+67	283+50	RT		0.016																
EL-1	151	278+50	279+17	LT				0.013														
EL-2	151	278+50	279+00	RT				0.010														
SL-1	151	279+00		RT																		
SL-2	151	281+01		RT & LT																		
CH-1	151	278+50	279+00	RT						50												
CH-2	151	281+01	282+42	RT						141												
TL-1	151	282+67	283+50	RT																		
LA-1	151	278+90		RT																		1
LA-2	151	281+11		RT																		1
LA-3	151	281+70		RT																		1
LA-4	151	282+29		RT																		1
LL-1	151	278+50	279+00	LT	0.010																	
LL-2	151	281+01	282+67	LT	0.031																	
CL-1	152	283+50	286+00	RT		0.047																
CLT-1	152	286+00	288+50	RT			0.047															
CL-2	152	283+50	285+65	RT		0.041																
EL-1	152	283+50	286+00	RT & LT																		
ELT-1	152	286+00	288+50	RT				0.047														
EL-2	152	283+50	285+65	RT				0.041														
TL-1	152	283+50	285+65	RT																		
PB-2	152	284+90	288+50	LT																	3	3
																					3	3
																					3	3
																					3	3
																					3	3
																					3	3
CLT-1	153	288+50	293+50	RT			0.095															
ELT-1	153	288+50	293+50	RT				0.095														
PB-3	153	288+50	293+50	C/L																	3	3
																					3	3
SUBTOTAL SHEET 51					0.19	0.53	0.14	0.38	0.14	436			87	55			8		6	6	6	590

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK - US - 20 - 19 . 59**



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REF NO.	SHEET NO.	STATION TO STATION	SIDE	614																622	CALCULATED ARK CHECKED EJT
				WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 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 TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY		
PHASE 2				MILE	MILE	MILE	MILE	MILE	FT			FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	
CLT-1	154	293+50	RT						0.095												
ELT-1	154	293+50	RT							0.095											
PB-4	154	293+50	C/L													1	4	4		349	
CLT-1	155	298+50	RT						0.095												
ELT-1	155	298+50	RT							0.095											
PB-5	155	298+50	C/L													4	3	3		214	
CLT-1	156	303+50	RT						0.095												
ELT-1	156	303+50	RT							0.095											
PB-6	156	303+50	C/L													2	4	4		424	
CLT-1	157	308+50	RT						0.095												
CL-2	157	10+25	LT				0.014														
CL-3	157	10+34	LT				0.015														
ELT-1	157	308+50	RT						0.095												
EL-1	157	309+40	LT					0.015													
EL-2	157	310+16	LT					0.010													
CW-1	157	10+84	LT & RT											23							
CW-2	157	10+90												22							
SL-1	157	10+25	LT									10									
SL-2	157	10+95	LT									10									
SL-3	157	10+34	LT									10									
PB-7	157	308+50	C/L			313+50										2	4	4		375	
CLT-1	158	313+50	RT						0.095												
ETL-1	158	313+50	RT & LT							0.095											
EL-1	158	317+72	LT					0.010													
SL-1	158	318+17	LT									24									
PB-8	158	313+50	C/L & LT			317+67										1	4	4		420	
CLT-1	159	318+50	RT						0.095												
ELT-1	159	318+50	RT							0.095											
EL-1	159	318+69	LT					0.009													
PB-9	159	318+50	C/L			323+50										1	5	5		440	
CTL-1	160	323+50	RT						0.095												
ETL-1	160	323+50	RT							0.095											
PB-10	160	323+50	C/L			328+00										1	5	5		434	
CLT-1	161	328+50	RT						0.095												
ELT-1	161	328+50	RT							0.095											
SLT-1	161	9+51	RT										14								
PB-11	161	328+50	C/L			333+50										6	4	4		300	
CLT-1	162	333+50	RT						0.104												
ELT-1	162	333+50	RT							0.104											
PB-12	162	333+50				339+00										6	3	3		176	
CLT-1	163	339+00	RT						0.095												
ELT-1	163	339+00	RT							0.095											
PB-13	163	339+00	C/L			344+00										4	2	2		201	
CLT-1	164	344+00	RT						0.095												
ELT-1	164	344+00	RT							0.095											
PB-14	164	344+00	C/L			349+00										6	3	3		134	
SUBTOTAL SHEET 52							0.03	1.05	0.04	1.05			54	14	45	34	41	41		3467	

MAINTENANCE OF TRAFFIC SUBSUMMARY

LAK-US-20-19.59

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	614																622	CALCULATED ARK CHECKED EJT
				WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 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 TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY		
PHASE 2				MILE	MILE	MILE	MILE	MILE	FT			FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	
CLT-1	165	349+00						0.095													
ELT-1	165	349+00							0.095												
PB-15	165	350+39														5	3	3	181		
CLT-1	166	354+00						0.095													
CL-2	166	10+28				0.014															
ELT-1	166	354+00								0.095											
EL-1	166	357+15						0.015													
EL-2	166	358+15						0.015													
SL-1	166	357+60										25									
LA-1	166	10+54													1						
LA-2	166	10+54													1						
CH-1	166	10+28			11+00					72											
PB-16	166	354+00			359+00											6	3	3	240		
CLT-1	167	359+00			364+00			0.095													
ELT-1	167	359+00			364+00					0.095											
PB-17	167	359+00			364+00											4	3	3	276		
CLT-1	168	364+00			369+00			0.095													
ELT-1	168	364+00			369+00					0.095											
PB-18	168	364+00			369+00											1	2	2	219		
CLT-1	169	369+00			374+00			0.095													
ELT-1	169	369+00			374+00					0.095											
PB-19	169	369+00			374+00											5	4	4	270		
CLT-1	170	374+00			379+00			0.095													
ELT-1	170	374+00			379+00					0.095											
PB-20	170	374+00			379+00											2	5	5	418		
CLT-1	171	379+00			384+00			0.095													
ELT-1	171	379+00			384+00					0.095											
PB-21	171	379+00			384+00											4	3	3	326		
CLT-1	172	384+00			389+00			0.095													
ELT-1	172	384+00			389+00					0.095											
PB-22	172	384+00			389+00											1	5	5	490		
CLT-1	173	389+00			394+00			0.095													
ELT-1	173	389+00			394+00					0.095											
PB-23	173	389+00			394+00											3	3	3	272		
CLT-1	174	394+00			399+00			0.095													
ELT-1	174	394+00			399+00					0.095											
PB-24	174	394+00			398+60											1	5	5	460		
CL-1	175	399+90			404+00																
CLT-1	175	399+00			399+90			0.017													
CL-2	175	400+10			403+08			0.056													
EL-1	175	399+90			404+00					0.078											
ELT-1	175	399+00			399+90						0.017										
EL-2	175	400+10			404+00					0.074											
TL-1	175	400+10			403+08																
CH-1	175	403+33			404+00						67										
LA-1	175	403+48														1					
SUBTOTAL SHEET 53						0.15	0.97	0.18	0.97	139		96	25		3	32	36	36	3152		

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614														622								
					WORK ZONE LANE LINE, CLASS I, 6", 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, 6", 642 PAINT				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 I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED					
PHASE 2					MILE	MILE	MILE	MILE	MILE	FT																	
CL-1	176	404+00	409+00	RT		0.095																					
CL-2	176	407+70	409+00	RT		0.025																					
CH-1	176	404+00	404+90	RT						90																	
CH-2	176	406+60	407+45	LT						85																	
CH-3	176	406+60	407+45	RT						85																	
SL-1	176	404+90		RT									22														
SL-2	176	406+60		RT & LT									33														
EL-1	176	404+00	409+00	LT					0.095																		
EL-2	176	404+00	409+00	RT					0.095																		
TL-1	176	407+70	409+00	RT																							
DL-1	176	408+20	409+00	LT								58															
LA-1	176	404+14		RT																			1				
LA-2	176	404+80		RT																			1				
LA-3	176	406+70		RT																			1				
LA-4	176	407+20		RT																			1				
LA-5	176	406+70		LT																			1				
LA-6	176	407+20		LT																			1				
PB-26	176	404+00	404+65	LT																					1	65	
CL-1	177	409+00	411+20	RT		0.042																					
CL-2	177	409+00	411+20	RT		0.042																					
CLT-1	177	411+20	411+82	RT & C/L				0.012																			
CLT-2	177	411+20	411+60	RT				0.008																			
EL-1	177	409+00	411+20	LT					0.042																		
ELT-1	177	411+20	414+00	LT						0.053																	
EL-2	177	409+00	411+06	RT					0.039																		
TL-1	177	409+00	411+60	RT								63															
ELT-1	178	414+00	419+00	LT						0.095																	
ELT-1	179	419+00	419+75	LT						0.014																	
PARMLY ROAD																											
CTL-1	188	309+55	310+61	RT				0.02																			
ELT-1	188	309+40	310+46	RT						0.02																	
PB-31	188	308+65	310+71	C/L																				2	2	206	
RED MILL VALLEY ROAD																											
CLT-1	190	317+87	319+16	RT				0.024																			
ELT-1	190	317+72	319+01	RT						0.024																	
PB-32	190	316+77	319+26	C/L																				2	2	249	
ANTIOCH ROAD																											
CTL-1	191	357+30	358+60	RT				0.025																			
ELT-1	191	357+15	358+45	RT						0.025																	
PB-33	191	356+80	358+70	C/L																				1	2	190	
SUBTOTAL SHEET 54						0.200	0.090	0.270	0.230	260		121	55		6		2		7	7	710						
SUBTOTALS FROM SHEET 51					0.190	0.530	0.140	0.380	0.140	436		87	55		8		6		6	6	590						
SUBTOTALS FROM SHEET 52						0.030	1.050	0.040	1.050				54		14	45		34		41	41	3467					
SUBTOTALS FROM SHEET 53						0.150	0.970	0.180	0.970	139		96	25		3		32		36	36	3152						
TOTAL					0.190	0.910	2.250	0.870	2.390	835		304	189	14	45	17	74		90	90	7919						
TOTALS CARRIED TO GENERAL SUMMARY					0.19	0.91	2.25	0.87	2.39	835		304	189	14	45	17	74		90	90	7919						

CALCULATED	ARK
	EJT
<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	
<b>LAK - US - 20 - 19 - 59</b>	
54 1088	



REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622		
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY
PHASE 3				FT	EACH	EACH	FT	EACH	EACH	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT	
TL-1	207	178+50	182+20	LT																							
PB-1	207	181+20	183+50	RT & LT														121									
P1	207	179+43	183+50	LT																			1		2	2	220
D1	207	180+60		LT																		320					
D1A	207	181+48		LT			6	1	1																		
CL-1	208	183+50	188+50	LT																							
EL-1	208	183+50	188+50	LT							0.095																
EL-2	208	183+50	188+50	LT																							
SL-1	208	10+65		LT																							
PB-2	208	183+50	188+50	LT																							
P2	208	183+50	188+18	LT																			2		4	4	373
D2	208	187+24		LT			13	1	1													760					
CL-1	209	188+50	193+50	LT																							
EL-1	209	188+50	193+50	LT							0.095																
EL-2	209	188+50	193+50	LT																							
PB-3	209	188+50	193+50	LT																			3		4	4	402
P3	209	188+50	193+50	LT																							
D3	209	190+74		LT			13	1	1													730					
CL-1	210	193+50	198+50	LT																							
EL-1	210	193+50	198+50	LT							0.095																
EL-2	210	193+50	198+50	LT																							
PB-4	210	193+50	198+50	LT																							
P4	210	193+50	198+50	LT																			3		3	3	330
D4	210	194+50		LT			13	1	1																		
D5	210	197+50		LT			13	1	1																		
CL-1	211	198+50	203+50	LT																							
EL-1	211	198+50	203+50	LT																							
EL-2	211	198+50	203+50	LT																							
PB-5	211	198+50	203+50	LT																							
P5	211	198+50	203+50	LT																							
D6	211	199+76		LT			13	1	1																		
D7	211	201+50		LT			13	1	1																		
D8	211	200+85	201+50	RT			70																				
GR-1	211	198+50	200+25	LT	125	1	1																				
CL-1	212	203+50	208+50	LT																							
EL-1	212	203+50	208+50	LT																							
EL-2	212	203+50	208+50	LT																							
PB-6	212	203+50	208+50	LT																							
P6	212	203+50	208+50	LT																							
D9	212	205+00		LT			13	1	1																		
CL-1	213	208+50	213+50	LT																							
EL-1	213	208+50	213+50	LT																							
EL-2	213	208+50	213+50	LT																							
PB-7	213	208+50	213+50	LT																							
P7	213	208+50	213+50	LT																							
D10	213	211+75		LT			13	1	1																		
D11	213	211+75	211+95	RT			35																				
CL-1	214	213+50	218+50	LT																							
EL-2	214	213+50	218+50	LT																							
EL-3	214	213+50	218+50	LT																							
PB-8	214	213+50	218+50	LT																							
P8	214	213+50	218+50	LT																							
<b>SUBTOTAL SHEET 56</b>					125	1	1	215	9	10								121	11				19	5700	27	27	2895

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

CALCULATED  
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622	
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY
PHASE 3				FT	EACH	EACH	FT	EACH	EACH	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT
D12	214	217+00	LT				13	1	1																		
D13	214	217+00	RT				105																				
CL-1	215	218+50	LT										0.095														
CL-2	215	8+75	RT										0.020														
EL-1	215	218+50	LT											0.095													
EL-2	215	218+50	LT											0.095													
SL-1	215	219+71	RT														14										
PB-9	215	218+50	LT																			3		3	3	324	
P9	215	218+50	LT																				740				
D14	215	220+00	LT				13	1	1																		
D15	215	220+00	RT				84																				
D16	215	223+00	LT				13	1	1																		
D17	215	222+80	RT				35																				
CL-1	216	223+50	LT										0.095														
EL-1	216	223+50	LT											0.095													
EL-2	216	223+50	LT											0.095													
PB-10	216	223+50	LT																			5		3	3	201	
P10	216	223+50	LT																				750				
D18	216	226+16	LT				12	1	1																		
CL-1	217	228+50	LT										0.095														
EL-1	217	228+50	LT											0.095													
EL-2	217	228+50	LT											0.095													
SL-1	217	10+61	LT														10										
PB-11	217	228+50	LT																			3		3	3	387	
P11	217	228+50	LT																				660				
CL-1	218	233+50	LT										0.095														
EL-1	218	233+50	LT											0.095													
EL-2	218	233+50	LT											0.095													
PB-12	218	233+50	LT																			1		4	4	439	
P12	218	233+50	LT																				700				
D19	218	237+85	LT				12	1	1																		
CL-1	219	238+50	LT										0.095														
EL-1	219	238+50	LT											0.095													
EL-2	219	238+50	LT											0.095													
PB-13	219	238+50	LT																						5	5	500
P13	219	238+50	LT																				730				
D20	219	240+50	LT				12	1	1																		
CL-1	220	243+50	LT										0.095														
EL-1	220	243+50	LT											0.095													
EL-2	220	243+50	LT											0.095													
PB-14	220	243+50	LT																			6		3	3	204	
P14	220	243+50	LT																				740				
D22	220	245+99	LT				12	1	1																		
D23	220	248+00	LT				12	1	1																		
CL-1	221	248+50	LT										0.095														
EL-1	221	248+50	LT											0.095													
EL-2	221	248+50	LT											0.095													
PB-15	221	248+50	LT																					5	5	500	
P15	221	248+50	LT																				760				
D24	221	252+60	LT				12	1	1																		
GR-2	221	252+50	LT	87.5		1																					
<b>SUBTOTAL SHEET 57</b>				87.5		1	335	9	9				0.685		1.330					24			18	5080	26	26	2555

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	CALCULATED
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<b>LAK-US-20-19.59</b>	
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622		
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY
PHASE 3				FT	EACH	EACH	FT	EACH	EACH	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	EACH	EACH	SY	EACH	EACH	FT
CL-1	222	253+50	258+50	LT										0.095													
EL-1	222	253+50	258+50	LT											0.095												
EL-2	222	253+50	258+50	LT											0.095												
PB-16	222	253+50	258+50	LT																				5	5	500	
P16	222	253+50	258+50	LT																			750				
D25	222	254+05		LT			12	1	1																		
D26	222	255+49		LT			13	1	1																		
D27	222	255+10	255+50	RT			48																				
D28	222	258+25		LT			13	1	1																		
D29	222	258+00	258+25	RT			35																				
GR-3	222	253+50	254+87.5	LT	125																						
CL-1	223	258+50	263+50	LT										0.095													
EL-1	223	258+50	263+50	LT											0.095												
EL-2	223	258+50	263+50	LT											0.095												
PB-17	223	258+50	263+50	LT																			2	3	3	308	
P17	223	258+50	263+50	LT																			750				
D30	223	261+25		LT			13	1	1																		
D31	223	261+00	261+25	RT			35																				
CL-1	224	263+50	268+50	LT										0.095													
EL-1	224	263+50	268+50	LT											0.095												
EL-2	224	263+50	268+50	LT											0.095												
PB-18	224	263+50	268+50	LT																				5	5	500	
P18	224	263+50	268+50	LT																			750				
D32	224	264+25		LT			13	1	1																		
D33	224	264+25	264+50	RT			37																				
D34	224	267+25		LT			13	1	1																		
D35	224	267+25	267+75	RT			57																				
GR-4	224	266+50	268+50	LT																							
CL-1	225	268+50	273+50	LT	187.5									0.095													
CL-2	225	273+30	273+50	LT										0.004													
EL-1	225	268+50	273+50	LT											0.095												
EL-2	225	268+50	273+50	LT											0.095												
PB-19	225	268+50	273+50	LT																				2	4	4	408
P19	225	268+50	273+50	LT																			750				
D36	225	270+00		LT			13	1	1																		
D37	225	270+00	270+25	RT			37																				
GR-5	225	268+50	269+50	LT	87.5																						
CL-1	226	273+50	278+50	LT										0.095													
CL-2	226	273+50	276+95	LT										0.065													
EL-1	226	273+50	278+50	LT											0.095												
EL-2	226	273+50	278+50	RT & LT											0.095												
LL-1	226	277+20	278+50	RT									0.025														
TL-1	226	273+50	276+95	LT																							
CH-1	226	277+20	278+50	LT												130											
LA-1	226	277+31		LT																				1			
LA-2	226	277+84		LT																				1			
LA-3	226	278+37		LT																				1			
PB-20	226	273+50	274+30	RT & LT																				1	1	80	
P20	226	273+50	275+22	LT																							
D38	226	274+76		LT																							
CL-1	227	278+50	283+50	LT										0.095													
CL-2	227	282+50	283+50	LT										0.019													
EL-1	227	278+50	283+50	LT											0.095												
EL-2	227	278+50	283+50	RT											0.095												
SUBTOTAL SHEET 58					400.0	3	339	7	8	0.025		0.658		1.140		130			100			3	5	3082	18	18	1796

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622		
				GUARDRAIL, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	12" CONDUIT, TYPE B, AS PER PLAN	CATCH BASIN, NO. 6, AS PER PLAN	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	WORK ZONE LANE LINE, CLASS I, 6", 873	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 DOTTED LINE, CLASS I, 6", 642 PAINT	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 I	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED
PHASE 3				FT	EACH	EACH	FT	EACH	EACH	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI	
LL-1	227	278+50	283+50	RT						0.095																		
CH-1	227	278+50	279+00	LT																								
CH-2	227	281+01	282+25	LT																								
CW-1	227	279+21		RT & LT																								
CW-2	227	280+75		RT & LT																								
CW-3	227	10+50		LT																								
CW-4	227	9+50		RT																								
SL-1	227	279+00		RT & LT																								
SL-2	227	281+01		LT																								
SL-3	227	10+57		LT																								
SL-4	227	9+43		RT																								
LA-1	227	278+90		LT																								
LA-2	227	281+11		LT																								
LA-3	227	281+61		LT																								
LA-4	227	282+11		LT																								
CL-1	228	283+50	286+00	LT																								
CL-2	228	283+50	286+00	LT																								
CLT-1	228	286+00	286+40	LT																								
CLT-2	228	286+00	288+50	LT																								
EL-1	228	283+50	286+00	RT																								
EL-2	228	283+50	286+00	LT																								
ELT-1	228	286+00	286+40	RT																								
ELT-2	228	286+00	286+40	LT																								
LL-1	228	283+50	286+00	RT																								
LLT-1	228	286+00	286+40	RT																								
CLT-1	229	288+50	293+50	LT																								
DLT-1	229	289+15	293+50	LT																								
CLT-1	230	293+50	294+55	LT																								
DLT-1	230	293+50	294+55	LT																								
<b>OHIO STREET</b>																												
CL-1	235	218+66	219+44	RT																								
CL-2	235	6+87	9+87	LT																								
EL-1	235	218+56	219+59	RT																								
EL-2	235	6+87	10+06	LT																								
EL-3	235	6+87	9+92	LT																								
SL-1	235	9+87		LT																								
PB-21	235	218+56	219+36	LT																								
P21	235	6+87	9+90.6	RT																								
CL-1	236	219+66	220+15	RT																								
CL-2	236	6+54	8+75	LT																								
CLT-1	236	8+75	9+60	LT																								
EL-1	236	219+51	220+30	RT																								
EL-2	236	6+54	9+25	LT																								
EL-3	236	6+54	8+75	LT																								
ELT-1	236	8+75	10+02	LT																								
ELT-2	236	9+25	9+68	LT																								
SLT-1	236	9+60		LT																								
PB-21	236	219+76	220+51	LT																								
P22	236	6+54	9+25	LT																								
SUBTOTAL SHEET 59																												
SUBTOTALS FROM SHEET 55																												
SUBTOTALS FROM SHEET 56																												
SUBTOTALS FROM SHEET 57																												
SUBTOTALS FROM SHEET 58																												
TOTAL																												
TOTALS CARRIED TO GENERAL SUMMARY																												

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614																622	CALCULATED ARK CHECKED EJT
					MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT			
<b>PHASE 4</b>																						
CL-2	247	160+50	163+50	RT		0.057																
CL-2	248	163+50	168+50	RT		0.095																
CL-3	248	167+25	168+50	LT		0.024																
EL-1	248	166+20	168+50	RT				0.044														
EL-3	248	166+50	168+50	LT				0.037														
LL-2	248	167+25	168+50	RT	0.024																	
CL-1	249	168+50	173+50	RT		0.095																
CL-2	249	168+50	171+15	RT		0.050																
EL-1	249	168+50	173+50	LT				0.095														
EL-2	249	168+50	173+50	RT				0.095														
LL-1	249	168+50	173+50	LT	0.095																	
TL-1	249	168+50	171+15	RT						118	91											
CH-1	249	171+40	172+58	RT																		
SL-1	249	172+58		RT								22										
LA-1	249	171+52		RT													1					
LA-2	249	172+00		RT													1					
LA-3	249	172+48		RT													1					
CL-1	250	173+50	178+50	RT		0.095																
EL-1	250	173+50	178+50	LT				0.095														
EL-2	250	173+50	178+50	RT				0.095														
LL-1	250	173+50	178+50	LT	0.095																	
CH-1	250	174+48	178+50	RT						402												
CH-2	250	175+12	177+30	RT						218												
SL-1	250	174+48		RT & LT								33										
LA-1	250	174+58		RT													1					
LA-2	250	175+23		RT													1					
LA-3	250	175+88		RT													1					
LA-4	250	176+53		RT													1					
LA-5	250	177+18		RT													1					
LA-6	250	177+83		RT													1					
LA-7	250	178+48		RT													1					
LA-8	250	175+30		RT													1					
LA-9	250	175+95		RT													1					
LA-10	250	176+60		RT													1					
CL-1	251	178+50	182+20	RT		0.070																
CL-2	251	178+85	181+83	RT		0.056																
CLT-1	251	182+20	183+50	RT			0.025															
EL-1	251	178+50	182+20	RT & LT				0.070														
EL-2	251	178+50	181+95	RT				0.065														
ELT-1	251	182+20	183+50	RT						0.025												
LL-1	251	178+50	178+60	LT	0.002																	
CH-1	251	178+50	178+60	RT						10												
TL-1	251	178+85	181+83	RT							97											
PB-1	251	181+00	183+50	RT & LT													1	3	3	250		
<b>SUBTOTAL SHEET 60</b>					0.220	0.540	0.030	0.600	0.030	748	188	55			13		1	3	3	250		

