



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

April 12, 2012

CALL NO. 354
CONTRACT ID NO. 121313
ADDENDUM # 1

Subject: Hardin County, JP02 047 NEW-ROUTE
Letting April 20, 2012

- (1) Revised - Plan Sheet - R2N
- (2) Added - Plan Sheets - R41I, R41J, R41K, & R41L
- (3) Revised - Table of Contents - Page 2 of 112
- (4) Added - Department of the Army - Pages 38(a)-38(r) of 112
- (5) Revised - Bid Items - Pages 103-112 of 112

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

Plan revisions are available at <http://www.lynnimaging.com/kytransportation/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith
Director
Division of Construction Procurement

RG:ks
Enclosures



An Equal Opportunity Employer M/F/D

GENERAL SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
HARDIN	04-8103.40	R2N

△ REVISED 4-10-10

NOTES:

- ⑪ FOR 42' X 12' 3-SIDED ARCH CULVERT AT STA. 826+00. (SEE SHEETS R411 - R414 FOR DETAILS)
- ⑫ 50% OF TOTAL LIN. FEET OF ALL INSTALLED PIPES, REGARDLESS OF MATERIAL TYPE (SEE SUPPLEMENTAL SPECIFICATIONS)
- ⑬ INCLUDES PROVIDING, PLACING, REMOVING AND REPOSITIONING PLATES, FENCES AND ANY OTHER MISCELLANEOUS ITEMS AT ALL LOCATIONS NOTED ON PLANS. (SEE SHEET R11A FOR DETAILS)
- ⑭ CAP WATER WELL. APPROXIMATE STA. 812+40, 100'+/- RIGHT

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

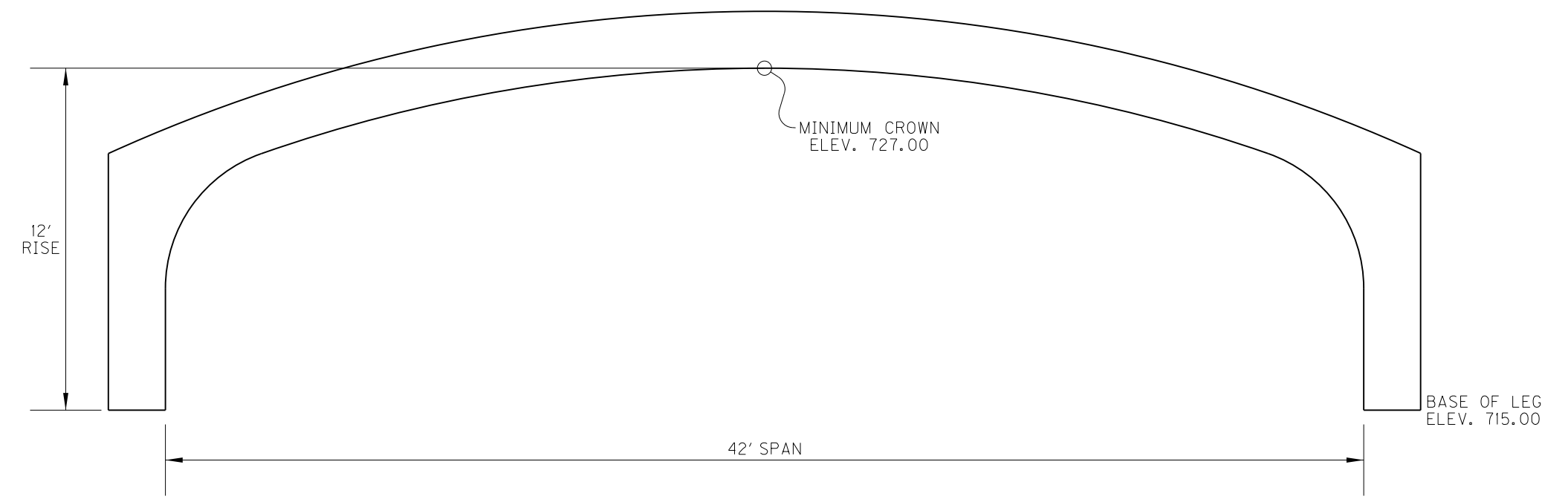
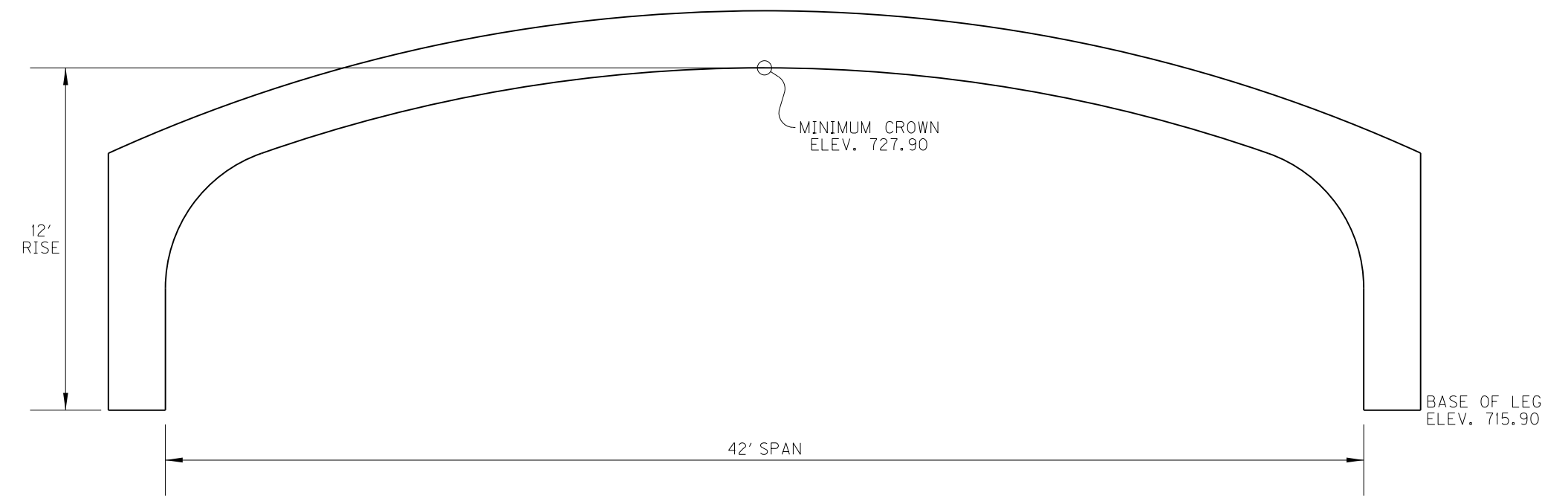
ITEM	DESCRIPTION	UNIT	E2RC MAINLINE	DECKARD SCHOOL ROAD	KY 313	ENTR. STA. 783+33															PROJECT TOTALS	
5989	SPECIAL SEEDING CROWN VETCH	SQ YD	7,635	885	4,495																	13,015
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LIN FT		7,923	45,900																	53,823
6514	PAVE STRIPING - PERM PAINT - 4 IN	LIN FT	56,324	6,765	36,539																	99,628
6567	PAVE MARKING - THERMO STOP BAR - 12 IN	LIN FT		52	48																	100
6568	PAVE MARKING - THERMO STOP BAR - 24 IN	LIN FT	48		135																	183
6573	PAVE MARKING - THERMO STR ARROW	EACH	3		4																	7
6574	PAVE MARKING - THERMO CURV ARROW	EACH	16	2	19																	37
6575	PAVE MARKING - THERMO COMB ARROW	EACH	3																			3
6598	PAVEMENT MARKING REMOVAL	SQ FT																				1,000
8002	STRUCTURE EXCAV - SOLID ROCK	CU YD	840																			840
8003	FOUNDATION PREPARATION	LP SUM	1																			1
21804EN	3 - SIDED CULVERT	LIN FT	164																			164
23131ER70I	PIPELINE VIDEO INSPECTION	LIN FT	1,379	89	519	19																2,006
23274ENIIF	TURF REINFORCEMENT MAT TYPE 1	SQ YD	8,683	1,954	3,233	306																14,176
2379IEC	PAVEMENT STRIPING - CHEVRON MARKINGS	SQ FT	283		2,998																	3,281
23964EC	PROTECTIVE FENCING	LIN FT	500																			500
△ 171I	FILL AND CAP WELL	EACH	1																			1

FOR PAVING QUANTITIES - SEE PAVING SUMMARY SHEET

FOR DRAINAGE QUANTITIES - SEE DRAINAGE SUMMARY SHEETS

USER: CPADGETT
 DATE: 4/10/2012
 FILE NAME: R0020NSU.dgn
 E-SHEET NAME:

PREPARED BY _____ DATE _____
 CHECKED BY _____ DATE _____
 APPROVED BY _____ DATE _____

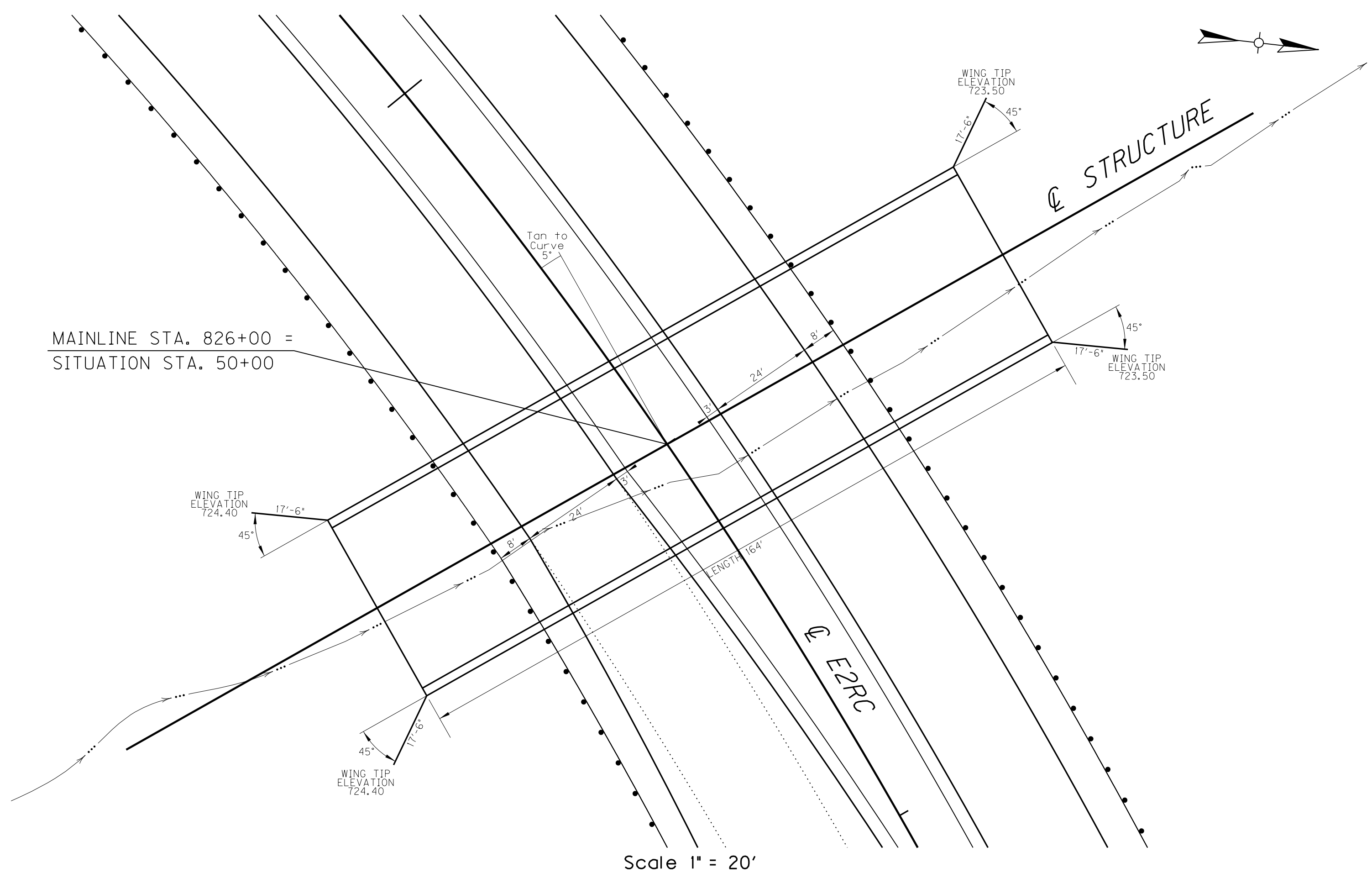


SHOWN IN THIS DRAWING IS:
 CONSPAN "MODIFIED LONG SPAN SERIES" 42' SPAN x 12' RISE, LISTED WATERWAY AREA 418 SQ. FT.

