

**ADDENDUM NO. 1**  
**TO THE**  
**DRAWINGS AND SPECIFICATIONS**  
**FOR THE**  
**TAPP ROAD PHASE III PROJECT**  
**PW2011-40**

**ISSUED FROM:** CITY HALL AT THE SHOWERS BUILDING  
Post Office Box 100  
401 North Morton Street  
Bloomington, Indiana 47404

**ISSUE DATE:** October 13, 2011

**Bid DATE:** October 20, 2011

This Addendum No.1, to the drawings and specifications shall supplement, amend and become a part of the bidding documents, plans, and specifications. All bids and construction contracts shall be based on these modifications to the original contract documents.

**ITEM No. 1:** Pre-bid Questions

1. Are casting adjustments part of the lump sum, or a unit price for each?
  - a. Include casting adjustment in lump sum bid. Provide unit price for any additional outside of limits.
2. Is the casting adjustment specific to the different kinds of castings – manholes, valves, manholes with vacuum nesting?
  - a. No. A revised unit price sheet is attached
3. Are there permits for the contractor to obtain and pay for.
  - a. No. City will provide Rule 5 permit and DNR floodway permit. Delay is possible, but uncertain.
4. Is the drive at 41+21 right residential?
  - a. Yes.

5. Does the contractor maintain access across Tapp for drive at 41+21 right; can the access be provided straight across Tapp to Weimer?
  - a. The contractor must provide access. Straight across to Weimer is acceptable.
6. Confirm full depth pavement ends before roundabout, there are 2-3 structures to be cut into existing pavement.
  - a. Yes. Full depth pavement ends at station 59+65.84. Work beyond the full depth pavement includes some structures, building curbs, and filling in side ditches. On the concrete option, full depth pavement shall extend to station 60+84.
7. Are there borings?
  - a. No.
8. Will rock excavation be paid as an addition to the lump sum?
  - a. No. Contractor shall include 300 cubic yards of undistributed rock excavation in lump sum bid based on the unit price provided on the unit price sheet. Rock removal quantity shall be recorded and amount under 300 cubic yards shall be subtracted from final payment.
9. What material is the pedestrian pathway under the bridge?  
There is a discrepancy in plan sheets
  - a. Pedestrian pathway under bridge shall be concrete.
10. What material is the pedestrian sidepath?
  - a. Sidepath shall be asphalt.
11. Please clarify sod and mulch seed areas?
  - a. The plans show sod between sidewalk/sidepath and curb, and mulch seed is shown behind sidewalk/sidepath. Seed and sod shall be placed as shown on the plans with these two exceptions:
    - i. Between station 41+21 and 62+33, the left (north) side of road shall be restored with sod. No mulch seed shall be used on the left (north) side of Tapp Road between station 41+21 and station 62+33
    - ii. Between station 41+00 and station 45+00, the right (south) side of Tapp Road shall be restored with sod. No mulch seed shall be used on the right (south) side of Tapp Road between station 41+00 and station 45+00.
12. What is required for the pedestrian access special condition?
  - a. Pedestrian access shall be provided from the on-street parking on Sunstone Drive to the Clear Creek trail head for the duration of time that vehicular access to the Clear Creek trail head is not available. Rick Coppock clarified that vehicular access to the trail parking lot can be

maintained during construction of the bridge. Temporary pedestrian access could be provided under the newly constructed bridge while the vehicular access to the trail is closed for bridge approach construction. At a minimum, the pedestrian access shall be constructed of 3 inches of compacted aggregate No. 53s and shall be maintained stable, firm, and non-slip.

13. Are there details for the pedestrian bridge?
  - a. The pedestrian bridge is a continental style 65-foot span similar to the one along Country Club Drive west of Walnut Street. Scott Foy of Con-tech is familiar with the requirements. Contractor shall mount fiber optic conduit to the underside of the pedestrian bridge.
14. Does the pedestrian bridge sit on the same abutments as the road bridge?
  - a. Yes.
15. Is there a sub-grade treatment such as lime stabilization required for the temporary run-around?
  - a. No. The contractor shall maintain the run-around during construction. If the contractor feels that a sub-grade treatment is necessary to minimize the contractor's maintenance costs, the contractor shall include such sub-grade treatment costs in the lump sum bid for the project.
16. Will there be utility relocation?
  - a. There are some utility poles that may be in conflict with the temporary run-around.
17. Is there a speed limit on the run-around?
  - a. There will not be a separate speed limit posted on the run-around
18. Can the contractor place curbs on the run-around to get closer to road side fixed objects such as utility poles?
  - a. Yes. Contractor may use curbs. Contractor shall maintain two feet clear zone from face of curb to face of fixed object.
19. Will the poles and overhead wires be reduced from about 30 feet to about 18 feet after fills?
  - a. Utility company shall be responsible for maintaining adequate clearance.
20. Will the pole relocation for the main road take place this winter?
  - a. Yes
21. Will the City pay for costs associated with relocation of utilities?
  - a. The City shall pay for costs arising from unknown conditions.

