



RETURN WITH BID

NOTICE TO BIDDERS

County Kane
Local Public Agency KDOT
Section Number 14-00413-02-BR
Route Co. Highway No. 36

Sealed proposals for the improvement described below will be received at the office of The County Engineer
41W011 Burlington Road, St. Charles, IL 60175 until 9:00 AM on May 28, 2014

Sealed proposals will be opened and read publicly at the office of The County Engineer
41W011 Burlington Road, St. Charles, IL 60175 at 9:00 AM on May 28, 2014

DESCRIPTION OF WORK

Name Harmony Road Culvert Improvements Length: 1035.00 feet ( 0.1960 miles)

Location Harmony Road between I-90 and Kelley Road

Proposed Improvement Partial removal and extension of Culvert Structure No. 045-55543 (Culvert #3) over Harmony Creek and removal and replacement of Culvert Structure No. 045-5544 (Culvert #4) over Tributary to Hampshire Creek

1. Plans and proposal forms will be available in the office of The County Engineer
41W011 Burlington Road, St. Charles, IL 60175 Contacts are Mike Zakosek (zakosekmike@co.kane.il.us)

2. [X] Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.

4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded project)
e. BLR 12326: Affidavit of Illinois Business Office

\$20 Charge for Proposal Non-refundable\*

Proposal Available on CD Only

No Proposals issued after 12 NOON Tuesday May 27, 2014

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.

6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.

7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.

8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filled prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

CHECK SHEET  
FOR  
RECURRING SPECIAL PROVISIONS

Adopted January 1, 2014

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

<u>CHECK SHEET #</u>	<u>RECURRING SPECIAL PROVISIONS</u>	<u>PAGE NO.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts (Eff. 2-1-69)(Rev. 1-1-10)	149
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	152
3	<input type="checkbox"/> EEO (Eff. 7-21-78) (Rev. 11-18-80)	153
4	<input type="checkbox"/> Specific Equal Employment Opportunity Responsibilities Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	163
5	<input type="checkbox"/> Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-13)	168
6	<input type="checkbox"/> Asbestos Bearing Pad Removal (Eff. 11-1-03)	173
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal (Eff. 6-1-89) (Rev. 1-1-09)	174
8	<input type="checkbox"/> Haul Road Stream Crossings, Other Temporary Stream Crossings, and In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	175
9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	176
10	<input type="checkbox"/> Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07)	179
11	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	182
12	<input type="checkbox"/> Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	184
13	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction (Eff. 11-1-87) (Rev. 1-1-09)	188
14	<input type="checkbox"/> Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09)	190
15	<input type="checkbox"/> PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	191
16	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	193
17	<input type="checkbox"/> Polymer Concrete (Eff. 8-1-95) (Rev. 1-1-08)	194
18	<input type="checkbox"/> PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	196
19	<input type="checkbox"/> Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07)	197
20	<input type="checkbox"/> Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-12)	198
21	<input type="checkbox"/> Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-12)	202
22	<input type="checkbox"/> Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	204
23	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07)	206
24	<input type="checkbox"/> Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07)	208
25	<input type="checkbox"/> Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	209
26	<input type="checkbox"/> English Substitution of Metric Bolts (Eff. 7-1-96)	210
27	<input type="checkbox"/> English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	211
28	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01) (Rev. 1-1-13)	212
29	<input type="checkbox"/> Portland Cement Concrete Inlay or Overlay for Pavements (Eff. 11-1-08) (Rev. 1-1-13)	213
30	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant (Eff. 8-1-00) (Rev. 1-1-14)	216
31	<input type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-14)	224
32	<input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations (Eff. 4-1-07)	240
33	<input type="checkbox"/> Pavement Marking Removal (Eff. 4-1-09)	242
34	<input type="checkbox"/> Preventive Maintenance – Bituminous Surface Treatment (Eff. 1-1-09) (Rev. 1-1-12)	243
35	<input type="checkbox"/> Preventive Maintenance – Cape Seal (Eff. 1-1-09) (Rev. 1-1-12)	249
36	<input type="checkbox"/> Preventive Maintenance – Micro-Surfacing (Eff. 1-1-09) (Rev. 1-1-12)	264
37	<input type="checkbox"/> Preventive Maintenance – Slurry Seal (Eff. 1-1-09) (Rev. 1-1-12)	275
38	<input type="checkbox"/> Temporary Raised Pavement Markers (Eff. 1-1-09) (Rev. 1-1-14)	285
39	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam (Eff. 1-1-09) (Rev. 1-1-12)	286

CHECK SHEET  
FOR  
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted January 1, 2014

The following LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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BDE SPECIAL PROVISIONS  
For the April 25 and June 13, 2014 Lettings

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An \* indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>	
80240	1	Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012	
80099	2	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014	
80274	3	Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013	
80192	4	Automated Flagger Assistance Device	Jan. 1, 2008		
80173	5	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2013	
80241	6	Bridge Demolition Debris	July 1, 2009		
50261	7	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010	
50481	8	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010	
50491	9	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010	
50531	10	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010	
80292	11	Coarse Aggregate in Bridge Approach Slabs/Footings	April 1, 2012	April 1, 2013	
80310	12	Coated Galvanized Steel Conduit	Jan. 1, 2013		
80198	13	Completion Date (via calendar days)	April 1, 2008		
80199	14	Completion Date (via calendar days) Plus Working Days	April 1, 2008		
*	80293	15	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2014
*	80294	16	Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	April 1, 2014
	80311	17	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
*	80334	18	Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	
	80277	19	Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
	80261	20	Construction Air Quality – Diesel Retrofit	June 1, 2010	Jan. 1, 2014
*	80335	21	Contract Claims	April 1, 2014	
	80029	22	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Aug. 2, 2011
	80265	23	Friction Aggregate	Jan. 1, 2011	
	80229	24	Fuel Cost Adjustment	April 1, 2009	July 1, 2009
	80329	25	Glare Screen	Jan. 1, 2014	
	80303	26	Granular Materials	Nov. 1, 2012	
	80304	27	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Jan. 1, 2013
	80246	28	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
	80322	29	Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Nov. 1, 2013	
	80323	30	Hot-Mix Asphalt – Mixture Design Verification and Production	Nov. 1, 2013	
	80315	31	Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
*	80336	32	Longitudinal Joint and Crack Patching	April 1, 2014	
*	80324	33	LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	April 1, 2014
	80325	34	LRFD Storm Sewer Burial Tables	Nov. 1, 2013	
	80045	35	Material Transfer Device	June 15, 1999	Jan. 1, 2009
	80165	36	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
*	80337	37	Paved Shoulder Removal	April 1, 2014	
	80330	38	Pavement Marking for Bike Symbol	Jan. 1, 2014	
	80298	39	Pavement Marking Tape Type IV	April 1, 2012	
	80254	40	Pavement Patching	Jan. 1, 2010	
	80331	41	Payrolls and Payroll Records	Jan. 1, 2014	
	80332	42	Portland Cement Concrete – Curing of Abutments and Piers	Jan. 1, 2014	
	80326	43	Portland Cement Concrete Equipment	Nov. 1, 2013	
*	80338	44	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	
	80300	45	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80328	46	Progress Payments	Nov. 2, 2013	
80281	47	Quality Control/Quality Assurance of Concrete Mixtures	Jan. 1, 2012	Jan. 1, 2014
3426I	48	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	49	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306	50	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2014
80327	51	Reinforcement Bars	Nov. 1, 2013	
80283	52	Removal and Disposal of Regulated Substances	Jan. 1, 2012	Nov. 2, 2012
80319	53	Removal and Disposal of Surplus Materials	Nov. 2, 2012	
80307	54	Seeding	Nov. 1, 2012	
* 80339	55	Stabilized Subbase	April 1, 2014	
80127	56	Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317	57	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
80301	58	Tracking the Use of Pesticides	Aug. 1, 2012	
80333	59	Traffic Control Setup and Removal Freeway/Expressway	Jan. 1, 2014	
20338	60	Training Special Provisions	Oct. 15, 1975	
* 80318	61	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80288	62	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2013
80302	63	Weekly DBE Trucking Reports	June 2, 2012	
80289	64	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	65	Working Days	Jan. 1, 2002	

The following special provisions are in the 2014 Supplemental Specifications and Recurring Special Provisions:

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80309	Anchor Bolts	Articles 1006.09, 1070.01, and 1070.03	Jan. 1, 2013	
80276	Bridge Relief Joint Sealer	Article 503.19 and Sections 588 and 589	Jan. 1, 2012	Aug. 1, 2012
80312	Drain Pipe, Tile, Drainage Mat, and Wall Drain	Article 101.01, 1040.03, and 1040.04	Jan. 1, 2013	
80313	Fabric Bearing Pads	Article 1082.01	Jan. 1, 2013	
80169	High Tension Cable Median Barrier	Section 644 and Article 1106.02	Jan. 1, 2007	Jan. 1, 2013
80320	Liquidated Damages	Article 108.09	April 1, 2013	
80297	Modified Urethane Pavement Marking	Section 780, Articles 1095.09 and 1105.04	April 1, 2012	
80253	Movable Traffic Barrier	Section 707 and Article 1106.02	Jan. 1, 2010	Jan. 1, 2013
80231	Pavement Marking Removal	Recurring CS #33	April 1, 2009	
80321	Pavement Removal	Article 440.07	April 1, 2013	
80022	Payments to Subcontractors	Article 109.11	June 1, 2000	Jan. 1, 2006
80316	Placing and Consolidating Concrete	Articles 503.06, 503.07, and 516.12	Jan. 1, 2013	
80278	Planting Woody Plants	Section 253 and Article 1081.01	Jan. 1, 2012	Aug. 1, 2012
80305	Polyurea Pavement Markings	Article 780.14	Nov. 1, 2012	Jan. 1, 2013
80279	Portland Cement Concrete	Sections 312, 503, 1003, 1004, 1019, and 1020	Jan. 1, 2012	Nov. 1, 2013
80218	Preventive Maintenance – Bituminous Surface Treatment	Recurring CS #34	Jan. 1, 2009	April 1, 2012
80219	Preventive Maintenance – Cape Seal	Recurring CS #35	Jan. 1, 2009	April 1, 2012
80220	Preventive Maintenance – Micro-Surfacing	Recurring CS #36	Jan. 1, 2009	April 1, 2012
80221	Preventive Maintenance – Slurry Seal	Recurring CS #37	Jan. 1, 2009	April 1, 2012

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80224	Restoring Bridge Approach Pavements Using High-Density Foam	Recurring CS #39	Jan. 1, 2009	Jan. 1, 2012
80255	Stone Matrix Asphalt	Sections 406, 1003, 1004, 1030, and 1011	Jan. 1, 2010	Aug. 1, 2013
80143	Subcontractor Mobilization Payments	Article 109.12	April 2, 2005	April 1, 2011
80308	Synthetic Fibers in Concrete Gutter, Curb, Median and Paved Ditch	Articles 606.02 and 606.11	Nov. 1, 2012	
80286	Temporary Erosion and Sediment Control	Articles 280.04 and 280.08	Jan. 1, 2012	
80225	Temporary Raised Pavement Marker	Recurring CS #38	Jan. 1, 2009	
80256	Temporary Water Filled Barrier	Section 708 and Article 1106.02	Jan. 1, 2010	Jan. 1, 2013
80273	Traffic Control Deficiency Deduction	Article 105.03	Aug. 1, 2011	
80270	Utility Coordination and Conflicts	Articles 105.07, 107.19, 107.31, 107.37, 107.38, 107.39 and 107.40	April 1, 2011	Jan. 1, 2012

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

# **PROJECT SPECIFICATIONS**

KANE COUNTY  
DIVISION OF TRANSPORTATION

**CULVERT 3 – SN 045-5543 – OVER HARMONY CREEK**  
**CULVERT 4 – SN 045-5544 – OVER TRIBUTARY TO HAMPSHIRE CREEK**

SECTION No: 14-00413-02-BR

Prepared by:

**CHASTAIN & ASSOCIATES, LLC**



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- LR 102-2 - BIDDING REQUIREMENTS AND CONDITIONS FOR CONTRACT PROPOSALS
- LR 105 - COOPERATION WITH UTILITIES
- LR 107-7 – WAGES OF EMPLOYEES ON PUBLIC WORKS

BDE SPECIAL PROVISIONS

PERMITS:

- ARMY CORPS OF ENGINEERS (ACOE)
- ILLINOIS DEPARTMENT OF NATURAL RESOURCES – DIVISION OF WATER RESOURCES (IDNR-DWR)
- KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT (KDSWCD)

GEOTECHNICAL REPORT

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

## **KANE COUNTY, ILLINOIS SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the construction of Culvert Improvements along County Highway 36, Structure Numbers 045-5543 (Culvert #3) and 045-5544 (Culvert #4), Section No.: 14-00413-02-BR, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

### **LOCATION OF IMPROVEMENT**

These Improvements are located along Harmony Road (CH 36) in northwestern Kane County, Illinois. SN 045-5543, Culvert #3, is located approximately 0.4 miles south of the I-90 overpass and SN 045-5544, Culvert #4, is located approximately 1.4 miles south of the I-90 overpass.

### **DESCRIPTION OF IMPROVEMENT**

The improvement for SN 045-5543, Culvert #3 will extend the existing crossroad culvert with a new 10 x 5 cast-in-place single barrel culvert section, with new wingwalls, and epoxy crack repair of the existing culvert barrel. Additional work will include removal of guardrail, embankment grading, constructing new bituminous shoulders, pavement resurfacing, site restoration and all collateral work necessary to complete the project as shown on the plans and as described herein.

The improvement for SN 045-5544, Culvert #4 will replace the existing cross road culvert with a new 2-cell 10' x 7' box culvert with new wingwalls. Additional work will include removal and replacement of guardrail, embankment grading, constructing new bituminous shoulders, pavement resurfacing, site restoration and all collateral work necessary to complete the project as shown on the plans and as described herein.

### **BIDDING PROCESS AND AWARD OF CONTRACT**

The bidding documents for this project are available at the Kane County Division of Transportation offices for a fee of \$20. They are available on CD only. All Contractors that purchase bidding documents must provide the following contact information: Company Name, Contact Person, Phone Number, Fax Number, and E-mail.

If addendums are necessary, they will be e-mailed to the Contractor or Subcontractor. The Contractor or Subcontractor shall acknowledge receipt of the e-mail addendum by responding to the contact listed on page one of the Notice to Bidders. The Contractor's representative shall sign a form to acknowledge receipt of the Addendum.

**KANE COUNTY SPECIAL PROVISION FOR PREQUALIFICATION OF BIDDERS**

PREQUALIFICATION OF BIDDERS in accordance with Section 102.01 of the Standard Specifications will be required of all bidders on this proposal. The Prime Contractor will be required to meet any of the following prequalification code for the discipline of work to be completed:

09 – Structures (Highway)  
12 – Drainage

The Subcontractor will be required to meet the prequalification code for the discipline of work they will be responsible for completing.

**START AND COMPLETION DATE**

After Notice to Proceed is issued and prior to starting of construction activities the Contractor is expected to submit all required documentation for review and/or approval. This documentation will include, but not limited to, shop drawings, catalog cuts and other design related calculation or drawings requiring review and/or approval.

This project is scheduled for road closure and detour routing for a maximum of 60 calendar days. Full closure can begin September 2, 2014 and roadway must be open to traffic and all work items completed on or before October 31, 2014.

**PROGRESS SCHEDULE**

Time is of the essence in this Contract. It may be necessary for the Contractor to work longer hours or use additional crews in order to complete the work within the required time limits. The Contractor shall submit a bar graph progress schedule for the Engineer's approval before the work can be started.

The schedule shall be based on an anticipated start date and for the project completion date as identified in the special provision for "START AND COMPLETION DATE".

**WORK HOURS**

The normal work hours for this project will be from 7:00 A.M. to 6:00 P.M., Monday through Saturday. Work hours outside this specified time frame will need to be approved by the Engineer. All work affecting traffic lane operations or staging will need to be approved by the Engineer prior to starting the work.

### **CONTRACTORS STAGING AREA**

Due to environmentally sensitive areas, flood plain and limited right-of-way, the Contractor should be aware that the project site has limited space for stock piling and storage of materials, worker and equipment parking. The Contractor will not be allowed to stock pile, storage materials or park within the environmentally sensitive areas and flood plain. Prior to starting any site activities, the Contractor will be responsible to visit the site to familiarize himself with these site conditions. The Contractor will be required to coordinate with the Engineer his plan for handling of materials to be stored on site and his worker and equipment parking. It may be necessary to arrange for this space outside the project limits. There will be no additional compensations for this coordination or if space is required for storage and/or parking outside the project limits.

Environmentally sensitive areas for this project are those areas within the existing right-of-way and temporary construction easements designated as wetland, and flood plain. These boundaries are shown on the Erosion Control Plans.

### **DEFINITION OF TERMS**

This special provision amends the provisions of Section 101 of the Standard Specifications for Road and Bridge Construction, adopted January 1, 2012, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

101.16 Engineer. Revise the third paragraph to read:

“The term Engineer shall apply to the awarding authority”.

101.19 Inspector. Add the following paragraph after the first paragraph:

“The term Inspector shall apply to the person or persons assigned by the Engineer to make detailed observations of any or all portions of the work or material.”

101.34 Resident Engineer/Resident Technician. Replace this paragraph with the following:

“The term Resident Engineer/Resident Technician shall apply to Kane County’s Authorized Representative. The term Resident Engineer shall not mean Engineer.”

Add the following paragraph:

“101.56 Design Consultant. The Design Consultant provided design services to Kane County. The Consultant for this project is Chastain & Associates LLC. The term Consultant shall not also mean the Engineer.”

**CONTRACTOR DISCLOSURE ACKNOWLEDGEMENT**

KANE COUNTY CODE, ARTICLE III, DIVISION 3, SECTION 2-211

1. Prior to award, every Contractor or vendor who is seeking or who has obtained contracts or change orders to contracts or two (2) or more individual contracts with Kane County resulting in an amount greater than Fifteen Thousand Dollars (\$15,000) shall disclose to the Kane County Purchasing Department, in writing all cumulative campaign contributions, (which includes multiple candidates) made within the previous twelve (12) months of awarding of the contract made by that Contractor, union, or vendor to any current officer or countywide elected officer whose office the contract to be awarded will benefit. Disclosure shall be updated annually during the term of a multi-year contract and prior to any change order or renewal requiring Board level approval. For purposes of this disclosure requirement, "Contractor or vendor" shall include owners, officers, managers, insurance brokers, lobbyists, agents, consultants, bond counsel and underwriters counsel, subcontractors, corporations, partnerships, associations, business trusts, estates, trustees, and/or beneficiaries under the control of the contracting person, and political action committees to which the contracting person has made contributions.
2. All Contractors and vendors who have obtained or are seeking contracts with Kane County must disclose the following information which shall be certified and attached to the application or document. Penalties for knowingly violating disclosure requirements will potentially result in immediate cancellation of the contract, and possible disbarment from future County contracts:
  - A. Name, address and percentage of ownership interest of each individual or entity having a legal or a beneficial interest of more than five percent (5%) in the applicant. Any entity required by law to file a statement providing substantially the information required by this paragraph with any other government agency may file a duplicate of such statement;
  - B. Names and contact information of their lobbyists, agents and representatives and all individuals who are or will be having contact with County employees or officials in relation to the contract or bid. This information disclosure must be updated when any changes to the information occurs.
  - C. Whenever any interest required to be disclosed in paragraph (a) above is held by an agent or agents, or a nominee or nominees, the principals for whom such agents or nominees hold such interest shall also be disclosed. The application of a spouse or any other party, if constructively controlled by another person, or legal entity as set forth above, shall state the name and address and percentage of beneficial interest of such person or entity possessing such constructive control and the relationship under which such control is being or may be exercised. Whenever a stock or beneficial interest is held by a corporation or other legal entity, such shareholder or beneficiary shall also make disclosure as required by paragraph (a) above.
  - D. A statement under oath that the applicant has withheld no disclosures as to economic interests in the undertaking nor reserved any information, data or plan as to the intended use or purpose for which it seeks County Board or other county agency action.

3. All disclosures and information shall be current as of the date upon which the application is presented and shall be maintained current until such time as Kane County shall take action on the application. Furthermore, this information shall be maintained in a database by the Purchasing Department, and made available for public viewing.
4. Notwithstanding any of the above provisions, the County Purchasing Department with respect to contracts awarded may require any such additional information from any applicant which is reasonably intended to achieve full disclosure relevant to the application for action by the County Board or any other County agency.
5. Any failure to comply with the provisions of this section shall render any ordinance, ordinance amendment, County Board approval or other County action in behalf of the applicant failing to comply voidable at the option of the County Board or other County agency involved upon the recommendation of the County Board Chairman or the majority of the County Board.
6. Contractor Disclosure information shall be sent to the Kane County Purchasing Department and the Kane County Division of Transportation at the following address, or via email, prior to Transportation Committee of the Kane County Board:

Kane County Government Center  
Purchasing Department, Bldg. A  
719 S. Batavia Ave. Geneva, IL 60134  
purchasing@countyofkane.org

Kane County Division of Transportation  
Linda Haines  
41W011 Burlington Road  
St. Charles, IL 60175  
haineslinda@countyofkane.org

Company Name: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Signature of Officer \_\_\_\_\_  
Print Name \_\_\_\_\_  
Title \_\_\_\_\_  
Date \_\_\_\_\_

**CERTIFICATE OF INSURANCE REQUIRED BY KANE COUNTY**

Contractor to furnish and deliver prior to commencement of work, a completed Certificate of Insurance satisfactory to the requirements of County of Kane containing:

- a) The Contractor and all Subcontractors shall provide a Certificate of Insurance naming the Owner (Kane County) as certificate holder and as additional insured. The certificate shall contain a 30-day notification provision to the owner (County of Kane) prior to cancellation or modification of the policy.
- b) Commercial General Liability insurance including Products/Completed Operations, Owners and Contractor Protective Liability and Broad Form Contractual Liability. The exclusion pertaining to Explosion, Collapse and Underground Property Damage hazards eliminated. The limit of liability shall not be less than the following:

General Aggregate	\$2,000,000
Products and Completed Operations	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000
Or - Combined Single Limit	\$1,000,000

- c) Products and Completed Operation coverage is to remain in force for a period of two years after the completion of project.
- d) Business Automotive Liability Insurance including owned, hired and non-owned automobiles, and/or trailer and other equipment required to be licensed, with limits of not less than the following:

Each Person for Bodily Injury	\$1,000,000
Each Occurrence for Bodily Injury	\$1,000,000
Each Occurrence for Property Damage	\$1,000,000
Or - Combined Single Limit	\$1,000,000

- e) Statutory Worker's Compensation insurance shall be in accordance with the provisions of the laws of the State of Illinois, including Occupational Disease Act provisions, for employees at the site of the project, and in case work is sublet, the Contractor shall require each Subcontractor similarly to provide this insurance. In case employees are engaged in work under this contract and are not protected under the Workers Compensation and Occupational Disease Act, the Contractor shall provide, and shall cause Subcontractor to provide, adequate and suitable insurance for the protection of employees not otherwise provided.
- f) Umbrella Liability:

Aggregate Limits	\$2,000,000
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- h) Professional Liability policy to cover all claims arising out of the Consultant's operations or premises, Sub-consultant's operation or premises, anyone directly employed by the Consultant or Sub-consultant, and the Consultant's obligation of indemnification under this Contract.

Limits:

Aggregate \$1,000,000

*Vendor to furnish a copy of the Endorsement showing County of Kane; Homer Chastain L. Chastain & Associates, LLP as an additional named insured on the General Liability, Auto, and Excess policies.*

The Contractor shall cease operations on the project if the insurance is cancelled or reduced below the required amount of coverage.

#### **LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**

107.27 Insurance. Delete paragraph (b)(3). Add the following after paragraph (d):

"Regardless whether or not an Owners' and Contractors' Protective (OCP) policy or Project Management Protective Liability (PMPL) policy is furnished, insurance certificates for commercial, general, automobile, umbrella, and builders risk shall specifically indicate by name the additional insured's, which are to include the County of Kane and Homer Chastain L. Chastain & Associates, LLP. as well as other persons or entities so identified. Certificates shall be Acord 25-S or equivalent.

Additional Insured Endorsement/OCP Policy/Project Management Protective Liability Policy

1. CONTRACTOR shall purchase and maintain liability insurance, as required in Article 107.27 of the Standard Specifications, specifically naming as additional insured the County of Kane and Homer Chastain L. Chastain & Associates, LLP, using Additional Insurance Endorsement Form CG 20 26 07 04, CG 81 11 05 06, CG 20 10 07 04, or equivalent form. General liability policies shall also be endorsed with Form CG 20 37 07 04 to include the "products-completed operations hazard.
2. As an alternative to providing Form CG 20 26 07 04, CG 81 11 05 06, or CG 20 10 07 04, CONTRACTOR may furnish to the County of Kane an OCP policy or a PMPL policy with the County of Kane as the named insured and Homer Chastain L. Chastain & Associates, LLP as either an additional insured or a named insured. OCP policy or PMPL policy shall provide for bodily injury and property plus the amount specified for the umbrella coverage. OCP policy or PMPL policy shall provide coverage arising out of:
  - i. Operations performed by CONTRACTOR at the project location.
  - ii. Acts or omissions in connection with the general supervision, inspection and/or coordination of such operations.

If an OCP or PMPL policy is provided, CONTRACTOR shall provide originals of the Final OCP or PMPL to all insured and additional insured parties.

Endorsements, OCP policy, PMPL policy, or General Liability policy shall not exclude supervisory or inspection services.

CONTRACTOR shall also provide an Additional Insured Endorsement for the automobile policy. The endorsement form shall be CA 2048, or equal.”

**PREVAILING WAGE RATES**

It is the policy of the State of Illinois as declared in the Illinois Prevailing Wage Act (820 ILCS 130/1 *et seq.*) “that a wage of no less than the general prevailing hourly rate as paid for work of a similar character in the locality in which the work is performed, shall be paid to all laborers, workers and mechanics employed by or on behalf of any and all public bodies engaged in public works”.

The CONTRACTOR agrees to pay, when applicable, the current Illinois Department of Labor Prevailing Wage Rates for all County of Kane projects. Current prevailing wage rates are available from the Illinois Department of Labor at their website: <https://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx>.

Prevailing wage rates are subject to revision monthly. The CONTRACTOR acknowledges its responsibility, for payment of any applicable future adjustment thereof.

The CONTRACTOR further acknowledges its responsibility to notify any sub-consultant of the applicability of the Prevailing Wage Act.

When applicable, the CONTRACTOR agrees to provide the Kane County Division of Transportation “certified payrolls” as required by the Prevailing Wage Act.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature of Officer of Company

\_\_\_\_\_  
Title:

\_\_\_\_\_  
Date:

### **MATERIAL TESTING – QUALITY CONTROL**

The Quality Assurance (QA) plant and field testing of concrete, hot-mix asphalt, soils, or other materials as determined by the Engineer will be performed by a testing firm designated by the County at the County's expense. The Engineer shall be notified 48 hours in advance of the work to allow scheduling of the tester. Quality Control (QC) plant and field testing of aggregates, concrete and hot-mix asphalt materials will be the responsibility of the Contractor. The Quality Control (QC) testing firm shall have a representative present throughout the duration of all work requiring testing. The Contractor will provide copies of the material testing plant and field reports to both the Engineer and the County. Testing frequency and requirements shall be as required in IDOT's "Manual of Test Procedures for Materials" (MTPM) latest edition. This item will not be measured separately for payment but shall be INCLUDED in the various items of work requiring testing.

### **INDEMNIFICATION**

In the first paragraph of Article 107.26 of the Standard Specifications, the words "the Department, its officers, employees and agents" shall be replaced with "Kane County, and Chastain & Associates LLC, their officers, employees and agents."

### **AUTOMATIC CLEARING HOUSE (ACH)**

The CONTRACTOR shall use the COUNTY'S Automatic Clearing House (ACH) payment program.

### **CORPS OF ENGINEERS PERMIT**

The work under this Contract shall comply with the terms of the Army Corps of Engineers' Regional Permit Program. A copy of the permit has been included in these special provisions.

### **MAINTENANCE OF ROADWAYS**

Beginning on the date that the Contractor begins work on this project, he shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

### **CLEAN CONSTRUCTION OR DEMOLITION DEBRIS**

Earthwork operations for this project shall be completed in accordance with Section 202 of the

Standard Specifications and material properly disposed of in accordance with Article 202.03.

This special provision only applies if the Contractor chooses to dispose of material at a permitted CCDD or registered uncontaminated soil fill facility. *The Contractor is advised to consider the cost of disposing of all surplus materials off-site and properly reflect those costs in their bids for earthwork and removal items.* The Contractor must be thoroughly familiar with the provisions of the environmental Protection Act as it relates to proper disposal of excavated material and construction debris.

Should the Contractor choose to dispose of materials at a permitted CCDD or registered uncontaminated soil fill facility, the Contractor shall be responsible for the lawful removal of all excavated soil, material and other clean construction or demolition debris in compliance with Public Act 96-1416. Disposal of materials at a permitted CCDD or registered uncontaminated soil fill facility will require that Form LPC-663 be submitted to the operator of that location before any materials can be disposed of at that site. Each certification covers only material from that specified job site. The Contractor shall be responsible for having the required analysis of soil materials completed and the Form 663 adequately completed and signed by a Professional Engineer or Geologist licensed in the State of Illinois

The Contractor is not responsible for the cost of soil remediation. In the event material is rejected it will be returned to the site where the extent of additional effort required to dispose of the material will be determined. The cost of returning rejected material will be the responsibility of the Contractor. The extent of additional effort for disposal or use of rejected material will be coordinated between the Engineer and the Contractor.

It should be noted that "Unsuitable Material" defined in these special provisions for Removal and Disposal of Unsuitable Material should not be confused with "contaminated" or "hazardous" materials.

### **EXPLORATION TRENCH, SPECIAL**

Description: This work shall be as required in Section 213 of the Standard Specifications and shall also consist of excavating a trench of sufficient width, (minimum 48"), length and depth (as field determined) to expose existing utilities, potential utility conflicts, other utility obstructions, underdrains and/or field tiles shown on the plans or as determined by the Engineer.

The depth and width of trench shall be of adequate width to allow investigation of the item in the trench. The maximum depth shall be based on the depth of the proposed utility depth or to the point of potential utility conflict.

The exploration holes will also be completed at all locations where the proposed sewers, casing pipe, underdrains or culvert pipes cross an existing utility line where meeting clearance requirements are essential and adjustment to the existing utility may be necessary prior to starting construction operations to meet said clearance requirements. Other exploration trenches may be excavated at the locations noted on the plans or required by the Engineer.

The depth of the inspection hole shall be as necessary to uncover the existing utilities or other

obstructions and of adequate width to allow investigation of the investigated item in the hole. In no case does the inspection hole need to be deeper than the proposed invert elevation of the proposed work item being installed plus the clearance requirement.

After a determination of the condition and/or location adequacy and at the direction of the Engineer, in areas of proposed structural embankment or pavement structures, the Contractor shall backfill the trench with materials meeting the requirement of TRENCH BACKFILL in Section 208 of the Standard Specifications. All areas outside the improvements can be backfilled with the originally excavated material. All excess excavated material created by this work shall be disposed of offsite by the Contractor.

Basis of Payment. This work will be paid for at the contract unit price per Foot for EXPLORATION TRENCH, SPECIAL regardless of depth for utility exploration and as specified in Section 213 for underdrain exploration, which will be payment in full for all required work as set forth above. Trench backfill will not be measured separately for payment but shall be INCLUDED in the cost of Exploration Trench, Special.

### **TRAFFIC CONTROL PLAN**

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards included herein and in the plans.

Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

Standard Specifications:

Section 701 - Work Zone Traffic Control and Protection

Highway Standards:

701301      701311      701901

In addition, the following also relate to traffic control for this project:

Supplemental Specifications and Recurring Special Provisions:

701 - Work Zone traffic Control and Protection

1106 - Work Zone Traffic Control Devices

Recurring Special Provisions:

Check Sheet #20 - Guardrail and Barrier Wall Delineation

Local Roads and Streets Recurring Special Provisions:

LRS3 - Work Zone Traffic Control Surveillance  
LRS4 - Flaggers in Work Zones

Details:

Detour Route and Construction Staging

SIGNS:

No bracing shall be allowed on post-mounted signs.

“BUMP” (W8-1(O)48) signs shall be installed as directed by the Engineer.

All regulatory signs shall be maintained at a 5-foot minimum bottom height for rural installations and 7-foot minimum bottom height for urban installations.

FLAGGERS:

Flaggers shall comply with all requirements contained in Article 701.13 of the Standard Specifications.

HIGHWAY STANDARDS APPLICATION:

701301 This standard will apply when short time work operations are being performed. Typical operations are bituminous density testing, application of temporary pavement marking, marking and saw cutting edge of pavements, and miscellaneous survey operations. Work performed under this traffic control application will not be paid for separately, but shall be INCLUDED in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Anticipated major operations for application of this standard:

- Installing erosion control measures.
- Installing detour signage.
- Surveying operations.

701311 This standard is used where any work activity requires a continuous moving operation where the speed is greater than 3 mph. Work performed under this traffic control application will not be paid for separately, but shall be INCLUDED in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Anticipated major operations for application of this standard:

- Permanent pavement marking operations.

701901 This standard includes general traffic control devices to be used throughout the project. These traffic control devices will not be paid for separately, but shall be INCLUDED in the cost of the related work items.

Anticipated major operations for application of this standard:

- All construction detour plans and applicable standards.

**KEEPING ENTRANCES OPEN TO TRAFFIC:**

Access to private entrances designated on the plans to remain open shall remain open at all times. On properties that have more than one access, one entrance may be temporarily closed. However, vehicular access must remain open to traffic for the opposite entrance. When it is necessary to close an entrance, the Contractor shall coordinate with the Engineer and the property owner forty-eight (48) hours in advance of the work.

**Maintenance of Traffic:**

The Contractor shall be required to notify the Kane County, the corresponding Township Commissioner, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Illinois Department of Transportation (Rte. 38) (Bureau of Project Implementation) regarding any changes in traffic control.

**Basis of Payment**

The basis of payment for traffic control and protection will be as follows:

Traffic control and protection as detailed on the plans and as required by the referenced traffic control standards will be paid for at the contract Lump Sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). The price for these items shall be payment in full for all labor, materials, transportation, signs, drums and barricades and incidental work necessary to furnish, install, maintain and remove all traffic control as shown in the plans and as required in these Special Provisions.

**STATUS OF UTILITIES TO BE ADJUSTED**

Utility companies involved in this project have provided the following estimated dates:

Name of Utility	Type	Location	Estimated Dates for Start and Completion of Relocation or Adjustments
AT&T	Telephone	East ROW Limit	Clear
ComEd	Overhead	In west Parkway	Clear

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

## **REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL**

Description: This item shall be completed in accordance with the applicable portions of Section 202 of the Standard Specifications with the following general additions. This work will include excavation and/or removing of unsuitable surplus topsoil, trench and other excavated material, or undercut material shown on the plans or as directed by the Engineer.

### Design Assumptions:

Materials removed under the pay item for Earth Excavation are generally considered those materials excavated from the project site that are considered suitable for use in the construction of the embankments. With the projects being constructed under road closed conditions stock piling materials for later use is possible with approval of the Engineer. As such, the following assumptions were made in calculating of the earthwork quantities.

Suitable excavated material within the project limits of both culverts, which shall include topsoil, earth excavation, trench materials, and undercut materials will be suitable for use at both culverts in embankments and as restoration.

Surplus unsuitable materials comprised of clean organic material that meet the requirements of Section 211 of the Standard Specifications for topsoil will become the property of the contractor.

In cut sections, the final subgrade shall be prepared as specified in Section 301. In areas where undercuts have been called out on the plans, the final subgrade will be prepared as specified in Section 301 and the subgrade will then be proof rolled. Final determination of the undercut area will be based on the proof roll after the subgrade has been prepared and as directed by the Engineer.

It is the intention of this specification to pay for handling earthwork material only once, except as directed herein and/or approved for additional payment in advance by the Engineer.

Method of Measurement: Removal and Disposal of Unsuitable Material will be measured for payment as described in Article 202.07 of the Standard Specifications.

Basis of Payment: The removal and disposal of unsuitable materials as described herein shall be paid for at the contract unit price per Cubic Yard for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, which shall be full compensation for, but not limited to, excavating, disposal off-site and all labor, equipment and materials required for performing the work as herein specified.



### **REMOVAL OF EXISTING STRUCTURES**

This item covers the removal and disposal of the existing cross road culvert structures. The Contractor shall perform this work according to the applicable portions of Sections 501 and 502 of the Standard Specifications at locations shown in the plans. Removal shall include the box culvert, wingwalls, footings and all appurtenances as noted in the plans.

Excavation of earth necessary to perform the removal of the existing box culvert will not be measured for payment. Backfilling of the excavated area outside of the limits for the new construction shall consist of placing and compacting the necessary fill within the space excavated for a structure below the ground surface, as it existed before any excavation was made. Backfill material shall be furnished and placed and mechanically compacted per Article 502.10 necessary to fill voids from the existing structure.

This item shall be paid for at the contract unit price Each for REMOVAL OF EXISTING STRUCTURES. This work will include excavation; backfill and all necessary work to satisfactorily remove the existing culvert structures. Back fill required due to over excavation will not be measured for payment. No additional compensation will be allowed because of variation from the assumed thickness or dimensions shown on the plans.

### **CHANGEABLE MESSAGE SIGN**

Description. The project will require that electronic changeable message signs be placed on the north and south ends of the project to warn the public of the pending road construction and road closures. The message boards will need to be placed and set out for seven (7) days in advance of the anticipated first day of construction and again seven (7) days prior to changing between each Closure.

Message Boards to be set prior to closure change and remain in place for:

Culvert 3 Road Closure – 7 days  
Culvert 4 Road Closure – 7 days

Unless otherwise directed by the Engineer, the signs shall be removed after the specified number of days. The Contractor will coordinate with the Engineer on the exact placement of the message boards and the message that is to be displayed.

Method of Measurement. Message board(s) will not be measured for payment, costs will be considered included in TRAFFIC CONTROL AND PROTECTION (SPECIAL).

### **TEMPORARY INFORMATIONAL SIGNS**

Description: Kane County requires that temporary information signing will be erected on the south and north side of the bridge to inform the public of the construction duration. The Contractor will coordinate with the Engineer on the exact placement of the sign. The sign shall be in place for the entire duration of the contract or as directed by the Engineer. The temporary sign will measure 68" x

45" and the message shall be coordinated and approved by the Engineer.

This work shall consist of furnishing, installing, maintaining, relocating for various states of construction, and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

Materials:

Materials shall be according to the following Articles of Section 1000- Materials:

Item	Article/Section
a. Sign Base (Notes 1 & 2)	1090
b. Sign Face (Note 3)	1091
c. Sign Legends	1092
d. Sign Supports	1093
e. Overlay Panels (Note 4)	1090.01

Note 1. The Contractor may use 16mm (5/8 inch) instead of 19mm (3/4 inch) thick plywood.

Note 2. Type A sheeting can be used on the plywood base.

Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1084.02(b).

Note 4. The overlay panels shall be 2mm (0.08 inch) thick.

General Construction Requirements:

Installation: the Contractor prior to fabrication shall verify the sign sizes and legend sizes.

Signs, which are placed along the roadway and/or within the construction zone, shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 2.1 m (7') above the near edge of the pavement and shall be a minimum of 600mm (2') beyond the edge of the paved shoulder. A minimum of 2 posts shall be used.

The Contractor shall place signs one (1) Week in advance of the start of any construction on end of the project limits that will state the start date of construction and the number of months the construction is anticipated to last.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Basis of Payment: The signing, which includes post and mounting, will not be measured for payment, costs will be considered included in TRAFFIC CONTROL AND PROTECTION (SPECIAL). All hardware, posts, or skids, supports, bases for ground-mounted signs, connections, which are required for mounting these signs, will be included.

## **GUARDRAIL MARKERS**

Description: This item will consist of providing and installing new guardrail markers on the new guardrail.

For markers on the existing guardrail, once the existing guardrail is removed the guardrail markers shall be salvaged and returned to the County.

Materials: The new guardrail mounted reflectors shall be “AKT-567” and shall be provided for all proposed Steel Plate Beam Guardrail locations.

- A. The reflective area shall be approximately nine (9) square inches of encapsulated lens reflective sheeting permanently mounted to the bracket by either pressure sensitive or heat. The sheeting shall be Hi-intensity grade reflective material and the color of the reflective sheeting shall be chosen by the Engineer in the field. The reflector shall be mounted at each post location shown in the plans per the manufacturer’s specifications and details.
- B. The bracket shall be 12 gauge galvanized steel. The bracket shall be of the same size and shape as the reflective sheeting that is mounted on it. The bracket shall have slotted holes in such a manner as to fit under the collars of the existing guardrail bolts when tightened down. There shall be no open area between the guardrail and the reflector so as to prohibit vandalism. The delineator shall mount within the channel section of the guardrail and shall not protrude further than the guardrail itself. Epoxy shall not be used to install the delineator to the guardrail. The delineator shall be capable of holding reflective material for either one-way or two-way applications. The galvanizing shall be G-90 or better.

### Colors:

Permanent Guardrail Final Installation – New guardrail markers shall be installed on all guardrail after the final installation and be reflective on both sides with the traffic side being “white” and the opposing side being “yellow”.

Basis of Payment: All new guardrail markers shall be paid for at the contract unit price Each for GUARDRAIL MARKERS, TYPE A, which price shall include the reflector, installation, labor, tools, equipment and incidentals required to complete the work as specified.

Existing guardrail markers removed from the existing guardrail and returned to the County will not be measured separately for payment but shall be INCLUDED in the cost of the GUARDRAIL MARKERS, TYPE A.

## **SIGN PANEL REMOVAL AND INSTALLATION**

The County will be responsible for the removal of the existing roadway signs within the project limits. The Contractor will mark all signs to be removed and will then coordinate with the Engineer to have the signs removed.

The County will also supply and erect all proposed roadway signs detailed on the Pavement Marking

and Signing Plan.

### **TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL)**

Description: This work shall consist of furnishing and erecting Traffic Barrier Terminal Type 1, Special at locations shown on the plans or as directed by the Engineer.

Materials: The barrier terminal shall consist of materials in accordance of Article 1006 of the Standard Specifications. The Traffic Barrier Terminal Type 1, Special shall be on the IDOT approved product list.

Construction Requirements: The guardrail shall be constructed in accordance with the requirements of Section 631.

Basis of Payment: Traffic Barrier Terminal Type 1, (Special) shall be paid for at the contract unit price Each for TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) TANGENT.

### **URETHANE PAVEMENT MARKING**

Description: This work shall consist of furnishing and applying a reflectorized Modified Urethane Pavement Markings in accordance with Section 780 of the Supplemental Specifications for Pavement Striping of the sizes and colors as shown on the plans.

Basis of Payment: This work will be paid for at the contract unit prices per Foot of applied line for MODIFIED URETHANE PAVEMENT MARKING - LINE of the size specified or per Square Foot for MODIFIED URETHANE PAVEMENT MARKING – LETTERS AND SYMBOLS measured as specified herein.

### **DEWATERING**

Description. This work shall consist of furnishing all labor, tools, equipment, and materials to install, maintain, and operate all necessary dewatering systems to divert, remove water from the work area or designed to control sediment discharge in dewatering applications where water is being pumped for the construction of the proposed culvert, stone rip rap channel lining and other work associated with channel bank grading to ensure that work can be completed in the dry or in manageable conditions as approved by the Engineer.

This item will also consist of constructing a dewatering filtering system consisting of filtration or sediment bags for collecting sediment from pumping operations within coffer dams and sump pits. Construction waters will include, but not be limited to, all waters generated from the installation of culverts, earthwork and ancillary construction items.

Prior to any culvert or ditch work associated with the project, Contractor shall identify the proposed dewatering and/or diversion/isolation method to be used and obtain approval from Kane DuPage Soil and Water Conservation District and/or Engineer prior to starting work. Culvert work shall take

place only during low flow conditions unless otherwise allowed by the Kane DuPage Soil and Water Conservation District and/or Engineer. Concentrated flow shall be isolated from the work area. Dewatering shall comply with all requirements contained in the plan.

