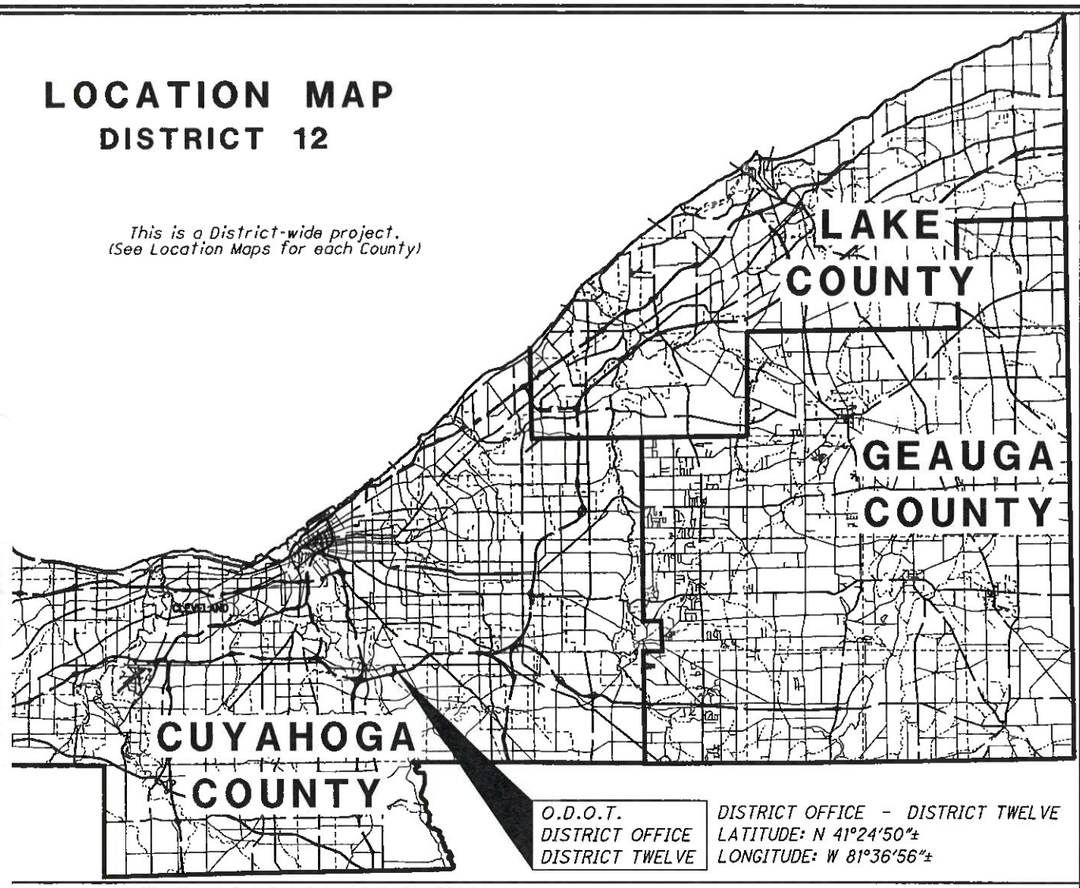
LOCATION MAP
DISTRICT 12

This is a District-wide project.
(See Location Maps for each County)



O.D.O.T.
DISTRICT OFFICE
DISTRICT TWELVE

DISTRICT OFFICE - DISTRICT TWELVE
LATITUDE: N 41°24'50"±
LONGITUDE: W 81°36'56"±

OR PLAN LOCATIONS 1,2,3,4,5,6,7 & 8 INFORMATION,
EE SHEETS 2 & 3 OF THE PLANS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
D12-PPM-FY2020
Cuyahoga County / Geauga County / Lake County

FEDERAL PROJECT NO. **NON-FEDERAL**

PID NO. **103289**

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT **NONE**

D12-PPM-FY2020

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PROJECT DESCRIPTION

DISTRICT PAVEMENT PREVENTIVE MAINTENANCE CONTRACT FOR SFY 2020.
WORK LOCATIONS 1 - 8
(See Sheet 4 for Work Locations Descriptions)

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

2019 SPECIFICATIONS

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

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

APPROVED _____
DATE 12/4/19 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 12/20/19 DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org
Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 12
PLANNING & ENGINEERING

ENGINEERS SEAL:

STATE OF OHIO
ERIC M. KALLIO
E-59990
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Eric M. Kallio
Eric M. Kallio
DATE: 12/17/19

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	7/17/15	MGS-1.1	1/19/18	MT-95.30	7/19/19	MT-101.90	7/21/17	TC-41.20	10/18/13	800-2020	01-17-20
BP-2.2	7/18/08	MGS-2.1	1/19/18	MT-95.31	7/19/19	MT-102.20	4/19/19	TC-52.20	7/20/18		
BP-3.1	10/18/19			MT-95.40	1/20/17	MT-105.10	7/19/13	TC-61.30	7/19/19	821	04-20-12
BP-9.1	1/18/19			MT-95.41	7/21/17			TC-65.10	1/17/14	832	10-19-18
				MT-95.45	4/19/19			TC-65.11	7/21/17	875	01-18-19
		HL-30.11	7/19/19	MT-95.50	7/21/17					897	01-16-15
		HL-30.22	1/17/14	MT-97.10	4/19/19					921	04-20-12
				MT-97.11	1/20/17						
				MT-97.12	1/20/17						
				MT-98.10	1/20/17						
				MT-98.11	4/19/19						
				MT-98.20	4/19/19						
				MT-98.22	1/20/17						
				MT-99.20	4/19/19						
				MT-101.70	7/20/18						
				MT-101.75	7/15/16						

SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

D12 - PPM FY2020
200190 PID - 103289
Dist 12 3/26/2020

Contract Proposal Available @
www.contracts.dot.state.oh.us/home

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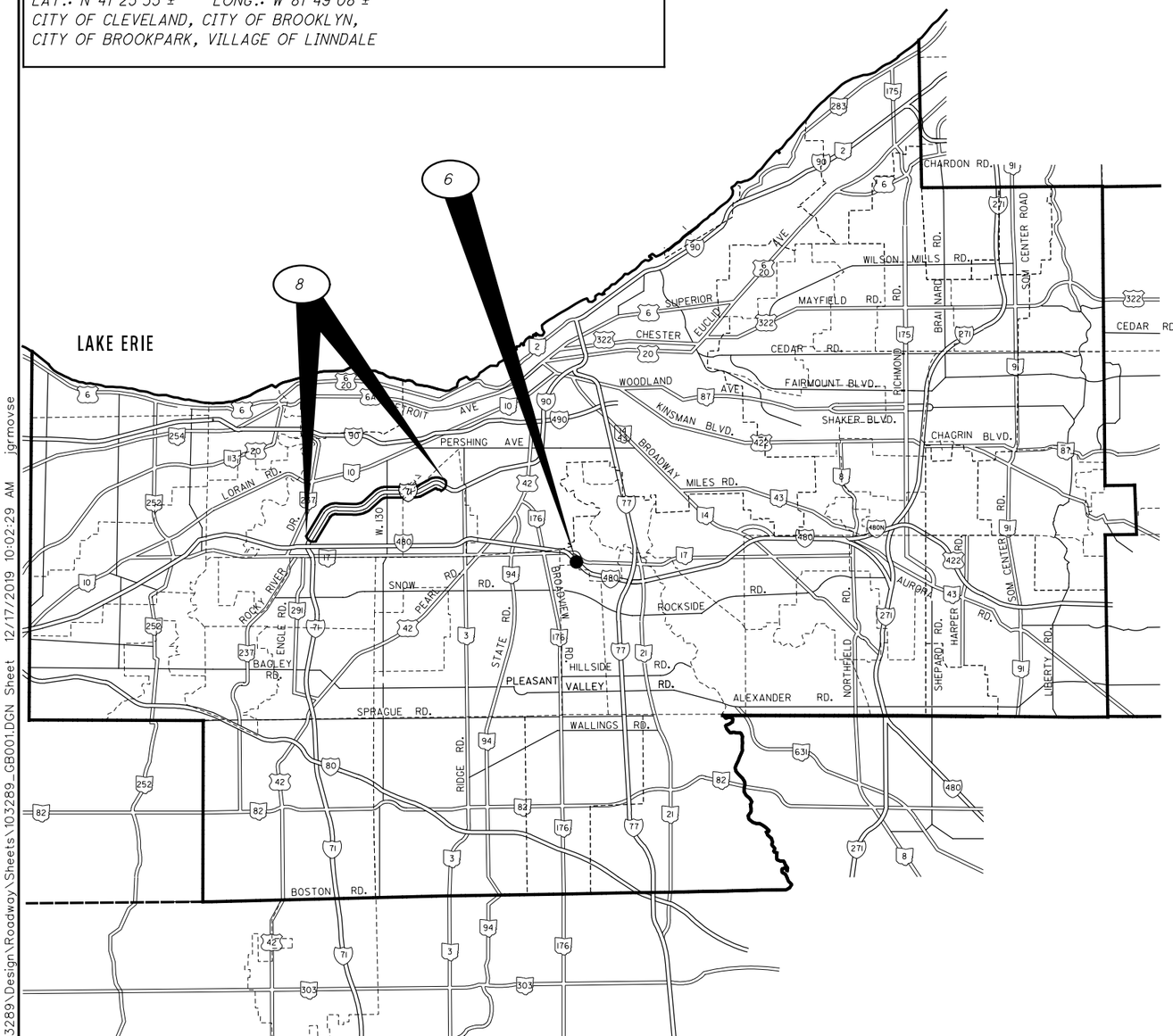
WORK LOCATION 6 - CUYAHOGA COUNTY
I.R.- 480 (CONSTRUCTION OF CROSS OVER - SLM 16.54)

LAT.: N 41°24'47"± LONG.: W 81°40'20"±
CITY OF BROOKLYN HEIGHTS

WORK LOCATION 8 - CUYAHOGA COUNTY
I.R.- 71 (3' LEFT SHOULDER PAVEMENT REPAIR - SLM 10.52 to SLM 14.87)

LAT.: N 41°25'35"± LONG.: W 81°49'08"±
CITY OF CLEVELAND, CITY OF BROOKLYN,
CITY OF BROOKPARK, VILLAGE OF LINNDALE



CUYAHOGA COUNTY

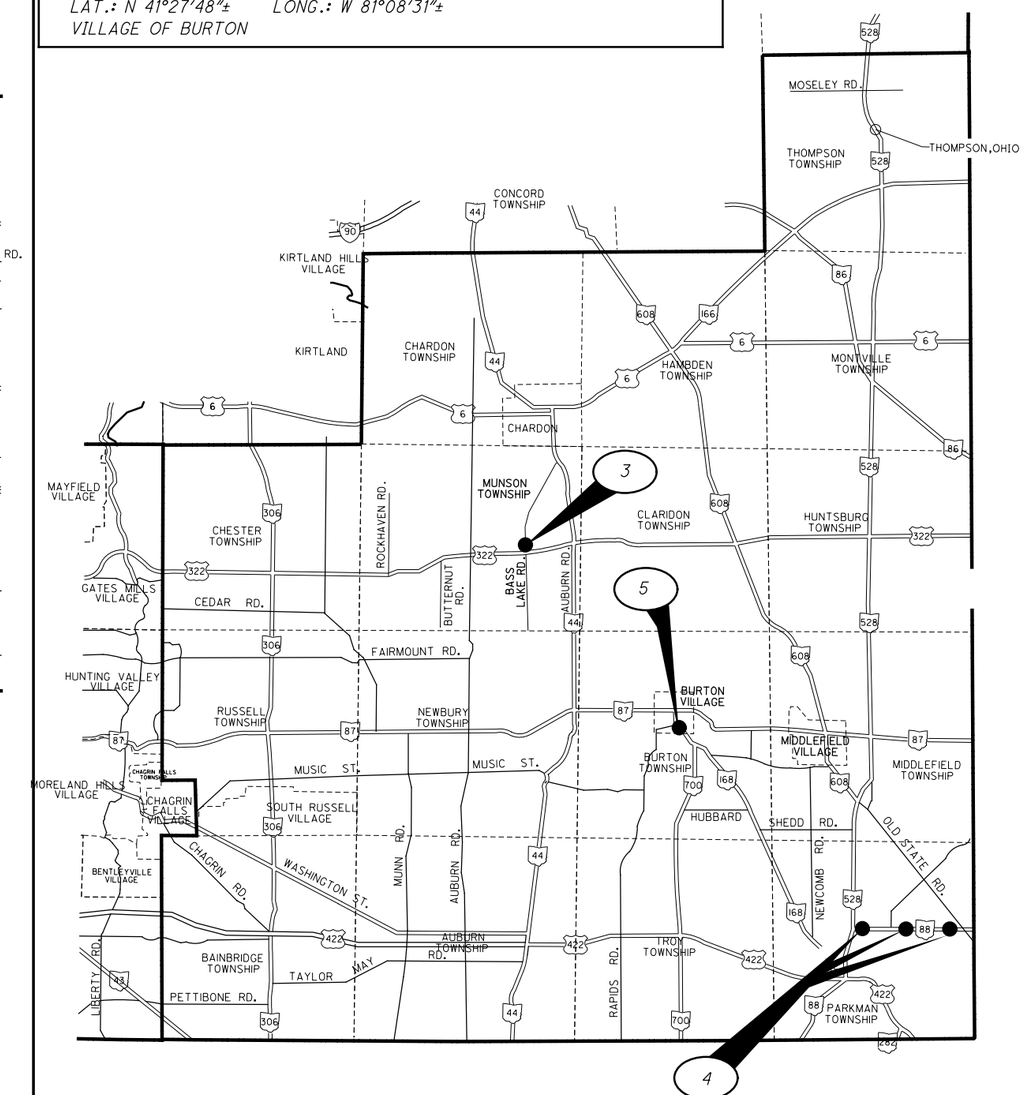
WORK LOCATION 3 - GEAUGA COUNTY
O.D.O.T. - MUNSON MAINTENANCE YARD
LAT.: N 41°31'54"± LONG.: W 81°12'59"±
MUNSON TOWNSHIP

WORK LOCATION 4 - GEAUGA COUNTY
S.R.-88 (SPOT RESURFACING - SLM 3.36 to SLM 3.81)
S.R.-88 (SHOULDER REPAIRS - SLM 4.79)
S.R.-88 (SHOULDER REPAIRS - SLM 5.95)

LAT.: N 41°23'20"± LONG.: W 81°12'59"±
PARKMAN TOWNSHIP

WORK LOCATION 5 - GEAUGA COUNTY
S.R.-168 (SPOT RESURFACING - SLM 7.90 to SLM 8.45)

LAT.: N 41°27'48"± LONG.: W 81°08'31"±
VILLAGE OF BURTON



GEAUGA COUNTY

N

HORIZONTAL SCALE IN FEET
0 4000 8000

CALCULATED JAG
CHECKED EMK

LOCATION MAP
CUYAHOGA COUNTY / GEAUGA COUNTY

D12-PPM-FY2020

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SPECIFIC WORK LOCATION 1
LAKE COUNTY - I.R.-90 (SLM 6.99 to SLM 13.10)
LAT.: N 41°38′09″± LONG.: W 81°23′06″± - CITY OF WILLOUGHBY, CITY OF MENTOR,
VILLAGE OF KIRTLAND HILLS,
CONCORD TOWNSHIP
LAKE COUNTY - I.R.-90 (SLM 17.85 to SLM 19.9)
LAT.: N 41°41′39″± LONG.: W 81°11′59″± - CONCORD TOWNSHIP, LEROY TOWNSHIP

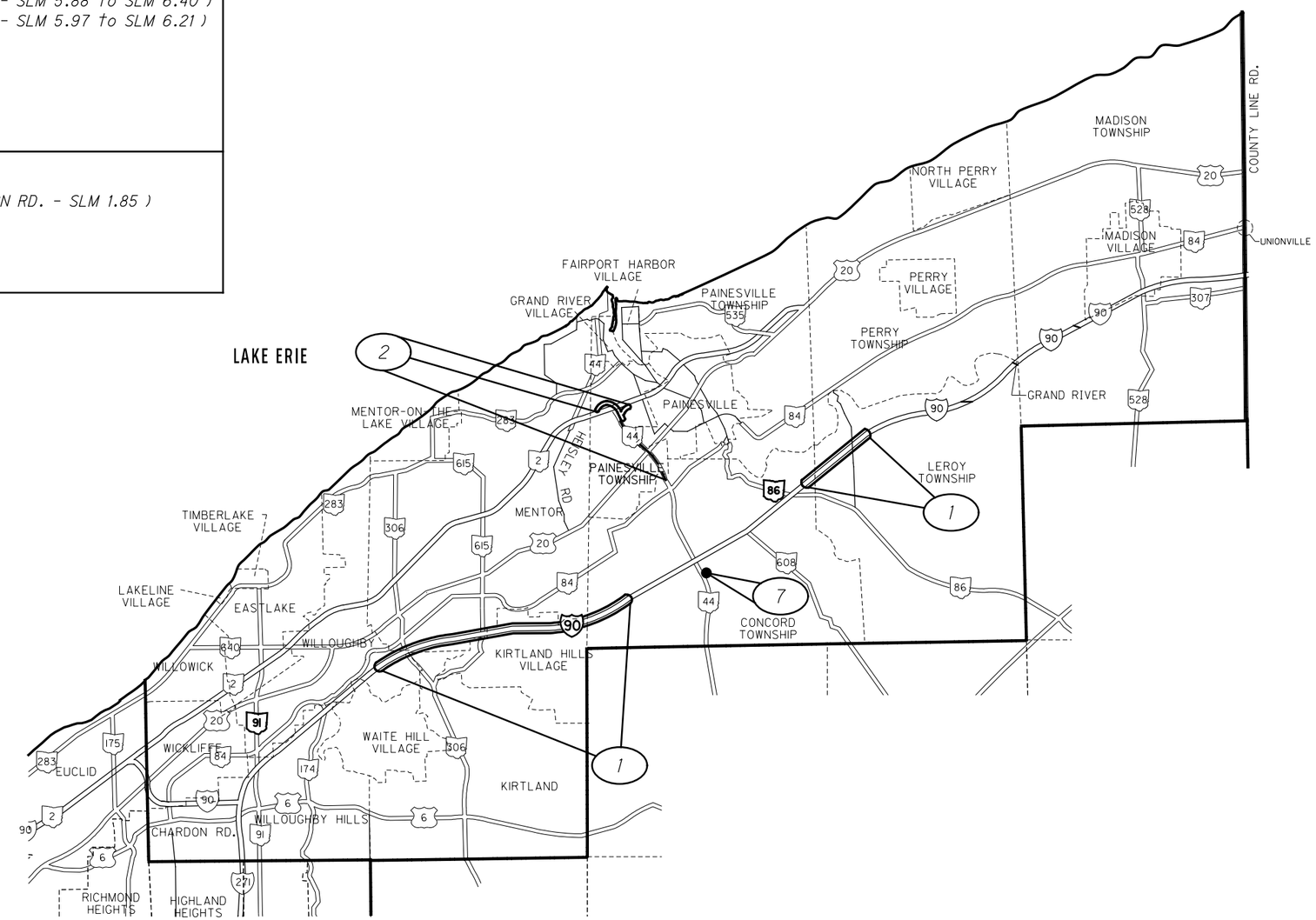
SPECIFIC WORK LOCATION 2
LAKE COUNTY - S.R.-44 (SOUTHBOUND - 2′ PAVEMENT JOINT REPAIR - SLM 4.14 to SLM 5.85)
S.R.-44 (NORTHBOUND - 2′ PAVEMENT JOINT REPAIR - SLM 4.14 to SLM 5.88)

S.R.-44 (NORTHBOUND - RAMP E - SPOT RESURFACING - SLM 5.88 to SLM 6.40)
S.R.-44 (NORTHBOUND - RAMP H - SPOT RESURFACING - SLM 5.97 to SLM 6.21)

LAT.: N 41°41′53″± LONG.: W 81°15′33″±
PAINESVILLE TOWNSHIP
CONCORD TOWNSHIP
CITY OF PAINESVILLE

SPECIFIC WORK LOCATION 7
LAKE COUNTY - S.R.-44 (SHOULDER WIDENING - NORTHBOUND AT AUBURN RD. - SLM 1.85)

LAT.: N 41°40′01″± LONG.: W 81°14′40″±
CONCORD TOWNSHIP



LAKE COUNTY

HORIZONTAL SCALE IN FEET
0 4000 8000

CALCULATED JAG
CHECKED EMK

LOCATION MAP
LAKE COUNTY

D12-PPM-FY2020

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GENERAL

Project description

This project consists of resurfacing and minor rehabilitation to locations throughout Cuyahoga, Geauga and Lake Counties in District 12.

District Pavement Preventive Maintenance contract for SFY 2019.

Work Location 1 (IR-90 – Overlay Repairs) :
Perform pavement repairs As Directed
by the Project Engineer

Work Location 2 (SR-44 – Pavement Joint Repairs / Spot Resurfacing) :
Perform pavement repairs and resurfacing As Directed
by the Project Engineer

Work Location 3 (ODOT Munson Outpost Facility Resurfacing) :
Repair Pavement / Plane Existing
Asphalt Pavement / Resurface

Work Location 4 (SR-88 – Resurfacing / Shoulder Repairs) :
Plane Existing Asphalt Pavement /
Repair Pavement / Resurface /
Install Pavement Markings
Perform Spot Shoulder Repairs

Work Location 5 (SR-168 – Resurfacing) :
Plane Existing Asphalt Pavement /
Repair Pavement / Resurface /
Install Pavement Markings

Work Location 6 (IR-480 – Construct Median Cross-Over) :
Construct Proposed Pavement As Directed By the Engineer /
Install Proposed Signs

Work Location 7 (SR-44 – Construct Paved Shoulder Widening) :
Remove Existing Guardrail
Construct Proposed Pavement, As Directed By the Engineer /
Install Proposed Guardrail, As Directed By the Engineer

Work Location 8 (IR-71 – Paved Shoulder Repairs) :
Perform Shoulder Repairs, As Directed By the Engineer /
Re-Install Pavement Markings and Rumble Strips

Right Of Way

All work shall be performed within the existing right of way or easements.

Existing Typical Sections

Existing typical sections have been taken from the records and are believed to represent the existing pavement, but the State Of Ohio does not guarantee the accuracy of the same.

For further information in regard to the existing typical sections, the contractor shall refer to the previous construction plans.

These plans may be reviewed at the following location:

Ohio Department Of Transportation
District 12 Office
5500 Transportation Boulevard
Garfield Heights, Ohio 44125

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.

Contingency quantities

The contractor shall not order materials or perform work for items designated by plan note to be used "As Directed By The Engineer " unless authorized by the Engineer . The actual work locations and quantities used for such items shall be incorporated into the final change order governing completion of this project.

Utilities

There are no underground utilities shown on this plan. The nature of the work required by this project will not affect any known underground utilities that exist under or adjacent to the work area.

Cooperation Among Contractors

The contractor shall cooperate and coordinate his/her operations with the contractors on other projects that may be in force during the life of the contract. No waiver of any provisions of 105.07 of the Construction and Material Specifications is intended.

Plan Sheet Stationing

The roadway was not surveyed prior to the preparation of these plans. Previous construction plan stationing was used to prepare plan sheets and calculate estimated pavement area quantities and pavement marking quantities.

Staging Areas

There are no specific areas given in the plans for the contractor to use as a staging area(s). If the contractor wants to use an area(s) for staging, regardless if it falls within the project limits or not, the contractor is to contact District 12 Permits Section at 216-584-2195 at District 12 in order to apply for a permit per Section 107.02 of the CMS.

If a permit is granted, all conditions of the permit shall be met in addition to the requirements of 104.04 of the CMS, at no additional cost to the state. If the project Engineer deems that all the conditions of the permit were not met, then 10% of the contract bid amount for mobilization shall be withheld until all the conditions of the permit are satisfied.

Equipment And Material Storage

In order to provide for the safety of the traveling public the contractor's attention is directed to 614.03. In addition the following provisions shall apply:

1. Any removed items shall not be stored on the right of way for more than thirty (30) days.
2. The storage of equipment, materials, and vehicles within the highway right of way will be permitted. The number of areas and exact locations shall be approved by the Engineer .
3. All disturbed areas shall be returned to their original condition at no expense to the state.

ROADWAY AND EROSION CONTROL

Item 209 – Linear Grading, As Per Plan

This item of work shall consist of grading along the outside edge of the paved shoulder, to back up a safety edge, eliminate high spots, fill in low areas and provide positive sheet flow off the pavement and shoulder into roadside ditches or drainage structures. This item is not intended to be used to excavate a uniform depth to place Item 617 – Compacted Aggregate, As Per Plan.

Any excess debris collected shall be removed and disposed of as specified in section 105.16 & 105.17 of the CMS.

A contingency quantity of Item 617 – Compacted Aggregate, As Per Plan, has been provided to be used As Directed By The Engineer to fill in any remaining low areas after Item 209 – Linear Grading, As Per Plan, has been completed.

Payment for the above work shall be made at the unit bid price For Item 209 – Linear Grading, As Per Plan and shall include all labor, tools, equipment and materials necessary to perform this item of work.

Item 659 – Seeding, Misc.: Seeding and Mulching

This item shall be used to seed and mulch all disturbed areas adjacent to shoulders, berms, curb ramps, curb, and sidewalk, As Directed By the Engineer. Use Class 1 Lawn Mixture.

At disturbed areas, remove top 2" of soil and replace with material conforming to 659.05. Provide a single application of commercial fertilizer per the requirements of 659.04. Placement of topsoil and application of fertilizer are incidental to this item.

For estimating purposes,
At **Location 6** - an average width of (10') by an average length of (212') will be used on each side of proposed pavement)

The estimated quantities in the sub-summaries have been carried to the General Summary as a contingency for use As Directed By The Engineer.

DRAINAGE

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 appurtenances 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 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 drainage 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 duty) for the particular structure in question. All materials must meet item 611 of the CMS and shall have the prior approval of the Engineer .

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.

The contractor shall not order materials until authorized by the Engineer, and if none are needed, the item shall be non-performed.

The following estimated quantity has been carried to the General Summary for use As Directed by the Engineer:

Item Special – Miscellaneous Metal ..... **1000 lbs**

Castings Adjusted To Grade

The following estimated quantities shall be used as directed by the Engineer to adjust castings to the finished roadway elevation. The time between adjusting the castings and resurfacing shall be kept to an absolute minimum. No adjusting rings shall be permitted. When performing this work, the pavement shall be sawcut prior to removal and hook bolts shall be used where practical to connect existing pavement to new concrete.

The following quantities have been carried to the General Summary:

(Location 5 -SR 168 – 2 Each)

Item 611 - Catch Basin Adjusted To Grade, As Per Plan ..... **2 Each**

(Location 5 -SR 168 – 8 Each)

Item 611 - Manhole Adjusted To Grade, As Per Plan ..... **8 Each**

(Location 5 -SR 168 – 2 Each)

Item 623 - Monument Box Adjusted To Grade, As Per Plan ..... **2 Each**

(Location 5 -SR 168 – 2 Each)

Item 638 - Valve Box Adjusted To Grade, As Per Plan ..... **2 Each**

Castings Reconstructed To Grade

The contractor and Field Engineer shall field check all existing catch basins, manholes, or monument boxes located within the limits of the project. Any casting found that exhibits substantial deterioration and requires more work than what is specified under "castings adjusted to grade" shall be "reconstructed to grade", at locations to be determined by the Engineer . If none are needed, these items are to be non-performed.

Item 611 - Catch Basin Reconstructed To Grade ..... **1 Each**

Item 611 - Manhole Reconstructed To Grade ..... **1 Each**

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GENERAL NOTES

D12-PPM-FY2020

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PAVEMENT

Alignment And Profile

Place the proposed pavement to follow the alignment and profile of the existing pavement. Place the proposed asphalt concrete overlay as shown on the typical sections. The intent of the plans is to maintain the existing profile while smoothing out ruts and bumps.

Planed Surfaces

The duration of time between milling and placement of the first asphalt course shall be no longer than seven **(7) days** for:
(Location 5 -SR 168)

The time limit shall begin on the first day of planing, and shall continue based on calendar days, minus any bad weather days, until completion of the first asphalt concrete course. Failure to meet this time constraint shall result in the assessment of liquidated damages per CMS 108.07.

Asphalt Concrete Surface Course Sealing Requirements

In addition to the gutter sealing requirements specified on SCD BP-3.1 and in CMS 401.15, after completion of the surface course, the contractor shall use a certified 702.01 PG binder to seal the following locations:

- All castings, including but not limited to: monuments, manholes, water valves, catch basins, curb inlets.
- Butt joints and feather joints including bridge approaches.
- Forward joint for driveway asphalt and trailing joint when butting to existing asphalt drive.
- Perimeter of all pavement repairs or other asphalt inlays when pavement repairs/inlays are not overlaid with an asphalt concrete surface course.
- All cold longitudinal joints between paved shoulders and guardrail asphalt.

The width of the sealer shall be 2 to 3 inches.

Any additional costs associated with the work identified in this note shall be included in the appropriate asphalt concrete surface course item of work.

Item 617 – Compacted Aggregate, As Per Plan

This item shall be used along the shoulders. Material shall be limited to reclaimed asphalt concrete pavement.
The actual depth used will vary depending upon existing conditions.

For estimating purposes,
At **Location 4** - an average depth of one inch (1.0") at one foot width will be used per side of roadway)
At **Location 6** - an average depth of two inches (2.0") at a two foot (2.0') width will be used per side of proposed pavement)

Water, if needed, shall be applied as per 617.05 and included for payment under Item 617 – Compacted Aggregate, As Per Plan.
The estimated quantities in the sub-summaries have been carried to the General Summary as a contingency for use As Directed By The Engineer.

Item 441 – Asphalt Concrete Surface Course, Type 1, (448), As Per Plan, PG70-22M

(Location 3 - Munson Maintenance Outpost)
(Location 7 – SR 44 Shoulder Widening)

The course virgin aggregate for this item shall consist of a blend of 60%min. air cooled blast furnace slag (ACBFS) or trap rock from Ontario with limestone comprising the remaining percentage.

Use a PG70-22M binder for this item.

Item 442 – Asphalt Concrete Surface Course, 12.5 MM, Type A (448), As Per Plan, PG 70-22M

(Location 2 - S.R. 44)
(Location 6 - I.R. 480)
(Location 8 - I.R. 71)

The coarse aggregate for this item shall be limited to a blend of air cooled blast furnace slag (ACBFS) and limestone. The Contractor shall use a minimum of 50 percent ACBFS with limestone comprising the remaining percentage.

