

MOT - IR-70-6.49/VARIOUS
090152 PID - 82419
Dist 7 3/4/2009

State Job No. 478617
Project No.

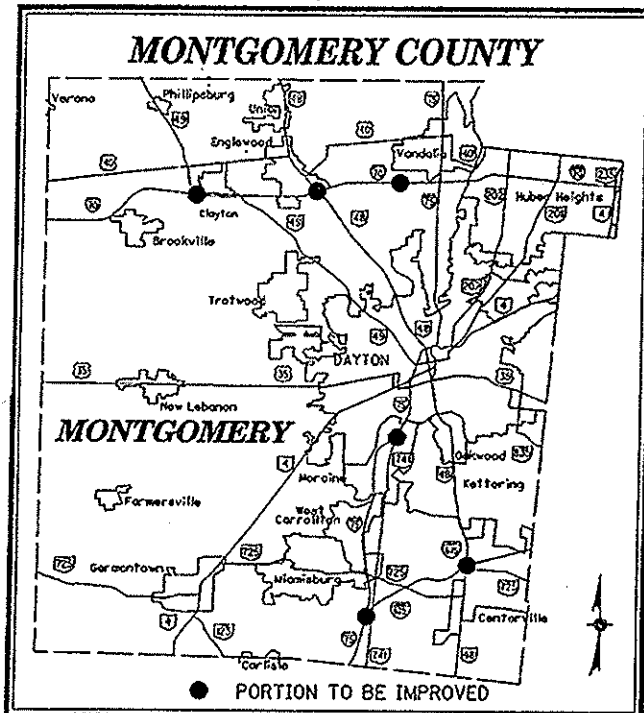
PID No. 82419
FED. No. E070(521)

PLAN PREPARED BY:



STATE OF OHIO
OHIO DEPARTMENT OF TRANSPORTATION
MOT-70-6.49/VARIOUS

LOCATION MAP



MAINTENANCE
TWO-LANE RESURFACING

Project Earth Disturbed Area = 0.0 Acres
Estimated Contractor Earth Disturbed Area = N/A
Notice of Intent Earth Disturbed Area = N/A

2008 SPECIFICATIONS

The Standard 2008 Specifications of the State of Ohio Department of Transportation, including changes and supplemental specifications listed in the plans and the proposal shall govern these improvements.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth in the plans and estimates.

12-15-08 Rex Dickey, P.E., P.S. / PRN
Date Approved District Deputy Director
12-19-08 James J. Beasley, III
Date Approved Director, Department of Transportation

PROJECT DESCRIPTION: The work proposed by this project consists of pavement planing and resurfacing at various locations throughout Montgomery County with Item 448 - Asphalt Concrete as set forth in these plans. Locations: Ramps @ I-70 & State Route 49, Ramps @ I-70 & State Route 48, Mainline I-70 @ Airport Access Road, Ramps @ I-75 & I-675, Ramps @ I-75 & Dryden Road and Ramps @ I-675 & State Route 48

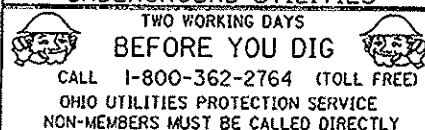
39° 52' 40" N Latitude
84° 18' 08" W Longitude

ENGINEER'S SEAL



Signed Philip N. Stormer
Date 12-15-2008

UNDERGROUND UTILITIES



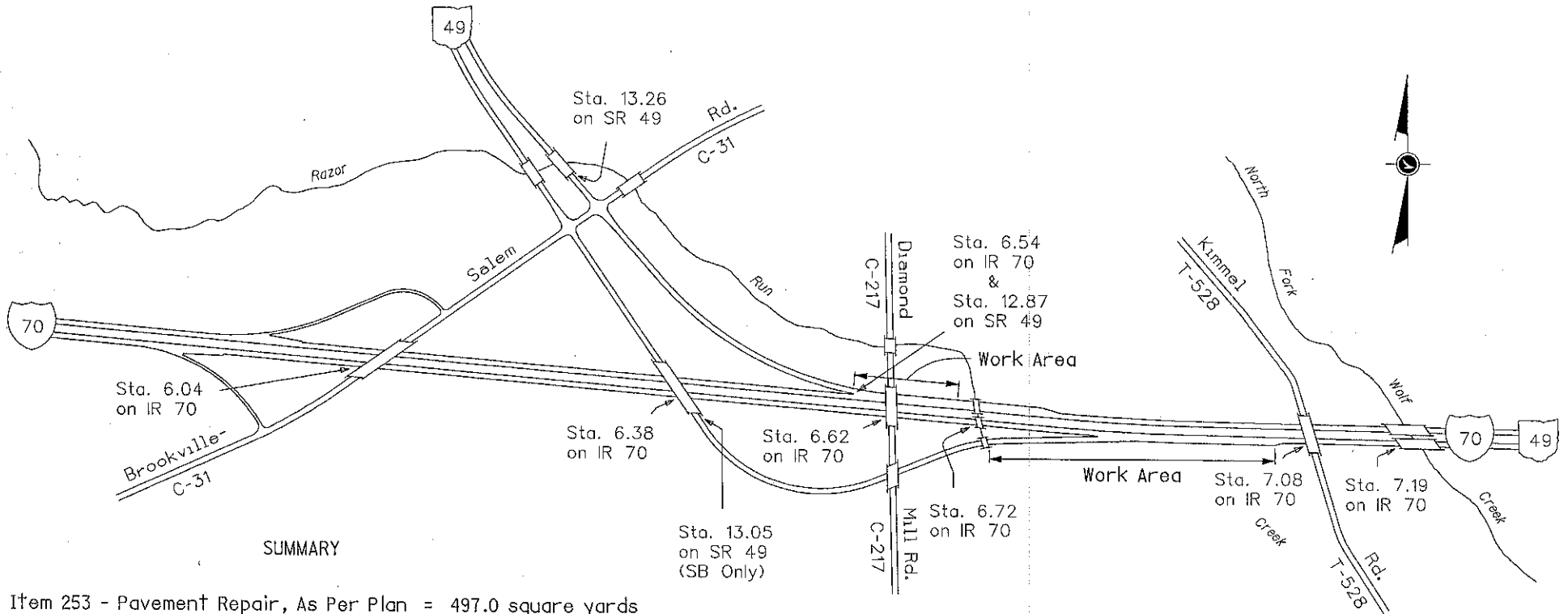
- 1 - Title Sheet
- 2 thru 7 - Plan Sheets
- 8 thru 11 - General Notes
- 12 & 13 - Maintenance of Traffic
- 14 thru 16 - Drop-Off Sheets
- 17 - General Summary

STANDARD DRAWINGS

STANDARD DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10-19-07	MT-98.10	10-19-07	TC-41.20	1-19-01		
BP-9.1	4-15-05	MT-98.11	10-19-07	TC-42.20	7-16-04	800-2008	1-16-09
DM-4.3	7-19-02	MT-98.20	10-19-07	TC-52.10	1-19-07		
DM-4.4	7-19-02	MT-98.22	10-19-07	TC-52.20	1-19-07	832	4-25-06
MT-35.10	4-20-01	MT-98.28	10-19-07	TC-65.10	1-21-05		
MT-95.30	9-5-06	MT-99.20M	1-30-95	TC-65.11	1-21-05	842	1-19-07
MT-95.50	9-5-06			TC-71.10	1-19-07		
MT-97.10	9-5-06	MT-105.10	10-18-02	TC-72.20	1-21-05		
MT-97.11	9-5-06	MT-105.20	10-18-02				

I-70 & State Route 49 Interchange

PLAN NO.