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK - US - 20 - 19 . 59**

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	614																622		
					MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
<b>PHASE 4</b>																							
CLT-1	252	183+50	187+50	RT																			
CL-2	252	10+33	10+79	C/L			0.009																
ELT-1	252	183+50	187+50	RT & LT																			
EL-1	252	187+65	188+10	LT																			
SL-1	252	188+10		LT																			
PB-2	252	183+50	187+55	C/L & LT																1	4		
CLT-1	253	188+50	193+50	RT																			
CL-2	253	10+79	11+25	C/L			0.009																
ELT-1	253	188+50	193+50	RT																			
EL-1	253	188+67	188+97	LT																			
PB-3	253	189+07	193+50	C/L																3	2		
CLT-1	254	193+50	198+50	RT																			
ELT-1	254	193+50	198+50	RT																			
PB-4	254	193+50	198+50	C/L																2	3		
CLT-1	255	198+50	203+50	RT																			
ELT-1	255	198+50	203+50	RT																			
PB-5	255	198+50	203+50	C/L																2	4		
CLT-1	256	203+50	208+50	RT																			
ELT-1	256	203+50	208+50	RT																			
PB-6	256	203+50	208+50	C/L																2	4		
CLT-1	257	208+50	213+50	RT																			
ELT-1	257	208+50	213+50	RT																			
PB-7	257	208+50	213+50	C/L																5	3		
CLT-1	258	213+50	218+50	RT																			
ELT-1	258	213+50	218+50	RT																			
PB-8	258	213+50	218+50	C/L																5	3		
CLT-1	259	218+50	223+50	RT																			
ELT-1	259	218+50	223+50	RT																			
SLT-1	259	9+45		RT																			
PB-9	259	218+50	223+50	C/L																4	3		
CTL-1	260	223+50	228+50	RT																			
ELT-1	260	223+50	228+50	RT																			
PB-10	260	223+50	227+30	C/L																3	3		
CLT-1	261	228+50	233+50	RT																			
CL-2	261	10+34	11+75	LT			0.027																
ELT-1	261	228+50	233+50	RT																			
EL-1	261	228+74	229+23	LT																			
EL-2	261	229+70	230+04	LT																			
SL-1	261	229+23		LT																			
PB-11	261	230+29	233+50	C/L																1	3		
SUBTOTAL SHEET 61							0.040	0.950	0.050	0.950					28	12				28	32	32	3040

614  
WORK ZONE LANE LINE, CLASS I,  
6", 642 PAINT

614  
WORK ZONE CENTER LINE, CLASS I,  
1, 642 PAINT

614  
WORK ZONE CENTER LINE, CLASS I,  
1, 873

614  
WORK ZONE EDGE LINE, CLASS I,  
6", 642 PAINT

614  
WORK ZONE EDGE LINE, CLASS I,  
6", 873

614  
WORK ZONE CHANNELIZING LINE,  
CLASS I, 8", 642 PAINT

614  
WORK ZONE DOTTED LINE, CLASS I,  
1, 6", 642 PAINT

614  
WORK ZONE TRANSVERSE/DIAGONAL LINE,  
CLASS I, 642 PAINT

614  
WORK ZONE STOP LINE, CLASS I,  
642 PAINT

614  
WORK ZONE STOP LINE, CLASS I,  
740.06, TYPE I

614  
WORK ZONE ARROW, CLASS I, 642  
PAINT

614  
WORK ZONE IMPACT  
ATTENUATOR, 24" WIDE  
HAZARDS, (BIDIRECTIONAL)

614  
BARRIER REFLECTOR,  
TYPE 1 (BIDIRECTIONAL)

614  
OBJECT MARKER, TWO WAY

622  
PORTABLE BARRIER,  
UNANCHORED

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	
61	1088





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REF NO.	SHEET NO.	STATION TO STATION	SIDE	MAINTENANCE ITEMS															
				614 WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	614 WORK ZONE CENTER LINE, CLASS I, 1, 642 PAINT MILE	614 WORK ZONE CENTER LINE, CLASS I, 1, 873 MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 873 MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 1, 6", 642 PAINT FT	614 WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT FT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	614 WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I FT	614 WORK ZONE ARROW, CLASS I, 642 PAINT EACH	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	614 BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	614 OBJECT MARKER, TWO WAY EACH	622 PORTABLE BARRIER, UNANCHORED FT	
<b>PHASE 4</b>																			
CH-1	271	278+50	279+15	RT						65									
CH-2	271	281+01	282+25	LT						124									
CH-3	271	281+01	282+25	RT						124									
TL-1	271	282+50	283+50	RT							60								
DL-1	271	283+00	283+50	LT						50									
SL-1	271	279+15		RT							22								
SL-2	271	281+01		RT & LT							33								
LA-1	271	279+05		RT								1							
LA-2	271	281+11		RT								1							
LA-3	271	281+61		RT								1							
LA-4	271	282+11		RT								1							
LA-5	271	281+11		LT								1							
LA-6	271	281+61		LT								1							
LA-7	271	282+11		LT								1							
CL-2	272	283+50	286+00	RT		0.047													
CL-3	272	283+50	286+00	RT		0.047													
CLT-1	272	286+00	286+40	RT			0.008												
CLT-2	272	286+00	286+40	RT			0.008												
EL-1	272	283+50	285+65	LT				0.041											
EL-2	272	283+50	286+00	LT				0.047											
ELT-1	272	286+00	288+50	LT					0.047										
TL-1	272	283+50	286+00	RT						45									
ELT-1	273	288+50	293+50	LT					0.095										
ELT-1	274	293+50	294+55	LT					0.020										
<b>BLACKMORE ROAD</b>																			
CLT-1	284	187+80	189+12	RT			0.025												
ELT-1	284	187+65	188+97	RT					0.025										
PB-28	284	186+70	189+22	CL										3	3	252			
<b>PERRY PARK ROAD</b>																			
CLT-1	285	228+89	230+19	RT			0.025												
ELT1	285	228+74	230+04	RT					0.025										
PB-29	285	228+30	230+29	CL										2	2	199			
SUBTOTAL SHEET 63						0.090	0.070	0.090	0.210	313	50	105	55	7	5	5	451		
SUBTOTALS FROM SHEET 60						0.220	0.540	0.030	0.600	0.030	748	188	55	13	1	3	3	250	
SUBTOTALS FROM SHEET 61							0.040	0.950	0.050	0.950			28	12	28	32	32	3040	
SUBTOTALS FROM SHEET 62							0.270	0.760	0.390	0.760	197	86		4	32	27	27	2438	
TOTAL						0.220	0.940	1.810	1.130	1.950	1258	50	379	138	12	24	61	67	6179
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>						0.22	0.94	1.81	1.13	1.95	1258	50	379	138	12	24	61	67	6179

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	611	611	614	614	614	614	614	614	614	614	614	614	614	614	614	622	
					12" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873 FT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT						
<b>PRE - PHASE 5</b>																					
EL-1	288	147+40		148+50	LT			0.021													
PB-1	288	148+50		148+50	LT													1			
EL-1	289	148+50		153+50	LT			0.095													
PB-1	289	148+50		150+70	LT													1	3	3	220
EL-1	290	153+50		156+00	LT			0.047													
<b>PHASE 5 - SUBPHASE 1</b>																					
EL-1	297	887+50	S.R.2	890+50	LT			0.057													
EL-2	297	887+50	S.R.2	890+50	RT			0.057													
PB-1	297	890+10	S.R.2	890+50	RT													1	1	1	40
CH-1	298	893+56	S.R.2	111+06	LT							177									
EL-1	298	890+50	S.R.2	893+56	LT			0.058													
EL2	298	890+50	S.R.2	111+72	RT			0.104													
LL-1	298	111+06		111+28	RT		0.004														
PB-2	298	890+50	S.R.2	112+00	RT														5	5	575
EL-1	299	112+00		117+50	LT			0.104													
PB-3	299	112+00		117+50	LT														6	6	550
EL-1	300	117+50		123+00	LT			0.104													
PB-4	300	117+50		118+50	LT													1	1	1	100
D1	300	119+25		119+57	LT	44	1														
EL-1	301	123+00		123+80	LT			0.015													
<b>PHASE 5 - SUBPHASE 2</b>																					
EL-1	305	887+50	S.R.2	890+50	LT			0.057													
EL-2	305	887+50	S.R.2	890+50	RT			0.057													
PB-1	305	890+00	S.R.2	890+50	LT													1	1	1	50
EL-1	306	890+50	S.R.2	891+00	RT			0.009													
EL-2	306	890+50	S.R.2	891+00	RT			0.009													
EL-3	306	109+27		112+00	RT			0.052													
ELT-1	306	891+00	S.R.2	112+00	RT					0.098											
ELT-2	306	891+00	S.R.2	112+00	RT					0.098											
PB-2	306	890+50	S.R.2	112+00	RT														5	5	575
PB-3	306	107+67		112+00	LT														4	4	433
ELT-1	307	112+00	S.R.2	117+50	RT					0.104											
ELT-2	307	112+00	S.R.2	117+50	RT					0.104											
EL-3	307	112+00		115+50	LT			0.067													
PB-4	307	112+00	S.R.2	115+50	RT														4	4	350
PB-5	307	112+00		115+50	LT													1	4	4	350
ELT-1	308	117+50	S.R.2	118+25	LT					0.014											
ELT-2	308	117+50	S.R.2	117+75	LT					0.005											
EL-3	308	117+50		123+00	RT			0.104													
LL-1	308	117+75		120+80	LT		0.058														
EL-1	309	123+00		123+80	LT			0.015													
<b>SUBTOTAL SHEET 64</b>					44	1	0.060	1.030	0.420	177				6	34	34	3243				

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK - US - 20 - 19 - 59**

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REF NO.	SHEET NO.	STATION TO STATION				SIDE	611	611	614	614	614	614	614	614	614	614	614	614	614	622
							12" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873 FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873 FT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT			
<b>PHASE 5 - SUBPHASE 3</b>																				
ETL-1	314	891+00	S.R.2	893+56	RT				0.048											
ELT-2	314	891+00	S.R.2	112+00	RT				0.100											
CH-1	314	109+27		111+27	LT							200								
CHT-2	314	893+56	S.R.2	111+27	LT							200								
LL-1	314	111+27		112+00	LT		0.014													
PB-1	314	107+67		108+67	LT								1		1	1	100			
ELT-1	315	112+00		117+50	RT				0.104											
LL-1	315	112+00		116+00	LT		0.076													
PB-2	315	116+47		117+50	RT								1		1	1	103			
ELT-1	316	117+50		119+00	RT			0.028												
EL-1	316	119+00		123+00	RT				0.076											
PB-3	316	117+50		118+73	LT								1		1	1	103			
PB-4	316	119+33		121+41	LT								2		2	2	176			
EL-1	317	123+00		123+80	LT			0.015												
PB-5	317	137+25		139+50	LT								1		2	2	205			
SUBTOTAL SHEET 65								0.090	0.040	0.330		200	200		6	7	7	687		
SUBTOTALS FROM SHEET 64						44	1	0.060	1.030	0.420		177			6	34	34	3243		
TOTAL						44	1	0.150	1.070	0.750		377	200		12	41	41	3930		
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>						44	1	0.15	1.07	0.75		377	200		12	41	41	3930		

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622												
				GUARDRAIL, TYPE MGS, AS PER PLAN FT	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016) EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN EACH	12" CONDUIT, TYPE B, AS PER PLAN FT	15" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 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 CHANNELIZING LINE, CLASS I, 8", 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 CROSSWALK LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT												
<b>PHASE 5</b>																																							
CL-1	321	93+80											0.032																										
EL-1	321	93+53																																					
EL-2	321	93+80																																					
CL-1	322	95+50											0.095																										
EL-1	322	95+50																																					
EL-2	322	95+50																																					
PB-1	322	99+60																						1		1	1	90											
CL-1	323	100+50											0.095																										
EL-1	323	100+50																																					
EL-2	323	100+50																																					
EL-3	323	885+75																																					
EL-4	323	886+75																																					
CH-1	323	887+52																																					
CH-2	323	104+57																																					
PB-2	323	100+50																																					
P1	323	101+50																																					
CL-1	324	105+50											0.095																										
EL-1	324	105+50																																					
EL-2	324	105+50																																					
EL-3	324	891+00																																					
EL-4	324	891+00																																					
CH-1	324	105+50																																					
CH-2	324	105+50																																					
CH-3	324	109+27																																					
CH-4	324	893+56	S.R.2																																				
PB-3	324	105+50																																					
P2	324	109+49																																					
P3	324	108+00																																					
CL-1	325	110+50											0.095																										
EL-1	325	110+50																																					
EL-2	325	110+50																																					
LL-1	325	111+28																																					
CH-1	325	110+50											0.080																										
CH-2	325	110+50																																					
P4	325	110+50																																					
P5	325	114+45																																					
CL-1	326	115+50											0.095																										
EL-1	326	115+50																																					
EL-2	326	115+50																																					
LL-1	326	115+50																																					
P6	326	115+50											0.095																										
P7	326	115+50																																					
<b>SUBTOTAL SHEET 66</b>																																							
													0.180	0.510																									
<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>																																							
<b>LAK-US-20-19.59</b>																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">66</td> <td style="width: 15%; text-align: center;">1088</td> <td style="width: 15%; text-align: center;">1</td> <td style="width: 15%; text-align: center;">1773</td> <td style="width: 15%; text-align: center;">9</td> <td style="width: 15%; text-align: center;">9</td> <td style="width: 15%; text-align: center;">907</td> </tr> </table>																												66	1088	1	1773	9	9	907					
66	1088	1	1773	9	9	907																																	

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	611	614	614	614	614	614	614	614	614	614	614	615	614	614	622		
				GUARDRAIL, TYPE MGS, AS PER PLAN FT	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (WASH 2016) EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN EACH	12" CONDUIT, TYPE B, AS PER PLAN FT	15" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 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 CHANNELIZING LINE, CLASS I, 8", 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 CROSSWALK LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT	
<b>PHASE 5</b>																											
CL-1	327	120+50	138+50	LT								0.099															
EL-1	327	120+50	138+50	LT									0.099														
EL-2	327	120+50	138+50	LT									0.100														
P8	327	120+50	138+50	RT																	765						
D1	327	123+82		LT			10		1	1																	
CL-1	328	138+50	143+50	LT								0.095															
EL-1	328	138+50	143+50	LT									0.095														
EL-2	328	138+50	143+50	LT									0.095														
PB-7	328	141+51	143+50	LT																	1		2	2	183		
P9	328	138+50	143+50	LT																	780						
CL-1	329	143+50	148+50	LT								0.095															
CL-2	329	0+75	1+26	RT								0.010															
EL-1	329	143+50	148+50	LT									0.095														
EL-2	329	143+50	148+50	LT									0.095														
SL-1	329	145+02		RT													13										
PB-8	329	143+50	148+50	LT																	4		3	3	288		
P10	329	143+50	148+50	LT																	815						
D2	329	144+45		LT			14		1	1																	
GR-1	329	148+00	148+50	LT	37.5		1																				
CL-1	330	148+50	153+50	LT								0.095															
EL-1	330	148+50	153+50	LT									0.095														
EL-2	330	148+50	153+50	LT									0.095														
PB-9	330	148+50	153+50	LT																	5		3	3	270		
P11	330	148+50	153+50	LT																	800						
D3	330	149+27		LT			15		1	1																	
GR-2	330	148+50	152+00	LT	300	1																					
CL-1	331	153+50	158+50	LT								0.095															
EL-1	331	153+50	158+50	LT									0.095														
EL-2	331	153+50	158+50	LT									0.095														
PB-10	331	153+50	158+50	LT																	4		3	3	208		
P12	331	153+50	158+50	LT																	800						
D4	331	154+75		LT			13		1	1																	
D5	331	154+50	154+75	RT			37																				
GR-3	332	157+50	158+50	LT	50	1																					
CL-1	332	158+50	163+50	LT								0.095															
EL-1	332	158+50	163+50	LT									0.095														
EL-2	332	158+50	163+50	LT									0.095														
PB-11	332	158+50	163+50	LT																	4		2	2	162		
P13	332	158+50	163+50	LT																		750					
D6	332	163+00		LT			13		1	1																	
D7	332	162+96	163+00	RT			28																				
GR-4	332	158+50	161+00	LT	200	1																					
CL-1	333	163+50	168+50	LT								0.095															
CL-2	333	168+10	168+50	LT								0.008															
EL-1	333	163+50	168+50	LT									0.095														
EL-2	333	163+50	168+50	LT									0.095														
PB-12	333	163+96	166+90	LT																	3		3	3	278		
P14	333	163+50	168+50	LT																		725					
D8	333	166+23	166+30	LT			8	39	1	1																	
D9	333	168+00	168+10	LT			10		1	1																	
<b>SUBTOTAL SHEET 67</b>					588	3	1	148	39	7	6	1	0.690		1.340						13		21	5435	16	16	1389

<b>MAINTENANCE OF TRAFFIC SUBSUMMARY</b>	CALCULATED
	ARK CHECKED EJT
LAK-US-20-19.59	67 1088



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REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622	
				GUARDRAIL, TYPE MGS, AS PER PLAN FT	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (WASH 2016) EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN EACH	12" CONDUIT, TYPE B, AS PER PLAN FT	15" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 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 CHANNELIZING LINE, CLASS I, 8", 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 CROSSWALK LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT
<b>PHASE 5</b>																											
CL-1	334	168+50	173+50	LT								0.095															
CL-2	334	168+50	171+75	LT								0.062															
EL-1	334	168+50	173+50	LT										0.095													
EL-2	334	168+50	173+50	RT & LT										0.095													
LL-1	334	171+50	173+50	RT								0.039															
CH-1	334	172+00	172+58	LT											58												
CW-1	334	173+06		RT & LT																		149					
CW-2	334	173+50		RT																		118					
SL-1	334	172+58		RT & LT																							
SL-2	334	19+56		RT																		33					
TL-1	334	168+50	171+75	LT														97				8					
LA-1	334	172+10		LT																			1				
LA-2	334	172+48		LT																			1				
P15	334	168+50	170+88	LT																							
D10	334	169+66		LT							1												125				
CL-1	335	173+50	178+50	LT								0.095															
CL-2	335	176+35	178+50	LT								0.041															
EL-1	335	173+50	178+50	LT										0.095													
EL-2	335	173+50	178+50	RT										0.095													
LL-1	335	174+48	178+50	RT								0.076															
CW-1	335	174+15		RT & LT																			150				
CW-2	335	173+50		LT																			100				
SL-1	335	174+48		LT																							
SL-2	335	20+63		LT																		22					
CH-1	335	174+48	176+10	LT																			16				
TL-1	335	176+83	176+59	LT											162												
LA-1	335	174+58		LT																				1			
LA-2	335	175+20		LT																				1			
LA-3	335	175+82		LT																				1			
CL-1	336	178+50	182+20	LT									0.070														
CL-2	336	178+50	182+20	LT									0.070														
CLT-1	336	182+20	183+50	LT										0.025													
EL-1	336	178+50	181+95	LT																							
EL-2	336	178+50	181+80	RT																							
LL-1	336	178+50	182+20	RT																							
DLT-1	336	182+75	183+50	LT									0.070														
CTL-2	337	183+50	187+70	LT																							
DTL-1	337	183+50	187+70	RT																							
SUBTOTAL SHEET 68												1	0.190	0.430	0.110	0.510		220	495	170	79	517	5		125		

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

CALCULATED  
ARK  
CHECKED  
EJT

REF NO.	SHEET NO.	STATION TO STATION	SIDE	606	606	606	611	611	611	611	611	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622											
				GUARDRAIL, TYPE MGS, AS PER PLAN FT	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (WASH 2016) EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN EACH	12" CONDUIT, TYPE B, AS PER PLAN FT	15" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 6, AS PER PLAN EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN EACH	WORK ZONE LANE LINE, CLASS I, 6", 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 CHANNELIZING LINE, CLASS I, 8", 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 CROSSWALK LINE, CLASS I, 12", 642 PAINT FT	WORK ZONE ARROW, CLASS I, 642 PAINT EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	OBJECT MARKER, TWO WAY EACH	PORTABLE BARRIER, UNANCHORED FT										
<b>NARROWS ROAD</b>																																					
CTL-1	345	144+31											0.019																								
ELT-1	345	144+46												0.019																							
PB-27	345	144+19																							2	2	223										
<b>WINTER PHASE</b>																																					
		114+45.60																																			
		179+42.60																																			
		283+46.30																																			
SUBTOTAL SHEET 69																					0.020			5.160													
SUBTOTALS FROM SHEET 66												0.180	0.510		1.190							1	1773			9	9	907									
SUBTOTALS FROM SHEET 67				588	3	1	148	39	7	6	1	0.690	1.340									21	5435			16	16	1389									
SUBTOTALS FROM SHEET 68											1	0.190	0.430	0.110	0.510	220	495	170	79	517	5		125														
<b>TOTAL</b>				588	3	1	148	39	7	6	2	0.370	1.650	0.110	8.200	1021	495	170	92	517	5	22	7333	27	27	2519											
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>				588	3	1	148	39	7	6	2	0.37	1.65	0.11	8.20	1021	495	170	92	517	5	22	7333	27	27	2519											