In addition to the joint sealing requirements specified in 401.17, the Contractor shall seal the perimeter of all rumble strip pavement replacement areas. The material used shall be a certified 702.01 PG binder. The width of the sealer shall be 2-3 inches.

Payment for all labor, materials and equipment required to perform the above work shall be included in the contract price for Item 442 – Asphalt Concrete Surface Course, 12.5 MM, Type A (448), As Per Plan, PG70-22M.

Item 251 – Partial Depth Pavement Repair (441), As Per Plan "A"

Use this item to repair unsound, cold-patch, or pop-out areas of longitudinal and transverse joints As Directed By The Engineer.

Perform repairs after planing at:
(Location 2 -SR 44)

Perform repairs after planing at:
(Location 5 -SR 168)

Make standard repairs at a depth of 3" and at a minimum width of 12". Center the repair over the existing joint.

Use Type 2 material for this item.

The estimated quantities in the sub-summaries have been carried to the General Summary for use As Directed By The Engineer.

Item 253 – Pavement Repair, As Per Plan "A"

This work item is for use, As Directed by the Engineer, for the purpose of pavement repair. All labor and material necessary to perform this work and Section 250 of the CMS shall be included for payment under Item 253.

(Location 3 – Munson Outpost - Perform repairs prior to planing)

Depth of pavement repair removal shall typically be **4"**. The depth of repair shall be directed by the Engineer if unsound material is encountered after the removal of the **4"**.

Use replacement materials conforming to the requirements of Item 301.

The estimated quantities in the sub-summaries have been carried to the General Summary for use As Directed By The Engineer.

Item 253 – Pavement Repair, As Per Plan "B"

This work item is for use, As Directed by the Engineer, for the purpose of pavement repair. All labor and material necessary to perform this work and Section 250 of the CMS shall be included for payment under Item 253.

(Location 2 – SR 44 – Transverse Joints) - The width of the repair shall be a minimum of **2**'.

(Location 4 – SR 88) - The width of the repair shall be **5'**.

Depth of pavement repair removal shall typically be **3"**. The depth of repair shall be Directed by the Engineer if unsound material is encountered after the removal of the **3"**.

Replacement shall be Item 441 – Asphalt Concrete Surface Course, Type 1, (448), As Per Plan, PG70-22M, (1-1/2"), **Placed in 2 lifts**.

The estimated quantities in the sub-summaries have been carried to the General Summary for use As Directed By The Engineer.

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GENERAL NOTES

D12-PPM-FY2020

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TRAFFIC CONTROL

Item Special – Misc.: Inventory Existing Pavement Markings

Prior to planing and paving operations, the contractor is responsible for conducting a field survey of the existing permanent markings excluding center line markings. This inventory shall be used for the placement of temporary markings and proposed final pavement markings. It is the intent of this plan to replace the pavement markings in the same location as the existing pavement markings. Any staking or marking required to establish control points to ensure that markings are accurately placed is the responsibility of the contractor.

The field survey shall be provided to the Engineer at least two weeks prior to the disturbance of the existing pavement markings for verification and approval. The Engineer will provide written concurrence once the inventory has been approved. The Engineer will also verify all permanent marking locations prior to the actual installation.

The contractor must lay out all center lines using the most recent copy of the no passing zone log. Copies of the no passing zone log can be obtained from the District 12 Roadway Services Department or can be found on the web at: http://www.dot.state.oh.us/districts/d12/highwaymanagement/pages/nopassingzones.aspx

Install transverse lines at the spacing indicated on SCD TC-71.10.

The following quantity has been carried to the General Summary to be used as Directed By The Engineer :

(Location 2 –SR 44), (Location 3 – Munson Outpost),
(Location 4 – SR 88), (Location 5 – SR 168), (Location 8 – IR 71)

Item Special – Misc.: Inventory Existing
Pavement Markings ..... **Lump Sum**

Item 646 – Epoxy Pavement Marking

A minimum of 48 hours prior to placement of the permanent school symbol markings on the pavement, the contractor will contact:
Attn: Keith Hamilton, District Traffic Engineer
O.D.O.T. District 12 – Roadway Services
(216) 584-2220
for the placement locations of the markings. The District 12 Traffic Engineer shall concur with the locations of the school symbol pavement markings, if encountered within the projects limits.

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MAINTENANCE OF TRAFFIC

Item 614 – Maintaining Traffic

Generally the contractor shall conduct his operations as to complete the proposed improvement with a minimum of hazard, delay and inconvenience to the motorists using the highway affected by the work done under this contract. In addition to the construction and material specifications, the following specific provisions are mandatory.

I. Notification

Since functional traffic control is a major concern on this project, it is essential that the motoring public be adequately forewarned of future lane closures and traffic constrictions. Therefore, the contractor shall submit a written schedule to the Engineer, responsible law enforcement agencies, and the ODOT Public Information Office (216-584-2007) indicating the locations and dates of the lane closures at least 3 days prior to the implementation of any such closures.

Use portable changeable message signs to alert motorists 3 days prior to the implementation of any changes such as lane closures or other restrictions.

II. Work Hours

See each Work Location specific Notes for Maintenance of Traffic and Work Hours.

III. Lane Closure, Planing And Paving Restrictions

- All closures shall be in accordance with the applicable standard construction drawing(s).
- All through traffic lanes shall be kept open at all times except during hours of construction. Maintain a minimum of two 10 foot lanes when a flagger or temporary signal is not present.
- Pedestrian traffic shall be permitted and accommodated on at least one side at all times.

Notwithstanding the above, no lane closures shall occur during the period beginning at 12:00 noon on the day preceding and continuing until noon on the following legal holidays and holiday weekends such as Memorial Day, Fourth Of July and Labor Day. Furthermore, no lane closures shall be implemented or in place during increased traffic volumes caused by special events or when the Engineer deems the climatological conditions too hazardous.

IV. Maintenance Of Traffic Systems

A. When Required

Whenever any part of the traveled surface is being worked upon or is otherwise not suitable for safe and convenient use by vehicles, traffic control devices sufficient to protect such areas to assure the safe and convenient passage of vehicular traffic shall be installed and maintained. Such traffic control devices and the manner in which they are used shall be consistent with these plans and the Ohio Manual Of Uniform Traffic Control Devices For Streets And Highways, hereinafter referred to as the OMUTCD. The traffic control device system shall constitute the minimum provisions for traffic control for each particular situation. Whenever the Engineer deems it necessary especially where a grade, curve, or merge conditions exists, he may direct that additional or alternative devices be used.

B. Conditions

During all parts of this project, flaggers, signing, barricades, flashing arrows, etc. Shall be located as indicated in the OMUTCD or as shown in the standard construction drawings. Two-way traffic shall be maintained at all times.

C. Advance Warning Signs

All advance warning signs for any condition which restricts traffic shall be erected before any such restriction is put into effect. All such signs shall be covered or removed from the view of traffic whenever they are not applicable.

D. Flashing Arrow Requirement

Whenever any part of the traveled surface is closed, the motorists shall be warned and directed by the contractor through the use of one flashing arrow for each lane closed. Additionally, the provisions set forth in the OMUTCD and the applicable standard construction drawings shall be met.

E. Flaggers And Law Enforcement Officers

At least two flaggers are required for each closure. The contractor shall furnish additional flaggers as directed by the Engineer. Law enforcement officers (LEO's) shall be required for traffic direction only under the following circumstances: (1) if signals are non-operational, or (2) if traffic must move against signal phasing.

F. Protection Of Public

Personal cars shall not be parked within the R/W.

G. Failure To Comply

If there is any failure to comply with provisions for traffic control set out in these plans and notes, or with the provisions of the OMUTCD, the highway in the vicinity of the work area shall not be considered in a condition for the safe and convenient use by the traveling public. Any failure to keep the highway, in the vicinity of the work area, in a condition for the safe and convenient use by the traveling public shall be considered a breach of this contract. Work shall be suspended until the contractor complies with the provisions of the aforementioned items.

V. Maintenance Of Traffic Materials

A. Signs

Sign dimensions and specifications, including letter sizes, shall be as provided in the OMUTCD or in design drawings provided by the Department Of Transportation. The signs shall be subject to approval of the Engineer prior to the start of the project.

B. Sign Supports

Sign supports shall be of sufficient size and mass as to support the signs at the appropriate height. Supports shall be as shown on the standard construction drawings.

C. Flashing Arrows

Whenever any part of the traveled surface is closed, the motorist shall be warned and diverted by the contractor through the use of one flashing arrow barricade for each lane closed. The contractor shall refer to supplemental specification 821 and 921 and the provisions set forth in the OMUTCD for all information regarding furnishing, maintaining, and use of flashing arrow barricades. Payment for the above shall be included in the lump sum bid for Item 614 – Maintaining Traffic.

D. Drums

Drums shall be in accordance with pertinent sections of the OMUTCD. All costs for installing, maintaining and subsequent removal of said drums shall be included in the lump sum bid price for Item 614 – Maintaining Traffic.

E. Cones

Cones, if utilized, shall be located as shown in the OMUTCD and the standard construction drawings.

F. Flashers

Flashers shall be 12 volt battery-operated models with 7 inch diameter yellow lenses illuminated by rapid intermittent flashers of short duration and shall be placed on all signs at all times as required by the OMUTCD and the standard construction drawings.

VI. Payment

Payment for providing, erecting, maintaining and removing temporary maintenance of traffic control devices shall be made under the Lump Sum price bid for:
Item 614 – Maintaining Traffic.

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MAINTENANCE OF TRAFFIC NOTES

D12-PPM-FY2020

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MAINTENANCE OF TRAFFIC (Cont'd)

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 events:

Christmas	New Years	Mother's Day
Memorial Day	Fourth Of July	Easter
Labor Day	Thanksgiving	

The period of time that the lanes are to be open depends on the day of the week on which the holiday or event falls. The following schedule shall be used to determine this period:

Day	Times all lanes must be open
Sunday	12 Noon Friday through 6:00am Monday
Monday	12 Noon Friday through 6:00am Tuesday
Tuesday	12 Noon Monday through 6:00am Wednesday
Wednesday	12 Noon Tuesday through 6:00am Thursday
Thursday	12 Noon Wednesday through 6:00am Monday
Friday	12 Noon Thursday through 6:00am Monday
Saturday	12 Noon Friday through 6:00am Monday

Should the contractor fail to meet any of these requirements, the contractor shall be assessed a disincentive in the amount of $50 for each minute the above described lane closure restrictions are violated.

Suspension Of Work

If the contractor fails to comply with the provisions for traffic control as set forth in these plans or with provisions of the OMUTCD, the Engineer shall suspend work until the contractor complies with the necessary requirements.

Maintenance Of Traffic Control Zones

The contractor shall be responsible to maintain the signs, drums and temporary pavement markings at the locations detailed in the plans or specified in the standard drawings. When the contractor is notified of deficiencies, he shall correct the deficiencies as soon as possible, preferably within 12 hours and no later than 24 hours.

Construction Traffic

All construction traffic shall use acceptable truck routes to access the construction area. Use of local residential streets is strictly prohibited unless allowed in writing by the local enforcement authority.

Contractor's Equipment – Operation And Storage

Vehicles and equipment shall always move with, and not across or against the flow of traffic. Vehicles and other equipment shall not park or stop except within designated work areas; and shall not enter and leave work areas in a manner which will be hazardous to, or interfere with the normal traffic flow. Personal vehicles will not be permitted to park within the Right-Of-Way except in specific areas designated by the Engineer.

Equipment, vehicles and materials shall not be stored or parked within 30 feet of the traveled way unless 6 feet behind PCB or guardrail.

All work vehicles and equipment that enters the work zone more than once a day must be equipped with at least one flashing, rotating, or oscillating amber light that is visible in all directions of traffic for at least one quarter of a mile, day or night.

Work Zone Markings

The estimated quantities have been carried to the General Summary for use at locations identified by the Engineer for work zone pavement markings per the requirements of CMS 614.04 and 614.11. Place temporary markings at the same locations as the proposed permanent markings.

The estimated quantities in the sub-summaries have been carried to the General Summary for use As Directed By The Engineer.

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MAINTENANCE OF TRAFFIC (Cont'd)

Maintaining Traffic And Sequence Of Operations – Asphalt Concrete

All asphalt concrete operations shall be conducted in a manner that will assure minimum danger and inconvenience to highway users. The procedure for the removal or placement of any existing or proposed asphalt course shall be such that no greater than 1-1/2" discontinuity in the elevation of the travelled surface shall be exposed to traffic.

Traffic shall not be permitted to cross any partial-width removal or resurfacing joint during the actual removal or paving operation except as necessary. Any partial-width longitudinal joints which must be exposed to traffic shall be ramped using Item 614 – Asphalt Concrete For Maintaining Traffic at a rate not steeper than 6:1.

Temporary transverse removal or paving joints which must be exposed to traffic shall be ramped using Item 614 – Asphalt Concrete For Maintaining Traffic at a rate not to exceed 1" in 10'.

For removal of existing overlays, a transition may be planed into the existing overlay and may be substituted for the asphalt ramps previously described, provided the transition is removed in a subsequent operation within 24 hours.

Whenever traffic is subject to partial width removals or overlays prior to full width completion, the contractor shall provide W8-11-48 "Uneven Lanes" signs (dual sign installation). Placement shall be as directed by the Engineer and included in the lump sum payment for Item 614 – Maintaining Traffic.

Whenever any part of the traveled surface is closed, the motorists shall be warned and diverted by the contractor through the use of a flashing arrow, in addition to those provisions set forth in the OMUTCD, the Traffic Engineering Manual and the applicable standard construction drawings.

Lane Closure/Reduction Required

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.

Item 614 – Asphalt Concrete For Maintaining Traffic

This item shall be used to install and remove temporary asphalt ramps at butt joints and drainage/utility castings where required. Material shall be removed prior to the placement of the next course of asphalt. The following estimated quantity has been carried to the General Summary to accomplish this item of work, As Directed By The Engineer.

Item 614 – Asphalt Concrete For Maintaining Traffic ..... **20 Cu Yd**

Covering Of Ground-Mounted Signs – General

When required by other items or incidentally to Item 614 – Maintaining Traffic, cover existing ground-mounted signs with plywood or OSB blanks (1/2" minimum thickness) covering 80% of the sign area and all of the sign legend. The use of low quality materials, such as duct tape and black plastic is not permitted.

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed By The Engineer

When additional signing is needed to maintain traffic, the contractor shall furnish the sign or signs as directed by the Engineer. These signs shall be ground mounted and meet all the specifications of the plan, proposal and current year CMS.

This item of work shall be used to provide signs that are beyond the requirements of the signage that is detailed in the standard construction drawings and the OMUTCD.

Payment for this item shall include, but not be limited to, the cost to furnish and erect the sign, including driving posts or other approved methods of sign support, maintaining the sign and removal of the sign. The following estimated quantity has been carried to the General Summary for use as directed by the Engineer:

(Location 1 – LAK IR 90 - 200 SF),
(Location 2 - S.R.-44 – 200 SF),
(Location 4 –S.R.-88 – 200 SF),
(Location 5 –S.R.-168 – 200 SF),
(Location 6 –I.R.-480 – 200 SF),
(Location 8 –I.R.-71 – 200 SF),

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed By The Engineer..... **1200 Sq Ft**

Continuous Access

The contractor shall maintain safe and adequate driveways and walkways in order to provide continuous access for pedestrians, passenger vehicles, trucks, and safety equipment to all adjoining properties.

The cost for all materials, equipment, and labor necessary to provide continuous access shall be included in the lump sum price for Item 614 – Maintaining Traffic.

Work Zone Traffic Supervisor

Subject to the approval of the Engineer, the contractor shall employ and identify, a certified worksite traffic supervisor (WTS) before starting work in the field. The WTS shall be certified from one of the following organizations:

1. American Traffic Safety Service Association (ATSSA), 1-877-642-4637, http://www.atssa.com/trainingcertification.aspx
   Certified Traffic Control Supervisor (TCS).

2. National Highway Institute, Design And Operation Of Work Zone Traffic, 1-877-558-6873.
   http://www.nhi.fhwa.dot.gov/training/course_search.aspx

3. The Ohio Contractors Association, Traffic Control Supervisor (OCA/TCS)
   Work Zone Class, only if taken after May 5, 2004, 1-800-229-1388.
   http://www.ohiocontractors.org/default.aspx

4. Ohio Laborers' Training, Traffic Control Supervisors Class, 1-800-635-7570.
   http:/www.ohiolaborerstraining.com/adv.htm

The WTS position is established for the purpose of supervising the installation of the work zone, monitoring it and correcting any deficiencies in the work zone. The WTS shall oversee all operations that affect the movement of vehicular and pedestrian traffic through the work zone.

The WTS shall be present when the contractor or subcontractor installs a traffic restriction, lane closure, etc. In lieu of the WTS being present when a subcontractor has a work zone in place, the subcontractor may use his own personnel if that person is a certified WTS. The contractor and subcontractor must present a copy of his WTS certificate to the Project Engineer.

A WTS must be present for any closure or traffic restriction that takes place on the project.

The WTS may be a part of the working crew and must be in charge of setting up the work zone. After the work zone is in place, the WTS may resume other duties not related to work zone traffic control. If the restrictions are short term, the WTS shall monitor the zone for compliance. Traffic control will be the WTS's main duty during implementation of the work zones. The WTS shall have the authority to have the deficiencies corrected as soon as possible.

The WTS shall provide the Project Engineer a sketch of the (TCP) traffic control plan every day there is to be a short term traffic restriction, lane closure etc. This TCP shall show how the work zones are to be implemented, approximate locations of the traffic control devices and what standard drawing or section from the Ohio Manual Of Uniform Traffic Control Devices was referenced.

A 24-hour phone number shall be made available to the project Engineer/supervisor in order to contact the WTS. The WTS shall have a pager and/or cell phone number provided to the Project Engineer.

Failure of the contractor to comply with any of the above shall constitute cause for the Project Engineer / supervisor to deduct $500.00 per day from money due the contractor not as a penalty but as a liquidated damage.

Payment for the WTS shall be included under the lump sum for **Item 614 – Maintaining Traffic**.

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MAINTENANCE OF TRAFFIC (Cont'd)

Item 614 – Law Enforcement Officer (With Patrol Car) For Assistance

Use of law enforcement officers (LEOs) by contractors other than the uses specified below will not be permitted at project cost. LEOs should not be used where the OMUTCD intends that flaggers be used.

In addition to the requirements of CMS 614 and the OMUTCD, a uniformed LEO with an official patrol car (car with top-mounted emergency flashing lights and complete markings of the appropriate law enforcement agency) may be provided for the following traffic control tasks as determined and pre-approved by the Engineer. Any LEO hours which are not pre-approved for the following purposes shall not be compensable:

- During the entire advance preparation and closure sequence where complete blockage of traffic is required.
- During a traffic signal installation when impacting the normal function of the signal or the flow of traffic or when traffic needs to be directed through an energized traffic signal contrary to the signal display (e.g., directing motorists through a red light).

In addition to the requirement of CMS 614 and the OMUTCD, a uniformed LEO with an official patrol car (car with top-mounted emergency flashing lights and complete markings of the appropriate law enforcement agency) should be provided for the following traffic control tasks as approved by the Engineer.

- For lane closures: during initial set-up periods, tear down periods, substantial shifts of a closure point or when new lane closure arrangements are initiated for long-term lane closures/shifts (for the first and last day of major changes in traffic control setup).

In general, LEOs should be positioned in advance of and on the same side as the lane restriction or at the point of road closure, and to manually control traffic movements through intersections in work zones.

LEOs should not forgo their traffic control responsibilities to apprehend motorists for routine traffic violations. However, if a motorist's actions are considered to be reckless, then pursuit of the motorist is appropriate.

The LEOs work at the direction of the contractor. The contractor is responsible for securing the services of the LEOs with the appropriate agencies and communicating the intentions of the plans with respect to duties of the LEOs. The Engineer shall have final control over the LEOs' duties and placement, and will resolve any issues that may arise between the two parties.

The LEO shall report in to the contractor prior to the start of the shift, in order to receive instructions regarding specific work assignments during his/her shift. The LEO is expected to stay at the project site for the entire duration of his/her shift. The LEO shall report to the contractor at the end of his/her shift. Once the LEO has completed the duties described above and still has time remaining on his/her shift, the LEO may be asked to patrol through the work zone (with flashing lights off) or be placed at a location to deter motorists from speeding. Should it be necessary to leave the project site, the LEO shall notify the Engineer. The contractor shall provide the LEO with a two-way communication device which shall be returned to the contractor at the end of his/her shift.

LEOs with patrol car required by the traffic maintenance tasks above shall be paid for on a unit price (hourly) basis under Item 614 - Law Enforcement Officer With Patrol Car For Assistance. The following estimated quantity has been carried to the General Summary.

(LOC 1 –LAK IR 90 - 160 HRS),
(LOC 2 –SR 44 - 80 HRS)
(LOC 6 –IR 480 - 40 HRS) ,
(LOC 8 –IR 71 - 80 HRS)

Item 614 – Law Enforcement Officer
With Patrol Car For Assistance..... **360 Hours**

The hours paid shall include any minimum show-up time required by the law enforcement agency involved.

Any additional costs (administrative or otherwise) incurred by the contractor to obtain the services of an LEO are included with the bid unit price for
Item 614 – Law Enforcement Officer With Patrol Car For Assistance.

Item 614 – Portable Changeable Message Signs, As Per Plan

The contractor shall furnish, install, maintain and remove when no longer needed, a changeable message sign. The sign shall be of a 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 ft. And 650 ft., respectively.

Each sign shall be trailer-mounted and equipped with a functional dimming mechanism, to dim the sign during darkness, and a tamper and vandal proof enclosure. Each sign shall be provided with appropriate training and operation instructions to enable on-site personnel to operate and troubleshoot the unit. The sign shall also be capable of being powered by an electrical service drop from a local utility company. The PCMS shall be delineated in accordance with CMS 614.03.

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, facing away from all traffic.

The Engineer shall be provided access to each sign unit and shall be provided with appropriate training and operation instructions to enable ODOT personnel to operate and troubleshoot the unit, and to revise sign messages, if necessary.

All messages to be displayed on the sign will be provided by the Engineer. A list of all required pre-programmed messages will be given to the contractor at the project preconstruction conference. The sign shall have the capability to store up to 99 messages. Message memory or pre-programmed displays shall not be lost as a result of power failures to the on-board computer. The sign legend shall be capable of being changed in the field. Three-line presentation formats with up to six message phases shall be supported. PCMS format shall permit the complete message for each phase to be read at least twice.

The PCMS shall contain an accurate clock and programming logic which will allow the sign to be activated, deactivated or messages changed automatically at different times of the day for different days of the week.
The PCMS unit shall be maintained in good working order by the contractor in accordance with the provisions of CMS 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 or her 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.

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 1 –LAK IR 90 – 2 units, 60 days) (2 SNMT)

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 2 –LAK SR 44 – 2 units, 60 days) (2 SNMT)

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 4 –GEA SR 88 – 2 units, 60 days) (2 SNMT)

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 5 –GEA SR 168 – 2 units, 60 days) (2 SNMT)

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 1 –LAK IR 90 – 2 units, 60 days) (2 SNMT)

The estimated quantity provides for
(two) PCMS units at **1 SNMT (30 days)** each.
(Location 8 –CUY IR 71 – 2 units, 60 days) (2 SNMT)

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. The contractor shall only be paid for PCMS units when they are in operation on the project as specified in the plans or by the Engineer.

Item 614 – Portable Changeable Message Sign,
As Per Plan ..... **12 SNMT**

Alternate Methods

If the contractor so elects, he may submit alternate methods for the maintenance of traffic, provided the intent of the provisions is followed and no additional inconvenience to the traveling public results there from. No alternate plan shall be placed into effect until approval has been granted, in writing, by the director.

All items proposed for use under these provisions must comply with current department standards for their use when the plan detail, standard construction drawing or other bid document governing their use is not provided as part of the bid package.

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MAINTENANCE OF TRAFFIC (cont'd)

Order Of Operations

The location number given to each location of work is to differentiate the location and is not intended to direct the contractor to perform work in any specific order. Work at each location can occur concurrently.

72 hours prior to work starting at each location or closure, a PCMS shall be placed as directed by the Engineer, to inform the motoring public of upcoming work or closures.

Following is a list of work to be performed and how traffic will be maintained at each location.

Work Location 1 (IR-90 – Overlay Repairs):
Refer to Sheet **"Location 1 – General Notes"** of the plans.

Work Location 2 (SR-44 – Pavement Joint Repairs / Spot Resurfacing) :
Refer to Sheet **"Location 2 – General Notes"** of the plans.

Work Location 3 (ODOT Munson Outpost Facility Resurfacing) :
Refer to Sheet **"Location 3 – General Notes"** of the plans.

Work Location 4 (SR-88 – Resurfacing / Shoulder Repairs) :
Refer to Sheet **"Location 4 – General Notes"** of the plans.

Work Location 5 (SR-168 – Resurfacing) :
Refer to Sheet **"Location 5 – General Notes"** of the plans.

Work Location 6 (IR-480 – Construct Median Cross-Over) :
Refer to Sheet **"Location 6 – General Notes"** of the plans.

Work Location 7 (SR-44 – Construct Paved Shoulder Widening) :
Refer to Sheet **"Location 7 – General Notes"** of the plans.

Work Location 8 (IR-71 – Paved Shoulder Repairs) :
Refer to Sheet **"Location 8 – General Notes"** of the plans.

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5-11	18	30	33	37	41	42	46	48	56		01/NFP/PV								
																		ROADWAY	
								100			100			202	38000	100	FT	GUARDRAIL REMOVED	
							79	12			91			203	10000	91	CY	EXCAVATION	
							6				6			203	20000	6	CY	EMBANKMENT	
							193	44			237			204	10000	237	SY	SUBGRADE COMPACTION	
				1.09			0.04				1.13			209	60501	1.13	MILE	LINEAR GRADING, AS PER PLAN	5
								50			50			606	15050	50	FT	GUARDRAIL, TYPE MGS	
								50			50			606	15150	50	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
2											2			623	39501	2	EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	5
																		EROSION CONTROL	
							LS				LS			659	98700	LS		SEEDING, MISC.:SEEDING AND MULCHING	5
											1,000			832	30000	1,000	EACH	EROSION CONTROL	
																		DRAINAGE	
2											2			611	98631	2	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	5
1											1			611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	5
8											8			611	99655	8	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	5
1											1			611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE	5
1,000											1,000			SPECIAL	61199820	1,000	LB	MISCELLANEOUS METAL	5
																		PAVEMENT	
		378		206	275						859			251	01001	859	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, "A"	6
	200										200			252	01001	200	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "A"	18
	75										75			252	01001	75	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "B"	18
	200										200			252	01001	200	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "C"	18
								100			100			252	01500	100	FT	FULL DEPTH PAVEMENT SAWING	
			30								30			253	02001	30	CY	PAVEMENT REPAIR, AS PER PLAN, "A"	6
		30		27							57			253	02001	57	CY	PAVEMENT REPAIR, AS PER PLAN, "B"	6
	80										80			253	02001	80	CY	PAVEMENT REPAIR, AS PER PLAN, "C"	18
		16,562	5,094						14,699		36,355			254	01000	36,355	SY	PAVEMENT PLANING, ASPHALT CONCRETE, (1.5")	
								5			5			301	46000	5	CY	ASPHALT CONCRETE BASE, PG64-22, 6"	
							51				51			302	46000	51	CY	ASPHALT CONCRETE BASE, PG64-22, 10.5"	
							31	5			36			304	20000	36	CY	AGGREGATE BASE, 6"	
		1,655	509	689	917		18	3	1,471		5,262			407	20000	5,262	GAL	NON-TRACKING TACK COAT	
				192	254						446			424	12000	446	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (1.0")	
			212					3			215			441	50101	215	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M, (1.5")	6
		690.8					12		614		1,316.8			442	20001	1,316.8	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN, PG70-22M, (1.5")	6
				17.7			2.6				20.3			617	10101	20.3	CY	COMPACTED AGGREGATE, AS PER PLAN	6
		1.25									1.25			618	40600	1.25	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
		822		645	735						2,202			875	10000	2,202	LB	LONGITUDINAL JOINT ADHESIVE	
				6,883	9,163						16,046			897	01010	16,046	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1.0")	
																		WATER WORK	
2											2			638	10801	2	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	5
																		LIGHTING	
							6				6			625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
							180				180			625	23200	180	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
							50				50			625	25500	50	FT	CONDUIT, 3", 725.04	
							50				50			625	29002	50	FT	TRENCH, 24" DEEP	
							2				2			625	30706	2	EACH	PULL BOX, 725.08, 24"	
							50				50			625	36000	50	FT	PLASTIC CAUTION TAPE	
																		TRAFFIC CONTROL	
		193		56							249			621	00100	249	EACH	RPM	
		146		46							192			621	54000	192	EACH	RAISED PAVEMENT MARKER REMOVED	
								4			4			626	00110	4	EACH	BARRIER REFLECTOR, TYPE 2	
							56				56			630	03100	56	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							28				28			630	80100	28	SF	SIGN, FLAT SHEET	
			135								135			642	00700	135	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1, YELLOW	
			200								200			642	01200	200	FT	PARKING LOT STALL MARKING, TYPE 1, WHITE	
		1.25		1.09		1.16			8.35		11.85			646	10010	11.85	MILE	EDGE LINE, 6"	
		3.45									3.45			646	10110	3.45	MILE	LANE LINE, 6"	
				0.45		0.56					1.01			646	10200	1.01	MILE	CENTER LINE	
		641									641			646	10310	641	FT	CHANNELIZING LINE, 12"	
				20		20					40			646	10400	40	FT	STOP LINE	
						100					100			646	10500	100	FT	CROSSWALK LINE	
		135									135			646	10600	135	FT	TRANSVERSE/DIAGONAL LINE	
LS											LS			SPECIAL	69098400	LS		INVENTORY EXISTING PAVEMENT MARKINGS	7

CALCULATED JAG
CHECKED EMK

GENERAL SUMMARY

D12-PPM-FY2020

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5-11	18	30	33	37	41	42	46	48	56		01/NFP/PV								
																		MAINTENANCE OF TRAFFIC	
360											360			614	11110	360	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	11
20											20			614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	10
12											12			614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	11
		3.45									3.45			614	20560	3.45	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
				0.45		0.56					1.01			614	21100	1.01	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				0.45		0.56					1.01			614	21550	1.01	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
				1.09		1.16					2.25			614	22110	2.25	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
		1.25		1.09		1.16			8.35		11.85			614	22360	11.85	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
		641									641			614	23690	641	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
		135									135			614	25620	135	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
				20		20					40			614	26200	40	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
				20		20					40			614	26610	40	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
1,200											1,200			630	97800	1,200	SF	SIGNING, MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER	10
																		INCIDENTALS	
											LS			614	11000	LS		MAINTAINING TRAFFIC	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	

