7/7/2025

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

THE CITY OF EASTLAKE

OWPC PROJECT LAKE COUNTY, OHIO

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CALL UNDERGROUND UTILITIES CONTACT BOTH SERVICES CALL TWO WORKING DAYS BEFORE YOU DIG

CALL

(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS

MUST BE CALLED DIRECTLY

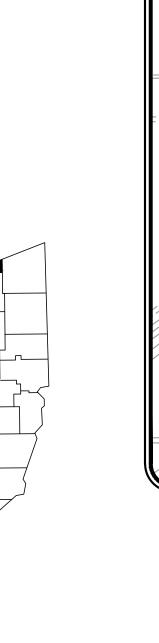
OIL & GAS PRODUCERS PROTECTIVE

1. THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER

 UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.

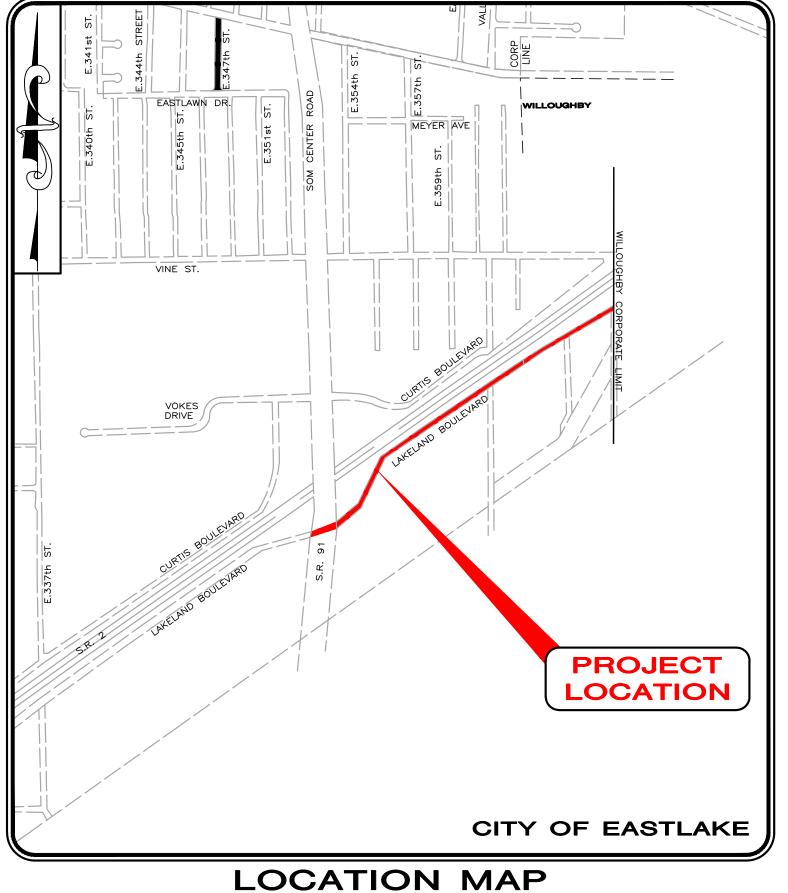
SERVICE CALL: 1-800-925-0988

3. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.



COUNTY

JULY, 2025



OFFICIALS

JAMES OVERSTREET	MAYOR
KEVIN KOSTELNIKSERVICE	DIRECTOR
JOSEPH R. KLAMMER	DIRECTOR
CAROL-ANN SCHINDEL	DIRECTOR
BRIAN MELUCH, P.ECITY	ENGINEER

MEMBERS OF COUNCIL

J. TODD GULLEY JASON KASUNICK. DANYIELLE KOSTELNIK MIKE SEMICK. AT LARGE ANGELA SCHMIDT.	JOHN MEYERS	PRESIDENT, WARD 2
DANYIELLE KOSTELNIK	J. TODD GULLEY	WARD 1
MIKE SEMICK	JASON KASUNICK	
	DANYIELLE KOSTELNIK	
ANGELA SCHMIDTAT LARGE	MIKE SEMICK	AT LARGE
	ANGELA SCHMIDT	AT LARGE







ENGINEER'S PROJECT No. 34541

GENERAL NOTES

- 1. MATERIALS OF WORK FOR "AS DIRECTED" ITEMS SHALL NOT BE ORDERED FOR THE DELIVERY TO THE PROJECT OR WORK PERFORMED UNTIL AUTHORIZED BY THE ENGINEER.
- 2. MANHOLES, CATCH BASINS, MONUMENT BOXES, WATER VALVE BOXES AND OTHER CASTINGS SHALL BE RAISED OR LOWERED FLUSH WITH THE FINISHED SURROUNDING SURFACE. ANY METER OR VALVE BOX ENCOUNTERED WITHIN THE WORK SITE SHALL BE EXPOSED AND ADJUSTED TO GRADE PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID.
- BEFORE THE CITY WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTY RETAINER, THE CONTRACTOR SHALL FURNISH THE CITY A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO, NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTOR HANDLING CLAIM, HOW CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY WHEN NEEDED OR ORDERED BY THE OWNER WATER FOR THE ALLEVIATION OR PREVENTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. THE COST OF DUST CONTROL SHALL BE INCLUDED IN THE UNIT BID PRICES FOR ALL ITEMS OF THE PROPOSAL.
- 5. THE CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION VIDEO SURVEY OF THE ENTIRE PROJECT AREA. ANY DAMAGE DEEMED TO HAVE BEEN CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS OWN EXPENSE. ALL COSTS ASSOCIATED FOR THIS WORK, INCLUDING THE VIDEO SURVEY, SHALL BE INCLUDED IN THE UNIT PRICES STIPULATED FOR THE VARIOUS ITEMS IN THE BID PROPOSAL UNLESS THERE IS A PRECONSTRUCTION VIDEO DOCUMENTATION BID ITEM INCLUDED IN THE PROJECT.
- 3. ALL WORK SHALL, AT ALL TIMES, BE SUBJECT TO THE DIRECT SUPERVISION OF THE EASTLAKE CITY ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE. ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT.

XISTING UTILITIES

- 1. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE CITY OF EASTLAKE DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS.
- 2. BEFORE ANY WORK IS STARTED THAT WILL INTERFERE WITH THE EXISTING UTILITIES, THE CONTRACTOR SHALL CALL THE "OHIO UTILITIES PROTECTION SERVICE", AT 1-800-362-2764, FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK. THE FOLLOWING REFERENCE NUMBERS HAVE BEEN ASSIGNED TO THIS PROJECT BY THE OHIO UTILITIES PROTECTION SERVICE. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO ADDITIONAL EXPENSE TO THE CITY OF EASTLAKE, TO AVOID DAMAGE TO EXISTING UNDERGROUND AND OVERHEAD UTILITY LINES DURING THE ENTIRE PROJECT. IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL EXPENSE TO THE CITY OF EASTLAKE, INCLUDING ANY INSPECTION FEES OR MAINTENANCE CREWS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS LISTED BELOW AND THE UTILITY PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND OUTLINED IN PROJECT SPECIFICATIONS. THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

OHIO UTILITY PROTECTION SERVICE THE ILLUMINATING COMPANY 106 WEST RYEN, ROOM 427 P.O. BOX 5000 CLEVELAND, OHIO 44101 PHONE: (800) 362-2746 PHONE: (216) 622-9800 CITY OF EASTLAKE (SEWER) 35150 LAKESHORE BLVD. LAKE COUNTY UTILITIES DEPT. EASTLAKE, OHIO 44095 105 MAIN STREET

PHONE: (440) 974-3401

320 SPRINGSIDE DRIVE, STE 320 AKRON, OHIO 44333 PHONE: (330) 664-2409

DOMINION EAST OHIO

CHARTER/SPECTRUM 7820 DIVISION DRIVE MENTOR, OHIO 44060 PHONE: (440) 974-3401

13630 LORAIN ROAD CLEVELAND, OHIO 44111 PHONE: (216) 476-6084

4. WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE HIS WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME WORK IS GOING ON ADJACENT TO THE POLE. THE COST AND COORDINATION FOR ANY REQUIRED PROTECTION OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL NOT BE THE RESPONSIBILITY OF THE CITY OF EASTLAKE. DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK IN CONFORMANCE TO THE UTILITY COMPANY'S SCHEDULE.

PAINESVILLE, OHIO 44077

PHONE: (440) 350-2645

5. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION.

GRASS RESTORATION

- 1. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL INVENTORY TREELAWNS FOR EXISTING ORNAMENTAL LANDSCAPE FEATURES INCLUDING LAWN SPRINKLER SYSTEMS AND IRON PINS. ANY LANDSCAPE FEATURE DISTURBED OR DAMAGED BY THE CONTRACTOR'S ACTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION. COST OF INVENTORY AND RESTORATION SHALL BE INCLUDED IN THE UNIT BID PRICE FOR LAWN RESTORATION.
- 2. RESTORATION OF TREELAWNS AND GRASS AREAS IN EASEMENTS SHALL BE PERFORMED BY A LANDSCAPE CONTRACTOR TO BE APPROVED BY THE CITY ENGINEER AND SERVICE DIRECTOR. THE LANDSCAPE CONTRACTOR MUST BE EXPERIENCED IN COMMERCIAL INSTALLATIONS AND PROVIDE REFERENCES AND OTHER DETAILED INFORMATION TO ENABLE THE OWNER TO JUDGE HIS EXPERIENCE AND CAPABILITY TO PERFORM THE WORK. GRASS AREAS TO BE RESTORED SHALL BE SEEDED UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. THE SEED SHALL BE PLACED ON A FOUR (4) INCH BED OF COMPACTED TOPSOIL THAT HAS BEEN RAKED AND BROUGHT TO AN EVEN SURFACE. TOPSOIL SHALL BE SHREDDED AND BE FREE OF ROCKS, ROOTS AND WEEDS. THE CONTRACTOR SHALL PROVIDE TOPSOIL SAMPLES AND SOURCES OF SUPPLY TO THE ENGINEER FOR APPROVAL PRIOR TO DELIVERY OF THE MATERIAL TO THE JOB SITE.

PROPERTY PINS AND MONUMENTS

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EMPLOY A REGISTERED SURVEYOR TO LOCATE, RECORD, AND MARK ALL EXISTING MONUMENTS AND PROPERTY CORNERS WITHIN THE CONSTRUCTION LIMITS. THIS COST SHALL BE DISTRIBUTED AMONG THE APPROPRIATE PROJECT PAY ITEMS. A LISTING OF THE PINS AND MONUMENTS SHALL BE SUPPLIED TO THE CITY ENGINEER PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL PINS AND MONUMENTS DURING CONSTRUCTION. IF PINS AND MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL HAVE THEM REPLACED BY THE REGISTERED SURVEYOR AT NO ADDITIONAL COST TO THE CITY.

EROSION AND DUST CONTROL

- SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY HYDRO SEEDING AND MULCHING IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH ODOT ITEM 659 OR AS DIRECTED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL BEGIN THE RESTORATION PROCESS AS SOON AS CONSTRUCTION IS COMPLETED, PERMANENTLY STABILIZING EACH DISTURBED AREA WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS OR DRIVES BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.
- 4. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOOD PLAIN OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- 5. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED.
- . IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY WHEN NEEDED OR ORDERED BY THE OWNER WATER PER ODOT 616 FOR THE ALLEVIATION OR PREVENTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. THE COST OF DUST CONTROL SHALL BE INCLUDED IN THE UNIT BID PRICES FOR ALL ITEMS OF THE PROPOSAL.
- 7. OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER ENTERING ACTIVE STORM DRAIN SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT POND. INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED.

EXCESS EXCAVATION

1. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A LOCATION TO BE SELECTED BY THE CONTRACTOR. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY IF THE MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS.

AIR/NOISE CONTROL

1. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO WEEKDAY DAYTIME HOURS, UNLESS APPROVED IN ADVANCE BY THE CITY.

CONSTRUCTION OBSERVATION

1. THE CONTRACTOR SHALL NOT COMMENCE WITH ANY FORM OF CONSTRUCTION WITHOUT CONTACTING MR. TOM GWYDIR (440) 487-5049 OR MR. BRIAN MELUCH (440) 376-1507 A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION ACTIVITY TO ARRANGE FOR OBSERVATION. IF ANY CHANGE IN THE WORK SCHEDULE BECOMES NECESSARY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT MR. GWYDIR TO AVOID UNNECESSARY OBSERVATION COSTS. IF NO NOTIFICATION IS MADE IN REGARDS TO CANCELLATION OF WORK, THE CONTRACTOR WILL BE CHARGED FOR THE TIME INCURRED.