<b>LAK - US - 20-19.59</b>	CALCULATED
	ARK CHECKED EJT



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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	622	CALCULATED	ARK	CHECKED	EJT	
				WORK ZONE LANE LINE, CLASS I, 6", 873	WORK ZONE CENTER LINE, CLASS I, 1, 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 1, 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, 1, 6", 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 1, 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 I	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	OBJECT MARKER, TWO WAY	PORTABLE BARRIER, UNANCHORED						
		<b>PHASE 6</b>		MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT						
CTL-1	359	148+50	153+50			0.095																				
ELT-1	359	148+50	153+50				0.095																			
PB-9	359	148+50	153+50																5	5	500					
CTL-1	360	153+50	158+50			0.095																				
ELT-1	360	153+50	158+50				0.095																			
PB-10	360	153+50	158+50														2		4	4	358					
CLT-1	361	158+50	163+50			0.095																				
ELT-1	361	158+50	163+50				0.095																			
PB-11	361	158+50	163+50																5	5	500					
CLT-1	362	163+50	168+10			0.087																				
CL-2	362	168+10	168+50		0.008																					
CL-3	362	168+10	168+50		0.008																					
ELT-1	362	163+50	168+10				0.087																			
EL-2	362	168+10	168+50				0.008																			
EL-3	362	168+10	168+50				0.008																			
PB-12	362	163+50	168+50														3		4	4	352					
CL-1	363	168+50	173+50		0.095																					
CL-2	363	168+50	171+08		0.049																					
EL-1	363	168+50	173+50	RT & LT			0.095																			
EL-2	363	168+50	173+50	RT			0.095																			
SL-1	363	172+58												22												
CH-1	363	171+33	172+58	RT					125																	
LA-1	363	171+48		RT																						
LA-2	363	171+98		RT																						
LA-3	363	172+48		RT																						
TL-1	363	168+50	171+08	RT									86													
CL-1	364	173+50	178+50	RT	0.095																					
CL-2	364	176+83	178+50	RT	0.032																					
EL-1	364	173+50	178+50	LT			0.095																			
EL-2	364	173+50	178+50	RT			0.095																			
CH-1	364	174+48	176+58	LT					210																	
CH-2	364	174+48	176+58	RT					210																	
CH-3	364	175+11	177+33	RT					222																	
SL-1	364	174+48		RT & LT																						
DL-1	364	177+33	178+50	LT																						
TL-1	364	176+83	178+50	RT																						
LA-1	364	174+58		LT																						
LA-2	364	175+20		LT																						
LA-3	364	175+82		LT																						
LA-4	364	176+44		LT																						
LA-5	364	174+58		RT																						
LA-6	364	175+20		RT																						
LA-7	364	175+82		RT																						
LA-8	364	176+44		RT																						
LA-9	364	175+29		RT																						
LA-10	364	175+91		RT																						
LA-11	364	176+53		RT																						
CL-2	365	178+50	180+25	RT & C/L		0.033																				
CL-3	365	178+50	180+25	RT		0.033																				
EL-2	365	178+50	182+20	LT			0.070																			
EL-3	365	178+50	180+25	RT			0.033																			
ELT-1	365	182+20	183+50	LT				0.025																		
TL-1	365	178+50	180+25	RT									56													
SUBTOTAL SHEET 71						0.350	0.370	0.500	0.400	767		117	216	55		14	5	18	18	1710						

**MAINTENANCE OF TRAFFIC SUBSUMMARY**

**LAK-US-20-19.59**

CALCULATED  
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REF NO.	SHEET NO.	STATION TO STATION	SIDE	614														614		614		622	
				MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	
<b>PHASE 6</b>																							
ELT-1	366	183+50																					
<b>BLASE NEMETH ROAD</b>																							
CLT-1	373	119+50						0.005															
ELT-1	373	119+70																					
EL-2	373	119+05																					
EL-3	373	102+25																					
PB-19	373	119+95																					
CLT-1	374	118+90																					
ELT-1	374	119+05																					
ELT-2	374	102+50																					
ELT-3	374	103+00																					
EL-2	374	102+00																					
PB-20	374	118+16																					
<b>S.R. 2 WESTBOUND RAMP</b>																							
EL-1	375	885+00	S.R. 2																				
EL-2	375	885+00	S.R. 2																				
ELT-3	375	105+40																					
PB-14	375	886+80	S.R. 2																				
PB-14A	375	105+40																					
EL-1	376	106+50	S.R. 2																				
EL-2	376	106+50	S.R. 2																				
ELT-3	376	106+50																					
CH-1	376	111+95	S.R. 2																				
CHT-2	376	111+95																					
PB-15	376	106+50	S.R. 2																				
PB-15A	376	106+50																					
EL-1	377	112+00	S.R. 2																				
DLT-1	377	113+95																					
CH-1	377	112+00	S.R. 2																				
CHT-2	377	112+00																					
PB-16	377	112+00																					
EL-1	380	885+75	S.R. 2																				
EL-2	380	885+75	S.R. 2																				
ELT-1	380	887+00	S.R. 2																				
ELT-2	380	887+00	S.R. 2																				
CHT-1	380	888+38	S.R. 2																				
CHT-2	380	105+40																					
PB-17	380	886+80	S.R. 2																				
PB-17A	380	105+40																					
ELT-1	381	106+50	S.R. 2																				
ELT-2	381	111+95																					
DLT-1	381	107+40																					
CHT-1	381	106+50	S.R. 2																				
CHT-2	381	106+50																					
PB-18	381	106+50	S.R. 2																				
PB-18A	381	110+65																					
EL-1	382	112+00																					
PB-19	382	112+00																					
<b>SUBTOTAL SHEET 72</b>																							
<b>SUBTOTALS FROM SHEET 70</b>																							
<b>SUBTOTALS FROM SHEET 71</b>																							
<b>TOTAL</b>																							
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>																							

MAINTENANCE OF TRAFFIC SUBSUMMARY

LAK-US-20-19.59

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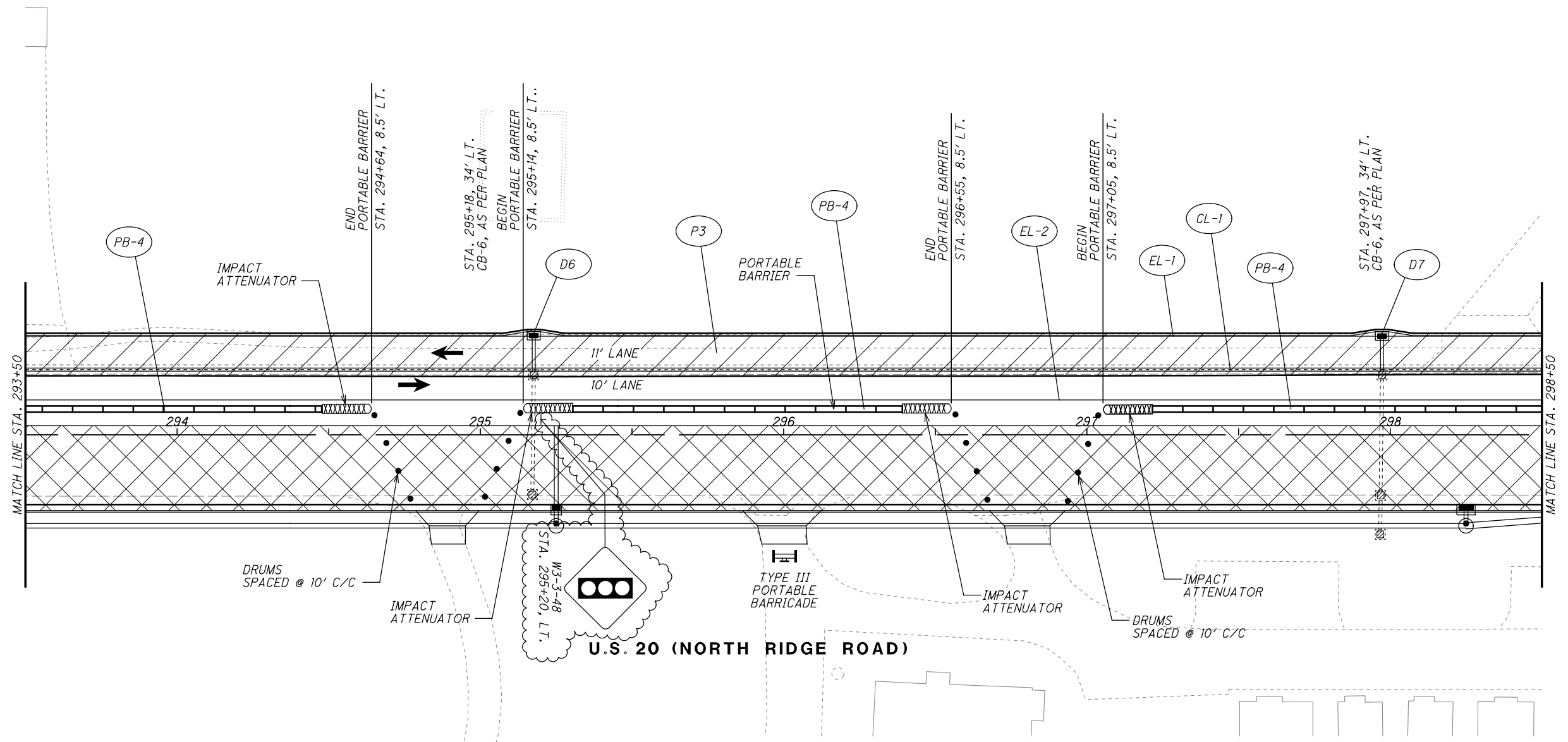
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0 20 40  
HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN - PHASE 1**  
**STA. 293+50 TO STA. 298+50**

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**LEGEND**

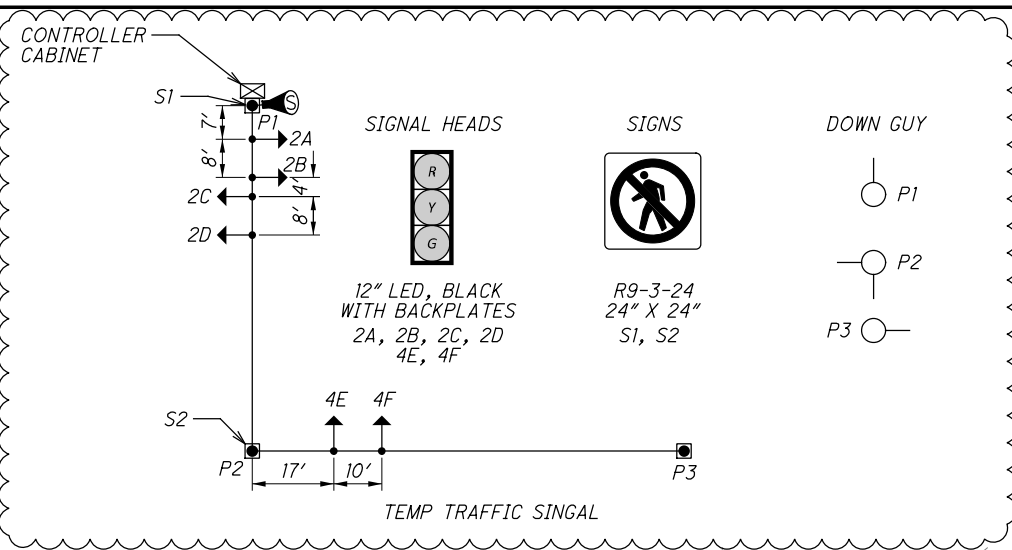
- MAINTENANCE OF TRAFFIC SIGN
- MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
- EXISTING TRAFFIC SIGN

- 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 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

**LEGEND**

- 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

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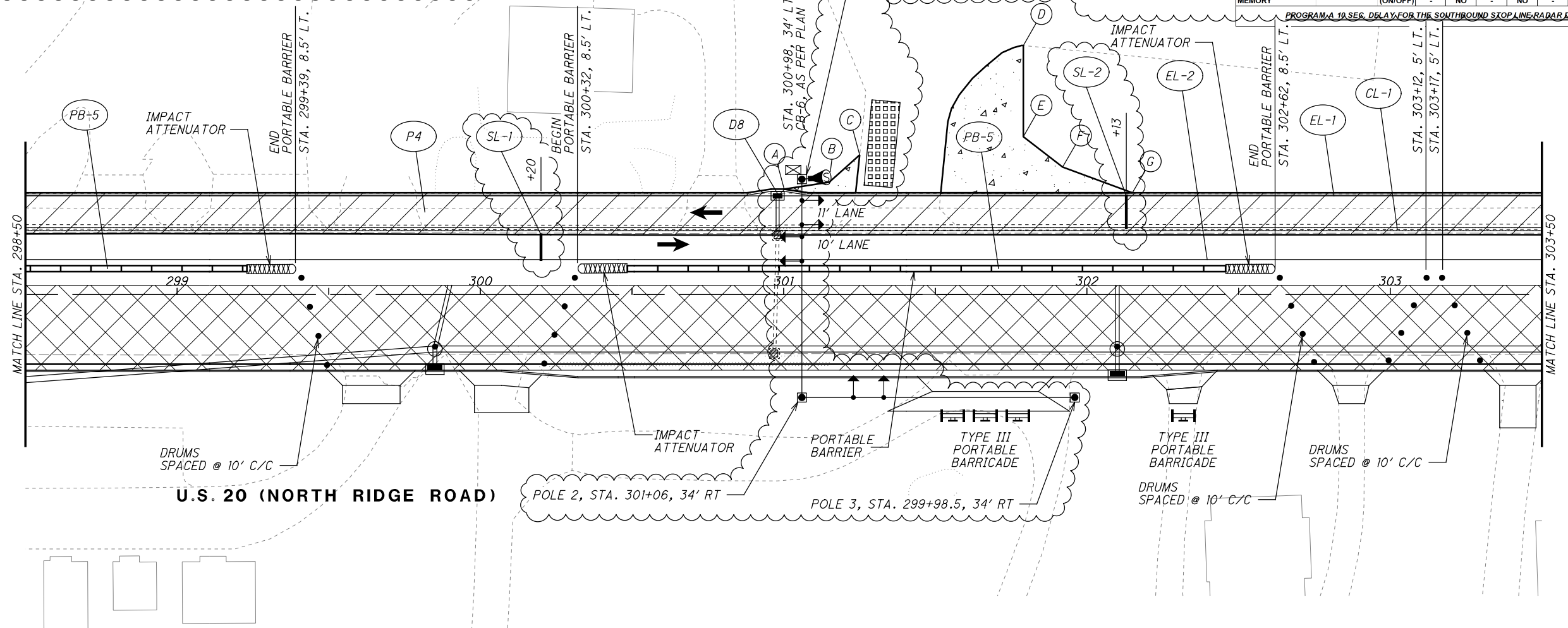
	STA.	OFFSET
A	301+00	
B	301+15	37' LT.
C	301+25	46' LT.
D	301+79	82' LT.
E	301+79	52' LT.
F	301+92	42' LT.
G	302+15	

TRAFFIC SIGNAL OPERATION PLANS		
	ON	FLASH
MONDAY	7:30 AM	5:30 PM
TUESDAY	7:30 AM	5:30 PM
WEDNESDAY	7:30 AM	5:30 PM
THURSDAY	7:30 AM	5:30 PM
FRIDAY	7:30 AM	5:30 PM
SATURDAY	7:30 AM	12:30 PM
SUNDAY	FLASH ALL DAY	

Traffic Signal Controller Timing Chart									
INTERSECTION: US 29 AT CONNELLY RECYCLING CENTER									
MAINTAINING AGENCY: ODOT									
START UP		DUAL ENTRY: NO		PHASES: 2					
REST IN RED:		RING 1		RING 2					
START IN: TIME FOR: FLASH, ALL RED (SEC.): 9, 6					OVERLAP				
FIRST PHASE(S): 2					A B C D				
COLOR DISPLAYED: GREEN					PHASES				
INTERVAL OR FEATURE					CONTROLLER MOVEMENT NO.				
INTERSECTION MOVEMENT (PHASE)					1 2 3 4 5 6 7 8				
DIRECTION					EB&WB SB				
MINIMUM GREEN (INITIAL) (SEC.)					10 7				
ADDED INITIAL (SEC./ACTUATION)									
MAXIMUM INITIAL (SEC.)									
PASSAGE TIME (PRESET GAP) (SEC.)									
TIME BEFORE REDUCTION (SEC.)									
MINIMUM GAP (SEC.)									
TIME TO REDUCE (SEC.)									
MAXIMUM GREEN I (SEC.)					30 30				
MAXIMUM GREEN II (SEC.)					30 30				
YELLOW CHANGE (SEC.)					4.5 4.0				
ALL RED CLEARANCE (SEC.)					2.0 1.5				
DELAYED GREEN (LPI) (SEC.)									
FLASHING YELLOW ARROW DELAY (SEC.)									
WALK (SEC.)									
PEDESTRIAN CLEARANCE (SEC.)									
RECALL					MAXIMUM (ON/OFF) MINIMUM (ON/OFF) PEDESTRIAN (ON/OFF)				
MEMORY					MAXIMUM (ON/OFF) MINIMUM (ON/OFF) PEDESTRIAN (ON/OFF)				

TRAFFIC SIGNAL OPERATION PLAN		
	ON	FLASH
MONDAY	7:30 AM	5:30 PM
TUESDAY	7:30 AM	5:30 PM
WEDNESDAY	7:30 AM	5:30 PM
THURSDAY	7:30 AM	5:30 PM
FRIDAY	7:30 AM	5:30 PM
SATURDAY	7:30 AM	12:30 PM
SUNDAY	FLASH ALL DAY	

Traffic Signal Controller Timing Chart									
INTERSECTION: US 29 AT CONNELLY RECYCLING CENTER									
MAINTAINING AGENCY: ODOT									
START UP		DUAL ENTRY: NO		PHASES: 2					
REST IN RED:		RING 1		RING 2					
START IN: TIME FOR: FLASH, ALL RED (SEC.): 9, 6					OVERLAP				
FIRST PHASE(S): 2					A B C D				
COLOR DISPLAYED: GREEN					PHASES				
INTERVAL OR FEATURE					CONTROLLER MOVEMENT NO.				
INTERSECTION MOVEMENT (PHASE)					1 2 3 4 5 6 7 8				
DIRECTION					EB&WB SB				
MINIMUM GREEN (INITIAL) (SEC.)					10 7				
ADDED INITIAL (SEC./ACTUATION)									
MAXIMUM INITIAL (SEC.)									
PASSAGE TIME (PRESET GAP) (SEC.)									
TIME BEFORE REDUCTION (SEC.)									
MINIMUM GAP (SEC.)									
TIME TO REDUCE (SEC.)									
MAXIMUM GREEN I (SEC.)					30 30				
MAXIMUM GREEN II (SEC.)					30 30				
YELLOW CHANGE (SEC.)					4.5 4.0				
ALL RED CLEARANCE (SEC.)					2.0 1.5				
DELAYED GREEN (LPI) (SEC.)									
FLASHING YELLOW ARROW DELAY (SEC.)									
WALK (SEC.)									
PEDESTRIAN CLEARANCE (SEC.)									
RECALL					MAXIMUM (ON/OFF) MINIMUM (ON/OFF) PEDESTRIAN (ON/OFF)				
MEMORY					MAXIMUM (ON/OFF) MINIMUM (ON/OFF) PEDESTRIAN (ON/OFF)				



**LEGEND**

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

**LEGEND**

	30' WOOD STRAIN POLE
	STOP LINE RADAR DETECTION UNIT
	DETECTION ZONE

	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 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

**LEGEND**

	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 JDC CHECKED EJT  
**MAINTENANCE OF TRAFFIC PLAN - PHASE 1**  
**STA. 298+50 TO STA. 303+50**  
**LAK-US-20-19.59**  
 109  
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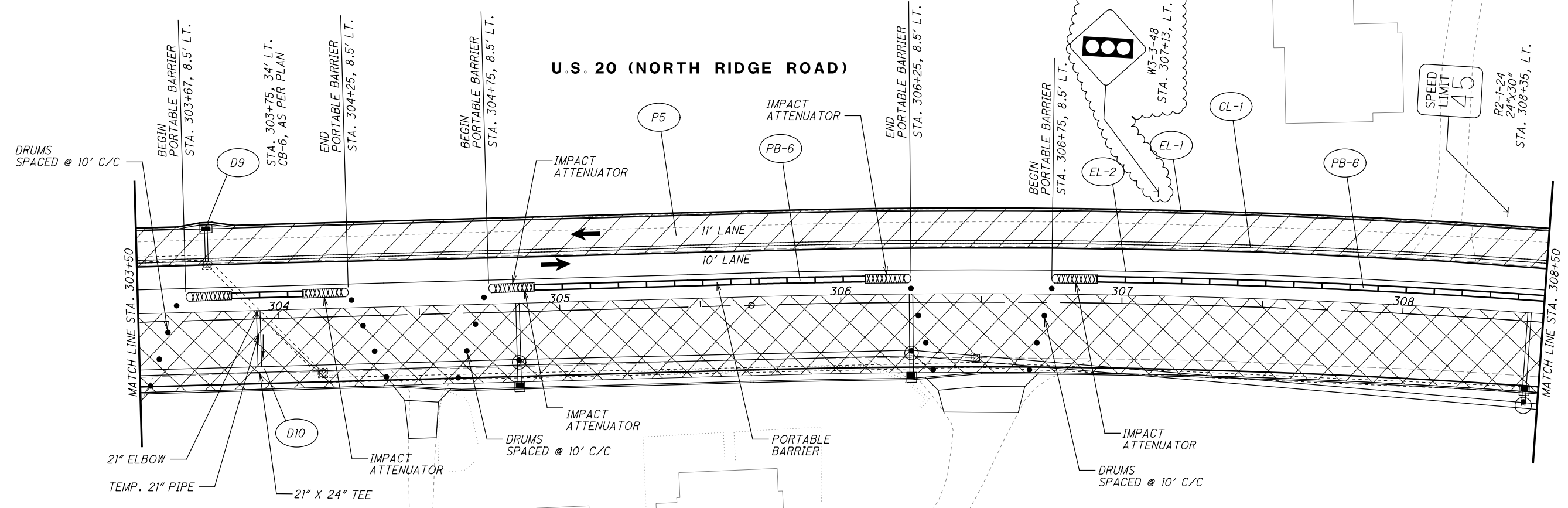

  

  
 HORIZONTAL SCALE IN FEET




**MAINTENANCE OF TRAFFIC PLAN - PHASE 1**  
**STA. 303+50 TO STA. 308+50**

**LAK-US-20-19.59**











CALCULATED JDC  
 CHECKED EJT












**LEGEND**

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

**LEGEND**

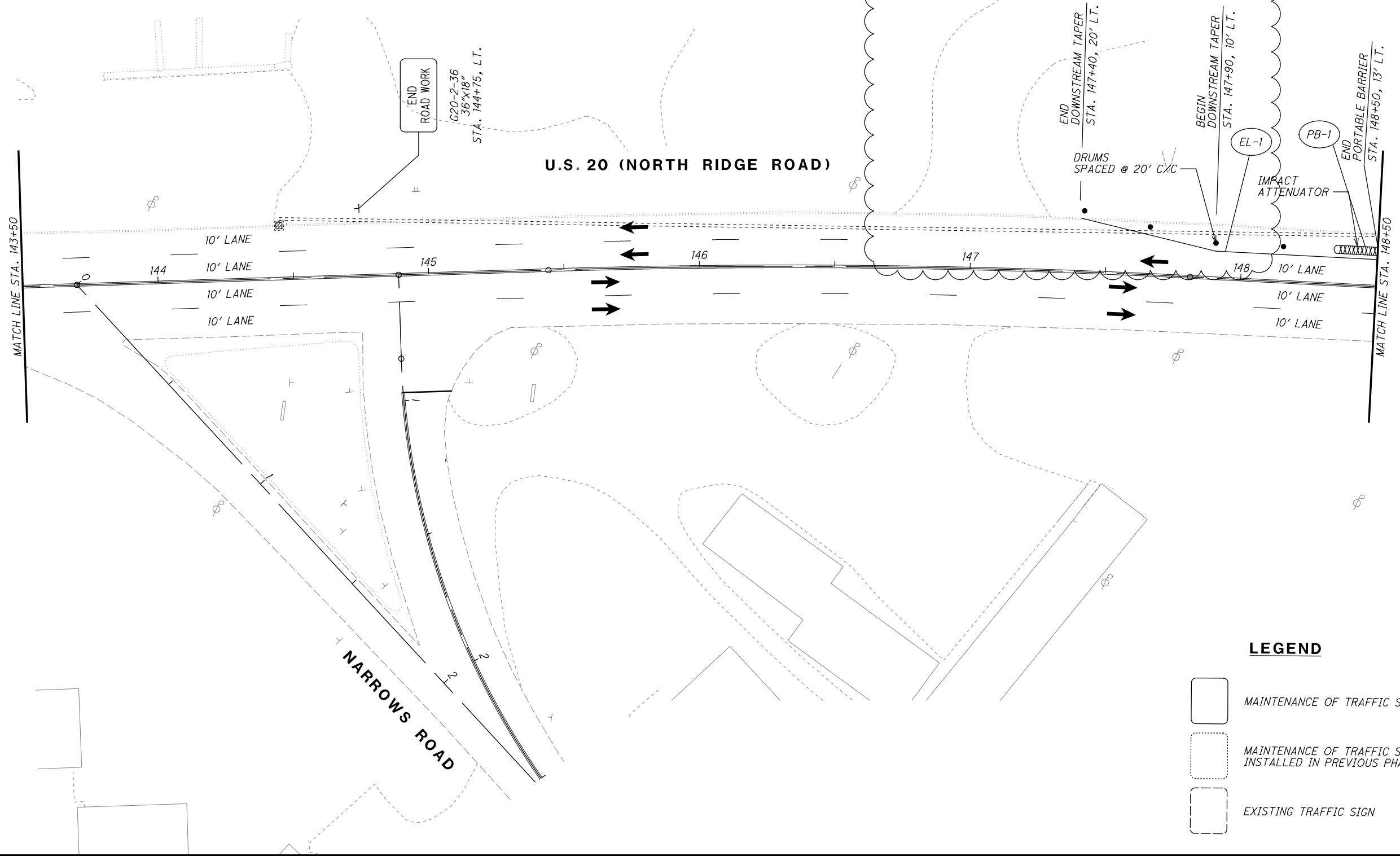
-  ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
-  ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06,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