22. What kind of testing is required?
- a. City shall provide compaction testing at bridge and bridge approaches from station 40+00 to station 46+00.
23. What is the purpose of the parking lot underdrain on sheet 15?
- a. The parking lot surface shall be permeable pavers as detailed in the attached Permeable Paver detail with the pavers selected from one of these two options:
    - 1. Reading Rock**  
*Paver Rock - StormLock Permeable Pavers*  
 Product: HydraBric  
 Color: Shall be a Blend such as *Autumn Blend, or Oak Blend*. Final selection to be determined by Owner.
    - 2. Unilock**  
 Product: Ecoloc or Eco Optiloc  
 Color: Shall be Nevada

The underdrain will collect permeated rainwater. A detail for the permeable pavers is attached. A revised Sheet 15 Weimer Parking Lot Sheet and Sheet 2 Typical X-Sections are also attached.
24. What surface shall be on the bridge faces?
- a. The bridge faces shall use form liner #1203 1-½” Random Ashlar Stone from American Formliners, Inc., 1567 Frontenac, Road, Naperville, IL 60563, or approved equal.
25. Are there piles?
- a. No.

**ITEM No. 2:** Concrete Option

Contractor shall submit the revised bid form attached. Contractor may provide an alternate price for completing the pavement in concrete as specified below.

For the alternate price, contractor shall use the following materials in place of the listed item:

<u>Replace</u>	<u>with</u>
A	Full Depth Concrete Pavement 11” PCCP on 6” No.53s Compacted Aggregate on Subgrade Treatment Type I.
B	Full Depth Concrete Pavement 11” PCCP on 6” No.53s Compacted Aggregate on Subgrade Treatment Type I.
31	Proposed epoxy paint line, dashed, white, 4”
32	Proposed epoxy paint line, solid, white, 4”
33	Proposed epoxy paint line, dashed, yellow, 4”

- 34 Proposed epoxy paint line, solid, yellow, 4"
- 35 Proposed epoxy paint line, double yellow, 4"
- 36 Proposed transverse epoxy paint marking, white, 24"
- 37 Proposed epoxy paint marking, directional arrow
- 38 Proposed epoxy paint line, yellow, 12"

**ITEM No. 3:** Fence

At station 55+24 left and 57+18, contractor shall remove existing wire fence to the right-of-way line and re-establish end post and corner bracing at the right-of-way line.

**ITEM No. 3:** Drive

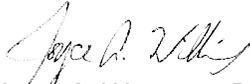
At station 57+41 left, contractor shall add a class III drive centered at station 57+41 of length 38 feet and matching existing width. Contractor shall omit one street tree at approximate station 57+41 left.

**ITEM No. 3:** Special condition: temporary runaround

The limits of the special condition for the maintenance of traffic are revised as follows:

The contractor shall maintain two way traffic on the temporary runaround from the west termini of the project to the driveway at 45+94.5 left and one way westbound traffic from the east termini to said driveway while completing construction from Station 45+50 to Station 60+84. The one way westbound traffic shall alternate travel lanes while each side is being constructed and maintained at all times. The contractor will be allowed 45 calendar days to construct each lane. Vehicular access to the Clear Creek Trail parking lot and the western most Hoadley Quarry drive may be closed during this time.

Contractor shall post 18" by 18" sign facing eastbound traffic at Weimer Road stating "OPEN TO CASSADY ELECTRIC".