CALCULATED JAG
CHECKED EMK

GENERAL SUMMARY

D12-PPM-FY2020

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NOT-USED

CALCULATED JAG
CHECKED EMK

GENERAL SUMMARY

D12-PPM-FY2020

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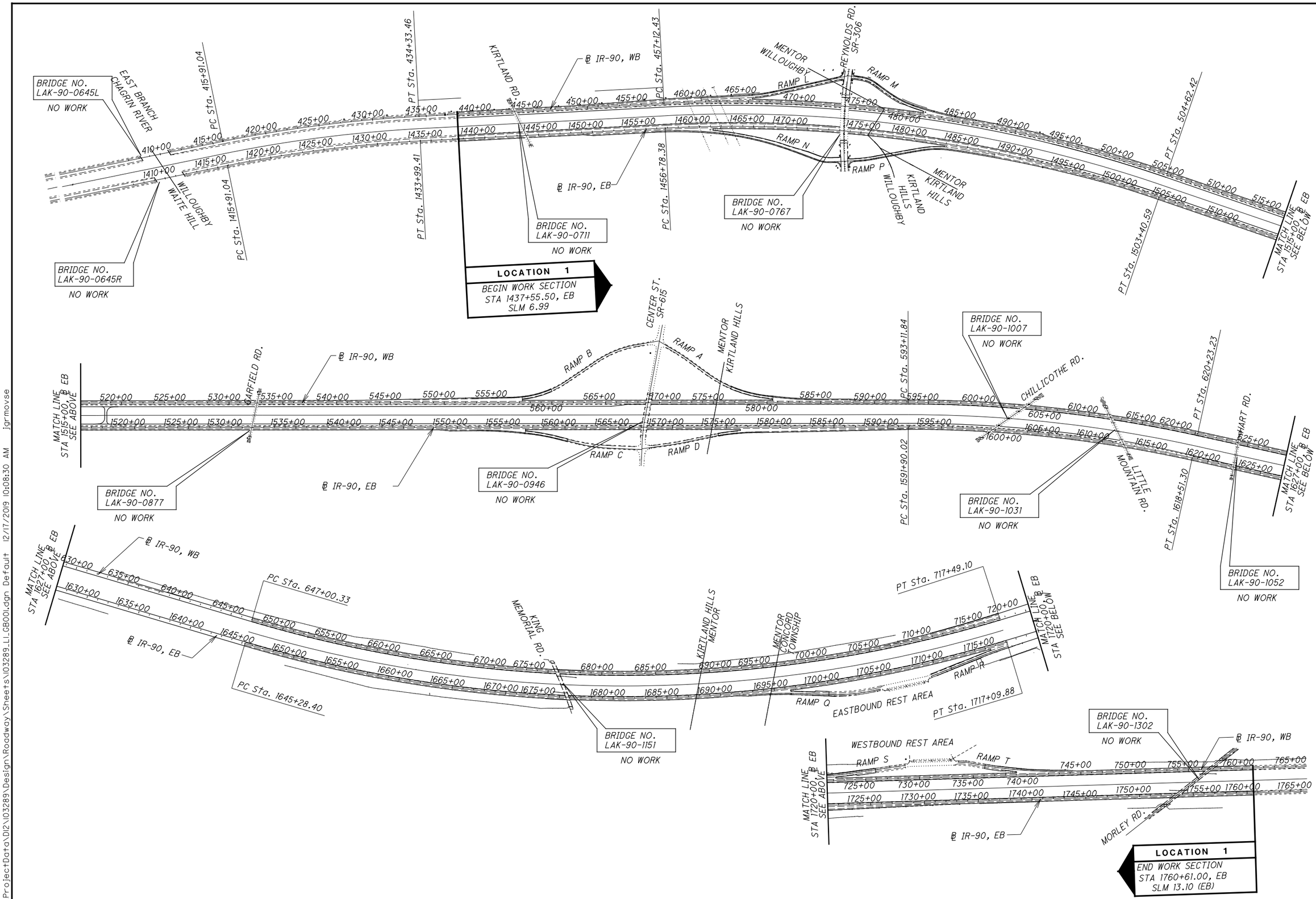

LOCATION 1- PLAN SHEET
LAKE COUNTY - I.R.-90

D12-PPM-FY2020

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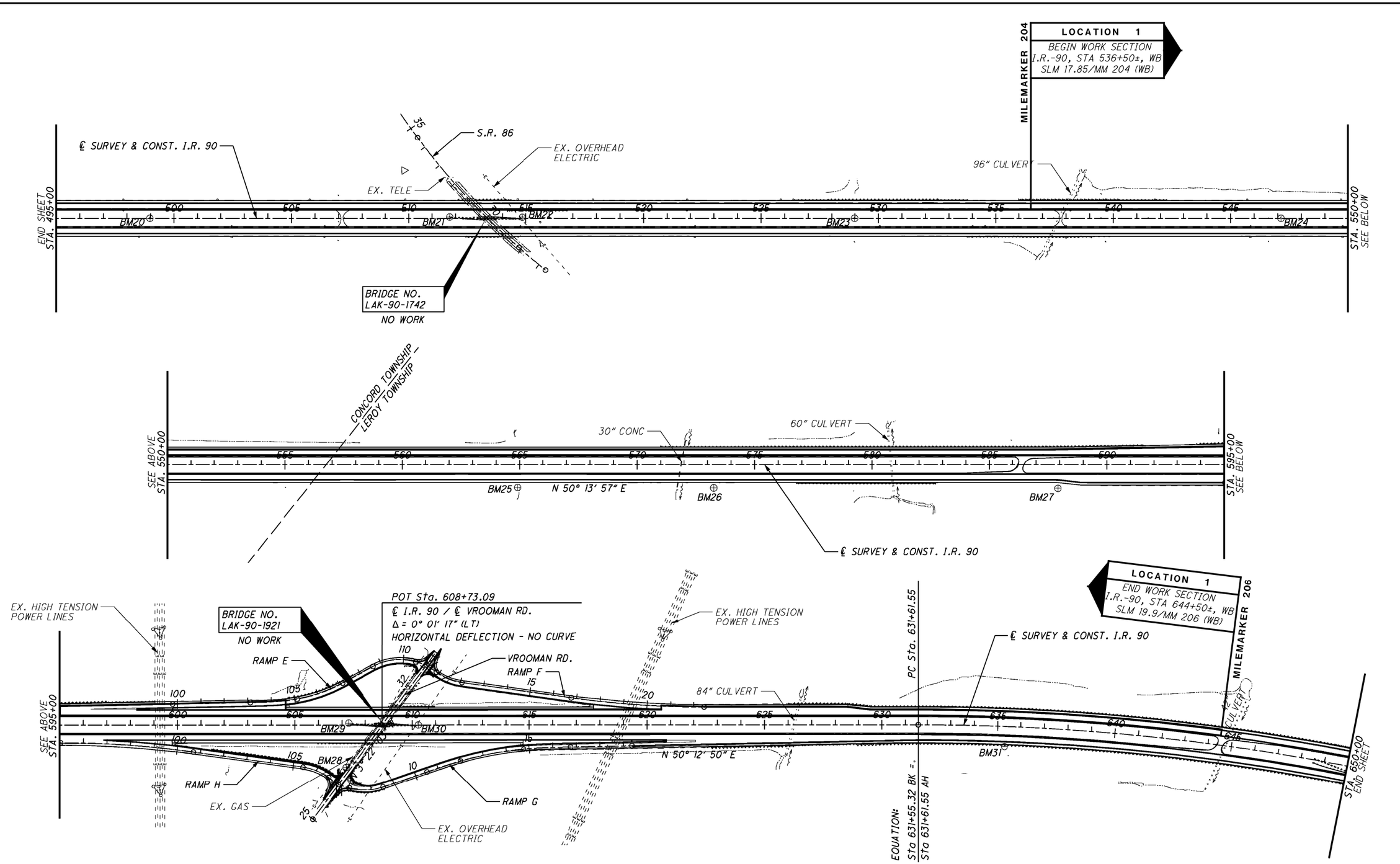

HORIZONTAL SCALE IN FEET
0 200 400

CALCULATED JAG
CHECKED EMK

LOCATION 1 - PLAN SHEET
LAKE COUNTY - I.R.-90

D12-PPM-FY2020

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LOCATION 1 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 1 Description

This project location consists of flexible pavement repairs to a rigid concrete pavement on IR-90 in Lake County with a work section just West of Kirtland Rd. to just East of Morley Rd on both the Eastbound and Westbound sides and another work section just east of the SR-86 overpass to just pass the Vrooman Rd. interchange on only the westbound side.

The items of work will include:

1. Perform pavement repairs to the unbonded concrete overlay section and full depth pavement section of I.R.-90 in Lake County, as directed by the Engineer, using quantities provided.

Project – Location 1 - Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the "District 12 Permitted Lane Closure Times" list, which is located on the ODOT website:

www.dot.state.oh.us/dist12/workzone/laneclo.htm

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed, unless directed by the Engineer.
Shoulder closures shall only be allowed at the times specified for lane closures, unless directed by the Engineer.

Item 253 - Pavement Repair, As Per Plan "C"

This item shall be used to repair surface distresses in the existing concrete pavement as detailed on sheet "LOCATION 1 – PAVEMENT REPAIR DETAILS" and as outlined below.

The depth of the repairs shall be between 4-5 inches. The size and location of the repair areas shall be determined by the Engineer.

The contractor shall sawcut the edges of the repair to a minimum depth of 4 inches. Use replacement asphalt materials conforming to the requirements of Item 442 – Asphalt Concrete Surface Course, 12.5mm.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 253, Pavement Repair, As Per Plan "C"

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 253 - Pavement Repair, As Per Plan "C" . . . . . **80 CY**

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "A"

This item shall be used to perform a full depth flexible pavement repair the existing concrete base pavement as detailed on sheet "LOCATION 1 – PAVEMENT REPAIR DETAILS" and as described below. The depth of the full depth repair shall be 13.5 inches.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material. Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "A"

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement,
As Per Plan "A" . . . **200 SY**

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "B"

This item shall be used to perform a full depth flexible pavement repair of the existing unbonded concrete overlay pavement in a normal pavement section as detailed on sheet "LOCATION 1 – PAVEMENT REPAIR DETAILS" and as described below. The depth of the full depth repair shall be between 9.5-10.5 inches. The concrete base under the unbonded concrete overlay shall remain in place.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material. Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "B"

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement,
As Per Plan "B" . . . **75 SY**

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "C"

This item shall be used to perform a full depth flexible pavement repair of the existing unbonded concrete overlay pavement in a superelevated pavement section as detailed on sheet "LOCATION 1 – PAVEMENT REPAIR DETAILS" and as described below. The depth of the full depth repair shall be vary between 9.5-15.5 inches. The concrete base under the unbonded concrete overlay shall remain in place.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material. Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan "C"

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

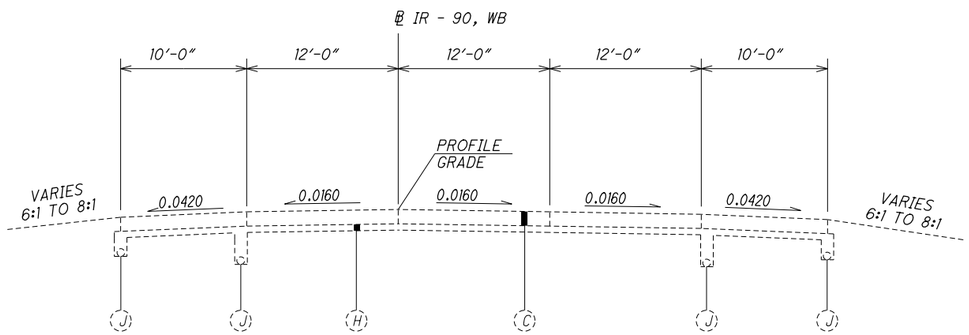
Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement,
As Per Plan "C" . . . **200 SY**

EXISTING

- (A) 9.5" NON-REINFORCED CONCRETE
- (B) 12.5" NON-REINFORCED CONCRETE
- (C) 13.5" NON-REINFORCED CONCRETE
- (D) 9.5" TO 14.5 NON-REINFORCED CONCRETE PAVEMENT
- (E) 10" REINFORCED CONCRETE BASE
- (H) SUBBASE
- (J) UNDERDRAIN
- (K) ASPHALT CONCRETE BONDBREAKER, 1"

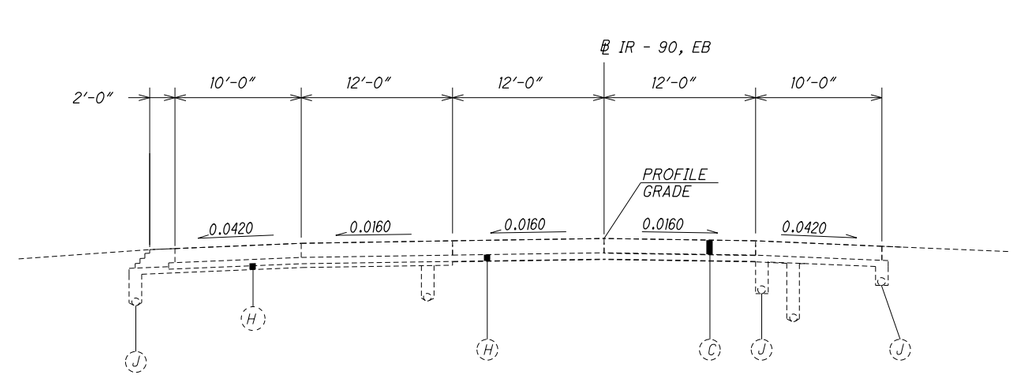
PROPOSED

1. FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "A"
2. FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "B"
3. FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "C"
4. PAVEMENT REPAIR, AS PER PLAN "B"



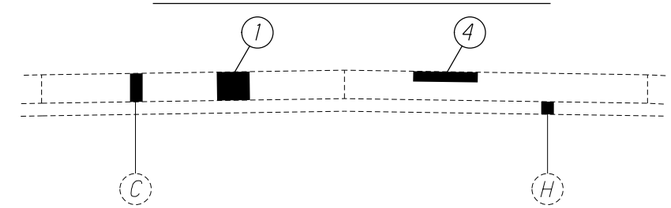
STA. 437+89.61 TO STA. 448+50.00, WB

NORMAL SECTION IR-90

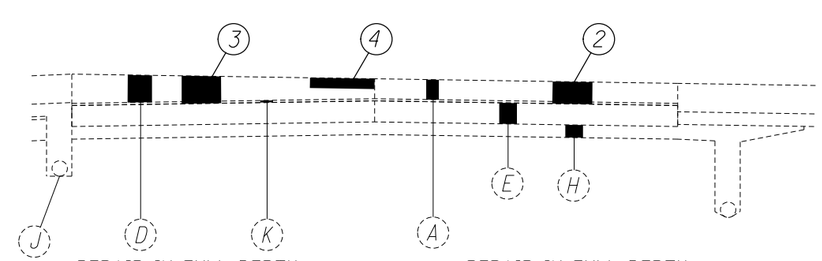


STA. 1437+55.56 TO STA. 1448+50.00, EB

PAVEMENT REPAIR DETAILS



REPAIR IN FULL DEPTH CONCRETE PAVEMENT



REPAIR IN FULL DEPTH UNBONDED CONCRETE OVERLAY SUPERELEVATED - SECTION

REPAIR IN FULL DEPTH UNBONDED CONCRETE OVERLAY NORMAL - SECTION

SEE SHEET "LOCATION 1 - PAVEMENT REPAIR DETAILS" FOR ADDITIONAL DETAILS

CALCULATED JAG
CHECKED EMK

EXISTING TYPICAL SECTIONS - LOCATION 1 - I.R.-90

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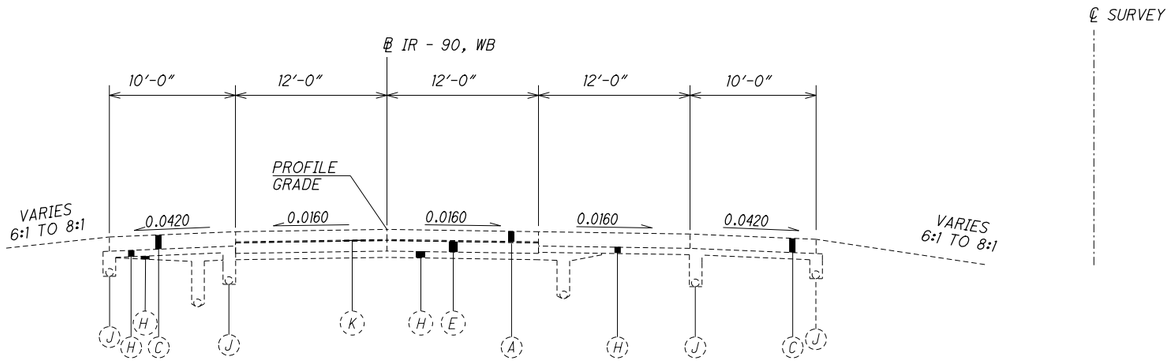
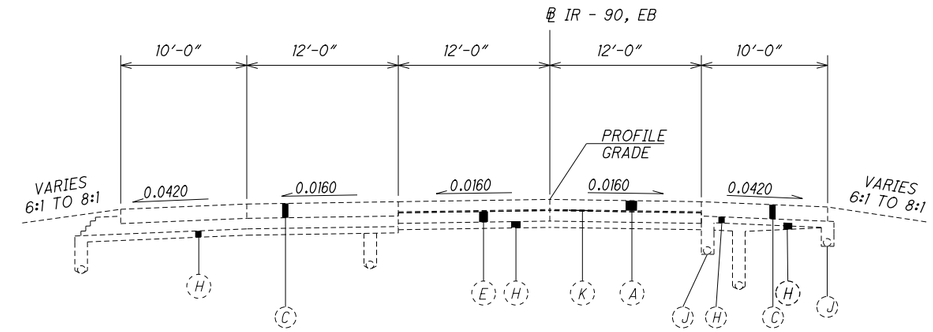
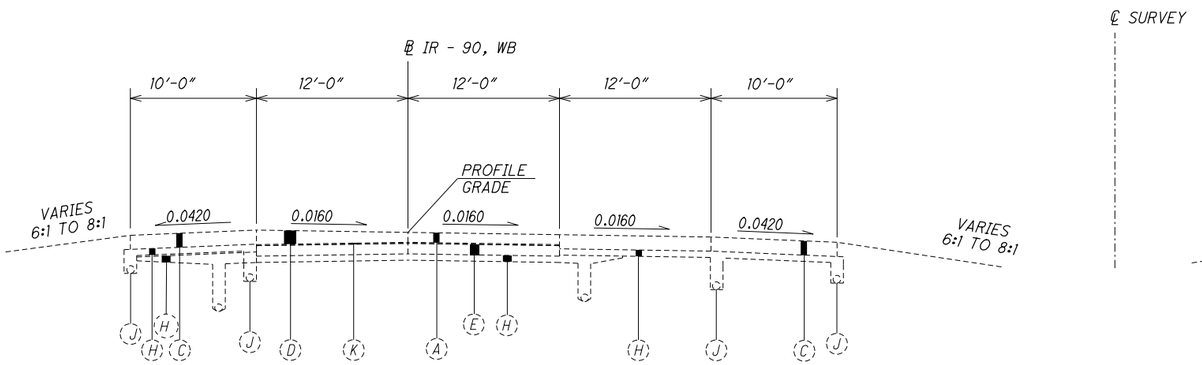


STA. 448+50.00 TO STA. 456+30.83, EB

NORMAL SECTION IR-90

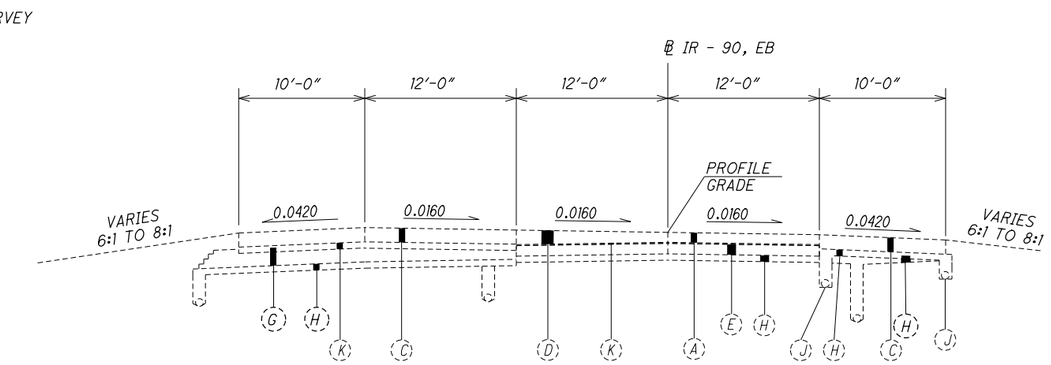


STA. 1448+50.00 TO STA. 1455+15.18, EB

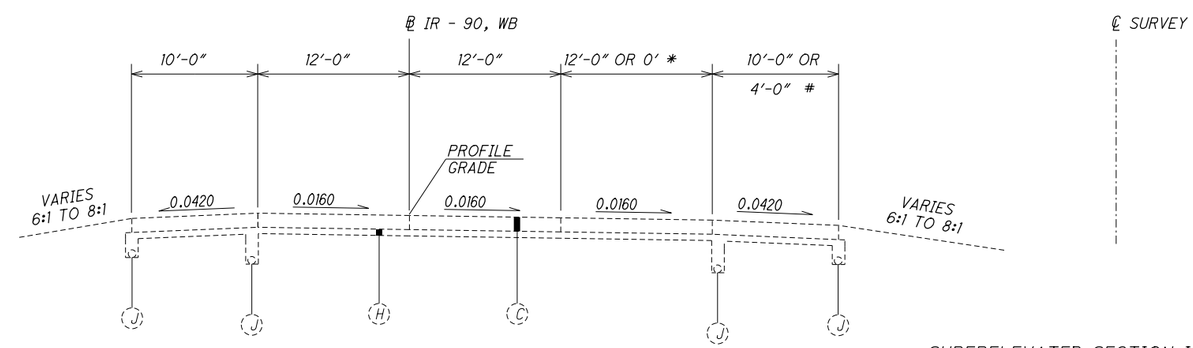


STA. 456+30.83 TO STA. 469+50.00, WB
STA. 479+00.00 TO STA. 491+39.50, WB

SUPERELEVATED SECTION IR-90

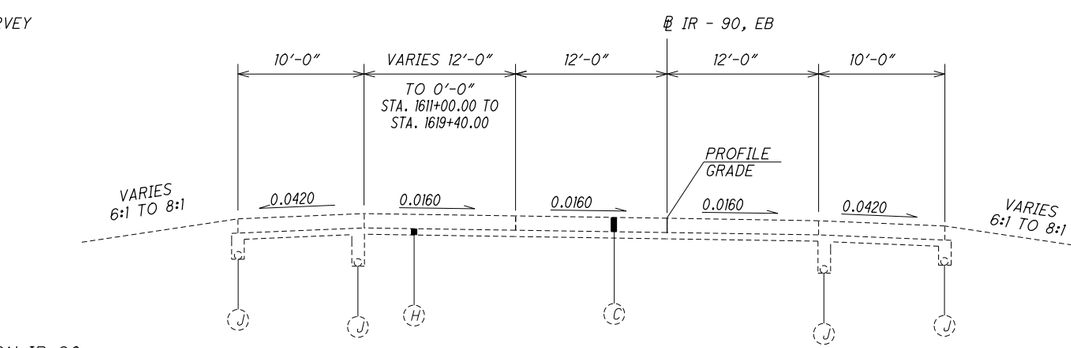


STA. 1455+15.18 TO STA. 1469+00.00, EB
STA. 1480+00.00 TO STA. 1490+60.32, EB



STA. 469+50.00 TO STA. 479+00.00, WB (* - 12'-0")
(# - 10'-0")
STA. 598+21.40 TO STA. 621+04.83, WB (* - 0'-0")
(# - 4'-0")

SUPERELEVATED SECTION IR-90



STA. 1469+00.00 TO STA. 1480+00.00, EB
STA. 1593+50.00 TO STA. 1619+32.90, EB

CALCULATED JAG
CHECKED EMK

EXISTING TYPICAL SECTIONS - LOCATION 1 - I.R.-90

D12-PPM-FY2020

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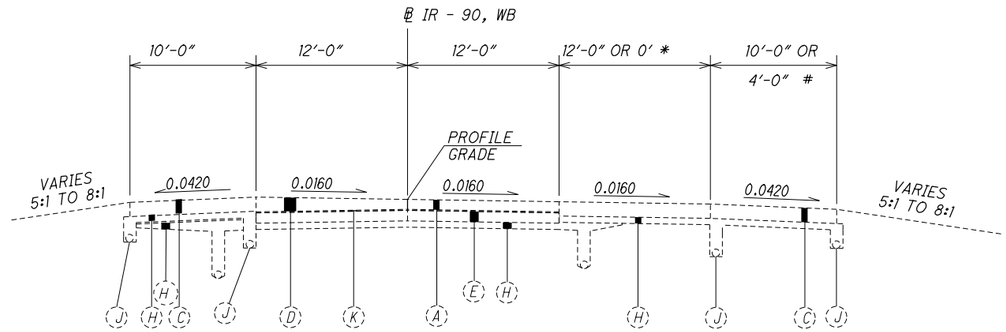
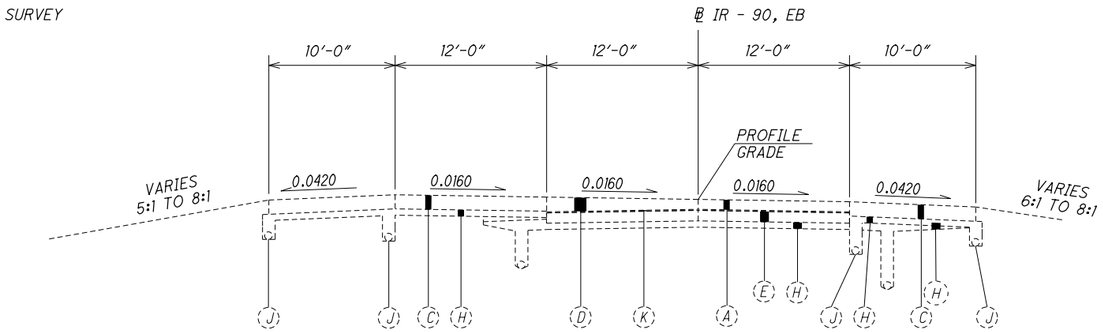
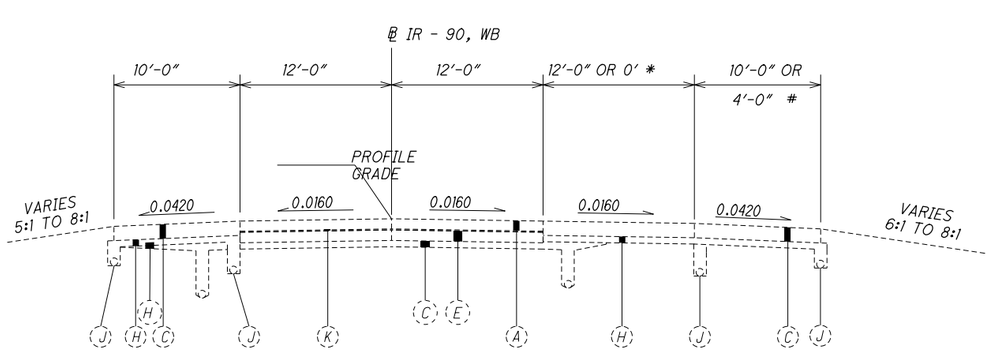


STA. 491+39.50 TO STA. 505+44.02, WB (* - 12'-0")
(# - 10'-0")
STA. 592+30.24 TO STA. 598+21.40, WB (* - 0'-0")
(# - 4'-0")



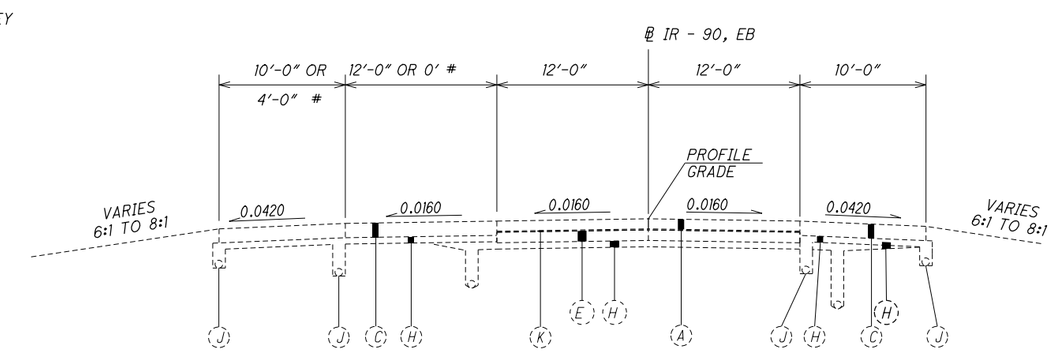
STA. 1490+60.32 TO STA. 1505+03.79, EB
STA. 1590+26.82 TO STA. 1593+50.00, EB

SUPERELEVATED SECTION IR-90

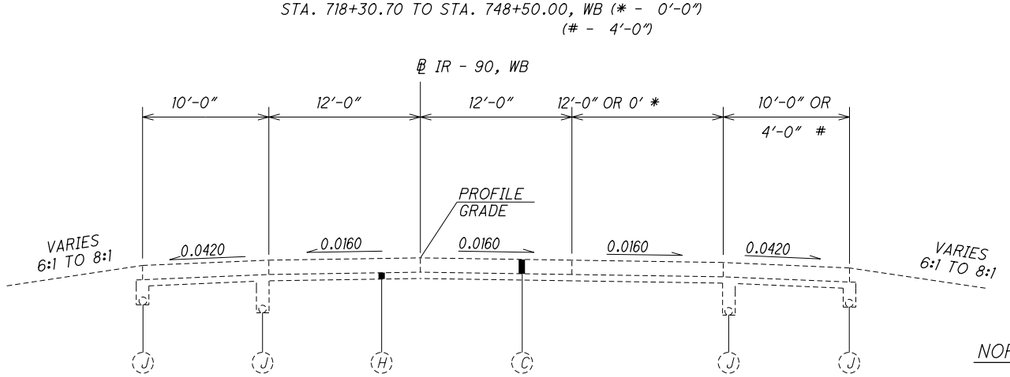


STA. 505+44.02 TO STA. 528+00.00, WB (* - 12'-0")
(# - 10'-0")
STA. 537+00.00 TO STA. 564+35.08, WB (* - 12'-0")
(# - 10'-0")
STA. 573+35.08 TO STA. 592+30.24, WB (* - 0'-0")
(# - 4'-0")
STA. 630+50.00 TO STA. 646+18.73, WB (* - 0'-0")
(# - 4'-0")
STA. 718+30.70 TO STA. 748+50.00, WB (* - 0'-0")
(# - 4'-0")