OTHER ACCEPTABLE ALTERNATES AS SHOWN IN THE "APPROVED LIST FOR 3-SIDED CULVERTS":
 BEBO "E-SERIES - E42" 41' 11-7/8" SPAN x 13' 2" RISE, LISTED WATERWAY AREA 431.2 SQ. FT.
 ECOSPAN ARCH SYSTEMS "ARCH-BOX (AB) SERIES" 42' SPAN x 12' RISE, LISTED WATERWAY AREA 439 SQ. FT.

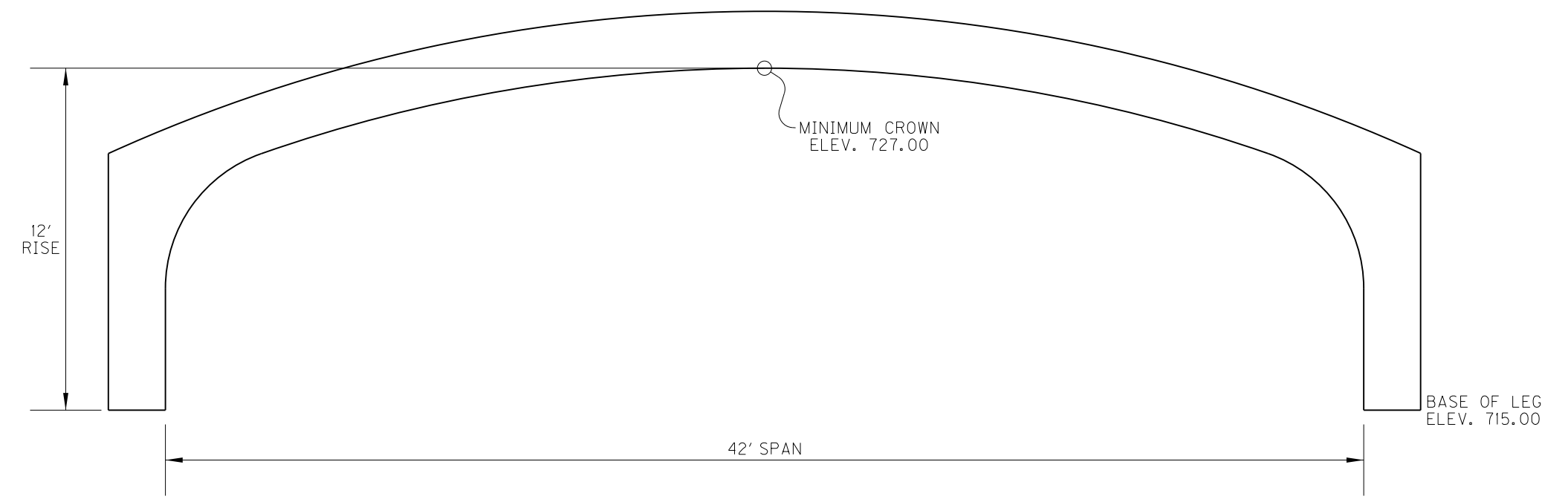
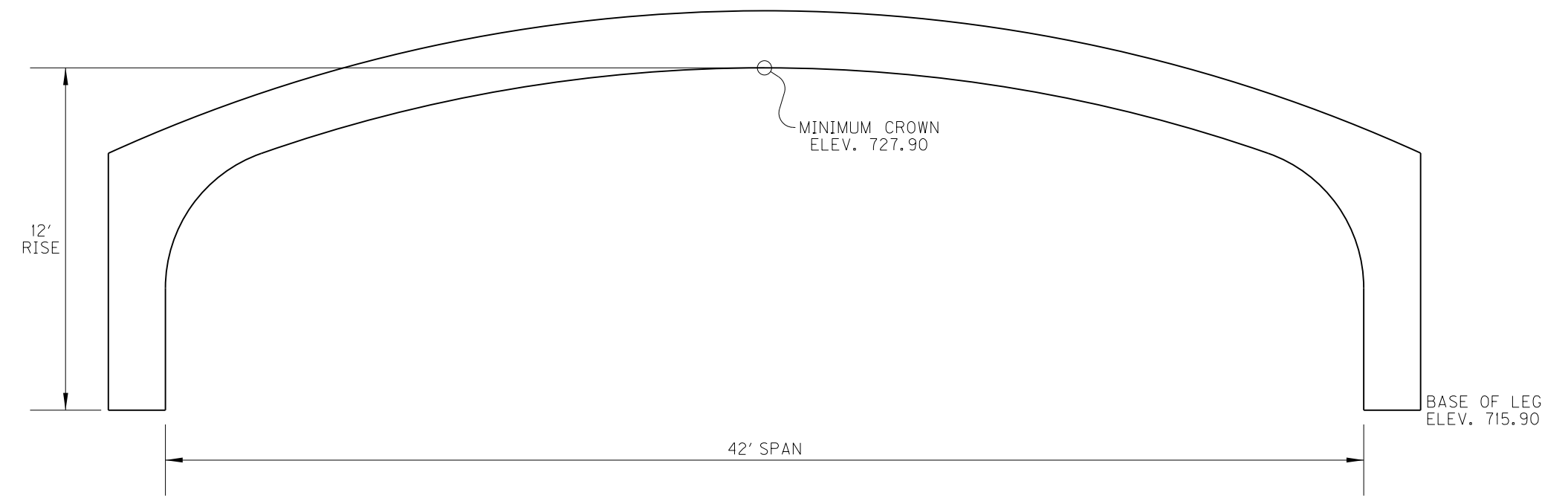
GENERAL NOTES

- DIMENSIONS AND ELEVATIONS SHOWN ARE APPROXIMATE AND INTENDED TO CONVEY ENOUGH INFORMATION TO DEVELOP DETAIL STRUCTURAL DRAWINGS AND BIDDING DOCUMENTS. IF THE CONTRACTOR DESIRES TO MODIFY THIS LAYOUT, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
- IF A LISTED ALTERNATE IS USED, CROWN ELEVATIONS MUST BE EQUAL TO OR GREATER THAN THE MINIMUM CROWN ELEVATION SHOWN HERE. IF MODIFICATIONS TO THE LAYOUT DUE TO THE SELECTION OF AN ALTERNATE STRUCTURE ARE REQUIRED, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
- ALL WORK TO CONSTRUCT THE 3-SIDED CULVERT IS PAID FOR UNDER THE BID ITEMS 3-SIDED CULVERT, FOUNDATION PREPARATION AND STRUCTURE EXCAV - SOLID ROCK. 3- SIDED CULVERT IS A LINEAR FOOT ITEM THAT COVERS ALL WORK TO CONSTRUCT THE CULVERT THAT IS NOT COVERED UNDER FOUNDATION PREPARATION AND STRUCTURE EXCAV - SOLID ROCK. THIS INCLUDES LABOR AND MATERIAL TO CONSTRUCT FOUNDATIONS, CULVERT SECTIONS, WING WALLS, PARAPET WALLS (ALSO REFERENCED TO AS HEADWALLS), JOINT SEALING AND STRUCTURE DRAINAGE APPURTENANCES. ANY FOOTING DESIGN, MATERIALS AND LABOR SHALL BE CONSIDERED INCIDENTAL. AS PER SECTION 603 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STRUCTURE EXCAVATION - SOLID ROCK WILL BE MEASURED AND PAID FOR AS NEEDED. GUARDRAIL WILL ALSO BE MEASURED AND PAID FOR SEPARATELY.
- ALL COMPONENTS MUST BE DESIGNED TO MEET STRUCTURAL REQUIREMENTS AS SET FORTH FOR EARTH, DEAD AND HL-93 LIVE LOAD IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, WITH INTERIMS. ALL DESIGNS SUBMITTED FOR CONSIDERATION MUST BE PERFORMED AND STAMPED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF KENTUCKY.
- ALL FOUNDATION DESIGNS MUST BE IN ACCORDANCE WITH THE APPROPRIATE PROJECT GEOTECHNICAL INVESTIGATION.
- ALL MATERIALS USED MUST BE IN ACCORDANCE WITH THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE KYTC LIST OF APPROVED MATERIALS AND ALL APPLICABLE ASTM AND AASHTO STANDARDS.
- ALL PRECAST COMPONENTS SHALL BE MANUFACTURED BY A FABRICATOR APPROVED BY KYTC AND BE IN STRICT COMPLIANCE WITH SECTION 605 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- COMPLY WITH SECTION 106.04 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- IN ACCORDANCE WITH SECTION 611 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WEEP HOLES WILL BE REQUIRED FOR THESE STRUCTURES.
- 3-SIDED STRUCTURES THAT REQUIRE SPECIAL BACKFILL CONTRARY TO THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WILL REQUIRE A CERTIFICATION LETTER STATING THAT THE BACKFILL WAS CONSTRUCTED PROPERLY. THE LETTER WILL BE SIGNED BY THE CONTRACTOR AND THE MANUFACTURER OF THE 3-SIDED STRUCTURE AND WILL BE SUBMITTED TO THE RESIDENT ENGINEER.
- THE MANUFACTURER OR SUPPLIER MUST PROVIDE SIX COPIES OF DETAILED SHOP DRAWINGS FOR FINAL APPROVAL FOR USE ON THIS PROJECT. BACKFILL REQUIREMENTS AND ANY SPECIFICATIONS THAT ARE CONTRARY TO THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHOULD BE SUPPLIED AS WELL. INCLUDE ONE SET OF STRUCTURAL DESIGN CALCULATIONS FOR REVIEW AND ARCHIVAL PURPOSES. THIS INFORMATION WILL BE SUBMITTED TO THE DIVISION OF CONSTRUCTION. ALLOW 4 WEEKS FOR REVIEW OF THIS MATERIAL.



USER: CPADGETT
 DATE: 4/10/2012
 FILE NAME: R04101DS.dgn
 E-SHEET NAME:

PREPARED BY _____ DATE _____
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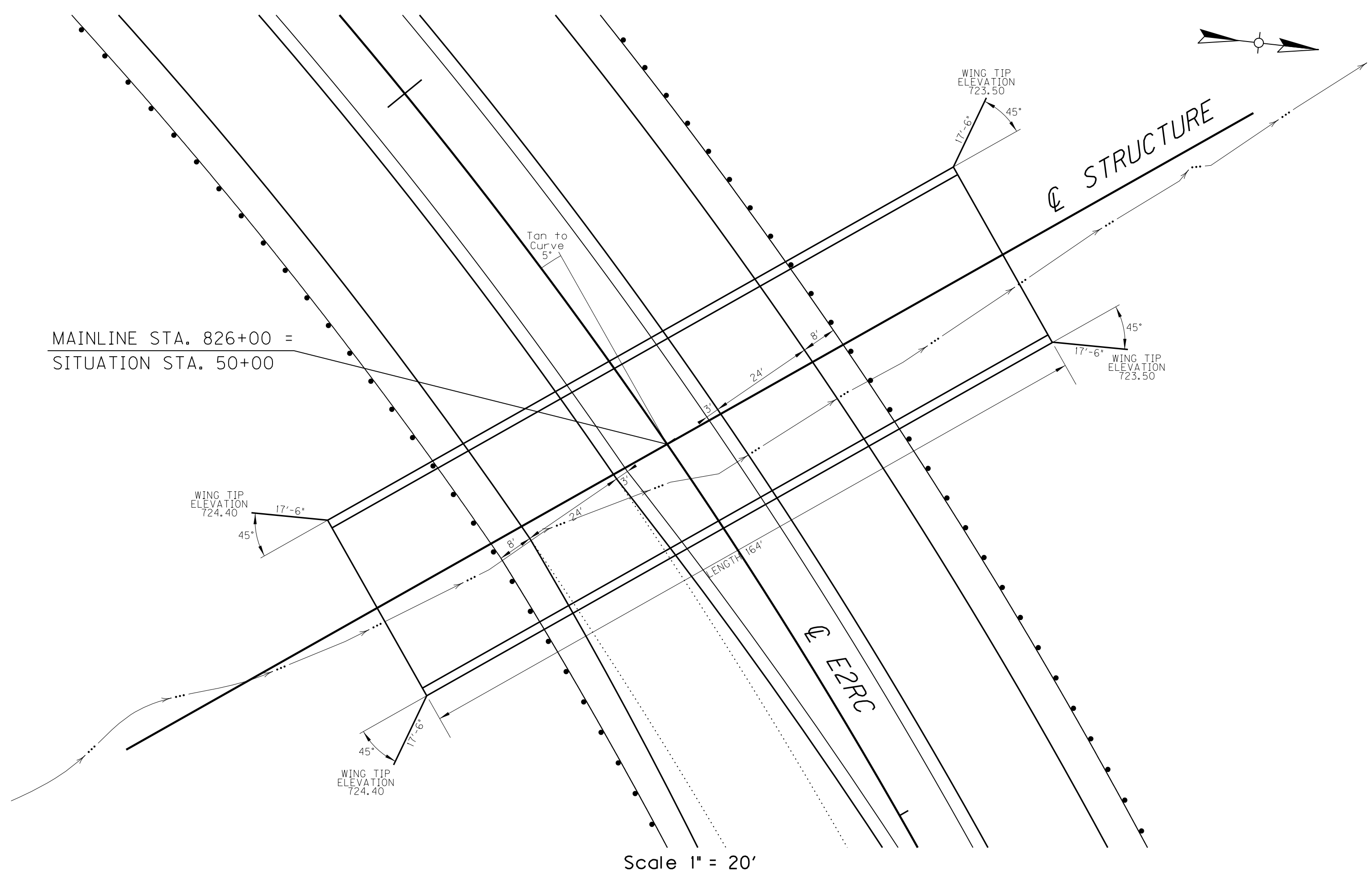