	<p><b>CERTIFIED BY:</b> </p> <p>JOYCE A. WILLIAMS, P.E. CITY OF BLOOMINGTON STATE OF INDIANA</p>
--	--

**Acknowledge receipt of the addendum by submitting a signed copy with your bid proposal.**

**RECEIVED BY: CONTRACTOR (FIRM AND ADDRESS)**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**PRINTED NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

# UNIT PRICE SHEET

FOR

PW 2011-40, Tapp Road Phase III

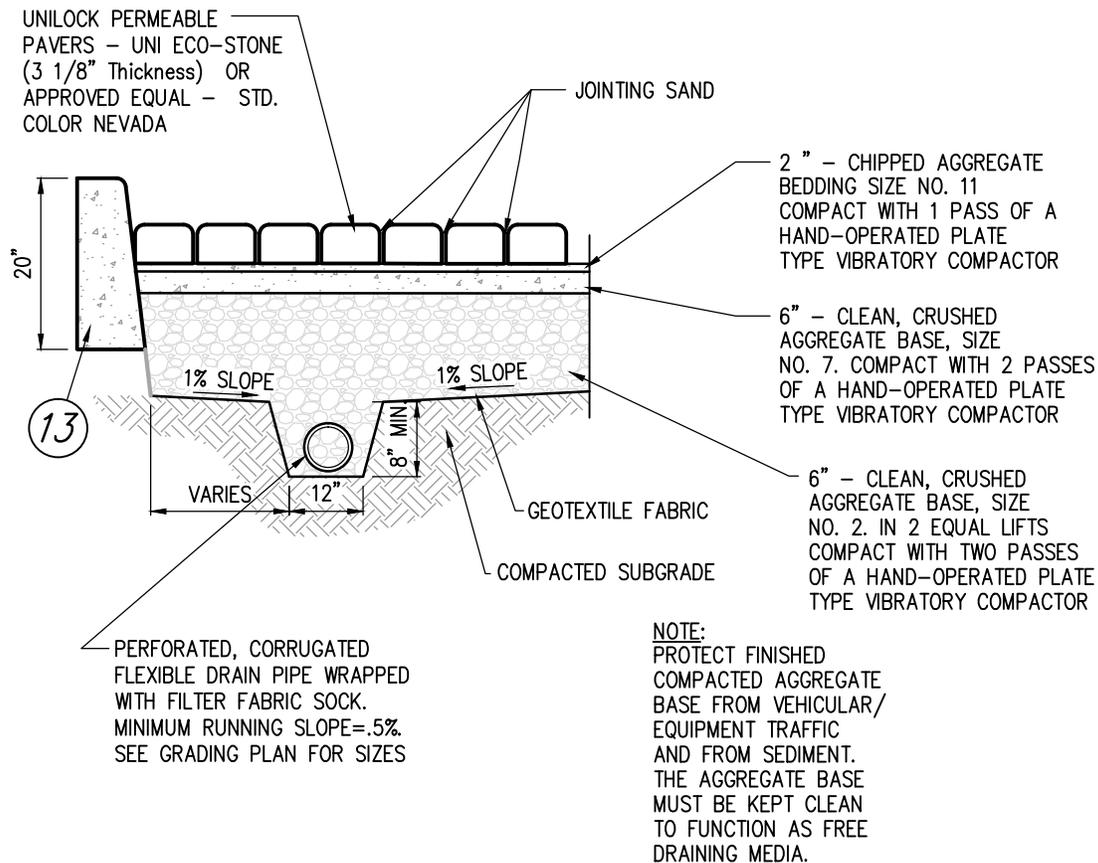
**Additions/Deductions**

**PROVIDE PRICES FOR ALL CHECKED ITEMS**

<u>Item #</u>	<u>Description</u>	<u>Price Each</u>	<u>Unit</u>
<input checked="" type="checkbox"/>	Topsoil	_____	TON
<input checked="" type="checkbox"/>	Casting, valve, Adjust to grade	_____	EA
<input checked="" type="checkbox"/>	Casting, manhole, Adjust to grade	_____	EA
<input checked="" type="checkbox"/>	Casting, manhole with CBU vacuum test, Adjust to grade	_____	EA
<input checked="" type="checkbox"/>	Tree Removal, 6" - 10"	_____	EA
<input checked="" type="checkbox"/>	Tree Removal, 12" - 24"	_____	EA
<input checked="" type="checkbox"/>	Saw-Cut Asphalt/Concrete	_____	LF
<input checked="" type="checkbox"/>	Common Excavation	_____	CY
<input checked="" type="checkbox"/>	Class X excavation	_____	CY
<input checked="" type="checkbox"/>	Rock Excavation (per INDOT specification/quantity)	_____	CY
<input checked="" type="checkbox"/>	Curb, Concrete – 20" Bat. Curb w/8" exposed	_____	LF
<input checked="" type="checkbox"/>	Sidewalk, Concrete - 4" Thick 4000psi Concrete	_____	SY
<input checked="" type="checkbox"/>	Sidewalk, Asphalt - (2" Base, 2" Surface)	_____	SY
<input checked="" type="checkbox"/>	Driveway, Class I (See INDOT Standard Detail)	_____	EA
<input checked="" type="checkbox"/>	Driveway, Class III (See INDOT Standard Detail)	_____	EA
<input checked="" type="checkbox"/>	Type B Ramp w/ Cast Iron Tactile Plate	_____	EA
<input checked="" type="checkbox"/>	Type G Ramp w/ Cast Iron Tactile Plate	_____	EA
<input checked="" type="checkbox"/>	Type H Ramp w/ Cast Iron Tactile Plate	_____	EA
<input type="checkbox"/>	Retaining Wall (See Detail)	_____	LF
<input checked="" type="checkbox"/>	Pavement Repair (city specification)	_____	SY
<input checked="" type="checkbox"/>	Mulched Seeding	_____	SY
<input checked="" type="checkbox"/>	Sodding	_____	SY