NORMAL SECTION IR-90



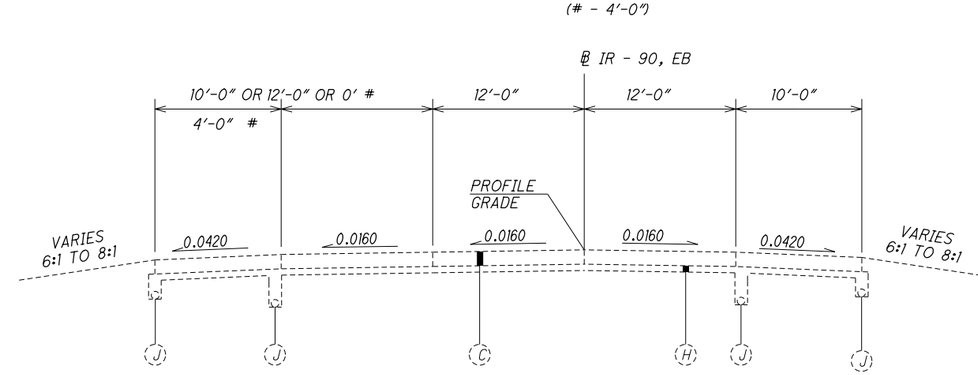
STA. 1505+03.79 TO STA. 1526+50.00, EB (# - 12'-0")
(# - 10'-0")
STA. 1535+50.00 TO STA. 1563+20.40, EB (# - 12'-0")
(# - 10'-0")
STA. 1572+20.40 TO STA. 1590+26.82, EB (# - 12'-0")
(# - 4'-0")
STA. 1629+00.00 TO STA. 1644+46.80, EB (# - 0'-0")
(# - 4'-0")
STA. 1717+91.48 TO STA. 1749+00.00, EB (# - 0'-0")
(# - 4'-0")



STA. 528+00.00 TO STA. 537+00.00, WB (* - 12'-0")
(# - 4'-0")
STA. 564+35.08 TO STA. 573+35.08, WB
STA. 621+04.83 TO STA. 630+50.00, WB (* - 0'-0")
(# - 4'-0")
STA. 748+50.00 TO STA. 761+00.00, WB (* - 0'-0")
(# - 4'-0")

NORMAL SECTION IR-90

* - VARIES 12'-0" TO 0'-0" FROM STA. 565+50.00 TO STA. 566+50.00
(# - 10'-0")
* - 0'-0" FROM STA. 566+50.00 TO STA. 573+35.08
# - VARIES 10'-0" TO 4'-0" FROM STA. 566+50.00 TO STA. 567+00.00



STA. 1526+50.00 TO STA. 1535+50.00, EB (# - 12'-0")
(# - 10'-0")
STA. 1563+20.40 TO STA. 1572+20.40, EB (# - 12'-0")
(# - 10'-0")
STA. 1619+32.90 TO STA. 1629+00.00, EB (# - 0'-0")
(# - 4'-0")
STA. 1749+00.00 TO STA. 1760+61.00, EB (# - 0'-0")
(# - 4'-0")

CALCULATED JAG
CHECKED EMK

EXISTING TYPICAL SECTIONS - LOCATION 1 - I.R.-90

D12-PPM-FY2020

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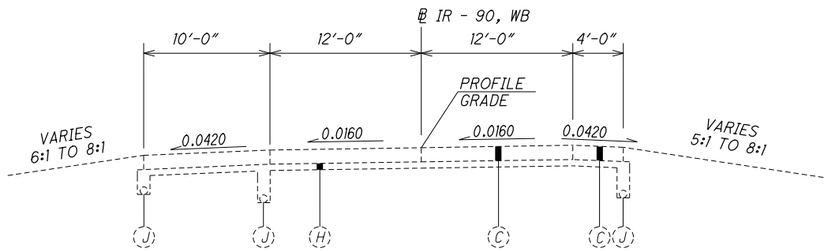
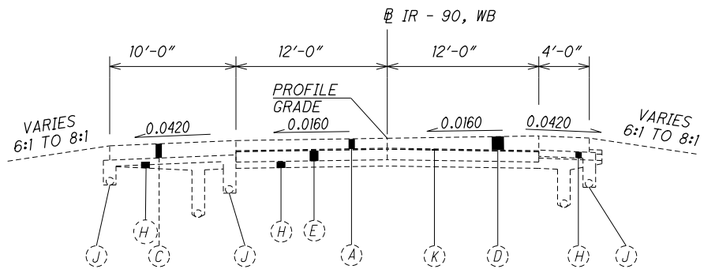


STA. 671+50.00 TO STA. 680+50.00, WB

℄ SURVEY

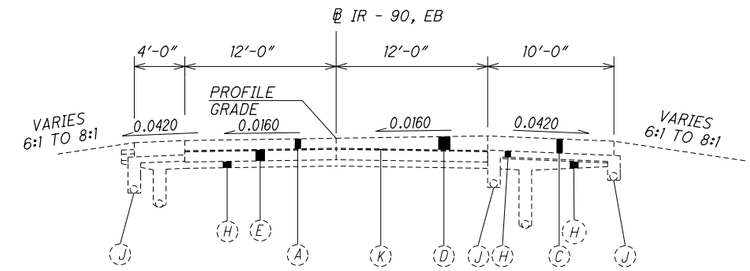
SUPERELEVATED SECTION IR-90



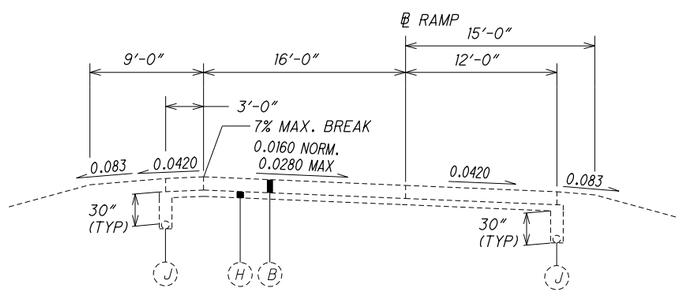
STA. 646+18.73 TO STA. 671+50.00, WB
STA. 680+50.00 TO STA. 718+30.70, WB

℄ SURVEY

SUPERELEVATED SECTION IR-90

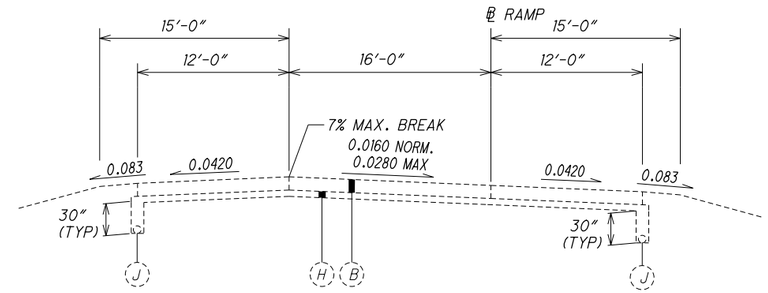


STA. 1644+46.80 TO STA. 1717+91.48, EB



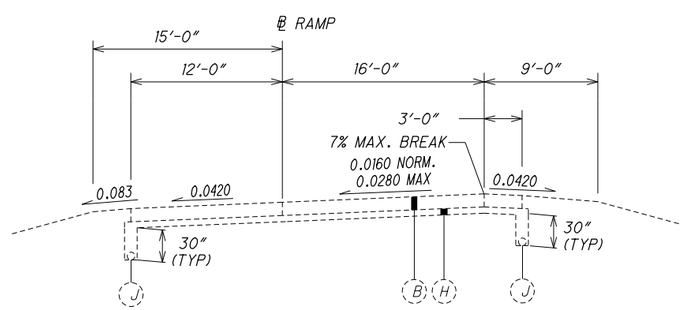
REST AREA RAMP

STA. 3+95.83 TO STA. 6+25.00 RAMP Q
STA. 2+00.00 TO STA. 6+01.84 RAMP R



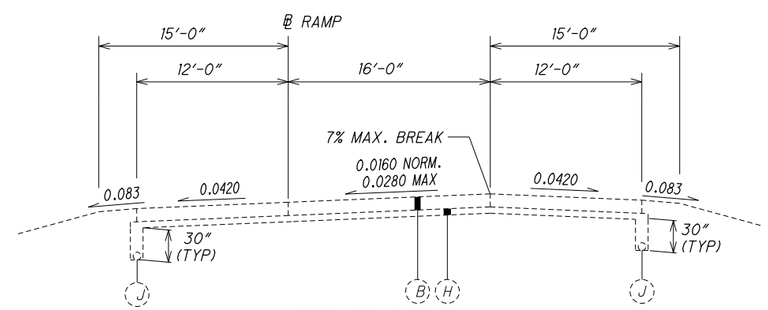
REST AREA RAMP

STA. 6+25.00 TO STA. 7+50.00 RAMP Q



REST AREA RAMP

STA. 4+76.05 TO STA. 6+75.00 RAMP S
STA. 4+00.00 TO STA. 5+45.68 RAMP T



REST AREA RAMP

STA. 6+75.00 TO STA. 8+50.00 RAMP S
STA. 2+00.00 TO STA. 4+00.00 RAMP T

CALCULATED JAG
CHECKED EMK

EXISTING TYPICAL SECTIONS - LOCATION 1 - I.R.-90

D12-PPM-FY2020

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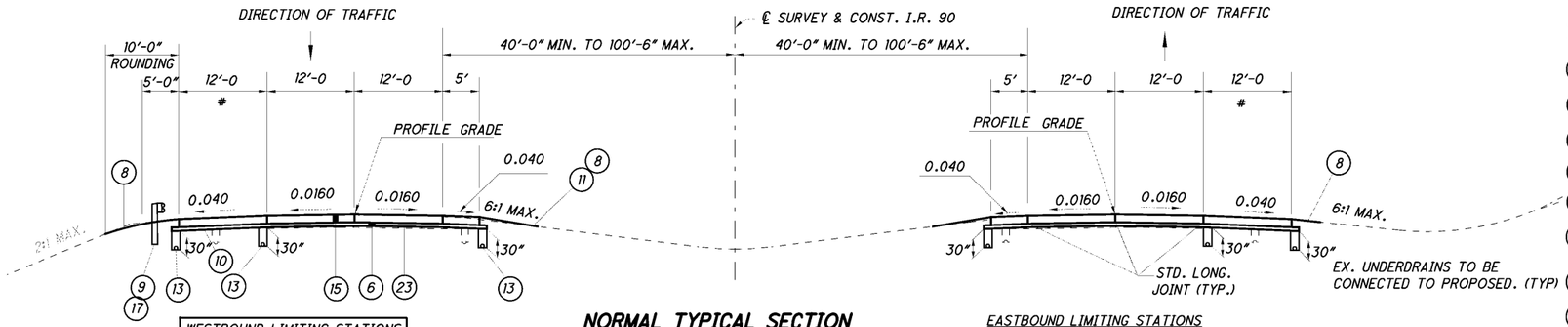


WESTBOUND LIMITING STATIONS

STA. 536+50± TO STA. 587+29.64
STA. 604+61.02 TO STA. 617+73.65
STA. 629+50.02 TO STA. 630+65.32

NORMAL TYPICAL SECTION

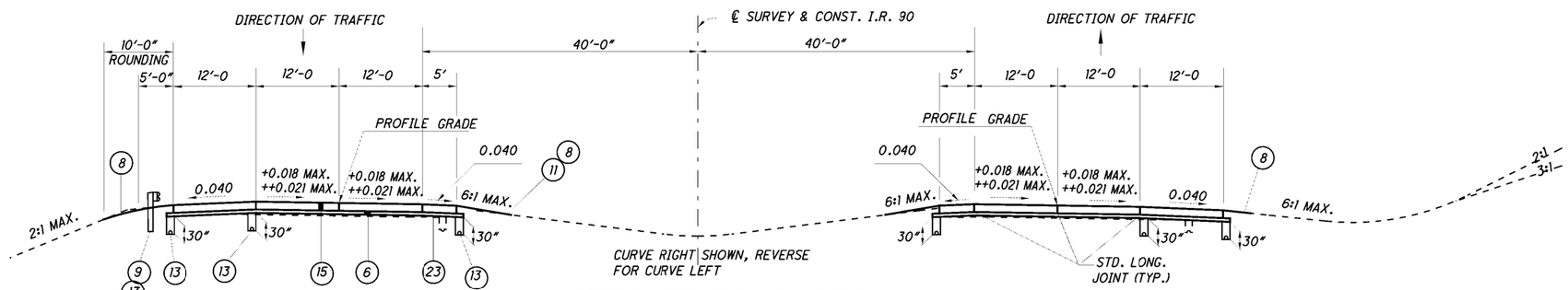
LIMITING STATIONS SHOWN INCLUDE THE ROCK AREAS WHICH ARE SHOWN BELOW AND ARE APPROXIMATE.

EASTBOUND LIMITING STATIONS

STA. 536+50± TO STA. 587+90.00
STA. 599+76.78 TO STA. 614+72.96

ITEM LEGEND

6	304	6" AGGREGATE BASE
8	659	SEEDING AND MULCHING
9	606	GUARDRAIL, TYPE 5
10	203	EXCAVATION
11	203	EMBANKMENT
13	605	6" SHALLOW PIPE UNDERDRAIN WITH FABRIC, WRAP AS PER PLAN, 707.31 OR 707.41
14	605	6" ROCK CUT UNDERDRAIN WITH FABRIC WRAP, AS PER PLAN
15	888	PORTLAND CEMENT CONCRETE PAVEMENT, 13" THICK (NON-REINFORCED PER 452) AS PER PLAN
17	448	3"ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN (4' WIDE)
23	204	SUBGRADE COMPACTION



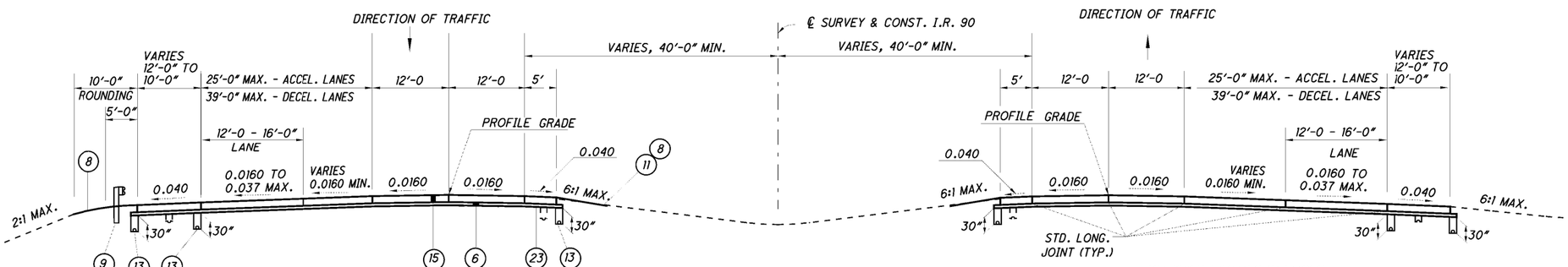
CURVE RIGHT SHOWN, REVERSE FOR CURVE LEFT

SUPERELEVATED TYPICAL SECTION

LIMITING STATIONS SHOWN INCLUDE THE ROCK AREAS WHICH ARE SHOWN BELOW AND ARE APPROXIMATE.

STA. 630+65.32 TO STA. 631+55.32(BACK) = STA. 631+61.55(AHEAD)
STA. 631+61.55 TO STA. 644+50±

STA. 631+61.55 TO STA. 644+50±



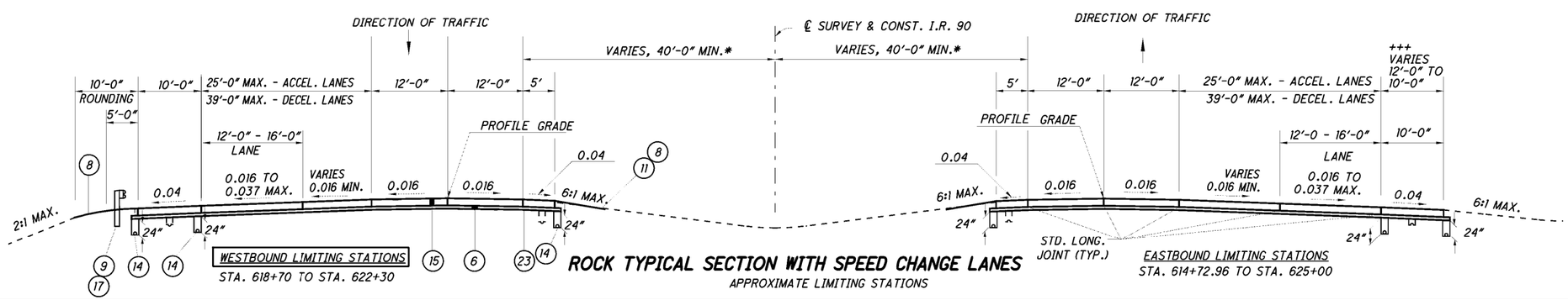
WESTBOUND LIMITING STATIONS

STA. 587+29.64 TO STA. 604+61.02
STA. 617+73.65 TO STA. 618+70
STA. 622+30 TO STA. 629+50.02

NORMAL TYPICAL SECTION WITH SPEED CHANGE LANES

EASTBOUND LIMITING STATIONS

STA. 587+90.00 TO STA. 599+76.78
STA. 625+50 TO STA. 631+55.32(BACK) = STA. 631+61.55(AHEAD)
STA. 631+61.55 TO STA. 631+85.81



WESTBOUND LIMITING STATIONS

STA. 618+70 TO STA. 622+30

ROCK TYPICAL SECTION WITH SPEED CHANGE LANES

APPROXIMATE LIMITING STATIONS

EASTBOUND LIMITING STATIONS

STA. 614+72.96 TO STA. 625+00

CALCULATED JAG
CHECKED EMK

EXISTING TYPICAL SECTIONS - LOCATION 1 - I.R.-90

D12-PPM-FY2020

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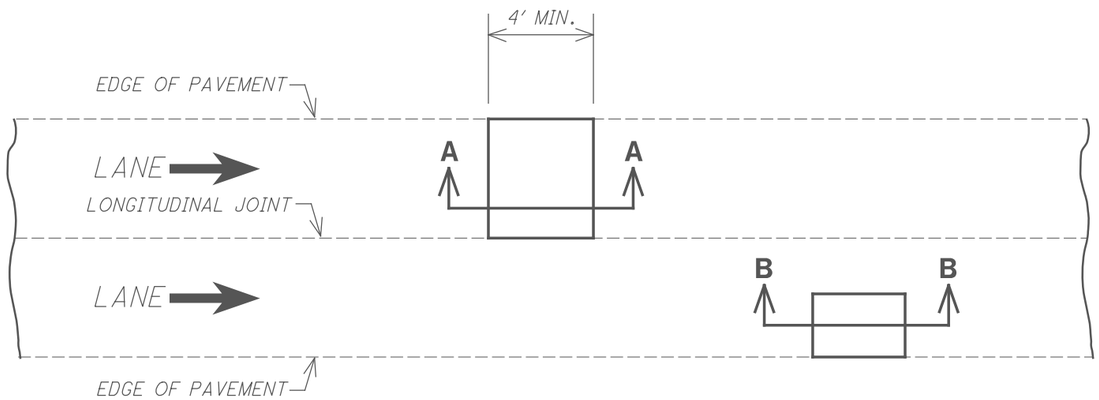
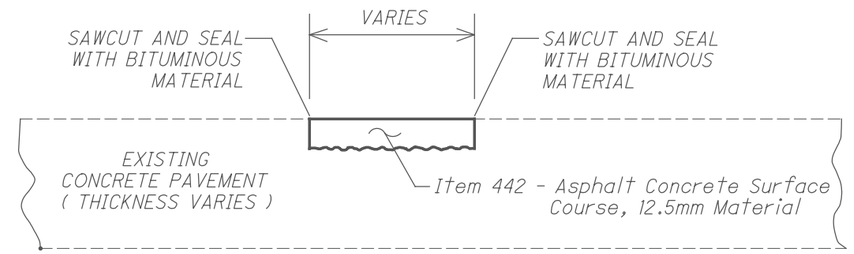
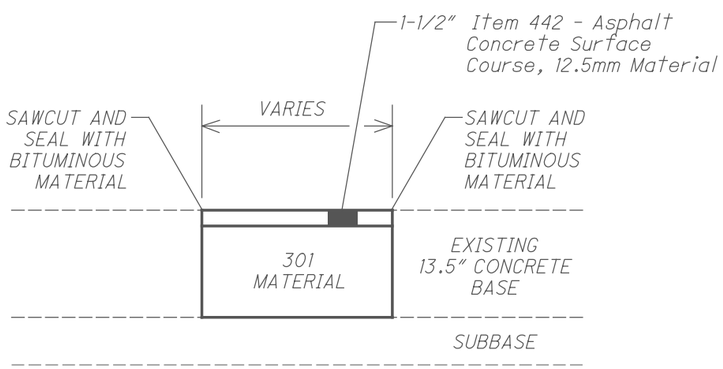


PLAN



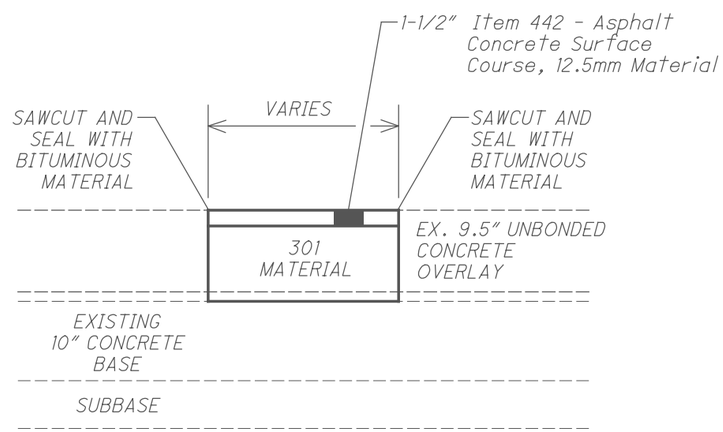
SECTION B-B

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN "C"



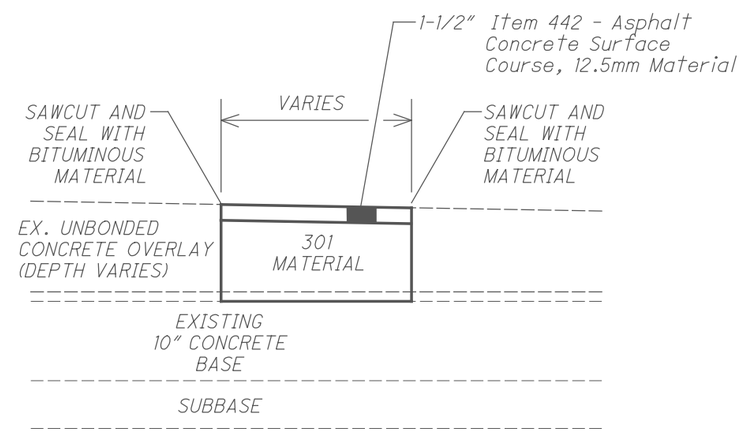
SECTION A-A

ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "A"



SECTION A-A

ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "B"



SECTION A-A

ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "C"

CALCULATED JAG
CHECKED EMK

LOCATION 1
PAVEMENT REPAIR DETAILS

D12-PPM-FY2020

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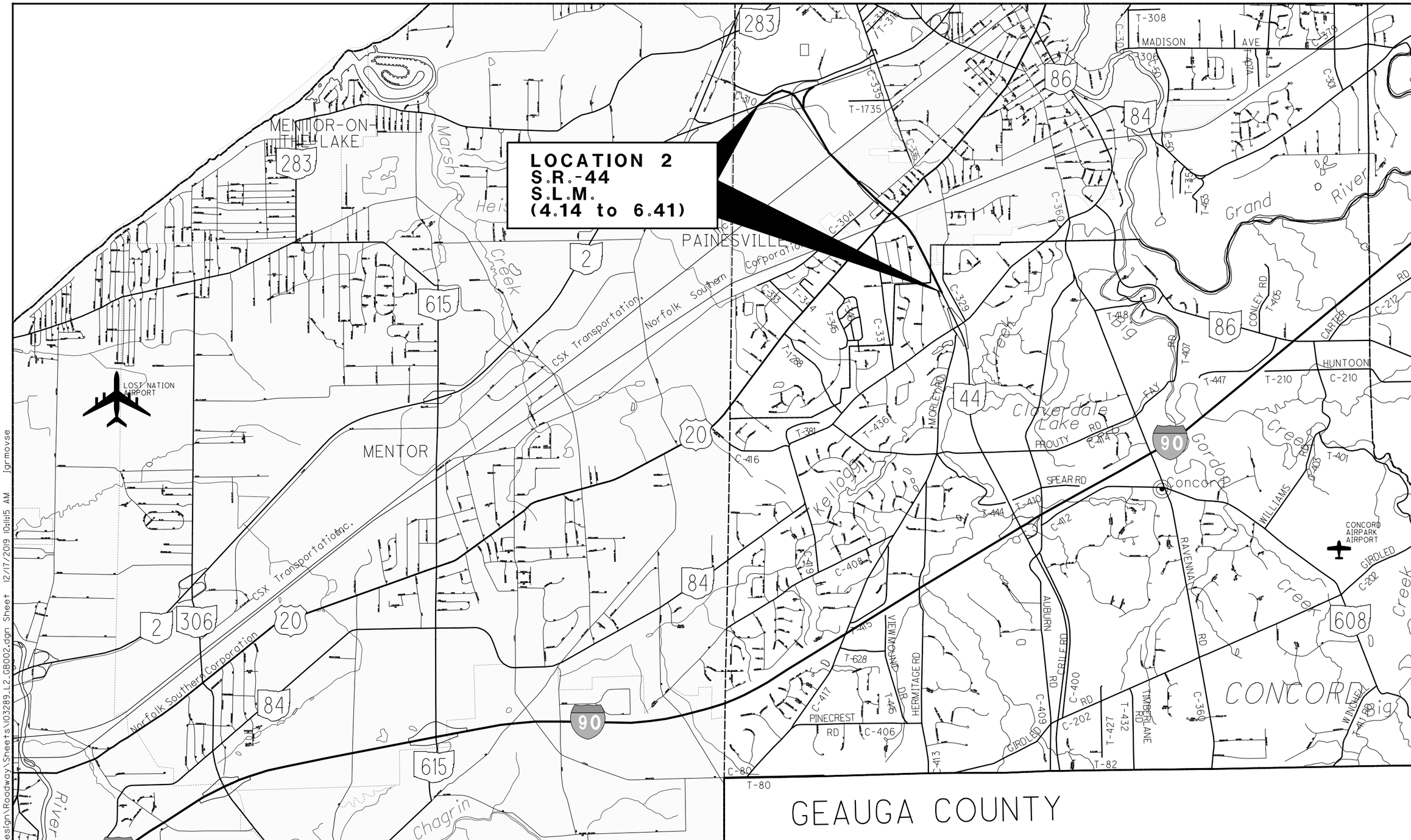