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 FILE NAME: R04101DS.dgn
 E-SHEET NAME:

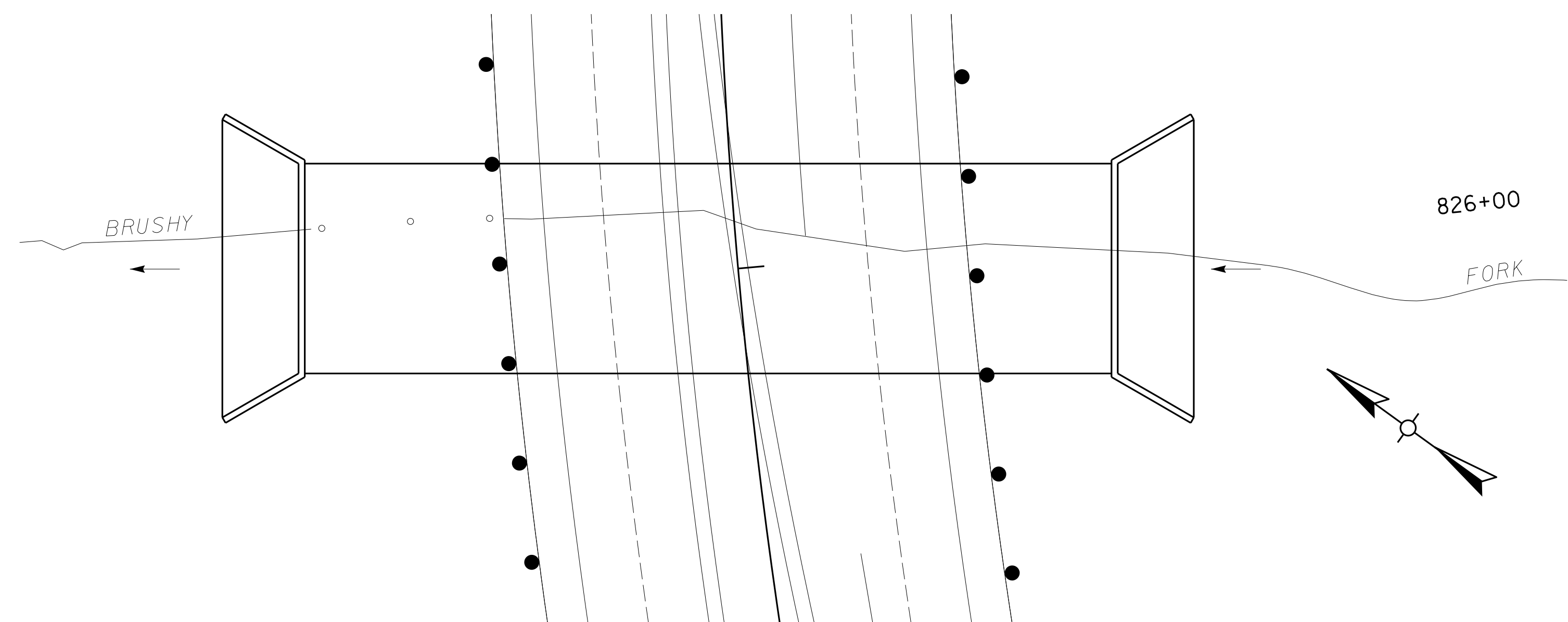
PRE-CAST ARCH STRUCTURE DETAIL

S-070-2010

E to R Connector Station 826+00 - 42' x 12' Pre-Cast Arch Culvert: non-yielding foundation

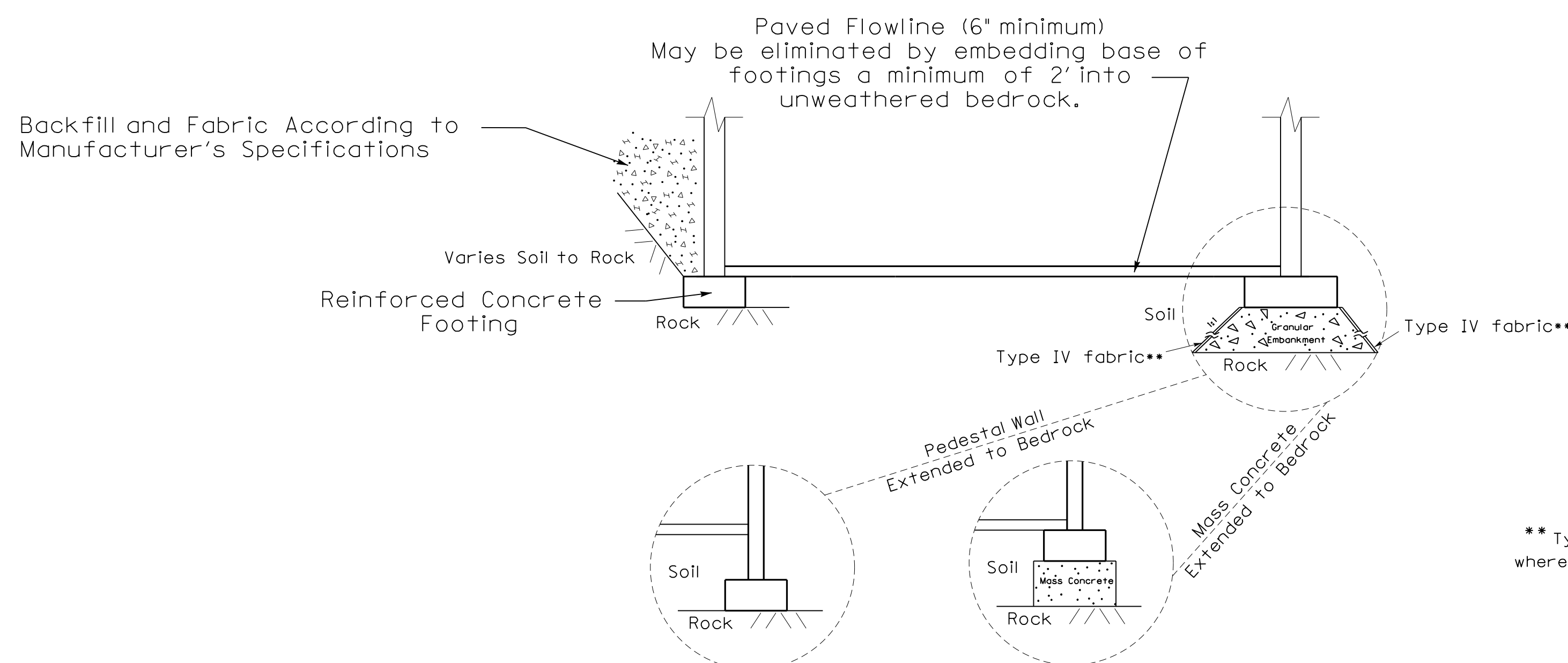
- 1a. **Alternate 1: Paved Flowline:**
Utilize a paved flow line with a 6 inch minimum thickness. Extend the paved flow line to include the inlet and outlet portions of the culvert. At the culvert inlet and outlet construct an apron from the outside edges of the culvert wingwalls that extends to sound bedrock or to a minimum depth of 4 feet.
- 1b. **Alternate 2: Natural/Unpaved Flowline:**
Utilize a natural bottom/unpaved flowline. This alternate requires spread footings bearing directly on bedrock. For wingwalls and along the culvert barrel the spread footing shall be embedded a minimum of 2 feet into competent, unweathered bedrock.
- 2a. **Alternate 1: Spread Footings on or extended by mass concrete to sound bedrock:**
Size the footing at the service limit state using a presumptive factored bearing resistance of 16 ksf. Contact this branch for a more detailed analysis of the nominal bearing resistance if the strength or extreme limit states control the footing design.
- 2b. **Alternate 2: Spread Footings on a combination of sound bedrock and granular replacement material extended to sound bedrock:**
Size the footing at the service limit state using a presumptive factored bearing resistance of 8 ksf. For checking the strength and extreme limit states, the nominal bearing resistance has been determined to be 24 ksf. Use a resistance factor of 0.45 for strength limit state analysis and a resistance factor of 1.0 for extreme limit state analysis.
3. All footing excavations in bedrock shall be cut neatly so that no forming or backfilling is necessary. Concrete shall be placed directly against the cut rock faces. The footing steel and concrete should be placed the same day as the footing excavation is made. Portions of the bedrock may degrade and become soft with exposure to the elements. If the bedrock becomes softened at bearing elevation, the softened material should be undercut to unweathered material prior to placing the concrete. Seasonal groundwater fluctuations may cause groundwater infiltration into the footing excavations and a dewatering method may be necessary.
4. Backfill the pre-cast structure and accompanying wingwalls according to the manufacturer's specification.

5. Granular replacement material shall consist of "Granular Embankment," non-erodible only, meeting the material requirements of Section 805 of the Standard Specifications for Road and Bridge Construction, current edition. Contrary to the Standard Specifications, the maximum size limit for "Granular Embankment" is 4 inches. The excavation for the granular replacement shall extend a minimum width beyond the edges of the footings equal to the replacement depth. The granular replacement shall be placed on a 1H:1V slope or flatter from the base of the footing to the bottom of the excavation. Place a Geotextile Fabric Type IV as a separator between the soil and the granular replacement. The Geotextile Fabric shall be in accordance with Section 214 & 843 of the Standard Specifications for Road and Bridge Construction, current edition.
6. Solid rock excavation will be required to reach required footing elevations and to construct the culvert barrel.
7. Temporary sheeting, shoring, cofferdams, and/or a dewatering method may be required for the installation of the culvert and footings.

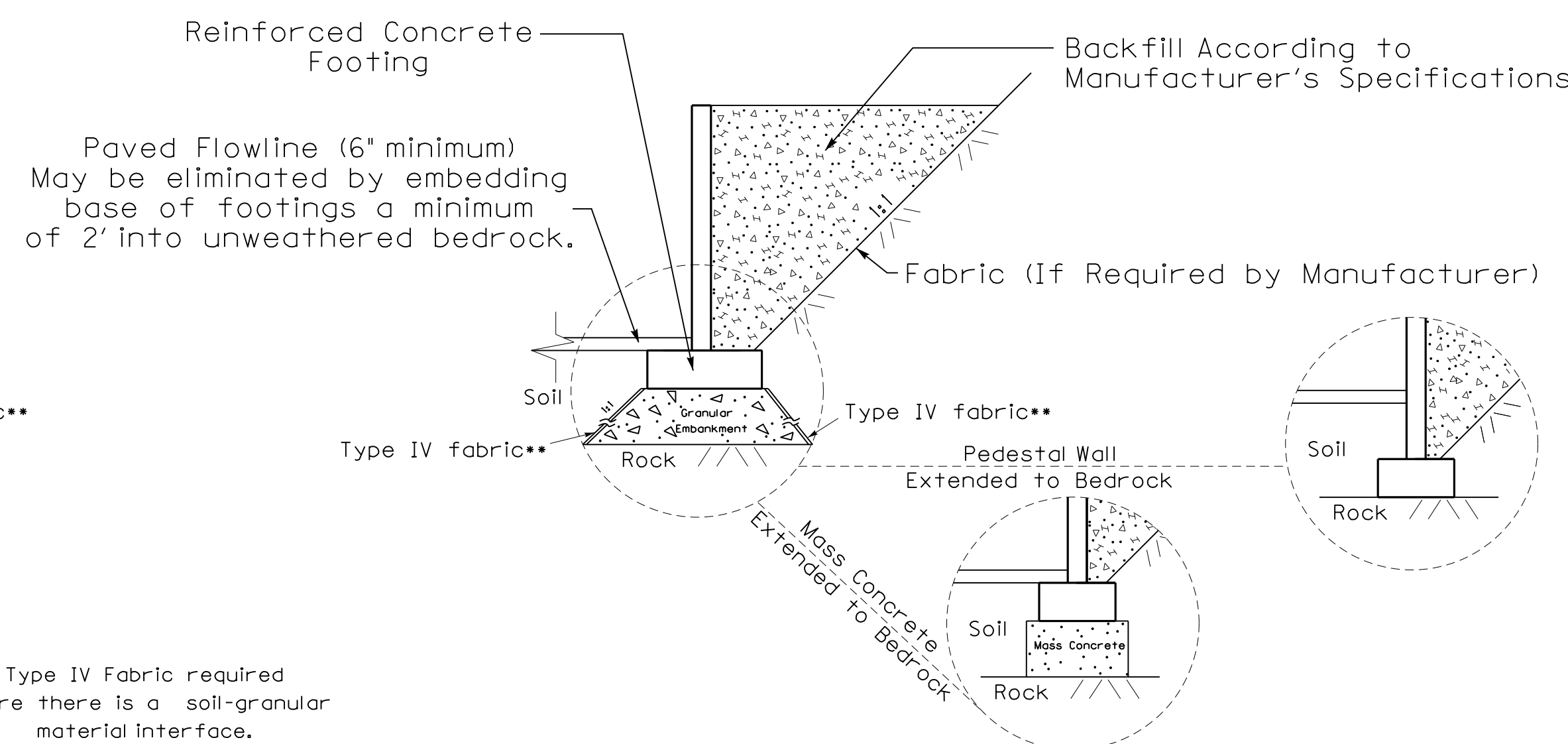


STRIP FOOTINGS ON BEDROCK OR GRANULAR REPLACEMENT TO BEDROCK

CULVERT BARREL SECTION



WING WALL FOOTING



** Type IV Fabric required where there is a soil-granular material interface.

DATE: 16-DEC-2011	CHECKED BY:
DESIGNED BY:	
DETAILED BY: E. BAILEY	M. CARPENTER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
HARDIN