SUMMARY

- Item 253 - Pavement Repair, As Per Plan = 497.0 square yards
- Item 254 - Pavement Planing, 2.0" Depth = 6249.0 square yards
- Item 407 - Tack Coat = 625.0 gallon
- Item 448 - Asphalt Concrete Surface Course, Type IH, As Per Plan = 347.0 cubic yards
- Item 621 - RPM (Y/R = 7, W/R = 41) = 48 each
- Item 621 - Raised Pavement Marker Removed = 48 each
- Item 642 - Edge Line = 0.54 mile
- Item 642 - Lane Line = 0.18 mile
- Item 642 - Dotted Line = 803 feet
- Item 644 - Channelizing Line = 1245 feet

Item 253 - Pavement Repair, As Per Plan

Westbound I-70 Shoulder Area - SLM 6.54 to SLM 6.60
and SLM 7.41 to SLM 7.49 = 497.0 square yards

Item 254 - Pavement Planing, 2.0" Depth

Westbound I-70 - SLM 6.54 to SLM 6.60
300.0' x 40.0' / 9 = 1333.0 square yards

Westbound I-70 Ramp to Northbound State Route 49
SLM 6.60 to SLM 6.67 - 340.0' x 25.0' / 9 = 944.0 square yards

Southbound State Route 49 to Eastbound I-70
and Eastbound I-70 SLM 6.74 to SLM 7.01
1430.0' x 25.0' / 9 = 3972.0 square yards

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MOT-70-6.49

PLAN SHEET

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I-70 & State Route 48 Interchange

PLAN NO.

Item 253 - Pavement Repair, As Per Plan

Ramp "C" - $850.0' \times 6.0' / 9 = 567.0$ square yards

Item 254 - Pavement Planing, 2.0" Depth

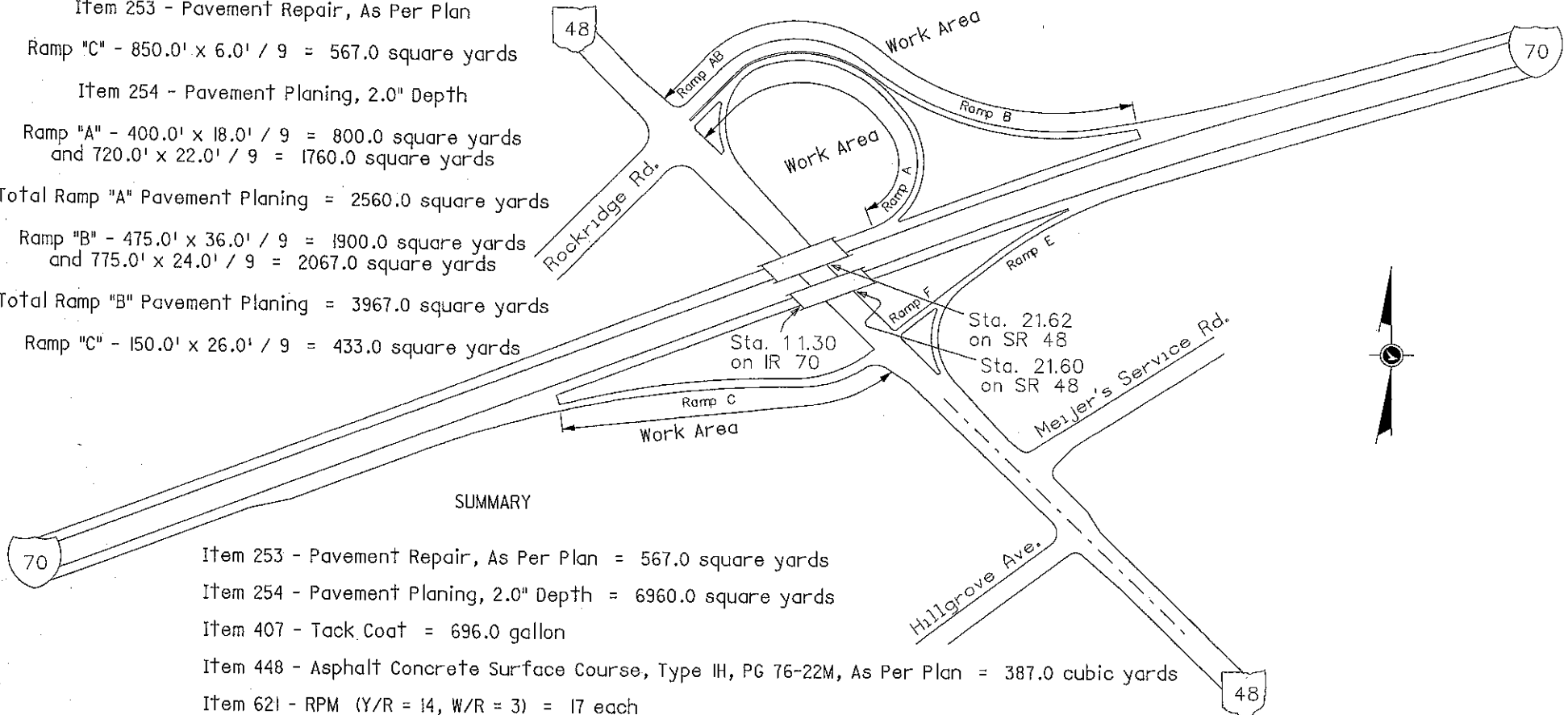
Ramp "A" - $400.0' \times 18.0' / 9 = 800.0$ square yards
and $720.0' \times 22.0' / 9 = 1760.0$ square yards

Total Ramp "A" Pavement Planing = 2560.0 square yards

Ramp "B" - $475.0' \times 36.0' / 9 = 1900.0$ square yards
and $775.0' \times 24.0' / 9 = 2067.0$ square yards

Total Ramp "B" Pavement Planing = 3967.0 square yards

Ramp "C" - $150.0' \times 26.0' / 9 = 433.0$ square yards



SUMMARY

Item 253 - Pavement Repair, As Per Plan = 567.0 square yards

Item 254 - Pavement Planing, 2.0" Depth = 6960.0 square yards

Item 407 - Tack Coat = 696.0 gallon

Item 448 - Asphalt Concrete Surface Course, Type IH, PG 76-22M, As Per Plan = 387.0 cubic yards