<input checked="" type="checkbox"/>	Trees, Northern Red Oak, 2"-3" DBH	_____	EA
<input checked="" type="checkbox"/>	12" N-12 Pipe	_____	LF
<input type="checkbox"/>	12" C900 Pipe	_____	LF
<input type="checkbox"/>	16" C900 Pipe	_____	LF
<input checked="" type="checkbox"/>	24" Reinforced Concrete Pipe	_____	LF
<input checked="" type="checkbox"/>	15" N-12 Pipe	_____	LF
<input checked="" type="checkbox"/>	18" N-12 Pipe	_____	LF
<input checked="" type="checkbox"/>	Sidewalk Removal	_____	SY
<input checked="" type="checkbox"/>	Curb Removal	_____	LFT
<input type="checkbox"/>	Storm Inlet Type B with Casting	_____	EA
<input checked="" type="checkbox"/>	Storm Inlet Type E with Casting	_____	EA
<input checked="" type="checkbox"/>	Storm Inlet Type J with Casting	_____	EA

- All prices shall reflect complete installation as shown on the plans or stated in the specifications, and be authorized by an approved change order prior to installation/deletion (All field orders must be issued in writing to be honored).
- Example: Sidewalk includes stone bedding, excavation; Asphalt Pathway includes stone, base, surface and backfill, excavation, etc.





**(PD) PARKING LOT PAVER DETAIL**  
**NOT TO SCALE**

**Concrete Pavers**

The manufacturing of high quality concrete pavers involves combining Portland cement, coarse and fine aggregate and sufficient water to produce zero-slump concrete. This concrete is molded in, specialized manufacturing equipment under vibration and extreme pressure. Admixtures may be used to increase various engineering properties (strength, density) and reduce the likelihood of efflorescence and decrease water absorption. Normally, the paver units are constructed with spacer bars to ensure uniform, properly spaced joints and with chamfered edges to prevent chipping.

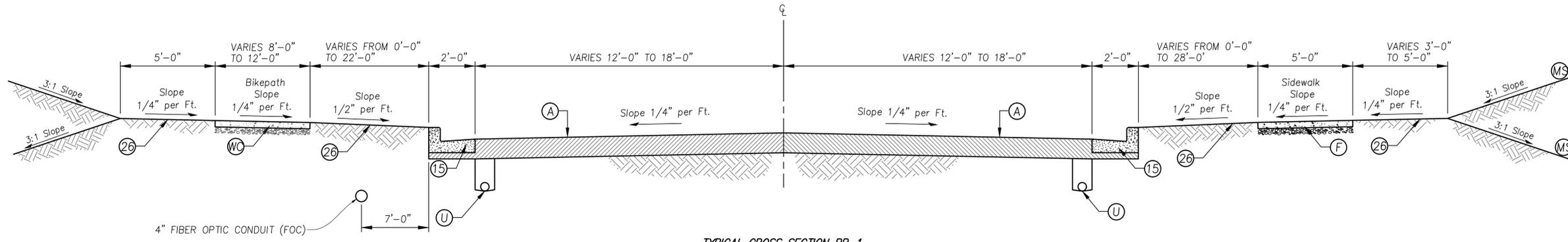
Pavers are manufactured to specifications outlined in ASTM C 936, Standard Specification for Interlocking Concrete Paving Units. This standard requires average paver strengths of 55 MPa (8000 psi), minimum unit paver strengths of 50 MPa (7200 psi), average absorption of 5 % and maximum unit absorption of 7 %, and resistance to 50 freeze-thaw cycles, with no breakage greater than 1.0% loss in dry weight of any individual unit.