LIMITS OF WORK

1. THE CONTRACTOR'S CONSTRUCTION OPERATIONS ARE CONFINED TO THE AREA WITHIN THE ROAD RIGHT-OF-WAY AND TEMPORARY EASEMENT AREAS. THE APPROXIMATE LIMITS OF CONSTRUCTION ARE SHOWN ON THE PLANS, WHICH ARE BASED ON THE ROADWAY CROSS SECTIONS. THE CROSS SECTIONS INDICATE THE APPROXIMATE LIMITS OF THE EARTHWORK NECESSARY FOR THE PROPOSED IMPROVEMENTS. THESE LIMITS ARE APPROXIMATE AND MAY BE MODIFIED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL USE THE APPROPRIATE CONSTRUCTION METHODS TO PREVENT DISTURBING ANY AREA OUTSIDE OF THE THE CONSTRUCTION LIMITS.

SUBSURFACE CONDITIONS

1. IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE THEIR OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR MAY EXAMINE RECORDS OF BORINGS AND ANY OTHER SUBSURFACE INVESTIGATIONS MADE FOR DESIGN PURPOSES.

SUBSURFACE INFORMATION

1. BORINGS AND OTHER SUBSURFACE INVESTIGATIONS ARE INCOMPLETE AND ARE NOT A PART OF THE CONTRACT DOCUMENTS, EXCEPT TO THE EXTENT THAT THE RESULTS THEREOF ARE SPECIFICALLY SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS, AND ARE NOT WARRANTED TO SHOW THE ACTUAL SUBSURFACE CONDITIONS. THE CONTRACTOR AGREES THAT HE WILL MAKE NO CLAIM FOR ADDITIONAL COST AGAINST THE OWNER OR THE ENGINEER, IF IN PERFORMANCE OF THE WORK HE FINDS THAT THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED DO NOT CONFORM TO THOSE INDICATED BY SAID BORINGS AND OTHER SUBSURFACE INVESTIGATIONS.

STORM SEWER

1. ALL CIRCULAR STORM SEWER UNDER PROPOSED PAVEMENT SHALL BE REINFORCED CONCRETE PIPE C-76, CLASS IV, WITH JOINTS MEETING THE REQUIREMENTS OF ASTM C-443. STORM SEWER OUTSIDE OF PAVEMENT AREAS SHALL BE CORRUGATED POLYETHYLENE SMOOTH LINED PIPE PER ODOT 707.33.

MANHOLES ADJUSTED TO GRADE

1. ALL MANHOLES, WHERE NOTED ON PLANS OR REQUIRED BY THE PROPOSED IMPROVEMENTS, SHALL BE ADJUSTED TO THE PROPOSED GRADE WITH NEW CASTINGS IN ACCORDANCE WITH ODOT ITEM 611. THE NEW CASTING SHALL BE AN E.J.I.W. 1710 WITH SOLID COVER OR APPROVED EQUIVALENT.

EXISTING ITEMS OUTSIDE THE RIGHT-OF-WAY

1. THERE ARE EXISTING FENCES, TREES, BUSHES, LANDSCAPE WALLS AND OTHER ITEMS ON PRIVATE PROPERTY JUST OUTSIDE THE RIGHT-OF-WAY. THE CONTRACTOR SHALL TAKE THE NECESSARY ACTIONS TO ENSURE THESE EXISTING ITEMS ARE NOT DISTURBED OR DAMAGED. IF ANY DAMAGE DOES OCCUR THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REPAIR OF THE ITEMS AT NO ADDITIONAL COST.

PETER J. + BROCK S8646

PROSENTE OF ONE OF O

verdantas

DATE DATE

CITY OF EASTLAKE

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

LAKE COUNTY, OHIO

ISSUED FOR:	DRAFT
ISSUE DATE:	7/7/2025
SCALE:	AS SHOWN
DESIGNED BY:	PJF
DRAWN BY:	CKW

CHECKED BY:

GENERAL NOTES

PROJECT NO.

34541

DISCIPLINE

CIVIL

SHEET NAME

GN-1

SHEET OF

2 15

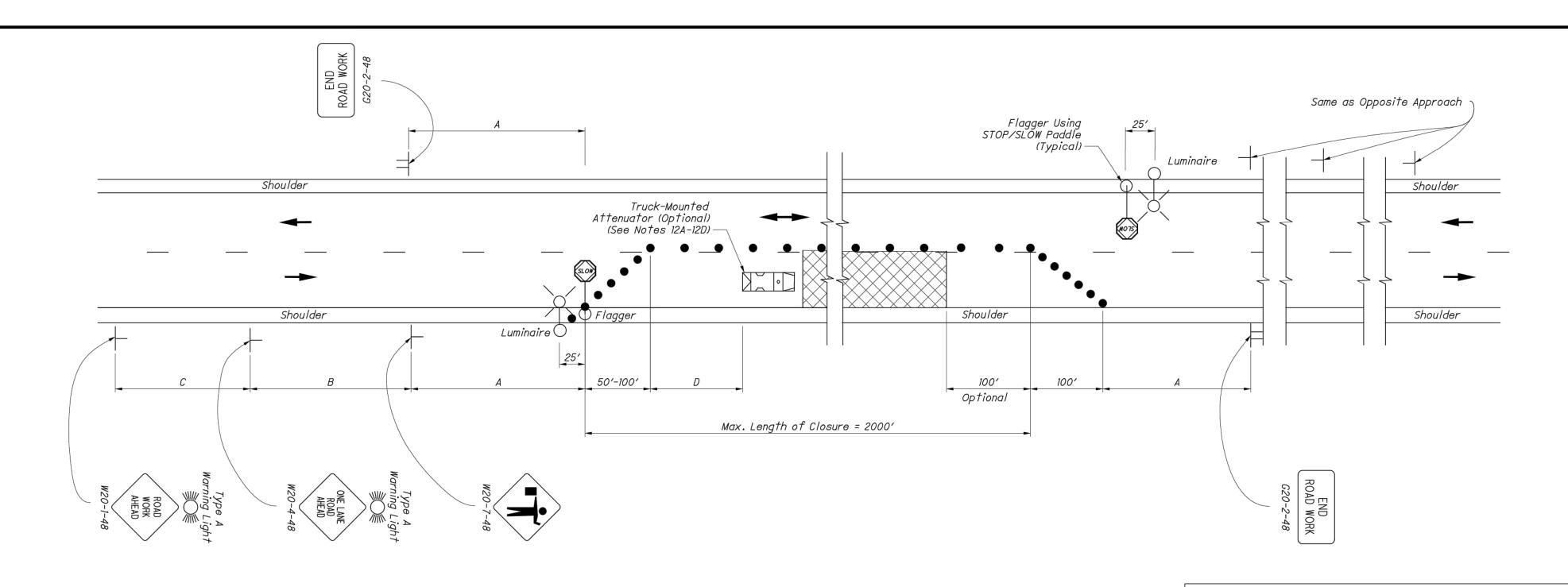


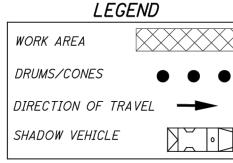
TABLE I (SIGN SPACING) DISTANCE BETWEEN SIGNS (FT) ROAD TYPE Two-Lane 100 100 100 (<u>≤</u> 40 MPH) Two-Lane *350 350* (45-50 MPH) Two-Lane 500 500 500 (55-60 MPH)

TABLE II SPEED BUFFER LIMIT | (D) (FT (MPH) MIN.25 155 30 200 35 250 40 305 360 45 *50* 425

495

60 570

55



NOTES:

FLAGGERS

 Flaggers, one for each direction, shall be used to control traffic continuously for as long as a one lane operation is in effect. The flaggers shall be able to communicate with each other at all times.

LENGTH OF CLOSURE

2. Several small work areas close together should be combined into one work zone. However, the closure shall not be more than 2000' long unless approved by the Engineer. The minimum length between closures shall be 2000'. Only one side of the road shall be closed in any one work zone.

SIGN LOCATION AND SPACING

- 3A. The minimum spacing between work zone signs is shown in Table I. Maximum spacing should not be greater than 1.5 times the distances shown in Table I.
- 3B. Sign spacing should be adjusted to avoid conflict with existing signs. Minimum spacing to existing signs shall be 200' for speeds of 45 mph or less and a minimum of 400' for speeds of 50 mph or greater.
- 3C. The location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment.

ADJUSTMENTS FOR SIGHT DISTANCE

4. The location of the flagger station and the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment.

BASIC SIGNING

- 5A. ROAD WORK AHEAD (W20-1) signs shall be provided on entrance ramps or roadways entering the work limits.
- 5B. END ROAD WORK (G20-2) signs are only required for lane closures of more than 1 day. It is intended that these signs be placed on the mainline, on all exit ramps, and on roadways exiting the work limits.
- 5C. Overlapping of signing for adjacent projects should be avoided where the messages could be confusing. Any ROAD WORK AHEAD (W20-1) or END ROAD WORK (G20-2) sign which falls within the limits of another traffic control zone shall be omitted or covered during the period when both projects are

SIGNING DETAILS

- 6A. The Advisory Speed (W13-1P) plaque shall be used when specified in the plan.
- 6B. 36" warning signs may be used when the approach speed limit is 40 mph or less.

FLASHING WARNING LIGHTS

7. Type A flashing warning lights shown on the ROAD WORK AHEAD (W20-1) signs and on the LANE CLOSED AHEAD (W20-5) signs are required whenever a night lane closure is necessary.

DRUMS / CONES

- 8A. Drum spacing shall be as follows:

 a) Spacing along the closure shall be 40' center-to-center.
 b) Spacing along the approach taper shall be 10' center-
- 8B. Cones may be substituted for drums as follows:
 - a) Cones used for daytime traffic control shall have a minimum height of 28".
- b) Cones used for nighttime traffic control shall have a minimum height of 42".
 c) Use of cones at night shall be prohibited along
- 8C. Provisions shall be made to stabilize the cones and drums to prevent them from blowing over.
- 8D. A minimum of two drums shall be used to close the paved shoulder.

(RESERVED FOR FUTURE USE)

9A. (intentionally blank)

AREA ILLUMINATION

- 10A. Adequate area illumination of each flagger station shall be provided at night. Use of portable flood lighting is acceptable. Luminaires shall be located adjacent to each flagger station.
- 10B. To ensure the adequacy of floodlight placement and the elimination of glare, the Contractor and the Engineer shall drive through the worksite each night when the lighting is in place. Light placement and shielding shall be adjusted to the satisfaction of the Engineer.

INTERSECTION / DRIVEWAY ACCESS

- 11. Within the length of closure, provision shall be made to control traffic entering from intersecting streets and major drives as necessary to prevent wrong-way movements and to keep vehicles off of new pavement not ready for traffic. The Contractor shall:
- a) Place across the closed lane, either three drums (cones) or barricades, and/or
 b) Provide an additional flagger at every public street intersection and major driveway.
- Drums (cones) placed across the closed lane shall be located 25' beyond the projected pavement edges of the driveway or cross highway, as shown in Standard Construction Drawings (SCDs MT-97.11 or MT-97.12. For barricades, see SCD MT-101.60.
- Existing STOP signs shall be relocated as necessary to assure proper location for the traffic conditions.
- The method of control shall be subject to the approval of the Engineer.

SHADOW VEHICLE

- 12A. The shadow vehicle shall be in place and unoccupied whenever workers are in the work area. This vehicle shall be removed from the pavement whenver workers are not in the work area.
- 12B. The shadow vehicle shall be equipped with a highintensity yellow rotating, flashing, oscillating, or strobe light(s).
- 12C. The vehicle shall be equipped with a truck-mounted attenuator when called for in the plans.
- 12D. Other protective devices may be used in lieu of the shadow vehicle shown when approved by the

CHIP SEAL OPERATIONS

- 13. For chip seal operations, additional signing shall be incorporated in the advanced warning area.
- a) The LOOSE GRAVEL (W8-7) and FRESH TAR (W21-2) signs shall both be used in advance of the chip seal operation.
 b) Repeat the LOOSE GRAVEL sign with a 35 mph Advisory Speed (W13-1) plaque every half mile per CMS 422.09.
 c) The FRESH TAR and the LOOSE GRAVEL signs shall both

be used for signing of side roads intersecting the work

MAINTAINING TRAFFIC

ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES. LOCAL ACCESS TO ABUTTING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. ACCESS TO ALL DRIVEWAYS SHALL ALSO BE MAINTAINED AT ALL TIMES.