Item 621 - RPM (Y/R = 14, W/R = 3) = 17 each

Item 621 - Raised Pavement Marker Removed = 17 each

Item 642 - Edge Line = 0.92 mile

Item 644 - Channelizing Line = 595.0 feet

Item 644 - Stop Line, As Per Plan = 72.0 feet

Item 644 - Lane Arrow, As Per Plan = 5 each

Item 644 - Word on Pavement, 72", As Per Plan = 2 each

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PLAN SHEET

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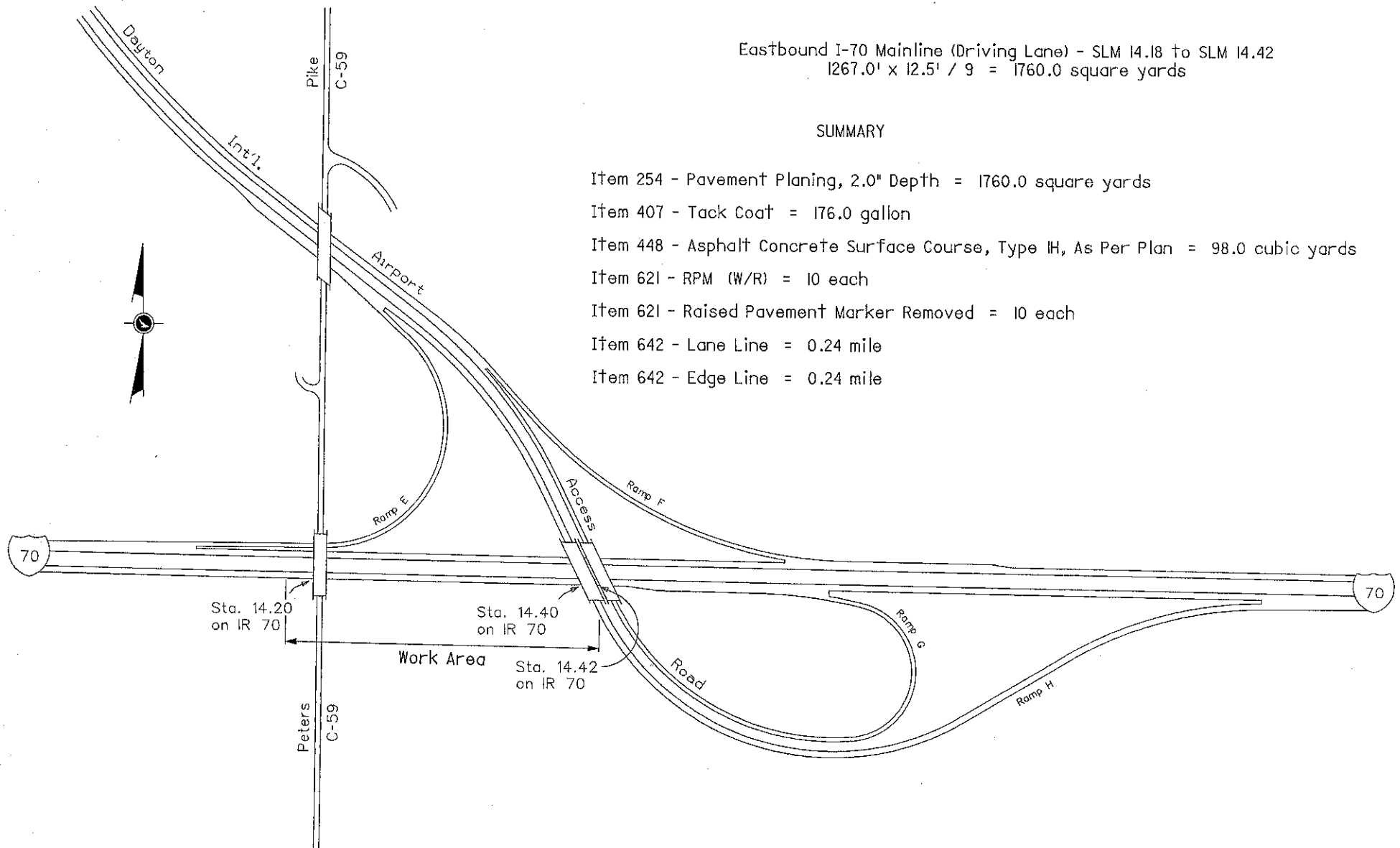
I-70 & Dayton Airport Access Road Interchange

PLAN NO.

Eastbound I-70 Mainline (Driving Lane) - SLM 14.18 to SLM 14.42
 $1267.0' \times 12.5' / 9 = 1760.0$ square yards

SUMMARY

- Item 254 - Pavement Planing, 2.0" Depth = 1760.0 square yards
- Item 407 - Tack Coat = 176.0 gallon
- Item 448 - Asphalt Concrete Surface Course, Type 1H, As Per Plan = 98.0 cubic yards
- Item 621 - RPM (W/R) = 10 each
- Item 621 - Raised Pavement Marker Removed = 10 each
- Item 642 - Lane Line = 0.24 mile
- Item 642 - Edge Line = 0.24 mile



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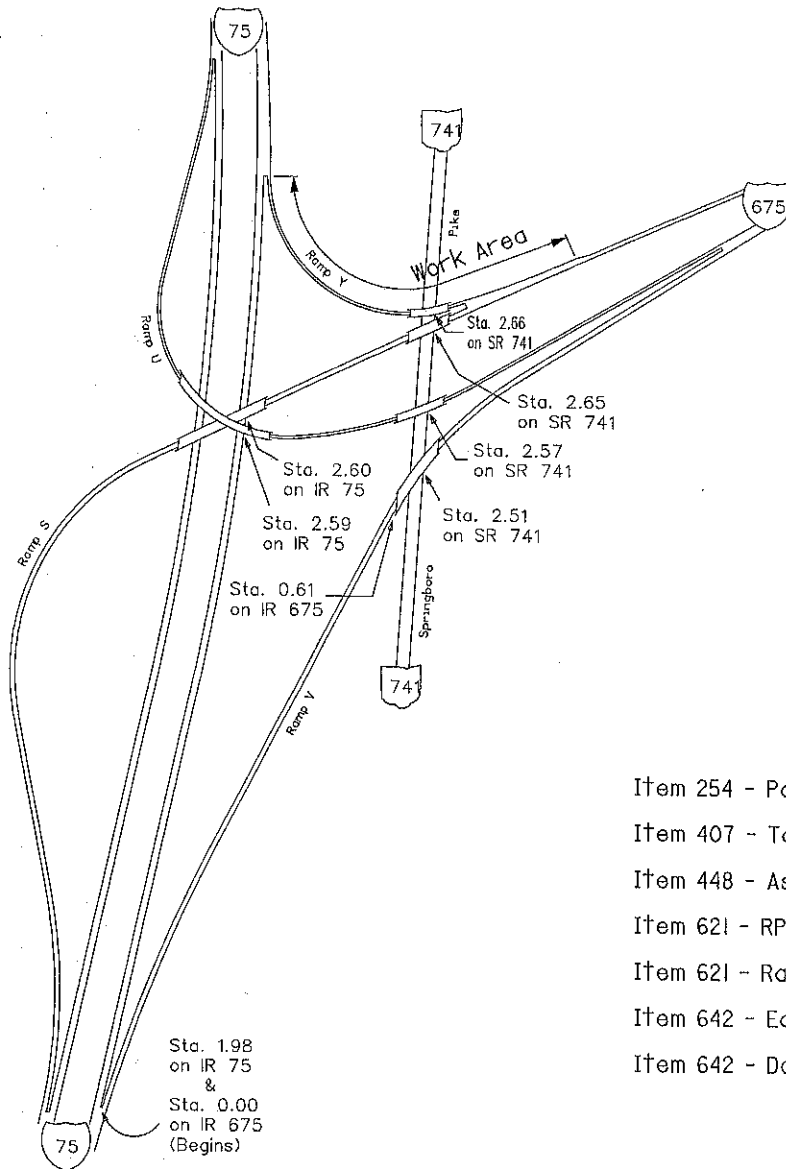
PLAN SHEET

