OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION

ADDENDUM NO. 3

CONTRACT NO. 39-14-02

RIGHT TWO (2) LANES AND SHOULDER RECONSTRUCTION
MILEPOST 159.80 TO MILEPOST 164.82
CUYAHOGA COUNTY, OHIO

OPENING DATE: PREVIOUSLY EXTENDED TO 2:00 P.M. (E.S.T.), JANUARY ~~30~~ *31*, 2014

ATTENTION OF BIDDERS IS DIRECTED TO:

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 P.M., JANUARY 27, 2014

MODIFICATIONS TO THE BID FORM
Pages BF-4

MODIFICATIONS TO THE SPECIFICATIONS
Special Provision Table of Contents Page 1 of 2 and SP-5, SP-7, SP-30, SP-63 and New Pages ***SP-30A*** and ***SP-30B***.

MODIFICATIONS TO THE DRAWINGS
TITLE SHEET and Pages 5, 11, 16, 22, 47, 87, 88, 114, 147, 176, 177, 207, 208, 209, 210, 220 and 224 of 414, and Standard Drawings CBR-5, CBR-6 and DJ-1.

Issued by the Ohio Turnpike and Infrastructure Commission on January 28, 2014. Issuance authorized by Richard Hodges, Executive Director, and Kathleen G. Weiss, General Counsel.

Richard Hodges 1/28/14
Richard Hodges Date

Kathleen Weiss 1/28/14
Kathleen G. Weiss Date

OHIO TURNPIKE COMMISSION
ADDENDUM NO. 3
CONTRACT NO. 39-14-02

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 P.M., JANUARY 27, 2014

Q#8 Plan Sheet 16 gives a table for the SP605 underdrains showing 662 feet worth. This quantity has not been carried to the general summary. Should the type 2 aggregate drain bid item quantity be adjusted accordingly?

A#8 Via this Addendum No. 3, the 662 feet of Item SP605 - Aggregate Drain, As Per Plan, is carried to the General Summary on Sheet 220 of 414. The grand total of SP605 - Aggregate Drain, As Per Plan, is increased to 44,234 feet in both the General Summary and Bid Form.

Q#9 Bid Item 65 - 42" Conduit, Type B: Per plan sheet 16 the owner has set up 250' as directed for reconstruction or relocation of a 42" storm sewer along/under ramp E in the vicinity of the underpasses beneath SB and NB IR-71. From first review, the plan shows the manholes and pipe on and under pavement. However from first appearance, there are no visible manholes in the locations shown on the plans. Above and beyond pavement replacement excavation, exactly how is the contractor supposed to locate a storm sewer whose location isn't confirmed? If the pipe runs under the bridges, then we'll need to know the clearance of the two overhead bridges to determine if the pipe can be open cut. If what is found doesn't match what is shown on the plans, then how is the contractor supposed to price out the item not knowing an exact location given this is a type B pipe requiring granular backfill? Would it make more sense to eliminate this bid item and handle it as a force account/change order once the project begins?

A#9 Bid Item 65 - 42" Conduit, Type B is removed via this Addendum No. 3. The General Note on Plan Sheet 16 of 414, "SP604 – Manhole Adjusted to Grade, As Per Plan," is revised via this Addendum No. 3 to require the Contractor to locate the buried manholes and reconstruct them to grade as directed by the Chief Engineer.

Q#10 Bid Item 67 "Manhole Adjusted to Grade, As Per Plan"- the note on plan sheet 16 states that "The Replacement Casting Supplied Shall Be Heavy Duty and Bolted". Is the contractor responsible for providing a new and bolted casting for all adjustments or just ones needing a new casting? If a new casting is required, please verify what model number from EJIW or Neenah. Would it make sense to have a separate bid item for the casting similar to that of the catch basin grate and casting item?

A#10 No, the Contractor shall reuse the existing manhole casting. The statement, "~~The Replacement Casting supplied shall be heavy duty and bolted~~" is removed via this Addendum No. 3 from the General Note on Sheet 16 of 414 under Item SP604 – Manhole Adjusted to Grade, As Per Plan.

Q#11 Note 3 on sheets 87, 88, 176, 177 refers to Item 615-Roads for Maintaining Traffic. There is no such item in proposal.

*A#11 All instances within the Drawings that read "Item 615 - ~~Roads~~ for Maintaining Traffic, Class A, As Per Plan" is corrected via this Addendum No. 3 to read "Item 615 - **Pavement** for Maintaining Traffic, Class A, As per Plan."*

Q#12 Are two way object markers required on the glare screen for the contra flow traffic? If so what is the quantity required and how is this paid for?

A#12 No, two (2) way object markers are not required for Temporary Portable Barrier with glare shield.

Q#13 Is the temporary slotted drain to be removed after the crossovers are no longer in use? If so what would the turnpike like for replacement in the trench area?

A#13 Yes, the temporary slotted drains are to be removed during MOT Phase 4 and the cost is included in the Unit Price Bid of for Item 615 – Pavement for Maintaining Traffic, Class A, As Per Plan. A new typical section is added via this Addendum No. 3 to Sheet 47 of 414.

Q#14 Where are the quantities for milling and asphalt paving the crossover areas back to their original configuration or is this considered part of the MOT?

A#14 Restoring the crossovers back to the existing condition is included in Item 615 - Pavement for Maintaining Traffic, Class A, As Per Plan. A new typical section showing the pavement build-up is added via this Addendum No. 3 to Sheet 47 of 414.

Q#15 Does the interduct in the barrier wall that is to be removed for the crossovers have any existing cable that needs to be removed or jumpered while this wall is out?

A#15 No, there are no existing cables; there is only a pull string.

Q#16 Under the 42" conduit, Type B how will the cost for locating and investigating the existing manholes and drainage be paid if the 42" conduit is not required?

A#16 The cost of investigating the location of the manhole to be adjusted to grade is added to the Item SP604 – Manhole Adjusted to Grade, As Per Plan General Note on Sheet 16 of 414 via this Addendum No. 3.

Q#17 Does the manhole adjustment to grade item include a new casting? If so what is the specification on this bolt down casting?

A#17 See response to Q#10.

Q#18 Does the 12" Conduit Type F require bends or if feasible can they be straight runs without bends?

A#18 Conduit bends are required in accordance with OTIC Standard Drawing CB-1.

Q#19 What will be done with the temporary crossovers during the winter shutdown? Will temporary barrier wall or attenuators need to be installed prior to this shutdown? If so how is this paid?

A#19 Closure of the temporary crossovers during the winter shutdown shall be included in the Lump Sum Price Bid for Item 614 – Pavement for Maintaining Traffic, Class A, As Per Plan. If the crossovers existed prior to construction; reinstall thirty-two (32) inch Portable Concrete Barrier in accordance with OTIC Standard Drawing XOV-3. If the crossovers did not exist prior to construction, temporally close up the median using thirty-two (32) inch Portable Concrete Barrier.

Q#20 Please reconsider your answer to question #4 from Addendum #1. Since there are 2 options for the soil stabilization and the contractor is required to bid both how is the OTC going to determine which contractor is low bidder? By making either option part of the base bid and the other option as an alternate would give the OTC an apples to apples comparison of the bids. By leaving both options as part of the base bid with no way to determine which method is to be used is only going to inflate the bid total for the contractors.

A#20 The site conditions will dictate the soil stabilization method utilized under the Contractor's mixture design for chemically stabilizing the soil in accordance with the General Note on Plan Sheet 17 of 414 for Item - 206 Chemically Stabilized Subgrade, As Per Plan, and Supplement 1120. The soil stabilization method utilized will not become apparent until a mix design is reviewed and approved by the Chief Engineer. Consequently, it is not feasible to designate each stabilization method as "Alternates" for purposes of Bid Evaluation because the lower cost method is not relevant to selecting appropriate means for stabilization. Therefore, the Commission will evaluate the Bids based on the total of both stabilization methods. Commission will scrutinize the Bids for these two (2) line

items utilizing previous Bids received for these items. Any irregularities in these line items that attempt to gain a competitive advantage may render a Bid to be deemed non-responsive. Therefore, Bidders shall submit Unit Prices for each stabilization method that accurately reflects the cost to perform the corresponding Work.

Q#21 Will the OTC allow the Contractors to use the service roads located at approx. Sta 439+00 for access in phase 2B & 3B since they will be within our work zone.

A#21 Yes, SP 104 is modified via this Addendum No. 3 to allow the Contractor to utilize the existing service roads that are located approximately at Sta. 439+00 Eastbound and Westbound, provided that the Contractor will not be permitted to use the service road during times that traffic is being maintained on the right lane of the adjacent roadway where the service road is located within a Project Construction Zone.

Q#22 Is the contractor required to remove the trench drains installed at the crossover locations? If so how will they be compensated.

A#22 See response to Q#13 above.

Q#23 Plan pages 207 & 210 show 12" conduit being connected from the existing catch basins to the proposed trench drain, how is this conduit paid for?

A#23 The conduit necessary to temporarily connect the trench drains to the existing catch basins is considered incidental to Maintaining Traffic in the crossover areas. All costs associated with this Work shall be included in Item 615 – Pavement for Maintaining Traffic, Class A, As Per Plan.

Q#24 Plan sheet 16 "Liner Pipe, As Per Plan"- the note reads that all existing lateral pipes or underdrain connections shall be connected to the proposed liner pipe. Nothing is showing on the plans and the number of connections can affect the cost of the item. Please provide locations, diameters, etc. of all lateral connections to existing culverts which are to be relined.

A#24 There are two (2) General Notes on Sheet 16 of 414 under Item 837 – Liner Pipe, As Per Plan. The second General Note for Item 837 – Liner Pipe, As Per Plan, describes the location and sizes of the connecting pipes.

Q#25 Could you please provide a Geotechnical Report and/or Soil Boring Report for this project? None were included with the plans or proposal.

A#25 There were no Geotechnical or Soil Borings preformed for this Project. The Mainline Pavement Evaluation, a Master Plan report, the Pavement Design Report for the Third Lane and the original soil boring logs from the original Turnpike Construction are available for viewing at the Commission's Administration Building in Berea, Ohio by contacting Kevin Golick, Procurement Manager.

Q#26 Page 14 of the general notes under Item 622 – Concrete Barrier, Type D, APP, references standard drawings CBR-5 & CBR-6. These were not included in the plan set and are also not listed on the front page of the plans. Could you please provide these standard drawings?

A#26 Yes, OTIC Standard Drawings CBR-5 and CBR-6 are added via this Addendum No. 3.

Q#27 Page Plan sheet 16 under Item 837 notes calls for required connections to new liner pipes. The connection for the new 36" liner pipe to the existing 48" CMP at station 520+85 presents a problem as the connection takes place under the existing paved median and median wall. Will the OTC allow the contractor to remove the existing median wall and pavement in that immediate area to make the connection? The new 36" liner pipe appears to be too confining to have the connection made from inside the pipe. If this method of construction is necessary, how is the removal and replacement of median barrier wall and median pavement outside the proposed replacement area to be paid for?

A#27 This is a question concerning construction means and methods that are the responsibility of the Contractor. The Bidder should price the Item accordingly.

Q#28 Is the contractor required to seal the joints in the 15" Concrete Pavement? The plans reference the ODOT Standard Drawings which do not require the joints to be sealed.

A#28 Yes, all joints shall be sealed in accordance with ODOT CMS 705.04 in the fifteen (15) inch Concrete Pavement, and shall be considered incidental to Item 452 – Non-reinforced Concrete Pavement (T=15").

Q#29 Per SP848, Page 235 Longitudinal Construction joints are permitted with approval of the Chief Engineer, will the contractor be permitted to place a longitudinal construction joint midway within the concrete bridge deck overlays to facilitate construction vehicle access, and to construct the grade break as shown on the typical sections?

A#29 Yes, but any additional construction joints added at the Contractor's request are to be sealed with HMWM in accordance with SP 516B. Placement of the additional

construction joints and the subsequent sealing shall be at no additional cost to the Commission.

Q#30 Will the contractor be permitted to use MS concrete in the approach slabs.

A#30 Yes, but at no additional cost to the Commission.

Q#31 Prior to the project bidding, in accordance with SP104 G, will the Chief Engineer grant access for the project thru the existing access drives for the salt storage domes just west of I-71; or does access utilizing the existing access drives need to be submitted in accordance SP 104 I. proposals for Temporary Access.

A#31 See response to Q#21 above.

Q#32 In SP400 paragraph (i) on page SP-63 it states that a MTD shall be used for all surface course mainline and ramp paving including SP302. Is a MTD required for SP402?

A#32 Yes, subsection (III)(E)(3)(i) of SP 400 is revised via this Addendum No. 3 to include the material transfer device requirement for SP 402.

Q#33 The SP400S specification limits diamond grinding to a maximum of 500 sf per single lane mile. There is no mention of bridge approaches, so it is assumed that as per previous projects the 0.05 mile sections at bridge approaches are exempt from the Half Car IRI of 45 inches per mile, and any corrective grinding at bridge approaches would also not count toward the 500 sf maximum per lane mile.

A#33 This interpretation is correct.

Q#34 Bid items 62 and 63 specify the pipe being 707.24 for 12" and 15" diameter. This type of pipe is not made in sizes less than 18". Please provide a revised type of pipe in an addendum.

*A#33 The quantities of twelve (12) inch and fifteen (15) inch Conduit, Type C ~~707.24~~ are revised via this Addendum No. 3 to provide for Conduit, Type C **707.33**.*

MODIFICATIONS VIA ADDENDUM NO. 3 TO THE CONTRACT DOCUMENTS FOR CONTRACT NO. 39-14-02

The following changes are made to the Contract Documents for Contract No. 39-14-02:

MODIFICATIONS TO THE BID FORM

Deletions are shown with ~~strikethrough~~ text.
Changes/Additions are shown with ***bold italicized*** text.

Page OTC – BF – 4

The estimated quantities for Ref. Nos. 62, 63, 67 and 73 are revised and Ref. No. 65 is removed completely and via this Addendum No. 3 as follows:

REF. NO.	ITEM NO.	DESCRIPTION	APPROX. QUANTITY	UNIT
62	603	Item 603 - 12" Conduit T Conduit, Type C, ~~707.24~~ ***707.33***	40	FT
63	603	Item 603 - 15" Conduit T Conduit, Type C, ~~707.24~~ ***707.33***	10	FT
65	~~603~~	~~42" Conduit, Type B~~ ***NOT USED***	~~250~~ ***0***	~~FT~~
67	604	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	~~19~~ ***2***	EACH
73	SP605	AGGREGATE DRAIN, AS PER PLAN	~~43,572~~ ***44,234***	FT

MODIFICATIONS TO THE SPECIAL PROVISIONS

Deletions are shown with ~~strikethrough~~ text.
Changes/Additions are shown with ***bold italicized*** text.

SPECIAL PROVISIONS Table of Contents Page 1 of 2

A reference is inserted via this Addendum No. 3 to the new Special Provision ***SP 121 – Project Document Control*** on pages ***SP-30*** through ***30B.***

Page SP-5

Section G of Special Provision SP 104 is modified via this Addendum No. 3 as follows:

G. Access for material delivery and/or construction equipment through access drives, maintenance garage and service plaza locations will not be permitted without prior written approval of the Chief Engineer, ***except at the location(s) noted below for***

which no access credit or plans are required under SP 104, Section I. Limited access will be granted to the delivery of millings only, if applicable.

- ***Sta. 439+00 EB and Sta. 439+00 WB***

Page SP-7
Section I of Special Provision SP 104 is modified via this Addendum No. 3 as follows:

I. Proposals for **Temporary Access** (Entrances or Exits) to the Turnpike may be submitted by the Contractor. The Contractor shall enter a lump sum credit in the space provided in the Proposal, setting forth the amount of credit, which will apply in case its proposal for Temporary Access is granted (See Bid form). In addition, ~~he~~ ***the Contractor*** shall furnish the following information in the sealed envelope containing its ***signed original Bid Guaranty/Performance Bond, Power of Attorney, Bidder's Affidavit and completed Financial Statement submitted within twenty-four (24) hours of the*** Bid ***Opening in accordance with Articles 2.7.2, 2.7.4 and 6.1.1 of the Instructions to Bidders***.

Page SP 30 and New Pages SP30A and SP30B
The provision that SP 30 was a ~~PAGE INTENTIONALLY LEFT BLANK~~ is deleted and the New Special Provision ***SP 121 – Project Document Control*** is added the Contract Documents via this Addendum No. 3.

Page SP-63
Section (III)(E)(3)(i) of Special Provision SP 400 is modified via this Addendum No. 3 as follows:

Material transfer device (MTD) shall be used for all ~~surface~~ course(s) mainline and ramp paving including ***SP404, SP402 and*** SP302. The MTD shall be self-propelled and independent of the asphalt spreading and finishing equipment. The MTD shall be capable of remixing and transferring the asphalt mixture from the MTD to the asphalt spreading and finishing equipment.

MODIFICATIONS TO THE PLAN DRAWINGS

Modifications to the Plan Drawings

Deletions in Plan Notes are shown with ~~strikethrough~~ text.
Changes/Additions in the Plan Notes are shown with ***bold italicized*** text.
Additions and deletions on Plan Drawings are indicated with
a cloud and revision triangle thus:

Title Sheet 1 of 414

The reference to new Standard Drawing ***CRB-5***, dated ***06-25-07***, and Standard Drawing ***CRB-6***, dated ***06-25-07***, is added via this Addendum No. 3 in the table identifying the Ohio Turnpike and Infrastructure Commission Standard Drawings.

Plan Sheet 5 of 414

Item L in the "Ex. Item Legend," is modified via this Addendum No. 3 to state, "Asphalt Concrete (T=~~10 ½~~ ***4 ¼***"±) ***and Bituminous Aggregate Base (T=10" ±)***".

Plan Sheet 11 of 414

A new Typical Section detail entitled "***Existing Entrance/Exit Ramp Section***" is added via this Addendum No. 3.

Plan Sheet 16 of 414

The General Note on Plan Sheet 16 of 414 entitled "ITEM 604 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN" is modified via this Addendum No. 3 as follows:

> "ITEM SP604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN
> ***RECORD PLANS SHOW STORM MANHOLES NEAR THE BASE LINE OF RAMP E AT STA. 62+00 AND 64+00 WITH A CONNECTING 42" CONDUIT THAT A RECENT FIELD SURVEY COULD NOT LOCATE. THE CONTRACTOR SHALL LOCATE THE MANHOLES AND ADJUST TO GRADE IF THE CHIEF ENGINEER DETERMINES THAT ADJUSTMENT IS NEED.***
>
> THE FOLLOWING CONTINGENCY ITEM HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE IN ADJUSTING, REPAIRING, AND/OR REBUILDING MANHOLES. THE CONTRACTOR SHALL REBUILD FROM THE TOP OF STRUCTURE TO THE BOTTOM OF THE CASTING AT THE EXISTING GRADE. THE USE OF BRICK TO REBUILD THE MANHOLE SHALL BE PROHIBITED. THE CONTRACTOR SHALL SAWCUT PAVEMENT AROUND THE EXISTING MANHOLE, A MINIMUM OF 12" AROUND THE CASTING AND REMOVE THE CASTING AND SAWCUT ASPHALT CONCRETE. THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "C" CONCRETE, TO REBUILD THE MANHOLE. TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE, THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC GROUT THAT CONFORMS TO ***CMS 705.20***~~SP 952~~. THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE MANHOLE,

AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED MANHOLE CASTING SHALL BE BACK FILLED WITH CLASS "C" CONCRETE TO THE BOTTOM OF THE PROPOSED PAVEMENT BASE. A CONTINGENCY QUANTITY OF SP604-MANHOLE ADJUSTED TO GRADE, AS PER PLAN, HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE CHIEF ENGINEER. ~~THE REPLACEMENT CASTING SUPPLIED SHALL BE HEAVY DUTY AND BOLTED.~~

ALL CONCRETE, DOWELS, DOWEL HOLES, GROUT, SAW CUTTING, ***LOCATING,*** LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER EACH:

ITEM SP604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH"

The General Note on Plan Sheet 16 of 414 entitled "ITEM 603 – 42" CONDUIT, TYPE B" is removed via this Addendum No. 3 as follows:

"~~ITEM 603 - 42" CONDUIT, TYPE B~~
~~RECORD PLANS SHOW STORM MANHOLES NEAR THE BASE LINE OF RAMP E AT STA. 62+00 AND 64+00 WITH A CONNECTING 42" CONDUIT THA A RECENT FIELD SURVEY COULD NOT LOCATE. THE CONTRACTOR SHALL LOCATE THE MANHOLES AND THE CONNECTING PIPE AND RECONSTRUCT IF THE CHIEF ENGINEER DETERMINES THAT RELOCATION IS NEEDED. ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER FOOT:~~

~~THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE CHIEF ENGINEER.~~

~~ITEM 603 - 42" CONDUIT, TYPE B 250 FEET~~"

The General Note on Plan Sheet 16 of 414 entitled "ITEM 605 – AGGREGATE DRAIN, AS PER PLAN" is modified by adding a new sentence after the first paragraph via this Addendum No. 3 stating as follows:

"***DIMENSIONS FOR THE OUTLETS WILL MATCH ODOT STD. DWG. BP-3.1 AND BE CONSTRUCTED WITH A SLOPE OF ¼"/FT.***"

Plan Sheet 22 of 414
The General Note entitled "ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN" is modified as follows:

"ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
THIS ITEM SHALL BE AS PER SECTION 615 OF THE CMS ***AND SHALL INCLUDED THE FOLLOWING: ESTABLISHING THE MOT CROSSOVER PAVEMENT PER THE TYPICAL SECTION ON SHEET 47, INSTALLING THE 12" SLOTTED DRAIN, TYPE 2 WITH THE REQUIRED CONNECTION TO THE EXISTING CATCH BASIN INCLUDING THE 12" CONDUIT, TYPE B, RESTORING THE MOT CROSS OVER AREA BACK TO ITS ORIGINAL CONDI TION PER THE TYPICAL SECTIONS ON SHEET 47 WHICH INCLUDES REMOVAL OF THE 12" SLOTTED DRAIN AND THE 12" CONDUIT***. ~~IN ADDITION, PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIALS REQUIRED TO INSTALL THE REQUIRED 12" SLOTTED DRAIN, TYPE 2 AT THE PROPOSED CROSSOVER LOCATIONS.~~

THE 12" SLOTTED DRAIN, TYPE 2 SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. THE PROPOSED 12" SLOTTED DRAIN, TYPE 2 SHALL BE ***A*** 12 INCH DIAMETER SLOTTED DRAIN ALUMINUM COATED STEEL CONDUIT 707.01 WITH 6 INCH TRAPEZOIDAL GALVANIZED SOLID BAR GRATE AS APPROVED BY THE CHIEF ENGINEER. ***THE EXISTING CATCH BASIN SHALL BE NEATLY CUT AND REPLACED WITH CLASS C AND THE BACK FILL MATERIAL AROUND THE CATCH BASIN SHALL BE LSM PER SP 604.***

ALL COSTS FOR THE PLACEMENT OF THE ***MOT CROSSOVERS, RESTORING THE MOT CROSSOVER AREA TO IT ORIGINAL CONDITION, INSTALLING AND REMOVING THE DRAINAGE SYSTEM AS DETAILED ABOVE*** ~~TEMPORARY PAVEMENT~~, LABOR***, EQUIPMENT*** AND MATERIALS~~, INCLUDING TYPE 2 BEDDING, AND BACKFILLING AS DETAILED ON STANDARD CONSTRUCTION DRAWING DM-1.3~~ SHALL BE INCLUDED IN THE ***UNIT*** PRICE BID FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.....4842 SQ. YD."