PART WIDTH CONSTRUCTION, ONE LANE WIDTH, SHALL BE USED DURING THE PERFORMANCE OF PAVING OPERATIONS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY LOCAL ACCESS, VEHICULAR AND PEDESTRIAN, TO ALL ABUTTING PROPERTIES WITHIN THE PROJECT. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, BARRIERS, TEMPORARY PAVEMENT, LIGHTING, FLAGMEN, TEMPORARY GUARDRAIL, DETOUR AND CONSTRUCTION SIGNING AND OTHER TRAFFIC CONTROLS SO AS TO AVOID DAMAGE AND/OR INJURY TO AND ENSURE THE SAFETY OF VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION BOTH WITHIN AND OUTSIDE OF THE PROJECT LIMITS.

MAINTAINING TRAFFIC SHALL BE IN ACCORDANCE WITH ODOT ITEM 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. DETOUR ROUTES & SIGNAGE SHALL MEET THE APPROVAL OF THE CITY ENGINEER.

IN ORDER TO MAINTAIN LOCAL AND DRIVEWAY ACCESS, THE CONTRACTOR SHALL FURNISH AND INSTALL TRAFFIC COMPACTED SURFACE, TYPE A OR B IN ACCORDANCE WITH ODOT ITEM 410 LIMESTONE OR GRAVEL ONLY INCLUDING NECESSARY WATER IN ACCORDANCE WITH ODOT ITEM 616 AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR MAINTAINING TRAFFIC INCLUDING PROVIDING TRAFFIC COMPACTED SURFACES, OTHER TEMPORARY ROADWAYS, TRAFFIC CONTROL, AND ALL OTHER SAFEGUARDS. COST FOR MAINTAINING TRAFFIC INCLUDING ALL MATERIALS, LABOR AND EQUIPMENT FOR CONSTRUCTION, MAINTENANCE AND SUBSEQUENT REMOVAL SHALL BE INCLUDED IN THE UNIT PRICES STIPULATED FOR THE VARIOUS ITEMS OF THE PROPOSAL.

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.

NOTICE OF CLOSURE SIGNS, FOR SEVERAL SIDE ROADS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. 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. THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN ON THE PLANS.

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

PAVEMENT REPLACEMENT

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

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC. A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY: OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. ALL EQUIPMENT AND STORED MATERIALS SHALL NOT CAUSE SIGNIFICANT SIGHT DISTANCE HAZARDS TO THE TRAVELING PUBLIC. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

WINTER TRAFFIC LIMITATIONS

TWO LANES IN EACH DIRECTION SHALL BE OPEN TO TRAFFIC.

SUSPENSION OF

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR MAINTENANCE OF TRAFFIC AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE MANUAL, THE ENGINEER MAY SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS. NO COMPENSATION WILL BE PAID FOR SUSPENSION OF WORK.

METHOD OF PAYMENT

PAYMENT FOR THE MAINTENANCE OF TRAFFIC ITEMS, UNLESS SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS DETAILED IN THE PLANS.

ALTERNATE MAINTENANCE OF TRAFFIC PLANS

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATIVE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ENGINEER.



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NO REVISION DATE

CITY OF EASTLAKE

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

LAKE COUNTY, OHIO

ISSUED FOR: DRAFT

ISSUE DATE: 7/7/2025

SCALE: AS SHOWN

DESIGNED BY: PJF

DRAWN BY: CKW

CHECKED BY: PJF

MAINTENANCE OF TRAFFIC

PROJECT NO.

34541

DISCIPLINE

CIVIL

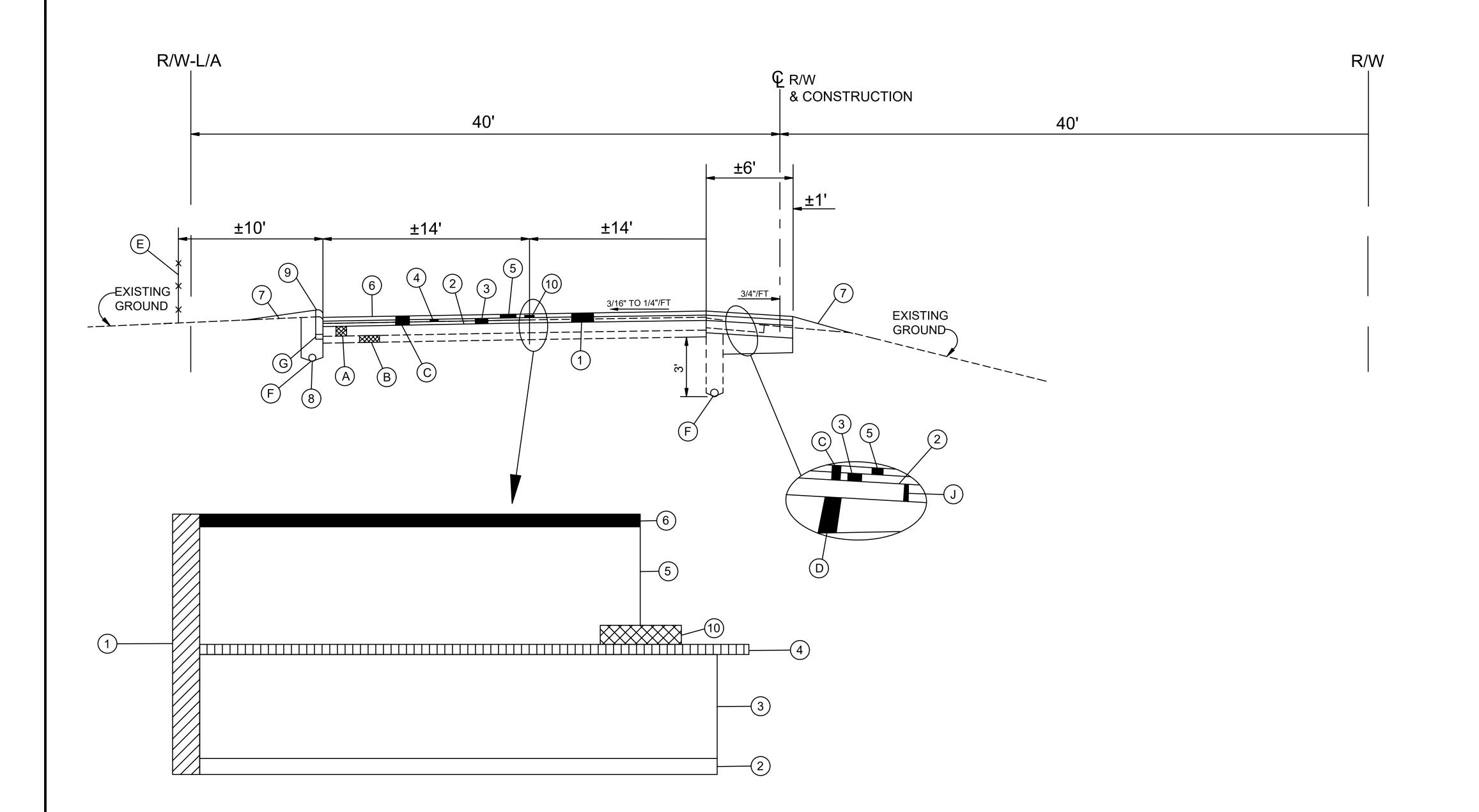
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3 15

TYPICAL SECTIONS



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TYPICAL SECTION LEGEND

- 1 PAVEMENT PLANING, ASPHALT CONCRETE, 3" DEPTH
- (2) ITEM 407 TACK COAT, TRACKLESS TACK (APPLICATION RATE PER ODOT TABLE 407.06-1)
- 3 1 1/4" ITEM 441 A.C. INTERMEDIATE COURSE, TYPE 1, PG 64-22, A.P.P. (MAX. 25% R.A.P.)
- PG 64-22, A.P.P. (MAX. 25% R.A.P.)

 PAVEMENT REINFORCING FABRIC -
- FIBERGLASS/POLYESTER BLEND, AS SPECIFIED, INCL. TACK COAT (INSTALLED BETWEEN SURFACE AND INT. COURSE)
- 5 1 3/4" ITEM 441 A.C. SURFACE COURSE, TYPE 1, PG 70-22M, AS PER PLAN (ALL VIRGIN MATERIAL)
- 6 APPLY CONSTRUCTION SEAL IMMEDIATELY AFTER SURFACE COURSE INSTALLATION
- 7 ITEM-SPECIAL LAWN RESTORATION, INCLUDING ITEM 653 4" TOPSOIL FURNISHED AND PLACED
- (8) UNDERDRAIN REPLACEMENT (AS DIRECTED)
- 9 CURB REMOVED AND REPLACED (AS DIRECTED)
- (10) ITEM 872 VOID REDUCING ASPHALT MEMBRANE
- (A) EXISTING REINFORCED CONCRETE PAVEMENT (9" TO 17")
- B EXISTING SUBBASE (3"-6")
- © EXISTING ASPHALT CONCRETE WITH FABRIC (2.75"-3")
- D EXISTING STABILIZED CRUSHED AGGREGATE
- E EXISTING FENCE
- F EXISTING SHALLOW PIPE UNDERDRAIN
- (G) EXISTING TYPE 6 CONCRETE CURB
- (H) EXISTING TYPE 2A CONCRETE CURB
- J EXISTING ASPHALT BASE (6")

NOTE: SEE PAVEMENT CORING REPORT DATED 2/14/24 FOR

SUPERELEVATED SECTION

STA. 95+66.41 TO STA. 108+45.00 = 1,278.59'