A suggested bypass plan for the tributary water has been included in the plans for construction of the proposed culvert. The Contractor is ultimately responsible for the choice of the product(s) and equipment; for and subsequent removal of dewatering systems and their safety and conformity with local codes, regulations, and these Specifications, as well as "means and methods" for the Site Dewatering and Diversion Work to be performed. The Contractors "means and methods" are subject to the review of the County and Kane-DuPage Soil and Water Conservation District. All products and "means and methods" selected shall be adequate for the intended use/application and within the construction limits represented on the plans. The Kane-DuPage Soil and Water Conservation District's review does not relieve the Contractor from compliance with the requirements of the Drawings, Standard Specifications, and the requirements of this special provision.

The Contractor shall submit to the Engineer and Kane-DuPage Soil and Water Conservation District County for review a description of dewatering techniques and equipment to be used, together with detail drawings showing items such as, but not limited to type of pumps, pump size, lengths and sizes of discharge piping and points(s) of discharge including erosion control procedures. Changes to the site dewatering and/or diversion plan(s) are to be approved by the Engineer and the Kane DuPage Soil and Water Conservation District. The Agency review of dewatering techniques and equipment shall in no way be construed as creating any obligation on the part of County for same.

The Contractor shall select the pumps he/she desires to use and the rate at which the pumps discharge, but adequate protection at the pump discharge shall be provided by the Contractor, subject to review by the Engineer. The Contractor shall ensure that downstream water quality and further erosion shall not be impaired.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent property or streets or to other work under construction. Water shall not be discharged onto roadways without adequate protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers. No water containing settleable solids shall be discharged without treatment to meet the requirements of the USACE 404 Permit and the KDSWCD requirements. Any and all damages caused by dewatering and/or diversion operations will be promptly repaired by the Contractor. Conditions and deficiency deductions as specified in Article 105.03(a) of the Standard Specifications shall apply. The Contractor is responsible for providing any and all labor, materials and equipment needed for the dewatering and/or diversion of waters in order to meet the scheduled completion of the project.

Method of Measurement. This item will be measured as Lump Sum for DEWATERING. The Contractor will not be due additional compensation for delay, lost productivity, or for re-establishing and maintaining the dewatered and/or diversion condition in the event the capacity of the system is exceeded. The payment under this item is for the duration of the contract, regardless of conditions encountered.

Basis of Payment. This work required for construction of dewatering and/or diversion systems and dewatering/diversion for the construction of all structures, channel and bank stabilization shall be paid for at the contract Lump Sum price for DEWATERING, which work shall include cofferdams, barrier wall, filter fabric, piping, pumping, foundation preparation, framing and supports, dewatering

filtering system consisting of filtration or sediment bags, installation, maintenance, removal of systems and all labor, material, and equipment needed to perform the work described herein and as specified on the plans.

### **TEMPORARY DITCH CHECKS**

Description: This work consists of the installation of Temporary Ditch Checks in accordance with applicable articles of Section 280 of the Standard Specifications and as detailed on the plans. The work shall include supplying, installing, relocating, cleaning, and removal of Temporary Ditch Checks as directed by the Engineer.

Materials: Temporary Ditch Checks shall be constructed with products from the Illinois Department of Transportation's approved list for sediment logs or rolled excelsior.

Method of Measurement: This work shall be measured for payment as foot.

Basis of Payment: This work will be paid for at the contract unit price per Foot for TEMPORARY DITCH CHECKS, which price shall be full compensation for all labor, equipment and materials required for performing the work as herein specified and detailed on the plans.

### **ITEMS ORDERED BY THE ENGINEER**

When the Engineer requests additional work, not indicated on the Contract drawings, in writing during construction, this additional work will be measured and paid for as described in Articles 104.02 and 109.04.

Basis of Payment: Payment for all additional work will be made from the ITEMS AS ORDERED BY THE ENGINEER pay item, which shall be in units of one dollar (\$1.00).

**WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS**

Effective: April 19, 2012

Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

“If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain.”

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

“Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10.”

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

State of Illinois  
Department of Transportation  
Bureau of Local Roads and Streets

SPECIAL PROVISION  
FOR  
BIDDING REQUIREMENTS AND CONDITIONS FOR CONTRACT PROPOSALS

Effective: January 1, 2001  
Revised: January 1, 2014

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 102.01 of the Standard Specifications with the following:

“Prequalification of Bidders. When prequalification is required and the Awarding Authority for contract construction work is the County Board of a County, the Council, the City Council, or the President and Board of Trustees of a city, village, or town, each prospective bidder, in evidence of competence, shall furnish the Awarding Authority as a prerequisite to the release of proposal forms by the Awarding Authority, a certified or photostatic copy of a "Certificate of Eligibility" issued by the Department of Transportation, according to the Department's "Prequalification Manual".

The two low bidders must file, within 24 hours after the letting, a sworn affidavit in triplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work, using the blank form made available for this affidavit. One copy shall be filed with the Awarding Authority and two copies with IDOT's District office.

Issuance of Proposal Forms. The Awarding Authority reserves the right to refuse to issue a proposal form for bidding purposes for any of the following reasons:

- (a) Lack of competency and adequate machinery, plant, and other equipment, as revealed by the financial statement and experience questionnaires required in the prequalification procedures.
- (b) Uncompleted work which, in the judgment of the Awarding Authority, might hinder or prevent the prompt completion of additional work awarded.
- (c) False information provided on a bidder's "Affidavit of Availability".
- (d) Failure to pay, or satisfactorily settle, all bills due for labor and material on former contracts in force at the time of issuance of proposal forms.
- (e) Failure to comply with any prequalification regulations of the Department.
- (f) Default under previous contracts.
- (g) Unsatisfactory performance record as shown by past work for the Awarding Authority, judged from the standpoint of workmanship and progress.
- (h) When the Contractor is suspended from eligibility to bid at a public letting where the contract is awarded by, or requires approval of, the Department.
- (i) When any agent, servant, or employee of the prospective bidder currently serves as a member, employee, or agent of a governmental body that is financially involved in the proposal work.



- (j) When any agent, servant, or employee of the perspective bidder has participated in the preparation of plans or specifications for the proposed work.

Interpretation of Quantities in the Bid Schedule. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased, or omitted as hereinafter provided.

Examination of Plans, Specifications, Special Provisions, and Site of Work. The bidder shall, before submitting a bid, carefully examine the provisions of the contract. The bidder shall inspect in detail the site of the proposed work, investigate and become familiar with all the local conditions affecting the contract and fully acquaint themselves with the detailed requirements of construction. Submission of a bid shall be a conclusive assurance and warranty the bidder has made these examinations and the bidder understands all requirements for the performance of the work. If his/her bid is accepted, the bidder shall be responsible for all errors in the proposal resulting from his/her failure or neglect to comply with these instructions. The Awarding Authority will, in no case, be responsible for any costs, expenses, losses, or change in anticipated profits resulting from such failure or neglect of the bidder to make these examinations.

The bidder shall take no advantage of any error or omission in the proposal and advertised contract. Any prospective bidder, who desires an explanation or interpretation of the plans, specification, or any of the contract documents, shall request such in writing from the Awarding Authority, in sufficient time to allow a written reply by the Awarding Authority that can reach all prospective bidders before the submission of their bids. Any reply given a prospective bidder concerning any of the contract documents, plans, and specifications will be furnished to all prospective bidders in the form determined by the Awarding Authority including, but not limited to, an addendum, if the information is deemed by the Awarding Authority to be necessary in submitting bids or if the Awarding Authority concludes the information would aid competition. Oral explanations, interpretations, or instructions given before the submission of bids unless at a prebid conference will not be binding on the Awarding Authority.

Preparation of the Proposal. Bidders shall submit their proposals on the form furnished by the Awarding Authority. The proposal shall be executed properly, and bids shall be made for all items indicated in the proposal form, except when alternate bids are asked, a bid on more than one alternate for each item is not required, unless otherwise provided. The bidder shall indicate in figures, a unit price for each of the separate items called for in the proposal form; the bidder shall show the products of the respective quantities and unit prices in the column provided for that purpose, and the gross sum shown in the place indicated in the proposal form shall be the summation of said products. All writing shall be with ink or typewriter, except the signature of the bidder which shall be written in ink.

If the proposal is made by an individual, that individual's name and business address shall be shown. If made by a firm or partnership, the name and business address of each member of the firm or partnership shall be shown. If made by a corporation, the proposal shall show the names, titles, and business addresses of the president, corporate secretary and treasurer. The proposal shall be signed by president or someone with authority to execute contracts and attested by the corporate secretary or someone with authority to execute or attest to the execution of contracts.

When prequalification is required, the proposal form shall be submitted by an authorized bidder in the same name and style as shown on the "Contractor's Statement of Experience and Financial Condition" used for prequalification.

Rejection of Proposals. The Awarding Authority reserves the right to reject any proposal for any of the conditions in "Issuance of Proposal Forms" or for any of the following reasons:

- (a) More than one proposal for the same work from an individual, firm, partnership, or corporation under the same name or different names.
- (b) Evidence of collusion among bidders.
- (c) Unbalanced proposals in which the bid prices for some items are, in the judgment of the Awarding Authority, out of proportion to the bid prices for other items.
- (d) If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items or lump sum pay items.
- (e) If the proposal form is other than that furnished by the Awarding Authority; or if the form is altered or any part thereof is detached.
- (f) If there are omissions, erasures, alterations, unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- (g) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- (h) If the proposal is not accompanied by the proper proposal guaranty.
- (i) If the proposal is prepared with other than ink or typewriter, or otherwise fails to meet the requirements of the above "Preparation of Proposal" section.

Proposal Guaranty. Each proposal shall be accompanied by a bid bond on the Department form contained in the proposal, executed by a corporate surety company satisfactory to the Awarding Authority, by a bank cashier's check or a properly certified check for not less than five percent of the amount bid, or for the amount specified in the following schedule:

<u>Amount Bid</u>		<u>Proposal Guaranty</u>
Up to	\$5,000	\$150
>\$5,000	\$10,000	\$300
>\$10,000	\$50,000	\$1,000
>\$50,000	\$100,000	\$3,000
>\$100,000	\$150,000	\$5,000
>\$150,000	\$250,000	\$7,500
>\$250,000	\$500,000	\$12,500
>\$500,000	\$1,000,000	\$25,000
>\$1,000,000	\$1,500,000	\$50,000
>\$1,500,000	\$2,000,000	\$75,000
>\$2,000,000	\$3,000,000	\$100,000
>\$3,000,000	\$5,000,000	\$150,000
>\$5,000,000	\$7,500,000	\$250,000
>\$7,500,000	\$10,000,000	\$400,000
>\$10,000,000	\$15,000,000	\$500,000
>\$15,000,000	\$20,000,000	\$600,000
>\$20,000,000	\$25,000,000	\$700,000
>\$25,000,000	\$30,000,000	\$800,000
>\$30,000,000	\$35,000,000	\$900,000
Over	\$35,000,000	\$1,000,000

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must equal to the sum of the proposal guaranties which would be required for each individual proposal.

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the County Treasurer, when a County is the Awarding Authority; or the City, Village, or Town Treasurer, when a city, village, or town is the Awarding Authority.

The proposal guaranty checks of all, except the two lowest responsible, will be returned promptly after the proposals have been checked, tabulated, and the relation of the proposals established. Proposal guaranty checks of the two lowest bidders will be returned as soon as the contract and contract bond of the successful bidder have been properly executed and approved. Bid bonds will not be returned.

After a period of three working days has elapsed after the date of opening proposals, the Awarding Authority may permit the two lowest bidders to substitute for the bank cashier's checks or certified checks submitted with their proposals as proposal guaranties, bid bonds on the Department forms executed by corporate surety companies satisfactory to the Awarding Authority.

Delivery of Proposals. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Authority and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

Withdrawal of Proposals. Permission will be given a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

Public Opening of Proposals. Proposals will be opened and read publicly at the time and place specified in the Notice to Bidders. Bidders, their authorized agents, and other interested parties are invited to be present.

Consideration of Proposals. After the proposals are opened and read, they will be compared on the basis of the summation of the products of the quantities shown in the bid schedule by the unit bid prices. In awarding contracts, the Awarding Authority will, in addition to considering the amounts stated in the proposals, take into consideration the responsibility of the various bidders as determined from a study of the data required under "Prequalification of Bidders", and from other investigations which it may elect to make.

The right is reserved to reject any or all proposals, to waive technicalities, or to advertise for new proposals, if in the judgment of the Awarding Authority, the best interests of the Awarding Authority will be promoted thereby.

Award of Contract. The award of contract will be made within 45 calendar days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter of intent that his/her bid has been accepted, and subject to the following conditions, the bidder will be the Contractor.

An approved contract executed by the Awarding Authority is required before the Awarding Authority is bound. An award may be cancelled any time by the Awarding Authority prior to execution in order to protect the public interest and integrity of the bidding process or for any other reason if, in the judgment of the Awarding Authority, the best interests of the Awarding Authority will be promoted thereby.

If a contract is not awarded within 45 days after the opening of proposals, bidders may file a written request with the Awarding Authority for the withdrawal of their bid, and the Awarding Authority will permit such withdrawal.

Requirement of Contract Bond. If the Awarding Authority requires a Contract Bond, the Contractor or Supplier shall furnish the Awarding Authority a performance and payment bond with good and sufficient sureties in the full amount of the award as the penal sum. The surety shall be acceptable to the Awarding Authority, shall waive notice of any changes and extensions of time, and shall submit its bond on the form furnished by the Awarding Authority.

Execution of Contract. The contract shall be executed by the successful bidder and returned, together with the Contract Bond, within 15 days after the contract has been mailed to the bidder.

If the bidder to whom the award is made is a corporation organized under the laws of a State other than Illinois, the bidder shall furnish the Awarding Authority a copy of the corporation's Certificate of Authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish such evidence of a Certificate of Authority within the time required will be considered as just cause for the annulment of the award and the forfeiture of the proposal guaranty to the Awarding Authority, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

Failure to Execute Contract. If the contract is not executed by the Awarding Authority within 15 days following receipt from the bidder of the properly executed contracts and bonds, the bidder shall have the right to withdraw his/her bid without penalty.

Failure of the successful bidder to execute the contract and file acceptable bonds within 15 days after the contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of the Awarding Authority, not as penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be readvertised and constructed under contract, or otherwise, as the Awarding Authority may decide.”

State of Illinois  
Department of Transportation  
Bureau of Local Roads and Streets

SPECIAL PROVISION  
FOR  
COOPERATION WITH UTILITIES

Effective: January 1, 1999  
Revised: January 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 105.07 of the Standard Specifications with the following:

**“105.07 Cooperation with Utilities.** The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:

- (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.

- (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
- (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.

(b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:

- (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
- (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

State of Illinois  
DEPARTMENT OF TRANSPORTATION  
Bureau of Local Roads & Streets

SPECIAL PROVISION  
FOR  
WAGES OF EMPLOYEES ON PUBLIC WORKS

Effective: January 1, 1999  
Revised: January 1, 2014

1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Illinois Department of Labor publishes the prevailing wage rates on its website at [www.state.il.us/agency/idol/rates/rates.htm](http://www.state.il.us/agency/idol/rates/rates.htm). If the Illinois Department of Labor revises the prevailing wage rates, the revised prevailing wage rates on the Illinois Department of Labor's website shall apply to this contract and the Contractor will not be allowed additional compensation on account of said revisions. The Contractor shall review the wage rates applicable to the work of the contract at regular intervals in order to ensure the timely payment of current wage rates. The Contractor agrees that no additional notice is required. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto.
2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of not less than five years from the date of the last payment on a contract or subcontract, records of all laborers, mechanics, and other workers employed by them on the project; the records shall include information required by 820 ILCS 130/5 for each worker. Upon seven business days' notice, the Contractor and each subcontractor shall make available for inspection and copying at a location within this State during reasonable hours, the payroll records to the public body in charge of the project, its officers and agents, the Director of Labor and his deputies and agents, and to federal, State, or local law enforcement agencies and prosecutors.
3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month with the public body in charge of the project, except that the full social security number and home address shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). The certified payroll shall consist of a complete copy of the payroll records except starting and ending times of work each day may be omitted  

The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor or an officer, employee, or agent of the contractor or subcontractor which avers that: (i) he or she has examined the certified payroll records required to be submitted by the Act and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor.
4. Employees Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.



**CONCRETE BOX CULVERTS WITH SKEWS  $\leq$  30 DEGREES REGARDLESS OF DESIGN  
FILL AND SKEWS  $>$  30 DEGREES WITH DESIGN FILLS  $>$  5 FEET (BDE)**

Effective: April 1, 2012

| Revised: April 1, 2014

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

“Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-in-place concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577.”

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80294

## CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: January 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term “equipment” refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

**GRANULAR MATERIALS (BDE)**

Effective: November 1, 2012

Revise the title of Article 1003.04 of the Standard Specifications to read:

**“1003.04 Fine Aggregate for Bedding, Trench Backfill, Embankment, Porous Granular Backfill, Sand Backfill for Underdrains, and French Drains.”**

Revise Article 1003.04(c) of the Standard Specifications to read:

“(c) Gradation. The fine aggregate gradations for granular embankment, granular backfill, bedding, and trench backfill for pipe culverts and storm sewers shall be FA 1, FA 2, or FA 6 through FA 21.

The fine aggregate gradation for porous granular embankment, porous granular backfill, french drains, and sand backfill for underdrains shall be FA 1, FA 2, or FA 20, except the percent passing the No. 200 (75 µm) sieve shall be 2±2.”

Revise Article 1004.05(c) of the Standard Specifications to read:

“(c) Gradation. The coarse aggregate gradations shall be as follows.

Application	Gradation
Blotter	CA 15
Granular Embankment, Granular Backfill, Bedding, and Trench Backfill for Pipe Culverts and Storm Sewers	CA 6, CA 9, CA 10, CA 12, CA17, CA18, and CA 19
Porous Granular Embankment, Porous Granular Backfill, and French Drains	CA 7, CA 8, CA 11, CA 15, CA 16 and CA 18”

## HOT-MIX ASPHALT – MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BDE)

Effective: November 1, 2013

Revise Article 406.14(b) of the Standard Specifications to read.

“(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF, the mixture and test strip will not be paid for and the mixture shall be removed at the Contractor’s expense. An additional test strip and mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF.”

Revise Article 406.14(c) of the Standard Specifications to read.

“(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF, the mixture shall be removed. Removal will be paid in accordance to Article 109.04. This initial mixture and test strip will be paid for at the contract unit prices. The additional mixture will be paid for at the contract unit price, and any additional test strips will be paid for at one half the unit price of each test strip.”

Revise Article 1030.04(a)(1) of the Standard Specifications to read.

“(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>										
Sieve Size	IL-25.0 mm		IL-19.0 mm		IL-12.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)		100								
1 in. (25 mm)	90	100		100						
3/4 in. (19 mm)		90	82	100		100				
1/2 in. (12.5 mm)	45	75	50	85	90	100		100		100
3/8 in. (9.5 mm)						89	90	100		100
#4 (4.75 mm)	24	42 <sup>2/</sup>	24	50 <sup>2/</sup>	28	65	32	69	90	100
#8 (2.36 mm)	16	31	20	36	28	48 <sup>3/</sup>	32	52 <sup>3/</sup>	70	90
#16 (1.18 mm)	10	22	10	25	10	32	10	32	50	65
#50 (300 µm)	4	12	4	12	4	15	4	15	15	30
#100 (150 µm)	3	9	3	9	3	10	3	10	10	18
#200 (75 µm)	3	6	3	6	4	6	4	6	7	9

Ratio Dust/Asphalt Binder		1.0		1.0		1.0		1.0		1.0 <sup>1/4</sup>
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- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the #4 (4.75 mm) sieve for binder courses with Ndesign ≥ 90.
- 3/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign ≥ 90.
- 4/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.”

Delete Article 1030.04(a)(4) of the Standard Specifications.

Revise Article 1030.04(b)(1) of the Standard Specifications to read.

“(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS High ESAL						
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum					Voids Filled with Asphalt Binder (VFA), %
	IL-25.0	IL-19.0	IL-12.5	IL-9.5	IL-4.75 <sup>1/</sup>	
50	12.0	13.0	14.0	15.0	18.5	65 – 78 <sup>2/</sup>
70					65 - 75	
90						
105						

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 76-83 percent”

Delete Article 1030.04(b)(4) of the Standard Specifications.

Revise the Control Limits Table in Article 1030.05(d)(4) of the Standard Specifications to read.

“CONTROL LIMITS
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Parameter	High ESAL Low ESAL	High ESAL Low ESAL	All Other	IL-4.75	IL-4.75
	Individual Test	Moving Avg. of 4	Individual Test	Individual Test	Moving Avg. of 4
% Passing: <sup>1/</sup>					
1/2 in. (12.5 mm)	± 6 %	± 4 %	± 15 %		
No. 4 (4.75 mm)	± 5 %	± 4 %	± 10 %		
No. 8 (2.36 mm)	± 5 %	± 3 %			
No. 16 (1.18 mm)				± 4 %	± 3 %
No. 30 (600 µm)	± 4 %	± 2.5 %			
Total Dust Content No. 200 (75 µm)	± 1.5 %	± 1.0 %	± 2.5 %	± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.5 %	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.2 %	± 1.0 %
VMA	-0.7 % <sup>2/</sup>	-0.5 % <sup>2/</sup>		-0.7 % <sup>2/</sup>	-0.5 % <sup>2/</sup>

1/ Based on washed ignition oven

2/ Allowable limit below minimum design VMA requirement"



## HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (BDE)

Effective: November 1, 2013

Description. This special provision provides the requirements for Hamburg Wheel and tensile strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production. This special provision also provides the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

Mix Design Testing. Add the following to Article 1030.04 of the Standard Specifications:

“(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified AASHTO T 283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department’s verification test, the Contractor shall make necessary changes to the mix and provide passing Hamburg Wheel and tensile strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(1) Hamburg Wheel Test Criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

PG Grade	Number of Passes
PG 58-xx (or lower)	5,000
PG 64-xx	7,500
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 415 kPa (60 psi) for non-polymer modified performance graded (PG) asphalt binder and 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 1380 kPa (200 psi).”

Production Testing. Revise Article 1030.06(a) of the Standard Specifications to read:

“(a) High ESAL, IL-4.75 and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials “Hot Mix Asphalt Test Strip Procedures”.

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 µm)	*
No. 200 (75 µm)	*
Asphalt Binder Content	± 0.3 %

\* In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer.”

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

“(b) Low ESAL and All Other Mixtures.”

System for Hydrated Lime Addition. Revise the fourth sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

“The method of application shall be according to Article 1102.01(a)(10).”

Replace the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

“When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer.”

Basis of Payment. Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

“For mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive.”

## **PORTLAND CEMENT CONCRETE EQUIPMENT (BDE)**

Effective: November 1, 2013

Add the following to the first paragraph of Article 1103.03(a)(5) of the Standard Specifications to read:

“As an alternative to a locking key, the start and finish time for mixing may be automatically printed on the batch ticket. The start and finish time shall be reported to the nearest second.”

80326

## **QUALITY CONTROL/QUALITY ASSURANCE OF CONCRETE MIXTURES (BDE)**

Effective: January 1, 2012

Revised: January 1, 2014

Revise Note 7/ of Schedule B of Recurring Special Provision Check Sheet #31 of the Standard Specifications to read:

- 7/ The test of record for strength shall be the day indicated in Article 1020.04. For cement aggregate mixture II, a strength requirement is not specified and testing is not required. Additional strength testing to determine early falsework and form removal, early pavement or bridge opening to traffic, or to monitor strengths is at the discretion of the Contractor. Strength shall be defined as the average of two 6 x 12 in. (150 x 300 mm) cylinder breaks, three 4 x 8 in. (100 x 200 mm) cylinder breaks, or two beam breaks for field tests. Per Illinois Modified AASHTO T 23, cylinders shall be 6 x 12 in. (150 x 300 mm) when the nominal maximum size of the coarse aggregate exceeds 1 in. (25 mm).

80281

## **RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)**

Effective: November 1, 2012

Revise: April 1, 2014

Revise Section 1031 of the Standard Specifications to read:

### **“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES**

**1031.01 Description.** Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum “Reclaimed Asphalt Shingle (RAS) Sources”, by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
  - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
  - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**1031.02 Stockpiles.** RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. “Homogeneous Surface”).

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type and lot number shall be maintained by project contract number and kept for a minimum of three years.

**1031.03 Testing.** RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

- (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

- (2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Each sample shall be split to obtain two equal samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".



Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a  $\leq 1000$  ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

**1031.04 Evaluation of Tests.** Evaluation of tests results shall be according to the following.

- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable  $G_{mm}$ . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		$\pm 5 \%$
1/2 in. (12.5 mm)	$\pm 8 \%$	$\pm 15 \%$
No. 4 (4.75 mm)	$\pm 6 \%$	$\pm 13 \%$
No. 8 (2.36 mm)	$\pm 5 \%$	
No. 16 (1.18 mm)		$\pm 15 \%$
No. 30 (600 $\mu\text{m}$ )	$\pm 5 \%$	
No. 200 (75 $\mu\text{m}$ )	$\pm 2.0 \%$	$\pm 4.0 \%$
Asphalt Binder	$\pm 0.4 \%$ <sup>1/</sup>	$\pm 0.5 \%$
$G_{mm}$	$\pm 0.03$	

1/ The tolerance for FRAP shall be  $\pm 0.3 \%$ .

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the

RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

- (b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

**1031.05 Quality Designation of Aggregate in RAP/FRAP.**

- (a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
  - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

**1031.06 Use of RAP/FRAP and/or RAS in HMA.** The use of RAP/FRAP and/or RAS shall be a Contractor's option when constructing HMA in all contracts.

(a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

- (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
- (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.

- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.
- (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

**RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage**

HMA Mixtures <sup>1/, 2/</sup>	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10
105	10	10	10

1/ For HMA “All Other” (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

(2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given N design.

**FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage**

HMA Mixtures <sup>1/, 2/</sup>	FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/, 4/</sup>
30	50	40	10

50	40	35	10
70	40	30	10
90	40	30	10
105	40	30	10

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.500 shall be used for mix design purposes.

**1031.08 HMA Production.** HMA production utilizing RAP/FRAP and/or RAS shall be as follows.

- (a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

(b) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within  $\pm 0.5$  percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

(c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(2) Batch Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.

- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

**1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders.** The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

## REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

**“508.05 Placing and Securing.** All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted on precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum “Quality Control / Quality Assurance Program for Precast Concrete Products”, and for precast prestressed concrete products as indicated in the Department’s current “Manual for Fabrication of Precast Prestressed Concrete Products”. Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage.”

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

“Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer.”

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

“Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed.”



Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

“In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns).”

Revise Article 1042.03(d) of the Standard Specifications to read:

“(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within  $\pm 1/4$  in. ( $\pm 6$  mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site.”

80327

## REMOVAL AND DISPOSAL OF SURPLUS MATERIALS (BDE)

Effective: November 2, 2012

Revise the first four paragraphs of Article 202.03 of the Standard Specifications to read:

**“202.03 Removal and Disposal of Surplus, Unstable, Unsuitable, and Organic Materials.** Suitable excavated materials shall not be wasted without permission of the Engineer. The Contractor shall dispose of all surplus, unstable, unsuitable, and organic materials, in such a manner that public or private property will not be damaged or endangered.

Suitable earth, stones and boulders naturally occurring within the right-of-way may be placed in fills or embankments in lifts and compacted according to Section 205. Broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities may be used in embankment or in fill. If used in fills or embankments, these materials shall be placed and compacted to the satisfaction of the Engineer; shall be buried under a minimum of 2 ft (600 mm) of earth cover (except when the materials include only uncontaminated dirt); and shall not create an unsightly appearance or detract from the natural topographic features of an area. Broken concrete without protruding metal bars, bricks, rock, or stone may be used as riprap as approved by the Engineer. If the materials are used for fill in locations within the right-of-way but outside project construction limits, the Contractor must specify to the Engineer, in writing, how the landscape restoration of the fill areas will be accomplished. Placement of fill in such areas shall not commence until the Contractor's landscape restoration plan is approved by the Engineer.

Aside from the materials listed above, all other construction and demolition debris or waste shall be disposed of in a licensed landfill, recycled, reused, or otherwise disposed of as allowed by State or Federal laws and regulations. When the Contractor chooses to dispose of uncontaminated soil at a clean construction and demolition debris (CCDD) facility or at an uncontaminated soil fill operation, it shall be the Contractor's responsibility to have the pH of the material tested to ensure the value is between 6.25 and 9.0, inclusive. A copy of the pH test results shall be provided to the Engineer.

A permit shall be obtained from IEPA and made available to the Engineer prior to open burning of organic materials (i.e., plant refuse resulting from pruning or removal of trees or shrubs) or other construction or demolition debris. Organic materials originating within the right-of-way limits may be chipped or shredded and placed as mulch around landscape plantings within the right-of-way when approved by the Engineer. Chipped or shredded material to be placed as mulch shall not exceed a depth of 6 in. (150 mm).”



**DEPARTMENT OF THE ARMY**  
CHICAGO DISTRICT, CORPS OF ENGINEERS  
111 NORTH CANAL STREET  
CHICAGO, ILLINOIS 60606-7206

REPLY TO  
ATTENTION OF:

Technical Services Division  
Regulatory Branch  
LRC-2012-62

May 20, 2013

**SUBJECT:** Permit Authorization for the Extension of an Existing Culvert with Headwalls at Culvert 3, Located at Harmony Road and Harmony Creek, Located South of Stoxen Road, Hampshire Township, Kane County, Illinois (SE ¼ of Section 4, T42N R6E)

Dear Mr. Schoedel:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permits 3 (Transportation Projects) and 7 (Temporary Construction Activities) and the overall RPP under Category I of the Regional Permit Program dated April 1, 2012.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans titled, "Kane County Division of Transportation, Harmony Road over Harmony Creek" dated October 21, 2011, prepared by Chastain & Associates, LLP. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

The following special conditions are a requirement of your authorization:

1. You shall undertake and complete the project as described in the plans titled, "Kane County Division of Transportation, Harmony Road over Harmony Creek" dated October 21, 2011, prepared by Chastain & Associates, LLP., including all relevant documentation to the project plans as proposed.
2. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Kane/DuPage Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on-site.

- a. You shall schedule a preconstruction meeting with the SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
  - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit construction plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
3. You shall provide written notification to this office at least ten (10) days prior to the commencement of work indicating the start date and estimated end date of construction.
4. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
5. A copy of this authorization must be present at the project site during all phases of construction.
6. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
7. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
8. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
9. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
10. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
11. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or

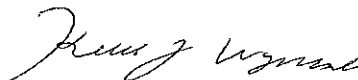
floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.

12. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
13. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or pre-construction conditions and fully stabilized prior to accepting flows.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Ms. Kimberly Kubiak of my staff by telephone at 312-846-5541, or email at [kimberly.j.kubiak@usace.army.mil](mailto:kimberly.j.kubiak@usace.army.mil).

Sincerely,



Keith L. Wozniak  
Chief, West Section  
Regulatory Branch

Enclosure

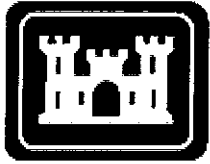
Copy Furnished:

Illinois Department of Natural Resources/OWR (Gary Jereb)

Kane County Division of Environmental Management (Ken Anderson)

Kane County Development and Resource Management Department (Paul Schuch)

Kane/DuPage SWCD (Candice Jacobs)



**PERMIT COMPLIANCE  
CERTIFICATION**

Permit Number: LRC-2012-62  
Permittee: Carl Schoedel  
Kane County Division of Transportation  
Date: May 20, 2013

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.<sup>1</sup>

\_\_\_\_\_  
PERMITTEE

\_\_\_\_\_  
DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers  
Chicago District, Regulatory Branch  
111 North Canal Street, 6th Floor  
Chicago, Illinois 60606-7206

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

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<sup>1</sup> If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



**DEPARTMENT OF THE ARMY**  
CHICAGO DISTRICT, CORPS OF ENGINEERS  
111 NORTH CANAL STREET  
CHICAGO, ILLINOIS 60606-7206

REPLY TO  
ATTENTION OF:

Technical Services Division  
Regulatory Branch  
LRC-2012-63

May 20, 2013

**SUBJECT:** Permit Authorization for the Installation of a New Culvert with Headwalls at Culvert 4, Located at Harmony Road and an Unnamed Tributary to Harmony Creek, Located South of Melms Road, Hampshire and Hampshire Township, Kane County, Illinois (SE ¼ of Section 9, T42N R6E)

Dear Mr. Schoedel:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permits 3 (Transportation Projects) and 7 (Temporary Construction Activities) and the overall RPP under Category I of the Regional Permit Program dated April 1, 2012.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans titled, "Kane County Division of Transportation, Harmony Road over Tributary to Hampshire Creek" dated October 21, 2011, prepared by Chastain & Associates, LLP. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

The following special conditions are a requirement of your authorization:

1. You shall undertake and complete the project as described in the plans titled, "Kane County Division of Transportation, Harmony Road over Tributary to Hampshire Creek" dated October 21, 2011, prepared by Chastain & Associates, LLP, including all relevant documentation to the project plans as proposed.
2. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Kane/DuPage Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control

(SESC) plan and the installation and maintenance requirements of the SESC practices on-site.

- a. You shall schedule a preconstruction meeting with the SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
  - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit construction plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
3. You shall provide written notification to this office at least ten (10) days prior to the commencement of work indicating the start date and estimated end date of construction.
  4. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
  5. A copy of this authorization must be present at the project site during all phases of construction.
  6. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
  7. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
  8. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
  9. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
  10. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.

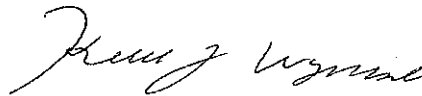


11. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
12. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
13. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or pre-construction conditions and fully stabilized prior to accepting flows.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Ms. Kimberly Kubiak of my staff by telephone at 312-846-5541, or email at [kimberly.j.kubiak@usace.army.mil](mailto:kimberly.j.kubiak@usace.army.mil).

Sincerely,



Keith L. Wozniak  
Chief, West Section  
Regulatory Branch

Enclosure

Copy Furnished:

Illinois Department of Natural Resources/OWR (Gary Jereb)

Kane County Division of Environmental Management (Ken Anderson)

Kane County Development and Resource Management Department (Paul Schuch)

Kane/DuPage SWCD (Candice Jacobs)



**PERMIT COMPLIANCE  
CERTIFICATION**

Permit Number: LRC-2012-63  
Permittee: Carl Schoedel  
Kane County Division of Transportation  
Date: May 20, 2013

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.<sup>1</sup>

\_\_\_\_\_  
PERMITTEE

\_\_\_\_\_  
DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers  
Chicago District, Regulatory Branch  
111 North Canal Street, 6th Floor  
Chicago, Illinois 60606-7206

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

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<sup>1</sup> If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



US Army Corps of Engineers®  
Chicago District

## GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. State 401 Water Quality Certification - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

1. The applicant shall not cause:
  - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - c) interference with water use practices near public recreation areas or water supply intakes;
  - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011, <http://aiswcd.org/IUM/index.html>).
6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
7. Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
  - b) excavation and backfilling are done under dry conditions.
10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 Il. Adm. Code,

Subtitle D. If considered “acid-producing material,” the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.

12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the “Notification” General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.

2. Threatened and Endangered Species - If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at [www.fws.gov/midwest/Endangered](http://www.fws.gov/midwest/Endangered). Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a “no effect” determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have “no effect” or “may effect” the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation.

If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine’s emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine’s emerald dragonfly critical habitat units in Illinois.

<http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html>

3. Historic Properties - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

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 with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, 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 permit application 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 permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District 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 which the activity may have the potential to cause effects and so notified the District, the non-Federal applicant shall not begin the activity until notified by the District either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency  
1 Old State Capitol Plaza  
Springfield, IL 62701-1507  
(217) 782-4836  
[www.illinoishistory.gov](http://www.illinoishistory.gov)

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We 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.

4. Soil Erosion and Sediment Control - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (<http://aiswcd.org/TUM/index.html>). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD  
2315 Dean Street, Suite 100  
St. Charles, IL 60174  
(630) 584-7961 ext.3  
[www.kanedupageswcd.org](http://www.kanedupageswcd.org)

McHenry-Lake County SWCD  
1648 South Eastwood Dr.  
Woodstock, IL 60098  
(815) 338-0099 ext.3  
[www.mchenryswcd.org](http://www.mchenryswcd.org)

North Cook SWCD  
899 Jay Street  
Elgin, IL 60120  
(847) 468-0071  
[www.northcookswcd.org](http://www.northcookswcd.org)

Lake County SMC  
500 W. Winchester Rd, Suite 201  
Libertyville, IL 60048  
(847) 377-7700  
[www.lakecountyil.gov/stormwater](http://www.lakecountyil.gov/stormwater)

5. Total Maximum Daily Load - For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: [www.epa.state.il.us/water/tmdl/](http://www.epa.state.il.us/water/tmdl/)

6. Floodplain - Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois

Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR  
2050 Stearns Road  
Bartlett, IL 60103  
(847) 608-3100  
<http://dnr.state.il.us/owr/>

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

7. Navigation - No activity may cause more than a minimal adverse effect on navigation. 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. 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.

8. Proper Maintenance - Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.

9. Aquatic Life Movements - No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.

10. Equipment - Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.

11. 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. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.

12. Tribal Rights - No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.

13. Water Supply Intakes - No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

14. Shellfish Production - No discharge of dredged or fill material may occur in areas of concentrated shellfish production.

15. Suitable Material - No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car bodies, asphalt, and creosote treated wood.

16. Spawning Areas - Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.

17. Obstruction of High Flows - Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.

18. Impacts From Impoundments - If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.

19. Waterfowl Breeding Areas - Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.

20. Removal of Temporary Fills - Any temporary fill material shall be removed in its entirety and the affected area returned to its pre-existing condition.

21. Mitigation - All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at [www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx](http://www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx)

22. Notification - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

For all activities, notification shall include:

- a. A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at [www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf](http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf). If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology ([www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg\\_supp.aspx](http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx)) and generally conducted during the growing season.\* Our wetland delineation standards are available at [www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf](http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf). For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at [www.fws.gov/midwest/Endangered](http://www.fws.gov/midwest/Endangered). Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

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\* If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a “no effect” determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have “no effect” or “may effect” on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR’s Ecological Compliance Assessment Tool (EcoCAT) at the following website: <http://dnrecocat.state.il.us/ecopublic/>. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- j. A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: [www.illinoishistory.gov/PS/rcdocument.htm](http://www.illinoishistory.gov/PS/rcdocument.htm) .
- k. Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- l. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- n. A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR), Illinois Environmental Protection Agency (IEPA), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

23. Compliance Certification - Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District’s authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.

24. Multiple use of Regional Permits - In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.

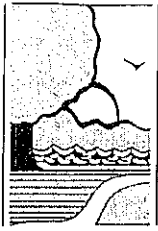
25. Other Restrictions - Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:

//ORIGINAL SIGNED//  
Frederic A. Drummond, Jr.  
Colonel, U.S. Army  
District Commander

February 24, 2012  
Date





# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

Pat Quinn, Governor  
Marc Miller, Director

**Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103**

January 11, 2013

SUBJECT: Permit No. NE2013001  
Harmony Road Culvert Replacement  
Unnamed Tributary to Hampshire Creek  
Kane County, Application No. 2012058

Carl Schoedel  
Kane County Division of Transportation  
410W11 Burlington Road  
St. Charles, Illinois 60175

Dear Mr. Schoedel:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. NE2013001 authorizing the subject project. This permit does not supersede any other federal, state or local authorizations that may be required for the project.

Please be advised that the Illinois Department of Natural Resources, Office of Realty and Environmental Planning (OREP) participates in the regulatory programs of the U.S. Army, Corps of Engineers (USACE) and may review this project if a USACE Section 10 or 404 permit is required. Issuance of a permit by the Office of Water Resources does not preclude OREP's provision of comments and/or recommendations, primarily related to biological effects of the proposed action, to the USACE and other federal agencies concerning your project.

If any changes of the permitted work are found necessary, revised plans should be submitted promptly to this office for review and approval. Also, this permit expires on the date indicated in Condition (13). If unable to complete the work by that date, the permittee may make a written request for a time extension.

Please contact Heather McGowan of my staff at 847/608-3100, ext. 32025 if you have any questions.

Sincerely,

Gary W. Jereb, P.E., Chief  
Northeastern Illinois Regulatory Programs Section

GJ/HM:crw

Enclosure

cc: Chicago District, U.S. Army Corps of Engineers  
Steve Frerichs, Chastain & Associates  
Kane County Development Dept.



PERMIT NO. NE2013001  
DATE: January 11, 2013

**State of Illinois**  
Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

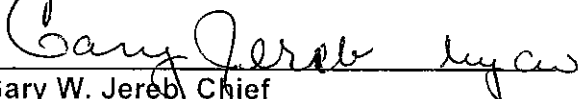
Kane County Division of Transportation  
410W11 Burlington Road  
St. Charles, Illinois 60175

to construct a replacement 10 ft. x 6 ft. box culvert on Harmony Road within the floodway of an Unnamed Tributary to Hampshire Creek in the Southeast Quarter of Section 9, Township 42 North, Range 6 East of the Third Principal Meridian in Kane County,


in accordance with an application dated December 9, 2011, and the plans and specifications entitled:

PLANS FOR PROPOSED HARMONY ROAD CULVERT IMPROVEMENTS, COVER SHEET AND SHEETS 7 AND 20 TO 24 OF 24, DATED OCTOBER 21, 2011, SHEETS 13, 14 AND 15 OF 24, DATED OCTOBER 20, 2011, ALL SHEETS RECEIVED APRIL 25, 2012.

Examined and Recommended:

  
Gary W. Jereb, Chief  
Northeastern IL Regulatory  
Programs Section

Approval Recommended:

  
Arlan R. Juhl, Director  
Office of Water Resources

Approved:

  
Marc Miller, Director  
Department of Natural Resources

**THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:**

- 1) This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- 2) This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any injury to private property or invasion of private rights.
- 4) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or state agency to do the work, this permit is not effective until the federal and state approvals are obtained.
- 5) The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.
- 6) In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.
- 7) The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.
- 8) Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.
- 9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.
- 10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.
- 11) In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.
- 12) Noncompliance with the conditions of this permit will be considered grounds for revocation.
- 13) If the construction activity permitted is not completed on or before December 31, 2016 this permit shall cease and be null and void.

# Kane – DuPage Soil & Water Conservation District



March 6, 2013

Steve Frerichs  
Chastain & Associates, LLP  
8609 West Bryn Mawr, Suite 204  
Chicago, IL 60631

Corps Number: LRC 2012-62 & LRC 2012-63  
KDSWCD File: 12e34 & 12e35  
Approved Plan Set Dated: 3/6/2013

Dear Mr. Frerichs:

I received your revised soil erosion and sedimentation control plan submittal for the KDOT Culverts 3 & 4 project located in Kane County, Illinois. Thank you for incorporating our comments into the plan, it will improve the quality of protection for the natural resources, both on and off site. This letter and a set of stamped plans located at the construction office on site, will serve to certify that the erosion and sediment control plans meet Technical Standards.

I will visit the site several times during the course of construction to assess compliance with the specifications and will be glad to address specific issues that may arise during the course of construction.

Sincerely,

A handwritten signature in blue ink that reads "Candice Jacobs".