Plan Sheet 47 of 414
A new "***Crossover Restoration Typical Section***" detail is added via this Addendum No. 3 to Sheet 47 of 414.

Plan Sheet 87 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 88 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 114 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 147 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 176 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 177 of 414
General Note 3 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE

PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 207 of 414
General Note 4 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 208 of 414
General Note 4 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 209 of 414
General Note 4 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 210 of 414
General Note 4 is modified via this Addendum No. 3 as follows:

"3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615 –PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615 – ~~ROADS~~ ***PAVEMENT*** FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN."

Plan Sheet 220 of 414
The entire pay item for the "42 Conduit, Type B" is removed and the quantities in rows under the columns entitled "SHEET NO. 16 and 224" and "GRAND TOTAL" on the General Summary Sheet 2 of 3 are modified, respectively, for reference Sheet No. 16 and 224 via this Addendum No. 3 as follows:

Sheet Number 16	ITEM	GRAND TOTAL	DESCRIPTION	REF. NO.
~~250~~	~~603~~	~~250~~	~~42" CONDUIT, TYPE B~~	
~~0~~ ***662***	SP605	~~43,572~~ ***44,234***	AGGREGATE DRAIN, AS PER PLAN	16

Sheet Number 224	ITEM	GRAND TOTAL	DESCRIPTION	REF. NO.
40	603	40	12" CONDUIT, TYPE C, ~~707.24~~ ***707.33***	
10	603	10	15" CONDUIT, TYPE C, ~~707.24~~ ***707.33***	
~~19~~ ***2***	604	~~19~~ ***2***	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	16

Plan Sheet 224 of 414
The column heading for Item 603 - 12" Conduit T Conduit, Type C, ~~707.24~~ is modified to read as follows: "Item 603 - 12" Conduit T Conduit, Type C, ***707.33***"

The column heading for Item 603 - 15" Conduit T Conduit, Type C, ~~707.24~~ is modified to read as follows: "12" ~~707.24~~ ***707.33***" and "15" Conduit, Type C, ***707.33***"

The entire column for "~~Manhole Adjusted to Grade, As Per Plan~~" is removed in its entirety via this Addendum No. 3 from the table entitled "Catch Basins ~~and Manholes~~ to be Adjusted in Median as directed by the Chief Engineer."

The Totals under the column entitled "604 - Manhole Adjusted to Grade, As Per Plan" in Table entitled "Drainage Subsummary" is revised via this Addendum No. 3 as follows:

Totals from Subsummary Below	~~17~~
Totals to General Summary	~~19~~ ***2***

Additional Standard Drawings
Ohio Turnpike and Infrastructure Commission Standard Drawings ***CBR-5*** and ***CBR-6*** are added and incorporated in the Contract Documents.

ATTACHMENTS:

Bid Form: BF-4

Special Provisions: Special Provision Table of Contents Page 1 of 2 and Pages SP-5, SP-7, SP-30, SP-63 and New Pages ***SP-30A*** and ***SP-30B***.

Contract Drawings: TITLE SHEET and Pages 5, 11, 16, 22, 47, 87, 88, 114, 147, 176, 177, 207, 208, 209, 210, 220 and 224 of 414, and Standard Drawings CBR-5, CBR-6 and DJ-1.

(BIDDERS ARE ADVISED TO UTILIZE THE ATTACHED REPLACEMENT PAGES).

Addendum No. 3 to Contract No. 39-14-02
is hereby acknowledged:

_____
(Firm Name)

_____
(Signature)

_____
(Printed Name)

Date: _____

CONTRACT NO. 39-14-02 BID FORM

Ref. No.	Item No.	Item Description	Approx. Quantity	Unit	Unit Cost	Extended Bid Amount
		DRAINAGE (Ref. Nos. 56 - 89)				
56	601	PAVED GUTTER, MISC.: GUTTER BROKEN IN-PLACE	1,228	FT		
57	601	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	28	CU YD		
58	601	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER	364	CU YD		
59	603	6" CONDUIT, TYPE F, 707.41 NON-PERFORATED ASTM D3034 (SDR 35) 707.42 OR 707.33	1,966	FT		
60	603	12" CONDUIT, TYPE F, 707.33	320	FT		
61	603	12" CONDUIT, TYPE C, 706.02	10	FT		
62	603	12" CONDUIT, TYPE C, 707.24***33***	40	FT		
63	603	15" CONDUIT, TYPE C, 707.24***33***	10	FT		
64	603	18" CONDUIT, TYPE C, 706.02	10	FT		
65	~~603~~	~~42" CONDUIT, TYPE B~~	~~250~~	~~FT~~		
66	603	48" CONDUIT, TYPE A, 707.33	16	FT		
67	604	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	***2***	EACH		
68	604	CATCH BASIN ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN	7	EACH		
69	604	CATCH BASIN ADJUSTED TO GRADE, 4" TO 12", AS PER PLAN	22	EACH		
70	604	CATCH BASIN ADJUSTED TO GRADE, 12" OR MORE, AS PER PLAN	7	EACH		
71	604	CATCH BASIN GRATE AND CASTING, AS PER PLAN	36	EACH		
72	SP604	CATCH BASIN, NO. CB-1, AS PER PLAN	6	EACH		
73	SP605	AGGREGATE DRAIN, AS PER PLAN	***44,234***	FT		
74	SP605	TYPE 1 AGGREGATE DRAIN, WITH WRAP, AS PER PLAN	200	FT		
75	SP605	TYPE 2 AGGREGATE DRAIN, WITH WRAP, AS PER PLAN	200	FT		
76	SP605	6" BASE PIPE UNDERDRAIN, WITH FABRIC WRAP	48,014	FT		
77	SP605	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP	57,329	FT		
78	SP605	6" UNCLASSIFIED PIPE UNDERDRAIN, WITH FABRIC WRAP	400	FT		
79	837	36" LINER PIPE, AS PER PLAN	168	FT		
80	837	42" LINER PIPE, AS PER PLAN	269	FT		
81	837	48" LINER PIPE, AS PER PLAN	224	FT		
82	837	60" LINER PIPE, AS PER PLAN	175	FT		
83	837	BACKFILL FOR LINER PIPE	190	CU YD		
84	SPECIAL	PRECAST REINFORCED CONCRETE OUTLET	68	EACH		
85	SPECIAL	12" PRECAST CONCRETE END SECTION	7	EACH		
86	SPECIAL	18" PRECAST CONCRETE END SECTION	1	EACH		
87	SPECIAL	48" PRECAST CONCRETE END SECTION	1	EACH		
88	SPECIAL	SECURING MANHOLE LID	22	EACH		
89	SPECIAL	PIPE CLEANOUT, 15" TO 36"	500	FT		
				TOTAL - DRAINAGE		

OHIO TURNPIKE COMMISSION
SPECIAL PROVISIONS FOR
CONTRACT NO. 39-14-02

Commission may determine to be necessary to avoid undue inconvenience or hazard to the traveling public.

E. Upon request from the Contractor and approval of the Chief Engineer, toll-free access will be provided for the Contractor's administrative and supervisory personnel and/or special equipment or material deliveries, exclusive of asphalt and concrete that may require Turnpike travel outside the toll-free zone.

F. Private automobiles of workmen will not be permitted on the Ohio Turnpike roadways and may not be parked in the construction area. All parking must be at an approved staging area.

G. Access for material delivery and/or construction equipment through access drives, maintenance garage and service plaza locations will not be permitted without prior written approval of the Chief Engineer***, except at the location(s) noted below for which no access credit or plans are required under SP 104, Section I***. Limited access will be granted to the delivery of millings only, if applicable.

- ***Sta. 439+00 EB and Sta. 439+00 WB***

H. **During all phases of construction**, the following will apply:

1. During periods of high Turnpike traffic flow, crossing of the active lanes and/or single lane zones will not be permitted unless authorized by the Chief Engineer. The following times are known to have high Turnpike traffic flows:

2014 Construction

New Years Day Holiday:	Sundown Monday, December 30, 2013 through Sunrise Friday, January 3, 2014
Easter:	Noon Friday, April 18, 2014 through Sunrise Tuesday, April 22, 2014
Mothers' Day:	Sunrise Sunday, May 11, 2014 through Sunrise Monday, May 12, 2014
Memorial Day Holiday:	Noon Friday, May 23, 2014 through Sunrise Tuesday, May 27, 2014
Independence Day Holiday:	Sundown Wednesday, July 2, 2014 through Sunrise Monday, July 7, 2014
Labor Day Holiday:	Noon Friday, August 29, 2014 through Sunrise Wednesday, September 3, 2014
Thanksgiving Day Holiday:	Sundown Tuesday, November 25, 2014 through Sunrise Monday, December 1, 2014
Christmas Day Holiday:	Sundown Monday, December 22, 2014 through Sunrise Friday, December 26, 2014
Summer Weekends:	Noon on Friday through Sunrise on Monday for the period beginning Friday, May 30, 2014 through Sunrise Wednesday, September 3, 2014

$10,000 per hour for each hour or portion of an hour that two (2) lanes are not open to Turnpike traffic.

5. No single lane traffic zones will be permitted after November 1 through April 1 unless approved by the Chief Engineer. Written request for single lane traffic zones shall be provided to the Chief Engineer at least forty-eight (48) hours in advance.

6. Traffic backups can be expected and should be anticipated by the Contractor. During all phases of construction, the Chief Engineer may restrict or suspend the Contractor's activities as per Article 13.1 - Suspension of the Work, of the General Conditions and/or require both Turnpike roadways to be open to traffic if the weather or traffic conditions should so indicate. Delays caused by these restrictions or suspensions are not the responsibility of the Commission. Once a traffic backup extends ½ mile beyond the first transitional arrow board, the Contractor is to make the work area, safe and remove the lane closure as directed by the Chief Engineer.

7. In the event that any of the above mentioned requirements relative to lane closure(s) are not complied with and/or not authorized by the Chief Engineer, the Commission may impose upon the Contractor a Liquidated Damage in the amount of $10,000 per hour for each hour or portion of an hour not in compliance.

8. The Contractor may elect to perform the culvert lining construction below the mainline in any construction phase, subject to the requirements of SP104, SP614 and two (2) lanes of traffic are open in each direction from 6:00 A.M. to 10:00 P.M. Prior to performance of this Work, the Contractor shall submit an access plan to the Chief Engineer for approval. The Contractor's access plan shall include but not limited to the following; the intended method of accessing the site, the extent of the material laydown and equipment area, and methods of maintaining proper drainage in the Work area. Existing guardrail lengths and locations shall be shown on the Contractor's access plan.

I. Proposals for **Temporary Access** (Entrances or Exits) to the Turnpike may be submitted by the Contractor. The Contractor shall enter a lump sum credit in the space provided in the Proposal, setting forth the amount of credit, which will apply in case its proposal for Temporary Access is granted (See Bid form). In addition, ~~he~~ ***The Contractor*** shall furnish the following information in the sealed envelope containing its ***signed original Bid Guaranty/Performance Bond, Power of Attorney, Bidder's Affidavit and completed Financial Statement submitted within twenty-four (24) hours of the*** Bid ***Opening in accordance with Articles 2.7.2, 2.7.4 and 6.1.1 of the Instructions to Bidders***.

1. The exact location of such proposed entrances or exits.

2. A detailed plan of all construction necessary to provide such access, including any drainage Work necessary and such Work as will be performed to restore the area to its original condition or repair of any damage after construction.

SP 121 PROJECT DOCUMENT CONTROL

(1-21-14)

A. Description

The Contractor will be given access to a website portal for an Information Management System to submit Project Documentation to the Construction Manager. Project Documentation to be submitted through this Information Management System will be all Contractor Requests For Information, all Contractor Submittals, Material Certifications, Daily Look Aheads, Construction Schedules and General Correspondence.

All machine readable ("electronic") submittals are to be of adequate resolution to read and translate during the review by the Commission, Construction Manager, and the Architect/Engineer. When any part of a Project Documentation includes color to provide meaning, the material uploaded to the System shall also be scanned or otherwise digitized in color so that the electronic Project Documentation accurately depicts the intended meaning of the original.

Project Documentation will be electronically stamped after the review process to the current disposition: Approved, Approved As Noted, Return For Corrections, and/or No Exceptions Taken. Any Project Documentation requiring full size document sets for meaningful review can be uploaded to the Information Management System and hard copies shall follow through traditional delivery methods.

The Management Information System does not adjust Contract review times as specified in the Contract Documents, but is intended to facilitate delivery and potentially expedite review periods. Also, the Information Management System does not revise any formal written notification requirements set forth in the Contract Documents.

B. Management Information System

The Information Management System is a Web-based program developed for the Commission's Mainline Pavement Replacement Program. The Web-based system utilizes the SharePoint 2010 Platform.

The Contractor shall upload Project Documentation into a folder solely dedicated for the Contractor's use only. The maximum allowable individual file size for uploading by the Contractor is 50MB. Larger files will need to be either split into multiple smaller files or delivered on a flash drive to the Construction Manager through traditional delivery methods.

After any given Project Documentation is uploaded by the Contractor, the Contractor shall send a confirming e-mail notification to the Construction Manager, and copying the Commission's Representative Project Engineer, Resident Engineer, and Project Manager. Contact information for these individuals will be provided to the Contractor at the Preconstruction Meeting.

The subject line of the confirming e-mail notification of the uploaded Project Documentation shall be labeled as described in Section C of this Special Provision.

I. Project Contacts and Access

The Contractor will be given access to the Information Management System for three (3) staff members on the Project. Staff roles for access are for Project Manager, Project Engineer and Superintendent. Prior to the Preconstruction Meeting the Contractor is to provide the following contact information for access setup purposes:

i. Company Name
ii. Prime Contact Minimum Information:
    a. Name
    b. Title
    c. Phone Numbers (Office and Cellular)
    d. Email Address
    e. Mailing Address

Subcontractor or material suppliers will not be given access, only Prime Contractor personnel will be able to access the SharePoint site.

C. Documentation for Submission/ Correspondence

The Contractor shall use the specified naming conventions and procedures below for each corresponding Project Documentation:

I. Requests for Information (RFI)

Contractor Requests For Information - A RFI form will be provided at the Preconstruction Meeting in both hard copy and electronic media. RFI Forms are to be handled as follows:

i. Transmittal Sequential Order – "RFI-01"

File Name-Submission: Project, Sequential Order, Subject
OTIC [39-XX-XX] [RFI-XX] [Subject]
Example: OTIC 39-14-01 RFI-01 Underdrain Location

File Name-Response: Project, Sequential Order, Subject
OTIC [39-XX-XX] RFI-01 [Subject]/Answer
Example: OTIC 39-13-02 RFI-01 Underdrain Location/Answer

II. Submittals

Contractor Submittals - All Submittals are to be accompanied with a Cover/Transmittal Sheet detailing all items in the submittal package and referencing the appropriate Specification that it correlates with for review. All submittals will have a Contractor Approved stamp with signature which shall indicate that the Contractor has reviewed and approved the submittal, and that the submittal conforms with the Contract Documents. Submittals are to be handled as follows:

i. Transmittal Sequential Order - "SUB-001"

File Name-Submission: Project, Sequential Order, Subject
OTIC [39-XX-XX] [SUB-XXX] [Subject]
Example: OTIC 39-14-01 SUB-001 Asphalt Mix Designs

File Name-Response: Project, Sequential Order, Subject
OTIC [39-XX-XX] [SUB-XXX] [Subject]/[Disposition]
Example: OTIC 39-13-02 SUB-001 Asphalt Mix Designs/APP

ii. Disposition Abbreviation Legend:

Approved - APP
Approved As Noted - APPN
Return For Corrections - RFC
No Exceptions Taken - APPN or NET

III. General Correspondence

i. Letters are to be handled as follows - Sequential Order by Letter Creator – "Ltr-XXX"

File Name: Project, Creator, Sequential Order, [Subject]
OTIC [39-XX-XX], [Creator], [Ltr-XXX] [Description]
Example: "OTIC 39-14-01 Hill Ltr-001 Request Cost Proposal-D-wall"

ii. Emails are to be handled as follows - Subject lines that specify the Project Name and Summary of the Topic of e-mail's contents

Subject Heading: Project Name, Topic
OTIC [39-XX-XX], [Topic]
Example: "OTIC 39-13-01 Asphalt Placement Mtg"

D. Basis of Payment

This work is considered incidental to the contract and will be completed at No Additional Cost to the owner.

Specifications so that the paving Work may be properly prosecuted without appreciable delay to the Work.

(i) Material transfer device (MTD) shall be used for all ~~surface~~ course(s) mainline and ramp paving including ***SP404, SP402 and*** SP302. The MTD shall be self-propelled and independent of the asphalt spreading and finishing equipment. The MTD shall be capable of remixing and transferring the asphalt mixture from the MTD to the asphalt spreading and finishing equipment.

MTD may be used for shoulder surfacing paving but is not required.

4. The surface of curbs and gutters in actual contact with asphaltic mixtures shall be painted with a thin uniform coating of asphaltic cement to provide a closely bonded watertight joint at these points. After completion of the surface course, the joint shall be sealed by applying asphaltic cement in a uniform width of approximately four (4) inches and at a rate just sufficient to fill surface voids.

5. Immediately after the bituminous mixture for any course has been laid by the paver and before roller compaction is started, the surface shall be checked, any inequalities adjusted, sandy accumulation from the screed removed by rake or hoe, and all fat or segregated spots in any course removed and replaced with satisfactory material. Irregularities in the surface and alignment along the outside edges of base courses shall be corrected by the addition or removal of mixture before the edge is rolled. The Contractor shall provide competent workmen and supervisors who are capable of performing the Work incidental to correcting of all pavement irregularities. Special attention shall be given by him to the straight-edging of each course before completion of the rolling in order to minimize subsequent corrections in the surface course, as required by SP 400S.

6. Mixtures may be spread by hand only upon permission by the Chief Engineer and at such locations as are inaccessible to machine spreading. They shall then be handled and spread by means of heated shovels, lutes, and rakes. Mixtures shall not be applied faster than they can be properly handled and spread. Workmen shall not stand or Work in the hot mixture while it is being placed, and every precaution shall be taken to distribute and spread the material uniformly to avoid segregation of the coarse aggregate and bituminous mortar.

7. Pavement under construction, which becomes contaminated by petroleum products shall be removed and replaced at the Contractor's expense.

8. In areas where pavement settlement, for a distance greater than thirty-five (35) feet, has occurred and more than one (1) layer of leveling course will be required to obtain the original pavement grade, the Contractor shall use automatic leveling control devices as directed by the Chief Engineer. The Contractor shall

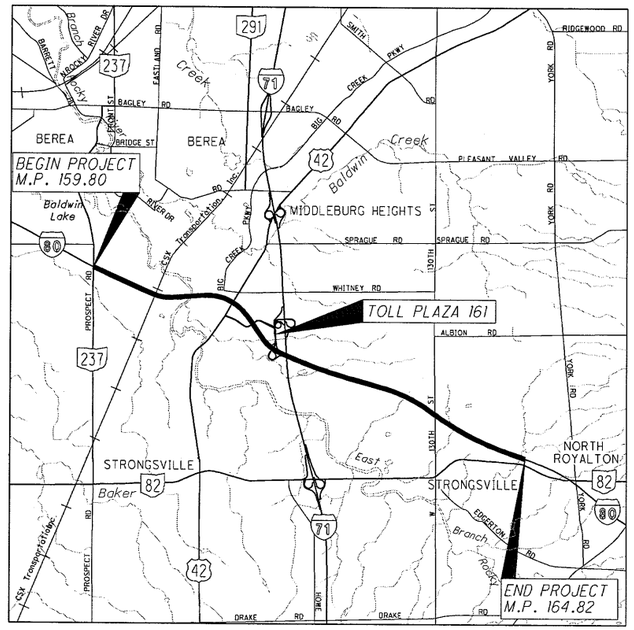
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

INDEX OF SHEETS

CONTRACT NO. 39-14-02
RIGHT TWO (2) LANES AND SHOULDER RECONSTRUCTION

M.P. 159.80 TO M.P. 164.82
CUYAHOGA COUNTY, OHIO



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APPROVED FOR
THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION
BY
Douglas F Hall
CHIEF ENGINEER
12/27/2013
DATE

OHIO TURNPIKE AND INFRASTRUCTURE STANDARD DRAWINGS

AS-1	11-20-12	DJ-1	06-25-07	TCB-3	12-21-11	UD-1	06-25-07
AS-2	11-20-12	DJ-2	06-25-07	TCR-1	06-25-07	XOV-3	06-25-07
AS-3	11-20-12			TCR-2	12-21-11		
AS-4	11-20-12	DR-1	06-25-07	TCR-2.1	12-21-11		
AS-5	11-20-12			TCR-3	06-25-07		
				TCR-3.1	06-25-07		
CB-1	11-20-12			TCR-5	10-05-05		
CB-2	11-05-07			TCR-5.1	10-05-05		
CB-3	11-05-07	JB-1	06-25-07	TCR-7	06-25-07		
CB-4	11-05-07	MCC-1	06-25-07	TCR-9	11-20-12		
1/ CB-5	11-05-07	PED-1	06-25-07	TCR-10	12-21-11		
CBR-2	06-25-07	RPM-1	12-21-11	TCR-11PS	12-21-11		
CBR-3	06-25-07			TCR-12	01-24-11		
2/ CJ-1	06-25-07	TC-1	06-25-07	TCR-13	01-24-11		
CBR-5	06-25-07	TC-2	06-25-07	TCR-15	12-21-11		
CBR-6	06-25-07	TCB-1	12-21-11				

OHIO DEPARTMENT OF TRANSPORTATION STANDARD CONSTRUCTION DRAWINGS

BP-1.1	07-28-00	MGS-2.1	07-19-13	RM-4.3	01-18-13	
BP-2.1	07-19-13	MGS-3.1	07-19-13	RM-4.5	10-16-09	
BP-2.2	07-18-08	MGS-3.2	01-18-13	RM-4.6	07-19-13	
		MGS-4.2	07-19-13			
BP-3.1	04-20-12			TC-12.30	10-18-13	
BP-5.1	07-19-13	HW-2.1	01-18-13	TC-21.10	10-18-13	
BP-9.1	07-19-13	HW-2.2	01-18-13	TC-21.20	10-18-13	
				TC-22.20	10-18-13	
BR-1	07-19-02	MT-100.00	07-19-13	TC-41.20	10-18-13	
		MT-101.90	07-19-13	TC-42.10	10-18-13	
DM-1.1	01-18-13	MT-105.10	07-19-13	TC-42.20	10-18-13	
DM-1.2	01-18-13			TC-52.10	10-18-13	
DM-4.3	07-19-13	RB-1-55	07-19-13	TC-52.20	01-18-13	
1/ DM-4.4	07-20-12					
DM-1.3	01-18-13	RM-4.1	07-19-13			
MGS-1.1	07-19-13	RM-4.2	10-15-10			

SUPPLEMENTAL SPECIFICATIONS

821	04-20-12 1/
832	10-18-13
837	01-20-12
839	12-31-12
921	04-20-12 1/
937	04-20-07
1120	06-13-11 1/

SPECIAL PROVISIONS

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

OHIO TURNPIKE DIVISION SUPERINTENDENT:
Eastern (440) 234-2081 X 5700
Western (440) 234-2081 X 5300

ENGINEERS SEAL:

FOR ENTIRE PLAN EXCEPT PLAN INSERTS AND GEOTECHNICAL

STATE OF OHIO
MARK R. GROSSMAN
E-61120
REGISTERED
PROFESSIONAL ENGINEER

SIGNED:
DATE: 12-19-13

GEOTECHNICAL SUPPLIED BY O.T.I.C.