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NO REVISION DATE

CITY OF EASTLAKE

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

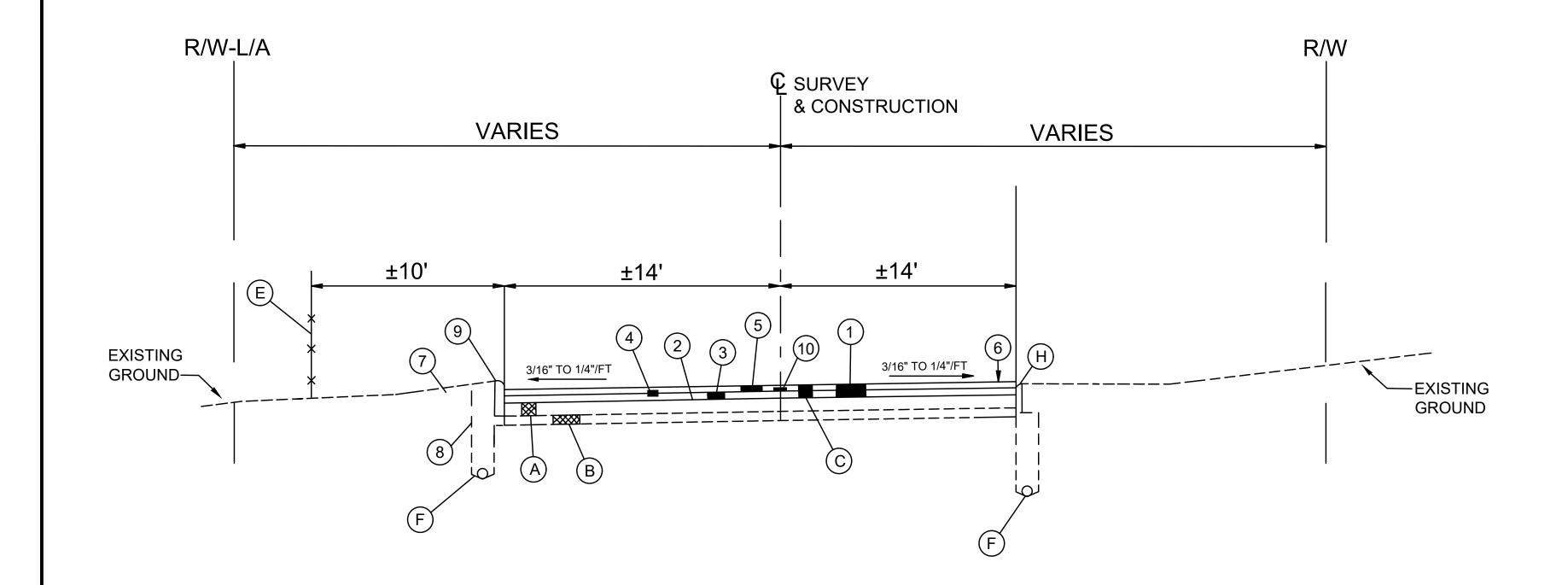
LAKE COUNTY, OHIO

SSUED FOR:	DRAFT	
SSUE DATE:	7/7/2025	
SCALE:	AS SHOWN	
DESIGNED BY:	PJF	
DRAWN BY:	CKW	
CHECKED BY:	PJF	

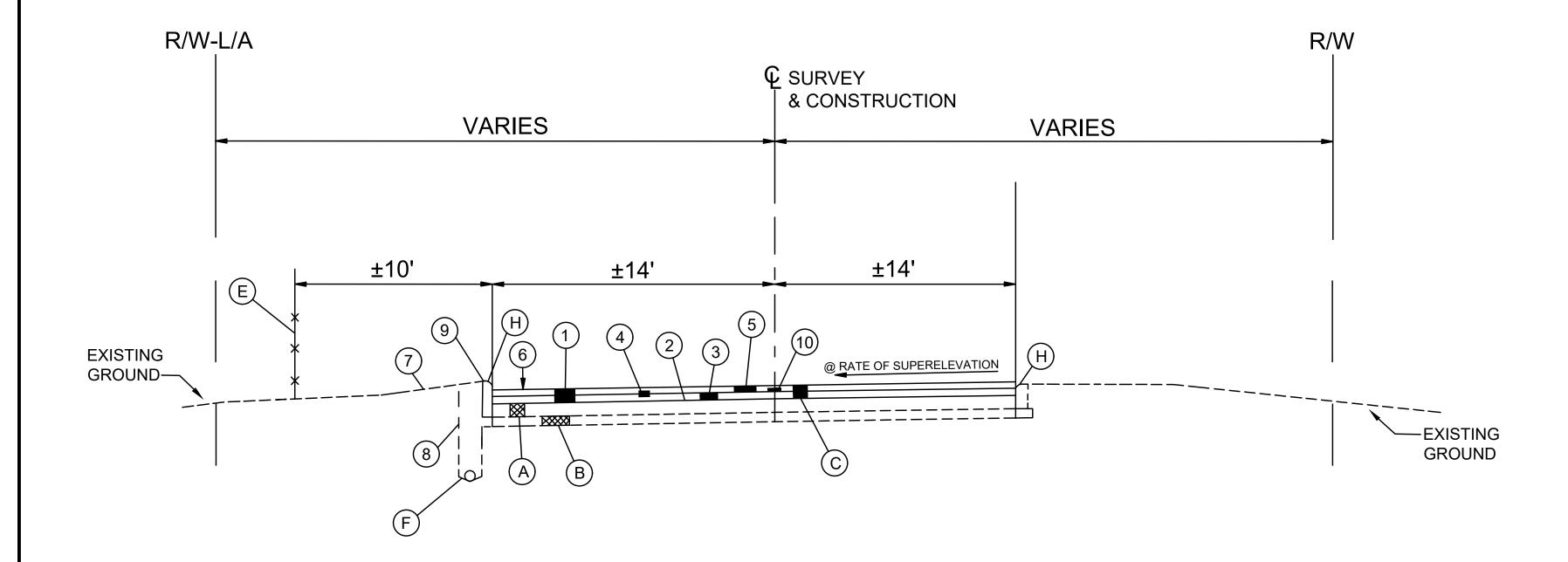
TYPICAL SECTIONS

PROJECT NO.		
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TYPICAL SECTIONS



NORMAL SECTION STA. 110+35 TO STA. 124+27 = 1,392'



SUPERELEVATED SECTION

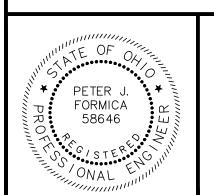
(OPPOSITE HAND FOR SUPERELEVATED CURVE TO RIGHT)

STA. 85+11.72 TO STA. 87+25.91 = 214.19' (FULL S.E. LT. @ 5/8"/ FT.)

STA. 87+25.91 TO STA. 90+33.91 = 308' (TRANSITION)

STA. 90+33.91 TO STA. 93+38.91 = 305' (FULL S.E. LT. @ 3/4"/ FT.)

STA. 93.38.91 TO STA. 95+66.41 = 227' (TRANSITION)



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* SEE LEGEND - SHEET 4

DATE

REVISION

DATE

CITY OF EASTLAKE

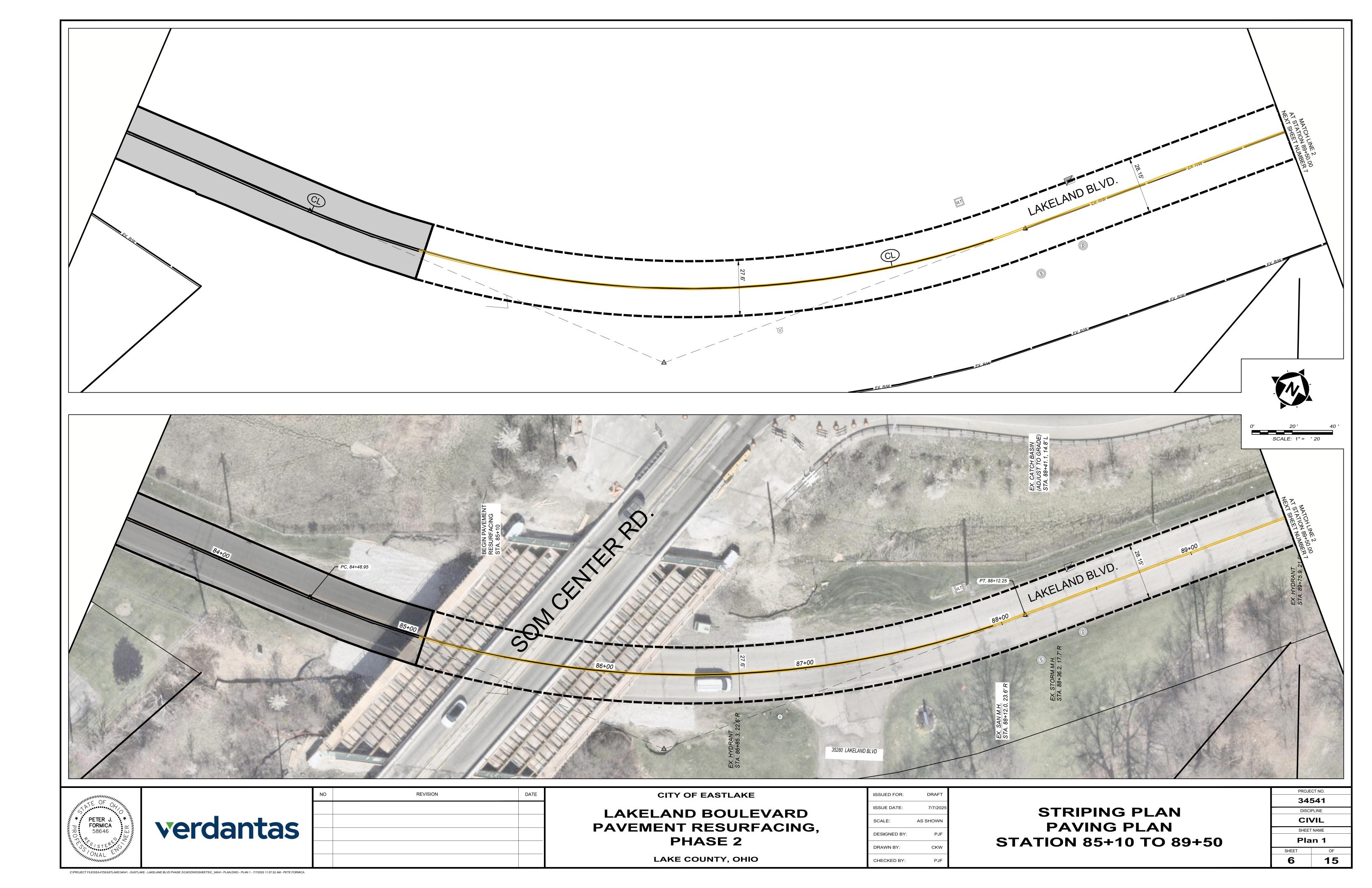
LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

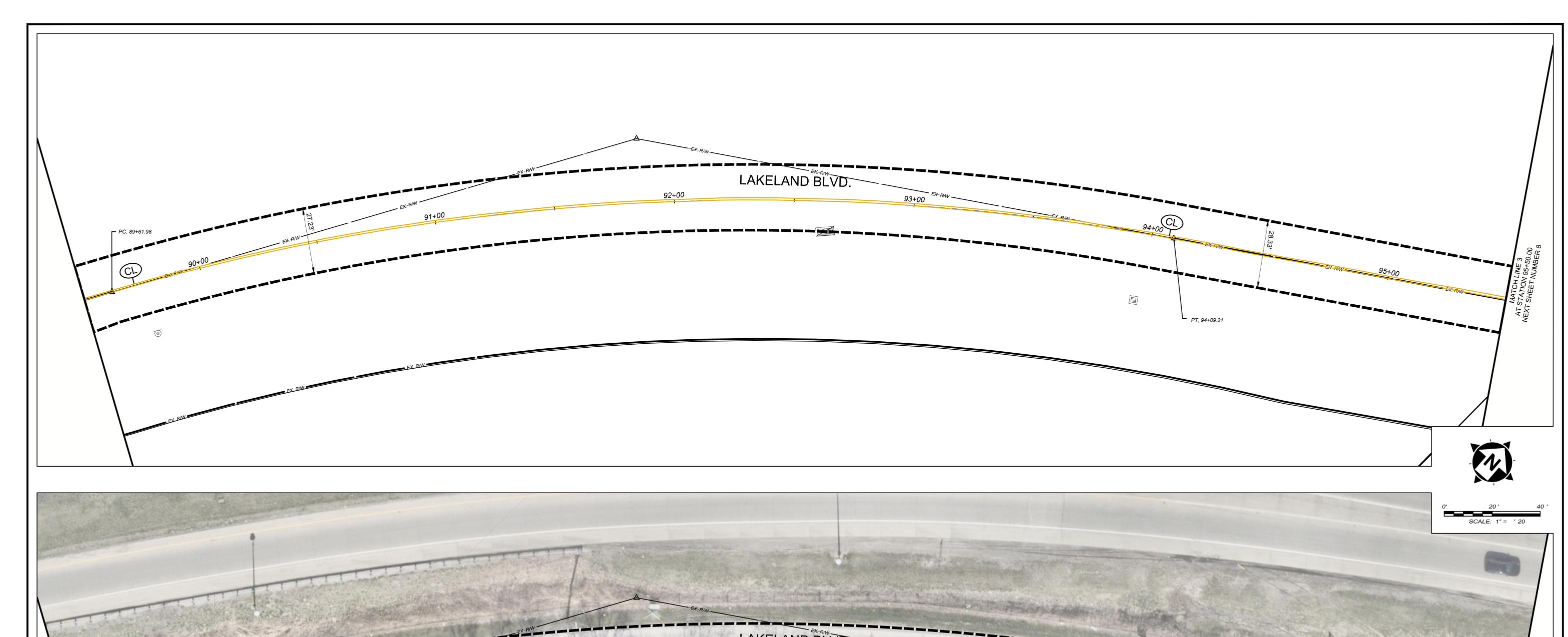
LAKE COUNTY, OHIO

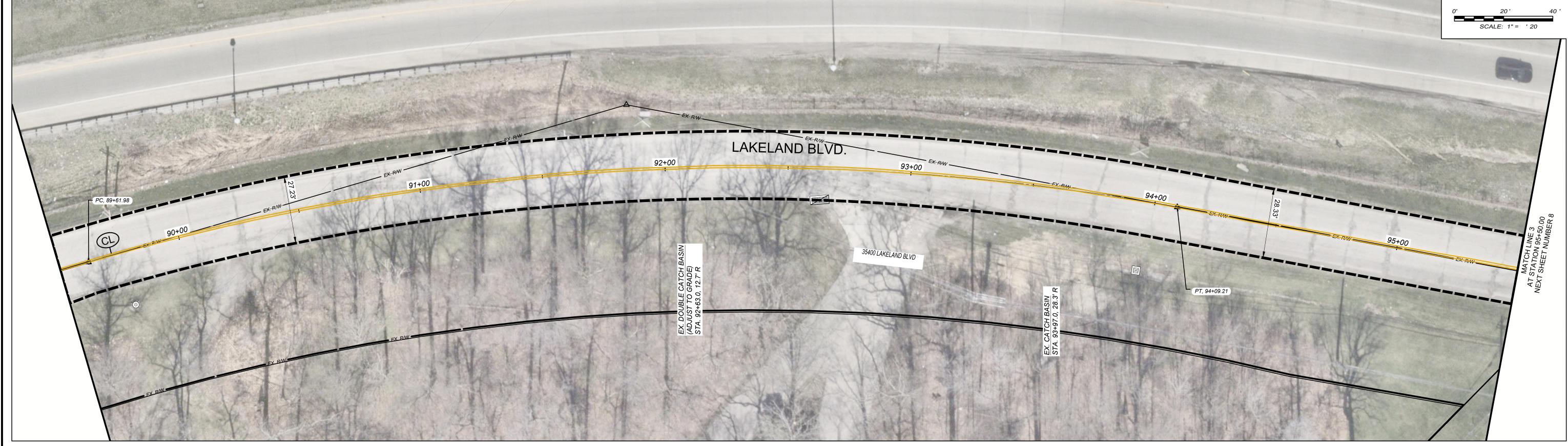
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ISSUE DATE:	7/7/2025	
SCALE:	AS SHOWN	
DESIGNED BY:	PJF	
DRAWN BY:	CKW	
CHECKED BY:	PJF	