**LEGEND**

-  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

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- |       |  |               |   |
|-------|--|---------------|---|
| (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  | (O)           | WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE                    |
| (CL)  | ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT     | (Hatched Box) | PROPOSED TEMPORARY PAVEMENT CONSTRUCTED THIS PHASE                |
| (LL)  | ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT       | (Arrow)       | TRAFFIC FLOW  |
| (EL)  | ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT       |               |   |



- LEGEND**
- (Solid Box) MAINTENANCE OF TRAFFIC SIGN
  - (Dashed Box) MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
  - (Dotted Box) EXISTING TRAFFIC SIGN

**MAINTENANCE OF TRAFFIC PLAN PRE-PHASE 5**

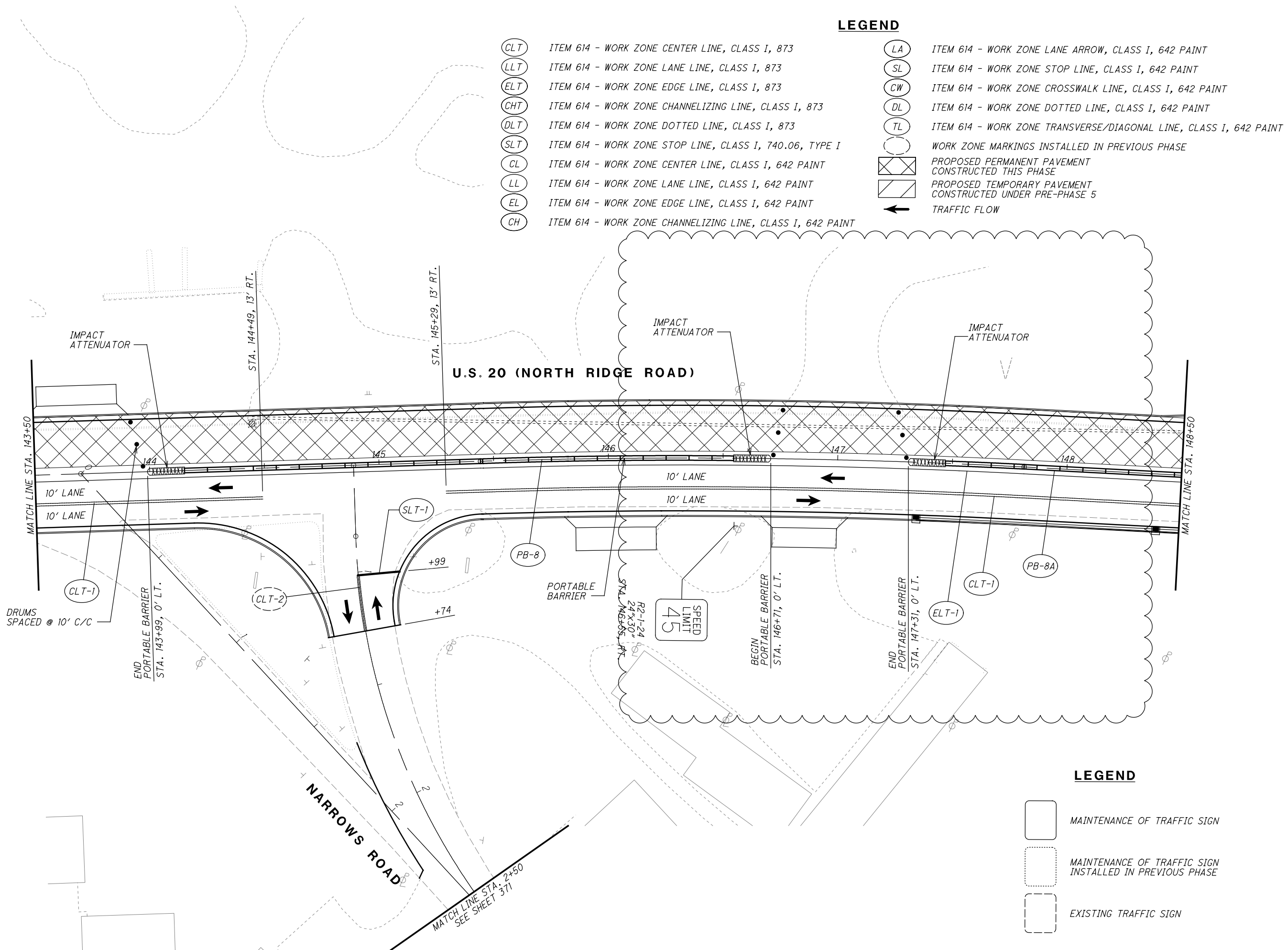
**LAK-US-20-19.59**

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CALCULATED JDC  
CHECKED EJT

0 10 20 40  
HORIZONTAL SCALE IN FEET

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- (CLT) ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 873
- (LLT) ITEM 614 - WORK ZONE LANE LINE, CLASS I, 873
- (ELT) ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 873
- (CHT) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 873
- (DLT) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 873
- (SLT) ITEM 614 - WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
- (CL) ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- (LL) ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- (EL) ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT
- (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

**LEGEND**

- (LA) ITEM 614 - WORK ZONE LANE ARROW, CLASS I, 642 PAINT
- (SL) ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT
- (CW) ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT
- (DL) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- (TL) ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
- (Symbol: Circle with dot) WORK ZONE MARKINGS INSTALLED IN PREVIOUS PHASE
- (Symbol: X-hatch) PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
- (Symbol: Diagonal hatch) PROPOSED TEMPORARY PAVEMENT CONSTRUCTED UNDER PRE-PHASE 5
- (Symbol: Arrow) TRAFFIC FLOW

**LEGEND**

- (Symbol: Solid rectangle) MAINTENANCE OF TRAFFIC SIGN
- (Symbol: Dashed rectangle) MAINTENANCE OF TRAFFIC SIGN INSTALLED IN PREVIOUS PHASE
- (Symbol: Dotted rectangle) EXISTING TRAFFIC SIGN

MAINTENANCE OF TRAFFIC PLAN - PHASE 6  
 STA. 143+50 TO STA. 148+50

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CALCULATED JDC  
 CHECKED EJT  
 HORIZONTAL SCALE IN FEET  
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SHEET NUM.													PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
23	24	24A	25	26	27	397	398	399	414	418	761	862	01/NHS/04	02/NHS/66	03/NHS/66						
LS													LS			201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN	23	
						1							1			202	20010	1	HEADWALL REMOVED		
					500					130,060	14,662		145,222			202	23001	145,222	PAVEMENT REMOVED, AS PER PLAN	26	
								55,804					55,804			202	30000	55,804	WALK REMOVED		
						589							589			202	30600	589	CONCRETE MEDIAN REMOVED		
								449		1,544			1,993			202	32000	1,993	CURB REMOVED		
						20,871							20,871			202	35100	20,871	PIPE REMOVED, 24" AND UNDER		
						2,090							2,090			202	35200	2,090	PIPE REMOVED, OVER 24"		
						5,001							5,001			202	38000	5,001	GUARDRAIL REMOVED		
						8							8			SPECIAL	20252990	8	PARKING BLOCK REMOVED	24	
						130							130			202	53100	130	MAILBOX REMOVED		
						5							5			202	58000	5	MANHOLE REMOVED		
						148							148			202	58300	148	CATCH BASIN OR INLET REMOVED		
						10							10			202	60010	10	MONUMENT ASSEMBLY REMOVED		
						945							945			SPECIAL	20270000	945	FILL AND PLUG EXISTING CONDUIT, 12" TO 36" DIA.	24A	
												100	100			SPECIAL	20270000	100	FILL AND PLUG EXISTING CONDUIT, 4' x 3' BOX	24A	
					4,400								4,400			SPECIAL	20270110	4,400	PIPE CLEANOUT, 24" AND UNDER	26	
				275									275			SPECIAL	20270120	275	PIPE CLEANOUT, 27" TO 48"	26	
						989							989			202	75000	989	FENCE REMOVED		
	LS					1							1			202	98000	LS	REMOVAL MISC.: WEATHER STATION FOUNDATION	24	
						24							24			202	98100	1	REMOVAL MISC.: BUILDING FOUNDATION	24	
						50							50			202	98100	24	REMOVAL MISC.: BOULDER	24	
						2							2			202	98100	50	REMOVAL MISC.: BUSINESS SIGN	24	
													2			202	98100	2	REMOVAL MISC.: LIGHT POLE	24	
						24							24			202	98100	24	REMOVAL MISC.: CONCRETE BLOCK	24	
						9							9			202	98100	9	REMOVAL MISC.: BOLLARD	24	
						77							77			202	98100	77	REMOVAL MISC.: POST	24	
						14							14			202	98100	14	REMOVAL MISC.: LANDSCAPE LIGHT	24	
						112							112			202	98200	112	REMOVAL MISC.: CONCRETE WALL	24	
						181							181			202	98200	181	REMOVAL MISC.: STONE WALL	24	
						115			32,361		1,399		33,875			203	10000	33,875	EXCAVATION		
													5,000			203	10001	5,000	EXCAVATION, AS PER PLAN	25	
									13,584				13,584			203	20000	13,584	EMBANKMENT		
													5,000			203	35130	5,000	GRANULAR MATERIAL, TYPE D		
			130										130			203	98600	130	ROADWAY, MISC.: SUPPORTING EXISTING UTILITY POLES	24A	
					500					167,723	12,648		180,871			204	10000	180,871	SUBGRADE COMPACTION		
	10,050												10,050			204	13000	10,050	EXCAVATION OF SUBGRADE		
	10,050												10,050			204	30010	10,050	GRANULAR MATERIAL, TYPE B		
	60												60			204	45000	60	PROOF ROLLING		
	18,100				11,200								29,300			204	50000	29,300	GEOTEXTILE FABRIC		
	18,100												18,100			204	51000	18,100	GEOGRID		
							5,088						5,088			606	15050	5,088	GUARDRAIL, TYPE MGS		
							25						25			606	16000	25	GUARDRAIL REBUILT		
							50						50			606	17360	50	GUARDRAIL, TYPE MGS, LONG-SPAN		
							17						17			606	26150	17	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	24	
							12						12			606	26550	12	ANCHOR ASSEMBLY, MGS TYPE T		
							2						2			606	35002	2	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
								49,452					49,452			608	10000	49,452	4" CONCRETE WALK		
								2,022					2,022			608	52000	2,022	CURB RAMP		
	34												34			623	38500	34	MONUMENT ASSEMBLY, TYPE C		
	3												3			623	39500	3	MONUMENT ASSEMBLY ADJUSTED TO GRADE		
						128							128			SPECIAL	69050100	128	MAILBOX SUPPORT SYSTEM, SINGLE	24	
		8,200											8,200			SPECIAL	69065016	8,200	WORK INVOLVING PETROLEUM CONTAMINATED SOIL	24A	
		4,100											4,100			SPECIAL	69065022	4,100	WORK INVOLVING NON-REGULATED WATER	24A	
		4,100											4,100			SPECIAL	69065024	4,100	WORK INVOLVING REGULATED WATER	24A	

GENERAL SUMMARY

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SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED EJT	CHECKED JMP
24A	25	26	408	411	419	862				01/NHS/04	02/NHS/66	03/NHS/66								
				9						9				601	21050	9	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
						26				26				601	32004	26	CY	ROCK CHANNEL PROTECTION, TYPE A WITH GEOTEXTILE FABRIC		
			13							13				601	32104	13	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC		
			3							3				601	32204	3	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC		
2										2				659	00100	2	EACH	SOIL ANALYSIS TEST		
13,524										13,524				659	00300	13,524	CY	TOPSOIL		
121,832										121,832				659	00500	121,832	SY	SEEDING AND MULCHING, CLASS 1		
6,092										6,092				659	14000	6,092	SY	REPAIR SEEDING AND MULCHING		
6,092										6,092				659	15000	6,092	SY	INTER-SEEDING		
16.99										16.99				659	20000	16.99	TON	COMMERCIAL FERTILIZER		
25.17										25.17				659	31000	25.17	ACRE	LIME		
691										691				659	35000	691	MGAL	WATER		
15,350										15,350				659	40000	15,350	MSF	MOWING		
4,200										4,200				670	00500	4,200	SY	SLOPE EROSION PROTECTION		
				LS						LS				832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		
				LS						LS				832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
				LS						LS				832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
					690,000					690,000				832	30000	690,000	EACH	EROSION CONTROL		
						LS				LS				503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	25	
	LS									LS				SPECIAL	53000200	LS		STRUCTURES MISC.: PRECONSTRUCTION CONDITION SURVEY	25	
	LS									LS				SPECIAL	53014000	LS		STRUCTURAL SURVEY AND MONITORING OF VIBRATION	25	
			3.5			4.1				7.39	0.21			602	20000	7.6	CY	CONCRETE MASONRY		
		500		160						660				605	13410	660	FT	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
		200		53,273						53,273				605	14020	53,273	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
										200				605	31100	200	FT	AGGREGATE DRAINS		
				2,981						2,981				611	00510	2,981	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
		50								50				611	01500	50	FT	6" CONDUIT, TYPE F		
			24							24				611	01800	24	FT	8" CONDUIT, TYPE B		
			1,596							1,186	410			611	04401	1,596	FT	12" CONDUIT, TYPE B, AS PER PLAN, 748.01 OR 748.06	26	
		500								500				611	04600	500	FT	12" CONDUIT, TYPE C		
			4,748							3,256	1,492			611	05900	4,748	FT	15" CONDUIT, TYPE B		
			1,331							1,062	269			611	06100	1,331	FT	15" CONDUIT, TYPE C		
			1,619							1,319	300			611	07400	1,619	FT	18" CONDUIT, TYPE B		
			3,355							3,355				611	07600	3,355	FT	18" CONDUIT, TYPE C		
			483							223		260		611	08900	483	FT	21" CONDUIT, TYPE B		
			1,634							1,634				611	09100	1,634	FT	21" CONDUIT, TYPE C		
			3,318							102	581	2,635		611	10400	3,318	FT	24" CONDUIT, TYPE B		
			880							129	114	637		611	10600	880	FT	24" CONDUIT, TYPE C		
			415							200		215		611	13400	415	FT	30" CONDUIT, TYPE B		
			353									353		611	13600	353	FT	30" CONDUIT, TYPE C		
			800									800		611	16400	800	FT	36" CONDUIT, TYPE B		
			1,095									1,095		611	19400	1,095	FT	42" CONDUIT, TYPE B		
			1,385							1,175		210		611	19600	1,385	FT	42" CONDUIT, TYPE C		
			3,816								388	3,428		611	20900	3,816	FT	48" CONDUIT, TYPE B		
			1,474								170	1,304		611	21100	1,474	FT	48" CONDUIT, TYPE C		
			48								48			611	22200	48	FT	54" CONDUIT, TYPE A, 706.02		
						130				130				611	25000	130	FT	66" CONDUIT, TYPE A, 706.02, 707.35, 707.75, 707.85 OR 72" CONDUIT, TYPE A, 707.02 (0.109) ALUMINIZED, 707.03 (0.249) GALVANIZED, 707.04 (1") (0.109)		
	50									50				611	97200	50	EACH	CONDUIT, MISC.: EXISTING UTILITY LOCATION TEST HOLES	25	
	130									130				611	97200	130	EACH	CONDUIT, MISC.: SUPPORT EXISTING UTILITY POLES FOR DRAINAGE EXCAVATION	25	
		500								500				611	97400	500	FT	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	26	
		500								500				611	97400	500	FT	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	26	
			98							73	25			611	98150	98	EACH	CATCH BASIN, NO. 3		
			119							76	43			611	98180	119	EACH	CATCH BASIN, NO. 3A		
			6							4	2			611	98370	6	EACH	CATCH BASIN, NO. 6		
			2							1	1			611	98470	2	EACH	CATCH BASIN, NO. 2-2B		

**GENERAL SUMMARY**

**LAK-US-20-19.59**



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SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
25	26	27	398	399	400	408	411	418	761	01/NHS/04	02/NHS/66	03/NHS/66						
<b>DRAINAGE</b>																		
45										45			611	98631	45	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	25
5										5			611	98634	5	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
	5									5			611	98700	5	EACH	INLET, SIDE DITCH	
											2		611	98710	2	EACH	INLET, NO. 2-6	
										134		12	611	99574	134	EACH	MANHOLE, NO. 3	
											6		611	99586	6	EACH	MANHOLE, NO. 3 WITH 108" BASE I.D. AND 12" WEIR	
17										17			611	99655	17	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	25
5										5			611	99660	5	EACH	MANHOLE RECONSTRUCTED TO GRADE	
										5			611	99710	5	EACH	PRECAST REINFORCED CONCRETE OUTLET	
	10									10			611	99720	10	EACH	INSPECTION WELL	
	10,000									10,000			SPECIAL	61199820	10,000	LB	MISCELLANEOUS METAL	26
											6		895	10040	6	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4	
<b>PAVEMENT</b>																		
	1,400									1,400			251	01000	1,400	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
										28,075			254	01000	28,075	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3.25")	
	230									784			301	56000	1,014	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
										23,164			301	56001	23,164	CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22	26
										456			301	56100	456	CY	ASPHALT CONCRETE BASE, PG64-22, (449), (DRIVEWAYS)	
	230									27,440			304	20000	28,594	CY	AGGREGATE BASE	
										20,447			407	20000	20,650	GAL	NON-TRACKING TACK COAT	
										273			441	70000	273	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
										330			441	70300	330	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	
										118			441	70500	118	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
			271							271			441	70801	271	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	24
										13,224			442	00100	13,224	CY	ANTI-SEGREGATION EQUIPMENT	
										6,814			442	10001	6,814	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG76-22M	26
										7,977			442	10101	7,977	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446), AS PER PLAN, PG64-28	26
										1,970			452	10050	2,220	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
	250									3,665			452	12050	3,915	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
	250									475			452	13010	475	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
										44,398		44,398	609	12000	44,398	FT	COMBINATION CURB AND GUTTER, TYPE 2	
										4,372		4,372	609	12001	4,372	FT	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	18
										199		199	609	20000	199	FT	CURB, TYPE 3-A	
				400						1,550		56	609	26000	2,006	FT	CURB, TYPE 6	
										423		423	609	72000	423	SY	CONCRETE MEDIAN	
										104		104	617	10100	104	CY	COMPACTED AGGREGATE	
										250		250	618	40100	250	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
										30,313		30,313	874	20001	30,313	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	27
										50		50	SPECIAL	63820008	50	FT	4" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD	27
										50		50	SPECIAL	63820048	50	FT	6" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD	27
										50		50	SPECIAL	63820088	50	FT	8" WATER MAIN DIP CLASS 53 MECHANICAL JOINTS AND FITTINGS, LCDU STANDARD	27
										18		28	SPECIAL	63820500	28	EACH	VALVE BOX ADJUSTED TO GRADE, LCDU STANDARD	27
										42		42	SPECIAL	63820750	42	EACH	6" FIRE HYDRANT, LCDU STANDARD	27
										42		42	SPECIAL	63820752	42	EACH	FIRE HYDRANT REMOVED FOR STORAGE, LCDU STANDARD	27
										3,500		3,500	SPECIAL	63820770	3,500	FT	1" COPPER WATER SERVICE LINE, LCDU STANDARD	27
										100		100	SPECIAL	63820774	100	FT	1 1/2" COPPER WATER SERVICE LINE, LCDU STANDARD	27
										100		100	SPECIAL	63820778	100	FT	2" COPPER WATER SERVICE LINE, LCDU STANDARD	27
										20		20	SPECIAL	63820902	20	EACH	SERVICE BOX ADJUSTED TO GRADE, LCDU STANDARD	27

**GENERAL SUMMARY**

**LAK-US-20-19.59**

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.		
28	29	30	44	50	54	59	63	65	69	72	01/NHS/04	02/NHS/66	03/NHS/66								
<b>MAINTENANCE OF TRAFFIC</b>																					
				1,013		613				588				2,214		606	15051	2,214	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	30
				1		1				3				5		606	26151	5	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016)	30
				3		5				1				9		606	26551	9	EACH	ANCHOR ASSEMBLY, MGS TYPE T, AS PER PLAN	30
45,200														45,200		608	21201	45,200	SF	TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN	33
				451		889		44	148					1,532		611	04401	1,532	FT	12" CONDUIT, TYPE B, AS PER PLAN	30, 32
									39					39		611	05901	39	FT	15" CONDUIT, TYPE B, AS PER PLAN	30, 32
				34										34		611	10401	34	FT	24" CONDUIT, TYPE B, AS PER PLAN	30, 32
				38		25		1	7					71		611	98371	71	EACH	CATCH BASIN, NO. 6, AS PER PLAN	30, 32
														69		611	98635	69	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	30, 32
														2		611	99155	2	EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN	30
	1,200													1,200		614	11110	1,200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
24														24		SPECIAL	61411300	24	EACH	WORK ZONE TRAFFIC SIGNAL	28
		1												1		SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL, TYPE 1	30
			3	78	74	47	61	12	22	28				325		614	12384	325	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
		LS												LS		614	12420	LS	EACH	DETOUR SIGNING	
			15	95	90	75	67	41	27	74				484		614	13310	484	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
			15	95	90	75	67	41	27	74				484		614	13360	484	EACH	OBJECT MARKER, TWO WAY	
180														180		614	18601	180	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	28
11.18				0.37	0.19	0.37	0.22	0.15	0.37					12.85		614	20110	12.85	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
				0.01		0.01					0.11			0.13		614	20356	0.13	MILE	WORK ZONE LANE LINE, CLASS I, 6", 873	
21.26														21.26		614	20560	21.26	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
6.62			1.38	3.23	0.91	2.85	0.94			1.65	0.44			18.02		614	21100	18.02	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				0.17	2.25	0.19	1.81			0.11	1.03			5.56		614	21350	5.56	MILE	WORK ZONE CENTER LINE, CLASS I, 873	
12.78														12.78		614	21550	12.78	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
1.28			1.09	5.52	0.87	5.07	1.13	1.07	8.2	1.55				25.78		614	22110	25.78	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
				0.01	2.39	0.06	1.95	0.75						6.83		614	22326	6.83	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 873	
5.06														5.06		614	22360	5.06	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
								200						1,164		614	23130	1,364	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 873	
3,156				894	835	775	1,258	377	1,021	1,578				9,894		614	23200	9,894	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
8,926														8,926		614	23680	8,926	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
				540		540				495	900			2,475		614	24122	2,475	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 873	
			1,800	450		450	50				117			2,867		614	24202	2,867	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	
1,600														1,600		614	24612	1,600	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
742				288	304	329	379			170	216			2,428		614	25200	2,428	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	
1,142														1,142		614	25620	1,142	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
693				329	189	247	138		92		55			1,743		614	26200	1,743	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
					14	11	12				18			55		614	26400	55	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
1,144														1,144		614	26610	1,144	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
2,665				623	45	1,135				517				4,985		614	27050	4,985	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	
4,068														4,068		614	27250	4,068	FT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	
72				18	17	19	24			5	14			169		614	30200	169	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
120														120		614	30650	120	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
74														74		614	32800	74	SF	WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	
	120													120		614	40051	120	EACH	BUSINESS ENTRANCE SIGN, AS PER PLAN	29
		LS												LS		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
			2,278	17,920		14,439				7,333				41,970		615	20001	41,970	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	30
1,100														1,100		616	10000	1,100	MGAL	WATER	
			1,080	8,090	7,919	7,621	6,179	3,930	2,519	7,125	44,463					622	41100	44,463	FT	PORTABLE BARRIER, UNANCHORED	
10											10					625	31507	10	EACH	PULL BOX REMOVED AND REPLACED, AS PER PLAN	28
450											450					642	00720	450	FT	CHEVRON MARKING, TYPE 1	
		250,000									250,000					SPECIAL	69098000	250,000	EACH	REIMBURSEMENT FOR MOT ITEMS PERMANENTLY DAMAGED BY TRAFFIC	30