Candice Jacobs, CPESC  
Resource Conservationist  
Kane-DuPage Soil and Water Conservation District

ECC: Kim Kubiak, USACE

# **Report of Soils Exploration**

**Culvert No.3 Extension**

**SN 045-5543**

**Harmony Road Sta. 35+49**

**Kane County, Illinois**

**Homer L. Chastian  
and Associates, LLP**



**TESTING SERVICE CORPORATION**

*Corporate Office:*

360 S. Main Place, Carol Stream, IL 60188-2404  
630.462.2600 • Fax 630.653.2988

*Local Office:*

457 E. Gundersen Drive, Carol Stream, IL 60188-2492  
630.653.3920 • Fax 630.653.2726

Local Office  
July 18, 2011

Mr. Steve Frerichs  
Homer L. Chastain and Associates, LLP  
127 North Wyman Street  
Rockford, Illinois 61101

RE: L - 75,957C  
Culvert Extension No. 3  
SN 045-5543  
Harmony Road Sta. 35+49  
Kane County, Illinois

Dear Mr. Frerichs:

This report presents results of the soils exploration performed for the extension of drainage Culvert No. 3 located on Harmony Road Sta. 35+49 in Kane County, Illinois. These geotechnical services have been provided in accordance with TSC Proposal No. 45,651 dated September 9, 2010 and the agreement between Homer L. Chastain and Associates, LLP (HLC) and Testing Service Corporation. This culvert was drilled in conjunction with seven (7) other culvert improvements in Kane County.

The subject culvert is for the Harmony Road creek crossing of Harmony Creek, lying approximately one-third mile south of Interstate 90. Harmony Road consists two traffic lanes, with gravel shoulders and open ditch drainage. The existing 5' x 10' concrete box culvert (SN 045-5543) is to be extended approximately 3 to 4 feet on the east and west sides of the roadway. Plan and profiles provided show the invert for the existing culvert at approximate Elevation 863.0. It is understood that plans also include construction of new headwalls.

Field Work and Laboratory Testing

Two (2) soil borings were drilled for the culvert improvements being extended to 20 feet below existing grade. The boring locations were selected by HLC and staked in the field by TSC. Ground surface elevations at them were interpolated from plan and profiles provided. Reference is made to the Boring Location Plan included with this report.

They were drilled and samples tested according to currently recommended American Society for Testing and Materials specifications. Soil sampling was performed at 2½-foot intervals to boring completion depths. The samples were taken in conjunction with the Standard Penetration Test, for which driving resistance to a 2" split-spoon sampler (N-value in blows per foot) provides an indication of the relative density of granular materials and consistency of cohesive soils. Water level readings were taken during and following drilling operations.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the Unified Soil Classification System. Laboratory testing included moisture content determinations for all cohesive and intermediate (silt or loamy) soil types along with dry unit weight

determinations on cohesive fill. An estimate of unconfined compressive strength was obtained for all cohesive soils using a calibrated pocket penetrometer, with actual measurements of unconfined compressive strength performed on representative native clay samples.

Reference is made to the attached boring logs indicating subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. Definitions of descriptive terminology are also included. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers will probably be more gradual.

### Discussion of Test Data

Boring 301 was drilled on Harmony Road, revealing approximately 8 inches bituminous concrete overlying about 4 inches sand and gravel base materials. The pavement thickness was estimated from the side of the augered borehole and should be considered approximate; cores may be taken if exact measurements are required.

Surficial topsoil extended approximately 3 feet below existing grade in Boring 302, having a moisture content of 30 percent. Loss-on-ignition (LOI) and wet combustion tests were also run on the clayey topsoil samples revealing a low to moderate values of 3.9 and 1.7 percent, respectively. Stiff to tough silty clay was found underlying the pavement section at Boring 301, extending approximately 5½ feet in depth. These upper clays had unconfined compressive strengths on the order of 1.0 tons per square feet (tsf) at moisture contents of 16 to 19 percent.

Firm to dense granular and intermediate materials were otherwise found extending 13 to 18 feet deep in the borings. They consisted of sand/gravel, silty sand/gravel and sandy silty materials, having Standard Penetration Test (N) values varying from 18 to 40 blows per foot (bpf). Stiff to very tough sandy clay soils were found below and extending to boring completion depths. They had unconfined compressive strengths ranging from 0.75 to 2.0 tons per square foot (tsf) at moisture contents usually varying from 10 to 13 percent.

Free water was initially encountered at between 3 and 8 feet below existing grade in the borings. Upon completion of drilling operations, the water level rose about 2 feet in Boring 302 and remained constant in Boring 301.

### Analysis and Recommendations

Borings 301 and 302 were drilled for the box culvert extension (SN 045-5543) below Harmony Road. Plan and profiles show the invert for the culvert at approximate Elevation 863.0. It is anticipated that the bearing elevation would be about 1.5 feet below the invert level or approximate Elevation 861.5, allowing for a normal 6-inch granular subbase and a 12-inch concrete slab. It is understood that the culvert extension and new headwalls will be designed for a net allowable bearing stress on the order of 1000 pounds per square foot (psf).

Soft clayey topsoil materials were encountered at the approximate bearing elevation in Boring 302. These soils are considered unsuitable as bearing materials and should be removed and replaced with

structural backfill beneath the box culvert and headwalls. If left in-place, consolidation of these soil types could lead to settlement cracking of base slabs constructed thereupon.

An approximate 1-foot undercut is anticipated at Boring 302. Replacement materials should consist of crushed stone or gravel between about ¼ to 4 inches in size and containing no fines; IDOT gradations CA-1, CA-5 and CA-7 meet these criteria. It should be spread in maximum 18-inch layers and compacted to a dense and stable state. Undercutting of unsuitable soil types will require that the base of the excavations exceed outside dimensions of the culvert footing by at least 12 inches along each side, 6 inches for every foot of overdig where the undercut exceeds 2.0 feet in depth.

Firm sand and gravel materials were encountered at the approximate bearing elevation in Boring 301, considered suitable for culvert support. While these materials are considered stable in a confined state, they may appear soft and spongy when exposed by excavation, to largely depend on water levels at the time of construction as well as dewatering methods being used by the Contractor. If the bottom of the excavation becomes unstable, 6 to 12 inches of 3" rock may be placed to provide a satisfactory base for culvert construction.

A qualified soils technician or engineer should inspect the culvert and headwall excavations to confirm that suitable bearing soils have been reached. All loose and disturbed soils should be removed from the excavations. Observations should confirm that all unsuitable soils have been stripped prior to the placement of granular materials. A qualified soils technician or engineer should also provide approval of placement and compaction of granular Fill materials.

#### Groundwater Management

The borings encountered groundwater at or near the proposed excavation depth, which was associated with a water bearing layer of sand and gravel and/or silty sand and gravel. The biggest concern will be where excavations extend below the groundwater level and through the saturated granular/intermediate materials. Granular and intermediate soil types encountered under hydrostatic pressure at the time of construction can lead to a running condition, where the materials in the bottom and the side walls will rapidly slough and "flow" into the excavation. If allowed to occur, running soils may lead to instability of the excavation side slopes, loss of ground and settlement in surrounding areas, and a loosening of foundation soils at the base of the excavation which would require undercutting. It should be noted that this condition represents a groundwater and not an actual soils problem. It is also a temporary condition which exists as long as the excavation is open, towards which the groundwater contained in the permeable soil layers will flow.

The Contractor will need to implement appropriate dewatering procedures to allow for placement and compaction of the granular backfill and subbase materials. It is our opinion that soil and groundwater conditions exist at the site for which well points could be effective in controlling groundwater problems. Preconstruction dewatering is recommended prior to the culvert excavation into the wet to saturated granular/intermediate materials. A dewatering expert may be consulted in connection with the design of a well system.





Closure

It is recommended that full-time technician services be provided by Testing Service Corporation personnel during foundation construction, so that the bearing capacity of the soils at bearing levels can be verified. In addition, the adequacy of building materials as well as box culvert construction should be monitored for compliance with the recommended procedures and specifications.

The analysis and recommendations submitted in this report are based upon the data obtained from the two (2) soil borings performed at the approximate location indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings or elsewhere on the site, the nature and extent of which may not become evident until during the course of construction.

Please call if there are any questions in regard to this matter or if we may be of further service.

Respectfully submitted,

TESTING SERVICE CORPORATION

Timothy R. Peceniak, P.E.  
Project Engineer  
Registered Professional Engineer  
Illinois No. 062-061269

Michael V. Machalinski, P.E.  
Vice President

TRP:MVM:trp



## TESTING SERVICE CORPORATION

# GENERAL CONDITIONS

## Geotechnical and Construction Services

**1. PARTIES AND SCOPE OF WORK:** If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom the Client transmits any report prepared by TSC. Unless otherwise expressly assumed in writing, TSC shall have no duty to any third party, and in no event shall TSC have any duty or obligation other than those duties and obligations expressly set forth in this Agreement. Ordering services from TSC shall constitute acceptance of these General Conditions.

**2. SCHEDULING OF SERVICES:** The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

**3. ACCESS TO SITE:** TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

**4. CLIENT'S DUTY TO NOTIFY ENGINEER:** Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.

**5. DISCOVERY OF POLLUTANTS:** TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

**6. MONITORING:** If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall

not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

**7. SAMPLE DISPOSAL:** Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

**8. TERMINATION:** This Agreement may be terminated by either party upon seven days prior written notice. In the event of termination, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses.

**9. PAYMENT:** Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

**10. WARRANTY:** TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on

damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

**11. INDEMNITY:** Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

**12. SUBPOENAS:** TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

**13. OTHER AGREEMENTS:** TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Should litigation be necessary, the parties consent to jurisdiction and venue in an appropriate Illinois State Court in and for the County of DuPage, Wheaton, Illinois or the Federal District Court for the Northern District of Illinois. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

**APPENDIX**

**UNIFIED CLASSIFICATION CHART**

**LEGEND FOR BORING LOGS**

**BORING LOGS**

**BORING LOCATION PLAN**

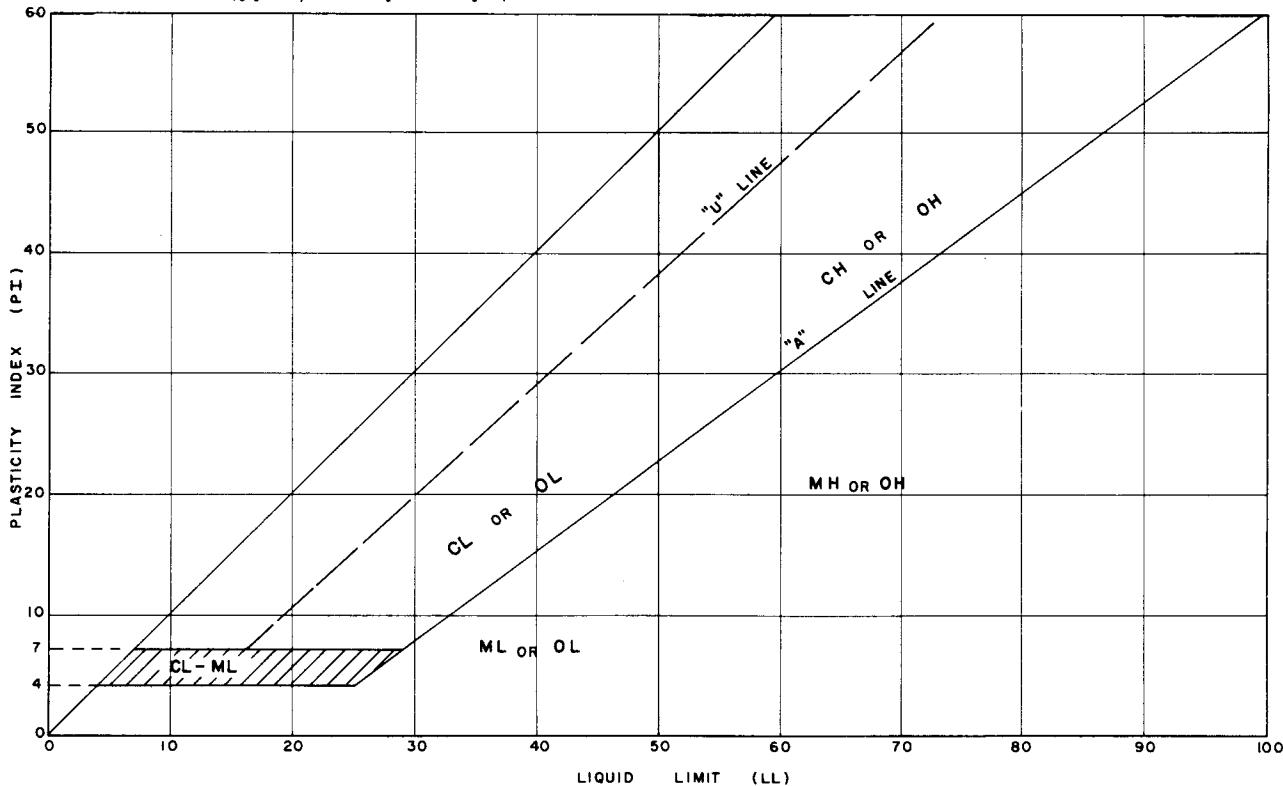
**TESTING SERVICE CORPORATION  
UNIFIED CLASSIFICATION CHART**

CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS <sup>a</sup>				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME <sup>b</sup>
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines <sup>c</sup>	$C_u \geq 4$ and $1 \leq C_c \leq 3$ <sup>e</sup>	GW	Well graded gravel <sup>f</sup>
			$C_u < 4$ and/or $1 > C_c > 3$ <sup>e</sup>	GP	Poorly graded gravel <sup>f</sup>
		GRAVELS WITH FINES More than 12% fines <sup>c</sup>	Fines classify as ML or MH	GM	Silty gravel f,g,h
			Fines classify as CL or CH	GC	Clayey gravel f,g,h
	SANDS 50% or more of coarse fraction passes No. 4 sieve	CLEAN SANDS Less than 5% fines <sup>d</sup>	$C_u \geq 6$ and $1 \leq C_c \leq 3$ <sup>e</sup>	SW	Well-graded sand <sup>l</sup>
			$C_u < 6$ and/or $1 > C_c > 3$ <sup>e</sup>	SP	Poorly graded sand <sup>l</sup>
		SANDS WITH FINES More than 12% fines <sup>d</sup>	Fines classify as ML or MH	SM	Silty sand g,h,f
			Fines classify as CL or CH	SC	Clayey sand g,h,f
FINE-GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS & CLAYS Liquid limit less than 50%	Inorganic	$PI \geq 7$ and plots on or above "A" line j	CL	Lean clay k,l,m
			$PI < 4$ or plots below "A" line j	ML	Silt k,l,m
		Organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} \leq 0.75$	OL	Organic clay k,l,m,n Organic silt k,l,m,o
	SILTS & CLAYS Liquid limit 50% or more	Inorganic	PI plots on or above "A" line	CH	Fat clay k,l,m
			PI plots below "A" line	MH	Elastic silt k,l,m
		Organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OH	Organic clay k,l,m,p Organic silt k,l,m,q
Highly organic soils	Primarily organic matter, dark in color, and organic odor			PT	Peat

- a. Based on the material passing the 3-in (75-mm) sieve.
- b. If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- c. Gravels with 5 to 12% fines require dual symbols  
GW-GM well graded gravel with silt  
GW-GC well graded gravel with clay  
GP-GM poorly graded gravel with silt  
GP-GC poorly graded gravel with clay
- d. Sands with 5% to 12% fines require dual symbols  
SW-SM well graded sand with silt  
SW-SC well graded sand with clay  
SP-SM poorly graded sand with silt  
SP-SC poorly graded sand with clay

- j. If Atterberg Limits plot in hatched area, soil is a CL-ML, silty clay.
- k. If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- l. If soil contains  $\geq 30\%$  plus No. 200, predominantly sand, add "sandy" to group name.
- m. If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.
- n.  $PI \geq 4$  and plots on or above "A" line.
- o.  $PI \geq 4$  or plots below "A" line.
- p. PI plots on or above "A" line.
- q. PI plots below "A" line.

- e.  $C_u = D_{60}/D_{10}$      $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- f. If soil contains  $\geq 15\%$  sand, add "with sand" to group name.
- g. If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- h. If fines are organic, add "with organic fines" to group name.
- i. If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name.



# TESTING SERVICE CORPORATION

## LEGEND FOR BORING LOGS



FILL



TOPSOIL



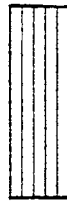
PEAT



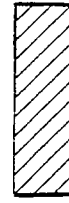
GRAVEL



SAND



SILT



CLAY



DOLOMITE

### SAMPLE TYPE:

SS = Split Spoon  
 ST = Thin-Walled Tube  
 A = Auger

### FIELD AND LABORATORY TEST DATA:

N = Standard Penetration Resistance in Blows per Foot  
 Wc = In-Situ Water Content  
 Qu = Unconfined Compressive Strength in Tons per Square Foot  
 \* Pocket Penetrometer Measurement; Maximum Reading = 4.5 tsf  
 $\gamma_D$  = Dry Unit Weight in Pounds per Cubic Foot

### WATER LEVELS:

▼ While Drilling  
 ▼ End of Boring  
 ▼ 24 Hours

### SOIL DESCRIPTION:

#### MATERIAL

BOULDER  
 COBBLE  
 Coarse GRAVEL  
 Small GRAVEL  
 Coarse SAND  
 Medium SAND  
 Fine SAND  
 SILT and CLAY

#### PARTICLE SIZE RANGE

Over 12 inches  
 12 inches to 3 inches  
 3 inches to ¾ inch  
 ¾ inch to No. 4 Sieve  
 No. 4 Sieve to No. 10 Sieve  
 No. 10 Sieve to No. 40 Sieve  
 No. 40 Sieve to No. 200 Sieve  
 Passing No. 200 Sieve

#### COHESIVE SOILS

<u>CONSISTENCY</u>	<u>Qu</u>
Very Soft	Less than 0.3
Soft	0.3 to 0.6
Stiff	0.6 to 1.0
Tough	1.0 to 2.0
Very Tough	2.0 to 4.0
Hard	4.0 and over

#### COHESIONLESS SOILS

<u>RELATIVE DENSITY</u>	<u>N</u>
Very Loose	0 - 4
Loose	4 - 10
Firm	10 - 30
Dense	30 - 50
Very Dense	50 and over

#### MODIFYING TERM

Trace  
 Little  
 Some

#### PERCENT BY WEIGHT

1 - 10  
 10 - 20  
 20 - 35

PROJECT **Culvert Improvements, Kane County, Illinois**



CLIENT **Homer L. Chastain and Associates, LLP, Rockford, Illinois**

BORING **301** DATE STARTED **4-29-11** DATE COMPLETED **4-29-11** JOB **L-75,957**

ELEVATIONS  
 GROUND SURFACE **870.5**  
 END OF BORING **850.5**

WATER LEVEL OBSERVATIONS  
 ▽ WHILE DRILLING **8.0'**  
 ▽ AT END OF BORING **8.0'**  
 ▽ 24 HOURS

DISTANCE BELOW SURFACE IN FEET	LENGTH RECOVERY	SAMPLE		N	WC	Qu	γ <sub>DRY</sub>	DEPTH	ELEV.	SOIL DESCRIPTIONS
		NO.	TYPE							
0									869.8	8" Bituminous Concrete
								0.7	869.5	4" Sand and Gravel Base
		1	SS	5	16.6	0.75*				Stiff to tough black silty CLAY, little sand, little organic, very moist moist (CL)
		2	SS	6	18.8	1.0*				
5								5.5	865.0	Firm brown and gray SAND and GRAVEL, saturated (SM/GM)
		3	SS	18						
		4	SS	19						
10		5	SS	24						
		6	SS	29						
15										Stiff gray sandy CLAY, trace gravel, very moist (CL-ML)
		7	SS	31						
		8	SS	18	10.2	0.75*		18.0	852.5	
20										End of Boring at 20.0'
										* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
25										

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC 75957.GPJ TSC\_ALL.GDT 7/19/11

DRILL RIG NO. **314**



ELEVATIONS

GROUND SURFACE	<b>863.0</b>
END OF BORING	<b>843.0</b>

WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING	<b>3.0'</b>
▽ AT END OF BORING	<b>1.0'</b>
▼ 24 HOURS	

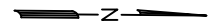
DISTANCE BELOW SURFACE IN FEET	LENGTH RECOVERY	SAMPLE		N	WC	Qu	γ <sub>DRY</sub>	DEPTH	ELEV.	SOIL DESCRIPTIONS
		NO.	TYPE							
0										▽ Soft black clayey TOPSOIL, very moist (OL) LOI = 3.9%
3.0		1	SS	10	29.5	0.5*			860.0	▼
5		2	SS	40	9.4					Dense brown and gray silty SAND and GRAVEL, saturated (SM/GM)
8.0		3	SS	34	8.6				855.0	
10		4	SS	36						Dense brown and gray SAND and GRAVEL, saturated (SP/GP)
10.5									852.5	
13.0		5	SS	39	9.6					Dense brown and gray sandy SILT, little gravel, wet (ML)
15		6	SS	17	12.6	1.62 1.5*			850.0	
17		7	SS	21	11.7	2.0*				Tough to very tough gray sandy CLAY, trace gravel, moist (SM)
20		8	SS	16	10.6	2.0*				
20.0										End of Boring at 20.0'

TSC 75957.GPJ TSC\_ALL.GDT 7/19/11

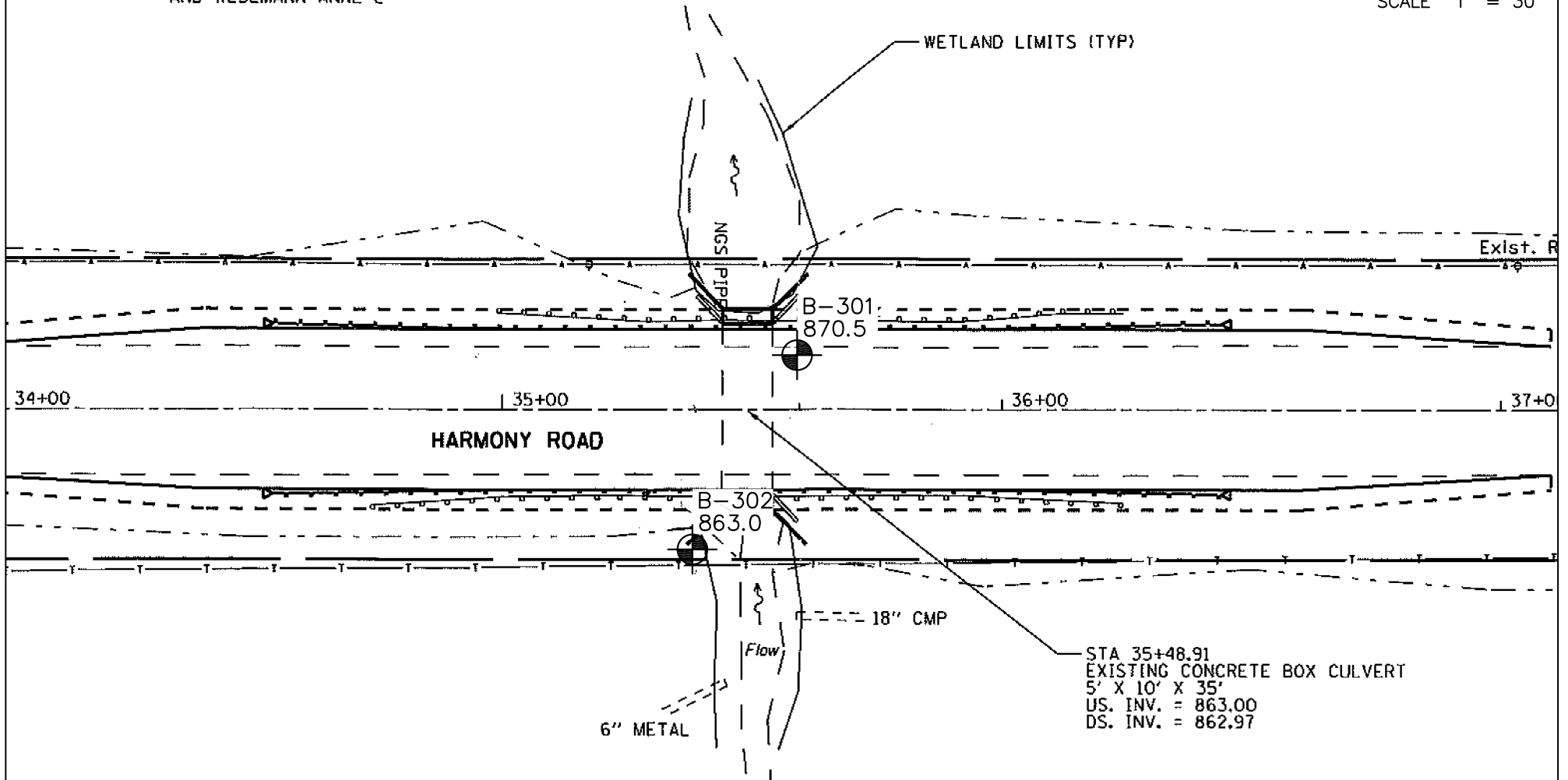
Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

\* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

II D L J OEHLER M S & WESEMANN A L STOXEN  
AND WESEMANN ANNE L



SCALE 1" = 30'



BENCHMARK: GROUND SURFACE ELEVATIONS AT THE BORING LOCATIONS WERE INTERPOLATED FROM PLAN AND PROFILES, BEING ROUNDED TO THE NEAREST 0.5 FOOT.

JM LL & DL II & WESEMANN AL & OEHLER ME STOXEN  
AND ANNE L WESEMANN

LEGEND

SOIL BORING LOCATION

BORING LOCATION PLAN  
CULVERT NO.3 EXTENSION  
SN 045-5543  
HARMONY ROAD - STA. 35+49  
KANE COUNTY, ILLINOIS



TESTING SERVICE CORPORATION  
457 EAST GUNDERSEN DRIVE  
CAROL STREAM, ILLINOIS 60188

DRAWN BY: TRP  
CHECKED BY: MVM  
JOB NO. : L-75,957C  
DATE: 07-12-11

PAGE NO.

1 OF 1



# **Report of Soils Exploration**

**Culvert No.4 Replacement**

**SN 045-5544**

**Harmony Rd Sta. 42+49**

**Kane County, Illinois**

**Homer L. Chastian  
and Associates, LLP**



**TESTING SERVICE CORPORATION**

*Corporate Office:*

360 S. Main Place, Carol Stream, IL 60188-2404  
630.462.2600 • Fax 630.653.2988

*Local Office:*

457 E. Gundersen Drive, Carol Stream, IL 60188-2492  
630.653.3920 • Fax 630.653.2726

Local Office  
July 18, 2011

Mr. Steve Frerichs  
Homer L. Chastian and Associates, LLP  
127 North Wyman Street  
Rockford, Illinois 61101

RE: L - 75,957D  
Culvert No. 4 Replacement  
SN 045-5544  
Harmony Road Sta. 42+49  
Kane County, Illinois

Dear Mr. Frerichs:

This report presents results of the soils exploration performed for the replacement of drainage Culvert No. 4 located on Harmony Road Sta. 42+49 in Kane County, Illinois. These geotechnical services have been provided in accordance with TSC Proposal No. 45,651 dated September 9, 2010 and the agreement between Homer L. Chastian and Associates, LLP (HLC) and Testing Service Corporation. This culvert was drilled in conjunction with seven (7) other culvert improvements in Kane County.

The subject culvert is for the Harmony Road crossing of a Tributary of Hampshire Creek, lying approximately 1.3 miles south of Interstate 90. Harmony Road consists of two traffic lanes with gravel shoulders and open ditch drainage. The existing double 3.5' x 7.0' concrete box culvert (SN 045-5544) is to be replaced with a new double 2' x 5' precast box culvert. Plan and profiles provided show the invert for the new culvert at approximate Elevation 863.0. It is understood that plans also include construction of new headwalls.

Field Work and Laboratory Testing

Two (2) soil borings were drilled for the new double box culvert and headwalls, being extended to 15 feet below existing grade. The boring locations were selected by HLC and staked in the field by TSC. Ground surface elevations at them were interpolated from plan and profiles provided. Reference is made to the Boring Location Plan included with this report.

They were drilled and samples tested according to currently recommended American Society for Testing and Materials specifications. Soil sampling was performed at 2½-foot intervals to boring completion depths. The samples were taken in conjunction with the Standard Penetration Test, for which driving resistance to a 2" split-spoon sampler (N-value in blows per foot) provides an indication of the relative density of granular materials and consistency of cohesive soils. Water level readings were taken during and following drilling operations.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the Unified Soil Classification System. Laboratory testing included moisture content determinations for all cohesive and intermediate (silt or loamy) soil types along with dry unit weight determinations on cohesive fill. An estimate of unconfined compressive strength was obtained for all

cohesive soils using a calibrated pocket penetrometer, with actual measurements of unconfined compressive strength performed on representative native clay samples.

Reference is made to the attached boring logs indicating subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. Definitions of descriptive terminology are also included. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers will probably be more gradual.

#### Discussion of Test Data

Boring 401 and 402 were drilled on Harmony Road, revealing on the order of 10 inches bituminous concrete overlying approximately 4 inches sand and gravel base materials. The pavement thicknesses were estimated from the side of the augered boreholes and should be considered approximate; cores may be taken if exact measurements are required.

Clayey topsoil and silty clay fill materials were found below the pavement section, extending to approximately 5½ feet below existing grade. Samples of the cohesive fill had dry unit weights ranging from 97 to 116 pound per cubic foot (pcf), unconfined compressive strengths from 0.5 to 2.0 tons per square foot (tsf) and moisture contents from 17 to 27 percent.

Firm to dense sand and sand/gravel were otherwise found extending to boring completion depths. These granular materials exhibited Standard Penetration Test (N) values ranging from 20 to 36 blows per foot (bpf). Free water was initially encountered at 5 feet below existing grade in the borings; upon completion of drilling operations, the water levels generally rose on the order of 1 foot.

#### Analysis and Recommendations

Borings 401 and 402 were drilled for the a new double 2' x 5' precast concrete box culvert, replacing the existing double 3.5' x 7.0' box culvert (SN 045-5544) below Harmony Road. Plan and profiles show the invert for the culvert at approximate Elevation 863.0. It is anticipated that the bearing elevation would be about 1.5 feet below the invert level or approximate Elevation 862.0, allowing for a normal 6-inch granular subbase and a 12-inch concrete slab. It is understood that the new culvert and headwalls are being designed for a net allowable bearing stress on the order of 1000 pounds per square foot (psf).

Firm sand and gravel materials were encountered at the approximate bearing elevation in the borings, considered suitable for culvert support. While these materials are considered stable in a confined state, they may appear soft and spongy when exposed by excavation, to largely depend on water levels at the time of construction as well as dewatering methods being used by the Contractor. If the bottom of the excavation becomes unstable, 12 inches of 3" rock may be placed to provide a satisfactory base for culvert construction.

A qualified soils technician or engineer should inspect the culvert and headwall excavations to confirm that suitable bearing soils have been reached. All loose and disturbed soils should be removed from the excavations. Observations should confirm that all unsuitable soils have been stripped prior to the placement of granular materials. A qualified soils technician or engineer should also provide approval of placement and compaction of granular Fill materials.

Groundwater Management

The biggest concern will be where excavations extend below the groundwater level (i.e. Elevation 864.5) and through the saturated granular materials. Granular soil types encountered under hydrostatic pressure at the time of construction can lead to a running condition, where the materials in the bottom and the side walls will rapidly slough and "flow" into the excavation. If allowed to occur, running soils may lead to instability of the excavation side slopes, loss of ground and settlement in surrounding areas, and a loosening of foundation soils at the base of the excavation which would require undercutting. It should be noted that this condition represents a groundwater and not an actual soils problem. It is also a temporary condition which exists as long as the excavation is open, towards which the groundwater contained in the permeable soil layers will flow.

The Contractor will need to implement appropriate dewatering procedures to allow for placement and compaction of the granular backfill and subbase materials. It is our opinion that soil and groundwater conditions exist at the site for which well points could be effective in controlling groundwater problems. Preconstruction dewatering is recommended prior to the culvert excavation into the saturated granular materials. A dewatering expert may be consulted in connection with the design of a well system.

Closure

It is recommended that full-time technician services be provided by Testing Service Corporation personnel during foundation construction, so that the bearing capacity of the soils at bearing levels can be verified. In addition, the adequacy of building materials as well as box culvert construction should be monitored for compliance with the recommended procedures and specifications.

The analysis and recommendations submitted in this report are based upon the data obtained from the two (2) soil borings performed at the approximate location indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings or elsewhere on the site, the nature and extent of which may not become evident until during the course of construction.

Please call if there are any questions in regard to this matter or if we may be of further service.

Respectfully submitted,

TESTING SERVICE CORPORATION

Timothy R. Peceniak, P.E.  
Project Engineer  
Registered Professional Engineer  
Illinois No. 062-061269

Michael V. Machalinski, P.E.  
Vice President

TRP:MVM:trp



## TESTING SERVICE CORPORATION

# GENERAL CONDITIONS

## Geotechnical and Construction Services

**1. PARTIES AND SCOPE OF WORK:** If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom the Client transmits any report prepared by TSC. Unless otherwise expressly assumed in writing, TSC shall have no duty to any third party, and in no event shall TSC have any duty or obligation other than those duties and obligations expressly set forth in this Agreement. Ordering services from TSC shall constitute acceptance of these General Conditions.

**2. SCHEDULING OF SERVICES:** The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

**3. ACCESS TO SITE:** TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

**4. CLIENT'S DUTY TO NOTIFY ENGINEER:** Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.

**5. DISCOVERY OF POLLUTANTS:** TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

**6. MONITORING:** If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall

not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

**7. SAMPLE DISPOSAL:** Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

**8. TERMINATION:** This Agreement may be terminated by either party upon seven days prior written notice. In the event of termination, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses.

**9. PAYMENT:** Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

**10. WARRANTY:** TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on

damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

**11. INDEMNITY:** Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

**12. SUBPOENAS:** TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

**13. OTHER AGREEMENTS:** TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Should litigation be necessary, the parties consent to jurisdiction and venue in an appropriate Illinois State Court in and for the County of DuPage, Wheaton, Illinois or the Federal District Court for the Northern District of Illinois. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

**APPENDIX**

**UNIFIED CLASSIFICATION CHART**

**LEGEND FOR BORING LOGS**

**BORING LOGS**

**BORING LOCATION PLAN**

**TESTING SERVICE CORPORATION  
UNIFIED CLASSIFICATION CHART**

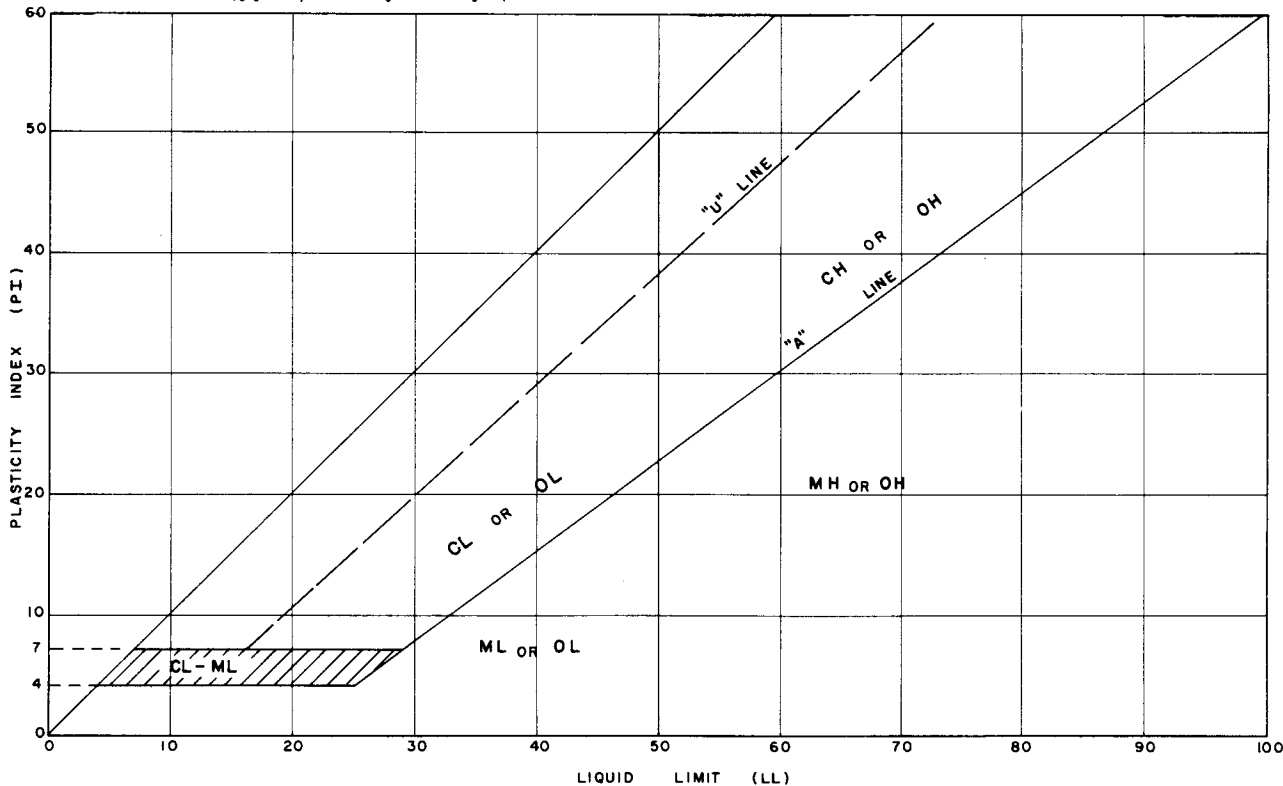
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS <sup>a</sup>				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME <sup>b</sup>
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines <sup>c</sup>	$C_u \geq 4$ and $1 \leq C_c \leq 3$ <sup>e</sup>	GW	Well graded gravel <sup>f</sup>
			$C_u < 4$ and/or $1 > C_c > 3$ <sup>e</sup>	GP	Poorly graded gravel <sup>f</sup>
		GRAVELS WITH FINES More than 12% fines <sup>c</sup>	Fines classify as ML or MH	GM	Silty gravel f,g,h
			Fines classify as CL or CH	GC	Clayey gravel f,g,h
	SANDS 50% or more of coarse fraction passes No. 4 sieve	CLEAN SANDS Less than 5% fines <sup>d</sup>	$C_u \geq 6$ and $1 \leq C_c \leq 3$ <sup>e</sup>	SW	Well-graded sand <sup>l</sup>
			$C_u < 6$ and/or $1 > C_c > 3$ <sup>e</sup>	SP	Poorly graded sand <sup>l</sup>
		SANDS WITH FINES More than 12% fines <sup>d</sup>	Fines classify as ML or MH	SM	Silty sand g,h,f
			Fines classify as CL or CH	SC	Clayey sand g,h,f
FINE-GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS & CLAYS Liquid limit less than 50%	Inorganic	$PI \geq 7$ and plots on or above "A" line j	CL	Lean clay k,l,m
			$PI < 4$ or plots below "A" line j	ML	Silt k,l,m
		Organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} \leq 0.75$	OL	Organic clay k,l,m,n Organic silt k,l,m,o
	SILTS & CLAYS Liquid limit 50% or more	Inorganic	PI plots on or above "A" line	CH	Fat clay k,l,m
			PI plots below "A" line	MH	Elastic silt k,l,m
		Organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OH	Organic clay k,l,m,p Organic silt k,l,m,q
Highly organic soils	Primarily organic matter, dark in color, and organic odor			PT	Peat

- a. Based on the material passing the 3-in (75-mm) sieve.
- b. If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- c. Gravels with 5 to 12% fines require dual symbols  
GW-GM well graded gravel with silt  
GW-GC well graded gravel with clay  
GP-GM poorly graded gravel with silt  
GP-GC poorly graded gravel with clay
- d. Sands with 5% to 12% fines require dual symbols  
SW-SM well graded sand with silt  
SW-SC well graded sand with clay  
SP-SM poorly graded sand with silt  
SP-SC poorly graded sand with clay

- j. If Atterberg Limits plot in hatched area, soil is a CL-ML, silty clay.
- k. If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- l. If soil contains  $\geq 30\%$  plus No. 200, predominantly sand, add "sandy" to group name.
- m. If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.
- n.  $PI \geq 4$  and plots on or above "A" line.
- o.  $PI \geq 4$  or plots below "A" line.
- p. PI plots on or above "A" line.
- q. PI plots below "A" line.

$$C_u = \frac{D_{60}}{D_{10}} \quad C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

- f. If soil contains  $\geq 15\%$  sand, add "with sand" to group name.
- g. If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- h. If fines are organic, add "with organic fines" to group name.
- i. If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name.