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I-75, I-675 & State Route 741 Interchange

PLAN NO.



$$\text{Ramp "Y"} - 1050.0' \times 24.0' / 9 = 2800.0 \text{ square yards}$$

SUMMARY

- Item 254 - Pavement Planing, 2.0" Depth = 2800.0 square yards
- Item 407 - Tack Coat = 280.0 gallon
- Item 448 - Asphalt Concrete Surface Course, Type IH, As Per Plan = 156.0 cubic yards
- Item 621 - RPM (Y/R) = 12 each
- Item 621 - Raised Pavement Marker Removed = 12 each
- Item 642 - Edge Line, As Per Plan = 0.4 mile
- Item 642 - Dotted Line, 6" = 350 feet

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PLAN SHEET

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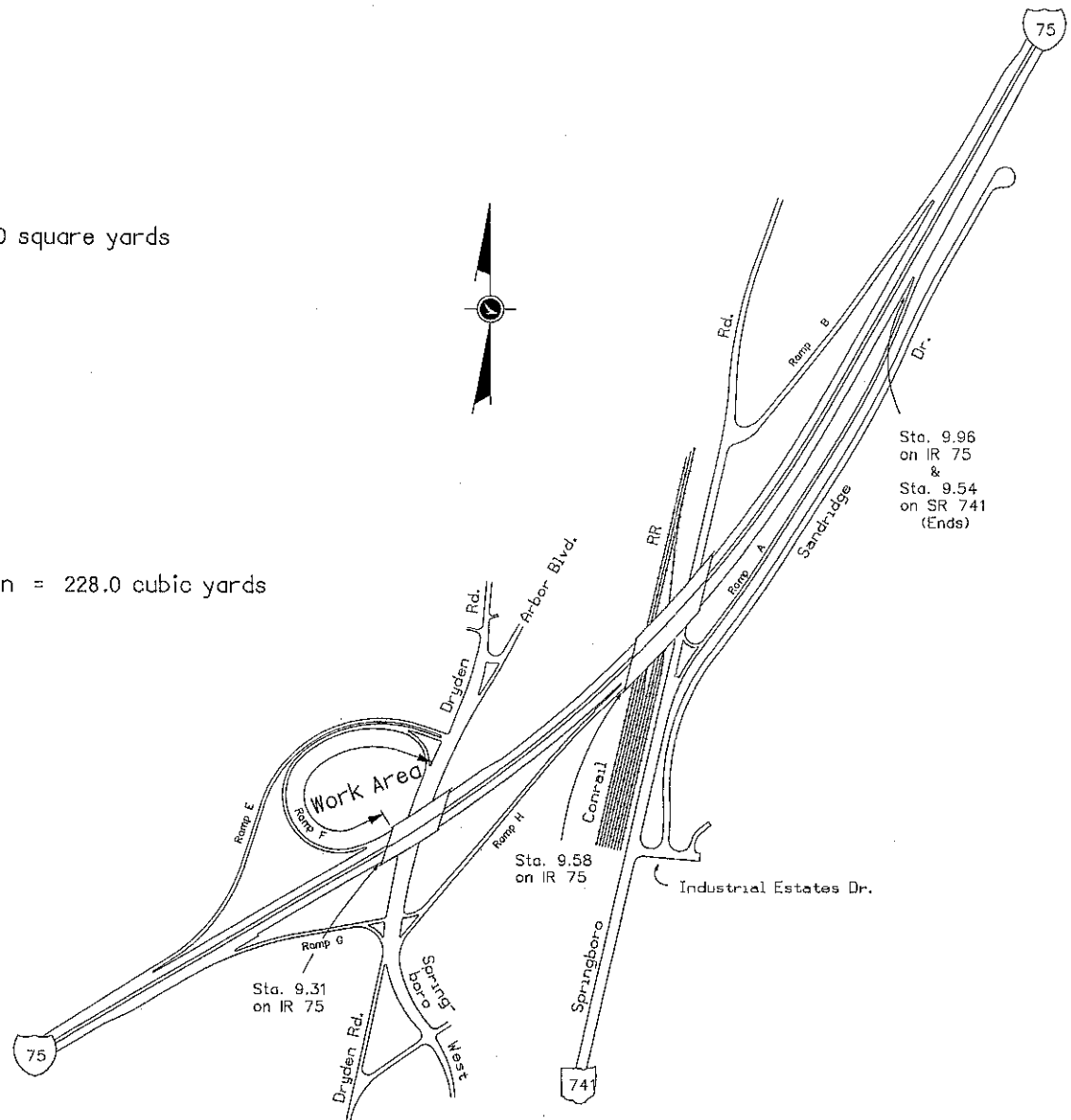
I-75, Dryden Road & State Route 741 Interchanges

PLAN NO.

Ramp "F" - $1540.0' \times 24.0' / 9 = 4107.0$ square yards

SUMMARY

- Item 254 - Pavement Planing, 2.0" Depth = 4107.0 square yards
- Item 407 - Tack Coat = 411.0 gallon
- Item 448 - Asphalt Concrete Surface Course, Type IH, As Per Plan = 228.0 cubic yards
- Item 642 - Edge Line, As Per Plan = 0.56 mile
- Item 644 - Stop Line = 13.0 feet