DESIGN CONTRACT: 71-13-06

PLAN PREPARED BY:

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

ADDENDUM NO. 1	1-14-14
ADDENDUM NO. 3	1-23-14

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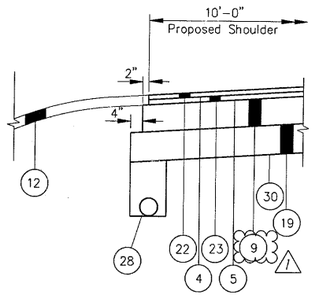
Date: Jan 23, 2014 Time: 3:52 pm Twist: -1.57079633
Technician: chuff



SHOULDER DETAIL

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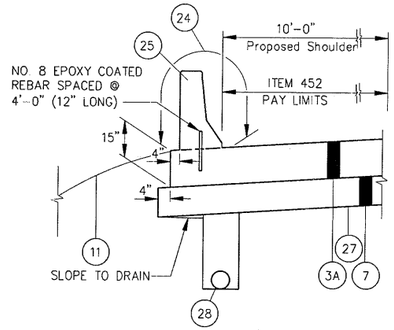

TYPE D BARRIER DETAIL

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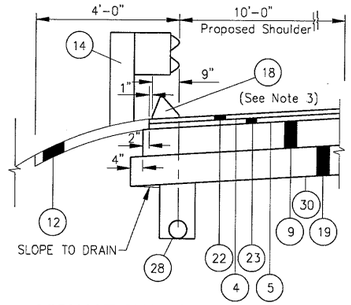

ASPHALT CURB SHOULDER DETAIL

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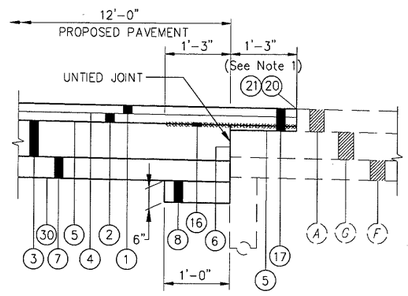

PAVEMENT JOINT DETAIL

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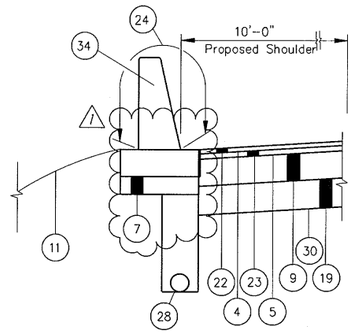
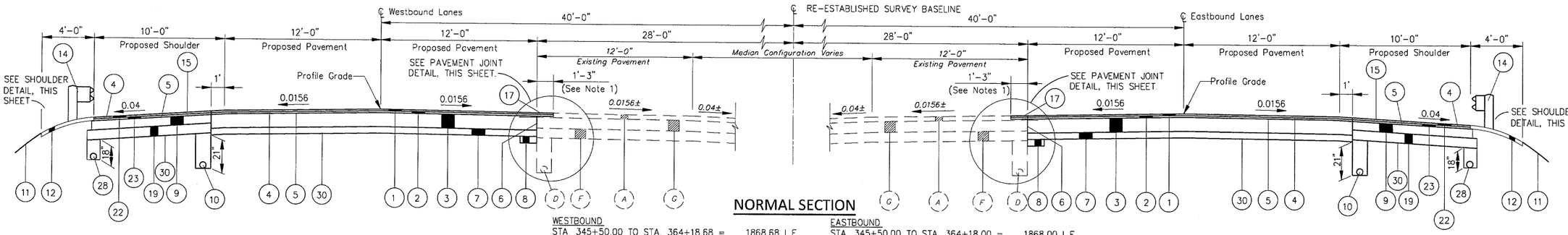


TYPE D, SINGLE SLOPE, BARRIER DETAIL

NOT TO SCALE



NORMAL SECTION

WESTBOUND		EASTBOUND	
STA. 345+50.00 TO STA. 364+18.68 =	1868.68 L.F.	STA. 345+50.00 TO STA. 364+18.00 =	1868.00 L.F.
*STA. 385+34.73 TO STA. 391+15.16 =	580.43 L.F.	*STA. 385+06.15 TO STA. 391+15.16 =	609.01 L.F.
*STA. 396+60.12 TO STA. 397+17.56 =	57.44 L.F.	*STA. 396+60.12 TO STA. 397+00.78 =	40.66 L.F.
STA. 497+69.81 TO STA. 513+78.28 =	1608.47 L.F.	STA. 497+82.18 TO STA. 514+11.06 =	1628.88 L.F.
STA. 547+41.72 TO STA. 548+05.28 =	63.56 L.F.	STA. 547+08.94 TO STA. 547+84.60 =	75.66 L.F.
STA. 598+32.81 TO STA. 603+50.00 =	517.19 L.F.	STA. 598+53.49 TO STA. 603+50.00 =	496.51 L.F.

* SEE RESURFACING AND MEDIAN PAVEMENT DETAIL ON SHEET 12.

ITEM LEGEND

1	ITEM SP 404	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70-22 (FR), (1-1/2")
2	ITEM SP 402	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22 (FR), (1-3/4")
3	ITEM SP 302	BITUMINOUS AGGREGATE BASE, PG 64-22, (12 1/2") (2 EQUAL LIFTS)
3A	ITEM SP 452	NON-REINFORCED CONCRETE PAVEMENT (T=15")
4	ITEM SPECIAL	TRACKLESS TACK FOR INTERMEDIATE COURSE (APPLIED @ 0.06 GAL./S.Y.), SEE SHEET 13.
5	ITEM SPECIAL	TRACKLESS TACK (APPLIED @ 0.075 GAL./S.Y.), SEE SHEET 13.
6	ITEM 252	FULL DEPTH PAVEMENT SAWING
7	ITEM SP 304	6" AGGREGATE BASE
8	ITEM SP 605	AGGREGATE DRAIN, AS PER PLAN, SEE SHEET 16.
9	ITEM SP 302	BITUMINOUS AGGREGATE BASE, PG 64-22 (T=8")
10	ITEM SP 605	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP
11	ITEM 659	SEEDING AND MULCHING
12	ITEM 617 ITEM SP 627	COMPACTED AGGREGATE (T=3") (WITHOUT GUARDRAIL) STONE SHOULDER PROTECTION (T=3") (WITH GUARDRAIL)
13	ITEM SP 526	CLASS C CONCRETE, APPROACH SLAB, USING TYPE I CEMENT (T=12")
14	ITEM 606	GUARDRAIL, TYPE MGS, USING LONG STEEL POSTS
15	ITEM SPECIAL	SONIC NAP ALERT PATTERN (SNAP)
16	ITEM SPECIAL	ASPHALT PAVEMENT REINFORCEMENT
17	ITEM 254	PAVEMENT PLANING, ASPHALT CONCRETE (3 1/4")
18	ITEM 609	ASPHALT CONCRETE CURB, TYPE 1, PG 64-22
19	ITEM SP 304	9" AGGREGATE BASE (SHOULDER)
20	ITEM SP 404A	JOINT SEALER (APPLIED TO VERTICAL FACE)
21	ITEM SPECIAL	SAW CUT JOINT (SEE NOTE 2)
22	ITEM SP 404	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22, (1-1/2")
23	ITEM SP 402	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22, (1-3/4")
24	ITEM SP 536A	MASONRY COATING, SEE SHEET 14.
25	ITEM 622	CONCRETE BARRIER, TYPE D, AS PER PLAN, SEE SHEET 14.
26	ITEM SP 304	AGGREGATE BASE, (12")
27	ITEM 204	SUBGRADE COMPACTION
28	ITEM SP 605	6" BASE PIPE UNDERDRAIN, WITH FABRIC WRAP
29	ITEM 254	PAVEMENT PLANING, ASPHALT CONCRETE, (1 1/2")
30	ITEM 206	CHEMICALLY STABILIZED SUBGRADE, AS PER PLAN
31	ITEM SP 403	ASPHALT CONCRETE LEVELING COURSE, PG 70-22 (FR)
32	ITEM SP 403	ASPHALT CONCRETE LEVELING COURSE, PG 64-22
33	ITEM 254	PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)
34	ITEM 622	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN, SEE SHEET 14.
35	ITEM 609	CURB, TYPE 4A

EX. ITEM LEGEND

- (A) ASPHALT CONCRETE (T=6"±)
- (B) 10"± REINFORCED CONCRETE PAVEMENT
- (C) AGGREGATE BASE (T=7"±)
- (D) 6" UNDERDRAIN
- (E) REINFORCED CONCRETE APPROACH SLAB (T=10"±)
- (F) AGGREGATE BASE (T=9"±)
- (G) BITUMINOUS AGGREGATE BASE (T=10"±)
- (H) REINFORCED CONCRETE APPROACH SLAB (T=12"±)
- (I) GUARDRAIL, TYPE 5
- (J) CONCRETE BARRIER
- (K) PLAIN CONCRETE PAVEMENT (T=15"±)
- (L) ASPHALT CONCRETE (T=4 1/4"±) AND BITUMINOUS AGGREGATE BASE (T=10"±) 2
- (M) ASPHALT CONCRETE (T=9"±)
- (N) AGGREGATE BASE (T=10 1/2"± AVERAGE)

NOTE 1: ASPHALT PAVEMENT PLANING OPERATION WITHIN THIS 15" AREA SHALL OCCUR AFTER PLACEMENT OF ITEM SP 302 – 12 1/2" BITUMINOUS AGGREGATE BASE, PG 64-22. REQUIREMENTS FOR ASPHALT PLACED WITHIN THIS 15" AREA SHALL BE IN STRICT COMPLIANCE WITH SP 400.

NOTE 2: SAW CUT IS REQUIRED. SAW CUT MAY BE WAIVED BY CHIEF ENGINEER PROVIDED CONTRACTOR DEMONSTRATES ABILITY TO PROVIDE A STRAIGHT, VERTICAL FACE CUT WITH NO DAMAGE TO ADJACENT PAVEMENT. FOR QUANTITY, SEE SHEET 17.

NOTE 3: ASPHALT CURB TO BE SEALED AS PER THE REQUIREMENTS OF SP 400.

NOTE 4: ALL EXPOSED SUBGRADE WILL HAVE SUBGRADE STABILIZATION PERFORMED USING ITEM 206 – CHEMICALLY STABILIZED SUBGRADE, AS PER PLAN. SEE GENERAL NOTES SHEET 17.

NOTE 5: FOR PAVEMENT AND SHOULDER WIDTHS AND CROSS SLOPES, SEE PAVEMENT ELEVATION DETAILS ON SHEETS 313 – 323.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	CLH	1-14-14
2	ADDENDUM NO. 3	CLH	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE RIGHT TWO LANES & SHOULDER RECONSTRUCTION
TYPICAL SECTIONS

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc 330-572-2100
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101
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DRAWN: CLH	IN CHARGE: MRG	SCALE: NTS	

CONTRACT 39-14-02 SHEET 5 OF 414

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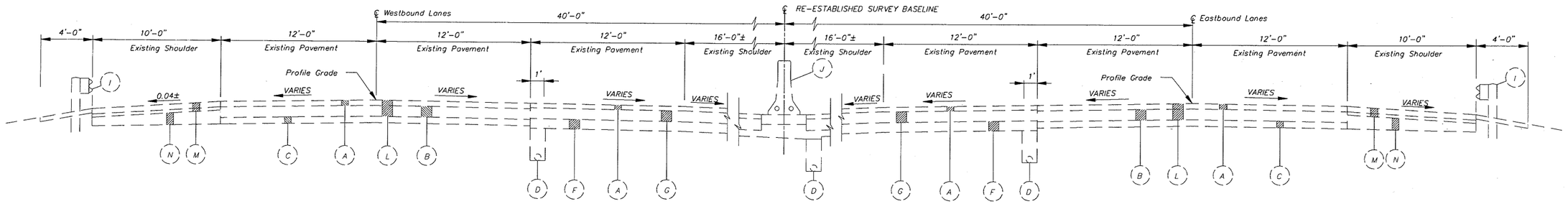
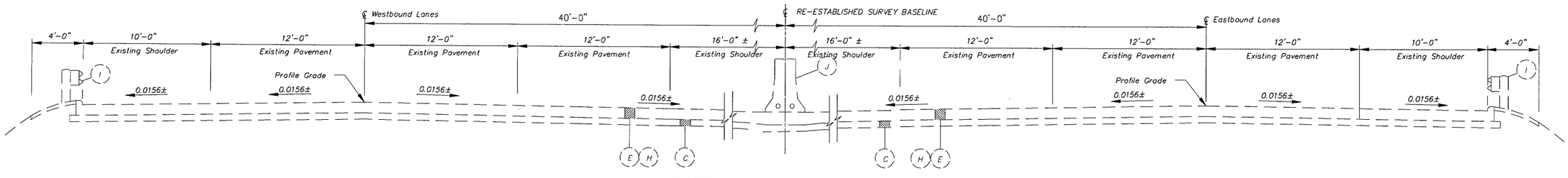


EXISTING SECTION

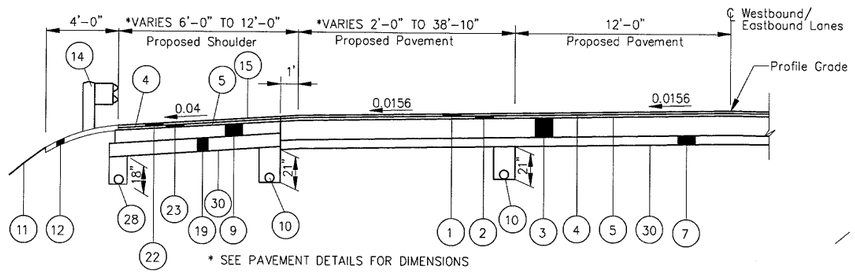
NOTE:
ITEM "L" APPLIES ONLY TO THE ORIGINAL 2 LANES WITH THE STATION LIMITS SHOWN BELOW
ITEMS "A" AND "B" APPLIES ONLY TO ALL MAINLINE PAVEMENT AREAS

WESTBOUND
STA. 387+89.00 TO STA. 395+29.00 = 740.00 L.F.
STA. 449+77.00 TO STA. 460+17.00 = 1040.00 L.F.

EASTBOUND
STA. 400+41.00 TO STA. 433+41.00 = 3300 L.F.



EXISTING APPROACH SLAB SECTION



* SEE PAVEMENT DETAILS FOR DIMENSIONS

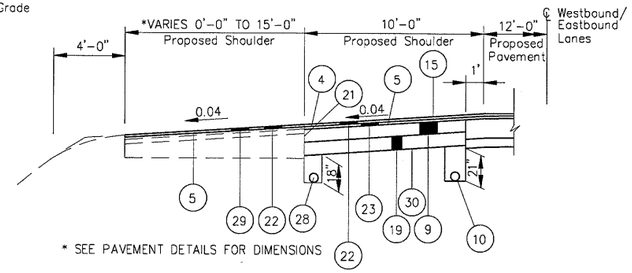
RAMP ENTRANCE/EXIT DETAIL

WESTBOUND SHOWN. EASTBOUND SYMMETRICAL ABOUT CENTERLINE

WESTBOUND
STA. 432+41.01 TO STA. 444+64.25 = 1223.24 L.F.
STA. 468+09.68 TO STA. 471+00.00 = 290.32 L.F.

EASTBOUND
STA. 442+70.86 TO STA. 449+02.20 = 631.34 L.F.
STA. 466+63.28 TO STA. 473+30.29 = 667.01 L.F.

SEE SERVICE ENTRANCE DETAIL AT
STA. 435+69.94 TO STA. 442+10.52



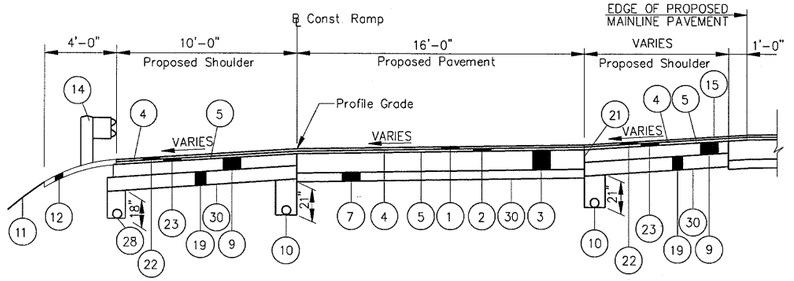
* SEE PAVEMENT DETAILS FOR DIMENSIONS

EMERGENCY PULL OFF AREA DETAIL

WESTBOUND SHOWN. EASTBOUND SYMMETRICAL ABOUT CENTERLINE

WESTBOUND
STA. 568+23.20 TO STA. 574+39.06 = 615.86 L.F.

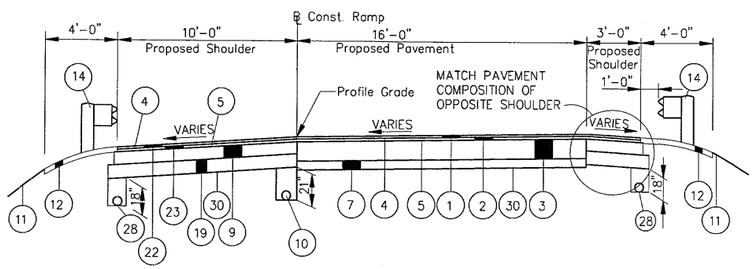
EASTBOUND
STA. 565+09.46 TO STA. 570+89.93 = 580.47 L.F.



ENTRANCE/EXIT RAMP SECTION

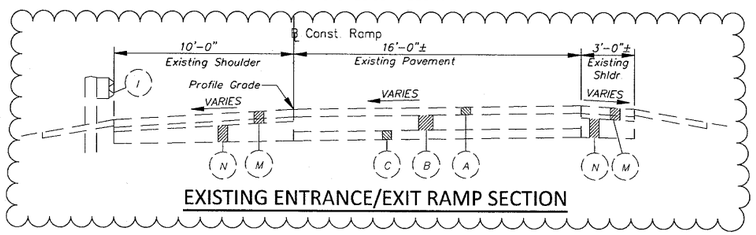
SEE PAVEMENT DETAILS FOR DIMENSIONS

RAMP F STA. 60+97.37 TO STA. 66+63.21 = 565.84 L.F.
RAMP L STA. 448+75.00 TO STA. 452+70.06 = 395.06 L.F.
RAMP C STA. 461+88.93 TO STA. 468+09.68 = 620.75 L.F.
RAMP H STA. 444+64.25 TO STA. 449+70.28 = 506.03 L.F.



ENTRANCE/EXIT RAMP SECTION

RAMP H STA. 449+70.28 TO 451+25.00 = 154.72 L.F.



EXISTING ENTRANCE/EXIT RAMP SECTION

2

FOR ADDITIONAL NOTES, EXISTING AND PROPOSED LEGEND, SEE SHEET 5.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	CLH	1-14-14
2	ADDENDUM NO. 3	CLH	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE RIGHT TWO LANES & SHOULDER RECONSTRUCTION
TYPICAL SECTIONS

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc 330-572-2100
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

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CONTRACT 39-14-02 SHEET 11 OF 414

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CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

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

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

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

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

VIDEOS OF STORM CULVERTS

RECENT VIDEOS WERE TAKEN OF CULVERTS THAT ARE TO BE SLIP LINED OR REPAIRED. THESE VIDEOS ARE AVAILABLE FOR VIEWING AT THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION OFFICE LOCATED AT 682 PROSPECT STREET, BEREA, OHIO 44017, TELEPHONE (440) 234-2081.

ITEM 837 - LINER PIPE, AS PER PLAN

SUPPLEMENTAL SPECIFICATION 837 LINER PIPE SHALL BE AMENDED AS FOLLOWS:
837.02 MATERIALS. THE LINER PIPE MATERIAL SHALL BE LIMITED TO 707.42, SS937 OR SS938.
837.03 INSTALLATION. INSTALLATION SHALL BE ADHERED TO WITH THE FOLLOWING ADDITIONS:
E. CONTRACTOR SHALL SUBMIT A WRITTEN INSTALLATION PROCEDURE FOR THE LINER PIPE FOR APPROVAL. THE CONTRACTOR SHALL ALSO PROVIDE: METHOD OF HOLDING THE LINER PIPE IN PLACE DURING THE GROUTING PROCEDURE TO INSURE THE LINER PIPE DOES NOT FLOAT; PROCEDURE FOR CONNECTING ALL LATERAL PIPES; A GROUT MIX DESIGN; THE GROUTING PROCEDURE SHALL BE APPROVED BY THE MANUFACTURE; THE CONTRACTOR SHALL SUPPLY AT LEAST FIVE VERIFIABLE PROJECTS WITH THE ENGINEER'S CONTACT NAME, ADDRESS AND PHONE NUMBER FOR EACH PROJECT WITH A SIMILAR SCOPE.
F. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE SPECIFIED PIPE WILL FIT INTO THE EXISTING CONDUIT AND VERIFY THE LENGTH PRIOR TO ORDERING THE LINER PIPE.
G. ALL EXISTING LATERAL PIPES OR UNDERDRAIN CONNECTIONS SHALL BE CONNECTED TO THE PROPOSED LINER PIPE. THESE CONNECTIONS MAY OR MAY NOT BE SHOWN OR SPECIFIED IN THE PLANS. THE CONTRACTOR SHALL VERIFY THE NUMBER, SIZE AND LOCATION OF ALL CONNECTING PIPES. LATERAL PIPES MAY NEED TO BE TRIMMED IN ORDER TO INSTALL THE LINER PIPE.
837.05 BASIS OF PAYMENT. PAYMENT FOR THE ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT REPRESENTS FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE ITEM OF WORK DESCRIBED IN THE SUPPLEMENTAL SPECIFICATION 837 LINER PIPE AND ABOVE .

1 ITEM 837 - LINER PIPE, AS PER PLAN

CONNECTIONS TO EXISTING PIPES WILL BE REQUIRED AS DESCRIBED BELOW. THE COST FOR ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE CONNECTIONS TO EXISTING PIPES SHALL BE INCLUDED IN THE BID PRICE.