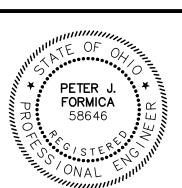
TYPICAL SECTIONS

PROJECT NO.	
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REVISION DATE

CITY OF EASTLAKE

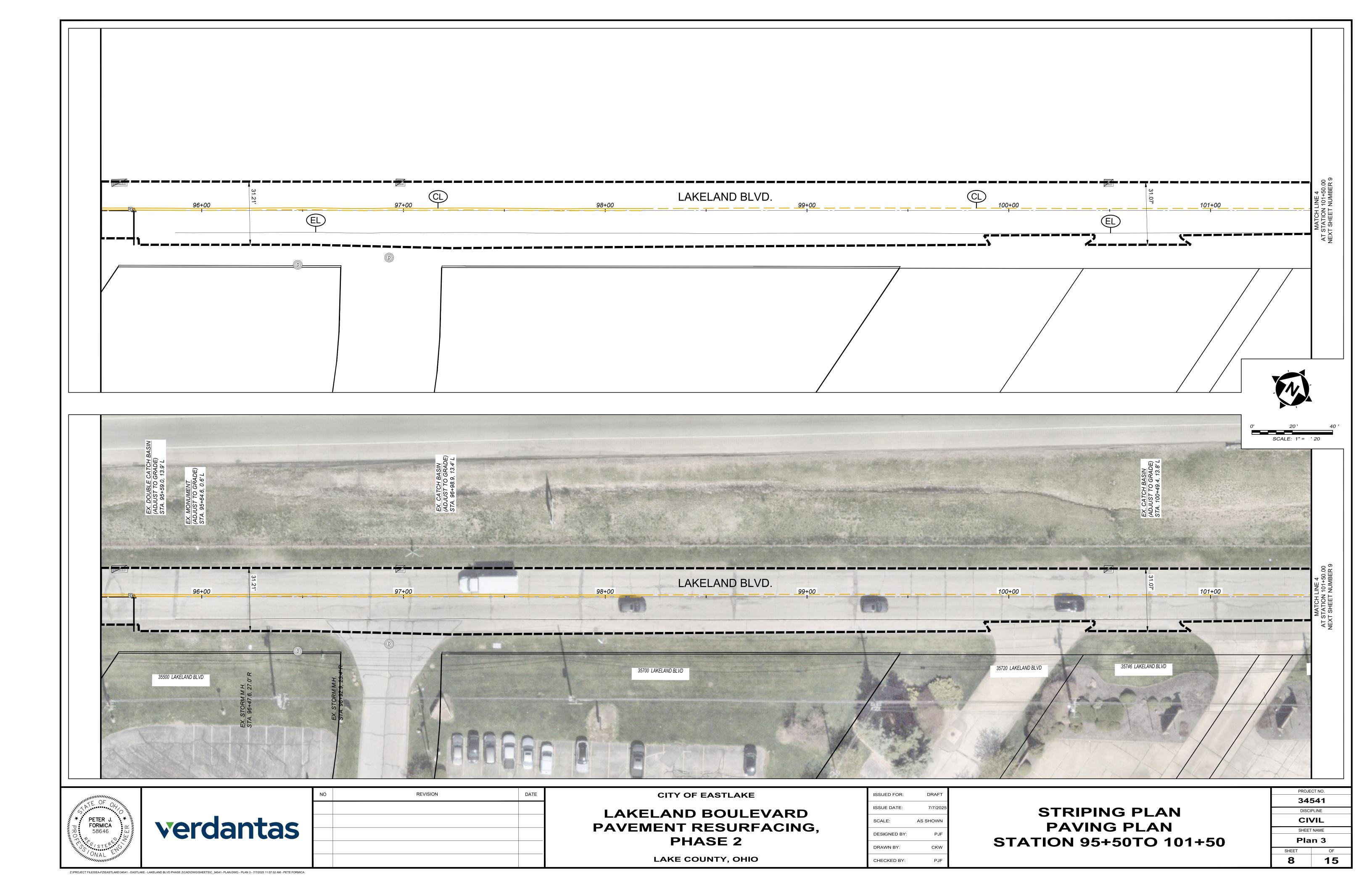
LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