**GENERAL SUMMARY**

**LAK-US-20-19-59**

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	202	202	202	202	202	SPECIAL	202	202	202	202	202	202	202	202	202	202	202	202	SPECIAL	SPECIAL	
					HEADWALL REMOVED EACH	CONCRETE MEDIAN REMOVED SY	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	PARKING BLOCK REMOVED EACH	MAILBOX REMOVED EACH	MANHOLE REMOVED EACH	CATCH BASIN OR INLET REMOVED EACH	MONUMENT ASSEMBLY REMOVED EACH	FENCE REMOVED FT	REMOVAL MISC.:POST EACH	REMOVAL MISC.:BUSINESS SIGN EACH	REMOVAL MISC.:BOULDER EACH	REMOVAL MISC.:BOLLARD EACH	REMOVAL MISC.:CONCRETE BLOCK EACH	REMOVAL MISC.:LANDSCAPE LIGHT EACH	REMOVAL MISC.:LIGHT POLE EACH	REMOVAL MISC.:BUILDING FOUNDATION EACH	REMOVAL MISC.:STONE WALL FT	REMOVAL MISC.:CONCRETE WALL FT
R1	426	100+83.41	TO	103+70.14																					
R2	426	102+10.69		107+99.56																					
R3	426	104+14.96		112+57.18																					
R4	426			105+21.69																					
R5	427	108+17.86		109+40.58																					
R6	427			108+99.93																					
R7	427	106+50.72		109+24.87																					
R8	427	109+48.56		118+88.35																					
R9	428	115+19.89		118+41.41																					
R10	429	118+06.71		119+24.73																					
R11	429	118+61.08		118+82.90																					
R12	429	118+07.75		119+47.22																					
R13	429			119+47.54																					
R14	429	119+48.54		119+82.08																					
R15	429	120+21.25		120+30.07																					
R16	430	119+47.22		120+57.43																					
R17	430			135+47.96																					
R18	430			135+57.64																					
R19	430			136+29.15																					
R20	430	120+57.43		136+50.82																					
R21	430			136+50.42																					
R22	430			136+74.64																					
R23	430			137+57.46																					
R24	430	137+62.66		137+89.70																					
R25	430			137+71.26																					
R26	430			137+79.70																					
R27	430			137+84.19																					
R28	431			139+62.40																					
R29	431			139+98.81																					
R30	431			140+99.12																					
R31	431			142.09.41																					
R32	432	144+45.27		149+27.35																					
R33	432			144+44.51																					
R34	432			144+88.90																					
R35	432			146+50.90																					
R36	432			147+71.17																					
R37	433	148+98.72		149+37.41																					
R38	433	149+27.35		149+34.74																					
R39	433			149+38.41																					
R40	433			149+48.14																					
R41	433			153+26.70																					
R41A	434			154+50.00																					
R42	434			154+75.10																					
R43	434	154+75.09		158+25.15																					
R44	434	155+14.41		157+10.33																					
R45	434			155+12.41																					
R46	434			155+24.83																					
R47	434	158+25.15		162+99.97																					
SUBTOTALS CARRIED TO SHEET 397																									
					589	2443		2172			7	1	14	2	210	7	12	4	1					6	

**ROADWAY SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	202	202	202	202	202	SPECIAL	202	202	202	202	202	202	202	202	202	202	202	202	SPECIAL	SPECIAL
					HEADWALL REMOVED EACH	CONCRETE MEDIAN REMOVED SY	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	PARKING BLOCK REMOVED EACH	MAILBOX REMOVED EACH	MANHOLE REMOVED EACH	CATCH BASIN OR INLET REMOVED EACH	MONUMENT ASSEMBLY REMOVED EACH	FENCE REMOVED FT	REMOVAL MISC.:POST EACH	REMOVAL MISC.:BUSINESS SIGN EACH	REMOVAL MISC.:BOULDER EACH	REMOVAL MISC.:BOLLARD EACH	REMOVAL MISC.:CONCRETE BLOCK EACH	REMOVAL MISC.:LANDSCAPE LIGHT EACH	REMOVAL MISC.:LIGHT POLE EACH	REMOVAL MISC.:BUILDING FOUNDATION EACH	REMOVAL MISC.:STONE WALL FT
R48	435		TO	158+61.01	RT						1													1
R49	435			158+64.84	RT										1	6								1
R50	435			159+24.12	RT						1													1
R51	435			160+57.37	RT						1													1
R52	435			161+50.68	RT								6											1
R53	435			161+70.48	RT						1													1
R54	435			162.39.08	RT									1										
R55	435			162+99.86	LT/RT			40					1											
R56	435	162+99.97		166+30.14	RT			330					1											
R57	435			163+42.77	RT										1									
R57A	435			163+50.00	RT						1													
R58	436			164+00.07	RT						1													1
R59	436			164+75.52	LT											1								
R60	436			166+29.52	RT								1											
R61	436			166+30.14	RT							1												
R62	436			166+30.23	LT/RT								1											
R63	436			166+30.42	LT								1											
R64	436			166+30.50	LT							1												
R65	436	NOT USED																						
R66	437	NOT USED																						
R67	437			173+09.97	RT								1											
R68	439	NOT USED																						
R69	439	NOT USED																						
R70	440			187+24.95	LT/RT			40					1											
R71	440	187+24.10		190+74.33	LT			351					1											
R72	440			187+32.10	RT											2								
R72A	440			187+99.78	RT						1													1
R73	440			188+05.89	CL								1											
R74	441			188+69.13	LT								1										70	
R75	441			188+82.06	LT											1								
R76	441			189+51.85	RT						1													1
R77	441			190+69.04	LT						1													1
R78	441			190+74.03	LT/RT			40					1											
R79	441	190+74.33		194+24.80	LT			350					1											
R80	441			190+82.53	LT												1							
R81	441			190+96.68	RT									1										
R82	441			191+02.09	RT											1								
R83	441			191+15.30	RT						1													1
R84	441			191+52.05	LT						1													1
R85	441			192+22.19	LT						1													1
R86	441			193+39.75	RT						1													1
R87	442	193+40.02		193+72.92	LT									37										
R88	442			194+25.22	LT/RT			40					1											
R89	442	194+24.80		197+50.08	LT			326					1											
R90	442			195+07.72	RT																			
R91	442			195+40.08	RT																			
R92	442			196+21.25	RT																			
R93	442			196+70.14	RT																			
R94	442			196+78.92	LT						1													
R95	442			197+16.14	RT																			
R96	442			197+50.06	LT/RT			40						1										
R97	442	197+50.08		199+75.74	LT			226						1										
SUBTOTALS CARRIED TO SHEET 397							1854				14	2	15	1	73	3	7	9					70	13

**ROADWAY SUBSUMMARY**

**LAK-US-20-19.59**

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REF NO.	SHEET NO.	STATION TO STATION	SIDE	202	202	202	202	202	SPECIAL	202	202	202	202	202	202	202	202	202	202	202	202	202	SPECIAL	SPECIAL			
				HEADWALL REMOVED EACH	CONCRETE MEDIAN REMOVED SY	PIPE REMOVED, 24" AND UNDER FT	PIPE REMOVED, OVER 24" FT	GUARDRAIL REMOVED FT	PARKING BLOCK REMOVED EACH	MAILBOX REMOVED EACH	MANHOLE REMOVED EACH	CATCH BASIN OR INLET REMOVED EACH	MONUMENT ASSEMBLY REMOVED EACH	FENCE REMOVED FT	REMOVAL MISC.:POST EACH	REMOVAL MISC.:BUSINESS SIGN EACH	REMOVAL MISC.:BOULDER EACH	REMOVAL MISC.:BOLLARD EACH	REMOVAL MISC.:CONCRETE BLOCK EACH	REMOVAL MISC.:LANDSCAPE LIGHT EACH	REMOVAL MISC.:LIGHT POLE EACH	REMOVAL MISC.:BUILDING FOUNDATION EACH	REMOVAL MISC.:STONE WALL FT	REMOVAL MISC.:CONCRETE WALL FT	FILL AND PLUG EXISTING CONDUIT, 12" TO 36" DIA. FT	MAILBOX SUPPORT SYSTEM, SINGLE EACH	
R396	480		TO								1													1			
R397	480					40						1															
R398	480	383+44.36					254					1															
R399	480														1												
R400	480					40						1															
R401	480	385+98.13				252						1															
R402	481										1													1			
R403	481										1													1			
R404	481										1													1			
R405	481					40						1															
R406	481	388+49.86				276						1															
R407	481										1													1			
R408	481										1													1			
R409	481										1													1			
R410	481														1												
R411	482														1												
R412	482					40						1															
R413	482	391+25.39				574						1															
R414	482										1													1			
R415	482	396+98.81				129						1															
R416	482					40						1															
R417	482	398+29.18				7						1															
R418	482										1													1			
R419	482												9														
R420	482												9														
R421	482														1						3						
R422	482										1													1			
R423	483	NOT USED																									
R424	483										1													1			
R425	483					40							1														
R426	483	398+29.18				157																					
R427	483																										
R428	483	399+90.42																					100				
R429	483										1													1			
R430	483										1													1			
R431	483					50																					
R432	483										1													1			
SUBTOTALS THIS SHEET						1685	254				14	1	12		18		5						100	14			
SUBTOTALS FROM SHEET 389					589	2443		2172			7	1	14	2	210	7	12	4	1					6			
SUBTOTALS FROM SHEET 390						1854					14	2	15	1	73	3	7	9					70	13			
SUBTOTALS FROM SHEET 391						2057		549			16		13		147	6	7	2	4	24	3			16			
SUBTOTALS FROM SHEET 392						2063					15		11	2	329	5	7	3	2					15			
SUBTOTALS FROM SHEET 393						2756		724	8		10		19	1	40	42	5	2	2					10			
SUBTOTALS FROM SHEET 394						3171		1556			17	1	20	2	152	5	4					96	112	17			
SUBTOTALS FROM SHEET 395						3311					23		19	1	20	4	5				1		85	275	23		
SUBTOTALS FROM SHEET 396						1531	1836				14		25	1		5	5						500	14			
TOTALS CARRIED TO GENERAL SUMMARY				1	589	20871	2090	5001	8		130	5	148	10	989	77	50	24	9	24	14	2	1	181	112	945	128

**ROADWAY SUBSUMMARY**

**LAK-US-20-19.59**

CALCULATED  
LIME  
CHECKED  
JMP

397  
1088

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SHEET NO.	REFERENCE NO.	STATION TO STATION	SIDE	SPECIAL	SPECIAL	SPECIAL					
				VALVE BOX ADJUSTED TO GRADE, LCDU STANDARD	6" FIRE HYDRANT FURNISHED, LCDU STANDARD	FIRE HYDRANT REMOVED FOR STORAGE, LCDU STANDARD					
				EACH	EACH	EACH					
431	W-1	139+52.80	L	1							
431	W-2	139+64.70	L		1	1					
432	W-3	145+61.20	L		1	1					
433	W-4	151+50.10	L		1	1					
434	W-5	155+04.60	L		1	1					
434	W-6	157+10.90	L	1							
435	W-7	159+70.00	L		1	1					
436	W-8	164+31.80	L		1	1					
437	W-9	169+01.20	L		1	1					
440	W-10	186+56.50	L		1	1					
440	W-11	186+79.40	L	1							
440	W-12	188+74.40	L	1							
441	W-13	191+88.80	L		1	1					
442	W-14	196+87.80	L		1	1					
443	W-15	201+90.70	L		1	1					
444	W-16	206+17.00	L		1	1					
445	W-17	210+76.90	L		1	1					
446	W-18	215+29.60	L		1	1					
447	W-19	219+73.10	R	1							
447	W-20	220+37.10	L		1	1					
448	W-21	224+73.10	L		1	1					
449	W-22	229+01.80	L		1	1					
449	W-23	229+69.70	L	1							
450	W-24	233+43.30	L		1	1					
451	W-25	237+77.80	L		1	1					
452	W-26	242+13.10	L		1	1					
453	W-27	251+33.60	L		1	1					
454	W-28	255+25.00	L		1	1					
455	W-29	259+00.70	L		1	1					
455	W-30	263+02.20	L		1	1					
456	W-31	266+88.30	L		1	1					
456	W-32	268+07.00	R	3							
457	W-33	270+70.40	L		1	1					
460	W-34	284+97.20	L		1	1					
462	W-35	294+37.10	L		1	1					
463	W-36	298+97.70	L		1	1					
463	W-37	300+11.00	L	1							
463	W-38	300+12.70	L	1							
465	W-39	309+28.40	L		1	1					
467	W-40	322+17.10	L		1	1					
469	W-41	331+31.80	L		1	1					
469	W-42	332+27.80	L	1							
469	W-43	332+51.40	R	1							
470	W-44	336+25.60	L		1	1					
471	W-45	339+01.40	L		1	1					
472	W-46	346+70.34	L	1							
473	W-47	352+23.00	L		1	1					
474	W-48	356+78.00	L		1	1					
474	W-49	358+43.70	L	1							
475	W-50	362+39.80	L		1	1					
476	W-51	366+20.70	L		1	1					
477	W-52	373+91.60	L	1							
477	W-53	373+93.10	L	1							
477	W-54	373+97.60	L	1							
480	W-55	385+34.80	L		1	1					
481	W-56	390+34.40	L		1	1					
483	W-57	400+10.10	L		1	1					
		MIDDLE RIDGE									
492	W-58	12+51.20	R		1	1					
TOTALS CARRIED TO GENERAL SUMARY				18	42	42					

SHEET NO.	REFERENCE NO.	STATION TO STATION	SIDE	611						
				MANHOLE ADJUSTED TO GRADE, AS PER PLAN						
				EACH						
469	SA-1	332+48.10	R	1						
474	SA-2	354+50.80	R	1						
475	SA-3	359+01.80	R	1						
TOTALS CARRIED TO GENERAL SUMARY				3						

CALCULATED	LIME
	CHECKED
JMP	
<b>WATERWORK / SANITARY SUBSUMMARY</b>	
<b>LAK-US-20-19.59</b>	
400	
1088	

SHEET NO.	REFERENCE NO.	STATION		SIDE	CFN	601	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	895			
		FROM	TO																																			
436	D49	164+50.00	166+00.00	RT																																		
436	D50	166+00.00		RT	1990637																																	
436	D51	166+49.79	166+00.00	LT																																		
436	D52	166+00.00		RT																																		
436	D53	NOT USED																																				
437	D54	NOT USED																																				
437	D55	NOT USED																																				
437	D56	19+09.87		RT									10																									
439	D57	NOT USED																																				
439	D58	NOT USED																																				
440	D59	186+00.00		LT/RT	1990638						50		10																									
440	D60	186+00.00	187+24.10	RT																																		
440	D61	188+00.00	189+02.00	RT													200																					
440	D62	188+00.00		LT/RT	1990639						53		10			102																						
441	D63	189+02.00		LT/RT	1990592						50		10																									
441	D64	189+02.00	190+50.00	RT																																		
441	D65	190+50.00	192+10.00	RT																																		
441	D66	192+10.00		RT									10																									
441	D67	192+10.00	193+40.00	RT																																		
441	D68	193+30.00		LT/RT	1990593						50		10																									
442	D69	193+40.00	194+80.00	RT																																		
442	D70	194+80.00		RT									10																									
442	D71	194+80.00	196+85.00	RT																																		
442	D72	196+85.00		LT/RT	1990607						50		10																									
442	D73	196+85.00	199+74.65	RT																																		
443	D74	199+00.00	199+58.00	RT																																		
443	D75	199+40.00		LT/RT	1990608						52		21																									
443	D76	199+58.00	200+13.00	RT																																		
443	D77	200+13.00		LT/RT	1990640						52		8																									
443	D78	213+13.00	200+50.00	RT																																		
443	D79	200+50.00	200+85.00	RT																																		
443	D80	200+85.00		RT/LT	1990610						50		10																									
443	D81	200+85.00	203+35.00	RT																																		
443	D82	203+40.00	203+35.00	LT/RT	1990611						50		10																									
443	D83	203+35.00	205+00.00	RT																																		
444	D84	205+00.00		LT/RT	1990641						50		10																									
444	D85	205+00.00	207+00.00	RT																																		
444	D86	207+00.00		RT									10																									
444	D87	207+00.00	208+75.00	RT																																		
445	D88	208+75.00		LT/RT	1990642						50		10																									
445	D89	208+75.00	210+50.00	RT																																		
445	D90	210+50.00		RT																																		
445	D91	212+05.00		LT/RT	1990612						50		10																									
445	D92	211+95.00		RT																																		

CALCULATED  
CWH  
CHECKED  
JMP

**DRAINAGE SUBSUMMARY**

**LAK-US-20-19.59**

402  
1088

SUBTOTALS CARRIED TO SHEET 408

607 10 482 475 223 568 595 542 215 58 18 11 20 3 3





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SHEET NO.	STATION		203	203	659
			EXCAVATION	EMBANKMENT	SEEDING AND MULCHING, CLASS 1
	FROM	TO	CY	CY	SY
<b>PERRY PARK ROAD</b>					
713	10+25.26	11+00.00	68	14	266
714	11+50.00	11+75.00	7	12	279
<b>MIDDLE RIDGE ROAD</b>					
715	11+00.00	12+00.00	129	179	416
716	12+50.00	13+50.00	567	2	567
<b>PARMLY ROAD</b>					
717	10+23.00	11+00.00	83	3	356
<b>RED MILL VALLEY ROAD (WEST)</b>					
718	10+34.27	11+11.00	51	47	384
<b>RED MILL VALLEY ROAD (EAST)</b>					
719	10+27.64	11+15.00	495	12	243
<b>CALL ROAD</b>					
720	8+25.00	9+00.00	49		283
721	9+50.00	9+76.52	69		203
<b>ANTIOCH ROAD</b>					
722	10+24.01	11+00.00	54		111
<b>S.R. 2 - RAMP A</b>					
723	886+00.00	886+50.00			
724	887+00.00	887+50.00	4	11	67
725	888+00.00	888+50.00	12	32	131
726	889+00.00	889+50.00	30	11	122
727	890+00.00	890+50.00	91		131
728	891+00.00	891+50.00	87		134
729	892+00.00	892+50.00	57	9	134
730	892+68.30		5	5	25
<b>S.R. 2 - RAMP B</b>					
731	890+00.00	891+00.00			
732	891+50.00	892+50.00	10	56	480
733	893+00.00	894+00.00	5	73	205
734	894+50.00	894+72.93	3	33	114
<b>CULVERT CHANNEL AT STA. 253+86</b>					
863	8+84	9+40	47	15	290
864	10+60	10+75	14	40	371
<b>SUBTOTALS CARRIED TO COLUMN 2</b>			1937	554	5312

SHEET NO.	STATION		203	203	659
			EXCAVATION	EMBANKMENT	SEEDING AND MULCHING, CLASS 1
	FROM	TO	CY	CY	SY
<b>SUBTOTALS COLUMN 2</b>					
<b>SUBTOTALS COLUMN 1</b>			1937	554	5312
<b>SUBTOTALS SHEET 412</b>			14747	5689	60916
<b>SUBTOTALS SHEET 413</b>			15677	7341	55604
<b>TOTALS CARRIED TO GENERAL NOTES</b>					121832
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>			32361	13584	

**EROSION CONTROL CALCULATIONS**

ITEM 659 TOPSOIL

121832 SY SEEDING AND MULCHING  
 121832 SY x 0.111 CY/SY = 13523.4 CY  
 QUANTITY CARRIED TO GENERAL NOTES = 13524 CY

ITEM 659 SOILS ANALYSIS TEST

13524 CY TOPSOIL  
 13524 CY x 1 TEST / 10000 CY = 1.4 EACH (2 TESTS MINIMUM)  
 QUANTITY CARRIED TO GENERAL NOTES = 2 EACH

ITEM 659 REPAIR SEEDING AND MULCHING

121832 SY SEEDING AND MULCHING  
 121832 SY x 5% = 6091.6 SY  
 QUANTITY CARRIED TO GENERAL NOTES = 6092 SY

ITEM 659 INTER-SEEDING

121832 SY SEEDING AND MULCHING  
 121832 SY x 5% = 6091.6 SY  
 QUANTITY CARRIED TO GENERAL NOTES = 6092 SY

ITEM 659 COMMERCIAL FERTILIZER

121832 SY SEEDING AND MULCHING  
 121832 SY x 1 TON / 7410 SY = 16.44 TON  
 6092 SY INTER-SEEDING  
 6092 SY x 1 TON / 11111 SY = 0.55 TON  
 QUANTITY CARRIED TO GENERAL NOTES = 16.99 TON

ITEM 659 LIME

121832 SY SEEDING AND MULCHING  
 121832 SY x 1 ACRE / 4840 SY = 25.17 ACRE  
 QUANTITY CARRIED TO GENERAL NOTES = 25.17 ACRE

ITEM 659 WATER

121832 SY SEEDING AND MULCHING  
 121832 SY x 0.0027 MGAL/SY X 2 = 658 MGAL  
 6092 SY INTER-SEEDING  
 6092 SY x 0.0027 MGAL/SY X 2 = 33 MGAL  
 QUANTITY CARRIED TO GENERAL NOTES = 691 MGAL