48" CMP AT MP 163.24, STA. 520+85	18" RCP WEST AT 90' +/- FROM IR 80 WESTBOUND END
54" CMP AT MP 163.41, STA. 530+20	NO CROSS PIPES
42" RCP AT MP 163.71, STA. 546+00	18" RCP EAST AT 84' +/- FROM IR 80 WESTBOUND END 6" CPVC WEST AT 76' +/- FROM IR 80 WESTBOUND END

ITEM SP 536A - MASONRY COATING

ALL NEW AND EXPOSED CONCRETE BARRIER SURFACES SHALL RECEIVE A COATING PER SP 536A. THE MASONRY COATING SHALL ALSO BE USED AS THE CURE COAT. THE FINAL APPEARANCE SHALL BE UNIFORM AND CONSISTENT AND SHALL CONFORM TO ALL PROVISIONS IN SP 536A. NO ADDITIONAL PAYMENT SHALL BE MADE IF THE CONTRACTOR IS REQUIRED TO APPLY ADDITIONAL COATINGS TO ACHIEVE A UNIFORM APPEARANCE. THE MATERIAL SHALL BE APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS. ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE BID PRICE PER SQUARE YARD FOR SP 536A - MASONRY COATING.

ITEM 601 – PAVED GUTTER, MISC.: GUTTER BROKEN IN-PLACE

THIS ITEM INCLUDES BREAKING UP THE PAVED GUTTER CONCRETE IN PLACE TO BE USED AS ROCK CHANNEL PROTECTION. THE CONTRACTOR SHALL REMOVE THE BROKEN CONCRETE FROM THE CHANNEL, EXCAVATE THE CHANNEL 18 INCHES AND PLACE FABRIC FILTER AT THE EXCAVATED GRADE. THE CONTRACTOR SHALL PLACE THE BROKEN CONCRETE IN THE CHANNEL IN CONJUNCTION WITH ROCK CHANNEL PROTECTION AT A TOTAL DEPTH OF 18 INCHES. THE BROKEN CONCRETE AND THE ROCK CHANNEL PROTECTION SHALL MEET THE REQUIREMENTS OF 703.19, TYPE D. THE PROPOSED CHANNEL SHALL MATCH THE WIDTHS AND SLOPES OF THE EXISTING CHANNEL. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE CHANNEL.

ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER FOOT FOR ITEM 601 - PAVED GUTTER, MISC.: GUTTER BROKEN IN-PLACE

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

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

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.
THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLE REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.

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

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 603.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OTIC, REPRESENTATIVES OF THE OTIC AND THE CONTRACTOR, SHALL MAKE AN 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 OTIC REPRESENTATIVE.

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 OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION.

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 OR REVISED AS SHOWN IN THESE PLANS. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE CHIEF ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

ITEM SPECIAL - PRECAST CONCRETE END SECTION

THIS ITEM SHALL BE IN ACCORDANCE WITH OTIC STANDARD DRAWING DR-1 AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO COMPLETE THIS ITEM.

ITEM SPECIAL - PRECAST REINFORCED CONCRETE OUTLET

THIS ITEM SHALL BE IN ACCORDANCE WITH OTIC STANDARD DRAWING UD-1 AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS TO COMPLETE THIS ITEM.

EXISTING UNDERDRAINS

ALL EXISTING UNDERDRAINS ENCOUNTERED IN THE THIRD LANE AND AT THE PAVEMENT SAW CUT LOCATION SHALL NOT BE DISTURBED.

ITEM SP604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN

2 RECORD PLANS SHOW STORM MANHOLES NEAR THE BASE LINE OF RAMP E AT STA. 62+00 AND 64+00 WITH A CONNECTING 42" CONDUIT THAT A RECENT FIELD SURVEY COULD NOT LOCATE. THE CONTRACTOR SHALL LOCATE THE MANHOLES AND ADJUST TO GRADE IF THE CHIEF ENGINEER DETERMINES THAT ADJUSTMENT IS NEEDED.

THE FOLLOWING CONTINGENCY ITEM HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE IN ADJUSTING, REPAIRING, AND/OR REBUILDING MANHOLES. THE CONTRACTOR SHALL REBUILD FROM THE TOP OF STRUCTURE TO THE BOTTOM OF THE CASTING AT THE EXISTING GRADE. THE USE OF BRICK TO REBUILD THE MANHOLE SHALL BE PROHIBITED. THE CONTRACTOR SHALL SAWCUT PAVEMENT AROUND THE EXISTING MANHOLE, A MINIMUM OF 12" AROUND THE CASTING AND REMOVE THE CASTING AND SAWCUT ASPHALT CONCRETE. THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "C" CONCRETE, TO REBUILD THE MANHOLE. TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE, THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC
2 GROUT THAT CONFORMS TO CMS 705.20.) THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE MANHOLE, AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED MANHOLE CASTING SHALL BE BACK FILLED WITH CLASS "C" CONCRETE TO THE BOTTOM OF THE PROPOSED PAVEMENT BASE. A CONTINGENCY QUANTITY OF SP604-MANHOLE ADJUSTED TO GRADE, AS PER PLAN, HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE CHIEF ENGINEER. ~~THE REPLACEMENT CASTING SUPPLIED SHALL BE HEAVY DUTY AND BOLTED.~~ 2

2 2 ALL CONCRETE, DOWELS, DOWEL HOLES, GROUT, SAW CUTTING, LOCATING, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER EACH:

ITEM SP604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH

~~ITEM 603 - 42" CONDUIT, TYPE B~~

RECORD PLANS SHOW STORM MANHOLES NEAR THE BASE LINE OF RAMP E AT STA. 62+00 AND 64+00 WITH A CONNECTING 42" CONDUIT THAT A RECENT FIELD SURVEY COULD NOT LOCATE. THE CONTRACTOR SHALL LOCATE THE MANHOLES AND THE CONNECTING PIPE AND RECONSTRUCT IF THE CHIEF ENGINEER DETERMINES THAT RELOCATION IS NEEDED. ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS
2 NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE BID PRICE PER FOOT:

~~THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE CHIEF ENGINEER.~~

~~ITEM 603 - 42" CONDUIT, TYPE B 250 FEET~~

ITEM SP605 - AGGREGATE DRAIN, AS PER PLAN

THE ENTIRE OUTSIDE PERIMETER OF THE AGGREGATE DRAIN SHALL BE WRAPPED WITH FILTER FABRIC, TYPE A, AS PER ODOT SPECIFICATION 712.09. DURING THE EXCAVATION OF THE TRENCH FOR AGGREGATE DRAIN, SPECIAL CARE IS NEEDED TO PREVENT DAMAGE TO THE ADJACENT EXISTING UNDERDRAIN FILTER FABRIC WRAP. PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM SP605 - AGGREGATE DRAIN, AS PER PLAN.

2 DIMENSIONS FOR THE OUTLETS WILL MATCH ODOT STD. DWG. BP-3.1 AND BE CONSTRUCTED WITH A SLOPE OF 1/4"/FT.

AGGREGATE DRAINS SHALL BE PLACED AT THE LONGITUDINAL JOINT AS SHOWN IN TYPICAL SECTIONS AND AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FEET FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE. THE TABLE BELOW SHALL BE USED FOR THE APPROXIMATE LOCATION AND LENGTH FOR THESE AGGREGATE DRAINS. ACTUAL LOCATION AND LENGTH WILL BE AS DIRECTED BY ENGINEER.

ITEM SP605 – AGGREGATE DRAIN, AS PER PLAN		
STATION	SIDE	FT.
463+50.00	LT.	22
464+00.00	LT	22
464+50.00	LT.	22
461+00.00	RT.	10
461+50.00	RT.	10
576+00.00	RT.	18
576+50.00	RT.	18
577+00.00	RT.	18
577+50.00	RT.	18
578+00.00	RT.	18
578+50.00	RT.	18
579+00.00	RT.	18
579+50.00	RT.	18
580+00.00	RT.	18
580+50.00	RT.	18
581+00.00	RT.	18
581+50.00	RT.	18
582+00.00	RT.	18
582+50.00	RT.	18
583+00.00	RT.	18
583+50.00	RT.	18
585+50.00	RT.	18
586+00.00	RT.	18
586+50.00	RT.	18
587+00.00	RT.	18
587+50.00	RT.	18
588+00.00	RT.	18
588+50.00	RT.	18
589+00.00	RT.	18
589+50.00	RT.	18
590+00.00	RT.	18
590+50.00	RT.	18
591+00.00	RT.	18
591+50.00	RT.	18
592+00.00	RT.	18
592+50.00	RT.	18
593+00.00	RT.	18
TOTAL		662

IN ADDITION TO THE QUANTITIES SHOWN IN THE TABLE, A CONTINGENCY QUANTITY OF TYPE 1 AND TYPE 2 AGGREGATE DRAIN AS PER PLAN ARE PROVIDED BELOW TO BE USED AS SHOWN IN OTIC STD DWG CJ-1 AND AS DIRECTED BY THE CHIEF ENGINEER.

ITEM SP605- TYPE 1 AGGREGATE DRAIN WITH WRAP, AS PER PLAN 200 FEET.

ITEM SP605- TYPE 2 AGGREGATE DRAIN WITH WRAP, AS PER PLAN 200 FEET.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	CLH	1-14-14
2	ADDENDUM NO. 3	CLH	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE RIGHT TWO LANES & SHOULDER RECONSTRUCTION
GENERAL NOTES

GPD GROUP.
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CONTRACT 39-14-02 SHEET 16 OF 414

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Date: Jan 24, 2014 Time: 10:47 am Tweak: -1.570796633
Technician: chuff

MAINTENANCE OF TRAFFIC GENERAL NOTES

ITEM SPECIAL – "SNAP" MILL AND FILL

MAINTENANCE OF TRAFFIC ON THE MEDIAN SHOULDER AND PORTIONS OF THE OUTSIDE SHOULDER WILL REQUIRE THE EXISTING "SNAPS" TO BE MILLED AND FILLED OUTSIDE THE WORK LIMITS FOR TEMPORARY TRAFFIC CONTROL PURPOSES.

1

PAYMENT FOR THIS ITEM SHALL INCLUDE REMOVAL OF EXISTING "SNAPS" AND THE EXISTING PAVEMENT JOINT BY MILLING 1 1/2" DEEP AND 5' WIDE, TACK COATING ALL EXPOSED MILLED SURFACES, AND PAVING THE MILLED AREA WITH 1 1/2" OF ITEM SP 404 – ASPHALT CONCRETE SURFACE COURSE, PG 64-22. ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL – "SNAP" MILL AND FILL.

ITEM SPECIAL – "SNAP" MILL AND FILL ..... 116,034 FT

DUST CONTROL

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

ITEM 616, WATER ..... 2,000 M GAL

ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC ..... 300 CU. YD.

2

ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

THIS ITEM SHALL BE AS PER SECTION 615 OF THE CMS AND SHALL INCLUDE THE FOLLOWING: ESTABLISHING THE MOT CROSSOVER PAVEMENT PER THE TYPICAL SECTION ON SHEET 47, INSTALLING THE 12" SLOTTED DRAIN, TYPE 2 WITH THE REQUIRED CONNECTION TO THE EXISTING CATCH BASIN INCLUDING THE 12" CONDUIT, TYPE B, RESTORING THE MOT CROSS OVER AREA BACK TO ITS ORIGINAL CONDITION PER THE TYPICAL SECTIONS ON SHEET 47 WHICH INCLUDES REMOVAL OF THE 12" SLOTTED DRAIN AND THE 12" CONDUIT.

THE 12" SLOTTED DRAIN, TYPE 2 SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. THE PROPOSED 12" SLOTTED DRAIN, TYPE 2 SHALL BE A 12 INCH DIAMETER SLOTTED DRAIN ALUMINUM COATED STEEL CONDUIT 707.01 WITH 6 INCH TRAPEZOIDAL GALVANIZED SOLID BAR GRATE AS APPROVED BY THE CHIEF ENGINEER. THE EXISTING CATCH BASIN SHALL BE NEATLY CUT AND REPLACED WITH CLASS C AND THE BACK FILL MATERIAL AROUND THE CATCH BASIN SHALL BE LSM PER SP 604.

ALL COSTS FOR THE PLACEMENT OF THE MOT CROSSOVERS, RESTORING THE MOT CROSSOVER AREA TO ITS ORIGINAL CONDITION, INSTALLING AND REMOVING THE DRAINAGE SYSTEM AS DETAILED ABOVE, LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN ..... 4842 SQ. YD.

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

1

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, FOUR (4) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS). TWO (2) OF THE SIGNS SHALL BE LOCATED NEAR THE PROJECT SITE, ONE FOR EACH DIRECTION OF TRAVEL, FOR THE DURATION OF THE PROJECT. TWO OF THE SIGNS SHALL BE LOCATED APPROXIMATELY TWENTY-FIVE (25) MILES OUTSIDE THE PROJECT LIMITS, ONE FOR EACH DIRECTION OF TRAVEL, AS DIRECTED BY THE ENGINEER FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED CLASS "A" PCMS UNITS MAINTAINED BY THE ODOT DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT.

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, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE CHIEF ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE CHIEF ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE CHIEF ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE AUTHORIZED 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 CHIEF 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 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.

1

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 THE PCMS UNITS WHEN THEY ARE IN OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE CHIEF ENGINEER.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 1960 DAY

ITEM SP 614 – ZONE PERSON REPORT FORM

THE ZONE PERSON REQUIREMENTS OF SP 614 – MAINTAINING TRAFFIC ARE MODIFIED AS FOLLOWS: THE CONTRACTOR SHALL DESIGNATE A ZONE PERSON, (SUBJECT TO THE APPROVAL OF THE CHIEF ENGINEER), OTHER THAN THE SUPERINTENDENT, TO BE RESPONSIBLE FOR THE MAINTENANCE OF TRAFFIC. THE DESIGNATED ZONE PERSON SHALL HAVE A FULL WORKING KNOWLEDGE OF THE MAINTENANCE OF TRAFFIC PLANS AND SPECIAL PROVISIONS. THE ZONE PERSON SHALL SUPERVISE THE SET-UP AND REMOVAL OF THE TRAFFIC CONTROL DEVICES AS WELL AS THE MAINTENANCE, ON A CONTINUAL BASIS TWENTY-FOUR(24) HOURS PER DAY, SEVEN (7) DAYS PER WEEK, WHILE THEY ARE IN PLACE. THE ZONE PERSON SHALL BE RESPONSIBLE TO ENSURE THAT ANY DAMAGED OR MISSING TRAFFIC CONTROL DEVICES ARE REPAIRED OR REPLACED IMMEDIATELY. IN ADDITION, THE ZONE PERSON SHALL CONTINUALLY CHECK THE REFLECTIVE SURFACES OF ALL THE TRAFFIC CONTROL DEVICES TO INSURE THAT THE DEVICES ARE CLEAN AND ARE PERFORMING ITS INTENDED FUNCTION. THE ZONE PERSON SHALL HAVE NO OTHER CONSTRUCTION RELATED DUTIES.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY:

1

ITEM SP 614 – ZONE PERSON ..... 10,000 HOURS

EARTHWORK FOR MAINTAINING TRAFFIC

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

EXCAVATION FOR MAINTAINING TRAFFIC ..... 13.1 CU. YD.
EMBANKMENT FOR MAINTAINING TRAFFIC ..... 48.4 CU. YD.

1

STORAGE OF TEMPORARY PORTABLE BARRIER

THE COMMISSION WILL ALLOW STORAGE OF TEMPORARY PORTABLE BARRIER WALL ON TURNPIKE RIGHT OF WAY AT TOLL PLAZAS (TP) 152, 161 AND 173. SPACE IS AVAILABLE AT EACH TOLL PLAZA WITH LIMITED SPACE AVAILABLE AT TP161. THE CONTRACTOR SHALL VERIFY THE AMOUNT OF SPACE THAT IS AVAILABLE AT EACH TOLL PLAZA. THE AVAILABLE SPACE AT THE TOLL PLAZAS MAY REQUIRE MINIMAL GRADING TO PREPARE THE SURFACE FOR LEVEL AND STABLE STORAGE. EITHER ASPHALT MILLINGS OR CRUSHED AGGREGATE MAY BE USED AT THE CONTRACTOR'S OWN EXPENSE TO GRADE AND STABILIZE THE STORAGE AREA. TEMPORARY PORTABLE BARRIER SHALL NOT BE STORED HIGHER THAN THREE PIECES HIGH. TYPICAL STORAGE ANTICIPATED WOULD BE IN CUBES OF 5 TEMPORARY PORTABLE BARRIER SECTIONS ALTERNATELY STACKED 3 HIGH OR AS RECOMMENDED BY THE MANUFACTURE. RESTORATION OF THE AREA WILL BE REQUIRED TO ORIGINAL OR BETTER CONDITIONS AS APPROVED BY THE CHIEF ENGINEER PRIOR TO FINAL COMPLETION. ALL BROKEN BARRIER AND DEBRIS SHALL BE REMOVED FROM THESE AREAS ONCE COMPLETE AND DISPOSED IN ACCORDANCE WITH SP105. FLAGGERS WILL BE REQUIRED FOR ANY TURNING MOVEMENTS IN FRONT OF THE TOLL PLAZAS PER THE OTIC'S STANDARDS. THE CONTRACTOR SHALL PROVIDE A UTILIZATION PLAN TO THE CHIEF ENGINEER FOR APPROVAL. THIS PLAN SHALL INCLUDE THE FOLLOWING: AN AERIAL DRAWING OF THE TOLL PLAZA WHICH DEFINES THE STORAGE AREA, SIZE OF AREA REQUIRED, DESCRIPTION OF HOW THE BARRIER IS TO BE STORED, DESCRIPTION OF WORK REQUIRED TO PREPARE THE STORAGE AREA WHICH INCLUDES TYPE OF SURFACE TO BE INSTALLED IF REQUIRED, GRADING THAT PROVIDES POSITIVE DRAINAGE AND ANY EROSION CONTROL MEASURES REQUIRED, AND THE LOGISTICS TO STORE AND RETRIEVE THE STORED TEMPORARY PORTABLE BARRIER TO AND FROM THE TOLL PLAZA. ALL COSTS ASSOCIATED WITH THE STORAGE OF TEMPORARY PORTABLE BARRIER SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM PRICE BID OF ITEM SP622A – TEMPORARY PORTABLE BARRIER, 32"

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	LOB	1-14-14
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

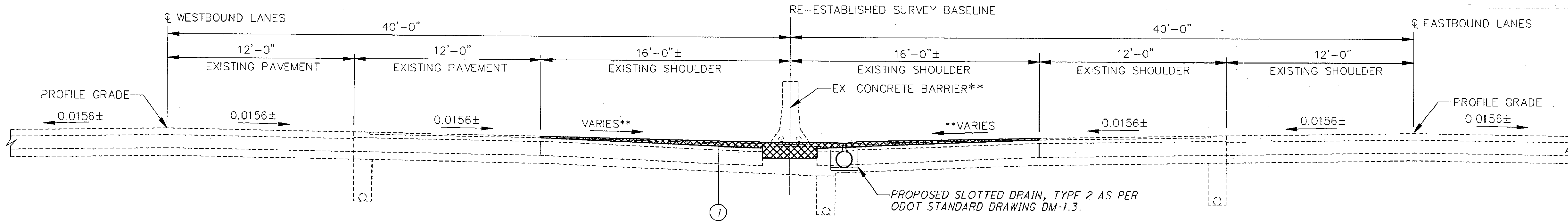
MAINTENANCE OF TRAFFIC NOTES
SHEET 3 OF 4

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100
Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 11/27/13
DRAWN: LOB | IN CHARGE: MAH | SCALE: N/A

CONTRACT 39-14-02 SHEET 22 OF 414

Drawing File: O:\2013\2013161\vnet\sheets\2013161MN003.dwg Layout: MN003
Date: Jan 24, 2014 Time: 12:45 pm Twist: -1.57079633
Technician: lblankenship



PROPOSED MAINTENANCE OF TRAFFIC CROSSOVER SECTION

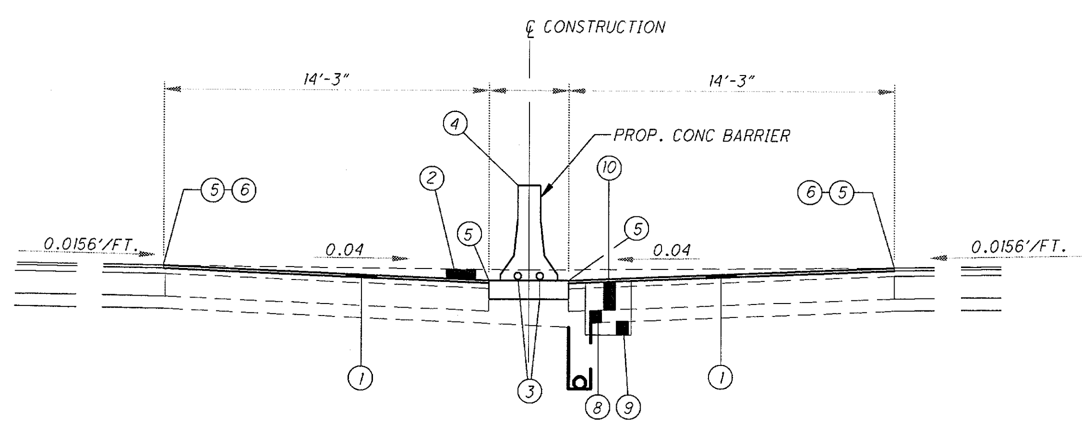
CROSSOVER #1 – STA 337+00 TO STA 345+00
CROSSOVER #2 – STA 606+00 TO STA 613+00

**REFER TO SHEETS 207 – 208 AND 209 – 210 FOR ELEVATION DETAILS AND MEDIAN CONCRETE BARRIER OPENING LIMITS.

NOTE: THE CONTRACTOR SHALL REMOVE THE EXISTING SURFACE COURSE OF ASPHALT WITHIN THE LIMITS OF THE PROPOSED CROSSOVER TEMPORARY PAVEMENT IN ORDER TO PROVIDE THE MINIMUM 1½" PAVEMENT THICKNESS. COST OF REMOVAL, SURFACE PREPARATION AND PLACEMENT OF VARIABLE DEPTH TEMPORARY PAVEMENT TO BE INCLUDED IN THE COST OF ITEM 615 – PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

ITEM LEGEND

- (hatched) PROPOSED TEMPORARY PAVEMENT MINIMUM 1½" THICKNESS
- (1) *ITEM SP404 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22*
- (2) *ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)*
- (3) *ITEM SP625 - CONDUIT, MULTI CELL INNERDUCT*
- (4) *ITEM 622 - CONCRETE BARRIER TYPE B-50, AS PER PLAN*
- (5) *ITEM SP404A - JOINT SEALER (APPLIED TO VERTICAL FACE)*
- (6) *ITEM SPECIAL - SAWCUT JOINT*
- (7) *ITEM SPECIAL - TRACKLESS TACK FOR INTERMEDIATE COURSE, APPLIED @ 0.06 GAL/S.Y.*
- (8) *ITEM 304 - AGGREGATE BASE*
- (9) *ITEM 203 - GRANULAR EMBANKMENT*
- (10) *ITEM 304 - BITUMINOUS AGGREGATE BASE*



CROSSOVER RESTORATION TYPICAL SECTION

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC
CROSSOVER TYPICAL SECTION

GPD GROUP. Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 520 South Main Street, Suite 2531, Akron, Ohio 44311 330-572-2100 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 9/16/2013
DRAWN: LOB | IN CHARGE: MAH | SCALE: 1"=4'

CONTRACT 39-14-02 SHEET 47 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MY010.dwg Layout: Crossover Typ
Date: Jan 24, 2014 Time: 3:17 pm Twist: -1.57079633
Technician: lblankenship

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STA. 441+50 TO STA. 442+00 — W-19

STA. 441+50 TO STA. 442+00 — LL-5

END TAPER (LL), MEET EXISTING LANE LINE OFFSET = 39.5' LT.
END TAPER (W), MEET EXISTING EDGE LINE OFFSET = 51.5' LT.
END TAPER (W), OFFSET = 13' LT.
END TAPER (Y), OFFSET = 24' LT.
END TAPER (PCB), OFFSET = 26' LT.
END TAPER (Y), OFFSET = 28' LT.
STA. 442+00

Y-34 STA. 441+50 TO STA. 452+50

PCB-24 STA. 441+50 TO STA. 452+50

Y-35 STA. 441+50 TO STA. 452+50

W-20 STA. 441+50 TO STA. 452+50

YIELD

R1-2 EXISTING GROUND MOUNTED SIGN

EXISTING PAVEMENT MARKINGS TO REMAIN

RE-ESTABLISHED SURVEY BASELINE

WESTBOUND OHIO TURNPIKE

EASTBOUND OHIO TURNPIKE

MATCHLINE STA. 441+50

MATCHLINE STA. 452+50

442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00 452+00

11.5' 12' 11'

TEMPORARY SUPPORT STA. 446+00 — TC-21-48

EXIT RAMP OPEN

DL-1 STA. 446+00 TO STA. 449+78

PCB-23A STA. 446+00 TO STA. 452+50

Y-33 STA. 441+50 TO STA. 452+50

W-21 STA. 441+50 TO STA. 452+50

PCB-23 STA. 441+50 TO STA. 446+00

BEGIN DOWNSTREAM TAPER (W), OFFSET = 22' RT.
BEGIN (DL), OFFSET = 22' RT.
STA. 446+00

END DOWNSTREAM TAPER (W), OFFSET = 33' RT.
STA. 446+20

EXISTING OVERHEAD MOUNTED SIGNS WITH OVERLAYS INSTALLED AS SHOWN

E9-H2

D9-H26
E1-H5P
E1-H3

DRUMS SPACED @ 40' C/C

STA. 449+78 TO STA. 452+50 — W-23

P.C. LANE SHIFT #2 ℄ OFFSET = 28.4' RT. STA. 449+66.73

P.R.C. LANE SHIFT #2 ℄ OFFSET = 44.81' RT. STA. 450+84.55

PCB-25A STA. 451+40 TO STA. 452+00

ROAD WORK AHEAD

TO REMAIN FROM PREVIOUS PHASE TC-1-48

RAMP H

RAMP F

SEE NOTE #3

℄ LANE SHIFT #2

DRUMS SPACED @ 20' C/C

STA. 449+78 TO STA. 452+50 — Y-36

STA. 452+40 TO STA. 452+50 — PCB-25

C5

C6

BEGIN LANE

END (DL), OFFSET = 22' RT. (EB EXIT)
SHIFT # 2 ℄ OFFSET = 27.5' RT.
BEGIN SHIFT (W), OFFSET = 33' RT.
BEGIN SHIFT (Y), OFFSET = 22' RT.
STA. 449+78

TEMPORARY SUPPORT TC-19-48 W13-1P-30 (ORANGE/BLACK) STA. 451+00

BEGIN (PCB) INSTALL TEMPORARY IMPACT ATTENUATOR STA. 451+40 — OFFSET = 30' RT.