**Jointing Sand**

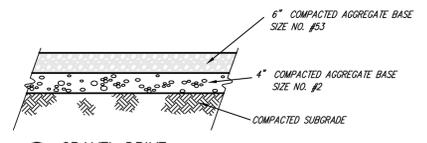
Finer graded (100 percent passing the 1.18 mm sieve size), high quality sand is required to fill joints (typically 5 to 6 mm (1/4 in.)) between the pavers. Typically sands conforming to the gradation requirements of ASTM C 144 will meet the necessary requirements. The jointing sand among the individual paver units provides interlocking thus transmitting loads to surrounding blocks by shear forces. This enables the pavers and bedding sand to structurally function as a distinct layer allowing distribution of loads in a manner similar to a hot mix asphalt concrete layer.

An alternative for regular sand is the Polymeric Jointing Sand. It is a mix of graded sand and binder, especially formulated for the filling of narrow or wide joints between pavers. Unlike regular sand, Polymeric Sand resists insect infestation, weed growth and erosion caused by rain, frost, wind, suction, etc. It is ideal for stabilizing horizontal or sloped installations. It allows for some movement of the pavers without loss of the jointing sand. This type of sand is applied dry and hardens after moistening.

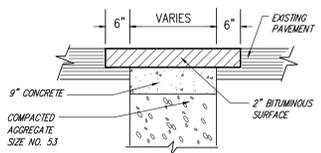




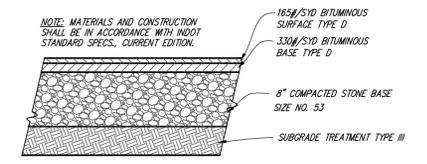
**TYPICAL CROSS SECTION PR-1**  
NOT TO SCALE



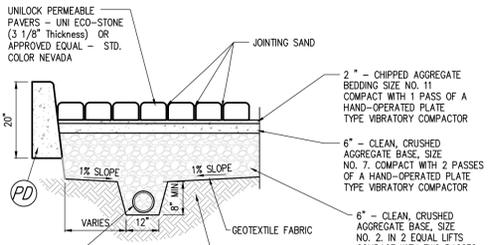
**GRAVEL DRIVE**  
NOT TO SCALE



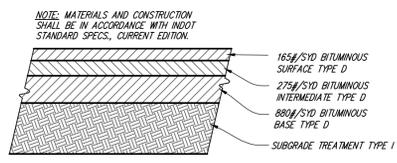
**BITUMINOUS PAVEMENT PATCH**  
NOT TO SCALE



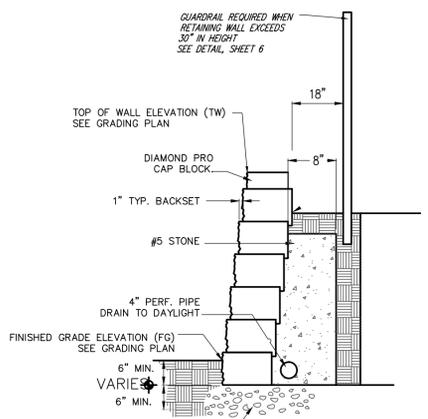
**BITUMINOUS MIXTURE FOR APPROACHES & PARKING AREAS**  
NOT TO SCALE



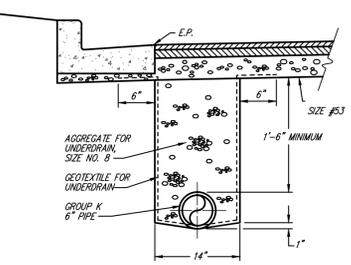
**PARKING LOT PAVER DETAIL**  
NOT TO SCALE