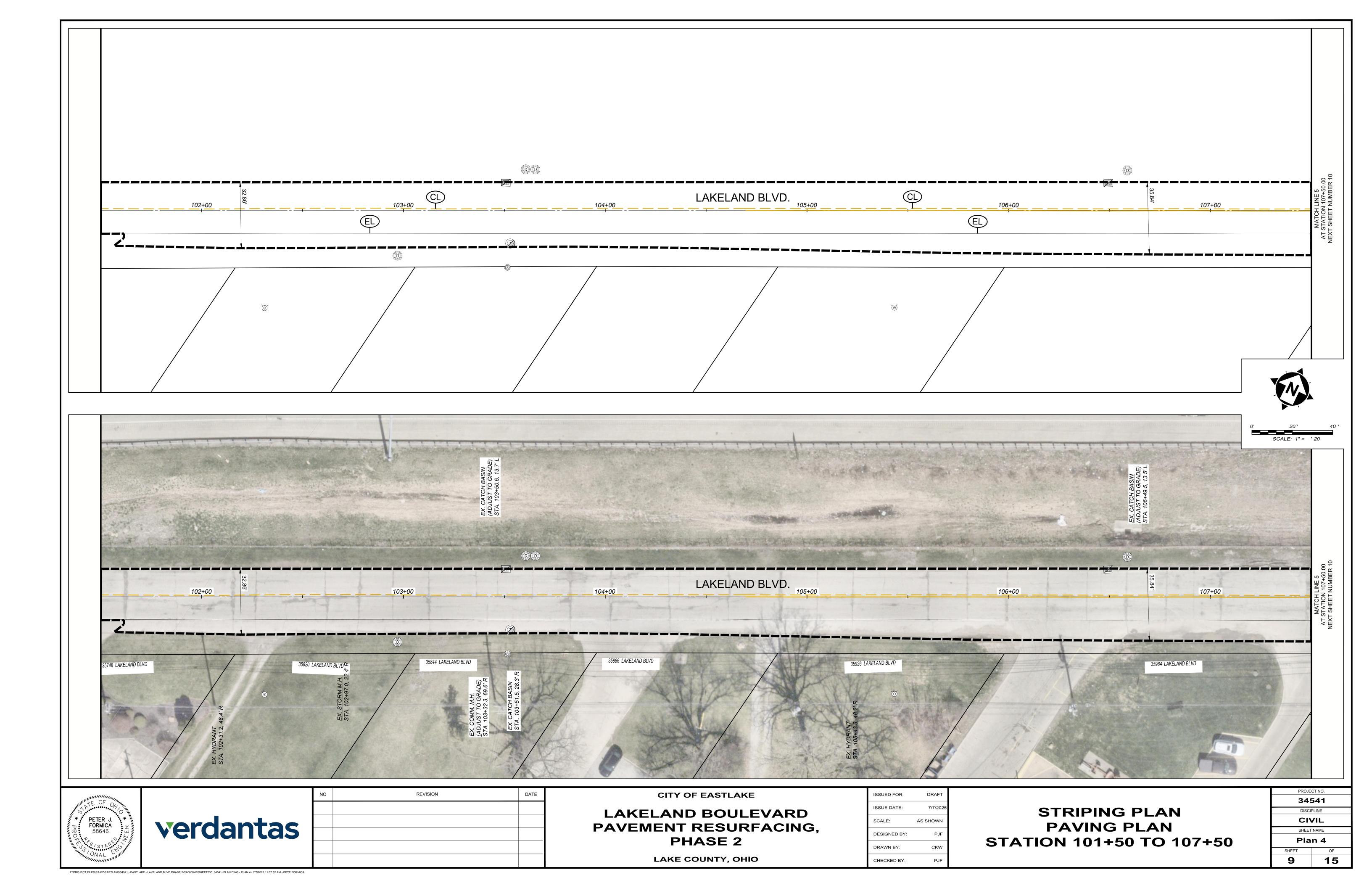
LAKE COUNTY, OHIO

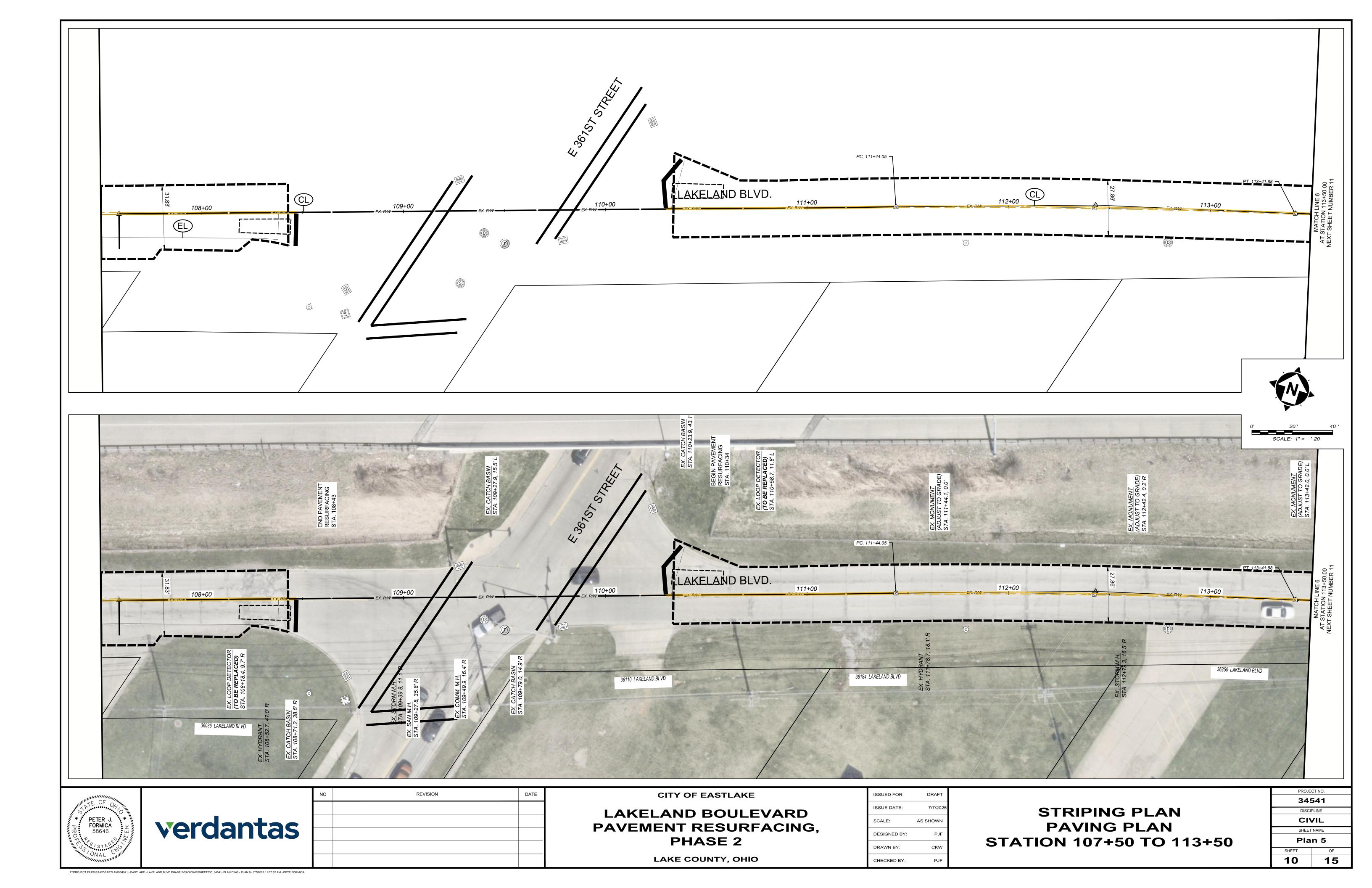
ISSUED FOR:	DRAFT	
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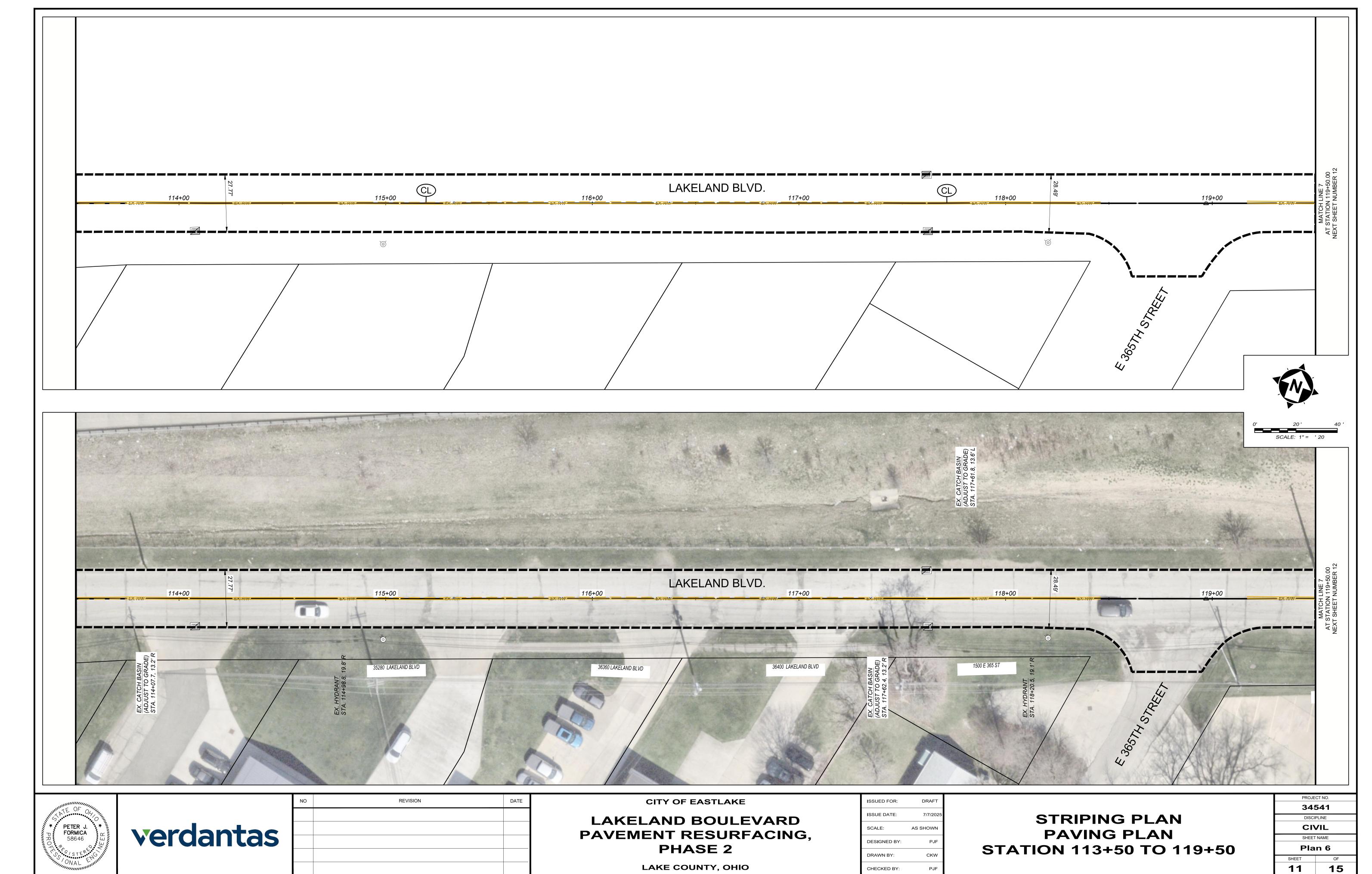
STRIPING PLAN
PAVING PLAN
STATION 89+50 TO 95+50

PROJE	CT NO.	
34541		
DISCI	PLINE	
CIVIL		
SHEET NAME		
Plan 2		
SHEET	OF	
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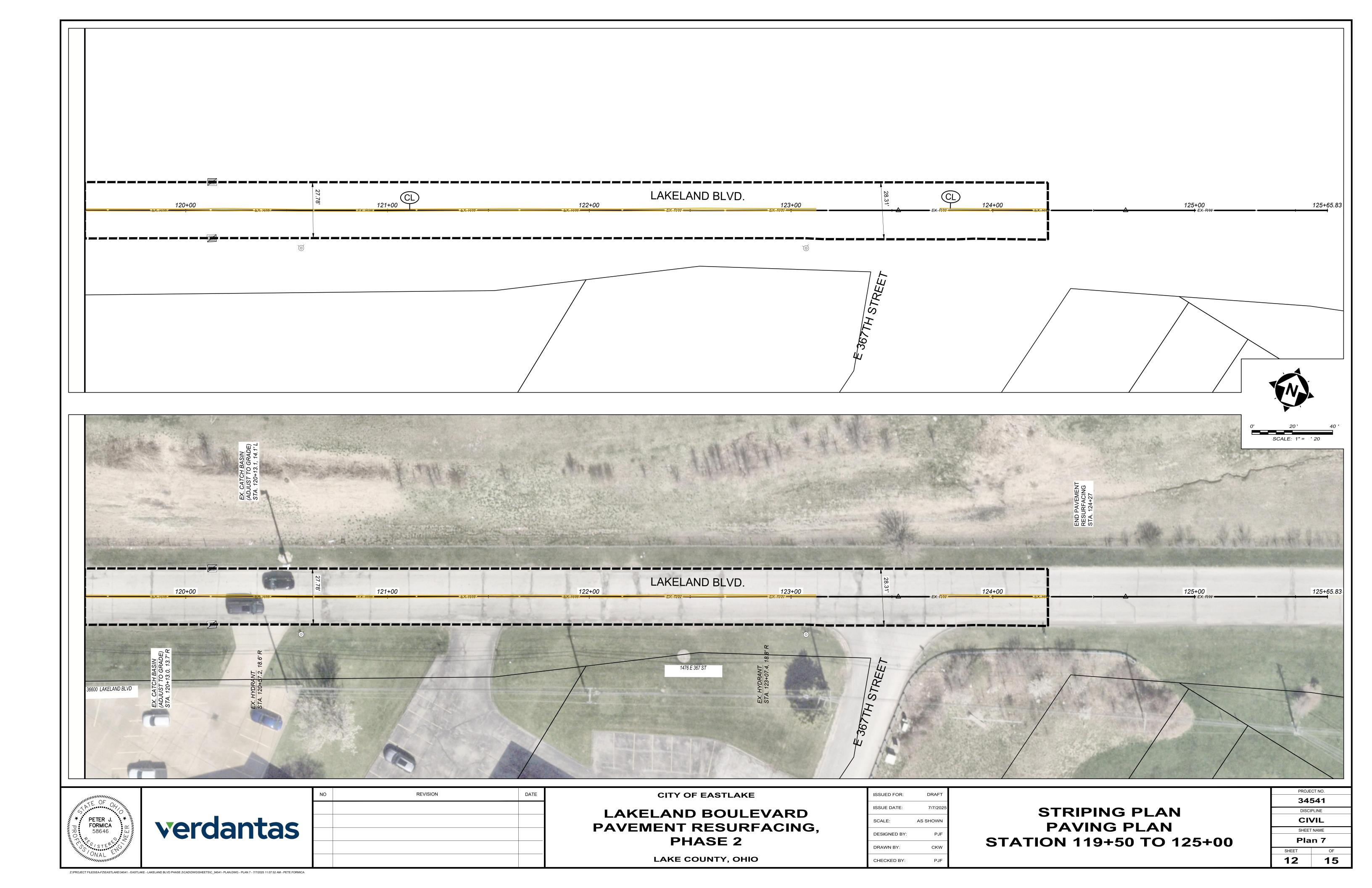


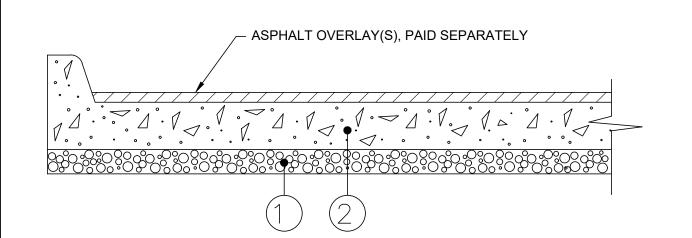






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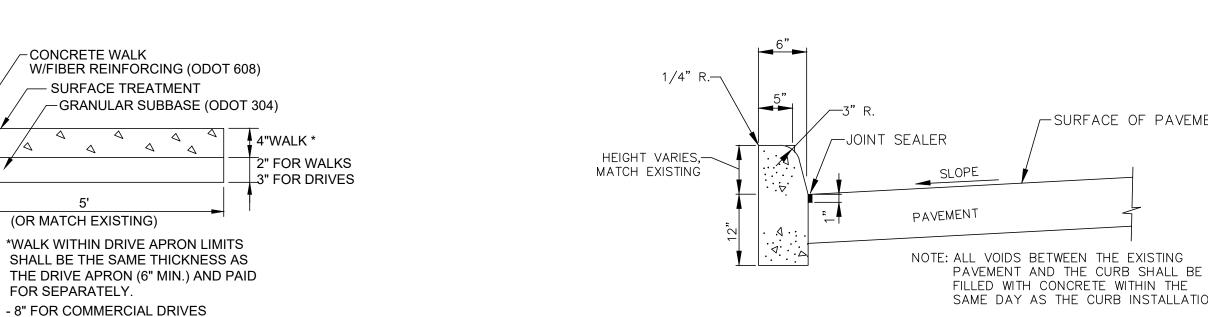


- 1 3" ODOT ITEM 304 COMPACTED LIMESTONE AGGREGATE BASE (IF EXISTING IS NOT PRESENT)
- 2 8" MIN. ODOT ITEM 255 INCLUDING INTEGRAL CURB, DOWEL/HOOK BOLT INSTALLATION.

NOTES:

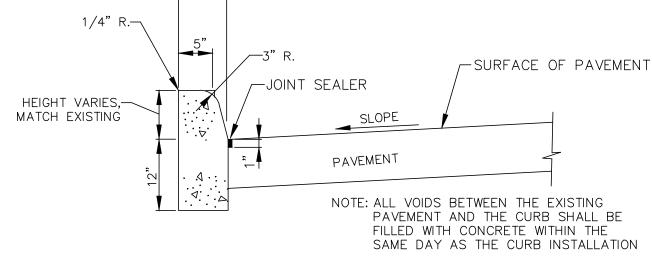
- EXCAVATION AND REMOVAL OF EXISTING PAVEMENT AND 3" OF SUBGRADE SHALL BE INCLUDED IN THE UNIT PRICE OF ITEM 255.
- PREP, INSTALLATION, AND COMPACTION OF 3" OF ODOT ITEM 304 SHALL BE INCLUDED IN THE PRICE OF ITEM 255.
- CONCRETE SHALL BE CLASS QC MS.
- FOR ALL PAVEMENT REPAIRS, ASPHALT AND/OR CONCRETE PAVEMENT SHALL BE FULL DEPTH
- ALL JOINTS SHALL BE SEALED WITH HOT APPLIED SEALER - ASTM D3405.
- HOOK BOLTS SHALL BE INSTALLED AT 18" O/C ALONG ALL LONGITUDINAL JOINTS.
- DOWELS SHALL BE INSTALLED AT 12" O/C ALONG ALL TRANSVERSE JOINTS.