ITEM 659 MOWING

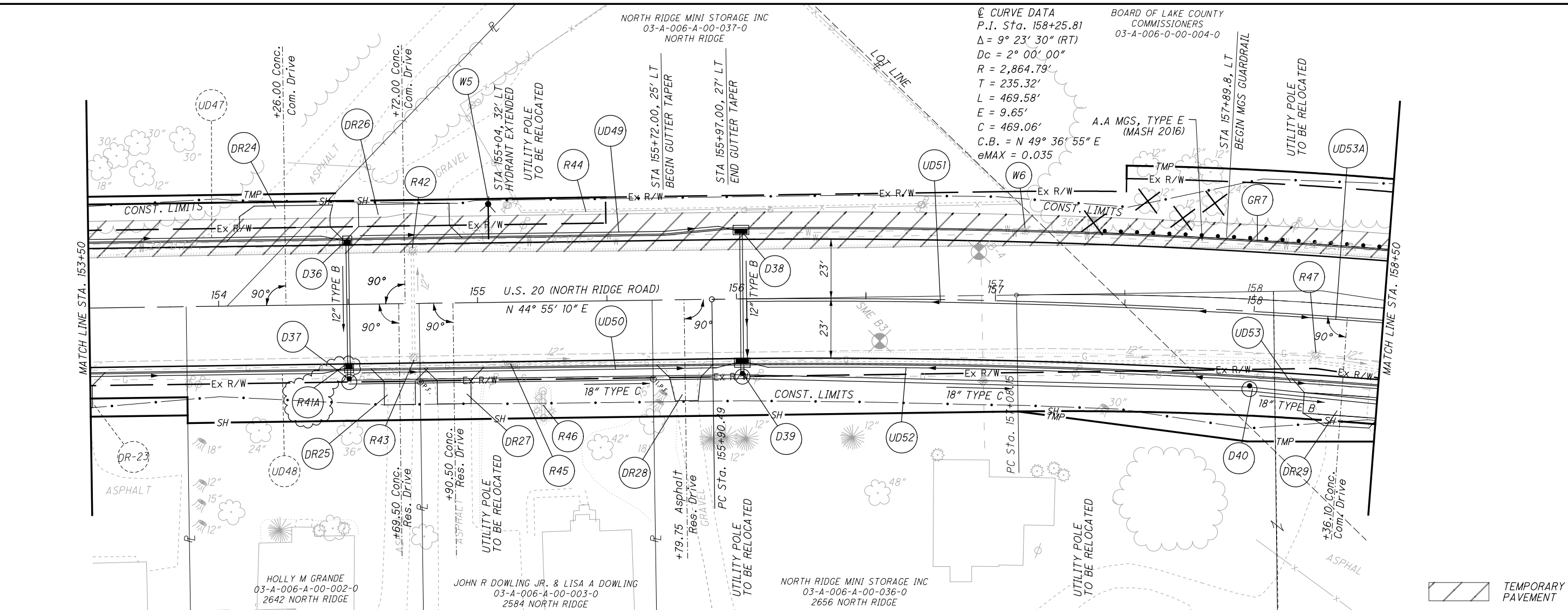
121832 SY SEEDING AND MULCHING  
 121832 SY x 9 SF/SY / 1000 SF/MSF  
 x 7 MTS/YEAR X 2 YEARS (AVG.) = 15350 MSF  
 QUANTITY CARRIED TO GENERAL NOTES = 15350 MSF

**MISCELLANEOUS CALCULATIONS**

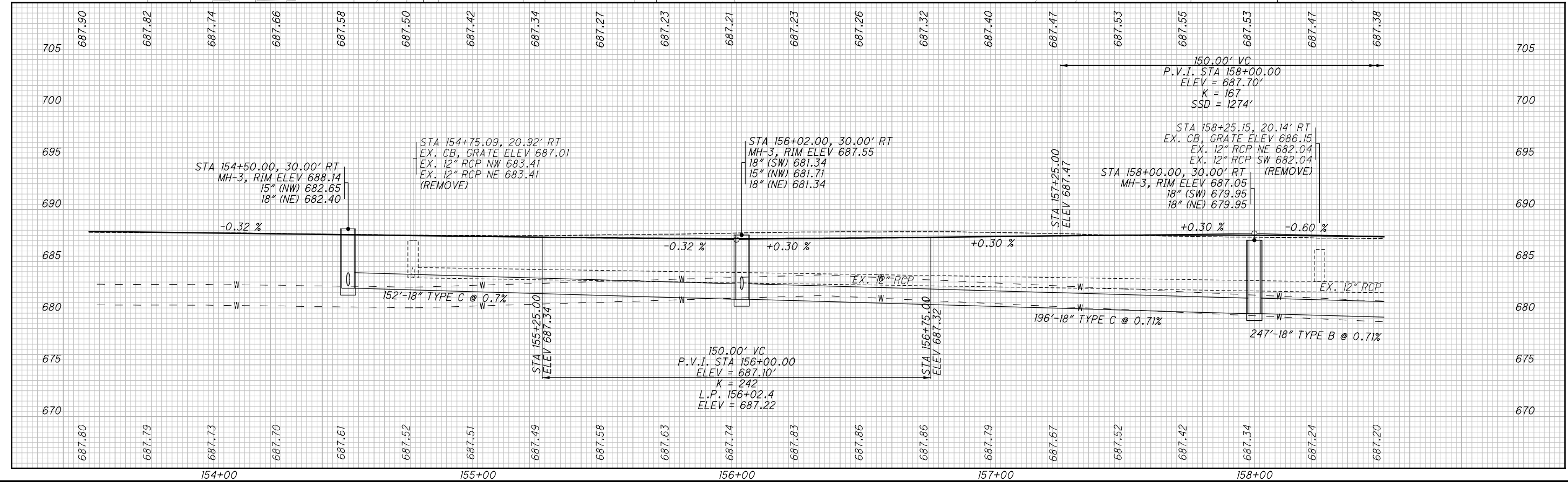
ITEM 204 PROOF ROLLING

180524 SY SUBGRADE COMPACTION  
 180524 SY / 3000 SY / HR = 60.0 HOUR  
 QUANTITY CARRIED TO GENERAL NOTES = 60 HOUR

CALCULATED	LIME	CHECKED	EJT
<b>EARTHWORK SUBSUMMARY - CALCULATIONS</b>			
<b>LAK-US-20-19.59</b>			
414		1088	



**Ⓢ CURVE DATA**  
 P.I. Sta. 158+25.81  
 $\Delta = 9^\circ 23' 30''$  (RT)  
 $D_c = 2^\circ 00' 00''$   
 $R = 2,864.79'$   
 $T = 235.32'$   
 $L = 469.58'$   
 $E = 9.65'$   
 $C = 469.06'$   
 C.B. =  $N 49^\circ 36' 55'' E$   
 $e_{MAX} = 0.035$   
 BOARD OF LAKE COUNTY COMMISSIONERS  
 03-A-006-0-00-004-0



CALCULATED  
 T.L.S.  
 CHECKED  
 J.M.P.

**PLAN AND PROFILE U.S. 20**  
**STA. 153+50 TO STA. 158+50**

**LAK-US-20-19.59**  
 434  
 1088

COUNTY OF LAKE (LCDU 80)  
03-A-006-0-00-004-0  
VOL. 597 PG. 798

2709 PRENGLER  
PROPERTIES LLC  
03-A-006-A-00-038-0  
NORTH RIDGE

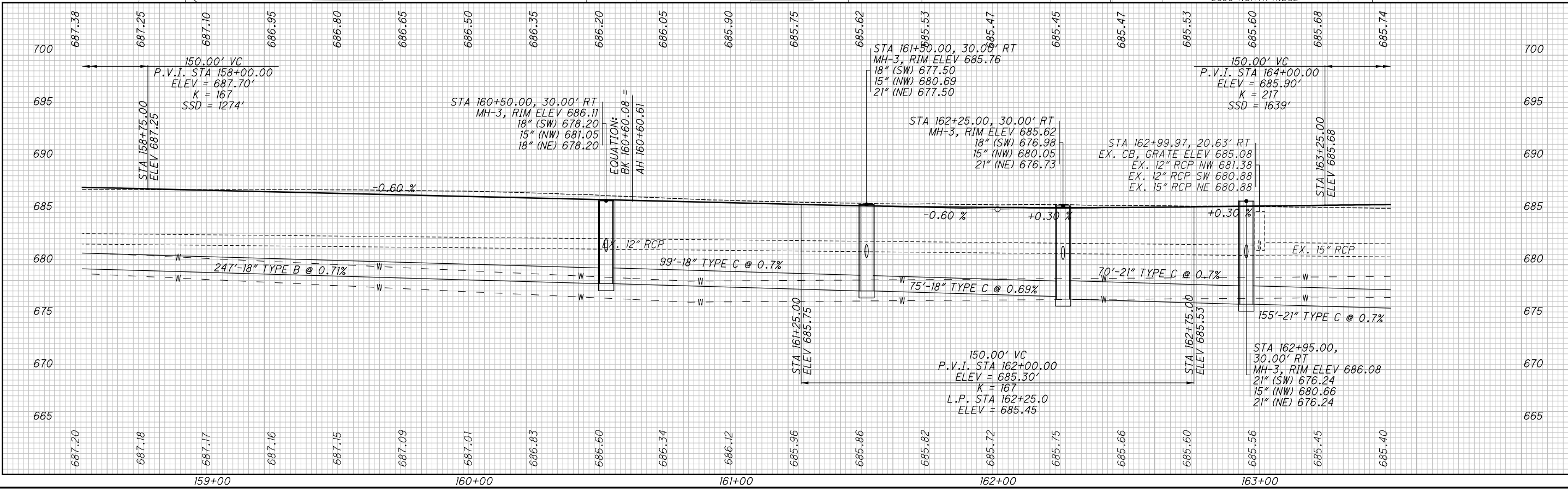
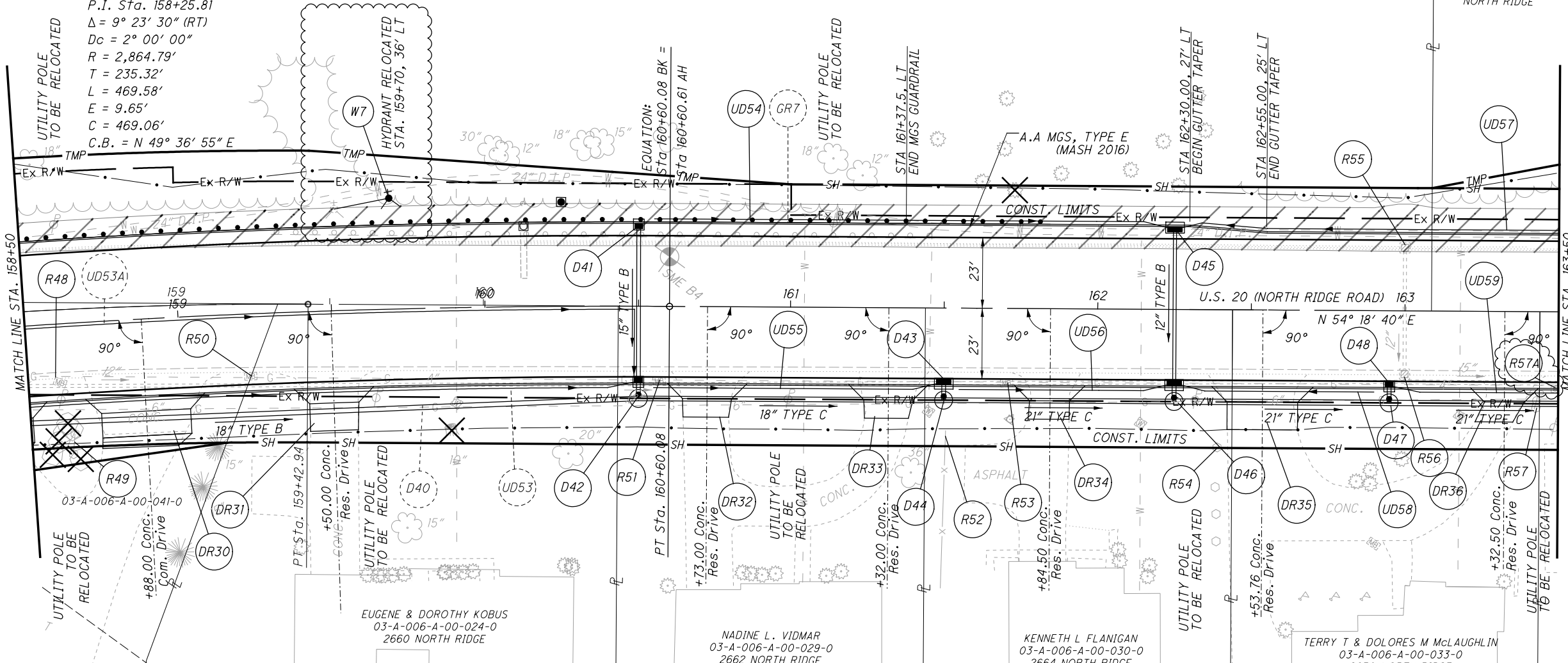
⊙ CURVE DATA  
P.I. Sta. 158+25.81  
Δ = 9° 23' 30" (RT)  
Dc = 2° 00' 00"  
R = 2,864.79'  
T = 235.32'  
L = 469.58'  
E = 9.65'  
C = 469.06'  
C.B. = N 49° 36' 55" E

CALCULATED  
T.L.S.  
CHECKED  
J.M.P.

PLAN AND PROFILE U.S. 20  
STA. 158+50 TO STA. 163+50

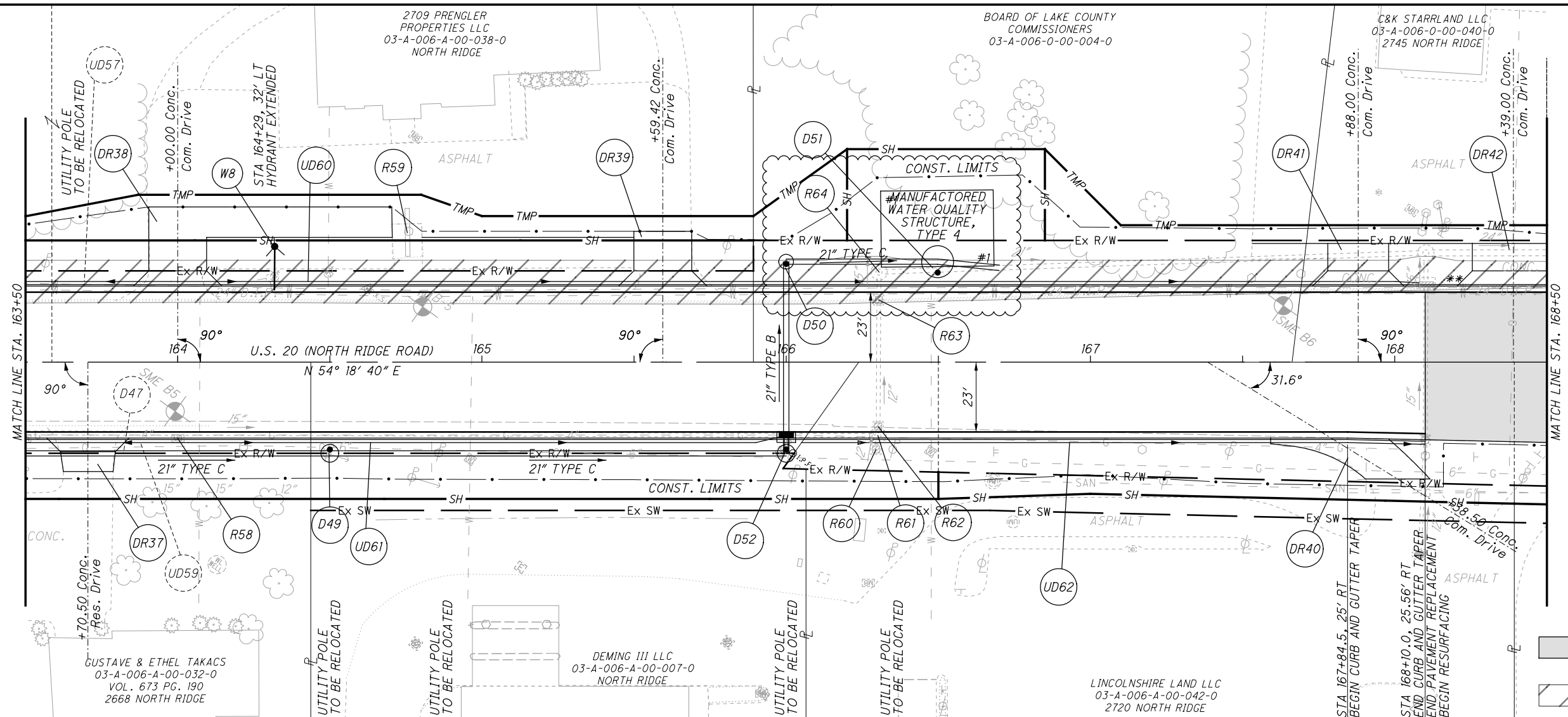
LAK-US-20-19.59

435  
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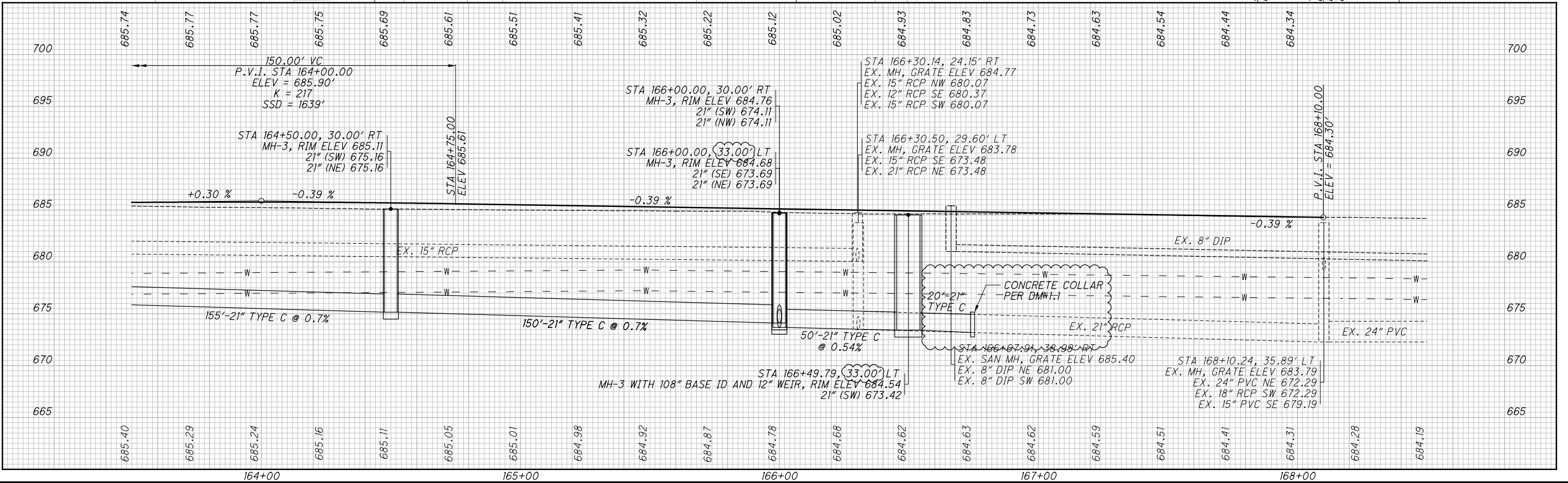
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\*\* VARY GUTTER CROSS SLOPE FROM 0.083 TO 0.016 IN 10.0' STA. 168+10.00 TO STA. 168+20.00

RESURFACING AREA  
TEMPORARY PAVEMENT



CALCULATED  
T.L.S.  
CHECKED  
J.M.P.

PLAN AND PROFILE U.S. 20  
STA. 163+50 TO STA. 168+50

LAK-US-20-19.59

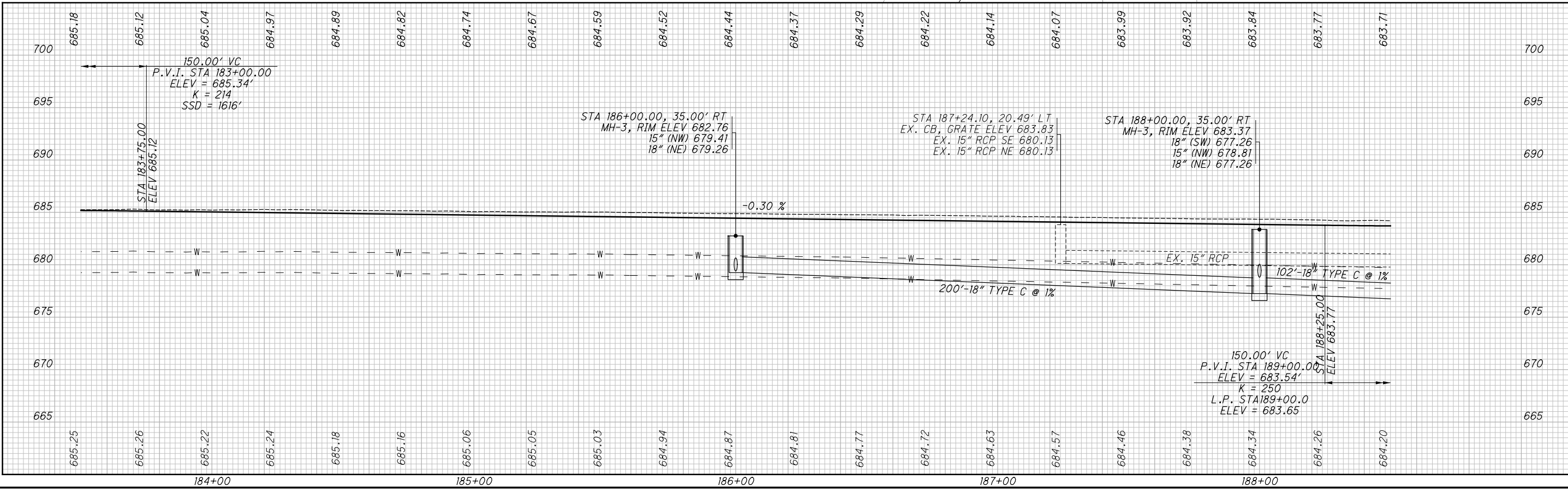
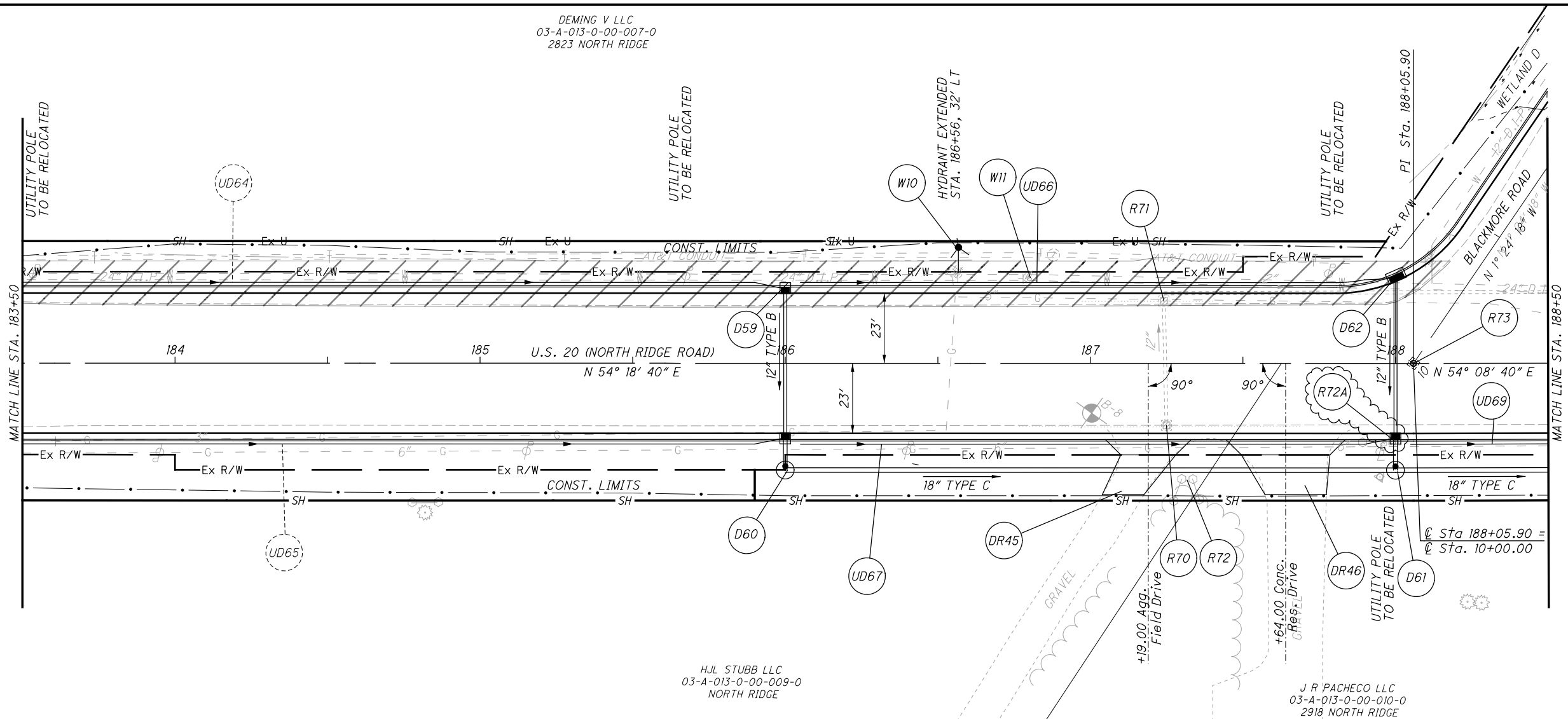
436  
1088

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DEMING V LLC  
03-A-013-0-00-007-0  
2823 NORTH RIDGE

CALCULATED  
T.L.S.  
CHECKED  
J.M.P.