BEGIN TAPER (PCB), OFFSET = 30' RT. STA. 451+80

BEGIN TAPER (PCB), OFFSET = 67.5' RT. STA. 451+80

END LANE SHIFT (Y), OFFSET = 62' RT.
END SHIFT (W), OFFSET = 73' RT.
END 452+00
STA. TEMPORARY PAVEMENT

P.T. LANE SHIFT #2 ℄ OFFSET = 67.20' RT. STA. 452+00.00

BEGIN (PCB) INSTALL TEMPORARY IMPACT ATTENUATOR STA. 452+40 — OFFSET = 62' RT.

BEGIN TEMPORARY PAVEMENT STA. 452+04 (EB EXIT) — OFFSET = 62' RT.

80 EAST Youngstown

DIVERT

LEVEL I TRAUMA CENTER

H

EXIT ONLY

EXT 161

EXT

35 MPH

(C5) PROPOSED CURVE (LANE SHIFT #2)
Δ = 13°17'58" (RT.)
Dc = 11°27'33"
R = 500.00'
T = 58.29'
L = 116.06'
E = 3.39'
P.C. = STA. 449+66.73
P.R.C. = STA. 450+84.55

(C6) PROPOSED CURVE (LANE SHIFT #2)
Δ = 13°47'54" (LT.)
Dc = 11°27'33"
R = 500.00'
T = 60.50'
L = 120.41'
E = 3.65'
P.R.C. = STA. 450+84.55
P.T. = STA. 452+00.00

NOTES:

1 THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.

2 THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.

3 TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615—PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615—PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A.

HORIZONTAL SCALE IN FEET
0 25 50 100

N

LEGEND

- WARNING LIGHT (TYPE PER MT – 101.60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE 2A
STA. 441+50 TO STA. 452+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB CHECKED: MAH DATE: 11/27/13
DRAWN: DTP IN CHARGE: MAH SCALE: 1" = 50'

CONTRACT 39-14-02 SHEET 87 OF 414

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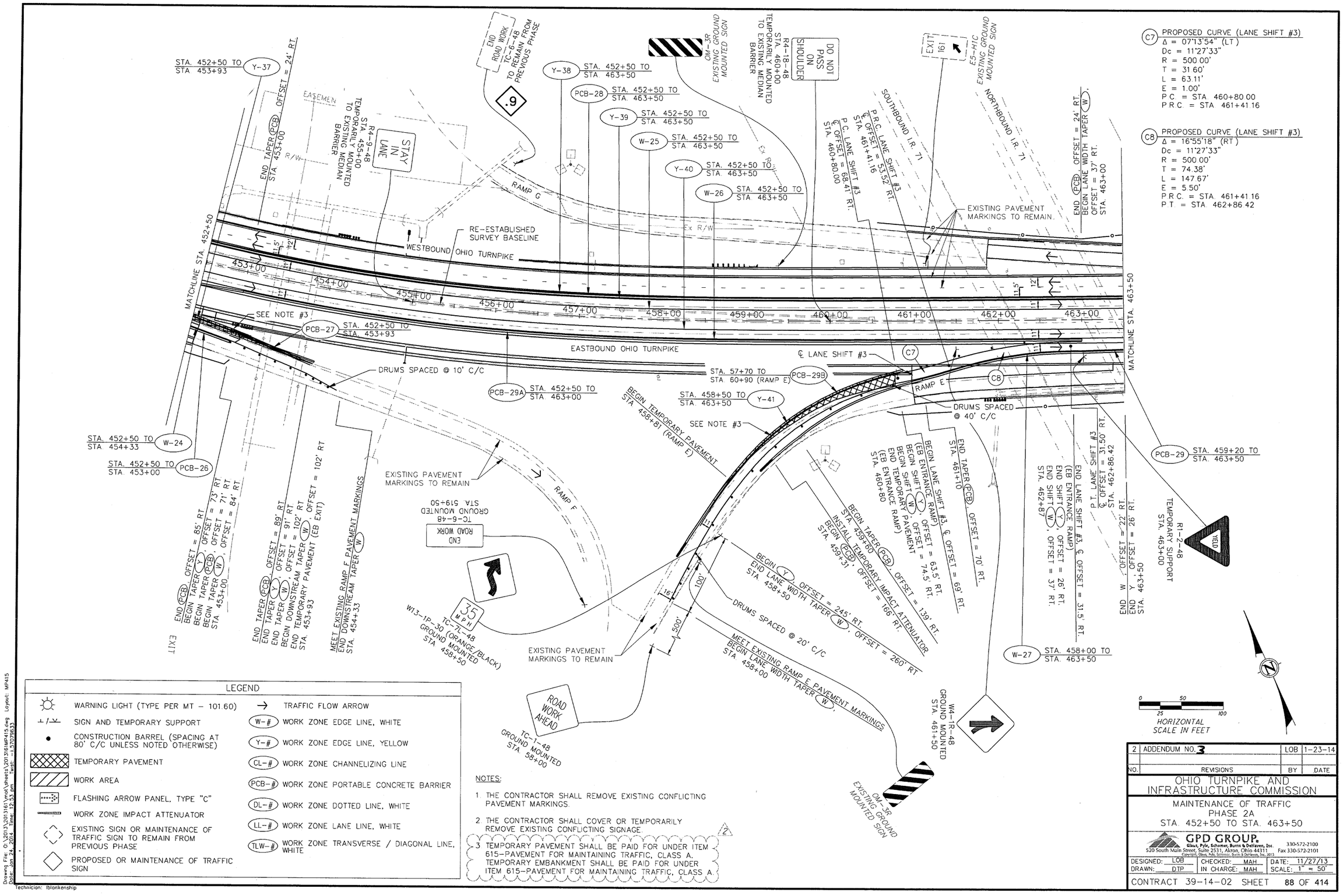

C7 PROPOSED CURVE (LANE SHIFT #3)
Δ = 07°13'54" (LT.)
Dc = 11°27'33"
R = 500.00'
T = 31.60'
L = 63.11'
E = 1.00'
P.C. = STA. 460+80.00
P.R.C. = STA. 461+41.16

C8 PROPOSED CURVE (LANE SHIFT #3)
Δ = 16°55'18" (RT.)
Dc = 11°27'33"
R = 500.00'
T = 74.38'
L = 147.67'
E = 5.50'
P.R.C. = STA. 461+41.16
P.T. = STA. 462+86.42

LEGEND

- WARNING LIGHT (TYPE PER MT – 101.60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- → TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NOTES:

1. THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.
3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. /2/

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE 2A
STA. 452+50 TO STA. 463+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 330-572-2100
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 11/27/13
DRAWN: DTP | IN CHARGE: MAH | SCALE: 1" = 50'

CONTRACT 39-14-02 SHEET 88 OF 414

Drawing File: O:\2013\2013161\root\sheets\2013161MP415.dwg Layout: MP415
Date: Jan 24, 2014 time: 12:33 pm Last: -1.57079633
Technician: lblankenship

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W TO REMAIN FROM PREVIOUS PHASE

LL TO REMAIN FROM PREVIOUS PHASE

Y TO REMAIN FROM PREVIOUS PHASE

PCB TO REMAIN FROM PREVIOUS PHASE

Y TO REMAIN FROM PREVIOUS PHASE

W TO REMAIN FROM PREVIOUS PHASE

YIELD

R1-2 EXISTING GROUND MOUNTED SIGN

EASEMENT

EXISTING PAVEMENT MARKINGS TO REMAIN

RE-ESTABLISHED SURVEY BASELINE

TO REMAIN FROM PREVIOUS PHASE W

TC-1-48 TO REMAIN FROM PREVIOUS PHASE ROAD WORK AHEAD

RAMP H

C6

C5

MATCHLINE STA. 452+50

WESTBOUND OHIO TURNPIKE

MATCHLINE STA. 441+50

442+00 443+00 444+00 445+00 446+00 447+00 448+00 449+00 450+00 451+00 452+00

EASTBOUND OHIO TURNPIKE

RAMP F

DRUMS TO REMAIN FROM PREVIOUS PHASE

℄ LANE SHIFT #2

SEE NOTE #3

Ex R/W

EASEMENT

Y TO REMAIN FROM PREVIOUS PHASE

W TO REMAIN FROM PREVIOUS PHASE

PCB TO REMAIN FROM PREVIOUS PHASE

TC-21-48 TO REMAIN FROM PREVIOUS PHASE

EXIT RAMP OPEN

PCB TO REMAIN FROM PREVIOUS PHASE

DL TO REMAIN FROM PREVIOUS PHASE

TO REMAIN FROM PREVIOUS PHASE W

TC-19-48 TO REMAIN FROM PREVIOUS PHASE

EXIT

PCB TO REMAIN FROM PREVIOUS PHASE

Y TO REMAIN FROM PREVIOUS PHASE

EXISTING OVERHEAD MOUNTED SIGNS WITH OVERLAYS TO REMAIN FROM PREVIOUS PHASE

E6-H2

80 EAST Youngstown

D9-H2b E1-H5P E1-H3

EXIT ONLY

71 42

EXIT 161

H LEVEL 3 TRAUMA CENTER

(C5) PROPOSED CURVE (LANE SHIFT #2)
Δ = 13°17'58" (RT)
Dc = 11°27'33"
R = 500.00'
T = 58.29'
L = 116.06'
E = 3.39'
P.C. = STA. 449+66.73
P.R.C. = STA. 450+84.55

(C6) PROPOSED CURVE (LANE SHIFT #2)
Δ = 13°47'54" (LT.)
Dc = 11°27'33"
R = 500.00'
T = 60.50'
L = 120.41'
E = 3.65'
P.R.C. = STA. 450+84.55
P.T. = STA. 452+00.00

LEGEND

- WARNING LIGHT (TYPE PER MT – 101.60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NOTES:

1. THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.
3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A.

0 25 50 100

HORIZONTAL SCALE IN FEET

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE 2B
STA. 441+50 TO STA. 452+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB	CHECKED: MAH	DATE: 11/27/13
DRAWN: DLS	IN CHARGE: MAH	SCALE: 1" = 50'

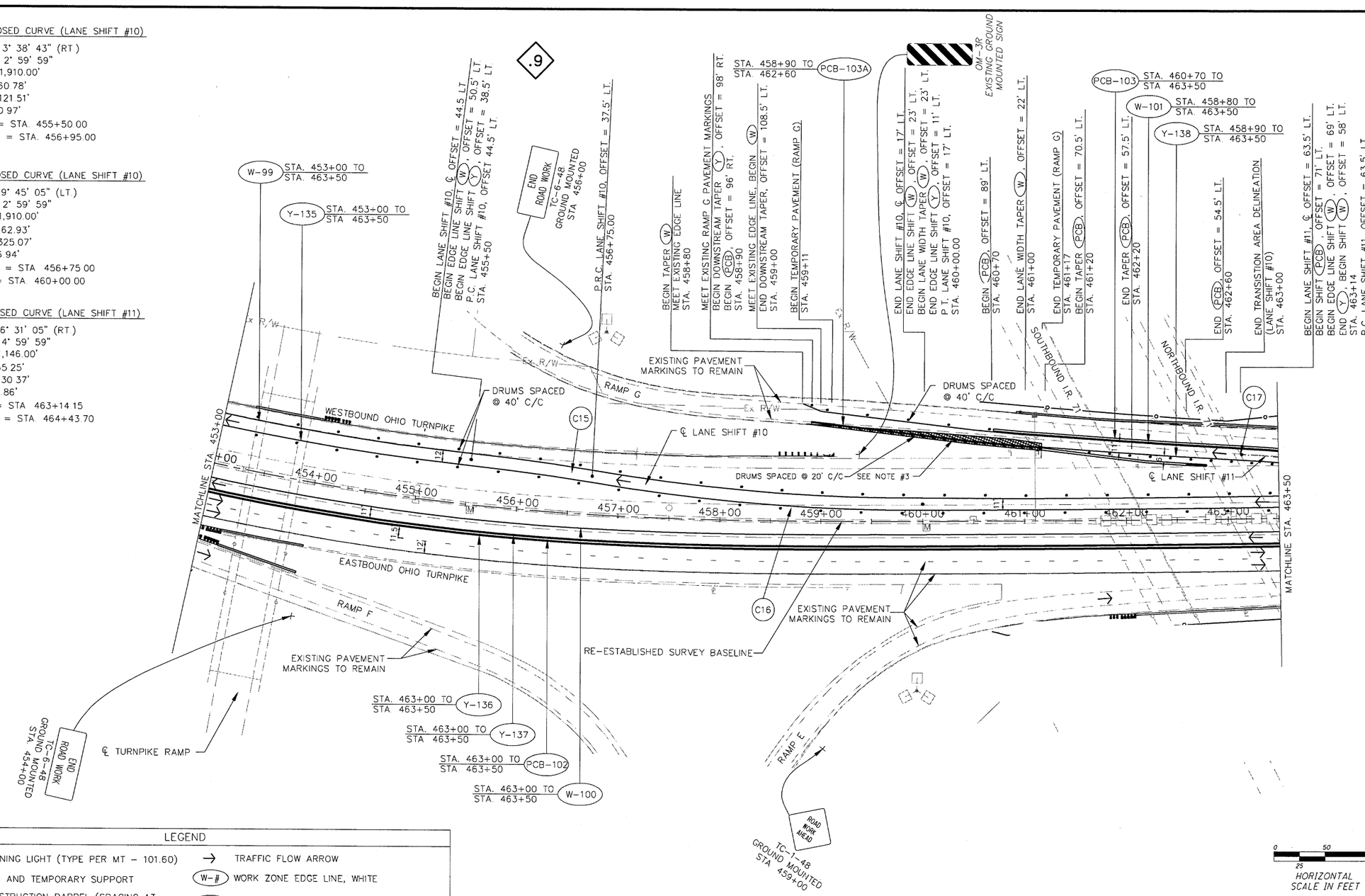
CONTRACT 39-14-02 SHEET 114 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MP514.dwg Layout: MP514
Date: Jan 24, 2014 Time: 12:55 pm Twist: -1.5707963.53
Technician: lblankenship

C15 PROPOSED CURVE (LANE SHIFT #10)
Δ = 3° 38' 43" (RT.)
Dc = 2° 59' 59"
R = 1,910.00'
T = 60.78'
L = 121.51'
E = 0.97'
P.C. = STA. 455+50.00
P.R.C. = STA. 456+95.00

C16 PROPOSED CURVE (LANE SHIFT #10)
Δ = 9° 45' 05" (LT.)
Dc = 2° 59' 59"
R = 1,910.00'
T = 162.93'
L = 325.07'
E = 6.94'
P.R.C. = STA. 456+75.00
P.T. = STA. 460+00.00

C17 PROPOSED CURVE (LANE SHIFT #11)
Δ = 6° 31' 05" (RT.)
Dc = 4° 59' 59"
R = 1,146.00'
T = 65.25'
L = 130.37'
E = 1.86'
P.C. = STA. 463+14.15
P.R.C. = STA. 464+43.70



LEGEND

- WARNING LIGHT (TYPE PER MT – 101.60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NOTES:

1. THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.
3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. (2)

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

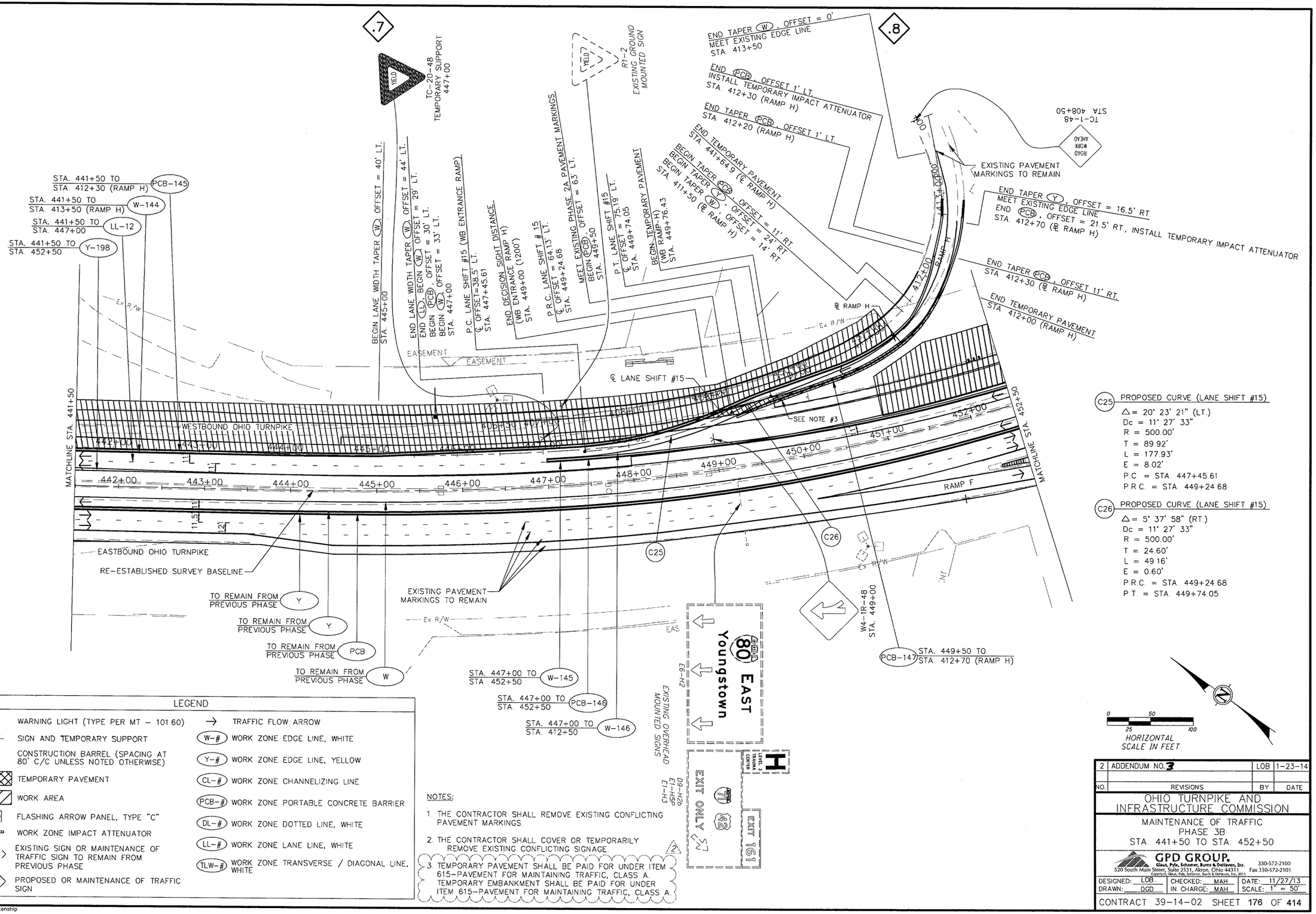
MAINTENANCE OF TRAFFIC
PHASE 3A
STA. 453+00 TO STA. 463+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100
Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 11/27/13
DRAWN: DGD | IN CHARGE: MAH | SCALE: 1" = 50'

CONTRACT 39-14-02 SHEET 147 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MP112.dwg Layout: MP112
Date: Jan 24, 2014 Time: 1:12 pm Twist: -1.5709633
Technician: lblankenship



C25 PROPOSED CURVE (LANE SHIFT #15)

△ = 20° 23' 21" (LT.)
Dc = 11° 27' 33"
R = 500.00'
T = 89.92'
L = 177.93'
E = 8.02'
P.C. = STA. 447+45.61
P.R.C. = STA. 449+24.68

C26 PROPOSED CURVE (LANE SHIFT #15)

△ = 5° 37' 58" (RT.)
Dc = 11° 27' 33"
R = 500.00'
T = 24.60'
L = 49.16'
E = 0.60'
P.R.C. = STA. 449+24.68
P.T. = STA. 449+74.05

LEGEND

- WARNING LIGHT (TYPE PER MT – 101.60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- → TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NOTES:

1. THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.
3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A.

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE 3B
STA. 441+50 TO STA. 452+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 11/27/13
DRAWN: DGD | IN CHARGE: MAH | SCALE: 1" = 50'