NOT TO SCALE

CALCULATED JAG
CHECKED EMK

LOCATION 2 - REPAIR / RESURFACING
LOCATION MAP - LAKE COUNTY

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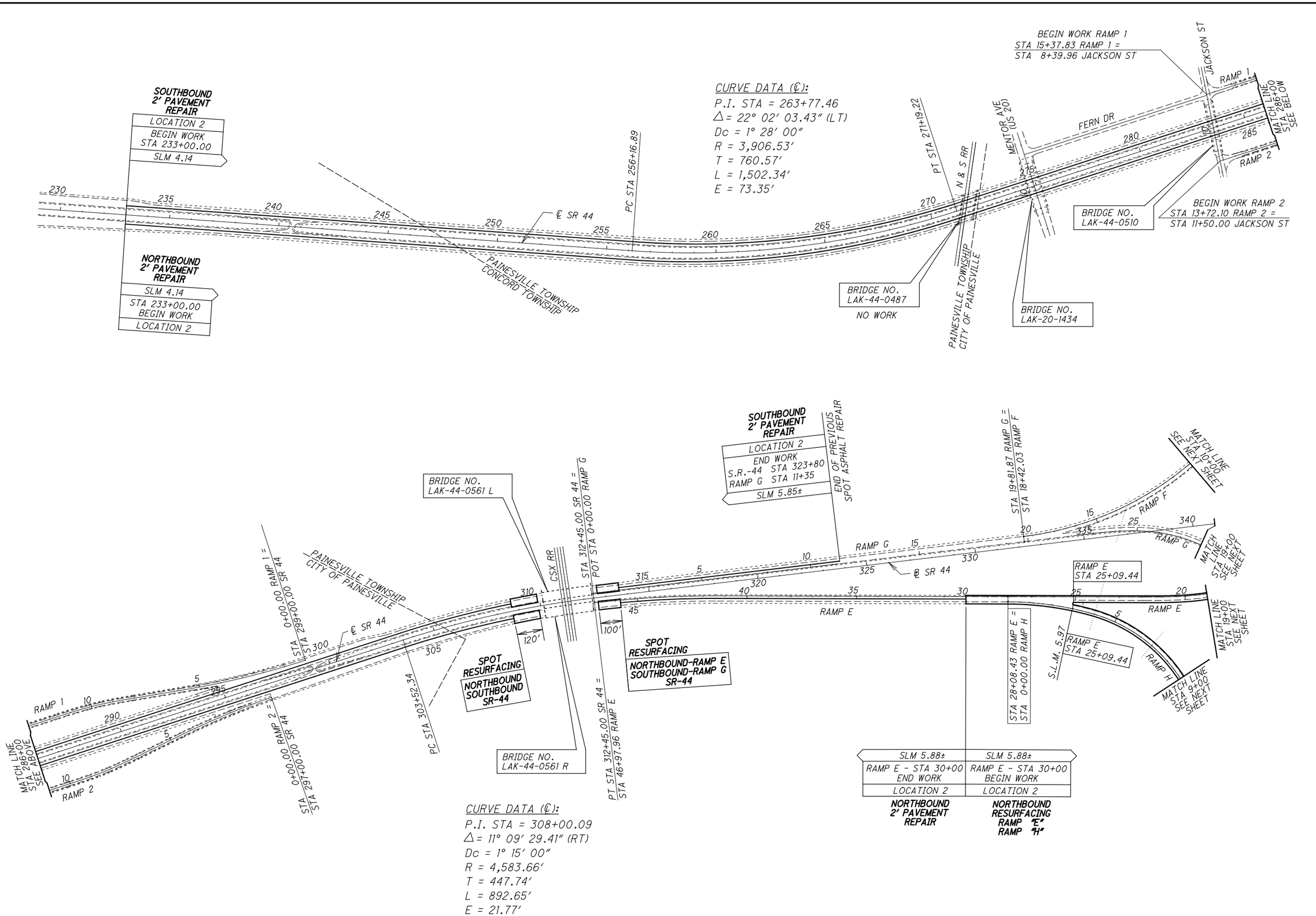
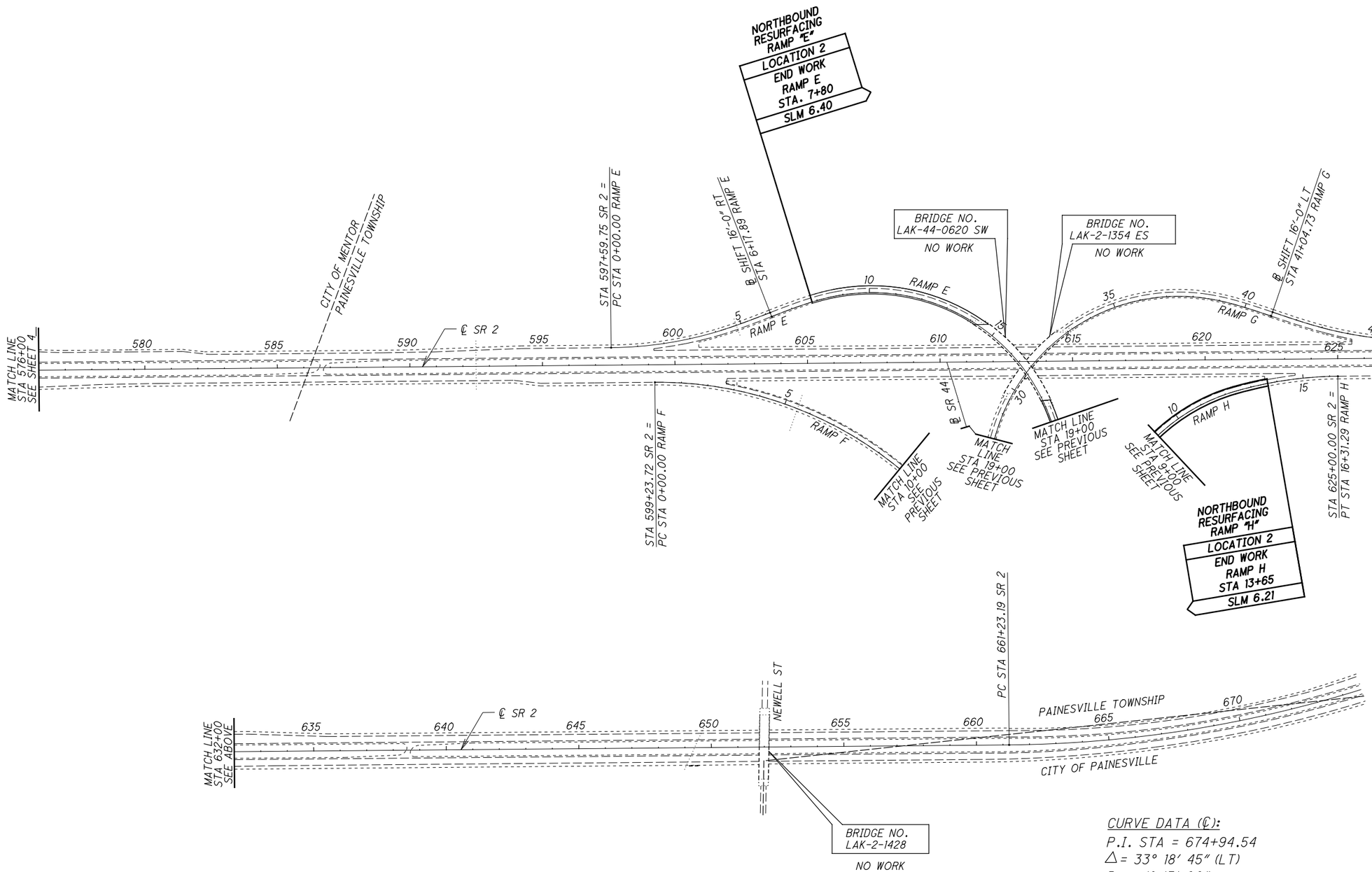


LOCATION 2 - REPAIR / RESURFACING
SCHEMATIC PLAN - S.R.-44

D12-PPM-FY2020

i:\ProjectData\D12\03289\Design\Roadway\Sheets\03289_L2_GB003.dgn Sheet 12/17/2019 10:11:16 AM jgrmovse



CURVE DATA (℄):

P.I. STA = 674+94.54
△ = 33° 18′ 45″ (LT)
Dc = 1° 15′ 00″
R = 4,583.66′
T = 1371.35′
L = 2,665.01′
E = 200.74′

NOT TO SCALE

CALCULATED JAG
CHECKED EMK

LOCATION 2 - REPAIR / RESURFACING
SCHEMATIC PLAN - S.R.-44

D12-PPM-FY2020

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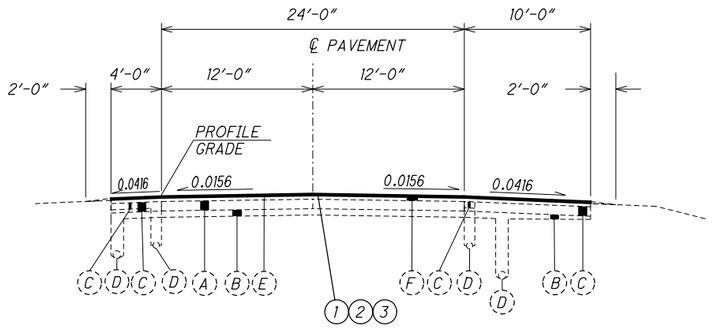
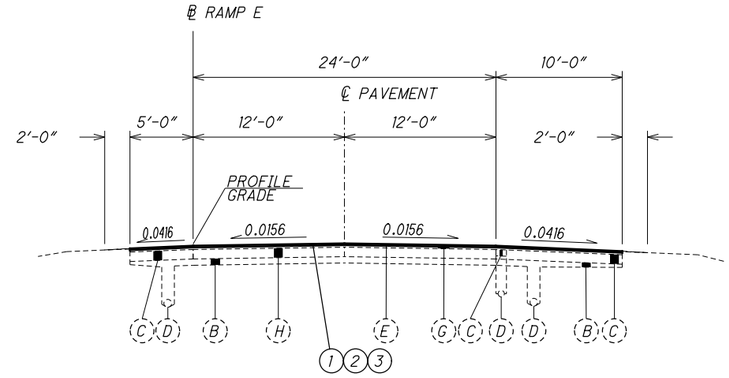


TYPICAL SECTION " RAMP E " (N.B.)

SPOT RESURFACING

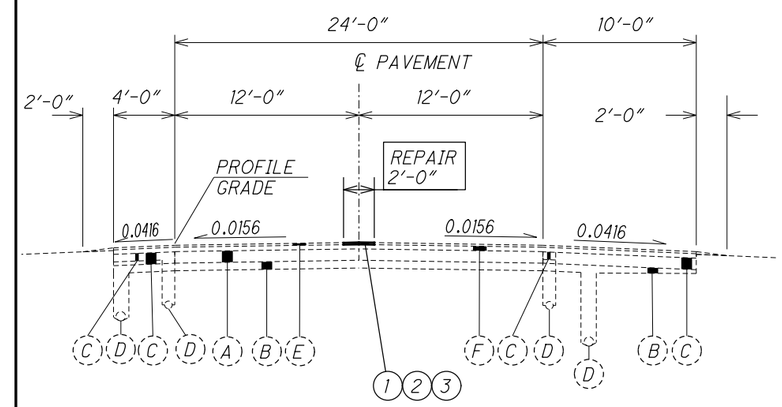
STA. 29+00.00 TO STA. 30+00.00 = 100 LIN. FT. " RAMP E "



NORMAL

SPOT RESURFACING

STA. 28+08.43 TO STA. 29+00.00 = 91.57 LIN. FT. RAMP E



TYPICAL SECTION S.R.-44 (N.B. & S.B.)

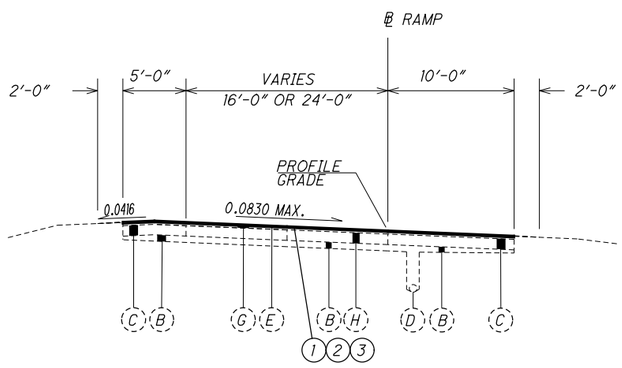
2' REPAIR - CENTERED ON JOINT

STA. 233+00.00 TO STA. 254+41.89 = 2,141.89 LIN. FT. (S.R.-44)
STA. 272+94.23 TO STA. 301+77.35 = 2,883.12 LIN. FT. (S.R.-44)

STA. 3+00.00 TO STA. 11+35 = 835 LIN. FT. " RAMP G "
STA. 30+00.00 TO STA. 39+67.51 = 967.51 LIN. FT. " RAMP E "

STA. 254+41.89 TO STA. 272+94.23 = 1,852.34 LIN. FT. (S.R.-44)
STA. 301+77.35 TO STA. 310+14.33 = 836.98 LIN. FT. (S.R.-44)
(BRIDGE NO. LAK-44-0561 L&R) (S.R.-44)
STA. 312+38.33 TO STA. 312+45.00 BK = 6.67 LIN. FT. (S.R.-44)

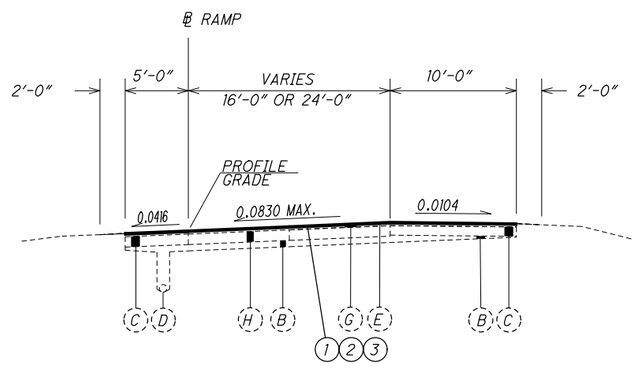
STA. 0+00.00 TO STA. 3+00.00 = 300.00 LIN. FT. " RAMP G "
STA. 39+67.51 TO STA. 46+97.96 = 730.45 LIN. FT. " RAMP E "



SUPERELEVATED (RIGHT)

SPOT RESURFACING

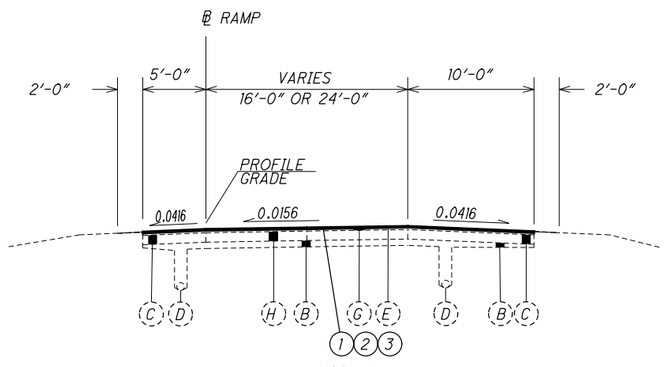
STA. 1+50.00 TO STA. 13+65.00 = 1,215 LIN. FT. " RAMP H "



SUPERELEVATED (LEFT)

SPOT RESURFACING

STA. 7+80 TO STA. 14+24.44 = 644.44 LIN. FT. " RAMP E "
BRIDGE NO. LAK-44-0620 SW
STA. 18+16.20 TO STA. 21+85.06 = 368.86 LIN. FT. " RAMP E "



NORMAL

SPOT RESURFACING

STA. 21+85.06 TO STA. 28+08.43 = 91.58 LIN. FT. " RAMP E "

EXISTING:

- (A) 9" REINFORCED CONCRETE BASE
- (B) SUBBASE
- (C) BIT. AGGREGATE BASE OR AGGREGATE BASE
- (D) UNDERDRAIN
- (E) 1-1/2" ASPHALT CONCRETE SURFACE COURSE
- (F) 3-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE
- (G) 2" ASPHALT CONCRETE INTERMEDIATE COURSE
- (H) 10" REINFORCED CONCRETE BASE

PROPOSED:

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2" DEPTH)
- (2) ITEM 407 - NON-TRACKING TACK COAT
- (3) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448), AS PER PLAN, PG70-22M (1-1/2")

HORIZONTAL NO SCALE

CALCULATED JAG
CHECKED EMK

LOCATION 2 - REPAIR / RESURFACING
S.R.-44 - TYPICAL SECTIONS

D12-PPM-FY2020

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LOCATIONS 2 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 2

These notes apply to Project Location 2 locations involving the 2' width repair of pavement longitudinal joint and spot resurfacing of Ramp "E" and Ramp "H".

Major Work Items – (SR-44)

The following major work items will require traffic maintenance which will be incorporated into the Contractor's sequence of operations:

Spot Resurfacing involving Ramp "E" and Ramp "H"

1. Removal and disposal of existing Raised Pavement Markers.
2. Planing of asphalt concrete, 1.5", As Directed by the Engineer.
3. Perform Partial Depth Repairs, As Directed by the Engineer.
4. Placing of asphalt concrete, 1.5"
5. Placing of Work Zone pavement markings.
6. Placing proposed permanent pavement markings.
7. Placing of Raised Pavement Markers.
8. Installing Runble Strips along edge lines.

Traffic shall not be permitted to travel on planed surface.

The asphalt concrete surface course shall be placed prior to opening roadway to traffic.

2' repair along longitudinal joint – involving SR-44, Ramp "E", and Ramp "G"

1. Removal and disposal of existing Raised Pavement Markers.
2. Planing 2' width of asphalt concrete, 1.5" depth,
   As Directed by the Engineer.
3. Placing 2' width of asphalt concrete, 1.5" depth.
4. Perform Transverse Joint Repairs, As Directed by the Engineer.
5. Placing of Work Zone pavement markings.
6. Placing proposed permanent pavement markings.
7. Placing of Raised Pavement Markers.

Traffic shall not be permitted to travel on planed surface.

The pavement planing and placement of asphalt concrete surface course should be completed in the same operation.

The asphalt concrete surface course shall be placed prior to opening roadway to traffic.

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PLAN SPLIT NO.	STATION TO STATION		LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA	254 PAVEMENT PLANING, ASPHALT CONCRETE, (1.5")	251 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, "A"	407 NON-TRACKING TACK COAT	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN, PG70-22M, (1.5")	253 PAVEMENT REPAIR, AS PER PLAN, "B"	875 LONGITUDINAL JOINT ADHESIVE	646 LANE LINE, 6"	614 WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	646 EDGE LINE, 6"		614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	646 CHANNELIZING LINE, 12"		614 WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	646 TRANSVERSE/DIAGONAL LINE	614 WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	618 RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	621 RAISED PAVEMENT MARKER REMOVED	621 RPM
			FT.	FT.	FT.	FT.	SQ. YD.	SY	SY	GAL	CY	CY	LB	MILE	MILE	MILE		MILE	FT		FT	FT	FT	MILE	EACH	EACH
	SR-44 - 2' PAVEMENT REPAIR - N.B.																									
1	233+00.00	308+73.33	7573.33	2	2	2	1683	1683		168	70.2			7573	7573										47	63
	309+93.33	310+14.33	21																							
	BRIDGE NO.: LAK-44-0561 R																									
	312+38.33	312+45.00	6.67																							
	RAMP "E" - 2' PAVEMENT REPAIR - N.B.																									
	46+97.96	46+83.63	14.33																							
1	45+83.63	30+00.00	1583.63	2	2	2	352	352		35	14.7			1584	1584										10	13
	SR-44 - 2' PAVEMENT REPAIR - S.B.																									
1	233+00.00	308+73.33	7573.33	2	2	2	1683	1683		168	70.2			7573	7573										47	63
	309+93.33	310+14.33	21																							
	BRIDGE NO.: LAK-44-0561 L																									
	312+38.33	312+45.00	6.67																							
	RAMP "G" - 2' PAVEMENT REPAIR - S.B.																									
	0+00.00	0+14.33	14.33																							
1	1+14.33	11+35.00	1020.67	2	2	2	227	227		23	9.5			1021	1021										6	9
	(FOR ABOVE REPAIR LOCATIONS)																									
1	TRANSVERSE JOINT REPAIRS		1215			2	270					30														
	RAMP "E" - SPOT RESURFACING - N.B.																									
1	30+00.00	28+08.43	191.57	39	39	39	830	830	25	83	34.6		47.9			383		383	192		192			383	1	2
1	28+08.43	25+09.44	298.99	39	70	54.5	1811	1811	54	181	75.5		74.75			598		598	449		449	135	135	598	9	10
	RAMP "E" - SPOT RESURFACING - N.B.																									
1	25+09.44	18+41.20	668.24	31	31	31	2302	2302	69	230	96		167.06			1336		1336						1336	6	8
	18+41.20	18+16.20	25																							
	BRIDGE NO.: LAK-44-0620 SW																									
	14+24.44	13+99.44	25																							
1	13+99.44	7+80.00	619.44	31	31	31	2134	2134	64	213	89		154.86			1239		1239						1239	6	8
	RAMP "H" - SPOT RESURFACING - N.B.																									
1	2+95.97	13+65.00	1069.03	31	31	31	3682	3682	110	368	153.5		267.26			2138		2138						2138	10	13
	SR-44 - SPOT RESURFACING - N.B.																									
1	308+73.33	309+93.33	120	38	38	38	507	507	15	51	21.2		30	120	120	240		240						240	1	1
	BRIDGE NO.: LAK-44-0561 R																									
1	46+83.63	45+83.63	100	38	38	38	422	422	13	42	17.6		25	100	100	200		200						200	1	1
	SR-44 - SPOT RESURFACING - S.B.																									
1	308+73.33	309+93.33	120	38	38	38	507	507	15	51	21.2		30	120	120	240		240						240	1	1
	BRIDGE NO.: LAK-44-0561 L																									
1	0+14.33	1+14.33	100	38	38	38	422	422	13	42	17.6		25	100	100	200		200						200	1	1
	SUBTOTALS							16562	378	1655	691	30	821.83	18191	18191	6574		6574	641		641	135	135	6574	146	193
	TOTALS CARRIED TO GENERAL SUMMARY							16562	378	1655	691	30	822	3.45 MI	3.45 MI	1.25 MI		1.25 MI	641		641	135	135	1.25 MI	146	193

CALCULATED JAG
CHECKED EMK

LOCATION 2 - SUB-SUMMARY
LAKE COUNTY - S.R.-44

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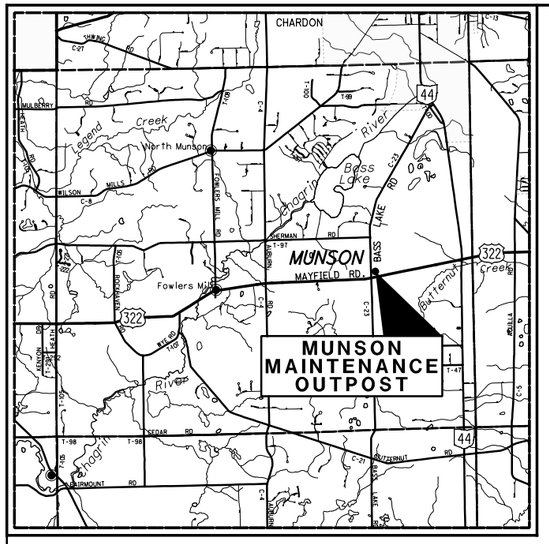
MUNSON
MAINTENANCE OUTPOST
12453 BASS LAKE ROAD
MUNSON TOWNSHIP, OHIO 44024
Phone: (440)-286-3167



LOCATION MAP

LATITUDE: 41°31'52" N LONGITUDE: 81°12'57" W

SCALE IN MILES

0 1 2 3 4

N

N

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED JAG
CHECKED EMK

LOCATION 3-(MUNSON OUTPOST)-GEAUGA CNTY
LOCATION MAP / SITE PLAN

D12-PPM-FY2020

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I:\ProjectData\D12\103289\Design\Roadway\Sheets\103289_L3_GP001.dgn Sheet 12/17/2019 10:12:28 AM jgrmovse

BURTON YARD SITE INFORMATION FROM RECORD PLANS. SITE WAS NOT SURVEYED. PLANIMETRIC AREAS DERIVED FROM AERIAL PHOTO INFORMATION AND RECORD PLANS.

LEGEND

- APPROXIMATE - PLANING / ASPHALT OVERLAY

32 / 56	D12-PPM-FY2020	LOCATION 3 - (MUNSON MAINTENANCE OUTPOST) PAVEMENT DETAILS SHEET	CALCULATED JAG / CHECKED EMK	0 20 / 0 40 HORIZONTAL SCALE IN FEET

LOCATION 3 – ADDITIONAL NOTES
(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 3 Description

This project location consists of flexible pavement repairs and the resurfacing of the District 12 Munson Maintenance Outpost.

The Project Engineer shall contact ODOT Geauga County Manager
Leo Cicirella (216) 584-2325 to coordinate work at the ODOT Munson Maintenance Outpost.
Additional Contact Persons:
Dustin Kraft – Transportation Manager – (216) 584-2318
Jim Lubanovich – Transportation Manager – (216) 584-2324

Contact the Project Engineer and the ODOT Geauga County Manager a minimum of two weeks before beginning work at the Munson Facility.

Maintenance of Traffic
Work Hours:

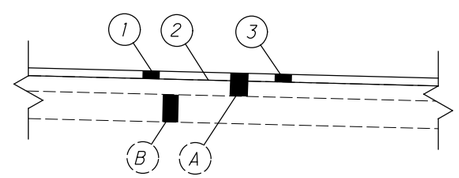
The Contractor is not permitted to work at night.

Pavement planing operations, pavement repairs and pavement planing are permitted during normal working hours of
7:00 AM through 3:30 PM, Monday thru Friday.

Any proposed working hour adjustments, Ex. 4- 10 hour days and vehicle and equipment relocation shall be coordinated between the Project Engineer and ODOT Geauga County Manager.

The items of work will include:

1. Perform site survey to record locations of existing pavement markings. Utilize the lump sum pay item: Item Special – Misc.: Inventory Existing Pavement Markings to compensate the contractor for the this item of work.
2. Contact the ODOT Geauga County Manager to coordinate and establish a schedule to get equipment and obstructions moved within the yard ahead of Contractor operations.
3. Plane existing pavement.
4. Perform pavement repairs to the existing asphalt, As Directed By the Engineer, using quantities provided.
5. Perform existing and proposed pavement elevation surveying to ensure proper draining of water away from existing buildings to existing drainage structures. Utilize the lump sum pay item: Item 623 – Construction Layout Stakes and Surveying to compensate the contractor for the essential vertical control due to the flatness of the existing pavement area.
6. Perform the placement of the proposed asphalt pavement overlay As Directed by the Engineer.
7. Place pavement markings.



TYPICAL SECTION
(WITH PLANING)

EXISTING LEGEND

(A) *ASPHALT, 5"±*

(B) *SUBBASE*

PROPOSED LEGEND

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

(2) *ITEM 407 - NON-TRACKING TACK COAT*

(3) *ITEM 441 - 1-1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M*

MUNSON MAINTENANCE OUTPOST
TYPICAL SECTION
RESURFACING EXISTING PAVEMENT

REF. NO.	SHEET NO.	PLAN SPLIT NO.	MUNSON OUTPOST	LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA	PLANIMETERED AREAS		253 PAVEMENT REPAIR, AS PER PLAN, "A"	254 PAVEMENT PLANING, ASPHALT CONCRETE, (1.5")		407 NON-TRACKING TACK COAT		441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M, (1.5")			642 TRANSVERSE/DIAGONAL LINE, TYPE 1, YELLOW	642 PARKING LOT STALL MARKING, TYPE 1, WHITE
				FT.	FT.	FT.	FT.	SQ. YD.	SQ. YD.		CY	SY		GAL		CY			FT	FT
			DISTRICT 12 - MUNSON MAINTENANCE OUTPOST																	
		1							5094		30	5094		509		212.3			135	200
SUBTOTALS											**30**	**5094**		**509**		**212.3**			**135**	**200**
TOTALS CARRIED TO GENERAL SUMMARY											**30**	**5094**		**509**		**212**			**135**	**200**

CALCULATED JAG
CHECKED EMK

LOCATION 3 - (MUNSON MAINTENANCE OUTPOST)
TYPICAL SECTION / GENERAL NOTES / SUBSUMMARY

D12-PPM-FY2020

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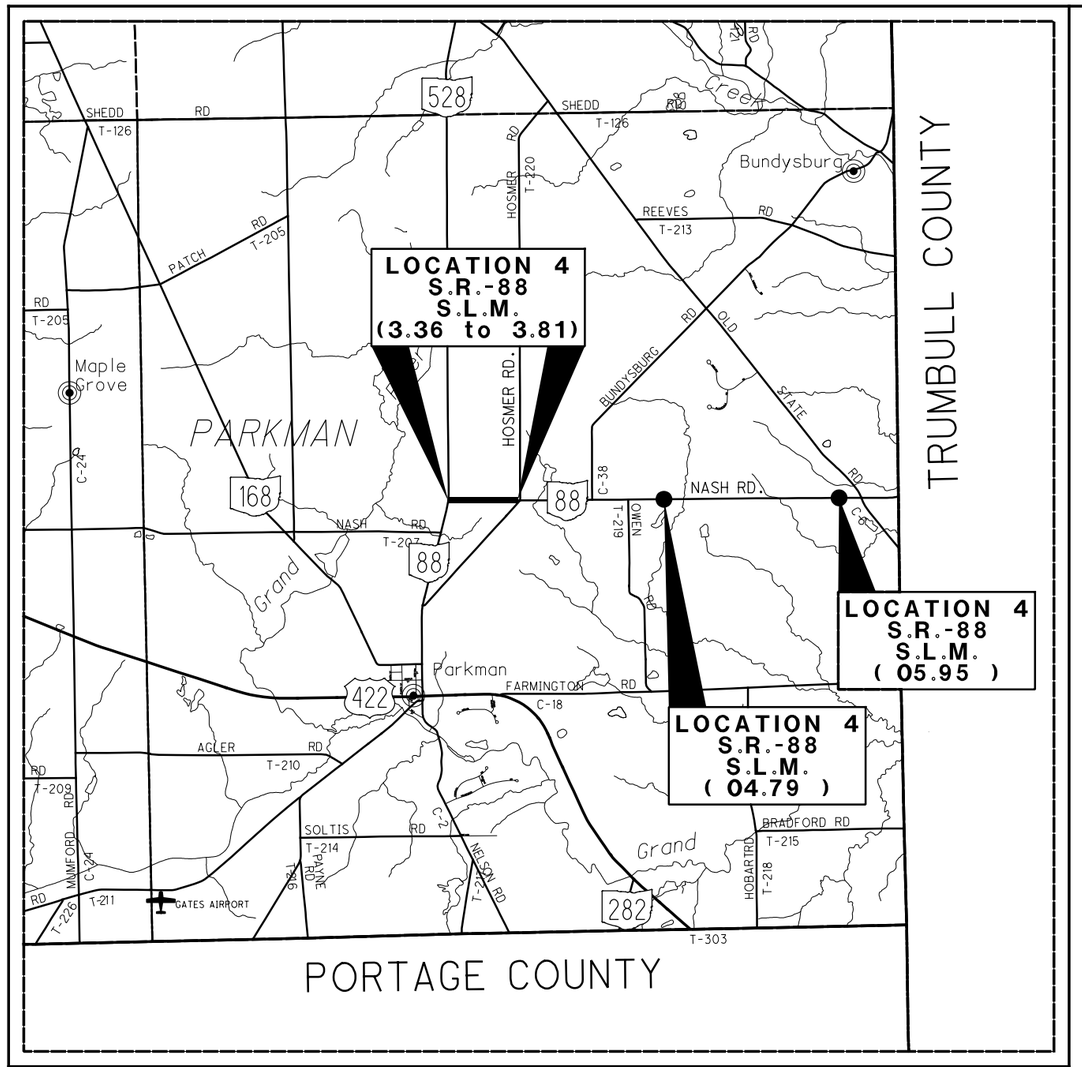
LOCATION 4 - S.R.-88 - GEAUGA COUNTY