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PLAN SHEET

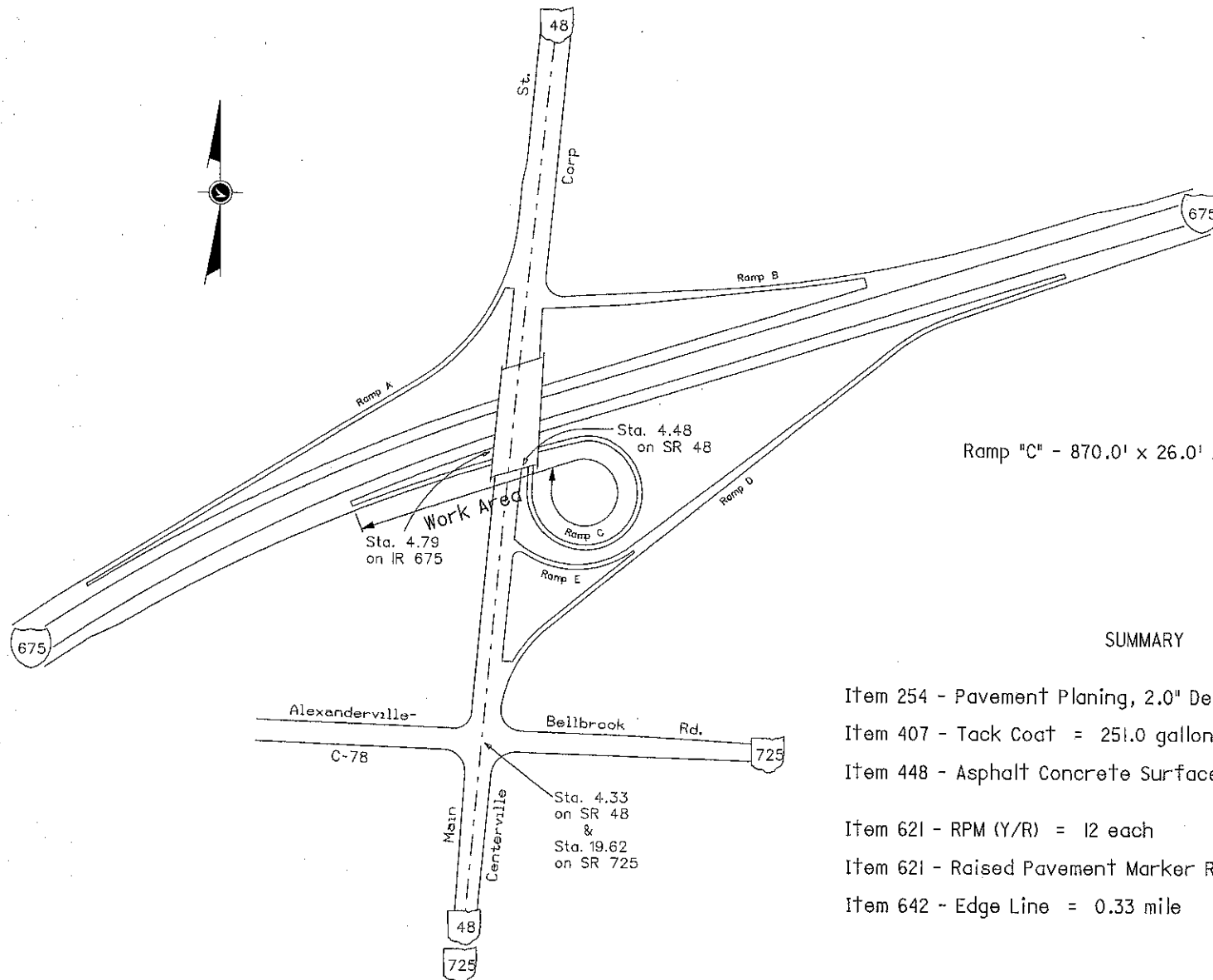
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I-675 & State Route 48 Interchange

PLAN NO. _____



Ramp "C" - $870.0' \times 26.0' / 9 = 2513.0$ square yards

SUMMARY

- Item 254 - Pavement Planing, 2.0" Depth = 2513.0 square yards
- Item 407 - Tack Coat = 251.0 gallon
- Item 448 - Asphalt Concrete Surface Course, Type I, As Per Plan = 140.0 cubic yards
- Item 621 - RPM (Y/R) = 12 each
- Item 621 - Raised Pavement Marker Removed = 12 each
- Item 642 - Edge Line = 0.33 mile

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PLAN SHEET

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GENERAL NOTES

PLAN NO.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

Pavement Repair shall be in accordance with Item 253 - Pavement Repair, with the following additions.

The pavement repair areas shall be roughly rectangular in shape and sawed or milled to a neat line. The depth of removal, as directed by the Engineer, shall be sufficient to remove all deteriorated pavement. The replacement material shall be Item 448 - Asphalt Concrete Intermediate Course, Type 2, PG 64-22.

The estimated pavement repair areas shall be six feet (6.0') in width and six inches (6.0") in depth.

Item 253 - Pavement Repair, As Per Plan = 1064.0 square yards

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

An estimated quantity of Item 254 - Pavement Planing, Asphalt Concrete has been carried to the General Summary and included in the plans to be used as directed by the Engineer.

The approximate width of pavement planing will be twelve feet, six inches (12.0'-6.0") to forty feet (40.0').

All areas of Pavement Planing will be marked out by the Ohio Department of Transportation prior to the beginning of work. No areas of Mainline Pavement Planing shall be open to the traveling public. All Vertical Face Butt Joints shall be protected using a minimum four foot (4.0') Asphalt Wedge.

All planed cuttings shall become the property of the Contractor and shall be removed from the limits of the project.

Item 254 - Pavement Planing, Asphalt Concrete = 24,389.0 square yards

ITEM 407 - TACK COAT, 702.13

Item 407 - Tack Coat has been calculated at one-tenth (0.10) gallon per square yard. Apply seventy-five hundredth (0.075) gallon per square yard for the first Variable Depth Asphalt Concrete course and twenty-five hundredth (0.025) gallon per square yard for the two inch (2.0") Surface Course.

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN

All requirements of Item 448 - Asphalt Concrete shall apply with the following additions.

441.02 - The Coarse Aggregate for Type 1H shall be one hundred percent (100%) Crushed Material. The Asphalt Binder used shall be PG 76-22M.

448.03 - Density Gauge Quality Control Testing shall apply to each individual area of Asphalt Concrete Surface Course, Type 1H placed.

ITEM 614 - MAINTAINING TRAFFIC

Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses.

ITEM 614 - REPLACEMENT DRUM

Drums furnished by the Contractor in accordance with the requirements of the plans, specifications and proposal which become damaged by traffic for reasons beyond the control of the Contractor shall be replaced in kind when ordered by the Engineer. Replacement Drums shall be new.

Payment for the new drums shall be made at the contract price per each for Item 614 - Replacement Drum and shall include the cost of removing and disposing of the damaged drum and providing and maintaining the Replacement Drum in accordance with the contract requirements for the original drum.

An estimated quantity of 25 each has been provided in the General Summary.

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GENERAL NOTES

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GENERAL NOTES

PLAN NO.

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, on site, for the duration of the project. The sign shall be of a type shown on a list of approved Portable Changeable Message Sign units maintained by the Director (Office of Materials Management). This list is available on the Ohio Department of Transportation website at:

<http://www.dot.state.oh.us/testlab/applists/misc/pcms.htm>

The list currently contains Class I, II and III units with minimum legibility distances of 1250 feet, 850 feet and 650 feet, respectively.

Each sign shall be trailer-mounted and equipped with a functional dimming mechanism, to dim the sign during darkness, and a tamper and vandal proof enclosure. Each sign shall be provided with appropriate training and operation instructions to enable on-site personnel to operate and troubleshoot the unit. The sign shall also be capable of being powered by an electrical service drop from a local utility company. Portable Changeable Message Sign trailers should be delineated on a permanent basis by affixing retroreflective material in a continuous line on the face of the trailer as seen by oncoming road users.

Placement, operation, maintenance and all activation of the signs by the Contractor shall be as directed by the Engineer. The Portable Changeable Message Signs shall be located in a highly visible position yet protected from traffic. The Contractor shall, at the direction of the Engineer, relocate the Portable Changeable Message Signs to improve visibility or accommodate changed conditions. When not in use, the Portable Changeable Message Sign shall be turned off. Additionally, when not in use for extended periods of time, the Portable Changeable Message Sign shall be turned, facing away from all traffic, and shall display one or more high-intensity yellow reflective sheeting surfaces of nine inch by fifteen inch (9.0" x 15.0") minimum size facing traffic.

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

The Contractor shall implement a system whereby changeable messages will be implemented within a short time following telephone notification from the Project Engineer to a designated phone.

All messages to be displayed on the sign will be provided by the Engineer.