HORIZONTAL SCALE IN FEET



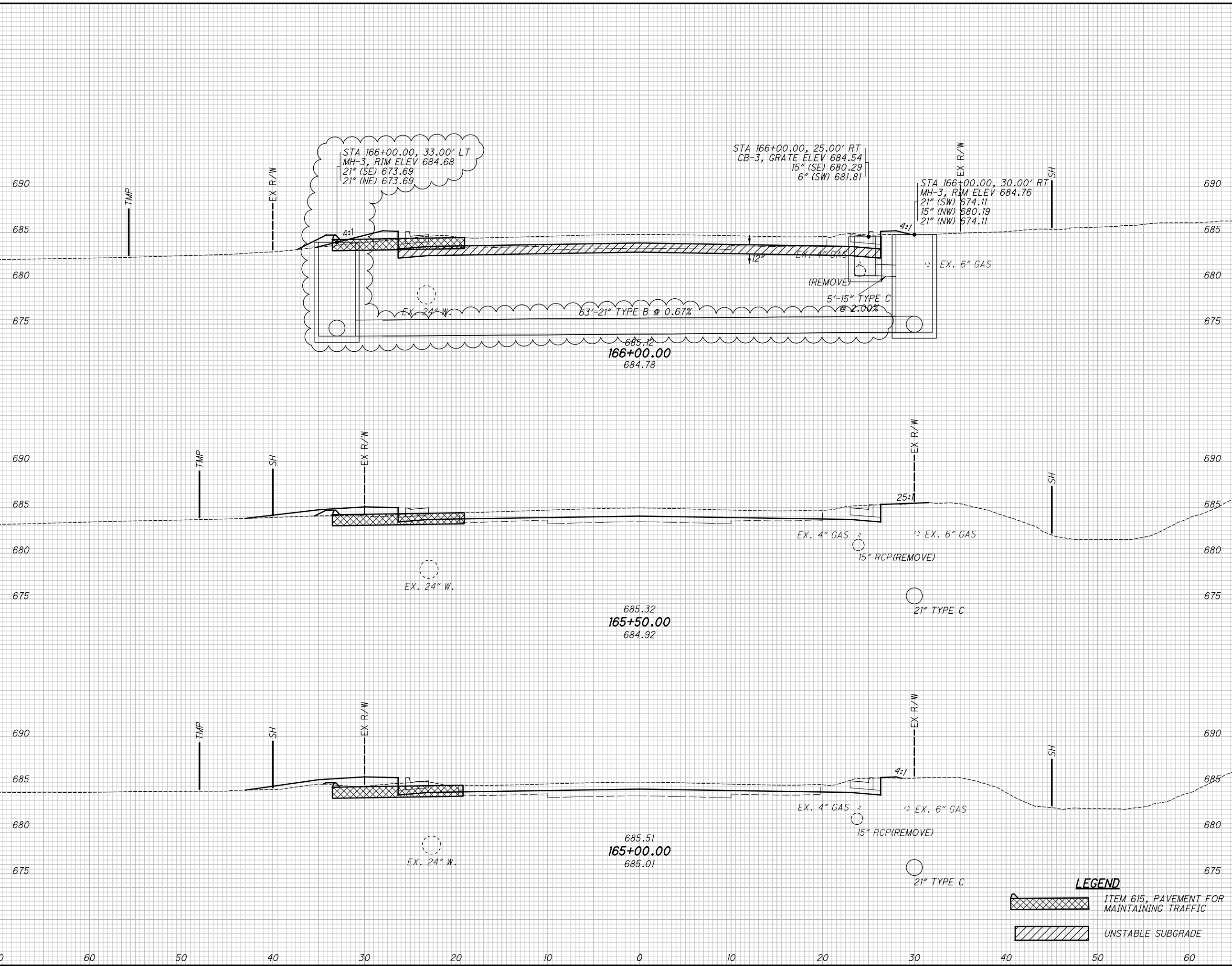
**PLAN AND PROFILE U.S. 20  
STA. 183+50 TO STA. 188+50**

**LAK-US-20-19.59**

440  
1088

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SEEDING	
END WIDTH	SO. YDS.
72570	49
60	250
50	41
40	228
30	41
20	247
10	
0	
10	
20	
30	
40	
50	
60	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
9	20	17	45
9	29	17	56
9	32	16	73
9	50	174	

CALCULATED  
 T L S  
 CHECKED  
 J M P

**CROSS SECTIONS U.S. 20**  
**STA. 165+00.00 TO STA. 166+00.00**

**LAK-US-20-19.59**

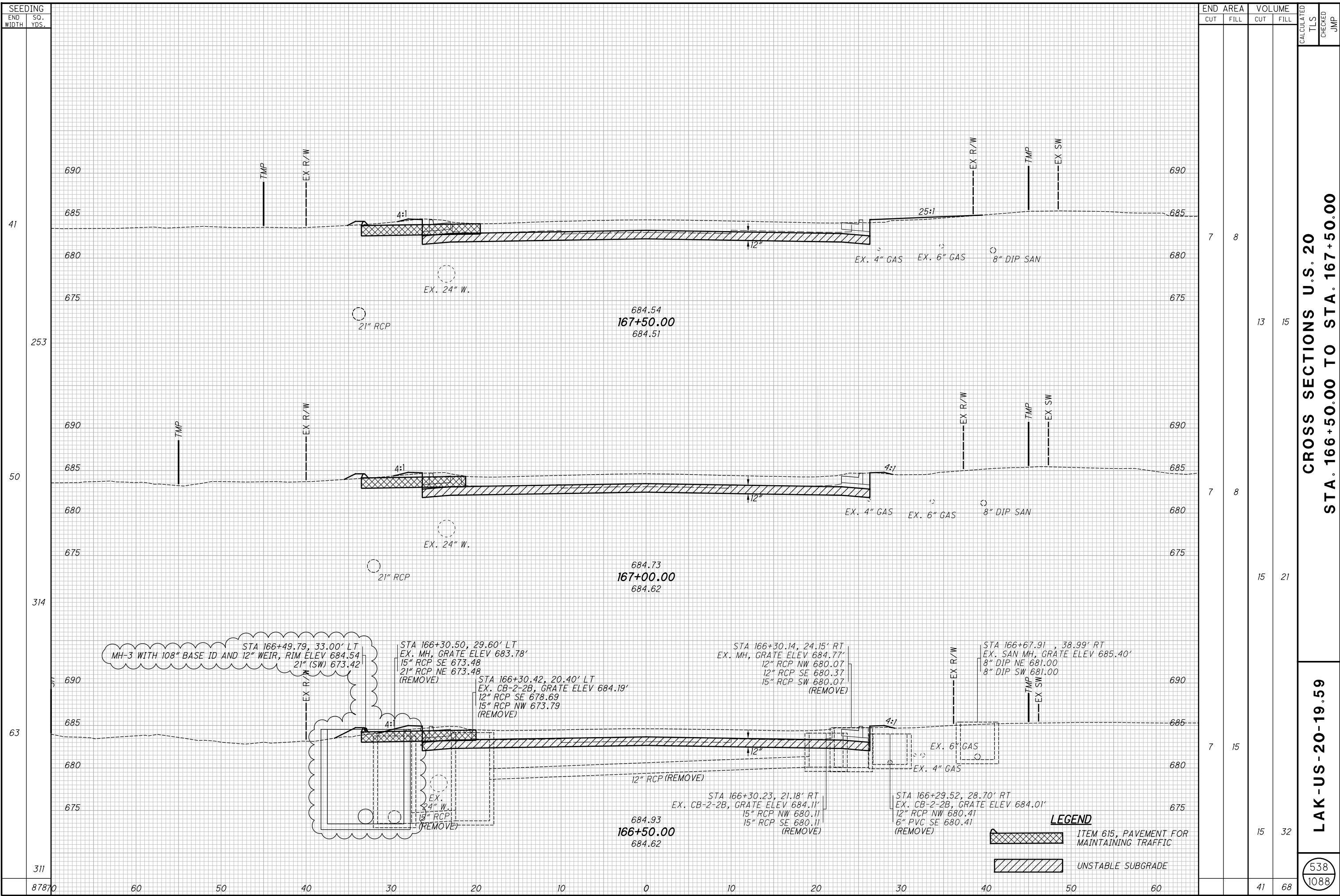
537  
 1088

**LEGEND**

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC

UNSTABLE SUBGRADE

H:\2018\180743\ProjectData\08665\_LAK\_20\_WEST\Design\Roadway\Sheets\08665\_XS001.dgn XS\_SHEET\_Temporary\_model\_name\_38 12/5/2024 11:18:40 AM somogyi



SEEDING	
END WIDTH	SO. YDS.
41	253
50	314
63	311
87870	

END AREA		VOLUME		CALCULATED	CHECKED	JMP
CUT	FILL	CUT	FILL			
7	8	13	15			
7	8	15	21			
7	15	15	32			
41	68					

CROSS SECTIONS U.S. 20  
STA. 166+50.00 TO STA. 167+50.00

LAK-US-20-19.59

538  
1088

**LEGEND**  
 ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC  
 UNSTABLE SUBGRADE

SHEET NO.	REFERENCE NO.	STATION	SIDE	COMMERCIAL "C" RESIDENTIAL "R"	CONCRETE "C" ASPHALT "A" GRAVEL "G"	DRIVE ANGLE	APRON LENGTH "L1"	WALK DRIVEWAY LENGTH "L2"	DRIVEWAY LENGTH "L3"	APRON WIDTH "W1"	APRON WIDTH "W2"	DRIVE WIDTH "W3"	CALCULATED APRON SURFACE AREA	CALCULATED WALK SURFACE AREA	CALCULATED DRIVE SURFACE AREA	CADD GENERATED DRIVE SURFACE AREA	202	203	204	301	304	407	441	452	452	609																	
						DEG.	FT	FT	FT	FT	FT	FT	SF	SF	SF	SF	SY	CY	SY	CY	CY	CY	3.5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	8" AGGREGATE BASE	10" AGGREGATE BASE	NON-TRACKING TACK COAT	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DIVEWAYS)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	CURB, TYPE 6												
429	DR-1	119+05.73	R	C	A		10.0			55.0	35.0		450.0				65.1	0.3	50.0																								
430	DR-2	120+81.00	R	C	G		5.4		7.2	45.8	35.0	35.0	218.2		252.9		58.1	13.2	52.3									50.0															
430	DR-3	120+90.00	L	C	A		4.5		18.1	44.0	35.0	49.2	177.8		760.4		116.3		104.2		7.8						24.2																
430	DR-4	121+67.00	L	C	G		4.5		18.0	44.0	35.0	29.2	177.8		578.3		148.2	22.2	84.0			5.1	2.9				19.8																
430	DR-5	121+97.50	R	C	A		4.5		11.5	55.0	45.0	45.0	225.0		519.0		135.7		82.7				8.0	2.0			25.0																
430	DR-6	122+66.78	L	C	A		4.5		9.5	25.0	16.0	16.0	92.2		152.0		132.2		27.1				2.3	1.0	0.6		10.2																
430	DR-7	123+10.17	R	C	A		4.5		11.5	44.0	35.0	34.3	177.7		398.4		84.2		64.0				6.2	2.7	1.5		19.7																
430	DR-8	123+38.74	L	C	A		4.5		9.5	44.0	35.0	35.0	177.8		332.4		80.8		56.7				5.1	2.2	1.3		19.8																
430	DR-9	123+50.00	R	C	A		4.5		11.5	33.0	24.0	24.0	128.3		276.0		38.9	2.1	44.9				4.3	1.8	1.1		14.3																
430	DR-10	136+95.00	R	C	A		4.5		8.0	44.0	35.0	35.0	177.8		280.0		155.2		50.9				4.3	1.9	1.1		19.8																
430	DR-11	137+23.81	L	C	A		4.5		9.0	44.0	35.0	35.0	177.8		315.0		131.9		54.8				4.9	2.1	1.2		19.8																
430	DR-12	138+16.00	L	C	A		4.5		9.0	44.0	35.0	35.0	177.8		315.0		102.8		54.8				4.9	2.1	1.2		19.8																
430	DR-13	138+38.00	R	C	A		4.5		4.5	44.0	35.0	32.0	177.8		150.8		82.9		36.5				2.3	1.0	0.6		19.8																
431	DR-14	139+31.00	L	C	G		4.5		8.5	44.0	35.0	35.1	177.8		297.9			13.6	52.9						9.2		19.8																
431	DR-15	139+75.32	L	R	A		4.5		10.0	21.0	12.0	12.0	74.3		120.0		28.8		21.6				1.3	0.8	0.5	8.3																	
431	DR-16	141+02.00	L	C	G		4.5		8.5	44.0	35.0	35.0	177.8		297.5			13.6	52.8						9.2		19.8																
431	DR-17	141+26.00	R	R	A		4.5		6.0	31.0	22.0	16.9	119.3		116.7		46.1		26.2				1.3	0.8	0.4	13.3																	
432	DR-18	143+69.00	L	C	G		4.5		8.5	44.0	35.0	35.0	177.8		297.5			13.6	52.8						9.2		19.8																
432	DR-19	146+03.00	R	C	G		4.5		10.0	44.0	35.0	35.0	177.8		350.0				15.2					10.8			19.8																
432	DR-20	146+86.00	R	C	G		4.5		8.5	37.0	28.0	28.0	146.3		238.0				10.9					7.3			16.3																
433	DR-21	150+62.00	R	C	A		4.5		7.0	36.0	27.0	27.0	141.8		189.0		75.9		36.8				2.9	1.3	0.7		15.8																
433	DR-22	152+14.15	R	C	G		4.5		4.5	41.0	32.0	32.0	164.3		144.0				8.5					4.4			18.3																
433	DR-23	153+44.77	R	R	A		4.5		8.5	21.0	12.0	12.0	74.3		102.0		22.9		19.6				1.1	0.7	0.4	8.3																	
434	DR-24	154+26.00	L	C	A		4.5		8.5	44.0	35.0	30.4	177.8			288.2	93.8		51.8				4.5	1.9	1.1		19.8																
434	DR-25	154+69.50	R	R	A		4.5		9.0	21.0	12.0	12.0	74.3		108.0		29.2		20.3				1.2	0.7	0.4	8.3																	
434	DR-26	154+72.00	L	C	G		4.5		8.5	44.0	35.0	35.0	177.8		297.5				13.6					9.2			19.8																
434	DR-27	154+90.50	R	R	A		4.5		9.0	22.0	13.0	13.0	78.8		117.0		37.8		21.8				1.3	0.8	0.5	8.8																	
434	DR-28	155+79.75	R	R	G		4.5		9.0	21.0	12.0	8.9	74.3		93.8				3.7				2.3			8.3																	
434	DR-29	158+36.10	R	C	G		4.5		8.0	38.0	29.0	29.0	150.8		232.0		65.4		6.7					3.0			16.8																
435	DR-30	158+88.00	R	C	C		4.5		8.0	38.0	29.0	29.0	150.8		232.0		75.9							3.0			42.5																
435	DR-31	159+50.00	R	R	C		4.5		9.0	25.0	16.0	15.6	92.3		142.1		38.5		26.0							26.0																	
435	DR-32	160+73.00	R	R	C		4.5		6.0	25.0	16.0	14.8	92.3		92.5		29.6		20.5							20.5																	
435	DR-33	161+32.00	R	R	C		4.5		6.0	25.0	16.0	14.3	92.3		90.9		29.4		20.4							20.4																	
435	DR-34	161+84.50	R	R	A		4.5		6.0	25.0	13.0	13.4	85.5		79.1		24.2		18.3				0.9	0.5	0.3	9.5																	
435	DR-35	162+53.76	R	R	C		4.5		9.0	32.0	23.0	23.0	123.8		207.0		50.1		36.8							36.8																	
435	DR-36	163+32.50	R	R	C		4.5		6.0	22.0	13.0	12.2	78.8		75.7		23.5		17.2							17.2																	
436	DR-37	163+70.50	R	R	C		4.5		6.0	27.0	18.0	16.4	101.3		103.1		32.2		22.7							22.7																	
436	DR-38	164+00.00	L	C	A		4.5		21.0	28.0	19.0	79.9	105.8			1008.5	206.7		123.8				15.6	6.7	3.9		11.8																
436	DR-39	165+59.42	L	C	A		4.5		13.0	28.0	19.0	19.0	105.8		247.0		136.1		39.2				3.8	1.6	1.0		11.8																
436	DR-40	167+38.50	R	C	A		25.6			38.8	21.2		366.9				41.0		40.8								40.8	56.0															
436	DR-41	167+88.00	L	C	A		4.5		9.0	29.0	20.0	20.0	110.3		180.0		90.6		32.3				2.8	1.2	0.7		12.3																
436	DR-42	168+39.00	L	C	A		4.5		9.0	36.0	27.0	27.0	141.8		243.0		128.9		42.8				3.8	1.6	0.9		15.8																
437	DR-43	169+22.00	L	C	A		12.3			30.0	20.0		307.5				33.9		34.2								34.2																
437	DR-44	170+41.84	L	C	A		7.0			41.0	31.5		253.8				29.2		28.2								28.2																
440	DR-45	187+19.00	R	R	G		4.5		13.0	27.0	18.0	13.7	101.3		205.9				7.0				5.1			11.3																	
440	DR-46	187+64.00	R	R	G		4.5		13.0	38.0	29.0	20.1	150.8		319.4				10.7				7.9			16.8																	
441	DR-47	189+54.00	L	C	G		4.5		8.5	44.0	35.0	35.0	177.8		297.5		2.0		13.6					9.2			19.8																
441	DR-48	189+95.00	R	R	G		4.5		13.0	38.0	29.0	14.1	150.8		280.3				9.7				6.9			16.8																	
441	DR-49	190+21.10	L	C	G		4.5		8.5	44.0	35.0	35.2	177.8		298.3				13.6					9.2			19.8																
441	DR-50	191+01.00	L	R	G		4.5		10.0	38.0	29.0	28.8	150.7		288.8	557.0			23.7				20.9			16.7																	
441	DR-51	191+48.00	R	C	A		4.5		13.0	44.0	35.0	35.0	177.8		455.0		127.8		70.3				7.0			1.8	19.8																
441	DR-52	191+63.70	L	R	G		4.5		16.0	21.0	12.0	12.0	74.3			206.4			6.5				5.1			8.3																	
441	DR-53	192+03.00	L	R	G		4.5		16.0	21.0	12.0	17.0	74.3			210.0			6.6				5.2			8.3																	
441	DR-54	192+35.00	L	R	G		4.5		8.5	28.0	19.0	9.9	120.0		122.7				5.2				3.0			13.3																	
441	DR-55	193+08.00	R	C	A		4.5		13.0	45.0	35.0	35.0	180.0		455.0		291.8		70.6				7.0			1.8	20.0																
TOTALS																	3123.8	239.3	2496.1															7.1	101.4	56.4	109.3	48.0	27.9	299.9	744.8	56.0	
SUBTOTALS CARRIED TO SHEET 761																	3124	240	2497																8	102	57	110	48	28	300	745	56