# TESTING SERVICE CORPORATION

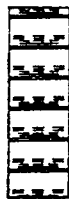
## LEGEND FOR BORING LOGS



FILL



TOPSOIL



PEAT



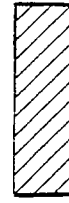
GRAVEL



SAND



SILT



CLAY



DOLOMITE

### SAMPLE TYPE:

SS = Split Spoon  
 ST = Thin-Walled Tube  
 A = Auger

### FIELD AND LABORATORY TEST DATA:

N = Standard Penetration Resistance in Blows per Foot  
 Wc = In-Situ Water Content  
 Qu = Unconfined Compressive Strength in Tons per Square Foot  
 \* Pocket Penetrometer Measurement; Maximum Reading = 4.5 tsf  
 $\gamma_D$  = Dry Unit Weight in Pounds per Cubic Foot

### WATER LEVELS:

▼ While Drilling  
 ▼ End of Boring  
 ▼ 24 Hours

### SOIL DESCRIPTION:

#### MATERIAL

BOULDER  
 COBBLE  
 Coarse GRAVEL  
 Small GRAVEL  
 Coarse SAND  
 Medium SAND  
 Fine SAND  
 SILT and CLAY

#### PARTICLE SIZE RANGE

Over 12 inches  
 12 inches to 3 inches  
 3 inches to ¾ inch  
 ¾ inch to No. 4 Sieve  
 No. 4 Sieve to No. 10 Sieve  
 No. 10 Sieve to No. 40 Sieve  
 No. 40 Sieve to No. 200 Sieve  
 Passing No. 200 Sieve

#### COHESIVE SOILS

<u>CONSISTENCY</u>	<u>Qu</u>
Very Soft	Less than 0.3
Soft	0.3 to 0.6
Stiff	0.6 to 1.0
Tough	1.0 to 2.0
Very Tough	2.0 to 4.0
Hard	4.0 and over

#### COHESIONLESS SOILS

<u>RELATIVE DENSITY</u>	<u>N</u>
Very Loose	0 - 4
Loose	4 - 10
Firm	10 - 30
Dense	30 - 50
Very Dense	50 and over

#### MODIFYING TERM

Trace  
 Little  
 Some

#### PERCENT BY WEIGHT

1 - 10  
 10 - 20  
 20 - 35



PROJECT **Culvert Improvements, Kane County, Illinois**

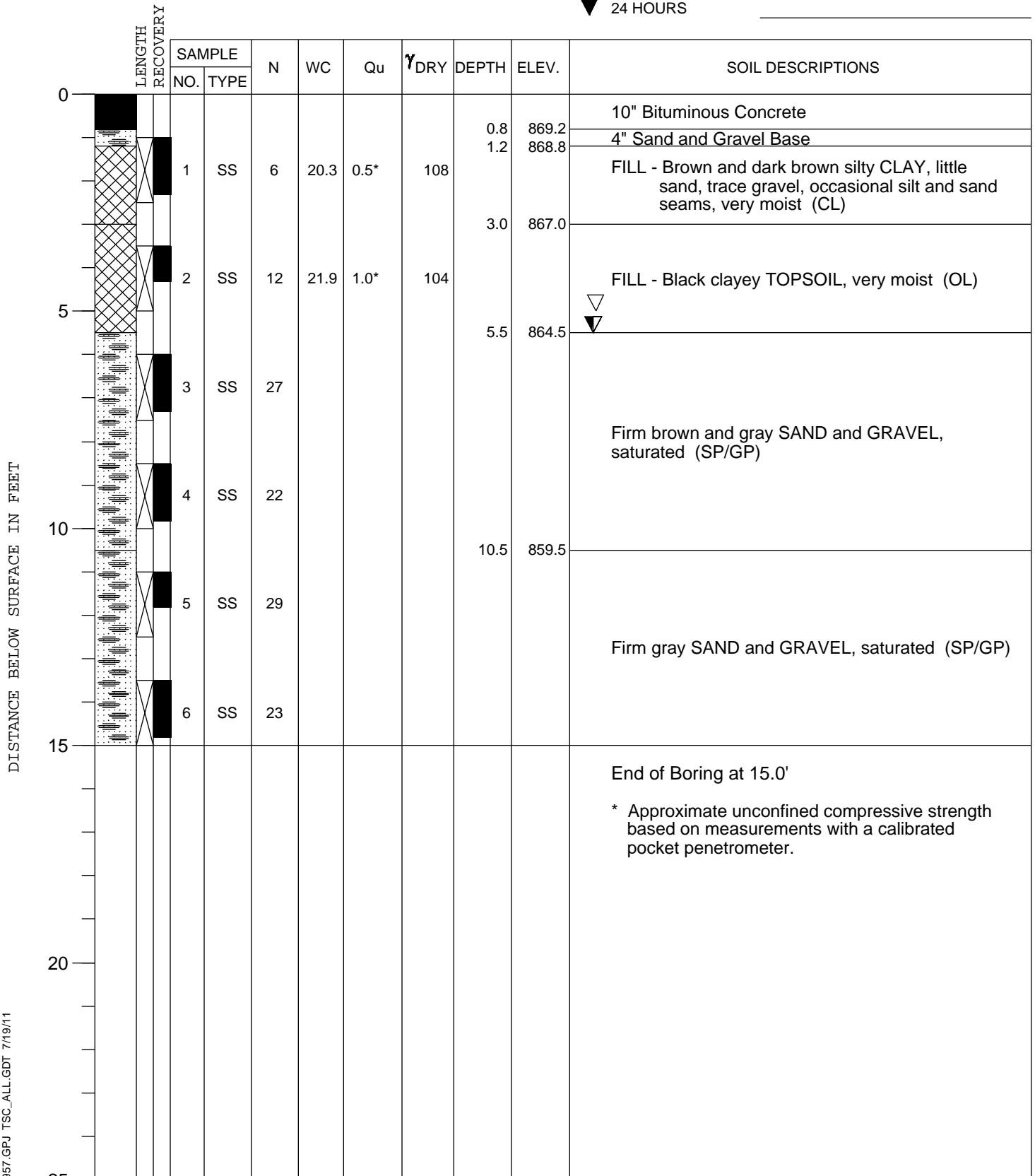


CLIENT **Homer L. Chastain and Associates, LLP, Rockford, Illinois**

BORING **401** DATE STARTED **4-29-11** DATE COMPLETED **4-29-11** JOB **L-75,957**

ELEVATIONS  
 GROUND SURFACE **870.0**  
 END OF BORING **855.0**

WATER LEVEL OBSERVATIONS  
 ▽ WHILE DRILLING **5.5'**  
 ▽ AT END OF BORING **5.0'**  
 ▼ 24 HOURS



TSC 75957.GPJ TSC\_ALL.GDT 7/19/11

DRILL RIG NO. **314**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

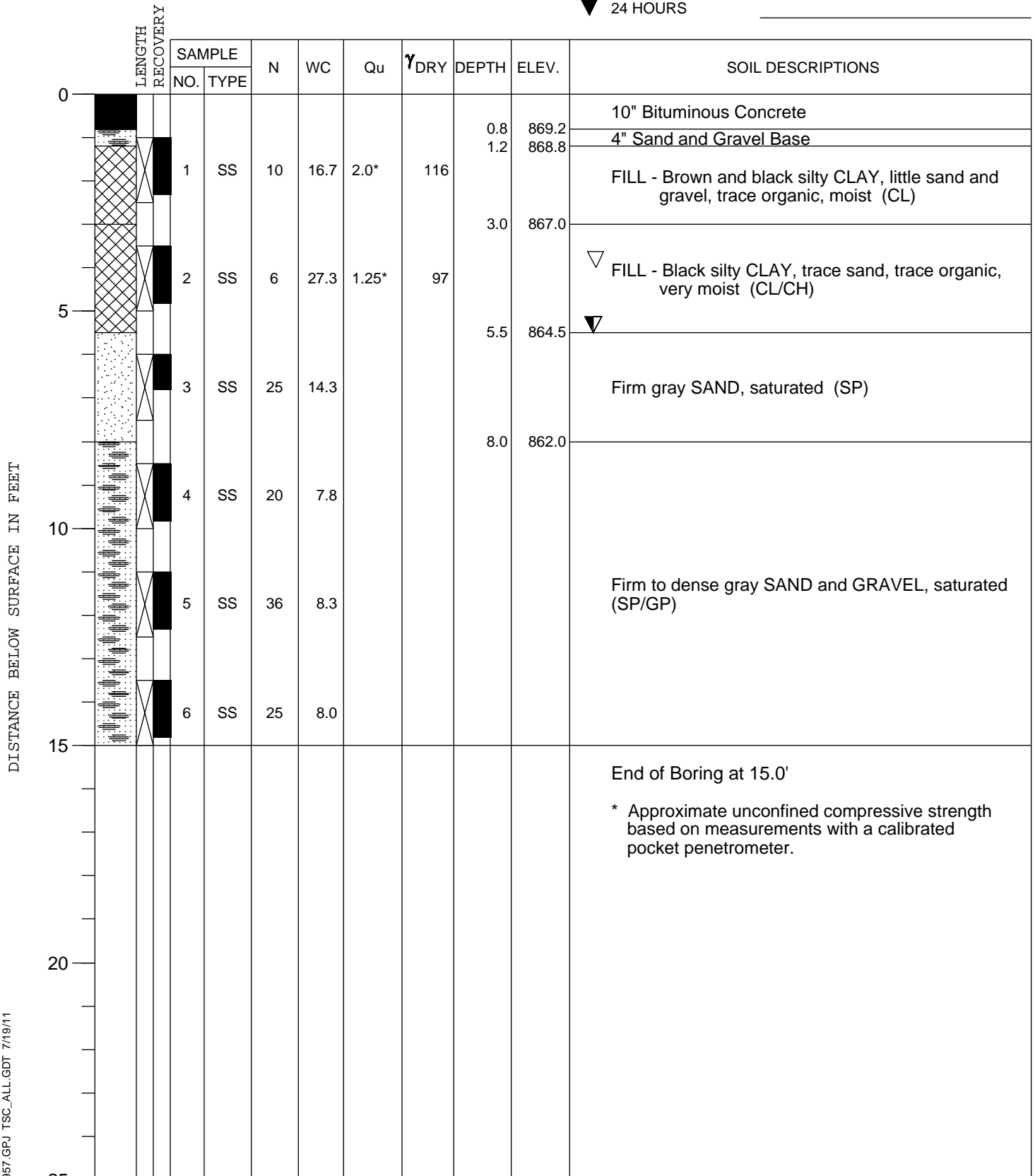


ELEVATIONS

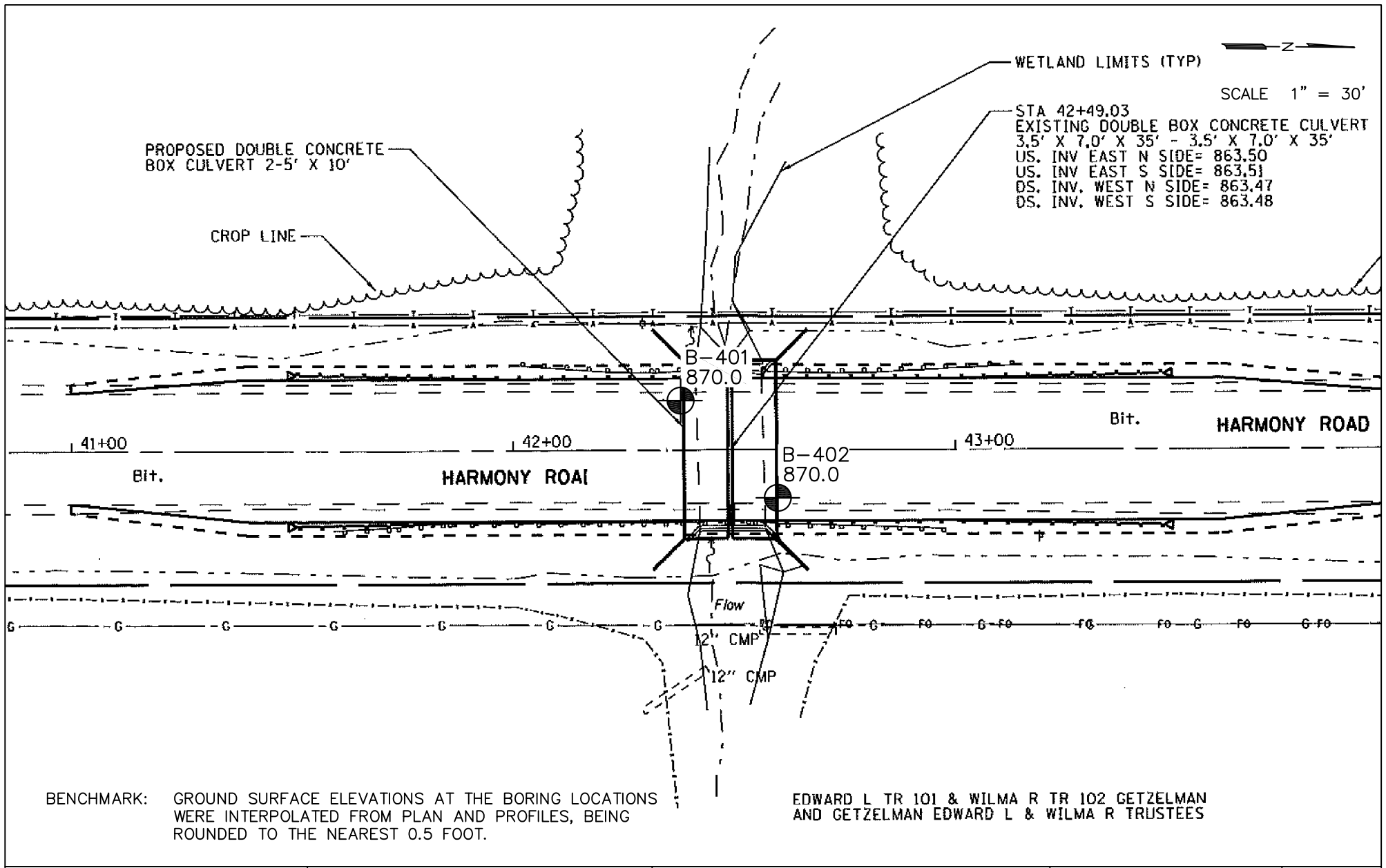
GROUND SURFACE	<b>870.0</b>
END OF BORING	<b>855.0</b>

WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING	<b>5.5'</b>
▽ AT END OF BORING	<b>4.0'</b>
▼ 24 HOURS	




Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.




BENCHMARK: GROUND SURFACE ELEVATIONS AT THE BORING LOCATIONS WERE INTERPOLATED FROM PLAN AND PROFILES, BEING ROUNDED TO THE NEAREST 0.5 FOOT.

EDWARD L TR 101 & WILMA R TR 102 GETZELMAN AND GETZELMAN EDWARD L & WILMA R TRUSTEES

**LEGEND**

 SOIL BORING LOCATION


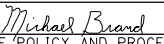
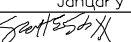
**BORING LOCATION PLAN**  
 CULVERT No.4 REPLACEMENT  
 SN 045-5544  
 HARMONY ROAD - STA. 42+49  
 KANE COUNTY, ILLINOIS

 TESTING SERVICE CORPORATION  
 457 EAST GUNDERSEN DRIVE  
 CAROL STREAM, ILLINOIS 60188

DRAWN BY: TRP  
 CHECKED BY: MVM  
 JOB NO. : L-75,957D  
 DATE: 07-12-11

PAGE NO.  
 1 OF 1

ABV	ABOVE	CU YD	CUBIC YARD	HD	HEAD	PED	PEDESTAL	STD	STANDARD
A/C	ACCESS CONTROL	CULV	CULVERT	HDW	HEADWALL	PNT	POINT	SBI	STATE BOND ISSUE
AC	ACRE	C&G	CURB & GUTTER	HDUTY	HEAVY DUTY	PC	POINT OF CURVATURE	SR	STATE ROUTE
ADJ	ADJUST	D	DEGREE OF CURVE	ha	HECTARE	PI	POINT OF INTERSECTION OF HORIZONTAL CURVE	STA	STATION
AS	AERIAL SURVEYS	DC	DEPRESSED CURVE	HMA	HOT MIX ASPHALT			SPBGR	STEEL PLATE BEAM GUARDRAIL
AGG	AGGREGATE	DET	DETECTOR	HWY	HIGHWAY	PRC	POINT OF REVERSE CURVE	SS	STORM SEWER
AH	AHEAD	DIA	DIAMETER	HORIZ	HORIZONTAL	PT	POINT OF TANGENCY	STY	STORY
APT	APARTMENT	DIST	DISTRICT	HSE	HOUSE	POT	POINT ON TANGENT	ST	STREET
ASPH	ASPHALT	DOM	DOMESTIC	IL	ILLINOIS	POLYETH	POLYETHYLENE	STR	STRUCTURE
AUX	AUXILIARY	DBL	DOUBLE	IMP	IMPROVEMENT	PCC	PORTLAND CEMENT CONCRETE	e	SUPERELEVATION RATE
AGS	AUXILIARY GAS VALVE (SERVICE)	DSEL	DOWNSTREAM ELEVATION	IN DIA	INCH DIAMETER	PP	POWER POLE OR PRINCIPAL POINT	S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
AVE	AVENUE	DSFL	DOWNSTREAM FLOWLINE	INL	INLET	PRM	PRIME	SURF	SURFACE
AX	AXIS OF ROTATION	DR	DRAINAGE OR DRIVE	INST	INSTALLATION	PE	PRIVATE ENTRANCE	SMK	SURVEY MARKER
BK	BACK	DI	DRAINAGE INLET OR DROP INLET	IDS	INTERSECTION DESIGN STUDY	PROF	PROFILE	T	TANGENT DISTANCE
B-B	BACK TO BACK	DRV	DRIVEWAY	INV	INVERT	PGL	PROFILE GRADELINE	T.R.	TANGENT RUNOUT DISTANCE
BKPL	BACKPLATE	DCT	DUCT	IP	IRON PIPE	PROJ	PROJECT	TEL	TELEPHONE
B	BARN	EA	EACH	IR	IRON ROD	P.C.	PROPERTY CORNER	TB	TELEPHONE BOX
BARR	BARRICADE	EB	EASTBOUND	JT	JOINT	PL	PROPERTY LINE	TP	TELEPHONE POLE
BGN	BEGIN	EOP	EDGE OF PAVEMENT	kg	KILOGRAM	PR	PROPOSED	TEMP	TEMPORARY
BM	BENCHMARK	E-CL	EDGE TO CENTERLINE	km	KILOMETER	R	RADIUS	TBM	TEMPORARY BENCH MARK
BIND	BINDER	E-E	EDGE TO EDGE	LS	LANDSCAPING	RR	RAILROAD	TD	TILE DRAIN
BIT	BITUMINOUS	EL	ELEVATION	LN	LANE	RRS	RAILROAD SPIKE	TBE	TO BE EXTENDED
BTM	BOTTOM	ENTR	ENTRANCE	LT	LEFT	RPS	REFERENCE POINT STAKE	TBR	TO BE REMOVED
BLVD	BOULEVARD	EXC	EXCAVATION	LP	LIGHT POLE	REF	REFLECTIVE	TBS	TO BE SAVED
BRK	BRICK	EX	EXISTING	LGT	LIGHTING	RCCP	REINFORCED CONCRETE CULVERT PIPE	TWP	TOWNSHIP
BBOX	BUFFALO BOX	EXPWAY	EXPRESSWAY	LF	LINEAL FEET OR LINEAR FEET	REINF	REINFORCEMENT	TR	TOWNSHIP ROAD
BLDG	BUILDING	E	EXTERNAL DISTANCE OF HORIZONTAL CURVE	L	LITER OR CURVE LENGTH	REM	REMOVAL	TS	TRAFFIC SIGNAL
CIP	CAST IRON PIPE	E	OFFSET DISTANCE TO VERTICAL CURVE	LC	LONG CHORD	RC	REMOVE CROWN	TSCB	TRAFFIC SIGNAL CONTROL BOX
CB	CATCH BASIN	F-F	FACE TO FACE	LNG	LONGITUDINAL	REP	REPLACEMENT	TSC	TRAFFIC SYSTEMS CENTER
C-C	CENTER TO CENTER	FA	FEDERAL AID	L SUM	LUMP SUM	REST	RESTAURANT	TRVS	TRANSVERSE
CL	CENTERLINE OR CLEARANCE	FAI	FEDERAL AID INTERSTATE	MACH	MACHINE	RESURF	RESURFACING	TRVL	TRAVEL
CL-E	CENTERLINE TO EDGE	FAP	FEDERAL AID PRIMARY	MB	MAIL BOX	RET	RETAINING	TRN	TURN
CL-F	CENTERLINE TO FACE	FAS	FEDERAL AID SECONDARY	MH	MANHOLE	RT	RIGHT	TY	TYPE
CTS	CENTERS	FAUS	FEDERAL AID URBAN SECONDARY	MATL	MATERIAL	ROW	RIGHT-OF-WAY	T-A	TYPE A
CERT	CERTIFIED	FP	FENCE POST	MED	MATERIAL	RD	ROAD	TYP	TYPICAL
CHSLD	CHISELED	FE	FIELD ENTRANCE	m	METER	RDWY	ROADWAY	UNDGND	UNDERGROUND
CS	CITY STREET	FH	FIRE HYDRANT	METH	METHOD	RTE	ROUTE	USGS	U.S. GEOLOGICAL SURVEY
CP	CLAY PIPE	FL	FLOW LINE	M	MID-ORDINATE	SAN	SANITARY	USEL	UPSTREAM ELEVATION
CLSD	CLOSED	FB	FOOT BRIDGE	mm	MILLIMETER	SANS	SANITARY SEWER	USFL	UPSTREAM FLOWLINE
CLID	CLOSED LID	FDN	FOUNDATION	mm DIA	MILLIMETER DIAMETER	SEC	SECTION	UTIL	UTILITY
CT	COAT OR COURT	FR	FRAME	MIX	MIXTURE	SEED	SEEDING	VBOX	VALVE BOX
COMB	COMBINATION	F&G	FRAME & GRATE	MBH	MOBILE HOME	SHAP	SHAPING	VV	VALVE VAULT
C	COMMERCIAL BUILDING	FRWAY	FREEWAY	MOD	MODIFIED	S	SHED	VLV	VAULT
CE	COMMERCIAL ENTRANCE	GAL	GALLON	MFT	MOTOR FUEL TAX	SH	SHEET	VEH	VEHICLE
CONC	CONCRETE	GALV	GALVANIZED	N & BC	NAIL & BOTTLE CAP	SHLD	SHOULDER	VP	VENT PIPE
CONST	CONSTRUCT	G	GARAGE	N & C	NAIL & CAP	SW	SIDEWALK OR SOUTHWEST	VERT	VERTICAL
CONTD	CONTINUED	GM	GAS METER	N & W	NAIL & WASHER	SIG	SIGNAL	VC	VERTICAL CURVE
CONT	CONTINUOUS	GV	GAS VALVE	NOAA	NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION	SOD	SODDING	VPC	VERTICAL POINT OF CURVATURE
COR	CORNER	GRAN	GRANULAR	NC	NORMAL CROWN	SM	SOLID MEDIUM	VPI	VERTICAL POINT OF INTERSECTION
CORR	CORRUGATED	GR	GRATE	NB	NORTHBOUND	SB	SOUTHBOUND	VPT	VERTICAL POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	GRVL	GRAVEL	NE	NORTHEAST	SE	SOUTHEAST	WM	WATER METER
CNTY	COUNTY	GND	GROUND	NW	NORTHWEST	SPL	SPECIAL	WV	WATER VALVE
CH	COUNTY HIGHWAY	GUT	GUTTER	OLID	OPEN LID	SD	SPECIAL DITCH	WMAIN	WATER MAIN
CSE	COURSE	GP	GUY POLE	PAT	PATTERN	SQ FT	SQUARE FEET	WB	WESTBOUND
XSECT	CROSS SECTION	GW	GUY WIRE	PVD	PAVED	m <sup>2</sup>	SQUARE METER	WILDFL	WILDFLOWERS
m <sup>3</sup>	CUBIC METER	HH	HANDHOLE	PVMT	PAVEMENT	mm <sup>2</sup>	SQUARE MILLIMETER	W	WITH
mm <sup>3</sup>	CUBIC MILLIMETER	HATCH	HATCHING	PM	PAVEMENT MARKING	SQ YD	SQUARE YARD	WO	WITHOUT

 Illinois Department of Transportation	
PASSED	January 1, 2011
 ENGINEER OF POLICY AND PROCEDURES	
APPROVED	January 1, 2011
 ENGINEER OF DESIGN AND ENVIRONMENT	

ISSUED 1-1-97


DATE	REVISIONS
1-1-11	Updated abbreviations and symbols.
1-1-08	Updated abbreviations and symbols.

## STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 1 of 8)

STANDARD 000001-06

<u>ADJUSTMENT ITEMS</u>			<u>ALIGNMENT ITEMS</u>			<u>CONTOUR ITEMS</u>		
	<u>EX</u>	<u>PR</u>		<u>EX</u>	<u>PR</u>		<u>EX</u>	<u>PR</u>
Structure To Be Adjusted		ADJ	Baseline	—————	—————	Approx. Index Line	- - - - -	
Structure To Be Cleaned		C	Centerline	— — — — —	— — — — —	Approx. Intermediate Line	- - - - -	
Main Structure To Be Filled		FM	Centerline Break Circle	○	⊙	Index Contour	—————	
Structure To Be Filled		F	Baseline Symbol	⊥	⊥	Intermediate Contour	—————	
Structure To Be Filled Special		FSP	Centerline Symbol	⊥	⊥	<u>DRAINAGE ITEMS</u>		
Structure To Be Removed		R	PI Indicator	△	△	Channel or Stream Line	- - - - -	- - - - -
Structure To Be Reconstructed		REC	Point Indicator	○	○	Culvert Line	- - - - -	—————
Structure To Be Reconstructed Special		RSP	Horizontal Curve Data (Half Size)	CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	Grading & Shaping Ditches	- - - - -	- - - - -
Frame and Grate To Be Adjusted		A	<u>BOUNDARIES ITEMS</u>					
Frame and Lid To Be Adjusted		A	Dashed Property Line	- - - - -	- - - - -	Drainage Boundary Line	//////	//////
Domestic Service Box To Be Adjusted		A	Solid Property/Lot Line	—————	—————	Paved Ditch		
Valve Vault To Be Adjusted		A	Section/Grant Line	- - - - -	- - - - -	Aggregate Ditch		
Special Adjustment		SP	Quarter Section Line	—————	—————	Pipe Underdrain	▲▲▲	▲▲▲
Item To Be Abandoned		AB	Quarter/Quarter Section Line	—————	—————	Storm Sewer	▶▶▶	▶▶▶
Item To Be Moved		M	County/Township Line	- - - - -	- - - - -	Flowline	⊥	⊥
Item To Be Relocated		REL	State Line	- - - - -	- - - - -	Ditch Check	◆	◆
Pavement Removal and Replacement			Iron Pipe Found	○	○	Headwall	-	∩
			Iron Pipe Set	●	●	Inlet	□	■
			Survey Marker	⊙	⊙	Manhole	⊙	⊙
			Property Line Symbol	⊥	⊥	Summit	↔	↔
			Same Ownership Symbol (Half Size)	↗	↗	Roadway Ditch Flow	~>	~>
			Northwest Quarter Corner (Half Size)	⊙	⊙	Swale	—▶	—▶
			Section Corner (Half Size)	⊙	⊙	Catch Basin	○	●
			Southeast Quarter Corner (Half Size)	⊙	⊙	Culvert End Section	◀	▶
						Water Surface Indicator	▽	▽
						Riprap	▒	▒


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 APPROVED January 1, 2011  
*Scott Schick*  
 ENGINEER OF DESIGN AND ENVIRONMENT

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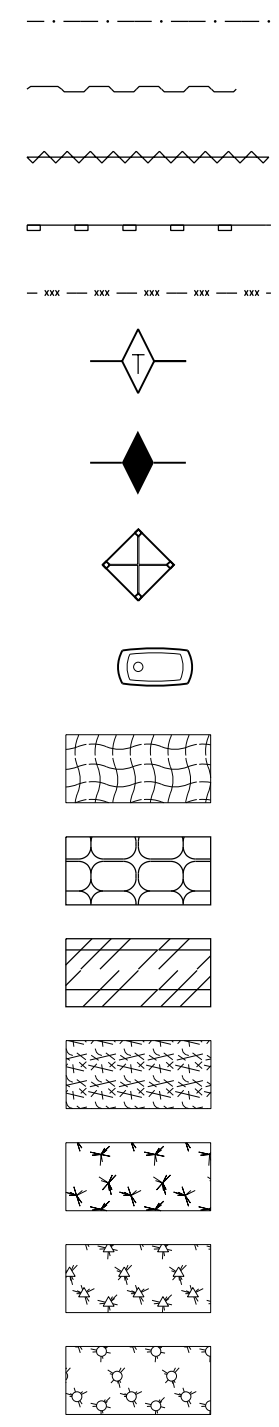
**STANDARD SYMBOLS,  
 ABBREVIATIONS  
 AND PATTERNS**  
(Sheet 2 of 8)  
**STANDARD 00001-06**

**EROSION & SEDIMENT CONTROL ITEMS**

**EX**

**PR**

- Cleaning & Grading Limits
- Dike
- Erosion Control Fence
- Perimeter Erosion Barrier
- Temporary Fence
- Ditch Check Temporary
- Ditch Check Permanent
- Inlet & Pipe Protection
- Sediment Basin
- Erosion Control Blanket
- Fabric Formed Concrete Revetment Mat
- Turf Reinforcement Mat
- Mulch Temporary
- Mulch Method 1
- Mulch Method 2 Stabilized
- Mulch Method 3 Hydraulic

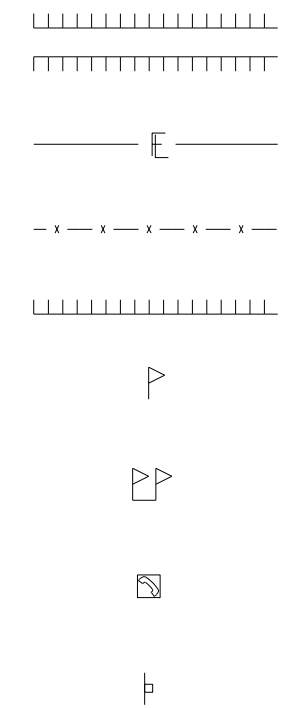


**NON-HIGHWAY IMPROVEMENT ITEMS**

**EX**

**PR**

- Noise Attn./Levee
- Field Line
- Fence
- Base of Levee
- Mailbox
- Multiple Mailboxes
- Pay Telephone
- Advertising Sign

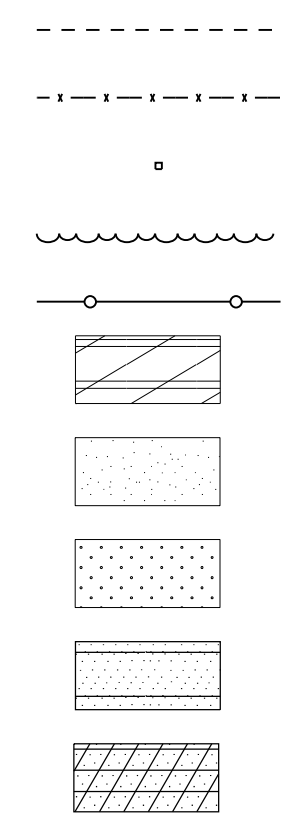


**LANDSCAPING ITEMS**

**EX**

**PR**

- Contour Mounding Line
- Fence
- Fence Post
- Shrubs
- Mowline
- Perennial Plants
- Seeding Class 2
- Seeding Class 2A
- Seeding Class 4
- Seeding Class 4 & 5 Combined

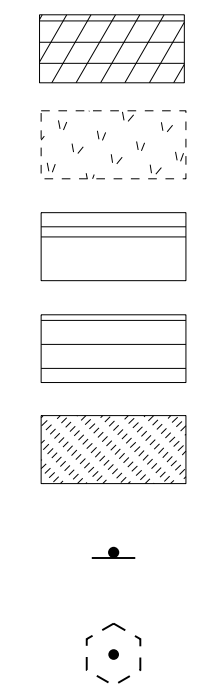


**EXISTING LANDSCAPING ITEMS (contd.)**

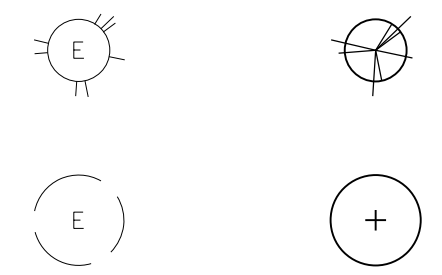
**EX**

**PR**

- Seeding Class 5
- Seeding Class 7
- Seedlings Type 1
- Seedlings Type 2
- Sodding
- Mowstake w/Sign
- Tree Trunk Protection



- Evergreen Tree
- Shade Tree

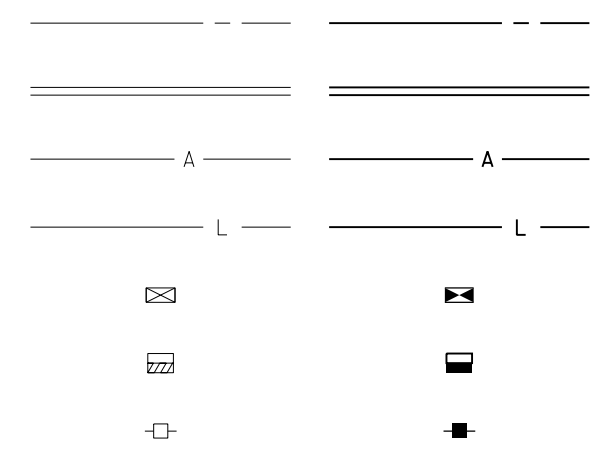


**LIGHTING**

**EX**

**PR**

- Duct
- Conduit
- Electrical Aerial Cable
- Electrical Buried Cable
- Controller
- Underpass Luminaire
- Power Pole



**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**

(Sheet 3 of 8)

**STANDARD 000001-06**

Illinois Department of Transportation

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**LIGHTING  
(contd.)**

**EX**

**PR**

Pull Point



Handhole



Heavy Duty Handhole



Junction Box



Light Unit Comb.



Electrical Ground



Traffic Flow Arrow



High Mast Pole  
(Half Size)



Light Unit-1

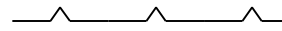
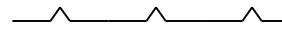


**PAVEMENT (MISC.)**

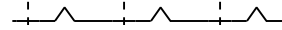
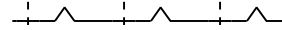
**EX**

**PR**

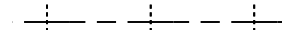
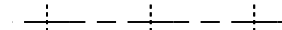
Keyed Long. Joint



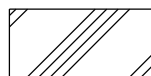
Keyed Long. Joint w/Tie Bars



Sawed Long. Joint w/Tie Bars



Bituminous Shoulder



Bituminous Taper



Stabilized Driveway



Widening



**PAVEMENT MARKINGS**

**EX**

**PR**

Bike Lane Symbol



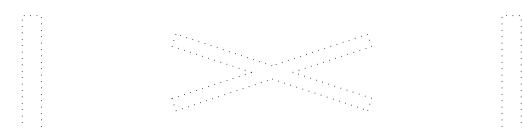
Bike Lane Text



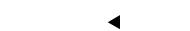
Handicap Symbol



RR Crossing



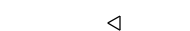
Raised Marker Amber 1 Way



Raised Marker Amber 2 Way



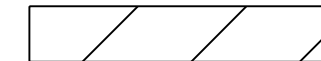
Raised Marker Crystal 1 Way



Two Way Turn Left



Shoulder Diag. Pattern



Skip-Dash White



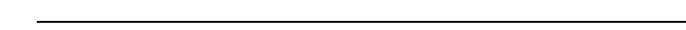
Skip-Dash Yellow



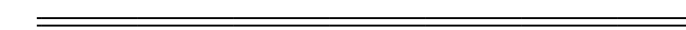
Stop Line



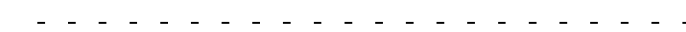
Solid Line



Double Centerline



Dotted Lines



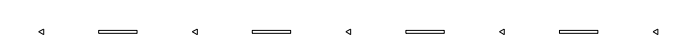
CL 2Ln 2Way  
RRPM 12.2 m (40') o.c.



CL 2Ln 2Way  
RRPM 80' (24.4 m) o.c.



CL Multilane Div.  
RRPM 40' (12.2 m) o.c.



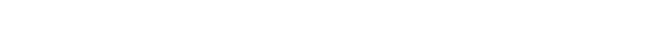
CL Multilane Div.  
RRPM 80' (24.4 m) o.c.



CL Multilane Div. Dbl.  
RRPM 80' (24.4 m) o.c.



CL Multilane Undiv.



Two Way Turn Left Line



Illinois Department of Transportation

PASSED January 1, 2011  
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*Scott Schick*  
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ISSUED 1-1-97

**STANDARD SYMBOLS,  
ABBREVIATIONS  
AND PATTERNS**

(Sheet 4 of 8)

**STANDARD 000001-06**

**PAVEMENT MARKINGS**

**(contd.)**

Urban Combination Left

**EX**



**PR**



Urban Combination Right



Urban Left Turn Arrow



Urban Right Turn Arrow



Urban Left Turn Only



**ONLY ONLY ONLY**



Urban Right Turn Only



Urban Thru Only



Urban U-Turn



Urban Combined U-Turn



Rural Combination Left



Rural Combination Right



Rural Left Turn Arrow



Rural Right Turn Arrow



Rural Left Turn Only



**ONLY ONLY ONLY**



Rural Right Turn Only



**ONLY ONLY ONLY**



Rural Thru Only



**ONLY ONLY ONLY**



**RAILROAD ITEMS**

**EX**

**PR**

Abandoned Railroad



Railroad



Railroad Point



Control Box



Crossing Gate



Flashing Signal



Railroad Cant. Mast Arm



Crossbuck

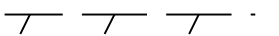


**REMOVAL ITEMS**

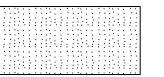
**EX**

**PR**

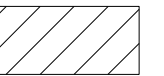
Removal Tic



Bituminous Removal



Hatch Pattern



Tree Removal Single



**RIGHT OF WAY ITEMS**

**EX**

**PR**

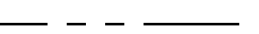
Future ROW Corner Monument



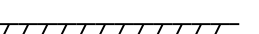
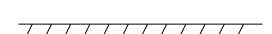
ROW Marker



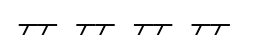
ROW Line



Easement



Temporary Easement



**STANDARD SYMBOLS,  
ABBREVIATIONS  
AND PATTERNS**

(Sheet 5 of 8)

**STANDARD 000001-06**

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PASSED January 1, 2011  
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**RIGHT OF WAY ITEMS**  
**(contd.)**

	<b>EX</b>	<b>PR</b>
Access Control Line	— AC —————	— AC —————
Access Control Line & ROW	— AC —————	— AC —————
Access Control Line & ROW with Fence	— x ————— AR —	— x — AC — x —
Excess ROW Line		— XS —————

**ROADWAY PLAN**  
**ITEMS**

	<b>EX</b>	<b>PR</b>
Cable Barrier		
Concrete Barrier		
Edge of Pavement	-----	-----
Bit Shoulders, Medians and C&G Line	-----	-----
Aggregate Shoulder	-----	-----
Sidewalks, Driveways	-----	-----
Guardrail		
Guardrail Post	□	
Traffic Sign		
Corrugated Median		
Impact Attenuator		
North Arrow with District Office (Half Size)		
Match Line		STA. 45+00
Slope Limit Line	-----	
Typical Cross-Section Line	-----	-----

**ROADWAY PROFILES**

	<b>EX</b>	<b>PR</b>
P.I. Indicator	△	△
Point Indicator	○	○
Earthworks Balance Point		
Begin Point		
Vert. Curve Data	VPI = ELEV = L = E =	VPI = ELEV = L = E =
Ditch Profile Left Side	-----	-----
Ditch Profile Right Side	-----	-----
Roadway Profile Line	-----	-----
Storm Sewer Profile Left Side	-----	-----
Storm Sewer Profile Right Side	-----	-----

**SIGNING ITEMS**

	<b>EX</b>	<b>PR</b>
Cone, Drum or Barricade		○
Barricade Type II		
Barricade Type III		
Barricade With Edge Line		
Flashing Light Sign		○
Panels I		
Panels II		
Direction of Traffic		
Sign Flag (Half Size)		

**SIGNING ITEMS**  
**(contd.)**

	<b>EX</b>	<b>PR</b>
Reverse Left W1-4L (Half Size)		
Reverse Right W1-4R (Half Size)		
Two Way Traffic Sign W6-3 (Half Size)		
Detour Ahead W20-2(0) (Half Size)		
Left Lane Closed Ahead W20-5L(0) (Half Size)		
Right Lane Closed Ahead W20-5R(0) (Half Size)		
Road Closed Ahead W20-3(0) (Half Size)		
Road Construction Ahead W20-1(0) (Half Size)		
Single Lane Ahead (Half Size)		
Transition Left W4-2L (Half Size)		
Transition Right W4-2R (Half Size)		

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**STANDARD SYMBOLS,  
ABBREVIATIONS  
AND PATTERNS**

(Sheet 6 of 8)

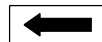
**STANDARD 000001-06**

**SIGNING ITEMS**  
**(contd.)**

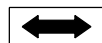
**EX**

**PR**

One Way Arrow Lrg. W1-6-(0)  
(Half Size)



Two Way Arrow Large W1-7-(0)  
(Half Size)



Detour M4-10L-(0)  
(Half Size)



Detour M4-10R-(0)  
(Half Size)



One Way Left R6-1L  
(Half Size)



One Way Right R6-1R  
(Half Size)



Left Turn Lane R3-I100L  
(Half Size)



Keep Left R4-7AL  
(Half Size)



Keep Left R4-7BL  
(Half Size)



Keep Right R4-7AR  
(Half Size)



Keep Right R4-7BR  
(Half Size)



Stop Here On Red R10-6-AL  
(Half Size)



Stop Here On Red R10-6-AR  
(Half Size)



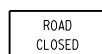
No Left Turn R3-2  
(Half Size)



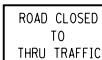
No Right Turn R3-1  
(Half Size)



Road Closed R11-2  
(Half Size)



Road Closed Thru Traffic R11-2  
(Half Size)



**STRUCTURES ITEMS**

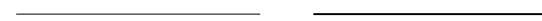
**EX**

**PR**

Box Culvert Barrel



Box Culvert Headwall



Bridge Pier



Bridge



Retaining Wall



Temporary Sheet Piling



**TRAFFIC SHEET**  
**ITEMS**

**EX**

**PR**

Cable Number



Left Turn Green



Left Turn Yellow



Signal Backplate



Signal Section 8" (200 mm)



Signal Section 12" (300 mm)



Walk/Don't Walk Letters



Walk/Don't Walk Symbols



**TRAFFIC SIGNAL**  
**ITEMS**

**EX**

**PR**

Galv. Steel Conduit



Underground Cable



Detector Loop Line



Detector Loop Large



Detector Loop Small



Detector Loop Quadrapole



**STANDARD SYMBOLS,**  
**ABBREVIATIONS**  
**AND PATTERNS**

(Sheet 7 of 8)

**STANDARD 000001-06**

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**TRAFFIC SIGNAL  
ITEMS (contd.)**

**EX**

**PR**

Detector Raceway



Aluminum Mast Arm



Steel Mast Arm



Veh. Detector Magnetic



Conduit Splice



Controller



Gulfbox Junction



Wood Pole



Temp. Signal Head



Handhole



Double Handhole



Heavy Duty Handhole



Junction Box



Ped. Pushbutton Detector



Ped. Signal Head



Power Pole Service



Priority Veh. Detector



Signal Head



Signal Head w/Backplate



Signal Post



Closed Circuit TV



Video Detector System



**UNDERGROUND  
UTILITY ITEMS**

**EX**

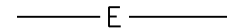
**PR**

**ABANDONED**

Cable TV



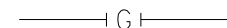
Electric Cable



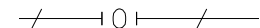
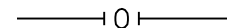
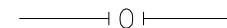
Fiber Optic



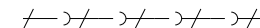
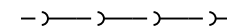
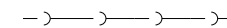
Gas Pipe



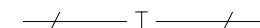
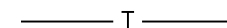
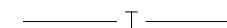
Oil Pipe



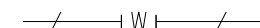
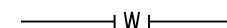
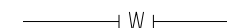
Sanitary Sewer



Telephone Cable



Water Pipe



**UTILITIES ITEMS**

**EX**

**PR**

Controller



Double Handhole



Fire Hydrant



GuyWire or Deadman Anchor



Handhole



Heavy Duty Handhole



Junction Box



Light Pole



Manhole



Pipeline Warning Sign



Power Pole



Power Pole with Light



Sanitary Sewer Cleanout



Splice Box Above Ground



Telephone Splice Box  
Above Ground



Telephone Pole



**UTILITY ITEMS  
(contd.)**

**EX**

**PR**

Traffic Signal



Traffic Signal Control Box



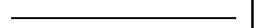
Water Meter



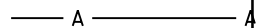
Water Meter Valve Box



Profile Line



Aerial Power Line



**VEGETATION ITEMS**

**EX**

**PR**

Deciduous Tree



Bush or Shrub



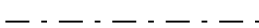
Evergreen Tree



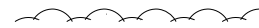
Stump



Orchard/Nursery Line



Vegetation Line



Woods & Bush Line

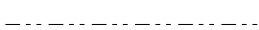


**WATER FEATURE  
ITEMS**

**EX**

**PR**

Stream or Drainage Ditch



Waters Edge



Water Surface Indicator



Water Point



Disappearing Ditch



Marsh



Marsh/Swamp Boundary



**STANDARD SYMBOLS,  
ABBREVIATIONS  
AND PATTERNS**

(Sheet 8 of 8)

**STANDARD 000001-06**


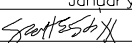
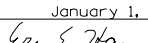
Illinois Department of Transportation

PASSED January 1, 2011  
*Michael Beard*  
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2011  
*Scott Schick*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

REINFORCEMENT BARS - ENGLISH (METRIC)																	
Bar Size English (metric)	Dia. in. mm	Cross- Sectional Area sq. in. (sq. mm)	Weight lbs./ft. kg/m	SPACING, in. (mm)													
				4 (100)	4½ (115)	5 (125)	5½ (140)	6 (150)	6½ (165)	7 (175)	7½ (190)	8 (200)	8½ (215)	9 (225)	10 (250)	11 (275)	12 (300)
				AREA OF STEEL PER FOOT (METER), sq. in. (sq. mm)													
3 (10)	0.375 (9.5)	0.110 (71)	0.376 (0.560)	0.330 (710)	0.293 (617)	0.264 (568)	0.240 (507)	0.220 (473)	0.203 (430)	0.189 (406)	0.176 (374)	0.165 (355)	0.155 (330)	0.147 (316)	0.132 (284)	0.120 (258)	0.110 (237)
4 (13)	0.500 (12.7)	0.196 (129)	0.668 (0.944)	0.588 (1290)	0.523 (1122)	0.470 (1032)	0.428 (921)	0.392 (860)	0.362 (782)	0.336 (737)	0.314 (679)	0.294 (645)	0.277 (600)	0.261 (573)	0.235 (516)	0.214 (469)	0.196 (430)
5 (16)	0.625 (15.9)	0.307 (199)	1.043 (1.552)	0.921 (1990)	0.819 (1730)	0.737 (1592)	0.670 (1421)	0.614 (1327)	0.567 (1206)	0.526 (1137)	0.491 (1047)	0.461 (995)	0.433 (926)	0.409 (884)	0.368 (796)	0.335 (724)	0.307 (663)
6 (19)	0.750 (19.1)	0.442 (284)	1.502 (2.235)	1.326 (2840)	1.179 (2470)	1.061 (2272)	0.964 (2029)	0.884 (1893)	0.816 (1721)	0.758 (1623)	0.707 (1495)	0.663 (1420)	0.624 (1321)	0.589 (1262)	0.530 (1136)	0.482 (1033)	0.442 (947)
7 (22)	0.875 (22.2)	0.601 (387)	2.044 (3.042)	1.803 (3870)	1.603 (3365)	1.442 (3096)	1.311 (2764)	1.202 (2580)	1.110 (2345)	1.030 (2211)	0.962 (2037)	0.902 (1935)	0.848 (1800)	0.801 (1720)	0.721 (1548)	0.656 (1407)	0.601 (1290)
8 (25)	1.000 (25.4)	0.785 (510)	2.670 (3.973)	2.355 (5100)	2.093 (4435)	1.884 (4080)	1.713 (3543)	1.570 (3400)	1.449 (3091)	1.346 (2914)	1.256 (2684)	1.178 (2550)	1.108 (2372)	1.047 (2267)	0.942 (2040)	0.856 (1855)	0.785 (1700)
9 (29)	1.128 (28.7)	1.000 (645)	3.400 (5.060)	3.000 (6450)	2.667 (5609)	2.400 (5160)	2.182 (4607)	2.000 (4300)	1.846 (3909)	1.714 (3686)	1.600 (3395)	1.500 (3225)	1.412 (3000)	1.333 (2867)	1.200 (2580)	1.091 (2345)	1.000 (2150)
10 (32)	1.270 (32.3)	1.267 (819)	4.303 (6.404)	3.801 (8190)	3.379 (7122)	3.041 (6552)	2.764 (5850)	2.534 (5460)	2.339 (4964)	2.172 (4680)	2.027 (4311)	1.901 (4095)	1.789 (3809)	1.689 (3640)	1.520 (3276)	1.382 (2978)	1.267 (2730)
11 (36)	1.410 (35.8)	1.561 (1006)	5.313 (7.907)	4.683 (10060)	4.163 (8748)	3.746 (8048)	3.406 (7186)	3.122 (6707)	2.882 (6097)	2.676 (5749)	2.498 (5295)	2.342 (5030)	2.204 (4679)	2.081 (4471)	1.873 (4024)	1.703 (3658)	1.561 (3353)

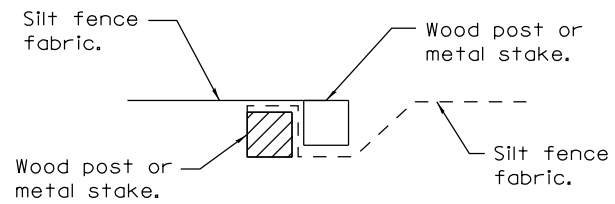
 Illinois Department of Transportation  
 PASSED January 1, 2009  
  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED January 1, 2009  
  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-07	Deleted metric table. Soft converted English table.