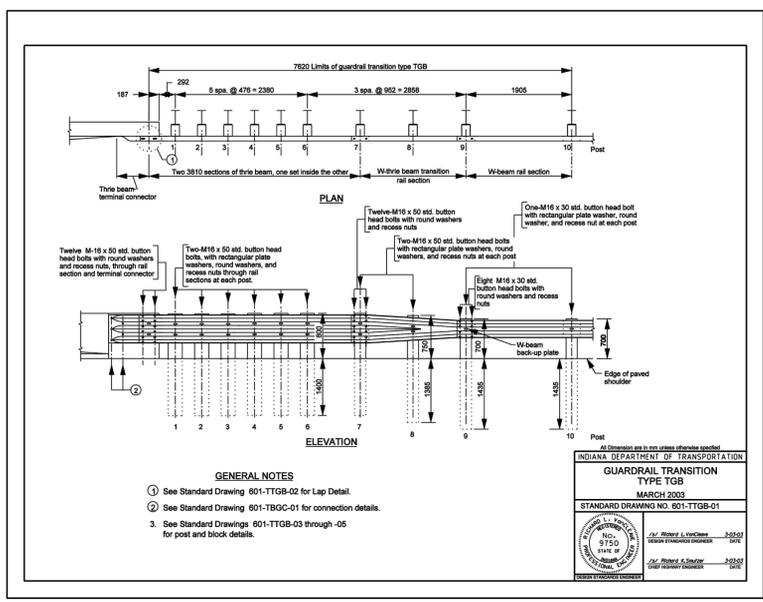
**BITUMINOUS PAVING DETAIL**  
NOT TO SCALE



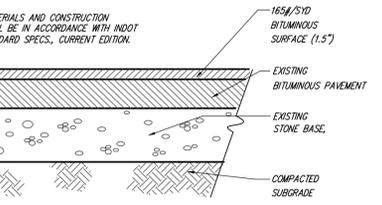
**MODULAR BLOCK RETAINING WALL FOR WALLS UP TO 3' IN HEIGHT**  
NOT TO SCALE



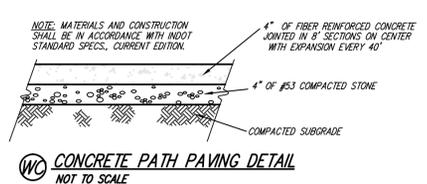
**TYPICAL ROAD UNDERDRAIN**  
NOT TO SCALE



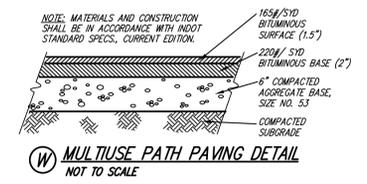
**GUARDRAIL TRANSITION TYPE TGB**  
MARCH 2003  
STANDARD DRAWING NO. 601-TTGB-01