LOCATION MAP

LATITUDE: 41°23′21″ N LONGITUDE: 81°03′37″ W

SCALE IN MILES

0 1 2 3 4

N

HORIZONTAL SCALE IN FEET

CALCULATED JAG
CHECKED EMK

LOCATION 4 - (S.R.-88) - GEAUGA COUNTY
LOCATION MAP / SCHEMATIC PLAN

D12-PPM-FY2020

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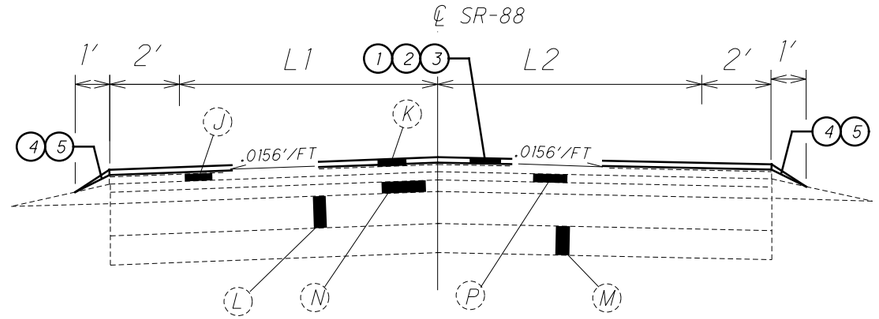
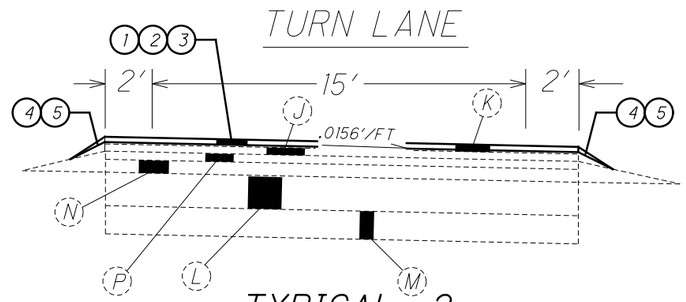


FOR SLM 3.36 - SLM 3.39, L1=11′ AND L2=10′
FOR SLM 3.39 - SLM 3.81, L1=10′ AND L2=10′

TYPICAL 1
SR-88



TYPICAL 2
SR-88

EXISTING:

- (L) ASPHALT CONCRETE (VARIES 2-1/2"-4")
- (M) BITUMINOUS AGGREGATE (4"±)
- (N) ITEM 403 - ASPHALT CONCRETE, AC-20
- (P) ITEM SPECIAL - ASPHALT CONCRETE W/SBR LATEX, SURFACE COURSE, TYPE 1, AC-10

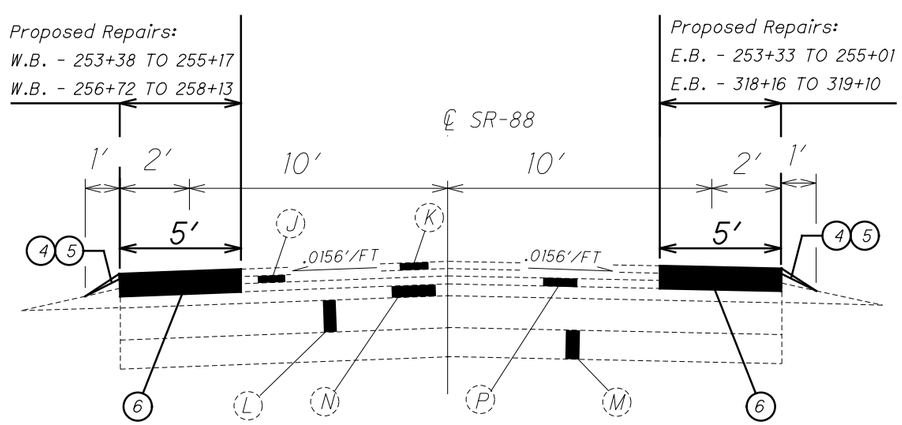
EXISTING LEGEND (PID 21753 - GEA-88/528-0.00/1.29 - (YEAR 2006)

- (J) ¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, PG64-28, AS PER PLAN (0" MIN)
- (K) 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22, AS PER PLAN

PROPOSED LEGEND:

1. ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1")
2. ITEM 407 - NON-TRACKING TACK COAT
3. ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (1")
4. ITEM 209 - LINEAR GRADING, AS PER PLAN
5. ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

SR-88, RESURFACING
SLM 3.36 TO SLM 3.81



TYPICAL 3
SR-88
SLM 4.69 (247+59) to SLM 4.89 (258+13)
SLM 5.85 (308+70) to SLM 6.05 (319+10)

PROPOSED LEGEND:

4. ITEM 209 - LINEAR GRADING, AS PER PLAN
5. ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN
6. ITEM 253 - PAVEMENT REPAIR, AS PER PLAN "B"

SR-88, PAVEMENT REPAIRS
SLM-04.79 / SLM-05.95

CALCULATED JAG
CHECKED EMK

LOCATION 4- TYPICAL SECTIONS - S.R.-88
SLM 3.36 TO SLM 3.81 / SLM-04.79 / SLM-05.95

D12-PPM-FY2020

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LOCATION 4 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 4 Description

This project location consists of the:

1. Planing and paving of SR-88 in Geauga County from SLM 3.36 to SLM 3.81.
2. Performing Pavement Repairs near the Culvert: GEA-088-04.79
3. Performing Pavement Repairs near the Culvert: GEA-088-05.95

Location 4 - (S.R.-88 – Resurfacing / Pavement Repairs)

Utilize standard drawings to close lanes during the working hours, As Directed By The Engineer. Outside of working hours, all lanes shall be open to traffic.

Resurfacing: SLM 3.36 to SLM 3.81

1. Plane asphalt from locations on Plan and Sub-Summary.
2. Perform pavement repairs.
   The duration of time between pavement planing and placement of the surface course shall be no longer than seven **(7)** days.
3. Place temporary pavement markings.
   4. Place asphalt concrete surface course and temporary markings.
   6. Place final pavement markings

Pavement Repairs near the Culverts: GEA-088-04.79 & GEA-088-05.95

1. Perform Pavement Repairs at each location.
2. Place temporary pavement markings.
3. Place final pavement markings.

Maintenance of Traffic

Work Hours:

The Contractor is not permitted to work at night.
Limit work hours for this Location to daylight hours between 7:00 AM and 9:00 PM, Monday through Friday or between 8:30 AM and 7:00 PM on Saturday and Sunday

The estimated quantities in the Location 4 - Sub-Summaries have been carried to the General Summary.

CALCULATED JAG
CHECKED EMK

LOCATION 4 - S.R.-88 - GENERAL NOTES

D12-PPM-FY2020

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REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION		DIRECTION	LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA	CADD AREAS	209 LINEAR GRADING, AS PER PLAN	251 PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, "A"	253 PAVEMENT REPAIR, AS PER PLAN, "B"	897 PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1.0")	617 COMPACTED AGGREGATE, AS PER PLAN	407 NON-TRACKING TACK COAT	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (1.0")	875 LONGITUDINAL JOINT ADHESIVE			
						FT.	FT.	FT.	FT.	SQ. YD.	SQ. YD.	MILE	SY	CY	SY	CY	GAL	CY	LB			
			LOCATION 4 - SR-88																			
		1	0+17.00	0+35.00		18	34	25	29.5	59		36			59	0.1	6	2	4.5			
		1	0+35.00	1+47.00		112	25	25	25	311		224			311	0.7	31	9	28			
		1	1+47.00	2+27.00		80	44	24	34	302		160	206		302	0.5	30	8	20			
		1	2+27.00	24+00.00		2173	24	24	24	5795		4346			5795	13.4	580	161	543.3			
			LOCATION 4 - SR-88 - TURN LANE																			
		1	MADISON RD.	SR-88		197	19	19	19	416		394			416	1.2	42	12	49.3			
			LOCATION 4 - CULVERT: GEA-88-04.79																			
		1	253+38.00	255+17.00	WB	179	5	5	5	99		179		8		0.6						
		1	256+72.00	258+13.00	WB	141	5	5	5	78		141		7		0.4						
		1	253+33.00	255+01.00	EB	168	5	5	5	93		168		8		0.5						
			LOCATION 4 - CULVERT: GEA-88-05.95																			
		1	318+16.00	319+10.00	EB	94	5	5	5	52		94		4		0.3						
SUBTOTALS												5742	206	27	6883	17.7	689	192	645			
TOTALS CARRIED TO GENERAL SUMMARY												1.09 MI	206	27	6883	17.7	689	192	645			

REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION		DIRECTION	LENGTH						646 EDGE LINE, 6"	646 CENTER LINE	646 STOP LINE	621 RPM	621 RAISED PAVEMENT MARKER REMOVED	614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT	614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT
						FT.						MILE	MILE	FT	EACH	EACH	MILE	MILE	MILE	MILE	FT	FT
			LOCATION 4 - SR-88																			
		1	0+17.00	0+35.00		18						36	18	20			18	18	36	36	20	20
		1	0+35.00	1+47.00		112						224	112		51	41	112	112	224	224		
		1	1+47.00	2+27.00		80						160	80				80	80	160	160		
		1	2+27.00	24+00.00		2173						4346	2173				2173	2173	4346	4346		
			LOCATION 4 - SR-88 - TURN LANE																			
		1	MADISON RD.	SR-88		197						394			5	5			394	394		
			LOCATION 4 - CULVERT: GEA-88-04.79																			
		1	253+38.00	255+17.00	WB	179						179							179	179		
		1	256+72.00	258+13.00	WB	141						141							141	141		
		1	253+33.00	255+01.00	EB	168						168							168	168		
			LOCATION 4 - CULVERT: GEA-88-05.95																			
		1	318+16.00	319+10.00	EB	94						94							94	94		
SUBTOTALS												5742	2383	20	56	46	2383	2383	5742	5742	20	20
TOTALS CARRIED TO GENERAL SUMMARY												1.09 MI	0.45 MI	20	56	46	0.45 MI	0.45 MI	1.09 MI	1.09 MI	20	20

CALCULATED JAG
CHECKED EMK

LOCATION 4 - SUB-SUMMARIES

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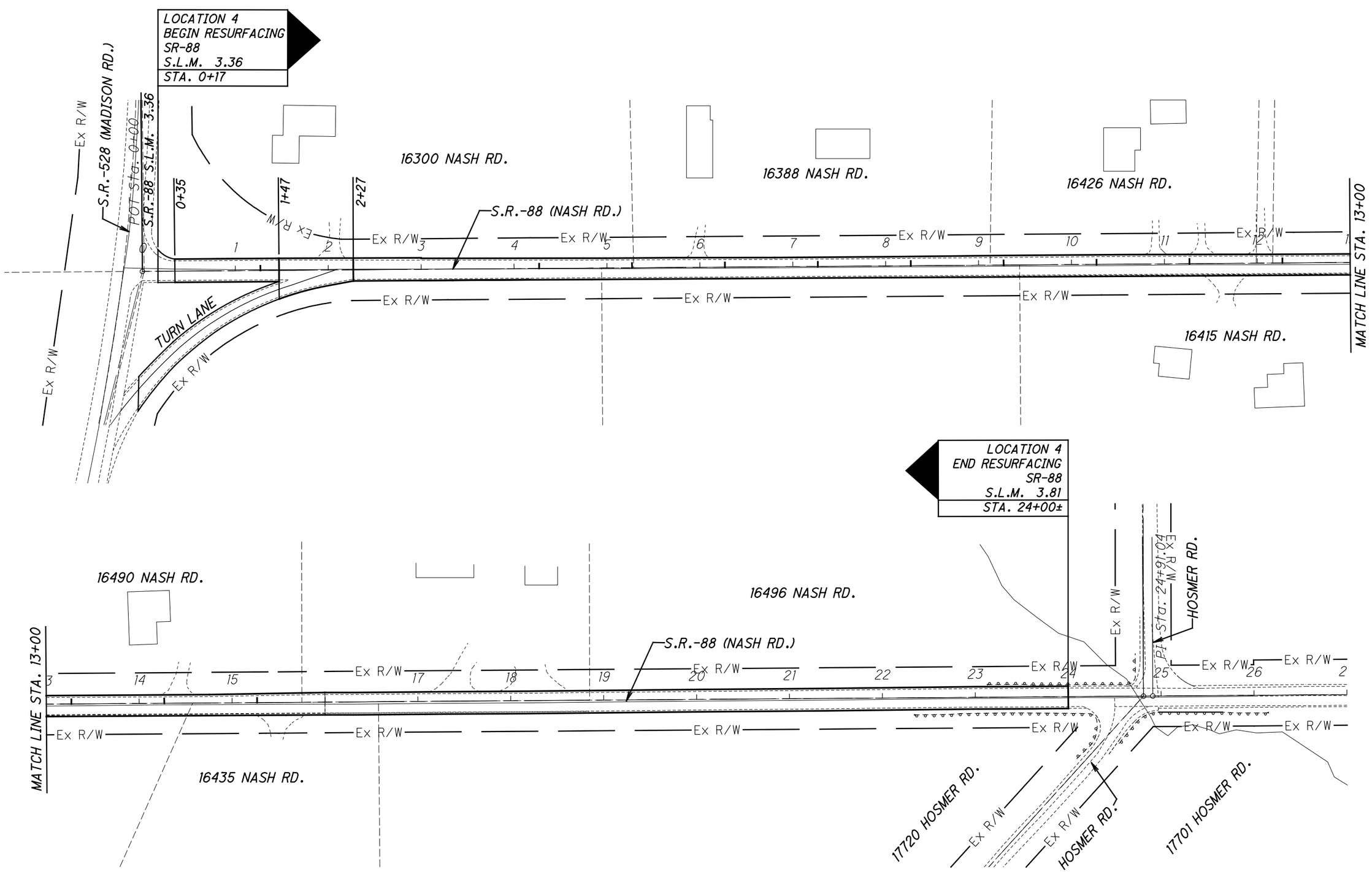

HORIZONTAL SCALE IN FEET
25 50 100

CALCULATED JAG
CHECKED EMK

LOCATION 4 - (S.R.-88) - GEAUGA COUNTY
PLAN SHEET - SLM 3.36 to SLM 3.78

D12-PPM-FY2020

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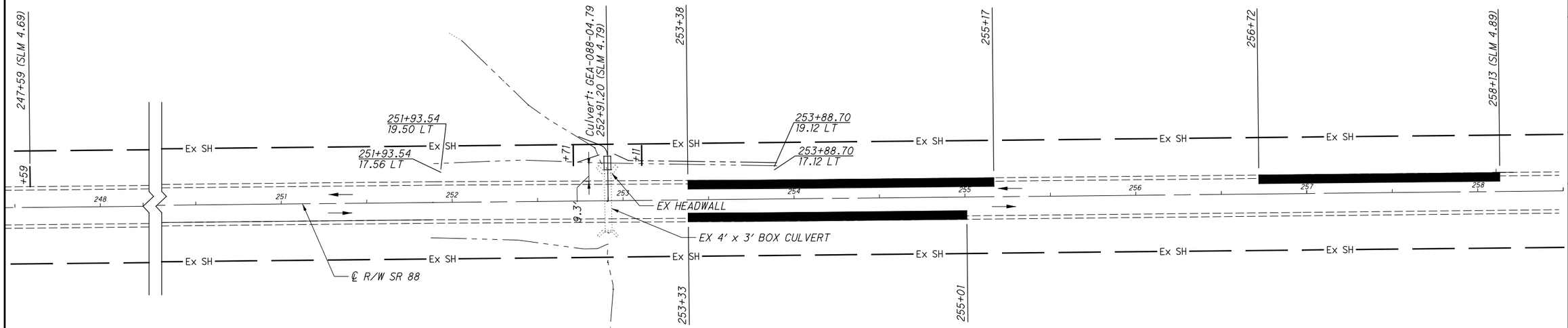
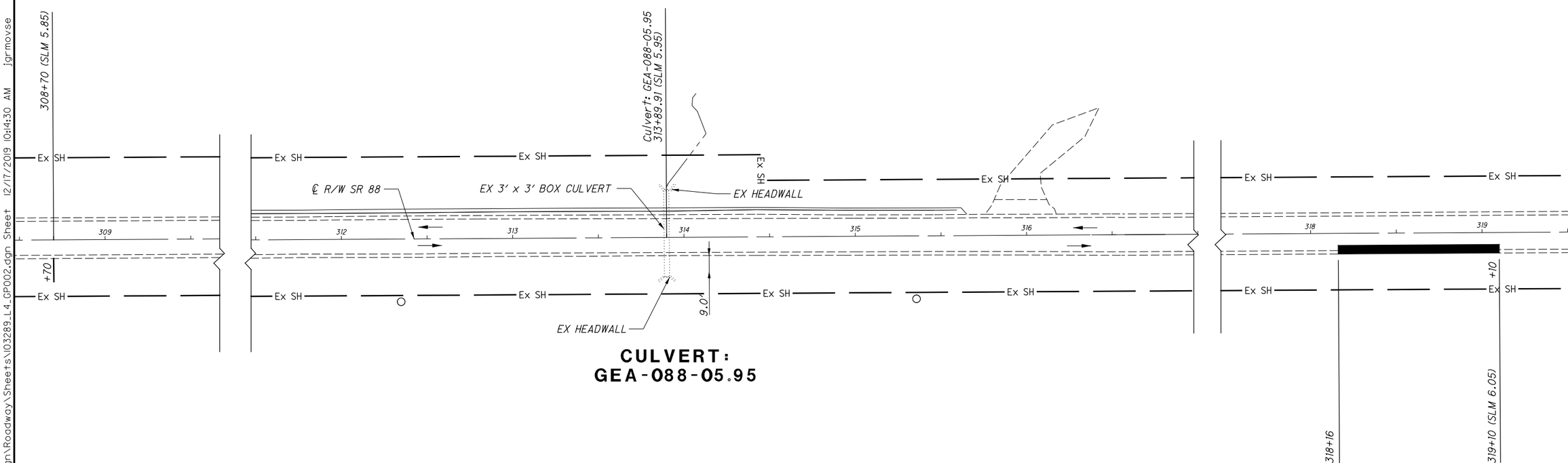


CULVERT:
GEA-088-04.79



CULVERT:
GEA-088-05.95

LEGEND:

- ITEM 253 - PAVEMENT REPAIR, AS PER PLAN "B"

HORIZONTAL SCALE IN FEET 0 30 60

CALCULATED JAG
CHECKED EMK

LOCATION 4 - (S.R.-88) - GEAUGA COUNTY
PLAN SHEET-LOCATIONS SLM 4.79 & SLM 5.95

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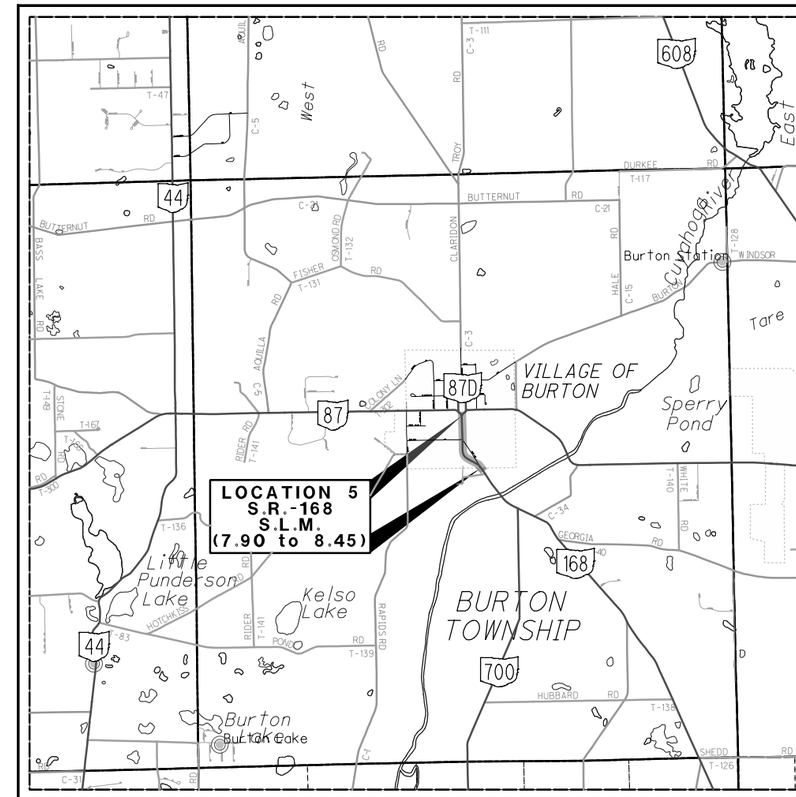
LOCATION 5 - S.R.-168
GEAUGA COUNTY
VILLAGE OF BURTON



LOCATION MAP

LATITUDE: 41°27′48″ N LONGITUDE: 81°08′31″ W

SCALE IN MILES

0 1 2 3 4

N

HORIZONTAL SCALE IN FEET

CALCULATED JAG
CHECKED EMK

LOCATION 5 - (S.R.-168) - GEAUGA COUNTY
LOCATION MAP / SCHEMATIC PLAN

D12-PPM-FY2020

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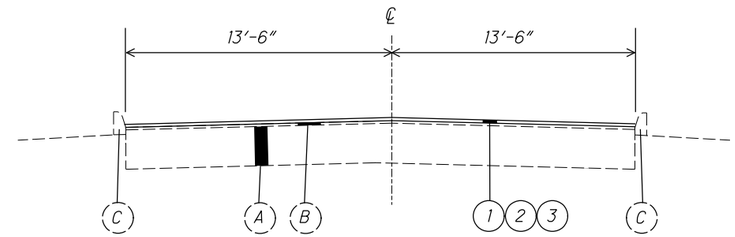

TYPICAL - S.R.-168

S.L.M. 7.90 (26+16) - S.L.M. 8.45 (55+56)

EXISTING LEGEND:

(A) ASPHALT CONCRETE (VARIES)

(B) ITEM 874 - ULTRATHIN BONDED ASPHALT CONCRETE (3/4") (PID 78975-YR2006)

(C) GUARDRAIL

PROPOSED LEGEND

(1) ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1")

(2) ITEM 407 - NON-TRACKING TACK COAT

(3) ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (1")

REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION	DIRECTION	LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA	CADD AREAS		PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN, "A"		PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1.0")		NON-TRACKING TACK COAT	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (1.0")	LONGITUDINAL JOINT ADHESIVE		
												251		897		407	424	875		
					FT.	FT.	FT.	FT.	SQ. YD.	SQ. YD.		SY		SY		GAL	CY	LB		
			LOCATION 5 - SR-168																	
		1	26+16.00 54+25.00		2809	27	27	27	8427					8427		843	234	702.3		
			LOCATION 5 - SR-168 - NORTHBOUND SIDE OF CENTERLINE	NB																
		1	54+25.00 55+56.00		131				331	331		275		331		33	9			
			LOCATION 5 - SR-168 - SOUTHBOUND SIDE OF CENTERLINE	SB														32.8		
		1	54+25.00 55+56.00		131				405	405				405		41	11			
SUBTOTALS												275		9163		917	254	735		
TOTALS CARRIED TO GENERAL SUMMARY												275		9163		917	254	735		

CALCULATED JAG
CHECKED EMK

LOCATION 5 - TYPICAL SECTION - SUB-SUMMARY
S.R.-168 - SLM 7.90 TO SLM 8.45

D12-PPM-FY2020

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LOCATION 5 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 5 Description

This project location consists of the:

1. Planing and paving of SR-168 in Geauga County from SLM 7.90 to SLM 8.45.

Location 5 - (S.R.-168 – Resurfacing)

Utilize standard drawings to close lanes during the working hours, As Directed By The Engineer. Outside of working hours, all lanes shall be open to traffic.

Resurfacing: SLM 7.90 to SLM 8.45

1. Plane asphalt from locations on Plan and Sub-Summary.
2. Perform pavement repairs.
   The duration of time between pavement planing and placement of the surface course shall be no longer than seven **(7)** days.
3. Place asphalt concrete surface course and temporary markings.
4. Place final pavement markings

Maintenance of Traffic

Work Hours:

The Contractor is not permitted to work at night.
Limit work hours for this Location to daylight hours between 7:00 AM and 9:00 PM, Monday through Friday or between 8:30 AM and 7:00 PM on Saturday and Sunday

The estimated quantities in the Location 5 - Sub-Summaries have been carried to the General Summary.

REF. NO.	SHEET NO.	PLAN SPLIT NO.	PAVEMENT MARKING SUB-SUMMARY STATION TO STATION	DIRECTION	LENGTH						646 EDGE LINE, 6"	646 CENTER LINE	646 STOP LINE	646 CROSSWALK LINE	614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT	614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT
					FT.						MILE	MILE	FT	FT	MILE	MILE	MILE	MILE	FT	FT
			LOCATION 5 - SR-168																	
		1	26+16.00 54+25.00		2809						5618	2809			2809	2809	5618	5618		
			LOCATION 5 - SR-168 - NORTHBOUND SIDE OF CENTERLINE	NB																
		1	54+25.00 55+56.00		131						262	131	20	50	131	131	262	262	20	20
			LOCATION 5 - SR-168 - SOUTHBOUND SIDE OF CENTERLINE	SB																
		1	54+25.00 55+56.00		131						262			50			262	262		
SUBTOTALS											6142	2940	20	100	2940	2940	6142	6142	20	20
TOTALS CARRIED TO GENERAL SUMMARY											1.16 MI	0.56 MI	20	100	0.56 MI	0.56 MI	1.16 MI	1.16 MI	20	20

CALCULATED JAG
CHECKED EMK

LOCATION 5 - GENERAL NOTES - SUB-SUMMARY

D12-PPM-FY2020

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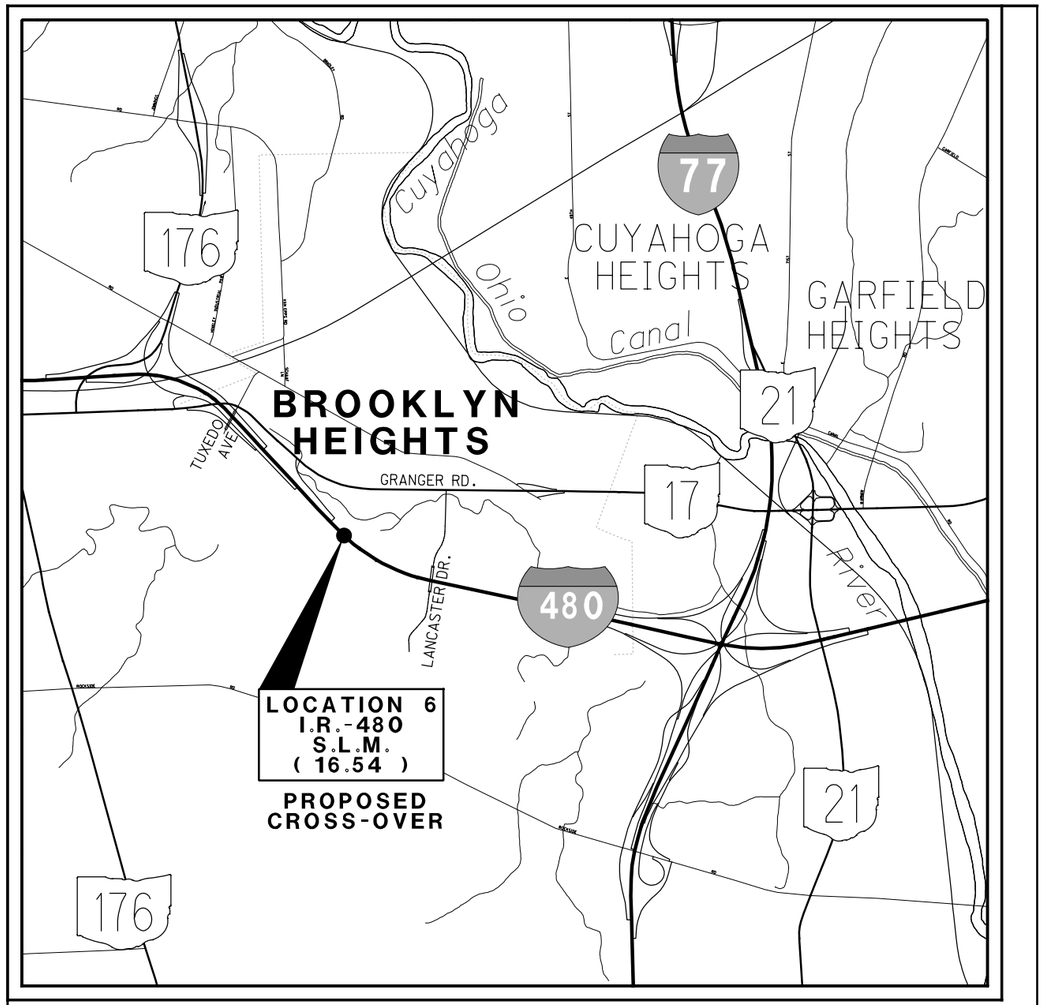
LOCATION 6 - I.R.-480 - CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: 41°24'47" N LONGITUDE: 81°40'20" W

SCALE IN MILES

0 .5 1 2

N

CALCULATED JAG
CHECKED EMK

LOCATION 6 - (I.R.-480) - CUYAHOGA COUNTY
LOCATION MAP

D12-PPM-FY2020

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LOCATION 6 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 6 Location

These notes apply to the Project Location 6 location involving the construction of a median cross over on IR-480

Major Work Items – Location 6 (IR-480)

The following major work items will require traffic maintenance which will be incorporated into the Contractor's sequence of operations:

1. Perform existing and proposed pavement elevation surveying to ensure proper drainage. Utilize the lump sum pay item: Item 623 – Construction Layout Stakes and Surveying to compensate the contractor for the essential horizontal and vertical control due to connecting the proposed pavement to the existing pavement.
2. Coordinate the routing of the existing lighting circuit under the proposed cross-over pavement, As Directed by the Engineer.
3. Coordinate the construction of the proposed cross-over pavement, As Directed by the Engineer.
4. Placing proposed signs, As Directed by the Engineer.

Project – Location 6 - Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the "District 12 Permitted Lane Closure Times" list, which is located on the ODOT website:

www.dot.state.oh.us/dist12/workzone/laneclo.htm

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed, unless directed by the Engineer.
Shoulder closures shall only be allowed at the times specified for lane closures, unless directed by the Engineer.

Maintenance of Traffic - Pavement Construction

Construction of the median cross over pavement, up to the top of the aggregate base, shall be completed in 7 calendar days.

During the working hours, the left shoulder can be closed to construct the pavement replacement.
At the end of each work day, the left shoulder must be opened and the contractor shall place aggregate base or fill material in the area of pavement widening to within 3" of the elevation of the edge of existing pavement to satisfy the conditions of MT-101.90.
Any dropoffs shall be in accordance with MT-101.90 condition II.
Drums adjacent to the shoulder replacement shall be placed 20 ft. C/C.

Overnight Trench Closing

The base widening shall be completed to a depth of no more than 3 inches below the existing pavement by the end of each work day.
No trench shall be left open overnight.
In case work must be suspended because of inclement weather or other reasons, the trench for the uncompleted base widening shall be backfilled at the direction of the Engineer.

Lighting Plans For Existing Lighting

The lighting plans for the existing lighting circuits are on file at ODOT District 12, Garfield Heights.