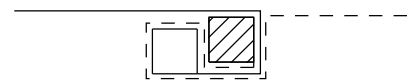
## AREAS OF REINFORCEMENT BARS

**STANDARD 001001-02**



Place end-post (stake) of first silt fence adjacent to end-post (stake) of second silt fence with fabric positioned as shown.

**STEP 1**

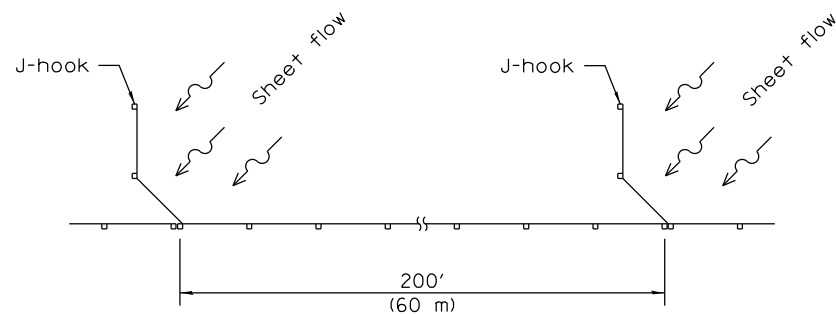


Rotate posts (stakes) together 180° clockwise and drive both posts (stakes) 18 (450) into ground.

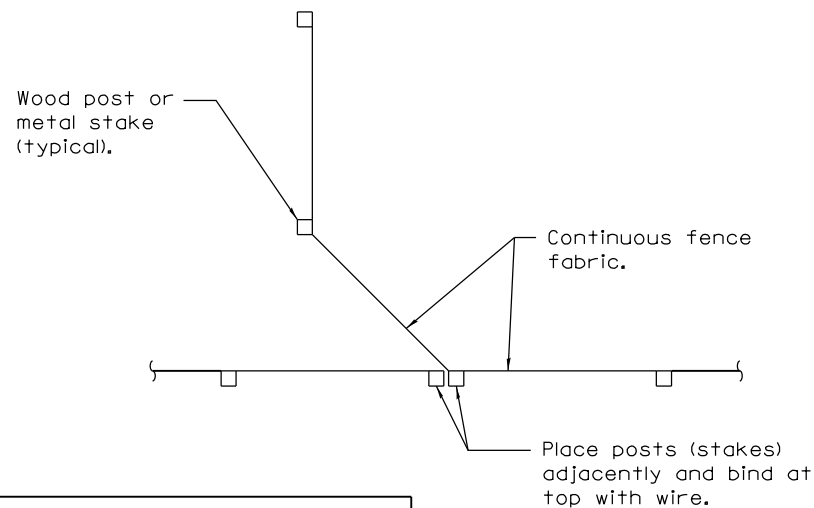
**STEP 2**

**ATTACHING TWO SILT FILTER FENCES**

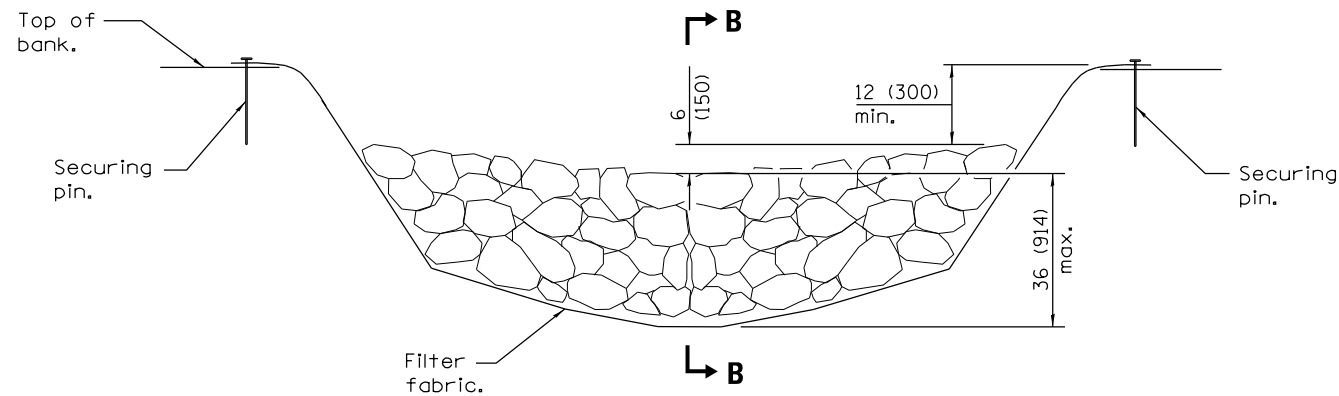
(Not applicable for J-hooks)



**SILT FILTER J-HOOK PLACEMENT**

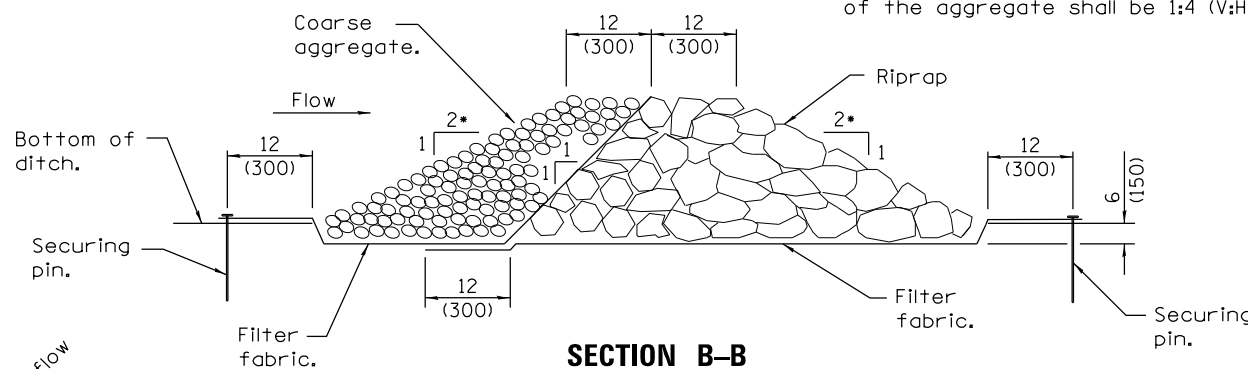


**J-HOOK**



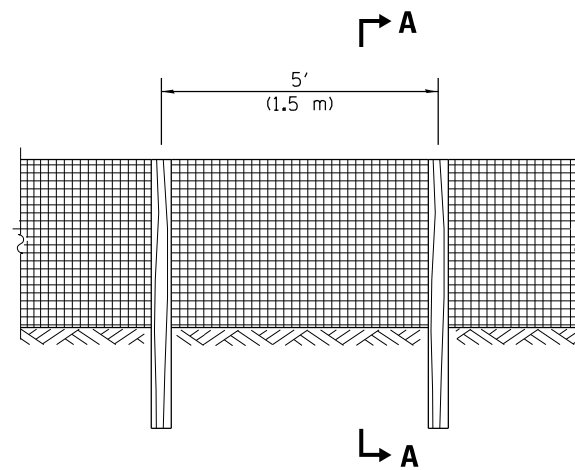
**ELEVATION**

• When the ditch check is within the clear zone and the road is open to traffic, the traffic approach slope of the aggregate shall be 1:4 (V:H).



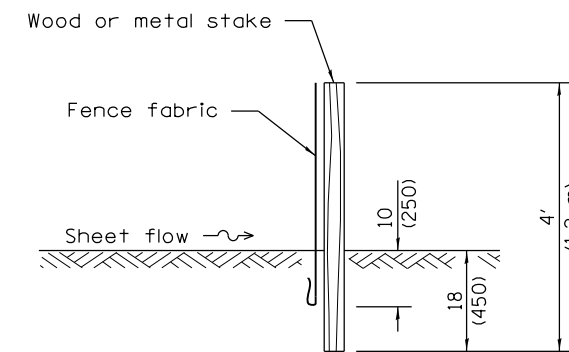
**SECTION B-B**

**AGGREGATE DITCH CHECK**

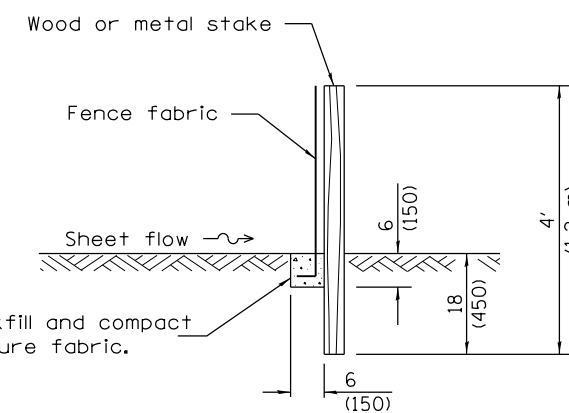


**ELEVATION**

**SILT FILTER FENCE AS A PERIMETER EROSION BARRIER**



**SLICE METHOD**



**TRENCH METHOD**

**SECTION A-A**

Excavate, backfill and compact trench to secure fabric.

**GENERAL NOTES**

The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-13	Corrected notation for flowline (E) on SEDIMENT BASIN ELEVATION.
1-1-12	Omitted hay/straw perimeter barrier. Added SLICE METHOD to SECTION A-A.

**TEMPORARY EROSION CONTROL SYSTEMS**

(Sheet 1 of 2)

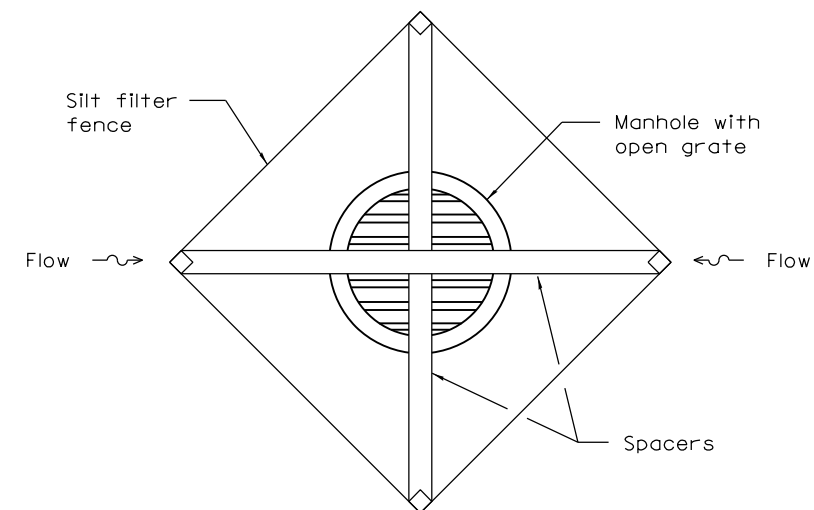
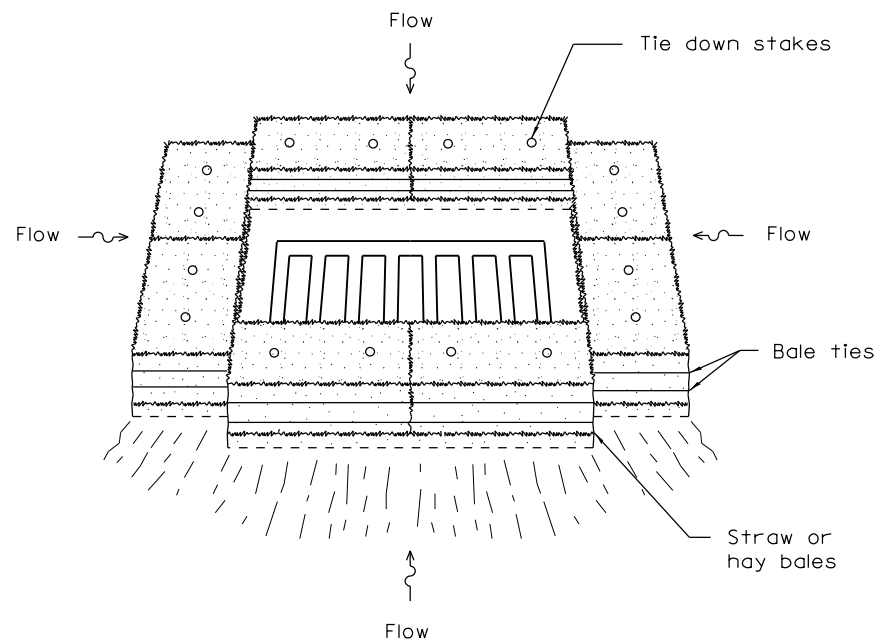
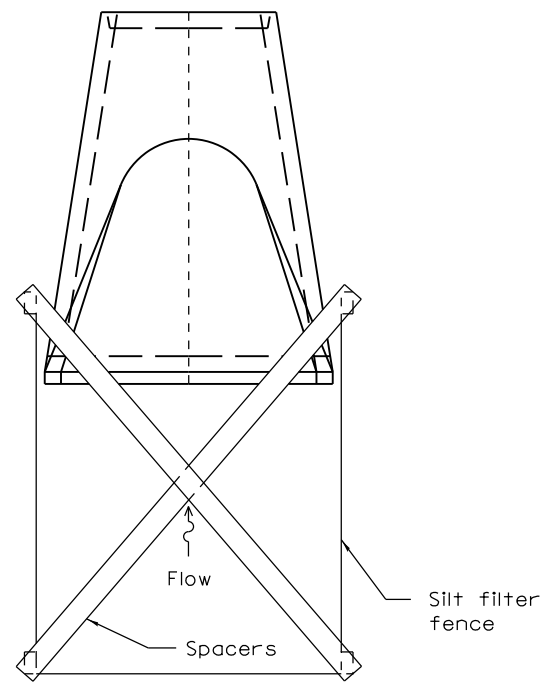
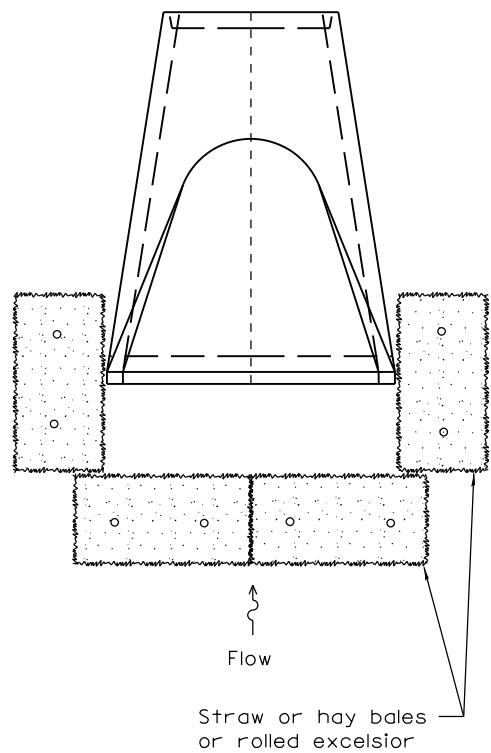
**STANDARD 280001-07**

Illinois Department of Transportation

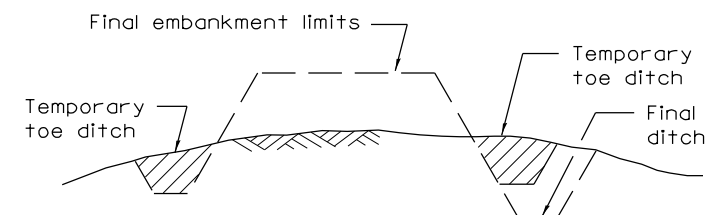
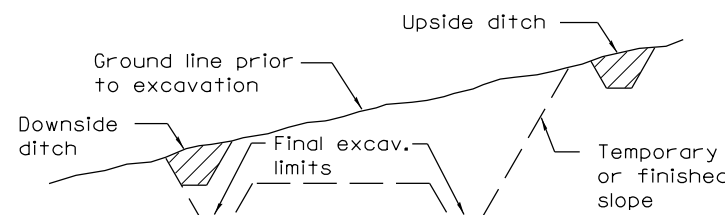
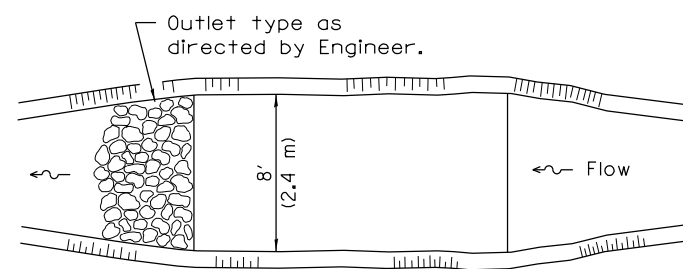
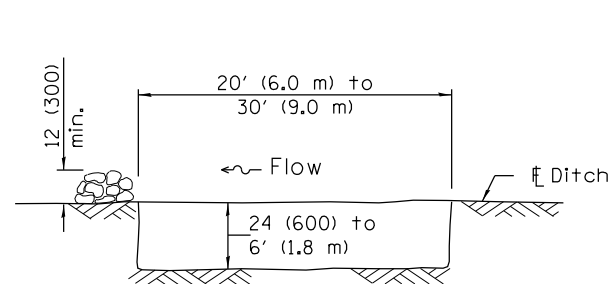
PASSED January 1, 2013  
*Michael Brand*  
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*[Signature]*  
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**INLET AND PIPE PROTECTION**



**TYPICAL CUT CROSS-SECTION**

**TYPICAL FILL CROSS-SECTION**

**TEMPORARY DITCHES FOR CUT & FILL SECTIONS**

The performance of the basin will improve if put into a series.

The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

**ELEVATION**

**PLAN**

**SEDIMENT BASIN**

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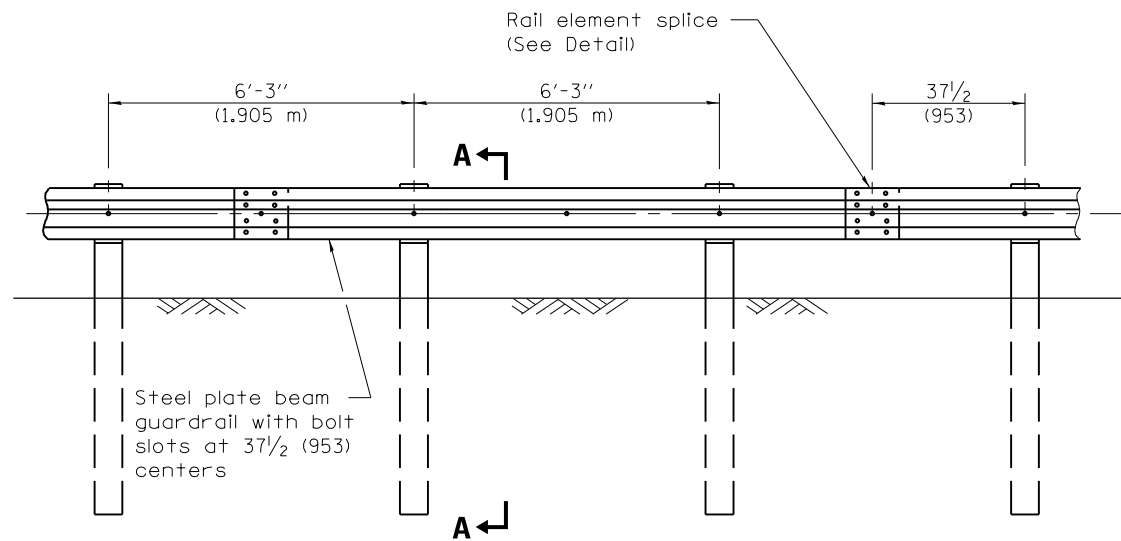
*[Signature]*  
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**TEMPORARY EROSION CONTROL SYSTEMS**

(Sheet 2 of 2)

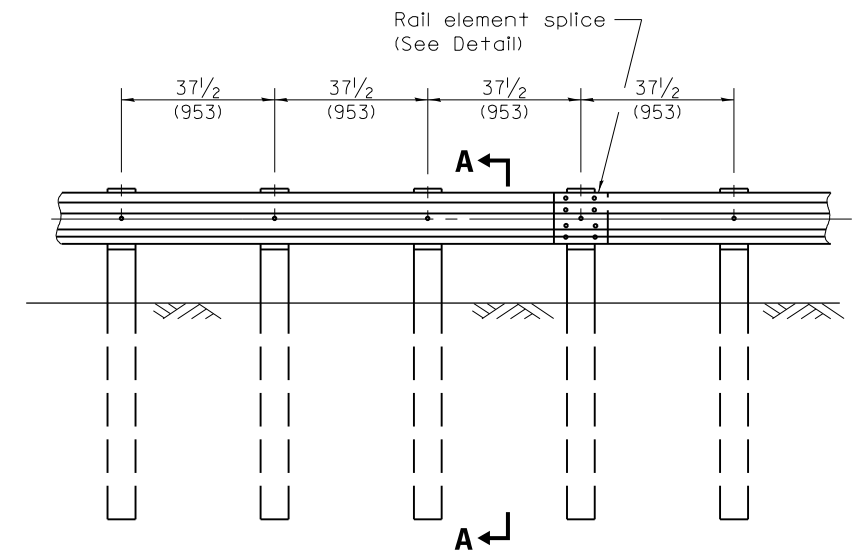
**STANDARD 280001-07**



**ELEVATION**

**TYPE A**

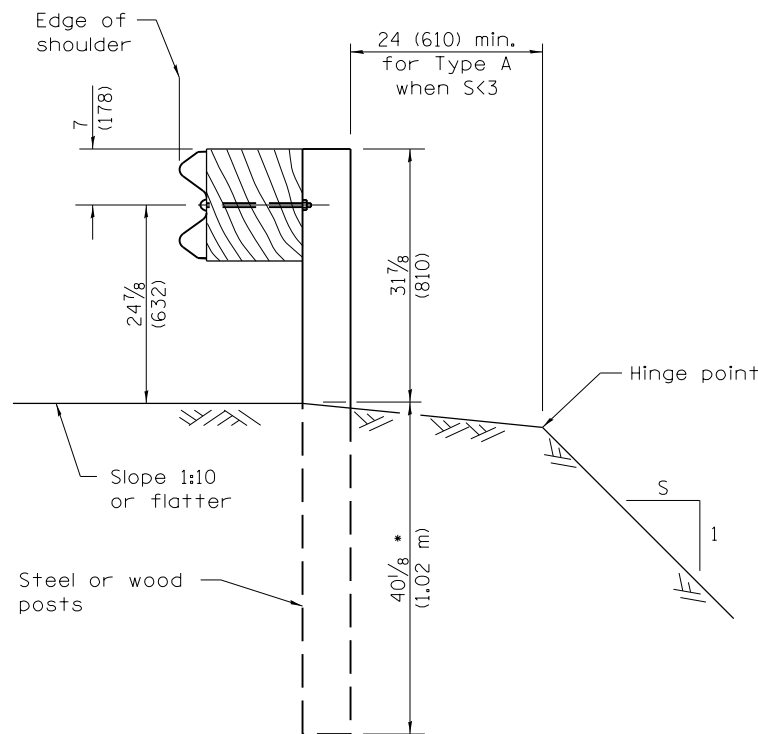
6'-3" (1.905 m) Typical post spacing



**ELEVATION**

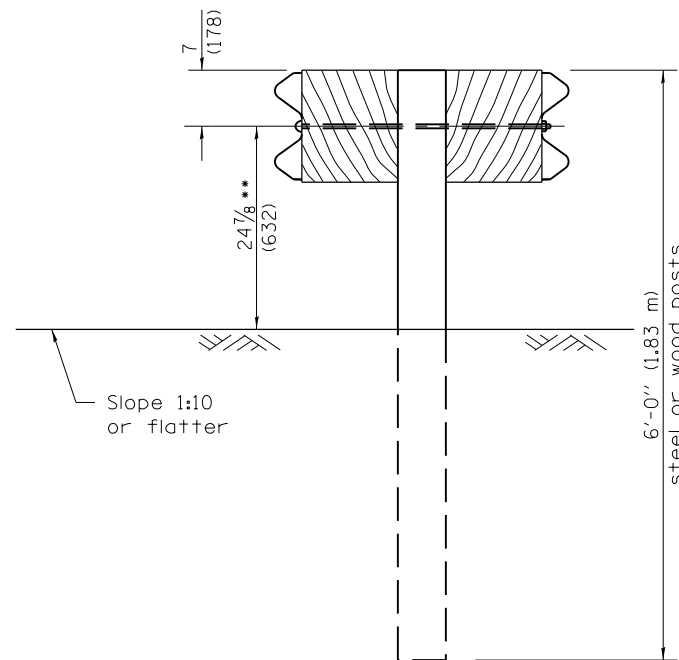
**TYPE B**

37 1/2 (953) Closed post spacing



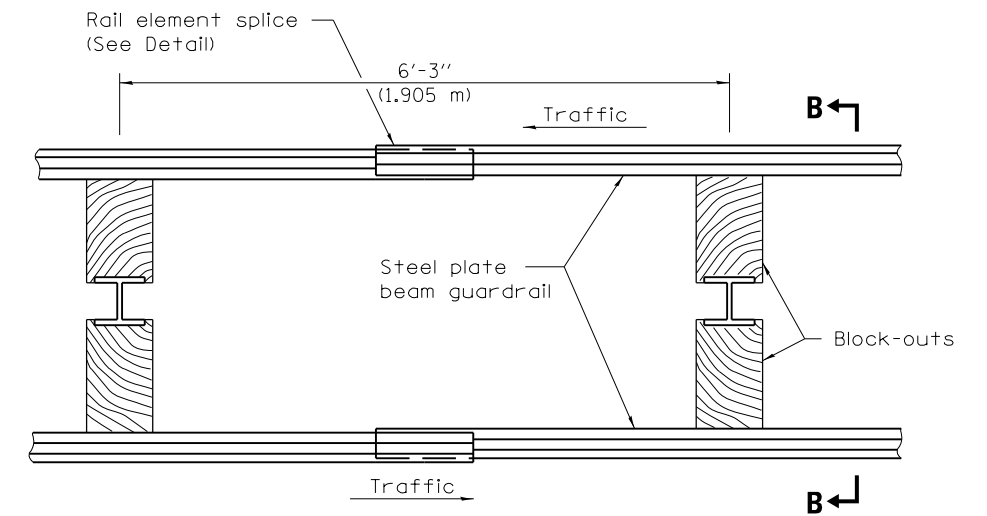
**SECTION A-A**

- When "S" is less than 3 and the distance from the back of post is less than 24 (610), the post shall be steel and the embedment shall be 76 1/8 (1934).



**SECTION B-B**

- When connecting Type D guardrail to an impact attenuator, adjust this dimension to 21 1/8 (556) over a distance of 25'-0" (7.62 m) from point of connection.



**PLAN**

**TYPE D**

Double steel plate beam guardrail  
6'-3" (1.905 m) typical post spacing

**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

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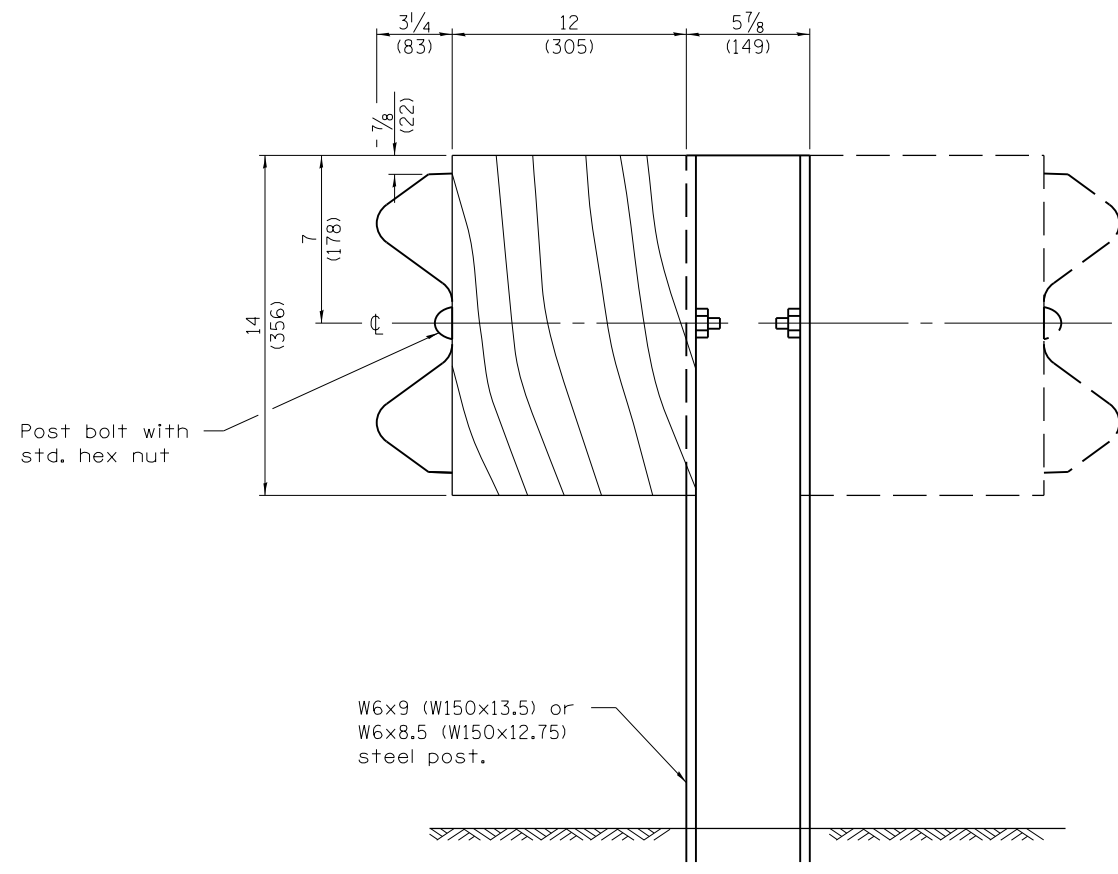
ISSUED 1-1-97

DATE	REVISIONS
1-1-12	Added req. for 9 ft. posts to be steel. Modified set back of g'rail behind curb.
1-1-11	Added note to Section B-B for conn. to impact att.
	Revised table on Sheet 4.

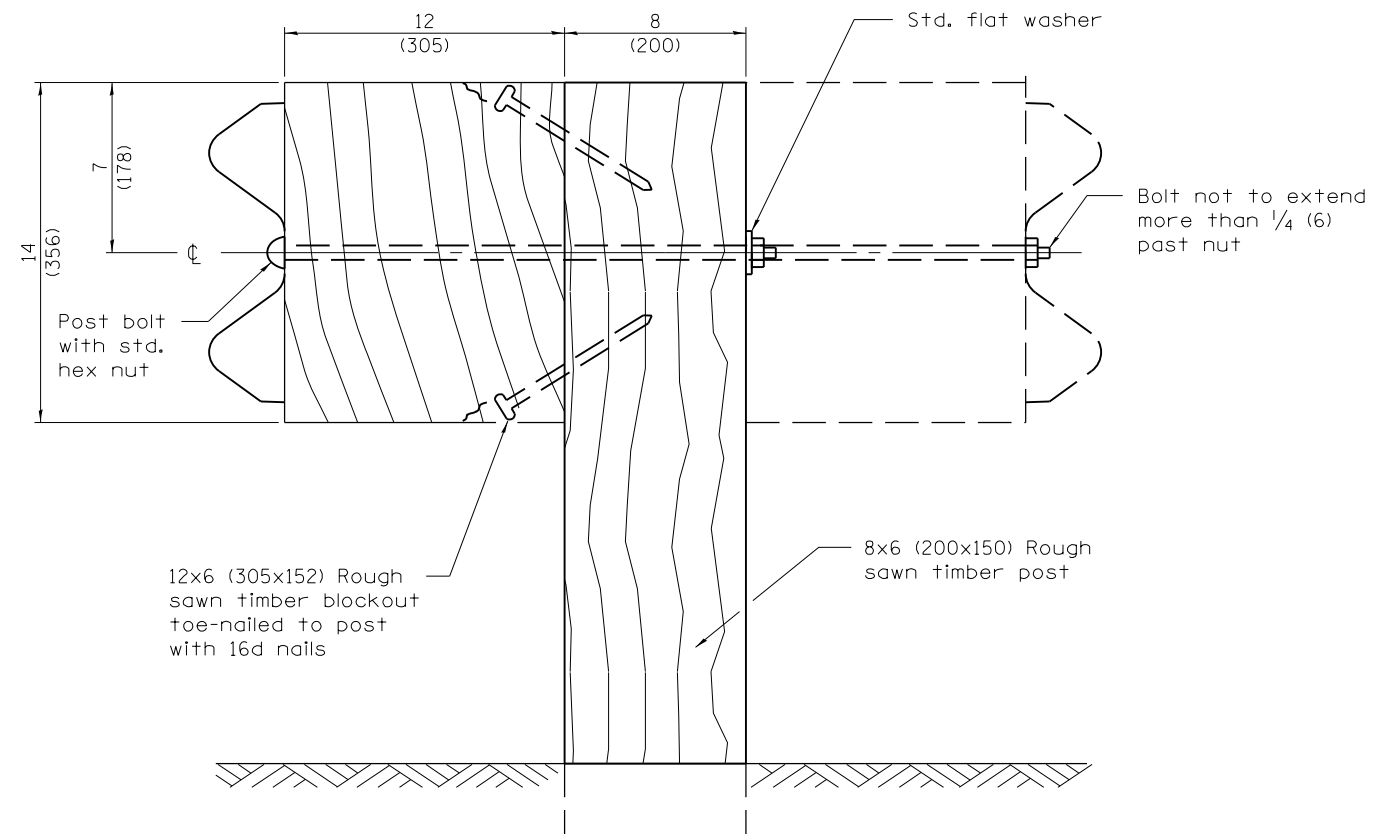
**STEEL PLATE BEAM GUARDRAIL**

(Sheet 1 of 4)

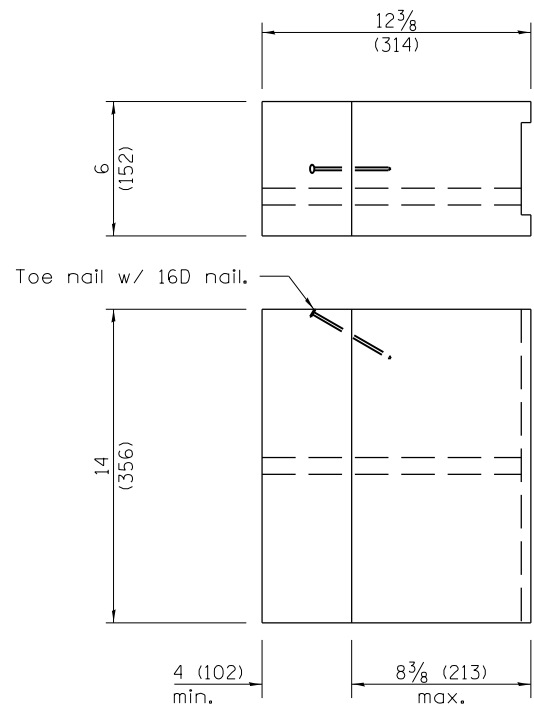
**STANDARD 630001-10**



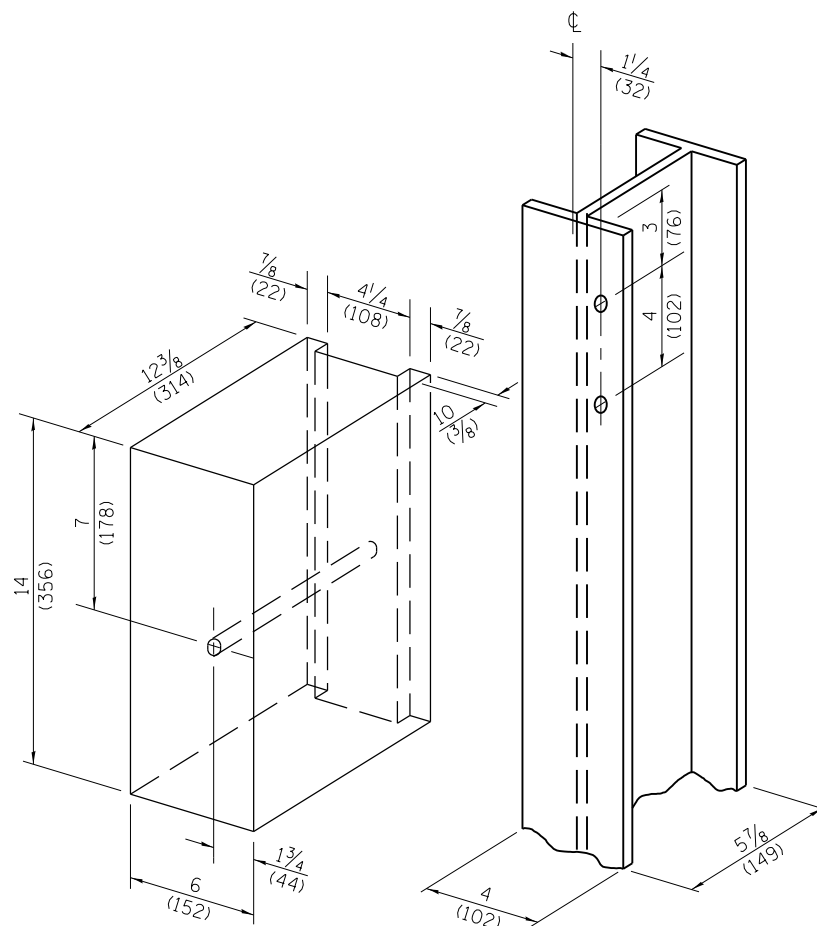
**STEEL POST CONSTRUCTION**



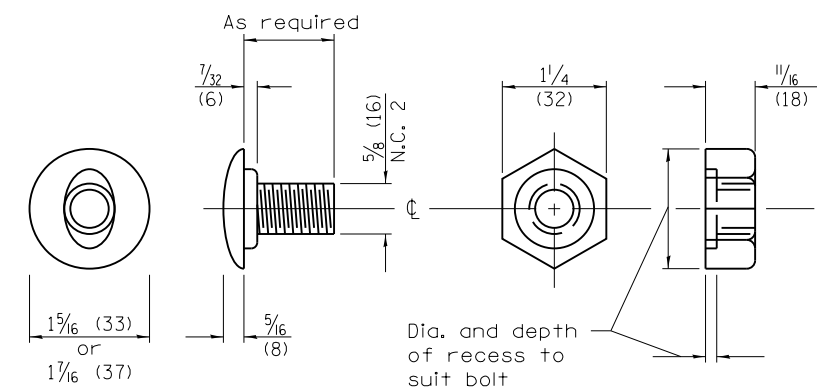
**WOOD POST CONSTRUCTION**



**TWO-PIECE WOOD BLOCKOUT OPTION**



**WOOD BLOCK-OUT AND STEEL POST DETAILS**



**POST OR SPLICE BOLT & NUT**

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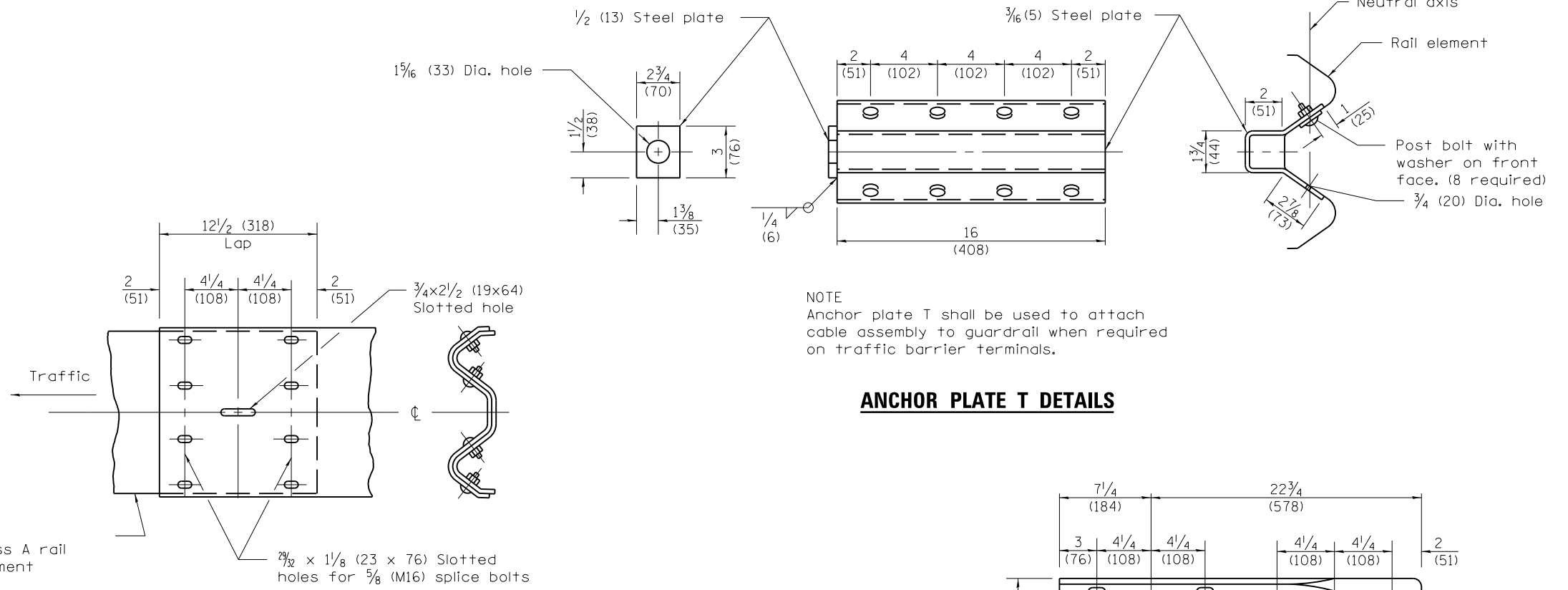
ISSUED 46-1-1 03/15/11