ROUTE ELIZABETHTOWN BY-PASS	CROSSING 42' x 12' RCBC	Sta. 826+00.00
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SUBSURFACE DATA

PREPARED BY
Division of Structural Design
GEOTECHNICAL BRANCH

SHEET NO.
R41J
DRAWING NO.
00000

S-070-10

ITEM NUMBER

4-8103.40

SHEET 1 OF 1

SHEET LOCATION:

FILE NAME: R0410JDS.dgn

USER NAME: CPADGETT

DATE: 4/10/2012

E-SHEET NAME:

PRE-CAST ARCH STRUCTURE DETAIL

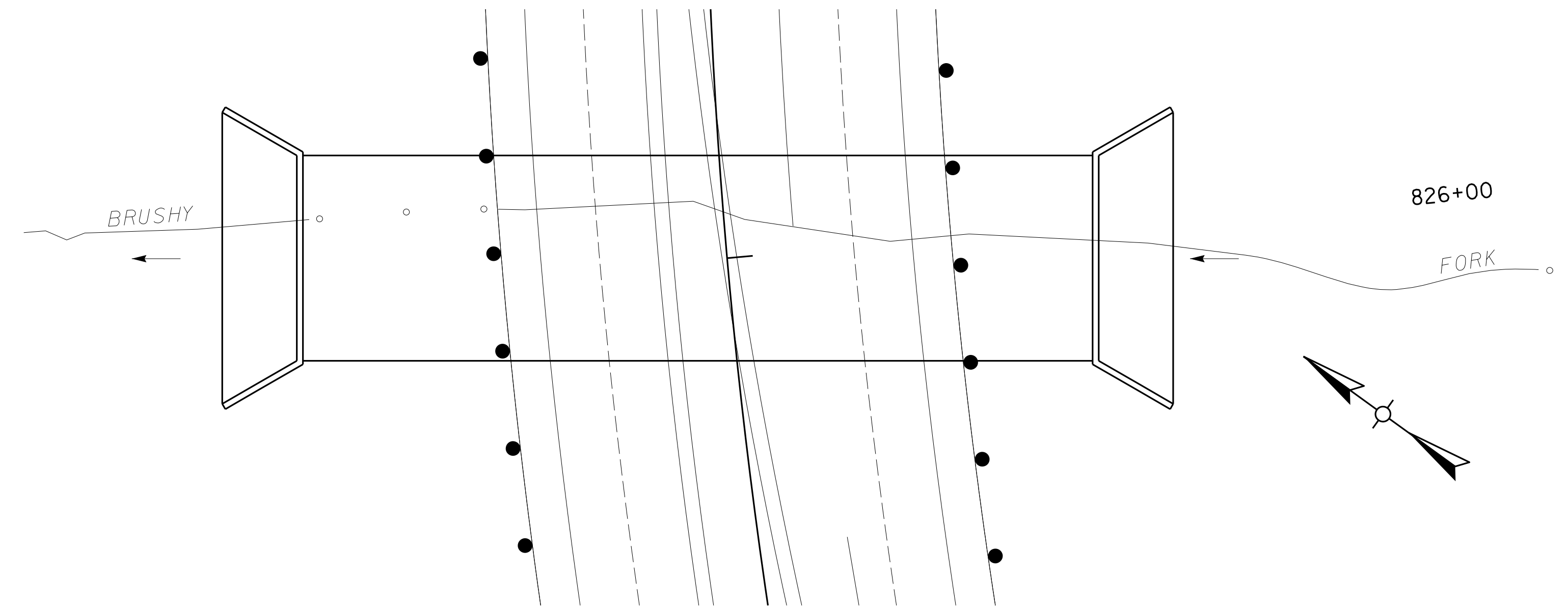
REVISED 4-10-12

S-070-2010

E to R Connector Station 826+00 - 42' x 12' Pre-Cast Arch Culvert: non-yielding foundation

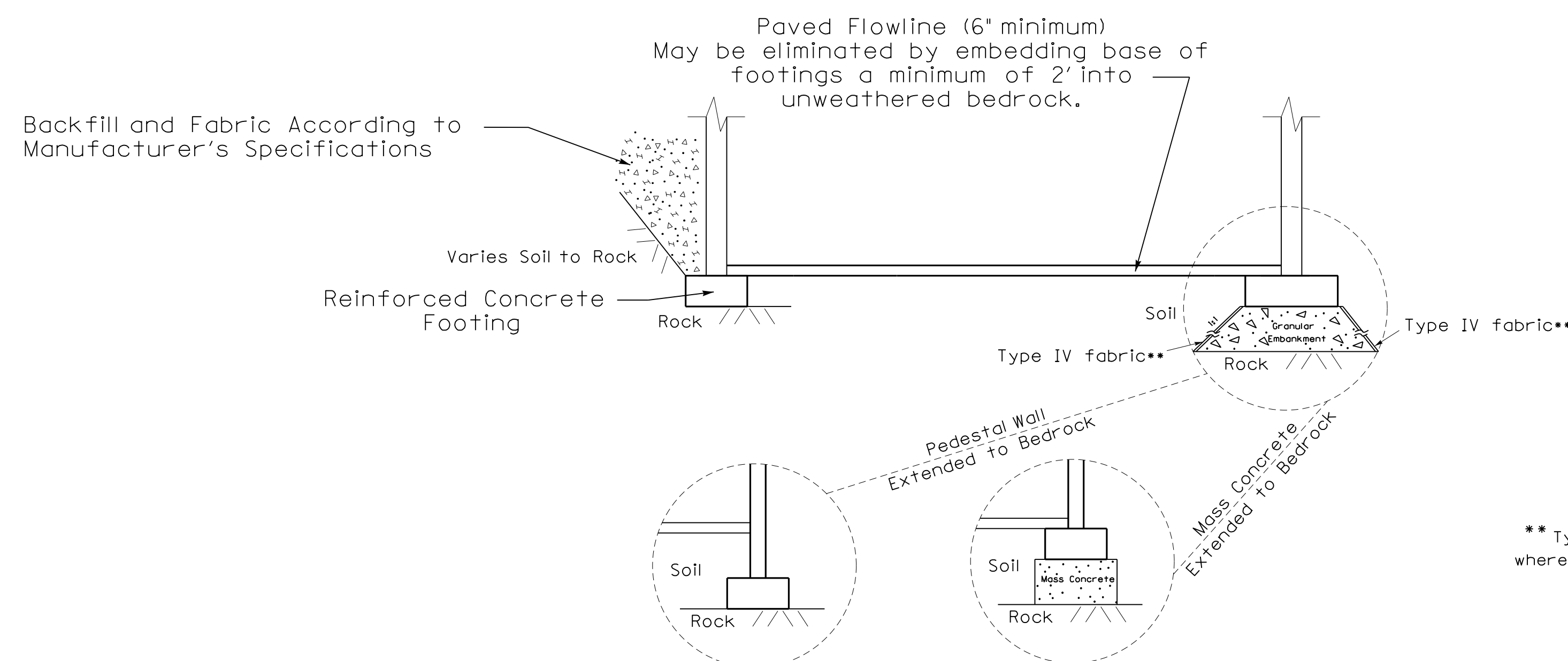
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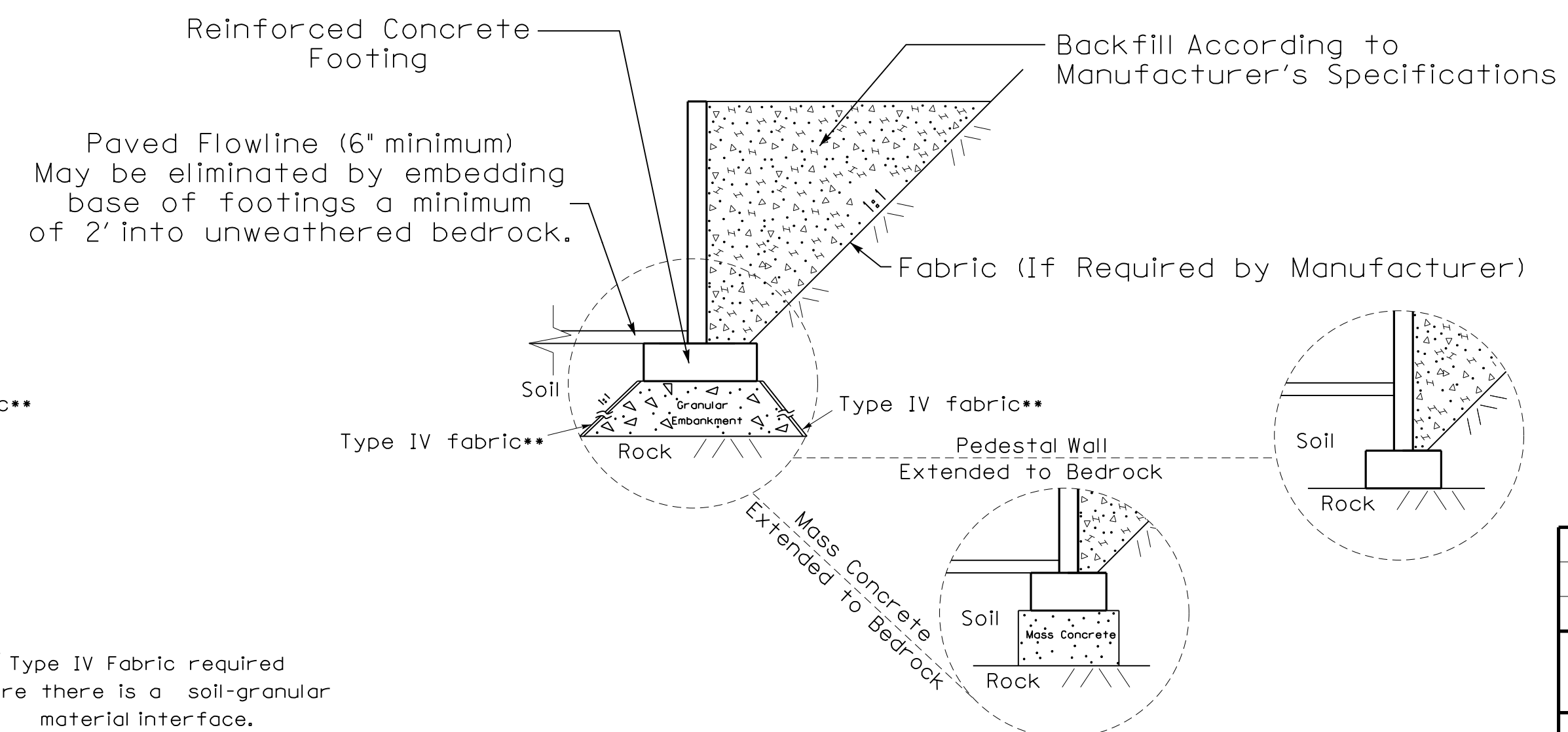


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ROUTE ELIZABETHTOWN BY-PASS	CROSSING 42' x 12' RCBC	Sta. 826+00.00
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SUBSURFACE DATA