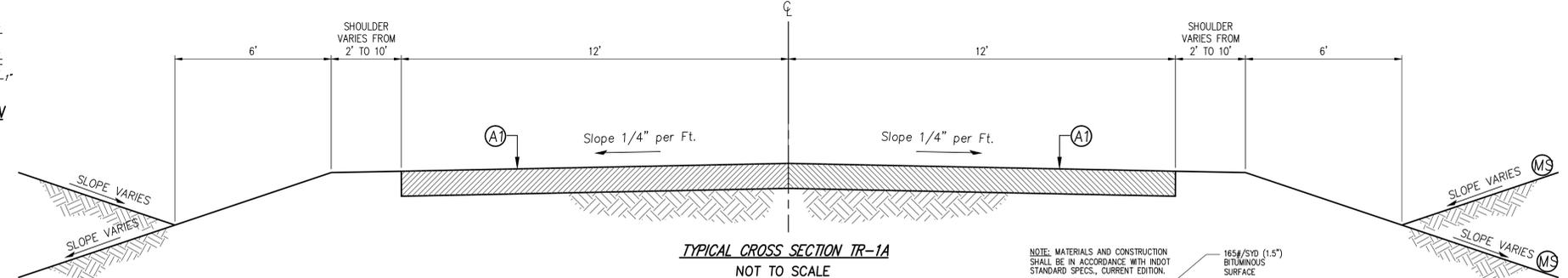
**BITUMINOUS PAVING DETAIL OF PARKING LOT**  
NOT TO SCALE



**CONCRETE PATH PAVING DETAIL**  
NOT TO SCALE

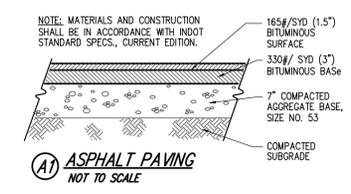


**MULTIUSE PATH PAVING DETAIL**  
NOT TO SCALE



**TYPICAL CROSS SECTION TR-1A**  
NOT TO SCALE

**TEMPORARY RUNAROUND SECTION**



**ASPHALT PAVING**  
NOT TO SCALE

**Concrete Pavers**  
The manufacturing of high quality concrete pavers involves combining Portland cement, coarse and fine aggregate and sufficient water to produce zero-slump concrete. This concrete is molded in, specialized manufacturing equipment under vibration and extreme pressure. Admixtures may be used to increase various engineering properties (strength, density) and reduce the likelihood of efflorescence and decrease water absorption. Normally, the paver units are constructed with spacer bars to ensure uniform, properly spaced joints and with chamfered edges to prevent chipping.

Pavers are manufactured to specifications outlined in ASTM C 936, Standard Specification for Interlocking Concrete Paving Units. This standard requires average paver strengths of 55 MPa (8000 psi), minimum unit paver strengths of 50 MPa (7200 psi), average absorption of 5 % and maximum unit absorption of 7 %, and resistance to 50 freeze-thaw cycles, with no breakage greater than 1.0% loss in dry weight of any individual unit.

**Jointing Sand**  
Finer graded (100 percent passing the 1.18 mm sieve size), high quality sand is required to fill joints (typically 5 to 6 mm (1/4 in.)) between the pavers. Typically sands conforming to the gradation requirements of ASTM C 144 will meet the necessary requirements. The jointing sand among the individual paver units provides interlocking thus transmitting loads to surrounding blocks by shear forces. This enables the pavers and bedding sand to structurally function as a distinct layer allowing distribution of loads in a manner similar to a hot mix asphalt concrete layer.

An alternative for regular sand is the Polymeric Jointing Sand. It is a mix of graded sand and binder, especially formulated for the filling of narrow or wide joints between pavers. Unlike regular sand, Polymeric Sand resists insect infestation, weed growth and erosion caused by rain, frost, wind, suction, etc. It is ideal for stabilizing horizontal or sloped installations. It allows for some movement of the pavers without loss of the jointing sand. This type of sand is applied dry and hardens after moistening.

**NOTES:**

- This sheet shall be used when W-beam guardrail is specified for bridge approach guardrail and is connected to the bridge rail with guardrail transition type TGB.
- See Table BAGR-1 for required length. The actual length of guardrail required at each location shall be as shown on the plans.
- L<sub>g</sub> = length of W-beam guardrail at 0-3 post spacing, ft.

**Guardrail End Treatment Type OS Required.**

**TABLE BAGR-1**  
OUTSIDE SHOULDER BRIDGE APPROACH GUARDRAIL LENGTHS  
Location of Bridge Rail End

Design speed (mph)	Location of Bridge Rail End		L <sub>g</sub>
	Inside Clear Zone	Outside Clear Zone	
≥ 50	≥ 4x the rounded calculated length of need or 100'	100'	X - 20'
< 50	≥ 4x the rounded calculated length of need or 50'	50'	

**INDIANA DEPARTMENT OF TRANSPORTATION**  
**ROADSIDE BRIDGE APPROACH GUARDRAIL**  
MAY 1999  
STANDARD DRAWING NO. 601-BAGR-01  
STATE OF INDIANA

revisions:  
10-12-11 ADDED PARKING  
LOT PAVER DETAIL - RLC

ARCHITECTURE  
CIVIL ENGINEERING  
PLANNING  
Bloomington, Indiana  
(812) 339-2990 (Fax)

**BFB**  
BYNUM FANTO & ASSOCIATES, INC.  
528 north walnut street  
(812) 332-8030

JEFFREY S. FANTO  
No. 18283  
STATE OF INDIANA  
PROFESSIONAL ENGINEER  
09-29-11  
certified by *[Signature]*

**Proposed:**  
**TAPP ROAD RECONSTRUCTION PHASE III**  
Bloomington, Indiana

title: LINE PR-1  
PLAN & PROFILE

designed by: JR, DS  
checked by:  
sheet no: 2  
project no.: 40101