**STEEL PLATE BEAM GUARDRAIL**

(Sheet 2 of 4)

**STANDARD 630001-10**



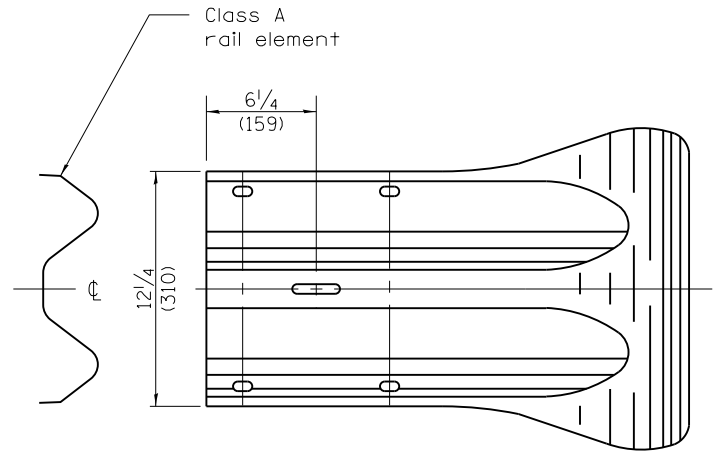
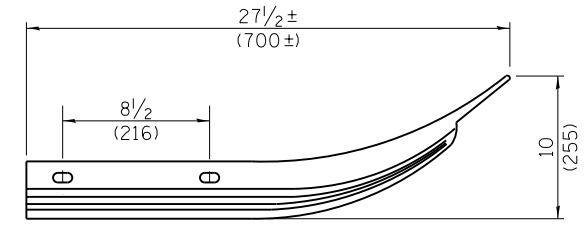


NOTE  
Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

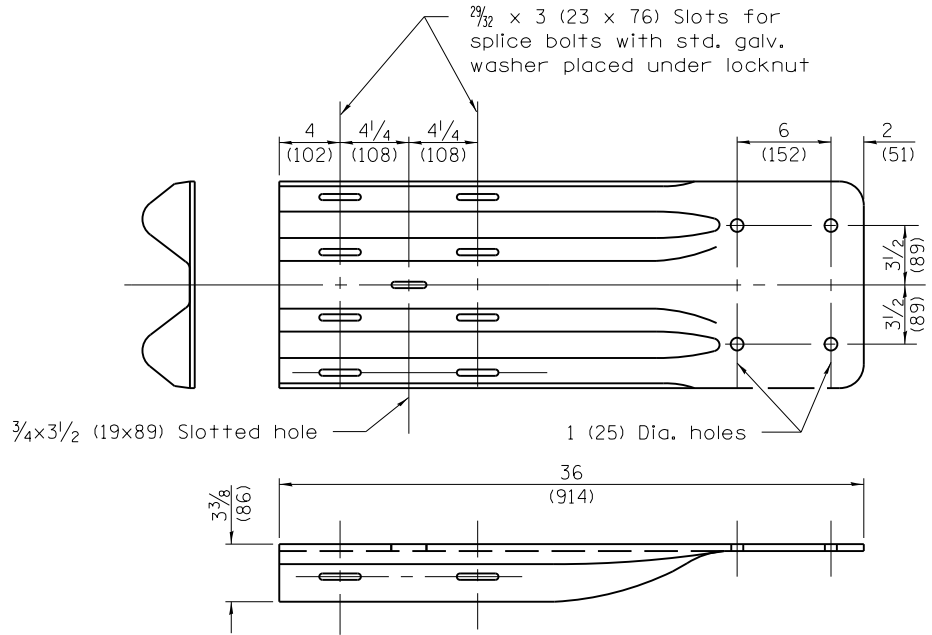
**ANCHOR PLATE T DETAILS**

Class A rail element

**RAIL ELEMENT SPLICE**



**END SECTION**

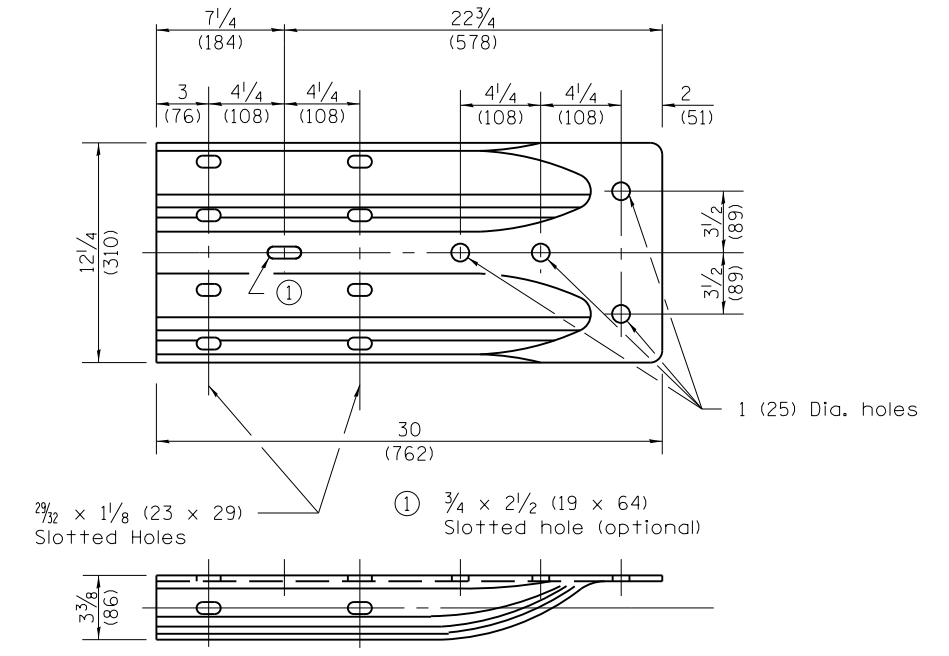


NOTE  
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

**END SHOE**



**ALTERNATE END SHOE**

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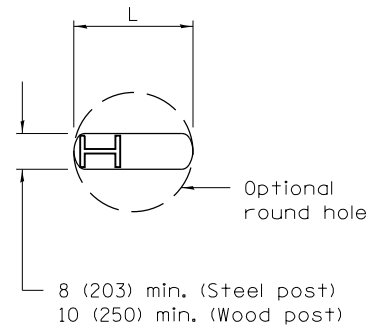
Scott Esch  
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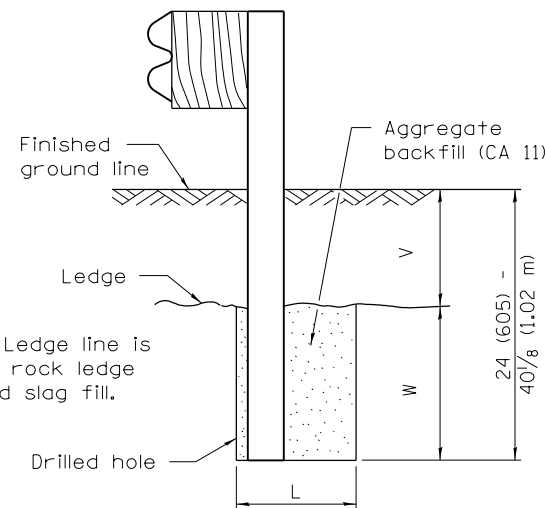
**STEEL PLATE BEAM  
GUARDRAIL**

(Sheet 3 of 4)

**STANDARD 630001-10**

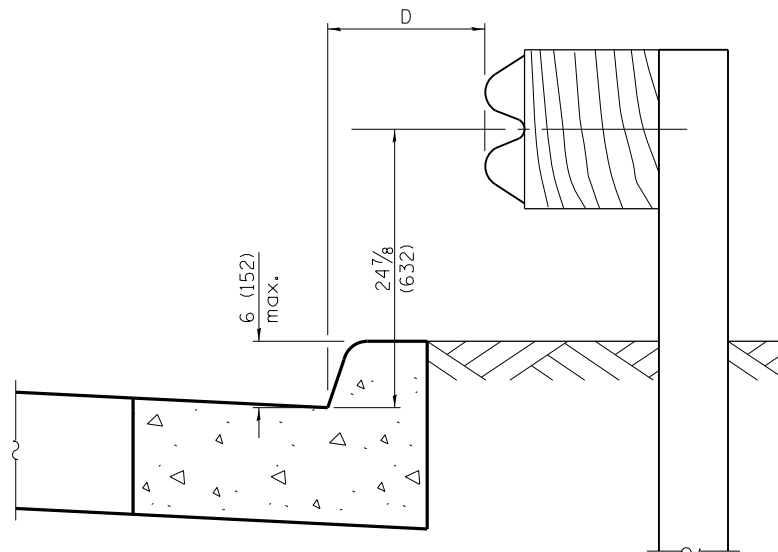


**PLAN**

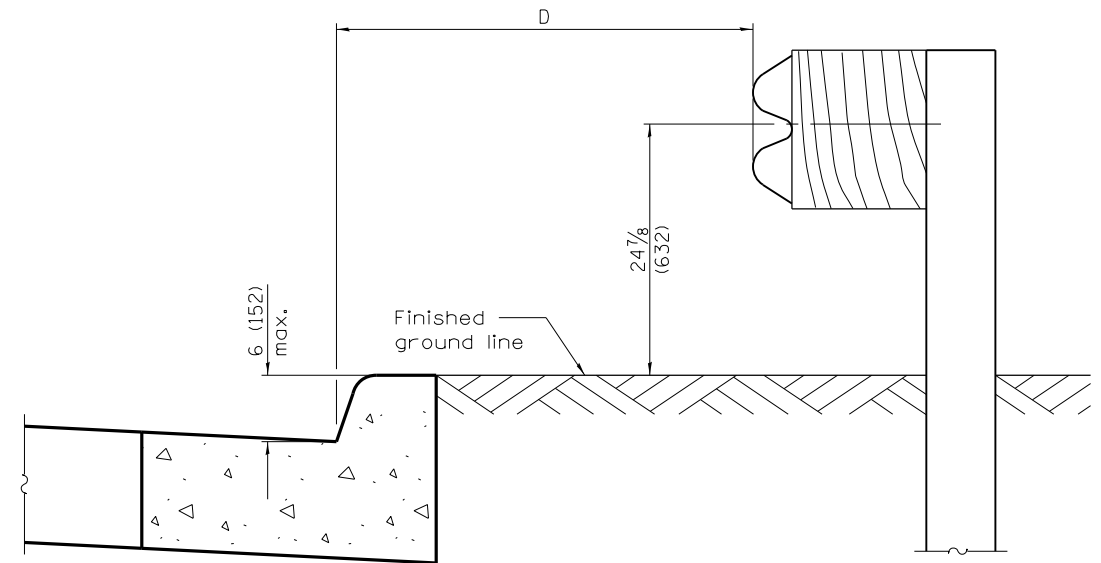


**ELEVATION**

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**



**0 ≤ D < 4'-0" (1.2 m)**

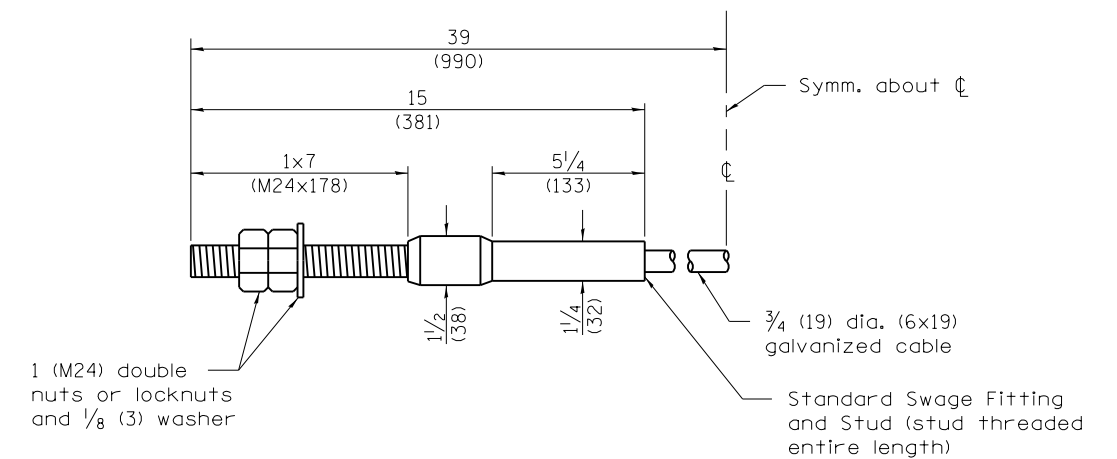


**4'-0" (1.2 m) ≤ D ≤ 12'-0" (3.7 m)**

**GUARDRAIL PLACED BEHIND CURB**

Note: 'D' shall not exceed 6 (152) for design speeds greater than 45 mph.

V	W	L	
		Steel Post	Wood Post
0 - 6 (0 - 152)	24 (610)	21 (530)	23 (580)
> 6 - 18 (> 152 - 458)	18 (458)	14 1/2 (368)	16 1/2 (419)
> 18 - 31 (> 458 - 787)	12 (305)	8 (203)	10 (250)
> 31 - 40 1/8 (> 787 - 1.02 m)	12 - 0 (305 - 0)	8 (203)	10 (250)



**CABLE ASSEMBLY**

(40,000 lbs. (18,100 kg) min. breaking strength)  
Tighten to taut tension.

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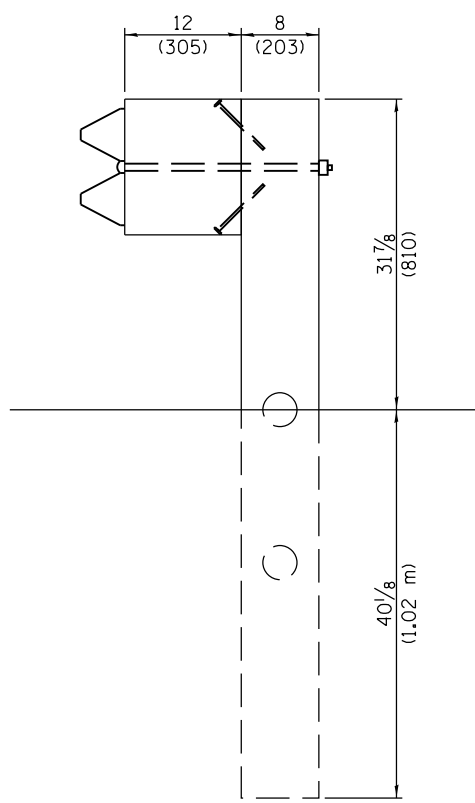
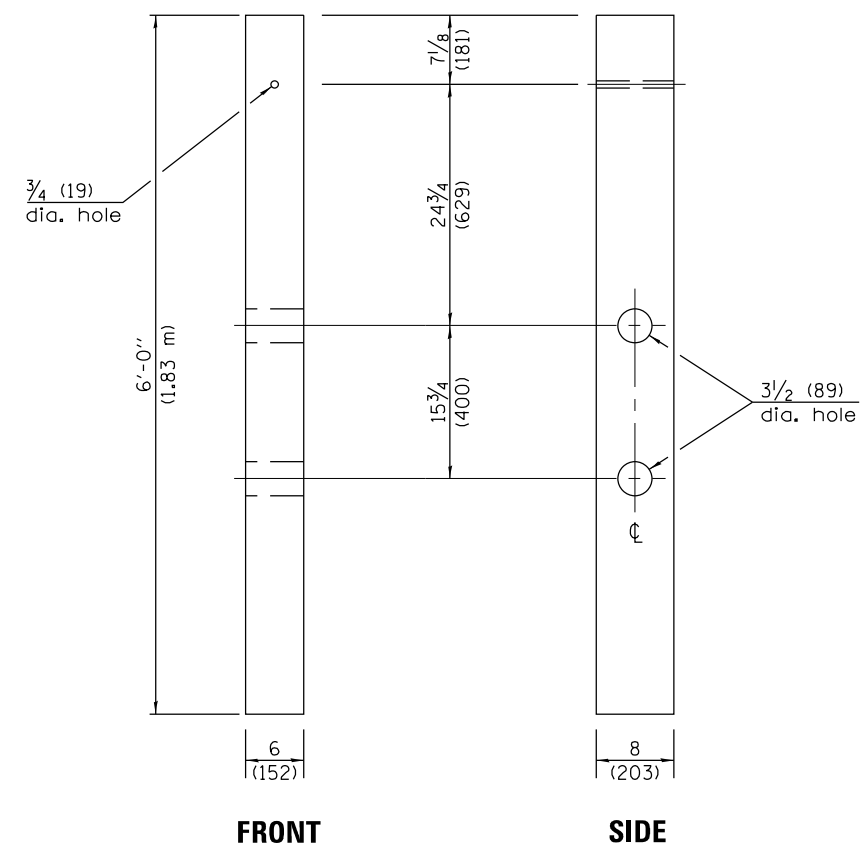
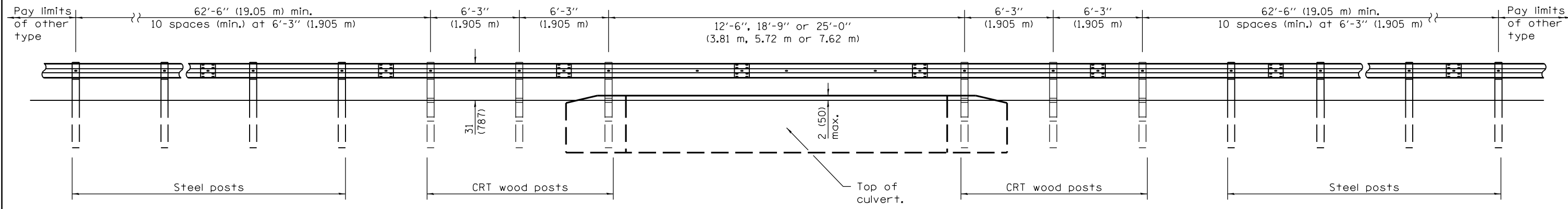
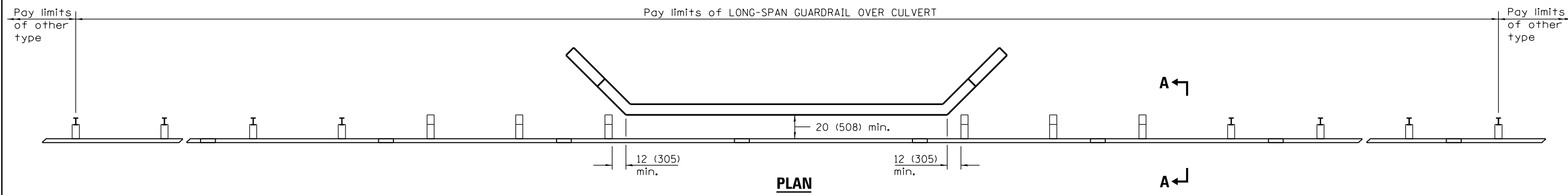
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**STEEL PLATE BEAM GUARDRAIL**

(Sheet 4 of 4)

**STANDARD 630001-10**



**GENERAL NOTES**  
 See Standard 630001 for details of guardrail not shown.  
 All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-13	Added min. dim. from guard-rail to headwall. Added dim. to section A-A.
1-1-11	New standard.

**LONG-SPAN GUARDRAIL  
OVER CULVERT**

**STANDARD 630106-01**

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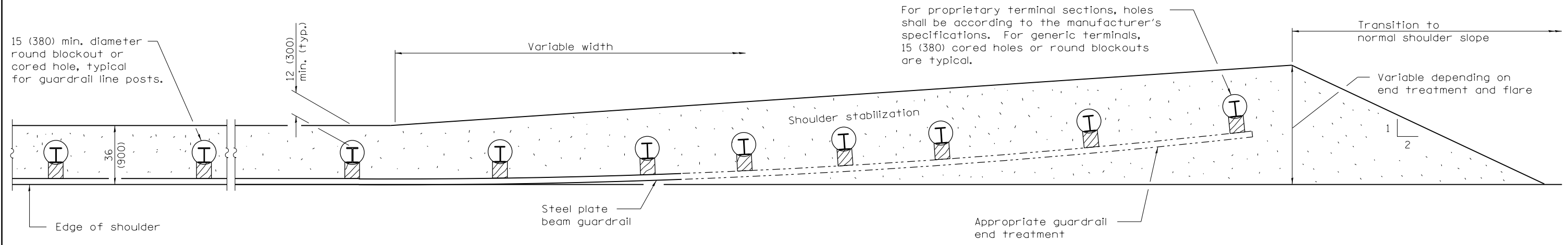
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*[Signature]*  
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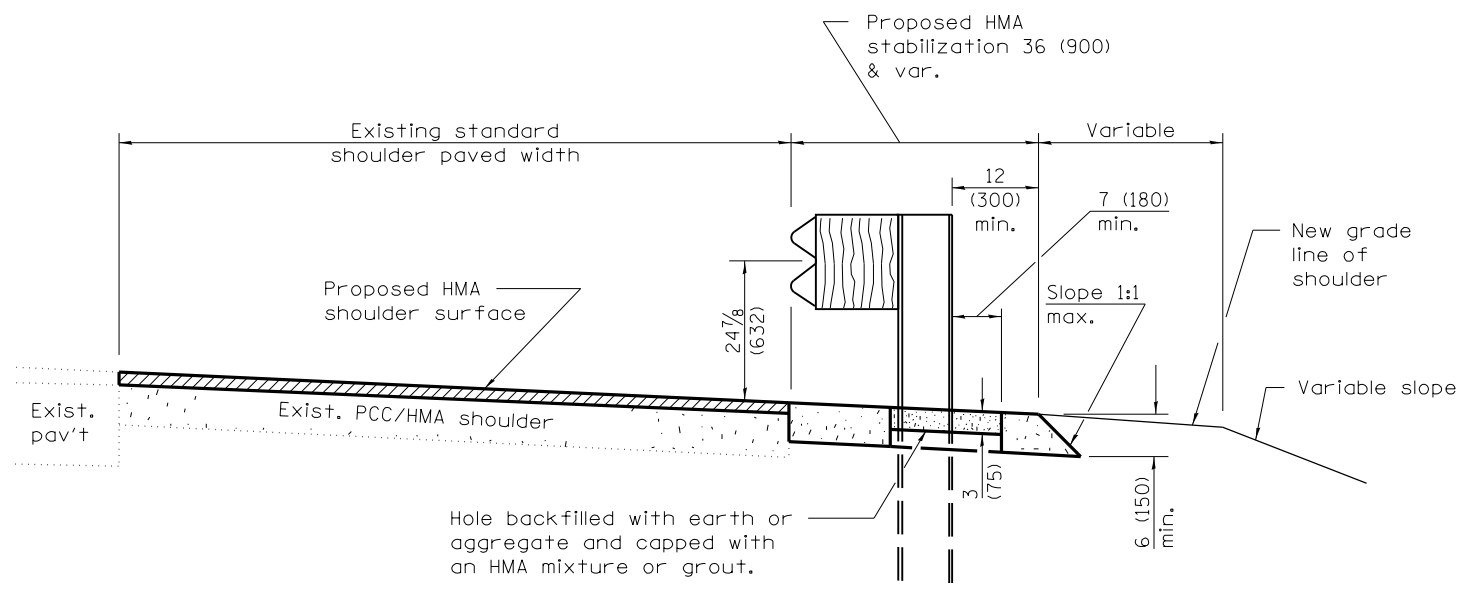
ISSUED 1-1-11

**CRT WOOD POST**

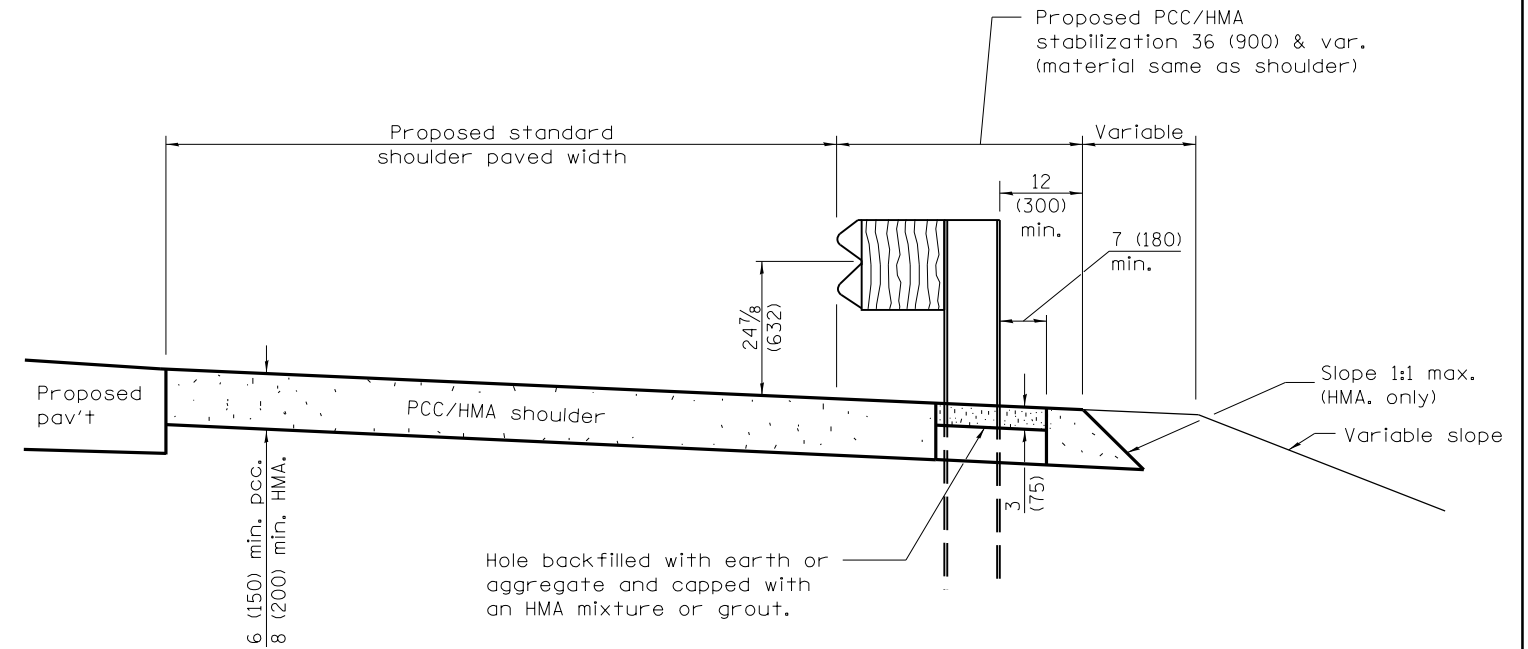
**SECTION A-A**



**PLAN**



**RESURFACING**



**NEW CONSTRUCTION**

**GENERAL NOTES**

See Standard 482001, 482006, or 483001 for details not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-08	Removed reference to "bituminous mixture or grout".

**PCC / HMA  
STABILIZATION AT STEEL  
PLATE BEAM GUARDRAIL**

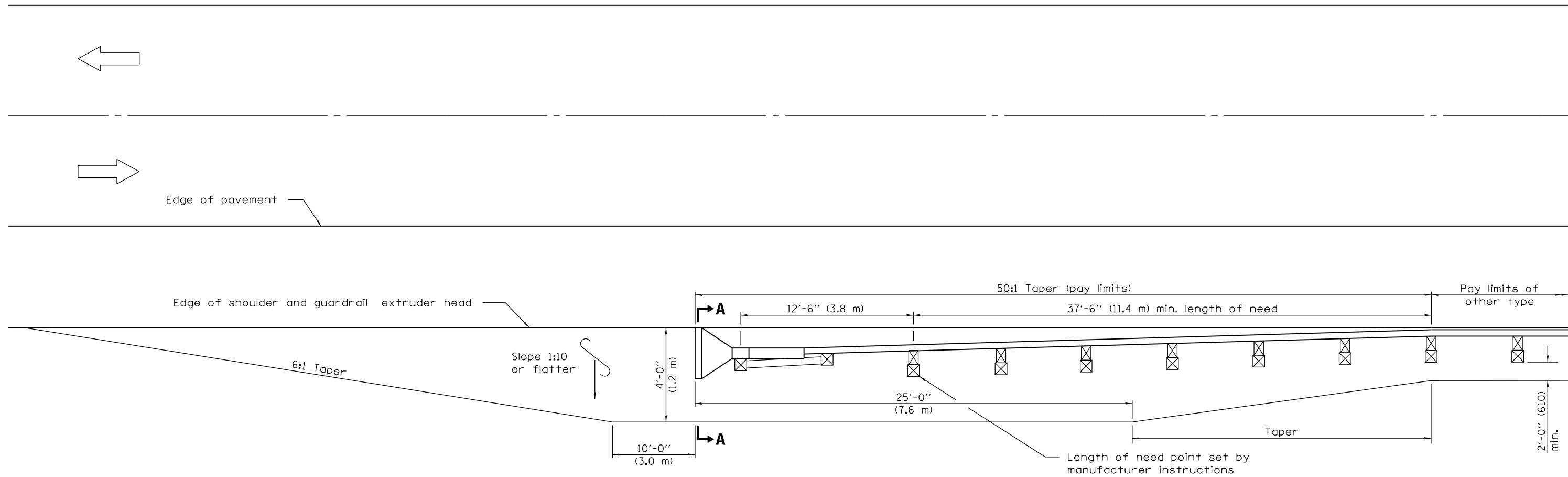
**STANDARD 630201-06**

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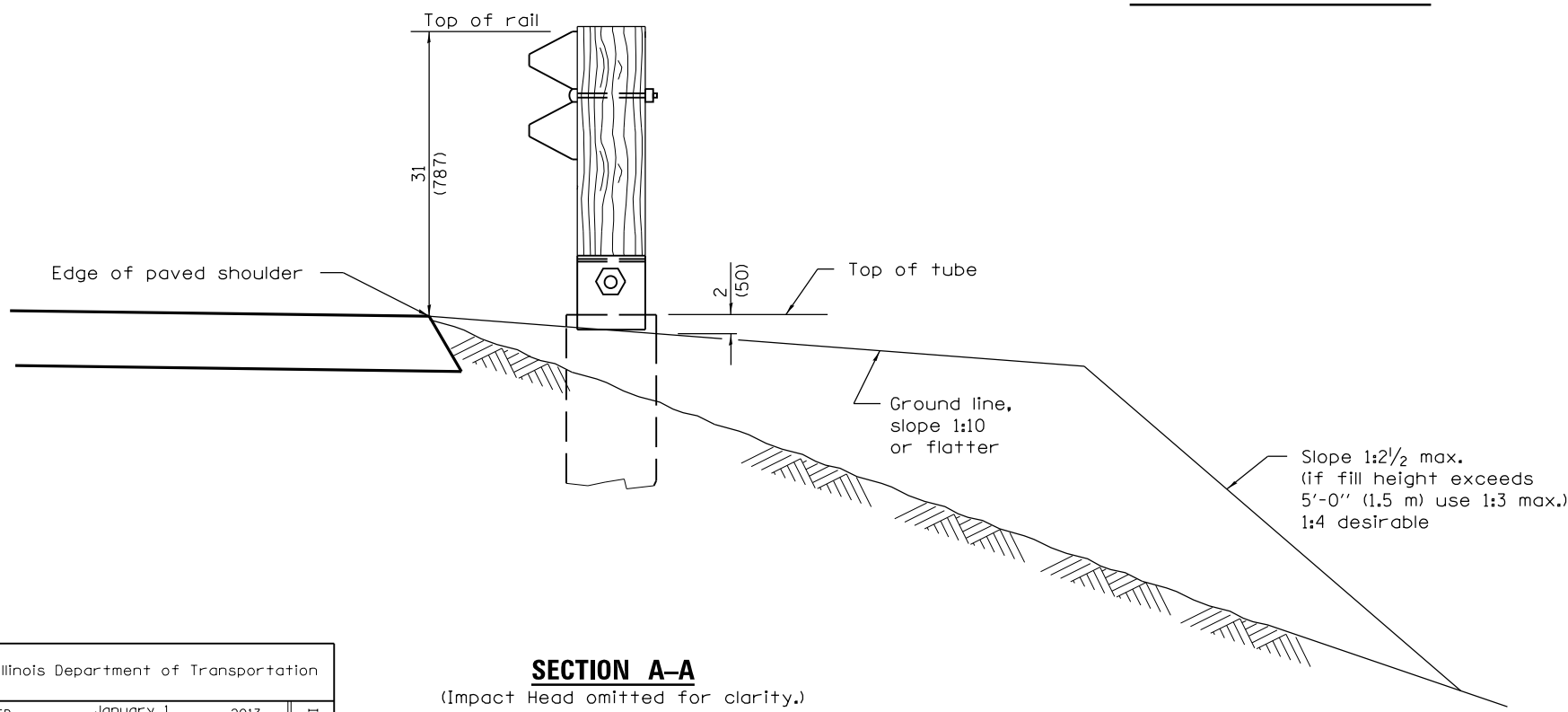
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*Scott Smith*  
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*Ken E. Han*  
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**SHOULDER WIDENING TRANSITION  
FOR TANGENT TERMINAL**



**SECTION A-A**  
(Impact Head omitted for clarity.)

**GENERAL NOTES**

50:1 Taper required so the guardrail head will not encroach on the shoulder.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-13	Modified dimensioning of terminal.
1-1-09	Switched units to English (metric).

**SHOULDER WIDENING FOR  
TYPE 1 (SPECIAL)  
GUARDRAIL TERMINALS**

(Sheet 1 of 2)

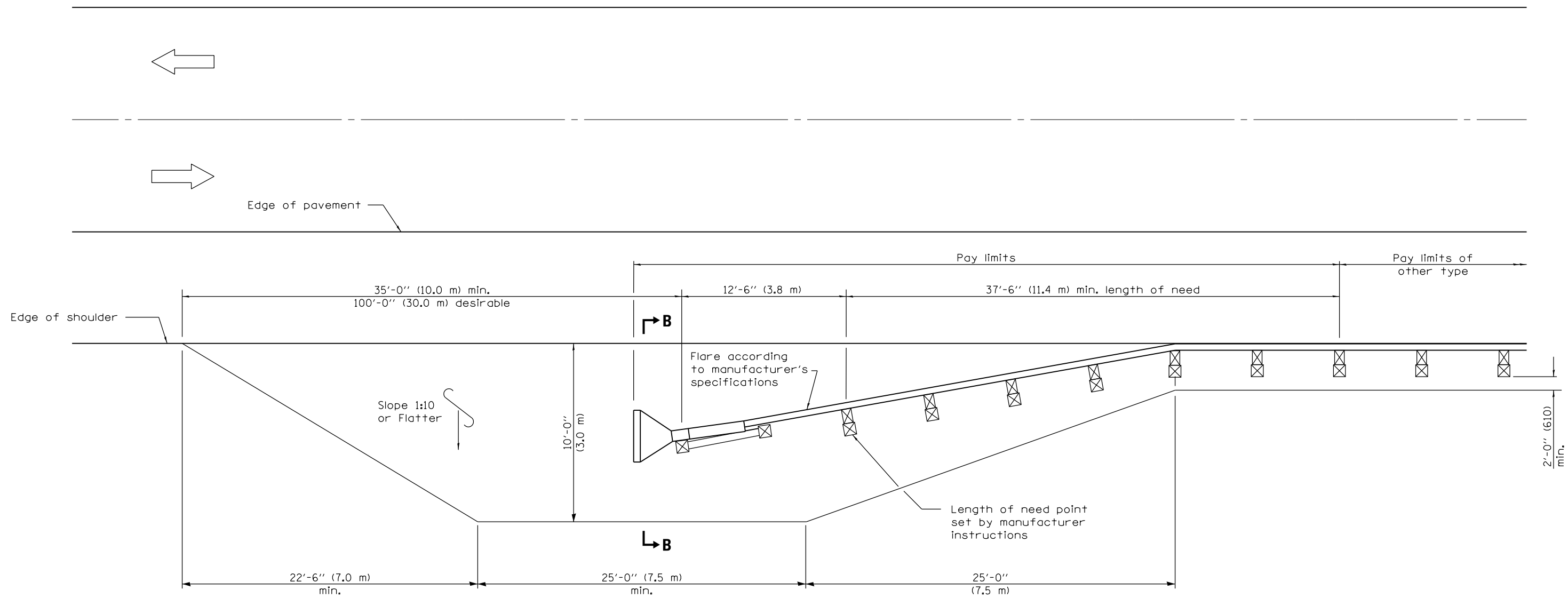
**STANDARD 630301-06**

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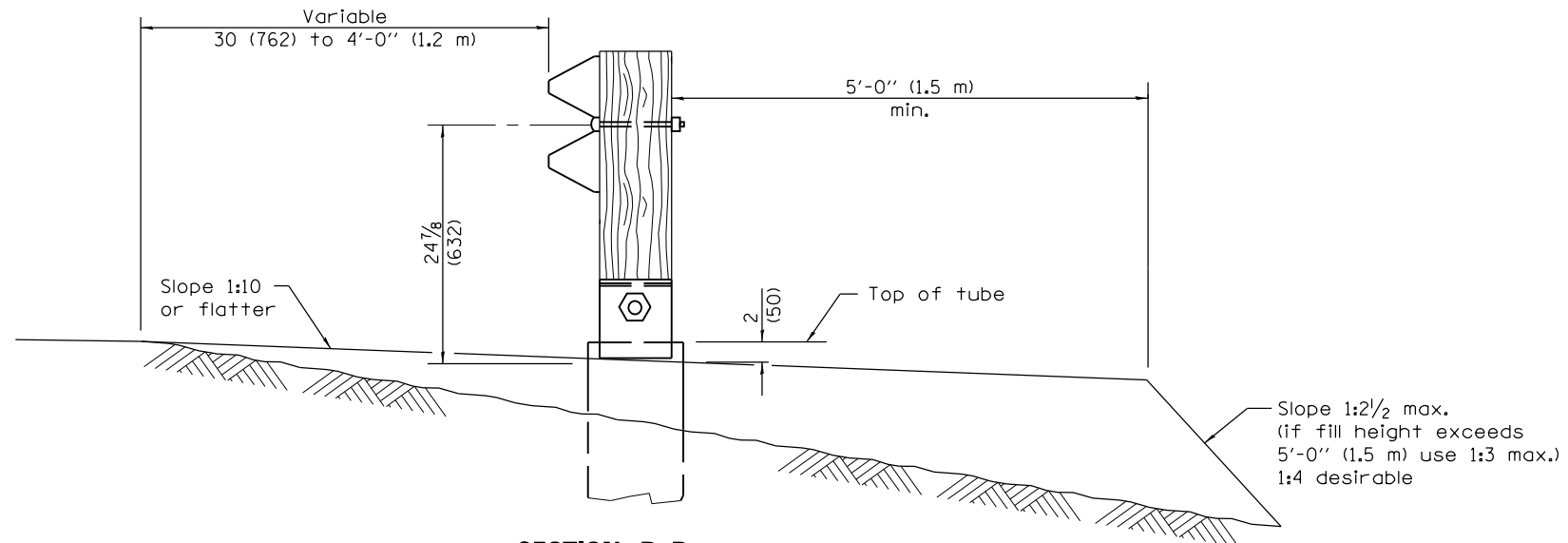
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**SHOULDER WIDENING TRANSITION  
FOR FLARED TERMINAL**



**SECTION B-B**  
(Impact Head omitted for clarity.)

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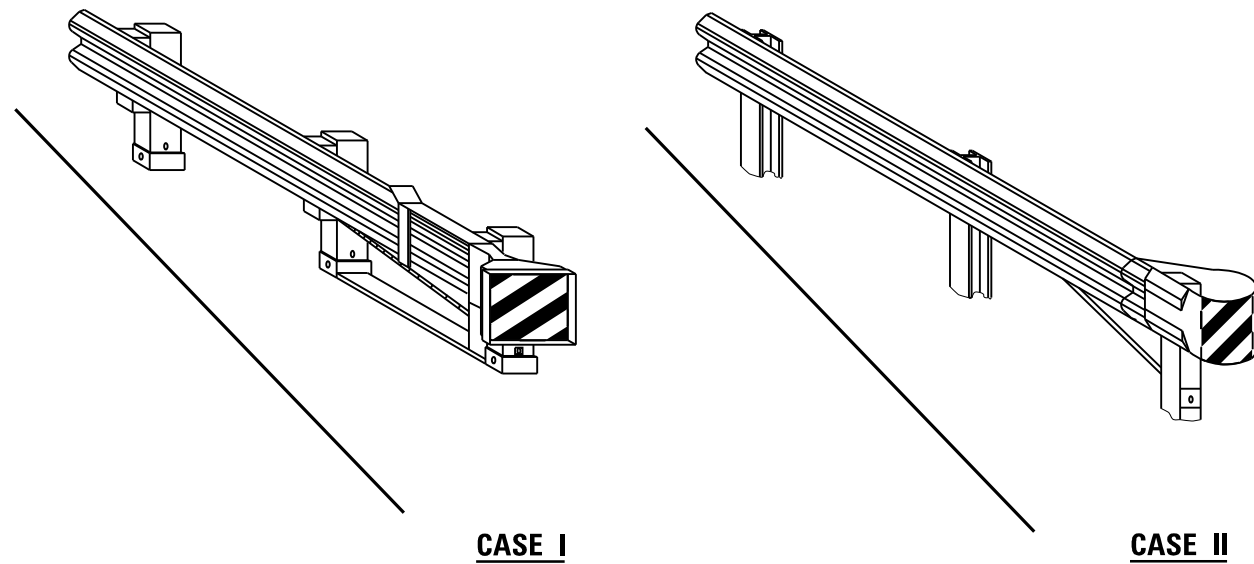
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*[Signature]*  
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**SHOULDER WIDENING FOR  
TYPE 1 (SPECIAL)  
GUARDRAIL TERMINALS**

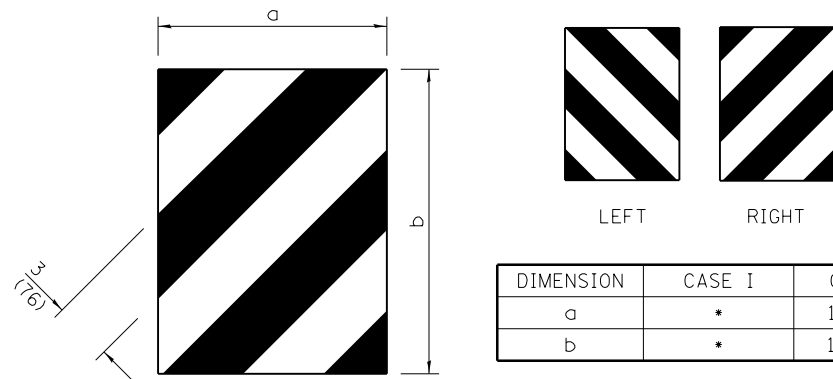
(Sheet 2 of 2)

**STANDARD 630301-06**



**CASE I**

**CASE II**

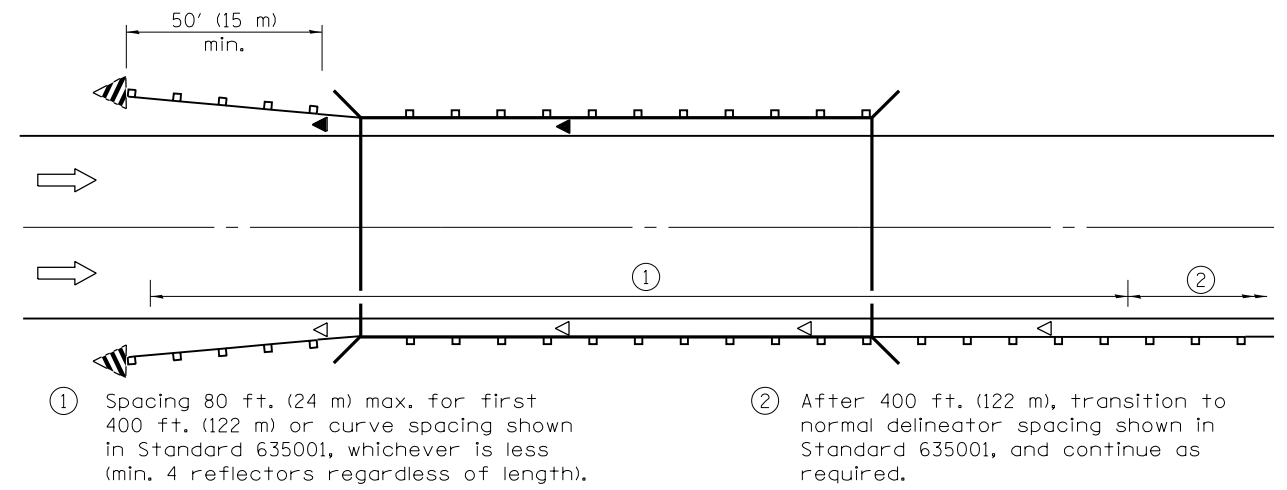


DIMENSION	CASE I	CASE II
a	*	18 (450)
b	*	16 (406)

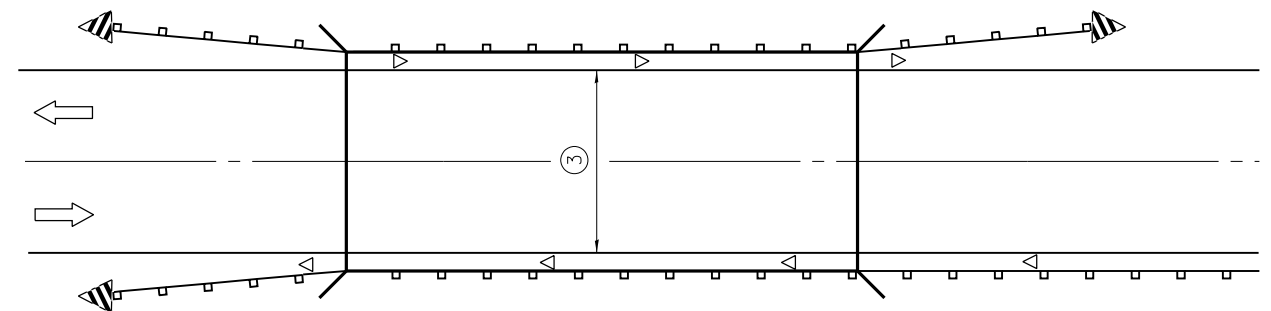
\* The width and height (a, b) of the terminal marker shall be within approximately 1 (25) of the outer edge of the terminal end, with a minimum reflective area of 288 sq. in. (0.18 m<sup>2</sup>).