A list of all required pre-programmed messages will be given to the Contractor at the Project Preconstruction Meeting. The sign shall have the capability to store up to ninety-nine (99) messages. Message memory or pre-programmed displays shall not be lost as a result of power failures on the on-board computer. The sign legend shall be capable of being changed in the field. Three-line presentation formats with up to six (6) message phases shall be supported. The Portable Changeable Message Sign format shall permit the complete message for each phase to be read at least once.

The Portable Changeable Message Sign 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 Portable Changeable Message Sign shall contain a cellular telephone data link which will (in active cellular phone areas) allow remote sign activation, message changes, message additions and revisions to time of day programs. The system shall also permit verification of current and programmed messages. One (1) remote data input device (laptop computer plus modem or equivalent) shall be furnished for use by the District Traffic Engineer, or equivalent, and shall be insured against theft.

The Portable Changeable Message Sign 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 Portable Changeable Message Sign, to assure prompt service in the event of failure. Any failure shall not result in the sign being out of service for more than twelve (12) hours, including weekends. Failure to comply may result in an order to stop work and open all traffic lanes and/or in the Department taking appropriate action to safely control traffic. The entire cost to control traffic, accrued by the department due to the Contractor's noncompliance, will be deducted from moneys due, or to become due the Contractor on his contract.

The Contractor shall be responsible for twenty-four (24) hour per day operation and maintenance of these signs on the project for the duration of the phases when the plan requires their use.

Payment for the above described item shall be at the contract unit price. Payment shall include all labor, materials, equipment, lubricating oils, fuels, software, hardware and incidentals to perform the above described work.

Item 614 - Portable Changeable Message Sign, As Per Plan = 2 months

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GENERAL NOTES

PLAN NO.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

Use of Law Enforcement Officers by Contractors other than the uses specified in this note will not generally be permitted at project cost unless prior approval has been obtained from the Project Engineer. Law Enforcement Officers should not be used where the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) intends that flaggers be used.

In addition to the requirements of CMS 614 and the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), a uniformed Law Enforcement Officer with an official Patrol Car (car with top-mounted emergency flashing lights and complete markings of the law enforcement agency) should be provided for the following traffic control tasks.

- * 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. In general, Law Enforcement Officers should be positioned at the point of lane restriction or road closure and to manually control traffic movements through intersections in work zones.
- * During the entire advance preparation and closure sequence where complete blockage of traffic is required.
- * During a traffic signal installation or when traffic needs to be directed through an energized traffic signal contrary to the signal display (eg. Directing motorists through a red light).
- * Routine patrolling through the work zone (with flashing lights off) as specified in the plans.

Law Enforcement Officers should not forgo their traffic control responsibilities to chase motorists for routine traffic violations. However, if the motorists actions are considered to be reckless, then pursuit of the motorist is appropriate.

The Law Enforcement Officers work at the direction of the Contractor. The Contractor is responsible for securing the services of the Law Enforcement Officers and communicating the intentions of the plans with respect to duties of the Law Enforcement Officers. The Engineer shall have final control over the Law Enforcement Officer's duties and placement and will resolve any issues that may arise between the two (2) parties. The Contractor shall provide the Engineer with a list of the appropriate law enforcement agency(s), including address and telephone number.

The Law Enforcement Officers should report to the Contractor prior to the start of the shift to receive instructions regarding specific work assignments during the shift. The Law Enforcement Officer is expected to stay at the project site for the entire duration of the shift. Should it be necessary to leave the project site, the Law Enforcement Officer should notify the Engineer. The Contractor shall provide the Law Enforcement Officer with a two-way communication device which will be returned to the Contractor at the end of the shift.

Law Enforcement Officers 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. The following estimated quantities have been carried to the General Summary.

Item 614 - Law Enforcement Officer with Patrol Car = 300.0 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 a Law Enforcement Officer are included with the bid unit price for Item 614 - Law Enforcement Officer with Patrol Car.

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GENERAL NOTES

PLAN NO.

ITEM 632 - DETECTOR LOOP

During the course of this contract, it may be necessary for the Contractor to coordinate loop detector work with other Contractors involved with asphalt planing and resurfacing projects. The intent of this work is to replace loop detectors removed by asphalt planing operations and the installation of new loop detectors in the Surface Course Asphalt.

The Contractor shall be responsible for contacting the Asphalt Planing/Paving Contractor(s) to coordinate all necessary work. The Contractor shall complete the loop replacements within three (3) days following the completion of the pavement planing operation in the area of the loop replacement.

The Contractor shall coordinate and corroborate the layout of all loop detectors and pavement markings with the Ohio Department of Transportation.

The Ohio Department of Transportation shall be present when the Contractor marks the location where the pavement is to be sawed to be assured that the proposed loop detectors are in the same place as the existing loop detectors. All installations shall be completed before Item 448 - Asphalt Concrete Surface Course is placed.

The Contractor shall give the Ohio Department of Transportation forty-eight (48) hours notice, before performing this work.

Loop intersection locations and number of loops are as follows:

Westbound I-70 @ State Route 48, Ramp "B" = 3 Loops - 6' x 6'
1 Loop - 6' x 20'
1 Loop - 15' x 15'

Eastbound I-70 @ State Route 48, Ramp "C" = 2 Loops - 6' x 20'

ITEM 632 - LOOP DETECTOR TIE-IN, AS PER PLAN

This work shall consist of making connections to existing loop detector lead-in wire, whether that wire is underground or aerial. Included in this item is the connector kit or cable splice kit (conforming to 725.15) that must be used in making these connections.

This item is needed only when a tie-in situation exists. When all new lead-in wire is specified in the plan, this item of work is not required.

Payment for this item will include all necessary labor, miscellaneous hardware and equipment required to provide for the loop detector tie-in and operation. Basis of payment will be at the contract bid price per each.

ITEM 642 - PAVEMENT MARKINGS, AS PER PLAN

All Edge Lines, Lane Lines and Dotted Lines on I-75 shall be six inches (6.0") in width.

ITEM 644 - PAVEMENT MARKINGS, AS PER PLAN

Existing Pavement Markings shall be documented by the Contractor to be replaced in kind.

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MONTGOMERY COUNTY
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MAINTENANCE OF TRAFFIC

PLAN NO.

In addition to the requirements as indicated in the "Ohio Manual of Uniform Traffic Control for Streets and Highways", and pertinent items of the Construction and Materials Specifications, the following requirements shall apply.

Due to traffic congestion on this project, the Contractor shall be required to expedite the work to meet the time detour or lane closure time limitations as detailed in the plans. The Contractor shall meet these dates using whatever measures are necessary including, but not limited to, performing work by multiple crews, multiple shifts, overtime, etc.

Work can be performed simultaneously in the Eastbound and Westbound lanes. One lane of directional traffic will be permitted while the Contractor is actively working on or immediately adjacent to the pavement, and then only for minimum periods of time consistent with the actual requirements of the specific type of work being performed. It is intended that the roadway not be subjected to any work closures unless active work is being performed within or immediately adjacent to the closed lane. The roadway shall not be restricted to one lane directional traffic during periods of intermittent or irregular work, nor closed solely for the convenience of the Contractor. The Engineer shall make the final determination as to what constitutes active work and whether or not the actual work being performed warrants the lane closure. If the lane closure is not justified, the Engineer may order all or part of the closed lane re-opened to traffic until such time that this condition is corrected. The duration and length of all lane closures shall at all times be commensurate with the actual work being performed. Maximum lane closure shall be one (1.0) mile.

