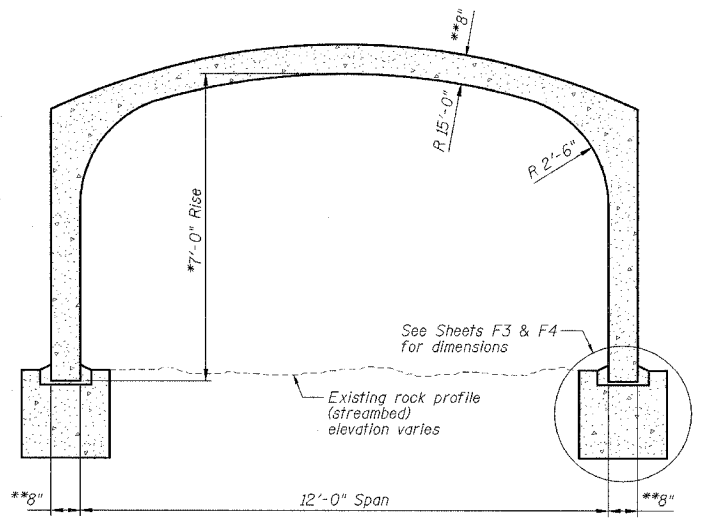
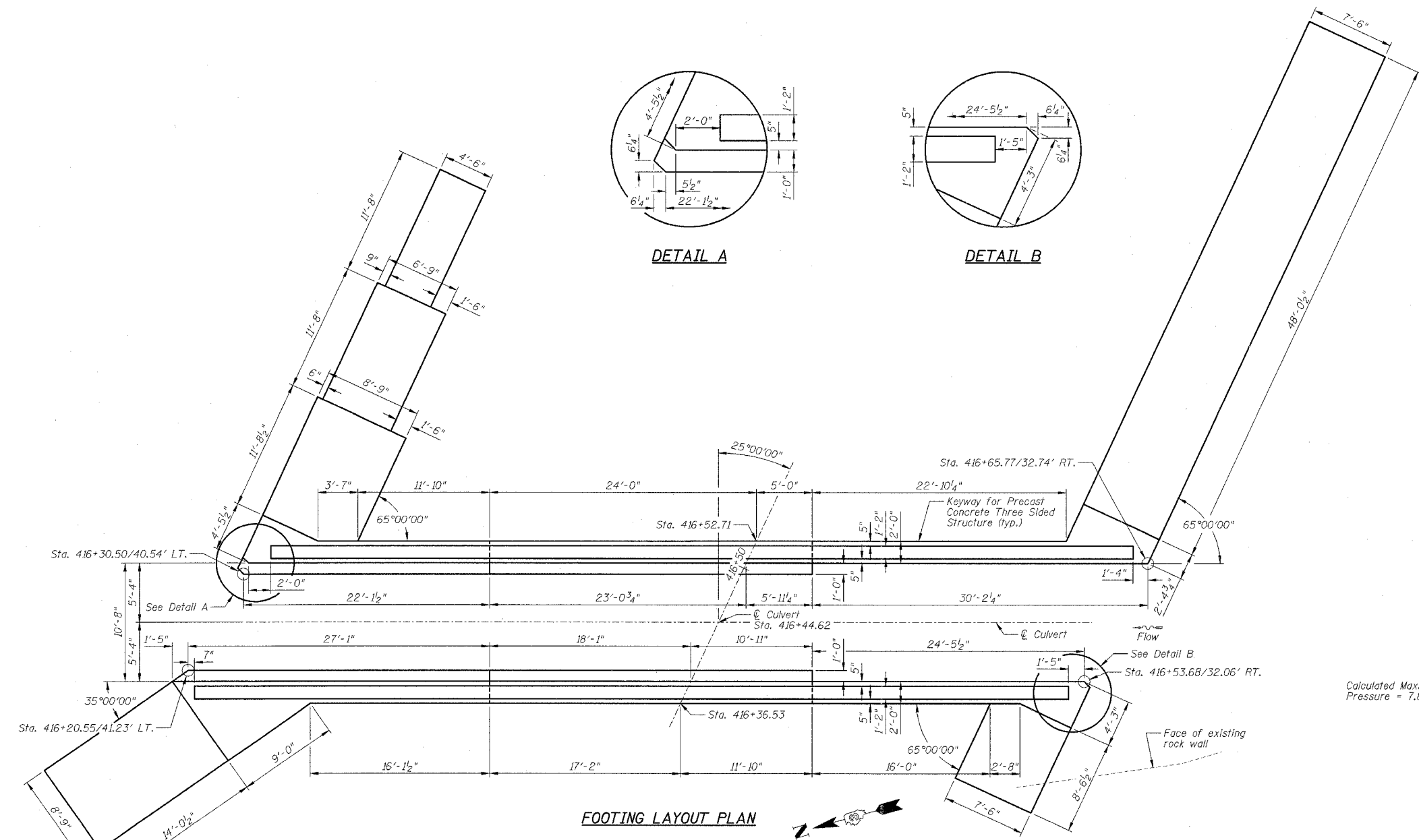


| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|--------------|---------------------------|--------------|-----------|
| 627 | (I-1) BR & I | LA SALLE | 106 | 36 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

SHEET NO. F2

OF 14 SHEETS



Calculated Maximum Bearing Pressure = 7.8 ksf

SECTION THRU PRECAST STRUCTURE

*Based on Con Span sections that have a minimum rise of 7'-0".
**Slab and wall thicknesses may vary as per manufacturer's design.

FOOTING LAYOUT PLAN

GENERAL NOTES:

- 1.) Reinforcement Bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- 2.) The option of using precast concrete footings is not allowed.
- 3.) Dimensions for the three-sided precast are for a Con Span section. Hy-span and Tri-span bridge sections are also acceptable, but dimensions may vary.
- 4.) The footings shall be keyed into rock a minimum of 2'-0" and shall be poured against in place rock.
- 5.) All details shown were developed assuming the use of cast-in-place headwalls and wingwalls placed as shown. The Contractor has the option of using precast headwalls and wingwalls. If the precast option is used, details for the headwalls and wingwalls and revised footing details shall be submitted to the Engineer for approval. The footing design is based on the following maximum reactions applied at the top of the footing:
Vertical 15.4 k/ft @ + 0.9 k/ft @
Horizontal 0.3 k/ft @ + 0.1 k/ft @
The Contractor should verify that the selected structure meets these design parameters. If the design parameters are exceeded, a complete footing design with calculations, details and the required seals shall be submitted for review and approval.
- 6.) After the keyways have been grouted and cured, the joints on all three sides of the structure shall be externally sealed using a 15" wide external sealing band conforming to Article 1057.01. The cost shall be included in the cost of Three Sided Precast Concrete Structures, 12'x7'.
- 7.) It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of "Concrete Structures".
- 8.) See Sheets F12 and F13 for Soil Borings.
- 9.) Structural Seal does not include design of precast elements.
- 10.) For backfilling and embankment, see the Standard Specifications.
- 11.) All construction joints shall be bonded.
- 12.) All exposed edges shall be chamfered 3/4".
- 13.) Allowable Bearing Pressure for Footings = 12.0 ksf.
- 14.) The existing plans are provided for informational use only.

TOTAL BILL OF MATERIALS

| ITEMS | UNITS | TOTAL |
|--|-------|-------|
| Porous Granular Embankment (Special) | Cu Yd | 91 |
| Removal of Existing Structures No. 2 | Each | 1 |
| Structure Excavation | Cu Yd | 280 |
| Rock Excavation for Structures | Cu Yd | 118 |
| Concrete Structures | Cu Yd | 188.8 |
| Reinforcement Bars | Pound | 12340 |
| Reinforcement Bars, Epoxy Coated | Pound | 1800 |
| Name Plates | Each | 1 |
| Geocomposite Wall Drain | Sq Yd | 68 |
| Three Sided Precast Concrete Structure, 12'x7' | Foot | 76 |
| Temporary Soil Retention System | Sq Ft | 803 |

NOTE:

Work this sheet with Sheets F1 and F3 thru F11.

**FOOTING LAYOUT PLAN,
SECTION THRU PRECAST STRUCTURE,
GENERAL NOTES AND BILL OF MATERIALS**

IL ROUTE 71
OVER TRIBUTARY TO ILLINOIS RIVER
F.A.P. ROUTE 627 - SEC. (I-1) BR & I
LA SALLE COUNTY
STATION 416+44.62
STRUCTURE NO. 050-C804

DESIGNED BY: J.M.L.
DRAWN BY: D.J.M.
CHECKED BY: M.S.W.

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FILE NO. 24-6772
DATE 05-12-06
SHEET NO. 36 OF 106