**TERMINAL MARKER DETAILS**

Color: Black / Yellow reflectorized



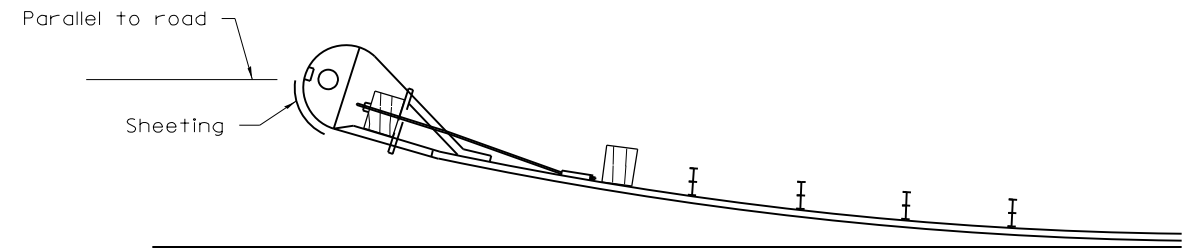
ONE-WAY TRAFFIC



TWO-WAY TRAFFIC

- ◁ Monodirectional crystal
- ◄ Monodirectional amber
- ◄◄ Terminal Marker - Black/Yellow Left or Right as appropriate

**GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS**



**SHEETING POSITION: CASE II**

All dimensions are in inches (millimeters) unless otherwise shown.

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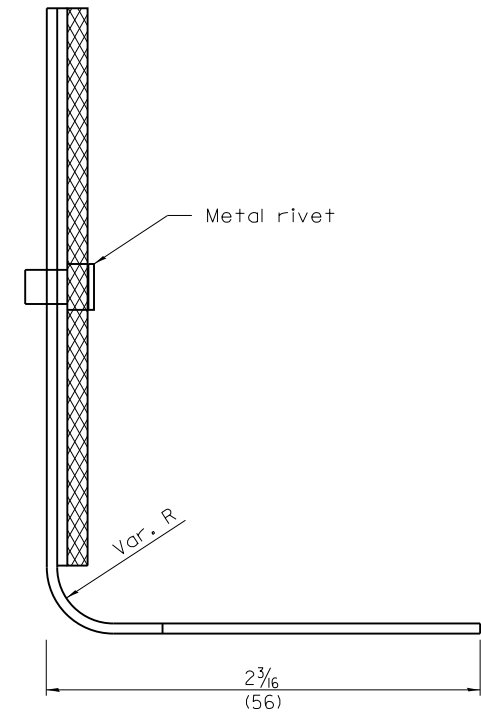
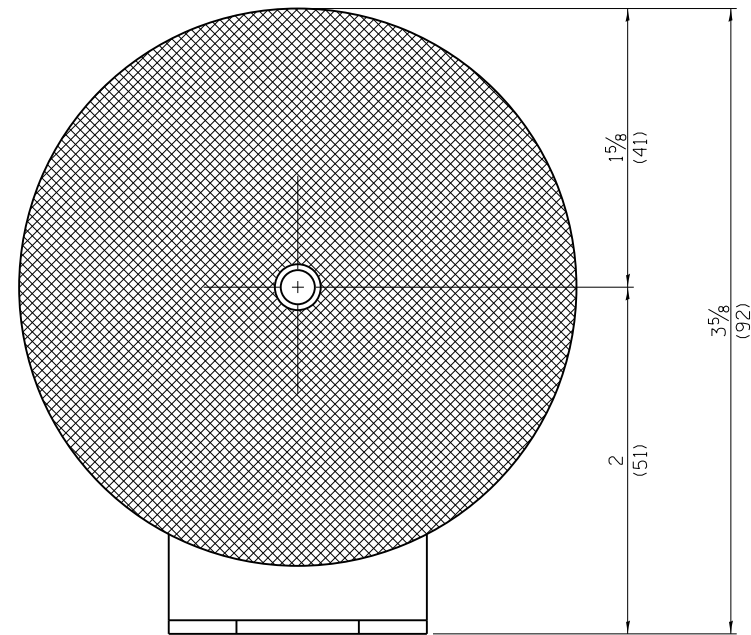
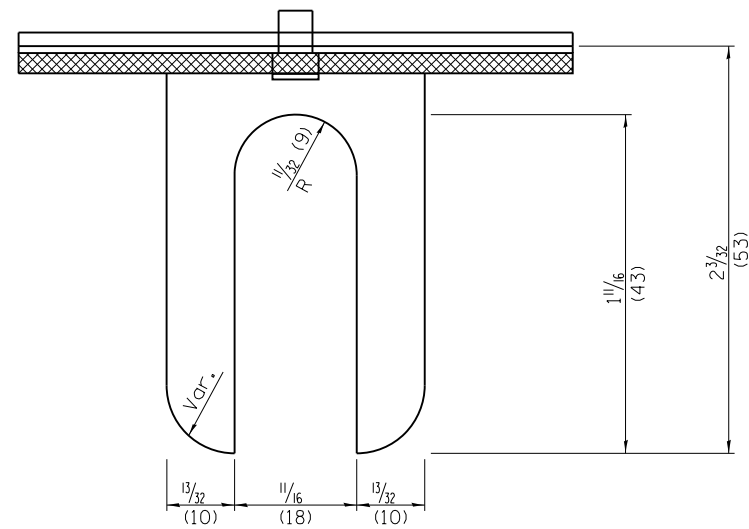
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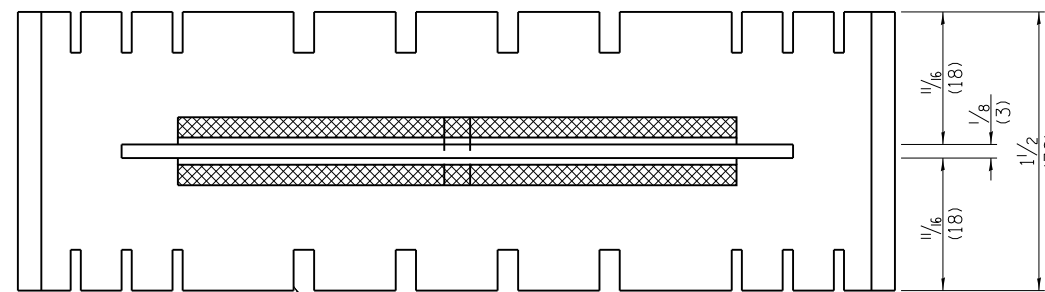
DATE	REVISIONS
1-1-09	Switched units to English (metric). Changed 'white' to 'crystal' ref.
1-1-02	Revise Case I Dimension and removed alternate detail.

**REFLECTOR AND TERMINAL MARKER PLACEMENT**

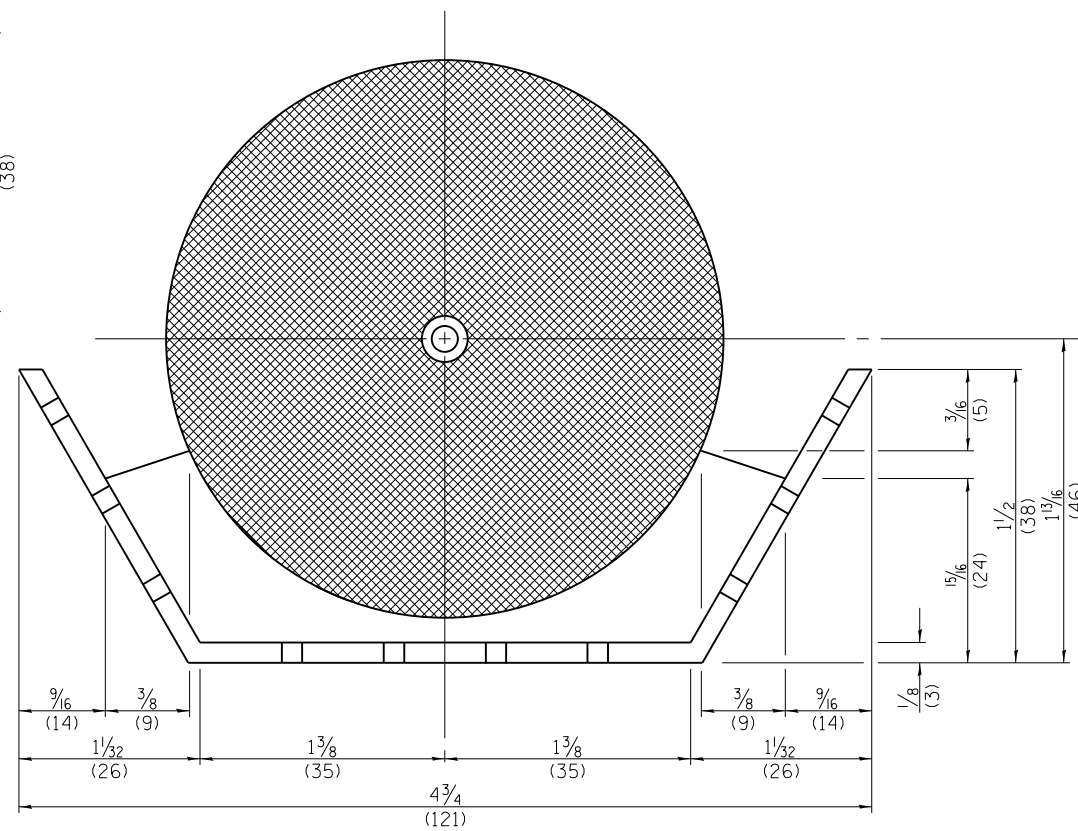
**STANDARD 635006-03**



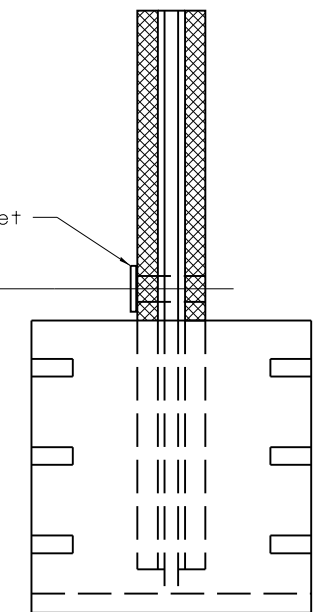
**REFLECTOR MARKER TYPE A**



Adhesive weep slots or holes  
equally spaced on both sides



Brass or plastic rivet



**REFLECTOR MARKER TYPE B**

All dimensions are in inches (millimeters)  
unless otherwise shown.

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ISSUED 1-1-2000

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-01	Revised signature block.

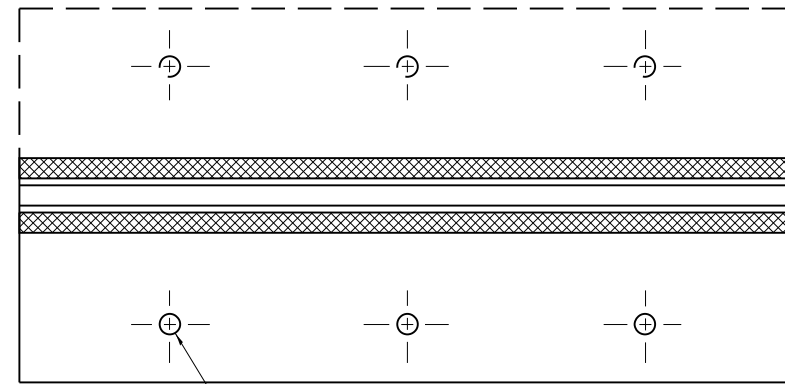
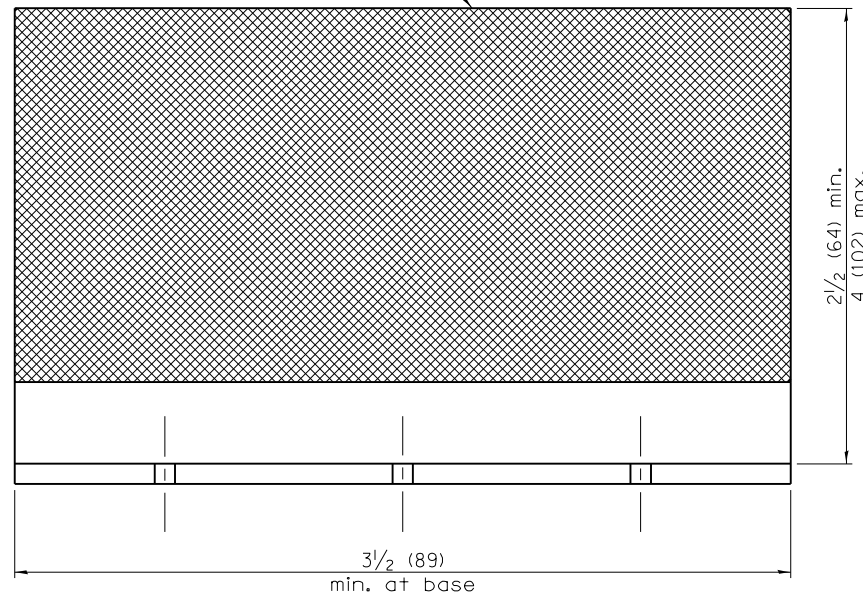
**REFLECTOR MARKER AND MOUNTING DETAILS**

(Sheet 1 of 3)

**STANDARD 635011-02**

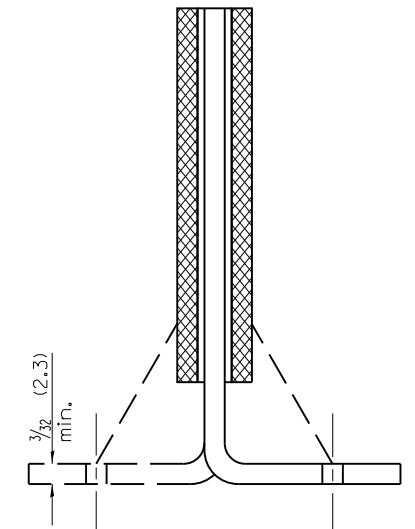


Min. reflective area  
 $6\frac{1}{2}$  sq. in. (4,194 mm<sup>2</sup>)  
 each side. May be  
 rectangular or slight  
 trapezoid.



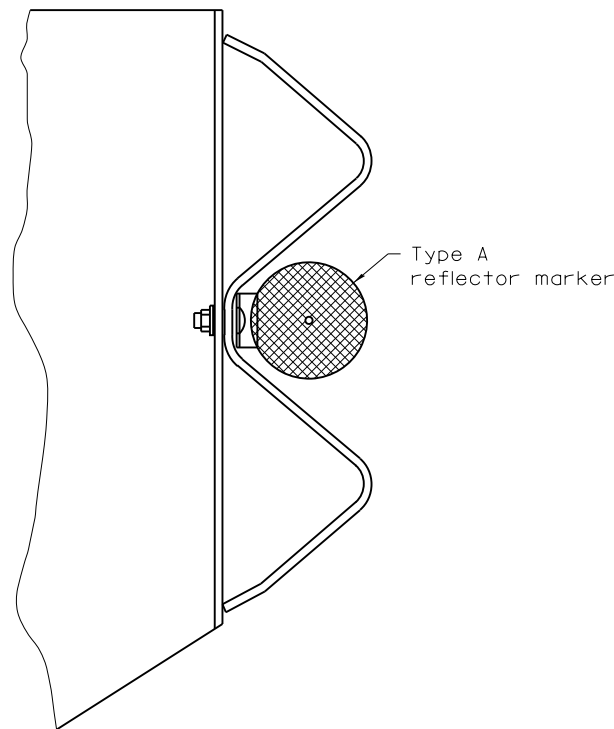
Minimum total area of  
 base 7.0 sq. in. (4,516 mm<sup>2</sup>)

3 min. adhesive weep  
 holes or slots each side,  
 variable spacing.

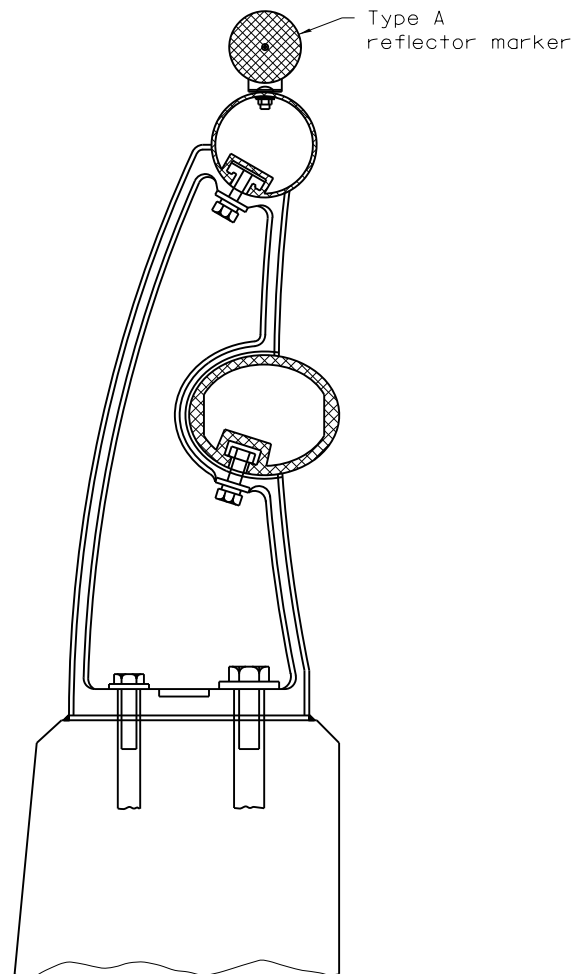


Cross section may be "T"  
 or "L" shaped and may have  
 side supports at ends.

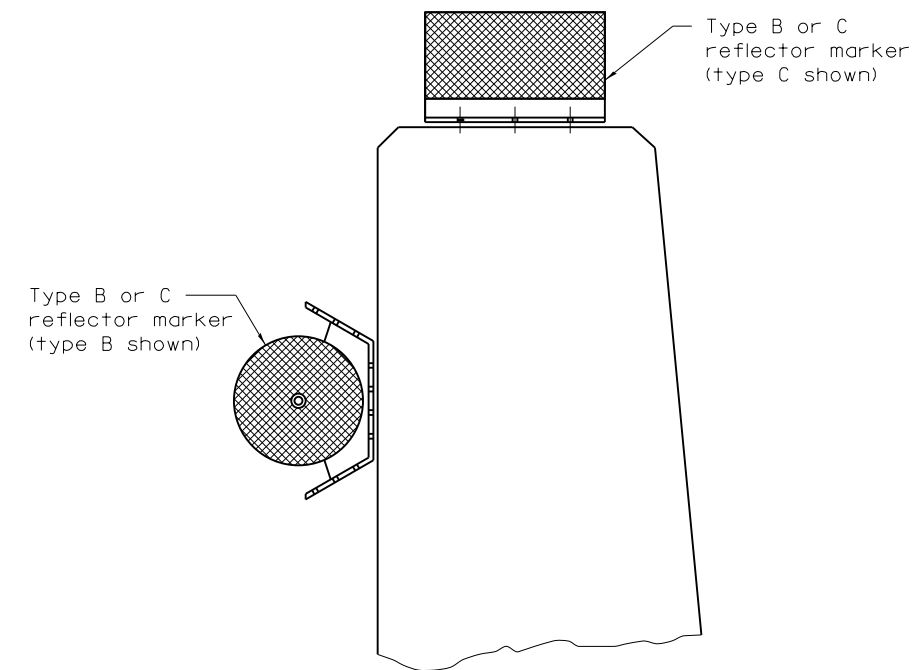
**REFLECTOR MARKER TYPE C**



**TYPICAL MOUNTING WITH REFLECTOR**



**TYPICAL MOUNTING DETAIL  
 FOR BRIDGE RAIL REFLECTOR**



**TYPICAL MOUNTING DETAIL  
 FOR BARRIER WALL REFLECTOR**

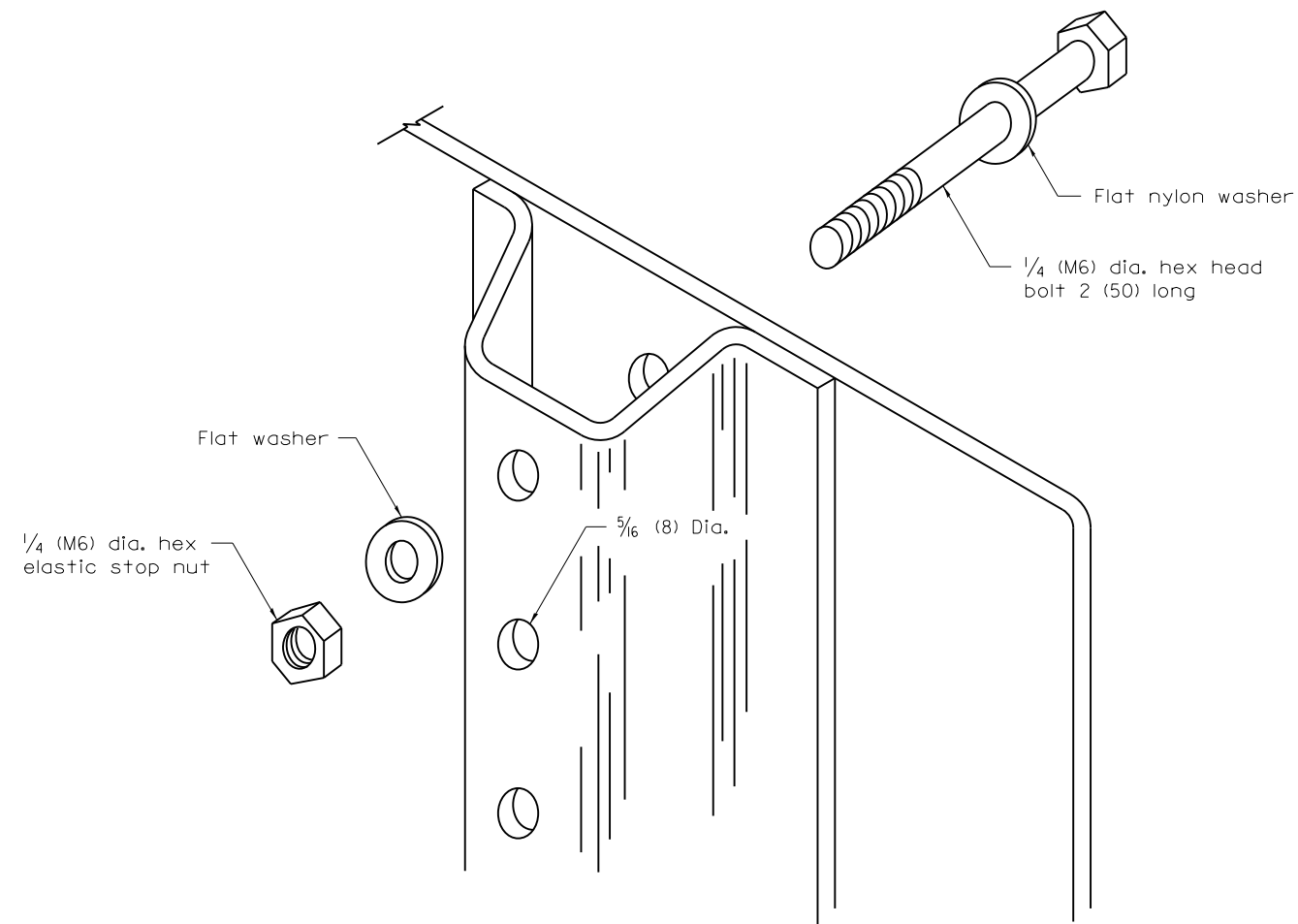
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 ENGINEER OF OPERATIONS  
 APPROVED January 1, 2009  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-2000

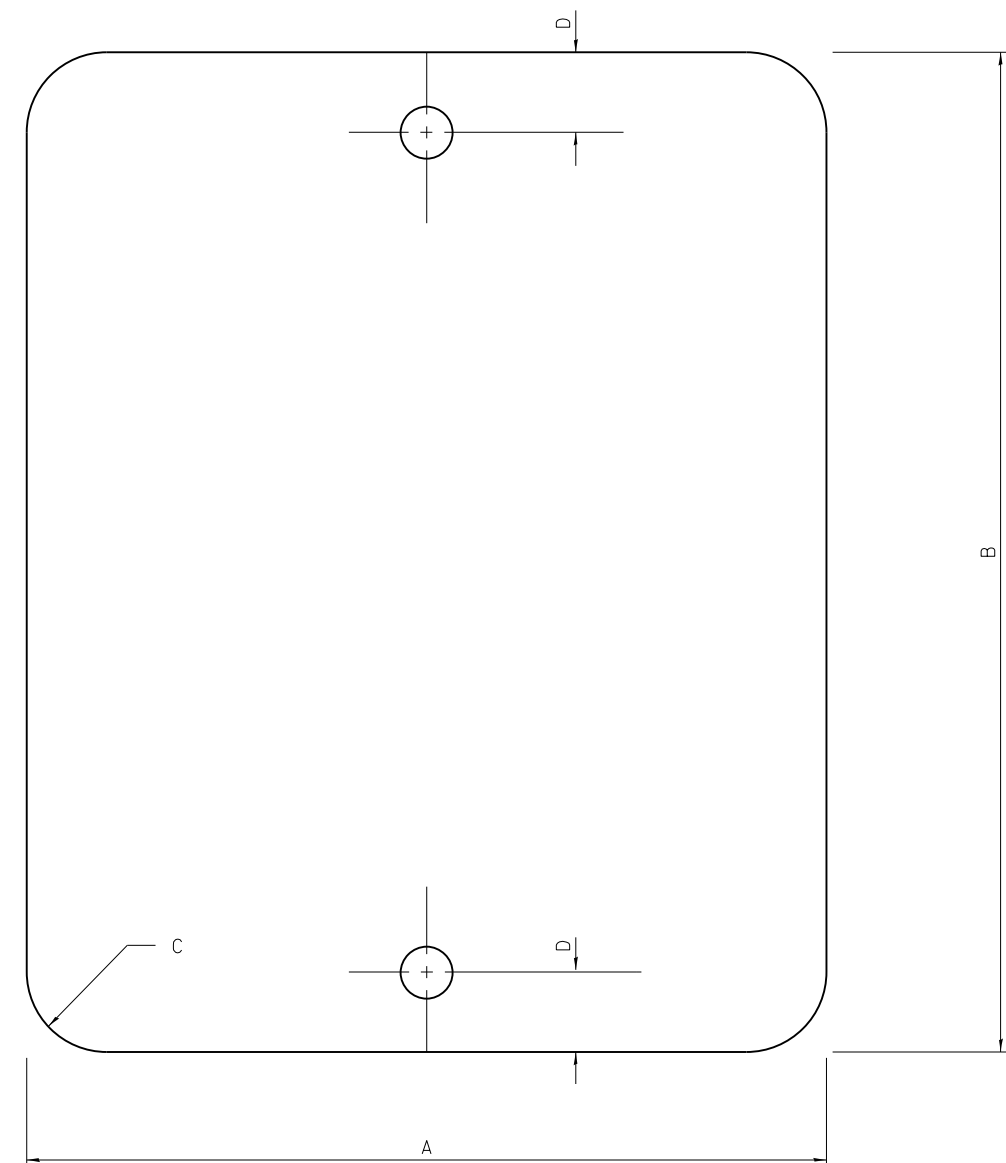
**REFLECTOR MARKER AND  
 MOUNTING DETAILS**

(Sheet 2 of 3)

**STANDARD 635011-02**



**DETAIL OF MOUNTING TERMINAL MARKER TO POST**



**STANDARD TERMINAL MARKER**

SIGN SIZE	DIMENSIONS			
	A	B	C	D
12x16 (305x406)	12.0 (305)	16.0 (406)	1.5 (38)	2.0 (50)

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ENGINEER OF OPERATIONS

APPROVED January 1, 2009

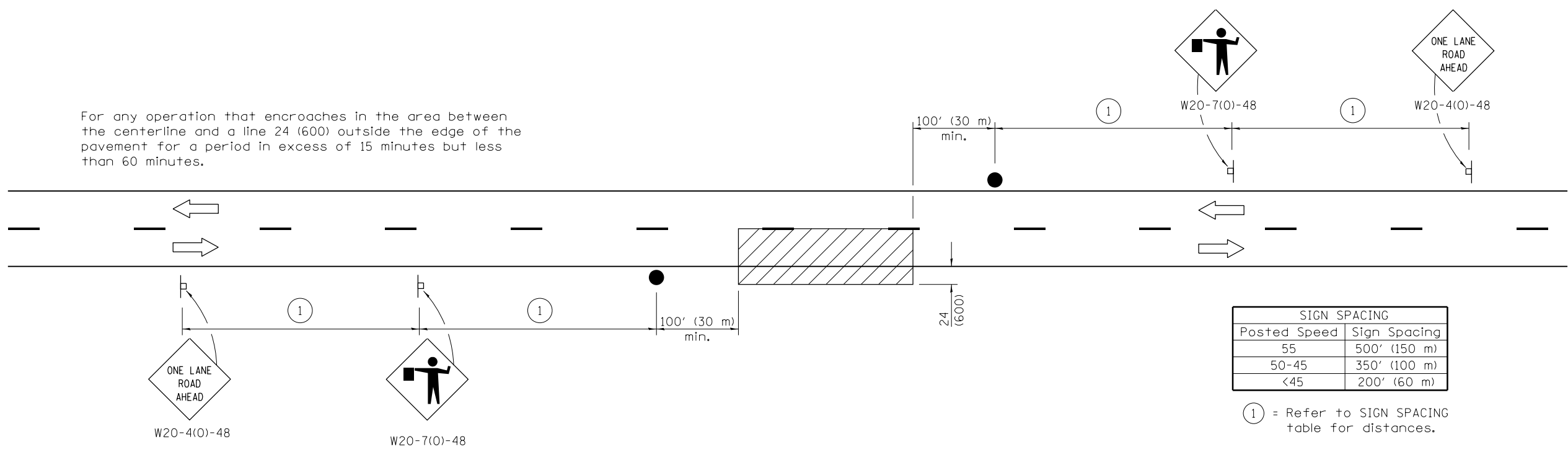
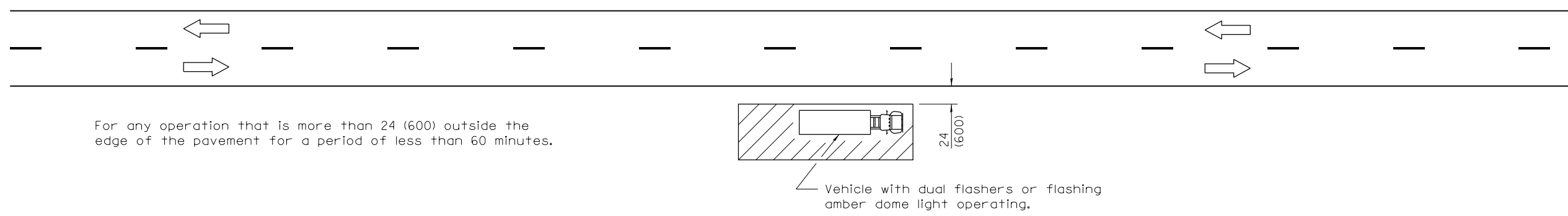
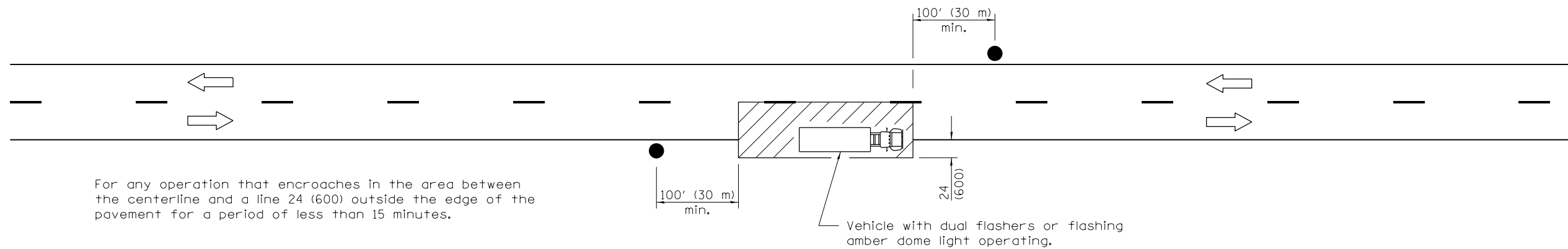
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-2000

**REFLECTOR MARKER AND MOUNTING DETAILS**

(Sheet 3 of 3)

**STANDARD 635011-02**



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

**TYPICAL APPLICATIONS**

- Marking patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

**SYMBOLS**

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2011  
*Amelia A. Davis*  
 ENGINEER OF SAFETY ENGINEERING

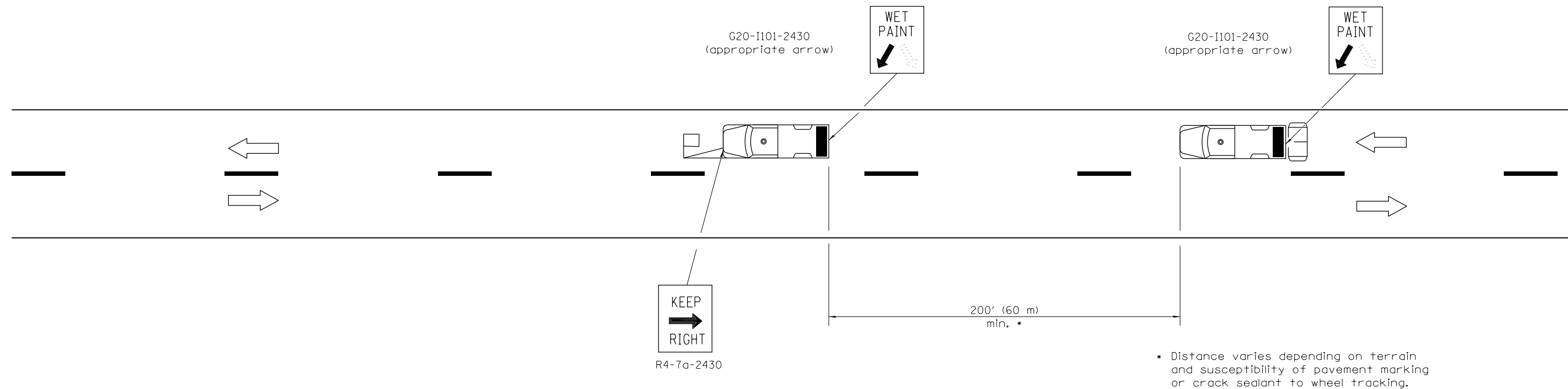
APPROVED January 1, 2011  
*Scott Schick*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).

**LANE CLOSURE, 2L, 2W,  
SHORT TIME OPERATIONS**


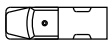


**STANDARD 701301-04**



**TYPICAL APPLICATIONS**

- Landscaping work
- Utility work
- Pavement marking
- Weed spraying
- Roadometer measurements
- Debris cleanup
- Crack pouring

**SYMBOLS**

-  Arrow board (Hazard Mode only)
-  Truck with headlights, emergency flashers and flashing amber light. (visible from all directions)
-  18x18 (450x450) min. orange flag (use when guide wheel is used)
-  Truck mounted attenuator

**GENERAL NOTES**

This Standard is used where any vehicle, equipment, workers or their activities will require a continuous moving operation where the average speed is greater than 3 mph (5 km/h).

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard 701426.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-09	Switched units to English (metric). Omitted Pass With Care sign.
1-1-00	Elim. speed restrictions in Standard title.

**LANE CLOSURE 2L, 2W  
MOVING OPERATIONS-  
DAY ONLY**

**STANDARD 701311-03**

Illinois Department of Transportation

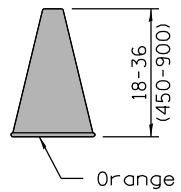
APPROVED January 1, 2009

ENGINEER OF OPERATIONS *[Signature]*

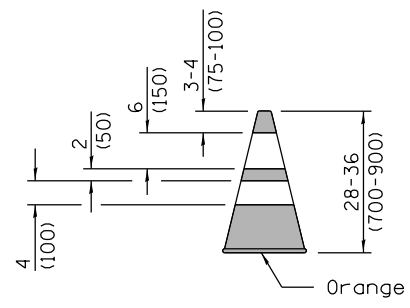
APPROVED January 1, 2009

ENGINEER OF DESIGN AND ENVIRONMENT *[Signature]*

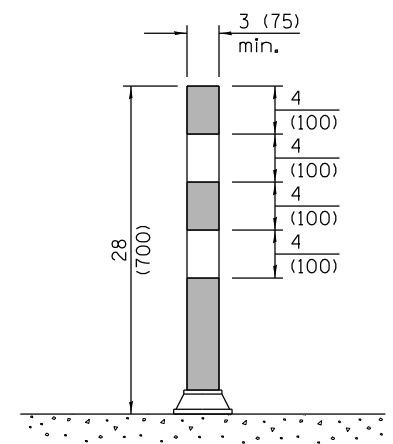
ISSUED 1-1-97



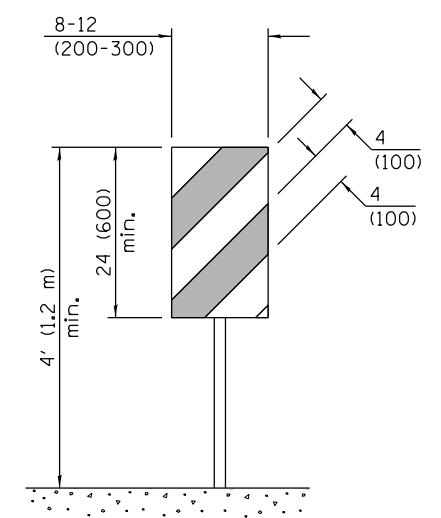
**CONE**



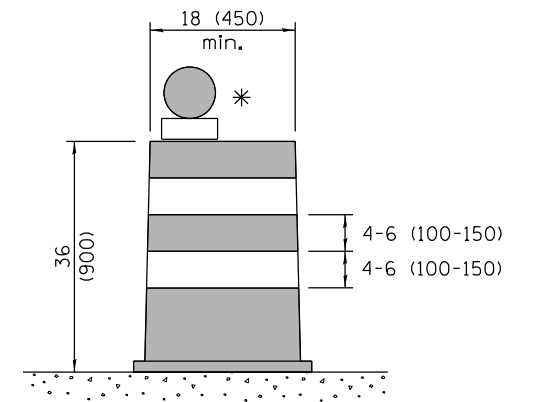
**REFLECTORIZED CONE**



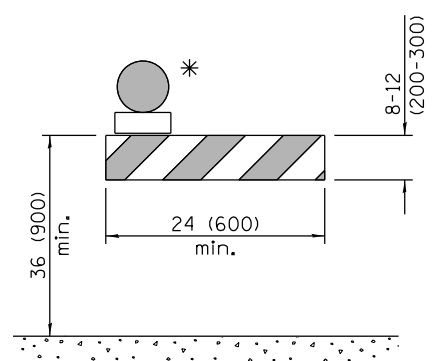
**FLEXIBLE DELINEATOR**



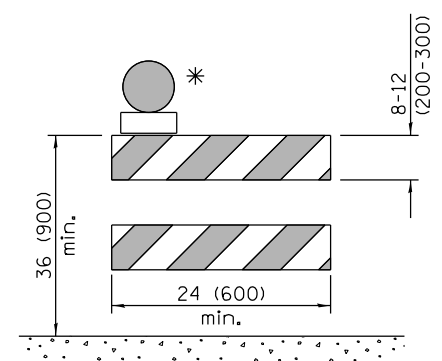
**VERTICAL PANEL  
POST MOUNTED**



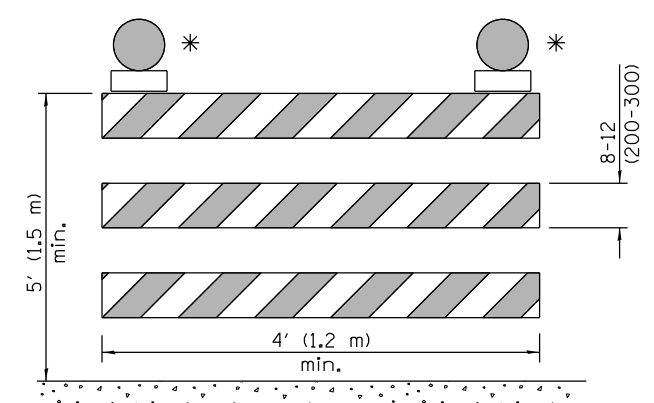
**DRUM**



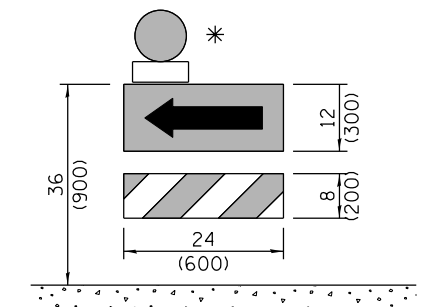
**TYPE I BARRICADE**



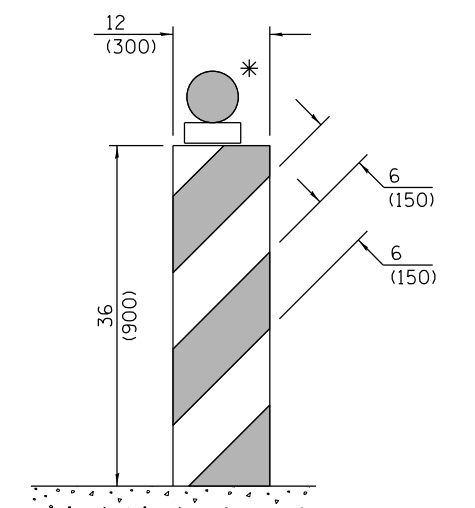
**TYPE II BARRICADE**



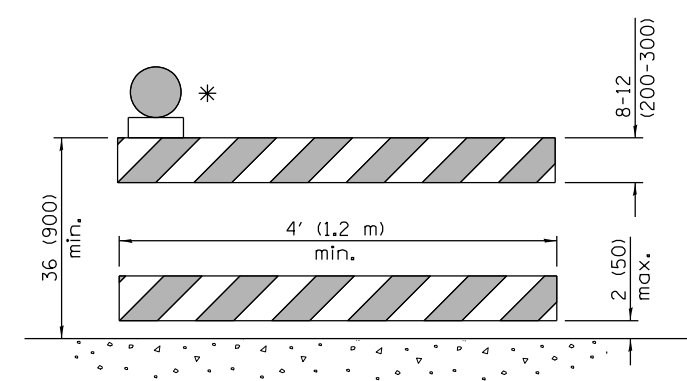
**TYPE III BARRICADE**



**DIRECTION INDICATOR  
BARRICADE**



**VERTICAL BARRICADE**



**DETECTABLE PEDESTRIAN  
CHANNELIZING BARRICADE**

\* Warning lights (if required)

**GENERAL NOTES**

All heights shown shall be measured above the pavement surface.  
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2014  
*Justin Mann*  
ENGINEER OF OPERATIONS

APPROVED January 1, 2014  
*[Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

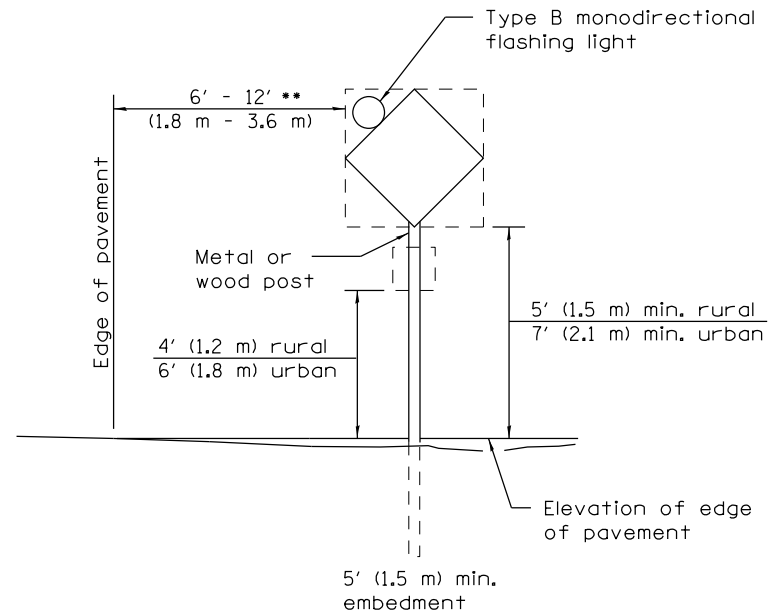
ISSUED 46-1-1 03/2011

DATE	REVISIONS
1-1-14	Modified flagger sign height. Added highway construction speed zone signs.
1-1-12	Added DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE.