All construction work shall be completed within forty-five (45) consecutive calendar days.

The Contractor shall submit, in detail, a schedule of operations and maintenance of traffic to the District Construction Engineer and receive written approval before work is started on the project.

Should the Contractor fail to meet any of these requirements, the Contractor shall be subject to disincentives per Specification 108.07.

It is the intention to perform the required work with the least inconvenience to and the maximum safety of the Contractor and the traveling public. Any variances from these Maintenance of Traffic Notes must be approved in advance in writing by the Director.

The Contractor's operations shall be arranged to prevent any interference to the continuous flow of traffic. All vehicles, equipment, workers and their activities are restricted at all times to one side of the pavement unless otherwise approved by the Engineer.

During all hours when traffic is restricted to less than two (2) lanes in the same direction of flow, the Contractor shall employ at least one (1) qualified person to continuously patrol, twenty-four (24) hours a day, the restricted areas. The Contractor shall maintain all lights, barricades, signs, cones, drums, etc. in order to provide a safe facility for the traveling public. The Contractor shall have available all tools and materials necessary to perform this function at all times. This will be in addition to the required Law Enforcement Officers with Patrol Cars.

A minimum lane width of ten feet (10.0') shall be provided at all times. A fourteen (14) day advance notice is required when the lane width is to be reduced to ten feet (10.0').

Before work begins, the Contractor shall submit to the Engineer, names and telephone numbers of a person or persons who can be contacted twenty-four (24) hours a day by the Ohio Department of Transportation and all interested police agencies. This person or persons shall be responsible for placing or replacing necessary traffic control devices to maintain the traveled pavement safely.

The Contractor shall be required to provide, erect, maintain (in proper position, clean, legible and good working condition) and remove all lights, signs, barricades, cones and all other traffic control devices necessary for the maintenance of traffic, including pavement markings.

The Contractor shall furnish and install two (2) "Watch for Stopped Traffic" signs (W3-H7) one thousand feet (1000') downstream from the "Road Work Ahead" sign (W20-1). If traffic backups reach the "Watch for Stopped Traffic" signs, the Contractor shall install two (2) additional "Watch for Stopped Traffic" signs every two thousand feet (2000') upstream from the "Road Work Ahead" signs. The necessity for these signs shall be constantly monitored by the Contractor.

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MAINTENANCE OF TRAFFIC

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MAINTENANCE OF TRAFFIC

PLAN NO.

HOLIDAYS AND SPECIAL EVENTS

No work shall be performed and existing lanes shall be open to traffic during the following designated holidays or events:

Christmas, New Years, Memorial Day, July 4th, Labor Day and 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 of the Week	Time All Lanes Must be Open to Traffic
Sunday	12:00 Noon on Friday thru 6:00 a.m. on Monday
Monday	12:00 Noon on Friday thru 6:00 a.m. on Tuesday
Tuesday	12:00 Noon on Monday thru 6:00 a.m. on Wednesday
Wednesday	12:00 Noon on Tuesday thru 6:00 a.m. on Thursday
Thursday	12:00 Noon on Wednesday thru 6:00 a.m. on Monday
Friday	12:00 Noon on Thursday thru 6:00 a.m. on Monday
Saturday	12:00 Noon on Friday thru 6:00 a.m. on Monday

Should the Contractor fail to meet any of these requirements, the Contractor shall be assessed disincentives in accordance with 108.07 of the Construction and Material Specifications.

PAYMENT

Payment for all of the above are to be included in the lump sum bid for Item 614 - Maintaining Traffic with the following exceptions: Item 614 - Law Enforcement Officer with Patrol Car, and Item 614 - Work Zone Marking Sign (only those in addition to standard drawings).

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

The Metric Standard Drawings referenced in this plan shall be converted to English units using the SI (Metric) to English conversion factors provided in Section 109.02 of the 2008 Construction and Material Specifications. Conversions shall be appropriately precise and shall reflect standard industry English values where suitable.

WORK HOURS

All work zones shall only be implemented at the times listed on the Ohio Department of Transportation's Permitted Lane Closure Web Site which is located at:

http://plcm.dot.state.oh.us//plcm/plcm_web.jsp

The permitted closure times listed on the website, fourteen (14) calendar days prior to the Bid Letting Date, shall be in effect for this project.

No work within active travel lanes or ramps, or work which will slow traffic is permitted at any other time.

NOTIFICATION

The Contractor shall notify the Ohio Department of Transportation District Seven Construction Engineer two (2) weeks prior to beginning any work. Phone: (937) 497-6848.

ALIGNMENT AND PROFILE

The work proposed by this project consists of pavement planing and resurfacing of the existing pavement. The alignment of the existing pavement will not be changed and the profile of the proposed surface will be similar to that of the existing pavement.

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MAINTENANCE OF TRAFFIC

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DROP-OFFS IN WORK ZONES

PLAN NO.

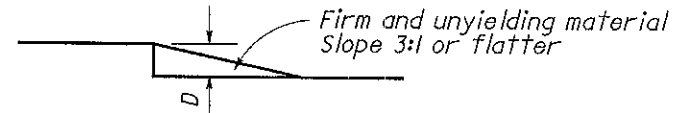
1. It is intended that the "Dropoffs in Work Zones" drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment or materials to implement the drop-off treatments specified herein, they shall be included for payment in the lump sum bid for Item 614, Maintaining Traffic.
2. While the need for certain advisory signing is noted herein, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown herein may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
6. When drums are specified for a drop-off condition, a minimum number of four (4) drums shall be used. Spacing shall be as indicated in the plans or as specified in the Ohio Manual of Uniform Traffic Control Devices (OMUTCD).
7. When W8-9 (Low Shoulder) signs or W8-11 (Uneven Lanes) signs are required, they shall be placed seven hundred and fifty feet (750') in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the drop-off condition extends more than one-half mile, additional signs should be erected at intervals of one (1) mile or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than ten feet (10'), drums may be placed on the opposite level from that of traffic, provided the drop-off depth does not exceed five inches (5") and approval is granted by the Project Engineer.

10. Pavement Repairs (or similar work):

- a. Lengths greater than sixty feet (60') - utilize appropriate treatment from Condition 1.
- b. Lengths of sixty feet (60') or less - repairs shall be affected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL SHOULDER TREATMENT

1. This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
2. OW-151 signs are required.



Sheet 1 of 3

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DROP-OFFS IN WORK ZONES

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DROP-OFFS IN WORK ZONES

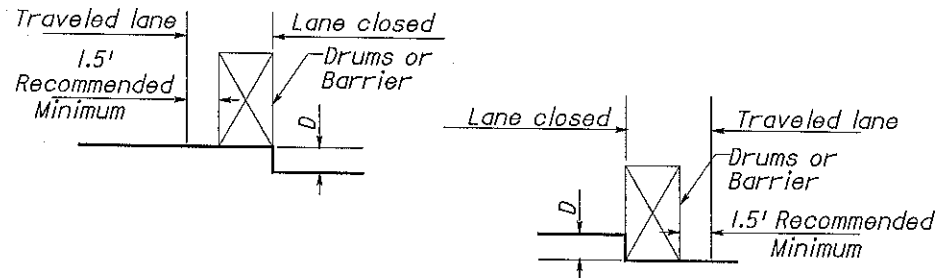
PLAN NO.