JOINT/SLAB AND PAVEMENT **REPAIR / REPLACEMENT DETAIL** (ITEM 255)

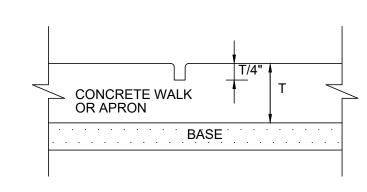


CONCRETE WALK DETAIL

- 6" FOR RESIDENTIAL DRIVES



CURB, TYPE 6 (VERTICAL CURB)



---NEENAH R-1968 TYPE 36-B OR EQUAL.

MONUMENT BOX SET PRIOR TO LAYING OF PAVEMENT SURFACE.

→ BASE COURSE

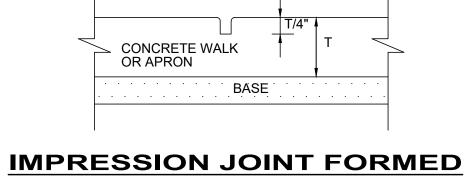
-ASPHALT SURFACE

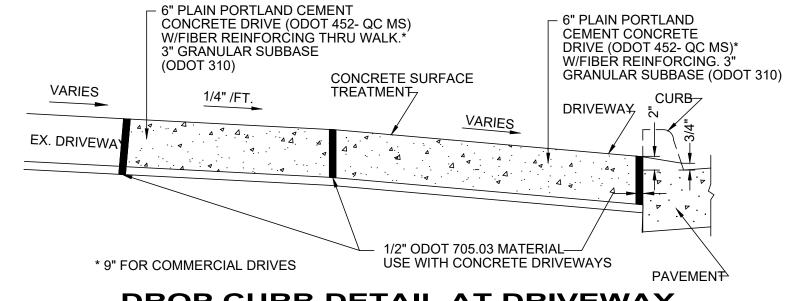
— 5/8"ø 30" LONG STEEL ROD

MONUMENT ASSEMBLY DETAIL

(FLEXIBLE PAVEMENT)

COURSE

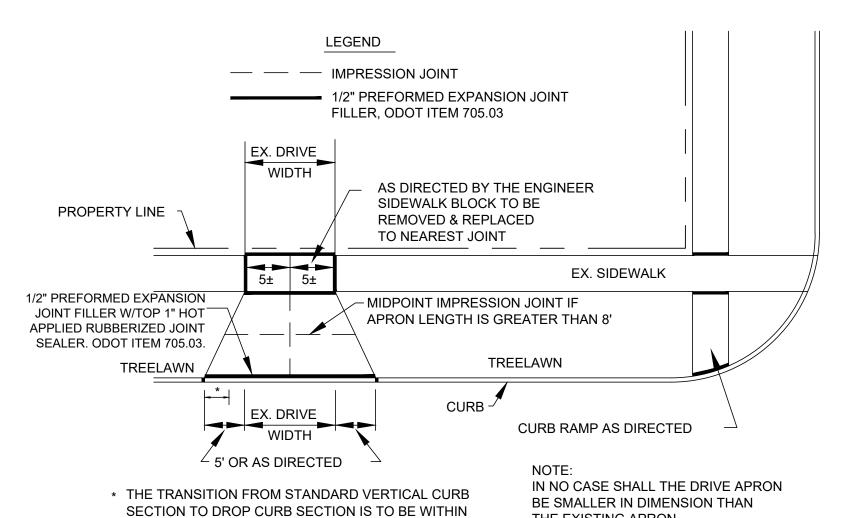




DROP CURB DETAIL AT DRIVEWAY

NOT TO SCALE

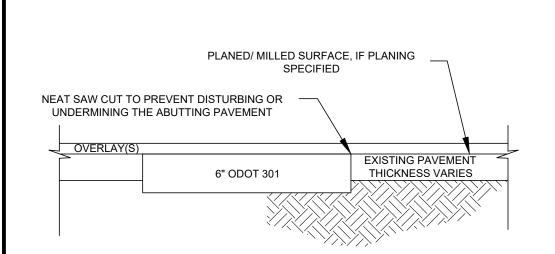
NOTE: WIRE MESH REINFORCING SHALL BE FURNISHED & INSTALLED IN-KIND IF FOUND IN THE EXISTING APRON.



DRIVEWAY APPROACH DETAIL NOT TO SCALE

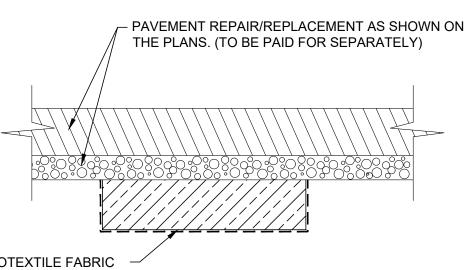
12" OF DRIVEWAY.

THE EXISTING APRON.



PAVEMENT REPAIR DETAIL (ITEM 253)

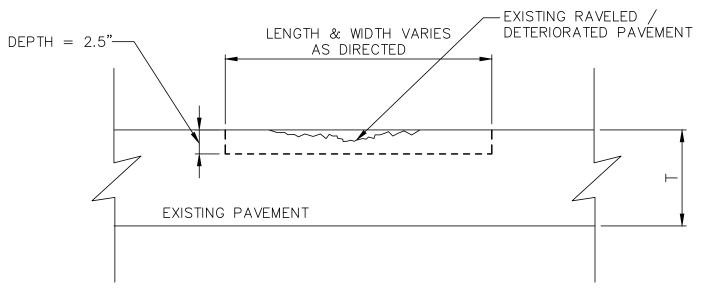
NOTE: ITEM SHALL BE USED AS DIRECTED



COMPACTED ODOT 304 STONE AND GEOTEXTILE FABRIC PER ODOT 712.09, TYPE D. DEPTH OF UNDERCUT AND AREA SHALL BE AS DIRECTED BY THE ENGINEER IN ORDER TO REPLACE UNSTABLE MATERIAL

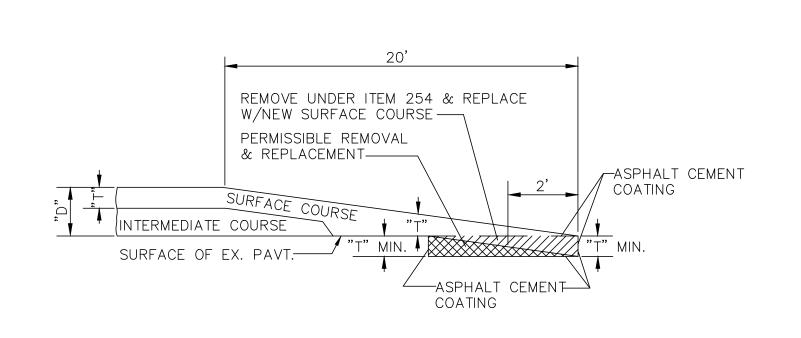
ADDITIONAL SUBGRADE REPLACEMENT DETAIL (ITEM 204)

NOTE: ITEM SHALL BE USED AS DIRECTED



ALL LOOSE AND DETERIORATED MATERIAL SHALL BE MILLED OUT UNTIL STABLE PAVEMENT IS FOUND. THE RESULTING EDGE SHALL BE REASONABLY VERTICAL AND SQUARE TO THE BOTTOM AND SHALL BE TACK COATED PRIOR TO THE PLACEMENT AND COMPACTION OF ODOT ASPHALT CONCRETE SURFACE COURSE, TYPE I, (448), PG64-22

PARTIAL DEPTH PAVEMENT REPAIR (ITEM 251)



BUTT JOINT DETAIL



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REVISION DATE **CITY OF EASTLAKE**

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

LAKE COUNTY, OHIO

ISSUED FOR:	DRAFT
ISSUE DATE:	7/7/2025
SCALE:	AS SHOWN
DESIGNED BY:	PJF
DRAWN BY:	CKW
CHECKED BY:	PJF

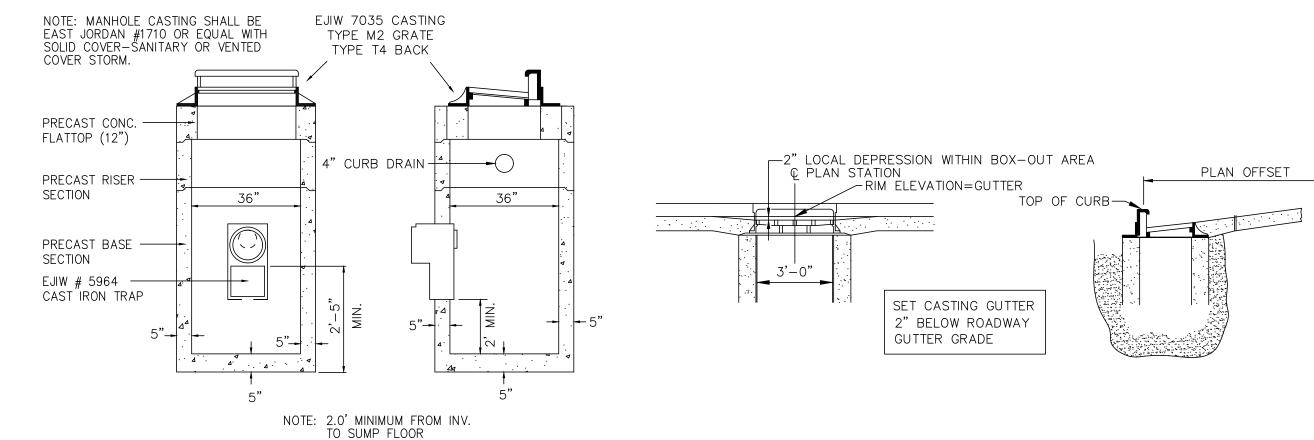
DETAILS - 1

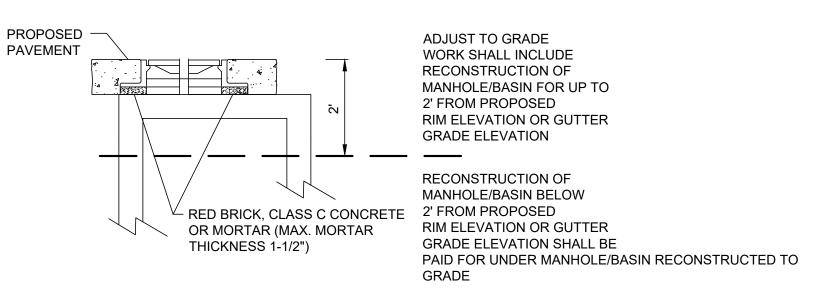
PROJECT NO. 34541 DISCIPLINE CIVIL SHEET NAME **DETAILS - 1** SHEET

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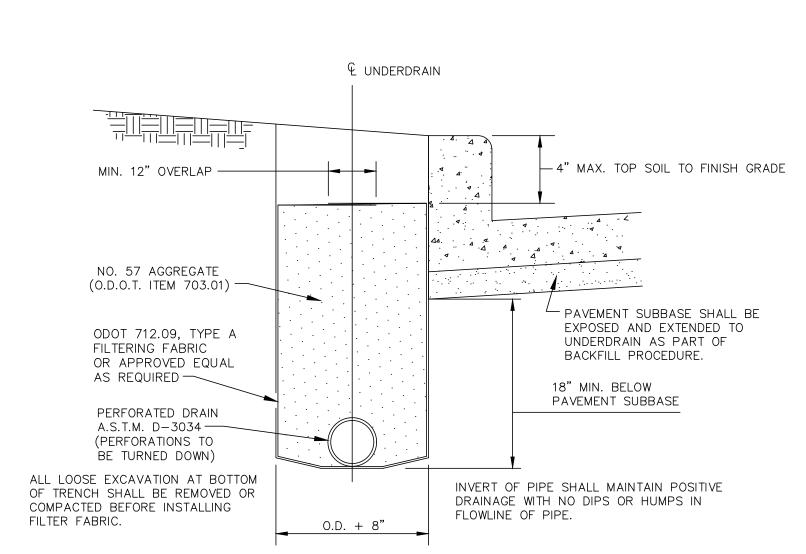
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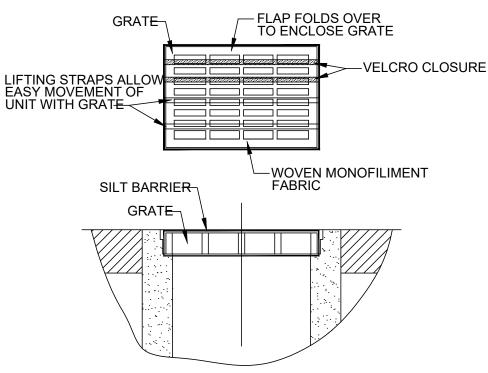