PREPARED BY
Division of Structural Design
GEOTECHNICAL BRANCH

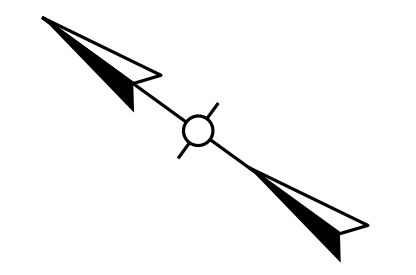
SHEET NO.
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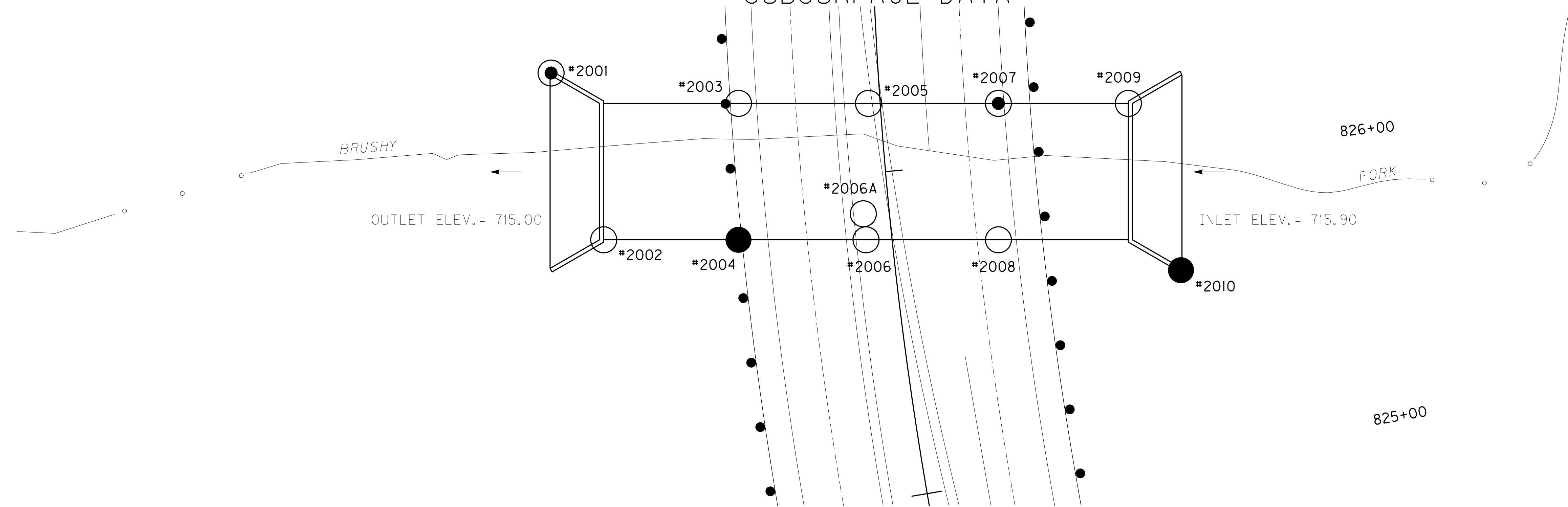
ITEM NUMBER

4-8103.40

SHEET 1 OF 1



SUBSURFACE DATA



Profile Scale:
Vertical 1" = 10'
Horizontal not to scale

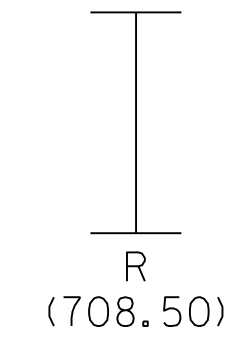
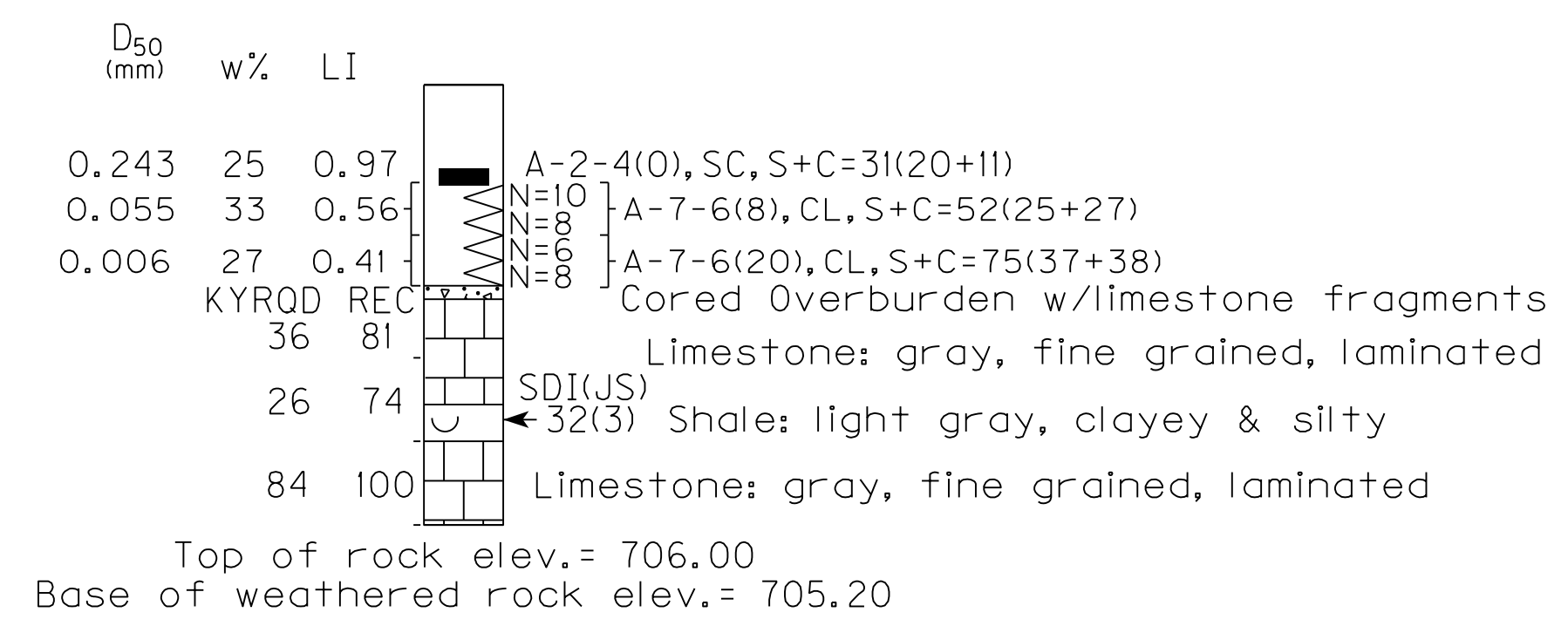
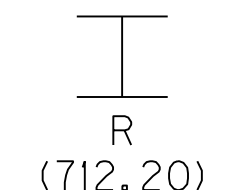
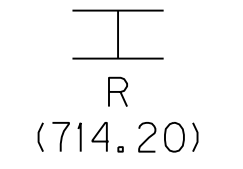
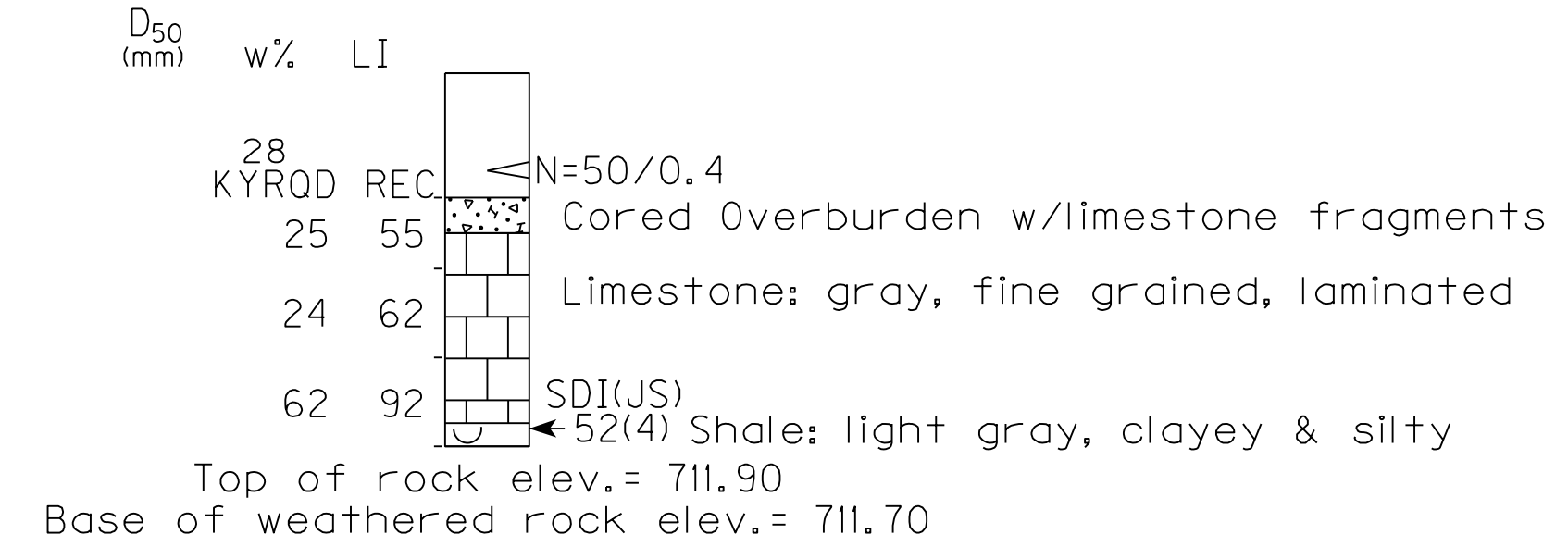
Hole No. 2001
Station 826+36.19
Offset 100.50 ft. Lt.
Elev. 720.90
(NAVD 88 datum)

2003
826+24.00
43.50 ft. Lt.
716.70
ROD SOUNDING

2005
826+21.32
3.60 ft. Lt.
716.40

2007
826+18.45
36.30 ft. Rt.
718.80

2009
826+15.38
76.20 ft. Rt.
720.00



SHEET LOCATION:
 FILE NAME: R0410KDS.dgn
 USERNAME: CPADGETT
 DATE: 4/10/2012
 E-SHEET NAME:



The Presumptive Factored Bearing Resistance at the Service Limit State is
16 ksf for Spread Footings on Competent Unweathered Bedrock

DATE: 04-NOVEMBER-2011	CHECKED BY:
DESIGNED BY:	
DETAILED BY: E. BAILEY	M. CARPENTER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

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ROUTE ELIZABETHTOWN RADCLIFF CON. CROSSING **42' x 12' Arch Culvert** Sta. **826+00**

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PREPARED BY
Division of Structural Design
GEOTECHNICAL BRANCH

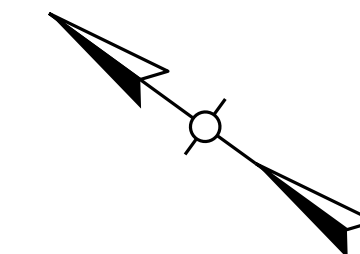
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ITEM NUMBER
4-8103.40

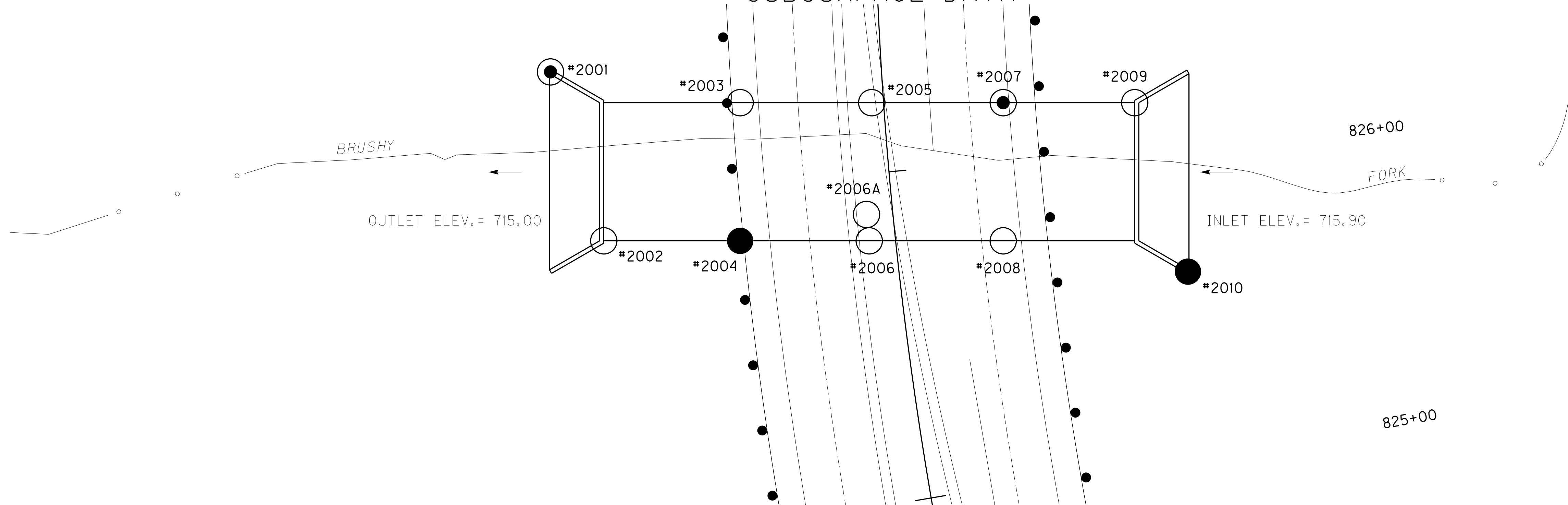
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REVISD 4-10-12