CONDITION I - DROP-OFFS BETWEEN TRAVELED LANES

- These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

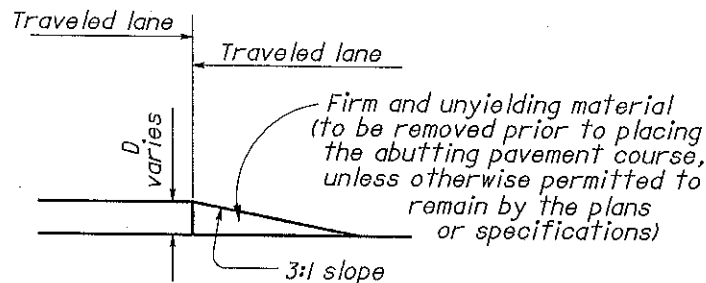
D (Inches)	Treatment
$< 1\frac{1}{2}$	Erect W8-II signs
$> 1\frac{1}{2} - 3$	1) Lane closure utilizing drums* as shown below or 2) Optional Wedge Treatment
$> 3 - 5$	Lane closure utilizing drums as shown below
> 5	Lane closure utilizing portable concrete barrier as shown below

* Cones may be used for daytime only conditions



OPTIONAL WEDGE TREATMENT (MILLING OR RESURFACING)

- This treatment may be used when permitted for Condition I only.
- W8-II signs are required.

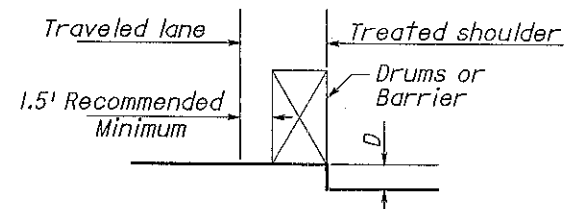


CONDITION II - DROP-OFFS WITHIN GRADED SHOULDER AREA

- The treatments indicated below are for use in conjunction with planing, resurfacing or excavations within the graded shoulder area.
- The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. It's surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials or concrete). For the purposes herein, it's maximum width shall be considered to be twelve feet (12').

D (Inches)	Treatment
$< 1\frac{1}{2}$	1) If edgelines are present, no treatment necessary, or 2) Erect W8-II signs.
$> 1\frac{1}{2} - 5$	1) If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below, or 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums, or 3) Optional Shoulder Treatment.
$> 5 - 12$ Daylight Only	If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below.
$> 5 - 24$	1) If minimum lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below, or 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

* Minimum lane widths shall be 10' unless otherwise specified in the plans.



Sheet 2 of 3

DROP-OFFS IN WORK ZONES

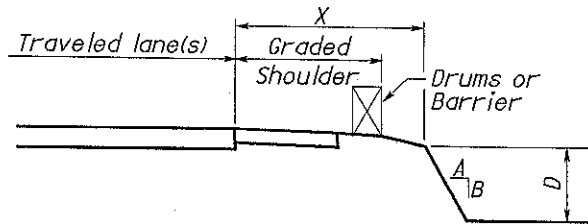
PLAN NO.

CONDITION III - DROP-OFFS BEYOND GRADED SHOULDER OR BACK OF CURB

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable.

CHART A

- Use for:
1. Uncurbed Facilities.
 2. Curbed Facilities, where:
 - a. Curbs are less than six inches (6") in height.
 - b. Curbs are six inches (6") or greater in height and the legal speed is greater than forty (40) mph.

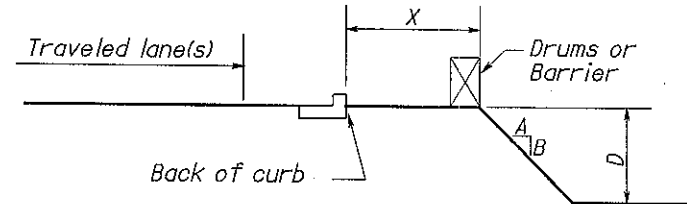


X Feet	D Inches	A/B	Treatment Required	
			Day	Night
0 - 4	Any	Any	(a)	(a)
4 - 30	Any	3:1 or Flatter	None	None
4 - 12	< 3	Steeper than 3:1	None	None
4 - 12	> 3 - > 12	Steeper than 3:1	Drums	Drums
4 - 12	> 12	Steeper than 3:1	Drums	Barrier
> 12 - 20	< 12	Steeper than 3:1	None	None
> 12 - 20	> 12 - > 24	Steeper than 3:1	Drums	Drums
> 12 - 20	> 24	Steeper than 3:1	Drums	Barrier
> 20 - 30	< 24	Steeper than 3:1	None	Drums
> 20 - 30	> 24	Steeper than 3:1	Drums	Barrier
> 30	Any	Any	None	None

(a) Use treatment specified under Condition II

CHART B

- Use for: Curbed Facilities, where the curb is six inches (6") or greater in height and the legal speed is forty (40) mph or less.



X Feet	D Inches	A/B	Treatment Required	
			Day	Night
0 - 10	< 12	Any	None	Drums
0 - 10	> 12	Any	Drums	Drums
> 10	Any	Any	None	None

Sheet 3 of 3

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DROP-OFFS IN WORK ZONES

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GENERAL SUMMARY

PLAN NO.

I-70 & VARIOUS	ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
1064	253	01001	1064	SQ. YARD	Pavement Repair, As Per Plan
24389	254	01000	24389	SQ. YARD	Pavement Planing, Asphalt Concrete
2439	407	13900	2439	GALLON	Tack Coat, 702.13
1356	448	50001	1356	CU. YARD	Asphalt Concrete Surface Course, Type 1H, As Per Plan
300	614	11100	300	HOURS	Law Enforcement Officer with Patrol Car
6	614	12460	6	EACH	Work Zone Marking Sign
25	614	12600	25	EACH	Replacement Drum
2	614	18510	2	MONTH	Portable Changeable Message Sign
0.42	614	20000	0.42	MILE	Work Zone Lane Line, Class I
99	621	00100	99	EACH	RPM
99	621	54000	99	EACH	Raised Pavement Marker Removed
7	632	26500	7	EACH	Detector Loop
7	632	27201	7	EACH	Loop Detector Tie-In, As Per Plan
5.12	642	00090	5.12	MILE	Edge Line
0.96	642	00091	0.96	MILE	Edge Line, As Per Plan
3.04	642	00190	3.04	MILE	Lane Line
803	642	01490	803	FEET	Dotted Line, 4"
350	642	01508	350	FEET	Dotted Line, 6"
1840	644	00400	1840	FEET	Channelizing Line
85	644	00501	85	FEET	Stop Line, As Per Plan
5	644	01301	5	EACH	Lane Arrow, As Per Plan
2	644	01401	2	EACH	Word on Pavement, 72", As Per Plan
LUMP	614	11000	LUMP		Maintaining Traffic
LUMP	624	10000	LUMP		Mobilization

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GENERAL SUMMARY

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