The following are the contacts for ODOT maintained lighting/traffic circuits:

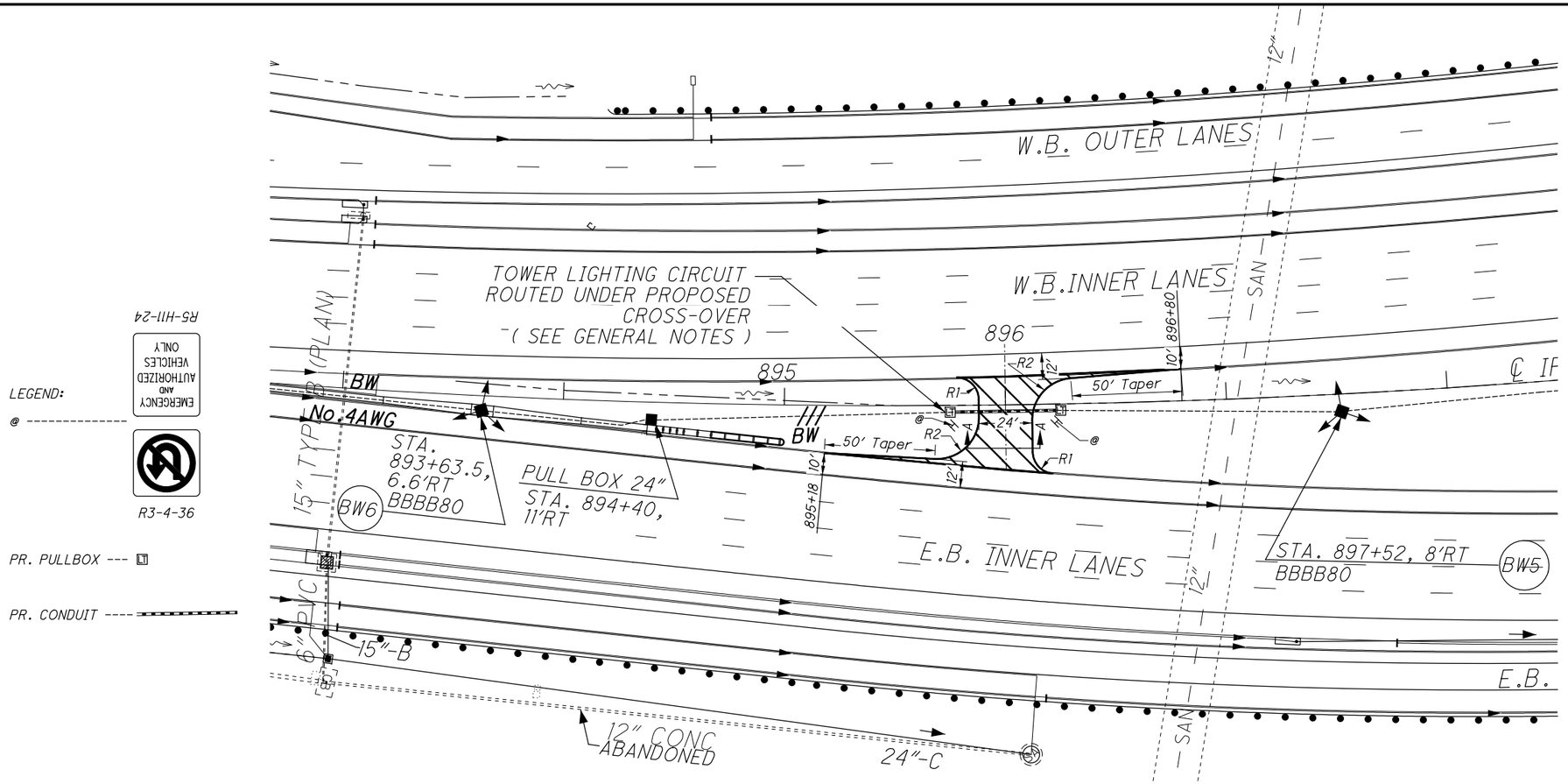
Attn: Keith Hamilton, District Lighting Engineer
O.D.O.T. District 12 – Roadway Services
(216) 584-2220

Attn: David Nimrichter, District Traffic Manager
O.D.O.T. District 12
(216) 584-2296

At least seven working days prior to commencing construction operations in an area which may involve underground utilities,

the Contractor shall notify the Project Engineer and the registered utility protection service. The owner of the underground utility facility shall, within forty-eight hours, excluding Saturdays, Sundays and Legal Holidays, after notice is received, stake, mark, or otherwise designate the location of the underground utility facilities in the construction areas in such a manner as to indicate their course together with the approximate depth at which they were installed.

The location and markings shall be coordinated to stay approximately two days ahead of the planned construction.



Median Crossover Detail

Median Crossover Pavement
R1 = 10'
R2 = 19'

LEGEND:

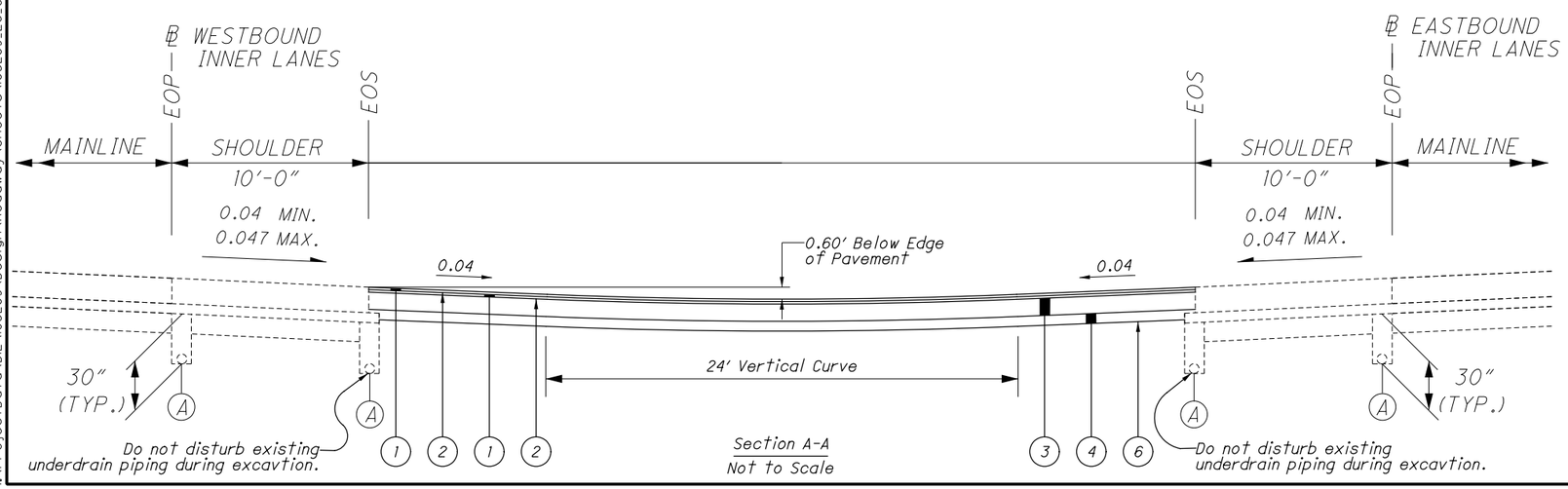
@ ----------

EMERGENCY AND AUTHORIZED VEHICLES ONLY
R5-H11-24

R3-4-36

PR. PULLBOX --- ⊔

PR. CONDUIT ----



Section A-A
Not to Scale

Proposed Legend:

1. Item 442 - 1-1/2" Asphalt Concrete Surface Course, 12.5mm, Type A (446), As Per Plan
2. Item 407 - Non-Tracking Tack Coat
3. Item 302 - 10-1/2" Asphalt Concrete Base, PG64-22
4. Item 304 - 6" Aggregate Base
5. Item 659 - Seeding and Mulching
6. Item 204 - Subgrade Compaction
7. Item 209 - Linear Grading, As Per Plan
8. Item 617 - Compacted Aggregate, As Per Plan

Existing Legend:

A Underdrain

HORIZONTAL SCALE IN FEET 0 15 30 60

CALCULATED JAG
CHECKED EMK

LOCATION 6 - MEDIAN U-TURN OPENING
IR-480, STA. 896+00

D12-PPM-FY2020

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PLAN SPLIT NO.	STATION TO STATION FROM	TO		625 CONNECTION, UNFUSED PERMANENT	625 NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	625 CONDUIT, 3", 725.04	625 TRENCH, 24" DEEP	625 PULL BOX, 725.08, 24"	625 PLASTIC CAUTION TAPE
				EACH	FT	FT	FT	EACH	FT
1	895+75	896+25		6	180	50	50	2	50
TOTALS TO GENERAL SUMMARY				6	180	50	50	2	50
PLAN SPLIT #1 TOTAL				6	180	50	50	2	50

LIGHTING SUB-SUMMARY

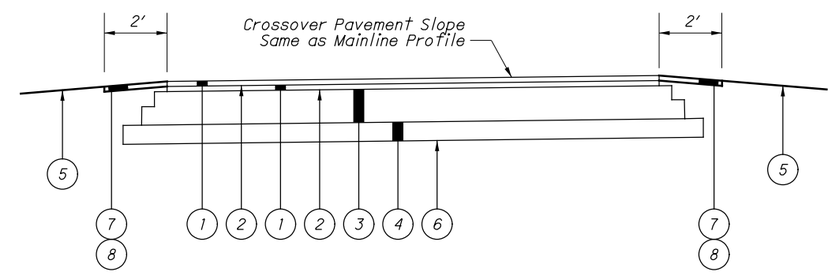
PLAN SPLIT NO.	STATION TO STATION FROM	TO	AREA	203 EXCAVATION	203 EMBANKMENT	204 SUBGRADE COMPACTION	302 ASPHALT CONCRETE BASE, PG64-22, 10.5"	304 AGGREGATE BASE, 6"	407 NON-TRACKING TACK COAT	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN, PG70-22M, (1.5")	630 SIGN, FLAT SHEET	630 GROUND MOUNTED SUPPORT, NO. 3 POST	659 SEEDING, MISC.:SEEDING AND MULCHING	209 LINEAR GRADING, AS PER PLAN	617 COMPACTED AGGREGATE, AS PER PLAN
			SQ.YD.	CY	CY	SY	CY	CY	GAL	CY	SF	FT		MILE	CY
1	895+18	896+80	157	79	6	193	51	31	18	12	28	56	LS	0.04	2.6
TOTALS TO GENERAL SUMMARY				79	6	193	51	31	18	12	28	56	LS	0.04	2.6
PLAN SPLIT #1 TOTAL				79	6	193	51	31	18	12	28	56	LS	0.04	2.6

PAVEMENT SUB-SUMMARY

SCHEMATIC LEGEND

- CIRCUIT CABLE
- UNDERPASS LUMINAIRE, 100 W HPS
- EXISTING CONVENTIONAL LIGHT POLE WITH NEW 200W HPS LUMINAIRE
- HIGH MAST TOWER W/-4-400 WATT HPS LUMINAIRES, SYMMETRICAL
- HIGH MAST TOWER W/-6-400 WATT HPS LUMINAIRES, SYMMETRICAL
- CONTROL CENTER

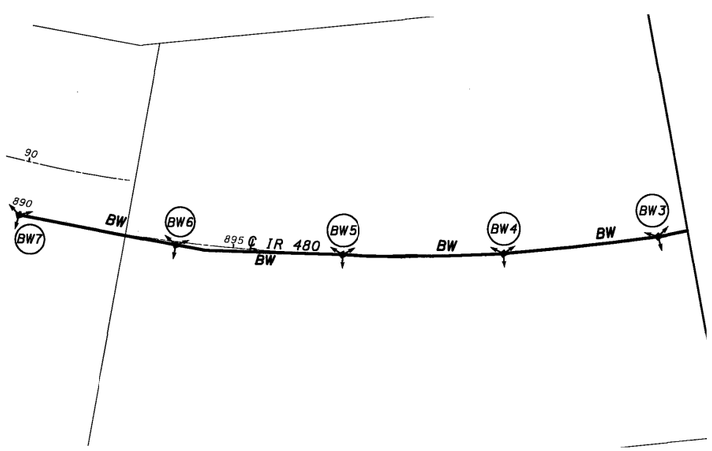
CUY-480-15.81

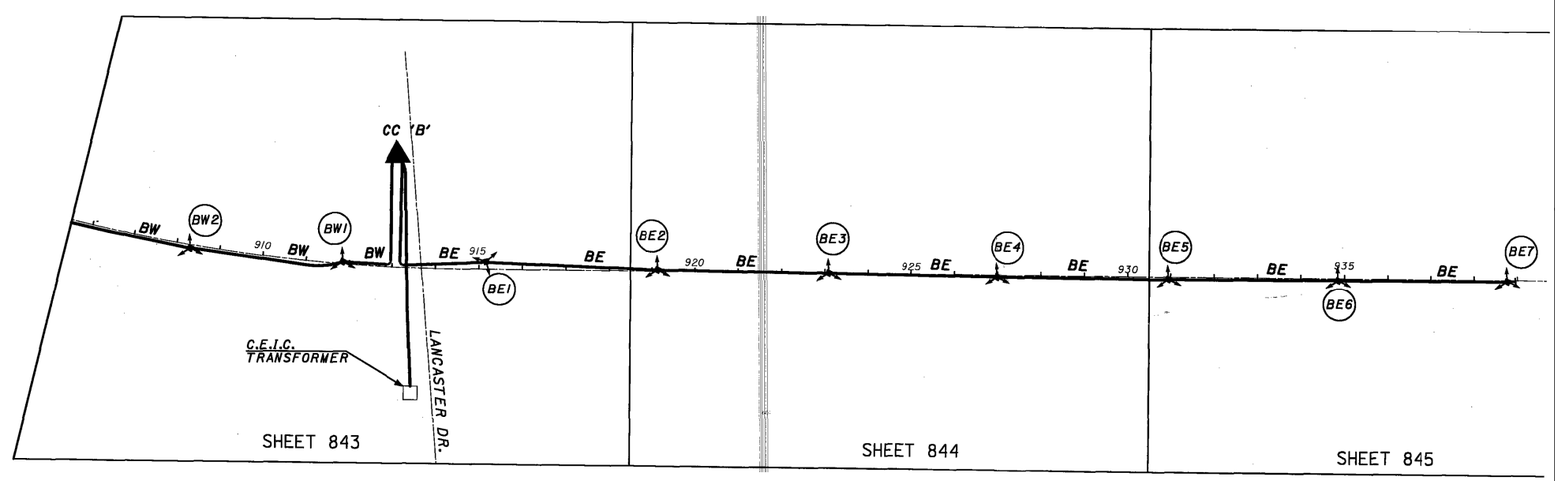


Section A-A

Not to Scale

For Legend See Previous Location 6 Sheet





Lighting Circuit Information From Record Plans
And Is Provided for Location Reference
Purposes and May Not Depict
Actual Current Conditions.
Perform Only Work Defined In These Plans
And Ignore Work Items Stated In Record Plans

LIGHTING CIRCUIT DIAGRAM

LOCATION 6 - MEDIAN U-TURN OPENING
IR-480, STA. 896+00

D12-PPM-FY2020

CALCULATED JAG
CHECKED EMK

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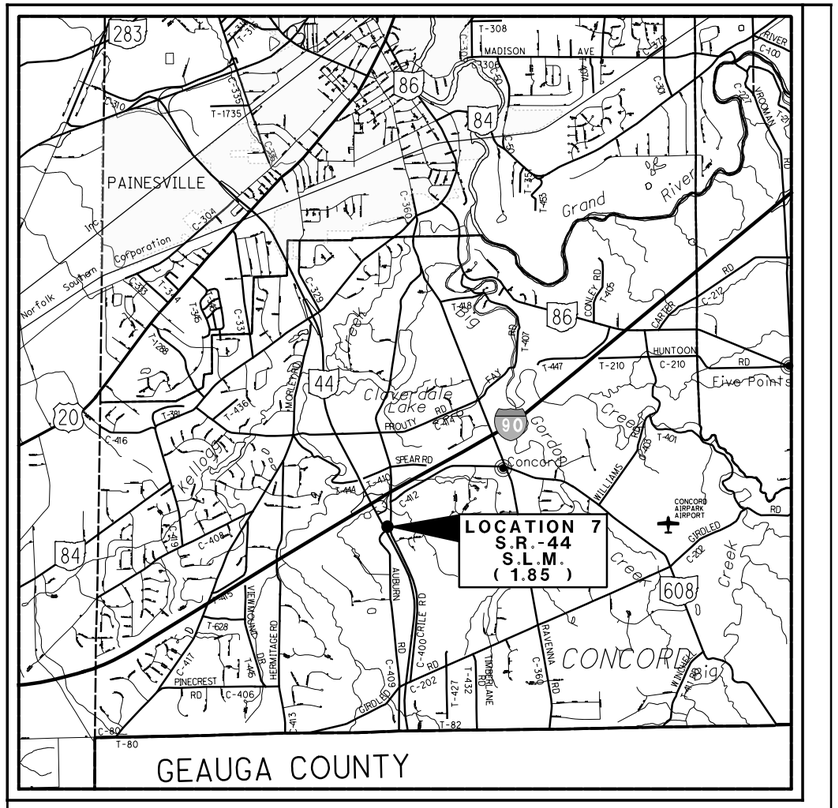
LOCATION 7 - S.R.-44 - LAKE COUNTY



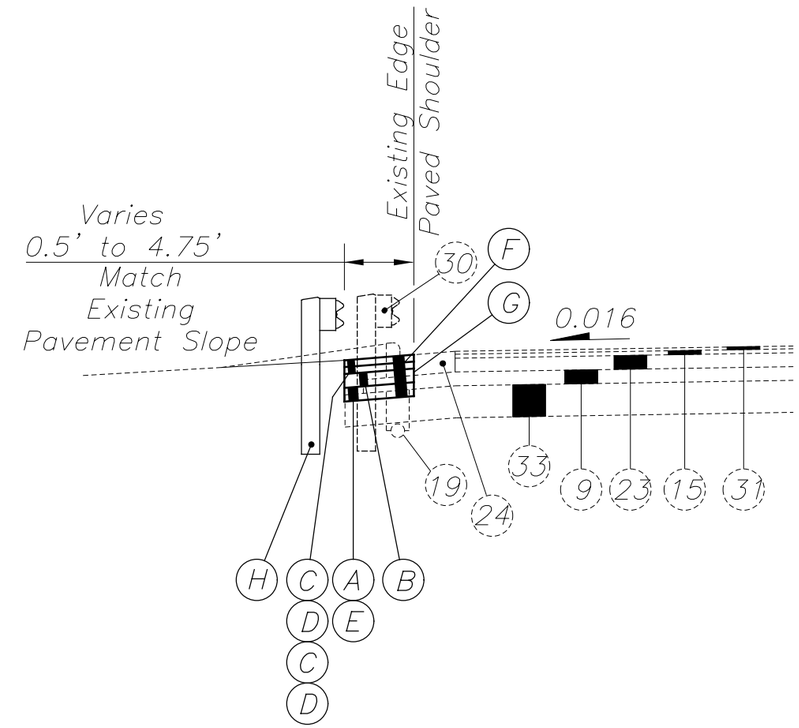
LOCATION MAP

LATITUDE: 41°40'01" N LONGITUDE: 81°14'40" W

SCALE IN MILES

0 .5 1 2

N



SHOULDER WIDENING DETAIL

EXISTING LEGEND:

- (9) ITEM 304 – 6" AGGREGATE BASE
- (15) ITEM 441 – 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) PG64-22
- (19) ITEM 605 – 6" BASE PIPE UNDERDRAINS WITH FABRIC WRAP, 707.31
- (23) ITEM 302 – 5" ASPHALT CONCRETE BASE, PG64-22
- (24) ITEM 609 – COMBINATION CURB AND GUTTER, TYPE 2
- (30) ITEM 606 – GUARDRAIL, TYPE MGS
- (31) ITEM 441 – 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG70-22M, AS PER PLAN
- (33) ITEM 206 – CEMENT STABILIZED SUBGRADE, 14 IN. DEEP

PROPOSED LEGEND:

- (A) ITEM 304 – 6" AGGREGATE BASE
- (B) ITEM 301 – 6" ASPHALT CONCRETE BASE, PG64-22
- (C) ITEM 441 – 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M (3" TOTAL – PLACED IN TWO LIFTS)
- (D) ITEM 407 – NON-TRACKING TACK COAT
- (E) ITEM 204 – SUBGRADE COMPACTION
- (F) ITEM 203 – EXCAVATION
- (G) ITEM 252 – FULL DEPTH PAVEMENT SAWING
- (H) ITEM 606 – GUARDRAIL, TYPE MGS

LOCATION 7 - S.R.-44 AT AUBURN RD.
LOCATION MAP / TYPICAL SECTION

D12-PPM-FY2020

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LOCATION 7 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 7 Location

These notes apply to Project Location 7 location involving the shoulder widening.

Major Work Items – Location 7 (SR-44)

As Directed by the Engineer, The following major work items will require traffic maintenance which will be incorporated into the Contractor's sequence of operations:

1. In order for protection of the motoring public, the removal of the guardrail shall be scheduled, with the ability for the installation of the new guardrail as soon as the shoulder asphalt is placed.
2. A quantity of sawcutting is provided to removed a minimum amount of the existing shoulder pavement edge to provide a vertical face and excavation of pavement.
3. Placement of pavement replacement items.
4. Placing of two lifts of asphalt concrete surface course, 1.5" for a total of 3"
5. Installation of the proposed MGS guardrail.
6. Restoration of work areas with Item 659 – Seeding, Misc.: Seeding and Mulching

Project – Location 7 - Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the "District 12 Permitted Lane Closure Times" list, which is located on the ODOT website:

www.dot.state.oh.us/dist12/workzone/laneclo.htm

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed, unless directed by the Engineer.
Shoulder closures shall only be allowed at the times specified for lane closures, unless directed by the Engineer.

Maintenance of Traffic for SR-44 paved shoulder widening

Reconstruction of the pavement, up to the top of the aggregate base, shall be completed in 7 calendar days.

During the working hours, the right thru lane can be closed to construct the pavement replacement.
At the end of each work day, the right thru lane must be opened and the contractor shall place aggregate base or fill material in the area of pavement widening to within 3" of the elevation of the edge of existing pavement to satisfy the conditions of MT-101.90.
Any dropoffs shall be in accordance with MT-101.90 condition II.
Drums adjacent to the shoulder replacement shall be placed 20 ft. C/C.

Overnight Trench Closing

The base widening shall be completed to a depth of no more than 3 inches below the existing pavement by the end of each work day.
No trench shall be left open overnight.
In case work must be suspended because of inclement weather or other reasons, the trench for the uncompleted base widening shall be backfilled at the direction of the Engineer.

REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION		LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA		202 GUARDRAIL REMOVED	252 FULL DEPTH PAVEMENT SAWING	203 EXCAVATION	204 SUBGRADE COMPACTION	304 AGGREGATE BASE, 6"	301 ASPHALT CONCRETE BASE, PG64-22, 6"	407 NON-TRACKING TACK COAT	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M, (1.5")	606 GUARDRAIL, TYPE MGS	606 GUARDRAIL, TYPE MGS HALF POST SPACING	626 BARRIER REFLECTOR, TYPE 2
					FT.	FT.	FT.	FT.	SQ. YD.		FT	FT	CY	SY	CY	CY	GAL	CY	FT	FT	EACH
			LOCATION 7 - S.R.-44 (SHOULDER WIDENING)																		
		1	0+00.00	0+14.00	14	0.5	1.5	1	1.6			14	0.7	4	0.3	0.3	0.2	0.2			
		1	0+14.00	0+36.00	22	1.5	2	1.8	4			22	1.7	7.7	0.7	0.7	0.6	0.4			
		1	0+36.00	0+66.00	30	2	2.4	2.2	7		100	30	2.9	12	1.2	1.2	0.8	0.6	50	50	4
		1	0+66.00	0+90.00	24	2.4	4.75	3.6	10			24	4.2	14	1.7	1.7	1.2	1			
		1	0+90.00	1+00.00	10	4.75	4	4.4	5			10	2.1	6.7	0.9	0.9	0.6	0.6			
SUBTOTALS											**100**	**100**	**11.6**	**44.4**	**4.8**	**4.8**	**3.4**	**2.8**	**50**	**50**	**4**
TOTALS CARRIED TO GENERAL SUMMARY											**100**	**100**	**12**	**44**	**5**	**5**	**3**	**3**	**50**	**50**	**4**

CALCULATED JAG CHECKED EMK

LOCATION 7 - GENERAL NOTES / SUB-SUMMARY

D12-PPM-FY2020

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HORIZONTAL SCALE IN FEET 0 5 10

CALCULATED JAG
CHECKED EMK

LOCATION 7 - LAKE COUNTY
S.R.-44 AT AUBURN RD.-SHOULDER WIDENING

D12-PPM-FY2020

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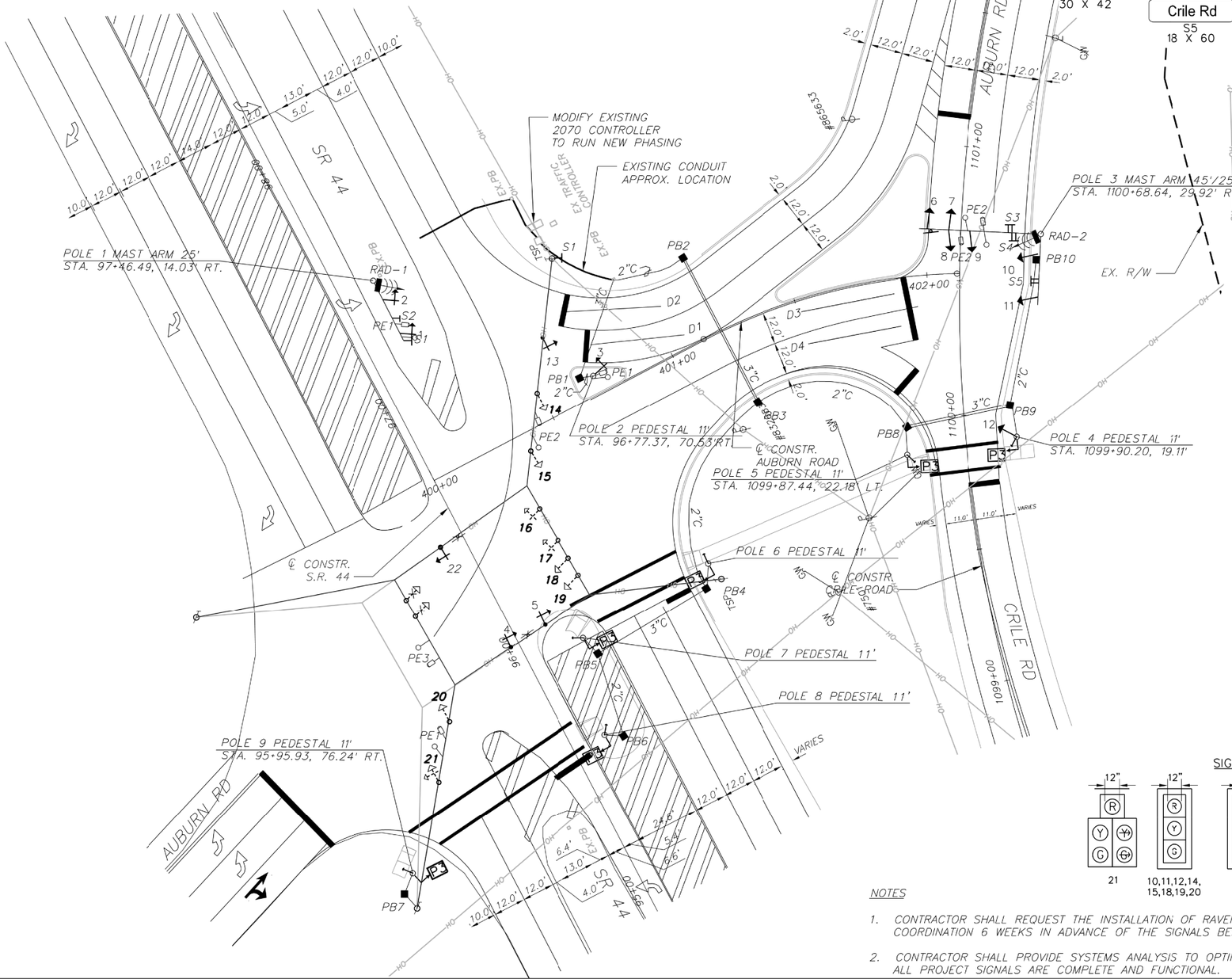


SIGNS

NO TURN ON RED EXCEPT FROM RIGHT LANE
S1
R10-11c
30 X 42

State Route 44
S2
18 X 96

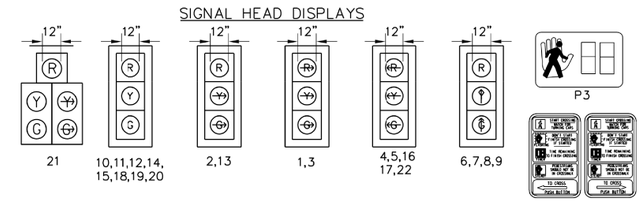
Auburn Rd
S3, S4
18 X 72

Crile Rd
S5
18 X 60

LEGEND

- MAST ARM POLE SUPPORT
- PED POLE SUPPORT
- 2"C — CONDUIT
- PROPOSED PULL BOX
- PROPOSED GROUND MOUNTED SIGN
- PROPOSED OVERHEAD SIGN
- EXISTING PULL BOX
- LOOP WIRES — EXISTING LOOP DETECTOR
- EXISTING TRAFFIC CONTROLLERS
- SIGNAL HEAD REMOVAL
- 1-WAY PED SIGNAL HEAD
- 2-WAY PED SIGNAL HEAD
- PED PUSH BUTTON
- PR SIGNAL HEAD MAST ARM 3-UNIT W/ARROWS
- PR SIGNAL HEAD MAST ARM 4/5 UNIT W/ARROWS
- PR SIGNAL HEAD MAST ARM
- PR SIGNAL HEAD SPAN WIRE 3-UNIT W/ARROWS
- PR SIGNAL HEAD SPAN WIRE 4/5 UNIT W/ARROWS
- PR SIGNAL HEAD SPAN WIRE
- EX SIGNAL HEAD SPAN WIRE 4/5 UNIT W/ARROWS
- EX SIGNAL HEAD SPAN WIRE
- RADAR DETECTOR
- CONFIRMATION LIGHT
- 1-WAY PREEMPT
- RADAR DETECTION ZONE
- CONTROLLER WITH WORK PAD

SIGNAL HEAD DISPLAYS



NOTES

1. CONTRACTOR SHALL REQUEST THE INSTALLATION OF RAVEN MODEMS BY ODOT TO IMPLEMENT COORDINATION 6 WEEKS IN ADVANCE OF THE SIGNALS BEING PLACED IN TO OPERATION.
2. CONTRACTOR SHALL PROVIDE SYSTEMS ANALYSIS TO OPTIMIZE TRAFFIC SIGNAL TIMING ONCE ALL PROJECT SIGNALS ARE COMPLETE AND FUNCTIONAL.