Plan Scale 1" = 20'



SHEET LOCATION:



Profile Scale:
Vertical 1" = 10'
Horizontal not to scale

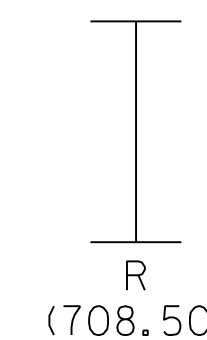
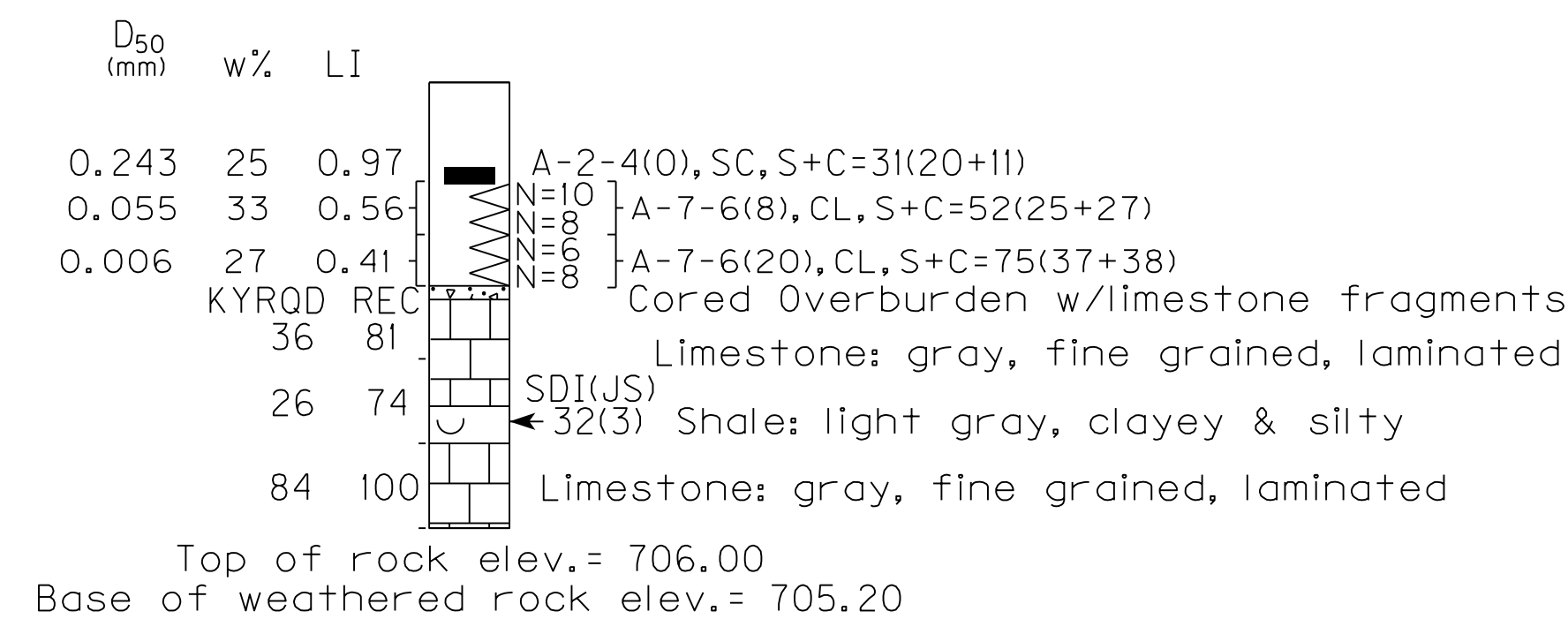
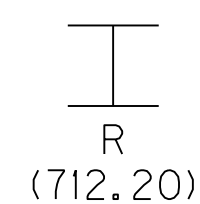
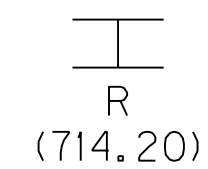
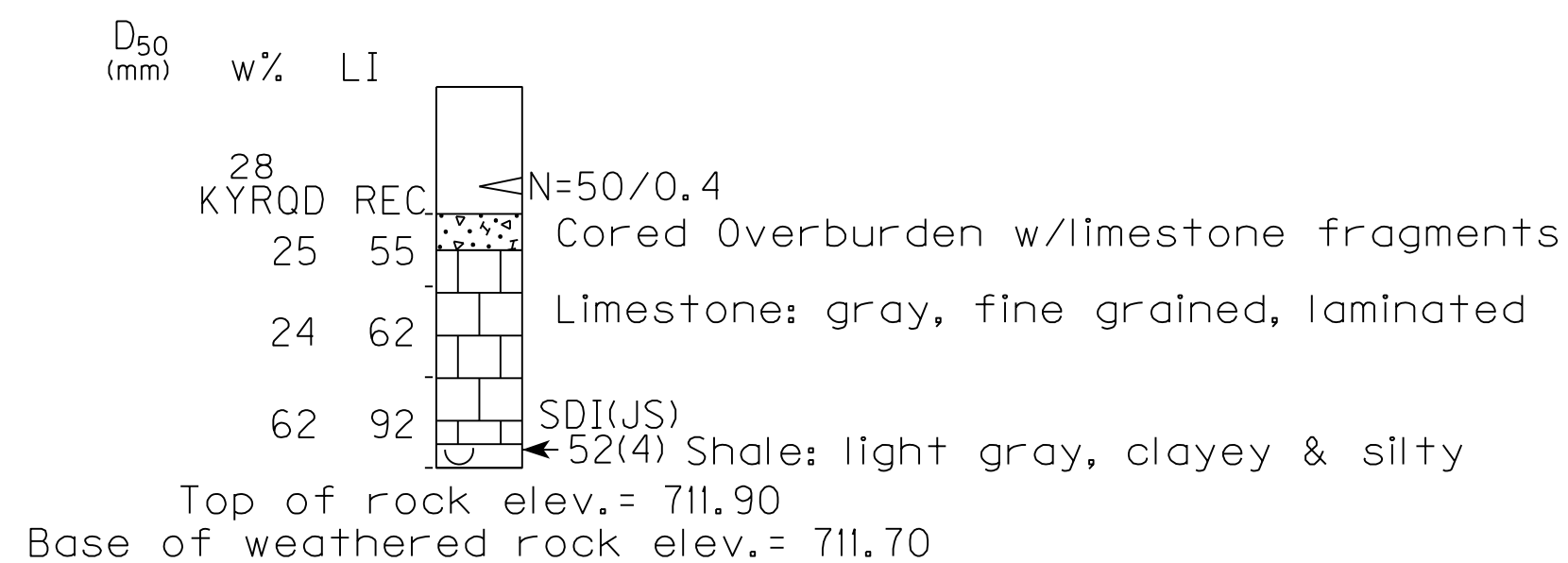
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Station 826+36.19
Offset 100.50 ft. Lt.
Elev. 720.90
(NAVD 88 datum)

2003
826+24.00
43.50 ft. Lt.
716.70
ROD SOUNDING

2005
826+21.32
3.60 ft. Lt.
716.40

2007
826+18.45
36.30 ft. Rt.
718.80

2009
826+15.38
76.20 ft. Rt.
720.00



FILE NAME: R0410KDS.dgn

USERNAME: CPADGETT

DATE: 4/10/2012

E-SHEET NAME:

The Presumptive Factored Bearing Resistance at the Service Limit State is
16 ksf for Spread Footings on Competent Unweathered Bedrock

DATE: 04-NOVEMBER-2011	CHECKED BY:
DESIGNED BY:	
DETAILED BY: E. BAILEY	M. CARPENTER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
HARDIN

ROUTE ELIZABETHTOWN RADCLIFF CON.	CROSSING 42' x 12' Arch Culvert	Sta. 826+00
---	---	--------------------

S-070-10

SUBSURFACE DATA

ITEM NUMBER

PREPARED BY
Division of Structural Design

SHEET NO.

R41K

4-8103.40

GEOTECHNICAL BRANCH

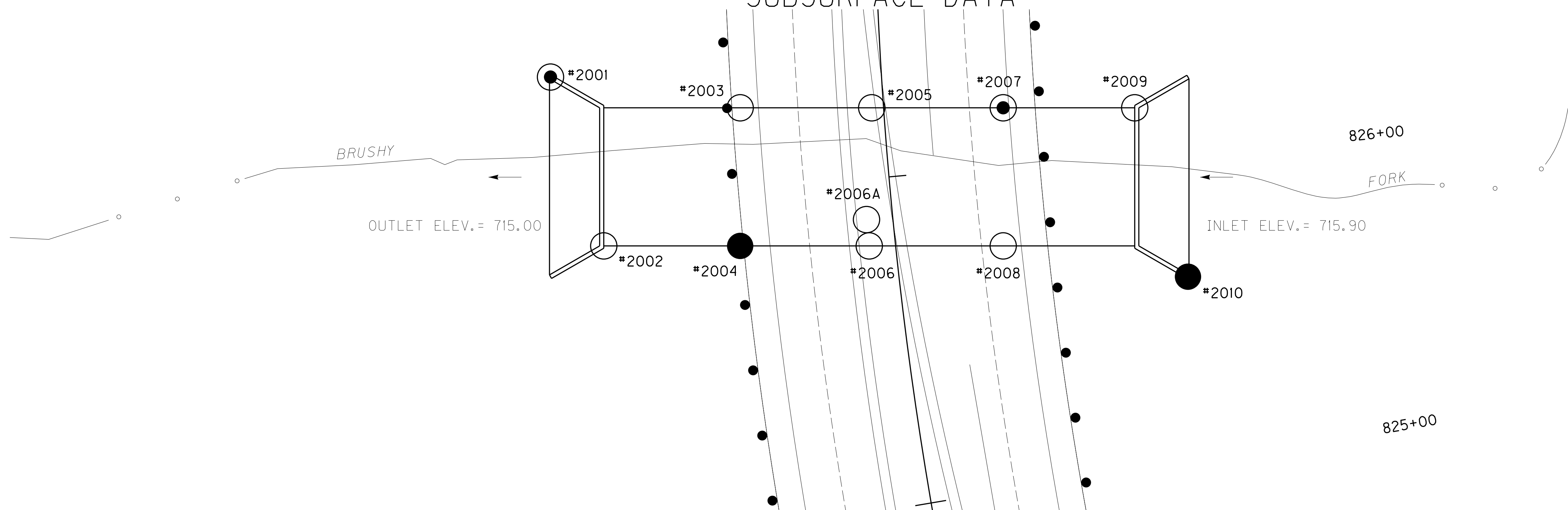
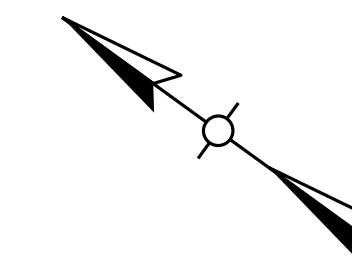
DRAWING NO.