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SHEET NO.	REFERENCE NO.	STATION	SIDE	COMMERCIAL "C" RESIDENTIAL "R" CONCRETE "C" ASPHALT "A" GRAVEL "G"	DRIVE ANGLE	APRON LENGTH "L1"	WALK DRIVEWAY LENGTH "L2"	DRIVEWAY LENGTH "L3"	APRON WIDTH "W1"	APRON WIDTH "W2"	DRIVE WIDTH "W3"	CALCULATED APRON SURFACE AREA	CALCULATED WALK SURFACE AREA	CALCULATED DRIVE SURFACE AREA	CADD GENERATED DRIVE SURFACE AREA	202	203	204	301		304		407	441	452	452	609																				
																PAVEMENT REMOVED, AS PER PLAN	EXCAVATION	SUBGRADE COMPACTION	3.5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	8" AGGREGATE BASE	10" AGGREGATE BASE	NON-TRACKING TACK COAT	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DIVEWAYS)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	CURB, TYPE 6																				
																SY	CY	SY	CY	CY	CY	GAL	CY	SY	SY	FT																					
442	DR-56	193+84.00	R	C	A	4.5		13.0	38.0	29.0	28.5	150.7		373.8		140.5		58.3		5.8		4.7		2.5	1.4	9.3	16.7																				
442	DR-57	195+20.00	R	R	G	4.5		13.0	23.0	14.0	15.5	83.3		191.8			6.3	30.6			4.7				9.3																						
442	DR-58	196+55.74	L	R	G	4.5		8.5	44.0	35.0	35.0	177.8		297.5			10.6	52.8			7.3				19.8																						
442	DR-59	196+52.01	R	C	A	4.5		13.0	53.0	43.0	43.0	216.0		559.0		129.9		86.1		8.6			3.7	2.2	8.3	24.0																					
442	DR-60	197+30.00	L	R	G	4.5		8.5	21.0	12.0	8.6	74.3		87.6			3.6	18.0			2.2				8.3																						
442	DR-61	197+91.51	R	C	A	4.5		13.0	57.0	46.0	46.0	231.8		598.0		136.5		92.2		9.2			4.0	2.3	8.3	25.8																					
442	DR-62	198+10.00	L	R	G	4.5		8.5	21.0	12.0	8.7	74.3		87.9			3.6	18.0			2.2				8.3																						
443	DR-63	201+13.50	L	C	G	4.5		11.0	44.0	35.0	35.0	177.8		385.0			16.3	62.5				11.9			9.3	19.8																					
443	DR-64	202+98.00	R	R	G	4.5		9.0	23.0	14.0	13.6	83.3		124.3			4.7	23.1			3.1				9.3																						
443	DR-65	203+08.00	L	C	G	4.5		8.5	44.0	35.0	35.0	177.8		297.5			13.6	52.8			9.2				9.3	19.8																					
444	DR-66	204+75.50	R	R	A	4.5		11.5	24.0	15.0	11.6	87.8		153.0		42.1		26.8		1.7			1.0	0.6	9.8																						
444	DR-67	206+30.00	L	R	G	4.5		8.5	24.0	15.0	10.8	87.8		109.8			4.3	22.0			2.7				9.8																						
444	DR-68	207+21.50	L	R	G	4.5		8.5	25.0	16.0	12.8	92.3		122.5			4.7	23.9			3.0				10.3																						
445	DR-69	208+50.35	R	R	A	4.5		12.5	21.0	12.0	12.0	84.9		150.0		42.5		26.1		1.6			1.0	0.6	9.4																						
445	DR-70	209+42.87	L	R	G	4.5		20.0	21.0	12.0	12.0	74.3		240.0			7.3	34.9			5.9				8.3																						
445	DR-71	210+83.60	R	R	G	4.5		11.0	21.0	12.0	11.1	74.3		127.1			4.5	22.4			3.1				8.3																						
445	DR-72	211+87.50	L	R	G	4.5		8.5	21.0	12.0	8.2	74.3		85.7			3.5	17.8			2.1				8.3																						
445	DR-73	212+12.50	R	R	G	4.5		4.5	21.0	12.0	12.0	74.3		54.0			2.7	14.3			1.3				8.3																						
445	DR-74	212+65.50	L	R	G	4.5		18.0	21.0	12.0	8.5	74.3		184.1			5.9	28.7			4.5				8.3																						
446	DR-75	213+65.08	L	R	G	4.5		10.0	25.0	15.0	15.0	90.0		150.0			5.4	26.7			3.7				10.0																						
446	DR-76	214+39.00	L	C	G	4.5		10.0	50.0	40.0	40.0	202.5		400.0			17.3	66.9				12.3			22.5																						
446	DR-77	215+61.00	L	R	G	4.5		8.5	24.0	15.0	19.7	87.8		147.3			5.2	26.1			3.6				9.8																						
446	DR-78	216+15.00	L	R	G	4.5		8.5	30.0	21.0	19.9	114.8		173.9			6.4	32.1			4.3				12.8																						
446	DR-79	217+02.40	R	C	C	4.5		11.0	41.0	32.0	26.9	164.3		323.8		80.8		54.2							54.2																						
446	DR-80	217+08.00	L	R	G	4.5		16.0	37.0	28.0	28.0	146.3		448.0			13.8	66.0			11.1				16.3																						
446	DR-81	217+86.38	L	R	G	4.5		15.0	32.0	23.0	23.0	123.8		345.0			10.8	52.1			8.5				13.8																						
447	DR-82	219+96.13	L	R	G	4.5		9.0	27.0	18.0	18.0	101.3		162.0			5.9	29.3			4.0				11.3																						
447	DR-83	220+63.65	L	R	G	4.5		12.0	24.0	15.0	15.0	87.8		180.0			6.0	29.8			4.4				9.8																						
447	DR-84	221+55.00	R	C	A	4.5		11	33	24	24	128.3		264.0		201.1		43.6		4.1			1.8	1.0	14.3																						
447	DR-85	222+88.33	L	C	A	4.5		9.0	56.0	46.0	46.0	229.5		414.0		198.4		71.5		6.4			2.8	1.6	25.5																						
447	DR-86	223+31.00	R	R	G	4.5		11.0	28.0	19.0	19.0	105.8		209.0			7.2	35.0			5.2				11.8																						
448	DR-87	224+19.00	R	C	A	4.5		11.0	44.0	35.0	55.6	177.8		498.4		109.6		75.1		7.7			3.3	1.9	19.8																						
448	DR-88	224+29.00	L	R	G	4.5		8.5	26.0	17.0	15.7	96.8		139.1			5.2	26.2			3.4				10.8																						
448	DR-89	225+22.00	R	C	A	4.5		11.0	44.0	35.0	44.7	177.8		438.4		91.1		68.5		6.8			2.9	1.7	19.8																						
448	DR-90	225+66.00	R	C	G	4.5		11.0	34.0	25.0	31.8	132.8		312.4		67.7	12.9	49.5				9.6			14.8																						
448	DR-91	226+54.10	R	C	G	4.5		11.0	34.0	25.0	27.2	132.8		287.3		67.2	12.2	46.7				8.9			14.8																						
448	DR-92	227+84.00	L	C	A	4.5		8.5	36.0	27.0	27.0	141.8		229.5		197.9		41.3		3.5			1.5	0.9	15.8																						
448	DR-93	227+91.00	R	C	A	4.5		11.0	44.0	35.0	35.0	177.8		385.0		129.3		62.5		5.9			2.6	1.5	19.8																						
449	DR-94	231+53.78	R	R	G	4.5		5.0	25.0	16.0	16.0	92.3		80.0			3.7	19.1			2.0				10.3																						
450	DR-95	233+65.57	R	C	A	4.5		11.0	27.0	18.0	18.0	115.1		198.0		70.8		34.8		3.1			1.3	0.8	12.8																						
450	DR-96	233+69.92	L	C	G	4.5		10.0	21.0	12.0	12.0	74.3		120.0			5.5	21.6				3.7			8.3																						
450	DR-97	234+54.42	L	C	G	4.5		8.5	44.0	35.0	35.0	177.8		297.5			13.6	52.8				9.2			19.8																						
450	DR-98	235+32.83	L	C	G	4.5		9.0	27.0	18.0	18.0	101.3		162.0			7.5	29.3				5.0			11.3																						
450	DR-99	235+78.00	R	C	A	4.5		17.0	37.0	28.0	20.3	146.3		410.9		85.9		61.9		6.3			2.7	1.6	16.3																						
450	DR-100	236+57.86	R	C	A	4.5		11.0	37.0	28.0	24.6	146.3		289.0		81.4		48.4		4.5			1.9	1.1	16.3																						
450	DR-101	237+16.00	L	C	A	4.5		8.5	26.0	17.0	17.0	96.8		144.5		49.0		26.8		2.2			1.0	0.6	10.8																						
450	DR-102	237+52.00	L	C	A	4.5		15.0	33.0	24.0	24.0	128.3		360.0		68.3		54.3		5.6			2.4	1.4	14.3																						
450	DR-103	238+30.97	R	C	G	4.5		13.0	21.0	12.0	12.0	74.3		156.0			6.6	25.6				4.8			8.3																						
450	DR-104	238+47.00	L	C	A	4.5		8.5	44.0	35.0	35.0	177.8		297.5		109.4		52.8		4.6			2.0	1.1	19.8																						
451	DR-105	239+04.20	L	C	A	4.5		8.5	21.0	12.0	12.0	74.3		102.0		57.3		19.6		1.6			0.7	0.4	8.3																						
451	DR-106	239+57.00	L	C	G	4.5		15.0	44.0	35.0	35.0	177.8		525.0			20.6	78.1				16.2			19.8																						
451	DR-107	240+50.35	L	C	G	4.5		8.0	44.0	35.0	33.1	177.8		272.6			12.8	50.0				8.4			19.8																						
451	DR-108	241+59.70	L	C	G	4.5		8.0	44.0	35.0	35.0	177.8		280.0			13.0	50.9				8.6			19.8																						
451	DR-109	242+80.21	L	C	G	4.5		16.0	44.0	35.0	35.0	177.8		560.0			21.7	82.0				17.3			19.8																						
TOTALS																2156.6	304.9	2322.4	3.3	85.9	92.3	125.1	39.1	22.7	252.5	552.9																					
SUBTOTALS CARRIED TO SHEET 761																2157	305	2323	4	86	93	126	40	23	253	553																					

DRIVEWAY SUBSUMMARY

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Table with columns: SHEET NO., REFERENCE NO., STATION, SIDE, COMMERCIAL "C", RESIDENTIAL "R", CONCRETE "C", ASPHALT "A", GRAVEL "G", DRIVE ANGLE, APRON LENGTH "L1", WALK DRIVEWAY LENGTH "L2", DRIVEWAY LENGTH "L3", APRON WIDTH "W1", APRON WIDTH "W2", DRIVE WIDTH "W3", CALCULATED APRON SURFACE AREA, CALCULATED WALK SURFACE AREA, CALCULATED DRIVE SURFACE AREA, CADD GENERATED DRIVE SURFACE AREA, PAVEMENT REMOVED, AS PER PLAN, EXCAVATION, SUBGRADE COMPACTION, 3.5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS), 5" ASPHALT CONCRETE BASE, PG64-22, (449), (DRIVEWAYS), 8" AGGREGATE BASE, 10" AGGREGATE BASE, NON-TRACKING TACK COAT, 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS), 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, CURB, TYPE 6.

DRIVEWAY SUBSUMMARY

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Main data table with columns: SHEET NO., REFERENCE NO., STATION, SIDE, DRIVE ANGLE, APRON LENGTH, WALK DRIVEWAY LENGTH, DRIVEWAY LENGTH, APRON WIDTH, DRIVE WIDTH, CALCULATED APRON SURFACE AREA, CALCULATED WALK SURFACE AREA, CALCULATED DRIVE SURFACE AREA, CADD GENERATED DRIVE SURFACE AREA, PAVEMENT REMOVED, EXCAVATION, SUBGRADE COMPACTION, 3.5" ASPHALT CONCRETE BASE, 5" ASPHALT CONCRETE BASE, 8" AGGREGATE BASE, 10" AGGREGATE BASE, NON-TRACKING TACK COAT, 1.25" ASPHALT CONCRETE SURFACE COURSE, 6" NON-REINFORCED CONCRETE PAVEMENT, 8" NON-REINFORCED CONCRETE PAVEMENT, CURB, TYPE 6.

TOTALS  
SUBTOTALS CARRIED TO SHEET 761

DRIVEWAY SUBSUMMARY  
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SHEET NO.	REFERENCE NO.	STATION	SIDE	COMMERCIAL "C" RESIDENTIAL "R" CONCRETE "C" ASPHALT "A" GRAVEL "G"	DRIVE ANGLE	APRON LENGTH "L1"	WALK DRIVEWAY LENGTH "L2"	DRIVEWAY LENGTH "L3"	APRON WIDTH "W1"	APRON WIDTH "W2"	DRIVE WIDTH "W3"	CALCULATED APRON SURFACE AREA	CALCULATED WALK SURFACE AREA	CALCULATED DRIVE SURFACE AREA	CADD GENERATED DRIVE SURFACE AREA	202	203	204	301		304		407	441	452	452	609																
																PAVEMENT REMOVED, AS PER PLAN	EXCAVATION	SUBGRADE COMPACTION	3.5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	5" ASPHALT CONCRETE BASE, PG64-22, (449), (DRIVEWAYS)	8" AGGREGATE BASE	10" AGGREGATE BASE	NON-TRACKING TACK COAT	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	FT																
DEG.	FT	FT	FT	FT	FT	FT	FT	SF	SF	SF	SF	SF	SF	SF	SF	SY	CY	SY	CY	CY	CY	GAL	CY	SY	SY	FT																	
475	DR-219	361+67.50	L	R	G	4.5	5.0	5.0	21.0	12.0	12.0	74.3	60.0	60.0		23.7	4.0	21.6			1.5			14.9																			
475	DR-220	362+13.19	L	C	A	4.5	5.0	5.0	33.0	24.0	24.0	128.3	120.0	120.0		86.5		40.9		1.9			0.8	0.5		27.6																	
475	DR-221	362+30.00	R	R	G	4.5		9.5	25.0	16.0	16.0	92.3		152.0			5.5	27.1		3.8				10.3																			
475	DR-222	363+06.25	L	C	A	4.5	5.0	5.0	44.0	35.0	35.0	177.8	175.0	175.0		139.4		58.6		2.7			1.2	0.7		39.2																	
476	DR-223	364+61.00	R	R	G	4.5		7.0	21.0	12.0	11.3	74.3		81.6			3.4	17.3			2.0			8.3																			
476	DR-224	365+37.73	L	R	G	4.5	5.0	6.0	22.0	13.0	13.0	78.8	65.0	78.0		25.6	4.6	24.6			1.9				16.0																		
476	DR-225	365+82.00	R	C	A	4.5		7.0	39.0	30.0	28.9	155.3		206.1		85.0		40.2			3.2		1.4	0.8		17.3																	
476	DR-226	366+53.82	L	R	G	4.5	5.0	10.0	32.0	23.0	23.0	123.8	115.0	230.0		37.2	10.1	52.1			5.7				26.5																		
476	DR-227	366+89.80	R	R	A	4.5		7.0	21.0	12.0	10.0	74.3		77.0		29.5		16.8				0.5	0.3		8.3																		
476	DR-228	367+35.51	L	R	G	4.5	5.0	15.0	30.0	21.0	21.0	114.8	105.0	315.0		46.6	11.9	59.4			7.8				24.4																		
476	DR-229	368+09.79	R	R	G	4.5		7.0	29.0	20.0	20.0	110.3		140.0		18.2	5.6	27.8			3.5				12.3																		
476	DR-230	368+32.00	L	R	G	4.5	5.0	20.0	21.0	12.0	9.4	74.3	60.0	214.0		20.8	7.8	38.7			5.3				14.9																		
476	DR-231	368+64.45	R	R	G	4.5		7.0	29.0	20.0	19.6	110.3		138.6			5.5	27.7			3.4				12.3																		
476	DR-232	368+89.00	L	C	A	4.5	5.0	20.0	44.0	35.0	23.3	177.8	175.0		563.8	126.8		101.8			8.7		3.8	2.2		39.2																	
477	DR-233	369+90.00	L	C	A	4.5	5.0	27.0	44.0	35.0	27.5	177.8	175.0	843.8		194.7		133.0			13.0		5.6	3.3		39.2																	
477	DR-234	370+26.23	R	C	G	4.5		7.0	29.0	20.0	19.6	110.3		138.6		11.2	7.0	27.7				4.3				12.3																	
477	DR-235	371+13.50	L	C	A	4.5	5.0	37.0	38.0	29.0	39.0	150.8	145.0		1303.8	214.6		177.7			20.1		8.7	5.0		32.9																	
477	DR-236	371+79.00	L	C	A	4.5	5.0	37.0	37.0	28.0	64.0	146.3	140.0		1685.5	218.0	3.2	219.1			26.0		11.2	6.5		31.8																	
477	DR-237	373+35.24	L	R	G	4.5	5.0	16.0	31.0	22.0	22.0	119.3	110.0	352.0		44.7	13.0	64.6			8.7				25.5																		
478	DR-238	376+85.00	R	C	G	4.5		7.0	37.0	28.0	27.2	146.3		193.2			9.6	37.7				6.0				16.3																	
478	DR-239	377+55.69	L	R	G	4.5	5.0	5.0	26.0	17.0	17.0	96.8	85.0	85.0			5.5	29.6			2.1				20.2																		
479	DR-240	380+08.26	L	R	G	4.5	5.0	10.0	25.0	16.0	16.0	92.3	80.0	160.0		31.7	7.2	36.9			4.0				19.1																		
479	DR-241	380+19.00	R	R	G	4.5		15.0	21.0	12.0	13.7	74.3		192.6			6.2	29.7			4.8				8.3																		
479	DR-242	382+60.65	L	R	G	4.5	5.0	8.0	29.0	20.0	20.0	110.3	100.0	160.0		48.0	7.9	41.1			4.0				23.4																		
479	DR-243	382+80.84	R	R	G	4.5		7.0	23.0	14.0	13.5	83.3		96.3			4.0	20.0			2.4				9.3																		
480	DR-244	384+09.00	R	C	G	4.5		7.0	37.0	28.0	27.2	146.3		193.3			9.6	37.7				6.0				16.3																	
480	DR-245	385+65.00	R	C	G	4.5		7.0	44.0	35.0	35.4	177.8		246.3		12.0	12.0	47.1				7.6				19.8																	
480	DR-246	387+06.00	R	C	G	4.5		7.0	44.0	35.0	33.3	177.8		239.2		11.6	11.8	46.3				7.4				19.8																	
480	DR-247	388+76.93	R	R	G	4.5		7.0	23.0	14.0	13.2	83.3		95.3			4.0	19.8			2.4				9.3																		
481	DR-248	389+31.62	L	R	G	4.5	5.0	14.0	24.0	15.0	15.0	87.8	75.0	210.0		36.0	8.2	41.4			5.2				18.1																		
481	DR-249	389+88.46	R	R	G	4.5		10.0	23.0	12.0	12.0	78.8		120.0			4.5	22.1			3.0				8.8																		
481	DR-250	391+54.52	L	R	G	4.5	5.0	17.0	21.0	12.0	12.0	74.3	60.0	204.0		28.1	7.5	37.6			5.0				14.9																		
481	DR-251	391+55.50	R	C	G	4.5		10.0	31.0	22.0	22.0	119.3		220.0			9.8	37.7				6.8				13.3																	
481	DR-252	392+31.67	L	R	G	4.5	5.0	23.0	23.0	14.0	14.0	83.3	70.0	322.0		32.1	10.8	52.8			8.0				17.0																		
481	DR-253	392+60.50	R	C	G	4.5		34.0	21.0	12.0	8.0	74.3			282.0		10.5	39.6				8.7				8.3																	
481	DR-254	393+13.71	L	R	G	4.5	5.0	24.0	21.0	12.0	12.0	74.3	60.0	288.0		31.1	9.6	46.9			7.1				14.9																		
481	DR-255	393+18.50	R	R	G	4.5		7.0	27.0	18.0	17.8	101.3		125.3			5.0	25.2			3.1				11.3																		
482	DR-256	394+56.00	R	C	C	4.5		7.0	41.0	32.0	32.3	164.3		225.0		87.3		43.3								43.3																	
482	DR-257	395+89.50	R	C	C	4.5		9.0	34.0	25.0	25.0	132.8		225.0		78.3		39.8								39.8																	
482	DR-258	397+65.00	R	R	G	4.5		7.0	21.0	12.0	10.8	74.3		79.7			3.4	17.1			2.0				8.3																		
482	DR-259	398+66.00	R	C	G	4.5		25.0	33.0	24.0	24.0	128.3		600.0		21.2	21.7	80.9				18.5				14.3																	
483	DR-260	399+13.47	L	C	A	4.5	5.0	20.0	30.0	21.0	21.0	114.8	105.0	420.0		98.3		71.1		6.5			2.8	1.6		24.4																	
483	DR-261	399+82.47	L	C	G	4.5	5.0	15.0	26.0	17.0	17.0	96.8	85.0	255.0		48.3	12.4	48.5			7.9				20.2																		
483	DR-262	401+56.62	L	R	C	8.0	5.0		34.5	25.0		238.0	125.0			35.0	0.9	40.3							40.3																		
483	DR-263	402+16.12	L	R	A	8.8	5.0		25.9	16.4		186.1	82.0			35.0		29.8							29.8																		
483	DR-264	402+52.54	L	R	A	8.8	5.0		32.5	23.0		244.2	115.0			38.1	0.3	39.9							39.9																		
483	DR-275	400+83.26	R	C	C	7.2			27.6	13.2		146.9				16.3	0.9	16.3								16.3																	
TOTALS																2010.8	264.9	2252.9													2011	265	2253		0.8	82.1	96.7	73.2	36.0	20.9	466.6	491.6	
SUBTOTALS CARRIED TO SHEET 761																2011	265	2253													2011	265	2253		1	83	97	74	36	21	467	492	

**DRIVEWAY SUBSUMMARY**

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SHEET NO.	REFERENCE NO.	STATION	SIDE	COMMERCIAL "C" RESIDENTIAL "R" CONCRETE "C" ASPHALT "A" GRAVEL "G"	DRIVE ANGLE	APRON LENGTH "L1"	WALK DRIVEWAY LENGTH "L2"	DRIVEWAY LENGTH "L3"	APRON WIDTH "W1"	APRON WIDTH "W2"	DRIVE WIDTH "W3"	CALCULATED APRON SURFACE AREA	CALCULATED WALK SURFACE AREA	CALCULATED DRIVE SURFACE AREA	CADD GENERATED DRIVE SURFACE AREA	202	203	204	301		304		407	441	452	452	609														
																PAVEMENT REMOVED, AS PER PLAN	EXCAVATION	SUBGRADE COMPACTION	3.5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	5" ASPHALT CONCRETE BASE, PG64-22, (449), (DIVEWAYS)	8" AGGREGATE BASE	10" AGGREGATE BASE	NON-TRACKING TACK COAT	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DIVEWAYS)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	609														
					DEG.	FT	FT	FT	FT	FT	FT	SF	SF	SF	SF	SY	CY	SY	CY	CY	CY	GAL	CY	SY	SY	FT															
BLASÉ NEMETH																																									
486	DR-265	102+75.00	L	C		10.0			44.0	24.0		340.0				60.5		37.8									37.8														
OHIO STREET																																									
490	DR-266	9+20.00	R	C	A	9.0			53.0	35.0		396.0				74.1		44.0									44.0														
490	DR-275	8+52.00	L	C	A	14.5			32.0	52.0		609.0				60.3	5.0	67.7									67.7														
PERRY PARK																																									
491	DR-267	9+74.50	L	C	A	10.0			55.0	35.0		450.0				104.5		50.0									50.0														
491	DR-268	11+39.00	R	C	G	11.2			43.4	21.0		360.6					8.9	40.1									40.1														
MIDDLE RIDGE																																									
492	DR-269	11+76.00	L	C	G	5.0		36.0	20.0	10.0	10.0	75.0		360.0			12.9	48.3				11.1					8.3														
492	DR-270	11+76.00	R	C	G	5.0		49.0	20.0	10.0	10.0	75.0		490.0			16.9	62.8				15.1					8.3														
492	DR-271	13+00.00	R	C	G	10.0		15.0	30.0	12.0	10.8	210.0		171.0			10.5	42.3				5.3					23.3														
CALL ROAD																																									
496	DR-272	8+50.00	R	C	G	10.5			37.0	16.0		278.3					6.9	30.9									30.9														
496	DR-273	9+30.00	R	C	G	10.0			40.0	20.0		300.0					7.4	33.3									33.3														
ANTIOCH ROAD																																									
497	DR-274	10+82.00	L	C	C	11.0			55.7	35.0		498.9				52.3	3.6	55.4									55.4														
TOTALS																351.7	72.1	512.6													31.5								399.1		
SUBTOTALS THIS SHEET																352	73	513														32								400	
SUBTOTALS SHEET 756																3124	240	2497															8	102	57	110	48	28	300	745	56
SUBTOTALS SHEET 757																2157	305	2323															4	86	93	126	40	23	253	553	
SUBTOTALS SHEET 758																3847	302	2657															10	81	106	103	41	24	509	632	
SUBTOTALS SHEET 759																3171	214	2405															17	64	56	70	38	22	441	843	
SUBTOTALS SHEET 760																2011	265	2253															1	83	97	74	36	21	467	492	
TOTALS CARRIED TO GENERAL SUMMARY																14662	1399	12648																456	924	203	118	1970	3665	56	

DRIVEWAY SUBSUMMARY

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