Record Plans Information Source:
PID: 89046
Project Name: LAK AUBURN-CRILE CONNECTOR RD.
Sale Date: 04/23/2015
Estimated End Construction: 12/31/2019

Plan Sheet Information From Record Plans And Is Provided for Location Reference Purposes and May Not Depict Actual Current Conditions. Perform Only Work Defined In These Plans And Ignore Work Items Stated In Record Plans

HORIZONTAL SCALE IN FEET

CALCULATED KAC
CHECKED JFG

TRAFFIC SIGNAL PLAN
S.R. 44 AND AUBURN/CRILE ROADS

LAK AUBURN-CRILE CONNECTOR RD.
LAK-44-0.73

301
326

CALCULATED XXX
CHECKED XXX

LOCATION 7 - S.R.-44-SHOULDER WIDENING
REFERENCE INFO-TRAFFIC CONTROL CONDUITS

D12-PPM-FY2020

50
56

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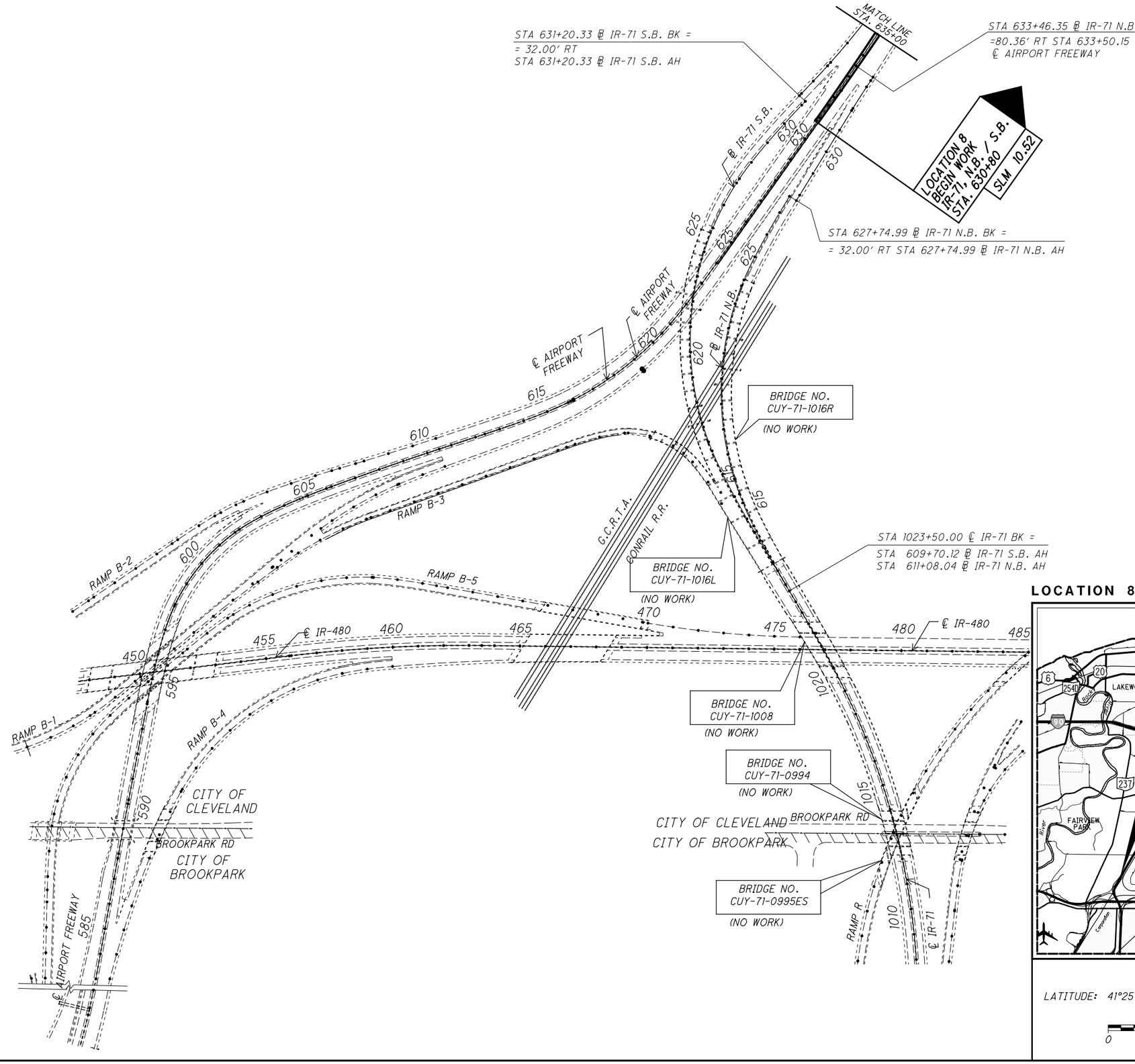
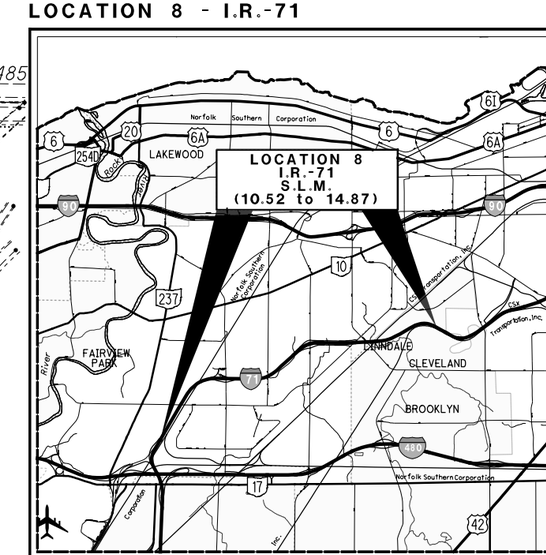


LOCATION 8 - I.R.-71



LOCATION MAP

LATITUDE: 41°25'35" N LONGITUDE: 81°49'08" W

SCALE IN MILES

0 1 2 3 4

N

N

0 100 200 400
HORIZONTAL SCALE IN FEET

CALCULATED JAG
CHECKED EMK

LOCATION 8 - (I.R.-71) - CUYAHOGA CNTY
LOCATION MAP / SCHEMATIC PLAN

D12-PPM-FY2020

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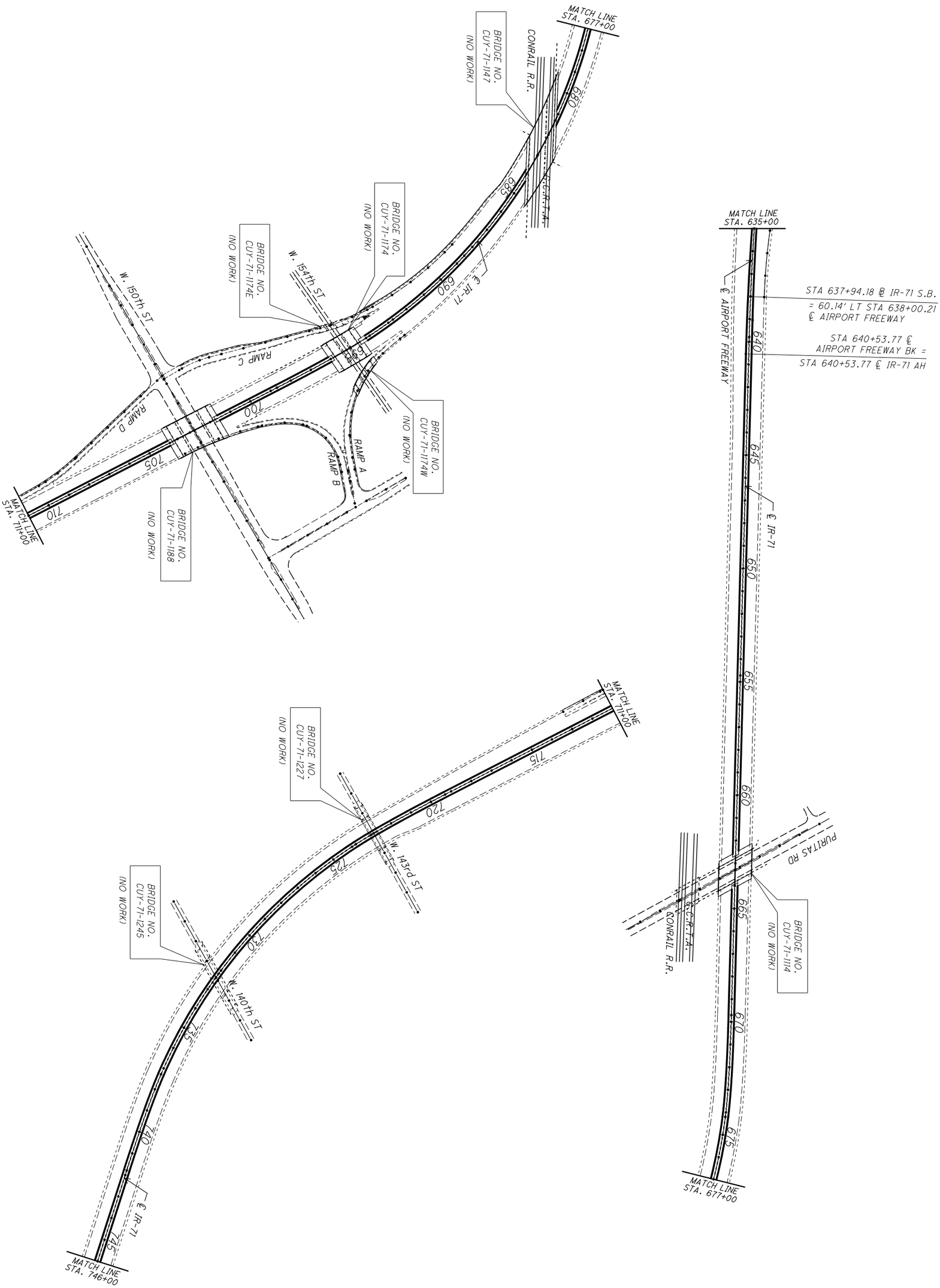
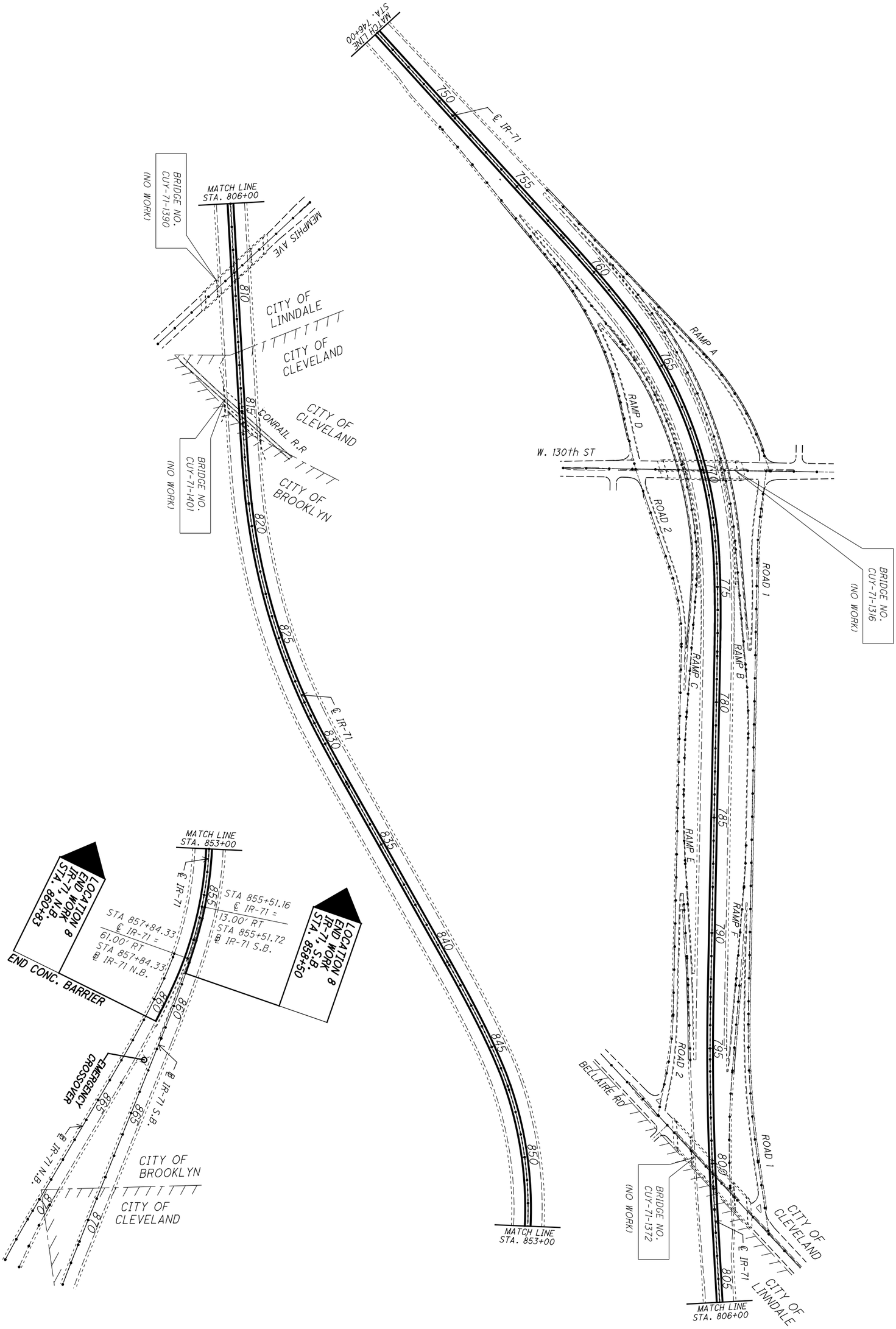
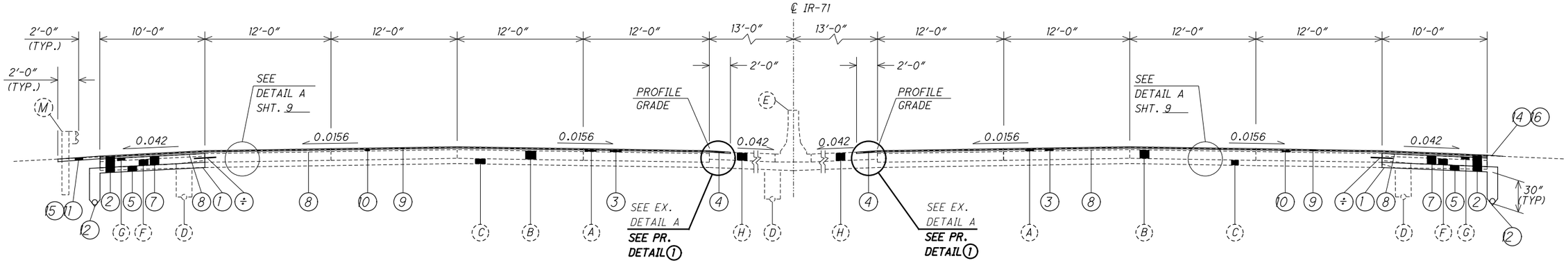


52 / 56	D12-PPM-FY2020	LOCATION 8 - (I.R.-71) - CUYAHOGA CNTY LOCATION MAP / SCHEMATIC PLAN	CALCULATED JAG CHECKED EMK	0 25 50 100 HORIZONTAL SCALE IN FEET



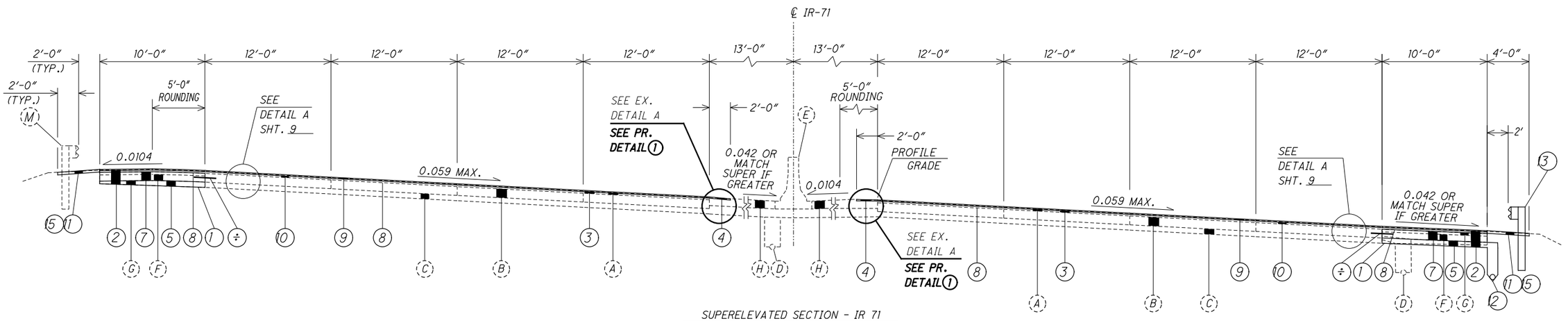
53 / 56	D12-PPM-FY2020	LOCATION 8 - (I.R.-71) - CUYAHOGA CNTY LOCATION MAP / SCHEMATIC PLAN	CALCULATED JAG CHECKED EMK	0 25 50 100 HORIZONTAL SCALE IN FEET



NORMAL SECTION - IR 71

STA. 640+53.77 TO STA. 662+52.54
STA. 664+08.08 TO STA. 668+25.00
STA. 700+50.00 TO STA. 701+59.50
STA. 704+02.74 TO STA. 717+50.00

STA. 743+50.00 TO STA. 756+00.00
STA. 779+50.00 TO STA. 814+00.00
STA. 833+75.00 TO STA. 839+50.00



SUPERELEVATED SECTION - IR 71

STA. 668+25.00 TO STA. 681+28.83
STA. 684+04.56 TO STA. 694+36.98
STA. 696+00.41 TO STA. 700+50.00
STA. 717+50.00 TO STA. 743+50.00 (CURVE LEFT)

STA. 814+00.00 TO STA. 833+75.00 (0.047 MAX. SUPER.) (CURVE LEFT)
STA. 839+50.00 TO STA. 858+50 S.B. (0.083 MAX. SUPER.)
STA. 839+50.00 TO STA. 860+83 N.B. (0.083 MAX. SUPER.)

EXISTING - BASED ON PROJECT: PID 13002 - (CUY-71-10.44)

RECORD PLANS - ITEMS NOT RE-NUMBERED (FOR REFERENCE ONLY)

1. ITEM 203 - SUBGRADE COMPACTION
2. ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
3. ITEM 254 - PAVEMENT PLANING, BITUMINOUS, AS PER PLAN
4. ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE
5. ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
6. ITEM 305 - 9" CONCRETE BASE, AS PER PLAN
7. ITEM 305 - 10" CONCRETE BASE, AS PER PLAN
8. ITEM 407 - TACK COAT
9. ITEM 446 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG67-28, AS PER PLAN
10. ITEM 446 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28

ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE

11. ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, UNDER GUARDRAIL, 3" (TYP.)
12. ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
13. ITEM 606 - GUARDRAIL, TYPE 5
14. ITEM 617 - COMPACTED AGGREGATE, TYPE A, AS PER PLAN (0.0625 MIN - 0.0833 MAX & WATER)
15. ITEM 203 - LINEAR GRADING, AS PER PLAN A
16. ITEM 203 - LINEAR GRADING, AS PER PLAN B

÷ TYPE D JOINT AS PER BP-2.1M USING 24" LONG NO. 5 DEFORMED BARS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 305-10" CONCRETE BASE, AS PER PLAN, OR ITEM 305-9" CONCRETE BASE, AS PER PLAN.

EXISTING

- A ASPHALT OVERLAY (2 ½"±)
- B 10" REINFORCED CONCRETE PAVEMENT
- C SUBBASE
- D UNDERDRAIN
- E CONCRETE BARRIER
- F AGGREGATE BASE
- G BITUMINOUS AGGREGATE BASE
- H 9" PLAIN CONCRETE BASE
- J CURB
- K BARRIER GUARDRAIL
- L 9" REINFORCED CONCRETE BASE
- M GUARDRAIL
- N 9" PLAIN CONCRETE

WORK LOCATION 8

PROPOSED WORK - ONLY ITEMS 20 - 22

20. **ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEPTH)**
21. **ITEM 407 - NON-TRACKING TACK COAT**
22. **ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448), AS PER PLAN, PG70-22M, 1-1/2"**

CALCULATED JAG
CHECKED EMK

LOCATION 8 - TYPICAL SECTIONS - I.R.-71

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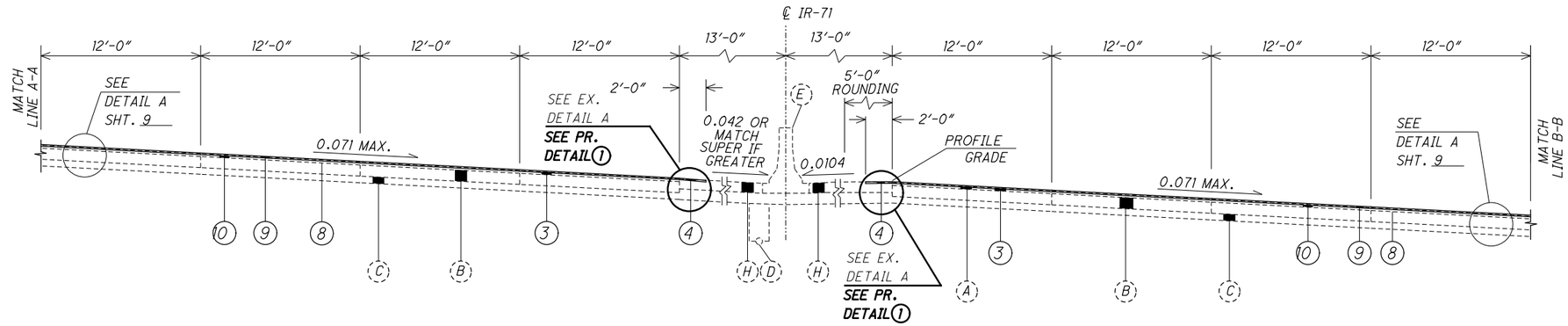
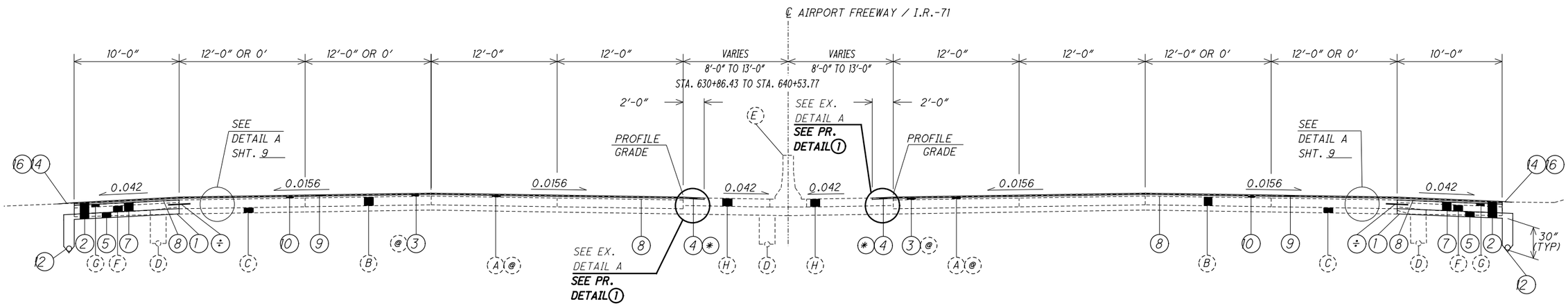


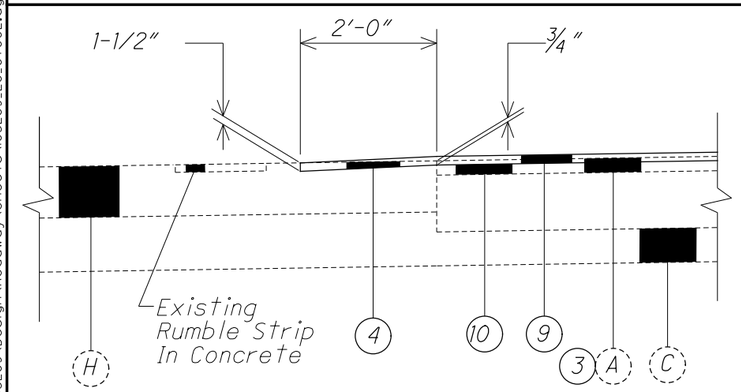
SUPERELEVATED SECTION - IR 71

STA. 756+00.00 TO STA. 779+50.00



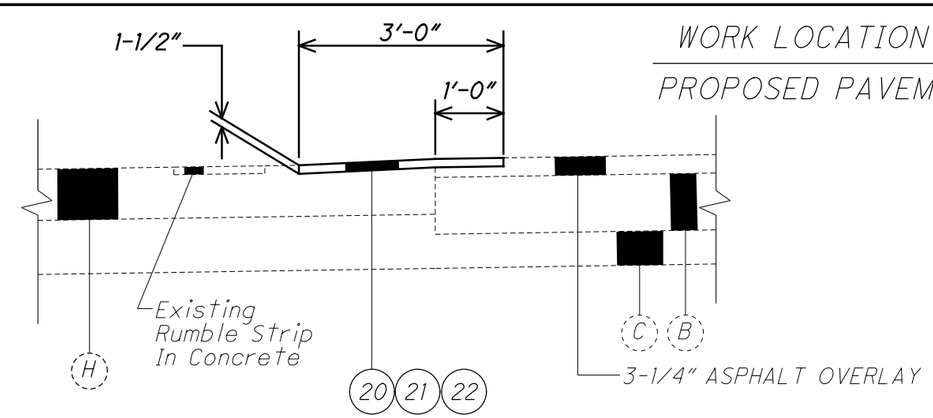
NORMAL SECTION - AIRPORT FREEWAY

STA. 589+34.00 TO STA. 591+00.00
STA. 607+25.00 TO STA. 610+75.00
STA. 630+80 TO STA. 640+53.77



EXISTING PAVEMENT DETAIL "A"

PID 13002 - (CUY-71-10.44)
RECORD PLANS - ITEMS NOT RE-NUMBERED (FOR REFERENCE ONLY)



WORK LOCATION 8 - I.R.-71

PROPOSED PAVEMENT DETAIL 1

PROPOSED:
1.5" MILL & FILL
RE-INSTALL
PAVEMENT MARKINGS
AND RUMBLE STRIPS

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LOCATION 8 - TYPICAL SECTIONS - I.R.-71

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LOCATION 8 – ADDITIONAL NOTES

(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 8 Location

These notes apply to the Project Location 8 location involving the three foot width of planing and paving of the left shoulder of I.R.71, Northbound and Southbound.

Major Work Items – Location 8 (IR-71)

The following major work items will require traffic maintenance which will be incorporated into the Contractor's sequence of operations:

1. Planing of asphalt concrete, 1.5", as directed by the Engineer.
2. Placing of asphalt concrete, 1.5"
3. Placing proposed pavement markings.

Traffic shall not be permitted to travel on planed surface.

The pavement planing and placement of asphalt concrete surface course should be completed in the same operation.

The asphalt concrete surface course shall be placed prior to opening roadway to traffic.

Project – Location 8 - Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the "District 12 Permitted Lane Closure Times" list, which is located on the ODOT website:

www.dot.state.oh.us/dist12/workzone/laneclo.htm

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed, unless directed by the Engineer.
Shoulder closures shall only be allowed at the times specified for lane closures, unless directed by the Engineer.

Item 442 – Asphalt Concrete Surface Course, 12.5 MM, Type A (448), As Per Plan, PG 70-22M

The coarse aggregate for this item shall be limited to a blend of air cooled blast furnace slag (ACBFS) and limestone. The Contractor shall use a minimum of 50 percent ACBFS with limestone comprising the remaining percentage.

In addition to the joint sealing requirements specified in 401.17, the Contractor shall seal the perimeter of all rumble strip pavement replacement areas. The material used shall be a certified 702.01 PG binder. The width of the sealer shall be 2-3 inches.

Payment for all labor, materials and equipment required to perform the above work shall be included in the contract price for Item 442 – Asphalt Concrete Surface Course, 12.5 MM, Type A (448), As Per Plan, PG70-22M.

REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION		LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA				254 PAVEMENT PLANING, ASPHALT CONCRETE, (1.5")		407 NON-TRACKING TACK COAT	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN, PG70-22M, (1.5")				646 EDGE LINE, 6"	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT
					FT.	FT.	FT.	FT.	SQ. YD.				SY		GAL	CY				MILE	MILE
			LOCATION 8 - NORTHBOUND & SOUTHBOUND - I.R.-71																		
		1	630+80.00	640+53.77	973.77	6	6	6	649				649		65	27				1947.54	1947.54
		1	640+53.77	662+52.54	2198.77	6	6	6	1466				1466		147	61				4397.54	4397.54
		1	664+08.08	681+28.83	1720.75	6	6	6	1147				1147		115	48				3441.5	3441.5
		1	684+04.56	694+36.98	1032.42	6	6	6	688				688		69	29				2064.84	2064.84
		1	696+00.41	701+59.50	559.09	6	6	6	373				373		37	16				1118.18	1118.18
			LOCATION 8 - NORTHBOUND - I.R.-71																		
		1	704+02.74	860+83.00	15680.26	3	3	3	5227				5227		523	218				15680.26	15680.26
			LOCATION 8 - SOUTHBOUND - I.R.-71																		
		1	704+02.74	858+50.00	15447.26	3	3	3	5149				5149		515	215				15447.26	15447.26
SUBTOTALS													14699		1471	614				44097.12	44097.12
TOTALS CARRIED TO GENERAL SUMMARY													14699		1471	614				8.35 MI	8.35 MI

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LOCATION 8 - GENERAL NOTES - SUB-SUMMARY

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