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SHEET 1 OF 2

SUBSURFACE DATA

Plan Scale 1" = 20'



Profile Scale:
Vertical 1" = 10'
Horizontal not to scale

Hole No.
Station
Offset
Elev.
(NAVD 88 datum)

2002
825+87.55
88.30 ft. Lt.
725.90

2004
825+83.66
47.00 ft. Lt.
725.70

2006
825+79.74
8.00 ft. Lt.
725.10

2006A
825+87.74
8.00 ft. Lt.
724.00

2008
825+75.38
32.50 ft. Rt.
725.40

2010
825+58.86
87.30 ft. Rt.
727.30

R
(724.40)

KYRQD REC.	69	81	Overburden
	64	100	Limestone: light gray, fine grained, pitted surfaces
	100	100	Void: clay filled
			Shale: brown, clayey & silty, weathered
			Limestone: gray, fine grained
			Shale: grayish brown, silty, calcareous
			Limestone: gray, fine grained, shale laminations

Top of rock elev. = 723.30
No weathered rock

R
(721.20)

R
(719.60)

R
(721.40)

KYRQD REC.	0	75	Overburden
	78	100	Cored Overburden w/limestone fragments
			SDI(JS) Shale: brown, clayey & silty, weathered
			52(4) Limestone: gray & dark gray, fine grained, shale partings

Top of rock elev. = 721.70
No weathered rock

SHEET LOCATION:

FILE NAME: R0410LDS.dgn

USER NAME: CPADGETT

DATE: 4/10/2012

E-SHEET NAME:

The Presumptive Factored Bearing Resistance at the Service Limit State is
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DATE: 04-NOVEMBER-2011	CHECKED BY:
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DETAILED BY: E. BAILEY	M. CARPENTER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
HARDIN

ROUTE ELIZABETHTOWN RADCLIFF CON.	CROSSING 42' x 12' Arch Culvert	Sta. 826+00
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S-070-10

SUBSURFACE DATA

ITEM NUMBER

PREPARED BY
Division of Structural Design

SHEET NO.
R41L

4-8103.40

GEOTECHNICAL BRANCH

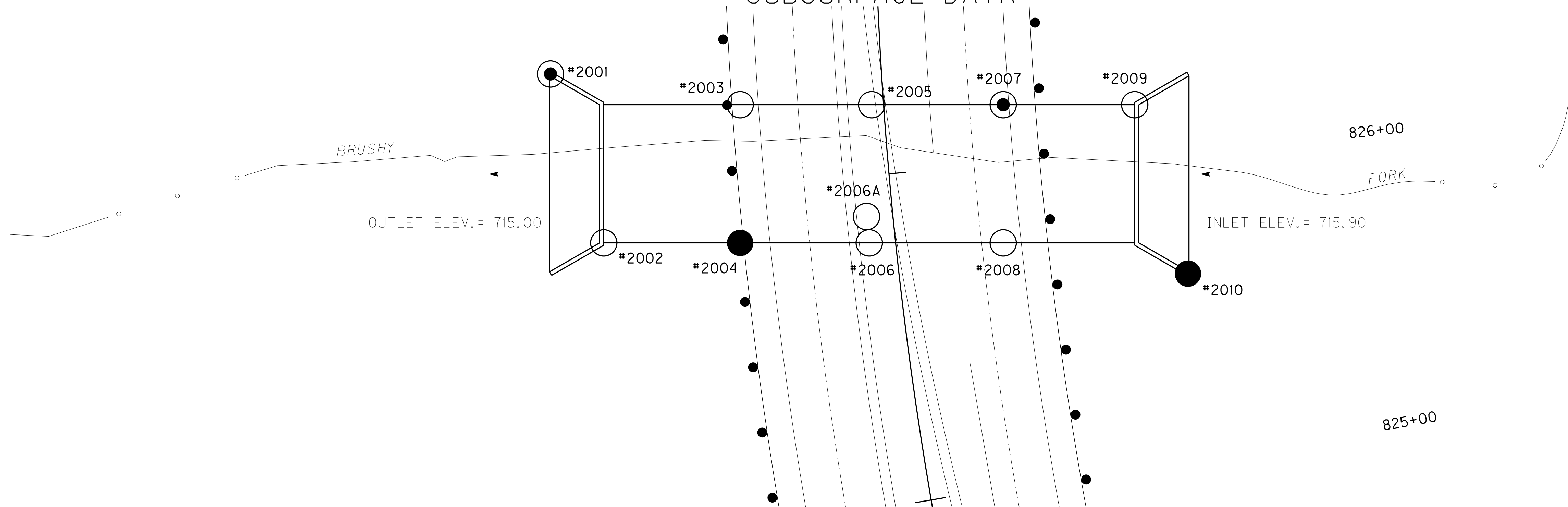
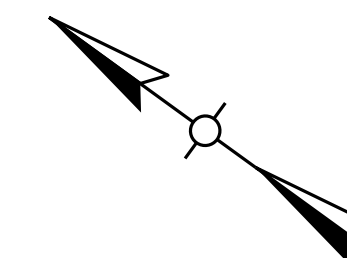
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SHEET 2 OF 2

SUBSURFACE DATA

REVISD 4-10-12

Plan Scale 1" = 20'



Profile Scale:
Vertical 1" = 10'
Horizontal not to scale

Hole No.
Station
Offset
Elev.
(NAVD 88 datum)

2002
825+87.55
88.30 ft. Lt.
725.90

2004
825+83.66
47.00 ft. Lt.
725.70

2006
825+79.74
8.00 ft. Lt.
725.10

2006A
825+87.74
8.00 ft. Lt.
724.00

2008
825+75.38
32.50 ft. Rt.
725.40

2010
825+58.86
87.30 ft. Rt.
727.30

FILE NAME: R0410LDS.dgn

USER NAME: CPADGETT

DATE: 4/10/2012

E-SHEET NAME:

R
(724.40)

KYRQD	REC	DESCRIPTION
		Overburden
69	81	Limestone: light gray, fine grained, pitted surfaces
		Void: clay filled
64	100	Shale: brown, clayey & silty, weathered
		Limestone: gray, fine grained
100	100	Shale: grayish brown, silty, calcareous
		Limestone: gray, fine grained, shale laminations

Top of rock elev.= 723.30
No weathered rock

R
(721.20)

R
(719.60)

R
(721.40)

KYRQD	REC	DESCRIPTION
		Overburden
0	75	Cored Overburden w/limestone fragments
78	100	SDI(JS) Shale: brown, clayey & silty, weathered
		← 52(4) Limestone: gray & dark gray, fine grained, shale partings

Top of rock elev.= 721.70
No weathered rock

Datum

The Presumptive Factored Bearing Resistance at the Service Limit State is
16 ksf for Spread Footings on Competent Unweathered Bedrock

DATE: 04-NOVEMBER-2011	CHECKED BY:
DESIGNED BY:	
DETAILED BY: E. BAILEY	M. CARPENTER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
HARDIN

ROUTE ELIZABETHTOWN RADCLIFF CON.	CROSSING 42' x 12' Arch Culvert	Sta. 826 + 00
---	---	----------------------

S-070-10

SUBSURFACE DATA

ITEM NUMBER

PREPARED BY
Division of Structural Design

SHEET NO.

R41L

4-8103.40

GEOTECHNICAL BRANCH

DRAWING NO.

00000

SHEET 2 OF 2

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PART II	SPECIFICATIONS AND STANDARD DRAWINGS
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PART IV	INSURANCE
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N O T I C E

**DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NATIONWIDE PERMIT AUTHORIZATION
Kentucky Division of Water 401 WQC**

PROJECT: Hardin County, Item No. 4-8103.4

The Section 404 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Crossings" as the project impacts are **BELOW NOTIFICATION THRESHOLDS**. Specifically all stream impacts are below 300', less than 0.10 acres and no special aquatic sites will be impacted. Impacts include:

Station 715+00
See Sheet R3/R5

Construct 179 feet of 54" elliptical pipe culvert under the road. The inlet and outlet areas of the culvert will have a total of 25 feet Class II channel lining. A total of **204 feet** of an ephemeral stream (UT to Otter Creek) will be impacted by culvert fill. This impact measures **0.02 acres**. The drainage area is **43 acres**.

Lat 37.768449 Long -85.934451

Station 826+00
See Sheet R19

Construct a 195 foot approximately 4' in width across Brushy Fork. A total of approximately **195 feet** and **0.02 acres** of perennial stream will be impacted by the structure. The drainage area is **2899 acres**

Lat 37.797273 Long -85.932682

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River

designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must

still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist

of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative

description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWP, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.



STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENTAL PROTECTION CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

200 FAIR OAKS LANE

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General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2012, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
3. The activity will impact less than 1/2 acre of wetland/marsh.
4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.

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5. For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.
6. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
7. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
 - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
 - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
 - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

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- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



US Army Corps of Engineers.

Nationwide Permit No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.

- a. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States.
- b. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.
- c. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Valid from March 19, 2012 through March 18, 2017

CONTRACT ID: 121313
COUNTY: HARDIN
PROPOSAL: JP02 047 NEW-ROUTE

PAGE: 1
LETTING: 04/20/12
CALL NO: 354

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
SECTION 0001 PAVING ALT GROUP AA1 (ALTERNATE 1 - ASPHALT)						
0010	00001	DGA BASE	142,369.000	TON		
0020	00013	LIME STABILIZED ROADBED	110,625.000	SQYD		
0030	00014	LIME	1,945.000	TON		
0040	00018	DRAINAGE BLANKET-TYPE II-ASPH	15,731.000	TON		
0050	00020	TRAFFIC BOUND BASE	1,308.000	TON		
0060	00078	CRUSHED AGGREGATE SIZE NO 2	9,266.000	TON		
0070	00100	ASPHALT SEAL AGGREGATE	520.000	TON		
0080	00190	LEVELING & WEDGING PG64-22	250.000	TON		
0090	00212	CL2 ASPH BASE 1.00D PG64-22	14,044.000	TON		
0100	00214	CL3 ASPH BASE 1.00D PG64-22	52,431.000	TON		
0110	00272	CL2 ASPH BIND 0.50D PG64-22	703.000	TON		
0120	00274	CL3 ASPH BIND 0.50D PG64-22	1,663.000	TON		
0130	00291	EMULSIFIED ASPHALT RS-2	62.000	TON		
0140	00301	CL2 ASPH SURF 0.38D PG64-22	4,627.000	TON		
0150	00358	ASPHALT CURING SEAL	186.000	TON		
0160	02200	ROADWAY EXCAVATION	463,120.000	CUYD		
0170	02599	FABRIC-GEOTEXTILE TYPE IV	24,457.000	SQYD		
0180	02677	ASPHALT PAVE MILLING & TEXTURING	250.000	TON		
0190	02702	SAND FOR BLOTTER	270.000	TON		
0200	10203ND	PAVEMENT ADJUSTMENT (ASPHALT)	(1.00)	LS	548,165.00	548,165.00

CONTRACT ID: 121313
COUNTY: HARDIN
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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0210	22906ES403	CL3 ASPH SURF 0.38A PG64-22	7,915.000	TON		
0220	24276EC	SUBGRADE REINFORCEMENT	11,340.000	SQYD		
SECTION 0002 PAVING ALT GROUP AA2 (ALTERNATE 2 - CONCRETE W/ CONCRETE SHOULDERS)						
0230	00001	DGA BASE	129,706.000	TON		
0240	00013	LIME STABILIZED ROADBED	104,652.000	SQYD		
0250	00014	LIME	1,901.000	TON		
0260	00018	DRAINAGE BLANKET-TYPE II-ASPH	15,265.000	TON		
0270	00020	TRAFFIC BOUND BASE	1,308.000	TON		
0280	00078	CRUSHED AGGREGATE SIZE NO 2	9,266.000	TON		
0290	00100	ASPHALT SEAL AGGREGATE	520.000	TON		
0300	00190	LEVELING & WEDGING PG64-22	250.000	TON		
0310	00212	CL2 ASPH BASE 1.00D PG64-22	8,423.000	TON		
0320	00214	CL3 ASPH BASE 1.00D PG64-22	16,008.000	TON		
0330	00272	CL2 ASPH BIND 0.50D PG64-22	703.000	TON		
0340	00274	CL3 ASPH BIND 0.50D PG64-22	1,663.000	TON		
0350	00291	EMULSIFIED ASPHALT RS-2	62.000	TON		
0360	00301	CL2 ASPH SURF 0.38D PG64-22	2,600.000	TON		
0370	00358	ASPHALT CURING SEAL	182.000	TON		
0380	02073	JPC PAVEMENT-9 IN	73,976.000	SQYD		
0390	02078	JPC PAVEMENT-6 IN SHLD	27,132.000	SQYD		
0400	02200	ROADWAY EXCAVATION	457,892.000	CUYD		