CONTRACT 39-14-02 SHEET 176 OF 414

Drawing File: G:\2013\2013161\mot\sheets\2013161MP211.dwg Layout: MP211
Date: Jan 24, 2014 Time: 1:14 pm Twist: -1.57079633
Technician: lblonkenship

.9

W-148 STA. 452+50 TO STA. 461+00

Y-200 STA. 452+50 TO STA. 461+00

PCB-148 STA. 452+50 TO STA. 463+40

END ROAD WORK TC-6-48 TO REMAIN FROM PREVIOUS PHASE

OM-3R EXISTING GROUND MOUNTED SIGN

EXISTING PAVEMENT MARKINGS TO REMAIN

PCB TO REMAIN FROM PREVIOUS PHASE

W TO REMAIN FROM PREVIOUS PHASE

Y TO REMAIN FROM PREVIOUS PHASE

BEGIN TAPER (PCB) OFFSET = 23' LT. STA. 460+40

MEET EXISTING PHASE 3A PAVEMENT MARKINGS END (W), OFFSET = 22' LT. END (Y), OFFSET = 11' LT. STA. 461+00

NORTHBOUND I-R. 71

PCB TO REMAIN FROM PREVIOUS PHASE

W TO REMAIN FROM PREVIOUS PHASE

Y TO REMAIN FROM PREVIOUS PHASE

W TO REMAIN FROM PREVIOUS PHASE

END TAPER (PCB) OFFSET = 36' LT. STA. 463+00

END (PCB) OFFSET = 36' LT. INSTALL TEMPORARY IMPACT ATTENUATOR STA. 463+40

EASEMENT

Ex R/W

RAMP G

WESTBOUND OHIO TURNPIKE

MATCHLINE STA. 452+50

453+00 454+00 455+00 456+00 457+00 458+00 459+00 460+00 461+00 462+00 463+00

SEE NOTE #3

℄ LANE SHIFT # 11

MATCHLINE STA. 463+50

EASTBOUND OHIO TURNPIKE

RAMP F

RE-ESTABLISHED SURVEY BASELINE

EXISTING PAVEMENT MARKINGS TO REMAIN

EXISTING PAVEMENT MARKINGS TO REMAIN

SOUTHBOUND I-R. 71

℄ TURNPIKE RAMP

TO REMAIN FROM PREVIOUS PHASE Y

TO REMAIN FROM PREVIOUS PHASE Y

TO REMAIN FROM PREVIOUS PHASE PCB

TO REMAIN FROM PREVIOUS PHASE W

EXISTING PAVEMENT MARKINGS TO REMAIN

ROAD END TO REMAIN FROM PREVIOUS PHASE TC-6-48

RAMP E

ROAD WORK AHEAD TO REMAIN FROM PREVIOUS PHASE TC-7-48

0 25 50 100

HORIZONTAL SCALE IN FEET

LEGEND

- WARNING LIGHT (TYPE PER MT – 101 60)
- SIGN AND TEMPORARY SUPPORT
- CONSTRUCTION BARREL (SPACING AT 80' C/C UNLESS NOTED OTHERWISE)
- TEMPORARY PAVEMENT
- WORK AREA
- FLASHING ARROW PANEL, TYPE "C"
- WORK ZONE IMPACT ATTENUATOR
- EXISTING SIGN OR MAINTENANCE OF TRAFFIC SIGN TO REMAIN FROM PREVIOUS PHASE
- PROPOSED OR MAINTENANCE OF TRAFFIC SIGN
- TRAFFIC FLOW ARROW
- (W-#) WORK ZONE EDGE LINE, WHITE
- (Y-#) WORK ZONE EDGE LINE, YELLOW
- (CL-#) WORK ZONE CHANNELIZING LINE
- (PCB-#) WORK ZONE PORTABLE CONCRETE BARRIER
- (DL-#) WORK ZONE DOTTED LINE, WHITE
- (LL-#) WORK ZONE LANE LINE, WHITE
- (TLW-#) WORK ZONE TRANSVERSE / DIAGONAL LINE, WHITE

NOTES:

1. THE CONTRACTOR SHALL REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL COVER OR TEMPORARILY REMOVE EXISTING CONFLICTING SIGNAGE.
3. TEMPORARY PAVEMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. TEMPORARY EMBANKMENT SHALL BE PAID FOR UNDER ITEM 615–PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A. (2)

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

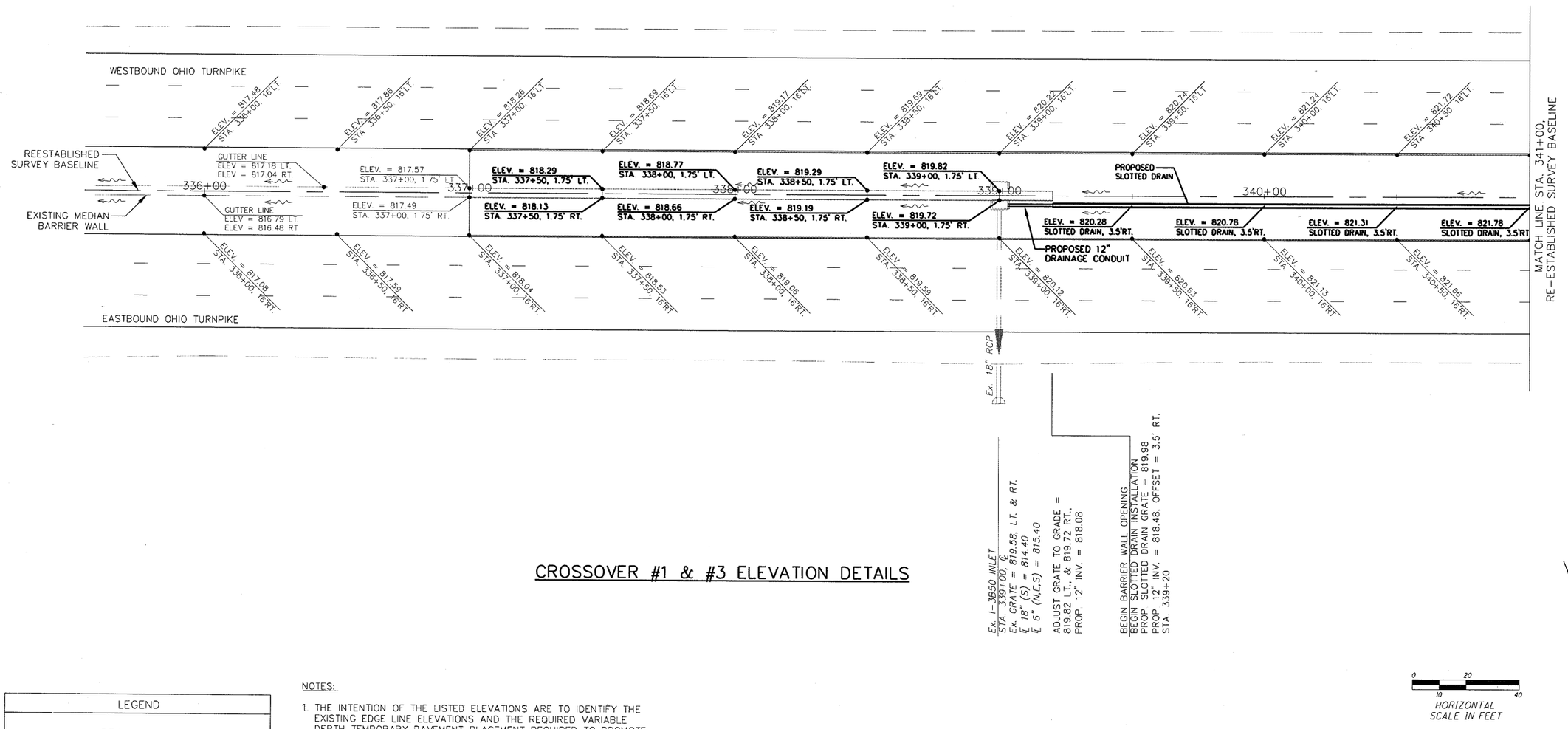
MAINTENANCE OF TRAFFIC
PHASE 3B
STA. 452+50 TO STA. 463+50

GPD GROUP.
Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 330-572-2100
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: 11/27/13
DRAWN: DGD | IN CHARGE: MAH | SCALE: 1" = 50'

CONTRACT 39-14-02 SHEET 177 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MP212.dwg Layout: MP212
Date: Jan 24, 2014 Time: 1:16 pm Twist: -1.5709583
Technician: lblankenship



CROSSOVER #1 & #3 ELEVATION DETAILS

LEGEND

- DRAINAGE FLOW ARROW
- ELEV.=XXX.XX / STA XXX+XX — EXISTING ELEVATION INFORMATION
- **ELEV.=XXX.XX / STA.XXX+XX** — PROPOSED ELEVATION INFORMATION
- TEMPORARY PAVEMENT (VARIABLE DEPTH OVERLAY)

NOTES:

1. THE INTENTION OF THE LISTED ELEVATIONS ARE TO IDENTIFY THE EXISTING EDGE LINE ELEVATIONS AND THE REQUIRED VARIABLE DEPTH TEMPORARY PAVEMENT PLACEMENT REQUIRED TO PROMOTE DRIVER SAFETY THROUGH THE WORKZONE AND PROVIDE POSITIVE ROADWAY DRAINAGE.
2. ALL ELEVATIONS ARE TO BE CONSIDERED AS RELEVANT TO THE EXISTING CONDITIONS AND SHALL BE VERIFIED FOR ACCURACY AND POSITIVE DRAINAGE BY THE CONTRACTOR PRIOR TO BEGINNING MEDIAN BARRIER WALL REMOVAL AND CROSSOVER CONSTRUCTION ACTIVITIES.
4. THE PROPOSED SLOTTED DRAIN SHALL BE AS PER ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. PAYMENT FOR INSTALLATION OF THE SLOTTED DRAIN SHALL BE INCLUDED IN ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN. (2)
5. PROPOSED ELEVATION INDICATED AT 3.5' RT. IS THE PROPOSED SLOTTED DRAIN GRATE ELEVATION.

0 10 20 40
HORIZONTAL SCALE IN FEET

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 2	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

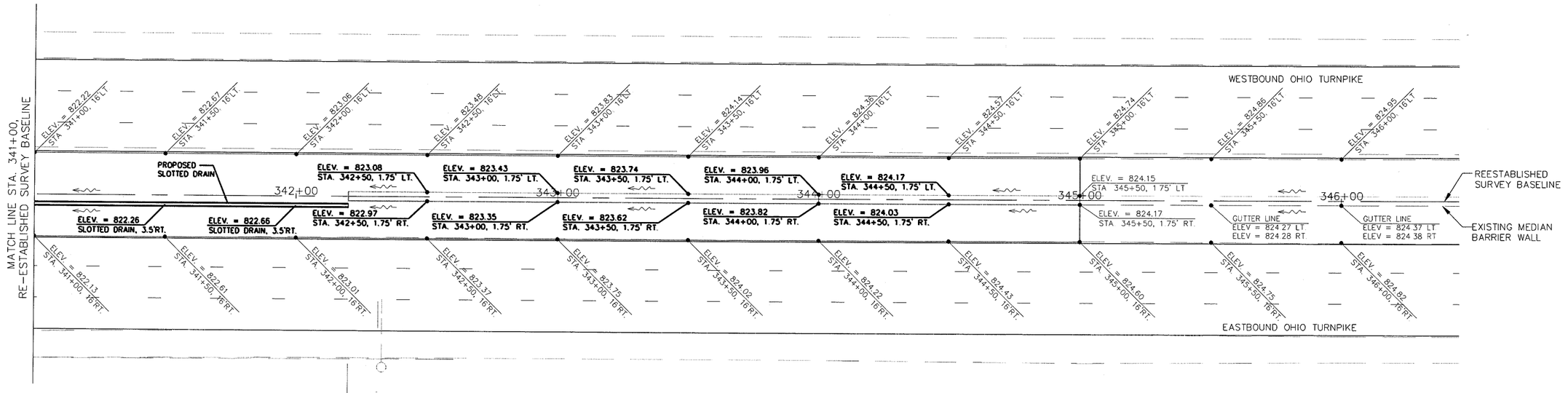
MAINTENANCE OF TRAFFIC
CROSSOVER ELEVATION DETAILS
CROSSOVER #1&#3-STA.336+00 TO STA.341+00

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: -
DRAWN: LOB | IN CHARGE: MAH | SCALE: 1" = 20'

CONTRACT 39-14-02 SHEET 207 OF 414

Drawing File: O:\2013\2013161\mai\sheets\2013161MM002.dwg Layout: MM002
Date: Jan 24, 2014 Time: 1:18 pm Twist: -1.5709583
Technician: lblankenship



CROSSOVER #1 & #3 ELEVATION DETAILS

LEGEND

- DRAINAGE FLOW ARROW
- ELEV.=XXX.XX / STA XXX+XX — EXISTING ELEVATION INFORMATION
- ELEV.=XXX.XX / STA.XXX+XX — PROPOSED ELEVATION INFORMATION
- TEMPORARY PAVEMENT (VARIABLE DEPTH OVERLAY)

NOTES:

1. THE INTENTION OF THE LISTED ELEVATIONS ARE TO IDENTIFY THE EXISTING EDGE LINE ELEVATIONS AND THE REQUIRED VARIABLE DEPTH TEMPORARY PAVEMENT PLACEMENT REQUIRED TO PROMOTE DRIVER SAFETY THROUGH THE WORKZONE AND PROVIDE POSITIVE ROADWAY DRAINAGE.
2. ALL ELEVATIONS ARE TO BE CONSIDERED AS RELEVANT TO THE EXISTING CONDITIONS AND SHALL BE VERIFIED FOR ACCURACY AND POSITIVE DRAINAGE BY THE CONTRACTOR PRIOR TO BEGINNING MEDIAN BARRIER WALL REMOVAL AND CROSSOVER CONSTRUCTION ACTIVITIES.
4. THE PROPOSED SLOTTED DRAIN SHALL BE AS PER ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. PAYMENT FOR INSTALLATION OF THE SLOTTED DRAIN SHALL BE INCLUDED IN ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN. (2)
5. PROPOSED ELEVATION INDICATED AT 3.5' RT. IS THE PROPOSED SLOTTED DRAIN GRATE ELEVATION.

HORIZONTAL SCALE IN FEET
0 10 20 40

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

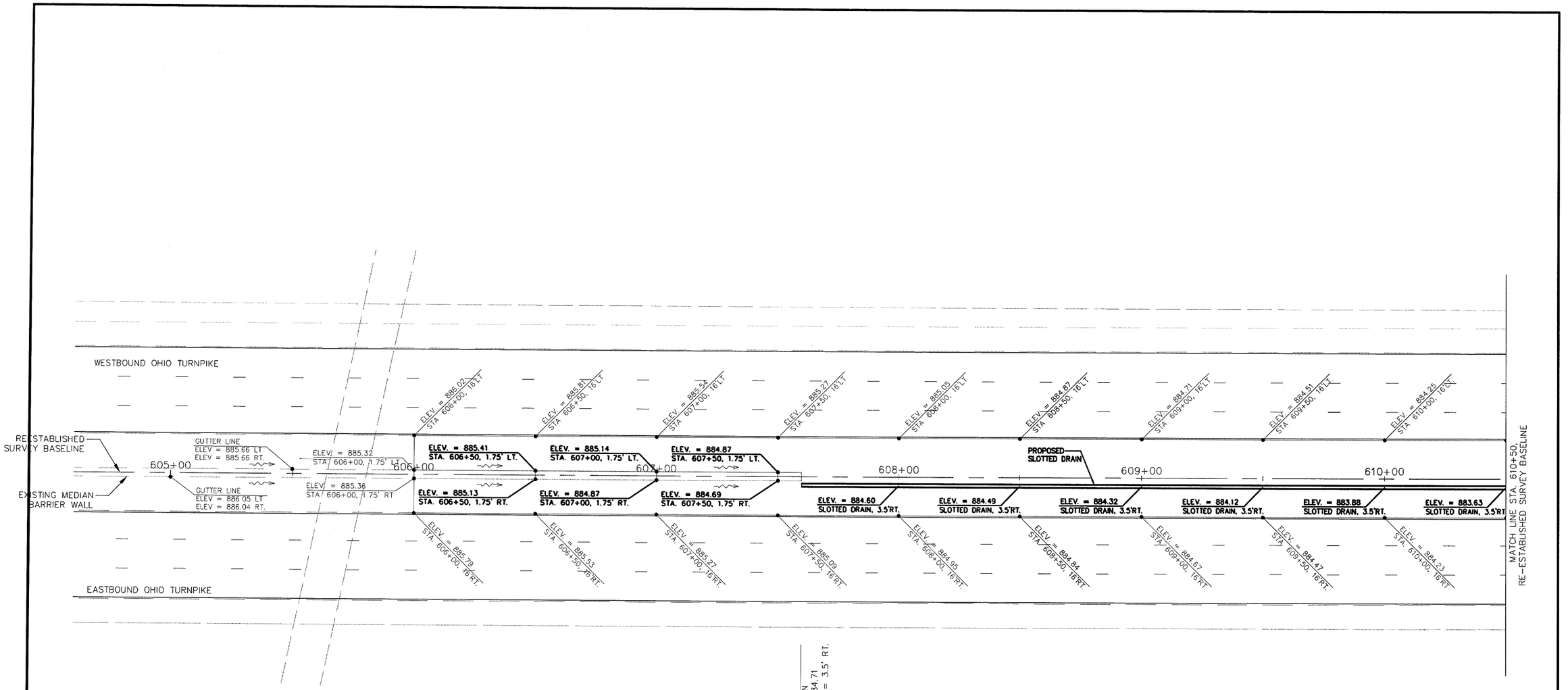
MAINTENANCE OF TRAFFIC
CROSSOVER ELEVATION DETAILS
CROSSOVER #1&#3-STA.341+00 TO STA.346+00

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: -
DRAWN: LOB | IN CHARGE: MAH | SCALE: 1" = 20'

CONTRACT 39-14-02 SHEET 208 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MA003.dwg Layout: MA003
Date: Jan 24, 2014 Time: 1:19 pm Twist: -1.5079633
Technician: lblankenship



BEGIN BARRIER WALL OPENING
BEGIN SLOTTED DRAIN INSTALLATION
PROP. SLOTTED DRAIN GRATE = 884.71
PROP. 12" INV. = 883.21, OFFSET = 3.5' RT.
STA. 607+60

CROSSOVER #2 & #4 ELEVATION DETAILS

LEGEND

- DRAINAGE FLOW ARROW
- ELEV.=XXX.XX STA.XXX+XX — EXISTING ELEVATION INFORMATION
- ELEV.=XXX.XX STA.XXX+XX — PROPOSED ELEVATION INFORMATION
- TEMPORARY PAVEMENT (VARIABLE DEPTH OVERLAY)

NOTES:

1. THE INTENTION OF THE LISTED ELEVATIONS ARE TO IDENTIFY THE EXISTING EDGE LINE ELEVATIONS AND THE REQUIRED VARIABLE DEPTH TEMPORARY PAVEMENT PLACEMENT REQUIRED TO PROMOTE DRIVER SAFETY THROUGH THE WORKZONE AND PROVIDE POSITIVE ROADWAY DRAINAGE.
2. ALL ELEVATIONS ARE TO BE CONSIDERED AS RELEVANT TO THE EXISTING CONDITIONS AND SHALL BE VERIFIED FOR ACCURACY AND POSITIVE DRAINAGE BY THE CONTRACTOR PRIOR TO BEGINNING MEDIAN BARRIER WALL REMOVAL AND CROSSOVER CONSTRUCTION ACTIVITIES.
4. THE PROPOSED SLOTTED DRAIN SHALL BE AS PER ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. PAYMENT FOR INSTALLATION OF THE SLOTTED DRAIN SHALL BE INCLUDED IN ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN. (2)
5. PROPOSED ELEVATION INDICATED AT 3.5' RT. IS THE PROPOSED SLOTTED DRAIN GRATE ELEVATION.

0 10 20 40
HORIZONTAL SCALE IN FEET

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
CROSSOVER ELEVATION DETAILS
CROSSOVER #2&#4-STA.605+00 TO STA.610+50

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB	CHECKED: MAH	DATE: -
DRAWN: LOB	IN CHARGE: MAH	SCALE: 1" = 20'

CONTRACT 39-14-02 SHEET 209 OF 414

Drawing File: D:\2013\2013161\mot\sheets\2013161MM004.dwg Layout: MM004
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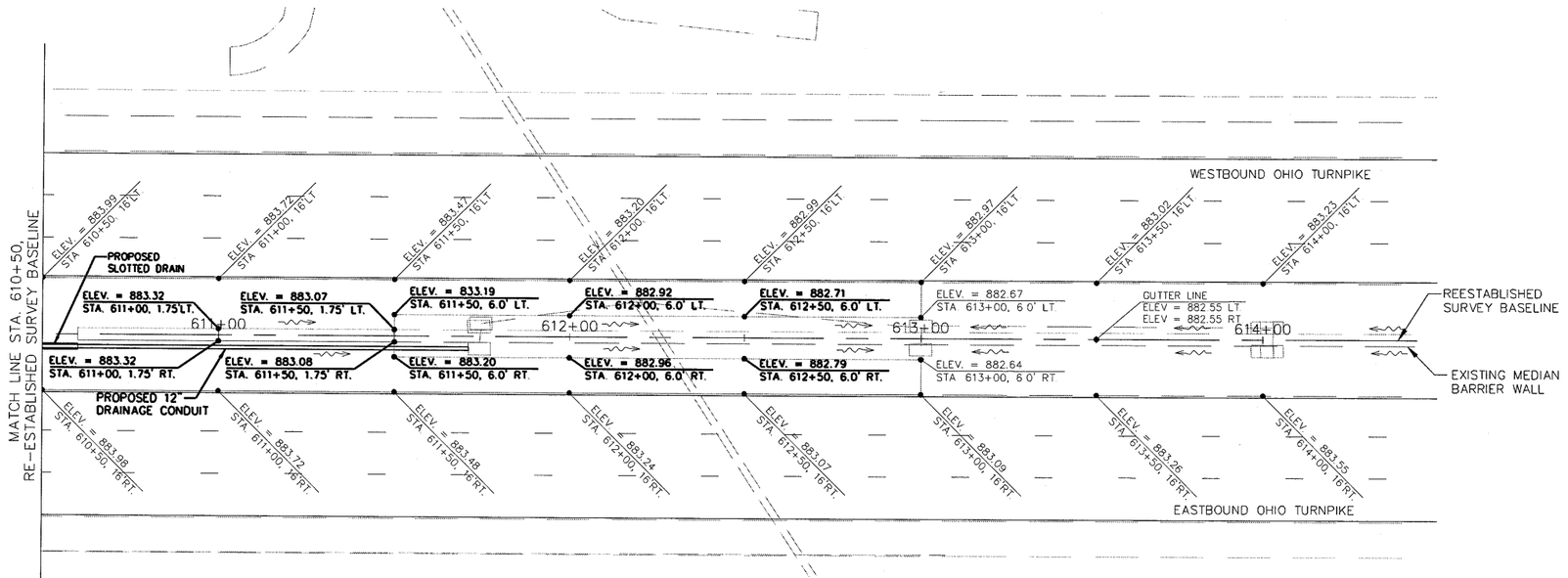
Technician: lblankenship



CROSSOVER #2 & #4 ELEVATION DETAILS

END BARRIER WALL OPENING
END SLOTTED DRAIN INSTALLATION
PROP SLOTTED DRAIN GRATE = 883.57
PROP 12" INV. = 882.07, OFFSET = 3.5' RT.
STA. 610+60

Ex. I-3850 INLET
STA. 611+75, ℄
Ex. GRATE = 882.86, LT. & RT.
ℓ 18" (E) = 877.14
ℓ 6" (W) = 878.51

PROP 12" (W) INV. = 881.36

Ex. I-3850 INLET
STA. 613+00, ℄
Ex. GRATE = 882.53, LT. & RT.
ℓ 18" (E,W) = 876.38
ℓ 6" (N) = 878.45
ℓ 6" (E,W) = 878.19
ℓ 6" (W) = 878.59

LEGEND

- DRAINAGE FLOW ARROW
- ELEV.=XXX.XX STA.XXX+XX — EXISTING ELEVATION INFORMATION
- **ELEV.=XXX.XX STA.XXX+XX** — PROPOSED ELEVATION INFORMATION
- TEMPORARY PAVEMENT (VARIABLE DEPTH OVERLAY)

NOTES:

1. THE INTENTION OF THE LISTED ELEVATIONS ARE TO IDENTIFY THE EXISTING EDGE LINE ELEVATIONS AND THE REQUIRED VARIABLE DEPTH TEMPORARY PAVEMENT PLACEMENT REQUIRED TO PROMOTE DRIVER SAFETY THROUGH THE WORKZONE AND PROVIDE POSITIVE ROADWAY DRAINAGE.
2. ALL ELEVATIONS ARE TO BE CONSIDERED AS RELEVANT TO THE EXISTING CONDITIONS AND SHALL BE VERIFIED FOR ACCURACY AND POSITIVE DRAINAGE BY THE CONTRACTOR PRIOR TO BEGINNING MEDIAN BARRIER WALL REMOVAL AND CROSSOVER CONSTRUCTION ACTIVITIES.
4. THE PROPOSED SLOTTED DRAIN SHALL BE AS PER ODOT STANDARD CONSTRUCTION DRAWING DM-1.3. PAYMENT FOR INSTALLATION OF THE SLOTTED DRAIN SHALL BE INCLUDED IN ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN. (2)
5. PROPOSED ELEVATION INDICATED AT 3.5' RT. IS THE PROPOSED SLOTTED DRAIN GRATE ELEVATION.