**TRAFFIC CONTROL  
DEVICES**

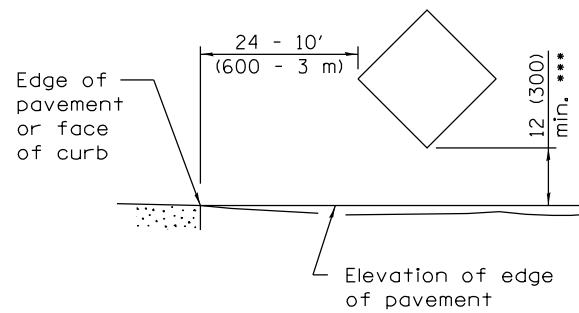
(Sheet 1 of 3)

**STANDARD 701901-03**



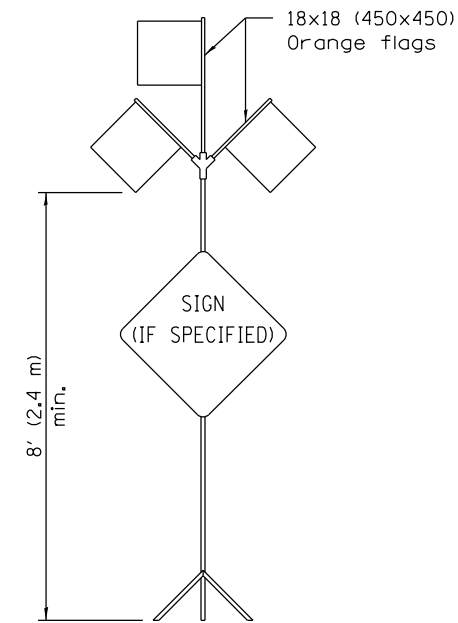
**POST MOUNTED SIGNS**

\*\* When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.



**SIGNS ON TEMPORARY SUPPORTS**

\*\*\* When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



**HIGH LEVEL WARNING DEVICE**

ROAD CONSTRUCTION NEXT X MILES

END CONSTRUCTION

G20-1(0)-6036

G20-2a(0)-6024

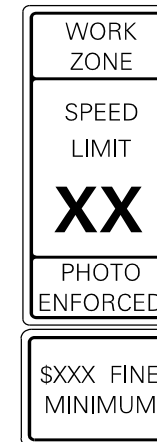
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

**WORK LIMIT SIGNING**



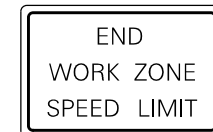
W21-1115(0)-3618

R2-1-3648

R10-1108p-3618

R2-1106p-3618

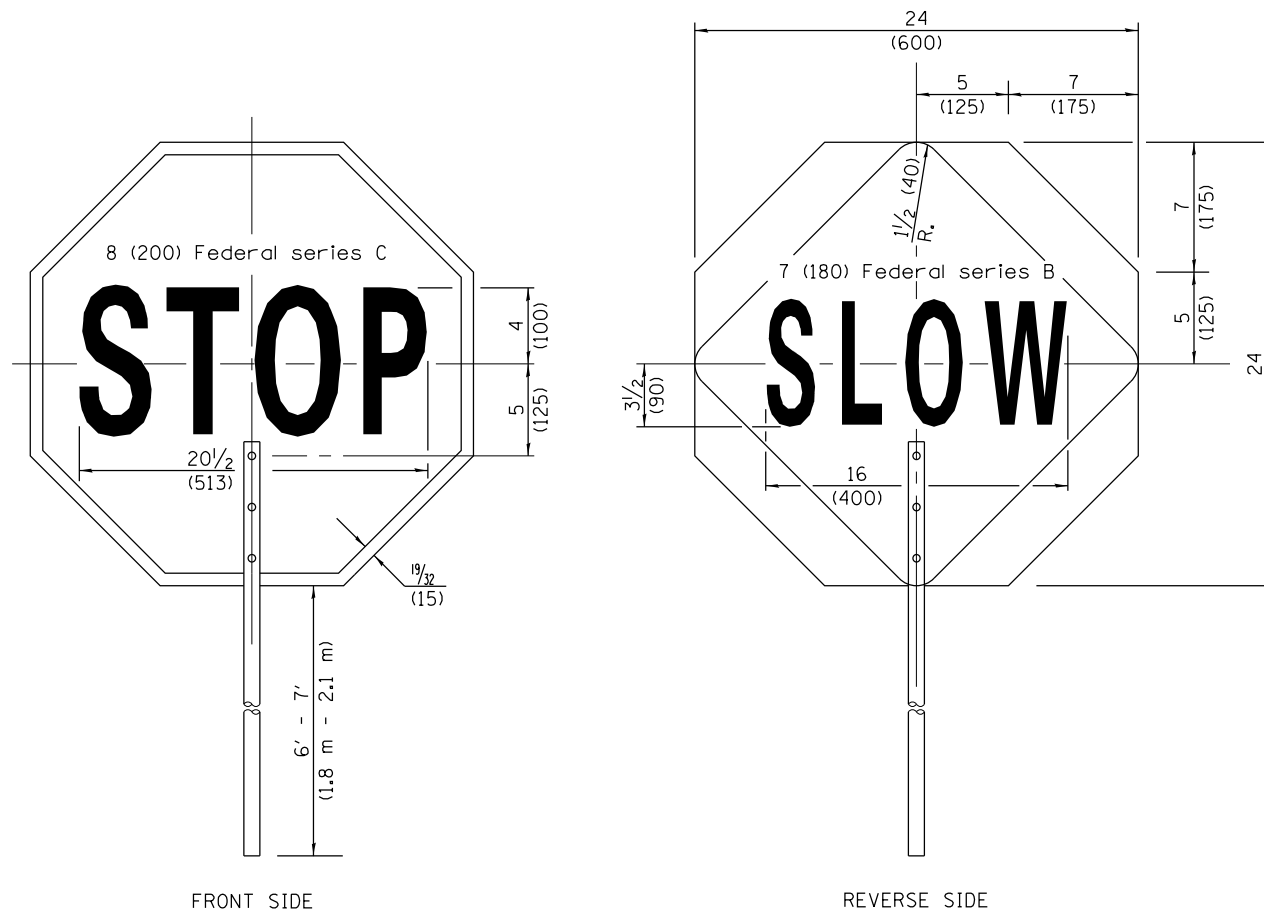
Sign assembly as shown on Standards or as allowed by District Operations.



G20-1103(0)-3660

This sign shall be used when the above sign assembly is used.

**HIGHWAY CONSTRUCTION SPEED ZONE SIGNS**



**FLAGGER TRAFFIC CONTROL SIGN**

Illinois Department of Transportation

APPROVED January 1, 2014  
*Dustin Mann*  
 ENGINEER OF OPERATIONS

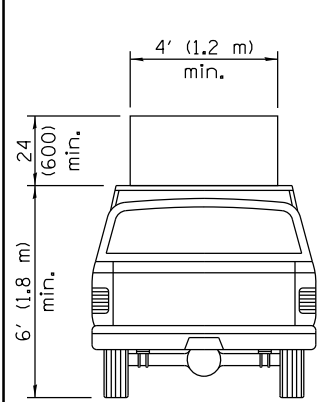
APPROVED January 1, 2014  
*[Signature]*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

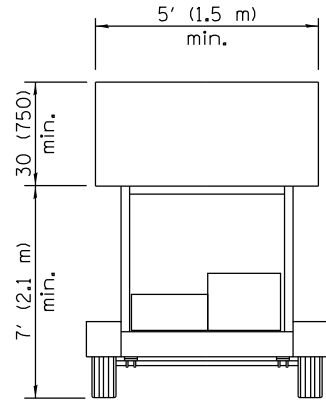
**TRAFFIC CONTROL DEVICES**

(Sheet 2 of 3)

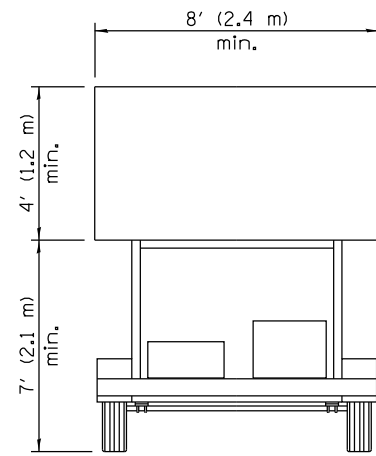
STANDARD 701901-03



**TYPE A  
ROOF  
MOUNTED**

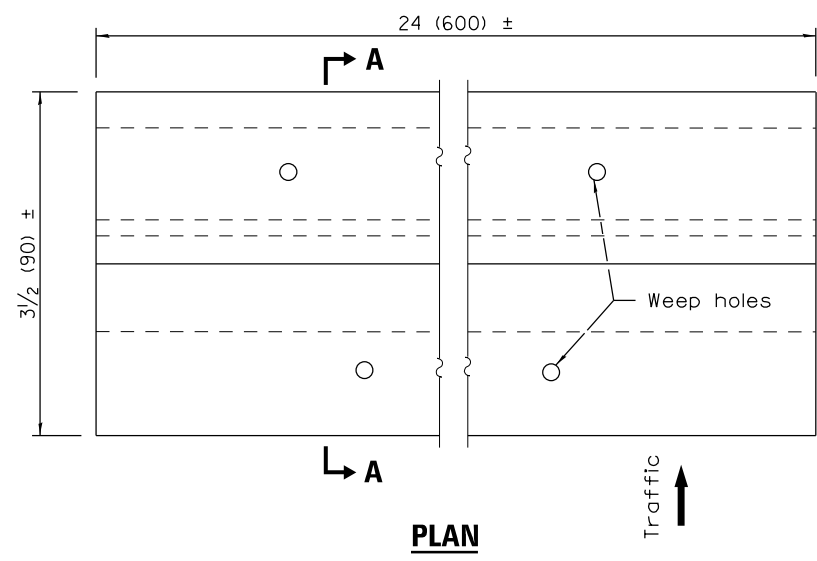


**TYPE B  
ROOF OR TRAILER  
MOUNTED**

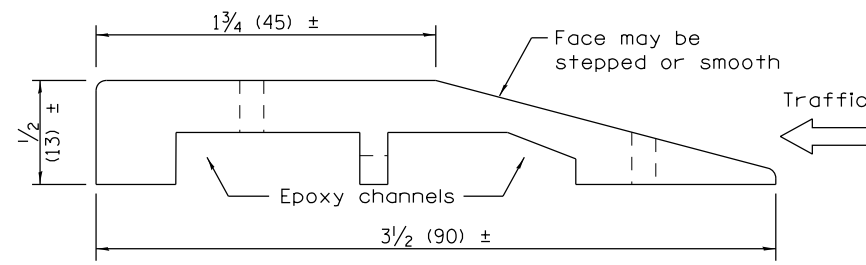


**TYPE C  
TRAILER  
MOUNTED**

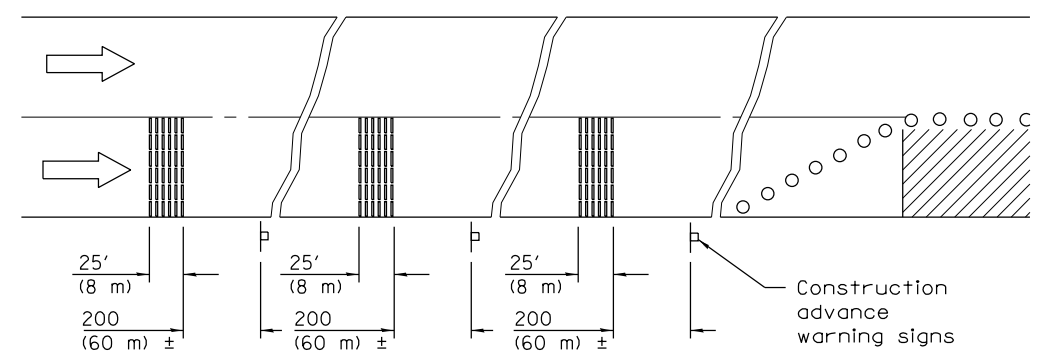
**ARROW BOARDS**



**PLAN**

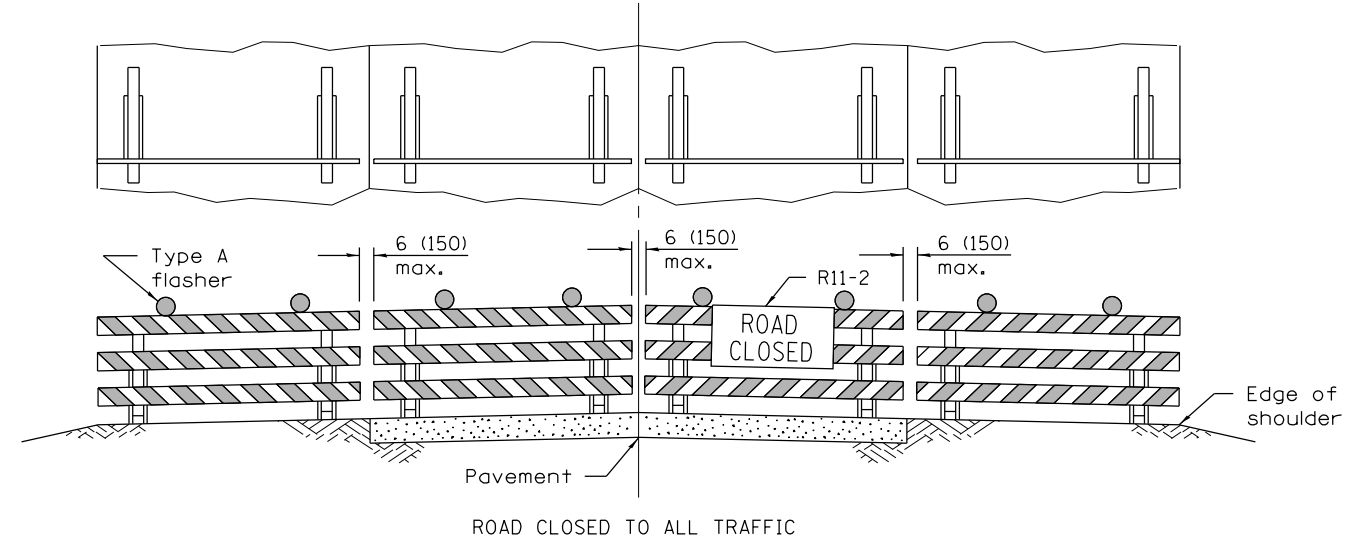


**SECTION A-A**



**TYPICAL INSTALLATION**

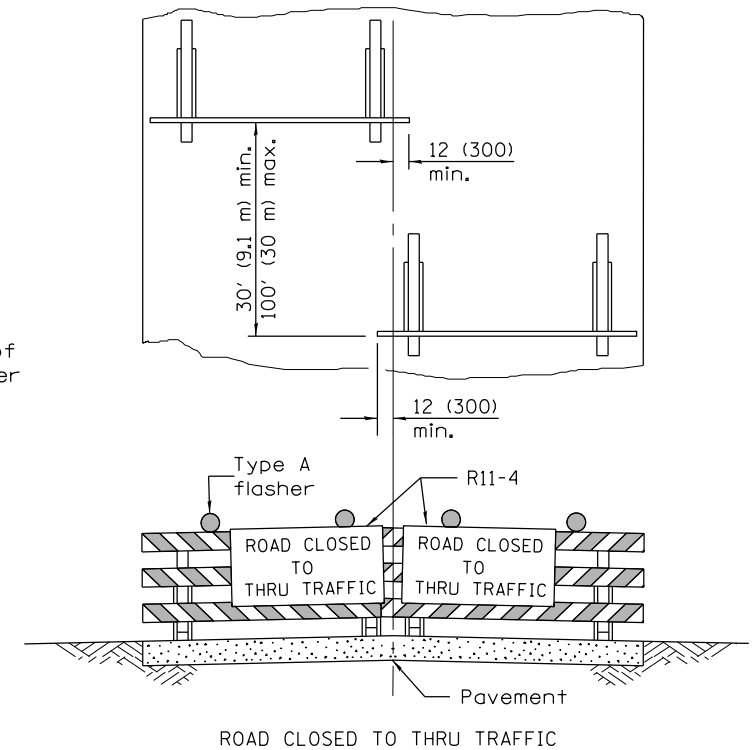
**TEMPORARY RUMBLE STRIPS**



ROAD CLOSED TO ALL TRAFFIC

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.

**TYPICAL APPLICATIONS OF  
TYPE III BARRICADES CLOSING A ROAD**



ROAD CLOSED TO THRU TRAFFIC

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

Illinois Department of Transportation

APPROVED January 1, 2014  
*Justin Mann*  
 ENGINEER OF OPERATIONS

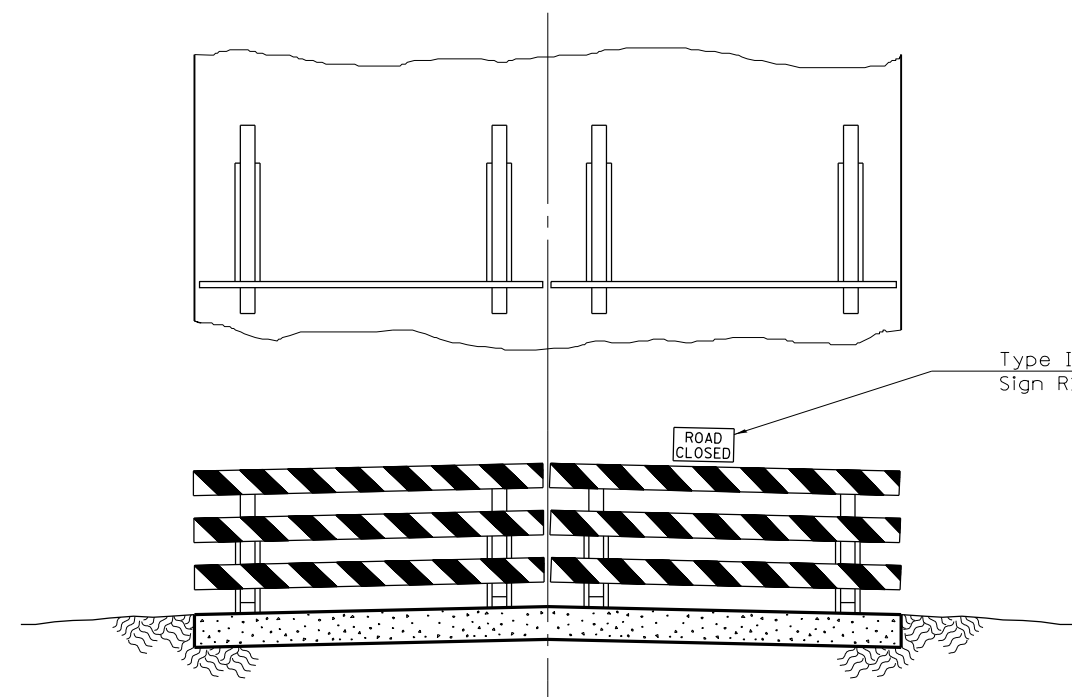
APPROVED January 1, 2014  
*[Signature]*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

**TRAFFIC CONTROL  
DEVICES**

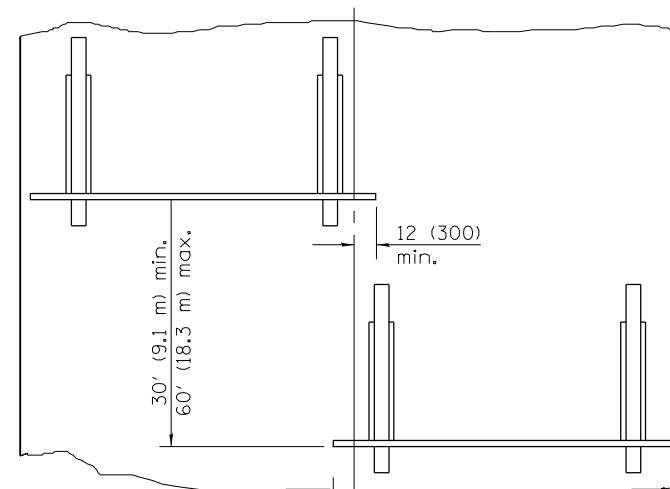
(Sheet 3 of 3)

**STANDARD 701901-03**

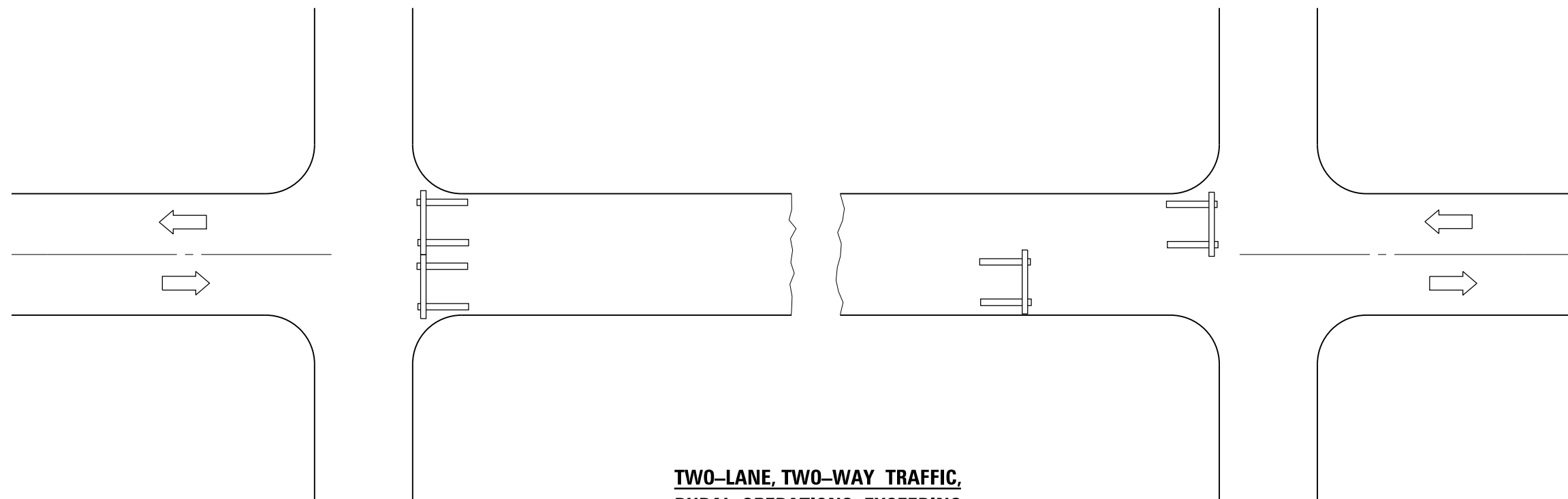


Resident traffic and day labor force's equipment to use road shoulder for passing barricade.

Type III Barricades with Standard Sign R11-2 or R11-4 mounted as shown.



Use when shoulders are too narrow for passage of traffic.



**TWO-LANE, TWO-WAY TRAFFIC,  
RURAL OPERATIONS EXCEEDING  
ONE DAYLIGHT PERIOD**

**GENERAL NOTES**

Type III barricades to be width of pavement only.

Reflectorized striping shall appear on both sides of barricades. Barricades shall be positioned so that stripes slope downward toward the side on which traffic is to pass.

Although not shown, advance warning signs with minimum dimensions of 36x36 (900x900) and black legends on orange reflectorized backgrounds shall be utilized where needed.

This case is for use on rural local roads where the local authority considers this protection to be appropriate for the specific job conditions.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-98	Rev. "R11-1" to "R11-4".
	Rev. 4th General Note.

**TRAFFIC CONTROL DEVICES –  
DAY LABOR CONSTRUCTION**

**STANDARD B.L.R. 17-4**

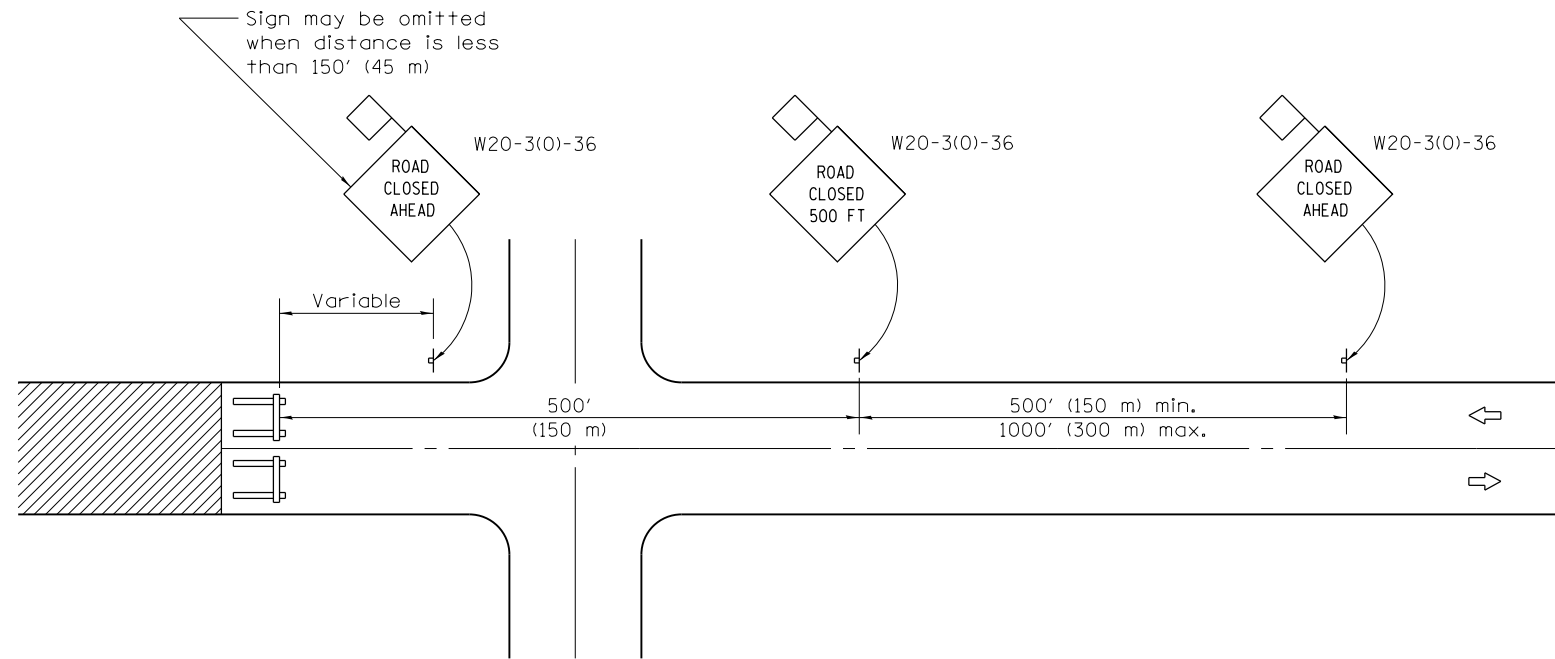
Illinois Department of Transportation

APPROVED January 1, 2009  
*Charles J. Longwell*  
ENGINEER OF LOCAL ROADS AND STREETS

APPROVED January 1, 2009  
*Ken E. Han*  
ENGINEER OF DESIGN AND ENVIRONMENT

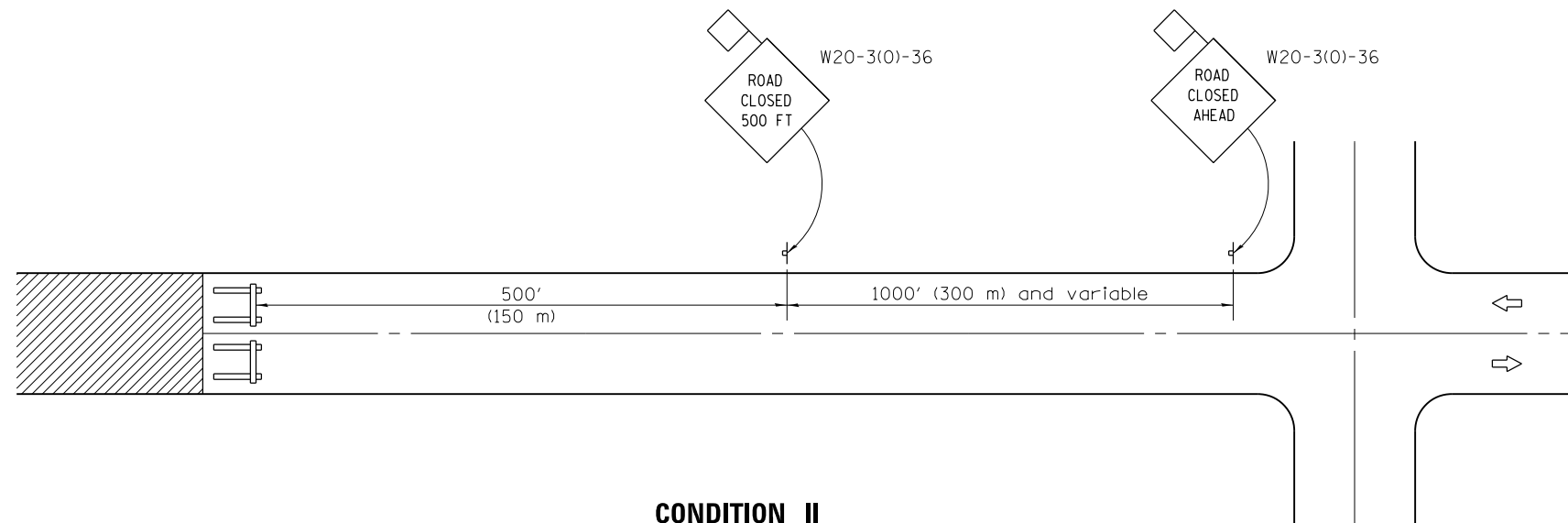
ISSUED 1-1-97





**CONDITION I**

When distance from closure to crossroad is less than 1500' (450 m)



**CONDITION II**

When distance from closure to crossroad is greater than 1500' (450 m)

**SYMBOLS**



Work area



Type III Barricade



Sign with 18x18 (450x450) min. orange flag attached

**GENERAL NOTES**

Type III Barricades and R11-2-4830 signs shall be positioned as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

Two Type A Low Intensity Flashing Lights shall be used on each approach in advance of the work area during hours of darkness. One light shall be installed above the barricades and the other above the first advance warning sign.

All warning signs shall have minimum dimensions of 36 x 36 (900 x 900) and have a black legend on an orange reflectorized background.

When fluorescent signs are used, orange flags are not required.

Longitudinal dimensions may be adjusted to fit field conditions.

When the distance between the barricade and the intersection is between 1500' (450 m) and 2000' (600 m), the advance sign shall be placed at the intersection. When the distance between the barricade and the intersection is over 2000' (600 m), an additional sign shall be placed at the intersection. The additional sign shall give the distance to the barricade in miles or fractions of a mile.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2012  
*Danell Lewis*  
 ENGINEER OF LOCAL ROADS AND STREETS

APPROVED January 1, 2012  
*Scott Esdaile*  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-12	Omitted two notes from GENERAL NOTES.
1-1-09	Switched units to English (metric).

**TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS**

**STANDARD B.L.R. 21-9**

PROPOSAL

County Kane
Local Public Agency KDOT
Section Number 14-00413-02-BR
Route Co. Highway No. 36

1. Proposal of

for the improvement of the above section by the construction of
Partial removal and extension of Culvert Structure No. 045-55543 (Culvert #3) over Harmony
Creek and removal and replacement of Culvert Structure No. 045-5544 (Culvert #4) over Tributary to Hampshire Creek

a total distance of 1035 feet, of which a distance of 1035 feet, ( 0.2 miles) are to be improved.

2. The plans for the proposed work are those prepared by Homer Chastain & Associates LLC
and approved by the Department of Transportation on May 8, 2014

3. The specifications referred to herein are those prepared by the Department of Transportation and designated as
"Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special
Provisions" thereto, adopted and in effect on the date of invitation for bids.

4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check
Sheet for Recurring Special Provisions" contained in this proposal.

5. The undersigned agrees to complete the work within working days or by Friday Oct 31, 2014
unless additional time is granted in accordance with the specifications.

6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and
Conditions for contract Proposals, will be required. Bid Bonds will be be allowed as proposal guaranty.
Accompanying this proposal is either a bid bond if allowed, on Department form BLR12230 or a proposal guaranty check,
complying with the specifications, made payable to:

County Treasurer of Kane

The amount of the check is ( ).

7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to
the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check
is placed in another proposal, it will be found in the proposal for: Section Number 14-00413-02-BR

8. The successful bidder at the time of execution of the contract will be be required to deposit a contract bond for the
full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu therefore. If
this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby
agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.

9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the
product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will
be divided by the quantity in order to establish a unit price.

10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.

11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this
contract.

12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on
BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid
specified in the Schedule for Multiple Bids below.



SCHEDULE OF PRICES

County Kane  
 Local Public Agency KDOT  
 Section 14-00413-02-BR  
 Route Co. Highway No. 36

**Schedule for Multiple Bids**

Combination Letter	Sections Included in Combinations	Total

**Schedule for Single Bid**

(For complete information covering these items, see plans and specifications)

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
1	EARTH EXCAVATION	CU YD	143		
2	REMOVAL AND DISPOSAL OF UNSUITABLE M	CU YD	343		
3	FURNISHED EXCAVATION	CU YD	326		
4	POROUS GRANULAR EMBANKMENT	CU YD	99		
5	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2308		
6	SEEDING, CLASS 2	ACRE	0.41		
7	SEEDING, CLASS 4	ACRE	0.06		
8	SEEDING, CLASS 4B	ACRE	0.02		
9	NITROGEN FERTILIZER NUTRIENT	POUND	44		
10	PHOSPHORUS FERTILIZER NUTRIENT	POUND	44		
11	POTASSIUM FERTILIZER NUTRIENT	POUND	44		
12	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1772		
13	TURF REINFORCEMENT MAT	SQ YD	572		
14	TEMPORARY EROSION CONTROL SEEDING	POUND	98		
15	TEMPORARY DITCH CHECKS	FOOT	100		
16	PERIMETER EROSION BARRIER	FOOT	1711		
17	TEMPORARY EROSION CONTROL BLANKET	SQ YD	4616		
18	STONE RIPRAP, CLASS B4	SQ YD	33		
19	FILTER FABRIC	SQ YD	33		
20	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	1308		
21	HOT-MIX ASPHALT BASE COURSE, 10"	SQ YD	159		
22	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1202		
23	LEVELING BINDER (MACHINE METHOD), N50	TON	169		
24	HOT-MIX ASPHALT SURFACE REMOVAL - BU	SQ YD	52		
25	HOT-MIX ASPHALT SURFACE COURSE, MIX "	TON	439		
26	PAVEMENT REMOVAL	SQ YD	159		



County KaneLocal Public Agency KDOTSection Number 14-00413-02-BRRoute Co. Highway No. 36**CONTRACTOR CERTIFICATIONS**

The certifications herinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Make a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.
2. **Bid-Rigging or Bid Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated ot guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporaton if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.
4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 55 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.

**RETURN WITH BID**

**SIGNATURES**

County	<u>Kane</u>
Local Pulic Agency	<u>KDOT</u>
Section Number	<u>14-00413-02-BR</u>
Route	<u>Co. Highway No. 36</u>

(If an individual)

Signature of Bidder \_\_\_\_\_

Business Address \_\_\_\_\_

\_\_\_\_\_

(If a partnership)

Firm Name \_\_\_\_\_

Signed By \_\_\_\_\_

Business Address \_\_\_\_\_

\_\_\_\_\_

Insert Names and Addressed of All Partners

} \_\_\_\_\_

} \_\_\_\_\_

} \_\_\_\_\_

} \_\_\_\_\_

(If a corporation)

Corporate Name \_\_\_\_\_

Signed By \_\_\_\_\_

President

Business Address \_\_\_\_\_

\_\_\_\_\_

Insert Names of Officers

} President \_\_\_\_\_

} Secretary \_\_\_\_\_

} Treasurer \_\_\_\_\_

Attest: \_\_\_\_\_

Secretary



Route CH 36
County Kane
Local Agency KDOT
Section 14-00413-02-BR

RETURN WITH BID

PAPER BID BOND

WE \_\_\_\_\_ as PRINCIPAL,
and \_\_\_\_\_ as SURETY,
are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this \_\_\_\_\_ day of \_\_\_\_\_

Principal

By: \_\_\_\_\_ (Company Name)
By: \_\_\_\_\_ (Company Name)
(Signature and Title) (Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

By: \_\_\_\_\_ (Name of Surety)
(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,
COUNTY OF \_\_\_\_\_
I, \_\_\_\_\_, a Notary Public in and for said county,
do hereby certify that \_\_\_\_\_

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_

My commission expires \_\_\_\_\_ (Notary Public)

ELECTRONIC BID BOND

[ ] Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code (grid)

Electronic Bid Bond ID Code

\_\_\_\_\_  
(Company/Bidder Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
Date



Apprenticeship or Training Program Certification

Return with Bid

Route CH 39
County Kane
Local Agency KDOT
Section 14-00413-02-BR

All contractors are required to complete the following certification:

- For this contract proposal or for all groups in this deliver and install proposal.
For the following deliver and install groups in this material proposal:

Blank lines for listing deliver and install groups.

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

Blank lines for listing program sponsors and work categories.



IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder: \_\_\_\_\_

By: \_\_\_\_\_

(Signature)

Address: \_\_\_\_\_

Title: \_\_\_\_\_



Affidavit of Illinois Business Office

County Kane
Local Public Agency KDOT
Section Number 14-00413-02-BR
Route CH 36

State of \_\_\_\_\_ )
County of \_\_\_\_\_ ) ss.

I, \_\_\_\_\_ of \_\_\_\_\_, \_\_\_\_\_,
(Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

- 1. That I am the \_\_\_\_\_ of \_\_\_\_\_ bidder.
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, \_\_\_\_\_, will maintain a
business office in the State of Illinois which will be located in \_\_\_\_\_ County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the
construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois
Procurement Code.

\_\_\_\_\_  
(Signature)
\_\_\_\_\_  
(Print Name of Affiant)

This instrument was acknowledged before me on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(SEAL)

\_\_\_\_\_  
(Signature of Notary Public)



Letting Date: \_\_\_\_\_ Item No.: \_\_\_\_\_

Contract No.: \_\_\_\_\_

Route: CH 36

Section: 14-00413-02-BR

Job No.: \_\_\_\_\_

County: Kane

The Substance Abuse Prevention on Public Works Act, Public Act 95-0635, prohibits the use of drugs and alcohol, as defined in the Act, by employees of the Contractor and by employees of all approved Subcontractors while performing work on a public works project. The Contractor/Subcontractor herewith certifies that it has a superseding collective bargaining agreement or makes the public filing of its written substance abuse prevention program for the prevention of substance abuse among its employees who are not covered by a collective bargaining agreement dealing with the subject as mandated by the Act.

A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and that deal with the subject matter of Public Act 95-0635.

\_\_\_\_\_  
Contractor/Subcontractor

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, the attached substance abuse prevention program that meets or exceeds the requirements of Public Act 95-0635.

\_\_\_\_\_  
Contractor/Subcontractor

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date



# Illinois Department of Transportation

Bureau of Construction  
2300 South Dirksen Parkway/Room 322  
Springfield, Illinois 62764

## Affidavit of Availability For the Letting of \_\_\_\_\_

**Instructions:** Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

### Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show **NONE**.

	1	2	3	4	Awards Pending	
Contract Number						
Contract With						
Estimated Completion Date						
Total Contract Price						Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor						
<b>Total Value of All Work</b>						

### Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show **NONE**.

						Accumulated Totals
Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases & Surfaces						
Highway, R.R. and Waterway Structures						
Drainage						
Electrical						
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning & Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
						\$ 0.00
<b>Totals</b>						

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

**Part III. Work Subcontracted to Others.**

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

I, being duly sworn, do hereby declare that this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates.

Subscribed and sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ Type or Print Name \_\_\_\_\_  
Officer or Director Title

Signed \_\_\_\_\_

\_\_\_\_\_  
 Notary Public

My commission expires \_\_\_\_\_

(Notary Seal)

Company \_\_\_\_\_

Address \_\_\_\_\_