CONTRACT ID: 121313
COUNTY: HARDIN
PROPOSAL: JP02 047 NEW-ROUTE

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0410	02599	FABRIC-GEOTEXTILE TYPE IV	24,457.000	SQYD		
0420	02677	ASPHALT PAVE MILLING & TEXTURING	250.000	TON		
0430	02702	SAND FOR BLOTTER	264.000	TON		
0440	10203ND	PAVEMENT ADJUSTMENT (CONCRETE)	(1.00)	LS	279,280.00	279,280.00
0450	22906ES403	CL3 ASPH SURF 0.38A PG64-22	2,990.000	TON		
0460	24276EC	SUBGRADE REINFORCEMENT	11,340.000	SQYD		
SECTION 0003 PAVING ALT GROUP AA3 (ALTERNATE 3 - CONCRETE W/ ASPHALT SHOULDERS)						
0470	00001	DGA BASE	129,706.000	TON		
0480	00013	LIME STABILIZED ROADBED	104,652.000	SQYD		
0490	00014	LIME	1,877.000	TON		
0500	00018	DRAINAGE BLANKET-TYPE II-ASPH	15,265.000	TON		
0510	00020	TRAFFIC BOUND BASE	1,308.000	TON		
0520	00078	CRUSHED AGGREGATE SIZE NO 2	9,266.000	TON		
0530	00100	ASPHALT SEAL AGGREGATE	520.000	TON		
0540	00190	LEVELING & WEDGING PG64-22	250.000	TON		
0550	00212	CL2 ASPH BASE 1.00D PG64-22	13,902.000	TON		
0560	00214	CL3 ASPH BASE 1.00D PG64-22	16,008.000	TON		
0570	00272	CL2 ASPH BIND 0.50D PG64-22	703.000	TON		
0580	00274	CL3 ASPH BIND 0.50D PG64-22	1,663.000	TON		
0590	00291	EMULSIFIED ASPHALT RS-2	62.000	TON		
0600	00301	CL2 ASPH SURF 0.38D PG64-22	4,627.000	TON		

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0610	00358	ASPHALT CURING SEAL	180.000	TON		
0620	02073	JPC PAVEMENT-9 IN	71,642.000	SQYD		
0630	02200	ROADWAY EXCAVATION	457,892.000	CUYD		
0640	02599	FABRIC-GEOTEXTILE TYPE IV	24,457.000	SQYD		
0650	02677	ASPHALT PAVE MILLING & TEXTURING	250.000	TON		
0660	02702	SAND FOR BLOTTER	261.000	TON		
0670	10203ND	PAVEMENT ADJUSTMENT (CONCRETE)	(1.00)	LS	279,280.00	279,280.00
0680	22906ES403	CL3 ASPH SURF 0.38A PG64-22	2,990.000	TON		
0690	24276EC	SUBGRADE REINFORCEMENT	11,340.000	SQYD		
SECTION 0004 ROADWAY						
0700	00078	CRUSHED AGGREGATE SIZE NO 2	15,539.000	TON		
0710	01000	PERFORATED PIPE-4 IN	24,936.000	LF		
0720	01010	NON-PERFORATED PIPE-4 IN	790.000	LF		
0730	01020	PERF PIPE HEADWALL TY 1-4 IN	5.000	EACH		
0740	01028	PERF PIPE HEADWALL TY 3-4 IN	27.000	EACH		
0750	01032	PERF PIPE HEADWALL TY 4-4 IN	17.000	EACH		
0751	01711	FILL AND CAP WELL (ADDED: 4-11-12)	1.000	EACH		
0760	01740	CORED HOLE DRAINAGE BOX CON-4 IN	17.000	EACH		
0770	01923	STANDARD BARRIER MEDIAN TYPE 5	556.000	SQYD		
0780	01982	DELINEATOR FOR GUARDRAIL-WHITE	79.000	EACH		
0790	02014	BARRICADE-TYPE III	29.000	EACH		

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0800	02091	REMOVE PAVEMENT	1,117.000	SQYD		
0810	02157	PAVED DITCH TYPE 1	440.000	SQYD		
0820	02159	TEMP DITCH	23,254.000	LF		
0830	02160	CLEAN TEMP DITCH	23,254.000	LF		
0840	02242	WATER	9.400	MGAL		
0850	02262	FENCE-WOVEN WIRE TYPE 1	24,546.000	LF		
0860	02351	GUARDRAIL-STEEL W BEAM-S FACE	5,136.000	LF		
0870	02360	GUARDRAIL TERMINAL SECTION NO 1	3.000	EACH		
0880	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	2.000	EACH		
0890	02369	GUARDRAIL END TREATMENT TYPE 2A	6.000	EACH		
0900	02371	GUARDRAIL END TREATMENT TYPE 7	1.000	EACH		
0910	02381	REMOVE GUARDRAIL	2,290.000	LF		
0920	02391	GUARDRAIL END TREATMENT TYPE 4A	4.000	EACH		
0930	02429	RIGHT-OF-WAY MONUMENT TYPE 1	133.000	EACH		
0940	02432	WITNESS POST	33.000	EACH		
0950	02471	FILL AND CAP SINKHOLE	6.000	EACH		
0960	02483	CHANNEL LINING CLASS II	2,168.000	TON		
0970	02484	CHANNEL LINING CLASS III	3,356.000	TON		
0980	02545	CLEARING AND GRUBBING (112.60 ACRES)	(1.00)	LS		
0990	02562	SIGNS	667.000	SQFT		
1000	02585	EDGE KEY	236.000	LF		

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1010	02596	FABRIC-GEOTEXTILE TYPE I	6,836.000	SQYD		
1020	02599	FABRIC-GEOTEXTILE TYPE IV	4,433.000	SQYD		
1030	02650	MAINTAIN & CONTROL TRAFFIC	(1.00)	LS		
1040	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.000	EACH		
1050	02690	SAFELOADING	10.600	CUYD		
1060	02701	TEMP SILT FENCE	23,254.000	LF		
1070	02703	SILT TRAP TYPE A	122.000	EACH		
1080	02704	SILT TRAP TYPE B	122.000	EACH		
1090	02705	SILT TRAP TYPE C	122.000	EACH		
1100	02706	CLEAN SILT TRAP TYPE A	366.000	EACH		
1110	02707	CLEAN SILT TRAP TYPE B	366.000	EACH		
1120	02708	CLEAN SILT TRAP TYPE C	366.000	EACH		
1130	02709	CLEAN TEMP SILT FENCE	69,762.000	LF		
1140	02726	STAKING	(1.00)	LS		
1150	05950	EROSION CONTROL BLANKET	22,364.000	SQYD		
1160	05952	TEMP MULCH	591,545.000	SQYD		
1170	05953	TEMP SEEDING AND PROTECTION	41,498.000	SQYD		
1180	05966	TOPDRESSING FERTILIZER	21.020	TON		
1190	05985	SEEDING AND PROTECTION	414,982.000	SQYD		
1200	05989	SPECIAL SEEDING CROWN VETCH	13,015.000	SQYD		
1210	06510	PAVE STRIPING-TEMP PAINT-4 IN	53,823.000	LF		

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1220	06514	PAVE STRIPING-PERM PAINT-4 IN	99,628.000	LF		
1230	06567	PAVE MARKING-THERMO STOP BAR-12IN	100.000	LF		
1240	06568	PAVE MARKING-THERMO STOP BAR-24IN	183.000	LF		
1250	06573	PAVE MARKING-THERMO STR ARROW	7.000	EACH		
1260	06574	PAVE MARKING-THERMO CURV ARROW	37.000	EACH		
1270	06575	PAVE MARKING-THERMO COMB ARROW	3.000	EACH		
1280	06598	PAVEMENT MARKING REMOVAL	1,000.000	SQFT		
1290	08002	STRUCTURE EXCAV-SOLID ROCK	840.000	CUYD		
1300	08003	FOUNDATION PREPARATION	(1.00)	LS		
1310	21804EN	3-SIDED CULVERT	164.000	LF		
1320	23131ER701	PIPELINE VIDEO INSPECTION	2,006.000	LF		
1330	23274EN11F	TURF REINFORCEMENT MAT 1	14,176.000	SQYD		
1340	23791EC	PAVE STRIPING-CHEVRON MARKINGS	3,281.000	SQFT		
1350	23964EC	PROTECTIVE FENCE	500.000	LF		
SECTION 0005 DRAINAGE						
1360	00440	ENTRANCE PIPE-15 IN	261.000	LF		
1370	00441	ENTRANCE PIPE-18 IN	117.000	LF		
1380	00443	ENTRANCE PIPE-24 IN	156.000	LF		
1390	00462	CULVERT PIPE-18 IN	1,667.000	LF		
1400	00466	CULVERT PIPE-30 IN	325.000	LF		
1410	00469	CULVERT PIPE-42 IN	213.000	LF		

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1420	00500	CULVERT PIPE-54 IN EQUIV	162.000	LF		
1430	00521	STORM SEWER PIPE-15 IN	489.000	LF		
1440	00522	STORM SEWER PIPE-18 IN	199.000	LF		
1450	00524	STORM SEWER PIPE-24 IN	393.000	LF		
1460	00526	STORM SEWER PIPE-30 IN	495.000	LF		
1470	00528	STORM SEWER PIPE-36 IN	42.000	LF		
1480	01310	REMOVE PIPE	51.000	LF		
1490	01391	METAL END SECTION TY 3-18 IN	26.000	EACH		
1500	01393	METAL END SECTION TY 3-24 IN	7.000	EACH		
1510	01394	METAL END SECTION TY 3-30 IN	11.000	EACH		
1520	01396	METAL END SECTION TY 3-42 IN	1.000	EACH		
1530	01517	DROP BOX INLET TYPE 5F	28.000	EACH		
1540	01518	DROP BOX INLET TYPE 5F MOD	6.000	EACH		
1550	01584	CAP DROP BOX INLET	1.000	EACH		
1560	01642	JUNCTION BOX-18 IN	1.000	EACH		
1570	01651	JUNCTION BOX-MOD	8.000	EACH		
1580	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	7,572.300	SQYD	2.00	15,144.60
1590	02625	REMOVE HEADWALL	10.000	EACH		
1600	08100	CONCRETE-CLASS A	10.220	CUYD		
1610	08150	STEEL REINFORCEMENT	635.000	LB		
1620	23048NN	METAL END SECTION TY 3-54 IN EQ	2.000	EACH		
SECTION 0006 SIGNALIZATION						
ALT GROUP AB1 (ALTERNATE 1 - ASPHALT)						

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1630	04793	CONDUIT-1 1/4 IN	490.000	LF		
1640	04795	CONDUIT-2 IN	770.000	LF		
1650	04811	JUNCTION BOX TYPE B	8.000	EACH		
1660	04820	TRENCHING AND BACKFILLING	1,260.000	LF		
1670	04830	LOOP WIRE	4,066.000	LF		
1680	04844	CABLE-NO. 14/5C	1,857.000	LF		
1690	04850	CABLE-NO. 14/1 PAIR	6,875.000	LF		
1700	04886	MESSENGER-15400 LB	700.000	LF		
1710	04895	LOOP SAW SLOT AND FILL	1,367.000	LF		
1720	04931	INSTALL CONTROLLER TYPE 170	1.000	EACH		
1730	04932	INSTALL STEEL STRAIN POLE	4.000	EACH		
1740	20188NS835	INSTALL LED SIGNAL-3 SECTION	12.000	EACH		
1750	20266ES835	INSTALL LED SIGNAL- 4 SECTION	2.000	EACH		
1760	23157EN	TRAFFIC SIGNAL POLE BASE	21.720	CUYD		
1770	23982EC	INSTALL ANTENNA	1.000	EACH		
SECTION 0007		SIGNALIZATION				
ALT GROUP AB2		(ALTERNATE 2 - CONCRETE)				
1780	04793	CONDUIT-1 1/4 IN	490.000	LF		
1790	04795	CONDUIT-2 IN	770.000	LF		
1800	04811	JUNCTION BOX TYPE B	8.000	EACH		
1810	04820	TRENCHING AND BACKFILLING	1,260.000	LF		
1820	04830	LOOP WIRE	2,650.000	LF		

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1830	04844	CABLE-NO. 14/5C	1,857.000	LF		
1840	04850	CABLE-NO. 14/1 PAIR	6,875.000	LF		
1850	04886	MESSENGER-15400 LB	700.000	LF		
1860	04894	PREFORMED LOOP/LEAD-IN	184.000	LF		
1870	04895	LOOP SAW SLOT AND FILL	839.000	LF		
1880	04931	INSTALL CONTROLLER TYPE 170	1.000	EACH		
1890	04932	INSTALL STEEL STRAIN POLE	4.000	EACH		
1900	20188NS835	INSTALL LED SIGNAL-3 SECTION	12.000	EACH		
1910	20266ES835	INSTALL LED SIGNAL- 4 SECTION	2.000	EACH		
1920	20453ES835	PREFORMED QUADRAPOLE LOOPS	408.000	LF		
1930	23157EN	TRAFFIC SIGNAL POLE BASE	21.720	CUYD		
1940	23982EC	INSTALL ANTENNA	1.000	EACH		
SECTION 0008 MOBILIZATION / DEMOBILIZATION						
1950	02568	MOBILIZATION (NO MORE THAN 5%)		LUMP		
1960	02569	DEMOBILIZATION (AT LEAST 1.5%)		LUMP		
		TOTAL BID				