0 10 20 40
HORIZONTAL SCALE IN FEET

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	LOB	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MAINTENANCE OF TRAFFIC
CROSSOVER ELEVATION DETAILS
CROSSOVER #2&#4-STA.610+50 TO STA.614+50

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: LOB | CHECKED: MAH | DATE: -
DRAWN: LOB | IN CHARGE: MAH | SCALE: 1" = 20'

CONTRACT 39-14-02 SHEET 210 OF 414

Drawing File: O:\2013\2013161\mot\sheets\2013161MM005.dwg Layout: MM005
Date: Jan 24, 2014 Time: 1:23 pm Last: -1.57079633
Technician: lblankenship

13	14	15	16	17	18	19	222	223	224	227	228	229	323	INSERT	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
																		DRAINAGE	
									1228						601	1228	FT	PAVED GUTTER, MISC.: GUTTER BROKEN IN-PLACE	
									28						601	28	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	
									364						601	364	CU YD	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER	
								1956	10						603	1966	FT	6" CONDUIT, TYPE F, 707.41 NON-PERFORATED ASTM D3034 (SDR 35) 707.42 OR 707.33	
									320						603	320	FT	12" CONDUIT, TYPE F, 707.33	
									10						603	10	FT	12" CONDUIT, TYPE C, 706.02	
									40						603	40	FT	12" CONDUIT, TYPE C, 707.33 (2)	
									10						603	10	FT	15" CONDUIT, TYPE C, 707.33	
									10						603	10	(2) FT	18" CONDUIT, TYPE C, 706.02	
		(2)	~~250~~												~~603~~	~~250~~	~~FT~~	~~42" CONDUIT, TYPE B~~	
									16						603	16	(2) FT	48" CONDUIT, TYPE A, 707.33 (1)	
							(2)		2						604	2	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	16
									7						604	7	EACH	CATCH BASIN ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN	16
									22						604	22	EACH	CATCH BASIN ADJUSTED TO GRADE, 4" TO 12", AS PER PLAN	16
									7						604	7	EACH	CATCH BASIN ADJUSTED TO GRADE, 12" OR MORE, AS PER PLAN	16
									36						604	36	EACH	CATCH BASIN GRATE AND CASTING, AS PER PLAN	16
									6						SP604	6	EACH	CATCH BASIN, NO. CB-1, AS PER PLAN	
		(2)	662						(1)	43572					SP605 (1)	44234 (2)	FT	AGGREGATE DRAIN, AS PER PLAN	16
			200												SP605	200	FT	TYPE 1 AGGREGATE DRAIN, WITH WRAP, AS PER PLAN	16
			200												SP605	200	FT	TYPE 2 AGGREGATE DRAIN, WITH WRAP, AS PER PLAN	16
								48014							SP605	48014	FT	6" BASE PIPE UNDERDRAIN, WITH FABRIC WRAP	
								57329							SP605	57329	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP	
								400							SP605	400	FT	6" UNCLASSIFIED PIPE UNDERDRAIN, WITH FABRIC WRAP	
									168						837	168	FT	36" LINER PIPE, AS PER PLAN	16
									269						837	269	FT	42" LINER PIPE, AS PER PLAN	16
									224						837	224	FT	48" LINER PIPE, AS PER PLAN	16
									175						837	175	FT	60" LINER PIPE, AS PER PLAN	16
									190						837	190	CU YD	BACKFILL FOR LINER PIPE	
								67	1						SPECIAL	68	EACH	PRECAST REINFORCED CONCRETE OUTLET	
									7						SPECIAL	7	EACH	12" PRECAST CONCRETE END SECTION	
									1						SPECIAL	1	EACH	18" PRECAST CONCRETE END SECTION	
									1						SPECIAL	1	EACH	48" PRECAST CONCRETE END SECTION	
				22											SPECIAL	22	EACH	SECURING MANHOLE LID	
					500										SPECIAL	500	FT	PIPE CLEANOUT, 15" TO 36"	
																		PAVEMENT	
				217718											206	217718	SQ YD	LIME STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	17
				5258											206	5258	TON	LIME	17
				217718											206	217718	SQ YD	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	17
				7894											206	7894	TON	CEMENT	17
			(1)	3000											206 (1)	3000	M GAL	WATER FOR CURING	17
				LUMP											206	LUMP		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	17
				73.0											206	73	HOUR	TEST ROLLING	17
300															251	300	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	
									(1)	51485					252 (1)	51485	FT	FULL DEPTH PAVEMENT SAWING	
300															255	300	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	
200															255 (1)	200	FT	FULL DEPTH PAVEMENT SAWING	
									(1)	67892					SP302	67892	CU YD	BITUMINOUS AGGREGATE BASE, PG64-22	
										27298					SP304	27298	CU YD	AGGREGATE BASE	
										14203					SP304	14203	CU YD	AGGREGATE BASE (SHOULDER)	
										2619					SP402	2619	CU YD	ASPHALT CONC. BASE COURSE OR RECYCLED ASPHALT CONC. BASE COURSE, PG64-22	
									(1)	8146					SP402 (1)	8146	CU YD	ASPHALT CONC. BASE COURSE OR RECYCLED ASPHALT CONC. BASE COURSE, PG70-22 (FR)	
										71					SP403	71	CU YD	ASPHALT CONCRETE LEVELING COURSE, PG64-22	
										33					SP403	33	CU YD	ASPHALT CONCRETE LEVELING COURSE, PG70-22 (FR)	
										2360					SP404	2360	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG64-22	
									(1)	7011					SP404 (1)	7011	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 (FR)	
									(1)	51357					SP404A (1)	51357	FT	JOINT SEALER	
										829					452	829	SQ YD	NON-REINFORCED CONCRETE PAVEMENT (T=15")	
										19401					617	19401	SQ YD	SHOULDER PREPARATION	
										987					617	987	CU YD	COMPACTED AGGREGATE	
										1197					SP627	1197	TON	STONE SHOULDER PROTECTION	

NO	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PJF	1-14-14
2	ADDENDUM NO. 3	CLH	1-23-14

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE RIGHT TWO LANES & SHOULDER RECONSTRUCTION

GENERAL SUMMARY SHEET 2 OF 3

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc
520 South Main Street, Suite 2531, Akron, Ohio 44311
330-572-2100 Fax 330-572-2101

DESIGNED: CLH | CHECKED: PJF | DATE: 12/19/13
DRAWN: CLH | IN CHARGE: MRG | SCALE: NTS

REMOVAL SUBSUMMARY

REF NO	SHEET NO	STATION TO STATION FROM	STATION TO STATION TO/AT	SIDE	202 GUARDRAIL REMOVED FT.	202 CONCRETE BARRIER REMOVED, AS PER PLAN FT.	202 CONCRETE BARRIER REMOVED FT.	202 APPROACH SLAB REMOVED SQ. YD.	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH
R-01	239	366+92.05	371+83.01	RT.	454		39.54		
R-02	239, 240	371+02.35	374+66.30	LT.	364		54.38		
R-03	239, 240	371+81.01	374+47.87	RT.	267				
R-04	240	374+31.09	374+58.41	RT.				100	
R-05	240	374+45.01	374+75.11	LT.				111	
R-06	240	375+82.57	376+14.10	RT.				101	
R-07	240	376+01.12	376+35.84	LT.				111	
R-08	240	376+00.01	376+74.57	RT.	75				
R-09	240	376+05.67	380+46.23	LT.	441				
R-10	240, 241	382+29.61	391+06.05	RT.	876				
R-11	240	383+97.11		RT.					1
R-12	241	387+99.83	391+60.09	LT.	360				
R-13	241	390+59.69	391+29.97	RT.				106	
R-14	241	391+17.50	391+57.77	LT.				106	
R-15	241	393+35.82	393+76.03	RT.				106	
R-16	241	393+63.63	394+03.90	LT.				106	
R-60	241	393+36.07	394+41.94	RT.			105.87		
R-61	241	393+89.65	394+71.76	LT.			82.11		
R-17	241	394+27.98	394+56.85	RT.				100	
R-18	241	394+43.63	394+72.55	LT.				100	
R-19	241, 242	396+29.88	396+58.81	RT.				100	
R-20	241, 242	396+45.53	396+74.46	LT.				100	
R-21	241, 242	396+27.67	399+22.14	RT.	294				
R-22	242	396+59.26	401+77.32	LT.	518				
R-23	242-244	405+72.28	424+74.63	RT.	1902		162.23		
R-24	243	408+14.65	410+88.64	LT.	202		73.89		
R-25	243	410+86.54	417+46.76	LT.	660				
R-26	243, 244	418+42.63	422+11.54	LT.	371		97.87		
R-27	244, 245	427+87.63	430+22.29	LT.	235				
R-28	245	430+60.97	435+28.40	RT.	412		57.05		
R-29	245	434+71.68	438+48.82	LT.	377				
R-30	245	435+21.94	435+61.94	RT.	40				
R-31	245, 246	439+50.13	451+94.41	LT.	1244				
R-32	245-247	441+40.44	452+79.63	RT.	1139				
R-33	246, 247	450+57.26	459+15.90	LT.	859				
R-34	246, 247	452+17.00	459+28.33	RT.	711				
R-35	263	452+55.49	454+10.92	LT.	155				
R-36	262	60+97.38	64+14.43	RT.	109		208.02		
R-37	264	460+82.13	460+95.65	LT.	14				
R-37	264	460+95.65	463+10.73	LT.			215.08		
R-37	264	463+10.73	474+60.60	LT.	1150				
R-38	248	468+63.84	474+05.38	RT.	469		75.09		
R-39	248, 249	474+61.64	479+79.83	LT.	445		75.64		
R-40	249	479+36.24	483+79.04	RT.	443				
R-41	249, 250	484+00.16	488+44.57	LT.	444				
R-42	251	497+99.82	500+12.04	LT.	212				
R-43	251	498+75.68	503+33.97	RT.	399		61.37		
R-44	251, 252	502+29.25	506+83.32	LT.	395		61.34		
R-45	253	516+73.91	521+14.39	RT.	440				
R-46	253	520+57.39	524+93.62	LT.	436				
R-47	253, 254	525+62.93	529+87.00	RT.	424				
R-48	254	530+56.15	534+79.74	LT.	424				
R-49	255, 256	542+11.51	551+29.22	RT.	855		64.78		
R-50	255	545+65.67	550+36.82	LT.	407		66.35		
R-51	255, 256	550+34.72	554+41.00	LT.	406				
R-52	257, 258	562+54.17	575+79.75	RT.	1326				
R-53	257	563+47.37	568+35.53	LT.	488				
R-54	258	574+41.84	578+47.46	LT.	406				
R-55	258, 259	580+17.48	585+02.06	RT.	393		93.44		
R-56	258, 259	583+30.93	588+04.58	LT.	405		70.51		
R-57	260	599+69.97	603+50.00	RT.	380				
R-58	237	339+20.00	342+20.00	CL		300			
R-59	260, 261	607+60.00	610+60.00	CL		300			
SUBTOTALS					22826	600	1665	1247	1
DEDUCTION FOR ITEM 202 - GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN (SEE SHEET 15)					10363				
TOTALS CARRIED TO GENERAL SUMMARY					12463	600	1665	1247	1

DRAINAGE SUBSUMMARY

REF NO.	SHEET NO.	STATION FROM	STATION TO OR AT	SIDE	202 CATCH BASIN OR INLET REMOVED EACH	202 PIPE REMOVED FT.	601 PAVED GUTTER, MISC.; GUTTER BROKEN IN-PLACE FT.	601 ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER CU. YD.	601 ROCK CHANNEL PROTECTION, TYPE D WITH FILTER CU. YD.	603 6" CONDUIT, TYPE F, 707.41 NON-PERF ASTM D3034 (SDR35) 707.42 OR 707.33 FT.	603 12" CONDUIT, TYPE F, 707.33 FT.	603 12" CONDUIT, TYPE C, 706.02 FT.	603 18" CONDUIT, TYPE C, 706.02 FT.	603 12" CONDUIT TYPE C, 707.33 FT.	603 15" CONDUIT TYPE C, 707.33 FT.	603 48" CONDUIT, TYPE A, 707.33 FT.	837 36" LINER PIPE, AS PER PLAN FT.	837 42" LINER PIPE, AS PER PLAN FT.	837 48" LINER PIPE, AS PER PLAN FT.	837 60" LINER PIPE, AS PER PLAN FT.	837 BACKFILL FOR LINER PIPE CU. YD.	SP604 CATCH BASIN, NO. CB-1, AS PER PLAN EACH	604 MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	SPECIAL PRECAST REINFORCED CONCRETE OUTLET EACH	SPECIAL 12" PRECAST CONCRETE END SECTION EACH	SPECIAL 18" PRECAST CONCRETE END SECTION EACH	SPECIAL 48" PRECAST CONCRETE END SECTION EACH
DR-01	240	376+40.00		LT.	1	28					28												1			1		
DR-02	241	385+25.01	391+85.20	RT.			721		213.63																			
DR-03	241	387+03.36	387+90.60	LT.			91		26.96																			
DR-04	241	390+84.00		RT.	1	59					59												1			1		
DR-05	241	391+37.00		LT.	1	65					65												1			1		
DR-06	241	393+65.00		RT.	1	79					79												1			1		
DR-07	241	394+15.00		LT.	1	57					57												1			1		
DR-08	243	408+22.00		LT./RT																		175	50					
DR-09	243	415+87.77		LT.		30								30														
DR-10	243	417+21.50		RT				3.70																				
DR-11	243	417+49.64	418+28.76	LT.				7.41																				
DR-12	245	434+53.73		LT.		10								10														
DR-13	245	435+18.71		RT.		10									10													
DR-14	245	439+60.00		LT./RT												16			224		53							1
DR-15	246	443+63.51		RT		10				10														1				
DR-16	246	445+75.00		LT.							32												1			1		
DR-17	247	455+01 06		LT.		10						10														1		
DR-18	262	61+98.72		RT.																				1				
DR-19	262	63+93.88		RT																				1				
DR-20	249, 250	484+66.22	488+80.57	LT.			416		123.26																			
DR-21	251	502+60.40		RT				7.41																				
DR-22	253	520+85.00		LT./RT													168				31							
DR-23	254	530+20.00		LT./RT														269			56							
DR-24	255	549+00.18		LT.		10							10														1	
DR-25	256	553+43.53		LT.				7.41																				
DR-26	258	580+40.03		LT.				1.85																				
TOTALS FROM SUBSUMMARY BELOW																												
TOTALS TO GENERAL SUMMARY					5	368	1228	28	364	10	320	10	10	40	10	16	168	269	224	175	190	6	~~17~~ 2	1	7	1	1

(2) CATCH BASINS ~~AND MANHOLES~~ TO BE ADJUSTED IN MEDIAN AS DIRECTED BY CHIEF ENGINEER

MILE POST	604 CATCH BASIN, ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN	604 CATCH BASIN, ADJUSTED TO GRADE, 4" TO 12", AS PER PLAN	604 CATCH BASIN, ADJUSTED TO GRADE, 12" OR MORE, AS PER PLAN	604 CATCH BASIN GRATE AND CASTING, AS PER PLAN	(2) 604 MANHOLE TO ADJUSTED TO GRADE, AS PER PLAN	MILE POST	604 CATCH BASIN, ADJUSTED TO GRADE, 4" OR LESS, AS PER PLAN	604 CATCH BASIN, ADJUSTED TO GRADE, 4" TO 12", AS PER PLAN	604 CATCH BASIN, ADJUSTED TO GRADE, 12" OR MORE, AS PER PLAN	604 CATCH BASIN GRATE AND CASTING, AS PER PLAN	(2) 604 MANHOLE TO ADJUSTED TO GRADE, AS PER PLAN
159.99		1		1	1	161.53				1	
160.02					1	161.69 *		1		1	
160.04					1	161.82					1
160.12					1	161.88 *		1		1	1
160.125		1		1		161.94					1
160.18					1	162					1
160.23					1	162.09		1		1	
160.29					1	162.27			1	1	
160.3					1	162.42 *		1		1	
160.34		1		1		162.55			1	1	
160.37		1		1		162.69 *		1		1	
160.45		1		1		162.86 *		1		1	
160.61		1		1		163.05 *			1	1	
160.62					1	163.23	1			1	
160.7		1		1		163.53		1		1	
160.75			1	1	1	163.6		1	1	2	
160.8					1	163.71 *	1			1	
160.84	1			1	1	163.87 *		1		1	
160.89	1			1	1	164.05		1		1	
161.1	1			1		164.13		1		1	
161.15	1			1		164.25 *		1		1	
161.16		1		1		164.45		1		1	
160.3		1		1		164.8	1			1	
161.41		1		1							
COLUMN 1 SUB TOTAL	4	10	1	15	13	COLUMN 2 SUB TOTAL	3	12	6	21	4
COLUMN 1 SUBTOTAL							4	10	1	15	13
TOTALS TO DRAINAGE SUBSUMMARY TABLE ABOVE											17
TOTALS TO GENERAL SUMMARY							7	22	7	36	

NOTE: CONTINGENCY QUANTITIES ARE SHOWN IN SUBSUMMARY ABOVE FOR ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER. THE NEED FOR ROCK CHANNEL PROTECTION WAS DETERMINED FROM THE FIELD INVESTIGATION REPORT. CALCULATIONS FOR THE ESTIMATED AMOUNT OF ROCK CHANNEL PROTECTION NEEDED ARE BASED ON THE FOLLOWING CALCULATIONS:

DR-10: WASHOUT UNDER S.W. BRIDGE SCUPPER FOR PEARL RD. BRIDGE @ M.P. 161.18
ESTIMATED AREA = 10' X 10' X 1' = 3.70 CU. YD.

DR-11: WASHOUTS UNDER N.W. AND N.E. BRIDGE SCUPPERS FOR PEARL RD. BRIDGE @ M.P. 161.20
ESTIMATED AREA = 2 X (10' X 10' X 1') = 7.41 CU. YD.

DR-21: WASHOUT AT 18" CONCRETE HEADWALL OUTLET @ M.P. 162.90
ESTIMATED AREA = 20' X 10' X 1' = 7.41 CU. YD.

DR-25: WASHOUT IN BACKSLOPE FROM NO NOTICEABLE OUTLET @ M.P. 163.85
ESTIMATED AREA = 20' X 10' X 1' = 7.41 CU. YD.

DR-26: EROSION IN BACKSLOPE FROM 8" OUTLET @ M.P. 164.38
ESTIMATED AREA = 10' X 5' X 1' = 1.85 CU. YD.