M.H./I.B. ADJUSTED TO GRADE



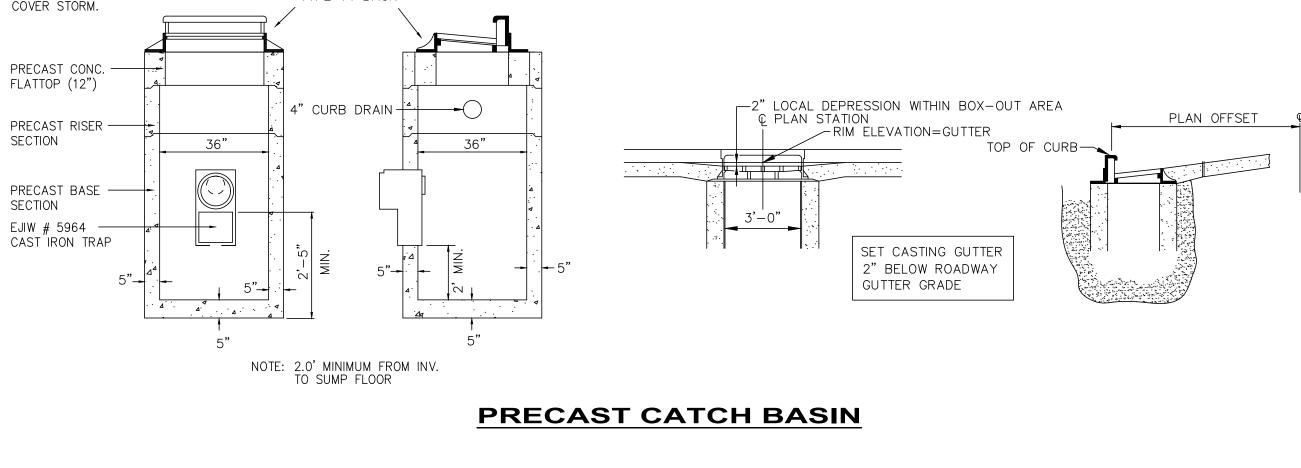
UNDERDRAIN DETAIL

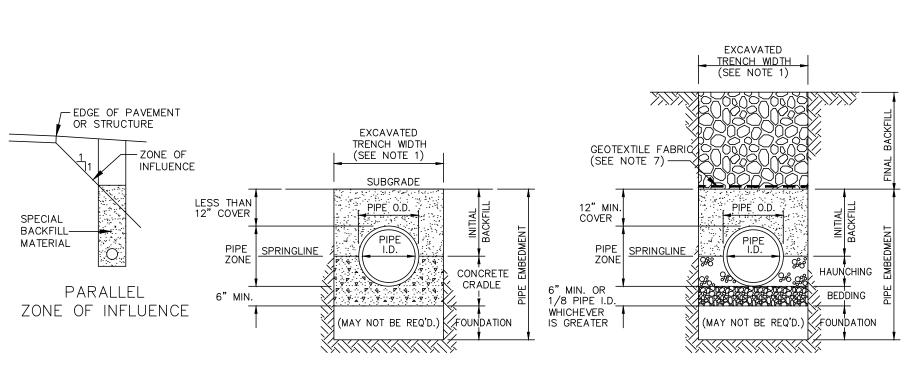
NOTE: ITEM SHALL BE USED AS DIRECTED



- 1. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT.
- 2. MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE SILT BARRIER AS NEEDED.
- 3. TO INSTALL CATCH BASIN INLET SILT BARRIER: THE EMPTY SILT BARRIER SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO

INLET PROTECTION FOR CATCH BASIN IN ROADWAY





AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

EXCAVATED PIPE SPRINGLINE HAUNCHING (MAY NOT BE REQUIRED) BEDDING SHAPE TRENCH BOTTOM FOR PROJECTING PIPE BELLS TO ALLOW PIPE BARREL TO BE EVENLY SUPPORTED BY THE TRENCH BOTTOM CLASS 'C' PIPE EMBEDMENT

DATE

NOTE: ITEM SHALL BE USED AS DIRECTED

CLASS 'A' PIPE EMBEDMENT CLASS 'B' PIPE EMBEDMENT

NOTES: 1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT)

SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.

2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH

MATERIAL AS DIRECTED BY THE ENGINEER. 3. PIPE EMBEDMENT:

CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS "C". THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 STONE GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE

CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE. WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

4. FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SPECIAL BACKFILL MATERIAL. IN ALL AREAS

OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER. 5. SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 02204CT.

6. CLAY TRENCH DAMS: CLAY TRENCH DAMS SHALL BE REQUIRED AS SHOWN ON PLANS OR WHEN AND WHERE NECESSARY AS DIRECTED BY THE ENGINEER.

7. GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE A, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 GRANULAR

8. DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 12" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE

TRENCHING, EMBEDMENT AND BACKFILL DETAIL

SD-1-1 6/04 NOT TO SCALE (FOR STORM SEWER INSTALLATION)

PETER J FORMICA 58646

- EDGE OF PAVEMENT OR STRUCTURE

TRANSVERSE

ZONE OF INFLUENCE

:-BACKFILL ::

...MATERIAL 📆

ZONE OF

INFLUENCE

REVISION NO verdantas

CITY OF EASTLAKE LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

LAKE COUNTY, OHIO

ISSUED FOR: DRAFT ISSUE DATE: 7/7/202 AS SHOWN SCALE: DESIGNED BY PJF DRAWN BY: CHECKED BY:

DETAILS - 2

PROJECT NO. 34541 DISCIPLINE CIVIL SHEET NAME **DETAILS - 2** SHEET

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RESTORATION/SEDIMENTATION AND EROSION CONTROL

- 1. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND OTHER AREAS AS SHOWN ON PLANS SHALL BE PROPERLY RESTORED WITH 4" OF TOPSOIL, SEEDING AND MULCHING PER THE SPECIFICATIONS.
- 2. IN ALL DISTURBED AREAS THE CONTOURS WILL BE RESTORED IN A MANNER THAT MAINTAINS EXISTING DRAINAGE PATTERNS. FOLLOWED BY SEEDING AND MULCHING. IF, DUE TO WEATHER, FINAL GRADING CANNOT BE ACCOMPLISHED IMMEDIATELY, TEMPORARY SEEDING & MULCHING, WITHIN SEVEN DAYS, WILL BE USED UNTIL FINAL RESTORATION CAN OCCUR.
- 3. SILT FENCING SHALL BE EXTRA STRENGTH SYNTHETIC FILTER FABRIC HAVING A MINIMUM FLOW RATE OF 0.3 GA/SQ.FT/MINUTE AND SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF O'F. TO 120°F. SEE STANDARD DETAIL.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN ONE-HALF (1/2") INCH TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY. THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND ANY REPAIRS THAT ARE DONE TO MAINTAIN EFFICIENCY.
- 5. CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS, DRIVES OR WALKS BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.

NOTES:

- 1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- 2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- 3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
- 4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
- 5. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 6. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- 7. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH-DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
- 8. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
- 9. MAINTENANCE SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
 - 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED,
 - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED. OR 3) OTHER PRACTICES SHALL BE INSTALLED.

10. SILT FENCE MATERIALS

- A. FENCE POSTS THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2 X 2 INCH HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET.
- B. SILT FENCE FABRIC (SEE CHART BELOW):

		SILT F	ENCE
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26	
EQUIVALENT OPENING SIZE	40-80 L	S STD. SIEVE CW-0221	Б
SLURRY FLOW RATE C	.3 GAL./MIN./F2 MAXIMU	М	
MULLEN BURST STRENGTH	190 PSI MINIMUM	ASTM D 3786	
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682	
FABRIC PROPERTIES	VALUES	TEST METHOD	

EROSION AND DUST CONTROL

—EXTRA STRENGTH

- WOOD SUPPORT

BY ENGINEER

POST OR FENCE POST AS APPROVED

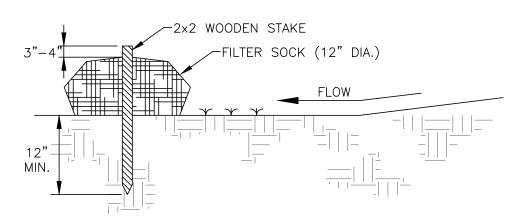
EXIST GROUND OR

PROP GRADE

FILTER FABRIC

OVERLAP

- 1. SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY HYDRO SEEDING AND MULCHING IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH ODOT ITEM 659 OR AS DIRECTED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL BEGIN THE RESTORATION PROCESS AS SOON AS CONSTRUCTION IS COMPLETED PERMANENTLY STABILIZING EACH DISTURBED AREA WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL REMOVE DAILY ALL MUD. SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS OR DRIVES BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS
- 4. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOOD PLAIN OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- 5. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED.
- 6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY WHEN NEEDED OR ORDERED BY THE OWNER WATER OR CALCIUM CHLORIDE PER ODOT 616 FOR THE ALLEVIATION OR PREVENTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL. THE COST OF DUST CONTROL SHALL BE INCLUDED IN THE UNIT BID PRICES FOR ALL ITEMS OF THE PROPOSAL.
- 7. OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER ENTERING ACTIVE STORM DRAIN SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT POND. INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED.



MATERIALS:

COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".

- 1. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES; GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1; ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE.
- 2. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE. SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION
- 3. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.

MAINTENANCE:

- 1. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
- 2. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
- 3. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
- 4. REMOVAL FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

GEOTEXTILE OVER WIRE MESH BACKING SPECIFICATIONS FOR INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

DANDY BAG

(INLET PROTECTION ALTERNATE)

NOT TO SCALE

CLOSURE

-DANDY BAG®

STORM SEWER -

LIFT STRAPS USED

MOVEMENT AND

INSPECTION OF

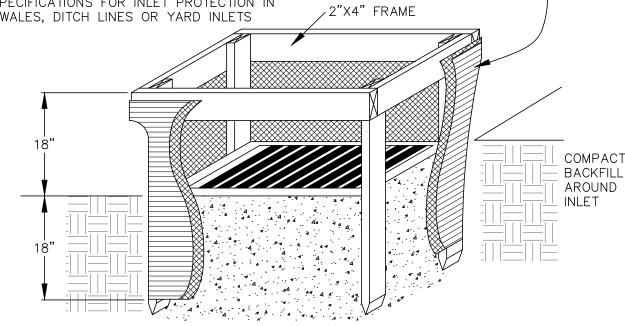
FOR EASY

UNIT

STORM SEWER-

GRATE

GRATE

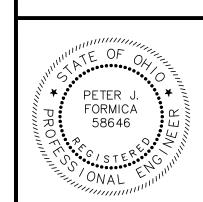


SPECIFICATIONS FOR INLET PROTECTION IN SWALES. DITCH LINES OR YARD INLETS

- 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL
- 2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
- 3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4-INCH CONSTRUCTION-GRADE LUMBER. THE 2-BY-4-INCH POSTS SHALL BE DRIVEN 1 FOOT INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-BY-4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- 4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- 5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- 6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- 7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.

FILTER SOCK (SILT FENCE ALTERNATE) NO SCALE

INLET PROTECTION NOT TO SCALE



verdantas

REVISION DATE

DETAIL

FABRIC TO OCCUR AT SUPPORT POSTS ONLY

ELEVATION

STANDARD-FILT**É**

SECTION

COMPACTED -SOIL

6'-0" MAX.

EX. GROUND OR

PROP. GRADE

SUPPORT POST (TYP.)-

CITY OF EASTLAKE

LAKELAND BOULEVARD PAVEMENT RESURFACING, PHASE 2

LAKE COUNTY, OHIO

ISSUE DATE: SCALE: DESIGNED BY DRAWN BY: CKW CHECKED BY:

ISSUED FOR:

DRAFT

EROSION & SEDIMENT CONTROL

PROJECT NO. 34541 DISCIPLINE CIVIL SHEET NAME ESC-1 SHEET 15 15