* ADDITIONAL WORK WILL BE REQUIRED TO REPAIR THE BACK SUPPORT OF THE CATCH BASIN (CONCRETE ENCASED STEEL BEAM). CONTRACTOR SHALL SUBMIT PROPOSED REPAIR METHOD FOR REVIEW AND APPROVAL BY THE CHIEF ENGINEER. ALL LABOR, EQUIPMENT AND MATERIALS NEEDED TO COMPLETE THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO THE REPAIR OF THIS BASIN.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PJF	1-14-14
2	ADDENDUM NO. 3	CLH	1-25-14

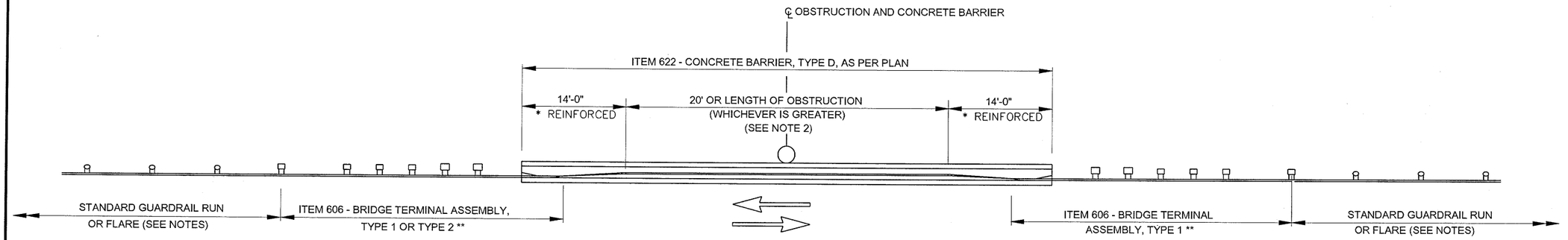
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE RIGHT TWO LANES & SHOULDER RECONSTRUCTION
REMOVAL & DRAINAGE SUBSUMMARIES

GPD GROUP. Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 330-572-2100
520 South Main Street, Suite 2531, Akron, Ohio 44311 Fax 330-572-2101

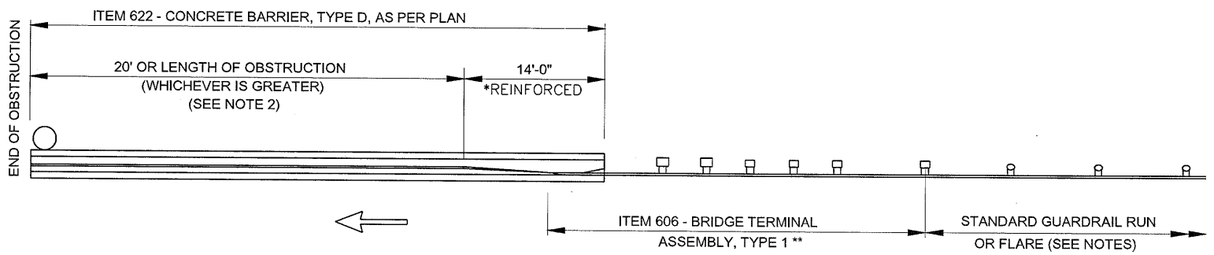
DESIGNED: PJF	CHECKED: CLH, MDG	DATE: 12/19/13
DRAWN: RTG	IN CHARGE: MRG	SCALE: N/A

Drawing File: C:\2013\2013161\roadway\sheets\2013161GS003.dwg Layout: Model
Date: Jan 27, 2014 Time: 12:03 pm Tests: -1.57079633
Technician: chuff

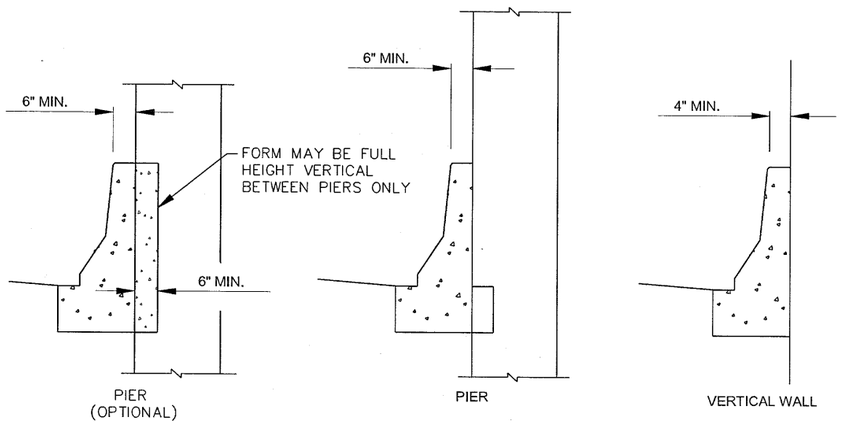


BI-DIRECTIONAL TRAVEL OR UNI-DIRECTIONAL TRAVEL WHERE TRAILING GUARDRAIL IS USED.

TYPICAL INSTALLATIONS



DIRECTIONAL TRAVEL WHERE NO TRAILING GUARDRAIL IS USED.



INCORPORATED INSTALLATIONS

NOTES:

1. LOCATION: CONCRETE BARRIER AT OBSTRUCTIONS SHALL BE CONSTRUCTED WITH THE TOE OF THE BARRIER SLOPE AT THE NORMAL GUARDRAIL OFFSET FROM THE ROADWAY. INSTALLATIONS WITHIN CONTINUOUS RUNS SHALL BE CONSTRUCTED SO THAT NO APPROACH OR TRAILING GUARDRAIL TAPERS ARE REQUIRED TO CONNECT TO THE BARRIER.

2. TYPE D BARRIER: SEE OTIC STANDARD DRAWINGS CBR-1, CBR-2, CBR-3, CBR-6 FOR STANDARD CONCRETE BARRIER, TYPE D, AS PER PLAN DETAILS.

3. REINFORCING: ALL REINFORCING BARS SHALL BE EPOXY COATED AND SHALL MEET THE REQUIREMENTS OF ODOT CMS 509.

4. INCORPORATED INSTALLATIONS: FOR BARRIER INSTALLATIONS THAT CANNOT BE CONSTRUCTED AT THE NORMAL GUARDRAIL OFFSET, THE INCORPORATED INSTALLATIONS SHOWN MAY BE INSTALLED AT VERTICAL WALLS, PIERS OR OTHER SIMILAR OBSTRUCTIONS. FOR PIER-INCORPORATED INSTALLATIONS THE CONTRACTOR MAY USE THE OPTIONAL TREATMENT, FORMING THE BACK FACE OF THE TYPE D CONCRETE BARRIER TO THE LOCATION SHOWN (BETWEEN PIERS ONLY), WITH ANY ADDITIONAL COST BEING INCLUDED IN THE COST OF ITEM 622.

5. GUARDRAIL: FOR TYPES 1 AND 2 BRIDGE TERMINAL ASSEMBLIES AND THEIR CONNECTIONS TO BARRIER, SEE ODOT STANDARD DRAWINGS GR-3.1 AND GR-3.2, RESPECTIVELY.

6. FOR UNI-DIRECTIONAL ROADWAYS WHERE TRAILING GUARDRAIL IS USED AND IS LOCATED BEYOND THE CLEAR ZONE OF OPPOSITE DIRECTION TRAFFIC, USE TYPE 2 BRIDGE TERMINAL ASSEMBLY.

   BARRIER INSTALLATIONS THAT CANNOT BE CONSTRUCTED AT THE NORMAL GUARDRAIL OFFSET AND ARE TO BE CONNECTED TO APPROACH OR TRAILING GUARDRAIL RUNS SHALL HAVE A 25:1 GUARDRAIL TAPER TO MEET THE EXISTING OR NORMAL GUARDRAIL OFFSET. INSTALLATIONS THAT ARE NOT TO BE CONNECTED TO APPROACH OR TRAILING GUARDRAIL RUNS SHALL INCLUDE THE STANDARD GUARDRAIL FLARE AS SHOWN ON ODOT STANDARD DRAWING GR-5.1.

7. PAYMENT: PAYMENT FOR ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN SHALL INCLUDE ALL MATERIALS, LABOR AND REINFORCING STEEL REQUIRED TO CONSTRUCT THE BARRIER AS SHOWN.

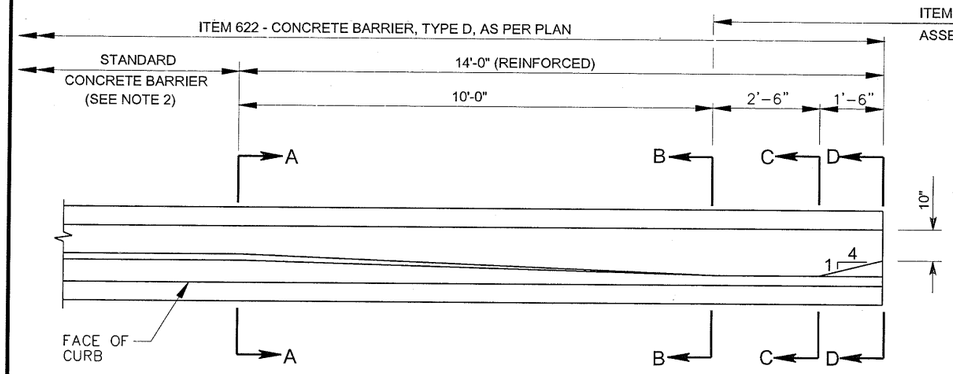
* FOR REINFORCEMENT DETAILS, SEE OTIC STANDARD DRAWING CBR-6.

** USING STEEL POST (ON TURNPIKE MAINLINE ONLY)

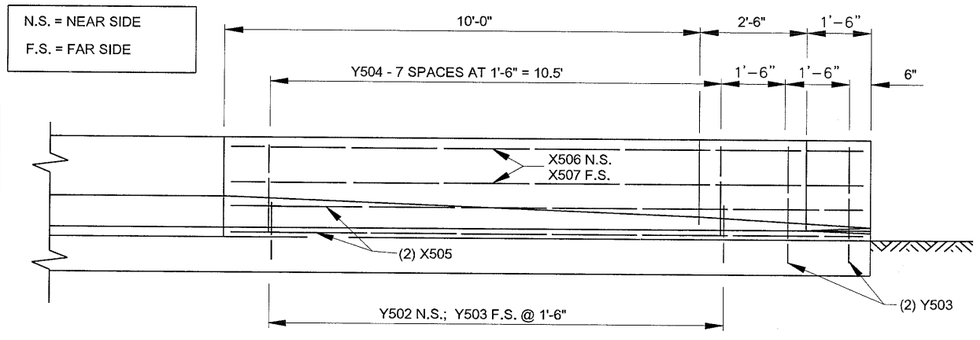
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

CONCRETE BARRIER, TYPE D AT OBSTRUCTIONS

DATE: JUNE 25, 2007	SCALE: N.T.S.
O.T.I.C. STANDARD DRAWING	CBR-5



PLAN

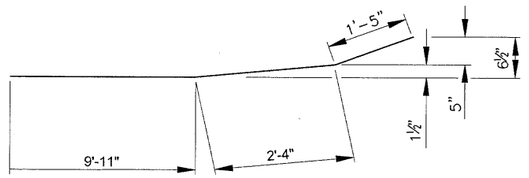


ELEVATION

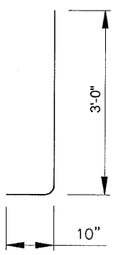
TYPE D REINFORCED BARRIER END SECTION

REINFORCING BAR LIST

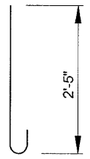
MARK	SIZE	LENGTH	SHAPE	NO.	WEIGHT (lb)
Y502	#5	2'-10"	BENT	8	23.6
Y503	#5	3'-9"	BENT	12	46.9
Y504	#5	3'-0"	BENT	8	25.0
X505	#5	13'-8"	STRAIGHT	4	57.0
X506	#5	13'-8"	BENT	2	28.5
X507	#5	13'-8"	STRAIGHT	2	28.5
		TOTAL (FOR INFO. ONLY):			209.5



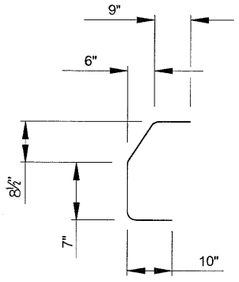
X506



Y503



Y504

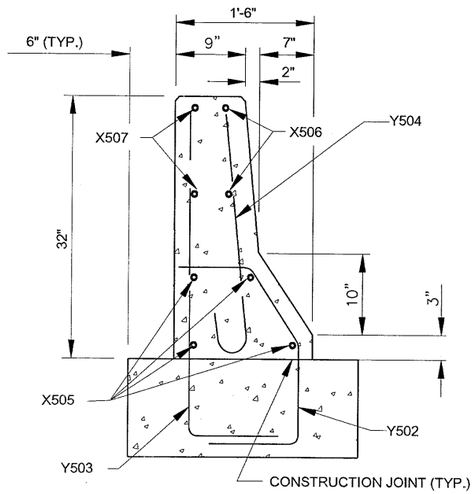


Y502

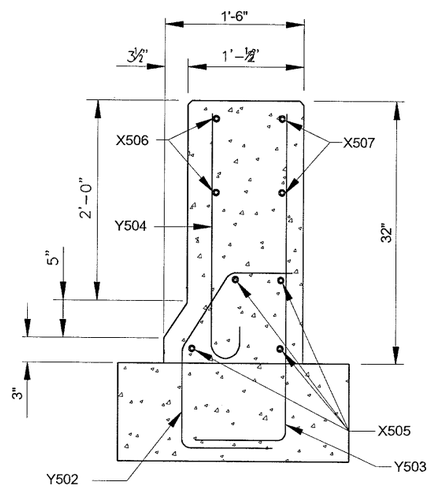
NOTES:

1. LOCATION: CONCRETE BARRIER AT OBSTRUCTIONS SHALL BE CONSTRUCTED WITH THE TOE OF THE BARRIER SLOPE AT THE NORMAL GUARDRAIL OFFSET FROM THE ROADWAY. INSTALLATIONS WITHIN CONTINUOUS RUNS SHALL BE CONSTRUCTED SO THAT NO APPROACH OR TRAILING GUARDRAIL TAPERS ARE REQUIRED TO CONNECT TO THE BARRIER.
2. ITEM 622 – TYPE D BARRIER, AS PER PLAN: SEE OTC STANDARD DRAWINGS CBR–1, CBR–2, CBR–3, CBR–5 FOR STANDARD ITEM 622 – CONCRETE BARRIER, TYPE D, AS PER PLAN DETAILS.
3. REINFORCING: ALL REINFORCING BARS SHALL BE EPOXY COATED AND SHALL MEET THE REQUIREMENTS OF ODOT CMS 509.
4. GUARDRAIL: FOR TYPES 1 AND 2 BRIDGE TERMINAL ASSEMBLIES AND THEIR CONNECTIONS TO BARRIER, SEE ODOT STANDARD DRAWINGS GR–3.1 AND GR–3.2, RESPECTIVELY.
5. PAYMENT: PAYMENT FOR ITEM 622 – CONCRETE BARRIER, TYPE D, AS PER PLAN SHALL INCLUDE ALL MATERIALS, LABOR AND REINFORCING STEEL REQUIRED TO CONSTRUCT THE BARRIER AS SHOWN.

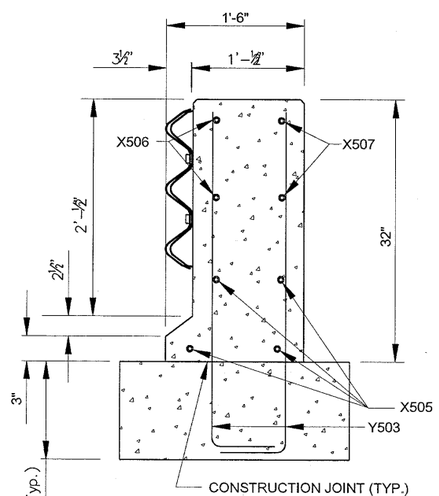
BENDING DIAGRAMS



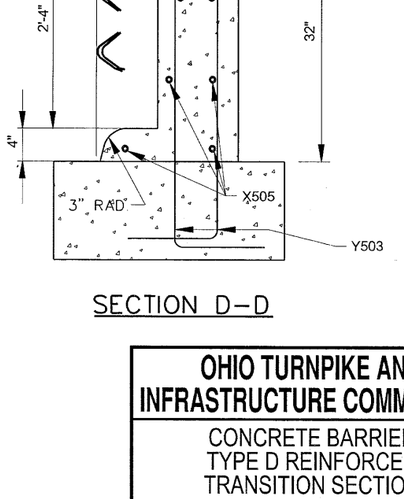
SECTION A–A



SECTION B–B



SECTION C–C

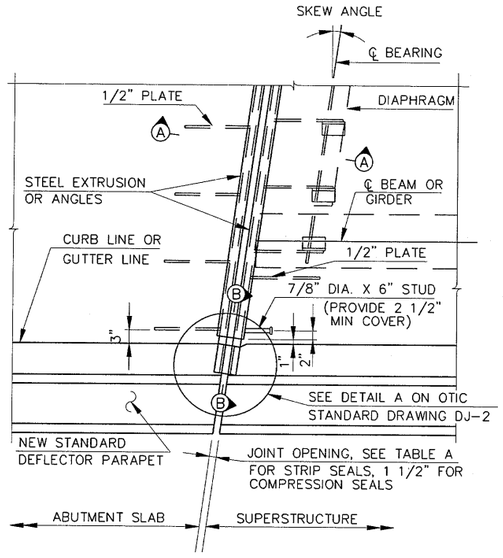


SECTION D–D

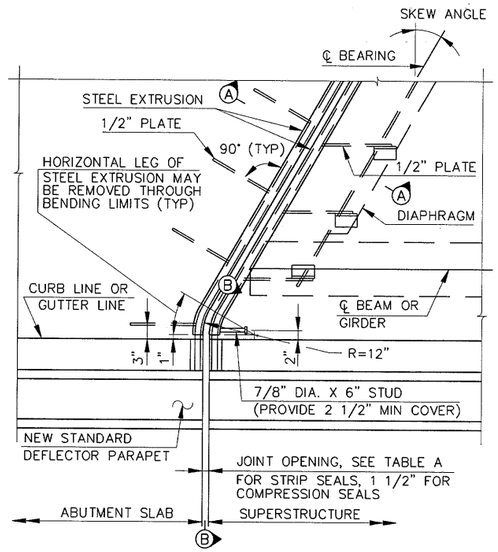
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

CONCRETE BARRIER, TYPE D REINFORCED TRANSITION SECTION

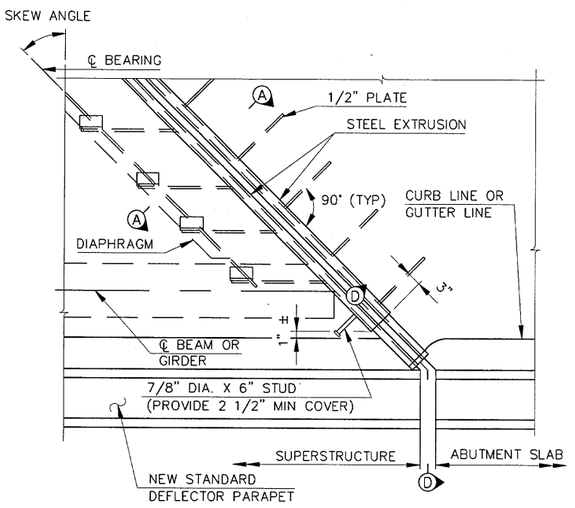
DATE: JUNE 25, 2007	SCALE: N.T.S.
O.T.I.C. STANDARD DRAWING	CBR-6



PLAN – SKEW ANGLE < 10°
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



PLAN – SKEW ANGLE 10° TO 45°
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



PLAN – SKEW ANGLE > 45° (STRIP SEAL ONLY)

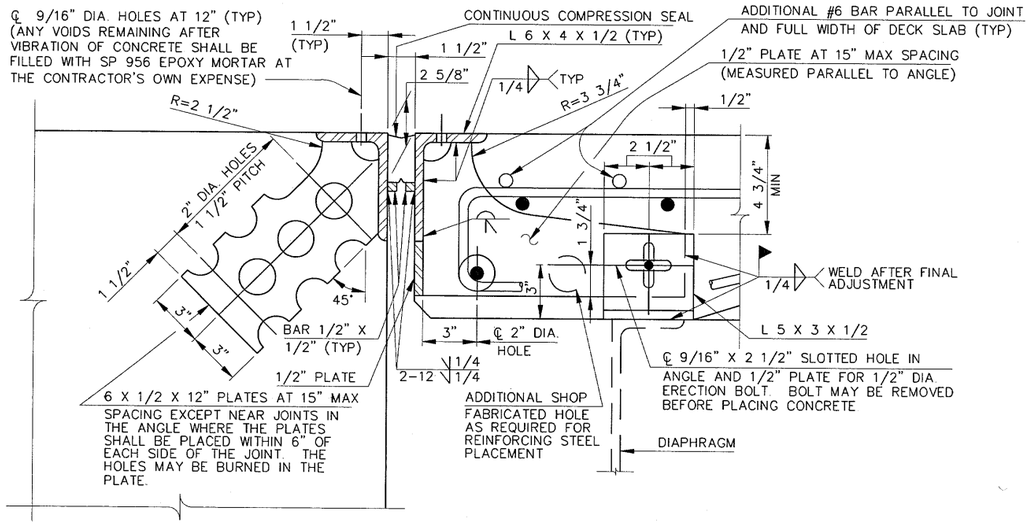
NOTE: WHEN SKEW ANGLE IS GREATER THAN 45°, FURNISH JOINT ASSEMBLIES IN TWO SECTIONS AND PROVIDE A FIELD SPLICE AT THE CENTERLINE OF ROADWAY.

GENERAL NOTES:

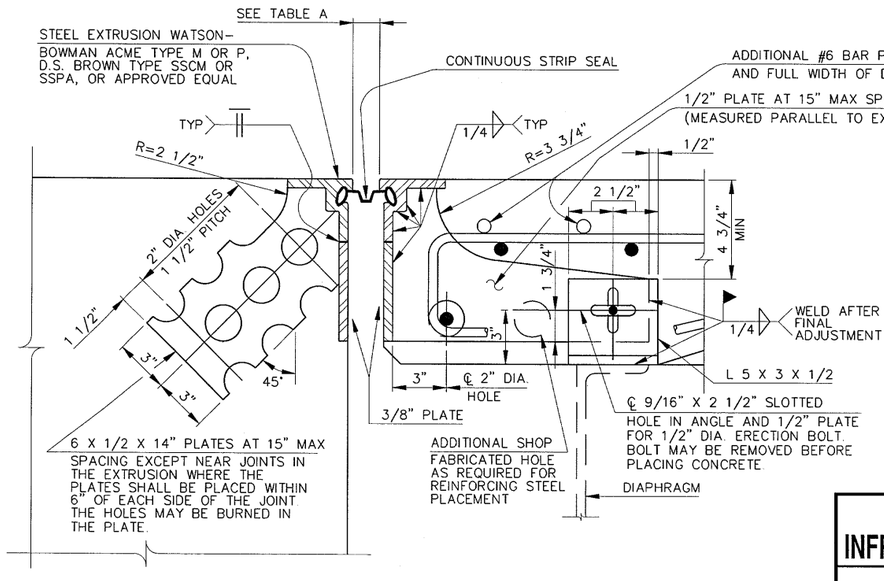
1. INSTALLATION OF SEAL: DURING INSTALLATION OF SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS ON BEARINGS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR ON THE BEAMS SHALL BE ACHIEVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.
2. ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.
3. STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.
4. THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS UNLESS OTHERWISE SHOWN.
5. JOINTS IN EXTRUSIONS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL AND/OR ANCHOR PLATES SHALL BE GROUND SMOOTH.
6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
7. ELASTOMERIC COMPRESSION SEALS SHALL BE WATSON-BOWMAN ACME WJ-200, D.S. BROWN C-V 2000, ERIE METAL SPECIALTIES BR200 OR APPROVED EQUAL.
8. CONTINUOUS STRIP SEALS SHALL BE AS MANUFACTURED BY WATSON-BOWMAN ACME, D.S. BROWN OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED SEE STRIP SEAL SELECTION TABLE.
9. DETAILS AT DIAPHRAGMS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR.
10. TRANSVERSE JOINTS IN COMPRESSION SEAL ARMOR AND VERTICAL LEGS OF EXTRUSIONS SHALL HAVE COMPLETE PENETRATION BUTT WELDS. WELDS WHICH WILL BE IN CONTACT WITH SEALS SHALL BE GROUND FLUSH.
11. ARMOR STEEL COATING: FINISHED STEEL ASSEMBLY SHALL BE METALIZED, SEE SP533_.
12. FOR SECTIONS B-B & D-D AND DETAIL A, SEE OTIC STANDARD DRAWING DJ-2

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2 1/4"	2 1/8"	2"	1 7/8"	1 3/4"	1 5/8"	1 1/2"
4"	2 5/8"	2 1/2"	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"
5"	2 7/8"	2 3/4"	2 3/4"	2 5/8"	2 5/8"	2 1/2"	2 3/8"



SECTION A-A (COMPRESSION SEAL)



SECTION A-A (STRIP SEAL)
WATSON-BOWMAN ACME TYPE M, OR D.S. BROWN TYPE SSCM EXTRUSIONS SHOWN.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

DECK JOINT DETAILS, CELLULAR ABUTMENTS

DATE: JUNE 25, 2007 | SCALE: N.T.S.

O.T.I.C. STANDARD DRAWING DJ-1